TABLE OF CONTENTS

3 — EDITING

4 — HELP

5 — FORMATTING

6 — PRINTING

7 — FILING

8 — MACROS

9 — MERGES

10 — SPECIAL FEATURES

11 — DICTIONARY

12 — MATH

13 — APPENDIX

14 — INSTALLATION

INDEX

INTRODUCTION

Wordperfect not only promises, but delivers everything hoped for in an excellent word processor. Its use of function keys allows you to create, edit, and print easily and automatically. Text on your screen looks very close to the printed document. Margins, page length, and spacing can be changed at any time. Features such as footnotes, headers, math, text columns, dual document editing, and merge are designed to be simple-to-use and automatic.

This introduction answers the beginning questions. It is designed to help you understand what you need to know to get started and what you should know about this manual. The purpose of this manual is to serve not only as a reference guide, but to help you learn to be both effective and efficient in using WP — using the capabilities of **WordPerfect** with the minimum keystrokes in meeting your word processing needs.

How Do I Get Started?

1. **Check WP Materials.** In the box of materials you received, you should have the following materials: WordPerfect User's Manual, 2 WordPerfect Diskettes, Keyboard Template, and License Certificate.

2. **Complete and Return License Certificate.** Fill out the license certificate. Keep the top copy for your records and mail SSI the back copy.

   Important Note: You are allowed to run WordPerfect only on the machine for which you are licensed. Copying the diskette for any purpose or running WordPerfect on any machine other than the machine for which you are licensed is a violation of copyright laws and any person or organization participating in the illegal copying of the diskette will be subject to legal Action.

3. **Place Template.** With your WP materials, you received a template that identifies WP features with certain keys on your computer keyboard. Place the template on your keyboard over the function keys as shown on the Reference Card.

4. **Review Reference Card.** The reference card enclosed at the beginning of this manual contains a summary of WP features and their associated keys on the keyboard. Read the "Getting Started" page on the back of the card and notice the keyboard photo showing the template and function keys.

5. **Read the Manual that Came with your Computer.** The manual that came with your computer contains detailed information for turning your computer off and on, how to bring up your operating system, how to format diskettes, and how to copy files.

What Should I Know about this Manual?

This manual was designed to provide information for two audiences — people who are new to word processing and people who have experience.

Section 1 of the manual, **Basics of WordPerfect,** is mainly for the inexperienced user, but it provides a brief overview of specific operations of WordPerfect that will be useful to all who are not familiar with WP. It includes basic information about how to enter WP; how to type, format, edit, and print, how to save and retrieve text; and how to exit WP. It has information about the messages that will appear at the bottom of your screen, including information about the Help key. This section also has exercises that encourage practice and learning.

Sections 2 through **7** contain detailed and specific information about each of these word processing functions-- **Typing, Editing, Formatting, Printing, and Filing.** Within each section, specific features and functions are listed in alphabetical order. In this way, this manual provides quick reference to experienced users and serves as a learning guide for new users. **Section 4** is a **Help** section that provides answers to common questions and gives instructions about how to use the help key.

Sections 8, 9, 10, and 11 provide instructions on WP features — **Macros, Merges, Special Features, and Math.** These are advanced features that can eliminate repetitions and allow you to create forms and figures with ease. **Section 12** is the appendix and includes information that all users should be aware of. Finally, the **Index** provides access to all features in this manual.

Because all information cannot be neatly divided into separate groups, you will notice that certain information is repeated in several places in the manual. This is an effort to provide you with easy access to the powerful features and functions of **WordPerfect.**

Note! The WordPerfect Diskettes are copy protected. You received 2 WordPerfect system diskettes; use one as a working copy and guard the other in a safe place in the event one of the WP disks becomes damaged.

Caution! Never turn off your machine or remove your WP diskette before properly exiting from WordPerfect (use the Exit/Restart key). Run **CHKDSK** on the WP disk immediately after a power failure or after you mistakenly turn off your machine without exiting properly.
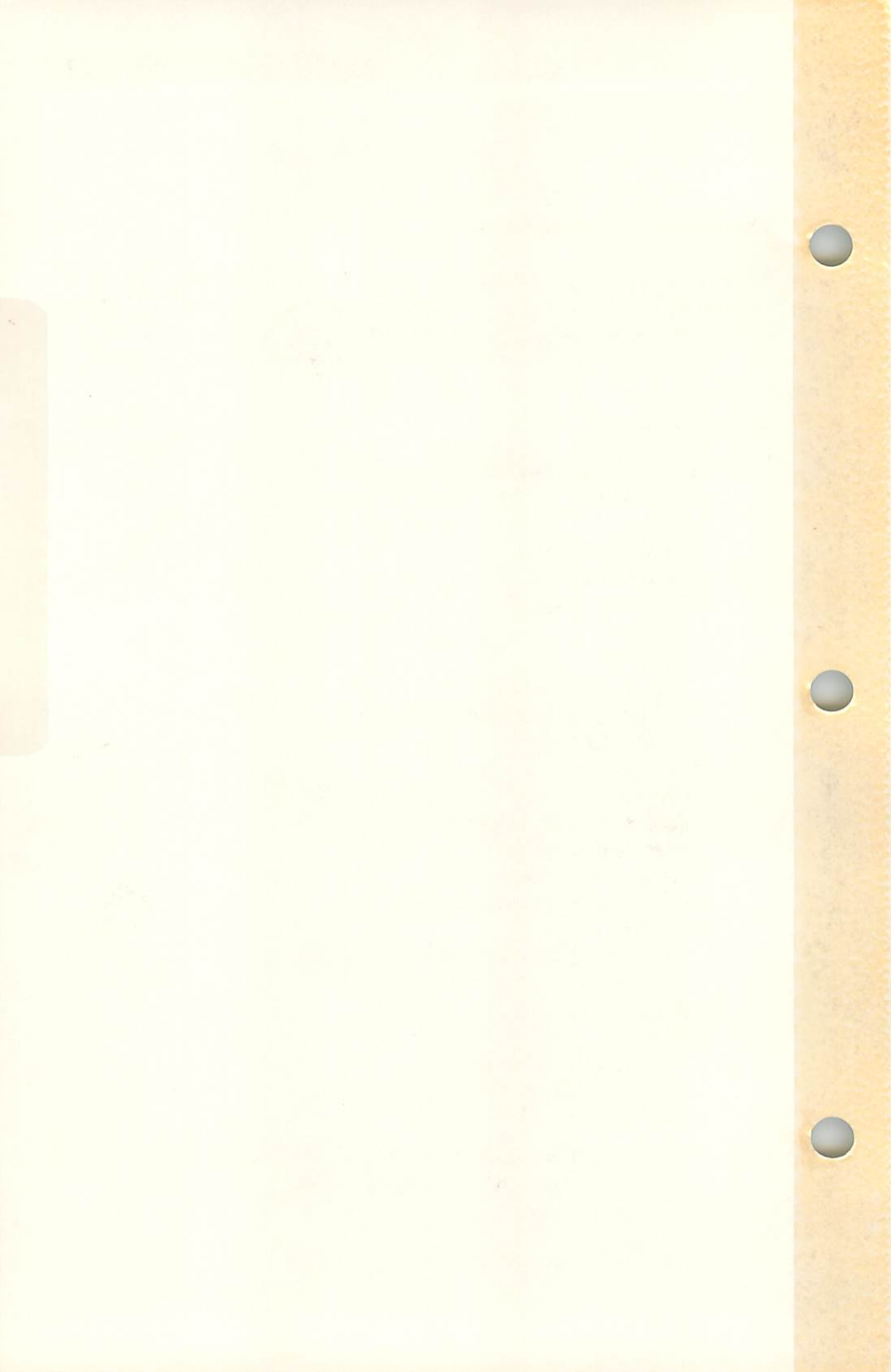
The Basics of WordPerfect

This section of the manual covers basic word processing skills —entering WP, typing, editing, formatting, printing, and filing. While it has been written with the beginning computer user in mind, much of the information is valuable for users of all skill levels.

In this Section:

Entering WordPerfect
Status Line
Typing
   Typing Text
   Hyphenation
   Function Keys
   Cancel
   Editing
   Cursor Movement
   Deleting Characters/Words
   Inserting Text
Formatting
   Preset Format
   Changing the Format
   Function Codes
   Reveal Functions
   Deleting Function Codes
Printing
   Printing from the Screen
   Full Text Print
   Page Print
Filing
   Clearing the Screen
   Saving a Document
   Retrieving a Document

CAUTION! Never remove the WordPerfect diskette from the disk drive while WordPerfect is running.

Entering WordPerfect

Entering
WordPerfect

The instructions given here are based on the assumption that you understand the instructions in the manual that came with your computer—specifically that you understand how to bring up DOS and have formatted your diskettes and copied appropriate files.

If you have two diskette drives:

1. Turn your computer on and bring up DOS.
2. Put your WP diskette in drive **A**, and another formatted diskette in drive **B** for storing your documents.
3. Type **b:** then press **Return**.
4. Type **a:wp** then press **Return**.
5. When you see "**Doc 1 Pg 1 Ln 1 Pos 10**" on your screen you are ready to begin.

If you have a hard disk:

1. Turn your computer on and bring up DOS.
2. Insert the WP diskette in the diskette drive.
3. Type **wp** then press **Return**.
4. When you see "**Doc 1 Pg 1 Ln 1 Pos 10**" on your screen, you are ready to begin.
5. You may now remove the WP diskette.

Note! The WordPerfect diskette is copy protected. You received 2 WP system diskettes; use one as a working copy and guard the other in a safe place in the event your working copy becomes damaged. Unless you have a hard disk, never remove the WP diskette from your machine before properly exiting Word-Perfect (via the Exit/Restart key). Run **CHKDSK** on the WP disk after a power failure or after you mistakenly turn off your machine before exiting WordPerfect.

Status Line

Status Line

When you enter WordPerfect, you are ready to begin typing. WordPerfect automatically formats the page--the inital format settings are explained later in this section under Formatting. Included below is information about what the screen shows before beginning to type.

Right Half

Located at the bottom of the screen, the right half of the status line constantly displays your current document, page, line, and position number. For example:

Doc 1   Pg 1   Ln 1   Pos   10

The **Doc** number changes as you switch *documents* when editing two documents at the same time (see "Dual Document Editing" in the Editing Section).

The **Pg** number tells you on which *page* of your document the cursor is located.

The **Ln** number tells you on which *line* of the page the cursor is located. The Up and Down Arrows move your cursor line by line through the text of the document.

The **Pos** number tells you at which *character position* the cursor is resting in the line. The Left and Right Arrows move your cursor through text position by position.

Left Half

The left half of the status line is used by WordPerfect to communicate with you. Sometimes the message will be a question that requires an answer. Other times the message will be a reminder or warning. All of the messages will be explained as you read through the manual.

Exercise   Press the **Return** key several times and notice the line number change on the status line. Press the **Space bar** several times and notice the position number change. Press the **New Page** key and notice the page number change.

Press the **Help** key and notice the message on the left half of the status line. You are being asked to press the key for which you need information. Pressing the **Help** key twice will allow you to choose any page from the index.

_____ **Notes** _____

For more information on error messages, see the "Help" section.

Typing

Typing Text   The keyboard that comes with your computer is similar in looks and function to the keyboard of a typewriter. When you press the "T" on the keyboard, a "t" appears on your screen. When you press the **space bar**, the cursor moves over one space. Likewise, the Tab, Shift, and Return keys have all been designed to operate like a typewriter. Initially, you should be aware of several functions that occur as you type.

Hyphenation   WordPerfect helps you with hyphenation by deciding if a word needs to be hyphenated, then showing the word on your status line with a hyphenation break. You may choose the proper point of hyphenation by using the Left and Right Arrow keys to move the hyphen to the desired location and pressing the **Escape** key.

The hyphenation zone may be changed to a new left and right setting if you wish to do less or more hyphenation. A large hyphenation zone will almost eliminate the automatic hyphenation (see Hyphenation Zone in the "Formatting" section of the manual).

Function Keys   When you enter text with WordPerfect, you will need to use certain function keys. For example, you may press the **Bold** key, then type a word. Notice that the text on the screen is bolded. Press the Bold key again to turn the Bold function off. Other function keys that you use frequently in entering text are **Underline, Center**, and **New Page**.

Cancel   You may press the **Cancel** key to cancel any func-
tion that gives you a prompt on the status line.
You need to press this key while the prompt if
showing and before pressing any other key.

Delete Left   As you type, you will occasionally make a
mistake that you become aware of almost imme-
diately. To correct this error, press the **Delete
Left** key to erase the mistake and then continue
typing.

Exercise   Type a paragraph of your own choosing. Use the
Tab key to indent the first line of the paragraph,
and press the **Return** key twice at the end of the
paragraph. As you type this paragraph, experi-
ment with using the bold, center, and underline
keys.

Press the **New Page** key and notice the page
break on your screen. Your status line should
also reflect a different page number. Now press
the **Delete Left** key to delete the *page break.*

Editing

Editing

Sometimes mistakes are recognized immediately. But at other times you will want to do a lot of editing. The "Editing" section of this manual deals with many editing functions. At this point, however, only cursor movement, deletion and insertion of text will be discussed.

Cursor Movement

The **cursor** is a dash (or block) which indicates your position on the screen. The cursor may blink, depending on the type of machine you are using. You may move the cursor through your text in a variety of ways. Remember, however, that the cursor will only move when there is a space, character, or code through which to pass. Something must first be typed from the keyboard; the cursor cannot move through "nothing."

Arrow Keys

The **Arrow** keys allow you to move the cursor through the text in four basic directions—left, right, up, or down:

One Space Left	Left Arrow
One Space Right	Right Arrow
One Line Up	Up Arrow
One Line Down	Down Arrow

Holding down an Arrow key will repeat horizontal or vertical movement through the text on your screen.

Home Key   Pressing the **Home** key, followed by one of the Arrow keys, will move the cursor quickly through your text. For example, press the Home and the Right Arrow key and your cursor will "jump" to the end of the line. Other combinations include:

Left Edge of Screen   Home—Left Arrow
Right Edge of Screen   Home—Right Arrow
Top of Screen   Home—Up Arrow
Bottom of Screen   Home—Down Arrow
Beginning of Document Home—Home—
                          Up Arrow
End of Document   Home—Home—
                          Down Arrow

Word Left &   These two features allow you to move the cursor
Word Right   one word to the left or one word to the right. A group of characters followed by a space is defined as a "word" by WordPerfect.

Exercise   Type a few lines of text on your screen, then experiment using the various cursor movement features.

_____ **Notes** _____

For an explanation of other cursor keys, refer to the Cursor Movement. Specialized page in the "Editing" section of the manual.

WordPerfect uses the number pad for cursor movement (home and arrow keys). Some machines have a number lock key (**NumLock**). When the NumLock key is pressed in WordPerfect, the number pad is used to enter numbers instead of moving the cursor. Pressing the NumLock key again activates the cursor movement keys.

Delete Left   The **Delete Left** key deletes text to the *left* of the cursor. Press the key once to delete a single character, or hold down the key to continue deleting several characters at the same time.

Delete Right   The **Delete Right** key deletes characters *at* the cursor. Press the key once to delete a single character, or hold down the key to continue deleting several characters at the same time.

Delete Word   This feature will delete the word *at* the cursor. Words are erased in the same direction as the **Delete Right** key erases characters. Continue pressing this key to delete one word at a time.

Exercise   Type a word, then erase it by pressing the **Delete Left** key several times or by holding down this key until the word is gone.

Type several words, then press the Home and Left Arrow keys to return to the beginning of the line. Hold down the **Delete Right** key until the entire line has been erased.

Position your cursor at the beginning of a sentence or paragraph and use the **Delete Word** feature to erase a number of words.

If you made any mistakes in a previous exercise, correct them with the delete keys.

———————————— **Notes** ————————————

Deleting is used when referring to characters and words. Erasing is used when referring to lines and pages.

Inserting Text   WordPerfect is preset so that you can insert text automatically. To insert text, move the cursor to the desired position and begin typing.

The text to the right of the cursor will be pushed forward, making room for the new text. WordPerfect reformats the text within the preset margins on the screen when you press the down arrow.

_____ **Notes** _____

If you wish to type over a part of your text, you will need to use the **Replace** mode (see Insert/Replace in the "Editing" section).

Formatting

Preset Format WordPerfect helps you by presetting all of the formatting features. These preset functions are called the **default** settings, and are in effect when you enter WordPerfect. Some of the default settings are:

Pitch	**10**
Left Margin	**10**
Right Margin	**74**
Top Margin	**6 lines (one inch)**
Bottom Margin	**6 lines (one inch)**
Line Spacing	**single**
Lines per Page	**66 (11 inches)**
Text Lines/Page	**54**

As you type, a line is filled with characters and spaces. When you reach the right margin, Word-Perfect returns or "wraps" the cursor to the next new line at the left margin. If you wish to add one or several lines without typing all the way to the right margin, simply press the **Return** key.

As your cursor passes line 54, WordPerfect will automatically end the page with a page break,

----

and the **Pg** number on the status line will be updated.

In addition, as you make changes in the text, WordPerfect will reformat the lines and pages of your document.

Changing the Format

Most of the formatting features may be changed anywhere in the document and as many times as you wish. The following example illustrates the keys you would press to change the margins from the preset margin of 10 left and 74 right to 20 left and 60 right. Move your cursor to the left margin at the top of your text. Press **Set Format** key and select Margin Set. Enter **20**, press **Return**, enter **60**, and press **Return**. The margin will remain at 20 left and 60 right unless you change the margins again or delete the embedded function code **[Margin Set:20,60]**.

Exercise

Check the Table of Contents and notice the number of formatting options that are available and check your reference card and template to find the key location of these functions.

Change the spacing to 2 by pressing the **Spacing** key and entering **2**. Now press the **Return** key a number of times and notice the **Ln** number on the status line. Now delete the spacing code.

Function Codes WordPerfect was designed to show a "clean" screen. As you type characters and spaces, they appear on your screen exactly as they would on a typewritten page. In fact, what you see on your screen is what will be printed.

However, what you *do not see* on your screen are certain function codes that are entered into your text every time you press keys other than letters, numbers, punctuation, etc. These unseen codes, called *embedded codes*, are messages that tell both the printer and WordPerfect exactly how you want your text to look. For example, when you press the Return key, a code **[NL]** is entered into your document telling WordPerfect to move the cursor to a **New Line**.

Reveal In order to see the **[NL]** or any other embedded
Functions codes, you need to press the **Reveal Functions** key. Once you press the Reveal Functions key, a new screen appears showing you the codes as they occur within the text. Only the three lines above and below your cursor are shown on the Reveal Functions screen.

Your current cursor position is represented by a [^] on the Reveal Functions screen, instead of the normal dash or block. Press any key, except the Delete and Arrow keys, to return to the normal WordPerfect editing screen.

**Deleting
Function Codes**
Codes may be erased just like characters, using any of the **Delete** and **Arrow** keys while in the Reveal Functions screen. For example, press the Reveal Functions key, look for an [NL] code, move the [^]cursor to the right of the code, and press the Delete Left key. The [NL] code will be erased.

While using Reveal Functions is one method of deleting a code, another method is to use the Search keys while in the normal WordPerfect screen. For example, pressing the Forward Search key, the Bold key, then the Return key places the cursor to the left of the next bold code in the document. Press the Delete Left key and the code will be deleted.

If you delete a code while in the normal Word-Perfect screen, a message will often appear asking you to confirm the deletion. However, while deleting codes in Reveal Functions, no messages appear because the codes are visible.

For more information on deleting codes, see Deleting Codes in the "Editing" section of the manual. A list of codes in Reveal Functions can be found in the Appendix.

Exercise
Press your **Return** key five times, then move your cursor up a couple of lines. Now press the **Reveal Functions** key. The [^] (cursor) should be surrounded by New Line [NL] codes. Press **Delete Right** and **Delete Left** keys to see how the NL codes are deleted. Notice that the entire code is deleted as if it were a single character.

Type a couple sentences, bolding a word in each sentence.Now press the Reveal Functions key to view the Bold on and Bold off codes **[B][b]**. Press a key to return to the normal screen and move the cursor to the beginning of the document. Press the **Forward Search** key, the **Bold** key, then the **Return** key. Press the **Delete Left** key and notice the "Confirm DEL of [Bold] Y/[N]" message that appears. Enter **Y** and the bolding code will be deleted.

_____ **Notes** _____

A list of all the embedded codes and their definitions may be found in Appendix A.

Some embedded codes will be put in automatically by WordPerfect, and are called "soft" codes. For instance, every time your cursor reaches the right margin of a line it will put in a **[SNL]** (Soft New Line). Every time your cursor reaches the end of a page, WordPerfect places a **[SNP]** (Soft New Page) in the text.

Embedded codes are an important part of WordPerfect. Do not become discouraged if you do not immediately understand them. Simply remember that they are a way of telling WordPerfect and the printer exactly how you want your document to look.

Printing

Printing From the Screen   WordPerfect allows you to print a document from your screen without first saving it on diskette. With the document you wish to print on your screen, press the **Print** key. The message "**1) Full Text Print; 2) Page Print; 3) Set Print Attrib; 0**" will appear on the left half of the status line.

Full Text Print   To print the *entire document*, press the "**1**" on your keyboard after pressing the **Print** key. A second message (***Please Wait***) will temporarily appear on the status line. After a few moments, the message will disappear, and you may continue typing.

Page Print   To print *one page* of the document, move your cursor anyplace on the selected page and after pressing the **Print** key press the "**2**" on your keyboard. After "***Please Wait***" disappears you may continue typing.

The **Set Print Attributes** item is explained in the Printing section.

If you wish to edit the **Print** menu *without printing* your document, simply press the "**0**" or **Cancel** key on your keyboard and the menu will disappear.

Exercise   Print the text currently on your screen.

Notes

Before your printer will print, you must **define** the type of printer you are using with WordPerfect. Consult the "Installation" and "Printing" sections of this manual for more information on defining printers.

If your printer does not work, make sure it is plugged into the electrical outlet, plugged into your computer, turned on, "on line," and has paper. If nothing happens after you have checked each of these possibilities, you may wish to call your dealer for help.

Filing

Clearing the Screen

After you have finished typing, you will probably want to clear your screen and either **exit** out of the WordPerfect program, or **restart** with a clear screen. To do either one, you will need to use the **Exit/Restart** key.

After pressing the Exit/Restart key, the question **"Save Document? ([Y]/N)"** will appear on the status line. This message allows you to save the text currently on your screen. Pressing the **"Y"** (for **Yes**), or any other key on your keyboard, will allow you to save your text on your diskette (see "Save Text" page for details). Pressing the **"N"** (for **No**), will tell WordPerfect you do not wish to save the text which you have been typing.

After entering **"N"**, the prompt **"Restart WP? (Y/[Exit])"** will appear on the status line. Type a **"Y"** if you wish to **restart** WordPerfect with a clear screen.

When the prompt **"Restart WP?"** appears and you decide that you should have saved your text, **press the Cancel key twice.**

Once you have exited out of WordPerfect, you may turn off your computer, or type **WP** to restart WordPerfect again.

Exercise

Press the **Exit/Restart** key to save some text you are using. Use your first name as the file name and then clear your screen.

_____ **Notes** _____

If you try to save a document with a name that has already been used, then the prompt **"Confirm replacement of** _____ **"** will appear on your status line (see "Save Text" in this section for details).

**Saving a
Document**

After typing, editing, and/or formatting a document on your screen, you will probably want to save it on your diskette. To save any document, it must be given a **filename**. The filename helps WordPerfect find the document on your diskette when you want to bring the document back onto your screen, or send the document to your printer.

There are two basic ways to save the text on your screen. If you are in the middle of typing a document and want to save what you have already typed and continue typing or editing, use the **Save Text** key.

Note! You may want to save your text onto your diskette every 5 or 10 minutes in case there is a power failure or something goes wrong with the computer.

The **Exit/Restart** key also allows you to save your text (by answering **Yes** to the "**Save Document?**" prompt). You then must choose to restart with a clear screen or exit word processing.

The method of saving your document is the same for both the **Save Text** key and the **Exit/Restart** key. The first prompt to appear on the status line will be "**Document to be Saved:**". If a name *does not* appear after the prompt, then you will need to type a filename (see notes) and press the Return key. The document will then be saved onto your diskette in a new file.

If you have made any changes to the copy, then WordPerfect will want to know if you wish to save the copy, the original, or both. To save both, you will need to type in a new filename for the copy, then press the **Return** key. To replace the original document on your diskette with the copy, simply press the **Return** key when the prompt appears. Another prompt, "**Confirm Replacement of** _____?", will appear on the screen, allowing you to make a final decision. Type **Y** for yes, and **N** for no. If you type **N**, WordPerfect will display the first prompt and allow you to enter a new filename. If you do not want to save the copy, simply press the **Cancel** key.

Exercise

Save the text on your screen using a name of your choosing.

Add a few more lines of text to the document. Now save the document by pressing **Save Text**, pressing **Return** to use the same name again, and typing **Y** to confirm.

Notes

To add another document to the **end of your file** (append), use the Range Append feature of WordPerfect (see "Range" in the Editing section).

A filename may contain up to **8** characters, plus an additional **3** following a period. **Letter.1**, **wp.123**, **JIM**, and **CONTRACT.481** are examples of filenames.

Retrieving a Document

To retrieve a copy of a document from a certain file on your diskette and display it on your screen, press the **Retrieve Text** key. The prompt "**Document to be Retrieved:**" will appear on the status line.

Type the filename on your screen, then press the **Return** key. The document will be displayed on your screen *from the cursor down.* If your cursor is at the top of the screen, the text will fill the screen. If your cursor is in the middle, the text will start halfway down the screen.

Besides retrieving a document onto a clear screen, you may also use the **Retrieve Text** key to retrieve a second document into another one that is already on your screen. The second document will be inserted into the first at the point where you place your cursor.

Of course, you may also retrieve one document after another onto your screen without restarting WordPerfect. However, if you try to save the document on your screen and you *have not restarted* WordPerfect, *all the documents you have retrieved* onto your screen will be saved on your diskette under that filename.

If the message "**ERROR: FILE DOES NOT EXIST**" flashes on your screen, then you have probably typed the filename incorrectly. The error message will disappear, and the "**Document to be Retrieved**" prompt will reappear on the status line. Try entering the filename again. If the error message appears again, then you may have the wrong filename. See File Management page in the "Filing" section to display a list of files.

Exercise   Retrieve a document from your files by pressing Retrieve Text, and entering the filename. Now move the cursor to a position in the middle of your text and retrieve the same document again. Notice how the second copy is displayed in the middle of the first.

_____ **Notes** _____

If you make changes in a retrieved document and try to save it on the diskette by using the original filename, **Confirm Replacement of** _____? will appear on the status line (see "Save Text" in this section).

Remember, when you retrieve a document from your diskette, only a copy is displayed on your screen. The original document remains on your diskette.

Notes:

TYPING

More than a typewriter, WordPerfect not only simplifies the typing process but performs many tasks automatically.

This section introduces you to the typing features of WP that make word processing an enjoyable experience.

In this Section:

Alignment Tabs
Bolding
Capitalization
Centering
Conditional End of Page
Flush Right
Hyphenation, Required
Hyphenation, Soft
Hyphenation, WP-Assisted
Left Margin Release
Line Advance
Overstrike
Page, Hard New
Page, Soft New
Required Space
Status Line
Subscript and Superscript
Tab Key
Underlining
Underlining, Single and Double
Widow/Orphan Protection

Note: Each entry includes simple exercises to encourage new users to learn the location and use of each key or feature.

Alignment Tabs

Alignment Tabs

The **Align** key allows you to line up a column of numbers at a decimal point or any other character.

When the Align key is pressed, the cursor jumps to the *next* tab position and begins pushing all entered characters to the *left* until the **alignment character** is typed. Then the align feature is *released*, and the cursor begins moving to the right again.

If you wish to move to a new column position *without* releasing the feature, then press TAB *before* typing the alignment character. The cursor will jump to the next tab stop and push characters to the left until the *alignment character* is typed, or a TAB or Return is pressed.

Exercise

Clear the screen, and type the following column of numbers around the preset "." character:

4,567.90
34.67
546.90
22

The numbers may be typed at any column position by pressing the **Align** key until the column is reached. Press **Return** after typing each number.

_____ **Notes** _____

The preset alignment character is a period. To change to another character, press the **Set** key, select the **Algn Char** option, and type the new alignment character.

Bolding

Bolding   To make your text appear as **bold**, press the **Bold** key. Notice that the Bold key operates like an on/off switch. Press once to turn it on, type your text, then press again to switch it off.

Exercise   Type the following paragraph using the **Bold** function key:

> The **SSI** word processing system uses templates which fit over the function **keys.**

Notes

Whenever the Bold key is on, the **Pos #**(e.g. Pos **10**) on the status line will also be bolded.

Capitalization

Capitalization   To capitalize letters *without* shifting punctuation or number keys, press the **Caps Lock** key (see notes). Press once to lock the feature on, then press again to unlock capitalization.

Exercise   Type the following text using the **Caps Lock** key:

WORDPERFECT allows you up to 5 columns of text on 1 page.

Notes

On some computer keyboards, the Caps Lock key may have a different label. The "Capitalization" entry on the reference card will list the name of the Caps Lock key for your machine.

Centering

Centering

This feature automatically centers a line of text as it is being typed.

Press the **Center** key, and the cursor will move to the center position between the left and right margins. Type your text, then press **Return**. Centering ends and the cursor moves to the next line.

To delete the Center feature, use the **Search** keys to find the code, then press the **Delete Left** key and answer **Y** to the prompt on the status line. (See Deleting Codes in the "Editing" section.)

Exercise

Center the following sentence using the **Center** key:

Smack dab in the middle!

Notes

If you have already typed a line of text and wish to center it, move the cursor to the beginning of the line, press **Center** and then the **down** arrow.

For this to work, the line of text must end with a **NL** (Return) code.

If the line of text you are typing begins to disappear from the screen, the cursor has probably run into a **Center** or **Indent** code and is "pushing" against it. To resolve the problem, delete the unwanted code. The "lost" text should reappear on your screen. (See Deleting Codes in the "Editing" or "Basics" section.)

Conditional End of Page

Conditional
End of Page

WP places an automatic page break when the end of a page is reached.

Sometimes the page break may fall in an inconvenient spot, such as the middle of a paragraph. The **Conditional End of Page** key allows you to protect those lines by forcing a page break to fall either before or after the paragraph.

For example, you may have a paragraph of **6** lines which you do not want split between two pages.

Move the cursor to the line before the paragraph, press the **Conditional End of Page** key, and enter a **6** after the message "**# lines to keep together** =". WP will always keep those six lines together, placing a page break before the paragrph, if needed.

Exercise

Press the **Return** key, move your cursor to **line 51** and type six lines of text. Notice the automatic page break.

Now move your cursor back to **line 50,** press the **Condl End Pg** key and enter **6.** Move the cursor through the text and notice where the new automatic page break is placed.

Notice how WP places a new page break to keep the next six lines together. Experiment on your own with this key.

Notes

You may also wish to place a **Conditional End of Page** before entering a title or subject heading, or before a table. It also helps to eliminate "widows" and "orphans" (single lines at the top or bottom of a page or headings with no following text).

Flush Right

Flush Right

This feature allows you to type a line of text even with the right margin.

Press the **Flush Right** key, and the cursor will jump to the right margin. As you type characters, they will be pushed to the *left* until you release the feature by pressing Return.

Delete a Flush Right by using the **Search** and **Delete Left** keys. (See Deleting Codes in the "Editing" section.)

Exercise

Type the following date using the **Flush Right** key:

April 6, 1830

Hyphenation, Required

**Hyphenation,
Required**

When a hyphen is part of a word or phrase (mother-in-law, one-of-a-kind), use the **Required Hyphen** key.

If it becomes necessary to divide the word at the right margin, WP will automatically use one of the required hyphens.

Exercise

Type the sentence below using the **Required Hyphen** key:

One-of-a-kind, matter-of-fact, father-in-law, and mother-in-law all need required hyphens.

Hyphenation, Soft

**Hyphenation,
Soft**

With the **Soft Hyphen** key you may place a hyphen in a word while entering text from the keyboard. If the word ever extends beyond the hyphenation zone while you are editing the document, then WordPerfect will use the soft hyphen to hyphenate the word. instead of "asking" for assistance (see Hyphenation, WP-Assisted).

While the soft hyphen is the same type used when WordPerfect assists in hyphenation, the soft hyphen does not show up on the normal Word-Werfect screen until the word is actually hyphenated.

Exercise

Make sure that your margins are set at 10 and 74, and the hyphenation zone is set at 5 and 5. Type the following sentence and place a soft hyphen in the word **unfortunate**:

The team that led the expedition found a most unfortunate location.

Now, edit the sentence to read:

The team that led the expedition found the caves in a most unfortunate location.

Notice that the word **unfortunate** is automatically hyphenated at the point where the soft hyphen is placed.

Notes

WP-Assisted hyphenation places a "soft" hyphen in words.

Hyphenation, WP-Assisted

Hyphenation, WP-Assisted

WordPerfect has been designed to assist you in hyphenating words. A "word" is a group of characters followed by a space. For example, both "welcome" and "ql4iourp" are seen as words because they are followed by a space.

The right margin is surrounded by a "wraparound" zone or a **hyphenation zone**. The hyphenation zone in WordPerfect has been preset for 5 spaces to the left and 5 spaces to the right of the right margin:

....**69**.....**74**.....**79**..........

If a word starts before or at column position **69** and ends before **79**, then the entire word is left on the line.

If a word begins before or at 69 and continues beyond **78**, the message "**Position hyphen; Press ESC**" will appear on the left side of the status line, followed by the word that needs hyphenation. The *dash* in the word shows where the the right margin is located. If the right margin is a good place to hyphenate the word, simply press the **Escape** key and WordPerfect will divide the word at that point.

To hyphenate in a different place, use the Left and Right Arrow keys to move the dash, then press Escape.

Hyphenation Cancel

If you let WP help you with hyphenation and come to a word which you do not wish to hyphenate, press the **Cancel** key and the word will drop to the next line. This is especially helpful in those cases where proper nouns should not be hyphenated or for words with only one syllable.

**Hyphenation
Off**

On the Set key the option **Hyphenate** is found. If you choose the Hyphenate option, a **Y** or **N** is displayed to indicate **Yes** hyphenation is on or **No** hyphenation is off. By pressing **n**, you may turn hyphenation off. Hyphenation will stay off until you Exit or Restart WP, or until you change hyphenation to "yes" again.

You may change the initial hyphenation setting from on to off with the **WP/S** described in the installation portion of the manual.

Exercise

On a new line, press the space bar until your cursor moves to position **66**. Now type the word "automatically" and press the space bar. Because "automatically" only reached position 79, there was no hyphenation. The cursor simply "wrapped" to the next line.

Now press the Return key and use the space bar to move the cursor to position **67**. Type the word **automatically** and press the space bar. This time the word reached column position **78**, so it is placed on the status line for hyphenation. Use the Arrow keys to move the dash to a correct point of hyphenation and press the Escape key.

_____ **Notes** _____

The hyphenation zone may be changed to a new left and right setting if you wish to do less or more hyphenation. A large hyphenation zone will almost eliminate the automatic hyphenation (see Hyphenation Zone in the "Formatting" section).

Left Margin Release

Left Margin Release   Similar to the key found on a regular typewriter, the **Left Margin Release** key releases the cursor a preset **5** spaces to the *left* of the left margin.

To change the number of spaces, use the **Mar Rel** option on the **Set** key.

Use the **Search** and **DEL** keys to delete the Left Margin Release code. (See Deleting Codes in the "Editing" section.)

Exercise   Type the following sentence using the **Left Margin Release** key:

WordPerfect cursor movement allows you to move anywhere within your text rapidly and efficiently.

Notes

The Left Margin Release key may either be used at the preset left margin or at an indent.

Line Advance

Line Advance The **Advance** key is used to print text up or down a half-line, or to advance the printer to a certain line.

Press the Advance key, and the message **Adv.** appears on the status line. If you want your text printed *up* a half-line, press the Up Arrow key; if you want your text printed *down* a half-line, press the Down Arrow key. After pressing an arrow key, a △ or ▽ appears on the status line, and the **Ln** number changes to show on which half-line the text will be printed (e.g.**1.5, 3.5, 10.5**).

If the cursor is moved to the next line, the Ln number continues to show the half-line spacing. For example, if the cursor is in line 2 and you advance up a half-line, the Ln number displays **1.5**. If you continue typing into the next line, the Ln number displays **2.5**.

If a **number** is entered instead of pressing the up or down arrow, the printer will advance to that line and start printing. For example, if the date on a page of letterhead paper needs to start on line 14, you could either press the Return key 13 times or press **Advance** and enter **14**.

Exercise   If your printer supports half-line spacing, try the following exercise.

Clear your screen and follow these steps:

- Press the Return key until the cursor is at the beginning of line 5.

- Type the words **It is harder to.**

- Press the Advance key, the up arrow, and type the word **lift.**

- Press the Advance key, the up arrow, and type the words **the arm.**

- Press the Advance key, the down arrow, and type the word **than.**

- Press the Advance key, the down arrow, and type the words **the tongue.**

Move the cursor slowly through the sentence and notice the changes on the status line. Send the page to the printer. The printed sentence should look like this:

It is harder to lift ^{the arm} than the tongue.

Try using the Advance key with more than one line of text and notice the printed results.

_____ **Notes** _____

When using the **Advance** key to type text on a certain line of the page, that text will always be printed on your selected line, even if new text is entered above it.

The half-line spacing only appears when the document is printed, and not on your screen. The status line indicates the half-line feature.

Some printers, such as many of the dot matrix style, *will not* back up or print in half-line spacing.

Overstrike

Overstrike   When *two* characters need to be printed in the same position, use the **Overstrike** key.

For example, to print the ~ in the spanish word manana type **n**, press **Overstrike**, then type ~ and the remainder of the word.

Exercise   Type the word mañana using the **Overstrike** key.

Notes

Only the *second character* typed is displayed on your screen. Both characters will appear when the document is printed.

Page, Hard New

Page, Hard New

To begin a new page *at any time,* simply press the **New Page** key. A page break will be placed in the text:

- -

Once you place a page break in the text with the New Page key, it *will not be moved* by WP if you insert or delete text on a page.

Use the **Search** and **Delete Left** keys to delete a New Page code.

Exercise

Experiment with the **New Page** key by typing a few lines of text and pressing **New Page.** Try this several times. Note the changes on the status line.

Now press **New Page** followed by the **Delete Left** key to delete the Hard New Page.

Notes

Like the Conditional End of Page key, **New Page** may be used to protect a block of text. If an automatic page break comes in the middle of a paragraph, move your cursor to the beginning of the paragraph and press New Page. WP will eliminate the "soft" page break as you move your cursor through the text.

Page, Soft New

Page,
Soft New

When the preset number of lines on a page have been filled, WP *automatically* ends that page (shown as a series of dashes on the screen), and a new page begins.

If you insert or delete text on a page, WP will automatically repaginate. If a page break occurs in a certain place on your screen, then it will occur in exactly the same place when the document is printed.

Exercise

Type several lines of text (you may just want to press Return's) until WP automatically enters a new page break. Notice the *page, line*, and *position* change on the status line.

Notes

The page text length is preset to 54 lines. Changing this number will be covered in the section on Formatting.

WP will automatically *decrease* the number of text lines per page if you have headers or footers.

_____ Required Space _____

Required   This key allows you to enter a space into the text
Space   that will be considered as *part* of a word or
                      character string.

For instance, if you enter "**a + b = x**" using
required spaces, the entire equation is treated
as if it were one word.

When entering text, WP automatically "wraps"
the cursor to the next line (like a *carriage
return*). If you have a short word you want to
remain on a line, and WP is ready to wrap, press
Required Space and enter the word. It will
remain at the end of that line.

Exercise   Type the equation "**100 × 6 = 600**" beginning
                      at position 64 of any line. (Use the space bar to
                      move the cursor to position 64.) Now try it again
                      using **required** spacing.

_____ Notes _____

Normally, two spaces are typed after the end of a sentence. However, if the end of
the sentence falls at the end *of the line* the cursor could possibly wrap to the next
line after the first space. The second space would then fall at the beginning of the
next line.

To avoid this problem, WP automatically defines the first space after the end of a
sentence as a *required space.* Both the first and second spaces are then
considered as part of the last word of the sentence, and will remain at the end of
the line.

Status Line

Right Half

Located at the bottom of the screen, the right half of the status line constantly displays the document, page, line, and position number of the cursor on your screen. For example:

Doc 1   Pg 1   Ln 1   Pos   10

The **document** number is only used when editing two documents at the same time (see Document Switching in the "Editing" section). The **page** number tells you on which page of your document the cursor is located. The **line** number tells you on which line of the page the cursor is resting. The **position** number tells you at which column position or "space" the cursor is resting in the line.

Left Half

The left half of the status line is used by WordPerfect to communicate with you. Sometimes a question or statement will appear that requires an answer. Sometimes an "error message" will appear, telling you that something is wrong or needs special attention. All of these messages will be explained as you read through the manual.

Exercise

Type a few lines of text, then use the arrows keys to move your cursor through the text. Notice the changes in the right half of the status line.

Notes

For more information on error messages, see Common Error Conditions in the "Help" section.

_____Subscript and Superscript_____

**Subscript and
Superscript**

A character, such as the **2** in H_2O, may be printed *down* 1/3 of a line by using the **Subscript** function key. To subscript a character, press **Subscript** and enter the character. An **s** will appear on the status line to indicate the subscript.

The **3** in X^3 may be printed *up* 1/3 of a line by using the **Superscript** key. Press **Superscript** and enter the character. An **S** on the status line will indicate the superscripting.

The scripting keys must be pressed for each new character, as WordPerfect automatically releases the scripting feature after a character has been typed.

Exercise

Clear the screen. Type **H**, press **Subscript**, type **2**, type **O**, and press **Return**. Then type **X**, press **Superscript**, and type **2**.

Print the page to see the subscript and superscript characters.

Tab Key

Tab Key   As on a regular typewriter, the **Tab** key moves the cursor to the next "tab stop" position.

Exercise   Using the **Tab** key, type the following text:

This is kind   of   spaced out.

1) for the money
2) for the show
3) to get ready
4)   to   go!

Notes

Unlike a typewriter, pressing the Tab key inserts a **[TAB]** code. Always press the Delete Left key to erase a tab, instead of using the Arrow keys.

To leave an even margin on several lines, use the **Tab** to move in from the left margin instead of the space bar, or your text *may not line up properly* when printed.

Tab stops are preset every *five* spaces. You will learn to change them in the Formatting section.

Underlining

Underlining   The **Underline** key is used to *underline* text. Like the Bold key, it also switches on and off when pressed.

Exercise   Type the following sentence using the **Underline** key:

<u>You can move anywhere in any direction with a minimum of keystrokes.</u>

Notes

The Position number on the status line will be underlined when the underlining feature is on.

Underlining, Single and Double

Underlining Single and Double

Menu item #5 on the **Print Modes** key allows you to choose from four different underlining modes. WordPerfect is normally set for *single non-continuous* underlining. Non-continuous means that WP will not underline when the **Tab** key is pressed. *Continuous* is designed to underline all tabs and text.

Both continuous and non-continuous may be set for **single** or **double** underlining:

Single		Non-Continuous
Double		Non-Continuous
Single	Continuous	
Double	Continuous	

Once you have changed the underline mode, the document will be printed in the new mode until it is changed again. Both modes underline spaces.

Notes

Normally, you may change underline modes as many times in your document as you wish, as long as you only have one change per line. However, by using the **Advance Key** you may move up one-half a line, enter a second underline mode, and then move back down. The printer will print both modes on the same line, but WP will recognize them as being on separate lines.

The screen will always display Single Non-Continuous underlining, even when the mode has been changed.

Most line-type printers cannot print a double underline.

Widow-Orphan Protection

A widow refers to a first line of a paragraph appearing by itself on the last line of the page. An orphan refers to a last line of a paragraph appearing by itself on the top of a page.

Widow/Orphan
Protection

To avoid widows and orphans, press the **Set** key and select **Widow/Orphan**. The current setting is displayed, and you can press **y** to change to yes, and **n** to change to no. If you change to yes, then from that point in the document forward you will avoid most widows or orphans.

You may turn widow/orphan protect on and off as many times in the document as you wish. One line subject headings and paragraphs of three lines or less are not protected, so you may want to use the **Conditional End of Page** in these cases.
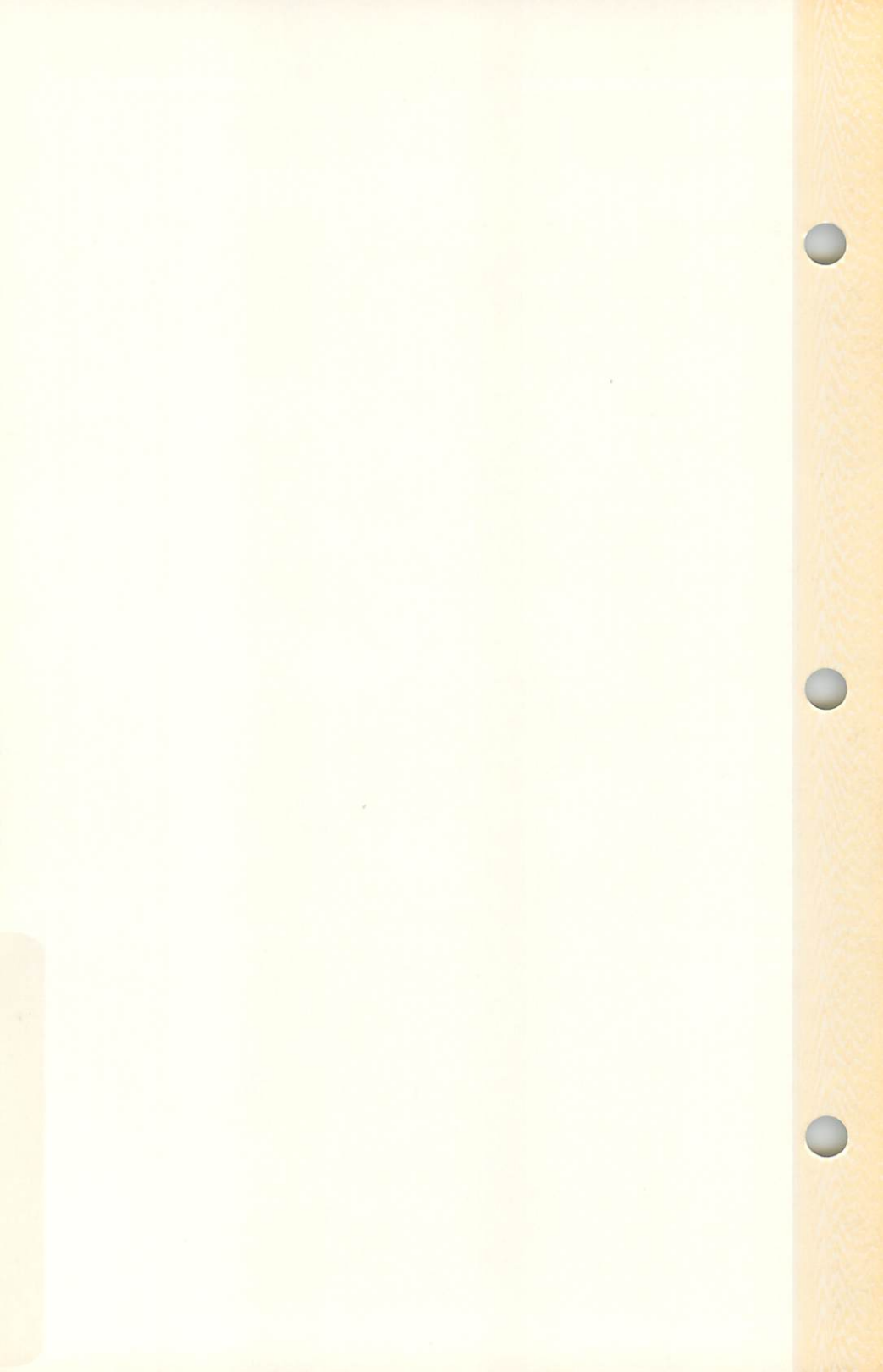
EDITING

Editing is a key feature of any word processor. Unlike even correcting typewriters, the word processor is wonderfully forgiving. If you make a mistake, it is easily corrected. Moving or changing blocks of text can be done quickly and efficiently. With WordPerfect, a simple keystroke eliminates the need for scissors, correction fluid, tape, and paste.

In this Section:

> Block
> Cursor Movement
> Cursor Movement, Specialized
> Cut and Paste
> Cut and Paste (Block on)
> Deleting Codes
> Deleting Text
> Dual Document Editing
> Insert/Replace
> Repetition Counter
> Reveal Functions
> Search, Forward and Reverse
> Search and Replace

Note: Remember that a WP document not only contains the characters you see on the screen, but codes, like margin and page length changes, which are used to format and print the text. Press the Reveal Functions key, and the codes are displayed with your text.

When you learn to delete codes as well as text characters, you have mastered most of the WP features.

Block On/Off

Block On/Off   The Block key is a powerful tool for editing an entire *section (block) of text* in your document.

First you must *define the block* of text you wish to edit. Move the cursor to the beginning of the block and press the **Block** key. **Block on** will be displayed on the status line. Move the cursor (forwards or backwards) to the opposite end of the block of text.

The block is now defined. You may perform one or more of the following:

Append a Block   Press **Block Append** and enter the name of the file to which you wish to add the block.

Bold a Block   Press your **Bold** key, and the block will be bolded.

Delete a Block   Press the **Delete Left** key, confirm the deletion by typing **y**, and the text will be erased.

Move a Block   Press the **Move** key and select Cut/Copy Block or Col umn. Position the cursor, press the Move key again, and select Retrieve Column/Text.

Print a Block   Press your **Print** key, and the block will be printed.

Save a Block   Press the **Save Text** key, and name the block as you would any document.

Underline a Block   Press the **Underline** key, and the block will be underlined.

Upper/Lower Case   To convert from upper to lower case letters (or vice versa), press the **Extended Features** key.

Exercise   To turn the block mode **off**, simply press the **Block** key again.

Press **Block**, move your cursor up or down a few lines, press **Bold**, and then press **Block**.

Press **Block**, move your cursor up or down a few lines, press the **Delete Left** key, then type **y**.

_____ **Notes** _____

When defining a block, you may type a character, and the cursor will move forward to the character typed. If the character is *not* found within the next **2,000** characters, the cursor is not moved, and a "beep" sounds.

When you use the **Block Append** key, the text will be added to the end of the file you select. If the filename you enter does not exist, WP will use the filename to create a new file containing the block of text.

Cursor Movement

Cursor Movement

The **cursor** is a dash (or block) which indicates your position on the screen. The cursor may blink, depending on the type of machine you are using.

Arrow Keys

The **Arrow** keys allow you to move the cursor through the text in four basic directions—left, right, up, or down:

One Space Left	Left Arrow
One Space Right	Right Arrow
One Line Up	Up Arrow
One Line Down	Down Arrow

Repeatedly pressing the Arrow keys will continue your horizontal or vertical movement through the text on your screen.

Home Key

Pressing the **Home** key, followed by one of the Arrow keys, will move the cursor quickly through your text. For example, press the Home and the Right Arrow key and your cursor will "jump" to the end of the line. Other combinations include:

Left Edge of Screen	Home—Left Arrow
Right Edge of Screen	Home—Right Arrow
Top of Screen	Home—Up Arrow
Bottom of Screen	Home—Down Arrow
Beginning of Text	Home—Home— Up Arrow
End of Text	Home—Home— Down Arrow

Word Left & Word Right

These two features allow you to move the cursor one word to the left or one word to the right. A group of characters followed by a space is defined as a "word" by WordPerfect.

Exercise   Type a few lines of text on your screen, then experiment using the various cursor movement features.

_____ **Notes** _____

The cursor will only move when there is a space, character, or code through which to pass. Something must first be typed from the keyboard; the cursor cannot move through "nothing." If you press the Home—Down Arrow combination and the cursor moves only half-way down your screen, it is because there is nothing else for the cursor to move through.

For an explanation of other cursor movements, refer to Cursor Movement, Specialized in this section.

Cursor Movement, Specialized

Screen Up
& Down

These keys allow you to move through your document *one screenful* (usually 24 lines) at a time. Pressing the **Screen Up** key moves you backward through your document. The **Screen Down** key moves you forward through your document.

Page Up
& Down

These keys allow you to move your cursor page-by-page through your document. Pressing the **Page Up** key will move your cursor to the top of the *previous* page. Pressing the **Page Down** key will move your cursor to the top of the *next* page (see notes).

Escape Key

The **Escape** key (repetition counter) when used with the *Arrow, Page Down,* or *Page Up* keys, moves you rapidly through the text.

Pressing Escape and the Left or Right Arrow key moves the cursor *eight positions* to the left or right in the line.

Pressing Escape and the Up or Down Arrow moves the cursor *eight lines* up or down in the text.

After pressing Escape, notice that the message "**n =** " appears on the status line. If you wish to move a certain number of *lines* or *characters,* enter the number, then press the appropriate arrow key.

To move a certain number of *pages* forward or backward, simply press Escape, enter the number, then press the Page Up or Page Down key.

Go To

This key allows you to move the cursor to a certain *page* or *character*, or to the top or bottom of the page.

After pressing the Go To key, the message "**Goto**" will appear on the status line. Enter a *number*, and the cursor will move to that *page*. Type any *character*, and the cursor will move forward to that character.

Using the Go To key with the Up or Down Arrow moves the cursor to the *top* or *bottom* of the current page.

Exercise

Retrieve a document to the screen, and experiment moving your cursor with the specialized cursor movement keys.

_____ **Notes** _____

A page-break line (- - - - - -) on your screen indicates the end of a page. The Word-Perfect program has been preset to automatically place a page break after 54 lines of text. However, you may use the **New Page** key to create a page of any length. If the pages in your document are various lengths, the Page keys will move the cursor a various number of lines (page break-by-page break).

When a character is entered after the "**Goto**" prompt, the cursor will remain in the same position if WP cannot find it within the next 2000 characters.

Cut and Paste

Cut and Paste

The operation of "cutting and pasting" is very important when editing a document. The **Move** key has been designed to help you perform this task quickly and efficiently. After pressing the Move key, the following menu is displayed on the status line: **1** Cut, **2** Copy, **3** Retrieve Column, or **4** Retrieve Text.

When you **copy** a portion of your document, the text is copied then saved in a temporary file. **Cutting** both *saves* the text and *deletes* it from the screen.

Select the cut or copy option, and the menu "**1** Sentence, **2** Paragraph, or **3** Page" will appear. Select an option, and WP automatically saves the text in the temporary file (see **Notes**).

Now move the cursor to where you would like the saved text to appear, press the Move key, and select the **Retrieve Text** option. The range will be pulled from the temporary file, and displayed on your screen. Use **Retrieve Column** when a column has been defined (see "Cut and Paste (Range on)" in this section).

Exercise

Retrieve or create a document of at least two paragraphs. Select the **Cut** option from the Move Key menu, and then select **Sentence.**

Move your cursor to the end of the second paragraph, press the Move key and select the **Retrieve Text** option.

Notes

WP definitions of text:

> **Sentence**—any line of characters ending with a *period, colon, question mark, or exclamation point.*
>
> **Paragraph**—any text that ends with a **NL** character. (using the **Return** key)
>
> **Page**—any text that ends with a new page code (soft or hard).

_____Cut and Paste (Block on) _____

Text

With the Block key on, you may define a portion of text and cut or copy it with the Move key (including those that would not automatically be defined by WP as a sentence, paragraph, or page). Simply turn the block mode on, define the portion with your cursor (see Block in this section), then select the cut or copy option from the menu.

To retrieve the text, use the Retrieve Text option from the Move Key menu (block mode off).

Columns

With the Block key on, the Move Key menu will display the **Cut** and **Copy Column** options. These options allow you to move a _vertical_ column of numbers or text.

To _define a column_ with the Block key:

1. Place the cursor at the beginning of the first line of the column.
2. Press the **Block** key _on_.
3. Move the cursor to the last line of the column.

To _save_ the defined column, simply press the Move Key and select the **Cut** or **Copy Column** option.

To _retrieve_ the saved column, press **Block** off, position the cursor, press the Move key (Block off) and select the **Retrieve Column** option.

Exercise

With a document on your screen, press the Block key on and move the cursor from the _middle_ of one sentence to the _middle_ of the next. Press the Move key and select the **Cut** option. Move the cursor to the end of the document, then select **Retrieve Text** from the Move Key menu.

Now clear your screen and type three columns
of several numbers each. Use TAB's between
each column and press the Return Key after
entering each line of three numbers. Save the
second column using the **Block** key and the **Cut
Column** option. Move your cursor below the
two remaining columns, press the Move key
and select the **Retrieve Column** option. Your
column should re-appear on the screen.

---------------------------------**Notes** ---------------------------------

You may also retrieve your saved text by pressing the Retrieve Text key and
Return.

If you are moving a number of Blocks, use the Save Text key and give each
block a name — a, b, c, d, etc. Once the blocks are saved, you may exit your
current document, retrieve a new one, and insert the blocks anywhere in your
text using the Retrieve Text key. Remember, the block will be filed on your
disk and remain there until deleted.

WP defines the left and right margins of a column as being an Align or TAB (if
there is one) followed by all characters up to the next TAB, Align, or NL code.
If there are two or more tabs in front of a column, WP will only move the tab
closest to the characters.

There are two temporary files — one for defined **text** and the other for defined
columns. The same files are used with the Block key OFF. The files hold only
one document at a time. When new text is saved, the old is automatically
erased. Both temporary files are deleted when you exit WP.

Deleting Codes

Delete Left and Right

Using the **Delete Left** and **Delete Right** keys, you can delete a *code* just as you would a character.

The most common code that you will delete is the **NL** (Return). To erase an unwanted NL, position the cursor just below the Return you wish to erase and press **Delete Left.**

To delete *any other code* in a document (bolding, underline, margin setting, etc.), find the unwanted code by using the Search keys (or the Reveal Functions key). Press the **Delete Left** key, and the code to the *left* of the cursor will be deleted. The **Delete Right** key may be used to erase a code to the *right* of the cursor.

If you are asked to confirm a deletion, type **y**.

Search and Replace

The **Search and Replace** (and **Search and Replace w/ Confirm**) function keys allow you to automatically delete a function code *every time* it appears in a document. Press the **Search and Replace** key and when the "▷ **Srch**" prompt appears on the status line, press the desired function key and press the **Escape** key twice.

Exercise   Move your cursor to the middle of a line of text, and press **Return**. Press the **Delete Left** key to remove the NL code from the previous line of text.

Press **Bold** and type one word. With the **Delete Left** key, delete the letters and the bolding code. Type **y** to confirm the deletion.

_____ **Notes** _____

By using the Search keys, you may rapidly locate a code in your text. Press Forward or Reverse Search, enter the code, then press ESC. The cursor will move to the right of the code. Use the Reveal Functions key to display the code on your screen.

The Search keys are explained later on in this section.

Deleting Text

Delete Left The **Delete Left** key deletes text to the *left* of the cursor. Press the key once to delete a single character, or hold down the key to continue deleting several characters at the same time.

Delete Right The **Delete Right** key deletes characters *at* and to the *right* of the cursor. Press the key once to delete a single character, or hold down the key to continue deleting several characters at the same time.

Delete Word The **Delete Word** key will delete a word *at* the cursor. Continue pressing this key to delete one word at a time.

Erase to End of Line This feature will erase all the text from the cursor to the end of a line. To erase an entire line, the cursor must be at the left margin.

Erase to End of Page This feature allows you to erase all the text and codes on a page from the cursor position to the end of the page. To erase the entire page, move the cursor to the left margin of line 1. After you press the key, "**Confirm DEL of Remainder of Page**" will appear on the status line, giving you a chance to make a final decision. If any important codes are in the text, WordPerfect will display certain prompts on the status line. These prompts give you the choice of keeping or deleting those codes.

Exercise

Type a word, then erase it by pressing the **Delete Left** key several times.

Type several words, then press the Home and Left Arrow keys to return to the beginning of the line. Hold down the **Delete Right** key until the entire line has been erased.

Type a couple words, then use the **Delete Word** key to erase both words.

If you made any mistakes in a previous exercise, correct them with the delete keys.

_____ **Notes** _____

To add a word, letter, space, or NL (Return), move the cursor to the desired position and begin typing. The text in front of the cursor will be pushed forward, making room for the new text.

If you wish to overwrite (type over) a part of your text, you will need to use the **Replace** mode (see Insert/Replace in this section).

You may also delete a block of text by using the Block key and the Delete Left or Move key. (see "Block" and "Cut and Paste (Block on)" in this section) The Move key may be used to "cut" a block of text from a document. (see "Move" in this section)

By using the **Escape** (Repetition Counter) and **Erase to End of Line** keys, you may erase an exact number of lines at one time

Dual Document Editing

**Dual
Document
Editing**

WordPerfect supports the editing of two documents by allowing you to switch between the two documents being edited. This makes the moving and copying of information from document to document a convenient process. The right-half of the status line shows you which document, **1** or **2**, is on your screen.

To Switch documents, press the Extended Features key and select the **Switch Documents** option. The same "cut and paste" temporary files (see Cut and Paste in this section) are used, so you can cut and copy information from one document to the other with the use of the **Move** key. You actually have two WordPerfect's working for you, and you can switch back and forth between them as much as you like. You may also save and retrieve any WordPerfect files in either document.

Exercise

Retrieve a document to your screen, then press the Extended Features key and select menu entry **1**. You should now have a clear screen (note that **Doc 2** now appears on your status line). Retrieve another document. Now return to the first document by selecting menu entry 1 again. Keep repeating this process until you become familiar with the feature.

With document 1 on your screen, use the Range key to copy a paragraph of text. Now switch to document 2, and retrieve the text using the Move key.

Now try experimenting with *all* the editing features.

—————————————————————— **Notes** ——————————————————————

For most computers, Dual Document Editing will work with 128k of memory. However, if you have less than 90,000 bytes of memory left after loading your operating system, then you will need more memory for Dual Document Editing to work properly. This applies especially to the **Victor 9000** and IBM users with **2.0 DOS.**(For DOS users, type the CHKDSK command after loading DOS to display the number of bytes left.)

Insert/Replace

Insert/Replace   Pressing the **Insert/Replace** key allows you to switch between **insert** and **replace** modes.

Normally, WP is in an **insert** mode, allowing you to enter characters *without* losing any text. Any text *at or to the right* of the cursor will be pushed forward in the document. You may type anywhere in your document, and your text is formatted as you type.

However, if you wish to type *over the top* of existing text, press the Insert/Replace key and you will switch to the **replace** mode (indicated by the message "**Replace**" on the status line).

Press the Insert/Replace key again to return to the insert mode.

Exercise   Position the cursor in the middle of a paragraph, and switch to **replace** mode. Type a few words, then switch back to **insert**.

_____ **Notes** _____

If you run into a *code* while typing in the replace mode, the code and *any text following the code* will be pushed to the right of what you are typing.

Repetition Counter

Repetition Counter

The **Repetition Counter** defines the number of times a certain operation will be performed. After you press the **Escape** key, the Repetition Counter prompt (**n =**) will appear on the left half of the status line. The default value of "n" is **8**.

The Escape key may be used with several keys to perform an operation "n" number of times:

ESC, Up Arrow   Cursor moves **8** lines up

ESC, Invoke Macro   Macro invoked **8** times

ESC, Delete Right   Deletes **8** characters to right

To reset the "n" number for one operation, press Escape and enter the new number. Then press the selected operation:

ESC, 5, Up Arrow   Cursor moves up **5** lines

ESC, 3, Invoke Macro   Macro invoked **3** times

ESC, 7, ERASE EOL   Deletes **7** lines of text

To reset the default value of "n", press the **Set** key, select the n option, and enter a new number for the default value of "n". The new value is *erased* when you exit or restart WP.

Exercise

Retrieve a document from your files.

Using the **Escape** key, move the cursor *down* eight lines, reset the default value to **5**, erase the next five lines, then reset the default value to **8**:

Press **Escape** and the **Down Arrow**. Press **Set**, select "**n**", enter **5**, press **Escape**, then press the **Erase to End of Line** key. Press **Set**, select "**n**", and enter **8**.

Reveal Functions

**Reveal
Functions**

This feature allows you to view your text *with embedded codes* three lines above and below the cursor position.

Pressing the *space bar* (or any other key) will return your normal text to the screen.

**Editing
in Reveal
Funtions**

While looking at your text in Reveal Functions, you may press the left arrow to move one character to the left. You may press the right arrow to move one character to the right. The Backspace or Delete Left key will delete the character or code to the left of the cursor, and the Del or Delete Right key will delete the character or code to the right of the cursor.

Pressing any other key will return you to your text.

Exercise

With a document on your screen, press the **Reveal Functions** key and note the cursor position (a "[^]" — usually blinking) and the various codes on your screen. Try deleting a couple of codes, press the **space bar**, and notice the changes that occur in your document as a result of deleting the codes.

_____ **Notes** _____

The *function codes* (see "Embedded Codes" in BASICS) are abbreviated and in brackets [ ]. See the appendix for a list of abbreviations.

The Reveal Functions key will also display header, footer, and footnote text and format settings.

Search, Forward and Reverse

Search, Forward and Reverse	These keys search from the cursor *forward* or *backward* through the text for a certain function code, character, word, or group of characters.
	Press the **Forward Search** key, and the message "▶**Srch:**" will appear on the status line. Press the function key to enter a code or type the characters you wish to locate, press **Escape** (or the Search key again) and the cursor will move to the *right* of your selection.
	Press the **Reverse Search** key, and follow the same process. You will note that the arrow in the status-line prompt now points to the left.
Exercise	Try using the **Forward** and **Reverse Search** keys to find a character, a word, and a code in a document of your selection.

Notes

If WP displays a *previous* selection after "▶**Srch:**", press ESC (or the Search key again) to search for that selection, or you may enter a *new* selection and press ESC (or the Search key).

If your selection cannot be found, the message *Not Found* briefly appears at the bottom of your screen.

Once you have found an embedded code with the Search keys, simply press the **Delete Left** key to erase the code (see Deleting Codes in this section).

Search and Replace

Search and Replace

This feature key is used when you wish to change a word or group of words *several* times within a document.

For example, if you have a contract for the **Acme** Insurance Company, and you want to print the same contract for the **AAA** Insurance Company, press the **Search and Replace** key. Enter the word **Acme**, press **Escape**, enter **AAA**, then press **Escape** again and wait. WP automatically performs the replacement.

Search and Replace w/ Confirm

Like the **Search and Replace** feature, **Search and Replace w/ Confirm** will also replace text strings (a word or group of words). However, WP will stop *each time* the string occurs and ask you to confirm the replacement. Type **Y** to replace, or **N** if you do not wish to replace, that particular text string.

You may stop the Search and Replace operation with the **Cancel** key.

Exercise   Retrieve a document, and using the **Search and Replace** key, replace **the** with **and**.

Move your cursor to the beginning of the document, and using the **Search and Replace w/ Confirm** key replace **and** with **the**.

_____ Notes _____

The Search and Replace keys work in a *forward* direction from the cursor, so be careful to position the cursor at the beginning of the text.

The Search string may contain *codes*, but the replacement string may only contain *characters*. For global insertion of codes, see the section on Macros.

You may also use the Search and Replace keys to completely delete a particular embedded code in a document (see Deleting Codes in this section).

When replacing **the**, you may have noticed that it was also replaced in words like **these**. By entering a **space** before and after the word you wish to find (and its replacement), you will eliminate this problem.

Help

This section provides details about the help and reference information available in diskette files and in the manual.

In this Section:

Help Key
If You Press the Wrong Key
Common Error Messages
Printer Troubleshooting

Note: The **Index** is a comprehensive guide to information in this manual and is cross referenced under many topics.

_____Help Key_____

Help Key   This function key allows you to view help and
                      reference information.

                      Press the **Help** key, and the message "**Help with
                      what?**" will appear on your screen. You may
                      press any function key, any arrow key, the print
                      key, Home, Esc, or Return to view information
                      about that key. After reviewing the information,
                      press any key to return to your text.

                      If you need extra space on your disk, you may
                      delete the file WPHELP.FIL (see notes).

Exercise   Press the **Help** then **Bold** key to view information
                      about the Bold feature. Press any key to return to
                      your text.

_____ **Notes** _____

The file WPHELP.FIL on your disk contains all the information displayed when
using the Help key. If you need extra space on your disk *and you do not need the
Help information,* you may delete this file by using the System Commands menu
(see System Commands in the "Filing" section).

If You Press A Wrong Key

If You Press A Wrong Key Sometimes you may accidentally press one key when you mean to press another. To correct the error,

1. Press the **Delete Left** key. This will correct a number of problems including pressing the New Page key by mistake, or pressing the Return key in the middle of the line rather than at the end. If, after pressing Delete Left, the status line displays the message **"Confirm Deletion Of ____ Y/N?"**, type **y** (for yes) to cancel the mistake.

If this doesn't solve the problem,

2. Press the **Cancel** key. If pressing the Cancel key gives you a new message, then press **Cancel** again.

If this doesn't work,

3. Press the **Rewrite Screen** key.

If the problem remains,

4. Press the **Erase End of Line** key. If the system displays the message "**Confirm Deletion of ____ Y/N?**" on the status line, then be sure to type **y** (for yes) to cancel the mistake. This key will erase everything from the cursor to the end of the line.

If there is still a problem,

5. Press the **Exit/Restart** key. This will work if you are typing text for a header or footer. If pressing the Exit key gives you a new message, then press **Cancel**.

6. Press the **Range** key if you want to get out of the range mode and range is on.

7. Press the **Macro Def** key if "Macro Def" is blinking and you want to get out of the Macro Definition mode.

Common Error Messages

"**Can't close file**" — The probable cause of this error is that the system cannot find the file to close it. If you have removed the WP diskette for any reason, replace it into the drive from which it was taken.

"**Can't find WPMENU.FIL**" — As WordPerfect begins execution, it looks for WPMENU.FIL to determine which directory to use as the WP directory. If WPMENU.FIL cannot be found, WP will terminate. WPMENU.FIL should exist in the same directory as WP.EXE.

"**Can't find virtual files**" — WP is looking for special files created on the WP diskette. Replace the WP diskette into the drive from which it was taken.

"**Can't rename file**" — Either the file to be renamed cannot be found or the new name for the file is not a valid file name.

"**Disk full—Strike any key to continue**" means that the document disk is full.

If the **document disk** is full, then replace the "full" disk with a new formatted disk and repeat the save function. You may also make room on the full disk by deleting files, or by deleting the original document and repeating the save function.

If the error occurred while you were printing, try printing again from the System Commands menu using the **Print a Document** option.

REMEMBER, IT IS EXTREMELY IMPORTANT THAT YOU MAKE SPACE ON YOUR DISK BEFORE CONTINUING TO EDIT OR SERIOUS PROBLEMS MAY OCCUR

"**File creation error**" — There is a limit to the number of files that DOS allows on a disk. This error is caused by trying to exceed that limit. If you want to create a new document on the disk, an existing file must be deleted.

"**Not enough room on WP disk to insert text**" — Before retrieving any text, WordPerfect first checks to see if it has enough internal memory and overflow disk space in the WP directory to accommodate the text. If there is not enough room, the best solution is to break up the text you are editing into smaller documents and to save them onto other diskettes or in other directories. Another solution, although not always a safe one, is to delete an unnecessary file in the WP directory before retrieving the desired text.

"**Printing in progress—can't exit WP**" — If any printer is active, WordPerfect will not allow for normal termination of the program. If you do not want to wait for the printer to finish printing before exiting WP, cancel the job being printed or "KILL" the printer (with the System Commands key). Then you may proceed to exit WP.

"**Too many open files**" — Under DOS 2.00 and later versions of DOS, there is a limit on the number of files which may be open at one time. This limit is specified in a file called CONFIG.SYS, which must exist in the root directory of the disk from which DOS is booted. In order to run WordPerfect, this limit must be at least 16. If you already have a file called CONFIG.SYS in the root directory, make sure that the line "FILES = 16" is included in that file. If you do not have a CONFIG.SYS file, then please copy CONFIG.SYS from your WordPerfect master diskette into the root directory of the disk used to boot DOS. After insuring that CONFIG.SYS exists as it should, reboot DOS and then run WordPerfect.

"Warning—no more files may be opened—strike any key to continue" — This message refers to the limit on the number of files which may be open at any one time under DOS 2.00. (See "Too many open files" above.)

"WP disk full—Strike any key to continue" means that the disk with the WordPerfect files is full.

If your **WP disk** is full, press the System Commands key and delete a file(s) to make more room on the disk. If you cannot delete a file, then break up your current document into smaller documents using the Range key.

Printer Troubleshooting

This section covers what you should do if the printer doesn't print correctly. A list of problems accompanied by a list of steps to take in order to solve the problem follows below. The solution steps are listed with the most elementary solution first. If the first solution doesn't work, proceed with the second solution and so on until the problem is solved.

Printer won't do anything—all lights are off.

1. Check the power cord to insure that it is plugged in.
2. Turn power switch on.

Printer won't do anything—power and *alarm* lights are on.

Some printers have separate alarm lights for each of the more common printer alarm conditions. If your printer has separate lights, check the item corresponding to the specific alarm light.

1. Insure adequate paper supply and proper feeding.
2. Insure proper printer cover position.
3. Check ribbon and replace if empty.
4. Reset sheet feeder (if present).
5. Check for a loose print wheel and remount if necessary.
6. Turn power off and then back on.

Printer won't print—power light is on, no alarm is indicated and printer has been printing prior to your document.

Is printer "Waiting" for GO?

Printer doesn't advance to correct line before starting to print.

You should place the first page in the printer so that the print head is lined up with the first line of paper for continuous forms, and the line on which you would like the first line of text to print if you have single sheet forms.

Printer does not vertically center page correctly when vertical page centering has been selected for the given page.

1. Insure that the paper is aligned in the printer as it would be for a normal page of printing.
2. Using the Reveal Functions key, insure that the vertical page centering function is positioned before any printable text on the page—preferably the first function on the page.

Printer prints first page correctly but does not advance to correct place on the second and subsequent pages.

1. Printer with sheet feeder.
   a. Check form length to insure that it matches the length of form being used.
   b. Make sure your system generation is set for a sheet feeder.
   c. Make sure that the cable that comes out of the printer and plugs into the sheet feeder is plugged in.
2. Printer without sheet feeder.
   a. Check form length to insure that it matches the length of the form being used.
   b. Check to make sure that the system doesn't think that the printer has a sheet feeder on it.

Printer prints off one edge of the page or does not center the text horizontally on the page or prints dark block at end of the line.

1. Printer with sheet feeder.
   Check your margin settings to make sure that the resulting text will fit on the size of paper that you are using. Obviously, settings of L = 10 and R = 120 will not fit on standard 8½ x 11 paper. Likewise, settings of L = 80 and R = 140 will print off the edge of the paper.

2. Printer without sheet feeder.
   a. There is a ruler mounted on the front cover of most printers with two scales on it—a 12 pitch scale and a 10 pitch scale. If you have set the left margin of your document at 12, then the first printed character will align with the 12 on the printer ruler which corresponds to the current pitch setting. Make sure your paper is horizontally positioned to align with the correct ruler position. Usually you will align the left edge of the paper with 0 on the ruler.
   b. Check your margin settings to make sure that the resulting text will fit on the size of paper that you are using. Obviously, settings of L = 10 and R = 120 will not fit on standard 8½ x 11 paper at standard pitch settings. Likewise, settings of L = 80 and R = 140 will print off the edge of the paper.

Document looks okay on the screen but when it is printed, some lines extend to the right further than others or vertically aligned columns don't vertically align correctly.

With Reveal Functions, display the lines of text that are not printing correctly. You will probably find that the lines in question end with a [SNL] (soft new line) instead of an [NL] code (or vice versa). To correct the problem, delete the [SNL] and press Return to replace it with a [NL]. Tabs, not spaces, should generally be used to separate columns. Spaces may vary in size when printed.

Every time an Indent code is encountered, the printer advances an extra line before printing.

Turn off the "Auto LF" or "Auto Line Feed" switch on the printer control panel.

Notes:

FORMATTING

Formatting refers to margins, spacing, page length, justification, or in other words, the way the text is displayed or printed. You may change the format settings almost anywhere in the text, and as many times as you wish.

The effect of some settings, such as margins and page length, will be immediately shown on your screen. Others, such as right justification and advance, will only appear when the document is printed. In every case, the format setting will take effect only at the point in your document where you choose to insert the format code.

In this Section:

    Alignment
    Alter Page Format
    Centering on a Column Position
    Center Page (Top to Bottom)
    Characters per Inch
    Footnotes, Create and Edit
    Footnotes, Renumber
    Headers and Footers
    Horizontal Scrolling
    Hyphenation Zone
    Indent
    Indent, Left/Right
    Justification
    Left Margin Release Number
    Lines per Inch
    Margins
    New Page Number
    Page Length
    Page Number Position
    Page Numbering (Headers/Footers)
    Spacing
    Tabs
    Tabs, Extended
    Top Margin

Note: The text on your screen is automatically re-formatted when you move the cursor through the text, or press the Re-write Screen key.

_____ **Alignment** _____

Alignment   The **Align** key allows you to line up a column of
                 numbers at a decimal point or any other
                 character.

                 The preset alignment character is a period. To
                 change to another character, press the **Set** key,
                 select the **Algn Char** option, and enter the new
                 alignment character.

Exercise   Change the alignment character to a comma by
                 selecting the **Algn Char** option from the **Set** key
                 menu, and typing a comma.

Alter Page Format

Alter Page Format

This feature is designed to **prevent** the printing of headers, footers, or page numbers on a specific page of your document.

After selecting the option from the Page Format menu, a list appears. You may choose to alter *one, several,* or *all* the formats on the page.

To alter more than one, link the menu numbers with addition symbols (**1+6+7**).

Exercise

Retrieve a document with page numbering and, using the **Alter Page Format** option, select the menu item that will prevent page numbering for the current page. Print the document.

Notes

Remember to position the cursor at the left margin of line 1 of the chosen page before altering formats.

──────── Centering on a Column Position ────────

Centering on a Column Position   The Center Key is designed to center a line of text *between the margins*. To center text around any *other* column position, use the **Center** option found on the Set Key menu.

Exercise   Tab over to position **55**, and enter the **Center** option from the Set Key menu.

Now type the following:

<div align="center">

Sincerely,

(your name)
President

</div>

As you have already noticed, the Center option needs to be entered for *each new line*.

────────────────── **Notes** ──────────────────

If the line of text you are typing begins to disappear from the screen, the cursor has probably run into a **Center** or **Temporary Margin** code and is "pushing" against it. To resolve the problem, delete the unwanted code. The "lost" text should reappear on your screen (see Deleting Codes in the "Editing" section).

Center Page (Top to Bottom)

**Center Page
(Top to
Bottom)**

Used to center text on the page *top to bottom*, this feature must be entered at the very *beginning* of the page (the left margin of line 1).

Position the cursor, then select the **Center Page** option of the Set Page Attributes menu. The page will be automatically centered as it is printed.

Exercise

Type a few lines of text on your screen.

Move the cursor to the *beginning* of the page, select the **Center Page** option on the Page Format key, then print the page.

Characters per Inch

Characters per Inch

Pitch refers to the number of *characters per inch*. Typewriters typically print in either 10 or 12 pitch.

WP is preset to print in **10** pitch, but may be set to *any* value that will divide into 120 evenly by selecting the **Pitch** option on the **Print Modes** menu. The most commonly used pitch settings are 10, 12, and 15.

Exercise

Change to **15 pitch**, type a few lines, and print the paragraph.

Notes

Pitch changes will only work with printers that have the capability to change pitch.

_____ Footnotes, Create and Edit _____

**Footnotes,
Create and
Edit**

Creating and editing footnotes with WP is simple. Place the cursor in the text where the footnote reference number should appear, and press the **Footnote Key**. A menu will display three options: "**1** Create; **2** Edit; **3** Renumber ?". (See Footnotes, Renumber in this section for information about menu item **3**.)

To **create** a footnote, select menu item **1**. When the screen clears, type in the text of the footnote and press **Exit/Restart**. Your document will appear on the screen with the new footnote number in place.

To **edit** a footnote, select menu item **2** and enter the *number* of the footnote you wish to edit. WP will search for and display the footnote on your screen. After editing, press **Exit/Restart**, and the original text will appear with the cursor at the edited footnote position.

When the document is printed, the footnote numbers will appear as superscripts in your document, while the text will be properly printed at the bottom of the page.

Exercise   Retrieve a document of at least two pages, then
move the cursor to the end of the first sentence
on page one.

Select the **Create** option on the Footnote menu,
and enter the footnote text "**This is my first foot-
note!**". Now move the cursor to the end of the
first paragraph on page two, and enter the
footnote "**This is the last footnote!**".

Next select the **Edit** option and change the first
footnote to read "**This is my first edited
footnote!**".

Print the document.

———————————— **Notes** ————————————

The **edit** menu option is also a valuable way of *searching* for a particular footnote.

You may look at the footnote text anytime by pressing the **Reveal Functions** key.

Most of the word processing functions may be used when typing the footnote text.

When deleting a footnote, place the cursor *at* the footnote number, press the
Delete Right key, and type **y** to confirm the deletion. Remaining footnotes will be
renumbered automatically as you move your cursor through the text.

Footnotes may not be over 1 page in length.

Footnotes, Renumber

Footnotes, Renumber

The WP system has been designed to automatically number footnotes. For example, you may have a document with 30 footnotes and need to insert a couple of pages with 6 more footnotes. After entering the text, WP will renumber the footnotes, repaginate, and make sure that the footnote text appears on the same page as the footnote number.

However, there may be an occasion when you will want to **reset** a footnote number. For instance, you might want the footnotes in every chapter to begin with **1**.

The **Renumber ?** option of the Footnote menu allows you to specify the new number for your footnotes. After entering the option, the message "**Ftn #?**" appears. Enter the new number and press **Return**.

The new number is assigned to the *next footnote* in the text, and all remaining footnotes are renumbered sequentially.

Exercise

Retrieve the document from the previous footnote exercise.

Position the cursor a few characters *before* the first footnote, and renumber the footnote to **10** using the **Renumber ?** option.

Now move the cursor *past* the footnote, and notice the automatic renumbering.

_____ **Notes** _____

Different footnote numbers may be defined. Some printer fonts have small numbers which are ideal for these superscripted characters. See the last page of the Installation manual for details.

Headers and Footers

**Headers and
Footers**

A header is text that is printed at the *top* of a
page, while a footer is printed at the *bottom* of a
page.

Select the **Headers or Footers** option on the Page
Format key, and a menu appears allowing you to
select **Header A** or **B**, or **Footer A** or **B**, and on
which pages you wish the header or footer to
appear.

After making your selection the screen is
cleared, allowing you to enter the header or
footer text (several lines of text are allowed).
When you are finished typing, press
Exit/Restart.

If you enter a header/footer at the very
beginning of a page, then it will be printed from
that page forward. A header/footer entered *any-
where else* on the page will be printed starting on
the *next* page.

Exercise

With at least a few lines of text on your screen,
go to the beginning of the document and define a
footer (a or b) that reads "**Confidential**", and
print one page of text.

_____ **Notes** _____

Many of the WP features like Margin Set and Center may be used when creating headers and footers.

Lines after the *first* line of the footer are printed in the bottom margin of the page.

If you use two headers (or footers) on the same page, be sure that one is *flushed right* or printed in a different place from the other—otherwise they may overprint each other.

If you choose to **edit** a header or footer from the header/footer menu, WP searches *backwards* through the text for the header or footer, and displays the text for editing or reports a "**Not Found**". After editing, press **Exit/Restart**.

If you change the margins in your text, and want your headers and footers to have the same margins, go to the end of your document and select **Edit** for each header and footer. With the text of the header/footer on your screen, press Exit/Restart and WP will automatically reset the header/footer margins to be the same as those in your text.

Horizontal Scrolling

Horizontal Scrolling

If your margins are set wider than 80 charac-ters, some of the text will be automatically pushed *off* your screen to the left.

The **horizontal scrolling** feature allows you to move your document to the left and right for viewing the off-screen text.

The **Home** and **Arrow** keys are used to move the text horizontally. Home-Home-Right Arrow takes you to the far right of the line, and Home-Home-Left Arrow takes you to the far left of the line.

Exercise

Set margins to **10** and **100**. (see **Margin Setting**)

Type a paragraph of text, and move the para-graph back and forth on the screen using the Home and Arrow keys. Reset margins to **10** and **74** at the end of the paragraph.

Notes

During normal typing, only one line of the text will scroll horizontally. To scroll *all* *the lines* on your screen, press the **Rewrite Screen** key.

Hyphenation Zone

Hyphenation Zone

There is a **hyphenation zone** that exists at the end of each line. WordPerfect prompts you to hyphenate any word that extends *beyond* the zone.

The zone is preset at 5 spaces to the *left* and 5 to the *right* of the right margin.

The size of the zone will determine how often you need to hyphenate. A *large* zone requires little hyphenation, but produces a more jagged right margin (needing more justification). A *small* zone leaves a more even right margin (needing less justification), but requires frequent hyphenation.

The hyphenation zone is changed by selecting the **H-Zone** option from the Set Format key menu, and entering the new numbers for the borders of the zone.

Exercise

Set the zone for **2** to the left and **3** to the right by pressing **Set Format**, selecting **H-Zone**, and entering **2** then **3**. Type a few lines of text, and note the increased hyphenation.

Reset the zone for 5 and 5.

_____ **Notes** _____

The hyphenation zone must have a minimum of **5** spaces within its borders, and the right border must have at least **1** space.

You may effectively turn off hyphenation by setting a very large hyphenation zone (8 and 8 for example).

For Line and Epson Printers to justify the right margin, you will need to set the right border to **1**.

For further information on the hyphenation zone, see Hyphenation, WP-Assisted in the "Typing" section.

Indent

Indent

The **Indent** key allows you to *indent* a portion of your text (such as a paragraph).

Press the Indent key, and the cursor will move to the next tab stop. This position is used as the *new* left margin until you press Return.

Indent the following paragraph using the **Indent** key:

Sometimes you may wish to have the first line of a paragraph flush with the left margin, and indent the remaining lines. To format this "hanging" paragraph, first press the **Indent** key, then **Left Margin Release**, *then* begin typing the first line of text.

Exercise 1

Indent the following paragraph

Word processing provides the secretarial staff with a tool which is much more efficient than the typewriter, freeing up a larger portion of their time for other activities.

Exercise 2   Sometimes you may wish to have the first line of a paragraph flush with the left margin, and indent the remaining lines. To format this "hanging" paragraph, first press the **Temporary Margin** key, then **Left Margin Release**, *then* begin typing the first line of text.

Now type the following two "hanging" paragraphs using the above instructions:

1. To eat bread is no art; to bake bread is a small art; to earn bread is a great art.

2. When the nightingale finished its song, the lark became silent but the crow kept on crowing.

_____ **Notes** _____

You may press the Indent key *several times* to set a deep indentation. If you are typing a "hanging" paragraph, press the Left Margin Release key the same number of times (after pressing Indent) to bring the cursor back to the left margin of the first line.

Remember to *first* enter the Indent then the Left Margin Release code at the beginning of the first line of a hanging paragraph or you may run into formatting problems when editing the paragraph.

If the line of text you are typing begins to disappear from the screen, the cursor has probably run into a **Center** or **Indent** code and is "pushing" against it. To resolve the problem, delete the unwanted code. The "lost" text should reappear on your screen (see Deleting Codes in the "Editing" section).

Indent, Left/Right

**Indent,
Left/Right**

This feature is like the Indent key, except that *both* right and left margins are indented, and the margins indent by the *margin release* value instead of tab positions.

Press **L/R Indent** twice, then type the following paragraph:

Exercise

Set the margin release value for **6**.

Press **L/R Temp Margin** twice and type the following paragraph:

> With the Speller, words of a document or of a selected page may be automatically checked for spelling errors against a dictionary. The dictionary is dynamic and can be modified by the user.

Reset the margin release value to 5.

Notes

The margin release value is the same as that used for **Left Margin Release**.

If the line of text you are typing begins to disappear from the screen, the cursor has probably run into a **Center** or **Indent** code and is "pushing" against it. To resolve the problem, delete the unwanted code. The "lost" text should reappear on your screen (see Deleting Codes in the "Editing" section).

Justification

Justification

Normally, the lines at the right margin are **justified** when your document is printed. Right justification does not appear on your screen, but WP automatically adjusts the lines as you type to make sure that an **even** right margin is printed. For example, the paragraphs on this page are right justified.

To switch justification off, press the Print Modes key, and select the **Justification Off** menu option. *From that point in the text forward,* the right margin of your document will be jagged.

If you wish to turn justification off for an entire document, turn it off at the very beginning of the text.

Exercise

Turn justification **off,** type a paragraph, turn justification **on,** type another paragraph, and print the page. Compare the right margins of the two printed paragraphs.

Notes

You may turn justification on and off any number of times in your document.

With most dot matrix and "text only" printers, WP will use "space fill" to justify the text. With supported letter-quality printers WP will adjust the space between characters.

If your "space filled" text occasionally extends beyond the right margin when printed, you may correct the problem by setting your hyphenation zone to at least 5 on the left and 1 on the right.

For Line and Epson Printers to justify the right margin, you will need to set the right hyphenation zone to 1.

_____ Left Margin Release Number _____

Left Margin   This option, listed in the Set Key menu, allows
Release Number you to change the number of spaces the cursor
will move when using the *margin release* keys.

For example, the Left Margin Release key is
preset to 5 spaces. To change the number to **3**,
simply press the **Set** key, choose the **Mar Rel #**
option, and enter the new number.

Exercise   Set the **Mar Rel #** to **3** using the Set Key menu.

Now type the following sentence, using the **Left
Margin Release** key on the first line:

Text can be entered anywhere on a page: between
lines, between words, within a word, and all
automatically without pressing special edit mode
keys or reading lengthy menus.

Reset the Mar Rel # to **5**.

_____ Notes _____

The Mar Rel # option also sets the number of spaces to indent both for the
Left/Right Temporary Margin and **Left Margin Release** features.

_____ Lines per Inch _____

Lines per Inch	The number of lines per inch is a **vertical** measurement of the lines on your page. The Print Modes menu allows you to change the lines per inch.
	Normal typewritten text has 6 single-spaced lines per vertical inch. WP is preset to 6 lines, but may be changed to **8** lines per inch by using the **Lines Per Inch** option on the Print Modes menu.
Exercise	Set the number of **lines per inch** to **8**, type a paragraph of your choosing and print it.
	Reset the lines per inch to **6**.

_____ **Notes** _____

When changing the number of lines per inch, you may also wish to adjust the number to text _lines per page_ by using the **Page Length** option on the Page Format key. For example, if you want to keep the normal one-inch top and bottom margins on a letter-sized page, and you are using **8** lines per inch, you would enter **72(9** inches x **8** lines per inch) for the number of single-spaced text lines.

Horizontal and vertical pitch changes will work only on printers which have such capabilities.

Margins

Left/Right Margins

Left and right margins are reset by using the Set Format key.

Press Set Format and select **Margin Set**. The message "**[Margin Set] 10 74 to Left =** " is displayed. The numbers 10 and 74 are the current margins. Enter the new left margin, then enter the new right margin after the "**Right =** " prompt.

Margins may be reset for a paragraph or every line, as long as the cursor is at the left margin position.

Exercise

Set your margins to **25** and **50** and type a paragraph of text. Reset your margins to 10 and 74.

_____ **Notes** _____

The default settings of **10** and **74** leave a one-inch margin on both sides of the text for *10 pitch* (pica type-style).

You may change the margins before or after typing the text. Only the text *following* the change is affected.

Margins may be reset to any values between **0** and **250**.

To check the margin setting, simply press the Margin Set key and note the displayed numbers.

To *temporarily* change margins see Left/Right Temporary Margins and Left Temporary Margin in this section.

_____ New Page Number _____

**New Page
Number**

You may change a page number by moving the
cursor to the left margin of line 1, and choosing
option **2** of the Page Format menu. A status line
message "**New Page #**" appears. Enter the new
number and press Return.

Exercise

Retrieve a document from your files and position
the cursor at the left margin of line 1 on the
second page. Select the **New Current Page
Number** option from the Page Format menu, and
number the page **1**.

Print the document, and notice the page
numbering.

Page Length

Page Length

This option on the Page Format menu allows you to change the *page length* and the number of *text lines* on a page.

Counting 6 lines per inch, WP is preset for the standard *letter* page length of 11 inches (**66** lines). The number of text lines is **54**—this number leaves a one-inch margin at the top and bottom of the page.

To change the page length and text lines, choose the **Page Length** option. Select **1** for letter size, and **2** for legal. Entering **3** will allow you to set *any* page length or number of text lines.

Exercise

Clear your screen. Press **Page Format**, select the **Page Length** option, and select **3**. Press Return to leave the Form Length at 66, then enter **10** and press Return twice. Type eleven lines of text, and notice the page break.

Reset the text lines to 54.

Notes

Changing the page length *does not* change the top margin. If you set your forms length to 66 and text lines to 60, then the printing will start down one inch from the top. If you desire more than 60 lines on a 66 line paper, then you must reset the top margin.

The **page length** is always set in terms of 6 lines per inch, while the number of **text lines** is set according to the number of lines you actually want printed on each page. The text lines include headers, footnotes, and one line of footer text.

Page Number Position

Page Number Position

When the **Page Number Position** is selected from the Page Format menu, a submenu appears listing several page positions. Select a position and WP will automatically number your pages in that position when the document is printed.

For example, entering **3** will place the page number at the **top right** margin of every page. Entering **4** will alternate the placing of page numbers between the left and right margins on every other page.

Page Number Position Set

In **10 pitch** the page number positions are preset to **10** at the left margin, **74** at the right margin, and **42** at the center column position.

To change the column position numbers, select the **Page Number Column Positions** option of the Page Format menu. After entering the option, a menu will appear allowing you to change the left, center, and right column position numbers.

Exercise

Retrieve a document, position the cursor at the beginning of the first page, then select a **page position** from the Page Number Position option and print the document.

Now reset the page number column positions to **15**, **35**, and **70** by using the **Column Positions** option. To set the positions back to their *default* numbers, simply enter item **1** from the column positions menu.

_____ **Notes** _____

Remember to move your cursor to the *left margin of line 1* before entering the page numbering options.

A number may also be placed in a *header* or *footer* by pressing the **Control** key while typing **N** (see Page Numbering in Headers or Footers).

Numbering your pages requires *two* text lines per page—one for the number and another blank line for double-spacing between the page number and text. This means that if you have text lines set for 54, only 52 of them are available for text when you choose to have WordPerfect number your pages.

Page Numbering (Headers/Footers)

Page Numbering (Headers/ Footers)
The ^N is created by holding down the **Ctrl** key and typing **N**. It may be used to place the current page number on any page in the text, or on every page if used in a header or footer.

To print a page number at the top of every page, enter the code in a header. If you want a page number at the bottom of every page, enter the code in a footer.

Exercise
Clear your screen and select the **Headers or Footers** option on the Set Page Attributes key.

Clear your screen and select the **Headers or Footers** option on the Page Format key. Select **Footer B** to be printed on every page. Press the **Center** key, enter a ^N (hold down Ctrl and type N), press Exit/Restart then the Return key.

Type a few lines of text, press New Page, type a few more lines of text, and print the document.

Notes

Numbering your pages requires *two* text lines per page—one for the number and another blank line for double-spacing between the page number and text. This means that if you have text lines set for 54, only 52 of them are available for text when you choose to have WordPerfect number your pages.

You may also create page numbers alternating in the left and right corners of the page. Define one header (or footer) with a △N at the left margin on even pages, and another header (or footer) with a △N at the right margin on odd pages.

Spacing

Spacing   WP is preset for single spacing between lines.

To change the spacing, press the Set Format key and select the **Spacing** option from the menu. Enter the appropriate number after "**[Spacing Set] 1 to**" is displayed. Use **2** for double spacing, **3** for triple spacing, **1.5** for one-and-a-half spacing, etc.

Exercise   Set your format for double spacing by pressing **Set Format**, selecting **Spacing**, and entering **2**. Type a paragraph and notice the spacing.

At the end of the paragraph, set the spacing back to **1**.

Notes

You may reset the spacing before or *after* typing your text.

The spacing may be reset any number of times in the document, and only the text below the spacing change will be affected.

To check the space setting press Set Format, select **Spacing** and, after reviewing the setting, press Return.

_____ Tabs _____

Tabs   Tabs are preset in WP for every five spaces. To ⬤
                    reset the tab stops, press the Set Format key and ⬤
                    select the **Tabs** option. A display of tab stops
                    ("**T**") and their positions will appear at the
                    bottom of your screen. Then

to erase _one_ tab   enter the **column number**
                            press **Delete Left** or **Delete Right**

to erase _many_ tabs   press **Erase EOL**
                            all tabs from the cursor
                            forward will be erased

to _move_ the cursor   use **left** and **right arrows**,
                            or enter the **column number**

to _set_ a tab   enter the **column number**, ⬤
                            or move the cursor to the
                            desired position and type a
                            t

to set _multiple_ tabs   press **Erase EOL**, enter the
                            first tab stop position
                            number, followed by a
                            comma and the interval.
                            Example: **5, 10** would set
                            tabs every **10** spaces start-
                            ing at position **5**.

                    When you finish setting the tab stops press **Esc**.
                    To leave the tab display _without_ disturbing the
                    tabs, press the **Cancel** key.

⬤

Exercise   Press **Set Format** and select **Tabs**. Type **5**, press **Return**, and press **Delete Left** (this deletes the tab stop at column 5). Type **6**, press **Return** (this sets a tab stop at position 6), and press **Esc**.

_____ **Notes** _____

Only the text *after* a tab reset is affected, allowing you to reset tabs as many times as you wish in a document.

_____ Tabs, Extended _____

Tabs,
Extended

You may have noticed that the Tabs option on the Set Format menu only allows you to set or delete tabs up to column position 158. However, WP is designed to allow up to **250** column positions on any line.

To set tabs _beyond_ the 158 position, use the **E-Tabs** option on the Set Format menu. After entering the option number, the message "**E-Tabs: 160,10 Beginning at:**" will appear. The 160,10 indicates that the tab stops are currently set every **10** columns, starting at column position **160**.

To change this, enter a _new_ beginning position, press Return, then enter a _new_ spacing number and press Return.

Exercise

To set **Extended Tabs** every **25** spaces beginning in column **175**, press the **Set Format** key, select **E-tabs**, type the beginning column position, press **Return**, type the interval and press **Return**.

Top Margin

Top Margin	Normally, WP allows a margin of **6** lines (one inch) at the top of each page. However, there may be times when you wish to have a top margin of more or fewer lines.
	To reset the top margin, move your cursor to the very beginning of the page and select the **Top Margin** option on the Page Format menu. The message **Set half-lines (12/inch) from 12 to** will appear on the status line.
	Clear your screen and reset the top margin to **3** inches. Press **Page Format**, select **Top Margin** and enter **36**. Now type a paragraph of your choosing, print the text, and note the top margin spacing.
Exercise	Clear your screen and reset the top margin to **3** inches. Press **Set Page Attributes**, select **Top Margin** and enter **36**. Now type a paragraph of your choosing, print the text, and note the top margin spacing.
	Reset the Top Margin to 1 inch.

Notes

Resetting the top margin affects the position of page numbers, headers and footers, but *not* the number of text lines. Use the **Page Length** option of the Page Format menu to adjust the number of lines on the page.

Notes:
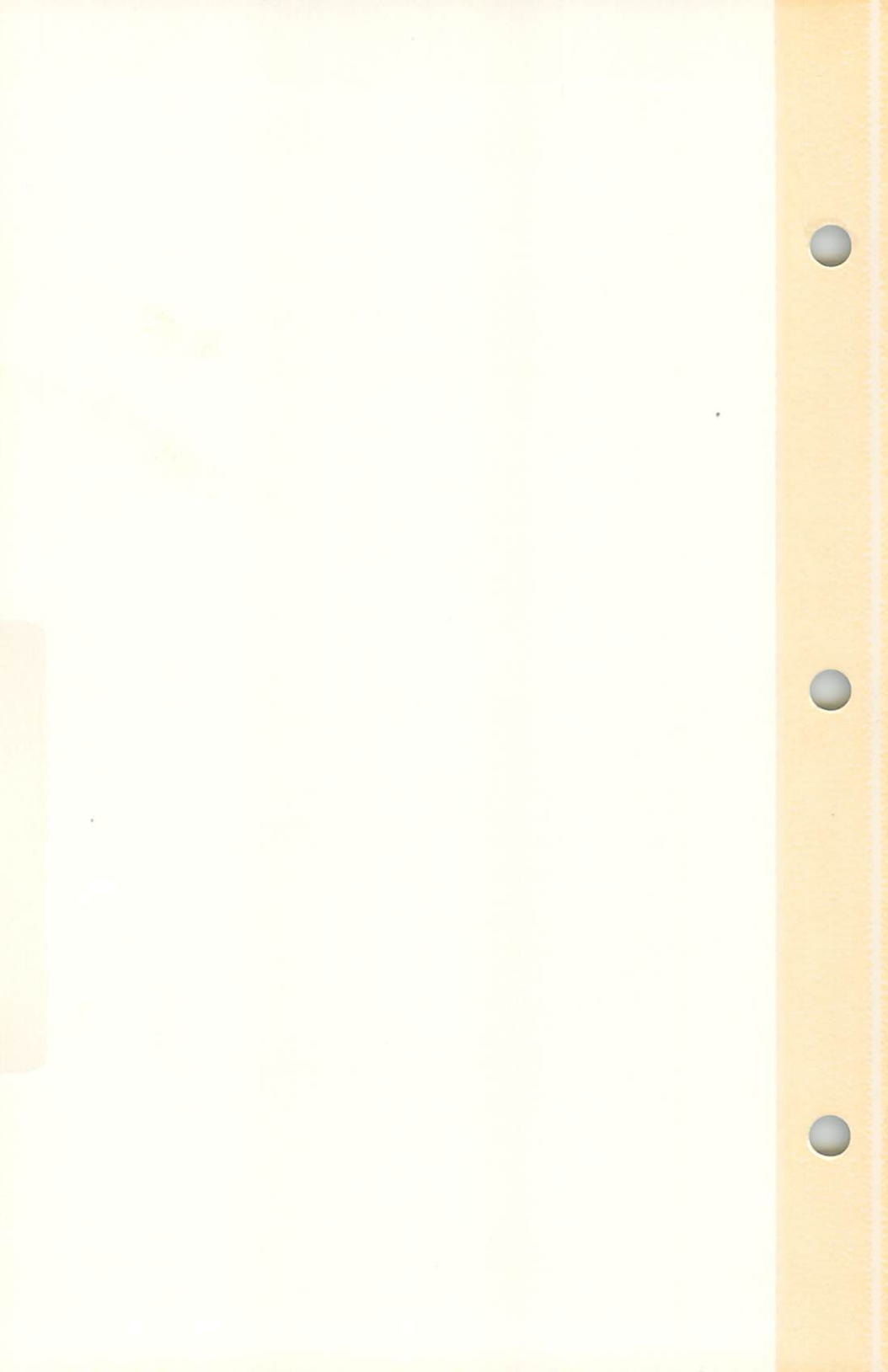
PRINTING

WordPerfect lets you automatically send text to the printer as needed while you continue editing. Also, you may send more than one document to the printer. The additional documents wait until their turn to be printed. You may *display* as well as *cancel* jobs that are waiting.

When paper jams in the printer, or you send a document to the printer by mistake, or you forget to turn the printer on, or any one of a number of printer problems, WP has the solution with several ways to help you stop and start over.

In this Section:

> Cancel Printing
> Changing Font/Print Wheel
> Changing Printers
> Display Print Jobs
> Embedded Printer Commands
> Number of Copies
> Printing from Disk
> Printing to Disk
> Printing from Screen
> Proportional Spacing
> Report Printer Status
> Sheet Feeders
> Sheet Feeders, Multiple Bins
> Single Sheet Printing
> Stopping the Printer
> Troubleshooting Printers

Note: You are not required to learn every printing function. Some features, like the Embedded Printer Command and the Print to Disk are included for the more technical user.

Cancel Printing

Cancel Printing

The **Cancel a Print Job** option on the System Commands menu cancels a print job.

Press the System Commands key, select the **Cancel** option, then

1. Press **Return** to cancel the job *currently printing*.
2. Enter a **job number** to cancel a *specific* job. (You may Display the Print Jobs to find a job number.)
3. Enter a **zero** to cancel *all jobs* waiting to be printed.

Exercise

Turn your printer *off*, and send a document to the printer using the Print key. Press the System Commands key, and select the **Display the Print Jobs** option to see the Job #. Press Return then select the **Cancel** option and enter the job #.

Display the print job list again to make sure that the job has been deleted.

Notes

The Cancel a Print Job option should be used only if the printer is working correctly and you want to stop the printing of a specific document. To stop the printer, use the Kill Printer or Restart Printer options.

Changing Font/Print Wheel

Changing
Font/Print
Wheel

To change fonts while printing a document, you must enter a code in the text before sending the document to the printer. This is done by selecting the **Font/Print Wheel** option from the Print Modes menu and entering the new font number.

On some printers this code will stop the printer to allow you to change print wheels. When the printer stops, change the print wheel and give a "**GO**" to the printer from the System Commands menu.

With the NEC printers, you may change from an odd to the next even numbered font, and the printer will print the additional characters on the print cup. With the Epson printers, a font change will change the type style. (Fonts 1 through 8 are available.)

Display Prin-
ters and Fonts

Pressing this option on the **System Commands** menu will display the defined printers and all of their fonts. Up to 8 fonts may be defined for each of 3 separate printers.

_____ **Notes** _____

You may switch fonts several times during the printing of a document by simply entering the font change code in the text every time you want the change to occur.

When some fonts are selected on the Epson printer, they will be narrower or wider than the normal font 1. When printed, the text may not line up with right-justified text.

Use the Printer Program, defined in Installation, to create or edit a font.

Changing Printers

Changing Printers

After pressing the Print Key, a menu will appear with the option "**Set Print Attrib**". Type a **3** to display the Print Attributes menu.

By selecting the **Printer Number** option on the Print Attributes menu and entering a new printer number, WP will send your document to that printer.

Exercise

(Skip this exercise if you only have one printer.)

Send a document to printer **2** by pressing the **Print** key, and selecting **Set Print Attributes**. Select Set Printer #, and enter 2.

Exit the Print Attributes menu and select Full Text Print. Your document will be sent to printer 2. Reset the printer number to **1**.

_____ **Notes** _____

Once a Printer Attribute is changed, the attribute stays at the new setting until you reset the attribute or exit WP.

_____Display Print Jobs_____

Print Jobs

As documents are sent to the printer, WP assigns each one a job number. To display a list of the print jobs waiting to be printed, press the System Commands key and select the **Display the Print Jobs** option.

A list with 5 columns will appear with information about each document sent to the printer:

Ptr	Job	Copies	Flags	Document Name
1	1	1	*	B:TAXES
2	2	1	D	B:FORMS.1

The **Printer** column tells you to which printer the document was sent. The **Job** column tells you the job number that was assigned to the document. Each document you send to the printer will be given a new job number in sequence (1,2,3,4,5,etc.) The Job numbering begins over again at 1 only after exiting and re-entering WordPerfect. The **Copies** column tells how many copies of the document will be printed.

The **Flags** column contains symbols or "flags" that tell you infor-mation about the printing status of the document. For instance, the asterisk * in the above example indicates that the Taxes document is currently being printed. The **D** indicates that the document is only a copy of the original and will be deleted after the printing is done.

The **Document Name** column gives you the full
pathname of the file, including the disk drive and
the filename.

Exercise   Send a document to the printer, then **Display the
Print Jobs** and note the various items of informa-
tion.

_____ **Notes** _____

The file {**WP**}.**Q** on your diskette is the list of print jobs, and has been designed to
hold up to 255 documents. **Do not delete or modify this file!**

_____ Embedded Printer Commands _____

Embedded   Used to control such devices as typesetters and
Printer   printers, these command codes do not affect the
Commands   formatting of your document. They are only
                  displayed on the screen in the **Reveal Functions**
                  mode.

Select the **Insert Printer Command** option from
the Print Modes menu. When prompted for a
Cmd, enter the command string and press
Return.

Command codes less than 32 decimal and
greater than 126 must be entered in angle
brackets (i.e. <15>). Codes between 32 and 126
decimal (printable characters) may be typed or
entered in decimal in angle brackets.

When WP encounters the command during print-
ing, it will be sent to the printer or file without
any interpretation.

_____ **Notes** _____

The > (greater than) and < (less than) symbols are the angle brackets.

Number of Copies

Number of Copies

The **Number of Copies** option on the Set Printer Attributes menu allows you to select the number of copies of a document you wish to print.

To change the number, press the **Print** key, select **Set Print Attributes**, enter the **Number of Copies** option and the number of copies. Reset the number to **1** after printing, or the printer will continue printing multiple copies.

Exercise

Print two copies of a short file by pressing the Print key, selecting Set Print Attributes, selecting the **Copies** option, and entering **2**. Press 0, and choose Full Text Print.

Notes

Any changes you make in the **print attributes** will be *saved* until you change the attribute again, or exit WP.

Printing from Disk

Printing from Disk

To print a document directly from the disk, select the **Print a Document** option from the System Command menu. The message "**Document**" will appear on the status line.

To print the **entire** document, enter the filename.

To print a **portion** of the document, type the file-name, a space, the number of the first page, a comma, and the number of the last page you want printed. For example, if the document was named LETTER.1, you would enter **LETTER.1 2,4** to print pages 2, 3, and 4. Entering **LETTER.1 2,2** would print only page 2.

Exercise

Print a file directly from your disk using the **Print a Document** option on the System Commands menu.

Notes

If the document to be printed is not on the default drive, type the name of the drive along with the filename (for example, B:LETTER.1). If you are on DOS 2.0, enter the complete pathname of the file.

When printing a portion of a document, WP begins counting from the first "page" of the document. If your page numbering has been set to start on another page, ignore your numbering and start counting from the beginning of the document when entering the pages you wish to print.

NEVER TRY TO PRINT A MACRO FILE, .EXE FILE, OR ANY OTHER NON-WP OR NON-TEXT FILE.

_____Printing to Disk_____

Disk File
Output

To file a copy of a document in **printer** or **text** format on your disk, select the Define Printers option on the System Commands key and specify that you have 3 printers. Assign printers 1 and 2 to your actual printers. (If you only have one printer, use the same definition for both 1 and 2.)

For printer 3, select one of the printer types and specify whether or not you want bi-directional printing. All files sent to that printer will be automatically written onto disk (default drive) under the name **TXT.WP**, and will contain all the characters and codes which would have ordinarily been sent to that printer.

For example, defining printer 3 as a line printer would strip the text of everything but characters, spaces, and NL (Return) codes when saved under TXT.WP. If printer 3 was defined as an NEC 3550, all the codes and characters necessary to print the text at that type of printer would be filed.

If a TXT.WP file already exists, then it will be deleted and replaced with the text on your screen. If you wish to save an existing TXT.WP, then you should rename the file before "printing" the document on your screen to the file.

_____ **Notes** _____

If a line printer output is requested, spaces are used to preserve margins, centering, flush right, etc., while bolding and underlining are accomplished by making a second pass on the same line (a CR but no LF). You will notice that duplicate lines appear in the text if you use bolding or underlining. A file in this format could be **exported** to other text editing systems.

You may look at TXT.WP with an editor (such as P-Edit), or you may set your margins to 1 and 90 with WP and then retrieve TXT.WP.

Printing from Screen

Printing from Screen

To print a document on your screen, simply press the **Print** key. The message **"Full Text Print; Page Print; Set Print Attrib"** will appear. Select Full Text Print by typing the appropriate number. The printing should begin within a few seconds.

You may also print a single page by moving the cursor to the desired page in your document and selecting the **Page Print** option. The **Print Attributes** option allows you to change several items. These options are found throughout the manual

While your printer is operating, you may continue typing and editing.

Exercise

Print the document currently on your screen.

_____ Proportional Spacing _____

Proportional   Many of the letter quality printers have print wheels
Spacing   or print cups with proportionally spaced characters
                      (capital letters are wider than small letters, m's are
                      wider than i's and j's, etc.).

To print porportionally, first place a proportionally
spaced print wheel on the printer. WP will handle the
spacing, so **do not select proportional mode at the
printer.**

Some printers, notably the different NEC printers,
have a switch setting on the front of the printer for a
PS print cup. If your printer has a switch for the print
wheel, set it to proportional spacing.

If you are confused about the proper settings see your
dealer. As a general rule, do not use the printer's
hardware proportional spacing mode. Only change
those settings which refer to the print wheel type.

You may select proportional spacing by pressing the
Print Modes key, choosing **Pitch**, and typing the
number for the pitch followed by an *, and selecting
Font 3. Ten pitch proportional would be **10***, twelve
pitch proportional **12***, thirteen pitch proportional
13*, etc. When you select proportional spacing, a code
is placed in your text so that the document will be
proportionally spaced each time you send it to the
printer.

You may wish to adjust the margins and pitch to your personal preference. If you change the pitch, remember to adjust your margins.

If the character spacing is not to your liking or if characters are not printed correctly, you may change the spacing and character mapping using the PRINTER program explained in Installation. The PRINTER program is very technical. You may wish to consult your dealer for help.

When you change the pitch and specify proportional spacing, the change takes effect from that point in the document forward.

You may turn off proportional spacing by deleting the code you entered, (it looks like **[Font Change:13*,1]** in Reveal Functions) or entering a non-proportional pitch at the point in the document you wish the change to take place.

With **WP-S**, you may change the initial setting to proportional spacing. Refer to the installation section for more information.

_____Report Printer Status_____

Printer Status The **Report Printer Status** option on the System Commands menu displays one of the following codes:

> **[Active]**   — the printer is currently printing a document
>
> **[Idle]**   — the printer is ready; no documents being printed
>
> **Waiting**   — enter "**GO**" option to con-
> **for a "GO"**   tinue printing or to print next document

The **/SS** indicates the printer is printing *single sheet* forms.

Before displaying the printer status, the message "**Ptr #** = **1**" will appear on your screen. If you wish to know the status of another printer besides **1**, enter the new printer number and press Return.

Sheet Feeders

Sheet Feeders If you answered "**Y**" to the sheet feeder question when you installed WP, you have already set the system to acknowledge the attached sheet feeder.

If you temporarily remove the sheet feeder, inform WP by selecting the **Sheet Feeder (Y/N)** option on the System Commands menu. WP will first display **Ptr #** on the status line, allowing you to identify the printer to which the sheet feeder is attached. Then type **N** to let WP know the sheet feeder is gone.

Remember to follow the same process when re-attaching the sheet feeder. Select the Sheet Feeder (Y/N) option, type the Ptr #, and type **Y**.

Sheet Feeders, Multiple Bins

Sheet Feeders, Multiple Bins
If your sheet feeder has two or more bins, you will need to use the **Set Sheet Feeder Bin #** option on the Print Modes menu to tell the printer from which bin you want the paper taken.

WP is preset for bin #1. If you wish to switch bins on a certain page of a document, move your cursor to the *beginning* of the page and press the Print Modes key. Select the Set Sheet Feeder Bin # option and enter the new bin #.

For example, to switch bins on page **4** of a document, move the cursor to the top of the page and enter the code. From page **4** on, the rest of the document will be printed from the new bin. Enter a new code each time you wish to switch bins.

To print an entire document from a particular bin, move the cursor to the beginning of the document before entering the code.

Exercise
If you have a sheet feeder with at least two bins, fill both bins with paper.

Retrieve a document of two pages or more. Move the cursor to the top of page **two**, press **Print Modes**, select **Sheet Feeder Bin #** option, and enter **2**. Now print the document and notice the switching of the bins during printing.

_____ **Notes** _____

All bin # codes must be entered in the document *before* it is sent to the printer. The codes may be entered either before or after typing the document.

If you temporarily remove your dual bin feeder, remember to use the **Sheet Feeder** option on the System Commands key to inform WP.

Single Sheet Printing

**Single Sheet
Printing**

WP assumes you are using **continuous forms** paper unless you tell it otherwise. Continuous forms means the sheets are automatically fed into the printer. Sheet feeders and tractor feeders which use one long sheet with perforations for tearing the sheet into individual pages are included in this category.

If you wish to print on *individual sheets* of paper, press the Print key and choose Set Print Attributes. Select the **Single Sheet Forms** option, enter **Y**, and send your document to the printer.

When the printer is ready you will hear a beep (unless your printer is not able to produce a beep). Place your first sheet of paper in the printer.

Display the System Commands menu and enter the "**GO**" option. Each time the printer finishes (you will hear a beep if your printer produces a beep), set another sheet of paper in the printer and enter "**GO**".

NOTE! When using this option, you will have to *manually* advance the sheet to the point where you want the printing to begin. Your printer will not automatically give you a top margin.

Exercise   Display a document of more than one page on your screen.

Press the Print key, select Set Print Attributes, and set the **Single Sheet** option to **Y**. Press Return, and select Full Text Print. Place a sheet of paper in the printer, and from the System Commands menu send the printer a "**GO**".

Each time the printer stops place another sheet of paper in the printer and send the printer a "GO".

_____ Notes _____

Any changes you make in the print attributes will be *saved* until you change the attribute again, or exit WP.

All *Top Margin* settings are ignored when you are doing *single sheet printing*. The printer will start printing at the position you roll your paper to; the only thing that will cause a form feed is [NL] codes at the top of your document.

You may also use the Single Sheet Forms option for printing out individual envelopes with your printer. Follow the same instructions found in the Continuous Labels pages in the "Special Features" section of the manual for printing out individual envelopes.

Stopping the Printer

Kill Printer

The **Kill Printer** option on the System Commands menu is designed to stop the printer *without canceling* the document from the printer list.

To continue printing, simply select the **Send Printer a "GO"** option from the System Commands menu. The printer will start again from the *beginning* of the document.

Restart Printer

The **Restart Printer** option on the System Commands menu **stops** the printer then **restarts** printing from the *top of the same page* or any other page in the document.

Once the Restart option is selected, you will be prompted to enter the **printer #** (press Return if the correct printer is displayed), and the page number.

To continue printing the **same** page, press Return. To restart on **another** page, simply enter the page number. To start back or forward a **certain number** of pages, enter a " **–** " or " **+** ", the number, then press Return. A **–2** would start 2 pages back from the current page, and a **+1** would start printing on the next page.

When you are ready to continue printing, send the printer a **GO** from the System Commands menu.

Exercise   Send a document of at least *three* pages to the
                      printer. When the printer begins typing page
                      two, enter the **Kill** option, adjust the paper to the
                      beginning of the next page, then **Send Printer a**
                      "GO". The printer should begin with *page one*
                      again.

                      Now send a document with more than one page
                      to the printer. Select **Restart** from the System
                      Commands menu, press Return, type + 1, then
                      press Return. When the printer stops, send the
                      printer a Go.

----------------------------- **Notes** -----------------------------

If your printer does not work, first check the **printer status**.

Use the **Kill** command when the printer is "hung" or printing does not start.
Remember to give the printer a "**GO**" to restart printing. After the Kill Printer
option is entered, the printer may continue typing a few characters before
stopping.

Use the **Restart** command if you wish to continue printing the same document, but
the printer is having problems.

Use the **System Commands** options to stop the printing process instead of the
printer on/off switch. If you turn the printer off and on during operation, it may
not print a portion of your text.

Troubleshooting Printers

**Trouble-
shooting
Printers**

If the printer is not printing when you think that it should be, check the status. If the status report shows the printer to be active, then there is probably an error in the communication between the computer and the printer. If this happens, Kill the printer, turn the printer off and then on again, and Send Printer a "GO".

If the problem continues, check the Status of the printer again. If the printer is still active, Kill the Printer, Cancel the Print Job, turn the printer off then on, and check the Status again. The printer should be [Idle] waiting for a "GO". Send the printer a "GO" and try printing again.

If the printer still does not print, check the printer definition with either System Commands or the /P switch (see the "System Generation—/P" in the Installation section or Appendix C).

If the printer has never printed, see your dealer. If the printer has been printing: check the cable to see that it is plugged in at the printer and at the computer; check the electrical hook-up; check to make sure the printer is on and "on line"; check to make sure there is paper; check the ribbon.

If all looks fine, try your back-up copy of WP. If the printer still doesn't print, see your dealer.

_____ **Notes** _____

You may delete all the print jobs from the queue by choosing the **Cancel Print Job** option and typing **0** (zero) when asked which job you wish to cancel. Choosing the **Kill Printer** option afterward should clear your printer of whatever was causing the problem.

Notes:
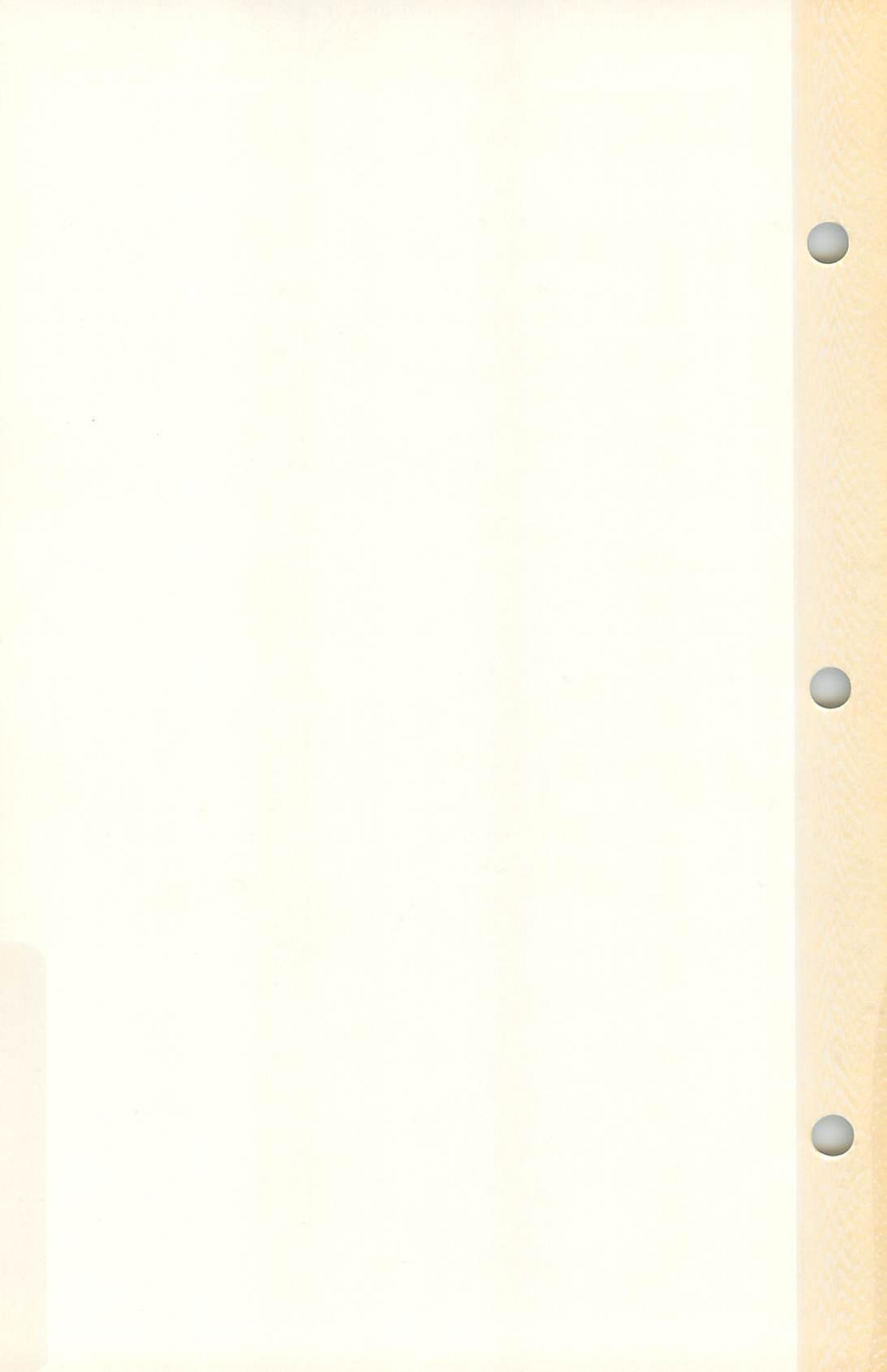
FILING

An important feature of a word processor is the ability to save documents for later use.

In addition to saving and retrieving particular documents, WordPerfect has a built-in document index (file manager) that automatically lists the document names in case you can't remember the name of a file or recall which files are on which diskette.

As you create and file more and more documents, you will want to perform the "housekeeping" chores of deleting and renaming files from within the word processor. With WP, these and other filing tasks are made easy.

In this Section:

> Clearing the Screen
> File Management
> File Protection
> Retrieving a Document
> Saving a Document
> System Commands
> Diskettes — Things to Know

Note: The pages under *Diskettes — Things to Know* contain technical information about saving and replacing files. Everyone will benefit from reading these pages even though some of the information may require some time to digest.

Clearing the Screen

Clearing the Screen

To clear your screen and either **exit** out of the WordPerfect program, or **restart** WordPerfect with a clear screen, use the **Exit/Restart** key.

After pressing the Exit/Restart key, the question **"Save Document? ([Y]/N)"** will appear on the status line. This prompt allows you to decide whether or not you wish to save the text you have been typing. Pressing the "**Y**" (for **Yes**) or any other key on your keyboard will allow you to save your text on your diskette (see Saving a Document page for details). Pressing the "**N**" (for **No**) will tell WordPerfect you do not wish to save the text which you have been typing.

After pressing the "**N**", the prompt "**Restart WP? (Y/[Exit])**" will automatically appear on the status line. Type a "**Y**" if you wish to **restart** WordPerfect with a clear screen. Press the Exit/Restart key again, or any other key, to **exit** out of the WordPerfect program.

Press the **Cancel** key once or twice to cancel the **Exit/Restart** procedure.

Once you have exited out of WordPerfect, you may turn off your computer, restart WordPerfect again or start any other program.

Exercise

Try using the **Exit/Restart** key to clear your screen and begin typing another document.

Notes

If you try to save a document with a name that has already been used, then the prompt "**Confirm replacement of** _____" will appear on your status line. (See Saving a Document in this section for details.)

File Management

**File
Management**

To display a listing of your files, press the System Commands key and select **File Management**.

Press **Return** and an alphabetized list of files appears on the screen. Your cursor position is shown in reverse video. You can move your cursor using the Arrow or Screen Up and Screen Down keys. Along with the filename you will see the number of characters in the file, and the date and time the file was last saved.

The menu at the bottom of the screen allows you to retrieve, delete, rename, or print the file that is currently in reverse video on your screen. Do not delete files unless you are sure that you wish to delete those files.

To get a listing of all the files of a directory, enter the full pathname of the directory followed by a backslash. For example, to see all the files of the C: \ WORD directory, enter **C: \ WORD ** . You may also enter **C: \ WORD   *.***.

A *filename template* may also be used to display selected files. The template is an abbreviated form of the filename, with the * used to designate "wild card" characters. For example, if you enter **A:*.TXT**, the system will show you all filenames ending in **.TXT** on the A drive. Enter **PE***, and you would see all files starting with **PE** on the default drive.

File Protection

The file protection feature (encryption) scrambles a document, so that if another person tries to look at a protected document, he will see a jumble of characters on the screen. Each file that is protected will have a password. A password may contain up to 75 characters. Be very careful to **remember** the password, because the password is *not* saved on your diskette, and there is absolutely no way for anyone to recover a protected file without the password.

File Lock   With the document that you wish to protect on your screen, press **Extended Features**, select **Prepare-Protect**, and choose **Lock and save current document**. You will be prompted to enter the password two times (this guards against mistyping the password). You will not see the password on your screen as you type. Then you will be prompted to enter the document name. Once the document is saved in a coded form you are returned to the document.

Make sure that you exit your document **without saving** again, otherwise your protected document will be replaced with the unprotected document on your screen.

File Unlock   When you want to retrieve a protected document, press Extended Features, and choose Prepare-Protect. Select **Unlock and Retrieve**, and enter the filename and password when prompted.

_____Retrieving a Document_____

Retrieving
a Document

To retrieve a document from a file on your diskette and display it on the screen, press the **Retrieve Text** key. "**Document to be Retrieved:**" will appear on the status line. Enter the name of the document (filename), and the text will be displayed.

You may retrieve several documents onto your screen, one after the other, or you may retrieve a document into the middle of another already on your screen. The document retrieved will always be displayed from the cursor down on the screen.

Exercise

Retrieve any document you have saved in a previous exercise by pressing **Retrieve Text**, and entering the filename.

_____ **Notes** _____

You may also retrieve text by using File Management on the System Commands menu. The file displayed in reverse video will be retrieved by selecting the Retrieve Text menu item. (See File Management in this section.)

If the message "**ERROR: FILE DOES NOT EXIST**" appears, the filename has been entered incorrectly. WP will allow you to try again.

When you retrieve text, only a copy is displayed on your screen. The original remains unchanged on the disk.

If you make changes and save the document, "**Confirm Replacement of (filename)? Y/[N]**" will appear on the status line. Type y if you wish to erase the old copy and replace it with the new text. Press any other key to enter a new filename.

NEVER TRY TO RETRIEVE FILES WHICH CONTAIN ONLY CODES by using the Retrieve Text key or File Management. Macro files, .EXE files, {WP}.Q, {WBV}.TMP, WPERROR.FIL are a few examples.

Saving a Document

Saving a Document

There are two basic ways you may save a document on your screen. If you wish to save the document and *exit* or *restart* WordPerfect, then press the **Exit/Restart** key and answer **Y** to the "**Save Text?**" prompt. If you wish to save the document on your screen while continuing to edit that document, press the **Save Text** key.

The message "**Document to be Saved:**" will appear on the status line. A name will also appear if the document has already been filed. Press **Return** to use the name displayed, or enter a new filename.

If you save a document already filed, then "**Confirm Replacement of (filename)? Y/[N]**" will appear. A **Y** answer **erases** the original copy and replaces it with the document on your screen. If you answer **N**, you will be prompted to enter a new filename.

Exercise

Save the text on your screen using a name of your choosing.

Type a few more lines of text in the document. Now save the document by pressing Save Text, pressing Return to use the same name again, and typing **y** to confirm.

Notes

A name may contain up to **8** characters, plus an additional **3** following a period. **Letter.1, wp.123, JIM,** and **CONTRACT.481** are examples of filenames.

When using the Save Text key, a copy of the document remains on your screen so that you may continue typing. It is a good idea to use the Save Text key frequently if you have problems with electric power outages or surges.

Systems Commands

**Current
Document Size**
Selecting this option on the System Commands key displays the size of the document on your screen.

Default Drive
To change the default directory from within the word processor, choose **Change Default Drive** on the System Commands key and enter the letter of the new drive with a colon (**b:**, **a:** ,etc.).

Delete a File
You may delete a file from disk by using the **Delete File** or **File Management** option on the Systems Commands key. Press System Commands, select Delete File, and enter the name of the file you wish to delete. You will be asked to confirm the deletion by typing **y**.

With a File Management index on the screen, you may delete the file at the cursor with **Delete File** option. You will be asked to confirm the deletion by typing **y**. Be careful that you do not delete a file that you might want at a later time.

Disk Space
The **Display Disk Space** option reveals the amount of unused space remaining on your diskette.

**Printer
Commands**
There is a menu of several printer commands which you may use to manage the printing process. All of these are explained in the Printing section.

Printer Set-up There are two options on this menu. The first, **Set Print Attributes**, allows you to specify the printer to which you want your document sent (**Printer Number**), the **Single Sheet Forms** status, and the **Number of Copies** you wish printed.

The second option, **Select Printers**, allows you to bring up the printer selection (/P) menu described in the Installation section of the manual to select the printers you wish to use with the WordPerfect program.

Rename a File Select **Rename File** on the System Commands menu to change the name of a file. You will be prompted to enter the old then the new filename. The Rename option at the bottom of the File Management index allows you to rename the file shown in reverse video.

Report Printer Status This option on the System Commands menu allows you to view current status of the printer. It may be active, idle, waiting for a "GO" command, or a combination of the three. For further information see Printer Status in the "Printing Section."

Diskettes - Things to Know

File Replacement

When retrieving a stored document, a *copy* and not the original file is retrieved from your disk to your screen. You may save the edited document on your screen while preserving the original document by saving the former with a *new filename*; or you may *replace* the original file with the edited document by using the *original filename* to save the document on your screen.

Whenever a file is replaced, the following occurs:

1. **filename** is renamed to be **filename**.BAK
2. The text on your screen is written to **filename**
3. **filename**.BAK is deleted.

Whenever you *replace* a file on disk, you will need enough room on your storage diskette for both the original document (filename.bak) and the document on your screen (filename) during the replacement process. If there is not enough room on your diskette you will get a "disk-full" error.

If there is a disk-full error, power failure, or any other error during step 2, then the original document is renamed to **filename** instead of being deleted. A power failure will erase everything on your screen but will not change anything that has been saved on disk.

In the event of a disk-full error, you may either make room on your storage diskette by deleting unwanted files via the **File Management** option on the **System Commands** key or you may replace the *full* diskette and repeat the save procedure.

When creating a new document, you should **Save Text** every so often in case a hardware or power problem occurs. If you have saved your text, then only those characters typed since you *saved* text will be lost.

Backing Up Diskettes

Constant use will eventually wear out a diskette if it is not first lost, stolen, x-rayed, bent, or devoured by a hungry disk drive. Any of the above atrocities is a good reason to backup your disks by duplicating (copying) important files onto another diskette which can be stored in a safe place. It is not uncommon for companies to make this a daily practice, using the same set of diskettes for their daily backup.

Virtual Files

The maximum size of a document which can be edited on the screen is limited by the amount of available space on the disk where the WordPerfect system files are located. This means that while a hard disk user can edit almost any size document, a floppy disk user is limited to the the remaining space on the WP system diskette plus 64k (the WordPerfect edit buffer size is 64k, equal to about 64,000 characters).

Two virtual files are located on your WordPerfect diskette to hold the overflow from the edit buffer. The *Top Virtual File* **{WTV}.TMP** holds the overflow above your cursor while the *Bottom Virtual File* **{WBV}.TMP** holds the overflow below your cursor. These two files are constantly changing to accommodate the overflow relative to the current cursor position. You cannot retrieve text from the virtual files.

Error:WP Disk Full

This error message will flash on your screen if you run out of edit space. This means your virtual files are full. You should delete a few lines of text and *Save* the document again. To correct the problem, either divide the file into two or more parts using the **Block Save** then **Block Delete** functions or increase your edit space.

Increasing Edit Space

Copy any personal files you may have saved on your WP diskette to another diskette and then delete those same files from your WP diskette. If you have copied a DOS system onto your WP disk so that you can boot from your WP disk, you may delete COMMAND.COM but some hidden files will remain. DOS revision 1 uses about 20k of disk space and DOS revision 2 uses about 40k of disk space.

Certain WP files are not necessary to run WP and others may be reduced in size (see Single Disk Drives). For example, the help file (WPHELP.FIL) may be deleted. This will disable the HELP key in WordPerfect but will not affect anything else.

Write Protecting the WP disk

The virtual files are automatically created wherever WPER-ROR.FIL is found. You can force the virtual files to be created on a disk or directory other than the *wp system diskette.* by copying all the *WP* files except WP.EXE to all of your storage diskettes and then placing a write protect tab on your WP diskette.

Notes:

MACROS

A Macro is a series of keystrokes (characters, functions or a combination of both) that can be remembered and filed by WordPerfect.

While using a word processor, you will do certain operations again and again. Typing the same company name, salutation, and format are just a few. The purpose of a macro is to let you do the task **once** and let WordPerfect do the task the rest of the time.

In this Section:

How to Define a Macro
How to Name a Macro
How to Start (Invoke) a Macro
Examples of How to Use Macros
    Typing Repetitious Names, Phrases, and Salutations
    Create or Retrieve Special Formats
    Send a Document to a Printer
    Insert Function Codes
    Search and Replace or Delete
    Execute a Merge
    Invoke a Macro from Within a Merge
Advanced Use of Macros
    Macro Chaining
    Conditional Execution of Macros
    Repetitive Conditional Macro Execution

Note: All of the examples of how to use macros contain at least one exercise and have been designed to lead you from the simpler to the more difficult applications. You should start with the first example and work forward as some of the beginning exercises are included as part of later ones.

How to Define a Macro

1) Press **Define Macro** to start macro definition

2) Enter a name for the macro

3) Type and/or press the desired keys

4) Press **Define Macro** to turn off macro definition

How to Name a Macro

There are three methods of naming macros:

1) The first method is to type a name of between two and eight characters (letters or numbers) then press the **Return** key.

2) The second method is to press **Alt a-z**. When you see **Macro Name:** on the status line, hold down the **Alt** key and press any letter from **A** to **Z** (available only on some machines).

3) The third method is to use single characters (numbers or letters) or the **Return** key to name a **temporary macro**.

Temporary macros are deleted when you exit WordPerfect. Macros created using the first two methods will remain on your disk after exiting.

How to Start (Invoke) a Macro

If you name a macro using methods *one or three*, press the **Invoke Macro** key, type in the name, and press **Return**. If you named your macro **Alt-A, Alt-B, Alt-C**, etc., hold down the **Alt** key and press the letter you used to name your macro—without pressing the Invoke Macro key.

_____ **Notes** _____

Macros are saved as files **on the default drive** and are automatically given a .**MAC** filename extension by the system. You delete macros just as you might delete a word processing file.

When using methods one and three to name macros, you may specify the disk on which you wish the macro to be saved. A macro named **a:print** would be saved on the A drive as **print.mac** even though the B drive may be the default drive. Macros named **Alt a-z** are always saved on the default drive.

Caution! All macros should be **INVOKED**, not **RETRIEVED**. Never retrieve a macro into a WordPerfect file using the **Retrieve Text** key or the Retrieve Text option in File Management. Keystrokes within a macro are saved as codes and will cause problems within a WP file if retrieved instead of invoked.

A macro is automatically terminated by either a "Not Found" or when starting a merge. After invoking a macro you may press **Cancel** to stop the macro before it is finished.

Typing Repetitive Names, Phrases, and Salutations

Exercise 1 Define and Invoke a macro that will finish a letter with:

> Sincerely,
>
> your name
> your title

Press **Define Macro** (you should now see **Macro Name:** on the status line), name your macro and press **Return** (you should now see **Define Macro** on the status line). Type **Sincerely,** press **Return** four times, type your name, press **Return**, type your title, press **Return**, press **Define Macro**.

Now invoke the macro by pressing the Invoke Macro key, typing the macro name, and pressing Return.

Exercise 2 Define and Invoke three individual macros that will type the following group names:

1. The BYU Cougar Marching Band
2. Red Nickles and the Five Pennies
3. The Boston Pops

_____ Create or Retrieve Special Formats _____

Exercise

Define and Invoke a macro that changes the margins to 12 and 96, the pitch to 12, and justification to off.

This exercise may be done in two ways:

Method 1—Clear your screen, press **Define Macro** on, name the macro, change margins to 12 and 96, pitch to 12, and justification off before turning **Define Macro** off. Clear your screen, invoke the macro then press the **Reveal Functions** key to view the format code.

Method 2—Clear your screen, change margins to 12 and 96, pitch to 12, and justification to off. Press the **Save** key and name this **F1**. Clear your screen and turn **Define Macro** on, name the macro, **Retrieve** F1, press **HOME HOME DOWN–ARROW**, and turn **Define Macro** off. Clear your screen, invoke the macro then press the **Reveal Functions** key to view the format code.

_____ Send a Document to the Printer _____

Exercise   Use a macro to send 2 copies of the document on your screen to printer 1.

Press **Define Macro**, name your macro **print**, press the print key, change attributes to **2** copies, select Full Page Print, press **Define Macro**. Invoke the **print** macro with a one-page letter on your screen.

Change the # of copies back to 1 using the Print Attributes menu.

Insert Function Codes

Insert
Function Codes Bolding, underlining, centering, indent, margins and all other formatting functions can be searched for and deleted from previously typed text with macros. Remember that macros can be invoked *multiple* times automatically by pressing **ESC - n** (where "n" is any number), followed by pressing **Invoke Macro**.

Exercise Define a macro that will center previously typed lines.

Clear your screen and type at least 3 partial lines, pressing Return at the end of each line:

This is line 1
This is line 2
This is line 3

Move your cursor to the left of line 1, turn **Define Macro** on and name your macro, press the **Center** key, press **Home-Right Arrow**, press **Down Arrow**, press **Home-Left Arrow** and turn **Define Macro** off.

Line 1 should have been centered in the process of defining this macro. To center the next 2 lines: place your cursor at the beginning of line 2, press **ESC 2**, then press **Invoke Macro**, etc.

───────── **Search & Replace or Delete** ─────────

Exercise 1   Delete any **Center [C]** codes in your document.

Clear your screen and create a document containing at least three lines that have been centered using the **Center** key. For example:

> Line 1 is centered
> Line 2 is centered
> Line 3 is centered

Move your cursor to the top of your document, turn **Define Macro** on, name your macro followed by pressing **Return**, press **Forward Search**, press **Center**, press **ESC**, press **DEL**, type **Y**, and turn **Define Macro** off. Line 1 should now begin at the left margin.

To move lines 2 and 3 to the left margin, press **ESC**, press **2**, press **Invoke Macro**, etc.

Exercise 2   Delete any **Bold [B]** codes in your document.

Defining a macro to delete **[B]** or **Underline [U]** codes, or any other function code, is the same as in the previous exercise. Simply press the key of the function code you wish to delete, press **ESC** then **DEL**, etc.

Exercise 3   Define a macro that does the same thing as the
Search & Replace key. Replace **and** with **banana**
and name the macro **fruit**.

You will need a document on your screen with
the word "**and**" in it. Move your cursor to the top
of your screen. Turn on and name your macro
fruit. Press **Forward Search**, type **and**, press
ESC, delete **and**, type **banana**, and press **Define
Macro**.

To replace all occurrences of the word **and** with
banana, press **ESC - 100, Invoke Macro**, type
fruit, press **Return**.

Execute a Merge

Execute a Merge

Macros can be used to execute a merge such as creating a memo. You may want to do some of the merge exercises in the next application before continuing with the remainder of this one.

Exercise

Type the following memo (explained in the Merge section), save it, then define a macro that will execute the memo.

MEMO

DATE: ^C

TO: ^C

FROM: ^C
****

^C

Press **Macro Def** and name your macro. Press **Execute Merge**, name your memo file, and press **Return** when asked for the Secondary File. This will initiate the merge. When the merge is finish ed, Macro Def will automatically be turned off.To start the merge again, press **Invoke Macro** and enter the macroname.

_____ Invoke a Macro From Within a Merge _____

Invoke a Macro From Within a Merge A single macro can be executed from within a merge. This is done by placing ˆGmacroname ˆG within the primary file. The ˆG character is found on the **Merge Commands** menu and means **Go Macro**. This macro will not be executed until the merge is completely done. You cannot press the **Invoke Macro** key when merging.

Exercise Place your **print** macro anywhere in your **memo** file and then invoke your **memo** macro.

Retrieve your **memo** file, press **Merge Commands** - **G**, type **print**, press **Merge Commands** - **G**, overwrite your **memo** file. Clear your screen and invoke your memo macro. You now have a macro that invokes a merge that invokes the print macro.

_____Macro Chaining_____

Macro

Macros can be linked or chained together. In other words, upon the completion of a macro execution, _another_ macro can be automatically executed. With this feature you may perform more complex tasks, such as searching and replacing more than one word or function.

In order to chain one macro to another, you simply invoke one macro while defining another. Only the code and filename of the invoked macro are actually linked to the defined macro. The invoked macro is automatically executed only after execution of the defined macro is completed.

For example, during the definition of Macro B, you invoke Macro A. The _command_ to invoke Macro A has now been chained to the definition of Macro B. Each time Macro B is invoked, Macro A stands ready to be executed upon the completion of Macro B.

Besides the Invoke Macro function, you may also chain to an **Alt-Letter** macro. A macro may be invoked _anywhere_ during the definition of another macro.

Exercise   Define a macro (named **end**) to finish a letter, chaining the previously defined **print** macro to the **end** macro.

Clear your screen, press **Define Macro**, name your macro **end**, type **Sincerely**, press **Invoke Macro**, enter **print**, press **Return** four times, type your name and title, press **Define Macro** to turn define off.

Now invoke the **end** macro. Notice that even though the **print** macro was invoked in the middle of defining **end**, the complete salutation is printed.

_____ Conditional Execution of Macros _____

Conditional Execution of Macros

A macro can be conditionally executed depending on the success or failure of a Search operation.

Suppose we want to search for something and, if we find it, we want to execute the macro **MSUCC**. However, if we don't find it, we want to execute the macro **MFAIL**.

Define the macro MSUCC as the phrase "Success is gold." Define MFAIL as the phrase "Failure gets old." Now define a *third* macro called **MCOND** to contain the following:

1) Invoke the macro MFAIL
2) Search for something
3) Invoke the macro MSUCC

Retrieve a file and invoke MCOND. When you invoke MCOND, the MFAIL macro will be readied for execution then the search will take place. If the search-for string is *not* found, the execution of MCOND will be immediately stopped, and the readied macro MFAIL will be executed. (On a "Not Found", the cursor is not moved, so MFAIL will be executed at the current position.)

If the searched-for string *is* found, the cursor will be placed just beyond the matched string and the macro, MSUCC will be executed.

____ Repetitive Conditional Macro Execution ____

Repetitive Conditional Macro Execution

Suppose we want to repeatedly search for a phrase, and each time the phrase occurs we want to do *something*, but if and when the search fails we want to do *something else*.

Define a macro **MELSE** which does the something else. Then define a macro called **MSOME** which contains the following:

1) Invoke the macro MELSE
2) Search for the phrase
3) Do *something*
4) Invoke the macro MSOME

Notice that the macro MSOME chains to itself upon a successful Search. When MSOME is invoked, *something* will be done at the occurrence of each sought-for phrase. Then, when there are no more occurrences of the phrase, the MELSE macro will be executed, and the *something else* will be done.

Experiment with conditional macro execution as outlined in the two categories above. Use simple macros on example text of your own making to see how conditional macro execution works. When the occasion arises, you will be ready to use this powerful tool to your advantage.

_____ **Notes** _____

Remember that a "Not Found" will end the current macro functions and immediately invoke a properly chained macro.

Notes:
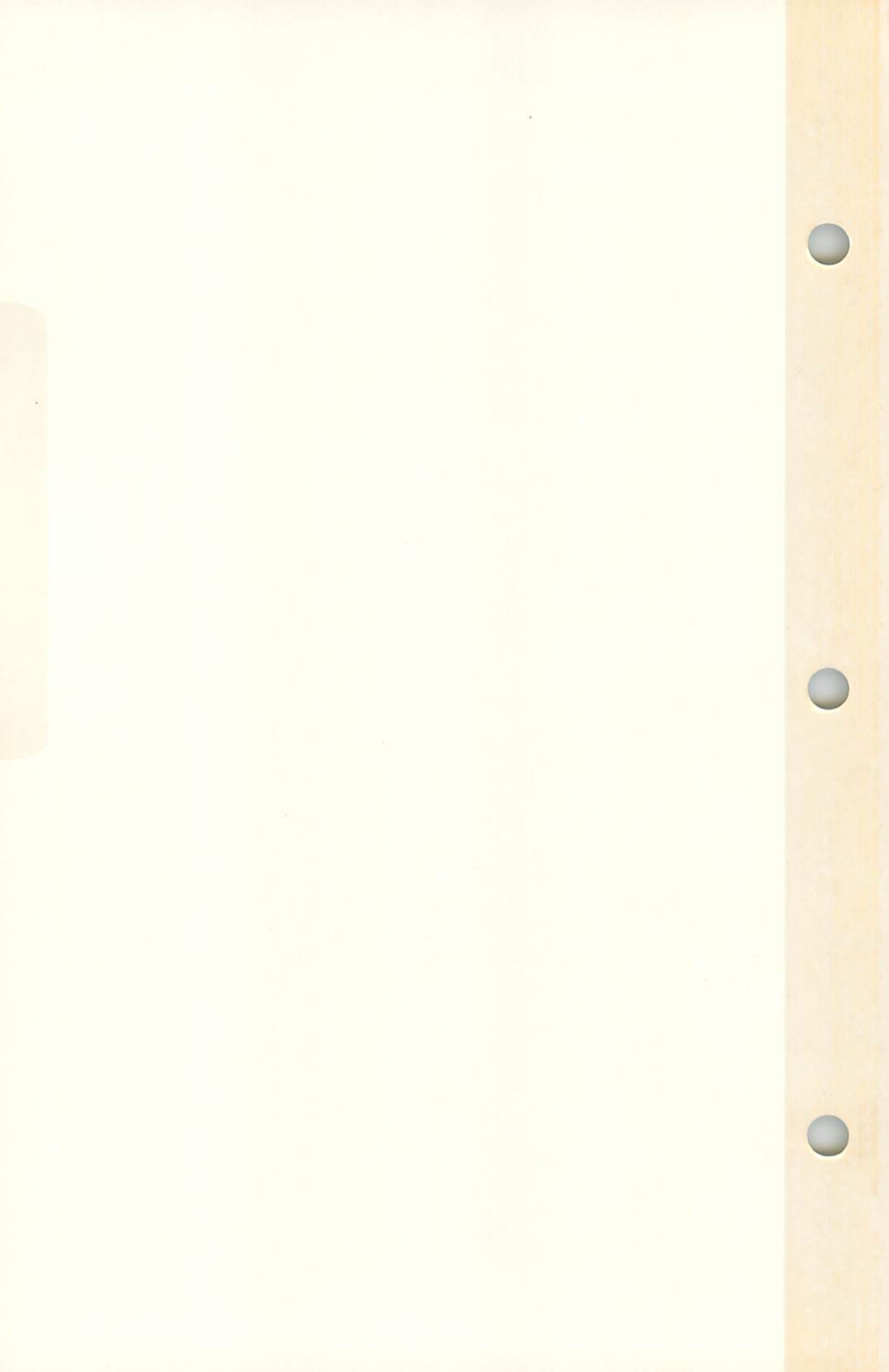
MERGE

The merge function allows you to combine or unite different documents or information. For example you may use the merge for form letters, document assembly, forms fill-in, and reports. The first few exercises in this section demonstrate a simple merge letter after which the exercises and concepts become progressively more difficult.

In this Section:

Creating an Address List
Creating a Merge Letter
Starting and Stopping a Merge
Merging with the Keyboard
Forms Fill-in
Changing Secondary Files
Using Macros to Start Merges
Starting a Macro from Within a Merge
Changing Primary Files
Generating Reports
Merging to a Printer
Merge Commands
Text From the Keyboard

Note: Because of WordPerfect's almost unlimited merge power, some of the concepts and exercises may require more practice time before you are able to master them. This is especially true for the beginning computer user as some of the advanced merge concepts (such as recursion and looping) are related to software programming.

_____ Creating an Address List _____

Creating an
Address List

The most popular merge operation is that of merging a form letter with an address list. The address list consists of numerous records which contain names and addresses of those persons to receive a "personalized" form letter.

Merge E

This function key inserts a ^E into your text which is used to separate **records** in an address list.

Merge R

This function key inserts a ^R into your text which is used to separate **fields** of information within records.

Records

An address list or file is made up of **records**. You can see an example of 3 records on page 9-4. WordPerfect uses a ^E to end a record. Press the **Merge E** key at the end of each record to enter the ^E. Records can be of different lengths and the maximum number of records you may have in a file is limited by disk space only.

Fields of
Information

Records are made up of **fields** of information. There are 5 fields in each of the 3 records on page 9-4. WordPerfect uses ˆ**R** to end a field of information. When you are typing your address list, press the **Merge R** key at the end of each field to enter a ˆ**R**.

When creating your own address files, Word-Perfect will not limit the length of your fields or the number of fields you can have in each record. Just be sure to type the same "category" of information in the corresponding fields of each record.

For example, in the following records there is a name in field 1 of each record; a company name in field 2 of each record; an address in field 3 of each record; a telephone number in field 4 of each record; and a salutation in field 5 of each record.

Exercise   Clear your screen, type the following address list using the **Merge R** (^R) and **Merge E** (^E) keys, then save the address list as **address.1**.

Mr. Alan Wilson^R
Computer Systems Co.^R
55 E. Quincy Ave.
Denver, Colorado 88888^R
912 345-4567^R
Mr. Wilson^R
^E
Mr. Jeff Richards^R
Information Systems, Inc.^R
58090 Bonnie View Court
Morgan Hill, CA 95722^R
916 987-1427^R
Mr. Richards^R
^E
Mr. John Elliot^R
Acme Computers^R
11 North State Street
Orem, Utah 87999^R
^R
John^R
^E

Mr. John Elliot does not have a telephone number. This means you have to create an empty field for field 4 of the last record to keep the salutation (John) in field 5.

_____ **Notes** _____

Typing the up-*caret* (^) then typing the letter **R** or **E** is not the same as the characters produced by pressing the Merge Return or Merge End of Record keys. The characters produced by the Merge Return, Merge End of Record and Merge Commands keys are all **Control** (Ctrl) characters. The merge will not recognize any characters preceded by an up-*caret* (^) as valid merge commands.

A ^R or ^E must be immediately followed by a **[NL]** code. The Merge E and Merge R keys do this automatically.

_____ **Creating a Merge Letter** _____

**Merge
Commands**

This key is used to insert special merge commands into merge letters and address lists.

A **merge letter** may request that a **field** of information from an **address list** be inserted at a specific location in the merge letter. For example, the command ^**F1**^ brings a copy of field 1 from your address file and places it where you typed the ^**F1**^ command. ^**F2**^ brings in field 2, ^**F3**^ brings in field 3, etc.

To place the ^**F1**^ command in your merge letter, position your cursor where you want field 1 to begin and: press **Merge Commands**, type **f**, then enter **1**.

Exercise:

Type the following merge letter and save it as **letter.1**.

March 1, 1982

^F1^
^F2^
^F3^

Dear ^F5^:

You will be happy to learn that you have won a cash prize of $1,000,000.00 in our national sweepstakes. Let us know, ^F5^, if you wish to accept or reject your winnings.

Sincerely,

(type your name)
President

_____ **Notes** _____

Fields of information from your address list can be requested as many times as you wish and in any order. For example, you can request field 4 (^F4^) before field 1 (^F1^) and request it as many times in the letter as you wish.

Starting and Stopping a Merge

Execute
Merge

To start a merge you first press the **Execute Merge** function key. The message **Primary File:** will appear on the status line. Type the name of the merge letter and press **Return**. The message **Secondary File:** will then appear on the status line. Type the name of the address file then press **Return**.

Stopping
a Merge

If a merge operation is in progress (if the ***Merging*** message is on the status line), the merge may be stopped by pressing the **Cancel** key. If the merge is waiting for an entry from the keyboard, the merge may be stopped by pressing the **Merge Commands** key followed by typing a **Q** or by pressing the **Merge E** key.

Merge
Commands—
Q

A merge **Q**uit command may be entered into either the Primary or Secondary file by pressing the **Merge Commands** key followed by typing a **Q**. When a ^**Q** is encountered during a merge, the merge is stopped. If the merge is waiting for an entry from the keyboard, entering **Merge Commands—Q** will terminate the merge operation.

Exercise   Following the instructions above, start a merge using **Letter.1** for your primary file and **address.1** for your secondary file.

The message ***Merging*** will be shown on the status line while your letter is merging. At the completion of the merge the last page of the merge will appear on your screen.

—————————————— **Notes** ——————————————

Every merge *must* have a primary file. A **merge letter** is an example of a *primary file*. Any file not containing ^R's and ^E's may be considered a *primary file*. Every merge does not have to have a *secondary file* (address file). You can also merge with the keyboard or other primary files or any combination of the 3.

The merge is recursive with respect to primary files. This means the primary files may be nested.

_____ **Merging with the Keyboard** _____

**Merge
Commands
— C**

You may wish to temporarily *stop* the merge to type information from your keyboard into each letter. Placing merge commands **C** anywhere in the primary or secondary file will temporarily stop the merge at that point.

^**C** is entered by pressing **Merge Commands**, then typing the letter **C**. Once the merge has stopped at a ^**C**, instead of pressing the Return key, press **Merge R** to continue the merge.

**Merge
Commands
— O**

You may wish to have a message displayed on the status line as a *reminder* of what you should type when the merge stops at a ^**C** command. Any message surrounded by ^**O**'s and placed *in front of* the ^**C** will be displayed on the status line when the merge stops at the ^**C**.

^**Omessage**^**O**^**C** is entered by first moving the cursor to the exact place in the primary file you want the merge to stop. Press **Merge Commands**, type **O**, type your message, press **Merge Commands**, type **O**, press **Merge Commands**, type **C**.

Exercise

Retrieve **Letter.1** and replace **$1,000,000.00** with **^Oenter amount of prize^O^C.**

Now save this file as **letter.2** and clear your screen.

Start a merge using **letter.2** as the primary file and **address.1** as the secondary file.

_____ **Notes** _____

Notice that there must be ^**O** on each side of the message. with ^**C** immediately following the second ^**O**.

A merged document is not automatically saved. After the merge is completed you may edit, save, and/or print.

Merging with the Keyboard You can create your own forms that will automatically move your cursor to the exact place you wish to make an entry. This feature can be used to create your own invoices, memos, order forms, job applications, etc.

Exercise2 Clear your screen and type the memo below. Save this file as **memo.mg**. Start a merge with **memo.mg** as your primary file. Press **Return** when asked for a secondary file as you will not have one.

MEMO

DATE: ^C   .

TO: ^C

FROM: ^C

RE: ^C

****

^Otype memo then press **Merge Return**^O^C

──────────────── **Notes** ────────────────

Remember to press the **Merge R** key instead of the **Return** key to move your cursor to the next ^C when you are in a merge.

If you press the **Return** key by mistake in a merge, press the delete or backspace key and then press **Merge R**.

To quit the merge you may either press **Merge Commands Q** or continue to press the **Merge R** key until all merge commands have been passed.

Forms Fill-in

Forms Fill-in If you have to type in the same *pre-printed* forms time-after-time, then WordPerfect can help. Information from the keyboard, primary files, and address files can all be used to fill in *pre-printed* forms such as W2's and invoices in a fraction of the time it would take you to fill in those forms on a typewriter.

Exercise ### Measure Fill-in Area
Measure the maximum area on the pre-printed form that will require fill-in. For example, an invoice whose total dimensions are 9" wide by 8" long may have a maximum fill-in area of 8" wide by 7" long.

Set Format
Clear your screen and Reset your margins (if the maximum fill-in width were 8" then you would need 80 spaces between your margins. Reset lines-per-inch if necessary (the default is 6). Reset page length if necessary (the default allows up to 54 lines of text).

Type Grid
Create a grid similar to the one shown below. This grid will be printed over your pre-printed form to pinpoint corresponding positions on your screen (you may also use a ruler to find positions).

12345678901234567890123456789012345678 90
Line 2
12345678901234567890123456789012345678 90
Line 4
12345678901234567890123456789012345678 90
Line 6
etc. until you have filled the maximum fill-in area. Remember that you can *copy* and *retrieve* the first line of the grid using the **Move** key.

**Print the
Grid**

Print the grid onto your form noting line and
position numbers that intersect fill-in points on
your pre-printed form.

**Insert Merge
Commands
^Oprompt^O^C**

Let's assume that your grid requests a **date** on
line 6, position 55; **ship to** beginning on line 9,
position 20; **terms** beginning on line 13, position
10; etc.

Recreate or move your margins, etc., to the top of
a clean screen; **Advance** line to line 6, tab over to
position 55 and enter **^Odate^O^C**; **Advance** line
to line 9, tab to position 20 and enter **^Oship
to^O^C**; etc.

In a similar manner you may create all the
prompts for this forms fill-in example. If you
need to put two prompts so close together that
you do not have room on the same line, you may
do an **Advance Up, Return, Advance Up** and tab
to the position of the second prompt. Both
prompts will appear on separate lines on the
screen but will print on the same line.

**The Last
Step**

Save the above file on disk. Load your pre-
printed forms into the printer and do a merge
just like the Memo Merge but with the file you
just created and saved as your primary file.

Merge Commands — S

Merge Commands — S

At some point in the merge you may wish to change to another Secondary (address) file. Any address file or primary file containing ^Sfilename^S will cause the secondary file to change to the file named between the two ^S.

Chaining Address Files

Separate address files can be chained together in a merge by placing ^Sfilename^S at the bottom of the first address file, where the new filename is that of the subsequent address file.

Exercise

Clear your screen and create another address file of 2 or 3 records similar to the records in **address.1**. Name this new file **address.2**.

Clear your screen, retrieve **address.1** and enter **^Saddress.2^S** just below the last ^E. Save this new file as **address.s**.

Start a merge with **letter.1** as the primary file and **address.s** as the secondary file. Your letter should merge with the records in both address.1 and address.2.

_____ **Using a Macro to Start a Merge** _____

Using a Macro If you have an office form that is used frequently
to Start such as a memo created in the previous exercise,
a Merge you can start the merge with a macro thereby
saving many keystrokes.

Exercise Define a macro that will start the *memo* merge.

Clear your screen, press **Define Macro**, and
name the macro **MEMO**, followed by pressing
Return. Press **Execute Merge**, type **memo.mg**,
then press **Return** twice. The macro definition
will be automatically terminated and the merge
will be executed. Press **Merge End of Record** to
stop the merge.

____ Starting a Macro From Within a Merge ____

**Merge
Commands
— G**

Macros can be started at the end of a merge automatically. This is done by including a pair of ^**G**'s with a macro name in between anywhere in the **primary** or **secondary** file. For example: ^**G**print^**G**. The ^**G** means **G**o-macro.

Exercise

Clear your screen and retrieve **memo.mg**. Press **HOME HOME Up Arrow** and enter ^**Gprint.2^G** as shown below. Save this document as **memo.mg**.

^Gprint.2^G   **MEMO**

DATE: ^C

TO: ^C

FROM: ^C

SUBJ: ^C

****

^Otype memo then press **Merge R^O^C**

With any text on your screen, define a macro that will print 2 copies of whatever is on your screen and name the macro **print.2**.

Press **Execute Merge**, type **memo.mg**, press **Return** twice, type in the memo, then press **Merge End of Record**. Two copies of your memo should be printed automatically when the memo merge is ended.

_____ **Notes** _____

Multiple **Go** macros are allowed in a merge, but only the last **Go** macro encountered will be invoked. It will not start until the merge is ended.

A **Go**-macro can be placed anywhere in the primary or secondary file without disrupting existing text or the merge.

_____ Changing Primary Files Within a Merge _____

Changing Primary Files Within a Merge	Up until now, when we have merged with an address file, WordPerfect has done 3 operations for us automatically: **1)** the next record in the address file has been requested; **2)** a page break has been inserted at the bottom of the primary file; and **3)** the merge is started over again with the same primary file. This process is repeated until all records from the secondary file have been merged into the primary file.
	In the event you want something different, Word-Perfect allows you to _customize_ a merge to do exactly what you tell it to do. The remainder of this section will explain how.
Merge Commands—N	Inserts a ^N into your text which tells the merge to go to the next record in the address file.
Merge Commands—P	Inserts a ^P into your text which allows you to request a new primary file in a merge. This command is always found in pairs and may have a filename in between—^P filename^P. If no filename is between the ^P's, the current primary file will be used again.
Merge Commands—U	Inserts a ^U into your text which updates the screen during a merge.

Document
Assembly

This feature is one method of assembling many files into a single document. Document assembly is the process of merging with other primary files. The other primary files may be words, sentences, paragraphs, pages or many pages that have been saved on disk. You can also merge with an address file and the keyboard when assembling a document.

Exercise 1

Create 4 files of one line each that contain the sentences: This is file 1; This is file 2; This is file 3; This is file 4. Name the files accordingly: file.1, file.2, file.3, file.4.

You should have 4 saved files of one sentence each. Now create a primary file as shown below and save it as **prim.1**.

1. ^Oenter filename^P^C^P^O

2. ^Oenter another filename^P^C^P^O

3. ^Oenter number between 1-4^Pfile.^C^P^O

4. ^Oenter another number between
   1-4^Pfile.^C^P^O

Start a merge with **prim.1** as your primary file and no secondary file. Follow the instructions on the status line. Remember to press **Merge Return** instead of **Return** to continue the merge after stopping for a ^C.

Exercise 2   Retrieve **Prim.1** and enter a **Merge Commands U**
(^U) at the end of each of the 4 lines as shown
below. At the bottom of the file enter ^**Pprim.2**^**P**
and save this file as **Prim.2**. Start a merge with
prim.2 as the primary file and no secondary file.
Remember to press **Merge Return** instead of
Return to continue the merge.

1. ^Oenter filename^P^C^P^O^U

2. ^Oenter another filename^P^C^P^O^U

3. ^Oenter number between 1-4^Pfile^C^P^O^U

4. ^Oenter another number between
   1-4^Pfile^C^P^O^U^Pprim.2^P

The ^**U** will Update the screen after each line is
assembled. The command ^**Pprim.2**^**P** will cause
this merge file to continue looping until **Merge
Commands Q** (^Q) or **Merge End of Record** is
pressed.

_____ **Notes** _____

Pressing **Merge Return** in a merge causes the merge to continue after stopping for
a ^C command. Pressing Merge Return outside of a merge inserts a Ctrl-R (^R) into
your text.

Any primary merge file can be **looped** (automatically continues the merge over
and over) by naming the file you want looped between two ^P's as in the exercise
above.

Generating Reports from Address Files

Generating Reports from Address Files

Word Processing can by used to quickly create reports using information found in your secondary merge files. Below is a sample of an employee phone list and how to create it. The merge exercises in the Merge Section should be completed before attempting the following.

Name	Phone #
Cindy McFarland	334-7886
James Osborne	224-1335
Leonard J. Paramore	334-5678
Wendy Rambridge	366-3613
George Sorensen	377-0201
Mickey Timonson	377-2009

Exercise 1

Step 1: Clear your screen and set tabs for each field of information you wish to place on your report. Remember that one field can start at the left margin. (Our phone list example has the name at the left margin and the TAB for the phone number 20 spaces from the left margin.)

Step 2: Insert the field # of the name at the left margin followed by a TAB and the field # of the phone number followed by a **[NL]** ^N^P^P as shown below.
^F1^   ^F4^
^N^P^P

Step 3: Save the above file, clear your screen and execute a merge using the above file as your primary file. The records in your secondary file should be similar to the following.

John W. Weinstock^R
17654 Bradley Court
Amherst, New Hampshire 03031^R
25,500^R
756-8900^R
^E

What is this ^N^P^P business?

Had we left the ^N^P^P out we would have seen a page break after each line of information. Since we want our information to be continuous we need to tell the system what to do. The ^N says to look at the **Next Secondary Record**. ^P^P tells the system to loop or in other words to retrieve the original **Primary File** and repeat the process until the requested information from each record has been copied.

Generating Reports with Calculations

It is almost as easy to create a report on adjusted salaries as it is to create a phone list. Reports on everything from grade point averages to project-man-hours to equipment depreciation can be extracted from a secondary file, calculated and then printed, all in a fraction of the time it would take you to create the same report manually.

Name	Salary	Adjusted Salary
Cindy McFarland	25,500	28,050
James Osborne	21,000	23,100
Leonard Colsen	18,000	19,800
Wendy Rambridge	26,500	29,150
George Sorensen	35,000	38,500
Mickey Timonson	12,500	13,750

Exercise 2   **Step 1:** Clear your screen and set TABS for the
salary and adjusted salary. The name field will
be entered at the left margin.

Step 2: Define column 2 to calculate **.1*1 + 1** (.1
times column 1 plus column 1). This calculation
gives a 10% raise to each employee in the
secondary file.

Step 3: Turn math on and enter the field #'s in
their appropriate places as shown below.

^F1^   ^F3^   !
^N^P^P

Step 4: Save the above file and execute a merge
using the above file as your primary file and
whatever secondary file you want to extract
information from. For the above example to
work, your secondary file records must have the
name in field #1 and salary in field #3.

Step 5: When the merge has finished, calculate
the adjusted salary column.

Merging to a Printer

Merge Commands — T

Inserting a **Merge Commands T** (^T) into a primary file will cause everything merged to that point to go directly to the printer.

Exercise

Retrieve **letter.1**, go to the bottom of the letter, put in a page break followed by **^T^N^Pletter.t^P**. Save this file as **Letter.T** and start a merge with letter.t as the primary file and address.1 as the secondary file.

<div align="right">March 1, 1982</div>

^F1^
^F2^
^F3^

Dear ^F5^:

You will be happy to learn that you have won a cash prize of $1,000,000.00 in our national sweepstakes. Let us know, ^F5^, if you wish to accept or reject your winnings.

Sincerely,

(type your name)
President

- -

^T^N^Pletter.t^P

_____**Notes**_____

You must print on *Continuous Forms* when merging to the printer. This means you must have some way of automatically feeding paper to your printer such as a cut sheet feeder or tractor feed. Single Sheet Printing will not work when merging to the printer.

This type of merge is generally used by those who do not have enough *edit space* to do a merge and then send the whole merge file to the printer. You will not be able to edit until the last page goes to the printer.

Merge Commands

Merge Commands

When you press the **Execute Merge** key, the system will ask for a **primary file**. Every merge operation must have a primary file. Once the merge begins, a primary file may request that text be brought in from a secondary file, another primary file, or from your keyboard. The system will also ask for the name of a **secondary file**. You may enter the name of a secondary file, or if you do not wish to use a secondary file you may simply press **Return**. The merge does not require a secondary file when the text comes from only the primary file and your keyboard.

During the merge operation, certain **merge commands** may be encountered in either the primary or secondary file. A list of various codes and the resulting action of each follows. We suggest that you experiment with these commands to fully understand them.

^Fn^

Text found in field **n** (field **1**, field **2**, field **3**, etc.) of the current record of the secondary file will be brought into the merged document.

^Omessage^O

A message such as "**Enter New Secondary File—**" will be typed on the status line.

^C

The merge operation will temporarily be stopped allowing for text to be entered from the keyboard. The merge operation will continue when the operator presses the **Merge Return** key.

^Pfilename^P	The selected primary file is retrieved and merged into the current primary file. When the end of this new primary file is reached, control is again returned to the old primary file.
^Sfilename^S	The selected secondary file replaces the current secondary file.
^Gmacro-name^G	The named macro will be invoked when the merge operation is completed.
^N	The next record in the secondary file (if it exists) will be used when any **^Fn^** information is requested. If there is not another record in the secondary file, the **^N** will cause the merge to stop.
^Q	The merge operation will stop.
^U	A screenful of the current text will be displayed on the screen.
^T	All text from the beginning of the current text to the point of the **^T** will be sent to the printer. When the printing is completed, all text that was printed will be deleted and the merge operation will continue.

_____ Text From the Keyboard _____

**Text From
the Keyboard**

Text and information may be entered from the
keyboard. Also, merge filenames may be speci-
fied from the keyboard, and you may stop a
merge from the keyboard.

If a ˆC is found in the primary or secondary file,
the merge will pause so that you may type in text.
When you press **Merge Return** the merging will
continue. The ˆC may be used in conjunction with
other merge commands to specify the names of
primary files, secondary files, or a macro. Here
is a list of a few of the possibilities and their
meanings.

ˆOEnter dateˆOˆC

The message "Enter date" will appear on the
status line, and the merge will pause so that you
may enter the date. The date will be placed in the
text in the position of the first ˆO.

ˆOEnter new primary file—ˆPˆCˆPˆO

The message "Enter new primary file—" will
appear on the status line, and the merge will
pause so that you may enter the name of a
primary file. The primary file text will begin at
the position of the first ˆP.

^OEnter address list name—^Slist^C^S^O

The message "Enter address list name—" will appear on the status line, and the merge will pause so that you may enter the name of a secondary file. In this case the secondary file name must begin with the letters **list**. This is allowed so that you may have secondary files named list1, list2, list3, etc., and you will only need to type one number to change to the correct list.

^OWhat do you want to do now?—^G^Cgo^G^O

The message "What do you want to do now?—" will appear on the status line, and the merge will pause so that you may specify a **macro**. In this example the name of the macro must end with the letters **go**.

Notes:

SPECIAL FEATURES

This section provides information about special features of WordPerfect that appear on the Extended Features key or in menus.

In this Section:

Continuous Labels
Lines and Boxes
Statistical Typing
Text Columns
Special Characters on the Screen
Special Characters -- Printing
Importing/Exporting Files

Note: Options such as WP*Sorter should go in this section.

Continuous Labels

Creating a Name & Address List

WordPerfect allows you to create "form" letters and address labels from the same file. You probably already have the needed names and addresses for your labels in a secondary merge file. The problem is that you don't want phone numbers, ^R's and ^E's printed out on your labels.

The solution is to merge the names and addresses into a separate file and then format that file for labels. The merge allows you to select the name and address fields and automatically deletes the ^R's and ^E's.

Suppose you have a secondary file containing records that are similar to the following:

Mr. Jeff Monaghan^R
Acme Pharmaceutical Inc.^R
12344 Riptide Dr.
Carson City, Nevada 90043^R
912 224-1242^R
^E

You want the first 3 fields without the ^R's and ^E printed on your labels. The name, company name, and address are in fields one, two, and three, respectively. Your primary file would look like the one below.

^F1^
^F2^
^F3^

After you have created and saved your primary file, clear your screen and execute a merge. You should now have a file that looks something like the following:

Mr. Jeff Monaghan
Acme Pharmaceutical Inc.
12344 Riptide Dr.
Carson City, Nevada 90043
- - - - - - - - - - - - - - - - - - - -
Mr. Raymond M. McNally
Rio Americano Writers Guild
783 Noblemen Str.
Sacramento, Calif. 95670
- - - - - - - - - - - - - - - - - - - -

Printing Single-Width Labels

After creating your address list as shown on page 1 of this appendix, press **Home Home Up-Arrow** and set your Margins, Page Length, and Set Top Margin. Below is an example of **single-width, 2" by 4"** labels and the appropriate format. **NOTE!** the example is in 10 pitch, 6 lines/inch.

```
     Mr. Jeff Monaghan
     Acme Pharmaceutical Inc.
     12344 Riptide Dr.
2"   Carson City, Nevada   90043
```

```
     Mr. Raymond M. McNally
     Rio Americano Writers Guild
     783 Noblemen Str.
     Sacramento, Calif.   95670
```

←————————— **4"** —————————→

A-19
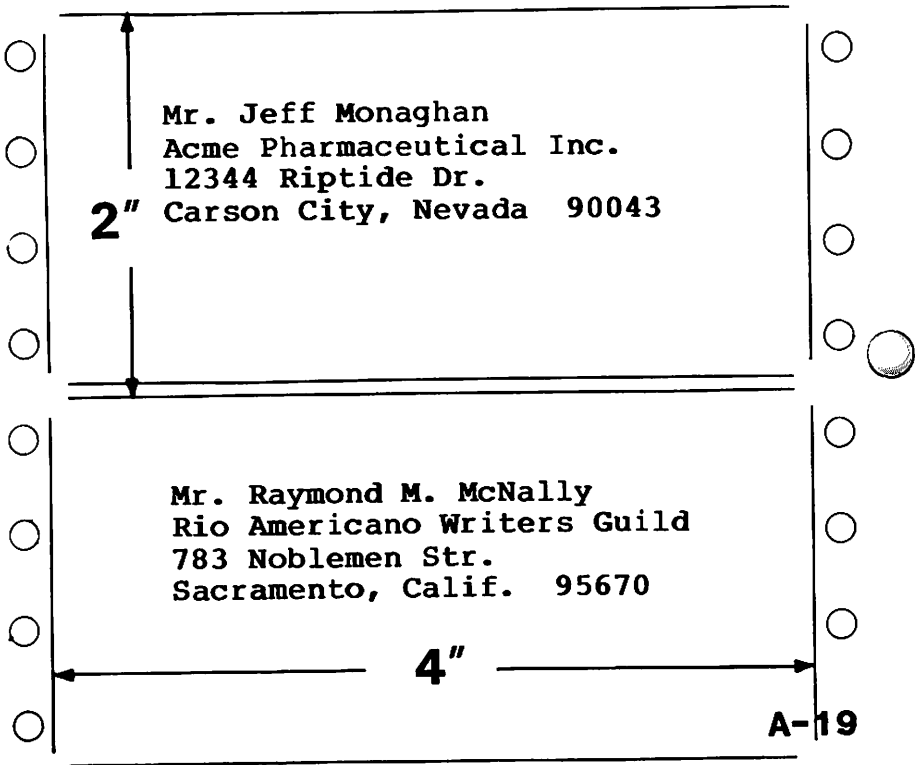
Margins = 6 left and 36 right

Page Length
    Form Length = 12 lines
    # of Text Lines = 12 lines

Set Top Margin = 5 lines

Roll in the labels so that the left edge of the labels is at position **0** on the printer. You can adjust the Margins and Set Top Margin to conform with your preferences. The distance from the top of one label to the top of the next label establishes the Page Length. At 6 lines per inch, you would have a page length of 12 lines on the above labels.

Printing Multiple-Width Labels

After creating your address list as shown on page 1 of this appendix, press **Home Home Up-Arrow**, set your Margins, Page Length, and Set Top Margin. Then define and turn on the Multiple Text Columns. **NOTE!** the example is in 10 pitch, 6 lines/inch.

ANOTHER NOTE! Your label format (Margins, Page Length, etc.) can be saved as either a file or macro to be either retrieved or invoked at the top of any newly created label file.

Below is an example of **3-wide, 15/16" by 3 1/2"** labels and the appropriate format.
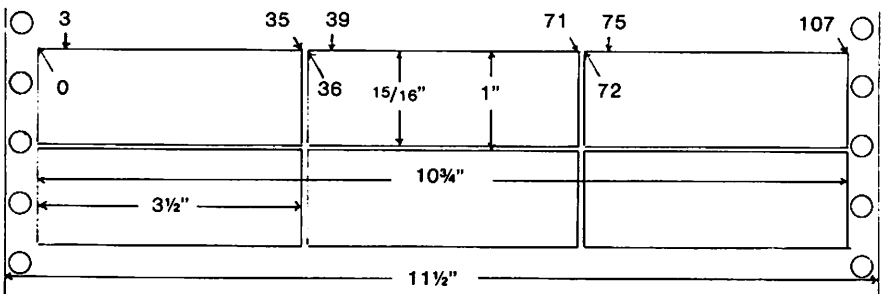
Margin Set = 3 left and 107 right

Page Length
  Forms Length = 6 lines
  # of Text Lines = 6

Set Top Margin = 1

Then invoke the **Column Def** through the **Mode** key and answer the questions accordingly:

Do you wish to have evenly spaced columns? no

Number of Text Columns (2-4): 3

Column Margins:	Left	Right
Column 1:	3	36
Column 2:	39	71
Column 3:	75	107

Turn the **Columns on** through the **Mode** key. Now roll your labels into the printer so that the left edge of the leftmost label is at **position 0** on the printer and the top edge of any row of labels is at **line 0** on the printer. Now do a Full-Text Print.

NOTE! By using the method described for printing single-width labels, you can also print out individual envelopes. However, you will need to use the Single Sheet Printing method described in the Printing section of the manual.

Lines & Boxes

**Lines &
Boxes**

Normally, the **Underline** key and **space bar** can be used to create a horizontal line: _____.
However the **underscore** and **dash** key may also be utilized:

(shift) **Underscore:** _____

Dash (10 pitch): – – – – – – – – – – – –

Dash (15 pitch): _____

A *vertical* line is created by setting the spacing for **.5**, and shifting the backslash (┊) key:

┊ ┊   These lines are made with **.5** spacing.

Notice that when using **.5** spacing, the **underscore** and **15 pitch dash** will *not* appear as a solid line on your screen—only on the printed page.

Exercise   Clear your screen. Erase *all* tabs and set tabs **20** and **54**. Set line spacing at **.5**.

Create the box below using **underscore** and the shifted backslash key (\ ):

Press **tab** and **underscore** to position **54**. Press **Return** twice.

Press **tab,** type ¦ , press **tab,** type ¦ , press **Return.** (repeat **5** more times)

Press **tab,** type ¦ , move cursor **12** spaces, type **Table 1,** press **tab,** type ¦ , press **Return.**

Repeat the **tab** and ¦ operation **6** more times.

Press **tab,** type ¦ , press **underscore** to position **53,** type ¦ , press **Return.**

```
 _____
|                                |
|                                |
|        Table 1                 |
|                                |
|_____|
```

_____ Notes _____

Remember to *reset* the spacing to **1** after completing the exercise.

Statistical Typing

Statistical Typing

By using the **Spacing Set, Advance, Superscript,** and **Subscript** features, WP makes creating equations a much simpler task.

To type an equation in the text, set the line spacing to **.5** and turn justification *off.* Using the space bar, fill enough lines with spaces to create the equation.

With the ___ key, switch to the **Replace** mode. This will allow you to easily move the cursor through the lines, replacing the *spaces* you have entered with *characters.*

After the equation has been typed, reset to **Insert** mode and set the line spacing to **1.**

Exercise

Clear your screen. Set line spacing to **.5**, select the **Replace mode** from the Ins key. Fill the next eight *half-lines* with at least **40** spaces each, and return the cursor to **line 1.**

You are now ready to type the following equation. The first example shows how the equation should appear *on your screen.* The second example is the printed document.

Example 1

$$Q = \frac{B^{n+y^2} + C_i D_j}{\sin^2 (A^2 + B^2) - \cos^2 (C_i^2 + D_j^2)}$$

Example 2

$$Q = \frac{B^{n+y^2} + C_i D_j}{\sin^2(A^2 + B^2) - \cos^2(C_i + D_j)}$$

_____ **Notes** _____

The **delete** keys in the replace mode will delete a character or space, so if you correct several mistakes you may need to _add_ spaces to finish a line. You may also delete characters with the space bar.

Remember to enter an **NL (Return)** at the end of each line, and to turn justification **off** before printing.

Use **Reveal Functions** to make sure your equation is free of any useless codes, and that each line ends with an **NL**.

Text Columns

Text Columns   Automatic text columns, also called newspaper columns, is available on the **MODE** key menu. There are two text column options which allow you to either turn **Text Columns Mode (on/off)** or **Define Text Columns**.

Text Columns Mode (on/off) enters or exits the automatic text column mode. Text columns may be turned on *only* if they have been previously defined. **Define Text Columns** allows you to define how many columns are desired and the size of those columns.

When defining text columns, the following menu is displayed:

Text Column Definition:

Do you wish evenly space columns?
(Y/N/[Cancel])
     If yes, number of spaces between columns:

Number of text columns (2-5):

Column margins: Left   Right

     Column 1:
     Column 2:
     Column 3:
     Column 4:
     Column 5:

When the above menu is displayed, the current text column definition values, if any, are also shown. You are asked if evenly-spaced columns are desired. If the response is "Yes", the number of spaces desired between each column is requested. From two to five columns may be defined. **WordPerfect** then calculates the left and right margins for each column.

For *unevenly-spaced* columns, the margin values must be entered by the user. You may accept or reject each margin value by pressing **Return** or by entering a new number (respectively).

Exercise

Select the **Column Def** option from the Mode key menu, then:

Type **y**—enter **4**—type **2**—press **Return** four times—press **Mode**—select **Text Column on.**

Now type the following text. Press the New Page key to end column 1 and start column 2. Notice that only *one continuous column* of text appears on your screen. Text columns will appear when the document is printed:

You have now defined two evenly spaced text columns with 4 spaces between each column. **Word-Perfect** defined the margins to be used for each column based on the current margin settings. While in columns mode, if you want to go to the next column, just press **New Page**.

The system automatically goes to the same line as column 1 when columns mode was turned on. If no new page is entered, the text will, of course, continue in column 1 until the end of the column and then be automatically shifted into column 2 and then back into column 1 of the next page. Also note that while in columns mode, the status line indicates which column you are in.

To print an entire page (such as the example above) while in columns mode, define a range around all columns and then do a **Block Print**. You may also do a Page Print.

NOTE! Most page functions work while in columns mode. This allows you more control over the format of the text. **Conditional EOP** for example, may be used to conditionally end a column.

Limitations While In Columns Mode

Limitations While in Columns Mode

1. Text columns may be turned on or off only at the beginning of a line. Otherwise, a new line will be inserted.

2. If text columns are turned off in a column other than the last column, the appropriate number of new pages (new columns) will be inserted automatically.

3. The following functions are not allowed while in text columns mode and, if encountered, will be deleted:

   Advance Line
   Margin Set
   Tab Set
   Footnotes
   Text Column Definition

_____ **Special Characters on the Screen** _____

**Special
Characters on
the Screen**

If your keyboard does not have the special characters you need (non-English, Greek, math, etc.) and you want to display them on your screen, you can assign (map) any of those characters to the Ctrl and Alt keys using the Set-Up program (WP/S).

For example, to map the ñ character to Ctrl—n, follow these steps:

1. With DOS running, type **WP/S** and press **Return**.

2. Select **Define Alt & Ctrl key Mapping**.

3. A table of characters and their ASCII decimal codes appear at the bottom of your screen. Find the code for the special character. The ñ has a decimal value of 164.

4. Choose the Alt or Ctrl key you wish to use for the special character and simply press that key. A reverse video cursor appears on the table next to the key you chose. If the Alt or Ctrl key of your choosing has no effect, choose another key and read the notes at the end of the next page.

5. Type **164** and press the **Return** key. The code and character are displayed in the table.

6. Press the **Exit/Restart** key to return to the Set-up menu and type a **1**.

You should now be in WordPerfect. To display the ñ, just press the Alt or Ctrl key combination you assigned to that character. If you have problems printing that character, follow the instructions on the following page.

Some keyboards may not have an Alt key. This limitation will allow only 26 special characters to be mapped instead of the 52 available to keyboards that have both Alt and Ctrl keys. On some computers, pressing both the Shift and Ctrl keys together will act like an Alt key.

_____**Notes** _____

If an Alt key is used for a special character, you cannot define that specific Alt key combination for a macro key. If a Ctrl key is used for a special character, it may not be used for a WP function. Some machines will not let you use every Ctrl key for special characters.

_____ Special Characters — Printing _____

**Special
Characters
Printing**

When your document is sent to the printer, the ASCII codes for each character are sent to the printer. Usually the "a" on the screen matches the "a" at the printer. Sometimes, especially when using special characters, the code on the screen doesn't match the code at the printer. If the codes do not match, the printer may print an incorrect character or no character at all.

If you are having problems printing a special character on your keyboard, or special characters that you have mapped with the Alt or Ctrl keys, then the wrong code is probably being sent to the printer. The PRINTER program allows you to change the code in the definition of your printer font.

There are two basic steps to the process of changing the code:

● Find the correct printer code for the character to be printed.

● Edit the font table using the PRINTER program.

**Finding the
Code**

Enter WordPerfect, retrieve and print the file FONT.TST. This is a printer _test_ **file** found on your WP diskette which contains the 256 ASCII characters.

If the character you wish to print is printed on the table, locate the value of the character in the printed table. If the character you wish to print is not printed, try printing FONT.TST using fonts 2 or 3 (to print with font 2 or 3, go to the very top of the page, press the Print Modes key and select either font).

If the character is printed with one of the fonts, locate the value of the character in the printed table. If the character you desire is not printed with any of the fonts, refer to your printer manual to find the ASCII decimal value of the chosen character if it exists. More techical information is provided under *PRINTER PROGRAM* in the "Installation" section of the manual.

If a font does not print a special character by using a single ASCII code, then you may enter a special code string that will overstrike two characters to create the special character. In the previous example, you could make a ñ with the **n** and the‾ characters.

A few printers, including the NEC printers, have print wheel (PW) select switches for proportion- ally spaced print wheels. If your printer seems to print most characters in the wrong place on the table, check your printer manual to see if you need to change a switch setting.

Once you know the correct code, you are ready to begin changing the code in the printer font definition.

Editing the Font

The PRINTER program on your WP System Diskette lets you change the codes that are sent to your printer by editing the font. To edit the font table, follow these these steps:

- With DOS up and running, type **PRINTER**, then press Return.

- Select the **Edit** option from the menu at the bottom of the screen, and enter the number of your printer from the list that is dis- played.

- A second menu is displayed. Select the **Select/Edit Fonts** option. Note the names of the fonts for your printer. If you are planning to change the definition for font one, then remember the name assigned to font 1.

- Select the **Edit a Font** option.

- A list of fonts appears on the screen. If you cannot find the correct font for your printer, then try editing a font that is listed or create a new font.Enter the number of the font you wish to edit.

- A table appears with characters, ASCII decimal codes, and the code that is being sent to the printer. Move the reverse video cursor to the character you want to print.

- Once the cursor is at the character in the table, select the **String sent to printer** option from the menu at the bottom of the screen.

- Enter the new decimal code or a command string to tell the printer to perform a certain operation, such as over-striking two characters found on your keyboard. All decimal codes should be entered in angle brackets (for example, <164>, <024>). The <8> does a backspace with most printers, so you may produce the ñ with the string **n**<8><126>

- Press **D** on your keyboard to exit the font table. You will return to the menu listing Fonts 1-8 and their assigned definitions.

- Press **D** once, the **Return** key twice, then **D** again to exit the PRINTER program.

  The changes to the font definition are saved in the file FONT.FIL. Be sure to copy this file to your WP back-up or master diskette if you wish to save the change on all WP copies.

Importing/Exporting Files

WordPerfect files contain special codes for formatting and printing. At times you may wish to convert a WordPerfect file to a standard ASCII DOS text file. This feature lets you use WP as a program text editor. You may also wish to convert a standard text file into a WordPerfect file.

WordPerfect to Text File   With the document that you wish to convert on your screen, press the **Extended Features** key, and select the **Prepare-Protect** option. Choose **Save current document as a DOS text file.** When prompted, enter a name for the text file you are creating. When the file is saved you are returned to your document.

Text File to WordPerfect   Press the **Extended Features** key, select **Prepare/ Protect**, select **Retrieve a DOS text file**, and when prompted enter the filename of the text file you wish to retrieve.

If your text file is in an 80 column format, you may want to reset your margins to 0 left and 85 right before you retrieve the text file. If you reset your margins, you will probably want to reset your margins back to the initial settings at the end of the text file.

You may retrieve a text file into the middle of a WordPerfect file on your screen when using this option.

Notes:

DICTIONARY

Most spellers make you exit the word processor before checking the spelling. The WordPerfect Speller lets you check your current document (the document on your screen) while in WordPerfect. You may check the entire document, one page of the document, or just one word.

The WordPerfect Speller consists of:

1 automatic spell-checking and updating the dictionary – all from within WordPerfect. The dictionary **WPDICT.WP** consists of two parts: a list of about 1500 commonly used words, and the less used 30,000 word dictionary. During spell-checking, the commonly used words reside in memory, while the larger list remains on disk.

As you check your documents for spelling, you may add words which are not found in the dictionary. You may add approximately 10,000 words to the existing 30,000 word dictionary.

2 a program, **SPELL,** for building and editing your dictionary outside of WordPerfect.

Installation Instructions

The Speller will not work with revisions earlier than 2.23 of WordPerfect. If you have purchased an older version of WordPerfect, please ask your dealer to call SSI at 1-800-321-5906 and we will send updated software. Before using the Speller, do the following:

Hard Disk

Copy the files SPELL.EXE and WPDICT.WP, to your hard disk.

Dual Diskette Drives

The following examples explain the process of spell checking a document if you have dual diskette drives. Follow the example that best describes your system.

Example 1: The WordPerfect diskette is in the A Drive, the default drive is B and a storage diskette is in the B drive.

With the document you wish to spell-check on the screen, replace the storage diskette in the B drive with the WP Speller Diskette, press the **Mode** key and choose the "Dictionary" option.

Example 2: The WordPerfect diskette is in the B Drive, the default drive is A and a storage diskette is in the A drive.

With the document you wish to spell-check on the screen, replace the storage diskette in the A drive with the WP Speller diskette, press the **Mode** key and choose the "Dictionary" option.

NOTE! Make a back-up copy of your Speller diskette. Keep the original diskette in a safe place, and use the back-up copy. As you add words to your dictionary you will want to back-up your dictionary (WPDICT.WP) from time to time.

CAUTION! Do not remove the WorkPerfect diskette from the drive while you are in WordPerfect.

CAUTION! Do not remove the WP Speller diskette from the drive while spell-checking a document.

CAUTION! Do not remove the diskette from the default drive if printing is in progress.

Using the Speller with WordPerfect

When you press the **Mode** key, a menu appears which has as one of the options, "Dictionary". When the dictionary option is selected, a new menu is displayed on the status line:

Check: **1** Word **2** Page **3** Document **4** Look Up or [Exit]?

Checking a Word, Page or Document

To check a word, page or the entire document select menu option 1, 2, or 3 (option 4 is explained later on). Each word is checked against the common word list first and if not found there, is checked against the larger list of the dictionary. During this checking, the message * **Please Wait** * is displayed on the status line.

When a word is found which is not in the dictionary, you will hear a beep and see the cursor in front of the unrecognized word. The line in which the word is found is displayed (you may press **Rewrite Screen** to view the full screen), and the following menu appears on the status line:

Word Not Found! **1** Continue, **2** Update, **3** Correct or **4** Look Up?

1 Continue

Choosing **1** indicates that the word does not require a change. The Speller will remember the word until you exit the dictionary.

2 Update

You may add a new word to the dictionary by selecting option **2**. The word is permanently placed in the less used area of the dictionary. The Speller will not stop for the word if it occurs in your document again. If you add a word to the dictionary by mistake, you may delete it with the SPELL program.

3 Correct

Choose option **3** if you wish to correct a misspelled word. After pressing a 3 you are free to use the Arrow and Delete keys. For convenience, you may press the **Right Arrow** instead of pressing 3 prior to editing a word.

4 Look-Up

When you select the "Look Up" option, a "template" appears on the status line containing the first three letters of the word and a dash. If you select the "Look Up" option while the cursor is on **accommodate** the template **acc-** is displayed.

You now have two options. The first option is to press **RETURN** and the screen will display all the words in the dictionary that match the template. The second option is to modify the template before pressing RETURN. For example, the template pattern, **acc-m-te,** will cause the word, "accommodate" and any other words that match the template to be typed. After the first three letters, any number of letters and dashes may be entered. It is possible to look up a single word containing fewer than three letters by typing the word without a dash.

NOTE! A number or a word with a number (for example, $1,456.90 or 2nd) is not checked by the speller. When checking the spelling, words in footers, and headers are not checked. You may, however, check the spelling of footers and headers while editing each footer or header.

Using SPELL Outside of WordPerfect

The program, SPELL, lets you perform a number of dictionary building operations on the dictionary. When not in WordPerfect and with DOS running, type **SPELL** then press **RETURN** to execute the program. If the program is not found on the default drive, you must specify the drive where the program is found (for example, **B:SPELL** if the program is found on the B drive).

After entering SPELL the following menu appears:

1. Insert a word into the dictionary
2. Insert a word into the often used area
3. Look up a word in the dictionary
4. Delete a word from the dictionary
5. Read words from a file into the dictionary
6. Read words from a file into the often used area
7. Check spelling of a file. Words are appended to MISSPELL
8. Create a new dictionary. Current WPDICT.WP is renamed to WPDICT.BK
9. See words matching a template
10. Delete words which are in a file from dictionary
11. Append words of a file not in the often used area to MISSPELL

Checking Spelling

Option **7** lets you check the spelling of a document when you are not using WordPerfect. The misspelled words are added to the file MISSPELL. If MISSPELL is deleted before the checking, then MISSPELL is created and the misspelled words are placed in the file. You may look at the words in MISSPELL with WordPerfect, P-Edit, or another editor.

A document does not have to be a WordPerfect file to be used with the Speller. Many text files may be checked with WP*Speller.

Adding Words to the Dictionary

You may add one word at a time to the less used area of the dictionary with option **1**. You may add all the words in a document not found in the dictionary to the less used area of the dictionary with option **5**. Options **2** and **6** are similar to 1 and 5, except that the words are added to the often used are of the dictionary. Be sure that the words are spelled correctly before you add them to the dictionary.

Deleting Words from the Dictionary

Choose option **4** to delete a word from the dictionary. Choose option **10** to delete all the words in a document from the dictionary. For example, to delete several words at once, put them in a document using WordPerfect then select option 10.

Look up

Choose option **3** to check if a certain word is in the dictionary. Option **9** lets you **Look Up** words matching a template as explained previously.

Appending Words to MISSPELL

The Speller checks the words in memory (the often used words) much faster than the words on diskette. If there are words which you use over and over again, you can increase the speed of the Speller by placing those words in the often used area.

With option **11** you may check one or more documents to identify the words that are not in the often used area. After checking, you can look at MISSPELL with WordPerfect (or another editor) to determine which words should go in the often used area. Option **6** will allow you to insert MISSPELL into the often used area of the dictionary.

New Dictionary Creation

You may wish to create your own dictionary. By choosing option **8,** the dictionary WPDICT.WP is renamed to WPDICT.BK and a new, empty WPDICT.WP is created. You may build your own dictionary using options 1, 2, 5, and 6.

NOTE! If you have the dictionary on a diskette rather than a hard disk, you will not have enough room on your diskette to rename the dictionary and create a new dictionary. In this case you should copy the program SPELL.EXE to a blank, formatted diskette, and then run SPELL on this newly formatted diskette. By choosing item 8, an empty WPDICT.WP will be created. You may build your dictionary using your own files and options 1, 2, 5, and 6.

Notes:
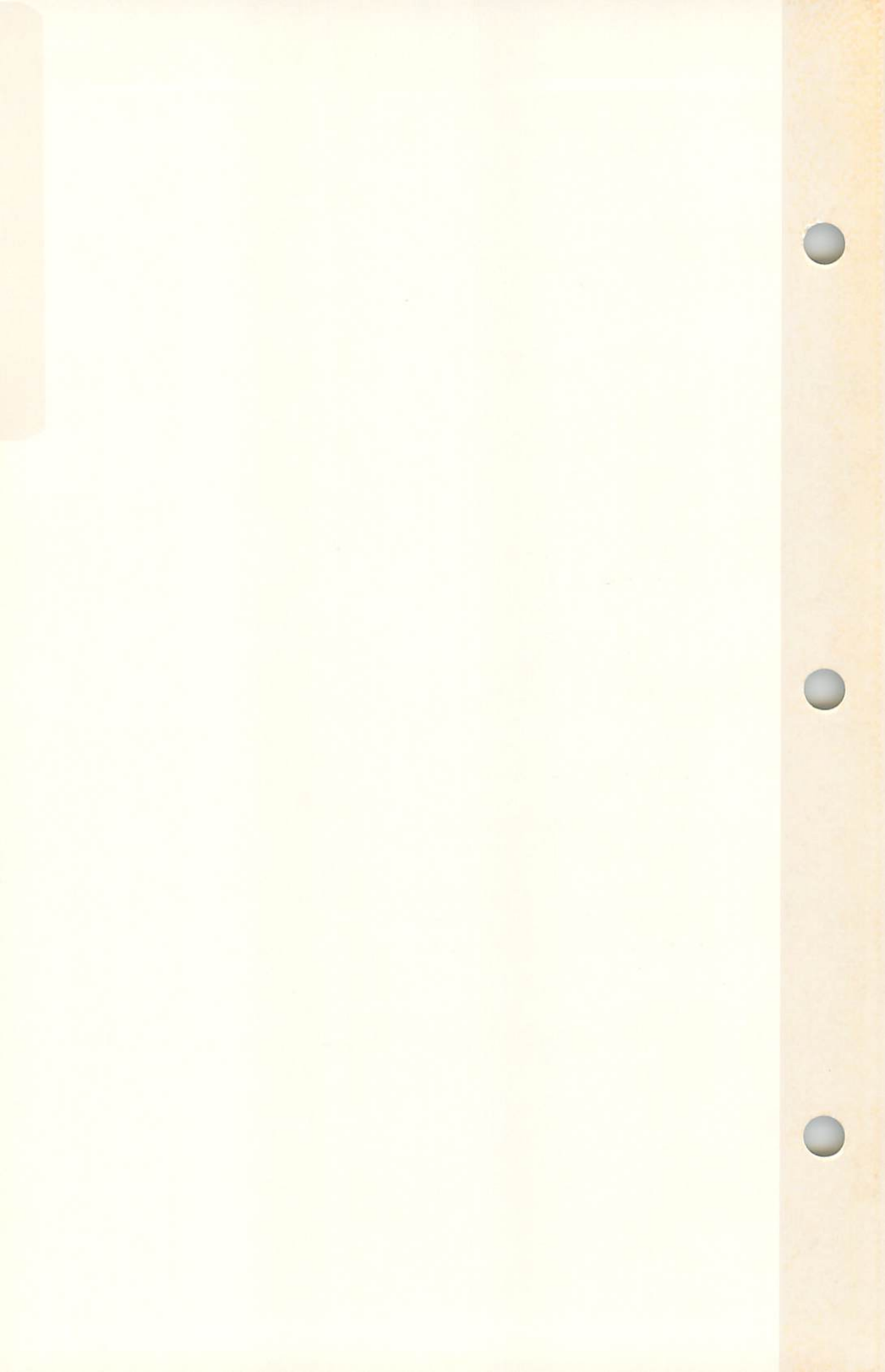
MATH

The math package lets you add, subtract, multiply, and divide across columns, and calculate subtotals, totals, and grand totals down columns.

In this Section:

Mode Key
Tab Stops Define Columns
Types of Columns
    Text Columns
    Number Columns
    Totals Columns
    Calculation Columns
Types of Numbers
Totaling Calculations
Basic Math Steps
If You Make a Mistake
Math Exercises
    Basics
    Invoice
    Financial Statement
    Budget
    Sphere Packing Problem
    Quarterly Stock Report

Note: The exercises become more and more difficult as you proceed through them. You need not work through all of the exercises to understand and use the math package.

The math mode may be used almost anywhere in a word processing document. A math section may extend over page boundaries, and may contain numbers and text up to column position 250.

———————————— Mode Key ——————————

All of the math functions—**math define, math on, math off,** and **calculate** are found on the **MODE** key.

———— Tab Stops Define Your Columns ————

The math feature is column oriented, and a column is simply a **Tab stop**. As you learned already, tab stops are preset at positions 5, 10, 15, 20, 25, etc. Normally the first step in using math would be to reset your tabs. **Caution: Do not allow columns to overlap.** Set your tab stops far enough apart so that numbers in one column do not extend into another column.

Types of Columns

A column may be defined as a **text** column, a **numeric** (numbers) column, a **totals** column, or a **calculation** column. The word processor has initially defined each column to be a **numeric** (numbers) column. The columns may be redefined via the **Mode** key. Up to 24 columns are allowed.

The left margin is column **0**, and may only be a text column. The first tab stop is column **1**, the second tab stop is column **2**, and so forth. Columns 1-24 may be any type of column, except that *only 4 columns may be calculation columns.*

Text Columns

A text column lets you type descriptions, labels, etc. while in the math mode. A text column does not figure in any calculation even if numbers appear in that column. Any column may be a text column.

Numbers Columns

A **numeric** column is for numbers. The system predefines columns 1-24 to be numeric. Numbers are predefined to have two digits to the right of the decimal, and negative numbers are designated by parenthesis. You may redefine numbers to have 0 to 4 digits to the right of the decimal, and negative numbers may be indicated by a – minus sign. (For users outside the US who may use a , in place of the ., change the alignment character with the **Set** key.) Numbers may have up to 16 digits to the left of the decimal.

When the math mode is on, tab to a numeric column and alignment will go into effect. A number can then be entered. Numbers will be aligned on the decimal at the column tab stop.

Totals Columns

A totals column is similar to a numeric column with respect to entering numbers and alignment and can be used as such. It can also be used to display subtotals, totals and grand totals so that they appear offset from the other columns of numbers.

Calculation Columns

A calculation column lets you add, subtract, multiply, and divide numbers in columns. The following characters may be used to define the calculation columns:

+ is used for addition
- is used for subtraction
* is used for multiplication
/ is used for division
a number with a decimal point, like **3.** or **3.1416**, is interpreted as a constant
a number without a decimal point, like **3** or **4**, is interpreted as a column

Examples of calculation equations:

3*4 + 5. − 4.5   (column 3 times column 4 plus the number 5 minus the number 4.5)

1 + (2/4)*.5   (column 1 plus column 2 divided by column 4 times the number .5)

Operations are performed in a left to right manner, except as altered by parentheses. Only one level of parentheses is allowed; parentheses may not be nested.

Each number or left parenthesis can optionally be preceded by a minus sign to indicate negation. For example, 4./3.* − (.5*4) or − 4 − − 3 .

Four special calculation equations are as follows:

Equation	Meaning
+	Sum all numbers in numeric columns
+ /	Calculate the average of numbers in numeric columns
=	Sum all numbers in totals columns
= /	Calculate the average of numbers in totals columns

Number Types

There are seven types of numbers which may occur and which will enter into the various calculations:

Number Type	Description
Entry	Normal number 1.23 4.5 – 3,345,456,893.7894
Subtotal	Result of a Subtotal (+) function 36.5 + (89,376) +
Subtotal Entry	A number preceded by a "t" t34 t – 7,834,324.2
Total	Result of a Total (=) function – 78 = (32,434,324) =
Total Entry	A number preceded by a "T" T343 T – 0.3
Grand Total	Result of Grant Total (*) function – 5* 90.89*
Calc. Result	Result of Calc (!) function 23! – 3,456.78!

The various functions (+ , = , *, t, T, !) can be observed in Reveal Function mode by the *blinking* +, =, t, etc. **Those symbols (+ , = , *, !) which are not blinking in Reveal-Function mode are not really functions.**

Calculation results are numbers occurring in calculation columns which are calculated according to calculation equations. Calculation results are signaled by exclamation marks (!) just after the number. The "!" is not stored as an exclamation mark in the text, but rather as a function. Calculation results act as normal entries when they enter into calculations, or they may act as subtotal entries or total entries if they are preceded by "t" or "T", respectively.

Totaling Calculations

Three classes of totals are allowed, namely subtotals, totals, and grand totals.

Sub-Totals

Subtotals are sums of numbers. If a subtotal mark, +, occurs in a numeric or calculation column, then all numbers above the subtotal mark in the same column up to another subtotal, total, or grand total are added together and that result is put at the subtotal mark. If a subtotal mark occurs in a totals column, then the numbers which are summed come from the column just to the left of the totals column.

Totals

Totals, indicated by a =, are column sums of subtotals and subtotal entries. When a total mark is encountered during calculation, all subtotals and subtotal entries up to another total or grand total are added together. If a total mark occurs in a totals column, then the subtotals are summed from the same column or from the column to the left of the totals columns.

Grand Totals

Grand totals, indicated by a *, are column sums of totals and total entries. If a grand total mark is encountered in a numeric or calculation column, all totals are added together. If a grand total mark occurs in a totals column, then the totals come from either the same column or from the column to the left.

The preceding information will become clearer as you proceed through the exercises.

Basic Math Steps

There are six basic steps to follow to use the math package. They are as follows:

1. Reset tabs
2. Define math columns
3. Turn Math on
4. Enter numbers and text
5. Calculate
6. Turn Math off

You will notice that each of the exercises follow these basic steps. It is assumed that you have learned the basic word processing functions.

If You Make a Mistake

The math package makes extensive use of the **Align** function. You might find alignment confusing at first, and you may make a mistake. The easiest way to correct a mistake is to move your cursor to the beginning of the line in which the difficulty exists and press the **ERASE EOL** key, confirm any deletions, and type the line again.

Math Exercises

Exercise 1

Exercise 1 — Basics

Work through the following examples. Each exercise example contains step-by-step instructions. All columns are number columns, so the **Math Def** option on the Mode Key menu will not be used.

Example A

Erase all tabs and set one tab at 20.

Press **Mode**, select **Math On** option, press **Tab**, type **200.00**, press **Return**, press **Tab**, type **300.00**, press **Return**, press **Tab**, type **+**, press **Return**.

Your column should look like this:

```
200.00
300.00
    +
```

Now press the **Mode** key and select **Calculate**. Your column should look like this:

```
200.00
300.00
500.00 +
```

_____ **Notes** _____

The word **math** appears at the bottom of your screen while you are in the math mode.

The **Tab** key in the math mode works exactly like the Align key in regular text entry when the cursor stops at a number column. Notice the **Align Char:** prompt that appears on the status line.

For ALL OTHER EXERCISES in the Exercise Section, the word **enter** will be used instead of **type** when the Return Key needs to be pressed immediately after the entry.

Example B   Both *parentheses* and the *minus sign* may be used to indicate negative numbers.

For this exercise, add (300.00) to – 400.00 below the total of Example A. Notice the parentheses around three hundred indicating a negative value:

Press **Return** twice, press **Tab**, enter **(300.00)**, press **Tab**, enter **400.00**, press **Tab**, enter **+**, press **Mode**, select **Calculate**.

Before Calculation   **After Calculation**

(300.00)   (300.00)

– 400.00   – 400.00

    +   (700.00)

_____ **Notes** _____

Through the Math Define option on the Mode Key, calculated negative numbers may be shown by a minus sign instead of parentheses.

Example C   In examples A and B, you used a plus sign (+) to sum. The plus sign indicates a subtotal. You may enter a non-*calculated* subtotal **number** into a column by placing a small (t) in front of the number.

Place a subtotal number below Example B, then total *all* the subtotals by entering the equals (=) sign:

Press **Return** twice, press **Tab**, enter **t500.00**, press **Return** twice, press **Tab**, enter =, press **Mode**, select **Calculate**.

Before Calculation	After Calculation
t500.00	t500.00
=	300.00 =

Example D   Adding subtotals gives you a **total** such as the 300.00 in Example C. You may also enter a non-calculated *total* number into a column by placing a large (**T**) in front of the number.

Place a total number below Example C, then calculate a *grand total* of all the totals in the column by using the (*).

Before Calculation	After Calculation
T2000.00	T2000.00
*	2,300.00*

Example E   Now press Mode, select the **Math Off** option, and notice the prompt **Math** is gone from the status line. If you move your cursor to the left, Math will re-appear. Turning Math on and off defines a certain portion of your document as being in the Math Mode. The **Calculate** option will only work if your cursor is somewhere within the defined limits of the math mode.

Press the **Reveal Functions** key and notice the blinking punctuation characters. These are the math operators and, although they appear on your screen, they will not appear on the printed document.

Exercise 2

Exercise 2 — **Invoice**

Complete the following invoice. WP will automatically extend the invoice (multiply the quantities by the prices), then give you a total at the bottom of the invoice in a **total** column.

Before Calculation:

Quan	Description	Price	Total
5	Things	45.89	!
17	Something Else	2.67	!
4	Another Thing	345	!
1	Something	(4.55)	!
3	Whatchamacalits	10.99	!
Total			+

Step A. Erase all existing tabs, and set new tabs at 15, 20, 50, 60, and 70.

Step B. Press **Bold** and type **Quan**. Space over to position 20 and type **Description**; space over to position 47 and type **Price**; space over to position 58 and type **Total**.

Step C. Select the Math Def menu on the Mode Key, and define the columns by selecting the **Type of Column** option.

The column number appears at the top of the menu. All columns are preset to be Numeric. Select the **Advance to Next Column** option after defining a column until all columns have been defined.

Now, define column 2 as a text column, and column 4 as a calculation column with the equation **1*3** (column 1 times column 3). Define column 5 as a total column, and leave columns 1 and 3 at the default value.

Step D. Press **Mode** and select **Math On**.

Step E. Type the invoice information found at the beginning of this exercise. Press **Tab** between each item on a line, then press **Return** at the end of the line. You do not need to tab over to the untitled total column until entering the **+** on the last line.

Step F. Calculate the invoice.

After Calculation

Quan	Description	Price	Total
5	Things	45.89	229.45!
17	Something Else	2.67	45.39!
4	Another Thing	345	1,380.00!
1	Something	(4.55)	(4.55)!
3	Whatchamacalits	10.99	32.97!
	Total		1,683.26 +

Step G. **Edit and Recalculate** the invoice by replacing the quantity of Something with **5** and then selecting the Calculate option. New totals should be displayed.

Step H. Move the cursor to the end of the invoice and turn the Math Mode **off**.

Exercise 3

Exercise 3 —   **Financial Statement**

Enter the following financial statement:

Before Calculation

Financial Statement

	Loss	Gain	Balance
Expenses			
Utilities	89.67		
Car	103.00		
total	±		
Income			
Contracts		80.00	
Consulting		100.00	
Salary		1000.00	
total		±	
Material Expenses			
Paper	35.00		
Tape	74.50		
total	±		
Total	=	=	!

Step A. Erase all existing tabs and set new ones at 30, 45, and 60.

Step B. Center the title.

Step C. Center the column headings using the **Center** option on the Set key menu. Tab to the column, select Center, then type.

Step D. Leave columns 1 and 2 at the preset numeric definition, and define column **3** to calculate column 2 minus column 1 $(2 - 1)$. Press **Return** twice to return to your screen.

Step E. Turn the math mode on.

Step F. Type in the remaining text and numbers. Remember to press **Return** after completing each line.

Step G. Calculate the statement.

After Calculation

Financial Statement

	Loss	Gain	Balance
Expenses			
Utilities	89.67		
Car	103.00		
total	192.67 +		
Income			
Contracts		80.00	
Consulting		100.00	
Salary		1000.00	
total		1,180.00 +	
Material Expenses			
Paper	35.00		
Tape	74.50		
total	109.50 +		
Total	302.17 =	1,180.00 =	877.83!

Step H.   Turn math mode off.

Exercise 4

Exercise 4 —   **Budget**

The following budget exercise will add the monthly and quarterly expenses both down and across, and calculate the actual and percent differences between the 3rd and 4th quarter expenses.

Step A.   Reset **Tabs** to 20, 30, 40, 55, 65, 75, 85.

Step B.   Reset **Margins** to 5 and 95.

Step C.   Change **pitch** to 12 pitch.

Step D.   Redefine columns 4, 6 and 7 to be calculation columns:

Column 4 — **1 + 2 + 3**
Column 6 — **4 − 5**
Column 7 — percent difference, **6/4*100.** or **6*100./4** (don't forget the period!)

Before Calculate

Quarterly Budget

	Oct.	Nov.	Dec.	4th Qtr.	3rd Qtr.	Diff.	% Diff.
Auto	505.25	250.50	325.50	!	798.57	!	!
Phone	875.45	1,055.55	675.25	!	1,505.25	!	!
Travel	1,575.50	225.45	3,275.45	!	2,307.25	!	!
Advertising	475.50	295.45	325.75	!	1,575.45	!	!
Shipping	147.50	75.85	95.56	!	157.04	!	!
Totals	+	+	+	!	+	!	!

Step E.   Turn math mode on.

Step F.   Type the Quarterly Budget text.

Step G.   Calculate.

After Calculate

Quarterly Budget

	Oct.	Nov.	Dec.	4th Qtr.	3rd Qtr.	Diff.	% Diff.
Auto	505.25	250.50	325.50	1,081.25!	798.57	282.68!	26.14!
Phone	875.45	1,055.55	675.25	2,606.25!	1,505.25	1,101.00!	42.24!
Travel	1,575.50	225.45	3,275.45	5,076.40!	2,307.25	2,769.15!	54.55!
Advertising	475.50	295.45	325.75	1,096.70!	1,575.45	(478.75)!	(43.65)!
Shipping	147.50	75.85	95.56	318.91!	157.04	161.87!	50.76!
Totals	3,579.20 +	1,902.80 +	4,697.51 +	10,179.51!	6,343.56 +	3,835.95!	37.68!

Step H.   Turn math mode off.

Exercise 5

Exercise 5 — Sphere Packing Problem

Let us suppose that we are given a set of packing boxes, each with specified dimensions (height, length, and width), and into each we wish to place a sphere that is the largest that can fit into the box. Along with each box we are also given an insulating material of given density (weight per unit volume) to pack into the box around the sphere. We wish to calculate how much insulating material will be needed for each box. To do this we will use 4 calculation columns. The first will calculate the radius of the inclosed sphere by halving the smallest dimension of the block (since no sphere with a diameter larger than the smallest dimension of the block could be completely enclosed in it). The second will calculate the volume of the box (height times length times width) and the third the volume of the sphere (four-thirds of pi times the radius cubed). Lastly we will use the fourth calculation column to subtract the two volumes and multiply the difference by the density of the insulation material to obtain the desired result, namely how much (by weight) of the insulating material is needed.

First we set our margins to 8 and 135 to allow ample room for the columns. Next we set our tabs in columns 11, 20, 29, 41, 53, 66, 73, 80, 95, 110, and 117 for a total of 11 columns. We then define our column attributes as follows:

columns 1-3, 5 default attributes—no change
column 4 calculation: 1/2. (radius of sphere)
column 6 calculation: 1*2*3 (volume of box)
column 8 calculation: 4*4*4*1.3333*3.1416
                                   (volume of sphere)
column 10 calculation: 6 – 8*5 (weight of packing
                                          material to fill
                                          difference)
columns 7, 9, 11 totals columns

Finally we type in our centered column headings and then enter math mode. Our data is entered as shown on page 22. Note the use of the totals columns which are slightly offset from the 3 rightmost calculation columns.

When we have finished entering our data we invoke the calculation mode to get the finished document.

Sphere Packing

Entered data form

| Dimensions of Box | | | Radius of Inclosed Sphere | Density of Packing Material | Volume of Box | Volume of Sphere | Weight of Packing Material Needed |
Small	Middle	Large					
1.0	1.0	1.0	--	1.0	--	--	--
2	4	5	--	2.0	--	--	--
4.56	6.21	8.45	--	3.45	--	--	--
1.0	2	4	--	1.5	--	--	--
.05	.90	1.2	--	4.66	--	--	--
				Totals:	+	+	+

Final document form with calculations

| Dimensions of Box | | | Radius of Inclosed Sphere | Density of Packing Material | Volume of Box | Volume of Sphere | Weight of Packing Material Needed |
Small	Middle	Large					
1.0	1.0	1.0	0.50	1.0	1.0000	0.5237	0.48
2	4	5	1.00	2.0	40.0000	4.1887	71.62
4.56	6.21	8.45	2.28	3.45	239.2837	49.6461	654.25
1.0	2	4	0.50	1.5	8.0000	0.5237	11.21
.05	.90	1.2	0.03	4.66	0.0540	0.0000	0.25
				Totals:	288.34	54.88	737.81

After the calculations are finished we can go back and reset the tab stops to rearrange the column positioning or reset the column attributes to increase the accuracy of our totals to 4 decimal places if desired.

Exercise 6

Exercise 6 — **Quarterly Stock Report**

Now let us suppose we wish to produce a listing of all stock purchases over the last three month quarter. We will type in the number of shares purchased, the total amount paid for those shares, and also the current market value of the stock (per share). We wish to know what the original price per share was, how much money has been gained or lost since the purchase time, and what percent of the initial investment this gain or loss represents. In addition we want month-by-month and quarterly totals of these figures and to update the year-to-date totals accordingly.

After setting our margins to 10 and 100 and setting our tabs to 28, 41, 50, 60, 70, 81, and 92 we define our 7 columns (excluding the left margin) as follows:

column 1: text
columns 2, 3, 5: default numeric—no change
column 4 calculation: 3/2 (price per share)
column 6 calculation: 5*2 – 3 (Gain/Loss)
column 7 calculation: 6/3*100. (percentage)

Then we enter in our data as shown on page 21. We use subtotal functions ("+") to perform our monthly totaling. Note that these generated totals can be used by the percent calculation column to calculate a monthly percentage. Also note that text such as "**Month Totals:**" and "**June**" can be interspersed through the math columns without turning off the math mode.

For the quarterly totals we use the totaling functions ("=") which will add the three monthly sub-totals in each column. Then we make two Total entries by preceding the numbers with the capital "**T**" total-entry function. Now when we enter the Grand Total function ("*") at the bottom, only the quarterly totals and the "**Total thru March:**" entries will be summed, as desired.

Stock Name	Date Acquired	# of Shares	Cost	Cost/Share	Current Value	Paper Gain/Loss	Percent Gain/Loss
April							
General Tire	4-06	100	10,000.00	!	111.00	!	!
Inland Steel	4-11	75	4823.00	!	65.34	!	!
FNMA Bonds	4-23	5	2542.71	!	500.00	!	!
SSI	4-28	10000	15,000.00	!	2.75	!	!
Month Totals:			+			+	!
May							
SSI	5-03	2500	4266.00	!	2.75	!	!
City Bonds	5-15	10	7500.00	!	775.00	!	!
Honeywell	5-16	25	1900.00	!	71.25	!	!
Curtis-Mathis	5-20	65	675.00	!	8.63	!	!
SSI	5-27	1100	2215.00	!	2.75	!	!
Month Totals:			+			+	!
June							
Chrysler	6-02	400	6200.00	!	4.32	!	!
SSI	6-09	7500	17,250.00	!	2.75	!	!
Campbells	6-12	100	6500.00	!	62.00	!	!
Other WP	6-13	5000	10,000.00	!	.25	!	!
Data General	6-21	195	675.00	!	4.05	!	!
MGM	6-25	50	1100.00	!	22.00	!	!
US Steel	6-26	35	735.00	!	21.75	!	!
Month Totals:			+			+	!
Quarterly Totals:			=			=	
Total thru March:			T114,625.10			T9300.45	!
YEAR - TO - DATE TOTAL:			*			*	!
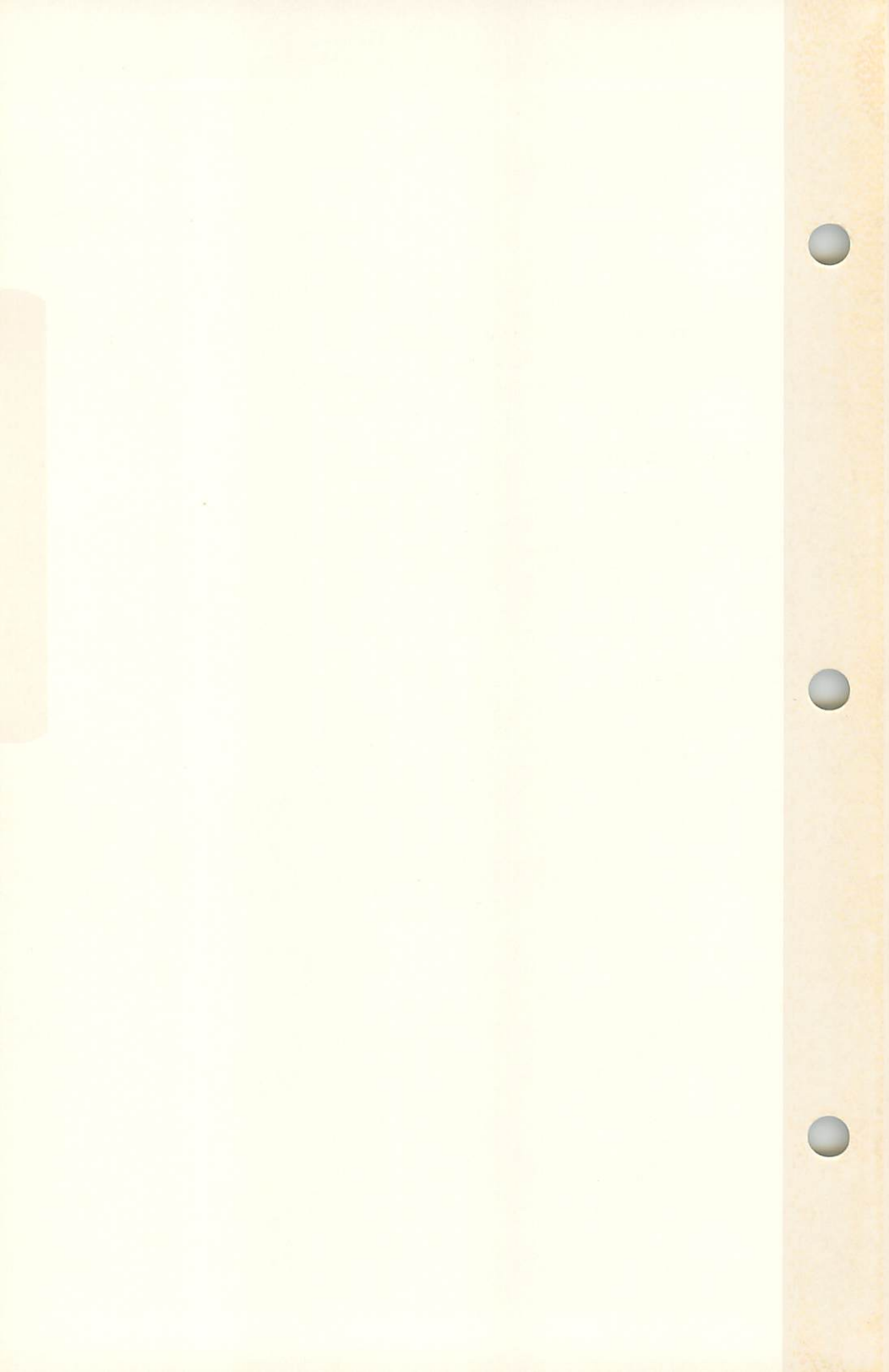
APPENDIX

This section includes additional information about the features of WordPerfect. The WP Sorter manual (optional) is numbered to fit at the back of this section.

In this Section:

Abbrevations in Reveal Functions
Common Error Conditions
Epson Printers & WordPerfect

Abbreviations in Reveal Functions

The following abbreviations, along with your text, will appear on the screen after pressing the Reveal Functions key. Each one represents a function code entered from your keyboard.

[ ]	Required Space
[—]	Required Hyphen
— (blinking)	Soft Hyphen
[A][a]	Align (begin and end)
[Adv △]	Advance Up 1/2 Line
[Adv ▽]	Advance Down 1/2 Line
[AdvLn:n]	Advance to Specific Line Number
[Align Char]	Set Align Character
[Aln/FlshR]	Align or Flush Right
[Alter Fmt]	Alter Page Format
[B][b]	Bold Face (begin and end)
[Bin#]	Set Bin Number
[C][c]	Centering (begin and end)
[Center Pg]	Center Current Page Top to Bottom
[CMD:]	Embedded Printer Command
[CndlEOP]	Conditional End of Page
[EInd]	End of Indent or Left/Right Indent
[E-Tabs]	Set Extended Tabs
[Fnote:n]	Footnote Definition
[Font Change]	Specify New Font or Print Wheel
[Ftn #:n]	Footnote Number Reset
[Hdr/Ftr:n,n]	Header or Footer Definition
[HZone Set]	Reset Size of Hyphenation Zone
[Indent]	Beginning of Indent
[LPI]	Lines per Inch
[l/rInd]	Beginning of Left/Right Indent
[Mar Rel]	Left Margin Release
[Margin Set]	Left and Right Margin Reset
[Math Beg]	Beginning of Math Column Mode
[Math Def]	Definition of Math Column Attributes
[Math End]	End of Math Column Mode

! (blinking)	Do Equation
+ (blinking)	Do Subtotal
= (blinking)	Do Total
* (blinking)	Do Grand-Total
[NL]	New Line (Fixed)
[NPg]	New Page (Fixed)
[Ovrstk]	Overstrike Preceding Character
[Pg#]	Set Current Page Number
[Pg # Col]	Specify Columns for Page Numbers
[Pg Lnth]	Set Page Length, # of Lines/Page
[Pos Pg#:n]	Set Position for Printed Page Numbers
[Rt Just Off]	Right Justification off
[Rt Just On]	Right Justification on
[SNL]	Soft New Line (Not Fixed)
[SNP]	Soft New Page
[SubScrpt]	Subscript
[SuprScrpt]	Superscript
[TAB]	Move to Next Tab Stop
[Tab Set]	Tab Reset
[Top Mar:n]	Set Top Margin in Half-Lines
[U][u]	Underlining
[Undrl Mode]	Underline Mode**

_____ Common Error Conditions _____

This appendix contains some common error messages one might receive while in **WordPerfect**. Most error conditions will cause an error message to be displayed on the status line, after which control will return to **WordPerfect** screen editing.

"Invalid Nesting"

This error message may appear during the merge execution. See Merge Section for more information.

"File not found"

This error message will occur when a filename is misstyped. You should retype the name.

"Invalid file name"

Certain characters are not valid in a document name. Some of the "illegal" characters are: space, "/", and "-".

"Disk full— Strike any key to continue"

Your current text is too large. Save a range of text to the archive diskette and delete that range before continuing.

"Directory full"

The diskette cannot accommodate another file name on the disk. Insert a new archive diskette, or delete a file with the **Systems Commands** key.

Epson Printers & WordPerfect

As far as WordPerfect is concerned, there are two types of Epson Printers—those with the Graftrax option and those without. Unless you have one of the early models (roughly before October of 1982) your Epson probably has the Graftrax option. Since *Word-Perfect does not offer any special support for the models without Graftrax*, you should simply define them as "LPT" type printers. The remainder of this appendix will be directed towards those models that have the Graftrax option.

The major features that are supported on the Epson printer are listed below.

1. 4 different fonts
2. Italics for each of the fonts (giving 8 fonts)
3. Superscripts and Subscripts
4. Bolding (double-strike)
5. Underlining
6. Right Justification ✱✱✱
7. Vertical spacing control
8. Absolute user control (via "Insert Printer Command")

Additionally, by using the "Insert Printer Command" option found on the "Print Modes" key, any available option can be "programmed" into your document. Some of those options will be discussed later in this appendix.

The standard WordPerfect features that are *not* supported by the Epson printer follow.

1. Variable pitch (aside from that which is implied by the above mentioned fonts).
2. Advance up and Advance down (half-line advance).
3. Advance to a line number which is smaller than the current line number.
4. Double underlining.
5. Single underlining is subject to certain hardware restrictions.

✱✱✱You must reset your "hotzone" such that there is only one space to the right of the right margin.

The different fonts are selected by specifying a font number after
pressing the "Print Modes" key (option #1). The following
examples illustrate how the different fonts appear.

Font 1 bolded and underlined.

Font 2 bolded and underlined.

Font 3 **bolded** and underlined.

Font 4 **bolded** and underlined.

Font 5 **bolded** and underlined.

Font 6 **bolded** and underlined.

Font 7 bolded underlined.

Font 8 bolded underlined.

The above fonts can be mixed in any desired combination but you
should keep in mind that mixing fonts with different character
sizes can make it impossible to maintain proper right justification.

If you wish to control the printer directly, you can do so by enter-
ing the proper printer commands through the "Print Modes"
function. For example, if you wanted to print a portion of your
document in "emphasized mode", you would position the cursor at
the beginning of that portion, press the "Print Modes" key, select
#7 on the menu, and enter the following command: **<27>E**. The
text following that command would print in emphasized mode up
to the point where you enter the command to turn it off (i.e.,
<27> F). You will notice that emphasized mode differs from the
standard bold (double strike) mode implemented within Word-
Perfect. The reason we did not use emphasized mode for bolding is
that emphasized mode cannot be used simultaneously with super-
scripting, subscripting or compressed print where double strike
can.

Another type style that you might want to try is very small print with close spacing such as is found in the following example. To get the printer to do that, you would set the spacing to .5, set the font number to 3, and then enter a printer command to turn on superscripting mode, i.e., <27>S<0>. The margins below are 40 left and 100 right.

As you can see, this type style is very small but may be
useful for certain applications.

Superscripting mode was turned off at the end of the above paragraph by entering the printer command <27>H.

For a comprehensive list of printer control commands see your Epson Printer Manual.

Notes:

INSTALLATION

Important Note!

Copying the WordPerfect Diskette or running WordPerfect on any machine for which this copy of WordPerfect is not licensed is a violation of copyright laws. Any person or organization participating in the illegal copying or use of this product will be subject to legal action.

WordPerfect Requirements

This section of the manual includes information about installing the WordPerfect program onto your computer. Familiarize yourself with the reference card and "Introduction" before installing WordPerfect.

You should be aware of the following program requirements for running WordPerfect on your computer:

* The MS/DOS operating system or a similar version (PC/DOS, Z/DOS, etc.) * 128 Kb of RAM * 2 disk drives (one may be hard or electronic)

See your dealer if your machine does not meet these requirements.

In this Section:

> Special Instructions
> Electronic and Single Sided Disk Drives
> Installing WP with DOS Revision 1
> Installing WP with DOS Revision 2
> Options for Entering WordPerfect
> Select Printers WP/P
> Set-up Menus WP/S
> WordPerfect Files
> Printer Notes
> PRINTER Program

_____Special Instructions_____

IBM Personal Computer (and IBM Compatibles)

You received 2 WP diskettes - WPFlash and WP. The "Flash" version is faster than WP. Flash works on the IBM PC/XT and some compatibles but not all.

If you do not have an IBM PC/XT and are not sure if *Flash* will run on your machine, try the *Flash* version; enter WP, type some text on your screen and press the **Rewrite Screen** key. The text will disappear if *Flash* is not compatible with your machine. The Flash version causes a flicker on color monitors.

Dual Disk Drives

Place the preferred version of WordPerfect (flash or wp) in the A drive. Place the less preferred version of WordPerfect in the other drive (B) and type **copy *.* b:**

Use one diskette as a **working** diskette and save the other diskette in a safe place in case your working diskette becomes damaged or lost.

_____Notes _____

"**Error: Too many open files**" will appear on your screen if you are using DOS Revision 2 and the file **CONFIG.SYS** has not been copied from the WP disk to the *boot disk* (see Installation - DOS Revision 2).

If you have a dual diskette system and would like to boot from the WP disk You may copy a DOS system onto the WP diskette using the **SYS** command but your potential edit space will be reduced by about 20k on DOS Rev 1 and 40 k on DOS Rev 2.

Victor 9000

The commands used to enter WordPerfect on the Victor 9000 are slightly different than on other machines. Below is a list of WP commands and corresponding commands on the Victor 9000.

WP Manual	Victor 9000
WP	VWP
WP/P	VWPP
WP/S	VWPS
WP/M=*macroname*	VWPM *macroname*
WP/M=*macroname filename*	VWPM *macroname filename*
WP *filename*	VWP *filename*

Caution! You can enter WordPerfect using the **WP** command and the program may appear as if all is well; this is not the case. Various problems will arise unless the **VWP** command is used to bring up WordPerfect on the Victor 9000.

The **Select Printers** menu will ask you which port(s) you will be using. Use LPT1 (option 0) for a parallel printer and COM2 (option 5) for a serial printer.

Note! To type a ^N (Ctrl-N) on the Victor 9000, press Alt-N.

DEC Rainbow 100

Use the **Set-Up** key to select printers on the DEC Rainbow instead of the **Select Printers** option on the System Commands key or **WP/P**. The Select Printers (WP/P) menu is ignored by WordPerfect.

TI Professional

The TI color monitor does not allow you to choose a background color. The background color is black and cannot be changed.

_____**Notes** _____

"Error: Too many open files" will appear on your screen if you are using DOS Revision 2 and the file **CONFIG.SYS** has not been copied from the WP disk to the boot disk (see Installation - DOS Revision 2).

If you have a dual diskette system and would like to boot from the WP disk You may copy a DOS system onto the WP diskette using the **SYS** command but your potential edit space will be reduced by about 20k on DOS Rev 1 and 40 k on DOS Rev 2.

—————————Electronic Disk Drives—————————

Electronic drives (sometimes called Ram Drives, Dynamic Drives, etc.) use RAM as a disk drive. You will need to copy the following files into the electronic drive each time you start WordPerfect:

WP.EXE, WPDEFOV.FIL, WPDCTOV.FIL, WPMENU.FIL, WPERROR.FIL, WPFEED.FIL WPRINTER.FIL, WPFONT.FIL

Note! WPFONT.FIL and WPPRINTER.FIL may be reduced in size by deleting printers and fonts (through the **Printer** program) that you will not use. WPFEED.FIL may be deleted if you are not using a cut sheet feeder.

—————————Single Sided Disk Drives—————————

Single Sided Disk users may run WordPerfect revisions through 2.30a. You will need to delete the help file (WPHELP.FIL) before installing WordPerfect. This means that you will not be able to use the Help key in WordPerfect.

Note! WPFONT.FIL and WPPRINTER.FIL may be reduced in size by deleting printers and fonts (through the **Printer** program)that you will not use. WPFEED.FIL may be deleted if you are not using a cut sheet feeder.

By increasing the amount of space on your WP disk you will increase the size of documents that may be edited on the screen. See "Diskettes - Things to Know" in the Filing section of the manual.

Installing WP with DOS Revision 1

Dual Diskette Drives

1. Bring up DOS, place your WordPerfect diskette in the A drive, type **WP/S**, choose option 3, type **A:**, press **Return**, type **B:**, press **Return**. You should now see **Doc 1 Pg 1 Ln 1 Pos 10** at the bottom of your screen. You are now in Word-Perfect. Never remove your WP diskette from the drive before exiting WP.

2. Press the **System Commands** key, choose the **Select Printers** option and select the printer(s) you will be using (see WP/P in this section).

3. Exit WP through the **Exit/Restart** key. Never turn off your machine without first exiting WP. If you experience a power failure or if the machine is mistakenly turned off while WP is running, run **CHKDSK** on your WP disk.

Note! You may copy a DOS system onto the WP diskette using the **SYS** command but your potential edit space will be reduced by about 20k.

Hard Disk

1. Bring up DOS, place the WordPerfect diskette in the disk drive, copy the wp files (using the **copy *.*** command) to a directory on your hard disk.

2. From your WP directory, type**WP/S**, choose option 3, answer the questions, and type **1** to exit the menu. You should now see **Doc 1 Pg 1 Ln 1 Pos 10** at the bottom of your screen. You are now in WordPerfect and may remove your WP disk from the drive.

3. Press the **System Commands** key, choose the **Select Printers** option and select the printer(s) you will be using (see WP/P in this section).

4. Exit WP through the **Exit/Restart** key. Never turn off your machine without first exiting WP. If you experience a power failure or if the machine is mistakenly turned off while WP is running, run **CHKDSK** on your disk.

Installing WP with DOS Revision 2

Dual Diskette Drives

1. Copy **CONFIG.SYS** to the disk you use to start the system (boot disk) by placing your WP diskette in the A drive, your boot disk in the B drive and typing **copy config.sys b**: followed by pressing **Return**.

2. Reboot the system and place your WordPerfect diskette in the A drive, type **WP/S**, choose option 3, type **A:**, press **Return**, type **B:**, press **Return** and type **1**. You should now see **Doc 1 Pg 1 Ln 1 Pos 10** at the bottom of your screen. You are now in WordPerfect and should never remove your WP diskette before exiting WP.

3. Press the **System Commands** key, choose the **Select Printers** option and select the printer(s) you will be using (see WP/P in this section).

4. Exit WP by pressing the **Exit/Restart** key. Never turn your machine off before exiting WP. If you experience a power failure or if the machine is mistakenly turned off while WP is running, run **CHKDSK** on your WP disk.

Hard Disk

1. Bring up DOS, place your WordPerfect diskette in the disk drive, copy **CONFIG.SYS** to the directory or disk from which you boot the system, then reboot DOS.

2. Place the WP diskette in the disk drive, copy the WP and dictionary files to the directories of your choice (use the **copy *.*** command), Type **WP/S**, choose option 3, answer the questions, and type **1** to exit the menu. You should now see **Doc 1 Pg 1 Ln 1 Pos 10** at the bottom of your screen. You are now in WordPerfect and may remove the WP diskette.

3. Press the **System Commands** key, choose the **Select Printers** option and select the printer(s) you will be using (see WP/P in this section).

4. Exit WP through the **Exit/Restart** key. Never turn off your machine without first exiting WP. If you experience a power failure or if the machine is mistakenly turned off while WP is running, run **CHKDSK** on your disk.

Options for Entering WordPerfect

Changing the Default Drive

You may change the default drive before or after entering WP. The default drive is the drive to and from which your files will be *saved* and *retrieved* unless otherwise specified.

To change the default drive to B before you enter WP,bring up DOS, type **B:** and press **Return**. Now enter WP by typing **a:wp**.

To change the default drive to B after entering WP, bring up DOS, type **wp**, press the **System Commands** key, choose option **2**, type **B:** and press **Return** twice.

You may enter WP with any one of the following options:

> WP
> WP/**S**
> WP/**M**=*macroname*
> WP/**M**=*macroname filename*
> WP *filename*

If you specify /**P**, WordPerfect will go through the printer selection and definition dialogue before coming up (see **Select Printers** in this section).

If you specify /**S**, WordPerfect will go display a menu of *set-up* options (see **Set-Up** in this section).

If you specify /**M**=*macroname*, WordPerfect will execute the macro when WP comes up. If you specify a macro *and* a filename, WordPerfect will bring up the file first then execute the macro (see Diskettes and WordPerfect in the Appendix).

If a filename is specified after WP, the text of the file is retrieved when WP comes up.

If a file access is attempted, and there is no diskette in the drive or the drive cover is not closed, DOS will display an error message followed by:

Abort, Retry, Ignore

Do not type A *for A bort*, unless you wish to terminate WP and return to DOS. The correct procedure is to insert the proper diskette, close the cover and type **R** for Retry or **I** for Ignore.

_____Select Printers — /P_____

If you execute WP with the /P option or choose the **Select Printers** option on the System Commands key, you will be asked to indicate the number of printers that you will be using. You may select up to 3 printers, but printer 3 prints to disk*.

At this point you will be asked to specify the printer types and their ports. (To modify these specifications while in WP, choose the **Select Printers** option on the System Commands key and specify the printer types and ports.)

If you have a printer that is not compatible with one of the listed printers, then you may use that printer as a Line Printer or use the Printer Definition Program (PRINTER) to define your printer to work with the program.

You will be asked whether or not the printer supports bi-directional printing. If it does, enter Y. If it does not or if you prefer uni-directional printing, enter N.

You will then be asked to which **port** the printer is connected. Parallel printers are connected to the LPT ports and serial printers are connected to the COM ports. If you have a parallel printer, you will most likely choose **O**; if you have a serial printer, you will most likely choose **4**.

If you have a serial printer, you will then be asked for more information concerning parity, baud rate, etc. The standard WP system settings are **EVEN** parity, **1200** baud rate, **1** stop bit, and **7** bit characters. You may set your printer to match these settings, or you may change the WP system settings to match your printer. The printer and the WP system settings must match for the printer to function properly. Your dealer should be able to help you if you have a problem.

After you have selected the last printer, a blank screen will be displayed. You may now start entering text.

Set-Up — WP/S

After bringing up DOS on your system and inserting the WP system diskette, enter the command **WP/S** and the following menu will appear:

1 — End this Set-up procedure, enter WP
2 — Set Colors for Color Monitor
3 — Specify Directories (Drives) for WP System Files
4 — Change Initial Format Settings
5 — Define Alt & Ctrl key mapping
6 — Screen Size

Note: Press the Cancel key to ignore changes and return to DOS

Menu option 2

If you have a color monitor or a graphics B&W monitor, a sub-menu of color selections allowing you to choose background, foreground, and underlining colors for your terminal will appear. If you have a color monitor, you can start up WP with /S anytime you wish to change colors. If you have a Black and White (single color) graphics monitor *and* you are asked to select a color, select the single-color monitor to cause reverse video to be used for underline.

WordPerfect allows you to choose from 8 different colors. WordPerfect checks (via a DOS call) to see if you are currently using a Monochrome display, a Black and White graphics monitor, or a Color graphics monitor. If you have both a monochrome and a graphics monitor connected to your system, WordPerfect will sense the current setting. To change the setting in DOS Revision 2, use one of the following commands:

MODE CO80
MODE BW80
MODE MONO

Once you have started up WordPerfect and chosen your colors, you can switch back and forth between the color and the monochrome displays with the above MODE commands and WordPerfect will use the appropriate display characteristics.

Menu option 3

The following question will appear:

Where do you plan to keep the following files?

WPERROR.FIL
WPMENU.FIL
WP.EXE

If you are running DOS revision 1, you will be asked to enter the
drive name (A,B,C,D,etc.). If you are running DOS revision 2,
you will be asked to enter a **full pathname**. You will then be
asked where you plan to keep the dictionary. Enter a full path-
name (or drive) where the dictionary will reside. If you merely
press Return, WordPerfect will look for the dictionary on the
default directory (or drive). Press Return to redisplay the Set-
up menu.

Menu option 4

WordPerfect is supplied with preset formats designed to meet
the needs of most users. We strongly recommend that you use
WP (as supplied) long enough to become familiar with all of its
intricacies before you consider changing the initial formats.

After selecting option 4, wait for the following setup screen to
appear:

Set Format	—	Tabs, E-Tabs, Margins, Spacing, H-Zone
Set	—	Alignment Char, Left Margin Release, N, Widow/Orphan, Hyphenate
Print Modes	—	Pitch, Font, Lines/Inch, Right Just, Underlining, SF Bin #
Print Key	—	Printer Number, Single Sheet Forms, Copies
Page Format	—	Page # Pos, Page Length, Top Margin, Page # ColPos

Selection:

Press **Return** to return to the Set-up menu

Press the function key corresponding to the value you would
like to change. Enter the new value. Repeat this process for each
value you wish to change. Press Return to display the /S menu.

Menu Option 5

By selecting the **Define Alt & Ctrl key mapping** option, you can define special characters to appear on the screen for the Alt and Ctrl keys.

You will be prompted to press the key to be defined, **Ctrl-A** for example, and the decimal value of the character. For convenience, the various characters available and their decimal values are displayed in a grid on the screen.

When you are finished defining characters press Exit/Restart. Some keyboards may not have an Alt key, and some may not have a Ctrl key. Because of this limitation, some machines will be limited to 26 special characters instead of 52. For some machines without an Alt key, holding down the Shift and Ctrl keys will act like an Alt key.

If you map special characters for your keyboard, your printer may or may not print the characters properly. If your printer does not print properly, refer to the information on defining your printer in the PRINTER Program pages of this section.

If an Alt key is used for a special character, then you cannot define an Alt-key macro for that key. If a Ctrl key is used for a special character, then it may not be used for a WP function. Some machines will not let you use every Ctrl key for a special character.

Menu Option 6

Some computers and/or special cards support screens more than 80 columns wide, or more than 24 or 25 rows (or lines) long. Choosing option **6** on the WP/S set-up menu lets you enter the number of rows and the number of columns for the WP display. The number of rows and columns you enter with option 6 must correspond to the hardware settings or serious results will occur.

Although you may be able to set the wide-screen display for over 128 columns, WordPerfect only allows you to enter text up to column 127. The hyphenation zone and right margin should also be considered when setting the columns. For example, if you set the display at 132 columns, and the hotzone is set at 5 and 5, then an ideal right margin would be 120.

Menu option 1

After completing the changes, select this menu option to record the changes and enter WP.

_____**Notes** _____

Formatting problems may occur to documents created under one set of initial format settings and then retrieved under another set of initial format settings.

WordPerfect Files

Included on the WordPerfect diskette are the following files:

WP.EXE   (the program)
WPHELP.FIL   (help file)
WPMENU.FIL   (menu file)
WPERROR.FIL   (WP error messages)
WPFEED.FIL   (sheet feeder information file)
WPDEFOV.FIL (overlay file for printer definition and default set-up)
WPDCTOV.FIL (overlay file for dictionary)
CONFIG.SYS   (configuration file for DOS 2.0)
PRINTER.EXE   (printer definition program)
PRINTER.FIL   (printer definition file)
WPFONT.FIL   (printer font file)
PRINTER.TST   (printer definition test file)
FONT.TST   (font definition test file)
PS.TST   (proportionally-spaced font definition test file)

WP.EXE, WPMENU.FIL and WPERROR.FIL must be found on the WP system diskette or the program will not run. WPHELP.FIL may be deleted to leave more room on the WP system diskette if desired.

If your printer does not have a sheet feeder, WPFEED.FIL may be deleted.

Other files are created by WordPerfect on the system diskette when the program is executed. The following is a list of those files:

WPSYS.FIL   contains printer definitions
WPSPACE.FIL   keeps track of disk space
{WP}.Q   list of documents sent to printer
{WBV}.TMP   bottom virtual file
{WTV}.TMP   top virtual file

Never delete the virtual or {WP}.Q files while WordPerfect is running, or serious results will occur!

Printer Notes

Printer Wiring

Parallel Port

The standard parallel cable available from your dealer works "as is" without any modification with the computer's parallel port. The NEC 3550 and the Epson printers use the parallel port.

Serial Port

WordPerfect supports the standard RS/232 EIA cabling configuration. Both hardware handshaking (checking CTS and DSR) and Xon/Xoff (DC1/DC3) software handshaking are supported. To test the printer cabling, print about one page to the printer directly from DOS or from BASIC. If you have trouble printing, contact your computer or printer dealer for correct cabling specifications.

Printer Switch Settings

The standard print protocol for serial printers is hardware handshaking using CTS and DSR. Turn off any AUTO-LF (line feed), AUTO-SCROLL, or AUTO-CR. Check with your dealer if you have a problem.

The NEC 3550 and the SW2-5 switch

The **SW2-5** switch on the **NEC 3550** may come from the factory set either "on" or "off". If you are having problems when printing superscripts or subscripts, it is probably because this switch has been set to "off". See your dealer for help in setting this switch to "on".

The Epson with Graftrax/IBM Epson

The IBM Epson-like printer is not completely compatible with the Epson with Graftrax. Most notably, the IBM printer does not support italics. WordPerfect does not support character set number 2 on the IBM printer, except with the **Insert Printer Command** option Print Modes key. Neither printer will print superscripts or subscripts if the **emphasized mode switch** inside the printer is set to on.

Notes

Some printers cannot handle the combination of hardware/-software handshaking. To correct the problem be sure to turn Xon/Xoff handshaking **off** at the printer.

If you have a parallel printer it will, in most cases, be connected to LPT1. If you have a serial printer, it will usually be connected to COM1.

Whenever you make any change to the printer, you should reset it by turning the power off and then back on.

Notes:

PRINTER Program

The PRINTER program is included on the WordPerfect diskette so that printers not listed in the WordPerfect printer menu may be supported. Using this menu driven program requires technical knowledge of the specific printer in question and its printer codes.

This program is intended for dealers who wish to support additional printers. We have included PRINTER with every copy of WP for those persons who have technical experience. **Our telephone support for the PRINTER program will be limited to dealers.** If you are not a dealer and need help, please send your questions in writing to

SSI Printer Support
288 W. Center Street
Orem, Utah 84057

- **Support almost any printer**

- **Support special fonts**

- **Define proportional space character widths**

- **Define a string which is sent to the printer for any character in a document**

The following pages of Installation are divided into four sections:

Starting the Program,
Creating/Editing Tables,
Printer Test Files, and
Special Applications.

STARTING THE PROGRAM

Program Files

Make sure you are on the drive containing the Word Perfect system files and that the files PRINTER.EXE, WPFONT.FIL and WPRINTER.FIL, are on the WP diskette. Printer definitions are saved in WPRINTER.FIL and Font definitions in WPFONT. FIL. PRINTER.EXE modifies these files.

Getting Started

Type **printer** at the DOS level to start the program.

Once you have entered "PRINTER" you will see the following menu:

1. Edit or Define Printer or associate fonts to a printer

2. Edit or Define Fonts only

Option 2 will display the menu on page 14-29

Option 1 will display the **Printers Currently Defined** and a menu at the bottom of your screen:

A. Create   B. Edit   C. Delete   D. Rename   E. Exit

Press **A** to Create a new printer definition. After entering the name of the printer. You will be asked which pre-defined printer you wish to use as a pattern. If you press Return, the table for Line Printer will be used.

Press **B** to Edit a printer definition. Type the number of the printer you wish to edit.

Press **C** to Delete a printer definition. You will be asked which printer to delete from the WPRINTER.FIL file.

Press **D** to Rename a printer definition.

Press **E** to exit the program.

Note! While inside this program, remember that pressing the Return key will display the previous menu and pressing the Exit/Restart key will exit you from the program.

Creating/Editing Tables

The heart of the program is the printer definition tables. These tables are the same for both the Create and Edit options. If you select the Create option (**A**) you will be asked to enter up to a 30 character name. If you select the Edit option (**B**) you will be asked to choose a number from the list of the previously defined printers.

After entering a printer number or name, the following menu appears:

0. **Help**

1. Line spacing and Paper movement (Vertical motion)

2. Spacing and Pitch changes (Horizontal motion)

3. Superscripts/Bold

4. Underlines

5. Font changes (Fonts 1-4)

6. Font changes (Fonts 5-8)

7. Initialize/Reset printer

8. Select/Edit Fonts

Press menu number (Press RETURN to exit):

Press **0** to get help with the Create/Edit menu. Press **1** through **7** to create or edit printer control strings for the functions which are indicated. Press **8** to create or edit a Font, to associate a named Font with one of the 8 printer fonts, or to change the character map or proportional spacing values.

Note! You may exit the program from any point by pressing the **Exit/Restart** key. You may return to the previous menu by pressing the **Return** key.

Font with a capital **F** refers to a named table font. *font* with a lower case **f** refers to one of the 8 printer fonts.

Help (0)

When you press **0**, the help message is displayed. This help message is a reminder. It tells you that you can use the Home key, Arrow keys, Del, DEL, and EOL keys in the editing of printer control strings and character mapping strings. You use them just as you do in WordPerfect editing.

The help message lists special bracket commands which you can use in any of your printer control strings or character mapping strings:

⟨A⟩ to shift the next character to print in the alternate character mode of the printer

⟨B⟩ to reset the line spacing

⟨C⟩ to reset the pitch

⟨D⟩ to send a Carriage Return (CR) to the printer and then to space back to the current column.

⟨E⟩ to cause the entire control string to be sent to the printer at the beginning of each line

⟨F⟩ to cause a bell to be sounded, and a "Wait for GO" to be done; printing will stop until a "GO" is given from System Commands

Note! See "Special Applications" for further information about these commands.

Press any key to exit from the Help screen and return to the Create/ Edit Menu.

Line spacing and Paper movement (1)

1. Set 6 lines per inch

2. Set 8 lines per inch

You do not define items 1 and 2 if there are not printer controls to select 6 lines per inch and 8 lines per inch line spacing.

3. Perform 1/2 line feed

Define item 3 to allow half-spacing, one-and-a-half-spacing, etc., and for advance-down to work.

4. Perform line feed

You must define how to perform a line feed. This is normally set to ⟨10⟩.

5. Perform reverse 1/2 line feed

Define item 5 for advance-up work.

6. Perform reverse 1/2 line feed

You may define item 6 so that advance-to-line, in a reverse direction, will work.

7. Advance paper 1/48 inch

Define item 7 to allow for an exact moving to the beginning of a new page where there is a mixture of both 6 LPI and 8 LPI on the same page.

Spacing and Pitch changes (2)

1. Set 10 pitch

2. Set 12 Pitch

3. Set 15 pitch

Do not define items 1, 2, and 3 if you use a variable HMI (item 6). These items are used to change a line-printer or dot-matrix printer from one pitch setting to another. You can use the 15 pitch setting (item 3) for putting your printer in 16.5 pitch, 17 pitch, or whatever, depending on the capabilities of your printer. When you change pitch in a WordPerfect document and these control strings are defined, then the appropriate control string will be sent to the printer.

4. Forward printing on

5. Reverse printing on

Define items 4 and 5 to allow WordPerfect to perform bidirectional printing. If your printer does bidirectional printing automatically, you need not define items 4 and 5. Some printers have problems with bidirectional printing — if this is the case with yours, leave these items undefined, and printing will be done left to right.

Horizontal Motion Index (HMI)

Your printer must work on the principle of a variable HMI (most dot matrix printers do not). For micro-spaced justification, proportional spacing, or proportional spaced justification to work you must first define items 6-A. If there is no HMI string (item 6) then space-filled justification will be done. Space-filled justification means spaces are inserted between words to justify each line.

Micro spaced justification means that uniform character spacing and spaces are expanded or contracted on a line to accomplish right justification.

Proportional spaced justification means that characters are proportionally spaced and that spacing between words and then between characters will be contracted or expanded to justify each line. Each proportional character requires a different amount of space depending on the size of the character (M is wider than i).

6. Set HMI

Define item 6 to micro-space or proportional-space depending on your printer and needs. Enter the HMI command string. In place of the number which sets a specific HMI, insert "<G>" if the number is sent to the printer in binary form, or "<H>" if the number is sent in ASCII decimal form (ANSI Standard). For example, you would enter <27><31><G> for Diablo printers since they require **ESC US (n)** to set the HMI.

Note: Your printer manual can help you tell if the number should be sent in binary form or decimal form. If the number is **binary** then the printer manual might suggest to send it out using the CHR$() command in BASIC. The number would be in decimal form if the printer follows ANSI standards.

7. HMI unit (120 = 1/120th inch):

This item and item 8 go together to specify the unit for adjusting proportionally spaced characters, and the true minimum horizontal increment of your printer. If your printer has a minimum horizontal advance increment greater than 1/125th of an inch just enter that number. However, if your printer has a minimum increment less than 1/125th of an inch, enter a number (less than 125) that can be multiplied by a whole number to equal the true minimum increment of your printer. (That whole number will be the answer to item 8.) For example, if the printer has a minimum increment of 1/720th inch, enter 120, and six (6) will be the answer to item 8 (720 = 120 * 6); if your printer has a minimum increment of 1/330th, then enter 110, and three (3) will be the answer to item 8 (330 = 110 * 3).

Leave item 7 at **120** if you do not have variable HMI.

8. Multiplication factor for HMI unit:

Enter the number to multiply to your answer to item 7 that gives the true minimum HMI increment for your printer. (The true HMI minimum increment of your printer is equal to the HMI Unit times the multiplication factor.) For example, if the minimum increment is 1/120th of an inch, (and your answer to item 7 is 120) just enter "1". If the minimum increment is 720, as in our example above, you would enter "6".

9. Maximum HMI Units:

Enter the maximum value allowed for the HMI unit of your printer. For example, Diablo allows a maximum setting of 125 120ths of an inch. The maximum HMI unit value would therefore be 125(NEC + 15).

A. HMI bias factor

Enter the bias value sent to the printer. For example, the HMI setting for a Diablo is **ESC US (n) = 1** (bias =1). The NEC HMI setting is **ESC]n = "@"** (bias = 64).

B. Does printer have a backspace (ASCII 8)?

Define item B to be **Y** (yes) for over-printing of characters to work with a sequence such as "= <8>/". (This sequence will produce "≠"). If you define item B to be **N** (no) then over-printing of characters is performed with a Carriage Return, followed by the appropriate number of spaces to get back to the place for the overstriking character.

Superscripts/Bold (3)

1. Bold on

2. Bold off

Define items 1 and 2 to have the printer hardware do bold face or shadow printing of highlighted text. If you do not define these items, overprinting (or shadow printing, if HMI is defined) of highlighted text will be done by WordPerfect.

3. Superscript on

4. Superscript off

5. Subscript on

6. Subscript off

Define items 3-6 for superscripting and subscripting of characters. If these codes alter the VMI (Vertical Motion Index) then put "⟨B⟩" at the end of the "off" command strings so that the correct line spacing value will be restored to the VMI.

Underlines (4)

1. Underline on

2. Underline off

Define items 1 and 2 to have your printer hardware perform underlining. If you don't define these, WordPerfect will overprint to do the underlining. The printer's hardware underlining may not always work correctly.

3. Double underline on

4. Double underline off

Define items 3 and 4 only if your printer has automatic double underlining capability. If these items are not defined, WordPerfect will do the double underlining (with a lowered equal sign, "="), provided you have defined variable HMI and define the next two items (5 and 6).

5. Move down if using "=" for double underline

6. Move back up if using "=" for double underline

Define items 5 and 6 for WordPerfect to do double underlining. If these commands alter the VMI, put the "⟨B⟩" code at the end of the "Move back up" command string to reset the VMI to the correct line spacing value.

5. String to move to middle of page (for sheet feeders)

This string is sent to the printer before the **select bin and insert sheet** string is sent. It should move the print head to the middle of the page so the sheet will be inserted properly.

Font changes (5 & 6)

1. **Shift into font 1**

2. **Shift out of font 1**

.... **etc.**

7. **Shift into font 8**

8. **Shift out of font 8**

Define these items to take advantage of various printer capabilities. When you change fonts in a WordPerfect document, the appropriate "off" and "on" codes are sent to the printer.

Examples of printer functions which can be used as "fonts" are "expanded printing modes," "correspondence printing modes," foreign language modes, subscript or superscript modes (to give a small printing font), italics, etc.

You may need to use the "⟨E⟩" command to cause the command string to be repeated at the beginning of each line, for some printer functions which are automatically canceled by a Carriage Return.

You may want to use the "⟨F⟩" command to cause a pause and a "Wait for GO" when shifting from font to font (especially in those cases where a print wheel must be changed).

Initialize/Reset printer (7)

1. String to send printer at start of document

2. String to send printer at end of document

Define items 1 and 2 to initialize a printer if needed at the beginning of each document, and to reset the printer (to normal line spacing and pitch, for example) after printing.

3. String to send printer at start of page

Define item 3 if a special command must be sent to the printer at the beginning of every page.

4. String to send printer at end of page

Define item 4 to send a special command to the printer at the end of every page. If this item is defined, WordPerfect will *not* space down to the next page — this command string will be done instead. You may want to define this string to be a Form Feed, for example.

Select/Edit Fonts (8)

Each printer may have 8 fonts assigned to it. Press **8** to see the current assignment of Named Fonts to the eight printer fonts. A Named Font consists of a character map (translation table) and proportional spacing values for each character. When you press **8** you will see something like the following:

1. Select Font name for font 1
ASCII/Backspace

. . . . . . etc.

8. Select Font name for font 8
ASCII/Backspace

9. Shift to alternate character set
⟨14⟩

A. Shift back to normal character set
⟨15⟩

B. Create or Edit a Font

Press a number 1 through 8 to assign a different Named Font to a printer font. You will see the list of the currently defined Fonts, and you can make your selection. See Appendix B for an explanation of the standard Fonts.

Press 9 and A to define command strings which shift the printer into and out of the alternate character mode (if your printer has such a mode). These are the strings which are sent to the printer when you use the "⟨A⟩" command.

Press B to Create a new Named Font or Change an existing Font. This entry allows you to create or change the character translation table and the proportional spacing values.

Creating a New Font

Note: Before creating a New Font you will want to read the section on PRINTER TEST FILES.

When you press B to Create or Edit a Font, you will see the list of currently defined Fonts.

You can:

Press **A** to create a new Font
Press **B** to edit an existing Font
Press **C** to delete an existing Font
Press **D** or **RETURN** to exit
Enter a Font number to edit a Font
(Shortcut to do **B**)

If you press A to create a Font, you are asked to supply a name for the Font and an existing Font number to be used as a pattern (or starting definition) for your new Font. Then it is the same as if you were editing a Font. (See the next section.)

Editing a Font

When you edit a Font, you will see the first part of the character map. The character map is shown in four columns, each of which has the same heading, for example:

Dsply	Ptr	Wd,Ad
. . .		
T 084	084	12,+0
X 088	**088**	**12,+0**
\ 092	092	12,+0
` 096	096	12,+0
. . .		

Information about: X (Decimal value is: 088)
A. Character width: 12
B. Adjust factor: +0
C. String sent to printer: X
D. Exit

You see the screen divided into an upper and lower section. Use the Arrows, Home key, Screen Down and Screen Up keys to move the reverse-video selection bar from character to character. "Home Home Up Arrow" moves the bar to character 0 (NULL), and "Home Home Down Arrow" moves the bar to character 255. You can type a decimal number of a character and the selection bar will move to that character. (For example to move the bar to the character "X" as shown above, enter 88.)

Above each of the four columns of characters you see *Dsply Ptr Wd,Ad.*

Dsply   shows what single character is displayed on the screen and the decimal value of the character.

Ptr   shows what will be sent to the printer when the character is printed. If a control string is to be sent, then an asterisk (*) is shown and the control string can be seen at **C** in the lower part of the screen.

Wd   shows the width of the character in 120ths of inches (or in terms of another number if you have changed the "Minimum increment of HMI"). This width may be from 1 to 15. This value is used only for proportional spacing. If your printer uses 120th's, then the width for all numbers and the space should be 9.

Ad   shows an adjustment number, which may be from −8 to 7. This value is used to shift the character a little to the left within its width (minus number) or a little to the right (positive number) to print the character in the correct place for proportional spacing. On different print wheels and cups, physical character placement is not the same, and adjustments must be made in order to produce nice looking printing.

To edit the values of the character shown in the selection bar do the following:

Press **A** to change the character width.

Press **B** to change the adjustment value.

Press **C** to edit the character map string. Editing a character mapping string is just like editing a printer control string. You can use the ⟨A⟩, ⟨B⟩, ⟨C⟩, ⟨D⟩, ⟨E⟩, and ⟨F⟩ commands.

If your printer allows fine horizontal and vertical movements, you can "manufacture" characters and symbols by overstriking various characters which are on your print wheel or cup. (See for example, the mapping of various characters in the Font, ECS Multi 10.)

Press **D** to exit.

When you exit, you see the menu which lets you create, edit or delete Fonts. If you delete some Fonts, the character maps are deleted from the file WPFONT.FIL, and the resulting file will take up less space on the disk.

To exit the entire PRINTER program, press RETURN over and over until you exit competely.

Printer Test Files

Three test files, PRINTER.TST, FONT.TST, and PS.TST, are provided on
the WordPerfect diskette to help you test your printer and font defini-
tions. These files will save you hours of work.

PRINTER.TST

Print this document with WordPerfect to see if a printer difinition
works properly. It is set to use the standard ASCII font. This file uses
all of the control strings except font changes. The text of this docu-
ment describes each test.

FONT.TST

Print this document with WordPerfect to discover the locations of all
characters on the print wheel. The printed document will show the
ASCII value sent to the printer and the character which is printed.
Use the printout to discover those characters where the printout does
not match the display. You may map these differences by creating a
special Font. You can save time by using the Standard ASCII Font or
the Standard PS Font (if you have a proportionally spaced print
wheel). See the Create Font option.

PS.TST

Print this document with WordPerfect if you are defining a proportionally spaced Font to see the initial width of each printed character. You may want to try printing this document using Fonts already defined. To do this you will use the Select Font name for font 1 option on the Select/Edit Fonts (8). Use as a pattern the Font which works best for your print wheel.

Each character in the document is printed between uppercase N's. As you use the Create/Edit Font options to change the widths, you will want to exit Printer and enter WordPerfect and reprint this document to check your changes.

Change the adjust factor until a small amount of light shows between the left N and the character. Then change the widths until a small amount of white shows between the character and the right N. You will probably print PS.TST a number of times.

Special Applications

Description of Special String Commands

You may use the following commands, both in printer command strings and in character mapping strings.

⟨A⟩ Use ⟨A⟩ to cause the next character to be printed in the alternate character mode of the printer. When you define Fonts you get to say what control strings shift the printer into and out of an alternate character mode. For example, is SO (⟨14⟩) (See ASCII code chart) shifts to the alternate mode and SI (⟨15⟩) shifts back to normal, then the printer control string, "⟨A⟩⟨141⟩" will cause the following codes to be sent to the printer: "⟨14⟩⟨141⟩⟨15⟩".

⟨B⟩ Use ⟨B⟩ to reset line spacing (VMI). Whenever you define a command string which alters the VMI such as subscripts, use "⟨B⟩" to reset the correct vertical line spacing. The "⟨B⟩" is used also in a character mapping string, where you change the VMI to cause a slight vertical adjustment of a character, such as an accent mark. For example, on Diablo compatible printers the following prints an underscore in the middle of a line instead of below the line: "⟨27⟩⟨30⟩⟨3⟩⟨27⟩⟨10⟩__⟨10⟩⟨b⟩". Explanation: ESC(27) RS(30) ⟨3⟩ sets the VMI to 2/48ths of an inch; ESC(27) LF(10) does a reverse Line Feed of this amount; "__" prints the underscore character; LF(10) does a Line Feed back to the original position, and ⟨B⟩ resets the VMI to the line spacing (6 LPI or 8 LPI depending on the current setting).

⟨**C**⟩ Use ⟨C⟩ to reset the pitch (HMI). Whenever you define a command string which alters the HMI, use "⟨C⟩" to reset the correct horizontal spacing. (See for example the double exclamation point symbol definition in the Diablo ECS Multi 10 Font.)

⟨**D**⟩ Use ⟨D⟩ to cause a CR (Carriage Return character) to be sent to the printer followed by spaces, to position back to the current column. This code should be used on Line Printers, or Dot Matrix printers which do not have variable HMI setting capabilities or back spacing capabilities. The CR caused most Line Printers to "Print" the print buffer to the paper; thus the ⟨D⟩ command allows you to mix various fonts on the same line, which some printers otherwise would not allow.

⟨**E**⟩ Use ⟨E⟩ to cause the command string to be sent to the printer at the beginning of every line. This is used when there are printer functions which are canceled by a CR. For example, if emphasized printing mode is to be a font and if the printer only allows a single line to be emphasized, you can cause the emphasized command to be sent on each line by including "⟨E⟩" in your command string.

⟨**F**⟩ Use ⟨F⟩ to cause the printer to stop and "Wait for GO". The screen will beep, and a message will be sent to the printer status (the WordPerfect System Commands function) asking for a "Font change". (You will generally use this command in connection with a Font definition, but you do not have to use it only there.)

NOTE! Entering certain command strings may be shortcut using single keys: **ESC** = ⟨**27**⟩, **spacebar** = ⟨**32**⟩, **Alt-A** thru **F** = ⟨**A**⟩ thru ⟨**F**⟩.

Standard Fonts

The first 4 Fonts are "standard" and can easily be used as a starting point for defining new Fonts of your choosing.

Standard ASCII

This Font maps all characters except +space+ through ⟨~⟩ (tilde) to spaces. That is, the normal printable characters are passed through unchanged, and all others are mapped to a space.

Extended ASCII

All characters except for ⟨0⟩ (NULL), ⟨127⟩, and ⟨255⟩ are unmapped. These 3 are mapped to spaces. Example, a ⟨141⟩ is sent through to the printer as the code 141, etc.

ASCII/Backspace

This Font is like Standard ASCII, except that some of the Foreign characters and other symbols are "manufactured" by overstriking of two characters. For example, the double quote mark is used as an umlaut, and the single quote marks are used for forward and backward accent marks.

ASCII/Line Ptr

This Font is like ASCII/Backspace, except that the command ⟨D⟩ is used instead of a backspace to do the overstriking of characters.

Defining Special Footnote Numbers

You can map the footnote numbers (the digits 0 through 9) if you want. Some print wheels have small superscripted numbers which are ideal for footnote references.

To map the footnote digits, enter character mapping strings in the Font table for the first 10 entries, ⟨0⟩ (NULL) through ⟨9⟩, for the digits 0 through 9. Normally NULL will be mapped to a space (⟨32⟩); but if it is mapped to anything else, then the first 10 entries are used for printing footnote references.

So, if you map NULL to a string which prints a tiny zero, and if you map the character ⟨1⟩ to print a tiny one, etc. up to the character ⟨9⟩ to print a tiny nine, then your footnote references will be printed as numbers using the small numbers.

You can also map the footnote digits to other characters. For instance you can map ⟨1⟩ to "*", ⟨2⟩ to "#", ⟨3⟩ to a dagger (if present on your wheel) etc. then the footnote references will be printed out using these symbols. (You can also superscript these characters in the respective mapping strings if your printer allows it.) If you use special symbols instead of numbers, you will probably want to reset footnote numbering in your documents on each page. NOTE! If you map a few of the digits to be used as footnote symbols, you must be sure to map the NULL character to something other than a space.

Notes:

INDEX

INDEX

INDEX

INDEX

INDEX

INDEX

Notes:

Notes: