

WordPerfect[®]

for DOS



Reference

*for IBM[®] Personal Computers
and PC Networks*



WordPerfect®

Reference

*for IBM® Personal Computers
and PC Networks*

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Version 5.1

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Printed in U.S.A.

MNUSIWP51X1C—6/92

74 — 2 0—7 0 S

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WordPerfect Software

WordPerfect word processing software is also available for the following computers and operating systems:

- Amiga computers
- Apple IIe/IIc and IIGS computers
- Atari ST computers
- Data General AOS/VS systems
- IBM PC (and most compatibles)
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- NeXT workstations
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- VMS Systems

Versions of WordPerfect are also available in selected languages. Contact your dealer or local WordPerfect Corporation International Affiliate Office, or the International Division of WordPerfect Corporation, for more information.

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If you purchased this product within the U.S. or Canada and want to register your license outside the U.S. and Canada with the WordPerfect Corporation International Affiliate Office in your area, entitling you to local customer support and update notices, you will be charged a maximum of 25% of the local retail price.

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Developer's Toolkit

WordPerfect Corporation offers a *Developer's Toolkit* for third-party developers who are creating products that will interact with WordPerfect. The *Developer's Toolkit* contains documentation and diskettes that help create interactive applications.

The toolkit is intended for experienced programmers. Novice programmers will probably not understand much of the toolkit's documentation or how to use the files on diskette.

To order the *Developer's Toolkit*, or to find out more about it, call WordPerfect Corporation's Information/Orders number: (801) 225-5000.





The Basics

This section will introduce you to WordPerfect and some of its basic functions and features. If you are new to WordPerfect, it will be to your advantage to take a few minutes to read through this section before you move on. If you are already familiar with WordPerfect, you may want to glance through this section as an introduction to some of the newer features that WordPerfect 5.1 has to offer.

Registration

Before you move on, take a moment to fill out and send in the Customer Registration card that came in your WordPerfect media box. Registering will make sure that you stay informed of the latest releases, and entitles you to receive WordPerfect Corporation's quarterly newsletter, *WordPerfect Report*. Keep the upper portion of the form with your manual for quick reference to your license number. If you are an upgrade customer, you will want to use the license number from your previous version of WordPerfect. You need your license number to receive interim releases and updated program diskettes.

Installation

Included in your package is the WordPerfect *Installation Program*, which guides you step-by-step through the WordPerfect installation process.

To install all of the WordPerfect files, your computer must have at least 4.5 megabytes of hard disk space.

Below are two sections to help you during installation. In *Program Installation*, we walk you through installing the WordPerfect 5.1 programs. You can also install your printer files at this time. The *Printer Installation* section is provided if you need to install printer files *after* your original program installation.

Program Installation

This section describes how to install your original WordPerfect 5.1 program files or how to install updated files.

Before you can install program files, you must find the diskette labeled **Install/Learn/Utilities 1** (printed in large letters) that you most recently received. If the only **Install/Learn/Utilities 1** diskette you have is the one that came in your original WordPerfect 5.1 package, find that diskette before moving on to the steps below.

To install program files,

- 1 Exit or quit all programs and go to a DOS prompt (for example, C>).
- 2 Insert the Install/Learn/Utilities 1 diskette into drive A.
- 3 From the DOS prompt, type **a:install** and press **Enter**.
- 4 Answer the on-screen prompts until the Installation menu appears.

- 5 Select **Basic** (1) for first-time installation. Follow the on-screen prompts for the remainder of installation.

or

Select **Update** (5), then continue the steps listed below.

Perform Step 6 for the source drive (the drive from which you are copying the new program files) and the destination drive (the drive to which you are copying the new program files).

- 6 If the name of the drive is correct, press **Enter**.

or

Change the name of the source drive (or the destination drive).

The Install: Update screen appears.

- 7 Select the type of files you want to install. For example, select **Program** (1) to install the WordPerfect Program.
- 8 Answer the prompts on the screen while providing directory or drive names and pressing **Enter**.

When WordPerfect asks you to insert a master diskette, "master" refers to the diskettes that came with your WordPerfect 5.1 package.

- 9 Repeat steps 7 and 8 until you have installed all the files you want.
- 10 When you are finished, select **Exit** (7) to exit the Installation program.

Your program files are now installed and ready to use.

Printer Installation

Before you can install printer files, you must find the diskette labeled **Install/Learn/Utilities 1** (printed in large letters) that you most recently received. If the only **Install/Learn/Utilities 1** diskette you have is the one that came in your original WordPerfect 5.1 package, find that diskette before moving on to the steps below.

If you are adding a printer not currently displayed on the Print: Select Printer (Shift-F7,s) list or under the Select Additional Printers (Shift-F7,s,2) option, you will need to find the diskettes labeled **Printer 1-4** and follow the instructions below (see *Printer, Select in Reference*).

***Important:** If you installed your printer files during program installation, you do not need to install the printer files now, unless you are updating them.*

To install printer files,

- 1 Exit or quit all programs and go to a DOS prompt (for example, **C>**).
- 2 Insert the Install/Learn/Utilities 1 diskette into drive A.
- 3 From the DOS prompt, type **a:install** and press **Enter**.

- 4 Answer the on-screen prompts until the Installation menu appears.
- 5 Select **Printer** (4).
- 6 If the Printer 1 diskette came with your package, insert it into drive A and press **Enter**.

or

If you received a Printer diskette numbered 5 or greater, insert it into drive A and press **Enter**.

A list of printers appears along with several instructions.

- 7 If you don't see your printer listed, press **Page Down** (PgDn) until the name of your printer appears on the list. The numbers next to the printer names do not change when you press Page Down.
- 8 Type the number that is next to the name of the printer you want to install, press **Enter**, then follow the on-screen prompts until the words "Helps and Hints" appear at the top of the screen.

The Helps and Hints screen contains information pertaining to your printer. Also read your printer manual for information regarding printer setup, dip switch or menu settings, cartridge installation, etc.

- 9 Press any key to exit and complete the printer installation.
- 10 Start WordPerfect the way you normally do.
- 11 Press **Print** (Shift-F7) to display the Print menu. Choose **Select Printer** (s) to display the Print: Select Printer screen.
- 12 Highlight the printer that you just installed and press **Enter** to select the new printer.

Your printer files are now installed, selected, and ready to use.

The Template

If all journeys begin with a simple first step, your experience with WordPerfect should begin with the template, a WordPerfect menu of feature options.

In your WordPerfect package, you received a color-coded template designed to fit over the function keys on your keyboard. This template corresponds to the

enhanced IBM keyboard. Place the template on your keyboard as shown in the photograph below.

FUNCTION KEYS



The different colors are your guide to using the WordPerfect function keys.

The color key means you should press the following key(s):

- Black** Press the function key
- Green** Hold down **Shift** and press the function key
- Blue** Hold down **Alt** and press the function key
- Red** Hold down **Ctrl** and press the function key

Example: To **Center**, which is printed in green on the template, you would hold down the **Shift** key and press **F6**.

If the template does not fit your keyboard, an address is provided for requesting a new template in the Getting Help section immediately following this section.

To remind you which key corresponds with each color, colored stickers called keycals have been provided in your package. You can, if you wish, peel the keycals from their backing and place them on the corresponding keys (Shift=Green, Alt=Blue, Ctrl=Red) on your keyboard.

Start WordPerfect

Once WordPerfect has been installed on your computer, you're ready to start the program. If you're a new user, some things will take some getting used to, but once you're familiar with the WordPerfect basics, the rest will fall into place.

*Any time you are asked to Enter something throughout the documentation, simply type the required information and press **Enter**.*

Hard Disk

To start WordPerfect on a computer with a hard disk,

- 1 Turn on your computer and start DOS.

In most cases, the Disk Operating System (DOS) starts automatically when you turn on your computer. DOS is software that helps your computer communicate with WordPerfect. DOS must be started before any other program can be used, including WordPerfect. If you need further information, please see DOS and WordPerfect in Reference and refer to your DOS manual.

- 2 At the DOS prompt, enter **cd\wp51** (or, if your WPEXE file is located in a directory other than WP51, enter the name of that directory after the backslash).

*WPEXE is a file that helps you to start WordPerfect. You start WordPerfect from the directory that contains WPEXE. In most cases, the Installation Program will have copied WPEXE to a directory called WP51, so you would type **cd\wp51** and then press **Enter**. WPEXE will be used every time you start WordPerfect and should not be deleted.*

- 3 Enter **wp**

*Remember, when you see Enter, type the required information (in this case **wp**) and then press **Enter**.*

Two Disk Drives

To run WordPerfect 5.1 on a two disk drive system, it is necessary that each of your drives be at least 720K or larger. If you are not sure whether your drives are at least 720K, please refer to your computer manual or contact your dealer.

To start WordPerfect on a computer with a two disk drive system,

- 1 Start DOS. (See the paragraph on DOS in the *Hard Disk* section above.)
- 2 Insert the WordPerfect 1 diskette into drive A.
- 3 Insert the diskette on which you want to store your files into drive B.
- 4 Enter **b:** to change the default drive to B.
- 5 Enter **a:wp** to start WordPerfect.
- 6 When prompted, replace the WordPerfect 1 diskette with the WordPerfect 2 diskette.

Clean Screen

Starting WordPerfect is like rolling a clean sheet of paper into a typewriter. When you begin a new document, WordPerfect gives you a clean screen to work from, which will be referred to throughout the documentation as the editing screen or the normal editing screen.

-  CURSOR
-  STATUS LINE
-  DOCUMENT
(1 OF 2)
-  PAGE
-  LINE
-  POSITION



The dash near the top of your screen is the *cursor*. It points to your current position on the screen. The *status line* at the bottom of the screen displays the position of the cursor as well as messages and warnings. When you save a document, the status line can also display the filename of that document for as long as you continue to work on it. (See *Display Setup* in *Reference*.)

Initial (default) formats, such as margins, tabs, and line spacing, have already been set for you. You can, however, change them at any time and as many times as you like throughout a document (see *Appendix G: Initial Settings* for a complete list of initial format settings).

Keys to Know

Before you begin experimenting, you'll need to know where to look for help in case you get lost or make a mistake. WordPerfect is a remarkably forgiving program; here are a few keys to remember in case you need them.

Backspace

The Backspace key is used to erase mistakes as you type. It erases characters to the immediate left of the cursor.

Cancel

This key (F1) backs you out of features that display a message on the status line, such as Block, Exit, and Retrieve, as well as backs you out of any menu. Cancel can also be used to restore text that has been erased by any of the delete keys.

Delete

The Delete key (Del) deletes text at the cursor position.

Help

Pressing Help (F3) displays on-screen information about any WordPerfect feature you are currently using. You can also use this feature to display the WordPerfect template and/or a list of features that begin with a particular letter. Pressing Enter or the Space Bar will exit you out of help. (See *Help in Reference* for more information.)

Num Lock

When Num Lock is on, you can use the keypad to type numbers. When Num Lock is off, the keypad gives you cursor control.

To prevent confusion between the number and cursor movement functions of the keypad, WordPerfect warns you if Num Lock is on. When you begin a new WordPerfect document, the "Pos" message at the bottom of the screen flashes if Num Lock is on. As soon as you display a menu or press Enter, the blinking stops, even though Num Lock is still on. The blinking will also stop if you turn Num Lock off by pressing that key.

Function Keys

Function keys provide one gateway to WordPerfect features. Throughout this manual and the *WordPerfect Workbook*, you will often see key names. The guide to using these keys is simple:

- If a key name appears by itself (F8), press the key.
- When the key names are separated by a hyphen (Shift-F8), hold down the first key while you press the second key.
- If the key names are separated by a comma (Shift-F8,1), complete the first sequence (Shift-F8), release the keys, *then* press the second key (1).

Function keys work in different ways, and present you with different responses. Below are a few examples:

Feature	Function Key	How it Works
Bold	F6	Turns the feature either on or off
Print	Shift-F7	Presents a menu of options
Center	Shift-F6	Begins a feature that is ended when Enter is pressed
Save	F10	Requires entry of a filename

The examples above refer to the original keyboard assignments. You can, if you want to, change these assignments to suit your needs. For example, the Help feature is currently assigned to the F3 function key. You could change the assignment so that Help would be assigned to the F1 function key. For further information on keyboard assignments, see *Keyboard Layout* in *Reference*.

For more information about simply assigning *Help* to *F1*, *Cancel* to *Escape*, and *Repeat Value* to *F3*, see *Alternate Keyboard* under *Environment Setup* in *Reference*.

Pull-Down Menus

In addition to the function keys, there is another way you can select WordPerfect features: *Pull-Down Menus*.



You can turn on the pull-down menus by holding down the **Alt** key and pressing the equal sign key (=) (Alt=). The pull-down menu titles will appear in a bar at the top of the screen. (You can turn off pull-down menus by holding down the **Alt** key and pressing the equal sign key (=) again.) You can also set up the **Alt** key so it will display the pull-down menu bar by pressing it alone (see *Menu Options* in *Reference*).

In WordPerfect, you can select features in the pull-down menus by using the arrow keys (↑,↓,→,←) and pressing Enter, or by using a mouse, if you have one connected to your computer. You can also select these features by typing the mnemonic letter that is highlighted in the feature name (e.g., **S** for Save). The pull-down menu can also be turned on and off by clicking the right-most button on the mouse.

If you don't have a mouse connected to your computer and set up to run with WordPerfect, the mouse pointer (■) will not appear. See Mouse Setup and Mouse Support in Reference for further information.

If you prefer to use the pull-down menus, look for this symbol in the steps: . Throughout the documentation, this symbol will be followed by the name of the pull-down menu where you can find the feature.

Example:

 Select Setup from the File menu.

Menu Options

Earlier in this section, when you were introduced to function keys, you learned that some features, such as Print (Shift-F7), present you with a menu of options.

```
Print
 1 - Full Document
 2 - Page
 3 - Document on Disk
 4 - Control Printer
 5 - Multiple Pages
 6 - View Document
 7 - Initialize Printer

Options
S - Select Printer           Standard Printer
B - Binding Offset         0"
N - Number of Copies       1
H - Multiple Copies Generated by WordPerfect
C - Graphics Quality       Medium
T - Text Quality           High

Selection: 0
```

Whenever you are presented with one of these menus, there are three ways that you can select an option:

- Type the option number, such as (1) for Full Document. (Use the numbers at the top of the keyboard as opposed to those on the number pad.)
- Type the mnemonic letter that is highlighted in the option name (e.g., **F** for Full Document).
- Position your mouse pointer on the option and click the left mouse button.

Codes

Codes are commands that tell WordPerfect and your printer what to do. Whenever you use a feature such as Block or Underline, WordPerfect inserts these hidden commands into your document. You can examine these codes in the Reveal Codes (Alt-F3) screen. For information, see *Appendix C: Codes* for a list of all codes, in addition to *Reveal Codes* and *Delete Codes* in *Reference*.

Exit WordPerfect

When you finish using WordPerfect, you must exit before turning off the computer.

1 Press **Exit** (F7) to begin exiting WordPerfect.

 Select *Exit from the File menu*.

2 Press **y** to save the document, then enter a filename.

or

Press **n** to continue exiting without saving the document.

3 Press **y** to exit WordPerfect.

There are several saving options. For further information, see Save in Reference.

Getting Help

If you have problems as you work with WordPerfect, help is available from several sources.

Help Feature

The Help feature (F3) displays on-screen information about any feature you are currently using. For more information, see *Keys to Know* in *The Basics* section of *Getting Started* and *Help in Reference*.

Reference Manual

This manual contains an alphabetical list of WordPerfect features, describing how each feature works. Each section contains steps and information pertaining to individual features, as well as more detailed information under the *Notes* heading at the end of each section. *See Also* will direct you to related information. A comprehensive index is provided to direct you to the information you need, as well as an Appendix devoted exclusively to troubleshooting (see *Appendix O: Troubleshooting* for further help).

WordPerfect Workbook

The *WordPerfect Workbook* contains several lessons which show you how WordPerfect features may be used and combined for specific applications. Lessons include advanced applications as well as basic fundamentals.

On-Line Tutorial

WordPerfect includes a tutorial that takes you step-by-step through a number of basic skills. The tutorial is intended for use with IBM personal computers and 100% compatibles only.

Important: *The On-Line Tutorial is installed with the WordPerfect Learning files. If you did not install the Learning files when you installed WordPerfect or have not subsequently done so, you must install them before running the tutorial (see the Installation Instructions card). If you are running the tutorial on a network and the Learning files have not been installed, check with your system administrator or see Appendix R: Networking WordPerfect for installation instructions.*

Hard Disk

To start the tutorial on a computer with a hard disk,

- 1 Start DOS on your computer. (See the paragraph on DOS in the *Hard Disk* section of *Start WordPerfect* in *The Basics*.)
- 2 Type **path**, then press **Enter**.

The path is a listing of the directories that are searched when you want to execute a program from the DOS prompt. The directories are searched in the order listed (see *DOS and WordPerfect* in *Reference* for further information).

- 3 Check the path to see if it contains the directories where WPEXE, WPFIL, and the Learning files are located.

The WordPerfect Auto-Install Program automatically asks you if you want the C:\WP51 directory entered into your path. If you inserted the C:\WP51 and C:\WP51\LEARN

directories upon installation, they should now appear in the path. If your path contains these directories, move on to step 6.

- 4 If your path doesn't contain the proper directories, type **path=** then type the same directories that were listed in the original path *plus* the directories where WP.EXE, WP.FIL, and the Learning files are contained.

In the *PATH* command, the directories must be separated by a semicolon (;) (e.g., *PATH=C:\WP51;C:\WP51\LEARN*).

This *PATH* command remains in effect until you turn off your computer. If you want to use the *PATH* command permanently, you should include it in an *AUTOEXEC.BAT* file (see *DOS and WordPerfect in Reference*).

- 5 After you have finished typing the *PATH* command, press **Enter**.

- 6 Enter **tutor** to start the tutorial.

Read the messages on the screen and follow the instructions as directed. When you exit out of the tutorial, you are returned to the same DOS prompt.

If you have problems starting the tutorial after following these steps, try exiting out of any program that may still be running, then try step 6 again. If you're still having problems, go to the DOS prompt before you enter **tutor** and enter the following command:

```
set wp=/nk/nc
```

These startup options disable the Cursor Speed feature and enhanced keyboard calls and remain in effect until you turn off your computer or use a new *SET* command. See your DOS manual and *Appendix N: Startup Options* for more information.

Two Disk Drives

To start the tutorial on a two disk drive system,

- 1 Start DOS on your computer. (See the paragraph on DOS in the *Hard Disk* section of *Start WordPerfect in The Basics*.)
- 2 Insert the WordPerfect 1 diskette into drive A.
- 3 Insert the Learning diskette into drive B.
- 4 Enter **path=a:\;b:** at the prompt.

The path lists the directories that are searched when you want to execute a program file from the DOS prompt. The directories are searched in the order listed.

This *PATH* command remains in effect until you turn off your computer. If you want to use the *PATH* command permanently, you should include it in an *AUTOEXEC.BAT* file (see *DOS and WordPerfect in Reference*).

- 5 Enter **tutor** to start the tutorial.

- 6 When prompted, replace the WordPerfect 1 diskette with the WordPerfect 2 diskette.

Read the messages on the screen and follow the instructions as directed. When you exit the tutorial, you are returned to the original DOS prompt.

Network

To start the tutorial on a network,

- 1 Make sure you are logged onto the network.
- 2 At the DOS prompt, change to the directory that contains the WordPerfect 5.1 program (e.g., Y:\WP51).
- 3 Enter **tutor** to start the tutorial.

Read the messages on the screen and follow the instructions as directed. When you exit the tutorial, you are returned to the network prompt.

If you are unable to run the tutorial from a network, you may have a problem with WordPerfect temporary files. These files are created by WordPerfect each time you run the tutorial. WordPerfect saves them in the network default directory, provided that you have access rights to store files in that directory. If you do not have these access rights, you must specify another location (directory) where temporary files can be stored. For more information, see `ld=drive/directory` and Startup Option Placement under Placing Startup Options in Appendix R: Network Administration.

Customer Support

WordPerfect Customer Support has earned a reputation as the best support in the software industry. We welcome your calls. We encourage you, however, to refer to your WordPerfect documentation before calling.

Before you call Customer Support, follow these steps:

- Try to duplicate the problem, keystroke by keystroke, to see exactly what was done.
- Be at your computer when you call Customer Support. Have your manual and license number handy. Also know the model of printer you are using.
- Run the WPINFO.EXE program to gather information about your setup that Customer Support may need (see *Appendix O: Troubleshooting*).

If you are an English version user within the United States, Canada, or any U.S. Territory, toll-free support is available by dialing the numbers listed below. For WordPerfect on IBM PC-compatible computers, Customer Support takes toll-free calls Monday through Friday from 7 a.m. to 6 p.m. Mountain time. For all other computers, support hours are from 8 a.m. to 5 p.m. Mountain time.

To provide you with the most efficient service possible, we have created specialized support groups. If you call the number from the following list that most closely corresponds to your problem, we can assist you in a more effective and timely manner.

Installation of WordPerfect Software

For assistance when installing WordPerfect 5.1 for the first time, when installing an upgrade of WordPerfect 5.1, or for answers to general installation questions.

Installation (800) 533-9605

General Features

For assistance when using any WordPerfect feature.

Equations (800) 321-3383
Columns (800) 541-5096
Graphics (800) 321-3383
Labels (800) 541-5129
Macros* (800) 541-5129
Merge* (800) 541-5129
Sort (800) 541-5096
Tabs (800) 541-5096
Tables (800) 321-3383
All Other Features (800) 541-5096

*Please note that, although Macros/Merge support operators can assist you in troubleshooting existing macros/merges, they cannot design and write customized macros/merges for you.

Printing and Fonts

For assistance when selecting a printer, setting up print options, or when experiencing other problems when printing from within WordPerfect 5.1. For assistance with printer hardware problems or when ordering printer accessories (e.g., toner or font packages), contact your local dealer.

Laser or PostScript Printing (800) 541-5170
Dot-Matrix/Inkjet/Thermal/
Daisywheel Printing (800) 541-5160

Networks

For assistance when installing and troubleshooting WordPerfect 5.1 on a Local Area Network (LAN).

Networks (800) 321-3389

Information

For answers to non-technical questions about WordPerfect products.

Information Services (800) 451-5151
Information Services—Canada (800) 321-2318

Orders (All Products)

For placing or inquiring about orders for program upgrades or product components (e.g., templates, manuals, workbooks). To order retail packages of WordPerfect 5.1 or other products, contact your local dealer.

Customer Orders (800) 321-4566

You can fax your problem to fax number (801) 222-4377.

If you purchased this product within the U.S. or Canada and want to register your license outside the U.S. and Canada with the WordPerfect Corporation International Affiliate Office in your area, entitling you to local customer support and update notices, you will be charged a maximum of 25% of the local retail price.

Non Toll-Free Support

If you are in an area where the phone system does not handle toll-free numbers, you can reach the same Support groups described above by dialing the following numbers, but you will be charged for the call. Note that there is only one printer number and only one feature number.

Installation	(801) 226-5444
Features	(801) 226-7900
Printers	(801) 226-7977
Networks	(801) 226-4777

You can fax your problem to fax number (801) 222-4377.

Electronic Support

WordPerfect Corporation offers electronic support through a Bulletin Board Service (BBS). The number to access the BBS is (801) 225-4414 (this is not a toll-free number). If you have a modem and a working knowledge of a Communications software package, you may access our Bulletin Board System.

Your Communications software must be set to 8 data bits, no parity, and 1 stop bit in order to connect properly. The recommended terminal emulation to use is ANSI. This number will support 1200 and 2400 baud modem callers. See *Appendix O: Troubleshooting* for common problems using the BBS.

Some examples of files found on the BBS are current printer drivers, support memos, utilities, current graphics drivers, and troubleshooting information. WordPerfect Program files are *not* posted for downloading. You may leave technical questions for Customer Support and enter enhancement requests for Development. The BBS also facilitates the transfer of problem files to be reviewed by Customer Support operators.

WordPerfect Corporation is using PCBoard BBS software and is accessible 24 hours a day. All files on the BBS are compressed with PKWare utilities (PKZIP) in order to protect the integrity of the files. You need to uncompress the files using PKUNZIP.

Electronic Support for the Hearing Impaired

WordPerfect Corporation also offers Electronic Support for the hearing impaired. Customers may call with a Telecommunications Device for the Deaf (TDD) or Teletype (TTY). Customer Support takes toll-free calls Monday through Friday from 8 a.m. to 4 p.m. Mountain time. The phone number is (800) 321-3256.

After-Hours Support

Call (801) 222-9010 to receive support on WordPerfect products for IBM PC-compatible computers Monday through Thursday from 6 p.m. to 7 a.m., Friday from 6 p.m. to 10 p.m., and Saturday from 8 a.m. to 4 p.m. Mountain time. This number is not toll free.

Ordering Templates

If the template included in your package does not fit your keyboard, return it along with the name (and a photocopy or rough sketch) of the keyboard you are using to:

WordPerfect Corporation
Attn: Information Services
1555 N. Technology Way
Orem, Utah 84057

WordPerfect Corporation will provide you with the closest match for your keyboard.

A Brief Lesson

Now that you've gone through the basics, here is a brief lesson designed to help you get to know WordPerfect. It will introduce you to some WordPerfect basics and features that you might typically use. To begin, start WordPerfect as previously described.

Creating the Document

Equipped with the basics, you're now ready to start typing. The document you create will be a simple note. If you make any mistakes, use the Backspace key to erase them.

You'll notice that when a line fills with text, the cursor returns to the left margin in a new line. This automatic return is known as *word wrapping*.

- 1 Type the following note *without* pressing Enter at the end of a line.

Remember the discussion we had about starting a study abroad program? I've just returned from a study abroad conference in Illinois, and I have an outline I'd like you to take a look at. Why don't you stop by my office the next time you're at this end of campus, and we can talk about it.

Editing the Document

You've just created your first document. Looking it over, you see a few things that you'd like to change. WordPerfect has several features that make editing quick and efficient.

Moving the Cursor

You can move the cursor on your screen by using either the Up and Down Arrows (↑/↓) or the Left and Right Arrows (←/→) on your keyboard. To move the cursor with a mouse, simply position the pointer where you want the cursor to be, and click the left mouse button.

*Some keyboards have a separate number pad that is also used for cursor control in WordPerfect. The **Num Lock** key (or its equivalent) operates as a toggle to turn Num Lock on and off. When Num Lock is turned off, the number pad can be used for cursor control.*

- 1 Using the arrow keys, move the cursor to the uppercase R in Remember.

Insert vs. Typeover

WordPerfect uses Insert as the main form of editing. While in Insert, any text you type is inserted at the cursor, moving the existing text to the right. The alternative is to type over existing text by using Typeover.

- 2 Type **Do you** and press the **Space Bar**.
- 3 Press **Insert** (Ins). Notice that the word **Typeover** appears at the bottom left of the screen.
- 4 Type a lowercase **r** to replace the existing R.

- 5 Press **Insert** to end Typeover.
- 6 Move the cursor to the h in have in the second sentence.
- 7 Press **Delete** (Del) until the remainder of the sentence (including the period) is erased.

Many functions on the WordPerfect keyboard will repeat if you simply hold down the key. Use caution in doing this until you get used to the keyboard; holding down a key too long can insert unwanted codes into your document and delete other necessary codes.

- 8 Type **think I've come up with an outline that will make us all very happy**.
- 9 Move the cursor to the v in very.

Block and Underline

The Block feature is used to define portions of text for use with other features.

- 1 Press **Block** (Alt-F4—in other words, hold down the Alt key and press F4), then press **Right Arrow** (→) until the word very has been highlighted.
 -  *Select **Block** from the **Edit** menu, then press **Right Arrow** (→) until the word very has been highlighted. Or you can hold down the left button on the mouse and drag until the word is blocked.*
- 2 Press **Underline** (F8) to underline the word.
 -  *Select **Appearance** from the **Font** menu, then select **Underline**.*

You can block characters, words, sentences, and entire pages if you wish. If you had blocked the rest of the note from the word **very** forward, the entire block would have been underlined.

- 3 Move the cursor to the D in Do at the beginning of the note.
- 4 Press **Enter** two times to add blank lines at the beginning of the note.

Using the Home Key

The Home key can be used for quick movement throughout your document.

- 1 Press the **Home** key twice, followed by **Up Arrow** (↑). This returns you to the top of your document.
- 2 Type **Mitch**.
- 3 Return to the D in Do at the beginning of the note.

4 Press Tab.

Mitch,

Do you remember the discussion we had about starting a study abroad program? I've just returned from a study abroad conference in Illinois, and I think I've come up with an outline that will make us all very happy. Why don't you stop by my office the next time you're at this end of campus, and we can talk about it.

Doc 1 Pg 1 Ln 2" Pos 6.5"

Your edited document is complete.

Saving the Document

You've typed the note and now you want to save it for future reference. When you save a document in WordPerfect, all document initial settings are saved as well, including printer selection.

There is more than one way to save a document in WordPerfect, but for now we'll use the Save feature.

1 Press **Save** (F10).

 Select *Save* from the *File* menu.

A message appears on the status line at the bottom of the screen: "Document to be Saved."

2 Type **study** as the filename, and then press **Enter**.

The name of your document and the directory in which it is located appear on the status line at the bottom of the screen. This original document is now saved. Any changes you make throughout the rest of the lesson are only temporary, and will not affect the original document unless you save them under the same filename at some future time.

Printing the Document

Now that you've edited and saved your document, you can send it to the printer. You can print from the screen or from disk. From the screen, you can print a document, page, or any block of text.

For this section of the lesson, you will print directly from the screen. To find out how to print from a disk, refer to *Print, Document on Disk* in the *Reference* section of this manual.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Select **Full Document (1)** from the Print menu to send the note to the printer.

If your printer does not print, check to make sure it is turned on, on-line, and that the printer cable is attached securely to your computer and printer. If you did not select a printer when installing WordPerfect, you may receive an error message.

For details on selecting a printer see Printer, Select in Reference.

Saving the Document and Exiting

You've saved your original document once. To show you another way to save your document, and also exit WordPerfect, you'll save the document under the same filename, using **Exit**.

For information on other saving and filing options, see *Save* and *List Files* in the *Reference* section of this manual.

To save the document and exit WordPerfect,

1 Press **Exit** (F7).

 Select **Exit** from the **File** menu.

A message appears on the status line at the bottom of the screen asking you if you want to "Save Document? **Yes (No)**."

2 Type **y**, and press **Enter** to save it under the **STUDY** filename.

*Simply pressing **Enter** will automatically select the default option (the option not in parentheses).*

Since there is already a document with the filename **STUDY**, the message on the status line asks if you want to replace the previously-saved document. Though the text has not been modified since you last saved the document, for the purpose of this lesson, you'll want to replace it. If you had changed any text, the new version of the text would replace the old version.

3 Type **y**.

The message on the status line asks if you want to "Exit WP? **No (Yes)**."

4 Type **y** to exit WordPerfect.

Now that you've finished this lesson, you may want to look through the *Reference* section for more information on individual features, or turn to the *WordPerfect Workbook* for a more in-depth introduction to WordPerfect.



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A Advance

You can use Advance to position text at an exact location on a page.

Advance is especially useful for placing text in graphics images. In the image below, Advance has been used to position "Help!" inside the cartoon bubble.



Advance is also often used to fill in spaces in existing forms. For instance, you might use Advance to position text so that it will fit correctly in a pre-printed job application (see *Filling in Forms* below).

When you are using different fonts and type sizes, Advance lets you move to a specific position on a page without having to calculate the line height required to reach that position. It can also be used to manually kern characters (see *Kerning in Reference*).

To use advance,

- 1 Move the cursor to where you want the advance to begin.
- 2 Press **Format** (Shift-F8), then select **Other** (4) to display the Other menu.
 Select *Other* from the *Layout* menu.
- 3 Select **Advance** (1), then select the advance option of your choice (see *Advance Options* below).
- 4 Enter a distance.
- 5 Press **Exit** (F7) to return to the document.
- 6 Type the text.

Advance and Graphics Images

If you are using Advance to position text over a graphics image, make sure that the Wrap Text Around Box option for the graphics box that contains the image is set to No. Otherwise, WordPerfect will not let you position text over the graphics box.

Advance and Page Breaks

You can only use Advance to move the cursor on the current page. You cannot enter an Advance measurement which advances the cursor past a page break (see *Page, Soft and Hard in Reference*).

Advance Options

If you select Advance Up (1), Down (2), Left (4), or Right (5), the distance you enter is measured relative to the cursor position. For example, if you enter an Advance Left measurement of 1" and the cursor is at position 3.5", you will be *advanced* to position 2.5" on the same line.

You cannot advance the cursor into the top margin.

If you select Advance to Line (3) or Position (6), the distance you enter is an absolute position on the page, regardless of where the cursor is located at that time.

Advance to Line is a vertical measurement, measured from the top edge of the page. For example, if you enter an Advance to Line measurement of 3", you will be advanced 3" down from the top edge of the page.

Advance to Position is a horizontal measurement, measured from the left edge of the page. For example, if you enter an Advance to Position measurement of 3", you will be advanced 3" in from the left edge of the page.

You cannot advance both vertically and horizontally by using one Advance code. To change the cursor position to a new vertical *and* horizontal position, you must enter two Advance codes.

Cursor Position

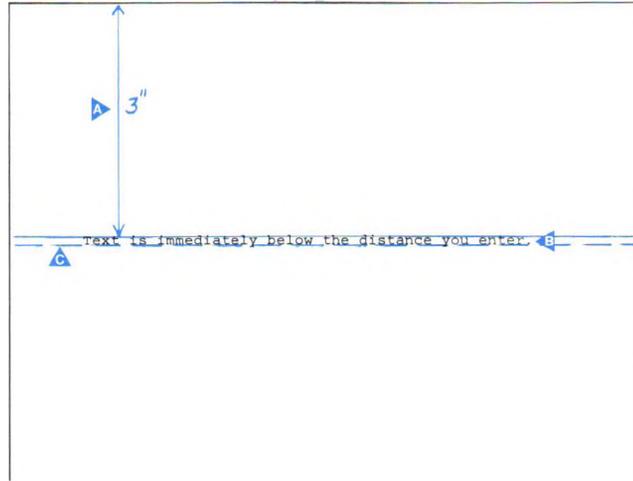
The Advance feature inserts an Advance code into your document indicating the type of advance being made and the distance (e.g., [AdvRgt:3"]). This does not change the on-screen position of the cursor. However, any change in location is reflected in the "Ln" and "Pos" numbers on the status line.

Whenever you are unsure of the position of text on a page, move the cursor to that text, using Reveal Codes (Alt-F3) to be certain that the cursor is placed after the Advance code, then check the position displayed on the status line. You can also use View Document (Shift-F7,6) to preview where the text will actually be printed on the page.

Filling in Forms

When you select Advance to Line (3) from the Advance options and enter a distance, text is printed immediately below the distance you enter. For example, if you enter an Advance to Line measurement of 3", the bottom baseline of your text is not printed 3" down from the top of the page. Instead, the full line of text is printed immediately below 3" from the top of the page.

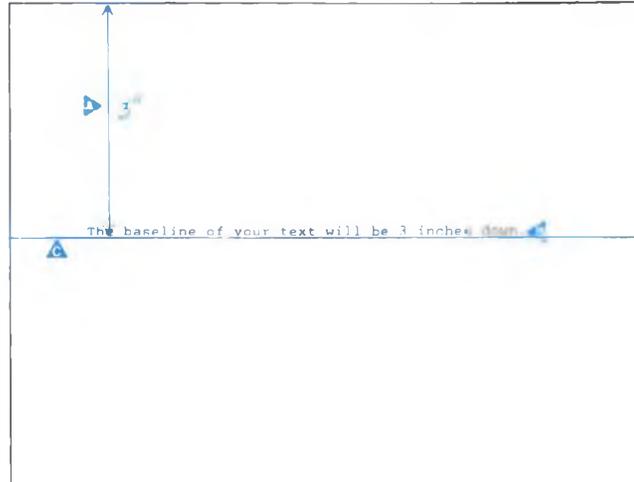
- ▲ ADVANCE MEASUREMENT
- ▲ LINE OF TEXT
- ▲ BASELINE



When you place text in pre-printed forms, we suggest that you set the Baseline Placement for Typesetters option on the Format: Printer Functions menu (Shift-F8,4,6,5) to Yes. You may also want to enter a fixed line height and enter a fixed line measurement (see *Line Height in Reference*). The text you type will then be printed on top of the line instead of below. With these settings, if you

enter an Advance to Line measurement of 3", the bottom or *baseline* of your text will be printed 3" down from the top of the page.

- ▲ ADVANCE MEASUREMENT
- ▲ LINE OF TEXT
- ▲ BASELINE



Returning to the Original Position

After using Advance, the easiest way to return the cursor to its original position is to enter both an Advance to Line and an Advance to Position measurement. For example, if you were originally at the Position 1" Line 1" position, you could return the cursor to that position by entering an Advance to Line measurement of 1" and an Advance to Position measurement of 1".

Text Boxes

Advance code measurements inside text boxes are measured from the top left corner of the box.

See Also: Cursor Movement

Append

Append is used to add on-screen text to an existing file on disk. Text is always added to the end of the file.

- 1 Move the cursor to the text you want to append.
- 2 Press **Move** (Ctrl-F4) to display the Move menu.
 - ☐ Choose *Select from the Edit menu*.
- 3 Select **Sentence** (1), **Paragraph** (2), or **Page** (3) to highlight the sentence, paragraph, or page on which the cursor is resting.

You can also append a block of text (see *Blocks of Text* below).

- 4 Select **Append** (4).
- 5 Enter the name of the file to which you want to append the text (see *Entering Filenames* below). If the file does not exist, WordPerfect will create it.

Notes

Append and Macros

If the filename you enter does not exist, WordPerfect creates the file. This is handy when using **Append** in macros, because you do not have to check whether or not the file already exists.

Blocks of Text

You can append a block of text to a file on disk by using **Block** (Alt-F4) to block the text, pressing **Move** (Ctrl-F4), selecting **Block** (1), and following steps 4 and 5 above.

Entering Filenames

If the file is found in your default directory, you need only enter the filename. However, if the file is found in some other directory, you also need to include the full pathname for the file.

For example, if your default directory is C:\WORK, and you want to append to a file called STUDY found in that directory, then you need only enter **study** as the filename. However, if you are in some other directory, you need to enter the full pathname, including the WORK directory (e.g., **c:\work\study**).

Locked Files

You can append to a locked file by using the above steps, then entering the correct password for the locked file.

Sentence, Paragraph, and Page Delimiters

WordPerfect distinguishes sentences, paragraphs, and pages by *delimiters*. In other words, it looks for such things as periods, Hard Return codes [HRt], Soft Page codes [SPg], and Hard Page codes [HPg] to determine where sentences, paragraphs, and pages begin and end. If you are having trouble blocking a sentence, paragraph, or page, it could be that one or more of the necessary delimiters are missing.

For a more complete description of sentence, paragraph, and page delimiters, see *Move* in *Reference*.

Tabular Columns and Rectangles

You can use **Block** (Alt-F4) to block a tabular column or a rectangle (see *Tabular Column* or *Rectangle* under *Move, Block* in *Reference*). While you cannot enter a filename to append a blocked tabular column or rectangle directly to a file, you can move these items by appending them to a temporary buffer.

First, use **Block** (Alt-F4) to block a tabular column or a rectangle as explained under *Move, Block in Reference*. With the block on-screen, press **Move** (Ctrl-F4), select **Tabular Column (2)** or **Rectangle (3)**, then select **Append (4)** to save the block to a temporary buffer. The text will remain in that temporary buffer until you move new text to that buffer or exit WordPerfect. Consequently, if you want to move the buffer to another file, you can switch to the new file and retrieve the buffer.

To retrieve the block, press **Move** (Ctrl-F4), select **Retrieve (4)**, then select **Tabular Column (2)** or **Rectangle (3)**. You cannot use the **Tabular Column** or **Rectangle** option to block and append graphics boxes unless the graphics box is empty or contains only text. If you attempt to use the **Tabular Column** or **Rectangle** option to block and append a graphics box which contains a graphics image, you will get an error message.

See Also: Block; Move; Move, Block

Attributes

Attributes change the size or appearance of printed text. They can be used to provide emphasis to a word or to set text apart on a page.

Size attributes (Small, Large, Very Large, etc.) change the size of printed text.

Appearance attributes (Bold, Underline, Italics, etc.) let you add various enhancements to printed text.

In the following example, size attributes were used to create headlines of different sizes.

WordPerfect 5.1

Fact Sheet

WordPerfect 5.1 is now available. The rich set of features that made WordPerfect the most powerful and popular word processor in history has been improved. Here's a sampling of some enhancements and new features which add power and ease of use to WordPerfect 5.1.

Table
The new Table feature lets you easily create organized rows and columns of tabular data that are automatically enclosed

	Jan	Feb	Mar	Apr	May	June
Division A	1274	1003	9573	1403	13303	
Division B	1712	2292	2223	1402	1320	
Division C	102	102	102	102	102	102
Division D	120	108	114	142	140	140
Total	3100	2400	11000	1547	1547	

in graphic lines. You can have as many as 32 columns and 25,776 rows in one table. You can perform math functions on the numeric data in a table, and import spreadsheets into a

table as well as anywhere else in WordPerfect.

Merge
We have significantly modified Merge to make it much easier for anyone to use. In response to your requests, we not only made the merge codes easier to understand, but we also made them more powerful. Merge commands can now be used inside headers and footers, footnotes and endnotes, and text boxes. You can either hide or reveal merge codes when you are doing normal text editing.

We have also added a powerful merge language that is much like our macro language.

Using the merge language, you can select merge records based on the information contained in specific fields. For example, you can select and merge only those records in which the state is

California and the education level is 12 years and above.

Equations
Many of you need to print detailed scientific and technical formulas and equations. So we have added an equation editor, which includes a comprehensive collection of symbols, character sets, and mathematical operators and functions.

$$f(x) = \int_{-1}^x \frac{1-3x^2}{x^2} dx$$

The Equation Editor lets you enter a mathematical expression and immediately preview its printed appearance.

The WordPerfect Character Set
That's what you see. The printer can't print some of the symbols in these equations. With WordPerfect 5.1 and any of WPCorp's supported printers that print graphics, you can directly print any of the more than 1700 characters in the WordPerfect character set. It's a character set built in to your printer. WordPerfect will automatically

To add an attribute as you type text,

- 1 Press **Font** (Ctrl-F8) to display the Font menu on the status line.
- 2 Select **Size** (1) or **Appearance** (2) to display the desired attributes menu at the status line.
 *Select specific size attributes directly from the Font menu. For appearance attributes, select Appearance from the Font menu.*
- 3 Select the attribute of your choice.
- 4 Type the text.
- 5 Turn off the attribute. You can do this by re-selecting the attribute (steps 1 through 3 above), or by moving the cursor past the attribute off code (see *Codes* below). You can also turn off all current active attributes at one time (see *Normal Text* below).

Notes

Appearance Attributes

Appearance attributes deal with the style of the text. Select **Bold** (1), **Underline** (2), **Double Underline** (3), **Italic** (4), **Outline** (5), **Shadow** (6), **Small Caps** (7), **Redline** (8), or **Strikeout** (9).

Base Font

The attributes you select are variations of the current base font in your document. If you have several different sizes of type, you can use the size attributes to vary from size to size without having to worry about actually changing your base font. How your attributes will actually appear in print depends upon the base font you have selected and the fonts your printer has available. If your attributes do not look the way you think they should in print, it could be that your printer does not have the necessary fonts to print them (see *Colors/Fonts/Attributes* and *Font in Reference*).

After you have selected attributes, you can preview how they will appear in print by using **View Document** (Shift-F7,6).

Bold and Underline

Bold and **Underline** are the two most commonly-used appearance attributes. For your convenience, they are also found on separate keys so that you can bold or underline text as you type by using one keystroke. Press **Bold** (F6) or **Underline** (F8) to turn on the feature you want, then press that keystroke once again to turn off the feature, or press **Right Arrow** (→) to move beyond the attribute off code (see *Codes* below).

Codes

When you select an attribute, both an on and off code are inserted, with the cursor resting just before the off code. For example, the on code inserted for the **Bold** attribute is [BOLD] and the off code is [bold]. You can display these

codes by pressing **Reveal Codes** (Alt-F3). Any text between the codes takes on the attribute.

When the cursor is placed on an Attribute On code for which an Automatic Font Change (AFC) is assigned (see *Printer Program, Modify Automatic Font Changes in Reference* for information), the Attribute On code will expand to display the name of the font used for that attribute. For example, if you are using the Courier 10cpi font, and the Bold AFC for Courier 10cpi is Courier 10cpi Bold, the [BOLD] code expands to display [BOLD: Courier 10cpi Bold] when it is highlighted.

To turn off the attribute, you can simply press **Right Arrow** (→) to move past the off code, rather than having to select the attribute again.

Existing Text

To add attributes to existing text, simply block the text using **Block** (Alt-F4), then select the attribute using steps 1 through 3 above. When you use this method, the cursor is placed after the attribute off code.

Normal Text

When you have more than one attribute active at a time, you can turn off all current attributes by pressing **Font** (Ctrl-F8), then selecting Normal (3) to return the text to the base font. This either inserts the necessary off codes or moves the cursor beyond existing off codes. Subsequent text is then printed in the current base font (see *Base Font* above).

On-Screen Appearance

The attribute currently selected appears both in the text you are typing and in the numbers next to the "Pos" indicator at the status line. When attributes are displayed on-screen, they can be represented in several ways depending on the screen display card you have installed in your computer (e.g., color, monochrome, etc.).

To learn more about the on-screen appearance of attributes, see *Colors/Fonts/Attributes in Reference*.

Printing

Since the appearance of text on the printed page depends upon the capabilities of your printer, you may not be able to print certain attributes. For example, some printers print underlining as a solid line while others can only produce a broken line. To learn more about how attributes are printed, see *Font in Reference*.

You can discover which attributes are available on your printer by retrieving and printing the PRINTER.TST file (select your printer before printing). It includes several attributes as well as some of the most common attribute combinations.

Important: *PRINTER.TST* is installed with the WordPerfect Program files. It is originally copied to the directory containing WPEXE.

Removing Attributes

You can remove attributes by deleting either one of the pair of attribute codes which surround the text. WordPerfect then deletes the matching code for you. It is easiest to delete these codes with Reveal Codes (Alt-F3) on. If you attempt to delete an attribute code in the normal editing screen, you will be prompted to confirm the deletion. You can then type **y** to confirm the deletion, or type any other key to skip over the code without deleting it.

Size Attribute Ratios

A new feature, Size Attribute Ratios (Shift-F1.4,8,6) helps you determine the size of these attributes (see *Initial Settings* in *Reference*).

Size Attributes

The size attributes deal with the height and width of a character and/or character position in a line.

Select either **Superscript** (1), **Subscript** (2), **Fine** (3), **Small** (4), **Large** (5), **Very Large** (6), or **Extra Large** (7).

If you want to alternate type sizes, you can use these size attributes rather than having to continually use Base Font (Ctrl-F8,4) to change point sizes in a document.

Remember, however, that using the size attributes may not actually change the size of the text you print. It all depends on what fonts your printer has available. For example, if your printer has only one font with one type size (e.g., Courier 10 point), it will print only in that font regardless of the size attributes you select.

The actual sizes used for Fine, Small, Large, Very Large, and Extra Large are determined by your current base font and the printer fonts which you have selected (see *Base Font* above, and *Font* in *Reference*).

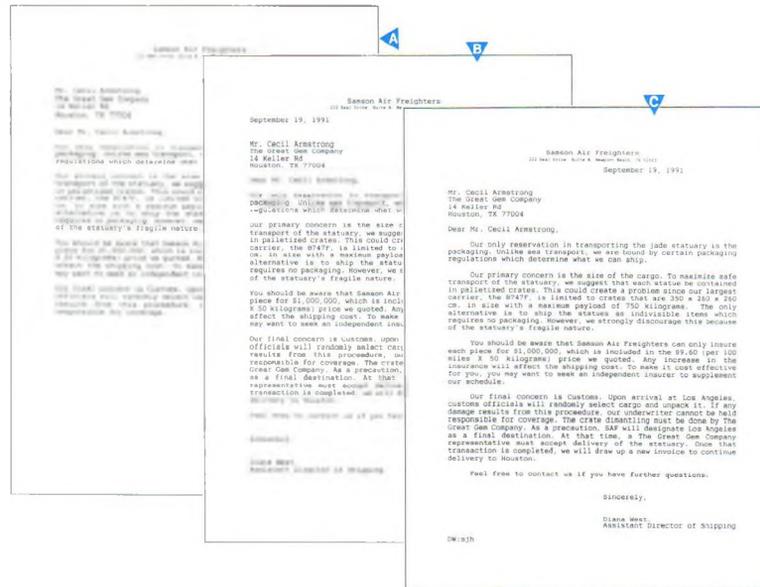
Although WordPerfect chooses which fonts to use for the attributes, you can also change the fonts being used by editing the .PRS file (see *Printer Program, Modify Automatic Font Changes* in *Reference* for details).

See Also: Colors/Fonts/Attributes; Font; Printer, Select; Redline/Strikeout



the second draft of LETTER is renamed LETTER.BK!, and the third draft is named LETTER.

- A FIRST DRAFT (DELETED)
- B SECOND DRAFT (LETTER.BK!)
- C THIRD DRAFT (LETTER)



To set Original Backup,

- 1 Press **Setup** (Shift-F1) to display the Setup menu.
- 2 Select **Setup** from the **File** menu.
- 3 Select **Environment (3)**, then select **Backup Options (1)** to display the Setup: Backup menu.
- 4 Select **Original Document Backup (2)**.
- 5 Type **y** to tell WordPerfect you want to use the Original Backup option.
- 6 Press **Exit (F7)** to exit the Setup: Backup menu.

Notes

Copying Files

Files do not “disappear” from a disk. The disk (both floppy disks and hard disks) may become corrupted, however, which would result in lost data and unusable files (both original and backup). It is for this reason that we suggest making backup copies of your files on a separate diskette regardless of whether you use Original Backup or not.

For more information on copying files, see *List Files in Reference*.

Disks can become corrupted by a variety of things such as static, power surges, magnets, etc.

Filename Extensions

Files that have the same name but a different extension (e.g., LETTER.1, LETTER.2) share the same original backup file. As you save and replace these files, the latest file you replace receives the backup.

Location of Backup Files

Original backup files will be stored in the same directory as the files they are backing up.

Retrieving Original Backup Files

In order to retrieve an original backup file, use the Rename feature in List Files (see *List Files in Reference*) to rename the backup file, then retrieve it as you would any other file.

***Important:** If you don't rename an original backup file, its contents will be changed in subsequent backups. Don't rename original backup files with a .BK! extension.*

Also, turning off the Original Backup option deletes the original backup file the next time you save the document. This means you should rename original backup files before you turn off Original Backup.

Timed Backup

Timed Backup is another WordPerfect backup option. It is used to safeguard against losing text during a power outage, machine failure, etc. Its function is different from Original Backup, so it may or may not help you in the situations where an original backup is most helpful.

You can use both original and timed backup at the same time (see *Backup, Timed in Reference*).

See Also: Backup, Timed; Save

Backup, Timed

One of the most frustrating things you may encounter as a computer user is the loss of large amounts of work due to machine failure, power outage, etc. The WordPerfect Timed Backup option lets you safeguard against such an experience.

Basically, Timed Backup “backs up” or makes a copy of your document at specified intervals. Every few minutes, a “Timed Backup” message is displayed on the status line, and the file is copied to the directory you specify in the Location of Files feature (see *Location of Files in Reference*).

While Timed Backup is a powerful option, it is not a substitute for saving your files on disk or making extra copies of your files on backup diskettes.

Timed backup files are deleted when you properly exit WordPerfect.

To set Timed Backup,

1 Press **Setup** (Shift-F1) to display the Setup menu.

 Select **Setup** from the **File** menu.

2 Select **Environment** (3), then select **Backup Options** (1) to display the Setup: Backup menu.

3 Select **Timed Document Backup** (1).

4 Type **y** to tell WordPerfect you want to back up your documents at a specified time interval.

5 Enter the time interval (in minutes).

6 Press **Exit** (F7) to exit the Setup: Backup menu.

Notes

Copying Files

Files do not “disappear” from a disk. The disk (both floppy disks and hard disks) may become corrupted, however, which can result in lost data and unusable files (both original and backup). It is for this reason that we suggest making backup copies of your files regardless of whether you use Timed Backup or not.

For more information on copying files, see *List Files* in *Reference*.

Disks can become corrupted by a variety of things such as static, power surges, magnets, etc.

Old Backup File Exists—Rename or Delete

If you receive the message, “Old Backup 1 File Exists or Old Backup 2 File Exists. 1 **Rename**; 2 **Delete**,” WordPerfect cannot back up the document currently on your screen because a backup file of another document exists. This happens when you restart WordPerfect after a power outage, machine failure, etc.

If you select **Rename** (1), you can enter a new name for the backup file and let WordPerfect properly back up the file currently on the screen. If you select **Delete** (2), WordPerfect will still properly back up the file currently on the screen, but the old backup files will be erased.

***Important:** You must rename the file if you want to retrieve it. This is how you save your backup files. If you don't rename it at this point, the file is deleted.*

Original Backup

Original Backup is another WordPerfect backup option. It is used to safeguard against mistakenly replacing a document that you do not want to replace. Its function is different from Timed Backup, so it may or may not help you in the situations where a timed backup is most helpful (see *Backup, Original* in *Reference*).

You can use both original and timed backup at the same time.

Retrieving Timed Backup Files

Timed backup files are temporary files that are stored in the directory you specified for Backup Files (1) in Location of Files (Shift-F1,6). If you did not specify a backup location, WordPerfect saves the backup files to the directory containing the WP.FIL file. If WordPerfect cannot write to that directory (e.g., you do not have network rights), the backup file is saved in the directory you specified for Documents (7) in Location of Files. If you did not specify a documents directory, the backup file is saved in the current default directory.

When you exit WordPerfect properly, timed backup files are deleted.

WP{WP}.BK1 is the name of the timed backup file for the document on the Document 1 screen, while WP{WP}.BK2 is the name of the timed backup file for the document on the Document 2 screen. If you have documents on both screens, only the document on the screen at the time of the backup interval is backed up. After the first backup, a document is backed up again only if you have made changes.

A network timed backup file is called WPxxx}.BK1 (where xxx is the user's ID).

In order to retrieve a timed backup file, use the Rename feature in List Files to rename the backup file, then retrieve it as you would any other file (see *List Files in Reference*).

See Also: Backup, Original; Save

Beep Options

Use the Beep Options feature if you want your computer to notify you with a “beep” when certain WordPerfect messages are displayed on the status line.

1 Press **Setup** (Shift-F1) to display the Setup menu.

 Select Setup from the File menu.

2 Select Environment (3), then select Beep Options (2).

3 Select an option (see the option headings under *Notes* below).

4 Press **y** to turn on the option.

or

Press **n** to turn off the option.

5 Repeat steps 3 and 4 above for any other options you want to change.

6 Press **Exit** (F7) to exit the Setup: Beep Options menu.

Notes**Beep on Error**

This option determines whether the computer will beep when an “ERROR: ...” message appears on the status line.

Beep on Hyphenation

This option determines whether the computer will beep when Hyphenation is on and the “Position Hyphen; Press ESC ...” message appears on the status line.

Beep on Search Failure

This option determines whether the computer will beep when the “*Not Found*” message appears on the status line after a search.

See Also: Hyphenation; Search; Appendix E: Error Messages.

Binding

If you are planning to bind your two-sided documents, you can use the Binding feature to shift text away from the bound edge. The text is shifted to the right on odd-numbered pages and to the left on even-numbered pages.

This feature is especially helpful with printers that print in duplex (see Double-Sided Printing under Paper Size/Type in Reference).

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Select **Binding Offset** (b), then enter the amount (in inches, points, etc.) you want the text shifted.

3 Press **Exit** (F7) to exit the menu.

Notes**Changing the Default**

If you want to change the default binding offset for all new documents, use the Print Options feature on the Setup: Initial Settings menu (Shift-F1,4,8,1) (see *Initial Settings* in Reference).

Documents previously saved with a different binding offset must be retrieved, have the binding changed, then be saved again.

Codes

A code for binding is *not* inserted into your document; however, the binding offset is saved with the document. This setting remains in effect for that document until you change it again. When you exit the current document, the Binding Offset setting on the Print menu returns to the default.

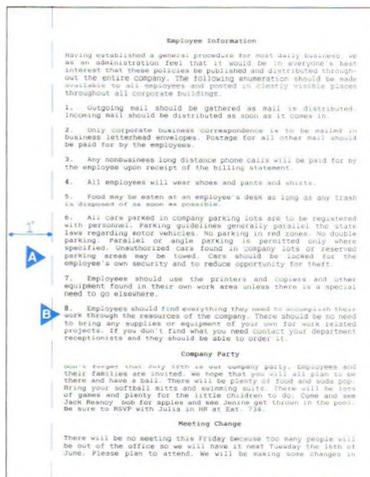
Labels

Binding width operates on logical pages rather than physical pages. Briefly, WordPerfect considers a sheet of labels one physical page, but each individual label as a logical page. (See *Physical Page vs. Logical Page* under *Labels* in *Reference* for a more extensive definition of physical and logical pages.) This means that binding width will affect odd labels differently than even labels on the same page.

Margin Settings

The binding offset shifts text on a page. On odd pages, the left margin is increased by the amount entered for the binding offset and the right margin is decreased by that same amount. On even pages the reverse is true. In other words, if your left and right margins are set to 1" and you want the text to start printing 1.5" from the left edge of the page, enter .5" as the binding offset. The right margin will then be only .5" wide.

-  LEFT MARGIN
-  BINDING OFFSET



If you want the margins to be even (not including the binding offset) on both odd and even pages, there is a formula you can follow. First, decide what you want your binding offset to be (e.g., .5"). Next, divide that number by 2 (e.g., .25"), then enter that number as the binding offset in step 2 above. Now you need to change the left and right margin settings. If you want 1" margins on both sides (not counting the binding offset), add the amount you entered for the binding offset to the left and right margin settings (e.g., enter 1.25" for left and right margins) (see *Margins, Left and Right* in *Reference*).

What this formula effectively does is increase the bound edge of the page to a 1.5" margin (allowing .5" for binding) and decrease the other edge of the page to a 1" margin, regardless of whether the page is odd or even.

One-Sided Documents

If you are creating a one-sided document, increase the left margin rather than using the Binding feature.

Resetting

If you want to change the binding offset back to zero, repeat steps 1 through 3 above, entering **0** as the binding offset.

Top Binding

You can add the binding offset to the top rather than the side of the page using the Binding Edge option (7) on the Format: Edit Paper Definition menu (Shift-F8,2,7,5) (see *Paper Size/Type* in *Reference*). If you select Top (1), the binding offset you enter in step 2 above will move the text up or down on the page rather than left or right.

See Also: Print, Document on Disk; Print, Document on Screen; Print Options; Printing—General Information

Block, Define

Block is used to highlight (usually in reverse video) any portion of the on-screen document file. You can then use the block of text with many other WordPerfect features (see *Associated Features* below).

To define a block,

- 1 Move the cursor to one edge of the text you want to block.
- 2 Press **Block** (Alt-F4) to turn on the Block feature.

 Select **Block** from the *Edit* menu to turn on Block (see *Mouse* below).

block, you are asked to confirm that you really want the block deleted. You can then type **y** to delete the block or **n** to cancel the command.

For more information on a specific feature, see that section in *Reference*.

Canceling Block

Block turns off after you perform a function. To cancel a block without performing a function, either press **Block** (Alt-F4) again or press **Cancel** (F1).

You can also cancel a block using the mouse (see *Mouse* below).

Codes

Since WordPerfect codes can be included in a block, you may want to press **Reveal Codes** (Alt-F3) before defining a block to be sure of the cursor's location in relation to existing codes. When Block is on, a Block code [Block] in the codes portion of the screen pinpoints the location where the block begins.

Cursor Movement

When Block is on, typing any character moves the cursor forward to the next occurrence of that character. If the character is not found within approximately 2000 characters, the cursor remains in place and a beep sounds.

Pressing **Enter** blocks the text from the cursor to the end of that paragraph (the next Hard Return code [HRt]).

While Block is on, you can block text in either a forward or reverse direction by using the arrow keys, or by using **♦Search** (F2) or **♦Search** (Shift-F2) to search for and highlight to the end of the search string (see *Search* in *Reference*).

Mouse:

To block text with the mouse, position the mouse pointer on one end of the text you want to block. Then press and hold down the left mouse button as you move the mouse pointer to the other end of the text you want to block. Finally, release the left mouse button. The text you blocked is highlighted.

Once you have blocked the text, you can use all of the features you normally use with a block (see *Associated Features* above).

Once a block is defined and you have released the left button, you can change the block size by pressing the arrow keys, or by using **♦Search** (F2) or **♦Search** (Shift-F2) to search for and highlight to the end of the next search string (see *Search* in *Reference*).

To cancel a block using the mouse, click the middle mouse button on a three-button mouse, or hold down either button on a two-button mouse, then click the other mouse button.

On-Screen Display

Normally, blocked text appears on the screen in reverse video. You can change the appearance of the block using Colors/Fonts/Attributes (Shift-F1,2,1) (see *Colors/Fonts/Attributes* in *Reference*).

Redefining a Block

You may sometimes want to perform more than one function on the same block of text. For example, you might want to underline, and then bold the same block. To redefine the block, press **Block** (Alt-F4), then press **Go To** (Ctrl-Home) twice.

Saving and Retrieving

Once a block has been defined, you can press **Save** (F10), then enter a filename to save the block to a permanent file, or press **Enter** to save the block as a temporary buffer.

If a block exists in the temporary buffer, pressing **Retrieve** (Shift-F10) then pressing **Enter** retrieves the block at the cursor. This temporary buffer is deleted when you exit WordPerfect, or when you save another block to the temporary buffer.

Short Cuts

On keyboards with an enhanced BIOS, you can also move a block of text by blocking the text, then pressing **Block Move** (Ctrl-Delete) to move the block, or **Block Copy** (Ctrl-Insert) to copy it. A prompt appears at the status line informing you that pressing **Enter** will retrieve the text you have just moved. You can then move the cursor to the place where you want the text, and press **Enter** to insert the text.

If you do not have a keyboard with an enhanced BIOS, you can re-assign or *map* the short-cut keystrokes to the keys of your choice. You can also map Block Append to a key on your keyboard (see *Keyboard Layout, Edit* in *Reference*).

See Also: Mouse Support; Move, Block

Block Protect

Block Protect is used to keep a block of text from being split between two pages.

When you are working with a document where the number of lines it contains is constantly increasing or decreasing, you can use Block Protect to keep a block of text (e.g., a table or chart) intact. You can add and delete text from the block itself or from the document. As long as the block is less than a page in length, it will remain together on the same page.

To protect a block,

- 1 Use **Block** (Alt-F4) to block the text you want protected. It must be less than a page in length.
- 2 Press **Format** (Shift-F8), then type **y** to confirm that you want to protect the block.

 *Select Protect Block from the Edit menu.*

The block is protected by codes (see *Codes* below). If part of the protected block has to be moved to the next page, the entire block will be moved to the next page.

Notes

Block Protect and Hard Returns

Two consecutive protected blocks must be separated by at least one Soft Return code [SRt] or Hard Return code [HRt] (see *Page, Soft and Hard* in *Reference*). Otherwise, the blocks are treated as one large block. Consequently, when you are protecting blocks of text, you can avoid problems by always defining blocks from character to character (e.g., the first word in a paragraph to the last word in a paragraph) and never including Hard Return codes.

Block Protect vs. Conditional End of Page

While Block Protect protects a block of text, Conditional End of Page protects a specific number of lines. When you want to keep a block of text together as you add or delete text from the block (such as a table), it is best to use Block Protect. However, if you want to keep certain lines together (such as a heading and the first two lines of a paragraph), it is best to use Conditional End of Page (see *Conditional End of Page* in *Reference*).

Codes:

Protecting a block places a Block Protect On code [Block Pro:On] at the beginning of the block and a Block Protect Off code [Block Pro:Off] at the end.

BLOCK PROTECT CODES

```
However, Steven obtained the contract without compromising our
corporate integrity. He presented the information in a clear and
concise manner, without going into the rudimentary details
concerning completion of the project.
```

```
The proposed locations for the facility are:
1425 Crowley Avenue, Twin Falls, ID
321 Knudsen Corner, Salt Lake City, UT
1665 Anne Street, Charlottesville, VA
```

```
A:\STEVEN.BLP                               Doc 1 Pg 1 Ln 2.33* Pos 1*
concerning completion of the project.[HRt]
[HRt]
[Block Pro:On]The proposed locations for the facility are:[HRt]
[-indent]1425 Crowley Avenue, Twin Falls, ID[HRt]
[-indent]321 Knudsen Corner, Salt Lake City, UT[HRt]
[-indent]1665 Anne Street, Charlottesville, VA[Block Pro:Off]
Press Reveal Codes to restore screen
```

Even if the Block Protect On code does not come at the beginning of the line, the entire line of text is protected.

You can cancel the block protection by deleting the codes. Deleting either code deletes the pair. If you delete a Block Protect code while in the normal editing screen, you will be asked to confirm the deletion.

Parallel Columns Without Block Protect

If you are using parallel columns without block protect (Alt-F7,1,3,1,2), you can only block protect one column when you are within the [Col On] and [Col Off] codes, regardless of how many columns are blocked. If you want to block the whole group of columns, you must be in front of the [Col On] code when you turn the block on.

See Also: Block; Conditional End of Page

C Cancel

Cancel may be the most commonly-used WordPerfect feature. Why? Because it is a way to get you out of places you don't want to be. It is also the key to press when you don't want to save the changes you have made.

Press **Cancel** (F1) to do any of the following:

- Back out of a WordPerfect menu or status line message without saving changes.
- Cancel a hyphenation request, forcing the word to wrap to the next line.
- Recover up to three levels of deleted text.
- Turn off Block.
- Cancel a search or macro in operation.

Notes

Backing Out of Menus and Options

You can back out of a menu by pressing **Cancel** (F1).

From some menus, you must press **Cancel** more than once to return to the normal editing screen.

If you want to save the changes you have made to a menu, the keystroke to press is **Exit** (F7) (see *Exit* in *Reference*). Pressing any letter or number that is not listed as a menu option will also back you out of a menu, saving any of the changes you have made.

Canceling with a Mouse

In a WordPerfect menu or when a prompt is displayed on the status line, clicking the middle mouse button on a three-button mouse or holding down either mouse button, and clicking the other mouse button on a two-button mouse performs the same function as pressing **Cancel** (F1).

Help Menus

Pressing **Cancel** (F1) does not back you out of the Help menus. Pressing **Enter** or the **Space Bar** does. Pressing **Cancel** in a Help menu displays the help screen for the Cancel feature.

Macros

While pressing **Cancel** (F1) cancels a macro in operation, it does not cancel a macro definition. To end a macro definition, press **Macro Define** (Ctrl-F10). Pressing **Cancel** in a macro definition simply inserts the Cancel keystroke into the definition (see *Macros* in *Reference*).

Pull-Down Menus

When you are using the pull-down menus, pressing **Cancel** (F1) or **Escape** (Esc) takes you back one level. Pressing **Exit** (F7), takes you all the way out of the menus. Clicking the center button on a three-button mouse takes you back one level. Holding down either mouse button, then clicking the other mouse button on a two-button mouse takes you back one level. Clicking the right button on a mouse takes you all the way out of the menus.

Recovering Text

When you press **Cancel** (F1) in the normal editing screen, a highlighted block appears in your document and a message appears on the status line asking if you want to restore that block.

The highlighted block contains the last text and/or codes you deleted from your document. It appears at the point on which the cursor is resting. If nothing appears in the block in the normal editing screen, you can press **Cancel** (F1), press **Reveal Codes** (Alt-F3), then press **Cancel** again to see the codes inserted into your document.

Select **Restore** (1) to restore the highlighted block, or continue selecting **Previous Deletion** (2) or pressing **Up Arrow** (↑) or **Down Arrow** (↓) to display up to your last three deletions. WordPerfect stores the three previous deletions in temporary files. These temporary files are erased when you exit WordPerfect. You can also use deleting and restoring text as a method of moving text in a document (see *Undelete* in *Reference*).

Reveal Codes

Pressing **Cancel** with the Reveal Codes screen displayed does not turn off Reveal Codes. You must press **Reveal Codes** (Alt-F3) (see *Reveal Codes* in *Reference*).

See Also: Exit; Mouse Support; Undelete

Capitalization

Capitalizing individual characters is as easy as typing the character while holding down the Shift key. However, using this method to capitalize a long string of characters can be tedious. You can also use the Caps Lock key to type uppercase letters.

- 1** Press **Caps Lock** to begin typing uppercase letters.
- 2** Type the text.
- 3** Press **Caps Lock** again to end typing uppercase letters.

Converting Existing Text

To convert existing text to all uppercase or lowercase letters,

- 1 Block the text.
- 2 Press **Switch** (Shift-F3).

 Select *Convert Case* from the *Edit* menu.

- 3 Select **Uppercase** (1) or **Lowercase** (2).

WordPerfect is case sensitive. This means that words that start with “I” followed by an apostrophe (I’m, I’d, etc.) and the first words of sentences remain capitalized when you select **Lowercase**. When you block text to be converted, include the punctuation from the end of the preceding sentence in the block to make sure that WordPerfect recognizes the first letter of a sentence. If there is no preceding punctuation, WordPerfect does not recognize the beginning of a sentence and therefore will not leave a capital letter there.

Shift and Caps Lock

Caps Lock affects only letters (A through Z). To type the characters displayed above the numbers at the top of the keyboard (e.g., @, #, \$, etc.), you still have to press **Shift**, then the number. When Caps Lock is on, pressing **Shift** causes letters to be typed lowercase.

Small Caps

If your printer has a small caps font, you can select it using the *Attributes* feature (see *Attributes* in *Reference*). All the text you type will then be printed in the small caps font with slightly larger letters for the letters you type in uppercase.

Status Line

When Caps Lock is on, “Pos” on the status line is displayed in all uppercase letters (i.e., POS).

See Also: *Attributes*; *Block*; *Switch*

Cartridges/Fonts/Print Wheels

Many printers let you access additional fonts with interchangeable print cartridges, print wheels, or downloadable font files. The *Cartridges/Fonts/Print Wheels* feature in WordPerfect lets you mark the cartridges, soft fonts, and print wheels you plan to use with your printer.

*If you have not purchased any soft fonts, cartridges, and/or additional print wheels for your printer, you do not need to go into the *Cartridges/Fonts/Print Wheels* menu at all.*

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Choose **Select Printer** (s), then move the cursor to the desired printer.

*You need to have already selected a printer for this feature to work (see **Printer**, **Select in Reference**).*

3 Select **Edit** (3), then select **Cartridges/Fonts/Print Wheels** (4) to display a list of font categories (built-in, cartridges, soft fonts, and/or print wheels) your printer supports.

*If you receive a "Printer files not found" message, WordPerfect cannot find the .ALL file that was used to define your printer. You need to specify the directory where the .ALL file was copied during installation (see the **Installation Instructions card**).*

4 Move the cursor to the type of font you want to mark (see *Font Category* below), then choose **Select** (1) to display a list of all fonts of that type that WordPerfect supports.

If you choose **Select** with the **Soft Fonts** category highlighted, a **Font Groups** screen might be displayed. If it is, move the cursor to the *group* containing the font you want to mark and choose **Select** (1). A list of fonts in that group is displayed.

5 Move the cursor to the cartridge, font, or print wheel you want to use with your printer, then mark it as **Present When Print Job Begins** (*) and/or **Can be Loaded/Unloaded During Job** (+) (see *Marking Cartridges/Fonts/Print* below).

 *Mark a cartridge, font, or print wheel in the **Select Printer: Cartridges/Fonts/Print Wheels** lists by double-clicking on the item. Items that can be marked with a plus sign (+) or an asterisk (*) are marked with a plus sign (+).*

Important: *Do not mark fonts you do not have. WordPerfect does not create fonts, nor does it provide them—it simply accesses the font capabilities of your printer.*

6 Press **Exit** (F7) to save the markings and return to the list of font categories.

*You may need to press **Exit** twice to return to the list of font categories, depending on whether or not a **Font Groups** screen was displayed.*

At this point you can select another font type and repeat steps 4 through 6 or press **Exit** to return to the **Select Printer: Edit** menu. WordPerfect updates the fonts before returning to this screen if you have made any changes in font selection.

Notes

Available

The **Available** column on the **Select Printer: Cartridges/Fonts/Print Wheels** screen shows you the quantity available for cartridges, fonts, and/or print wheels. This amount is decreased when you mark cartridges, soft fonts, or print wheels with an asterisk (*) (see *Marking Cartridges/Fonts/Print* below). This keeps you

from selecting more cartridges, soft fonts, or print wheels than your printer can accommodate.

If you change the total quantity (see *Quantity* below), the Available quantity is also changed by the same amount.

Cartridges

The Available column for cartridges shows how many slots are still available. For example, if you have two slots for cartridges, but have not yet marked any cartridges, the Available column will show "2." Each cartridge you mark with an asterisk (*) decreases this amount by 1.

Print Wheels

The Available column for print wheels gives the number of print wheels your printer still has available. Each print wheel you mark with an asterisk (*) decreases this amount by 1.

Soft Fonts

The Available column for soft fonts shows the amount of memory still available. This amount is decreased when you mark fonts with an asterisk (*).

Base Font

The fonts you mark using the above steps appear on all of the Base Font menus as long as they match the Font Type (which is set with the Paper Size/Type feature). In other words, if you have landscape fonts available, they will not appear on the Base Font menus until you select a landscape paper type (see *Paper Size/Type* in *Reference*). The printer's built-in fonts also appear on the Base Font menus if they match the Font Type (see *Font* in *Reference*).

Built-In

Built-In is one of the font categories on the Select Printer: Cartridges/Fonts/Print Wheels screen for dot matrix and laser printers (not for daisy wheel printers); however, no amount is listed under the Quantity or Available headings. WordPerfect marks all these fonts automatically to indicate they are currently in the printer. You can unmark these fonts (see *Marking Cartridges/Fonts/Print* below) if you do not want WordPerfect to access them.

WordPerfect makes the built-in fonts available (includes them on the Base Font menus) when you select a printer. Information about each printer's built-in fonts is copied to the .PRS file when you add a printer to the printer definition list (see *Printer, Select* in *Reference*).

Downloading Soft Fonts

Soft fonts are purchased as software (on diskettes) and must, therefore, be sent from your computer to your printer. This process is called "downloading" fonts. WordPerfect can download fonts in either of two ways. If you mark a soft font with an asterisk (*) (see *Marking Cartridges/Fonts/Print Wheels* below), you will have to initialize your printer (Shift-F7,7) every time you turn it on. This sends

all fonts marked with an asterisk to the printer. These fonts remain in the printer (even if you exit WordPerfect) until you turn off the printer (or until you unmark the font, then reinitialize the printer).

If you mark a font with a plus sign (+), WordPerfect will only download that font when it is needed for a print job, then deletes the font from the printer's memory once the print job is completed.

If you change your font selection (marking or unmarking fonts with asterisks and plus signs), you will need to reinitialize your printer to make sure the proper fonts are available. If you only mark fonts with a plus sign (no asterisks), you will not need to initialize your printer.

Important: *Marking fonts tells WordPerfect which fonts you have. You must tell WordPerfect where these fonts are by specifying a path using the Path for Downloadable Fonts and Printer Command Files option on the Select Printer: Edit menu (Shift-F7,s,3,6) (see Printer, Edit in Reference).*

Font Category

This heading on the Select Printer: Cartridges/Fonts/Print Wheels screen lists the different *types* of fonts available for your printer. The choices for this column might include: Built-In, Cartridges, Print Wheels, Slot Fonts, and Soft Fonts. If your printer only has its built-in fonts available, that is the only thing listed under this heading.

Font Groups

If you choose Select (1) with the Soft Fonts category highlighted in step 4 above, a Font Groups screen could be displayed (depending on your printer). You would then need to select the font group containing the fonts you want to mark. Once you mark fonts (see *Marking Cartridges/Fonts/Print Wheels* below), the font group containing the marked fonts is displayed with a bullet (•).

▲ FONT GROUP CONTAINING MARKED FONTS

```
Select Printer: Soft Fonts
Font Groups:
▶ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
▶ HP AD TmERen/Helv RB
• HP AE TmERen/Helv US
  HP AF TmERen/Helv RB
  HP AG Helv Headlines PC-8
```

1 Select: N Name search: 1

Marking Cartridges/Fonts/Print Wheels

After you choose **Select (1)** in step 4 above, WordPerfect displays a list of those cartridges, soft fonts, or print wheels (depending on which font category you select) that are available for your printer at the time your version of WordPerfect is released. (If you selected soft fonts, you may need to select a font group before the list is displayed.) The list includes each font, cartridge, or print wheel name and the quantity it represents.

 FONT NAME
 QUANTITY

Select Printer: Soft Fonts		Quantity	* Fonts
		Total:	350 K
		Available:	301 K
			32
			26

HP AC Tearm/Helv US	Quantity Used
(AC) Helv 8pt	8 K
(AC) Helv 8pt Bold	8 K
(AC) Helv 8pt Bold (Land)	8 K
(AC) Helv 8pt Italic	8 K
(AC) Helv 8pt Italic (Land)	8 K
(AC) Helv 8pt	9 K
(AC) Helv 8pt (Land)	9 K
(AC) Helv 8pt Bold	11 K
(AC) Helv 8pt Bold (Land)	11 K
(AC) Helv 8pt Italic	10 K
(AC) Helv 8pt Italic (Land)	10 K
(AC) Helv 10pt	13 K
(AC) Helv 10pt (Land)	13 K
(AC) Helv 10pt Bold	13 K
(AC) Helv 10pt Bold (Land)	13 K

Mark: * Present when print job begins Press Exit to save
 + Can be loaded/unloaded during job Press Cancel to cancel

In the upper right corner of the screen, WordPerfect displays the total quantity of that type of font that your printer can support, along with the quantity still available. In addition, if you are marking soft fonts, the number of fonts your printer allows you to mark with an asterisk (*) at one time may be displayed.

For example, if you are marking soft fonts and your printer has 350K of memory, the Available Quantity and the Total Quantity start at 350. As you mark soft fonts with an asterisk (*), the Available Quantity is decreased by the amount of memory needed by those soft fonts, while the Available number of fonts is decreased by one for every font marked.

Depending on the printer, there may be a limit to the *number* of soft fonts you can mark with an asterisk, regardless of the memory available. (This limit is displayed in the Select Printer: Soft Fonts screen to let you know when you are approaching the limit.) For example, if your printer lets you mark 32 fonts (displayed under “* Fonts” in the upper right corner of the Select Printer: Soft Fonts screen) and you mark 32 fonts, you cannot mark another font with either an asterisk (*) or a plus sign (+), even if you have memory available.

Mark the soft font(s) or print wheel(s) you have available for your printer with one or both of two possible settings: Present When Print Job Begins (*) or Can be Loaded/Unloaded During Job (+). Cartridges can only be marked with an asterisk.

You can mark soft fonts until the maximum quantity (in memory or number of fonts) is reached. WordPerfect counts all fonts you mark with an asterisk (*) when calculating the available quantity.

Can be Loaded/Unloaded During Print Job

Mark a print wheel with a plus sign (+) if you want to be prompted to change the print wheel. Mark a soft font this way if you want WordPerfect to load and unload the soft font during a print job. Because fonts marked with a plus sign are downloaded only when needed, marking a font or print wheel with this option does not decrease the available quantity; however, be aware that you cannot mark a font with a plus sign (+) if that font is larger than the remaining available quantity or if the “* Fonts” amount displays 0. For example, if you have 350K of memory and have marked 300K of fonts with an asterisk, you cannot mark any single font that is larger than 50K with a plus sign. (You cannot mark it because WordPerfect would not be able to load that font during a print job.)

If you have marked a print wheel with a plus sign and selected that font in your document, the printer stops and your computer beeps to signal a print wheel change. When this happens, display the Printer Control screen (Shift-F7,4), follow the displayed instructions (shown next to “Action:”), then select Go (4) to continue the print job.

If you have one print wheel you use more than any other, mark that print wheel with an asterisk () (see Present When Print Job Begins below). Otherwise, you will be prompted to insert it every time you print with that print wheel.*

Some printers can load and unload soft fonts during a print job. Others can only load fonts during a print job and unload them after the job is finished. And still others will not let you load and unload fonts at all during a print job. If the fonts can be loaded and unloaded, the “+ Can be Loaded/Unloaded During Job” message appears at the bottom of the screen. If this message does not appear, WordPerfect will not let you mark any fonts with a plus sign. In this case, the fonts you intend to use during a print job must be present when the print job begins (marked with an asterisk).

Marking with Both Settings

Fonts on some printers can be marked with both an asterisk (*) and a plus sign (+). If a font is marked with both settings, it is considered “swappable” and WordPerfect will unload it if the space is needed in the printer’s memory to swap in another font. Swappable fonts (those marked with an asterisk and a plus sign) are reloaded at the end of the print job if they were swapped out during the print job.

Any fonts marked with both settings remain marked as initially present each time WordPerfect is started.

Present When Print Job Begins

Mark a cartridge, soft font, or print wheel with an asterisk (*) if the cartridge is in a slot, the soft font is in the printer memory, or the print wheel is already installed when you start a print job. Marking a cartridge, soft font, or print wheel with this option decreases the available quantity.

You must select the Initialize Printer option on the Print menu (Shift-F7,7) every time you turn on your printer to download soft fonts marked with this option (see *Downloading Soft Fonts* above).

Quantity

Quantity refers to the number of slots available for cartridges, the amount of printer memory available for soft fonts, or the number of print wheels available. The quantity number is preset to original printer specifications. If you have added more memory to your printer, you can change the quantity number by selecting Change Quantity (2) from the Select Printer: Cartridges/Fonts/Print Wheels menu, then entering the new quantity. The largest number you can enter for the quantity is 65535.

***Important:** Increasing the quantity of memory available for soft fonts will work properly only if you have physically installed more memory in your printer. If you increase the quantity number and mark more fonts than can be downloaded to your printer's memory, documents will not print properly when using the font(s) that are not completely downloaded.*

Soft Font Programs

Some third-party soft font programs have installation programs that can add names of fonts and information about those fonts to your printer files. If you have used such a program, the names of those fonts will appear on the Select Printer: Soft Fonts screen when you are marking fonts.

Unmarking Cartridges/Fonts/Print Wheels

To unmark a cartridge, font, or print wheel, type an asterisk (*) if the item is marked with an asterisk, or type a plus sign (+) if the item is marked with a plus sign. You can unmark all items marked with a plus sign by pressing **Home,+**. You can unmark all items marked with an asterisk by pressing **Home,***.

See Also: Font; Printer, Edit; Printer, Select

Center Page

To center text vertically (between the top and bottom margins) on just one page, use the Center Page feature.

The following letter is centered vertically on the page.



- 1 Press **Go To** (Ctrl-Home), then press **Up Arrow** (↑) to move the cursor to the top of the page you want to center, before any codes (see *Codes* below).
- 2 Press **Format** (Shift-F8), then select **Page (2)** to display the Page Format menu.
-  Select **Page from the Layout menu**.
- 3 Select **Center Page (top to bottom) (1)**, then type **y** to turn on this option.
- 4 Press **Exit** (F7) to exit the Page Format menu and return to the document.

Notes

Center Lines of Text

To center individual lines of text between the left and right margins, use **Center** (Shift-F6) (see *Center Text* in *Reference*). To center several lines of text, use **Center Justification** (Shift-F8,1,3,2) (see *Justification* in *Reference*).

Codes

Selecting **Center Page** (1) inserts a **Center Page** code [Center Pg] at the location of the cursor.

Usually, the **Center Page** code should precede any codes on a page. The two exceptions are the **Paper Size/Type** code [Paper Sz/Typ] and **Top/Bottom Margin** code [T/B Mar]. When these codes are used, they should always precede the **Center Page** code. The order of the codes should be [Paper Sz/Typ][T/B Mar][Center Pg].

For a block of text to be correctly centered on a page, it cannot have any extra **Hard Return** codes [HRt] before or after it. Consequently, when you need to

force a page break at the end of a block of text that you want to center on a page, you should press **Hard Page** (Ctrl-Enter) rather than continuously pressing **Enter** to insert a series of extra Hard Return codes. The extra hard returns would just keep the text from being centered correctly.

Footnotes and Endnotes

You should not center a page that contains endnotes. When centering text on a page that contains footnotes, only the text is centered. The footnote remains at the bottom of the page.

On-Screen Page

Center Page affects only the way the page is printed or displayed in View Document (Shift-F7,6). It does not change the way text is displayed on the normal editing screen.

Uncentering a Page

Once you have turned on the Center Page option, you can turn it off for that page simply by deleting the Center Page code.

You can also uncenter a page by setting the Center Page entry to No (Shift-F8,2.1,n). WordPerfect will then find and delete the Center Page code on the page where the cursor is located.

See Also: Block; Center Text; Justification

Center Text

Use Center to center text between the left and right margins or over a particular point in a line.

The page displayed below shows a title centered between the left and right margins as well as several titles centered over columns of text.

Welcome New Employees		
TAKE NOTE	Employee Parking	resources of the company. There should be no need to bring any supplies or equipment of your own for work related projects. If you don't find what you need contact your department receptionist and they should be able to order it.
Outgoing Mail	All cars parked in company parking lots are to be registered with personnel. Parking guidelines generally parallel the state laws regarding motor vehicles. See parking in red zones. No double parking. Parallel or angle parking is permitted only where specified. Unauthorized cars found in company lots or reserved parking areas may be towed. Cars should be locked for the employee's own security and to reduce opportunity for theft.	
Long Distance Calls		Important Dates
Only corporate business correspondence is to be mailed in business letterhead envelopes. Postage for all other mail should be paid for by the employees.		7/3 Managers Conf. 7/8 New Emp. Mtg. 7/12 Company Party 7/23 End-user Conf. 8/17 Acc. Training 8/23 Summer Social
		Company Party
		Don't forget that July 12th is our
Dress Standard		
Any nonbusiness long distance phone calls will be paid for by the employee upon receipt of the billing statement.		
All employees will wear shoes and		

When you type new text, you can center a line of text between the left and right margins.

- 1 Move the cursor to the left margin.
- 2 Press **Center** (Shift-F6) to move the cursor to the center of the line.
- 3  Select **Align** from the **Layout** menu, then select **Center**.
- 3 Type the text you want centered.
- 4 Press **Enter** to end centering.

or

Press **Format** (Shift-F8), select **Other** (4), then select **End Centering/Alignment** (9) to end centering.

Notes

Center Code

Pressing **Center** (Shift-F6) inserts a Center code [Center] into your document. Pressing **Enter** inserts a Hard Return code [HRt] and ends the centering. Selecting **End Centering/Alignment** (9) from the **Format: Other** menu inserts an End Centering/Alignment code [End C/A] and allows the cursor to remain on the same line when centering ends.

A Center code affects only the line of text which it is on. Consequently, if you insert a Center code at the beginning of a line and type text that extends beyond that line, only the first line of that text will be centered. The code will not affect subsequent lines of text.

A Center code takes precedence over other text. Consequently, if you are in the middle of a line of text when you press **Center** (Shift-F6), or if the text you are typing runs into a Center code, on-screen text may seem to disappear. When this happens, use Reveal Codes (Alt-F3) to view and delete the unwanted text or code.

Centering at a Specific Position

You do not always have to center text between margins. In fact, if the cursor is not at the left margin, and if it is preceded by a Tab code, or at least two spaces, pressing **Center** (Shift-F6), then typing text centers that text over the cursor position.

For example, to center text over a tab stop at position 5", tab to that position, press **Center** (Shift-F6), then type the text. You can perform this type of operation more than once on a line as long as the text is preceded by a tab, or at least two spaces. However, when you center text at a line position, you should be aware that it may overlap any preceding text, both on-screen and when the document is printed.

Centering Existing Text

You can center an existing line of text by moving the cursor to the beginning of the line of text, and then pressing **Center** (Shift-F6).

This method will not work if the cursor is not at the beginning of the line when you press **Center**. When the cursor is anywhere other than at the beginning of the line or just two spaces in from the beginning of a line, pressing **Center** centers the text which is to the right of the cursor at the cursor position. This can cause overlapping text.

Dot Leader

When centering text between margins, you can insert a dot leader from the left margin to the beginning of the centered text by pressing **Center** (Shift-F6) twice.

To continue the dot leader to the right of centered text, press **Flush Right** (Alt-F6) twice.

You can also insert a dot leader using the Home keystrokes (see *Hard Center Tab* below).

Hard Center Tab

A Hard Tab is a tab that does not change its alignment (e.g., left, right, center, or decimal), even if you change the setting with the Tab Set feature (see *Tab in Reference*). You can insert a Hard Center Tab over the next tab stop by pressing Home,Center (Shift-F6). WordPerfect inserts a [CENTER] code in the document. To insert a Hard Center Tab with dot leaders, press **Home,Home,Center**.

Pages of Text

You can use Center Page to center an entire page of text vertically (see *Center Page in Reference*).

Removing Centering

Remove centering by deleting the Center code [Center]. Since the centered text is visible on-screen, you are not asked to confirm the deletion of a Center code.

Text in Columns

If you are centering text in columns created with the Columns feature, move to the left margin of the column, then follow the centering steps given at the beginning of this section.

If you are centering text in columns created with tabs or indents, use the method for centering text at a specific line position described under *Centering at a Specific Position* above.

See Also: Block; Center Page; Justification

Colors/Fonts/Attributes

WordPerfect supports several display cards and monitors. Depending on the capabilities of your display card and monitor, WordPerfect can display text with and without attributes (e.g., bold, underline, italics) in a variety of ways.

For example, WordPerfect may be able to highlight bolded characters on the screen. It may also be able to assign a color to underlined text.

The Colors/Fonts/Attributes feature determines what text with and without attributes will look like on the screen. Tailored to your display card and monitor's capabilities, it offers you options for changing text display.

The information about your graphics card is found under the Graphics Screen Type and Text Screen Type options. For more information, see Graphics Screen Type and Text Screen Type in Reference.

As you use this feature, you must remember that this only affects the way text is displayed on your monitor screen. It does *not* affect the way text will be printed. For information on printed text, see *Font in Reference*.

1 Press **Setup** (Shift-F1) to display the Setup menu.

 Select **Setup** from the **File** menu.

2 Select **Display** (2), then select **Colors/Fonts/Attributes** (1).

The screen that appears at this point varies according to your display card and monitor. If you have a monochrome monitor (with no Hercules card), skip to step 4.

- 3 Select Screen Attributes (or Screen Colors) (1).
- 4 Assign a screen color or screen font to each attribute listed (see *Assigning Fonts and Colors* below).
- 5 Press **Exit** (F7) until you return to the normal editing screen.

These settings are in effect for the current editing screen only (see the “Doc” heading on the status line). If you want to set them for the other editing screen, see *Document 1 and Document 2* below.

All settings you make with this feature are stored in the WP{WP}.SET file and are in effect each time you start WordPerfect.

Notes

Assigning Fonts and Colors

When you assign fonts and colors to the WordPerfect attributes with the Colors/Fonts/Attributes feature, you are assigning screen fonts and screen colors. The options you have to choose from vary according to your display card and monitor. The way text appears on the screen is independent of the way it is printed.

As you begin to assign screen fonts and screen colors to WordPerfect attributes, you will notice that the left-most column of the Setup: Colors/Fonts/Attributes menu is a list of the size and appearance attributes found on the Font key, plus a few others. The right-most column is a sample column that will show you the result of your selections.

Between the left and right columns are columns which you use to assign screen fonts or screen colors to the listed attributes. The number and types of these columns vary according to your display card and monitor’s capabilities. The screen shown below is the Setup: Colors/Fonts/Attributes menu for a monochrome monitor.

```

Setup: Attributes
Attribute      Blink  Bold  Blocked  Underline  Normal  Sample
Normal         N     N     N         N         Y     Sample
Blocked       N     N     Y         N         N     Sample
Underline     N     N     N         Y         N     Sample
Strikeout     N     N     N         N         Y     Sample
Bold          N     Y     N         N         Y     Sample
Double Underline N     N     N         N         Y     Sample
Redline       N     N     N         N         Y     Sample
Shadow        N     N     N         N         Y     Sample
Italics       N     N     N         N         Y     Sample
Small Caps    N     N     N         N         Y     Sample
Outline       N     N     N         N         Y     Sample
Subscript     N     N     N         N         Y     Sample
Superscript   N     N     N         N         Y     Sample
Fine Print    N     N     N         N         Y     Sample
Small Print   N     N     N         N         Y     Sample
Large Print   N     N     N         N         Y     Sample
Very Large Print N     N     N         N         Y     Sample
Extra Large Print N     N     N         N         Y     Sample
Bold & Underline N     Y     N         Y         N     Sample
Other Combinations N     N     N         N         Y     Sample

```

Switch documents: Move to copy settings Doc 1

Move your cursor to the row representing the attribute appearance you want to change, then change the settings by pressing a letter or number. Again, the options you have to choose from vary according to your display card and monitor's capabilities.

For example, if you want to change the Redline attribute to blinking, bolded text in the screen above, use the Up or Down Arrows (↑,↓) to move to the Redline line, then type **y** under the Blink column and **y** under the Bold column. The Left and Right Arrows (←,→) move you from column to column.

There may be some attributes on the list that you cannot change because the setting for one attribute controls the settings for a group of related attributes. The cursor will skip over these attributes.

If you ever have a question as to how text with a particular attribute will appear on the screen look at the sample column for that attribute.

More information on the various display card and monitor types can be found under *Monochrome, CGA/PC3270/MCGA, EGA/VGA, and Hercules Cards* below.

Attribute Combinations

Text can have more than one attribute at a time. For example, text can be both bolded and italicized.

The Setup: Colors/Fonts/Attributes screen does not list all possible combinations. It does, however, list an Other Combinations heading. Most attribute combinations will be displayed according to the Other Combinations setting.

However, with color settings, certain attributes are provided by the hardware. These are attributes such as Bold and Underline on a monochrome monitor, Strikeout on a Hercules Card with RamFont, or Italics on an EGA card with the italics font loaded. WordPerfect can always display such hardware attributes regardless of any other attributes that might be active. Also, such hardware attributes are removed from the list of active attributes when WordPerfect is considering what screen attributes will appear.

For example, suppose you have an EGA monitor with an italics font loaded and the Italics and Small Caps attributes are on. WordPerfect will detect that Italics is a hardware attribute and use the italic font. The remaining active attribute is Small Caps. WordPerfect will now look in the list of colors and attributes specified by the user to find out which color to use for Small Caps. The final result: text with the combination of Italics and Small Caps attributes will display as italicized characters in the Small Caps color.

However, if the active attributes had been Small Caps and Outline, WordPerfect would have detected that neither attribute is a hardware attribute. In this case, WordPerfect would use only the color specified for Other Combinations.

CGA/PC3270/MCGA

If you are using one of these types of display cards or monitors, you are given two options after you select Colors/Fonts/Attributes. You can select an option by pressing the number corresponding to the option.

If you select **Fast Text Display (2)**, you can have WordPerfect speed up text display. If you type **y** for Yes, there is a chance that "snow," or static, may appear on the screen as WordPerfect writes to the screen. If this is the case, you can type **n** to disable this option. If the setting for this option is N/A, the setting cannot be changed.

If you select **Screen Colors (1)**, you can select a foreground and background color for each attribute in the menu. To assign a color, move the cursor to the Foreground or Background column for the attribute you want to change, then type the letter of a color listed at the top of the screen. If you see a letter that appears to represent no color, it simply means that letter represents the current background color.

Document 1 and Document 2

When you set attributes, you are setting them for the current editing screen only. In other words, if you are in the Document 1 screen, you are setting them for Document 1. If you are in the Document 2 screen, you are setting them for Document 2. Check the "Doc" heading on the status line to find out which editing screen you are in.

If you want to simply copy the settings from one editing screen to the other, press **Switch** (Shift-F3) to switch editing screens. Next, go to the Setup: Colors/Fonts/Attributes screen by following the steps at the beginning of this reference section, press **Move** (Ctrl-F4), then type **y**.

For example, if you want to copy the settings from the Document 1 screen to the Document 2 screen, press **Switch** (Shift-F3) while in the Document 1 screen to switch to the normal editing screen of Document 2. Next, go to the Setup: Colors/Fonts/Attributes screen for Document 2 by following the steps at the beginning of this reference section, pressing **Move** (Ctrl-F4), typing **y**.

EGA/VGA

If you are using an EGA or VGA display card or monitor, you can choose from five screen font options after selecting Colors/Fonts/Attributes. You can select an option by pressing the number corresponding to the option. An asterisk (*) is displayed next to the option that is currently selected.

If you are presented with only two options, you do not have enough memory on your EGA/VGA card to use screen font capabilities, or you may have your EGA/VGA card and monitor set for an extended text mode (see Text Screen Type in Reference). If this is the case, follow the procedure for CGA display cards and monitors (see CGA/PC3270/MCGA above).

If you select Normal Font Only (6), the procedure for assigning attributes becomes like the procedure for CGA cards and monitors (see *CGA/PC3270/MCGA* above).

The four other screen font options take advantage of the EGA/VGA's ability to utilize one additional screen font in foreground appearance. As you should be able to tell by the menu, this screen font can be italics, underline, or small caps. Or, it can also be a "font" that increases the number of displayable characters from 256 to 512. You can only select one of these screen fonts, but if you do, you will be limited to eight foreground colors.

If the asterisk does not move to the screen font when you try to select it, make sure that all files ending in .FRS are installed in the directory that contains WP.EXE. These files are installed with the Graphics files (see the *Installation Instructions* card).

After you select the screen font option of your choice, select Screen Colors (1). To assign an appearance to an attribute, move to the Foreground or Background column for the attribute you want to change, then type the letter of a color listed at the top of the screen. If you see a letter that appears to represent no color, it simply means that letter represents the current background color.

To assign the screen font you selected to an attribute, move to the Font column, then type y. Type n to turn off the screen font.

Hercules Cards

If you have a Hercules Graphics Card Plus with RamFont or a Hercules InColor Card with RamFont, you are given three screen font options after selecting Colors/Fonts/Attributes. You can select an option by pressing the number corresponding to the option. An asterisk (*) is displayed next to the option that is currently selected.

```
Setup: Fonts/Attributes
  1 - Screen Attributes
  2 - 12 Fonts, 256 Characters
  3 - 6 Fonts, 512 Characters
  *4 - Normal Font Only
```

```
Selection: 0
```

If only two options appear, you may have your card and monitor set for an extended text mode (see Text Screen Type in Reference).

If you select Normal Font Only (4) then select Screen Attributes (1), the procedure becomes like that of a monochrome monitor (see *Monochrome* below).

If you select 12 Fonts, 256 Characters (2) or 6 Fonts, 512 Characters (3), you can use 12 or 6 of the Hercules screen fonts. Depending on your selection, you can also display 256 or 512 different characters on the screen.

If you select option 2 or 3, you must have *HRF12.FRS* or *HRF6.FRS* (respectively) in the directory that contains *WP.EXE*. These files are installed with the Graphics files (see the Installation Instructions card).

After you select one of the options, then select Screen Attributes (or Screen Colors) (1), you are placed in the Setup: Colors/Fonts/Attributes screen. If you selected the 12 or 6 font options, you will notice that a column titled "Font" is displayed on the screen.

Setup: Fonts/Attributes						
Attribute	Font	Reverse	Bold	Underline	Strikeout	Sample
Normal	1	N	N	N	N	Sample
Blocked	1	Y	N	N	N	Sample
Underline	1	N	N	Y	N	Sample
Strikeout	1	N	N	N	Y	Sample
Bold	1	N	Y	N	N	Sample
Double Underline	2	N	N	N	N	Sample
Redline	1	Y	N	N	N	Sample
Shadow	5	N	N	N	N	Sample
Italics	3	N	N	N	N	Sample
Small Caps	4	N	N	N	N	Sample
Outline	5	N	N	N	N	Sample
Subscript	6	N	N	N	N	Sample
Superscript	7	N	N	N	N	Sample
Fine Print	8	N	N	N	N	Sample
Small Print	9	N	N	N	N	Sample
Large Print	A	N	N	N	N	Sample
Very Large Print	B	N	N	N	N	Sample
Extra Large Print	C	N	N	N	N	Sample
Bold & Underline	1	N	Y	Y	N	Sample
Other Combinations	1	N	N	N	N	Sample

Switch Documents: Move to Copy settings Doc 1

For 12 fonts, the numbers 1 through 9 and the letters A through C represent the various screen fonts. For 6 fonts, the numbers 1 through 6 represent the screen fonts. Move to the Font column for the attribute whose setting you want to change, then press the number or letter corresponding to your choice. You can cycle through the screen fonts by pressing **Screen Up/Down** (+ or - on the number pad) or the **Space Bar**.

The other columns are simply toggled with **y** for Yes and **n** for No.

Monochrome

If you have a monochrome monitor (no Hercules card), you are placed immediately in the Setup: Attributes screen after selecting Colors/Fonts/Attributes. Five monitor capabilities are listed at the top of this screen.

Move the cursor to the row representing the attribute you want to change, then move from column to column, typing **y** to turn on the capability or typing **n** to turn off the capability.

See Also: Display Setup; Graphics Screen Type; Text Screen Type

Columns, Display

Displaying columns on the screen side-by-side can slow the speed with which WordPerfect reformats text as you edit a document.

You can speed up display of columns by turning off Side-by-side Column Display. Then, rather than appearing on the screen side-by-side, columns are separated by page breaks, as in the following example.

```
deek as long as any
trash is disposed
of as soon as
possible.

Employee Parking

All cars parked in
company parking
lots are to be
registered with
-----
personnel. Parking
guidelines
generally parallel
the state laws
vehicles. No
parking in red
zones. No double
parking. Parallel
or angle parking is
permitted only

Col 1 Doc 1 Pg 1 Ln 9.76" Pos 2.5"
```

- 1 Press **Setup** (Shift-F1), then select **Display** (2).
- 2 Select **Edit-Screen Options** (6).
- 3 Select **Side-by-side Column Display** (7), then type **n** to turn off this option.
- 4 Press **Exit** (F7) to return to your document.

Notes

Automatic Reformatting

When Side-by-side Column Display is off, WordPerfect reformats columnar text with the same speed it uses to reformat any text. You can also increase the speed of editing in columns by turning off Automatic Reformatting. Normally, text reformats each time certain keys are pressed. When this feature is turned off, the screen is only reformatted as you move the cursor down through text, and not each time you press certain keys. To turn this option off, repeat steps 1

and 2 above, select **Automatically Format and Rewrite (1)**, then type **n**. Press **Exit (F7)** to return to your document.

Cursor Movement

Even when columns are not being displayed side-by-side on the screen you can use essentially the same cursor movements to move the cursor through each column and from column to column (see *Moving from Column to Column* under *Columns, Parallel* and *Columns, Newspaper* in *Reference*).

However, there is one change. When columns are not displayed side-by-side on the screen. **Up Arrow (↑)** and **Down Arrow (↓)** move from column to column each time the cursor crosses a page break, rather than always remaining in the same column.

Printing

Regardless of the type of on-screen display you select, newspaper and parallel columns are always printed side-by-side on a page. You can see how they will appear in print by using **View Document (Shift-F7,6)**.

See Also: Columns, Newspaper; Columns, Parallel

Columns, Newspaper

Newspaper-style columns let text flow continuously from column to column on a page, as it does in a newspaper article. WordPerfect users often use newspaper-style columns to create newsletters like the one shown below.

Welcome New Employees		
TAKE NOTE	Employee Parking	resources of the company. There should be no need to "take any equipment of your own for work related projects. If you don't find what you need contact your department representative and they should be able to order it.
Outgoing Mail	All cars parked in company parking lots are to be reserved - visit personnel. Parking guidelines - generally parallel the state laws regarding motor vehicles. No parking in red zones. No double parking. Parallel of engine parking is permitted only where specified. Unauthorized cars found in company lots or reserved - parking areas may be towed. Cars should be locked for the employee's own security and to reduce opportunity for theft.	Important Dates 7/3 Managers Conf. 7/8 New Emp. Trn. 7/22 Company Party 7/23 End-user Conf. 8/27 Adv. Training 8/28 Summer Social
Only corporate business correspondence is to be mailed in Business letterhead envelopes. Postage for all other mail should be paid for by the employee.	Long Distance Calls	Company Party
Any nonbusiness long distance phone calls will be paid for by the employee upon receipt of the billing statement.	Dress Standard	Don't forget that this is our company party. All employees and their families are invited. We hope that you will all have a ball. There will be drinks, food and soda pop. Bring your softball mitts and swimming suits. There will be lots of games and prizes for the little children to do. Come and see how we are doing for apples and see behind our curtain in the good, or bad, or
Food in the Work Area	Department Facilities	
Food may be eaten at an employee desk as long as any trash is disposed of. Employees are responsible and personal cleanliness in the work area is a necessity.	Employees should use the printers and copiers and other equipment found in their own work area unless there is a special need to go elsewhere.	
	Supplies	
	Employees should find everything they need to accomplish their work through the	

If you know the margins you want and the number of equal-sized columns you want on a page, WordPerfect will do all the work of calculating the actual widths and spacing of the columns for you. It will then place the text you type into columns. You can also use Columns to have WordPerfect put existing text into columns.

To define and create newspaper columns,

- 1 Move the cursor to where you want the columns to begin.
- 2 Press **Columns/Table** (Alt-F7), then select **Columns (1)**.
 *Select Columns from the Layout menu.*
- 3 Select **Define (3)** to display the Text Column Definition menu.
- 4 Enter the number, and margins of the columns you want (see *Number* and *Margins* below), then press **Enter** or **Exit** (F7) to return to your document with the Columns menu displayed on the status line.
- 5 Select **On (1)** to turn on the Columns feature (see *Turning Columns On and Off* below).
- 6 Type the text you want in the columns, if necessary. Press **Hard Page** (Ctrl-Enter) if you want to end a column and start a new one before reaching the bottom of a page (see *Text Flow in Newspaper Columns* below).
- 7 Press **Columns/Table** (Alt-F7), select **Columns (1)**, then select **Off (2)** to turn off the Columns feature.

 *Select Columns from the Layout menu, then select Off.*

Notes

Defining Columns

Whenever you want columns in a document, you need to use the Columns/Definition feature to specify the number and margins of the columns you want. This is called defining columns (steps 1 through 3 above). When you define columns, a Column Definition code [Col Def:*column type*;
columns;*margins*] is inserted into your document. *Column type* is the type of columns defined (i.e., Newspaper, Parallel, or Parallel with block protect). *#columns* is the number of columns. *Margins* indicates the left and right margins for each column. That definition is in effect until another column definition is inserted.

Once you have defined columns, you can then turn on Columns. If you try to turn on Columns before columns have been defined, an error message is displayed. Whenever Columns are turned on, a "Col #*n*" indicator is displayed before the document number at the status line, where *n* is the number of the column where the cursor is currently found. It is not necessary to turn off columns unless you want to end the columns.

You can have several different column definitions in one document. This enables you to have standard text along with several different combinations of multiple columns in one document. However, you cannot enter a new column

definition while Columns are on. You need to turn off Columns, create the new column definition, and turn on Columns again.

Distance Between Columns

Unless you enter a distance between columns, WordPerfect calculates the distance for you, at approximately one-half inch. To set your own distance, select **Distance Between Columns (3)** from the text Column Definition menu, then enter a new measurement.

Changing the left and right margin settings of columns can also affect the distance between columns.

Editing in Newspaper Columns

The cursor keys that move up and down scroll all columns at the same time. These cursor keys include the Up Arrow (↑), Down Arrow (↓), Home,Up Arrow, Home,Down Arrow, Page Up (PgUp), and Page Down (PgDn). The cursor keys that move left and right, for example, Left Arrow (←) and Right Arrow (→), Home,Left Arrow and Home,Right Arrow, move within a column.

The delete keys work inside a single column. For example, if you use Delete to End of Page (Ctrl-PgDn) only the text from the cursor to the bottom of the current column is deleted.

You can use Move (Ctrl-F4) within a single column to cut or copy a sentence. However, you need to use Block (Alt-F4) with Move to move an entire column of text. Block a column, press **Move** (Ctrl-F4), select **Block (1)**, then select a move option. When using move with Newspaper columns, do not select Tabular Column (2) since this option does not let you retrieve the moved text correctly.

Features

You can create columns while using several WordPerfect features, including graphics text boxes and headers. You cannot include columns in footnotes, endnotes, or tables, however.

If you want to include a table in a column, create the table in a graphics box (see Table, Create in Reference).

Margins

Once you select the number of columns, WordPerfect calculates the settings for equal columns according to your current margin setting. These settings are displayed in the text Column Definition menu under Margins. If you do not want equal columns, or you need to change the displayed column sizes, select **Margins (4)** on the Text Column Definition menu. Enter a new measurement for each setting, or press **Enter** to skip over a displayed setting.

Remember, however, that changing the margins for your columns does not change the left and right margin settings of your document. A good rule of thumb is to always make the left margin of the first column correspond to your current left margin setting for the page, and the right margin of the last column

correspond to your current right margin setting for the page. When you try to place graphic images in columns, problems can occur if these settings do not correspond.

Moving from Column to Column

Once you have typed text in columns, you can move the cursor from column to column by pressing **Go To** (Ctrl-Home), then pressing **Right Arrow** (→) to move one column to the right, or **Left Arrow** (←) to move one column to the left. Press **Go To** (Ctrl-Home), **Home**, **Left** or **Right Arrow** to move to the first or last column on a page. Pressing **Go To**, then pressing **Up Arrow** (↑) or **Down Arrow** (↓) moves the cursor to the top or bottom of the current column.

You can also move the cursor to a column by pointing to the correct column with the mouse pointer and clicking the left mouse button.

Using the arrow keys on keyboards with an enhanced BIOS, you can press **Alt-Left Arrow** (⇐) and **Alt-Right Arrow** (⇒) to move from column to column. If you do not have a keyboard with an enhanced BIOS, you can map those functions to other keys of your choice using Keyboard Layout (see *Keyboard Layout, Edit in Reference*).

Newspaper vs. Parallel Columns

In the default setting, WordPerfect creates newspaper-style columns. You can also create parallel columns in which blocks of text are held together side-by-side on a page, but text cannot flow from column to column (see *Columns, Parallel and Table, Format Columns and Cells in Reference*).

Number

In the default setting, WordPerfect creates two columns to a page according to the existing margins in your document. To change the number of columns on the Text Column Definition menu, select Number of Columns (2), then enter the number of columns you want across a page (up to 24 are possible). If you have already entered a column definition, you can change the number of newspaper columns by placing the cursor immediately after the previous Column Definition code [Col Def:column type;#columns;margins] and redefining the columns. The columns will adjust automatically. You can then delete the previous Column Definition code.

Removing Columns

If you create columns and then decide that you do not want them, you can return your text to normal format by deleting the Column Definition code [Col Def:column type;#columns;margins]. This can either be done in Reveal Codes (Alt-F3) or in the normal editing screen. When you attempt to delete a Column Definition code in the normal editing screen, you are asked to confirm the deletion. When you delete a column definition, all the codes that go with column definition are deleted (i.e., Columns On and Columns Off). The Hard Page codes [HPg] remain. It's up to you to delete them. If you want to delete just one set of columns delete either of the [Col On] or [Col Off] codes.

If a previous column definition exists in a document when you delete a column definition, the codes that go with the column definition remain and the existing columns are formatted according to the previous column definition.

If you have several sets of columns in your document but just want to delete one set, don't delete the Column Definition code, delete the Column On [Col On] or Column Off [Col Off] code for that set.

Text Flow in Newspaper Columns

When the text in a newspaper column reaches the bottom of a page, WordPerfect inserts a Soft Page code [SPg], and the text moves to the top of the next column on that page. When WordPerfect reaches the end of the last column on a page, it inserts a Soft Page break, and the cursor moves to the beginning of the next page.

To end a column before the bottom of a page, press **Hard Page** (Ctrl-Enter) to insert a Hard Page code [HPg]. This moves the cursor to the next column. In the last column on a page, pressing **Hard Page** (Ctrl-Enter) moves the cursor to the first column on the next page.

If your columns are not being displayed on-screen side-by-side, check your current column display selection in Setup (Shift-F1,2,6,7) (see *Columns, Display* in *Reference*).

Turning Columns On and Off

Columns can be turned on before or after text has been entered. It is sometimes easier and faster to create and edit a document first, then move to the beginning of the document and turn on Columns.

To do so, turn Columns on anywhere after a Column Definition code, then turn Columns off where you want them to end. Be aware, however, that hard page breaks between the [Col On] and [Col Off] codes end the current column of text and begin a new one.

See Also: Columns, Display; Columns, Parallel; Table, Create

Columns, Parallel

Sometimes you want columns which contain unequal blocks of text to be printed side-by-side on a page; yet, you do not want the information in one column to flow into the column next to it. This is the case, for instance, when you are

creating a movie script or typing an inventory list. You cannot do this using tabs, indents, or newspaper columns. You can do this using parallel columns, as in the following example.

HALVA International Office Inventory			
Product	Quantity	Date	Comments
File Cabinets	14	8/1/90	Need to reorder in September.
Executive Desk	22	8/1/90	Need to order at least 15 more.
Light Tables	8	8/1/90	Need 4 more by December.
Lithotype Machines	3	8/1/90	Good for at least another year.
Magazine Stand	1	8/1/90	Could use but do not have to have one more.
Office Chairs	55	8/1/90	Records show too many--need to locate.
Personal Computers	35	8/1/90	Need to order at least 10 more.
Staple Pictactors	40	8/1/90	Good quantity--have needed buy in the past year.
Wastebaskets	40	8/1/90	Need 15 more--15 immediately. 15 more before January.

This same effect can also be easily accomplished using the WordPerfect Tables feature (see *Table, Create* in *Reference*).

To define and create parallel columns,

- 1 Move the cursor to where you want the columns to begin.
- 2 Press **Columns/Table** (Alt-F7), then select **Columns (1)**.
 Select Columns from the Layout menu.
- 3 Select **Define (3)** to display the Text Column Definition menu.
- 4 Select **Type (1)** to display the choice of columns at the status line, then select the type of parallel columns you want (see *Parallel vs. Parallel with Block Protect* below).
- 5 Enter the number and margins of the columns you want (see *Number and Margins* below), then press **Enter** or **Exit (F7)** to return to document with the Columns menu displayed on your status line.
- 6 Select **On (1)** to turn on the Columns feature.
- 7 Type the text (see *Entering Text in Parallel Columns* below). Press **Hard Page** (Ctrl-Enter) whenever you want to end a column and start a new one.
- 8 Press **Columns/Table** (Alt-F7), select **Columns (1)**, then select **Off (2)** to turn off the Columns feature.
 Select Columns from the Layout menu, then select Off.

Converting Columns to Tables

If you want to turn existing parallel columns into a table, you must block the text with the Block feature (Alt-F4), press **Columns/Table** (Alt-F7), select **Tables (2)**, select **Create (1)**, then select **Parallel Column (2)**. The parallel column definitions will be used to define the table columns, while Hard Page codes will define the table rows.

Defining Columns

When putting columns in a document, use the Columns feature to specify the number and size of the columns you want. This is called defining columns (steps 1 through 4 above).

When you define Parallel columns, a Column Definition code [Col Def:column type;#columns;margins] is inserted into your document. When you turn on columns, a Column On code [Col On] is inserted. After you have entered the text that you want in your columns, you can then turn off columns. Text between the [Col On] and [Col Off] codes is formatted on columns.

If you turn on Columns within existing text, the remaining text in the document from the cursor forward will be formatted within the current columns. While this is often convenient in newspaper columns (see *Turning Columns On and Off* under *Columns, Newspaper in Reference*), it can be very confusing in parallel columns. For example, if your first parallel column is only one inch wide, all the remaining text in your document will suddenly be formatted within a one-inch width.

Consequently, when you want to insert a group of parallel columns into an existing document, it is a good practice to turn on Columns, and then immediately turn off Columns. This inserts a Column On code [Col On] and a Column Off code [Col Off] into your document, and the format of the subsequent text returns to normal. You can then move the cursor between the Column On and Column Off codes, and insert the new text you want in columns.

Distance Between Columns

Unless you enter a Distance Between Columns, WordPerfect calculates the distance for you, keeping it at approximately one-half inch. To set your own distance, select **Distance Between Columns (3)** from the text Column Definition menu, then enter a new measurement.

Changing the left and right margin settings of columns can also affect the distance between columns.

Editing in Parallel Columns

With the exception of using Move (Ctrl-F4), editing text in parallel columns works exactly the same as it does in newspaper columns (see *Columns, Newspaper in Reference*).

When editing parallel columns, use Move (Ctrl-F4) to move the columns. However, when you want to move sets of parallel columns, be sure to pay

careful attention to the codes which accompany them. In fact, it's a good practice to edit columns with Reveal Codes (Alt-F3) on.

Typing a set of parallel columns across a page inserts a Column On code [Col On] and a Column Off code [Col Off] at the beginning and end of the set. When you move a set of parallel columns to another place in the same file, you must block both the Column On and Column Off codes and move them along with the text. Without the Column On and Column Off codes, the text within parallel columns is just separated by a series of Hard Page codes [HPg]. Consequently, it is displayed and printed as a series of separate pages.

With Block Protect on, typing a set of columns across a page inserts a Block Protect On code [Block Pro:On] and Block Protect Off code [Block Pro:Off] at the beginning and end of each set, just next to the Column On and Off codes. When you want to move sets of parallel columns that have been created with Block Protect on, you must also move the Block Protect codes.

Entering Text in Parallel Columns

When entering text in parallel columns for the first time, type the text you want in the first column, then press **Hard Page** (Ctrl-Enter) to end that column and begin the second column. This will insert a Hard Page code [HPg] in your document; however, it should not cause a hard page break. Press Hard Page to continue creating columns across the page.

When you reach the last column on the page, pressing **Hard Page** starts a new set of columns, placing you in the first column in the set. It also inserts an extra Hard Return code [HRt] so that each separate set of columns will be separated by an extra space. If you want your sets of columns to be single-spaced on a page, you need to go back and delete the Hard Return code [HRt] between each set of columns.

Features

You can create columns while using several WordPerfect features, including graphics text boxes, headers, and footers. You cannot include columns in footnotes, endnotes, or tables, however.

If you want to include a table in a column, create the table in a graphics box (see Table, Create in Reference).

Margins

Once you select the number of columns, WordPerfect then calculates the settings for equal columns according to your current margin setting. These settings are displayed in the Text Column Definition menu under Margins. If you do not want equal columns, or you need to change the displayed column sizes, select **Margins (4)** on the Text Column Definition menu. Enter a new measurement for each setting, or press **Enter** to skip over a displayed setting.

If you define parallel columns, and then decide that you want to change the column margins, you can do so by entering a new parallel column definition directly after your existing one and then deleting the old code. The new column

margins will then take effect, and the existing text will be formatted within the new column margins. You can also change the number of columns. However, this sometimes disturbs the existing text. For example, when two columns are combined into one, the text within those columns is also combined.

Remember, however, that changing the margins for your columns does not change the left and right margin settings of your document. A good rule of thumb is to always make the left margin of the first column correspond to your current left margin setting for the page, and the right margin of the last column correspond to your current right margin setting for the page. This is particularly important when placing graphic images in columns (see *Graphics, Define a Box in Reference*).

Moving from Column to Column

Once you have created columns using Hard Page (Ctrl-Enter), you can move the cursor from column to column by pressing **Go To** (Ctrl-Home), then pressing **Right Arrow** (→) to move one column to the right, or **Left Arrow** (←) to move one column to the left. Press **Go To, Home.Left** or **Right Arrow** to move to the first or last column on a page. Pressing **Go To**, then pressing **Up Arrow** (↑) or **Down Arrow** (↓) moves the cursor to the top or bottom of the current column.

You can also move the cursor to a column by pointing to the correct column with the mouse pointer and clicking the left mouse button.

Using the arrow keys on keyboards with an enhanced BIOS, you can press **Alt-Left Arrow** (⇐) and **Alt-Right Arrow** (⇒) to move from column to column. The Left Arrow and Right Arrow keys are not the arrow keys on the number pad. If you do not have a keyboard with an enhanced BIOS, you can map those functions to the keys of your choice using Keyboard Layout (see *Keyboard Layout, Edit in Reference*).

Number

In the default setting, WordPerfect creates two columns to a page according to the existing margins in your document. To change the number of columns on the Text Column Definition menu, select **Number of Columns (2)**, then enter the number of columns you want across a page.

While up to 24 columns are possible, if you enter more columns than can fit within your margins you will get an error message. If this occurs, you might try reducing the distance between columns (see *Distance Between Columns* above).

Parallel vs. Newspaper

In parallel columns, blocks of text are held together side-by-side on a page. You can also create newspaper-style columns where text moves down the first column to the bottom of the page, then moves to the top of the next column (see *Columns, Newspaper in Reference*).

Parallel vs. Parallel with Block Protect

When creating parallel columns, you can either select **Parallel (2)** or **Parallel with Block Protect (3)**. In **Parallel (without Block Protect)**, a single parallel column can be longer than one page. This is useful when writing scripts.

In **Parallel with Block Protect**, each set of columns is held together on one page (unless the text in one of the columns is longer than a page). This is useful when typing inventories where you want to hold sets of items together as much as possible.

Removing Columns

If you create columns and then decide that you do not want them, you can return your text to normal format by deleting the Column Definition code [Col Def:column type:#columns;margins]. This can either be done in Reveal Codes (Alt-F3) or in the normal editing screen. When you attempt to delete a Column Definition code in the normal editing screen, you are asked to confirm the deletion.

If no previous column definitions exist in a document when you delete a column definition, all the codes that go with the column definition are deleted (i.e., Column On and Column Off). The Hard Page codes [HPg] remain. If you were using Parallel Columns with Block Protect, the Block Protect On codes [Block Pro:On] and the Block Protect Off codes [Block Pro:Off] also remain. It's up to you to delete them.

If a previous column definition exists in a document when you delete a column definition, the codes that go with the previous column definition remain and the existing columns are formatted according to the previous column definition.

If you have several sets of columns in your document but just want to delete one set, don't delete the Column Definition code, delete the Column On [Col On] code and Column Off [Col Off] code for that set.

See Also: Columns, Display; Columns, Newspaper

Compose

WordPerfect includes many characters beyond those found on your keyboard. A listing of these is found in the WordPerfect Character Sets (see *Appendix P: WordPerfect Characters*). The Compose feature is used to access these characters.

1 Press **Compose** (Ctrl-2 or Ctrl-v).

 Select Characters from the Font menu.

Pressing **Ctrl-v** displays a "Key =" prompt at the bottom of the screen; the keys you press in steps 2 through 4 below are displayed. Pressing **Ctrl-2** displays no

prompt and the keys you press do not appear on the screen. However, both keystrokes perform the same function in the normal editing screen.

2 Type the number of the character set containing the character you want to create.

3 Type a comma (,).

or

Press **Enter**.

4 Enter the number of the character you want to create.

For example, if you want to create Æ (character number 36 in WordPerfect Character Set 1), press **Compose**, then enter **1,36**.

Notes

Characters on the Screen

Not all characters in the WordPerfect Character Sets can appear on the normal editing screen. Some are represented by a box. Use View Document (Shift-F7,6) to see what the characters will look like when they are printed (see *View Document in Reference*).

Compose with Limited Characters

If you use Compose to enter a character from a WordPerfect Character Set into a long document name, macro description, graphics caption, or some other situation where the number of characters is limited, be aware that you may not be able to enter as many characters as if you did not use any Compose characters.

We suggest you do not use any Compose characters in the DOS filename because many of these characters are not valid in a DOS filename (see Entering Filenames under Exit in Reference).

Ctrl-v

You can use the Ctrl-v keystroke to access Compose from the normal editing screen and from many other places in WordPerfect. However, if you press Ctrl-v from Window Edit structures such as comments and document summaries, or from Line Edit structures such as macro descriptions and other document summary fields, the "Key =" prompt will not be displayed on your screen.

You cannot use the Ctrl-v keystroke to access Compose from the Macro Editor. You must press **Ctrl-2** instead.

Digraphs, Symbols, and Diacritical Marks

You can use Compose to access some of the more common digraphs and diacritical marks from the WordPerfect Character Sets without typing the character set or character numbers. After pressing **Compose**, type one character followed by another character. You do not need to type a comma between the two characters, nor do you need to press **Enter** after typing the characters. You can type either character in the pair first.

Diacritical Marks

Diacritical marks are used with characters to represent a certain phonetic value. Accessing diacritical marks is not as specific as accessing digraphs and symbols since diacritical marks are allowed for many characters. Examples of some diacritical marks are listed below. Try the diacritical marks with the character of your choice, or if in doubt, use the WordPerfect Character Set number.

Mark	Example	Result
Acute	'i	í
Caron	vz	ž
Cedilla	,c	ç
Centered Dot	:l	l·
Circumflex	^a	â
Crossbar	-t	ƒ
Dot Above	.c	ċ
Grave	`e	è
Macron	_u	ū
Ogonek	;a	ą
Ring Above	@a	ā
Slash	/o	ø
Stroke	\l	ł
Tilde	~n	ñ
Umlaut	“u	ü

Digraphs and Symbols

The following are some of the digraphs and symbols that can be created with Compose:

Type	Character	Result
AE	[1,36]	Æ
ae	[1,37]	æ
IJ	[1,138]	IJ
ij	[1,139]	ij
OE	[1,166]	Œ
oe	[1,167]	œ
ox	[4,24]	œ
ss	[1,23]	ß
L-	[4,11]	£
Pl	[4,5]	¶
<<	[4,9]	«
>>	[4,10]	»
Y=	[4,12]	¥
Pt	[4,13]	Pt
c/	[4,19]	¢
+-	[6,1]	±
<=	[6,2]	≤
>=	[6,3]	≥

Type	Character	Result
==	[6,14]	≡
~~	[6,13]	≈
/=	[6,99]	≠
tm	[4,41]	™
sm	[4,42]	SM
ro	[4,22]	®
co	[4,23]	©
rx	[4,43]	℞
/2	[4,17]	½
/4	[4,18]	¼
*	[4,3]	*
**	[4,0]	•
*o	[4,45]	◦
*O	[4,1]	○
ao	[1,35]	ä
f-	[4,14]	f
a=	[4,15]	ª
o=	[4,16]	º
??	[4,8]	¿
!!	[4,7]	¡
n-	[4,33]	—
m-	[4,34]	—
--	[4,34]	—

Keyboard Mapping

You may want to “map” characters you frequently use to a specific key (or keys) on the keyboard. To do so, you can use Compose with Keyboard Layout (Shift-F1,5) (see *Keyboard Layout* in *Reference*).

Printable Characters

If your printer is capable of printing graphics, you will be able to print every character found in the WordPerfect Character Sets (see *Appendix P: WordPerfect Characters*). If your printer does not have a particular character, WordPerfect creates that character using the .DRS (driver resource) file that comes with WordPerfect, and then prints this character as a graphic image. When printing characters with diacritical marks, often only the diacritical mark must be created graphically (e.g., only the $\grave{}$ of \grave{e} is printed as a graphic image).

If your printer cannot print graphics, some characters from the Character Sets will not print. See *Printer Program, Customize Substitute Fonts* in *Reference* to find out how you can increase the number of characters you can print as text.

See Also: Keyboard Layout; Printer Program, Customize Substitute Fonts; Appendix P

Conditional End of Page

Use Conditional End of Page to keep titles and subsequent paragraphs together. This feature protects a specified number of lines from being split between pages.

In the document below, the paragraph title is separated from the paragraph by a page break.

- A TITLE
- B PAGE BREAK
- C PARAGRAPH

projects. If you don't find what you need contact your department receptionists and they should be able to order it.

Company Party

Don't forget that July 12th is our company party. Employees and their families are invited. We hope that you will all plan to be there and have a ball. There will be plenty of food and soda pop. Bring your softball mitts and swimming suits. There will be lots of games and plenty for the little children to do. Come and see Jack Reaney bob for apples and see Jenine get thrown in the pool. Be sure to RSVP with Julia in HR at Ext. 734.

Meeting Change

There will be no meeting this Friday because too many people will be out of the office so we will have it next Tuesday the 16th of June. Please plan to attend. We will be making some changes in location of management and accounting. We will also need your input on some new ideas that have been suggested for more efficient Handling of paycheck and mail distribution.

Doc 1 Pg 2 Ln 1.75" Pos 5"

In the document below, Conditional End of Page keeps the title and paragraph on the same page.

- A TITLE
- B PAGE BREAK
- C PARAGRAPH

projects. If you don't find what you need contact your department receptionists and they should be able to order it.

Company Party

Don't forget that July 12th is our company party. Employees and their families are invited. We hope that you will all plan to be there and have a ball. There will be plenty of food and soda pop. Bring your softball mitts and swimming suits. There will be lots of games and plenty for the little children to do. Come and see Jack Reaney bob for apples and see Jenine get thrown in the pool. Be sure to RSVP with Julia in HR at Ext. 734.

Meeting Change

There will be no meeting this Friday because too many people will be out of the office so we will have it next Tuesday the 16th of June. Please plan to attend. We will be making some changes in location of management and accounting. We will also need your input on some new ideas that have been suggested for more efficient Handling of paycheck and mail distribution.

Doc 1 Pg 2 Ln 1.92" Pos 5"

Before using Conditional End of Page, you should determine the number of lines you want to keep together. You need to enter this number in step 4 below.

- 1 Move the cursor to the line immediately *above* the lines you want kept together (even if there is text on that line).
 - 2 Press **Format** (Shift-F8), then select **Other** (4).
- Select *Other* from the *Layout* menu.

- 3 Select **Conditional End of Page** (2).
- 4 Enter the number of lines to be kept together.
- 5 Press **Exit** (F7) to return to the document.

Notes

Codes

This feature places a Conditional End of Page code [Cndl EOP:#] in your document, where # is the number of lines to be held together. Rather than splitting the protected lines, WordPerfect will insert a soft page break before them. However, you can still separate these protected lines with a hard page break, by pressing **Hard Page** (Ctrl-Enter).

Conditional End of Page vs. Block Protect

Conditional End of Page protects a specific number of lines from a certain point forward. Block Protect protects a block of text (see *Block Protect* in *Reference*).

Line Spacing

When entering the number of lines to be protected, consider any blank lines that will result from double- or triple-spaced text. For example, to hold together a heading and the first line of a paragraph in double-spaced text, you would enter 4 and not 2 as the number of lines to protect.

See Also: Block; Block Protect

Convert Program

Files created with other word processing programs often cannot be used directly by WordPerfect. Similarly, WordPerfect files often cannot be used directly by other word processing programs. The Convert Program converts files so that they can be used by programs other than the one with which they were created.

The Convert Program that came with WordPerfect converts files from selected programs to WordPerfect and vice versa. As much of the format is preserved as possible. If you simply want to convert a file to ASCII format (without any word processing codes), you may want to use the Text In/Out feature in WordPerfect (see *Text In/Out* in *Reference*).

Important: The Convert Program file (CONVERT.EXE) needs to be installed properly before using the program. If you chose not to install the WordPerfect utility programs when you installed WordPerfect (or have not subsequently installed them), you must do so now to use the Convert Program. See the Installation Instructions card for installation instructions.

To use the Convert Program,

- 1 Exit WordPerfect and go to DOS, then change to the drive or directory where the CONVERT.EXE file is located.

The Installation Program copies this file to the directory where WordPerfect (WP.EXE) is located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "Utilities" if you are using a two disk drive system.

- 2 Enter **convert** at the prompt.
- 3 Enter the pathname of the file to be converted (input file).
- 4 Enter the pathname for the converted file (output file).

If the output filename you enter already exists, you are asked to confirm that you want the file overwritten by the new output file. If you do, type y. If you do not want the file overwritten, type n, then enter a new output filename.

```
Name of Input File? c:\letter
Name of Output File? letter.new

0 EXIT
1 WordPerfect to another format
2 Reversible-Form-Text (IBM DCA Format) to WordPerfect
3 Final-Form-Text (IBM DCA Format) to WordPerfect
4 Navy DIF Standard to WordPerfect
5 wordStar 3.3 to WordPerfect
6 MultiMate Advantage II to WordPerfect
7 Seven-Bit Transfer Format to WordPerfect
8 WordPerfect 4.2 to WordPerfect 5.1
9 Mail Merge to WordPerfect Secondary Merge
A Spreadsheet DIF to WordPerfect Secondary Merge
B Word 4.0 to WordPerfect
C DisplayWrite to WordPerfect

Enter number of Conversion desired
```

- 5 Select an option from the displayed menu by typing the corresponding number (see the instructions for each option under *Notes* below).

Notes

Command Line Convert

You can convert files from the DOS command line without going through the menus. You can also enter several command lines in a batch file if several conversions are to be done at once.

To use Command Line Convert,

- 1 If you are using a hard disk system, change to the directory where CONVERT.EXE is located. (The Installation Program copies it to C:\WP51 unless you specify otherwise.)

or

If you are using a two disk drive system, insert the diskette you labeled "Utilities" into drive A. (The Installation Program copies CONVERT.EXE to the diskette you labeled "Utilities.")

- 2** On a hard disk system, enter **convert *inputfilename outputfilename inputfiletype outputfiletype fielddelimiter recorddelimiter deletecharacters*** (Each parameter is separated by a space. See the explanation of these parameters after this step for more information.)

or

On a two disk drive system, enter **a:convert *inputfilename outputfilename inputfiletype outputfiletype fielddelimiter recorddelimiter deletecharacters*** (Each parameter is separated by a space. See the explanation of these parameters after this step for more information.)

The *inputfiletype* is the number or letter on the Convert Program menu that represents the format of the input file. You can use the following:

- 1 WordPerfect
- 2 Revisable-Form-Text (IBM DCA Format)
- 3 Final-Form-Text (IBM DCA Format)
- 4 Navy DIF Standard
- 5 WordStar 3.3
- 6 Multimate Advantage II
- 7 Seven-Bit Transfer Format
- 8 WordPerfect 4.2
- 9 Mail Merge
- A Spreadsheet DIF
- B Microsoft Word 4.0
- C DisplayWrite

The *outputfiletype* is the number or letter on the Convert Program menu that represents the format of the output file, and is only needed if you entered WordPerfect (1) for the *inputfiletype*. Use the following list to determine the *outputfiletype*:

- 1 Revisable-Form-Text (IBM DCA Format)
- 2 Final-Form-Text (IBM DCA Format)
- 3 Navy DIF Standard
- 4 WordStar 3.3
- 5 MultiMate Advantage II
- 6 Seven-Bit Transfer Format
- 7 ASCII Text File
- 8 WordPerfect Secondary Merge to Spreadsheet DIF

Important: If a file already exists by the same name as the output file you specify, it will be overwritten automatically by the output file generated in the conversion.

The *fielddelimiter*, *recorddelimiter*, and *deletecharacters* are needed only if Mail Merge (9) is used for the input file type. They are entered the same as they

would be if you ran the Convert Program using the prompts (see *Delimiters and Delete Characters* below).

Remember that spaces are used to separate parameters. Do not enter spaces between the characters of field delimiters or record delimiters, or between delete characters. If you do, the conversion will not be performed correctly. For example, to convert a Microsoft Word 4.0 file named **letter** located on the diskette in drive A to a WordPerfect 5.1 document named **letter.wp** located in C:\WP51 on your hard drive, you would enter:

```
convert a:\letter c:\wp51\letter.wp b
```

To convert a dBase merge file named **a:\merge.db** to a WordPerfect secondary merge file named **c:\wp51\merge.wp**, you would enter the following:

```
convert a:\merge.db c:\wp51\merge.wp 9 , {13}{10} {34}
```

where , is the field delimiter, {13}{10} is the record delimiter, and {34} is the delete character (representing a double quote character (")) in the input file.

dBase files must be saved in a delimited format (using dBase) before you convert them with the Convert Program.

Delimiters and Delete Characters

The field delimiter and record delimiter are the characters in the input file that separate fields and records. Delete characters are any characters you want deleted in the conversion from the input to the output file. For field and record delimiters, you can enter either characters or decimal ASCII values enclosed in braces ({}). If a Carriage Return and Line Feed follow a delimiter, they must be specified as part of the delimiter by typing {13}{10}. For more information on fields and records, see *Secondary Files* under *Merge in Reference*.

Display/Write to WordPerfect

Converts Display/Write to WordPerfect. For information on the .CRS prompt, see *Revisable-Form-Text* below.

Filename Patterns

When entering input and output filenames, you can use the question mark (?) and asterisk (*) characters to create a filename pattern. The asterisk represents zero or more characters; the question mark represents a single character. For example, if you want to convert all the files in a directory that end with a .DOC extension, you would type *.doc for the input filename. The output filename might be *.wp which would create converted files using the same filenames but with .WP extensions. When using wildcard characters, any existing output file is automatically overwritten.

If you enter *.* as part of the string, all files are converted, so you need to output the files to another directory.

*If you use *.* , the Convert Program tries to convert all files in the directory, including executable files. Non-document files may be corrupted.*

Final-Form-Text (IBM DCA Format) to WordPerfect

Converts DCA/FFT to WordPerfect. Final-Form-Text (FFT) is used on some mainframe computers.

IBM Products (Non-PC)

When transferring a file to or from an IBM mainframe, you must transfer the file as binary data and not as text data. No other conversions should be made.

To attach an IBM PC to an IBM 5520, use the 5520 attachment board. This board and the software that comes with it causes the emulation of a 5520 workstation and will transfer files (after the Revisable-Form-Text conversion) from the PC to the 5520 in its DCA word processing format.

To attach an IBM PC to an IBM Displaywriter, use the IBM PC attachment convenience kit #6403664.

Mail Merge to WordPerfect Secondary Merge

This conversion is useful for dBase, WordStar, or other mail merge files. The converted file is in WordPerfect secondary merge format (`{END FIELD}[HRt]` to separate fields and `{END RECORD}[HPg]` to separate records).

When you choose this option, you are asked for the field delimiter, record delimiter and any characters to be deleted from the file. (See *Delimiters and Delete Characters* above.)

Microsoft Word 4.0 to WordPerfect

Converts Microsoft Word documents to WordPerfect.

MultiMate Advantage II to WordPerfect

Converts MultiMate Advantage II to WordPerfect.

Navy DIF Standard to WordPerfect

Converts Navy DIF to WordPerfect.

Revisable-Form-Text (IBM DCA Format) to WordPerfect

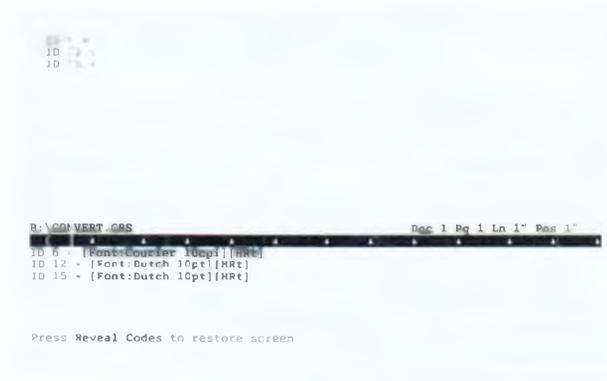
Converts DCA/RFT to WordPerfect. Revisable-Form-Text (RFT) is used on some mainframe computers. Many other word processors can convert to and from this format.

When you select this option, the following prompt appears:

Enter name of CRS file or press ENTER for none

A .CRS (conversion resource) file is a file you create in WordPerfect that tells the Convert Program how you want certain fonts converted. Without a .CRS file, the Convert Program converts fonts based on its own defaults. If you don't want to use a .CRS file, press **Enter** at the prompt and the conversion will continue. If you want to create a .CRS file, press **Cancel** (F1) to exit the Convert Program, then re-enter WordPerfect in order to create the file.

The .CRS file contains a list of the GFID font numbers (as listed in your DCA/RFT product documentation), matched with the WordPerfect font codes you designate as their equivalents. A sample file might look like this:



```
B:\CONVERT\CRS                               Bar 1 Pg 1 Ln 1" Pas 1"
ID 6 - [Font:Courier 10pt][HRt]
ID 12 - [Font:Dutch 10pt][HRt]
ID 15 - [Font:Dutch 10pt][HRt]

Press Reveal Codes to restore screen
```

The spaces are optional, and are used to make the file more readable. Be sure to precede the GFID font number with the letters ID, and follow it with an equal sign (=) and the WordPerfect base font code (Ctrl-F8,4). Each pair of equivalents must be separated by at least one Hard Return code. When you have completed the list of font equivalents, save the file in WordPerfect format using either Save (F10) or Exit (F7). You may give the file any legal filename.

Once you have created the .CRS file, restart the Convert Program, following the steps at the beginning of this section. When you see the "Enter name of CRS file or press ENTER for none" prompt, enter the name of the .CRS file (use a full pathname if necessary). The file will then be converted using the .CRS file.

Seven-Bit Transfer Format to WordPerfect

Used to convert a previously converted WordPerfect file from seven-bit transfer format back to its original form. (Use this option after receiving the file through a 7-bit modem.)

Spreadsheet DIF to WordPerfect Secondary Merge

Converts a spreadsheet DIF file to WordPerfect secondary merge format. Rows become records and cells become fields.

Startup Option

Use the code page startup option to tell the Convert Program which code page your hardware (BIOS) system uses. Setting this option lets you access the proper keyboard and 256-character ASCII character set for which your system is preset. The Convert Program supports the following code pages: 437 Standard English, 850 PC Multilingual, 851 Greek, 8510 Greek Alternate, 860 Portuguese, 8600 Portuguese Alternate, 861 Icelandic, 863 French (Canada), 865 Norwegian

and Dutch, 866 Russian, 8660 Russian Alternate, and 895 Czechoslovakian. For more information on code pages, see your DOS manual.

To use the option, enter **convert/cp=code page number** to start the program.

This startup option has no effect on conversions to or from Revisable-Form-Text (IBM DCA), Final-Form-Text (IBM DCA), or Navy DIF Standard formats since these formats use their own tables to convert international characters.

Two Disk Drives

To run the Convert Program on a two disk drive system (no hard disk), change to the drive or directory where the files you are converting are located (e.g., drive B) and insert the diskette you labeled "Utilities" into drive A. (The Installation Program copies CONVERT.EXE to the "Utilities" diskette. If you have not installed CONVERT.EXE, you must do so before running the program.) Enter **a:convert**. Then follow steps 3 through 5 at the beginning of this section.

WordPerfect 4.2 to WordPerfect 5.1

Used to convert WordPerfect 4.2 documents to WordPerfect 5.1 documents. Select this option, then enter the correct .CRS filename. If no .CRS filename is entered, the STANDARD.CRS file is used. If STANDARD.CRS does not exist, the document is converted without a .CRS file (see *Document Conversion, WordPerfect 4.2 to 5.1 in Reference*).

You can also convert a WordPerfect 4.2 file to 5.1 format simply by retrieving it in WordPerfect 5.1. You should use the Convert Program when you have multiple files you want to convert (see *Filename Patterns* above).

WordPerfect to Another Format

Converts a WordPerfect file to one of the following formats.

```
Name of Input File? c:\wp51\learn\memo.wkb
Name of Output File? c:\wp51\learn\parkmemo

0 EXIT
1 Revisable-Form-Text (IBM DCA Format)
2 Final-Form-Text (IBM DCA Format)
3 Navy DIF Standard
4 WordStar 3.3
5 MultiMate Advantage II
6 Seven-Bit Transfer Format
7 ASCII text file
8 WordPerfect Secondary Merge to Spreadsheet DIF

Enter number of output file format desired
```

ASCII Text File

Converts WordPerfect to ASCII (DOS) text. You can also use the Text In/Out feature to convert WordPerfect documents to ASCII text (see *Text In/Out* in *Reference*). You should use the Convert Program when you have multiple files you want to convert (see *Filename Patterns* above).

Final-Form-Text (IBM DCA Format)

Converts WordPerfect to DCA (used by IBM mainframes).

MultiMate Advantage II

Converts WordPerfect to MultiMate Advantage II.

Navy DIF Standard

Converts WordPerfect to the Navy DIF.

Revisable-Form-Text (IBM DCA Format)

Converts WordPerfect to DCA (used by IBM mainframes).

When you select this option, the following prompt appears:

Enter name of CRS file or press ENTER for none

See *Revisable-Form-Text (IBM DCA Format) to WordPerfect* above for information on using a .CRS file.

Seven-Bit Transfer Format

Useful when transferring documents over a modem or line that only transfers seven bits. Because WordPerfect codes use the eighth bit, these are usually stripped during the transfer. With this conversion, they are rearranged in a seven-bit format, thus preserving all codes. The person receiving the file should then convert it back to WordPerfect format using the seven-bit format.

WordPerfect Secondary Merge to Spreadsheet DIF

Converts a WordPerfect secondary merge file to spreadsheet DIF format. Records become rows and fields become cells.

WordStar 3.3

Converts WordPerfect to WordStar 3.3.

WordStar 3.3 to WordPerfect

Converts WordStar (versions 3.3 or earlier) to WordPerfect.

See Also: Document Conversion, WordPerfect 4.2 to 5.1; Retrieve; Text In/Out

Cross-Reference

The cross-reference is a useful tool for a writer who wants to keep a document concise and avoid repetition of material. Situations where cross-references are

useful include legal documents, research papers, or other documents which refer a reader to a page number, table number, or footnote number.

Examples of cross-references are shown in the illustration below.

CROSS-REFERENCES

Despite advice to the contrary, Metcalf has always maintained that employees should be given direction instead of management.² To that end, he has worked to give employees a voice in both their job description and the goals of this company.²

Maximizing the Organization
However, in all the attention to employees, the goal to provide quality merchandise at discount prices (see figure 4) continues to give purpose and direction to the company. 

As indicated in the Operating Expenses table (again, see page 2), that goal contributes to the recent venture into retail outlets. After the opening of several retail stores in 1990, sales increased by 50% in the first quarter. However, as demonstrated by the table figures, operating expenses were often more than twice those of the third quarter. 

Operating Expenses
1990

Expense	Fourth Quarter	Third Quarter	Change
---------	-------------------	------------------	--------

The difficulty with cross-referencing involves maintaining the correct numbers after editing changes are made. For example, the information that was on page 23 may have been moved to page 25 after an editing change.

Fortunately, the WordPerfect Cross-Reference feature marks and maintains cross-references for you. Even if you make an editing change, WordPerfect can update the cross-references.

Cross-referencing with WordPerfect involves three elements: a reference, a target, and a target name.

The reference is the location *from* which you are referring. In other words, it is where you create the text and numbers that send a reader to other parts of the document. The examples shown at the beginning of this section are references.

The target is the location *to* which you are referring. In other words, it is where you are sending the reader. In the examples shown above, the targets are where you would look after reading the information.

The target name is a unique identifier that ties references and targets together. When WordPerfect *generates* or compiles your cross-references, it uses the target name to match references and targets.

The target name is only used during generation. It is not printed and is only displayed in the Reveal Codes screen (Alt-F3).

Creating a cross-reference involves two basic tasks:

- Mark the references and targets and include a target name.
- Generate the cross-references.

The steps below guide you through marking both the reference and target in one operation, but WordPerfect also gives you the opportunity to mark the reference and target in separate operations. Notes on those procedures are included under *Mark Reference Only* and *Mark Target Only* below.

To mark both the reference and target in one operation,

- 1 Move the cursor to where you want to create the reference.
- 2 Type any introductory text you want to include, then press the **Space Bar** to add a space between the introductory text and the location of the reference (see *Introductory Text* below).
- 3 Press **Mark Text** (Alt-F5), then select **Cross-Ref** (1).

 Select **Cross-Reference** from the *Mark* menu.

- 4 Select **Mark Both Reference and Target** (3) to begin marking both the reference and target.

 Select **Both** from the *Cross-Reference* submenu.

- 5 Select the type of reference you want to use (see *Reference Types* below).
- 6 Move the cursor to a position immediately *after* the target, then press **Enter**.

*You may want to make sure the cursor is located after the target by checking **Reveal Codes** (Alt-F3).*

- 7 Enter a target name (see *Target Name* below).
- 8 If necessary, finish typing the introductory text for the reference.
- 9 Repeat the steps above, marking all references and targets in your document.
- 10 Press **Mark Text** (Alt-F5), then select **Generate** (6).

 Select **Generate** from the *Mark* menu.

- 11 Select **Generate Tables, Indexes, Cross-References, etc.** (5), then type **y** to generate.

The last cross-references generated are the cross-references that are printed. Therefore, you should generate your cross-references just before you plan to print the document to ensure that cross-references will be correct. For a more detailed explanation of **Generate**, see *Generate in Reference*.

Introductory Text

WordPerfect inserts a number, letter, or character at the spot of the reference when the cross-references are generated. If you want introductory text that explains the number or letter (e.g., “See Page”), you must type the text in yourself.

The only exceptions to this rule occur if you are referencing graphics box numbers or page numbers. For graphics box numbers, WordPerfect will insert the Caption Number Style before the box number. If the Caption Number Style includes text, that text appears when the cross-reference is generated. For more information about Caption Number Styles, see *Graphics Options in Reference*.

For page numbers, WordPerfect will insert the Page Number Style. If the Page Number Style includes text, that text appears when the cross-reference is generated. For more information about Page Number Styles, see *Page Numbering in Reference*.

Mark Reference Only

If you come to a place in your document where you want to create a reference and know that you plan to create the target later (or already have created the target), you can create the reference only.

To do so,

- 1 Move the cursor to where you want to create the reference.
- 2 Type any introductory text you want to include, then press the **Space Bar** to add a space between the introductory text and the location of the reference (see *Introductory Text* above).
- 3 Press **Mark Text** (Alt-F5), then select **Cross-Ref (1)**.
 -  Select **Cross-Reference** from the **Mark** menu.
- 4 Select **Mark Reference (1)** to begin marking the reference.
 -  Select **Reference** from the **Cross-Reference** submenu.
- 5 Select the type of reference you want to use (see *Reference Types* below).
- 6 Enter a target name. The target name should be the same as the target name for the target (see *Target Name* below).
- 7 If necessary, finish typing the introductory phrase for the reference.

Repeat the steps above for additional references you want to mark separately. When you mark a reference, [Ref(*target name*):*type*] can be seen in **Reveal Codes** (Alt-F3).

A question mark (?) will appear in place of the reference number. After you mark targets and generate cross-references, the question mark will be replaced by the correct information (see *Mark Target Only* below).

Mark Target Only

If you have marked or plan to mark a reference separately and want to create a target, you can mark the target separately.

To do so,

- 1 Move the cursor to a position immediately after the target.

You may want to use Reveal Codes (Alt-F3) to be sure of the cursor location.

- 2 Press **Mark Text** (Alt-F5), then select **Cross-Ref** (1).

 Select **Cross-Reference** from the **Mark** menu.

- 3 Select **Mark Target** (2) to mark the target.

 Select **Target** from the **Cross-Reference** submenu.

- 4 Enter a target name. The target name should be the same as the target name for the reference (see *Target Name* below).

Repeat the steps above for all targets you want to mark separately. When you mark a target, [Target (*target name*)] can be seen in Reveal Codes (Alt-F3).

If you have marked all your references and targets, you are now ready to generate the cross-references. To do so, press **Mark Text** (Alt-F5), select **Generate** (6), select **Generate Tables ...** (5), then type **y**.

Master Documents

If your document is extremely long, you may want to use the Master Document feature to divide it into smaller files. You can still generate cross-references which will include any references and targets marked in subdocuments (see *Master Documents in Reference*).

Multiple Cross-References

There are two kinds of multiple cross-references that you can create with WordPerfect. One cross-references the same target with one or more reference types (e.g., see page 23, figure 2), while the other cross-references one or more targets with the same reference type (e.g., see pages 10, 24, 29).

To create the first kind of cross-reference, mark a reference for each different reference type. You only need one target, however, for both references. For

example, in the following cross-reference you should mark two references, one a page number reference and one a graphics box reference.

 CROSS-REFERENCE

The Next Fifty Years

While the recent upswing in the growth of HALVA International is a welcome indicator, there are also potential problems that need to be addressed.

However, if these needs are met, the company can look forward to a bright and exciting future through the decade of the 1990's and beyond.

Expanding Markets
From oriental rugs to imported jewelry, HALVA International has always provided a variety of merchandise to its customers. However, the variety of products has often been limited to those items that are a known quantity.

Recent trends indicate, however, that there is profit to be made in areas such as oriental furniture and music boxes. In fact, our research indicates that music boxes may become a long-term, profitable investment (see page 4, figure 2).



Expanding Resources

Then, you only need to mark the target once as long as both references use the same target name. The target can be marked in the same operation as one of the references or separate from both of the references.

To create the second kind of cross-reference, you only need to mark the reference once, but you need to mark each target separately. The targets should all have the same target name. For example, in the following cross-reference you should mark one page number reference.

 CROSS-REFERENCE

In this report, the past, present, and future status of HALVA International are reviewed (see pages 4, 10, 12), with an emphasis on these characteristics as being vital to the continued survival of the company.

The European Connection
The year was 1939, and the rumors of war had become a nightmare of reality. With the transportation of goods between many countries blocked, and the lines of economic communication virtually severed, intercontinental business was at a standstill.

"Suddenly, the entire face of economics changed to a survival industry. Manufacturing resources were transformed overnight into a war machine. Sacrifice of conveniences became the test of civil loyalty."

It was an awkward, if not impossible, time for the birth of an import/export business. But, then, Bryan Metcalf was no ordinary individual.

The Roots of Mail Order

Then, you should mark a target on each of the pages you are referring to. You can mark one of the targets in the same operation as the reference, but you must mark at least two of the targets separately. When you generate the cross-references, they will be separated by a comma and one space.

Reference Types

There are five types of references you can create, or in other words, five items you can cross-reference. They are page numbers, paragraph/outline numbers, footnote numbers, endnote numbers, and graphics box numbers.

If you cross-reference a graphics box number, you must also select the type of graphics box you wish to cross-reference (e.g., figure, text, etc.).

To mark a target for most of these items, move the cursor to the immediate right of the code that represents that item, then mark the target. For example, mark a paragraph number by moving the cursor to the immediate right of the paragraph number code you want to cross-reference, then mark the target.

You may want to mark the target in Reveal Codes (Alt-F3) to be sure of the cursor location.

The following are the exceptions:

- If you are marking a page number, simply move to the text on the page that you want to cross-reference, then mark the target. Make sure you mark the target within the text. This ensures that the cross-reference will be correct even if the text is moved to a different page.
- To mark a page number for a footnote or endnote, display the footnote or endnote in its editing screen (Ctrl-F7, Footnote (1) or Endnote (2), Edit (2), *note number*) before marking the target.

To mark a page number for an endnote, you must generate endnotes for the page number to appear correctly (see Generate in Reference).

- To mark a page number for a graphics box, place the target in the graphics box caption. If the box “bumps,” the correct page number is still referenced.
- If your reference is located in a graphics box caption, a header, or a footer, you cannot mark both the reference and the target in the same operation. You must mark the reference and target separately (see *Mark Reference Only* and *Mark Target Only* above).

Target Name

The Target Name “ties” the reference and target together. When WordPerfect generates cross-references, it looks for matching target names, then creates the cross-reference.

The target names must be an exact match. For example, if you type “Bird” at the reference and mistakenly type “Birds” at the target, the two will not match, and WordPerfect will not be able to create the correct cross-reference.

Target names are not case specific, however. "BIRD" and "bird" are considered the same.

Update Cross-References

The last cross-references generated are the cross-references that are printed. Therefore, you should generate your cross-references just before you plan to print the document to ensure that cross-references will be correct. For a more detailed explanation of Generate, see *Generate in Reference*.

See Also: Generate

Cursor Movement

The cursor is the on-screen dash that tells you where you are in your document (see *Cursor Appearance* below).

You can use the cursor movement keys to move through text a character, a word, a screen, or a page at a time. You can also quickly move to either edge of the screen or to either end of your document.

If your computer supports a mouse, you can move the cursor by placing the mouse pointer on the text and clicking the left mouse button (see *Mouse Support in Reference*).

Notes

Codes

When you move the cursor through text on the screen, it also moves through any codes in that text. When editing text, it is often important to know where the cursor is positioned in relation to the existing codes in your text. If you press **Left Arrow** (←) and **Right Arrow** (→) and the cursor does not appear to move, it is probably moving through codes. You can use **Reveal Codes** (Alt-F3) to display the codes on the screen as you move the cursor through them (see *Reveal Codes in Reference*).

Cursor Appearance

Normally, the cursor is displayed on the screen in WordPerfect as a small blinking line. The CURSOR.COM program provided with WordPerfect lets you change the size and appearance of the cursor (see *Cursor Program in Reference*).

Cursor Movement Keystrokes

The following table lists the keystrokes used to move the cursor through text.

Location	Cursor Keys
Left One Character	Left Arrow (←)
Right One Character	Right Arrow (→)

Location	Cursor Keys
Left One Word	Word Left (Ctrl←)
Right One Word	Word Right (Ctrl→)
Left Side of Screen	Home,Left Arrow
Right Side of Screen	Home,Right Arrow
Far Left of Line (even when the line extends beyond the left edge of the screen)	Home,Home,Left Arrow
Far Right of Line (even when the line extends beyond the right edge of the screen)	Home,Home,Right Arrow or End
Up One Line	Up Arrow (↑)
Down One Line	Down Arrow (↓)
Top of Screen (then up one screen at a time)	Home,Up Arrow or Minus (-) on the number keypad
Bottom of Screen (then forward one screen at a time)	Home,Down Arrow or Plus (+) on the number keypad
First Line on the Previous Page	Page Up (PgUp)
Up One Paragraph	Ctrl-Up Arrow (on keyboards with enhanced BIOS)*
Down One Paragraph	Ctrl-Down Arrow (on keyboards with enhanced BIOS)*
First Line on the Next Page	Page Down (PgDn)
Beginning of a Document (<i>after</i> any formatting codes)	Home,Home,Up Arrow
Beginning of a Document (<i>before</i> any formatting codes)	Home,Home,Home,Up Arrow
End of a Document (<i>after</i> any formatting codes)	Home,Home,Down Arrow

*If you do not have a Keyboard with an enhanced BIOS you can map these functions with the Keyboard Layout feature (see *Keyboard Layout, Edit in Reference*).

Cursor Movement Pattern

The cursor can only move through text or codes which already exist in your document. When you reach a point where there is no more text or codes, the cursor stops moving.

As you move the cursor up or down through a document, the cursor retains its current horizontal position, if possible. For example, if the cursor is at Position 4.5" on one line, it stays at Position 4.5" in all the lines it moves through, unless they are shorter than 4.5" long, in which case the cursor moves to the right edge of the line.

Escape

You can use Escape (Esc) to move the cursor a specified number of characters, lines, or pages. Press **Escape**, type a number, then select the cursor control key you want repeated (see *Repeat Value* in *Reference*).

Go To

You can use Go To (Ctrl-Home) to move the cursor to a specific character or page, the top or bottom of the current page, a different column, or back to its original position (see *Go To* in *Reference*).

See Also: Go To; Mouse Support; Repeat Value; Reveal Codes

Cursor Program

You can use the Cursor Program to change the appearance of the cursor. Depending on the type of text you are working with, modifying the cursor shape can make it more or less visible on the screen.

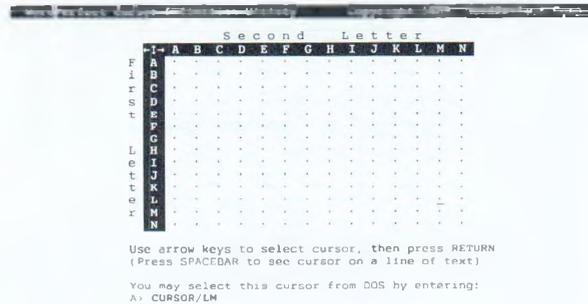
The Cursor Program cannot stop the cursor from blinking.

Important: *The Cursor Program file (CURSOR.COM) needs to be installed properly before using the program. If you chose not to install the WordPerfect utility programs when you installed WordPerfect (or have not subsequently installed them), you must do so now to use the Cursor Program. See the Installation Instructions card.*

- 1** Exit WordPerfect and go to DOS.
- 2** Change to the directory where CURSOR.COM is located.

The Installation Program copies this file to the directory where WordPerfect (WP.EXE) is located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "Utilities" if you are using a two disk drive system.

3 Type **cursor** and press **Enter**.



4 Use the arrow keys to move the cursor on the grid until it is the desired size and shape.

Some grid combinations will cause the cursor to disappear. In addition, with some graphics cards, the entire grid cannot be used.

5 If you want to see how the cursor looks in text, press the **Space Bar**. Press the **Space Bar** again to return to the grid.

You may want to make a note of the two-letter combination identifying your cursor (displayed at the bottom of the screen). The first letter is the grid row, the second is the grid column.

6 When you are finished, press **Enter** to select the cursor and return to DOS.

Once you know the cursor combination you want, you can select it directly from DOS. To select it,

7 Enter **cursor/nn** at the DOS prompt (where *nn* is the two-letter combination for your cursor).

For example, to use cursor KL, you would enter **cursor/kl** at the DOS prompt.

Notes

Extent of Use

Because the cursor is changed at the DOS level, the new cursor is used both at DOS and in any application run under DOS, including WordPerfect. If you exit DOS, however (for example, if you turn off your machine or run BASIC), the cursor will return to its regular size and shape. To use the new cursor every time you start your computer, enter the **cursor/nn** command in your AUTOEXEC.BAT file (see *DOS and WordPerfect* in *Reference*).

Some applications may themselves change the shape of the cursor while you are in that program. Upon exiting many of these applications, the cursor is returned to the default size and shape, rather than what it was when you started the application. You may need to run the Cursor Program again to return it to the size and shape you want.

See Also: Cursor Movement; Cursor Speed

Cursor Speed

You may have noticed that when you hold down certain keys, the character on that key begins to repeat itself. The Cursor Speed feature lets you increase or decrease the repeat rate of the keys on your keyboard.

Cursor Speed can be changed from the Setup menu, and its setting remains in effect each time you start WordPerfect.

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Environment** (3).

3 Select **Cursor Speed** (3) to display a menu of possible options.

4 Select a repeat speed (see *Repeat Speed* below).

5 Press **Exit** (F7) to return to your document.

Notes

Repeat Speed

While the repeat speeds are displayed at the status line you can type a number from 1 through 5 to select intervals ranging from 15 through 50 characters per second, or you can select **Normal** (6) to have WordPerfect use your computer's normal setting.

Normal for most computers is 11 characters per second. In other words, for every second you hold a key down, 11 characters appear on-screen. This is the recommended setting if you are using WordPerfect under a memory-resident program such as Repeat Performance (see *Troubleshooting* below).

The default setting is for the fastest repeat speed, 50 characters per second.

Scrolling Speed

Increasing the cursor speed also increases the scrolling speed of the arrow keys.

Troubleshooting

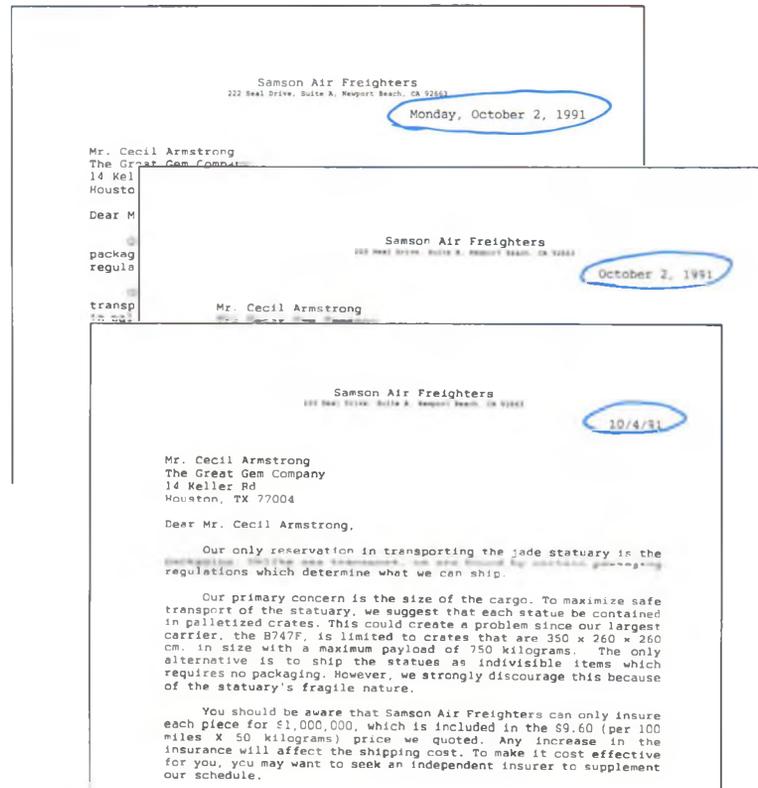
It is possible that the Cursor Speed feature conflicts with a memory-resident program on your computer or that it does not work properly with your computer. If this is the case, select the Normal option to avoid incompatibilities or use the /NC startup option to disable the Cursor Speed feature altogether (see *Appendix N: Startup Options in Reference*).

See Also: Cursor Movement; Appendix N

D Date

If you keep the date and time current on your computer, you can use Date to make sure that the documents you create always have the latest date and time in them.

Date inserts the current date as text or as a code which is replaced by the current date each time you retrieve or print that document.



To use the Date feature,

- 1 Move the cursor to the place where you want the date inserted.
- 2 Press **Date/Outline** (Shift-F5) to display the Date/Outline menu on the status line.
- 3 Select an option to insert either the current date or a Date code into your text (see *Date Text* or *Date Code* below).

 Select a Date option from the Tools menu.

Notes

Date Code

Selecting Date Code (2) from the Date/Outline menu inserts a Date code at the cursor position. In the normal editing screen and when the document is printed, the Date code is replaced by the current date. Each time you retrieve the document at a later date, the Date code is updated to reflect the current date.

You can see the actual code in Reveal Codes (Alt-F3). It is displayed as [Date:format] where *format* represents the format in which the date will be printed (see *Date Format* below).

Date Format

Normally, WordPerfect inserts the date as *month day, year* (e.g., November 19, 1991) but you can change the appearance of the date that is inserted. WordPerfect offers a wide variety of formats. For example, November 19, 1991 can also be printed as: 19 November, 1991; Sun Nov 19, 1991; 11/19/91 (Sunday), etc. A date can also include the time, single words, or phrases.

To change the way the date is displayed, select Date Format (3) from the Date/Outline menu to display the date format screen.

- ▲ NUMBERS
- ▲ PARTS OF THE DATE



Enter a new date format, then press **Exit** (F7) to return to your document.

The numbers 0 through 9 on the date format screen represent different ways the parts of the date and time can be written. You can include words, spaces, and other punctuation with these numbers to create a date format. A format can be up to 29 characters in total length.

Format

3 1, 4
3 1, 4 — 8:90
DATE: 2/1/5 (6)
TIME: 8:90

Display

March 15, 1990
March 15, 1990 — 10:55am
DATE: 3/15/90 (Tuesday)
TIME: 10:55am

Inserting the percent sign (%) before a format number adds a zero to any number that is less than ten or abbreviates the names of the months and days.

Format	Display
2/1/5	3/6/90
%2/%1/5	03/06/90
3 1, 4 (6)	November 21, 1990 (Monday)
%3. 1, 4 (%6)	Nov. 21, 1990 (Mon)

Inserting the dollar sign (\$) before a format number adds a space to any number that is less than ten.

Format	Display
2/1/5	3/6/90
\$2/\$1/5	3/ 6/90

The month and day names and their abbreviations are determined by a language resource file (WP.LRS) provided with WordPerfect. If you want to change the month and day names or their abbreviations, you can edit the WP.LRS file (see *Language Resource File in Reference*).

Changing the date format affects only those date codes which are inserted after the format has been changed. This lets you have several different date formats within one document.

Any changes you make to the date format are erased when you exit WordPerfect. To change your date format permanently, press **Setup** (Shift-F1), select **Initial Settings** (4), select **Date Format** (2), enter a new format, then press **Exit** (F7) to save your changes and return to the normal editing screen (see *Initial Settings in Reference*).

Date Text

Selecting **Date Text** (1) from the **Date/Outline** menu inserts the current date at the cursor as text (e.g., March 18, 1991). The way the date is written is determined by your current date format (see *Date Format* above).

Language

If a language code is in effect at the **Date** code, the text of the date and the date format correspond with that language code. To change the language being used, change the language code (see *Language in Reference*).

You can also change the way the month and day names and their abbreviations are being written in a particular language by editing the language resource file (see *Language Resource File in Reference*).

Merge Files

You can include a {DATE} command or a ^D character in a primary or secondary merge file. WordPerfect then inserts the current date when you perform the merge. Move the cursor to the place in the file where you want the

code inserted, press **Merge Codes** (Shift-F9), select **More** (6), type **d** to move to the {DATE} code, then press **Enter** (see *Merge* in *Reference*).

Wrong Date and Time

WordPerfect does not set the date and time. If your computer clock is working correctly, but the wrong date and time are being displayed, you can usually reset the correct time using the **date** and **time** commands at the DOS prompt. Refer to your DOS manual for more information on these commands.

See Also: Initial Settings; Language; Language Resource File; Merge Codes

Delete Codes

In WordPerfect, codes determine how your text looks both on the screen and at the printer. However, these codes are not shown in the normal editing screen. Sometimes unwanted codes or codes in the wrong place can cause problems. For example, a misplaced Center code [Center] or Indent code [→Indent] can cause text to overlap.

When you run into problems with on-screen text, you can move through your text in the Reveal Codes screen and delete any unwanted codes.

1 Press **Reveal Codes** (Alt-F3) to display the Reveal Codes screen.

 Select **Reveal Codes** from the **Edit** menu.

The cursor is displayed as usual in the normal editing screen. It is highlighted in the screen which displays text accompanied by codes (see *Reveal Codes* in *Reference*).

2 Move the cursor to a code using any of the cursor keys or Search (see *Searching for Codes* below).

3 Press **Delete** (Del) to delete the code at the cursor.

or

Press **Backspace** to delete the code to the immediate left of the cursor.

4 Press **Reveal Codes** again to return to the normal editing screen.

 Select **Reveal Codes** from the **Edit** menu.

Notes

Normal Editing Screen

You can delete codes while in the normal editing screen. However, since unseen codes are often very important to your text, when you use Delete (Del) or Backspace to delete text in the normal editing screen you are usually asked to confirm the deletion of any codes. Type **y** to confirm the deletion or type any other key to skip over the code without deleting it.

Since deleting some codes immediately changes the on-screen appearance of your text, you are not asked to confirm the deletion of these codes when you use Delete (Del) or Backspace. For example, you can delete a Center code [Center], a Date code [Date:*format*], a Tab code [Tab], an Indent code [→Indent], or a Double Indent code [→Indent←] without having to confirm the deletion.

Using any deletion method other than Delete (Del) and Backspace usually deletes any codes within the deleted text. For example, most codes are deleted when you use Delete Word (Ctrl-Backspace), Delete to End of Line (Ctrl-End), Delete to End of Page (Ctrl-PgDn), etc. Most codes are also deleted when you use Block (Alt-F4) to block text and then delete it.

However, WordPerfect is designed to keep the attributes of text the same unless you change them. Consequently, if you block only one of the two codes in a paired code (e.g., bold, underline, etc.) and delete the block, WordPerfect inserts the necessary code to keep the bolded text bolded, the underlined text underlined, etc. (see *Attributes in Reference*).

Should you accidentally delete codes, you can restore them using Undo (see *Undo in Reference*).

Searching for Codes

Often you may want to delete several occurrences of troublesome codes from your text. For instance, it's a good idea to delete any unnecessary paired bold codes (e.g., [BOLD][bold]). You may also want to delete a series of different margin settings in a document.

An easy way to locate and delete codes is to use ♦Search (F2) or ♦Search (Shift-F2). Press ♦Search or ♦Search, press the key(s) used for a particular feature, then press ♦Search again to begin the search. The cursor moves to the right of the first occurrence of the code. You can then use Backspace to delete it.

For example, to search for a left or right margin setting you would press ♦Search (F2), press **Format** (Shift-F8), select **Line** (1), then select **Margins** (6) to insert a Left/Right Margin code [L/R Mar] in the Search string. Keep in mind that you cannot press ♦Search, then type [L/R Mar] to search for the Left/Right Margin code. You must use the necessary keystrokes to insert the actual code into the search string (see *Search in Reference*).

To search for the second code in a set of paired codes, you need to first insert both codes in the pair into the search string and then delete the first code. For example, to search for the Bold Off code [bold], press ♦Search (F2), press **Bold** (F6) twice to insert a pair of bold codes (i.e., [BOLD][bold]) into the search string, press **Left Arrow** (←) to move to the immediate right of the Bold On code [BOLD], press **Backspace** to delete it, then press ♦Search to begin the search.

Replace (Alt-F2) can also be used to search for troublesome codes and delete them. If you do not enter a replacement string, the code you search for is deleted when you do the Replace (see *Replace in Reference*).

See Also: Replace; Reveal Codes; Search

Delete Files

When you delete files, keep in mind that once you delete a file it is gone. You cannot use WordPerfect to get it back.

To help keep close track of the files you are deleting, WordPerfect lets you display an alphabetical list of all the files (or documents) in a directory. You can then move the cursor through the filenames on the list and delete one file at a time, mark certain files and delete them, or mark all the files in a directory and delete them all at once.

Once a file has been deleted, its name disappears from the file list, and the remaining files are displayed in alphabetical order.

To delete files,

- 1 Use **List** (F5) to display an on-screen listing of the files in a directory (see *List Files in Reference*).

 Select List Files from the File menu.

- 2 Use one of the Delete features as described in *Notes* below.

Notes

Deleting a Single File

To delete any file on a displayed file list, use the cursor keys or Name Search to move to the file, select **Delete** (2), then type **y**.

Deleting All the Files in a Directory

Files are divided into groups called *directories*. When a list of files is displayed on-screen, the name of the directory being listed is displayed at the top center of the screen. The names of any subdirectories within that directory appear alphabetically at the first of the list, with a <Dir> to the right of each directory name.

When a list of the files in a directory is displayed, you can delete all the files in that directory by pressing **Mark Text** (Alt-F5) or **Home,*** to mark all the files with an asterisk (*), selecting **Delete** (2), then typing **y** twice. Because the deleted files will be lost, you are asked twice to confirm that you want to delete all the marked files.

You cannot delete a directory until all the files in it have been deleted. Once a directory is empty, you can highlight the empty directory, select **Delete** (2), and type **y** to delete it (see *Directories in Reference*).

Deleting Several Files in a Directory

To delete several files at once, move the cursor to each file you want to delete, type an asterisk (*) to mark each file, then select **Delete** (2). Type **y** twice, and the marked files are deleted.

After pressing **Delete** (Del) or selecting **Delete** (2) to delete the marked files, if you answer No by typing **n**, you are asked if you want to delete the file on

which the cursor is resting even if it is not marked. You can then delete that file by typing **y** or skip over it by pressing any other key.

You can unmark a marked file by moving the cursor to the filename and typing an asterisk (*) again. Before selecting **Delete (2)**, you can mark or unmark any file on the list. Even after selecting **Delete**, you can press **Cancel (F1)** at any time before completing the deletion process.

Restoring Lost Files

If you delete an important file, you may want to attempt to restore it using a file recovery program. These recovery programs are not available from WordPerfect Corporation. See your computer dealer for more information.

Short Cuts

You can display only a certain group of the files in a directory and then use **Mark Text (Alt-F5)** to mark and delete those files as described in *Deleting All the Files in a Directory* above.

After you press **List (F5)**, the name of the current directory is displayed followed by *.*. These three characters cause all the files in that directory to be displayed (e.g., C:\PAPERS*.*)).

For example, if a directory contains several files with the .LTR extension, changing the *.* to *.LTR (e.g., C:\PAPERS*.LTR), then pressing **Enter** will display only the .LTR files. You can then press **Mark Text (Alt-F5)** to mark all the .LTR files, select **Delete (2)**, then type **y** twice to delete them.

See Also: Directories; List Files

Delete Text

There are many different ways that you can delete part of the document you are creating in WordPerfect. They are listed under *Deletion Keystrokes* below.

Notes

Codes

As you use **Delete (Del)** and **Backspace** to delete text in the normal editing screen, you can delete both text and codes (see *Appendix C: Codes* for a list of codes). When you attempt to delete an unseen code, you are normally asked to confirm the deletion (see *Delete Codes in Reference*).

When you use any other deletion keystroke, any unseen codes within the text are automatically deleted (see *Deletion Keystrokes* below).

Deleting Using Block

Block makes it easy for you to delete large portions of text in a document. You can use Move (Ctrl-F4) or Block (Alt-F4) and the cursor keys to block several paragraphs or pages of text, and then delete the blocked text simply by pressing **Backspace** or **Delete** (Del) and typing **y** (see *Block* in *Reference*).

Keep in mind that when you delete a block of text any codes within that text will also be deleted. Consequently, you may want to press **Reveal Codes** (Alt-F3) before you block the text you are going to delete to avoid deleting any important codes (see *Reveal Codes* in *Reference*).

Deletion Keystrokes

The following table lists the keystroke(s) used to delete text.

Deletion	Keystrokes
Character to the left of the cursor	Backspace
Character at the cursor	Delete (Del)
Word at the cursor	Delete Word (Ctrl-Backspace)
Word at the cursor	Delete Word (Ctrl-Del)
From the cursor to the end of the line	Delete to End of Line (Ctrl-End)
From the cursor to the end of the page	Delete to End of Page (Ctrl-PgDn), y
Blocked text	Backspace, y or Delete (Del), y
Delete from cursor to beginning of word	Home,Backspace
Delete from cursor to beginning of next word	Home,Delete

Restoring Deletions

If you mistakenly delete text, it is not immediately lost. WordPerfect stores your last three deletions. Pressing **Cancel** (F1) displays your last deletion on the screen and highlights it. You can then select **Restore** (1) to insert the currently displayed deletion into your text at the cursor, or select **Previous Deletion** (2) or press **Up Arrow** (↑) or **Down Arrow** (↓) to continue displaying up to your last three deletions (see *Undelete* in *Reference*).

See Also: Block; Delete Codes; Reveal Codes; Undelete

Directories

A directory is a special file that holds the names of a group of files. It helps you group your files to keep them more organized. You can organize your directories with the List Files feature in WordPerfect (see *List Files in Reference*).

To create a new directory while in WordPerfect,

- 1 Press **List** (F5).

 Select *List Files from the File menu*.

- 2 Type an equal sign (=).

or

Press **Enter**, then select **Other Directory (7)** from the List Files menu.

- 3 Enter the name of a new directory (see *Pathnames* below).
- 4 Type **y** to create the directory.

Notes

Default Directory

Each time you start WordPerfect, a directory is selected for saving and retrieving document files. This directory is called the *default directory*. When you save or retrieve a document file, simply enter a filename to save the file to or retrieve the file from the default directory.

You can find out which directory is the default by pressing **List** (F5). The directory displayed at the bottom left of the screen is the default directory.

If you specify a documents directory using the Location of Files feature in Setup (Shift-F1,6,7), that directory is used as the default directory in WordPerfect. If you do not specify a documents directory, the default directory is initially set to the directory from which you started WordPerfect (the DOS default directory).

Changing the Default

To change the default directory while in WordPerfect, follow the steps above for creating a directory, but enter the name of a directory that already exists rather than a new directory. This will change the default while you are in WordPerfect; however, if you exit and restart WordPerfect, the default returns to the documents (or DOS) directory.

Deleting a Directory

You can delete a directory from the List Files screen (F5,Enter). However, the directory must be empty before WordPerfect can delete it.

- 1 Move the cursor to an empty directory (“<Dir>” appears in the Size column for all directories) in the List Files screen.

- 2 Select **Delete** (2).

or

Press **Delete** (Del).

- 3 Type **y** to delete the directory.

If the directory contains any files, you will receive an error message indicating this. Look in that directory (see *Look in Reference*), delete or move all files found there, then repeat steps 1 through 3 above.

Directory Alias

You can create an *alias* name for any existing directory to give the directory a more descriptive name. This alias is displayed under the Descriptive Name heading when you have the long display on for List Files (see *List Files in Reference*).

To create a directory alias, first make sure you are in a blank normal editing screen, then follow these steps.

- 1 Type the full name of the directory to which you want to give an alias (e.g., **c:\wp51\work**), then press **End Field** (F9).
- 2 Type a descriptive directory alias name (e.g., **My WP 5.1 work directory**), then press **End Field**.
- 3 Press **Merge Codes** (Shift-F9), then select **End Record** (2).

You can enter up to 68 characters or spaces for a long document name. The first 30 of those characters can be displayed on the List Files Long Display screen. Characters entered with Compose may take up more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 68 characters or spaces for the document name.

- 4 Repeat steps 1 through 3 for every directory to which you want to give an alias.

When you finish, your screen should look similar to the following (your directories and aliases will differ).

```
C:\wp5)(END FIELD)
My WordPerfect 5.1 directory(END FIELD)
(END RECORD)
-----
C:\wp51\learn(END FIELD)
My WP 5.1 learn directory(END FIELD)
(END RECORD)
-----
C:\wp51\work(END FIELD)
My WP 5.1 work directory(END FIELD)
(END RECORD)
-----
C:\work(END FIELD)
My work directory in WP 5.0(END FIELD)
(END RECORD)
-----
C:\wp50(END FIELD)
My WP 5.0 directory(END FIELD)
(END RECORD)
-----
```

Field: 1

Doc 1 Pg 1 Ln 1 Pos 1

- 5 Press **Exit** (F7), type **y**, then enter **c:\wp{wp}.dln** as the filename. If you are running WordPerfect from a two disk drive system, enter **a:** or **b:** (enter the letter of the disk drive you started DOS from) in place of “c:”.

The file must be named WP{WP}.DLN and must be saved in the root directory of the partition you are working in.

If you are running WordPerfect on a network, the file must be named using your initials (e.g., WPKK).DLN).

- 6 Type **n** to stay in WordPerfect.

When you want to edit this file (e.g., if you create more directories), retrieve the file, edit it, then save it in the normal fashion (see *Save in Reference*).

List Files

The List Files feature lets you display all or some of the files in a directory. (A directory has “<Dir>” in the Size column of the List Files screen.)

The file size, date, and time it was created (or last revised) are displayed with each filename. All this information is kept in the directory. Additionally, if you display the List Files screen in the “long” display (see *List Files in Reference*), any directory alias is also displayed (see *Directory Alias* above).

Pathnames

A full pathname includes the drive letter and any subdirectory names. Each name is separated by a backslash (\). For example, “C:\WP51” refers to the WP51 directory (or file) on the C drive. “C:\WP51\TEST” refers to the TEST subdirectory (or file) in the WP51 directory on the C drive.

When you want to specify a document filename that is not found in the default directory, you should enter the full pathname. For example, if you want to

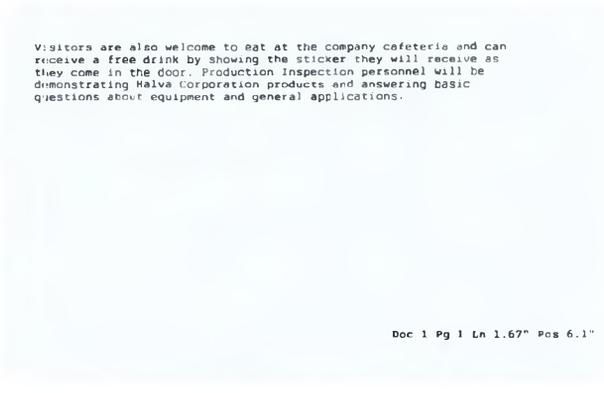
retrieve a file named LETTER from the disk in drive A, you must enter **a:letter** at the "Document to be Retrieved:" prompt.

See Also: List Files

Display Pitch

When you change the base font in WordPerfect, text may wrap differently on the screen depending on the size of the font. While the width of the actual on-screen characters does not change, the number of characters that fit on one line varies.

In the screen below, notice where the text wraps.



Visitors are also welcome to eat at the company cafeteria and can receive a free drink by showing the sticker they will receive as they come in the door. Production inspection personnel will be demonstrating Halva Corporation products and answering basic questions about equipment and general applications.

Doc 1 Pg 1 Ln 1.67" Pos 6.1"

Here is the same text. Now notice where the text wraps.



Visitors are also welcome to eat at the company cafeteria and can receive a free drink by showing the sticker they will receive as they come in the door. Production inspection personnel will be demonstrating Halva Corporation products and answering basic questions about equipment and general applications.

Doc 1 Pg 1 Ln 2.39" Pos 7.39"

The only difference between the two screens is that the first screen represents text that will be printed in 10pt text, while the second screen represents text that will be printed in 18pt text. Since 18pt text is not only taller, but, in this case, wider than 10pt text, fewer 18pt characters can fit on one line.

WordPerfect doesn't change the size of the characters on the screen, but it accurately represents the number of characters that will fit on one line of the page when the text is printed. It does this by calculating the actual printed width of characters and spaces (taken from information in the printer files) to determine how many characters will fit on the line of text.

Occasionally, WordPerfect may run across certain codes (Indents, Tabs, Table Margins, and Column Margins) that call for an absolute measurement. In other words, codes that are represented by a specific distance (e.g., 1.5") rather than a certain number of characters. When WordPerfect encounters these types of codes, it cannot use character information from the printer files to determine the correct on-screen representation of the code. Instead, it uses the display pitch.

The display pitch determines the amount of space (in width) one on-screen character or space represents. It is used to help WordPerfect display codes that call for an absolute measurement. For example, if the display pitch is set to .1", a 1" indent occupies the same space as 10 characters or spaces ($10 \times .1 = 1$).

As the display pitch measurement is decreased, the document on the screen expands horizontally. If you use the 1" indent from the example above and change the display pitch to .05", the indent occupies the same space on the screen as 20 characters or spaces ($20 \times .05 = 1$).

WordPerfect is initially set to adjust the display pitch automatically. If you wish, however, you can enter a display pitch of your own. Since WordPerfect uses the display pitch for only the few codes mentioned above, you would only want to change the display pitch when you want to change the space allotted on the screen to these codes.

Please understand that Display Pitch only affects the way text is displayed on the screen and does not affect the way text will be printed. If you want to see how a document will appear when it is printed, use the View Document feature (Shift-F7,6) (see *View Document* in *Reference*).

To set the display pitch,

- 1 Press **Format** (Shift-F8), then select **Document** (3) to display the Format: Document screen.

 Select *Document* from the *Layout* menu.

- 2 Select **Display Pitch** (1).

- 3 Press **y** to have WordPerfect set the display pitch automatically.

or

Press **n** to enter a display pitch of your own.

4 Enter a display pitch width. The initial (default) setting is .1".

If you are having WordPerfect set the display pitch automatically, the display pitch you enter has no effect.

5 Press **Exit** (F7) to return to the document.

The setting you make with this option is in effect for the entire document. When you save the document, the display pitch is saved with it. Once you exit the document, the display pitch setting is returned to Automatic.

Notes

Codes

Unlike most other features, a display pitch change does not insert a code into your document. The setting can be changed anywhere in your document and is in effect for the entire document. When you save the document, the display pitch is saved with the document. Once you exit the document, the display pitch setting is returned to Automatic.

Columns

Display Pitch is probably most useful in making columns more readable on the screen. For example, if text in columns overlaps, you can decrease the display pitch to increase the amount of space between columns.

Rewrite

If there are no absolute measurement codes in the portion of the document on the screen, selecting Rewrite (Ctrl-F3,3) resets Display Pitch and adjusts the text.

Tables

Display Pitch can be used to increase or decrease the amount of on-screen space allotted to table cells. The setting only affects the width of the cells and does not affect the amount of text that can be entered in a cell.

See Also: Display Setup

Display Setup

The Display Setup feature lets you change the way WordPerfect displays text and menus on the screen to make document creation and editing easier for you. For example, you can change the way many things are displayed in the normal editing screen and the View Document screen.

Read the information below to get a general idea about the options on the Display Setup feature. More information on each of the options can be found under specific headings in *Reference*.

The options on the Display Setup feature do *not* affect printed text.

1 Press **Setup** (Shift-F1).

 Select **Setup** from the *File* menu.

2 Select **Display** (2).

3 Select an option from the Setup: Display menu, then make the necessary changes.

General information about the options is included under *Notes* below. More information can be found under specific headings in *Reference*.

4 Press **Exit** (F7) until you return to the normal editing screen.

Settings made with any of the Setup: Display menu options are stored in the WP{WP}.SET file and remain in effect each time you start WordPerfect.

Notes

Colors/Fonts/Attributes

This option determines the on-screen appearance of text with and without attributes. The choices on its menu are tailored to your display card and monitor.

For information on using this option, see *Colors/Fonts/Attributes* in *Reference*.

Edit-Screen Options

This option lets you change several things on the normal editing screen including the way WordPerfect formats a document after editing changes. It also determines how document comments, document filenames, hard returns, merge codes, the Reveal Codes screen, and columns are displayed.

For information on using this option, see *Edit-Screen Options* in *Reference*.

Graphics Screen Type

This option determines the graphics driver WordPerfect will use to produce correct graphics screens. Graphics screens include the Graphics Editor, the Equation Editor, and the View Document screen.

For information on using this option, see *Graphics Screen Type* in *Reference*.

Menu Options

This option lets you change the way mnemonic selection letters are displayed. It also lets you change the appearance of your pull-down menus and determines whether you want the left Alt key to display the pull-down menu bar. For information on using this option, see *Menu Options* in *Reference*.

Text Screen Type

This option determines the text driver WordPerfect will use to display text on the screen in non-graphics screens. For information on using this option, see *Text Screen Type* in *Reference*.

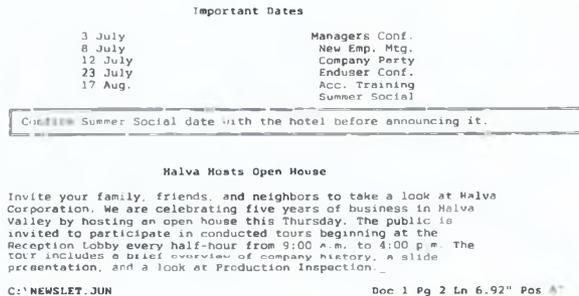
View Document Options

This option lets you change the way the View Document screen appears. For information on using this option, see *View Document, Options in Reference*.

See Also: Colors/Fonts/Attributes; Edit-Screen Options; Graphics Screen Type; Menu Options; View Document, Options

Document Comments

Document Comments lets you add comments, or reminders, to your text which will not actually be printed as part of the document. These comments appear in a double-lined box whenever your document is displayed on the screen.



Comments can serve several purposes. For example, you can use comments to remind you of changes you need to make to a document (information that needs to be added when it becomes available, etc.). You might include suggested test questions on a class-study paper as comments. Also, several people who are reading the same file can list their suggested changes as comments so that the original text of the document remains intact.

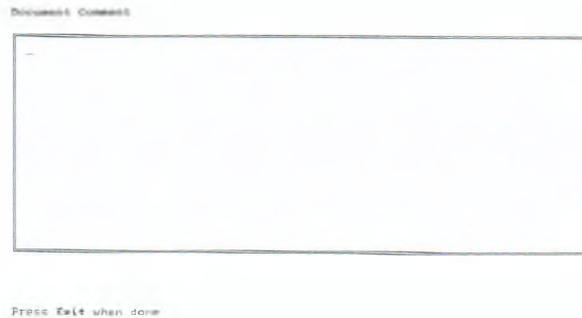
To create a comment,

1 Press **Text In/Out** (Ctrl-F5), then select **Comment** (4).

 Select **Comment** from the **Edit** menu.

2 Select **Create** (1).

An empty comments box is displayed.



- 3 Type the text of your comment (see *Entering and Editing Text* below).
- 4 Press **Exit** (F7) to save the comment and return to your document.

The comment is inserted at the cursor.

You can also place existing text in a comment. Block the text you want to include using **Alt-F4**, press **Text In/Out** (Ctrl-F5), then type *y*. Any codes in the blocked text will be ineffective in the comment, but will become active again if the comment is converted back to text.

Notes

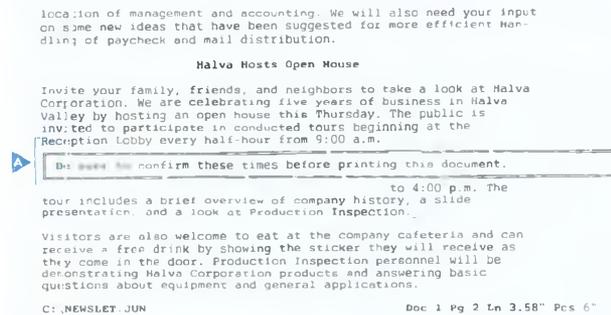
Codes

Creating a comment inserts a *Comment code* [Comment] into your text. You can delete the comment by deleting the code, either in *Reveal Codes* (Alt-F3) or in the normal editing screen. If you delete a comment accidentally, you can restore it just as you would restore any other deleted text (see *Undelete* in *Reference*).

When comments are hidden (see *Hiding Comments* below), you can find them by using ♦Search (F2) and ♦Search (Shift-F2) to search for the *Comment code* (see *Search* in *Reference*).

A comment may artificially separate a line of text when it does not appear at the first of the line, as in the following example.

ONE LINE OF TEXT



However, a comment is always considered as a single code. Consequently, when you use the arrow keys to move through text, you can pass over the comment with a single keystroke. Also, the comment will not affect the line of printed text.

Columns, Tables, and Comments

When you include a comment in text which is formatted in parallel or newspaper columns, the comment does not appear on-screen. If you format existing text into newspaper columns, any comments within the text will not appear. The comments will reappear if you remove the Column codes (see *Turning Columns On and Off* under *Columns, Newspaper* in *Reference*).

The comments also do not appear if they occur within Table codes. However, the comments will reappear if you remove the Table codes.

Editing an Existing Comment

To edit an existing comment, move the cursor just after the comment, press **Text/In Out** (Ctrl-F5), select **Comment** (4), then select **Edit** (2).

WordPerfect first searches backward for a comment. If it cannot find a comment it searches forward. WordPerfect then displays the first comment it finds on the screen in the comments box. You can then edit the comment and press **Exit** (F7) to save your changes.

Entering and Editing Text

You can use the standard cursor movement and deletion keys to edit the text of a comment. You can also use **Bold** (F6) and **Underline** (F8) to emphasize text, and **Compose** (Ctrl-2) to add any character from a WordPerfect character set to the comment (see *Compose* in *Reference*).

However, you cannot use the Speller, Thesaurus, or Search while in the Comments screen.

Pressing **Cancel** (F1) and typing **y** while in the Comments screen lets you return to your document without saving any changes you have made.

A Document Comment can only contain 1024 bytes of information.

Hiding Comments

You may want to edit a document without having on-screen space taken up by comments. You can keep comments from being displayed on the screen by turning off Comments Display in Setup (Shift-F1,2,6,2,n) (see *Edit-Screen Options* in *Reference*).

Printing Comments

Neither the Comment code, nor the comment itself has any effect on printed text. If you want a comment to be printed, you need to change it into text. With the cursor just after the comment, press **Text/In Out** (Ctrl-F5), select **Comment** (4), then select **Convert to Text** (3).

WordPerfect searches backward from the cursor. If it does not find a comment it searches forward. WordPerfect then changes the first comment it finds to text. Since the characters in the comment are inserted immediately at the comment code, you may then need to add spacing and punctuation before and after the comment to blend it correctly into the existing text.

See Also: Edit-Screen Options

Document Compare

With Document Compare you can have WordPerfect compare two different versions of the same document and note the differences in them.

For example, suppose that you send a disk copy of a report to a co-worker requesting his or her suggestions. Your co-worker then returns the revised report to you. You can retrieve the changed report to the screen and use Document Compare to have WordPerfect mark the passages in the document on the screen that differ from the original.

Or, suppose that you retrieve a document to the screen and make several changes to it. You then want to know how it compares with the original. You can use Document Compare to mark the passages that have been changed.

WordPerfect marks differences phrase-by-phrase and not word-by-word (see *Phrases* below). The smaller the document, the less confusing the comparison can become.

You may want to save a backup copy of the document on the screen just before making the comparison (see *Undoing the Comparison* below).

To compare a document on the screen with another document on disk,

1 Press **Mark Text** (Alt-F5), then select **Generate** (6).

 Select **Generate** from the **Mark** menu.

2 Select **Compare Screen and Disk Documents and Add Redline and Strikeout** (2).

You are asked to enter the name of a document on disk that you want to compare with the on-screen document. If the on-screen document has been saved, its filename is displayed as the default choice.

3 If you have made changes to the document on-screen and you want to compare it with the original which is still on disk, press **Enter**.

or

Enter the name of a document on disk.

While the two documents are being compared, a counter appears at the left end of the status line.

When the comparison is finished, the differences are marked and the cursor is placed at the beginning of the on-screen document (see *Difference Indicators* below).

Notes

Difference Indicators

When WordPerfect compares the text in the two documents, it uses several indicators to note the differences.

Difference	Indicators
Added Phrases	A pair of Redline codes [REDLN][redln] are placed around the phrase that was added.
Deleted Phrases	A pair of Strikeout codes [STKOUT][stkout] are placed around the phrase that was deleted.
Moved Phrases	Inserts THE FOLLOWING TEXT WAS MOVED before and THE PRECEDING TEXT WAS MOVED after the phrase that was moved.

Redline and Strikeout codes do not appear in the normal editing screen. They can be seen in Reveal Codes (Alt-F3).

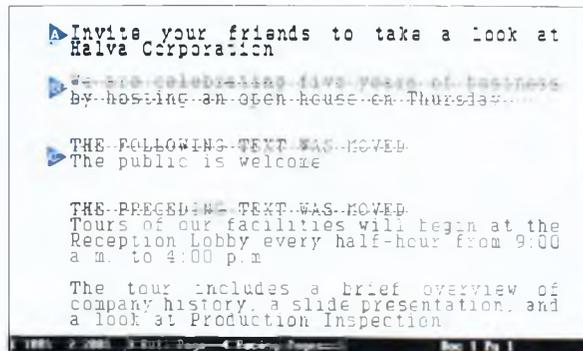
Normally, Strikeout puts a dash through text (see *Redline/Strikeout in Reference*). You have three options as to the way redlined text appears in print (see *Redline Method* under *Document Format in Reference*).

The appearance of Redline and Strikeout text in the normal editing screen depends upon your monitor and display card capabilities. If Redline and

Strikeout markings are not being displayed in your normal editing screen, you may want to modify your settings for the Redline and Strikeout attributes under Colors/Fonts/Attributes in Setup (Shift-F1,2,1) so that you can clearly identify these passages (see *Colors/Fonts/Attributes* in *Reference*).

You can also display the marked passages by printing the document, or by previewing the printed text in View Document (Shift-F7,6), as in the following example.

- ▲ ADDED PHRASE
- DELETED PHRASE
- ◀ MOVED PHRASE



Phrases

The phrases used as a basis of comparison are, as much as possible, the sentences in your document (not the words).

A *phrase* is defined as the text found between two *phrase markers*. The phrase markers WordPerfect uses are those items which normally punctuate sentences, including punctuation marks (period, comma, exclamation point, question mark, colon, semicolon), Hard Return codes [HRt], Hard Page codes [HPg], Footnote codes [Footnote:#;[Note Num] text], Endnote codes [Endnote:#;[Note Num] text], and the end of the document.

WordPerfect starts from the first word in your document and compares the text in the two documents until it reaches a phrase marker. If any change has been made, WordPerfect marks the phrase, noting the change (see *Difference Indicators* above). WordPerfect then starts the comparison again from that point. It continues on through to the end of the document, marking from phrase marker to phrase marker.

The comparison includes any text found within the footnotes, endnotes, and tables in your document. If a change has been made to the text included in these features, it is marked.

However, the comparison does not include changes made to text found within graphics boxes, headers, and footers.

Keep in mind that, since punctuation can vary, the phrases that WordPerfect marks may not always correspond to the actual grammatical sentences in your document. For example, in order to cut down on the length of the phrases being used for comparison, WordPerfect considers any group of words that end with commas as a phrase. Grammatically, such a group of words is an incomplete sentence.

Undoing the Comparison

After making a comparison, you may want to restore the document on the screen to the way it was before the comparison was made. To have WordPerfect remove the markings, press **Mark Text** (Alt-F5), select **Generate** (6), select **Remove Redline Markings and Strikeout Text from Document** (1), then type y.

This deletes Redline codes, Strikeout codes (and the text found in between them), and the notations around the moved phrases (see *Difference Indicators* above). Note that this also deletes any Redline codes and Strikeout codes (and the text found in between them) that were already a part of your document before you made the comparison. It leaves the cursor at the end of the document.

If many differences have been marked, restoring a compared document to its original state can sometimes become complicated. Consequently, when you are comparing two documents that you know you will want to keep, it's a good idea to have a copy of both documents on disk before making the comparison. You can then exit the new compared document without saving it and retrieve either original.

See Also: Redline/Strikeout

Document Conversion, WordPerfect 4.2 to 5.1

The following section discusses how to convert a WordPerfect document created in WordPerfect 4.2 to a WordPerfect 5.1 document. While WordPerfect "4.2" is used, these instructions are applicable for any WordPerfect documents created with WordPerfect 4.2 and previous versions.

If you want to convert a WordPerfect 5.1 document to WordPerfect 4.2, see *Document Conversion, WordPerfect 5.1 to 4.2* in Reference.

If you want to convert a WordPerfect 5.0 document to a WordPerfect 5.1 document, simply retrieve the 5.0 document into 5.1, then save it. All codes should convert completely. If you want to convert a WordPerfect 5.1 document to WordPerfect 5.0, see Text In/Out in Reference.

The easiest way to convert a WordPerfect 4.2 document to WordPerfect 5.1 is to simply retrieve the document in 5.1. All text and most codes are converted to

5.1. If you are happy with the document as it is, save it in 5.1 and your document on disk is converted.

After you retrieve the document, you may notice that some of your 4.2 codes did not convert (e.g., Font/Pitch, Bin Number). If this is the case, you may want to use a conversion resource (.CRS) file to convert those codes.

When you retrieve a 4.2 document in 5.1, WordPerfect displays the message “Document Conversion in Progress.” As part of the conversion process, WordPerfect searches for a conversion resource file. This file, which you can create (using the STANDARD.CRS file as a model), translates “untranslatable” 4.2 codes (codes that have no equivalent 5.1 codes). It also inserts codes that may be necessary to properly format your work at the beginning of your converted document.

To create a conversion resource (or .CRS) file,

1 Press **Retrieve** (Shift-F10).

 Select **Retrieve** from the **File** menu.

2 Retrieve the STANDARD.CRS file.

***Important:** STANDARD.CRS is installed with the WordPerfect utility programs. If you chose not to install the WordPerfect utility programs when you installed WordPerfect (or have not subsequently done so), you need to do so before you can retrieve STANDARD.CRS (see the Installation Instructions card).*

3 Press **Reveal Codes** (Alt-F3) to turn on Reveal Codes.

 Select **Reveal Codes** from the **Edit** menu.

4 Modify the commands in STANDARD.CRS.

STANDARD.CRS contains a series of commands represented by capital letters and, in some cases, numbers and comments. These commands, separated by hard returns, serve as the basis for the conversion resource file you will create.

Some of the lines of commands are used in the 4.2 to 5.1 conversion process. These lines start with FO, FF, BN, SZ, CH, BC, and IP. One line, (the one that starts with MB), is used in the 4.2 to 5.1 conversion process as well as the 5.1 to 4.2 conversion process. The rest of the lines are used in the 5.1 to 4.2 conversion process (see *Document Conversion, WordPerfect 5.1 to 4.2 in Reference*).

Each command line contains an equal sign (=). If you think of the file as a translation file, 4.2 “language” is on the left side of each equal sign, and 5.1 “language” is on the right side of each equal sign (4.2 to 5.1 commands only). Basically, when WordPerfect converts a document from 4.2 to 5.1, it searches for 4.2 codes (represented by the letters and numbers on the left side of the equal sign) and replaces them with 5.1 codes which you will enter on the right side of the equal sign. The process for editing STANDARD.CRS commands differs depending on the type of command (see the command headings under *Notes* below).

You should always edit a .CRS file with *Reveal Codes (Alt-F3)* on.

5 Press **Exit** (F7) to save the file and clear the screen.

 Select **Exit** from the **File** menu.

6 Type **y** to save the document.

7 Enter the name (including the complete pathname) of your printer (.PRS) file (minus the .PRS extension), and include a .CRS extension (e.g., C:\WP51\HPLASEII.CRS).

If you don't know the name of your printer file, use *List Files* to display your printer files (see *List Files* and *Printer, Select* in *Reference*) or use the *Printer: Edit* screen (see *Printer, Edit* in *Reference*).

You don't have to rename the .CRS file. If you name the .CRS file with your printer filename, however, it will be used when that printer is selected. If you are using more than one printer, you can create a .CRS file for each of your printers. If you don't have a .CRS file for the selected printer, WordPerfect uses STANDARD.CRS. If WordPerfect can't find any .CRS files (STANDARD.CRS or otherwise), it converts the document without one.

In order for WordPerfect to use .CRS files, they must be located in the directory where your printer files (.PRS) are located, your default directory, or the directory where WPEXE is located (see *Location of Files* in *Reference*).

8 Type **n** to clear the screen.

After you create the .CRS file, retrieve your WordPerfect 4.2 documents into 5.1. You can edit the .CRS file for each document you retrieve, or you can retrieve them one after another without ever editing your .CRS file again.

Notes

Beginning Codes Command

The Beginning Codes command is a way of allowing you to insert codes at the beginning of your converted documents (after the code for the SZ command) and is helpful for including any codes such as styles, headers, and footers that you may want to use to format 5.1 documents.

This command allows you to convert 4.2 documents whose defaults were changed with the /s option in 4.2.

To edit the BC command.

1 Find the line of STANDARD.CRS that contains the letters BC.

2 Move the cursor to the immediate right of the equal sign (=).

3 Include the codes just as you would in any other 5.1 document.

For example, if you want to include a Tab Setting, press **Format** (Shift-F8), select **Line** (1), select **Tab Set** (8), then set your tabs. The code is inserted after the equal sign.

A BC command in Reveal Codes should look similar to the one below.

```
BC=[Tab Set:Abs; 2"]][HRt]
```

This particular command will insert the Tab Set code at the top of the converted document.

You can include as many codes as you like as long as you end the command with a hard return. In fact, you can enter codes here that you cannot enter in the Initial Codes feature.

Bin Number Commands

WordPerfect 4.2 Bin Number codes are represented in STANDARD.CRS by BN #. WordPerfect 5.1 Bin Number replacement codes are represented in STANDARD.CRS by a comment. If you want to convert Bin Number codes, you should replace the comment with a 5.1 Paper Size/Type code. In a 5.1 document, this Paper Size/Type code is matched with an existing Paper Size/Type definition on the Paper Size/Type menu and tells WordPerfect where to find the form you want to print on (see *Paper Size/Type* in *Reference*).

To edit a Bin Number command,

Find the command representing the Bin Number code you wish to replace and move the cursor to the Comment code on that line.

1 Press **Format** (Shift-F8), then select **Page (2)** to display the Page Format menu.

 *Select Page from the Layout menu.*

2 Select **Paper Size/Type (7)**.

3 Select a paper size and type (see *Paper Size/Type* in *Reference*).

4 Press **Exit** (F7) until you return to the normal editing screen with STANDARD.CRS displayed.

5 Delete the comment.

An edited Bin Number command in Reveal Codes should look similar to the one below.

```
BN 1=[Paper Sz/Typ:9.5"x4",Envelope][HRt]
```

Extended Character Command

The Extended Character command is for those of you who changed information in a 4.2 character table with the WordPerfect 4.2 Printer Program.

1 Find the line of STANDARD.CRS that contains the letters CH.

2 Move the cursor to the equal sign (=).

3 Type the 4.2 font number, a comma, the number of the character within that font that you wish to convert, then a space.

- 4 Move the cursor to the immediate right of the equal sign.
- 5 Using Compose (Ctrl-2 or Ctrl-v), insert a character from the WordPerfect 5.1 character sets (see *Compose* in *Reference*).

The result in Reveal Codes should look like the one below.

```
CH 1,9 =[■: 4,23][HRt]
```

The 5.1 code located to the right of the equal sign will only expand if the cursor is resting on it.

Keep in mind that you only need to edit this command if you changed information in a 4.2 character table. If you did not, the characters convert correctly without this command.

Font On/Off Commands

The Font On/Off commands (FO #.# and FF #.#) in STANDARD.CRS represent WordPerfect 4.2 Font/Pitch codes. FO stands for “font on” while FF stands for “font off.” 4.2 Font/Pitch codes are not paired codes and do not have an “on” or an “off.” You will see why STANDARD.CRS includes “on” and “off” when you read the examples that follow.

WordPerfect 5.1 codes on the Font On/Off command lines are represented by a comment. If you use STANDARD.CRS without making any editing changes, Font/Pitch codes in 4.2 documents would be replaced by a comment when a document is converted. It is the comment that you want to replace as you create your own .CRS file.

To do so,

- 1 Find the Font On command line representing the Font/Pitch code you want to translate, then place the cursor on the [Comment] code.

For example, if you have a [Font Change:1,10] code in a 4.2 document you want to convert (where 1 is the font number and 10 is the font pitch), move the cursor to the comment code associated with the FO 1,10 command.

- 2 Insert the 5.1 code that will replace the 4.2 Font/Pitch code by following the same steps you would use to insert the 5.1 code in any document (see *Open Codes* and *Paired Codes* below).

Open Codes

Open codes instruct WordPerfect to change the format of text from a certain point forward. They are never turned off; instead, they are replaced by other open codes. If you insert an open code, the Font Off command line (FF #,#) is not needed.

For example, suppose you want to convert a 4.2 [Font Change] code to an open code such as one of the fonts on the Base Font list. To make the proper editing change to the Font On command, place the cursor on the [Comment] code, then perform the following steps.

1 Press **Font** (Ctrl-F8), and select **Base Font** (4) to display the list of fonts.

 *Select Base Font from the Font menu.*

2 Move the cursor to the font you want to choose.

3 Choose **Select** (1) to insert the Base Font code.

4 Delete the comment associated with the FO command line.

5 Delete the entire FF command line associated with the font you are working with.

When you are finished, the command in Reveal Codes should look similar to the one below.

```
FO 1,10=[Font:Helv 14.4pt Bold][HRt]
```

The font is one of your own choosing, but the important thing to notice is that the command ends with a hard return and there is no accompanying Comment code or FF command.

Paired Codes

Unlike open codes, paired codes have a beginning and an end. They are turned on before a block of text and are turned off following the text (e.g., [BOLD][bold]). When you wish to replace a 4.2 Font/Pitch code with a paired 5.1 code, you must use both the Font On (FO #,#) and Font Off (FF #,#) commands.

As an example, suppose you want to convert a 4.2 Font Change code [Font Change] to a 5.1 paired code such as one of the font attributes (e.g., Italics). To make the proper editing change to the Font On and Font Off commands, make sure the cursor is positioned on the Font On Comment code representing the Font/Pitch code you want to convert, then perform the following steps.

1 Press **Block** (Alt-F4) to turn on Block.

 *Select Block from the Edit menu.*

2 Move the cursor immediately to the Comment code associated with the FF #,# command line representing that same Font/Pitch code.

3 Follow the steps you normally would to select the attribute.

4 Delete the Comment codes on both the Font On and Font Off command lines.

When you finish inserting a paired code, the command in Reveal Codes should look similar to the one below.

```
FO 2,10=[ITALC][HRt]
FF 2,10=[italc][HRt]
```

The FF #,# command line will appear in the attribute that you chose.

Again, the attribute code would be one of your own choosing, but each command should not contain a Comment code and must end with [HRt]. A Font Off command is necessary with all paired codes.

Translating Other Font/Pitch Codes

If your Font/Pitch code is not represented by any of the displayed Font On/Off commands, you can edit one of the existing command lines or create one of your own. If you create one of your own, use the same syntax as the rest of the Font On/Off commands.

It is important that comments for commands representing codes you want to convert are deleted. If they are not, they will appear in the converted document.

Initial Pitch Command

The Initial Pitch command does not have an equivalent command in 4.2. If your 4.2 document is initially set for a pitch other than 10 pitch, however, you will need to edit this command.

To do so,

- 1 Find the letters IP in STANDARD.CRS.
- 2 Move the cursor to the immediate right of the equal sign (=) on that line.
- 3 Edit the initial pitch as necessary.

An edited Initial Pitch command in Reveal Codes should look like the one shown below.

```
IP=13[HRt]
```

As you probably know, 4.2 margins, tabs, indents, tab aligns, and column margins were based on the current pitch of your document. Similar features in 5.1 are measured absolutely from the margins. (Although tabs in WordPerfect 5.1 can be measured absolutely, the default is for tabs to be measured relative to the margin.) By specifying the pitch of your 4.2 document, 5.1 absolute measurements are converted correctly.

Margin Bias Command

The Margin Bias command is similar to the Size and Beginning Codes commands in that it does not have an equivalent 4.2 code. It is used, however, to correct adjustments you may have made to features which call for absolute horizontal measurements (margins, tabs, column margins) because of an unprintable region.

Most laser printers have an unprintable region. This region is an area measured from all four edges of a form in which you cannot print. In 4.2, margins, tabs, and column margins all were measured from the unprintable region. For example, if you set the left margin to 10 for a 10-pitch font and the unprintable region was .25", the actual left margin was 1.25" (1" + .25").

If you compensated in 4.2 for the unprintable region by reducing the margins, you will not get the same margins in 5.1. Suppose you reduced a margin in 4.2 to 7 for a 10-pitch font to give you a .95" margin (.7" + .25"). In 5.1, unprintable regions are not taken into account when measuring margins (unless the margin is less than the unprintable region), so that same margin will result in a .7" margin in 5.1.

To edit the Margin Bias command,

- 1 Find the letters MB in STANDARD.CRS.
- 2 Move the cursor to the immediate right of the equal sign (=) on that line.
- 3 Edit the margin bias measurement as necessary.

The measurement you type is the number of inches you want to add to your 4.2 measurements. If you type .25, .25" is added to your 4.2 measurements. For example,

```
MB=.25[HRt]
```

The MB command is initially set to zero. If you delete this zero and do not enter a number, WordPerfect adjusts for the unprintable region by looking at the Minimum Margin setting for your printer in your printer definition (.PRS) file.

The Minimum Margin setting is usually very close to the unprintable region measurement, so you may just want to delete the zero, convert the 4.2 document, then see how it looks.

Size Command

The Size command is simply a way of telling WordPerfect 5.1 the size of paper you plan to use. While 4.2 did not actually have such a code, 5.1 needs this information to calculate margins, tabs, columns, and tab aligns correctly.

This command has a default setting of Standard 8 1/2" x 11" and does not need to be edited if you are planning on using that size of paper in 5.1. If you are using a different paper size,

- 1 Find the line of STANDARD.CRS that contains the letters SZ.
- 2 Move the cursor to the immediate right of the equal sign (=) on that line and delete the existing Paper Size/Type code.
- 3 Press **Format** (Shift-F8), then select **Page** (2) to display the Page Format menu.
 Select Page from the Layout menu.
- 4 Select Paper Size/Type (7).
- 5 Select a paper size and type (see *Paper Size/Type in Reference*).
- 6 Press **Exit** (F7) until you return to the normal editing screen with STANDARD.CRS displayed.

When a document is converted, the code is placed before any other codes or text.

An edited Size command in Reveal Codes should look like the one below.

```
SZ=[Paper Sz/Typ:9.5"x4",Envelope][HRt]
```

See Also: Convert Program; Document Conversion, WordPerfect 5.1 to 4.2; Text In/Out

Document Conversion, WordPerfect 5.1 to 4.2

The following section discusses how to convert a WordPerfect document created in WordPerfect 5.1 to a WordPerfect 4.2 document.

If you want to convert a WordPerfect 4.2 document to WordPerfect 5.1, see *Document Conversion, WordPerfect 4.2 to 5.1* in Reference.

If you want to convert a WordPerfect 5.1 document to WordPerfect 5.0, see Text In/Out in Reference. If you want to convert a WordPerfect 5.0 document to a WordPerfect 5.1 document, retrieve the 5.0 document into 5.1, then save the document. All codes should convert completely.

The easiest way to convert a WordPerfect 5.1 document to WordPerfect 4.2 is to use the Save as WordPerfect 4.2 option on the Text In/Out key (Ctrl-F5,3,3). Most text and many codes are converted to 4.2. If you are happy with the document as it is, you need to do nothing more.

After you save your document, you may notice that some of your 5.1 codes did not convert. Most WordPerfect 5.1 codes that have no equivalent in WordPerfect 4.2 are removed.

Some WordPerfect 5.1 codes that have no equivalent in WordPerfect 4.2 can be converted to 4.2 codes with the aid of a conversion resource (.CRS) file. This file, which you create (using the STANDARD.CRS file as a model), translates some "untranslatable" 5.1 codes (codes that have no equivalent 4.2 codes). When you use the Save as WordPerfect 4.2 option on the Text In/Out key, WordPerfect looks for a .CRS file.

To create a conversion resource (or .CRS) file,

1 Press **Retrieve** (Shift-F10).

Select **Retrieve from the File menu**.

2 Retrieve the STANDARD.CRS file.

Important: STANDARD.CRS is installed with the WordPerfect utility programs. If you did not install the WordPerfect utility programs when you installed WordPerfect (or have not subsequently done so), you need to do so before you can retrieve STANDARD.CRS (see the Installation Instructions card).

3 Press **Reveal Codes** (Alt-F3) to turn on Reveal Codes.

 Select *Reveal Codes* from the *Edit* menu.

4 Modify the commands in STANDARD.CRS.

STANDARD.CRS contains a series of commands represented by capital letters and, in some cases, numbers and comments. These commands, separated by hard returns, serve as the basis for the conversion resource file you will create.

Some of the lines of commands are used in the 5.1 to 4.2 conversion process. These lines start with FT, AO, AF, BP, and WC. One line (the one that starts with MB) is used in both the 5.1 to 4.2 conversion process as well as the 4.2 to 5.1 conversion process. The other lines are used in the 4.2 to 5.1 conversion process (see *Document Conversion, WordPerfect 4.2 to 5.1 in Reference*).

Each command contains an equal sign (=). If you think of the file as a translation file, 5.1 “language” is on the left side of each equal sign, and 4.2 “language” is on the right side of each equal sign (5.1 to 4.2 commands only). Basically, when WordPerfect converts a document from 5.1 to 4.2, it searches for 5.1 codes represented by letters, numbers, and codes on the left side of the equal sign and replaces them with 4.2 information which you will enter on the right side of the equal sign. The process for editing STANDARD.CRS commands differs depending on the type of command (see the command headings under *Notes* below).

You should always edit a .CRS file with Reveal Codes (Alt-F3) on.

5 Press **Exit** (F7) to save the file and clear the screen.

 Select *Exit* from the *File* menu.

6 Type **y** to save the document.

7 Enter the name (including the complete pathname) of your printer (.PRS) file (minus the .PRS extension), and include a .CRS extension (e.g., C:\WP51\HPLASEII.CRS).

If you don't know the name of your printer file, use List Files to display your printer files (see *List Files* and *Printer, Select* in *Reference*) or use the Printer: Edit screen (see *Printer, Edit* in *Reference*).

You don't have to rename the .CRS file. If you name the .CRS file with your printer filename, however, it will be used to convert documents when that printer is selected. If you are using more than one printer, you can create a .CRS file for each of your printers. If WordPerfect can't find a .CRS file for a printer, WordPerfect uses STANDARD.CRS. If WordPerfect can't find any .CRS file (including STANDARD.CRS), it converts the document without one.

In order for WordPerfect to use a .CRS file, it must be located in the same directory as your printer (.PRS) files, the default directory, or the directory where WPEXE is located (see *Location of Files* in *Reference*).

8 Type **n** to clear the screen.

After you create the .CRS file, use the Save as 4.2 option on the Text In/Out menu to save your WordPerfect 5.1 documents as 4.2 documents. If you wish, you can edit the .CRS file for each document you convert, or you can convert them one after another without ever editing your .CRS file again.

Notes

Attribute On/Off Command

The Attribute On/Off command (AO and AF) in STANDARD.CRS represents WordPerfect 5.1 attribute codes (e.g., Italics, Small Caps). AO stands for “attribute on” while AF stands for “attribute off.” Attribute codes are converted to a 4.2 Font/Pitch code.

To edit Attribute On/Off commands,

- 1 Move the cursor to the immediate right of the AO command.
- 2 Press **Block** (Alt-F4) to turn on Block.
-  Select **Block** from the *Edit* menu.
- 3 Move the cursor to the immediate right of the AF command.
- 4 Select the attribute you want to convert.

Select the attribute just as you would in any 5.1 document (see *Attributes in Reference*).

- 5 Move the cursor to the immediate right of the equal sign (=) on the AO command line.
- 6 Edit the Font and Pitch command as necessary.
- 7 Move the cursor to the immediate right of the equal sign on the AF command line.
- 8 Edit the Font and Pitch command as necessary.

The Font and Pitch command on the AO and AF command lines do not have to (and probably will not) be the same. The Font and Pitch command on the AO command line is the font and pitch you want to use at the beginning of the surrounded text. The Font and Pitch command on the AF command line is the font and pitch you want to use at the end of the surrounded text.

An example of an edited Attribute On/Off command as it should appear in Reveal Codes is shown below.

```
AO[ITALC]=3,10[HRt]
AF[italc]=1,10[HRt]
```

In this example, the 5.1 Italics On code is replaced with a 4.2 Font 3, Pitch 10 code. The 5.1 Italics Off code is replaced with a 4.2 Font 1, Pitch 10 code.

The 4.2 font you select on the AF line should usually be the default font for the document.

Bin Paper Command

WordPerfect 5.1 Paper Size/Type codes that are used to select paper from a particular bin location are represented in STANDARD.CRS by BP. WordPerfect 4.2 Bin Number codes are represented by a number.

To edit a Bin Paper command.

- 1 Move the cursor to the immediate right of the BP command.
- 2 Delete the existing Paper Size/Type code.
- 3 Insert a Paper Size/Type code.

Insert the code just as you would in any 5.1 document (see *Paper Size/Type* in *Reference*).

- 4 Move the cursor to the immediate right of the equal sign (=) on the same command line.
- 5 Edit the Bin Number as necessary.

An edited Bin Paper Command in Reveal Codes should look similar to the one shown below.

```
BP[Paper Sz/Typ: 9.5"x4", Envelope]=2[HRt]
```

The command in the example above would convert a 9.5" x 4" Envelope Paper Size/Type code to a 4.2 Bin Number 2 code.

Font Command

Font (FT) commands in STANDARD.CRS represent WordPerfect 5.1 Base Font codes (e.g., [Font:Tms Rmn 10pt]). WordPerfect 4.2 Font codes on the Font command lines are represented by two numbers. For example, Font 1, Pitch 10 is represented by 1,10.

To edit a Font command line,

- 1 Move the cursor to the immediate right of the FT on the Font command line.
- 2 Insert the 5.1 Base Font code that you wish to convert.

Insert the code just as you would insert a Base Font code in any 5.1 document (see *Font* in *Reference*).

- 3 Move the cursor to the immediate right of the equal sign (=) on the same command line.
- 4 Edit the Font and Pitch command as necessary.

For example, if you want to convert a 5.1 Times Roman 10pt Base Font to a 4.2 Font 2, Pitch 13 code, the command in Reveal Codes should read:

```
FT[Font:Tms Rmn 10pt]=2,13[HRt]
```

You can create as many FT command lines as necessary, but make sure that they have the syntax shown above.

Margin Bias Command

The Margin Bias command is used to make adjustments to features which call for an absolute horizontal measurement (tabs, margins, column margins). This command is necessary because unprintable regions on some printers cause WordPerfect to treat absolute horizontal measurements differently in WordPerfect 5.1 and 4.2.

Most laser printers have an unprintable region. This region is an area measured from all four edges of a form in which you cannot print. In WordPerfect 5.1, unprintable regions are not taken into account for features requiring an absolute horizontal measurement (unless the measurement is less than the unprintable region), so a 1" margin measurement in 5.1, equals a 1" margin measurement.

In WordPerfect 4.2, however, horizontal measurements are all measured from the unprintable region. For example, if you set the left margin to 10 for a 10-pitch font and the unprintable region is .25", the actual left margin is 1.25" (1" + .25").

If you have an unprintable region and are converting a document from 5.1 to 4.2, you will not get the same measurements. As you can see in the examples given in the two paragraphs above, a 1" margin in 5.1 becomes a 1.25" margin in 4.2 if you have a .25" unprintable region.

To edit the Margin Bias command,

- 1 Find the letters MB in STANDARD.CRS.
- 2 Move the cursor to the immediate right of the equal sign (=) on that line.
- 3 Edit the margin bias measurement.

Type the number of inches you want to subtract from your 5.1 measurements. If you type .25, .25" is subtracted from your 4.2 measurements.

An edited Margin Bias command in Reveal Codes should look like the one below.

```
MB=.25[HRT]
```

The MB command is initially set to zero. If you delete this zero and do not enter a number, WordPerfect adjusts for the unprintable region by looking at the Minimum Margin setting for your printer in your printer definition (.PRS) file.

This setting is usually very close to the unprintable region measurement, so you may want to delete the zero, convert the document, and see how the document looks.

WordPerfect Character Command

The WordPerfect Character command converts WordPerfect 5.1 characters to 4.2 extended characters.

To edit the command,

- 1 Move the cursor one space to the right of the WC command.
- 2 Insert a character from a WordPerfect character set.

Insert the character just as you would in any 5.1 document (see *Compose in Reference*).

- 3 Move the cursor to the immediate right of the equal sign (=) on the same command line.
- 4 Type a space, then type the font number, a comma, then the character number of the 4.2 extended character.

For example, if you want to convert the 5.1 character to the character represented in 4.2 by Font 1, Character 3, type **1,3**.

An edited WordPerfect Character command in Reveal Codes should look like the one shown below.

```
WC [■:4,23]= 1,9[HRt]
```

The 5.1 code to the left of the equal sign will only expand if the cursor is resting on it.

In the example above, 5.1 character 4,23 would be converted to character 9 in the 4.2 character set and would be printed in 4.2's Font 1.

See Also: Convert Program; Document Conversion, WordPerfect 4.2 to 5.1; Text In/Out

Document Format

The Document Format options let you make certain format changes that affect only the document you are currently working on.

For example, you can use Document Format to change your standard format settings for just one document, change the initial base font, or create a document summary.

- 1 Press **Format** (Shift-F8), then select **Document** (3) to display the Document Format menu.
 Select *Document from the Layout menu*.
- 2 Select an option, then make any necessary adjustments (see *Notes* below).
- 3 Press **Exit** (F7) to return to the normal editing screen.

Notes

Display Pitch

If you want to change the space on the screen allotted to tabs, indents, or column "gutters," you can adjust the display pitch to a setting of your own (see *Display Pitch in Reference*).

Changing the display pitch at any point in your document does not insert a code into your text, but it does affect the on-screen appearance of the text throughout that document.

Initial Base Font

When you select a printer, an initial base font is assigned with that printer (see *Printer, Select in Reference*). This option on the Format: Document menu lets you override that setting for just one document. The font you select using this option becomes the base font for that document, unless you change it using Base Font (Ctrl-F8,4) (see *Font in Reference*).

Initial Codes

The Initial Codes option on the Format: Document menu lets you display the codes that you have placed in the Initial Codes option on the Setup: Initial Settings menu (Shift-F1,4,5). You can then edit these settings or insert new codes for just one document. Any changes you make using this option override the settings made on the Setup: Initial Settings menu. The method for entering the codes is the same for both features (see *Initial Codes in Reference*).

Although the codes you enter using this option do not appear in your actual document, they take effect from the first of the document and remain in effect until you enter new codes within the document to change them.

Redline Method

This feature determines how Redline marking is displayed on the printed page for a specific document (see *Redline/Strikeout in Reference*).

Select either Printer Dependent (1), Left (2), or Alternating (3).

Printer Dependent marks the redlined text according to the redline string in the printer file, as displayed when you print PRINTER.TST (see *Font in Reference*). Left marks redlined text with a vertical bar (|) in the left margin. Alternating marks redlined text with a vertical bar in the left margin for even-numbered pages and in the right margin for odd-numbered pages.

When you select Left or Alternating, you are asked for a redline character that will be placed in the margins. The default is the vertical bar (|). You can enter the redline character of your choice by typing the character or by using Compose (Ctrl-2) to enter any character in the WordPerfect character sets (see *Compose in Reference*).

Summary

Select Summary (5) to create or edit a document summary for the document you are creating (see *Document Summary in Reference*).

See Also: Display Pitch; Document Summary; Font; Initial Settings; Redline/Strikeout

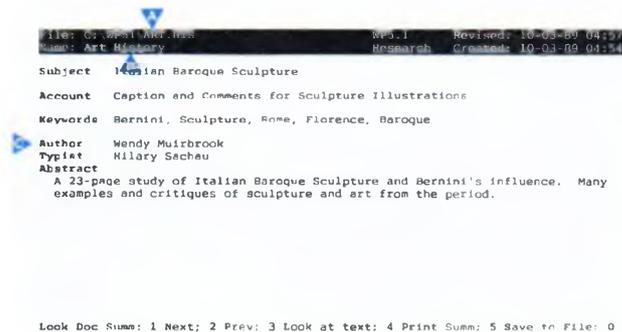
Document Summary

Document Summary helps you organize, and then quickly locate, your documents.

If you create a document summary for a file, that summary is the first thing which is displayed when you look at the contents of the file in List Files. Consequently, when you are looking through a directory filled with many large files, you don't have to scroll through the text of each file to determine what the file contains.

Instead, you are presented with a brief on-screen synopsis of each document, giving you the author, typist, and a short description of the file's contents.

- ▲ DOS NAME
- ▲ LONG FILENAME
- ▲ INFORMATION ABOUT THE FILE



If you are using the Long Document Name feature, the summary lists both the DOS name and the long name for each document (see *Name and Type* below).

The document summary also displays both the date when the summary was created and the latest revision date of the document itself. If you make several different revisions of the same file for different purposes, you can edit the document summary for each revision, indicating the differences. You will then be able to quickly display a summary of the changes made in that revision, accompanied by the revision date.

Document summaries also let you narrow the scope of a search when you use Find in List Files (see the information on keywords under *Document Summary Menu* below).

You can create or edit a document summary from anywhere in your document.

- 1 Press **Format** (Shift-F8), then select **Document** (3).
-  Select *Document* from the *Layout* menu.
- 2 Select **Summary** (5) to display the Document Summary menu.
- 3 Select the options and enter the information you want included in that document summary (see *Document Summary Menu* below).
- 4 Press **Exit** (F7) to return to your document and save your changes.

The cursor returns to its original place in your document.

While the Document Summary menu is on-screen, press **Cancel** (F1) to return to the previous menu, ignoring any changes you have made.

Notes

Create Summary Feature

You can set Create Summary on Save/Exit in Setup (Shift-F1,3,4,1) to Yes to have WordPerfect prompt you to create document summaries. When the Create Summary feature is set to Yes, WordPerfect displays the Document Summary menu each time you save or exit a document, until you have created a summary for that document (see *Document Management/Summary* under *Environment Setup* in *Reference*).

Delete

Creating a document summary does not insert any codes into a document. Once you have created a summary for a document, the only way you can delete it is by pressing **Delete** (Del), then typing **y** while the cursor is on the status line in the Document Summary menu. This deletes the document summary and returns you to the normal editing screen.

If you delete a document summary, you cannot restore it. You can only create a new summary for that document.

Document Summary Menu

When you display the document summary menu using steps 1 and 2 at the beginning of this section, it presents any information contained in the current summary.

- A REVISION DATE
- B CREATION DATE
- C NAME AND TYPE
- D AUTHOR AND TYPIST
- E INFORMATION ENTRIES
- F ABSTRACT



Even when no summary exists for a document, the Creation Date is still displayed on the Document Summary menu. If the document has a Revision Date, Long Document Name, or Type, these entries are also displayed.

The Revision Date is the latest date when the document was revised. A revision date cannot be edited or changed. Whenever you edit and save a document, WordPerfect updates this date according to your computer's current date and time.

To change any entry on the document summary menu, select the entry, then enter the information you want. While editing these entries, you can use the standard cursor movement and deletion keys to edit text. You can also use Bold (F6) and Underline (F8) to emphasize text, and Compose (Ctrl-2) to add any character from a WordPerfect character set (see *Compose in Reference*). However, you cannot use other editing features such as the Speller, Thesaurus, or Search. If you change your mind while editing an entry, you can press **Cancel** (F1) to leave the entry and ignore your changes.

An explanation of each entry on the document summary menu follows.

Abstract

The Abstract entry (7) can contain up to 780 characters, excluding any space required for extended characters created using Compose (Ctrl-2). An abstract is usually a brief summary of a document's contents. You can type an abstract in this entry, or you can press **Retrieve** (Shift-F10) when the cursor is on the Document Summary menu and type **y** to retrieve the first 400 characters of the document as its abstract (see *Retrieve* below).

Author and Typist

The Author and Typist entries (3) can include up to 60 characters excluding any extra space required for extended characters. You can type names in these entries, or you can press **Retrieve** (Shift-F10) and type **y** when the cursor is on the Document Summary menu to retrieve the latest Author and Typist entries which you saved to a document summary during that editing session (see *Retrieve* below).

Creation Date

The Creation Date (1) is the date the document summary was created. It remains constant unless you change it.

Once you select this entry, you can either edit the existing date and time or enter a new one. For the date, enter the month, day, and year, separated by slashes (e.g., 9/9/99 or 09/09/1999). For the time, enter the complete time (e.g., 10:00a and not 10a for 10:00 a.m.).

Information Entries

Entries 4 through 6 on the Document Summary menu can each contain up to 160 characters excluding any extra space required for extended characters.

Select **Subject** (4) to enter any information which will help you identify a document. You can type in a subject or you can move to the status line in the Document Summary menu, press **Retrieve** (Shift-F10), then type **y** to retrieve the first 160 characters of the Subject entry from the document (see *Subject Entries* below).

Select **Account** (5) to enter any information which will help you identify the document.

Select **Keywords** (6) to enter keywords that label a document. When you are using Find in List Files, you can then search for the Keyword entries from the document summaries (see *Find, Conditions in Reference*).

Name and Type

The Document Name entry (2) applies to the Long Document Name (see *Exit in Reference*). A long document name can contain up to 68 characters. A long document type can contain up to 20 characters.

Do not enter a pathname. WordPerfect does not recognize pathnames in long document names and treats them as part of the long document name.

If a document already has a long name and type, they are displayed in this entry. You can enter or edit both the long name and type in Document Summary. If you change them, the new name and type will appear when you exit or save the document.

Even if you set Long Document Names in Setup (Shift-F1,3,4,3) to No, any long document name and type you place in the Document Summary will be included with that document when you save it. That long document name will then be displayed on-screen whenever you use the Long Display feature in List Files (see *List Files in Reference*).

Retrieve

When the cursor is on the status line in the Document Summary menu, you can press **Retrieve** (Shift-F10) and type **y** to retrieve all of the following entries into the Document Summary menu:

- The latest author and typist entries saved with a document summary during that editing session.
- The first 160 characters of a subject entry in the document as the Document Summary Subject entry (see *Subject Entries* below).
- The first 400 characters of the document as the Document Summary Abstract entry.

These entries are all retrieved at once.

Saving and Printing Summaries

To save a document summary to a file while the Document Summary menu is on-screen and the cursor is on the status line, press **Save** (F10), then enter a filename. If the filename you enter already exists, you are asked if you want to replace the file or add to it. Select **Replace** (1) to replace the contents of the file with the summary text or **Append** (2) to add the summary text at the end of the existing file. When it appends a document summary to a file, WordPerfect inserts a Hard Return code immediately preceding the document summary.

While a document summary is displayed on-screen, you can print it by pressing **Print** (Shift-F7). Whenever you print selected pages of a document on disk, you can also type **s** to print the document summary (see *Selected Pages* under *Print, Document on Disk* in *Reference*). The printed appearance of the prompts on the document summary menu is determined by the WPLRS file which is provided with WordPerfect. You can change the appearance of these prompts in print by editing the WPLRS file (see *Language Resource File* in *Reference*).

Subject Entries

Normally, RE: is the standard heading for the subject entry in official documents. Consequently, when you retrieve a subject from your document by pressing **Retrieve** (Shift-F10) and typing **y** while the cursor is on the status line, WordPerfect searches the document for an RE: notation. It then copies the text immediately following the RE: (up to 160 characters or the next Hard Return code [HRt]) into the Subject entry.

You can have WordPerfect search for any subject heading of your choice (e.g., SUBJECT: or CONTENTS:) by changing the Subject Search Text in Setup. Press **Setup** (Shift-F1), select **Environment** (3), select **Document Management/Summary** (4), select **Subject Search Text** (2), then enter the subject heading. The heading you enter becomes the notation WordPerfect looks for in the future.

When entering the subject search text, you can enter up to 39 standard characters, excluding the extra space used by any extended characters you add using Compose (Ctrl-2).

System Filename and System Filetype

When you print a document summary, WordPerfect includes entries which do not appear on the Document Summary menu and adds the necessary information for them. These entries are System Filename and System Filetype. The system filename is the complete DOS pathname for the document (e.g., C:\STUDIES\TAX). The System Filetype is the version of WordPerfect used to create that document (e.g., WP 5.1).

See Also: List Files

DOS and WordPerfect

The Disk Operating System (DOS) is software that directs the operations your computer performs. It serves as a link between applications software (such as WordPerfect) and the hardware inside your computer. Without an operating system, your computer can do nothing. Therefore, DOS must be started before any other program can be used.

There are different versions of DOS for different computers. The most common disk operating system is MS-DOS, manufactured by Microsoft Corporation. Most computer companies have adapted MS-DOS, with permission of Microsoft Corporation, to run on their machines. DOS is constantly being improved, with new releases being introduced regularly. WordPerfect 5.1 currently runs on IBM computers or 100% compatibles that use DOS 2.0 or later versions.

Because DOS serves as the link between WordPerfect and your computer, we say WordPerfect runs *under* DOS. It is important to remember, however, that DOS software is not manufactured by WordPerfect Corporation. WordPerfect and DOS are two entirely different software products. You can start your machine with a WordPerfect diskette only if it is also a bootable DOS diskette.

If you are having problems formatting, copying, filing, and in some cases printing, the problems may be occurring because of DOS and not because of WordPerfect.

To use WordPerfect effectively, you should know how to use the following DOS commands and features:

CD	Change directory
CHKDSK	Check a disk
COPY	Copy files from one diskette/directory to another
DIR	Display the files in a directory
FORMAT	Format a diskette
MD	Make a directory

All of the above commands are described in your DOS documentation.

Some of the operations these commands perform can also be accomplished through the List Files feature. See List Files in Reference.

Notes

Backup

You should be sure to keep extra copies of your files to protect against diskette corruption and similar happenstances which may cause you to lose hours or days of work. These copies are called *backups*.

Many people and companies have strict daily backup procedures. Some even use fire-proof vaults to keep their backup diskettes safe from theft and natural disaster.

To minimize losses due to power and machine failures, WordPerfect has provided you with Backup features. The Backup features, however, do not ensure you against lost work due to damaged or worn out disks (see *Backup, Original and Backup, Timed* in *Reference*).

If you have two disk drives, use the COPY *.* or DISKCOPY commands to back up diskettes. If you have a hard disk, there is a BACKUP command that allows you to back up in a number of ways. More about these and other DOS commands can be found in your DOS manual. In addition, there are many other software products on the market that perform these backup functions.

You should also keep often-used diskettes free from outdated and seldom-used files. You can use Look on the WordPerfect List Files menu to quickly check the contents of each file on a diskette or in a subdirectory (see *List Files in Reference*). Delete outdated files and copy seldom-used and questionable files to an archive diskette. Well-organized, up-to-date diskettes and hard disks keep backup time to a minimum and program speed at a maximum.

Batch Files and AUTOEXEC.BAT

Batch files (designated with a .BAT extension) hold a series of DOS commands that are executed when you type the name of the file at the DOS prompt. If you frequently type the same series of commands at DOS, you may want to put them in a batch file so that you can execute them without typing each one. See your DOS manual for more information on batch files.

The AUTOEXEC.BAT file is a special batch file whose commands are executed each time you start your computer. The AUTOEXEC.BAT file must reside in the root directory (see *Root Directory* under *Organizing Disks and Directories* below).

You may already have an AUTOEXEC.BAT file. To check,

- 1 Press **List** (F5).

- 2 Enter the full pathname of the root directory of your hard disk plus ***.bat** (e.g., **c:*.bat**).

or

For two disk drive systems, insert your DOS diskette in drive B and enter **b:*.bat**.

If you have an AUTOEXEC.BAT file, it will appear in the list of files.

There are several commands you may want to have in an AUTOEXEC.BAT file. For example, you may want to include a Path command (see *Path Command* below). You can also include **prompt \$p\$g** to display the current directory in the DOS prompt. See your DOS manual for other commands you may want in your batch file.

To edit or create an AUTOEXEC.BAT file,

- 1 If you do not already have an AUTOEXEC.BAT file, check to be sure you are in a clear normal editing screen, then skip to step 6 below.
- 2 From a clear editing screen, press **Format** (Shift-F8), then select **Line** (1).

 *Select Line from the Layout menu.*

- 3 Select **Margins** (7), enter **0** (zero) for both left and right margins, then press **Exit** (F7) to return to the blank normal editing screen.

Setting the margins to zero reduces wrapping when you retrieve the AUTOEXEC.BAT file. Some printers do not allow margins of zero. If the printer currently selected does not, the minimum margin for the printer appears when you enter margins of zero.

- 4 Press **Text In/Out** (Ctrl-F5), select **DOS Text** (1), then select **Retrieve** (CR/LF to [HRt]) (2).

 *Select Text In on the File menu, then select DOS Text (CR/LF to HRt).*

- 5 Enter **c:\autoexec.bat** to retrieve the AUTOEXEC.BAT file.

or

If you are using a two disk drive system, insert your DOS diskette in drive B, then enter **b:\autoexec.bat**.

- 6 Enter the commands you want in the file.
- 7 When you are finished, press **Text In/Out** (Ctrl-F5), select **DOS Text** (1), then select **Save** (1).

 *Select Text Out from the File menu, then select DOS Text.*

Be sure you use the Text Out feature to save the file instead of the Save or Exit features. Using Save or Exit will save the file in WordPerfect format instead of DOS Text format, which makes it unrecognizable to DOS as a batch file.

- 8 Enter **c:\autoexec.bat** as the name of the file. (If the file already exists, type **y** to replace it.)

or

If you are using a two disk drive system, enter **b:\autoexec.bat** as the filename. (If the file already exists, type **y** to replace it.)

Once you have created (or edited) AUTOEXEC.BAT, you must restart DOS for the commands to take effect.

- 9 Press **Exit** (F7).

 Select **Exit** from the **File** menu.

- 10 Type **n** to not save the document (you have already saved it), then type **y** to exit WordPerfect.

- 11 Restart your computer.

Date and Time

When you start DOS, you may be asked to enter the current date and time. This information is important for some features of WordPerfect, such as List Files and Date, which use it to label files or insert the date/time in your documents. If you do not enter the correct date and time, they will be incorrect when you use these features of WordPerfect.

Some computers have a time card that keeps the date and time automatically, even when you turn off your computer. In this case, you may only need to enter the date and time once, not every time you start your computer.

DOS Prompt

After starting DOS and before another program is started, the DOS prompt appears on the screen. Although you can change the appearance of this prompt, it normally appears as **A>**, **B>**, **C>**, etc., and marks the DOS command line. Programs such as WordPerfect can be started from the command line.

Go to DOS

If you are working in WordPerfect and need to quickly execute some DOS commands (e.g., **FORMAT**), you can “Go to DOS” without exiting WordPerfect (see *Go to DOS* in *Reference*).

Naming Files

Every operating system has its own rules for naming files. DOS allows up to eight characters followed by an optional period and three-character extension.

You should develop a system for naming documents which gives you a clue to the contents of the file. For example, **SMITH.LTR** or **JONES.LTR** are much more descriptive than **LETTER.1** or **LETTER.2**. Files with matching extensions can all be copied or deleted in a single operation.

The following characters can be used in a filename:

A-Z
0-9
! @ # \$ % & () - ' { } ^

A period can only be used to separate the first part of the filename from the filename extension. The following characters *cannot* be used to create a filename:

* + = [] ; : " ~ < > ? \ , (space)

DOS 3.0 or later allows international characters (all non-graphics characters above ASCII 32) in filenames.

You should not use .EXE, .COM, .CON, or .WPM as extensions for WordPerfect files. These extensions are reserved for program and macro files and using them to name documents might cause confusion. If you give a file one of these extensions accidentally, just rename the file (see List Files in Reference).

The Long Document Name feature lets you enter a longer, more descriptive name for your documents (see *Environment Setup* in Reference).

Organizing Disks and Directories

Diskettes should be organized in such a way that each contains similar data (one for each client, each class of students, personal correspondence, etc.). You can further divide files into groups using *directories*.

Root Directory

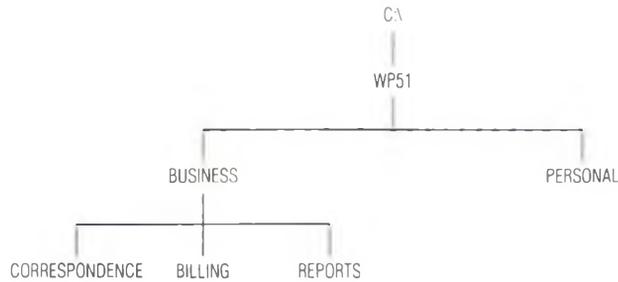
Every disk (hard or floppy) has a *root* directory designated by a single backslash (\). The full pathname of the root directory includes the drive, (e.g., C:\). Up to 112 filenames are allowed in the root directory of a floppy diskette (224 on a 1.2M floppy diskette); hard disks generally have higher limits.

Subdirectories can be created from the root directory with no limit on the number of filenames. A subdirectory of the root directory is given a name (e.g., WP51 or WORK). Backslashes are used to separate subdirectory names (e.g., C:\WP51\MEMOS).

Parent Directories

Each subdirectory has a parent and can in turn be a parent to several subdirectories of its own. For instance, on a hard disk, you can keep DOS files in one subdirectory, the WordPerfect system files in another, and business files in still another. The subdirectory for your business files could

then become a parent directory to other subdirectories for correspondence, billing, and reports.



In this example, C:\, WP51, BUSINESS, PERSONAL, CORRESPONDENCE, BILLING, and REPORTS are all directories. C:\ is the root directory. WP51 is the parent directory to the BUSINESS and PERSONAL directories, CORRESPONDENCE, BILLING, and REPORTS are subdirectories to the BUSINESS directory.

Path Command

In general, you cannot start WordPerfect from a directory other than C:\WP51 unless you specify the pathname (see *Pathnames* below). However, you can use a DOS path command to give DOS a list of directories to search through for executable program files. This allows you to start a program from any subdirectory listed in the path command, not just the subdirectory containing software.

The order of the directories in the path command determines the order in which the directories are searched. For example, you could enter **path c:\;c:\wp51** from the DOS prompt to tell DOS to search the root directory (C:\) and then the WordPerfect directory (\WP51) for a program file. When entering the path command, separate each directory in the list with a semicolon (;).

Unless the path command is in the AUTOEXEC.BAT file (see *Batch Files and AUTOEXEC.BAT* above), you must enter it each time you start your machine.

Pathnames

As you save and retrieve files in WordPerfect, you may be asked to specify a *full pathname*. A full pathname includes the drive, root, and any subdirectory names. For example, "C:\WP51" is the full pathname of the WP51 subdirectory. When you want to retrieve a file from a directory other than the one in which you are currently working (the default directory), you must enter the full pathname of the file (e.g., C:\WP51\JONES.LTR).

Startup Options

Many programs that can be started from DOS (such as WordPerfect and several other utility programs that come with WordPerfect) have optional commands you can use when you start the program. Often these options are for your convenience. Sometimes they are necessary to run the software on your particular hardware.

Startup options are entered with the name of the program at DOS. They usually consist of a slash (/), then a letter or letters, then other information pertaining to the option.

For example, */m-macroname* and */w=cm,em* are two startup options for WordPerfect. To execute a macro named **layout** when you start WordPerfect, you would enter **wp/m-layout** at the DOS prompt.

Many startup options can be combined. In the above example, if you wanted to limit the amount of conventional memory WordPerfect would use to 100K *and* run the layout macro when you start WordPerfect, you would enter **wp/w=100/m-layout** at the DOS prompt.

If you regularly use startup options with WordPerfect, you may want to include them in a batch file (see *Batch Files and AUTOEXEC.BAT* above).

See *Appendix N: Startup Options* for more information on startup options for WordPerfect. For a list of startup options for other programs that come with WordPerfect, see the sections on those programs in *Reference*.

See Also: Backup, Original; Backup, Timed; List Files; Text In/Out; Appendix N

E Edit-Screen Options

The way a document is displayed on the screen can make a great deal of difference in your writing efficiency. WordPerfect lets you change the general appearance of the normal editing screen with the Edit-Screen options.

The options on this menu do *not* affect printed text.

1 Press **Setup** (Shift-F1).

 Select *Setup* from the *File* menu.

2 Select **Display** (2), then select **Edit-Screen Options** (6).

3 Select the option of your choice, then make the necessary changes (see the option headings under *Notes* below).

4 Press **Exit** (F7) until you return to the normal editing screen.

Settings for this menu are stored in the WP{WP}.SET file and remain in effect each time you start WordPerfect.

Notes

Automatically Format and Rewrite

This option determines how WordPerfect formats text on the screen after an editing change. If the setting is *No*, WordPerfect formats the text as you scroll through it. If the setting is *Yes*, WordPerfect formats the text after each editing change. Local editing keystrokes are an exception to this rule. These include inserting a character, Backspace, Delete, Left Arrow, Right Arrow, Word Left, Word Right, and Delete Word.

When you select *No*, the editing process is usually faster.

*You can manually rewrite the screen at any particular time by pressing **Screen** (Ctrl-F3), then selecting **Rewrite** (3) (see *Rewrite in Reference*).*

Comments Display

This option determines whether document comments are displayed on the screen. For information on document comments, see *Document Comments in Reference*.

Filename on Status Line

This option determines whether the document filename is displayed on the status line. If you set this option to *Yes* and are editing a document that has been previously saved, the filename will appear on the left end of the status line.

The filename may be replaced with messages from time to time, even if you set this option to *Yes*.

Hard Return Display Character

Normally, when you press Enter to end a paragraph or short line of text, WordPerfect moves to the next line without displaying any type of character. If

you want to display a character at each hard return, select this option, then type the character.

You can enter a character from the WordPerfect character sets with the Compose feature (Ctrl-2) (see Compose in Reference).

If you have inserted a character and wish to delete that character, go back to the Hard Return Display option (Shift-F1,2,6,4), then press the **Space Bar**.

The Hard Return Display Character will not print or display in View Document.

Merge Codes Display

This option determines whether merge codes are displayed on the screen. For more information about the Merge feature, see *Merge* in *Reference*.

Reveal Codes Window Size

This option lets you enter the number of lines you want to allot to the Reveal Codes screen (Alt-F3). For example, you can allot 10 lines.



Press Reveal Codes to restore screen

Or, you can allot three lines.



If you choose to allot one line, only the character or code where the cursor is located is displayed in the Reveal Codes screen. In addition, you will be prompted for confirmation when you delete codes.

For more information on the Reveal Codes screen, see *Reveal Codes* in *Reference*.

Side-by-side Columns Display

This option determines whether columns created with the Columns feature (Alt-F7,1) are displayed on the screen side-by-side or on separate pages. While columns will always print side-by-side, you can edit a document faster if they are displayed on separate pages.

For more information on this option, see *Columns, Display* in *Reference*.

See Also: Colors/Fonts/Attributes; Display Setup; Menu Options

Environment Setup

Like other menus on the WordPerfect Setup key, the Environment Setup menu offers you several options that let you determine how features will operate the entire time you are in WordPerfect. This is useful because you can tailor WordPerfect to your own needs by making the setting once, rather than each time you create a new document.

The options on the Environment Setup menu let you:

- Set backup options for safeguarding against losing documents.

- Instruct the computer to sound a “beep” when certain status line messages are displayed.
- Control the cursor speed.
- Make default settings for the Document Summary and Long Document Names features.
- Speed up the document saving process.
- Make default settings for the Hyphenation feature.
- Determine the units of measure for the status line as well as WordPerfect features that call for a measurement.

To set the options on the Environment Setup menu,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the *File* menu.

2 Select **Environment** (3).

3 Select an option, then make the necessary adjustments. General information on each of the options is found under *Notes* below. More information can be found under specific headings in *Reference*.

4 Press **Exit** (F7) until you return to the normal editing screen.

The settings made with this feature are stored in the WP{WP}.SET file and remain in effect each time you start WordPerfect.

Notes

Alternate Keyboard

This option lets you assign Help to F1, Cancel to Escape, and Repeat Value to F3. If you set this option to Yes, you can still select a keyboard layout (see *Keyboard Layout* in *Reference*).

Backup Options

WordPerfect has two backup options, Timed and Original. Both of these options act as safeguards against losing your work.

Timed backup makes a copy of the document you are working on every few minutes. This prevents you from losing large amounts of work due to machine failure, power outage, etc. Original backup lets you save both the original and replacement versions of the same document. This prevents you from losing a document you accidentally replaced.

More information on these options can be found in *Backup, Timed* and *Backup, Original* in *Reference*.

Beep Options

This option lets you determine whether WordPerfect will have the computer notify you with a “beep” when it displays an error message, prompts you for hyphenation, or cannot find search text. More information on this option can be found in *Beep Options in Reference*.

Cursor Speed

This option lets you change the speed at which your cursor moves through text. The speed is measured in characters per second. More information on this option can be found in *Cursor Speed in Reference*.

Document Management/Summary

This option lets you make settings for the Document Summary and Long Document Names features.

Create Summary on Save/Exit (1) lets you determine whether you want WordPerfect to create a document summary for you when you save a document. This option is only in effect if you haven't previously created a summary for the document.

Subject Search Text (2) determines what WordPerfect should search for when it is inserting information under the Subject heading in a Document Summary. And Default Document Type (4) determines what is inserted under the Document Type heading when you create a Document Summary.

These options are in effect for all document summaries, but the Subject Search Text and Document Type entries can be overridden for individual document summaries with the Document Summary feature. Once a document summary is created, it can be edited only with the Document Summary feature.

More information on these options can be found in *Document Summary in Reference*.

Long Document Names (3) determines whether you want to name a document with a long document name when you save the document. Setting this option to Yes lets you exceed the limits DOS puts on a filename (eight characters followed by a three-character extension). It also lets you give a more descriptive name to your documents.

You can enter up to 68 characters or spaces for a long document name. The first 30 of those characters can be displayed on the List Files Long Display screen. Characters entered with Compose may take up more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 68 characters or spaces for the document name. Also, do not enter a pathname. WordPerfect does not recognize pathnames in long document names and treats them as part of the long document name.

When you save a document after setting Long Document Names to Yes, WordPerfect will prompt you to enter the long document name, the document type, and the DOS filename. If you have not previously entered a DOS filename, one will be provided for you from the characters in the long document

name and the characters in the document type. You can edit this name as you wish.

If you set the Long Document Names option to Yes, WordPerfect also displays the Long Display screen when you use the List Files feature. Once you are in List Files, you can then change to the Short Display screen if you like (see *List Files in Reference*).

Sort List Files (5) determines whether you want subdirectories and files in List Files to display in alphabetical order or in the order that they reside on disk. If you set this option to Yes, List Files displays subdirectories in alphabetical order followed by an alphabetical listing of files. If you set this option to No, List Files displays subdirectories and files in the order they reside on the disk. This will speed display of the file list (especially for very large directories).

Fast Save (unformatted)

If this option is set to Yes (the default setting), WordPerfect saves your document faster than if this option is set to No. If you are printing from disk, however, a document saved with Fast Save will usually take longer to print than a document saved without Fast Save because it must be formatted before it is printed (see *Fast Save in Reference*).

Hyphenation

This option lets you determine which dictionary WordPerfect will use to hyphenate words when Hyphenation is on. You have two choices: External Dictionary/Rules and Internal Rules.

External Dictionary/Rules (1) tells WordPerfect to use the hyphenation program and dictionary contained within the WP{WP}US.HYC and WP{WP}US.LEX files. Internal Rules (2) tells WordPerfect to use a hyphenation dictionary contained within WPEXE itself. The external dictionary is much more powerful and accurate than internal hyphenation, but it occupies more disk space.

The Prompt for Hyphenation option discussed below determines when WordPerfect stops to prompt you for hyphenation.

More information on the Hyphenation feature itself can be found under *Hyphenation in Reference*.

Prompt for Hyphenation

This option determines when WordPerfect will prompt you for hyphenation assistance when you are using the Hyphenation feature. Normally, WordPerfect asks for help only when the hyphenation dictionary it is using cannot determine how to hyphenate a word. This is what is meant by the When Required (2) setting.

Never (1) tells WordPerfect to never prompt you for assistance. If WordPerfect comes to a word that it normally would ask for assistance in hyphenating, it will wrap that word to the next line without hyphenating it.

Always (3) tells WordPerfect to always prompt you for assistance. WordPerfect will stop at every word that needs to be hyphenated and ask you for assistance.

More information on these options can be found under *Hyphenation* in *Reference*.

Units of Measure

This option determines the units of measure WordPerfect will use for the status line as well as for features that require a measurement (e.g., margins). Inches, centimeters, points, WordPerfect 4.2 units (lines, columns), and 1/1200ths of an inch are supported.

For more information on this feature, see *Units of Measure* in *Reference*.

See Also: Backup, Original; Backup, Timed; Beep Options; Cursor Speed; Document Summary; Fast Save; Hyphenation; Units of Measure

Equations

Until now, creating a mathematical or scientific equation in a full-featured word processing program was not easy. Even simple equations were difficult or impossible to create because they require special mathematical characters as well as a way to format those mathematical characters.

Now WordPerfect contains an Equation Editor which helps you create mathematical or scientific equations and include them in WordPerfect documents such as reports, tests, and research papers.

For example, the following equations can be created in the Equation Editor.

$$\frac{d}{dx} \left[n^{\frac{1}{n}} \right] = \frac{1}{n} x^{\left(\frac{1}{n} \right) - 1}$$

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$

$$dU = \left[\frac{1}{2} \epsilon_0 E(cB) + \frac{1}{\mu_0} B \left(\frac{E}{c} \right) \right] A dx$$

Important: The Equation Editor helps you create, align, and print (typeset) mathematical equations. It does not calculate equations for you.

To format an equation, you first define a graphics box that will contain the equation, then you create the equation itself. You use the WordPerfect Graphics feature to define the box, then you use the WordPerfect Equation Editor to create the equation.

Graphics, Edit and *Graphics, Define a Box* in *Reference* discuss editing and renumbering equation boxes and are the sections you should turn to if you would like to perform any of those operations.

1 Press **Graphics** (Alt-F9), then select **Equation** (6).

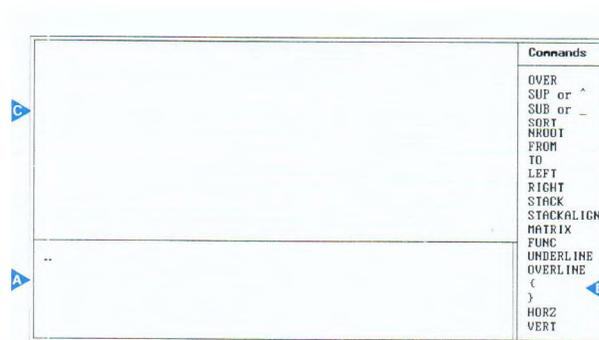
 Select **Equation** from the **Graphics** menu.

2 Select **Create** (1) to display the **Definition: Equation** screen.

3 Select **Edit** (9) to display the **Equation Editor**.

The Equation Editor is displayed any time you select **Edit** for a box whose contents are listed as **Equation**. Once the Equation Editor is displayed, you can create your equation. The Equation Editor has three windows: the **Editing** window, the **Equation Palette**, and the **Display** window.

-  EDITING WINDOW
-  EQUATION PALETTE
-  DISPLAY WINDOW



By selecting commands and symbols from the Equation Palette in the Equation Editor and by typing characters from the keyboard, you can create the equation in the Editing window. After creating the equation, you can then display it in the Display window to see a representation of how it will look when printed. Since there are several commands and symbols included in the Equation Palette, your equations can be as simple or as complex as necessary.

4 Create your equation (see *Editing Window* below).

For example, typing **a times b** in the Equation Editor creates this equation,

$$a \times b$$

Typing **{a times b} over c** in the Equation Editor creates this equation,

$$\frac{a \times b}{c}$$

And typing **x={-b plusminus sqrt {b^2-4ac}} over {2a}** in the Equation Editor creates this equation,

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

5 Press **Screen** (Ctrl-F3) or **F9** to view your equation (see *Display Window* below).

 Click in the *Display Window*.

6 Repeat steps 4 and 5 above until you are satisfied with the appearance of the equation.

7 Press **Exit** (F7) until you return to the normal editing screen.

Pressing **Cancel** (F1), then typing **y** while in the Equation Editor cancels any changes you may have made to the equation you are creating and returns you to the Definition: Equation screen.

Once you are in the normal editing screen, you can view your equation as it will appear in the document by selecting **View Document** (Shift-F7,6).

Editing Window

The Editing window is where you create the equation. It is shown in the screen that accompanies the numbered steps at the beginning of this reference section.

You can enter numbers, letters, and the following keyboard characters (+ - * / = < > ! ? . ! @ , ; :) in the Editing window by pressing the appropriate keys. Other keyboard characters (^ ' " { } ()) as well as pairs of keyboard characters shown above (e.g., -> <= >=) can also be entered but have special meaning to the Equation Editor (see *Equations, Commands and Symbols in Reference* for a description of these characters).

You can enter a character from a WordPerfect character set by pressing **Compose** (Ctrl-2), typing the character set number, a comma, the number of the character within the character set, and pressing **Enter** (e.g., 7,63). See *Compose in Reference*.

You can also enter one of the numerous equation commands and symbols by pressing **List** (F5) to move to the Equation Palette, moving the cursor to the command or symbol you want to include, then pressing **Enter** or **Ctrl-Enter** (see *Equation Palette* below). If you choose not to enter a command or symbol, pressing **Exit** (F7) or **Cancel** (F1) moves you from the Equation Palette back to the Editing window.

Hard returns move the cursor to the next line of the Editing window, but do not insert Hard Return codes in the equation. In order to create multiple-line equations in one equation box such as the one shown below, you should use the pound sign (#), STACK, or STACKALIGN command (see *Equations, Commands and Symbols in Reference*).

$$a+b=c$$
$$x+y=z$$

Likewise, pressing the Space Bar inserts a space in the Editing window, but does not add a space between characters in an equation. If you want to add a space, type a tilde (~) for a normal space or a backward accent (˘) for a thin space. A thin space is equivalent to one-fourth of a normal space.

Equations are formatted according to established mathematical typesetting guidelines which include specific size, attribute, and placement requirements for characters and symbols. You can include approximately 2000 characters in the Editing window. Pressing Ctrl-Page Down in the Editing window deletes text from the cursor forward and resets all display parameters (i.e., Move, Scale) in the Display window to Automatic.

Equation Palette

The Equation Palette displays the commands and symbols you can use in an equation. It is shown in the screen that accompanies the numbered steps at the beginning of this reference section.

To move the cursor from the Editing window to the Equation Palette, you must be in the Equation Editor. When you are, press **List** (F5), or click with the mouse in the Equation Palette window. Once in the Palette, you can use the Up and Down Arrow keys to move the cursor to the desired command or symbol within the displayed menu, or press **Page Up** (PgUp) or **Page Down** (PgDn) to show the next menu on the Palette. If the menu extends beyond the screen, you can scroll to the bottom of the menu to display more commands or symbols.

When the cursor is resting on the command or symbol you want, press **Enter** or **Ctrl-Enter** to insert the command or symbol into the Editing window. Some symbols can be represented by both text (keywords) and a character. For these symbols, pressing **Enter** inserts the keyword, while pressing **Ctrl-Enter** inserts the character.

When you are in the Equation Palette, the command or symbol your cursor is on is highlighted in reverse video. The name of each menu in the Palette appears at the top of the Palette.

To leave the Equation Palette without entering a command, press **Exit** (F7) or **Cancel** (F1). For more information on the commands and symbols themselves, see *Equations, Commands and Symbols* and *Equations, Commands Syntax in Reference*. Some of the commands require a special syntax such as a space between a command and the number or variable you want the command to

affect. *Equations, Commands Syntax in Reference* contains information on the proper syntax.

You can enter a command without going to the Equation Palette by typing the command in the Editing window. Again, this is covered in more detail in Equations, Commands and Symbols in Reference.

Display Window

After you create or edit an equation in the Editing window, you can view it in the Display window. The Display window is shown in the screen that accompanies the numbered steps of this reference section.

You must have a graphics card for the equation to display correctly in the Display window (see Graphics Screen Type in Reference).

To display an equation in the Display window, press **Screen** (Ctrl-F3) or **F9**. Redisplay an equation after you make editing changes by pressing **Screen** (Ctrl-F3) again.

If you have some type of syntax error in the equation, the equation will not display in the Display window. Instead, you will receive the "Incorrect Format" error message, and the cursor will return to the point in the equation where the error occurs. This error message could be displayed for a variety of reasons depending on the command you are using. Check the information pertaining to the command you are using in *Equations, Commands Syntax in Reference*.

The size of the equation in the Display window is not the exact size of the equation as it will appear in the document. The percentage measurement at the lower right of the screen, however, tells you the viewing magnification. For example, if the percentage shows 500%, the equation on the screen is 5 times its printed size.

Press **Switch** (Shift-F3) to display an equation in the Display window *and* move to the Display window. Doing so lets you use the Display window options to move and resize the equation. While you are in the Display window, you cannot use the cursor in the Editing window.

When you are in the Display window, a double line appears at the right of the Display window. When you are not, a double line appears at the right of the Editing window.

The Display window options let you use the arrow keys to reposition the equation and the Page Up (PgUp) and Page Down (PgDn) keys to enlarge or reduce the view of the equation. Go To (Ctrl-Home) resets any changes you made with the arrow, Page Up, and Page Down keys.

Moving or resizing the equation in the Display window with the arrow, Page Up, and Page Down keys only helps you view the equation. It does not affect the way the equation will be printed. The *Aligning Equations, Fonts, Graphical Font Size, and Print as Graphics* headings below give you more information on the way the equation will be printed.

Press **Switch** (Shift-F3) again or **Exit** (F7) to move to the Editing window and display the Editing window options.

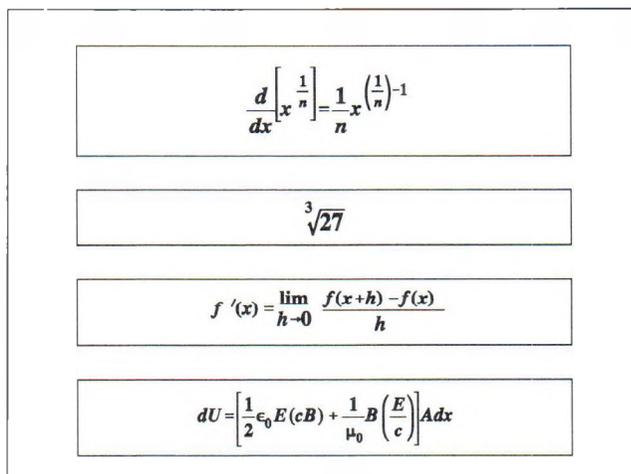
Notes

Aligning Equations

Several options let you choose the way equations will be aligned in the equations box.

Alignment options for the box itself are discussed in Graphics, Define a Box in Reference.

Before you change alignment settings for an equation, you should know that initial or default alignment settings are located on the Setup: Initial Settings menu (Shift-F1,4,3). Unless you change alignment options for an equation in the Equation Editor, the equation conforms to the settings on the Setup: Initial Settings menu. As shipped, the alignment option centers the equation both vertically and horizontally in the box as shown below.



The image shows four equations, each centered within a rectangular box. The boxes are stacked vertically. The equations are:

$$\frac{d}{dx} \left[x^{\frac{1}{n}} \right] = \frac{1}{n} x^{\left(\frac{1}{n}\right)-1}$$
$$\sqrt[3]{27}$$
$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$
$$dU = \left[\frac{1}{2} \epsilon_0 E(cB) + \frac{1}{\mu_0} B \left(\frac{E}{c} \right) \right] A dx$$

In the equations above, box lines are shown to illustrate how the equation is centered in the box. If you have created your equation in an Equation type graphics box and have not changed the default box options, no box lines will show.

Once an equation is created, it retains the alignment settings it was created under, and the only way you can change those settings is to edit them in the Equation Editor.

To change the default alignment settings, you must be in the normal editing screen. When you are, press **Setup** (Shift-F1), select **Initial Settings** (4), select **Equations** (3), then select **Horizontal Alignment** (3) or **Vertical Alignment** (4). Next, select the alignment option of your choice, then press **Exit** (F7) to return to the normal editing screen.

To change the alignment settings for a single equation, make sure you are in the Editing window of the Equation Editor. When you are, press **Setup**, then select **Horizontal Alignment** (3) or **Vertical Alignment** (4). Next, select the alignment option of your choice, then press **Exit** to return to the Equation Editor.

Deleting in the Equation Editor

If you are in the Editing window of the Equation Editor, you can delete single letters or symbols with the Delete and Backspace keys. To delete text and symbols from the cursor forward to the end of the equation in the Equation Editor, make sure the cursor is located in the Editing window, press **Delete to End of Page** (Ctrl-PgDn), then type y. Pressing Ctrl-Page Down in the Editing window also resets all display parameters (i.e., Move, Scale) to Automatic.

To delete text and symbols from the cursor forward to the end of the line in the Equation Editor, make sure the cursor is located in the Editing window, then press **Delete to End of Line** (Ctrl-End).

If you want to delete the entire equation (including the box), you must delete the Graphics Box code in the normal editing screen.

Equation Keyboard

If you have used the Keyboard Layout feature, you know that you can reassign or *remap* WordPerfect features or characters to different keys on your keyboard. For example, you can remap Alt-a to be the Greek Alpha character or Alt-i to be the integral symbol.

Using an option on the Setup: Initial Settings menu, you can assign a specific keyboard layout to the Equation Editor. In other words, any time you are in the Equation Editor, that keyboard will be in effect.

To do so, you must be in the normal editing screen. When you are, press **Setup** (Shift-F1), select **Initial Settings** (4), select **Equations** (3), then select **Keyboard for Editing** (5). Next, move the cursor to the keyboard you want to select, then choose **Select** (1). Press **Exit** (F7) until you return to the normal editing screen.

An equations keyboard has been provided with WordPerfect; however, you must still select it if you wish to use it. For information on the keyboard contents, see *Appendix H: Keyboards*.

If you want to learn how to create a keyboard layout of your own, see *Keyboard Layout in Reference*.

Equation Setup

While you are in the Equation Editor, you can press **Setup** (Shift-F1) to display a menu of options that change equation alignment and determine the printing options for the equation you are working on. These options are discussed in detail under *Aligning Equations* above and *Graphical Font Size and Print as Graphics* below.

Fonts

When WordPerfect prints equation symbols, it prints the symbols in the initial base font for the document (Shift-F8,3,3) unless there is an Equation Box Options code preceding the equation in the document.

If there is an Equation Box Options code, all subsequent equations are printed in the font that is the current base font at the Equation Box Options code. This may or may not be the same font as the initial base font for the document depending on whether you made any base font changes in your document.

If you want to change the size of your equation, you can use the Graphical Font Size option (see *Graphical Font Size* below), or you can change the size of your initial base font or change the base font prior to an Equation Box Options code (see *Font in Reference*).

More information on Equation Box Options codes can be found under Graphics Options in Reference.

If the Print as Graphics option is set to Yes (see *Print as Graphics* below), WordPerfect can instruct your printer to emulate three fonts: WP Helv, WP Roman, and WP Courier. WordPerfect selects the font that is closest in appearance to the base font preceding the Equation Box Options code (or the initial base font for the document if there is no Equation Box Options code). You can change the size of the font with the Graphical Font Size option (see *Graphical Font Size* below).

Equations are formatted according to established mathematical equation typesetting guidelines. Variables, defined as any sequence of alphabetical characters you type (other than equation commands), are printed in italics if you are printing equation symbols as graphics characters (see *Print as Graphics* below). If not, variables will be printed in the italics font corresponding to your base font (see *Font in Reference*).

Second-level characters such as subscripts, superscripts, small fractions, binomials, and limits are printed in the superscript font. If they are third-level characters (e.g., superscript of a superscript), they are printed in the superscript font for the superscript font. Characters at subsequent levels are printed in the same font as third-level characters (see *Font in Reference*).

If the second-level characters mentioned in the paragraph above are printed as graphics characters (see *Print as Graphics* below), the superscript font is two-thirds the size of the graphical font size and the superscript font for the superscript font is one-half the size of the graphical font size (see *Graphical Font Size* below).

Graphical Font Size

If you are printing equation symbols as graphics characters (see *Print as Graphics* below), you have two choices as to the size of the font that is used to create the equation symbols. You can set a specific size yourself, or you can have WordPerfect determine the size for you.

Before you change the graphical font size setting for an equation, you should know that an initial or default graphical font size setting is located on the Setup: Initial Settings menu (Shift-F1,4.3). Unless you change the graphical font size setting for an equation in the Equation Editor, the equation conforms to the setting on the Setup: Initial Settings menu. As shipped, the graphical font size setting is set to Default Font.

Once an equation is created, it retains the graphical font size setting it was created under, and the only way you can change that setting is to edit it in the Equation Editor.

To change the initial graphical font size setting, you must be in the normal editing screen. When you are, press **Setup** (Shift-F1), select **Initial Settings** (4), select **Equations** (3), then select **Graphical Font Size** (2). Next, select the graphical font size option of your choice, enter information as necessary, then press **Exit** (F7) until you return to the normal editing screen.

To change the graphical font size setting for a single equation, make sure you are in the Editing window of the Equation Editor. When you are, press **Setup**, then select **Graphical Font Size** (2). Next, select the graphical font size option of your choice, then press **Exit** until you return to the Equation Editor.

There are two graphical font size options: **Default Font** (1) and **Set Point Size** (2). If you select Default Font, the font size will be the same as the size for the base font prior to the Equation Box Options code for the equation (or the initial base font for the document if there is no Equation Box Options code).

If you select Set Point Size, you can enter the point size yourself.

Positioning Equations

It is probably a good idea to become familiar with WordPerfect Graphics Boxes if you plan to create equations. These boxes are used to position your equations on the page.

While WordPerfect contains a graphics box type called "Equation," you do not need to create an equation in an Equation type box. In fact, you can create an equation in any type of graphics box by specifying Equation for the box contents. The Equation type graphics box, however, has an initial appearance (no box lines, positioned from margin to margin) that is common for many equations. This is why we suggest using it in the steps of this section.

For more information on the Graphics feature, see *Graphics, Create in Reference*.

Print as Graphics

WordPerfect is initially set to print all equation symbols as graphics characters. You can change this setting to have WordPerfect print an equation symbol as a graphics character only if you don't have the symbol in one of the printer fonts.

Before you change the Print as Graphics setting for an equation, you should know that an initial or default printing setting is located on the Setup: Initial

Settings menu (Shift-F1,4,3). Unless you change the printing setting for an equation in the Equation Editor, the equation conforms to the default setting. Once an equation is created, it retains the printing setting it was created under, and the only way you can change this setting is to edit it in the Equation Editor.

To change the default printing setting, you must be in the normal editing screen. When you are, press **Setup** (Shift-F1), select **Initial Settings** (4), select **Equations** (3), then select **Print as Graphics** (1). Next, type **y** to print all equation characters as graphics or type **n** to print equation characters as graphics only when necessary. Then, press **Exit** (F7).

To change the printing setting for a single equation, make sure you are in the Editing window of the Equation Editor. When you are, press **Setup**, then select **Print as Graphics** (1). Next, type **y** to print all equations as graphics characters or type **n** to print equation characters as graphics only when necessary. Then, press **Exit**.

If you have a printer that doesn't print graphics, you should set Print as Graphics to No.

If you set the Print as Graphics setting to No, WordPerfect will search your automatic font changes and substitute fonts for the symbol it is looking for (see *Printer Program, Customize Substitute Fonts* and *Printer Program, Modify Automatic Font Changes in Reference*). If it cannot find the symbol, it will print the symbol as a graphics character.

If your printer does not have a font that contains the symbol WordPerfect is looking for and cannot print graphics, it cannot print the symbol. Instead, it will leave a blank space.

If for some reason you don't want to ever print an equation symbol (or any other character) as a graphics character, set the Graphics Quality option on the Print menu to Do Not Print (see Print Quality in Reference).

For a more detailed description of the WordPerfect printing process, see *Printing—General Information in Reference*.

If you are printing equation characters as graphics, you can improve the print quality with the Print Quality feature (see Print Quality in Reference). If the Text Quality option on the Print menu is set to High, graphics equation characters are printed in high quality. If the Text Quality option is set to a quality less than High but greater than Do Not Print, WordPerfect uses the Graphics Quality setting to print graphical equations.

Retrieving an Equation

If you want to retrieve an equation that you have previously saved, press **Retrieve** (Shift-F10) while in the Equation Editor, then enter the filename of the equation. WordPerfect will first look for the equation in the document directory, then in the default directory (see *Location of Files in Reference*).

*After pressing **Retrieve** (Shift-F10), you can press **List** (F5), then enter a directory name to display the files in a directory. If you select **Retrieve** (1) while you are in that directory, WordPerfect will retrieve the highlighted file to the Equation Editor.*

You can also enter the equation filename under the Filename heading on the Definition: Equation menu to retrieve the equation.

If you retrieve a WordPerfect (non-equation) file to the Equation Editor, all codes will be removed except hard returns [HRt] and WordPerfect characters. Soft returns will be changed to hard returns. The file will still be formatted according to mathematical equation typesetting guidelines, so spaces and hard returns will not separate text in the printed equation (see *Editing Window* above).

If there are equation syntax errors in the text, the “Incorrect Format” message will appear when you try to display the equation. For more information on this message, see *Display Window* above.

Saving an Equation

To save the equation you have created to a separate file, press **Save** (F10) while in the Equation Editor.

If you have entered a pathname for a documents directory in Location of Files (Shift-F1,6,7), WordPerfect prompts you to save it in this directory (see *Location of Files in Reference*).

If you are saving an equation that you retrieved to the Equation Editor, WordPerfect displays the pathname to the documents directory (regardless of the directory you retrieved the equation from) along with the equation filename. If you want to save the equation in the documents directory under the same filename, press **Enter**, then type **y** if you are asked to replace. If you want to make changes to the path or filename, make the changes, then press **Enter**.

If you are saving an equation that you did not retrieve to the Equation Editor, WordPerfect displays the pathname to the documents directory. If you want to save the equation to the documents directory, press **End**, then enter the filename. If you simply enter a filename without moving to the end of the displayed pathname, the equation will be saved to the default directory.

If you have not entered a pathname for a documents directory and are saving an equation, WordPerfect displays the filename for the equation (if the equation was retrieved to the Equation Editor) or nothing at all. You can press **Enter**, then type **y** to save the equation under the same filename, or you can enter a filename of your own. Unless you enter a complete pathname, your equation will be saved to the default directory.

A saved equation can be retrieved into the Equation Editor for other equations (see *Retrieving an Equation* above). When you save an equation as a separate file, none of the alignment or printing options for the equation are saved with the equation.

Saving an equation is *not* the same thing as saving the entire document. In order to save the document, you must be in the normal editing screen.

See Also: Lesson 29; Equations, Commands and Symbols; Equations, Commands Syntax; Graphics, Define a Box; Appendix D

Equations, Commands and Symbols

This section assumes that you are familiar with entering and exiting the Equation Editor. If you are not, refer to *Equations in Reference*.

When you enter the Equation Editor, the cursor is in the Editing window. From there you can build your equation with commands, symbols, and text.

There are two different methods for entering equation commands and symbols:

- You can enter math commands and letters found on the keyboard, as well as extended characters, directly from the keyboard.

or

- You can choose commands and symbols from the Equation Palette. The various menus on the Palette are discussed below.

Write down your equation as you are creating it, just as you would say it aloud. In most cases, the Equation Editor closely follows the normal conventions for verbalizing mathematical equations. For example, to produce the following equation, you might say “y equals 1 over the square root of x.”

$$y = \frac{1}{\sqrt{x}}$$

This is similar to how you would produce the formula in the Equation Editor.

$$y = 1 \text{ OVER SQRT } x$$

You could also type the formula in lowercase letters,

$$y = 1 \text{ over sqrt } x$$

and obtain the same result.

The keywords OVER and SQRT are on the Equation Palette. You can select them from the Palette or type them from the keyboard.

To select an item from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the desired menu, use the cursor keys to move to the command you want, then press **Enter** or **Ctrl-Enter**.

For items in the menus that contain both a symbol and a corresponding keyword (e.g., \int and INT), pressing **Enter** puts the keyword (INT) in your equation in the Editing window. If you prefer to have the symbol (\int), press **Ctrl-Enter**. This only affects what is shown in the Editing window. In both cases, when you press **Display** (F9), or when you print the equation, the appropriate symbol is displayed or printed. If there is no keyword or if the keyword is the same as the symbol, there is no difference between Enter and Ctrl-Enter.

You may find that once you become familiar with the commands and their syntax, it is easier to simply type them in than to retrieve them from the Palette.

The building blocks of the Equation Editor are commands, symbols, numbers, and variables. You can access the commands and most symbols from the Equation Palette. You can create numbers and variables arbitrarily. Each of these classes is explained below.

Commands

Commands is one of the menus on the Equation Palette. It contains keywords which the Equation Editor recognizes as commands. Most commands require you to use a specific syntax, or structure, when you enter the command. All commands have some formatting function, such as drawing a line or arranging variables in the equation.

To select a command from the Equation Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Commands menu, use the cursor keys to move to the command you want, then press **Enter**.

All commands on the Commands menu can also be typed in from the keyboard (either uppercase or lowercase). For example, the Equation Editor views “OVER” and “over” as the same command. You can also mix case (e.g., “Over”) if you find it useful.

If you type a command, you must separate the command from any variable on either side. You can do this with a space, the Enter key, or with any symbol that is part of your equation. For example, if you type

x OVER{-y}

the Equation Editor recognizes the command OVER and formats the equation correctly. (Braces { } are used to group items. For more information, see *Grouping Commands* below.)

$$\frac{x}{-y}$$

When you retrieve a command from the Palette, the Equation Editor adds a space before the command (unless the command begins the first line in the Editing window) and a space after the command.

For a description of each command, see *Equations, Commands Syntax in Reference*.

Symbols

There are a variety of symbols that you can use in the Equation Editor. You can use keyboard symbols, symbols from WordPerfect character sets, and six menus of symbols on the Equation Palette. The following Palette menus are discussed under *Notes* below: Arrows, Greek, Large, Other, Sets, and Symbols.

For a complete list of the symbols available on the Palette, see *Appendix D: Equation Palette*.

Variables

The Equation Editor treats all alphabetic character input that it does not recognize as reserved commands as variables. A variable must begin with an alphabetic character, can be one or more characters, and can contain numbers. A variable is terminated by a non-alphanumeric character (such as a symbol, space, or Enter). For example, x , $y1$, $A1A$, abc are valid variables.

Keep in mind that spaces you type in the Editing window are not converted to spaces by the Equation Editor. If you want to insert spaces into your equation, use a backward accent ($\grave{}$) for a thin space, or a tilde (\sim) for a normal space (4 thin spaces = 1 normal space).

Variables are printed in the italic setting for the current base font. For details, see *Fonts* under *Equations* in *Reference*.

Numbers

A number is any non-negative integer (0, 1, 32767, etc.) terminated by a non-integer (a symbol, space, period, alphabetic character). Numbers are formatted using the base font currently in effect.

You can enter real numbers (including negative and decimal numbers), but the numbers are treated as separate alphabetic, numeric, or operator parts by the Equation Editor. For example, -2 is treated as two parts—a minus sign ($-$) and 2. 100.5 is treated as three parts—100, a decimal point ($.$), and 5.

In order to have a construction with more than one part act as a single unit, you must surround the construction with braces. For example, if you want to print x raised to the power of negative 2, you would group the minus sign and the 2 as follows: $x^{\{-2\}}$

$$x^{-2}$$

Similarly, if you wanted to divide x by 0.5, you would type **x OVER {0.5}**

$$\frac{x}{0.5}$$

Notes

Arrows

Arrows is a menu on the Equation Palette. It contains a variety of arrows as well as several hollow and solid figures such as triangles, squares, and circles.

To select an arrow key from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Arrows menu, use the cursor keys to move to the symbol you want, then press **Enter**.

As you highlight each Arrow symbol on the Palette, the status line shows a description of that symbol.

The Left Arrow and the Right Arrow can be entered by typing <- (< and -) and -> (- and >), respectively.

Each symbol on the Arrows menu can also be entered using the Compose (Ctrl-2) feature.

For a complete list of the symbols on the Arrows menu, see *Appendix D: Equation Palette*.

Commands

Commands is a menu on the Equation Palette. To select a command from the Equation Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Commands menu, use the cursor keys to move to the command you want, then press **Enter**. You can also type in the command keyword from the keyboard.

As you highlight each command on the Palette, the status line shows the keyword for that command, as well as a description and an example of the syntax.

Most commands require you to use a specific syntax, or structure, when you enter the command. See *Equations, Commands Syntax in Reference* for details of individual commands.

Common Operators and Symbols

These common operators and symbols are not on the Equation Palette and must be entered directly from the keyboard.

+ - * / = < > ! ? . | @ " , ;

Dynamic Operators (Delimiters)

Dynamic operators, or delimiters, are special commands used to create symbols which vary in height, width, or both, depending on the size of the equation part to which they apply.

There are eight dynamic operators: OVER, LEFT, RIGHT, SQRT, NROOT, BINOM, LONGDIV, and LONGDIVS. Each of these operators has a specific syntax that is explained in *Equations, Commands Syntax in Reference*.

Following is an example using four of the six operators. To create this equation, type **SQRT LEFT (x OVER {x+y} RIGHT)**

$$\sqrt{\left(\frac{x}{x+y}\right)}$$

Functions

Functions is a menu on the Equation Palette. It contains commands that are recognized as mathematical functions by the Equation Editor (e.g., sin, cos, log). Function names are formatted in the base font.

To select a function from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Functions menu, use the cursor keys to move to the function you want, then press **Enter**.

As you highlight each function on the Palette, the status line shows the complete name for that function.

You can also type all function names from the keyboard. You should separate function names from surrounding items with a symbol, space, or Enter. Function names retain the case you type them in.

To create the following equation, type `cos^2`ital theta`+`sin^2`ital theta`=1`

$$\cos^2 \theta + \sin^2 \theta = 1$$

For a complete list of the Functions menu, see *Appendix D: Equation Palette*.

The Equation Editor also lets you define your own functions. For details, see *User-Defined Functions* below.

Greek

Greek is a menu on the Equation Palette. It contains both uppercase and lowercase Greek characters, as well as some variants.

To select a Greek character from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Greek menu, use the cursor keys to move to the Greek character you want, then press **Enter** to insert the keyword into your equation in the Editing window or **Ctrl-Enter** to insert the character itself.

As you highlight each Greek character on the Palette, the status line shows the keyword for that character.

The Greek characters in the WordPerfect character set that are not on the Palette are available in the Equation Editor only if they are entered with Compose (Ctrl-2).

The keywords for uppercase and lowercase letters are differentiated only by the case. If the command contains an uppercase letter, it is assumed to refer to an uppercase Greek character (e.g., **SIGMA** or **Sigma** would produce Σ and **sigma** would produce σ).

Greek letters are not italicized.

For a complete list of the Greek menu, see *Appendix D: Equation Palette*.

Grouping Commands

Braces ({ }) are used to group (indicate groupings of) equation symbols and commands in the Equation Editor.

For example, if you want a group of characters to be used as a superscript, you can specify $x^{\{y+2\}}$

To determine the order that the Equation Editor uses for ordering commands, see *Precedence* below.

Large

Large is a menu on the Equation Palette. The Large symbols make available operators that can be one of two sizes—small and large (e.g., SMALLSUM and SUM). The smaller size (e.g., SMALLSUM) is typically used for Character Equation boxes (e.g., if you wanted an in-line equation). The larger size (e.g., SUM) is typically used in other anchor box types. See *Graphics, Define a Box* in *Reference* for more details.

To select a large symbol from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Large menu, use the cursor keys to move to the symbol you want, then press **Enter** to insert the keyword into your equation in the Editing window or **Ctrl-Enter** to insert the symbol itself.

As you highlight each Large symbol on the Palette, the status line shows the keyword and a description for that symbol.

You can enter Large commands from the keyboard as either keywords or symbols. Keywords for large symbols can be uppercase or lowercase.

For a complete list of the Large menu, see *Appendix D: Equation Palette*.

Other

Other is a menu on the Equation Palette. It contains diacritical marks (accents) and four orientations of ellipses (see *Diacritical Marks* and *Ellipses* below).

To select one of these items from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Other menu, use the cursor keys to move to the item you want, then press **Enter** to insert the keyword into your equation in the Editing window or **Ctrl-Enter** to insert the item itself.

As you highlight each Other symbol on the Palette, the status line shows the keyword for that symbol, as well as a description and an example of the syntax.

You can also enter Other symbols from the keyboard as keywords; these keywords are not case sensitive.

Diacritical Marks

The diacritical command follows the variable to which it applies. For example, to produce the first example below, you would type **e acute**

The diacritical marks are placed according to the height of the base character to which they apply.

Keyword	Example
ACUTE	\acute{e}
BAR	\bar{x}
BREVE	\breve{a}
CHECK	\check{x}
CIRCLE	$\overset{\circ}{x}$
DOT	\dot{x}
DDOT	\ddot{x}
DDDOT	$\overset{\cdot}{\overset{\cdot}{\overset{\cdot}{x}}}$
DYAD	$\overset{\cdot}{\overset{\cdot}{x}}$
GRAVE	\grave{e}
HAT	\hat{x}
TILDE	\tilde{n}
VEC	\vec{x}

Ellipses

The following commands insert ellipses into an equation as described below. Each ellipsis consists of three dots. The spacing between the dots is the same for all 4 commands—only the orientation is different.

Keyword	Description
DOTSAXIS	A horizontal row of dots centered on the axis
DOTSLOW	A horizontal row of dots on the baseline
DOTSVERT	A vertical row of dots
DOTSDIAG	A diagonally-aligned row of dots (upper left to lower right)

For example, to produce the following equation with a horizontal row of dots on the baseline, type **x DOTSLOW x_n**

$$x \dots x_n$$

Precedence

The Equation Editor groups elements in a specific order. This order is listed below, starting with the highest level of grouping.

- 1 Groups
- 2 Diacritical marks
- 3 Primes, SUB, SUP, FROM, and TO
- 4 Roots
- 5 OVER, BINOM
- 6 Other elements group left-to-right

You can override the normal grouping order by using braces ({ }) around those elements that you want to keep together as a unit. For example, the Equation Editor treats $x + y$ as three elements, but $\{x + y\}$ is treated as a single group. If

commands are used inside of braces, these commands are evaluated first. If braces are used inside of braces, the elements in the inner braces are evaluated first. Examples with braces are shown below.

Diacritical marks are attached to the variable immediately preceding them. In the following example, type **x VEC '**

The vector is first attached to the variable x , then the prime is attached to the entire unit.

$$\vec{x}'$$

Primes are attached to the variable immediately preceding them. In the following example, type **SQRT x '**

The prime is first attached to the variable x , then the radical sign is placed over the entire unit.

$$\sqrt{x'}$$

If you want a subscript and a superscript on the same variable, you must put the subscript first, then the superscript. For example, to produce the following equation, type **a_i^2**

$$a_i^2$$

If you want a prime and a subscript on the same variable, you must again put the subscript first. (The prime operates like a superscript.) For example, type **SUB 2 '** to produce the following equation:

$$x_2'$$

To produce the following equation, type **x SUP 2 SUP 3**

The 3 is first attached as the superscript of 2, and then the entire unit is attached as the superscript of x .

$$x^{2^3}$$

The following equation demonstrates how some of these levels of grouping work together. Type **SQRT x^3-1**

$$\sqrt{x^3-1}$$

The superscript 3 is first bound to the x . This group is then bound to the SQRT function and placed under the square root radical sign. Finally, the remainder of the equation (-1) is bound.

Keep in mind that symbols such as plus (+), minus (–), and decimal point (.) are treated as separate elements by the Equation Editor. To produce the square root of –1, for example, insert braces as follows:

sqrt {-1}

Otherwise, the square root function would assume that the minus sign was its sole argument and **sqrt –1** would produce the following:

$$\sqrt{-1}$$

Sets

Sets is a menu on the Equation Palette. It contains set symbols, relational operators, and some commonly-used Fraktur and hollow letters.

To select a set symbol from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Sets menu, use the cursor keys to move to the symbol you want, then press **Enter** to insert the keyword into your equation in the Editing window (if there is no keyword, the symbol is inserted) or **Ctrl-Enter** to insert the symbol itself.

As you highlight each Set symbol on the Palette, the status line shows the keyword for that symbol (if a keyword is available), as well as a description.

For a complete list of the Sets menu, see *Appendix D: Equation Palette*.

Two common set symbols, union and intersection, are located on the Palette in the Large menu.

Spaces and Line Breaks

Spaces and hard returns serve as delimiters (i.e., separators) in the Editing window, but they are not translated into spaces or hard returns in your equation.

If you want to insert spaces in your equation, type a backward accent (˘) for a thin space or a tilde (~) for a normal space (4 thin spaces = 1 normal space). See *Equations, Commands Syntax* in *Reference* for more information on the backward accent (˘) and the tilde (~).

If you want to insert line breaks into your equation, use the pound sign (#) or the **MATRIX**, **STACK**, or **STACKALIGN** commands. See *Equations, Commands Syntax* in *Reference* for more details on these commands.

Spacing Commands

Three commands that you can use to manually adjust the spacing of your equation within the equation box are **HORZ**, **VERT**, and **LINESPACE**. See *Equations, Commands Syntax* in *Reference* for details on these three commands.

Symbols

Symbols is a menu on the Equation Palette. It contains miscellaneous symbols, such as ∞ , \pm , and \equiv .

To select a symbol from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** (PgUp) or **Page Down** (PgDn) as necessary to locate the Symbols menu, use the cursor keys to move to the symbol you want, then press **Enter** to insert the keyword into your equation in the Editing window or **Ctrl-Enter** to insert the symbol itself.

As you highlight each symbol on the Palette, the status line shows the keyword and a description for that symbol.

You can also type in keywords for each symbol; the keywords are not case sensitive.

Some of the keywords are actually two or more keyboard symbols typed together without a break. For example, you can enter a \pm by typing $+-$. These unique sequences of symbols include " (double prime), " (triple prime), $+-$ (plus or minus), $-+$ (minus or plus), $<=$ (less than or equal), $>=$ (greater than or equal), $<<$ (much less than), $>>$ (much greater than), $=$ (equivalent).

You can use any of the symbols on the Symbols menu by itself except for the three primes. Each prime must be attached to a variable: x' , x'' , x''' .

For a complete list of the Symbols menu, see *Appendix D: Equation Palette*.

User-Defined Functions

The Equation Editor formats variables in an italic font. If you want to print a character string in the normal base font, you must define the string as a function using the **FUNC** command. Functions are formatted as normal text and retain the case with which they are typed in.

For example, suppose you want to spell out "cosine" in your equation. The Equation Editor treats the word as a variable and italicizes it, but you decide you do not want it italicized. If you type **FUNC cosine** in the Editing window, the Equation Editor formats "cosine" in the normal base font.

If you want to apply **FUNC** to more than one variable, simply group the variables with braces ({ }) and place **FUNC** in front of the group. If you want to italicize an item, use the **ITAL** command (see *ITAL* under *Equations, Commands Syntax in Reference*).

See Also: Equations; Equations, Commands Syntax; Appendix D

Equations, Commands Syntax

The following words and symbols are keywords that the Equation Editor recognizes as commands. They are located under the Commands menu on the Equation Palette. All commands have some formatting function, such as drawing a line in an equation or arranging variables in an equation.

To insert one of these commands into your equation, switch to the Equation Palette by pressing **List** (F5), move the reverse video bar to the command you want (using Page Up, Page Down, and the cursor keys), then press **Enter**.

Commands require a specific syntax or structure. An example of the proper syntax is shown on the status line when you highlight each of the commands.

As an alternative to retrieving the commands from the Palette, you can also type them from the keyboard in either uppercase or lowercase. For example, the Equation Editor views "OVER" and "over" as the same command. You can also mix case (e.g., "Over") if you find it useful.

In the following descriptions, a subgroup is simply used to refer to a part of an equation. Also, wherever a variable is indicated in the syntax of a command, you can substitute a group (enclosed in braces) for the variable.

Commands

(pound sign)

This symbol is a row separator and indicates a line break (or a new subgroup) in *MATRIX*, *STACK*, and *STACKALIGN*. The basic syntax is $x \# y \# \dots \# z$, although the syntax for each of the above commands is slightly different. For the correct usage for each command, see *MATRIX*, *STACK*, and *STACKALIGN* below. At the outermost level of an equation, the pound sign can be used by itself to separate lines in an equation (e.g., $a=b-c\#a=d+3$).

& (ampersand)

This symbol has two functions. When used in *MATFORM* or *MATRIX*, it is a matrix column separator. The basic syntax is *MATRIX* { $x \& y \& \dots \& z$ } (see *MATFORM* and *MATRIX* below for details).

When used in *STACKALIGN*, ampersand (&) indicates the character on each row on which to align. The basic syntax is *STACKALIGN* { $x\&y$ }, where x is the character on which you want to align (see *STACKALIGN* below for details).

. (period)

This symbol is used with dynamic operators to indicate that there is no corresponding opening or closing delimiter (see *Dynamic Operators (Delimiters)* under *Equations, Commands and Symbols in Reference*). *LEFT* and *RIGHT* must always be used together; if you only want one dynamic delimiter, you must indicate that the other end is open. *LEFT* . or *RIGHT* . is the syntax.

For example, type **LEFT LANGLE x OVER {x+1} RIGHT .** to create the following equation:

$$\left\langle \frac{x}{x+1} \right\rangle$$

For more information, see *LEFT* below.

\ (backslash)

This symbol indicates that the following symbol or command is treated as a literal. The syntax is **\command**. For example, if you want a tilde to print as a tilde rather than as a space, you would type **\~**

You can also use the backslash to print commands such as **OVER**, rather than have the command perform its normal function. If you type **\OVER**, the word is treated literally, and the command is no longer recognized by the Equation Editor as a command.

^ (backward accent)

This symbol is translated into a thin space (one-quarter space) by the Equation Editor. Insert this symbol where you want to print a thin space.

Below is an example of no space ($x+y$), one thin space after the x (x^+y), two thin spaces after the x ($x^{++}y$), and three thin spaces after the x ($x^{+++}y$).

$$x+y \quad x^+y \quad x^{++}y \quad x^{+++}y$$

For information on a normal space, see *~ (tilde)* below.

{ (left brace)

This symbol signals the start of a group. It is used in tandem with the right brace (**}**) symbol, which signals the end of a group. The syntax is **{x...y}**. For example, to print the following equation type **{x+1} OVER {x-2}**

$$\frac{x+1}{x-2}$$

Without the braces (**{ }**) your equation would print like this:

$$x+\frac{1}{x}-2$$

} (right brace)

This symbol signals the end of a group (see *{ (left brace)* above).

~ (tilde)

This symbol is translated into a normal space by the Equation Editor. Insert this symbol where you want to print a normal space. Below is an example of no space ($x+y$) and one normal space after the x ($x\sim+y$).

$$x+y \quad x \sim +y$$

For information about thin spaces, see $\`$ (*backward accent*) above.

ALIGNC

This command aligns its accompanying argument in the center of the current subgroup or matrix column. Since center alignment is the default for most commands, ALIGNC is only useful in matrices. The syntax is **ALIGNC** x .

For more information, see *MATFORM* below.

ALIGNL

This command aligns its accompanying argument on the left margin of the current subgroup or matrix column. ALIGNL can be used with OVER, FROM, TO, etc., as well as with matrices. The syntax is **ALIGNL** x .

For example, type **ALIGNL 1 OVER 10000** to left align the 1 in the equation below.

$$\frac{1}{10000}$$

For more information, see *MATFORM* below.

ALIGNR

This command aligns its accompanying argument on the right margin of the current subgroup or matrix column. ALIGNR can be used with OVER, FROM, TO, etc., as well as with matrices. The syntax is **ALIGNR** x .

For example, type **ALIGNR 1 OVER 10000** to right align the 1.

$$\frac{1}{10000}$$

For more information, see *MATFORM* below.

BINOM

This command creates a binomial construction. The left and right parentheses are placed around the binomial and are dynamically sized. The syntax is **BINOM** x y .

For example, to produce the equation below, type **BINOM alpha beta**

$$\binom{\alpha}{\beta}$$

BINOMSM

This command works like BINOM with the exception that the entire construction is printed in the next smaller font. The syntax is **BINOMSM x y**.

For example, to produce the equation below, type **BINOMSM alpha beta**

$$\binom{\alpha}{\beta}$$

BOLD

This command causes its argument to be bolded. The syntax is **BOLD x**.

FROM

This command works with TO and provides beginning and ending limits for symbols. These limits are always placed below and above the symbol. If you want side limits, use SUB and SUP.

The syntax is *operator* **FROM x TO y**, where *operator* is some symbol such as SUM or INT, and *x* and *y* are the beginning and ending limits, respectively.

For example, if you want to produce the following equation, type **SUM FROM {k=0} TO INF**

$$\sum_{k=0}^{\infty}$$

FUNC

This command causes any variable to be treated as a function name, rather than as a variable. The variable is thus printed in the base font. The syntax is **FUNC variable**, where *variable* is a single variable or a group enclosed in braces ({}).

For example, if you type **WordPerfect**, it prints in an italic font—*WordPerfect*. If you want it to print in a non-italic font, type **FUNC WordPerfect**

HORZ

WordPerfect calculates correct spacing for equation commands and operators. The equation itself is centered vertically in the equation box with respect to the “baseline” of the equation. You can use the following keyword commands to adjust the spacing manually:

HORZ n

VERT n

where n is the percentage of the current font size to move in a relative direction to the right or left for **HORZ** and up or down for **VERT**. If the number is positive, the direction is right or up; if the number is negative, the direction is left or down.

For example, if you are using a 12 point font and type **HORZ 100 x=y**, the equation is moved 12 points (approx. 1/6") to the right.

ITAL

This command italicizes its argument. It is useful for italicizing functions (e.g., \cos), numbers, or symbols (e.g., INT , SUM). The syntax is **ITAL x**. (Compare **FUNC** above.)

If you use **ITAL** with a symbol keyword (e.g., **ITAL SUM**), the keyword is still correctly translated into the symbol (Σ), but the symbol will be italicized.

LEFT

LEFT or **RIGHT** inserts a delimiter which expands according to the size of the subgroup it encloses. The syntax is **LEFT delimiter** (or **RIGHT delimiter**), where *delimiter* is one of the following delimiters:

Delimiter	Description
(	left parenthesis
)	right parenthesis
/	slash
[	left bracket
]	right bracket
DLINE	double vertical line (||)
LANGLE	left angle bracket (<)
LBRACE	left brace ({)
LCEIL	left ceiling ($\overline{\quad}$)
LFLOOR	left floor ($\lfloor \quad \rfloor$)
LINE	single vertical line ()
RANGLE	right angle bracket (>)
RBRACE	right brace (})
RCEIL	right ceiling ($\overline{\quad}$)
RFLOOR	right floor ($\rfloor \quad \rfloor$)

For example, type **LEFT [STACK {x=1 # y=2} RIGHT)** to create the following equation:

$$\left[\begin{array}{l} x=1 \\ y=2 \end{array} \right)$$

LEFT and **RIGHT** must always be used together. However, the left and right delimiters do not need to be identical or from a matched pair (e.g., []). You can choose from any of the above delimiters for either the left or right delimiter.

If you want one end open, use LEFT or RIGHT followed by a period (.) to indicate an open or null delimiter (see . (*period*) above).

If delimiters are used by themselves (without a preceding LEFT or RIGHT command), the symbol is inserted without any automatic sizing. The above equation would look quite different without using the dynamic delimiters. For example, [STACK {x=1 # y=2})

$$\left[\begin{array}{l} x=1 \\ y=2 \end{array} \right)$$

Delimiters can have limits associated with them. Use the SUB and SUP commands. For example, to produce the following equation, type LEFT [x OVER y RIGHT] _1^INF

$$\left[\begin{array}{l} x \\ y \end{array} \right]_{1}^{\infty}$$

LINESPACE

This command allows you to change the vertical line spacing within STACK, STACKALIGN, and MATRIX structures. The command must be placed before any of these structures, and the syntax is **LINESPACE** *n* where *n* is the percentage of normal line spacing for these structures. For example, **LINESPACE 200** is double line spacing.

LONGDIV

This command creates the long division character over the accompanying variable. The long division character expands to cover the variable. The syntax is **LONGDIV** *x*.

LONGDIVS

Does the same thing as LONGDIV, but leaves the left end of the long division character straight.

MATFORM

This command is used in a MATRIX command to indicate the alignment formats. It is followed by a row of alignment formats: **MATFORM** {*alignment* & *alignment* & ... & *alignment*}, where *alignment* is ALIGNC, ALIGNL, or ALIGNR, and & is a matrix column separator. In a MATRIX command, you might use MATFORM as follows: **MATRIX** {**MATFORM** {ALIGNL & ALIGNR} *aaa&bbb* # *ii&jj* # *x&y*}

$$\begin{array}{cc} aaa & bbb \\ \overline{ii} & \overline{jj} \\ x & y \end{array}$$

The first alignment format is paired with the first element in each row, the second alignment format with the second element, and so on. The number of alignments should match the number of matrix columns in **MATRIX**.

MATRIX

This command creates a matrix in the equation. The syntax is **MATRIX {x & x1 & x2 # x3 & x4 & x5}**, where # is used to delimit rows and & is used to delimit matrix columns. You should not create a matrix with more than 48 columns. The Equation Editor makes no assumptions on the type of brackets which surround your matrix. With **LEFT** and **RIGHT** (see *LEFT* above), you have several options for your left and right delimiters. For example, if you want to produce the following equation, type **LEFT LINE MATRIX {1 & 2 & 3 # 4 & 5 & 6} RIGHT LINE**

$$\left| \begin{array}{ccc} 1 & 2 & 3 \\ 4 & 5 & 6 \end{array} \right|$$

NROOT

This command creates the n th root of the accompanying argument. The radical sign expands to enclose the variable. The syntax is **NROOT n x**, where n is the n th root and x is the variable. To create this example, type **x`=`NROOT 3 {-{27 OVER 8}}**

$$x = \sqrt[3]{-\frac{27}{8}}$$

OVER

This command generates fractions. The syntax is **x OVER y**. Type **x OVER {x+1}** to create the following equation:

$$\frac{x}{x+1}$$

All fractions appear with a horizontal bar, as in the above illustration. The Equation Editor does not use the diagonal bar (e.g., a/b). The horizontal bar expands according to the size of the numerator or denominator, whichever is larger. (Of course, you can type a/b manually, but the "/" does not expand dynamically.)

OVERLINE

This command places a bar over the variable included as its argument. The syntax is **OVERLINE** *x*. Type **OVERLINE** {Hello,-world.} to create the following equation:

Hello, world.

OVERSM

This command works like OVER except that the entire construction is printed in the next smaller font. The syntax is **OVERSM** *y*. Type **x OVERSM** {x+1} to create the following equation:

$\frac{x}{x+1}$

PHANTOM

This command generates a place holder. It is useful for aligning elements in a stacked equation when the equations do not contain an equal number of elements. The syntax is **PHANTOM** *x*. For example, in the equation below,

$x+y=1$
 $x \quad =2$

if you want the two *x*'s to align as well as the equal signs, you would insert a PHANTOM command containing the elements in the upper equation missing in the lower equation. You would type

STACK {x+y=1 # x **PHANTOM** {+y}=2}

This would cause blank space equivalent to that taken up by +y to be inserted into the lower equation.

RIGHT

For information on RIGHT, see *LEFT* above.

SCALESYM

This command can scale normal symbols, numbers, or text when you print the equation as graphics. The syntax is **SCALESYM** *n symbol*, where *n* is the percentage of the normal size of the *symbol*. For example, to make the integral sign 300% larger, enter **SCALESYM 300 int**.

When printing the equation as text, **SCALESYM** only scales the delimiters: () [] { }. When scaling the { or } delimiters, you must precede them with a \ (backslash): **SCALESYM 250 \{**.

SQRT

This command creates the square root of the accompanying variable. The square root radical sign expands to cover the variable. The syntax is **SQRT** *x*. For example, type **SQRT {1-x^2}** to create the following equation:

$$\sqrt{1-x^2}$$

STACK

A stack is a vertically aligned set of groups or subgroups. Although you can only have one equation per box, you can “stack” equations within a box. An example is

STACK {x+y # a+b}

where # is used to delimit each subgroup or line within the stack, and *x+y* and *a+b* can be any equation.

$$\begin{array}{l} x+y \\ a+b \end{array}$$

You can also align subgroups horizontally within a stack. To format the subgroup flush left, flush right, or centered, use **ALIGNL**, **ALIGNR**, or **ALIGNC**, respectively, before the subgroup that you want to align. For example, to align the lower subgroup flush right in the equation below, type

STACK {x+y+z # ALIGNR a+b}

$$\begin{array}{l} x+y+z \\ a+b \end{array}$$

You can also align entire stacks within larger structures. Place the appropriate alignment command in front of the **STACK** command.

STACKALIGN

This command allows you to align a stack of equations on an arbitrary symbol or symbols. For example, you may wish to align your stack on a decimal point or on an equal sign. The syntax is **STACKALIGN** {*x alignchar* & *y # a alignchar* & *b*}, where *alignchar* is the character on which you wish to align, & follows and marks the align character, and # creates a line break. For example, **STACKALIGN {x>&y+z # a+b<=&c}** would produce the following:

$$\begin{array}{l} x>y+z \\ a+b\leq c \end{array}$$

SUB or _

Either of these two commands generates subscripts. The syntax is **x SUB y** (or **x_y**), where *x* has the subscript *y*.

$$x_y$$

If you want a subscript and a superscript at the same time, enter the subscript first, then the superscript. For example, type **x_1^2**

$$x_1^2$$

If you type **x^2_1**, the 1 is subscripted to the 2.

$$x^{2_1}$$

SUB and SUP are also used to indicate lower and upper limits for functions and large operators. These limits are always placed on the side of the operator. If you want bottom and top limits, use FROM and TO.

For example, type **INT _0^1 1 OVER x = y** to create the following equation:

$$\int_0^1 \frac{1}{x} = y$$

SUP or ^

Either of these two commands generates superscripts. The syntax is **x SUP y** (or **x^y**), where *x* is to be raised to the power of *y*. For more information, see *SUB or _* above.

$$x^y$$

TO

For information on TO, see *FROM* above.

UNDERLINE

This command places a bar under the variable included as its argument. The syntax is **UNDERLINE x**, where *x* can be a single variable or a group.

Type **UNDERLINE {Hello,~world.}** to create the following equation:

$$\underline{\text{Hello, world.}}$$

VERT

For information on VERT, see *HORZ* above.

See Also: Equations; Equations, Commands and Symbols; Appendix D

Exit

Exit can quickly take you out of an option, a menu, a document, or the WordPerfect program. It also lets you save any changes you have made.

To exit a document from the normal editing screen,

1 Press **Exit** (F7) to begin exiting.

 *Select Exit from the File menu.*

You are asked if you want to save your work.

2 Type **n** to continue exiting without saving the on-screen document, then go to step 4 below.

or

If you want to save the document on the screen, type **y**.

If you type **y**, you are asked to name the document.

WordPerfect gives you the option of using long document names in addition to the standard DOS filenames (see *Long Document Names* below).

3 Enter a filename (see *Entering Filenames* below).

You are asked if you want to exit WordPerfect.

4 Type **y** to exit WordPerfect.

or

Type **n** to clear the screen and begin a new document.

Notes

Backtracking

If you change your mind during the exiting process you can press **Cancel** (F1) at the Save or Exit prompts to return to the document on the screen.

Built-in Safety Features

WordPerfect has several built-in safeguards designed to protect you from accidentally losing or replacing the work you have done.

Whenever you exit a WordPerfect document, you are always asked if you want to save the document you are in. If you have not made any changes to the document since the last time it was saved, a "(Text was not modified)" message appears on the right end of the status line. If this message does not appear, you may have made changes that you will want to save.

WordPerfect will never let you replace an existing document without asking you if you want to do so (see *Entering Filenames* below).

Entering Filenames

A standard DOS filename can include up to 8 characters followed by a period and up to 3 more characters after the period.

When an existing filename is displayed, pressing any character key erases the existing filename so you can start typing a new name. However, before you press a character key, you can use Left Arrow (←) and Right Arrow (→) to move through the existing filename and edit it. Use Backspace, Delete (Del), or Delete to End of Line (Ctrl-End) to delete existing characters. You can also press **Insert** (Ins) to move back and forth between inserting and typing over characters (see *Typeover* in *Reference*).

Each time you enter a filename which already exists, a prompt appears asking if you want to replace the existing file. Type **y** to replace the existing file with the document on your screen. If you press **n** (or any other key), you are prompted for a new filename. Enter a different filename to keep both the new and the existing documents.

Unless you enter a full pathname, a file is saved in the current default directory. If you prefer, you can use the Location of Files feature in Setup (Shift-F1,6,7) to specify a directory where your files will be saved when you do not enter a full pathname (see *Location of Files* in *Reference*).

*If you want to save a file to a diskette in an external drive, you must type the drive letter and a colon before entering the filename. For example, if you want to save a file to a diskette in drive A, press **Exit** (F7), type **y**, and then enter **a:filename**.*

Exit vs. Save

Exit (F7) lets you save your work and clear the screen so you can begin another document. While you are editing a document, you may also want to use **Save** (F10) to save the document from time to time without actually exiting (see *Save* in *Reference*).

Exiting Menus and Options

You can press **Exit** (F7) to leave menus and submenus or the special editing screen you are in when you type a header, footer, footnote, endnote, etc.

When you use **Exit** to leave a menu or an option, any changes you have made are automatically saved for you. If you want to ignore the changes you have made, press **Cancel** (F1) rather than **Exit** (F7) (see *Cancel* in *Reference*).

Often as you advance through a series of menus, you can press **Exit** (F7) to return directly to your on-screen document without having to stop at each submenu. However, sometimes you may need to press **Exit** more than once.

Exiting Multiple Documents

In WordPerfect, you can have two documents active in memory at the same time (see *Switch* in *Reference*). If both documents are open when you complete step 3 at the beginning of this reference section, you are asked if you want to leave the screen you are in (e.g., "Exit Doc 2? **No** (Yes)"). Type **n** (or any other key)

to clear the current screen and remain in it or type **y** to close the screen you are in and switch to the other screen.

WordPerfect has a startup option, */n2*, that disables the Document 2 screen to save memory (see *Appendix N: Startup Options*).

Long Document Names

Long Document Name lets you enter an additional name that is saved along with the standard DOS filename for each document you create. Whereas the DOS filename is limited to eight characters plus a three-character extension, the long document name can contain up to 68 characters and spaces, excluding the additional space required for extended characters. You can turn on the Long Document Name feature by setting the Long Document Names entry to Yes in Environment Setup (Shift-F1,3,4,3,y) (see *Environment Setup* in *Reference*). Then, when you exit a document, you are asked to enter a long document name and document type before you enter a standard DOS filename. The “Long Document Name:” prompt appears immediately after step 2 at the beginning of this section.

When you enter a long document name, you can include spaces and type any character on the keyboard. You can also use Compose (Ctrl-2) to add any character from a WordPerfect character set to the name (see *Compose* in *Reference*). You can use Left Arrow (←) and Right Arrow (→) to move through the name and edit it. Use Backspace, Delete (Del), or Delete to End of Line (Ctrl-End) to delete existing characters. You can also press Insert (Ins) to move back and forth between inserting and typing over characters.

After you enter a long document name, you are asked to enter the document type. The document type is another way of categorizing your documents. It can include any information which will help you group and identify your files. A document type can include up to 20 characters, excluding any additional space required for extended characters.

Once you have entered a name and type, the DOS filename prompt appears (i.e., “Document to be Saved:”). You can then continue the exiting process as explained in steps 3 and 4 at the beginning of this section.

Even when a document has a long document name, only the standard DOS filename is displayed on the left end of the status line in the normal editing screen when you are editing a document. Long document names are displayed only in the List Files Long Display screen and in the Document Summary feature.

You can have your documents displayed alphabetically by long document names when you use List (F5) to list the files in a directory (see *File List* under *List Files* in *Reference*). You can also display and enter long document names in the Document Summary menu (see *Document Summary* in *Reference*).

See Also: Cancel; Location of Files; Save; Switch

F Fast Save (unformatted)

Normally, when you save a document in WordPerfect it is *fast saved*. This means that WordPerfect does not format the document for printing in order to speed up the saving process.

When you print a document that has been fast saved from disk, WordPerfect “retrieves” the document in the background without actually displaying it on-screen, and moves the cursor completely through it to make certain that it is correctly formatted before printing.

If you prefer, you can turn off the Fast Save feature, and WordPerfect will then format each document completely at the time it is saved.

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Environment** (3).

3 Select **Fast Save (unformatted)** (5), then type **n** to turn off the Fast Save feature.

4 Press **Exit** (F7) to return to your document.

Notes

Disk Space and File Size

Depending on the changes you have made and the features you have used while editing a document, fast saving a document can increase the size of the document. Old information concerning settings which are no longer in effect (e.g., former printer definitions, former styles) is not purged when a document is fast saved. It is purged when fast save is not on, or when you retrieve a file for editing.

Each time you save, fast save, or print a fast saved file from disk, WordPerfect first makes a copy of that file on the same disk. Therefore, you must have enough available disk space for two copies of your document.

See Also: Print, Document on Disk

Find

It is sometimes difficult to spot the exact file you need. This becomes even more difficult when there are many files in a directory.

Find gives you several helps in searching through the files in a directory for a certain file. You can use Find to find a file by filename or to list only those files which contain a specific word or phrase.

For example, suppose you know you sent a memo to Mr. Claussen, but you can't remember what you named your file. You can use Find to search through the files in your MEMO directory and locate the memo which contains Mr. Claussen's name.

To use Find to help you locate a certain file,

- 1 Use **List** (F5) to display the files in the directory where the file is located (see *List Files in Reference*).

At this point, you can limit your search to only certain files (see *Limiting a Search* below).

- 2 Select **Find** (9) to display the Find menu.
- 3 Select an option to specify where you want to search (see *Filenames and Documents* below and *Find, Conditions in Reference*).

You are asked to enter a search phrase.

- 4 Enter the word or phrase you want to search for (see *Search Patterns* below).

WordPerfect searches the files, then rewrites your screen, listing only the files which meet your conditions.

You can then use the cursor keys to move through the remaining filenames, press **Enter** or select **Look** (6) to display the contents of certain files, and use **Search** (F2) within **Look** to search for the word or phrase. You can also use **Find** again to search this reduced group of files. Once you have found the file you want, you can select **Retrieve** (1) to retrieve it. Even after you have retrieved a file, you can still redisplay the reduced list by pressing **List** (F5) twice. If no files are found, a "Not Found" message appears briefly at the status line, followed by a blank List Files screen.

Pressing List twice does not redisplay the list if you have changed the default setting for the Long Document Name feature (Shift-F1,3,4,3).

Notes

Conditions

Selecting **Conditions** (5) from the Find menu displays a Conditions screen which lets you enter specific conditions to further limit a search (see *Find, Conditions in Reference*).

Documents

Three of the options on the Find menu let you specify which part of each file you want to search. Select **Doc Summary** (2) to search only the text of the document summaries. Select **First Page** (3) to search only the first pages or the first 4000 characters (whichever comes first). Select **Entire Doc** (4) to search the entire contents of each document, excluding the document summary.

Filenames

Select Name (1) from the Find menu to search for a file by name.

Whereas in Name Search you have to type in a filename beginning with the first letter to move to that file, the Name option works more like the Search feature in the normal editing screen. You can enter just part of a filename to list the filenames which contain the same letters in that same order. For example, you can enter **et** to display files called **LETTER**, **LETTERS**, **BETTER**, **GETSET**, etc.

When entering filenames, you can use the question mark (?) and the asterisk (*) to represent other characters (see *Search Patterns* below).

Only filenames that match the pattern you enter will remain on-screen when the search is over.

If you want the filenames that match the pattern you enter to be removed from the screen and only filenames which *do not* match the pattern to remain on-screen, use the dash (-). You can also use other logical operators to limit the scope of a search (see *Search Patterns* below).

Using the Name feature on the Find menu lets you reduce a long list of files to a specific few which match a certain pattern. When you want to quickly move to a certain filename without changing the current file list, you can use ♦Search (F2) or ♦Search (Shift-F2) (see *Short Cuts* below).

Limiting a Search

Obviously, the more files you search through, the longer your search is going to take. Consequently, Find offers you many features designed to let you narrow the scope of your search.

For example, you can search through only parts of files (see *Documents* above). In addition, when you display the files, you can use a filename pattern to display only certain files in a directory. Also, before you begin the search, you can move the cursor through the filenames and type an asterisk (*) to mark each file you want to include in the search. Then only the marked files will be searched.

Search Patterns

You can enter a search pattern in response to the “Word Pattern:” prompt that appears after you have selected options 1 through 4 on the Find menu. You can also enter a search pattern in any of the entries on options 4 and 5 on the Find: Conditions screen (see *Find, Conditions* in *Reference*). When entering the word or phrase you want to find, you can include up to 39 characters. No distinction is made between uppercase and lowercase letters.

The 39 characters cannot consist of more than five words, nor can any word contain more than 20 characters.

You can use the question mark (?) and the asterisk (*) to represent other characters within words and phrases. The question mark takes the place of a single character, while the asterisk takes the place of zero or more characters

To search for a pattern of words, enclose the pattern in quotation marks. To search for an exact phrase, include a space between the last letter and the last quotation mark. If a phrase contains a single quotation mark, use double quotation marks around the phrase.

The following list gives some examples of patterns.

Pattern	Selection
book	The files that contain the word " <i>book</i> ."
d?sk	The files that contain words that match the <i>d?sk</i> pattern (e.g., desk, disk, dusk).
"replace disk "	The files that contain the exact phrase " <i>replace disk</i> ."
"replace disk"	The files that contain patterns such as " <i>replace disks</i> " and " <i>replace diskette</i> ."
"replace*disk"	The files that contain a pattern that starts with " <i>replace</i> " and ends with " <i>disk</i> " plus any other characters. For example, " <i>replace the B diskette</i> ."

You can also combine words with the following logical operators: the semicolon (;) or the space (), the comma (,), and the dash (-). The semicolon (;) or space () selects files which contain both the words it joins. The comma (,) selects files which contain either word it joins. The dash (-) works like a minus sign. Use the dash (-) to conduct an *exclusive* search. WordPerfect then excludes all files that match any pattern which follows the dash. To search for an actual dash (-), enclose the dash within quotation marks (e.g., "-").

WordPerfect performs the operations from left to right.

The following list gives a few examples of using logical operators:

Operator	Selection
Bill Sue <i>or</i> Bill;Sue	All files that contain both Bill <i>and</i> Sue.
Bill,Sue	All files that contain either Bill <i>or</i> Sue.
Bill,Sue;Ted	All files that contain either Bill <i>or</i> Sue <i>and also</i> Ted.
Bill "replace disk "	All files that contain Bill <i>and</i> the phrase "replace disk." Bill can occur before or after the phrase.
-way	Only the files that do not contain <i>way</i> .
four-way	Files that contain four, but do not contain <i>way</i> .
"four-way"	The files that contain <i>four-way</i> .

Short Cuts

You can use **◆Search** (F2) or **◆Search** (Shift-F2) to quickly move to a filename whenever a file list is displayed on-screen, even after selecting **Find** (1).

Press **◆Search** or **◆Search**, type a word or phrase found anywhere in the filename, then press **Enter** or a search key. As opposed to Name Search, you do not have to begin the search pattern at the first letter in the filename. This is a rapid means of moving through a file list, especially when you are using long document names (see *Long Document Names* under *Exit in Reference*). You can enter a word or word pattern found in either the long name, the type, the DOS filename, or the subdirectory name.

Some of the Find features work more rapidly than others. In terms of speed, the fastest way to move to a filename is to use **◆Search** (F2). Ranking the options on the Find menu by speed, they are Name, Document Summary, First Page, and finally, Entire Document.

Undo

Undo works in much the same way that Undelete does in the normal editing screen. Once a search has been completed, you can select **Undo** (6) from the Find options menu to return the file list to the way it was before you performed the search. Undo maintains up to three different backup levels of file lists. As you narrow the scope of a search, Undo lets you back up to a previous list if you do not find the file you want.

For example, suppose you search for a certain word pattern in a directory which contains 70 files. You enter a search pattern that reduces the list to 40 files. You then enter another search pattern only to display a blank screen. You can select **Undo** (6) from the find menu to redisplay the 40 files. That way, Undo spares you from having to start over again from the beginning.

See Also: Find, Conditions; List Files; Search

Find, Conditions

When you are using Find to search through the files in a directory for a certain file, you can display a Conditions screen which lets you enter specific conditions for the search.

To use the Conditions screen.

- 1 Display the files in the directory where the file is located (see *List Files in Reference*).
- 2 Select **Find** (9) to display the Find menu.
- 3 Select **Conditions** (5) to display the Find: Conditions screen.

When any conditions appear on this screen, only the files which meet all the conditions will be listed after a search. You can reset this screen at any time (see *Reset Conditions* below).

- 4 Enter the conditions you want to use for this search (see *Document Summary*, *Text*, and *Revision Date* below).
- 5 Select **Perform Search** (1) to perform the search.

WordPerfect searches the files, then rewrites your screen, listing only the files which meet your conditions.

Notes

Document Summary

To limit a search to a specific item within the document summary (creation date, document name, document type, etc.), select **Document Summary** (5) from the Conditions menu, then enter the word or phrase under that item (see *Search Patterns* under *Find* in *Reference*). You can press **Down Arrow** (↓) or **Up Arrow** (↑) to move from item to item. Remember that the **Document Summary Creation Date** entry gives the date of the file when the document summary was created, and not necessarily the date on which the document itself was created (see *Revision Date* below).

Perform Search

Once you have entered all the conditions you want, select **Perform Search** (1) to perform the search.

Reset Conditions

The conditions of the last search are in effect until you change them to do another search. Selecting **Reset Conditions** (2) completely clears this screen and empties all existing search conditions.

Revision Date

Select **Revision Date** (3) from the Conditions screen to search only for files which have been edited between certain dates. Enter the month, day, and year, separated by slashes (e.g., 9/9/99 or 09/09/1999).

Text

The options on the Find menu let you limit a search to document summaries, the first page, or the entire document. Selecting **Text** (4) from the Conditions screen lets you combine these three different searches into one. You can enter a different search pattern for the document summary, the first page, and the complete document, and then select **Perform Search** (1) to search for all three patterns at once (see *Search Patterns* under *Find* in *Reference*). You can press **Down Arrow** (↓) or **Up Arrow** (↑) to move from item to item.

See Also: Find

Flush Right

Flush Right aligns dates, titles, or headings flush against the right margin.

FLUSH RIGHT



You can also use Flush Right with Home to insert a Hard Right Tab [RGT TAB] (see *Hard Right Tab* below).

To align text with the right margin,

1 Press **Flush Right** (Alt-F6).

 Select **Align** from the *Layout* menu, then select *Flush Right*.

The cursor moves to the right margin.

2 Type the text you want aligned at the right margin.

The text you type is inserted at the left of the cursor.

3 Press **Enter** to open a new line and end the flush right alignment.

or

Press **Format** (Shift-F8), select **Other (4)**, then select **End Centering/Alignment (9)** to end the flush right alignment.

Notes

Codes

When you align text, a Flush Right code [Flsh Rgt] is placed immediately to the left of the aligned text. When you press **Enter**, a Hard Return code [HRt] is inserted, and the alignment ends. When you select **End Centering/Alignment (9)** from the *Format: Other* menu, an End Centering/Alignment code [End C/A] is

inserted and the cursor remains on the same line when the alignment ends. These codes can be displayed in Reveal Codes (Alt-F3).

Be aware that a Flush Right code takes precedence over other text. Consequently, if you are in the middle of a line when you press **Flush Right** (Alt-F6) and then type text which runs into existing text, on-screen text may disappear. When this happens, use Reveal Codes (Alt-F3) to view and delete the unwanted text or codes.

Dot Leader

When aligning text flush right, you can insert a dot leader before the aligned text by pressing **Flush Right** (Alt-F6) twice, as in the following example.

Contents	
Preface	111
Chapter 1.	2
Chapter 2.	14
Chapter 3.	27
Chapter 4.	34
Chapter 5.	46
Appendix A	54
Appendix B	59
Appendix C	63
Index	

You can also insert a dot leader with a Hard Right Tab [RGT TAB] (see *Hard Right Tab* below).

Existing Text

You can flush right an existing line or part of a line of text. Place your cursor at the beginning of the text you want to flush right, then press **Flush Right** (Alt-F6).

Hard Right Tab

A Hard Right Tab aligns text with the next tab stop. To create a Hard Right Tab at the next tab stop, press **Home,Flush Right** (Alt-F6). WordPerfect inserts a Hard Right Tab code [RGT TAB]. To create a Hard Right Tab with dot leaders, press **Home,Home,Flush Right** (see *Types of Tab Settings* under *Tab Set in Reference*).

Multiple Lines

You can use Block to flush right one or more lines of existing text. Block the lines you want at the right margin, press **Flush Right** (Alt-F6), then type y. All the lines in the block are aligned against the right margin (see also *Block in Reference*).

When a block of text is aligned, a Right Justification code [Just:Right] is placed at the beginning of the text and a code matching the original justification setting is placed at the end (e.g., Left, Center, or Full). You can remove the alignment by deleting both codes (see *Justification in Reference*).

If you block text to the end of your document, and if you do not have a hard return at the end of your document, WordPerfect will insert a hard return at the end of your document after you press **Flush Right**.

Part of a Line

The cursor does not have to be at the left margin when you press **Flush Right** (Alt-F6). You can use **Flush Right** to type new text and align it on lines that include tabs, indents, and centered text.

Simply move the cursor to the right edge of any existing text or codes, press **Flush Right** (Alt-F6), then type the text you want at the right margin. This lets you create headings with text aligned at the left or right margin, or centered all in one line.

See Also: Center Text; Justification

Font

Font refers to the appearance of characters on a printed page. A font consists of three elements: typeface (e.g., Times Roman), weight (e.g., Bold or Light), and point size (for proportionally spaced fonts) or pitch (for mono-spaced fonts). Your printer comes with the capability to print in at least one font.

A point is approximately 1/72".

In WordPerfect, the base font is the font in which normal text (text without attributes) is printed. For example, if your normal text is printed in Times Roman 10pt, your base font is Times Roman 10pt.

WordPerfect attributes are usually printed in variations of the base font, so the selection of your base font also selects the fonts for your attributes. For example, if your base font is Times Roman 10pt, italicized text is probably Times Roman 10pt italic. Large text is probably Times Roman, but in a larger point size than 10pt.

“Probably” is the correct term because it all depends on what fonts your printer has available. If your printer has one font, then all text is printed in that font. If

your printer has hundreds of fonts that can be scaled to size, you probably have a different font for each WordPerfect attribute.

You tell WordPerfect which fonts your printer has available with the Cartridges and Fonts feature (see Cartridges/Fonts/Print Wheels in Reference).

You can change the base font several ways in WordPerfect.

Important: *Do not use more than 255 unique fonts in one document.*

Your printer has an initial base font selection. This selection is made on the Select Printer: Edit menu (Shift-F7,s,3,5) and instructions on how to set it can be found under *Printer, Edit* in Reference. Unless you change the base font with one of the two options discussed below, the setting made on the Select Printer: Edit menu determines the base font for all documents subsequently created.

Only portrait fonts are shown on the Select Printer: Edit menu.

Document Initial Base Font

The second place you can set the base font is on the Format: Document menu. This setting is only for the document on the screen, and is used to override the initial base font setting on the Select Printer: Edit menu.

To change this setting,

- 1 Press **Format** (Shift-F8), then select **Document** (3).

 Select *Document* from the *Layout* menu.

- 2 Select **Initial Base Font** (3).

At this point, a list of portrait fonts is displayed on the screen. These fonts are a duplication of the information entered on the Cartridges/Fonts/Print Wheels feature (minus any landscape fonts).

- 3 Move the cursor to the font you want to select as your base font, then choose **Select** (1).
- 4 Press **Exit** (F7) until you return to the normal editing screen.

The setting you make on this menu takes precedence over the setting on the Select Printer: Edit menu. Unless you change your base font with the option discussed below, your base font will be printed according to this setting.

Base Font Code

The third place you can set your base font is on the Base Font menu. This option inserts a code and changes the base font from the location of the code forward in your document. The code overrides the Initial Base Font option on both the Select Printer: Edit and Format: Document menus.

To change this option,

- 1 Move the cursor to the location in your document where you want to change the base font.

2 Press **Font** (Ctrl-F8), then select **Base Font** (4).

 *Select Base Font from the Font menu.*

At this point, a list of fonts is displayed on the screen. Depending on your paper size/type information, these fonts are either all landscape fonts or all portrait fonts (see *Landscape and Portrait Fonts* below). Regardless, all fonts listed are fonts entered on the Cartridges and Fonts feature.

3 Move the cursor to the font you want to select as your base font, then choose **Select** (1).

The setting made with this feature inserts a code in your document. From that point on in the document (or until you make another change with this feature), the base font is changed to the selection you made.

Base Font codes may be entered in sub-editing screens such as header, footer, footnote, endnote, and graphics caption screens. When a Base Font code is located in one of these screens, it affects only the information in that screen.

You may also insert Base Font codes in Setup: Initial Codes and Document: Initial Codes (see *Initial Codes* in *Reference*). A Base Font code in either one of these screens acts as if you had placed a Base Font code at the top of your document, so text in the document will be printed in that font. Footnotes, endnotes, equations, and graphics box captions, however, will use the Document Initial Base Font unless a Graphics Box Options, Footnote Options, or Endnote Options code is located in the document (see *Document Initial Base Font* above).

If one of the options codes listed in the paragraph above is located in the document, subsequent graphics box captions, footnotes, and endnotes (depending on the options code) are printed in the base font that is in effect at the options code.

Notes

Attributes

As mentioned at the beginning of this section, WordPerfect attributes are usually printed in variations of the base font depending on the fonts your printer has and what your printer can do with those fonts. When you tell WordPerfect about your fonts in the Cartridges/Fonts/Print Wheels feature and select a base font, WordPerfect determines which fonts will represent the different attributes.

If you want to determine how attributes with a particular base font will be printed, retrieve the PRINTER.TST file, select your printer, change the Base Font code with the Initial Base Font option on the Format: Document menu (Shift-F8,3,3), then print the document from the screen.

PRINTER.TST is installed separately with the WordPerfect Install/Learn/Utility files. It is initially installed in the directory where WPEXE is located.

You can change the font assignments WordPerfect has made for your attributes in two places.

The first is with the Size/Attribute Ratio feature (Shift-F1.4.8.6). This feature lets you enter sizes for some of the attributes as compared to the base font. It is discussed in *Initial Settings in Reference*.

The second is with the WordPerfect Printer Program. This program lets you change font assignments for all attributes. It is discussed in *Printer Program, Modify Automatic Font Changes in Reference*.

For more information on size and appearance attributes, see *Attributes in Reference*.

Landscape and Portrait Fonts

The fonts that are displayed on the various Base Font menus are fonts that come with your printer as well as fonts you mark on the Cartridges/Fonts/Print Wheels feature. Portrait fonts and landscape fonts, however, cannot be displayed on any of the Base Font menus at the same time. In fact, landscape fonts can only be displayed on the Base Font menu (Ctrl-F8.4) and even then, not all of the time.

Whether portrait fonts or landscape fonts are displayed on the Base Font menu depends on the Font Type of the current Paper Size/Type. If the Font Type is Portrait, portrait fonts are displayed. If the Font Type is Landscape, landscape fonts are displayed.

For example, if you want to display landscape fonts, you must first select a Paper Size/Type with a landscape font type (Shift-F8.2.7.1). As long as the cursor is positioned after the Paper Size/Type code, only landscape fonts will be displayed on the Base Font menu. If the cursor is positioned before the Paper Size/Type code, then portrait fonts will be displayed.

For more information on font types, see *Paper Size/Type and Printing, Landscape in Reference*.

Name Search

In all of the menus where you select a base font, you can quickly move the cursor to the font you are looking for by selecting Name Search (n), then typing letters to move the cursor to the first font that begins with those letters. Press **Enter** or any of the arrow keys to exit Name Search.

If you are defining a macro that selects a font, we suggest you use Name Search to locate that font.

Printer Selection

Fonts are printer specific. This means that if you enter a base font in a document, then print the document on a printer that does not have the font, the font will not be printed. In this situation, WordPerfect makes a "best guess" from the available fonts and tries to print the document in a similar font.

If you create a document for one printer, then save it with another printer, you may notice that your Font codes which usually list the name of the font (e.g., [Font:Tms Rmn 10pt]) are replaced with Font codes that show an asterisk in

front of the font name (e.g., [Font:*Tms Rmn 10pt]). The asterisk means that the printer you saved it under does not have the font that you initially entered. Again, when the document is printed, WordPerfect makes a “best guess” and tries to print the document in a similar font.

You must make font changes within WordPerfect. WordPerfect overrides any font settings you set on your printer.

See Also: Attributes; Printer Program, Modify Automatic Font Changes; Printing—General Information; Cartridges/Fonts/Print Wheels

Footnotes and Endnotes

Footnotes and endnotes are useful for listing sources or providing more detailed information on an item in your text. Footnotes are usually listed at the bottom of the page where they are referenced. Endnotes are usually listed at the end of the document.

- A** FOOTNOTES
- E** ENDNOTES

The screenshot shows a document with two columns of text. The left column contains a paragraph about socialized communities and a footnote (A) that reads: "Some research will y... The period in which... and therefore, most people...". The right column contains a longer paragraph about democratic liberalism and a list of endnotes (B) numbered 1 through 5. The endnotes list sources and details about the text, including a reference to 'The Sculptor of the Roman Baroque' by Paulson Press Ltd. (1981), p. 7. The page number '10' is visible at the bottom right of the document area.

When you create footnotes and endnotes, WordPerfect will number and format them for you. You can type in the text, then have WordPerfect number the notes and place them on each page, adjusting the text in your document to fit correctly. WordPerfect places footnotes at the bottom of the page and compiles endnotes at the end of the document or at a location of your choice.

Even after you have finished your document, you can edit, add, or delete a note, and WordPerfect will do all of the necessary renumbering and reformatting.

In this section, the word “note” refers to both footnotes and endnotes.

To create a note,

- 1 Move to the place in your document where you want the number for the new note inserted.
- 2 Press **Footnote** (Ctrl-F7), then select **Footnote (1)** or **Endnote (2)**.
 *Select Footnote or Endnote from the Layout menu.*
- 3 Select **Create (1)**.
- 4 Type the text of the note (see *Editing a New Note* below).
- 5 Press **Exit** (F7) to return to your document.

Notes

Adding and Deleting Notes

You can add new notes anywhere in a document (except in columns and footnotes) by following the steps above.

Creating a note inserts a Note code into your document. The format for the code is [*note*:#:[Note Num]*text*] where *note* is Footnote or Endnote, # is the note number and *text* is the text of the note, up to 50 characters. You can view this code in Reveal Codes (Alt-F3) and delete the note by deleting the code.

In the normal editing screen, you can delete an existing note simply by deleting the number representing it and then typing **y** to confirm the deletion. If you accidentally delete a note, you can use **Cancel** (F1) to restore it, just as you would restore any other deletion (see *Undelete in Reference*).

When you add or delete a note, the remaining notes in your document are renumbered automatically. However, you must rewrite the screen (press **Ctrl-F3,3** or move the cursor past the notes that follow the new number code) to display the renumbered notes.

Editing a New Note

Selecting **Create (1)** from the Footnote or Endnote menu places you in a special Note Editing screen. The number, letter, or character for the note you are

creating appears in the upper left corner of the screen. The type of note you are creating (i.e., Footnote or Endnote) appears on the status line.

▲ NOTE NUMBER

▲ NOTE TYPE

This has been associated with

Footnote: Press Exit when done

Doc 1 Pg 1 Ln 2.33" Pos 4.56"

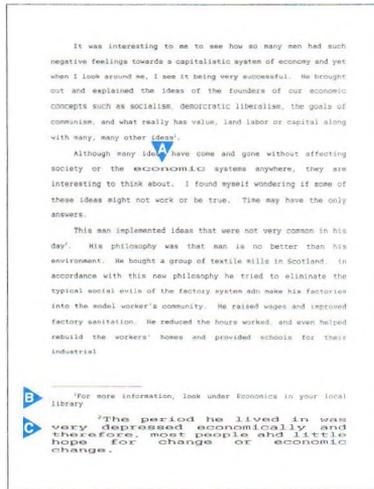
Enter text as you normally would, using the WordPerfect editing features (e.g., Bold, Underline, Center, Tab, Flush Right). A single footnote or endnote can contain up to 65,000 bytes (approximately 65,000 characters). Use Move (Ctrl-F4), Block (Alt-F4), and Cancel (F1) to move, delete, and restore text within the note. Move can also be used to move text from your document into a footnote and back again (see *Move in Reference*). You can also use the Speller and Thesaurus while in this screen.

Unless a Base Font code exists in the note, a note is printed in the initial base font for that document as displayed in the Initial Base Font entry on the Format: Document screen (Shift-F8,3.3) (see *Document Format in Reference*).

However, if a note options code precedes a note, the notes from that point on are printed in the font that is in effect wherever the options code is found (see

Footnotes and Endnotes, Options in Reference), as the following example demonstrates.

- A LOCATION OF OPTIONS CODE
- B FOOTNOTE BEFORE CODE
- C FOOTNOTE AFTER CODE



Remember to press **Exit** (F7) once you have finished typing the text of the note to save the note and return to your document. If you forget to exit the Note Editing screen, you may wind up typing part of your document in the Note Editing screen by mistake. If this happens, you can use **Block** (Alt-F4) and **Move** (Ctrl-F4) to block the unwanted text and move it back into your document (see *Block and Move in Reference*).

Editing an Existing Note

As long as you know the current number, letter, or character for a note, you can edit any of the notes you have created, at any time, from anywhere in the main body of the document.

To edit an existing note, press **Footnote** (Ctrl-F7), select **Footnote** (1) or **Endnote** (2), then select **Edit** (2). You are asked which note you want to edit. The number (or letter or character) displayed is one number greater than the number of the note which immediately precedes the cursor position. Enter the number of the note you want to edit, using your current numbering style (for a discussion of numbering styles, see *Footnotes and Endnotes, Options in Reference*).

After you enter a number, if that note exists, the note editing screen appears with the current text for that note displayed on the screen. Edit it (see *Editing a New Note* above), then press **Exit** (F7) to save your changes and return to the normal editing screen.

If the number you enter is not found, a ***Not Found*** message appears briefly at the left end of the status line and you are returned to the normal editing screen.

Endnote Placement

Normally, WordPerfect prints endnotes at the end of your document. Although there is no code indicating where the endnotes are to be printed, you can see the endnotes when the document is printed, or when you use View Document to preview the printed document (Shift-F7,6). If endnotes exceed one page, only one page of endnotes can be viewed.

Sometimes you may want endnotes at a different location. For example, if one document contains several chapters, you may want to compile each chapter's endnotes at the end of that chapter.

To specify an endnote location, move the cursor to where you want to insert the Endnote Placement code, press **Footnote** (Ctrl-F7), then select Endnote Placement (3). You are asked if you also want endnote numbering to start over from that point. Type **y** to have endnotes renumbered from that point or type **n** to have numbering continued from the current number. An Endnote Placement code [Endnote Placement] is inserted at the cursor, followed by a Hard Page code [HPg]. If you chose to have your endnotes numbered from that point, a New Endnote Number code [New End Num:#] is then inserted, where # is the first number in the current numbering method (e.g., 1 or a).

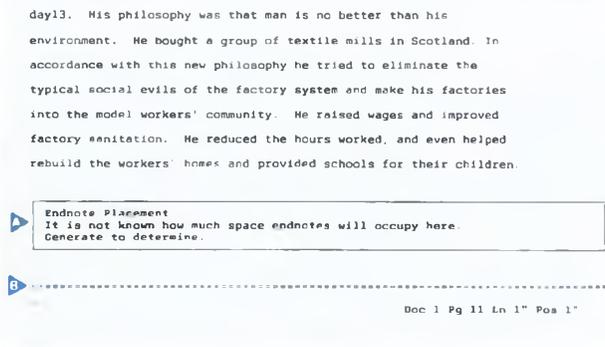
Whenever you print the document, the endnotes are printed at the location of the Endnote Placement code. All endnotes either from the beginning of the document or from the point of the last Endnote Placement code will be printed at this location.

When WordPerfect inserts an Endnote Placement code, it follows the code with a Hard Page code to separate the endnotes from the next page of text. If you want the endnotes to begin on a separate page, you should also insert a Hard Page code immediately before the Endnote Placement code.

In the normal editing screen, the Endnote Placement code is represented by a box which contains a message informing you that you must generate your endnotes. This box is followed by a hard page, as in the following example.

▲ ENDNOTE PLACEMENT
CODE

▲ HARD PAGE CODE



If you use Endnote Placement, you then need to generate the endnotes in that document if you want to determine how much space they will occupy in the printed document. To do so, press **Mark Text** (Alt-F5), select **Generate** (6), select **Generate Tables, Indexes, Cross References, etc.** (5), then type **y**. The message in the box then changes to “Endnote Placement,” indicating that the endnotes have been generated (see *Generate in Reference*).

You do not have to generate endnotes in order for them to be printed.

Footnote Placement

When you add a footnote to your text, WordPerfect places it at the bottom of that page. WordPerfect automatically reduces the text on the page to make room for any footnotes and inserts a blank line between the footnotes and the text.

If a footnote is too long to fit on one page, WordPerfect tries to keep at least one half inch of the note on the same page as the number that references that footnote. If it cannot do this, WordPerfect moves both the footnote and the line of text containing the footnote reference to the next page.

You can change both the spacing between footnotes and the amount of footnote text to be kept on a page (see *Footnotes and Endnotes, Options in Reference*).

Graphics

Only a graphics box with a character anchor type can be included in a note (see *Graphics, Create in Reference*).

Master Documents

If your document is extremely long, you may want to use the Master Document feature to divide it into smaller files. Footnotes and endnotes are numbered consecutively throughout a master document (see *Master Documents in Reference*).

Options

Several available options let you determine the numbering style of your notes and the way notes are formatted (see *Footnotes and Endnotes, Options in Reference*).

Renumbering Notes from a Given Point

When you have a document divided into several files, you may need to start note numbering at a certain number. To do so, press **Footnote** (Ctrl-F7), select **Footnote** (1) or **Endnote** (2), select **New Number** (3), then enter a number using the current note numbering method (see *Note Numbering Method* under *Footnotes and Endnotes, Options in Reference*).

This Inserts a New Number code into your document, i.e., [New *note type* Num:#] where *note type* is Footnote (Ftn) or Endnote (End), and # is the new number. All the notes of that type from that point forward in the document will be numbered consecutively, starting with the new number. However, you must

rewrite the screen (press **Ctrl-F3,3** or move the cursor past the notes that follow the new number code) to display the renumbered notes.

See Also: Footnotes and Endnotes, Options

Footnotes and Endnotes, Options

WordPerfect offers you several options in determining the numbering style for your footnotes and endnotes and the way they are formatted on a page. You can change these options or let WordPerfect select them for you.

To change note options,

- 1 Press **Footnote** (Ctrl-F7), then select **Footnote (1)** or **Endnote (2)**.
 *Select Footnote or Endnote from the Layout menu.*
- 2 Select **Options (4)** to display the Options menu.
- 3 Select an option and enter the necessary information (see the option headings under *Notes* below).
- 4 Press **Exit** (F7) until you return to the normal editing screen.

Notes

Amount of Note to Keep Together

If a note is too long to fit on a page, it is continued on the next page. This option sets the amount of space in a note (not necessarily the number of lines) that is to be kept on one page. The default is one-half inch.

Codes

Changing note options inserts an options code ([Ftn Opt] or [End Opt]) which can be seen in **Reveal Codes** (Alt-F3). The options code affects only the notes from that point forward in the document. If you want the new format to affect all the footnotes in your document, the options code must be placed before any notes in the document.

An options code cannot be edited. The only way to change your option settings is to delete the options code or to create a new code by using the steps given at the beginning of this section.

Each time you display an Options menu, the settings it contains reflect any changes made by any previous options code.

You can include the options code in your Initial Settings to have the footnote and endnote options you want placed in every subsequent document you create (see *Initial Settings in Reference*).

Footnote Options

Four options are available only for footnotes:

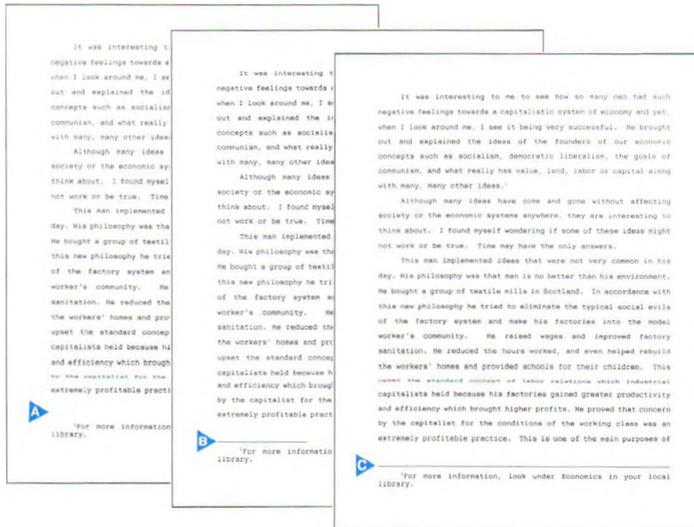
Footnotes at Bottom of Page

When text does not fill a page, this option determines whether footnotes will be printed at the bottom of the page or just below the last line of text. If this option is set to Yes, blank lines are inserted between text and footnotes, when necessary, to keep all footnotes at the bottom of each page.

Line Separating Text and Footnotes

This option determines whether WordPerfect prints a line to separate text from footnotes. You can select No Line (1), 2-Inch Line (2), or Margin to Margin (3), as in the following illustration.

- A** NO LINE
- B** 2-INCH LINE
- C** MARGIN



Print Continued Message

When a footnote must be split between two pages, setting this option to Yes prints “(continued...)” on the last footnote line of the first page and “(...continued)” on the first footnote line of the next page. You can change the language in which this message is printed by inserting a language code in the initial codes for a document (see *Language in Reference*). You can also change the text for these messages by editing the WPLRS file (see *Language Resource File in Reference*).

Start Footnote Numbers Each Page

If this is set to Yes, footnote numbering starts at 1 on every page. If this is set to No, footnotes are numbered continuously throughout the document.

Note Numbering Method

Normally, WordPerfect uses numbers (e.g., 1, 2, 3, etc.) to number notes. The

Note Numbering Method option lets you select either **Numbers (1)**, **Letters (2)**, or **Characters (3)**.

When you select **Characters (3)**, you then need to enter the character(s) you want to use.

The character used most often to number notes is an asterisk (*). However, you can enter any WordPerfect character using *Compose* (see *Compose in Reference*). A character is used once, then doubled, then tripled, etc. (e.g., *, **, ***, etc.). If you want a different character for each note, you can enter up to five different characters (e.g., * † ‡ § •). WordPerfect uses the first character, then the second, etc., until it has used them all. It then doubles, then triples the characters. After each character has been repeated 15 times, they start over at one again.

Spacing Within and Between Notes

Normally, notes will be single spaced with .167" (the height of a 12-point font) blank space between each note. Within notes, you can enter **1** for single, **1 1/2** for one-and-a-half line spacing, **2** for double, etc. If you want to vary the spacing for a particular note, you can use *Line Spacing in Format* (Shift-F8,1.6) to set line spacing within a note while in the Note Editing screen.

Style for Numbers

You can select how your note numbers appear both in the text of your document (*Style for Number in Text*) and in the note itself (*Style for Number in Note*).

WordPerfect normally displays the note number in superscript in a document (e.g., Footnote¹). Within a footnote, WordPerfect displays a superscripted number which is indented, and within an endnote, WordPerfect displays a number which is followed by a period (1.).

When you select either *Number Style* option, a "Replace With:" prompt appears. You may enter characters and use *Font* (Ctrl-F8) to select any of the WordPerfect size or appearance attributes (see *Font in Reference*). You can also add and delete spacing. Within a style, the Note Number code [Note Num] indicates where the note number will print. While creating a note numbering style, you can insert the Note Number code by pressing **Footnote** (Ctrl-F7), selecting **Footnote (1)** or **Endnote (2)**, then selecting **Number Code (2)**.

See Also: *Compose*; *Font*; *Footnotes and Endnotes*

Force Odd/Even Page

Sometimes you may want to make sure that certain pages in a document always have an odd, or even, page number. For example, it is customary to begin each chapter in a book on an odd-numbered page.

You can have WordPerfect insert blank pages where necessary to make sure that a certain page always has an odd or even number.

- 1 Move the cursor to the top of the page for which you want to force the number (see *Codes* below).
- 2 Press **Format** (Shift-F8), then select **Page** (2).
 *Select Page from the Layout menu.*
- 3 Select **Force Odd/Even Page** (2).
- 4 Select **Odd** (1) to force the page to have an odd number.
or
Select **Even** (2) to force the page to have an even number.
- 5 Press **Exit** (F7) to return to your document.

The page number is forced to odd or even. It appears in the Pg # indication on the status line.

Notes

Codes

Forcing a page number inserts a Force Page code ([Force:Odd] or [Force:Even]) into your text at the cursor position. This code can be seen in Reveal Codes (Alt-F3).

A Force Page code should always be placed at the top of the page it is forcing. When necessary, WordPerfect inserts an extra Soft Page code [SPg] directly before this code to create a blank page and make certain the forced page retains an odd or even number. If the Force Page code is not at the top of the page, the blank page will be inserted in the middle of the existing page and create unnecessary blank space, depending on if the page was already odd or even.

Force Odd/Even Page vs. New Page Number

Forcing a page inserts blank pages where necessary, but it continues to keep the pages in your document numbered consecutively. If you want a page in your document to begin with a certain number that is not necessarily in consecutive order, you can do this without inserting blank pages by using New Page Number (Shift-F8,2,6,1,#) (see *Page Numbering in Reference*).

See Also: Page Numbering

Format

WordPerfect offers a wide variety of possible format settings.

Format lets you access any of the options used to format your text. You can then make changes which will affect the current document.

- 1 Press **Format** (Shift-F8) to display the main format menu.

- 2 Select **Line** (1), **Page** (2), **Document** (3), or **Other** (4) to display a submenu which lists a certain group of Format options (see *Line*, *Page*, *Document*, and *Other* below).
-  Select *Line*, *Page*, *Document*, or *Other* from the *Layout* menu.
- 3 Select a format option and change it.
- 4 Press **Exit** (F7) to return to the document.

Notes

Codes

In WordPerfect, you type text on a clear screen. The default settings being used to format your text on the page are hidden from sight. They do not appear in the normal editing screen, and they cannot even be seen at the top of your document when you use Reveal Codes (Alt-F3).

WordPerfect comes with standard settings for several of the most commonly-used formatting features (e.g., left and right margins, tabs, top and bottom margins, etc.). These settings are in place whenever you type a document. For a list of all these settings, see *Appendix G: Initial Settings*.

When you want to know the current setting for any Format option, press **Format** (Shift-F8) and select the menu which displays that option. The menu displays any current setting if there is one, and you can then change the setting.

For the *Line*, *Page*, and *Other* Format menus, changing a setting inserts a code which changes that setting from that point forward in a document. As a rule of thumb, *Line* Format codes should come at the beginning of a line, and *Page* Format codes should come at the beginning of a page. These codes can be displayed in Reveal Codes (Alt-F3).

For the *Format: Document* menu (Shift-F8,3), changing a setting does not insert a code into your document but it does change that setting for the entire document.

If you want your own personalized format settings in place whenever you create a document, you can customize the standard WordPerfect initial format settings by using Initial Codes on the *Setup: Initial Settings* menu (Shift-F1,4,5) (see *Initial Codes* in *Reference*).

Document

The *Document* submenu options let you make changes that affect the entire document you are working on. For example, you can use the *Document* options to create a *Document Summary* or change the initial base font for your document. The *Document* options are:

- Display Pitch
- Redline Method
- Initial Base Font
- Summary
- Initial Codes

For more information, see *Document Format* in *Reference*.

Line

The Line submenu options deal with the way text is formatted horizontally on a line, that is *across* a page. They are:

- Hyphenation
- Hyphenation Zone
- Justification
- Line Height
- Line Numbering
- Line Spacing
- Margins Left/Right
- Tab Set
- Widow/Orphan Protection

For more information, see *Line Format* in *Reference*.

Other

The Other submenu contains several advanced formatting options. They are:

- Advance
- Border Options
- Conditional End of Page
- Decimal Align Character/
Thousands' Separator
- End Centering/Alignment
- Language
- Overstrike
- Printer Functions
- Underline Spaces/Tabs

For more information, see *Other Format* in *Reference*.

Page

The Page submenu options deal with the way text is arranged on a page, and from page to page throughout a document. For example, you can use Page options to center the text vertically on the page. The Page options also let you have WordPerfect add page numbers and special headings to pages. Page submenu options are:

- Center Page
- Force Odd/Even Page
- Headers and Footers
- Margins Top/Bottom
- Page Numbering
- Paper Size/Type/Labels
- Suppress

Generally, these codes should be placed at the top of the page. For more information, see *Page Format* in *Reference*.

See Also: Document Format; Line Format; Other Format; Page Format; Appendix G

G Generate

Generating is the final step in creating a table of contents, table of authorities, list(s), and index(es). Generating also updates cross-references and the space being used for endnotes (if you are using Endnote Placement). Before generating, you should have marked the text you want, inserted any Endnote Placement codes, and defined your table, list, or index. For more information, see the appropriate *Define* heading for each in *Reference* (e.g., *Index*, *Define*). Also see *Cross-Reference*, *Mark Text*, or *Footnotes and Endnotes*.

To generate,

1 Press **Mark Text** (Alt-F5), and select **Generate** (6).

 Select **Generate** from the **Mark** menu.

2 Select **Generate Tables, Indexes, Cross-References, etc.** (5).

A message appears asking if you want to replace any existing tables, lists, and indexes.

3 Type **y** to generate cross-references, endnotes, tables, lists, or indexes, replacing any previously existing ones.

or

Type **n** if you want to return to your document without generating.

Generating begins, and a counter at the bottom of the screen indicates the progress of generation. All tables, lists, and indexes in the document are generated, and cross-references and endnote placement are updated—all in one generating process.

Depending on the number and length of the items you are generating, generating may be time consuming. Also, don't be concerned if the counter on the status line indicates WordPerfect is *passing* through the document multiple times. That is a necessary part of the generating process.

You can use generate as many times as you want. Each time, cross-references and endnote placement are updated, and the previous versions of tables, lists, and indexes are deleted before the new ones are created—provided you have not deleted any [Def Mark:] codes (see [Def Mark:] and [End Def:] below). This allows you to generate, mark new entries, create new endnotes, add cross-references, and generate again, updating the entries in the tables, lists, or indexes.

Be aware that if you make any changes to text you have marked, cross-references, endnotes or endnote placement, or the definition of tables, lists, or indexes, your changes will not be included unless you generate again.

Notes

Cross-Referencing

When you generate cross-references, question marks are replaced with numbers, and existing numbers are updated.

[Def Mark:] and [End Def:]

When you defined your table, list, or index, [Def Mark:*type*.#] (where *type* represents the type of reference — ToC, List, or Index — and # represents the numbering style) was inserted into your document at the cursor position. Each table, list, or index is generated at its [Def Mark:]. When generating is complete, [End Def:] is inserted at the end of each table, list, or index. These codes can be seen in Reveal Codes (Alt-F3).

When you generate again, WordPerfect deletes everything between [Def Mark:] and [End Def:] before creating a new table, list, or index. You should be careful when editing your document that you are not adding text between the two codes (unless you really do want to edit a generated table, list, or index).

If you delete [Def Mark:] and leave [End Def:], WordPerfect briefly displays a message (the next time you generate) stating that a needed [Def Mark:] is missing.

WordPerfect needs to have both [Def Mark:] and [End Def:] in order to replace an old table, list, or index with a new one. If you delete [End Def:], WordPerfect leaves your old table, list, or index and generates a new one as well. Also, if you define a new table, list, or index, you should delete the old [Def Mark:] or the item will be generated twice. If you find you have duplicate tables, lists, or indexes, these may be the reasons.

Remember, each time you change the definition for tables, lists, and indexes, you are also creating a new [Def Mark:] code. Be sure to delete the old [Def Mark:] when you create a new [Def Mark:].

When generating tables, lists, and indexes, WordPerfect sorts according to the language at the point of the [Def Mark:].

Editing Tables, Lists, and Indexes

WordPerfect uses standard formatting features to format tables (contents and authorities), lists, and indexes. Once they have been generated, you can edit them like you would any other WordPerfect text. For example, a table of contents is formatted using indents [→Indent] and margin releases [←Mar Rel]. These codes align on tab stops. If the table is not aligned properly, you may need to change the tab stops (see *Tab Set* in *Reference*). Be aware that if you do edit the text in a table, list, or index, and then regenerate it, the old table, list, or index will be replaced with a new one, and you will lose any editing you did to the old one. It may be better to edit the marked text in the document and then regenerate.

You should be careful that as you edit you do not delete [Def Mark:] or [End Def:] before and after the table, list, or index. This will cause problems if you ever generate again.

Endnote Placement

You can tell WordPerfect to print endnotes someplace other than the end of the document by using the Endnote Placement feature (see *Footnotes and Endnotes in Reference*). When you insert an Endnote Placement code into a document, the following message appears at the insertion point:

“Endnote Placement. It is not known how much space endnotes will occupy here. Generate to determine.”

In order to have WordPerfect determine how many pages the endnotes occupy, you need to use the Generate feature.

After you have generated the document, an “Endnote Placement” message replaces the original message. This new message takes up as many pages of the document as the endnotes will require. You can identify the number of pages by moving the cursor past the message and past the page break under the message. The status line will reflect which page the rest of the document starts on.

If, after adding or deleting endnotes, you decide you need to know if the endnotes will take up any more or less pages, regenerate to update the Endnote Placement code.

Not Enough Memory—Marked Text Block Too Large

When generating a table, list, or index, a message may appear indicating that your computer does not have enough memory available to complete generation. You can free up additional memory by making sure Document 2 is empty (press **Switch** (Shift-F3) to check and **Exit** (F7) to close Document 2), or by unloading any memory resident programs that may be installed. Be sure to save your document before unloading any memory resident programs.

WordPerfect has a startup option, /n2, that disables the Document 2 screen to save memory (see *Appendix N: Startup Options*).

A message also appears if you are using a concordance file and run out of memory. You can type **y** for Yes and only the concordance entries scanned up to that point will be included in the index. Type **n** for No to stop index generation (see *Index, Concordance and Mark Text in Reference*).

Sorting Order

WordPerfect sorts index entries and authorities alphabetically when generating an index or table of authorities. Entries in lists or a table of contents are sorted according to the order in which they appear in the document.

Table of Authorities

When you define a table of authorities, you should set a new page number between the table of authorities definition and the next page of the document (see *Page Numbering in Reference*). If you do not, page number references may not be accurate after the table is generated (since the table itself will likely introduce new pages into the document). A warning message appears when the table of authorities is generated if a New Page Number code is not found.

See Also: Lesson 22; Index; Lists; Table of Authorities; Table of Contents

Go To

As you move the cursor through your document, use Go To to move quickly to a certain location.

To move through text using Go To,

- 1 Press **Go To** (Ctrl-Home), then press an appropriate keystroke (see *Go To Keystrokes* below).

 Select *Go to* from the Search menu.

Notes

Go To Keystrokes

The following table lists the keystrokes that can be used with Go To to move the cursor through text:

Location	Keystrokes
To the immediate right of the next occurrence of any character.	Go To, <i>character</i>
To the next Hard Return code [HRt]	Go To, Enter
To the top of the current page or column	Go To, Up Arrow (↑)
To the bottom of the current page	Go To, Down Arrow (↓)
To the top of any page in your document	Go To, <i>page number</i> , Enter
To the beginning of a block (when Block is on)	Go To, Block (Alt-F4)

In Columns

When you are using the Columns features (Newspaper and Parallel), you can use Go To with the Left and Right Arrow keys to move the cursor from column to column as you edit existing text (see *Columns, Newspaper* and *Columns, Parallel* in *Reference*).

Not Found

When Go To searches for a character or a Hard Return code [HRt], if that character is not found within approximately the next 2000 characters, a beep sounds and the cursor remains in place.

Previous Position

You can press **Go To** (Ctrl-Home) twice to return the cursor to its estimated previous location, after using the following keys:

- Block (Alt-F4)
- Escape (Esc)
- Go To (Ctrl-Home)
- Home arrow keys
- Page Up (PgUp)
- Page Down (PgDn)
- Replace (Alt-F2)
- Screen Up (- on the number pad)
- Screen Down (+ on the number pad)
- Search (F2)
- Search (Shift-F2)

See Also: Columns, Newspaper; Columns, Parallel

Go to DOS

When you start WordPerfect from the DOS prompt, if you have enough memory in your computer, you can return to DOS without exiting WordPerfect.

1 Press **Shell** (Ctrl-F1), then select **Go to DOS** (1).

 *Select Go to DOS from the File menu.*

2 Perform any DOS commands.

3 Type **exit** and press **Enter** to return to WordPerfect. You cannot return to WordPerfect by pressing **Exit** (F7) (see *Caution* below).

Your cursor is returned to the same place it was when you left WordPerfect.

Notes

Caution

If WordPerfect is still active while you are at DOS, an “Enter ‘EXIT’ to return to WordPerfect” message is displayed above the DOS prompt. You must type **exit** and press **Enter** to return to the active copy of WordPerfect. Do not try to return to your currently active copy of WordPerfect by entering **wp**. This only loads another copy of WordPerfect into memory.

If you have enough memory, you can run other programs from DOS before returning to WordPerfect.

While WordPerfect is active, do not use the CHKDSK/F or DELETE commands on the WordPerfect program files. Also, any DOS command which might affect WordPerfect should be avoided (e.g., REN).

DOS Command

While running WordPerfect from DOS, you can also perform a DOS command without leaving WordPerfect. Press **Shell** (Ctrl-F1), then select **DOS Command** (2). You are prompted for the command at the status line. After the command has been performed, press any key to return to WordPerfect.

Memory

When you select **Go to DOS (1)** or **DOS Command (2)**, a new copy of **COMMAND.COM** (a DOS file) is loaded into memory. If there is not enough memory to load the new copy, an error message appears, and you are returned to your document.

Under Shell

Different Shell menu options appear when you press **Shell (Ctrl-F1)** if you are running WordPerfect under the WordPerfect Shell (see *Go to Shell* in *Reference*).

See Also: Go to Shell

Go to Shell

When running WordPerfect under the WordPerfect Shell, you can leave WordPerfect and return to the Shell without exiting WordPerfect.

- 1 Press **Alt-Shift-Space Bar** to go directly to the Shell, then go to step 3.

or

Press **Shell (Ctrl-F1)** to display the Shell options.

-  Select **Go to Shell** from the **File** menu, then go to step 3.

- 2 Select **Go to Shell (1)**.

The Shell menu is displayed.

- 3 You can start another program from the Shell menu, select a Shell feature, or go to DOS to perform one or several commands, depending upon the current available memory (see *Caution* below).
- 4 Select the WordPerfect program letter from the Shell menu to return to WordPerfect.

Your cursor is returned to the same place as it was when you left WordPerfect.

Notes

Caution

If the Shell is still active while you are at DOS, a “(Shell)” message precedes the DOS prompt at the command line. If WordPerfect is active, do not try to return to WordPerfect by entering **wp** from the DOS prompt. This will only load another copy of WordPerfect. To return to your active copy of WordPerfect, you need to first enter **exit** to return to the Shell, and then go to WordPerfect.

While WordPerfect is active, do not use the **CHKDSK/F** or **DELETE** commands on the WordPerfect program files. Also, any DOS command which might affect WordPerfect should be avoided (e.g., **REN**).

DOS Command

While running WordPerfect from the Shell, you can also perform a DOS command without leaving WordPerfect. Press **Shell** (Ctrl-F1), then select DOS Command (5). You are prompted for the command at the status line. After the command has been performed, press any key to return to WordPerfect.

Library 1.1

We strongly recommend that you use WordPerfect Library 2.0 or WordPerfect Office 2.0 dated 6/30/88 or later when using WordPerfect 5.1. If this is not possible, be aware of the following:

- The Save and Append options on the 5.1 Shell menu will not work. Use the Library Screen Copy feature to save text to the Clipboard (see *Screen Copy* in *Shell Reference* in the *WordPerfect Library* or *WordPerfect Office Manual*).
- If you are using a version of the Shell program dated earlier than 6/30/88 and are receiving the "Error 258" prompt, you need to order an upgrade from Library 1.1 to Library 2.0 in order to run WordPerfect from the Shell.
- WordPerfect Merge files need to be exported in 4.2 format in order to be compatible with the Library 1.1 Notebook (see *Text In/Out* in *Notebook Reference* in the *WordPerfect Library* or *WordPerfect Office Manual*).
- With any version of File Manager prior to 6/30/88, you can only lock WordPerfect files in 4.2 format. This means that any 5.1 files locked with File Manager must be unlocked with File Manager before they can be used in WordPerfect 5.1.

Memory

The number of other programs you can run while you have WordPerfect resident in memory depends on the available memory in your computer (see *Memory Map* in *Shell Reference* in your *WordPerfect Library* or *WordPerfect Office Manual*).

Shell Clipboard

The Clipboard is a special file the Shell uses to hold the text you transfer from program to program.

While running WordPerfect under the Shell, pressing **Shell** (Ctrl-F1) from the normal editing screen displays the Shell Clipboard options. You can then select **Save** (2) to save the current document to the Clipboard, **Append** (3) to add the current document at the end of any existing text in the Clipboard, or **Retrieve** (4) to retrieve the contents of the Clipboard at the cursor.

If block is on when you press **Shell** and select **Save** (2) or **Append** (3), only the blocked text is saved or appended to the Clipboard (see also *Clipboard* in *Shell Reference* in your *WordPerfect Library* or *WordPerfect Office Manual*).

See Also: Go to DOS

Graphics, Conversion Program

The Graphics Conversion Program converts files in a number of graphics formats to WordPerfect (.WPG) format. Many files can be converted directly through the Graphics feature in WordPerfect. Some formats, such as AutoCAD DXF, must be converted with the Graphics Conversion Program. See *Graphics, Formats and Programs in Reference* for more information before using the Graphics Conversion Program.

You might want to use the Graphics Conversion Program to convert files in supported formats if:

- The file is in DXF format. (All DXF files must be converted through the Conversion Program.)
- You want to use some of the startup options available with the Conversion Program that affect the way the file is converted (see *Startup Options* below).
- You want to convert multiple files (see *Multiple Files* below).
- You are using the Graphic on Disk feature and want to save time in printing, viewing, and editing the display parameters of the graphic (see *Graphic on Disk* below).

Important: *The Graphics Conversion Program file (GRAPHCNV.EXE) needs to be installed properly before using the program. If you chose not to install the utility programs when you installed WordPerfect (or have not subsequently installed them), you must do so now to use the Graphics Conversion Program. See the Installation Instructions card for installation instructions.*

To run the program,

- 1 Go to DOS.
- 2 Change to the directory where GRAPHCNV.EXE is located.

The Installation Program copies this file to the directory where WordPerfect (WPEXE) is located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "Utilities" if you are using a two disk drive system.

- 3 Enter **graphcnv** to start the program.
- 4 Enter the full pathname of the file to be converted (input file).
- 5 Enter the full pathname of the converted file (output file).

When you see the "->ok" message, the conversion is complete.

- 6 Press any key to exit the program.

Error Messages

As the Graphics Conversion Program tries to convert your files, the following error messages may appear.

Bad Format

The input file is in a format not converted by the Graphics Conversion Program. Try exporting the file to another supported format (use your graphics program). For a list of supported formats, see *Graphics, Formats and Programs in Reference*.

Bad Input File

The input file cannot be accessed. This error occurs when the specified path to the input file cannot be found or does not exist, or when the graphics file you want to convert is marked "Read Only." This message may also indicate that an error occurred while converting a file. For example, the input file may be corrupt, or it may contain information not expected given the type of the input file.

First check whether you entered the path correctly. If not, run the Graphics Conversion Program again and enter the correct path. If the original path was correct, try re-exporting the file with your graphics program, then run the Graphics Conversion Program again.

Disk Full

This error occurs when there is not enough room on disk to convert the file. If you can, make room by deleting files, then try again.

End of File

An unexpected end of file was encountered while trying to convert the file. Try exporting the file in another supported format (use your graphics program). See *Graphics, Formats and Programs in Reference* for a list of supported formats.

File Not Found

The specified file could not be found. Check to be sure you entered the correct path and name of the file.

Graphic on Disk

When WordPerfect needs to use an image located in a graphic file on disk, it must find the file and convert it. The converted file is placed in a temporary file which is then deleted when WordPerfect no longer needs it. This conversion takes time, and occurs every time you print or view a document using a graphic on disk, or when you edit the display parameters of a graphic on disk (see *Graphics, Edit in Reference* for more information).

If you pre-convert the file by using the Graphics Conversion Program, you will reduce the time required for these tasks. Note, however, that if you convert the graphic on disk, the graphics program you used to create the file may not be able to edit the converted file.

Multiple Files

You can use wildcard characters when specifying the input filename to convert multiple files. Use "?" to represent a single character, and "*" to represent zero or more characters in succession. The output filenames will match the input filenames except that they will have a .WPG extension.

For example, if you have a series of graphics named GRAPHIC1.DXF, GRAPHIC2.DXF, GRAPHIC3.DXF, etc., you could convert them all at once to WordPerfect format by entering **graphic?.dxf** as the input filename. The output files would be named GRAPHIC1.WPG, GRAPHIC2.WPG, GRAPHIC3.WPG, etc. To convert any file with a DXF extension to WordPerfect format you would enter ***.dxf** as the input filename.

Startup Options

The following startup options can be used with the Graphics Conversion Program:

inputfilename outputfilename

You can designate both the input filename and output filename when you start the Graphics Conversion Program by entering `graphcnv inputfilename outputfilename`, where *inputfilename* is the name of the file to be converted, and *outputfilename* is the name of the output file.

You can also use wildcard characters in the input filename without using an output filename to convert multiple files. See *Multiple Files* above for more information.

/b=#

Sets the background color for the .WPG output file, where # represents one of the following colors:

1=Black, 2=Blue, 3=Green, 4=Cyan, 5=Red, 6=Magenta, 7=Brown, 8=White

If no number is specified, the background color defaults to intense white.

/c=2

Converts color values in the input file to monochrome (black and white) values.

/c=16

Converts color values in the input file to the WordPerfect standard 16-color palette.

/c=256

Converts color values in the input file to the WordPerfect standard 256-color palette. (Use this option when you have a graphics adapter capable of displaying 256 simultaneous colors.)

/c=b

Converts all color values in the input file to black.

/c=w

Converts all color values in the input file to white.

/f=#

After a color or gray scale conversion (with /c or /g), you can use this option to change the fill color. # represents the following colors:

1=Black, 2=Blue, 3=Green, 4=Cyan, 5=Red, 6=Magenta, 7=Brown, 8=Gray, 9=Dark Gray

/g=16

Converts color values in the input file to the WordPerfect standard 16 shades of gray palette.

/g=256

Converts color values in the input file to the 16 shades of gray present in the WordPerfect standard 256-color palette. (Use this option when you have a graphics adapter capable of displaying 256 simultaneous colors.)

/h

Displays helpful information about the Graphics Conversion Program.

/l

Lets you send conversion status messages for each converted file to the standard printer device. See also */l=filename* below.

/l=filename

Lets you send conversion status messages for each converted file to the specified file. See also /l above.

/m

Inverts monochrome bitmapped images.

/n=#

After a color or gray scale conversion (with /c or /g), you can use this option to change the line color. See */f=#* above for a list of colors.

/o

Lets you override the "Replace files?" user prompts. This is known as *unattended mode*. When the Graphics Conversion Program writes an output file with a filename that already exists, it will replace the existing file without issuing a prompt.

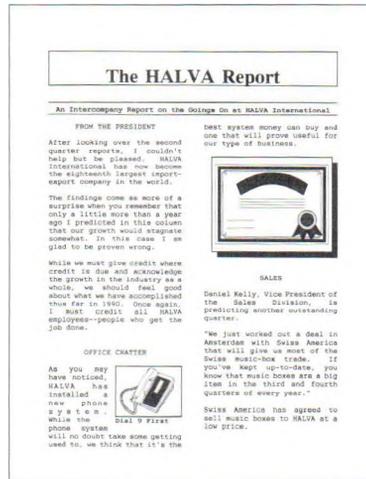
/w

As WordPerfect 5.1 converts HPGL plotter files, all measurements are scaled. WordPerfect 5.0 translated pen widths as "hairline" with no width conversion. If you still want WordPerfect to translate pen widths as hairline, start the 5.1 Graphics Conversion Program with the /w startup option.

See Also: Graphics, Create; Graphics, Edit; Graphics, Formats and Programs; Screen Capture Program

The Graphics feature lets you incorporate pictures or images from many sources into your document. The capability to mix text and graphics in the same document makes it easy to produce newsletters, instructional materials, and other documents where figures, diagrams, logos, and/or pictures are needed.

To see a list of the graphics formats that WordPerfect supports (and the programs that produce those formats), see Graphics, Formats and Programs in Reference.



Using the Graphics feature, you can create a box around which you can wrap text. The location, appearance, and size of the box can be adjusted as needed, and a graphics image, an equation, or even another document (less than a page long) can be retrieved into the box. You can even define columns, create tables, enter merge codes, and import a spreadsheet into a graphics box.

On the normal editing screen, an outline of the graphics box is displayed in your document if you are wrapping text around the box (see *Wrap Text Around Box* under *Graphics, Define a Box* in Reference). To see the contents of the box, you must use **View Document** (Shift-F7,6) or select **Edit (9)** on the box definition menu (see *Graphics, Edit* in Reference).

You can also place horizontal or vertical lines on a page with the Graphics feature.

You can include graphics in a document even if you do not have a graphics display card installed in your computer; however, WordPerfect will only be able to display a rough image of graphics figures. We suggest investing in a graphics display card if you want to take full advantage of the graphics capabilities in WordPerfect (see *Graphics Screen Type* in Reference).

As long as your printer supports graphics, you can print both text and graphics in a document even if you do not have a graphics display card installed (see *Print, Document on Disk* and *Print, Document on Screen in Reference*).

To create a graphics box,

1 Press **Graphics** (Alt-F9), then select a box type (see *Box Types* below).

 Select a box type (*Figure, Table Box, Text Box, User Box, or Equation*) from the *Graphics* menu.

2 Select **Create** (1), then define the box (see *Defining a Box* below).

3 Press **Exit** (F7) to return to the document.

Notes

Box Types

There are five box types from which you may choose (all are considered *graphics* boxes): *Figure*, *Table*, *Text*, *User*, and *Equation*. The *Line* option on the *Graphics* menu is not a box but rather an option that lets you place horizontal and vertical lines on the page (see *Graphics Lines in Reference*).

There are only three differences among the five types of graphics boxes: 1) they each belong to a separately numbered list (see *Lists, Define in Reference*); 2) they have different default options on the *Graphics Options* menu (e.g., border style, numbering method); and 3) *Equation* boxes have different *Caption Position* choices (see *Graphics Options in Reference*).

You can retrieve graphic images, text, or equations into any of the box types, or you can leave a box empty. The box type does not necessarily refer to the contents of the box, but rather to which of the independent lists of graphics boxes it belongs.

Each box type is numbered on a separate list and has its own set of options. For example, the default numbering mode for *Table* boxes is Roman numerals (*Table I*, *Table II*, etc.), while the default numbering mode for *Figure* boxes is numbers (*Figure 1*, *Figure 2*, etc.). The numbering mode, border styles, and other options can be changed with the *Graphics Options* menu (see *Graphics Options in Reference*).

A separate list for each box type can be generated with the *List* feature (see *Lists in Reference*).

You may want to use *Figure* boxes for graphic images, diagrams, and charts; *Table* boxes for WordPerfect tables, tables of numbers, maps, and statistical data; *Text* boxes for quotes, sidebars, or other special text that is set off from the rest of the document; and *Equation* boxes for mathematical and scientific equations (see *Equations in Reference*). *User* boxes could be used for any images in the document that do not fall into any of the other categories.

If you are editing or creating a graphics box and need to change the box type (e.g., change a *Table* box into a *Figure* box), press **Graphics** (Alt-F9) while in the box definition menu and select the desired box type.

Defining a Box

After you select a box type and select **Create** (1) to create a graphics box, you need to define the box. You can simply retrieve a graphics image into a box by selecting **Filename** (1) at this point, then entering the name of a file created in one of the many graphics formats that WordPerfect supports (for a list of supported graphics formats and the programs producing those formats, see *Graphics, Formats and Programs* in *Reference*). You can also retrieve a table or text by entering the name of a WordPerfect file containing one of these (see *Table, Create* in *Reference*). If you want to retrieve an equation into a box, you must first select **Equation** (4) as the contents (see *Contents* under *Graphics, Define a Box* in *Reference*).

If you want to include the graphics image, table, text, or equation in your document with all the default settings, you can press **Exit** (F7) to exit the definition menu at this point. If you would like to change any of the settings (e.g., size and position of the graphics box on the page), refer to *Graphics, Define a Box* in *Reference*.

New Number

Graphics boxes are numbered consecutively according to the box type. You can start numbering with a new number at any point in the document.

- 1 Move the cursor to where you want to enter the new number.

Use Reveal Codes (Alt-F3) to find the box code (e.g., [Fig Box:3;filename; caption]), then make sure your cursor is before the box code you want renumbered (see Reveal Codes in Reference).

- 2 Press **Graphics** (Alt-F9), then select the type of box you want to renumber.

 *Select the type of box you want to renumber (Figure, Table Box, Text Box, User Box, or Equation) from the Graphics menu.*

- 3 Select **New Number** (3), then enter a number.

From that point forward in the document, graphics boxes of the type you selected in step 2 are renumbered starting with the new number.

The maximum number for any type of graphics box is 2047. After that, numbering starts over with 1.

See Also: Equations; Graphics, Define a Box; Graphics, Edit; Graphics Lines; Graphics Options

Graphics, Define a Box

When you want to place a graphics box in your document, an essential part of the process is defining the box. You can use the default settings for any box type. However, if you want to change any of these settings, WordPerfect provides a way of editing them.

- 1 Press **Graphics** (Alt-F9), then select the type of box you want to define.
 -  Select a box type (*Figure, Table Box, Text Box, User Box, or Equation*) from the *Graphics* menu.
- 2 Select **Create** (1), then select an option and enter any necessary information (see the information for each option under *Notes* below).
- 3 Press **Exit** (F7) to return to the document.

Notes

Anchor Type

This option (4) determines whether the graphics box moves with the text that wraps around it (paragraph type), remains placed at a fixed position on a page (page type), or is treated as part of the text on a line (character type).

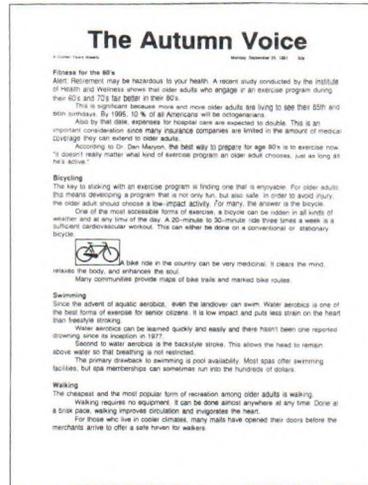
Bumping Graphics Boxes

If you edit a graphics box (or the text surrounding the box) after it has been created so that it no longer fits on the current page (e.g., it is contained in a paragraph too near the bottom of the page), it is *bumped* to the next page. If, then, you edit another box so that it cannot fit on the first page, it is bumped, too. However, if the two boxes cannot fit together on the next page, the second box is bumped again. A box can be bumped up to 255 pages. (After that, the graphics boxes will overlap.)

Character

Boxes with a character anchor type are treated as a single character, regardless of the box size. When the line containing the box is wrapped, the

next line starts below the box. Use this anchor type to position images or equations in a line of text.



The code for a character box (see *Codes* below) is placed at the cursor position.

The outside border space (see Outside Border Space under Graphics Options in Reference) is not used with character type boxes.

Page

If you want the graphics box to stay at a fixed position on a specified page, make sure the cursor is at the top of the current page when you create the box, select **Page (2)** as the anchor type, then enter the number of pages you want skipped. For example, if you want a page type box to appear on the current page, enter **0** as the number of pages to skip. If you want the box to appear on page 3 and the cursor is on page 1, enter **2** as the number of pages to skip. Make sure the cursor is at the top of page 1, and the graphics box will appear on page 3. If you edit the text after creating the box, make sure the graphics box code (see *Codes* below) remains at the top of the page.

Be aware that if your document does not contain as many pages as the "pages to skip" number you enter, the box will appear on the page following the last page of the document. For example, if your document has only one page and you enter **4** as the number of pages to skip, the box will appear on page 2.

The code for a page box (see *Codes* below) is inserted at the cursor position.

Paragraph

If you want the graphics box to stay with its surrounding text, select **Paragraph (1)**. The code for a paragraph box (see *Codes* below) is placed at the beginning of the paragraph the cursor is in (after the last hard return or hard page code).

If the paragraph is too close to the bottom of the page for the graphics box to fit on the page, the box is bumped to the top of the next page or column. However, the text of the paragraph containing the box does not move with it.

When the box is bumped, text that normally follows the box is moved in front of the box to fill the empty space.

You can use Block Protect (see Block Protect in Reference) to keep the text of the paragraph with the graphics box.

When editing the paragraph, be sure you do not add text in front of the graphics box code; the code should be the first thing in the paragraph.

Caption

When you select this option (3), you are placed in a special editing screen where you can create a caption for the box with WordPerfect text and codes. The current box number is a numbering code that is displayed when you enter this screen. This number automatically updates as you create other boxes of the same type (all Figure boxes are numbered consecutively, as are all Table boxes, Text boxes, etc.).

 CURRENT BOX NUMBER



You can choose to use the number or you may delete it in the caption editing screen with Backspace. Press **Graphics** (Alt-F9) in this same screen to reinsert the number.

Any changes you make to the numbering code in the caption editing screen will override the Caption Number Style on the Graphics Options menu (see Caption Number Style under Graphics Options in Reference).

The text for the caption wraps according to the width of the graphics box you are defining. You may use as many as 256 bytes in the caption.

If you want to change the position of the caption relative to the box or the caption numbering style, use Graphics Options (see *Graphics Options in Reference*).

Important: If you do not select *Caption (3)* from the box definition menu, a caption will not display or print with your graphics box.

If, after you have created a caption, you decide you do not want it to print or display, select *Caption (3)* from the box definition menu and delete all text and codes from the caption editing screen.

Press **Exit** (F7) when you finish creating the caption to return to the box definition menu.

Changing a Box Definition

If you have already created a graphics box following the steps above and want to edit the box definition, select **Edit (2)** rather than **Create** in step 2, then enter the number of the box you want to edit. (The number displayed is one higher than the box number preceding the cursor position.) The same box definition menu is displayed and the options work identically whether you are creating or editing the box.

Codes

A code is inserted into your document when you create a graphics box. Its placement depends on the anchor type (see *Anchor Type* above for details). The code contains the name of the type of graphics box (Figure, Text box, etc.), plus the box number, filename, and caption (e.g., [Figure:1;filename;caption] where *caption* includes the first part of the text you enter for the caption). To delete the box, delete the code.

Contents

This option (2) displays a menu that lets you choose the kind of information you want to put in the graphics box. The Contents option you select determines which Editor (i.e., Equation, Graphics, or Text) will be displayed when you select **Edit (9)** from the box definition menu (see *Graphics, Edit in Reference*). It also lets you decide whether or not graphics information is kept on disk in a separate file or as part of the document.

If you specify a filename before selecting this option (see *Filename* below), the Contents option will display a default depending on the type of file you specified. For example, if you retrieve a graphics file, the Contents option will default to Graphic.

If there is information inside the box and you select a Contents option that differs from the option already displayed, you will be asked if you want to delete the current contents of the box. For example, if you retrieve a text file into a box, the Contents option will display "Text." If you then change the Contents

option to Graphic, WordPerfect asks if you want to delete the current contents. Type **y** if you want to replace the text file in the box with a graphic image. Type **n** if you want to leave the text in the box.

The Contents menu options are:

Equation

Select this option (4) before creating or editing an equation. Selecting **Edit** (9) will then display the Equation Editor (see *Equations* in *Reference*).

Graphic

This option (1) is the Contents default if you have specified a graphics image with the Filename option (see *Filename* below). (If you select this option with "Graphic on Disk" already displayed, the graphics image will be retrieved from disk into the document.)

If you select this option and then select **Edit** (9), the image will be displayed in the Graphics Editor (if an image has been retrieved into the box and if you have a graphics display card installed). If you have not yet retrieved a graphics image into the box, the Contents option will display "Empty" and selecting **Edit** will display the Text Editor. See *Graphics Editor* and *Text Editor* under *Graphics*, *Edit* in *Reference* for details on the Graphics and Text Editors.

Graphic on Disk

Select this option (2) to have your graphics information kept in a separate file on disk, rather than being saved with the document. This option is the only method for placing a graphics box containing a graphics image into a style (see *Style* in *Reference*). It also lets you reference the graphics image multiple times in a document without saving the information in the document each time. This conserves space in the document file.

WordPerfect prompts you to save your graphic image to disk whenever you change Contents from Graphic to Graphic on Disk. This prevents you from losing the image if the file is not already in the Graphics or default directory. You can press **Cancel** to bypass this saving process (if the file already exists in one of the directories); however, if the file is not in the right directory, it will be lost.

Selecting **Edit** (9) after selecting this option retrieves the image from disk and displays it in the Graphics Editor if you have already specified a filename. If you have not yet specified a filename, selecting **Edit** does nothing.

When you want to view the graphics image in the View Document screen (Shift-F7,6) (see *View Document* in *Reference*) or from the Graphics Editor (by selecting **Edit** from the box definition menu), or when you want to print the document, WordPerfect looks for the graphics file first in your graphics directory (set using Location of Files in Setup (Shift-F1,6,6)), then in the default directory. It then places the graphics image in a temporary file.

When you finish viewing or printing, the image is deleted from the temporary file.

If WordPerfect cannot find the graphics file and you are trying to view the graphics image in the View Document screen, a blank box is displayed. If you are trying to view it in the Graphics Editor, an error message appears stating that the graphics file cannot be found. Copy the file into your graphics or default directory, then select **Edit** (9) from the box definition menu to display the image.

If you are trying to print the graphics image and WordPerfect cannot find the file, an error message stating that the graphics file cannot be found appears in the Printer Control screen (Shift-F7,4). Type **c** to cancel the print job or you can copy the file into your graphics or default directory, then type **g** from the Printer Control screen to continue printing.

If you type **g** to continue *without* copying the graphics file into your graphics or default directory, a blank box is printed.

If you save your document to a floppy disk and print it from another computer, you will have to copy the graphics file into that computer's graphics or default directory before printing.

Text

This option (3) identifies the contents of a graphics box as text. Selecting **Edit** (9) will display the Text Editor where you can type or enter text and/or WordPerfect codes (see *Text Editor* under *Graphics, Edit* in *Reference* for details on the Text Editor).

Edit

This option (9) lets you rotate, scale, and move a graphics image in the box (see *Graphics, Edit* in *Reference*) if a filename has been specified and the Contents option is set to Graphic or Graphic on Disk. If the Contents option is set to Text or Empty, this option displays the Text Editor where you can type or edit text in the box. If the Contents option is set to Equation, this option displays the Equation Editor (see *Equations* in *Reference*).

Filename

Select this option (1) to specify a file you want put into a graphics box. If you want to retrieve text into the box, specify the name of a WordPerfect document. If you want to retrieve a graphics image, enter the name of a file created in one of the many graphics formats that WordPerfect supports (for a list of supported graphics formats and programs producing those formats, see *Graphics, Formats and Programs* in *Reference*). If you want to retrieve an equation, select **Equation** (4) from the Contents menu (see *Contents* above), then specify the filename of an equation you have previously saved in the Equation Editor. (If you do not select **Equation** before specifying a filename, WordPerfect will interpret the file as text.)

You can press **List** (F5) at the "Enter Filename" prompt and retrieve a file from the List Files screen if you want. Your graphics directory is displayed as the default when you press **List** (see List Files in Reference). You can also press **Shell** (Ctrl-F1) at the "Enter Filename" prompt (if you are running WordPerfect under the WordPerfect Shell), then type *y* to retrieve the contents of the Clipboard into a graphics box (see Shell Clipboard under Go to Shell in Reference).

After you specify a filename, WordPerfect determines the format of the file and retrieves the image or text into the box. If the file was not created in a WordPerfect supported format, an error message is displayed. For a list of supported graphics formats and programs producing those formats, see *Graphics, Formats and Programs in Reference*.

If you want to leave the box empty, do not enter a filename for the box. If you want to delete the contents of a box without deleting the box itself, select **Filename** (1), press **Delete to End of Line** (Ctrl-End), press **Enter**, then type *y*. The Contents option on the menu is changed to "Empty." (If the Contents option says "Graphic on Disk" before you delete the filename, it will stay "Graphic on Disk.")

Horizontal Position

This option (6) is tailored to the choice you made for the Anchor Type option (see *Anchor Type* above). These choices and their effects on this option are described below.

Character

If you selected **Character** (3) as the anchor type, you cannot enter a horizontal position. The box is positioned after the character to its left.

Page

If you selected **Page** (2) as the anchor type, you have three options to choose from: **Margins**, **Columns**, or **Set Position**.

Selecting **Margins** (1) displays a menu that lets you align the box with the **Left** (1) or **Right** (2) margin, **Center** (3) it between the margins, or expand the box to the **Full** (4) horizontal width between the left and right margins. This last option also aligns the box with the left and right margins.

Columns (2) lets you enter a column number(s), then align the box with the **Left** (1) or **Right** (2) edge of, or **Center** (3) it between, one or more columns.

If you enter a range of columns (e.g., 2-3), the box is left aligned, right aligned, etc., over that range of columns.



You can also select **Full (4)** to expand the box to align with the specified column margins. If no columns are defined when you select this option, the box is aligned with the margins.

Set Position (3) lets you enter an absolute measurement from the left edge of the form to position the box horizontally. This positions the outside border space at that measurement.

Paragraph

If you selected **Paragraph (1)** as the anchor type, you can have the box aligned with the **Left (1)** or **Right (2)** edge of, or **Center (3)** it in the area where the text currently wraps. You can also select **Full (4)** to have the box fill this area from left to right. A box with a paragraph anchor type honors any indents, columns, or other graphics boxes in effect and can be positioned only within the area where the text currently wraps.

Size

There are four **Size** options you can choose from when defining a graphics box. Three of these options include complete or partial automatic sizing by WordPerfect. When you select option 1, 2, or 4, the automatic part of these options is displayed in parentheses next to the **Size** option. For example, if you select **Set Height/ Auto Width (2)**, the word "wide" appears in parentheses following the measurement because WordPerfect determined the width.

The default width for all graphics boxes (except Equation boxes) is equal to one half of the available space between the left and right margins. For example, if you have 1" margins on an 8.5" x 11" form, there are 6.5" of available space.

The default width for a graphics box is then 3.25". Equation boxes default to fill the space between the margins (6.5" in this example).

The Size options are:

Auto Both

Select this option (4) with a graphics image or equation to restore the dimensions the image or equation had when it was originally created (rather than when the graphics box was created). WordPerfect automatically calculates both the height and width, preserving the original shape of the graphics image or equation.

When you retrieve a scanned image into a graphics box, WordPerfect scales the image to fit in the box. The Auto Both option can help restore the original dimensions and resolution of the scanned image.

If you select this option for a Text box and there is only one line of text, the box fits just around the words. If there is more than one line of text, the height fits the text and the width returns to the default.

Set Both

Select this option (3) if you want a particular height *and* width, then enter the measurements.

Be aware that because you are manually changing the dimensions, a graphics image may appear and print distorted.

Set Height/Auto Width

Select this option (2) if you want the box to be a particular height, but want WordPerfect to calculate the width automatically, preserving the original shape of the graphics image.

For text and equations, the automatic width is determined by the last width measurement entered, and the text or equation will not reformat in the box.

Set Width/Auto Height

Select this option (1) if you want the box to be a particular width, but want WordPerfect to calculate the height of the box automatically so that the original shape of the graphics image is preserved.

With this option, text will reformat to the width you enter and adjust the height accordingly. Equations will be centered horizontally and the height will adjust as needed. You can change this default setting for equations using Equations Options (see *Equations in Reference*).

When WordPerfect must reduce the desired height/width settings for a box to fit within the margins on the page, it remembers the original settings and will readjust should space become available after editing.

Vertical Position

This option (5) is dependent on the choice you made for the Anchor Type option (see *Anchor Type* above). These choices and their effects on this option are described below.

Character

If you selected **Character** (3) as the anchor type, a menu is displayed that lets you position the box so that the **Top** (1), **Center** (2) or **Bottom** (3) of the box is aligned with the baseline of the line of text containing the box. You can also select **Baseline** (4).

If you select **Baseline** for a box containing an equation, the baseline of the equation is aligned with the baseline of the line of text containing the box. If the box contains text, the baseline of the last line of text inside the box is aligned with the baseline of the line of text containing the box.

If you want to align the bottom of a graphics image box with the baseline of the line of text containing the box, select **Bottom** (3).

Page

If you selected **Page** (2) as the anchor type then entered the number of pages to skip, a menu is displayed that lets you align the box with the **Top** (2) (even with the first line of text—below any headers, page numbers, etc.) or **Bottom** (4) (above any footers, page numbers, footnotes, etc.) of the page. You can also **Center** (3) the box on the page or select **Set Position** (5), then enter an offset measurement from the top edge of the form.

If you select **Full Page** (1), the graphics box fills the page area within the top and bottom margins. (A graphics image will maintain the proper dimensions.)

Paragraph

If you selected **Paragraph** (1) as the anchor type, enter an offset measurement from the top of the paragraph your cursor is on. For example, enter **0** to align the top of the box with the top of the first line of the paragraph.

If you enter anything other than 0 for this option, the outside border space (rather than the top edge of the box) is placed at that vertical position.

After creating the graphics box, the default shown for the **Vertical Position** option is the distance the cursor is from the top of the current paragraph. The offset you enter changes the setting unless the paragraph is so close to the bottom of the page that the box does not fit on the page. In this case, the box is moved up in the paragraph to try to keep the box within the paragraph. If there is still not enough room on the page, the box is bumped to the next page.

You control how far the box can move up in the paragraph before being bumped to the next page with the **Minimum Offset from Paragraph** option on the **Graphics Options** menu (see *Graphics Options* in *Reference*).

Consider the following example of how this feature works: Set the **Minimum Offset** option on the **Graphics Options** menu to .5" and the **Vertical Position** option on a paragraph type box to 1". The paragraph containing the box is moved down the page (e.g., text is inserted before it); when the bottom of the box reaches the bottom margin of the page, the box starts moving up in the paragraph. If there is still not enough room when the

top of the box reaches the .5" mark in the paragraph, it is bumped to the next page.

Wrap Text Around Box

If you want WordPerfect to ignore the box and continue printing text from margin to margin, type **n** for this option. Setting this option (8) to No is a method you can use (in conjunction with the Advance feature) to superimpose one graphics box on top of another or to print text on top of a graphics image, as shown in the illustration below (see *Advance in Reference*).



When this option is set to No, the box outline is not shown in the normal editing screen. To view the box on the page, you must use View Document (Shift-F7,6) (see *View Document in Reference*).

If you set this option to No for a box with a Paragraph anchor type, the figure cannot be bumped to the following page. If there is not enough room for the figure to fit entirely on the current page, only the amount of the figure that fits on the page is printed.

WordPerfect can wrap text around a maximum of 100 boxes on any one page. More boxes can be created, but this option must be set to No.

100 boxes may not be possible in all cases; your computer must have sufficient memory.

See Also: Graphics, Create; Graphics, Edit; Graphics Options

Graphics, Edit

As you are creating a graphics box (or after you have created one) in your document, you may need to edit the way the graphics image is displayed. The Graphics feature in WordPerfect provides an option for doing this.

Remember as you are editing graphics that regardless of the type of box you are editing, you can change the contents of the box to a different type (e.g., you can retrieve a graphics figure into a Text box or an equation into a Figure box).

1 Press **Graphics** (Alt-F9), then select the type of box you want to edit.

 Select a box type (*Figure, Table Box, Text Box, User Box, or Equation*) from the *Graphics* menu.

2 Select **Create** (1).

or

Select **Edit** (2), then enter the number of the box you want to edit.

The screen displayed is the box definition menu, and it lets you define the graphics box (see *Graphics, Define a Box* in *Reference* for details on this menu).

3 Select **Edit** (9) from the box definition menu.

Three different screens can appear depending on the type of information you are editing: the Equation Editor, Graphics Editor, or Text Editor (see the different editors listed under *Notes* below).

4 Select an option (e.g., Scale, Rotate) or press a feature whose name is displayed at the bottom of the editing screen (e.g., Graphics, Switch, Setup), then enter any necessary information (see the information for each editor under *Notes* below).

5 Press **Exit** (F7) twice to return to the document.

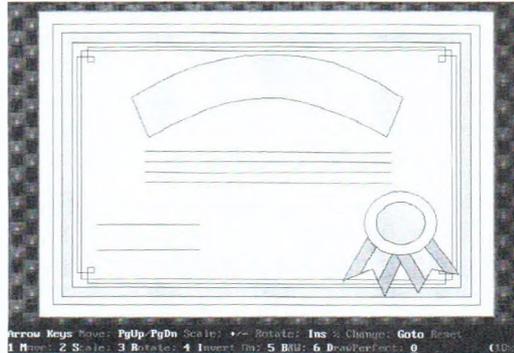
Notes

Equation Editor

If you are creating or editing an equation (i.e., the Contents option on the box definition menu is set to Equation), selecting **Edit** (9) from the box definition menu displays the Equation Editor. This screen lets you create and edit scientific and mathematical equations (see *Equations* in *Reference*).

Graphics Editor

If you are editing a graphics image (i.e., the Contents option on the box definition menu is set to Graphic or Graphic on Disk and a filename has been specified), select **Edit (9)** to display the Graphics Editor.



Black & White

Select this option, then type **y** to display/print a color image with black and white instead of a shading or fill pattern.

DrawPerfect

This option enables you to go directly into DrawPerfect to edit a graphics image. It is explained in detail in the Shell documentation included with DrawPerfect.

Go To

Press **Go To** (Ctrl-Home) to redisplay the image with the default settings.

Insert (% Change)

Press **Insert** (Ins) to change the percentage amount displayed in the lower right corner of the screen to 1, 5, 10, or 25 percent. This percentage amount determines the extent to which the arrow keys, Page Up/Down, and Screen Up/Down affect the image for moving, scaling, and rotating.

Invert On/Off

If this option says “Invert On,” select it for a bitmap image to display the complementary color of each dot in the image (black becomes white and vice versa). Select it again to return to the original display.

With figures that are line drawings (vector-type graphics), select this option to switch just the background color. If the background color is white, it becomes black. You need to realize, however, that if you switch the background color to black and the print color is black, nothing will print when you print the graphic. WordPerfect will not try to print color values that match the background color.

Graphics from scan and paint programs are usually considered bitmapped, while graphics from CAD and draw programs are usually considered vector-type graphics (see Graphics, Formats and Programs in Reference).

You will not see the Invert effect on color monitors, but the image will print inverted.

Move

The Move option (and the arrow keys) lets you move the image horizontally and vertically in the box. You can move the image the percentage displayed in the lower right corner of the screen by pressing the arrow keys. You can move the image a specific amount by selecting **Move** (1), then entering the horizontal and vertical measurements in positive or negative numbers.

Entering positive numbers for horizontal and vertical moves the image up and to the right; a positive horizontal and negative vertical moves it down and to the right; negative numbers for both moves it down and to the left; and a negative horizontal and positive vertical moves it up and to the left.

When you enter horizontal and vertical measurements, the numbers you enter move the image from the starting point, not from any measurements you have previously entered. For example, if you enter **.5** for both the horizontal and vertical measurements, the image moves up and to the right. If you decide you want the image moved half again as far up and to the right, you would not enter **.25**, you would need to enter **.75**.

*If you move the image in the screen, then want to move it back to the original position, press **Go To** (Ctrl-Home). This will also reset any other changes you have made.*

Rotate

The Rotate option (and the Screen Up (–) and Screen Down (+) keys) lets you rotate the image. You can rotate the image the percentage displayed in the lower right corner of the screen by pressing **Screen Up** (–) or **Screen Down** (+). You can rotate the image a specific amount by selecting **Rotate** (3), then entering the number of degrees.

To understand how Rotate works, think of the image as having a tack stuck in the middle of it. As you rotate the image using the **Rotate** option, it moves counterclockwise, pivoting around the tack. (Pressing **Screen Up** rotates it counterclockwise, while **Screen Down** rotates it clockwise.)

When you enter the number of degrees, the image is rotated from the starting point, not from any rotation amount you have previously entered. For example, if you enter **180** to move the image halfway around in the box, you cannot enter **180** again to return it to its previous position. You would need to enter **360** (or **0**) to return the image to the starting point.

If you select **Rotate**, you are asked if you want a mirrored image. A mirrored image changes the dots in the image so they display from right to left instead of left to right. For example, if the box contained a profile of a person facing right, the mirror image would show the profile facing left.

*If you rotate or mirror the image in the screen, then want to return it to the original position, press **Go To** (Ctrl-Home). This will also reset any other changes you have made.*

Save

Once a graphics image is displayed inside the Graphics Editor, it can be saved in WordPerfect graphics format by pressing **Save** (F10) and entering a filename. If you have specified a graphics directory using Location of Files on Setup (Shift-F1,6,6), the filename displayed includes your graphics directory in the path. A .WPG extension is added unless you specify a different extension.

When you enter a filename, just the data inside the image is saved, not any editing changes you have made. So if you retrieve the saved file as a graphics image in another box, any editing changes you made before saving will not be displayed.

Scale

The Scale option (and the Page Up (PgUp) and Page Down (PgDn) keys) lets you expand or contract the image in a horizontal and vertical direction. You can scale the image the percentage displayed in the lower right corner of the screen by pressing **Page Up** (PgUp) and **Page Down** (PgDn). You can scale the image a specific amount by selecting **Scale** (2), then entering the horizontal (x) and vertical (y) percentages.

For example, if you select Scale, then enter 80 for the x value and 80 for the y value, the image will be 80% of the original size. If, however, you enter 80 for x and 110 for y, the image will be 80% as wide, but 110% as tall as the original size. (Page Up and Page Down automatically scale x and y the same amount.)

When you enter x and y percentages, the image is scaled from the starting point, not from any x and y amounts you have previously entered.

*If you scale the image larger or smaller, then want to return it to the original size, press **Go To** (Ctrl-Home). This will also reset any other changes you have made.*

Shell

If you are running WordPerfect under the WordPerfect Shell, you can press **Shell** (Ctrl-F1) while in the Graphics Editor to **Go to Shell** (1), **Save** (2) the graphics image to the Clipboard, or **Retrieve** (3) the contents of the Clipboard into the Graphics Editor.

This feature will let you more fully integrate WordPerfect with other programs you are running under the Shell. For example, you can save a graphics image to the Clipboard, go to Shell and start another program (such as DrawPerfect), then retrieve the contents of the Clipboard into that program. Once there, you can make changes to the image, then repeat the process to come back to WordPerfect and **Retrieve** (3) the contents of the Clipboard into the Graphics Editor (see *Shell Clipboard* under *Go to Shell* in *Reference*).

Switch

Pressing **Switch** (Shift-F3) in the Graphics Editor does the same thing as selecting **Invert On/Off** (4) (see *Invert On/Off* above).

Text Editor

If you are creating or editing text inside a box (i.e., the Contents option on the box definition menu is set to **Text** or **Empty**), selecting **Edit** (9) displays a blank Text Editor (if you have not yet entered a filename for the graphics box) or the Text Editor with text in it (if you are editing existing text). You can enter the text and/or WordPerfect codes you want placed inside the box. Press **Exit** (F7) to exit the Text Editor or press **Graphics** (Alt-F9), then select the option with the number of degrees you want to rotate the text in the box (text is rotated counterclockwise). To print rotated text in a box, your printer must be able to rotate fonts (see *Printing, Landscape* in *Reference*).

If you retrieve a document that is longer than one page, you will get an error message saying that the file contains too much text when you try to exit the Text Editor. At this point, you must delete text or use **Block** (Alt-F4) and **Move** (Ctrl-F4) to move text until the remaining text fits on the page (see *Move, Block* in *Reference*).

WordPerfect Features in the Text Editor

Once inside the Text Editor, you can use several WordPerfect features. You can define columns in the box (see *Columns, Newspaper* and *Columns, Parallel* in *Reference*), use **Text In/Out** (Ctrl-F5) to import and export files (including spreadsheets) to and from the box (see *Text In/Out* in *Reference*), enter Merge commands into a box (see *Inserting Commands* under *Merge* in *Reference*), and create WordPerfect Tables in a box (see *Table, Create* in *Reference*).

You can also use **Retrieve** (Shift-F10) to retrieve a WordPerfect document or DOS text file into a box, or use **List** (F5) to display the files in a directory. Press **Shell** (Ctrl-F1) (if you are running WordPerfect under the WordPerfect Shell) to **Go to Shell** (1), or **Save to** (2), **Append to** (3), or **Retrieve from** (4) the Clipboard. You can also enter a DOS Command (5) from the Text Editor (see *Go to Shell* in *Reference*).

See Also: Graphics, Create; Graphics, Define a Box; Graphics Options

Graphics, Formats and Programs

WordPerfect supports several graphics formats. If a graphics program is able to save files in a WordPerfect-supported format, the graphics files can be used with the Graphics feature of WordPerfect to create images on the printed page.

In order for a graphic file to be used by WordPerfect, it must ultimately be converted to .WPG (WordPerfect Graphic) format. The following diagram illustrates this conversion process:

▲ CONVERSION A
▲ CONVERSION B



As you can see in this diagram, there are two major conversions that must occur. Conversion A is the conversion of the file from a format not supported by WordPerfect to one that is supported. Your graphics program must perform this conversion. Each graphics program may be able to save files in a variety of formats.

If your graphics files are already in a format supported by WordPerfect, this conversion is unnecessary. (You may, however, want to convert it to another supported format. See *Supported Formats, Conversion Notes* below for more information.)

The following is a list of the formats currently supported by WordPerfect:

CGM	Computer Graphics Metafile
DHP	Dr. Halo PIC Format
DXF	AutoCAD Format
EPS	Encapsulated PostScript
GEM	GEM Draw Format
HPGL	Hewlett-Packard Graphics Language Plotter File
IMG	GEM Paint Format
MSP	Microsoft Windows Paint Format
PCX	PC Paintbrush Format
PIC	Lotus 1-2-3 PIC Format
PNTG	Macintosh Paint Format
PPIC	PC Paint Plus Format
TIFF	Tagged Image File Format
WPG	WordPerfect Graphics Format

If your graphics program cannot save files in any of the supported formats, see Screen Capture Program below.

Conversion B in the diagram is from a WordPerfect-supported format to .WPG format. This conversion can occur in one of three ways:

- You retrieve the graphics file into WordPerfect through the Graphics feature (see *Graphics, Define a Box* in *Reference*). Retrieving the graphic into a graphics box automatically converts it to .WPG format.
- You print or preview a document that uses a graphic on disk, or you edit the display parameters of a graphic on disk in a WordPerfect document (see *Graphics, Define a Box* and *Graphics, Edit* in *Reference*). This conversion is only temporary and does not affect the graphics file on disk, but does allow WordPerfect to use the image.
- You use the Graphics Conversion Program (a utility program that comes with WordPerfect) to convert the file. The Graphics Conversion Program creates a copy of the image and stores it in a .WPG formatted file. (See *Graphics, Conversion Program* in *Reference*.) This file can then be retrieved through the Graphics feature or used as a graphic on disk.

Graphics files in any of the formats on the above list (except DXF format) may be converted by retrieving the graphic in the Graphics feature, without any additional conversion.

Files in DXF format must be converted by the Graphics Conversion Program before they can be retrieved into the Graphics feature of WordPerfect.

The Graphics Conversion Program *can* be used to convert files of any of the supported formats to .WPG format. Whether you should use the Graphics Conversion Program to accomplish the conversion or simply retrieve the file through the Graphics feature of WordPerfect depends on several factors. See *Graphics, Conversion Program* for more information.

Notes

Graphics Programs

The following is a list of graphics programs that have been tested with WordPerfect 5.1. If your graphics program is not on this list, you may still be able to use it with WordPerfect if it can generate a WordPerfect supported graphics format (see the list of supported formats above).

The Export column lists the WordPerfect compatible formats that can be created with each particular graphics program. You may need to consult your graphics program documentation for information on creating a particular format.

A Yes entry under the Grab column indicates that the WordPerfect Screen Capture Program can be used with that graphics program to capture an image from the screen (see *Screen Capture Program* below and in *Reference*). N/A in this column means *not applicable* (e.g., from Macintosh or IBM host). If no formats are listed under the Export column, use the Screen Capture Program to capture the image.

Program	Export	Grab
Adobe Illustrator	EPS	N/A
Anvil-5000	HPGL	
Arts & Letters	CGM	

Program	Export	Grab
AutoCAD 9.0, 10.0	DXF,HPGL	
AutoSketch 1.03	DXF,HPGL	
Boeing Graph 4.0	IMG	
CCS Designer	HPGL	Yes
ChartMaster 6.21	HPGL	
Chemfile 11	HPGL	
Chemtext	EPS	
CIES (Compuscan)	TIFF	
Designer 1.2 (Micrografx)	HPGL	
Designer 2.0 (Micrografx)	EPS,CGM,PCX,TIFF	
DFI Handy Scanner	IMG,TIFF	Yes
DiagramMaster 5.02	HPGL	Yes
Diagraph	HPGL	
Dr. Halo II, III	DHP (PIC)	Yes
DrawPerfect	CGM,HPGL,WPG	Yes
Easyflow 4.4	HPGL	
Enable		Yes
Energraphics 2.1	IMG,TIFF	Yes
Framework II		Yes
Freelance Plus 2.0, 3.0	CGM	Yes
GEM Draw	GEM	
GEM Paint 2.0	IMG,TIFF	Yes
GEM Scan	IMG,TIFF	Yes
Generic CAD	HPGL	Yes
GeniScan Scanedit (2.07 and earlier)	MSP,PCX	
GeniScan Scanedit II 2.08	TIFF,MSP,PCX	
Graph-in-the-Box 2.0	HPGL	
Graph Plus 1.3 (Micrografx)	HPGL,EPS,CGM, PCX,TIFF	
Graphics Editor 200	HPGL	N/A
Graphwriter	CGM	Yes
Harvard Graphics 2.1	HPGL,CGM,EPS	Yes
HiJaak	WPG	
HOTSHOT Graphics 1.5	WPG	
HP Scanning Gallery A.01	TIFF,PCX	
IBM CADAM	HPGL	N/A
IBM CATIA	HPGL	N/A
IBM CBDS	HPGL	N/A
IBM GDDM	HPGL	N/A
IBM GPG	HPGL	N/A
Javelin Plus	HPGL	
Logitech Ansel	TIFF,PCX,EPS	
Lotus 1-2-3 1A, 2.0	PIC	Yes
Lotus 1-2-3 3.0	PCX,CGM	Yes
Macintosh Paint 1.5	PNTG	N/A

Program	Export	Grab
MathCAD		Yes
Microsoft Chart	HPGL	Yes
Microsoft Excel	HPGL	Yes
Mirage	HPGL	
Paradox 3.0	PIC	
PC Paint Plus 1.5, 2.0	PPIC	Yes
PicturePak	WPG,CGM,PCX	N/A
Pixie	CGM	
Pizazz 1.01	PCX,TIFF	
PlanPerfect 3.0*, 5.0	CGM	Yes
PFS: First Publisher	PCX (MAC)	
PrintMaster		Yes
Professional Plan		Yes
Reflex 2.0	PIC	Yes
Quattro	PIC,EPS	Yes
SAS/Graph (6.03 and earlier)	HPGL	
SAS/Graph (6.04 and later)	CGM	
ScanMan	TIFF	
Schema	HPGL	
SignMaster 5.11	HPGL	
Silk		Yes
SlideWrite Plus 2.1	HPGL,TIFF,PCX	Yes
SuperCalc 4	PIC	Yes
Symphony	PIC	Yes
Twin		Yes
Versacad	HPGL	
VGA Paint	WPG,PCX,TIFF	
VP Graphics	HPGL	
VP Planner	PIC	Yes
Windows Draw	HPGL	
Windows Paint 2.11	MSP	
Words & Figures	PIC	Yes
Z-Soft PC Paintbrush	PCX	Yes

*PlanPerfect 3.0 requires the META.SYS (GSS Metafile) graphics driver in order to produce CGM files. The driver may be included on the PlanPerfect Graphics Drivers diskette (depending on the date of your version). If you do not have the driver, and are interested in obtaining it, write to or call:

WordPerfect Corporation
 Attn: Information Services
 1555 N. Technology Way
 Orem, UT 84057
 (801) 225-5000

The files created are named METAFILE.DAT.

Screen Capture Program

If your graphics program cannot save an image file in a WordPerfect-supported format, you may be able to use the Screen Capture Program (GRAB.COM) to capture the image in a file that can be retrieved in WordPerfect. However, if given the choice, use WordPerfect-supported graphics formats rather than the Screen Capture Program. Because the Screen Capture Program only captures data in the resolution of the screen, images captured with the program are usually of a lesser quality than images created in a WordPerfect-supported format. For more information on using the Screen Capture Program, see *Screen Capture Program* in *Reference*.

Supported Formats, Conversion Notes

WordPerfect-supported graphics formats are listed below with information regarding the conversion of each format to .WPG format.

CGM (Computer Graphics Metafile)

- Fonts are converted to one of the following WordPerfect vector fonts: WP Courier, WP Helv, or WP Roman.
- CGM colors are used to create a custom color table that is used to display the image. The background and foreground colors are colors 0 and 1, respectively, of the custom color palette.
- Multiple pictures within a single file are superimposed.

DHP (Dr. Halo PIC Format)

- Supported up to Dr. Halo III.
- Area cut pictures are not supported.
- In Dr. Halo III, set your screen type to CGA, EGA, or Hercules. VGA pictures are not supported.

DXF (AutoCAD Format)

- The following DXF attributes are not converted: text obliquing, text control codes and special characters, curve fitting, and 3D rendering.
- DXF files must be converted to .WPG files with the GRAPHCNV.EXE program. GRAPHCNV.EXE changes the background color to white (not intense white) and changes all white information to black.

EPS (Encapsulated PostScript)

- An EPS file should conform to version 2.0 of the Adobe PostScript document structuring conventions.
- EPS files may begin with either the standard 30 byte header or the following string: “%%PS-Adobe” or “%!PS-Adobe-2.0.” The string indicates a PostScript-only file.
- The Show Page, Copy Page, and Erase Page commands are redefined to be null commands since page handling is controlled by WordPerfect.

- The EPS file may have a graphics screen representation that can be manipulated and displayed in WordPerfect. If contained within the file, only TIFF bitmap images are supported. The TIFF representation is also used to print the graphic with a non-PostScript printer.
- If no graphics screen representation is available, the image will be represented as a box with the message “Graphics Contains Data for PostScript Printers Only” in the Graphics Editing and View Document screens. The image can only be printed with a PostScript printer.

GEM (GEM Draw Format)

- Rounded boxes are not supported. They are converted as regular boxes.
- End of line types (including arrows) are not supported.

HPGL (Hewlett-Packard Graphics Language Plotter File)

- Several graphics programs can create HPGL plotter files by redirecting the output to a disk file rather than directly to the plotter. If given the choice, select the HP 7475A plotter.
- Fonts are all converted to Monospaced WP Helv.
- Not all plotters support the same HPGL commands. The most commonly used commands, however, are supported.

IMG (GEM Paint Format)

- Tested with version 2.0.

MSP (Microsoft Windows Paint Format)

- The images are saved as a full page.

PCX (Zsoft PC Paintbrush Format)

- PC Paintbrush files are created using the Save As option.

PIC (Lotus 1-2-3 PIC Format)

- Once a graph is created in Lotus 1-2-3, a .PIC file can be saved with the /GS command.

PNTG (Macintosh Paint Format)

- The MacPaint version used to create the image must be prior to version 2.0.
- Pictures are always transferred as a full 8 1/2" x 11" page. Images conforming to the size of the Macintosh screen are reproduced in the upper left corner of the page.
- Use of a network or other communication link is necessary to transfer the data fork of the Macintosh file to the IBM PC.
- Macintosh screen grabber output is also compatible. The Macintosh screen grabber is activated by pressing Shift-Command-3. This creates files named SCREEN x where x is the sequential number of the file created.

PPIC (PC Paint Plus Format)

- Packed picture file format is supported (PC Paint Plus 2.0 and PC Paint 1.5).
- Unpacked picture file format is supported (PC Paint 1.5).
- BSAVE format is not supported (PC Paint 1.0 or 1.01).

TIFF (Tagged Image File Format)

- WordPerfect supports the modified CCITT/3 (standard compression) and PackBits compression formats.
- WordPerfect supports version 4.2 of the TIFF specifications.
- Version 5.0 color TIFF files are not supported.
- WordPerfect supports monochrome TIFFS, and either 16 or 256 level grayscale TIFF images.
- Six-bit-per-sample images are not supported.

WPG (WordPerfect Graphics Format)

- This is the internal graphics format that WordPerfect uses.
- Detailed specifications for creating this format are available by contacting Information Services at (801) 225-5000.

See Also: Graphics, Conversion Program; Graphics, Create; Graphics, Define a Box; Graphics, Edit; Screen Capture Program

Graphics Lines

If you want to place horizontal and vertical lines in your document, you can use the Graphics Lines feature. The lines can be black or shaded a percentage of black.

- 1** Press **Graphics** (Alt-F9), then select **Line** (5).
 *Select Line from the Graphics menu.*
- 2** Select **Create Horizontal Line** (1) or **Create Vertical Line** (2).
- 3** Select an option, then enter any desired information (see *Horizontal Lines* and *Vertical Lines* below).
- 4** Press **Exit** (F7) to return to the document.

Codes

The Graphics Lines feature inserts a code (e.g., [HLine:horizontal position,vertical position,length of line,width of line,gray shading] for a horizontal line) in your document that puts a horizontal or vertical line at that position.

Editing a Line

You can edit a graphics line by selecting Edit Horizontal Line (3) or Edit Vertical Line (4) in step 2 above. WordPerfect searches backward from the cursor for the first graphics line of that particular type (horizontal or vertical). If it cannot find one, it returns to the cursor position, then searches forward before displaying the Graphics Line definition. You can edit the definition as necessary.

Horizontal Lines

Although the options found on the Horizontal Line menu match those on the Vertical Line menu, some options work somewhat differently.

Gray Shading

This option (5) lets you determine how much a line should be shaded (100% is black).

Horizontal Position

This option (1) lets you position the line against the Left (1) or Right (2) margin, Center (3) it between the left and right margins, or start at a Set Position (5) from the left edge of the page.

▲ LEFT



You can also select **Full** (4) to have the line fill the area from the left to the right margin.

These lines are positioned against the margins in effect at the time. For example, if you press **◆Indent** (F4) before creating a horizontal line, then select **Left** as the horizontal position, the line will be positioned against that *temporary* margin.

Length of Line

This option (3) lets you specify the length of a horizontal line.

For lines that have a horizontal position of **Left** or **Right**, the default line length is calculated from the cursor to the specified margin. If a line has a horizontal position of **Full**, you cannot change the line length. If a line has a horizontal position of **Center**, the default line length is 0", and you will need to enter a line length.

Line Height

If you place a horizontal line in your document (with the vertical position set to **Baseline**), and that Horizontal Line code [HLine] is the only thing on the line (no other text or codes), the height of that line is determined by the width of the horizontal line. However, if there is any text (even a space) on the same line as the Horizontal Line code, the line height is determined by the font and point size currently being used (see *Line Height* in *Reference*).

Vertical Position

Select **Baseline** (1) to align the bottom of the graphics line with the baseline of the line of text that contains the Graphics Line code [HLine]. Select **Set Position** (2) to specify a distance from the top of the form for the horizontal line.

Width of Line

This option (4) lets you specify how thick (wide) the line should be. As you make the line wider, the top of the line stays in the same position and the line expands down if the vertical position is set to **Set Position**. If the vertical position is set to **Baseline**, the bottom of the line stays in the same position and the line expands up.

Vertical Lines

Some options on the Vertical Line menu work somewhat differently from the corresponding options on the Horizontal Line menu.

Gray Shading

This option (5) lets you determine how much a line should be shaded (100% is black).

Horizontal Position

This option (1) displays a menu that lets you position the line slightly to the **Left** (1) of the left margin or slightly to the **Right** (2) of the right margin.

You can also select **Between Columns (3)** and enter a column number to position the line between that column and the one to its right.



Set Position (4) lets you enter a specific horizontal offset from the left edge of the form for the vertical line.

Length of Line

This option (3) lets you specify how long you want a vertical line to be.

For lines with a vertical position of **Top** or **Bottom**, the default line length is calculated from the cursor to the specified margin. If a line has a vertical position of **Full Page**, you cannot change the line length. If a line has a vertical position of **Center**, the default line length is the distance between the top and bottom margins.

Vertical Position

This option (2) displays a menu that lets you position the line against the **Top (2)** or **Bottom (4)** margin, **Center (3)** it between the top and bottom margins, or start a **Set Position (5)** from the top of the form.

Select **Full Page (1)** to have the line extend from the top to the bottom margin.

Width of Line

This option (4) lets you specify how thick (wide) the line should be. As you make the line wider, it will always expand to the right, regardless of the **Horizontal Position**.

See Also: Graphics, Create; Graphics Options

Graphics Options

When you create a graphics box in your document, you need a way of adjusting certain settings (e.g., caption style, border style, gray shading) for that box. The Graphics Options menu lets you make changes to these settings.

- 1 Move the cursor to where you want to change the option.

***Important:** Make sure you place the cursor before the graphics box codes you want affected by the option change.*

- 2 Press **Graphics** (Alt-F9), then select the type of box whose option(s) you want to change.

Select the type of box you want to change (*Figure, Table Box, Text Box, User Box, or Equation*) from the Graphics menu.

- 3 Select **Options (4)** to display the Graphics Options menu.

- 4 Select an option, then make the necessary changes (see the information for each option under *Notes* below).

- 5 Press **Exit** (F7) to return to the document.

The following table lists the default graphics options for each type of graphics box.

GRAPHICS BOX OPTIONS									
Figure	Table Box	Text Box	User Box	Equation					
				$x = \sqrt[3]{\frac{27}{8}}$					
BORDER STYLE									
Left	Single	Left	None	Left	None	Left	None	Left	None
Right	Single	Right	None	Right	None	Right	None	Right	None
Top	Single	Top	Thick	Top	Thick	Top	None	Top	None
Bottom	Single	Bottom	Thick	Bottom	Thick	Bottom	None	Bottom	None
OUTSIDE BORDER SPACE									
Left	0.167"	Left	0.167"	Left	0.167"	Left	0.167"	Left	0.083"
Right	0.167"	Right	0.167"	Right	0.167"	Right	0.167"	Right	0.083"
Top	0.167"	Top	0.167"	Top	0.167"	Top	0.167"	Top	0.083"
Bottom	0.167"	Bottom	0.167"	Bottom	0.167"	Bottom	0.167"	Bottom	0.083"
INSIDE BORDER SPACE									
Left	0"	Left	0.167"	Left	0.167"	Left	0"	Left	0.083"
Right	0"	Right	0.167"	Right	0.167"	Right	0"	Right	0.083"
Top	0"	Top	0.167"	Top	0.167"	Top	0"	Top	0.083"
Bottom	0"	Bottom	0.167"	Bottom	0.167"	Bottom	0"	Bottom	0.083"
FIRST LEVEL NUMBERING									
Number		Roman		Number		Number		Number	
SECOND LEVEL NUMBERING									
Off		Off		Off		Off		Off	
CAPTION NUMBER STYLE									
[BOLD]Figure 1[bold]		[BOLD]Table 1[bold]		[BOLD]1[bold]		[BOLD]1[bold]		[BOLD]1[bold]	
POSITION OF CAPTION									
Below box, outside borders		Above box, outside borders		Below box, outside borders		Below box, outside borders		Right side	
MINIMUM OFFSET FROM PARAGRAPH									
0"		0"		0"		0"		0"	
GRAY SHADING									
0%		0%		10%		0%		0%	

Notes

Border Style

This option (1) displays a menu of border styles you can use for each of the four borders of your box. Select an option for each border or press **Enter** to leave a setting as it is and continue on to the next border setting.

To make settings for each type of border you can create (e.g., Single, Thick), select Border Options (Shift-F8,4,8). This menu determines the appearance of the border type you select.

You can use this option to give the border of your box a 3-dimensional effect. As you are selecting an option for each border, select **Thick** (6) or **Extra Thick** (7) for two adjacent borders and select **Single** (2) for the other two adjacent borders.

- ▲ EXTRA THICK
- ▲ SINGLE



If you want to create a full-page border, increase the dimensions of your graphic to the largest size allowable. You can set dimensions from the box definition menu when you create or edit a graphics box (see *Graphics, Define a Box in Reference*).

If you want to create a border for multiple pages, place the border in a header (Shift-F8,2,3). See *Headers and Footers in Reference* for more information.

Caption Number Style

This option (6) lets you use text and WordPerfect codes to define a style for caption numbers. The caption numbering style is printed or displayed when WordPerfect encounters a numbering code [Box Num] in a caption. You can set dimensions from the box definition menu when you create or edit a graphics box (see *Graphics, Create* or *Graphics, Edit in Reference*). Enter **1** in the style where you want the first level caption number. Enter **2** in the style where you want the second level caption number (see *Level Numbering Methods* below).

For example, entering "Fig. 1-2" causes numbering codes in captions to display "Fig. " followed by the first level box number, a dash, and the second level box number. You can include Bold, Italics, Underline, and Small Caps, as well as text, in the caption style (see *Attributes in Reference*).

Second level numbering only goes as high as 31. After that, the first level moves up one number and the second level starts over (e.g., 1-31 is followed by 2-1).

The numbering method for second level numbering must be turned on before it will appear in the caption, even if you have entered it in the Caption Number Style.

If you do not want your first level caption number to print, select **Caption Number Style (6)** from the Graphics Options menu, delete all text and codes, then press **Enter**.

Any changes you make to the numbering code in the caption editing screen will override the Caption Number Style (see Caption under Graphics, Define a Box in Reference).

Codes

A code (e.g., [Fig Opt] for a Figure box) is inserted into your document when you use this feature. Any options you change for that box type are changed from the code forward in the document.

You cannot edit a graphics options code; you must insert a new code, then delete the old code if you want to change the options again.

Font

Graphics box text and captions are printed in the font that is the base font where the option code is located. If there is no option code, text and captions are printed in the initial base font for the document (see *Font* in Reference).

Gray Shading

Select this option (9) to enter a shading intensity (by percentage) for graphics boxes of a particular type (e.g., all Figures). The closer the percentage is to 100, the more the box is shaded (100% means the box is black).

Initial Settings

The initial settings for this menu vary according to the type of box (e.g., Text Box options have different settings from Figure Box options). Once you have changed the settings, you can delete the code to return to the initial settings.

You can change the initial settings using Initial Codes in Setup (Shift-F1,4,5) (see *Initial Settings* in Reference). These settings will be in effect each time you create a document.

Inside Border Space

The measurements in this option refer to the amount of space you want between each border of your box and the information inside the box. Select this option (3), then enter a setting for each border or press **Enter** to leave a setting as it is and continue on to the next border setting.

Level Numbering Methods

There are two level numbering methods listed on this menu: **First (4)** and **Second (5)**. These methods let you define up to two levels of numbering for

captions. Select either option, then select a numbering style from the menu displayed.

Although **Off** is displayed as an option for both numbering methods, you cannot select it for the first level. For information on printing captions without first level caption numbers, see *Caption Number Style* above.

Letters or Roman numerals are shown in uppercase when used for first level numbering and lowercase when used for second level numbering. For example, if you are writing a book with several illustrations in each chapter, and your second level numbering method is Letters, the illustrations could be numbered 1.a, 1.b, 1.c, etc. for chapter 1; 2.a, 2.b, 2.c, etc. for chapter 2, and so on.

Minimum Offset from Paragraph

When you position a paragraph type graphics box a specific distance (offset) from the top of the current paragraph (see *Graphics, Define a Box* in *Reference*), the offset you specify is honored unless the paragraph is too close to the bottom edge of the page for the box to fit. If this is the case, the offset measurement is reduced to try to keep the text and box together on the same page. If the offset cannot be reduced enough to fit the box on the page, the box is bumped to the top of the next page (or column).

The Minimum Offset option (8) lets you specify how far the box can move up into the paragraph when WordPerfect needs to reduce the offset measurement. For example, if you enter 1" for this option, graphics boxes can move up to 1" from the top of the paragraph before being bumped to the next page.

If you want to have the offset measurement honored regardless of how close the text is to the bottom of the page, set the minimum offset to a large value (e.g., 11" on an 11" long page).

Outside Border Space

The measurements in this option refer to the amount of space you want between each border of your box and the text outside your box. Select this option (2), then enter a setting for each border or press **Enter** to leave a setting as it is and continue on to the next border setting.

If the box is aligned with any setting (left margin, right margin, etc.), the outside border space on that side of the box is ignored.

Position of Caption

This option (7) lets you set the position of the caption **Below** (1) or **Above** (2) the box, and **Outside** (1) or **Inside** (2) the border.

For Equation boxes, this option lets you position the caption **Below** (1) or **Above** (2) the equation, or on the **Left** (3) or **Right** (4) side of the equation. All these options are inside the Equation box.

If you select **Left** or **Right** and the equation is too wide for the caption to fit inside the box, the caption will be placed below the equation.

See Also: Graphics, Create; Graphics, Define a Box; Graphics, Edit

Graphics Screen Type

Since WordPerfect can run on several different types of display cards with several different types of monitors, it needs to know the type of display card and monitor you have. It needs to know because the method for displaying graphics and text on the screen differs from display card to display card and monitor to monitor.

A graphics driver is one of the files WordPerfect uses to communicate with a display card and monitor. This file, which ends with a .VRS (video resource file) extension, is used to display images in graphics screens such as the Graphics Editor, the Equation Editor, and the View Document screen.

If you are having trouble displaying images in any of these screens, it could be that the correct graphics driver isn't selected.

WordPerfect uses a feature called Graphics Screen Type to select the correct graphics driver. When you enter a graphics screen, WordPerfect attempts to automatically select the correct graphics driver for your system (unless you have selected one manually).

The list of graphics drivers WordPerfect searches is a list of the most common graphics drivers. These drivers reside in the STANDARD.VRS file which is installed with the WordPerfect program files and should reside in the directory where WPEXE is located.

If your driver is not on the list or if you have a special situation (e.g., two monitors run by the same computer), you will need to select the driver that is designed for that monitor or situation.

To do so,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Display (2)**, then select **Graphics Screen Type (2)**.

3 Move the cursor to the type of display card and/or monitor you have, then choose **Select (1)**.

If you don't know the type of display card and monitor you have, consult the documentation that accompanied them or ask the person who installed them.

- 4 Move the cursor to your specific display card and/or monitor, then choose Select (1).
- 5 Press **Exit** (F7) until you return to the normal editing screen.

This setting is stored in the WP{WP}.SET file and remains in effect each time you start WordPerfect.

Notes**Auto-Select**

WordPerfect initially selects your graphics driver automatically. If you selected one yourself, but now wish to have WordPerfect select one automatically, go to the Setup: Graphic Screen Driver menu (Shift-F1,2,2), then choose **Auto-Select** (2).

WordPerfect makes a “best guess” at the type of display card and monitor you have.

Card or Monitor Not Shown

If your display card or monitor is not shown on either of the selection menus, then the information for that monitor is not located in the directory where WPEXE resides.

If you have files ending with a .VRS extension in a directory other than where WPEXE resides, make sure you are in the Setup: Graphic Screen Driver menu (Shift-F1,2,2), then select **Other Disk** (3). After you do so, enter the pathname to where your .VRS files are kept. WordPerfect will display those files on the Setup: Graphic Screen Driver menu.

If you do not have .VRS files in any directory other than the directory where WPEXE is located and your display card or monitor is not shown on either of the selection menus, send the name of your display card and monitor, a brief description of the problem you are having, your return address, and your phone number to:

Graphics/Text Driver
Attn: WordPerfect Corporation Information Services
1555 N. Technology Way
Orem, UT 84057

At WordPerfect Corporation we are constantly updating our software and there is a chance that we may have created a driver for your display card. In the meantime, consult your display card and monitor manufacturers for a suitable emulation and select that emulation from the list.

Graphic Driver Not Selected

If you get this error message in any of the graphics screens, it is because WordPerfect cannot find your graphics driver or the incorrect driver is selected. If this is the case, follow the numbered steps at the beginning of this reference section and select the appropriate driver.

If you still get the message, try using the Auto-Select option (see *Auto-Select* above).

Name Search

The Name Search option on the Setup: Graphic Screen Driver menu (Shift-F1,2,2) helps you easily move the cursor to the name of your display card or monitor. To use the option, select Name Search (n), then begin typing the name of your display card or monitor. As you type letters, the cursor moves to the first name on the list that matches those letters. Press **Enter** or an arrow key to exit Name Search.

Other Disk

The Other Disk option is used in case your display card or monitor is not displayed on the Setup: Graphic Screen Driver menu. For more information, see *Card or Monitor Not Shown* above.

STANDARD.VRS

STANDARD.VRS is a special graphics and text driver that comes with WordPerfect, and it contains information for most common display cards and monitors. This driver should reside in the directory where WP.EXE is located.

Text Screen Type

The Text Screen Type option is used to select a text driver. Text drivers also end with a .VRS extension (and, in fact, can be contained in the same .VRS file as graphics drivers), but they are different from graphics drivers in that they determine display in text (non-graphics) screens.

Among other things, text drivers let WordPerfect use extended text modes (more lines and columns on a screen) and text fonts that are available on many of the newer display cards and monitors. If you have a display card that is capable of these operations or are having trouble displaying text on the screen, see *Text Screen Type* in *Reference*.

Wrong Driver

You must have the monitor and card for the graphics screen type you select. If you don't, WordPerfect may not be able to display graphics screens properly.

See Also: Display Setup; Text Screen Type

H Hard Space

A hard space holds the words on each side of it together on one line.

For example, you can use a hard space to keep dates (e.g., January 21, 1990) or names (e.g., John Paul Jones, Jr.) from being split by a soft return.

To insert a hard space,

- 1 Press **Hard Space** (Home,Space Bar).

Notes

Codes

Pressing **Hard Space** (Home,Space Bar) inserts a Hard Space code []. You can use Reveal Codes (Alt-F3) to display the Hard Space code on the screen.

Deleting a Hard Space

A hard space can be deleted either in the normal editing screen or in Reveal Codes (Alt-F3). You are not asked to confirm the deletion.

Hyphenation

WordPerfect considers the words joined by hard spaces as one word. Consequently, when Hyphenation is on, WordPerfect may ask if you want to hyphenate the combined words. You can then press **Cancel** (F1) to wrap the combined words to the next line (see *Hyphenation in Reference*).

See Also: Hyphenation

Headers and Footers

Often you may want certain things to appear on every page of a document. For example, you might want to put a chapter title, a date, or the company name at the top or bottom of each page (or on certain pages).

Such repeated items are called *headers* when they appear at the top of a page, and *footers* when they appear at the bottom.



In WordPerfect, you only need to create a header or footer once. You can then have WordPerfect place it on the pages you want.

To create a header or footer.

- 1 Move the cursor to the top of the first page on which you want the header or footer.
- 2 Press **Format** (Shift-F8), then select **Page** (2).
- 3  Select **Page** from the **Layout** menu.
- 3 Select **Headers** (3) or **Footers** (4).
- 4 Select **a** (1) or **b** (2) to create the first or second header or footer (see *Number of Headers/Footers Allowed* below).
- 5 Select **Every Page** (2), **Odd Pages** (3), or **Even Pages** (4) (see *Placement Options* below).
- 6 Type the text of the header or footer (see *Creating a Header or Footer* below).
- 7 Press **Exit** (F7) twice to return to your document.

Notes

Adding and Deleting Headers and Footers

You can add new headers and footers anywhere in a document by following the above steps.

You can delete an existing header or footer by deleting the code for it (see *Codes* below). When you attempt to delete a header or footer code in the normal editing screen using Delete (Del) or Backspace, you are asked to confirm the deletion. When you use any other deletion feature, any headers or footers within the deleted text are automatically deleted (see *Delete Text* in *Reference*).

If you accidentally delete a header or footer, you can use Cancel (F1) to restore it, just as you would restore any other deletion (see *Cancel* in *Reference*).

Codes

Creating a header or footer inserts a code into your document. The format for the code is [*header/footer letter:location,text*] where *header/footer letter* is the letter of that header or footer (e.g., Header A or Footer A), *location* is the placement of that header or footer (e.g., every page or odd pages), and *text* is the text of the header or footer, up to the first fifty characters. If a header or footer contains more than fifty characters, three dots appear at the end of the header or footer text (e.g., . . .). You can view a Header or Footer code in Reveal Codes (Alt-F3).

Header and Footer codes only affect the text in your document from the point where they are inserted forward. Consequently, if you want a header to start on a certain page, you must define it at the very top of that page (i.e., before any characters). Usually, it's also a good practice to place Footer codes at the top of the first page on which you want the footer to appear.

If you like, you can place headers and footers at the very beginning of your document, then use Suppress on the Page Format menu (Shift-F8,2,8) to keep them from appearing on the pages where you do not want them. For example, when the first page of your document is a title page, you can still place the header or footer at the beginning of page 1 and then suppress it on page 1 so that it won't start appearing until page 2 (see *Suppress Page Format* in *Reference*).

If a Header code is not on the first page of your document, it may move from the top of the page as you add or delete text. As a result, it may not be printed until the following page. If a header code is located on a page other than the first page of a document, you will want to make sure the Header code remains at the top of that page as you edit the document.

Creating a Header or Footer

Once you have selected the header/footer number and placement options, you are placed in a special editing screen. The letter for the header or footer you are

creating appears on the left end of the status line (e.g., Header A for first, Header B for second).

- ▲ HEADER
- ▲ FOOTER



Enter text as you normally would, using the WordPerfect editing features (e.g., Bold, Underline, Center, Tab, Flush Right, etc.). Use Move, Block, and Cancel to move, delete, and restore text within the header or footer. You can also use the Speller, the Thesaurus, and the Date feature. If you do not want to use the current margin settings of your document, you can use Line Format (Shift-F8,I,7) to set new left and right margins for your header or footer.

A single header or footer can contain up to one page of text, as defined by the format of the current document (e.g., top and bottom margins, font size). Unless a Base Font code exists in the header or footer, it is printed in the font that is the base font at the point where the Header or Footer code is located (see *Codes* above and *Font* in *Reference*).

You can also use Move (Ctrl-F4) to move text from your document into a header or footer and back again (see *Move* in *Reference*).

Remember to press **Exit** (F7) twice when you have finished typing the text to save the header or footer and return to your document. Be sure to press **Exit** (F7) and not Enter or Cancel (F1). Pressing **Enter** will only add an extra line of space to the header or footer.

If you forget to exit the Header and Footer Editing screen, you may wind up typing more than a page of information into this screen by mistake. If you exceed the page limit, an error message is displayed and the cursor is placed at the end of the header or footer when you try to exit the screen. You can then use Block (Alt-F4) and Move (Ctrl-F4) to block the unwanted text and move it back into your document (see *Block* and *Move* in *Reference*).

Editing an Existing Header or Footer

When you tell WordPerfect you want to edit a header or footer, WordPerfect searches backward in your document for the first Header or Footer code it can find. If it does not find one, it then searches forward. Consequently, before starting to edit a header or footer, it is a good idea to place the cursor immediately after the header or footer that you want to edit.

To edit an existing header or footer, press **Format** (Shift-F8), select **Page** (2), select **Headers** (3) or **Footers** (4), select **A** or **B**, then select **Edit** (5).

WordPerfect searches for the header or footer as explained above. It then displays an editing screen with the current text for the first header or footer that it finds. Edit it, then press **Exit** (F7) twice to save your changes and return to your document.

If you have several different headers and footers in one document, you can search for a specific one by pressing a Search key and then pressing the Format keystrokes necessary to insert that Header or Footer code into a search string (see *Search in Reference*). Once you have used Search to find the header or footer you want, you can then use the steps given in the above paragraph to display and edit it.

Editing an existing header or footer changes that header or footer wherever it appears in a document. For example, if you want Header A to be in one format on pages 1 through 5 of your document, and then change format beginning on page 5, you cannot just edit Header A on page 5. You need to redefine a new Header A on that page (see *Number of Headers/Footers Allowed* below).

Number of Headers/Footers Allowed

WordPerfect lets you define two different headers or footers on each page (e.g., **A** and **B**). However, there is actually no practical limit to the number of different headers and footers you can have in one document.

Each time you define a header or footer, the code that is placed in your document takes effect from that point forward, until you insert a new code for that same header or footer. While each new code does not affect any previous code, it does change the header or footer definition from that point on.

For example, you can define Footer A to be one kind of footer on pages 1 through 7 of your document, then redefine it on page 8. The new definition will affect only the footers from page 8 forward.

Page Numbers

Normally, you will want to use the Page Numbering feature (Shift-F8,2,6) to have WordPerfect number the pages in a document for you. However, you can include page numbering within the text of a header or footer by pressing **Ctrl-b** to insert a ^B code into the text (see *Page Numbering in Reference*).

If you use both the Page Numbering feature, and the Headers and Footers features in the same document, the header or footer and page number may overlap. You can avoid this by inserting an extra blank line at the top of the

header whenever you are going to use the Page Numbering feature at the top of the same document. In the same manner, insert an extra blank line at the end of the footer to leave space for the Page Numbering feature whenever you are going to use the Page Numbering feature at the bottom of the same document. If you use a single line header or footer with the Page Numbering feature, you can also avoid overlapping by leaving blank space in the header or footer where the page number will print.

Placement Options

Each time you create a header or footer, you can have it placed on every page, odd pages, or even pages. You can also discontinue existing headers and footers.

WordPerfect places the header or footer on the pages you select, and inserts a blank space (usually .33") between the header or footer and the existing text on the page. WordPerfect considers the header or footer to be part of the text and not part of the top or bottom margin of a page. A header or footer is *never* printed in the top or bottom margin. If you are using headers and footers and find that you need more space on a page, use Margins, Top and Bottom in Page Format (Shift-F8,2,5) to change your top and bottom margins.

If you use two headers (or footers) on the same page, be sure that one is flush right or printed on a different line. Otherwise, one may print on top of the other. For example, Header A will print on top of Header B; Footer A will print on top of Footer B, etc. If you need to add some space between two headers or two footers that will be printed on the same page, place one or more hard returns between them. You must add these hard returns in the Header or Footer Editing screen, not in the document itself.

Turning Off a Header or Footer

You can have a header or footer print on several pages, then discontinue it at a certain point in your document.

To discontinue an existing header or footer, press **Format** (Shift-F8), select **Page** (2), select **Headers** (3) or **Footers** (4), select **A** or **B**, then select **Discontinue** (1).

You can also use **Suppress** on the Page Format menu (Shift-F8,2,8) to suppress a header or footer on certain pages (see *Suppress Page Format in Reference*).

You should always place both **Suppress** and **Discontinue** codes at the top of the page.

See Also: Suppress Page Format

Help

Help lets you quickly learn more about WordPerfect without having to turn to the manual. You can use Help to find out what WordPerfect keystrokes do by pressing them.

Of course, the on-screen information Help provides is often condensed. While using Help, if you feel you need more detailed information about a feature, you can always refer to the manual.

Use Help (F3) to display any of the following on your screen:

- An alphabetical listing of WordPerfect features and their keystrokes.
- Descriptions of WordPerfect features and menu options.
- Information about the current feature you are using.
- A template listing the keystrokes and names of the WordPerfect function keys.

To display on-screen Help while using WordPerfect,

1 Press **Help** (F3).

 Select **Help** (see *Mouse below*).

The type of information displayed depends upon what you are currently doing in WordPerfect (see *Context-Sensitive Help* and *Normal Editing Screen* below).

2 Press **Enter** or the **Space Bar** to return to the previous screen or menu.

Notes

Alternate Keyboard

The Alternate Keyboard option (Shift-F1,3,9) lets you assign Help to F1. For more information, see *Alternate Keyboard* under *Environment Setup* in *Reference*.

Context-Sensitive Help

WordPerfect offers you *context-sensitive* help. That means that while you are using a certain feature, you can press **Help** (F3) to learn more about it.

For example, suppose you have pressed **Format** (Shift-F8) and displayed the Format menu on-screen, but you are not certain which option you need to select. You can press **Help** (F3) to display a screen which briefly describes the available options.

Keep in mind that some of the help screens appear very similar to the actual menus they describe. If you need to be sure you are in a help screen, look for the "Press ENTER to Exit Help" prompt which appears at the lower right corner of the status line on every help screen.

Context-sensitive help also works in pull-down menus. When you press Help (F3), a menu of information for the highlighted item appears.

Help File

The information necessary to display on-screen Help is contained in the file WPHHELP.FIL which is provided with WordPerfect. When you install WordPerfect, you are asked if you want to use Help. If you type y, the Help file is correctly installed for you.

If you did not install Help when you installed WordPerfect but you do want to use it, you can run the Installation Program and answer Yes when you are asked if you want to install the Help files.

Mouse

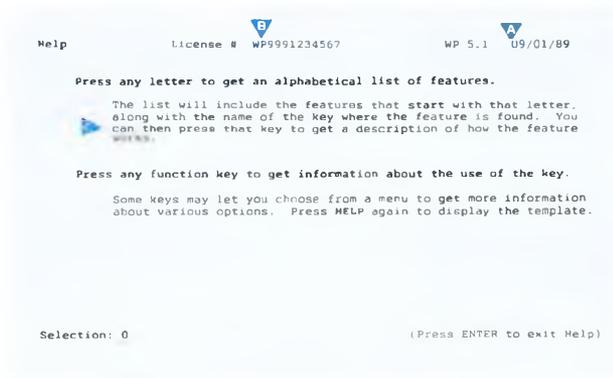
Using the mouse to select Help from the pull-down menu bar displays the pull-down menu options for the Help feature. You can then select Help to display the main Help menu, Index to display an alphabetical listing of WordPerfect features, or Template to display an on-screen template.

While using Help, you can exit the Help feature at any time by clicking the right mouse button.

Normal Editing Screen

Pressing Help (F3) from the normal editing screen displays the main Help menu.

- ▲ VERSION NUMBER AND DATE
- ▲ LICENSE NUMBER
- ▲ KEYSTROKE INSTRUCTIONS



At the upper right corner of the main Help menu, the version number of the WordPerfect program that you are using is listed, along with the date when that version was issued. If you are running WordPerfect on a network, your three-letter file ID will also appear in the upper right corner of the menu.

The first time you start WordPerfect you are asked to enter your license number. Thereafter, the number you have entered is displayed in the main Help screen so that you can refer to it whenever you need it, such as each time you call Customer Support.

The text on the main Help menu tells you how to use the Help feature.

Whenever you are using Help, you can either display alphabetical lists of WordPerfect features or on-screen help about certain features.

If you are just browsing or you are not certain of the keystroke for the feature you want to learn about, you can press any letter of the alphabet to display a list of features that start with that letter. Each list includes features by keystroke, feature name, and keystroke name. You can then press a keystroke to learn more about any feature on the list.

For example, suppose you want to learn more about how to make letters uppercase or lowercase but you are not certain what that feature is called. You might type **u** for Uppercase from the main Help menu. The list of features that is then displayed tells you that the Uppercase/Lowercase feature is called **Switch** and that the keystroke for that feature is Shift-F3. You can then press **Switch** (Shift-F3) to display a screen filled with information about how to switch existing text back and forth from uppercase to lowercase.

On the other hand, if you already know the keystroke and you just want to learn more about how to use it, you can press the keystroke to display a screen filled with information. This works both for function keys and cursor movement keys.

For example, while using Help, you can press **Switch** (Shift-F3) to learn about Switch, **Bold** (F6) to learn about Bold, **Setup** (Shift-F1) to learn about Setup, or **Right Arrow** (→) to learn about cursor movement.

Some WordPerfect features and their keystrokes are listed on your keyboard template. You can also display an on-screen template by pressing **Help** (F3) once again while in any Help screen. From the on-screen template, you can then press a feature keystroke to learn more about a feature.

See Also: Getting Started

Hyphenation

Normally, when a word extends beyond the right margin setting, WordPerfect wraps the word to the next line on the page. If you want to hyphenate words at the right margin to improve the look of the printed page, you may do so with the WordPerfect Hyphenation feature. As you type text or scroll through existing text, WordPerfect will hyphenate where necessary.

When Hyphenation is on, WordPerfect looks at three things before deciding when and how to hyphenate: the hyphenation zone, the hyphenation dictionary, and the Hyphenation Prompt option. These options come preset to meet a variety of user needs, but if you would like to make changes to the way WordPerfect is hyphenating your document, see *Hyphenation Zone*, *Hyphenation Dictionary*, and *Hyphenation Prompt* below.

To turn on Hyphenation,

- 1 Move the cursor to where you want to start hyphenation.
- 2 Press **Format** (Shift-F8), then select **Line** (1).
 *Select Line from the Layout menu.*
- 3 Select **Hyphenation** (1).
- 4 Type **y** to turn on Hyphenation.
- 5 Press **Exit** (F7) until you return to the normal editing screen.

If Hyphenation is on and you want to turn it off, follow the steps above but type **n** in step 4.

Notes

Canceling Hyphenation

If you want to cancel hyphenation for a word that has already been hyphenated, move to the first letter of the word, press **Home**, then type a slash (/). Next, move to the hyphen and delete it. If you want to cancel hyphenation for a word that is displayed at the “Position Hyphen; Press ESC” prompt, press **Cancel** (F1).

When you cancel hyphenation for a word, that word is wrapped to the next line.

You can search for the Cancel Hyphenation code by pressing **Search** (F2), then pressing **Shift-F8,1,3**.

Hyphenation Alternatives

There are characters that you can type from the keyboard as well as codes that WordPerfect itself can enter in a document to handle long words or words that you need to keep together. These characters and codes are discussed below.

A *Hyphen Character* is the character that is placed in your document when you type a dash (–). Displayed and printed as a dash, the Hyphen Character tells WordPerfect where you want a word hyphenated when the word needs to be hyphenated (even if Hyphenation is off). If WordPerfect hyphenates the word at a Hyphen Character, it does not add a Soft Hyphen.

A *Hard Hyphen* is the character that is placed in your document when you press **Home**, then type a dash. Displayed and printed as a dash, the Hard Hyphen tells WordPerfect that a word should be treated as one word and should not necessarily be hyphenated at the dash. WordPerfect will follow regular hyphenation procedure (checking the dictionary, prompting for assistance if appropriate) if it needs to hyphenate the word.

A *Soft Hyphen* is a code (–) that is placed in your document when WordPerfect hyphenates a word or when you hold down **Ctrl**, then type a dash. This tells WordPerfect where a word should be hyphenated when it needs to be hyphenated. If the word does not need to be hyphenated, the Soft Hyphen code remains in the document but has no effect.

An *Invisible Soft Return* is a code [ISRt] placed in your document when you press **Home**, then press **Enter**. It tells WordPerfect where a word should be broken when it needs to be hyphenated. In other words, it is like a Soft Hyphen except it doesn't produce a hyphen; it simply breaks the word. It is especially useful for words separated by en dashes, em dashes, and slashes (e.g., Colors/[ISRt]Fonts/[ISRt]Attributes). If the word doesn't need to be hyphenated, the Invisible Soft Return remains in the document but has no effect.

A *Deletable Soft Return* is a code [DSRt] inserted by WordPerfect when WordPerfect needs to break a word that extends from left margin to right margin. A frequent sight in extremely narrow columns where Hyphenation is turned off, the Deletable Soft Return is deleted and the word it divides is pulled back together when the code is not at the end of a line or page.

Hyphenation Dictionary

When Hyphenation is on and a word needs to be hyphenated, WordPerfect looks at one of two dictionaries to determine where to hyphenate the word. One of the dictionaries is an internal dictionary that is built into WordPerfect. The other is an external dictionary which is contained in the WP{WP}US.LEX and WP{WP}US.HYC files.

The external dictionary is much larger than the internal dictionary. It contains more words and thus, gives WordPerfect more hyphenating alternatives than the internal dictionary, but it also takes up more disk space. You can choose which hyphenation dictionary WordPerfect will use.

To do so, go to the normal editing screen and press **Setup** (Shift-F1). Then, select **Environment** (3) and select **Hyphenation** (6). Select **External Dictionary/Rules** (1) for the external dictionary or **Internal Rules** (2) for the internal dictionary. Next, press **Exit** (F7) until you return to the normal editing screen.

When you make your selection, that setting is stored in the WP{WP}.SET file and remains in effect each time you start WordPerfect.

Important: *If you select External Dictionary/Rules, WP{WP}US.LEX and WP{WP}US.HYC must be installed and located in the thesaurus/spell/hyphenation directory. These files are installed when the Speller is installed, so if you chose not to install the Speller when you installed WordPerfect or have not subsequently done so, you must do so before you begin to hyphenate (see the Installation Instructions card).*

If WordPerfect can't find the WP{WP}US.LEX or WP{WP}US.HYC files and you have selected External Dictionary/Rules, it prompts you with a message on the status line that tells you which file it can't find, then wraps the word to the next line.

More information on the thesaurus/spell/hyphenation directory can be found under *Location of Files in Reference*.

If you want to add words to or change the hyphenation criteria for words in the External Dictionary, you may do so with the Speller Utility. For more information, see *Speller Utility* in *Reference*.

Hyphenation Prompt

When WordPerfect is hyphenating, it may ask you for assistance. You can determine how often it will ask for assistance.

There are three Hyphenation Prompt options: Never, When Required, and Always. These options determine what WordPerfect will do when Hyphenation is on and a word needs to be hyphenated.

To set a prompt option, go to the normal editing screen and press **Setup** (Shift-F1). Then, select **Environment** (3) and select **Prompt for Hyphenation** (7). Select an option from the bottom of the screen, then press **Exit** (F7) until you return to the normal editing screen.

Never (1) instructs WordPerfect to hyphenate the word according to the instructions in the hyphenation dictionary you chose (see *Hyphenation Dictionary* above). If the word doesn't exist in the dictionary, WordPerfect will wrap the entire word to the next line.

When Required (2) instructs WordPerfect to hyphenate the word according to the instructions in the hyphenation dictionary you chose (see *Hyphenation Dictionary* above). If the word doesn't exist in the dictionary, WordPerfect will prompt you with the "Position Hyphen; Press ESC" message (see *Position Hyphen; Press ESC* below). You will also be prompted for confirmation when more than one correct hyphenation can be made or if WordPerfect cannot determine a correct hyphenation for a word.

Always (3) instructs WordPerfect to stop at each word that needs to be hyphenated, then prompt you with the "Position Hyphen; Press ESC" message (see *Position Hyphen; Press ESC* below).

This setting is stored in the WP{WP}.SET file and is in effect each time you start WordPerfect.

Hyphenation Zone

The hyphenation zone determines when a word needs to be hyphenated. It is a feature that establishes a region ("zone") across which a word must be located if it is to be hyphenated. If the word is not located in that zone, it is either kept intact on the current line of text or wrapped to the next line.

If you want more or less hyphenation in your document, you may want to change the size of the hyphenation zone (see *Hyphenation Zone* in *Reference*).

Language

WordPerfect has created hyphenation/speller dictionaries in several different languages. When Hyphenation is on and you are using the External Dictionary,

WordPerfect searches for the dictionary that matches the current language code (see *Language in Reference*).

For more information about the hyphenation/speller dictionary, call (801) 225-5000. This number is not toll free.

Position Hyphen; Press ESC

When this prompt appears on the status line, it means that WordPerfect needs your help in hyphenating the displayed word. Use Left or Right Arrow (←/→) to position the hyphen where you like, then press **Escape** (Esc) to insert the hyphen into your document.

You may notice that you can't move the hyphen as far as you would like. This is because the cursor must be located between the first letter of the word and the right hyphenation zone setting (see *Hyphenation Zone* above).

If you press **Cancel** (F1), the entire word will be wrapped to the next line. The space before the word is changed to a soft return and a Cancel Hyphenation code [/] is inserted in front of the word.

You can choose to have a beep accompany the "Position Hyphen; Press ESC" message (see *Beep Options in Reference*).

Turning Off Hyphenation

The process for turning off Hyphenation is described in the steps at the beginning of this reference section. If you want to turn off Hyphenation temporarily during spell-checking or any scrolling command (e.g., Home,Home,Down Arrow), you can do so by pressing **Exit** (F7) at the first "Position Hyphen; Press ESC" prompt.

Two Disk Drives

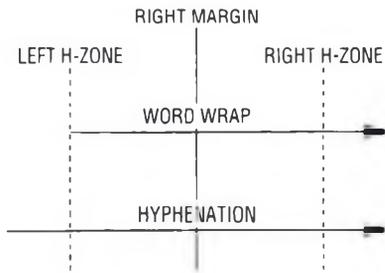
If you have a two disk drive system (no hard disk) and want to use the External Dictionary/Rules option, we suggest hyphenating the document after you have finished writing the document. To do so, insert the Speller diskette into the B drive, turn on Hyphenation at the beginning of the document, then press **Home,Home,Down Arrow** (↓) to hyphenate the document.

See Also: Lesson 25; Environment Setup; Hyphenation Zone

Hyphenation Zone

When you use the WordPerfect Hyphenation feature to hyphenate words, the Hyphenation Zone setting is used to determine which words need to be hyphenated. Increasing the size of the zone decreases the number of words that need to be hyphenated, while decreasing the size of the zone increases the number of words that need to be hyphenated.

The hyphenation zone works this way:



There is a left hyphenation zone setting and a right hyphenation zone setting. If Hyphenation is on and a word starts before the left hyphenation zone setting and extends past the right hyphenation zone setting, the word needs to be hyphenated. As you can see, if the hyphenation zone is small, more words will meet these criteria.

The hyphenation zone uses a percentage measurement. The percentage is a percentage of the line length. For example, if a line is 6.5" long and the hyphenation zone is 10% and 4%, the left hyphenation zone setting is .65" ($.10 \times 6.5 = .65$) to the left of the right margin, and the right hyphenation zone is .26" ($.04 \times 6.5 = .26$) to the right of the right margin.

The hyphenation zone is a percentage measurement rather than an absolute value because it allows the size of the hyphenation zone to change with the line length. This is especially useful in columns where the line length of a column may be much smaller than the non-column line length.

To set the hyphenation zone,

- 1 Move the cursor to the line in the document where you want to change the hyphenation zone.
- 2 Press **Format** (Shift-F8), then select **Line** (1).
 Select **Line** from the **Layout** menu.
- 3 Select **Hyphenation Zone** (2).
- 4 Enter the left hyphenation zone setting.
- 5 Enter the right hyphenation zone setting.
- 6 Press **Exit** (F7) to return to the document.

Hyphen Position

When Hyphenation is on and a word falls in the hyphenation zone, WordPerfect searches the specified hyphenation dictionary to see where the hyphen should be placed (see *Hyphenation* in *Reference*).

If WordPerfect finds an appropriate location in the hyphenation zone, it positions the hyphen there. If not, WordPerfect checks to the left of the hyphenation zone, and if it finds an appropriate location there, it positions the hyphen. If WordPerfect still can't find an appropriate location, it positions the hyphen at the right margin.

In all of the cases in the paragraph above, WordPerfect may or may not prompt you for hyphenation assistance depending on the setting for the Prompt for Hyphenation option. If Prompt for Hyphenation is set to Never and WordPerfect can't find an appropriate hyphenation location, it wraps the entire word to the next line. For information on the Prompt for Hyphenation option, see *Hyphenation Prompt* under *Hyphenation* in *Reference*.

When WordPerfect does prompt you for hyphenation assistance, the message, "Position Hyphen: Press ESC" is displayed on the status line along with the word to be hyphenated. You can move the hyphen with the Left and Right Arrow keys anywhere from between the first two letters of the word to just before the letter that is located at the right hyphenation zone. Regardless of the size of the hyphenation zone, it must contain a minimum of two characters to allow you some flexibility in hyphenation.

Hyphenation and Full Justification

Like hyphenation, full justification is a way to keep lines of text more even at the right margin.

For more information about Justification, see *Justification* in *Reference*.

See Also: Hyphenation



I Indent

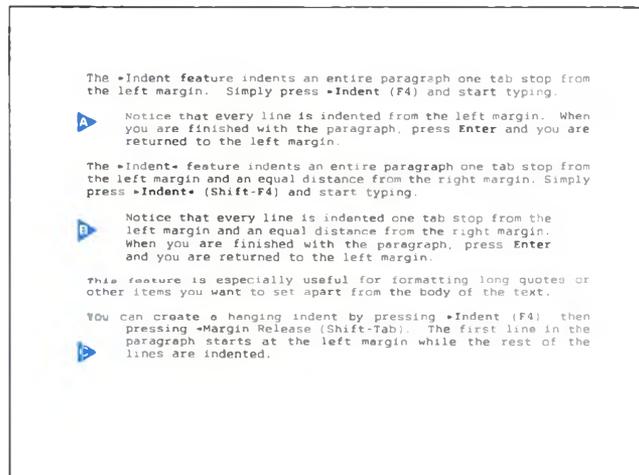
Indent lets you indent a complete paragraph without changing the current margins.

When you use Indent, you don't have to press **Tab** to indent each line of text you type. Pressing **Tab** indents just one line of text to the next tab setting. Pressing **Indent** sets up a temporary left margin at the next tab setting. All the text you type is then indented to that tab stop until you press **Enter** to insert a Hard Return code [HRt] (see *Codes* below).

There are three different indentation keystrokes. You can use them to do any of the following:

- Indent all the lines in a paragraph from the left margin (left indent).
- Indent all the lines in a paragraph from both margins (double indent).
- Keep the first line in a paragraph flush with the left margin while indenting the remaining lines (hanging indent).

- ▲ LEFT INDENT
- ▲ DOUBLE INDENT
- ▲ HANGING INDENT



To indent text,

- 1 Press the appropriate indentation keystroke (see *Indentation Keystrokes* below).
- 2 Type the text you want indented.
- 3 Press **Enter** to end the indentation and return the cursor to the left margin.

Notes

Indentation Keystrokes

The following table lists the keystrokes used to indent text.

Indentation	Keystroke
<i>Left</i> —Left side of paragraph only (at the next tab stop).	◆Indent (F4)
<i>Double</i> —Both sides of a paragraph an equal distance from the left and right margins. (The left side is indented at the next tab stop; the right side is indented an equal distance in from the right margin.)	◆Indent◆ (Shift-F4)
<i>Hanging Indent</i> —First line of paragraph remains at the left margin, remaining lines are indented at the next tab stop.	◆Indent (F4), ◆Margin Release (Shift-Tab)

Indentation Codes

A code is inserted at the cursor each time you press an indentation keystroke. Pressing **◆Indent** (F4) inserts the Indent code [→Indent]. Pressing **◆Indent◆** (Shift-F4) inserts the Double Indent code [→Indent←]. Pressing **◆Indent** (F4), **◆Margin Release** (Shift-Tab) inserts an Indent code [→Indent] followed by a Margin Release code [←Mar Rel].

The Indent codes indent any text from that point forward until the appearance of the next Hard Return code [HRt].

Tab Stops

The indentations you get when you use the indentation keystrokes are based on the existing tab stops. You can change the distances that text is indented by changing the tab settings (see *Tab* in *Reference*). You can also press an indentation key more than once to indent text by more than one tab stop.

See Also: Tab; Tab Set

Index, Concordance and Mark Text

The first step in creating an index is to designate the words and phrases you want included. When the index is generated, these words and phrases (entries) become the headings and subheadings of the index.

- A HEADING
- B SUBHEADING



There are two ways to designate the entries you want in an index:

- Create a concordance file.
- Manually mark entries throughout the document.

You create a concordance file by listing each index entry in a WordPerfect file (see *Concordance* below). When you use a concordance file, WordPerfect searches the document for each occurrence of an entry and inserts the appropriate page numbers in the index. You manually mark entries by searching through the document and marking each occurrence you want in the index (see *Mark Text* below). When you mark entries in the document, WordPerfect generates index page numbers for only those entries you have marked.

Using a concordance file saves you the time of manually searching for entries throughout the document. However, marking text within the document lets you select existing phrases instead of having to compose a master list of index entries. Also, when you use a concordance file, WordPerfect only searches for exact matches. For example, if "Bird" is an entry in the concordance file, an occurrence of "Birds" in the document will not be included in the index.

You can use a combination of the two, marking some entries within the document and using a concordance file for others. WordPerfect will generate the index using entries from both the concordance file and the text marked in the document.

Once you have designated the index entries, you need to define the index location and numbering style. See *Index, Define* in *Reference* for details.

Notes

Concordance

To create a concordance file,

- 1 Start with a blank document screen.
- 2 Type an entry for the index and press **Enter**. Repeat this step for each entry you want to include.
- 3 Save the document (see *Save* in *Reference*).

Below is an example of what a concordance file might look like.

```
Advance
Append
Arrow Keys
ASCII
Automatic Reference
Backup
Backspace
BASIC
Block
Bold
Cancel
Center
Change
Characters
Codes
Colors
Columns
Comments
Conditional End of Page
Cursor Movement
Date
Document
```

Doc 1 Pg 1 Ln 4.5" Pos 1.8"

You can edit the list and resave the file as needed.

When you define the index (see *Index, Define* in *Reference*), you are asked for the name of the concordance file. Then when you generate the index (see *Generate* in *Reference*), WordPerfect searches the document for each occurrence of the entries listed in the concordance file and includes the appropriate page numbers in the index.

Each entry in the concordance file can be as long as you want but must end with a hard return [HRt] (inserted in the *Reveal Codes* screen when you press **Enter**). Don't worry if the line automatically wraps; this inserts a soft return [SRt], not a [HRt].

An index will generate faster if you sort the entries in the concordance file alphabetically before using it (see *Sort* in *Reference*). Sorting a concordance file is easiest if each entry is only one line long.

WordPerfect automatically makes each entry in the concordance file a heading in the index. If you want an entry in the concordance file to be a subheading in the index, mark it in the concordance file using steps 1 through 4 under the *Mark Text* heading below. If you want a concordance entry to be both a heading and

subheading, mark it twice—once as a heading and once as a subheading (see *Mark Text* below).

The index heading has a size limit of 40 bytes.

Mark Text

To mark text for use in an index,

- 1** Move the cursor to the word you want in the index, or if it is more than one word, block the phrase (Alt-F4).
- 2** Press **Mark Text** (Alt-F5), and select **Index** (3).

 *Select Index from the Mark menu.*

- 3** Press **Enter** to use the displayed text as an index heading.

or

Enter your own text for the heading.

- 4** Press **Enter** to use the displayed text (if any) for the subheading.

or

Enter your own text for the subheading.

You can also press **Cancel** (F1) in step 4 if you do not want a subheading.

The text you selected in step 1 appears as the index heading in step 3. If you don't use the displayed text as the heading, it appears as the subheading in step 4. If you use the displayed text as a heading, no text appears for the subheading.

Mark all the entries you want in the index. If you want an entry to be both a heading and a subheading, you must mark it twice—once as a heading and once as a subheading.

If you have phrases that occur frequently throughout the document, you may want to include them in a concordance file (see *Concordance* above). You can mark entries within a concordance file using steps 1 through 4 above.

When you mark an entry, [Index:*heading*;*subheading*] (where *heading* is text of the heading and *subheading* is the text of the subheading) is inserted in the Reveal Codes screen next to the word or phrase. If you decide you don't want the entry in the index, delete [Index:].

Master Documents

If you are using the Master Documents feature, you can mark index entries within the subdocuments. Then when you generate the index, these entries will

be combined into one index. WordPerfect will also search each subdocument for entries you have listed in a concordance file (see *Master Documents in Reference*).

See Also: Lesson 22; Generate; Index; Index, Define

Index, Define

Once you have designated the entries you want (see *Index, Concordance and Mark Text*), the next step in creating an index is to define the location and numbering style for the index. The following instructions assume you want the index at the end of the document. Although you can put an index anywhere in a document, be aware that doing so may give you some unanticipated results. For details, see *[Def Mark:]* below.

- 1 Move the cursor to the end of the document.
- 2 If you want the index to start on a separate page, press **Hard Page** (Ctrl-Enter).
- 3 If you want a heading (title) for the index, type it now, then press **Enter** as many times as you want to add extra spacing.
- 4 Press **Mark Text** (Alt-F5), select **Define** (5), then select **Define Index** (3).

 Select **Define** from the **Mark** menu, then select **Index**.

- 5 Enter the concordance filename (include the full path if it is not in your default directory), if you are using one (see *Index, Concordance and Mark Text* in *Reference*).

or

Press **Enter** if you are not using a concordance file.

- 6 Select a numbering style (see *Numbering Styles* below).

Once you have defined the index numbering style, you are ready to generate the index (see *Generate* in *Reference*).

Notes

[Def Mark:]

When you select a numbering style while defining an index, **[Def Mark:Index,#.filename]** (where # represents the numbering style you selected and *filename* represents the concordance file, if you entered one) is inserted into the Reveal Codes screen at the cursor position. The index will be generated at this code. Please note that if you have marked index entries in a document, they will only be included in the index if they occur *before* the **[Def Mark:]** code. All concordance file entries will be included in the index, regardless of where **[Def Mark:]** is located.

If you are using the Master Documents feature, you should place the [Def Mark:] code at the end of the master document, not inside one of the subdocuments (see *Master Documents in Reference*).

Numbering Styles

Numbering styles refer to the way the page numbers for headings and subheadings will be displayed. You can choose from the following five numbering styles while defining an index:

- No page numbers
- Page numbers following the entries (separated by a space)
- Page numbers in parentheses following the entries (separated by a space)
- Flush right page numbers
- Flush right page numbers with dot leaders

These five options affect the placement of page numbers in an index. If you want to change the actual type of number used (from Arabic to Roman, for example), you can use the New Page Number feature (Shift-F8,2,6,1). Changing the page number type with the New Page Number feature affects both page numbers displayed in the document and those generated in a table, list, or index. See *Page Numbering in Reference* for details.

See Also: Lesson 22; Generate: Index; Index, Concordance and Mark Text

Initial Codes

If you create many similar documents, you may format them a particular way. For example, your margins may always be set to 2", you may always have Justification off, and you may always have a particular page numbering format.

WordPerfect gives you two places to put the codes you use to format a document without having to actually enter them in the document. The benefit of this is that the codes don't "clutter" your document. And depending on where they were entered, you might not have to re-enter them each time you begin a new document.

Initial Codes is an option on both the Setup: Initial Settings menu (Shift-F1,4) and the Format: Document menu (Shift-F8,3). For both options, the method for entering the codes is the same. The difference is that the option on the Setup: Initial Settings menu sets codes for all subsequently created documents, while the option on the Format: Document menu sets codes for the document on the screen. The option on the Format: Document menu overrides (takes precedence over) the option on the Setup: Initial Settings menu.

For example, if most of your documents have 2" left and right margins, it is a good idea to enter that setting in Initial Codes on the Setup: Initial Settings menu. If you have one particular document that has 1" left and right margins,

you may want to make that setting in Initial Codes on the Format: Document menu. For that one document, the left and right margins will be set to 1". For the rest of the documents, the setting will be 2".

In *Initial Settings in Reference*, we tell you how to get to the Initial Codes option on the Setup: Initial Settings menu (Shift-F1,4,5). Here, we will tell you how to get to the Initial Codes option on the Format: Document menu. The method for entering codes is exactly the same.

1 Press **Format** (Shift-F8), then select **Document** (3).

 Select *Document* from the *Layout* menu.

2 Select **Initial Codes** (2).

3 Select a feature as you normally would, then enter the information. When you select a feature, a code is inserted in the bottom half of the screen.

An example of a few settings is shown below.



Initial Codes: Press Exit when done Lp 0.5" Pos 0.5"
[B Marg:0.5",0.5"] [L/R Marg:0.5",0.5"] [Enter Pg]

The list of codes you can enter is discussed in *Codes* below. You should not enter text in an Initial Codes screen.

4 Press **Exit** (F7) until you return to the normal editing screen.

When you save a document for the first time, the settings you make on both the Setup: Initial Settings menu and Format: Document menu are saved with the document. From that point on, the only way you can change the initial codes for that document is by changing them in Initial Codes on the Format: Document menu with the document on the screen. You must save the document for any changes to be saved with the document.

Codes inserted in the document itself or in features such as headers and footnotes take precedence over initial codes.

Notes**Codes**

The following codes are allowed in the Initial Codes screen:

- Base Font
- Column Definition
- Column On
- Decimal/Align Character
- Endnote Number
- Endnote Options
- Footnote Number
- Footnote Options
- Graphics Box Number
- Graphics Box Options
- Hyphenation On/Off
- Hyphenation Zone
- Justification
- Kerning
- Language
- Line Height
- Line Numbering
- Line Spacing
- Margins, Left/Right
- Margins, Top/Bottom
- Math Column Definition
- Math On
- New Page Number
- Page Number Position
- Page Number Style
- Paper Size/Type
- Print Color
- Suppress Page Format
- Tab Set
- Underline Spaces and Tabs
- Widow/Orphan On/Off
- Word and Letter Spacing

You may be able to enter codes other than the ones listed above as well as text, but they will have no effect.

A list of initial settings for these and other codes is shown in *Appendix G: Initial Settings*.

Existing Documents

Any document retrieved into an existing document will not retain its initial codes. Instead, it will use the initial codes for the existing document.

If you want to change initial codes for an existing document, you should retrieve the document to the screen, edit the codes in the Initial Codes option on the Format: Document menu, then save the document.

Initial Codes on the Format: Document Menu

Any codes in Initial Codes on the Setup: Initial Settings menu also appear in Initial Codes on the Format: Document menu. You can then edit the Initial Codes for an individual document in Initial Codes on the Format: Document menu as you like.

Merge

If you are using one primary file and several records from a secondary file to create a mass-mailing, it is a good idea to include initial codes for the primary file in Initial Codes on the Format: Document menu. If you don't, the codes at the top of the document are repeated each time the primary file is repeated.

If you are using merge to create labels, the Paper Size/Type code *must* be placed in Initial Codes. Otherwise, only one entry per page of labels will be printed. For more information, see *Labels in Reference*.

See Also: Initial Settings; Appendix G

Initial Settings

Setup: Initial Settings is a menu on the Setup key that allows you to make default settings for WordPerfect features that will affect all subsequently created WordPerfect documents.

Several of the options on the Setup: Initial Settings menu are repeated on other keys throughout WordPerfect and are set similarly. The difference is that Initial Settings sets options for all subsequently created WordPerfect documents. These options can be temporarily overridden for a single document with similar options on different keys.

Specific relationships between options on the Setup: Initial Settings menu and similar options on other keys are discussed for each option under *Notes* below.

To change an option on the Setup: Initial Settings menu,

- 1 Press **Setup** (Shift-F1).
 Select Setup from the File menu.
- 2 Select **Initial Settings** (4), then select the option of your choice.
- 3 Change the settings for the option. The options are discussed under *Notes* below.
- 4 Press **Exit** (F7) until you return to the normal editing screen.

These settings are stored in the WP{WP}.SET file and are in effect each time you start WordPerfect. In addition, these settings are saved with subsequently created documents when you save the documents and are in effect when you retrieve those documents.

Documents created before you change these settings retain their old settings.

Notes

Date Format

This option lets you change the format for dates that you enter in your documents with the WordPerfect Date feature. A similar feature exists on the Date Format menu (Shift-F5,3) and the method for creating a format is the same (see *Date in Reference*).

Settings made with the options on the Date Format menu insert a code into your document and affect the document from the code forward. The code will override the same settings made with the Date Format option in Initial Settings.

See *Language in Reference* to learn about other ways of changing the date format.

Equations

This option lets you determine printing and alignment options for equations. It also lets you select a keyboard layout that will be used only when you are in the Equation Editor.

Printing and alignment options made in the Equation Editor itself override settings made with this option, but if you do not make settings in the Equation Editor, the equations use the settings made with this option. Once an equation is created, the only way you can change the printing and alignment options is in the Equation Editor. Information about these printing and alignment options is found in *Equations in Reference*.

The option for specifying the equations keyboard can only be set with this option. To do so, select the Equations option from the Setup: Initial Settings screen, then select **Keyboard for Editing (5)**. Next, move the cursor to the keyboard you want to select, then choose **Select (1)**. Press **Exit (F7)** until you return to the normal editing screen.

To learn how to create a keyboard layout (remap keys), see *Keyboard Layout in Reference*. If you want to learn more about equations or the equation keyboard in general, see *Equations in Reference*.

Format Retrieved Documents for Default Printer

When a document is saved, the printer selection for that document is also saved with it. If you are retrieving a document that was saved for a printer that is not the printer currently selected on the Printer, Select feature (Shift-F7,s), WordPerfect needs to know if you want to reformat the document for the currently selected printer or select the printer with which the document was saved.

A **Yes** setting for this option instructs WordPerfect to reformat the document for the currently selected printer. Keep in mind that among other things, this may change the way certain fonts and attributes are printed.

A **No** setting for this option instructs WordPerfect to try to select the printer for which the document was created. If that printer is not on your list of selectable printers, and the .PRS File is not found in the printer directory, WordPerfect displays a message indicating that the document is not formatted for the currently selected printer, then formats the document for the currently selected printer.

If you decide to change Format Retrieved Documents to **Yes** after a document has been retrieved, the printer selection already attached to that document will not change.

For more information on printer selection and the printing process, see *Printing—General Information* and *Printer, Select* in *Reference*.

Initial Codes

This option lets you enter codes that will be in effect each time you begin creating a document in WordPerfect. A feature similar to this option is located on the Format: Document menu (Shift-F8,3), and the method for entering the codes is the same (see *Initial Codes* in *Reference*).

Examples of codes you can enter in the Initial Codes options are margin, justification, tab, and paper size/type settings.

Any settings made with the feature on the Format: Document menu override settings made with this option. Any settings made in the document itself override settings made with both options.

Merge

This option determines the field and record delimiters for a DOS text (or pre-WordPerfect 4.0) secondary merge file. In other words, when you merge information using a DOS text (or pre-WordPerfect 4.0) file as a secondary file, this option tells WordPerfect how fields and records are divided in that secondary file.

After you select this option, select **Field Delimiters** (1) or **Record Delimiters** (2). Then, type the characters that determine where fields or records begin, press **Down Arrow** (↓), and type the characters that determine where fields or records end. While you may not have beginning characters, you should definitely have ending characters. Pressing **Enter** inserts a Line Feed code [LF]. Pressing **Ctrl-m** inserts a Carriage Return code [CR].

For more information on merge, see *Merge* in *Reference*.

Print Options

These options let you change the appearance of a printed document. Most of them are also located on the Print menu (Shift-F7) and are discussed in detail under *Print Options* in *Reference*.

Settings made on the Print menu override settings made with this option but are only in effect until you exit the current document.

One of the two options that are located on this menu, but not on the Print menu, is the Redline Method. It is also located on the Format: Document menu (Shift-F8,3). The method for setting it is the same, but the setting on the Format: Document menu overrides the setting on this menu (see *Redline/Strikeout* in *Reference*).

The other option, Size Attribute Ratios, lets you determine the size ratio of text with certain attributes as compared to the current base font. For example, if you want to make text formatted as Large to be twice as large as normal text, enter

200% next to the Large heading. WordPerfect will use this information to select the correct font when the document is printed.

The Size Attribute Ratio option does not change your printer's capabilities. In other words, the fonts your printer has or what it can do with those fonts, determines how much effect the Size Attribute Ratio has on your printed text. If you have a printer with numerous fonts that can be scaled to size, the Size Attribute Ratio will have a large effect. If you have a printer with one font or print wheel, the Size Attribute Ratio will have no effect.

If you do not have a font that is the exact size you specified, WordPerfect will usually pick the font closest to that size.

Changes to the Size Attribute Ratio option only affect printer definitions. In order for the changes to take effect in the printer definition for a non-PostScript printer, you must update the definition (see *Update* under *Printer, Select* in *Reference*). After updating the definition, documents saved with that printer selected will reflect the changes.

You do not have to update PostScript printer definitions.

For a discussion on how fonts are assigned to WordPerfect attributes, see *Font* in *Reference*.

Repeat Value

This option determines the initial (default) value for the Repeat Value feature. You can also set this value with the Repeat Value feature itself, and the setting made with the Repeat Value feature overrides the setting made with this option (see *Repeat Value* in *Reference*).

Table of Authorities

This option determines how entries in your table of authorities will be formatted. The information is exactly the same as on the Definition for Table of Authorities menu (Alt-F5,5,4). Settings made on the Definition for Table of Authorities menu insert a code in your document and override settings made with this option (see *Table of Authorities* in *Reference*).

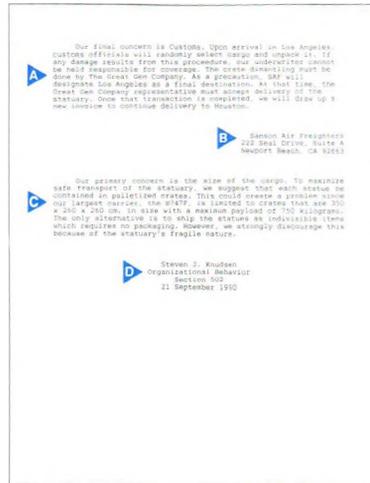
See Also: Date; Equations; Initial Codes; Merge; Print Options; Repeat Value; Table of Authorities

J Justification

The WordPerfect Justification feature is used to align text. Using the Justification feature, you can align multiple lines of text on the right or left margins, on both margins, or center it between margins.

The screen below shows the four types of justification you can use in WordPerfect.

- A LEFT JUSTIFICATION
- B RIGHT JUSTIFICATION
- C FULL JUSTIFICATION (BOTH LEFT AND RIGHT)
- D CENTER JUSTIFICATION



You can use the *Flush Right (Alt-F6)* and *Center (Shift-F6)* features to right-align or center a single line of text.

To change justification in your document,

- 1 Move the cursor to the beginning of the line where you want to change justification.

If you don't change justification at the beginning of a line, WordPerfect inserts a Deletable Soft Return [DSRt] in your document before the Justification code in order to force the code to be placed at the beginning of a line.

- 2 Press **Format** (Shift-F8), then select **Line** (1).

 *Select Line from the **Layout** menu.*

- 3 Select **Justification** (3).

- 4 Select the justification option of your choice (details about the options are described below).

- 5 Press **Exit** (F7) until you return to the normal editing screen.

The change remains in effect from the cursor forward in the document. If you want to change the justification again, you must go through the steps above.

Center Justification

Center Justification centers lines of text between margins as you can see in the example that accompanies this reference section. If you divide a center-justified line of text in half, the same amount of text exists on both the left and right sides of the line.

This setting is much like the Center (Shift-F6) feature except it is much better at centering multiple lines of text. If you were to use the Center feature to center multiple lines of text, you would need to turn on Center at the beginning of every line. With Center Justification, all you need to do is turn it on and subsequent lines of text are centered.

When Center Justification is active, you cannot use the Center, Flush Right, Tab, and Tab Align features.

Full Justification

Full Justification aligns lines of text on both the left and right margins as you can see in the example that accompanies this reference section. In order to do so, spaces between words must be compressed or expanded as necessary (see *Word Spacing Justification Limits* below). Full Justification will not show on the normal editing screen but will display in the View Document screen correctly.

When Full Justification is active, you can use the Center, Flush Right, and Tab Align features.

Left Justification

Left Justification is used to produce a “ragged right” margin as you can see in the example that accompanies this reference section. Text is aligned at the left margin, but not at the right margin. If Left Justification is active, you can still use the Center, Tab Align, and Flush Right features.

Right Justification

Right Justification is used to produce a “ragged left” margin as you can see in the example that accompanies this reference section. Text is aligned at the right margin, but not at the left margin.

This setting is much like the Flush Right (Alt-F6) feature except it is much better at right-aligning multiple lines of text. If you were to use the Flush Right feature to right-align multiple lines of text, you would need to turn on Flush Right at the beginning of every line. With Right Justification, all you need to do is turn it on and subsequent lines of text are flushed right.

When Right Justification is active, you cannot use the Center, Flush Right, and Tab Align features.

Existing Text

If you want to Center or Right Justify existing lines of text, block the text, press the **Center** (Shift-F6) or **Flush Right** (Alt-F6) keys, then type y. Even though you are pressing those keys, a Justification code (rather than a Center or Flush Right code) is placed in front of the block. At the end of the block, WordPerfect inserts another Justification code which changes justification back to what it was before the text you blocked.

Hyphenation

Like Justification, Hyphenation improves the look of the printed page. You cannot, however, hyphenate right- or center-justified text. For more information on hyphenation, see *Hyphenation in Reference*.

Search

If you enter a Justification code in the Search feature, you will notice that the code is represented as [Just]. This is a generic Justification code that will find any of the four types of Justification codes.

Tables

When WordPerfect encounters a table, the justification setting is turned off at the beginning of the table, then turned back on at the end of the table. Within the table, the Table Position option determines the alignment of the entire table structure (see *Position* under *Table, Edit Structure in Reference*).

The Justification feature can be used within a table to determine text alignment inside cells. When a justification setting is made with the Justification feature, it only affects text in the cell where the justification setting is made.

You can also change the Justify settings under the Table Format options to make justification settings for individual cells or entire columns of cells. Table Justify settings, however, are overridden by any settings you make with the Justification feature inside of the table. The Table Justify settings allow for an additional option, Decimal Align, which lets you align text on a decimal character. This is useful if the table contains numbers.

For more information on justification in tables, see *Table, Format Columns and Cells in Reference*.

Word Spacing Justification Limits

When Full Justification is active, WordPerfect expands or compresses spacing between words as needed to justify the text on a line. The Word Spacing Justification Limits option lets you set limits on this expansion and compression. Once a limit is reached, WordPerfect then begins to adjust spacing between characters.

To adjust the Word Spacing Justification Limits,

- 1 Move the cursor to where you want to set the limits.
- 2 Press **Format** (Shift-F8), then select **Other** (4).
-  *Select Other from the Layout menu.*
- 3 Select **Printer Functions** (6), then select **Word Spacing Justification Limits** (4).
- 4 Enter a compression percentage, then enter an expansion percentage.

The percentages you enter are percentages of an existing space. For example, if you do not want WordPerfect to compress a space more than 60% (.6) of its normal size, enter 60% for the compression percentage. If you do not want WordPerfect to expand a space more than 120% (1.2) of its normal size, enter 120% for the expansion percentage.

For the expansion percentage, anything over 999% is considered unlimited.

- 5 Press **Exit** (F7) until you return to the normal editing screen.

If your printer cannot support this feature, Word and Letter Spacing will have no effect.

See Also: Center; Flush Right; Tab Align

K Kerning

On the printed page, certain letter pairs appear to have more space between them than others because of the shape and slant of each letter. If you would like to reduce the space between these letters, WordPerfect offers a feature called *Kerning*.

△ UN-KERNED LETTER PAIRS

△ KERNED LETTER PAIRS



WALTER
WALTER

Some fonts are defined with kerning tables while others are not. For example, there is no mono-spaced font with defined kerning tables. The printer resource file (.PRS file) determines which letter combinations are kerned.

- 1 Move the cursor to where you want kerning to begin.
- 2 Press **Format** (Shift-F8) to display the Format menu, then select **Other** (4).
 Select Other from the Layout menu.
- 3 Select **Printer Functions** (6).
- 4 Select **Kerning** (1).
- 5 Type **y** to turn on kerning
or
Type **n** to turn off kerning.
- 6 Press **Exit** (F7) to return to the document.

Notes

Codes

Kerning starts at the [Kern:On] code and affects text from that point forward in the document until it reaches a [Kern:Off] code.

Manual Kerning

Depending on your needs, you can manually kern by inserting an Advance code between the pair of characters to be kerned (see *Advance in Reference*).

Printers and Kerning

By using the Printer Program, it is possible to define kerning tables for specific sets of characters by making adjustments to your .ALL file. For more information, see *Printer Program in Reference*.

Test File

KERN.TST is a file containing the letter pairs which are most often kerned. Retrieve this file, select the printer you are using, and change the base font to the

font which you want to test. You may then print the file to see how the letter pairs are kerned for the chosen font.

KERN.TST is installed with the Printer Program files. If you did not install the Printer Program files when you installed WordPerfect or have not subsequently done so, you must do so if you wish to use KERN.TST (see the Installation Instructions card).

See Also: Printer Program; Word and Letter Spacing

Keyboard Layout

When WordPerfect is shipped, certain WordPerfect features and operations are assigned to certain keyboard keys. For example, Cancel is assigned to the F1 function key, Help is assigned to the F3 function key, and so on. Many of you have learned how to use WordPerfect with these key assignments, and changing the assignments might prove frustrating to those of you who like the key assignments just the way they are.

But to keep the key assignments as they are and to prohibit you from changing them can prove frustrating if you have switched to WordPerfect from another word processing program, or if you would simply like to design a keyboard layout of your own. To help those of you who would like to tailor key assignments to your own needs, WordPerfect provides the Keyboard Layout feature.

The Keyboard Layout feature lets you reassign or *remap* WordPerfect features and operations to the keys on your keyboard. This includes the function keys (F1 through F10 or F1 through F12, depending on your keyboard), the character keys, and the Alt, Ctrl, and Shift states of the character and function keys.

This lets you assign features and operations to the keys of your choice. For example, many software programs use F1 as the Help key. If you feel more comfortable with F1 as the Help key instead of F3, you can re-assign Help to the F1 key. Then, you can re-assign Cancel to another key. To do this, you can create a keyboard layout from which you can modify some, or all, of the key assignments.

There are two ways of assigning keys, and they are discussed in *Keyboard Layout, Edit and Keyboard Layout, Map in Reference*. After you have created a keyboard layout, the process for selecting it and putting it to use is very simple.

WordPerfect includes some keyboard layouts when it is shipped. For more detail on these, see Appendix H: Keyboards.

- 1 Press **Setup** (Shift-F1).
 Select **Setup** from the **File** menu.
- 2 Select **Keyboard Layout** (5).

- 3 Move the cursor to the keyboard of your choice, then choose **Select (1)** to select it.

The keyboard names displayed on the Setup: Keyboard Layout menu are the keyboard files (files with a .WPK extension) listed in the keyboard/macro directory (see *Location of Files* in *Reference*). If the keyboard you want to use is not listed, either you have not created it, or it is not located in the keyboard/macro directory that you specified in Location of Files. If you have not created it, see *Create* below. If it is not located in the keyboard/macro directory, see *Location of Files* in *Reference*.

- 4 Press **Exit (F7)** to return to the normal editing screen.

The keyboard selection you make is stored in the WP{WP}.SET file and remains in effect each time you start WordPerfect.

Notes

Copy

The Copy option on the Setup: Keyboard Layout menu lets you copy an existing keyboard layout. Use this option if you want to create a keyboard layout using an existing keyboard layout as a model.

To copy a keyboard layout, move the cursor to the name of the keyboard layout you want to copy in the Setup: Keyboard Layout menu, select **Copy (5)**, then enter a name for the new keyboard.

You can enter up to eight characters for a keyboard name. If you try to name a keyboard with the name of an existing keyboard, you will get an error message and must try naming the keyboard with another name.

Create

The Create option on the Setup: Keyboard Layout menu lets you create and name a keyboard layout. To do so, select **Create (4)** from the Setup: Keyboard Layout menu, then enter a name (up to eight characters) for the keyboard. When you give a keyboard a name, it is stored as a file in the keyboard/macro directory and a .WPK extension is added to the name (see *Location of Files* in *Reference*).

The new keyboard initially has the same key assignments as your original keyboard. For information on editing the keyboards you create, see *Keyboard Layout, Edit* in *Reference*.

Delete

The Delete option on the Setup: Keyboard Layout menu lets you delete a keyboard on the menu. To delete a keyboard layout, move the cursor to the name of the keyboard you want to delete in the Setup: Keyboard Layout menu, select **Delete (2)**, then type **y**.

The keyboard is deleted from the Setup: Keyboard Layout menu and its associated .WPK file is deleted from your disk.

Edit

The Edit option on the Setup: Keyboard Layout menu lets you edit key assignments for a keyboard layout. Using this option, you can assign WordPerfect features, macros, Compose characters, and keyboard characters to the various keyboard keys. For more information, see *Keyboard Layout, Edit in Reference*.

The Map option also lets you perform many of the same operations as the Edit option. For more information on the Map option, see *Keyboard Layout, Map in Reference*.

Keyboard Layouts and Macros

If you have defined an Alt-macro and execute it by pressing **Alt-letter**, WordPerfect first looks to see if a feature or operation has been assigned to that *Alt-letter* key on the current keyboard layout. If it has, WordPerfect will use the key assignment. If not, WordPerfect will search for the macro file, then execute it.

For example, if you have an Alt-d macro that normally inserts the date in your document, but are using a keyboard where Alt-d has been defined to turn on Bold, pressing **Alt-d** will turn on Bold. If Alt-d is not assigned in the keyboard layout you are using, pressing **Alt-d** will insert the date in your document.

If you want to make sure that the macro file is executed, you can press **Macro** (Alt-F10), then enter the name of the Alt-macro (e.g., **altp**).

Non-Alt-macros (macros invoked with Alt-F10) will always be accessible no matter which keyboard is active. Their operation, however, depends on several factors (see *Key Macro* under *Keyboard Layout, Edit* and *Keyboard Layout, Map in Reference*).

Keyboard Layouts vs. Alt-Macros

Keyboard layouts let you assign features and operations to *Alt-character* keys. But so does the Macro feature. What's the difference?

The obvious difference is that keyboard layouts give you more flexibility. If you read through the information in this and the following keyboard sections, you will learn that keyboard layouts let you assign more than macros to most keys on the keyboard.

When you are deciding whether to create an Alt-macro or a keyboard layout, however, you should be aware that an individual Alt-macro file takes up less disk space than a keyboard layout file. In other words, you may not want to create a keyboard layout that simply re-assigns one or two Alt keys. Try creating an Alt-macro instead (see *Macros, Define in Reference*).

Map

The Map option on the Setup: Keyboard Layout menu gives you a “big picture” or “map” of key assignments, while letting you assign WordPerfect features,

Compose characters, and keyboard characters to various keyboard keys. For more information, see *Keyboard Layout, Map* in *Reference*.

The Edit option is similar to the Map option in that it can perform all of the same operations and more, including making assignments for function keys and assigning macros to a keyboard key. For more information on the Edit option, see *Keyboard Layout, Edit* in *Reference*.

Name Search

The Name Search option on the Setup: Keyboard Layout menu lets you easily move the cursor to the keyboard name you are looking for. Select **Name Search** (n) in the Setup: Keyboard Layout menu, then begin typing the name of the keyboard you are looking for. As you type letters, the cursor moves to the keyboard name that matches those letters. To exit Name Search, press **Enter** or one of the arrow keys.

Original

The Original option on the Setup: Keyboard Layout menu lets you re-select the original keyboard. To do so, simply select **Original** (6) in the Setup: Keyboard Layout menu.

You can also switch to the original keyboard from anywhere in WordPerfect by pressing **Ctrl-6**. Unlike the Original option, Ctrl-6 temporarily disables the selected soft keyboard. Press **Ctrl-6** when you want to perform keystrokes that have been disabled by the keyboard currently in use. If you don't use the Original option or select another keyboard on the Setup: Keyboard Layout menu, the keyboard you selected prior to pressing **Ctrl-6** will be in effect the next time you start WordPerfect.

*To switch back to the keyboard you temporarily disabled without using the Setup menus, press **Ctrl-6, Ctrl-6**. The message, "Active keyboard-[keyboard name]" is displayed. To disable the Ctrl-6 option, use the /no startup option (see Appendix N: Startup Options).*

Rename

The Rename option on the Setup: Keyboard Layout menu lets you rename a keyboard. To use this option, move the cursor to a keyboard on the menu, select **Rename** (3), then enter the new name. When you select this option, the filename for the keyboard layout is also changed to the new filename. The filename maintains the .WPK extension and is stored in the keyboard/macro directory (see *Location of Files* in *Reference*).

See Also: Lesson 26; Compose; Keyboard Layout, Edit; Keyboard Layout, Map

Keyboard Layout, Edit

The Edit option on the Setup: Keyboard Layout menu (Shift-F1,5,7) is one of the two options (Map is the other) that lets you re-assign (or *remap*) WordPerfect features to keys on your keyboard. These keys become part of a *keyboard layout*.

If you want to learn more about keyboard layouts in general, see *Keyboard Layout* in *Reference*.

To use the Edit option,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Keyboard Layout** (5), then move the cursor to the keyboard you want to edit.

The keyboard names displayed on the Setup: Keyboard Layout menu are the keyboard files (files with a .WPK extension) listed in the keyboard/macro directory (see *Location of Files* in *Reference*). If the keyboard you want to edit is not listed, either you have not created it, or it is not located in the keyboard/macro directory you specified in Location of Files. If you have not created it, see *Create* under *Keyboard Layout* in *Reference*. If it is not located in the keyboard/macro directory, see *Location of Files* in *Reference*.

3 Select **Edit** (7).

The Keyboard: Edit menu is shown below.

Keyboard: Edit
Name: MACROS

Key	Action	Description
Alt-L	(KEY MACRO 11)	Go to Main Editing Screen
Alt-N	(KEY MACRO 14)	Replace an Arc with a different type
Alt-T	(KEY MACRO 7)	Transpose 2 visible characters
Alt-I	(KEY MACRO 2)	Insert a line.
Alt-D	(KEY MACRO 3)	Delete a line
Alt-F	(KEY MACRO 10)	Find the Bookmark
Alt-G	(KEY MACRO 4)	Send GO to printer
Alt-C	(KEY MACRO 8)	Capitalize 1st letter of current word
Alt-B	(KEY MACRO 6)	Restore the previous block
Alt-N	(KEY MACRO 5)	Edit the Next or Previous Note.
Alt-M	(KEY MACRO 9)	Insert Bookmark
Ctrl-F8	(KEY MACRO 17)	Font Key
Alt-F9	(KEY MACRO 1)	List Files from Graphics Key
Ctrl-C	(KEY MACRO 13)	Calculator
Ctrl-D	(KEY MACRO 12)	Generate Standard Documents
Ctrl-E	(KEY MACRO 19)	Print Name & Address on an Envelope
Ctrl-G	(KEY MACRO 18)	Glossary Macro - Expand Abbreviations

1 Action; 2 Dscrptn; 3 Original; 4 Create; 5 Move; Macro; 6 Save; 7 Retrieve;

Notice the Name heading at the top of the screen. This reminds you which keyboard layout you are editing.

4 Move the cursor to the key you want to edit.

If the key you want to edit is not displayed, its function is the same as on the original keyboard (see Create below). You can move directly to a key on the list by selecting Name Search (n), then pressing the key.

5 Select one of the options on the Keyboard: Edit screen and perform the necessary operations (see the option headings under Notes below).

6 Press **Exit** (F7) to return to the Setup: Keyboard Layout menu.

At this point, you may select one of the options from the Setup: Keyboard Layout menu, or you can press **Exit** (F7) to return to the normal editing screen. If you wish to select the keyboard for use, move the cursor to the keyboard name, then choose Select (1).

Notes

Action

This option on the Keyboard: Edit menu takes you directly into a macro editing screen called the Key: Action screen, where you can assign a WordPerfect feature or operation to the key.

```
Key: Action
Key          Alt-R
Description  Replace an AFC with a different type

(IF){STATE}64          (:)At-edit-screen/no-block"
(ELSE)
(RETURN)
(END IF)
(IF){STATE}612R"
(FROMF)block:mod:ha:word:off"
(RETURN)
(END IF)

(DISPLAY OFF)          (:)Check-for-confirmation"
(CHR)0"Confirm-Replace?-(Y/N)-No[Left]{Left}"
(CASE){VAR 0}"
y"yes"Y"yes
(ASSIGN)0"

Ctrl-PgUp for macro commands: Press Exit when done
```

Depending on what you want to do in this screen, your task can be as simple as assigning a feature located on a function key to another key, or it can be as intricate as creating the most powerful WordPerfect macro.

To use this option, move the cursor to the key on the Keyboard: Edit menu whose assignment you want to change, select Action (1), then edit the key as necessary. Press **Exit** (F7) when you are finished.

The procedure for editing in the Key: Action screen is the same as editing in the WordPerfect Macro Editor. Before you decide to edit in the Key: Action screen,

you may want to read *Macros, Macro Editor* in *Reference* to learn about the things you can do in the Key: Action screen.

The following are some simple operations you can perform:

To assign a function key feature to the key, press the function key for that feature. For example, press the function key for ♦Indent (F4) if you want to assign the ♦Indent feature to the key.

If you want to assign Cancel, Exit, Help, or many of the cursor movement keys (e.g., arrow keys), you must press Ctrl-v before pressing the key assigned to those features.

If you want to assign a Compose character, press **Compose** (Ctrl-2), type the WordPerfect character set number, a comma, the character within the character set, then press **Enter** (see *Compose* in *Reference*).

If you want to use the WordPerfect macro programming language, press **Macro Commands** (Ctrl-PgUp) to display the programming commands, move the cursor to the command you want, then press **Enter**.

Notice that commands such as Block Append/Copy/Move and Item Up/Down/Left/Right are located on the list of programming commands. This is how you can assign these functions to keys on keyboards without an enhanced BIOS.

Cancel

Pressing **Cancel** (F1) in the Keyboard: Edit menu displays the prompt “Cancel Changes? No (Yes).” Typing **n** keeps you in the Keyboard: Edit menu while typing **y** cancels all changes you made since you entered the Keyboard: Edit menu and exits you to the Setup: Keyboard Layout menu. If you don’t want to cancel the changes, press **Exit** (F7) instead of **Cancel** to exit the menu and save the changes.

Create

This option on the Keyboard: Edit menu lets you assign a WordPerfect feature or operation to a key that is not listed on the Keyboard: Edit menu. To use this option, select **Create** (4) from the Keyboard: Edit menu, then press the key you want to assign the feature or operation to.

After you press the key and enter a description for the key, you are placed in a screen called the Key: Action screen, and the procedure is the same as if you had selected the **Action** option for an existing key assignment. Read the information under *Action* above to find out what your options are at this point.

Delete

If you want to delete a key and its assignment from the Keyboard: Edit menu, move the cursor to the key you want to delete, press **Delete** (Del) or **Backspace**, then type **y** to confirm the deletion. When you delete a key from the Keyboard: Edit menu, its assignment is returned to what it was on the original keyboard.

Description

This option on the Keyboard: Edit menu lets you enter or add a description for a key. The description is used to tell you what the key does and is displayed on the Keyboard: Edit screen.

To use this option, move the cursor to a key on the Keyboard: Edit menu, select Description (2), then enter a description for the key.

Key Macro

If you retrieve a macro file to a key (see *Retrieve* below) or if you create a macro for a key (see *Action* above), the macro is represented as {Key Macro #} under the Action heading on the Keyboard: Edit screen.

The Key Macro command is used in macros where you press the key associated with the key macro. For example, suppose you assign a macro to the F1 key in a keyboard layout called TESTKEY, and suppose that macro becomes {Key Macro 1}. If you are using TESTKEY while defining a macro called MACRO, and then press F1, {Key Macro 1} is inserted into the macro (and can be viewed in the Macro Editor).

When you execute MACRO and it comes time for WordPerfect to interpret the {Key Macro 1} command, it will look in the keyboard layout you are currently in, then execute the steps associated with the key assigned to {Key Macro 1}. As long as everything is the same as when you defined the macro (the keyboard layout, the key assigned to {Key Macro 1}, the operation that {Key Macro 1} represents), the macro will work as expected. If any of those things have changed by the time you execute the macro, the macro may not function as you would like.

For this reason, we suggest that you create your macros with the original keyboard in effect. With the original keyboard in effect, it is impossible to insert {Key Macro} commands into a macro. Therefore, as long as the macro is created correctly, it should execute as expected no matter which keyboard layout you are in. The only exception to this is an Alt-macro which is discussed in *Keyboard Layouts and Macros* under *Keyboard Layout* in *Reference*.

Keyboard Layout: Map

The Map option on the Setup: Keyboard Layout menu is similar to the Edit option discussed in this section in that it lets you assign WordPerfect features and operations to keys. It is another way to edit the same keyboard layout.

Unlike the Edit option, the Map option does not let you assign an existing macro to a key, save a key assignment as a macro, or assign features and operations to function keys. One advantage the Map option has over the Edit option, however, is that it gives you a “big picture” of your keyboard layout. It shows most of the keys on your keyboard and the features or operations assigned to them. More information on this option can be found in *Keyboard Layout, Map* in *Reference*.

Move

This option on the Keyboard: Edit menu lets you move a key assignment from a key existing on the Keyboard: Edit menu to a key that may or may not exist on the menu. To use the option, move the cursor to the key on the Keyboard: Edit menu whose assignment you want to move, select **Move (5)**, then press the key you want to move the feature or operation to.

For example, if you have retrieved a macro named TEST.WPM to F6 and you want to change its assignment to F8, move the cursor to the F6 key assignment on the Keyboard: Edit menu, select **Move (5)**, then press **F8**.

If you are replacing a key assignment that previously existed on a key, you must type **y** to confirm the replacement. The key from which an assignment was moved is returned to its assignment on the original keyboard and is no longer displayed on the Keyboard: Edit menu.

Original

This option on the Keyboard: Edit menu lets you return a key's function to what it was on the original keyboard. In effect, it deletes the "remapped" definition of this key from the keyboard layout.

To use this option, move this cursor to the key on the Keyboard: Edit menu you want to change, select **Original (3)**, then type **y**.

Retrieve

This option on the Keyboard: Edit menu lets you assign an existing macro to a key. To do so, select **Retrieve (7)** from the Keyboard: Edit menu, press the key you want to assign the macro to, then enter the name of the macro. If you are replacing a key assignment that previously existed on a key, you must type **y** to confirm the replacement.

WordPerfect will look for the macro in the keyboard/macro directory unless you enter a different pathname.

Once a macro is retrieved to a key, the association with the macro ends. In other words, editing changes to the macro itself (not the key assignment), or the macro assigned to the key do not affect each other.

More information about naming macros can be found in *Macros, Define in Reference*. More information about the keyboard/macro directory can be found in *Location of Files in Reference*.

Save

This option on the Keyboard: Edit menu lets you save a key assignment as a macro. This enables you to use that assignment as a macro no matter which keyboard is selected.

For example, suppose you have a key assignment that saves a document, then clears the screen. If you want that assignment to be stored as a macro that can

be executed with the Macro feature regardless of the keyboard layout you are using, use this option.

To do so, move the cursor to the key on the Keyboard: Edit menu whose assignment you want to save as a macro, select **Save (6)** from the Keyboard: Edit menu, then enter the name you want to call the macro. If you are replacing a macro that previously existed under the same name, you must type **y** to replace the macro. The macro will be saved to the keyboard/macro directory (unless you enter a pathname to a different directory) and a **.WPM** extension will be added.

More information about naming macros can be found in *Macros, Define* in *Reference*. More information about the keyboard/macro directory can be found in *Location of Files* in *Reference*.

See Also: Lesson 26; Compose; Keyboard Layout; Keyboard Layout, Map; Macros, Macro Editor

Keyboard Layout, Map

The Map option on the Setup: Keyboard Layout menu lets you see the key assignments for most keys on a keyboard layout. In addition, you can assign WordPerfect features and operations to keys on the Keyboard: Map menu.

If you like to assign WordPerfect characters to keys on a keyboard layout, this option is especially useful for helping you determine which keys the characters are assigned to.

To use the Map option,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the *File* menu.

2 Select **Keyboard Layout (5)**, then move the cursor to the keyboard whose map you want to display.

The keyboard names displayed on the Setup: Keyboard Layout menu are the keyboard files (files ending with a **.WPK** extension) listed in the keyboard/macro directory (see *Location of Files* in *Reference*). If the keyboard whose map you want to display is not listed, either you have not created it, or it is not located in the keyboard/macro directory you specified in *Location of Files*. If you have not created it, see *Create* under *Keyboard Layout* in *Reference*. If it is not located in the keyboard/macro directory, see *Location of Files* in *Reference*.

3 Select **Map (8)**.

Cancel

Pressing **Cancel** (F1) in the Keyboard: Map menu displays the “Cancel Changes?” prompt. Typing **n** keeps you in the Keyboard: Map menu, while typing **y** cancels all changes you made since you entered the Keyboard: Map menu and exits you to the Setup: Keyboard Layout menu. If you don’t want to cancel the changes, press **Exit** (F7) instead of **Cancel** to exit the screen and save the changes.

Compose

This option on the Keyboard: Map menu lets you enter a WordPerfect character for a key. To use the option, move the cursor to the Action line under the key, select **Compose** (5), type the WordPerfect character set number, a comma, the character within the character set, then press **Enter** (see *Compose* in *Reference*).

Since the Keyboard: Map menu is in text mode, the number of characters WordPerfect can display is limited by the computer, monitor, and display card. If a character cannot be displayed, a box appears on the screen. Read the *Printing—General Information* section in *Reference* to learn how WordPerfect characters are printed.

Delete

If you want to delete a key assignment for a key, move to the Action line under that key on the Keyboard: Map menu, press **Delete** (Del) or **Backspace**, then type **y** (if necessary) to confirm the deletion. When you delete a key assignment, the key is then assigned to its function on the original keyboard.

Description

This option on the Keyboard: Map menu lets you enter a description for the key. The description is used to tell you what the key does.

To use this option, move the cursor to the Action line under the key on the Keyboard: Map menu whose description you want to change, select **Description** (3), then enter a description for the key.

Key

This option on the Keyboard: Map menu lets you assign a feature or operation that exists on one key to the key on which the cursor is resting. To use this option, move the cursor to the Action line under a key on the Keyboard: Map menu, select **Key** (1), then press the key whose feature or operation you want to assign.

For example, move the cursor to Alt-c, select **Key** (1), then press **Cancel** (F1) to assign **Cancel** to Alt-c.

If you are replacing an existing macro, WordPerfect will display the “Replace KEY MACRO?” message before letting you replace the macro. Type **y** to confirm.

If the key you press after selecting this option already has a function or operation assigned to it in the current keyboard, it will execute that function. For this reason, we suggest you use Ctrl-6 or the Original option on the Setup: Keyboard Layout screen to make sure the original keyboard is in effect before you make assignments with this feature (see *Original* under *Keyboard Layout, Edit in Reference*).

Key Macro

If you create a macro for a key (see *Macro* below), the macro is represented as {Key Macro #} under the Action heading on the Keyboard: Map screen.

The Key Macro command is used in macros where you press the key associated with the key macro. For example, suppose you assign a macro to the F1 key in a keyboard layout called TESTKEY, and suppose that macro becomes {Key Macro 1}. If you are using TESTKEY while defining a macro called MACRO, and then press F1, {Key Macro 1} is inserted into the macro (and can be viewed in the Macro Editor).

When you execute MACRO and it comes time for WordPerfect to interpret the {Key Macro 1} command, it will look in the keyboard layout you are currently in, then execute the steps associated with the key assigned to {Key Macro 1}. As long as everything is the same as when you defined the macro (the keyboard layout, the key assigned to {Key Macro 1}, the operation that {Key Macro 1} represents), the macro will work as expected. If any of those things have changed by the time you execute the macro, the macro may not function as you would like.

For this reason, we suggest that you create your macros with the original keyboard in effect. With the original keyboard in effect, it is impossible to insert {Key Macro} commands into a macro. Therefore, as long as the macro is created correctly, it should execute as expected no matter which keyboard layout you are in. The only exception to this is an Alt-macro which is discussed in *Keyboard Layouts and Macros* under *Keyboard Layout in Reference*.

Keyboard Layout: Edit

The Edit option on the Setup: Keyboard Layout menu is similar to the Map option discussed in this section in that it lets you assign WordPerfect features and operations to keys. It is another way to edit the same keyboard layout.

The Edit option doesn't give you the "big picture" that Map gives you. The advantages to using the Edit option, however, are that it lets you retrieve an existing macro to a key, save a key assignment as a macro, and assign features and operations to function keys and other keys such as Escape, Backspace, and the arrow keys that are not located on the Keyboard: Map menu.

More information on this option can be found in *Keyboard Layout, Edit in Reference*.

Macro

This option on the Keyboard: Map menu lets you use the Key: Action screen to create a macro for a key. To do so, move the cursor to the Action line under a key on the Keyboard: Map menu, select **Macro** (2), then edit the key as necessary. Press **Exit** (F7) when you are finished.

The procedure for editing in the Key: Action screen is the same as editing in the WordPerfect Macro Editor. Before you decide to edit in the Key: Action screen, you may want to read *Macros, Macro Editor* in *Reference* to learn about the things you can do in the Key: Action screen.

The following are some simple operations you can perform:

To assign a function key feature to the key, press the function key for that feature. For example, press the function key for ♦Indent (F4) if you want to assign the ♦Indent feature to the key.

*If you want to assign Cancel, Exit, Help, or many of the cursor movement keys (e.g., arrow keys), you must press **Ctrl-v** before pressing the key assigned to those features.*

If you want to assign a Compose character, press **Compose** (Ctrl-2), type the WordPerfect character set number, a comma, the character within the character set, then press **Enter** (see *Compose* in *Reference*).

If you want to use the WordPerfect macro programming language, press **Macro Commands** (Ctrl-PgUp) to display the programming commands, move the cursor to the command you want, then press **Enter**.

Notice that commands such as Block Append/Copy/Move and Item Up/Down/Left/Right are located on the list of programming commands. This is how you can assign these functions to keys on keyboards without an enhanced BIOS.

Name Search

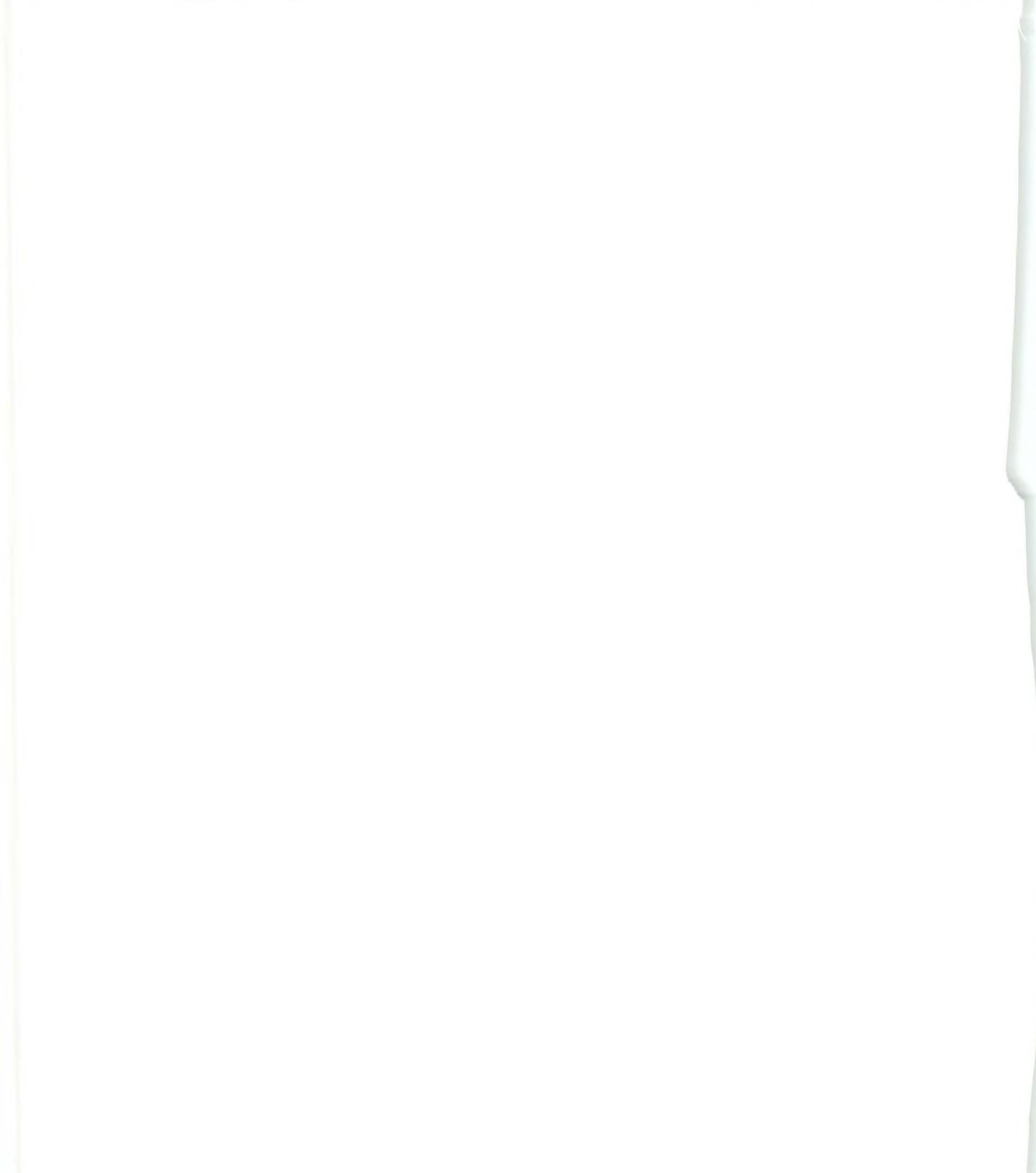
The Key Name Search option on the Keyboard: Map menu lets you easily move the cursor to the key you are looking for. To use this option, select Key Name Search (n) in the Keyboard: Map menu, then press the key you are looking for.

Original

This option on the Keyboard: Map menu lets you return a key's function to what it was on the original keyboard layout. To use this option, move to the Action line under a key on the Keyboard: Map menu, select **Original** (4), then type **y** (if asked to confirm).

You will be asked to confirm if you are deleting a key macro.

See Also: Lesson 26; Compose; Keyboard Layout; Keyboard Layout, Edit; Macros, Macro Editor



L Labels

WordPerfect is commonly used to produce mailing labels. This process is as simple as providing WordPerfect with the information it needs to know about your labels, then inserting that information in your document where you want to begin creating mailing labels.

Once you have done so, you can type the labels individually or merge one or more labels from a secondary file into a primary file.

Since the Labels feature is actually an option on the Paper Size/Type menu and can be used for more than labels (e.g., program covers, side-by-side landscape pages), it is a good idea to become familiar with the Paper Size/Type feature (see *Paper Size/Type* in *Reference*). Also, *Lesson 28: Envelopes and Labels* in the *WordPerfect Workbook* talks about using Merge to create mailing labels.

The steps below take you through creating paper size and type information for labels. If you have already created this information, skip to the notes at the bottom of the steps to see what your options are at that point.

1 Press **Format** (Shift-F8), then select **Page** (2).

 *Select Page from the Layout menu.*

2 Select **Paper Size/Type** (7).

3 Select **Add** (2).

4 Select a paper type. We suggest you select **Labels** (4) to make the paper type easily recognizable, but you have the option of selecting any of the other types listed or creating one of your own.

5 At this point, you can select and change any of the **Format: Edit Paper Definition** options. These options tell WordPerfect the size of the page you are using, the font orientation, where the form is located in your printer and more. These options are explained in *Paper Size/Type* in *Reference*.

Of particular importance is the size. If you are printing an entire sheet of labels, enter the dimensions of the entire sheet. If you are using tractor-fed labels, see *Tractor-Fed Labels* under *Notes* below.

6 Select **Labels** (8), then type **y** to move to the **Format: Labels** screen.

7 Change your label settings as necessary. For more information about the options on the **Format: Labels** menu, see the option headings below.

8 Press **Exit** (F7) twice to return to the **Paper Size/Type** menu.

After you have created a **Paper Size/Type** for your labels, you can select it immediately by choosing **Select** (1), then pressing **Exit** (F7) until you return to the normal editing screen. You can also select it at any other time by moving the cursor to where you want to start using labels, going to the **Paper Size/Type**

menu (Shift-F8,2,7), highlighting the correct Paper Type, choosing **Select** (1), and pressing **Exit** (F7).

If you are not merging information (see *Merge in Reference*), place the code at the top of the page where you want it to take effect. If you don't place it at the top of the page, it will go into effect starting with the next page.

Important: *If you are creating a primary file preparatory to merging name and address information from a secondary file (see *Merge in Reference*), you should place the Paper Size/Type information in Document Initial Codes (Shift-F8,3,2) (see Initial Codes in Reference).*

Also, if WordPerfect will not allow you to enter the Paper Size/Type code, try setting the left and right (Shift-F8,1,7) and top and bottom (Shift-F8,2,5) page margins (not the label margins) to 0" before entering the Paper Size/Type code.

Once you have selected the labels paper size and type, you can begin typing the text for your labels if you aren't merging information from a secondary file. If you are merging information from a secondary file, you can begin creating your primary file.

After a Paper Size and Type code is entered, any editing changes you make to the information on the Paper Size/Type menu do not affect the existing code. If you want to have your editing changes reflected in the document, you must delete the existing code, then re-enter the paper size/type information after you make the changes.

When you are satisfied with your label text, insert the labels into your printer and print them as you would any other document (see *Printing Labels* under *Notes* below).

Label Size

This option on the Format: Labels menu lets you enter the width and height of an individual label. If your labels are 2.75" wide by 1" high, these are the measurements you should enter.

Number of Labels

This option on the Format: Labels menu lets you enter the number of columns and rows you have on your sheet of labels. Columns run vertically, while rows run horizontally.

Top Left Corner

This option on the Format: Labels menu lets you enter the location of the top left corner of the first label on the sheet of labels. The top measurement is measured from the top edge of the page to the top edge of the first label, while the left measurement is measured from the left edge of the page to the left edge of the first label.

If your first label starts .5" from the top of the page and .5" from the left edge of the page, these are the measurements you should enter for this option. If your

labels start at the top left edge of the page, 0" and 0" are the measurements you should enter.

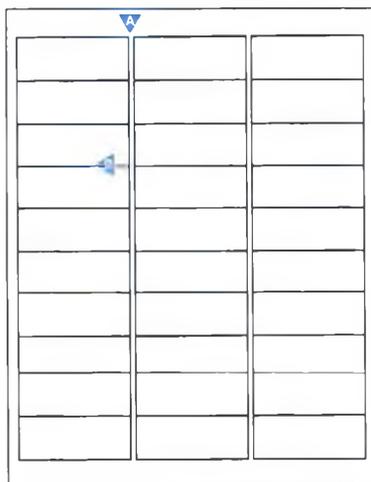
If you are using tractor-fed labels, the top left corner measurements should be 0", 0", and the label(s) should be positioned in the printer so that the printer will print on the first line of the top left-most label (see *Tractor-Fed Labels* under *Notes* below).

Distance Between Labels

This option on the Format: Labels menu lets you enter the distance between labels on your sheet of labels. There are two measurements, one for distance between columns and one for distance between rows.

When you measure the distance, measure the distance between two labels. The illustration below shows you an example of a sheet of labels and where you should measure the distance between columns and rows.

- ▲ COLUMN DISTANCE
- ▲ ROW DISTANCE



If there is no space between labels on the page, enter 0" and 0" for the measurements.

Label Margins

This option on the Format: Labels menu lets you enter the left, right, top, and bottom margins you want for each individual label. In other words, this option does not set margins for the entire sheet of labels; it sets them for the individual labels themselves.

Notes

Centering Text on Labels

You can vertically center text on a label by entering a Center Page code (Shift-F8,2,1,y) at the top of each label. If you are merging information and want to vertically center text on every label, place the Center Page code at the top of the primary file (not in Document Initial Codes).

Code

The labels Paper Size/Type code (which you can see in Reveal Codes (Alt-F3)) will display like other Paper Size/Type codes except that the label size will also be displayed (e.g., [Paper Sz/Type:8.5"x11",Labels,2"x3"]).

WordPerfect ignores any duplicate Paper Size/Type codes for labels. When WordPerfect encounters a second Paper Size/Type code for the same label form, the second Paper Size/Type code is ignored.

Entering Measurements

This feature, like other WordPerfect features that call for measurements, allows you to enter fractions (see *Units of Measure in Reference*).

Label Information Needs to be Updated for Paper Size

If you get this message when you exit the Format: Paper Size/Type menu, it is because you have changed the paper size for a paper type that is set to print labels. This message means that the current label information cannot be correct for the new paper size. You must update the label information to make it match the paper size.

Check information such as the label size, the number of rows and columns you have on the page, the label margins, and the location of the top left label. Then make the necessary corrections.

Label Margins Increased Due to Printer's Minimum Margin

This message means that at least one of the label margins (left, right, top, or bottom) had to be increased due to an unprintable region for your printer.

An unprintable region is an area measured from the edge of the page in which your printer cannot print. If one or more of your label margins is less than the unprintable region, WordPerfect increases the margin(s). This increase takes effect for all labels on the page.

Check your printer manual or consult your printer manufacturer to see if your printer has an unprintable region.

Labels Macro

A macro called LABELS.WPM has been included with WordPerfect. This macro allows you to create and insert a label Paper Size/Type code into Document Initial Codes. Using the Labels macro can greatly simplify the process of creating labels. If you want to use this macro, press **Macro** (Alt-F10), then enter **labels**.

WordPerfect will search the keyboard/macro directory for the Labels macro (see *Location of Files in Reference*). If the macro is elsewhere, you must enter the full pathname (including the filename) to the macro after pressing **Macro**.

Important: *The Labels macro is installed with the macro and keyboard files. If you chose not to install the macro and keyboard files when you installed WordPerfect or have not subsequently done so, you must do so before executing the macro (see the Installation Instructions card).*

When you retrieve the Labels macro, a list of preset label definitions for laser printers appears. Press **Switch** (Shift-F3) to see a list of label definitions for tractor-fed (dot matrix) printers.

You can scroll through either list by pressing the arrow keys or **Page Up** (PgUp) and **Page Down** (PgDn). You can also move the cursor to a particular definition by typing the name of that definition. With the definition highlighted, press **Enter** to begin building the label.

WordPerfect prompts you to specify how paper is fed into your printer. For information on these location options, see *Editing a Definition* under *Paper Size/Type* in *Reference*.

When you select an option, a message on the status line asks whether you want to insert the label definition into Document Initial Codes. Even if you choose not to insert the label definition into Document Initial Codes, the definition will be added to your Format: Paper Size/Type menu.

If you have already created a labels Paper Size/Type and then run the Labels macro, the "Error: Labels Previously Defined" message will appear. You are then taken to the Format: Paper Size/Type menu where the specified labels paper size is highlighted.

Labels Will Not Fit on Paper Size

If you get this error message, the information you have entered on the Format: Labels menu or the Format: Edit Paper Definition is incorrect. WordPerfect gives you this message because it calculates the information you have given it and knows that the labels you defined cannot fit on the page.

Check information such as the size of the page of labels, the number of rows and columns you have on the page, the label margins, and the location of the top left label. Then make the necessary corrections.

Merging Labels

If you are creating several labels, it is probably best to merge the information from a secondary file into a primary file. The secondary file should contain your mailing list, while the primary file contains the merge codes that represent the information you want to extract from the secondary file (see *Merge* in *Reference* and *Lesson 28: Envelopes and Labels* in the *WordPerfect Workbook*).

An example of a primary file that would extract the first three fields of each record in your secondary file is shown below.

```
(FIELD)1~  
(FIELD)2~  
(FIELD)3~
```

An example of two records in a secondary file is shown below.

```
Robin Pierce(END FIELD)  
InterChange, Inc.  
544 Westminster Circle NW(END FIELD)  
Atlanta, GA 30327(END FIELD)  
(END RECORD)  
-----  
Joyne Wilder-Smith(END FIELD)  
8611 Market St.(END FIELD)  
San Francisco, CA 94102(END FIELD)  
(END RECORD)  
-----
```

Field: 1

Doc 1 Pg 1 Ln 1" Pos 1"

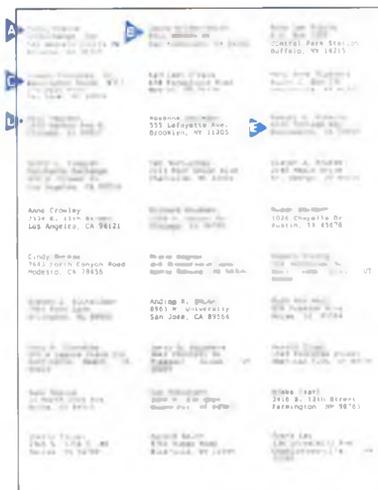
If you are merging records, go to Document Initial Codes (Shift-F8,3,2), select Paper Size/Type (Shift-F8,2,7), highlight the labels paper size/type, choose **Select (1)**, then press **Exit (F7)** to insert the labels Paper Size/Type code into the Document Initial Codes of the primary file. If you do not and are printing multiple labels, the labels may not be printed where you expect them to be.

Physical Page vs. Logical Page

WordPerfect considers the entire sheet of labels as a physical page and each individual label as a logical page. It gets the size information for the physical page under Paper Size on the Format: Edit Paper Definition menu and the size information for logical page on the Format: Labels menu. It numbers the logical

pages from left to right, then top to bottom from the top left label to the bottom right label. For example,

- ▲ LABEL ONE
- ▲ LABEL TWO
- ▲ LABEL FOUR
- ▲ LABEL SEVEN
- ▲ LABEL NINE



After you have selected the label paper size/type, the “Pg” heading on the status line in the normal editing screen reflects the logical page the cursor is on. So, even though you may be working on one sheet (physical page) of labels, you will notice that the sheet has several logical pages. This is very useful in letting you know which label the cursor is resting on and helping you move from one label to another. You can see the entire physical page of labels in View Document (Shift-F7,6).

Page Down (PgDn) will move you to the next label. Page Up (PgUp) will move you to the previous label. Go To (Ctrl-Home), then a page number will send you to a specific label.

Since labels are considered as separate “pages,” formatting features that affect subsequent pages, such as Page Numbering, Headers, and Footers, will be in effect for each label. Thus, if you have a header for every page defined at the top of the document, each label will have the header.

Also, if you print a single page, only one label (rather than the entire sheet) will be printed. Likewise, if you print selected pages, only those labels will be printed.

Printing Labels

There are several measurements you need to enter when you create labels, and a mistake on one of these measurements will give WordPerfect incorrect information. We suggest you look at your final document in View Document (Shift-F7,6) to make sure everything is correct.

If you think all of your measurements are set correctly, yet you only see one label on an entire sheet of labels in the View Document screen, make sure that your Paper Size/Type code is in Document Initial Codes (see the note marked as **"Important"** under the steps of this reference section).

Since sheets of labels are more expensive than regular sheets of paper, you may want to print some sample labels on a sheet of paper to make sure that everything is positioned properly. If you are merging a very large number of labels, just merge a few at first to make sure. This may save you the frustration of wasting several sheets of labels because a measurement was entered improperly.

If labels do not print the way you like or expect, re-check your measurements.

If you receive a beep from your computer or a message from your printer when you try to print labels, check the Control Printer menu (Shift-F7,4). If it instructs you to insert your label sheets, do so, then press g to continue. If you want to avoid this prompt, try setting the Prompt to Load setting for the labels Paper Size/Type to No (see Paper Size/Type in Reference).

If you are printing selected logical pages of labels, the labels will be printed on a single physical page of labels until that page is full. For example, if you are printing labels 1, 15, 40, and 75 on a 30-label sheet of labels, all four of the labels will be printed on the same sheet.

Program Covers

You can also use the Labels feature to create program covers or print two pages of information side-by-side as shown below.

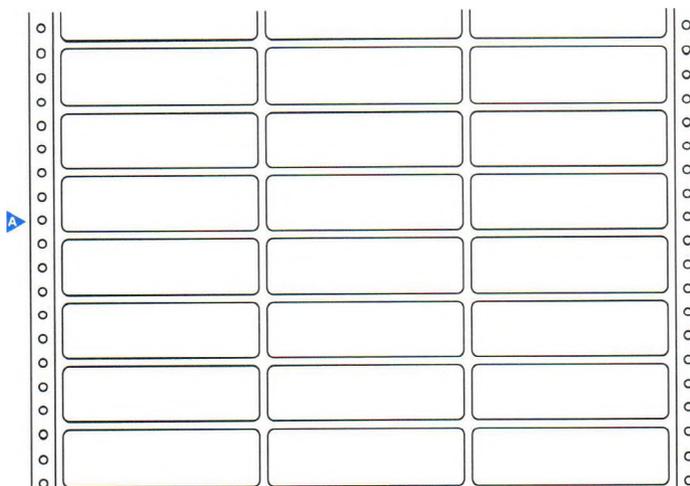
Friday Meeting 10 a.m.	
1. Introduce New Employees Sara Swenson Richard Knudsen Jan Sorenson Howard Jensen Iggie Walker Randy Richards	6. National Secretary Day Susan Williams
2. Farewell To Departing Employees James Phillips Bonnie Wilsey Tim Morris Jonathan Sprouck Billy Toomey Craig Williamson	7. Comments by Dave Jensen
3. New Break Policy John Richards	Break
4. Open House Next Thursday Alex Smith Aaroc Christiansen	8. Security Cards Officer Payne
5. Ted Houghton Parking Spaces Music in the Office Materials List	9. New Phones Rick Sumner
	10. Management Changes Harvey Carter
	11. Vacation and Sick Days Mike Jensen
	12. Concluding Remarks John Johnson Be sure to pick up your T-shirts from shipping.

To do so, specify the physical page as a landscape form, then treat each half of the page as a “label” and enter the appropriate measurements. For example, you may have an 11” x 8.5” page with two 5.5” x 8.5” “labels.”

Tractor-Fed Labels

Tractor-fed labels are labels on a sheet that has holes along its side to guide the labels through the printer. Tractor-fed labels are commonly used on dot-matrix and daisy-wheel printers.

TRACTOR-FED LABELS



Probably the most time-consuming part of printing tractor-fed labels is positioning the labels in the printer so that the first line of text will print on the first line of a label. To position the labels, set your label margins (not your page margins; see *Label Margins* above) to 0”, print a test label and calculate how far and in which direction you need to move the labels in the printer to have the first character in the label print at the top left corner of the row of labels.

Once the labels are positioned correctly, they should print correctly as long as you have entered the paper size/type and label information correctly.

When you enter label information for tractor-fed labels, we suggest you treat each row of labels as a “sheet” of labels.

When you treat each row of labels as a sheet of labels, the number of rows is always 1, and the distance between rows is always 0. However, the paper size should account for the distance between labels.

For example, if you have two-across labels that are 4” wide with a .5” space between columns, the paper width is 8.5” (4” + .5” + 4”). If you have labels that are 15/16” long with 1/16” between rows of labels, your paper height is 1” (15/16” + 1/16”).

This does not change the information you enter for the label size or the distance between columns (if you have multiple columns). Those measurements should accurately reflect the actual label size. Using the example in the paragraph above, your labels are still 4" wide and 15/16" high.

Typing Label Text

As you type label text, you can end the information for one label and move on to the next by pressing **Hard Page** (Ctrl-Enter). If you want to leave a label blank (maybe you already peeled it off and don't want to waste the rest of the sheet), press **Hard Page** (Ctrl-Enter) without entering text for the label.

If you exceed the number of lines WordPerfect can fit on a label, you can try changing the base font to a smaller font or change the top and bottom label margins (see *Font* in *Reference* and *Label Margins* above). Once you exceed the number of lines, WordPerfect inserts a soft page break (represented by a row of dashes), and the remaining text is moved to the next label.

Similarly, you can end a line of text by pressing **Enter**. Once you exceed the amount of text WordPerfect can fit on one line of a label, WordPerfect wraps the text to the next line.

Use View Document (Shift-F7,6) to see how labels will appear when they are printed.

See Also: Lesson 28; Merge; Paper Size/Type

Language

Versions of WordPerfect are available in several languages. When you write or edit in any of these languages, you can have WordPerfect help you use them correctly.

You can change the language being used as a reference for your document at any time by entering a language code.

1 Press **Format** (Shift-F8), then select **Other** (4).

 Select **Other** from the *Layout* menu.

2 Select **Language** (4), then enter letters which represent the language you want to use (see *Language Codes* below).

3 Press **Exit** (F7) to return to your document.

If you want the language code to affect all text in a document (including substructures such as footnotes), place the code in Document: Initial Codes.

Keyboard Layout

If a language which you often use contains extended characters, you can create a keyboard for that language by mapping those special characters to the keys of your choice (see *Keyboard Layout* in *Reference*).

Language Codes

The following list details the languages in which WordPerfect is available.

Language	Language Code
Afrikaans	AF
Catalan	CA
Croatian	HR
Czechoslovakian	CZ
Danish	DK
Dutch	NL
English—Australia	OZ
English—United Kingdom	UK
English—United States	US
Finnish	SU
French—Canada	CF
French—France	FR
Galician	GA
German—Germany	DE
German—Switzerland	SD
Greek	GR
Hungarian	MA
Icelandic	IS
Italian	IT
Norwegian	NO
Portuguese—Brazil	BR
Portuguese—Portugal	PO
Russian	RU
Slovak	SL
Spanish	ES
Swedish	SV
Turkish	TK
Ukranian	YK

You can also display the most current list of language codes on-screen by pressing **Help** (F3) while the cursor is on the Language entry in the Format: Other menu in step 2 above.

When you select a reference language using steps 1 through 3 above, WordPerfect inserts a language code [Lang:xx] into your document, where xx represents the two-letter code denoting that language (e.g., CA for Catalan, DK for Danish).

At any point following the code, WordPerfect then uses that language as a reference for the Sort and Date features. When you sort the document,

WordPerfect uses the guidelines of that language's alphabet, and when you insert a date, WordPerfect inserts the date in the way dates are written in that language (e.g., 12 décembre 1990 for French).

Inserting a language code does not change the language in which WordPerfect menus are being displayed.

Also, inserting a language code within the text of a document does not change the way the "(continued)" message is displayed in footnotes. If you want the "(continued)" message printed in a different language, you need to enter the language code for that language in the Initial Codes for that document (Shift-F8,3,2) (see *Initial Codes in Reference*). You must also set the Print Continued Message entry in Footnote Options to Yes (Ctrl-F7,1,4,8) (see *Footnote and Endnote, Options in Reference*). This affects only how the "(continued)" message is printed and not how it is displayed in the normal editing screen. You can view the change on-screen by using View Document (Shift-F7,6) to preview the printed document.

In order to know how to format dates and write the "(continued)" message in a given language, WordPerfect refers to the WP.LRS file. When you install WordPerfect, a WP.LRS file is stored in the same directory where the WPEXE file is found. If you want to change the information concerning a language, you can do so by editing the WP.LRS file (see *Language Resource File in Reference*).

While each copy of WordPerfect normally comes with only one copy of the Speller, Thesaurus, and Hyphenation dictionaries, you can buy additional copies in many of these languages. For information on purchasing dictionaries, you can call WordPerfect Information Services at (801) 225-5000. This number is not toll-free.

For WordPerfect to find and use a Speller, Thesaurus, or Hyphenation dictionary, that dictionary either needs to be stored in the same directory where the WPEXE file is found, or the path to the directory where the dictionary is stored needs to be listed on the Location of Files entry in Setup (Shift-F1,6,3).

If a dictionary is correctly installed, then at any point following the language code, WordPerfect uses that language's Speller for spell-checking, its Thesaurus for displaying synonyms and antonyms, and its Speller, hyphenation dictionary, or hyphenation guidelines as a reference for hyphenation.

When WordPerfect cannot find a dictionary for a certain language, it displays an error message, "WP{WP}.xx.LEX Not Found" where xx is the language code for that language.

See Also: Language Resource File

Language Resource File

When you install WordPerfect, a WPLRS file is stored in the same directory where the WP.EXE file is found. The WPLRS file is the WordPerfect language resource file. WordPerfect refers to it when you use the date feature, print the “(continued)” message in footnotes, print the Document Summary menu, and display the date and time for each file in List Files. You can change the language information by editing the WPLRS file.

For example, you may want to use different abbreviations for the months and days than those contained in the WPLRS file. You can modify any of the information in the WPLRS file to suit your specific language needs, or you can change the entries being used at all times for the language in which you purchased WordPerfect (see *Package Language* below).

The WPLRS file is a WordPerfect 5.0 secondary merge file. It is also saved in a format that can be used in the Notebook program which is a part of the WordPerfect Library and WordPerfect Office packages.

You can edit the WPLRS file in the normal editing screen just as you would edit any secondary merge file.

- 1 Press **Retrieve** (Shift-F10), then enter **wp.lrs**. If the file is not found in your default directory, you need to enter the full pathname (e.g., C:\WP51\WPLRS).

The WPLRS file is retrieved and displayed on the normal editing screen.

- 2 Make any changes you want (see *Editing the Language Resource File* below).
- 3 Press **Exit** (F7), then type **y** to indicate that you want to save the new file.
- 4 Press **Enter** and type **y** to replace the old WPLRS, then type **n** to remain in WordPerfect and return to the normal editing screen.

Certain changes made to the WPLRS file do not take effect until you exit WordPerfect and then enter again.

Notes

Editing the Language Resource File

When a WPLRS file is retrieved into WordPerfect, the first thing that appears on-screen is the Notebook header which formats the file so that it can be

retrieved into the Notebook in the WordPerfect Library or WordPerfect Office packages.

A HEADER

```
^N
01 F01 1,1,1,3,
02 F02 1,5,1,37,
03 F03 2,1,13,26,
04 F04 2,30,13,35,
05 F05 15,1,21,26,
06 F06 15,30,21,35,
07 F07 1,39,1,57,
08 F08 1,59,1,77,
09 F09 2,39,2,77,
10 F10 3,39,3,77,
11 F11 4,39,4,77,
A 12 F12 5,39,5,77,
13 F13 6,39,6,77,
14 F14 7,39,7,77,
15 F15 8,39,8,77,
16 F16 9,39,9,77,
17 F17 10,39,10,77,
18 F18 11,39,11,77,
19 F19 12,39,12,77,
20 F20 13,39,13,77,
21 F21 15,39,15,39,
22 F22 15,42,15,45,
23 F23 15,55,15,56,
C:\WP51\WP.LRS
```

Doc 1 Pg 1 Ln 1" Pos 1"

When editing a WPLRS file in WordPerfect, you need to be careful not to change or alter this header. Instead, you want to quickly move to the records which contain the language information. You can do this using ♦Search (F2).

A secondary merge file is made up of records which are divided into fields. The merge codes in the WPLRS secondary merge file are in WordPerfect 5.0 and WordPerfect Office 2.0 Notebook format. In this format, each record ends with a ^E (Ctrl-e) code and the fields in each record end with a ^R (Ctrl-r) code. You can move from record to record by searching for the ^E codes, or from field to field by searching for the ^R codes.

You can convert the merge codes in the WPLRS file into WordPerfect 5.1 merge code format (see *Previous Versions* under *Merge* in *Reference*). However, if you do so, you can no longer use the WPLRS file with WordPerfect 5.0 or WordPerfect Office 2.0 Notebook.

Each record in the WP.LRS secondary merge file begins with a field containing the language code for the language referenced by that field.

- A END OF HEADER
- B FIRST LANGUAGE CODE
- C FIELDS FOR THAT LANGUAGE

```

^N
^B
BR^R
1 00 2 00 4
-----
^M
^M^R
janeiro
fevereiro
-----
^M^R
junho
julho
agosto
setembro
outubro
novembro
dezembro^R
^M
Jan
fev
mar
abr
C:\WP51\WP.LRS                               Doc 1 Pg 3 Ln 3.83" Pos 0.5"

```

You can move to the record for a specific language by searching for the field which contains that language code. For a list of the language codes, see *Language Codes* under *Language* in *Reference*.

For example, you can press **Search** (F2), type **US** and press **Enter** to insert **US[HRt]** as the search string, then press **Search** to begin the search.

The cursor then moves to the record for the English—United States language.

- A US LANGUAGE CODE
- B DATE FORMAT
- C MONTHS OF THE YEAR
- D MONTHS, ABBREVIATED

```

-----
US
English-United States^R
3 1 4 6
^M
^M^R
January
February
March
April
May
June
July
August
September
October
November
December^R
Jan
Feb
Mar
Apr
May
Jun
C:\WP51\WP.LRS                               Doc 1 Pg 41 Ln 4.67" POS 0.5"

```

Each field in the record is separated by a ^R code.

While you need to be careful not to change the number of fields within the record or the number of lines within each field, you can edit the information contained within each field.

The first field in each record contains the language code.

Fields 2 through 6 apply to the Date feature. They determine the information that is inserted concerning a date whenever the language code for that language appears in your document.

Field 2 contains the information which controls the way a date is written when you insert Date Text (Shift-F5,1) or Date Code (Shift-F5,2). The first line of field 2 contains the format in which the date is written (see *Date Format* under *Date* in *Reference*). The second line of field 2 determines the way a.m. is written when it follows a time. The default is *a.m.* The third line determines the way p.m. is written. The default is *p.m.*

Field 3 contains the complete names of the months of the year. Each name is on a separate line so that the different names are separated by Hard Return codes [HRt]. You can display these Hard Return codes on-screen in Reveal Codes (Alt-F3).

Field 4 contains the abbreviated names of the months of the year, separated by Hard Return codes [HRt].

Field 5 contains the complete names of the days of the week, separated by Hard Return codes [HRt].

Field 6 contains the abbreviated names of the days of the week, separated by Hard Return codes [HRt].

Fields 7 and 8 contain the footnote “(continued)” messages. When you insert the language code for a language into the Initial Codes of the document, these fields determine the way the continued messages appear in the footnotes for that document.

As explained above, you can move to the record for any language in the WPLRS file by searching for the field which contains that language code. You can then edit any of the items in the fields in that record to suit your current needs.

For fields 1 through 8, any changes you make to the fields for a certain language will determine how those items appear when WordPerfect inserts them into your document after you have placed the language code in your document (see *Language* in *Reference*).

Package Language

The package language is the language which your version of WordPerfect comes in.

For example, if you bought an English version of WordPerfect for the United States, your package language is English—United States and your package language code is US. If you bought an English version of WordPerfect for England or Canada, your package language is English—United Kingdom and your package language code is UK.

Your package language determines which record in the WP.LRS file that your version of WordPerfect uses to obtain the default settings when you use the date feature, print the “(continued)” message in footnotes, print the Document Summary menu, and display the date and time for each file in List Files.

For example, if your package language is English—United States, WordPerfect searches for the US Language code and the US record in WP.LRS to determine the default entries for these items. If your package language is English—United Kingdom, WordPerfect searches for the UK Language code and the UK record to determine the default entries.

Consequently, if you want to change your default settings, you need to edit the record for your package language. You can even change the fields in this record to another language if you want that language to be used as the default.

▲ DOCUMENT SUMMARY MENU ITEMS

```
System Name:~R
System Filetype:~R
Document Name:~R
Document Type:~R
Creation Date:~R
Revision Date:~R
Subject:~R
Account:~R
Keywords:~R
Author:~R
-----
Typist:~R
Abstract:~R
2~R
~R
12~R
~R
p~R
~R
Figure~R
Table~R
E
C:\WP51\WP.LRS                               Doc 1 Pg 42 Ln 3" POS 0.4"
```

Fields 9 through 20 contain the prompts that appear on the different entries in the Document Summary menu. These entries do not change the way the menu appears on the screen. They appear only when you print the document summary. You can do this either while in the Document Summary menu (see *Document Summary* in *Reference*) or while viewing a document summary using Look in List Files (see *List Files* in *Reference*).

Please note that the Document Summary fields will only print in a given language when the language code for that language is placed in Setup Initial

Codes (Shift-F1,4,5). Placing the language code in the document or in Document Initial Codes is not sufficient.

A LIST FILES MENU ITEMS

```
System Name:R
System Filetype:R
Document Name:R
Document Type:R
Creation Date:R
Revision Date:R
Subject:R
Account:R
Keywords:R
Author:R
Typist:R
Abstract:R
-----
-~R
12~R
p~R
~R
Figure~R
Table~R
C:\WP51\WP.LRS                               Doc 1 Pg 42 Ln 2.67" Pos 0.36"
```

Fields 21 through 25 in the records in the WP.LRS file are referenced only for the package language for your version of WordPerfect. If you want to change the entries for these fields, you need to edit the record for your package language.

Fields 21 through 25 contain information that determines how the file attributes are displayed on the List Files screen. These file attributes include the date and time for each file and the thousands separator which can appear in the file size for each file (see *List Files in Reference*).

Field 21 contains a number which determines the order in which the items in the date are displayed for each file on the List Files screen, as detailed in the following list.

Number	Order of Display
1	Day Month Year
2	Month Day Year
3	Year Month Day

Field 22 contains the two characters being used to separate each of these items in the date. These two characters are separated by a Hard Return code [HRt].

Field 23 contains either the number 12 or the number 24. This determines whether the time on the List Files screen is displayed according to a 12 or 24 hour clock.

Field 24 contains the character used to separate hours from minutes, followed by the letters used to indicate a.m. and p.m. when a 12 hour clock is used. Each of these entries is separated by a Hard Return code [HRt].

Field 25 contains the thousands separator that is used when a file size is displayed for each file on the list files screen.

Fields 26 and 27 contain information to be used with other operating systems (e.g., UNIX and VAX). They are not applicable to the IBM PC versions of WordPerfect.

Fields 28-31 contain symbols that are used when you import spreadsheets. For more information, see *Currency Symbols* under *Spreadsheet, Import and Link in Reference*.

Field 28 contains the character used to separate decimal numbers from whole numbers. Field 29 contains the currency symbol. Fields 30 and 31 contain the credit and debit symbols.

Please note that the spreadsheet import fields will only print in a given language when the language code for that language is placed in Document Initial Codes (Shift-F8,3,2) or Setup Initial Codes (Shift-F1,4,5). Merely placing the language code in the document is not sufficient.

See Also: Language

Line Draw

With the Line Draw feature, you can draw boxes, graphs, borders, and other illustrations using special line draw characters. Using the arrow keys, you can draw on a clear screen or around and over existing text. WordPerfect inserts corners automatically as you draw, and fills blank areas with spaces and/or hard returns. Any codes in front of the cursor are pushed forward.

You need to select a mono-spaced font that has a line draw automatic font change or a line draw font in order to print correctly. Most proportionally-spaced fonts cannot be used for Line Draw.

- 1 Press **Screen** (Ctrl-F3) to display the Screen menu, then select **Line Draw** (2) to display the Line Draw menu.

 *Select Line Draw from the Tools menu.*

- 2 Type **1** and move the cursor with the arrow keys to begin drawing with a single line.

or

Type **2** and move the cursor with the arrow keys to draw with a double line.

To choose one of the remaining Line Draw options, refer to Notes below.

- 3 Press **Exit** (F7) when you finish drawing to return to normal editing.

Arrows and Lines

The arrows that appear on the screen as you draw are used to represent two things. First, they represent a line that does not connect to another line. They also represent half-space lines, which means if printed or seen in the View Document screen, these arrows will appear as a line exactly one half-space long.

It is possible to erase these arrows and remove the half-lines (see *Erase* below). If you want, you can also extend the half-line into a full-space line simply by pressing the End key. These arrows will not show on a printed document at any time.

When you have one space representing a single line directly adjacent to a space representing a double line, WordPerfect inserts a character (■) to represent the intersection of the two lines. This character will not show on your printed document. To preview how the intersection will look when printed, look in the View Document screen.

Broken Lines

If you have broken lines in Line Draw, there are three things you should check. First, make sure Justification is set to Left. Second, make sure you are using a fixed pitch font. Third, make sure you have a hard return at the end of every line.

Character Options

The third option on the Line Draw menu lets you draw with an optional character. The third character is preset as an asterisk, but you can change that character with the Change option.

For example, if you select Change (4) from the Line Draw menu, you can select one of the menu characters by typing the corresponding number. You can, if you want, select Other (9) and enter the character of your choice. Once you do this, the chosen character will then appear on the menu, and you can select it by typing 3. You can use *Compose* to create any of the characters in the WordPerfect character sets (see *Compose* in *Reference*).

Dot-Matrix Lines

If you have a dot-matrix printer, vertical lines can sometimes appear on the printed page as broken or separated lines. This is because the initial setting for Line Height is Automatic, and in certain fonts the lines aren't tall enough at that setting to touch the lines above them. If you have this problem, set your Line Height to .125" (8 lines per inch) (see *Line Height* in *Reference*).

Erase

When you want to delete a line, select Erase (5) from the Line Draw menu. As you move the cursor, lines are erased from the screen. Spaces and hard returns may be left or added by WordPerfect to keep the unerased part of the illustration intact.

Graphics Lines and Tables

Lines and boxes can also be created by using Graphics Lines and Tables. It would be a good idea to experiment with these features to find out which method would best suit your needs (see *Graphics Lines and Table, Create in Reference*).

Justification

Using Full Justification with Line Draw can create problems with the borders of any illustration you might create. While using Line Draw, use Left Justification only (see *Justification in Reference*).

Move

When you want to move through lines or illustrations without disturbing any characters, select **M**ove (6) from the Line Draw menu. As you move the cursor, WordPerfect may add spaces and hard returns to allow the cursor to move freely.

Repeat

You can use the Escape key to repeat a line of a specific length. For example, if you press **E**scape (Esc), type **54**, and then press **R**ight **A**rrow (→), you will draw a horizontal line 54 characters long. The line is drawn in the direction of the arrow key that you press. Since WordPerfect will not draw lines past your right or left margin, it presents no problem to enter an Escape number that is larger than necessary.

Another way to repeat the value of your line is to use the **H**ome key. For example, if you were to press **H**ome and then **R**ight **A**rrow your line would extend to the right margin of your screen. The exception to this is when you have a previously drawn line acting as a border, in which case your new line would extend only as far as the border line. If you would like to move through the border line to the right margin, press **H**ome,**H**ome,**R**ight **A**rrow (Home.Home,→).

Text in a Line Draw Box

The area inside a Line Draw box is filled with spaces and hard returns. If you would like to keep your structure intact while including text, you must use *T*ypeover (see *Typeover in Reference*).

See Also: Graphics Lines; Table, Create

Line Format

The Line Format options determine the way text is formatted horizontally on a line, between the left and right margins.

WordPerfect not only wraps the text at the end of each line, but it will also handle hyphenation, justification, and line numbering.

To change a line format setting,

- 1 Move the cursor to where you want the setting changed.
- 2 Press **Format** (Shift-F8), select **Line** (1), then select an option and make the necessary adjustments (see the options described in *Notes* below).

 Select *Line* from the *Layout* menu.

- 3 Press **Exit** (F7) to return to your document.

Notes

Codes

Changing any of the Line Format options inserts a code into your text which changes that setting from that point forward in your document. However, if the code is not placed at the beginning of a line, it doesn't take effect until the next line.

Hyphenation

The Hyphenation options let you determine whether you want WordPerfect to hyphenate the words that fall at the end of a line, as well as the region ("zone") in which a word must be located if it is to be hyphenated (see *Hyphenation* and *Hyphenation Zone* in *Reference*).

Initial Codes

If you want different line format settings than those that come with WordPerfect, you can enter your own settings using Initial Codes in Setup (Shift-F1,4,5) (see *Initial Codes* in *Reference*). They will then be in place each time you create a document.

Justification

WordPerfect lets you determine whether you want text centered, aligned at the left margin, at the right margin, or at both the left and right margins (i.e., full justification). Full justification is the default setting (see *Justification* in *Reference*).

Line Height

WordPerfect uses the Line Height option to calculate the space allotted to each line of text. This determines the number of lines on a page. You can set your own line height or have WordPerfect calculate it for you (see *Line Height* in *Reference*).

Line Numbering

Line Numbering lets you have WordPerfect number the lines in your text and print a number for each line at a specified position (see *Line Numbering* in *Reference*).

Line Spacing

Line Spacing lets you select single spacing, double spacing, etc. This determines how many lines of space will be given to each Soft Return code [SRt] and Hard Return code [HRt] in your document (see *Line Spacing* in *Reference*).

Margins

This option lets you set new left and right margins for your document (see *Margins, Left and Right* in *Reference*).

Tabs

Initially, standard tabs are set at every one-half inch. You can use this option to change the tab settings and to select several different types of tabs (see *Tab Set* in *Reference*).

Widow/Orphan Protection

A *widow* is the last line of a paragraph appearing alone at the top of a page. An *orphan* is the first line of a paragraph appearing alone at the bottom of a page. If this option is set to Yes, WordPerfect does not allow widows or orphans in your text (see *Widow/Orphan* in *Reference*).

See Also: Hyphenation; Hyphenation Zone; Justification; Line Height; Line Numbering; Line Spacing; Tab Set; Widow/Orphan

Line Height

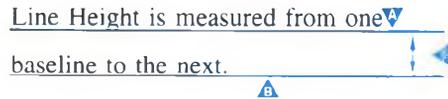
Line Height lets you enter an exact amount of space to be used for each line on a page. You can adjust the line height to create documents that need to meet exact publishing specifications.

Normally, WordPerfect assigns a line height measurement to each different font or attribute you use. WordPerfect calculates line height to be the height of a font plus any additional leading which WordPerfect automatically includes with that font (see *Leading Adjustment* below).

When you are using single spacing and WordPerfect calculates the line height for you, you can usually measure line height from the baseline of one line to the

baseline of the next. The *baseline* is the line on which the characters in a line are placed. Each letter sits immediately on the baseline. For letters with descenders (i.e., g, j, p, and y) the descenders drop below the baseline.

- ▲ BASELINE
- ▲ BASELINE
- ▲ LINE HEIGHT



Normally, the line height entry on the Format: Line menu is set to Automatic. This means that as you change fonts and attributes, WordPerfect automatically adjusts the line height to match the space required for the largest font on a line.

When only a few of the letters on a line are in a large font, you may not want your lines of text to be spaced according to the largest font on a line. You can then assign a line height measurement of your own.

A fixed line height measurement fixes the value of each Line Return code in your document (see *Return, Soft and Hard* in *Reference*). This causes the lines in your document to be of equal height, regardless of the font.

To set a fixed line height,

- 1 Press **Format** (Shift-F8), then select **Line** (1).
 Select *Line* from the *Layout* menu.
- 2 Select **Line Height** (4), then select **Fixed** (2).
- 3 Enter a line height measurement (e.g., 1/5").
- 4 Press **Exit** (F7) to return to the normal editing screen.

Notes

Baseline Placement for Typesetters

One WordPerfect option requires you to set a fixed line height using steps 1 through 4 at the beginning of this section. When you set the Baseline Placement for Typesetters entry on the Format: Printer Functions menu to Yes, you must also set a fixed line height.

This places the baseline for the first line of text on the top margin of your page, keeping it constant. It is like placing a grid over your page, where all the measurements on the page are measured from the top margin and every line height has a constant value (see *Printer Functions* in *Reference*).

Codes

Changing the line height inserts a Line Height code [Ln Height:#] into your document, where # is the current line height. This code can be seen in Reveal Codes (Alt-F3). Adjustment takes effect from the line containing the code and continues until another Line Height code is encountered.

You can delete the line height setting by deleting the code.

You can also return the line height setting back to Automatic by pressing **Format** (Shift-F8), selecting **Line** (1), selecting **Line Height** (4), selecting **Auto** (1), then pressing **Exit** (F7) to return to your document. This inserts a Line Height code [Ln Height:Auto] so that WordPerfect will resume adjusting the line height automatically.

Exceptions

If your printer can only print 6 lines per inch, adjusting the line height will not have any effect on printed text.

Initial Codes

If you want a certain line height to be in place each time you create a document, you can enter it in Initial Codes in Setup (Shift-F1,4,5) (see *Initial Codes* in *Reference*).

Leading Adjustment

Leading is the extra space which is added to the height of the fonts you use in order to place white space between the lines in your text. The term *leading* refers to the long strips of lead that typesetters once placed between lines of text when they prepared a page for printing.

The height for a font is not merely the height of the largest characters in a line. It also includes any leading which is built into that font.

The fonts you use can be classed in two different types: mono-spaced fonts, and proportionally-spaced fonts. For a definition of these font types, and also of font sizes (points), see the *Glossary*.

For mono-spaced fonts, the extra leading is built into the font size by the manufacturer. WordPerfect does not add any additional leading when it calculates the line height. For example, if the font size for a mono-spaced font is 10 points, then the line height is 10 points. With single spacing, that makes the distance from baseline to baseline 10 points (see *Spacing* below).

For proportionally-spaced fonts, WordPerfect always adds an extra two points of leading to the height of a font, in addition to any leading built into the font size by the manufacturer. For example, if the font size of a proportionally-spaced font is 10 points, then WordPerfect adds 2 points, making the actual line height 12 points. With single spacing, that makes the distance from baseline to baseline 12 points (see *Spacing* below).

The default line height which WordPerfect calculates for you always includes the leading value which WordPerfect adds. This is the line height WordPerfect displays in the Line Height entry on the Format: Line menu. For example, a 12 point mono-spaced font has a line height of 12 points. A 12 point proportionally-spaced font has a line height of 14 points (i.e., 12 points plus 2 points of leading).

WordPerfect also provides you with an option that lets you add or subtract leading values of your own. You can add or subtract leading from line heights

by using the Leading Adjustment option on the Format: Printer Functions menu (Shift-F8,4,6,6) (see *Printer Functions* in *Reference*). This changes the distance from the baseline of one line of text to the baseline of the next line of text. You can also change the distance from baseline to baseline by changing the current line spacing (see *Spacing* below).

However, changing the Leading Adjustment or changing the line spacing does not change the line height which WordPerfect assigns to a line of text. Consequently, any leading value you have entered in the Leading Adjustment option on the Format: Printer Functions menu is not reflected on the Line Height entry on the Format: Line menu.

Spacing

With single spacing, the distance from baseline to baseline is one line height. This is the default setting in WordPerfect. You can change the line spacing at any time by entering a different number in the Line Spacing entry on the Format: Line menu (Shift-F8,1,6). The number you enter is multiplied by the current line height, changing the distance from the baseline of one line of text to the baseline of the next line of text (see *Line Spacing* in *Reference*).

However, keep in mind that changing the spacing does not change the distance which WordPerfect calculates as a line height.

Total Lines

WordPerfect uses the line height, page length, and top and bottom margins to calculate the total number of lines on a page.

See Also: Line Format; Line Spacing; Printer Functions

Line Numbering

You can have WordPerfect number the lines in a document and print the number of each line at a specified position on the page. The actual numbers appear only when the document is printed or when you preview the document to be printed using View Document (Shift-F7,6).

To turn on Line Numbering,

- 1** Move the cursor to the place in your document where you want line numbering to begin.
- 2** Press **Format** (Shift-F8), then select **Line (1)**.
 *Select Line from the Layout menu.*
- 3** Select **Line Numbering (5)**, then type **y** to display the Format: Line Numbering menu.

- 4 Select and change any option you want (see *Notes* below).
- 5 Press **Exit** (F7) to return to your document.

Notes**Codes**

You can start and stop numbering anywhere in a document. When you turn on Line Numbering using the above steps, you place a Line Numbering On code [Ln Num:On] in your document. If the code is not at the beginning of the line, line numbering starts on the next line. Lines will be numbered until you turn off Line Numbering again. You can do so by pressing **Format** (Shift-F8), selecting **Line (1)**, selecting **Line Numbering (5)**, then typing **n**.

Line numbers are printed in the base font that is in effect where the Line Numbering On code is found (see *Font* in *Reference*).

Footnotes and endnotes are included in line numbering; headers and footers are *not* included.

Count Blank Lines

If this option is set to No, any lines that contain only a Hard Return code [HRt] will not be counted.

Number Every *n* Lines

This option lets you print the line numbers every *n* number of lines, where *n* is the number you specify.

Position of Number from Left Edge

In this option, you can enter the distance from the left edge of the page you want the line numbers to appear (e.g., 1 1/8" for 1.13" inches).

Restart Number on Each Page

Selecting No for this option, gives you continued consecutive line numbering throughout the document. If this option is set to Yes, numbers restart with each new page either from 1 or from a starting number you have selected (see *Starting Number* below).

When you preview the printed page in View Document (Shift-F7,6), numbers always restart with every page regardless of how this option is set. Nevertheless, if this option is set to No, the numbers will still be numbered consecutively throughout the document when it is printed.

Starting Number

Unless you change this option and enter a number, WordPerfect will start numbering lines from 1. If you enter a number, the lines in your document will begin being numbered from that number.

See Also: Line Format

Line Spacing

Line Spacing determines the number of lines that will be inserted for each Soft Return code [SRt] and Hard Return code [HRt] in your document. WordPerfect single spaces your documents unless you change the line spacing.

To change the line spacing in your document,

- 1 Press **Format** (Shift-F8), then select **Line** (1).
 *Select Line from the Layout menu.*
- 2 Select **Line Spacing** (6), then enter a number (see *Spacing* below).
- 3 Press **Exit** (F7) to return to your document.

Notes

Codes

Changing the line spacing inserts a Line Spacing code [Ln Spacing:#] into your document where # represents the current line spacing. WordPerfect only changes the line spacing *after* the Line Spacing code. Any text before the code uses the previous setting.

This makes it easy to change the spacing at any point in the document. To change the line spacing of existing text, use steps 1 through 3 above to insert a Line Spacing code immediately before the text.

When you attempt to delete a Line Spacing code in the normal editing screen, you are asked to confirm the deletion.

Initial Codes

If you want different line spacing settings than those that come with WordPerfect, you can enter your own settings using Initial Codes in Setup (Shift-F1,4,5) (see *Initial Codes* in *Reference*). They will then be in place each time you create a document.

Leading Adjustments

Leading is the amount of space which is added to the height of the characters in a line of text (see *Leading* under *Line Height* in *Reference*).

You can change line spacing by changing the amount of leading added to the Soft Return codes [SRt] or Hard Return codes [HRt] in your document (see *Return, Soft and Hard* and *Printer Functions* in *Reference*).

Spacing

Line Spacing lets you increase the line spacing by multiplying. For example, entering **2** for the line spacing doubles the current setting and creates double spacing. You can also enter any fraction (e.g., 1.5", 1.33", 2 1/3", or 3 1/10") to more accurately adjust the line spacing.

The number you enter is multiplied by the current line height in order to create the new line spacing (see *Line Height* in *Reference*).

See Also: Lesson 13; Line Format; Line Height; Return, Soft and Hard

List Files

Files are stored in directories (see *Directories* in *Reference*). The directory can be the name of a disk drive (e.g., A:\, B:\) or a subdirectory on a floppy or hard disk (e.g., C:\LETTERS). The full name (pathname) of a file includes the drive letter, directory, and filename (e.g., B:CLIENT.1, C:\LETTERS\CLIENT.1).

The List Files feature lets you change the default directory (see *Directories* in *Reference*), as well as display the names of the files in a directory. It is an important feature for organizing and working with files.

Using List Files, you can retrieve, delete, rename, print, or copy a file. You can also change the default directory, look into a file or directory, or display all files that contain the same word(s).

- 1 Press **List** (F5) to display the name of the default directory at the bottom left of your screen.

 Select *List Files* from the *File* menu.

- 2 Press **Enter** to display the names of the files in the default directory.

or

Enter the name of another directory to display the names of the files in that directory.

*If you want to see the file list of a diskette in an external drive, you must type the drive letter and a colon before pressing **Enter**. For example, if you want to see the file list of a diskette in drive A, press **List Files** (F5) and enter **a:**.*

- 3 Move the cursor to the name of a file, select an option from the List Files menu at the bottom of the file list, then enter any requested information (see the options listed under *List Files Menu* below).

Some options on the List Files menu do not need a file highlighted first. These options are explained under List Files Menu below.

- 4 Press **Exit** (F7) to return to the normal editing screen.

Notes

Current and Parent Directories

At the top of the list on the List Files screen are the words “Current” and “Parent.” The “<Dir>” on the same line indicates that these are directories. The Current directory is the one currently being displayed. It is listed in the header at the top of the screen. If there is more than one directory in the name, the

parent directory is the one listed just before the current directory (e.g., in the path C:\WP51\LETTER, LETTER is the current directory and WP51 is the parent directory).

File List

The major portion of the List Files screen consists of the file list. Certain aspects of this list (e.g., the thousands' separator, the date display) are displayed according to the .LRS file. To make changes to the file list display, see *Language Resource File in Reference*.

When you display the List Files screen, you have the option of displaying the file list with "short" or "long" filenames. Use Short/Long Display (5) on the List Files menu to choose the type of display (see *Short/Long Display* under *List Files Menu* below). The appearance of the file list is one of the major differences between short and long display.

Another option affecting the file list is the Sort List Files option (see *Sort List Files* below for details). This option allows you to choose whether you want your subdirectories and files sorted alphabetically (default) or in the order that they reside on your disk.

If the Sort List Files option is set to No, subdirectories and files are displayed according to where they reside on disk for both short display and long display.

If the Sort List Files option is set to Yes, the subdirectories are listed first in alphabetical order, followed by an alphabetical listing of files for both short display and long display. Sorting takes place according to the package language. However, when long display is on, only files *created* in WordPerfect version 5.x (no DOS, PlanPerfect, macro files, WordPerfect program files, etc.) appear on the screen, and the files are alphabetized by descriptive name rather than by filename.

Long Display

When you have long display on, the information for each filename takes up one line of the list rather than having two filenames per line (as in the short

display). Additionally, the header at the top of the screen increases by one row to display several column headings.

- ▲ HEADER
- ▲ FILE LIST
- ▲ MENU

09-28-89 01:30p Directory C:\MSD1\WORK

Document size: 0 Free: 3,577,856 Used: 71,065 Files: 10

Descriptive Name	Type	Filename	Size	Revision Date
Current Dir: C:\MSD1\WORK				
Parent Directory				
Letter to President	Letter	ACCPAIN .SSS	4,130	12-15-88 08:11a
List of Employees, June	Work	GORP .LET	12,540	09-28-89 01:30p
Mailing Label Lesson	Lesson	EMP1ST .JUN	3,128	09-28-89 01:35p
Math Lesson	Lesson	LESS-24	19,048	09-28-89 01:32p
		LESS-25	11,620	05-28-89 01:33p
		MEMFORM.NEW	6,916	01-11-89 01:46a
		PLFILES .AFF	6,153	06-12-89 10:16a
September Birthday List	Work	SEPT-OCT.B6W	1,298	09-28-89 01:36p
		SHORTORD.NEW	2,642	12-15-88 07:38a
		R10DATA.DEL	3,580	12-15-88 07:39a

1 Retrieve; 2 Delete; 3 Move/Rename; 4 Print; 5 Short/Long Display;
6 Lock; 7 Other Directory; 8 Copy; 9 Find; N Name Search; 6

This feature lets you add another level of organization to your files. For example, you can give the same “Type” name to a group of similar files, then use the Find option (9) on the List Files menu to display just the files with that document type (see *Find* in *Reference*).

The Descriptive Name column lists the long document name rather than the shorter DOS (8 characters plus 3 characters extension) filename (see *Environment Setup* in *Reference* for an explanation of long document names). If you have not entered a long document name, nothing is displayed in this column.

If you have a locked document in your directory, “[Locked]” is displayed in this column rather than the long document name.

If you created an *alias* name for a subdirectory of the current directory (see *Directory Alias* under *Directories* in *Reference*), that name is displayed in this column. If you have not created an alias for a subdirectory, nothing is displayed in this column.

The Type column lists the long document type you entered (if any) when you saved the file with a long document name (see *Environment Setup* and *Document Summary* in *Reference*).

The Filename column lists the DOS filename or directory name.

The Size column lists the size of the file or “<Dir>” if referring to a directory.

The Revision Date column lists the date and time the file or directory was most recently revised.

When entering a filename, be sure to use the DOS filename.

If you mark files (see *Marking Files* below) before selecting this option, you will be asked if you want to copy the marked files. Type **y**, then enter the drive or directory where you want them copied, or type **n** and you can copy just the currently highlighted file.

Delete

Select **Delete** (2) to delete a filename or directory. (A directory must be empty before it can be deleted.) A prompt appears asking if you want to delete the file or directory. Type **y** to delete it; type any other key if you decide not to delete. Once deleted, a file cannot be retrieved.

If you mark files (see *Marking Files* below) before selecting this option, you will be asked twice if you want to delete the files. Type **y** twice to delete the marked files. If you type **n** with either prompt displayed, you will be asked if you want to delete the currently highlighted file. Type **y** to delete this file only or type **n** to return to the List Files menu.

Find

Use **Find** (9) to search for files in the current directory that meet certain conditions (see *Find in Reference*).

Look

If you highlight a directory on the List Files screen, you can select **Look** (6), then press **Enter** to display the names of the files in that directory on the List Files screen. With a file highlighted, select **Look** to display the text or document summary of that file in a special Look screen (see *Look in Reference*).

Move/Rename

Select **Move/Rename** (3). then enter a new filename to move or rename the highlighted file. If you enter the same filename, but specify a different path, the file is moved to another directory. If you enter a new filename, the file is renamed. If you specify a different path *and* enter a new filename, the file is moved and renamed. If you enter a filename that already exists, you will be asked if you want to replace that file. Type **y** to replace it or type **n** to return to the List Files menu.

If you mark files (see *Marking Files* below) before selecting this option, you will be asked if you want to move the marked files. Type **y**, then enter the drive or directory where you want them moved, or type **n** and you can move or rename the currently highlighted file.

Name Search

Besides using the cursor keys to move through the list of filenames, you can also move the cursor to a specific file by selecting **Name Search** (n), then typing the filename.

You can also use ♦Search (F2) to move the cursor to a specific file (see Search under WordPerfect Features in List Files below).

When you use this option, a "Name Search" message appears at the bottom right of the screen. When you type the first letter of the filename (or descriptive name if long display is on), the cursor moves to the first file that begins with that letter. As you continue to add letters to the name, the cursor moves to the first filename that matches the displayed letters.

You may only need to type part of the filename (or descriptive name) to move the cursor to that file. You can erase characters with Backspace. Press **Enter**, **Exit** (F7), or an arrow key to exit Name Search and redisplay the List Files menu.

You can also use this option to move the cursor to a subdirectory. After typing **n**, type a slash (/) or backslash (\), then start typing the subdirectory name.

Other Directory

Use **Other Directory** (7) to change the default directory or create a new directory (see *Directories in Reference*).

Print

Use **Print** (4) to send a file to the printer. After selecting Print, you are asked for the pages you want printed. You can print all of the file or selected pages, including the document summary (see *Print, Document on Disk in Reference* for details).

If you mark files (see *Marking Files* below) before selecting this option, you will be asked if you want to print the marked files. Type **y** to print all the marked files, then enter selected pages; the same pages in each file will be printed. Type **n** to print the currently highlighted file.

When printing a document from List Files or from disk that is fast saved, that needs to be generated, or that is formatted for a different printer, WordPerfect attempts to reformat the document. To reformat a document, WordPerfect must associate a printer definition (.PRS file) to the document.

WordPerfect uses a .PRS file if a printer selection exists in the setup file (WP{WP}.SET) for that .PRS file. If the .PRS file exists, but its printer definition is not found in the setup file, WordPerfect reformats the document using the currently-selected printer.

Retrieve

Use **Retrieve** (1) to retrieve a copy of the file to your screen at the cursor position. If there is already text in the normal editing screen, a message appears asking if you want to retrieve the file into the current document. Type **y** to place the contents of the retrieved file at the cursor position in the document on the screen. Text below the cursor is pushed down to make room for the incoming file. (See *Retrieve in Reference* for details on retrieving.)

You can select this option with a DOS text file highlighted, and the file will automatically be converted to WordPerfect format and retrieved to the screen. Be aware, however, that if you then save this document using the

same filename, it will replace the DOS text file and be saved as a WordPerfect document. If you want to keep the DOS text file on disk, enter a different filename when you save the document on the screen (see *Save in Reference*).

If you select this option with a locked document highlighted, you will be asked to enter the password (see *Locked Documents in Reference*).

Short/Long Display

Select **Short/Long Display (5)** to display a menu that lets you switch between the short and long display of the List Files screen (see *Long Display* and *Short Display* under *File List* above). If you are currently in short display, **Long Display (2)** is the default option. If you are currently in long display, **Short Display (1)** is the default option. After you select an option, the current directory name is displayed in the bottom left corner of the screen. Press **Enter** to display that directory, or enter another directory name.

This option can be selected with either a file or directory highlighted.

Marking Files

You can copy, delete, find, move, or print a group of files by “marking” each file with an asterisk (*). Move the cursor to a file in the list and type an asterisk. Once the files are marked, select a menu option and enter any requested information.

You can “unmark” a file by moving the cursor to a marked file and typing another asterisk. To mark (or unmark) every file on the List Files screen, press **Mark Text (Alt-F5)** or **Home,***. This method of unmarking files works even if only one file is marked.

As you mark files (whether in short or long display), the asterisk (*) appears to the left of the filename, and the Files amount in the header changes to the number of files marked. The Used amount changes from the amount of disk or directory space used to the total amount of bytes in the marked files.

Redisplaying List Files

If you have been displaying files or directories from your hard drive, you can press **List (F5)** twice in a row to redisplay the most recently displayed List Files screen. This is especially helpful if you changed your List Files screen the last time it was displayed (e.g., marked files or used **Find** to display selected files).

This feature will not work to display the files on a diskette drive nor will it work if you have changed the default setting for the Long Document Name feature (**Shift-F1,3,4,3**). You can rewrite the currently displayed List Files screen by pressing **Screen (Ctrl-F3)**.

Sort List Files

Sort List Files (5) is an option on the Setup: Document Management/Summary menu (**Shift-F1,3,4,5**). This option determines whether you want subdirectories and files in List Files to display in alphabetical order or in the order that they reside on

disk. If you set this option to Yes, List Files displays subdirectories in alphabetical order followed by an alphabetical listing of files. If you set this option to No, List Files displays subdirectories and files in the order they reside on the disk. This will speed display of the file list (especially for very large directories).

When the file list in List Files is not sorted, Name Search is not allowed. Pressing “n” for Name Search will display the “ERROR: Name Search not allowed on unsorted list, use F2” message. Also, pressing List Files twice (**F5,F5**) will bring up the previous file list, but if the sort mode has been changed (from sorted to unsorted or vice versa), the file list will not be in the same order.

WordPerfect Features in List Files

There are a number of WordPerfect features you can use with the List Files screen displayed. These are described as follows.

List

You can press **List** (F5) from anywhere in the List Files screen to display the current directory name at the bottom left of the screen. At this point, you can enter a different directory name or just press **Enter** to display the names of the files in that directory.

Print

You can print a list of all the filenames in the current directory list by pressing **Print** (Shift-F7) with the List Files screen displayed. (The current directory is the one currently being displayed on the List Files screen.) The long display is printed if that is currently on the screen; the short display is printed if that is on the screen.

This list is automatically sent to the currently selected printer (see *Printer, Select in Reference*).

Search

You can move the cursor forward or backward through the file list using ♦Search (F2) or ♦Search (Shift-F2). With long display on, Search will look through the Descriptive Name, Type, and Filename columns. With short display on, Search will look through the filenames and subdirectory names. You can use patterns when searching (see *Search Patterns* under *Find* in *Reference*).

Text In/Out

You can use Text In/Out (Ctrl-F5) with the List Files screen displayed to import a DOS text file into WordPerfect (see *Text In/Out* in *Reference*).

This feature only works when short display is on; no DOS files appear in long display (see Long Display under File List above).

See Also: Directories; Find; Find, Conditions; Look

Lists

In many documents you may want to include lists of figures, illustrations, tables, maps, etc. WordPerfect can help you create up to ten lists within a document. You also choose one of five numbering styles for each list. When a list is generated, the entries will be listed in the order in which they appear in the document.

NUMBERING STYLE

Tables	
Import/Export Firms -Total	(23)
HALVA Sales	(27)
Merchandising Results	(31)
Net Profit	(33)
Quarterly Results	(33)
Market Share	(34)
Major Distribution Centers	(40)
Non-HALVA Quarterly Results	(43)
Non-HALVA Market Share	(44)
Non-HALVA Major Distribution Centers	(50)
Individual Sales	(57)
Music Box Sales	(58)
Price Differential	(60)
Overhead	(62)
Number of Employees	(80)
Number of Branches	(88)

There are three basic steps to follow when creating a list:

- Mark the text you want included in the list.
- Define the location and numbering style for the list.
- Generate the list.

Each step is exclusive of the others. For example, you could mark text as you write, define the list while formatting the document, and generate the list just before your final edit. Later, you could edit the marked text or the list definition, and then regenerate the list.

The instructions for these three steps are divided into separate sections in *Reference*. To begin, see *Lists, Mark Text*, then see *Lists, Define*, and finally see *Generate*.

Notes

Graphics

If you want a list of captions from figure, table, text, equation, or user-defined boxes, you do not have to mark text. You can simply define a list to include one of these caption types, and WordPerfect will include the appropriate captions when the list is generated (see *Lists, Define* in *Reference*).

Master Documents

If your document is extremely long, you may want to use the Master Documents feature to break it into smaller pieces. You can still generate a list which will include any text marked in subdocuments (see *Master Documents in Reference*).

See Also: Generate; Lists, Define; Lists, Mark Text

Lists, Define

Once you have marked the text you want (see *Lists, Mark Text in Reference*), you need to define the location and numbering style for each list.

- 1 Move the cursor to the place in your document where you want the list to appear.
- 2 If you want the list on a separate page, press **Hard Page** (Ctrl-Enter), then move the cursor to the page where you want the list generated.
- 3 If you want a heading (title) for the list, type it now, then press **Enter** as many times as you want to add extra spacing.
- 4 Press **Mark Text** (Alt-F5), select **Define** (5), then select **Define List** (2).

 Select *Define* from the *Mark* menu, then select *List*.

- 5 Enter the number of the list you want to define (1 through 10).

Lists 6-10 are preset to assemble captions (see *Graphics* below).

- 6 Select a numbering style for the list (see *Numbering Styles* below).

Repeat steps 1 through 6 for each list you want to define. Once you have defined and marked text for the list, you are ready to generate it (see *Generate in Reference*).

[Def Mark:]

When you select a numbering style, [Def Mark:List,list#:numbering style#] (where *list#* and *numbering style#* represent the numbers you entered for the list number and numbering style) is inserted into the Reveal Codes screen at the cursor position. The list will be generated at this code. If you are using the Master Documents feature, [Def Mark:] should be in the master document and not in one of the subdocuments (see *Master Documents in Reference*).

Graphics

Lists 6 through 10 are pre-assigned to automatically assemble captions. For example, you can follow the steps above and type **6** in step 5 to define list 6. When you generate the list, all captions for figure boxes will be included in the list automatically. You don't have to mark any text.

Likewise, captions of table boxes are included in list 7, captions of text boxes are included in list 8, captions of user-defined boxes are included in list 9, and captions of equation boxes are included in list 10 (see *Graphics, Create* in *Reference*).

You can include other text or phrases in lists 6 through 10 by marking text for them (see *Lists, Mark Text* in *Reference*). When you mark text for one of these lists, the text will be included with the captions pre-assigned to the list. If you have no captions for any one of lists 6 through 10, you can use the list just as you would lists 1 through 5 by marking text for it and defining it.

Numbering Styles

Numbering styles refer to the way the page numbers for each list entry are displayed. You can choose from the following five numbering styles while defining a list:

- No page numbers
- Page numbers following the entries (separated by a space)
- Page numbers in parentheses following the entries (separated by a space)
- Flush right page numbers
- Flush right page numbers with dot leaders

These five options affect the placement of page numbers in a list. If you want to change the actual type of number used (from Arabic to Roman, for example), you can use the **New Page Number** feature (Shift-F8,2,6,1). Changing the page number type with the **New Page Number** feature affects both page numbers displayed in the document and those generated in a table, list, or index. See *Page Numbering* in *Reference* for details.

See Also: Generate; Lists; Lists, Mark Text

Lists, Mark Text

If you want to create a list of captions from figure, table, text, equation, or user-defined boxes, you do not have to mark the text of the captions. WordPerfect will generate a list of them for you once you define the list (see *Lists, Define* in *Reference*).

The table boxes referred to in this section are created using Graphics (Alt-F9) and should not be confused with Tables created using the Tables feature (Alt-F7).

The first step in creating any other lists is to mark the text you want in the list. If you want to create multiple lists, you should mentally assign each a number before marking text. You will be asked for this list number in step 3 below.

1 Block the word or phrase you want included (Alt-F4).

2 Press **Mark Text** (Alt-F5) and select **List (2)**.

 *Select List from the Mark menu.*

3 Enter the list number (1 through 10).

Repeat the steps above for each item you want included in the list. Once you have marked all the entries you want, you should define the list(s) (see *Lists, Define* in *Reference*).

Notes

Graphics

If you want a list of captions from graphic, table, text, equation, or user-defined boxes, you do not have to mark text. You can simply define a list to include one of these caption types, and WordPerfect will include the appropriate captions when the list is generated (see *Lists, Define* in *Reference*).

[Mark:] and [End Mark:]

When you mark text, [Mark:List,#] (where # represents the list number you entered for the marked item) is inserted in the Reveal Codes screen before the text, and [End Mark:] is inserted after. Any codes included in the block of text (Bold, Underline, Center) are included with the text when the list is generated.

If you decide you do not want a marked word or phrase included in a list, delete [Mark:] before generating.

See Also: Generate; Lists; Lists, Define

Location of Files

To help you more efficiently organize all of the files you may use or create, WordPerfect has included the Location of Files feature.

Location of Files tells WordPerfect where certain files are located. For example, when you spell-check a document, WordPerfect looks for the dictionary file in the thesaurus/spell/hyphenation directory. If no location is specified, the Speller may not work.

When you install WordPerfect, the Installation Program organizes your files for you. If you want to change the way the files are organized, you may do so with one of several features, including Location of Files.

Before you use Location of Files, you should have created the directory or directories you want to use. You may do so with the DOS MD (make directory) command (e.g., MD C:\WP51\SPELL) or the Other Directory option on the WordPerfect List Files feature (see *List Files* in *Reference*).

You should also copy the proper files to the appropriate directory (see the information pertaining to each option under *Notes* below to determine which files should be copied to each directory).

1 Press **Setup** (Shift-F1) to display the Setup menu.

 Select **Setup** from the *File* menu.

2 Select **Location of Files** (6).

3 Select the option of your choice (see the information pertaining to each option under *Notes* below).

4 Enter the directory or full pathname for the option (again, see the information pertaining to each option under *Notes* below).

5 Press **Exit** (F7) to exit the Setup menu.

Notes

Backup Files

Enter the directory where you want your timed backup files (WP{WP}.BK1 and WP{WP}.BK2) to be stored. If you are using Timed Backup, WordPerfect creates timed backup files for you in the directory you specify. If you do not specify a directory, the backup files are stored in the directory where WPEXE is located (see *Backup, Timed* in *Reference*).

Documents

Enter the name of the directory where you want your documents to be stored. Once you enter a directory for this option, that directory becomes the default directory.

If you want to save a document to or retrieve a document from this directory, there is no need to enter a full pathname for the document. In addition, you may wish to move (or copy) previously existing documents to the directory specified for this option.

You can change the default directory with the List Files feature. If you do so, documents will be saved to the new default directory (see List Files in Reference). Also, the documents directory overrides (takes precedence over) any default directory you may enter in the WordPerfect Shell Program.

Of course, if you want to save a document to or retrieve a document from a directory other than the one specified as the documents directory, you may do so by entering a complete pathname.

Graphic Files

Enter the directory where your graphics files are kept. These graphics files (several of which come with WordPerfect) are used when you are retrieving a file to a graphics box.

Once you enter a directory for this option, all *subsequent* graphics files you retrieve are retrieved from that directory. Simply enter the name of the graphics file when you are retrieving the graphics file in the Graphics feature, and the file will be retrieved from the graphics files directory. There is no need to enter a full pathname for the graphics file.

You may want to move (or copy) previously existing graphics files to this directory. If you want to retrieve a graphic file from a directory other than the one specified as the graphic files directory, however, you may do so by entering a complete pathname.

For more information about using the Graphics feature, see *Graphics, Create in Reference*.

Invalid Drive/Path Specification

If you enter a directory that has not yet been created, you will receive the "Invalid Drive/Path Specification" error message. The cursor will be repositioned at the beginning of the pathname, and WordPerfect will let you try again.

The maximum path length you can enter in Location of Files is 66 characters (or less if extended characters are used).

You can press **Cancel** (F1) to back out of an option and restore the previous setting.

Keyboard/Macro Files

Enter the directory where your keyboard files (files ending in .WPK) and macro files (files ending in .WPM) are located.

Keyboard files contain information for the various keyboard layouts you can use with WordPerfect, while macro files contain information for WordPerfect macros. Some keyboard and macro files come with WordPerfect, and you can also create many more.

Once you enter a directory for this option, all *subsequent* keyboard and macro files you define or execute are saved to or executed from that directory. Simply enter the name of the keyboard or macro when you are defining a keyboard or executing a macro and the file will be saved to or executed from the keyboard/macro directory. There is no need to enter a full pathname for the keyboard or macro.

You may want to move (or copy) previously existing macros to the directory specified for this option. If you want to invoke a macro from, create a macro in, or save a macro to a directory other than the one specified as the keyboard/macro directory, however, you may do so by entering a complete

pathname. When you edit or execute a macro, WordPerfect will look in the default directory in addition to the directory listed in Location of Files.

Important: You should move all previously existing keyboard files to the keyboard/macro directory. Only keyboard files that exist in the keyboard/macro directory can be displayed on the Setup: Keyboard Layout screen.

For more information on the Keyboard Layout and Macro features, see *Keyboard Layout* and *Macros* in *Reference*.

Printer Files

Enter the directory where your printer files (files ending in .ALL and .PRS) are kept. These files are used to help WordPerfect communicate with a specific printer. They are created when you go through the printer selection process.

Once you enter a directory for this option, all *subsequent* printer files you define are saved in that directory. You may want to move (or copy) previously existing printer files into the printer files directory.

All printers that you have selected are listed on the Print: Select Printer List, but only the printer files in the printer files directory are shown when you select List Printer (PRS) Files (Shift-F7,s,2,4).

If you want to display printer files that exist in another directory, you should use the Other Disk option (Shift-F7,s,2,2). (See *Printer, Select* in *Reference*.)

For more information on printer files, see *Printer, Select* in *Reference*.

Unless you enter a directory for downloadable fonts and printer command files on the Select Printer: Edit menu, WordPerfect searches for downloadable fonts and printer command files in the Printer Files menu (see *Printer, Edit* in *Reference*).

Spreadsheet Files

Enter the directory where your spreadsheet files are located. WordPerfect uses this directory when you import or link to a spreadsheet. For more information, see *Spreadsheet, Import and Link* in *Reference*.

Style Files

For the Style Files heading, enter the directory where your style files are located. These files are used when you use the Style or Outline Style feature.

Once you enter a directory for this option, all *subsequent* style files you create, save, or retrieve are created in, saved to, or retrieved from that directory. Simply enter the name of the style file when you are saving or retrieving a style on the Style or Outline Style menus, and the file will be saved to or retrieved from the style files directory. There is no need to enter a full pathname for the style file.

When you retrieve a style file, both outline and non-outline styles appear on the Style menu. Only outline styles appear on the Outline Style menu.

You may want to move (or copy) previously existing style files to the style files directory. If you want to retrieve a style file from or save a style file to a directory other than the one specified as the style files directory, however, you may do so by entering a complete pathname.

For the Style Library Filename heading, enter the filename (or the complete pathname if the library is not in the style files directory) of the file you want to use for your style library. The style library is your default list of styles and is retrieved when you enter the Style or Outline Style menu in a document that has no previously defined styles.

For more information on the Style and Outline Style features and the Style Library, see *Style, Create* and *Outline, Style* in *Reference*.

Thesaurus/Spell/Hyphenation Files

For the Main option, enter the directory where the thesaurus (WP{WP}US.THS) as well as the hyphenation and speller dictionary files (WP{WP}US.HYC and WP{WP}US.LEX) are located. These dictionaries are the files WordPerfect uses when you use the Thesaurus, Spell, and Hyphenation features.

For the Supplementary heading, enter the directory where your supplementary speller dictionary files are located. They include the WP{WP}US.SUP file as well as any other supplementary dictionaries you may create with the Speller Utility or in WordPerfect.

For more information on the Thesaurus, Spell, and Hyphenation features see *Thesaurus; Speller, Check Spelling; and Hyphenation* in *Reference*. For more information on the Speller Utility, see *Speller Utility* in *Reference*.

See Also: Directories; List Files

Locked Documents

If you create a personal document or any document that you would prefer to remain confidential, WordPerfect allows you to lock the document with a password. Once it has been locked, you cannot retrieve or print the file without knowing the password. It is not possible to lock directories in WordPerfect.

In most situations, the password will provide the security you need. The password is not, however, intended to meet U.S. Department of Defense or other high-level security standards. WordPerfect Corporation will not unlock a document for you.

- 1 Press **Text In/Out** (Ctrl-F5) to display the Text In/Out menu, then select **Password** (2).

 Select **Password** from the **File** menu.

- 2 Select **Add/Change** (1).
- 3 Enter a password twice.

Since the password does not appear on the screen, you must enter the same password twice to ensure that the correct password is used for the file. The password can contain no more than 23 characters, and you can use Compose (see Compose in Reference).

- 4 Save the document for the lock to take effect.

Notes

Associated Files

When you lock a document, all files associated with the current editing of the document (backup files, undelete files, move files, temporary buffer files, virtual files, and the original file on disk) are also locked.

Document Protection

Though locking a document can prevent others from accessing it, you cannot protect that document from being deleted. If you have a need to protect a document, it would be best to make sure you have a copy of the document on disk and store it in a safe place.

Find

If you are using the Find feature to search through a directory, and WordPerfect encounters a locked document, you must enter a password to have the locked document searched. You will also be asked for a password when you merge locked documents or use Look to look at a document.

Retrieve

Once a document has been locked, you are asked for the password each time you retrieve the document. If a "File is Locked" message appears after you try to retrieve the document, you entered the wrong password.

Text Out

When you use Text In/Out to save a document as a 5.0 document, the file remains locked. If you save the document as a 4.2 file, the file is unlocked.

Unlock

To unlock a document, you must remove the password. Follow the same steps as listed above, but instead of selecting Add/Change, select **Remove** (2). Be sure to save the document so the change can take effect.

See Also: Retrieve; Save

Look

The List Files menu includes a Look option that lets you view the text or document summary of a WordPerfect 5.1 or 5.0 file, the text of a WordPerfect 4.2 or DOS text file, a WordPerfect 5.1 macro description, or a list of the files in a directory.

- 1 With the List Files screen displayed, move the cursor to the file you want to look at.

If you want to display the names of the files in a directory, move the cursor to that directory in step 1 (see *Directories* below).

- 2 Select **Look** (6) or press **Enter** to display the file in the Look screen.

If the file is a WordPerfect 5.0 or 5.1 document and contains a document summary, the summary is displayed (see Document Summary below).

- 3 Use the cursor keys to scroll through the text.
- 4 Select **Next Document** (1) or **Previous Document** (2) to display the next or previous file from the List Files screen in the Look screen.
- 5 Press **Exit** (F7) or the **Space Bar** to return to the List Files screen.

Notes

Clipboard

With the Look screen displayed, you can use **Block** (Alt-F4) with **Shell** (Ctrl-F1) (if you are running WordPerfect under the WordPerfect Shell) to block a portion of the document and save or append it to the Clipboard.

- 1 Move to one end of the block of text you want saved to the Clipboard.
- 2 Press **Block** (Alt-F4), then move the cursor to the other end of the text you want saved.
- 3 Press **Shell** (Ctrl-F1), then select **Save** (1) or **Append** (2) to save or append the blocked text to the Clipboard.

You can then retrieve the contents of the Clipboard into WordPerfect or any other WPCorp product (see *Shell Clipboard* under *Go to Shell* in *Reference*).

This feature will work only if you are running WordPerfect under the WordPerfect Shell.

Cursor Movement

When you first enter the Look screen, the cursor is at the bottom of the screen. You can use the arrow keys to move through the document in the Look screen. Press **Right** or **Left Arrow** (→/←) to display all of the document if it is wider than the screen. Screen Up (–) and Screen Down (+) and Page Up (PgUp) and Page Down (PgDn) move the cursor up or down through the document one screen at a time. Home, Home, arrow keys will move the cursor to the far edges of the document.

If your document is too wide to be displayed completely on the screen, press **End** to alternate between showing the right and left ends of the document.

You can scroll backward or forward, left or right in a Look screen, but because you have not actually retrieved the file, you cannot edit the file. Type **s** to continuously scroll forward through the document. Press any other key to stop scrolling.

Directories

You can use **Look** (6) to display the files in a subdirectory of the current directory. Move the cursor to a directory (“<Dir>” appears in the Size column), then select **Look** or press **Enter**. The name of that directory appears in the lower left corner of the screen. Press **Enter** again or enter another directory name to display the names of all the files in that directory (see *Filename Patterns* below for details on entering a pattern at this point).

You can select **Look** with the Parent directory highlighted, then press **Enter** to move back through the path one directory. The path includes the root directory and all other subdirectories listed after the root directory (see *Directories in Reference*).

For example, if the directory currently being displayed in the List Files screen is C:\WP51\WORK, selecting **Look** with Parent highlighted, then pressing **Enter** will display the names of the files and subdirectories of C:\WP51 in the List Files screen. The cursor will be placed on the WORK subdirectory. If you highlight Parent, select **Look**, then press **Enter** again, the names of the files and subdirectories of C:\ will be displayed in the List Files screen.

Filename Patterns

When you select **Look** (6) or press **Enter** with a directory on the List Files screen highlighted, the name of the directory is displayed at the bottom of the screen with a filename pattern that includes all files in the directory (e.g., C:\WP51\WORK*.*).

You can press **Enter** to display the names of all the files, or type another pattern to display the names of all the files that match that pattern. For example, entering ***.ltr** in place of ***.*** displays only those filenames that have a .LTR extension (see *Search Patterns* under *Find* in *Reference* for details on filename patterns).

Document Summary

The Look screen changes slightly if you are looking at a WordPerfect 5.0 or 5.1 document that contains a document summary (see *Document Summary* in *Reference*). If the document summary only contains the document name (and type if you are looking at a 5.1 document), the Look screen looks the same as when there is no document summary, except that the header increases to two lines to include the long document name, document type, and date of creation.

If you have created a document summary with more than just the name and type, the document summary, instead of the text of the document, is displayed in the

Look screen. A new menu appears at the bottom of the screen when the document summary is displayed (see *Look Menu* below for details on the menu displayed when there is no document summary or just the long document name and type in the summary). These options are explained as follows.

Look at Text

Select this option (3) or press **Down Arrow** (↓) to display the text of the document in the Look screen. If you want to return to looking at the document summary, select **Look at Document Summary** (3).

Next

This option (1) does the same thing as **Next Document** on the regular Look screen (see *Look Menu* below).

Previous

This option (2) does the same thing as **Previous Document** on the regular Look screen (see *Look Menu* below).

Print Summary

Select this option (4) to send the document summary to the currently selected printer.

Save to File

Select this option (5), then enter a filename to save the document summary to a file. The entire summary is included in the file, plus the DOS filename (including the path) and type of system that created the document (e.g., WordPerfect 5.1).

If you enter a filename that already exists, you can choose to **Replace** (1) the existing file or **Append** (2) the document summary to the existing file.

Header

The Look screen has a header at the top of the screen. It contains information about the file currently being displayed (i.e., filename, revision date and time, and if it is a WordPerfect 5.0 or 5.1 file).

If you select **Look** (6) on a file containing a document summary, the header changes slightly. A second line is added that includes the long document name and type, and the date the file was created.

Locked Documents

If you select **Look** (6) with a locked file highlighted (see *Locked Documents in Reference*), you will be asked to enter the password of that file. If you cannot remember the password, you will not be able to look at the contents or document summary of the file.

Look Menu

When you select **Look** (6) with a file highlighted (and that file has no document summary or just the document name and type in the summary), the text of the

file appears in the Look screen, and a menu appears below the text. The options on this menu are described as follows.

Next Document

This option (1) displays the text or document summary of the next file from the List Files screen in the Look screen. You can continue selecting this option until the end of the file list is reached.

Previous Document

This option (2) displays the text or document summary of the previous file from the List Files screen in the Look screen. You can continue selecting this option until you reach the beginning of the files on the file list. As soon as you come to a directory, you are returned to the List Files screen.

Search in the Look Screen

You can search forward or backward for characters or words while in the Look screen using ♦Search (F2) or ♦Search (Shift-F2). You cannot search while in the document summary; you must have the text of the file displayed in the Look screen (see *Search in Reference*).

When you first display the Look screen, the cursor is at the bottom of the screen. You will have to use ♦Search, or move the cursor to the top of the screen and use ♦Search to search through the text displayed in that screen.

See Also: Directories; List Files

M Macros

The Macro feature records keystrokes and plays them back just as they were recorded, much like the re-dial feature on a telephone. For example, you may perform one of the following tasks several times a day:

- Type a closing to a letter.
- Back up a directory of files.
- Replace several different items in a document.
- Print and save a file.
- Send a “Go” to your printer.
- Print several copies of a document.

Instead of repeating keystrokes manually each time you need to perform the task, you can define (create) a macro to do it for you.

While the WordPerfect Macro feature can be as simple as saving a few keystrokes from the keyboard, it also includes a flexible programming language for more complex uses (see *Macros, Macro Editor in Reference*). For most circumstances, you will only need the fundamental macro features. For example, each of the tasks listed above could be included in a macro without using the macro programming language.

There are two steps to using the fundamental macro features. First, you need to define the macro (create it), and then you can execute the macro (run it). For details on these two steps, see *Macros, Define* and *Macros, Execute in Reference*.

If your macro needs are more sophisticated, and you have a fundamental understanding of logical structures and variables, you may want to explore the macro editor and macro programming language (see *Macros, Macro Editor in Reference*). The language includes such features as the following:

- External condition handling
- Logical structures (e.g., if/then, case)
- Subroutine calls
- User-defined prompts and menus
- Variable assignment, storage, and retrieval

The macro language is quite flexible and can be used to create very sophisticated macros. However, if you are new to the macro feature, we recommend that you start with some fundamental macros before jumping into the macro language.

Notes

Keyboard Layout

You can also create macros using the Keyboard Layout feature. These macros are assigned to specific keys on the keyboard and can be executed by simply pressing the assigned key (see *Keyboard Layout in Reference* for details).

One advantage to using keyboard layout macros is that you can have multiple keyboard layout definitions, each with different macros assigned to the same keys. For example, you might have one keyboard layout where Alt-m marks

items for an index and another keyboard layout where Alt-m moves paragraphs to document 2. Then depending on the task you need, you can change the keyboard layout for the appropriate macro.

Another advantage to using keyboard layout macros is that they are stored together in one keyboard definition file. If you define multiple macros using the Macro feature, each macro is its own file. And multiple macros in individual files will take up more disk space than the same macros in one keyboard file.

Macro Support Policy

Although Macro support operators can assist you in troubleshooting existing macros, they cannot design and write customized macros for you.

See Also: Lesson 15; Keyboard Layout; Macros, Define; Macros, Execute

Macros, Conversion Program

The Macro Conversion Program helps you convert macros written with WordPerfect 4.x (4.0, 4.1, or 4.2) to WordPerfect 5.x (5.0 or 5.1) macros. You can also use the Macro Conversion Program to break and chain WordPerfect 5.0 or 5.1 macros that you define at the normal editing screen that are then too large to edit in the Macro Editor (see */m* under *Startup Options*, and *Large Macro Files* below).

WordPerfect 5.0 macros do not require conversion through the Macro Conversion Program to run with WordPerfect 5.1. However, since the keystrokes to accomplish certain tasks may have changed with WordPerfect 5.1, you may need to edit the macro in the Macro Editor (see Macros, Macro Editor in Reference).

When converting a 4.x macro, the portions of the 4.x macro containing text, cursor keystrokes, and functions that haven't been changed for WordPerfect 5.x are converted directly to the new format. Those that have changed with 5.x are converted to comments (see *[;]comment~* in *Appendix K: Macros and Merge, Programming Commands*). Once you have converted the macro, you can retrieve it in the Macro Editor (see *Macros, Macro Editor in Reference*) and make any additional changes.

Important: *The Macro Conversion Program file (MACROCNV.EXE) needs to be installed properly before using the program. If you chose not to install the WordPerfect utility programs when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Macro Conversion Program (see the Installation Instructions card).*

To use the Macro Conversion Program to convert a 4.x macro to a 5.x macro,

- 1 Go to DOS.
- 2 Change to the directory where MACROCNV.EXE is located.

The Installation Program copies this file to the directory where WordPerfect (WP.EXE) is located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "Utilities" if you are using a two disk drive system.

- 3 Enter **macrocnv macroname** (where *macroname* is the name of the macro to be converted) to start the program and the macro conversion. If you do not specify a macro name when you start the program, you are prompted to enter one. (Be sure to enter the full pathname of the macro if it is not in the current directory. You need not enter the .MAC extension.)

When the conversion is finished, you will see "Done" appear on the screen, along with a report on the conversion of the macro. Portions of the macro that could not be converted (or which require additional modification to replicate its function in 5.x) are described. To make further modifications to the macro, use the Macro Editor in WordPerfect (see *Macros, Macro Editor in Reference*).

The output file generated in the conversion has the same name as the original macro file, except with an extension of .WPM. It is stored in the same directory as the original file, which remains intact in the directory.

If a file already exists in the directory with the same name as the new output file, you will be asked before the conversion starts whether you want to replace the file. You may either replace it or enter a new name for the output file.

Notes

5.0 vs. 5.1

WordPerfect 5.0 macros do not require conversion through the Macro Conversion Program to run with WordPerfect 5.1. However, since the keystrokes to accomplish certain tasks have changed with WordPerfect 5.1, you may need to edit the macro in the Macro Editor (see *Macros, Macro Editor in Reference*) to make it function properly in WordPerfect 5.1.

WordPerfect 4.x macros that you convert with the Macro Conversion Program can be run in either WordPerfect 5.0 or 5.1. (You will still have to edit the portions of the macro that were not converted in the Macro Editor.)

It is possible to run macros created in WordPerfect 5.1 in WordPerfect 5.0; however, commands that are specific to 5.1 and keystroke processes which changed from 5.0 to 5.1 will not function correctly.

Large Macro Files

If you defined a macro in WordPerfect 4.x that was very large, it may not fit in the Macro Editor in WordPerfect 5.1. The Macro Conversion Program checks the size of the macro it is converting, and if it is too large for the Macro Editor, it automatically breaks it into smaller files (about 4.5K in size) which are chained together. (For an explanation of chained macros, see *Chaining Macros* under *Macros, Define in Reference*, and *Chaining, Nesting, and Substituting* under *Notes in Appendix K: Macros and Merge, Programming Commands*.)

The resulting 5.x macro files are named with the same filename as the input file, except a number is appended to the end of the filename. For example, if you

converted a very large WordPerfect 4.2 macro called DOIT.MAC, the resulting WordPerfect 5.x macro files would be named DOIT1.WPM, DOIT2.WPM, DOIT3.WPM, etc. Since the Macro Conversion Program chains the macros together, executing DOIT1.WPM in WordPerfect 5.x would automatically execute DOIT2.WPM, then DOIT3.WPM, etc.

If the Macro Conversion Program must break and chain a macro whose name already contains 8 characters, you will receive a warning message, and it will try to alter the name so that it can still append the number(s) and maintain unique filenames.

WordPerfect 5.x macros you define at the normal editing screen can also become too large to fit in the Macro Editor. You can use the Macro Conversion Program with the */m* startup option to break and chain them. See */m* under *Startup Options* below.

Multiple Files

If you want to convert several macro files at once, use wildcard characters (“?” to represent a single character, “*” to represent zero or more characters) in the name of the macro file to be converted. For example:

- search?** Would convert all the macros in the directory named “SEARCH” followed by a single character.
- search*** Would convert all the macros in the directory named “SEARCH” followed by zero or more characters.
- *** Would convert all the macros in the directory.

Startup Options

There are several startup options you can use with the Macro Conversion Program.

/h

This option displays helpful information about the Macro Conversion Program. To use the option, enter **macrocnv/h** at the DOS prompt.

/m

If you define a macro at the normal editing screen of WordPerfect 5.0 or 5.1, it may be so large that it will not fit in the Macro Editor. If you want to edit the macro in the Macro Editor, use the Macro Conversion Program with this startup option to break the macro into smaller files which are then chained together. See *Large Macro Files* above for more information on breaking and chaining large macro files.

***Important:** You should not use this startup option for 4.x macro files since the Macro Conversion Program breaks and chains 4.x macros automatically. This option is for 5.x macros only.*

WARNING: Do not use the */m* startup option with the Macro Conversion Program to try to break and chain macros that use subroutines (see *Subroutines* in *Appendix K: Macros and Merge, Programming Commands*) or any other control direction commands (such as {IF}, {CASE}, {WHILE}),

etc.). The Macro Conversion Program breaks and chains macros using a sequential order of commands. Macros whose commands are not meant to be executed in the same order they occur in the file are likely to be non-functional after the Macro Conversion Program breaks and chains them.

/o

This option causes existing .WPM files to be overwritten by newly generated macro files of the same name without a warning prompt.

/p

When you run the Macro Conversion Program, a report of the conversion of the macro is written to the screen. This startup option lets you write the report to the printer or to a file instead of to the screen. In addition, the report sent to a file or the printer contains a representation of the original 4.x macro, with notations of the commands that did not convert or that will need modification.

If you want the report written to a file, enter the following at the DOS prompt:

macrocnv/p *macroname* >*filename*

where *macroname* is the name of the macro to be converted, and *filename* is the name of the file where you want the report written.

If you want the report written to the printer, enter the following at the DOS prompt:

macrocnv/p *macroname* >PRN:

where *macroname* is the name of the macro to be converted. ">PRN:" is the standard DOS redirect command to send output to the printer. It defaults to LPT1. If you want more specific information about this command, see your DOS manual.

See Also: Lesson 15; Macros; Macros, Define; Macros, Execute; Macros, Macro Editor; Appendix K

Macros, Define

The following instructions describe defining (creating) a macro from a normal editing screen. You can also define a macro from the macro editing screen (see *Macros, Macro Editor in Reference*). If you are new to defining macros, we recommend that you start by following the steps below.

To define a macro,

1 Press **Macro Define** (Ctrl-F10) to begin defining the macro.

 Select **Macro** from the **Tools** menu, then select **Define**.

2 Enter the name for the macro (eight characters or fewer).

You can also hold down Alt and type any single letter, or you can just press **Enter** to name a macro (see *Naming Macros* below).

3 Enter a brief description of the macro (see *Macro Descriptions* below).

or

Press **Enter** to define the macro without a description.

At this point you are returned to the normal editing screen with “Macro Def” displayed on the status line.

4 Type the keystrokes you want recorded.

5 Press **Macro Define** (Ctrl-F10) again to end defining the macro.

Select Macro from the Tools menu, then select Define.

The keystrokes are saved in a file in the keyboard/macro directory (unless you specified a full path when naming the macro). The default setting for the keyboard/macro directory is the current default directory, unless you have changed the pathname using the Location of Files option on the Setup menu (Shift-F1,6,2). See *Location of Files in Reference*.

A macro file is automatically given a .WPM extension by WordPerfect.

If you try to name a macro with a name that you have already used, WordPerfect gives you the opportunity to replace or edit the original macro. If you select **Replace** (1) and type **y** for Yes, the original macro definition is deleted, and you can enter a description for the new macro (or just press **Enter**), then begin entering keystrokes for the new definition. If you select **Edit** (2), you are placed in the macro editing window. If you select **Description** (3), you can edit the macro description before entering the macro editing window (see *Editing Macros* below).

When you create macros that select fonts, printers, paper sizes, etc., use Name Search, not arrow keys, to select the desired item. If you use arrow keys to select an item and later add an item to or delete an item from the list (thus changing the position of the desired item in the list), your macro may not select the correct item.

Notes

Chaining Macros

Chaining macros means that when one macro ends, the next macro starts. You can chain macros both with and without using the macro language. The following example describes how to chain macro B to macro A without using the macro editor.

1 Press **Macro Define** (Ctrl-F10) to begin defining macro A.

Select Macro from the Tools menu, then select Define.

2 Enter **a** for the macro name, then enter a macro description (or just press **Enter**).

- 3 Type the keystrokes for macro A.
- 4 Press **Macro** (Alt-F10) to begin chaining macro B to macro A.
 - Select *Macro* from the *Tools* menu, then select *Execute*.
- 5 Enter **b** for the macro name.
- 6 Press **Macro Define** (Ctrl-F10) to end defining macro A.
 - Select *Macro* from the *Tools* menu, then select *Define*.
- 7 If you have not already done so, define macro B.

Pressing **Macro** (Alt-F10) while defining macro A (or any macro), records the keystrokes for starting the macro, but does *not* start macro B. Only when you actually run macro A does WordPerfect start macro B.

When you start macro A, WordPerfect runs through all the keystrokes in macro A before starting macro B.

You can expand a simple chain to include several macros by continuing to start one macro while recording another. This takes some careful planning to make sure the macros are chained in the correct order. Start macro B while recording macro A, start macro C while recording macro B, etc.

If you want to chain an *Alt-letter* macro (see *Naming Macros* below), you must first press **Macro** (Alt-F10), then the *Alt-letter* macro keystroke.

You can also nest macros (execute a macro anywhere within another macro). See *Nesting Macros* below.

Converting Macros

Portions of WordPerfect 4.2 macros containing text, cursor keystrokes, and functions that haven't changed in WordPerfect 5.1 can be converted to WordPerfect 5.1 with the MACROCNV.EXE program (see *Macros, Conversion Program* in *Reference*). Macros created in version 5.0 will work in version 5.1 if the keystrokes required to accomplish the task are the same in both versions. Macros created in version 5.1 will only work in version 5.0 if no new 5.1 features have been included in the macro, and if the keystrokes required to accomplish the task are the same in both versions.

If you create a 5.1 macro using features that are not available in 5.0, these features will be represented by a box character (■) in the 5.0 Macro Editor window.

Editing Macros

WordPerfect provides a Macro Editor that can be used to edit WordPerfect macros, whether the macros are simple or complex. However, with some fundamental macros it may be easier to re-create the macro rather than go through the steps of editing it.

If you want to edit a macro, press **Macro Define** (Ctrl-F10), enter the macro name (you don't need to type the .WPM extension), then select **Edit** (2). You are placed in the macro editing window. You can now edit the macro by deleting codes as desired and pressing function keys to enter function codes. You can also enter programming commands with the Macro Commands key (Ctrl-PgUp). See *Macros, Macro Editor in Reference* and *Appendix K: Macros and Merge, Programming Commands* for details.

You can edit a macro description by pressing **Macro Define** (Ctrl-F10), entering the macro name, then selecting **Description** (3). Edit the description, then press **Enter** and you are placed in the macro editing window. To exit the macro editing window, press **Exit** (F7).

If you want to go directly to the macro editing window to create a macro, press **Home, Define Macro** (Ctrl-F10), enter a new macro name, then enter a description (or just press **Enter**).

Ending a Macro Definition

You can press **Macro Define** (Ctrl-F10) to stop defining a macro—even at a message or in a menu. Please note that starting a merge while defining a macro also ends a macro definition.

Macro Commands

The Macro Commands key (Ctrl-PgUp) displays a different menu depending upon the state of WordPerfect when you press it. If you press it while in the Macro Editor, it displays a list of the macro language commands (see *Appendix K: Macros and Merge, Programming Commands* for details). If you press it while at a document screen, it allows you to enter a variable for macro programming. If you press it while Block is on, it assigns the contents of the block to a variable you specify. And if you press it while defining a macro, the following four options become available.

Pause

You can insert a pause that will let you enter text from the keyboard while the macro is running. Select **Pause** (1). At this point, you can type any keystrokes (except **Enter**), and these keystrokes will not be included in the macro. Then press **Enter** to insert the pause. Once you have inserted the pause, you can continue defining the rest of the macro.

When the macro is running, WordPerfect pauses for an entry from the keyboard. You can then type any text and press **Enter** to continue running the macro.

Display

A macro usually executes a task without displaying the various prompts and screens that are included in the task. If you want to see the screen change as the macro executes, you must turn on the display while defining the macro.

To do so, press **Macro Commands** (Ctrl-PgUp), select **Display** (2), then type **y** (or type **n** to turn off the display).

Assign

The macro language lets you assign values to variables. The Macro Commands key lets you assign variables without being in the Macro Editor. Select Assign (3), enter the variable name or number, then enter the value you are assigning to the variable.

If you highlight a block of text before selecting Assign, you are asked for the variable name. When you enter the variable name, the contents of the block are assigned to the variable (most codes included in the block will not be included in the variable).

For details on variables, see *Appendix L: Macros and Merge, Variables*.

Comment

The macro language lets you insert comments to document your macro. These comments can be seen in the macro editing window but do not disturb macro execution. You can insert a comment while defining a macro using the Macro Commands key. Select Comment (4), type the text of the comment, then press **Enter**. The comment is inserted into the macro but can only be seen in the macro editing window. For details on macro comments, see *Appendix K: Macros and Merge, Programming Commands*.

Macro Descriptions

A macro description can be used to describe the contents of a macro. It is displayed at the top of the macro editing screen (see *Macros, Macro Editor* in *Reference*). It is also displayed if you select Look in List (F5,Enter,6) to view the contents of a macro (see *List Files* in *Reference*). The description can be up to 39 characters long.

You do not have to enter a description for a macro.

Mouse

You can use the mouse to access pull-down menus while defining a macro. However, you *cannot* use the mouse to move the cursor while defining a macro. Use the cursor keys instead.

Naming Macros

Before you define a macro, you are asked to enter a name. There are three ways to name a macro:

- Enter one to eight characters.
- Hold down **Alt** and type a letter from A to Z.
- Press **Enter**.

WordPerfect adds a .WPM extension to all macro names.

The advantage to using an *Alt-letter* macro name is that to execute the macro, you simply press the *Alt-letter* keystroke without pressing the Macro key.

If you named a macro with the Enter key, WordPerfect names the macro WP{WP}.WPM. However, you do not have to enter this name when you execute the macro. Just press **Macro** (Alt-F10), then **Enter**.

If you want to edit a macro named with the Enter key, press **Macro Define** (Ctrl-F10), then enter **wp{wp}**. If you just press **Enter** after pressing Ctrl-F10, the existing Enter macro will be replaced without confirmation.

Macros are saved as files in the keyboard/macro directory and can be copied like other files (see *List Files in Reference*). If no directory is specified using the Location of Files feature, then the macro is saved in the default directory. When you execute a macro (see *Macros, Execute in Reference*), WordPerfect looks for the macro in the keyboard/macro directory first (or default directory) and then the system directory (where WPEXE is located) next.

You can define macros using full pathnames (e.g., B:\MEMO, C:\JULIEMEMO). This is useful if you want to store macros in directories other than the keyboard/macro directory. Remember, if you give a macro a full pathname when you create it, you will most likely have to use that full pathname when you execute the macro.

Nesting Macros

You can use *Alt-letter* macros to *nest* one macro inside another macro. You do this by pressing **Alt**, then the letter of the macro while you are defining another macro. Unlike chained macros, WordPerfect does not wait until it completes the first macro before executing the nested macro. Rather, it executes the nested macro at the point it is inserted, and then returns to the original macro after executing the nested macro.

See Also: Lesson 15; Macros; Macros, Execute; Macros, Macro Editor

Macros, Execute

The instructions for executing (running) a macro depend on the way you named the macro when you defined it. If you named a macro using the Alt key (see *Macros, Define in Reference*), you can execute it by holding down Alt and typing the letter you used to name the macro. You do not have to press the Macro key.

If you named the macro any other way,

- 1 Press **Macro** (Alt-F10).
-  Select *Macro* from the *Tools* menu, then select *Execute*.
- 2 Enter the macro name, or press **Enter** (if you named the macro with the Enter key).

When you enter the macro name, you do not have to include the .WPM extension that WordPerfect automatically adds to macro names.

/m Startup Option

You can have a macro execute automatically each time you start WordPerfect using the /m startup option (see *Appendix N: Startup Options*).

Pathnames

You can execute macros using full pathnames (e.g., B:\MEMO, C:\JULIE\MEMO). This is useful if you want to execute macros from directories other than the keyboard/macro directory (see *Location of Files in Reference* for details on the keyboard/macro directory). When you edit or execute a macro, WordPerfect will look in the default directory in addition to the directory listed in Location of Files.

Repeating a Macro

You can use the Repeat feature to repeat a macro a specific number of times.

- 1 Press **Repeat** (Esc), and type the number of times you want the macro repeated.
- 2 Press **Macro** (Alt-F10).

or

If you named the macro with the Alt key, press the *Alt-letter* combination you gave it, then skip step 3 below.

- 3 Enter the macro name.

The macro executes the specified number of times.

Stopping a Macro

You can press **Cancel** (F1) to stop a macro while it is running. If you include a search in a macro, the macro stops when it can no longer find the searched-for item. A macro also stops if an error is detected.

You can change these three conditions using advanced macro commands. For details, see *Appendix K: Macros and Merge, Programming Commands*.

See Also: Lesson 15; Macros; Macros, Define; Macros, Macro Editor

Macros, International Interface

Some menus have options that are chosen by mnemonic letter only and not by number. This can create problems for macros written in one language and running in another because the mnemonics will not always coincide. For example, the mnemonic for Number of Copies on the Print menu (F7) is N in English and Italian (Numero di Copie), but A (Aantal Exemplaren) in Dutch. To help you avoid this difficulty, WordPerfect provides an optional international interface for mnemonics used in macros.

As a general rule, treat mnemonic options in international macros as though they were numbered in sequence with the numbered options. For example, the English WordPerfect Print menu contains seven numbered options followed by six mnemonic-only options. Select 8 for the first mnemonic-only option (Select Printer) and 9 for the next (Binding offset). Instead of using two-digit numbers for the international macro interface, use the following characters which have been chosen to represent the numbers 10 through 15.

/ = 10, \ = 11, : = 12, * = 13, ? = 14, + = 15

For any YES/NO menu option, you can use a plus (+) for yes and a minus (-) for no.

Name Search is on several menus in different positions. It is the tenth menu item on the List Files menu, but sixth on the Format Paper Size/Type menu (Shift-F8, 2, 7). To maintain consistency in macros, Name Search is always represented by the equal sign (=).

When you specify sort keys in an international macro, Alphanumeric (a) is 1 and Numeric (n) is 2.

In the Tab Set feature, there are only mnemonic choices for **Type**, **Left**, **Center**, **Right**, and **Decimal**. These can be accessed by pressing / for Type, **Tab** for Left, **Shift-F6** for Center, **Alt-F6** for Right, and **Ctrl-F6** for Decimal.

When entering numbers with a unit of measurement (e.g., 2"), you can use these character equivalents to represent the units wanted.

Unit	Character Equivalent
i	\
c	:
p	*
w	?
u	+

So, for example, you would enter 2" as 2\.

Macros, Macro Editor

The Macros feature lets you create and edit macros using a programming language. Macro programming is done in the Macro Editor.

The Macro Editor is a special editing window that shows you the individual commands (keystrokes) of your macro. You can insert macro programming commands, keystroke commands, editing keys, and text into your macro. Each command is displayed in braces ({}). Characters and numbers appear without braces.

Below you are shown how to define a new macro (see *Defining a Macro*) and how to edit an existing macro (see *Editing an Existing Macro*).

Defining a Macro

There are two ways to define a new macro. You can define the macro from the keyboard (see *Macros, Define in Reference*) or you can define it in the Macro Editor.

To use the Macro Editor when defining a new macro,

- 1 Press **Home**, then press **Macro Define** (Ctrl-F10) to begin defining the macro.
- 2 Enter the name of your macro. (You can enter a pathname if you want the macro in a directory other than the default.)
- 3 Enter a macro description (up to 39 characters).

or

Press **Enter** if you do not want a description.

You are now in the Macro Editor. The Macro Editor screen displays the name of the macro, its description (your explanation of its function), and the keystrokes and commands that you insert.

- A MACRO NAME
- B MACRO DESCRIPTION
- C EDITING WINDOW



- 4 Create the macro (see *Inserting Text, Inserting Macro Programming Commands, and Inserting Editing Keys and Keystroke Commands* below).
- 5 Press **Exit** (F7) to end macro definition and save the macro.

You cannot use the pull-down menu for rapid entry into a macro (i.e., Home, Ctrl-F10).

If you do not want to save your macro, press **Cancel** (F1) instead of Exit. WordPerfect asks if you want to cancel changes. If you choose No (the default), you remain in the Macro Editor. If you choose Yes, your changes are not saved and you are taken back to the normal editing screen.

When you cancel a new macro, any editing that you may have done is disregarded. However, a macro with the name you gave it will exist, containing nothing but a (DISPLAY OFF) command.

The {DISPLAY OFF} command is inserted at the beginning of all macros. (For information on the {DISPLAY OFF} command, see *Appendix K: Macros and Merge, Programming Commands*.)

However, if a macro that you define from the normal editing screen ends at a menu (e.g., Print) or contains a {Pause}, the {DISPLAY OFF} command is deleted to let you see the menu.

If you define a macro from the normal editing screen, some commands that you insert from the menu bar are treated specially. If the command displays a menu (e.g., Font), the Macro Editor inserts a {MENU OFF} before the command and a {MENU ON} after the command (e.g., {MENU OFF}{Font}{MENU ON}F). Turning the menu off prevents any menus from flashing on the screen when you run the macro. See the descriptions for the {MENU OFF} and {MENU ON} commands in *Appendix K: Macros and Merge, Programming Commands*.

Editing an Existing Macro

There are two ways to enter the Macro Editor when editing an existing macro.

To go directly into an existing macro,

- 1 Press **Home**, then press **Macro Define** (Ctrl-F10).

WordPerfect prompts you for a macro name and a macro description, then places you in the Macro Editor.

If you have already entered a description, the existing description appears at the Description: prompt, where you can edit it or delete it, or you can accept it as it is by pressing **Enter**.

To edit an existing macro without using the rapid entry,

- 1 Press **Macro Define** (Ctrl-F10).

 Select **Macro** from the **Tools** menu, then select **Define**.

- 2 Enter the name of your macro.

You are given the option of replacing the old macro:

YOURMAC.WPM Already Exists: 1 Replace; 2 Edit; 3 Description: 0

If you choose **Replace** (1), you are asked to confirm that you really want to replace your macro.

Replace YOURMAC.WPM? No (Yes)

If you choose **No** (default), you are returned to the normal editing screen. If you choose **Yes**, your old macro is deleted, you are prompted to enter a description, then you are placed in the normal editing screen where you can begin defining the new macro.

If you choose **Edit** (2), WordPerfect brings up your macro and puts it in the Macro Editor where you can edit it.

If you choose **Description (3)**, you are prompted for your description, then placed in the Macro Editor.

Inserting Text

Once you are in the Macro Editor, you can insert and delete text, keystroke commands, and macro commands, and format your macro.

You can insert text by simply typing it at the desired location. To move your cursor through the macro, use the cursor control keys as you would in the normal editing screen. The cursor keys, as well as Enter, Tab, Page Up (PgUp), Page Down (PgDn), Delete, Backspace, and End, perform their normal functions.

Spaces that you type appear as centered dots in the macro editing screen.

You can use Tab and Enter to make your macro more readable. The tabs and hard returns do not affect the execution of your macro. (For details, see *Inserting Editing Keys and Keystroke Commands* below.)

Comments can also help make a macro easier to read and edit. See the *{;}comment~* command description in *Appendix K: Macros and Merge, Programming Commands*.

Typeover cannot be used in the Macro Editor.

Inserting Macro Programming Commands

You can insert both macro programming commands (e.g., {DISPLAY ON}, {IF}) as well as WordPerfect keystroke commands (e.g., {Spell}, {Tab}) into your macro.

All commands are bolded and enclosed in braces. However, those commands that are assigned to a keystroke are shown in initial capital letters ({Spell}), while the macro programming commands (those commands not assigned to a keystroke) are shown in all capital letters ({DISPLAY ON}).

To insert macro programming commands into your macro,

- 1** Move the cursor to where you want to insert the command.
- 2** Press **Macro Commands** (Ctrl-PgUp or Alt-=) to display the Macro Commands menu. You can scroll to your desired command or you can use Name Search.
- 3** When you have highlighted the command you want, press **Enter** to insert it into your macro.

Press **Cancel** (F1), **Escape**, or **Exit** (F7) to exit the Macro Commands menu without inserting a command.

You can use the cursor keys to move around in the Macro Commands menu. In addition to the cursor keys, pressing the Space Bar moves the cursor to the top of the menu.

Name Search is active while you are in the Macro Commands menu. To use Name Search, start typing the name of the command you want to insert. (You do not need to type the opening brace {}, just the letters.) The letters you type appear in the lower left corner of your screen, and the cursor moves to the command that most closely matches those characters. You can press **Enter** to insert the command, or you can press one of the arrow keys to reset Name Search (so that you can type characters for another command) and to move the cursor.

You cannot simply type a macro command surrounded by braces—it must be retrieved from the Macro Commands menu. Each macro command that you insert into your macro is treated as a single unit by the Macro Editor. Each command is deleted with a single delete.

Most commands require a specific syntax. For more information, see *Appendix K: Macros and Merge, Programming Commands*.

Inserting Editing Keys and Keystroke Commands

Besides using the editing keys (e.g., Enter, arrows, Home, Backspace, PgUp) for editing your macro, you may want to insert editing key commands into your macro.

You must enter the Command Insert mode before pressing the key to insert the following commands: macro commands (Ctrl-PgUp), variables, certain control characters, keyboard macro names, and cursor keys.

To enter Command Insert mode, either press **Ctrl-v**, which places you in Command Insert mode for the following keystroke, or press **Ctrl-F10**, which places you in Command Insert mode until you press **Ctrl-F10** again.

Command Insert mode tells WordPerfect to insert the command for any key you press into the macro. For example, to insert the {Enter} command into your macro, press **Ctrl-v**, then press **Enter**.

If you only need to insert one Tab, cursor key, etc., into your macro, press **Ctrl-v**. A prompt “Press Command Key” appears. Press the desired key.

If you will be inserting many of these commands, enter the Command Insert mode by pressing **Macro Define** (Ctrl-F10). While in this mode, all keys you press will insert the key command. When you want to use the editing keys to edit, press **Macro Define** again to return to edit mode.

You can insert most of the function key commands simply by pressing the corresponding feature key. For example, press **Spell** (Ctrl-F2) to insert the {Spell} command into your macro.

If you want to have your macro view a document, press **Print** (Shift-F7), then type **v**. Your macro should then look like this: {Print}v

However, there are four functions which are executed when you press the corresponding keys: Macro Define (Ctrl-F10) (toggles Command Insert mode as described above), Cancel (F1), Help (F3), and Exit (F7). You can insert these

corresponding keystroke commands into your macro by entering Command Insert mode, then pressing the function key. You can only insert {Macro Define} into your macro by first pressing **Ctrl-v**, then pressing **Macro Define** (Ctrl-F10).

If you want to insert the commands associated with a macro assigned to a key on the current keyboard layout, press **Ctrl-v**, then press the key.

When you create macros that select fonts, printers, paper sizes, etc., use Name Search, not arrow keys, to select the desired item. If you use arrow keys to select an item and later add an item to or delete an item from the list (thus changing the position of the desired item in the list), your macro may not select the correct item.

Notes

Combining Macros

You can insert the contents of a macro into other macros by assigning it to a key (see *Action* under *Keyboard Layout, Edit* in *Reference*). The commands of the macro are inserted into the Macro Editor when you press Ctrl-v, key.

Macro Size Limit

The Macro Editor has a limit on the size of macro that it can hold (at least 5K). If you are editing a macro, the Macro Editor simply stops inserting your commands or text when you reach this limit. You can use {CHAIN} or {NEST} to overcome this limitation (see *Appendix K: Macros and Merge, Programming Commands*).

If you have created a macro (e.g., in the normal editing screen) that is larger than can fit in the Macro Editor, an error message appears, “Not enough memory,” and then you are returned to the normal editing screen. In order to edit such large macros, use the /m option of the Macro Conversion Program. This option breaks your large macro into smaller macros and then chains them together. See /m under *Macros, Conversion Program* in *Reference* for details.

Message Display

You can position your cursor and text on the screen, as well as change attributes of the text that you display. See *Macros, Message Display* in *Reference* for details.

Programming Commands

There is a wide range of programming commands that you can use in your macro. See *Appendix K: Macros and Merge, Programming Commands* for details.

Variables and Expressions

You can assign values to variables and store text in variables. See *Appendix J: Macros and Merge, Expressions* and *Appendix L: Macros and Merge, Variables* for details.

See Also: Macros; Macros, Conversion Program; Macros, Define; Macros, Execute; Macros, Message Display; Appendix I; Appendix J; Appendix K; Appendix L

Macros, Message Display

You can use control characters to affect the way the messages in the {CHAR}, {INPUT}, {PROMPT}, {STATUS PROMPT}, and {TEXT} commands are displayed on the screen. (See *Appendix K: Macros and Merge, Programming Commands* for details of the above commands.) For example, you can use control characters to determine the attributes of text in the message (such as bolding or underlining), or to place messages at different locations on the screen.

The following screen shows an example of how you might display a message using these control characters.

```
Please select document type:
1. Report
2. Letter
3. Memo
4. Other
```

```
Enter selection:
```

The characters are divided into three categories: Attribute On/Off Characters, Attribute Characters, and Cursor Positioning Characters. Some of the characters have different functions depending on where they appear in the message string (e.g., which character precedes them). The tables below describe how each control character functions.

*In all of the tables below, the Character column lists the control characters you should press to insert the commands listed in the second column (the Shown As column). In the Character column, ^letter means to hold down the Ctrl key, then press the letter. You may also press the key which corresponds to the command. For example, to display the [Home] command, you can press either ^v followed by ^h (Ctrl-v, Ctrl-h), or Ctrl-v followed by **Home**.*

In order to insert certain commands into your macro, you must be in Command Insert mode (see Inserting Editing Keys and Keystroke Commands under Macros, Macro Editor in Reference). The appropriate commands are listed following each table.

Attribute On/Off Characters

The following characters are used to control attribute display:

Character	Shown As	Action
^N	{^N}	Turn on display attribute (followed by attribute character) (see <i>Attribute Characters</i> below).
^O	{^O}	Turn off display attribute (see <i>Attribute Characters</i> below).
^Q	{^Q}	Turn off all display attributes.
^R	{^R}	Turn on reverse video.
^S	{^S}	Turn off reverse video.
^T	{^T}	Turn on underline.
^U	{^U}	Turn off underline.
^V	{^V}	Turn on mnemonic attribute (the attribute selected with the Display menu of the Setup key). Turn off with ^Q.
^]	{^]}	Turn on bold.
^\	{^\}	Turn off bold.

Important: To insert {^V} into your macro, you must be in Command Insert mode (Ctrl-v or Ctrl-F10).

Attribute Characters

The following control characters turn a display attribute on or off when they are preceded by {^N} or {^O}. To turn on an attribute, precede the appropriate control character with {^N}. To turn off the attribute, precede the control character with {^O}. The attribute is displayed with the settings you have selected on the Screen Attributes menu on the Setup key (see *Colors/Fonts/Attributes in Reference*).

Attribute	Character	Shown As
Blink	^P	{^P}
Bold	^L	{Del to EOP}
Double Underline	^K	{Del to EOL}
Fine Print	^D	{^D}
Italics	^H	{Home}
Large	^B	{^B}
Outline	^G	{^G}
Redline	^J	{Enter}
Reverse Video	^Q	{^Q}
Shadow	^I	{Tab}
Small	^C	{^C}

Attribute	Character	Shown As
Small Caps	^O	{^O}
Strikeout	^M	{^M}
Subscript	^F	{^F}
Superscript	^E	{^E}
Underline	^N	{^N}
Very Large	^A	{^A}

Important: To insert {Del to EOL}, {Home}, {Enter}, or {Tab}, you must be in Command Insert mode (Ctrl-v or Ctrl-F10).

The following example illustrates one use of underlining.

```
{ASSIGN}name~Hemingway~
{CHAR}1~Is-the-Author-^{^N}{VARIABLE}name~{^O}{^N}?.(Y/N):~
```

The word “Hemingway” is assigned to the variable name. The {CHAR} command then displays the following message at the bottom of the screen:

```
Is the author Hemingway? (Y/N): _
```

The first ^N signals that an attribute character follows. The second ^N turns on underline. Notice that the contents of the variable name are displayed next. The ^O signals that the attribute associated with the next character should be turned off. Since ^N represents underline, underlining is turned off.

The following example illustrates one use of bold.

```
{CHAR}1~
  {^}1{^Q}·{^V}M{^Q}emo;·
  {^}2{^Q}·{^V}L{^Q}etter;·
  {^}3{^Q}·{^V}I{^Q}tinerary;~
```

The {CHAR} command displays this message at the bottom of the screen:

```
1 Memo: 2 Letter: 3 Itinerary:
```

The ^] codes turn on bold, the ^Q codes turn off all attributes (including bold). The ^V codes turn on the mnemonic attribute (in this case, bold). (Remember, you must press Ctrl-v twice to get {^V}.) Again, ^Q is used to turn off the mnemonic attribute.

Cursor Positioning Characters

The following control characters affect the location of text in a message on the screen. When a control character is inserted, the cursor is moved to the location indicated, and any text that follows the control character is displayed beginning at that location. You can use as many display position control characters in a message as you need to position and format the message.

Character	Shown As	Action
^H	{Home}	Position cursor at upper-left corner of screen.
^J	{Enter}	Position cursor at beginning of next line.
^K	{Del to EOL}	Clear text to end of line. Cursor remains.
^L	{Del to EOP}	Clear the screen, position cursor at upper-left corner of screen.
^M	{^M}	Position cursor at beginning of line.
^P	{^P}	Position cursor (followed by two characters: column, then row). See <i>Ctrl-P</i> below.
^W	{Up}	Position cursor up one line.
^X	{Right}	Position cursor right one character.
^Y	{Left}	Position cursor left one character.
^Z	{Down}	Position cursor down one line.

Important: To insert any of the above codes except {Del to EOP}, {^M}, or {^P}, you must be in Command Insert mode (Ctrl-v or Ctrl-F10).

The following example illustrates the use of the ^Y control character (displayed as {Left}) for repositioning the cursor.

```
{ASSIGN}name~Hemingway~
{CHAR}I~Is the Author~{^N}{^N}{VARIABLE}name~{^O}{^N}?
(Y/N):·Yes{Left}{Left}{Left}~
```

```
Is the author Hemingway? (Y/N): Yes
```

The three *{Left}* commands position the cursor three characters to the left. When the message is displayed, the cursor is on the "Y" of Yes.

Notes

Conversion Chart, Alphabetic

Use the following chart to determine row and column positions using alphabetical control characters:

Screen Position	Control Character	Screen Position	Control Character
1	{^A}	14	{^N}
2	{^B}	15	{^O}
3	{^C}	16	{^P}
4	{^D}	17	{^Q}
5	{^E}	18	{^R}
6	{^F}	19	{^S}
7	{^G}	20	{^T}
8	{^H}	21	{^U}
9	{^I}	22	{^V}
10	{^J}	23	{^W}
11	{^K}	24	{^X}
12	{^L}	25	{^Y}
13	{^M}	26	{^Z}

If you want to use ASCII characters for your row and column positions, the ASCII Conversion Chart is in *Appendix A*.

Ctrl-P

You can use the Ctrl-P character {^P} to position the cursor (and hence, the message) on the screen. Ctrl-P is a shortcut to positioning the cursor. Moving the cursor can also be accomplished by using the other control characters as listed in the table under *Cursor Positioning Characters* above.

The two characters following Ctrl-P should be the coordinates for the position on the screen. The screen is divided into columns and rows. Each position that can be occupied by a character on the screen has a column and row coordinate. The

column coordinate is listed first, then the row coordinate. For example, the upper left corner of the screen has the coordinates 0,0. The position directly below 0,0 is 0,1. One position to the right of 0,1 is 1,1.

Within the {CHAR}, {INPUT}, {PROMPT}, {STATUS PROMPT}, and {TEXT} commands, the coordinates that follow {^P} must be entered as either *control characters* or *ASCII character equivalents*. If you use control characters, {^A} corresponds to coordinate 1, {^B} corresponds to coordinate 2, and so on. If you use ASCII character equivalents, coordinate 1=⊙, 2=●, 3=♥, and so on.

Refer to Conversion Chart, Alphabetic *above* and Appendix A: ASCII Conversion Chart to translate all the row and column positions.

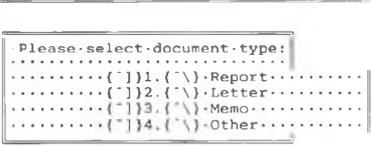
The first row and column of the screen are at position zero. Since there is no letter of the alphabet for zero (A=1), the top row and left-most column are inaccessible using the {^P}nn positioning feature with control characters. Also, you cannot use the ASCII equivalent of 0 since this is a null character.

However, you can reach row 0 or column 0 using ASCII 254. For example, to position at column 0, row 0, insert a prompt command ({CHAR}, {INPUT}, etc.), press **Ctrl-P**, then press **Alt-254** twice.

Since there are only 26 letters of the alphabet (Z=26), to position a message starting at a row or column position greater than 26 you must use the ASCII equivalents.

To produce the menu shown at the beginning of this section, the command you would enter in the macro would be the following:

```
{CHAR}3 {^Q}{Del to EOP}
  {^P}{^U}{Home}
  {^P}{^U}{Tab}
  {^P}{^U}{Enter}
  {^P}{^U}{Del to EOL}
  {^P}{^U}{Del to EOP}
  {^P}{^U}{^M}
  {^P}{^U}{^N}
  {^P}{^U}{^O}
  {^P}{^A}{Right}Enter·selection:·
```



Notice that this is all one {CHAR} command. {^Q} turns off all attributes (see Attribute On/Off Characters above). {Del to EOP} clears the screen and positions the cursor at the upper left corner. The first {^P}{^U}{Home} positions the cursor at column 21, row 8 (U=21, H=8-see Conversion Chart, Alphabetic above). The rest of the line is simply characters written to the screen as part of the message string. (You can enter these characters like any other ASCII character. See Appendix A: ASCII Conversion Chart.) When the next {^P} is encountered, the cursor is repositioned to the next row at the 21st

column position. `{^P}{^A}{Right}` positions the cursor at column 1, row 24 (the last row on the screen) for the prompt. Finally, the tilde (~) ends the `{CHAR}` command.

Using only ASCII equivalents, you would enter this to produce the screen:

```
(CHAR)3~(^Q){Del to EOP}
(^P)S
(^P)S0 .Please select document type:
(^P)S1 .....(^)1.(^)Report.....
(^P)S2 .....(^)2.(^)Letter.....
(^P)S3 .....(^)3.(^)Memo.....
(^P)S4 .....(^)4.(^)Other.....
(^P)S5
(^P)S6 Enter selection:..
```

Display On/Off, Effect on Messages

The messages of the `{CHAR}`, `{INPUT}`, `{PROMPT}`, `{STATUS PROMPT}`, and `{TEXT}` commands display on the screen whether Display is on or off (see `{DISPLAY ON}` and `{DISPLAY OFF}` under *Appendix K: Macros and Merge, Programming Commands*).

The message stays on the screen until the screen is rewritten. If Display is on, the screen is rewritten very frequently (at each vertical cursor movement, change of menu, etc.). If Display is off, the screen is not rewritten unless a `{DISPLAY ON}` code is encountered and a subsequent action rewrites the screen.

However, when Display is off, a new message will overwrite a previous message. If you use cursor positioning, only the part of the screen occupied by the new message is overwritten. You can use this feature to create a *stacking* effect with messages.

```
Please select document type:
Updating current document type
4. Other
```

If you don't want messages stacked, use the ^L ({{Del to EOP}}) positioning command to clear the screen, as in the example under *Ctrl-P* above. You can also rewrite the screen to clear a previous message by pressing **Screen,Screen** (Ctrl-F3, Ctrl-F3).

Even if Display is off in your macro, your document may still be visible under a message, as in this example:

```

The two characters following Control P should be the
coordinates for the position on the screen. The
screen is divided into columns and rows. Each
position that can be occupied by a character on
the screen has a column and row coordinate. The column
coordinate is listed first and the row coordinate.
For example, the upper left corner of the screen
has the coordinates 0,0 or 0,1. One position directly
below 0,0 is 0,1. One position directly to the right
of 0,1 is 1,1.

Within the {CHAR}, {INPUT}, {PROMPT}, {STATUS PROMPT},
and {TEXT} commands, the characters or ASCII
control characters that follow {P} must be entered as
character equivalents. For example, the character
equivalent for the left arrow key is ^L. The
character equivalent for the right arrow key is ^R.
(^A) corresponds to the ASCII character
coordinate 2, and (^B) corresponds to the
ASCII character equivalent, coordinate 3.

Refer to Conversion Chart, Alphabetic below and
Appendix A: ASCII Conversion Chart to translate all
the row and column positions.

The first row and column of the screen are at position
Enter Selection: 1

```

Using the ^L ({{Del to EOP}}) positioning command in the {CHAR}, {INPUT}, {PROMPT}, {STATUS PROMPT}, or {TEXT} command will also clear the screen in this case.

If Display is on and you use cursor positioning for messages, a message may remain on the screen when the macro has finished. (This may make it look like the macro got "stuck.") You can cause the screen to rewrite by pressing **Down Arrow** (↓). However, if you put {PROMPT}{Del to EOP}~ (inserted using Ctrl-L) somewhere after the last message command in the macro, the screen will be clear when the macro finishes.

Reappearing {PROMPT} Messages

After executing a {CHAR} or {TEXT} command, WordPerfect restores the contents of the status line, even if the contents are the message of a previously executed {PROMPT} command. If you do not want a {PROMPT} message to reappear after the {CHAR} or {TEXT} command, use {PROMPT}~ before the {CHAR} or {TEXT} command to clear the status line.

Reveal Codes, Effect on Messages

If Reveal Codes is on when you execute a macro using Ctrl-P cursor positioning (see *Ctrl-P* above), the message may not display correctly. You can use the following commands at the beginning of the macro to turn off Reveal Codes (if it is on):

```

{ASSIGN}RevealCodes~~
{;}Clear-RevealCodes-variable~

```

```
{IF}{STATE}&512~
  {;}If Reveal Codes on~
  {Reveal Codes}
  {;}Turn Reveal Codes off~
  {ASSIGN}RevealCodes~was on~
  {;}Set flag~
{END IF}
```

If you want Reveal Codes turned back on when the macro finishes (if it was on when the above codes were encountered by the macro), insert the following commands at the end of the macro:

```
{IF}"{ VARIABLE}RevealCodes~"="was on"~
  {;}If flag was set (RC was turned off) by above commands~
  {Reveal Codes}
  {;}Turn Reveal Codes back on~
{END IF}
```

If you frequently write macros where you need these commands, we recommend that you save each set of commands as a separate macro and then use {NEST} (see *Appendix K: Macros and Merge, Programming Commands*) to nest them in macros that need them.

See Also: Macros; Macros, Define; Macros, Execute; Macros, Macro Editor; Appendix A; Appendix I; Appendix J; Appendix K; Appendix L

Margins, Left and Right

In WordPerfect, the left and right margins are measured from the left and right edges of the page. They remain constant regardless of the font size you are using. WordPerfect adjusts the text you type to fit within the current margins. The default setting is for a 1" margin on each side of the page.

To change the left or right margin setting,

- 1 Press **Format** (Shift-F8), then select **Line** (1).
 Select Line from the Layout menu.
- 2 Select **Margins** (7).
- 3 Enter a left margin measurement, then enter a right margin measurement (see *Measurements* below).
- 4 Press **Exit** (F7) to return to your document.

Codes

Changing the margins inserts a Left and Right Margin code [L/R Mar:#,##] into your document where # represents the left margin and ## represents the right margin. The code takes effect from that point in your document forward, until you change the margins again. WordPerfect only changes the margins *after* the Left and Right Margin code. Any text before the code uses the previous setting.

This makes it easy to change the margins at any point in the document. To change the margins of existing text, follow steps 1 through 4 above to insert a Left and Right Margin code immediately before the text.

If the cursor is not at the left margin when you change margins, a Hard Return code [HrT] is inserted just before the new Left and Right Margin code and the cursor moves to the left margin on the next full line of text.

In Reveal Codes (Alt-F3), the ruler across the center of the screen displays the left margin as a left bracket ([) and the right margin as a right bracket (]). If a margin falls on a tab setting, it is displayed as a left brace ({) or a right brace (}).

When you attempt to delete a Left and Right Margin code in the normal editing screen, you are asked to confirm the deletion.

Initial Codes

If you want margin settings different from those that come with WordPerfect, you can enter your own margin settings using Initial Codes in Setup (Shift-F1,4,5) (see *Initial Codes* in *Reference*). They will then be in place each time you create a document.

Measurements

When entering a measurement, you can enter fractions (e.g., 1 1/2). The measurement you enter will be converted to a decimal number in the current unit of measure. For example, if inches are the current unit of measure, 1 1/2 is converted to 1.5". The default unit of measure is selected in Units of Measure in Setup (Shift-F1,3,8) (see *Units of Measure* in *Reference*). WordPerfect allows ten input characters for margins.

If you enter margins that overlap the current paper width, an error message is displayed and you are given the chance to enter new settings (see steps 2 through 4 above).

You must make margin changes within WordPerfect. WordPerfect overrides any margin settings you set on your printer.

Most laser printers have a minimum margin setting to allow for an unprintable region. If you enter a margin setting that is less than the minimum margin setting, WordPerfect resets the margins to equal the minimum margin setting. For example, if your left unprintable region is .25" and you enter 0 for your left margin setting, WordPerfect will set your left margin at .25".

See Also: Margins, Top and Bottom; Units of Measure

Margins, Top and Bottom

In WordPerfect, the top and bottom margins are measured from the top and bottom edges of the page. They remain constant regardless of the font or paper size you are using. WordPerfect places the text on the page within the current margins.

The default setting is for a 1" margin at the top and bottom of the page.

To change the top or bottom margin setting,

1 Press **Format** (Shift-F8), then select **Page** (2).

 Select *Page* from the *Layout* menu.

2 Select **Margins** (5).

3 Enter a top margin measurement, then enter a bottom margin measurement.

4 Press **Exit** (F7) to return to your document.

Notes

Baseline Placement

Normally, text is never printed within the top or bottom margin of a page. WordPerfect prints the first line of text immediately below the top margin.

You can have WordPerfect place the first line of text inside the top margin by setting the Baseline Placement option on the Format: Printer Functions menu to Yes (Shift-F8,4,6,5,y). WordPerfect will then print the first line of text within the top margin, and place the baseline of that line on the top margin (see *Printer Functions* in *Reference*). This measurement will not vary, regardless of the fonts you use in that first line of text.

Codes

Changing the top and bottom margins inserts a Top and Bottom Margin code [T/B Mar:##,##] into your document, where # represents the top margin and ## represents the bottom margin. The code takes effect from that point in your document forward, until you change the margins again. However, keep in mind that a top and bottom margin code should always be placed at the top of a page, with any codes used to format that page. Otherwise it does not take effect until the next page.

Although the top and bottom margins are not displayed in the normal editing screen, the top margin is always taken into account in calculating the position number which is displayed on the right end of the status line (unless you are using 4.2 units of measure). You can also view the current top and bottom margins on-screen by using View Document to preview the printed page (Shift-F7,6) (see *View Document* in *Reference*).

Headers, Footers, and Footnotes

WordPerfect does not print headers, footers, and footnotes within the top and bottom margins of a page. It places headers immediately below the top margin. It places footers and footnotes immediately above the bottom margin.

Measurements

When entering a measurement, you can enter fractions (e.g., 1 1/2). The measurement you enter will be converted to a decimal number in the current default measurement, as selected in Units of Measure in Setup (Shift-F1,3,8) (see *Units of Measure in Reference*). WordPerfect allows ten input characters for margins.

If the measurements that you enter are greater than the overall length of the page, they will return to the default settings.

You must make margin changes within WordPerfect. WordPerfect overrides any margin settings you set on your printer.

Most laser printers have a minimum margin setting to allow for an unprintable region. If you enter a margin setting that is less than the minimum margin setting, WordPerfect resets the margins to equal the minimum margin setting. For example, if your top unprintable region is .25" and you enter 0 for your top margin setting, WordPerfect will set your top margin at .25".

Text Adjustment

If you find that text on the printed page is not located where you expect it should be (according to the margins you have set), you may need to change your text adjustment. See *Text Adjustment* under *Paper Size/Type* in *Reference* for more information.

Note that your top margin setting should not be smaller than your text adjustment. If it is, text at the top of the page may be overprinted.

See Also: Line Height; Margins, Left and Right; Printer Functions

Master Documents

A master document is a WordPerfect document that contains one or more subdocuments as well as intermixed text and codes. Subdocuments are other WordPerfect documents.

For example, a master document could be a book with several chapters. Each chapter could be a subdocument that exists as an individual file.

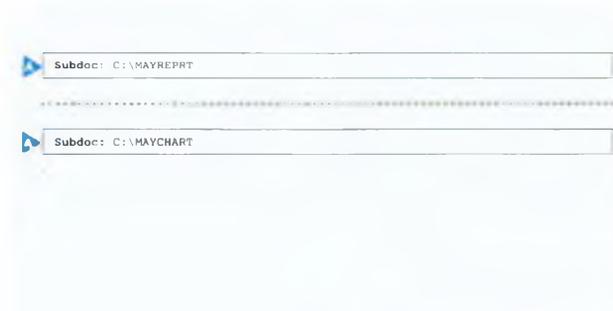
The benefit of using a master document is that it is very manageable and easy to edit. This is because the subdocuments can easily be removed from or retrieved to the master document. This lets you edit your individual subdocument files without having to scroll through a very large document to do so. It also lets you easily combine several subdocuments to create, among other things, a table of contents, a list, or an index for a large document.

Subdocuments can be easily retrieved or removed from a master document because the master document contains subdocument links. These links, which

you insert in a master document, are used to tell WordPerfect where a subdocument should be located in the master document. When you are ready to retrieve the subdocuments to the link locations, you can expand the master document. When you want to remove the subdocuments from the link locations, you can condense the master document.

Subdocument links are represented on the screen as comments. In the screen below, you can see two subdocument links.

SUBDOCUMENT LINKS



These links tell you and WordPerfect the name of the file that is to be retrieved to the link location. You can see the filename after the “Subdoc:” heading.

The process of creating a master document is as simple as typing text and inserting codes as you would in a normal document, then inserting the links where you want to include subdocuments.

To insert a subdocument link,

- 1 Move the cursor to where you want to insert the link.

You may want to insert a hard page break before the location of the subdocument link to make sure that the subdocument starts on a separate page. WordPerfect will not insert a hard page break for you when you expand the master document.

- 2 Press **Mark Text** (Alt-F5), then select Subdocument (2).

 *Select Subdocument from the Mark menu.*

- 3 Enter the filename (include the pathname if necessary) of the subdocument you want to link to.

WordPerfect will let you enter a filename to a subdocument that does not yet exist. If the subdocument does not exist when you expand the master document, however, WordPerfect will display a prompt that tells you that subdocument does not exist (see *Expanding a Master Document* below).

You can create as many subdocument links as you like in a master document. You can also save the master document, give it a filename, and use it as a subdocument in other master documents.

Notes

Codes

One of the best things about using a master document is that codes in the master document function just like codes in a normal WordPerfect document. In other words, a code remains in effect until it is replaced by another code of the same type.

For example, if you set a code such as a margin setting anywhere in a master document, including in the subdocuments, that code remains in effect until WordPerfect reaches the next code of the same type. The same holds true for any type of numbering (e.g., page numbering, footnote numbering, line numbering) that you may have in your document.

One thing you should realize, however, is that a master document must be expanded for any of the subdocument codes to take effect.

Condensing a Master Document

Condensing a master document removes the subdocuments from the master document. It does not remove the links to the subdocuments, just the subdocuments themselves. If a master document is not expanded, it does not need to be condensed.

To condense a master document, press **Mark Text** (Alt-F5), select **Generate** (6), then select **Condense Master Document** (4).

When a master document is condensed, you are given the opportunity to save any editing changes you may have made to the subdocuments while they were in the master document. When WordPerfect displays the "Save Subdocs?" message on the status line, type **y** to save the subdocuments or type **n** to continue condensing the document without saving the subdocuments.

If you type **y**, WordPerfect displays the "Replace *filename*" message, then gives you three choices. **Yes** (1) tells WordPerfect to replace the old subdocument with the newly edited subdocument, **No** (2) lets you enter a new filename for the newly edited subdocument, and **Replace All Remaining** (3) tells WordPerfect to replace the old subdocument with the newly edited subdocument and to do the same for the rest of the subdocuments in the master document.

If a subdocument by the same name as the subdocument you are saving doesn't exist, WordPerfect saves the newly edited subdocument without further prompt.

Cross-References, Tables, Lists, and Indexes

A master document is especially useful for generating cross-references, endnotes, indexes, lists, tables of contents, and tables of authorities for a document. As long as the proper codes for those features are located in the master document, the Generate feature (Alt-F5,6,5) will work as it does in a normal document.

For most of the features listed in the paragraph above, you should mark the entries in the subdocuments. Then, you should include the definition code in the master document. For example, if you are compiling an index, you should mark the index entries in the subdocuments. Then, you should move to the bottom of the master document, insert a hard page break, and insert an Index Definition code.

If you are generating a condensed master document, WordPerfect expands the document during generation, then condenses the document after generation. During the generation, WordPerfect prompts you with the “Update Subdocs?” message. Type **n** to delete the subdocuments without saving them, or type **y** to save all subdocuments before deleting them from the master document.

As mentioned in *Codes* above, numbering in a master document functions just as it does in a normal document. Unless WordPerfect encounters a code calling for a numbering change somewhere in the master document (including the subdocuments), numbering starts at one and continues throughout the document. If WordPerfect does encounter a code calling for a numbering change, it changes numbering at that point, then continues from the specified number.

Unless you have a hard page break at the top of your subdocuments (a rare occurrence), you should insert a hard page break (Ctrl-Enter) before the link to the subdocument. Otherwise, WordPerfect will not start the subdocument on a separate page.

Expanding a Master Document

Expanding a master document retrieves the subdocuments to the master document. If you plan to print a master document, you must expand the document. If you don't expand the master document, the condensed version is printed.

When a master document is expanded, subdocuments are formatted for the currently selected printer. This means that if the subdocuments were saved with a different printer definition, fonts and other printer-specific formatting changes may not appear as they did in the subdocument.

To expand a master document, press **Mark Text** (Alt-F5), select **Generate** (6), then select **Expand Master Document** (3).

As the master document is being expanded, prompts appear on the status line letting you know which subdocuments are being expanded. If a subdocument doesn't exist, WordPerfect displays the “Subdoc Not Found (Press **Enter** to Skip)” message along with the filename of the subdocument that doesn't exist. You can press **Enter** to have WordPerfect skip over that subdocument and continue, or you can re-enter the filename.

When the master document is expanded, the “Subdoc: *filename*” comments are replaced with a “Subdoc Start: *filename*” comment at the beginning of the subdocument and a “Subdoc End: *filename*” comment at the end of the subdocument. These comments let you know which text in the master document

is in a subdocument. Like all WordPerfect comments, these comments are not printed.

You can edit any text in a master document, including text in a subdocument. If you save or condense the document, WordPerfect will give you the opportunity to save the editing changes in the subdocuments (see *Condensing a Master Document* above and *Saving a Master Document* below).

Saving a Master Document

You can save a master document just as you can any other document. This includes saving a document with either the Save or Exit features.

If you are saving an expanded master document, however, WordPerfect displays the “Document is Expanded, Condense it?” prompt. If you type **n**, WordPerfect will save the document in its expanded form and will not display this prompt on subsequent saves. If you type **y**, WordPerfect begins to condense the master document.

As WordPerfect begins to condense the master document, it gives you the opportunity to save any editing changes you may have made to the subdocuments while they were in the master document. This process is described under *Condensing a Master Document* above.

See Also: Cross-Reference; Generate; Index; Lists; Table of Authorities; Table of Contents

Math

There are two ways to perform fundamental math calculations in a document: Tables and Math. The Tables feature approaches math operations much like a spreadsheet program, and may be easier for those familiar with such programs. The Math feature takes a different approach to math operations which avoids the formatting of Table lines and boxes.

If you have not used the Math features in WordPerfect, we recommend that you try Tables math first (see *Table, Math in Reference*).

The Math feature uses tab stops to designate columns. Both numbers and text can be typed into columns, and numbers can be calculated down or across columns.

Monthly Revenues -- February				
Item	Revenues	Year to Date	Sales Tax	Status
Appliances	3510.00		175.50	Up
Televisions	5300.00		265.00	Up
Total	8,810.00			
Art				
Paintings	3080.00		152.00	Down
Sculptures	1450.00		72.50	Up
Total	4,530.00			
Jewelry				
Small	5000.00		250.00	Up
Medium	4700.00		235.00	Up
Large	3500.00		175.00	Down
Total	13,200.00			
Music Boxes				
Crystal	2200.00		110.00	Up
Fluted	1320.00		66.00	Down
Wood	6200.00		310.00	Up
Total	9,720.00			
Watches				
Pocket	1400.00		70.00	Down
Wrist	5200.00		260.00	Up
Total	6,600.00			
January Total		42,890.00	2,144.50	
February Total		40,545.00	2,027.25	Down
Year to Date		83,435.00	4,171.75	

The simplest way to use Math is to calculate subtotals, totals, and grand totals *down* the tab columns. This process eliminates the need to define Math columns (step 2 below). The headings under *Notes* below guide you through the process of performing such fundamental math calculations (down columns).

If you want to use Math for more sophisticated applications, the instructions under *Notes* refer you to three other sections in *Reference*: *Math, Define Columns*; *Math—Row Titles, Numbers, and Functions*; and *Math, Formulas*.

There are six basic steps to creating a math document. For details on each step, see the individual headings under *Notes* below.

- 1 Move the cursor to where you want to use Math, then set a tab stop for each math column (see *Tab Set* in *Reference* for details).
- 2 Define the math columns (Alt-F7,3,3)—only if you need to do more than just calculate *down* columns.
- 3 Turn on Math (Alt-F7,3,1).
- 4 Enter row titles, numbers, functions, and formulas into the math document.
- 5 Calculate the operators, functions, and formulas in the math document.
- 6 Turn off Math (Alt-F7,3,2).

Notes

The following headings are listed in the order they should be performed (in most cases) when using Math, rather than alphabetically as in other sections.

Set Tab Stops

You designate math columns by setting tab stops. You can use the default tab stops, but they will likely provide too narrow of columns.

You can adjust the space between columns by resetting the tab stops (Shift-F8,1,8). If the numbers in one column overlap into the next column, the calculations will not be correct, and you will need to reset the tab stops to make more room (see *Tab Set* in *Reference*).

Please note that it is the tab stops that represent columns in Math—not the space between tab stops. When you insert numbers into most math columns, they are aligned *at* the tab stops. Numbers are preset to align on a decimal character (see *Other Format* in *Reference*).

Both absolute and relative tabs work with Math.

Since numbers align at the tab stops, the space between the left margin and the first tab stop is not counted as a math column. It can be used for row titles or any text that labels the math document.

Define the Math Columns

There are four types of Math columns: Text, Numeric, Total, and Calculation. All Math columns are preset to be numeric. In numeric columns, you can type numbers and then calculate subtotals, totals, and grand totals down the columns. If that is all you need, you can skip *Define the Math Columns* and proceed to *Turn On Math* below.

If your needs are more sophisticated (e.g., calculating across columns), you will need to display the Math Definition menu by pressing **Columns/Table** (Alt-F7), selecting **Math** (3), then selecting **Define** (3).

From the Math Definition menu, you can change numeric columns into text, total, and calculation columns. For details, see *Math, Define Columns* in *Reference*.

To exit the Math Definition menu, press **Exit** (F7).

Turn On Math

When you define Math columns from the Math Definition menu, you are returned to the Math menu. From the Math menu you can turn on Math by selecting **On** (1).

If you do not need to define your Math columns, you can use the following steps to turn on Math. These steps also apply if you are using Math in multiple locations in a document (with the same definition) and want to turn on Math at any of those locations.

- 1 Move the cursor to the place in the document where you want Math to start (if you defined math columns, the cursor should be positioned *after* the Math Definition code).

2 Press **Columns/Table** (Alt-F7), select **Math** (3), then select **On** (1).

 Select **Math** from the **Layout** menu, then select **On**.

Turning on the Math feature inserts [Math On] into the Reveal Codes screen at the cursor position. Whenever the cursor moves to the right of the code, the message “Math” appears at the bottom left of the screen.

Enter Row Titles, Numbers, Functions

Since the space between the left margin and the first tab stop is not used by the **Math** feature, you can type any row titles or labels using this space. Once you have typed a title or label, press **Tab** to move to the first column. Unless you have changed it, the first column is a numeric column, and you can type a number into it. In numeric columns, numbers shift left until you type the alignment character (usually a decimal point), and then they allow normal entry to the right (see *Other Format* in *Reference*). For decimal numbers, WordPerfect will calculate up to four digits to the right of the decimal.

Once you have typed a number, press **Tab** again to move to the next **Math** column, then type another number. Repeat this process until your first row of numbers is complete. Then press **Enter** to move to the next line where you can begin inserting the next row of information.

When you reach the bottom of a column of numbers, you can type a *function* instead of a number to designate where a calculation should occur. Functions are abbreviated formulas. They tell WordPerfect what to do with a column of numbers. For simple calculations type any of the following functions (just type the character +, =, or *) to perform the following calculations:

- + Subtotals numbers above it.
- = Totals all subtotals above it.
- * Gives a grand total of all totals above it.

When you type the function, the character appears on the screen (+, =, *), but a code is inserted into the Reveal Codes screen (e.g., [+]). The result of the function does not appear until you calculate the Math document. The function characters appear on the screen but do not print.

The Math feature includes several other functions in addition to those mentioned above and allows for more sophisticated calculations and formatting. For details, see *Math—Row Titles, Numbers, and Functions* in *Reference*.

Calculate

When you finish creating the math document, you are ready to calculate the results.

1 Press **Columns/Table** (Alt-F7), select **Math** (3), then select **Calculate** (4).

 Select **Math** from the **Layout** menu, then select **Calculate**.

Any function characters you have entered in the document now display the appropriate calculation results.

If numbers overlap into other columns, calculations may not be accurate, and you will need to reset your tab stops to allow more space, and then calculate again (see *Tab Set* in *Reference*).

If you have more than one math section in a document, WordPerfect starts at the cursor position and searches backward for the closest math section and calculates it. If no math section is found in the backward search, then WordPerfect searches forward from the cursor and calculates the closest math section in that direction. You need to calculate each section separately.

Turn Off Math

When you finish working on a math section of the document, you can return to regular WordPerfect editing by turning off Math.

- 1 Move the cursor to the end of the math section of the document.
- 2 Press **Columns/Table** (Alt-F7), select **Math** (3), then select **Off** (2).

 Select *Math* from the *Layout* menu, then select *Off*.

[Math Off] is inserted into the Reveal Codes screen at the cursor position. [Math On] and [Math Off] codes define the limits of the math section of a document. When you move the cursor to the right of [Math Off], the “Math” message disappears from your screen.

By turning on and off Math at different locations, you can have multiple math sections in a document. You can also create distinct math definitions at different locations in a document by moving the cursor to a new position, then defining math columns (see *Math, Define Columns* in *Reference*).

If an entire document includes only math, you do not have to turn off Math.

See Also: Math, Define Columns; Math, Formulas; Math—Row Titles, Numbers, and Functions

Math, Define Columns

Once you have set the tab stops for the columns you want to use in Math, you are ready to define the Math columns. If you only want to add numbers *down* a math column (or if you have previously defined math columns in your document and want to use the same definition again), you can skip this step and turn on Math to start using the feature (see *Math* in *Reference*). You can define each column to be one of four different types (see *Types of Columns* below), and you can specify the way numbers will be displayed.

To define math columns.

- 1 Press **Columns/Table** (Alt-F7), select **Math** (3), then select **Define** (3) to display the Math Definition menu.
 Select **Math** from the *Layout* menu, then select **Define**.
- 2 Move through the Math Definition menu with the arrow keys, then edit any of the column settings you want changed (see the headings under *Notes* below).
- 3 Press **Exit** (F7) to save the definition and return to the Columns/Table menu.

[Math Def] is inserted into the Reveal Codes screen at the cursor position. If you want these changes to affect your math section, the cursor must be positioned after [Math Def] when you turn on Math.

Notes

Calculation Formulas

If you define a calculation column, you can enter a formula which will be used to calculate numbers *across* columns. You can define up to four calculation columns per Math definition.

For information on calculation formulas, see *Math, Formulas* in *Reference*.

Decimal/Align Character/Thousands' Separator

Though not listed on the Math Definition menu, the Decimal/Align Character/Thousands' Separator feature also affects the way math results are displayed.

The decimal/align character is the character that is used to separate decimal fractions from whole numbers and is preset to a period (.). The thousands' separator character is the character used to separate hundreds from thousands and is preset to a comma (,).

To change these settings,

- 1 Move the cursor to the place where you want to change the settings (usually before the Math Definition code).
- 2 Press **Format** (Shift-F8), then select **Other** (4).
 Select **Other** from the *Layout* menu.
- 3 Select **Decimal/Align Character/Thousands' Separator** (3).
- 4 Type a decimal character or press **Enter**, then type a thousands' separator character or press **Enter**.
- 5 Press **Exit** (F7) to return to the document.

The settings change from that point forward in the document. The decimal character also serves as the alignment character in number, total, and calculation columns (see *Other Format* in *Reference*).

If you are using an international version of WordPerfect, you can use a period (.) as the decimal/align character regardless of the primary decimal/align character of the package language. However, you cannot use a period (.) as the decimal/align character when you are using the Math feature, where both the decimal/align character and the thousands' separator are used together. (This applies to international versions only.)

Math Definition Menu

The Math Definition menu includes 24 columns (A through X), all of which are available for performing math operations. Column A is at the first tab stop to the right of the margin; column B is at the second tab stop to the right, etc.

```

Math Definition          Use arrow keys to position cursor
Columns                 A B C D E F G H I J K L M N O P Q R S T U V W X
Type                   2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Negative Numbers       ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
Number of Digits to   2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
the Right (0-4)
Calculation            1
Formulas               2
                       3
                       ↓
Type of Column:
0 - Calculation      1 - Text      2 - Numeric    3 - Total
Negative Numbers
( - Parentheses (50.00)    - - Minus Sign -50.00

Press Exit when done

```

To change the definition of a column, move the cursor underneath the column letter using Left Arrow (←) or Right Arrow (→), then select the number corresponding to the column type you want (0-3). If you select Calculation (0), the cursor moves to a calculation formula line where you can enter the formula to be used in the calculation column (see *Math, Formulas* in *Reference*).

With the cursor directly under a column letter, you can also press **Down Arrow** (↓) once and change the way negative numbers will be displayed in results by typing (or – (see *Negative Numbers* below). Press **Down Arrow** again, and you can change the number of digits that will be displayed to the right of the decimal in results by typing a number (see *Number of Digits to the Right* below).

Negative Numbers

You can choose how you want WordPerfect to display negative results by typing (for parentheses or – for the minus sign in the Math Definition menu. The default setting for displaying negative numbers is with parentheses.

Number of Digits to the Right

You can choose how many digits (up to 4) you want WordPerfect to display to the right of the decimal character (in calculated results) by entering a number from 0 to 4 in the Math Definition menu. WordPerfect rounds a trailing digit up if it is greater than or equal to 5.

You can also create formulas if you are using the Tables feature (see *Table, Math in Reference*).

This section is devoted to a description of formulas used with the Math feature. The steps below indicate how to insert formulas into a document. For instruction on creating formulas, see *Creating Formulas* below.

Formulas can only be inserted into calculation columns. You can define up to four calculation columns in your math definition. When you define a calculation column, you must also define the formula to be used in that column.

The following steps show you how to enter a formula starting from the normal editing screen. If you are already at the Math Definition menu, skip to step 3 below.

- 1 If you have already turned on Math, move the cursor immediately to the left of the [Math On] code (in the Reveal Codes screen).

or

Move the cursor to where you want the math definition inserted into the document.

- 2 Press **Columns/Table** (Alt-F7), select **Math** (3), then select **Define** (3).

 Select **Math** from the *Layout* menu, then select **Define**.

- 3 Move the cursor directly below the letter of the column you want to define as a calculation column.

Each column has a letter associated with it. The first tab stop is column A, the second is column B, etc.

- 4 Select **Calculation** (0) to define the column as a calculation column.

- 5 Enter the formula you want calculated for the column.

- 6 Press **Exit** (F7) twice to return to the normal editing screen.

You can create up to four formulas for each Math section in a document (one per calculation column).

As you press **Tab** to move into a calculation column, an exclamation mark (!) appears on the screen, and a [!] code is inserted into the Reveal Codes screen. This is a symbol inserted by WordPerfect indicating that the formula for the column will be calculated on the current line. Delete the “!” if you do not want WordPerfect to calculate the formula for that line.

Notes

Calculating Formulas

To calculate formulas, press **Columns/Table** (Alt-F7), select **Math** (3), then select **Calculate** (4). WordPerfect calculates the formula across the columns of your math document.

Calculation Order

When there are two or more operators, they are calculated from left to right.

Formulas	Result
$2*3-1/2$	2.5
$2-3*1/2$	(.50)

In the first example, $2*3=6$, $6-1=5$, and $5/2=2.5$. In the second example, $2-3=-1$, $-1*1=-1$, and $-1/2=-.5$.

If you want to change the order of calculation, use parentheses. The operator(s) in parentheses are calculated first.

Formula	Result
$2*(3-1)/2$	2.00

In this example, $3-1=2$ is calculated first, then $2*2=4$, and $4/2=2$.

You can nest parentheses within parentheses up to seven levels—for example, $2*((a-1)/2)+b$.

Creating Formulas

Once you have selected a calculation column from the Math Definition menu (see the steps above), you can create a formula for the designated column using operators, numbers, and math column letters, or you can use four special functions.

There are four operators you can use to create a formula.

+	Add
-	Subtract
*	Multiply
/	Divide

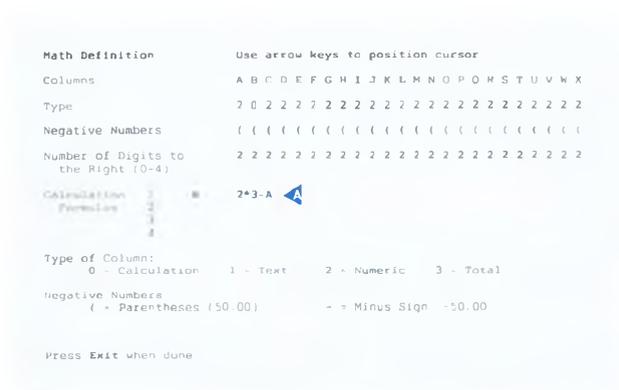
You use these operators in combination with numbers and the math column letters to create a formula. For example:

Formula	Result
$2*3-1$	5.00
$2*3-A$	6.00—the number in column A

In the second example, the number in column A (on the same line as the formula) is subtracted from 6.00.

The formula might appear as follows:

▲ FORMULA



A formula can use numbers from the left *and* right of the formula (on the same row).

If you use decimal numbers in a formula, WordPerfect will calculate up to 4 digits to the right of the decimal.

When you want to indicate a negative number in a formula, use a minus sign.

Formula	Result
$-2*3-1/2$	(3.50)
$-2*3-A$	(6.00)—the number in column A

Results displayed in parentheses are negative numbers. You can change the way WordPerfect displays negative numbers by changing the math definition (see *Math, Define Columns* in *Reference*).

There are also four special functions you can use while defining a formula in Math:

+	Add numbers across numeric columns.
+/	Average numbers across numeric columns.
=	Add numbers across totals columns.
=/	Average numbers across totals columns.

These functions cannot be combined or used with other functions, operators, or numbers.

Editing Formulas

If you want to edit a formula, you must first move the cursor immediately to the right of the [Math Def] code you want to edit (in the Reveal Codes screen).

Then, display the Math Definition menu (Alt-F7,3,3), move the cursor directly below the column you want to edit, type **0**, make any changes, and press **Enter**. Pressing **Enter** without making any changes erases the formula.

Fractions

When you want to use a fraction in a formula, place it in parentheses or use its decimal equivalent (e.g., (1/2), .5).

See Also: Math; Math, Define Columns; Math—Row Titles, Numbers, and Functions

Math—Row Titles, Numbers, and Functions

The Math feature (not Tables math) lets you define four math column types: Text, Numeric, Total, and Calculation. Each type is designed for entering row titles, numbers, functions, and/or formulas. Row titles can only be entered in text columns; functions can only be entered in numeric, total, or calculation columns. Numbers can be entered in all four types of columns but are not calculated when entered in text columns. And formulas can only be entered in calculation columns (for details on formulas, see *Math, Formulas in Reference*).

If you want column titles, you should enter them before turning on Math (see *Math in Reference*).

Notes

Functions

A function is a symbol that determines the way WordPerfect calculates numbers. In numeric, calculation, or total columns, you can use one of six functions (+, =, *, t, T, and N). You can also use four special functions when creating a formula (see *Math, Formulas in Reference*).

A calculated answer is called a *result*. Results do not appear until they are calculated (see *Math in Reference*).

Functions used in numeric and calculation columns calculate numbers above them, within the same column. Functions used in totals columns calculate numbers in the column to the left above them.

When you type a plus sign (+) as the function, the numbers above the function (the column to the left if a totals column) will be added when you calculate. The result is a *subtotal*.

- A NUMERIC COLUMN
- B SUBTOTAL

Monthly Revenues -- February				
Item	Revenues	Year to Date	Sales Tax	Status
Appliances				
Stereos	3510.00		175.50	Up
Televisions	5300.00		265.00	Up
Total	8,810.00*			
Art				
Paintings	3060.00		153.00	Down
Sculptures	1450.00		72.50	Up
Total	4,510.00*			
Lamps				
Small	5000.00		250.00	Up
Large	3500.00		175.00	Down
Total	8,500.00*			
February Total		21,820.00-	1,091.00*	Up
January Total		22,230.00	1,023.00	
Year to Date		44,050.00*	2,114.00-	
Math Doc 1 Pg 1 Ln 4.62* Pos 1,1*				

When you type an equal sign (=) as the function, only the *subtotals* above the function are added (the column to the left if a totals column). The result is a *total*.

- A NUMERIC COLUMN
- B TOTALS COLUMN
- C TOTAL

Monthly Revenues -- February				
Item	Revenues	Year to Date	Sales Tax	Status
Appliances				
Stereos	3510.00		175.50	Up
Televisions	5300.00		265.00	Up
Total	8,810.00*			
Art				
Paintings	3060.00		153.00	Down
Sculptures	1450.00		72.50	Up
Total	4,510.00*			
Lamps				
Small	5000.00		250.00	Up
Large	3500.00		175.00	Down
Total	8,500.00*			
February Total		21,820.00-	1,091.00*	Up
January Total		22,230.00	1,023.00	
Year to Date		44,050.00*	2,114.00-	
Math Doc 1 Pg 1 Ln 4.62* Pos 1,1*				

When you type an asterisk (*) as the function, only the *totals* above the function are added (the column to the left if a totals column). The result is a *grand total*.

- A NUMERIC COLUMN
- B TOTALS COLUMN
- C CALCULATION COLUMN
- D GRAND TOTAL

Monthly Revenues -- February				
Item	Revenues	Year to Date	Sales Tax	Status
Appliances				
Stereos	3510.00		175.50	Up
Televisions	5300.00		265.00	Up
Total	8,810.00*			
Art				
Paintings	3060.00		153.00	Down
Sculptures	1450.00		72.50	Up
Total	4,510.00*			
Lamps				
Small	5000.00		250.00	Up
Large	3500.00		175.00	Down
Total	8,500.00*			
February Total		21,820.00*	1,091.00*	Up
January Total		722,230.00	11,023.00	
Year to Date		44,050.00*	2,114.00*	
Math				Doc 1 Pg 1 Ln 4.62* Pos 5.1*

Two additional functions let you insert your own subtotals and totals into a column. Type **t** in front of a number you want to be calculated as a subtotal and **T** in front of a number you want calculated as a total.

- A SUBTOTAL
- B TOTAL

Monthly Revenues -- February				
Item	Revenues	Year to Date	Sales Tax	Status
Appliances				
Stereos	3510.00		175.50	Up
Televisions	5300.00		265.00	Up
Total	8,810.00*			
Art				
Paintings	3060.00		153.00	Down
Sculptures	1450.00		72.50	Up
Total	4,510.00*			
Lamps				
Small	5000.00		250.00	Up
Large	3500.00		175.00	Down
Total	8,500.00*			
February Total		21,820.00*	1,091.00*	Up
January Total		722,230.00	11,023.00	
Year to Date		44,050.00*	2,114.00*	
Math				Doc 1 Pg 1 Ln 4.62* Pos 6.1*

When you type **N** in front of a number, the number is negative when calculated. **N** can be combined with other functions. It is especially useful in a Net Worth situation where assets and liabilities are both added up as positive numbers, and then liabilities are subtracted from assets.

For functions to work correctly, they should be entered in the order below (top to bottom).

- +t (Subtotal, Extra Subtotal)
- =,T (Total, Extra Total)
- * (Grand Total)

Functions and results both appear on the screen, but the function characters (e.g., +, =, T) are not printed when the document is sent to the printer. The functions appear as codes in the Reveal Codes screen (e.g., [+]).

Numbers

Numbers can be entered in any column, but are not calculated when entered in a text column. They can be positive or negative. If you want to indicate a negative number, you can use a minus sign or parentheses (e.g., -3.45, (3.45)).

The Negative Number option on the Math Definition menu indicates how you want WordPerfect to display negative results. You can enter a negative number with the minus sign or parentheses regardless of the negative number setting.

Numbers are preset to align on tab stops at the decimal point. You can change the tab stops or the character preset for decimal alignment (.) to change the way numbers align (see *Tab Set* or *Other Format* in *Reference*).

Row Titles

Row titles can be entered in text columns only. The space between the left margin and the first tab stop is not considered a math column and can be used for row titles that label the rows in the math document.

If you want column titles, you should create them outside of the math document (before the [Math On] code).

See Also: Math; Math, Define Columns; Math, Formulas

Memory

When running, WordPerfect requires that *memory* be used to store information. The document(s) being edited, the program file, and several other files must be in memory in order for WordPerfect to operate.

There are two types of memory WordPerfect can use—conventional memory (known as *RAM* or *cache*) and expanded memory. All computers have conventional memory, but not all computers have expanded memory. Unless you specify otherwise, WordPerfect first uses all available conventional memory, then available expanded memory. When no more memory is available, additional information is stored on disk.

Many people want to run other programs at the same time as they run WordPerfect. Since WordPerfect uses all available conventional memory, no memory is available for other programs. However, if your computer is equipped with expanded memory, you can use the `/w=cm,em` startup option to limit the amount of conventional memory and increase the amount of expanded memory WordPerfect uses, providing conventional memory space for other programs. See *Appendix N: Startup Options* for more information on this option.

If you have expanded memory but do not want WordPerfect to use it, use the `/ne` startup option (see *Appendix N: Startup Options*).

For additional information on expanded memory, see *Expanded Memory* below.

Notes

/r Startup Option

If you have at least 592K of unused expanded memory (LIM Spec 3.2 or 4.0), the WP.FIL file portion of the WordPerfect program can be loaded into memory by starting WordPerfect with the `/r` and `/w` startup options (e.g., `wp/w=*,*/r`). The `/w=*,*` instructs WordPerfect to use all available conventional memory and expanded memory, while the `/r` sends the WP.FIL portion to expanded memory (see *Appendix N: Startup Options*).

Expanded Memory

Expanded memory is treated as an extension to conventional memory. The maximum amount of expanded memory WordPerfect can use is 16M. The following WordPerfect features and modules can use expanded memory if there is sufficient expanded memory available: File caching, Generate, Hyphenation, overflow (virtual) files, Printing Graphics, Spell, and View Document. However, only LIM expanded memory versions 3.2 or 4.0 are supported. If you have a version previous to 3.2 installed on your system, expanded memory is ignored. For more information, see `/32` in *Appendix N: Startup Options*.

If you are running WordPerfect under Shell (an optional program by WordPerfect Corporation), 50% of the available expanded memory is used by WordPerfect, when needed. If not, nearly 90% of available expanded memory can be used by WordPerfect.

Extended Memory

WordPerfect does not use or support extended memory.

Freeing Up Memory

If you frequently receive the “Not enough memory” error message, try one or more of the following to free up some memory:

- Remove any Terminate and Stay Resident (TSR) programs, including Shell (an optional WordPerfect Corporation product).
- If you are running WordPerfect on a 286 or 386 machine, use a memory remapping program (like QEMM) to make more conventional memory available.
- If you have a soft keyboard selected, deselect it (press **Ctrl-6**) (see *Keyboard Layout* in *Reference*).
- Turn off Hyphenation, or select Internal Rules as the hyphenation type (see *Hyphenation* in *Reference*).
- While editing a document, have a printer selected that uses a .PRS file that has a limited number of fonts (see *Printer, Select* in *Reference*).

- Do not print in the background (see *Printing—General Information in Reference*).
- Use fewer graphics boxes in your document (see *Graphics, Define a Box in Reference*).
- Use only Document 1 while editing (see *Switch in Reference*). This will also increase the speed of generating, sorting, or printing from disk.

WordPerfect has a startup option, /n2, that disables the Document 2 screen to save memory (see Appendix N: Startup Options).

- Rather than executing one large macro, chain or nest several small macros together (see *Chaining, Nesting, and Substituting under Notes in Appendix K: Macros and Merge, Programming Commands*). The series of small macros will execute faster than a large one.
- Don't select a mouse type in Setup (see *Mouse Type in Reference*).
- Use the default drivers for text and graphics (see *Text Screen Type and Graphics Screen Type in Reference*).
- Use WPSMALL.DRS rather than WP.DRS for editing equations (see *Appendix Q: WordPerfect Files*). To do so, rename or delete WP.DRS. Then make sure WPSMALL.DRS is in the graphic files directory specified in Location of Files (Shift-F1,6), or if no directory is specified in Location of Files, make sure it is in the directory where WPEXE is located.
- If you used the /w startup option (see *Appendix N: Startup Options*), restart WordPerfect and increase the workspace specified in the /w option.
- Reduce the FILES= and/or BUFFERS= commands in your CONFIG.SYS file (see your DOS manual). However, do not reduce FILES= to less than 20.
- Exit WordPerfect and start it again.
- See your dealer about increasing the memory in your computer.

Memory Requirements

WordPerfect requires 384K of the available conventional memory in your computer to run WordPerfect.

Overflow Files

The part of the document which does not fit into memory is spilled into "overflow" files on disk until all available disk space is used. This means that you can increase potential editing space by increasing memory and/or disk space.

The overflow files are named WP}WP{.TV1 for overflow above the cursor in Document 1 and WP}WP{.BV1 for overflow below the cursor in Document 1. The overflow files for Document 2 are WP}WP{.TV2 and WP}WP{.BV2.

Unless otherwise specified, overflow files are directed to the directory where WPEXE is located. The overflow files can be directed into a different

drive/directory by entering **wp/d-drive\directory** when you start WordPerfect (see *Appendix N: Startup Options*) or by using the SET command. These commands can be included in an AUTOEXEC.BAT file.

If you do not have a hard disk, you can redirect the overflow files to another drive (RAM, drive B, etc.) with the /d option (see *Appendix N: Startup Options*).

RAM Drives

There is little to be gained by using a RAM drive with WordPerfect. If you must have a RAM drive, direct the overflow files, Speller, or Thesaurus to that drive (depending on how much room you have), thereby utilizing memory that is otherwise lost to WordPerfect. If you do load the Speller or Thesaurus into a RAM drive, you must inform WordPerfect of its location through the Location of Files feature (see *Location of Files in Reference*).

See Also: Appendix N

Menu Options

You can select an option from most WordPerfect menus with a number, a mnemonic letter, or by clicking on it with a mouse. The Menu Options feature lets you change the appearance of WordPerfect menus to make option selection easier.

For example, you can make your mnemonic letters “stand out” by assigning them an attribute.

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Display** (2), then select **Menu Options** (4).

3 Select the menu option of your choice (see the option headings under *Notes* below).

4 Select **Size** (1) or **Appearance** (2), then select the attribute of your choice.

or

Select **Normal** (3) to have the option appear as normal text.

*If you are changing the setting for **Alt Key Selects Pull-Down Menu** (4) **Menu Bar Separator Line** (7), or **Menu Bar Remains Visible** (8), the only choices are **y** for **Yes** and **n** for **No**.*

5 Press **Exit** (F7) until you return to the normal editing screen.

Settings for all of these options are stored in the WP{WP}.SET file and remain in effect each time you start WordPerfect.

Alt Key Selects Pull-Down Menu

This option determines whether the left Alt key will display the pull-down menu bar. Setting this option to Yes causes the Alt key (if pressed and released without pressing any other key) to display the pull-down menu bar at the top of the screen. Setting this option to No prevents the Alt key from displaying the pull-down menu bar. No matter what you set this option to, **Alt=** (equal sign) will display the pull-down menu bar.

If you set this option to Yes, Alt also "hides" the menu bar if it is displayed. This option is overridden by the Menu Bar Remains Visible option (see Menu Bar Remains Visible Below).

You may want to set this option to No if you have another program that can be accessed from WordPerfect with the Alt key. If you have such a program and do not set this option to No, the Alt key (when pressed and released without pressing any other key) will display the pull-down menu bar when you are in WordPerfect.

Assigning Attributes

To assign an attribute to one of the menu options, select the option, select Size (1) or Appearance (2), then select the attribute. The attribute will appear as it is defined in the Colors/Fonts/Attributes feature (see *Colors/Fonts/Attributes* in *Reference*).

Menu Bar Remains Visible

This option determines whether the pull-down menu bar is always displayed at the top of the screen (in screens where you can use the pull-down menus). Once you set this option to Yes, the only way to "hide" the menu bar is to set this option to No.

Menu Bar Letter Display

This option determines how the mnemonic letter on the pull-down menu bar will appear.

Menu Bar Separator Line

This option determines whether you want a double line separating the pull-down menu bar from the rest of the screen.

Menu Bar Text

This option determines how the text (other than the mnemonic letter) on the pull-down menu bar will appear.

Menu Letter Display

This option determines how the mnemonic selection letter in menus (other than pull-down menus) will appear.

Pull-Down Letter Display

This option determines how the mnemonic selection letter in pull-down menus will appear. It does not affect the mnemonic letter on the pull-down menu bar.

Pull-Down Text

This option determines how text (other than the mnemonic selection letter) in pull-down menus will appear. It does not affect the text on the pull-down menu bar.

See Also: Colors/Fonts/Attributes

Merge

Sometimes referred to as *mail-merge* because it can be used to mass-produce personalized form letters and mailing labels, the WordPerfect Merge feature can be used for these purposes and much more. Contracts, boilerplates, phone lists, and memos are just a few of the documents that WordPerfect helps people create every day.

Important: *For more information about merging, along with some examples of merges, it is strongly recommended that you work through lessons 23, 24, and 25 (Merge Fundamentals, Mass Mailings, and Special Techniques) in the WordPerfect Workbook.*

Merging is the process of combining information from two or more sources into a single document. One source is always a *primary file*, which is also the file that controls the merge. The other sources of information may be *secondary files*, the *keyboard* (information you enter at the time of the merge), specially designed WordPerfect *document files*, *DOS text files*, or the *Shell Clipboard* (if you own WordPerfect Shell). See *Primary Files*, *Secondary Files*, *Keyboard*, *Document Assembly*, and *Shell Clipboard* below for an explanation of these information sources.

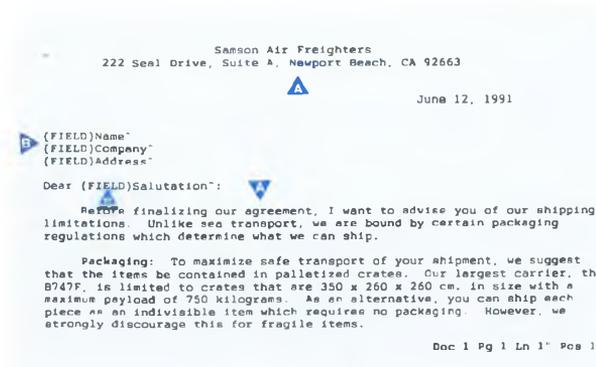
Primary Files

Every merge requires a *primary file*. This file directs the merge, inserting a name here, an address there, a date some place else, and even a selected paragraph in the middle. Text may come from *secondary merge files*, the *keyboard*, *document files*, *DOS text files*, or the *Shell Clipboard*.

A primary file contains text and merge commands. The text and format can be whatever you want, while merge commands must be chosen and inserted with care. Whenever possible, formatting codes should be placed in the primary file, either in the document itself or in Initial Codes (see *Initial Codes* below). However, you can use attribute codes such as Bold and Italics in a secondary file. Codes that affect an entire page, such as Paper Sizes and Top/Bottom Margins, should *only* be used with primary files.

If you want certain formatting codes to always affect a certain field (e.g., bolding a state in an address field), you can enter these codes *once* in a primary file rather than entering them for each record in a secondary file.

- A TEXT
- B MERGE COMMANDS



WordPerfect gives you many different merge commands to automate your most demanding applications. In addition, you can combine merges with macros to increase the capacity of WordPerfect to create the documents you need. For a complete description of both macro and merge programming commands, see *Appendix K: Macros and Merge, Programming Commands*.

Secondary Files

Sometimes called an *address* file, the secondary merge file may contain many *records* (a record is a collection of related information). The number of records in a secondary file is limited only by disk space, and each record can contain as much information as you like. Records are separated by the {END RECORD}

merge command followed by a hard page, and can be sorted (see *Sort in Reference*).

- ▲ FIELD 1
- ▲ FIELD 2
- ▲ FIELD 3

```
{FIELD NAMES}
Company
Address
Salutation
Phone
{END RECORD}
-----
Robin Pierce{END FIELD}
Interchange, Inc.{END FIELD}
544 Westminster Circle NW
Atlanta, GA 30327{END FIELD}
Robin {END FIELD}
(404) 555-2828{END FIELD}
{END RECORD}
-----
Anna Lee Pierce{END FIELD}
Tradewinds, Inc.{END FIELD}
P.O. Box 1392
Central Park Station
Buffalo, NY 14215{END FIELD}
Anna{END FIELD}
(716) 555-5678{END FIELD}
{END RECORD}
```

Doc 1 Pg 1 Ln 1 Pos 1

The information in each record is divided into *fields*. One field may contain a name, another field may contain a company name, and another field may contain an address. It is these fields that are merged into a primary file. During a merge, only those fields that have been requested by the primary file are merged.

Fields within each record are separated by the {END FIELD} merge command followed by a hard return.

Important: *Never separate fields or records with an extra hard return or insert spaces between the last word in a field and the {END FIELD} command. If you do, your merged documents may not look as you expect them to.*

Fields may be referenced by number or by name. Fields are numbered from top to bottom in a record. You can assign names to the fields by using the {FIELD NAMES} command that includes the names of the fields (in order) at the beginning of the secondary file. For more information on the {FIELD NAMES} command, see *Appendix K: Macros and Merge, Programming Commands*.

As you move the cursor to each field, the number or name of the field at the current cursor position appears on the status line. You can clear the name or number from the status line by pressing **Home.Home.Up Arrow**.

While there is no limit to the number of fields allowed in a record, each record should contain the same number of fields, and each field should contain the same type of information or remain empty. If field 3 of one record contains a phone number, then field 3 of every other record in that file should also contain a phone number—or nothing at all. (Even if empty, the field still needs an {END FIELD} command.) Records using the {NEXT RECORD} or {FIELD NAMES} commands (see *Appendix K: Macros and Merge, Programming Commands*) are the only exceptions to this rule.

You do not have to keep the same number of lines or words within each field. For example, you might have two lines in the address field of one record and five lines in the address field of another record.

We recommend that you consider how information is organized into fields. For example, if the city, state, and ZIP Code are in the same field, it is impossible to merge anything but the whole field (city, state, and ZIP Code) into a primary file. This problem is remedied by reducing the information to smaller categories, (i.e., the city in one field, the state and ZIP Code in another).

Secondary files can grow to include many thousands of records. If you are merging with a large secondary file, the merge stops if you run out of disk space. You can break the secondary file into two or more smaller files, or merge to the printer using the {PRINT} command (see *Appendix K: Macros and Merge, Programming Commands*).

Once the primary file and other information sources are set up properly, you can merge them together. To perform a merge.

1 Press **Merge/Sort** (Ctrl-F9) to display the Merge/Sort menu, then select **Merge (1)**.

 Select **Merge** from the **Tools** menu.

2 Enter the name of the primary file.

3 Enter the name of the secondary file if you are using one.

or

Press **Enter** if you are not using a secondary file.

When you are prompted to enter the primary or secondary file, you can use the List (F5) key to list the files in a directory. When you have found the file you want, select Retrieve (1) to select the file and continue the merge. For more information on listing files, see List Files in Reference.

When you perform the merge, a document is created with the combined information from the sources used in the merge. For example, if you merged a letter (primary file) with an address list (secondary file), a document would be

created with a copy of the letter for each record in the secondary file. Each letter would be separated by a hard page [HPg].

- A PRIMARY FILE
- B SECONDARY FILE
- C MERGED DOCUMENT

Samson Air Freighters
222 Seal Drive, Suite A, Newport Beach, CA 92663

June 12, 1991

(FIELD)Name
(FIELD)Company
(FIELD)Address

Dear (FIELD)Salutation:

Before finalizing our agreement, I want to advise you of our shipping limitations. Unlike sea transport, we are bound by certain packaging regulations which determine what we can ship.

Packaging: To maximize safe transport of your shipment, we suggest that the items be contained in palletized crates. Our largest carrier, the B747, is limited to crates that are 350 x 260 x 260 cm in size with a maximum payload of 750 kilograms. As an alternative, you can ship each piece as an indivisible item which requires no packaging. However, we strongly discourage this for fragile items.

Doc 1 Pg 1 Ln 1 "os |"

(FIELD)NAME

Company
Address
Salutation
Phone
-(END RECORD)

Robin Pierce(END FIELD)
InterChange, Inc.(END FIELD)
544 Westmeade Circle NW
Atlanta GA 30327(END FIELD)
@robin(END FIELD)
(404) 555-2626(END FIELD)

(END RECORD)

Anna Lee Pierce(END FIELD)
P.O. Box 1392
P.O. Box 1392
Centers: Park Station
Buffalo, NY 14215(END FIELD)
Anna(END FIELD)
(716) 555-5678(END FIELD)
(END RECORD)

Doc 1 Pg 1 Ln 1 "Pos 1"

<p>Samson Air 222 Seal Drive, Suite A,</p> <p>Robin Pierce InterChange, Inc. 544 Westmeade Circle NW Atlanta, GA 30327</p> <p>Dear Robin:</p> <p>Before finalizing our agreement, I want to advise you of our shipping limitations. Unlike sea transport, we are bound by certain packaging regulations which determine what we can ship.</p> <p>Packaging: To maximize safe transport of your shipment, we suggest that the items be contained in palletized crates. Our largest carrier, the B747, is limited to crates that are 350 x 260 x 260 cm in size with a maximum payload of 750 kilograms. As an alternative, you can ship each piece as an indivisible item which requires no packaging. However, we strongly discourage this for fragile items.</p> <p>Insurance: You should be aware that Samson Air Freighters can only insure each piece for \$1,000,000, which is included in the price we quoted. Any increase in the insurance will affect the shipping cost. To make it cost effective for you, you may want to seek an independent insurer to supplement our schedule.</p> <p>Customs: Upon arrival at its destination, customs officials will randomly select cargo and inspect it. If any damage results from this procedure, our underwriter cannot be held responsible for coverage. The crate dismantling must be done by your company. SAF will designate the city you specify on Form B215 as a final destination. At that time, a your company representative must accept delivery of the shipment.</p> <p>Feel free to contact us if you have further questions.</p> <p>Sincerely,</p> <p>Diana West, Assistant Director of Shipping</p> <p>DW:ajh</p>	<p>Samson Air 222 Seal Drive, Suite A,</p> <p>Anna Lee Pierce P.O. Box 1392 P.O. Box 1392 Centers: Park Station Buffalo, NY 14215</p> <p>Dear Anna:</p> <p>Before finalizing our agreement, I want to advise you of our shipping limitations. Unlike sea transport, we are bound by certain packaging regulations which determine what we can ship.</p> <p>Packaging: To maximize safe transport of your shipment, we suggest that the items be contained in palletized crates. Our largest carrier, the B747, is limited to crates that are 350 x 260 x 260 cm in size with a maximum payload of 750 kilograms. As an alternative, you can ship each piece as an indivisible item which requires no packaging. However, we strongly discourage this for fragile items.</p> <p>Insurance: You should be aware that Samson Air Freighters can only insure each piece for \$1,000,000, which is included in the price we quoted. Any increase in the insurance will affect the shipping cost. To make it cost effective for you, you may want to seek an independent insurer to supplement our schedule.</p> <p>Customs: Upon arrival at its destination, customs officials will randomly select cargo and inspect it. If any damage results from this procedure, our underwriter cannot be held responsible for coverage. The crate dismantling must be done by your company. SAF will designate the city you specify on Form B215 as a final destination. At that time, a your company representative must accept delivery of the shipment.</p> <p>Feel free to contact us if you have further questions.</p> <p>Sincerely,</p> <p>Diana West, Assistant Director of Shipping</p> <p>DW:ajh</p>	<p>Samson Air Freighters 222 Seal Drive, Suite A, Newport Beach, CA 92663</p> <p>June 12, 1991</p> <p>Joseph Corrales, Jr. ConnectCom, Inc. Washington House, #312 175 West 43rd New York, NY 10036</p> <p>Dear Joe:</p> <p>Before finalizing our agreement, I want to advise you of our shipping limitations. Unlike sea transport, we are bound by certain packaging regulations which determine what we can ship.</p> <p>Packaging: To maximize safe transport of your shipment, we suggest that the items be contained in palletized crates. Our largest carrier, the B747, is limited to crates that are 350 x 260 x 260 cm in size with a maximum payload of 750 kilograms. As an alternative, you can ship each piece as an indivisible item which requires no packaging. However, we strongly discourage this for fragile items.</p> <p>Insurance: You should be aware that Samson Air Freighters can only insure each piece for \$1,000,000, which is included in the price we quoted. Any increase in the insurance will affect the shipping cost. To make it cost effective for you, you may want to seek an independent insurer to supplement our schedule.</p> <p>Customs: Upon arrival at its destination, customs officials will randomly select cargo and inspect it. If any damage results from this procedure, our underwriter cannot be held responsible for coverage. The crate dismantling must be done by your company. SAF will designate the city you specify on Form B215 as a final destination. At that time, a your company representative must accept delivery of the shipment.</p> <p>Feel free to contact us if you have further questions.</p> <p>Sincerely,</p> <p>Diana West, Assistant Director of Shipping</p> <p>DW:ajh</p>
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Canceling a Merge

You can press **Cancel** (F1) to stop a merge. If Cancel has been turned off (see *[CANCEL OFF]* in *Appendix K: Macros and Merge, Programming Commands*), press **Ctrl-Break** to cancel the merge. See also *Inserting Merge Commands During Execution* in *Appendix K: Macros and Merge, Programming Commands*.

Document Assembly

A primary file can merge with other document files by using the {DOCUMENT} command (see *Appendix K: Macros and Merge, Programming Commands*). These files are usually short paragraphs that can be chosen and inserted into preselected places in the primary file during a merge. This process is sometimes called *document assembly*.

DOS Delimited Text Files

Delimiters are the characters in the exported file that determine the beginning and end of each field and record. An exported file may have both beginning and end delimiters for fields and records, or it may have combinations of beginning and/or end delimiters. It must have at least an end delimiter for both fields and records.

You can merge a primary file with spreadsheet or database files if the spreadsheet or database program can export files in a delimited DOS text format. In order for WordPerfect to perform the merge, you must tell WordPerfect what the delimiters are. You can declare the delimiters using the Setup feature, or at the time of the merge. To declare the delimiters through the Setup feature,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the File menu

2 Select **Initial Settings** (4).

3 Select **Merge** (1).

4 Select **Field Delimiters** (1), enter the field delimiters of the exported DOS text file, then press **Exit** (F7).

5 Select **Record Delimiters** (2), enter the record delimiters, then press **Exit** (F7).

To enter a Line Feed command [LF] as a delimiter, press **Enter**. To enter a Carriage Return [CR] as a delimiter, press **Ctrl-m**. To enter a Form Feed command [FF], press **Ctrl-l**.

You cannot specify ^C, ^D, ^E, ^F, ^G, ^N, ^O, ^P, ^Q, ^R, ^S, ^T, ^U, or ^V as a delimiter.

If you do not specify the delimiters through Setup, or if you want to change the delimiter specification at the time of the merge,

1 Press **Merge/Sort** (Ctrl-F9) to begin the merge.

 Select **Merge** on the Tools menu.

- 2 Enter the name of the primary file.

When the prompt for the secondary file appears,

- 3 Press **Text In/Out** (Ctrl-F5) to change the prompt to "DOS Text Delimited File:".

***Important:** Text In/Out (Ctrl-F5) must be the first key pressed at the prompt. If you begin typing, then use Backspace to delete the characters, pressing **Text In/Out** will not bring up the DOS Text Files menu. You should cancel the merge and begin again.*

- 4 Enter the name of the delimited DOS text file (include a full pathname if necessary).

You can also use List (F5) to list and select the DOS text file at the prompt.

- 5 Select **Field Delimiters** (1) or **Record Delimiters** (2), enter the delimiters, and press **Exit** (F7). Press **Enter** when all the delimiters are specified correctly.

The merge continues as usual.

The DOS Text Files menu also appears if you enter the name of a secondary file that is not in WordPerfect secondary file format. If you have made a mistake, press **Cancel** (F1) to stop the merge. If the file is in delimited DOS text format, enter the delimiters and proceed with the merge.

Graphics

If you are using graphics in your merge files, it is a good idea to use the Graphic on Disk feature (see *Graphic on Disk* under *Graphics, Define a Box in Reference*). Using graphics on disk (rather than in the document) saves a great deal of disk space and considerably speeds up merge execution.

Initial Codes

When creating a primary file, some formatting codes are better placed in Initial Codes, rather than in the document portion of the primary file. Keep in mind that everything in the document portion of the primary file will be repeated for each record in the secondary file, even formatting codes. So, for example, if you have a Tab Set code, it will be inserted at the top of *each* copy of the merged document. Inserting the tab setting in Initial Codes, however, sets the tabs only once for the entire file. Placing codes you want to appear only once in the merged document in Initial Codes saves disk space and speeds up merge execution.

***Important:** Merge commands cannot be used in Initial Codes.*

Inserting Merge Commands

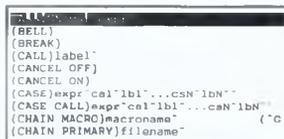
To insert any merge command in a document,

- 1 Press **Merge Codes** (Shift-F9), then select **More** (6).

or

Press **Merge Codes** (Shift-F9) twice.

- 1 Select **Merge** from the **Tools** menu, then select **Merge Codes**.



```
{(BELL)}
{(BREAK)}
{(CALL)label}
{(CANCEL OFF)}
{(CANCEL ON)}
{(CASE)expr"cal"lbl"...csN"ldN""}
{(CASE CALL)expr"cal"lbl"...caN"lbN""}
{(CHAIN MACRO)macroname" ("C)}
{(CHAIN PRIMARY)filename}
```

A box appears in the upper right corner of the screen, with a list of merge commands.

- 2 Use **Up Arrow** (↑) and **Down Arrow** (↓) to scroll to the command you want to insert.

or

Begin typing the name of the command you want until it is highlighted (you need not type the brace ({})).

- 3 Press **Enter** to insert the command in the document.

Some commands require *arguments*, such as a variable name, a field name, or other information. (The arguments and syntax required by the command are displayed in the command access box. For more information on arguments and command syntax, see *Appendix K: Macros and Merge, Programming Commands*.)

- 4 Enter each argument as requested.

Once the command is entered, you can edit the arguments as regular text.

Some of the most common commands can be entered without going to the command access box. To enter the {FIELD}, {END RECORD}, {INPUT}, {PAGE OFF}, and {NEXT RECORD} commands,

- 1 Press **Merge Codes** (Shift-F9) to display the merge codes menu.
- 2 Select the command you want from the menu.

Selecting the **More** option (6) on the menu displays the command access box.

- 3 Enter any arguments as requested.

To enter the {END FIELD} command,

1 Press End Field (F9).

Merge commands may be placed in the regular document portion of a file, in graphics boxes that are either empty or designated for text, and in headers, footers, footnotes, and endnotes. Merge codes are not permitted in styles or graphics box captions.

If you want to insert the merge codes that were used in previous versions of WordPerfect (such as ^F, ^Q, ^R, etc.), press **Ctrl-letter**, where *letter* is the letter corresponding to the code. For example, to insert ^Q, press **Ctrl-q**. If the code requires arguments or a terminating ^, you must type them in manually. For more information on these codes, see *Previous Versions* below and *Previous Merge Commands* under *Notes* in *Appendix K: Macros and Merge, Programming Commands*.

Keyboard

A primary or secondary file can merge with the keyboard by inserting the {KEYBOARD} or {INPUT} command (see *Appendix K: Macros and Merge, Programming Commands*). The merge pauses at the {KEYBOARD} or {INPUT} command to let you enter information.

Merge Commands Display

You may choose whether you want to display the merge commands in a document in the normal editing screen. When you are creating a document (e.g., a primary file), it is helpful to see the commands. However, since these commands do not actually affect the format of the other text and codes in the document, you may want to turn off Merge Commands Display to have a better idea of how the text will fall on the page when the merge is performed.

Merge Support Policy

Although Merge support operators can assist you in troubleshooting existing merges, they cannot design and write customized merges for you.

The following illustrations show how the screen looks with Merge Commands Display on, then with Merge Commands Display off.



To turn Merge Commands Display on or off,

- 1 Press **Setup** (Shift-F1).
- 2 Select **Display** (2).
- 3 Select **Edit-Screen Options** (6), then select **Merge Codes Display** (5).
- 4 Type **y** to turn on Merge Commands Display or **n** to turn it off.
- 5 Press **Exit** (F7) to return to the normal editing screen.

Previous Versions

Secondary merge files you may have created with previous versions of WordPerfect require no conversion to be run with WordPerfect 5.1. Primary merge files created with WordPerfect 5.0 also require no conversion. If you prefer, however, you may convert the merge codes in these files to the new merge command format. Primary files created with WordPerfect 4.2 or earlier versions *do* need to be converted to function with WordPerfect 5.1.

To convert the merge codes in a file to the new command format,

- 1 Retrieve the document containing the old format merge codes.
- 2 Press **Merge/Sort** (Ctrl-F9), then select Convert Old Merge Codes (3).
- 3 Save the file.

If you want to convert the commands back to the control codes format, use the Text Out feature to save the file as either a WordPerfect 4.2 or 5.0 document (see *Text In/Out* in *Reference*). You will lose any merge commands unique to 5.1 in the conversion.

If you save a merge file in WordPerfect 5.1, then retrieve it in WordPerfect 5.0, 5.1 merge commands will appear as [Unknown] codes in WordPerfect 5.0. If you retrieve the file again in WordPerfect 5.1, the original 5.1 merge commands will be restored.

Previous version equivalents to the WordPerfect 5.1 merge commands are listed to the right of the command in the command access box (Shift-F9, Shift-F9) (see *Inserting Merge Commands* above). A list is also included under *Previous Merge Commands* under *Notes* in *Appendix K: Macros and Merge, Programming Commands*. For information on inserting these commands, see *Inserting Merge Commands* above.

For an example of how to create a primary file, see *Lesson 23: Merge Fundamentals* in the *WordPerfect Workbook*.

Programming Commands

There are many merge programming commands you can use in both primary and secondary files to control and add flexibility to your merges. You can also use macros to add even more versatility to your merges. See *Appendix K: Macros and Merge, Programming Commands* for information on programming commands for both Macros and Merge.

Shell Clipboard

If you own WordPerfect Shell, the Shell Clipboard may be used as the source for either the primary or secondary merge file, as long as its contents are in the appropriate format. To use the Clipboard as a file source when executing a merge,

- 1 Begin executing the merge (see steps above).
- 2 Press **Shell** (Ctrl-F1) at the Primary File: or Secondary File: prompt.

Important: *Shell (Ctrl-F1) must be the first key pressed at the prompt. If you begin typing, then use Backspace to delete the characters, pressing **Shell** will not access the contents of the Clipboard. You should cancel the merge and begin again.*

The Setup: Merge DOS Text File screen will appear. For more information about this screen, see *DOS Delimited Text Files* above.

- 3 Continue executing the merge as described in the steps at the beginning of this section.

See Also: Lessons 23 through 25; Labels; Appendix I; Appendix J; Appendix K; Appendix L

Mouse Setup

You can use a mouse with WordPerfect to position the cursor, block text, and select WordPerfect features and options. Before you do so, however, you need to install your mouse according to the instructions in your mouse documentation. Then you should check the Mouse Setup menu in WordPerfect to ready your mouse for use with WordPerfect.

The Mouse Setup menu is used to tell WordPerfect the type of mouse you are using and where it is plugged into the computer. Since WordPerfect supports several different kinds of mice, it is important for WordPerfect to know which mouse you have and where it is located.

The Mouse Setup menu is also used to tailor mouse operation to your level of mouse experience. Settings on the menu let you change mouse responsiveness, select a submenu display time, and tell WordPerfect if you are using the mouse with your left hand.

To change a setting on the Mouse Setup menu,

- 1 Press **Setup** (Shift-F1).
- 2  Select *Setup from the File menu*.
- 2 Select **Mouse (1)** to display the Mouse Setup menu.
- 3 Select a setup option and make the necessary changes (see the option headings under *Notes* below).
- 4 Press **Exit** (F7) to return to the normal editing screen.

The settings on the Mouse Setup menu are stored in the WP{WP}.SET file and are in effect each time you start WordPerfect.

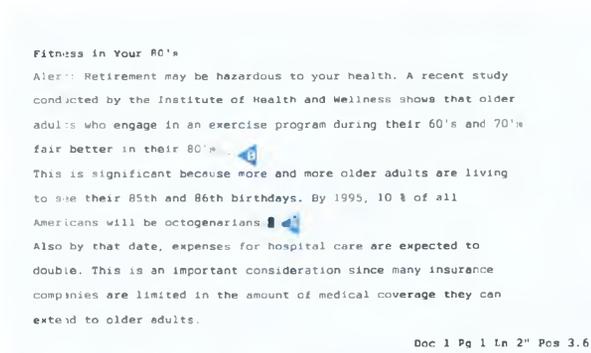
Notes

A MOUSE POINTER

B CURSOR

Acceleration Factor

The mouse pointer is controlled by moving the mouse and is shown on the screen below. While the exact appearance of the mouse pointer may vary from monitor to monitor, this should give you an idea of what the mouse pointer looks like.



Depending on your experience using a mouse and the mouse acceleration factor, you may feel that the mouse pointer is more or less responsive than it should be to mouse movement. Using WordPerfect, you can adjust the mouse acceleration factor.

The acceleration factor determines how responsive the mouse pointer is to actual mouse movement. The smaller the acceleration factor, the less responsive the mouse pointer is. For example, if you set the acceleration factor to 30, the pointer will be less responsive to mouse movement than if you set the acceleration factor to 200. You may want to experiment with different settings to find which is most comfortable for you.

You can set the acceleration factor to any number between and including 1 and 1200.

Assisted Mouse Pointer Movement

This option determines whether WordPerfect moves the mouse pointer to the first selectable item when the menu bar or a WordPerfect menu is displayed.

Double-Click Interval

As you use the mouse in WordPerfect, and read the mouse instructions under *Mouse Support* in *Reference*, you will learn that pressing a mouse button, then releasing it is called “clicking” and clicking the mouse button twice in rapid succession is called “double-clicking.” You will also learn that the difference is important to WordPerfect since the mouse functions differently depending on whether you are clicking or double-clicking.

The double-click interval determines the difference between a click and a double-click. If you don't click the mouse button twice within the double-click interval,

you are clicking the mouse twice rather than double-clicking. The double-click interval is measured in 100ths of a second, so you can enter 50, for example, to make the double-click time one-half of a second.

Left-Handed Mouse

This option lets you tell WordPerfect whether you are using the mouse with your left hand. If you set this option to Yes, the operations that are normally performed with the left-most mouse button are performed with the right-most mouse button and vice versa. If you set this option to Yes, keep in mind that the documentation is written for the default setting, which is No. Thus, instructions pertaining to the left-most mouse button will apply to the right-most mouse button and vice versa.

Port

The port is where your mouse is plugged into your computer. If you have a serial mouse, you must select the proper location. If you have a bus mouse, you don't need to use this option. If you don't know the proper location, there are four choices, and you can try each one until your mouse works properly. Or, you can try asking the person who installed your mouse.

Submenu Delay Time

The Submenu Delay Time setting determines how long the cursor must rest on a pull-down menu item that has a submenu before the submenu is displayed. It also determines how long you have to move the mouse pointer to a submenu item if you are dragging the mouse and are "short cutting" to the submenu through the main menu to the submenu.

The submenu delay time is measured in 100ths of a second, so you can enter 50, for example, to make the submenu delay time one-half of a second.

Pull-down menu items with submenus are displayed with a ► at the immediate right of the item. The mouse pointer is shown on the screen under *Acceleration Factor* above.

Type

A mouse driver is a set of information that helps WordPerfect communicate with your mouse. Without this information, your mouse cannot work properly in WordPerfect. The Type option is used to help WordPerfect select the correct mouse driver.

For information on using this option, see *Mouse Type* in *Reference*.

See Also: Mouse Support; Mouse Type; Pull-Down Menus

Mouse Support

A “mouse” is a piece of hardware that connects to your computer to perform different operations. While you don’t need a mouse to run WordPerfect, WordPerfect supports most common mice. Mice can be used for three operations in WordPerfect:

- Blocking Text
- Cursor Movement
- Feature and Option Selection

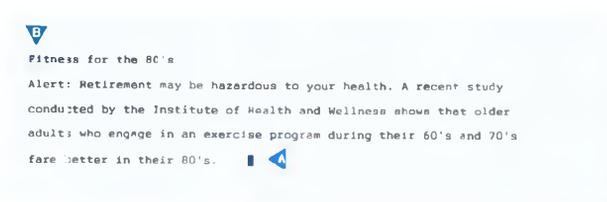
Information on performing these operations is listed below.

Before you begin using the mouse, you should have installed the mouse according to the instructions in the documentation that came with your mouse. You should also have used the Mouse Setup menu to give WordPerfect information about your mouse (see *Mouse Setup in Reference*).

Before you read more about the mouse and WordPerfect, you should know that in the normal editing screen and some WordPerfect menus, the mouse pointer is usually represented by a reverse-video box (■). This pointer exists separately from the WordPerfect cursor (usually a dash) and should not be mistaken as the WordPerfect cursor. It appears when you move the mouse and disappears when you press a key.

A mouse pointer is shown in the screen below. While its appearance may vary from monitor to monitor, the example below should give you a good idea of what the mouse pointer looks like.

- ▲ MOUSE POINTER
- ▲ WORDPERFECT CURSOR



When talking about the mouse, “click” means to press a button, then release it. “Double-click” means to click a button twice in rapid succession. “Drag” means to press the button, hold it down, then move the mouse.

Blocking Text

To block text with the mouse, position the mouse pointer on one end of the text you want to block. Next, press the left mouse button and drag the mouse until the mouse pointer is at the immediate right of the other end of the text you want to block. Then release the left mouse button. The text you blocked is highlighted.

Once you have blocked the text, you can use any of the features you can if you had used the Block feature (Alt-F4) to block the text (see *Block, Define in*

Reference). The same codes are inserted and the document is formatted the same. The only thing that is different is the method of blocking the text.

Once a block is defined and you have released the left button, you can change its size without canceling the block and starting over by using the arrow keys, ♦Search (F2) or ♦Search (Shift-F2). (See Search in Reference.)

Cursor Movement

Using the mouse pointer, you can “point” to a specific location, then click the left button on your mouse to move the WordPerfect cursor to that location.

Like the cursor keys, the mouse cannot be used to position the cursor where there is no text or codes. If you position your mouse pointer where there is no text or codes, then click the left mouse button, the cursor will be positioned at the nearest text.

As you are positioning the cursor with the mouse, remember that double-clicking the left button or pressing the left button, then dragging the mouse mean different things to WordPerfect (see *Blocking Text* above and *Clicking and Double-Clicking* below).

If you have split the screen with the Window feature (Ctrl-F3,1), the mouse can be used to position the cursor in either document screen. Also, the mouse can be used to position the cursor in WordPerfect prompts that ask for some type of input such as a filename (e.g., Document to be Saved: C:\WP51\LETTER.DOC).

If you want to scroll to parts of the document that are not displayed on the screen, press the right mouse button, then drag the mouse to the edge of the screen in the direction you want to scroll. When you release the right mouse button, scrolling stops. If you want to scroll *and* block text as you scroll, use the left mouse button instead of the right mouse button.

If you are scrolling left or right, scrolling stops when you reach the beginning or end of the current line of text. If you are scrolling up or down, scrolling stops when you reach the top or bottom of the document.

Feature and Option Selection

The mouse can be used to select any WordPerfect feature or option. You can use the mouse to select features and options in combination with WordPerfect keystrokes, or you can use the mouse exclusively.

To display the pull-down menu bar, you should click the right mouse button. To hide the menu bar once it is displayed, you can click the right button again (unless you have chosen to have the menu bar always visible).

To select an option from any WordPerfect menu (pull-down or other), you can do one of two things. You can move the mouse pointer to that item, then click the left mouse button. Or, you can press the left button, drag the mouse to the item you want to select, then release the left button.

You can also click on prompts such as “Press **List**” to select the key to which the prompt refers.

As you use the mouse to select features and options, be aware that the right mouse button serves the same function as Exit (F7). In other words, it will exit you out of a menu.

Also, be aware that double-clicking the left button acts the same as pressing the left button, then pressing **Enter**. This is especially useful in menus such as List Files, Base Font, and Printer Selection where a list of items is displayed.

Double-clicking in List Files, Base Font, and Printer Selection is useful because the first click highlights the item you want to select, then the second click acts as the Enter key. In List Files, this lets you quickly view a document. In Base Font and Printer Selection, this lets you quickly select a base font or a printer.

Double-clicking is also useful when a Status line prompt is displayed because it tells WordPerfect to accept the default value.

Notes

Canceling

Clicking the middle mouse button on a three-button mouse performs the same function as pressing the Cancel key (F1). Among other things, this includes canceling Block, backing out of a menu without making changes, and restoring deleted text (see *Cancel* in *Reference*).

To cancel with a two-button mouse, press and hold either mouse button, click the other button, then release the first button.

Center Button

The center button on a three-button mouse performs the same function as the Cancel key (F1). If you have a two-button mouse, press and hold either mouse button, click the other button, then release the first button.

Clicking and Double-Clicking

Pressing a mouse button, then releasing it is called clicking. Clicking the mouse button twice in rapid succession is called double-clicking. If you read the information under *Feature and Option Selection* above, you will see that clicking and double-clicking cause WordPerfect to act in different ways.

For example, a click, then another click in the List Files menu simply highlights a file. A double-click in the List Files menu highlights a file and lets you look into the file's contents.

How does WordPerfect tell the difference between two separate clicks and a double-click? It checks the Double-Click Interval setting.

If you click a mouse button twice within the double-click interval, WordPerfect considers it a double-click. If you exceed the double-click interval in clicking the mouse button twice, WordPerfect considers it as two separate clicks.

Information on setting the double-click interval can be found in *Double-Click Interval* under *Mouse Setup* in *Reference*.

Exiting

When you click the right mouse button, it performs the same function as if you had pressed **Exit** (F7). In many WordPerfect menus, this exits you out of the menu.

The right button does not exit you out of a document. If you want to do so with the mouse, you must select Exit from the **File** menu.

Left Button

The left button on your mouse performs several functions. When you are in normal text, clicking the left button moves the cursor to where the mouse pointer is located. Pressing the left button, dragging the mouse, and releasing the left button blocks text.

In a WordPerfect menu, clicking the left button highlights the menu item where the mouse pointer is located. Pressing the left mouse button, dragging the mouse pointer to a menu item, then releasing the left mouse button also selects the item. If the mouse pointer is not located on an item, clicking the left button cancels you out of that menu.

Double-clicking the left mouse button performs the same function as pressing the left button, then pressing **Enter**. If the “Move Cursor; Press **Enter** to Retrieve” message is on the screen, however, double-clicking the left mouse button retrieves the text that is in the temporary move buffer to the location of the mouse pointer.

Macros

Menu selections with the mouse are stored as the equivalent keystrokes in macros. This provides you with a clearer idea of what you did in the macro should you need to edit the macro in the Macro Editor.

When you are defining a macro, you cannot use the mouse to position the cursor.

Mouse and Keystrokes

You can use the mouse and WordPerfect keystrokes in combination with one another or exclusively. For example, you can use the mouse to move the cursor or select a menu option, then in the next operation, use the keystrokes. You can use the mouse in one step of an instruction in the *WordPerfect Workbook* or this manual, then use the keystrokes in the next step.

With few exceptions, WordPerfect is designed to let the mouse work anywhere that keystrokes work. Notable exceptions include typing keyboard characters, moving the cursor in the Reveal Codes screen, and entering the text and codes to be searched for after selecting the Search or Replace features.

Mouse Responsiveness

If you want the mouse pointer to be more or less responsive to your mouse movements, change the Acceleration Factor setting on the Mouse Setup menu (see *Acceleration Factor* under *Mouse Setup* in *Reference*).

Pull-Down Menus

WordPerfect lets you select features from pull-down menus. This is especially useful if you are using the mouse, although you can select features from the pull-down menus with both the mouse and the keyboard.

More information on how the mouse works in pull-down menus can be found under *Feature and Option Selection* above. More information on the pull-down menus themselves can be found in *Pull-Down Menus* in *Reference*.

Right Button

In the normal editing screen, clicking the right button on your mouse does one of two things. If the pull-down menu bar (located at the top of the screen) is not displayed, clicking the right button displays the menu bar. If the menu bar is displayed, clicking the right button “hides” the menu bar (unless you have chosen to have the menu bar always visible).

In WordPerfect menus, clicking the right mouse button performs the same function as Exit (F7). This means that it exits you from the menu.

Pressing the right mouse button, then dragging the mouse pointer to the edges of the normal editing screen, lets you scroll through a document.

Yes/No Options

When an option gives you two choices, Yes and No, the default response is shown without parentheses. Clicking on Yes sets the option to Yes, while clicking on No sets the option to No.

See Also: Mouse Setup; Mouse Type; Pull-Down Menus

Mouse Type

Since WordPerfect can support several different types of mice, it needs to know the type of mouse you have. The method for supporting mouse functions differs from mouse to mouse.

A mouse driver is the file WordPerfect uses to communicate with a mouse. This file, which ends with a .IRS (input resource file) extension, is used to support mouse functions such as cursor movement, blocking text, and selecting WordPerfect features and options.

If you are having trouble performing any of these functions with the mouse, see *Mouse Support* in *Reference* to make sure you are using the mouse correctly. If you are, it could be that the correct mouse driver isn't selected.

WordPerfect uses a feature called Mouse Type to select the correct mouse driver. When you install WordPerfect, it selects a generic mouse driver called

MOUSE.COM which works with most mice. However, you should check the Mouse Type screen to see if your mouse is one of the supported types.

The list of mouse drivers on the Setup: Mouse Type menu comes from a file called STANDARD.IRS. This file is installed with the WordPerfect program files and should reside in the directory where WP.EXE is located.

To select your mouse driver from the Mouse Type screen,

1 Press **Setup** (Shift-F1).

 Select **Setup** from the **File** menu.

2 Select **Mouse** (1), then select **Type** (1).

3 Move the cursor to the type of mouse you are using, then press **Enter** to select it.

Notice that the same mouse may have two or more options such as serial and bus. These options refer to how your mouse is connected to your computer. You should be able to tell which option to choose from the documentation that came with your mouse. You can also check the underside of your mouse, which often has a sticker giving you information about the mouse.

4 Press **Exit** (F7) until you return to the normal editing screen.

This setting is stored in the WP{WP}.SET file and remains in effect each time you start WordPerfect.

Notes

Auto-Select

WordPerfect initially selects the generic “Mouse Driver” (see *MOUSE.COM* below). If you selected a mouse driver yourself, but now wish to have WordPerfect deselect the driver you selected, go to the Setup: Mouse Type menu (Shift-F1,1,1), then choose Auto-Select (2).

Deselecting the Mouse

If you wish to deselect a mouse driver, go to the Setup: Mouse Type menu (Shift-F1,1,1), move the cursor to the mouse driver you want to deselect, then type an asterisk (*).

Mouse Not Shown

If your mouse is not shown on the Setup: Mouse Type menu, then the information for that mouse is not located in the directory where WP.EXE resides.

If you have files ending with a .IRS extension in a directory other than where WP.EXE resides, make sure you are in the Setup: Mouse Type menu (Shift-F1,1,1), then select **Other Disk** (3). After you do so, enter the pathname to where your .IRS files are kept. WordPerfect will display those files on the Setup: Mouse Type menu.

If you do not have .IRS files in any directory other than the directory where WP.EXE is located and your mouse is not shown on the Setup: Mouse Type menu, send the name of your mouse, your return address, and your phone number to:

Mouse Driver
Attn: WordPerfect Corporation Information Services
1555 N. Technology Way
Orem, UT 84057

At WordPerfect Corporation, we are constantly updating our software and there is a chance that we may have created a driver for your mouse. In the meantime, select the generic "Mouse Driver" from the Setup: Mouse Type menu (see *MOUSE.COM* below).

MOUSE.COM

If the name of your mouse is not listed on the Setup: Mouse Type menu, select the generic "Mouse Driver." This instructs WordPerfect to use a mouse driver called MOUSE.COM.

MOUSE.COM is a program that comes with your mouse. You must run MOUSE.COM before starting WordPerfect if you plan to select "Mouse Driver." Information on running MOUSE.COM should be found in the documentation that came with your mouse.

On the other hand, if the name of your mouse is listed on the Setup: Mouse Type menu, and if you don't use your mouse with any other program on your computer, you don't need to run MOUSE.COM. The WordPerfect mouse driver will be all that you need to support your mouse.

Name Search

The Name Search option on the Setup: Mouse Type menu (Shift-F1,1,1) helps you easily move the cursor to the name of your mouse. To use the option, select Name Search (n), then begin typing the name of your mouse. As you type letters, the cursor moves to the first name on the list that matches those letters. Press **Enter** or an arrow key to exit Name Search.

Other Disk

The Other Disk option is used in case your mouse is not displayed on the Setup: Mouse Type menu. For more information, see *Mouse Not Shown* above.

STANDARD.IRS

STANDARD.IRS is a special mouse driver that comes with WordPerfect, and it contains information for most common mice. This driver should reside in the directory where WP.EXE is located.

Wrong Driver

You must have the mouse for the mouse type you select. If you don't, WordPerfect may not be able to properly support your mouse.

See Also: Mouse Setup; Mouse Support

Move

You can use Move to highlight a sentence, paragraph, or page of text, and then move, copy, or delete it.

- 1 Place the cursor on the text you want to move.
- 2 Press **Move** (Ctrl-F4), then select **Sentence** (1), **Paragraph** (2), or **Page** (3) to highlight the sentence, paragraph, or page on which the cursor is resting (see *Text Delimiters* below).
-  Choose *Select from the Edit menu, then select Sentence, Paragraph, or Page.*
- 3 Select a Move option (see *Move Options* below) and move the text.

or

Select **Delete** (3) to delete the text. The text is then removed from the screen. It can be retrieved as deleted text (see *Undelete in Reference*).

Notes

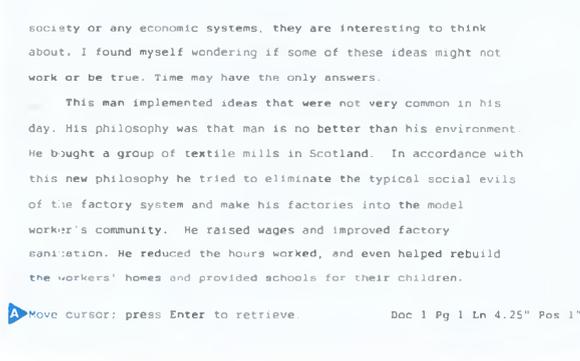
Move Options

When you use Move, the Move options appear the same as when you are using Move with Block. They are Move, Copy, Delete, or Append. Move and Copy are explained in the following paragraphs. The Delete option is explained in step 3 above. To learn about Append, see *Append in Reference*.

Selecting either Move (1) or Copy (2) stores text in a temporary buffer. With Move, the text is removed from your document. With Copy, the text remains on the screen but is also held in a temporary buffer. In both cases, a prompt

appears on the status line informing you that pressing **Enter** will retrieve the text you have just moved or copied.

MOVE PROMPT



You can then move the cursor to any other place in your document and press **Enter** to retrieve the text. If you switch to another document, you can still press **Enter** to retrieve the text (see *Switch in Reference*). Even if you retrieve another document into the second screen, pressing **Enter** will still retrieve the text. The text will not be removed from the temporary buffer until you exit WordPerfect, or use Move again to store new text in the buffer.

As long as the Move prompt appears on the status line, the text in the temporary buffer will be retrieved when you press **Enter**. You can use the cursor movement and deletion keys to move through text in your document, but you cannot press **Enter** without retrieving the text at the point on which the cursor is resting.

While the Move prompt is on the screen, if you decide you do not want to retrieve the text, you can press **Cancel** (F1) to make the prompt disappear. However, the text will still remain in the temporary buffer until you move new text into it or exit WordPerfect. As long as the text is in the buffer, you can retrieve it by pressing **Move** (Ctrl-F4), selecting **Retrieve** (4), then selecting **Block** (1). You can also retrieve it by pressing **Retrieve** (Shift-F10), then pressing **Enter**.

When the Move prompt is displayed and you then create a table, the Move prompt is suppressed while you are in table editing mode. As soon as you exit Table Edit, the prompt should reappear, unless the temporary buffer is destroyed while you are in Table Edit.

If the Edit pulldown is used and Paste is selected, the text reappears.

Text Delimiters

Move lets you move a sentence, paragraph, or page.

The Sentence option is designed to move a sentence from the capital letter that begins the sentence, up to and including the punctuation that ends the sentence, along with as many as three spaces following it. The sentence you move can end with a period (.), question mark (?), or exclamation point (!). However, a Hard Return code [HRt] is always considered to be a definite end of a sentence. Consequently, if a Hard Return code [HRt] occurs before the end of a sentence, WordPerfect highlights only up to the Hard Return code.

You can place the cursor anywhere on a sentence before highlighting it. When the sentence is retrieved, any existing ending spaces are inserted after the end of the sentence. Consequently, if the sentence you move is followed by two spaces, and you move the cursor to the first letter in a sentence before retrieving it, your text will continue to be spaced correctly.

Since paragraphs are normally separated by Hard Return codes [HRt] in WordPerfect, the Paragraph option is designed to move a paragraph from the last Hard Return code in your text up to, and including, the next Hard Return code. Any spacing at the beginning of the paragraph (e.g., a tab or indentation code or a series of spaces, etc.) is included. When the paragraph is moved, the Hard Return code at the end of the paragraph is moved with it. Consequently, if you move the cursor to the start of a paragraph before retrieving it (and not to any extra line above a paragraph), your text will continue to be spaced correctly.

In WordPerfect, pages can be separated by both a Soft Page code [SPg] (represented in the normal editing screen by a single-dashed line) or a Hard Page code [HPg] (represented in the normal editing screen by a double-dashed line). The Page option is designed to move text from one page break to the next. When a page of text is moved, soft page breaks are not moved with it. However, if the bottom of the page is indicated by a hard page break, that page break is moved with the text. Unless every page in your document is separated by hard page breaks, using the Page option usually changes where the page breaks occur in your document.

See Also: Append; Move, Block

Move, Block

You can use Move to move a block of highlighted text.

1 Block the text (Alt-F4).

- 2 Press **Move** (Ctrl-F4), then select **Block** (1), **Tabular Column** (2), or **Rectangle** (3). These options indicate the type of block you are moving (see *Block*, *Tabular Column*, and *Rectangle* below).

 Choose *Select from the Edit menu*, then select *Tabular Column* or *Rectangle*.

The Move options appear.

- 3 Select **Move** (1), **Copy** (2), or **Append** (4) to move, copy, or append the text.

or

Select **Delete** (3) to delete the text. The text is then removed from the screen. It can be retrieved as deleted text (see *Undelete* in *Reference*).

Notes

Block

Most often, you will probably select **Block** (1) when you use Move (Ctrl-F4) to move text. The Block option lets you block any part of your document by placing the cursor on the first character you want to move, pressing **Block** (Alt-F4) to turn on Block, then moving the cursor to the last character you want to move. You can block a heading, a part of a sentence or a paragraph, or any part of a line (see *Block* in *Reference*).

Once you have defined a block of text, selecting **Block** (1) from the Move menu displays the move options: Move, Copy, Delete, and Append. You can then select any option. For a description of the Move options, see *Move* in *Reference*.

When you use Block to move text, any codes within the blocked text are moved with the block. However, WordPerfect is designed to keep the attributes of blocked text the same whenever it is moved. Consequently, if you block only part of a line, WordPerfect inserts the necessary codes to keep the bolded text bolded, the underlined text underlined, etc.

Rectangle

The Rectangle option lets you move a rectangular-shaped block without disturbing other parts of the text on a page. Each of the lines of text must end with Hard Returns (see *Return*, *Soft* and *Hard* in *Reference*).

Suppose, for example, you have imported an ASCII text file into WordPerfect which contains several vertical columns of numbers and that these columns of

numbers are separated by spaces and not by tabs. You can use the Rectangle option to re-arrange the columns and also keep them intact.

- A COLUMN TO BE MOVED
- B SPACES
- C HARD RETURNS

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Larsen	David	573893
7898	Long	Frank	129876

Doc 1 Pg 1 Ln 87 Pos 277

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Larsen	David	573893

Press Reveal Codes to restore screen

To move a rectangular-shaped block, place the cursor at one corner of the rectangle you want to move (e.g., upper left or lower right), then press **Block** (Alt-F4). A “Block On” message appears at the left corner of the status line. Move the cursor to the opposite corner of the rectangle. As you do so, WordPerfect highlights an irregular-shaped block of text on-screen.

- A IRREGULAR BLOCK
- B BEGINNING OF BLOCK
- C END OF BLOCK

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Larsen	David	573893
7898	Long	Frank	129876
6756	Stewart	Stan	348293
6758	Chapel	Bob	234728
5555	Cox	Stan	455643
1112	Cooper	Rachell	324343
5544	Fullmer	Charles	112233
4321	Gardner	Hank	445566
3415	Fowler	Kevin	998800
8767	Gibb	Gary	112234
9878	Chamberlain	Brian	456123
4599	Giles	Greg	600980
7765	Marsh	Lisa	789900
7777	Mann	Daniel	677777
2888	Brown	Mitch	754992

Block on Doc 1 Pg 1 Ln 4.83 Pos 4.4

Keep in mind that this irregular-shaped block is no indication of the actual text that you are going to move. Once you have diagonally spanned the rectangle you want to move, press **Move** (Ctrl-F4), then select **Rectangle** (3).

- ▲ BLOCK TO BE MOVED
- ▲ MOVE OPTIONS

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2369	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Kruidsen	Steven	123433
7865	Forrest	Richard	342567
7834	Larsen	David	573893
7898	Long	Frank	129876
6756	Stewart	Stan	348293
6758	Chapel	Bob	234728
5555	Cox	Stan	455643
1112	Cooper	Rachell	324343
5544	Fullmer	Charles	112233
4321	Gardner	Hank	445566
3415	Fowler	Kevin	958800
8767	Gibb	Gary	112234
9878	Chamberlain	Brian	456123
4599	Olles	Greg	600980
7765	Warsh	Lisa	789900
7777	Mann	Daniel	677777
7788	Brown	Mitch	754992

▲ 1 Move: 2 Copy: 3 Delete: 4 Append: 0

The on-screen block changes to highlight only the rectangle which will be moved, and the Move options are displayed on the status line. You can then select **Move** (1) or **Copy** (2), move the cursor to the place where you want the rectangle inserted, and press **Enter** to insert it.

While the Move options are displayed, selecting **Delete** (3) deletes the highlighted text. You can also select **Append** (4). For more information, see *Append* in *Reference*.

Short Cuts

On keyboards with an enhanced BIOS, you can also move a block of text by blocking the text, then pressing **Block Move** (Ctrl-Del) to move the block, or **Block Copy** (Ctrl-Ins) to copy it. A prompt appears on the status line informing you that pressing **Enter** will retrieve the text you have just moved. You can then move the cursor to the place where you want the text and press **Enter** to insert the text.

If you do not have a keyboard with an enhanced BIOS, you can re-assign or *map* these same keystrokes to different keys. You can also map **Block Append** to a key on your keyboard (see *action* under *Keyboard Layout, Edit* in *Reference*).

Tabular Column

When you press **Tab**, **◆Indent** (F4), or **Tab Align** (Ctrl-F6) to create a series of columns across a page, you may sometimes decide that you want to re-arrange those columns without typing them in again. For example, if you have typed

four tabbed columns across a page, you might want to move the first tabbed column to the right of the page.

- A COLUMN TO BE MOVED
- B NEW LOCATION FOR COLUMN

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Darsen	David	573893
7898	Long	Frank	129876

C:\WP51RF.SCR\MOVEBLOCK.PGE Doc 1 Pg 1 Ln 1 Pos 2

[Tab Set: Tab 1" 0.5" 0" +1 7" +3 4" +5 1" | BOLD | UNF | Fct: Extension[und] | bold | Tab | UNF | UNF | D: Last Name [Tab] First Name [Tab] Employee Number[und] | hold | HRT | HRT |

2345[Tab]Hansen[Tab]Jean [Tab]234123[HRT]
 2389[Tab]Jensen [Tab]Jack [Tab]234567[HRT]
 4534[Tab]Richards [Tab]Shawn [Tab]234987[HRT]
 3412[Tab]Hawkins[Tab]Larry [Tab]345642[HRT]
 4564[Tab]Muirbrook [Tab]Wendy[Tab]342543[HRT]
 9876[Tab]Knudsen [Tab]Steven [Tab]123433[HRT]
 7865[Tab]Forest [Tab]Richard [Tab]342567[HRT]

Press Reveal Codes restore screen

You can do this by using the Tabular Columns option.

To move any of the tabbed columns on a page, place the cursor on the first character following the Tab code [Tab] in the first line of the left-most column you want to move, then press **Block** (Alt-F4). A "Block On" message begins blinking at the left corner of the status line. You then need to move the cursor through any of the columns you want to move. As you do so, WordPerfect highlights an irregular-shaped block of text on-screen.

- A IRREGULAR BLOCK
- B BEGINNING OF BLOCK
- C END OF BLOCK

Extension	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Jensen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Muirbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Darsen	David	573893
7898	Long	Frank	129876
6756	Stewart	Stan	348293
6758	Chapel	Bob	234728
5555	Cox	Stan	455643
1112	Coppar	Rachell	324343
5544	Fullmer	Charles	112233
4321	Gardner	Hank	445566
3415	Fowler	Kevin	998800
8767	Gibb	Gary	112234
9878	Chamberlain	Brian	456123
4599	Giles	Greg	600980
7765	Marsh	Lisa	789900
7777	Maan	Daniel	677777
2888	Braden	Mitch	734592

Block on Doc 1 Pg 1 Ln 4.83 Pos 3

As with the Rectangle option, this irregular on-screen block is no indication of the actual text that you are going to move.

Once you have moved the cursor through all the columns you want to move, move down to a character in the last line of the right-most column you want to move, press **Move** (Ctrl-F4), then select **Tabular Column (2)**.

The block changes to highlight only the columns which will be moved, and the Move options are displayed at the status line.

- A BLOCK TO BE MOVED
- B MOVE OPTIONS

Employee Number	Last Name	First Name	Employee Number
2345	Hansen	Jean	234123
2389	Hansen	Jack	234567
4534	Richards	Shawn	234987
3412	Hawkins	Larry	345642
4564	Mulbrook	Wendy	342543
9876	Knudsen	Steven	123433
7865	Forest	Richard	342567
7834	Larsen	David	573893
7898	Long	Frank	129876
6756	Stewart	Stan	348293
6758	Chapel	Bob	234728
5555	Cox	Stan	455643
1112	Cooper	Rachell	324343
5544	Fullmer	Charles	112233
4321	Gardner	Hank	445566
3415	Fowler	Kevin	998800
8767	Gibb	Gary	112234
9878	Chamberlain	Brian	456123
4599	Siles	Oreg	600980
7765	Marsh	Lisa	789900
7777	Mann	Daniel	677777
2888	Brown	Mitch	754992

1 Move; 2 Copy; 3 Delete; 4 Append; 0

You can then select **Move** (1) or **Copy** (2), move the cursor to the place where you want the column inserted, and press **Enter** to insert it.

Using Tabular Column to move text moves the Tab code preceding the column, along with the text in the column (e.g., [Tab]text).

When the Move options are displayed, selecting **Delete** (3) deletes the column. You can also select **Append** (4). For more information, see *Append* in *Reference*.

The Tabular Column option can be used to move columns that you create using Tab, Indent (F4), or Tab Align (Ctrl-F6). Do not use it to move text within Newspaper Columns, Parallel Columns, or Tables. For information on moving text in Newspaper Columns, Parallel Columns, or Tables, see *Columns*, *Newspaper*; *Columns*, *Parallel*; and *Table*, *Create* in *Reference*.

See Also: Append; Move

0 Other Format

The Other Format menu contains several specialized formatting and printing functions, such as changing the language code or selecting whether or not spaces are underlined when you use Underline (F8).

To change an Other Format setting,

- 1 Move the cursor to where you want the setting changed.
- 2 Press **Format** (Shift-F8), select **Other** (4), then select an option and make the necessary adjustments (see the option headings under *Notes* below).

 Select *Other* from the *Layout* menu.

- 3 Press **Exit** (F7) to return to your document.

Notes

Advance

Advance lets you position text at a specific point on a printed page, for example, in a graphics image or in a pre-printed form (see *Advance in Reference*).

Border Options

This menu determines the appearance of the border types you can select for both graphics boxes and tables.

Conditional End of Page

This feature protects a specified number of lines from being split between two pages. It is most often used to keep titles with the paragraphs which follow them (see *Conditional End of Page in Reference*).

Decimal/Align Character and Thousands' Separator

The decimal/align character is preset to a period (.). It is used as the alignment character when you use Tab Align (Ctrl-F6) to align text vertically on a character (see *Tab Align in Reference*).

The decimal/align character is also the character that is used in Math. It separates decimal fractions from whole numbers and serves as the alignment character in number, total, and calculation columns (see *Math, Define Columns in Reference*).

The thousands' separator character is the character used to separate hundreds from thousands and is preset to a comma (,).

If you want to select other characters for these functions, you can do so using the Decimal/Align Character and Thousands' Separator options (see *Tab Align and Math, Define Columns in Reference*).

End Centering/Alignment

You can use this option to place an End Centering/Alignment code [End C/A] in your document. This code will turn off a Center code [Center], a Hard Decimal Align Tab code [DEC TAB], or a Flush Right code [Flsh Rgt] at the cursor position. The cursor remains on the same line when the alignment ends. For more information, see *Center Text*, *Flush Right*, and *Tab Align* in *Reference*.

Language

You can use this option to place a language code [Lang:language] in your document. At any point following the code, WordPerfect then uses that language as a reference for the Sort and Date features. When you sort the document, WordPerfect uses the guidelines of that language's alphabet, and when you insert a date, WordPerfect inserts the date in the way dates are written in that language (e.g., 12 décembre 1990 for French).

WordPerfect Corporation also offers versions of the Speller, Thesaurus, and Hyphenation dictionaries in several languages. If you have purchased and installed a dictionary for a certain language then, at any point following the language code for that language, WordPerfect uses that language's Speller for spell-checking, its Thesaurus for displaying synonyms and antonyms, and its hyphenation dictionary as a reference for hyphenation. For more information, see *Language* in *Reference*.

Overstrike

This option lets you print two or more characters in the same location such as combining the / and the 0 to create Ø (see *Overstrike* in *Reference*).

Printer Functions

This option presents a submenu used for handling such specialized printer functions as kerning, leading, and the placement of the baseline (see *Printer Functions* in *Reference*). Your ability to use these functions depends upon your printer's capabilities.

Underline Spaces/Tabs

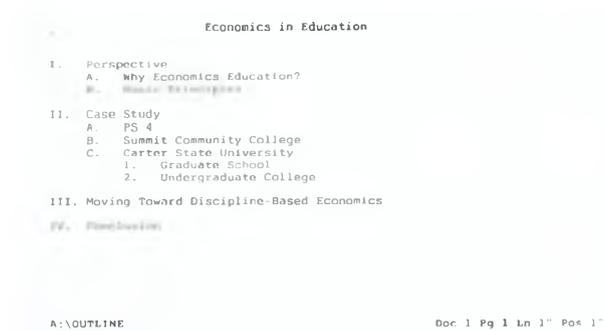
Underline and Double Underline are attributes. For information on adding these attributes to text, see *Attributes* in *Reference*. WordPerfect is initially set to underline spaces but not tabs when you underline or double underline text.

To change the current settings, select **Underline (7)** from the **Format: Other** menu to move the cursor to the **Spaces** entry. Type **y** to underline spaces or type **n** if you do not want spaces underlined. The cursor moves to the **Tabs** entry. Type **y** to underline tabs or type **n** if you do not want tabs underlined. Press **Exit (F7)** to return to your document.

See Also: Advance; Conditional End of Page; Language; Math, Define Columns; Overstrike; Printer Functions; Tab Align

Outline, Create

There are times when part or all of the document you are creating is actually an outline such as the one shown in the screen below.

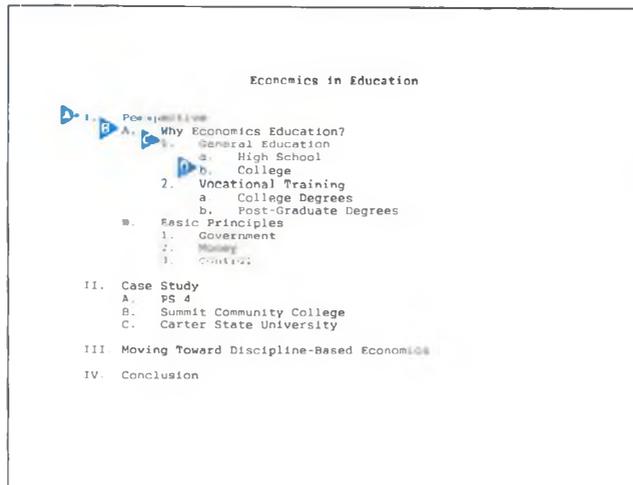


Using the WordPerfect Outline feature, you can easily create and number several different types of outlines. Once you turn on Outline, inserting the next outline number is as easy as pressing **Enter**.

Before you learn more about outlines, you should know that outlines consist of paragraph numbers. These numbers are differentiated by levels, then by numbers, letters, keyboard characters, WordPerfect characters, or styles within a level. You can have up to eight levels of paragraph numbering within a document, and this differentiation lets you organize text in a hierarchical manner.

Four outline levels are shown below.

- A LEVEL ONE
- B LEVEL TWO
- C LEVEL THREE
- D LEVEL FOUR



While you can use numbers, letters, keyboard characters, WordPerfect characters, or styles to "number" paragraph numbers, we use "numbers" in the rest of this reference section to describe all of the possibilities.

The following instructions explain how to create an outline with the Outline feature. They are written to conform to the default settings for the Outline feature. If you have changed any of these settings with the Paragraph Number Definition menu, you should read *Outline, Define in Reference* to see how these changes affect outlining.

1 Press **Date/Outline** (Shift-F5), then select **Outline** (4).

 Select *Outline from the Tools menu.*

2 Select **On** (1) to turn on Outline.

3 Press **Enter** to insert a first level paragraph number.

4 Type the text for the first outline level (see *Typing Text* below).

It is a good idea to always use **Indent** (F4) when you want to move text to a tab stop in Outline.

5 Press **Enter** to insert another first level paragraph number.

or

Press **Enter**, then press **Tab** to insert a second level paragraph number.

6 Type the text for that outline level.

7 Continue pressing **Enter** to insert a new paragraph number, then press **Tab** to change the paragraph number to the next level or **Margin Release**

(Shift-Tab) to change the paragraph number to the previous level (see *Levels* below).

- 8 When you are finished with your outline, press **Date/Outline** (Shift-F5), then select **Outline** (4).

 Select *Outline* from the *Tools* menu.

- 9 Select **Off** (2) to turn off **Outline**.

If the cursor is not at the left margin when you select **Off**, WordPerfect inserts a hard return before inserting the **Outline Off** code.

To learn more about outlines, see *Lesson 18: Corporate Report—Outline* in the *WordPerfect Workbook*.

Notes

Codes

When you insert a paragraph number in an outline, WordPerfect represents that number as an Automatic Paragraph Number code [Par Num:Auto]. This code is no different from the code inserted with the Paragraph Numbering feature, but there is a difference between the two features (see *Paragraph Numbering vs. Outline* below).

If you delete an Automatic Paragraph Number code, you can reinsert it by pressing **Date/Outline** (Shift-F5), selecting **Paragraph Numbering** (5), and pressing **Enter**.

Cursor Control

WordPerfect includes a few cursor movement commands specifically designed for use in outlines. When **Outline** is on, the following cursor commands can be used:

- | | |
|----------------------------|---|
| Alt-Left Arrow (←) | Moves the cursor <i>backward</i> to the first paragraph number or outline style it can find. |
| Alt-Right Arrow (→) | Moves the cursor <i>forward</i> to the first paragraph number or outline style it can find. |
| Alt-Up Arrow (↑) | Moves the cursor <i>backward</i> to the first paragraph number of the same (or preceding) level it can find. For example, if the cursor is resting on a third level paragraph number, Alt-Up Arrow will move the cursor backward to the first third, second, or first level paragraph number it can find. |

Alt-Down Arrow (↓) Moves the cursor *forward* to the first paragraph number of the same (or preceding) level it can find. For example, if the cursor is resting on a third level paragraph number, Alt-Down Arrow will move the cursor forward to the first third, second, or first level paragraph number it can find.

The Alt-arrow functions only work on keyboards with an enhanced BIOS. If you don't have a keyboard with an enhanced BIOS, you can map the Alt-arrow keys to keys on your keyboard with the Item Left/Right/ Up/Down commands (see Action under Keyboard Layout in Reference).

Enter

If you are in an outline and press **Enter** immediately after inserting a paragraph number (or after placing the cursor to the immediate right of the Paragraph Number code), Enter inserts a hard return in front of the paragraph number. If you press **Enter** at any other time in an outline, it is preset to insert a hard return, the tabs that are necessary to place a paragraph number at the correct level, then a paragraph number.

You can change this setting on the Paragraph Number Definition menu (see *Outline, Define* in Reference).

Level Numbering

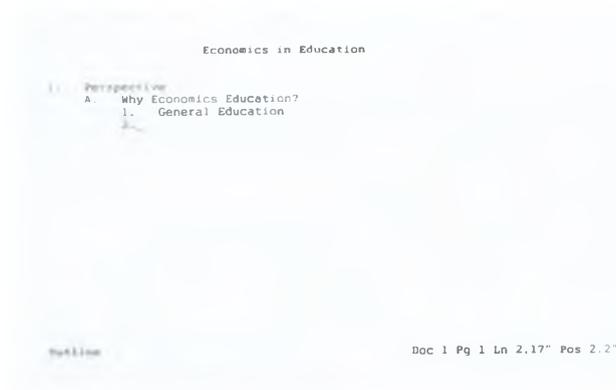
In an outline, WordPerfect automatically updates the paragraph numbers as necessary to keep numbering current. This is also true even when you make editing changes such as inserting new paragraph numbers anywhere in the outline. See *Levels* below for more information.

Levels

The concept of levels is explained at the beginning of this section, and you can have up to eight levels of numbering in an outline. Enter is preset to insert a paragraph number into an outline (see *Enter* above).

Pressing **Enter** inserts a paragraph number at the same level as the current level. In other words, if the current level is the second level, pressing **Enter** inserts another second level paragraph number.

For example, in the outline below, the current level is the third level.



After you press **Enter**, another third level paragraph number is inserted.



Again, this is preset. If you want WordPerfect to always insert a first level paragraph number when you press **Enter**, or if you do not want Enter to insert a paragraph number at all, you may make the changes on the Paragraph Number Definition menu (see *Outline, Define* in *Reference*).

If you want to change the paragraph number to the next level (e.g., first level to second level), press **Tab** immediately after inserting the number. If you want to change the paragraph number to the previous level (e.g., second level to first level), press **◆Margin Release** (Shift-Tab) immediately after inserting the number.

If you want to return to an existing paragraph number and change its level, you must make sure the cursor is positioned to the immediate right of the Paragraph Number code you want to change before pressing **◆Margin Release** or **Tab**. Use **Reveal Codes (Alt-F3)** to make sure.

*If the paragraph number is not in an outline, the cursor must be positioned to the immediate left of the code to have **Tab** change the paragraph number to the next level and have **◆Margin Release** change the paragraph number to the previous level.*

Move/Copy/Delete Family

An outline “family” is the paragraph number on the line where the cursor is located, plus any paragraph numbers of subordinate levels. The family also includes any text associated with those levels.

In the example below, the cursor is located on the line where the number II has been inserted. The outline family in this example includes all paragraph numbers and text from the number II to the number III.

```
I. Perspective
  A. Why Economics Education?
    1. General Education
      a. High School
      b. College
    2. Vocational Training
      a. College Degrees
      b. Post Graduate Degrees
  F. Basic Principles
    1. Government
    2. Money
    3. Control

II. Case Study
  F. PS 4
    1. Main Concepts
    2. Why it is important
  F. Summit Community College
  C. Carter State University

III. Moving Toward Discipline-Based Economics

IV. Conclusion
Outline
```

Doc 1 Pg 1 Ln 3.67" Pns 1.3"

Using the **Move**, **Copy**, and **Delete Family** options, you can move, copy, and delete entire outline families. This is an excellent way to edit your outline since paragraph numbers are automatically updated to reflect your changes.

To use the options, move to the family, press **Date/Outline** (Shift-F5), select **Outline** (4), then select the option of your choice.

If you select **Move Family** (3), the family is highlighted, and you can use the arrow keys to reposition the family in the outline. When you are satisfied with the location, press **Enter** and the family will be inserted in that location.

If you select **Copy Family** (4), a copy of the family is highlighted, and you can use the arrow keys to position the new copy in the outline. When you are satisfied with the location, press **Enter**, and the family will be inserted in that location. The original family will not be moved.

When you are moving or copying a family, Home,Up Arrow (↑) moves the family to the top of the outline, while Home,Down Arrow (↓) moves the family to the bottom. The Left and Right Arrows move the family in or out a level. If you use the Left and Right Arrows, however, you cannot move the family more than one level past the level of the line preceding the family.

If you select **Delete Family** (5), then press **y** to confirm, the family is deleted from the outline and is stored in a temporary file. You can retrieve this file by moving the cursor to where you want to retrieve it, pressing **Cancel** (F1), then pressing **Restore** (1). Once the family is moved out of the delete buffer or you exit WordPerfect, however, you cannot restore the family (see *Undelete in Reference*).

You can use the Block feature (Alt-F4) to block a family, then use the Move feature (Ctrl-F4) to move, copy, or delete the block (see Move in Reference).

Outline On/Off

When you turn on Outline, an Outline On code is inserted into the document. When you turn off Outline, an Outline Off code is inserted into the document. This facilitates easy movement of an entire outline from one document to another. Anytime the cursor is located between Outline On and Off codes, “Outline” is displayed on the status line.

Also, when WordPerfect encounters an Outline On code, it uses the settings for the closest Paragraph Number Definition code preceding the Outline On code. This includes starting the outline with the specified Starting Paragraph Number.

If no Paragraph Number Definition code exists, the outline is formatted according to the default settings (see *Outline, Define in Reference*).

Paragraph Number Definition Menu

The Paragraph Number Definition menu has several options which will help you create the kind of outline you need. If you change any of these options, the steps shown above may need some modifications. For more information on the Paragraph Number Definition menu, see *Outline, Define in Reference*.

Paragraph Numbering vs. Outline

When you use the Outline feature to create an outline, you are simply inserting automatic paragraph numbers between outline codes. Why does WordPerfect have both an Outline feature and a Paragraph Numbering feature? Versatility.

If you are using Outline, you can insert paragraph numbers by simply pressing **Enter**. You can move entire “families” of paragraph numbers and accompanying text to different locations in an outline, and you can keep paragraph numbering intact as you move an entire outline from one document to another.

If you are using Paragraph Numbering, you can insert single paragraph numbers anywhere in a document without having to turn Outline on or off. And, you can “fix” paragraph numbers at a specific level.

If you want to insert fixed paragraph numbers in an outline, you can do so with the Paragraph Numbering feature.

For more information on the Paragraph Numbering feature, see *Paragraph Numbering in Reference*.

Styles

You can include an Outline On code in a style. More importantly, however, you can define an outline style of your own with a combination of the Outline and Style features (see *Outline, Style in Reference*).

Substructures

The Outline feature in the normal editing screen is independent of the Outline feature in document substructures such as graphics boxes, footnotes, endnotes, headers, and footers. If you want to turn on Outline in one of the above mentioned features, you must do so in the editing screen for that feature.

Typing Text

After you insert a paragraph number, you may begin typing text. As you type text, however, you should be aware that pressing **Tab** when the cursor is at the immediate right of a Paragraph Number code changes the paragraph number to the next level (see *Levels* above).

It is a good idea to always use **◆Indent** (F4) when you want to move text to a tab stop in Outline. For example, press **Tab** until the paragraph number is at the correct level, then press **◆Indent** (F4) before typing text. If you must use a tab, press **Home**, then **Tab** to insert a hard tab after the Paragraph Number code.

See Also: Lesson 18; Outline, Define; Outline, Style; Paragraph Numbering

Outline, Define

Several options on the Paragraph Number Definition menu let you tailor the Outline feature and paragraph numbers to your needs. Among the things you can do with the options on this menu are select a style of paragraph numbering, start paragraph numbering at a number other than one, and redefine the function of the Enter key in an outline.

These options (with the exception of Automatically Adjust to Current Level) affect paragraph numbers outside of outlines as well as paragraph numbers within outlines. If you do not know how to use the Outline feature, see *Outline, Create in Reference* and *Lesson 18: Corporate Report—Outline* in the *WordPerfect Workbook*.

The Paragraph Number Definition menu is shown below.

Paragraph Number Definition

1 - Starting Paragraph Number (in legal style)

	1	2	3	4	5	6	7	8
2 - Paragraph	1.	a.	1.	(1)	(a)	(1)	(1)	a
3 - Outline	1.	A.	1.	(1)	(a)	(1)	(1)	a
4 - Legal (1.1.1)	1.	.1	.1	.1	.1	.1	.1	a
5 - Bullets	*	o	-	•	*	•	*	a
6 - User-defined								

Current Definition: I. A. 1. a. (1) (a) i) a

Attach Previous Level: No No No No No No No No

7 - Enter Inserts Paragraph Number: Yes

8 - Automatically Adjust to Current Level: Yes

9 - Outline Style Name:

Selection: 0

- 1 Move the cursor to a location preceding the spot where you want the changes to take effect.
- 2 Press **Date/Outline** (Shift-F5), then select **Define** (6).
 Select Define from the Tools menu.
- 3 Select the option of your choice and make the appropriate changes (see the option headings under *Notes* below).
- 4 Press **Exit** (F7) until you return to the normal editing screen.

WordPerfect inserts a Paragraph Number Definition code at that location. From that point forward (or until WordPerfect finds another Paragraph Number Definition code), WordPerfect formats all outlines and paragraph numbers according to the settings you entered.

You can press **Cancel** (F1) while in the Paragraph Number Definition menu to exit the menu without inserting a code into your document.

Notes

Attach Previous Level

This heading on the Paragraph Number Definition menu tells WordPerfect whether to connect the previous level paragraph number to the current level paragraph number. For example, if you want the first three levels of an outline format connected (e.g., I.A.3) at the third level, you would type **y** for Yes under the second and third level paragraph numbers.

WordPerfect presets the answers under this heading to No for all numbering formats except the legal numbering format. The settings for the established formats cannot be changed.

The only way for you to change the Attach setting is to create a user-defined numbering format. After selecting **User-Defined** (6), you can move to the Attach setting by pressing **Down Arrow** (↓). Type **y** if you want to attach the previous

level number or type **n** if you don't want to attach the previous level number. Press **◆Margin Release** to move backward through the settings or **Tab** to move forward.

For more information on creating a user-defined numbering format, see *Numbering Formats* below.

Automatically Adjust to Current Level

This option tells WordPerfect the level an automatic paragraph number in an outline should have when it is inserted. If this option is set to Yes, WordPerfect will insert the number at the last level that was inserted.

For example, if the last number that was inserted was a second level paragraph number in the outline numbering format (e.g., A., B., C.), the next automatic paragraph number will also be a second level number. If this option is set to No, WordPerfect will always insert a first level automatic paragraph number (e.g., I., II., III.).

Of course, you can still use **Tab** to move the number to the next level or **◆Margin Release** (Shift-Tab) to move the number to the previous level no matter what the setting is for this option (see *Levels* under *Outline, Create* and *Changing Levels* under *Paragraph Numbering in Reference*).

Enter Inserts Paragraph Number

This option defines the function of the Enter key when Outline is on. Yes means that Enter will insert a paragraph number as it normally does. No means that Enter will end a line of text and nothing more.

If this option is set to No, the only way you can insert a paragraph number is with the Paragraph Numbering feature (Shift-F5,5.). You may want to define a macro to perform this task (see *Macros* in *Reference*).

If this option is set to Yes and Outline is on, you can insert a hard return without inserting a paragraph number by pressing **Ctrl-v** before pressing **Enter**. Similarly, pressing **Ctrl-v** before pressing **Ctrl-Enter** will insert a hard page break.

For more information on the Paragraph Numbering feature, see *Paragraph Numbering in Reference*.

Existing Numbers

If you insert a Paragraph Number Definition code prior to an existing outline or paragraph number, the outline and paragraph numbers will be converted to conform to the new definition.

Initial Codes/Settings

You can insert a Paragraph Number Definition code in Initial Codes.

For more information on the Initial Codes features, see *Initial Codes* in *Reference*.

Numbering Formats

You can choose one of four WordPerfect paragraph numbering formats or create your own. The formats and examples of each are displayed under options two through six on the Paragraph Number Definition menu.

▲ NUMBERING FORMATS

Paragraph Number Definition

1 - Starting Paragraph Number	8							
(in legal style)								
2 - Paragraph	1.	a.	1.	(1)	(a)	(1)	1)	a)
3 - Outline	1.	A.	1.	a.	(1)	(a)	1)	a)
4 - Legal (1.1.1)	1	.1	.1	.1	.1	.1	.1	.1
5 - Bullets	*	o	-	*	*	-	*	*
6 - User-defined								
Current Definition	I.	a.	1.	a.	(1)	(a)	1)	a)
Attach Previous Level	No	No	No	No	No	No	No	No
7 - Enter Inserts Paragraph Number	Yes							
8 - Automatically Adjust to Current Level	Yes							
9 - Outline Style Name								

Selection: 0

Once you select a format, it is displayed next to the Current Definition heading.

To define your own format, select User-Defined (6), then select the option of your choice from the menu at the bottom of the screen. If you want an uppercase Roman numeral for that level, select Uppercase Roman (I). If you want a lowercase letter, select Lowercase Letters (a). If you want a paragraph number to be a Roman numeral at its own level and an Arabic numeral when attached to subsequent levels (e.g., I., 1.1, 1.11), select Uppercase Roman/Digits if attached (X) or Lowercase Roman/Digits if attached (x).

If you want a WordPerfect character, press **Compose** (Ctrl-2). Next, type the character set number, a comma, the character within the character set, then press **Enter** (see *Compose* in *Reference*). If you want a keyboard character, type the keyboard character. If you don't want any number, letter, or character displayed at that level, delete the displayed number, and leave it blank.

Your choices are displayed under the Current Definition heading. Press **Enter** or **Tab** to move from one level to the next. Press **◆Margin Release** (Shift-Tab) to move backward through the settings.

After you choose the numbers, letters, or characters for all eight levels, you must type **y** for Yes or **n** for No in the Attach Previous Level heading. Press **Exit** (F7) at any time when you are satisfied with the displayed settings. For more information on the Attach Previous Level heading, see *Attach Previous Level* above.

Outline Style Name

Select this option to go into the Outline Style menu and select an outline style. For more information on the Outline Style feature, see *Outline, Style in Reference*.

Starting Paragraph Number

Editing this option lets you start outline numbering at any level with any number. Some situations where this might be helpful are discussed in the following paragraphs.

When you enter a number for this option, you must enter it in a numeric format. This means you should use arabic numerals separated by commas, spaces, or periods. If you want to start at VI.B.3 in the outline numbering format, enter 6.2.3 for the Starting Paragraph Number option.

One situation where the Starting Paragraph Number option is useful is in a document where you turn off Outline, then turn it on again later in the document. For example, you may have one outline at the beginning of your document that stops with a first level paragraph number of III.

Later in the same document, you may want to turn on Outline again but start with a first level paragraph number of IV (rather than I). To do so, you can make the change with the Starting Paragraph Number option.

To make the change, move the cursor to a location after the first outline but before the second outline. Next, select **Starting Paragraph Number** (Shift F5,6,1), delete the default value, and enter **4**. Then press **Exit** (F7) until you return to the normal editing screen.

When you move the cursor past the second Outline On code, you will notice that the outline numbers change.

Another thing you could have done in the example above was to delete the starting paragraph number and leave it blank. When you leave the option blank, WordPerfect continues numbering from any previous paragraph numbers in the document.

In the example above, WordPerfect would have searched for the first paragraph number preceding the numbering change (III), then would have continued paragraph numbering from that point on. This is especially helpful when you add or delete paragraph numbers prior to the location of the numbering change.

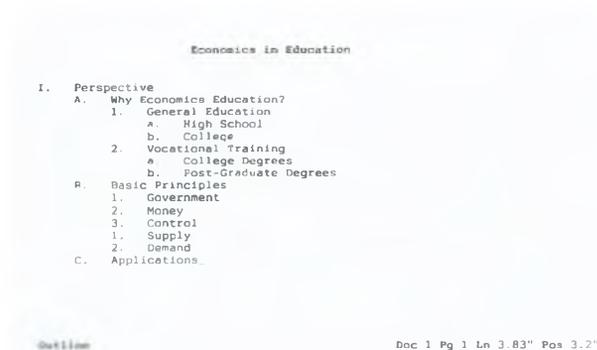
Another situation where changing the Starting Paragraph Number option may be useful is when you want to start numbering over on a level without starting the entire outline over.

For example, your cursor may be located at a third level paragraph number as shown below.



To start numbering over at this level without starting numbering for the entire outline over, move the cursor to where you want to make the change. Next, select **Starting Paragraph Number** (Shift-F5,6,1) and enter the numbers that represent the level and the number at which you want to restart numbering (1.2.1 for the example above). Then press **Exit** (F7) until you return to the normal editing screen.

As you finish your outline, you will notice that numbering started over at that level, but continued on in the rest of the outline.



Another thing you could have done in the example above was to enter the starting paragraph number as ??1. The question mark (?) tells WordPerfect to leave a paragraph number at that level as it is.

In the example above, it could have been used to tell WordPerfect not to do anything to first and second level paragraph numbers. This is especially useful if you add or delete paragraph numbers prior to the location of the numbering change or if you don't know what the numbers for previous levels were (such as in subdocuments for a master document).

See Also: Outline, Create; Outline, Style; Paragraph Numbering

Outline, Style

The Outline Style feature uses the power of the WordPerfect Style feature to let you create styles for your paragraph numbers. This lets you go beyond the simple numbering formats found in the Paragraph Number Definition menu.

Styles consist of codes and text and can be used to format text. Styles are easily created and edited and make editing a document easier. If you are not familiar with the Style feature, we highly recommend that you read *Style* and *Style, Create* in *Reference* before reading this section.

Once you have selected an outline style, it then becomes the numbering format for paragraph numbers (both within and without outlines). To learn more about the basics of the Outline feature, you should read *Outline, Create* in *Reference* and *Lesson 18: Corporate Report—Outline* in the *WordPerfect Workbook*. To learn more about Paragraph Numbering, see *Paragraph Numbering* in *Reference*.

To select an outline style,

- 1 Move the cursor to the location in your document where you want to begin using outline styles for your paragraph numbers.

- 2 Press **Date/Outline** (Shift-F5), then select **Define** (6).

 Select *Define* from the *Tools* menu.

- 3 Select **Outline Style Name** (9).

- 4 Move the cursor to the style you want to select, then choose **Select** (1).

From that point forward in your document, paragraph numbers will be formatted according to that outline style.

If you have not created an outline style or cannot find the style you want to use, you can create or retrieve an outline style (see *Creating an Outline Style* and *Retrieving an Outline Style* below). After you do so, be sure to select it.

Notes

Changing Non-Outline Styles to Outline Styles

To change a non-outline style to an outline style, press **Style** (Alt-F8) from the normal editing screen, move the cursor to the style you want to change, then press **Edit** (4).

Next, select **Type** (2), select **Outline** (3), then enter the necessary information to change the style. The necessary information includes the name of the outline style you want to include the style under and the number of the level at which you want to include the style.

For example, if you want to change the style to a third level number under an outline style named "Outline," you would enter **Outline** for the style name and **3** for the level.

If the name you enter does not match an existing outline style, an outline style with that name will be created.

After entering the information, you can select the outline style from the Outline Styles menu at any time as you normally would.

Creating an Outline Style

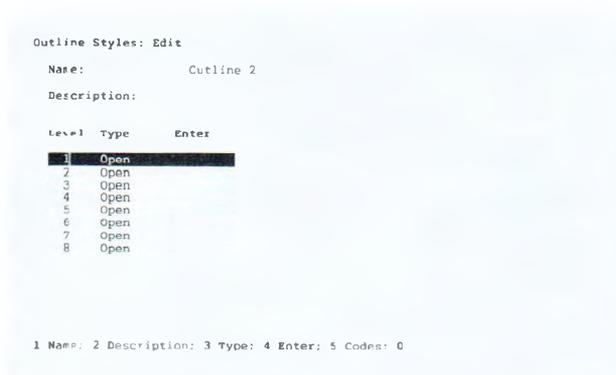
Creating an outline style is similar to creating a style on the Styles menu. To do so, select **Create** (Shift-F5,6,9,2) from the Outline Styles menu, then enter the necessary information. Press **Exit** (F7) until you return to the Outline Styles menu. The Outline Styles menu is shown below.

```
Outline Styles
Name          Description
-- NONE --    Use paragraph numbers only
Outline 1
Outline 2
Outline 3
```

1 Select: 2 Create: 3 Edit: 4 Delete: 5 Save: 6 Retrieve: 7 Update: 1

You may notice that there are several other options (Edit, Save, Retrieve, etc.) on the Outline Styles menu. These options function the same way they do in the Style feature (see Style in Reference).

You create outline styles in the Outline Styles: Edit menu. This menu is shown below.



The *Name* is the name you want to call an outline style. You don't name the styles for each paragraph numbering level, rather, you use one name for the style that incorporates all of the level styles. Select **Name** (1), then enter a name for the outline styles.

You can enter up to 12 characters or spaces for an outline style name. Characters entered with Compose may take up more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 12 characters or spaces for the outline style name.

The *Description* is something you can label the style with to help you remember its contents. Select **Description** (2), then enter a description for the outline style.

You can enter up to 54 characters or spaces for an outline style description. Characters entered with Compose may take up more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 54 characters or spaces for the outline style description.

Creating a style for each paragraph numbering level is *very* similar to creating a style in the Styles menu. Move the cursor to the level for which you want to create a style, then enter the Type, Enter, and Codes information.

Type tells WordPerfect whether the style is paired or open. See *Style, Create in Reference* for a discussion on paired and open styles. Select **Type** (3), then **Paired** (1) or **Open** (2).

Enter lets you define the function of the Enter key with regard to a particular style. Once again, this procedure is discussed under *Style, Create in Reference*. This option is only in effect for paired styles. Select **Enter** (4), then select the option of your choice.

You may wonder how this Enter option works in conjunction with the setting for the Enter key on the Paragraph Number Definition menu. When you are inside

Style On and Off codes, the Enter key setting for the style is in effect. Once you are outside of the Style codes, the Paragraph Number Definition menu setting is in effect.

Codes lets you enter the codes for the style. Again, a discussion on this procedure is found under *Style, Create* in *Reference*. Select **Codes** (5), then enter the codes you want to include in the style. Press **Exit** (F7) to return to the Outline Styles: Edit screen.

If you don't enter codes for a level in an outline style, WordPerfect inserts a fixed paragraph number for that level (see *Paragraph Numbering* in *Reference*).

Nesting Styles

You cannot nest outline styles (include one paired outline style completely within another). If you try to do so, WordPerfect will turn the first style off before inserting the second style.

Non-Existing Styles

If WordPerfect encounters an Outline Style code in a document that doesn't have a corresponding style on the Styles or Outline Styles menus, it re-creates the outline style on both the Styles and Outline Styles menus. All codes in the style are preserved.

This will most likely happen because a style was created, used, then deleted from either the Styles or Outline Styles menu. This will also happen when a style is renamed on the Styles or Outline Styles menu but not in the document.

Retrieving a Style

If you want to retrieve a previously saved list of outline styles to the Outline Styles menu, select **Retrieve** (6) from the Outline Styles menu, then enter the name of the style file. If you don't enter a complete pathname, WordPerfect will search the style directory (see *Location of Files* in *Reference*). If no style directory exists, WordPerfect searches the default directory.

*After you select **Retrieve** (6), you can press **List** (F5), then enter a directory name to display the files in that directory. With the directory displayed on the screen, select **Retrieve** (1) to retrieve the highlighted file.*

When you retrieve a list of outline styles, WordPerfect checks your current list of outline styles for style names that match the incoming styles. If WordPerfect finds a match, it displays the "Style(s) Already Exist, Replace?" message. If you type **n** for No, WordPerfect only retrieves the styles whose names do not match current style names. If you type **y** for Yes, WordPerfect retrieves all of the styles, replacing current styles with the incoming files of the same name.

When you retrieve the style file, all styles (both outline and non-outline) in the file are retrieved to the Styles menu.

Saving a Style

If you want to save all of the outline styles on the Outline Styles menu to a separate file that can be used from document to document, select **Save (S)**, then enter a name for the style. WordPerfect will save the outline styles to the style directory (see *Location of Files in Reference*). If no style directory exists, WordPerfect will save the outline styles to the default directory.

Keep in mind that this option is only for saving outline styles as a separate file that can be used from document to document. When you save a document, you save the outline styles associated with it, so there is no need to use this option if you plan on using the outline styles in the current document only.

***Important:** We suggest you create a style directory, specify it in Location of Files (Shift-F1,6,5), and name style files with some type of descriptive extension (e.g., .STY) when you save them. This may help you remember that a style file is a style file and not a document.*

When you save outline styles, the styles on the Styles menu are also saved to the file.

Style vs. Outline Style

Outline Style is very similar to the Style feature. In fact, you may notice that Outline Style contains all of the options that Style contains with the exception of On and Off.

Outline Style replaces On and Off with Select which is used to tell WordPerfect that you want to use a particular outline style. Once you have selected an outline style, paragraph numbers are formatted according to the style from that point forward in the document. The style for each numbering level is turned on when you insert a new level number and is turned off when you use the Right Arrow key (or Enter, if it is so set) to move past the Style Off code.

If the style is an open style, you can't turn it off.

As you work with the Style feature, you may notice that your outline styles are also shown on the Styles menu. They are there to remind you that they are part of the document and will be saved with the document when you save the document. You can only turn outline styles on and off from the Styles menu, however, when you are in an outline.

You can change a non-outline style to an outline style (see *Changing Non-Outline Styles to Outline Styles* above). One advantage outline styles have over styles is that outline styles can be changed to a previous or following level with ♦Margin Release (Shift-Tab) or Tab just like other paragraph numbers.

See Also: Outline, Create; Outline, Define; Style; Style, Create

Overstrike

You may want to combine the characters found on your keyboard to create new characters. For example, if the printer font you are using does not clearly differentiate a zero (0) from a capital O (O), you may want to combine the zero with a slash (e.g., 0). You can do this using Overstrike.

If your printer has the capability, overstrike lets you combine characters and attributes to create mathematical symbols, chemical symbols, and other character combinations which are not included in the WordPerfect character sets.

To create an overstrike,

- 1 Move the cursor to where you want to create the overstrike.
- 2 Press **Format** (Shift-F8), then select **Other** (4).
 *Select Other from the Layout menu.*
- 3 Select **Overstrike** (5), then select **Create** (1).
- 4 Type the characters that you want printed as an overstrike. For example, to get the 0 overstrike you would type /0. You can also use **Font** (Ctrl-F8) to select the attributes you want those characters to have. When you are ready to save the overstrike, press **Enter**.
- 5 Press **Exit** (F7) to return to your document.

Notes

Codes

When you select **Overstrike** (5) from the **Format: Other** menu, then select **Create** (1), an Overstrike code [Ovrstk] appears on the status line. Any characters you then type appear side-by-side on the screen. You can type up to 30 characters, discounting the space taken up by the attributes you select.

When the document is printed, all the characters you type will be printed on top of one another. However, only the last character you type appears in the normal editing screen. To see all the characters in the overstrike, you can press **Reveal Codes** (Alt-F3). In the **Reveal Codes** part of the screen, all the characters in an overstrike are included as part of the Overstrike code (e.g., [Ovrstk:0/]).

Editing an Overstrike

To edit an existing Overstrike, select **Edit** (2) rather than **Create** (1) in step 3 of the steps given at the beginning of this reference section. WordPerfect searches through text backward, from the cursor position and displays the first overstrike it encounters. If it can't find an overstrike searching backward it then searches forward.

Once an existing overstrike is displayed on the screen, you can edit it. Typing a character key erases the existing overstrike and you have to start over. However,

before you press a character key, you can use Left Arrow (←) and Right Arrow (→) to move through the characters and edit them. When you are ready to save the overstrike, press **Enter**, then press **Exit** (F7) to return to your document.

Overstrike vs. Compose

Many overstrike character combinations are already provided in the WordPerfect character sets (see *Appendix P: WordPerfect Characters*). This includes international characters. You can enter these characters into your text using Compose (Ctrl-2). You can also use Compose to create many of the most common character combinations (e.g., é, í, ü) (see *Compose* in *Reference*).

Whenever possible, it is preferable to use Compose rather than Overstrike to enter characters into your text. If the elements of those characters are available, WordPerfect will then compose the characters for you, even if the total character is not available on a printer.

Short Cuts

If there is an overstrike that you use often, you might want to define a macro that creates an overstrike and then map that macro to a certain key on your keyboard using the Keyboard Layout feature in Setup (Shift-F1,3). That would spare you from having to re-create the overstrike each time you want to insert it in your document (see *Keyboard Layout* in *Reference*).

See Also: Compose; Keyboard Layout

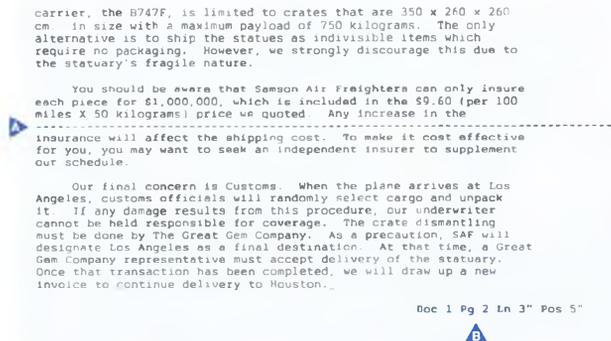
P Page, Soft and Hard

You do not need to divide the text you type into pages. WordPerfect does that for you. Just as WordPerfect automatically wraps the text you type each time you come to the end of a line, it also inserts a page divider each time you reach the end of a page.

The page dividers which WordPerfect inserts for you are called soft page breaks. They are represented in the normal editing screen by a line of dashes which extends across the width of the screen.

 SOFT PAGE BREAK

 CURRENT PAGE NUMBER



Such page breaks are called *soft* because their location is likely to change as you add and delete text from your document. They reformat your text so you don't have to. Even as you add or delete footnotes, endnotes, headers, or footers in your document, WordPerfect continually reformats your document from page to page, displaying on the status line the page number on which the cursor is found.

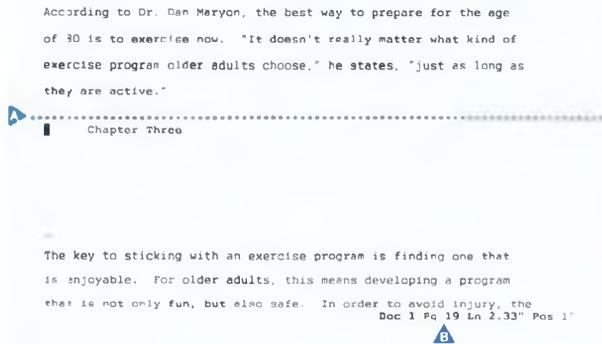
However, there are times when you may want to insert a page break of your own. For example, if the document you are creating contains two sections, you might want to be sure that the second section always begins on a new page. You can do this by inserting a hard page break. The location of a *hard* page break will not change regardless of the changes you make to your document.

To insert a hard page break at the cursor.

1 Press **Hard Page** (Ctrl-Enter).

▲ HARD PAGE BREAK

▲ CURRENT PAGE NUMBER



A hard page break is represented in the normal editing screen by a line of double dashes which extends across the width of the screen.

Notes

Alternate Keystroke

On keyboards with an enhanced BIOS, you can also insert a hard page break by pressing **Ctrl-Insert**. If you do not have a keyboard with an enhanced BIOS, you can re-assign or *map* this alternate keystroke to a different key (see *Keyboard Layout in Reference*).

Codes

In the Reveal Codes (Alt-F3) portion of the screen, a hard page is represented by a Hard Page code [HPg] and a soft page is represented by a Soft Page code [SPg]. If the Soft Page code [SPg] was originally a Hard Return code [HRt], it is displayed as [HRt-SPg].

Deleting Page Breaks

You can delete a hard page break in either the normal editing screen or in Reveal Codes (Alt-F3). Since the on-screen change is evident, you are not asked to confirm the deletion.

You cannot add or delete soft page breaks. WordPerfect adds and removes them for you as you make changes to a document.

Other Features

Although hard page breaks can be used to separate sections or chapters within a document, it is preferable to create documents in small, manageable sizes and then combine them together using the Master Document feature (see *Master Documents in Reference*).

WordPerfect also offers several methods of keeping text together on a page. These include the Block Protect, Conditional End of Page, and Widow/Orphan features.

See Also: Block Protect; Conditional End of Page; Headers and Footers; Master Documents; Widow/Orphan

Page Format

The Page Format menu deals with the way text is formatted on the page. For example, you can use Page Format options to set the top and bottom margins of a page and to select the paper size and type. Page Format options also let you center text vertically on a page, add headers or footers, and have WordPerfect handle page numbering. You can have an option take effect on every page in a document, or you can turn off an option for any given page.

Some of the changes you make to text using Page Format options are not apparent in the normal editing screen. They only appear on the printed page or when you preview the printed page using View Document (Shift-F7,6).

To change a Page Format option,

- 1 Move the cursor to the top of the page on which you want the setting changed.
- 2 Press **Format** (Shift-F8), then select **Page (2)**.
 *Select Page from the Layout menu.*
- 3 Select an option and make the necessary adjustments (see the option headings under *Notes* below).
- 4 Press **Exit** (F7) to return to your document.

Notes

Center Page Top to Bottom

Center Page lets you center the entire page of text vertically, between the top and bottom margins on the page (see *Center Page* in *Reference*).

Codes

Changing any of the Page Format options inserts a code into your text which determines that setting from that point forward in your document. In general, these codes should be placed at the top of the page before any Column On Codes.

Force Odd/Even Page

Sometimes you may want to make sure that certain pages in a document always have an odd, or an even, page number. For example, it is customary to begin

each chapter in a book on an odd-numbered page. You can do this using the Force Odd/Even Page option (see *Force Odd/Even Page* in *Reference*).

Headers and Footers

Often you may want certain information (a chapter title, the date, or the company name) to appear on every page in a document. Such items are called headers when they appear at the top of a page and footers when they appear at the bottom of the page. WordPerfect offers you considerable latitude in creating and alternating headers and footers (see *Headers and Footers* in *Reference*).

Margins, Top and Bottom

This option lets you set new top and bottom margins for the pages in your document (see *Margins, Top and Bottom* in *Reference*).

Page Numbering

You can use this feature to have WordPerfect number the pages in your document. WordPerfect gives you eight choices as to where it will place the numbers on each page. It also lets you insert text with page numbers (e.g., Page 10) and begin renumbering pages at any point in a document (see *Page Numbering* in *Reference*).

Paper Size/Type

In versions of WordPerfect sold in the United States, WordPerfect is set to print on 8 1/2" x 11" paper, with the text running parallel to the narrow edge of the page.

The Paper Size/Type options let you select from several common paper sizes and positions. You can even create a new Paper Size/Type definition of your own (see *Paper Size/Type* in *Reference*).

Suppress Page Format

This option lets you turn off page numbering and headers and footers for the current page only (see *Suppress Page Format* in *Reference*).

See Also: Center Page; Force Odd/Even Page; Headers and Footers; Margins, Top and Bottom; Page Numbering; Paper Size/Type; Suppress Page Format

Page Numbering

The Page Numbering feature is designed to let you quickly select the kind of numbers you want and where you want them to be on the page.

You can choose Arabic (e.g., 1, 2, 3) or two different kinds of Roman numerals (e.g., i, ii, iii, or I, II, III) and have them placed at any one of eight possible

locations. You can also have WordPerfect accompany your page numbers with a word or phrase (e.g., Page Number 1 or Economics—Page 1).

Once you've made your selections, WordPerfect numbers the pages in your document for you and keeps them numbered correctly no matter how much you edit the document. The actual numbers do not appear on the normal editing screen, only on the printed page. However, you can preview how they will look using View Document (Shift-F7,6).

To have WordPerfect number your pages,

- 1 Move to the top of the page where you want numbering to begin.
- 2 Press **Format** (Shift-F8), then select **Page** (2).
 *Select Page from the Layout menu.*
- 3 Select Page Numbering (6) to display the Format: Page Numbering menu.
- 4 Select Page Number Position (4), then select a number indicating where you want the numbers placed (see *Page Number Position* below).

The location you have selected is displayed on the screen in entry number 4 (e.g., Top Alternating). At this point, you can also have words included with the page number (see *Page Number Style* below) or change the type of number being used (see *New Page Number* below).

- 5 Press **Exit** (F7) to return to your document.

Notes

Codes

Selecting Page Numbering as explained in steps 1 through 4 above inserts a Page Numbering code [Pg Numbering:location] into your document, where *location* indicates where the page numbers will appear on the page (e.g., Bottom Center or Top Alternating). From that point forward, page numbers will appear at that location. Generally, this code should always be placed at the top of the page on which you want the page numbering to start.

Selecting New Page Number (1) from the Format: Page Numbering menu, then typing a number and pressing **Exit** (F7) inserts a New Page Number code [Pg Num:#] into your document, where # is the current number. You can also use this option to change the type of number being used by entering another numbering type (e.g., i or IV). From that point forward, pages will be numbered consecutively starting with that number and in that type. If no New Page Number code appears, Arabic numerals are used (see *New Page Number* below).

Selecting Page Number Style (2) from the Format: Page Numbering menu, then changing the text being used with numbers, inserts a Page Numbering Style code [Pg Num Style:style] into your document, where *style* is the current style being used (e.g., [Pg Num Style:Page ^B]). From that point forward, page numbers will be accompanied by that additional text (see *Page Number Style* below).

Any changes made by the Page Numbering, New Page Number, and Page Number Style codes are also reflected in the numbers which appear in the lists

and tables you generate (e.g., Indexes, Tables of Contents, Tables of Authorities, Cross-References).

Initial Settings

Page numbers are not initially included in the documents you create in WordPerfect. However, you may always want to use page numbers in your documents. You can have a page number format automatically inserted at the beginning of the documents you create by inserting the page numbering codes into the Initial Codes you enter in Setup (Shift-F1,4,5) (see *Initial Codes in Reference*).

Inserting a Page Number

Sometimes you may want to include the current page number in text which appears elsewhere on a page. You can do this by pressing **Ctrl-b** to insert a ^B code into your text. This also works in headers, footers, footnotes, and endnotes.

If you want to insert the complete current page numbering style into your text (e.g., Page ^B), select **Insert Page Number (3)** from the Page Numbering menu. This returns you to your document, inserting the complete current page numbering style at the cursor.

New Page Number

This option lets you begin renumbering pages at any point in your document. It also lets you change the type of numbers being used.

To change the page number, select **New Page Number (1)** from the Format: Page Numbering menu, enter the new starting number, and press **Exit (F7)** to return to your document.

The new number is displayed on the status line, and the pages which follow are numbered consecutively starting with that number.

Three different kinds of numbering are possible: Arabic (e.g., 1, 2, 3), Lowercase Roman (e.g., i, ii, iii), or Uppercase Roman (e.g., I, II, III). Unless you make a change in this entry, Arabic numerals are used. You can change to Roman by entering a Roman numeral (e.g., i or I) as the new page number. If you want all the numbers in your document to appear as Roman numerals, you must do this on the first page of your document.

Page Number Position

Page numbers are not included in a document unless you select them.

Selecting **Page Number Position (4)** from the Format: Page Numbering menu displays the possible page number selections graphically on the screen.

The possible selections are:

Selection	Page Number Location
1	Top left corner, every page
2	Top center, every page
3	Top right corner, every page
4	Top left corner for even pages, top right corner for odd pages
5	Bottom left corner, every page
6	Bottom center, every page
7	Bottom right corner, every page
8	Bottom left corner for even pages, bottom right corner for odd pages
9	No page numbers

Selecting any of these locations returns you to the Format: Page Numbering menu and displays that selection in the Page Number Position entry. You can then press **Exit** (F7) to return to the normal editing screen. This inserts a Page Numbering code into your document (e.g., [Page Numbering:Bottom Center]) as explained in *Codes* above. The code takes effect from that point forward, until a new one is inserted.

Page Number Style

Normally, page numbers include only numerals (e.g., 1, 2, 3). This is represented by a Ctrl-B code (^B) in the Page Number Style entry on the Format: Page Numbering menu.

You may sometimes want to accompany page numbers with text (e.g., Page 2, or Economics, Page 6). You can do this by adding text to the Page Number Style entry.

When you select Page Number Style (2) from the Page Numbering menu, the cursor moves to the current style. You can then type any character to erase the current style or use the arrow keys to move through the current style and edit it. You can type characters from the keyboard or use Compose (Ctrl-2) to insert any character in the WordPerfect character sets (see *Compose* in *Reference*). Up to 28 characters are possible, excluding the extra space required to display extended characters.

Once you have completed the style you want, press **Enter** to save it.

A page number style must always include the Ctrl-B code (^B). If you forget to include the Ctrl-B code in this entry, WordPerfect inserts it for you at the end of the Page Numbering Style entry.

Page Numbers with Headers and Footers

WordPerfect inserts page numbers on either the top or bottom line of text on each page. It also inserts a blank line between the page numbers and the remaining text.

Since headers are also printed on the top line of every page, and footers on the bottom line, this can cause problems when you use both the Page Number feature and the Header and Footer feature in the same document. You can avoid this by inserting an extra line at the top of a header or at the bottom of a footer whenever you are going to use these features along with page numbers (see *Headers and Footers in Reference*).

Suppressing Page Numbering

To suppress page numbering for one page, press **Format** (Shift-F8), select **Page** (2), select **Suppress (this page only)** (8), select **Suppress Page Numbering** (4), type y, then press **Exit** (F7) to return to your document (see *Suppress Page Format in Reference*).

To suppress page numbering for several pages, move to the top of the page where you want to begin suppressing numbers, press **Format** (Shift-F8), select **Page** (2), select **Page Numbering** (6), select **Page Number Position** (4), select **No Page Numbers** (9), then press **Exit** (F7) to return to your document.

You can then move to the page where you want page numbers to reappear, and turn on page numbering again by following the steps given at the beginning of this reference section. WordPerfect will take the intervening pages into account as it numbers your pages, but it will not print numbers on them when you print your document.

See Also: Headers and Footers; Initial Codes

Paper Size/Type

When printing in WordPerfect, you need a way of selecting and creating different kinds and sizes of paper (forms) to print on. In addition, you need to be able to tell WordPerfect which form you are printing on at a particular time. The Paper Size/Type feature lets you do this.

This feature lets you define any kind of form (letterhead, labels, envelopes, etc.), then print on that form. Since there are so many possible types of paper you can print on, WordPerfect needs information about each type you use. For example, it needs to know the size of the paper, how the paper is inserted into the printer (e.g., bin number), and whether or not you want WordPerfect to prompt you to insert the paper.

In addition to directing WordPerfect to the proper form, this information helps WordPerfect format text on both the screen and the printed page. For example,

word wrap and soft page breaks are directly related to the size of the current page.

The Paper Size/Type feature displays a list of all the paper sizes and types defined for the currently selected printer. Each printer you select will have different paper sizes and types already defined. You can edit or delete definitions, or create new ones that will be displayed when you select Paper Size/Type with that printer selected.

Before WordPerfect can use any of the information that is displayed with the list of paper size/type definitions, you need to select a paper size and type.

Each version of WordPerfect has a default form that is used if you do not select a paper size and type. For U.S. versions, this is Standard 8.5" x 11" paper. For non-U.S. versions, the form varies.

To select a paper size and type,

- 1 Move the cursor to the place in your document where you want to change to a different paper size and type. This should be the top of a page in the document.
- 2 Press **Format** (Shift-F8), then select **Page (2)** to display the Format: Page menu.
 *Select Page from the Layout menu.*
- 3 Select **Paper Size/Type (7)**, move the cursor to the paper type you want to use (see *Paper Type and Orientation* below), then choose **Select (1)**.

The paper definition currently in use is highlighted when you enter the Paper Size/Type screen.

- 4 Press **Exit** (F7) to return to the normal editing screen.

If you have not yet selected a printer, these steps will work somewhat differently (see Paper Size/Type Screen below).

When you select a definition (as in the steps above), WordPerfect inserts a Paper Size/Type code (see *Codes* below) into your document. When WordPerfect encounters one of these codes while printing, it looks on the list of paper sizes and types and uses the definition that matches the code exactly. If it cannot find a definition to match the code, it uses the [ALL OTHERS] definition (see [ALL OTHERS] below).

Important: *The information concerning your forms is stored in the .PRS file for the currently-selected printer. You can print the forms on different printers as long as each printer has an identical form definition. Otherwise, the [ALL OTHERS] definition is used. If you delete or replace your .PRS file, you will lose the forms that you have defined for that .PRS file.*

Adding a Definition

It is not necessary to define a paper type for every different form you print on. WordPerfect comes with some preset definitions; in addition, the [ALL OTHERS] paper type (see [ALL OTHERS] below) exists so that if you do not have a paper definition to match the Paper Size/Type code in your document (see *Codes* below), the [ALL OTHERS] definition is used instead. There are some situations, however, where you may want to add a definition.

For example, if you have multiple bins or paper trays from which your printer can retrieve paper, you can create a definition which directs your printer to the proper location for a particular form.

Likewise, if you need to print a landscape document (text is parallel to the long edge of the paper) and can only do so by rotating the form (i.e., inserting the long edge of the form into the printer first), you may need to create a definition specifying new dimensions for the form.

In short, if you are not happy with the [ALL OTHERS] definition, you need to add a definition or edit the [ALL OTHERS] definition (see *Edit [ALL OTHERS] Paper Definition* under [ALL OTHERS] below).

To add a definition, choose **Add (2)** instead of **Select (1)** in step 3 above, then select a paper type (see *Paper Type* under *Editing a Definition* below). A screen is displayed that lets you accept the defaults for that definition or edit them as necessary (see *Editing a Definition* below). Press **Exit (F7)** when you finish editing the definition, and you can see that the definition has been added to the **Format: Paper Size/Type** screen.

*If the paper definition you are copying or editing is the same as an existing definition (i.e., values for Paper Size, Paper Type, Font Type, and Labels match), WordPerfect will display the error message "Paper type should be unique for this paper definition" when you try to exit the Format: Edit Paper Definition menu (Shift-F8,2,7,5). You must edit the definition to make it unique before it can be saved and added to the list of paper definitions (see *Editing a Definition* below).*

[ALL OTHERS]

The [ALL OTHERS] paper definition exists in case WordPerfect cannot find a paper definition to match a Paper Size/Type code in your document (see *Codes* below). It allows you to specify any paper size and type (according to your printer's capabilities) without actually creating a definition.

The [ALL OTHERS] definition increases your document portability (i.e., printing a document from different computers and printers). Because WordPerfect uses this definition if it cannot find a paper definition to match the code, you can print your document with any printer, whether or not the document has the same paper definitions as your printer.

Select the [ALL OTHERS] paper definition by choosing **Select (1)** with the [ALL OTHERS] definition highlighted on the **Format: Paper Size/Type** menu (Shift-F8,2,7). WordPerfect displays the **Format: All Others** menu with the following three options:

Add (Create) New Paper Definition

Selecting this option (1) from the Format: All Others menu is the same as selecting Add (2) from the Format: Paper Size/Type menu (see *Adding a Definition* above).

Insert Temporary Paper Size/Type Code

Selecting this option (2) from the Format: All Others menu allows you to insert a temporary paper size/type code into your document. Select a paper size (or select **Other** (o) and enter your own dimensions), then select a paper type (or select **Other** (o) and enter a name). The Format: Page menu is displayed. After you exit this menu and return to the normal editing screen, a Paper Size/Type code is inserted into your document.

When the document is printed, WordPerfect tries to match this temporary paper size and type with an existing paper definition; if no match is found, the [ALL OTHERS] paper definition is used.

When WordPerfect uses the [ALL OTHERS] definition, it will sound a beep during printing if the Prompt to Load option has been set to Yes (the default setting for [ALL OTHERS]). When it beeps, you need to insert the correct paper into your printer and select Go (4) from the Printer Control menu (Shift-F7,4).

You may want to edit the Prompt to Load option and change it to No so you don't have to select Go from the Printer Control menu for every document you print (see *Prompt to Load* under *Editing a Definition* below). You may also want to change Location to Continuous; otherwise, you will be prompted to insert a sheet of paper into your printer for each page in your document (see *Location* under *Editing a Definition* below).

Edit [ALL OTHERS] Paper Definition

Selecting this option (3) from the Format: All Others menu is the same as selecting Edit (5) from the Format: Paper Size/Type menu with the [ALL OTHERS] paper definition highlighted (see *Editing a Definition* below).

The screen that appears is slightly different from the one displayed if you edit any other paper definition. Several options are not available on the [ALL OTHERS] screen, and one additional option (Maximum Width) has been included.

The defaults for this menu are general enough to fit most paper sizes and types that do not have a corresponding paper definition. However, you can edit these options (see *Editing a Definition* below for details).

There is no option for editing the Font Type on the [ALL OTHERS] definition. If your printer can rotate fonts (e.g., most laser printers), the only way you can use landscape fonts for the [ALL OTHERS] definition is if your paper width exceeds the maximum width and your paper height does

not. In this case, WordPerfect assumes you want to print in landscape and uses the landscape fonts.

▲ MAXIMUM DEFAULT WIDTH

Paper type and Orientation	Paper Size	Prompt Loc	Font Type	Double Sided	Labels
Standard - Wide	11" x 8.5"	Ro	Combin	Land	NB
[ALL OTHERS]	Width < 8.5"	Yes	Manual		No

1 Select; 2 Add; 3 Copy; 4 Delete; 5 Edit; N Name Search; 1

The [ALL OTHERS] paper definition has a maximum width associated with it. If your printer cannot rotate fonts and the width of the paper size you select from the Paper Size menu when editing the [ALL OTHERS] paper definition exceeds this maximum width, the message “Requested Form is Unavailable” appears next to the Paper Size/Type option on the Format: Page menu (Shift-F8,2). The width dimension displayed next to “Paper Size” is then set to the maximum width measurement. The on-screen and printed text wraps relative to the maximum width measurement specified by the [ALL OTHERS] definition.

You might want to enter a bigger number for Maximum Width if you plan on using paper that is wider than the measurement displayed.

You can enter a new maximum width using the Maximum Width option on the Format: Edit Paper Definition menu for the [ALL OTHERS] definition; however, you should not enter a width that exceeds your printer's capability.

If your printer can rotate fonts, the only time you may get the “Requested Form is Unavailable” message is if both the width *and* the height exceed the [ALL OTHERS] maximum width measurement.

For example, if [ALL OTHERS] is set to Width \leq 8.5" and you select a paper size that is 11" x 12" (for which there is no matching paper definition), WordPerfect uses the location specified in the [ALL OTHERS] definition and positions the right margin relative to 8.5".

Codes

When you select a paper size and type (as you did in the steps above), a [Paper Sz/Typ:size,type] code is inserted into your document at the cursor position. When WordPerfect encounters this code during a print job, it uses the requested form from that point forward. Therefore, you should *always* place the

Paper Size/Type code before any other codes at the top of a document (or page) and use only one Paper Size/Type code per page.

You must place the Paper Size/Type code before any other codes at the top of the page. If you place the code anywhere other than the top of the page, it does not take effect until the following page. You cannot place the code in a table or column.

If you edit a definition after a Paper Size/Type code has been inserted into the document, WordPerfect automatically updates the Paper Size/Type code to reflect the new definition when you exit the Format: Paper Size/Type menu.

Copying a Definition

You can make a copy of an existing paper size/type definition simply by highlighting the definition you want to copy, then selecting **Copy** (3). WordPerfect takes you into the Format: Edit Paper Definition menu where you must edit the definition to make it unique before it can be saved and added to the list of paper definitions. If the paper definition you are copying or editing is the same as an existing definition (i.e., values for Paper Size, Paper Type, Font Type, and Labels match), WordPerfect will display the error message "Paper type should be unique for this paper definition" when you try to exit the Format: Edit Paper Definition menu (Shift-F8,2,7,5).

You can press **Exit** (F7) to save the definition, or you can press **Cancel** (F1) to exit this menu without saving the definition.

Deleting a Definition

You can delete a paper size/type definition by highlighting that definition, selecting **Delete** (4) or pressing **Delete** (Del), then typing **y** to confirm that you want to delete the definition.

Editing a Definition

If you want to change a setting for any of the paper definitions displayed on the Format: Paper Size/Type screen, move the cursor to the definition you want to edit, then select **Edit** (5). The screen displayed lets you edit all of the information found on the Format: Paper Size/Type screen.

Binding Edge

Select this option (7) to add the binding offset (see *Binding in Reference*) to the **Top** (1) or the **Left** (2) of the page. (The default for this setting is **Left**.)

Double Sided Printing

Select this option (6) (if your printer is capable of duplex printing), then type **y** to tell WordPerfect to print on both sides of the paper. Type **n** to return to the default of no double-sided printing.

If you have selected **Top** or **Left** for the binding edge (see *Binding Edge* above), your printer will try to rotate the paper around the edge you specify. For example, if you want to bind a document at the top (e.g., a calendar) and print on both sides of the page, select **Top** for the binding edge. The printer

will print top to bottom, turn the paper over (like turning the page of a calendar), then print top to bottom again.

Font Type

Select this option (3) to print using **Portrait** (1) or **Landscape** (2) fonts. Landscape fonts print text perpendicular to the inserted edge of the paper; portrait fonts print parallel to the inserted edge. (See *Printing, Landscape* in *Reference* for an explanation of printing landscape versus printing portrait.)

This feature must be used with the Paper Size feature (see *Paper Size* below) for you to print in landscape (see *Printing, Landscape* in *Reference*).

If your printer cannot rotate its fonts (e.g., dot matrix and daisy wheel printers), you should only specify **Portrait** for this option. (See *Printing, Landscape* for details on landscape printing with a printer that cannot rotate fonts.)

Labels

Select this option (8), then type **y** to define labels corresponding to this paper definition (see *Labels* in *Reference*).

When you define labels to go with a paper definition, the Paper Size/Type code (see *Codes* above) includes the dimensions of the labels.

Location

This option (5) displays a menu that tells WordPerfect how the paper is fed to the printer. Select **Continuous** (1) if your printer is dot matrix or daisy wheel and the paper is tractor-fed with perforated holes on each side. Continuous forms on laser printers are single sheets of paper that are fed with a paper cassette or a single bin sheet feeder.

Sometimes it may be difficult to determine if the paper in a laser printer is continuous or comes from a sheet feeder with more than one bin. Generally, if a laser printer has only one place to get paper, the paper should be defined as continuous.

If your printer has more than one paper bin from which it can get paper, select **Bin Number** (2), then enter the number of the bin where the paper is located. The *Helps and Hints* screen for your sheet feeder may contain information about your sheet feeder bins (see *Sheet Feeder* in *Reference*).

Select **Manual** (3) if your paper is *hand fed* into the printer one sheet at a time.

Paper Size

This option (1) displays the Paper Size menu which lists several common paper sizes. You can select one that is displayed or select **Other** (o) and enter your own dimensions.

Paper Size refers to the dimensions of the paper on which you will print. The dimensions are determined by the way the document is to be read. In other words, the first measurement (width) represents the edge of the paper parallel to text.

For example, on a 9.5" x 4" envelope, text is parallel to the long edge of the paper, so the paper width is 9.5". The paper height is 4". For an example of creating an envelope definition, see *Lesson 28: Envelopes and Labels* in the *WordPerfect Workbook*.

- A PAPER WIDTH
- B PAPER HEIGHT



If your printer cannot rotate its fonts (see *Printing, Landscape* in *Reference*) and you want to print a page landscape (long edge of the form parallel to text), the only possible way you can do so is to insert the long edge of the paper into the printer first. Make sure that the long edge of the paper (the insertion edge) is represented as the width measurement in the paper size. More information on landscape printing can be found in *Printing, Landscape* in *Reference*.

You cannot select **Other**, then enter a height or width that is smaller than your top or side margin settings (e.g., .75" x 2" labels when the margins are 1"). WordPerfect will not let you create a definition smaller than your margins. You must first change your margins, then enter the desired height and width.

Paper Type

Paper Type is simply what you want to call the paper you are defining. When you select this option (2), the Format: Paper Type menu is displayed. This menu lets you select from several different predefined types of paper (e.g., Cardstock, Letterhead). If you want to use a form other than those listed, select **Other** (9), then enter any name you want (e.g., Phil's Second Sheet Paper) to name your own paper type.

Prompt to Load

Select this option (4), then type **y** to have WordPerfect prompt you when it is ready to print on this paper type. Your computer will beep and a message telling you to insert the paper will appear on the Printer Control screen (Shift-F7,4). Insert the paper, then type **g** to continue printing.

If you are printing directly to a network printer (without using a capture command), this option has no effect.

Text Adjustment

If you find that text on the printed page is not located where you expect it should be (according to your margins), you may need to select this option (9) to make adjustments to the text.

Note that your top margin setting should not be smaller than your text adjustment. If it is, text at the top of the page may be overprinted.

If, for example, you set your top and left margins at the default of 1" and text does not start printing 1" from the top and left edges of the paper, try adjusting the text using this option.

This option moves text on the page. If you want to move text up, select **Up** (1), then enter the distance. If you want to move text down, select **Down** (2), then enter the distance. Always enter a positive number for the distance you want the text moved. If you select **Up** or **Down**, the amount you enter is displayed next to "Top." If you select **Left** (3) or **Right** (4), the amount you enter is displayed next to "Side." You can enter a text adjustment up or down *and* left or right.

If you want to return to the default of 0", select the same option you selected to adjust the text (e.g., select **Up** (1) if the Text Adjustment option says "Up" next to it), then enter 0.

View Document (Shift-F7.6) does not reflect text adjustment settings.

Macros for Envelopes and Labels

Two macros are included with WordPerfect that may help you in creating envelopes and labels.

A macro for producing envelopes is included on the Macros keyboard layout. See *Macros* in *Appendix H: Keyboards* for more information.

A macro for producing labels, LABELS.WPM, is included in the WordPerfect keyboard files group. See *Labels Macro* under *Labels* in *Reference* for more information.

Paper Size/Type Screen

When you select **Paper Size/Type** (7) from the **Format: Page** menu, the screen displayed lists information about all the paper definitions for the currently selected printer. You can edit this information using the screen that is displayed when you select **Edit** (5) (see *Editing a Definition* above).

You can add, delete, or select the definitions displayed on this screen. (You cannot delete the [ALL OTHERS] definition.)

If you have not yet selected a printer, selecting **Paper Size/Type** from the **Format: Page** menu will take you straight into the **Format: Paper Size** menu. Select a paper size (see *Paper Size* above), then select a paper type from the **Format: Paper Type** menu (see *Paper Type* above). "Requested Form is Unavailable" will appear next to **Paper Size/Type** on the **Format: Page** menu; however, a **Paper Size/Type** code is inserted into your document.

Paper Type and Orientation

The far left column of the Format: Paper Size/Type screen displays the Paper Type and Orientation of those definitions set up for the currently selected printer. This column displays the type of paper you selected (or that is already defined); if the width of the paper is greater than the height, the word “Wide” appears next to the type.

See Also: Printing—General Information; Printing, Landscape

Paragraph Numbering

A versatile tool, paragraph numbers can be used in the WordPerfect Outline feature to create an outline. Used outside of the Outline feature, paragraph numbers can be inserted anywhere in a document to simply number individual paragraphs.

The paragraph numbers are numbered by WordPerfect and are automatically updated to reflect any editing changes.

Paragraph numbers are differentiated by levels, then by numbers, letters, keyboard characters, WordPerfect characters, or styles within a level. You can have up to eight levels of paragraph numbering within a document, and this differentiation lets you organize text in a hierarchical manner.

The screen below shows some examples of paragraph number levels.

- A** FIRST LEVEL NUMBER
- B** SECOND LEVEL NUMBER
- C** THIRD LEVEL NUMBER



Although you can use numbers, letters, keyboard characters, WordPerfect characters, or styles to “number” paragraph numbers, we use the word “numbers” in the rest of this section to describe all of the possibilities.

If you are using paragraph numbers to create an outline, we suggest you read *Outline, Create in Reference*. Although you can create and edit an outline without using the Outline feature, it is easier to do so with the Outline feature.

To insert paragraph numbers in your document,

- 1 Move the cursor to where you want to insert the paragraph number.
- 2 Press **Date/Outline** (Shift-F5), then select **Paragraph Number** (5).

 *Select Paragraph Number from the Tools menu*

- 3 Enter a level number to “fix” the number at a certain level (see *Levels* below).

or

Press **Enter** to let WordPerfect automatically determine the level for the paragraph number (see *Levels* below).

You can use this method to insert paragraph numbers in an outline if you wish.

Notes

Appearance

The appearance of paragraph numbers is determined by the Paragraph Number Definition feature (Shift-F5,6). When a Paragraph Number Definition code is located in a document, all subsequent paragraph numbers conform to that definition. If no Paragraph Number Definition code is located in a document, paragraph numbers conform to the default (initial) settings for the Paragraph Number Definition feature.

The Paragraph Number Definition feature lets you determine the starting number for paragraph numbers as well as the appearance of the numbers themselves. Several common paragraph numbering formats are included with WordPerfect, and you can define formats of your own.

For more information on the Paragraph Number Definition feature, see *Outline, Define in Reference*.

Changing Levels

To change the level of an automatic paragraph number to the next level, move the cursor to the immediate left of an existing paragraph number, then press **Tab** or **◆Indent** (F4). To change the level of an automatic paragraph number to the previous level, move the cursor to the immediate left of an existing number, then press **◆Margin Release** (Shift-Tab).

If the paragraph numbers are in an outline, you must place the cursor to the immediate right of the paragraph number for **Tab** to change the paragraph number to the next level and **◆Margin Release** to change the paragraph number to the previous level.

You can change the level of a fixed paragraph number in an outline by performing the same operation described in the paragraph above. Only the level

number (not the position of the number) will change. You cannot change the level of a fixed paragraph number outside of an outline or an outline style inserted as a paragraph number.

Editing Paragraph Numbers

If you add or delete paragraph numbers from a document, WordPerfect automatically updates the rest of the paragraph numbers for you to keep numbering sequential. To delete a paragraph number, move the cursor to the number, then press **Delete** (Del).

Levels

When you insert a paragraph number, you must determine its level, and you are given two ways of doing so. Using the first way, you insert a level number. Using the second way, you let WordPerfect determine the level number.

If you decide to insert a level number, the paragraph number is a Fixed Paragraph Number [Par Num:number] (where *number* is the level number). This means that the paragraph number does not change its level number based on its tab stop position. For example, if you want the number to be a third level number even though it may be located at the left margin, enter **3** in step 3 above.

If a fixed paragraph number is in an outline, you can change its level number without changing its position on the page. If a fixed paragraph number is not in an outline, you cannot change its level number (see Changing Levels above).

If you decide to let WordPerfect enter a level number for you, the number is an Automatic Paragraph Number [Par Num:Auto]. This means that the paragraph number's level depends on several factors, but that the level can always be changed with Tab and ♦Margin Release (see *Changing Levels* above).

The "several factors" depend on the settings for the Paragraph Number Definition options and the location of any Paragraph Number Definition codes in your document. If you are interested in the Paragraph Number Definition options, read Outline, Define in Reference. As you do so, remember that the Paragraph Number Definition code affects all subsequent paragraph numbers.

Numbering

You can determine (or have WordPerfect determine) the *level* for a paragraph number. The actual *number* for the paragraph number depends on the last paragraph number or Paragraph Number Definition code prior to the one you are entering (depending on which is closest to the paragraph number you are entering).

Keep in mind that paragraph numbers are numbered sequentially in a document. You can restart paragraph numbering from time to time in a document, or you can start numbering at a number other than one, but even then, numbers will be numbered sequentially from that point on in a document until you change numbering again.

When WordPerfect encounters an Outline On code, it searches for the closest Paragraph Number Definition code preceding the Outline On code and uses those settings. This includes starting the outline with the specified Starting Paragraph Number.

For information on restarting or changing paragraph numbering in a document, see *Starting Paragraph Number* under *Outline, Define* in *Reference*.

Outline and Paragraph Numbers

When you use the Outline feature to create an outline, you are simply inserting automatic paragraph numbers between outline codes. Why two features? Versatility.

If you are using Outline, you can insert paragraph numbers by simply pressing **Enter** if you wish. You can move entire “families” of paragraph numbers and accompanying text to different locations in an outline, and you can keep paragraph numbering intact as you move an entire outline from one document to another.

For more information on Outline, see *Outline, Create* in *Reference*.

If you are using Paragraph Numbering, you can insert single paragraph numbers anywhere in a document without having to turn Outline on or off. And, you can “fix” a paragraph number at a specific level.

If you want to insert fixed paragraph numbers in an outline, you can do so with the Paragraph Numbering feature.

See Also: Outline, Create; Outline, Define; Outline, Style

Print, Document on Disk

You may want to print a document that has already been saved on disk without retrieving the document to the screen. The Print feature lets you print part or all of a document from disk, and also print the document summary.

1 Press **Print** (Shift-F7) to display the Print menu.

 *Select Print from the File menu.*

2 Select **Document on Disk** (3), then enter the filename of the document you want to print.

3 Press **Enter** to print the entire document.

or

Enter the pages you want printed (see *Selected Pages* below).

If the printer does not respond at this point, select *Control Printer (4)* to check for any messages or instructions (see *Printer Control in Reference*). If you see a message telling you the document is not formatted for the current printer, see *Printer Format below*.

4 Press **Exit** (F7) to return to the normal editing screen.

Notes**Document Summary**

You can print just the document summary for a document on disk by entering **s** when you are asked to enter the pages in step 3 above (pressing **Enter** to print all the pages will *not* print the document summary). If you want to print the document summary along with selected pages of a document, type **s** in step 3 above, type a comma (,), then enter the selected pages. You must type **s** before entering the selected pages. For example, enter **s,1-3** to print the document summary and pages 1 through 3. If you want to print the entire document, including the document summary, enter **s-**. See *Selected Pages* below for details on printing selected pages of a document.

Even/Odd Pages

You can print the even or odd pages in a document by entering **e** for even or **o** for odd when WordPerfect asks you which pages you want to print. The **e** or **o** must be the first thing listed or must follow the **s** for document summary (see *Selected Pages* below).

You can also print the even or odd pages in a range of pages (e.g., e,2-20). Similarly, you can print the even or odd logical pages (i.e., labels) by entering le or lo.

Fast Save

A document saved with the Fast Save feature (the default method for saving in WordPerfect) can take longer to print than one saved when Fast Save is turned off (see *Fast Save in Reference*). You need to be particularly aware of this when you print several documents from disk at the same time.

List Files

You can print any WordPerfect file listed on the List Files screen (F5,Enter,4) without retrieving it first (see *List Files in Reference*).

Printer Format

When printing a document from List Files or from disk that is fast saved, that needs to be generated, or that is formatted for a different printer, WordPerfect attempts to reformat the document. To reformat a document, WordPerfect must associate a printer definition (.PRS file) with the document.

WordPerfect uses a .PRS file if a printer selection exists in the setup file (WP{WP}.SET) for that .PRS file. If the .PRS file exists, but its printer definition is not found in the setup file, WordPerfect reformats the document using the currently-selected printer.

Selected Pages

You can indicate individual pages or groups of pages to be printed by following these guidelines:

N	Page N
S,N,M	Document Summary and pages N and M
N M	Pages N and M
N-	Page N through the end of the document
N-M	Pages N through M
-M	The beginning of the document through page M
S-	Document Summary and entire document

For example, if you enter **4,7** or **4 7** as the selected pages, pages 4 and 7 are printed. If you enter **4,7,10-15** as the pages, then pages 4, 7, and 10 through 15 are printed.

If you have renumbered your pages with the New Page Number option on the Format: Page menu (Shift-F8,2,6,1), WordPerfect uses the new numbers when it prints selected pages.

Section Numbers

For some larger documents, you may have used New Page Number several times to divide the document into sections. For example, you may have numbered a document in the following way:

Preface	i-vii
Chapter 1	1-12
Chapter 2	1-20
Chapter 3	1-10
Index	i-iii

Notice in the above example that the preface and index have been formatted for lowercase Roman numerals, while the chapters are formatted for Arabic numerals.

When entering the numbers of individual pages to be printed, you can indicate a section by typing the section number, a colon, then the pages you want printed in that section (e.g., 2:4-7 will print pages 4 through 7 of chapter 2). Sections for the two styles of page numbering (Roman and Arabic) are counted separately by WordPerfect. So 1:12 indicates chapter 1, page 12, while 1:vi indicates preface, page vi.

The following table lists pages that can be entered for the example given above:

i	Preface, page i
1	Chapter 1, page 1
11 or 1:11	Chapter 1, page 11
13	Chapter 2, page 13 (chapter 1 has only 12 pages)
2:i	Index, page i
-12	Preface and chapter 1
1-	Chapter 1, page 1 through the end of the document
2.2:2	Chapter 1, page 2 and chapter 2, page 2
1:1-2:3	The first page of chapter 1 (whether it is numbered as page 1 or not) through chapter 2, page 3
3:1-3:999	All of chapter 3
i-vii,i-iii	All of the preface and index
1:i-ii	Preface, pages i through ii

Notice that if *no section number* is entered, the first page of the document matching the entered page number (Roman or Arabic) is printed.

When printing selected pages, you must enter the page numbers in numerical order (e.g., 1 must come before 3). If you enter **3,1** as the pages to print, only page 3 will print. If you have two sections, however, and you enter **3,1**, page 3 of section 1 and page 1 of section 2 will print.

Spaces are allowed with section and page numbers only when used as range delimiters (e.g., 2-5<space>8-10). For example, **1-35** prints pages 1 through 35, but **1-3 5** prints pages 1 through 3, then page 5.

See Also: Page Numbering; Print, Document on Screen; Print Options; Printing—General Information

Print, Document on Screen

As you create a document on the screen, you will often want to print part or all of that document. Print lets you print the page currently on the screen, selected pages of the document on the screen, the whole document, or just the document summary.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

- 2 Select **Full Document** (1), **Page** (2), or **Multiple Pages** (5) to print the whole document, the current page, or selected pages.

If you select **Multiple Pages**, enter the pages you want printed. If you press **Exit** (F7) with the “Page(s):” prompt on the screen, the full document is printed. (See *Selected Pages* under *Print, Document on Disk* in *Reference* for a detailed explanation of printing selected pages of a document.)

If your printer does not respond, display the Printer Control screen (Shift-F7,4) to check the status of the print job.

Notes

Block

You can print a block of text from the document on the screen by first blocking the text you want to print, pressing **Print** (Shift-F7), then typing y to send the block to the printer.

When you print a block of text, the text is printed on the page in the same format as in the document. For example, if the block of text you print starts 3 inches from the top of the page, the printed block will start 3 inches from the top of the page.

Document Summary

You can print just the document summary for the document on the screen by entering s after selecting **Multiple Pages** in step 2 above. If you want to print the document summary along with selected pages of the document, type s after selecting **Multiple Pages**, type a comma (,), then enter the selected pages. You must type s before entering the selected pages. You can print the document summary plus the entire document by entering s- at the “Page(s):” prompt.

Full Document

This option prints the entire document, with the exclusion of the document summary. You must use the **Multiple Pages** option to print the document summary (see *Document Summary* above).

Multiple Pages

Select this option to print the document summary or selected pages of the document currently on the screen (see *Selected Pages* under *Print, Document on Disk* in *Reference* for a complete explanation).

Page

Select this option to print the page the cursor is on.

See Also: Page Numbering; Print, Document on Disk; Print Options; Printing—General Information

Print Color

WordPerfect provides a Print Color feature to let you select the color of text on the printed page (if you have a color printer).

1 Press **Font** (Ctrl-F8), then select **Print Color** (5).

 *Select Print Color from the Font menu.*

2 Select a color, then press **Exit** (F7) to return to the document.

3 Type the text you want printed in the new color.

Notes

Codes

WordPerfect places a Print Color code (e.g., [Color:Red]) in your document at the position where you select the color. Any text following the code is printed in that color until another Print Color code is encountered in the document.

Color Options

WordPerfect gives you the following 11 preset colors from which you can choose to print. There is also an option to create your own colors (see *Creating Colors* below).

- Black
- Blue
- Brown
- Cyan
- Gray
- Green
- Magenta
- Orange
- Red
- White
- Yellow

Color Percentages

The percentage amounts next to each print color represent the intensity level of red, green, and blue that combine to create the print color.

Creating Colors

You can create any color you want by selecting **Other** (o) from the Print Color menu, then entering the desired intensity percentages for each displayed color (red, green, blue). You can also create a color by editing the color percentages of an existing print color. Select the color you want to edit, select **Other**, then enter the new intensity percentages.

Not all color printers allow the changing of intensity percentages. Consult your printer manual for your printer's color capabilities.

Existing Text

If you decide you want to change the print color of existing text, move the cursor directly before the text you want to change, then go through the steps for changing the print color, as described above. Then move the cursor to the end

of the text you want printed in another color and repeat the process, selecting the original color.

On-Screen Color

Print color is independent of the on-screen color of text. When you want to change the on-screen color of text (for a color monitor), use the Colors/Fonts/Attributes feature (see *Colors/Fonts/Attributes* in *Reference*), not the Print Color feature. Inserting a Print Color code in a document does not change the display color, even on a color monitor.

Resetting Print Color

To reset the print color back to the original color (e.g., black), press **Font** (Ctrl-F8), select **Print Color** (5), select **Black** (1) (or whatever the original color was), then press **Exit** (F7). From that point on in the document, the text will be printed in the original color.

If you want to reset the entire document back to black, you must search for the Print Color code (press **Ctrl-F8,5** when entering the Search characters), then go into Reveal Codes and delete the Print Color code (see *Search and Reveal Codes* in *Reference*).

Selecting the Normal font (Ctrl-F8,3) does not reset the font color back to black.

Reversed-out Text

Use the Print Color feature combined with a graphics box when you want to print reversed-out text (white text on a black background) on PostScript printers. You need to first go into the Graphics Options menu (Alt-F9,3,4) and specify 100% as the gray shading, then create a text box using Graphics (Alt-F9,3,1). Next, you need to select Edit (9) from the box definition menu, go through the above steps for selecting a print color (specifying **White** (2) as the print color), then type the text you want reversed-out (see *Graphics, Create and Graphics Options* in *Reference* for details).

This method for printing reversed-out text currently works only with PostScript printers. Other printers may do this in the future.

See Also: Colors/Fonts/Attributes; Print, Document on Disk; Print, Document on Screen

Print Job, Cancel

Sometimes while printing you may realize that something is wrong with a print job (it is printing on the wrong type of paper, using the wrong font, etc.). When this occurs, you can cancel the print job using the Cancel Job(s) option (1) on the Printer Control menu.

- 1 Press **Print** (Shift-F7) to display the Print menu.
 Select *Print* from the *File* menu.
- 2 Select **Control Printer** (4), then select **Cancel Job(s)** (1).
- 3 Enter the number of the print job you want to cancel.
or
Type an asterisk (*), then type **y** to cancel all print jobs.
- 4 Press **Exit** (F7) to exit the Printer Control screen.

This process stops the flow of information from WordPerfect to your printer. However, there may be information left in the printer (see Printer Buffer below).

Notes

Additional Print Jobs

You can cancel additional print jobs not listed under the Job List heading. Just enter the number of the print job you want to cancel (see *Job Number* below and *Print Job, Display in Reference*).

Advancing Paper

If you cancel a print job while it is printing, WordPerfect advances the paper in your printer to the top of the next page. If you type **c** again after canceling a print job to cancel it immediately (see *Canceling Immediately* below), WordPerfect does not eject the page and the paper may not be in the correct position. In this case, you will need to reset the printer.

Canceling Immediately

When you cancel a print job, WordPerfect tries to complete a number of tasks in preparation for the next print job (e.g., advance the paper to the top of the next page, unload any soft fonts marked with a plus sign (+)). If you type **c** again, then type **y** to cancel the print job immediately, these tasks are not completed and the printer will not be ready for the next print job.

The only time we recommend canceling a print job immediately is if the printer is not accepting input (so you cannot do a normal cancel). If you do cancel immediately, you will need to reset the forms in the printer and, if you have marked any downloadable soft fonts with an asterisk (*) (see *Marking Cartridges/Fonts/Print Wheels* under *Cartridges/Fonts/Print Wheels* in *Reference*), reinitialize the printer (see *Initialize Printer* under *Printing—General Information* in *Reference*). Additionally, you will have to type **g** from the Printer Control screen (Shift-F7,4) when you are ready to start the next print job. (This is because WordPerfect is waiting for you to reset the printer.)

Job Number

Every time you send a document to the printer, WordPerfect assigns a number to that print job. The job number is listed in the far left column under the Job List heading. You can have as many as 999 print jobs waiting to print.

WordPerfect starts renumbering with "1" each time you start WordPerfect.

Network Printing

If you are running WordPerfect from a network, your print jobs are carried on a print spooler. This is an intermediate step on the way from WordPerfect to the printer. Once WordPerfect has sent the print job to the print spooler, you can no longer cancel that print job from WordPerfect.

Printer Buffer

Depending on the size of the printer's buffer, a cancel may take a while. Everything that has already been sent to the printer must print before the printer will stop.

If an entire print job has already been sent to the printer's buffer, canceling the print job will display a "Job not found" message. You can no longer cancel that print job.

See Also: Print, Document on Disk; Print, Document on Screen; Print Job, Display; Print Job, Rush; Printer Control; Printing, Stop

Print Job, Display

When you send a document to the printer, WordPerfect assigns it a job number and places it in the print job list. As many as three print jobs are displayed under the Job List heading at the bottom of the Printer Control screen.

```
Print Control Printer
Current Job
Job Number: 1                      Page Number: 1
Status: Printing                   Current Copy: 1 of 1
Message: None
Paper: Standard 8.5" x 11"
Location: Continuous feed
Action: None

Job List
Job Document      Destination      Print Options
1 (Screen)        LPT 1
2 (Screen)        LPT 1
3 (Screen)        LPT 1

Additional Jobs Not Shown: 2

1 Cancel Job(s); 2 Rush Job; 3 Display Jobs; 4 Go (start printer); 5 Stop; 6
```

If there are more than three print jobs and you want to see a list of all the jobs printing or waiting to be printed (including those displayed under the Job List heading), use Display Jobs on the Printer Control menu.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Select **Control Printer** (4), then select **Display Jobs** (3) to display the complete list of print jobs.

If three or less jobs are in the job list, the message “All jobs are displayed” will appear. If there are no jobs in the job list, “No print jobs” will appear. In either case, skip to step 4.

3 Press any key to continue.

4 Press **Exit** (F7) to exit the Printer Control screen.

Notes

Additional Jobs

At the bottom of the Printer Control screen is an “Additional Jobs Not Shown” message. The number following this message indicates the number of additional jobs waiting to be printed that do not appear under the Job List heading.

Maximum Print Jobs

You can have as many as 999 jobs waiting to print.

See Also: Print, Document on Disk; Print, Document on Screen; Print Job, Cancel; Print Job, Rush; Printer Control; Printing, Stop

Print Job, Rush

When you want to move one print job ahead of all other jobs on the Print Job list, use the Rush Job option on the Printer Control menu.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Select **Control Printer** (4), then select **Rush Job** (2) to rush a print job.

3 Enter the number of the print job you want to move ahead in the list.

*If the job you want to rush is not displayed on the Printer Control screen, select **Display Jobs** (3) to find the job number. (The default job number is the last one on the list.)*

If the printer is in the middle of another job, you will be asked if you want the current job interrupted.

- 4 Type **n** to print the document after the current job finishes.

or

Type **y** to interrupt the current job.

- 5 Press **Exit** (F7) to exit the Printer Control screen.

Notes

Interrupt Current Job

If you choose to interrupt the job currently printing, WordPerfect tries to complete the page currently printing. It then automatically restarts the interrupted print job on the following page after completing the rushed print job.

If you type **n** in step 4 above to not interrupt the current print job, the rushed print job is moved up on the list to immediately follow the current print job.

Print Jobs

Only jobs found on the Print Job list (including additional jobs not shown on the screen) can be rushed. In other words, to rush a print job you must first send it to the printer in the normal fashion (see *Print, Document on Disk* and *Print, Document on Screen* in *Reference*). After doing so, you may proceed to rush the print job.

Rushing Immediately

If you type **r** a second time to rush the print job immediately, WordPerfect quits printing in the middle of the current page; however, this is not a recommended method for rushing a print job. If you do rush the job immediately, you will need to reset the forms in the printer and, if you have marked any downloadable soft fonts with an asterisk (*) (see *Marking Cartridges/Fonts/Print Wheels* under *Cartridges/Fonts/Print Wheels* in *Reference*), reinitialize the printer. You will also have to specify the page on which you want the interrupted print job to continue (see *Initialize Printer* under *Printing—General Information* in *Reference*).

See Also: *Print, Document on Disk*; *Print, Document on Screen*; *Print Job, Cancel*; *Print Job, Display*; *Printer Control*; *Printing, Stop*

Print Options

The Print screen is divided into two different sections. The Print section (the top half) lets you print part or all of a document from the screen or from disk, initialize the printer, and also gives you access to other printing features in WordPerfect (see *Initialize Printer* under *Printing—General Information*, *Printer Control*, and *View Document* in *Reference*).

The Print Options section (the bottom half of the screen) gives you several options for changing the appearance of a printed document. These settings let you select a new printer and change the binding offset, number of copies, and print quality of a print job.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the *File* menu.

2 Select an option, then enter the requested information (see the information on each option under *Notes* below).

3 Press **Exit** (F7) to display the document again.

Any changes you make to the options listed in the bottom half of the Print screen (except Number of Copies and Multiple Copies Generated By) are saved with the document. The settings for Number of Copies and Multiple Copies Generated By remain in effect until you change them again or exit the current document.

Notes

Binding Offset

Enter the amount of space you want text shifted to the right on odd-numbered pages and to the left on even-numbered pages for binding two-sided copies (see *Binding* in *Reference*).

Changing the Default

You can change the default setting for all the options on the Print Options section (the bottom half) of the Print screen (except Select Printer) using the Print Options menu on the Setup: Initial Settings menu (Shift-F1,4,8) (see *Initial Settings* in *Reference*). The changes you make there will remain in effect until you change them again.

Graphics Quality

Select this option, then enter the quality level at which you want to print graphics in your document (see *Print Quality* in *Reference*).

Multiple Copies Generated By

This option lets you determine if multiple copies will be generated by WordPerfect or by your printer. (If you are running WordPerfect from a network *and* your network supports this feature, you can choose to have the network generate the multiple copies.)

If WordPerfect generates the multiple copies, it creates x number of copies of the print job, then sends them to the printer. The copies come out of the printer already collated. If you have your printer generate the copies, WordPerfect sends one copy of the print job to the printer and tells the printer to make x copies of it (where x is the number entered for the Number of Copies option). The copies are not collated in this case. For example, if you are making 2 copies of a 3-page document, the printer will print 2 copies of page 1, then 2 of page 2, and so on.

The benefit of this option is that printing time can be shortened if you select Printer (or Network). However, if your selected printer does not support this feature, WordPerfect will automatically generate the multiple copies at print time.

Number of Copies

Enter the number of copies of the document or portion of the document you want printed.

Printing

Many of the options listed in the Print section (the top half) of the Print screen send a document or part of a document to the printer. See *Print, Document on Disk* and *Print, Document on Screen in Reference* for details on these options.

Select Printer

Select the printer where you want the document or portion of the document printed. The printer you select here remains selected unless you select another or retrieve a document that has been formatted for a different printer. However, when you exit the retrieved document, the Select Printer option returns to the default printer (see *Printer, Select in Reference*).

Text Quality

Select this option, then enter the quality level at which you want to print text in your document (see *Print Quality in Reference*).

The text quality you assign in WordPerfect overrides any quality selections made directly at the printer.

See Also: Print, Document on Disk; Print, Document on Screen; Print Quality; Printing—General Information

Print Quality

When you want to print a “rough” draft of a document or increase the resolution of a graphics image printed in a document, use the Print Quality feature in WordPerfect. You can also print text and graphics in separate printings with this feature.

- 1 Press **Print** (Shift-F7) to display the Print menu.
 Select *Print* from the *File* menu.
- 2 Select **Graphics Quality** (g), then select a print quality setting for graphics (see *Quality Settings* below).
- 3 Select **Text Quality** (t), then select a print quality setting for text (see *Quality Settings* below).
- 4 Press **Exit** (F7) to exit the Print menu.

These settings affect the document on the screen and are saved with the document.

If your printer cannot print different qualities, this feature will have no effect.

Notes**.DRS Characters**

If you are trying to print a character that your printer does not support (e.g., one from a WordPerfect character set), WordPerfect creates that character from the .DRS (driver resource) file that is included with WordPerfect and prints the character graphically (if your printer prints graphics). See *Compose* in *Reference* and *Appendix P: WordPerfect Characters* for details on extended characters.

Because these .DRS characters are considered text *and* graphics, the Text and Graphics Quality settings must work together. If either of these is set to Do Not Print, .DRS characters will not print. If neither is set to Do Not Print, .DRS characters will print at the current Graphics Quality setting, unless the Text Quality is set to High. In this case, the .DRS characters will print at the Text Quality setting.

Quality Settings

As print quality increases, text and/or graphics are printed with better resolution on the printed page. However, the higher the quality (particularly when printing graphics), the more time required to complete the print job (and the more memory required by laser printers). Rough drafts are printed faster because, by decreasing the print quality, you decrease the amount of data being sent to the printer.

You cannot print part of a document with one quality setting and part with a different quality setting.

Text, Graphics, or Both

WordPerfect can print text and graphics together on most printers. Some printers, however, have trouble printing both text and graphics in the same printing. In these cases, you can use the Do Not Print option to print text only, reinsert the paper, then print graphics only.

If you use this method for printing, the .DRS characters will not print at all (see .DRS Characters above).

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the File menu.

2 Select **Graphics Quality** (g), then select **Do Not Print** (1).

3 Select **Text Quality** (t), then select a print quality setting for text (other than **Do Not Print**).

4 Print the document on the screen in the usual fashion (see *Print, Document on Screen* in *Reference*).

- 5 Select **Graphics Quality** (g), then select a print quality setting (other than Do Not Print).
- 6 Select **Text Quality** (t), then select Do **Not Print** (1).
- 7 Reinsert the paper and print the document again.
- 8 Change the quality settings back to their normal settings, if desired.
- 9 Press **Exit** (F7) to exit the Print menu.

***Important:** If you are printing graphics with double-high fonts on a dot-matrix printer, you may need to use the above procedure to print the page correctly.*

See Also: Print, Document on Disk; Print Options; Printing— General Information

Printer, Edit

You can edit a printer's name or settings using the Select Printer: Edit screen when you define the printer. You can also change printer settings after you have defined the printer. See *Printer, Select* in *Reference* for details on defining a printer.

WordPerfect automatically takes you to the Select Printer: Edit screen when you are defining a printer. Once in the screen, the information given under *Notes* below applies.

To edit the printer settings of a printer you have already defined,

- 1 Press **Print** (Shift-F7) to display the Print menu.
 *Select Print from the File menu.*
- 2 Choose **Select Printer** (s), move the cursor to the printer definition you want to edit, then select **Edit** (3).
- 3 Make any desired changes by selecting an option, then entering the change (see the information for each option under *Notes* below).
- 4 Press **Exit** (F7) twice to return to the Print menu, saving any changes you made.

Notes

Cartridges/Fonts/Print Wheels

This option (4) lets you select the cartridges and fonts (in addition to the printer's built-in fonts) you plan to use when printing a document (see *Cartridges/Fonts/Print Wheels* in *Reference*).

Initial Base Font

When you select a printer (see *Printer, Select* in *Reference*), WordPerfect automatically selects an initial base (default) font for the printer from the list of the printer's built-in portrait fonts (see *Cartridges/Fonts/Print Wheels* in *Reference*). If you want to change the initial base font for the currently selected printer, use Initial Base Font (5). A list of your printer's built-in portrait fonts, plus any portrait fonts you marked with the Cartridges/Fonts/Print Wheels feature (see *Cartridges/Fonts/Print Wheels* in *Reference*), is displayed. Move the cursor to the font you want to select, then choose Select (1).

The Initial Base Font setting affects all new documents you create in WordPerfect. If you want to change the base font for one document or part of one document (existing or new), see *Font* in *Reference*.

Name

When you are defining a printer, WordPerfect enters the name of your printer for you. Use Name (1) to change the name of the printer definition. You can enter as many as 36 characters. The following characters *cannot* be used when naming a printer definition:

: ; < > ? @

The printer name appears on the Print: Select Printer screen (Shift-F7,s) and is independent of the printer definition filename (displayed at the top of the Select Printer: Edit screen). Changing the name of the printer definition (Shift-F7,s,3,1) does not change the printer definition filename (the .PRS file used for printing).

Path for Downloadable Fonts and Printer Command Files

This option (6) displays the drive or directory where WordPerfect should look for downloadable font files (see *Cartridges/Fonts/Print Wheels* in *Reference*) and printer command files (see *Printer Commands* in *Reference*). Use this option if your downloadable font files are stored somewhere other than the printer files directory (specified using Location of Files on the Setup menu (Shift-F1,6,4)). Be sure to enter a complete pathname (see *Directories* in *Reference*).

Port

Port (2) designates where your printer is plugged into your computer. When you select this option, a menu of port locations is displayed across the bottom of the screen. Select the port (1 through 7) where your printer is plugged into your computer. Select Other (8), then enter a filename if you want to print to disk (see *Printing to Disk* in *Reference*). If you are running WordPerfect from a network, you may be asked if the filename you enter is a network printer. Type **y** or **n** to specify Yes or No.

If you select one of the COM ports (4–7) for serial printers, the Select Printer: COM Port screen is displayed. To set up a COM port for your printer, you need the following information from your printer manual or dealer:

- Baud rate
- Parity (None, Odd, Even)
- Stop bits (1 or 2)
- Character length (7 or 8)

You also need to know if your printer is using XON/XOFF protocol. (Only use this if your printer requires it.)

After you gather this information, make any necessary changes to the COM Port default settings (the defaults are common to most laser printers). Then press **Exit** (F7) to return to the Select Printer: Edit screen.

Print to Hardware Port

This option lets WordPerfect print directly to the printer port rather than through the computer BIOS. If your printer is attached directly to your computer, make sure you can print properly with this option set to No, then try setting this option to Yes and see if it speeds up the printing process.

If you cannot print properly with this option set to Yes, return the setting to No. There are several reasons why this option may not work with your printer.

The Advanced Setup option that appears after you select Print to Hardware Port lets you specify the Interrupt Request Level and Base Port Address of the I/O port.

Sheet Feeder

A sheet feeder is used to feed paper into a printer. If you have a sheet feeder, use this option (3) to select it (see *Sheet Feeder* in *Reference*).

If you have a laser printer with a single paper bin, this bin is not considered a sheet feeder.

See Also: Cartridges/Fonts/Print Wheels; Printer, Select

Printer, Select

Before you can print in WordPerfect, you need to select a printer. The process of selecting a printer includes installing information specific to your printer onto a disk or directory where WordPerfect can find it. It also includes entering information that WordPerfect uses to communicate with your printer.

The printer selection process begins when you install WordPerfect. During installation, you are taken through the steps of telling WordPerfect which printer you will be using and installing a printer file into the appropriate spot for WordPerfect to access that file.

You can select a printer during installation; however, once you have used the Installation Program to install your printer files onto a disk or directory, you can also select a printer from within WordPerfect.

WordPerfect comes with several .ALL files (located on the Printer diskettes) that contain information about various printers. When you select a printer, WordPerfect installs the information specific to your printer from the .ALL file, then creates a file with a .PRS extension. Every time you print, WordPerfect accesses that .PRS file (see .ALL and .PRS Files under Printing—General Information in Reference).

The Select Printer feature lets you select a printer, or copy, delete, edit, or update a printer definition.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Choose **Select Printer (s)** and the Print: Select Printer screen is displayed.

This screen lists the currently defined printer definitions from which you can select your printer.

3 Choose an option from the Print: Select Printer screen, then enter the necessary information (see the information for each option under *Notes* below).

4 Press **Exit** (F7) until you return to the normal editing screen.

Notes

Additional Printers

Select **Additional Printers (2)** if you want to select a printer that is not listed on the Print: Select Printer screen. A list of all the printers found on the .ALL files you installed during installation is displayed when you select this option. The list displays all the printers found in the printer files directory—specified using Location of Files in Setup (Shift-F1.6.4)—and in the directory where WP.EXE is located.

If you want to display more printers, you need to run the Installation Program again, installing additional .ALL files (see Installation under The Basics in Reference). If you install all the .ALL files and your printer is still not displayed, see Printer Not Found below.

A description of each option on the Select Printer: Additional Printers Screen follows.

Help

Selecting **Help (3)** in this screen does the same thing as selecting **Help** in the Print: Select Printer screen (see *Help* below).

List Printer (PRS) Files

Each printer you add to the printer definition list on the Print: Select Printer screen is saved as a printer file with a .PRS extension. Use this option (4) to view all printer files (those ending in .PRS) in the printer files directory, even those that have been deleted from the Print: Select Printer screen.

Once you display these files, you can choose **Select** (1) to add the printer to the printer definition list again. If you choose **Select** with a printer file that is already on the **Print: Select Printer** screen, the printer will appear twice on the list. These two definitions reference the same printer file; however, some options on the **Select Printer: Edit** menu can be different. To create a new definition by *copying* an existing definition (thus creating a separate printer file), use **Copy** (4) on the **Print: Select Printer** screen (see *Copy* below).

Name Search

Select this option (n), then start typing the name of a printer to move the cursor to that printer on the list. Press **Enter** or an arrow key to exit **Name Search**.

Other Disk

Use this option (2) to specify where (in which directory or drive) the printer files (those ending in **.ALL**) have been installed. This option is especially helpful if you have printer files in a directory other than the printer files directory.

Select

Use this option (1) to add a printer definition to the **Print: Select Printer** screen.

After you select this option, a filename for the printer definition is displayed. Press **Enter** to accept the filename or type a new filename (be sure to include a **.PRS** extension). The **Printer Helps and Hints** screen for that printer is then displayed (see *Help* below). Press **Exit** (F7) when you finish reading the information there, and the **Select Printer: Edit** screen is displayed. This screen lets you edit the name and settings for the printer you are adding to the **Print: Select Printer** screen (see *Printer, Edit in Reference*). When you finish editing the printer settings, press **Exit** to display the definition on the **Print: Select Printer** screen.

Copy

This option (4) lets you make a copy of a printer definition already on the **Print: Select Printer** screen. When you select this option, a filename appears that is slightly different from the one being copied. Press **Enter** to accept the new filename, and you are taken through the same steps as when you are adding a printer to the **Print: Select Printer** screen (see *Select* under *Additional Printers* above).

Delete

Select this option (5), then type y to delete a printer definition from the list.

Although this deletes the definition from the **Print: Select Printer** screen, the **.PRS** file (where the definition is saved) remains in your printer files directory. (To completely delete a definition, you must delete the **.PRS** file also.)

You can restore a deleted printer definition with **List Printer (PRS) Files (4)** on the **Select Printer: Additional Printers** menu (see *List Printer Files* under *Additional Printers* above).

Edit

This option (3) is used to change the settings WordPerfect needs to communicate properly with a printer listed on the **Print: Select Printer** screen (see *Printer, Edit* in *Reference*).

Help

Select this option (6) to display the **Printer Helps and Hints** screen for the currently highlighted printer definition. If you have selected a sheet feeder, press **Switch** (Shift-F3) after selecting **Help** to see the **Sheet Feeder Helps and Hints** screen.

If you have not selected a sheet feeder, a "No Help Available" message is displayed.

Printer Not Found

If your printer is not displayed after you have installed all the .ALL files using the **Installation Program**, send the name of your printer, along with your return address and telephone number to:

Printer Diskette
Attn: WordPerfect Corporation Information Services
1555 N. Technology Way
Orem, UT 84057

At WordPerfect Corporation, we are constantly updating our software and may have created a definition for your printer. In the meantime, consult your printer manual or manufacturer for a suitable emulation, or select the "Standard Printer" definition.

We suggest you do not use the **Standard Printer** definition to print on a laser printer, as many features are lost.

Select

Use this option (1) to select a printer definition from the **Print: Select Printer** screen. You are immediately returned to the **Print** menu. All new documents are saved with that definition's formats and settings until you select a different printer definition. An asterisk (*) appears next to the currently selected printer in the **Print: Select Printer** screen, and the name of the printer appears next to the **Select Printer** option on the **Print** menu.

Update

This option (7) is used to update your .PRS (printer resource) files if you receive a newer version of a .ALL file. The .ALL files are found on the **Printer** disks and contain all the printer information.

To use Update, rename or delete the old .ALL file from which your .PRS file came. Then run the Installation Program, installing the printer disks into the same directory as the old .ALL file (hard disk only). Once the disks have been installed, go into the Print: Select Printer screen in WordPerfect, highlight a printer name, then select Update.

If the sheet feeder in the .PRS file you are updating has previously been edited in the Printer Program, the prompt "Update the Sheet Feeder? No (Yes)" will display to let you choose whether or not to update the sheet feeder information.

You can also update your printer files from within the Installation Program (see the Installation Instructions card).

If you are using a two disk drive system (no hard disk), you must still use the Installation Program to install the new printer disks. Once the disks have been installed, go into the Print: Select Printer screen in WordPerfect, highlight a printer name, then select Update.

If you have altered your old .ALL file or .PRS file with a soft font installation program (e.g., Bitstream Fontware) or with the WordPerfect Printer program, you will probably want to rename (using Move/Rename on the List Files menu (F5,Enter,3)) rather than delete the .ALL and .PRS files. This way they will still be available if you want to use them (see Font Libraries under Printer Program in Reference).

See Also: Printer, Edit; Printing—General Information

Printer Commands

Your printer manual may contain several printer commands that take advantage of the special functions of your printer. The Printer Commands feature lets you insert these commands into your document.

Important: *The commands do not affect the formatting of your document on the screen.*

Be aware that most situations in which you might want to use a printer command are taken care of by WordPerfect features. Sometimes the use of printer commands leaves the printer in an unpredictable state. Use printer commands with care.

- 1 Move the cursor to where you want to insert the printer command.
- 2 Press **Format** (Shift-F8), then select **Other** (4) from the Format menu.
 Select **Other** from the **Layout** menu.
- 3 Select **Printer Functions** (6), select **Printer Command** (2), then select **Command** (1).
- 4 Enter the commands to be sent to the printer (see *Entering Command Codes* below).

- 5 Press **Exit** (F7) to return to the normal editing screen.

Notes

Entering Command Codes

You can enter printer command codes directly into your document from within WordPerfect, or you can create a file of printer command codes using BASIC or a text editor.

When you enter printer command codes from within WordPerfect, command codes *less than 32* decimal and *greater than 126* must be entered in angle brackets (<>). Codes *between 32 and 126* decimal (printable characters) may be typed or entered in decimal or in angle brackets.

If a large number of codes must be sent to the printer, you may want to create a file containing these codes using BASIC or a text editor. If you are using a text editor, you must type the true ASCII value and save the file in binary format. WordPerfect sends the entire file to the printer.

To insert a printer command file code into a document,

- 1 Move the cursor to where you want to enter the file.
- 2 Press **Format** (Shift-F8), then select **Other** (4) from the Format menu.
 *Select Other from the Layout menu.*
- 3 Select **Printer Functions** (6), select **Printer Command** (2), then select **Filename** (2).
- 4 Enter the filename, then press **Exit** (F7) to return to the document.

The contents of the printer command file are not displayed on the screen but are sent to the printer when the document is printed.

If the text of a printer command prints, your printer is not recognizing it as a printer command. Check your printer manual and make sure you have entered the command correctly.

You do not need to enter a path with the filename in step 4 above. In fact, any path you enter is ignored. The file must be located in the directory specified using Path for **Downloadable Fonts and Printer Command Files** (6) on the **Select Printer: Edit** menu (Shift-F7,s,3) (see *Printer, Edit in Reference*).

Resetting the Printer

If you send a printer command (whether by itself or in a file) to your printer, you may need to reset the printer to make sure that the command does not corrupt the remainder of the print job.

Reveal Codes

You can see the printer commands you enter by pressing **Reveal Codes** (Alt-F3). If you select **Command** (1) from the **Format: Printer Functions** menu, a **Printer Command** code [Ptr Cmnd:commands] is entered in your document. If you select **Filename** (2) from the **Format: Printer Functions** menu, a **Printer**

Command File code [Ptr Cmnd:filename] is entered in your document. These commands are not displayed in the normal editing screen.

See Also: Print, Document on Disk; Print, Document on Screen; Printing—General Information

Printer Control

When you send a document or part of a document to the printer, WordPerfect creates a print job. You can have several print jobs waiting to be printed. The Printer Control screen provides a way to manage and check the status of these print jobs.

If you receive the message “Press Shift-F7,4 to resume printing,” go to the Printer Control screen and read the messages displayed on the “Message:” and “Action:” lines to find out what you need to do. See *Appendix E: Error Messages in Reference* for a listing of common error messages.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Select **Control Printer (4)** to display the Printer Control screen.

3 Check the status of the current print job.

and/or

Select an option, then enter any requested information (see the information on each option under *Notes* below).

4 Press **Exit** (F7) to exit the Printer Control screen.

Notes

Cancel Job(s)

Select this option (1) to cancel one or all print jobs (see *Print Job, Cancel in Reference*).

Current Job

The top half of the Printer Control screen displays detailed information about the current print job (e.g., the page number currently printing, the way paper is being fed to the printer, the paper type, the job number currently printing). Messages are displayed here from time to time that can help you solve most printing problems. For example, if your printer is not on-line, the message “Printer not accepting data” would be displayed next to “Message.”

Display Jobs

Displays a list of all the print jobs waiting to be printed (see *Print Job, Display in Reference*).

Go (Start Printer)

Restarts the printer after it has been stopped for a form or print wheel change, after you have used the Stop option (see *Printing, Stop in Reference*), or if your paper definition has been set up to prompt you for loading (see *Paper Size/Type in Reference*).

Job List

A list of the first three print jobs, including the current job, is displayed in the bottom half of the screen under the Job List heading. WordPerfect numbers each job in the order in which it was sent to the printer. When numbering reaches 999 (or if you exit and restart WordPerfect), it starts over with 1. Each job's destination and Print Options settings are also displayed. If there are more than three jobs waiting to print, the number of jobs not shown on the screen is displayed (see *Print Job, Display in Reference*).

Rush Job

Moves the specified print job ahead of all other jobs on the print job list (see *Print Job, Rush in Reference*).

Stop

Stops the printer without canceling any print jobs. Use this feature if the paper jams, ribbon runs out, etc. After fixing the problem, type g (for Go) twice to restart the print job. If WordPerfect had passed page 1 before you stopped the print job, you will be prompted for the page number to restart printing on. The default is the page that was printing when you stopped the print job (see *Printing, Stop in Reference*).

When you select this option, a warning appears telling you that you may need to reinitialize your printer (see *Initialize Printer* under *Printing—General Information in Reference*).

Text at the Printer (Buffer)

WordPerfect has no control over text after it has been sent to the printer. If your printer has a buffer (a storage area for text waiting to be printed), printing does not stop until the buffer is empty. Switching the printer off empties the buffer.

If the buffer is large enough, it may contain more than one print job. Once a print job has been completely loaded into the buffer, WordPerfect deletes it from the job list and has no control over it. If you switch off the printer with a document in the buffer that is no longer on your screen and has not been saved on disk, the document is lost.

If you turn off your printer, you may need to reinitialize the printer (if you are using downloadable soft fonts) regardless of whether or not there was a

WordPerfect print job in the buffer (see *Initialize Printer* under *Printing—General Information in Reference*).

Because of the printer's buffer, your printer may be several pages behind the page number displayed on the Printer Control screen.

See Also: Print, Document on Disk; Print, Document on Screen; Print Job, Cancel; Print Job, Display; Print Job, Rush; Printing, Stop

Printer Functions

After printing a document (or using View Document to look at a document), you may notice situations where the text is not printed just how you want. For example, you might have too much white space between letters in a word or between words. The Printer Functions feature in WordPerfect lets you instruct your printer how to handle special printing situations like these.

With the cursor at the point in the document where you want the feature to start,

1 Press **Format** (Shift-F8), then select **Other** (4).

 Select *Other* from the *Layout* menu.

2 Select **Printer Functions** (6) to display the Format: Printer Functions menu.

3 Select an option from the menu, then make the desired adjustments (see the information for each option under *Notes* below).

4 Press **Exit** (F7) to return to the normal editing screen.

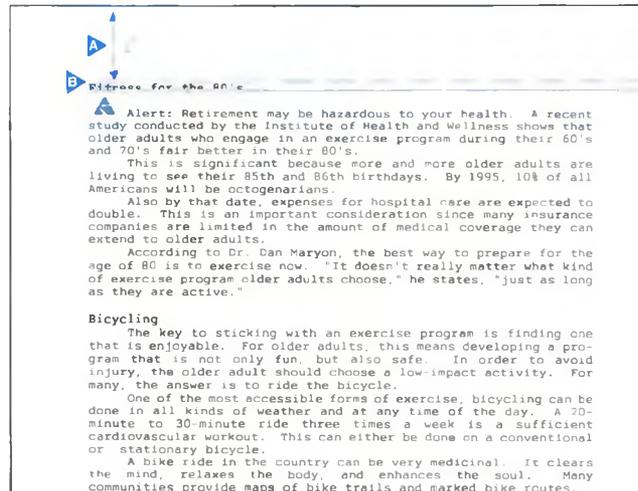
Notes

Baseline Placement for Typesetters

Normally, text is never printed within the top margin of a page. WordPerfect places the *top* of the first line of text even with the top margin. The letters in

the line sit right on the baseline, placing the baseline of the text below the top margin.

- ▲ TOP MARGIN
- ▲ TEXT
- ▲ BASELINE



Because WordPerfect places the first baseline of the page below the top margin, changing the fonts in that first line of text causes the placement of the baseline to vary.

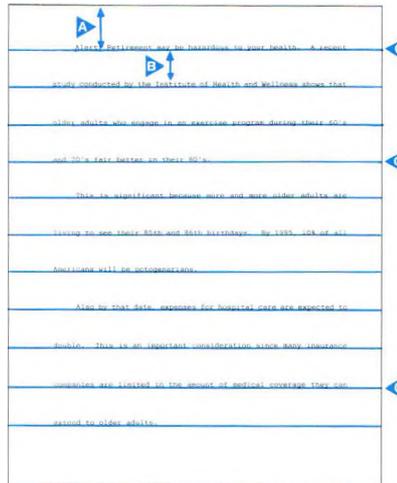
When you want to be precise in placing text on a page, you need that first baseline to remain constant. Setting the **Baseline Placement for Typesetters** option (5) to **Yes** causes the first baseline to be placed even with the top margin of the page (i.e., the text sitting on that baseline extends up into the margin). This ensures that the first baseline of the page will always be placed in the same spot (i.e., even with the top margin), regardless of the font.

This option affects any WordPerfect feature that places text in a specific position on the page. For example, if you use **Advance** (see *Advance in Reference*) to move text down the page a specified distance, the baseline of the line of text is placed below that specified distance, unless you set the **Baseline Placement for Typesetters** option to **Yes**. If you set this option to **Yes**, the baseline of the text being advanced is placed precisely at the measurement you enter.

Once you set this option to **Yes**, you need to set the **Line Height** to **Fixed** (Shift-F8,1,4,2) and enter a fixed line measurement (see *Line Height in Reference*).

For example, with the Baseline Placement for Typesetters option set to Yes, an 8.5" x 11" page with a 1" top margin and a 1" fixed line height would have constant baselines one inch apart on the page, as in the following illustration.

- ▲ TOP MARGIN
- ▲ 1" LINE HEIGHT
- ▲ BASELINES



Every line on the page will be placed on one of these baselines, regardless of the font sizes you use.

Codes

A code is inserted into your document at the point where you select a printer function. The setting remains in effect from that point forward in the document.

Kerning

This option (1) allows for space reduction between specific letter pairs (e.g., W, A) as defined in the .PRS file. This eliminates excessive white space (see *Kerning in Reference*).

Not all printers support kerning.

Leading Adjustment

This option (6) lets you set the amount of spacing assigned to Soft Return codes [SRt] and Hard Return codes [HRt] (see *Return, Soft and Hard in Reference*).

Normally, hard and soft returns are assigned the same amount of spacing. However, you might want to add different amounts to these codes in certain applications. For example, suppose you wanted to get double-spacing between single-spaced paragraphs without having to press **Enter** twice. Select **Leading Adjustment (6)**, and the cursor moves to the Primary [SRt] entry. Press **Enter** to accept the default setting and move the cursor to the Secondary [HRt] entry. Enter **1u** as the value for Hard Return codes [HRt].

Entering **1u** tells WordPerfect to *add* one line of space in the current unit of measurement (see *Units of Measure* in *Reference*) to the amount already allotted for a hard return. WordPerfect then calculates the exact measurement for that line of space and displays it on the screen in the Secondary [HRt] entry. This saves you from having to calculate that measurement.

You can then press **Exit** (F7) to return to your document. A Leading code [Leading:###] is inserted into your document, where # is the leading being added to Soft Return codes and ## is the leading being added to Hard Return codes.

From that point forward when you type single-spaced text, press **Enter** once to separate two paragraphs. WordPerfect inserts the equivalent of two blank lines between all paragraphs that are separated by a Hard Return code. This extra blank space does not appear in the normal editing screen. You can only see it using View Document (Shift-F7,6) or by printing the document.

If you want *triple* spacing between paragraphs that have *double-spaced* text (see *Line Spacing* in *Reference* for details on double spacing text), enter **1/2u** in the Secondary [HRt] entry. This tells WordPerfect to add one half the current measurement or, in other words, one line of space to the amount already allotted to every Hard Return code [HRt].

Consider another application of this feature: You can enter **2p** for both the [SRt] and [HRt] options if you want 2 points of leading *added* to any leading assigned to each line (regardless of the point size of the font). This means that you will always have 2 extra points of leading added to every line. This adjustment will be made whether the line height is fixed or automatic (see *Line Height* in *Reference*).

You can also enter negative numbers for this feature to decrease the amount of leading.

Printer Command

This option (2) lets you enter a string of printer codes or download a file that is sent directly to the printer when the document is printed (see *Printer Commands* in *Reference*).

Word and Letter Spacing

This option (3) lets you fine-tune the spacing between words and/or letters (see *Word and Letter Spacing* in *Reference*).

Word Spacing Justification Limits

This option (4) adjusts spacing between words in justified text (see *Justification* in *Reference*).

See Also: Justification; Kerning; Line Height; Printer Commands; Word and Letter Spacing

Printer Program

In order for WordPerfect to print documents with your printer, WordPerfect codes must be translated into codes your printer understands. The translations are held in the .ALL files that come with WordPerfect. Each .ALL file contains translation information for a number of similar printers.

When you select a printer, WordPerfect creates a .PRS file specific to that printer from the information in the .ALL file. When you print, WordPerfect uses the .PRS file to communicate with your printer. You are editing the .PRS file when you go into the Select Printer: Edit menu (Shift-F7,s,3) (see *Printer, Select in Reference*).

The Printer Program is used to make adjustments to .PRS files (or .ALL files) that cannot be made in the Select Printer: Edit menu. Although most users will never use the Printer Program, some users may use it quite often. Some tasks you can perform with the Printer Program require a great deal of technical knowledge.

This section describes some of the basic concepts you should know about the Printer Program. The *Printer Program, Customize Substitute Fonts* and *Printer Program, Modify Automatic Font Changes* sections in *Reference* document two of the more common applications associated with the Printer Program.

WordPerfect Corporation has produced an extensive manual called *WordPerfect Printer Definition Program, A Technical Reference* which covers the Printer Program in detail. For more information, call the WordPerfect Information Services department at (801) 225-5000. This number is not toll free. Be sure to specify that you want the manual for WordPerfect version 5.1.

Before starting the Printer Program, you should copy the .PRS or .ALL file you want to edit to a diskette or another directory. This file is used as a backup in case you are not happy with the editing changes you make.

The Printer Program file (PTR.EXE) needs to be installed properly before using the program. If you chose not to install the Printer Program when you installed WordPerfect, or have not subsequently installed it, you must do so now to use the Printer Program (see the Installation Instructions card).

To start the Printer Program,

- 1 Be sure you have a backup copy of the .PRS or .ALL file you want to edit.
- 2 Go to the DOS prompt.
- 3 Enter **cd\directory name** (where *directory name* is the name of the directory that contains PTR.EXE) to change to the directory where the Printer Program is located.

The Installation Program copies this file to the directory where your printer files are located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "PTR Program" if you are using a two disk drive system.

- 4 Enter **ptr** at the DOS prompt to start the Printer Program.

For information on startup options that you can use with the Printer Program, see Startup Options below.

- 5 Once in the Printer Program, press **Retrieve** (Shift-F10), then enter the name of the file you want to edit (e.g., **hplaseii.prs**, **wphp1.all**). You may include a full pathname if the file is not in the default directory.

*If you have forgotten the name of the .PRS or .ALL file, use the List Files feature (F5) to find and retrieve the file. If you have already saved a file during this session with the Printer Program, the name of that file appears as a default when you press **Retrieve** (Shift-F10).*

Notes

Consistency Check

To check for any inconsistencies in the new .PRS or .ALL file, press **Consistency Check** (Ctrl-F2) at the Printers menu (see *Menu Structure* below). The Printer Program performs a consistency check on the printer definition currently highlighted. The information about any inconsistencies is saved in a file named PRS.ERR (located in the default directory), and the contents of the file are displayed on the screen in Look mode (where you can look at but not edit the file).

You can scroll up and down in the document with the arrow keys, or use **Search** (F2) to go to specific points in the document. If there are no inconsistencies, no information is displayed and no PRS.ERR file is created. Press **Exit** (F7), **Enter**, or the **Space Bar** to exit the document. You can also retrieve the PRS.ERR file into WordPerfect.

Subsequent consistency checks (pressing **Consistency Check** (Ctrl-F2)) will replace the PRS.ERR file without prompting you.

Convert to New Format

If a "Convert to New Format? (Y/N) N" message appears when you are retrieving a .PRS or .ALL file, the file was created under a version of the Printer Program that is older than the one currently on your screen. In most cases, you will want to type **y** to convert the file. Once the file is converted and saved, however, you will not be able to retrieve it again into an older version of the Printer Program.

Any .PRS or .ALL files that you have customized with 5.0 can be converted to 5.1 format by answering Yes to the "Convert to New Format? (Y/N) N" prompt. You can also convert them by using the `/convert filename` startup option. See *Startup Options* below. However, you may have better results using the printer definitions that come with WordPerfect 5.1.

Exiting the Printer Program

To exit the Printer Program, press **Exit** (F7) at each menu until you arrive at one of the seven main menus (see *Menu Structure* below). Once you arrive at one of the seven main menus, press **Exit** one more time to exit the Printer Program. As a short cut to pressing **Exit** repeatedly, you can press **Quit** (Alt-F7) to exit from anywhere in the program.

The prompts that appear when you exit are the same as in WordPerfect. To save changes after pressing **Exit** (F7) at a main menu or **Quit** (Alt-F7) from any menu, type **y** to save the file, press **Enter** (or enter a new filename), then type **y** to replace the current file (or create a new file). Remember to include a .PRS or .ALL extension as part of the filename. The actual type of the file and the extension must match. If you give a .ALL file a .PRS extension or vice versa, the file will no longer be usable by WordPerfect. (If you make this mistake, simply rename the file with the correct extension.)

.PRS files are created (extracted from the .ALL file) by WordPerfect when you select printers. If the file you are using was not created this way, use a .ALL extension.

If you do not want to save the changes, type **n** when asked if you want to save the file. When the exit message appears, type **y** to exit the Printer Program or type **n** to stay in the Printer Program.

Font Libraries

Font libraries are groups of fonts. *Shareable* font libraries may have any name (up to 36 characters). *Non-shareable* font libraries have the exact name as the printer for which they were created. Fonts in a shareable library can be copied to a non-shareable library and vice versa, but only shareable libraries can be copied from one .ALL file to another.

You can use the Printer Program to create and copy fonts within a .ALL file or shareable font libraries from one .ALL file to another. This is useful when you have added fonts from a third-party software company (e.g., Bitstream Inc.) to your 5.0 .ALL files, and you want to copy them to the 5.1 file.

- 1 Retrieve the 5.0 .ALL file that has the fonts you need into the WordPerfect 5.1 version Printer Program. If it is a 5.0 file, type **y** when you are prompted to convert the file.
- 2 Highlight the printer you want to edit and press **Enter**.
- 3 At the menu that appears, highlight **Fonts** and press **Enter**.
- 4 Select **Add (1)**, then press **Ctrl-Enter**.
- 5 Enter a name to create a shareable font library.

or

Press **Enter** without entering a name to create a non-shareable font library.

- 6 Select **Soft (KB) (2)**.
- 7 Highlight the library on the list that contains the fonts you want to copy and press **Enter**.

If you convert a 5.0 .ALL file, all font libraries will have the same name as the printer because they are non-shareable.

- 8 Use the arrow keys and asterisk (*) to mark each font you want copied to the new font library, then select **Copy (4)**.

- 9 Highlight the font library you just created and press **Enter**.
- 10 Press **Exit** (F7) to return to the list of font libraries.
- 11 Highlight the font library you just created and select Copy (4).
- 12 Enter the name of the 5.1 .ALL file to which you want to copy the new font library.
- 13 Exit the .ALL file you are editing, then retrieve the .ALL file to which you copied the font library.
- 14 Highlight the printer and press **Enter**.
- 15 Highlight Fonts and press **Enter**.
- 16 Highlight the font library you copied and type an asterisk (*).
- 17 Exit and save the .ALL file, then exit the Printer Program.

Help

You can press **Help** (F3) from any place in the Printer Program to display a template for the Printer Program with some information about using the Help feature.

If you press **Help** again, you are placed in a help screen with the cursor on the information available for the items in the current menu.

You can display the information for a given feature by pressing the keystrokes for the feature (as listed on the template). Other keys, such as Backspace and Delete (Del), display a glossary of keystrokes and text describing the keystrokes' purpose.

As with the Help feature in WordPerfect, the Space Bar returns you to the menu.

List Files

A List Files feature has been included in the Printer Program. Whenever you are requested to enter a filename, (e.g., when you press **Retrieve** (Shift-F10) to retrieve a .PRS or .ALL file), you can press **List Files** (F5), then enter the path and filename pattern for the directory you want to see.

The default path that appears when you press **List Files** (F5) includes the path to the current directory, plus an extension in the filename pattern. If you have already retrieved a file, the extension is the same as the file you have retrieved. If you used the /afc or /sub startup options (see *Startup Options* below), the extension is .PRS. Otherwise, the extension is .ALL.

Menu Structure

The Printer Program has seven main menus: Printers, Font Libraries, Sheet Feeders, Typefaces, Character Maps, Proportional Spacing Tables, and Kerning Tables.

When you start the Printer Program, the Printers menu is displayed. By pressing the following keys, you can display one of the other six menus:

- Font Libraries (Ctrl-F8)
- Sheet Feeders (Shift-F8)
- Typefaces (Shift-F6)
- Character Maps (F4)
- Proportional Spacing Tables (F6)
- Kerning Tables (Alt-F6)

To return to the Printer menu from one of the other menus, press **Printers** (F8).

The seven basic menus are lists of printers, font libraries, sheet feeders, typefaces, character maps, proportional spacing tables, and kerning tables. You can add, delete, rename, or copy any of the listed items.

Each item represents an organized group of information. Some information is organized in tables while other information is organized in submenus. By placing the cursor on an item listed in a menu and pressing **Enter**, a table or another menu (submenu) is displayed.

When you are in a menu, you can continue moving to the information you need to add or edit by placing the cursor on an option and pressing **Enter**. As you move through a series of menus, a “map” is displayed at the top of the screen that traces the path through which you moved to reach the current menu or table.

If you use a function key to move to a menu, the map displays only the menu from which you started.

You can move back through the path a menu at a time by pressing **Exit** (F7) until you reach the menu where you started. At that point, press **Exit** again to exit the program and save the changes to the .PRS or .ALL file. (You can also use **Quit** (Alt-F7) as a shortcut to exit the Printer Program. See *Exiting the Printer Program* above for more information.)

Printer Definition Support Policy

WordPerfect Corporation is committed to providing definitions for a wide variety of printers. However, you may have a printer that is not yet supported. If that is the case, you can use the Printer Program to create your own printer definition (see the *WordPerfect Printer Definition Program* manual for details).

While the WordPerfect Customer Support department will answer questions about currently-defined printer definitions, operators do not have the resources available to help you create new printer definitions. However, they will answer any questions you may have about the features of the Printer Program.

In addition, Customer Support operators do not have the resources to support a printer driver that has been customized (i.e., if you have made changes to the printer driver using a font package or the Printer Program).

Printing a Definition

The Text In/Out feature in the Printer Program creates a WordPerfect document containing the information in a printer definition. You can retrieve or print this document to get an overall view of what is defined for a printer.

- 1 Retrieve the .PRS or .ALL file.
- 2 If you retrieved a .ALL file, move the cursor to the definition you want to print.
- 3 Press **Text In/Out** (Ctrl-F5).
- 4 Enter a filename (or full pathname) for the document to be created.

If you do not enter a filename (or pathname) in step 3, the document is saved as PTR.OUT in the default directory.

One of two basic versions of the document is created. If the .PRS or .ALL file contains only one printer definition, information on every aspect of the definition is included in the file. (It may be *very* long.) If the .PRS or .ALL file contains multiple printer definitions, a shorter version of the file is created, containing abbreviated information about the definition currently highlighted.

Generally a .PRS file contains only one definition. However, if you want the shorter version, you can add a dummy definition using Add (1) at the Printers menu, then use the Text In/Out feature (Ctrl-F5). Be sure to delete the dummy definition before saving the file.

Startup Options

The following startup options are available for the Printer Program (see *DOS and WordPerfect in Reference* for a general discussion of startup options):

filename

Automatically retrieves the named .PRS or .ALL file into the Printer Program (e.g., **ptr a:hplaseii.prs**).

/50point filename

Converts a .PRS or .ALL file to 5.1. This maintains line height and spacing values but cannot be used with PostScript files.

/afc

Provides a shortcut for getting to the Automatic Font Changes list in the program (see *Printer Program, Modify Automatic Font Changes in Reference*.) After starting the Printer Program with this option, you would retrieve the .PRS file, cursor to the printer and press **Enter**, then press **Enter** again at the font for which you want to modify the automatic font changes. The Automatic Font Changes list then appears.

/autofont

The /autofont start option allows you to add third-party font information to your .All files. For more information on AutoFont, see *Printer Program, AutoFont in Reference*.

/convert filename

Converts a .PRS or .ALL file from 5.0 to 5.1 format and exits the Printer Program. Using this option is the same as answering Yes to the "Convert to New Format? (Y/N) N" prompt (when retrieving the file) and then saving the file, except that with this option, the file is immediately converted (there is no confirmation prompt).

/cp=code page number

Tells the Printer Program which code page your hardware (BIOS) system uses. Setting this option lets you access the proper keyboard and 256-character ASCII character set for which your system is preset. The Printer Program supports the following code pages: 437 Standard, 850 PC Multilingual, 851 Greek, 8510 Greek Alternate, 860 Portuguese, 8600 Portuguese Alternate, 861 Icelandic, 863 French (Canada), 865 Norwegian and Dutch, 895 Czechoslovakian, 866 Russian, and 8660 Russian Alternate.

/mono

Use this option if you have a plasma, LCD, or composite display monitor.

/sub

Provides a shortcut for getting to the Substitute Fonts list in the program (see *Printer Program, Customize Substitute Fonts* in *Reference*). After starting the Printer Program with this option, you would retrieve the .PRS file, cursor to the printer and press **Enter**, then press **Enter** again at the font for which you want to substitute another font. The Substitute Fonts list then appears.

/units=n

Sets the units of measure to inches, centimeters, points, or WordPerfect units, where *n* is:

- i** or **"** for inches
- c** for centimeters
- p** for points
- w** for 1200ths of an inch

See *Units of Measure* in *Reference* for more information.

/update inputfilename outputfilename

Copies the font libraries (or font groups) from the input 5.1.ALL file to the output 5.1.ALL file. For example, suppose you have added a font library to a .ALL file, then you receive an updated .ALL file from WordPerfect Corporation that has enhancements you want to use. You could use this option to copy the font information from your modified .ALL file (input file) to the updated .ALL file from WordPerfect Corporation (output file). Fonts and Font Libraries are thoroughly discussed in *WordPerfect Printer Definition Program, A Technical Reference*, which you can purchase as noted above. For information on copying font libraries from a 5.0 .ALL file, see also *Font Libraries* above.

Two Disk Drives

If you are working on a two disk drive system (no hard disk), you can start the Printer Program by following these steps.

- 1 Go to a DOS prompt.
- 2 Insert the diskette you labeled "PTR Program" in drive A and the diskette with your printer file into drive B.

Important: Be sure you have a backup copy of the file.

- 3 Enter **b:** at the DOS prompt to change the default drive to B.
- 4 Enter **a:ptr** to start the Printer Program.

See Also: Printer, Select; Printer Program, Customize Substitute Fonts; Printer Program, Modify Automatic Font Changes

Printer Program, AutoFont

The WordPerfect Printer Program (PTR.EXE) has a /autofont startup option that supports the AutoFont technology recently introduced. This option allows users to add third-party font information to their .ALL files. This option affects cartridge, built-in, and soft fonts.

For now, PTR/autofont only works with PCL 4 compatible printers such as the HP LaserJet Series II for non-scalable typefaces, and with PCL 5 compatible printers, such as the HP LaserJet III, that support scalable typefaces.

You must first run the AutoFont Support Installer that the font vendor supplies. This creates the AutoFont directory from the root drive (C:\AUTOFONT) and installs the GLUE.TXT and TFM files that the Printer Program uses to modify the .ALL files.

You can check for the GLUE.TXT and TFM files by looking in the AutoFont directory (e.g., **dir c:\autofont**).

You need to have a copy of PTR.EXE dated 6-29-90 or later. If it is not already on your hard disk, run the WordPerfect Installation Program (INSTALL.EXE) on the *Install/Learn/Utilities 1* diskette to install PTR.EXE. Alternatively, the font vendor may have included a disk with a recent copy of the Printer Program.

Each time you use AutoFont Support to add new typefaces to your hard disk, you should run PTR/autofont to update your .ALL files.

To use PTR/autofont,

- 1 Switch to the directory where the Printer Program is located (e.g., **cd\wp51** if the Printer Program is in the \WP51 directory).

- 2 Enter **ptr/autofont**. The Printer Program searches available .ALL files and displays a list of printers supporting AutoFont. Highlight the printer that you want to update with AutoFont information, then choose Select Printer(s) (1) to mark the printer. You can then mark additional printers.

or

Enter **ptr/autofont filename.all** from the DOS prompt, where filename.all is the .ALL file that needs added information.

If you want to update multiple .ALL files, do not include the .ALL filename when invoking PTR/autofont.

If GLUE.TXT is not in the AutoFont directory of the current drive, you are prompted for the path.

The Printer Program looks in the current directory, then the directory that holds PTR.EXE, for the required .ALL file. If the Printer Program cannot find the .ALL file, it prompts you to enter the full pathname for the file. In this case, you should know the location of the .ALL file. If the .ALL file cannot be found, you may not have installed your printer .ALL files. You may need to run the WordPerfect Install Program to install the .ALL file for your printer.

- 3 Select Add Autofont (2), then type **y** to add AutoFont to the selected printers. If the Printer Program does not encounter any problems, it displays the message "Autofont successfully installed. Press any key to continue." Press a key.
- 4 Press **Enter** to exit the Printer Program.

For more help with /autofont, press **Help** (F3) twice from the Printer Program.

Notes

Necessary Files

As stated above, you need a copy of the Printer Program (PTR.EXE) dated 6-29-90 or later. If you installed the Printer Program when you installed your WordPerfect 5.1 software, and if you used the default path, PTR.EXE will be in your \WP51 directory. You can check for the file and its date by typing a command similar to the following from a DOS prompt: **dir c:\wp51\ptr.exe**. If the version you have is earlier than 6-29-90, you need to order a more recent copy of the program.

You also need the .ALL file that contains the information used to create your printer definition. The default directory during installation for .ALL files is your \WP51 directory.

If you are not sure in which directory your printer files are located, go into WordPerfect, press Setup (Shift-F1), then **Location of Files** (6). The directory where WordPerfect looks for your printer files is listed under **Printer Files** (4). If the Printer Files directory is not \WP51, use the Printer Files directory instead to look for your files.

PTR/autofont requires two types of files which are created by the font vendors' AutoFont installer: a TFM (Tagged Font Metrics) file for each font, and a GLUE.TXT file that tells the Printer Program which fonts to load into specific font libraries in the .ALL file. Information extracted from the TFM files include character maps, proportional spacing tables, and select strings.

Symbol Sets

You can use the /symset startup option with /autofont. This option allows you to add fonts with a specific symbol set. To use this option,

1 Enter ptr/autofont/symset.

This displays a menu of supported symbol sets. Only those fonts in GLUE.TXT that support the requested symbol set will be added. You can select the symbol set directly by entering PTR/autofont/symset=x, where x is the value from the menu for the desired symbol set.

If you do not use the /symset option, the following priorities determine the symbol set used for each font. If, in GLUE.TXT, all the symbol sets used in the HP III PC-8 (w/subs) character map are available, this map will be used with the default symbol set of PC-8. If all the symbols are not available, the DeskTop symbol set will be used. If DeskTop is not available, the last symbol set listed for the font in GLUE.TXT is selected. ITC Zapf Dingbat fonts are added with the PS ITC Zapf Dingbat symbol set. Dingbats map to the WordPerfect character set 12.

Typefaces/Fonts

To make your typefaces or fonts active so you can select them within your document, perform the following steps after AutoFont has been installed and the .ALL file has been updated:

- 1** Start WordPerfect.
- 2** Press **Print** (Shift-F7), then choose **Select Printer (s)**. Highlight your printer, then select **Edit (3)**.
- 3** Select **Cartridges/Fonts/Print Wheels (4)** to change the cartridge and font information.

If your typeface collection is on a cartridge,

- 1** Select **Cartridges**.
- 2** Type an asterisk (*) to mark the name of the cartridge you want to install.

Continue with Step 4 below.

If you are using disk-based typefaces,

- 1** Select **Soft Fonts**.
- 2** Select the AutoFont font group that contains the typefaces you want to use.
- 3** Mark all the typefaces that you want to use in WordPerfect.

You can mark typefaces with an asterisk (*) or a plus (+) symbol, or both, depending on the way you choose to use them in WordPerfect. (See *Marking Cartridges/Fonts/Print Wheels* under *Cartridges/Fonts/Print Wheels* in *Reference* for details.)

Important: *Marking soft fonts* tells WordPerfect which soft fonts you have. You must tell WordPerfect where these fonts are by specifying a path using the *Path for Downloadable Fonts and Printer Command Files* option on the *Select Printer: Edit* menu (Shift-F7.s.3.6) (see *Printer, Edit* in *Reference*).

- 4 Press **Exit** (F7) until you return to the *Print: Select Printer* menu. Select the printer which has the fonts that you just marked, then press **Exit** (F7) until you return to the normal editing screen.
- 5 Press **Font** (Ctrl-F8), then select **Base Font** (4) to select or change fonts within your document.

If you select a scalable font, the screen will prompt you to enter a point size. You can enter any point size ranging from 0.2 point to 999.7 points (about 14 inches.).

See Also: *Cartridges/Fonts/Print Wheels; Printer, Edit*

Printer Program, Customize Substitute Fonts

You may want to use the Printer Program for customizing substitute fonts.

Substitute fonts are used by WordPerfect on a character-by-character basis to produce characters which are not found in the current font. By assigning substitute fonts, you can usually print more characters. A useful application for Substitute Fonts involves printing characters in the WordPerfect character sets.

WordPerfect sets up substitute fonts for you when you select printers. Use the Printer Program if you want to change the way WordPerfect has set them up.

In the discussion below, “character” refers to a character in one of the 12 WordPerfect character sets.

When sending characters to the printer, WordPerfect first looks for each character in the base font. (If there is an Automatic Font Change (AFC) set up for the character set, the AFC font becomes the base font while WordPerfect tries to print it.) If the character is found, it is printed. If the character is not found, WordPerfect tries to build it using a base character and diacritical. If it can't build the character, it looks for it in the substitute fonts for the base font. If it can't find the character in the substitute fonts, WordPerfect prints it in graphics (if the printer you are using supports graphics).

The difference between an automatic font change and a substitute font for characters in WordPerfect character sets is that an automatic font change is used

for *every* character in a specific character set, while a substitute font is used only for missing characters, but in *all* character sets.

Up to nine substitute fonts are assigned by WordPerfect when you create, edit, or update a .PRS file. You can use the Substitute Font feature in the Printer Program to assign and prioritize up to nine substitute fonts.

For example, suppose your Times Roman 10 point font contains many more characters than your Courier 10 point font. If you like to use Courier 10 point as normal text but need to print characters that font does not contain, you should assign the Times Roman 10 point as a substitute font for the Courier 10 point font.

Keep in mind that the substitute characters come from a different font and may be in a different typeface, size, or weight than the current font. Also, as WordPerfect searches through substitute fonts, the amount of time needed to print a document may increase.

To assign substitute fonts,

- 1** Enter **ptr/sub** at the DOS prompt to start the Printer Program.
 - 2** Press **Retrieve** (Shift-F10) and enter the filename of your printer (.PRS) file. Include the .PRS extension. If you are not sure of the filename, check the Select Printer: Edit menu (Shift-F7,s,3) in WordPerfect before you start the Printer Program (see *Printer, Select* in *Reference*), or use the List Files feature (F5) at the "File to be Retrieved:" prompt.
 - 3** Highlight the printer you want, then press **Enter** to display the list of fonts for the printer file.
 - 4** Move to the font for which you want to assign a substitute font, then press **Enter**.
 - 5** Move to the font you want as a substitute for the font you highlighted in step 4.
 - 6** Type a priority indication 1–9 (1 is first priority), or type an asterisk (*) to have the Printer Program use the next priority.
- Priority numbers are automatically updated as you make editing changes to the substitute fonts list.
- 7** Repeat steps 5 and 6 to mark additional substitute fonts.
 - 8** Press **Exit** (F7) to return to the list of fonts.
 - 9** Repeat steps 4 through 9 to assign substitute fonts to any other fonts.
 - 10** Press **Quit** (Alt-F7), then type **y** to begin saving the file.
 - 11** Press **Enter**, then type **y** to replace the old file with the new file.

or

Enter a new filename.

If you are entering a new filename, be sure to include the .PRS extension.

12 Type **n** to clear the screen and remain in the Printer Program.

or

Type **y** to exit the Printer Program.

Notes

Startup Option

The /sub startup option provides a shortcut to moving to the Substitute Fonts list in the Printer Program. For more information, see *Startup Options* under *Printer Program* in *Reference*.

Subsequent Editing of .PRS Files in WordPerfect

Once you use the Printer Program to change substitute fonts in the .PRS file, you may be asked if you want new substitute fonts when you edit or update the .PRS file in WordPerfect.

For example, after editing a .PRS file in the Printer Program, you may go into WordPerfect and mark a cartridge on the Cartridges/Fonts/Print Wheels feature. When you exit, you will be prompted with “Do you want new substitute fonts?” Typing **y** at this prompt causes WordPerfect to select new substitute fonts for the fonts in the .PRS file. Changes you made using the Printer Program are overwritten as WordPerfect selects new substitute fonts. Typing **n** leaves existing substitute fonts as they are. In this case, the newly-marked cartridge fonts will not have substitute fonts unless you then use the Printer Program to set them up.

Testing Substitute Fonts

One way to see if the substitute fonts have been set up correctly is to retrieve the CHARMAP.TST document into WordPerfect, move to the top of the document, change the Base Font to the font you have selected substitute fonts for in the Printer Program, then view or print the document (see *Font*, *Print*, and *View Document* in *Reference*).

If your printer supports graphics, be sure to set Graphics to “Do not print” (see *Print Quality* in *Reference*) before printing the file.

See Also: Printer, Select; Printer Program; Printer Program, Modify Automatic Font Changes; Printing—General Information

Printer Program, Modify Automatic Font Changes

WordPerfect contains several attributes on its Font (Ctrl-F8) key. Italics, Large, Fine, and Double Underline are a few examples of these attributes. Fonts are automatically assigned to an attribute when you create or edit a .PRS file in WordPerfect. Usually, the attribute fonts are various weights or point sizes of the current font typeface. You may want to modify the font attributes assignments with the Automatic Font Changes feature in the Printer Program. See *Printer Program, Customize Substitute Fonts* for additional information on automatic font changes, and on substitute fonts, which are closely related to automatic font changes.

For example, if the current font is Courier 10 point, then WordPerfect usually assigns Courier Bold 10 point (if that font is available) to the Bold attribute. Likewise, if the current font is Courier 10 point, the font assigned to the Large attribute usually has a Courier typeface with a point size larger than 10 (if such a font is available).

If an attribute cannot be created with another font, WordPerfect may try another method to create the attribute (e.g., double-striking for Bold, underlining for Italics).

To modify automatic font changes.

- 1 Enter **ptr/afc** at the DOS prompt to start the Printer Program (see *Startup Option* below).
- 2 Press **Retrieve** (Shift-F10), then enter the filename of your printer (.PRS) file.

Include the .PRS extension. If you are not sure of the filename, check the Select Printer: Edit (Shift-F7,s,3) menu before starting the Printer Program (see *Printer, Select* in *Reference*), or use the List Files feature (F5) at the "File to be Retrieved:" prompt.

- 3 Press **Enter** to display the list of fonts selected for your printer.
- 4 Move the cursor to the base font whose attributes you want to change, then press **Enter** to display the Automatic Font Changes list.
- 5 Move to the attribute whose font assignment you want to change, then press **Enter**.
- 6 Move to the font you want to assign to that attribute, then type an asterisk (*) next to the font (or press **Enter**, then type y).
- 7 Press **Exit** (F7) to return to the list of attributes.
- 8 Make changes to other attributes by following steps 5 through 7.
- 9 Press **Exit** (F7) to return to the list of fonts.
- 10 Repeat steps 4 through 9 to make automatic font changes to other fonts.
- 11 Press **Quit** (Alt-F7), then type y to begin saving the file.

12 Press **Enter**, then type **y** to replace the old file with the new file.

or

Enter a new filename.

If you are entering a new filename, be sure to include the .PRS extension.

13 Type **n** to clear the screen and remain in the Printer Program.

or

Type **y** to exit the Printer Program.

Notes

Attributes, Character Sets, and Orientations

Also included among the attributes on the Automatic Font Change menu are the names of character sets and font orientations. By following the steps above, you can assign a font to those character sets or orientations.

After assigning a font to an attribute and saving the change, all characters for that attribute come from the assigned font. In addition, additional attributes will come from the assigned font's automatic font changes.

For example, if text is formatted for extra large and italics, WordPerfect switches to the font assigned to extra large, then uses the italics automatic font change for that extra large font to print the italicized text. If you wanted to change the setting, you would start the Printer Program, go into the Automatic Font Change for the font assigned to extra large, then look for the setting for italics.

The same is true for an orientation. After assigning a font to an orientation and saving the change, all characters for that orientation come from the assigned font. Additional attributes will come from the assigned font's automatic font changes.

After assigning an automatic font change to a character set, WordPerfect switches to that font for every character in that character set. The switch is done on a character set-by-character set basis.

Because WordPerfect switches to the character set automatic font change only for specific character sets, text that uses multiple character sets will print in different fonts, which may not look as you expect.

Delete Font Selection

A font selection can be cleared from the automatic font change list by following steps 1 through 6 above, then placing the cursor on the font selection and pressing **Backspace** or **Delete**.

Small Caps

If a font is selected for small caps, WordPerfect checks to see if it is a true small caps font. If it is, all the characters are printed in that font. If it is not, WordPerfect converts lowercase letters to uppercase and prints them in the selected font. Uppercase letters are printed in the current font. In order for

small caps to print as expected, a font should be selected that is about 80% of the size of the base font.

In the example below, the first sentence shows how the text looks in Reveal Codes. Depending on the font selected for small caps, you might get any one of the last three sentences as the result when this sentence is printed.

- A IN REVEAL CODES
- B TRUE SMALL CAPS FONT, SAME POINT SIZE
- C NOT TRUE SMALL CAPS FONT, SAME POINT SIZE
- D NOT TRUE SMALL CAPS FONT, SMALLER POINT SIZE

This is in [SM CAP]small caps[sm cap] A

This is in SMALL CAPS B

This is in SMALL CAPS C

This is in SMALL CAPS D

Startup Option

The /afc startup option is a shortcut to moving to the Automatic Font Change list in the Printer Program. For more information, see *Startup Options* under *Printer Program* in *Reference*.

Subsequent Editing of .PRS Files in WordPerfect

Once you use the Printer Program to modify automatic font changes in the .PRS file, you may be asked if you want new automatic font changes when you edit or update the .PRS file in WordPerfect.

For example, after editing a .PRS file in the Printer Program, you may go into WordPerfect and mark a cartridge on the Cartridges/Fonts/Print Wheels feature. When you exit, you will be prompted with “Do you want automatic font changes?”. Typing **y** at this prompt causes WordPerfect to select new automatic font changes for the fonts in the .PRS file. Changes you made using the Printer Program are overwritten as WordPerfect selects new automatic font changes. Typing **n** leaves existing automatic font changes as they are. In this case, the newly-marked cartridge fonts will not have automatic font changes unless you then use the Printer Program to set them up.

See Also: Printer, Select; Printer Program; Printer Program, Customize Substitute Fonts; Printing—General Information

Printing—General Information

No word processing program would be complete without a way to print the documents you create on your screen. The Print feature in WordPerfect lets you print part or all of a document currently on the screen or one that has been previously saved to disk.

You can print a block of the document on the screen, selected pages of a document from either the screen or disk, and you can also print the document summary (see *Print, Document on Disk* and *Print, Document on Screen* in *Reference* for details).

Notes

.ALL and .PRS Files

Whenever you send a document to the printer, WordPerfect needs to translate that document into commands that the printer can understand. The information WordPerfect needs to communicate with your printer is stored in a .PRS (Printer Resource) file. This file is created when you select a printer, either while installing WordPerfect (see *Printer Installation* under *The Basics* in *Reference*) or later from the Select Printer: Edit menu (Shift-F7,s,3) (see *Printer, Select* in *Reference*).

Important: *WordPerfect cannot print anything unless you have a printer selected.*

The information in a .PRS file is copied from a much larger file (a .ALL file) that contains all the information WordPerfect Corporation currently provides for your printer (as well as several other printers). .ALL files (i.e., files with a .ALL extension) are included on printer diskettes shipped with your WordPerfect package.

The set of commands for a printer in a .PRS file is often called the printer definition. When you edit a printer definition from the Select Printer: Edit menu, your changes are made to the .PRS file. The Printer Program is available for you to make more extensive changes to your printer definition (see *Printer Program* in *Reference*).

Background Printing

The Print feature is designed to let you continue working in the document screen while you are printing (this is called “background printing”). When you print a document (whether from the screen or from disk) a copy of the document is sent to the printer. If you are printing a document from the screen, you are automatically returned to the normal editing screen. If you are printing a document from disk, press **Exit** (F7) to return to the normal editing screen to continue working.

Important: *If you are printing graphics or downloading soft fonts, printing speed is dramatically increased if you remain in the Printer Control screen or if you do not select any features while in the normal editing screen.*

Graphics

If your printer prints graphics, you can use the Print feature to print a page or document that includes graphics or .DRS characters (see *Printable Characters* below).

Important: *If you are printing large, full-page graphics or several graphics on a single page to a laser printer, and not all of the graphics print completely, your laser printer may have insufficient memory for that print job.*

If you have a PostScript printer capable of printing color graphics, you can print color graphics images in color. If not, color graphics images are printed in black and white using shading or fill patterns.

Initialize Printer

This option is found on the Print screen (Shift-F7,7). Use it only if you have a printer with soft fonts that you have marked with an asterisk (*) (see *Marking Cartridges/Fonts/Print Wheels* under *Cartridges/Fonts/Print Wheels* in *Reference*) to load those fonts into the printer. You should use it every time you turn on your printer prior to the print job. When you select this option, type **y** to confirm initialization, and the soft fonts you have marked with an asterisk (*) (meaning initially present) are downloaded to the selected printer to be readily available for printing (see *Cartridges/Fonts/Print Wheels* in *Reference*).

Landscape/Portrait Printing

Landscape printing means that text is printed parallel to the long edge of the form. Portrait printing prints text parallel to the short edge of the form. Some printers rotate their fonts (or have landscape fonts available) to print in landscape, while others do not.

Class Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00 a.m.						
8:00 a.m.						
9:00 a.m.						
10:00 a.m.						
11:00 a.m.						
12:00 p.m.						
1:00 p.m.						
2:00 p.m.						
3:00 p.m.						
4:00 p.m.						
5:00 p.m.						

Fitness for the 80's

Alert: Retirement may be hazardous to your health. A recent study conducted by the Institute of Health and Wellness shows that older adults who engage in an exercise program during their 80's and 70's fair better in their 80's.

This is significant because more and more older adults are living to see their 80th and 85th birthdays. By 1992, 10% of all Americans will be age 65 or older.

By their 80th birthdays, 50% of all Americans are expected to double their health care needs. This is an important consideration since many insurance companies are limited in the amount of medical coverage they can extend to older adults.

According to Dr. Sam Maryon, the best way to prepare for the age of 80 is to exercise now. "It doesn't really matter what kind of exercise program older adults choose," he states, "just as long as they are active."

Bicycling

The key to sticking with an exercise program is finding one that is enjoyable. For older adults, this means developing a program that is not only fun, but also safe. In order to avoid injury, the older adult should choose a low-impact activity. For many, the answer is to ride the bicycle.

One of the most accessible forms of exercise, bicycling can be done in all kinds of weather and at any time of the day. A 20-minute to 30-minute ride three times a week is a moderate cardiovascular workout. This can either be done on a conventional or stationary bicycle.

A bike ride in the country can be very medicinal. It clears the mind, releases the body, and enhances the soul. Many communities provide maps of bike trails and marked bike routes.

Swimming

Since the advent of aquatic aerobics, even the least-active can swim. Water aerobics is one of the best forms of exercise for senior citizens. It is low impact and puts less strain on the heart than freestyle swimming.

Water aerobics can be learned quickly and easily. Most important, there hasn't been one reported drowning due to water aerobics since its inception in 1977.

Second in preference to water aerobics is swimming using the backstroke stroke. This allows the head to remain above water so that breathing is not restricted.

The primary benefit to swimming is good availability. Most spas offer swimming facilities, but SPA memberships can sometimes run into the hundreds of dollars.

Walking

The cheapest and the most popular form of recreation among older adults is walking.

Walking requires no equipment. It can be done almost anywhere at any time. Done at a brisk pace, walking improves circulation and invigorates the heart.

If your printer cannot rotate its fonts and does not have landscape fonts available (e.g., dot matrix and daisy wheel printers), the only way you can print in landscape is by inserting the paper lengthwise into the printer.

If your printer can rotate its fonts (e.g., most laser printers), you must change the font type or select a landscape font to print in landscape (see *Font Type* under *Paper Size/Type* in *Reference*).

See *Printing, Landscape* in *Reference* for details on landscape and portrait printing.

Paper Size/Type

This feature tells WordPerfect what size and kind of paper you will be printing on. The code inserted specifies the dimensions and name of the form (see *Paper Size/Type* in *Reference*).

Preview Copy

Any document can be printed on any printer, although the appearance may vary from printer to printer. When you select a new printer, the document on the screen is reformatted to match the capabilities of the new printer.

You can print a “preview” copy of a document even if the document has not been formatted for the current printer. Print the document with **D**ocument on Disk on the Print menu (Shift-F7,3) or **P**rint on the List Files screen (F5,Enter,4) without retrieving the document. A message appears stating that the document has not been formatted for the current printer. It then asks if you want to continue printing. Type **y** to print on the new printer.

Font selections in the document will be converted to the font most similar on the new printer. Other printer-specific codes in the document may also appear different in the printout; however, there will be no changes to the document on disk. Line endings will remain the same with the new printer, which may cause an odd appearance in the printout.

Print Quality

The print quality of a document is determined by the Graphics and Text Quality options on the Print menu.

Graphics Quality and Text Quality let you print graphic images and text with a greater or lesser degree of resolution. However, the higher the quality, the longer it takes to print (see *Print Quality in Reference*).

Printable Characters

WordPerfect is capable of printing all characters found in the WordPerfect character sets (see *Appendix P: WordPerfect Characters* for a list of all the character sets). If your printer does not have a particular character available and it can print graphics, WordPerfect accesses that character from the .DRS (driver resource) file that is included with WordPerfect, and then creates the character as a graphic image.

WordPerfect tries to emulate the font currently being used in your document. However, WordPerfect has only three fonts it can choose from for this emulation: WP Courier, WP Helv, and WP Roman. When WordPerfect creates a character graphically, it uses the font among these three that is most like the font currently being used.

When WordPerfect tries to access the character from the .DRS file, it looks for the .DRS file first in your graphics directory (see *Location of Files in Reference*), then in the directory containing WP.EXE (e.g., C:\WP51). It also looks in the printer files directory (see *Location of Files in Reference*) and in the current default directory. If it cannot find the .DRS file, a space is inserted where the character should be.

Your printer must be able to print graphics for this feature to work.

Characters that cannot be displayed on the screen appear as a box.

Because these DRS characters are considered text *and* graphics, their printing is affected by both the Text and Graphics Quality settings (see *.DRS Characters* under *Print Quality* in *Reference* for details).

Important: *Keep in mind that if you try to print a document with many .DRS characters, the print job will take considerably longer to complete. If the print job is not completed, it might be that your printer does not have enough memory.*

Printer Control

The Printer Control screen (Shift-F7,4) helps you manage and check the status of print jobs. If your printer does not respond when you send all or part of a document, check the Printer Control screen for any messages (see *Printer Control* in *Reference*).

Printer Format

When printing a document from List Files or from disk that is fast saved, that needs to be generated, or that is formatted for a different printer, WordPerfect attempts to reformat the document. To reformat a document, WordPerfect must associate a printer definition (.PRS file) with the document.

WordPerfect uses a .PRS file if a printer selection exists in the setup file (WP{WP}.SET) for that .PRS file. If the .PRS file exists, but its printer definition is not found in the setup file, WordPerfect reformats the document using the currently-selected printer.

Printer Helps and Hints

To display the Printer Helps and Hints screen, highlight the desired printer definition on the Print: Select Printer list (**Shift-F7,s**), then select **Help** (6). If you have selected a sheet feeder for the highlighted printer, press **Switch** (Shift-F3) after selecting Help to see the Sheet Feeder Helps and Hints screen.

Printer Troubleshooting

If nothing happens when you send a document to the printer, display the Printer Control screen (Shift-F7,4) to see any explanatory messages that may be displayed. These messages often indicate why the printer is not printing and what can be done about it (see *Appendix E: Error Messages* for details on printer error messages and *Appendix O: Troubleshooting* for troubleshooting guidelines).

Two-Sided (Duplex) Printing

You can print on both sides of the paper if your printer is capable of duplex printing (see *Double Sided Printing* under *Paper Size/ Type* in *Reference*).

See Also: Print, Document on Disk; Print, Document on Screen; Print Options; Printer, Select

Printing, Landscape

When printing documents in WordPerfect, you will probably want to print the text parallel to the short edge of the paper most of the time (i.e., "portrait" printing). Sometimes, however, you may have the need to print the text parallel to the long edge of the paper (i.e., "landscape" printing). For example, when you print envelopes, the name and address are printed parallel to the long edge of the paper.

Portrait printing has been aptly named to coincide with the shape and position of the canvas on most painted portraits. Landscape printing coincides with the shape and position of the canvas on painted landscapes.

- A PORTRAIT PRINTING
- B LANDSCAPE PRINTING

Fitness for the 80's

Alert: Retirement may be hazardous to your health. A recent study conducted by the Institute of Health and Wellness shows that older adults who engage in an exercise program during their 80's and 90's fair better in their 80's.

This is significant because more and more older adults are living to see their 85th and 86th birthdays. By 1995, 104 of all Americans will be octogenarians.

Also by that date, expenses for hospital care are expected to double. This is an important consideration since many insurance companies are limited in the amount of medical coverage they can extend to older adults.

According to Dr. Dan Marvon, the best way to prepare for the age of 80 is to exercise now. "It doesn't really matter what kind of exercise program older adults choose," he states, "just as long as they are active."

Bicycling

The key to sticking with an exercise program is finding one that is enjoyable. For older adults, this means developing a program that is not only fun, but also safe - to prevent an acute injury, the older adult should choose a low-impact activity. For many, the answer is to ride the bicycle.

One of the most accessible forms of exercise, bicycling can be done in all kinds of ways, and at any time of the day. A 20-minute 30-minute ride three times a week is a sufficient cardiovascular workout. This can either be done on a conventional or stationary bicycle.

A bike ride in the country can be very medicinal. It clears the mind, relaxes the body, and refreshes the soul. Many communities provide maps of bike trails and marked bike routes.

Swimming

Since the advent of aquatic aerobics, even the land-lover can swim. Water aerobics is one of the best forms of exercise for senior citizens. It is low impact and puts less strain on the heart than freestyle stroking.

Water aerobics can be learned quickly and easily. Most reports since its inception in 1970 reported drowning due to water breathers. This allows the head to remain above water so that breathing is not restricted.

The primary drawback to swimming is pool availability. Most spas offer swimming facilities, but spa memberships can sometimes run into the hundreds of dollars.

Walking

The cheapest and the most popular form of recreation among older adults is walking.

Walking requires no equipment. It can be done almost anywhere at any time. Done at a brisk pace, walking improves circulation and invigorates the heart.

Class Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00 a.m.						
8:00 a.m.						
9:00 a.m.						
10:00 a.m.						
11:00 a.m.						
12:00 p.m.						
1:00 p.m.						
2:00 p.m.						
3:00 p.m.						
4:00 p.m.						
5:00 p.m.						

There are two methods for printing in landscape—one is used if your printer can rotate its fonts, the other if your printer cannot. Both of these methods require you to define a landscape paper size and type. If you are unsure about your printer's ability to rotate fonts, consult your printer manual or dealer.

- 1 Press **Format** (Shift-F8), then select **Page** (2) to display the Format: Page menu.

 Select *Page* from the *Layout* menu.

- 2 Select Paper Size/Type (7) to display the Format: Paper Size/Type screen.

- 3 Select Add (2) to add a new paper definition.

or

Highlight the definition you want to change to landscape, then select **Edit** (5).

- 4 Depending on whether or not your printer can rotate fonts, follow the corresponding instructions for defining a landscape paper type under *Printer Can Rotate Fonts* and *Printer Cannot Rotate Fonts* below.
- 5 Choose Select (1) with the landscape paper type highlighted to insert a Paper Size/Type code into your document (see *Codes* below).
- 6 Press **Exit** (F7) to return to the normal editing screen.
- 7 Print the document in the normal fashion (see *Print, Document on Screen in Reference*).

Notes

Codes

When you follow the steps above for defining a landscape paper type, a [Paper Sz/Typ:size,type] code is inserted into your document at the cursor position. When you want to print a page in landscape, be sure this code is placed at the top of that page. (Any Paper Size/Type code should be placed at the top of the page you want affected.)

Displaying Landscape Fonts

Before you can display landscape fonts, you must select a Paper Size/Type with a landscape font type (**Shift-F8,2,7,1**). As long as the cursor is positioned after the Paper Size/Type code, only landscape fonts will be displayed on the Base Font menu. If the cursor is positioned before the Paper Size/Type code, then portrait fonts will be displayed.

Printer Can Rotate Fonts

If your printer *can* rotate fonts (e.g., many laser printers), you probably cannot change the way paper is inserted into the printer to print in landscape (i.e., the insertion edge stays constant). You can, however, change the font orientation.

To print in landscape in this case, select **Font Type** (3) from the Format: Edit Paper Definition menu (Shift-F8,2,7,5), then select **Landscape** (2). Next you

need to select **Paper Size** (1) from this same menu, then make sure you select a landscape paper size from the **Format: Paper Size** menu. All the landscape paper sizes have the long edge of the paper as the first dimension (e.g., 11" x 8.5").

If you select **Other** (o) to specify your own dimensions, enter the long edge of the paper as the width. See *Editing a Definition* under *Paper Size/Type* in *Reference* for details.

For example, if you want to print in landscape on an 8.5" x 11" paper using a laser printer, select **Font Type** (3), **Landscape** (2), **Paper Size** (1), then select **Standard Landscape** (2). Press **Exit** (F7) to return to the **Format: Paper Size/Type** screen. The **Paper Size** column will display "11" x 8.5"" for that paper type.

Important: *If you select **Landscape** as the **Font Type**, WordPerfect assumes the second dimension (height) is the edge of the paper being inserted into the printer.*

If you specify the long edge of the paper as the second size dimension when you have selected **Landscape** as the **Font Type** and you are not inserting the long edge of the paper into the printer, the printer might not respond the way you want.

Printer Cannot Rotate Fonts

If your printer *cannot* rotate fonts (e.g., most dot matrix and daisy wheel printers), the only way you can print in landscape is by inserting your paper into the printer lengthwise (i.e., changing the insertion edge). For an 8.5" x 11" page, you have to insert the 11" edge of the paper into the printer.

If your printer cannot rotate fonts and will not let you insert the paper lengthwise, you will not be able to print in landscape on a full sheet of paper.

To print in landscape if your printer cannot rotate fonts, leave your **Font Type** on the **Format: Edit Paper Definition** menu (Shift-F8,2,7,5) at **Portrait**, select **Paper Size** (1) from this same menu, then select a landscape paper size from the **Format: Paper Size** menu. If you select **Other** (o) to enter your own dimensions, specify the long edge as the width. Press **Exit** (F7) to return to the **Format: Paper Size/Type** screen, and the **Paper Size** column should read "11" x 8.5"" for that paper type. See *Editing a Definition* under *Paper Size/Type* in *Reference* for details.

Important: *If you select **Portrait** as the **Font Type**, WordPerfect automatically assumes the first size dimension (width) is the edge of the paper being inserted into the printer.*

See Also: Paper Size/Type; Printing—General Information

Printing, Stop

The Stop option on the Printer Control menu is designed to temporarily stop a print job because of a paper jam, ribbon problem, etc. Once the printer stops, you can correct the problem, then continue the print job by using the Go option on the Printer Control menu.

You cannot use the Stop option to stop a print job, then resume printing at the same place on the page (see Restarting the Printer below). However, you can take your printer off-line to accomplish this.

- 1 Press **Print** (Shift-F7) to display the Print menu.
 Select **Print** from the File menu.
- 2 Select **Control Printer** (4), select **Stop** (5), then type **y** to stop printing.
- 3 Make any necessary corrections, reset the forms in the printer (advance the paper to the top of the next page), then select **Go** (Start Printer) (4).
- 4 Reset the printer (press **Reset** on a laser printer or on any other printer, turn the printer off, then on again), select **Go** (4), then enter the page number on which you want the printing to restart (if requested).
- 5 Press **Exit** (F7) to exit the Printer Control screen.

Notes

Canceling a Print Job

If you want to start a print job from the beginning again and the job is on the screen or on disk, or if you just want to cancel the print job, select **Cancel Job(s)** from the Printer Control menu (Shift-F7,4,1). The **Cancel Job(s)** option stops WordPerfect from sending information to the printer, clears the print job from the job list, then advances the next sheet of paper to the top of the page when the printer's buffer is empty (see *Print Job, Cancel* in *Reference*).

You can also cancel a print job after you have stopped it by typing **c** from the Printer Control screen in step 3 above.

Restarting the Printer

When you select **Go** (Start Printer) (4) after using the **Stop** option on the Printer Control menu (Shift-F7,4), you will be asked to enter the page where you want printing to start. If the print job was still on the first page when you stopped it, printing is automatically restarted at the top of page 1.

See Also: Print Job, Cancel; Print Job, Display; Print Job, Rush; Printer Control

Printing to Disk

If you will be printing from a computer that does not have WordPerfect, or if you want someone who does not have WordPerfect to be able to print your WordPerfect document, the Print to Disk feature enables you to do this. This feature lets you output a file to your disk in a *printer* or *text* format. While the file is stored as a DOS file, it also contains all the characters and codes which ordinarily would have been sent to the printer you selected. The document can then be printed from DOS (see *Printing from DOS* below).

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Choose **Select Printer** (s), then move the cursor to the appropriate printer.

3 Select **Edit** (3) to display the list of settings for the selected printer.

4 Select **Port** (2), select **Other** (8), then enter a filename.

If you are running WordPerfect from a network, you may be asked if this is a network printer. Type **n** to specify No.

5 Press **Exit** (F7) twice to return to the Print menu.

6 Print the document as usual (see *Print, Document on Disk* and *Print, Document on Screen* in *Reference*).

Any prompting for form insertion, print wheel changes, etc., is disabled.

7 Change the port back to its original setting, if desired.

The document is sent to a file on disk rather than to a port on your computer. For example, entering A:LETTER as the filename in step 4 above creates a file named "LETTER" on the disk in drive A.

Notes

DOS File

Although the file you print to disk is saved as a DOS file, it is not the same thing as a DOS text file: For example, if you retrieve the file into WordPerfect, it will not look like a normal DOS text file. You can, however, print the file from DOS (see *Printing from DOS* below).

Filename

If you enter a filename without a path in step 4 above (e.g., LETTER), the file is saved in the default directory.

Printer Troubleshooting

You can also use the Print to Disk feature for troubleshooting purposes. For example, if your printer is not printing correctly, you can print the document to a file, then use a text editor to inspect the file and see exactly which characters are being sent to the printer.

Printing from DOS

When you use the Print to Disk feature to create a DOS file, and then print that file from DOS using the DOS Print or Copy command (see your DOS manual for instructions on printing), occasionally a problem occurs with the printing. The problem usually involves the print job ending prematurely, graphic images not printing properly, or *garbage* appearing in the printout. In these cases, you must use the Copy command with the */b* switch in place of the Print command. See your DOS manual for details on using the Copy command with the */b* switch.

Resetting the Port

The filename you entered for the port in step 4 above remains the destination port unless you changed it back in step 7. If you do not change that setting, the next document you print will be printed to disk, replacing the file indicated by the filename. Be sure to reset the port to where your printer is plugged into your computer when you want to resume printing to your printer (see *Printer, Edit in Reference*).

Soft Fonts

If you are printing to disk, soft fonts must be marked with a plus sign (+) in Cartridges/Fonts/Print Wheels (Shift-F7,s,3,4). If soft fonts are not marked with a plus sign (+) and you print a print-to-disk file to a printer that does not have the soft fonts selected in your document, you will not get the correct results (e.g., letter spacing will be off because that printer does not have the font). When soft fonts are marked with a plus sign (+), the print-to-disk file supplies all the information necessary to print the font even if the printer does not have that font in its memory.

See Also: Print, Document on Disk; Print, Document on Screen; Printer, Edit; Printing—General Information

Pull-Down Menus

WordPerfect has a *function key interface*, which means that you can select WordPerfect features with the F1 through F10 (and in some cases F11 and F12) keys on your keyboard.

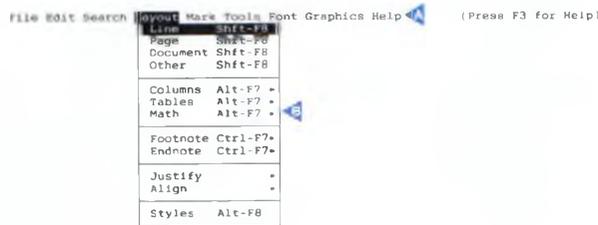
WordPerfect also has a *pull-down menu interface*. This means that you can select the same WordPerfect features with a series of menus that “pull-down” from the top row of the screen.

An example of one of the WordPerfect pull-down menus is shown below.

The keystroke commands listed next to the menu items are the keystrokes you can press to select the same item.

▲ PULL-DOWN MENU BAR

▲ PULL-DOWN MENUS



The pull-down menus can be accessed with both the mouse and the keyboard. A list of the items on the pull-down menu can be found in *Appendix M: Pull-Down Menus*.

To display the pull-down menu,

1 Press **Alt+=** to display the pull-down menu bar.

☞ Click the right mouse button.

2 Select a menu of your choice (see *Selecting Menus* below).

To back out of the pull-down menu one menu at a time without making a selection, press **Cancel** (F1), **Escape** (Esc), or the **Space Bar**. To exit all the way out of pull-down menus in one operation, press **Exit** (F7).

Selecting Menus

The procedure for selecting a pull-down menu from the pull-down menu bar differs depending on whether you are using the keyboard or a mouse. (You can use both the keyboard and the mouse in the same set of steps).

If you are using the keyboard, move the cursor to the menu of your choice with the Right or Left Arrow keys (←/→), and press **Enter**. Or, type the mnemonic letter associated with the menu.

From that point you can select an option on the displayed menu by moving the cursor to it with the Up and Down Arrow keys (↑/↓), then pressing **Enter**. Or, you can select the mnemonic letter for that option (see *Menu Options* in *Reference* for information on ways of displaying mnemonic letters).

Home.Left Arrow and Home.Right Arrow move you to the ends of the menu bar, while Home,Up Arrow and Home,Down Arrow move you to the top or

bottom of the pull-down menus. Page Up/Down and Screen Up/Down also move you to the ends of the menu bar and pull-down menus.

If you are using a mouse, move the mouse pointer to the menu name, then click the left mouse button to display the pull-down menu. From that point you can move the pointer to a menu item, then click the left mouse button to select it, or you can press and hold the left mouse button, drag the mouse pointer to an item, then release the left mouse button to select it.

If the mouse pointer is not on a pull-down menu item and you release the mouse button (either after a click or a drag), you are exited all the way out of the pull-down menus.

Information on using the mouse can be found in *Mouse Support in Reference*.

Notes

Alt Key

An option on the Menu Options feature (Shift-F1,2,4,4) determines whether the Alt key will display the pull-down menu bar. For more information, see *Menu Options in Reference*.

Brackets

If an item on the pull-down menu is displayed in brackets (e.g., [List Files]), it cannot be selected at that time. This happens when a feature that cannot be used with the bracketed feature is active.

A good example of this is Block. When Block is active, several features cannot be used, and they are displayed on pull-down menus with brackets. The cursor will skip over bracketed menu items.

Function Keys

If you press a function key while in the pull-down menus, you are exited from the menus, and the feature associated with the function key is accessed. For example, if you press **Center** (Shift-F6), the Center feature is turned on.

The function keys are listed next to each menu item.

Macros

When you define macros, you may select items from the pull-down menus. Regardless of the way you select the items, the selections are stored as keystrokes. This is helpful when you edit the macro in the Macro Editor (see *Macros, Define in Reference*).

Menu Bar Remains Visible

If you want the pull-down menu bar always displayed in the screens where it can be used, you may display it by setting the Menu Bar Remains Visible option on the Setup: Menu Options menu (Shift-F1,2,4) to Yes. If you do so, the only way you can “hide” the menu bar is by re-setting the same option to No.

For more information, see *Menu Options in Reference*.

Menu Options

An option on the Setup: Display menu called Menu Options lets you tailor the appearance of the pull-down menus. For example, it lets you display the menu bar and the menu text in the on-screen attribute of your choice. It also lets you select an on-screen attribute for mnemonic letters.

This can be most useful in helping you use and select items from WordPerfect menus. For more information, see *Menu Options in Reference*.

Pull-Down Menu Icon

In previous versions of WordPerfect, the feature key selection has been the main emphasis. In this manual and the *WordPerfect Workbook*, we have continued this tradition.

If you are using pull-down menus, however, we have tried to accommodate you in the instructional steps by including a pull-down menu note. This note, represented by the  icon, lets you know where the pull-down menu instructions differ from feature key instructions.

Submenus

Some items on pull-down menus display submenus. The items that do so are marked with a ► to the right of the item in the menu. When you highlight the item on the main menu, the submenu is displayed.

If you are using a mouse, the submenu delay time determines how long the cursor must be resting on a main menu item that has a submenu before the submenu is displayed. It also determines how long you have to move the mouse pointer to an item on the displayed submenu if you are dragging the mouse and are “short cutting” to the submenu through a main menu item. More information on the submenu delay time is found under *Mouse Setup in Reference*.

Once a submenu is displayed, selecting an item from a submenu is the same as selecting an item from the main menu (see *Selecting Menus* above). To cancel out of a submenu and return to the main menu without making a selection, press **Cancel** (F1), **Escape** (Esc), or the **Space Bar**.

If you want to exit all the way out of the pull-down menus, press **Exit** (F7).

See Also: Menu Options; Mouse Support

R Redline/Strikeout

Usually, Redline and Strikeout are used to mark text that might be added to (redline) or deleted from (strikeout) the original draft.

Since Redline and Strikeout are appearance attributes, they are both found on the Appearance Attributes menu. For the steps involved in adding these attributes to text, see *Attributes* in *Reference*.

Before printing the final draft of a document, you can have WordPerfect remove the redline markings and the strikeout text.

1 Press **Mark Text** (Alt-F5), then select **Generate** (6).

 Select **Generate** from the **Mark** menu.

2 Select **Remove Redline Markings and Strikeout Text from Document** (1), then type **y** to confirm the deletion.

This deletes each pair of Redline On and Off codes [REDLN][redln] in the document. It also deletes each pair of Strikeout On and Off codes [STKOUT][stkout] and any text found between them.

Once the process has been completed, the cursor is placed at the end of the document.

Notes

Document Compare

You can have WordPerfect use Redline and Strikeout in Document Compare to mark the phrases that have been added to or deleted from a document (see *Document Compare* in *Reference*).

On-Screen Appearance

The way redline and strikeout text is displayed in the normal editing screen depends upon your monitor and display card capabilities (see *Colors/Fonts/Attributes* in *Reference*).

Redline Appearance in Print

On the printed page, redline text is marked according to the redline string in the Printer Definition file and the capabilities of your printer. On most laser printers, it is printed on a shaded background. You can also have redline text marked by a vertical bar (|) in the left margin, or vertical bars which alternate between the left and right margins (see *Redline Method* under *Document Format* in *Reference*).

Strikeout Appearance

Normally, the strikeout character is a dash (–) which is printed across the middle of text.

See Also: Attributes; Colors/Fonts/Attributes; Font

Repeat Value

You can use Repeat Value to repeat characters or certain WordPerfect features a specific number of times.

To repeat a feature or character.

- 1 Press **Escape** (Esc) to display the current repetition number. You can also change the repetition number at this point (see *Repetition Number* below).
- 2 Press a key (see *Features* below).

Notes

Alternate Keystroke

You can also press **Escape** (Esc) to back out of menus and prompts in the same way you would use Cancel (F1) (see *Cancel in Reference*).

Features

You can use Repeat Value with the following keys, where # represents the repetition number:

Feature	Result
Characters	Repeats a non-numeric character # times
Delete (Del)	Deletes # characters to the right of the cursor (including spaces)
Delete EOL (Ctrl-End)	Deletes # lines from the cursor down
Delete EOP (Ctrl-PgDn)	Deletes # pages from the cursor down
Delete Word (Ctrl-Backspace)	Deletes # words to the right of cursor
Down Arrow (↓)	Moves cursor down # lines
Left Arrow (←)	Moves cursor to the left # characters
Macro	Repeats the macro # times
Page Up	Moves cursor back # pages
Page Down	Moves cursor forward # pages
Right Arrow (→)	Moves cursor to the right # characters
Space Bar	Inserts # spaces
Up Arrow (↑)	Moves cursor up # lines
Word Left (Ctrl-←)	Moves # words to the left of the cursor
Word Right (Ctrl-→)	Moves # words to the right of the cursor

On keyboards with an enhanced BIOS, you can also use Repeat Value with the following keys:

Feature	Result
Alt-Left Arrow	Moves # columns to the left
Alt-Right Arrow	Moves # columns to the right
Ctrl-Down Arrow	Moves # paragraphs down
Ctrl-Up Arrow	Moves # paragraphs up

Repetition Number

Normally, the repetition number which appears when you press **Escape** (Esc) is 8. To change that number for one repetition, press **Escape**, then type a new number before typing a character or pressing a feature. To change the repetition number for one editing session, press **Escape**, type a new number, then press **Enter**. The number you entered will stay in effect until you exit WordPerfect.

To change the preset number permanently, use the Initial Settings in Setup (Shift-F1,4,6) (see *Initial Settings* in *Reference*).

See Also: Cancel; Initial Settings; Macros

Replace

You may want to change a certain word or phrase which appears several times in a document. Suppose, for example, you have typed a letter to John Simpson, and you now want to send the same letter to Alice Jones. Or, perhaps you have typed a letter to Alice Jones only to discover that she spells her first name *Alyce*.

You can use Replace to search for and replace every occurrence of a word, phrase, or code.

However, keep in mind that using Replace can often make multiple changes to your document. Consequently, you may want to make a backup copy of the document before using Replace. Then, if you run into problems, you can exit the altered document without saving it and retrieve the backup copy.

To use Replace,

1 Press **Replace** (Alt-F2).

Select **Replace** from the Search menu.

You are asked if you want to confirm each replacement.

2 Type **y** to replace with confirmation, or type **n** to replace without it (see *Confirming Replacements* below).

At this point you have the option of changing the direction of the search.

- 3 Press **Down Arrow** (↓) to search forward from the cursor. (This is the default direction.)

or

Press **Up Arrow** (↑) to search backward from the cursor.

- 4 Type what you want to replace (commonly referred to as the *search string*), then press **Search** (F2).

- 5 Type the replacement, then press **Search**.

or

Press **Search** without entering a replacement to delete every occurrence of the search string (see *Codes* below).

Notes

Capitalization

In a search string, lowercase characters match both lowercase and uppercase. Uppercase match only uppercase. For example, *jim* will find *Jim*, but *Jim* will not find *jim*.

If you search for a lowercase word (e.g., dog) and replace it with a lowercase word (e.g., cat), WordPerfect preserves the case of the word found. However, if “dog” were capitalized because it was at the beginning of a sentence, it would be replaced by “Cat.”

Codes

When typing a search string (in step 4 above), you can include codes by pressing the function keys and also selecting options to actually select the feature you want. For example, to insert an underline code into a search string, press **Underline** (F8).

Remember, you must actually select the feature. For example, you could not search for an Underline code [UND] by typing an open bracket ([), then typing **UND** and typing a closed bracket (]) as the search string.

To search for a pair of codes, press the function key twice. For example, to search for [UND][und], press **Underline** (F8) twice.

The Replace feature is particularly valuable in helping you to find and delete troublesome codes. If you do not enter a replacement (in step 5 above), the code you search for is deleted (see also *Delete Codes* in *Reference*).

For example, to delete any unnecessary paired Bold codes (e.g., [BOLD][bold]) in a document, you could move the cursor to the beginning of the document, press **Replace** (Alt-F2), type **n** to not confirm, press **Bold** (F6) twice [BOLD][bold] as the search string, then press **Search** (F2) twice.

When typing a replacement (in step 5 above), you can only use certain codes. A list of the features you can use follows:

- Align
- Center
- Center Page
- Columns On/Off
- End Def
- Flush Right
- Font Appearance*
Size*
- Graphics Box Number
- Hard Page
- Hard Space
- Hard Hyphen
- Hyphen
- Hyphenation Cancel
- ♦Indent
- ♦Indent♦
- Invisible Soft Return
- Margin Release
- Math On/Off
- Math Operators
- Merge Codes
- Note Number
- Outline Off
- Soft Hyphen
- Tab Types
- Tab Align
- Widow/Orphan On/Off

*Replacing these features only works correctly if you use the Alt-R macro located on the MACROS keyboard.

Confirming Replacements

The Replace feature can be impressively fast and efficient. However, if you are not exactly certain of what you are replacing, you might wreak havoc in a document. As an example, you might want to replace the word *indent* by using Replace, but not *indention*, *indentation*, *indentured*, *indenter*, *indenturing*, etc., or any occurrences of *indent* followed by punctuation. If you do not enter spaces in a search string, the Replace will affect any occurrence of that word even when it is found in other words (see *Words* below).

When you want to be absolutely certain of each replacement, you can use Replace with Confirm by typing *y* in step 2 above. WordPerfect then stops at each occurrence of the search string and pauses, letting you indicate whether or not to replace it. It then moves on to the next replacement.

Editing Search Strings

When you type in a search string (in step 4 above), you can use the arrow and delete keys to move through and edit it just as you would edit text in the normal editing screen.

Search Keys

Once you are at a Search prompt, you can press ♦Search (F2), ♦Search (Shift-F2), or **Escape** (Esc) to continue the search (in steps 4 and 5 above). However, these keys have no effect on the direction of the search.

Variations

You can do a Replace on a block of text by blocking the text, then following the steps given at the beginning of this section (see *Block* in *Reference*).

Normally, Replace searches only the main text of a document. If you want Replace to include any text in headers, footers, footnotes, endnotes, graphics box captions, and text boxes, press **Home** before pressing **Replace** (Alt-F2). This is called an *Extended* Replace.

You can include a Ctrl-X in a Search string by pressing **Ctrl-v**, **Ctrl-x**. However, the Ctrl-X cannot be the first letter in the search string. Ctrl-X matches any character except a function code.

You can include a Soft Page code [SPg] in a Search string by pressing **Ctrl-v**, **Ctrl-k**. You can include a Soft Return code [SRt] in a search string by pressing **Ctrl-m**.

You can only search for Soft Page codes [SPg] which were originally Soft Return codes [SRt]. You cannot search for Soft Page codes which were originally Hard Return codes [HRt-SPg].

Words

When you are replacing a particular word, press the **Space Bar** to include spaces before and after the word. Otherwise, the Replace will affect any occurrences of that word even when it is found in other words. For example, insert spaces before and after the word *the* to replace *the* only when it appears alone, and not in such words as *these*, *therefore*, and *other*.

See Also: Block; Delete Codes; Search

Retrieve

The documents you create in WordPerfect are commonly called *files*. These files are stored on disks (e.g., a hard drive or floppy disks). When you want to edit a document, you need to *retrieve* a copy of the file from a disk, or in other words bring it to the screen.

If you know the name of a document and where it is located, you can use Retrieve (Shift-F10) to quickly retrieve it.

1 Press **Retrieve** (Shift-F10).

 Select **Retrieve** from the **File** menu.

You are asked for the name of the document.

2 Enter the filename of the document (see *Entering Filenames* below).

The document appears on the screen at the cursor.

The cursor is placed immediately after any of the codes which are found at the beginning of the new document. The document is now active in your computer's memory, and you can edit it. However, the changes you make will affect only the document on the screen. They will not be recorded on disk until you save them to a disk using Save (F10) or Exit (F7) (see *Save and Exit in Reference*).

Notes

Entering Filenames

If WordPerfect cannot find the filename you enter, it displays an "ERROR: File Not Found" message, then redisplay the filename. If you have typed the filename incorrectly, this gives you the chance to examine the name, edit it, and then enter it again. If you are unsure of the exact filename, you can use List (F5) to search your directory for the appropriate file.

When you use Retrieve (Shift-F10) to retrieve files, you can retrieve a document that is found in any directory. If you are already in the directory where the document is found, all you need to enter is the document name. However, if the document is found in some other directory, you also need to include the full pathname for the document.

For example, if you are in the WORK directory and you want to retrieve a document called STUDY.DOC found in that directory, then you need only enter **study.doc**. However, if you are in some other directory, you need to also include the full pathname, including the WORK directory (e.g., c:\work\study.doc).

You can determine what directory you are in by pressing **List Files** (F5). The name of your default directory then appears in the status line at the bottom left corner of the screen (e.g., Dir C:\WORK*.*)). You can then press **Cancel** (F1) to return to the normal editing screen.

You can enter a default directory for your documents in Location of Files in Setup (Shift-F1.6.7) (see *Location of Files in Reference*). If a directory name exists in this entry, your files will always be saved and retrieved from that directory unless you enter the full pathname of a different directory.

*If you want to retrieve a file from a diskette in an external drive, you must type the drive letter and a colon before entering the filename. For example, if you want to retrieve a file from a diskette in drive A, press **Retrieve** (Shift-F10) and enter **a:filename**.*

For more information on drives, directories, and pathnames, see *DOS and WordPerfect and Directories in Reference*.

Initial Codes

You can use Initial Codes in Setup (Shift-F1.4.5) to have certain formatting codes preset at the beginning of each document you create (see *Initial Settings in Reference*). Any document you retrieve to a clear screen retains the Initial Codes settings that were given to it at the time it was created. Any document you retrieve into an existing document takes on the Initial Code settings of the on-screen document.

List Files

You can also retrieve documents by using List Files (F5). This is especially helpful when you are not sure of the document name, but you do know the name of the directory where the document is found. Use List Files to alphabetically display on-screen the names of all the files in that directory (see *List Files* in *Reference*), then move the cursor to the filename and select **Retrieve** (1). The file is retrieved at the cursor.

You can also use List Files (F5) to locate a filename when you are using Retrieve (Shift-F10) (see step 1 above).

However, when you use List Files (F5), there is one caution. It's possible to forget you already have a document on-screen and accidentally retrieve another document into it. In order to help you avoid this problem, when you attempt to retrieve one document into another using List Files, WordPerfect always asks you if you are sure you want to do this. You can then type **y** to retrieve the document.

Locked Files

When you attempt to retrieve a locked document, you are asked for the password. Once you enter the correct password, the file is retrieved at the cursor (see *Locked Documents* in *Reference*).

Other WordPerfect Formats and Non-WordPerfect Files

WordPerfect 4.2 and 5.0 files are converted into 5.1 format as they are retrieved.

If you try to retrieve a file that is not in WordPerfect format, you may get an error message. WordPerfect will retrieve DOS text files and convert them for you; however, you may want to use Text In/Out (Ctrl-F5) to retrieve certain non-WordPerfect files (e.g., ASCII) (see *Text In/Out* in *Reference*). Use the WordPerfect Convert Program to convert files of other formats into WordPerfect files (see *Convert Program* in *Reference*).

When you use Retrieve (Shift-F10) to retrieve and convert a DOS text file, keep in mind that if you save that file using Save (F10) or Exit (F7) it will be saved in WordPerfect format. Consequently, you might want to save it under a different filename to avoid replacing the DOS text version of the file.

Retrieving a Second Document into the Current Document

You can combine documents by retrieving one document into another. Retrieve the first document using **List Files** (F5) or **Retrieve** (Shift-F10), position the cursor where you want to insert the second document, then retrieve the second document. If you retrieve the second document using List Files, type **y** in response to the "Retrieve into current document?" prompt. If you retrieve the second document using Retrieve, you are not prompted and the file is simply inserted at the current cursor position.

Retrieving Blocks

When you are blocking and moving text, you can place text in a temporary buffer. If text is in that temporary buffer when you press **Retrieve** (Shift-F10), you can press **Enter** to retrieve it at the cursor (see *Block in Reference*).

See Also: Exit; List Files; Locked Documents; Save; Text In/Out

Return, Soft and Hard

In WordPerfect, you do not need to divide the text you type into lines. WordPerfect does that for you. Each time you come to the end of a line, WordPerfect wraps the text to the next line and inserts a line divider.

The line dividers which WordPerfect inserts for you are called *soft returns* because their location is likely to change as you add and delete text. This lets you add a word, a phrase, or a sentence without having to reformat an entire paragraph.

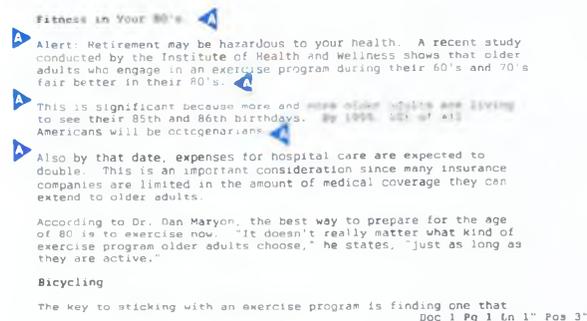
However, sometimes you do need to insert your own line dividers. For example, you will want to put a line break at the end of each paragraph you create so that all the paragraphs in your text will not run together. You can do this by inserting a *hard return*. A hard return always causes a line to end.

To insert a hard return at the cursor,

1 Press **Enter**.

A hard return ends the line on which the cursor is resting and moves the cursor to the next line. If there is no text in a line, a hard return is represented on-screen and in print by a blank line.

▲ HARD RETURNS



Notes

- A HARD RETURN
- B HARD RETURN CODE
- C SOFT RETURN
- D SOFT RETURN CODE

Codes

In the Reveal Codes (Alt-F3) part of the screen, a hard return is represented by a Hard Return code [HRt] and a soft return is represented by a Soft Return code [SRt].

```
Fitness for the 60's

Alert: Retirement may be hazardous to your health. A recent
study conducted by the Institute of Health and Wellness shows that
older adults who engage in an exercise program during their 60's
and 70's fair better in their 80's.
This is significant because more and more older adults are
living to see their 85th and 86th birthdays. By 1995, 10% of all
Americans will be octogenarians.
Also by that date, expenses for hospital care are expected to
double. This is an important consideration since many insurance

Doc 1 Pg 1 Ln 1" Pg 3"
[BOLD]Fitness for the 60's[BOLD][HRt]
[HRt]
[Tab]Alert: Retirement may be hazardous to your health. A recent[SRt]
study conducted by the Institute of Health and Wellness shows that[SRt]
older adults who engage in an exercise program during their 60's[SRt]
and 70's fair better in their 80's. [HRt]
[Tab]This is significant because more and more older adults are[SRt]
living to see their 85th and 86th birthdays. By 1995, 10% of all[SRt]
Americans will be octogenarians. [HRt]
[Tab]Also by that date, expenses for hospital care are expected to[SRt]
Press Reveal Codes to restore screen
```

Deletable Soft Return

A Deletable Soft Return [DSRt] code is inserted by WordPerfect when WordPerfect needs to break a line of text that extends from left margin to right margin without any breaks (such as a space). This often occurs when you have narrow margins, such as with tables or columns.

You cannot delete a [DSRt] code. It can only be deleted by WordPerfect if you edit the line of text so that WordPerfect has a place to break it (e.g., by inserting a space).

Deleting Hard and Soft Returns

You can delete a hard return in either the normal editing screen or in Reveal Codes (Alt-F3). Since the resulting change is evident, you are not asked to confirm the deletion.

It is not necessary to add or delete Soft Return codes. WordPerfect does this for you as you make changes to your text. Since a Soft Return code was originally a space, deleting a Soft Return code deletes the space and combines the words on either side of that space into one word. This usually causes WordPerfect to insert a new Soft Return code in a different place.

Dormant Hard Return

Just as the line dividers which WordPerfect inserts for you are called *soft returns*, the page dividers which WordPerfect inserts for you are called *soft page breaks* because their location is likely to change as you add and delete text in your document. In the Reveal Codes screen (Alt-F3), a soft page break is represented by a Soft Page code [SPg] (see *Page, Soft and Hard* in *Reference*).

Whenever a Hard Return code [HRt] appears alone on a line at the top of a page that is started by a soft page break, WordPerfect changes the Hard Return code into a Dormant Hard Return code [Dorm HRt] to ensure that an unwanted blank line is not inserted into your text at the top of a page. Should a Dormant Hard Return code be moved from the top of the page, WordPerfect then changes it back to a normal Hard Return code.

Hyphenation

You can also have WordPerfect divide the words that fall at the end of a line into syllables and insert the necessary hyphens for you (see *Hyphenation in Reference*).

Leading for Hard Returns

When you use single spacing, you can insert an extra hard return between each paragraph to separate the paragraphs in your document with a blank line.

At times you may want WordPerfect to single-space your paragraphs and yet insert two blank lines between each paragraph. If you do not want to insert extra hard returns, you can have WordPerfect insert the extra space by changing the leading values assigned to the Hard Return codes in your document.

Leading is the amount of white space which is added to the height of the characters in a line of text (see *Leading* under *Line Height* in *Reference*).

Normally, WordPerfect calculates leading for you. For Soft Return codes [SRt] and Hard Return codes [HRt], WordPerfect first calculates the height of the font. No extra leading is then added to the Hard and Soft Return codes in mono-spaced fonts. Two extra points of leading are added to the Hard and Soft Return codes in proportionally-spaced fonts.

See the Glossary for a definition of *mono-spaced fonts* and *proportionally-spaced fonts*.

You can change the amount of space allotted to the Soft Return codes [SRt] or Hard Return codes [HRt] in your document by changing the amount of leading which WordPerfect adds to them. This is determined by the leading adjustment entries for Soft and Hard Return codes on the Format: Printer Functions menu (Shift-F8,4,6,6) (see *Printer Functions in Reference*).

To get double spacing between single-spaced paragraphs, select **Leading Adjustment (6)** from the Format: Printer Functions menu. The cursor moves to the Primary [SRt] entry. Press **Enter** to accept the default setting and move the cursor to the Secondary [HRt] entry. Enter **1u** as the value for Hard Return codes [HRt].

Entering **1u** tells WordPerfect to add one line of space in the current unit of measurement. WordPerfect then calculates the exact measurement for that line of space and displays it on-screen in the Secondary [HRt] entry.

You can then press **Exit (F7)** to return to your document. A Leading code [Leading Adj:##,##] is inserted into your document where # is the leading being

added to Soft Return codes and ## is the leading being added to Hard Return codes.

From that point forward in single-spaced text, WordPerfect inserts the equivalent of two blank lines between all paragraphs that are separated by a Hard Return code. This extra blank space does not appear in the normal editing screen. You can see it by using View Document to preview the printed text (Shift-F7,6) or by printing the document.

Be aware that these settings will not change when you change fonts. Each time you use Base Font (Ctrl-F8,4) to change point sizes in your document, you will need to repeat the above process so that the measurement in the Secondary [HRt] entry will coincide with the new font.

To get one and one-half line spacing between paragraphs, enter **1/2 u** or **.5 u**. This tells WordPerfect to add one-half the current line height measurement to each line created by a Hard Return code [HRt]. This creates one and a half line spacing.

Also, if you want *triple* spacing between paragraphs that have *double-spaced* text, enter **1/2 u** in the Secondary [HRt] entry. This tells WordPerfect to add one-half the current line height to each line created by a Hard Return code [HRt]. Since each Hard Return code creates two blank lines, this creates triple spacing.

Line Spacing

WordPerfect lets you change the line spacing of text before or after you type it.

Normally, WordPerfect single spaces your documents. However, you can change to double or triple spacing. You can also space by any number of lines or any fraction of a line.

You change line spacing by changing the number of lines inserted into your text for each Soft Return code [SRt] and Hard Return code [HRt] in your document (see *Line Spacing* in *Reference*).

You can also change the spacing by changing the leading value used for Hard Return codes [HRt] in your document (see *Leading for Hard Returns* above).

See Also: Line Spacing

Reveal Codes

WordPerfect is a *clean screen* program. As closely as possible, it displays your text just as it will appear on the printed page.

Consequently, the codes which WordPerfect uses to determine the appearance of your text are not visible in the normal editing screen.

Yet the codes you insert are very important to your document. You insert a code almost every time you use a WordPerfect feature. For example, when you bold text, change margins, or change page numbering, a code is inserted into your text. These codes determine how your document will look when it is printed.

Since the placement of these codes is essential, you sometimes need to observe the exact location of certain codes.

- 1 Press **Reveal Codes** (Alt-F3) to display the codes in your text (see *Codes* below).

 Select *Reveal Codes* from the *Edit* menu.

- 2 Press **Reveal Codes** again to return to the normal editing screen.

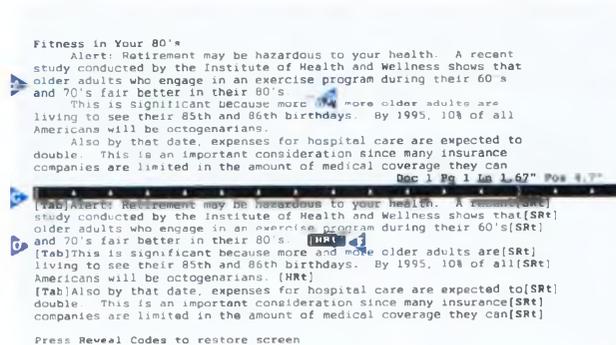
You do not need to exit Reveal Codes to use WordPerfect features or edit text in your document.

Notes

-  NORMAL TEXT
-  CURSOR IN NORMAL TEXT
-  TAB RULER
-  TEXT WITH CODES
-  CURSOR IN TEXT WITH CODES

Codes

Pressing **Reveal Codes** (Alt-F3) divides the screen into two parts. The top part is the normal editing screen. The lower part displays the same text, accompanied by the codes it contains. A tab ruler divides the two parts of the screen.



In the ruler line which splits the screen, a triangle (^) represents each tab. A left bracket ([]) represents the left margin; a right bracket (]) represents the right margin. If a margin falls on a tab stop setting, it is displayed as a left brace ({} or a right brace ({}).

If you are editing a table in the normal editing screen, the ruler line indicates where the table columns are found. The table columns are shown in braces (e.g., { }) unless they match a tab stop setting, in which case they are shown in brackets (e.g., []).

Normally, 11 lines appear above the ruler line, and 12 lines below. You can adjust this while in Reveal Codes by using Screen (Ctrl-F3,1,) (see *Window in Reference*).

You can also change the Reveal Codes window size permanently in Setup (Shift-F1,2,6,6) (see *Edit-Screen Options in Reference*). If you use a 1 line Reveal Codes screen, you will be prompted for confirmation when you delete codes.

The cursor appears at the same location in both parts of the screen. In the normal editing screen it is usually displayed as a dash. In the Reveal Codes part of the screen, the cursor is displayed in the same way you have chosen to display blocked text. This selection is made on the Attributes menu in Colors/Fonts/Attributes in Setup (Shift-F1,2,1,1) (see *Colors/Fonts/Attributes in Reference*). Normally, the cursor is displayed in the Reveal Codes part of the screen as a horizontal rectangle which highlights in reverse video any character on which it is resting.

You can use the cursor keys or the mouse to move through text in the normal editing screen. Moving the cursor changes its position in both parts of the screen.

As you move through text, WordPerfect attempts to keep about five lines of text below the cursor in the Reveal Codes part of the screen at all times. Consequently, the larger the Reveal Codes part of the screen is, the more lines that can remain above the cursor.

Although WordPerfect attempts to display the same text in both parts of the screen, the text in the Reveal Codes window has to include codes and consequently it takes up more space. Therefore, it does not always exactly match the text displayed in the normal editing screen.

Editing in Reveal Codes

When in Reveal Codes, you can use all WordPerfect features and edit text just as you normally do in the normal editing screen. However, when you delete codes, you are not asked to confirm the deletion.

If you are having trouble highlighting a particular code with the Up and Down Arrow keys, you may need to use the Left or Right Arrow key.

Status line messages and prompts continue to appear on the bottom line of the normal editing part of the screen. The screen remains split even when you switch screens or use full-screen menus. The only way to return to the normal editing screen is by pressing **Reveal Codes** (Alt-F3). Reveal Codes is also turned off when you exit WordPerfect.

For a list of all the codes used in WordPerfect and the function of each code, see *Appendix C: Codes*.

See Also: Delete Codes

Rewrite

As you move the cursor through text in your document, WordPerfect rewrites the text from the cursor to the end of the document.

When you need to be certain that the text in a document is correctly formatted, use Rewrite to completely reformat the text on your screen at any time, without moving the cursor. Should the text on your screen become jumbled for any reason, you can quickly use Rewrite to correct the problem.

Rewrite is particularly useful when you are editing graphics images. Each time you edit an existing graphics image (e.g., change the horizontal or vertical position of a graphics box), you will want to rewrite your screen when you return to the normal editing screen (see *Graphics, Define a Box* in *Reference*).

To rewrite the screen,

- 1 Press **Screen** (Ctrl-F3), then select **Rewrite** (3) or press **Enter**.

Notes

Automatic Formatting

At times you may not want to wait for the text in a document to be continually reformatted. To turn off this feature, press **Setup** (Shift-F1), select **Display** (2), select **Edit-Screen Options** (6), select **Automatically Format and Rewrite** (1), type **n**, then press **Exit** (F7) to return to your document.

When Automatic Formatting is off, text is not rewritten until you use a cursor key to scroll through it. Also, the screen is only rewritten one line at a time when you rewrite the screen.

See Also: Graphics, Define a Box; Screen

S Save

While creating or editing a document, any changes you make are only stored temporarily in your computer's active memory. Should a power failure occur, or should your computer crash, the work you have done would be lost.

A document is not stored permanently until you save it to a disk. Consequently, it is a good idea to save the document you are working on from time to time.

You can save a document without losing your place on the screen and then continue creating or editing it.

To save a document you are creating,

1 Press **Save** (F10). You are then asked to name the document.

 Select *Save* from the *File* menu.

2 Enter a filename (see *Entering Filenames* below).

Notes

Backup Files

You can also protect your work against loss by using the Backup features. Original Backup protects you from accidentally replacing an existing file with a newer version. Timed Backup saves your document at timed intervals. For more information, see *Backup, Original* and *Backup, Timed* in *Reference*.

DOS Text Files and Password Locking

To save your document in DOS text format and to password lock files, use Text In/Out (Ctrl-F5) (see *Text In/Out* and *Locked Documents* in *Reference*).

Entering Filenames

A filename can include up to 8 characters followed by an optional period and up to 3 more characters (see *Extensions* below).

Unless you enter a full pathname, a file is saved in your default directory. You can determine what your default directory is by pressing **List** (F5). Its name then appears on the status line at the bottom left corner of the screen (e.g., Dir C:\WORK*.*). You can then press **Cancel** (F1) to return to the normal editing screen (see *Default Directory* under *Directories* in *Reference*).

*If you want to save a file to a diskette in an external drive, you must type the drive letter and a colon before entering the filename. For example, if you want to save a file to a diskette in drive A, press **Save** (F10) and enter **a:filename**.*

You can also use longer filenames. If you are using the Long Document Name feature, you must enter a long document name and a document type before entering the DOS filename (see *Environment Setup* in *Reference*).

Once you have saved a document, the current document name appears at the save prompt whenever you save it again (see *Saving an Existing File* below).

Extensions

When adding extensions to filenames, you should not use the extensions that have a special meaning to WordPerfect or to DOS, which include .ALL, .AUX, .BAT, .CHM, .COM, .CON, .CRS, .DRS, .EXE, .FIL, .FRS, .IRS, .PRS, .SET, .TUT, .WPK, .WPM, .VRS.

Fast Save

In WordPerfect you can save unformatted files or have files formatted before they are saved (see *Fast Save in Reference*).

Initial Settings

Any initial codes you have placed in Initial Settings in Setup (Shift-F1,4,5) or Document Format (Shift-F8,3,2) are saved with your document (see *Initial Codes in Reference*).

Saving an Existing File

WordPerfect is designed with safeguards to protect you from replacing an existing file accidentally.

When you press **Save** (F10) to save a newer version of a file that already exists, WordPerfect displays the existing filename. You can press **Enter** if you want to replace the existing file, or you can enter a new filename. If you press **Enter**, WordPerfect asks you to confirm the replacement.

Type **y** to replace the existing file on disk with the document on your screen. If you press **n** (or any other key), you are prompted for a new filename. You can enter a different filename in order to keep both copies of your document.

When an existing filename is displayed, typing a character key erases the existing filename, and you have to start over. However, before you press a character key, you can use Left Arrow (←) and Right Arrow (→) to move through the existing filename and edit it. Use Backspace, Delete (Del), or Delete to End of Line (Ctrl-End) to delete existing characters.

Saving With Exit

When you are ready to exit a file, you can save your file as you leave by using Exit (F7) (see *Exit in Reference*).

See Also: Exit; Fast Save; Text In/Out

Screen

Screen (Ctrl-F3) lets you rewrite the screen, create windows, and use Line Draw.

Notes

Line Draw

Selecting Line Draw (2) from the Screen menu accesses the Line Draw feature. You can use it to create lines, boxes, and borders (see *Line Draw* in *Reference*).

Rewrite

Selecting Rewrite (3) rewrites the screen (see *Rewrite* in *Reference*).

Window

Selecting Window (1) lets you divide your screen into two parts so you can see and edit two documents at once. You can also use Window to adjust the number of lines contained in the normal editing screen in Reveal Codes (Alt-F3) (see *Window* in *Reference*).

See Also: Line Draw; Rewrite; Window

Screen Capture Program

The Screen Capture Program is used to copy an image displayed on the screen. The image is saved in a file which can then be used with the Graphics feature of WordPerfect.

The Screen Capture Program only works in graphics programs and the graphics screens of WordPerfect, such as the Graphics Editor, the Equation Editor, and the View Document screen. It does not work in text mode.

Important: *The Screen Capture Program file (GRAB.COM) needs to be installed properly, and then loaded into memory before it can be used. If you chose not to install the utility programs when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Screen Capture Program (see the Installation Instructions card).*

To load the Screen Capture Program into memory,

- 1 Exit any programs that are currently running (including WordPerfect, and the optional WordPerfect Shell) and go to DOS.
- 2 From the DOS prompt, change to the directory where GRAB.COM is located by entering **cd***directory name*.

The Installation Program copies this file to the directory where WordPerfect (WP.EXE) is located (usually C:\WP51) if you are using a hard disk, or to the diskette you labeled "Utilities" if you are using a two disk drive system.

- 3 Enter **grab** to load the Screen Capture Program into resident memory.

To capture an image.

1 Using a graphics program, display the image you want to capture on the screen.

2 Press **Alt-Shift-F9**.

A two-toned chime indicates that the Screen Capture Program is ready to capture the image. After the chime, a box is displayed on the screen.

3 Use the arrow keys to reposition the box, use Shift-arrow keys to resize the box.

Use the **Insert** key (*Ins*) to switch between fine and coarse increments when you are moving and sizing the box.

4 Press **Enter** to capture the contents in the box.

The Screen Capture Program copies the contents in display memory to a file. When copying is complete, the two-tone chime sounds again.

Notes

Batch File

If you frequently use the Screen Capture Program to capture images, you may wish to put the *pathname\grab* command (e.g., *c:\wp51\grab*) in your AUTOEXEC.BAT file so that GRAB.COM is always in memory (see *DOS and WordPerfect in Reference*). You can also use any of the startup options in the command (see *Startup Options* below).

Canceling Screen Capture

If you decide not to capture the screen after the box is displayed, press **Escape** (Esc). You can press **Cancel** (F1) at any time to cancel the capture.

Clipboard

If you own WordPerfect Shell, you can use the Screen Capture Program to save images to the Shell Clipboard. To save an image to the clipboard, press **Alt-Shift- -** (Alt-Shift-Minus) instead of **Alt-Shift-F9** in step 2 above. You can retrieve the image from the Clipboard into a graphics box in WordPerfect (see *Graphics, Define a Box in Reference*).

Graphics Modes Supported by GRAB.COM

GRAB.COM supports all graphics modes in the STANDARD.VRS file, as well as the IBM 8514/A, as shown below:

Graphics Cards/Monitors	Graphics Modes
AT&T 6300	640x400 Monochrome
Compaq Portable	640x400 Monochrome
VGA	320x200 256 Color 640x480 16 Color 640x480 Monochrome

Graphics Cards/Monitors

EGA

Hercules

IBM 8514/A

CGA

MCGA

Graphics Modes

640x200 16 Color
640x350 4 Color (64K)
640x350 16 Color
640x480 16 Color
640x350 Monochrome

720x348 Monochrome

1024x768 256 Color (with /8 startup switch)

640x200 Monochrome

320x200 256 Color

Help

You can enter **grab/h** at the DOS prompt (you may need to specify the path, e.g., **c:\wp51\grab/h**) for information regarding the Screen Capture Program. When you are done reading the information, press any key to exit. Running **grab/h** does not load the program. If you want to use the Screen Capture Program to capture images, you must load it into memory (see instructions above).

If You Hear a Buzz

A low-pitched buzz after pressing **Alt-Shift-F9** indicates that you are not in graphics mode or you have a video adapter that is not supported by the Screen Capture Program. It could also mean that your graphics program or some other TSR (Terminate and Stay Resident) program in memory is incompatible with the Screen Capture Program.

Try removing from memory all programs except the Screen Capture Program and the program generating the image you are capturing. If you still get the buzz, it may be a software incompatibility.

To check whether a hardware incompatibility is causing the problem, try to capture the View Document screen in WordPerfect with only GRAB.COM and WordPerfect in memory. If you get the buzz, it is probably a hardware problem.

Image Filenames

The first file that is captured is named GRAB.WPG. If GRAB.WPG exists, the file is named GRAB1.WPG. If GRAB1.WPG exists, the file is named GRAB2.WPG, and so on. The Screen Capture Program can name files up to GRAB9999.WPG. You can use the */f=fileroor* startup option to save the files under a different name (see *Startup Options* below).

The files are stored in the default directory. You can use the */d* startup option (see *Startup Options* below) to redirect the files to another directory.

Only the directory where the files are to be saved is checked to see whether a file by the same name already exists.

Loading GRAB.COM

You must load the Screen Capture Program before you start WordPerfect or any other program. You cannot use the Go to DOS feature to load the Screen Capture Program.

GRAB.COM needs to be loaded each time you start your machine. If you try to load GRAB.COM after it has already been loaded, a message telling you that the Screen Capture Program has already been loaded will be displayed.

The Screen Capture Program may conflict with some TSR (Terminate and Stay Resident) programs.

Microsoft Windows

The Screen Capture Program cannot be loaded while Microsoft Windows is running resident. You can capture images with the Screen Capture Program from Windows, as long as GRAB.COM is loaded first.

Startup Options

The following startup options may be used when installing the GRAB.COM file:

/cn

Use this option when loading the Screen Capture Program with Sidekick and some other TSR (Terminate and Stay Resident) programs. This option prevents the computer from locking up by controlling the number of attempts the Screen Capture Program makes to get the keyboard interrupt back from the other program. *n* is the number (from 0 to 5) of tries the Screen Capture Program will make.

To load the Screen Capture Program with Sidekick, enter **grab/c0**, then load Sidekick. This option also allows the non-numeric arrow keys on an enhanced keyboard to scale the image box.

/d=pathstring

Pathstring is a pathname (up to 80 characters) used to indicate where you want to store the captured files. For example, you would enter **grab/d=c:\wp51\grab** to store the files in the C:\WP51\GRAB directory.

/f=fileroot

Fileroot is the root of the filename (up to 4 characters) for captured files. This name is used in place of "GRAB" in the filenames of the image files.

/i

This option causes the Screen Capture Program to ignore the DOS-busy flag, allowing it to run under some applications.

/k

This option retains the image box from the previous **grab**. Use this command when you want to capture the same area on several different screens.

/m

This option is used to generate monochrome bitmap files. It is useful when capturing color bitmapped images that will be used on monochrome systems.

p=2

This option allows the Screen Capture Program to capture page 2 when using a Hercules Graphics Adapter.

/s

This option makes the Space Bar toggle between moving and sizing the box when arrow keys are pressed. This option is useful for some programs when the Shift-arrow keys do not work.

/8

This option should be used if you have an 8514A graphics card.

Two Disk Drives

To run GRAB.COM on a two disk drive system, exit all programs, insert the diskette you labeled "Utilities" and enter **grab** at the A> DOS prompt.

See Also: Graphics, Conversion Program; Graphics, Define a Box; Graphics, Formats and Programs

Search

When editing a document you may sometimes need to move to a certain passage, yet you might not remember exactly where it is found.

You can use Search to quickly move to a word, phrase, or code in your text.

1 Press a Search keystroke (see *Search Directions* below).

 Select **Forward** or **Backward** from the Search menu.

2 Type the characters and/or codes you want to find (commonly referred to as the search string).

3 Press the Search keystroke to begin the search (see *Codes* and *Editing Search Strings* below).

 Click the right mouse button to continue the search

4 After the cursor stops at the first match, press the Search keystroke twice to continue the search.

 Select **Next** or **Previous** from the Search menu.

For example, with the cursor at the beginning of a document in which you mention Mr. Claussen, you can press **♦Search** (F2), type **claussen**, then press **♦Search** again to move the cursor to the first occurrence of Mr. Claussen's name.

You can then continue pressing **◆Search** twice to move forward through the document to every occurrence of Mr. Claussen's name until you find the exact reference you want.

Notes

Capitalization

In a search string, lowercase characters match both lowercase and uppercase. Uppercase characters match only uppercase. For example, *jim* will find *Jim*, but *Jim* will not find *jim*.

Codes

When typing a search string (in step 2 above), include codes by pressing the function keys and also selecting options to actually select the feature you want. For example, to insert an Underline code into a search string, press **Underline** (F8).

Remember, you must actually select the feature. For example, you could not search for an Underline code [UND] by typing an open bracket ([), then typing UND and typing a closed bracket (]) as the search string.

To search for a pair of codes, press the function key twice. For example, to search for [UND][und], press **Underline** (F8) twice.

To search for the second code in a set of paired codes, you need to first insert both codes in the pair into the search string and then delete the first code. For example, to search for the Bold Off code [bold], press **◆Search** (F2), press **Bold** (F6) twice to insert a pair of bold codes (i.e., [BOLD][bold]) into the search string, press **Left Arrow** (←) to move to the immediate right of the Bold On code [BOLD], press **Backspace** to delete it, then press **◆Search** to begin the search.

For a complete list of WordPerfect codes, see *Appendix C: Codes*.

Editing Search Strings

When you type a search string (in step 2 above), you can use the arrow and delete keys to move through and edit it just as you would edit text in the normal editing screen.

Search Directions

To search from the cursor forward, press **◆Search** (F2). To search from the cursor backward, press **◆Search** (Shift-F2). While a Search prompt is displayed on the status line, you can change the search direction by pressing **Up Arrow** (↑) or **Down Arrow** (↓).

Once you have typed a search string, you can press **◆Search** (F2), **◆Search** (Shift-F2), or **Escape** (Esc) to perform the search. You can also begin the search by double clicking the left mouse button.

Variations

When block is on (see *Block in Reference*), you can use Search to expand or contract the block to include the next occurrence of the search string. For example, with block on in a document in which you mention Mr. Claussen, you can press **◆Search** (F2), type **claussen**, then press **◆Search** again to extend the block to include the next occurrence of Mr. Claussen's name. In the same way, you can also use **◆Search** (Shift-F2) to contract the block back to the last occurrence of Mr. Claussen's name.

Normally, Search searches only the main text of a document. A Search that includes any text in headers, footers, footnotes, endnotes, graphics box captions, and text boxes is called an *Extended Search*. To perform an extended search, press **Home** before beginning the Search. The word *extended* is then displayed within the search prompt, (e.g., "-> Extended Search:").

When you type in a search string, you can use a Ctrl-X to represent any single character. To include a Ctrl-X (^X) in a Search string, press **Ctrl-v, Ctrl-x**. If you use Ctrl-X be aware that Ctrl-X does not represent function codes and it cannot be the first letter in the search string. For example, the search string **s^Xe** finds any words which contain "s" and "e" separated by any other single letter (e.g., *cluster. speller. stellar. step. systems*).

To include a Soft Return code [SRt] in a search string, press **Ctrl-m**.

You can include a Soft Page code [SPg] in a search string by pressing **Ctrl-v, Ctrl-k**. However, WordPerfect finds only those Soft Page codes which were originally Soft Return codes [SRt]. You cannot search for Soft Page codes which were originally Hard Return codes [HRt-SPg]. Instead, search for the Hard Return code and it will find the Hard Return code [HRt-SPg] that caused that soft page.

Words

When you are searching for a particular word that is surrounded by two spaces, press the **Space Bar** to include spaces before and after the word. Otherwise, the Search will include any occurrences of that word even when it is found in other words. For example, insert spaces before and after the word *the* to find *the* only when it appears alone, and not in such words as *these*, *therefore*, and *other*.

See Also: Block, Define; Replace

Setup

WordPerfect comes with settings for most of its features preset. After you install WordPerfect, you can start typing and creating documents.

The default (or initial) settings are set so that they will accommodate a variety of users in a variety of situations. You can tailor these settings to your own needs.

The Setup key is the gateway to creating your own default settings. While this section does not go into specifics about the features associated with the Setup key, it does give you some idea of what you will find there.

Settings made with features on the Setup key are stored in a file called WP{WP}.SET and are in effect each time you start WordPerfect. Some of these settings can be temporarily overridden with other features in WordPerfect.

To change settings,

1 Press **Setup** (Shift-F1).

 Select Setup from the *File* menu.

2 Select the option of your choice. The option headings are listed under *Notes* below. More specific information about those options and the items on their menus is found in specific locations in *Reference*.

Notes

Display Menu

This menu lets you make default settings for the way menus, screens, and text are displayed on the monitor in WordPerfect. Its options include:

- Colors/Fonts/Attributes
- Edit-Screen Options
- Graphics Screen Type
- Menu Options
- Text Screen Type
- View Document Options

More information about the Display menu itself can be found in *Display Setup* in *Reference*. Check the *Index* for more information about the options.

Environment Menu

This menu lets you make default settings for several WordPerfect features. Its options include:

- Alternate Keyboard
- Backup Options
- Beep Options
- Cursor Speed
- Document Management/Summary
- Fast Save
- Hyphenation (Dictionary)
- Prompt for Hyphenation
- Units of Measure

More information on the Environment menu itself can be found in *Environment Setup* in *Reference*. Check the *Index* for more information about the options.

Initial Settings Menu

This menu lets you make default settings for several WordPerfect features as well as for documents you create. Its options include:

- Date Format
- Equation (Options)
- Format Retrieved Documents for Default Printer
- Initial Codes
- Merge (Options)
- Print Options
- Repeat Value
- Table of Authorities (Options)

More information on the Initial Settings menu itself can be found in *Initial Settings* in *Reference*. Check the *Index* for more information about the options.

Keyboard Layout Menu

This menu lets you *map* your keyboard. This means you can assign WordPerfect features, WordPerfect characters, and WordPerfect macros to almost any key on the keyboard. For more information about this menu, see *Keyboard Layout* in *Reference*.

Location of Files Menu

This menu helps you organize your files. With it, you can specify directories for the following files:

- Backup Files
- Document Files
- Graphic Files
- Keyboard/Macro Files
- Printer Files
- Spreadsheet Files
- Style Files (and Style Library Filename)
- Thesaurus/Spell/Hyphenation Files (Main and Supplementary)

More information about the Location of Files menu itself can be found in *Location of Files* in *Reference*. Check the *Index* for information about the files represented on this menu.

Mouse Menu

This menu lets you set default settings for the way your mouse will work in WordPerfect. Its options include:

- Acceleration Factor
- Double-Click Interval
- Left-Handed Mouse
- Port
- Type
- Submenu Delay Time

More information about the Mouse menu itself can be found in *Mouse Setup* in *Reference*. Check the *Index* for information about the options.

See Also: Display Setup; Environment Setup; Initial Settings; Keyboard Layout; Location of Files; Mouse Setup

Sheet Feeder

A sheet feeder contains one or more paper bins and feeds paper from those bins to the printer one sheet at a time.

If you have a laser printer with a single paper bin, this bin is not considered a sheet feeder.

If you use a sheet feeder with your printer, you must select the feeder on the Select Printer: Edit menu.

1 Press **Print** (Shift-F7) to display the Print menu.

 Select **Print** from the **File** menu.

2 Choose **Select Printer (s)**, move the cursor to the printer whose sheet feeder you want to select, then select **Edit (3)**.

3 Select **Sheet Feeder (3)**, move the cursor to the name of the sheet feeder you are using, then choose **Select (1)**.

If you receive a "Printer files not found" message, WordPerfect cannot find the .ALL file that was used to define your printer. You need to specify the directory where the .ALL file was copied during Installation (see the Installation Instructions card).

A **Helps and Hints** screen appears after the sheet feeder is selected. Press **Exit (F7)** after reading the information to exit the screen.

4 Press **Exit (F7)** until you return to the normal editing screen.

Notes

Bin Number

Once you select a sheet feeder, you need to indicate which bin number you will be using. (This information is found on the Sheet Feeder **Helps and Hints** screen displayed after you selected a sheet feeder in step 3 above.) You specify the bin number when you create a paper definition (see *Editing a Definition* under *Paper Size/Type* in *Reference*).

Deselecting a Sheet Feeder

If you decide you do not want to have a sheet feeder selected, select **None (2)** from the **Select Printer: Sheet Feeder** menu.

Helps and Hints

You can display the **Helps and Hints** screen for any sheet feeder without selecting that sheet feeder. Move the cursor to the sheet feeder and select **Help (3)** from the **Select Printer: Sheet Feeder** menu.

.PRS File

The sheet feeder definition is copied from the .ALL file to the **Printer Resource (.PRS)** file. (See *.ALL and .PRS Files* under *Printing—General Information* in *Reference* for an explanation of the .PRS file.)

Selecting a Printer

In addition to using the above steps to select a sheet feeder, you can also select one when you select a printer (see *Printer, Select in Reference*).

See Also: Paper Size/Type; Printer, Select

Sort

Sort lets you select and sort (alphabetize) lines, paragraphs, secondary merge records, or rows in a table (Table feature) from within WordPerfect documents or files. You can sort the contents of entire documents or use the Block feature to sort portions of a document.

The document or block you want to sort is referred to as the *input* file. It can be on your screen or in a file on disk. After the document (or block) is sorted, it is referred to as the *output* file. The output file can either replace the document (or block) on-screen, or it can be sent to a file on disk.

The input file (unsorted) and output file (sorted) can be different files (if you use different names for each). This lets you sort a file without replacing the original, unsorted file. If you use the same name for the input and output file, you will be asked if you want to replace the existing input file. If you answer Yes, the output file will *replace* the input file.

The following steps explain how to sort an entire document. If you want to sort a block of information or rows in a table, see *Block Sort* or *Table Sort* below. You should always save your document before sorting.

1 Press **Merge/Sort** (Ctrl-F9), then select **Sort (2)**.

 *Select Sort from the Tools menu.*

2 Press **Enter** to sort the document on your screen.

or

Enter the name of the file on disk that you want to sort.

3 Press **Enter** to replace the document on your screen (input) with the sorted document (output).

or

Enter the name of the output file (the file where you want the sorted information saved).

If you use the same name in both steps 2 and 3, you will be asked if you want to replace the existing input file with the sorted output file. Type **y** to replace the file or **n** to enter a new output filename.

- 4 When the Sort menu appears at the bottom of the screen, enter the keys and other criteria you want to use for sorting the document (see *Sort Menu* and *Records and Fields* below).
- 5 Select **Perform Action (1)** to begin sorting.

It is possible to use a file on disk as the input file and the screen as the output file. If you do so, the input file will be sorted and then inserted into the document on screen at the cursor position.

The default setting for the Sort menu is to sort lines, alphabetically sorting each line by the first word in the line. Using the Sort menu options (see *Sort Menu* below), you can change sorting criteria such as the type of sort (merge file, paragraph) the sort order (ascending, descending) and others. Any changes you make to the sort criteria are saved for the next sort until you exit WordPerfect then start it again.

Codes on a line will sort with the line. Therefore it is a good idea to place codes at the top of the document or in Document: Initial Codes.

Notes

Block Sort

To sort a section of a document, block the text you want to sort (Alt-F4), then press **Merge/Sort** (Ctrl-F9). When sorting a block of text, you are not asked for input or output files but are taken directly to the Sort menu. When you select **Perform Action (1)**, the block is sorted on the screen and the sorted block replaces the original block.

If you have a Language code in your document, and you want it to affect the sorting of a block of text, the Language code should be *before* the block in the document (see *Language* in *Reference*).

Languages

Some languages include characters not available in the English alphabet. WordPerfect can identify these characters for sorting purposes only if you use the Language feature to specify the language you are sorting (see *Language* in *Reference*). To specify a language, you usually insert a Language code into your document (Shift-F8,4,4). For the Language code to affect sorting, it must be inserted into the Initial Codes screen (Shift-F1,4,5). See *Initial Codes* in *Reference* for details.

The only exception to this rule is if you are sorting a block. Then the Language code can be inserted anywhere in the document *before* the selected block of text.

Records and Fields

Records are the units that are sorted in a file. In a line sort, each line is a record and can end with a hard or soft return. In a paragraph sort, each paragraph is a record and must end with two or more hard returns [HRt]. In a merge file sort, records are separated by {END RECORD} (see *Merge* in *Reference*). And in a table sort, each row is a record.

Each record is divided into parts that you can use to specify key words by which the record may be sorted. These parts include fields, lines, and words.

Fields

Secondary merge records (merge sort), lines (line and paragraph sort), and rows in a table can be divided into fields. For example, you could have a group of addresses. Each address is a record which can be divided into fields of information. The city may be a field and the ZIP Code may be another.

Corresponding fields from each record should contain the same type of information. For example, if field 1 of the first record contains a ZIP Code, then field 1 of every record in that file should contain a ZIP Code.

You can have as many fields as you like within a record. Each field is numbered consecutively: field 1, field 2, field 3, etc. Using our address example, field 1 might be the street address, field 2 the city, field 3 the state, and field 4 the ZIP Code.

Fields are separated by tabs or indents in lines or paragraphs and by {END FIELD} in secondary merge files. In a table, each cell is a field. When you specify keys, you will need to enter a cell number. Cells are numbered from left to right, starting with cell 1.

Text at the left margin is considered field one. A single Tab or Indent code before any text will cause the field number for that text to be increased by one.

If you are sorting lines or paragraphs, be sure to insert only one tab or indent between each field. Two tabs or indents next to each other (with nothing between them) will be interpreted as a blank field. Inconsistent use of tabs and indents between fields will lead to inconsistent results.

Be aware that Flush Right, Center, Margin Release, and Dec Tab also act as field delimiters within a sort.

Lines

Lines are used in merge, paragraph, and table sorting and can end with hard or soft returns. In line sorting, each line is considered a record.

Lines are usually counted from the top of the record to the bottom but, when sorting merge records or rows in a table, can be counted from bottom to top by using negative numbers. However, when you are sorting paragraphs, you cannot use negative numbers to indicate line numbers (see *Sort, Keys in Reference*).

Words

Words are separated by spaces, forward slashes (/), and Hard Hyphens (Home,-) within a line or field. Words are usually counted from left to right but can be counted from right to left by using negative numbers to specify a key (see *Sort, Keys in Reference*).

Sort Delimiters

The following table lists the delimiters and record definitions for each sort type:

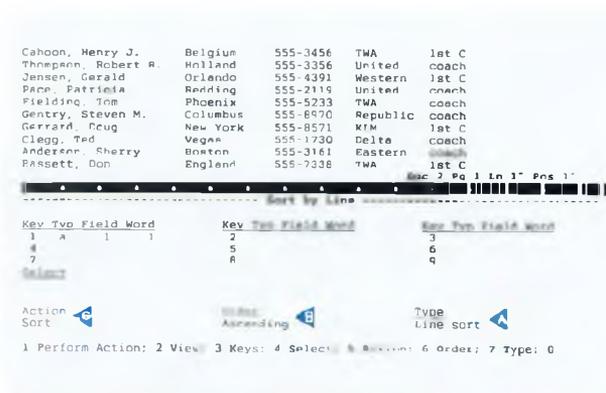
Sort Type	Word Delimiter	Line Delimiter	Field Delimiter	Record Definition
Line	Space, Forward Slash (/), Hard Hyphen [-]		Tab, Indent, Flush Right, Center, Margin Release, Tab Align	Each line ends with a hard or soft return.
Paragraph	Space, Forward Slash (/), Hard Hyphen [-]	Hard or Soft Return	Tab, Indent, Flush Right, Center, Margin Release, Tab Align	Each paragraph ends with two or more hard returns.
Secondary Merge Record	Space, Forward Slash (/), Hard Hyphen [-]	Hard or Soft Return	{END FIELD} code	Each merge record ends with an {END RECORD} code.
Table Row* (cursor must be inside an existing table)	Space, Forward Slash (/), Hard Hyphen [-]	Hard or Soft Return		Each row is a line of cells beginning with a [Row] code.

*The cell delimiter for a table row is a [Cell] code.

Sort Menu

Once you have specified the input and output files for the sort, the Sort menu appears in the lower half of the screen.

- ▲ CURRENT SORT TYPE
- ▲ CURRENT SORT ORDER
- ▲ CURRENT SORT ACTION



All of the current sort criteria are displayed. At the bottom of the screen is a menu of options which you can use to change the sort (and select) criteria.

The following is a brief description of each option on the Sort menu.

Perform Action

Select **Perform Action** (1) to begin sorting or selecting. When sorting is complete, the sorted document is either displayed on your screen or saved in a file on disk, depending on the output file you indicated.

View

Select **View** (2) to scroll through the input file displayed in the upper-half of the screen.

You can use any of the cursor keys or the search keys to scroll through the text. When you finish, press **Exit** (F7) to return to the Sort menu.

Keys

“Keys” are words, fields, or phrases within a record used to sort and/or select specific items in a document. Select this option to define the keys you want to use for sorting the document.

For example, if you had a list of names (first and last), key1 might be the last names in the list, and key2 might be the first names in the list. When sorting, WordPerfect would first sort the list using the last names (key1). WordPerfect would use the first name (key2) only to sort people in the list who had the same last name.

Keys can be alphanumeric or numeric. See *Sort, Keys* in *Reference* for more details.

Select

When you use this option, you are asked to enter a statement that specifies records to be extracted from the file before sorting. For example, you might use **Select** if you have a list of addresses, but you only want to sort the addresses with the same ZIP Code. See *Sort, Select Records* in *Reference*.

Action

If you are only sorting text, you will not need to use this option. **Action** (5) lets you specify whether you want to **Select and Sort** (1) or **Select Only** (2). If you choose **Select and Sort**, WordPerfect always performs the selection before sorting the selected records. You cannot select this feature unless you have entered a select statement (option 2 on the Sort menu). See *Sort, Select Records* in *Reference*.

Order

Select **Order** (6), then select **Ascending** (1) or **Descending** (2). In ascending order, letters are sorted from A to Z and numbers from 0 to 9. In descending order, letters and numbers are sorted in reverse order.

Type

If you want to change the displayed type of sort, select **Type** (7), then select **Merge** (1) for secondary merge records, **Line** (2) for line records, or **Paragraph** (3) for paragraph records.

Table Sort

If you want to sort rows of information in a table (Table feature), you must first move your cursor into a cell within the table. Once the cursor is inside the table, press **Merge/Sort** (Ctrl-F9). When sorting table information, you are not asked for input or output files but are taken directly to the Sort menu. When you select **Perform Action** (1), the table rows are sorted on the screen replacing the original table information on the screen.

Each row in a table is a record, and each cell in a row is a field within the record. Rows are numbered from top to bottom starting with 1, and cells are numbered from left to right starting with 1.

You should only sort rows with the same number of cells. You should also avoid sorting rows with cells that span multiple rows.

If you use a select string that deletes an entire table in a table sort, you can restore the table by pressing **Cancel** (F1), then selecting **Restore** (1). For more information about selecting records, see *Sort, Select Records* in *Reference*.

See Also: Lesson 32; Sort, Keys; Sort, Select Records

Sort, Keys

In a WordPerfect sort, “keys” define words by which lines, paragraphs, merge records, and rows (Table feature) are selected and sorted.

You can sort the records in a file by using up to nine keys. Key1 has first priority, key2 has second priority, etc. If the information in key1 is the same for more than one record, then key2 (if it exists) may be used to sub-sort all records having the same key1 value.

For example, you may have a phone list with the following information in each record (in this case the record is a line).

- A FIELD 1
- B FIELD 2
- C FIELD 3
- D FIELD 4
- E FIELD 5

Key	Type	Field	Word
1	a	1	1
2	a	1	2
3	a	1	3
4			
5			
6			
7			
8			
9			

Action Sort Order Ascending Type Line sort

Type: a - Alphanumeric; n - Numeric; Use arrows; Press Exit when done

The first field in each record contains at least two words—last name and first name. If you want to sort the records by last name *then* first name, the last name becomes key1 and the first name becomes key2.

- A KEY 1
- B KEY 2

Key	Type	Field	Word
1	a	2	1
2	a	1	2
3			
4			
5			
6			
7			
8			
9			

Action Sort Order Ascending Type Line sort

Type: a - Alphanumeric; n - Numeric; Use arrows; Press Exit when done

Key1 indicates that you want the records sorted by the first word (last name) in the first field (Name) of each record. Key2 indicates that you want the records sorted by the second word (first name) in the first field *if* two or more last names are identical.

To enter key information, you must first display the Sort menu (**Ctrl-F9, 2**, enter the input file, then enter the output file). From the Sort menu.

- 1** Make sure you have selected the *type* of sort you want (merge, line, or paragraph) using the **Type** option (7). See *Sort* in *Reference*.
- 2** Select **Keys** (3) and type the key *type* (**a** for alphanumeric and **n** for numeric). See *Key Type* below.
- 3** Enter the field or cell (tables) number, the word number, and the line number (if you are using a paragraph, merge, or table sort). For example, type **1** for first, **2** for second, etc., if you are counting from left to right or top to bottom, or type **-1** for first, **-2** for second, etc., if you are counting from right to left or bottom to top (see *Lesson 32: Sorting Records* in the *WordPerfect Workbook* for details on using negative numbers in keys).

Negative numbers can only be used for words and fields.

The cursor automatically moves to the next set of key information after you enter the last number. You can follow steps 1 and 2 above to enter information for the second key, or you can press **Exit** (F7) to finish entering key information.

Once you have selected **Keys** (3), you can also use Insert and Delete to add and delete keys. Insert (Ins) adds keys at the cursor position, and Delete (Del) deletes the key at the cursor position.

Notes

Dates

If you want to sort dates, you can treat the month, day, and year as separate words if you divide them with forward slashes or Hard Hyphens (e.g., 11/08/59, 11-08-59). This means you can set up separate keys for each. For example, key1 could be the year (the third word in 11/08/59), and key2 could be the month (the first word in 11/08/59).

To insert a Hard Hyphen, press **Home** and then press the dash character key (-). If you just press the dash character key alone, you insert a hyphen which is ignored by Sort. This means your date will be treated as a single number (e.g., 110859).

Key Type

The first item in each key identifies the sort as alphanumeric or numeric.

Alphanumeric keys are made up of letters or numbers and are indicated with an "a" in the key information. Numbers, such as ZIP Codes, telephone numbers, and social security numbers, must be of equal length if you want to designate them as alphanumeric keys.

Numeric keys are numbers that can be of unequal length. Numeric keys can contain dollar signs, commas, and periods. For example: \$25.00, 7,250, 26,000. Letters and non-numeric characters (e.g., commas, dollar signs) in numeric keys are ignored during selecting and sorting.

See Also: Lesson 32; Sort; Sort, Select Records

Sort, Select Records

At times you may want to select specific records from a file or document before sorting them. For example, you may want to create a sorted list of individuals that have the same ZIP Code.

You should always save your document before beginning a select, because your output file (even if you are outputting to the screen) will only include selected items.

Before you start the selection process, you should have already defined the keys you want to use when you sort and/or select text (see *Sort, Keys* in *Reference*). When you want to select as well as sort, display the Sort menu (**Ctrl-F9,2**, enter an input file, enter an output file), then type **4** for Select. The following menu appears:

```

Smith, Henry J.      Orem      Utah      84057
Davis, Robert R.   Provo     Utah      84601
Jensen, Gerald     Seattle   Washington 98112
Jones, Patricia    Honolulu  Hawaii    96706
Fielding, Tom      Phoenix   Arizona   85013
Davis, Steven M.   Columbus  Ohio      43230
Smith, Ted         Las Vegas Nevada    89120
Anderson, Sherry   Detroit   Michigan  48236
Fields, Carl J.    Oakland   California 54617
  
```

```

          Doc 2 Pg 1 Ln 1" Pgs 1"
-----
          Sort by Line
-----
Key Typ Field Word      Key Typ Field Word      Key Typ Field Word
1  n   1   1             2  n   1   1             3  a   3   1
4  n   4   1             5  a   1   2             6
7                                     9
Select
  
```

```

Action Order Type
Sort Ascending Line sort
  
```

<(OR), *(AND), *, <, >, <*, >*: Press Exit when done

From this menu you can create a select statement. A select statement specifies the criteria you want to use to select records. The menu includes several logical symbols which you can combine with keys (e.g., key1, key2, key3) to create a select statement.

Symbol	Description
+ (OR)	<p>Select records that meet the conditions of either key.</p> <p>Example: key1=Smith + key3=Nevada would select records which include a “Smith” for key1 <i>or</i> a “Nevada” for key3.</p>
* (AND)	<p>Select records meeting the conditions of <i>both</i> keys.</p> <p>Example: key1=Smith * key3=Nevada would select records for every “Smith” in “Nevada.”</p>
=	<p>Select records that have <i>exactly the same</i> information in an indicated key.</p> <p>Example: key4=84057 would select only those records with this ZIP Code.</p>
<>	<p>Select records that <i>do not match</i> the information for an indicated key.</p> <p>Example: key3<>Nevada would select all records that do not have “Nevada” for key3.</p>
>	<p>Select records that have information <i>greater than</i> the information for an indicated key.</p> <p>Example: key3>Nevada would select records with states for key3 alphabetically greater than “Nevada” (e.g., “Ohio,” “Washington”).</p>
<	<p>Select records that have information <i>less than</i> the information for an indicated key.</p> <p>Example: key4<84601 would select records with ZIP Codes for key4 numerically less than “84601” (e.g., “43230,” “48236”).</p>
>=	<p>Select records that have information <i>greater than or equal to</i> the information for an indicated key.</p> <p>Example: key4>=84601 would select records with ZIP Codes greater than or equal to “84601.”</p>
<=	<p>Select records that have information <i>less than or equal to</i> the information for an indicated key.</p> <p>Example: key3<=Nevada would select records with states alphabetically less than or equal to “Nevada” (e.g., “Nevada,” “Michigan,” “California”).</p>

Notes**Global Select**

You can also do a *global select* to request all records containing key words by typing a **g** or a **0** (zero) after the key. When doing a global select, you do not have to define keyg or key0 as a key word.

```
keyg=Hawaii  
key0=Utah
```

In the first example, all records that have the word "Hawaii" in *any field* will be selected. In the second example, all records that have the word "Utah" in *any field* will be selected.

Select Only

If you want to select records without sorting them, select **Action (5)** from the Sort menu, then choose **Select Only (2)**.

You need to create a select statement before you can use the Action option.

There is no way to select words adjoined by a hard space. Hard spaces are considered functions by Sort, so they are ignored like any other function. To select on **Dan[]Baker**, use **DanBaker** in the select statement.

Select Statement Order

Selection is done from left to right unless parentheses are used to change the order. For example:

```
key1=male * key2=Jones + key2=Davis
```

This statement first selects all males named Jones and then adds everyone named Davis. You could use parentheses to create the following statement:

```
key1=male * (key2=Jones + key2=Davis)
```

The statement now looks for everyone named Jones or Davis, but then only selects the males with those two names.

See Also: Lesson 32; Sort; Sort, Keys

Speller, Check Spelling

The WordPerfect Speller checks the spelling in your document and looks for double words, words with numbers, and certain types of capitalization errors. You can check a word, page, document, or block of text without leaving your document. You can also look up words phonetically, do a word count, or display all the words in the dictionary that match a pattern.

Speller is not intended to be a comprehensive dictionary. Because the main purpose of Speller is to help you keep misspelled words out of your documents,

it lists only the most common correct spelling of a word. It does not list all possible spellings or words in the language.

Important: *The Speller needs to be installed properly before it is used. If you chose not to install the Speller files when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Speller, (see the Installation Instructions card).*

Save your document before spell-checking.

- 1 Retrieve the document you want to spell-check.
- 2 Press **Spell** (Ctrl-F2) to display the Speller menu.

 Select **Spell** on the **Tools** menu.

```
aerobics since its inception in 1977.
Second in preference to water aerobics is swimming using the
backstroke. This allows the head to remain above water so
that breathing is not restricted.
The primary drawback to swimming is pool availability. Most
spas offer swimming facilities, but spa memberships can sometimes
run into the hundreds of dollars.

Walking
The cheapest and the most popular form of recreation among
older adults is walking.
Walking requires no equipment. It can be done almost anywhere
at any time. Done at a brisk pace, walking improves circulation
and invigorates the heart.
-----
For those who live in cooler climates, many malls open their
doors before the merchants arrive to offer a safe haven for
walkers.

Reminder
It's always, it is a safe practice to get a physician's approval
before beginning any exercise program.

Check: 1 Word; 2 Page; 3 Document; 4 New Sup. Dictionary; 5 Look Up; 6 Count: 0
```

- 3 Select **Word** (1) or **Page** (2) to check the word or page on which the cursor is located or select **Document** (3) to check the entire document.
- 4 When the Speller stops and highlights a word, use the menu in the lower half of the screen to make any corrections and continue (see *Double Word*, *Irregular Case*, or *Word Not Found* below).
- 5 When checking is complete, press **Exit** (F7) to return to your document.
- 6 Replace the original document with the spell-checked version (use **Save** (F10) or **Exit** (F7)).

Notes

Adding Words

When the Speller stops on a word that you know is spelled correctly, you can use the **Add Word** option to add it to the dictionary. The words you add are saved in the WP{WP}US.SUP (U.S. English version) file created by WordPerfect. This file is located in your WordPerfect directory or on your WordPerfect 2 diskette unless you specify another directory with the **Location of Files** feature (see *Location of Files in Reference*).

If you chose New Supplementary Dictionary (4) before spell-checking, the words are added to your own supplementary dictionary instead of WP{WP}US.SUP. (See *New Supplementary Dictionary* below, and *Speller, Dictionaries in Reference*.)

Canceling Spell-Checking

Press **Cancel** (F1) at any time to stop the spell-checking, then press **Exit** (F7) to return to your document.

Checking a Block

You can spell-check a block of text by blocking the text (Alt-F4), then pressing **Spell** (Ctrl-F2). (The New Supplementary Dictionary, Look Up, and Word Count options are not available when checking a block.)

Dictionaries

The Speller helps you proof the document on your screen by comparing each word in your document with the list of words in a dictionary (WP{WP}US.LEX) supplied by WordPerfect. It also checks a supplementary dictionary you create when you add words during spell-checking. In addition, you can create other dictionaries for use during spell-checking. For more information, see *Speller, Dictionaries in Reference*.

Dictionary Full

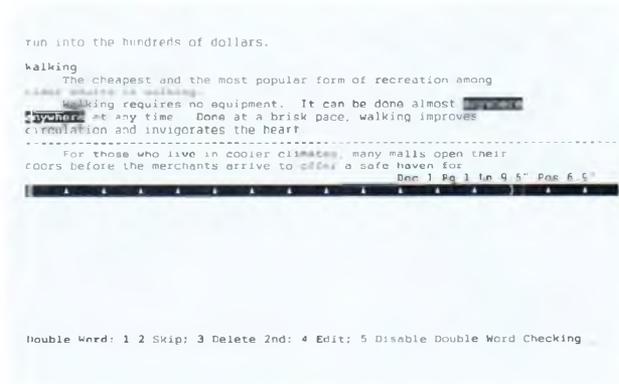
A temporary area in memory is used to save *skipped* words and to keep a copy of *added* words before they are written to the supplementary dictionary file. If this area becomes full, skipped words are removed to make room for added words. If the area is filled with added words, a "Dictionary Full" message appears. To correct this problem, you may want to exit the Speller to let WordPerfect add the words in memory to the supplementary dictionary, then spell-check the rest of the document using Block (Alt-F4).

Dictionary Not Found

If no path for the dictionary file is specified in the Location of Files feature (see *Location of Files in Reference*), WordPerfect checks your default directory, then the directory where WPEXE is located. If it is not found in any of these locations, you will receive an error message which allows you to enter the location of the file. To avoid getting the message each time you use the Speller, use the Location of Files feature to specify the directory.

Double Word

When the Speller finds a double word occurrence, the two words are highlighted and the following menu appears.



Skip

Spell-checking continues; the double word is left as it was in the document. The Speller will stop on subsequent occurrences of the same double word.

Delete 2nd

The second occurrence of the word is deleted.

Edit

Change the text of the document using Left Arrow (←), Right Arrow (→), Backspace, Delete, or text characters, then press **Exit** (F7) or **Enter** to continue spell-checking.

You can also press **Left Arrow** or **Right Arrow** to begin editing.

Disable Double Word Checking

Ignore double-occurring words for the rest of the document.

Irregular Case

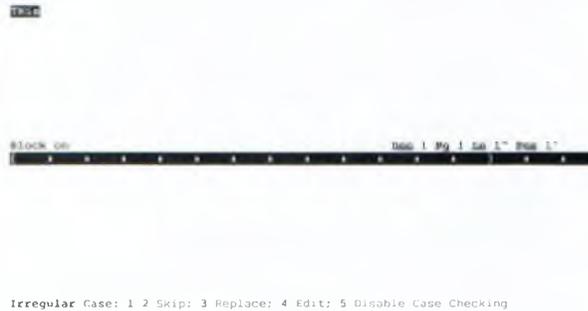
The Speller checks for five types of capitalization errors. It then lets you change the capitalization pattern to a predetermined format. The errors the Speller looks for, and the capitalization pattern they are changed to (upon your confirmation) are:

In the following list, U represents an uppercase letter, l represents a lowercase letter.

- UU... is changed to Ull... (e.g., “THis” becomes “This”).
- lUl... is changed to Ull... (e.g., “tHis” becomes “This”).
- lJU... is changed to UUU... (e.g., “tHIS” becomes “THIS”).
- lJU... is changed to ll... (e.g., “thIs” becomes “this”).
- lU is changed to Ul (in two-letter words only, e.g., “iS” becomes “Is”).

The capitalization of the entire word is based on the first three characters only. For example, “aPpLE,” “aPpLE,” “aPpLe,” and “aPple” would all be replaced with “Apple” because in each case the first three letters fit the IU1... pattern.

When the Speller finds a word with any of the above types of capitalization patterns, it highlights the word and displays the following menu.



Skip

Spell-checking continues without changing the capitalization of the word; the word with its capitalization pattern is only skipped once. If it occurs subsequently in the document, the Speller will stop at each occurrence.

Replace

Rewrites the word with the new capitalization pattern as described in the list above. Subsequent occurrences of the word with the same capitalization pattern are not replaced automatically. Rather, the Speller stops at each occurrence.

Edit

Change the text of the document using Left Arrow (←), Right Arrow (→), Backspace, Delete, or text characters, then press **Exit** (F7) or **Enter** to continue spell-checking.

You can also press **Left Arrow** or **Right Arrow** to begin editing.

Disable Case Checking

Ignores case in words for the rest of the document.

New Supplementary Dictionary

To change the supplementary dictionary to be used for spell-checking,

1 Press **Spell** (Ctrl-F2).

 *Select Spell on the Tools menu.*

- 2 Select New Supplementary Dictionary (4), then enter the name of the supplementary dictionary you want to use.

If a directory for the supplementary files is specified under Setup: Location of Files (see *Location of Files in Reference*), then WordPerfect will only access (or create) supplementary dictionaries in that directory. If no directory is specified, then WordPerfect checks your document directory. If no document directory is specified, then WordPerfect looks for the supplementary dictionary in your current default directory.

You cannot specify the path to the supplementary dictionaries when using the “New Supplementary Dictionary” option. The new supplementary dictionary must be found in one of the directories indicated in the paragraph above.

For more information, see *Speller, Dictionaries in Reference*.

Password

If a “Password:” prompt appears when you start the Speller, the supplementary dictionary file you are using is locked. This prompt also appears when you enter the name of a locked supplementary file after choosing New Supplementary Dictionary (4).

To use the locked supplementary dictionary, enter the password to the file. If you press **Enter** or **Cancel** (F1) at the prompt, or if you enter an incorrect password, “1 Re-enter Password; 2 Continue Without Supplementary Dictionary” appears. Select **Re-enter Password** (1) to try again, or **Continue Without Supplementary Dictionary** (2) to have no supplementary dictionary in effect.

Reveal Codes

If you are in Reveal Codes when you begin to spell-check a document, WordPerfect turns it off and uses the full screen. When spell-checking is complete, WordPerfect redisplay the Reveal Codes screen.

Substructures

The Speller checks regular document text and text in substructures (like headers, footers, footnotes, endnotes, graphics boxes with text, etc.). Although the Speller counts the number of words inside styles, it does not check the spelling of text inside styles. Also, only the captions of equation boxes are checked by the Speller, not the text of the equation. To spell-check only the text in a substructure, you must invoke the speller while in that substructure.

Two Disk Drives

If you are running WordPerfect from two disk drives, insert the diskette you labeled “Speller” in drive B before pressing **Spell** (Ctrl-F2). Do not remove the WordPerfect 2 or Speller diskette from the drive while using the Speller.

Word Count

When the spell-check is complete, a count of the number of words in the block, page, or document is displayed at the bottom of the screen. If you want to count words without spell-checking, use the Word Count option on the menu (see *Speller, Word Count in Reference*).

Word Not Found

When a word is not found in any of the dictionaries used by the Speller, it is highlighted and a list of possible replacement words is displayed. The replacement list includes words that are different by a single letter or two letters typed out of sequence. The list also includes words that sound similar to the word you are checking.

Replacement words come only from the WordPerfect dictionary, not from the supplementary dictionary. For information on having words from other dictionaries appear as replacements, see Speller, Dictionaries in Reference.

Should the list extend beyond the screen, press Enter to view more words in the replacement list.

```
run into the hundreds of dollars.
Walking
The cheapest and the most popular form of recreation among
older adults is walking.
Walking requires no equipment. It can be done almost anywhere
at any time. Done at a brisk pace, walking improves circulation
and invigorates the heart.
For those who live in cooler climates, many malls open their
doors before the merchants arrive to offer a safe haven for
Doc 1 Pg 1 Ln 9.67" Pos 3.2"
A. mn          B. na          C. nay
D. ne          E. nea         F. neigh
G. new         H. nigh        I. no
J. now         K. noway       L. nu
M. nw          N. ny

Not Found: 1 Skip Once; 2 Skip; 3 Add; 4 Edit; 5 Look Up; 6 Ignore Numbers: 0
```

You can type the letter next to the correct spelling in the replacement list to replace the highlighted word (subsequent occurrences of the misspelled word are then replaced automatically as the Speller finds them), or select one of the following options:

Add

The word is saved in the supplementary dictionary and spell-checking continues.

You can edit the supplementary dictionary in WordPerfect, or use the Speller Utility to add the supplementary dictionary to the main dictionary (WP{WP}US.LEX) (see *Speller, Dictionaries and Speller Utility in Reference*).

Edit

Correct the spelling in the document by using Left Arrow (←), Right Arrow (→), Backspace, Delete, or text characters, then press Exit (F7) to continue spell-checking.

You can also press **Left Arrow** (←) or **Right Arrow** (→) to begin editing.

The word is redisplayed if it is still not found in the dictionary. If you know the word is spelled correctly, use the Add Word or Skip option.

Ignore Numbers

Spell-checking continues; the Speller ignores words containing numbers in the rest of the document.

Look Up

You can look up a word in the main dictionary that matches a pattern. Use “?” to represent a single letter, “*” to represent zero or more letters in succession in the pattern. If you don’t enter a word pattern, a list of phonetically similar words is displayed when you use this option.

Once a list of words is displayed, you can then replace the misspelled word with the correct spelling by typing the letter next to the word in the replacement list. Subsequent occurrences of the misspelled word are then replaced automatically as the Speller finds them.

If you don’t want to replace the word with any of the words in the list, press **Exit** (F7) to enter a new word or word pattern. If you don’t want to enter another word or word pattern, press **Exit** again to return to the Word Not Found menu where you can then select any of the other options on the menu.

Skip

Spell-checking continues; reoccurrences of the word are ignored for the rest of the spell-check.

Skip Once

Spell-checking continues; the Speller will stop at the next occurrence of the word.

WP{WP}.SPW

The WP{WP}.SPW file contains programming code necessary to run the Speller. This file must be in the same directory as the other Speller files (WP{WP}US.LEX, WP{WP}US.SUP). The Installation Program copies this file to the directory where WordPerfect is located (usually C:\WP51) if you have a hard disk, or to the diskette you labeled “Speller” if you are using a two disk drive system. If you move the Speller files, use the Location of Files feature to indicate to WordPerfect where they are stored (see *Location of Files in Reference*).

If you are using algorithmic dictionaries (see *Speller, Dictionaries*), additional files are required.

See Also: Speller, Dictionaries; Speller, Look Up Words; Speller, Word Count; Speller Utility; Thesaurus

Speller, Dictionaries

The Speller helps you proof the document on your screen by comparing each word in your document with the lists of words in a dictionary (WP{WP}US.LEX for the U.S. English version) supplied by WordPerfect. It also checks a supplementary dictionary (WP{WP}US.SUP) which contains words you add during spell-checking. In addition, you can create your own dictionaries for use during spell-checking (see *Personal Dictionaries* below).

Notes

Editing Dictionaries

You can add, delete, or edit words in any of the word-list-based dictionary files. There are two ways to edit a dictionary file.

- Use the Speller Utility program.
- Edit the file in WordPerfect.

The type of dictionary and whether or not it has been compressed determine whether you should use the Speller Utility or WordPerfect to edit the file.

The WordPerfect dictionary (WP{WP}US.LEX) can only be edited using the Speller Utility. (See *Speller Utility* in *Reference*.)

Uncompressed supplementary dictionaries (or uncompressed portions of supplementary dictionaries) can be edited in WordPerfect. Simply retrieve the file in WordPerfect. The words must be entered one per line, and separated by a Hard Return code [HRt]. After making any changes, save the file, replacing the old version.

The Speller Utility has a feature which compresses a supplementary dictionary file. Compressing a file moves the words from the document portion of the file to the header portion which you cannot see or edit in WordPerfect. For more information on the advantages of compressed files, see *Optimize Dictionary* under *Speller Utility* in *Reference*.

Compressed supplementary dictionaries (or compressed portions of supplementary dictionaries) must be edited using the Speller Utility. Words added to a compressed supplementary dictionary during spell-checking are not compressed. They are stored in the document portion of the file, and can be edited in WordPerfect.

For more information on using the Speller Utility, see *Speller Utility* in *Reference*.

Hyphenation

The WordPerfect dictionary file (see *WordPerfect Dictionary* below) is also the file used to determine hyphenation. Supplementary dictionaries (see *Supplementary Dictionary* below) do not affect hyphenation.

An additional file (WP{WP}.HYC) is also required for hyphenation. For more information on this file, see Hyphenation in Reference.

The words in the WordPerfect dictionary have dashes (–) indicating where they may be hyphenated. If words have been added to the WordPerfect dictionary without hyphenation indicators (such as if you use the Speller Utility to add your WP{WP}US.SUP file to the WordPerfect dictionary), the words may not be hyphenated by the Hyphenation feature of WordPerfect. See *Hyphenation* and *Hyphenation Zone in Reference* for more information on hyphenation.

You can add words to the WordPerfect dictionary with indicators for where they may be hyphenated by using the Speller Utility. See *Speller Utility in Reference* for more details on adding words with hyphenation indicators.

International Dictionaries

WordPerfect has created dictionaries in several languages. The two letters before the .LEX extension indicate the language of the dictionary. For example, WP{WP}US.LEX is the United States English version of the WordPerfect dictionary, WP{WP}FR.LEX is the French (National) version.

WordPerfect offers the following versions of the dictionary:

- Afrikaans (AF)
- German – National (DE)
- Catalanian (CA)
- German – Switzerland (SD)
- Danish (DK)
- Icelandic (IS)
- Dutch (NL)
- Italian (IT)
- English – Australia (OZ)
- Norwegian (NO)
- English – U.K. (UK)
- Portuguese – Brazil (BR)
- English – U.S. (US)
- Portuguese – National (PO)
- Finnish (SU)
- Spanish (ES)
- French – Canada (CF)
- Swedish (SV)
- French – National (FR)

New dictionaries may have been added to this list since this printing.

The dictionaries listed above function on a word-list basis, except for Finnish, French-Canada, French-National, Italian, and Swedish, which use algorithmic dictionaries. Algorithmic dictionaries use rules instead of word lists to check spelling. Because they use rules, they can find more words than word-list dictionaries. However, a hard disk is required to use algorithmic dictionaries. Also, algorithmic dictionaries cannot be modified, either in the Speller or in the Speller Utility Program.

To acquire international versions of the WordPerfect dictionary, call WordPerfect Orders at (801) 225-5000.

To use an international dictionary instead of WP{WP}US.LEX, insert a Language code (Shift-F8,4,4) in your document (see *Language* in *Reference*). The Speller will use the dictionary corresponding to the code until it finds another Language code or until you exit the Speller.

If you want to spell-check new documents using a specific language, place the appropriate Language code in Initial Codes (Shift-F1,4,5).

If you commonly use more than one language, you may want to combine WordPerfect dictionaries of different languages, so that the Speller will recognize words of any of those languages. Use the Speller Utility to combine WordPerfect dictionaries (see *Speller Utility* in *Reference*).

You can only combine word-list dictionaries. You cannot combine algorithmic dictionaries.

Personal Dictionaries

You can create your own supplementary dictionary by typing a list of words in WordPerfect and saving it in the WordPerfect directory or on the diskette you labeled "WordPerfect 2." When you run the Speller, select New Supplementary Dictionary (4), then enter the name of your personal dictionary so that the Speller will use your supplementary dictionary instead of WP{WP}US.SUP.

As long as the new supplementary dictionary is selected, any words you add while spell-checking are added to your personal dictionary. Your new supplementary dictionary selection remains in effect until you exit WordPerfect, or select another supplementary dictionary.

You can enter the directory name for your supplementary dictionaries on the Location of Files menu (see *Location of Files* in *Reference*). If you specified a directory name for your supplementary dictionaries in Location of Files, WordPerfect will access your supplementary dictionary files from this directory. WordPerfect will also save your supplementary dictionaries to this directory.

Supplementary Dictionary

The default supplementary dictionary file (WP{WP}US.SUP) contains words you add during spell-checking. If you specified a directory name for your supplementary dictionaries in Location of Files, WordPerfect will access your supplementary dictionary files from this directory. WordPerfect will also save your supplementary dictionaries to this directory (see *New Supplementary Dictionary* under *Speller, Check Spelling* in *Reference* for more information).

The naming convention for this supplemental dictionary on a network is WP{WP}.xxx.SUP, where xxx is the individual's three-letter file ID.

If you specified a directory name for your supplementary dictionaries in Location of Files, WordPerfect will access your supplementary dictionary files from this directory. WordPerfect will also save your supplementary dictionaries to this directory (see *New Supplementary Dictionary* under *Speller, Check Spelling* in *Reference* for more information).

WordPerfect Dictionary

The dictionary supplied with WordPerfect (WP{WP}US.LEX) is made up of a *main* word list and a *common* word list. To speed up proofing, the Speller first looks for the word in the smaller, common word list. The main list is checked only if the word is not found in the common word list.

In order to run the Speller, WP{WP}US.LEX must be located in the WordPerfect directory (or on the diskette you labeled “Speller” if you use two disk drives), unless you enter another location in the Location of Files feature (see *Location of Files in Reference*).

See Also: Speller, Check Spelling; Speller, Look Up Words; Speller, Word Count; Speller Utility; Thesaurus

Speller, Look Up Words

You can use the WordPerfect Speller to look up a word whose spelling you are unsure about.

***Important:** The Speller needs to be installed properly before it is used. If you chose not to install the Speller files when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Speller (see the Installation Instructions card).*

- 1 Press **Spell** (Ctrl-F2) to display the Speller menu.
 Select **Spell** on the **Tools** menu.
- 2 Select **Look Up** (5) to display the “Word or word pattern:” message.
- 3 Enter a pattern that matches the word you want to find, or enter a word that sounds like the word you want to find (see *Word Patterns* below).

Notes

Two Disk Drives

If you are running WordPerfect from disk drives, insert the disk you labeled “Speller” in drive B before starting the Speller. Do not remove the Speller or WordPerfect 2 disk from the drive while using the Speller.

Word Patterns

To enter a word pattern, enter the characters you know, and use wildcards to represent letters you don't know. Use a question mark (?) to represent a single character, and an asterisk (*) to represent zero or more letters in succession.

A list of all the words matching the pattern is displayed. For example, entering **re?d** matches “read” and “reed” but not “red.” **Bl*ot** matches “blot,” “Blackfoot,” and “bloodshot.” **Bl*fo?t** matches “Blackfoot” only.

You can use any combination of question marks and asterisks. Looking up words takes much longer, however, when a question mark (?) or an asterisk (*) is used as the first letter.

If you enter a word without a ? or *, WordPerfect lists the words in the dictionary that sound like the word you entered.

See Also: Speller, Check Spelling; Speller, Dictionaries; Speller, Word Count; Speller Utility; Thesaurus

Speller, Word Count

Many academic and professional publishing environments require that you submit a count of the words in a document. This task is made easy with the Word Count feature of the WordPerfect Speller.

Important: *The Speller needs to be installed properly before it is used. If you chose not to install the Speller files when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Speller (see the Installation Instructions card).*

Save the document before you run the Speller.

- 1 Retrieve the document whose words you want to count.
- 2 Press **Spell** (Ctrl-F2) to display the Speller menu.
 Select **Spell** on the **Tools** menu.
- 3 Select **Count** (6).
- 4 When the count is displayed, press any key to return to the Speller menu, then press **Exit** (F7) to return to your document.

Notes

Block

The Word Count option is not available when Block is on. However, you can count the words in a block of text by spell-checking it. The number of words is displayed when the spell-check is complete. See *Checking a Block* under *Speller, Check Spelling* in *Reference* for more information.

Count While Spell-Checking

The Speller also counts words when you spell-check a block, page, or document. For more information, see *Word Count* under *Speller, Check Spelling* in *Reference*.

Two Disk Drives

If you are running WordPerfect from disk drives, insert the diskette you labeled “Speller” in drive B before starting the Speller. Do not remove the Speller or WordPerfect 2 diskette from the drive while using the Speller.

What is Counted

WordPerfect counts as a word any continuous series of valid characters. The following characters are valid:

- a-z
- A-Z
- International alphabetic characters (such as Ç, ê, and ā)
- Apostrophe (')

Numeric digits 0-9 are also valid characters; however, WordPerfect does not count “words” that consist entirely of numbers. All other characters are invalid (including spaces and punctuation). For example, the WordPerfect Speller would count 19 words in the following:

Your interview will be held Friday, June 23,
in room B214. Please bring your resume. If
you have questions, call (801) 991-2435.

“23,” “801,” and “991-2435” are not counted as words because they consist entirely of numbers. (The parentheses in “(801)” and the hard hyphen in 991-2435 are invalid characters.) “B214” is counted because B, 2, 1, and 4 are each valid characters, and are not all numbers.

See Also: Speller, Check Spelling; Speller, Dictionaries; Speller, Look Up Words; Speller Utility; Thesaurus

Speller Utility

The Speller Utility performs various editing functions on the dictionaries used by the Speller. For example, you can use the Utility to add or delete words from the WordPerfect dictionary (WP{WP}US.LEX), display the common word list, or check the location of a word.

Some editing tasks on dictionaries can be done in WordPerfect. See the *Editing Dictionaries* subheading under *Speller, Dictionaries in Reference* for more information before using the Speller Utility.

Important: The Speller Utility file (SPELL.EXE) needs to be installed properly before using the program. If you chose not to install the WordPerfect Utility Programs when

you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Speller Utility (see the Installation Instructions card).

To start the Speller Utility,

- 1 Go to a DOS prompt.
- 2 Change to the directory that contains the SPELL.EXE file by entering **cd\directory name**.

The Installation Program copies this file to the directory where WordPerfect (WP.EXE) is located (usually C:\WP51) if you are using a hard disk.

- 3 Enter **spell** to start the Speller Utility.

```
Spell -- WordPerfect Speller Utility          C: \WP51\WP\WP\US.LEX
0 - Exit
1 - Change/Create Dictionary
2 - Add Words to Dictionary
3 - Delete Words from Dictionary
4 - Optimize Dictionary
5 - Display Common Word List
6 - Check Location of a Word
7 - Look Up
8 - Phonetic Look Up
9 - Convert 4.2 Dictionary to 5.1
A - Combine Other 5.0 or 5.1 Dictionary
B - Compress/Expand Supplemental Dictionary
C - Extract Added Words from Word-List Based Dictionary
Selection: _
```

- 4 Select an option (see instructions for each option under *Notes* below).

Notes

Add Words to Dictionary

This option adds words to the compressed portion of the dictionary currently selected (see *Change/Create Dictionary* below). Words to add can be entered using existing files (e.g., WP{WP}US.SUP) or by typing them in at the keyboard. (Words added to the common and main word lists cannot exceed 79 characters.) Be sure to enter all files and words before selecting Exit on the Add Words menu since the update process takes about the same amount of time no matter how many words are being added. This process may be quite lengthy, up to 20 minutes.

The update process will be somewhat faster if the words are sorted alphabetically before the update. If you have many words to add, we recommend you put them in a file and sort them before using the Speller Utility to add them to the dictionary.

You have the following options when adding words:

```
Spell--Add Words                                : WP{WP}US.LEX
0 - Cancel - do not add words
1 - Add to common word list (from keyboard)
2 - Add to common word list (from a file)
3 - Add to main word list (from keyboard)
4 - Add to main word list (from a file)
5 - Exit
Selection:
```

If a supplementary dictionary is currently selected (see *Change/Create Dictionary* below), options 1 (Add to Common Word List (from Keyboard)) and 2 (Add to Common Word List (from a File)) are not available (although they appear on the screen).

Words added to the common word list are automatically added to the main word list.

Hyphenation Indicators

The WordPerfect dictionary (WP{WP}US.LEX) is also used to determine hyphenation. If you add words to this dictionary, insert dashes (-) at each location where you want WordPerfect to hyphenate the word. You can either type a dash (Hyphenation Character) or press **Home**, then type a dash (Hard Hyphen). Both will work to produce hyphenation in the .LEX file. If you do not include these hyphenation indicators in the words you add, WordPerfect will not hyphenate them when you use the Hyphenation feature. Instead they will be wrapped to the next line.

If you are adding the words in a supplementary file to the main dictionary, insert the dashes by editing the file in WordPerfect first. If you are adding individual words, insert the dashes as you type the words.

Algorithmic Dictionaries (International)

Algorithmic dictionaries that are available in some languages (see *Speller, Dictionaries* in *Reference*) cannot be modified.

Change/Create Dictionary

This option selects the dictionary on which the actions of the other options will be performed. Depending on the type of dictionary you change to, some of the other options are not available. If the dictionary name you enter when you use this option does not exist (or is not found), you are asked if you want it created.

If you create a main dictionary that you want to use with the Speller in WordPerfect, you must use a valid filename for the dictionary. These filenames follow the pattern WP{WP}xx.LEX, where xx is the two-letter language code for the dictionary. See Language in Reference for a list of the codes.

Check Location of a Word

You can see if a word is found in either the common or main word lists of the WordPerfect dictionary currently selected. This option is not available if a supplementary dictionary is currently selected (see *Change/Create Dictionary* above).

Combine Other 5.0 or 5.1 Dictionary

WordPerfect has created dictionaries in several languages. The two letters before the .LEX extension indicate to the Speller the language of the dictionary. For example, WP{WP}FR.LEX is the French version of the WordPerfect dictionary.

If you commonly use more than one language, you may want to use this option to combine WordPerfect dictionaries of different languages, so that the Speller will recognize words of either language. The resulting dictionary retains the name of the dictionary originally selected (see *Change/Create Dictionary* above), but contains the word lists of both dictionaries.

***Important:** You can only combine word-list dictionaries. Algorithmic dictionaries cannot be combined. See Speller, Dictionaries for more information.*

Compress/Expand Supplemental Dictionary

This option compresses a supplementary dictionary file. Compressing a file moves the words from the document portion of the file to the header portion which you cannot see or edit in WordPerfect. Compressing the file has the following advantages:

- The amount of disk space required to store the file is reduced.
- The Speller will not ignore words in the supplementary dictionary that do not fit in memory.
- Words in the compressed portion of the dictionary will appear as replacement words when a word is not found during spell-checking.

Convert 4.2 Dictionary to 5.1

Choose this option, enter the name of an existing WordPerfect 4.2 dictionary, then enter another filename to convert a 4.2 dictionary to a 5.1 dictionary.

The resulting 5.1 dictionary will not contain hyphenation indicators. If you want to include hyphenation indicators, follow the procedure described under Convert 5.0 Dictionary to 5.1 below, except enter in step 2 the name of the 5.1 dictionary that resulted from your conversion of the 4.2 dictionary.

Convert 5.0 Dictionary to 5.1

The difference between versions 5.0 and 5.1 of the WordPerfect dictionary are the inclusion of hyphenation indicators in version 5.1 (see *Hyphenation* under *Speller, Dictionaries* in *Reference*).

If you have not altered the WordPerfect dictionary of WordPerfect 5.0, simply use the new version that came with WordPerfect 5.1. Version 5.0 supplementary dictionary files require no conversion to work with WordPerfect 5.1.

If you have added words to your 5.0 version WordPerfect dictionary and want to use that dictionary but also add hyphenation indicators to the file,

- 1 Start the Speller Utility (see the steps at the beginning of this section).
- 2 Select Change/Create Dictionary (1), then enter the name (include a path if necessary) of your 5.0 dictionary file (e.g., `c:\wp50\wp{wp}us.lex`).
- 3 Select Combine Other 5.1 Dictionary (A), then enter the name (include a path if necessary) of your 5.1 dictionary file (e.g., `c:\wp51\wp{wp}us.lex`).

The words in the 5.1 dictionary that duplicate words in the 5.0 dictionary overwrite the 5.0 words in the combined dictionary, so that they will have hyphenation indicators. Words you added will remain as they were, without hyphenation indicators. If you want to add the indicators for these words, re-add the words using the Add Words to Dictionary (2) option (see *Add Words to Dictionary* above).

Delete Words from Dictionary

This option deletes words from the compressed portion of the dictionary currently selected (see *Change/Create Dictionary* above). Words to be erased can be entered from existing files or the keyboard. Be sure to enter all files and words before selecting Exit on the Delete Words menu since the delete process takes the same amount of time no matter how many words are being deleted. This process may be quite lengthy, up to 20 minutes.

The delete process will be somewhat faster if the words are sorted alphabetically before the update. If you have many words to delete, we recommend you put them in a file and sort them before using the Speller Utility to delete them from the dictionary.

You have the following options when deleting words:

```
Speller -- Help -- [F1]
1 = Cancel - do not delete words
2 = Delete from common word list (from keyboard)
3 = Delete from common word list (from a file)
4 = Delete from main word list (from keyboard)
5 = Delete from main word list (from a file)
6 = Exit
Selection:
```

Words deleted from the main word list are also deleted from the common word list.

Display Common Word List

This option lets you view the words in the common word list. Press **Enter** to see additional words. Press **Cancel** (F1) to return to the menu.

Extract Added Words from Word-List Based Dictionary

Use this option when you are changing from a word-list dictionary to an algorithmic dictionary. To use this option,

- 1 After selecting the option, enter the name of the word-list dictionary (include a path if necessary).
- 2 Enter the name of the algorithmic dictionary (include a path if necessary).
- 3 Enter the name of the supplementary dictionary where you want non-matching words to be written (see note below).

The Speller Utility uses the algorithmic dictionary you entered to check the spelling of the words in the word-list dictionary. Any words it does not recognize (usually words you added) are written to the supplementary file you entered.

Look Up

This option works the same as Look Up on the Not Found menu in the Speller (see *Speller, Check Spelling in Reference*). If you want to use this option with a supplemental dictionary, the dictionary must be compressed (see *Compress/Expand Supplemental Dictionary* above).

Optimize Dictionary

This option optimizes the compressed portion of a dictionary file, making the dictionary take less disk space and run faster.

Phonetic Look Up

This option lets you look up all the words in the compressed portion of the selected dictionary that sound like the word or word pattern you enter after selecting **Look Up (5)**. If you want to use this option with a supplemental dictionary, the dictionary must be compressed (see *Compress/Expand Supplemental Dictionary* above).

Two Disk Drives

Important: *The Speller Utility file (SPELL.EXE) needs to be installed properly before using the program. If you chose not to install the utility programs when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Speller Utility. See the Installation Instructions card.*

To start the Speller Utility on two disk drives,

- 1 Insert the diskette you labeled “Speller” into drive B.

The data diskette may contain dictionaries, supplementary word lists, or files of words to be added or deleted.

- 2 Insert the diskette you labeled “Utilities” during installation into drive A.
- 3 Go to DOS, then enter **a:** to change to drive A.
- 4 Enter **spell b:** to start the Speller Utility.

See Also: Speller, Check Spelling; Speller, Dictionaries; Speller, Look Up Words; Speller, Word Count

Spreadsheet, Import and Link

Spreadsheet software is designed to help you enter and calculate numerical information. It can go beyond simple math to help you prepare financial or statistical worksheets.

While a spreadsheet program such as PlanPerfect is powerful in its own right, it doesn't have the word processing features of WordPerfect. If you want to combine both the numerical prowess of a spreadsheet program with the word processing expertise of WordPerfect, you can do so with the Spreadsheet Import and Spreadsheet Link features.

The Spreadsheet Import and Spreadsheet Link features instruct WordPerfect to extract information from a spreadsheet file and include it in a WordPerfect file. Using this feature, you can let the spreadsheet do the calculations for you, then

bring the information into WordPerfect to create an impressive financial or statistical report.

For example, the statistical information in the document below was imported from PlanPerfect into WordPerfect to create a financial report.



The difference between a spreadsheet import and a spreadsheet link is that a spreadsheet import imports the information from the spreadsheet file *one time only*. A spreadsheet link provides a way for you to continuously update the imported information in your WordPerfect document to reflect changes you have made to the spreadsheet file.

As of this printing of the *WordPerfect Reference Manual*, the Spreadsheet Import and Spreadsheet Link features can import files from PlanPerfect (versions 3.0 through 5.1), Lotus 1-2-3 (1x, 2x, and 3x), Microsoft Excel (versions 2.x through 3.0), Quattro, Quattro Pro, and Symphony.

You can view the Help screen for this feature to see if any other spreadsheet support has been added (see Help in Reference).

To import a spreadsheet file,

- 1 Move the cursor to where you want to import the spreadsheet file.
- 2 Press **Text In/Out** (Ctrl-F5).
-  Select **Text In** from the **File** menu.
- 3 Select **Spreadsheet** (5), then select **Import** (1).

*If you want to create a spreadsheet link (see Links below), select **Create Link** (2) instead of **Import** (1) in the step above.*

- 4 Select **Filename** (1), then enter the filename of the spreadsheet file you want to import. Unless the spreadsheet file is in your spreadsheets directory, you must enter the full pathname to the file.

If you enter the name of a file that is not in a supported format, WordPerfect displays the “Incompatible File Format” error message.

You can also press **List** (F5) after selecting **Filename**, then enter a pathname to display the files in a directory. Selecting **Retrieve** (1) from the List Files screen selects the highlighted file as the file to be imported.

- 5 Select **Range** (2), then enter the range (or block) of cells in the spreadsheet file you want to import. The default is the entire spreadsheet file.

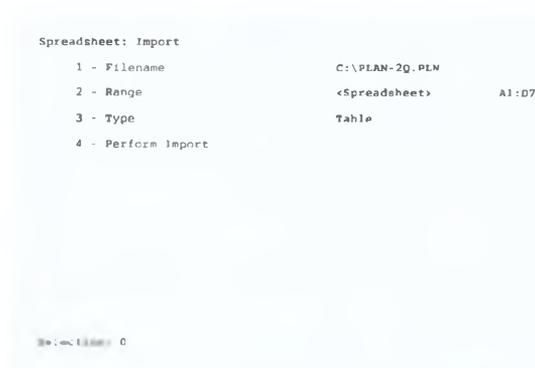
Acceptable ways of entering a range allow for a colon, a period, or two periods between the beginning and ending cells of a range (e.g., A1:C3, A1.C3, A1..C3). Also, if you have defined a named range (or block) in your spreadsheet, you can simply enter the name of that range (e.g., Expenses).

You can press **List** (F5) after selecting **Range** to display the ranges you have defined in your spreadsheet file. Moving the cursor to one of these ranges and pressing **Enter** selects that range as the range of cells to be imported.

More information on the **Range** option can be found in *Range (Block)* below.

- 6 Select **Type** (3), then select **Table** (1) or **Text** (2) to import the spreadsheet file as a WordPerfect table or as text. More information on this option can be found in *Type* below.

At this point, your options should be set, and the **Spreadsheet: Import** or **Spreadsheet: Create Link** menu should look something like the following.



- 7 After your options are set, select **Perform Import (4)** (or **Perform Link (4)**) to import the spreadsheet file to the cursor location.

While the spreadsheet file is being imported, an “Importing Spreadsheet” prompt is displayed on the status line. During this time, WordPerfect searches for and imports the specified information.

If you are using the Spreadsheet Import feature, the spreadsheet file is not imported until you select **Perform Import (4)** from the Spreadsheet: Import menu. If you are creating a link, however, and you press **Exit (F7)** to exit the Spreadsheet: Create Link menu without selecting **Perform Link (4)**, the link codes are included in your document (but the spreadsheet file is not imported). This enables you to create a link to a spreadsheet file that may not yet be created.

If you want to exit the Spreadsheet: Create Link menu without inserting link codes into your document, press **Cancel (F1)**.

*You can also press **Retrieve (Shift-F10)** from the normal editing screen, then enter the name of a spreadsheet file to import the file. Or, you can press **List (F5)**, enter a directory name, highlight a spreadsheet file, then select **Retrieve (1)** to import the file. In either case, the entire file will be imported into a WordPerfect table.*

Notes

Appearance

When WordPerfect imports a spreadsheet file, it tries to preserve the file’s appearance as it was formatted by the spreadsheet program. If the file you are importing is from PlanPerfect, WordPerfect will even import the font attributes.

When a spreadsheet file is imported, column widths are determined by the base font in effect at the location of the import (see *Font* in *Reference*).

If you import a spreadsheet file as a WordPerfect table (see *Type* below), the cells are separated into columns by [Cell] codes and are separated into rows by [Row] codes. Alignment and justification of text within a table cell is maintained by the Table Format options.

Important: *If you lock cells in a spreadsheet file, those cells are locked when you import them as a WordPerfect table. You can unlock them with the Lock option in the Table feature (see Cell, Lock under Table, Format Columns and Cells in Reference).*

If you import a spreadsheet file as text (see *Type* below), WordPerfect separates the cells into columns with tabs and into rows with hard returns. The beginning of a column is marked with a left-aligned tab, while the end of a column is marked with a right-aligned tab. Left- and right-aligned text is supported, but text that was center-aligned in the spreadsheet file becomes left-aligned text in WordPerfect. Tabs are reset following the end of the imported file.

Once a spreadsheet file is imported, regardless of whether it is in table or text form, it can be edited. Editing may be necessary for a few reasons.

First of all, if the number of columns you are trying to import exceeds the maximum number of table (32) or text (20) columns WordPerfect allows, WordPerfect does not import the columns that exceed the limits.

Second, even if you are importing an allowable number of columns, the columns might not fit between the page margins. In this case, WordPerfect will display a warning message and treat the text differently depending on whether it is imported as a table or as text.

If the file is imported as a table (see *Type* below), WordPerfect will import up to 32 columns on a row and display those columns in the normal editing screen. Only the columns that fit between the left margin and the right edge of the paper, however, will be displayed in View Document (Shift-F7,6) and printed.

If the file is imported as text (see *Type* below), WordPerfect will import up to 20 columns on a row. If WordPerfect reaches the right margin before it imports all 20 of the cells, it will insert a soft return or deletable soft return and continue the remainder of the cells on the next line of the page.

In either case, you will probably want to edit the spreadsheet file appearance.

One place you can edit the spreadsheet file appearance is in the spreadsheet program itself. Try reducing the column widths. Information on this procedure can be found in your spreadsheet manual.

Within WordPerfect, changing the base font prior to the location of the import will reduce the size of the columns. If you change the base font, however, change it before you import the file. If you have already imported the file, delete the imported file from the WordPerfect document, change the base font, then import the file again.

Also, try reducing the left and right page margins in WordPerfect prior to the location of the import. This will fit more text on a line.

If you are importing the spreadsheet file as a table, you may want to set the Table Position option to Full (see *Options* under *Table, Edit Structure* in *Reference*). Doing so sizes the table to fit between the left and right margins.

You can also print in landscape (text parallel to the long edge of the paper) if your printer has that capability (see *Printing, Landscape* in *Reference*).

Important: *If you are linking to a spreadsheet file, editing changes made to the text of the imported file in WordPerfect will be replaced the next time you update the link.*

Currency Symbols

When you import a spreadsheet, WordPerfect uses the Language Resource file to “translate” decimal separators, currency symbols, and credit and debit symbols according to the current language code.

Date Cells

When you import a spreadsheet that contains date cells, these dates are formatted according to field 2 for the current language code in the Language Resource file.

Existing Table

If you position your cursor in an existing WordPerfect table, you can import a spreadsheet file into that table. When you do so, the spreadsheet information will overwrite existing information in the cells where the spreadsheet information is being imported.

If you import the file as text (see *Type* below), the file will be imported into the cell in which your cursor is located. If you import the spreadsheet file as a table, each cell in the file will be imported into a different cell of the table, but only the number of cells that exist in the table (from the cursor forward) can be imported.

If the table (from the cursor forward) isn't big enough to accommodate the entire range of cells, some of the cells won't be imported. WordPerfect will start at the beginning of the range and import only the number of cells that exist in the table. For example, if your range is A1:E5 and the table (from the cursor forward) is three rows long and three columns wide, only cells A1:C3 will be imported.

Export

If you want to export information to PlanPerfect (versions 3.0 or 5.0), the information must be divided into columns by tabs and into rows by hard returns. So, if the information is in a WordPerfect table, press **Reveal Codes** (Alt-F3) to display the Reveal Codes screen, then delete the [Table Def] code. If you delete a [Table Def] code without using Block (Alt-F4), you cannot restore it.

Information about exporting a file from WordPerfect to PlanPerfect can be found in the *PlanPerfect Reference Manual*.

Graphics Boxes

You can import a spreadsheet file into a graphics box (see *Text Editor* under *Graphics, Edit* in *Reference*). If the information you are importing is longer than a page, however, you will get an error message and must edit the information to keep it within the bounds of a page.

If you create a link in the graphics box, you can import information that exceeds a page by performing the link outside of the graphics box. The information that extends beyond the page, however, will not display in View Document (Shift-F7,6), nor will it print. Also, if you go into the graphics box to edit the spreadsheet file once it is imported, you will have to edit it to keep it within the bounds of a page.

The size of the spreadsheet file and the size of the graphics box you are importing it into will affect the appearance of the imported file. In addition to

changing the box size, you can edit the spreadsheet file appearance in several ways (see *Appearance* above).

Links

A spreadsheet link lets you import a spreadsheet file into a document, then update the imported information as often as necessary to reflect editing changes you may have made in the spreadsheet file itself. When you create a link, two codes showing where the link begins and ends are inserted into your document.

Link: C:\PLAN-20.PLN <Spreadsheet>			
	TOTAL	SALES	
	Sales	Overhead	Profit
April	85,000.00	12,040.00	73,000.00
May	86,345.00	13,980.00	72,365.00
June	94,430.00	14,781.00	79,649.00
TOTAL			225,014.00
Link END			
Doc 1 Pg 1 Ln 4 Pos 1			

The comment representing the beginning link code lists the filename and the range of cells you are linking to. The comment representing the ending link code simply displays "Link End." The comments representing the link codes are never printed.

If you don't want the comments representing the link codes to be displayed in the normal editing screen, change the Show Link Codes option (Ctrl-F5,5,4,2) on the Link Options menu. Instructions for doing so are found under *Spreadsheet, Link Options* in *Reference*.

When you import a spreadsheet into an existing table or into columns, the comments representing the link codes are not displayed in the normal editing screen regardless of the Show Link Codes setting.

Deleting a Link

If you want to delete a link, you can delete either the Link or Link End codes.

Editing Links

Once a link is created, the only way to edit it is with the Edit Links option. After you make the necessary changes, you can update the link by selecting Perform Link (4).

More information on updating a link can be found under Updating Links below.

To edit a link, position the cursor after the link you want to edit (you may want to use Reveal Codes (Alt-F3) to be sure). Then, press **Text In/Out** (Ctrl-F5), select **Spreadsheet** (5), and select **Edit Link** (3). Edit the options as necessary. Select **Perform Link** (4) to change the link and import the newly-specified information.

WordPerfect searches for a link backward from the cursor position before displaying information. If it cannot find a link searching backward, it then returns to the cursor position and searches forward.

Nesting Links

You should not include one link inside of another ("nest"). If you do, updating a link deletes all the information between the Link and Link End codes before the new information is retrieved (see *Updating Links* below).

Updating Links

Updating links is the process of updating the information in your WordPerfect file with the current information in your linked file. You can do this at any time or have WordPerfect do it for you each time you retrieve the WordPerfect document. The last spreadsheet information imported to a link is the information that is printed.

To update links in the document on the screen at any time, press **Text In/Out** (Ctrl-F5), select **Spreadsheet** (5), select **Link Options** (4), then select **Update All Links** (3). When you do so, WordPerfect imports the current information from the linked files and places it in the link. The linked file must have been saved in the spreadsheet program for WordPerfect to get the correct information. Any existing information in the link is deleted.

If you want to update a single link, use the **Perform Link** (1) option on the **Spreadsheet: Edit Link** menu (see *Editing Links* above).

If you want to have WordPerfect update your links each time you retrieve the WordPerfect document, see *Spreadsheet, Link Options* in *Reference*.

Range (Block)

The range (or block) of cells is a rectangular region on your spreadsheet file defined by the cell at the upper left-hand corner of the range and the cell at the lower-right corner of the range. When you enter a range for the **Spreadsheet Import** and **Spreadsheet Link** features, you are telling WordPerfect which rectangular block of cells you want to import. The two numbers representing the upper left and lower right cells should be separated by a colon, a period, or two

Spreadsheet, Link Options

The WordPerfect Link Options let you update spreadsheet links and determine whether link codes are displayed. *Spreadsheet, Import and Link in Reference* explains in detail how to create a spreadsheet link that will let you retrieve current data from a spreadsheet file.

To set the Link Options,

- 1 Press **Text In/Out** (Ctrl-F5).
 *Select Text In from the File menu.*
- 2 Select **Spreadsheet (5)**, then select **Link Options (4)**.
- 3 Select the option of your choice and make the necessary settings (see the heading corresponding to an option under *Notes* below).
- 4 If necessary, press **Exit** (F7) to return to the normal editing screen.

Changes made with the Link Options are only in effect for the document on the screen and do not insert a code in the document.

Notes

Show Link Codes

This option determines whether WordPerfect displays the beginning and ending link comments on the screen. Type **n** to keep them from being displayed.

The comments mainly serve as a reminder that you are in a link. They are never printed regardless of the setting for this option. Also, they are never displayed if the link was created in an existing WordPerfect table or columns.

Update all Links

If you select this option, WordPerfect updates all of the links in the document on the screen, retrieving the current information from the linked files.

The spreadsheet file must have been saved for WordPerfect to retrieve the most current information.

The information that is printed in a link is the last information that is retrieved to the link. When you update a link, any existing information in the link is deleted.

Update on Retrieve

This option determines whether WordPerfect will update your links each time you retrieve the WordPerfect document in which the links are located. Type **y** to have WordPerfect update the links on document retrieval, bringing in the most current information from the linked file.

The spreadsheet file must have been saved in the spreadsheet program for WordPerfect to retrieve the most current information.

Keep in mind that the information that is printed is the last information that is retrieved to the link. If it's absolutely necessary that your WordPerfect file has

the current information from the spreadsheet file, it's a good idea to set the option to Yes.

When you update a link, any existing information in the link is deleted.

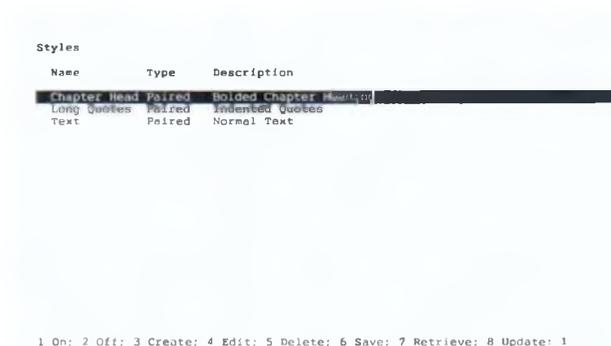
See Also: Spreadsheet, Import and Link

Style

The WordPerfect Style feature lets you insert *styles* that format your text. Unlike other codes, styles can contain text and multiple formatting codes that create a text appearance. Since styles can be easily inserted into a document, they are best used to create and insert an often-used format.

For example, if you are writing a book, you may have a certain appearance for your text. You can create a style called "Text" and use it anytime you want that appearance to take effect. Similarly, you can create styles called "Chapter Head" and "Long Quotes" that format chapter headings and long quotes. When you reach a place where you want to create a chapter heading and long quote, you can easily insert the style rather than re-entering the same formatting codes every time.

The Styles menu and some examples of styles on the menu are shown below.



Information on creating a style is found in *Style, Create in Reference*. Styles are saved with a document when the document is saved.

We recommend that you read *Lesson 33: Styles* in the *WordPerfect Workbook* to learn more about styles.

To insert a style into your document,

1 Press **Style** (Alt-F8).

 Select *Styles from the Layout menu*.

2 Move the cursor to the style you want to turn on.

3 Select **On** (1).

Styles are either paired or open. Paired styles have an On [Style On] code and an Off [Style Off] code, while open styles simply are turned on and cannot be turned off. As you create styles with *Style, Create in Reference* you will learn more about paired and opened styles.

The important thing to know right now is that you can turn off a paired style by repeating steps 1 and 2 above, then selecting **Off** (2), or by moving the cursor past the Style Off code. You can also place paired style codes around existing text by blocking the text, then following the steps above.

Notes

Creating a Style

Before you can insert a style, the style must be created. To create a style, press **Style** (Alt-F8), select **Create** (3), then enter information for the style. For specific information about creating a style, see *Style, Create in Reference*.

Deleting a Style

To delete a style from the Styles menu, press **Style** (Alt-F8), move the cursor to the style you want to delete, then select **Delete** (5).

After you do so, WordPerfect will give you three options. **Leaving Codes** (1) instructs WordPerfect to delete the style from the Styles menu and all Style codes with the same name from the document. All codes that the style contains, however, replace the Style codes. For example, if your style called for 2" left and right margins, the Style code would be deleted, but a code calling for 2" left and right margins would be inserted into the document.

Including Codes (2), instructs WordPerfect to delete the style from the Style menu and all Style codes with the same name from the document. When the Style codes are deleted, the codes within the style are also deleted.

Definition Only (3) instructs WordPerfect to delete the style from the Styles menu. Style On and Off codes with the same name in the document remain intact. When WordPerfect encounters those codes in the document, it re-creates them on the Styles menu. If you have a long list of styles and want to find out which ones you are actually using in a document, you can delete all of the styles with **Definition Only**, then return to the document and press

Home,Home,Down Arrow (↓) to re-create the styles that exist in the document.

Editing a Style

If you want to edit an existing style on the Styles menu, press **Style** (Alt-F8), move the cursor to the style you want to edit, select **Edit** (4), then edit the style. For specific information about editing a style, see *Editing a Style* under *Style Create* in *Reference*.

Graphics

If you want to include graphics images in a style, you must use the Graphics on Disk option (see *Graphics, Define a Box* in *Reference*).

Name Search

You can search for a style on the Styles menu by pressing Name Search (n), then typing the letters of the style name you are searching for. As you type the letters, the cursor moves to the first style name that matches the letters. To reset Name Search, press **Enter** or any of the arrow keys.

If you are searching for a style in a macro definition, we suggest you use Name Search to find the style.

Nesting Styles

Nesting a style refers to including a paired style within another paired style. This is allowed in WordPerfect with the following exception:

You cannot include Style On and Style Off codes for the same style immediately next to each other. If the Style On and Style Off codes are separated by a Style On and Style Off code from another style, however, you can nest a style within a style of the same name.

For example, this is not allowed:

```
[Style On:a][Style On:a][Style Off:a][Style Off:a]
```

The following, however, is allowed:

```
[Style On:a][Style On:b][Style On: a][Style Off:a][Style Off:b][Style Off:a]
```

Outline Styles

Outline styles are styles that are used with the Outline and Paragraph Numbering features. If you are within Outline On and Off codes and are using outline styles as your method of outline numbering, you can turn on an outline style from the Styles menu by following the steps at the beginning of this section. If you are not within Outline On and Off codes, you can only turn on outline styles with the Outline Styles menu (Shift-F5,6,9).

For more information on outline styles, see *Outline, Style* in *Reference*.

Retrieving Styles

If you want to retrieve a list of styles that you have previously saved to the Styles menu, press **Style** (Alt-F8), select **Retrieve** (7), then enter the name of the style list. If you don't enter a complete pathname, WordPerfect will search the

style directory (see *Location of Files in Reference*). If no style directory exists, it searches the default directory.

After you select Retrieve, you can press List (F5), then enter a pathname to view the files in that directory. Positioning the cursor on a style file, then selecting Retrieve (1) will retrieve that file to the Styles menu.

When you retrieve a list of styles, WordPerfect checks your current list of styles for style names that match the incoming styles. If WordPerfect finds a match, it displays the “Style(s) Already Exist, Replace?” message. If you type **n** for No, WordPerfect only retrieves the styles whose names do not match current style names. If you type **y** for Yes, WordPerfect retrieves all of the styles, replacing current styles with the incoming files of the same name.

Outline styles in the file you retrieve are also retrieved to the Outline Styles menu (Shift-F5,6,9) (see *Outline, Style in Reference*).

Saving Styles

If you want to save all of the styles on the Styles menu to a separate file that can be used from document to document, press **Style** (Alt-F8), select **Save** (6), then enter a name for the list of styles. WordPerfect will save them to the style directory (see *Location of Files in Reference*). If no style directory exists, WordPerfect will save the styles to the default directory. Of course, you can also enter a full pathname to have WordPerfect save the file elsewhere.

Keep in mind that this option is only for saving styles as a separate file that can be used from document to document. When you save a document, you save the styles associated with it, so there is no need to use this option if you plan on using the styles in the current document only.

***Important:** We suggest you create a style directory (see *Location of Files in Reference*), specify it in *Location of Files* (Shift-F1,6,5), and name style files with some type of descriptive extension (e.g., .STY) when you save them. This may help you remember that a style file is a style file and not a document.*

When you use the Save option, outline styles on the Outline Styles menu are also saved to the file.

Style Library

The style library is a default list of styles. This means that if you press **Style** (Alt-F8) and no styles exist, the style library (LIBRARY.STY) is retrieved to the Styles menu, provided that the pathname and the filename have been entered in Style Files under Setup: Location of Files. (See *Appendix Q: WordPerfect Files* for a description of each style in the style library.)

Once the style library is retrieved to the Styles menu, it is like any other list of styles. If you make editing changes to it, then save the document, the editing changes are saved for that document only. However, if you make editing changes to the style list, then save it as a separate file under the same name, the changes are made to the style library file.

To specify a location, a style library, press **Setup** (Shift-F1), select **Location of Files** (6), select **Style Files** (5), enter the pathname to the style directory, then enter the filename to the style library. WordPerfect will use the pathname to locate the style library when it is needed.

If the style library is in a directory other than where your style files are located, you will need to enter a complete pathname (rather than just a filename) for the style library.

The style library is also retrieved to the Styles menu any time you select **Update** (8) from the Styles menu (see *Update* below).

Styles and Master Documents

If you are creating a master document, the styles in all of the subdocuments (and any styles in the non-subdocument portion of the master document) are combined on the Styles menu for the master document when the master document is expanded. However, if two styles in the master document have the same name, the one closest to the top of the document is used.

Also, if you decide to save the subdocuments when the master document is condensed, the combined list of styles is saved with each subdocument. For more information, see *Master Documents* in *Reference*.

Styles vs. Macros

Styles and macros are similar in that they are a way to “short cut” entering frequently-used series of codes and text. Styles, however, are easier to edit than macros.

Macros must be edited individually. If you used the same macro 45 times in a document, then find that a change is necessary, you must edit all 45 occurrences of the macro. If you used styles in the same situation, you just need to edit the style on the Styles menu once, and it changes all occurrences of the style.

To learn more about editing styles, see *Style, Create* in *Reference*.

Update

This option on the Styles menu retrieves the style library to the screen. If you select this option, existing styles with the same names as any styles in the style library will be overwritten.

In addition, this option will retrieve all outline styles in the style library to the Outline Styles screen.

See Also: Lesson 33; Outline, Style; Style, Create

Style, Create

As mentioned in *Style in Reference*, a style is useful for formatting a document. In this section, we will tell you how to create a style.

1 Press **Style** (Alt-F8).

 *Select Styles from the Layout menu.*

2 Select **Create** (3).

3 Select an option from the Styles: Edit menu to begin creating a style (see the option headings below).

4 Press **Exit** (F7) to return to the Styles menu.

5 If you want to insert the style in your document, select **On** (1). If not, press **Exit** (F7) to return to your document.

Styles are saved with a document when the document is saved. You can also save the styles on the Styles menu as a separate file (see *Style in Reference*).

For more information about using a style once it is created, see *Style in Reference*.

Name

The Name option lets you enter a name for the style. You can enter up to 12 characters or spaces for a style name.

Characters entered with Compose may take more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 12 characters or spaces for the style name (see *Compose in Reference*).

If you enter a name that already exists on the list of styles, WordPerfect will prompt you with a message that tells you the name already exists. The cursor will then be positioned to let you try again.

The style names are not case sensitive. For example, style 1 and STYLE 1 are considered the same name.

Type

There are three types of styles you can create: Paired, Open, and Outline.

Paired (1) is a style that has a beginning and an end. In other words, it has a Style On code and a Style Off code. Anything between the On and Off codes conforms to the style.

Open (2) is a style that takes effect from a point in a document to the end of the document, unless another Open Style code is encountered. An open style has no Off code, but you can override it by turning on another style (open, paired, or outline) or by using local formatting codes.

Outline (3) is a style that is used with the Outline and Paragraph Numbering features. Outlines and paragraph numbers can have up to eight levels of paragraph numbering, and when you specify this type of style, you can define a style for each level of numbering.

After you select Outline as the style type, you must give it a name and a level number. When you enter a name, that name becomes the name of the entire outline style. When you enter a level number, any codes you may have previously entered for the style become the codes for the paragraph numbering level you enter.

For example, if you enter **Outline1** as the name and **4** as the level number, any codes you may have previously entered become the codes for the fourth-level paragraph number in the outline style called "Outline1."

Once you enter a level number, you are placed in the Outline Styles: Edit screen where you can create styles for each paragraph numbering level.

Outline styles can be created and are displayed in two places. One is on the Styles menu (Alt-F8), while the other is on the Outline Styles menu (Shift-F5,6,9). More information on outline styles can be found in *Outline, Style in Reference*.

Description

The description is simply a way of letting you enter text that describes the style. The description appears on the Styles menu, and you can enter up to 54 characters or spaces for a style description.

Characters entered with Compose may take up more space than regular keyboard characters, so if you decide to enter characters with Compose, you may not be able to use all 54 characters or spaces for the style description (see *Compose in Reference*).

Codes

The Codes option is where you enter the codes and text you want to include in a style. To enter codes, insert them just as you would in the normal editing screen. Codes function differently depending on if they are located in a paired or open style.

Outline styles are also paired or open styles at the various numbering levels, so their codes function as described below.

If a code is in an open style, it is not turned off. The screen below shows codes in an open style. In this case, the margin setting would take effect from the

point where the style is inserted in a document and would remain in effect until the end of a document (or until you insert another margin setting).



Open codes are useful for creating formats that you want to affect an entire document, such as margin settings, tab settings, and most other settings that you normally set with features on the Format key (Shift-F8).

Codes in paired styles function differently. The Style Codes screen for a paired style has an On section and an Off section. These sections are divided by a comment.

- ▲ ON SECTION
- ▲ OFF SECTION
- ▲ COMMENT



Codes in the On section are turned on when you turn the style on. Codes in the Off section are turned on when you turn the style off. This is true with the following exceptions:

- Codes in the On section are reset when you turn off a style. If they have a corresponding code in the Off section, that code will not be turned on when the style is turned off. For example, in the screen above, when the style is

turned off, the Left/Right Margin setting will be returned to whatever it was before you turned on the style. This is true even if you enter a margin setting in the Off section.

- The only codes the paragraph above does not apply to are the codes on the Format: Page menu. These codes include Center Page, Force Odd/Even Page, Headers/Footers, Top/Bottom Margins, Page Numbering, Paper Size/Type, and Suppress Page Format. They will remain in effect when the style is turned off if they are entered in either the On or Off sections.
- Codes in any text that is affected by the paired style override (take precedence over) codes in the On section. They are, however, reset if they have a corresponding code in the On section. For example, in the screen above, a Left/Right Margin setting in text affected by the style will override the Left/Right Margin setting in the On section. When the style is turned off the Margin setting will be returned to whatever it was before you turned on the style because there is a Left/Right margin setting in the On section.

Enter

This option determines what the Enter key will do when you are in a paired style. If you are in an open style, this option has no effect, and that is why this option does not appear when you are defining an open style.

HRt (1) tells Enter to function just as it normally does. Pressing **Enter** will insert a hard return.

Off (2) tells Enter to turn off a paired style. Pressing **Enter** will move the cursor past the Style Off code.

Off/On (3) tells Enter to turn off a paired style, then turn it on again. Pressing **Enter** will move the cursor past the Style Off code, then insert a Style On code. If you move past a Style Off code with an arrow key, Enter will function as it normally does (insert a hard return).

Notes

Editing a Style

When you want to edit a style, press **Style** (Alt-F8), move the cursor to the style you want to edit, then select **Edit** (4). From that point, you can select an option, then change the information as necessary like you did when you created the style. The editing changes will affect all styles of the same name in the document. A few things you should be aware of are listed below.

Name

If you are editing an existing style and decide to change the style name, WordPerfect asks you if you want to rename the styles in the document. If you type **y** for Yes, the previous style name is changed to the new style name for styles in the document. If you type **n** for No, the style names in the document remain unchanged.

If you type **n** for No, WordPerfect will re-create the style on the Styles menu with the style's old name when WordPerfect encounters a style with the old name in the document. All codes in the style will be preserved.

For example, if you have a style named "Heading" and decide to rename it to "Heading One," WordPerfect will re-create "Heading" on the Styles menu when it encounters a Style code for the "Heading" style in the document. The re-created "Heading" style will be exactly like the old "Heading" style.

This means that renaming styles, then typing **n** to not rename the styles in the document is a good way to make minor modifications to an existing style rather than creating a new one. It saves you the trouble of entering all of the codes for a new style if all you really want to do is pattern a style after an existing style. The old style will not be lost because WordPerfect will re-create it when WordPerfect encounters it in a document.

Type

If you are changing a style type from paired to open, all codes in the Off section of the paired style as well as Style Off codes for that style in the document are deleted. This is because open styles don't have an Off section.

If you are changing a style type from open to paired, all codes are placed in the On section of the paired style. For styles existing in the document, the Style code does not change.

If you are changing a paired or open style type to outline, the name you enter determines which outline style the style will be added to (if it doesn't exist, it is created for you). The level number you enter is the outline or paragraph numbering level within the outline style you are assigning the style to. For example, if you enter 4 for the level number, the style becomes the fourth level paragraph numbering style within the outline style.

You cannot change an outline style to a paired or open style.

Codes/Text

Any codes or text you include in a style must be edited by editing the style. This includes tables and graphics boxes.

*To spell-check the text inside a style, you must place your cursor inside the style code and press **Spell** (Ctrl-F2).*

Existing Text

You can create a style from existing codes by using Block (Alt-F4) to block the codes, then pressing **Style** (Alt-F8), and selecting Create (3). You should then enter a name for the style, or one will be provided for you. Any codes existing after text in the block will not be copied to the style.

The style type is initially set to Paired, but you can change that to Open. If you do, any codes located after the On section of the Style Codes screen are deleted because open styles can't be turned off.

If you are copying codes from a screen other than the normal editing screen, you should block the codes, press **Move** (Ctrl-F4), select **Block** (1), select **Copy** (2), then press **Exit** (F7) until you return to the normal editing screen. Next, press **Style** (Alt-F8), select **Create** (3), select **Codes** (4), then press **Enter** to retrieve the codes to the Style Codes screen.

Generate

Some features that must be generated (e.g., Cross-Reference, Subdocuments, and Endnote Placement) are not allowed in styles.

Graphics

If you want to include a graphics image in a file, you must use the Graphics on Disk option (see *Graphics, Define a Box in Reference*).

See Also: Lesson 33; Outline, Style; Style

Suppress Page Format

Suppress Page Format lets you keep page numbers, headers, and footers from being printed on a certain page without disturbing the page numbering sequence in your document.

For example, suppose you want to number the pages in your document consecutively from the title page forward, but you don't want a page number to appear on the title page. You can use Suppress Page Format to keep the page number from being printed on the first page, and yet display the subsequent page numbers as page 2, 3, 4, etc.

To suppress an item,

- 1 Move to the top of the page on which you want to suppress an item (see *Location of Codes* below).
- 2 Press **Format** (Shift-F8), then select **Page** (2).
 *Select Page from the Layout menu.*
- 3 Select **Suppress** (this page only) (8) to display a menu of options.
- 4 Select the items you want suppressed (see *Codes and Selections* below).
- 5 Press **Exit** (F7) to return to the normal editing screen.

Codes and Selections

Selecting a Suppress Page Format option inserts a Suppress code [Suppress:*item*], where *item* represents the item that is being changed, as listed in the following table.

Selection	Code	Effect
1	PgNum,HA,HB,FA,FB	Suppress all page numbering, headers, and footers
2	HA,HB,FA,FB	Suppress all headers and footers
3	PgBC	Print page numbers bottom, center
4	PgNum	Suppress all page numbering
5	HA	Suppress Header A
6	HB	Suppress Header B
7	FA	Suppress Footer A
8	FB	Suppress Footer B

You can display these codes using Reveal Codes (Alt-F3).

For selections 1 and 2, you need only select the number and then press **Exit** (F7) to return to your document and insert the Suppress code.

For selections 3 through 8, you need to select the number, type **y** or **n** to turn that option on or off, then press **Exit** (F7) to return to your document and insert the corresponding Suppress code. The current setting for selections 3 through 8 is always displayed in the Format: Suppress (this page only) menu (Shift-F8,2,8).

You can select any combination of options 3 through 8.

In order for the Suppress code to take effect on a page, it must be found at the top of the page, immediately after the Soft Page code [SPg] or Hard Page code [HPg] which starts that page (see *Page, Soft and Hard* in *Reference*). Otherwise, the Suppress code takes effect on the next page (see *Page Format* in *Reference*).

If you use more than one Suppress code before any text on a page, only the last Suppress code is valid.

Consequently, when you want a page number, header, or footer to begin appearing on the second page of a document, it is a good practice to define that item immediately at the beginning of your document, then use Suppress to suppress it. This will make certain that the code takes effect on the correct page.

Keep in mind that Soft Page codes move as you add and delete text from your document. Consequently, when you use Suppress on a page that is not the first page in your document, you need to always make certain that the Suppress code remains at the top of the page. You may sometimes have to move the Suppress code to accomplish this. When you do not need to have text flow onto a page as you edit your document, you can press **Hard Page** (Ctrl-Enter) to insert a Hard

Page code [HPg] at the top of the page, then insert the Suppress code immediately after it (see *Page, Soft and Hard in Reference*).

Graphs and Charts

Suppress Page Format also lets you keep page numbers or headers and footers from conflicting with graphics (e.g., charts, line draw boxes, graphic boxes with equations) which fill a page. If a graphic fills a page, you can suppress page numbers or headers or footers completely. If page numbers at the top of a page conflict with a graphic, you might not have to suppress the page number. Instead, you may be able to select Print Page Number at Bottom Center (3) to move the number to the last line of text on the page, below the graphic.

See Also: Headers and Footers; Page, Soft and Hard; Page Format; Page Numbering

Switch

WordPerfect lets you keep two documents active in memory at the same time. You can use Switch (Shift-F3) to open a second document screen into which you can then retrieve and edit another document (see *Editing Two Documents* below). Each document is displayed on its own separate screen, and pressing **Switch** (Shift-F3) moves you from screen to screen.

Using Switch is almost like having two copies of WordPerfect running at once, without having to tie up additional memory in your computer.

From the normal editing screen,

- 1 Press **Switch** (Shift-F3) to switch to a second screen.

 Select *Switch Document on the Edit menu*.

 SECOND DOCUMENT



A separate editing screen appears with its own status line. The number 2 in the "Doc" item on the status line indicates that you are in the Document 2 screen.

You can continue pressing **Switch** to move between the two screens. Switching from document to document does not change the position of the cursor in either document. For example, if the cursor is at the top of document 1 when you switch to document 2, it will still be at the top of document 1 when you return to document 1.

Switch works differently when Block (Alt-F4) is on or when you are using the Window feature (see *Case Conversion* and *Window* below).

WordPerfect has a startup option, /n2, that disables the Document 2 screen to save memory (see *Appendix N: Startup Options*).

Notes**Case Conversion**

When you have used Block (Alt-F4) to highlight text, pressing **Switch** (Shift-F3), then selecting **Uppercase** (1) or **Lowercase** (2) converts the blocked text to either uppercase or lowercase letters (see *Capitalization in Reference*).

Closing the Second Screen

If there is no document in the second screen, WordPerfect closes it automatically for you when you exit WordPerfect.

However, if you make changes to a document in the second screen and switch out of it without saving those changes, WordPerfect will return you to it before letting you exit. You can then exit from the second screen just as you would from the first (see *Exit in Reference*).

Editing Two Documents

When you have two document screens open, you can use **List** (F5) and **Retrieve** (Shift-F10) to retrieve documents into either screen just as you normally would (see *List Files* and *Retrieve in Reference*). You can also use **Block** (Alt-F4) and **Move** (Ctrl-F4) to cut, copy, and move information from one document to another (see *Block, Define* and *Move in Reference*).

Window

If you want to see two documents on-screen at the same time, you can use the **Window** option on the **Screen** feature (Ctrl-F3,1) to divide your screen into two windows. Pressing **Switch** (Shift-F3) then moves the cursor from window to window (see *Window in Reference*).

See Also: Capitalization; Window

Tabs are a precise measurement for indenting text in a document. They are especially useful in aligning vertical rows of text in your document.

Since tabs are seen as an exact measurement by your printer, use tabs rather than spaces for aligning vertical columns. When you use spaces, the actual amount of space that you insert between the rows can vary slightly from printer to printer. Using proportional spacing or justifying each line of text against the left and right margins can make the size of spaces vary even more.

The following illustration demonstrates the advantage of using tabs. Both documents below were printed on the same printer, but the rows are much straighter when tabs are used to align them.

-  TABS
-  SPACES

A

Cahoon, Henry J.	Belgium	555-3456	TWA	1st C
Thompson, Robert R.	Holland	555-3356	United	coach
Jensen, Gerald	Orlando	555-4301	Western	1st C
Pace, Patricia	Redding	555-2119	United	coach
Fielding, Tom	Phoenix	555-5233	TWA	coach
Gentry, Steven M.	Columbus	555-8970	Republic	coach
Gerrard, Doug	New York	555-8571	RLM	1st C
Clegg, Ted	Vegas	555-1730	Delta	coach
Anderson, Sherry	Boston	555-3161	Eastern	coach
Bussett, Don	England	555-7338	TWA	1st C
Fields, Carl J.	Sweden	555-1076	TWA	coach
Hyde, Mary C.	Maine	555-1555	Frontier	coach
Jacobs, Ronald	New York	555-2248	TWA	1st C
Latic, Patsy	Portland	555-2676	Western	1st C
White, Cathy	LA	555-6713	Western	coach
Collins, Fred	Calif	555-4981	Republic	coach
Jacobs, Daniel	LA	555-7502	Western	coach
Larsen, Scott J.	Calif	555-3566	Western	coach
Psyot, Ted H.	New York	555-2954	TWA	coach
Silvers, Conrad	D.C.	555-9132	TWA	coach
Curtis, Helen	LA	555-2604	Western	1st C
Anderson, Ken	New York	555-1831	TWA	coach
Boman, Dalia	Orlando	555-0987	Frontier	coach
Knaub, Steven	Germany	555-7513	Delta	1st C
Crowley, Anne	England	555-5657	Delta	1st C
Steiner, Rodney	Seattle	555-5890	Western	1st C
White, Ben	D.C.	555-1234	Eastern	1st C
Harris, Richard	LA	555-2345	TWA	coach
Anderson, David	New York	555-6577	Republic	coach
Johnson, Bruce	Seattle	555-6755	Frontier	coach
Jensen, Mike	Boston	555-7897	TWA	1st C
VanWagenen, Ronald	LA	555-3423	Republic	coach
Johnson, Bret	Portland	555-4323	Western	1st C
Dillan, John	Sweden	555-2319	Eastern	coach
White, Robin	London	555-3456	TWA	coach
Christiansen, Aaron	Israel	555-9854	Frontier	coach

B

Cahoon, Henry J.	Belgium	555-3456	TWA	1st C
Thompson, Robert R.	Holland	555-3356	United	coach
Jensen, Gerald	Orlando	555-4301	Western	1st C
Pace, Patricia	Redding	555-2119	United	coach
Fielding, Tom	Phoenix	555-5233	TWA	coach
Gentry, Steven M.	Columbus	555-8970	Republic	coach
Gerrard, Doug	New York	555-8571	RLM	1st C
Clegg, Ted	Vegas	555-1730	Delta	coach
Anderson, Sherry	Boston	555-3161	Eastern	coach
Bussett, Don	England	555-7338	TWA	1st C
Fields, Carl J.	Sweden	555-1076	TWA	coach
Hyde, Mary C.	Maine	555-1555	Frontier	coach
Jacobs, Ronald	New York	555-2248	TWA	1st C
Latic, Patsy	Portland	555-2676	Western	1st C
White, Cathy	LA	555-6713	Western	coach
Collins, Fred	Calif	555-4981	Republic	coach
Jacobs, Daniel	LA	555-7502	Western	coach
Larsen, Scott J.	Calif	555-3566	Western	coach
Psyot, Ted H.	New York	555-2954	TWA	coach
Silvers, Conrad	D.C.	555-9132	TWA	coach
Curtis, Helen	LA	555-2604	Western	1st C
Anderson, Ken	New York	555-1831	TWA	coach
Boman, Dalia	Orlando	555-0987	Frontier	coach
Knaub, Steven	Germany	555-7513	Delta	1st C
Crowley, Anne	England	555-5657	Delta	1st C
Steiner, Rodney	Seattle	555-5890	Western	1st C
White, Ben	D.C.	555-1234	Eastern	1st C
Harris, Richard	LA	555-2345	TWA	coach
Anderson, David	New York	555-6577	Republic	coach
Johnson, Bruce	Seattle	555-6755	Frontier	coach
Jensen, Mike	Boston	555-7897	TWA	1st C
VanWagenen, Ronald	LA	555-3423	Republic	coach
Johnson, Bret	Portland	555-4323	Western	1st C
Dillan, John	Sweden	555-2319	Eastern	coach
White, Robin	London	555-3456	TWA	coach
Christiansen, Aaron	Israel	555-9854	Frontier	coach

A tab is displayed on the screen as a certain amount of space. You can change how much actual on-screen space is given to each tab setting (see *Display Pitch in Reference*).

To move the cursor to the next tab setting,

- 1 Press **Tab** to insert a tab.

The cursor moves to the next tab setting (see *Tab Settings* below).

Notes

Codes

Normally, pressing **Tab** inserts a Left Tab code [Tab] into your document. You can display this code in Reveal Codes (Alt-F3). A Left Tab code [Tab] indicates that text will be left-aligned at that tab setting.

Four tab alignment settings are available: Left, Center, Right, and Decimal. The kind of Tab code inserted when you press **Tab** is determined by the alignment setting for that tab stop. You can change the tabs that already exist in a document by changing the tab alignment setting prior to those tabs. You can also insert *Hard* Tabs that will not change, regardless of the alignment setting (see *Tab Alignment Settings* under *Tab Set* in *Reference*).

Although pressing **Tab** in the normal editing screen always inserts a Tab code [Tab], the cursor does not move forward if no more tab settings remain on that line. If you have more Tab codes than tab settings on a line, the extra Tab codes remain dormant. They can be seen in Reveal Codes (Alt-F3), but they will not take effect unless you change the tab settings.

If there is not enough space for one character in the current font to fit between the cursor and the next tab stop, pressing Tab moves the cursor past that tab stop to the next tab stop. When you are using Typeover, you can press **Tab** to move from one existing Tab code to another without inserting a new Tab code.

Math

While using the Math feature, pressing **Tab** inserts a Decimal Tab code [Dec Tab] in numeric or calculation columns and a Left Tab code [Tab] in text columns (see *Math* in *Reference*).

Outline

Pressing **Tab** while using the Outline feature moves the paragraph number to the next numbering level and inserts a Hard Tab code [TAB] (see *Outline. Create* in *Reference*).

Tab Ruler

Ordinarily, the actual tab settings are not displayed in the normal editing screen. If you want an on-screen representation of the current tab settings in your document, use the Window feature to display the tab ruler at the bottom of your screen (see *Window Size* under *Window* in *Reference*). The tab ruler is also displayed on-screen in Reveal Codes (Alt-F3).

Tab Settings

In WordPerfect, you do not need to set tabs unless you want to change the current tab settings. Standard tab settings have been pre-set at one-half inch intervals, up to 14". They are in place every time you create a document.

However, you can set tabs at any intervals you want, from zero up to 54 1/2". There are also four tab alignment settings available (see *Tab Alignment Settings* under *Tab Set* in *Reference*).

Tab vs. Indent

Pressing **Tab** lets you indent only one line of information at a time. Consequently, it can only be used to indent the first line of a paragraph. When you want to indent several lines of a paragraph without changing the current left

and right margin settings, use Indent (F4) (see *Indent* in *Reference*). Indent is useful for creating a temporary left margin at the next tab setting.

See Also: Flush Right; Math: Outline, Create; Split Screen; Tab Align; Tab Set; Window

Tab Align

Tab Align aligns text on a specific character. For example, Tab Align can be used to align memo headings on a colon (:).

To align text,

1 Press **Tab Align** (Ctrl-F6).

 Select **Align** from the *Layout* menu, then select *Tab Align*.

The cursor moves to the next tab setting and the current alignment character appears on the status line (see *Alignment Character* below).

2 Type the text and numbers you want aligned, including the alignment character.

The cursor remains at the tab setting and the characters you type are inserted to the left of it, until you type the alignment character. Text typed after the alignment character is then inserted normally.

You can end alignment without typing the alignment character by pressing **Tab**, **Tab Align** (Ctrl-F6), or **Enter**.

Notes

Alignment Character

Normally, the alignment character is a period or decimal point (.) since this is the character most often used in aligning dollar amounts and mathematical figures. However, you can select any character you choose.

To change the current alignment character, press **Format** (Shift-F8), select **Other** (4), select **Decimal/Align Character** (3), then enter the alignment character. You can type any character on the keyboard including a space, or use **Compose** (Ctrl-2) to enter other WordPerfect characters (see *Compose* in *Reference*). Next, enter a new character to be used to separate hundreds from thousands in the Math feature or press **Enter** to skip over this entry. Press **Exit** (F7) to return to your document.

An Alignment Character code [Decml/Algn Char:#,##] is inserted into your document, where # is the alignment character and ## is the thousands' separator. This code takes effect from that point forward in the document, until you change the alignment character again.

The alignment character is also used as the decimal character in math (see *Math, Define Columns* in *Reference*).

Codes

Using Tab Align (Ctrl-F6) inserts a Hard Decimal Align Tab code [DEC TAB] into your document. This is a permanent Tab code that will not change, even if you change the tab setting for that Tab code (see *Types of Tab Settings* under *Tab Set* in *Reference*). Selecting End Centering/Alignment (9) from the Format: Other menu inserts an End Centering/Alignment code [End C/A] into your document and allows the cursor to remain on the same line when the alignment ends.

Decimal Tabs vs. Tab Align

When a period (or decimal point) is the alignment character, you can press **Tab Align** (Ctrl-F6) in the normal editing screen to temporarily turn any tab setting into a decimal tab.

However, when you are typing several columns filled with numbers and you want the numbers aligned on a decimal point, you will probably want to change the tab setting for each column to a decimal tab setting. You can then align the text on a decimal point simply by pressing **Tab** (see *Types of Tab Settings* under *Tab Set* in *Reference*).

See Also: Lesson 25; Tab Set

Tab Set

Standard tab settings have been pre-set at one-half inch intervals. These tab settings are in place every time you create a document.

While this is often convenient, you may not always want your tab stops to be set one-half inch apart. For example, if you only need 3 tabular columns on a page, you will want to change your tab settings so that you don't have to press **Tab** several times to move from column to column.

Also, you may want to use different tab alignment settings. For instance, you may want to center text at a tab stop, right-align text at a tab stop, or align numbers on a decimal point at a tab stop. You may also want WordPerfect to insert dot leaders between the text found at each tab stop.

WordPerfect lets you change the current tab alignment settings whenever you choose. It also gives you four tab alignment settings to choose from (see *Tab Alignment Settings* below).

You can have your tab settings measured from the left edge of the page or from the left margin (see *Type* below).

To change the current tab settings,

1 Press **Format** (Shift-F8), then select **Line** (1).

 *Select Line from the Layout menu.*

2 Select **Tab Set** (8) to display the Tab Set menu at the bottom of the screen (see *Tab Set Menu* below). You can set up to 40 tabs.

3 Make the changes. You can delete existing settings (see *Deleting Tab Settings* below), change the current tab settings one at a time (see *Single Tab Settings* below), or set several evenly-spaced tabs at once (see *Multiple Tab Settings* below).

4 Press **Exit** (F7) twice to return to the normal editing screen.

Tab Set Menu

When you display the Tab Set menu using step 1 above, it presents the tab settings which are in effect at that point in your document.

The top line of the menu is the tab set line, where the current tab settings (or tab stops) are displayed and changed.

Below the tab set line, the current line measurements are displayed. The standard unit of measurement is inches, unless you change it in Setup (Shift-F1,3,8) (see *Units of Measure in Reference*). Tab settings can be measured either from the left margin or from the left edge of the page (see *Type* below).

The next line lists the keystrokes that can be used to change tab settings, and the last line lists the possible types of tab settings.

When the Tab Set menu is first displayed, the cursor retains the same line position that it has in your document. For example, if you are measuring your tab settings in inches from the left edge of the paper (see *Type* below), and your cursor is at the 5" position in the normal editing screen, it will also be at the 5" position when you go to the Tab Set menu. You see only part of the tab set line which matches the width of text currently being displayed on-screen.

Moving the cursor on the tab set line in the Tab Set menu does not change the cursor position in your document. For example, if your cursor is at the 5" position in the normal editing screen when you go to the Tab Set menu, it will still be at the 5" position when you return to your document, no matter how much you move the cursor on the tab set line.

You can move the cursor across the tab set line on the Tab Set menu by using the keystrokes listed in the following table.

Location	Cursor Keys
Left one character	Left Arrow (←)
Right one character	Right Arrow (→)
Left one tab stop	Down Arrow (↓)
Right one tab stop	Up Arrow (↑)
To the left edge of the screen	Home,Left Arrow
To the right edge of the screen	Home,Right Arrow
To the left edge of the tab set line	Home,Home,Left Arrow
To the right edge of the tab set line	Home,Home,Right Arrow, or End

On enhanced keyboards, you can also press **Alt-Left Arrow** to move the cursor left one tab stop and **Alt-Right Arrow** to move the cursor right one tab stop. (Do not use the arrow keys on the number pad.)

You can also quickly move the cursor to any position on the tab set line and set a standard (left) tab at that position by typing the position number and then pressing **Enter**. For example, if you are measuring your tab settings in inches from the left edge of the paper, entering **5** at the tab set line will move your cursor to the 5" position and set a left tab there. Since you can include up to four decimal points with the number you enter, this is the most accurate method of moving to an exact position. This method is particularly valuable when you are using proportional spacing. Once the cursor is at the position you want, you can change the left tab setting to any type you want (see *Types of Tab Settings* below).

While the cursor is on a tab setting, you can slide that tab stop to the left by holding down **Ctrl** and pressing **Left Arrow**. To slide the tab setting to the right, hold down **Ctrl** and press **Right Arrow**.

While the Tab Set menu is displayed, you can change one tab setting at a time (see *Single Tab Settings* below) or several tab settings at once (see *Multiple Tab Settings* below).

When you are ready to leave the Tab Set menu, pressing **Exit** (F7) twice will return you to your document and insert a code which puts those new tab settings into effect (see *Codes* below). If you do not want to record your new settings, you can press **Cancel** (F1) to return to your document and ignore any changes you have made.

Notes

Codes

Changing the tab settings inserts a Tab Set code [Tab Set:type;#] into your document, where *type* indicates whether tabs are being placed at an absolute location on the line or relative to the current left margin (see *Type* below), and #

represents the number(s) of the tab settings. If tabs are set at regular intervals, # is represented as #, every #, where the first number indicates the starting point and the second number represents the distance between tabs (e.g., 1", every 0.5").

A Tab Set code takes effect from that point forward in the document. Any tabs following the Tab Set code will be spaced according to the measurements given in the code. The Tab Set code also determines the types of tabs that appear from that point forward (see *Types of Tab Settings* below).

Deleting Tab Settings

To delete a single tab setting in the Tab Set menu (see *Tab Set* menu above), move the cursor to that tab setting then press **Delete** (Del) or **Backspace**.

To delete all existing tab settings from the cursor forward, press **Ctrl-End** (clear tabs). However, remember that the complete Tab Set menu may not be currently displayed on the screen. Consequently, when you want to clear all tabs, you should first press **Home,Home,Left Arrow** (←) to move the cursor to the very left edge of the Tab Set line, then press **Ctrl-End** (clear tabs).

Dot Leaders

A dot leader inserts a row of dots between the text and the next tab stop. To include a dot leader with any tab setting, move the cursor to the tab on the Tab Set menu, then type a period (.). When a tab setting has been set for a dot leader, the tab setting appears in reverse video or your current selection for the block attribute (see *Colors/Fonts/Attributes in Reference*).

Initial Codes

If you prefer some other tab settings to the ones that are normally in place each time you create a document, you can use Initial Codes under Setup (Shift-F1,4,5) to enter your own tab settings. These tab settings will then be in place each time you create a document (see *Initial Codes in Reference*).

Multiple Tab Settings

To set tabs at regular intervals in the Tab Set menu, enter the position number for the first tab stop, followed by a comma (,), then by a number indicating the amount of space you want between tabs. Unless you indicate a specific unit of measure, the tab will be set in the current unit of measure (see *Units of Measure in Reference*).

For example, if you are measuring tabs from the left margin of the page in inches, you can set tab stops one inch apart beginning at the left margin by entering **0,1** in the Tab Set menu.

Unless a tab type is already set at the position of the first tab stop, left tab settings are inserted. Otherwise, the tab settings inserted match the type of tab setting found at the first tab stop (see *Types of Tab Settings* below).

Single Tab Settings

You can set a left tab anywhere on the Tab Set line by entering the number of that position. For example, to set a left tab at the 2" position, enter 2. However, remember to enter a zero before any fraction of an inch (e.g., **0.5** and not **.5**), since typing a decimal point (.) creates a dot leader tab at the current cursor position on the tab ruler (see *Dot Leaders* above). You can also enter a fraction such as **1/2**, and WordPerfect will set a tab at 0.5".

To set any other type of tab setting, move the cursor to that location on the tab set line, then select the type of tab you want to set (see *Types of Tab Settings* below). As a short cut, you may want to enter the number of a location to move the cursor to that location and set a standard (left) tab there, then select a type of tab to change it to that tab type.

Tab Ruler

The WordPerfect editing screen is a clear screen, with no tab ruler to show you where your tab settings are. While tabs are represented on-screen, the actual tab settings are not displayed in the normal editing screen. They only appear on-screen when you display the Tab Set menu (see *Tab Set Menu* above).

If you want to display a tab ruler at the bottom of the normal editing screen, you can do so using Screen (see *Window Size* under *Windows* in *Reference*). You will then be able to see exactly where your tab settings are at all times. The tab ruler is displayed on-screen whenever you are in Reveal Codes (Alt-F3) (see *Reveal Codes* in *Reference*).

Type

The Type selection on the Tab Settings menu lets you determine whether tab settings are measured from the left edge of the page, or from the left margin. Select Type from the Tab Set menu, then select **Absolute** (1) or **Relative to Margin** (2). Relative to Margin is the default setting.

When you select **Absolute** (1), tabs are measured from the left edge of the page, regardless of your current margin settings. The left edge of the page is displayed as zero (0), with positive numbers to the right of it (e.g., 1", 2", 3").

When you select **Relative to Margin** (2), tabs are measured relative to the left margin. The left margin setting is displayed as zero (0), with negative numbers to the left of it (e.g., -1") and positive numbers to the right (e.g., +1", +2", +3").

The negative numbers let you use Margin Release (Shift-Tab) to move to the left of the left margin.

When you use this selection, the distance between tab settings and the left margin always stays the same, regardless of how often you change your margins.

The Relative option is particularly useful when you are using Newspaper or Parallel Columns. In Newspaper or Parallel columns, when you select **Relative to Margin** (2), tabs are measured from the left margin of each column. For example, if you are formatting text into newspaper columns and you have three columns across the page, you can set one relative tab at the +0.5" position to

have a tab one-half inch in from the left margin of each column (see *Columns, Newspaper* and *Columns, Parallel in Reference*).

Tab Alignment Settings

Four tab alignment settings are available. Each one aligns text differently. On the top line of the Tab Set menu (see *Tab Set Menu* above), each tab alignment setting is represented by the letter used to select it, as listed in the following table.

Selection	Tab Alignment Setting	Codes
Left	Text is left-aligned at the tab stop (standard tab).	[Tab]
Center	Text is centered over the tab setting (like Center).	{Cntr Tab}
Right	Text is right-aligned at the tab stop (like Flush Right).	[Rgt Tab]
Decimal	Text is aligned at the align character (like Tab Align).	{Dec Tab}

You can change the tabs that already exist in a document by changing the tab alignment setting prior to those tabs. For example, if you change a left tab setting to a center tab, all the left tabs at that tab stop from that point forward in your document become center tabs.

When you want to insert tabs that will not change regardless of the tab alignment setting, use a Hard Tab. Hard tabs remain constant regardless of the tab alignment setting. You can insert hard tabs by using the keystrokes given in the following table.

Keystroke	Permanent Tab Alignment	Codes
Home,Tab	Hard Left	[TAB]
Home,Center (Shift-F6)	Hard Center	[CNTR TAB]
Home,Flush Right (Alt-F6)	Hard Right	[RGT TAB]
Tab Align (Ctrl-F6)	Hard Decimal Align	[DEC TAB]

Hard Tab codes do not change when you change the type of tab stop settings which precede them in a document.

If you want to set tabs in a macro, the Tab Set menu only allows mnemonic choices for **Type**, **Left**, **Center**, **Right**, and **Decimal**. These options can also be accessed by pressing the following keys: **/** for Type, **Tab** for Left, **Shift-F6** for Center, **Alt-F6** for Right, and **Ctrl-F6** for Decimal. These keys are especially useful for international macros.

See Also: Center Text; Flush Right; Initial Codes; Tab; Tab Align; Units of Measure; Window

Table, Create

The WordPerfect Table feature has many uses. First and foremost, it provides an easy way to create and edit organized rows and columns of tabular data—without having to enter tabs or tab settings.

For example, the table in the following document was created with the Table feature:



GROWING TREND

Stock TICKER	Purchase Price	Number Shares	Cost Basis	Income Received	Current Bid Price	Dividend Yield	Gain/Loss %	Gain/Loss (\$)
Amstar	8/15/90	11,240	92,375	4762.70(0)	\$1,538.26(0)	1.08	38.85%	\$1,688,801.08(0)
Levitt	10/24/90	28,500	37,175	1,200.00(0)	\$1,275.80(0)	5.75	1.84%	29,438.47(0)
Downer	12/12/88	5,515	1,510.00	47,500.00(0)	865.00(0)	7.50	20.57%	386,435.00(0)
EastTM	5/24/90	17,500	24,300	778,015.00(0)	891.40(0)	0.94	20.27%	4,341,538.00(0)
MP&L	10/27/90	27,500	40,250	1,480.00(0)	\$1,996.25(0)	0.13	11.13%	43,562,455.00(0)
Healey	10/14/90	13,600	41,820	460,000.00(0)	862.00(0)	0.09	10.27%	1,108,447.00(0)
Total				\$2,480,070.00	\$2,244,978.00			\$756,226.08(0)

Imperator Gems, Ltd. has until Sept. 1, 1991 to complete the second phase of acquiring the Beryline Mining Group and Beryline Laboratories from Permin Inc. Imperator Gems APOR to buy the Permin subsidiaries for \$15,000,000 and to tender 65% of the outstanding common stock. The purchasing terms of the second phase are:

- Deposit the final two \$10,000,000 down payments over six months, actions on August 10 and September 1, 1991.
- Make a final payment of \$40,000,000 to tender one million shares of Beryline Mining Group common stock held by Richard Madden & Hermer Mason. Mr. Madden has agreed to surrender a 2.8% controlling interest in Beryline Mining.
- Sell the five executives of the \$40-million stake offer for Beryline Mining Group common stock. October 26 is the suggested expiration date. Imperator Gems has only one month option to extend the tender offer.
- Complete negotiations with Canada's Corp. for a \$15,000,000 provisional loan and \$5,000,000 financing toward modernization to return Canada's Corp. will receive a 20% stake in the Beryline Mining Group.
- Divest Imperator Gems of its residential assets and holdings.

especially income in Athabasca. When Canadian National, Duquesne, Berrymore Time, MP&L, and West Armistead.

- Finalist sale of Beryline Laboratories to Daily Bros. Five million shares at \$3 a share are to be sold by August 1.

The acquisition of the Beryline Mining Group includes four emerging mines: (1) The Brazilian Whispering Gems mine alone annually produces 5,000,000 carats of emerald annually. However, one of the four mines, the Shalvay Mine, located in Bolivia, has failed to produce a significant quantity in four years. This mine will be sold to Mexican investors.

The remaining assets' combined output will mean Imperator Gems 21% of the market. This share will make the company the world's leading emerald supplier.

Beryline Mine Production

Year	Output (Thousands of Carats)	Reserves (Thousands of Carats)
1985	~10	~100
1986	~15	~100
1987	~20	~100
1988	~30	~100
1989	~40	~100
1990	~50	~100

• Sell the five executives of the \$40-million stake offer for Beryline Mining Group common stock. October 26 is the suggested expiration date. Imperator Gems has only one month option to extend the tender offer.

The Table feature is also useful for creating forms such as invoices that are formatted in tabular form. In fact, you may want to compare the Table feature against some of the other WordPerfect features, such as Math and Parallel Columns to see which features are best for you in specific situations.

Before you begin working with tables, you should understand their basic structure. Tables consist of rows, which run horizontally, and columns, which run vertically. These rows and columns create cells which are labeled alphabetically from left to right and numerically from top to bottom.

- A ROW TWO
- B COLUMN C
- C CELL A6
- D CELL D2

We will observe the following schedule this week. Forward any questions to Helen in Personnel.

Day	Shift One	Shift Two	Shift Three
Monday	Rick	Joan	Sue
Tuesday	Jill	Roger	David
Wednesday	John	Becky	Alex
Thursday	Steve	Howard	Anne
Friday	Lucy	Hank	Phil

Doc 1 Pg 1 Ln 3.25" Pos 1"

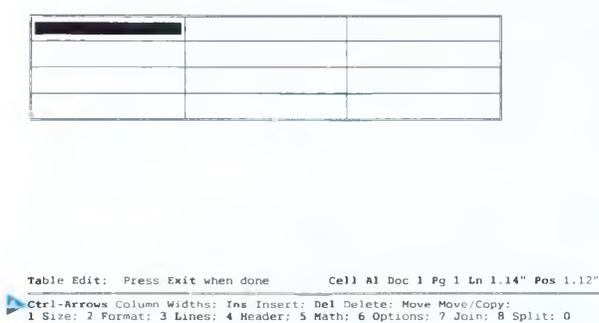
To create a table,

- 1 Move the cursor to the left margin of the line where you want to create the table.
- 2 Press **Columns/Table** (Alt-F7), then select **Tables (2)**.
 Select Tables from the Layout menu.
- 3 Select **Create (1)**.
- 4 Enter the number of columns you want in your table (maximum of 32).
- 5 Enter the number of rows you want in your table (maximum of 32,765).

The table is displayed on the screen. At this point, you need to be aware that there are two modes for a table on the screen. In the normal editing mode, you can enter text in the table and do other things which are described in this reference section. In the table editing mode, you can position the table and edit the table structure itself, but you cannot enter text in the table.

When you are in the table editing mode, the Table Edit menu is displayed on the screen as it is now.

TABLE EDIT MENU



In this section, we will talk about what you can do in the normal editing mode, so

6 Press **Exit** (F7) to return to the normal editing mode.

Anytime the Table Edit menu is displayed on the screen, you can press **Exit** (F7) or **Columns/Table** (Alt-F7) to return to the normal editing mode. Unless otherwise noted, all information in this reference section pertains to table options in the normal editing mode.

If you want to learn about the table editing mode, read *Table, Edit Structure* and *Table, Format Columns and Cells in Reference*.

If you want to learn more about tables, we recommend that you read *Lesson 34: Tables—Part I* and *Lesson 35: Tables—Part II* in the *WordPerfect Workbook*.

Table Text

To include text in a table, use one of the cursor keys (see *Cursor Movement* below) to move to the cell where you want to type the text, then type the text. When you are finished typing text in a cell, press **Tab** to move to the next cell or **◆Margin Release** (Shift-Tab) to move to the previous cell.

*If you want to insert a Tab code into a cell (rather than move to the next cell), press **Ctrl-v**, then press **Tab**. If you want to insert a Margin Release code into a cell (rather than move to the previous cell), press **Ctrl-v**, then press **◆Margin Release**.*

Enter is preset by WordPerfect to insert a hard return and move the cursor to the next line in the cell. If you want your cells to be only one line high regardless of the amount of text in the cell, you may make the change with an option on the Table Edit menu (see *Row Height* under *Table, Format Columns and Cells in Reference*).

You can use most of the WordPerfect features in tables including footnotes, endnotes, font changes, and mark text features (i.e., cross-reference, index, table of contents, table of authorities, and lists).

Notes**Adding a Row**

If you have a keyboard with an enhanced BIOS and want to add a blank row to the table without using an option on the Table Edit menu, you may do so by moving the cursor to an existing row and pressing **Ctrl-Insert**. WordPerfect will add the blank row before the existing row and will pattern the new row structure after that of the existing row, keeping the same column and cell attributes as well as the same justification, column width, and line appearance settings specified in the Table Edit menu.

If you do not have a keyboard with an enhanced BIOS, you can assign this function to a key on your keyboard (see *Action* under *Keyboard Layout, Edit* in *Reference*). The function to assign is Block Copy.

If you want to know how to add a row or column from the Table Edit menu, see Adding Rows or Columns under Table, Edit Structure in Reference. Likewise, see the same section if you want to add multiple rows or columns, or want to know how adding a row works with a row that contains a cell that spans more than one row.

Attributes

You can enter attribute codes such as Bold, Italics, and Underline in a table by selecting them as you normally would. These codes affect table text between the on and off codes just as they do normal text.

For information on other ways to assign attributes to table cells and columns, see *Table, Format Columns and Cells* in *Reference*.

Base Font

You can enter a Base Font code anywhere in a table, and the text following the code will be printed in that base font (see *Font* in *Reference*). Changing the base font to a smaller font is a good way to fit more text on a line in a cell.

Columns

You cannot include tables in newspaper or parallel columns, nor can you include newspaper or parallel columns in tables. You can, however, include tables in graphics boxes, which in turn can be included in columns. So, if you want to include tables in columns or create two tables side-by-side, put them in graphics boxes (see *Graphics Boxes* below).

Cross-Reference

WordPerfect assigns a number to each table (e.g., I, II, III), and these numbers fall in the same numbering sequence as table graphics boxes. So, if you have a table graphics box (whether or not it contains a table) at the beginning of a document, a table in the middle, and another table graphics box at the end, the

first table graphics box is numbered one, the table is numbered two, and the last table graphics box is numbered three.

This is important to know if you are using the Cross-Reference feature to reference a table. To do so, you must reference the table as a table graphics box (see *Cross-Reference in Reference*).

Cursor Movement

The following is a list of table locations and the cursor keys that can move you to those locations (when the Table Edit menu is not displayed). To learn more about the cursor functions that are allowable when the Table Edit menu is displayed, see *Cursor Movement* under *Table, Edit Structure in Reference*.

Notice that in some cases you can get to the same location with one of two or three sets of cursor keys. This lets you choose the keys you feel most comfortable with. Remember that a dash means for you to hold the first key down and press the next key, while a comma means to press the first key, release it, then press the second key.

The Alt key combinations are for keyboards with an enhanced BIOS only, and the Home and arrow keys associated with Alt key combinations are not the Home and arrow keys on the Number Pad. If you don't have a keyboard with an enhanced BIOS, you can assign the Alt-arrow key functions to another key with the Keyboard Layout feature (see *Action* under *Keyboard Layout, Edit in Reference*). The functions to assign are Item Up/Down/ Left/Right.

If there is no text in the cell where the cursor is located, the arrow keys move the cursor one cell in the direction of the arrow.

Location	Cursor Keys
One Cell Down	Alt-Down Arrow (↓)
One Cell Left	Shift-Tab Go To,Left Arrow Alt-Left Arrow (←)
One Cell Right	Tab Go To,Right Arrow Alt-Right Arrow (→)
One Cell Up	Alt-Up Arrow (↑)
Beginning of Text in Cell	Go To,Up Arrow
Last Line of Text in Cell	Go To,Down Arrow
First Cell in a Column	Go To,Home,Up Arrow Alt-Home,Up Arrow

Location	Cursor Keys
Last Cell in a Column	Go To,Home,Down Arrow Alt-Home,Down Arrow
First Cell in a Row	Go To,Home,Left Arrow Home,Home,Home,Left Arrow Alt-Home,Left Arrow
Last Cell in a Row	Go To,Home,Right Arrow Home,Home,Home,Right Arrow Alt-Home,Right Arrow
First Cell in the Table	Go To,Home,Home,Up Arrow Alt-Home,Home,Up Arrow
Last Cell in the Table	Go To,Home,Home,Down Arrow Alt-Home,Home,Down Arrow

Deleting a Row

If you have a keyboard with an enhanced BIOS, you can delete a single table row *and* the text inside the row by moving the cursor to the row, pressing **Ctrl-Delete**, then typing *y* to confirm.

If you do not have a keyboard with an enhanced BIOS, you can assign this function to a key on your keyboard (see *Action* under *Keyboard Layout, Edit in Reference*). The function to assign is Block Move.

To undelete a deleted row, you must have the Table Edit menu displayed on the screen, then press **Cancel** (F1), and type *y*.

If you want to know how to delete a row or column from the Table Edit menu, or want to know how to delete multiple rows or columns, see Deleting Rows or Columns under Table, Edit Structure in Reference.

If you want to know how deleting a row works with a row that contains a cell that spans more than one row, see Adding Rows or Columns under Table, Edit Structure in Reference.

Deleting a Table

To delete the table structure but not the text inside the table, delete the Table Definition code [Tbl Def]. To delete the entire table (structure and text), block the table (including the Table Definition and Table Off codes [Tbl Off]) with the Block feature (Alt-F4), press **Delete** (Del) or **Backspace**, then type *y*.

*If you delete the Table Definition code without using Block, you cannot use **Cancel** (F1) to restore the code.*

If you delete the structure but not the text, the columns will be separated by tabs, and the rows will be separated by hard returns.

Deleting Text

To delete text in a table cell, use the delete keys (or Block and delete) as you would with normal text. Delete to End of Line (Ctrl-End) does not cross cell boundaries.

Edit Option

The Edit option (Alt-F7,2.2) instructs WordPerfect to search backward from the cursor position and move the cursor to the first table it can find. If WordPerfect cannot find a table searching backward, it returns to the cursor position, then searches forward. Once the cursor is placed in a table, you can select an option from the Table Edit menu, or you can press **Exit** (F7) and edit the table text.

More information on the Table Edit menu can be found in *Table, Edit Structure* in *Reference*.

Converting Columns to Tables

If you want to turn existing tabular columns or parallel columns into a table, you must block the text with the Block feature (Alt-F4), press **Columns/Table** (Alt-F7), select **Tables** (2), then select **Create** (1). Next, select **Tabular Column** (1) or **Parallel Column** (2) depending on the text you are converting.

If you are converting tabular columns, the current tab settings will be used to define the table columns, while the hard returns in the text will define the table rows. If you are converting parallel columns, the parallel column definitions will be used to define the table columns, while Hard Page codes will define the table rows.

Formatting Codes

You can enter formatting codes such as Center, Tab Align, Flush Right, and Justification in a table by selecting them as you normally would. For information on other ways to assign formatting codes to table cells and columns, see *Table, Format Columns and Cells* in *Reference*.

Forms Fill-In

You can use the Table feature to create a form or to fill out pre-printed forms by creating the structure of the form with a table(s) and using merge codes to

prompt you for proper input. For more information on merge codes, see *Merge* in *Reference*.

HALVA International Employee Survey			
Name: (KEYBOARD)			
Address: (KEYBOARD)			
City: (KEYBOARD)	State: (KEYBOARD)	ZIP: (KEYBOARD)	
Interests: (KEYBOARD)			

Cell A5 Doc 1 Pg 1 Ln 2.81" Pos 2.32"

For more information on Forms Fill-In, see *Lesson 30: Forms Fill-In* in the *WordPerfect Workbook*.

Graphics Boxes

You can include tables in graphics boxes. To do so, create the table in the graphics box Text Editor. This is the way to include tables in columns, and it is also the way to wrap text around a table on a page or create side-by-side tables.

In the example below, the table was created in a graphics box.

WordPerfect 5.1 Fact Sheet

WordPerfect 5.1 is now available. The rich set of features that made WordPerfect the most powerful and popular word processor in history has been improved. Here's a sampling of some enhancements and new features which add power and ease of use to WordPerfect 5.1.

Tables
The new Tables feature lets you easily create organized rows and columns of tabular data that are automatically enclosed

	Jan	Feb	Mar	Apr	May	June
Division A	2279	3225	3676	3461	3828	3528
Division B	1142	2200	2228	2463	2281	2281
Division C	1561	1617	1628	1648	1681	1681
Division D	1927	1981	1911	1921	1928	1928
Total	6188	8483	8723	8288	8638	8438

Using the graphics boxes, you can have as many as 32 columns and 32,768 rows in one table. You can perform math functions on the numbers data in a table, and import spreadsheets into a table, and records in which the data is

table as well as anywhere else in WordPerfect.

Merge
We have significantly modified Merge to make it much easier for anyone to use. In response to your requests, we not only made the merge codes easier to understand, but we also made them more powerful. Merge commands can now be used inside headers and footers, footnotes and endnotes, and text boxes. You can either hide or reveal merge codes when you are doing normal text editing.

We have also added a powerful merge language that is much like our macro language.

Using the merge language, you can select merge records based on the information contained in specific fields. For example, you can select and merge only those records in which the state is

California and the education level is 12 years and above.

Equations
Many of you need to print detailed scientific and technical formulas and equations. So we have added an equation editor, which includes a comprehensive collection of symbols, characters, and mathematical operators and functions.

$$f(x) = \int \frac{\sqrt{1-\sin^2 x}}{x^2} dx$$

The Equation Editor lets you enter a mathematical expression and immediately preview its printed appearance.

The WordPerfect Character Set
"But," you say, "my printer can't print some of the symbols in those equations." With WordPerfect 5.1 and any of WPCorp's supported printers that print graphics, you can directly print any of the more than 1200 characters in the WordPerfect character sets. If a character or symbol isn't built in to your printer, WordPerfect will automatically

If the table is larger than the graphics box, the rows and columns that do not fit within the box, yet fit on the page will still display in View Document (Shift-F7,6) and print. Some things you can do to keep a table within a graphics box are editing the size of the table, editing the size of the graphics box, or making sure that the table Position option is set to Full.

WordPerfect sets the Position option to Full when you create a table in a graphics box.

For more information on editing the size of the table, see *Column, Width* under *Table, Format Columns and Cells* in *Reference*. For more information on editing the size of the graphics box, see *Graphics, Edit* in *Reference*. For more information on the table Position option, see *Options* under *Table, Edit Structure* in *Reference*.

You can also create graphics boxes in tables *if* the table itself is not in a graphics box. As long as your cells are not set for a fixed height (see *Format* under *Table, Edit Structure* in *Reference*), the cells will expand lengthwise with a graphics box that has a Character or Paragraph anchor type. You cannot enter a box width larger than the cell width.

If a graphics box with a Page anchor type is positioned on a table, the text in the table will wrap around the box (if you specify that it should when you define the box), but the table lines will print on the graphics box. You can remedy this by turning off the table lines (see *Lines* under *Table, Edit Structure* in *Reference*).

Lesson 31: Graphics in the WordPerfect Workbook discusses tables and graphics boxes.

Math

WordPerfect has a Math feature. This feature helps you perform mathematical calculations and is independent of tables. WordPerfect also has a Table Math feature. This feature lets you perform the same calculations as the Math feature, but in some instances may be easier to use.

WordPerfect assumes that Table Math is on in tables. For more information on using Table Math, see *Table, Math* in *Reference*. For more information on the Math feature, see *Math* in *Reference*.

Move

In the normal editing screen, pressing **Move** (Ctrl-F4) in a table displays the same options as it does in normal text. If the cursor is in a table and you select Sentence or Paragraph, however, no more than one entire cell of text is highlighted.

If the Table Edit menu is displayed, Move is specially tailored to moving text in tables, with options for moving rows and columns (see *Table, Edit Structure* in *Reference*).

If you use Block to move or copy the entire table (structure and text), you must include both the Table Definition and Table Off codes in the block. If you use Block to move the table text (without the table structure), you must not include

either of the codes. In no situation should you include one code without the other.

When you move or copy table text (without the table structure), the text is separated into columns by tabs and into rows by hard returns.

When you are moving or copying text and then create a table, the “Move cursor; press Enter to retrieve” message is suppressed while you are in table editing mode. As soon as you exit Table Edit, the message should reappear.

If the Edit pull-down menu is used and Paste is selected, the text reappears.

Page Breaks

A table can span a page break. In other words, a table is broken at the page break and continued on the next page. If you want to protect the table that doesn't exceed a page from being split by a page break, use Block Protect (see *Block Protect in Reference*).

WordPerfect breaks pages at a row boundary. Text within rows cannot be split by a page break.

If you want the same information repeated on the top row(s) of the table at the top of each page, use the Header feature on the Table Edit menu (see *Header under Table, Edit Structure in Reference*).

Parallel Columns

While WordPerfect has a Parallel Columns feature, tables can also be used to create parallel columns. You may want to try creating parallel columns with both features and decide which is easiest for you. The following set of columns was created using the Table feature with the lines turned off around the cells.

NALVA International Inventory		
Item	Quantity	Notes
Ceramic Figurines	345,000	Should last until December. Sell 200,000 in last quarter of last year.
Clocks	234,000	Should reorder. Sold quickly last year in third and fourth quarters.
Crystal Watches	432,980	Should last until June. Sell 100,000 in last 3 months. Sell 100,000 from last year.
Glass Figurines	123,000	Should last until June. Numbers don't show big inventory but there are no slow movers. Suggest reconstituting line.
Jewelry Boxes	234,000	Should last for winter past weren't seen moving well. Perhaps a sale in order.
Music Boxes	400,000	Need to reorder. Number one seller-sold half a million in last quarter of last year.

For more information on parallel columns, see *Columns, Parallel in Reference*.

Printing

The lines that are printed around a table are graphics lines. If your printer cannot print graphics, it may not be able to print table lines.

Occasionally, as in the case with imported spreadsheets or tables retrieved to a graphics box, a table width can be wider than the actual page width. If it is, only the information that fits on the page will be printed.

Sort

If the cursor is in a table and you select Sort (Ctrl-F9,2), you should notice that the Sort feature is tailored to tables. The main difference between a table sort and other types of sorts is that you specify which cell you want to sort when you define the sorting keys. In a sort, the cells are numbered from left to right on a row, with the left-most cell on a row numbered one.

If you sort a table, we recommend that you do not have cells in the table that span multiple rows. For an example of such cells, see *Adding Rows or Columns* under *Table, Edit Structure in Reference*.

For more information about sorting, see *Sort in Reference*.

Spreadsheets

You can import data from a PlanPerfect, Lotus 1-2-3, Microsoft Excel, Quattro, or Quattro Pro spreadsheet into a table. For more information on doing so, see *Spreadsheet, Import and Link in Reference*.

Status Line

When the cursor is located in a table, the "Cell" heading is added to the status line. This heading tells you the cell location of the cursor.

Styles

You can include styles in tables. You can also include tables in styles. If you edit a table that is located in a style, you must do so by first editing the style.

Table Codes

Tables are marked with a Table Definition and a Table Off code. Row and Cell codes are located between the Table Definition and Table Off codes.

You cannot delete the Row, Cell, and Table Off codes, but you can delete the Table Definition code. If you do so, the Cell codes in the table will be converted to tabs, the Row codes will be converted to hard returns, and the Table Off code will be deleted (see *Deleting a Table* above).

See Also: Lesson 34; Lesson 35; Columns, Parallel; Table, Edit Structure; Table, Format Columns and Cells; Table, Math

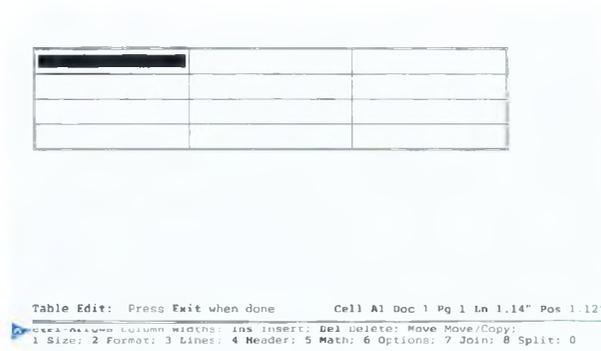
Table, Edit Structure

In *Table, Create in Reference*, we discuss how to create the table grid on the screen. We also talk about the two modes (normal editing and table editing) that are available with a table on the screen. In this section, we discuss the table editing mode. In this mode, you can position a table and edit its structure. Unless otherwise noted, the information in this reference section pertains to table options in the table editing mode.

When you create a table, WordPerfect structures the table according to default settings. For example, the lines bordering the outside of the table are double lines, the cell height varies according to the size and amount of text in the cell, text is left aligned in a cell, and so on.

While these settings are useful in many situations, they may not be exactly what you want for your table. Using the options on the Table Edit menu, you can change the table structure. The screen below shows the Table Edit menu.

▲ TABLE EDIT MENU



The Table Edit menu is extremely versatile. Chances are that it has one or more options which you will find useful in creating the table appearance you want. Carefully read the information in this section to find out more about each option.

When you create a table, the Table Edit menu is displayed, and you can edit the table structure at that point by selecting a Table Edit option (see the option headings under *Notes* below). If you do not know how to create a table or simply want to learn how to enter text in a table, see *Table, Create in Reference*.

When the Table Edit menu is not displayed, you can display it by following the steps below.

- 1 Move the cursor to a location inside the table.
- 2 Press **Columns/Table** (Alt-F7).

 Select *Tables* from the *Layout* menu, then select *Edit*.

- 3 Select a menu option from the Table Edit menu and follow the procedure for making the change you want to make (see the option headings under *Notes* below).

If your cursor is not located in a table, you can edit a table structure by pressing **Columns/Table** (Alt-F7), selecting **Tables** (2), then selecting **Edit** (2). WordPerfect searches backward from the cursor position for the first table it can find, moves the cursor to that table, then displays the Table Edit menu. If WordPerfect cannot find a table searching backward, it returns to the cursor position and searches forward.

For more information on tables, see *Lesson 34: Tables—Part I* and *Lesson 35: Tables—Part II* in the *WordPerfect Workbook*.

Notes

Adding Rows or Columns

With the Table Edit menu displayed on the screen, press **Insert** (Ins), select **Rows** (1) or **Columns** (2), then enter a number to insert copies of the row or column where the cursor is located. The new row or column will be added immediately before the row or column where the cursor is located and will contain the same column and cell attributes as well as the same justification and column width settings as the row where the cursor is located. Text is not copied.

If you use Block (Alt-F4) before pressing Insert (Ins), you don't need to enter the number of rows or columns you want to add. WordPerfect assumes that the number of rows or columns that are blocked is the number of rows or columns you want to add.

If you are adding a column and the table does not occupy the entire space between the left and right margins, WordPerfect will try to give the new column the same width as the current column, or at the very least, insert the column with a minimum width. If the table already occupies the entire space between the margins, WordPerfect will split the current column into two columns.

If you want to learn more about how the table is positioned between margins and what you can do to change that position, see Options below.

You may wonder what happens when you add a row patterned after a row such as row two shown below. Notice that the first cell in row two spans three rows.

Table Edit: Press Exit when done Cell A2 Doc 1 Pg 1 Ln 1.42" Pos 1.12"
Ctrl-Arrows Column Widths: Ins Insert: Del Delete: Move Move/Copy:
1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

In this case, WordPerfect functions differently depending on the cursor location at the time you add the new row.

If the cursor is located in the cell that spans multiple rows, this is what happens:

A ADDED ROW

Table Edit: Press Exit when done Cell A2 Doc 1 Pg 1 Ln 1.42" Pos 1.12"
Ctrl-Arrows Column Widths: Ins Insert: Del Delete: Move Move/Copy:
1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

Notice that the entire row, including the large cell and its sub-rows were duplicated in the table.

If the cursor is not located in the cell that spans multiple rows, this is what happens:

A ADDED ROW



Table Edit: Press Exit when done Cell B3 Doc 1 Pg 1 Ln 1.7" Pos 2.72"
Ctrl-Arrows Column Widths; Ins Insert; Del Delete; Move Move/Copy;
1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split; 0

Notice that only a sub-row was duplicated, and the large cell was simply expanded.

WordPerfect follows the same principle when deleting the same type of rows and when adding or deleting columns that have a cell that spans several columns.

For information on adding rows or columns to the end of a table, see *Size* below.

Cursor Movement

When the Table Edit menu is displayed, the cursor occupies an entire table cell.

The following is a list of table locations and the cursor keys that can move you to those locations when the Table Edit menu is displayed. To learn more about the cursor functions that are allowable when the Table Edit menu is not displayed, see *Cursor Movement* under *Table, Create in Reference*.

Notice that in some cases you can move to the same location with one of two or more sets of cursor keys. This lets you choose the keys you feel most comfortable with. Remember that a dash means for you to hold the first key down and press the next key, while a comma means to press the first key, release it, then press the second key.

The Alt key combinations are for keyboards with an enhanced BIOS only, and the Home and arrow keys associated with the Alt key combinations are not the arrow keys on the number pad. If you don't have a keyboard with an enhanced BIOS, you can assign the Alt arrow key functions to another key with the Keyboard Layout feature (see *Action* under *Keyboard Layout, Edit in Reference*). The functions to assign are Item Up/Down/Left/Right.

Location	Cursor Keys
One Cell Down	Down Arrow (↓) Go To,Down Arrow Alt-Down Arrow
One Cell Left	Left Arrow (←) Shift-Tab Go To,Left Arrow Alt-Left Arrow
One Cell Right	Right Arrow (→) Tab Go To,Right Arrow Alt-Right Arrow
One Cell Up	Up Arrow (↑) Go To,Up Arrow Alt-Up Arrow
First Cell in a Column	Home,Up Arrow Go To,Home,Up Arrow Alt-Home,Up Arrow
Last Cell in a Column	Home,Down Arrow Go To,Home,Down Arrow Alt-Home,Down Arrow
First Cell in a Row	Home,Left Arrow Home,Home,Left Arrow Go To,Home,Left Arrow Alt-Home,Left Arrow
Last Cell in a Row	Home,Right Arrow Home,Home,Right Arrow End Go To,Home,Right Arrow Alt-Home,Right Arrow
First Cell in the Table	Home,Home,Up Arrow Go To,Home,Home,Up Arrow Alt-Home,Home,Up Arrow
Last Cell in the Table	Home,Home,Down Arrow Go To,Home,Home,Down Arrow Alt-Home,Home,Down Arrow
Specific Cell	Go To,Cell Location (e.g., A1)

Deleting Cell Contents

If the Table Edit menu is displayed and you want to delete the text in a block of cells without deleting the table structure, you may do so by blocking the text of the cells you want to delete, pressing **Backspace**, then typing *y*.

Pressing **Delete to End of Line** (Ctrl-End) with the Table Edit menu displayed deletes all of the text on a row from the cursor forward.

Deleting Rows or Columns

Press **Delete** (Del), select **Rows** (1) or **Columns** (2), then enter a number to delete that many rows or columns from the table. Text, as well as the table structure, from the row on which the cursor is located forward will be deleted.

*If you use Block (Alt-F4) before pressing **Delete** (Del), you don't need to enter the number of rows or columns you want to delete. WordPerfect assumes that you want to delete the rows or columns you have blocked.*

You may wonder what happens when you delete a row or column that contains a cell that spans multiple rows or columns. For a discussion of this principle, see *Adding Rows or Columns* above.

Format

The Format option lets you format a single cell in a table or an entire column of cells. It also lets you change the height of a row of cells. Since this option has several sub-options, it is discussed in detail in *Table, Format Columns and Cells* in *Reference*.

Header

Header rows are rows that are repeated at the top of every page for tables that span page breaks. Select **Header** (4), then enter a number if you want header rows. The number you enter is the number of header rows (starting from the top of the table) you want. For example, if you enter 2, the first two rows of the table will be the header rows.

The example below has two header rows.

Fitness for the 80's

Alert: Retirement may be hazardous to your health. A recent study conducted by the Institute of Health and Wellness shows that most adults who engage in an exercise program during their 50's and 60's are better in their 80's.

This is significant because more and more older adults are living to see their 85th and 95th birthdays. By 1995, 10% of all Americans will be 65 or older.

Also by that date, expenses for hospital care are expected to double. This is an important consideration since many insurance companies are limited in the amount of medical coverage they can extend to older adults.

According to Dr. Dan Meryon, the best way to prepare for the age of 80 is to exercise now. "It doesn't really matter what kind of exercise program older adults choose," he states, "just as long as they are active."

Bicycling

The way to sticking with an exercise program is finding one that is enjoyable. For older adults, this means developing a program that is not only fun, but also safe. In order to avoid injury, the older adult should choose a low-impact activity. For many, the answer is to ride the bicycle.

One of the most accessible forms of exercise, bicycling can be done in all kinds of weather and at any time of the day. A 20-minute to 30-minute ride three times a week is a sufficient cardiovascular workout. This can either be done on a conventional or stationary bicycle.

A bike ride in the country can be very medicinal. It clears the mind, relaxes the body, and enhances the soul. Many communities provide maps of bike trails and marked bike routes.

Swimming

Since the advent of aquatic aerobics, even the least-active can swim, never missing a day of the best form of exercise for senior citizens. It is low impact and puts less strain on the heart than freestyle swimming.

Water aerobics can be learned quickly and easily. Most importantly, there have been no reported drownings due to water aerobics since its inception in 1977.

Water aerobics is different from water aerobics in swimming using the backstroke stroke. This allows the head to remain above water so that breathing is not restricted.

Recommended Exercise Programs (Ages 60-85)		
Exercise	Times per week	Number of Minutes
Bicycling	Three-Four	20-30
Aquatic Swimming	Three-Four	20-30

Recommended Exercise Programs (Ages 60-85)		
Exercise	Times per week	Number of Minutes
Aquatic Swimming	Three-Four	15-30
Walking	Five-Six	40-45

Walking

The cheapest and the most popular form of recreation among older adults is walking.

Walking requires no equipment. It can be done almost anywhere at any time. Done at a brisk pace, walking improves circulation and invigorates the heart.

For those who live in cooler climates, many malls open their doors before the merchants arrive to offer a safe haven for walkers.

Reminder

As always, it is a safe practice to get a physician's approval before beginning any exercise program.

Selecting Header, and entering zero (0) means that you don't want any header rows.

When the cursor is located in a header row, an asterisk (*) appears next to the cell name on the status line. Header rows are not displayed on pages other than the first one on which they appear in the normal editing screen but may be seen in the View Document screen (Shift-F7,6).

Join

To create one cell out of multiple cells, use the Block feature (Alt-F4) in the Table Edit menu to block the cells you want to join, select **Join (7)**, then type **y** to confirm.

Text that was previously separated by columns will be separated by tabs in one cell and will continue to be positioned in approximately the same way. Likewise, text that was previously separated by rows will be separated by hard returns. Should you then split the cell, the text can be repositioned in its original cell.

For information on splitting a cell, see *Split* below.

Lines

The Lines option lets you decide the type of lines you want around your table. While in the Table Edit menu, use the Block feature (Alt-F4) to block the group of cells whose line settings you want to change, then select **Lines (3)**.

If you don't use Block, only the cell in which the cursor is positioned is affected.

The first submenu that is displayed asks you which lines you want to change. For example, Left changes the left border of the group of cells you have blocked. Inside refers to the lines inside the highlighted cells, and Outside refers to the outside borders of the highlighted cells. All is the same as both Inside and Outside.

Each cell in a table has four borders and a setting for any one of the four borders is independent of borders on adjoining cells. In addition, there is no space between borders of adjoining cells. Thus, a change to a border setting, when combined with the existing border of an adjacent cell, may produce a thicker line than expected. If you want to be sure what your borders will look like, use View Document (Shift-F7,6).

Initially, the top and left borders for each cell are set as a single or double line, while the bottom and right borders are set for no line. This is true for all cells except the cells in the right-most column or the bottom row of the table where the right or bottom borders must be set to create the table borders.

The Shade option on this submenu simply asks you whether you want to turn shading on or off for the blocked cells. You can set the percentage of shading with the Options feature (see *Options* below). If shading is on, the “Cell” heading on the status line is shown in reverse-video when the cursor is in a shaded cell.

When you select a location option (e.g., Left, Right, All) from the first submenu, you are placed in a submenu that lets you select the line style you want to use. In the example below, all of the cells are blocked and the All option has been selected from the first submenu. The next selection will determine the style for all of the lines in the table



Block on

Cell 04 Dec 1 Pg 1 In 2.15" Pos 5.97"

1 None; 2 Single; 3 Double; 4 Dashed; 5 Dotted; 6 Thick; 7 Extra Thick; 0

You can determine the appearance for each style with the Border Options menu (Shift-F8,4,8).

If you want to create a 3-dimensional effect for a cell, a group of cells, or an entire table, you can specify **Thick** (6) or **Extra Thick** (7) for two adjacent borders and **Single** (2) for the other two adjacent borders.

Arrows represent half-cell lines on the display screen. When you print a table, a line that is the same length as half of a space will be printed instead of the arrow.

Math

Selecting **Math** (5) displays a menu of Table Math options. While WordPerfect has a Math feature that is independent of tables, you may find Table Math more suitable for your mathematical applications. Since this option contains several sub-options, it is discussed in detail under *Table, Math in Reference*.

Move

The Move feature in the Table Edit menu is tailored to tables. After you press **Move** (Ctrl-F4) in the Table Edit menu, you can choose the current block of text or the row or column of cells where the cursor is located. You can then move, copy, or delete the block, row, or column just as you can normal text. If you choose a row or column, the table structure codes are moved as well as the text inside the cells.

To retrieve the block, row, or column, move the cursor to a table location and press **Enter**. When you do so, the block, row, or column will be retrieved at the cursor position. If you are retrieving a row or column, WordPerfect inserts it in front of the row or column where the cursor is located.

You must retrieve the same type of item that you moved or copied. In other words, you cannot move a row and retrieve it as a column. You can, however, retrieve a row or column as a block of cells by pressing **Cancel** (F1) to clear the "Move Cursor ..." message, pressing **Move** (Ctrl-F4), selecting **Retrieve** (4), then selecting **Block** (1).

If you are retrieving a block, WordPerfect inserts the text into existing cells and deletes any text that may have previously existed in those cells. It inserts the text in the same layout as the original block.

For example, if you block the following cells, move them as a block, and retrieve them as a block in cell B1.

Month	Shift One	Shift Two	Shift Three	Shift Four
January	Art	Lucy	Bill	Jane
February	Wendy	Julio	Sarah	Abe
March	Mark	Trish	Michael	Carla

Block on Cell D4 Doc 1 Pg 1 Ln 1.98" Pos 5"
 Ctrl-Arrows Column Widths: Ins Insert; Del Delete; Move Move/Copy;
 1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

Your new table will look like this:

Month	Shift Two	Shift Three		Shift Four
January	Lucy	Bill		Jane
February	Julio	Sarah		Abe
March	Trish	Michael		Carla

Table Edit: Press Exit when done Cell B1 Doc 1 Pg 1 Ln 1.14" Pos 2.4"
 Ctrl-Arrows Column Widths: Ins Insert; Del Delete; Move Move/Copy;
 1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

If you retrieve table text into a table that has a different number of columns, only the number of columns that will fit into the new table will be retrieved.

A separate buffer (or storage area) is used to save text that is moved or copied with the Move feature in the Table Edit menu. This allows you to retrieve text into other tables in the same or different documents. To do so, move to the table, then with the Table Edit menu displayed, press **Move** (Ctrl-F4), select **Retrieve** (4), and select the item you want to retrieve.

When you exit WordPerfect, the buffer is emptied.

If you are not in the Table Edit menu, Move works differently. For more information, see *Move* under *Table, Create* in *Reference*.

Multiple Tables

If you want to create a single table whose top and bottom halves are quite different in structure, you may find it easier to create two tables to produce the same effect. You can create the second table immediately following the first and use the Lines option on the Table Edit menu to change line appearance as necessary to make the two tables appear as one (see *Lines* above).

Options

Select Options (6) to change certain settings for all cells in the current table.

Display Negative Results

Select Display Negative Results (2), then select With Minus Signs (1) to display negative numbers with minus signs (e.g., -23) or select With Parentheses (2) to display negative numbers inside of parentheses (e.g., (23)). This affects how results are displayed in math calculations. You can enter negative numbers yourself with *either* a minus sign or parentheses.

For information on math and tables see *Table, Math in Reference*.

If a result is already displayed with a minus sign and you decide to re-display it with parentheses, you must delete the minus sign before recalculating the number. Otherwise, the number may appear with both a minus sign and parentheses (e.g., -(98)).

Gray Shading

Select Gray Shading (4), then enter a percentage to determine how much a cell will be shaded (100% is black). To turn shading on or off, use the Lines option (see *Lines* above).

Position of Table

Select Position of Table (3), then select the alignment option of your choice for the table. Left aligns the table with the left margin, Right aligns the table with the right margin, and Center centers the table between margins. Full adjusts the table width to fill the current margins.

Left is the default (initial setting) unless the table is being created in a graphics box. If so, Full is used to keep the width of the table within the graphics box.

If you select Full and the table moves to an area with different margins (e.g., a graphics box), or you change the margins where the table is located, WordPerfect adjusts the table width so the columns will fit between the margins.

Set Position prompts you to enter a specific position location for the table. For example, if you enter 2", the table is aligned 2" from the left edge of the paper.

You should realize that when a table is originally created and Left is selected for the table position, WordPerfect checks the current margins, formats the table to occupy the entire space between the left margin and right margin and aligns the table with the left margin. Only when the table occupies less

space than the entire distance between margins do the Right and Center options come into effect.

One way to create a table that occupies less space than the entire distance between margins is to set the Position option to Left or Right, then decrease the size of one or more columns in the table. When you decrease the size of a column and the Position option is set to Left or Right, the size of the entire table decreases (see *Column, Width* under *Table, Format Columns and Cells* in *Reference*).

However, if you size columns with the Position of Table option set to Full, WordPerfect will only adjust the column widths. The width of the entire table will remain the same (i.e., extending from left to right margin).

Spacing Between Text and Lines

Spacing Between Text and Lines or “gutter spacing,” determines how much space you have between text and cell borders. To change spacing, select Spacing Between Text and Lines (1), press **Enter** until you move to the spacing value you want to change, then enter a measurement. This allows you to “tighten” or “loosen” the table appearance.

Restoring a Row or Column

Pressing **Cancel** (F1), then typing **y** for Yes while the Table Edit menu is displayed allows you to restore the last row, column, or block of cells (text and structure for rows and columns, text only for blocks) that you deleted. Only the last row, column, or block that you deleted is stored in the Table Delete buffer.

The Table Delete buffer is a separate buffer than the one for non-table text, so you can use **Cancel** (with the Table Edit menu displayed) to move table contents from one table to another in the same or different documents.

You cannot restore rows or columns that were deleted with the Size option (see Size below).

Size

The Size option is used to add rows and columns to or delete them from the end of a table. After selecting Size (1) a submenu is displayed. The options on this submenu are described below.

If you enter a number for the Size option that is smaller than the existing number of columns or rows, WordPerfect prompts you to confirm the deletion of columns or rows.

Columns

Select Columns (2), then enter a number to add columns to or delete them from the right end of the table. The number that is displayed after you select this option is the number of columns that currently exist in the table.

For example, if your table has four columns and you want to add two columns to the right end of the table, enter **6**. When you add columns with this option, WordPerfect uses the structure of the right-most column in the

table as the pattern for the columns you are adding. Text is not copied to the new column.

Rows

Select **Rows** (1), then enter a number to add rows to or delete rows from the end of the table. The number that is displayed after you select this option is the number of rows that currently exists in the table.

For example, if your table has four rows and you want to add two rows to the end of the table, enter **6**. When you add rows with this option, WordPerfect uses the structure of the last row in the table as the pattern for the rows you are adding. Text is not copied to the new rows.

Additional information on adding and deleting columns and rows may be found under *Adding Rows or Columns* and *Deleting Rows or Columns* above.

Split

To split a single cell into multiple rows or columns, move the cursor to the cell, then select **Split** (8). After selecting **Split**, select **Rows** (1) or **Columns** (2) to split the cell into rows or columns, then enter the number of rows or columns you want to create from the single cell.

For example, if you want to split a cell into 3 rows, select **Split** (8), select **Rows** (1), then enter **3**.

When you split a cell into rows or columns, WordPerfect will try to use previously existing rows or columns as a pattern for the new columns.

In the example below, the highlighted cell in the first screen is split into three columns in the second screen.

Table Edit: Press Exit when done Cell B2 Dec 1 Pg 1 Ln 1.42" Pos 3.26"
 Ctrl-Arrows Column Widths; Ins Insert; Del Delete; Move Move/Copy;
 1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

Table Edit: Press Exit when done Cell B2 Dec 1 Pg 1 Ln 1.42" Pos 3.26"
 Ctrl-Arrows Column Widths; Ins Insert; Del Delete; Move Move/Copy;
 1 Size; 2 Format; 3 Lines; 4 Header; 5 Math; 6 Options; 7 Join; 8 Split: 0

You can also split several cells at once by blocking the cells with the Block feature (Alt-F4) in the Table Edit menu. The number you enter is the number of rows or columns that will be created in each blocked cell.

See Also: Lesson 34; Lesson 35; Columns, Parallel; Table, Create; Table, Format Columns and Cells; Table, Math

Table, Format Columns and Cells

This reference section describes the Format option on the Table Edit menu. If you want to learn how to create a table or edit text in a table, see *Table, Create in Reference*. If you want to learn more about some of the other Table Edit options, see *Table, Edit Structure in Reference*. Unless otherwise noted, the information in this reference section pertains to table options in the table edit mode (when the Table Edit menu is displayed).

You may want to assign a particular format (attributes, size, justification, etc.) to cells or columns in a table. The Format option on the Table Edit menu makes this process easy.

For example, in the screen below, you will notice that the numbers in the left-most column of the table are bolded and right justified, while the numbers in the right-most column of the table are decimal-aligned. All of these settings were made with the Format option on the Table Edit menu.

Student	Grade
001	93.4567
002	88.453
003	97.2341
004	82.8745
005	75.68
006	99.999
007	89.48953
008	92.987
009	77.89
010	93.236

Doc 1, Pg 1, Lx 4.15" Fx 1"

You can use Block (Alt-F4) to format several cells or columns. Simply block the cells or columns you want to format, then follow the steps below. If you are blocking columns, you only need to block one cell in the column to represent the entire column.

- 1 Make sure that the cursor is in a table and the Table Edit menu is displayed.

*To display the Table Edit menu, move the cursor to the table, then press **Columns/Table** (Alt-F7).*

- 2 Use the Block feature (Alt-F4) to block the cells or columns you want to format.
- 3 Select **Format (2)** to display the Format submenu.

4 Select **Cell** (1) to display the options for cell formatting.

or

Select **Column** (2) to display the options for column formatting.

A third option, **Row Height** also appears at this point. For information on **Row Height**, see *Row Height* under *Notes* below.

5 Select an option and enter the information. For information on each of the **Cell** and **Column** options, see the appropriate heading below.

For more information on tables, see *Lesson 34: Tables—Part I* and *Lesson 35: Tables—Part II* in the *WordPerfect Workbook*.

Cell, Attributes

Select **Attributes** (2) from the **Cell Format** menu, then select the attribute of your choice for text in the cell. **Normal** turns off all attributes for text in the cell, while **Reset** resets the cell attributes to the column attributes setting (see *Column, Attributes* below). Settings made with the **Attributes** feature in the normal editing screen (Ctrl-F8,1 or 2) are added to any settings made with this option (see *Attributes in Reference*).

*If you want to bold or underline a cell, you can do so without having to go into the **Format** option by moving to the cell (with the **Table Edit** menu displayed) and pressing **Bold** (F6) or **Underline** (F8).*

Cell, Justify

Select **Justify** (3) from the **Cell Format** menu, then select the justification setting of your choice (**Left**, **Right**, **Center**, **Full**, **Decimal-Align**) for text in the cell. **Reset** resets the cell justification to the column justification setting (see *Column, Justify* below). Settings made with the **Justification** feature in the normal editing screen (Shift-F8,1,3) override any settings made with this option (see *Justification in Reference*).

Cell, Lock

Select **Lock** (5), then select **Lock On** (1) from the **Cell Format** menu when you want to “lock” a cell. Locking a cell prevents you (or anybody else) from changing the information in the cell. **Lock** is especially useful when you are using the **Table** feature to fill out forms because you can display a form heading without worrying about someone altering information in that cell.

You can move the cursor into a locked cell when the **Table Edit** menu is displayed (see *Table, Edit Structure in Reference*). When the cursor is located in a locked cell, the **Cell** heading on the status line is shown in brackets.

Math formulas are always calculated when you select **Calculate** even if the formula is located in a locked cell (see *Table, Math in Reference*). Spreadsheet data can also be imported into locked cells (see *Spreadsheets, Import and Link in Reference*).

You cannot use the Move feature to move text to a locked cell.

Select Lock (5), then select Lock Off (2) when you want to unlock a cell.

Cell, Type

Selecting Type (1) from the Cell Format menu displays two options: Numeric and Text. Normally, WordPerfect considers all cells numeric which means that as long as they contain a valid number, they can be calculated with the Math options (see *Math* below).

If you want to specifically mark a cell as non-numeric, select Text (2). When you are in a text cell, a pair of quotation marks (") is placed next to the Cell heading on the status line (e.g., "A1).

If you mark a cell that contains a formula as a text cell, it will not be calculated. Also, text cells cannot be referenced by formulas in other cells. For more information on math in tables, see *Table, Math in Reference*.

Cell, Vertical Alignment

Selecting Vertical Alignment (4) from the Cell Format menu displays three options: Top, Bottom, and Center. These options determine how text is aligned vertically in a cell. You will not notice the change on the screen, but the text will display in View Document (Shift-F7,6) and print properly.

Column, Attributes

Select Attributes (2) from the Column Format menu, then select an attribute for text in the column. Normal turns off all column attributes.

Column, # Digits

Select # Digits (4) from the Column Format menu, then enter a number (up to 4) to specify the allowable number of digits to the right of a decimal point. For example, enter 3 to specify three digits to the right of a decimal point (e.g., 35.465). Math results will be calculated and displayed according to this setting.

This option also helps WordPerfect position the decimal point if you select decimal-aligned justification for the column or cell.

This option does not limit the numbers to the right of the decimal point that you can enter.

Column, Justify

Select Justify (3) from the Column Format menu, then select an option (Left, Right, Center, Full, or Decimal-Align) to change the justification for text in a column.

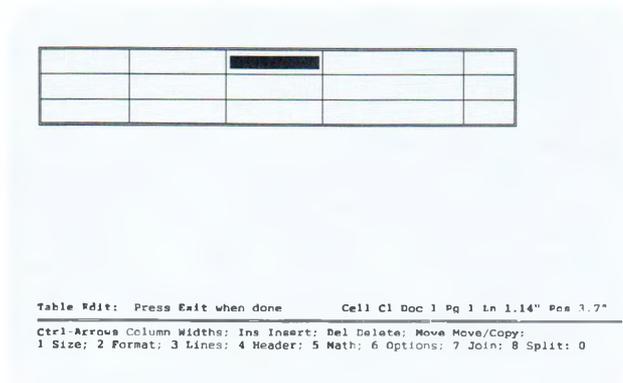
More information about Justification can be found in *Justification in Reference*. Decimal-Align justification means that characters will be aligned on the alignment character. For more information, see *Column # Digits* above and *Alignment Character* under *Tab Align in Reference*.

Column, Width

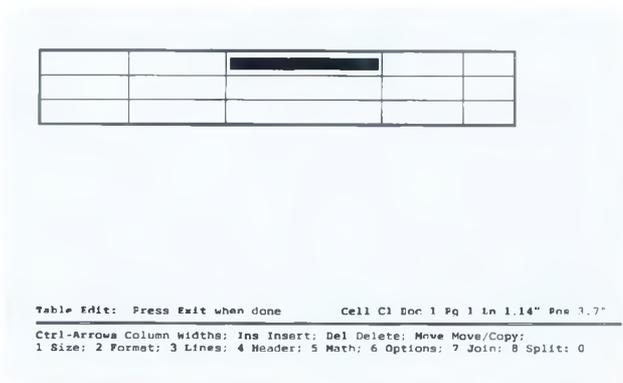
When WordPerfect creates a table, it checks the current margins and the number of columns you specify, then sets default column widths. Selecting **Width (1)**, then entering a measurement allows you to change the width of a column to that measurement.

When a column width is increased, the table grows until the right margin is reached. When the right margin is reached, WordPerfect decreases the largest column to the right of the expanded column to make room for the expanded column. When a column width is decreased, the table width decreases.

In the first screen below, notice that the cursor is located in cell C1.



When you expand the width of cell C1, the width of cell D1 (the widest cell to the right of C1) decreases.



If all cells to the right of the expanded column are the same size, they are decreased equally.

*When the Table Edit menu is displayed, you can also increase and decrease column widths in one character increments by moving the cursor to a column and pressing **Ctrl-Right Arrow** to increase width and **Ctrl-Left Arrow** to decrease width.*

Notes

Codes

Changes made with Cell and Column options do not insert codes into your document. They simply modify the existing [Cell] and [Tbl Def] codes.

Inserting Tabs

Tab settings above a table are valid for tabs used within the table. You can also change tab settings within a table. For more information on setting tabs, see *Tab Set* in *Reference*.

If you want to insert a Tab code into a cell (rather than move to the next cell), press **Ctrl-v**, then press **Tab**.

If you want to insert a Margin Release code into a cell (rather than move to the previous cell), press **Ctrl-v**, then press **Shift-Tab**.

Precedence

When assigning formats to a table, WordPerfect has a system of precedence. First of all, settings made with individual features in the normal editing screen (e.g., Attributes, Justification) are added to or override (depending on the feature) any settings made with the Table Format feature.

For example, if you turn on Bold, all text between the Bold codes is bolded regardless of any settings you make with the Table Format option. The text may be bolded and italicized or bolded and underlined (depending on your Table Format settings), but at the very least, the text will be bolded.

If you set Justification to Right with the Justification feature, that setting overrides any setting you make with the Cell or Column, Justify options.

Second, settings made with the Cell option override any settings made with the Column option. If text is located in a cell where the Cell option calls for right-aligned text and the Column option calls for left-aligned text, the text in the cell will be right-aligned.

Row Height

Select **Format (2)** from the Table Edit menu, then select **Row Height (3)** to display a submenu. Select one of the options on the submenu to determine how WordPerfect will calculate the height of the row where the cursor is located. The submenu options are described below.

You can use the Block feature (Alt-F4) while in the Table Edit menu to block several rows of text, then use the Row Height option to change the height for all the rows in the block.

The *Single Line* settings allow for only one line of text in a cell. You cannot insert text that extends beyond one line in Single Line cells. Pressing **Enter** in a cell with a single line row height moves the cursor to the next cell.

If you already have more than one line of text in a cell and use this option to change the row height to a single line setting, you will notice that text that extends beyond the right border of the cell will not wrap, will not be displayed, will not show in Reveal Codes, and will not print. It will, however, be remembered by WordPerfect in case you reset the row height to a multi-line setting.

Select **Single Line Fixed (1)**, then enter a measurement to set the row height at that measurement regardless of text size. Text that will not fit in the measurement you enter will not be displayed in View Document, nor will it print. Select **Single Line Auto (2)**, to have WordPerfect calculate the row height according to the height of the text in the cell.

The *Multi-line* settings allow text to wrap within the cell (just as it does outside of tables when you reach the end of a line). Pressing **Enter** in a cell with a multi-line row height inserts a hard return and moves the cursor to the next line of the cell.

Select **Multi-line Fixed (3)**, then enter a measurement to set the row height at that measurement regardless of text size. With this setting, text that wraps below the specified height will not print and cannot be viewed in View Document. Select **Multi-line Auto (4)**, to have WordPerfect calculate the row height according to the height of the text in the cell.

See Also: Lesson 34; Lesson 35; Table, Create; Table, Edit Structure; Table, Math

Table, Math

Math lends itself well to tabular form, and you can perform four-function math in WordPerfect tables. In fact, depending on your application, you may prefer to use Table Math rather than the Math feature described in *Math* in *Reference*. You should try both Table Math and the Math feature to see which is best for you.

The following invoice was created and calculated with the Table feature:

HALVA International Invoice				
Customer Information Podley Associates 457 Campus Drive West Windsor, NJ 08540			Date: 9/12/91	
Item #	Description	Unit Price	Qty.	Price
8413	Music Box	25.90	2	51.80
790	Glass Figurine	12.50	4	50.00
4481	Wrist Watch	55.60	1	55.60
345	Picture Frame	15.85	2	31.70
Sub				189.10
Tax				11.35
Tot				200.45

- 1 Make sure that the cursor is in a table and the Table Edit menu is displayed.
*To display the Table Edit menu, move the cursor to the table, then press **Columns/Table** (Alt-F7).*
- 2 Select **Math** (5) to display the Math submenu.
- 3 Choose a math option and enter the appropriate information (see the options under *Notes* below).

Notes

Calculate

When you enter a formula in a table, WordPerfect immediately calculates it.

To have WordPerfect re-calculate all formulas or functions you may have entered in the table (see *Formula* and *Functions* below), select **Math** (5) from the Table Edit menu, then select **Calculate** (1).

If you make changes to any cells that would affect a calculated result, re-calculate the results. The last result calculated is the result that is displayed and printed.

Copy Formula

To copy a formula from one cell to another, move the cursor to the cell that contains the formula you want to copy, then select **Math** (5) from the Table Edit menu. Next, select **Copy Formula** (3), select **Cell** (1), move to the cell where you want to copy the formula, then press **Enter**.

To copy a formula from one cell to the cell(s) underneath or to the right of the cell, move the cursor to the cell that contains the formula you want to copy,

select **Math** (5), select **Copy Formula** (3), select **Down** (2) or **Right** (3), then enter a number to copy the formula down or to the right the specified number of times.

For example, if you enter **3** after selecting **Down**, WordPerfect will copy the formula to the three cells directly beneath the left margin of the cell in which the cursor is located.

Only the formula is copied to the cell with this option. Cell attributes, justification, and other cell contents are not.

Formula

To enter a math formula in the cell where the cursor is located, select **Math** (5) from the **Table Edit** menu, then select **Formula** (2). A formula may reference any cell in the table. The following are some examples of formulas that you can enter in a table:

A1*A2	Multiplies the number in cell A1 by the number in cell A2.
B1-B2/C1	Subtracts the number in cell B2 from the number in cell B1, then divides the difference by the number in C1.
D3+D4-A1	Adds the number in cell D3 to the number in D4, then subtracts the number in A1 from the sum.

If you begin to create a formula, then realize you need to exit the formula definition to check the location of a cell, you can do so. WordPerfect maintains the formula, so that you can return to the formula and make the necessary editing changes.

If you wish, you can simply create a formula for a table cell that does not reference any other cells (e.g., 65.4*34). This is useful for any quick calculations you may need to make.

You can also enter column letters without numbers (B*C) as a formula. If you do, WordPerfect will assume you are referring to the specified columns on the row where the formula is located. For example, if you enter (B*C) in a cell on row 2, WordPerfect will treat the formula as B2*C2.

In order for WordPerfect to correctly calculate a formula, the cells represented in the formula must contain a valid number. Positive and negative decimal numbers (e.g., 23.4) as well as integers (e.g., -45) are considered valid numbers. Cells with letters only are not considered valid numbers, but cells that contain any numbers at all are considered to contain valid numbers. If you want to specifically mark a cell as non-numeric, you can do so with the **Format** option (see *Cell, Type* under *Table, Format Columns and Cells* in *Reference*).

If a cell contains two numbers on separate lines, WordPerfect uses the number closest to the bottom in calculations. If the two numbers are on the same line, any spaces between the digits are ignored and the two numbers are interpreted as one number (e.g., 2 4 is interpreted as 24 in calculation).

If WordPerfect cannot calculate the formula (e.g., one of the cells you are referencing in a formula is a text cell), the calculated result will be displayed as two question marks (??). Check the formula to make sure that it is correct and that the cells you are referencing are numeric cells.

You must enter the addition (+), subtraction (–), multiplication (*), and division (/) operators from the keyboard. Do not confuse them with the functions (see *Functions* below).

WordPerfect calculates math formulas in tables the same way it does in the Math feature. When there are two or more operators, they are calculated from left to right. Parentheses can change the order of operation. For more information on calculation order, see *Calculation Order* under *Math, Formulas in Reference*.

As you add rows or columns to your table or when you copy formulas to other cells, WordPerfect uses a concept called “relative cell references” to update formulas in your table. For example, if you have a formula in cell B1 that references cell A1 (the cell that is one cell to the left) and move that formula to cell D8, the formula will reference cell C8 (the cell that is one cell to the left).

If rows or columns are inserted or deleted between a formula and the cell it references, the formula may need to be edited. If you are unsure about the formula, move to the cell that contains the formula. When you are in a cell that contains a formula, the formula is shown at the left edge of the screen just below the table.

To delete a formula from a cell, move to a location inside the table, press **Columns/Table** (Alt-F7) to enter the Table Edit menu. Move the cursor to the cell that has the formula and press **Backspace**.

Functions (+, =, *)

The *Functions* (+, =, *) are used in calculations and function the same way they do in the Math feature. You can enter a function by selecting **Math** (5) from the Table Edit menu, then selecting the function, or by selecting **Math**, selecting **Formula** (2), then entering the function. If you type a plus sign, an equal sign, or an asterisk from the keyboard without selecting **Math**, then selecting **Formula**, WordPerfect will not treat those symbols as functions.

The Subtotal function (+) adds the numbers directly above the function. For example, Subtotal functions in cells B3 and B6 below display the following results when calculated:

- A SUBTOTAL ONE
- B SUBTOTAL TWO

Result 1	94.56		
Result 2	89.54		
Subtotal 1	184.10	92.05	Down
Result 3	98.65		
Result 4	93.23		
Subtotal 2	191.88	95.94	Up
Total 1			
Result 5			
Subtotal 3			
Total 2			
Grand Total			

Cell D10 Doc 1 Pg 1 Ln 3.66 Pos 6.07

The Total function (=) adds the subtotals directly above the function. For example, Total functions in B7 and B10 below display the following result:

- A SUBTOTAL ONE
- B SUBTOTAL TWO
- C SUBTOTAL THREE
- D TOTAL ONE
- E TOTAL TWO

Result 1	94.56		
Result 2	89.54		
Subtotal 1	184.10	92.05	Down
Result 3	48.65		
Result 4	93.23		
Subtotal 2	191.88	95.94	Up
Total 1	375.98	94.00	Up
Result 5	93.45		
Subtotal 3	93.45	93.45	Up
Total 2	93.45	93.45	Up
Grand Total			

Cell D10 Doc 1 Pg 1 Ln 3.66 Pos 6.07

The Grand Total function (*) adds the totals directly above the function. For example, the Grand Total function in B11 below displays the following result:

-  TOTAL ONE
-  TOTAL TWO
-  GRAND TOTAL

Result 1	94.56		
Result 2	89.54		
Subtotal 1	184.10	92.05	Down
Result 3	98.65		
Result 4	93.23		
Subtotal 2	191.88	95.94	Up
Total 1	 375.98	94.00	Up
Result 5	93.45		
Subtotal 3	93.45	93.45	Up
Total 2	 93.45	93.45	Up
Grand Total	 469.43	93.89	Up

Cell B11 Doc 1 Pg 1 Ln 3.94" Pos 6.07"

Negative Numbers

You can enter negative numbers with either a minus sign or parentheses.

You can change the way negative numbers are displayed with a setting on the Options menu (see *Options* under *Table, Edit Structure* in *Reference*).

See Also: Table, Create; Table, Edit Structure; Table, Format Columns and Cells

Table of Authorities

A table of authorities is a list of citations. This table is used primarily for legal briefs to list where citations of specific cases and statutes occur in a document.

A table of authorities can be divided into one or more sections (e.g., cases, statutes, regulations) with a different format for each section. WordPerfect sorts the authorities within each section alphanumerically.

- A SECTION HEADING
- B AUTHORITY (CITATION)
- C PAGE NUMBERING STYLE

TABLE OF AUTHORITIES	
Constitution, Statutes, and Regulations:	
United States Constitution:	
Fifth Amendment (Equal Protection Clause)	4, 6, 9, 11, 13, 16
Sixth Amendment (Right to Speedy Trial)	12, 19, 54
Civil Rights Act of 1964:	
42 U.S.C. 1981	4, 5
42 U.S.C. 1982	4, 5
42 U.S.C. 1983	4
42 U.S.C. 1988	2
Equal Access to Justice Act:	
28 U.S.C. 2412(b)	4, 22, 41
28 U.S.C. 2412(d)	22, 41

There are three basic steps to creating a table of authorities:

- Mark the authorities you want included in the table.
- Define each section of the table.
- Generate the table.

Each step is exclusive of the others. For example, you could mark text as you write, define the different sections while formatting the document, and generate the table just before your final edit. Later, you could edit the marked text or the table definition, and then regenerate the table.

The instructions for these three steps are divided into separate sections in *Reference*. To begin, see *Table of Authorities, Mark Text*, then see *Table of Authorities, Define*, and finally see *Generate*.

Notes

Master Documents

If your document is extremely long, you may want to use the Master Documents feature to break it into smaller pieces. You can still generate one table of authorities for the master document and all subdocuments (see *Master Documents* in *Reference*).

Table of Authorities Design

Before you begin marking the authorities for a table, you should consider the design of the table, especially the number of sections and the order each section will appear. When you mark an authority, you will be asked for the section number.

See Also: Generate; Table of Authorities, Define; Table of Authorities, Mark Text

Table of Authorities, Define

Once you have marked the authorities you want (see *Table of Authorities, Mark Text in Reference*), you are ready to define where and how they should appear in the table of authorities.

Since you marked each authority in the document for a specific section in the table, you should already know what type of authority each section will include. One or more of the following categories are commonly used (and may even serve as section headings):

- Cases
- Constitution, Statutes, and Regulations
- Legislative Material
- Treaties
- Miscellaneous

For each section you include, you need to create a heading, then define the format for that section.

- 1 Move the cursor to the place in your document where you want the section to appear when it is generated.
- 2 If you want the section on a separate page, press **Hard Page** (Ctrl-Enter).
- 3 Type a heading (e.g., Cases:, Treaties:), then press **Enter** as many times as you want to add extra spacing.

You can use any formatting you want for the heading (e.g., bold, indents).

- 4 Press **Mark Text** (Alt-F5), select **Define** (5), then select Define Table of Authorities (4).

 Select *Define* from the *Mark* menu, then select *Table of Authorities*.

- 5 Enter the number of the section you want to define (1 to 16).

Sections do NOT have to be ordered sequentially in the document.

- 6 Set the dot leader, underlining, and blank line options from the displayed menu (see *Format Options* below).

7 Press **Exit** (F7) or **Enter** to save the section definition.

Follow the steps above for each section you want in the table (you will probably want to skip step 2 for each additional section). Each section can have its own unique format if you choose.

You should now set a new page number for the page immediately following the table of authorities. If you do not, page number references may not be accurate after the table is generated (since the table will likely introduce new pages into the document). If a New Page Number code is not found when the table is generated, a warning message will appear.

To set a new page number,

1 Press **Hard Page** (Ctrl-Enter) to insert a hard page break after the table of authorities.

2 Press **Format** (Shift-F8), then select **Page (2)**.

 Select *Page* from the *Layout* menu.

3 Select **Page Numbering (6)**, select **New Page Number (1)**, and enter the page number you want the document to start with after the table of authorities.

4 Press **Exit** (F7).

Once you have defined all the sections of the table, inserted a new page number, and marked the text for each section, you can generate the table (see *Generate* in *Reference*).

Notes

[Def Mark:]

Each time you define a section of the table, [Def Mark:ToA.#] (where # represents the section number you defined) is inserted into the Reveal Codes screen at the cursor position. The table section will be generated at this code. If you are using the Master Documents feature, [Def Mark:] should be in the master document and not in one of the subdocuments (see *Master Documents* in *Reference*).

Format Options

After entering the section number, a menu appears that lets you set the format for the section.

Dot Leaders (1)

Type **y** to include a dot leader with page numbers aligned at the right margin; type **n** to keep the numbers flush right, without a dot leader.

Blank Line Between Authorities (2)

Type **y** for double spacing between authorities; type **n** for single spacing.

Underlining Allowed (3)

Type **y** to keep Underline codes in the text of the entries in this section; type **n** to have all Underline codes deleted when the table is generated.

You can change these settings permanently with the Initial Settings option on the Setup key (see *Initial Settings* in *Reference*).

Numbering Type

If you want to change the type of number used in a table of authorities (from Arabic to Roman, for example), you can use the New Page Number feature (Shift-F8,2,6,1). Changing the page number type with the New Page Number feature affects both page numbers displayed in the document and those generated in a table, list, or index. See *Page Numbering* in *Reference* for details.

See Also: Generate; Table of Authorities; Table of Authorities, Mark Text

Table of Authorities, Mark Text

After you have a firm idea of how you would like your table of authorities organized (e.g., number of sections, section headings, section order), the next step in creating a table of authorities is to mark the authorities (citations) you want listed in the table. You can mark authorities within the body of the document, as well as in footnotes, endnotes, and graphic boxes.

The first time you mark an authority, you edit the text as you want it to appear in the table. This mark is called the *full form*. As part of the full form mark, you also assign a nickname or *short form*, which may simply be a part of the full form text (e.g., the first name in the case being cited). The short form is used for convenience each subsequent time you mark the authority (since some authorities can be quite long).

To mark an authority,

- 1** Find an occurrence of the authority within the document and block the text (Alt-F4).
- 2** Press **Mark Text** (Alt-F5) and select ToA (4).
 *Select Table of Authorities from the Mark menu, then select Mark Full.*
- 3** Enter the section number of the table where you want the authority inserted (1 through 16).
- 4** Edit the text in the special editing screen to make it appear as you want it in the table.

You can use most WordPerfect editing and formatting features to edit the full form text (see *Full Form* below).

- 5** Press **Exit** (F7) to save the edited text.

A [ToA:#; *text*: Full Form] code (where # represents the section number you defined, and *text* represents the text of the short form) is inserted into the Reveal Codes screen at the cursor.

You are now asked to enter a short form nickname.

6 Press **Enter** to use the displayed text as the short form name.

or

Edit the text and press **Enter** to use the short form name you want.

The short form name must be unique, since it is used to identify other occurrences of the same authority in the text (see *Short Form* below).

After entering the short form name, a Mark Text code for the full form name is inserted into your text at the cursor position.

Now you can mark all subsequent occurrences of that authority with the short form.

7 Press **Home,Home,Up Arrow** (↑) to move the cursor to the beginning of the document.

8 Press **Extended Search** (Home,F2) to search through text, footnotes, endnotes, and graphic boxes for an occurrence of the authority.

9 Type a few characters or words of the authority (or type the entire authority if you want), then press **Search** (F2) to start the search.

When the search ends, the cursor will be to the right of the characters you searched for.

10 Press **Mark Text** (Alt-F5) and select **ToA Short Form** (4).

 *Select Table of Authorities from the Mark menu, then select Mark Short.*

11 If the short form name is displayed, press **Enter** to accept it.

or

Enter the correct short form name.

Repeat steps 8 through 11 until you have marked every occurrence of the authority.

• If you block the short form text before step 10 above, the short form name will always be displayed in step 11.

After entering the short form name, a [ToA::*text*] code (where *text* represents the text of the short form) is inserted into the text at the cursor position.

Once you have marked all your authorities, you are ready to define the table of authorities (see *Table of Authorities, Define in Reference*).

Full Form

A full form contains the text of a complete citation as it will appear in the table of authorities. The text of a full form citation can be up to 30 lines long. You may want to include bold, italics, etc. You may also want to shorten the lines with Enter or indent the beginning of all lines after the first line by pressing ♦**Indent** (F4), then ♦**Margin Release** (Shift-Tab) at the beginning of the first line.

Full Form, Edit

After you have generated a table of authorities, you may need to change a full form. To edit a full form, find the first occurrence of the authority (use ♦**Search** (F2) or the page reference listed in the original table).

- 1 Move the cursor to the immediate right of the [ToA:] code (use **Reveal Codes** to be sure).
- 2 Press **Mark Text** (Alt-F5), select **Define** (5), then select **Edit Table of Authorities Full Form** (5).
 Select Table of Authorities from the Mark menu, then select Edit Full.
- 3 Edit the Full Form text (if desired).
- 4 Press **Exit** (F7) to save the changes.
- 5 Enter the section number.

If there is no Mark Text code for the full form before the cursor, the text of the nearest full form after the cursor is displayed.

Once you have edited the full form, you will need to generate the table of authorities again to display the changes.

Short Form

A short form is an abbreviation of the full form. It is used for convenience in marking, so you don't have to keep entering the complete text of the full form. Only one short form name can be assigned to any single authority in the document. If the short form you enter is already associated with another full form of an authority, an error message appears when you generate the table of authorities, and WordPerfect places asterisks instead of page numbers next to the text of the second full form.

If you enter a short form name that does not match any existing full forms, the short form name appears with an asterisk at the beginning of the table of authorities when generated.

See Also: Generate; Table of Authorities; Table of Authorities, Define

Table of Contents

You can have WordPerfect generate (create) a table of contents for a document. You can include up to five levels and define the numbering style for each level.

- A LEVEL ONE
- B LEVEL TWO
- C LEVEL THREE
- D NUMBERING STYLE

The screenshot shows a table of contents for a document titled "Contents". The entries are organized into chapters and sections, with hierarchical markers A, B, C, and D indicating levels. The markers are placed to the left of the text. The table lists the following items and their page numbers:

Chapter/Section	Page Number
Chapter 1: Management Fundamentals	2
What Is Management?	3
Management: A Historical Perspective	4
Where Do We Begin?	5
Why Me?	6
Choosing the Position	7
Qualifications	8
The Interview	9
The Managing Leader	11
Chapter 2: Useful Goals	14
Goals vs. Wishes	14
Behavioral Objectives	15
Evaluation	16
Chapter 3: THE HIRING PROCESS	20
Finding the Right Person for the Job	26
Interviewing with a Purpose	28
Evaluating Applicants	30
Making a Decision	32
Chapter 4: Training the New Employee	36
Fundamental Training Approaches	37
On-the-Job Training	38
Formalized Classroom	39
Combination Training	40
On the Job Help	42
Chapter 5: Problem Solving	43
Defining the Problem	44
Finding the Solution	44
Group Construction	46
Beyond Brainstorming to Solutions	47
A Five Step Approach to Solutions	50
Chapter 6: Interpersonal Relationships	51
Mutual Respect	52
Learning Trust	53
When to Put Your Foot Down	54
Being Carefully Honest	55
Building Rapport	57
Helping Employees Feel Useful	59
Solving Problems	62
Avoiding Discrimination	63
Caring	67
Chapter 7: Effective Communication	72
The Message	73
Understanding Your Own Message	74
Preparing the Message	78
Encoding and Decoding	78

When the table of contents is generated, the entries will be listed in the order in which they appear in the document.

There are three basic steps to creating a table of contents:

- Mark the text you want included in the table.
- Define the location of the table and the numbering style for each level.
- Generate the table.

Each step is exclusive of the others. For example, you could mark text as you write, define the table while formatting the document, and generate the table just before your final edit. Later, you could edit the marked text or the table definition, and then regenerate the table.

The instructions for these three steps are divided into separate sections in *Reference*. To begin, see *Table of Contents, Mark Text*, then see *Table of Contents, Define*, and finally see *Generate*.

Notes

Master Documents

If your document is extremely long, you may want to use the Master Documents feature to break it into smaller pieces. You can still generate one table of contents for the master document and all subdocuments (see *Master Documents in Reference*).

See Also: Lesson 22; Generate; Table of Contents, Define; Table of Contents, Mark Text

Table of Contents, Define

Once you have marked the text you want (see *Table of Contents, Mark Text in Reference*), you need to define the location for the table of contents and the numbering style for each level of heading.

To define the location and numbering style.

- 1 Move the cursor to the place in the document where you want the table to appear (usually the beginning of the document).
- 2 If you are at the beginning of the document and want the table generated on a page of its own, press **Hard Page** (Ctrl-Enter) to create a page break, then press **Up Arrow** (↑).
- 3 If you want to type a heading (title) for the table, type it now, then press **Enter** as many times as you want to add extra spacing.
- 4 Press **Mark Text** (Alt-F5), select **Define** (5), then select **Define Table of Contents** (1).

 Select **Define** from the **Mark** menu, then select **Table of Contents**.

- 5 Enter the number of heading levels you want in the table by selecting **Number of Levels** (1) and entering a number (1 through 5).
- 6 Select **Display Last Level in Wrapped Format** (2) and type **y** to wrap the last level of entries (if you selected more than one level). See *Wrapped Levels* below.

or

Skip to step 7 if you do not want the last level to wrap (if you have selected more than one level).

- 7 Select **Page Numbering** (3) and enter a numbering style for each level (see *Numbering Styles* below). Use the arrow keys to move among the levels.
- 8 Press **Exit** (F7) to exit the **Page Numbering** menu.

At this point, you may want to set a new page number for the page immediately following the table of contents. If you do not, page number references may not be accurate after the table is generated (since the table will likely introduce new pages into the document).

To insert a new page number,

- 1 Move the cursor down until it is just below the page break you created in step 2 above.
- 2 Press **Format** (Shift-F8), then select **Page** (2).

 Select **Page** from the **Layout** menu.

- 3 Select Page Numbering (6), select New Page Number (1), and enter the page number you want the document to start with after the table of contents.
- 4 Press **Exit** (F7).

Once you have defined the table of contents, set a new page number if you wanted, and marked the text for the table, you are ready to generate it (see *Generate in Reference*).

Notes

[Def Mark:]

When you select a numbering style, [Def Mark: ToC.##:] (where the first # represents the number of levels in the table, and the second # represents the numbering style for each level) is inserted into your text at the cursor position. The table will be generated at this code. If you are using the Master Documents feature, [Def Mark:] should be in the master document and not in one of the subdocuments (see *Master Documents in Reference*).

Numbering Styles

Numbering styles refer to the way the page numbers are displayed. You can choose one of the following five numbering styles for each level of heading:

- No page numbers
- Page numbers following the entries (separated by a space)
- Page numbers in parentheses following the entries (separated by a space)
- Flush right page numbers
- Flush right page numbers with dot leaders

You cannot select a flush right style for the last level if you also want it to wrap (see *Wrapped Levels* below).

The five options above affect the placement of page numbers in a table of contents. If you want to change the actual type of number used (from Arabic to Roman, for example), you can use the New Page Numbering feature on the Format menu (Shift-F8,2,6,1). Changing the page number type with the New Page Number feature affects both page numbers displayed in the document and those generated in a table, list, or index. See *Page Numbering in Reference* for details.

Wrapped Levels

When WordPerfect wraps the last level of heading in a table of contents, the headings follow one another, wrapping at the right margin as if they were one paragraph of information. Page numbers are placed in parentheses following each heading.

You cannot select a flush right style for the last level if you also want it to wrap.

See Also: Lesson 22; Generate; Table of Contents; Table of Contents, Mark Text

Table of Contents, Mark Text

The first step in creating a table of contents is marking the text you want included in the table.

To mark text,

- 1 Block the word or phrase you want included (Alt-F4).
- 2 Press **Mark Text** (Alt-F5) and select ToC (1).
-  Select *Table of Contents from the Mark menu.*
- 3 Enter the table level number in which you want to include the text (1 through 5).

Repeat the steps above for each item you want included in the table. Once you have marked all the entries you want, you should define the table. See *Table of Contents, Define* in *Reference*.

Notes

[Mark:] and [End Mark:]

When you mark text, [Mark:ToC.#] (where # represents the level number for the marked text) is inserted before the text in the Reveal Codes screen, and [End Mark:] is inserted after. Any codes included in the block of text (Bold, Underline, Center) are included with the text when the table is generated.

If you decide you do not want a word or phrase included in a table, delete [Mark:] before generating.

See Also: Lesson 22; Generate; Table of Contents; Table of Contents, Define

Text In/Out

The Text In/Out feature is used to import and export text in various usable formats. It does the following:

- Retrieves a DOS (ASCII) text file into WordPerfect.
- Saves the document on your screen as a DOS text file, as a WordPerfect 4.2 or 5.0 file, or in a generic word processing format.
- Converts a block of text to a comment.
- Imports information from cells in a spreadsheet, or links spreadsheet cells to a WordPerfect document. For more information on these features, see *Spreadsheet, Import and Link* in *Reference*.

For document conversions other than those listed above, see the sections under *See Also* below.

The Text In/Out key also contains the Locked Document (Password) and Document Comments features (see *Locked Documents* and *Document Comments* in *Reference*).

To retrieve (import) a DOS text file into WordPerfect.

- 1 Press **Text In/Out** (Ctrl-F5), select **DOS Text** (1), then select **Retrieve** (CR/LF to {HRt}) (2), or **Retrieve** (CR/LF to {SRt} in H-Zone) (3) (see *CR/LF* below).

 Select **Text In** on the *File* menu, then select **DOS Text** (CR/LF to HRt) or **DOS Text** (CR/LF to SRt).

- 2 Enter the filename of the DOS text file to be retrieved.

To save (export) a WordPerfect document in a different file format,

- 1 Press **Text In/Out** (Ctrl-F5), select **DOS Text** (1), then select **Save** (1) to save the file in DOS Text format.

or

Press **Text In/Out** (Ctrl-F5), select **Save As** (3), then select **Generic** (1), **WordPerfect 5.0** (2), or **WordPerfect 4.2** (3) to save the file in another format.

 Select **Text Out** on the *File* menu, then select **DOS Text**, **Generic**, **WP5.0** or **WP4.2**.

- 2 Enter a filename for the converted (output) file.

If the filename already exists, you are prompted to replace the file. Type y to replace the file, or n to enter a different filename.

Notes

Block to Comment

If Block (Alt-F4) is on when you press **Text In/Out** (Ctrl-F5), you are asked if you want to create a comment (see *Document Comments* in *Reference*). If you type y for yes, the blocked text becomes a comment.

CR/LF

CR/LF (Carriage Return/Line Feed) is a set of codes in a DOS text file that ends a line and moves the cursor to the beginning of the next line. If you choose to have CR/LF's converted to soft returns, the retrieved text file more closely matches WordPerfect format.

When CR/LF's are converted to soft returns in the hyphenation zone (see *Hyphenation Zone* in *Reference*), hard returns in the middle of a paragraph are eliminated. Any sequence of two or more <CR><LF> codes preserves the original format (i.e., converts each pair of codes to hard returns).

If you are converting CR/LF's to hard returns, you may want to reset your margins to make them wider than those of the document which you are retrieving. This helps to preserve the current format of your document.

If you are converting CR/LF's to soft returns, you should set the width of your margins as close as possible to the margins of your DOS text file.

Default Filename

When you use the Text Out feature to save a DOS text or generic word processor file that was retrieved using Text In in the same format, a default filename appears next to the prompt. You can press **Enter** to save the file under its original name and format.

If you use Save (F10) or Exit (F7) to save a file which was retrieved as DOS text through Text In, no default filename appears. If you enter a filename, the file is saved in WordPerfect format, not DOS text format.

When you save any version of a WordPerfect document in the same or later version WordPerfect format, a default filename appears. If you save the WordPerfect document in the format of a previous WordPerfect version, or in a different format, the default filename does not appear at the "Document to be saved" prompt. To display the default filename, press **Retrieve** (Shift-F10).

DOS Text Files

Sometimes you may want to preserve just the text of a document, without any of the formatting codes. You can accomplish this by saving the file as a DOS text file. A DOS text file contains text, spaces, and carriage returns. Formatting codes are eliminated to make the file acceptable to many other programs. For example, some grammar-checkers cannot handle WordPerfect documents, but can check a DOS text file. Some output devices also require a DOS text file.

When you save a WordPerfect document as a DOS text file, codes for features such as Date, Soft Hyphens, and Paragraph Numbering are converted to ASCII text. (Soft hyphens are converted to hard hyphens.) ♦Indent, ♦Indent♦, Center, Tab Align, and Flush Right are converted to spaces. Columns, footnotes, endnotes, headers, footers, etc., are deleted. You can preserve these formats with space fill in the file by printing to disk. If you do so, however, all the printing codes will also be contained in DOS format in the file. (See *Printing to Disk* in *Reference* for more information on using this feature.)

When you use Text In to retrieve a DOS text file as a WordPerfect document, you must specify how you want the end-of-line codes converted. See *CR/LF* above. You can also retrieve the file through the List Files menu (see *List Files* in *Reference*); however, you cannot specify how you want the Carriage Returns and Line Feeds converted when you retrieve them this way.

If you want to edit a DOS text file (e.g., CONFIG.SYS or AUTOEXEC.BAT), Text In/Out lets you use WordPerfect as a "program editor" to retrieve and save the file. If you use the Text In feature to edit batch files, be sure to save your changes as a text file using Text Out. If you use the WordPerfect Save feature, the text file will be saved as a WordPerfect document and will no longer be recognized as a batch file by DOS. (To correct this situation, simply retrieve the file in WordPerfect using Retrieve (Shift-F10) or List (F5, 1), then use the Text Out feature to export the file in DOS Text format.)

Extended Characters

Extended characters from the WordPerfect character sets that are not located in the IBM character set are stored as ASCII character 254 (a box) when converted to a DOS text, generic word processor, or WordPerfect 4.2 or 5.0 file.

Generic Word Processor Format

A file saved in a generic word processing format is saved without WordPerfect-specific codes. Text format is maintained, however. Spaces are used in place of Center, Flush Right, and Soft Return codes. <CR><LF> is used in place of hard returns, Indent codes are converted to Tabs, and Tab codes are retained.

WordPerfect 4.2 or 5.0 Format

Save your WordPerfect 5.1 documents in WordPerfect 4.2 or 5.0 format when you want to edit or use the document in their respective versions of WordPerfect. You may also want to save documents in 4.2 or 5.0 format when you wish to use them with other companies' software products which accept 4.2 or 5.0 format files, or for conversion to WordPerfect for other hardware systems.

If a 5.1 code has no corresponding 4.2 code, the code is deleted from the document during the conversion to 4.2 format (unless you modify the .CRS file). (see *Document Conversion, WordPerfect 5.1 to 4.2 in Reference*). If a 5.1 code has no corresponding 5.0 code, [Unknown] appears in place of that code in the 5.0 document. The [Unknown] codes are ignored by WordPerfect 5.0; however, you can see them in the Reveal Codes screen. Although the codes are ignored in WordPerfect 5.0, the original meaning of each code is preserved. If you retrieve the document back into 5.1 format, they are restored as originally entered. (You can check this in Reveal Codes of WordPerfect 5.1.)

Because the [Unknown] codes are not recognized in WordPerfect 5.0, you may have to make some formatting adjustments to the converted file.

The conversion of a WordPerfect 5.1 file to a 5.0 file does not use a .CRS file. The conversion of a WordPerfect 5.1 file to a 4.2 file does use a .CRS file. A .CRS file allows you to specify how certain codes are converted. For more information on .CRS files, see *Document Conversion, WordPerfect 5.1 to 4.2 in Reference* for more information on .CRS files.

Without a .CRS file, 5.1 tables are converted to parallel columns, merge commands that have a 5.0 or 4.2 equivalent are converted to their 4.2 or 5.0 equivalent code, and left and full justification are converted to justification off and on, respectively.

Files in 4.2 and 5.0 format require no manual conversion to be compatible with WordPerfect 5.1. When you retrieve a 4.2 or 5.0 document into 5.1, it is converted to a 5.1 format.

See Also: Convert Program; Document Comments; Document Conversion, WordPerfect 5.1 to 4.2; DOS and WordPerfect; Locked Documents; Spreadsheet, Import and Link

Text Screen Type

Since WordPerfect can run on several different types of display cards with several different types of monitors, it needs to know the type of display card and monitor you have. This information is necessary because the method for displaying graphics and text on the screen differs from display card to display card and monitor to monitor.

A text driver is one of the files WordPerfect uses to communicate with a display card and monitor. These files, which end with a .VRS (video resource file) extension, are used to correctly display text in non-graphics screens.

If you have trouble displaying text on your monitor screen or notice an unwanted change in text display after you exit a graphics screen such as View Document, it could be that the correct text driver isn't selected.

WordPerfect uses a feature called Text Screen Type to select the correct text driver. When you install WordPerfect, it attempts to automatically select the correct text driver for your system.

The initial text driver WordPerfect selects is a text driver that works with most common display cards and monitors. This driver resides in the STANDARD.VRS file which is installed with the WordPerfect program files and should reside in the directory where WP.EXE is located. If this driver does not access some of the features your display card and monitor have, such as an extended text mode (more than 25 rows and 80 columns) or a text font, you may want to select your own text driver.

To do so,

- 1 Press **Setup** (Shift-F1).
 *Select Setup from the File menu.*
- 2 Select **Display (2)**, then select **Text Screen Type (3)**.
- 3 Move the cursor to the type of display card and/or monitor you have, then press **Enter** to select it.

If you don't know the type of display card and monitor you have, consult the documentation that accompanied them or ask the person who installed them.

- 4 Move the cursor to your specific display card and/or monitor, then press **Enter** to select it.

At this point, WordPerfect displays a Helps and Hints screen for the text driver it will use for your display card and monitor. Read this information.

- 5 Press **Exit** (F7) until you return to the normal editing screen.

This setting is stored in the WP{WP}.SET file and remains in effect each time you start WordPerfect.

Auto-Select

WordPerfect initially selects your text driver automatically. If you selected one yourself, but now wish to have WordPerfect select one automatically, go to the Setup: Text Screen Driver menu (Shift-F1,2,3), then choose **Auto-Select** (2).

WordPerfect makes a “best guess” at the type of display card and monitor you have.

Card or Monitor Not Shown

If your display card or monitor is not shown on either of the selection menus, then the information for that display card is not located in the directory where WPEXE resides.

If you have files ending with a .VRS extension in a directory other than where WPEXE resides, make sure you are in the Setup: Text Screen Driver menu (Shift-F1,2,3), then select **Other Disk** (3). After you do so, enter the pathname to where your .VRS files are kept. WordPerfect will display those files on the Setup: Text Screen Driver menu.

***Important:** STANDARD.VRS is installed with the WordPerfect files, but additional .VRS files are installed with the graphics driver files. If you chose not to install the graphics driver files when you installed WordPerfect and have not subsequently done so, you must do so to use any of WordPerfect's other .VRS files.*

If you do not have .VRS files in any directory other than the directory where WPEXE is located and your display card or monitor is not shown on either of the selection menus, send the name of your display card and monitor, a brief description of the problem you are having, your return address, and your telephone number to:

Graphics/Text Driver
Attn: WordPerfect Corporation Information Services
1555 N. Technology Way
Orem, UT 84057

At WordPerfect Corporation we are constantly updating our software and there is a chance that we may have created a driver for your graphics card. In the meantime, try using the /ss startup option if your problem involves extended text mode (see *Appendix N: Startup Options*).

Extended Text Mode

If your monitor has an extended text mode, it can have more than the usual 25 rows and 80 columns of text on the screen. If WordPerfect appears not to support the extended text mode for your monitor, follow the steps above and make sure the correct display card and monitor are selected in the Text Screen Type feature.

The extended text mode will be active while you are in WordPerfect. When you exit WordPerfect, the text mode will return to what it was before you entered WordPerfect.

If your display card and monitor are selected and WordPerfect still can't use extended text mode or if your display card and monitor don't appear on the Setup: Text Screen Driver menu, you may want to try the /ss startup option (see *Appendix N: Startup Options*).

Graphics Screen Type

The Graphics Screen Type option is used to select a graphics driver. Like text drivers, graphics drivers end with a .VRS extension.

Graphics screen drivers are used to display graphics screens such as the Graphics Editor, the Equation Editor, and the View Document screen. If you are having problems displaying one of these screens, see *Graphics Screen Type in Reference*.

Name Search

The Name Search option on the Setup: Text Screen Driver menu (Shift-F1,2,3) helps you easily move the cursor to the name of your display card or monitor. To use the option, select Name Search (n), then begin typing the name of your display card or monitor. As you type letters, the cursor moves to the first name on the list that matches those letters. Press **Enter** or an arrow key to reset Name Search.

Other Disk

The Other Disk option is used in case your display card or monitor is not displayed on the Setup: Text Screen Driver menu. For more information, see *Card or Monitor Not Shown* above.

STANDARD.VRS

STANDARD.VRS is a special graphics and text driver that comes with WordPerfect, and it contains information for most common display cards and monitors. This driver should reside in the directory where WP.EXE is located.

Text Fonts and Palettes

Some graphics cards give you the ability to create text fonts or use color palettes for display purposes. Selecting a Text Screen Type with the Save Font feature will allow you to load these fonts so that you can use them in WordPerfect and DOS. (You must have a screen font to use the Save Font feature.) To activate the Save Font feature, exit WordPerfect, load the font from DOS, and restart WordPerfect. After you exit WordPerfect, the font will be active in DOS, as well as when you re-enter WordPerfect.

If you have an appropriate graphics card and you feel that WordPerfect is not supporting all of the features of your card, or if text does not appear correctly when you exit a graphics screen or WordPerfect, follow the steps at the beginning of this reference section and select your display card and monitor.

After you do, the Helps and Hints screen will give you more information about what WordPerfect will and will not support with your card and monitor.

If you still are having trouble, see *Card or Monitor Not Shown* above.

Wrong Driver

You must have the card and monitor for the text screen type you select. If you don't, WordPerfect may not be able to display text properly.

See Also: Display Setup; Graphics Screen Type

Thesaurus

The WordPerfect Thesaurus searches for and displays synonyms (words with the same or very similar meaning) of words in your text or words you enter from the keyboard. Antonyms (words with the opposite meaning) are also displayed.

Up to 3 words and their references can be displayed side-by-side on a single screen.

***Important:** The Thesaurus file needs to be installed properly before using the Thesaurus. If you chose not to install the Thesaurus files when you installed WordPerfect, or have not subsequently installed them, you must do so now to use the Thesaurus, (see the Installation Instructions card).*

To look up words with the Thesaurus,

- 1 Move the cursor to the word you want to look up.
- 2 Press **Thesaurus** (Alt-F1) to display the Thesaurus screen.
 Select *Thesaurus on the Tools menu.*
- 3 Select an option (see the information pertaining to each option under *Notes* below).

Notes

Clearing Columns

If you only have a single headword, you can clear all the columns in the Thesaurus screen by selecting Clear Column (4) or by pressing **Backspace** or **Delete** (Del).

If you have more than one headword, you can clear the columns for a particular headword by pressing **Left** or **Right Arrow** (←/→) to move the Reference menu to the column containing that headword (see *Reference Menu* below), and selecting Clear Column (4) or pressing **Backspace** or **Delete** (Del).

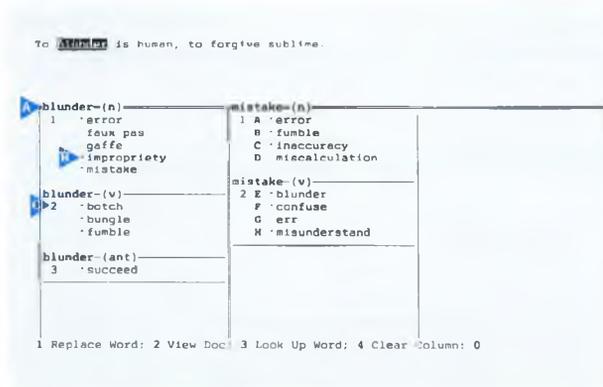
Exiting the Thesaurus

Should you finish using the Thesaurus without replacing a word, press **Exit** (F7) to return to your document.

Headwords, References, and Subgroups

When WordPerfect displays alternatives for a word, they are arranged according to headwords, references, and subgroups.

- ▲ HEADWORD
- ▲ REFERENCE
- ▲ SUBGROUP



A *headword* is a word that can be looked up in the Thesaurus. The words under the headword are divided into nouns (n), verbs (v), adjectives (a), and antonyms (ant), and are called *references*. References marked with a bullet (•) are other headwords or words which, if selected, will display other useful words.

A *subgroup* is a group of words with the same basic meaning. Subgroups are numbered under the headword.

Look Up Word

While in the Thesaurus screen, you can look up other words in one of the following ways:

- Select Look Up Word (3) from the Thesaurus menu and enter the word.
- Type the letter which is next to a word marked with a bullet (•).
- Select View Document (2), move the cursor to another word in the document, then press **Thesaurus** (Alt-F1). This clears the screen of all headwords except the one you are looking up.

The selected headword and its references fill the column(s) to the right. If the columns are already filled, then the last column is replaced by the new headword.

Moving Through Columns

When you first display the Thesaurus screen, the references for the headword that do not fit in the first column spill over to the second and third columns.

If you select a second headword, any references from the first headword in columns 2 and 3 are moved to column 1 below the screen, so that they are not visible. The same is true if you select a third headword. All references are

placed beneath column 2 and cannot be seen without scrolling through the list. Any references in column 3 from the second headword are moved back to column 2.

You can scroll through all the references in a column by moving the Reference menu to the column and using **Up Arrow** (↑), **Down Arrow** (↓), **Screen Up** (– on the number pad), **Screen Down** (+ on the number pad), **Page Up** (PgUp), or **Page Down** (PgDn). Press **Home** twice and then **Up Arrow** or **Down Arrow** to move to the first or last subgroup. Go to a particular subgroup by pressing **Go To** (Ctrl-Home), then entering the subgroup number.

Reference Menu

The Reference menu is the column of bolded letters next to the words, and can be moved from column to column with **Left Arrow** (←) and **Right Arrow** (→). You can use the Reference menu letters to look up headwords listed on the Thesaurus screen (see *Look Up Word* above).

Replace Word

Once you have found the word in the Thesaurus that you want to substitute for the word in your document, move the Reference menu to the column where the word is listed, select **Replace Word** (1) (or press **Insert**), then type the bolded letter next to the word.

The word is replaced, the Thesaurus is exited, and you are returned to your document.

Two Disk Drives

If you are running WordPerfect from disk drives, save your document, then replace your data diskette in drive B with the diskette you labeled “Thesaurus” before starting the Thesaurus. When you exit the Thesaurus, re-insert your data diskette into drive B.

View Document

When the Thesaurus screen is displayed, four lines of your document are displayed at the top of the screen with the headword highlighted. When you want to view another part of the document or look up another word, select **View Document** (2) and use the cursor keys to scroll through the text.

When you finish, press **Exit** (F7) to return to the Thesaurus.

WP{WP}US.THS Not Found

WordPerfect first looks for the WP{WP}US.THS file in the default directory. If it is not found, it then checks the directory specified in Location of Files (see *Location of Files in Reference*). If it is still not found, WordPerfect looks in the directory where WP.EXE is located. If the file is not found in any of these locations, “File not found—WP{WP}US.THS” appears.

If you are using an older version of the Thesaurus, the Thesaurus filename may be WP(WP)EN.THS. If you are using another English version of the Thesaurus, the two letters before the .THS extension may not be US or EN.

See Also: Lesson 37; Lesson 39; Speller, Look Up Words

Typeover

Normally, WordPerfect inserts text as you type. This pushes forward any existing text and rewrites the text in your document from the cursor forward.

As you are editing a document, it is sometimes easier to simply type over the top of existing text rather than to delete and replace it. Suppose, for example, you spot a word with transposed characters (e.g., **hte** for **the**, **gvie** for **give**), or several words that you want to capitalize. Typeover lets you type over those characters without having to use the delete keys to delete them.

Typeover is necessary when you are editing a document you have created using Line Draw (Ctrl-F3,2) and you want to add text to the boxes you have created without disturbing the box borders (see *Line Draw* in *Reference*).

To use Typeover,

1 Press **Insert** (Ins) to begin typing over text.

The word “Typeover” replaces the current filename at the left end of the status line. As long as “Typeover” is displayed on the screen, characters are replaced, and codes are pushed in front of the text you type (see *Codes* below).

2 Type the new text.

3 Press **Insert** to return to inserting text.

You can also return to inserting text by exiting the current document (see *Exit* in *Reference*).

Notes

Codes

In Typeover, you cannot type over codes. If the text you type encounters a code, it will simply be inserted before the code. For example, you cannot type over the Hard Return code [HRt] at the end of a sentence or paragraph.

The exception is Tab codes. You can type over Tab codes.

Also, while you are in Typeover, pressing a key that inserts a code (e.g., **Bold** (F6). **Underline** (F8)) simply inserts that code. It does not replace existing text.

Forced Insert

Sometimes, when creating macros, you need to be certain that you are turning on Insert and not Typeover. While you are defining a macro, you can press **Home,Home.Insert** (Ins) to make sure that Insert is in effect as you run the macro. If you want typeover to be in effect when you run the macro, press **Home,Insert**.

Keystroke Function Changes

Typeover changes the function of certain keys, as explained in the following list.

Key	Function
Backspace	Replaces the character to the left of the cursor with a space. (However, in Reveal Codes, Backspace deletes codes normally even when Typeover is on.)
Space Bar	Replaces the character at the cursor with a space, rather than inserting a space.
Tab	Moves the cursor through the text to the next tab stop or inserts a tab if none exists.
◆Margin Release (Shift-Tab)	Moves the cursor back through text to the previous tab stop, or inserts a Margin Release code if the cursor is already at the left margin.

Line Draw

Normally, the word “Typeover” is displayed at the left of the status line whenever you are using Typeover. However, when you are in Line Draw (Ctrl-F3,2) Typeover is always in effect, even though “Typeover” is not displayed on the status line.

Restoring Typed-Over Text

When you use Typeover, you are actually deleting text. If you accidentally type over something you do not want to delete, you can use Cancel (F1) to display your last three deletions on-screen and restore the deletion of your choice (see *Undelete* in *Reference*).

See Also: Line Draw; Undelete

U Undelete

If you mistakenly delete text in WordPerfect, it is not immediately lost. WordPerfect temporarily stores your last three deletions. You can display them on-screen in reverse video at any time, and restore the deletion of your choice.

To restore a deletion,

1 Press **Cancel** (F1) to display your last deletion.

 Select **Undelete** from the **Edit** menu.

Your last deletion is displayed in reverse video at the cursor position.

2 Select **Restore (1)** to restore the highlighted text.

or

Select **Previous Deletion (2)** or use Up Arrow (↑) and Down Arrow (↓) to continue displaying up to three levels of deletions, then select **Restore (1)** when the one you want appears on-screen.

The deletion is restored at the cursor.

Notes

Codes

You can delete text and codes using Backspace, Delete (Del), Delete Word (Ctrl-Backspace), Delete to End of Line (Ctrl-End), Delete Page (Ctrl-PgDn), and Block (Alt-F4, Backspace,y).

When you delete text and codes using Backspace, or Delete (Del), the paired codes (e.g., [BOLD][Bold], [UND][Und]) within the text are not restored when you restore the deleted text. Other codes are usually restored.

When you delete text and codes using the other deletion keystrokes, both the text and the codes within the text are usually restored. For a list of the deletion keys and the text they delete, see *Delete Text* in *Reference*.

Even though codes may be restored when you restore text, the actual codes themselves do not appear in the normal editing screen. You can display them in Reveal Codes (Alt-F3). If you attempt to restore a deletion and nothing appears on the screen, you may want to use Reveal Codes (Alt-F3) to see if the deletion contains only codes.

Deletions

A deletion is any group of characters and/or codes which you delete before moving the cursor to another place in your document. You can use several keys to delete text (see *Codes* above).

Files

Although the text you delete in WordPerfect is not immediately lost when you delete it, this is not the case with the files you create. When you delete a file

using Delete in List Files, it is lost. It cannot be restored with WordPerfect (see *Delete Files in Reference*).

Memory

Once you have made three deletions, your oldest deletion is removed from memory each time you make a new deletion. It can then no longer be restored.

The only practical limit to the amount of text you can delete at one time is your available disk space. If your computer has enough memory available, deletions are stored in memory. When there is no room left in memory, they are then stored on disk. When you attempt to delete text, if there is not enough room to save a deletion either in memory or on a disk, you are asked if you still want to delete it. You can then type **y** to delete the text permanently, or you can type **n** to cancel the deletion.

When you exit WordPerfect, all temporary deletions are removed from memory. They can no longer be restored.

See Also: Cancel; Delete Files; Reveal Codes

Units of Measure

WordPerfect uses measurements to position text on a page. For example, WordPerfect measures the margins, the height of each line on a page, and the distance between tab settings. You also need to enter measurements when you create graphics boxes, or use Advance, or various other features. WordPerfect needs to know the units you want to use for these measurements.

Normally, WordPerfect uses inches as the standard unit of measure. That means that top and bottom margins, left and right margins, etc., are all measured in inches. In addition, each time you enter a number without specifying a measurement, WordPerfect converts it into inches.

However, WordPerfect also gives you the option of using other units of measure (see *Units of Measure* below). You can use any one of these units for just one entry (see *Entering Units of Measure* below), or you can select a unit to be used permanently, as the standard unit of measure.

To change the standard unit of measure,

- 1 Press **Setup** (Shift-F1), then select **Environment** (3).
-  Select **Setup** from the **File** menu, then select **Environment**.
- 2 Select **Units of Measure** (8) to display the Units of Measure screen.
- 3 Select a new unit of measure (see *Units of Measure* below).
- 4 Press **Exit** (F7) to return to your document.

All the measurements throughout WordPerfect then use that unit.

Notes

Entering Units of Measure

When WordPerfect asks you for a measurement and you enter a number, WordPerfect converts that number to the current unit of measure. You can also enter fractions, and have WordPerfect convert them into decimals for you. For example, if inches are the current unit of measure, and you enter **1 1/8**, WordPerfect converts it into 1.13".

You can enter any unit of measure other than the standard simply by typing the letter used to identify that unit of measure after an entry (e.g., **c** for centimeters, **p** for points, as listed below). WordPerfect then converts each entry to the current standard unit of measure. For example, if inches are the standard unit of measure, and you enter **12p** for 12 points, WordPerfect converts it to 0.167".

Units of Measure

The standard units of measure being used at any time are displayed in the entries in the top half of the Units of Measure screen.

Select **Display and Entry of Numbers for Margins, Tabs, etc. (1)** to determine the unit of measure used throughout WordPerfect, with the exception of on the status line. Although only one, two, or three digits right of the decimal point are displayed in WordPerfect menus, WordPerfect calculates up to six places. For example, if you enter **2.3679**, only 2.37 is displayed on-screen, but 2.3679 is used in the calculation.

Select **Status Line Display (2)** to determine the unit of measure displayed on the status line. Usually, you will want both your display and status line choices to be in the same unit of measure.

On the status line, the **Line** entry (Ln) measures how far down the cursor is from the top of the page; the **Position** entry (Pos) measures how far the cursor is from the left edge of the page. However, when you are using WordPerfect 4.2 units of measure, the **Line** entry measures how far down the cursor is from the top line on the page, without taking into account any space allotted to the top margin.

WordPerfect lets you select from five different units of measure, as displayed in the bottom half of the Units of Measure screen.

The possible selections are as follows:

Selection	Measurement
" or i or \	Inches (1/12 of a foot)
c or :	Centimeters (1/100 of a meter or .39")
p or *	Points (1/72" inch, as opposed to 1/72.27" in the publishing industry)

Selection	Measurement
w or ?	1200ths of an inch (300 for 1/4", 600 for 1/2", 900 for 3/4", etc.)
u or +	WordPerfect 4.2 units (lines and columns)

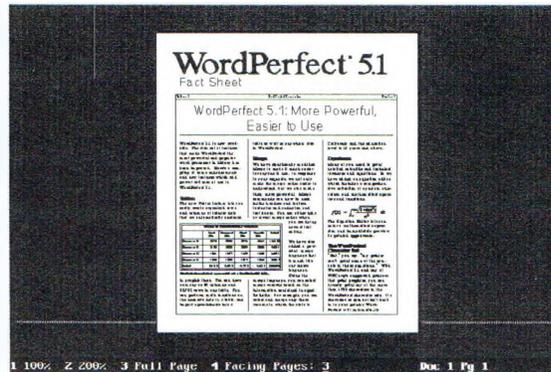
Since the w selection lets you measure in very small increments of an inch, use it to make minute changes to a setting.

The u selection is the standard measurement type used in WordPerfect 4.2. It measures vertically by lines, and horizontally by columns. The actual size of a line or column is determined by the current font size. When you enter these measurements, enter a **v** for line (or vertical) measurements, and enter an **h** for column (or horizontal) measurements.

See Also: Format

V View Document

View Document lets you view the format of a document before it is printed. Headers, footers, footnotes, endnotes, margins, page numbers, and graphics are displayed along with the text. Everything is displayed as close in appearance as possible to the printed page.



- 1 Press **Print** (Shift-F7) to display the Print menu.
-  Select **Print** from the **File** menu.
- 2 Select **View Document** (6).
- 3 Select 100% (1), 200% (2), or Full Page (3) to display views of the current page (see *Current Page* below).
- or*
- Select Facing Pages (4) to view facing pages (see *Facing Pages* below).
- 4 Use the Page Up/Down, Screen Up/Down, Home, arrow keys, and Go To (Ctrl-Home) to move through the document.
- 5 Press **Exit** (F7) to exit the View Document screen and return to the original document.

You cannot edit your document while in the View Document screen.

Notes

Current Page

Select 100% (1) to view the document at its actual size or 200% (2) to view the document at twice its actual size. You can use the arrow keys while in these two screens to move through the document. Select Full Page (3) to view the entire page. Certain card/monitor combinations don't have the resolution to read the text in Full Page, but they will provide the closest approximation to the actual printed page.

Facing Pages

If you select Facing Pages (4), even-numbered pages are displayed to the left, and odd-numbered pages are displayed to the right. Because of this, there is no facing page to match page one (unless you have a page 0).

Foreground and Background Colors

If you want to switch the foreground and background colors in the View Document screen, press **Switch** (Shift-F3). This will have no effect on the actual printing of the document.

View Document and the Printer

View Document gets the information it needs to display a document from the .PRS file you have selected for the document. In order for View Document to display a document as it will be printed, you must select a printer and enter the correct information for that printer (see *Printer, Select* in *Reference*).

View Document Options

If you have a color monitor, there are other View Document options available to you (see *View Document, Options* in *Reference*).

See Also: View Document, Options

View Document, Options

If you have a color monitor and graphics card, and would like to change the appearance of certain attributes or graphics in the View Document screen, use *View Document Options*. These options do not affect the way a document will look when printed.

- 1 Press **Setup** (Shift-F1), then select **Display** (2).
 Select *Setup* from the *File* menu, then select *Display*.
- 2 Select **View Document Options** (5).
- 3 Select an option (see option headings under *Notes* below).
- 4 Press **y** to turn on the option.
or
Press **n** to turn off the option.
- 5 Repeat steps 3 and 4 above for any other options you want to change.
- 6 Press **Exit** (F7) to exit the View Document Options menu.

Notes**Bold Displayed With Color**

By selecting Yes for this option, bolded text on the menu line will appear on your screen according to the color defined in Colors/Fonts/Attributes.

It is possible to change the color of boldfaced text on the menu line in the View Document screen through Colors/Fonts/Attributes. You should bear in mind that doing so will change the color in your normal editing screen as well (see *Colors/Fonts/Attributes* in *Reference*).

By selecting No for this option, bolded text on the menu line will appear as it generally does on a monochrome monitor, usually as thicker or brighter characters.

Because of the color maps in certain WordPerfect graphics, it is possible that your bolded menu text can change colors or disappear altogether while using these graphics. For example, if you have a graphic with a certain color mapping to red, your bolded text may disappear if it is also set to red. To counteract this, you should either select a different bold color or set this option to No.

Graphics in Black & White

This option makes it possible for you to view any color graphic images in the View Document screen in black and white. The color-shaded areas appear as a pattern which WordPerfect uses to represent the actual color, while the remainder of the image appears as black lines on a white background. Any text you have surrounding the image will still appear according to the text option you have chosen (see *Text in Black & White* below).

Text in Black & White

Select this option if you want to view your text in the View Document screen in black and white. The text will appear as black letters on a white background. Any graphic images you have on the page will still appear according to the graphics options you have chosen (see *Graphics in Black & White* above).

See Also: Colors/Fonts/Attributes; View Document

W Widow/Orphan

It is generally considered a good practice in printed documents to avoid having one line of a paragraph printed by itself at the top or bottom of a page.

When the last line of a paragraph appears alone at the top of a page it is called a *widow*. When the first line of a paragraph appears alone at the bottom of a page it is called an *orphan*.

Some dictionaries and style books call both types of lines a widow.

You can have WordPerfect prevent widows and orphans by turning on the Widow/Orphan feature.

1 Press **Format** (Shift-F8), then select **Line** (1).

 Select **Line** from the *Layout* menu.

2 Select **Widow/Orphan Protection** (9), then type **y**.

3 Press **Exit** (F7) to return to the normal editing screen.

Notes

Codes

Setting **Widow/Orphan Protection** (9) on the **Format: Line** menu to **On** inserts a **Widow/Orphan On** code [W/O On] at the cursor position. This code takes effect from that point forward in your document, or until you turn off **Widow/Orphan** protection by repeating the above steps and typing **n** in step 2.

You can also turn off **Widow/Orphan** protection by deleting the code.

Effect

When **Widow/Orphan** protection is on, **WordPerfect** moves one line of the paragraph to the top of the page to join a widow. To avoid an orphan, it moves the orphan to the next page, with the rest of the paragraph. With three-line paragraphs, it moves the entire paragraph to the next page.

You can also hold groups of lines together with **Block Protect** and **Conditional End of Page**. You can use **Block Protect** to keep a block of text together as you add or delete text from the block (see *Block Protect* in *Reference*). You can use **Conditional End of Page** to keep certain lines together, such as a heading and the first two lines of a paragraph (see *Conditional End of Page* in *Reference*).

See Also: **Block Protect**; **Conditional End of Page**

Window

You can use Window to split the screen into two separate windows, so that you can display two documents on the screen at once and then compare and edit them.

1 Press **Screen** (Ctrl-F3), then select **Window** (1).

 Select **Window** from the *Edit* menu.

You are asked to enter the number of lines you want in the current window.

2 Enter the number of lines you want in the current window (see *Window Size* below).

or

Press **Up Arrow** (↑) or **Down Arrow** (↓) to move the reverse video bar to a line on the screen, then press **Enter**.

The screen splits into two separate windows.

Each window becomes a separate editing screen, with its own status line. The number of each separate window is displayed as the document number on each window's status line.

A reverse video bar divides the two windows. In the reverse video bar, a triangle (▲) represents each tab setting. The triangles in the reverse video bar point to the window that the cursor is in. A left bracket ([) represents the left margin; a right bracket (]) represents the right. If a margin falls on a tab setting, it is displayed as a left brace ({} for the left margin or a right brace (}) for the right margin.

Press **Switch** (Shift-F3) to move from one window to the other (see *Switch in Reference*).

WordPerfect has a startup option, /n2, that disables the Document 2 screen to save memory. If you start WordPerfect with option /n2 and then use the Window feature (Ctrl-F3,1), your display options will be limited to either the full screen or the full screen minus one line for the tab ruler (see *Appendix N: Startup Options*).

Notes

Closing the Window

To close a window, enter **0** (zero) in step 2 above, or press **Up Arrow** (↑) or **Down Arrow** (↓) to move the reverse video bar off the screen then press **Enter**. If a document is still active in the window when you close it, it is switched off-screen. You can still move to it using Switch (Shift-F3) (see *Switch vs. Window* below).

Editing Documents in the Windows

Each window you open is actually a separate editing screen. Use the cursor keys to move through and edit the text in each window (see *Cursor Movement in Reference*). You can use List (F5) and Retrieve (Shift-F10) to retrieve documents into the window just as you normally would (see *List Files and Retrieve in Reference*). You can also use Block (Alt-F4) and Move (Ctrl-F4) to cut, copy, and move information from one document to another (see *Block and Move in Reference*).

Switch vs. Window

While Window lets you display two documents on-screen at once, Switch (Shift-F3) lets you open a second editing screen so you can keep two documents active at the same time. Unless you use Window with Switch, each document that you switch to is displayed on its own separate screen (see *Switch in Reference*).

Using Screen in Reveal Codes

Screen has a different function when you are in Reveal Codes (Alt-F3). Rather than splitting the normal editing screen into two separate windows, Screen lets you adjust the location of the ruler line which separates the two parts of the Reveal Codes screen.

Press **Screen** (Ctrl-F3), then select **Window** (1). You are asked to enter the number of lines you want displayed in the normal editing part of the screen. You can use Up Arrow (↑) and Down Arrow (↓) to adjust the location of the ruler line and then press **Enter**, or you can simply enter the number of lines you want to have in the normal editing part of the screen.

The Reveal Codes window size you have selected remains in place until you change it or until you exit WordPerfect. You can also change the Reveal Codes window size permanently in Setup (Shift-F1,2,6,6) (see *Edit-Screen Options in Reference*).

Window Size

Entering **11** splits the standard computer screen roughly in half, giving you 11 lines in each window.

Since a window must contain more than 2 lines, if you enter **1**, WordPerfect gives you 2 lines in the window. Entering **0** (zero) or any number higher than 23 closes the window the cursor is in. Entering **23** places the tab ruler on the bottom line of the screen. Sometimes you might like to use this on-screen tab ruler to indicate where your tab settings are at all times. (see *Tab in Reference*).

See Also: Retrieve; Switch

Word and Letter Spacing

Sometimes when printing documents in WordPerfect, you might want to increase or decrease the spacing between adjacent words and letters. WordPerfect provides the Word and Letter Spacing feature that lets you adjust this spacing.

- 1 Move the cursor to where you want to change the setting.
- 2 Press **Format** (Shift-F8), then select **Other** (4).
 Select **Other** from the *Layout* menu.
- 3 Select **Printer Functions** (6), then select **Word Spacing/Letter Spacing** (3).
- 4 Select a setting for word spacing and enter any required information (see *Setting Adjustments* below).
- 5 Select a setting for letter spacing and enter any required information (see *Setting Adjustments* below).
- 6 Press **Exit** (F7) to exit the Printer Functions menu.

Notes

Codes

A Word and Letter Spacing code [Wrd/Ltr Spacing:*word setting,letter setting*] is inserted into your document at the cursor. The change is in effect from that point forward in your document.

Printer Support

Not all printers support this feature. Test this out with your printer to see if it is supported. You can test this feature by following the steps above, typing text, then printing the document on the screen (see *Print, Document on Screen* in *Reference*).

Setting Adjustments

You can select from four settings for word and letter spacing. The default setting for both word spacing and letter spacing is **Optimal**.

Normal

Select this option (1) to use the spacing that looks best according to the printer manufacturer's opinion.

Optimal

Select this option (2) to use the spacing that looks best according to WordPerfect Corporation's opinion. Sometimes this setting does the same thing as selecting **Normal** (1), but on many printers it is different.

For a proportionally-spaced font, this option sets the width of a space to 1/3 the point size of the font. On a mono-spaced font, this setting is the pitch.

Percent of Optimal

Select this option (3) to enter a width of your own. The setting you enter is a percentage of the Optimal setting. Numbers less than 100% reduce the amount of space while numbers greater than 100% increase the amount of space. Entering 100% is exactly like selecting **Optimal** (2).

Set Pitch

Select this option (4), then enter a pitch (characters per inch) setting to change word and/or letter spacing to an exact pitch. The pitch you specify is displayed and saved in the same manner as a **Percent of Optimal** setting.

This setting does not, however, change the pitch to a specific value for all fonts. Instead, it chooses the correct **Percent of Optimal** setting required to obtain the desired pitch in the current font.

If your printer cannot move the exact amount you enter, WordPerfect instructs it to move as close to the amount as possible.

See Also: Kerning; Printer Functions



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Appendix A: ASCII Conversion Chart

You can enter ASCII characters by holding down Alt and typing the corresponding number on the number pad. (Do not use the numbers at the top of the keyboard.) The character does not appear until you release the Alt key. The number is also the screen position used in creating messages with macros (see *Ctrl-P* under *Macros, Message Display* in *Reference*).

Screen Position	ASCII Character	Screen Position	ASCII Character
1	☺	24	↑
2	☹	25	↓
3	♥	26	→
4	♦	27	←
5	♣	28	└
6	♠	29	↔
7	•	30	▲
8	■	31	▼
9	○	32	(space)
10	◉	33	!
11	♂	34	"
12	♀	35	#
13	♪	36	\$
14	♫	37	%
15	⚙	38	&
16	▶	39	'
17	◀	40	(
18	1	41)
19	!!	42	*
20	¶	43	+
21	§	44	,
22	■	45	-
23	‡	46	_

Screen Position	ASCII Character	Screen Position	ASCII Character
47	/	76	L
48	0	77	M
49	1	78	N
50	2	79	O
51	3	80	P
52	4	81	Q
53	5	82	R
54	6	83	S
55	7	84	T
56	8	85	U
57	9	86	V
58	:	87	W
59	;	88	X
60	<	89	Y
61	=	90	Z
62	>	91	[
63	?	92	\
64	@	93]
65	A	94	^
66	B	95	_
67	C	96	`
68	D	97	a
69	E	98	b
70	F	99	c
71	G	100	d
72	H	101	e
73	I	102	f
74	J	103	g
75	K	104	h

Screen Position	ASCII Character	Screen Position	ASCII Character
105	i	134	ä
106	j	135	ç
107	k	136	ë
108	l	137	ē
109	m	138	è
110	n	139	ÿ
111	o	140	î
112	p	141	ì
113	q	142	Ā
114	r	143	Ă
115	s	144	É
116	t	145	æ
117	u	146	Æ
118	v	147	ô
119	w	148	ö
120	x	149	ò
121	y	150	û
122	z	151	ù
123	{	152	ÿ
124	|	153	Ö
125	}	154	Ü
126	~	155	ç
127	△	156	£
128	Ç	157	¥
129	ü	158	Р
130	ē	159	f
131	ā	160	ā
132	ā	161	ī
133	ā	162	ó

Screen Position	ASCII Character	Screen Position	ASCII Character
163	ú	192	—
164	ñ	193	—
165	Ñ	194	—
166	ª	195	—
167	º	196	—
168	¿	197	—
169	¬	198	—
170	¬	199	—
171	½	200	½
172	¼	201	—
173	¡	202	—
174	«	203	—
175	»	204	—
176	—	205	—
177	—	206	—
178	—	207	—
179	—	208	—
180	—	209	—
181	—	210	—
182	—	211	—
183	—	212	—
184	—	213	—
185	—	214	—
186	—	215	—
187	—	216	—
188	—	217	—
189	—	218	—
190	—	219	■
191	—	220	■

Screen Position	ASCII Character	Screen Position	ASCII Character
221	█	250	*
222	█	251	√
223	■	252	n
224	α	253	²
225	β	254	■
226	Γ	255	
227	π		
228	Σ		
229	σ		
230	μ		
231	τ		
232	Φ		
233	Θ		
234	Ω		
235	δ		
236	∞		
237	ϕ		
238	ε		
239	∩		
240	≡		
241	±		
242	≥		
243	≤		
244	∫		
245	J		
246	+		
247	=		
248	o		
249	.		

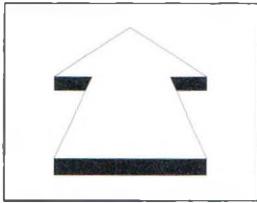
Appendix B: Graphic Images

The 30 images included in this section have been provided for your use in the WordPerfect Graphics feature. The name below the image is the image's filename. For more information on how to use these images, see *Graphics, Define a Box* in *Reference*.

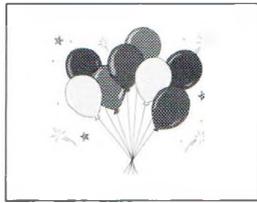
Important: *If you did not install the graphic images when you installed WordPerfect or have not subsequently done so, you need to do so before you can use them in the Graphics feature.*

These images were created in DrawPerfect, the new business presentation graphics package released by WordPerfect Corporation in early 1990.

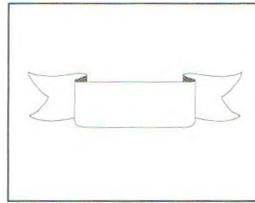
For more information about DrawPerfect, contact your local dealer or call WordPerfect Information Services at (801) 225-5000.



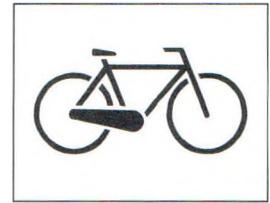
ARROW-22.WPG



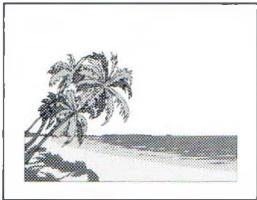
BALLOONS.WPG



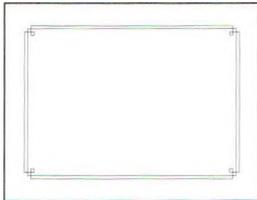
BANNER-3.WPG



BICYCLE.WPG



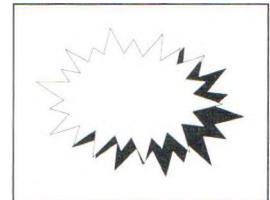
BKGRND-1.WPG



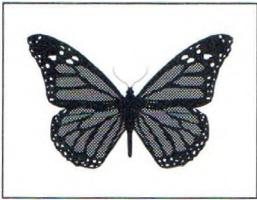
BORDER-8.WPG



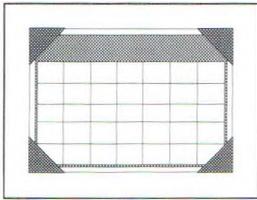
BULB.WPG



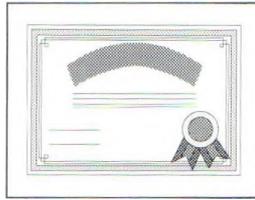
BURST-1.WPG



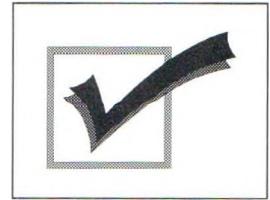
BUTTERFLY.WPG



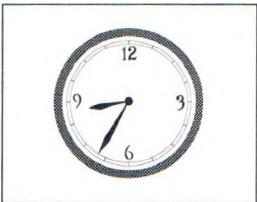
CALENDAR.WPG



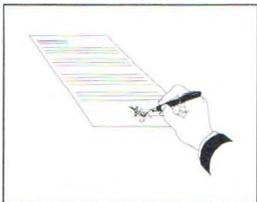
CERTIF.WPG



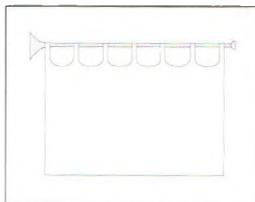
CHKBOX-1.WPG



CLOCK.WPG



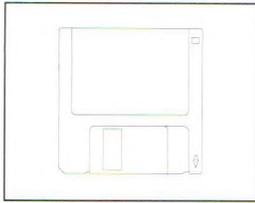
CNTRCT-2.WPG



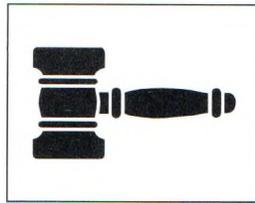
DEVICE-2.WPG



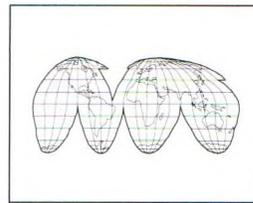
DIPLOMA.WPG



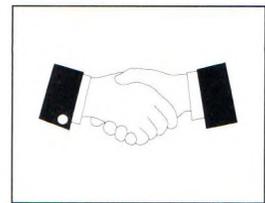
FLOPPY-2.WPG



GAVEL.WPG



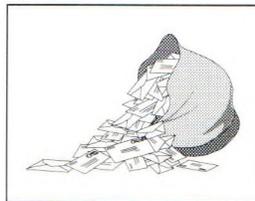
GLOBE2-M.WPG



HANDS-3.WPG



MAGNIF.WPG



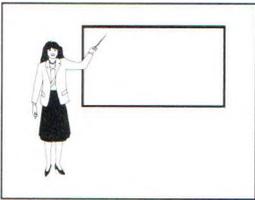
MAILBAG.WPG



NEWS.WPG



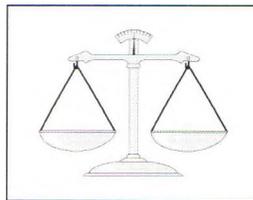
PC-1.WPG



PRESNT-1.WPG



PRINTR-3.WPG



SCALE.WPG



STAR-5.WPG



TELEPHONE.WPG



TROPHY.WPG

Appendix C: Codes

The following list contains WordPerfect codes which may appear in the Reveal Codes screen (Alt-F3). *On* codes for the attribute features are displayed in uppercase letters in Reveal Codes; *Off* codes are displayed in lowercase letters (e.g., [BOLD][bold]).

Code	Definition
[]	Hard Space
[-]	Hyphen Character
-	Soft Hyphen
[/]	Cancel Hyphenation
[Adv]	Advance
[Bline]	Baseline Placement
[Block]	Beginning of Block
[Block Pro]	Block Protection
[Bold]	Bold
[Box Num]	Caption in Graphics Box
[Brdr Opt]	Border Options
[Cell]	Table Cell
[Center]	Center
[Center Pg]	Center Page Top to Bottom
[Cndl EOP]	Conditional End of Page
[Cntr Tab]	Centered Tab
[CNTR TAB]	Hard Centered Tab
[Col Def]	Column Definition
[Col Off]	End of Text Columns
[Col On]	Beginning of Text Columns
[Color]	Print Color
[Comment]	Document Comment
[Date]	Date/Time Function
[Dbl Und]	Double Underline
[Dec Tab]	Decimal Aligned Tab
[DEC TAB]	Hard Decimal Aligned Tab
[Decml/Algn Char]	Decimal Character/Thousands' Separator
[Def Mark:Index]	Index Definition
[Def Mark:List]	List Definition
[Def Mark:ToA]	Table of Authorities Definition
[Def Mark:ToC]	Table of Contents Definition
[Dorm HRT]	Dormant Hard Return
[DSRt]	Deletable Soft Return
[End C/A]	End Centering/Alignment
[End Def]	End of Index, List, or Table of Contents
[End Mark]	End of Marked Text
[End Opt]	Endnote Options
[Endnote]	Endnote
[Endnote Placement]	Endnote Placement

Code	Definition
[Equ Box]	Equation Box
[Equ Opt]	Equation Box Options
[Ext Large]	Extra Large Print
[Fig Box]	Figure Box
[Fig Opt]	Figure Box Options
[Fine]	Fine Print
[Flsh Rgt]	Flush Right
[Font]	Base Font
[Footer]	Footer
[Footnote]	Footnote
[Force]	Force Odd/Even Page
[Ftn Opt]	Footnote Options
[Header]	Header
[HLine]	Horizontal Line
[HPg]	Hard Page Break
[Hrd Row]	Hard Row
[HRT]	Hard Return
[HRT-SPg]	Hard Return-Soft Page
[Hyph Off]	Hyphenation Off
[Hyph On]	Hyphenation On
[HZone]	Hyphenation Zone
[→Indent]	Indent
[→Indent←]	Left/Right Indent
[Index]	Index Entry
[Insert Pg Num]	Insert Page Number
[ISRT]	Invisible Soft Return
[Italc]	Italics
[Just]	Justification
[Just Lim]	Word Spacing Justification Limits
[Just Off]	Justification Off (WP 5.0)
[Just On]	Justification On (WP 5.0)
[Kern]	Kerning
[L/R Mar]	Left and Right Margins
[Lang]	Language
[Large]	Large Print
[Leading Adj]	Leading Adjustment
[Link]	Spreadsheet Link
[Link End]	Spreadsheet Link End
[Ln Height]	Line Height
[Ln Num]	Line Numbering
[Ln Spacing]	Line Spacing
[←Mar Rel]	Left Margin Release
[Mark:List]	List Entry
[Mark:ToC]	Table of Contents Entry
[Math Def]	Definition of Math Columns
[Math Off]	End of Math

Code	Definition
[Math On]	Beginning of Math
[!]	Formula Calculation
[t]	Subtotal Entry
[+]	Calculate Subtotal
[T]	Total Entry
[=]	Calculate Total
[*]	Calculate Grand Total
[N]	Negate
[New End Num]	New Endnote Number
[New Equ Num]	New Equation Box Number
[New Fig Num]	New Figure Box Number
[New Ftn Num]	New Footnote Number
[New Tbl Num]	New Table Number
[New Txt Num]	New Text Box Number
[New Usr Num]	New User Box Number
[Note Num]	Footnote/Endnote Number
[Open Style]	Open Style
[Outline Lvl;Open Style]	Open Outline Style
[Outline Lvl;Style On]	Paired Outline Style On
[Outline Lvl;Style Off]	Paired Outline Style Off
[Outline Off]	Outline Off
[Outline On]	Outline On
[Outln]	Outline (Attribute)
[Ovrstk]	Overstrike
[Paper Sz/Typ]	Paper Size and Type
[Par Num]	Paragraph Number
[Par Num Def]	Paragraph Numbering Definition
[Pg Num]	New Page Number
[Pg Num Style]	Page Number Style
[Pg Numbering]	Page Numbering
[Ptr Cmnd]	Printer Command
[Redln]	Redline
[Ref]	Reference (Cross-Reference)
[Rgt Tab]	Right Aligned Tab
[RGT TAB]	Hard Right Aligned Tab
[Row]	Table Row
[Shadw]	Shadow
[Sm Cap]	Small Caps
[Small]	Small Print
[SPg]	Soft Page Break
[SRt]	Soft Return
[StkOut]	Strikeout
[Style Off]	Style Off
[Style On]	Style On
[Subdoc]	Subdocument (Master Documents)
[Subdoc Start]	Beginning of Subdocument

Code	Definition
[Subdoc End]	End of Subdocument
[Subsct]	Subscript
[Suppress]	Suppress Page Format
[Suprsct]	Superscript
[T/B Mar]	Top and Bottom Margins
[Tab]	Left-Aligned Tab
[TAB]	Hard Left-Aligned Tab
[Tab Set]	Tab Set
[Target]	Target (Cross-Reference)
[Tbl Box]	Table Box
[Tbl Def]	Table Definition
[Tbl Off]	Table Off
[Tbl Opt]	Table Box Options
[Text Box]	Text Box
[ToA]	Table of Authorities Entry
[Txt Opt]	Text Box Options
[Und]	Underlining
[Undrln]	Underline Spaces/Tabs
[Unknown]	Non-WordPerfect 5.1 Code
[Usr Box]	User-Defined Box
[Usr Opt]	User-Defined Box Options
[VLine]	Vertical Line
[Vry Large]	Very Large Print
[W/O Off]	Widow/Orphan Off
[W/O On]	Widow/Orphan On
[Wrd/Ltr Spacing]	Word and Letter Spacing

Appendix D: Equation Palette

The following lists show the commands and symbols available from the Equation Palette in the Equation Editor. Although these lists are comprehensive with respect to the Palette, there are other commands and symbols that are not listed on the Palette that are available for use in the Equation Editor. See *Equations, Commands and Symbols in Reference* for information on these unlisted items, as well as information on using those items listed below. See *Equations, Commands Syntax* for descriptions of the commands listed under the Commands menu.

The first column in each list below contains the command or symbol as it is listed on the Palette. Other columns contain other information displayed on the status line in the Equation Editor about the particular command or symbol.

In all of the lists except Arrows, there is a column labeled *Keyword*. When a keyword is available, you can type in the word or symbol from the keyboard or retrieve it from the Palette.

If no keyword is available, you must retrieve the word or symbol from the Palette. To retrieve a word or symbol from the Palette, press **List** (F5) to switch to the Palette, press **Page Up** or **Page Down** to select the appropriate menu, highlight the item, then press **Enter** to insert the item into your equation.

In cases where there is both a symbol and a corresponding keyword (e.g., Σ and SUM), pressing Enter will put the keyword (SUM) in your equation in the Editing window. If you prefer to have the symbol (Σ), press **Ctrl-Enter**. This only affects what is shown in the Editing window. In both cases, when you display or print the equation, the appropriate symbol (Σ) will be displayed or printed.

Many symbols are in the WordPerfect character sets. You can retrieve any of these symbols using Compose (Ctrl-2) (see *Compose* in *Reference*).

Arrows

The Arrows menu contains a variety of arrows and several hollow and solid figures such as triangles, squares, and circles. There are no keywords for this menu, but each symbol can be entered using the Compose (Ctrl-2) feature.

Symbol	Description
←	Left Arrow
→	Right Arrow
↑	Up Arrow
↓	Down Arrow
↔	Left & Right Arrow
↕	Up & Down Arrow
⇐	Two Left Arrows
⇒	Two Right Arrows
↔	Left & Right Arrows

Symbol	Description
	Right & Left Arrows
	Double Left Arrow
	Double Right Arrow
	Double Up Arrow
	Double Down Arrow
	Double Left & Right Arrow
	Double Up & Down Arrow
	North East Arrow
	South East Arrow
	South West Arrow
	North West Arrow
	Curly Right Arrow
	Left Harpoon Up
	Left Harpoon Down
	Right Harpoon Up
	Right Harpoon Down
	Left & Right Harpoons
	Right & Left Harpoons
	Up Harpoon Left
	Up Harpoon Right
	Down Harpoon Left
	Down Harpoon Right
	Hook Left Arrow
	Hook Right Arrow
	Maps To
	Triangle Left
	Triangle Right
	Triangle Up
	Triangle Down
	Small Triangle Left
	Small Triangle Right
	Big Triangle Up
	Big Triangle Down
	Solid Triangle Left
	Solid Triangle Right
	Solid Triangle Up
	Solid Triangle Down
	Defined As
	Corresponds To
	Bowtie
	Solid Star
	Big Solid Star
	Diamond
	Solid Diamond
	Hollow Diamond
	Big Circle

Symbol	Description
○	Circle
◦	Small Circle
•	Small Solid Circle
□	Square
■	Solid Square

Commands

The following are keywords that the Equation Editor recognizes as commands. Most require the use of a specific syntax when entering the command (see *Equations, Commands Syntax*). All have some formatting function, such as drawing a line in the equation or arranging variables in the equation. All commands can be typed from the keyboard and can be in either uppercase or lowercase.

Keyword	Function	Syntax
OVER	Fraction	x OVER y
SUP or ^	Superscript	x SUP y or x^y
SUB or _	Subscript	x SUB y or x_y
SQRT	Square root	SQRT x
NROOT	Nth root	NROOT n x
FROM	Limits	x FROM y TO z
TO	Limits	x FROM y TO z
LEFT	Left delimiter	LEFT char
RIGHT	Right delimiter	RIGHT char
SCALESYM	Scales symbols, numbers, or text	SCALESYM n symbol
STACK	Vertical Stack	STACK {x#y}
STACKALIGN	Vertical Stack with character alignment	STACKALIGN {x&y # a&b}
MATRIX	Matrix	MATRIX {x&y # a&b}
FUNC	User Function	FUNC name
UNDERLINE	Underline	UNDERLINE {x+y}
OVERLINE	Overline	OVERLINE {x+y}
{	Start group	{x+2}
}	End group	{x+2}
HORZ	Horizontal move	HORZ n
VERT	Vertical move	VERT n
~	Normal space	x~y
·	Thin space (¼ normal space)	x'y
BINOM	Binomial	BINOM x y
&	Column separator	x & y
#	Row separator	x # y
MATFORM	Matrix column format	MATFORM {ALIGNx & ALIGNx &...& ALIGNx}

Keyword	Function	Syntax
ALIGNL	Align left	ALIGNL x
ALIGNR	Align right	ALIGNR x
ALIGNC	Align center	ALIGNC x
PHANTOM	Place holder	PHANTOM x
.	No delimiter	LEFT .
\	Literal	\x
BOLD	Bold attribute box	BOLD x
ITAL	Italic attribute box	ITAL x
OVERSM	Fraction small	x OVERSM y
BINOMSM	Binomial small	BINOMSM x y
LINESPACE	Vertical Spacing	LINESPACE n
LONGDIV	Long Division	LONGDIV x
LONGDIVS	Long Division (straight)	LONGDIVS x

Functions

The following commands are recognized as mathematical functions by the Equation Editor. These function names will be formatted in the base font (non-italic). All functions can be typed from the keyboard and retain the case in which they are entered.

Keyword	Description
cos	Cosine
sin	Sine
tan	Tangent
arccos	Arc cosine
arcsin	Arc sine
arctan	Arc tangent
cosh	Hyperbolic cosine
sinh	Hyperbolic sine
tanh	Hyperbolic tangent
cot	Cotangent
coth	Hyperbolic cotangent
sec	Secant
cosec	Cosecant
exp	Exponent
log	Logarithm
ln	Natural logarithm
lim	Limit
liminf	Limit inferior
limsup	Limit superior
min	Minimum
max	Maximum
gcd	Greatest common denominator
arc	Arc function
det	Determinant
mod	Modulo

Greek

All of the following Greek characters and variants are supported via keyword commands. Greek character keywords are case sensitive; if any letter in the keyword is uppercase, the Greek character is printed in uppercase; otherwise, it is printed in lowercase. All Greek characters available in the WordPerfect character set are available if they are entered with Compose (Ctrl-2).

Symbol	Keyword
α	alpha
β	beta
γ	gamma
δ	delta
ε	epsilon
ε	varepsilon—epsilon (variant)
ζ	zeta
η	eta
θ	theta
θ	vartheta—theta (variant)
ι	iota
κ	kappa
λ	lambda
μ	mu
ν	nu
ξ	xi
ο	omicron
π	pi
π	varpi—pi (variant)
ρ	rho
ς	varrho—rho (variant)
σ	sigma
ς	varsigma—sigma (variant)
τ	tau
υ	upsilon
φ	phi
φ	varphi—phi (variant)
χ	chi
ψ	psi
ω	omega
A	ALPHA
B	BETA
Γ	GAMMA
Δ	DELTA
E	EPSILON
Z	ZETA
H	ETA
Θ	THETA
I	IOTA

Symbol	Keyword
K	KAPPA
Λ	LAMBDA
M	MU
N	NU
Ξ	XI
O	OMICRON
Π	PI
P	RHO
Σ	SIGMA
T	TAU
Y	UPSILON
Φ	PHI
X	CHI
Ψ	PSI
Ω	OMEGA

Large

The following commands insert an operator that takes on one of two sizes—small or large. The smaller size is typically used for Character Equation boxes; the larger size is typically used in other cases. These commands can be entered from the keyboard as either keywords or symbols, or with Compose (Ctrl-2). Keywords for large symbols are not case sensitive.

Symbol	Keyword	Description
Σ	SUM	Summation
Σ	SMALLSUM	Small Sum
\int	INT	Integral
\int	SMALLINT	Small Integral
\oint	OINT	Contour Integral
\oint	SMALLOINT	Small Contour Integral
\prod	PROD	Product
\prod	SMALLPROD	Small Product
\coprod	COPROD	Coproduct
\coprod	SMALLCOPROD	Small Coproduct
\cap	CAP	Intersection
\cap	BIGCAP	Big Intersection
\cup	CUP	Union
\cup	BIGCUP	Big Union
\uplus	UPLUS	Multiset Union (U Plus)
\uplus	BIGUPLUS	Big U Plus
\sqcap	SQCAP	Square Intersection
\sqcap	BIGSQCAP	Big Square Intersection
\sqcup	SQCUP	Square Union
\sqcup	BIGSQCUP	Big Square Union
\vee	OR	Logical Or

Symbol	Keyword	Description
∇	BIGVEE	Big Vee
\wedge	AND	Logical And
\bigwedge	BIGWEDGE	Big Wedge
\oplus	OPLUS	Circle Plus
\bigoplus	BIGOPLUS	Big Circle Plus
\ominus	OMINUS	Circle Minus
\bigominus	BIGOMINUS	Big Circle Minus
\otimes	OTIMES	Circle Multiply
\bigotimes	BIGOTIMES	Big Circle Multiply
\oslash	ODIV	Circle Divide
\bigoslash	BIGODIV	Big Circle Divide
\odot	ODOT	Circle Dot
\bigodot	BIGODOT	Big Circle Dot
(	(	Left Parenthesis
)	)	Right Parenthesis
[	[	Left Bracket
]	]	Right Bracket
[[	LDBRACK	Left Double Bracket
]]	RDBRACK	Right Double Bracket
{	LBRACE	Left Brace
}	RBRACE	Right Brace
⌊	LFLOOR	Left Floor
⌋	RFLOOR	Right Floor
⌈	LCEIL	Left Ceiling
⌋	RCEIL	Right Ceiling
⋖	LANGLE	Left Angle
⋗	RANGLE	Right Angle
|	LINE	Vertical Line
||	DLINE	Double Vertical Line

Other

The Other menu contains diacritical marks and different orientations of ellipses. Each item has a keyword and the keywords are not case sensitive.

Symbol	Keyword	Description
$\vec{}$	VEC	Vector Above; x VEC
$\bar{}$	BAR	Bar (Overline); x BAR
$\hat{}$	HAT	Hat (Above); x HAT
$\acute{}$	ACUTE	Acute Accent; x ACUTE
$\grave{}$	GRAVE	Grave Accent; x GRAVE
$\breve{}$	BREVE	Breve Accent; x BREVE
$\dot{}$	DOT	Dot Above; x DOT
$\ddot{}$	DDOT	Double Dot Above; x DDOT
---	DDDOT	Triple Dot Above; x DDDOT
\circ	CIRCLE	Circle Above; x CIRCLE

Symbol	Keyword	Description
˘	TILDE	Tilde Above; x TILDE
ˆ	DYAD	Dyad Above; x DYAD
⋯	DOTSAXIS	Ellipses (centered)
⋯	DOTSLOW	Ellipses (on baseline)
⋮	DOTSVERT	Ellipses (vertical)
⋯	DOTSDIAG	Ellipses (diagonal)
⊜	CHECK	Check Above; x CHECK

Sets

This menu contains set symbols, relational operators, and some commonly-used Fraktur and hollow letters. There are keywords for some of the set symbols. These commands are not case sensitive. All symbols are available with Compose (Ctrl-2).

Symbol	Keyword	Description
\	SETMINUS	Set Minus (Figure Backslash)
⊂	SUBSET	Proper Subset
⊃	SUPSET	Proper Superset
⊆		Reflex Subset (Contained In)
⊇		Reflex Superset (Contains)
⊈		Subset But Not Equal
⊉		Superset But Not Equal
⊊	SQSUBSET	Square Proper Subset
⊋	SQSUPSET	Square Proper Superset
⊌		Square Reflex Subset
⊍		Square Reflex Superset
⊎		Square Subset, Not Equal
⊏		Square Superset, Not Equal
∈	IN	Member (Element)
∉	NOTIN	Not a Member
owns	OWNS	Owns (Contains As A Member)
∅	EMPTYSET	Empty Set
∪		Double Union
∩		Double Intersection
⊆		Double Subset
⊇		Double Superset
⊈		Not Subset
⊉		Not Superset
⊊		Not Reflex Subset
⊋		Not Reflex Superset
⊌		Square Not Subset
⊍		Square Not Superset
⊎		Square Not Reflex Subset
⊏		Square Not Reflex Superset
⊐		Not Less Than

Symbol	Keyword	Description
\leq		Not Less Than or Equal
$>$		Not Greater Than
\geq		Not Greater Than or Equal
\sim		Not Similar
\neq		Not Similar or Equal
\cong		Not Congruent
\approx		Not Approximately Equal
\nprec		Does Not Precede
\nlessgtr		Neither Precedes nor Equals
\nfollows		Does Not Follow
\nlessgtr		Neither Follows nor Equals
\nparallel		Not Parallel
\nmid		Does Not Divide
\nexists		There Never Exists
\Re	REAL	Real (R Fraktur)
\Im	IMAG	Imaginary (I Fraktur)
\mathbb{C}		C Fraktur
\mathbb{Z}		Z Fraktur
\wp		Weierstrass
\mathcal{P}		Capital Weierstrass
\hbar		Planck's Constant
\mathcal{L}		Laplace Transform (Script L)
\mathcal{E}		Script E
\mathcal{F}		Fourier Transform (Script F)
\mathbb{C}		Complex Number (Hollow C)
\mathbb{I}		Integer (Hollow I)
\mathbb{N}		Natural Number (Hollow N)
\mathbb{R}		Real Number (Hollow R)
$\text{\textcircled{M}}$	MHO	Mho
\AA	ANGSTROM	Angstrom

Symbols

Miscellaneous symbols are listed below. Keywords exist for each symbol. The keywords are not case sensitive. You can also use Compose (Ctrl-2) to insert the symbol into your equation.

Symbol	Keyword	Description
\prime		Prime
$\prime\prime$	"	Double Prime
$\prime\prime\prime$	'''	Triple Prime
∞	INF (INFINITY)	Infinity
∂	PARTIAL	Partial Derivative
∇	GRAD	Nabla (Gradient)
\times	TIMES	Multiplication Sign (x)
\div	DIV	Division Sign

Symbol	Keyword	Description
\pm	+ (PLUSMINUS)	Plus Or Minus
\mp	-+ (MINUSPLUS)	Minus Or Plus
\cdot	CDOT	Center Dot
\vee	XOR	Logical Exclusive Or
\leq	<=	Less Than Or Equal
\geq	>=	Greater Than Or Equal
\ll	<<	Much Less Than
\gg	>>	Much Greater Than
\lll	LLL	Much Much Less
\ggg	GGG	Much Much Greater
\neq	!=	Not Equal
\neg	NOT	Logical Not
\prec	PREC	Precedes
\succ	SUCC	Succeeds (Follows)
\preceq	PRECEQ	Precedes Or Equals
\succeq	SUCCEQ	Succeeds (Follows) Or Equals
\equiv	==	Equivalent
$\not\equiv$	NEQUIV	Not Equivalent
\sim	SIM	Similar
\simeq	SIMEQ	Similar Or Equal
\approx	APPROX	Approximately Equal
\cong	CONG	Congruent
\propto	PROPTO	Proportional To
$\stackrel{\text{def}}{=}$	DOTEQ	Equal by Definition
\parallel	PARALLEL	Parallel
\perp	PERP	Perpendicular To
\forall	FORALL	For All
\exists	EXISTS	There Exists
\therefore	THEREFORE	Therefore
\because	BECAUSE	Because
\equiv	IDENTICAL	Identical
$\dot{+}$	DSUM	Direct Sum (Dot Plus)
$\stackrel{?}{=}$	QEQUAL	Questioned Equality
\fallingdotseq	IMAGE	Image (Falling Dots Equals)
$\overleftarrow{=}$	RIMAGE	Reverse Image
\cong	ISO	Isomorphic
$\not\cong$	NISO	Not Isomorphic
\asymp	ASYMEQ	Asymptotically Equivalent
$\not\asymp$	NASYMEQ	Not Asymptotically Equivalent
\smile	SMILE	Smile
\frown	FROWN	Frown
\wp	BETWEEN	Between (Quantic)
\wr	WREATH	Wreath Product
\top	TOP	Top
\vDash	ASSERT	Assertion
\dashv	MASSERT	Mirrored Assertion

Symbol	Keyword	Description
\models	MODELS	Models
\sphericalangle	ANGLE	Angle
\sphericalangle	MSANGLE	Measured Angle
\sphericalangle	SANGLE	Spherical Angle
\perp	RTANGLE	Right Angle
$^\circ$	DEG	Degree

Appendix E: Error Messages

This appendix contains the most common error messages associated with WordPerfect 5.1. The error message is listed as it appears on the screen, and should give a general indication of the type of error encountered.

Below the error message, one or more possible causes for the error are listed, followed by solutions based on those causes. If you encounter an error message,

- 1 Follow the exact order of the steps suggested to solve the problem.
- 2 Consult the Help files, WordPerfect manuals, or other accompanying manuals that pertain to your software or system.
- 3 If the problem is hardware related, contact your dealer.
- 4 Call WordPerfect Customer Support (see *Getting Help* in the *Getting Started* section of this manual).

If an error seems unusual to you, or if an error, cause, or solution that you are aware of does not appear on this list, please call and report it to WordPerfect Corporation. The Customer Support phone numbers are listed in the *Getting Help* section of *Getting Started*.

In several of the error messages described below, we have used the term "/d disk." This term refers to the device or directory to which overflow and temporary buffer files are directed. You can specify this device or directory when you start WordPerfect by using the /d startup option (see /d in Appendix N: Startup Options). Unless you specify the device or directory through the startup option, WordPerfect directs the files to where WPEXE is located for stand-alone WordPerfect or to your default directory for network WordPerfect.

Access Denied

Cause: The maximum number of files allowable in the root directory has been reached. (The maximum number varies with disk size and format. 112 files is a common maximum for floppies and 512 for hard disks.)

Solution: Delete files from the root directory, or save the file to a subdirectory or to another disk.

Cause: The file is read-only. (Use ATTRIB filename from DOS to see current attributes of the file.)

Solution: Use the ATTRIB -R command to change the file from read-only to read-write. (See your DOS documentation.)

Cause: You are trying to delete a file that is currently on a document screen.

Solution: You must exit the file before you can delete it.

Cause: A directory with the same name exists.

Solution: Use another name, or remove the directory.

Cause: On a network, you don't have sufficient rights.

Solution: Gain access rights for your network. (See your network documentation.)

Cause: When more than one user has the same file open on the network, only the first user has write rights to the file.

Solution: If you have not changed the file, press **Cancel** (F1) to exit the file. If you have changed the file and want to preserve your changes, save the file under a different name. However, this file will not contain changes made by the first user.

Adjust Paper (Press FORM FEED or Advance Paper to Top of Page)

Cause: A job was canceled before it finished printing. WordPerfect does not always know where the paper is since the job was terminated without feeding the paper to the next page.

Solution: Reset the printer, press the reset button, or place the paper in the proper location. If your printer has no reset or top of form button, you may have to turn the printer off and then on again.

Are Other Copies of WordPerfect Running?

Cause: WordPerfect was not exited properly.

Solution: Answer No to the prompt.

Cause: Another copy of WordPerfect is running using the same directory for temporary files. This can happen on a shared network directory or because two copies of WordPerfect are active on the same machine under Shell or certain window environments.

Solution: Answer Yes to the prompt and enter a new directory for temporary files, or press **Cancel** at the new directory prompt and exit the other copy of WordPerfect before proceeding.

Bad Memory Image of FAT

Cause: The copy of the FAT (File Allocation Table) in memory used by DOS does not properly correspond to the FAT on disk.

Solution: Restart your computer. If the problem persists, have your hard disk checked.

Block is Too Large

Cause: You attempted to create a Table of Authorities, Full Form by using Block, but the amount of text in the block is nearly as large, or larger than, your edit buffer. (The edit buffer is a minimum of 13K, but might be larger if you have more than 400K available when you run WordPerfect.)

Solution: Make your block smaller or use smaller blocks to bring the text in.

Can't Find COMMAND.COM

Cause: You are using the Shell key (Ctrl-F1) to go to DOS or execute a DOS command, but WordPerfect cannot find COMMAND.COM. This might be because COMMAND.COM was deleted or is stored somewhere other than the

active root directory. If you're on a network, it's because the COMSPEC environment variable has not been set up correctly by the operating environment (certain customized operating environments have had this problem).

Solution: Use List Files (see *List Files* in *Reference*) to see if COMMAND.COM is in your active root directory. Also, see your DOS manual for information on changing the COMSPEC environment variable.

Cause: You may get this message if you are using a two floppy drive system and you start the system from a separate DOS diskette (WordPerfect diskettes do not have COMMAND.COM).

Solution: Insert the boot diskette in the correct drive and follow the prompts.

Can't Find Correct Copy of WP.FIL

Cause: The WP.FIL file is not in the same directory as WPEXE.

Solution: You are prompted for the path and name of the WP.FIL file. If you know the correct path, enter it. If not, exit out of WordPerfect. Find the file and put it in the same directory as WPEXE, then start WordPerfect again.

Can't Find Graphics Overflow File

Cause: On a network, the file WP\WP{.GF1 (or WP\WP{.GF2 for Document 2) can no longer be found in the unshared directory. You may have deleted the file, or the access privileges to the file may have been altered. If you're not on a network, you may have deleted the files before the session was over.

Solution: Exit WordPerfect and try again.

Can't Find Virtual Files

Cause: This error may occur because of a conflict with the operating environment.

Solution: If there is an operating environment active (such as TopView, DesqView, Windows, WinDOS, Concurrent DOS, network software), remove the environment from memory, then try the operation again.

Cause: You went to DOS using the Shell key (Ctrl-F1) and modified one of the overflow files (WP\WP{.TV1, .TV2, .BV1, or BV2).

Solution: You should never modify any files named WP\WP{.* while WordPerfect is running.

Cause: You removed the WordPerfect 2 diskette from the drive.

Solution: Replace the diskette in the drive.

Cause: On a network, you modified a virtual file to a read-only status.

Solution: Change the file to read-write status.

Can't Find WP.DRS File

Cause: You are trying to enter View Document, but WordPerfect cannot locate WP.DRS, which is required to use the View Document feature.

Solution: Copy the WP.DRS file to the directory where WP.FIL is located.

Can't Find WP.FIL File

Cause: WordPerfect can't read WP.FIL.

WordPerfect searches for WP.FIL in the following sequence:

- Under DOS 3.0 or greater, WordPerfect searches the drive/directory where WP.EXE started from. Earlier versions of DOS skip this step.
- WordPerfect searches the current drive/directory.
- WordPerfect searches each path in the environment string.
- WordPerfect searches the current directory of every drive.

Solution: Re-install WordPerfect.

Cause: Depending on the error number (*nn*), one of the following five DOS problems is occurring:

DOS Error Number	Explanation
0	Overlay error (possible corruption of WP.FIL)
5	Access denied
6	Invalid handle
30	Read fault
65535	Critical error (sector not found or drive not ready)

Although these DOS errors occur more often in a network environment, they can also happen while running WordPerfect on a floppy disk drive system. For example, removing the diskette containing WP.FIL or leaving the disk drive door open will result in an error message.

Solution: If you're running WordPerfect on a floppy disk drive system, make sure the diskette that contains WP.FIL is in the disk drive and that the disk drive door is closed. Otherwise, re-install WordPerfect.

Can't Read Overlay or Error: 258

Cause: WordPerfect can't read WP.FIL, usually because of problems in an operating environment.

Solution: Restart the computer and try again. Call WordPerfect Customer Support and report the situation which caused the error.

Can't Read Sort Data

Cause: An error occurred while reading from the Sort input file. (If "(Screen)" was specified as the input file, then this is a temporary file to which WordPerfect has written the document on the screen.) This might be because of an operating environment problem, or because someone else is accessing the input file on a network.

Solution: Retrieve the input file and check to be sure it is intact. If you were sorting from disk, try sorting from the screen.

Can't Rename File

Cause: A file or directory with the intended new name already exists.

Solution: Choose a different name.

Cause: The file to be renamed is open (on a network).

Solution: Ask the person using the file to close it.

Cause: You don't have network rights to rename files.

Solution: See your System Manager about obtaining this right.

Cause: The intended name is not a valid name.

Solution: Choose a new name.

Cause: For some reason, the operating environment can't handle certain characters in filenames (we have heard of problems with !, {, }, and ').

Solution: Try renaming the file at DOS (see your DOS manual) when you have verified that the four cases above do not apply. You could try removing the operating environment and try again. Refer to your DOS manual.

Cannot Remove WP.FIL, Use Other Drive for Speller Disk

Cause: When running WordPerfect on a two disk drive system you are not allowed to remove the WordPerfect 2 diskette which contains the WP.FIL file.

Solution: Replace the WordPerfect 2 diskette in its original drive, then insert the Speller diskette in the other drive. Make sure the paths for the Speller files are correctly specified in Location of Files (Shift-F1,6,3).

Clipboard Data is Not Correct Format

Cause: A version of the WordPerfect Shell which does not support your version of WordPerfect is being used.

Solution: Update to the current version of the Shell.

Critical Disk Error Occurred

Cause: While printing, a critical disk error (data error, sector not found, drive not ready, etc.) occurred.

Solution: You may be able to recover the file in question by recopying it to an undamaged disk, or by using a third-party utility program. Then try again to print.

Delete Without Saving for Undelete?

Cause: You are deleting a large block, and the disk where the undelete files are kept (the /d disk) is full.

Solution: Type **y** if you want the block deleted (you will not be able to undelete it). Type **n** if you need the option to undelete it, in which case your deletion will be canceled; you should then free up some space on the drive, or exit WordPerfect and re-enter with a different /d disk which has more available space.

Device Not Ready

Cause: The diskette is not in the drive, or the door is not shut.

Solution: Reinsert the diskette properly into the drive and close the drive door.

Directory is in Use. New WP Directory:

Cause: While starting WordPerfect, overflow files were detected in the /d disk or WP.FIL directory. This is usually caused by exiting WordPerfect improperly. You were then asked if other copies of WordPerfect were running, to which you replied Yes. WordPerfect now needs to know where it should put overflow files.

Solution: Enter a valid directory for which you have write access and in which there are no overflow files belonging to another copy of WordPerfect currently running.

Directory Not Empty

Cause: You are trying to delete a directory in List Files, but DOS reports that the directory is not empty.

Solution: Make sure that the directory is empty, which means that there can be no files or subdirectories under that directory.

Disk Full—Block Not Saved to Undelete Buffer

Cause: You were deleting a block, and the /d disk filled up while WordPerfect was trying to save the block for undelete.

Solution: There is no solution—this is just a message to let you know the block has been deleted, but wasn't saved for undelete.

Disk Full—Can't Undelete Graphics

Cause: The disk is full. WordPerfect is trying to read a graphic from the undelete buffer and copy it to the WP}WP{.GF1 file (the temporary file where graphics for the document on the screen are stored), but there is no room on the disk to expand WP}WP{.GF1 to hold the graphic.

Solution: The undelete operation will finish and the document will be OK, but some of the graphics boxes will now be empty. You should replace the graphic image into the box from its original source file. If you plan to delete/undelete multiple or large graphics regularly, you should not redirect temporary files to a RAM drive or a diskette unless it is large enough to hold the graphics data (see /d in *Appendix N: Startup Options*).

Disk Full—Press Any Key to Continue

Cause: This error occurs when you do not have enough disk space while trying to save a file to a diskette or to your hard drive, or when you try to replace a document that has previously been saved on the disk. If you have Original Backup on and you are replacing a document already on the disk, the original will remain on the disk but with the extension of .BK!

Solution: You can either delete some unwanted files on your disk to make more room or insert another formatted disk into the drive. If you receive a disk full error message on a hard disk, save the document on a diskette. If you have Original Backup on, you can also try turning it off. This will not affect your

ability to save this document, but will prevent your disk from becoming filled with old backup (.BK!) files. See *Backup, Original in Reference*.

Disk or Directory Full, Can't Add Job to List

Cause: If there are at least three jobs currently being printed or waiting to be printed, and the device to which overflow and temporary buffer files are directed is full, then no new jobs may be printed.

Solution: Either free up some room on the /d disk, or wait for a print job to finish before trying to start a new print job.

Diskettes are Corrupt

Cause: Diskette may be stuck in diskette sleeve or disk drive heads may be dirty or out of alignment.

Solution: Take diskette out of drive, tap it gently, and reinsert the diskette into the disk drive.

Cause: Turbo switch may be on.

Solution: Turn turbo switch off.

Cause: A TSR (Terminate and Stay Resident) program may be conflicting with WordPerfect.

Solution: Try rebooting your computer without activating the TSR program.

Cause: Diskettes may be corrupt.

Solution: Try the following options to determine if the problem is hardware related.

- 1 Try copying the diskettes from DOS to the hard drive and installing from the hard drive.
- 2 Try the Copy (6) option in the Installation Program.
- 3 Try installing to another computer.

If you still receive the "Diskettes are Corrupt" error message, call WordPerfect Corporation at (800) 533-9605 or (801) 226-5444 to receive additional assistance.

Display File is Wrong Version

Cause: The WP.DRS or WPSMALL.DRS file does not match the version of the WPEXE file.

Solution: Re-install WP.DRS or WPSMALL.DRS from your master diskettes.

Divide Overflow—Press Any Key to Continue

Cause: The software may have been corrupted, or have inadequate limits checking for bad data (for example, if WordPerfect let you set your display pitch to 0, you would get thousands of divide overflow errors, but this limit is checked). One possible cause could be a corrupt .PRS file.

Solution: Often the effects are not serious—after pressing a key to continue, normal operation may proceed. If not, re-install the WordPerfect program files, and reselect the printer.

Document Line is Too Complex to Print

Cause: An internal buffer in the printing process overflowed because a line in the document contained too many font changes, embedded printer commands, advances, or other printer codes.

Solution: Simplify the complicated lines in the document by removing font changes or printer commands, or by putting hard returns between lines instead of vertical advances (where possible).

Document May Need to be Generated. Print?

Cause: The document you are trying to print contains some codes requiring generation. Some editing has been done since the last time it was generated.

Solution: Type **n** to answer No, then generate the document before printing (see *Generate in Reference*). If you are sure that all the page numbers are correct, (or if you want to print the document regardless of whether they are correct or not) type **y** to answer Yes and the document will be printed as is.

Document Needs to be Generated

Cause: The document you are trying to print has not been generated.

Solution: Generate the document (see *Generate in Reference*).

Document Not Formatted for Current Printer. Continue?

Cause: You have asked to print a document from disk, but the document was formatted for a printer other than the one you currently have selected.

Solution: To print the document on the printer for which it was formatted, you should retrieve the document, select the printer, then either print from the screen or save the document. If you choose to print the document on the currently selected printer, fonts and other printer-specific items may appear differently.

[End Def] Code Does Not Have Matching [Def Mark]

Cause: The first time a table of contents, list, table of authorities, or index is generated, WordPerfect inserts an [End Def] code at the end of the generated table or list. If [Def Mark] is subsequently deleted, or [End Def] is mistakenly moved or undeleted somewhere else in the document, then the generate process will find [End Def] without a matching [Def Mark] preceding it.

Solution: Make sure that each [End Def] immediately follows the generated text which has been placed just after [Def Mark]. Remember that all text between [Def Mark] and [End Def] will be replaced during additional generations. (These codes may be seen in Reveal Codes (Alt-F3).)

File Can't be Copied onto Itself

Cause: At List Files, you tried to copy a file, but you used the same name and directory (destination) as the original file.

Solution: Copy the file to a different directory or to a different name within the same directory.

File Creation Error

Cause: You are trying to save a document or otherwise create a file in the root directory of a disk which already has the maximum number of files (112 for floppies, 512 for many hard disks).

Solution: Delete unneeded files from the root directory, or create the file in a subdirectory or on another disk.

Cause: You do not have proper rights on a network to create a file in the specified directory.

Solution: Obtain creation rights for the directory, or save the file somewhere else.

Cause: You are trying to select a printer with an incorrect path (or a path to which you do not have sufficient network rights) specified in the Printer Files option of the Location of Files feature.

Solution: Go to the Location of Files menu (Shift-F1,6,4) and check the path.

File is Locked

Cause: You were trying to access a locked (password-protected) document, but did not enter the password correctly.

Solution: Try again to retrieve the file and enter the correct password when prompted. See *Locked Documents* in *Reference* for more information on passwords. If you have forgotten the password, there is no way to retrieve the document.

File Not Found

Cause: You asked WordPerfect to access a file and it could not be found in the specified directory (or default directory if no directory was specified). Usually this message will be followed by the name of the file WordPerfect was looking for and could not find.

Solution: Make sure you typed the filename *and* the path correctly. You might use List (F5) to verify the exact spelling and location of the file you need.

Formula Exceeds Maximum Storage Available

Cause: In Math Definition, the formula you entered for a calculation column is larger than 20 bytes.

Solution: Reduce the complexity of the formula. Basically, each column or operator referred to takes one byte, and constants take 1 byte for every two digits.

Formula Must be Entered

Cause: In Math Definition, you specified a column as a calculation column, but did not enter a formula.

Solution: Enter a formula for the column, or change the column type to something other than calculation.

Generate Codes Found Between [Def Mark] and [End Def] Codes

Cause: In a previously generated document, you have subsequently added some sort of Mark Text code within a generated section. Since generation deletes previously generated text, these newly added codes will be lost.

Solution: Move the Mark Text codes outside the [Def Mark] and [End Def] codes. These codes can be seen in Reveal Codes (Alt-F3). See *Generate* in *Reference* for more information.

Graphics in Block Not Saved to Clipboard

Cause: Clipboard formats for the Shell program do not allow the mixture of text and graphics codes, so the graphics portion of the block you are saving to the Clipboard will not be included in the Clipboard.

Solution: If you are interested in the graphics data, save the contents of each graphic figure from the Graphics Edit menu to the clipboard; the graphics data can then be retrieved into another figure by pressing the Shell key (Ctrl-F1) at the filename prompt in the Graphics: Edit screen. If you are planning to retrieve text and graphics into WordPerfect, then use a named or unnamed block to move the text and graphics instead of the Clipboard (see *Move* in *Reference*).

Illegal Character(s)

Cause: In Math Definition, invalid characters were found in a calculation formula.

Solution: Remove the illegal characters. The only valid characters are spaces, digits, math operators (+ - / *), decimal points, parentheses, and column letters (A-X). Check for incorrect syntax as well.

Incompatible File Format

Cause: The file in question is not in the correct format for the requested operation. For example, you are trying to print a WordPerfect 4.2 document from disk, or you are trying to retrieve a document created in another word processor.

Solution: Convert the file to the correct format and then try again. See *Convert Program; Document Conversion, 4.2 to 5.1*; and *Text In/Out* in *Reference* for more information.

Cause: You are trying to retrieve a graphics image into the normal editing screen.

Solution: Graphics images can only be retrieved into graphics boxes.

Incompatible Supplementary Dictionary File Format

Cause: The supplementary dictionary you specified is not a WordPerfect 5.1 document.

Solution: If it is a 4.2 or 5.0 document, or a DOS text file, retrieve it (using Text In if appropriate) and save it as a 5.1 document. See also *Speller Utility* in *Reference*.

Incorrect Format

Cause: You attempted to save a file with a name reserved by DOS (e.g., CON, AUX, NUL, PRN).

Solution: Save the file under a different name. See *DOS* and *WordPerfect in Reference*.

Cause: You are trying to select or edit a keyboard or macro that has become corrupted.

Solution: If you have a backup copy of the keyboard or macro file, recopy the file and then select or edit it.

Insert Paper—Press “G” to Continue

Cause: “Prompt to Load” in Paper Size/Type is marked Yes for the form you are currently printing on.

Solution: Insert the paper (position it correctly), and press g to continue.

Insufficient Disk Space—Insert New Diskette and Press Any Key

Cause: While copying files in List Files, the destination disk became full.

Solution: Insert a blank diskette in the destination drive and press a key. If the destination drive is a hard disk, you must press **Cancel** (F1).

Insufficient Expanded Memory for /R

Cause: When the /r startup option is used to start WordPerfect (see *Appendix N: Startup Options*), WP.FIL is loaded into expanded memory if sufficient expanded memory is available (note that this is not extended memory, but only memory that follows the LIM 3.2 or 4.0 specifications).

There are three reasons no expanded memory is present: either the /ne startup option was also specified (which inhibits WordPerfect’s use of expanded memory); there is not enough expanded memory available (as much as the size of the WP.FIL plus a few thousand bytes is needed); or the Expanded Memory Manager (EMM) is not properly installed or functioning.

Solution:

- 1 Reduce other programs’ use of expanded memory (for example, if you are running under Shell and swapped some programs to expanded memory, exit from some of those programs before entering WordPerfect).
- 2 Make sure expanded memory is present and active. Some utilities should have been shipped with your expanded memory board or driver to check this, or if you have Shell, look at the memory map (see the documentation that came with the utilities or with Shell).
- 3 Make sure the /ne startup option was not used when starting WordPerfect (restart it without the /ne option if you are not sure).

Insufficient File Handles to Run WordPerfect. Increase FILES= in CONFIG.SYS and Reboot Your Computer

Cause: As WordPerfect was started, it detected that there were too many files open by other programs, and/or that the FILES= command in the CONFIG.SYS was too small.

Solution: WordPerfect requires at least 20 available file handles in order to run. If any other programs have open files, the number should be even larger.

To increase the number of file handles from DOS:

- 1 Exit to a DOS prompt (if you are not already there), then make a copy of your CONFIG.SYS file (e.g., type **copy c:\config.sys c:\config.old**). Your CONFIG.SYS file should be where COMMAND.COM is located, in the root directory.
- 2 Type **type config.sys** and then press **Enter** to display the contents of the CONFIG.SYS file. Locate the "Files =" line and see how many file handles are currently open.
- 3 Retrieve the CONFIG.SYS file by typing **copy config.sys+con config.sys** and pressing **Enter**.
- 4 Type **files=*n*** where *n* represents the number of file handles you want to open. (We recommend that you increase the number of file handles in increments of five.)
- 5 Press **F6**, then press **Enter**.
- 6 Reboot your computer.

If you are still unable to run WordPerfect, repeat the process and increase the number of file handles by another increment of five. (See your DOS manual for more information.)

The CONFIG.SYS file is a DOS text file that can be edited in WordPerfect using the Text In/Out feature (see *Text In/Out* in *Reference*).

Insufficient Memory to Run WordPerfect

Cause: WordPerfect requires a minimum of approximately 384K of free memory, and WordPerfect was started with less than this amount of memory free.

Solution: If needed, increase the base memory to at least 512K, preferably 640K. Remove TSR (Terminate and Stay Resident) programs (such as Shell). Reduce the FILES= or BUFFERS= commands in CONFIG.SYS and remove device drivers, or reduce the size of RAM drives in base memory (see your DOS manual). Remember, WordPerfect needs at least 20 files in the FILES= command.

Invalid Drive/Path Specification

Cause: You are trying to access a file (saving or retrieving a document, executing a macro, printing a document from disk, etc.), and the drive or path

you specified is not valid. Either the drive or directory name was entered incorrectly.

Solution: Check to see if the drive exists, and that the specified subdirectory exists.

Invalid File Name

Cause: The filename was too long, or contained invalid characters.

Solution: See *Naming Files* under *DOS and WordPerfect* in *Reference* for information about naming files.

Invalid Graphics Driver

Cause: You are trying to view a document or edit a graphics box, but the graphics driver you selected in graphics screen type is invalid. Either the graphics driver is in an improper format, or you do not have the hardware that corresponds to your selection.

Solution: Make sure that the graphics screen type was correctly specified in Setup (see *Graphics Screen Type* in *Reference*).

Invalid Graphics File Format

Cause: While retrieving a graphic file into a graphic box, WordPerfect detected that the file is either not in a WordPerfect-supported format, or that there is something in the file that we do not support.

Solution: If the format of the graphics file is not supported by WordPerfect, then you need to convert it into a supported format.

See *Graphics, Formats and Programs* and *Graphics, Conversion Program* in *Reference* for more information.

Many graphics packages save graphic images in several formats. Some formats supported by WordPerfect have many variations in the industry, not all of which are currently supported by WordPerfect. If a file in one of these formats cannot be retrieved, please send in the file so that we can try to extend WordPerfect's support of the format to handle this new variation.

Send the file to:

Graphics Format
Attn: WordPerfect Corporation Information Services
1555 N. Technology Way
Orem, UT 84057

Invalid Printer Definition String

Cause: Your .PRS file contains an unrecognized command and is not communicating properly with the printer. Your .PRS file may contain an invalid or unrecognized command if you modified the .PRS file using the Printer Program. If you did not use the Printer Program, the .PRS file was corrupted some other way.

Solution: If you used the Printer Program, review the modification(s) you made to the .PRS file and ensure that all the commands are valid. If you did not use

the Printer Program, try updating your .PRS file by selecting Update (7) from the Print: Select Printer menu. WordPerfect will then update the existing .PRS file.

Invalid Thesaurus File Format

Cause: The Thesaurus is not a correct format.

Solution: Make sure the Thesaurus was installed correctly.

Invalid Username

Cause: When you started WordPerfect on a network, an invalid username was specified.

Solution: Use just three characters, and only letters A-Z (or a-z), digits, and underscores, or "{WP"}.

Job is Already Printing

Cause: You tried to rush a job that was already being printed.

Solution: You can't make the specified job come out any faster by rushing it, since it is currently being printed.

Job Not Found

Cause: You tried to cancel or rush a job with a job number which is not currently in the list of jobs.

Solution: Enter the correct job number; if you entered it correctly, it could be that the job finished printing while you were trying to cancel or rush it.

Lock Violation

Cause: Someone else is using the file you are trying to access, and DOS SHARE (see your DOS manual) is running or you are on a network.

Solution: You will be given the option to **Retry** or **Cancel**. If the other user is finished with the file or will finish soon, retry the operation; otherwise, cancel it.

Marked Files Must Be Copied to a Directory or Drive

Cause: In List Files, you marked one or more files and then requested that they be copied to a filename instead of a disk, directory, or drive.

Solution: Specify a directory or drive only.

Maximum Records Exceeded

Cause: The input file for the sort contained more than 65,535 records.

Solution: Break up the file into smaller files, and sort them individually.

Maximum String Size Exceeded

Cause: Sort: The Select String in the Sort feature contains a constant of more than 16 digits.

Solution: Reduce the size of any constants in the Select String.

Network Device Fault

A network timeout error occurred for one of the following reasons:

Cause: Another card is trying to use the same high memory space as the network card (expanded memory page frames are a common cause of this conflict).

Solution: Remove the conflicting card, or adjust the portion of high memory it uses. Check the manufacturer's instructions for your card.

Cause: There is too much physical distance between the station and the server.

Solution: You may need to reduce the distance. You may also want to contact your dealer; some cards may be available to correct this problem.

Network Not Accepting Job

Cause: WordPerfect is trying to spool a print job to the network spooler, which will not accept it. Either the server volume to which it is spooling is full, or the maximum number of print jobs has been reached. You will also get this message at the Print: Control Printer menu if you have entered an invalid queue name or an incorrect logical printer number for the port on the Select Printer: Edit menu (see *Printer; Edit in Reference*). It may also be that the network print server spooler is down (see your network manual).

Solution: Free some disk space on the spooler volume, or wait for other network spool jobs to finish so that there will be a slot available for your job. Enter a valid queue name or correct logical printer number.

Network Spool Disk Full

Cause: The disk to which the network spools print jobs is full.

Solution: Free up some disk space on that volume and check your network manual.

No Available File Handles

Cause: WordPerfect is trying to access a file, but is unable to do so because there are no more DOS file handles, either because some other program is running, or because the FILES= command in the CONFIG.SYS file is too small.

Solution: See "Solution:" under *Insufficient File Handles to Run WordPerfect. Increase FILES= in CONFIG.SYS and Reboot Your Computer* for details on increasing file handles. See your DOS manual for information on the CONFIG.SYS file.

No Room on WP Disk to Retrieve Text

Cause: The /d disk or WP.FIL disk is full, or would be if WordPerfect tried to retrieve the document.

Solution: Free up some space on your /d disk, or change your /d disk to a disk with more free space.

No Text Columns Defined

Cause: You tried to turn on columns (Alt-F7,1,1) before defining columns.

Solution: Define columns (Alt-F7,1,3), then try again to turn on columns (Alt-F7,1,1).

Not a Prefixed File

Cause: The file has been corrupted, and WordPerfect is unable to read the prefix of the file.

Solution: If you have a backup, copy the file. You may also need to check your system setup or any utilities you are using to determine if they are making your files unreadable.

Not Enough Memory

Cause: Not enough memory is available for the current operation.

Solution: See *Freeing Up Memory* under *Memory in Reference*.

Cause: Not enough free RAM on the machine to run the program.

Solution: Free some memory by taking out memory-resident (TSR) programs. Run a disk check to see the amount of bytes which are free. (See information on the CHKDSK command in your DOS manual unless you're on a network. For network users, see information on CHKVOL.) Make sure total memory is large enough to load the WordPerfect program (384K).

Not Enough Memory for Graphics

Cause: WordPerfect ran out of memory while trying to retrieve a graphic image into a graphics box.

Solution: You can print text and graphics separately. See *Print Quality* and *Freeing Up Memory* under *Memory in Reference*.

Not Enough Memory to Load Display Fonts

Cause: WordPerfect is trying to load an EGA/VGA display font (512 characters, underline, italics, or small caps), but there is not enough memory available.

Solution: See *Freeing Up Memory* under *Memory in Reference*.

Not Enough Memory to Print Columns

Cause: While printing columns, WordPerfect needs extra memory, but is unable to find as much as it needs.

Solution: See *Freeing Up Memory* under *Memory in Reference*.

Not Enough Memory to Print Graphics

Cause: While printing graphics, WordPerfect needs extra memory, but is unable to find as much as it needs.

Solution: See *Freeing Up Memory* under *Memory in Reference*.

Other Document Must be Empty for Specified Operation

Cause: You are trying to generate or sort, but you have relatively little free memory, and Document 2 contains text.

Solution: Clear the screen in Document 2 so that WordPerfect can use that memory to sort or generate.

Paper Type Should be Unique for This Paper Definition

Cause: The paper definition you are adding, copying, or editing is the same as an existing definition (i.e., values for Paper Size, Paper Type, Font Type, and Labels match).

Solution: WordPerfect takes you into the Format: Edit Paper Definition menu where you must edit the definition to make it unique before it can be saved and added to the list of paper definitions (see *Editing a Definition* under *Paper Size/Type* in *Reference*). You can exit the menu without saving by pressing **Cancel** (F1).

Port Not Set Up in Printer Selection

Cause: You are printing a document that has been set up with a different printer selected. Even though the printer is deleted, the .PRS file still exists. WordPerfect finds the old .PRS file and selects it, but the port information is not available.

Solution: Add the port information to the printer selection which WordPerfect created. This will make the selection permanent. If in Setup: Initial Settings you set "Format Retrieved Documents to Default Printer" to Yes, you will never get this message (see *Initial Settings* in *Reference*).

Printer Not Accepting Data

Cause: WordPerfect is trying to send data to your printer which will not accept it. Either the printer is not "on-line" or the connection between your printer and computer is faulty.

Solution: Use the following checklist to help determine the problem (for more information, see *Appendix O: Troubleshooting* in *Reference*):

- Has the printer been turned off and, after at least a 15-second pause, turned back on?
- Is the cable connected tightly to the printer and the computer? (Before making adjustments to the cable, turn off all equipment.)
- If your printer manual recommends special switch or menu panel settings specific to your printer, have you made the correct settings?
- Is the correct printer selected (Shift-F7,s)?
- Has the correct printer port been selected (Shift-F7,s,3,2)?

Printer Not Selectable

Cause: You may not have enough disk space to install the .ALL file, especially if you are running WordPerfect from a two-disk drive system.

Solution: If you have a hard disk, erase any unnecessary files in the directory where your printer files are located. If you are using a two-disk drive system, try using a diskette with more disk space.

Cause: An incorrect printer files directory may be specified in Setup: Location of Files.

Solution: During custom installation, you may have specified an invalid directory. Check the directory specified for printer files in Setup: Location of Files (Shift-F1,4) to make sure it is a valid directory. In addition, make sure that the path you specified for printer files in Setup: Location of Files is identical to the path you used for printer files during installation.

Printer Not Selected

Cause: You tried to print or view a document, but had not selected a printer.

Solution: Select a printer (make sure that an asterisk appears by it in the printer selection list) and then try to print again (see *Printer, Select in Reference*).

Printer Out of Paper

Cause: When printing to a parallel printer, the printer ran out of paper without going off-line. This error may also occur when there is a problem with the cabling between the computer and printer, or when the printer needs to be checked.

Solution: Put in more paper, or check to see if the paper is loaded correctly. Check the cable to the printer.

Put Diskette Back in Drive (File Not Found)

Cause: The document WordPerfect was trying to print was removed during printing. WordPerfect needs to access the temporary print file it created on the default drive when you print from screen, and on the disk when you print from disk.

Solution: Put the disk containing the printer file back in the drive and press a key to continue.

Record Too Large

Cause: While sorting, the maximum size allowed per record (9216 bytes) has been exceeded for at least one record.

Solution: Make your records smaller.

Sector Not Found

Cause: The disk drive can't find a sector.

Solution: Use a backup of the file.

Cause: The drive may be out of alignment.

Solution: Have the drive serviced.

Cause: The diskette is improperly inserted.

Solution: Insert the diskette correctly.

Cause: The diskette is physically damaged.

Solution: Replace the diskette.

Start/End Mismatch on:

Cause: While condensing a master document, either because of a specific request or as part of generation, WordPerfect detected a Subdocument End without a Subdocument Start, or vice versa.

Solution: Check the document to make sure that Subdocument Start and Subdocument End codes are properly paired.

Subdoc Not Allowed Within This Function

Cause: You tried to insert a Subdocument code within a Footnote or Header/Footer, or similar editing substructure.

Solution: Insert Subdocument codes only at the main level of the document.

Too Many Characters in Constant

Cause: When defining your calculation column in the Math feature, you can include up to 7 digits in each constant.

Solution: Make sure to use no more than 7 digits for each constant.

Too Much Text

Cause: You tried to exit a Header, Footer, Footnote, Endnote, Text Box, Caption, or Styles, but there was too much text. The limit for Footnotes and Endnotes is 64K bytes (approximately 16,000 lines of text); the limit for captions is 256 bytes; for all others, the limit is one page.

Solution: Delete text until the text is within acceptable limits. If you forgot to exit the edit screen and continued with your document, use the Move feature to move the text back to the document (see *Move* in *Reference*).

Training Version Can't Save Large Files

Cause: Special training versions of WordPerfect have a limit on the size of document that can be saved. This limit was exceeded.

Solution: Reduce the size of the document, then try to save again.

Unable to Change Key Repeat Speed

Cause: During startup, WordPerfect detected that its method for changing the cursor speed will not work on your hardware/BIOS combination.

Solution: If your hardware/BIOS combination cannot support the Cursor Speed feature, upgrade the BIOS to be fully IBM-compatible, or use the /nc startup option (see *Appendix N: Startup Options*) to disable the Cursor Speed feature. If your hardware/BIOS combination can support the Cursor Speed feature, restart WordPerfect without the /nc startup option.

Unable to Process Secondary File Field Names

Cause: Missing tilde at the end of the {FIELD NAMES} definition.

Solution: Enter the tilde, save secondary file, and run the merge again.

Unable to Switch Documents While in Edit Mode

Cause: You were editing a substructure (Header, Footer, Footnote, etc.) in one document, switched to the other document, edited or created a substructure there, then tried to switch back to the original document.

Solution: Exit out of editing the substructure in the other document before switching back.

Unmatched (or)

Cause: A parenthesis is missing in the sort select string (see *Sort, Select Records* in *Reference*). All mathematical expressions require the same number of left and right parentheses, with the left parenthesis to the *left* of the matching right parenthesis.

Solution: Examine the string to find the missing parenthesis.

WARNING: Backup File Deleted Due to Disk Error—Press Any Key to Continue

Cause: A disk error or disk full error occurred during timed backup. You do not have a valid timed backup at this point in the event that the power fails.

Solution: Save your document so that you will have it securely backed up, and then you can continue editing. Investigate what caused the backup file to be deleted and fix it (see your DOS manual).

WARNING: New Page Num Not Found Between ToA Def and First Mark (Press Any Key)

Cause: When you define a table of authorities, you should set a new page number between the table of authorities definition and the next page of the document (see *Page Numbering* in *Reference*). If you do not, page number references may not be accurate after the table is generated (since the table itself will likely introduce new pages in the document).

Solution: Make sure you insert a Hard Page code [HPg] after the table of authorities definition and insert a New Page Number code at the top of that page.

WARNING: No Room on Backup Drive—Press Any Key to Continue

Cause: WordPerfect is trying to back up the file on the screen to 1) a disk or drive that is full or 2) a non-existent directory.

Solution: Check where the backup files are directed to (see *Location of Files* in *Reference*), then check the location to see that there is space available.

WP Disk Full—Press Any Key to Continue

Cause: You have added so much text to your document that the edit buffer, cache memory, expanded memory, and the /d disk are full. Consequently, there is no more room to increase the size of your document. You will receive this error message for each keystroke you type at the main document level. If you continue to type and add text, you may lose the document.

Solution: Free some room on your /d disk, or save the document and then start WordPerfect again with a /d disk pointing to a disk with more free space (see *Appendix N: Startup Options*).

Write-protect Error

Cause: There is a write-protect tab on the disk you are trying to save or print to.

Solution: Remove the write-protect tab, or insert a different diskette.

Appendix F: Font Programs

Depending on your printer's capabilities, you may enhance your printer's font handling ability by purchasing additional font cartridges or one of the third-party, downloadable soft font products listed below. (See *Cartridges/Fonts/Print Wheels* in *Reference* for information about how to use these products with WordPerfect.)

WordPerfect Corporation (WPCorp) has not evaluated nor does it endorse these third-party font products. WPCorp conducts limited testing for compatibility but does not guarantee complete testing or certify that these products work with WPCorp product lines.

The following information was provided to WPCorp by the respective companies and may not constitute a complete list. WPCorp is not responsible for any inaccuracies in this list.

Adobe Type Library for the PC

For information about Adobe Type Library for the PC Version 3.0 and to receive the free Adobe Type catalog, *Font & Function*, call (800) 83-FONTS. For technical support on Adobe's PC typeface package, call (415) 961-4992.

Bitstream Fontware 3.0—Starter Kit for WordPerfect 5.1

Bitstream Fontware 3.0 is a product of Bitstream, Inc. and is distributed by WordPerfect Corporation under license from Bitstream, Inc. To order the Bitstream Starter Kit, call your nearest dealer. Once you order Fontware, you can receive support by dialing (617) 497-7514.

Fonts-on-the-Fly

To order or receive support for Fonts-on-the-Fly from LaserTools Corporation, call (800) 767-8004.

Glyphix Scalable LaserJet Fonts

To order Glyphix, call (800) 237-9383. Once you order Glyphix, you receive support by dialing (302) 234-1750.

Hewlett-Packard Type Director

To order Type Director 2.0, call Hewlett-Packard at (800) 752-0900.

MoreFonts

MoreFonts from MicroLogic Software can be ordered by calling your local dealer or Egghead store, or call (800) 888-9078 to order direct. Once you order MoreFonts, you can receive support by dialing (415) 652-5464.

Publisher's Powerpak

Publisher's Powerpak is from Atech Software. To order or obtain more information, call (800) 748-5657. Once you order Publisher's Powerpak, you can receive support by dialing (619) 438-2244.

**SoftCraft Font
Solutions**

For Font Solutions information or orders, call SoftCraft at (800) 351-0500 or FAX (608) 257-6733. Once you order SoftCraft Font Solutions, you can receive support by dialing (608) 257-3300.

Appendix G: Initial Settings

This section contains a list of WordPerfect initial settings found on the Setup (Shift-F1) and Format (Shift-F8) features. For more information, check the *Index* for references to each of these options. Also, see *Initial Codes* in *Reference*.

Feature	Initial Setting
Automatically Format and Rewrite	Yes
Backup Options	
Minutes Between Timed Backups	30
Original Document Backup	No
Timed Document Backup	Yes
Baseline Placement for Typesetters	No
Beep Options	
on Error	No
on Hyphenation	Yes
on Search Failure	No
Border Options	
Single-Width	.013"
Single-Shading	100%
Double-Width	.013"
Double-Shading	100%
Double-Spacing Between	.013"
Dashed-Width	.013"
Dashed-Shading	100%
Dashed-Dash Spacing	.013"
Dashed-Dash Length	.053"
Dotted-Width	.013"
Dotted-Shading	100%
Dotted-Dot Spacing	.013"
Thick-Width	.063"
Thick-Shading	100%
Extra Thick-Width	.125"
Extra Thick-Shading	100%
Center Page (top to bottom)	No
Comments Display	Yes
Cursor Speed	50 cps
Date Format	3 1, 4 (e.g., May 1, 1990)
Decimal/Align Character	*
Default Document Type	None
Display Pitch	
Automatic	Yes
Width	0.1"

Feature	Initial Setting
Document Summary	No
Create on Save/Exit	RE:
Subject Search Text	
Equation Options	
Graphical Font Size	Default
Horizontal Alignment	Center
Keyboard	Original
Print as Graphics	Yes
Vertical Alignment	Center
Fast Save (unformatted)	Yes
Filename on the Status Line	Yes
Footers	None
Force Odd/Even Page	Off
Format Retrieved Documents for Default Printer	Yes
Graphics Screen Type	None Selected
Hard Return Display Character	Space
Headers	None
Hyphenation (feature)	No
Hyphenation Dictionary	External Dictionary/ Rules
Hyphenation Prompt	When Required
Hyphenation Zone	
Left	10%
Right	4%
Justification	Full
Kerning	No
Keyboard Layout	Original
Language	US
Leading Adjustment	
Primary—[SRt]	0"
Secondary—[HRt]	0"
Letter Spacing	Optimal
Line Height	Auto
Line Numbering	No
Line Spacing	1
Location of Files	Set by Installation Program
Long Document Names	No
Margins	
Bottom	1"
Left	1"
Right	1"
Top	1"
Menu Bar	
Letter Display	Redline
Remains Visible	No

Feature	Initial Setting
Separator Line	No
Text	Shadow
Menu Letter Display	Bold
Merge	
Field Delimiters	
Begin	None
End	*
Record Delimiters	
Begin	None
End	[CR]
Merge Codes Display	Yes
Mouse	
Acceleration Factor	24
Double-Click Interval	70
Left-Handed Mouse	No
Port	None
Submenu Delay Time	15
Type	Mouse Driver (MOUSE.COM)
Page Number	
New Page Number	1
Page Number Position	No Page Numbering
Page Number Style	^B (Ctrl-B)
Paper Size	8 1/2" x 11"
Paper Type	Standard
Print Options	
Binding Offset	0"
Graphics Quality	Medium
Multiple Copies Generated By	WordPerfect
Number of Copies	1
Text Quality	High
Pull-Down Menu	
Alt Key Selects	No
Letter Display	Redline
Text	Shadow
Redline Method	Printer Dependent
Repeat Value	8
Reveal Codes Window Size	10
Side-by-side Columns Display	Yes
Size Attribute Ratios (% of Normal)	
Fine	60%
Small	80%
Large	120%
Very Large	150%
Extra Large	200%
Super/Subscript	60%

Feature	Initial Setting
Suppress	
All Page Numbering, Headers, and Footers	Off
Suppress Headers and Footers	Off
Print Page Number at Bottom Center	No
Suppress Page Numbering	No
Suppress Header A	No
Suppress Header B	No
Suppress Footer A	No
Suppress Footer B	No
Tab Set	Relative to Left Margin, every 0.5"
Table of Authorities	
Blank Line between Authorities	Yes
Dot Leaders	Yes
Underlining Allowed	No
Text Screen Type	Auto-Select
Thousands' Separator	*
Underline Spaces	Yes
Underline Tabs	No
Units of Measure	
Display and Entry	Inches (")
Status Line Display	Inches (")
View Document Options	
Bold Displayed with Color	Yes
Graphics in Black & White	No
Text in Black & White	No
Widow/Orphan Protection	No
Word Spacing	Optimal
Word Spacing Justification Limits	
Compressed to	60%
Expanded to	400%

Appendix H: Keyboards

In addition to the original keyboard layout, WordPerfect includes five keyboard layouts which you may use or edit as you like. They include an Alternate keyboard, an Enhanced keyboard, an Equation keyboard, a Macros keyboard, and a Shortcut keyboard. The key assignments that differ from the key assignments on the original keyboard are listed below.

For information on defining and selecting keyboard layouts, see Keyboard Layout in Reference. For information on editing a keyboard layout (which you can do to any of the keyboard layouts described below), see Keyboard Layout, Edit and Keyboard Layout, Map in Reference.

ENHANCED

The Enhanced keyboard layout may be useful to you if you have an enhanced keyboard. It includes the following key assignments:

Key	Description
Home (on the number pad)	Home,Home,Home,Left Arrow
5 (on the number pad)	Home
Alt-Down Arrow (↓)	Move Down one sentence
Alt-Left Arrow (←)	Move Left one column
Alt-Right Arrow (→)	Move Right one column
Alt-Up Arrow (↑)	Move Up one sentence
Alt-F11	Very Large
Alt-F12	Copy Block
Ctrl-5 (on the number pad)	Go To
Ctrl-F11	Large
Ctrl-F12	Move Block
Shift-F11	Italics
Shift-F12	Retrieve Block

EQUATION

The Equation keyboard layout assigns mathematical and scientific characters to keys on your keyboard. It includes the following key assignments:

Key	Symbol	Description
Alt-=	≠	!= (Not Equal to)
Alt-'	≈	SIMEQ (Similar or Equal to)
Alt--	≡	CONG (Congruent)
Alt-,	≤	<= (Less Than or Equal to)
Alt-.	≥	>= (Greater Than or Equal to)
Alt-\	|	LINE (Line)
Alt-a	α	alpha
Alt-b	β	beta
Alt-d	δ	delta
Alt-e	ε	epsilon

Key	Symbol	Description
Alt-f	ϕ	phi
Alt-g	γ	gamma
Alt-i	∞	INF (infinity)
Alt-l	λ	lambda
Alt-m	μ	mu
Alt-n	η	eta
Alt-o	ω	omega
Alt-p	π	pi
Alt-r	ρ	rho
Alt-s	σ	sigma
Alt-t	θ	theta
Alt-Tab	→	(Right Arrow)
Ctrl-a	SUP*	SUP (Superscript)
Ctrl-b	BAR*	BAR (Bar)
Ctrl-d	Δ	DELTA (Uppercase)
Ctrl-e	\in	IN (Member, Element)
Ctrl-f	FROM	FROM TO (x From a, To b)
Ctrl-g	∇	GRAD (Nabla, Gradient)
Ctrl-i	\int	INT (Integral)
Ctrl-l	OVERLINE*	OVERLINE (Overline)
Ctrl-n	∇	GRAD (Nabla, Gradient)
Ctrl-o	OVER*	OVER (Over)
Ctrl-p	∂	PARTIAL (Partial)
Ctrl-q	SQRT*	SQRT (Square Root)
Ctrl-s	Σ	SUM (Sum)
Ctrl-z	SUB*	SUB (Subscript)
Ctrl-Tab	←	← (Left Arrow)

**Must be entered with parameters or arguments.*

For information on how to use the Equation keyboard layout, see Equation Keyboard under Equations in Reference. While you can use the Equation keyboard outside the Equation Editor by selecting it with the Keyboard Layout feature, some characters may not display as expected. This is because keywords specific to the Equation Editor represent some characters.

FAST KEYS

Below is a list of the WordPerfect fast keys which can be selected from the Keyboard Layout menu in **Setup** (Shift-F1).

Key	Description
Ctrl-a	Paste Block
Ctrl-b	Bold
Ctrl-c	Center
Ctrl-d	Date Text
Ctrl-e	Endnote Create
Ctrl-f	Base Font

Key	Description
Ctrl-g	Graphics Create
Ctrl-i	Italics
Ctrl-k	Copy
Ctrl-m	Move (Cut)
Ctrl-n	Normal Text
Ctrl-p	Preview (View Document)
Ctrl-r	Reveal Codes
Ctrl-s	Spell
Ctrl-t	Thesaurus
Ctrl-u	Underline
Ctrl-v	Characters

MACROS

The Macros keyboard layout assigns some useful macros to the Alt and Ctrl keys. It includes the following key assignments:

Key	Description
Alt-b	Restores (redefines) the previous block.
Alt-c	Capitalizes the first letter of the word on which your cursor is located.
Alt-d	Deletes the line on which the cursor is located.
Alt-e	Returns you to the normal editing screen.
Alt-f	Finds a “bookmark” («MARK») in your document (see <i>Alt-m</i> below).
Alt-g	Gives the printer a “Go.”
Alt-i	Inserts a blank line immediately preceding the line on which the cursor is located.
Alt-m	Inserts a “bookmark” («MARK») into your document (see <i>Alt-f</i> above).
Alt-n	Edits the next or previous footnote or endnote.
Alt-r	Replaces an attribute with another attribute. Place the cursor on the attribute on code before pressing this key.
Alt-t	Transposes two visible characters. Place the cursor to the immediate right of the second character before pressing this key.
Ctrl-c	Displays a calculator which you can use to perform mathematical calculations.
Ctrl-d	Helps you create a memo, letter, or itinerary.

Key	Description
Ctrl-e	Selects (and defines, if necessary) an envelope paper size/type, then helps you type a name and address on the envelope.
Ctrl-f	Searches for and replaces specific font codes.
Ctrl-g	Expands abbreviated words. Place the cursor at the immediate right of the abbreviation to be expanded before pressing this key. Edit this macro to add more words to the abbreviation "dictionary."
Ctrl-r	Recalculates all math formulas in a table.
Ctrl-s	Searches for multiple spaces and replaces with tabs beginning at the current cursor position. Also allows user to specify a minimum number of spaces to be replaced.
Ctrl-F8	Lets you temporarily change base fonts. Press the Right Arrow key (→) to return to your regular font.

ORIGINAL

If you have a keyboard with an enhanced BIOS, WordPerfect has assigned a few functions to the Ctrl and Alt keys on the original keyboard. If you do not have a keyboard with an enhanced BIOS, you can still map these functions using the Keyboard Layout feature (see *Keyboard Layout, Edit and Keyboard Layout, Map in Reference*). The original keyboard for an enhanced BIOS includes the following key assignments:

Key	Description
Alt-Down Arrow (↓)	Item Down. This moves the cursor down one cell in a table or forward to the first paragraph number of the same (or preceding level) in an outline.
Alt-Left Arrow (←)	Item Left. This moves the cursor left one cell in a table or backward to the first paragraph number it can find in an outline.
Alt-Right Arrow (→)	Item Right. This moves the cursor right one cell in a table or forward to the first paragraph number it can find.
Alt-Up Arrow (↑)	Item Up. This moves the cursor up one cell in a table or backward to the first paragraph number of the same (or preceding level) in an outline.
Ctrl-Delete (Del)	If Block is on, move the block. If in a table, delete a row.
Ctrl-Down Arrow	Move the cursor down one paragraph.

Key	Description
Ctrl-Insert (Ins)	If Block is on, copy the block. If in a table, add a row.
Ctrl-Up Arrow	Move the cursor up one paragraph.

SHORTCUT

The Shortcut keyboard assigns some of the most common WordPerfect features to a macro, enabling quick access to these features with fewer keystrokes. The Shortcut keyboard includes the following key assignments:

Key	Description
Alt-a	Adds an attribute to the text. Place your cursor on the attribute on code before selecting this option.
Alt-b	Subscript
Alt-d	Double Underline
Alt-e	Edit a Code (see <i>Codes</i> below)
Alt-f	Fine
Alt-g	Give printer a "Go"
Alt-i	Italics
Alt-l	Large
Alt-o	Outline
Alt-p	Superscript
Alt-r	Redline
Alt-s	Small
Alt-t	Strikeout
Alt-v	Very Large
Alt-w	Shadow
Alt-x	Extra Large
Ctrl-b	Base Font
Ctrl-c	Column Definition
Ctrl-d	Double Spacing (places a spacing code at the cursor position)
Ctrl-e	Create Endnote
Ctrl-f	Create Footnote
Ctrl-g	Create Figure Box
Ctrl-h	Create Header
Ctrl-i	Document Initial Codes
Ctrl-j	Justification
Ctrl-l	Margins, Left/Right
Ctrl-m	Margins, Top/Bottom
Ctrl-o	Create Footer A
Ctrl-p	Paper Size/Type
Ctrl-q	Create Equation
Ctrl-s	Single spacing (places a spacing code at the cursor position)
Ctrl-t	Tab Set

Codes

The Edit Code key (Alt-e) on the Shortcut keyboard lets you immediately edit a code for several WordPerfect features. In order to use the Edit Code key, you must position your cursor on the code, then press **Alt-e**.

You can use the Alt-e macro to edit text within a substructure, but you cannot use it to edit a code within a substructure (e.g., you cannot use Alt-e to edit a graphics box within a header).

The following codes can be edited with Alt-e:

- Attribute On/Off
- Base Font
- Baseline Placement for Typesetters
- Center Page
- Column Definition
- Comment
- Conditional End of Page
- Cross-Reference
- Date
- Decimal/Align Character/Thousands' Separator
- Equation Options
- Footer
- Footnote/Endnote
- Force Odd/Even Page
- Graphics Boxes
- Graphics Lines
- Graphics Options
- Header
- Hyphenation Zone
- Justification
- Justification Limits
- Kerning
- Language
- Leading
- Line Height
- Line Numbering
- Line Spacing
- Margins, Left/Right
- Margins, Top/Bottom
- Math
- Outline Style
- Overstrike
- Page Number Insert
- Page Number Position
- Page Numbering, New
- Page Numbering Style
- Paper Size/Type
- Paragraph Numbering Definition

- Print Color
- Style
- Suppress
- Tab Set
- Table
- Target
- Underline Spaces and Tabs
- Widow On/Off
- Word and Letter Spacing

Appendix I: Macros and Merge, Comparison

Macros and Merge are both complex features of WordPerfect that have many similarities, but important differences. Since these features can perform many of the same tasks, this section is provided to help you better understand each feature and distinguish between them.

Before reading this section, we recommend that you familiarize yourself with the Macros and Merge features, as documented in the following sections:

- Workbook Lessons 23, 24, and 25
- Macros
- Macros, Define
- Macros, Execute
- Macros, Macro Editor
- Macros, Message Display
- Merge
- Appendix J: Macros and Merge, Expressions
- Appendix K: Macros and Merge, Programming Commands
- Appendix L: Macros and Merge, Variables

Similarities

Commands

Both Macros and Merge use a similar programming command language. Many of the major programming structures (IF structures, CASE structures, FOR and WHILE loops, global variables, subroutine branching structures) are identical, whether in a macro or merge file. See also *Commands* under *Differences* below.

Macro-to-Merge Interface

Either feature can initiate execution of the other, i.e., a macro can execute a merge, and a merge can execute a macro (by nesting or chaining). This allows you to take advantage of the abilities of both features to accomplish any given task.

Overlap in Abilities

Often the same task can be performed by either a macro or a merge. Depending on the nature of the task, one feature may be more efficient than the other in accomplishing the task.

Repetition

Both Macros and Merge control repetitive processes, and greatly enhance the flexibility of WordPerfect and its ability to assist you in creating the documents you need.

Differences

Command Insertion

Although you can define a macro at the normal editing screen when in macro define mode, macro programming commands must be inserted in the macro via

the Macro Editor. In Merge, the codes are inserted in the document at the normal editing screen. There is no “Merge Editor.”

In Macros, when you select a command from the command access box, only the command itself is entered in the macro. You must then enter the arguments with their appropriate tildes (~) yourself. In Merge, if you select a command that requires arguments, you are prompted for each argument, and WordPerfect enters the tildes for you.

Commands

Although there are many common programming commands between Macros and Merge, many are very different. Sometimes even the same command has important differences in function depending on whether it is in a macro or merge file.

For example, the User Interface commands ({CHAR}, {INPUT}, {PROMPT}, {TEXT}) in Macros allow cursor positioning codes to position the message of the command anywhere on the screen. In Merge, cursor positioning is not allowed. You must use a scrolling technique, or nest a macro to display large messages (see *Message Display* in *Appendix K: Macros and Merge, Programming Commands*).

In Merge, the {LEN} and {MID} commands can take full expressions (see *Appendix J: Macros and Merge, Expressions and Command Syntax* in *Appendix K: Macros and Merge, Programming Commands*) as arguments. In Macros, these commands can take only values as arguments. The differences between Macros and Merge for each command are outlined in *Appendix K: Macros and Merge, Programming Commands*.

In Macros, there are both programming commands and keystroke commands. Keystroke commands (such as {Search}, {Left}, {Home}, {Mark Text}, etc.) cannot be entered in a merge file. See *Keystroke Commands in Variables* in *Appendix L: Macros and Merge, Variables* for more information.

Execution

You execute a macro by using the **Macro** (Alt-F10) key. You execute a merge by using the **Merge/Sort** (Ctrl-F9) key.

In both Macros and Merge, you then enter the name of the file that will control the process. In the case of Macros, you enter the name of a macro file. In the case of Merge, you enter the name of a primary merge file (see *Merge* in *Reference*).

In Macros, execution display defaults to off, but you can turn display on to see every keystroke as it is executed.

In Merge, execution is never displayed. You can use the {REWRITE} command to display on the screen the state of the merged document at that point, but this is only a checking device. You cannot display execution of a merge.

However, in both Macros and Merge, you can use the {STEP ON} command to check each step of execution.

File Format

Macro programming commands are stored in a file in a special format (.WPM format). All macro files must have the extension .WPM (added automatically when you define a macro) which allows WordPerfect to recognize it as a macro file.

Merge programming commands are stored in regular WordPerfect documents. These documents may use any extension you can use for a WordPerfect file.

Formatting of Commands

When editing a macro in the Macro Editor, pressing **Tab** or **Enter** formats the commands, but does not place a code in the macro. The tabs and hard returns are completely ignored when the macro executes.

In Merge, because the non-command part of the file(s) is part of the resulting merged document, the formatting of the commands must be very carefully done. You can still use tabs and hard returns to make the commands more readable, but you must be careful to enclose them in a {COMMENT} command if you want to prevent them from appearing in the merged document (see the description of the {COMMENT} command in *Appendix K: Macros and Merge, Programming Commands*).

General Process

A macro is a recorded series of *keystrokes*. It is executed as if you were performing the same keystrokes at the console. The macro programming commands simply determine *which keystrokes* are executed in *which order*. WordPerfect will perform only those commands that are in the macro.

A merge is the process of combining *text* from multiple sources into a single document. The merge programming commands give you control over the merge, affecting *what text* is merged in *what order* into the resultant document.

It is important, however, to know what parts of the merge WordPerfect handles for you, without a specific command in the merge file. For example, WordPerfect executes the primary file once for each record in a secondary file, unless you insert commands forcing it to do otherwise. WordPerfect also automatically moves the record pointer (see *Record Pointer* at the end of *Appendix K: Macros and Merge, Programming Commands*) in the secondary file from one record to the next when an iteration of the primary file is complete. If you were not aware of how WordPerfect handles the records, you might be tempted to put a {NEXT RECORD} command at the end of the primary file, causing the merge to skip every other record in the secondary file and insert a hard page between each iteration of the resulting document.

Repetition

Macros are most useful for repetitive *keystroke* activity. For example, you might create an Alt-letter macro to save and print a document (see *Macros, Define in Reference*). The Alt-letter macro would replace the following keystrokes with a single keystroke: F10,Enter,y,Shift-F7,f.

Merge is most useful for repetitive *text* activity. For example, you might create a merge document that contains the text of a letter you frequently send to clients. The text of the letter would always be the same, but the client information would vary for each letter. When you perform the merge, the information for each client would then be substituted into each copy of the letter. If you had certain paragraphs that frequently but not always needed to be included in the letter, you could create a more complex merge document that would insert the paragraphs only when certain criteria were met.

Searching

The concept of *searching* is very different between Macros and Merge. Searching in Macros is very similar to searching in a document. You use the ♦Search (F2) or ♦Search (Shift-F2) key (represented by the {Search} and {Search Left} commands in a macro) to search forward or backward in a document for a string of text. Macro execution then depends on whether or not the text is found. You can use the {ON NOT FOUND} command to specify what should occur if the text is not found.

In Merge, *searching* is carried out in the context of *fields* and *records*. You can search a given field in all records of a secondary file, or you can check whether the contents of a given field in the current record are the same as the contents of a variable. But you cannot insert a {Search} or {ON NOT FOUND} command in a merge file to search for a specific string of text and branch accordingly, as with macros.

Records in a secondary file are searched in the order they occur in the secondary file, from top to bottom. You cannot search “backwards” through a secondary file. This order of procedure through records is governed by WordPerfect and cannot be altered using programming commands, except by nesting, substituting, or chaining secondary files. (See *Chaining, Nesting, and Substituting* in *Appendix K: Macros and Merge, Programming Commands* for more information on the {CHAIN ...}, {NEST ...}, and {SUBST ...} commands available in merge. See also *General Process* above.)

Variables

Macros use only global variables. Merge can use the same global variables as Macros, but Merge can also use local variables.

You can also pass information between macro variables and Shell variables. See *{SHELL ASSIGN}* and *{SHELL VARIABLE}* in *Appendix K: Macros and Merge, Programming Commands* for more information.

See *Appendix L: Macros and Merge, Variables* and *{VARIABLE}* in *Appendix K: Macros and Merge, Programming Commands* for more information on variables in *Macros and Merge*.

See Also: Lessons 23 through 25; *Macros*; *Macros, Define*; *Macros, Execute*; *Macros, Macro Editor*; *Macros, Message Display*; *Merge*; *Appendix J*; *Appendix K*; *Appendix L*

Appendix J: Macros and Merge, Expressions

Expressions are used to determine values in the {ASSIGN}, {CASE}, {CASE CALL}, {FOR}, {FOR EACH}, {IF}, {SHELL ASSIGN}, and {WHILE} commands in both Macros and Merge, and additionally in the {LEN}, {LOCAL}, {MID}, and {NTOC} commands in Merge (see *Appendix K: Macros and Merge, Programming Commands*). You can also use expressions to determine values for Alt-number variables. Expressions can perform operations on either numbers or strings of text.

An expression can contain up to 129 keystrokes. A keystroke can be a character, an extended character, a keystroke command (in Macros), or a programming command.

Numeric Expressions

The following is a list of numeric expressions. The values must contain only integers (or variables which contain integers).

The highest positive number you should use is 2,147,483,647. Numbers higher than 2,147,483,647 are considered to be negative by WordPerfect (see *Negative Numbers* below). You can use signed numbers in expressions.

When performing multiplication or division, only one number may exceed $\pm 65,535$. For example, $65535*65536$ is legal; $65536*65536$ is not legal.

In the table, the terms n1 and n2 represent number 1 and number 2. Although only a single operator is illustrated in each example below, you can use several operators as well as parentheses in expressions. For definitions of the operations used in this table, see *Expression Terms* below.

Expression	Operation
!n1	Returns the logical NOT (bitwise) of the number n1 (see <i>Expression Terms</i> below). Example: !0 is -1.
-n1	Returns the negative of the number n1 (see <i>Negative Numbers</i> below). Example: If variable 1 holds 5, -{VARIABLE}1 is -5.
n1+n2	Returns the sum of n1 and n2. Example: 5+4 is 9.
n1-n2	Returns the difference of n1 and n2. Example: 10-1 is 9.
n1*n2	Returns the product of n1 and n2. Example: 6*5 is 30.
n1/n2	Returns the integer quotient of n1 and n2. Examples: 20/5 is 4. 5/2 is 2.
n1%n2	Returns the <i>remainder</i> of the quotient of n1 and n2. Examples: 20%5 is 0. 5%2 is 1.

Expression	Operation
$n1 \& n2$	Returns the logical AND (bitwise) of $n1$ and $n2$ (see <i>Expression Terms</i> below). Examples: $7 \& 4$ is 4. $3 \& 4$ is 0.
$n1 | n2$	Returns the logical OR (bitwise) of $n1$ and $n2$ (see <i>Expression Terms</i> below). Examples: $7 | 4$ is 7. $3 | 4$ is 7.
$n1 = n2$	Returns a true value (-1) if $n1$ and $n2$ are equal; otherwise, returns a false value (0). Example: If variable 1 holds 5, then $\{\text{VARIABLE}\}1 = 5$ is true and $\{\text{VARIABLE}\}1 = 3$ is false.
$n1 \neq n2$	Returns a true value (-1) if $n1$ and $n2$ are not equal; otherwise, returns a false value (0). Example: If variable 1 holds 5, then $\{\text{VARIABLE}\}1 \neq 3$ is true and $\{\text{VARIABLE}\}1 \neq 5$ is false.
$n1 > n2$	Returns a true value (-1) if $n1$ is greater than $n2$; otherwise, returns a false value (0). Examples: $6 > 4$ is true. $4 > 6$ is false.
$n1 < n2$	Returns a true value (-1) if $n1$ is less than $n2$; otherwise, returns a false value (0). Examples: $2 < 10$ is true. $10 < 2$ is false.

If you try to use an invalid numeric expression (e.g., incorrect use of operators, characters other than numbers and valid operators), the expression is simply treated as a text string.

String Expressions

A string is a name for any sequence of one or more characters, including spaces. For example, "Apple", "245", "QB12", "Z", and "Personal Computer" are strings. Keyboard commands (e.g., {Enter}, {HPg}) should be enclosed in string delimiters (" or ') when they are part of an expression (see *String Delimiters* below).

String delimiters must also be used whenever you compare strings. If you are comparing the string contents of two variables, both variable commands must be enclosed in string delimiters. For example, $\{\text{VARIABLE}\}x = \{\text{VARIABLE}\}y$.

The expressions outlined below are used to compare strings. The terms $s1$ and $s2$ represent string 1 and string 2.

Expression	Operation
"s1"="s2"	Returns a true value (-1) if string 1 is identical (including case) to string 2; otherwise, returns a false value (0). Examples: "true"="true" is true. "true"="TRUE" is false.
"s1"!="s2"	Returns a true value (-1) if string 1 is not identical (including case) to string 2; otherwise, returns a false value (0). Examples: If variable 1 holds the string "string", then "{VARIABLE}1"!="rope" is true. "{VARIABLE}1"!="string" is false.
"s1">"s2"	Returns a true value (-1) if string 1 is greater than* string 2; otherwise, returns a false value (0). Examples: "abcd">"abcd" is true. "a">"A" is true.
"s1"<"s2"	Returns a true value (-1) if string 1 is less than* string 2; otherwise, returns a false value (0). Examples: "abcd"<"abcd" is true. "A"<"a" is true.

*In a string comparison, the WordPerfect character set values are compared. See WordPerfect Character Set Values below for details.

If you do not use the delimiters correctly on s1, the expression is simply treated as a text string. If you do not use the delimiters correctly on s2, the expression evaluates as false.

Expression Evaluation

An expression must be written according to the rules in this appendix so WordPerfect can evaluate it correctly. The following information will help you create and use expressions.

When an expression is encountered in a command, the expression is evaluated first, and the result of the expression is used to complete the command. For example, in the statement {ASSIGN}1~{VARIABLE}1~+1~, the expression is "{VARIABLE}1~+1". When the expression is evaluated, the contents of variable 1 are incremented by one. The assignment is then performed, replacing the old contents of variable 1 with the result of the expression.

In several of the expressions, the result of the operation is either true (-1) or false (0). WordPerfect assigns a numeric value to true and false. These values were chosen because they are opposites (numeric complements) of each other (see *NOT* under *Expression Terms* below).

In the following example, the first assignment statement assigns false (0) to variable 1, the second assignment statement assigns true (-1), the complement of false, to variable 1, and the third assignment statement assigns true (-1) to variable 1.

```
{ASSIGN}1^5=4^
{ASSIGN}1^{VARIABLE}1^
{ASSIGN}1^5!=4^
```

The order in which the various operators are applied in an expression is not simply the order in which they occur. WordPerfect uses an order of precedence that determines which operators are used first, second, etc. For example, in the expression $4+7*8$, there is a different result depending on whether the addition is performed before or after the multiplication. Operator precedence is described below.

Operator Precedence

WordPerfect supports expressions with several operators. Consequently, some order of evaluation must be followed. The operator precedence used by WordPerfect is similar to the accepted precedence for mathematical operators in arithmetic. The following table shows the order that operators are applied:

- 1 - (unary minus), + (unary plus), ! (NOT)
- 2 * (multiply), / (divide), % (mod)
- 3 - (subtract), + (add)
- 4 < (less than), > (greater than), = (equal), != (not equal) (Relational operators also work on strings.)
- 5 & (AND), | (OR)

You can override the operator precedence by placing parentheses around those elements that you want to be evaluated first. Elements inside of parentheses are always evaluated before the elements outside. If parentheses are nested, the innermost parentheses are evaluated first.

In the expression $4+7*8$, the multiplication ($7*8$) is performed first, followed by the addition. This is because multiplication has a higher precedence than addition. The result is 60. If you wanted the addition to be performed first, you would type $(4+7)*8$. In this case, the result is 88.

Notes

Expression Terms

The following are technical terms referenced in the discussion of expressions above. An understanding of these terms is not an essential part of creating macros or performing merges. These definitions are provided for those who are somewhat familiar with programming.

AND (&)

A bitwise AND operation compares the bits of two numbers. When both numbers have a 1 bit in the same position (for example, there is a 1 bit in column 1 (right-most column) of the first number *AND* the second number), a 1 is placed in that position in the result. For example, the expression $21&47$ is evaluated as follows:

Value	Bits
21	000000000010101
47	<u>000000000101111</u>
21&47	00000000000101

The resulting bits represent the number 5. So, 21&47=5.

Bitwise Operation

In the computer's memory, numbers are represented as a series of sixteen 1s and 0s. Each of the 0s and 1s represents a bit. The pattern for each number is unique. The following table outlines some values and their corresponding bits:

Value	Bits
0	0000000000000000
-1	1111111111111111
-3	1111111111111101
-21	111111111101011
3	000000000000011
4	000000000000100
7	000000000000111
21	00000000010101
47	000000000101111

A bitwise operation works on one column at a time, using a single bit from each number. The operation is done 16 times so each bit of each number is operated on.

Evaluate the Expression

Perform the operation(s) on the expression.

NOT (!)

A bitwise NOT operation takes the bits of the number and complements them. For example, if the expression is !0 (0 is 0000000000000000), the resulting value is -1 (-1 is 1111111111111111).

OR (|)

A bitwise OR operation compares the bits of both numbers. When either number has a 1 bit in the same position (for example, there is a 1 bit in column 1 (right-most column) of the first number *OR* the second number), a 1 is placed in that position in the result. For example, the expression 21|47 is evaluated as follows:

Value	Bits
21	000000000010101
47	<u>000000000101111</u>
21|47	000000000111111

The resulting bits represent the number 63. So, 21|47=63.

Negative Numbers

In WordPerfect, negative numbers are represented as large positive numbers, from 2,147,483,648 to 4,294,967,295. 4,294,967,295 is -1, 4,294,967,294 is -2, and so on. To determine the number WordPerfect uses to represent any given negative number from -1 to -2,147,483,647, use the following formula:

$$4,294,967,296 - |x|$$

where x is the negative number whose equivalent you are trying to find. For example, to find the WordPerfect equivalent of -3,

$$4,294,967,296 - 3 = 4,294,967,293$$

To find the negative number represented by a given WordPerfect equivalent, use this formula:

$$x - 4,294,967,296$$

where x is the WordPerfect equivalent. For example, to find the negative number represented by 4,294,967,293,

$$4,294,967,293 - 4,294,967,296 = -3$$

You can assign variables to be negative numbers by using the minus (-) operator (see *Numeric Expressions* above), or by using the WordPerfect equivalent. Do not use commas or other punctuation in the WordPerfect equivalent. For example,

```
{ASSIGN}number^-1^
```

is the same as

```
{ASSIGN}number^4294967295^
```

String Delimiters

A string delimiter is a character which marks the beginning or end of a string. In string operations, the " and ' characters serve as string delimiters. Delimiters must be paired correctly. For example, the delimiters in "string" and 'string' are correctly paired, but in "string' they are not. However, one string *can* use the " character while the other uses the ' character (e.g., "string"='string').

Whenever you compare any two items that are not numbers, you must use string delimiters around both strings.

WordPerfect Character Set Values

WordPerfect assigns a unique value to each character in each WordPerfect character set (see the descriptions for the {KTON} and {NTOK} commands in *Appendix K: Macros and Merge, Programming Commands*). This is called the WordPerfect character set value. In a string comparison, the character set values are compared.

For characters in the same character set, one character is considered “less than” another character if the first character comes before the second character. For example, in character set 0, “3” is less than “4” and “A” is less than “a”.

For characters in different character sets, the character from the character set with the lower numerical value is considered “less than” the character from the higher numerical character set. For example, any character from character set 2 is less than any character from character set 3.

See Also: Macros; Macros, Define; Macros, Execute; Macros, Macro Editor; Merge; Appendix I; Appendix K; Appendix L

Appendix K: Macros and Merge, Programming Commands

The WordPerfect Programming Language commands let you control how macros and merges function. Those familiar with programming will recognize many commands as similar to those in other programming languages.

Some of the commands described in this section can be used only in macros, others only in merge files, and others can be used in both. The  icon designates a command that is available in Macros; the  icon designates a command that is available in Merge. The presence of both icons indicates that the command is available in both features. When you see an icon in parentheses next to the command under the Programming Commands heading, it means that the command itself is not available in the feature, but there is an equivalent (or nearly equivalent) command or method in the feature that performs the same function as the command being described. Be sure to read further under the feature subheading for additional information.

Command Types

The programming commands can be categorized by the functions they perform. The categories are User Interface; Flow Control; Macro, Merge, or Subroutine Termination; External Condition Handling; Macro Execution; Variables; System Variables; Execution Control; Programming Aids; and Keystroke Commands.

User Interface

These commands communicate with the user. They display a prompt, allow input from the keyboard, or both. ({BELL} rings a bell.)

{BELL}		
{CHAR}		
{INPUT}		
{KEYBOARD}		
{LOOK}		
{ORIGINAL KEY}		
{PAUSE}		
{PAUSE KEY}		
{PROMPT}		
{STATUS PROMPT}		
{TEXT}		

Flow Control

These commands can change the flow of macro or merge execution.

{BREAK}		
{CALL}		
{CASE}		
{CASE CALL}		
{CHAIN}		
{CHAIN MACRO}		
{CHAIN PRIMARY}		
{CHAIN SECONDARY}		
{ELSE}		

{END FOR}		
{END IF}	000000	YY
{END WHILE}	000000	YY
{FOR}	000000	Y
{FOR EACH}		
{GO}		
{IF}	000000	YY
{IF BLANK}		
{IF EXISTS}	0	YY
{IF NOT BLANK}		
{LABEL}	00	Y
{NEST}	00	
{NEST MACRO}		
{NEST PRIMARY}		YY
{NEST SECONDARY}		YY
{NEXT}	000000	YY
{ON CANCEL}	000000	YY
{ON ERROR}	000000	Y
{ON NOT FOUND}		
{OTHERWISE}	000000	YY
{PROCESS}		
{QUIT}	000000	Y
{RESTART}	000000	
{RETURN}	000000	YY
{RETURN CANCEL}	000000	YY
{RETURN ERROR}	000000	Y
{RETURN NOT FOUND}	000000	
{SHELL MACRO}	000000	
{STOP}		YY
{SUBST PRIMARY}		YY
{SUBST SECONDARY}		YY
{WHILE}	0	Y

Macro, Merge, or Subroutine Termination

These commands will terminate a macro, merge, or subroutine.

{BREAK}	000000	Y
{QUIT}	000000	Y
{RESTART}	000000	
{RETURN}	000000	Y
{RETURN CANCEL}	000000	YY
{RETURN ERROR}	000000	Y
{RETURN NOT FOUND}	000000	
{STOP}		Y

External Condition Handling

These commands determine how a condition outside of macro or merge execution is responded to (e.g., when Cancel is pressed), or they create the condition.

{CANCEL OFF}	00	Y
{CANCEL ON}	00	Y
{ON CANCEL}	000	Y
{ON ERROR}	000	Y
{ON NOT FOUND}	000	
{RETURN CANCEL}	00	Y
{RETURN ERROR}	00	Y
{RETURN NOT FOUND}	00	

Macro Execution

These commands start a macro.

{ALT <i>letter</i> }	00	
{CHAIN}	00	
{CHAIN MACRO}		Y
{KEY MACRO <i>n</i> }		
{NEST}	00	
{NEST MACRO}		Y
{SHELL MACRO}	00	
{VAR <i>n</i> }	000	
{VARIABLE}	00	Y

Variables

These commands assign a value to a variable, determine the state of a variable, or execute (write out) a variable.

{ASSIGN}	00	Y
{CHAR}	000	Y
{IF EXISTS}	000	Y
{LEN}	000	Y
{LOCAL}		Y
{LOOK}	000	Y
{MID}	000	Y
{NEXT}	000	Y
{SHELL ASSIGN}	000	
{SHELL VARIABLE}	000	
{SYSTEM}	000	Y
{TEXT}	000	Y
{VAR <i>n</i> }	000	
{VARIABLE}	00	Y

System Variables

These commands are used to determine the value of system variables.

{DATE}		Y
{ORIGINAL KEY}	0	

{STATE}	⌘	
{SYSTEM}	⌘	⌘

Execution Control

These commands affect the speed or visibility of execution on the screen.

{DISPLAY OFF}	⌘	
{DISPLAY ON}	⌘	
{MENU OFF}	⌘	
{MENU ON}	⌘	
{REWRITE}		⌘
{SPEED}	⌘	
{WAIT}	⌘	⌘

Programming Aids

These commands can be used as programming aids.

{;} (Comment)	⌘	
{BELL}	⌘	⌘
{COMMENT}		⌘
{DISPLAY OFF}	⌘	
{DISPLAY ON}	⌘	
{SPEED}	⌘	
{STEP OFF}	⌘	⌘
{STEP ON}	⌘	⌘

Keystroke Commands

These commands are mapped to certain keys if you have a keyboard with an enhanced BIOS. However, if you do not have a keyboard with an enhanced BIOS and you have not mapped these commands to keys on your keyboard, you must insert these commands from the Macro Commands menu to achieve their function in a macro (see *Action* under *Keyboard Layout, Edit* in *Reference* for information on mapping keys).

{Block Append}	⌘
{Block Copy}	⌘
{Block Move}	⌘
{Item Down}	⌘
{Item Left}	⌘
{Item Right}	⌘
{Item Up}	⌘
{Para Down}	⌘
{Para Up}	⌘

Command Insertion

For information on how to insert Macro commands, see *Macros, Macro Editor* in *Reference*. For information on inserting Merge commands, see *Inserting Merge Commands* under *Merge* in *Reference*.

Command Syntax

Many of the commands use *parameters* or *arguments* which require a tilde (~) at the end. If the tilde is missing, the macro or merge will not work correctly and may use subsequent commands as part of the arguments for the current command. If a macro or merge is not working properly, check to make sure all the comments and commands have their tilde marks correctly placed. (See also *Troubleshooting* under *Notes* at the end of this appendix.)

The syntax and arguments for each command are displayed in the command access box when you insert the command, and in each command heading below. In the arguments, *var* represents a variable. *Expr* represents a number, string, variable, command, or expression (or a combination). Additional argument types are described under each command.

Programming Commands

The programming commands available in Macros and Merge are listed below with information about their use. Examples are included to clarify the instructions.

The Macros Keyboard Definition (see Keyboard Layout in Reference) contains several macros. Studying these examples will help you see how some of the macro commands interrelate. The examples have numerous comments included, which help you follow the commands of the macro.

{;}comment~

The text you type between the comment command {;} and the tilde (~) is ignored during macro execution. Comments are useful in helping to quickly recognize what each part of your macro does. You can also use comments to modify (“comment out”) a section of your macro so it will not execute with the macro (see *Commenting Out* under *Notes* at the end of this appendix).

Macros

The comments in the following example show how comments help you to understand what is happening in the macro.

```
{ASSIGN}Phrase1~One~
    {;}Assign "One" to var Phrase1~
{ASSIGN}Phrase2~Two~
    {;}Assign "Two" to var Phrase2~
{ASSIGN}Concatenation~{VARIABLE}Phrase1~{VARIABLE}Phrase2~
    {;}Assign to var Concatenation the contents of var Phrase1 combined
    with var Phrase2~
{VARIABLE}Concatenation~
    {;}Execute var Concatenation (Type the string "OneTwo")~
```

Note the centered dots (·) between many of the words. Spaces are represented this way in the Macro Editor. If the space were not between Phrase1 and Phrase2, the variable Concatenation would hold "OneTwo."

Merge

The `{COMMENT}` merge command is equivalent to the `{;}` macro command. See *{COMMENT}* below.

`{ASSIGN}var~expr~` ↻ ↘

The `{ASSIGN}` command assigns to the global variable *var* the value returned by *expr*. Do not enclose the expression in quotes. Expressions are evaluated (see *Appendix J: Macros and Merge, Expressions*) and the result is assigned to the variable. Non-numeric characters and expressions that cannot be evaluated are treated as strings.

After a value has been assigned to a variable, the variable command (`{VARIABLE}var~`) can be placed anywhere you would normally place the variable contents. See *Appendix L: Macros and Merge, Variables* for more information on variables.

If you want to empty the variable of its contents, leave the *expr* argument empty (e.g., `{ASSIGN}Fred~`). It is a good idea to empty variables at the beginning of a macro or merge in which they are used (unless the macro or merge assigns new contents to them). When you empty a variable, it no longer “exists” (see *{IF EXISTS}* below).

Macros

In this example, variable Fred is first assigned a value, then an expression, then a string.

```
{ASSIGN}Fred~3~  
    {;}Assign-3-to-var-Fred~  
{ASSIGN}Fred~{VARIABLE}Fred~*2~  
    {;}Multiply-old-value-of-var-Fred-by-2,-assign-the-result-(6)-as-the-new  
    value-of-var-Fred~  
{ASSIGN}Fred~WordPerfect~  
    {;}Assign-"WordPerfect"-string-to-var-Fred~
```

See the *Macro* subheading under the following commands for additional examples: `{;}` (comment), `{BREAK}`, `{ELSE}`, `{Item Down}`, `{Item Left}`, `{Item Right}`, `{Item Up}`, `{KTON}`, `{MID}`, `{STATE}` (in text), `{WHILE}`.

Merge

To assign a local variable, see *{LOCAL}* below.

In this example, variable Fred is first assigned a value, then an expression, then a string.

```
{ASSIGN}Fred~3~{COMMENT}  
    Assign 3 to variable Fred  
~{ASSIGN}Fred~{VARIABLE}Fred~*2~{COMMENT}  
    Multiply old value of var Fred by 2, assign the result (6) as the new value of var  
    Fred.  
~{ASSIGN}Fred~WordPerfect~{COMMENT}  
    Assign the string "WordPerfect" to var Fred~
```

See the *Merge* subheading under the following commands for additional examples: {CTON}, {IF}, {LEN}, {MID}, {NEST MACRO}, {PAGE ON}.

{BELL}

The {BELL} command causes your computer to sound a beep. This command is often useful in combination with the {CHAR}, {INPUT}, {KEYBOARD}, {PROMPT}, {STATUS PROMPT}, and {TEXT} commands which prompt the user to enter information. You can also use it to signal arrival at various points of the macro or merge, such as at the end of a lengthy process.

Macros

In this example, a bell will sound and the text "Hello *name*." will be typed at the cursor position. The {BELL} command can also be placed inside the prompts for {CHAR}, {TEXT} and {PROMPT} commands (i.e., {TEXT}|~{BELL}Please enter your name~).

```
{BELL}
    {;}Sound a bell~
{TEXT}Name~Please enter your name:~
    {;}Prompt for a name and place it in var:Name~
Hello-{VARIABLE}Name~
    {;}Type the message with the name that was entered~
```

Merge

The following example checks the DATABASE.SF secondary file to see if the name entered by the user matches the Name field in one of the records in the file. If so, it asks for a password. If the name is not found in the secondary file, the user is notified that access is denied because he or she is not in the database.

The first {BELL} command in the example sounds a bell just before the name prompt. Within the IF structure, if the name is not found in the secondary file (the last record in the secondary file has "End" as the Name field), a double bell sounds ({BELL}{BELL}) at the error message "Access denied." If the name is found in the secondary file, another bell sounds at the prompt to enter the password.

```
{BELL}{TEXT}Name~Enter your name: ~{COMMENT}
    Sound a beep and prompt for a name. Place input in var Name
~{NEST SECONDARY}database.sf {COMMENT}
    Begin using the DATABASE.SF secondary file. The record pointer is positioned at
    the first record in the file.
~{LABEL}CheckName~{COMMENT}
~{IF}"{FIELD}Name"!="{VARIABLE}Name"~{COMMENT}
    If the contents of the Name field and the var Name do not match
~{IF}"{FIELD}Name"!="End"~{COMMENT}
    and if not at the end of the secondary file
~{NEXT RECORD}{COMMENT}
    Move record pointer to the next record
~{GO}CheckName~{COMMENT}
```

```

        Check the next record to find a match
    ~{ELSE}{COMMENT}
        Otherwise (no match found in file)
    ~{BELL}{BELL}{PROMPT}Access Denied--You are not entered in the
database.~{WAIT}30~{COMMENT}
    ~{STOP}{COMMENT}
        End the merge
    ~{END IF}{COMMENT}
~{ELSE}{COMMENT}
    Otherwise (name found in file)
    ~{BELL}{TEXT}Password~Enter password: ~{COMMENT}
~{END IF}{STOP}

```

{Block Append} ↻

{Block Append} is a keystroke command and works like the Append feature. It appends a block of text to the end of a file that you designate. It is equivalent to the keystrokes Move (Ctrl-F4), **Block** (1), **Append** (4).

After this command executes, you are prompted for the name of the file to which you wish to append. See *Append* in *Reference* for details.

Macros

Suppose, for example, that you wanted to compile a new document from parts of one or more existing documents. Simply block each section in the order that you want it to appear in the new document, then execute the following macro after each block. Each block is appended to the file listed as *yourfile.wp*.

```

{Block Append}
    ~{;}Invoke Block Append~
yourfile.wp{Enter}
    ~{;}Include the name of your append file~

```

The following two macros are equivalent:

```

{Block}{Word Right}{Block Append}
{Block}{Word Right}{Move}ba

```

Merge

This command is not available in Merge.

{Block Copy} ↻

{Block Copy} is a keystroke command and is a shortcut to copying a block in Macros. It is equivalent to the keystrokes Move (Ctrl-F4), **Block** (1), **Copy** (2).

After this command executes, you are prompted to press **Enter** at the point where you want to copy. You can cursor to this position or have your macro move to it (see *Move*, *Block* in *Reference*).

Macros

For example, if you want to copy a block of text to the end of your document, first block the text, then run the following macro.

```
{Block Copy}
    {;}Invoke-Block-Copy~
{Home}{Home}{Down}
    {;}Move-cursor-to-end-of-document~
{Enter}
    {;}Retrieve-block~
```

The following two macros are equivalent:

```
{Block}{Word Right}{Block Copy}
{Block}{Word Right}{Move}bc
```

Merge

This command is not available in Merge.

{Block Move} ↻

{Block Move} is a keystroke command and is a shortcut to moving a block in *Macros*. It is equivalent to the keystrokes *Move* (Ctrl-F4), *Block* (1), *Move* (1).

After this command executes, you are prompted to press **Enter** at the point where you want to move to. You can cursor to this position or have your macro move to it (see *Move, Block* in *Reference*).

If *Block* is not on when the macro encounters {Block Move}, the command will act like Ctrl-Del and delete the word at the cursor.

Macros

For example, if you want to move a line of text to the beginning of your document, move the cursor to the line you want to move, then run the following macro.

```
{Home}{Home}{Left}
    {;}Move-cursor-to-beginning-of-line~
{Block}
    {;}Turn-on-Block~
{End}{Right}
    {;}Move-cursor-past-the-HRt-or-SRt~
{Block Move}
    {;}Invoke-Block-Move~
{Home}{Home}{Up}
    {;}Move-cursor-to-beginning-of-document~
{Enter}
    {;}Insert-blocked-text~
```

The following two macros are equivalent:

```
{Block}{Word Right}{Block Move}
{Block}{Word Right}{Move}
```

Merge

This command is not available in Merge.

{BREAK} ↻ ➔

{BREAK} is useful when you want to skip some commands when a Cancel, Error, or Not Found condition occurs. Usually it is used to break out of a loop where several nested IF statements are used. The location of the command in the file determines its function.

The rules that govern how this command functions are as follows:

Each of these rules assumes that the previous rules do not hold.

- 1 If a {BREAK} command is encountered within a FOR, FOR EACH, or WHILE structure, execution moves to the end of the structure (just after the {END FOR} or {END WHILE}). If these structures are nested, execution moves after the {END FOR} or {END WHILE} command of the current level.
- 2 If a {BREAK} command is encountered within an IF structure, execution moves to the end of the structure (just after the {END IF}). If the IF structure is nested within a {FOR}, {FOR EACH}, or a {WHILE} structure, the execution moved after the {END FOR} or the {END WHILE}. If the IF structures are nested, execution moves after the {END IF} command of the current IF structure.
- 3 If a {BREAK} command is encountered in a nested file, execution returns to the parent file.
- 4 If none of the above rules hold: In Macros, if a {BREAK} command is encountered, it is ignored. In Merge, if the {BREAK} command is encountered in a primary file, the primary file is ended and execution returns to the next iteration of the current primary file. If the {BREAK} command is encountered in a secondary file, the merge is terminated.

Macros

The following macro parses a full pathname entered by the user into path and filename portions. Notice that the {BREAK} command is within an IF structure, but is also within a FOR structure. The FOR structure takes precedence, so this {BREAK} command sends execution directly after the {END FOR} command (no more iterations of the FOR loop are performed), not after the {END IF} command (remaining iterations of the FOR loop would be performed).

```
{TEXT}String`Enter pathname:`  
    {;} Ask user to enter full pathname and assign it to var String`  
{ASSIGN}Length`{LEN}String`  
    {;} Assign length of full pathname to var Length`  
{FOR}Pos`{VARIABLE}Length`-1`1`-1`  
    {;} From last character to first...`  
    {ASSIGN}Char`{MID}String`{VARIABLE}Pos`1`  
    {;} Assign the character to var Char`
```

```

{IF}"{VARIABLE}Char"="\`
    {;}If the character is a "\`
    {ASSIGN}Pathlen`{VARIABLE}Pos`+1`
    {;}Assign the length of the path (not pathname) to var Pathlen`
    {ASSIGN}Path`{MID}String`0`{VARIABLE}Pathlen`
    {;}Assign the path portion of var String to var Path`
    {ASSIGN}Filelen`{VARIABLE}Length`-{VARIABLE}Pathlen`
    {;}Assign the length of the filename to var Filelen`
    {ASSIGN}File`{MID}String`{VARIABLE}Pathlen`{VARIABLE}Filelen`
    {;}Assign the filename portion of var String to var File`
    {BREAK}
    {;}Break out of the FOR loop`
{END IF}
    {;}End of IF structure.`
{END FOR}
    {;}End of FOR structure.`The {BREAK} command sends execution here at the first
    "\` found in the pathname`
{CHAR}Foo`Path: {VARIABLE}path`-Filename: {VARIABLE}file`...press Enter`
    {;}Display the path and filename portions until user presses a key.`

```

Merge

In the following example, the message “Counting...#” is displayed until it has counted up to 9. Then the message “I am no longer counting.” is displayed.

```

{ASSIGN}Counter`0`{COMMENT}
    Initialize var Counter
`{ASSIGN}Stop`9`{COMMENT}
    Assign the stop value
`{LABEL}Count`{COMMENT}
    `{IF}{VARIABLE}Counter`={VARIABLE}Stop`{COMMENT}
    If var Counter has reached 9
    `{BREAK}{COMMENT}
    Break to the end of the IF statement
`{ELSE}{COMMENT}
    Otherwise
    `{ASSIGN}Counter`{VARIABLE}Counter`+1`{COMMENT}
    Increment var Counter
    `{PROMPT}Counting...{VARIABLE}Counter`{COMMENT}
    Send a message
    `{WAIT}5`{COMMENT}
    Wait .5 seconds
    `{GO}Count`{COMMENT}
    Repeat the loop
`{END IF}{COMMENT}
    End of IF statement
`{PROMPT}I am no longer counting.`{COMMENT}
    Send a message
`{WAIT}20`{COMMENT}
    Display the message for 2 seconds
`{QUIT}{COMMENT}
    End the merge`

```

{CALL}label~ ↻ ➔

The {CALL} command transfers execution to the subroutine *label*. When execution of the subroutine is completed (when a {RETURN} is encountered in the subroutine), execution returns to the command following {CALL}. (See *Subroutines* under *Notes* at the end of this appendix for more information about subroutines. See also *Levels* under *Notes* at the end of this appendix.)

Macros

In the following example, the macro searches for “test”. When it finds it, the macro deletes the entire line on which “test” was found. Then the macro inserts the bolded phrase “This line was deleted.”

```
{LABEL}SearchLoop~
  {;}Begin-SearchLoop-subroutine~
  {Search}test{Search}
  {;}Search-for-the-word"test"~
  {CALL}Delete~
  {;}Commence-Delete-subroutine~
  {Bold}This line was deleted.{Bold}{Enter}
  {;}Place-the-bolded-message-in-the-document-after-line-is-deleted~
  {GO}SearchLoop~
  {;}Repeat-SearchLoop-subroutine~

{LABEL}Delete~
  {;}Subroutine-Delete~
  {Home}{Home}{Left}
  {;}Move-to-beginning-of-line~
  {Del to EOL}
  {;}Delete-the-line~
{RETURN}
  {;}End-of-Delete-subroutine~
```

Merge

In the following example, the merge checks the Name field in the current record of the secondary merge file. If the name is not blank, the salutation “Dear *name*:{HRT}{HRT}” is written in the merged document. If the name is blank, a generic salutation “Dear Sir or Madam:{HRT}{HRT}” is written.

```
{LABEL}Top~{COMMENT}
  ~{IF BLANK}Name~{COMMENT}
    If the name field is blank
    ~{CALL}Generic~{COMMENT}
      Call the subroutine "Generic"
  ~{ELSE}~{COMMENT}
    Otherwise, write a name-specific salutation using the information in the Name field
    ~Dear {FIELD}Name~:
  {COMMENT}
  ~{END IF}~{COMMENT}
    End the IF statement
~{RETURN}~{COMMENT}
  End of Top routine, return to point where Top was called.
```

```

~{LABEL}Generic~{COMMENT}
  Dear Sir or Madam:
{RETURN}

```

{CANCEL OFF}

The **{CANCEL OFF}** command is used to stop the Cancel key from performing its normal function. The default condition is for Cancel to be enabled (**{CANCEL ON}**).

Once you have turned Cancel off with this command, you can use Ctrl-Break to cancel the macro or merge during execution.

Macros

In the following example, the macro pauses at the **{INPUT}** command to let the user edit the text of the document. The **{CANCEL OFF}** command lets the user press Cancel (F1) to undelete text while editing.

```

{CANCEL OFF}
{INPUT}Edit the desired text.-Press Enter when done.~
  {;}The {CANCEL-OFF} command lets the user press Cancel to
  undelete text without terminating the {INPUT}.~
{CANCEL ON}
  {;}Restores the normal function of Cancel.~

```

{CANCEL OFF} is also useful if you want to be able to get a Cancel key as input from the user in the **{CHAR}**, **{LOOK}**, or **{PAUSE}** commands.

Merge

In the following example, the merge pauses at the **{INPUT}** command to let the user edit the text of the document. The **{CANCEL OFF}** command lets the user press Cancel (F1) to undelete text while editing.

```

{CANCEL OFF}{COMMENT}
~{INPUT}Type the text of the memo. Press F9 when done.~{COMMENT}
  The {CANCEL OFF} command lets the user press Cancel to undelete text without
  terminating the {INPUT}.
~{CANCEL ON}{COMMENT}
  Restores the normal function of Cancel.~

```

{CANCEL OFF} is also useful if you want to prevent a user from stopping a merge (by pressing Cancel) at a **{CHAR}**, or **{LOOK}** command.

{CANCEL ON}

The **{CANCEL ON}** command is used to enable the Cancel key after it has been disabled with the **{CANCEL OFF}** command (see *{CANCEL OFF}* above).

Macros

See the *Macros* subheading under *{CANCEL OFF}* above for an example of how to use this command.

Merge

See the *Merge* subheading under *{CANCEL OFF}* above for an example of how to use this command.

```
{CASE}expr~case1~label1~...caseN~labelN~ ↻ ➤
```

The *{CASE}* command allows execution to branch to different locations in the file (designated by *label1*, *label2*, etc.) (see also *Subroutines* under *Notes* at the end of this appendix), depending on what the value returned by *expr* is. The value returned by *expr* is compared to each case. When a match is found, execution branches to the corresponding label. For example, your macro or merge might ask the user to answer Yes or No to a prompt. If the answer is Yes, one function will be performed. If the answer is No, another function will be performed. It is often helpful to format the *{CASE}* statement (place it on several lines) so it is more readable. Notice that there is an extra tilde (~) required at the end of the *{CASE}* statement.

The variable contents must match a case exactly. For example, a case of “y” will match “y” but not “Y”. If no match is found in the *{CASE}* statement, execution continues after the *{CASE}* statement. You can use an *{OTHERWISE}* command as the last case in the command to handle all cases that do not match.

It is possible to use the *{ELSE}* command instead of the *{OTHERWISE}* command to handle cases that do not match. However, using *{ELSE}* will produce an error if the *{CASE}* command is within an *IF* statement. For this reason, we recommend that you use *{OTHERWISE}*. The *{CASE}* command does not require that program execution return after the routine is completed. In other words, it does not *call* the routine rather, it *goes* to the routine. If you want program execution to return, use *{CASE CALL}* (see *{CASE CALL}* below).

Macros

In this example, the Error subroutine is *not* executed unless a character other than n or y is pressed. If the *{CASE}* command is changed to *{CASE CALL}*, the subroutines are *called*, and execution returns to the *{QUIT}* command.

```
{LABEL}GetChar~
{CHAR}Answer~Continue?(Y/N)~
    {;}Assign character to var Answer~
{CASE}{VARIABLE}Answer~
    y~Yes~
    Y~Yes~
    n~No~
    N~No~
    {OTHERWISE}~Error~
    {;}If var Answer contains y or Y, go to label Yes; if var Answer
contains n or N, go to label No; Otherwise, go to label Error.~
{QUIT}
```

See the *Macros* subheading under *{CHAR}* for an additional example.

Merge

In this example, the Error subroutine is *not* executed unless a character other than n or y is pressed. If the *{CASE}* command is changed to *{CASE CALL}*, the subroutines are *called*, and execution returns to the *{STOP}* command.

```
{LABEL}GetChar~{COMMENT}
~{CHAR}Answer~Continue? (Y/N) ~{COMMENT}
    Assign y or n to var Answer
~{CASE}{VARIABLE}Answer~
    y~Yes~
    Y~Yes~
    n~No~
    N~No~
    {OTHERWISE}~Error~
~{COMMENT}
    If var Answer contains y or Y, go to label Yes; if var Answer contains n or N, go to
    label No. Otherwise, go to label Error.
~{STOP}
```

See the *Merge* subheading under *{COMMENT}* for an example of how to use these commands.

{CASE CALL}expr~case1~label1~...caseN~labelN~ ↻ →

The *{CASE CALL}* command is similar to the *{CASE}* command in that it can branch to different subroutines. The difference is that *{CASE CALL}* requires that execution return after a subroutine has executed (see *{CASE}* above).

Macros

In the following example, the user is prompted to select an author. The *{CASE CALL}* command allows the user to select the author by number or letter (note the *{^V}*s which turn on and *{^Q}*s which turn off the mnemonic attribute (see *Macros, Message Display* in *Reference*)). If a correct number or letter is not selected, the *{OTHERWISE}* case executes the routine again. Once the subroutine corresponding to the option selected is executed, execution returns to the *{LABEL}GetType~* command.

```
{LABEL}GetAuthor~
{CHAR}Author~{^V}1~J{^Q}oe;{^V}2~S{^Q}ue;{^V}3~M{^Q}arco:~
    {;}Prompt-user-for-author~
{CASE CALL}{VARIABLE}Author~
    1~Joe~
    j~Joe~
    J~Joe~
    {;}If user enters 1, j, or J, call subroutine Joe~
    2~Sue~
    s~Sue~
    S~Sue~
    {;}If user enters 2, s, or S, call subroutine Sue~
    3~Marco~
```

```

m~Marco~
M~Marco~
    {;}If user enters 3, m, or M, call subroutine Marco~
{OTHERWISE}~GetAuthor~
    {;}Otherwise, send prompt again.~ Notice the tilde after the {OTHERWISE}
command.~
.
.
.
    {;}Notice the extra tilde to end the CASE statement~
{LABEL}GetType~
.
.
.

```

Merge

In the following example, the user is prompted to select an author. The {CASE CALL} command allows the user to select the author by number. If a correct number is not selected, the {OTHERWISE} case executes the routine again. Once the subroutine corresponding to the option selected is executed, execution returns to the {LABEL}GetType~ command.

```

{LABEL}GetAuthor~{COMMENT}
~{CHAR}Author~1 Joe; 2 Sue; 3 Marco; ~{COMMENT}
    Prompt user for author
~{CASE CALL}{VARIABLE}Author~
    1~Joe~
    2~Sue~
    3~Marco~
    {OTHERWISE}~GetAuthor~
~{COMMENT}
    If user enters 1, call subroutine Joe. If user enters 2, call subroutine Sue. If user
    enters 3, call subroutine Marco. Otherwise, send prompt again. Notice the extra
    tilde to end the CASE statement.
~{LABEL}GetType~
.
.
.

```

{CHAIN}macroname ~ ↻ (→)

The {CHAIN} command stores the name of the indicated macro and executes it after the current macro is completed. You can enter a full pathname if you wish (the .WPM extension is not necessary).

You can chain one macro at each level of nesting (see *Levels* under *Notes* at the end of this appendix). If more than one macro is chained at the current nest level, only the last macro chained is executed when the current macro is completed.

See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on chaining.

Macros

The following macro executes a loop until the search text is not found. When the search fails, the loop is exited, completing the current macro. Execution is then transferred to the chained macro (NOTFOUND.WPM).

```
{CHAIN}NotFound~
    {;}Execute the NOTFOUND-macro when this macro is completed~
{ON NOT FOUND}{RETURN}~
    {;}When the search fails, stop this macro, and start the chained macro~
{LABEL}Loop~
    {;}Begin the repeating subroutine~
    {Search}at{Search}
    {;}Search for:"at"~
    {PAUSE}
    {;}Pause (allow user to edit)~
{GO}Loop~
    {;}Search was successful, repeat the search~
```

The section of the macro between the {LABEL} and {GO} commands is repeatedly executed until the search fails. As soon as the search fails, the NOTFOUND macro begins.

Notice the {ON NOT FOUND}{RETURN}~ command. If a macro is not nested and has not been called with {CALL} or {CASE CALL}, {RETURN} ends the macro (see *RETURN* below).

Merge

The {CHAIN} command in Macros is equivalent to the {CHAIN MACRO} command in Merge. See *CHAIN MACRO* below.

{CHAIN MACRO}macroname~ (C) ↗

The {CHAIN MACRO} merge command starts the named macro at the end of the merge, if the merge terminates normally. You can enter a full pathname for the *macroname* if you wish. You need not enter the .WPM extension.

Only the last macro chained during the merge is executed.

See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on chaining.

In previous versions of WordPerfect, this merge command was represented as ^Gmacroname^G.

Macros

The {CHAIN} command in Macros is equivalent to the {CHAIN MACRO} command in Merge. See *CHAIN* above.

Merge

In the following example, the chained macro PRINT.WPM prints the resulting merge file when the merge is complete.

```
{CHAIN MACRO}print~{COMMENT}
    Chain the macro PRINT.WPM when the merge is complete
                                                                    {DATE}

Dear {FIELD}Name`.
•
• (rest of the letter)
•
Sincerely,

Chris Smith
```

{CHAIN PRIMARY}filename~ ➤

This merge command continues the merge with the named primary file as soon as the current primary file is complete. You can enter a full pathname for the *filename* if you wish.

See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on chaining.

Macros

This command is not available in Macros.

Merge

The {CHAIN PRIMARY}Envelope~ command in the following example executes the ENVELOPE.PF primary file after the last iteration of the current primary file.

```
{CHAIN PRIMARY}Envelope~
•
• (rest of current primary file)
•
```

{CHAIN SECONDARY}filename~ ➤

This merge command begins using records from the named secondary file when the end of the current secondary file is reached. This command is especially useful if you have broken a large secondary file into several smaller files. If you insert a {CHAIN SECONDARY} command in each smaller secondary file, they will act like one secondary file.

You can use a full pathname for *filename* if you wish.

See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on chaining.

Macros

This command is not available in Macros.

Merge

The following example shows how a large secondary file has been broken into two smaller files. When a merge is executed using the first secondary file, the records of the second file will be used as soon as those in the first file are completed.

Large File:

```
{FIELD NAMES}
Name~
Status~
~{END RECORD}
=====
Jose{END FIELD}
Staff{END FIELD}
{END RECORD}
=====
•
• (additional records)
•
=====
Barbara{END FIELD}
Professional{END FIELD}
{END RECORD}
=====
Julie{END FIELD}
Part-time{END FIELD}
{END RECORD}
=====
•
• (additional records)
•
=====
Shoji{END FIELD}
Leave of Absence{END FIELD}
{END RECORD}
=====
```

First Small File:

```
{FIELD NAMES}
Name~
Status~
~{COMMENT}
~{PROCESS}{CHAIN SECONDARY}File2~{PROCESS}{COMMENT}
    The {PROCESS} commands ensure that the {CHAIN SECONDARY} command
    executes. The merge remembers the {CHAIN SECONDARY} command and
    filename so that it can execute it when the current secondary file has ended.
~{END RECORD}
=====
```

```
Jose{END FIELD}
Staff{END FIELD}
{END RECORD}
=====
```

- (additional records)

```
=====
Barbara{END FIELD}
Professional{END FIELD}
{END RECORD}
=====
```

Second Small File (named FILE2, and in the default directory):

```
{FIELD NAMES}
Name~
Status~
~{END RECORD}
=====
```

```
Julie{END FIELD}
Part-time{END FIELD}
{END RECORD}
=====
```

- (additional records)

```
=====
Shoji{END FIELD}
Leave of Absence{END FIELD}
{END RECORD}
=====
```

{CHAR|var~message~

This command is useful for creating menus and prompts. The {CHAR} command prompts the user with the *message* and waits until a single key is pressed. The key is then assigned to the indicated variable (see *Appendix L: Macros and Merge, Variables*). If Cancel is pressed, the macro or merge ends unless the {CANCEL OFF} or {ON CANCEL} commands have been previously executed. Once the key has been assigned to the variable, a {CASE}, {CASE CALL}, or {IF} command can be used to perform different operations depending on the key pressed.

See *Message Display* under *Notes* at the end of this appendix, and *Macros, Message Display* in *Reference* for information on affecting the way messages are displayed. See also *Prompting and User Input* under *Notes* at the end of this appendix.

After the {CHAR} command executes, the contents of the status line just previous to the execution of the {CHAR} command are restored. Use {PROMPT}~ or {STATUS PROMPT}~ before the {CHAR} command to clear the status line.

Macros

The user can press any key as the input (including a feature key such as Search). In the following example, the user is prompted to select a type of document, after which a subroutine is executed based on what the user entered.

```
{CHAR}DocType~1~Memo;2~Letter;3~Itinerary;~  
    {;}Prompt the user for input and assign the character to var:DocType~  
{CASE}{VARIABLE}DocType~  
    1~Memo~  
    2~Letter~  
    3~Itin~  
    .  
    {;}Check var:DocType and branch to the appropriate subroutine~
```

See the *Macros* subheading under the following commands for additional examples: {BREAK}, {CASE}, {CASE CALL}, {KTON}, {RESTART}, {SHELL MACRO}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {CASE}, {CASE CALL}, {CTON}.

{COMMENT}comment~ (C) ~>

Use this merge command to put comments in a primary or secondary merge file to make it easier to understand. You can also use this command to format the merge commands so that they are more readable, without inserting extra hard return or tab codes in the document.

Macros

The {COMMENT} command in Merge is equivalent to the {;} (comment) command in Macros (see *;/* above).

Merge

The following shows how you can use the {COMMENT} command to format the primary document. This merge creates a list of employees and their salaries. The secondary file has three fields: Name, Type, and Salary. Any record in the secondary file that has 1, 2, or 7 in the Type field is not merged into the list.

```
{LABEL}List~{COMMENT}  
    This comment prevents the insertion of a [HRt] between execution of the {LABEL}  
    command and the {LOCAL} command.  
~{LOCAL}Type~{FIELD}Type~{COMMENT}  
    This comment prevents the insertion of a [HRt] between execution of the {LOCAL}  
    and {CASE CALL} commands.  
~{CASE}{VARIABLE}Type~  
    1~Next~  
    2~Next~  
    7~Next~
```

~{COMMENT}

Notice that there is no need for a {COMMENT} command between the cases. Since these are all part of the same command, no [HRt] will be inserted. The {COMMENT} command after the {CASE} command *is* necessary to prevent the insertion of [HRt] codes between the execution of the {CASE} command and the {LABEL}WriteIt command.

~{LABEL}WriteIt~{COMMENT}

This comment prevents the hard return between the {LABEL} command and {FIELD} command from appearing in the resulting document.

~{FIELD}Name~

{FIELD}Salary~

{COMMENT}

No comment command was inserted between the {FIELD} commands so that in the document resulting from the merge, the Name and Salary field information will be separated by a [HRt]. Notice the position of this {COMMENT} command. This positioning will put two [HRt] codes between each Name-Salary pair in the resulting list.

~{LABEL}Next~{COMMENT}

~{NEXT RECORD}{COMMENT}

~{GO}List~

See the other Merge examples in this section to see more on how to use this command.

{CTON}character (C) ➤

The {CTON} merge command (Character **TO** Number) converts *character* (which may be any character in the WordPerfect character sets) to a unique number, its WordPerfect “key value.” {CTON} performs the inverse (opposite) function of the {NTOC} command (see *NTOC* below). You can use the key value to calculate the WordPerfect character set value.

To calculate the character set value for a given character,

- 1 Use the {CTON} command to obtain the key value.
- 2 Divide the key value by 256.

The quotient is the number of the WordPerfect character set (0-12). The remainder is the character number in the character set (0-255).

Macros

This command is not available in Macros. However, the {KTON} macros command is very similar to the {CTON} merge command. See *KTON* below.

Merge

This example calculates the character set value for a character:

{CHAR}Char~Type a character: ~{COMMENT}

Assign input to var Char

```

^-[ASSIGN]Set^-[CTON]{VARIABLE}Char^~/256^-[COMMENT]
    Assign quotient to var Set
^-[ASSIGN]Num^-[CTON]{VARIABLE}Char^~/256^-[COMMENT]
    Assign remainder to var Num
^-[VARIABLE]Set^-,{VARIABLE}Num^-[COMMENT]
    Write out character set value

```

{DATE} (C) >

The {DATE} merge command inserts the current date and/or time in the document, as formatted in the Date Format feature (see *Date in Reference*).

In previous versions of WordPerfect, this merge command was represented as ^D.

Macros

Although this command is not available in Macros, you can program a macro to access the Date feature, such as in the following example:

This document was printed: {Date/Outline}c

*{Date/Outline} may be inserted in the macro by pressing **Date/Outline** (Shift-F5). When the macro is executed, {Date/Outline}c will select Date Code from the Date/Outline menu.*

For more information, see *Date in Reference*.

Merge

You can use either this command, or the Date Code (Shift-F5,2) (see *Date in Reference*) to insert the current date in merged documents. The first example below uses the {DATE} command; the second example shows how to achieve the same result using the Date Code.

Example 1:

{DATE}

```

{FIELD}Name^
{FIELD}Address^

```

Example 2:

```
(FIELD)Name~
(FIELD)Address~

October 24, 1991

Doc 1 Pg 1 Ln 1.33 Pos 1.8"
+-----+
|Plab Rgt| (Date:0 1.4) (MRC)|
|Mrq:FIELD)Name~ (MR*)|
|Mrq:FIELD)Address~|
+-----+

Press Reveal Codes to restore screen
```

See the *Merge* subheading under the following commands for additional examples: {CHAIN MACRO}, {KEYBOARD}, {PRINT}, {QUIT}, {REWRITE}.

{DISPLAY OFF} ↻

The {DISPLAY OFF} macro command turns off the display of macro execution. If this command were not present, each action of the macro would be rapidly displayed on the screen as it was executed. In many cases, you may want to turn the display off because macro execution is faster when it does not display.

When you create a macro, the {DISPLAY OFF} command is inserted at the beginning of the macro. You can delete this command if you want the macro to display execution. (Exceptions: If you create a macro at the normal editing screen that ends at a menu or includes a {PAUSE} or {PAUSE KEY} command, the {DISPLAY OFF} command is not inserted.)

If you use this command to turn display off, the screen is not automatically cleared. Whatever is on the screen will remain on the screen (unless another command overwrites it) while the macro is executing.

If display is off when a {PAUSE} or {PAUSE KEY} (see {PAUSE} and {PAUSE KEY} below) is executed, the screen does not rewrite. The user will probably not know what to do at the pause. You should be sure to turn on display before using one of these commands.

Messages in the {CHAR}, {INPUT}, {PROMPT}, and {TEXT} commands always display on the screen, even when display is off.

Macros

In the following example, display is off until the file is ready to be printed. The {DISPLAY ON} command just before the {Print} command allows the Print menu to display.

```
{DISPLAY OFF}
{Home}{Home}{Up}
    (;)Move-to-beginning-of-file~
{Replace}n|{Search}|{Search}
    (;)Replace-""with-""w/o-confirm~
{Home}{Home}{Up}
    (;)Move-the-cursor-to-the-top-of-the-file~
{Replace}n|{Search}|{Search}
    (;)Replace-""with-""w/o-confirm~
{DISPLAY ON}
    (;)Turn-on-display-to-allow-menu-to-display~
{Print}s
    (;)Display-printer-select-menu~
```

Merge

This command is not available in Merge. Merges are always invisible unless you use the {REWRITE} command to rewrite the screen.

{DISPLAY ON} ↻

The {DISPLAY ON} macro command is used to turn on the display of macro execution after it has been turned off by the {DISPLAY OFF} command (see *{DISPLAY OFF}* above). Display On is the default for macro execution. Macro execution is slower when display is on.

{DISPLAY ON} does not itself rewrite the screen. The screen is only rewritten when a command subsequent to the {DISPLAY ON} command performs an action that rewrites the screen.

Macros

See the *Macro* subheading under the following commands for examples of how to use this command: {DISPLAY OFF}, {MENU OFF}.

Merge

This command is not available in Merge. Merges are always invisible unless you use the {REWRITE} command to rewrite the screen.

{DOCUMENT}filename~ (C) ➤

The {DOCUMENT} merge command inserts the named document into the merged document at the point the command is encountered. The document is not processed, so any merge commands in the inserted document are ignored. This command is commonly used for inserting variable paragraphs in contracts and similar documents, often called *document assembly*, or to have the merge build a primary or secondary file.

Macros

This command is not available in Macros. However, you can perform a similar function with the following macro:

```
{Retrieve}document.wp{Enter}
```

These commands retrieve DOCUMENT.WP into the current document.

Merge

In the following example, the {DOCUMENT} command inserts the document called ONEROOM.MRG in the merged document if variable Rooms is equal to 1, or the document TWOROOMS.MRG if variable Rooms is not equal to 1.

```
{IF}{VARIABLE}Rooms=1{COMMENT}  
  {DOCUMENT}OneRoom.mrg{COMMENT}  
{ELSE}{DOCUMENT}TwoRooms.mrg{COMMENT}  
{END IF}
```

{ELSE} ↻ ➤

The {ELSE} command is used in connection with the {IF}, {IF BLANK}, {IF EXISTS}, {IF NOT BLANK}, and {END IF} commands. It marks the beginning of the commands which execute should the IF value be zero (false) (see *{IF}* below).

The {ELSE} command is not a required part of an IF statement. It should be used when there are certain steps that need to be performed *only* when the IF value is zero (false). The commands below {END IF} execute whether or not the IF value is true.

It is possible to use the {ELSE} command instead of the {OTHERWISE} command to handle cases that do not match in a {CASE} or {CASE CALL} command. However, {ELSE} will not function correctly if the CASE statement is within an IF statement.

Macros

In the example below, if variable Number contains a negative number, add 2. If not, subtract 2.

```
{IF}{VARIABLE}Number<0`  
  {;}If var-Number-is-less-than 0`  
  {ASSIGN}Number{VARIABLE}Number+2`  
  {;}Add-2-to-var-Number`  
{ELSE}  
  {;}If not`  
  {ASSIGN}Number{VARIABLE}Number-2`  
  {;}subtract-2-from-var-Number`  
{END IF}  
  {;}End-of-IF-statement`
```

See the *Macros* subheading under the following commands for additional examples: {IF EXISTS}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {RESTART}, {SHELL MACRO}, {STATE}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {DOCUMENT}, {IF}, {IF BLANK}, {IF EXISTS}, {LOOK}, {NEST MACRO}, {NEXT RECORD}, {SUBST PRIMARY}.

{END FIELD} ➤

The {END FIELD} merge command signals the end of a field in a secondary file. A Hard Return [HRt] is automatically inserted with this command for better readability.

*When you insert this command, a message appears at the bottom of the screen that lets you know the number of the field where the cursor is currently located. If you use the {FIELD NAMES} command, the name of the field appears instead of the number. Pressing **Home.Home.Up Arrow** will temporarily remove the message from the screen. However, as long as you have an {END FIELD}, {END RECORD}, or {FIELD NAMES} command in the file, the message will display when the cursor is after the command. If you delete all the {END FIELD}, {END RECORD}, and {FIELD NAMES} commands from the file, then press **Home.Home.Up Arrow**, the message will not reappear.*

In previous versions of WordPerfect, this merge command was represented by ^R.

Macros

This command is not available in Macros.

Merge

Records in the following secondary file have three fields:

```
International Exporting{END FIELD}
(801) 555-4421{END FIELD}
George Wiley{END FIELD}
{END RECORD}
```

```
=====
Tradewinds, Inc.{END FIELD}
(409) 555-3567{END FIELD}
Susan Escher{END FIELD}
{END RECORD}
=====
```

See the *Merge* subheading under the following commands for additional examples: {CHAIN SECONDARY}, {FIELD NAMES}.

{END FOR} ↻ ➤

This command signals the end of a {FOR} or {FOR EACH} loop (see {FOR} and {FOR EACH} below).

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {BREAK}, {FOR}, {FOR EACH}, {NEXT}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {FOR}, {MID}, {NEXT}.

{END IF}

The {END IF} command marks the end of an IF structure and is used with the {IF}, {IF BLANK}, {IF EXISTS}, {IF NOT BLANK}, and {ELSE} commands.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {BREAK}, {ELSE}, {GO}, {IF}, {IF EXISTS}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {LEN}, {LOOK}, {NEXT}, {ORIGINAL KEY}, {RESTART}, {SHELL MACRO}, {STATE} (in text).

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {BELL}, {CALL}, {DOCUMENT}, {GO}, {IF}, {IF BLANK}, {IF EXISTS}, {IF NOT BLANK}, {MID}, {NEST MACRO}, {NEST PRIMARY}, {NEST SECONDARY}, {NEXT}, {NEXT RECORD}, {SUBST PRIMARY}, {SUBST SECONDARY}.

{END RECORD}

This merge command signals the end of a record in a secondary file. A hard page break is inserted automatically with this code for better readability.

*When you insert this command, a message appears at the bottom of the screen that lets you know the number of the field where the cursor is currently located. If you use the {FIELD NAMES} command, the name of the field appears instead of the number. Pressing **Home.Home.Up Arrow** will temporarily remove the message from the screen. However, as long as you have an {END FIELD}, {END RECORD}, or {FIELD NAMES} command in the file, the message will display when the cursor is after the command. If you delete all the {END FIELD}, {END RECORD}, and {FIELD NAMES} commands from the file, then press **Home.Home.Up Arrow**, the message will not reappear.*

In previous versions of WordPerfect, this merge command was represented as ^E.

Macros

This command is not available in Macros.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {CHAIN SECONDARY}, {END FIELD}, {FIELD NAMES}.

{END WHILE}

This command signals the end of a {WHILE} loop (see {WHILE} below).

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {SYSTEM}, {WHILE}.

Merge

See the *Merge* subheading under {SYSTEM} for an example of how to use this command.

{FIELD}field~ ➤

The {FIELD} merge command inserts the contents of the named (or numbered) field in the merged document or in another merge command.

In previous versions of WordPerfect, this merge command was represented as ^Fname^ or ^F#^.

Macros

This command is not available in Macros.

Merge

In the following example, the contents of the Name and Address fields in the current record in the secondary merge file are inserted in the letter.

```
{FIELD}Name~  
{FIELD}Address~  
  
Dear {FIELD}Name~  
.  
.  
.
```

See the *Merge* subheading under the following commands for additional examples: {BELL}, {CALL}, {CHAIN MACRO}, {COMMENT}, {DATE}, {GO}, {IF BLANK}, {IF NOT BLANK}, {MID}, {MRG CMND}, {NEST MACRO}, {NEST PRIMARY}, {NEST SECONDARY}, {NEXT RECORD}, {PAGE OFF}, {PAGE ON}, {PRINT}, {REWRITE}, {SUBST PRIMARY}.

{FIELD NAMES}name1~... nameN~ ➤

This merge command declares the names and order of the fields in a secondary file. Using this command in the secondary file allows you to reference the fields by name in a primary file. (Referencing fields by name in a primary file is usually much easier than remembering the order of the fields in the secondary file.)

The {FIELD NAMES} command must be the first command in the secondary file. If the records have more fields than those declared in this command, additional fields are numbered. The {FIELD NAMES} command must precede the records. When initially inserted, the command and field names are all on one line.

You may find it easier to read by formatting it on separate lines, as in the example below. An {END RECORD} command and its accompanying [HPg]

code are inserted automatically when you insert this command. You are limited to 100 named fields, and field names are limited to 39 characters.

After you insert this command, a message appears at the bottom of the screen that lets you know the name or number of the field where the cursor is currently located.

Pressing **Home.Home.Up Arrow** will temporarily remove the message from the screen. However, as long as you have an {END FIELD}, {END RECORD}, or {FIELD NAMES} command in the file, the message will display when the cursor is after the command. If you delete all the {END FIELD}, {END RECORD}, and {FIELD NAMES} commands from the file, then press **Home.Home.Up Arrow**, the message will not reappear.

Macros

This command is not available in Macros.

Merge

In the following example, the first three fields of each record are named using the {FIELD NAMES} command. The additional fields are not named, and so are numbered Field 4, Field 5, etc. The {FIELD NAMES} command shown in this example has been formatted on several lines so that it is easier to read.

```
{FIELD NAMES}
Company~
Phone~
Contact~
~{END RECORD}
=====
International Exporting{END FIELD}
(801) 555-4421{END FIELD}
George Wiley{END FIELD}
Furniture{END FIELD}
45{END FIELD}
$1.5 million{END FIELD}
{END RECORD}
=====
Tradewinds, Inc.{END FIELD}
(409) 555-3567{END FIELD}
Susan Escher{END FIELD}
Memorabilia{END FIELD}
200{END FIELD}
$2.0 million{END FIELD}
{END RECORD}
=====
```

See the *Merge* subheading under {CHAIN SECONDARY} for an additional example.

{FOR}var~start~stop~step~

The {FOR} command is useful for executing a series of commands a certain number of times. The commands between the {FOR} and {END FOR} commands are executed once for each value of *var* between *start* and *stop* inclusive, as incremented by *step*.

The start, stop, and step values can be entered in the command as expressions, variables, or other commands. Each expression, variable, or command is evaluated to a value, then the value is assigned to the variable.

In any FOR loop, {END FOR} command must be used to determine the end of the series of commands included in the loop. The {END FOR} command sends execution to the top of loop for the next iteration. You can also use the {NEXT} command to send execution to the next iteration (see {NEXT} below), but you must still include an {END FOR} to mark the end of the loop.

The {FOR} command itself initializes the variable with the start value. You do not need to pre-assign the variable. Each subsequent time the {FOR} command is executed (at the top of the loop), the variable is incremented by the *step* value.

Macros

The following example shows how you could use the {FOR} command to write out a line of 20 asterisks (*). (See *Merge* below for a more complicated example.)

```
{FOR}Counter`1`20`1`
    {;}For every value of Counter from 1 to 20 (values incremented
    by 1 each time through the loop)`
    *
    {;}Write an asterisk-(*)`
{END FOR}
    {;}End of {FOR} loop. Repeat the loop unless Counter=20`
```

See the *Macros* subheading under the following commands for additional examples: {BREAK}, {NEXT}.

Merge

The following example is similar to the example under *Macros* above; however, in this example the start value has been changed to 4, and the step to 3. Counter is initialized to 4 the first time through the loop, and so the asterisk will be written out. In subsequent iterations of the loop, only 5 more asterisks will be written out (Counter equals 7, 10, 13, 16, 19). After that the loop will end because 22 (the next increment after 19) is greater than 20 (the stop value).

```
{FOR}Counter`4`20`3`{COMMENT}
    For every value of Counter from 4 to 20 (values incremented by 3 each time
    through the loop)
    `*{COMMENT}
    Write an asterisk (*)
`{END FOR}{COMMENT}
    End of {FOR} loop. Repeat the loop unless Counter>=20`
```

See the *Merge* subheading under the following commands for additional examples: {MID}, {NEXT}.

{FOR EACH}var~expr1~...~exprN~ ↻

The {FOR EACH} macro command is similar to the {FOR} command. The difference is that instead of having a sequential step value, each value to be assigned to the variable is included as an argument in the command. (The values can still be included as expressions, variables, or commands. They are evaluated before being assigned to the variable.) See *{FOR}* above for more information.

Like the {FOR} command, the {FOR EACH} command itself initializes the variable with the start value. You do not need to pre-assign the variable. Each time the {FOR EACH} command is executed (at the top of the loop), the variable is assigned the next value.

Remember to end the loop with an {END FOR} command.

Macros

In the following example, the macro will loop 5 times. Each time it loops, the variable "Count" will be equal to the specified value (i.e., on the first loop, Count=15, on the second loop, Count=10, on the third, Count=25, etc.).

```
{FOR EACH}Count~15~10~25~95~50~
    {;}Var-Count-is-initialized-to-15-the-first-time-through-the-loop,then
    10..then-25,,and-so-on~
    {VARIABLE}Count~
    {;}Write-out-var-Count-followed-by-a-space~
{END FOR}
    {;}Perform-the-next-iteration-of-the-loop-unless-Count=50..In-that-case,end-the-loop.~
```

When execution is complete, "15 10 25 95 50 " will have been written out. Note the space (represented by "~") after the {VARIABLE}Count~ command. This is the space after each number when they are written out.

Merge

This command is not available in Merge.

{GO}label~ ↻ ➔

The {GO} command transfers execution to the location in the macro or merge file indicated by *label*. It is used in conjunction with the {LABEL} command which marks the place to which execution is transferred.

The {GO} command is useful when you want to skip a part of your macro or merge, or to transfer control to another part based on a condition. Unlike the {CALL} command, {GO} does not require that execution return.

Macros

This macro checks to see if the Search command has been entered in variable Key. Notice that the steps between {END IF} and {LABEL} will be skipped if variable Key contains {Search}.

```
{IF}"{VARIABLE}Key"="{Search}"~
    {;}If-var-Key-contains-{Search}~
{GO}Search~
```

```

        {;}Go-to-the-Search-Label~
{END IF}
.
.   (middle section of macro)
.
{LABEL}Search~
    {;}Perform the search~
.
.   (Steps of the search)
.
{QUIT}
    {;}Stop-macro-execution~

```

The macro ends after the search has been completed.

See the *Macros* subheading under the following commands for additional examples: {CHAIN}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {LEN}, {LOOK}, {ON CANCEL}, {ON ERROR}, {RETURN CANCEL}, {RETURN ERROR}.

Merge

In the following example, suppose you have a secondary file where the last record has “End” as the contents of its Name field. You could use the following commands to stop the merge when it gets to that record.

```

{IF}"(FIELD)Name"="End"~{COMMENT}
    ~{GO}EndTheMerge~{COMMENT}
~{END IF}
.
.   (more of the primary file)
.
{LABEL}EndTheMerge~{COMMENT}
    {STOP}

```

See the *Merge* subheading under the following commands for additional examples: {BELL}, {COMMENT}, {IF}, {LOOK}, {ON CANCEL}, {ON ERROR}, {RETURN CANCEL}, {RETURN ERROR}.

{IF} *expr*

The {IF} command is used to execute a set of commands only *if* a certain condition exists. If the condition exists (*expr* is evaluated to be true), the commands directly after the {IF} command are executed.

The *expr* argument is usually a logical expression. An expression is true if it is evaluated as a non-zero number. For example, when the expression 4=4 is evaluated, the result is -1 (which corresponds to true). The value is false if it results in a 0 or contains nothing at all. String values and commands must be enclosed in quotes to be evaluated correctly. See *Appendix J: Macros and Merge, Expressions* for more information on expression evaluation.

If the value is true, the commands directly after the {IF} execute. If the value is false (or there is no value at all), the commands after {IF} are skipped, and execution continues after the {END IF} command.

An {IF} statement always begins with {IF} and ends with {END IF}. If you want certain commands to execute only when the value is not true, use the {ELSE} command (see */ELSE/* above).

It is possible to nest {IF} commands. See */STATE/* below for an example of nested {IF} statements.

Macros

In the example below, the Setup menu is displayed only if the appropriate password is in variable Input.

```
{IF}"{VARIABLE}Input"="{VARIABLE>Password"~
    (;)If-var Input contains the password-(as stored-in-var Password)~
    {Setup}
    (;)Enter the Setup menu~
{END IF}
    (;)End-of-{IF}-structure~
```

Notice that quotes are placed around both {VARIABLE}Input~ and {VARIABLE}Password~ because it is a string comparison.

See the *Macros* subheading under the following commands for additional examples: {BREAK}, {ELSE}, {GO}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {LEN}, {LOOK}, {NEXT}, {ORIGINAL KEY}, {RESTART}, {SHELL MACRO}, {STATE} (in text).

Merge

The following example writes "again " each time through the loop until variable Counter equals 0. Then it writes "Finished." (Final output is "again again again Finished.") Notice that the {IF} statement does not use a logical expression. Rather, it checks to see if the IF value is non-zero.

```
{ASSIGN}Counter~3~{COMMENT}
    Set var Counter to 3 (loop will execute 3 times before IF value is false (zero))
~{LABEL}Loop~{COMMENT}
    ~{IF}{VARIABLE}Counter~{COMMENT}
        If var Counter is non-zero
        ~again {COMMENT}
            Write "again "
        ~{ASSIGN}Counter~{VARIABLE}Counter-1~{COMMENT}
            Subtract 1 from var Counter
        ~{GO}Loop~{COMMENT}
            Repeat the loop
    ~{ELSE}{COMMENT}
        ~Finished.{COMMENT}
            Write "Finished."
    ~{END IF}{COMMENT}
        End of {IF} statement~
```

See the *Merge* subheading under the following commands for additional examples: {BELL}, {DOCUMENT}, {GO}, {MID}, {NEST PRIMARY}, {NEST SECONDARY}, {NEXT}, {NEXT RECORD}, {SUBST PRIMARY}.

{IF BLANK}field ➤

If the indicated field is blank, the commands after this command are executed. Be sure to end the set of commands to be executed with an {END IF} command. See also *{IF NOT BLANK}* below, and *If Blank, If Not Blank, and ?* under *Notes* at the end of this appendix.

Macros

This command is not available in Macros.

Merge

In the following example, the secondary merge file records have a Title field and a Name field. WordPerfect checks to see if the Title field of the current record is blank. If so, it inserts just the Name in the merged document. Otherwise, it inserts the Title before the Name.

```
{IF BLANK}Title{COMMENT}
    If the Title field is blank in this record
    {FIELD}Name{COMMENT}
    Write out just the Name followed by a space
{ELSE}{COMMENT}
    Otherwise
    {FIELD}Title{FIELD}Name{COMMENT}
    Write the Title before the Name
{END IF}{COMMENT}
    End of {IF BLANK} statement
```

See the *Merge* subheading under the following commands for additional examples: {CALL}, {NEST MACRO}, {SUBST SECONDARY}.

{IF EXISTS}var ↻ ➤

The {IF EXISTS} command checks to see if the indicated variable has been assigned. If it has, the commands following {IF EXISTS} are executed. Like other IF statements, the {IF EXISTS} command requires an {END IF} and can use an {ELSE} (see *{IF}* above).

Common uses for the {IF EXISTS} command include establishing a default response at a menu (see Macro example below). {IF EXISTS} is also useful when you want execution to wait until a key is pressed (see *{LOOK}* below).

Macros

The following example shows how you can use the {IF EXISTS} command to set up a default response to a user prompt:

```
{TEXT}Author:1 Joe;2 Sue;3 Marco:1{Left}
    {;}User selects author
{IF EXISTS}Author
{ELSE}
```

```

        {;}If user pressed Enter at menu
    {ASSIGN}Author~1~
        {;}Use default of "1"
{END IF}

```

Merge

The following example shows how you can use the {IF EXISTS} command to set up a default response to a user prompt:

```

{TEXT}Author~1 Joe; 2 Sue; 3 Marco: ~{COMMENT}
    User selects author
~{IF EXISTS}Author~{COMMENT}
~{ELSE}{COMMENT}
    If user pressed Enter at menu
    ~{ASSIGN}Author~1~{COMMENT}
        Use default of "1"
~{END IF}

```

{IF NOT BLANK}field~ ➤

If the indicated field is not blank, the commands following this merge command are executed. Be sure to end the set of commands to be executed with an {END IF} command. See also *{IF BLANK}* above.

Macros

This command is not available in Macros.

Merge

In the following example, the secondary merge file records have a Title field and a Name field. WordPerfect checks to see if the Title field of the current record is blank. If not, it inserts the Title before the Name. Otherwise, it inserts just the Name.

```

{IF NOT BLANK}Title~{COMMENT}
    If the Title field is not blank in this record
    ~{FIELD}Title~ {COMMENT}
        Write out the title and a space
~{END IF}{COMMENT}
    End of {IF NOT BLANK} statement
~{FIELD}Name~

```

{INPUT}message~ ↻ ➤

This command prompts the user with the message, then pauses, allowing the user to perform any keystroke operations. Once input is terminated (see *Macros* and *Merge* subheadings below), the message is removed from the screen and execution continues.

Using an {INPUT} command after a {STATUS PROMPT} command will remove the previous {STATUS PROMPT} message (see {STATUS PROMPT} below).

See also *Prompting and User Input* under *Notes* at the end of this appendix for alternative means of obtaining user input.

While an executing merge is paused at an {INPUT} (or {KEYBOARD}) command, you can execute the {QUIT}, {NEXT RECORD}, or {STOP} commands from the keyboard. See *Inserting Merge Commands During Execution* under *Notes* at the end of this appendix.

In previous versions of WordPerfect, this merge command was represented as ^Omessage^O^C.

Macros

After the command below is executed, the user can do any editing. Execution continues when the user presses **Enter**.

```
{INPUT}Edit the codes. Press Enter when done.
```

See the *Macros* subheading under the following commands for additional examples: {CANCEL OFF}, {MENU OFF}, {Para Down}, {Para Up}.

Merge

After the command below is executed, the user can do any editing. Execution continues when the user presses **End Field** (F9).

```
{INPUT}Type the memo text. Press F9 when done.
```

See the *Merge* subheading under *{CANCEL OFF}* for an additional example.

{Item Down} ↵

The {Item Down} keystroke command is used in tables and paragraph numbering to move down one section or cell.

Macros

The following example moves down each cell in a column of a table and inserts the cell number in it.

```
{ASSIGN}PreviousCell^0^
{LABEL}Number-Cells^
{IF}^"{VARIABLE}PreviousCell"!="{SYSTEM}Cell"^^
  {SYSTEM}Cell^
  {;}Write-current-cell-number^
  {ASSIGN}PreviousCell^{SYSTEM}Cell^^
  {;}Assign-current-cell-number-to-var-PreviousCell^
  {Item Down}
  {;}Move-down-to-the-next-cell^
  {GO}Number-Cells^
  {;}Repeat-the-loop^
{ELSE}
  {QUIT}
{END IF}
  {;}End-of-IF-statement^
{RETURN}
```

Merge

This command is not available in Merge.

{Item Left} ⇐

The {Item Left} keystroke command is used in tables and paragraph numbering to move left one section, column, or cell.

Macros

The following example moves right to left to each cell in a table and inserts the cell number in it.

```
{ ASSIGN }PreviousCell^0^
{ LABEL }Number-Cells^
  { IF }" { VARIABLE }PreviousCell^"!="{ SYSTEM }Cell^""
    { SYSTEM }Cell^
      { ; }Write-current-cell-number^
    { ASSIGN }PreviousCell^ { SYSTEM }Cell^
      { ; }Assign-current-cell-number-to-var-PreviousCell^
    { Item Left }
      { ; }Move-left-to-the-previous-cell^
    { GO }Number-Cells^
      { ; }Repeat-the-loop^
  { ELSE }
    { QUIT }
  { END IF }
  { ; }End-of-IF-statement^
{ RETURN }
```

Merge

This command is not available in Merge.

{Item Right} ⇨

The {Item Right} keystroke command is used in tables and paragraph numbering to move right one section, column, or cell.

Macros

The following example moves left to right to each cell in a table and inserts the cell number in it.

```
{ ASSIGN }PreviousCell^0^
{ LABEL }Number-Cells^
  { IF }" { VARIABLE }PreviousCell^"!="{ SYSTEM }Cell^""
    { SYSTEM }Cell^
      { ; }Write-current-cell-number^
    { ASSIGN }PreviousCell^ { SYSTEM }Cell^
      { ; }Assign-current-cell-number-to-var-PreviousCell^
    { Item Right }
      { ; }Move-right-to-the-next-cell^
    { GO }Number-Cells^
      { ; }Repeat-the-loop^
  { ELSE }
    { QUIT }
```

```

{END IF}
    {;}End-of-IF-statement~
{RETURN}

```

Merge

This command is not available in Merge.

{Item Up} ↺

The {Item Up} keystroke command is used in tables and paragraph numbering to move up one section or cell.

Macros

The following example moves up each cell in a column of a table and inserts the cell number in it.

```

{ASSIGN}PreviousCell~0~
{LABEL}Number~Cells~
{IF}"{VARIABLE}PreviousCell~"!="{SYSTEM}Cell~""
    {SYSTEM}Cell~
        {;}Write-current-cell-number~
        {ASSIGN}PreviousCell~{SYSTEM}Cell~
        {;}Assign-current-cell-number-to-var~PreviousCell~
        {Item Up}
        {;}Move-up-to-the-next-cell~
    {GO}Number~Cells~
    {;}Repeat-the-loop~
{ELSE}
    {QUIT}
{END IF}
    {;}End-of-IF-statement~
{RETURN}

```

Merge

This command is not available in Merge.

{KEYBOARD} (⌘) ⤴

The {KEYBOARD} merge command pauses an executing merge to rewrite the screen and then let the user enter information from the keyboard. This command is similar to the {PAUSE} and {PAUSE KEY} commands in Macros. When **End Field** (F9) is pressed, the merge continues. See also *Prompting and User Input* under *Notes* at the end of this appendix for additional methods of obtaining user input.

While an executing merge is paused at a {KEYBOARD} (or {INPUT}) command, you can execute the {QUIT}, {NEXT RECORD}, or {STOP} commands from the keyboard. See *Inserting Merge Commands During Execution* under *Notes* at the end of this appendix.

In previous versions of WordPerfect, this merge command was represented as ^C.

Macros

This command is not available in Macros. Use {PAUSE}, {PAUSE KEY}, or {INPUT} instead.

Merge

In the following example, the {KEYBOARD} commands pause to let the user enter the “From:,” “To:,” and “Subject:” text as the merge is executed. The screen is rewritten at each {KEYBOARD} command which displays the portion of the file merged so far, so that the user knows what information to enter.

MEMO

From: {KEYBOARD}

To: {KEYBOARD}

Date: {DATE}

Subject: {KEYBOARD}

See the *Merge* subheading under {STATUS PROMPT} for an example of how to use this command.

{KTON}key[~] ↻ (↔)

The {KTON} macro command (**Key TO Number**) converts *key* (which may be any key on the keyboard) to a unique number, its WordPerfect “key value.” {KTON} performs the inverse (opposite) function of the {NTOK} command (see {NTOK} below).

If you take the {KTON} of a function key, an editing key, or a cursor key, the key value is the end result. This is the value you would use with the {NTOK} command.

If *key* is a character (characters are a subset of all keys), you can use the key value to calculate the WordPerfect character set value. The character set value can be assigned to a variable, and a variable can be used to input the character set value.

To calculate the character set value for a given key,

- 1 Use the {KTON} command to obtain the key value.
- 2 Divide the key value by 256.

The quotient is the number of the WordPerfect character set (0-12). The remainder is the character number in the character set (0-255). For additional values returned by the {KTON} command, see *Appendix T: Macros and Merge, Value Tables*.

Macros

For example, if you want your macro to calculate the character set value for a character, you could use the following:

```
{CHAR}Key~Type any key~  
    {;}Assign input to var-Key~  
{ASSIGN}Set~{KTON}{VARIABLE}Key~/256~  
    {;}Assign quotient to var-Set~  
{ASSIGN}Num~{KTON}{VARIABLE}Key~/%256~  
    {;}Assign remainder to var-Num~  
{VARIABLE}Set~{VARIABLE}Num~  
    {;}Write out character set value~
```

This macro prompts for a key, then calculates and writes out the character set value for that key.

Merge

This command is not available in Merge; however, the {CTON} merge command is very similar to it (see *{CTON}* above).

{LABEL}/label~ ↻ ➤

A {LABEL} command marks a place in the macro or merge file. Execution can be sent directly there from any place in the macro or merge file. The {CALL}, {CASE}, {CASE CALL}, and {GO} commands are used to direct execution to the label. The {LABEL} command can also be used to mark the beginning of a subroutine (see *Subroutines* under *Notes* at the end of this appendix).

The label name distinguishes each label from the others. Label names have no restrictions regarding length; however, only the first 15 characters are used to determine uniqueness. (In other words, ABCDEFGHIJKLMNO (15 characters) and ABCDEFGHIJKLMNOP (16 characters) would be considered by WordPerfect to be the same label name, but ABCDEFGHIJKLMN (14 characters) and ABCDEFGHIJKLMNO (15 characters) would be considered by WordPerfect to be different label names. The only character you cannot use in the label name is a tilde (~) because a tilde ends the label name. You *can* use spaces.

There can be many labels in the same macro or merge file as long as each one has a different name. If the name is duplicated, the first one is used. The other is ignored.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {CALL}, {CASE}, {CASE CALL}, {CHAIN}, {GO}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {LEN}, {LOOK}, {ON CANCEL}, {ON ERROR}.

Merge

You may not use a label and local variable (see *Appendix L: Macros and Merge, Variables*) of the same name. If you do, when you execute the

merge, you will receive an error message "Label is already defined."
Rename either the label or local variable.

See the *Merge* subheading under the following commands for examples of how to use this command: {BELL}, {CALL}, {CASE CALL}, {COMMENT}, {GO}, {IF}, {LOOK}, {ON CANCEL}, {ON ERROR}.

{LEN}var⁻ or {LEN}expr⁻ ↻ ↘

This command determines the length of a variable or length of the value returned by an expression (see *Macros* and *Merge* subheadings below). This command is useful for validating or restricting the length of user input.

Macros

In *Macros*, you can only use a variable name for the *var* argument, not an expression.

In this example, if the user enters more than two letters at the {TEXT} prompt, the macro rejects it and the user is prompted again.

```
{LABEL}Get-State-
  {TEXT}State~Enter a two-letter state abbreviation:~
  {IF}{LEN}State~>2~
    {GO}Get State-
  {END IF}
```

See the *Macros* subheading under *{BREAK}* for an additional example.

Merge

In *Merge*, you can use text, {FIELD}, {VARIABLE}, or complex expressions in argument *expr*.

In the following example, variable NameLength is assigned 7, which is the number of characters in the name "Sharron".

```
{ASSIGN}Name~Sharron~
{ASSIGN}NameLength~{LEN}{VARIABLE}Name~
```

See the *Merge* subheading under *{MID}* for an additional example.

{LOCAL}var⁻expr⁻ ↻ ↘

The {LOCAL} merge command assigns the value returned by *expr* to the local variable *var*. Local variables are known only to the current file, and are deleted when the merge is finished or the file is exited. See also *{ASSIGN}* above, and *Appendix L: Macros and Merge, Variables* for more information.

You may not use a label and local variable of the same name. If you do, when you execute the merge, you will receive an error message "Label is already defined." Rename either the label or local variable.

Macros

This command is not available in Macros.

Merge

See the *Merge* subheading under *(COMMENT)* for an example of how to use this command.

{LOOK}var~ ↵ ➤

The {LOOK} command checks to see if a key has been pressed by the user. If a key has been pressed, it is assigned to the variable; it is not executed. If a key has not been pressed, the contents of the variable are deleted and execution is continued without stopping.

Macros

In the following example, {LOOK} is used to simulate a Pause which does not terminate with the Enter key (see *PAUSE* below). (You could also do this with the {PAUSE KEY} command.)

```
{STATUS PROMPT}Press Exit to Quit.~
    {;}Exit terminates the pause~
{LABEL}Loop~
    {;}Top-of-the-loop~
    {LOOK}Key~
        {;}Check to see if a key was pressed~
    {IF}'{VARIABLE}Key'='{Exit}'~
        {;}If Exit was pressed~
        {GO}Next~
        {;}drop-out-of-the-loop~
    {END IF}
    {;}End-of-{IF}-structure~
    {VARIABLE}Key~
        {;}Perform the keystroke~
    {GO}Loop~
    {;}Go to the top-of the loop~
```

See the *Macros* subheading under *(ORIGINAL KEY)* for an additional example.

Merge

The following merge sounds a beep until the user presses "s." Then the message "You did it!" is written out.

```
{PROMPT}Press "s" to stop the beep~{COMMENT}
    Send the message to the user
~{LABEL}Top~{COMMENT}
    ~{BELL}{LOOK}Key~{COMMENT}
        Sound the bell and check the last key pressed
    ~{IF}'{VARIABLE}Key'="s"~{COMMENT}
        If the user pressed "s"...
        ~{GO}End~{COMMENT}
        Break out of the loop
    ~{ELSE}{COMMENT}
```

```

Otherwise
~{GO}Top~{COMMENT}
Repeat the loop
~{END IF}{COMMENT}

~{LABEL}End~{COMMENT}
~You did it!{QUIT}

```

{MENU OFF} ↻

Use the {MENU OFF} macro command to turn off display of menus (except pull-down menus).

When you define a macro from the normal editing screen using the mouse to access pull-down menus, WordPerfect automatically inserts a {MENU OFF} command before, and a {MENU ON} command after, the keystroke command that displays the menu (e.g., {MENU OFF}{Font}{MENU ON}). Normally, in macro execution, the intervening menus to the final option chosen on the pull-down menu would display as regular menus. The {MENU OFF} command prevents the display of these intervening menus.

If execution terminates while menus are off, WordPerfect will automatically turn them on again.

Macros

The macro in the following example displays a directory in List Files, allows the user to mark the files, then copies the files to the diskette in drive A.

```

{TEXT}Directory~Enter the directory~
      {;}Prompt-user-to-enter-directory~
{DISPLAY ON}
      {;}Turn-display-on-so-List-Files-will-display.~
{MENU OFF}
      {;}Turn-off-menus-so-that-the-menu-at-the-bottom-of-the-List-Files
      screen-will-not-display~
{List}{VARIABLE}Directory~{Enter}
      {;}List-the-files-in-the-directory-entered-by-the-user~
{INPUT}Mark files.~Press-Enter-when-done.~
      {;}After-sending-an-instructional-message,-pause-for-the-user-to-mark-the-files.~
cya:{Enter}
      {;}Copy-marked-files-to-A:~
{MENU ON}
      {;}Turn-menus-back-on-so-future-menus-will-display.~

```

Merge

This command is not available in Merge.

{MENU ON} ↻

The {MENU ON} macro command is used to turn on the display of menus after a {MENU OFF} command has been executed (see {MENU OFF} above).

Macros

See the *Macros* subheading under *{MENU OFF}* for an example of how to use this command.

Merge

This command is not available in Merge.

{MID}var~offset~count~ or {MID}expr~offset~count~ ↻ ↵

Use this command to extract substrings. The substring returned is the set of characters of the string resulting from the evaluation of *expr* (see *Merge* subheading below) or the string in *var* (see *Macros* subheading below), starting at the *offset* character and continuing *count* characters. This command is often used with *{LEN}* to parse non-integer numbers.

Macros

In Macros, you can only use a variable name for the *var* argument.

In the following example, the *{MID}* command converts the adverb “quickly” to the adjective “quick” by extracting the first five characters of the adverb.

```
{ASSIGN}Adverb~quickly~
      {;}Assign-string-"quickly"-to-var Adverb~
{MID}Adverb~0~5~
      {;}Extract-the-first-5-characters-from-the-string-in-var Adverb-and-write-them-out~
```

For a more complex example, see the *Macros* subheading under *{BREAK}*.

Merge

In Merge, you can use text, *{FIELD}*, *{VARIABLE}*, or complex expressions in argument *expr*.

In this example, the secondary file has a Name field where the names are stored in the format Last, First. The subroutine below uses the *{MID}* command to extract the first name from the field. (For a simple example of *{MID}*, see the example under *Macros* above.)

```
{ASSIGN}Name~{FIELD}Name~{COMMENT}
      Transfer the contents of the Name field to var Name
~{FOR}Counter~0~{LEN}{VARIABLE}Name~1~{COMMENT}
      For each character of var Name (from the 0th character to the last character)...
~{IF}"{MID}{VARIABLE}Name~{VARIABLE}Counter~1~"=","{COMMENT}
      ...Check to see if the current character is a comma (.).
~{GO}End~{COMMENT}
      If it is a comma, stop checking characters (break out of the loop)
~{END IF}{COMMENT}
      End of {IF} statement
~{END FOR}{COMMENT}
      End of {FOR} statement
~{LABEL}End~{COMMENT}
~{ASSIGN}ThisChar~{VARIABLE}Counter~+2~{COMMENT}
      Assign to var ThisChar the position in the string of the first character of the first
      name
```

```

~{ASSIGN}FirstName~{MID}{VARIABLE}Name~{VARIABLE}ThisChar~{LEN}{VARIABLE}
E)Name~{COMMENT}
    Assign to var FirstName the substring of characters in var Name starting at the first
    character of the first name ({VARIABLE}Counter) and continuing
    {LEN}{VARIABLE}Name characters (to the end of the name)
~{VARIABLE}FirstName~{COMMENT}
    Write out the first name~

```

{MRG CMND}codes{MRG CMND} >→

This merge command lets you insert text, codes, and commands in the document being created by the merge. Any text, codes, or merge commands between the {MRG CMND} commands are sent directly to the merged document, without the commands being interpreted or executed.

In previous versions of WordPerfect, this merge command was represented as ^Vcodes^V.

Macros

This command is not available in Macros.

Merge

In the following example, the merge command {FIELD}Name~ is inserted in the resulting merged document.

```

{MRG CMND}{FIELD}Name~{MRG CMND}{COMMENT}
    Insert {FIELD}Name(tilde) in the resulting document~

```

{NEST}macroname~ ↻ (→)

The {NEST} macro command transfers control to another macro. When the nested macro has finished, execution returns to the parent macro. It is somewhat like placing the contents of the specified macro where the {NEST} command is. See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on nesting.

Macros

For example, suppose you often create macros that use cursor positioning to display large menus and messages on the screen (see *Macros, Message Display* in *Reference*). The messages will not display correctly if Reveal Codes is on. So, in each macro that uses cursor positioning, you need to first check whether Reveal Codes is on, and if so, turn it off. If you have already defined those keystrokes as a separate macro (say, CODESOFF.WPM), you can nest that macro in each macro that uses cursor positioning rather than re-entering the necessary commands. The macro that nests the CODESOFF.WPM macro would look something like this:

```

{NEST}CodesOff~
    {;}Nest the CODESOFF.WPM macro to be sure Reveal Codes is
    turned off before any messages are sent~
    •
    • (commands of the macro)
    •

```

```
{PROMPT}{^P}{^A}{Up}The macro is altering your file. Please Wait
(;)Send the message, positioning it at position 1,23. This should
display correctly because the CODESOFF.WPM macro turned off Reveal Codes.
```

-
- (rest of the macro)
-

See the *Macros* subheading under *{RESTART}* for an additional example.

Merge

The `{NEST MACRO}` merge command is equivalent to the `{NEST}` macro command. See *{NEST MACRO}* below.

{NEST MACRO}macroname~ (↻) >→

The named macro is executed when this merge command is encountered. When the macro is finished, the merge is continued with the code following the `{NEST MACRO}` command.

See also *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix for more information on nesting.

Macros

This command is not available in *Macros*. However, its function is identical to the `{NEST}` macro command. See *{NEST}* above for more information.

Merge

In the following example, the secondary file records each have an Address, City, State, and ZipCode field. During the merge, if a record is encountered with a blank ZipCode field, the merge nests a macro `ZIPCODE.WPM` that calculates the ZIP Code based on the address and stores it in a global variable named ZipCode.

```
•
• (first part of primary file)
•
{IF BLANK}ZipCode~{COMMENT}
    If the ZipCode field is blank
    ~{ASSIGN}Address~{FIELD}Address~{COMMENT}
    ~{ASSIGN}City~{FIELD}City~{COMMENT}
    ~{ASSIGN}State~{FIELD}State~{COMMENT}
    Assign the contents of the Address, City, and State fields to global variables that the
    nested macro can access
    ~{NEST MACRO}zipcode~{COMMENT}
    This macro calculates the zip code and stores it in the global var ZipCode
    ~{VARIABLE}ZipCode~{COMMENT}
    Write out the calculated ZIP code
~{ELSE}{COMMENT}
    If the ZipCode field is not blank
    ~{FIELD}ZipCode~{COMMENT}
    Write out the contents of the ZIPCode field
~{END IF}{COMMENT}
```

-
- (rest of primary file)
-

{NEST PRIMARY}filename~ ↘

This merge command is similar to {NEST MACRO}. When this command is encountered, control of the merge is turned over to the named primary file. When the commands in the nested file have been executed, control is returned to the original primary file, where execution is resumed after the {NEST PRIMARY} command. To change the secondary file, use the {NEST SECONDARY} command (see *{NEST SECONDARY}* below).

You can nest primary files up to 10 deep. However, using this command without specifying a filename ({NEST PRIMARY}~) is the same as using the {SUBST PRIMARY} command with the current primary filename as the argument ({SUBST PRIMARY}CurrentPrimaryFilename~) (see *{SUBST PRIMARY}* below). In this case, the {NEST PRIMARY} command does not use one of the 10 nest levels. See *Levels* under *Notes* at the end of this appendix for more information.

In previous versions of WordPerfect, this merge command was represented as ^Pfilename^P. Using {NEST PRIMARY}~ (without a filename) is equivalent to ^P^P in previous versions, which is equivalent to the {SUBST PRIMARY}CurrentPrimaryFile~ command.

Macro

This command is not available in Macros. Use the {NEST} command to nest a macro, or use the macro to begin a merge. For example,

```
{Merge/Sort}m
    {;}Begin-a-merge~
letter.pf{Enter}
    {;}Primary file=LETTER.PF~
address.sf{Enter}
    {;}Secondary file=ADDRESS.SF~
```

will begin a merge. You can then use the {NEST PRIMARY} command in the LETTER.PF file.

Merge

Be aware that a sort cannot be performed in a nested macro from a merge.

In the following example, the primary file is a letter to customers. It checks to see whether there is a balance due, and if so, it nests a primary file that creates an invoice section in the letter, using records of transactions in the nested secondary file TRANSACT.SF.

```
{FIELD}Name~.
```

It has been a pleasure serving you this year.

```
{IF}{FIELD}Balance<0{COMMENT}
  ~{NEST SECONDARY}Transact.sf{COMMENT}
  ~{NEST PRIMARY}Invoice.pf{COMMENT}
~{END IF}
```

Sincerely,

See the *Merge* subheading under the following commands for additional examples: {ON ERROR}, {PAGE ON}.

{NEST SECONDARY}filename ➤

The named secondary file is opened and used for the subsequent merge commands. Use of the parent secondary file can only be continued when the merge on the nested secondary file has been completed. (You can, however, re-nest the original secondary file from the primary file, which will open a second copy of the secondary file and begin at the first record.) You can nest secondary files up to 10 deep (see *Levels* under *Notes* at the end of this appendix).

If you nest a secondary file from a secondary file, the first record in the nested secondary file effectively replaces the record containing the {NEST SECONDARY} command in the original secondary file and execution continues in the nested file. When execution returns to the parent secondary file, the record pointer skips to the next record *after* the one containing the {NEST SECONDARY} command. (For more information on the record pointer, see *Record Pointer* under *Notes* at the end of this section.) Therefore, you can only nest one secondary file per record in the parent secondary file. In addition, any field text following the {NEST SECONDARY} command is ignored.

Using this command without specifying a filename ({NEST SECONDARY}~) returns an error.

Macros

This command is not available in Macros.

Merge

In this example, the original secondary file has a dummy record at the end of the file with "End" in the name field. The commands shown here nest the secondary file ADDRESS2.SF when the last record of the secondary file is reached.

```
{IF}"{FIELD}Name"="End"{COMMENT}
  ~{NEST SECONDARY}Address2.sf{COMMENT}
~{END IF}
```

See the *Merge* subheading under the following commands for additional examples: {BELL}, {NEST PRIMARY}.

{NEXT} ↻ ➤

Use this command to execute the next iteration of a {FOR}, {FOR EACH}, or {WHILE} loop. Usually, the {END FOR} or {END WHILE} command that ends the loop sends execution to the next iteration. However, the {NEXT}

command can be used to send execution to the next iteration from *other* than the end of the loop. For example, you may use nested IF statements as part of the loop, where when a certain condition is true, you want to abandon the rest of the commands in the loop and go to the next iteration. In this case, you would use the {NEXT} command at the point where you want the next iteration to begin.

Even if you use the {NEXT} command in a loop, you must still use an {END FOR} or {END WHILE} command to mark the end of the loop.

Macros

The following macro writes out "*****@ @ @ @ @".

```
{FOR}1^1^15^1^
    {;}Repeat the loop 15 times, starting at 1, ending at 15, in increments
    of 1^
{IF}{VARIABLE}1^>10^
    {;}If var 1 is > 10,^
    @
    {;}Write an @^
{NEXT}
    {;}Skip to the next iteration of the loop^
{END IF}
*
    {;}Write an asterisk^
{END FOR}
```

Merge

The following merge writes out "*****@ @ @ @ @".

```
{FOR}Fred^1^15^1^ {COMMENT}
    Repeat the loop 15 times, starting at 1, ending at 15, in increments of 1
^ {IF}{VARIABLE}Fred^>10^ {COMMENT}
    If var Fred is > 10,
    * @ {COMMENT}
    Write an @
^ {NEXT} {COMMENT}
    Skip to the next iteration of the loop
^ {END IF} {COMMENT}
^ * {COMMENT}
    Write an asterisk
^ {END FOR}
```

{NEXT RECORD} ➔

The {NEXT RECORD} merge command moves the record pointer in the secondary file to the next record (see *Record Pointer* under *Notes* at the end of this appendix). If it does not find the next record, it ends the merge, or returns the merge to the next command in the primary file if the secondary file was nested, and un-nests the secondary file.

While an executing merge is paused at a {KEYBOARD} or {INPUT} command, you can execute the {NEXT RECORD} command from the keyboard. See

Inserting Merge Commands During Execution under *Notes* at the end of this appendix.

In previous versions of WordPerfect, this command was represented by ^N.

Macros

This command is not available in Macros.

Merge

In this example, the secondary file is searched until the variable `CompanyName` matches the field `Company` in the secondary file. When a match is found, the contents of the `Amount` field of that record in the secondary file are written to the merged document.

```
{LABEL}DoCompany~{COMMENT}
~{IF}"{VARIABLE}CompanyName"!="{FIELD}Company"~{COMMENT}
  ~{NEXT RECORD}{COMMENT}
  ~{GO}DoCompany~{COMMENT}
~{ELSE}{COMMENT}
  ~{FIELD}Amount~
{END IF}
```

See the *Merge* subheading under the following commands for additional examples: `{BELL}`, `{COMMENT}`, `{SUBST PRIMARY}`.

{NTOC}number~ (C) ↗

The `{NTOC}` merge command (**N**umber **T**O Character) converts a WordPerfect key value or character set number to its character equivalent. It performs the inverse (opposite) function of the `{CTON}` command (see *{CTON}* above). For example, the `{NTOC}` of 294 is "Ç".

If you want to calculate the key value for a given character set value,

- 1 Multiply the character set number by 256, then add the number of the character.

For example, "Ç" is character number 38 in character set 1. Multiply 256 times 1 (256), then add 38 (294). The `{NTOC}` of 294 is "Ç".

`{NTOC}` will return nothing if it is taken of a number that is not equivalent to a character.

Macros

This command is not available in Macros. However, the `{NTOK}` macro command is very similar to the `{NTOC}` merge command. See *{NTOK}* below for more information.

Merge

The following example prompts for a number, then returns the character equivalent.

```
{TEXT}Num~Type a key value number: ~{COMMENT}
~{NTOC}{VARIABLE}Num~
```

{NTOK}number ↻ (→)

The {NTOK} macro command (Number **TO** Key) converts a WordPerfect key value to its character or function equivalent. It performs the inverse (opposite) function of the {KTON} command (see {KTON} above). For example, if you take the {NTOK} of 32809 (Save), a Save is executed. If you take the {NTOK} of 1537, a “±” is written out.

You can also take the {NTOK} of a WordPerfect character set value. For example, the character set value for “±” is 6,1. Type {NTOK}6,1~ to obtain “±”.

If you want to calculate the key value for a given character set value,

- 1 Multiply the character set number by 256, then add the number of the character.

You can then use the {NTOK} command to obtain the character.

For example, “±” is character number 1 in character set 6. Multiply 256 times 6 (1536), then add 1 (1537). You can then take the {NTOK} of 1537 to obtain “±”. (For additional values see *Appendix T: Macros and Merge, Value Tables.*)

Macros

The following example prompts for a number, then returns the character or function equivalent.

```
{TEXT}Num~Type a number:~  
{NTOK}{VARIABLE}Num~
```

If the number returns a function, such as Save, and you do not want the function to execute, you can store it in a variable (e.g.,

```
{ASSIGN}Key~{NTOK}{VARIABLE}Num~~
```

Merge

This command is not available in Merge; however, the {NTOC} merge command is very similar to it. See {NTOC} above.

{ON CANCEL}action ↻ (→)

The {ON CANCEL} command tells WordPerfect what to do if a user presses **Cancel** (F1) or if a {RETURN CANCEL} command has been returned by a subroutine or nested macro or merge. When a Cancel occurs, WordPerfect will know what to do next only if it has already encountered the {ON CANCEL} command. For this reason, it is a good idea to place the command before a Cancel can occur, otherwise execution will terminate when Cancel is pressed.

The valid *actions* available with this command in Macros are:

```
{BREAK}           {RETURN}  
{CALL}            {RETURN CANCEL}  
{GO}              {RETURN ERROR}  
{QUIT}            {RETURN NOT FOUND}  
{RESTART}
```

The valid *actions* available with this command in Merge are:

{BREAK}	{RETURN}
{CALL}	{RETURN CANCEL}
{GO}	{RETURN ERROR}
{QUIT}	{STOP}

Since *{GO}* and *{CALL}* require a tilde (~) after the label, there must be two tilde marks (~) at the end (e.g., *{ON CANCEL}{GO}label~*).

In Macros, the default response to a Cancel (if no *{ON CANCEL}* command is encountered) is *{RETURN CANCEL}*. In Merge, the default response to a Cancel (if no *{ON CANCEL}* command is encountered) is *{STOP}*.

If no *action* is specified in the command (i.e., *{ON CANCEL}~*), the cancel is ignored and execution continues as if there had been no cancel. In Macros, not only is the cancel condition ignored, but if the Cancel key was pressed, the key is thrown away. In other words, if either a *{LOOK}* or *{ORIGINAL KEY}* is used, they do not detect that the Cancel key was pressed. If you want the Cancel key to be used as input, use the *{CANCEL OFF}* command before the input is requested.

Macros

When Cancel is pressed (or a *{RETURN CANCEL}* is encountered), WordPerfect executes the last *{ON CANCEL}* command encountered at the current level (see *Levels* under *Notes* at the end of this appendix). If no *{ON CANCEL}* command was encountered during execution of the current level, WordPerfect looks to successively higher levels and executes the last one that was encountered. If none was encountered, the default (*{RETURN CANCEL}*) is executed.

If you chain or nest a macro, the *{ON CANCEL}* command is not passed from the parent file to the nested or chained file. Rather, the default (*{RETURN CANCEL}*) is in effect until another *{ON CANCEL}* command is encountered.

When execution returns from a lower level to a higher level, the last *{ON CANCEL}* command encountered at the higher level resumes effect.

In the following example, if the user presses **Cancel** (F1) during the macro, the subroutine *End* is executed.

```
{ON CANCEL}{GO}End~
•
•   (commands in macro)
•
{LABEL}End~
    {;}Beginning-of-End-subroutine~
{PROMPT}Macro-cancelled prematurely.~
    {;}Send-notification-message~
{WAIT}40~
    {;}Display message for 4 seconds~
```

```

{Screen}{Screen}
    {;}Clear-message-from-screen~
{QUIT}
    {;}Terminate-execution~
•
• (rest of macro)
•

```

See the *Macros* subheading under *{RETURN CANCEL}* for an additional example.

Merge

In Merge, when Cancel is pressed, the last `{ON CANCEL}` command encountered in the file is executed. If none was encountered, the default (`{ON CANCEL}{STOP}`) is executed.

The `{ON CANCEL}` command is local to the file in which it is encountered. It cannot be seen from other files. For example, a secondary file cannot use the `{ON CANCEL}` command from a primary file.

In the following example, if the user presses **Cancel** (F1) during the merge, the subroutine End is executed.

```

{ON CANCEL}{GO}End~{COMMENT}
    If Cancel (F1) is pressed during the merge, execute the End subroutine~
•
• (commands in primary file)
•
{LABEL}End~{COMMENT}
    Beginning of End subroutine
    ~{PROMPT}Merge cancelled prematurely.~{COMMENT}
    Send notification message
    ~{WAIT}40~{COMMENT}
    Display message for 4 seconds
    ~{STOP}{COMMENT}
    Terminate execution~

```

See the *Merge* subheading under *{RETURN CANCEL}* for an additional example.

{ON ERROR}action

The `{ON ERROR}` command tells WordPerfect what to do if an error is detected in macro or merge execution, or returned by WordPerfect or DOS, or if a `{RETURN ERROR}` command has been returned by a subroutine or nested macro or merge. Inserting this command without an action (`{ON ERROR}`) will cause WordPerfect to ignore the error and continue execution (when possible).

In Macros, any error that returns an error message to or from WordPerfect can be trapped with this command. In Merge, the errors that can be trapped with this command are:

- File not found
- Print queue errors
- End of file condition returned by a {NEXT RECORD}

If you chain a file that does not exist or is not found, the error condition is not generated until WordPerfect tries to execute the chained file (i.e., at the end of the current macro or merge file). See *Chaining, Nesting, and Substituting* under *Notes* at the end of this appendix, and the descriptions for the {CHAIN}, {CHAIN MACRO}, {CHAIN PRIMARY}, and {CHAIN SECONDARY} commands in this section for more information.

In Macros, the default *action* (if no {ON ERROR} is encountered) is {RETURN ERROR}. In Merge, the default *action* is {STOP}. For a list of other possible actions, see {ON CANCEL} above.

Macros

The range of effect of the {ON ERROR} command is the same as the {ON CANCEL} command (see the *Macros* subheading under {ON CANCEL} above).

In the following example, the macro requests that the user enter the name of a file. The macro then tries to retrieve it. The {ON ERROR} command specifies that the Error subroutine be executed if the file is not found when the macro tries to retrieve it.

```
{ON ERROR}{GO}Error~
      {;}If an error is generated, execute the Error subroutine~
{LABEL}GetFile~
  {TEXT}Filename~File to be retrieved:~
      {;}Prompt user for file~
  {Retrieve}{VARIABLE}Filename~{Enter}
      {;}Retrieve the file~
  •
  • (more commands)
  •
{LABEL}Error~
  {;}If the file was not found when the macro tried to retrieve it,
  execution moves here~
  {Cancel}
      {;}Cancel."Document to be retrieved:" prompt~
  {PROMPT}The file you entered is not in the default directory...Try again.~
      {;}Tell the user what happened~
  {WAIT}15~
      {;}Display the message for 1.5 seconds~
  {GO}GetFile~
      {;}Prompt again for the file~
```

See the *Macros* subheading under {RETURN ERROR} for an additional example.

Merge

The range of effect of the {ON ERROR} command is the same as the {ON CANCEL} command.

In the following example, a new primary file is nested. The {ON ERROR} command specifies that the Error subroutine be executed if the file is not found when the merge tries to nest it.

```
{ON ERROR}{GO}Error~{COMMENT}
    If an error is generated, execute the Error subroutine~
    •
    • (more merge commands)
    •
{NEST PRIMARY}invoice.pf~
    •
    • (more merge commands)
    •
{LABEL}Error~{COMMENT}
    If the file was not found when the merge tried to nest it, execution moves here
~{PROMPT}File not found. Move INVOICE.PF to default directory and start merge
again.~{COMMENT}
    Send a message to the user
~{WAIT}15~{COMMENT}
    Display the message for 1.5 seconds
~{STOP}{COMMENT}
    Terminate execution~
```

See the *Merge* subheading under *{RETURN ERROR}* for an additional example.

{ON NOT FOUND}action~ ↻

The {ON NOT FOUND} macro command tells WordPerfect what to do if a search fails (e.g., Search, Word Search, or Name Search) or a {RETURN NOT FOUND} is returned by a nested macro or subroutine. If no {ON NOT FOUND} command is included before a Not Found condition occurs, the Not Found stops that level of macro execution (an {ON NOT FOUND} {RETURN NOT FOUND}~ is executed).

For a list of valid actions for this command, see *Macros* under *{ON CANCEL}* above. The range of effect of the {ON NOT FOUND} command is the same as the {ON CANCEL} command.

If you search for a nonexistent name with the Name Search feature, the Not Found condition is returned at the first character that does not match. You should insert an {Enter} command somewhere in the macro after the Not Found is generated to terminate the name search.

If during a name search all characters before the {Enter} match, a Not Found is *not* generated, even though there may be additional characters in the name of the file at the cursor. To check whether the file is an exact match, use {HPg} (Ctrl-Enter) to terminate the Name Search instead of {Enter}. When you use {HPg}, a Not Found is generated if the filename does not exactly match.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {CHAIN}, {RETURN NOT FOUND}.

Merge

This command is not available in Merge.

{ORIGINAL KEY} ↻

The {ORIGINAL KEY} macro command evaluates the original (unmapped) action of the last key entered from the keyboard. The last key pressed could be either a key that was read before the macro started (which may be the key which invoked the macro) or a character input with a {CHAR}, {LOOK}, {TEXT}, {PAUSE}, or {PAUSE KEY} command.

Macros

This command is useful if your keyboard has been remapped with a keyboard definition (see *Keyboard Layout* in *Reference*). For example, you might want your macro to check if a user has typed a specific key, regardless of the keyboard definition. If you want to exit if F7 has been pressed, use the following macro:

```
{LOOK}Key`
    {;}Check-to-see-if-a-key-has-been-pressed.-Assign-it-to-var-Key`
{IF}"{ORIGINAL KEY}"="{Exit}"`
    {;}If the-unmapped-key-is-Exit`
    {Exit}
    {;}Exit`
{END IF}
    {;}End-of-{IF}-statement`
```

Merge

This command is not available in Merge.

{OTHERWISE}

Use this command as the last case in a {CASE} or {CASE CALL} command for cases other than the specified cases.

{PAGE OFF} ➤

The {PAGE OFF} merge command eliminates the hard page [HPg] between copies of the primary file in the merged document. Use {PAGE ON} to begin insertion of hard page codes again after you have used {PAGE OFF}. The {PAGE ON} and {PAGE OFF} commands are global to the merge; they may be included in any primary or secondary file and are in effect for all the files in the merge until the opposite command is encountered.

These commands are useful for merging labels or for including multiple records in a document. You can also use {PAGE OFF} with the {PRINT} command to eliminate blank pages between copies of the merged document when merging to the printer. (In previous versions of WordPerfect, this was accomplished with the ^N^P^P codes.)

The {PAGE OFF} command must be separated from the previous text by a hard return in order for the merge to perform a line feed before continuing the merge.

Macros

This command is not available in Macros.

Merge

In the following example, the records in the secondary file have 2 fields: Name and Salary. When merged with the primary file below, a list is created of each name and salary. Because Page is off, no hard page break is inserted between each iteration of the primary file, thereby creating a single list.

```
{PAGE OFF}
{FIELD}Name~ . . . . . {FIELD}Salary~
```

See the Merge example under the following commands for additional examples: {PAGE ON}, {PRINT}.

{PAGE ON} ➤

The {PAGE ON} merge command reinstates the use of hard page codes between copies of the primary file in the merged document. See {PAGE OFF} for more information.

Macros

This command is not available in Macros.

Merge

In the example below, the nested primary file LIST.PF creates a list of players on a given team—one team per page.

```
{ASSIGN}Team~{FIELD}Team~{COMMENT}
    Assign the current field to a global variable so that the nested primary file can use it
~These people are on your team (Team {FIELD}Team~)

{PAGE OFF}{COMMENT}
    This command prevents the insertion of a hard page between iterations of the nested
    primary file
~{NEST PRIMARY}List.pf~{COMMENT}
    This primary file uses another secondary file to produce the list. (It writes the
    Name field of all records whose Team field matches the current Team variable.)
~{PAGE ON}{COMMENT}
    This command restores the use of page breaks to allow one team list per page~
```

{Para Down} ↻

The {Para Down} keystroke command moves the cursor to the beginning of the next paragraph (just beyond the next [HRT]).

Macros

The following macro swaps two paragraphs.

```
{INPUT}Position-cursor-on-paragraph-to-be-moved-down.then-press-Enter.~
      {;}Prompt-user-and-pause-for-user-to-position-cursor~
{Move}pm
      {;}Move-paragraph-into-buffer~
{Para Down}
      {;}Position-cursor-down-one-paragraph~
{Home}{Home}{Left}
      {;}Position-cursor-at-beginning-of-the-line~
{Enter}
      {;}Retrieve-the-paragraph~
```

Merge

This command is not available in Merge.

{Para Up} ↻

The {Para Up} keystroke command moves the cursor to the beginning of the current paragraph (to the right of the previous [HRT]) or, if the cursor is already at the beginning, to the beginning of the previous paragraph.

Macros

The following macro swaps two paragraphs.

```
{INPUT}Position-cursor-on-paragraph-to-be-moved-up.then-press-Enter.~
      {;}Prompt-user-and-pause-for-user-to-position-cursor~
{Move}pm
      {;}Move-paragraph-into-buffer~
{Para Up}
      {;}Position-cursor-up-one-paragraph~
{Home}{Home}{Left}
      {;}Position-cursor-at-beginning-of-the-line~
{Enter}
      {;}Retrieve-the-paragraph~
```

Merge

This command is not available in Merge.

{PAUSE} ↻ (↔)

The {PAUSE} macro command causes the macro to pause until **Enter** is pressed. This command lets the user edit or type new text as if there were no macro running. Macro execution proceeds after Enter is pressed. (If you want another key to end the pause, see {PAUSE KEY} below.)

{PAUSE} does not prompt the user. Because of this, the {PROMPT} and/or {BELL} commands are often used with {PAUSE}. See also *Prompting and User Input* under *Notes* at the end of this appendix for other methods of obtaining user input.

Macros

In the following example, after the {PROMPT} command is executed, the user can do any editing. Execution continues when the user presses Enter.

```
{STATUS PROMPT}Edit the codes.--Press Enter when done.~  
    {;}Send a prompt to the screen~  
{PAUSE}  
    {;}Pause for user to edit codes~  
{STATUS PROMPT}~  
    {;}Clear status prompt message
```

See the *Macros* subheading under {CHAIN} and {RESART} for additional examples.

Merge

This command is not available in Merge. However, the {KEYBOARD} merge command is very similar to the {PAUSE} macro command. See *{KEYBOARD}* above.

{PAUSE KEY|key} ↻ (↵)

This command functions like the {PAUSE} command (see *{PAUSE}* above), except that you specify the key that terminates the pause.

Macros

If you wanted Exit (F7) to terminate the pause, you could use the following:

```
{STATUS PROMPT}Edit the codes.-- Press Exit when done.~  
    {;}Send message to user.~  
{PAUSE KEY}{Exit}~  
    {;}Stop so that user can edit codes.--Execution continues when the user presses Exit  
    (F7)~  
{STATUS PROMPT}~  
    {;}Clear prompt.~
```

Merge

This command is not available in Merge. However, you may be able to use the {KEYBOARD} merge command instead. See *{KEYBOARD}* above.

{PRINT} ↵

The {PRINT} merge command sends all text that has been merged so far to the printer. Once the text is sent to the printer, it is cleared from the edit buffer (i.e., it is no longer in the “resulting document”). When you merge to the printer using this command, the usual page break is still inserted between each iteration of the primary file. To eliminate the extra page between each copy, insert the {PAGE OFF} command before the {PRINT} command (see the example under *Merge* below).

The {PRINT} command is ignored if encountered in a substructure during a merge.

In previous versions of WordPerfect, this command was represented as ^T.

Macros

This command is not available in Macros.

Merge

The secondary file to be used with the primary file in the following example contains 1000 records. If you were to merge it to the screen, the resulting document would have 1000 pages. So, this merge uses the {PRINT} command to send each letter to the printer as soon as it is merged.

ABC Company
245 West Center Street
Long Beach, California 90807

{DATE}

{FIELD}Name`
{FIELD}Company`

Dear {FIELD}Salutation`:

Thank you for your inquiry regarding our new product.

•
•
•

Sincerely,

Amy Wilcox
Product Manager{COMMENT}

~{PAGE OFF}{PRINT}

See the *Merge* subheading under *{SYSTEM}* for an additional example.

{PROCESS}codes {PROCESS} ➤

This merge command is designed to be used in a secondary merge file. The text, codes, or commands enclosed in the {PROCESS} commands are executed when they are encountered, regardless of the current location in the secondary file. For example, if this command is encountered while the merge is scanning the secondary file for a record, the codes are processed, even if they are not in the record being searched for.

To prevent the codes from being executed, you can use a {GO} command to send control of the merge to another part of the file, thus skipping over the {PROCESS} command.

Macros

This command is not available in Macros.

Merge

See the *Merge* subheading under *{CHAIN SECONDARY}* for an example of how to use this command.

{PROMPT}message

The **{PROMPT}** command displays the *message* on the status line. See *Message Display* under *Notes* at the end of this appendix for information on affecting the way messages are displayed on the screen. See also *Prompting and User Input* under *Notes* at the end of this appendix for other methods of prompting the user.

In previous versions of WordPerfect, this merge command was represented as ^Omessage^O.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: **{NEST}**, **{ON CANCEL}**, **{ON ERROR}**, **{SYSTEM}**, **{WHILE}**.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: **{BELL}**, **{ON CANCEL}**, **{ON ERROR}**, **{SYSTEM}**.

{QUIT}

The **{QUIT}** command stops the execution of the macro or merge. If macros are nested or chained, it stops their execution at that point.

While an executing merge is paused at a **{KEYBOARD}** or **{INPUT}** command, you can execute the **{QUIT}** command from the keyboard. See *Inserting Merge Commands During Execution* under *Notes* at the end of this appendix.

In previous versions of WordPerfect, this merge command was represented as ^Q.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: **{CASE}**, **{GO}**, **{ON CANCEL}**.

Merge

In a merge, the rest of the primary file after the **{QUIT}** command is written out to the resulting merged document before the merge terminates, but any commands after **{QUIT}** are not executed. Arguments in the commands following the **{QUIT}** command are included as text in the merged document. If you don't want the rest of the primary file written out, use the **{STOP}** command instead of **{QUIT}** (see *{STOP}* below).

If **{QUIT}** is used in a secondary file, the secondary file is abandoned at that point. However, the rest of the primary file is written out (but not processed) just as if the command had been encountered in the primary file, and then the merge terminates.

The following example is a standard memo sent by a Personnel department to each employee before his or her six-month salary review. The merge ends just after the {DATE} command, but the rest of the memo is written out to the resulting merged document.

MEMO

To: {KEYBOARD}
From: Kim Charleston, Personnel
Date: {DATE}{QUIT}
Subject: Six-month Review Preparation

*
* (rest of memo)
*

{RESTART} ↺

The {RESTART} macro command terminates all macro execution at the end of the current nested macro. This command can be used if you do not want a macro to return to the macro from which it was nested. The {RESTART} command can be inserted anywhere in the nested macro. The macro “remembers” the {RESTART} command and executes it after all other commands have been executed.

Macros

In the following example, the parent macro nests the macro CONTINUE.WPM which asks the user whether he or she wants to continue or stop. If the user elects to continue, execution returns to the parent file. If the user elects to stop, the {RESTART} command prevents execution from returning after the last command of the nested file.

Parent File:

*
*
*
{NEST}Continue`
*
*
*

Nested File (CONTINUE.WPM):

```
{CHAR}Answer`1-Continue;:2-Stop::1{Left}`  
  {;}Prompt user`  
{IF}{VARIABLE}Answer`=1`  
  {;}If user elects to continue...`  
{RETURN}
```

```

        {;}...return-execution-to-the-parent-file.~
{ELSE}
        {;}Otherwise...~
        {RESTART}
        {;}...terminate-execution-at-the-end-of-this-file.~
{END IF}
        {;}End of-IF statement~
{PROMPT}You-have-elected-to-stop-the-macro.-Press-Enter-to-terminate-execution.~
        {;}Prompt-user~
{PAUSE}
        {;}Wait-for user-to press-Enter~
{Screen}{Screen}
        {;}Clear-the-screen.-Execution-stops-after-this-command.~

```

Merge

This command is not available in Merge.

{RETURN}

The {RETURN} command marks the end of a subroutine and signals the macro or merge to return from a {CALL} or {CASE CALL} command.

Macros

If there is no {CALL} or {CASE CALL} to return to and the macro file containing this command is nested, {RETURN} signals the macro to return to the file from which it was nested. If the command is not in a nested file and there is no {CALL} or {CASE CALL} to return to, {RETURN} marks the end of a macro (see *{CALL}* above).

See the *Macros* subheading under the following commands for examples of how to use this command: {CALL}, {CHAIN}, {Item Down}, {Item Left}, {Item Right}, {Item Up}.

Merge

In Merge, the {RETURN} command must be paired with a {CALL} or {CASE CALL} command. If there is no {CALL} or {CASE CALL} to return to, an error message will be displayed.

See the *Merge* subheading under {CALL} for an example of how to use this command.

{RETURN CANCEL}

The {RETURN CANCEL} command causes execution to leave the current level and indicates a Cancel to the next higher level (see *Levels* under *Notes* at the end of this appendix).

Macros

Since {RETURN CANCEL} is the default action to Cancel when no {ON CANCEL} command is used (see *{ON CANCEL}* above), the {RETURN CANCEL} command is most often used to reset the {ON CANCEL} action back to the default after it has been changed.

In this example, the {RETURN CANCEL} is used to set the {ON CANCEL} action to {RETURN CANCEL}.

```
{ON CANCEL}{GO}Send Message~
```

- (During this part of the macro, if the user presses Cancel, execution will be transferred to the Send Message label.)

```
{ON CANCEL}{RETURN CANCEL}~
```

- (During this part of the macro, if the user presses Cancel, a {RETURN CANCEL} is returned to the higher level.)

Merge

In this example, the {RETURN CANCEL} is used to set the {ON CANCEL} action to {RETURN CANCEL}.

```
{ON CANCEL}{GO}Send Message~
```

- (During this part of the merge, if the user presses Cancel, execution will be transferred to the Send Message label.)

```
{ON CANCEL}{RETURN CANCEL}~
```

- (During this part of the merge, if the user presses, a {RETURN CANCEL} is returned to the higher level.)

{RETURN ERROR}

The {RETURN ERROR} command causes execution to leave the current level and indicate an error to the next higher level (see *Levels* under *Notes* at the end of this appendix) (see also *ON ERROR* above).

Macros

Since {RETURN ERROR} is the default action when an error occurs and no {ON ERROR} command is used (see *ON ERROR* above), the {RETURN ERROR} command is most often used to reset the {ON ERROR} action back to the default after it has been changed.

In this example, the {RETURN ERROR} is used to reset the {ON ERROR} action back to the default.

```
{ON ERROR}{GO}Send Message~
```

- (During this part of the macro, if an error occurs, execution will be transferred to the Send Message label.)

```
{ON ERROR}{RETURN ERROR}~
```

- (During this part of the macro, if an error occurs, a {RETURN ERROR} is returned to the higher level.)

Merge

In this example, the {RETURN ERROR} is used to set the {ON ERROR} action to {RETURN ERROR}.

```
{ON ERROR}{GO}Send Message^^
```

- (During this part of the merge, if an error occurs, execution will be transferred to the Send Message label.)

```
{ON ERROR}{RETURN ERROR}^
```

- (During this part of the merge, if an error occurs, a {RETURN ERROR} is returned to the higher level.)

{RETURN NOT FOUND} ↺

The {RETURN NOT FOUND} macro command terminates macro execution on the current level and indicates a search Not Found condition to the next higher level (see {ON NOT FOUND} above). {RETURN NOT FOUND} can be used wherever you would use {RETURN} (see {RETURN} above).

Since {RETURN NOT FOUND} is the default action when a *Not Found* condition occurs and no {ON NOT FOUND} command is used (see {ON NOT FOUND} above), the {RETURN NOT FOUND} command is most often used to reset the {ON NOT FOUND} action back to the default after it has been changed.

Macros

In this example, the {RETURN NOT FOUND} is used to reset the {ON NOT FOUND} action back to the default.

```
{ON NOT FOUND}{GO}Send:Message^^
```

- (During this part of the macro, if a search string is not found, execution will be transferred to the Send Message label.)

```
{ON NOT FOUND}{RETURN NOT FOUND}^
```

- (During this part of the macro, if a search string is not found, a {RETURN NOT FOUND} is returned to the higher level.)

Merge

This command is not available in Merge.

{REWRITE} (↺) ↷

This merge command causes the screen to be rewritten. Since none of the merged document is written to the screen during a merge, you may want to use this command to display what has been merged at a certain point.

In previous versions of WordPerfect, this merge command was represented as ^U.

Macros

This command is not available in Macros; however, you can use the following (inserted in the Macro Editor or while defining a macro at the normal editing screen by pressing **Screen** (Ctrl-F3) twice):

```
{Screen}{Screen}
```

You can also use the {DISPLAY ON} command (see *{DISPLAY ON}* above).

Merge

In the following example, the {REWRITE} command is used so that the letter can be seen after it is merged.

```
ABC Company  
245 West Center Street  
Long Beach, California 90807
```

{DATE}

```
{FIELD}Name~  
{FIELD}Company~
```

```
Dear {FIELD}Salutation~:
```

```
Thank you for your inquiry regarding our new product.
```

-
- (rest of the letter)
-

```
Sincerely,
```

```
Amy Wilcox  
Product Manager{COMMENT}  
~{REWRITE}
```

{SHELL ASSIGN}shellvar~ expr~ ↻

The {SHELL ASSIGN} command assigns the value returned by *expr* to the Shell variable *shellvar*. Expressions are evaluated (see *Appendix J: Macros and Merge, Expressions*) and the result is assigned to the variable. Non-numeric characters and expressions that cannot be evaluated are treated as strings.

This command is only available if you are running WordPerfect under Shell 3.0 (or later). If you have a previous version of Shell (or if you do not own Shell), this command will do nothing.

After a value has been assigned to a variable, the variable command {SHELL VARIABLE}shellvar~ can be placed anywhere you would normally place the variable contents.

For more information on Shell variables, see the documentation that accompanies the Shell program.

{SHELL MACRO}*macroname*

The {SHELL MACRO} macro command invokes a Shell macro. This is useful when switching between various WordPerfect Corporation products.

This command is only available if you have Shell version 3.0. If you have a previous version of Shell (or if you do not own Shell), this command will do nothing.

You do not need to include the .SHM extension in *macroname*. However, you must include a path if the Shell macro is in a directory other than the directory specified in Location of Macro Files in Shell Setup (see your Shell documentation).

Macros

You can use the macro in the following example to execute a Shell macro, or to let you know why if it can't be executed.

```
{IF}{SYSTEM}ShellVer>2*256~
    {;}If Shell is version 3.0 or later~
    {SHELL MACRO}c:\shm\test~
    {;}Execute the Shell macro TEST.SHM~
{ELSE}
{IF}{SYSTEM}ShellVer=0~
    {;}Otherwise, if no Shell is running~
    {CHAR}AnyKey^ERROR: Shell not present. Press any key to continue.~
    {;}Inform user.~
{ELSE}
    {;}Otherwise (if a Shell is running but is a version earlier than 3.0)~
    {CHAR}AnyKey^ERROR: Shell wrong version. Press any key to continue.~
    {;}Inform user.~
{END IF}
{END IF}
```

Merge

This command is not available in Merge.

{SHELL VARIABLE}*shellvar*

This command accesses the contents of Shell variables. After a value has been assigned to a Shell variable (see {SHELL ASSIGN} above) the {SHELL VARIABLE}*shellvar* command can be placed anywhere you would normally place the variable contents. It can be placed within or as an argument for another command, or can be used by itself.

This command is only available if you have Shell version 3.0 or later. If you have a previous version of Shell (or if you do not own Shell), this command will do nothing.

For more information on Shell variables, see the documentation that accompanies the Shell program.

{SPEED}100ths second ↻

The {SPEED} macro command can slow down macro execution. It causes macro execution to wait the amount of time indicated by the *100ths second* argument between each command.

The default speed is no delay between commands (i.e., {SPEED}0~).

Macros

For example, if you want macro commands to execute every 1.5 seconds, insert the following into your macro:

```
{SPEED}150~
```

Merge

This command is not available in Merge.

{STATE} ↻

The {STATE} macro command returns a number representing the current operational state of WordPerfect. This lets you create macros which are aware of the environment in which they are executing. The operational states and their corresponding code numbers are listed below.

3	Current Document (1,2)
4	Normal Editing Screen
8	Editing Structure Other than Normal Editing Screen
16	Macro Definition Active
32	Macro Execution Active (always set)
64	Merge Active
128	Block Active
256	Typeover Active
512	Reveal Codes Active
1024	Yes/No Question Active
2048	In a list (See also the List system variable description under {SYSTEM} below.)
4096	Help Active
32768	Cannot go to Shell

State 8 (Editing Structure Other than Normal Editing Screen) refers to a screen which is used for editing footnotes, headers, styles, etc. Macro Execution (32) is labeled as "always set" because the {STATE} command is only used in a macro as it is executing.

You can determine what the state of WordPerfect is by forming an AND (&) expression with a value called a *mask* (e.g., {STATE}&3). The result of the operation indicates the current state of WordPerfect.

To choose a mask, determine which state(s) you want to check for. Note the numbers associated with each state and add them together to calculate the mask value. For example, if you want to know what document you are currently in (1, 2, or 3), the mask value is 3. If you want to know if you are at the normal editing screen (4) and/or if Reveal Codes is active (512), the mask value is 516 (4+512=516).

Document 3 is a temporary document used during a merge. It is not normally accessible; however, you can check to see whether it is active with the {STATE} command.

After you have determined the appropriate mask, create an AND expression, then assign the result to a variable. For example,

```
{ASSIGN}DocNum{STATE}&3`
    {;}Assign-the-current-document-number-to-var-DocNum`
{ASSIGN}Active{STATE}&516`
    {;}Assign-the-result-(either-4,-512,-516,-or-0)-to-var-Active`
```

In this example, the mask values are 3 and 516. Variable DocNum contains the current document number and variable Active contains a number which indicates whether the normal editing screen (4), Reveal Codes (512), both (516), or neither (0) are active.

If the result of the AND operation is 0, then the state you were checking for is not present. If the result is a non-zero number, then some (or all) of the states you checked for are present.

For example, if you want to check for both types of editing screens ((4) and (8)), the mask is 12. {STATE}&12 gives four types of information. If the result is 0, then neither the normal editing screen nor another editing screen is active (some type of menu is active). If the result is 4, the normal editing screen is on. If the result is 8, a menu is active, but you are editing a style, footnote, etc. (e.g., you pressed Format while editing a footnote). If the result is 12, you are in the normal editing screen, and you are editing a style, footnote, etc.

Since the {IF} command interprets 0 as false, you can form {IF} statements that will perform functions when a certain condition exists. For example, the following macro returns you to the normal editing screen if Reveal Codes, Block, both, or neither is on.

```
{LABEL}Top`
{IF}{STATE}&4`
    {;}If-at-the-normal-editing-screen`
{IF}{STATE}&512`
    {;}And-Reveal-Codes-is-on`
    {Reveal Codes}
    {;}Turn-Reveal-Codes-off`
{ELSE}
    {;}Otherwise`
{IF}{STATE}&128`
    {;}If-Block-is-on`
    {Block}
    {;}Turn-off-Block`
{ELSE}
    {;}Otherwise`
    {RETURN}
    {;}Exit-the-loop`
{END IF}
{END IF}
{END IF}
{GO}Top`
    {;}Repeat-the-loop-until-the-{RETURN}-command-exits-it`
```

When {STATE} is executed by itself (not in an expression), it returns a number which represents the total state of WordPerfect. All applicable numbers are added together. For example, if the cursor is in the normal editing screen (4) of document 1 (1) and if Block is on (128) and a macro is executing (32), then the executional state of WordPerfect is $4+1+128+32=165$.

See also {SYSTEM} for information on accessing other system variables.

Macros

See the examples in the above description of this command.

Merge

This command is not available in Merge.

{STATUS PROMPT}message[~] ⌘ ↵

This command puts a message on the status line. Although you can use cursor positioning commands (see *Message Display* under *Notes* at the end of this appendix) to position the message elsewhere on the screen, the message may not redisplay correctly when the screen is rewritten if you do. Also, the {STATUS PROMPT} message only displays when the status line normally displays. So, for example, in Merge, the message would only display when a {KEYBOARD} command pauses the merge for input from the keyboard, and when the merge is finished.

If you position the message on the status line, only the first 48 characters will show.

When you use this command, the message is stored in memory, much like a variable. However, this spot in memory is shared with the {INPUT} command. If you use an {INPUT} command after a {STATUS PROMPT} command, the {STATUS PROMPT} message will be replaced in memory by the {INPUT} message. Since the {INPUT} command clears its own message from memory when execution continues after the command, the {STATUS PROMPT} message no longer exists after the {INPUT} command. This is one way to clear the {STATUS PROMPT} message from memory.

To clear a status prompt message without using {INPUT}, insert another {STATUS PROMPT} command with no message ({STATUS PROMPT}[~]). If you do not clear the message with an {INPUT} or {STATUS PROMPT}[~] command, the message will be on the screen whenever the status line is displayed until you exit WordPerfect.

For additional methods of prompting the user, see *Prompting and User Input* under *Notes* at the end of this appendix.

Macros

In the following example, the {STATUS PROMPT} is used to display the date the macro was created on the status line before the rest of the macro executes.

```
{DISPLAY ON}
    {;}Turn Display on so the subsequent {STATUS PROMPT} message will show
{STATUS PROMPT}Macro created: 10/25/89
```

```

        {;}Display the creation date on the status-line~
{WAIT} 15~
        {;}Give the user 1.5 seconds to read the message~
{STATUS PROMPT}~
        {;}Clear the {STATUS PROMPT} message from memory~
{DISPLAY OFF}
        {;}Turn Display off so that the rest of execution will not display.~
    •
    • (Rest of macro)
    •

```

See the *Macros* subheading under the following commands for additional examples: {LOOK}, {PAUSE}.

Merge

The first command puts the message “Press F9 when done.” on the status line. The second command erases the message.

```

{STATUS PROMPT}Press F9 when done.~{COMMENT}
~{KEYBOARD}{COMMENT}
    When the merge pauses at the {KEYBOARD} command, the message is displayed
    on the status line.
~{STATUS PROMPT}~{COMMENT}
    This clears the {STATUS PROMPT} message from memory~

```

{STEP OFF}

The {STEP OFF} command turns off single step execution after it has been turned on (see {STEP ON} below).

Macros

See the example under {STEP ON} below.

Merge

See the example under {STEP ON} below.

{STEP ON}

The {STEP ON} command is useful for debugging macros and merges. It causes the macro or merge to execute one step at a time. Between each step, a message on the status line indicates what the next key or command is. The key or command executes when any key is pressed (see the *Macros* and *Merge* subheadings below).

During macro execution, press **Exit** (F7) to turn off the Step mode. Pressing **Cancel** (F1) terminates execution unless Cancel is turned off or is redefined (see {CANCEL OFF} and {ON CANCEL} above).

Macros

While step is on in macro execution, if the next step in the macro is a character (e.g., A), that character will be displayed. If it is a command, a label followed by a number will be displayed. The four labels are as follows:

Label	Meaning
ALT <i>X</i>	Alt- <i>letter</i> Macro Execution
KEY CMD <i>n</i>	WordPerfect Command, Cursor Control, etc.
KEY MACRO <i>n</i>	Soft Keyboard Macro Execution
MACRO CMD <i>n</i>	Specific Macro Command

The *X* and *n* in the table above represent the letter or number that identifies the specific command of that type. Alt-*letter* macro commands are identified by the letter to which they are assigned. Soft keyboard macro commands are identified by the number assigned to the macro by the Keyboard Layout feature (see *Keyboard Layout* in *Reference*). Variables are identified by name. Keystroke commands and macro commands are identified by special code numbers that are listed below.

Keystroke Command Codes (KEY CMD)

1 ^A	26 ^Z – Down
2 ^B – Page Number	27 ^
3 ^C – Merge from Console	[– Escape
4 ^D – Merge Date	28 ^\
5 ^E – Merge End Record	29 ^]
6 ^F – Merge Field	30 ^^ – Reset Keyboard Map
7 ^G – Merge Macro	31 ^_
8 ^H – Home	32 Cancel
9 ^I – Tab	33 Forward Search
10 ^J – Enter	34 Help
11 ^K – Delete to End of Line	35 Indent
12 ^L – Delete to End of Page	36 List
13 ^M – Search Value for [SRt]	37 Bold
14 ^N – Merge Next Record	38 Exit
15 ^O – Merge Output Prompt	39 Underline
16 ^P – Merge Primary Filename	40 End Field
17 ^Q – Merge Quit	41 Save
18 ^R – Merge End Field	44 Setup
19 ^S – Merge Secondary Filename	45 Backwards Search
20 ^T – Merge Text to Printer	46 Switch
21 ^U – Merge Update the Screen	47 Left/Right Indent
22 ^V – Ignore Meaning of Following Code	48 Date/Outline
23 ^W – Up	49 Center
24 ^X – Right & Search Wildcard – Same as Typical “?”	50 Print
25 ^Y – Left	51 Format
	52 Merge Codes
	53 Retrieve
	56 Thesaurus
	57 Replace
	58 Reveal Codes
	59 Block
	60 Mark Text

61	Flush Right	89	PgUp
62	Columns/Table	90	PgDn
63	Style	91	Screen Down (by hitting “+” on numeric keypad)
64	Graphics	92	Screen Up (by pressing “-” on numeric keypad)
65	Macro	93	Typeover
68	Shell	94	Left Margin Release (reverse tab)
69	Spell	95	Hard Page (Ctrl-Enter)
70	Screen	96	Soft Hyphen (Ctrl--)
71	Move	97	Hyphen
72	Text In/Out	98	Required (Hard) Space (Home.Space Bar)
73	Tab Align	99	Para Up
74	Footnote	100	Para Down
75	Font	101	Item Left
76	Merge/Sort	102	Item Right
77	Macro Define	103	Item Up
80	Backspace	104	Item Down
81	Delete Right	105	Alt-Home
82	Delete Word (Ctrl- Backspace)	106	Delete Row (Ctrl-Delete)107 Menu Bar (Alt=)
83	Word Right	108	Block Append
84	Word Left	109	Block Move
85	Home.Home.Right (by pressing end key)	110	Block Copy
86	Home.Home.Left (by pressing begin key on the Victor computer)		
88	GoTo (Ctrl-Home)		

Macro Command Codes (MACRO CMD)

1	{ASSIGN}	19	{FOR EACH}
2	{BELL}	20	{GO}
3	{BREAK}	21	{IF}
4	{CALL}	22	{LABEL}
5	{CANCEL OFF}	23	{LOOK}
6	{CANCEL ON}	24	{NEST}
7	{CASE}	25	{NEXT}
8	{CASE CALL}	26	{SHELL MACRO}
9	{CHAIN}	27	{ON CANCEL}
10	{CHAR}	28	{ON ERROR}
11	{;} (comment)	29	{ON NOT FOUND}
12	{DISPLAY OFF}	30	{PAUSE}
13	{DISPLAY ON}	31	{PROMPT}32 {QUIT}
14	{ELSE}	33	{RESTART}
15	{END FOR}	34	{RETURN}
16	{END IF}	35	{RETURN CANCEL}
17	{END WHILE}	36	{RETURN ERROR}
18	{FOR}		

37 {RETURN NOT FOUND}	50 {STATUS PROMPT}
38 {SPEED}	51 {INPUT}
39 {STEP ON}	52 {VARIABLE}
40 {TEXT}	53 {SYSTEM}
41 {STATE}	54 {MID}
42 {WAIT}	55 {NTOK}
43 {WHILE}	56 {KTON}
44 {Macro Commands}	57 {LEN}
45 {STEP OFF}	58 [~] (hard tilde)
46 {ORIGINAL KEY}	59 {PAUSE KEY}
47 {IF EXISTS}	61 {OTHERWISE}
48 {MENU OFF}	62 {SHELL ASSIGN}
49 {MENU ON}	63 {SHELL VARIABLE}

In Macros, the {STEP ON} feature is particularly useful when you want to track the contents of a variable. When a variable is encountered during macro execution with Step on, MACRO CMD 52 (for {VARIABLE}) is first displayed, then each letter of the name of the variable is displayed. Then its contents (if they exist) are displayed one character at a time. For example, if variable Num contains 14, the first message, MACRO CMD 52, is followed by an N, then a u, then an m, then a tilde (~), which are then followed by a l, then a 4.

If the execution command for a variable was entered as {VAR #}, VAR # is displayed instead of MACRO CMD 52. The contents are then displayed one character at a time as usual.

```

•
• (This section will execute normally.)
•
{STEP ON}
•
• (This section will execute one keystroke at a time.)
•
{STEP OFF}
•
• (This section will execute normally.)
•

```

Merge

When step is on in Merge, if the next thing to be executed is a command (e.g., {FIELD}), the command is displayed (there are no code lists as in Macros). Each character is displayed after it is written out to the resulting document.

You may find it more useful to step through merges with Reveal Codes on.

```

•
• (This section will execute normally.)
•

```

{STEP ON}

-
- (This section will execute one keystroke at a time.)
-

{STEP OFF}

-
- (This section will execute normally.)
-

{STOP} (C) ↘

This merge command stops all execution when it is encountered. It is similar to the {QUIT} command (see *{QUIT}* above) except that the rest of the primary file is not read in. If this command is found in a nested file, execution is not returned to the parent file. Chained files are also not executed.

While an executing merge is paused at a {KEYBOARD} or {INPUT} command, you can execute the {STOP} command from the keyboard. See *Inserting Merge Commands During Execution* under *Notes* at the end of this appendix.

Macros

This command is not available in Macros; however, {QUIT} in Macros is equivalent to {STOP} in Merge (see *{QUIT}* above).

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {BELL}, {CASE}.

{SUBST PRIMARY}filename~ ↘

This merge command is similar to the {NEST PRIMARY} and {CHAIN PRIMARY} commands, except with this command, the named primary file is used instead of the current primary file from the point of this command on. You are never returned to the original primary file; no commands following this one in the original primary file are executed. Local variables in a previous primary file are erased.

If you substitute a file that is not found, or no file ({SUBST PRIMARY}~), an error will be returned. You can use the {ON ERROR} command to determine what should happen if this error occurs (see *{ON ERROR}* above).

Macros

This command is not available in Macros.

Merge

In the following example, the secondary file has a field named DaysOverDue. The merge begins using the primary file INVOICE.PF, which substitutes a different primary file depending on the number in the DaysOverDue field. At the end of each substituted file, the record pointer is moved to the next record and INVOICE.PF is substituted so that it will execute again.

Primary file INVOICE.PF:

```
{IF}{FIELD}DaysOverDue<30{COMMENT}
  ^{SUBST PRIMARY}0-29.PF^{COMMENT}
^{ELSE}{COMMENT}
  ^{IF}{FIELD}DaysOverDue<60{COMMENT}
    ^{SUBST PRIMARY}30-59.PF^{COMMENT}
  ^{ELSE}{COMMENT}
    ^{IF}{FIELD}DaysOverDue<90{COMMENT}
      ^{SUBST PRIMARY}60-89.PF^{COMMENT}
    ^{ELSE}{COMMENT}
      ^{SUBST PRIMARY}Over90.PF^{COMMENT}
    ^{END IF}{COMMENT}
  ^{END IF}{COMMENT}
^{END IF}
```

Structure of primary files 0-29.PF, 30-59.PF, 60-89.PF, and Over90.PF:

```
*
• (body of file)
*
{NEXT RECORD}{COMMENT}
^{SUBST PRIMARY}Invoice.pf
```

{SUBST SECONDARY}filename

This merge command changes to the named secondary file and uses the first record in that file. If you substitute a file that is not found or no file (`{SUBST PRIMARY}`), an error will be returned. You can use the `{ON ERROR}` command to determine what should happen if this error occurs (see *ON ERROR* above).

In previous versions of WordPerfect, this merge command was represented as ^Sfilename^S.

Macros

This command is not available in Macros.

Merge

In the following example, two secondary files are used, each sorted by ZIP Code in descending order so that any records where the Zip field is blank will be at the end of the file. The `{SUBST SECONDARY}` command in the primary file below causes the records with no ZIP Code to be skipped, and the next secondary file to be used.

```
{IF BLANK}Zip^{SUBST SECONDARY}File2^{COMMENT}
  If the Zip field is blank, substitute the secondary file
^{END IF}
```

{SYSTEM}sysvar

The `{SYSTEM}` command returns the value of the given system variable. These system variables allow the macro or merge to be aware of the current state of

WordPerfect. You can use mask values (see *[STATE]* above) to check for multiple system variables. Valid system variables are listed below.

Rather than use the name of the system variable in the {SYSTEM} command, you can use the number given in parentheses next to each system variable name below. Using the number instead of the name is especially useful when you want to use the same macro in different international versions of WordPerfect. Since the system variable names are translated in international versions, running an English version of a macro would create an error at the {SYSTEM} command. The numbers, however, are the same across international versions.

Some of these system variables have restrictions when used in Merge. See the description of each variable for possible restrictions.

Sysvar	Value(s) Returned
Attrib (1)	Current font attribute:
	0 Normal
	1 Extra Large
	2 Very Large
	4 Large
	8 Small
	16 Fine
	32 Superscript
	64 Subscript
	128 Outline
	256 Italics
	512 Shadow
	1024 Redline
	2048 Double Underline
	4096 Bold
	8192 Strikeout
	16384 Underline
	32768 Small Caps

If two attributes are present, their respective numbers will be added together.

Cell (2)	Current cell position in a table, e.g., A4, E7, etc. This system variable is undefined if the cursor is not in a table when the command is encountered.
CellAttr (23)	Attributes of the current cell (see <i>Attrib</i> above for values). This system variable is undefined if the cursor is not in a table when the command is encountered.
CellState (24)	State of a cell. Divide the value returned by 256 (<i>value returned/256</i> —see <i>Appendix J: Macros and Merge, Expressions</i>) to determine the following states:
	0 Left justified.
	1 Full justified.
	2 Center justified.

Sysvar	Value(s) Returned
	3 Right justified.
	4 Decimal aligned.
	Mod the value returned by 256 (<i>value returned%256</i> —see <i>Appendix J: Macros and Merge, Expressions</i>) to determine the following states:
	1 Justify is cell-specific.
	2 Attribute is cell-specific.
	4 Cell is bottom-aligned.
	8 Cell is center-aligned.
	16 Contents type is "text."
	32 Contents is a formula.
	64 Cell is locked.
	This system variable is undefined if the cursor is not in a table when the command is encountered.
Column (3)	Current column number (numbered sequentially from left to right) in a table or in columns.
Direction (31)	Text entry direction.
	0 Direction is left-to-right.
	1 Direction is right-to-left (e.g., the Arabic version of WordPerfect).
Document (4)	Current modification status of the document on the screen:
	1 Document has been modified
	4 Document has been modified since last generated.
	256 Document is blank. (Blank documents are those that appear in document screens 1 and 2 when you first start WordPerfect, and when you exit to a clear screen. A document from which you delete all text and codes is not "blank.")
	512 Cursor is between [Tbl Def] and [Tbl Off] codes (in a table).
	1024 Cursor is between [Math On] and [Math Off] or the end of the file (Math is on).
	2048 Cursor is between [Outline On] and [Outline Off] or the end of the file (Outline is on).

Sysvar	Value(s) Returned
	4096 Cursor is between [Column On] and [Column Off] or the end of the file (Column is on). All other values are undefined and not guaranteed to be 0.
EditType (33)	Current editing mode. Returns information useful for international keyboards that need to use ASCII mnemonics in menus. 0 Cursor is in a menu prompt. 1 Cursor is in a main editing screen (e.g., Doc 1 or 2). 2 Cursor is in a substructure editing screen (e.g., Header/Footer edit). 4 Cursor is in line editing mode (e.g., entering a description for a paper/size type). 8 Cursor is in window editing (e.g., the Document Comment window).
Endnote (5)	Number of the current endnote.
Entry (29)	When in a list, the string name of the currently highlighted entry. This system variable is not available when the cursor is not in a list (see <i>List</i> below) or in the following lists: Keyboard Edit, Macro Commands, Merge Commands, and Equation Palette.
Equation (6)	Number of the current equation, according to the following formula: Return value/32=first level Return value%32=second level For example, if the current equation is 1.2, {SYSTEM}Equation~ will return 34 (i.e., 34/32=1, 34%32=2).
Figure (7)	Number of the current figure, according to the formula described under system variable <i>Equation</i> above.
Footnote (8)	Number of the current footnote.
KeyState (26)	Current keyboard status. 1 Right Shift key pressed 2 Left Shift key pressed. 4 Ctrl key pressed. 8 Alt key pressed. 16 Scroll Lock active. 32 Num Lock active.

Sysvar	Value(s) Returned
	64 Caps Lock active.
	128 Insert active.
Language (32)	Current language as found under Format: Other (Shift-F8,4,4). A two-letter abbreviation is returned.
	AF Afrikaans
	CA Catalan
	HR Croatian
	CZ Czechoslovakian
	DK Danish
	NL Dutch
	OZ English—Australia
	CE English—Canada
	UK English—United Kingdom
	US English—United States
	SU Finnish
	CF French—Canada
	FR French—France
	GA Galician
	DE German—Germany
	SD German—Switzerland
	GR Greek
	MA Hungarian
	IS Icelandic
	IT Italian
	NO Norwegian
	BR Portuguese—Brazil
	PO Portuguese—Portugal
	RU Russian
	SL Slovak
	ES Spanish
	SV Swedish
	YK Ukranian
Left (9)	Item (character or code) immediately to the left of the cursor (see <i>Appendix T: Macros and Merge, Value Tables</i>).
Line (10)	Vertical position of the cursor in 1200ths of an inch.
List (11)	Number of items in the current list. (For purposes of this system variable, a <i>list</i> is any list in WordPerfect where you can perform a name search.)
	65535 The cursor is not in a list.
	0 The list is empty.

Sysvar	Value(s) Returned
	<p>Other The number of items in the list. In List Files, "Current" and "Parent" each count as an item on the list. Therefore, {SYSTEM>List~ while in List Files returns 2 plus the number of files in the list (e.g., if there are 3 files in the list, {SYSTEM>List~ returns 5; if there are no files in the list, it returns 2).</p>
Menu (13)	Number of the menu currently active (see <i>Appendix T: Macros and Merge Value Tables</i>).
Name (12)	Name of the current document, (e.g., JONES.LTR.) Since there is no filename associated with the merged document while the merge is executing, this system variable is not available in Merge.
Network (30)	Current network status. <ul style="list-style-type: none"> 0 WordPerfect is not operating in a network environment. 1 WordPerfect is operating in a network environment.
Page (14)	Current page number.
Path (15)	Path to the current document. (e.g., C:\WP51\). (Note the slash on the end of the path.) Since there is no path associated with the merged document during a merge, this system variable is not available in Merge.
Pos (16)	Current horizontal cursor position in WordPerfect units (1200ths of an inch).
Print (17)	Current print status. <ul style="list-style-type: none"> 1 No characters have been sent to printer. 2 An attempt has been made to send characters to printer. 8 Printer is waiting for a Go. 16 Trying to rush job. 32 Trying to cancel job. 64 Network down. 128 Printing in progress. 256 Downloading a file. 2048 Last print job aborted abnormally. <p>All others are undefined and not guaranteed to be 0.</p>

Sysvar	Value(s) Returned
Right (18)	Item on which the cursor is resting. In Merge, this command will return 0 if the cursor is resting on a Soft Return or Soft Page code (see <i>Appendix T: Macros and Merge, Value Tables</i>).
Row (22)	Current row number in a table (equals 0 if the cursor is not in a table when the command is encountered).
RowState (27)	Header status of current row. 0 Not in a table, or in a table but current row is not a header row. 1 In a table, and current row is a header row.
ShellVer (25)	Current Shell version number. (Shell is an optional WordPerfect Corporation program.) The formula for determining the version from the number returned is: (Major Version# * 256) + Minor Version# For example, if you were running WordPerfect under Shell version 1.1, 257 would be returned (i.e., (1*256)+1). If you were running under Shell 2.0, 512 would be returned (i.e., (2*256)+0).
TableBox (19)	Number of the current Table box, according to the formula described under system variable <i>Equation</i> above.
TextBox (20)	Number of the current Text box, according to the formula described under system variable <i>Equation</i> above.
UserBox (21)	Number of the current User-Defined box, according to the formula described under system variable <i>Equation</i> above.
Version (28)	Current WordPerfect version number. This system variable works for version 5.1 and later, but will produce an error in version 5.0. The formula for determining the version from the number returned is: (Major Version# * 256) + Minor Version# For example, if you are running WordPerfect version 5.1, 1281 is returned (i.e., (5*256)+1).

Macros

The following example sends a message to the screen while printing is in progress, then another message when printing has stopped.

```
{PROMPT}Printing is in progress...~
      {;}Send message to user~
{WHILE}{SYSTEM}Print~&128~
      {;}While printing is in progress~
```

```

{WAIT}100~
    {;}Let WordPerfect print~
{END WHILE}
    {;}End-{WHILE}-loop~
{PROMPT}Printing has stopped.~{WAIT}40~
    {;}Send new message to user.--Display it for 4 seconds.~

```

The {WAIT} command is very important in this macro because it gives the computer processor time to print. If it weren't there, nothing would print because the macro loop would take all of the computer processor's time.

See the *Macros* subheading under the following commands for additional examples: {Item Down}, {Item Left}, {Item Right}, {Item Up}, {SHELL MACRO}.

Merge

In the following example, the message "Document is printing..." displays while printing is in progress.

```

{PRINT}{COMMENT}
    Print what has been merged to this point
~{PROMPT}Document is printing...~{COMMENT}
    Send message to user
~{WHILE}{SYSTEM}Print~&|28~{COMMENT}
    While printing is in progress
    ~{WAIT}100~{COMMENT}
        Wait 10 seconds to allow printing to continue
~{END WHILE}{COMMENT}
    Repeat the WHILE loop~

```

{TEXT}var~message~

The {TEXT} command prompts the user by displaying a message on the status line. The input (up to 129 characters) from the user is then assigned to the variable (see {CHAR} above). See *Message Display* under *Notes* at the end of this appendix for information on affecting the way messages are displayed. See also *Prompting and User Input* under *Notes* at the end of this appendix for additional methods of obtaining user input.

After the {TEXT} command executes, the contents of the status line just previous to the execution of the {TEXT} command are restored, even if the contents are the message of a previously executed {PROMPT} or {STATUS PROMPT} message to reappear after the {TEXT} command. Use {PROMPT}~ or {STATUS PROMPT}~ before the {TEXT} command to clear the status line.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {BELL}, {BREAK}, {BREAK}, {IF EXISTS}, {LEN}, {MENU OFF}, {NTOK}, {ON ERROR}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {BELL}, {IF EXISTS}, {NTOC}.

{VARIABLE}var~ ↻ ➔

This command accesses the contents of global and local (Merge) variables. If you have both a global and local variable by the same name, this command accesses the local variable. There is no way to access global variables while local variables of the same name exist. (For an explanation of global and local variables, see *Appendix L: Macros and Merge, Variables.*)

You can also pass information between macro variables and Shell variables (Shell version 3.0 or higher) using the {SHELL ASSIGN} and {SHELL VARIABLE} commands (see {SHELL ASSIGN} and {SHELL VARIABLE} above).

After a value has been assigned to a variable (see {ASSIGN} and {LOCAL} above), the {VARIABLE}var~ command can be placed anywhere you would normally place the variable contents. It can be placed within or as an argument for another command, or by itself.

A variable can hold no more than 129 keystrokes (characters).

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {;} (comment), {ASSIGN}, {BELL}, {BREAK}, {CASE}, {CASE CALL}, {CHAR}, {ELSE}, {FOR EACH}, {GO}, {IF}, {Item Down}, {Item Left}, {Item Right}, {Item Up}, {KTON}, {LOOK}, {MENU OFF}, {NEXT}, {NTOC}, {ON ERROR}, {RESTART}, {SHELL ASSIGN}, {SHELL VARIABLE}, {WHILE}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {ASSIGN}, {BELL}, {BREAK}, {CASE}, {CASE CALL}, {COMMENT}, {CTON}, {DOCUMENT}, {IF}, {LEN}, {LOOK}, {MID}, {NEST MACRO}, {NEXT}, {NEXT RECORD}, {NTOC}.

{WAIT}10ths second~ ↻ ➔

The {WAIT} command delays further execution of the macro or merge for the indicated time. This command is useful when you want a message to be displayed for a certain amount of time.

Macros

See the *Macros* subheading under the following commands for examples of how to use this command: {ON CANCEL}, {ON ERROR}, {STATUS PROMPT}, {SYSTEM}.

Merge

See the *Merge* subheading under the following commands for examples of how to use this command: {BELL}, {ON CANCEL}, {ON ERROR}, {SYSTEM}.

{WHILE}expr

While the expression *expr* is true, the commands between the {WHILE} and the {END WHILE} are repeatedly executed. This command is like the {FOR} command, except that it does not increment a value each time through the loop. In order to end the loop, use another command that will force the expression to be evaluated as false (see *Loops* under *Notes* at the end of this appendix).

Remember that if you use a variable in *expr*, the variable must already exist *before* the {WHILE} command is executed.

Macros

In this example, the message “Counting” will be displayed until variable “Count” reaches 50.

```
{ASSIGN}Count`0`  
    {;}Initialize var Count. (This command creates the variable, then  
    assigns it "0")  
{WHILE}{VARIABLE}Count`<50`  
    {PROMPT}Counting`  
    {;}Send the prompt "Counting".  
    {ASSIGN}Count`{VARIABLE}Count`+1`  
    {;}Increment var Count each time through the loop`  
{END WHILE}
```

See the *Macros* subheading under {SYSTEM} for an additional example.

Merge

See the *Merge* subheading under {SYSTEM} for an example of how to use this command.

Notes

Chaining, Nesting, and Substituting

Chaining a macro or merge file causes the named file to take over control of execution as soon as execution of the current file is complete. A single file (whether a macro file, a primary merge file, or a secondary merge file) can only use one chain command. If you include more than one chain command, the last one encountered during the merge or macro will be the only one executed. The chained file only executes when the current macro or merge file is completely finished.

The commands that chain are as follows:

```
{CHAIN}   
{CHAIN MACRO}   
{CHAIN PRIMARY}   
{CHAIN SECONDARY} 
```

Nesting is the process of moving control of execution to another file (such as another macro file or primary file). Execution then returns to the parent file (directly after the nest command) when execution of the nested file terminates.

Nesting a macro is similar to calling a subroutine (see *Subroutines* below), except that the nested macro is not a part of the calling macro. It is a separate macro, referenced by giving the macro name or the full pathname if it is not in the Keyboard/Macro Files directory currently specified in Location of Files (see *Location of Files in Reference*). You do not need to include the .WPM extension in the filename or pathname. Because execution is automatically returned when the nested macro has finished, you do not need to place a {RETURN} command at the end of a nested macro.

If there are certain procedures which you frequently use in your macros or merges, you can put them in smaller macros and nest them when they are needed.

You can nest macro and merge files several levels deep (see *Levels* below). The main file nests a second file; the second file nests a third. After the third file has finished, the rest of the second file is executed. After the second file has finished, the remaining part of the main file is executed.

The commands that nest are as follows:

```
{NEST}                ↻
{NEST MACRO}           ↻
{NEST PRIMARY}        ↻
{NEST SECONDARY}      ↻
```

Substituting is the process of permanently changing control of execution to another file. The substitution takes effect as soon as the command is encountered, and control is never returned to the file that contained this command.

The commands that substitute are as follows:

```
{SUBST PRIMARY}      ↻
{SUBST SECONDARY}    ↻
```

Commenting Out

You can use the {;} or {COMMENT} commands to *comment out* sections of a macro or merge that you don't want to execute. This practice is useful for testing and debugging your macros and merges.

Anything (including commands) between the {;} or {COMMENT} command and the next tilde is ignored in execution. It is easy to comment out commands such as {NEST}, {CHAIN}, etc., where there is only one tilde associated with the command:

```
{;}{NEST}thefile~
```

However, if the commands to be commented out have more than one tilde, you must insert a {;} or {COMMENT} to correspond to each one:

```
{COMMENT}{ASSIGN}Number~{COMMENT}45~
```

When multiple tildes are involved, you may find it easier to delete the additional tildes in the section to be commented out so that you only have to use one {;} or {COMMENT} command. The tildes would have to be re-inserted if you later decided to restore the section.

In Merge, a frequent use of {COMMENT} is to comment out Hard Return and Tab codes you use to format commands in the file. If you do not comment out these codes, they are included in the resulting merged document. See the *Merge* subheadings in this appendix for examples. The example under the {COMMENT} command may be especially useful.

If Blank, If Not Blank, and ?

In previous versions of WordPerfect, a question mark (?) was used to avoid merging a field if it was blank (e.g., ^F1?^). This system had certain drawbacks, such as that anything in the primary file after the question mark but on the same line was also not printed if the field was blank. The {IF BLANK} and {IF NOT BLANK} commands in WordPerfect 5.1 have eliminated this problem, plus added all the flexibility of a standard IF structure.

Although you can still use the question mark construction (represented as either {FIELD}fieldname? or ^Ffieldname?^ in 5.1), you will probably find the {IF BLANK} and {IF NOT BLANK} commands more flexible.

In some cases, however, you may want to use the question mark as a shortcut for the {IF BLANK} and {IF NOT BLANK} commands. So, for example, if you had a list of addresses where you wanted to include the company name if it existed, but not if it didn't, you could use the question mark as a short cut method of handling the "company name line." For example:

```
{FIELD}name~  
{FIELD}company?~  
{FIELD}address~
```

In this example, if the company field is blank, no information is merged and the entire line is eliminated, moving the address up one line. To accomplish the same task with the {IF NOT BLANK} command, you could do the following:

```
{FIELD}name~  
{IF NOT BLANK}company~{COMMENT}  
~{FIELD}company~  
{END IF}{COMMENT}  
~{FIELD}address~
```

To insert the question mark, simply type it as the last character of the field name. If you are using numbered fields, type the question mark after the number.

Inserting Merge Commands During Execution

While an executing merge is paused at a {KEYBOARD} or {INPUT} command, you can execute the {QUIT}, {NEXT RECORD}, or {STOP} commands from the keyboard.

- 1 Press **Merge Codes** (Shift-F9).
- 2 Select **Quit** (1), **Next Record** (2), or **Stop** (3).

Selecting the command from this menu functions as if the command had been encountered in the primary file. See the description of each of these commands in this appendix for more information on their functions.

Levels

In Macros, you can have up to 30 levels of execution. Each {NEST} command uses 2 levels (one for executing the macro and one for a possible CHAIN command). Each {CALL}, {CASE CALL}, nested {IF}, {FOR}, {FOR EACH}, or {WHILE} command uses 1 level.

In Merge, you can have up to 20 levels of execution *per file*. {IF} commands do not require a level (they can be nested indefinitely). Each {CASE}, {CASE CALL}, {FOR}, or {WHILE} uses 1 level.

Execution levels are maintained in *stacks*. In general, Macros and Merge use separate stacks to maintain levels. However, all expressions use the Macros stack. Generally, expressions use one level, but may use more if they are very complex. However, since expressions use the Macros stack, they effectively use no levels in Merge.

In Merge, the levels for the nesting commands ({NEST MACRO}, {NEST PRIMARY}, or {NEST SECONDARY}) are maintained in a separate stack. They do not require an execution level (because for each file nested you have 20 new execution levels), but they do require a nesting level. Files can be nested 10 deep.

The levels used by these commands are released when the command ends normally. For example, the level used by a {CALL} command is released when a {RETURN} command ends the subroutine. The level used by the {IF} command is released when the {END IF} is executed, and the level used by the {FOR} command is released at the {END FOR} after the last iteration of the FOR loop. If any of these level-using structures are exited abnormally, the level is not released. For example, if you use a {GO} or {CASE} in the subroutine executed by a {CALL} command, the level corresponding to the {CALL} is never released. If you "lose" 28 levels in this way, the macro will terminate.

Loops

Whenever the same commands repeat several times, that section of the macro or merge is called a loop. For example,

```
{LABEL}Top`
    {;}Top-of-the-loop`
endless-loop
    {;}Type:"endless-loop"``
```

```
{GO}Top`
      {;}Go-to-top`
```

In this example, the words “endless loop” are written continuously to the screen. There is no way to stop execution without pressing **Cancel** (F1), Ctrl-Break, etc. When you create a loop, it is very important to have a way for the loop to end.

In the following example, a count is kept of the number of times the text has been written to the screen. After the tenth time, the loop ends.

```
{ASSIGN}Counter`0`
      {;}Assign-0-to-var-Counter`
{LABEL}Top`
      {;}Top-of-the-loop`
      {ASSIGN}Counter`{VARIABLE}Counter`+1`
      {;}Add-1-to-var-Counter`
Loop`{VARIABLE}Counter`Enter`
      {;}Type-"loop"#{
      {IF}{VARIABLE}Counter`=10`
      {;}If-this-is-the-tenth-time`
      {QUIT}
      {;}Quit-the-macro`
      {ELSE}
      {;}Otherwise.`
      {GO}Top`
      {;}Go-to-top-(repeat-the-loop)`
      {END IF}
      {;}End-of-{IF}-structure`
```

There are many types of loops you can create with Macros and Merge commands. You can use an IF structure as in the above examples, or you can use the {FOR}, {FOR EACH}, or {WHILE} commands (see each command above). You can also create loops by going to or calling subroutines (with the {GO} or {CALL} command). The structure you should use for any given loop will depend on the task you are trying to accomplish.

Message Display

The following commands send a message to the screen when executed:

{CHAR}	00	Y
{INPUT}	00	Y
{PROMPT}	00	Y
{STATUS PROMPT}	00	Y
{TEXT}	00	Y

In Macros, you can use control characters to both position the message on the screen, and affect the display attributes (such as Bold, Mnemonics, etc.) of the message. For information on using control characters and display attributes, see *Macros, Message Display in Reference*.

In Merge, neither control characters nor display attributes are available when sending messages to the screen. However, there are techniques for affecting the display of messages:

Soft Wrapping

If you include a message that is longer than you have room for on the status line, it will automatically wrap to the next line. The first line of the message will *scroll* up to the next line. The message will continue to scroll until the entire message is displayed. (You can also use this method in Macros.)

Hard Wrapping

If you want to determine where a message will wrap (rather than letting it soft wrap), insert a hard return [HRt] at each point in the message where you want it to wrap.

Nesting a Macro

If you decide you need or want the positioning and attributes available for message display in Macros, you can put the command that sends the message in a nested macro (see *{NEST MACRO}* above).

See also *Prompting and User Input* below.

Previous Merge Commands

In previous versions of WordPerfect, some of the Merge programming commands were available, although they were represented using a caret (^) and a letter as a control character, instead of a command made up of a word or words in braces, as they are in WordPerfect 5.1. The following is a list of these command equivalents:

Old Command	New Command
^C	{KEYBOARD}
^D	{DATE}
^E	{END RECORD}
^Fname^ or ^F#^	{FIELD}
^Gmacroname^G	{CHAIN MACRO}
^N	{NEXT RECORD}
^Omessage^O	{PROMPT}
^Pfilename^P	{NEST PRIMARY}
^Q	{QUIT}
^R	{END FIELD}
^Sfilename^S	{SUBST SECONDARY}
^T	{PRINT}
^U	{REWRITE}
^V	{MRG CMND}

If you have files that use the old code format, see *Previous Versions* under *Merge* in *Reference* for information on whether or not they will have to be converted for use with WordPerfect 5.1.

Prompting and User Input

The following commands can be used to prompt the user of your macro or merge, and/or obtain input from the user:

{CHAR}	☺	Y
{INPUT}	☺	YY
{KEYBOARD}		YY
{LOOK}	☺	Y
{PAUSE}	☺	
{PAUSE KEY}	☺	
{PROMPT}	☺	Y
{STATUS PROMPT}	☺	YY
{TEXT}	☺	Y

These commands are similar to each other in some ways, yet different in others. The following chart shows some of these differences and similarities. Comparisons are based on the following features of each command:

- Whether or not a message is sent with the command or command combination.
- If a message is sent, whether the message remains on the screen until 1) the screen is rewritten or the message is overwritten with a new command, 2) input is terminated, or 3) you exit WordPerfect or the message is overwritten with a new command.
- Whether or not execution stops at the command or command combination for user input.
- If execution stops for input, whether the input goes directly into the document or into a variable.
- If execution stops for input, the method of terminating input.
- Whether the command or command combination is available in Macros only, Merge only, or in both features.

	Sends Message?	Message Duration	Stops for user input?	Input Goes To:	Input Termination method:	Available In:
Commands						
{CHAR}	Yes	R/O	Yes	Var.	1 Char.	Both
{INPUT}	Yes	T	Yes	Doc.	Enter (Macros) F9 (Merge)	Both
{KEYBOARD}	No	n/a	Yes	Doc.	F9	Merge
{LOOK}	No	n/a	No	Var.	1 Char. or nothing	Both
{PAUSE}	No	n/a	Yes	Doc.	Enter	Macros
{PAUSE KEY}	No	n/a	Yes	Doc.	Specified key	Macros
{PROMPT}	Yes	R/O	No	n/a	n/a	Both
{STATUS PROMPT}	Yes	E/O	No	n/a	n/a	Both
{TEXT}	Yes	R/O	Yes	Var.	Enter	Both

Command Combinations

{PROMPT} with {KEYBOARD}	Yes	R/O	Yes	Doc.	F9	Merge
*{PROMPT} with {PAUSE}	Yes	R/O	Yes	Doc.	Enter	Macros
*{PROMPT} with {PAUSE KEY}	Yes	R/O	Yes	Doc.	Specified key	Macros
{STATUS PROMPT} with {KEYBOARD}	Yes	E/O	Doc	F9	Merge	
{STATUS PROMPT} with {PAUSE}	Yes	E/O	Yes	Doc.	Enter	Macros
{STATUS PROMPT} with {PAUSE KEY}	Yes	E/O	Yes	Doc.	Specified key	Macros

Legend

n/a	Not applicable
T	Termination
R/O	Rewrite Screen or Overwrite Message
E/O	Exit WordPerfect or Overwrite Message

*Although {PROMPT} messages normally appear only until the screen is rewritten or the message is overwritten, the message will reappear even after these normal terminations if the {PROMPT} command is followed by a {CHAR} or {TEXT} command.

This occurs because the {CHAR} and {TEXT} commands take a "picture" of the status line, execute, and then redisplay the "picture."

Record Pointer

In a secondary merge file, there are several records. As a merge is executed, the primary file is repeated once for every record in the secondary file (unless you use commands to alter this procedure). The *record pointer* is the internal device that WordPerfect uses to keep track of which record it is currently using from the secondary file. (You cannot see the record pointer.)

At the start of a merge, the record pointer points to the first record in the secondary file. As the merge progresses, the pointer automatically moves to each subsequent record as the primary file is repeated. You can force the record pointer to move to the next record by using the {NEXT RECORD} command (see [NEXT RECORD] above). This is useful when you want to change to the next record *without* repeating the primary file.

Subroutines

A subroutine is a set of commands you may want to execute several times in a macro or merge. Instead of repeating the commands each time you need them, you can include them only once, then send execution to that spot each time you want the commands performed. Inserting a call to a subroutine functions as if its commands were placed at each point of the call. There is no limit to the number of subroutines you can have in a macro or merge file.

A subroutine is identified by two commands. The first command, {LABEL}, marks the beginning of a subroutine. The second command, {RETURN}, marks the end.

Some subroutines do not need a {RETURN} at the end, if the commands in the subroutine guarantee correct branching or returning.

The commands you can use to send execution to a subroutine are as follows:

{CALL}		
{CASE}		
{CASE CALL}		
{GO}		
{ON CANCEL}		
{ON ERROR}		
{ON NOT FOUND}		

Since there may be more than one subroutine in a macro, the name associated with each one must be unique. The label name must be entered as an argument in the command that sends execution to the subroutine, and must match the name following the {LABEL} command identifying the beginning of the subroutine.

If you use local variables in Merge, you cannot use the same name for both a subroutine and a local variable.

Troubleshooting

If you have trouble getting your macros or merges to work, check to see that you have not made one of the following errors:

- Incorrect number or placement of tildes. (See the descriptions of the commands you are using.)
- Using a variable name instead of the `{VARIABLE}var~` command, or vice versa. (See the description of the commands you are using, and *Appendix L: Macros and Merge, Variables.*)
- Other syntax errors. (See the descriptions of the commands you are using.)
- Infinite loops. (See *Loops* above.)
- Trying to reference a global variable while a local variable of the same name is accessible. (See *Appendix L: Macros and Merge, Variables.*)
- Using a local variable and label of the same name. (See *{LOCAL}* and *{LABEL}* above.)
- In a merge, accessing a global variable that contains keystrokes. (See *Keystroke Commands in Variables* in *Appendix L: Macros and Merge, Variables.*)
- Missing a `{RETURN}` at the end of a subroutine. (See *Subroutines* above.)
- Misspelled variable or label names.
- Going to or calling non-existent labels, or accessing non-existent variables.
- In a merge, incorrect placement of `{COMMENT}` command and its tilde, or lack of use of the `{COMMENT}` command. (See *{COMMENT}* and *Commenting Out* above.)
- Nesting files too many deep or using too many levels. (See *Levels* above.)
- Performing a numeric operation on a string. This usually happens when you use an invalid character (such as a space, period, or comma) in an expression which is assigned to a variable. (See *Appendix J: Macros and Merge, Expressions.*)
- Missing loop terminators (see *{END FOR}*, *{END IF}*, *{END WHILE}*).
- Missing or improper nested files, or improper termination of nested files (see *{NEST}* *{NEST MACRO}*, *{NEST PRIMARY}*, *{NEST SECONDARY}*, and *Chaining, Nesting, and Substituting* above).
- In a merge, using an open code (such as a Tab Set or Margin Set) in a primary file that is not reset at the beginning of the file. (Any open code encountered during the merge will be in effect in the resulting merged document until another open code of the same type is found to counteract it.)

See Also: Lessons 23 through 25; Macros; Macros, Define; Macros, Execute; Macros, Macro Editor; Macros, Message Display; Merge; Appendix I; Appendix J; Appendix L

Appendix L: Macros and Merge, Variables

A variable represents a place in memory where data is stored. As its name indicates, the data in a variable is changeable. You might want to use variables to calculate and/or keep track of values and text which change during execution.

System Variables vs. User-Defined Variables

There are two major types of variables in WordPerfect: *system variables* and *user-defined variables*. System variables are variables that WordPerfect creates and maintains, and that contain information about the current state of WordPerfect. You cannot change the names or contents of these variables, but you can find out and use their contents at any given time. The names and possible contents of system variables are listed in *Appendix K: Macros and Merge, Programming Commands* under the description of the {SYSTEM} command.

User-defined variables are variables that *you* create and name, and whose contents *you* determine. You can perform operations on these variables to change their contents. There are two sub-categories of user-defined variables: *global* variables and *local* variables.

Global vs. Local Variables

Global variables are accessible from anywhere inside a macro or merge.

Local variables are available only in Merge, and are stored in a separate place in memory from global variables. They are only accessible from the file in which they are created. For example, if you create a local variable named Number in a primary file, the secondary files or other primary files cannot access the information stored in it. When you nest merge files, the local variables in the parent file are not visible to the nested file. When you return to the parent file, the local variables in the nested file no longer exist, but the local variables in the parent file are once again accessible.

Local variables take precedence over global variables. For example, suppose you have both a global and local variable named Number. If you try to access the global variable Number from inside a file where the local variable Number is accessible, you will get the contents of the local variable. The global variable Number still exists, but is inaccessible until execution moves to where the local variable Number is no longer accessible (out of the merge file).

Naming Variables

Variables, whether local or global, must have a unique name by which you refer to them. The name may consist of any combination of the characters in the WordPerfect character sets. However, in Macros, only the first 7 letters are used to determine uniqueness. So, in Macros, ABCDEFG and ABCDEFGH are considered by WordPerfect to refer to the same variable. In Merge, however, 15 characters are used to determine uniqueness. In Merge, ABCDEFG (7 characters long) and ABCDEFGH (8 characters long) would be considered two separate,

unique variables, but ABCDEFGHIJKLMNO (15 characters long) and ABCDEFGHIJKLMNOP (16 characters long) would be considered the same variable.

Variable names are not case sensitive. Abc, AbC, ABC, abc, are all considered by WordPerfect to be the same variable.

Variables receive their names when they are *assigned*. See *Assigning Variables* below for more information.

Variable Contents

All user-defined variables can contain text or numbers. In addition to text and numbers, global variables can also contain keystrokes. The method you use to assign variables may affect the kinds of codes, commands, and keystrokes that can be assigned to a variable (see *Assigning Variables* and *Keystroke Commands in Variables* below). A user-defined variable can only hold 129 keystrokes. A keystroke can be a character, an extended character, a keystroke command (in Macros), or a programming command.

Assigning Variables

You assign a global variable with the {ASSIGN} command, and a local variable with the {LOCAL} command. For example, the following two statements assign two different variables, one global, and one local:

```
{ASSIGN}Number~45~  
{LOCAL}Number~36~
```

The {ASSIGN} command creates a global variable named Number and puts in "45" as its contents. The {LOCAL} command creates a separate, local variable named Number and puts in "36" as its contents. (See the description of the {ASSIGN} and {LOCAL} commands in *Appendix K: Macros and Merge, Programming Commands*.)

In a macro, the {ASSIGN} command can only be entered from within the Macro Editor (see *Inserting Commands under Macros, Macro Editor in Reference*). In a merge file, the {ASSIGN} and {LOCAL} commands are inserted from the normal editing screen by pressing **Merge Codes** (Shift-F9) twice, then selecting the command from the command access box (see *Inserting Merge Commands under Merge in Reference*).

In addition to using the {ASSIGN} and {LOCAL} commands, the following commands also assign variables:

```
{CHAR}           {LOOK}  
{FOR}           {SHELL ASSIGN}  
{FOR EACH}     {TEXT}
```

See *Appendix K: Macros and Merge, Programming Commands* for a description of each of these commands.

The following rules determine whether the variable assigned by the {CHAR}, {LOOK}, and {TEXT} commands are local or global in a merge:

- If a local variable by the name used in the command exists, the command will assign to the local variable.
- If no local variable by the name used in the command exists, but a global variable by that name does exist, the command will assign to the global variable.
- If no variable exists by the name used in the command, a global variable of that name is created and assigned by the command.

The {FOR} command in Merge assigns by the same rules as above, except that if no variable exists by the name used in the command (the third rule), a *local* variable is created and assigned by the command. This feature allows recursion using the {FOR} command in Merge.

You can also assign global variables without using a command from the normal editing screen or while in macro definition mode (see *Macros, Define* in *Reference* for an explanation of macro definition mode). To assign the variable,

- 1 Press **Macro Commands** (Ctrl-PgUp).
- 2 If you are in macro definition mode, a menu appears. Select **Assign** (3). Otherwise, skip to the next step.
- 3 Enter the variable name.

You are prompted for the value.

- 4 Enter the variable contents.

Using this method, you can only assign characters and numbers to the variable. You can enter up to 79 characters. If the characters you enter form a valid expression (see *Appendix J: Macros and Merge, Expressions*), the expression is evaluated and the result is assigned to the variable.

To assign a block of existing text to the variable (from the normal editing screen or while in macro definition mode),

- 1 Block the text (Alt-F4).
- 2 Press **Macro Commands** (Ctrl-PgUp).
- 3 If you are in macro definition mode, a menu appears. Select **Assign** (3). Otherwise, skip to the next step.
- 4 Enter the variable name.

The first 128 characters are assigned to the variable.

When codes are encountered in the block, they are converted (if possible) to the keystroke command that would normally insert that code. For example, if the block includes a [Tab] code, it is converted to the keystroke command {Tab}.

The codes that can be converted are:

Code	Converted To
[♦Indent]	{ Indent }
{♦Indent♦}	{ Indent }
[Tab]	{ Tab }
[Center]	{ Tab }
[Flsh Rgt]	{ Tab }
[♦Mar Rel]	{ Tab }
[–] (Hyphen character)	– (dash)
– (Hard Hyphen)	– (dash)
[HRt]	{ Enter }
[Hrt–Spg]	{ Enter }
[Dorm HRt]	{ Enter }
{SRt}	(space)
{SPg}	(space)
{HPg}	{HPg}

See *Keystroke Commands in Variables* below for information on limitations to using variables that contain keystroke commands.

If a variable already exists, assigning new contents to it replaces the previous contents without warning.

Executing Variables

You can *execute* or *write out* a variable anywhere you would want its contents. For example, by executing a variable you can do the following:

- Use the contents of the variable as a subroutine.
- Insert the contents as text in a document, or in the message strings of programming commands.
- Provide variable arguments in other programming commands.

To execute a variable, you use the {VARIABLE} command. For example, the statement {VARIABLE}Number~ would execute the variable named Number.

If a global variable is named with a single-digit number (1, 2, 3, 4, 5, 6, 7, 8, 9, or 0) (see *Naming Variables* above), the Macro Editor allows a short-cut method of inserting the command to execute the variable in the macro. You can press **Ctrl-v.Alt-#**, where # is the number of the variable, or if you have pressed **Macro Define** (Ctrl-F10) to turn on command insert mode, just press **Alt-#**. The command that is inserted looks like this: {VAR #}. This command is equivalent to {VARIABLE}#~. Remember, however, that this shortcut is only available in the Macro Editor.

Another advantage of naming global variables with a single digit is that you can execute them at the normal editing screen. For example, if you are at the normal editing screen and want to know the current contents of variable 5, press **Alt-5**.

The contents are executed/written out. You cannot use this method to execute variables of other names at the normal editing screen.

Variable Duration

Local variables exist only in the file in which they are created. Once the file that created the variables is exited or the merge ends, the local variables are erased (and the memory assigned to them is released). However, the contents of global variables remain in memory until you exit WordPerfect. To conserve memory, local variables instead of global variables whenever possible.

If you want to erase a variable before WordPerfect does it for you, assign the variable "nothing" by using the following commands: {ASSIGN}var~~ or {LOCAL}var~~. These commands not only empty the variable of its contents, but also release the memory used by the variable. After this command, the variable no longer exists. It is a good idea to empty variables at the beginning of a macro or merge in which they are used (unless the macro or merge assigns new contents to them).

Operations on Variables

All variables can be compared to each other, and user-defined variables can have other operations performed on them. Operations are performed using various programming commands (see *Appendix K: Macros and Merge, Programming Commands* and *Appendix J: Macros and Merge, Expressions*).

Keystroke Commands in Variables

In Macros, variables are executed as keystrokes. Therefore, if in a macro you assign keystroke commands (such as {Search}, {Tab}, {Enter}, {Home}) to a variable, then execute the variable, the keystrokes will be performed.

Keystroke commands do not exist in Merge, so it is impossible to assign keystroke commands to a variable in a merge.* (You also cannot enter keystroke commands in the merge files themselves.)

However, since all variables assigned in macros are global, it is possible to execute within a merge a global variable that was assigned keystroke commands by a macro. If you do so, the keystrokes will not be executed as they would be in a macro. Instead, the character equivalents of the keystroke commands will be written out to the document.* If you are combining macros and merges and find unexpected control characters (such as ^I, ^F, ^H) or extended characters in the merged document, see that you have assigned your variables properly.

There is one exception to this rule. When you use a {CHAR} command in a merge, the user can press **Enter at the prompt to assign the variable the keystroke command [Enter]. If you then execute the variable, a [HRt] is inserted in the resulting document. See {CHAR} in Appendix K: Macros and Merge, Programming Commands for more information on using the {CHAR} command.*

See Also: Macros; Macros, Define; Macros, Execute; Macros, Macro Editor; Macros, Message Display; Merge; Appendix I; Appendix J; Appendix K

Appendix M: Pull-Down Menus

This section contains a list of the pull-down menus used in WordPerfect. Information about using the pull-down menus can be found in *Pull-Down Menus* in *Reference*.

MENU BAR

File Edit Search Layout Mark Tools Font Graphics Help

File Menu

- Retrieve
- Save
- Text In ♦
 - DOS Text (CR/LF to HRt)
 - DOS Text (CR/LF to SRt)
- Spreadsheet ♦
 - Import
 - Create Link
 - Edit Link
 - Link Options
- Text Out ♦
 - DOS Text
 - Generic
 - WP5.0
 - WP4.2
- Password ♦
 - Add/Change
 - Remove
-
- List Files
- Summary
-
- Print
-
- Setup ♦
 - Mouse
 - Display
 - Environment
 - Initial Settings
- Keyboard Layout
- Location of Files
-
- Go to DOS (or Go to Shell)
- Exit

Edit Menu

- Move (Cut)
- Copy
- Paste
- Append ♦
 - To File
 - To Clipboard
-
- Delete
- Undelete
-
- Block
- Select ♦
 - Sentence
 - Paragraph
 - Page
-
- Tabular Column
- Rectangle
- Comment ♦
 - Create
 - Edit
- Convert to Text
- Convert Case ♦
 - To Upper
 - To Lower
- Protect Block
-
- Switch Document
- Window
-
- Reveal Codes

Search Menu

Forward
Backward
Next
Previous

Replace

Extended ♦
 Forward
 Backward
 Next
 Previous

 Replace

Go to

Layout Menu

Line
Page
Document
Other

Columns ♦
 On
 Off

 Define
Tables ♦
 Create
 Edit
Math ♦
 On
 Off

 Define
 Calculate

Footnote ♦
 Create
 Edit
 New Number
 Options
Endnote ♦
 Create
 Edit
 New Number
 Options
 Placement

Justify ♦
 Left
 Center
 Right
 Full
Align ♦
 Indent ->
 Indent -><-
 Margin Rel <-

 Center
 Flush Right
 Tab Align

 Hard Page

Styles

Mark Menu

- Index
- Table of Contents
- List
- Cross-Reference ♦
 - Reference
 - Target
 - Both
- Table of Authorities ♦
 - Mark Short
 - Mark Full
 - Edit Full
-
- Define ♦
 - Index
 - Table of Contents
 - List
 - Table of Authorities
-
- Generate
-
- Master Documents ♦
 - Expand
 - Condense
- Subdocument
-
- Document Compare ♦
 - Add Markings
 - Remove Markings

Tools Menu

- Spell
- Thesaurus
-
- Macro ♦
 - Define
 - Execute
-
- Date Text
- Date Code
- Date Format
-
- Outline ♦
 - On
 - Off
-
- Move Family
- Copy Family
- Delete Family
- Paragraph Number
- Define
-
- Merge Codes ♦
 - Field
 - End Record
 - Input
 - Page Off
 - Next Record
 - More
- Merge
-
- Sort
-
- Line Draw

Font Menu

Base Font

Normal
Appearance ♦
 Bold
 Underline
 Double Underline
 Italics
 Outline
 Shadow
 Small Cap
 Redline
 Strikeout
Superscript
Subscript
Fine
Small
Large
Very Large
Extra Large

Print Color

Characters

Graphics Menu

Figure ♦
 Create
 Edit
 New Number
 Options
Table Box ♦
 Create
 Edit
 New Number
 Options
Text Box ♦
 Create
 Edit
 New Number
 Options
User Box ♦
 Create
 Edit
 New Number
 Options
Equation ♦
 Create
 Edit
 New Number
 Options

Line ♦
 Create Horizontal
 Create Vertical

 Edit Horizontal
 Edit Vertical

Help Menu

Help
Index
Template

Appendix N: Startup Options

When starting from DOS, you may enter WordPerfect with any of these options:

wp
wp/bp=*printing output buffer*
wp/cp=*code page number*
wp/d=*drive\directory*
wp *filename*
wp/f2
wp/lf
wp/lm
wp/m=*macroname*
wp/mono
wp/n2
wp/nb
wp/nc
wp/nd
wp/ne
wp/nf
wp/nh
wp/nk
wp/no
wp/nt=*network #*
wp/pf=*path*
wp/ps=*path*
wp/r
wp/sa
wp/ss=*rows.columns*
wp/u=*username*
wp/w=*workspace*
wp/ws
wp/x
wp/32

Any of the options may be combined. See *DOS and WordPerfect in Reference* for general information about startup options.

Startup options used in other products (e.g., Shell) are not passed to WordPerfect. However, you can use the DOS SET command to have options automatically included when you start WordPerfect (see *DOS SET Command* below).

Notes

/bp=printing output buffer

Specifies the amount of memory (in K) allocated for the printing output buffer if you are printing directly to the hardware port (see *Print to Hardware Port* under *Printer, Edit in Reference*). The allowable range is 0-63. Setting this option to zero disables printing to the hardware port.

/cp=code page number

Tells WordPerfect which code page your hardware (BIOS) system uses. Setting this option lets you access the proper keyboard and 256-character ASCII character set for which your system is preset. WordPerfect supports the following code pages: 437 Standard, 850 PC Multilingual, 895 Czechoslovakian, 851 Greek, 8510 Greek Alternate, 852 Eastern Language Standard, 860 Portuguese, 8600 Portuguese Alternate, 8601 Brazilian Alternate, 861 Icelandic, 863 French (Canada), 865 Norwegian and Dutch, 897 Hungarian, 866 Russian, and 8660 Russian Alternate.

To create a code page which maps values 128-254 of the first 256 ASCII characters defined by DOS ROM, create a file called WP:xxx.WCP (where xxx is a number that is padded left with zeroes; e.g., WP0002.WCP instead of WP2.WCP). In the file, type the ASCII number, a space or tab, the WordPerfect character set number, a space or comma, the WordPerfect character number, then a hard return (e.g., 128 8.1[HRt]). The first 32 characters in the WP:xxx.WCP file can be remapped. Start WordPerfect with the /cp option and the number of the file (e.g., /cp=2 or /cp=0002).

Using this option will not make WordPerfect display or print in these languages. For more information on code pages, see your DOS manual.

/d-drive\directory

Redirects the overflow files and temporary buffers to the specified directory. If you have a two disk drive system (no hard disk), you can use this option in combination with /r to enable you to remove the WordPerfect 2 diskette from drive A. To do so, you can redirect the files to a RAM disk or to drive B. For example, if your RAM disk is D, start WordPerfect with **wp/d-d:/r**.

You must have expanded memory to use the /r option.

filename

Retrieves the specified file from the Documents directory specified in Setup: Location of Files. If no directory is specified for the Documents directory, then WordPerfect will look for the file in the current directory. You can also specify full or partial pathnames.

/f2

Should be used if you are having problems with extended text display (more than 25 lines and 80 columns) on your monitor that the /ss option cannot solve. While this problem was first resolved to support the Paradise Autoswitch EGA 480 and Paradise VGA Plus video boards, the /f2 option may correct a similar problem with other video boards.

To use the /f2 option, set the desired text mode with the software included with the video board. Then, start WordPerfect with the /f2 option. WordPerfect should automatically recognize the current number of columns and rows and if possible will preserve this configuration when exiting graphics screens or exiting to DOS. This option remains in effect until WordPerfect is exited.

/lf

Forces WordPerfect to use a Line Printer font (16.66 cpi) when printing the List Files screen. This startup option allows you to print the List Files screen to a printer with an unprintable zone.

/ln

Lets you update or change your license number.

/m-macroname

Starts the specified macro when WordPerfect starts. If the macro is not located in the keyboard/macro directory, you must include its complete pathname.

/mono

Lets you better access the capabilities of a machine that can emulate both monochrome and color adapters when that machine is set for monochrome emulation. Such machines include the Compaq Portable III and the Compaq Portable 386/20.

Make sure that no text driver is selected (see Text Screen Type in Reference).

/n2

Disables the Document 2 screen. This option is useful when you want to run WordPerfect under limited memory situations. In this mode, pressing Switch (Shift-F3) only converts blocked text to uppercase or lowercase. Using the Window feature (Ctrl-F3,1) restricts your choice to a full screen, or displays the tab ruler (one line less than a full screen).

/nb

If you have Original Backup set to On, WordPerfect renames the old file to *filename.bk!* and deletes the .bk! file when the file is saved again. This option instructs WordPerfect to overwrite the original document when you save and replace a file, and is useful if you do not have enough disk space to hold two copies of your files. If you use this option and a power failure occurs during the saving process, the document is lost (unless you have previously saved it or are using the Timed Backup feature). See also *Backup, Original and Backup, Timed* in *Reference*.

/nc

Disables the Cursor Speed and Alt Key Selects Pull-Down Menu features. In rare instances, these features may conflict with TSR (Terminate and Stay Resident) software or some hardware. The /nc option is useful when WordPerfect does not start up at all.

/nd

Disables the fix for the Shift key sticking. The Shift key on some enhanced keyboards could appear to "stick," causing other keys to act as if the Shift key were still pressed. This startup option will have no effect if you are already

using the /nc or /nk startup options or if your Cursor Speed in Setup: Environment (Shift-F1,3,3) is set to Normal. This option can be used if you experience conflicts with other TSR (Terminate and Stay Resident) programs.

/ne

Prevents the access of expanded memory.

/nf

Must be used with some compatibles and windowing programs (other than TopView). This is the "non-flash" (not fast) version of WordPerfect and should be used if text is displayed over the window or if the screen goes blank from time to time.

/nh

Disables a call to the BIOS which WordPerfect makes at startup that enables the Print to Hardware Port option to work. Certain older BIOS versions can cause problems in starting WordPerfect with this call.

/nk

Disables enhanced keyboard calls which are not recognized by some compatibles and TSR (Terminate and Stay Resident) programs. This option is especially useful if you are having trouble getting WordPerfect to start up (e.g., WordPerfect comes up and locks up).

/no

Disables the Keyboard Reset key (Ctrl-6), which returns the keyboard to its original mapping (see *Keyboard Layout* in *Reference*).

/nt=network #

Specifies which network software you are using, such as Novell, Banyan, etc. (see *Appendix R: Networking WordPerfect*).

/pf=path

Redirects the temporary print queue files to the specified path. This frees up space if you are using two disk drives, (no hard disk). If you are on a network, you can direct the files to your hard drive to speed up printing.

/ps=path

Instructs WordPerfect to use the .SET (Setup Options) file in the specified path and is especially helpful if you are running WordPerfect on a network.

Important: *If you do not use this option, WordPerfect uses the .SET file that is located in the directory where WP.EXE is located (stand-alone version) or the default directory (network versions).*

/r

Loads about 580K of menus, error messages, and overlays from WP.EXE and WP.FIL into expanded memory, in addition to the memory normally required by the program (see *Memory* in *Reference*). This speeds up parts of the program.

You may need to use this option with `/w=*,*` to free enough expanded memory. If you are a two disk drive user (no hard disk), you can use `/r` with `/d` to allow you to remove the WordPerfect 2 diskette.

/sa

Instructs WordPerfect to run in stand-alone mode, even if in a network environment (see *Appendix R: Networking WordPerfect*).

/ss=rows,columns

Lets you set screen size. WordPerfect usually detects the screen size automatically. If for some reason it does not (e.g., you have a Genius monitor), you can use this option to set the screen size.

You can only use this option to set the screen to its actual size (i.e., the display card must be in that mode). Do not set any other size or screen display will not function correctly.

The Text Screen Type feature also helps WordPerfect function correctly with your monitor. You may want to read the information in *Text Screen Type* in *Reference* before using the `/ss` startup option.

/u=username

Sends user initials to WordPerfect to allow multiple users within a network environment (see *Appendix R: Networking WordPerfect*).

/w=workspace

Lets you limit the amount of conventional memory allocated to WordPerfect. Enter the value for *workspace* in kilobytes (K). The minimum value is 53. If you have expanded memory, you can enter `/w=cm,em` (where *cm* is the amount of conventional memory and *em* is the amount of expanded memory) to limit both the amount of conventional and expanded memory allocated to WordPerfect. WordPerfect uses all available space in conventional memory and 87.5% of available expanded memory unless you use this option. (If you are running WordPerfect under Shell, WordPerfect uses 50% of available expanded memory unless you use the `/w` option). For more information on expanded memory, see *Memory* in *Reference*.

This option limits workspace. It does not limit the amount of memory you need to run WordPerfect.

You can use an asterisk (*) as the expanded memory parameter to have WordPerfect use all available. For example,

wp/w=120,512

Means "Start WordPerfect using 120K of conventional memory and 512K of expanded memory for workspace."

wp/w=*,*

Means "Start WordPerfect using all available conventional memory and all available expanded memory for workspace."

wp/w=120

Means "Start WordPerfect using 120K of conventional memory and the default amount of expanded memory for workspace."

If you do not have expanded memory, the expanded memory parameter is ignored. If you indicate the amount of expanded memory as zero (e.g., /W=*,0), no expanded memory will be accessed. You can also prevent the use of expanded memory using the /ne startup option (see /ne above).

/ws

Displays the amount of conventional and expanded memory available. If no expanded memory is available or if you use /ne, only the amount of conventional memory is displayed.

/x

Instructs WordPerfect to restore the default values for the Setup feature (see *Setup* in *Reference*). When you exit, previous changes to the Setup feature are restored.

/32

Instructs WordPerfect to use LIM 3.2 calls only. This helps WordPerfect run on some expanded memory drivers that are not LIM 4.0 compatible.

DOS SET Command

Use the SET command at DOS to include any of the above options automatically when you start WordPerfect. An example of a SET command to start a macro named "startup" would be: set wp=/m-startup.

If you use the SET command, you do not have to type the same string each time you start WordPerfect. The startup options will be in effect until you turn off (or restart) your computer. However, if when you start WordPerfect, you enter a string using the same option as the SET command but using a different value, the new string overrides the SET command.

For example, if you use the SET command above, then enter **wp/m-newmac** to start WordPerfect, the macro NEWMAC will execute, but STARTUP will not.

WordPerfect starts faster using the SET command than with a batch file. You can place the SET command in the AUTOEXEC.BAT file so you do not have to enter it each time you start your computer (see *Batch Files and AUTOEXEC.BAT* under *DOS and WordPerfect* in *Reference*).

Normally startup options require an equal sign (=). In a SET command, however, you should use a hyphen (-) instead. For example, type **set wp=/u-cbk** in a SET command rather than **set wp=/u=cbk**.

See Also: Memory; DOS and WordPerfect

Appendix O: Troubleshooting

This appendix gives suggestions that will help answer questions you might encounter while using WordPerfect. Compiled by WordPerfect Customer Support representatives, the checklists in this section contain the same type of questions you will be asked if you call Customer Support.

If after going through this appendix, you feel that you need to call Customer Support, use the Gather Information checklist below to find out the specific information you need before calling. If you have this information, Customer Support operators will be able to help you faster and more effectively. *Getting Help in Getting Started* lists the phone number for each support group.

Customer Support uses a five-step approach to answering questions:

- Understand the customer's questions
- Duplicate situation on operator's computer
- Gather information
- Check resources
- Follow through

The Gathering Information part of the process is listed below. Following the *Gather Information* section, a few checklists are included to help you answer your questions. Make sure that you can answer Yes to each question before proceeding to the next. If you can answer Yes to all the questions and have studied the Tips section below each checklist, gather the information you need, then call Customer Support.

If you answer No to a question, read the Tips section below the checklist, then check the *Index* of this manual to see what you need to do to be able to answer the question Yes.

Gather Information

Getting Help in *Getting Started* lists some things you should do before calling or writing to Customer Support. If you want to speed up the time it takes to answer your questions, you should have the following information readily available.

Write the information down as you gather it.

- WordPerfect Reference Manual and WordPerfect Workbook
- Original (Master) WordPerfect Diskettes
- Registration Number
- Computer Information
 - Computer Brand Name and Type/Model
 - Monitor Brand Name and Type/Model
 - Graphics Card Brand Name and Type/Model
 - Contents of AUTOEXEC.BAT File (see *WPINFO.EXE* below)
 - Contents of CONFIG.SYS File (see *WPINFO.EXE* below)
 - Version of DOS (see *WPINFO.EXE* below)
 - RAM Memory Information (see *WPINFO.EXE* below)

- Printer Information
 - Printer Brand Name and Type/Model
 - Printer (.ALL) File Release Date
- Sheet Feeder Brand Name and Type/Model
- Version and Release Date of WP.EXE (Press **Help** (F3))
- DOS bootup diskette

You do not have to have all of this information when you call Customer Support. If you don't, Customer Support can assist you in gathering this information.

Installation Checklist

Did you install the WordPerfect program using the Installation Program?

Is the CONFIG.SYS file located in the root directory?

Does your CONFIG.SYS file contain the command FILES=20 (or greater than 20) (see *WPINFO.EXE* below)?

Did you specify path and directory names in the Location of Files feature (Shift-F1,6)?

Did you select the correct graphics card in the Graphics Screen Type feature (Shift-F1,2,2)?

Did you select your printer (or a suitable emulation) from the Printer: Select Printer screen (Shift-F7,s) correctly?

If you are using any startup options, have you read the information on them in *Appendix N: Startup Options* to see what they should be doing?

Installation Tips

You must use the WordPerfect Installation Program to install WordPerfect. The files on the master diskettes are compressed files which must be "decompressed" by the Installation Program. If you are in doubt as to what to do in the Installation Program, use the Basic Installation.

If your screen displays incorrectly in WordPerfect, it may be that your graphics card and monitor are not selected in WordPerfect. Read the information in *Graphics Screen Type*, *Text Screen Type* and *Colors/Fonts/Attributes* in *Reference*. If you have problems with a monochrome monitor, read *Appendix N: Startup Options*, paying particular attention to the /nf, /nc, /nk, and /mono options.

If the screen freezes when you start WordPerfect, it may be that you're running a memory-resident (TSR) program. If you are, remove the TSR program and try starting WordPerfect again. Also, read *Appendix N: Startup Options* paying particular attention to the /nf, /nc, and /nk options.

Feature Checklist

If you have used the feature without having a problem before, are you using it the same way you previously did?

Have you read the information on the feature in the *WordPerfect Reference Manual* and *WordPerfect Workbook*?

Have you tried using the feature on a blank screen?

Have you tried using the feature at a different place in the same document?

Have you checked Reveal Codes (Alt-F3) to see if there are any duplicate or improperly placed codes?

Did you exit WordPerfect, re-start WordPerfect, and try to use the feature again?

Did you check Initial Codes on the Setup: Initial Settings (Shift-F1,4,5) and Format: Document (Shift-F8,3,2) menus for any unwanted codes?

If the feature is not printing properly, have you read *Printer Checklist* below?

If you are running a memory-resident (TSR) program with WordPerfect, have you removed the TSR program and tried using the feature again?

If a TSR program seems to be causing the problem, have you contacted the manufacturer of the TSR program to obtain information about running the program with WordPerfect?

If you are receiving an error message, have you looked for the error message in *Appendix E: Error Messages* and in the index of the *WordPerfect Reference Manual*?

Feature Tips

Try using the feature on a blank screen. Often, when you use the feature on a blank screen, you can isolate your problem.

Use the Reference, Appendix, and Index sections of this manual. The information you need may be in one of those sections.

Printer Checklist

- Is the paper properly inserted?
- Has the printer been turned off and, after at least a 15 second pause, turned back on?
- When the printer is turned on, does it indicate that it is ready to receive data (i.e., "On-Line" or "Ready" light is lit)?
- Is the correct printer selected (Shift-F7,s)?
- Has the correct printer port been selected (Shift-F7,s,highlight printer,3,2)?
- Is the cable connected tightly to the printer and the computer? (Before making adjustments to the cable, turn off all equipment.)
- Have you responded to any error messages that appear in the Print: Control Printer screen (Shift-F7,4)?
- Can you duplicate the problem on a clear screen?

- Have you read through the Helps and Hints information about your printer (Shift-F7,s,highlight printer,6)?
- If your printer manual recommends special switch or menu panel settings specific to your printer, have you made the correct settings? (See Printer Helps and Hints (Shift-F7,s,highlight printer,6) for information.)
- Does the printer print at the DOS level? (See *Printer Tips* below.)
- If you are using font cartridges or soft fonts, have you read the information under *Printer Tips* below?
- If the document does not look correct in View Document (Shift-F7,v), have you read through *Feature Checklist* above?
- Does the Location of Files feature (Shift-F1,6) indicate the correct location of your printer files?
- Does the problem occur in other programs or applications?
- Are you running a memory-resident (TSR) program that might be conflicting with WordPerfect?
- Are you running a third-party font program?
- If you have changed printer selections recently, have you checked to be sure the document is formatted for your current printer selection? (See *Format Retrieved Documents for Default Printer* under *Initial Settings* in *Reference*.)

Printer Tips

If your printer has more than one paper source, select the proper sheet feeder, and be sure the correct bin is set up in the Paper Size location (see *Sheet Feeder* or *Paper Size/Type* in *Reference*).

If you want to change your fonts or margins, you should change them in WordPerfect and not simply change settings on your printer.

When you mark font cartridges and soft fonts, do not mark fonts that you have not purchased and made available for your printer. Most fonts listed on the Cartridges and Fonts screen do not come with your printer and must be purchased separately from your dealer (see *Cartridges and Fonts* in *Reference*).

If you have a Paper Size/Type code in your document, it should be placed at the very top of the page on which you want it to take effect.

If you find that text on the printed page is not located where you expect it should be (according to your margins), you may need to use the Text Adjustment option to make adjustments to the text (see *Text Adjustment* under *Editing a Definition* under *Paper Size/Type* in *Reference*). Also note that your top margin setting should not be smaller than your text adjustment. If it is, text at the top of the page may be overprinted.

When soft fonts are not printing correctly, either the fonts have not been selected properly, have not been downloaded, or the WordPerfect (.PRS) or soft font file containing information about the fonts has been corrupted.

- Set the Path for Downloadable Soft Fonts and Printer Command Files correctly (see *Printer, Edit in Reference*).
- Make sure your Initial Font selection matches the font you want to use (see *Font in Reference*).
- Initialize your printer (see *Printing—General Information in Reference*).

For an explanation of .ALL and .PRS files, see *.ALL and .PRS Files* under *Notes in Printing-General Information*.

To determine which port to select in WordPerfect, inspect the end of the printer cable that plugs into your computer. If it has pins (male), choose a parallel port (probably LPT1). If it has sockets (female), choose a serial port (probably COM1).

You can only send information to the printer at 19200 baud if you are using a PS/2 or 100% compatible BIOS. If you do not have a PS/2 or 100% compatible BIOS and try to print at 19200 baud, WordPerfect sends the information at 110 baud.

Try selecting the Standard Printer definition, then print the document with that definition. If the document prints incorrectly, you should check the printer manual or consult your printer manufacturer for menu or switch setting requirements for your printer.

If your printer will not print in WordPerfect, run a printer test. If the printer doesn't print a line of text, the problem may have nothing to do with WordPerfect. To run a printer test, exit to DOS. At a DOS prompt, type **copy con LPT1** (or **copy con COM1** if the port is serial), then press **Enter**. Next, type **this is a test** and press **Enter**.

- If you are using a laser printer, press **Ctrl-L**, press **Enter**, press **Ctrl-z**, then press **Enter** again.
- If you are not using a laser printer, simply press **Ctrl-z**, then press **Enter**.

*If you are using a PostScript printer, type **showpage** instead of **this is a test**. Then press **Enter**, press **Ctrl-d**, and press **Enter**. Next, press **Ctrl-z**, then press **Enter**. The printer should eject a blank page.*

Read through the *Installation Checklist* and *Feature Checklist* above to see if any information in those sections will help you.

WPINFO.EXE

WPINFO.EXE is used to gather information about your system that can be used to help Customer Support. To run WPINFO.EXE,

- 1 Exit WordPerfect.
- 2 Change to the directory where WPINFO.EXE is located.

Important: *WPINFO.EXE* is installed with the WordPerfect utilities. If you did not install the utility programs when you installed WordPerfect, or have not subsequently done so, you must do so before running *WPINFO.EXE*.

- 3 Enter **wpinfo** at the DOS prompt.
- 4 Write down the information shown.

or

Press **Print Screen** (PrtSc) to send the information to the printer.

Electronic Bulletin Board Checklist

The following are some common Bulletin Board Service (BBS) problems and the best way to resolve them:

- The Support BBS line, (801) 225-4414 (not a toll-free number), only supports 1200 and 2400 baud rates.
- Do you have a working knowledge of your Communications software? If not, you will have problems downloading files and using the BBS in general. Refer to your software manual for proper usage.
- Your Communications software must be set to 8 data bits, *no* parity, and 1 stop bit in order to connect properly to the BBS. Consult your software manual to make sure your settings are correct.
- Is your Communications software set to run in ANSI Terminal Emulation? If your software does not support ANSI, use TTY, NONE, or ASCII. Some of the other terminal emulations like VT100 will cause problems downloading files.
- Are you using a Script (type of macro) in your Communications software? This will cause problems when you initially connect to the BBS. You will need to turn it off or consult your modem/communications manual for proper usage.
- If you are having problems *downloading* a file, here are some general guidelines to follow. Select D)ownload from the main menu and enter the filename you wish to download. When entering a filename for download on the BBS, *do not enter a drive or path specification*. Next, specify the Transfer Protocol you will be using. Be sure the protocol you select on the BBS will match the same protocol you have selected in your Communications package.

Issue the keystrokes that will take you back into your communications software to receive the file. PCBoard will wait for your software to take control of the transfer. If you do not tell your software to receive the file, PCBoard will abort the transfer after 60 seconds of inactivity.

Information regarding keystrokes to perform the above steps must be obtained from your Communications software manual.

If, during your transfer, the blocks of data in the file you have specified start to transfer and then abort, you can try a different transfer protocol. You may need to call back because of possible noise from the phone line interfering with the transfer process. We have no control over line conditions and no solution if this persists. In some cases, older Communications software is not 100% compatible with the newer transfer protocols and it might be necessary to try a different software package.

- If you are having problems *uploading* a file, here are some guidelines to follow. After selecting SEND from the main menu, enter the filename *only*, without any path before it. You will then be prompted for the Operator's name and Group for which the file is intended. Select a protocol from the BBS that matches a protocol supported and selected in your Communications software. At this point, issue the keystrokes that will take you back into your Communications software to send the file. Your software will then prompt you for the path and filename so it can find and send the file.
- Our High Speed modem line, (801) 225-4444 (not a toll-free number), supports 9600 baud rates and above. Your modem must be a US Robotics HST or support V.32 format to connect to our modem properly. We are presently using US Robotics HST Dual Standard high speed modems. Modems calling in to this line at 1200 or 2400 baud will be disconnected. First time callers to the High Speed line must first register onto the Low Speed line at 1200 or 2400 baud. Then you must wait 24 hours for verification before you can call the High Speed line.
- Did you supply proper information when logging on to the BBS, such as accurate user name, phone number, etc.? If invalid information is entered, your user account will be purged from the BBS system. All accounts not used within a 6 month period will also be purged.
- Are you trying to login with a name that already exists on the BBS? If you call in for the first time to the BBS and it displays your name with a different city and state than yours, your name is already in use. You will need to use a variation of the spelling for your name. Bill/William, Dave/David, etc. Do not use initials. Each user account must be unique. Please remember to use a Contact Name rather than a Company Name when registering on the BBS.
- Do you have enough disk space to which the file may be downloaded. If you are not allowing enough room on your end to receive the file being downloaded, the download process will be aborted.
- The BBS Support phone number (voice support only) is (801) 228-9904 (not a toll-free number). BBS support is available at this number Monday through Friday from 8 a.m. to 5 p.m. Mountain time.

Appendix P: WordPerfect Characters

More than 1500 characters are available with WordPerfect. Depending on your printer, you can print some, or all, of these characters. The ability to view these characters on the normal editing screen and the View Document screen, the ability to print, and the print quality depend upon several factors described below.

If your printer can print graphics, you can print all of the characters in the character sets below. If your printer cannot print graphics, you must have a font that contains the character. Each font has a unique typeface and type weight (for example, Times Roman, or Helvetica Narrow Bold). If you don't have a font that contains the character and your printer cannot print graphics, your printer will not print the character.

Character Entry

You insert a character in a document with Compose. Press **Compose** (Ctrl-v) which displays a "Key =" prompt at the bottom of your screen. Type the number of the character set, a comma, and the number of the character and press **Enter**. For example, to enter an Å, press **Ctrl-v**, then **1,30** and press **Enter**. (To calculate the number of the character, add the number to the left of the line the character is on to the number at the top of the column the character is under. For example, "Å" is on the second row of character set 1, under the first column. The number at the left of that row is 30. The number over the letter is 0. The number for "A" is 30+0, or 30. The number for "H" in character set 0 would be 60+12, or 72.) You must use Ctrl-2 in the Equation and Macro Editors, search strings, and filename entry. With Ctrl-2, the "Key =" prompt is not displayed. See *Compose* in *Reference* for more information on Compose.

The WordPerfect Keyboard Layout feature allows you to remap a single key or a key combination to function as a WordPerfect character. You can remap the uppercase "A" to "Å" or you can map Ctrl-a to "Å." See *Keyboard Layout, Map* in *Reference* for more information.

Screen Display

Not all characters can appear in the normal editing screen. EGA and VGA graphics cards and the Hercules Graphics Card Plus with RamFont or the Hercules InColor card with RamFont can display either 256 or 512 characters at a time. That is well short of the 1500+ WordPerfect characters. You can access the 512 character alternative by using Setup (Shift-F1),2,1,5 to turn this option on. When a character can't appear in the normal editing screen, it is represented by a small square box "■" on the screen. All printable characters will appear in the View Document screen (Shift-F7,6).

Language Modules are available for Greek and Russian (a Hebrew upgrade is also available) that include screen fonts, language-specific keyboard drivers and language-specific printer fonts. (See ordering information following the specific character set.) Users with one of these language modules can display all of their

characters on the screen (as part of the 512 character limit) with one of the above graphics cards. You may also order the WordPerfect Screen Font Editor™ from your dealer, and choose your own set of 512 characters to display.

Printing Characters

Each table below contains the character set value (location) and a representation of how the character *should* appear. The WordPerfect characters in this appendix were printed using the International-Expanded WP.DRS (Display ReSource) file, instead of the standard WP.DRS file that ships with WordPerfect. The standard WP.DRS file prints some of the characters in a full-bodied font and some using a vector font (stick figures) constructed from line segments. The International-Expanded WP.DRS file prints all characters to look more like full-bodied standard fonts, except Character Set 11, which still uses a vector font. The use of this WP.DRS file uses more printer memory and takes longer to print. Call (800) 321-4566 or (801) 225-5000 to order the International-Expanded WP.DRS file. The Greek and Russian Language Modules include the International-Expanded WP.DRS file and provide language-specific printer fonts that improve the speed and quality of printing and also provide language-specific keyboard drivers. To order the International-Expanded WP.DRS file for other language modules, see the ordering information following each character set.

This appendix was printed in Times Roman 10pt on a Linotronic 330 Laser Imagesetter at 1270 dots per inch (dpi). The typical laser printer achieves a maximum of 300 dpi. The print quality you experience depends on the capabilities of your printer, and on the font and point size you select. The print quality also depends on the Graphics and Text Quality settings used in Print (Shift-F7, G and T) and on which WP.DRS file you are using.

When printing characters, WordPerfect first uses built-in printer fonts or soft fonts to print text characters. If these fonts are unavailable, WordPerfect prints the graphics characters from the WP.DRS file. The Print Quality Settings are important in determining the visual appearance of graphically printed characters. The WP.DRS characters print at the current Graphics Quality setting (Draft, Medium, or High). However, if Text Quality is set to High, the WP.DRS characters print as if at the High Graphics Quality setting. When either Quality is set to Do Not Print, the WP.DRS characters will not print. The Medium and Draft settings use less printer memory and print faster, but they do not look as dense as the High setting.

A document with many WP.DRS characters can take a long time to print. Enhanced WordPerfect characters from the International-Expanded WP.DRS file take even more time to print. If the print job does not finish printing, your printer may not have enough memory for the number of WP.DRS characters you are printing. WordPerfect has only three fonts with which to print WP.DRS characters: WP Courier, WP Helv, and WP Roman. If you have selected a different font, WordPerfect automatically chooses between these three for the font most like the one you have chosen. If you make frequent use of these WP.DRS characters, you should either buy the appropriate WordPerfect language

module or some printer soft fonts. This will speed up printing at a higher quality.

The examples of WordPerfect Characters reproduced below were printed on a Hewlett-Packard LaserJet III and pasted into this appendix. A CG Times 10pt font was used, as were both the standard (stick characters) WP.DRS file and the International-Expanded (full-bodied characters) WP.DRS file. Text Quality was set to Medium, and Graphics Quality was set to High, Medium, and Draft. The Russian (Character Set 10, Cyrillic) word for Moscow, Москва shows the effects of changing the Graphics Quality settings, and switching the WP.DRS files.

Graphics Quality Settings:	High	Medium	Draft
Standard WP.DRS:	Москва	Москва	Москва
International-Expanded WP.DRS:	Москва	Москва	Москва

You can determine which characters will print with a particular font. To do this, retrieve the CHARMAP.TST document to the screen, select your printer, change the Document Initial Base Font to the font you want to use (Shift-F8,3,3), then view or print the document.

Important: CHARMAP.TST installs with the WordPerfect Printer Program files. If you did not install the Printer Program files, you must do so before you can use CHARMAP.TST (see Installation in Getting Started).

Character Sets

The character sets are shown below. Character set 12 is a user-defined set. If your printer can print characters other than the ones listed in character sets 0 through 11, you can include those characters in character set 12. To do so, you must use the Printer Program to edit the character map for a font.

For more information about the strings that send additional characters to the printer, consult your printer or soft font documentation or ask your printer or soft font manufacturer.

Character Set 0 (ASCII)

	1										2																			
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9										
0																														
30			!	"	#	\$	%	&	'	()	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	
60	<	=	>	?	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
90	Z	[\]	^	_	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
120	x	y	z	{	|	}																								

Character Set 1 (Multinational 1)

	1										2																			
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9										
0	·	·	·	·	/	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·										
30	Ä	ä	Å	å	Å	å	Æ	æ	Ç	ç	È	è	É	é	Ê	ê	Ë	ë	Ì	ì	Í	í	Î	î	Ï	ï	Ñ	ñ	Ó	ó
60	Ô	ô	Õ	õ	Ò	ò	Û	û	Ü	ü	Û	ü	Ý	ý	À	à	Ð	ð	Ø	ø	Ö	ö	Ÿ	ÿ	Ð	ð	Þ	þ		
90	Ă	ă	Â	â	Ą	ą	Ć	ć	Ĉ	ĉ	Ċ	ċ	Č	č	Ď	ď	Ě	ě	Ĕ	ĕ	Ė	ė	Ę	ę	Ğ	ğ	Ĝ	ĝ	Ġ	ġ
120	Ģ	ģ	Ĥ	ĥ	Ħ	ħ	Ĩ	ḥ	İ	ı	Ī	ī	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ	Ĵ	ĵ
150	Ł	ł	Ł	ł	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń	Ń	ń
180	Š	š	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť	Ť	ť
210	Ŧ	ŧ	Đ	đ	Ĺ	ĺ	Ń	ń	Ŧ	ŧ	Š	š	Ť	ť	Ŧ	ŧ	Š	š	Ť	ť	Ŧ	ŧ	Š	š	Ť	ť	Ŧ	ŧ	Š	š

Important: The standard WP.DRS file constructs some of these characters using stick figures. To get better quality fonts, call (800) 321-4366 or (801) 225-5000 and order the International-Expanded WP.DRS file.

Character Set 2 (Multinational 2)

	1										2									
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0																				

Character Set 3 (Box Drawing)

	1										2										
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
0				■	■	■	■	■													
30																					
60																					

Character Set 4 (Typographic Symbols)

	1										2																			
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9										
0	•	◦	■	+	*	¶	§	;	¿	«	»	£	¥	₤	ƒ	ª	º	½	¼	¢	²	ª	®	©	™	¾	³	´	˘	
30	"	”	“	–	—	<	>	○	□	†	‡	™	SM	℞	●	◦	■	▪	□	◻	–	ff	ffi	ffl	fi	fl	...	\$	₣	€
60	€	£	,	..	⅓	⅔	⅛	¾	⅝	⅞	∞	©	©	©	%	%	%c	Nº	–	˘										

Character Set 5 (Iconic Symbols)

	1										2																				
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9											
0	♥	♦	♣	♠	♂	♀	☀	☺	☹	♪	♫	■	🏠	!!	√	↓	↵	↶	↷	⊠	⊡	←	↩	↪	✓	□	⊞	☹	#	b	||
30	⚖	⌚	⌚	⌚	—																										

Character Set 6 (Math/Scientific)

	1										2																		
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9									
0	–	±	≤	≥	∞	/	∖	÷	|	<	>	–	≈	=	≡	≠	∩	∪	∑	∞	∫	∫	∫	∫	∫	∫	∫	∫	∫
30	∇	+	•	◦	•	Å	°	μ	–	x	∫	∏	+	∇	∂	'	"	˘	e	ℓ	ℏ	℔	℔	℔	℔	℔	℔	℔	℔
60	↕	↕	/	∖	∖	∖	∪	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩
90	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
120	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
150	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
180	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
210	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫

Character Set 7 (Math/Scientific Extension)

	0	1	2	3	4	5	6	7	8	9	¹ 0	1	2	3	4	5	6	7	8	9
0	∫	∫	|	_	√	−	Σ	Π	Π	∫	∫	|	|	|	|	|	|	|	|	|
20	|	{	{	{	{	{	{	{	{	{	}	}	}	}	}	}	}	}	}	}
40	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
60	|	∪	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩	∩
80	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
100	((((((((()))))))))))
120	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
140	\	\	\	\	∪	∩	⊕	⊕	⊕	⊕	∧	∧	∨	∨	⊗	⊗	⊕	⊕	⊙	⊙
160	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
180	⊖	⊖	⊕	⊕	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|
200	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
220	|	∏	∏	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|	|

Character Set 10 (Cyrillic)

	1										2																			
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9										
0	А	а	Б	б	В	в	Г	г	Д	д	Е	е	Ё	ё	Ж	ж	З	з	И	и	Й	й	К	к	Л	л	М	м	Н	н
30	О	о	П	п	Р	р	С	с	Т	т	У	у	Ф	ф	Х	х	Ц	ц	Ч	ч	Ш	ш	Щ	щ	Ъ	ъ	Ы	ы	Ь	ь
60	Э	э	Ю	ю	Я	я	Ґ	ғ	Ғ	ғ	Є	є	Ѕ	ѕ	І	і	Ї	ї	Ј	ј	Љ	љ	Њ	њ	Ћ	ћ	К	к		
90	Ў	ў	Ц	ц	Ъ	ъ	Ө	ө	Ү	ү	Ж	ж	җ	җ	Ш	ш	Ғ	ғ	А	а	Á	á	Ё	ё	Й	й	Ó	ó	У	у
120	Ы	ы	Э	э	Ю	ю	Я	я	А	а	Ё	ё	Ё	ё	И	и	О	о	У	у	Ы	ы	Э	э	Ю	ю	Я	я		

Important: The standard WP.DRS file constructs Cyrillic characters using a basic vector (stick) font. Call (800) 451-5151 for information about the WordPerfect 5.1 Russian Language Module, which includes screen fonts, keyboard drivers, and printer fonts for Russian and other Cyrillic-based languages.

Character Set 11 (Hiragana and Katakana)

	1										2																			
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9										
0	あ	い	う	え	お	か	き	く	け	こ	ま	み	む	め	も	や	ゆ	よ	ら	り	ろ	わ	を	ん	ア	イ	ウ	エ	オ	カ
30	キ	ク	ケ	コ	サ	シ	ス	セ	ソ	タ	チ	ツ	テ	ト	ナ	ニ	ヌ	ネ	ノ	ハ	ヒ	フ	ヘ	ホ	マ	ミ	ム	メ	モ	ヤ
60	ヨ	リ	ル	レ	ロ	ワ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ
90	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ
120	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン
150	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ
180	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ	ヰ	ヱ	ヲ	ン	ヴ	ヵ	ヶ	ヷ	ヸ	ヹ	ヺ	・	ー	ヽ	ヾ	ヿ

Character Set 12

Character Set 12 is a user-defined character set.

Appendix Q: WordPerfect Files

When you install files from the WordPerfect master diskettes, they are installed in groups. When you answer Yes to a question in the Installation Program, the files in the group represented by that question are copied to the specified directory or diskette.

The following list shows which files are copied in the various groups. This should help you in locating a particular file.

An asterisk in parentheses (*) to the right of a filename denotes that the file is essential to WordPerfect operation. Keep in mind, however, that some files are not essential to WordPerfect operation, but are essential to the operation of a specific feature (e.g., Speller, Thesaurus). Read the description underneath a filename to determine the function of a file.

WordPerfect Program

The following files are installed as WordPerfect Program files:

KEYS.MRS

This is used with the Key: Action screen. For more information on the Key: Action screen, see *Keyboard Layout, Edit* and *Keyboard Layout, Map in Reference*.

STANDARD.IRS

This is the standard mouse driver file. For more information, see *Mouse Type in Reference*.

STANDARD.PRS

This is the standard printer definition and is also used to view your document if you select the graphics screen type titled Text (No Graphics). For more information, see *Graphics Screen Type* and *Printer, Select in Reference*.

STANDARD.VRS

This is the standard graphics and text driver file. For more information, see *Graphics Screen Type* and *Text Screen Type in Reference*.

WP.EXE (*)

This is the main WordPerfect program file. You must either start WordPerfect from the directory where WP.EXE is located, or the directory where WP.EXE is located must be included in a DOS PATH command (see *DOS and WordPerfect in Reference*).

WP.FIL (*)

This contains part of the WordPerfect code. For information on redirecting this file to expanded memory, see */r* under *Appendix N: Startup Options*.

WP.MRS

This is used with the Macro Editor. For more information on the Macro Editor, see *Macros, Macro Editor in Reference*.

WP.QRS

This is used to display the Equation Editor. For more information on the Equation Editor, see *Equations in Reference*.

WPSMALL.DRS

The following file is installed by itself:

WPSMALL.DRS

This is the .DRS file used if you are running WordPerfect from two disk drives (no hard disk). While this file does not contain all of the capabilities of WP.DRS, it does contain many of them, including the ability to display the View Document screen (see *WP.DRS* under *Graphics Driver Files* below).

Utility Files

The following files are installed as WordPerfect utility files:

CHARACTR.DOC

This file lists the names of the characters in the WordPerfect character sets (see *Appendix P: WordPerfect Characters*). Print this file as you would any other document.

CONVERT.EXE

This is the WordPerfect Convert Program. For more information, see *Convert Program in Reference*.

CURSOR.COM

This is the WordPerfect Cursor Program. For more information, see *Cursor Program in Reference*.

FIXBIOS.COM

This program is used to solve some problems you may have when you start WordPerfect on a computer that is not 100% IBM compatible (e.g., your computer is locking). If you need to run this program, copy it to your root directory, then include the FIXBIOS command in your AUTOEXEC.BAT file.

GRAB.COM

This is the WordPerfect Screen Capture Program. For more information, see *Screen Capture Program in Reference*.

GRAPHCNV.EXE

This is the WordPerfect Graphics Conversion Program. For more information, see *Graphics, Conversion Program in Reference*.

INSTALL.EXE

This is the WordPerfect Installation Program. To run this program, insert the Install/Learn/Utilities 1 diskette into drive A, go to a DOS prompt, type **install** and press **Enter**.

MACROCNV.EXE

This is the WordPerfect Macro Conversion Program. For more information, see *Macros, Conversion Program in Reference*.

NWPSETUP.EXE

This program is used to help you install WordPerfect as a network version. For more information, see *Appendix R: Networking WordPerfect*.

PRINTER.TST

This is the printer test file. When printed, this file shows attribute assignments (see *Attributes* under *Font* in *Reference*).

SPELL.EXE

This is the WordPerfect Speller Utility. For more information, see *Speller Utility* in *Reference*.

STANDARD.CRS

This is the standard file used in the WordPerfect 4.2 to WordPerfect 5.1 and WordPerfect 5.1 to WordPerfect 4.2 document conversion process. For more information, see *Document Conversion, 4.2 to 5.1*; *Document Conversion, 5.1 to 4.2*; and *Text In/Out* in *Reference*.

WP.LRS

This is the WordPerfect Language Resource File. For more information, see *Language Resource File* in *Reference*.

WP.PIF

This is a program information file that can be used if you are running WordPerfect under Microsoft Windows version 3.0 (see *Appendix S: .PIF File*).

WP51-286.PIF

This is a program information file that can be used if you are running WordPerfect under Microsoft Windows/286 or a Microsoft Windows version prior to 3.0 (see *Appendix S: .PIF File*).

WP51-386.PIF

This is a program information file that can be used if you are running WordPerfect under Microsoft Windows/386 (see *Appendix S: .PIF File*).

WPINFO.EXE

This program helps you gather information about your system. If you plan to call Customer Support, we recommend that you run this program and record the information on the screen before calling. For more information, see *Appendix O: Troubleshooting*.

Learning Files

The following files are installed as WordPerfect learning files:

***.TUT**

Files ending in .TUT are files designed for use with the On-Line Tutorial. For more information about the Tutorial, see *Getting Help* in *Getting Started*.

***.WKB**

Files ending in .WKB are files designed for use with the *WordPerfect Workbook*.

***.WPG**

Files ending in .WPG that are installed with the Learning files are WordPerfect graphics images that are used in various *WordPerfect Workbook* lessons.

TUTOR.COM

This operates the On-Line Tutorial. For more information about the Tutorial, see *Getting Help* in *Getting Started*.

WORKBOOK.PRS

This is the printer file that is used in various lessons in the *WordPerfect Workbook*.

Help File

The following file is installed as the WordPerfect help file:

WPHELP.FIL

This is used with the Help feature. For more information on the Help feature, see *Help* in *Reference*.

Keyboard Files

The following files are installed as WordPerfect keyboard files:

***.WPK**

These are pre-defined keyboard layouts. For more information, see *Appendix H: Keyboards*.

CALC.WPM

This macro displays a calculator that you can use for mathematical calculations. This macro is accessed by selecting the MACROS keyboard and pressing **Ctrl-c**.

EDIT.WPM

This macro assists you in editing some WordPerfect codes. If you place the cursor on a code and then execute the EDIT.WPM macro, the macro recognizes the code and takes you to the appropriate menu or editing screen, where you can edit the code. For example, if you place the cursor on a Header code and then execute the EDIT.WPM macro, the macro takes you into the Header and Footer Editing screen. This macro is accessed by selecting the SHORTCUT keyboard and pressing **Alt-e**.

Macro Files

The following predefined macros are included with your WordPerfect 5.1 package. In order to run one of these macros, press **Macro** (Alt-F10), then enter the name of the macro (the .WPM extension is not necessary).

CODES.WPM

This macro prints Merge codes as well as text and codes from the Reveal Codes screen.

ENDFOOT.WPM

This macro changes endnotes in a document to footnotes.

FOOTEND.WPM

This macro changes footnotes in a document to endnotes.

INLINE.WPM

This macro sets up necessary codes for creating an equation in a line of text. It then places you in the Equation Editor. For more information about equations, see *Equations in Reference*.

LABELS.WPM

This macro helps you define a paper size and type for printing labels. For more information, see *Labels in Reference*.

PLEADING.WPM

This macro allows you to set specifications for a Pleading style and then creates the style.

POSTNET.WPM

This macro assists you in creating postal bar codes from ZIP Codes. You can execute this macro from a blank screen, an existing document, or a secondary merge file. The macro will prompt you to enter the correct information so the postal bar code can be created.

Check with your local Post Office to find out where to place the bar code and how to qualify for a postal discount.

Style Library File

The following file is installed as the style library file:

LIBRARY.STY

This file contains several common styles that you may want to use as your style library. You can customize each style to fit your needs. A brief description of each style contained in LIBRARY.STY follows:

Bibliography (Bibliography)

This paired style produces a hanging indent which is useful when creating a bibliography. Because it is a paired style, you can format as many bibliographic entries as you like, as long as the cursor remains within the Style codes.

Doc Init

This paired style inserts a Table of Contents Definition Mark [Def Mark:ToC.#:#] code, a Paragraph Number Definition [Par Num Def] code, and an [Outline On] code into your document. You must turn this style on before using the Document style described below. If you generate a table of contents using these styles, it will begin at the [Def Mark:ToC.#:#] code.

Document

This outline style provides formatting for eight outline levels.

Pleading

This open style creates a header for numbered pleading paper.

Right Par

This outline style creates right-aligned paragraph numbers.

Tech Init

This open style inserts a Paragraph Number Definition [Par Num Def] code and an [Outline On] code into your document. You must turn this style on before using the Technical style described below.

Technical

This outline style provides formatting for eight technical outline levels. This style contains table of contents markings. However, before you can generate a table of contents, you must insert a Table of Contents Definition Mark [Def Mark:ToC.#:#] code (Alt-F5,5,1) into your document at the point where you want table generation to begin.

For more information on styles, see *Style in Reference*.

Speller Files

The following files are installed as speller files:

WP{WP}.SPW

This file is used in conjunction with WP{WP}US.LEX to operate the Speller. For more information, see *Speller; Check Spelling in Reference*.

WP{WP}US.HYC

This file is used in conjunction with WP{WP}US.LEX to operate the external hyphenation dictionary. For more information on hyphenation, see *Hyphenation in Reference*.

WP{WP}US.LEX

This file is the main word list for the Speller and the external dictionary for the Hyphenation feature. For more information on the Speller and Hyphenation features, see *Speller, Check Spelling and Hyphenation in Reference*.

Thesaurus Files

The following file is installed as the thesaurus file:

WP{WP}US.THS

This file is the word list for the Thesaurus. For more information on the Thesaurus, see *Thesaurus in Reference*.

PTR Program Files

The following files are installed as PTR Program files:

***.ALL**

Files ending with .ALL are printer files containing information for many printers. When you select a printer, a .PRS file, which contains information specific to a single printer, is created from the information in the .ALL file.

This file is installed when you select a printer, rather than with the .PTR files.

CHARMAP.TST

This file contains all of the characters in the WordPerfect character sets (see *Appendix P: WordPerfect Characters*).

EHANDLER.PS

This file is furnished to simplify troubleshooting on PostScript printers. You are not required to use this file. To load the file, copy it to your printer from DOS (see your DOS manual for instructions).

This file is installed when you select a PostScript printer, rather than with the PTR files.

KERN.TST

This file contains a listing of the most commonly kerned letter pairs. For more information, see *Kerning in Reference*.

PTR.EXE

This file contains the WordPerfect Printer Program. For more information, see *Printer Program in Reference*.

PTR.HLP

This file contains the information for the Printer Program Help feature. For more information, see *Printer Program* in *Reference*.

Graphics Driver Files

The following files are installed as graphics driver files:

***.FRS**

Files ending in .FRS are used to display screen fonts with an EGA or VGA monitor or Hercules Graphics Card with RamFont. For more information, see *Colors/Fonts/Attributes* in *Reference*.

***.VRS**

Files ending in .VRS are graphics or text drivers. For more information, see *Graphics Screen Type* and *Text Screen Type* in *Reference*.

WP.DRS

This is one of the files used to display the View Document screen, as well as the file used to print WordPerfect characters graphically (see *WPSMALL.DRS* under *WordPerfect Program* above and *Printing—General Information* in *Reference*).

Graphics Image Files

The following files are installed as graphics images files:

***.WPG**

Files ending in .WPG are graphics images that you can retrieve into a graphics box. For more information, see *Graphics, Define a Box* in *Reference*.

Temporary Files

The following files are not installed with WordPerfect. They are temporary files created by WordPerfect, and most of them are deleted when you exit WordPerfect.

File	Description
WP}WP{.ARI	Cross-reference index file
WP}WP{.ART	Cross-reference index file
WP}WP{.BK#	Timed backup file
WP}WP{.BLK	Block file
WP}WP{.BV#	Bottom virtual file
WP}WP{.CHK	Check file
WP}WP{.CLM	Columns file
WP}WP{.DIR	Directory listing file
WP}WP{.DL#	Directory listing print file
WP}WP{.GFH	GIF graphic image file
WP}WP{.GFP	Printer GIF graphic image file
WP}WP{.GFT	GIF bitmap compress file
WP}WP{.GFV	View document GIF graphic image file
WP}WP{.LSO	List manager overflow files
WP}WP{.MRG	Merge file

File	Description
WP}WP{.PF#	Document prefix file
WP}WP{.Q1	Print buffer sort file
WP}WP{.Q2	Print buffer file
WP}WP{.RCT	Rectangle file
WP}WP{.SPC	Space file
WP}WP{.SRI	Sort input file
WP}WP{.SRO	Sort output file
WP}WP{.SRT	Sort file
WP}WP{.SRX	Sort file
WP}WP{.STY	List manager file for styles
WP}WP{.TBL	Table block file
WP}WP{.TBU	Table undelete file
WP}WP{.TPR	File for creating .PRS files
WP}WP{.TV#	Top virtual file
WP}WP{.UN#	Undelete text
WP}WP{DS.###	Document summary file
WP}WP{PJ.###	Print file, where ### is the number of print jobs

Appendix R: Networking WordPerfect

Setting up WordPerfect on a network gives multiple users access to the WordPerfect program. You can run WordPerfect from the network server or from the hard disks of individual workstations.

This appendix is for the network supervisor who is responsible for installing and maintaining WordPerfect on the network. We assume that you have a basic knowledge of networks. If not, review your network documentation.

This appendix covers the following topics to help you use WordPerfect on the network:

- Getting ready to install WordPerfect
- Installing WordPerfect
- Granting rights/privileges
- Establishing network-wide default settings
- Setting up user workstations
- Using NWPSETUP to add/change master settings
- Giving users access to WordPerfect dictionaries
- Using startup options
- Troubleshooting
- Solving error messages
- Running the tutorial on the network
- Disabling keystrokes
- Sharing WordPerfect files between IBM® PCs and Macintosh® computers
- Using network redirection commands

Throughout this appendix, we have provided special NetWare tips, which are indicated by the *NetWare Users:* tag. The *Troubleshooting* and *Solving Error Messages* sections below include tips for other networks.

Getting Help

Everyone needs help on occasion. If, after reading this appendix, you are still having trouble networking WordPerfect, our Network Support Operators are ready to help. Just dial **1-800-321-3389** Monday through Friday, from 7 a.m. to 6 p.m. Mountain time. This is a toll-free call. If you are in an area where the phone system does not handle toll-free numbers, you can reach the Network Support group by dialing **(801) 226-4777**, but you will be charged for the call. You can also fax your problem to **(801) 222-4377**.

Before you call, try to repeat the keystrokes or procedures that you did before encountering problems. Note these procedures and have them on hand. Open this appendix so that you can refer to it as the Customer Support Operator helps you.

Getting Ready to Install WordPerfect

This section explains what you need to know before you install WordPerfect and how to prepare your file server for installation.

Server or Workstation?

You can install WordPerfect on a network server or on users' individual workstations. The benefit of installing to the server is that users may access WordPerfect without sacrificing their own hard disk space (if they have a hard disk). The advantage of installing to a workstation is that WordPerfect runs faster and is not subject to network down time. The installation steps below work for either kind of installation.

Understanding Your Software License Agreement

Whether you are installing to a server or a workstation, the total number of WordPerfect copies in use should not exceed the number printed on your Certificate of License.

You should have received this certificate when you purchased WordPerfect, or when you purchased WordPerfect additional licenses packages. Take a minute to review it. The Software License Agreement on the back of your Certificate of License explains more about using multiple copies of WordPerfect.

If you have more users than you have licenses, contact WordPerfect Information Services at **1-800-451-5151** to receive information about purchasing additional licenses. This is a toll-free call. If you are in an area where the phone system does not handle toll-free calls, dial **1-801-225-5000**. You can also contact your dealer for additional license prices.

Required Disk Space

You'll need at least 4.5M of available disk space on the machine to which you will install WordPerfect.

Checking Rights/Privileges to Installation Drive

Make sure you have sufficient rights or privileges to the drive to which you are going to install WordPerfect (e.g., you should be able to copy, rename, type, delete, read, and create).

Planning WordPerfect Directories

A common mistake is to begin the installation process without a "game plan" for WordPerfect directories. To avoid confusion later, take a minute now to sketch out how you want to organize WordPerfect directories.

You can set up WordPerfect files in one directory or in multiple directories. The tables below explain the advantages and disadvantages of each type of installation.

One Directory

Advantages

Simplifies the installation process. Ideal if you have a small network and/or if you are not concerned about rights.

Simplifies the installation of interim releases since all files are copied to only one directory.

Disadvantages

Reduces flexibility on the network. Users will either have all rights or no rights.

Compromises file integrity if users have all rights to files.

Generates more work for you as the network supervisor. If the users have limited rights to files, they will probably rely heavily on you to set up WordPerfect initially and to make changes thereafter.

Makes it more difficult to determine what files serve what purpose.

Multiple Directories

Advantages

Increases the flexibility of access to files. Multiple directories make it possible for you to assign different levels of security as needs dictate.

Gives users more autonomy; lets them change settings without your help.

Helps you to organize files.

Disadvantages

Increases the complexity of installation and may require more time to assign rights.

Requires more effort to maintain since you will have to keep track of which files are in which directory.

Makes the installation of an interim release more complicated unless you have good records of what files are in each directory.

We suggest a multiple directory installation because it affords greater flexibility for you and your users and because it allows individualized file security. The table below proposes a method for organizing WordPerfect files into multiple directories. The drive letter "J" is for illustrative purposes only. You can create these directories now using the DOS MD command, or you can let the Installation Program create them for you (see *Installing WordPerfect on the Network* below).

Wait until after installing WordPerfect to assign rights to these directories (see *Granting Rights/Privileges* below).

WordPerfect Files	Pathname Example
WP.EXE	J:\WP51
WP.FIL	
WP{WP}.ENV	
WP{WP}.SET	J:\WP51\SETUP
NWPSETUP.EXE	
WP.xxx}.SET	
*.PRS	J:\WP51\PRINTERS
*.ALL	
TUTOR.COM	J:\WP51\LEARNING
*.TUT	
*.WKB	
*.WPK (common)	J:\WP51\MACROS
*.WPM (common)	
*.WPG	J:\WP51\GRAPHICS
WP{WP}US.LEX	J:\WP51\SPELLER
WP{WP}US.SPW	
WP{WP}US.THS	
WP{WP}US.HYC	
WPxxx}US.SUP	
Documents	J:\USERS\userdirectory
WPxxx{.BV1	
WPxxx{.TV1	
WPxxx{.SPC	
WPxxx{.CHK	
*.WPM (personal)	
*.WPK (personal)	

If you don't specify a location for personal macro (*.WPM) files, WordPerfect looks for them in the directory where WP.EXE is located, and then in the default directory. If you don't specify a location for personal keyboard (*.WPK) files, WordPerfect looks next in the *default directory* only; WordPerfect does not look in the program directory for personal keyboard files.

NetWare Users: Because you will not be able to exit the Installation Program to map a search drive to the directory that contains WP.EXE, we recommend mapping a search drive now. Only one search drive is needed to run WordPerfect on NetWare.

Installing WordPerfect on the Network

Your WordPerfect package contains an Installation Program that you should use to install WordPerfect on the network. Because the WordPerfect program files are in compressed format, you *must* use the Installation Program to install them.

If you have trouble using the Installation Program, call toll-free **1-800-533-9605**. Have the Installation Program running so that you can refer to it as the Customer Support Operator helps you.

To install WordPerfect,

- 1** Make sure the destination resource (or drive) to which you intend to install WordPerfect is available.
- 2** Insert the diskette labeled **Install/Learn/Utilities 1** into your file server's disk drive.
- 3** Enter **a:install** (or **b:install** if you are using the B drive) at the DOS prompt.
- 4** Press **Enter**.
- 5** Type **y** to continue.
- 6** Type **y** for hard disk.
- 7** Select **Network (3)** for a network installation.
- 8** Select **Install Files From (1)** and enter the drive from which you will install WordPerfect.
- 9** Select **Install Files To (2)** and enter the drive letters and directories to which you will install WordPerfect and to which all users will have access.

NetWare Users: Specify network drive letters rather than search drive letters.

- 10** Select **Install Disks (3)** to copy files.
- 11** Type **y** if you want to copy files; type **n** if you don't want to copy files.
- 12** Select **Check CONFIG.SYS and AUTOEXEC.BAT (4)**.

Selecting this option checks and edits (if necessary) the CONFIG.SYS and AUTOEXEC.BAT files on the machine that you are using to install WordPerfect. You should also check and/or adjust these files on each user's workstation individually.

The Installation Program ensures that at least 20 files can be open at one time, and that the directory that contains the WordPerfect program is in the PATH.

NetWare Users: There's no reason to use the PATH statement if you have a search drive mapped to the main WordPerfect directory.

- 13** Select **Check WordPerfect Network Environment file (WP{WP}.ENV) (5)**.

The WordPerfect environment file is a DOS text file that is referenced each time you start WordPerfect. Two startup options are placed in this file: The /nt option, which tells WordPerfect to operate as networked software under the network you designate, and the /ps option, which specifies the location of where WordPerfect will place setup files.

14 Select the number below that corresponds to your network operating system.

- 0-Other
- 1-Novell NetWare
- 2-Banyan Vines
- 3-TOPS Network
- 4-IBM PC LAN
- 5-Nokia PC-Net
- 6-3COM 3+ Share
- 7-10NET
- 8-LANtastic
- 9-AT&T StarGROUP
- A-DEC Pathworks
- B-3COM 3+ OPEN
- C-Banyan Streetalk

Network number 4 can also be used for any of the following networks:

- IBM LAN Server
- Microsoft LAN Manager
- Ungerman Bass LAN Manager
- LANsmart
- PC NOS
- DNA
- Invisible NET
- NetWare Lite
- Main LAN
- PowerLAN
- HP LAN Manager
- CBIS

If your network is not listed above, try network numbers 4 or 0. If neither of these choices works, call Network Support at the numbers listed above. If you do not choose a network number, WordPerfect will not run as a network-aware application. After you select your network, you are prompted for the setup file directory.

15 Enter the pathname where you want WordPerfect to write setup files.

Using the information you provide, the Installation Program inserts the network number and setup directory pathname next to their respective startup options. For example, if you selected Novell NetWare (1) and you specify J:\WP51\SETUP as the setup file directory, then the following information would appear in the WordPerfect environment file (WP{WP}.ENV):

```
/nt=1  
/ps=j:\wp51\setup
```

If you need to change the network number or setup file directory pathname, you can edit the WordPerfect environment file using a DOS text editor. Though we do not recommend it, you can include other startup options in the WordPerfect

environment file, provided that they start with the letters "p" or "n." Do *not* include the /u or /d startup options in the WordPerfect environment file.

16 Choose Select and Install Printer and Exit (6).

17 Insert the Printer master diskette into the disk drive.

Depending on the printer files you need to install, the Printer master diskette is either the Printer 1 diskette or a an additional Printer diskette numbered 5 or greater. You can call WordPerfect Orders at **1-800-321-4566** to obtain additional printer diskettes.

18 Select each type of printer that will be on the network.

This step selects the appropriate .ALL file that you will later use to create a specific .PRS (**P**rinter **R**esource) file for each printer on your network (see *Creating the Master Setup File and Setting Up Network Printers* below). This step also exits the Installation Program.

You are now finished with the installation process.

Granting Rights/Privileges

Before *any* users start WordPerfect on the network, you should secure files that are critical to the operation of WordPerfect. You secure such files by granting read-only rights (or equivalent) to directories and/or to files themselves. Read-only rights let users use files but prevent users from modifying the files.

This section explains the general level of security that is suggested for WordPerfect directories, which files need read-only (or equivalent) rights, and how to use the security mechanisms within WordPerfect to enhance protection.

Protecting Directories

Securing a directory secures the files within that directory. The following table lists 12 major networks and the rights or privileges that users should have to the directories that they will use with WordPerfect.

You assign rights to directories using a special utility provided by your network such as the SYSCON utility or GRANT command line utility offered by Novell.

Network Operating System	WordPerfect Executable Files	Setup and Temporary Files	Most Location of Files Directories*	Printer**, Graphics, and Main Dictionary Files
Novell NetWare 286	Read, Open, Search	All but Parental	All but Parental	Read, Open, Search
Novell NetWare 386	Read, Filescan	All but Supervisor and Access Control	All but Supervisor and Access Control	Read, Filescan
Banyan Vines	Read or R	Modify or M	Modify or M	Read or R
IBM PC LAN	Read, Execute	Read, Write, Create, Execute	Read, Write, Execute, Delete	Read
IBM OS/2 LAN	Read, Execute	Read, Write, Create, Execute	Read, Write, Execute, Delete	Read
MS LAN MAN 2.0	Read, Execute	Read, Write, Create, Execute	Read, Write, Delete	Read, Execute
3COM 3+ Share	Read	Read, Write, Create	Read, Write	Read
10NET	Read	Read, Write, Create	Read, Write, Create	Read
LANtastic	Read, File Lookup, Execute	All but Physical Access to Devices	All but Physical Access to Devices	Read and File Lookup
AT&T	Read, Execute	Read, Write, Create, Delete	Read, Write, Execute, Delete	Read
DEC Pathworks PCSA	Disk Service	File Service	File Service	File Service
3 COM 3+ OPEN	Read, Execute	Read, Write, Create, Delete	Read, Write, Execute, Delete	Read

*These include the Backup, Keyboard, Macros, Supplementary Dictionary, Style, Documents, and Spreadsheet files.

**Because you cannot edit a file that is read-only, wait until after you have created the master setup file (WP{WP}.SET) and set up network printers to assign rights to the directory that contains printer files (see *Creating the Master Setup File and Setting Up Network Printers* below).

What Rights Should Users Have to Printer Files?

As a general rule, you should give users read-only rights to printer files (those with .PRS and .ALL extensions). However, if users do not have the ability to change these files, they will have to depend on you, their network supervisor, to perform simple tasks such as adding new paper sizes and types, cartridges, or fonts.

The extent to which you allow users to edit printer settings depends upon your network managerial style and your company's needs. If you want to maintain control over printer files, then grant read-only rights (or equivalent).

If you want to relax the level of security to printer files, enabling users to change settings, then grant them read/write rights (or equivalent). While this could place the files at risk, you can always make copies of the printer files and place them in a protected directory for safekeeping.

Protecting Individual Files

Securing a specific file is the deepest level of protection you can give a file. In addition to the directory security that you provide above, you should also secure WordPerfect files with the following extensions:

.COM	.HLP	.PRS*
.CRS	.HYC	.THS
.DRS	.IRS	.VRS
.EXE	.LEX	.WPK
.FIL	.LRS	
.FRS	.MRS	

*Because you cannot edit a file that is read-only, wait until after you have edited printer files to assign rights to individual printer files.

Use the DOS ATTRIB command to set these files to +R, or use your network's file attribute feature.

NetWare Users: Use the FLAG command to set these files to SRO.

WordPerfect File Security

To augment your network's security features, WordPerfect offers two types of file security: file locking and passwords.

File Locking

When a user retrieves a file from the network that is being used by someone else, brackets appear around the filename. For example:

```
[J:\USERS\DOCUMENTS\PROPOSAL.1]
```

The brackets around the filename indicate that the file is locked. If a filename appears this way, you may edit the file, but you must choose a different filename when saving changes. This ensures that only one person can edit a file at a time.

Passwords

You can assign individual passwords to files so that if you do not have the correct password you cannot access that file (see *Locked Documents in Reference*).

Establishing Network-Wide WordPerfect Default Settings

You can establish network-wide default settings to help give company documents a consistent, uniform look.

For example, the company format may have a certain font, 1-inch margins, left justification, and the date inserted at the top right of the first page.

Many users will probably define their own setup after you have established default or "master" settings. As the network supervisor, you should decide how much autonomy users will have over their own settings. You can maintain control over several key default settings using the Network Setup Utility (NWPSETUP) provided with WordPerfect (see *Using NWPSETUP to Add/Change Master Settings* below).

Possible Default Settings

WordPerfect is shipped with predefined default settings that many people will find satisfactory; however, you can edit these settings to fit your company's needs. WordPerfect records default settings in **Setup** and **Printer Resource** files, which you can identify by their .SET and .PRS extensions, respectively. The following lists, which are organized by the settings that each file contains, show which settings you can make.

.SET

- Setup Initial Codes
- Location of Files pathnames
- Initial document font
- Backup interval
- Keyboard names
- Screen size
- Beep options
- Screen attributes
- Repeat count
- Table of Authorities definition
- Date format
- Mouse settings
- Graphics screen type
- Default printer*
- Print options*
- Printer list*
- Printer ports*
- Printer names*
- Path for downloadable fonts*

.PRS

- Sheet feeders
- Paper Size/Type
- Cartridges and fonts
- List of fonts

*Note that .SET files contain some printer information.

Master vs. Personal Setup Files

Setup files come in two varieties: master and personal. The master setup file contains company-wide default settings and uses the network supervisor initials ({wp}) in its filename. Personal setup files are defined by the individual user and override the master setup file settings for that user only. They include users' unique initials. For example:

Master Setup File

WP{WP}.SET

Personal Setup Files

WPKLC}.SET

WPKSW}.SET

WPGRM}.SET

WPBWK}.SET

WPRSB}.SET

Personal setup files inherit the settings in the master setup file the first time a user starts WordPerfect. It is therefore best to define a master setup file *before* users start WordPerfect so that they will acquire the default settings you want them to.

If you define a master setup file *after* users start WordPerfect, they will only inherit the default settings that ship with WordPerfect, which may not be the ones you want them to have. For example, suppose you add a new printer to the network and a corresponding printer definition in WordPerfect. The only users that will see this printer in the WordPerfect Print: Select Printer menu will be those that start WordPerfect for the first time after you have added the printer. This rule applies to any changes you make to the master setup file.

You can still make changes to personal setup files after users have started WordPerfect, but only by starting each user's copy of WordPerfect with his or her unique initials and making changes individually, or by deleting all users' setup files so that new ones, based on the latest master setup file, are created. As this could be time consuming, we recommend running the NWPSETUP utility instead to add or change settings. *Using NWPSETUP to Add/Change Master Settings* below explains which settings it can change.

Using Initials Consistently

To ensure that only one setup file exists for each user, users should use the same initials every time they start WordPerfect. The /u startup option can be used in each user's AUTOEXEC.BAT file (or login script for NetWare users) to ensure that WordPerfect starts with the same initials every time (see *Setting Up User Workstations* below to learn how).

Checking Rights to the Setup File Directory

During installation, you were asked to enter a pathname for the setup file directory. Double check to make sure that users have sufficient rights or privileges to this directory as outlined under *Granting Rights/Privileges* above.

Creating the Master Setup File and Setting Up Network Printers

Now that you understand how default settings are set, where they are recorded, and how users inherit them, you're ready to create a master setup file (WP{WP}.SET) and set up network printers.

- 1 Start WordPerfect using the {wp network supervisor initials by entering **wp/u={wp}** at the DOS prompt.

Because the master setup file (WP{WP}.SET) can only be created by starting WordPerfect with the {wp network supervisor initials, you *must* use these initials. If you use other initials, such as SUP, WordPerfect will create a setup file based on those initials (e.g., WPSUP).SET), but WordPerfect will not recognize it as a master setup file.

- 2 Set up the document format initial settings that you would like all users to have every time they create a WordPerfect document.

Document format initial settings include justification, margins, single or double spacing, etc. See *Setup* and *Format* in *Reference* for a complete list of options.

- 3 If you want to specify a keyboard, press **Setup** (Shift-F1), then select **Keyboard Layout** (5).
- 4 Press **Setup** (Shift-F1), then select **Location of Files** (6) to organize directory pathnames.

Location of Files pathnames change frequently on a network because users edit pathnames to fit their own needs. However, as the network supervisor, you should establish some initial pathnames to help users get started.

Use the table below as a guide while you specify Location of Files pathnames. Note that some pathnames require a master setup file setting, while others may be set in either the master setup file, the user setup file, or may simply be left blank.

Location of Files Directory	Suggested Setting
Backup Files	Master
Keyboard/Macro Files	Master, User, or Blank
Thesaurus/Spell/Hyphenation (Main)	Master
Thesaurus/Spell/Hyphenation (Supplementary)	Master, User, or Blank
Printer Files	Master, User, or Blank
Style Files	Master, User, or Blank
Library Filename	Master, User, or Blank
Graphics Files	Master, User, or Blank
Documents	Blank
Spreadsheet Files	Blank

- 5 Press **Print** (Shift-F7), then choose **Select Printer** (s).
- 6 Examine the list that is displayed and make sure a unique printer definition (or .PRS file) exists for each printer on the network.

Even though you may have two identical printers on the network, you should create a unique .PRS file for each printer because each one may have unique (customized) settings (e.g., different cartridges, paper sizes and types, etc.) or at least a different location.

7 Copy previously created .PRS files, if necessary, so that they appear in the list as well.

8 Highlight a printer definition name.

9 Select **Edit (3)**.

10 Select **Name (1)** and give the printer a unique name based on location or owner (e.g., WEST PRINTER or GREG'S PRINTER).

The name you give the printer will appear in the printer list.

11 Select **Port (2)** and select the appropriate port.

The port you select depends on how your network software handles print jobs. See *Using Network Redirection Commands* below for more information.

NetWare Users: Because the CAPTURE command contains many variables that could cause problems if not set up properly, we recommend printing directly to the print queue. Choose "Other" for the port option and then type the print queue name when asked for the Device or Filename. You may need to use a server/queue name if there are multiple servers.

12 Type **y** when asked if the printer is a network printer.

You should consider a printer a network printer if it used by multiple users on the network.

13 Type **n** when asked to suppress the top of the form on the last page of the document.

At the end of a print job, WordPerfect sends a form feed at the end of the document. If the network printer also produces an extra piece of blank paper after a print job, repeat step 13 above, but type **y** instead of **n**. If this doesn't work, return the setting to "no" and consult your network documentation about form feeds.

14 Continue editing the printer definition by designating sheet feeders, cartridges, fonts, print wheels, an initial base font, paper sizes and types, and forms for this particular printer.

Many printers let you access additional fonts with interchangeable print cartridges, print wheels, or downloadable font files. The WordPerfect Cartridges/Fonts/Print Wheels feature lets you mark the cartridges, soft fonts, and print wheels you plan to use. See *Cartridges/Fonts/Print Wheels* in *Reference* for complete instructions for marking cartridges and fonts.

15 Repeat steps 8 through 14 for each printer in the Print: Select Printer list.

Files with .ALL extensions contain general printer information and are used to create printer-specific .PRS files. If you are concerned about disk storage space,

you may want to delete .ALL files after you have selected printers. You can also copy them to a protected directory to prevent users from replacing .PRS files. If users replace a .PRS file, all default settings that you have established in that file will be lost.

In the event that you add or replace printers on your network, or select additional soft fonts or sheet feeders, you will need to access .ALL files. This may require using the Installation Program to re-install them if you have deleted them.

16 If you have given users read/write access (or equivalent) to the printer files directory, you may want to store a backup copy of each .ALL and .PRS file in a read-only (or equivalent) directory for safekeeping (see *What Rights Should Users Have to Printer Files?* above).

17 Exit WordPerfect without saving the document.

Before printing from the network, you should include your network's redirection command in each user's AUTOEXEC.BAT file (or login script for NetWare users). See *Setting Up User Workstations* below.

You have now finished creating the master setup file and setting up network printers.

Setting Up User Workstations

Before users start WordPerfect from their workstations, you may want to include various startup options and other commands in their AUTOEXEC.BAT files, or, for NetWare users, in their login scripts. This is also an ideal time to check if the CONFIG.SYS file on each user's machine allows at least 20 files to be opened at one time.

After you have included the proper commands in the users' AUTOEXEC.BAT files, CONFIG.SYS files, and/or login scripts, have all users reboot their computers to put settings into effect.

AUTOEXEC.BAT File

The information below is an example of the commands you can place in the AUTOEXEC.BAT file for networks that do not use a login script or an equivalent batch of commands.

```
PATH J:\WP51
SET WP=/U-KLC/D-J:\KENT/PF-J:\KENT
redirection command for printers and drives
```

Note that the startup options in the SET command use a hyphen (-) rather than the usual equal sign (=).

See *Using Startup Options* and *Using Network Redirection Commands* below for more information.

Novell Login Script

The following is an example of what to include in the Novell system login script:

```
DOS SET WP="/U-%LOGIN_NAME/D-J:\%LOGIN_NAME/PF-J:\%LOGIN_NAME"
```

You must use uppercase letters for all variables such as the %LOGIN_NAME. You must also use the quotation marks (") as shown in the examples above.

Note that startup options that normally use an equal sign (=) require a hyphen (-) when included in a DOS SET command. For example, use /u=klc from the command line, but /u-klc in a DOS SET command.

Because WordPerfect reads only the first three characters of the %LOGIN_NAME when it is used with the /u startup option, users with similar names could share the same setup file. For example, if you have a Kathy and a Katrina on the network, and you use these names as the %LOGIN_NAME with the /u startup option, they will share a setup file called WPKAT}.SET.

To avoid this problem, use the /u startup option and use a unique set of user initials (e.g., "KAT" for Kathy and "KTR" for Katrina) in users' login scripts.

Using NWPSETUP to Add/Change Master Settings

Users inherit the settings found in the master setup file (WP{WP}.SET) the first—and *only* the first—time they start WordPerfect. This is why you should establish network-wide or master settings *before* any users start WordPerfect (see *Establishing Network-Wide Default Settings* above). Should master settings change after users have created their own setup files (i.e., a new printer is added to the network, or the format of company documents changes), you have three ways of updating users' setup files with the new settings:

- Start WordPerfect with each users' initials and make changes to each user's setup file (it's easy to see how this could take a long time, especially in a large organization).
- Delete all users' setup files and have them restart WordPerfect to inherit the latest changes.
- Use the Network Setup Utility (NWPSETUP) provided with WordPerfect.

NWPSETUP is a fast and convenient way of updating users' setup files. However, it only updates the following default settings:

- Location of Files
- Keyboards
- Initial Codes
- Network printer definitions

Any other information stored in users' setup files must be changed on an individual basis.

For NWPSETUP to work, it needs to be in the *same* directory you have specified with the /ps startup option in the WordPerfect environment file (WP{WP}.ENV) or in the PATH.

To use NWPSETUP,

- 1 Make sure all users have exited WordPerfect.

If users are still in WordPerfect when you run NWPSETUP, their setup files may not be updated.

- 2 Verify that the master setup file (WP{WP}.SET), the NWPSETUP utility, and all users' personal setup files (WPxxx).SET) exist in the same directory.
- 3 Make a copy of all setup files in case you change items that you do not intend to update.
- 4 At a DOS prompt, change to the setup file directory.
- 5 Enter **nwpsetup** at the DOS prompt.
- 6 Type **y** next to those settings you want to change and **n** next to those settings you don't want to change.

The NWPSETUP utility replaces the information in the individual user setup files with the information in the master setup file. Press **Cancel** (F1) or **Exit** (F7) before answering "yes" or "no" to the last question to terminate the updating process.

Note: NWPSETUP only updates printers which you have specified as network printers. You specify a printer as a network printer by answering "yes" when asked during the printer editing process (see *Creating the Master Setup File and Setting Up Network Printers* above).

Giving Users Access to WordPerfect Dictionaries

The two dictionaries available with WordPerfect are the main dictionary (WP{WP}US.LEX) and the supplementary dictionary (WPxxx)US.SUP, where xxx represents a user's unique initials). The main dictionary contains over 115,000 words and the supplementary dictionary contains words that a user adds.

Users should have read-only rights (or equivalent) to the directory that contains the main dictionary file. This allows them to use the file without corrupting it. You may also want to ATTRIB the file to +R (or on Novell networks, flag the file SRO). The pathname to this directory should be global; that is, it should be a network directory so that all users have access to it.

Users should have all rights to the directory that contains their own supplementary dictionary so they can add words. The pathname to this directory may be global since a unique filename is created for each user's supplementary dictionary.

The steps below explain how to change dictionary pathnames in the master setup file (WP{WP}.SET) and users' personal setup files.

- 1 Start WordPerfect by entering **wp/u={wp** at the DOS prompt.
- 2 Press **Setup** (Shift-F1).
- 3 Select **Location of Files** (6).

- 4 Specify the directory pathnames for the main dictionary.
- 5 Run the NWPSETUP utility to replace user setup file settings with the new master setup file settings.

Note: NWPSETUP replaces user setup files with the directory pathnames exactly as they appear in Setup: Location of Files, even if they are blank. For example, if the Style File option is blank, and you use NWPSETUP, users will inherit the blank setting for Style Files even though they may have set up their own personal style file directory pathname.

For additional information on using the Network Setup Utility, see *Using NWPSETUP to Add/Change Master Settings* above.

Using Startup Options

Startup options, also known as “switches,” can be used to control the way WordPerfect works in a networked environment. The first section below defines six startup options that can be used when running WordPerfect on the network. Some startup options are essential while others are optional. To help you decide where to place startup options, the last section explains the order in which these startup options are executed depending on their location.

What Startup Options Do

This section explains how the /nt, /ps, /d, /pf, /u, and /sa startup options affect WordPerfect.

Normally these startup options use equal signs. However, if you use them in a SET COMMAND, use a hyphen (-) instead of the equal sign. For example, /D-C:\TEMP instead of /D=C:\TEMP.

/nt=network #

The /nt startup option instructs WordPerfect to operate as a network type. When you use /nt, WordPerfect operates as networked software under the network you specify (e.g., /nt=1 for Novell or /nt=2 for Banyan). See *Installing WordPerfect on the Network* above for a complete list of /nt numbers.

When WordPerfect is started with /nt, it prompts for user initials during startup and, based on the initials that are used, creates user-specific files (e.g., setup files, temporary files, and supplementary dictionaries). This individualized file naming lets multiple users start, use, and customize WordPerfect at the same time.

The /nt startup option is copied to the WordPerfect environment file (WP{WP}.ENV) during installation. You should not use the /nt startup option in any other location. If this startup option is not used, WordPerfect will not prompt for initials, and will not create user-specific setup files or temporary files; in short, WordPerfect will not run as a network-aware application.

/ps=drive\directory

The */ps* startup option specifies the path to the setup file directory, which instructs WordPerfect where to write the master setup file (WP{WP}.SET) and users' personal setup files. This startup option is essential if you want to manage setup files from a centralized location using the NWPSETUP utility (see *Using NWPSETUP to Add/Change Master Settings* above). Users should have all rights to the directory that you specify with this startup option.

The */ps* startup option is copied to the WordPerfect environment file (WP{WP}.ENV) during installation. If this startup option is not used, it is much more difficult to control where users will create and store their setup files on the network.

You can use the */ps* startup option from the command line, or in the WP DOS or WPC DOS variables (see *Order of Execution* below); however, we recommend using it in the WordPerfect environment file (WP{WP}.ENV).

/d=drive\directory

When WordPerfect starts, it creates temporary files (also known as virtual or overflow files). An example of a temporary file is WP}WP{.BV1 (see *Appendix Q: WordPerfect Files* for a list of other temporary files).

Normally, temporary files are written to the directory where the WordPerfect program file (WP.EXE) is located or to the current default directory. If users do not have sufficient rights to these directories, you can use the */d* startup option to "redirect" temporary files to a directory to which users do have adequate rights. The */d* startup option directs these files to the drive and directory you specify, regardless of the user's current default directory. Make sure that the directory you specify is one to which users have all rights.

You can use the */d* startup option from the command line, or in the WP DOS or WPC DOS variables (see *Order of Execution* below).

/pf=drive\directory

The */pf* startup option redirects temporary print files (e.g., WP}WP{PJ.###) that WordPerfect creates during a print job.

Normally, temporary print files are written to the default directory. If users do not have sufficient rights to this directory, you can use the */pf* startup option to place temporary print files in a directory to which users do have adequate rights. The */pf* startup option directs these files to the drive and directory you specify, regardless of the user's current default directory. Make sure that the directory you specify is one to which users have all rights.

You can use the */pf* startup option from the command line, or in WP DOS or WPC DOS variables (see *Order of Execution* below).

/u=username

As a network type, WordPerfect prompts for initials when it is started to let multiple users run it on a network. These initials are important because they are used to create files that are unique to the user (e.g., WP{CBK.SET}).

You can use the /u startup option to avoid being prompted for initials every time WordPerfect is started and to ensure that the *same* initials are used. If users do not use this startup option, and if you are not using WordPerfect Office, they will be prompted to enter their initials each time they start WordPerfect.

You can use the /u startup option from the command line, or in the WP DOS or WPC DOS variables (see *Order of Execution* below).

/sa

The /sa startup option causes WordPerfect to start up in stand-alone mode even if the WordPerfect environment file (WP{WP}.ENV) exists.

The /sa startup option is useful if you have a copy of WordPerfect on your workstation's hard disk and the network is either not loaded or down. By starting WordPerfect with the /sa startup option, you won't be prompted for user initials, and you won't receive a "Network Not Loaded" error message. You may also find that WordPerfect starts faster than normal. The /sa startup option can also be used as a troubleshooting aid to see if WordPerfect operates differently in standalone mode versus network mode.

You can use the /sa startup option from the command line, or in the WP DOS or WPC DOS variables (see *Order of Execution* below).

Order of Execution

The following list illustrates the order in which startup options are executed.

- 1) Command line
- 2) WP DOS variable
- 3) WPC DOS variable
- 4) WordPerfect environment file (WP{WP}.ENV)

For example, if you start WordPerfect from the command line with /u=cbk (e.g., **wp/u=cbk**), yet /u-bwk exists in the WP DOS variable (e.g., **dos set wp/u-bwk**), WordPerfect will recognize "CBK" as the user initials rather than "BWK."

The WP DOS variable is for the WordPerfect program, whereas WPC is the WordPerfect Product Global DOS variable.

Troubleshooting

The first part of this section provides general guidelines for narrowing down problems you may encounter while using WordPerfect on the network. After this section you will find the causes and solutions for several common networking problems. If you have tried to isolate the problem and/or considered the solutions, but you are still faced with a problem, call Network Customer Support. See *Getting Help* at the beginning of this appendix for Customer

Support telephone numbers. See also *Solving Error Messages* below for causes and solutions to common error messages.

Narrowing Down the Problem

You can understand a problem better by eliminating the variables. For example,

- See if the problem exists on another networked computer.
- Start WordPerfect with different user initials.
- Log in as the network supervisor.
- Start WordPerfect on a stand-alone machine's local drive.
- Unload any TSR programs from CONFIG.SYS or AUTOEXEC.BAT files, or from login scripts or batch files. Reboot.
- Exit WordPerfect and try again.
- If you receive an "Access Denied" message, start WordPerfect with the /d and /pf startup options to redirect temporary files to a local drive or a drive with all rights (or equivalent).
- If you have a printing problem, try printing from DOS or hook up the printer locally.

Can't Read Drive A on Diskless Workstation

Cause 1: The path to the COMMAND.COM is unknown to WordPerfect.

Cause 2: The COMSPEC command is not the first item in the AUTOEXEC.BAT file, or there is more than one COMSPEC command.

Cause 3: (Novell) There is a volume name in one or more of the WordPerfect paths.

Cause 4: (Novell) The COMSPEC command is not the first item after the drive mappings in the login script.

Cause 5: (Novell) The first search drive is not mapped to the directory where COMMAND.COM is located.

Solution: Correct the deficiencies listed above. See the information under *Invalid COMMAND.COM* under *Solving Error Messages* below.

Default Directory Problems on Novell

While using Novell v3.1, pressing List Files (F5) twice defaults to the default directory instead of the previous directory.

Cause: The user is probably using XMSNET3 in the AUTOEXEC.BAT file instead of NET3. XMS is for extended memory.

Solution: Use NET3 or NETx instead of XMSNET3 in the AUTOEXEC.BAT file. Save the file and reboot.

Network Printer Does Not Print from WordPerfect

Cause: During installation, a network number for the /nt startup option was not selected, or an incorrect network number was selected.

Solution: Check the WordPerfect environment file (WP{WP}.ENV) to make sure the number for your network is included in the /nt startup option. Use a DOS text editor if necessary.

Cause: Users do not have sufficient rights or privileges to the directory where WordPerfect writes the temporary print file (either the WordPerfect default directory, or a temporary print files directory specified by the /pf startup option).

Solution: Check to see if the user has all rights to one of the directories listed above.

Cause: The printer port does not match the port you specified in the WordPerfect Select Printer: Edit screen.

Solution: Start WordPerfect with the network supervisor initials ({wp), press **Print** (Shift-F7), choose **Select Printer** (s), highlight the desired printer, then select **Edit** (3) and check the port setting (check for proper queue name on Novell networks). Run NWPSETUP to change the port setting in users' setup files.

Cause: The user may not have sufficient rights or privileges to the printer, or the redirection command is incorrect.

Solution: Try printing at DOS. If you can, increase the rights or privileges to the printer, and/or adjust the redirection command.

Not Enough Room on WordPerfect Disk to Retrieve Text

Cause: Most likely a problem with Novell's Shell v3.02a or v3.10.

Solution: Try blocking the text and saving to a local drive. Next, enter **nver** at the DOS prompt and check the version of the shell. Contact your dealer for the latest version of the network shell. As a work around, add the following to the SHELL.CFG file (an ASCII text file): `CACHE BUFFERS = 0`. You should place this in the directory from which ipx and netx are executed (C:\ or A:\).

Printer Not Listed After Using NWPSETUP

You have started WordPerfect using the network supervisor initials ({wp), selected a new printer, then run the NWPSETUP utility to update users' setup files. However, when a user starts WordPerfect under his or her unique user initials, the new printer is not listed in the Print: Select Printer list.

Cause: NWPSETUP will not update printers that have not been specified as network printers.

Solution: When asked if the printer is a network printer in the Select Printer: Edit screen, answer "yes" (see *Creating the Master Setup File and Setting Up Network Printers* above for detailed steps).

Cause: The user is using a different setup file than the one in the directory that you have specified with the /ps startup option (usually placed in the WordPerfect environment file (WP{WP}.ENV)).

Solution 1: The user needs to start WordPerfect using the /ps startup option and the pathname where setup files are located (e.g., **wp/ps=j:\wp51\setup**). Find out how the user starts WordPerfect (menu string, BAT file, or by entering **wp** at the DOS prompt from his or her personal subdirectory). Make the necessary

modifications so that the /ps startup option is used. For example, modify the menu string or .BAT file to include the /ps option, or instruct the user to include the SET command with the /ps option included if they are starting WordPerfect at DOS from their personal subdirectory.

Solution 2: On Novell networks, use the NDIR *.SET SUB command to check what setup file the user is accessing.

Solution 3: Remove all /ps startup options except the one in the WordPerfect environment file (WP{WP}.ENV).

Problems While Saving a File on LANtastic

While saving a file on LANtastic 4.0, you encounter one or more of the following problems: 1) file corruption, 2) 0 byte file, or 3) prefix corruption or loss.

Cause: The initial release of v4.0 handles file information differently than other LANtastic versions do. When WordPerfect saves a file, it writes the prefix to a buffer. LANtastic clears the buffer when the file is saved. If the buffer is cleared before the file is saved, then vital WordPerfect information is lost. Some of this information is in the prefix.

Solution: Contact Artisoft Technical Support and tell them that you are having the "WordPerfect File Corruption Problem."

Speller Stops Working

Cause: The WP{WP}.SPW file is not in the same subdirectory as WP{WP}US.LEX.

Solution: Find out where the Speller files are and move them to the appropriate directories if necessary.

Cause: The supplemental Speller files are not in a directory to which the user has all rights, or the files themselves have been ATTRIBed as read-only.

Solution 1: A user should have all rights to the directory that contains his or her supplemental dictionary files.

Solution 2: (Banyan) Use the **setattr +S** command on the WP{WP}US.LEX command.

Solving Error Messages

This section attempts to explain why you have received an error message and what you can do to solve the problem. The error messages are arranged in alphabetical order. If you have considered the solutions, and you are still faced with a problem, see *Getting Help* at the beginning of this appendix.

Access Denied: filename.BV1

Cause: There are open temporary files in the directory in which the user is trying to start WordPerfect.

Solution 1: Make sure the user is not using the same user initials as another user.

Solution 2: Make sure no one is using the files, exit to DOS, and try to delete the files. If you can't delete them, your network may offer a utility to close them.

Access Denied (Periodic)

While using WordPerfect, you receive an "Access Denied" message that seems to come at periodic intervals.

Cause: The timed backup feature is trying to write a backup file to a directory where the user does not have sufficient rights to write a document.

Solution 1: Increase the rights to the directory in which users' backup files are written.

Solution 2: Specify a Location of Files path to a directory to which the user has sufficient rights.

Solution 3: Turn off the backup option.

Access Denied (While Changing Paper Sizes/Types or Selecting a Printer)

Cause: You may not have sufficient rights to the directory that contains printer files.

Solution: Check your rights in the directory you are working in. You need full rights or privileges.

Cause: The specific .PRS file you need to edit has been ATTRIBed +R or (on Novell networks) flagged SRO.

Solution: Remove the file attribute of the specific .PRS file that you want to edit.

Cause: (Novell) Available directory entries are exhausted.

Solution: On a Novell 286 network, use the CHKVOL utility at the DOS prompt in the default directory. The last entry that appears will indicate how many directory entries are available. If the entries are 10 or fewer, they will have to be increased at the Novell network level.

Can't find WP.FIL nn

This error message is usually caused by a hardware problem.

Cause: Use the accompanying number (*nn*) to interpret the specific error. For example:

Error Number	Explanation
0	Overlay error (possible corruption of WP.FIL)
5	Access denied
6	Invalid handle
30	Read fault
65535	Critical error (sector not found or drive not ready)

Solution: Use the error number to decide which corrections to make.

Cause: (Novell) Volume names may exist in the pathnames of the following areas:

- WP{WP}.ENV file
- Other Directory (F5,7)
- Location of Files (Shift-F1,6)
- Path for Downloadable Fonts (Shift-F7,s,3,6)

- Document to be retrieved (Shift-F10)
- In the /ps, /d, or /pf startup options

Solution: Check each of these areas and make sure that only drive letters are being used.

Cause: (Novell) Two users may be using the same initials.

Solution: Give each user unique initials.

Cause: (Novell) Users may have used the DOS CD command or the Other Directory (7) option in List Files to change directories. This could have changed the mappings. The DOS CD command temporarily reassigns the path associated with that drive.

Solution: Restore pathnames to their original state and instruct users to not change mappings.

Cause: (Banyan) The communication settings may be insufficient.

Solution: (Banyan) Enter **pcconfig** at the DOS prompt of the appropriate workstation. Check the settings in Communication Settings: Communication Buffers (16), Sockets (20), and SPP (50). The values in brackets are the defaults. They may be too low. By increasing these values, you may help reduce the problem. However, increasing these values uses up RAM.

Error Reading Drive F:

Note: This error is usually caused by hardware problems.

Cause: The network is experiencing communication errors with the workstation or there is an improper setup.

Solution 1: If using Etherlink 3c501 cards, use the /nc startup option.

Solution 2: (Novell) Update the network shell to version 2.12C or later.

Solution 3: Ensure that all passive hubs are terminated if using an ARCNET network.

Solution 4: Check to see if there is a conflict between fast machines and slow cards.

Solution 5: You may have high memory conflicts with expanded memory, EGA or VGA monitors, or with the network address.

Solution 6: Check for bad cabling, bad cards, duplicated addresses, or distance problems.

File Creation Error When Starting WordPerfect on Novell

Cause: Directory entries have been exhausted.

Solution: If using a Novell 286, use CHKVOL. On Novell 386, use VOLINFO or FILER. These utilities should display a listing of directory entries available for this volume as well as the number of bytes available. The user will have to increase the number of entries either through the deletion of files or through the network system management routines.

Invalid COMMAND.COM

Cause: The SET COMSPEC command is not the first item in the AUTOEXEC.BAT file, ahead of any environment commands, such as the DOS SET command. (Novell) The SET COMSPEC command is not the first item in the system login script. TSRs or other programs are affecting the path pointing to the location of COMMAND.COM.

Solution: Make sure the SET COMSPEC command exists only on the first line of the AUTOEXEC.BAT file (or login script for NetWare users). This ensures that WordPerfect uses the workstation's COMMAND.COM instead of the network's. For example, insert the following:

```
SET COMSPEC = [d]:\COMMAND.COM
```

The [d] symbol represents either the C drive (for hard disks), the A drive (for non-hard disk systems), or the network drive. Compare the two DOS version numbers that display after you have entered **ver** and then **command** at the DOS prompt. They should be the same. You can also enter **set** at the DOS prompt. The COMSPEC command should be the first item listed.

Unable to Create Temporary Files

Cause: The user does not have sufficient rights to the directory where WordPerfect is creating temporary files (also known as the workspace or overflow directory).

Solution: Increase the user's rights to read, write, delete, and modify to the temporary files directory. Make sure temporary files go to this directory by using the /d and /pf startup options (see *Using Startup Options* above).

Cause: (Novell) The /ps startup option in the WordPerfect environment file (WP{WP}.ENV) may specify a volume rather than a drive.

Solution: For example, /PS=W:\WP51\SETUP is correct, but /PS=SYS:WP51\SETUP is incorrect. Change volumes to drives if necessary.

Running the Tutorial from the Network

Follow the steps below to run the WordPerfect Tutor from the network. See *NetWare Users* for specific tips on Novell networks.

- 1 Ensure that there is a PATH statement that includes both the WordPerfect and Learning directories.
- 2 At a DOS prompt (or in an AUTOEXEC.BAT file), enter **set wp=/u-xxx**, where xxx are the user's initials.
- 3 Make sure you are in a directory to which you have rights to write temporary files.
- 4 From the directory specified in step 3, enter **tutor** and follow the prompts.

NetWare Users

To run the Tutor on a Novell network:

- 1 Make sure there are search drives to both the WordPerfect and Learning directories.

- 2 Include the following information in the system login script or user's login script:

```
DOS SET WP="/U-%LOGIN_NAME"
```

or

```
DOS SET WP="/U-xxx"
```

You must use uppercase letters in the %LOGIN_NAME. You must also use the quotation marks (") as shown in the examples above.

- 3 Make sure you are in a directory to which you have rights to write temporary files.
- 4 From the directory specified in step 3, enter **tutor** and follow the prompts.

Disabling Keystrokes

You can disable certain keystrokes to customize your WordPerfect setup. For example, the steps below explain how to disable the Shell keystroke (Ctrl-F1).

- 1 Start WordPerfect using the {wp initials}.
- 2 Press **Setup** (Shift-F1), then select **Keyboard Layout** (5).
- 3 Rename the existing keyboard file for backup purposes.
- 4 Name the new keyboard **DISABLE** or something that tells you this keyboard has been edited.
- 5 Select **Edit** (7).
- 6 Select **Create** (4), then press **Shell** (Ctrl-F1).
- 7 Write a description that indicates Shell is disabled.
- 8 Press **Enter**.
- 9 A macro box will appear containing the cursor and displaying **{Shell}**.
- 10 Delete the **{Shell}** code, then exit to the list of keyboards.
- 11 With the **DISABLE** keyboard highlighted, press **Enter** twice. To restore the functions, press **Ctrl-6**.

For further security, use the /no startup option which disables the Keyboard Reset key (Ctrl-6) and returns the keyboard to its original mapping.

You may also want to disable the Setup keystroke (Shift-F1).

Sharing WordPerfect Files Between IBM PCs and Macintosh Computers

If you have a mixture of Macintosh and IBM PC-compatible computers on an Ethernet network using Novell software and would like to share files, you must have WordPerfect version 1.03 or greater for the Macintosh and version 5.0 or greater for the IBM PC. Save the files to the network and then retrieve them.

**Using Network
Redirection
Commands**

The following is a list of network-specific commands that you can use to redirect printing. The default port in these sample commands is LPT1. If the printer is connected to another print device such as LPT2 or LPT3, substitute the correct print device number for LPT1.

The term *printer name* represents the name you have assigned to the network printer connected to the server (e.g., PTR1). The term *server name* represents the name you have assigned to the network server. The term *share name* represents the name you have assigned the shared network directory or device.

Important: *WordPerfect acts as if it is printing to a local device. The network redirection command, not WordPerfect, intercepts and redirects the printer output from the computer's port to a network printer.*

You can enter redirection commands at the DOS prompt or place them in an AUTOEXEC.BAT file.

Novell NetWare

From a single workstation, enter

```
capture s=server name q=queue name l=1 nff nb nt ti=nn
```

The symbols "l=1" mean the LPT1 port, and *nn* stands for the time out value. In addition to the login script, you can place redirection commands in the login script.

Microsoft LAN Manager

From a single workstation, enter

```
net use lpt1 \\servername\printername
```

Ranjan Vines

From a single workstation, enter

```
setprint lpt1 "servicename"
```

TOPS Network

From a network server, enter

```
tops publish lpt1:as printer name using c:\tops
```

From a single workstation, enter

```
tops mount lpt1: to \\server name\printer name
```

IBM PC LAN Networks

From a network server, enter

```
net share ptr1=lpt1
```

From a single workstation, enter

```
net use lpt1 \\server name\ptr1
```

Nokia PC-Net

From a network server, enter

```
net share ptr1=lpt1
```

From a single workstation, enter

```
net use lpt1 \\server name\ptr1
```

3Com 3+ Share

From a network server, enter

```
3f share ptr=lpt1
```

From a single workstation, enter

```
3f link lpt1: \\server name\printer name
```

10NET

From a network server, enter

```
net use lpt1 \\server name\share name
```

10NET will only output to LPT ports. Before a workstation can use a superstation's COM1 or COM2 port, the superstation must use the MODE command to redirect the serial printer output to the parallel port. If you want to use a COM1 port, enter a MODE command with the appropriate baud rate, parity, character length, and stop bits.

For example, enter

```
mode com1:9600,n,8,1
```

Then, enter another MODE command to redirect the port. For example, enter

```
mode lpt1=com1
```

LANTastic

For a network server, see your LANTastic network manual.

From a single workstation, enter

```
net use lpt1 \\server name\ptr1
```

AT&T StarGROUP

From a network server, enter

```
srv share share name=lpt1
```

From a single workstation, enter

```
srv link lpt1: \\server name\printer name
```

3Com 3+ OPEN LAN Manager

From a network server, enter

net share *printer name*=lpt1

From a single workstation, enter

net use lpt1: \\server name\printer name

Appendix S: .PIF File

If you plan to run WordPerfect 5.1 under Microsoft Windows, you need to have a program information file (.PIF) that gives Windows the information it needs to run WordPerfect. WordPerfect has provided several for you which you may edit as necessary. Refer to the following table to determine which file you should use.

File	Condition
WP.PIF	If you are running WordPerfect under Microsoft Windows version 3.0.
WP51-286.PIF	If you are running WordPerfect under Microsoft Windows/286 or a Microsoft Windows version prior to 3.0.
WP51-386.PIF	If you are running WordPerfect under Microsoft Windows/386.
WP-PIF.DVP	If you are running WordPerfect 5.1 in a DESQView 2.2 environment. The WP-PIF.DVP file, which was probably placed in your WP51 directory during installation, must be copied to the DESQView directory for WordPerfect 5.1 to work correctly.

Important: *The .PIF file and the .DVP file are installed with the WordPerfect utility programs. If you did not install the utility programs when you installed WordPerfect, or have not subsequently done so, you need to do so before you can use the .PIF file or the .DVP file (see the Installation Instructions card).*

The .PIF file has default settings that are common to most WordPerfect users. If WordPerfect is not running correctly under Windows, you may need to edit the .PIF file. To do so, you must edit it in the PIF Editor that comes with Windows. Information for using the PIF Editor to edit .PIF files is found in your Windows documentation.

After you edit the information, we suggest you store the .PIF file in the directory with .PIF files for other programs. Also, we suggest entering the name of your .PIF file directory at the beginning of your path in AUTOEXEC.BAT (see *DOS and WordPerfect in Reference*).

As you edit the .PIF file in the PIF Editor, the following information is important in helping WordPerfect operate correctly under Windows:

Initial Directory

This option sets your default directory. Keep in mind, however, that any directory you enter in WordPerfect as your document directory (see *Location of Files in Reference*) will override this setting.

Memory Requirements

Make sure that the KB Required heading is set to 384. The minimum conventional memory requirement is 384K. The EMS memory KB limit is 2048K.

Program Name

The default setting for the location of the WordPerfect Program is listed as C:\WP51\WP.EXE. If the WordPerfect Program is contained in a directory other than C:\WP51, you need to specify that directory under the Program Name heading.

If you are receiving a message from Windows that says it cannot find WP.EXE, check the Program Name setting for the .PIF file.

Program Parameters

This option is where you enter any startup options you want to take effect. For more information on WordPerfect startup options, see *Appendix N: Startup Options*.

Program Title

While not essential to WordPerfect operation, the program title lets you enter a descriptive name for the WordPerfect program. The name you enter here will appear beneath the program icon in Windows.

Appendix T: Macros and Merge, Value Tables

This appendix lists the values returned by various macro and merge programming commands.

{KTON} and {NTOK}

The following table shows the WordPerfect key values used with the {KTON} and {NTOK} programming commands. For more information on using these commands, see *Appendix K: Macros and Merge, Programming Commands*.

Value	Key Name	Key	Macro Command
32768	Compose	Ctrl-2	{Compose} ¹
32769	^A	Ctrl-a	{^A}
32770	^B	Ctrl-b	{^B}
32771	^C	Ctrl-c	{^C}
32772	^D	Ctrl-d	{^D}
32773	^E	Ctrl-e	{^E}
32774	^F	Ctrl-f	{^F}
32775	^G	Ctrl-g	{^G}
32776	Home or ^H	Home or Ctrl-h	{Home}
32777	Tab or ^I	Tab	{Tab}
32778	Enter or ^J	Enter or Ctrl-j	{Enter}
32779	Delete to End of Line or ^K	Ctrl-End or Ctrl-K	{Del EOL}
32780	Delete to End of Page or ^L	Ctrl-PgDn or Ctrl-I	{Del EOP}
32781	^M	Ctrl-m	{^M}
32782	^N	Ctrl-n	{^N}
32783	^O	Ctrl-o	{^O}
32784	^P	Ctrl-p	{^P}
32785	^Q	Ctrl-q	{^Q}
32786	^R	Ctrl-r	{^R}
32787	^S	Ctrl-s	{^S}
32788	^T	Ctrl-t	{^T}
32789	^U	Ctrl-u	{^U}
32790	^V	Ctrl-v	{^V}
32791	Up Arrow or ^W	↑ or Ctrl-w	{Up}
32792	Right Arrow or ^X	→ or Ctrl-x	{Right}
32793	Left Arrow or ^Y	← or Ctrl-y	{Left}
32794	Down Arrow or ^Z	↓ or Ctrl-z	{Down}
32795	Escape or ^[	Esc or Ctrl-[	{Esc}
32796	^\ (backslash)	Ctrl-\	{^\ (backslash)}
32797	^] (right bracket)	Ctrl-]	{^] (right bracket)}
32798	^^ (caret)	Ctrl-^	{^^ (caret)}
32799	^_ (underscore)	Ctrl- (underscore)	{^_ (underscore)}
32800	Cancel	F1	{Cancel}
32801	◆Search	F2	{Search}
32802	Help	F3	{Help}
32803	Indent	F4	{Indent}
32804	List	F5	{List}
32805	Bold	F6	{Bold}
32806	Exit	F7	{Exit}
32807	Underline	F8	{Underline}
32808	End Field ²	F9	{End Field}
32809	Save	F10	{Save}
32810	Reveal Codes	F11 ³	{Reveal Codes}
32811	Block	F12 ³	{Block}
32812	Setup	Shift-F1	{Setup}
32813	◆Search	Shift-F2	{Search Left}
32814	Switch	Shift-F3	{Switch}
32815	◆Indent	Shift-F4	{L/R Indent}
32816	Date/Outline	Shift-F5	{Date/Outline}
32817	Center	Shift-F6	{Center}

Value	Key Name	Key	Macro Command
32818	Print	Shift-F7	{Print}
32819	Format	Shift-F8	{Format}
32820	Merge Codes	Shift-F9	{Merge Codes}
32821	Retrieve	Shift-F10	{Retrieve}
32822		Shift-F11 ⁴	{Sht F11} ¹
32823		Shift-F12 ⁴	{Sht F12} ¹
32824	Thesaurus	Alt-F1	{Thesaurus}
32825	Replace	Alt-F2	{Replace}
32826	Reveal Codes	Alt-F3	{Reveal Codes}
32827	Block	Alt-F4	{Block}
32828	Mark Text	Alt-F5	{Mark Text}
32829	Flush Right	Alt-F6	{Flush Right}
32830	Columns/Table	Alt-F7	{Columns/Tables}
32831	Style	Alt-F8	{Style}
32832	Graphics	Alt-F9	{Graphics}
32833	Macro	Alt-F10	{Macro}
32834		Alt-F11 ⁴	{Alt F11} ¹
32835		Alt-F12 ⁴	{Alt F12} ¹
32836	Shell	Ctrl-F1	{Shell}
32837	Spell	Ctrl-F2	{Spell}
32838	Screen	Ctrl-F3	{Screen}
32839	Move	Ctrl-F4	{Move}
32840	Text In/Out	Ctrl-F5	{Text In/Out}
32841	Tab Align	Ctrl-F6	{Tab Align}
32842	Footnote	Ctrl-F7	{Footnote}
32843	Font	Ctrl-F8	{Font}
32844	Merge/Sort	Ctrl-F9	{Merge/Sort}
32845	Macro Define	Ctrl-F10	{Macro Define}
32846		Ctrl-F11 ⁴	{Ctrl F11} ¹
32847		Ctrl-F12 ⁴	{Ctrl F12} ¹
32848	Backspace	Backspace	{Backspace}
32849	Delete	Del	{Del}
32850	Delete Word	Ctrl-Backspace	{Del Word}
32851	Word Right	Ctrl-→	{Word Right}
32852	Word Left	Ctrl-←	{Word Left}
32853	End of Line	End or Home, Home, → ⁵	{End}
32854	Beginning of Line	Begin (Victor computer) or Home, Home, ← ⁵	
32855			{Invalid}
32856	Go To	Ctrl-Home	{Goto}
32857	Page Up	PgUp	{Page Up}
32858	Page Down	PgDn	{Page Down}
32859	Screen Down	+	{Screen Down}
32860	Screen Up	-	{Screen Up}
32861	Typeover	Ins	{Typeover}
32862	Margin Release	Shift-Tab	{Left Mar Rel}
32863	Hard Page	Ctrl-Enter	{HPg}
32864	Soft Hyphen	Ctrl--	{SHy}
32865	Hyphen Character	Alt--	{-}
32866	Hard Space	Home, Space Bar ⁵	{ } ¹
32867	Paragraph Up	Ctrl-↑	{Para Up}
32868	Paragraph Down	Ctrl-↓	{Para Down}
32869	Item Left	Alt-←	{Item Left}
32870	Item Right	Alt-→	{Item Right}
32871	Item Up	Alt-↑	{Item Up}
32872	Item Down	Alt-↓	{Item Down}
32873		Alt-Home ⁴	{Alt Home}
32874	Delete Row	Ctrl-Del	{Block Move}
32875	Menu Bar	Alt-=	{Menu Bar} ¹
32876	Block Append		{Block Append}
32877	Block Move	Ctrl-Del	{Block Move}
32878	Block Copy	Ctrl-Ins	{Block Copy}
64513			{ASSIGN}

Value	Key Name	Key	Macro Command
64514			{BELL}
64515			{BREAK}
64516			{CALL}
64517			{CANCEL OFF}
64518			{CANCEL ON}
64519			{CASE}
64520			{CASE CALL}
64521			{CHAIN}
64522			{CHAR}
64523			{:}
64524			{DISPLAY OFF}
64525			{DISPLAY ON}
64526			{ELSE}
64527			{END FOR}
64528			{END IF}
64529			{END WHILE}
64530			{FOR}
64531			{FOR EACH}
64532			{GO}
64533			{IF}
64534			{LABEL}
64535			{LOOK}
64536			{NEST}
64537			{NEXT}
64538			{SHELL MACRO}
64539			{ON CANCEL}
64540			{ON ERROR}
64541			{ON NOT FOUND}
64542			{PAUSE}
64543			{PROMPT}
64544			{QUIT}
64545			{RESTART}
64546			{RETURN}
64547			{RETURN CANCEL}
64548			{RETURN ERROR}
64549			{RETURN NOT FOUND}
64550			{SPEED}
64551			{STEP ON}
64552			{TEXT}
64553			{STATE}
64554			{WAIT}
64555			{WHILE}
64556	Macro Commands	Ctrl-PgUp	{Macro Commands}
64557			{STEP OFF}
64558			{ORIGINAL KEY}
64559			{IF EXISTS}
64560			{MENU OFF}
64561			{MENU ON}
64562			{STATUS PROMPT}
64563			{INPUT}
64564			{VARIABLE}
64565			{SYSTEM}
64566			{MID}
64567			{NTOK}
64568			{KTON}
64569			{LEN}
64570			{~}
64571			{PAUSE KEY}
64573			{OTHERWISE}
64574			{SHELL ASSIGN}
64575			{SHELL VARIABLE}

¹To insert this command in a macro, you must define a macro containing {NTOK}x~, where x is the value listed on the table. Then map this macro to a key using Keyboard Layout (see Keyboard Layout in Reference). With the keyboard containing the mapping selected, enter the Macro Editor. Press the key to which the macro is mapped to insert the command.

²Pressing **End Field** (F9) inserts “[Mrg.End Field][HRt]” into the document.

³F11 and F12 are remapped on the original keyboard to correspond to Alt-F3 and Alt-F4, respectively.

⁴This key is not mapped on the original keyboard.

⁵Although it is impossible to take the {KTON} of multiple keys, you can produce (execute) this keystroke sequence by taking the {NTOK} of its key value.

{SYSTEM}Right~ {SYSTEM}Left~

The following table shows the values returned by the {SYSTEM}Right~ and {SYSTEM}Left~ commands when the item to the right or left of the cursor is a WordPerfect code. In most cases, a five-digit number is returned. For some codes, however, the keystroke corresponding to the code is returned instead of a number. These codes are listed at the end of the table.

For some codes, the value returned differs depending on whether it was returned by the {SYSTEM}Right~ or {SYSTEM}Left~ command. These values are marked with (R) and (L), respectively, in the table below.

For more information on using these commands, see *Appendix K: Macros and Merge, Programming Commands*.

Value	Code
33024	[Just On]
33280	[Just Off]
34304	[Center Pg]
34560	[Col On]
34816	[Col Off] preceded by [HPg]
35328	[W/O On]
35584	[W/O Off]
35840	[HRt-SPg]
36096	[Note Num]
36352	[Box Num]
36608	[End C/A]
36864	[DSRt]
37376	[SPg] (not a space or [HRt])
37632	[ISRt]
38656 (R), 38400 (L)	[Block]
39168	[Dorm HRt]
39424	[/] (Cancel Hyphenation)
39680	[End Def]
40448	[Hyph Off]
40704	[Hyph On]
40960	[] (Hard Space)
41216	[+]
41472	[!]
41728	[=]
41984	[T]
42240	[*]
42496	[!]
42752	[Math On]

Value	Code
43008	[Math Off]
43264	[_] (Hyphen Character)
44032	- (Soft Hyphen)
44800	[Col Off] if created by [HPg] but not preceded by [HPg]
45056	[Col Off] if created by [SPg] but not preceded by [HPg]
45312	[N]
45568	[Outline Off]
49408	[TAB]
49410	[Tab]
49424	[TAB] (with dot leader)
49426	[Tab] (with dot leader)
49474	[Dec Tab]
49480	[RGT TAB]
49482	[Rgt Tab]
49490	[Dec Tab] (with dot leader)
49496	[RGT TAB] (with dot leader)
49498	[Rgt Tab] (with dot leader)
49504	[Flsh Rgt]
49520	[Flsh Rgt] (with dot leader)
49536	[Mar Rel]
49608	[CNTR TAB]
49610	[Cntr Tab]
49624	[CNTR TAB] (with dot leader)
49626	[Cntr Tab] (with dot leader)
49632	[Center]
49648	[Center] (with dot leader)
49664	[→Indent]
49665	[→Indent←]
49920	[EXT LARGE]
49921	[VRY LARGE]
49922	[LARGE]
49923	[SMALL]
49924	[FINE]
49925	[SUPRSCPT]
49926	[SUBSCPT]
49927	[OUTLN]
49928	[ITALC]
49929	[SHADW]
49930	[REDLN]
49931	[DBL UND]
49932	[BOLD]
49933	[STKOUT]
49934	[UND]
49935	[SM CAP]
50176	[ext large]
50177	[vry large]
50178	[large]
50179	[small]
50180	[fine]
50181	[suprscpt]
50182	[subscpt]
50183	[outln]
50184	[italc]
50185	[shadw]
50186	[redln]
50187	[dbl und]
50188	[bold]
50189	[stkout]
50190	[und]
50191	[sm cap]
50432	[Block Pro:On]
50433	[Block Pro:Off]
53248	[Ln Height]

Value	Code
53249	[L/R Mar]
53250	[Ln Spacing]
53251	[HZone]
53252	[Tab Set]
53253	[T/B Mar]
53254	[Just]
53255	[Suppress]
53256	[Pg Numbering]
53259	[Paper Sz/Typ]
53504	[Color]
53505	[Font]
53760	[Math Def]
53761	[Col Def]
53762	[Par Num Def]
53763	[Ftn Opt]
53764	[End Opt]
53765	[Fig Opt]
53767	[Txt Opt]
53768	[Usr Opt]
53769	[Equ Opt]
53771	[Tbl Def]
53773	[Link]
53774	[Link End]
53776	[Tbl Opt]
53777	[Brdr Opt]
54016	[Decml/Algn Char]
54017	[Undrin]
54018	[New Ftn Num]
54019	[New End Num]
54020	[Pg Num]
54021	[Ln Num]
54022	[Adv]
54023	[Force]
54024	[BLine]
54026	[Wrd/Ltr Spacing]
54027	[Just Lim]
54028	[New Fig Num]
54029	[New Tbl Num]
54030	[New Txt Num]
54031	[New Usr Num]
54032	[New Equ Num]
54033	[Lang]
54034	[Pg Num Style]
54528	[Header A]
54529	[Header B]
54530	[Footer A]
54531	[Footer B]
54784	[Footnote]
54785	[Endnote]
55040	[Mark]
55041	[End Mark]
55042	[Def Mark]
55043	[Index]
55044	[ToA]
55045	[Endnote Placement]
55047	[Ref]
55048	[Target]
55049	[Subdoc]
55050	[Subdoc Start]
55051	[Subdoc End]
55296	[Date]
55297	[Par Num]
55298	[Ovrstk]

Value	Code
55299	[Insert Pg Num]
55552	[Pir Cmd]
55553	[Cnd] EOP]
55554	[Comment]
55555	[Kern]
55556	[Outline On]
55557	[Leading Adj]
55808	[Fig Box]
55809	[Tbl Box]
55810	[Text Box]
55811	[Usr Box]
55812	[Equ Box]
55813	[HLine]
55814	[VLine]
56064 (R), 56067 (L)	[Style:On] or [Outline Lvl # Style On]
56065 (R), 56067 (L)	[Style:Off] or [Outline Lvl # Style Off]
56066 (R), 56067 (L)	[Open Style] or [Outline Lvl # Open Style]
56320	[Cell]
56321	[Row]
56322	[Tbl Off]
56579	[Hrd Row]
56864	[Mrg:ASSIGN]
56865	[Mrg:BELL]
56866	[Mrg:BREAK]
56867	[Mrg:CALL]
56868	[Mrg:CANCEL OFF]
56869	[Mrg:CANCEL ON]
56870	[Mrg:CASE]
56871	[Mrg CASE CALL]
56872	[Mrg:CHAIN MACRO]
56873	[Mrg:CHAIN PRIMARY]
56874	[Mrg:CHAIN SECONDARY]
56875	[Mrg:CHAR]
56876	[Mrg:COMMENT]
56877	[Mrg:CTON]
56878	[Mrg:DATE]
56879	[Mrg:DOCUMENT]
56880	[Mrg:ELSE]
56881	[Mrg:END FIELD]
56882	[Mrg:END FOR]
56883	[Mrg:END IF]
56884	[Mrg:END RECORD]
56885	[Mrg:END WHILE]
56886	[Mrg:FIELD]
56887	[Mrg:FOR]
56889	[Mrg:GO]
56890	[Mrg:IF]
56891	[Mrg:IF BLANK]
56892	[Mrg:IF EXISTS]
56893	[Mrg:IF NOT BLANK]
56894	[Mrg:KEYBOARD]
56895	[Mrg:LABEL]
56896	[Mrg:LOCAL]
56897	[Mrg:LOOK]
56898	[Mrg:MID]
56899	[Mrg:MRG CMND]
56900	[Mrg:NEST MACRO]
56901	[Mrg:NEST PRIMARY]
56902	[Mrg:NEST SECONDARY]
56903	[Mrg:NEXT]
56904	[Mrg:NEXT RECORD]
56905	[Mrg:NTOC]
56906	[Mrg:PROCESS]

Value	Code
56907	[Mrg:ON CANCEL]
56908	[Mrg:ON ERROR]
56909	[Mrg:PAGE OFF]
56910	[Mrg:PAGE ON]
56911	[Mrg:PRINT]
56912	[Mrg:PROMPT]
56913	[Mrg:QUIT]
56914	[Mrg:RETURN]
56915	[Mrg:RETURN CANCEL]
56916	[Mrg:RETURN ERROR]
56917	[Mrg:REWRITE]
56918	[Mrg:STEP OFF]
56919	[Mrg:STEP ON]
56920	[Mrg:SUBST PRIMARY]
56921	[Mrg:SUBST SECONDARY]
56922	[Mrg:SYSTEM]
56923	[Mrg:TEXT]
56924	[Mrg:VARIABLE]
56925	[Mrg:WAIT]
56926	[Mrg:WHILE]
56927	[Mrg:STATUS PROMPT]
56928	[Mrg:INPUT]
56929	[Mrg:LEN]
56930	[Mrg:FIELD NAME]
56931	[Mrg:STOP]
{^A}	^A
{^B}	^B
{^C}	^C
{^D}	^D
{^E}	^E
{^F}	^F
{^G}	^G
{Home}	^H
{Enter}	{HRt}
{^N}	^I
{^O}	^O
{^P}	^P
{^Q}	^Q
{^R}	^R
{^S}	^S
{^T}	^T
{^U}	^U
{^V}	^V
{Up}	^W
{Right}	^X
{Left}	^Y
{Down}	^Z
{Esc}	^[
{^}	^\ ^]
{^}	^^
{Shy}	- (Soft Hyphen, Ctrl-)

{SYSTEM}Menu~

The tables below list the values returned by the {SYSTEM}Menu~ command. The first table lists the values by menu, the second by number. The Keystrokes column of both tables lists the keystrokes required to produce the menu. Bracketed keystrokes indicate that any one of the given keys may be pressed at that point in the keystroke series to produce the menu. Other conditions required to produce the menu appear in the Conditions column. Block is assumed to be off unless otherwise specified.

For more information on using the {SYSTEM}Menu command, see *Appendix K: Macros and Merge, Programming Commands*.

By Menu

This table lists the menus by general menu name and then by the keystrokes required to produce the menu. Use this table when you know the menu but not the value that will be returned at that menu.

Value	Keystrokes	Conditions
Cancel Menu (F1)		
49	F1	
Setup Menu (Shift-F1)		
177	Shift-F1	
346	Shift-F1,1	
363	Shift-F1,1,2	
221	Shift-F1,2	
221	Shift-F1,2,1	monochrome graphics card
190	Shift-F1,2,1	Hercules RAM Font graphics card
180	Shift-F1,2,1	CGA graphics card
187	Shift-F1,2,1	EGA,VGA graphics card
221	Shift-F1,2,[2,3]	
341	Shift-F1,2,4	
341	Shift-F1,2,4,[1,2,3,5,6],[1,2]	
342	Shift-F1,2,5	
343	Shift-F1,2,6	
347	Shift-F1,3	
68	Shift-F1,3,1	
44	Shift-F1,3,2	
181	Shift-F1,3,3	
348	Shift-F1,3,4	
349	Shift-F1,3,6	
101	Shift-F1,3,7	
55	Shift-F1,3,8	
45	Shift-F1,4	
344	Shift-F1,4,1	
45	Shift-F1,4,2	
345	Shift-F1,4,3	
400	Shift-F1,4,3,2	
400	Shift-F1,4,3,2,2	
379	Shift-F1,4,3,3	
380	Shift-F1,4,3,4	
220	Shift-F1,4,7	
105	Shift-F1,4,8	
252	Shift-F1,4,8,2,Enter	
369	Shift-F1,4,8,2,Enter	running on a network
202	Shift-F1,4,8,3	
199	Shift-F1,4,8,4	
11	Shift-F1,4,8,5	
208	Shift-F1,5	
209	Shift-F1,5,7	
235	Shift-F1,5,7,1	
303	Shift-F1,5,8	
235	Shift-F1,5,8,2	
56	Shift-F1,6	
Thesaurus Menu (Alt-F1)		
32824	Alt-F1	word not found
110	Alt-F1	word found
Shell Menu (Ctrl-F1)		
103	Ctrl-F1	not under Shell
102	Ctrl-F1	under Shell

Value	Keystrokes	Conditions
Search Menus (F2 and Shift-F2)		
32801	F2'	
32813	Shift-F21	
32776	Home,F2	
Replace Menu (Alt-F2)		
32825	Alt-F2	
Spell Menu (Ctrl-F2)		
17	Ctrl-F2	
64	Ctrl-F2,[1,2,3]	word not found
Help Menu (F3)		
32802	F3	
Switch Menu (Shift-F3)		
31	Shift-F3	Block on
Screen (Ctrl-F3)		
38	Ctrl-F3	
362	Ctrl-F3,2	
365	Ctrl-F3,2,4	
Move (Ctrl-F4)		
30	Ctrl-F4	
23	Ctrl-F4	Block on
32	Ctrl-F4,[1,2,3]	Block on or off
112	Ctrl-F4,4	
List Files (F5)		
389	F5	
305	F5, <i>directory</i> , Enter	
401	F5, <i>directory</i> , Enter, 5	
114	F5, <i>directory</i> , Enter, 6	no document summary
33+	F5, <i>directory</i> , Enter, 6	document summary
335	F5, <i>directory</i> , Enter, 6, 3	
232	F5, <i>directory</i> , Enter, 9	
241	F5, <i>directory</i> , Enter, 9, 5	
Date/Outline (Shift-F5)		
24	Shift-F5	
57	Shift-F5, 3	
350	Shift-F5, 4	
79	Shift-F5, 6	
256	Shift-F5, 6, 9	
263	Shift-F5, 6, 9, 2	
339	Shift-F5, 6, 9, 2, 3	
201	Shift-F5, 6, 9, 2, 4	
263	Shift-F5, 6, 9, 3	
339	Shift-F5, 6, 9, 3, 3	
201	Shift-F5, 6, 9, 3, 4	
370	Shift-F5, 6, 9, 4	
390	Shift-F5, 6, 9, 6	
Mark Text (Alt-F5)		
78	Alt-F5	
2	Alt-F5	Block on
159	Alt-F5, 1	
154	Alt-F5, 1, [1, 3]	
244	Alt-F5, 1, [1, 3], 5	
32806	Alt-F5, 4, Enter	Block on
121	Alt-F5, 5	
88	Alt-F5, 5, 1	
89	Alt-F5, 5, 1, 3	

Value	Keystrokes	Conditions
85	Alt-F5,5,2,[1,3]	
36	Alt-F5,5,4,1	
176	Alt-F5,6	
Text In/Out (Ctrl-F5)		
60	Ctrl-F5	
32840	Ctrl-F5	Block on
70	Ctrl-F5,1	
249	Ctrl-F5,2	
388	Ctrl-F5,3	
250	Ctrl-F5,4	
259	Ctrl-F5,5	
260	Ctrl-F5,5 [1,2,3]	
390	Ctrl-F5,5,[1,2,3],1	
261	Ctrl-F5,5,[1,2,3],3	
314	Ctrl-F5,5,4	
Center (Shift-F6)		
32817	Shift-F6	Block on
Flush Right (Alt-F7)		
32829	Alt-F7	Block on
Exit (F7)		
32806	F7,y	Long Document Name=No
65027	F7,y	Long Document Name=Yes
Print (Shift-F7)		
74	Shift-F7	
126	Shift-F7	running on a network
32818	Shift-F7	Block on
217	Shift-F7,4	
153	Shift-F7,6	
76	Shift-F7,s	
76	Shift-F7,s,2	
133	Shift-F7,s,2,3	
47	Shift-F7,s,2,4	
134	Shift-F7,s,3	
46	Shift-F7,s,3,2	
21	Shift-F7,s,3,2,[4,5,6,7]	
184	Shift-F7,s,3,2,[4,5,6,7],1	
191	Shift-F7,s,3,2,[4,5,6,7],2	
75	Shift-F7,s,3,3	
42	Shift-F7,s,3,4	
182	Shift-F7,s,3,4,1	cursor on Soft Fonts; soft fonts available
132	Shift-F7,s,3,5	
410	Shift-F7,s,3,7,3	
252	Shift-F7,u	
202	Shift-F7,g	
199	Shift-F7,t	
Columns/Table (Alt-F7)		
353	Alt-F7	cursor not in a table
298	Alt-F7	cursor in a table
301	Alt-F7,Ins	cursor in a table
309	Alt-F7,Del	cursor in a table
318	Alt-F7,Ctrl-F4	cursor in a table
324	Alt-F7,Ctrl-F4,[1,2,3]	cursor in a table
16	Alt-F7,1	cursor not in a table
325	Alt-F7,1	cursor in a table
33	Alt-F7,1,3	cursor not in a table
255	Alt-F7,1,3,1	cursor not in a table
296	Alt-F7,2	cursor not in a table

Value	Keystrokes	Conditions
311	Alt-F7,2	cursor in a table
296	Alt-F7,2,1	cursor not in a table
306	Alt-F7,2,1	cursor in a table
323	Alt-F7,2,1,1	cursor in a table
351	Alt-F7,2,1,2	cursor in a table
148	Alt-F7,2,1,2,1	cursor in a table
149	Alt-F7,2,1,2,2	cursor in a table
352	Alt-F7,2,1,3	cursor in a table
308	Alt-F7,2,1,4	cursor in a table
367	Alt-F7,2,1,5	cursor in a table
298	Alt-F7,2,2	cursor not in a table; a table exists in document
307	Alt-F7,2,2	cursor in a table
301	Alt-F7,2,2,Ins	cursor not in a table; a table exists in document
309	Alt-F7,2,2,Del	cursor not in a table; a table exists in document
318	Alt-F7,2,2,Ctrl-F4	cursor not in a table; a table exists in document
324	Alt-F7,2,2,Ctrl-F4,[1,2,3]	cursor not in a table; a table exists in document
325	Alt-F7,2,2,1	cursor not in a table; a table exists in document
307	Alt-F7,2,2,1	cursor in a table
311	Alt-F7,2,2,2	cursor not in a table; a table exists in document
231	Alt-F7,2,2,2	cursor in a table
306	Alt-F7,2,2,2,1	cursor not in a table; a table exists in document
148	Alt-F7,2,2,2,1	cursor in a table
323	Alt-F7,2,2,2,1,1	cursor not in a table; a table exists in document
351	Alt-F7,2,2,2,1,2	cursor not in a table; a table exists in document
148	Alt-F7,2,2,2,1,2,1	cursor not in a table; a table exists in document
149	Alt-F7,2,2,2,1,2,2	cursor not in a table; a table exists in document
352	Alt-F7,2,2,2,1,3	cursor not in a table; a table exists in document
308	Alt-F7,2,2,2,1,4	cursor not in a table; a table exists in document
367	Alt-F7,2,2,2,1,5	cursor not in a table; a table exists in document
307	Alt-F7,2,2,2,2	cursor not in a table; a table exists in document
149	Alt-F7,2,2,2,2	cursor in a table
307	Alt-F7,2,2,2,2,1	cursor not in a table; a table exists in document
231	Alt-F7,2,2,2,2,2	cursor not in a table; a table exists in document
148	Alt-F7,2,2,2,2,2,1	cursor not in a table; a table exists in document
149	Alt-F7,2,2,2,2,2,2	cursor not in a table; a table exists in document
317	Alt-F7,2,2,2,2,3	cursor not in a table; a table exists in document
312	Alt-F7,2,2,2,3	cursor not in a table; a table exists in document
299	Alt-F7,2,2,3	cursor not in a table; a table exists in document
317	Alt-F7,2,2,3	cursor in a table
145	Alt-F7,2,2,3,[1,2,3,4,5,6,7]	cursor not in a table; a table exists in document
300	Alt-F7,2,2,3,8	cursor not in a table; a table exists in document
298	Alt-F7,2,2,4	cursor not in a table; a table exists in document
297	Alt-F7,2,2,5	cursor not in a table; a table exists in document
366	Alt-F7,2,2,5,3	cursor not in a table; a table exists in document; formula exists in cell
313	Alt-F7,2,2,6	cursor not in a table; a table exists in document
333	Alt-F7,2,2,6,3	cursor not in a table; a table exists in document
298	Alt-F7,2,2,7	cursor not in a table; a table exists in document
302	Alt-F7,2,2,8	cursor not in a table; a table exists in document
312	Alt-F7,2,3	cursor in a table
28	Alt-F7,3	cursor not in a table
299	Alt-F7,3	cursor in a table
145	Alt-F7,3,[1,2,3,4,5,6,7]	cursor in a table
300	Alt-F7,3,8	cursor in a table
298	Alt-F7,4	cursor in a table
297	Alt-F7,5	cursor in a table
366	Alt-F7,5,3	cursor in a table; formula exists in cell
313	Alt-F7,6	cursor in a table
333	Alt-F7,6,3	cursor in a table
298	Alt-F7,7	cursor in a table
302	Alt-F7,8	cursor in a table

Value	Keystrokes	Conditions
Footnote (Ctrl-F7)		
3	Ctrl-F7	
137	Ctrl-F7,1	
67	Ctrl-F7,1,4	
92	Ctrl-F7,1,4,5	
223	Ctrl-F7,1,4,7	
392	Ctrl-F7,2	
135	Ctrl-F7,2,4	
92	Ctrl-F7,2,4,5	
Format (Shift-F8)		
32819	Shift-F8	Block on
155	Shift-F8	
5	Shift-F8,1	
331	Shift-F8,1,3	
20	Shift-F8,1,4	
122	Shift-F8,1,5,y	
12	Shift-F8,1,8	
358	Shift-F8,1,8,t	
1	Shift-F8,2	
156	Shift-F8,2,2	
6	Shift-F8,2,3	
240	Shift-F8,2,3,[1,2]	
117	Shift-F8,2,4	
240	Shift-F8,2,4,[1,2]	
368	Shift-F8,2,6	
9	Shift-F8,2,6,4	
328	Shift-F8,2,7	
229	Shift-F8,2,7,2	
230	Shift-F8,2,7,2,Enter,1	
229	Shift-F8,2,7,2,Enter,2	
330	Shift-F8,2,7,2,Enter,3	
234	Shift-F8,2,7,2,Enter,5	
359	Shift-F8,2,7,2,Enter,7	
356	Shift-F8,2,7,2,Enter,8,y	
329	Shift-F8,2,7,2,Enter,9	
227	Shift-F8,2,7,5	form is not [ALL OTHERS]
230	Shift-F8,2,7,5,1	form is not [ALL OTHERS]
229	Shift-F8,2,7,5,2	form is not [ALL OTHERS]
330	Shift-F8,2,7,5,3	form is not [ALL OTHERS]
234	Shift-F8,2,7,5,5	form is not [ALL OTHERS]
359	Shift-F8,2,7,5,7	form is not [ALL OTHERS]
356	Shift-F8,2,7,5,8,y	form is not [ALL OTHERS]
329	Shift-F8,2,7,5,9	form is not [ALL OTHERS]
326	Shift-F8,2,7,5	form is [ALL OTHERS]
234	Shift-F8,2,7,5,3	form is [ALL OTHERS]
329	Shift-F8,2,7,5,4	form is [ALL OTHERS]
10	Shift-F8,2,8	
169	Shift-F8,3	
132	Shift-F8,3,3	
11	Shift-F8,3,4	
125	Shift-F8,3,5	
25	Shift-F8,4	
150	Shift-F8,4,1	
164	Shift-F8,4,5	
7	Shift-F8,4,6	
84	Shift-F8,4,6,2	
93	Shift-F8,4,6,3	
151	Shift-F8,4,6,3,Enter	
403	Shift-F8,4,8	

Value	Keystrokes	Conditions
Style (Alt-F8)		
59	Alt-F8	
387	Alt-F8,3	
174	Alt-F8,3,2	
201	Alt-F8,3,5	paired styles only
387	Alt-F8,4	not outline style
263	Alt-F8,4	outline style
174	Alt-F8,4,2	not outline style
339	Alt-F8,4,3	outline style
201	Alt-F8,4,4	outline style
201	Alt-F8,4,5	not outline style: paired styles only
370	Alt-F8,5	
Font (Ctrl-F8)		
147	Ctrl-F8	
63	Ctrl-F8	Block on
148	Ctrl-F8,1	Block on or off
149	Ctrl-F8,2	Block on or off
132	Ctrl-F8,4	
146	Ctrl-F8,5	
Merge Codes (Shift-F9)		
340	Shift-F9	
340	Shift-F9,6	
Graphics (Alt-F9)		
136	Alt-F9	
393	Alt-F9,1	
138	Alt-F9,1,1	
257	Alt-F9,1,1,2	
139	Alt-F9,1,1,4	
140	Alt-F9,1,1,5	anchor type=Page
152	Alt-F9,1,1,5	anchor type=Character
142	Alt-F9,1,1,6	anchor type=Paragraph
141	Alt-F9,1,1,6	anchor type=Page
142	Alt-F9,1,1,6,1	anchor type=Page
142	Alt-F9,1,1,6,2, <i>number of columns,Enter</i>	
210	Alt-F9,1,1,7	
402	Alt-F9,1,1,9	Contents=Graphics; DrawPerfect on Shell
374	Alt-F9,1,1,9	Contents=Equation; DrawPerfect on Shell
373	Alt-F9,1,1,9	DrawPerfect not on Shell
225	Alt-F9,1,1,9,Alt-F9	Contents=Text
399	Alt-F9,1,1,9,F5	Contents=Equation
399	Alt-F9,1,1,9,Shift-F3	Contents=Equation; equation palette active
374	Alt-F9,1,1,9,Shift-F3	Contents=Equation; editing window active
375	Alt-F9,1,1,9,Shift-F3	Contents=Equation; display window active
381	Alt-F9,1,1,9,Shift-F1	Contents=Equation
400	Alt-F9,1,1,9,Shift-F1,2	Contents=Equation
379	Alt-F9,1,1,9,Shift-F1,3	Contents=Equation
380	Alt-F9,1,1,9,Shift-F1,4	Contents=Equation
144	Alt-F9,1,4	
145	Alt-F9,1,4,1	
239	Alt-F9,1,4,[4,5]	
183	Alt-F9,1,4,7	Contents=Equation
143	Alt-F9,1,4,7	Contents≠Equation
115	Alt-F9,1,4,7,[1,2]	Contents≠Equation
394	Alt-F9,2	
138	Alt-F9,2,1	
144	Alt-F9,2,4	
395	Alt-F9,3	
138	Alt-F9,3,1	
144	Alt-F9,3,4	

Value	Keystrokes	Conditions
396	Alt-F9,4	
138	Alt-F9,4,1	
144	Alt-F9,4,4	
227	Alt-F9,5	
224	Alt-F9,5,1	
243	Alt-F9,5,1,1	
361	Alt-F9,5,1,2	
226	Alt-F9,5,1,2,2	
226	Alt-F9,5,2	
242	Alt-F9,5,2,1	
140	Alt-F9,5,2,2	
226	Alt-F9,5,2,2,5	
224	Alt-F9,5,3	
226	Alt-F9,5,4	
397	Alt-F9,6	
138	Alt-F9,6,1	
144	Alt-F9,6,4	
Merge/Sort (Ctrl-F9)		
62	Ctrl-F9	
390	Ctrl-F9,1	
52	Ctrl-F9,2, file,Enter, file,Enter	
61	Ctrl-F9,2, file,Enter, file,Enter,3	
109	Ctrl-F9,2, file,Enter, file,Enter,5	Select active
108	Ctrl-F9,2, file,Enter, file,Enter,6	
107	Ctrl-F9,2, file,Enter, file,Enter,7	
Save (F10)		
65027	F1	Long Document Name=Yes
32809	F10	Long Document Name=No
Retrieve (Shift-F10)		
32821	Shift-F10	
Macro (Alt-F10)		
32833	Alt-F10	
Macro Define (Ctrl-F10)		
32845	Ctrl-F10	
222	Ctrl-F10	macro already defined
236	Ctrl-F10,2	macro already defined
Other Keys		
32795	Esc	repeat value
32848	Backspace	deleting code and Reveal Codes off
32776	Home	
32856	Ctrl-Home	
32849	Del	deleting code and Reveal Codes off
32780	Ctrl-PgDn	
253	Ctrl-PgUp	macro definition or execution active
32790	Ctrl-v	
Pull-Down Menus		
264	Menu Bar (Alt- =)	
265	File	
273	File,Text In	
321	File,Text In,Spreadsheet	
272	File,Text Out	
293	File>Password	
377	File.Setup	
266	Edit	
270	Edit,Append	Block on
274	Edit,Select	

Value	Keystrokes	Conditions
322	Edit,Comment	
275	Edit,Convert Case	
287	Search	
277	Search,Extended	
268	Layout	
276	Layout,Columns	
378	Layout,Tables	
286	Layout,Math	
279	Layout,Footnote	
280	Layout,Endnote	
283	Layout,Justify	
290	Layout,Align	
376	Mark	
288	Mark,Cross-Reference	
289	Mark,Table of Authorities	
285	Mark,Define	
295	Mark,Master Documents	
294	Mark,Document Compare	
271	Tools	
281	Tools,Macro	
284	Tools,Outline	
282	Tools,Merge Codes	
269	Font	
278	Font,Appearance	
267	Graphics	
279	Graphics,[Figure,Table,Text Box,User Box,Equation]	
291	Graphics,Line	
292	Help	

The value returned corresponds to the original key pressed, not to the direction of the search. For example, if you press Shift-F2, then press ↓ to change the search to a forward search, {SYSTEM}Menu~ still returns 32813.

By Number

This table lists the menus by menu number (value returned by {SYSTEM}Menu~). Use this table when you know the value but not the menu(s) at which that value is returned.

Value	Keystrokes	Conditions
1	Shift-F8,2	
2	Alt-F5	Block on
3	Ctrl-F7	
5	Shift-F8,1	
6	Shift-F8,2,3	
7	Shift-F8,4,6	
9	Shift-F8,2,6,4	
10	Shift-F8,2,8	
11	Shift-F1,4,8,5	
	Shift-F8,3,4	
12	Shift-F8,1,8	
16	Alt-F7,1	cursor not in a table
17	Ctrl-F2	
20	Shift-F8,1,4	
21	Shift-F7,s,3,2,[4,5,6,7]	
23	Ctrl-F4	Block on
24	Shift-F5	
25	Shift-F8,4	
28	Alt-F7,3	cursor not in a table
30	Ctrl-F4	
31	Shift-F3	Block on

Value	Keystrokes	Conditions
32	Ctrl-F4,[1,2,3]	Block on or off
33	Alt-F7,1,3	cursor not in a table
36	Alt-F5,5,4,1	
38	Ctrl-F3	
42	Shift-F7,s,3,4	
44	Shift-F1,3,2	
45	Shift-F1,4	
	Shift-F1,4,2	
46	Shift-F7,s,3,2	
47	Shift-F7,s,2,4	
49	F1	
52	Ctrl-F9,2, file,Enter, file,Enter	
55	Shift-F1,3,8	
56	Shift-F1,6	
57	Shift-F5,3	
59	Alt-F8	
60	Ctrl-F5	
61	Ctrl-F9,2, file,Enter, file,Enter,3	
62	Ctrl-F9	
63	Ctrl-F8	Block on
64	Ctrl-F2,[1,2,3]	word not found
67	Ctrl-F7,1,4	
68	Shift-F1,3,1	
70	Ctrl-F5,1	
74	Shift-F7	
75	Shift-F7,s,3,3	
76	Shift-F7,s	
	Shift-F7,s,2	
78	Alt-F5	
79	Shift-F5,6	
84	Shift-F8,4,6,2	
85	Alt-F5,5,2,[1,3]	
88	Alt-F5,5,1	
89	Alt-F5,5,1,3	
92	Ctrl-F7,[1,2],4,5	
93	Shift-F8,4,6,3	
101	Shift-F1,3,7	
102	Ctrl-F1	under Shell
103	Ctrl-F1	not under Shell
105	Shift-F1,4,8	
107	Ctrl-F9,2, file,Enter, file,Enter,7	
108	Ctrl-F9,2, file,Enter, file,Enter,6	
109	Ctrl-F9,2, file,Enter, file,Enter,5	
110	Alt-F1	Select active
112	Ctrl-F4,4	word found
114	F5, directory,Enter,6	no document summary
115	Alt-F9,1,4,7,[1,2]	Contents≠Equation
117	Shift-F8,2,4	
121	Alt-F5,5	
122	Shift-F8,1,5,y	
125	Shift-F8,3,5	
126	Shift-F7	running on a network
132	Ctrl-F8,4	
	Shift-F7,s,3,5	
	Shift-F8,3,3	
133	Shift-F7,s,2,3	
134	Shift-F7,s,3	
135	Ctrl-F7,2,4	
136	Alt-F9	
137	Ctrl-F7,1	
138	Alt-F9,[1,2,3,4,6],1	
139	Alt-F9,1,1,4	

Value	Keystrokes	Conditions
140	Alt-F9,1,1,5	anchor type=Page
	Alt-F9,5,2,2	
141	Alt-F9,1,1,6	anchor type=Page
142	Alt-F9,1,1,6	anchor type=Paragraph
	Alt-F9,1,1,6,1	anchor type=Page
	Alt-F9,1,1,6,2, <i>number of columns</i> ,Enter	anchor type=Page
143	Alt-F9,1,4,7	Contents≠Equation
144	Alt-F9,[1,2,3,4,6],4	
145	Alt-F7,2,2,3,[1,2,3,4,5,6,7]	cursor not in a table; a table exists in document
	Alt-F7,3,[1,2,3,4,5,6,7]	cursor in a table
	Alt-F9,1,4,1	
146	Ctrl-F8,5	
147	Ctrl-F8	
148	Alt-F7,2,[1,2],2,1	cursor in a table
	Alt-F7,2,2,2,[1,2],2,1	cursor not in a table; a table exists in document
	Ctrl-F8,1	Block on or off
149	Alt-F7,2,[1,2],2,2	cursor in a table
	Alt-F7,2,2,2,[1,2],2,2	cursor not in a table; a table exists in document
	Ctrl-F8,2	Block on or off
150	Shift-F8,4,1	
151	Shift-F8,4,6,3,Enter	
152	Alt-F9,1,1,5	anchor type=Character
153	Shift-F7,6	
154	Alt-F5,1,[1,3]	
155	Shift-F8	
156	Shift-F8,2,2	
159	Alt-F5,1	
164	Shift-F8,4,5	
169	Shift-F8,3	
174	Alt-F8,3,2	
	Alt-F8,4,2	not outline style
176	Alt-F5,6	
177	Shift-F1	
181	Shift-F1,3,3	
182	Shift-F7,s,3,4,1	cursor on Soft Fonts; soft fonts available
183	Alt-F9,1,4,7	Contents=Equation
184	Shift-F7,s,3,2,[4,5,6,7],1	
190	Shift-F1,2,1	
191	Shift-F7,s,3,2,[4,5,6,7],2	
199	Shift-F1,4,8,4	
	Shift-F7,t	
201	Alt-F8,3,5,1	paired styles only
	Alt-F8,4,4	outline style
	Alt-F8,4,5	not outline style; paired styles only
	Shift-F5,6,9,[2,3],4	
202	Shift-F1,4,8,3	
	Shift-F7,g	
208	Shift-F1,5	
209	Shift-F1,5,7	
210	Alt-F9,1,1,7	
217	Shift-F7,4	
220	Shift-F1,4,7	
221	Shift-F1,2	
	Shift-F1,2,[2,3]	
222	Ctrl-F10	macro already defined
223	Ctrl-F7,1,4,7	
224	Alt-F9,5,1	
	Alt-F9,5,3	
225	Alt-F9,1,1,9,Alt-F9	Contents=Text
226	Alt-F9,5,1,2,2	
	Alt-F9,5,[2,4]	
	Alt-F9,5,2,2,5	

Value	Keystrokes	Conditions
227	Alt-F9,5	
229	Shift-F8,2,7,2	
	Shift-F8,2,7,2,Enter,2	
	Shift-F8,2,7,5,2	form is not [ALL OTHERS]
230	Shift-F8,2,7,2,Enter,1	
	Shift-F8,2,7,5,1	form is not [ALL OTHERS]
231	Alt-F7,2,2,2	cursor in a table
	Alt-F7,2,2,2,2,2	cursor not in a table; a table exists in document
232	F5, <i>directory</i> ,Enter,9	
234	Shift-F8,2,7,2,Enter,5	
	Shift-F8,2,7,5,3	form is [ALL OTHERS]
	Shift-F8,2,7,5,5	form is not [ALL OTHERS]
235	Shift-F1,5,7,1	
	Shift-F1,5,8,2	
236	Ctrl-F10,2	macro already defined
239	Alt-F9,1,4,[4,5]	
240	Shift-F8,2,[3,4],[1,2]	
241	F5, <i>directory</i> ,Enter,9,5	
242	Alt-F9,5,2,1	
243	Alt-F9,5,1,1	
244	Alt-F5,1,[1,3],5	
249	Ctrl-F5,2	
250	Ctrl-F5,4	
252	Shift-F1,4,8,2,Enter	
	Shift-F7,u	
253	Ctrl-PgUp	macro definition or execution active
255	Alt-F7,1,3,1	cursor not in a table
256	Shift-F5,6,9	
257	Alt-F9,1,1,2	
259	Ctrl-F5,5	
260	Ctrl-F5,5,[1,2,3]	
261	Ctrl-F5,5,[1,2,3],3	
263	Alt-F8,4	outline style
263	Shift-F5,6,9,[2,3]	
264	(pull-down) Menu Bar (Alt--)	
265	(pull-down) File	
266	(pull-down) Edit	
267	(pull-down) Graphics	
268	(pull-down) Layout	
269	(pull-down) Font	
270	(pull-down) Edit,Append	Block on
271	(pull-down) Tools	
272	(pull-down) File,Text Out	
273	(pull-down) File,Text In	
274	(pull-down) Edit,Select	
275	(pull-down) Edit,Convert Case	
276	(pull-down) Layout,Columns	
277	(pull-down) Search,Extended	
278	(pull-down) Font,Appearance	
279	(pull-down) Graphics,|Equation,Figure, Table,Text Box,User Box)	
279	(pull-down) Layout,Footnote	
280	(pull-down) Layout,Endnote	
281	(pull-down) Tools,Macro	
282	(pull-down) Tools,Merge Codes	
283	(pull-down) Layout,Justify	
284	(pull-down) Tools,Outline	
285	(pull-down) Mark,Define	
286	(pull-down) Layout,Math	
287	(pull-down) Search	
288	(pull-down) Mark,Cross-Reference	
289	(pull-down) Mark,Table of Authorities	
290	(pull-down) Layout,Align	

Value	Keystrokes	Conditions
291	(pull-down) G raphics, L, r, e	
292	(pull-down) H elp	
293	(pull-down) F ile, P, a, s, s, w, o, r, d	
294	(pull-down) M ark, D, o, c, u, m, e, n, t, C, o, m, p, a, r, e	
295	(pull-down) M ark, M, a, s, t, e, r, D, o, c, u, m, e, n, t, s	
296	Alt-F7,2	cursor not in a table
296	Alt-F7,2,1	cursor not in a table
297	Alt-F7,2,2,5	cursor not in a table; a table exists in document
	Alt-F7,5	cursor in a table
298	Alt-F7	cursor in a table
	Alt-F7,2,2	cursor not in a table; a table exists in document
	Alt-F7,2,2,[4,7]	cursor not in a table; a table exists in document
	Alt-F7,[4,7]	cursor in a table
299	Alt-F7,2,2,3	cursor not in a table; a table exists in document
	Alt-F7,3	cursor in a table
300	Alt-F7,2,2,3,8	cursor not in a table; a table exists in document
	Alt-F7,3,8	cursor in a table
301	Alt-F7,2,2,Ins	cursor not in a table; a table exists in document
	Alt-F7,Ins	cursor in a table
302	Alt-F7,2,2,8	cursor not in a table; a table exists in document
	Alt-F7,8	cursor in a table
303	Shift-F1,5,8	
305	F5, <i>directory</i> , Enter	
306	Alt-F7,2,1	cursor in a table
	Alt-F7,2,2,2,1	cursor not in a table; a table exists in document
307	Alt-F7,2,2	cursor in a table
	Alt-F7,2,2,1	cursor in a table
	Alt-F7,2,2,2,2	cursor not in a table; a table exists in document
	Alt-F7,2,2,2,2,1	cursor not in a table; a table exists in document
308	Alt-F7,2,1,4	cursor in a table
	Alt-F7,2,2,2,1,4	cursor not in a table; a table exists in document
309	Alt-F7,2,2,Del	cursor not in a table; a table exists in document
	Alt-F7,Del	cursor in a table
311	Alt-F7,2	cursor in a table
	Alt-F7,2,2,2	cursor not in a table; a table exists in document
312	Alt-F7,2,2,2,3	cursor not in a table; a table exists in document
	Alt-F7,2,3	cursor in a table
313	Alt-F7,2,2,6	cursor not in a table; a table exists in document
	Alt-F7,6	cursor in a table
314	Ctrl-F5,5,4	
317	Alt-F7,2,2,2,2,3	cursor not in a table; a table exists in document
	Alt-F7,2,2,3	cursor in a table
318	Alt-F7,2,2,Ctrl-F4	cursor not in a table; a table exists in document
	Alt-F7,Ctrl-F4	cursor in a table
321	(pull-down) F ile, T, e, x, t, I, n, S, p, r, e, a, d, s, h, e, e, t	
322	(pull-down) E d, i, t, C, o, m, m, e, n, t	
323	Alt-F7,2,1,1	cursor in a table
	Alt-F7,2,2,2,1,1	cursor not in a table; a table exists in document
324	Alt-F7,2,2,Ctrl-F4,[1,2,3]	cursor not in a table; a table exists in document
	Alt-F7,Ctrl-F4,[1,2,3]	cursor in a table
325	Alt-F7,1	cursor in a table
	Alt-F7,2,2,1	cursor not in a table; a table exists in document
326	Shift-F8,2,7,5	form is [ALL OTHERS]
327	Shift-F8,2,7,5	form is not [ALL OTHERS]
328	Shift-F8,2,7	
329	Shift-F8,2,7,2,Enter,9	
	Shift-F8,2,7,5,4	form is [ALL OTHERS]
	Shift-F8,2,7,5,9	form is not [ALL OTHERS]
330	Shift-F8,2,7,2,Enter,3	
	Shift-F8,2,7,5,3	form is not [ALL OTHERS]
331	Shift-F8,1,3	
333	Alt-F7,2,2,6,3	cursor not in a table; a table exists in document
	Alt-F7,6,3	cursor in a table

Value	Keystrokes	Conditions
334	F5, <i>directory</i> , Enter, 6	document summary
335	F5, <i>directory</i> , Enter, 6, 3	
339	Alt-F8, 4, 3 Shift-F5, 6, 9, [2, 3], 3	outline style
340	Shift-F9 Shift-F9, 6	
341	Shift-F1, 2, 4 Shift-F1, 2, 4, [1, 2, 3, 5, 6], [1, 2]	
342	Shift-F1, 2, 5	
343	Shift-F1, 2, 6	
344	Shift-F1, 4, 1	
345	Shift-F1, 4, 3	
346	Shift-F1, 1	
347	Shift-F1, 3	
348	Shift-F1, 3, 4	
349	Shift-F1, 3, 6	
350	Shift-F5, 4	
351	Alt-F7, 2, 1, 2 Alt-F7, 2, 2, 2, 1, 2	cursor in a table cursor not in a table; a table exists in document
352	Alt-F7, 2, 1, 3 Alt-F7, 2, 2, 2, 1, 3	cursor in a table cursor not in a table; a table exists in document
353	Alt-F7	cursor not in a table
356	Shift-F8, 2, 7, 2, Enter, 8, y Shift-F8, 2, 7, 5, 8, y	form is not [ALL OTHERS]
358	Shift-F8, 1, 8, t	
359	Shift-F8, 2, 7, 2, Enter, 7 Shift-F8, 2, 7, 5, 7	form is not [ALL OTHERS]
361	Alt-F9, 5, 1, 2	
362	Ctrl-F3, 2	
363	Shift-F1, 1, 2	
365	Ctrl-F3, 2, 4	
366	Alt-F7, 2, 2, 5, 3	cursor not in a table; a table exists in document; formula exists in cell
366	Alt-F7, 5, 3	cursor in a table; formula exists in cell
367	Alt-F7, 2, 1, 5 Alt-F7, 2, 2, 2, 1, 5	cursor in a table cursor not in a table; a table exists in document
368	Shift-F8, 2, 6	
369	Shift-F1, 4, 8, 2, Enter	network
370	Alt-F8, 5 Shift-F5, 6, 9, 4	
373	Alt-F9, 1, 1, 9	DrawPerfect not on Shell
374	Alt-F9, 1, 1, 9 Alt-F9, 1, 1, 9, Shift-F3	Contents=Equation DrawPerfect on Shell
375	Alt-F9, 1, 1, 9, Shift-F3	Contents=Equation editing window active
376	(pull-down) Mark	Contents=Equation, display window active
377	(pull-down) File, Setup	
378	(pull-down) Layout, Tables	
379	Alt-F9, 1, 1, 9, Shift-F1, 3 Shift-F1, 4, 3, 3	Contents=Equation
380	Alt-F9, 1, 1, 9, Shift-F1, 4 Shift-F1, 4, 3, 4	Contents=Equation
381	Alt-F9, 1, 1, 9, Shift-F1	Contents=Equation
387	Alt-F8, 3 Alt-F8, 4	not outline style
388	Ctrl-F5, 3	
389	F5	
390	Ctrl-F5, 5, [1, 2, 3], 1 Ctrl-F9, 1 Shift-F5, 6, 9, 6	
392	Ctrl-F7, 2	
393	Alt-F9, 1	
394	Alt-F9, 2	
395	Alt-F9, 3	

Value	Keystrokes	Conditions
396	Alt-F9,4	
397	Alt-F9,6	
399	Alt-F9,1,1,9,F5	Contents=Equation
	Alt-F9,1,1,9,Shift-F3	Contents=Equation; equation palette active
400	Alt-F9,1,1,9,Shift-F1,2	Contents=Equation
	Shift-F1,4,3,2	
	Shift-F1,4,3,2,2	
401	F5, <i>directory</i> ,Enter,5	
402	Alt-F9,1,1,9	Contents=Graphics; DrawPerfect on Shell
403	Shift-F8,4,8	
410	Shift-F7,s,3,7,3	
32776	Home	
	Home,F2	
32780	Ctrl-PgDn	
32790	Ctrl-v	
32795	Esc	repeat value
32801	F2'	
32802	F3	
32806	Alt-F5,4,Enter	Block on
	F7,y	Long Document Name=No
32809	F10	Long Document Name=No
32813	Shift-F2'	
32817	Shift-F6	Block on
32818	Shift-F7	Block on
32819	Shift-F8	Block on
32821	Shift-F10	
32824	Alt-F1	word not found
32825	Alt-F2	
32829	Alt-F7	Block on
32833	Alt-F10	
32840	Ctrl-F5	Block on
32845	Ctrl-F10	
32848	Backspace	deleting code and Reveal Codes off
32849	Del	deleting code and Reveal Codes off
32856	Ctrl-Home	
65027	F10	Long Document Name=Yes
65027	F7,y	Long Document Name=Yes

'The value returned corresponds to the original key pressed, not to the direction of the search. For example, if you press Shift-F2, then press ↓ to change the search to a forward search, {SYSTEM}Menu still returns 32813.



Glossary

ASCII

American Standard Code for Information Interchange is one of the standard formats for representing characters. It is useful when files are shared between programs. A text file is in ASCII format.

BIOS

The Basic Input/Output System or the part of the computer operating system that communicates with the screen, the keyboard, printers, and other peripheral devices.

Bit

A binary digit is the smallest storage unit for data in a computer.

Bitwise

A bitwise operation is an operation that is performed on bits, not decimal numbers.

Buffer

A temporary data storage area used by computers and some printers.

Byte

The amount of space needed to store a single character (number, letter, or code). A byte generally represents eight binary digits (bits). For example, if a character requires one byte of storage space, that one byte is translated to eight bits when processed in the computer. 1024 bytes equals one kilobyte (K).

Card

A removable printed-circuit board that is plugged into an expansion slot (for example; graphics card, clock card).

Default Directory

In WordPerfect, the directory where files are saved to or retrieved from when you enter a filename (no pathname). It can be seen by pressing **List** (F5), then **Enter**.

Defaults

The startup settings for WordPerfect. The defaults may be changed temporarily but will be reset each time the program is started. To change defaults permanently, use the Setup feature.

Delimiter

Most commonly used to refer to a character or code that marks the beginning or end of an item such as a sentence, paragraph, page, record, or field. Also used

in “dynamic delimiter” to refer to a character that expands to enclose part of an equation.

Diacritical

A mark added to a letter to indicate a specific phonetic value.

Digraph

Two letters written, and usually sounded, as a single character. A ligature.

DOS

The **Disk Operating System** is software that directs the flow of data between disk drives and your computer. Without an operating system, your computer can do nothing.

Driver

A set of commands used to run peripheral devices. For example, .PRS files are drivers used to run the printer.

Expanded Memory

Lotus Intel Microsoft specification for addressing more than 640K of memory. To access expanded memory, you need a special memory board and/or driver.

Fixed-Pitch Fonts

Fonts can normally be separated into two general categories: fixed-pitch fonts (mono-spaced) and proportionally spaced fonts. Fixed-pitch fonts allocate the same amount of space to each character in the font (for example, the *i* takes up as much horizontal space as the *w*).

Font

A specific typeface, point size, and weight (for example, 10pt Helvetica Bold).

Kilobyte (K)

1024 bytes of information or storage space.

Megabyte (M)

1024 kilobytes (1,048,576 bytes) of information or storage space.

Memory

A computer's temporary data storage area (see *RAM* and/or *ROM* below).

Mono-Spaced Fonts

See *Fixed-Pitch Fonts* above.

Output

The information produced by the computer.

Parallel Interface

An interface in which several bits of information (usually 1 byte) are transmitted simultaneously.

Parallel Printer

A printer that accepts information by way of a parallel interface.

Pathname

A full pathname includes the drive, root, and any subdirectory names. Each name is separated by a backslash (\). For example, C:\WP51 refers to the WP51 directory on the C drive. C:\WP51\TEST refers to the TEST subdirectory (or file) on the WP51 directory on the C drive.

Point Size

Points are the unit of measure normally used to measure font sizes. In WordPerfect, point equals 1/72 of an inch.

Port

A connection device between a computer and another component such as a printer or modem. For example, a printer cable is plugged into the printer port on the computer so information can be sent to the printer.

Proportionally-Spaced Fonts

Proportionally-spaced fonts vary the amount of space given to characters in the font (for example, the letter i usually gets less space than w).

RAM

Random Access Memory is the working space or temporary storage area for the program you are using and the document on your screen. RAM is erased when the power is turned off.

ROM

Read Only Memory contains information the computer uses to run the system. ROM is permanent and is not erased when the power is turned off.

Serial Interface

An interface in which information is transmitted one bit at a time.

Serial Printer

A printer that accepts information from the computer by way of a serial interface.

Soft Font

A font file that is located in a file on a diskette. When the printer is switched on, soft font files must be copied (downloaded) from the diskette to the printer's memory.

Syntax

The way certain elements are organized in an operation. In WordPerfect 5.1 for example, equation and macro commands both require a specific *syntax* or organization in order for them to function properly.

Toggle

A feature or key that is turned on or off with the same keystroke. If the feature or key is on, pressing the keystroke turns off the feature or key. If the feature or key is off, pressing the keystroke turns on the feature or key. Bold, which is turned on or off by pressing F6 is an example of a toggle key in WordPerfect 5.1.

TSR

Terminate and Stay Resident program.

Typeface

A style of type (for example, Courier).

Unary

An operator that applies to a single element, as opposed to a binary operator.

Weight

The appearance of a character in a typeface (for example, bold).

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MNUSIWP51X1C—6/92 S
74 — 2 0—7 0

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