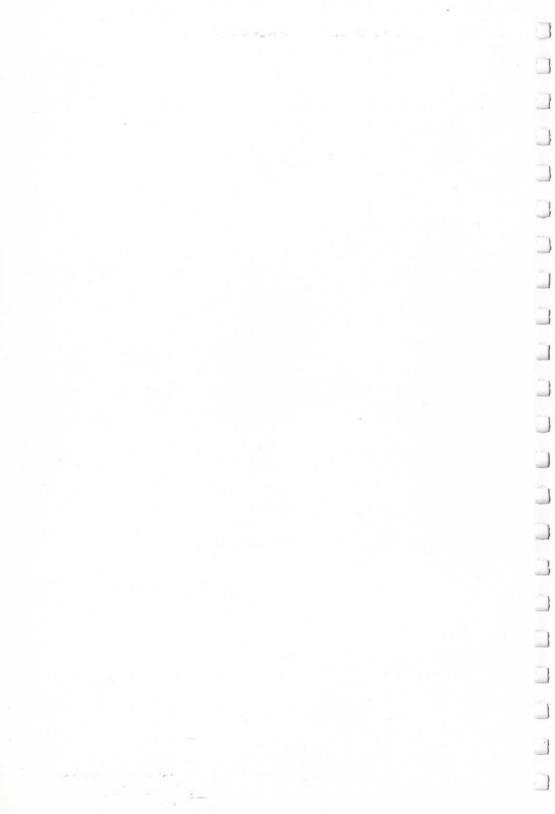




Portable WordStar™ Reference Manual





EPSON PX-8

Portable WordStar™ Reference Manual

For Release 1.0

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San Rafael, California 94903 USA
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Portable WordStar''' Reference Manual

For Release 1 0

Welcome

Unwrap the Portable WordStar word processing package and meet your professional editor and layout artist. Put aside correction fluid, scissors, and paste. WordStar software does the work for you.

Once you typed and *retyped*; now you can process words. Your fingers still press those familiar keys, but other tasks that had to be done by hand—making corrections, moving text—can now be done by command.

As you enter your text, you'll find program features make editing on the electronic page easy. Each line you type wraps automatically around to the line below. Setting and resetting margins is accomplished by a few keystrokes. At a given signal, Portable WordStar re-forms your paragraphs to new dimensions. If you change your mind and want to double-space your work, the program responds instantly. And if you decide you want to move, copy, or discard words, press a few keys and the job is done.

Portable WordStar also makes it easy to design an attractive printed page. Print commands entered along with your text provide special effects and custom layout.

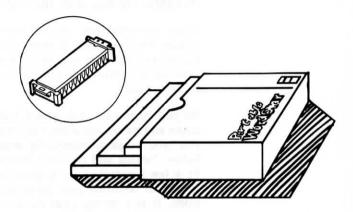
Portable WordStar is adapted from WordStar, the popular word processing program from MicroPro International, to run on the Epson PX-8. Throughout this manual, the term "standard WordStar" will be used to refer to the parent product.

Files created with Portable WordStar can be edited on Epson's QX-10 or other desktop computers using standard WordStar. Certain print control commands will have different effects when printing with standard WordStar; you can find the details in Chapters 7 and 9.

Everything you need to know about the program appears in the pages ahead. Whether you're a first timer with computers or an old pro, you'll find Portable WordStar easy to learn.

WHAT YOU HAVE

Your Portable WordStar software package contains a ROM capsule and a manual.



The Portable WordStar program is contained in two files:

- · WS.COM This is the command file.
- WSMSGS.OVR This file contains all program messages and menus.

You don't need to make a back-up copy of these files, because they are a permanent part of your computer and cannot be damaged or lost. In fact, the Portable WordStar files are copy-protected to prevent unauthorized use. A copy of this program will not run properly.

Hi, first time with computers?
Check the glossary in Appendix C if form words are unfamiliar.

YOUR MANUAL

The Portable WordStar Reference Manual is a comprehensive description of the program. If you're a first-time user, read it through to learn about the program's features. An old pro now? Use this guide for reference and keep the menu map handy.

At the back of the Portable WordStar Reference Manual you'll find a fold-out menu map which shows you how to get from one menu to another and lists the commands as they appear on those menus. You'll also find a quick guide to Portable WordStar.

COMPARISON TO STANDARD WORDSTAR

If you are an experienced WordStar user, you will find that this program lacks some of the features you are used to. Here is a list of features that have been omitted to save space on your ROM drive:

- · help menus
- · file directory
- · renaming a file
- · running a program
- paragraph tab
- · print control display toggle
- · hyphen help
- soft hyphen entry
- column mode
- · decimal tab

All other features work the same as they do in standard WordStar, except for a few minor changes. The optional programs that can accompany standard WordStar—MailMerge, SpellStar, and StarIndex—are not available with Portable WordStar.

Portable WordStar™ Reference Manual

For Release 1.0

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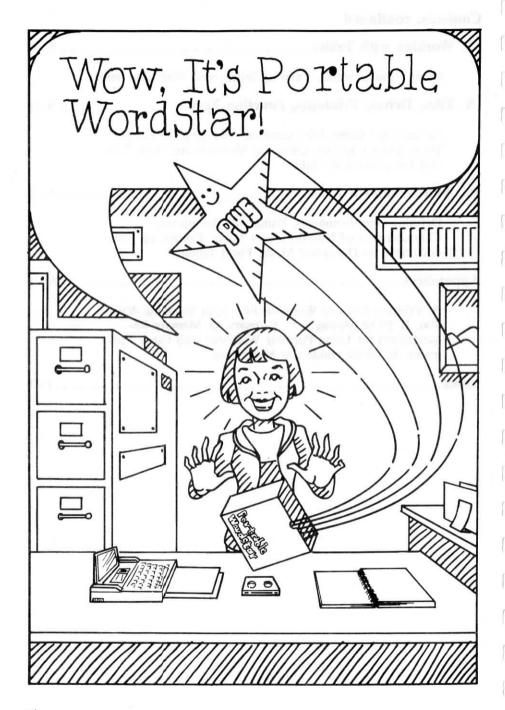
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How to Use this Book

You are the most important character in this book. The Reference Manual describes every feature and command of the Portable WordStar program with you in mind. After the opening chapters introduce the program, you will find the book organized by tasks that WordStar can do for you.

REFERENCE AIDS

When you want access to information, use the following reference aids:

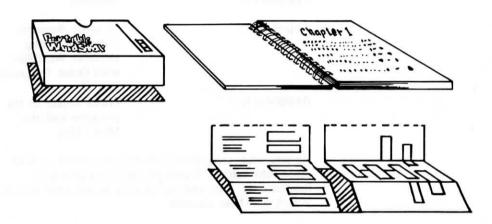


Table of Contents at the beginning of the manual

Table of Contents at the beginning of each chapter List of every subject covered in the ten chapters and five appendices

Closer look at the subjects covered in the chapter

Summary Table at the end of each chapter Chart of commands covered in the chapter

Index

Quick pointer to a subject or command

When you want summaries, use the appendices:

Appendix A

Printing Portable WordStar Files with Standard WordStar

Appendix B

Error Messages

Appendix C

Glossary

Appendix D

Memory Requirements for Using Portable WordStar with Other Programs

Appendix E

Quick Guide to the program and the

Menu Map

As you read, cross-references tell you where to find more information. Cartoons and illustrations illuminate the way, and signposts give you easy access. Watch for these symbols:

filename filename.EXT When you see one of these imitation file names in a procedure, use it as a reminder to insert an appropriate file name from your own directory.

n

"Any number"

 $\longrightarrow r$

"Refer to this page (n) of the Portable WordStar Reference Manual for more information."

CAUTION

"CAUTION"



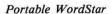
"REMEMBER"

viii

"An example on screen" "An example on paper" "RETURN Key" A single-key command A two-key command A three-key command A dot command A function key An option that only works with a previously entered command You may find it easier to learn some commands by the mnemonic devices which appear in boldface when applicable. You can remember, for example, to open a file with D to edit in Document mode. NOTE: ^ or CTRL represents the control key on

your keyboard.

RETURN



CHAPTER 1. INTRODUCING PORTABLE WORDSTAR

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This is exactly what we need! Portable Wordstar will help us get organized.



1. Introducing Portable WordStar

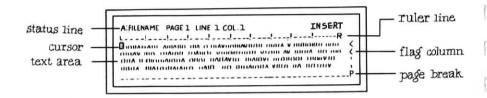
You command the Portable WordStar program from the keyboard of your computer terminal, using your regular keys, function keys, and one special key marked CTRL (control). Onscreen messages and symbols show you how to use the program. Keep an eye on the screen and you won't get lost.

If you are new to computers and word processing, read this chapter carefully and refer frequently to the glossary at the back of this manual. If you are experienced, you may want to read selectively.

THE BIG PICTURE

Portable WordStar is highly flexible and very visible. As you give comands, watch the screens for information that will guide you or let you know the command has been executed.

WHAT YOU SEE Here are the parts of the screen:



The *status line* indicates whether or not you are editing or printing and whether certain editing features are in operation.

The cursor —a small, dark block or line—locates your place on the screen as you type.

The text area, which can be moved (scrolled) up or down, is where your work appears.

The ruler line indicates margins and tabs.

The *flag column* remains blank on lines ending with a soft carriage return; in all other lines, a symbol relating to text format or layout will appear.

The page break display indicates where the program will stop printing one page and begin another.

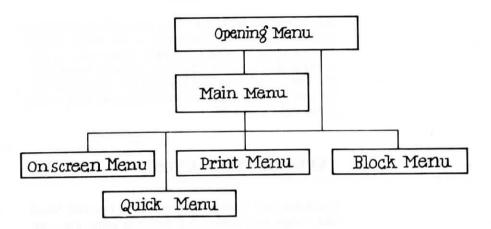


Menus display lists of commands. When a menu is on the screen you will not see the status line or your text.

Sometimes you will see a message or a question (prompt) between the status line and the ruler line. The ruler line is pushed down to make room.

WHERE YOU ARE

The six Portable WordStar menus are your greatest aids. They are like signposts, showing you where you are. Your path through the program looks like this:



The most important part of the screen is the text area where your work appears. How does your work get there? When you're at the Opening Menu, you command Portable WordStar to open a file for your work, and you give the file a name. Then the status and ruler lines and text area appear. Here you enter your work and give commands from your keyboard. Until you command the program to save your file, however, the work on the screen is not stored on your drive.

Use the save-and-resume command, $^{\wedge}$ KS, periodically as you work (except in a file on the microcassette). Your file will be stored in its current form, and you can continue to work without having to reopen the file. \longrightarrow 9-3

There are two modes for working with files in Word-Star, document and non-document. Document mode is tailor-made for word processing. Non-document mode, which eliminates many word processing features, is useful when you want to enter data or write computer programs. You choose the mode suited to your task as you open a file.

You are in command of Portable WordStar. With WordStar commands you can work in your files, arranging and editing your work. You can also work with your files without opening them; for example, you can print a file or delete it.

When working with your files, you type commands or respond to questions (prompts) on the screen. Typing commands in WordStar is simple. Sometimes all that is required is a single keystroke. At other times, you press both the command key and the control key for the results you want. And sometimes you type a command right into a file.

TYPES OF COMMANDS

There are four types of commands in Portable Word-Star: single-key, control key with one other key, control key with two other keys, and dot commands (which are discussed in Chapter 7). When entering any WordStar command, you can use either upper- or lowercase letters.

Single-Key Commands

The Opening Menu offers a choice of single-key commands, such as **D** (**D**ocument mode). To activate a command, press the single letter shown. The command will work the same whether you press the control key at the same time or not.

Two-Key Commands

Some commands, such as those in the table on page 1-14, require that you hold the control key down while you press a second key. An example is the cursor movement command, $^{\wedge}D$.

Three-Key Commands

You perform many operations in Portable WordStar, such as saving files (^KD) for example, by using three-key commands.

To enter a three-key command, hold down the control key (CTRL) while you press the first key; then release CTRL (or if you like you can continue to hold it down) and press the second key.

Function keys

On the top row of your keyboard are function keys that duplicate some Portable WordStar commands, such as $^{\text{PS}}$ (underscore), thus turning three-key commands into single-key commands! You can even program the function keys to execute the commands you choose, or to insert a phrase into your text. $\longrightarrow 9-24$

The regular WordStar commands can be executed from the "home position" for touch typing, but function keys require fewer keystrokes. Choose the way you prefer to enter these commands—both methods will be presented in this manual.

Labeled Keys

Certain keys on your PX-8 keyboard are labeled with words or abbreviations, such as SCRN, INS, HOME, etc. If there are two such labels on one key, you get the top function by shifting the key. In Portable Word-Star, most of these keys will do nothing at all or will give a different effect than the one their labels imply.

DEL (delete), BS (backspace), ESC (escape), HELP, TAB, CTRL, CAPS LOCK, and SHIFT give the expected results in Portable WordStar, as described throughout this manual.

The NUM GRPH key can be used to enter numbers, but not graphics. \longrightarrow 8-3

SCRN, STOP, PAUSE, CLR, and HOME either give no results or unexpected results, and thus should not be used in Portable WordStar.

Responding to Prompts

Some commands cause a prompt to appear on the screen. You may, for example, be asked to name a file, to answer yes or no to a question, or to enter a number. The following guidelines apply when you respond to a prompt:

- You can use either upper- or lowercase letters.
- Type simply the first letter of yes or no; type Y or N.
- After your response (except when only a single-key response is possible), press the carriage return key

Toggle switches

Some commands turn a feature off or on. These features are called toggle switches. $\wedge OJ$, which turns justification on and off, for example, is a WordStar toggle switch. $\longrightarrow 6-4$

STARTING WORK IN PORTABLE WORDSTAR

NOTE: If your system has the optional RAM Disk Unit, you don't need to set the RAM disk size, but you should read about the RAM Disk Unit in your system documentation before attaching it. Precautions must be taken to save files before attaching or removing the RAM Disk Unit.

If you don't have a RAM Disk Unit, while you're learning to use Portable WordStar, Portable Calc, and Portable Scheduler set the RAM disk to 14K using procedures from your system documentation. Appendix D of the Portable WordStar Reference Manual tells you how to set the size of the RAM disk according to the programs you're using. When you become more familiar with the programs you will want to adjust the RAM disk to make the most efficient use of memory.

PLUGGING IN THE CAPSULE

First you must plug in the ROM capsule that contains Portable WordStar. See your PX-8 User's Manual for instructions. If you are inserting only the Portable WordStar capsule, it must be placed in ROM 1.

HOW TO ENTER PORTABLE WORDSTAR

When you turn on your computer you may see a program that you have been using, the MENU screen, or the system prompt. If you are in another program, you must first exit from the program. If you are at the MENU screen, simply use an arrow key to move the cursor to WS.COM. When the program name flashes or if it is already flashing on the screen, press RETURN to enter Portable WordStar. See PX-8 User's Manual for instructions on using the MENU screen.

At the system prompt you can enter Portable Word-Star by one of three methods. The first, the basic entry method, introduces you to WordStar's Opening Menu. The second and third methods, which involve some shortcuts, are discussed at the end of the chapter.

If you are on drive B or C, you should change to (log onto) drive A or H (or D, E, F, or G if you have floppy disk drives) before entering Portable WordStar, since drives B and C are read-only drives on which you cannot save files. \longrightarrow 9-14

NOTE: You can use a utility program to rearrange the letters (A-H) assigned to your drives. Should you do so, however, you will have to substitute your choices for the default values used in this manual. — 1-11

Entering Portable WordStar

BASIC METHOD

With this method (or when you choose WS.COM at the Menu Screen) you enter Portable WordStar and then choose an activity from a list of commands. Begin at the system prompt:

TYPE B:WS



NOTE: If WordStar is located on drive C, substitute C:WS.

SEE copyright message

THE OPENING MENU

The next display will appear automatically, but you can hurry it along by pressing the space bar after the copyright message appears.

SEE Opening Menu \longrightarrow 2-3

Opening Menu Commands

To enter or edit files on a drive other than the current one, you can change (Log) to another drive. If you have entered Portable WordStar while logged on drive B or C, you will want to change drives at this point. $\longrightarrow 9-14$

TYPE L

The following screen appears:

```
L not editing

LOGGED DRIVE IS NOW B:

NEW LOGGED DRIVE (letter, colon, RETURN)?
```

Your first alternative is to log onto a different drive:

TYPE A: (or another letter D-H)





Be sure to name a drive on your system; naming a non-existent drive will cause an error message to appear, then you'll return to the operating system.

Your second alternative is to maintain the currently logged drive:

RETURN OF PRESS ESC

Here is a summary of the characteristics of your drives:

- A drive (RAM disk)—This drive is non-removable, with a limited capacity for storing files. The drive operates quickly and is good for working with small documents. An optional RAM Disk Unit can enlarge storage capacity significantly (from 24K to 120K); it is recommended for use with larger documents. See your PX-8 User's Manual and Appendix D of this manual for information on setting the size of the standard RAM disk.
- B and C drives (ROM)—Plug-in capsules, such as the one containing Portable WordStar, are inserted in these drives. You cannot store files to either of these drives, nor can you log onto these drives with the L command. It is possible to run Portable WordStar on drive B or C by logging onto one of them at the operating system, but you would only be able to work with files from other drives.
- D, E, F, and G drives (optional floppy disk drives)—These disk drives offer a much larger storage capacity than drives A or H. You can have up to four drives.
- H drive (microcassette)—The removable cassette tape has a medium-size storage capacity (around 30K bytes per side). Operation is rather slow.



Opening a File

With the Opening Menu on your screen, you can open a new or existing file in document mode. (Non-document mode is explained in Chapter 10.)

TYPE D

A new screen appears and explains the use of the **D** (**D**ocument) command:

d

not editing

This command is for creating a new document or altering an existing one.

NAME OF FILE EDIT?

Naming Files

The most useful file name is one that helps you remember the file contents. The following guidelines apply to choosing names:

CHOOSING A

- A file name is 1-8 letters or digits, a period, and an optional 1-3 character type.
- The file name may be preceded by a drive letter and a colon, otherwise the current logged drive is used.
- Do not use names that are already in use on the current drive.
- Exclude spaces, question marks, asterisks, hyphens, semicolons, and other special characters which may affect your system.
- You can use upper- and lowercase letters interchangeably.

You may include a period followed by an extension of one to three letters to describe the type of file. For example, you might add .LET after each letter file name, .REP after each report or .912 to indicate that September 12 was the last editing session.

These are valid file names:

RESUME REPORTJAN INDEX LETTER(521

Extensions



Don't use the extension .BAK because it's used by the Portable WordStar program to name backup copies. If other software on your system also creates files with extensions, avoid duplicating these as well. Check the product documentation.

Files on Other Drives

To edit a file on another drive, you must include the name of the drive. If you are logged onto the A drive and you want to edit file LETTER.DOC on drive D, enter three pieces of information (drive, file name, and extension). At the "NAME OF FILE TO EDIT?" prompt:

TYPE D:LETTER.DOC

Correcting Typing Errors

There are a set of two-key commands that allow you to correct typing errors as you enter a file name. You can use them whenever you respond to a prompt that ends with a question mark.

To give a two-key command, such as ^S, hold down CTRL while you type S.

This table describes the purpose of the special editing commands:

SPECIAL EDITING COMMANDS		
Keys	Purpose	
^ s	Erases one character to the left. BS, DEL, or ^H may also be used.	
^ D	Restores one erased character at a time to the right. The restored characters are repeated from the last response given to the same prompt.	
^ Y	Erases the entire reponse.	
^ R	Restores the last response to the same prompt. If you delete an entry with $^{\wedge}Y$, $^{\wedge}R$ can recall it. $^{\wedge}R$ can also restore the remainder of a file name after you make a change in it. Check carefully, however, to be sure that the recalled entry is the one you want.	
^ U	Interrupts and terminates the current command, requests that you press the ESCape key, and clears any command or response already typed.	





Many of the keys described as special editing commands have a double identity. At any of the Opening Menu screens or in certain file operations, these keys serve the purposes indicated in the chart. Once you begin editing "inside" a file, however, you'll see the same keys appear on the Main Menu as cursor control commands.

Use ^U to interrupt commands from almost anywhere in the Portable WordStar program.

Your Response

HOW TO ENTER YOUR FILE NAME The cursor awaits your response to the prompt on the screen.

SEE NAME OF FILE TO EDIT?

TYPE filename RETURN

If you have named a file not yet contained on the drive, the words NEW FILE will appear briefly just below the prompt.

If you see this message when you intend to edit an existing file, you probably mistyped the name or logged onto the wrong drive. Abandon editing by pressing **KO**, then Y, which returns you to the Opening Menu.

9-5

WHAT HAPPENS AFTER YOU PRESS RETURN

The next screen you'll see will contain the status and ruler lines and, below them, either your existing file or a blank text area ready to be filled.

STORING FILES

HOW TO USE SAVE COMMANDS

Use save commands as you work on a file and when you finish. Save commands store your work on the drive. \longrightarrow 9-3

The save—Done command (^KD) stores your current file and returns you to the Opening Menu.

PRESS ^KD

SEE SAVING FILE A: filename

SEE Opening Menu

PRINTING YOUR DOCUMENT

HOW TO PRINT

At this point you can print your file. You give the basic print command at the Opening Menu. \longrightarrow 9-20

Here are the steps:

STEP 1 Prepare your printer. Refer to your printer manual for information.

STEP 2 At the Opening Menu

TYPE P

TYPE filename

PRESS ESC

NOTE: By pressing ESCape, rather than RETURN, you ignore a list of print options that would otherwise appear. Print options will be explained in Chapter 9.

Your document will be printed just as you designed it on the screen.

LEAVING PORTABLE WORDSTAR

HOW TO EXIT

When you finish working with a file, use this procedure to leave Portable WordStar:

SEE Opening Menu

TYPE X (eXit)

SEE MENU screen or operating system prompt

NOTE: When you leave Portable WordStar, you will be logged onto the drive you were on when you entered the program, even if you changed drives with the L command.

If you plan to be away from the computer for a while, you may want to turn it off by holding down the control key and pushing the switch on the right side of the computer to the OFF position. This will turn off the display, but the system will not be reset. When you turn the switch to the ON position you will still be in your file (or wherever you were when you turned off the display).



When you turn off your PX-8 while in Portable WordStar, you must press the CTRL key before turning the power switch off. If you don't press the CTRL key first, any document in progress will be destroyed.

ALTERNATE METHODS OF ENTERING PORTABLE WORDSTAR

There will be times when you want to enter Portable WordStar and go directly into a particular file to begin editing. You have two alternatives, both of which allow you to bypass the Opening Menu. The second also allows you to edit on one drive and store your file on another.

Editing and Storing on One Drive

HOW TO BYPASS THE OPENING MENU

To enter a Portable WordStar file directly, you include a file name, either new or existing, at your operating system prompt or at the MENU screen. This method works in document mode only and does not accommodate non-document files. At the operating system prompt:

your system prompt SEE

TYPE B:WS (or C:WS) filename RETURN



SEE copyright message

Then you can begin editing:

SEE your file

If you enter a new name, first you'll see the following:

SEE **NEW FILE**

Then you'll go into the new file:

status and ruler lines and blank text area SEE

If the file you want to edit is located on a different drive, include the drive name. For example, if you are logged on drive A, Portable WordStar is on drive B, and the file named RESPONSE is located on drive D, the command looks like this:

TYPE B:WS D:RESPONSE



SEE copyright message

Then you can begin editing:

SEE the file you named

At the MENU screen:

SEE the MENU screen

PRESS cursor key to select WS.COM

TYPE filename RETURN

SEE A>B:WS (or A>C:WS) filename and the copyright message

Then you can begin editing:

SEE your file

If you enter a new name, first you'll see the following:

SEE NEW FILE

Then you'll go into the new file:

SEE status and ruler lines and blank text area

Editing on One Drive and Storing on Another

BYPASS AND CHANGE DISKS

When space on your drive is limited, you can edit a file on one drive and place the result on another drive. Remember though, that you cannot use this method to store files onto drive H (the microcassette tape) or drives B and C (ROM). To edit a file which occupies more than half of your drive space, you must use this method:

TYPE file's present drive (and a colon)

filename SPACE

the second drive (and a colon)



NOTE: If you are performing this function from the MENU screen, first select WS.COM, then type the filename, a space, the second drive, and press RETURN.



Make sure you don't type anything but RETURN after the name of the second drive (including the colon), not even a space.

Note that you can omit the file's present drive if it's your currently logged drive.

Here's an example that tells Portable WordStar you want to edit the file BOOK.DOC on drive H and save it on drive A:

TYPE B:WS H:BOOK.DOC A:



After you edit and save the file named BOOK.DOC, the new version is placed on drive A. The file on drive H will have been renamed BOOK.BAK and will serve as your backup file.

If you have floppy disk drives, you may want to edit a file on a disk in drive D and save it on another disk in drive E. If you use the save-and-resume command (KS) while editing, each successive save command will result in a location switch; you will edit on drive E and save on drive D, then edit on D and save on E, and so on. \longrightarrow 9-3

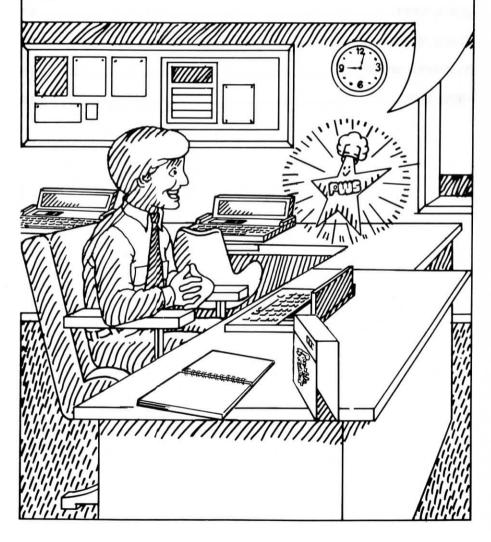
Do not use ^KS when editing a file on the microcassette tape.

CHAPTER 2. USING MENUS

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OPENING MENU	
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PRINT MENU	

Hi, Choose from the menu, and I'll bring whatever you would like to order!



2. Using Menus

The Portable WordStar program has six major menus which provide an onscreen guide to WordStar commands. This chapter lists all of these menus, along with quick references to command explanations throughout this manual. The menus are charted on a fold-out map in Appendix E. Refer to it as you read this chapter.

OPENING MENU

After you start the Portable WordStar program, the Opening Menu appears. Here's what you see:

The Opening Menu is like a platform on which you begin and end your work. You normally pass the Opening Menu when you enter or exit from Word-Star. When you are at the Opening Menu, you do not have a file open and you cannot give a control command leading to auxiliary menus. At the Opening Menu you can perform tasks either before or after beginning work on a file, such as changing the logged drive or printing a file.

The following table lists the commands on the Opening Menu and indicates where to get more information about them:

	OPEN	ING ME	NU C	HOICES	
Preliminary Command			File Commands		
L	Change logged drive	p. 9-14	Р	PRINT a file	p. 9-20
	5 55		0	COPY a file	p. 9-7
			Y	DELETE a file	p. 9-8
			Т	TRANSMIT a file	p. 9-9
			С	RECEIVE files	p. 9-9
Commands to open a file				System command	
D	Open a document file	p. 1-12	X	EXIT to system	p. 9-4
N	Open a non-document file	p. 10-4		11.000	

MAIN MENU

HELP

When you open a document (D) or non-document (N) file you can get to the Main Menu by pressing the key labeled HELP. This command is a toggle switch; it will also remove the Main Menu from the screen.

Menus take up the entire screen, replacing the status and ruler lines and the text area. Even though you cannot see a menu while in the text area, you can use all its commands. Menus simply remind you what the commands are.

When editing text, you can get to the other menus by pressing ${}^{\wedge}\mathbf{K}$, ${}^{\wedge}\mathbf{Q}$, ${}^{\wedge}\mathbf{P}$, or ${}^{\wedge}\mathbf{O}$, then **HELP**. Be sure to release the CTRL key before pressing HELP, or you will get the System Display Menu. If you are at the Main Menu already, simply type the command for the menu you want (${}^{\wedge}\mathbf{K}$, ${}^{\wedge}\mathbf{Q}$, ${}^{\wedge}\mathbf{P}$, ${}^{\wedge}\mathbf{O}$). You can't change from one of these four menus to another without first removing the current menu by pressing the space bar. You have three options while you are at any one of the HELP screens:

 You can return to your file and cancel the command by pressing the space bar.

- 2) You can return to your file and leave the menu active by pressing the HELP key. Once in your file, you can still complete the command by typing its second letter. This method enables you to check your file again before changing anything.
- 3) You can perform the desired functions by pressing the appropriate command key. This action will also return you to your file.

Here is the Main Menu:

Cursor Movement ^S char left ^D char right ^A word left ^F word right ^E line up ^X line downScrolling ^W up line ^Z down line ^R up screen ^C down screen	C < MAIN MENUZ Delete- AG char	eout- Reform
--	---------------------------------	--------------

The following table tells you where to find more information about each of the Main Menu commands:

		CURSOR MOVEMENT	
^s	char left	Moves cursor one character to the left	p. 3-7
^ D	char right	Moves cursor one character to the right	p. 3-7
^ A	word left	Moves cursor one word to the left	p. 3-8
^F	word right	Moves cursor one word to the right	p. 3-7
^E	line up	Moves cursor up one line	p. 3-8
^X	line down	Moves cursor down one line	p. 3-9
		SCROLLING	
^w	up line	Moves screen view up one line	p. 3-8
^ Z	down line	Moves screen view down one line	p. 3-9
^ R	up screen	Moves up one whole screen	p. 3-8
^C	down screen	Moves down one whole screen	p. 3-9
`		DELETE	
^ G	char	Deletes one character to the right	p. 3-14
DEL	char If	Deletes one character to	
		the left	p. 3-15
^T	word rt	Deletes one word to the right	p. 3-16
^Y	line	Deletes one full line	p. 3-17
· ·		MISCELLANEOUS	
^1	Tab	Moves cursor to next tab mark	p. 6-8
^ B	Re-form	Rearranges text to form paragraphs	•
		within margins	p. 3-18
۸V	INSERT ON/OFF	Toggle switch for insertion feature	p. 3-11
^L	Find/Replace again	Continues the search of a ^QA or	
	== 70	^QF command	p. 5-6
RETURN	End paragraph	Inserts a "hard" carriage return into	
		text	p. 3-22
^N	Insert a RETURN	Inserts a "hard" carriage return into	
*****		text without moving cursor	p. 3-23
^υ	Stop a command	Interrupts many commands before	
		they are executed	p. 1-14

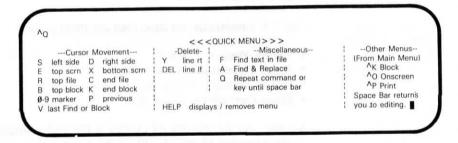
		OTHER MENUS
^K HELP ^Q HELP ^P HELP ^O HELP	Block Quick Print Onscreen	Displays the Block Menu Displays the Quick Menu Displays the Print Menu Displays the Onscreen Menu

The last section of the Main Menu identifies the four other menus. Take a look at them now, one at a time.

QUICK MENU



When you press $^{\wedge}Q$ at the Main Menu (or $^{\wedge}Q$ and then **HELP** while editing), you'll see the Quick Menu:



The Quick Menu lists commands that activate other commands until specific conditions are reached. For example, ^S moves the cursor one character to the left, and ^QS moves the cursor all the way back to the left end of the line.

The $^{\wedge}\mathbf{Q}$ commands are explained in subsequent chapters.

- Cursor movement commands

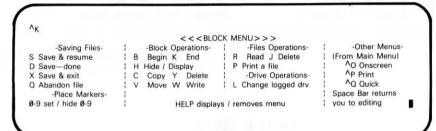
 → 3-5
- Delete commands

 → 3-14

BLOCK MENU



When you press ^K at the Main Menu, you'll see the Block Menu illustrated here:



The Block Menu lists commands for manipulating blocks of text, whether the block is a whole file or only a portion of text.

The ^K commands are described on these pages.

- Block Operations

 → 4-5
- File Operations

 → 9-7
- Drive Operations \longrightarrow 9-14

To save you the trouble of closing a file and returning to the Opening Menu, the Block Menu includes commands for file and drive operations which duplicate some of those on the Opening Menu.

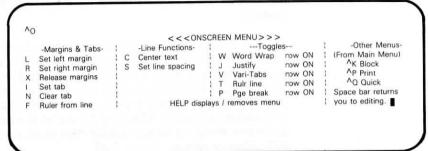
Refer to the following chart for a comparison of these commands:

OPENING MENU (outside file)	BLOCK MENU (inside file)	FILE AND DRIVE OPERATIONS
L	^KL	Change logged drive
P	^ KP	Print
Y	^KJ	Delete

ONSCREEN MENU



You reach the Onscreen Menu by pressing O at the Main Menu.



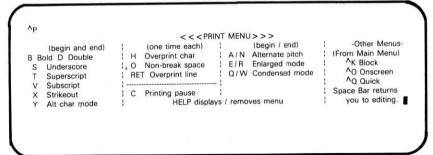
The Onscreen Menu lists commands for formatting text. The effects of these commands can be seen right on the screen. This menu also shows the status of most toggle switches. If you forget whether a toggle switch is on or off, you can press ^O and HELP to see.

The $\wedge \mathbf{O}$ commands for formatting text are explained in Chapter 6.

PRINT MENU



When you press $^{\wedge}P$ at the Main Menu or $^{\wedge}P$ and **HELP** while editing a file, you see the Print Menu.



The Print Menu lists commands which affect design of the printed page. Unlike O commands, their effects are not visible on the screen. When you press P followed by one of the letters on the Print Menu, the letter will appear on the screen, preceded by the control symbol. ^PB appears as ^B on the screen, for example.

You can also use $^{\wedge}P$ to enter control characters that do not appear on the menu. In the other auxiliary menus, when you press a key that is not listed you are returned to your unchanged text. However, in the Print Menu any key you press is entered into your file as a control character. This may be useful in non-document mode, or when creating files to be used with other programs. \longrightarrow 7-30

The $^{\mathsf{P}}$ commands are explained in Chapter 7.

CHAPTER 3. ENTERING AND EDITING TEXT

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3. Entering and Editing Text

Entering text in Portable WordStar is much easier than using a typewriter. No more retyping a whole page to correct a single error. No need to watch the margins or respond to a ringing bell.

PROGRAM FEATURES

When you enter text, certain program features simplify your work. The terms defined and explained on the next few pages will help you understand these features.

Use $^{\ }$ KS frequently to save your work (except when editing on the microcassette tape). $^{\ }$ KS allows you to save and then reSume work without leaving your file or the WordStar program. Press $^{\ }$ QP to return Quickly to your work Place prior to saving. \longrightarrow 9-3

Word Wrap and Justification

Word wrap keeps track of the number of characters and spaces on each line. If you type beyond the right margin, words automatically move to the next line. The cursor appears at the end of the "wrapped" word so you can continue typing. You can enter an entire paragraph at high speed before pressing the RETURN key. Word wrap is a toggle switch (^OW). \longrightarrow 6-3

As you type a paragraph, word wrap will insert spaces between words as necessary to align them at the right margin. This process, called justification, is turned off by a toggle switch ($^{\land}$ OJ). \longrightarrow 6-4



WHAT IS INSERTION?

Insertion is another feature that can be turned on or off with a toggle switch (^V). When on, insertion moves existing text or spaces to the right to make room for what you type at the cursor position. With insertion off, each character you type replaces whatever was in the same cursor position, whether a letter, number, space, or empty position (blank).

Hard and Soft Spaces

The Portable WordStar program provides three types of spaces: hard, soft, and non-break. Non-break spaces are described in Chapter 6.

WHAT IS A HARD SPACE?

A hard space is created any time you press the space bar while entering text. It becomes a permanent part of the file but can be removed by deletion, just like any other character. If you enter two spaces after a period, for example, two spaces will always follow that period. If the period falls at the end of a line, you won't see the spaces. If, however, in re-forming the paragraph, the period moves to the middle of a line, the spaces will be inserted. \longrightarrow 3-18

To form indented paragraphs, type the desired number of spaces at the beginning of each paragraph, or use the tabulator key (TAB or $^{\text{N}}$). You insert these spaces, too, as hard spaces. \longrightarrow 6-8

WHAT IS A SOFT SPACE?

Soft spaces look like hard spaces on the screen, but the Portable WordStar program distinguishes between them. Soft spaces are not a permanent part of your file. They're inserted and removed selectively as the program forms and re-forms your text within the margins you set. Soft spaces are used to give you a justified right margin.

Paragraphs and Carriage Returns

Paragraph re-forming, controlled by a Portable Word-Star command ($^{\text{N}}$ B), reshapes your paragraphs within specified margins. With this command you can automatically re-form every paragraph in an entire file. \longrightarrow 3-18

The Portable WordStar program distinguishes between carriage returns that you purposely enter (hard) and automatic carriage returns at the end of a typed line (soft).

WHAT IS A SOFT CARRIAGE RETURN?

Soft carriage returns automatically appear at the end of each line as you enter text with word wrap on. They are indicated on the screen by a blank in the flag column. You can rearrange or delete these soft carriage returns when you re-form the text.

WHAT IS A HARD CARRIAGE RETURN?

You enter hard carriage returns purposely to end a paragraph or to add blank lines. These returns are not moved or removed unless you delete them, and the process of re-forming a paragraph always stops at the first hard carriage return. This is why you don't want to press RETURN at the ends of lines within a paragraph. Hard carriage returns are indicated on the screen by the symbol < in the flag column.

MOVING AROUND IN YOUR TEXT

Once you've entered text, you can easily move the cursor around on your electronic page—by character, word, line, or page. You can even move to the beginning or end of a file with a few keystrokes.

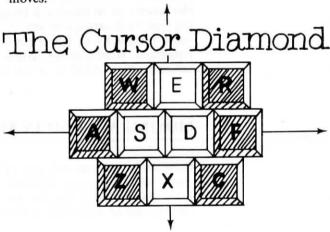
In addition to the Portable WordStar cursor control commands, you can use the arrow keys to move the cursor. Both methods will be explained in this chapter; choose the one you prefer.

Moving with cursor control commands does not affect your text. The cursor simply moves through words without changing, adding, or deleting any characters. Moving the cursor with the space bar or RETURN key, however, does affect your text, so be sure to use the cursor control commands instead. You'll find a table describing them at the end of this chapter.

RIGHT AND LEFT

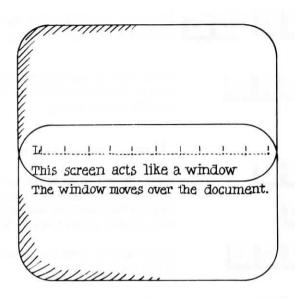
Moving to the right with basic cursor control commands means moving to the *next* character or space—even when it rests on the next line. Likewise, moving left means moving to the *preceding* character or space. Cursor control commands also offer you the choice of moving by whole words to the left or right or moving to the left or right end of the line in which the cursor is located.

In the following illustration, "The Cursor Diamond," notice the relationship between control characters on the keyboard and the direction in which the cursor moves.





As you move around the screen with the cursor control commands, you will sometimes move to a portion of text not currently displayed on the screen. Imagine the screen as a "window" onto your text. Scrolling moves that window up or down, allowing you to view various portions of your electronic page. Here's an illustration.



Moving Right and Left



Press $^{\wedge}\mathbf{D}$ or the right arrow key to move to the right by one character. If you want to move to the right by several characters, press $^{\wedge}\mathbf{D}$ repeatedly.



Press ^F, or CTRL plus the right arrow key, to move the cursor to the first character in the next word.



Press $^{\wedge}\mathbf{QD}$ to move to the right end of the current line. The cursor will stop at the right of the last character entered on that line or column 79. If a line is too long to display on the screen and it extends to the next line, $^{\wedge}\mathbf{QD}$ will not move the cursor down to the continuation line. $\longrightarrow 6-6$



Press ^S or the left arrow key to move to the left by one character.



Press ^H (backspace), too, to move to the left, character by character.



Press ^A, or CTRL plus the left arrow key, to proceed back through your text, word by word.



Press ^QS to move quickly to the left edge of your screen. The cursor moves to column 1, regardless of the left margin setting.

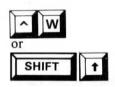
Moving Up and Down



Press ^E or the up arrow key to move the cursor up one line at a time. As you move the cursor up, it stays in the same column until it reaches a blank area; then it moves toward the left edge of the screen.



Press ^QE to move the cursor to the top screen line in the same column.

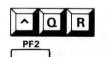


Press ^W, or SHIFT plus the up arrow key, to scroll the screen window up one line at a time. You'll see the added text at the top of your screen.



or

Press ^R, or CTRL plus the up arrow key, to scroll the screen window upward a screenful. The top line on the screen will become the bottom line.

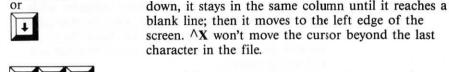


Press ^QR or the PF2 function key to move the cursor back to the beginning of your file in one step.



Use caution when moving the cursor backward through long files; doing so may involve heavy memory requirements. \longrightarrow B-5

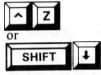




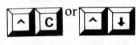


Press **\OX** to move the cursor to the next-to-last screen line in the same column.

Press $^{\wedge}X$ or the down arrow key to move the cursor down one line at a time. As you move the cursor



Press \(^{\mathbb{Z}}\), or SHIFT plus the down arrow key, to scroll the screen window down one line at a time. You'll see the added text at the bottom of your screen.



Press AC, or CTRL plus the down arrow key, to scroll the screen window down a screenful. The last line on the screen will become the first.



Press AOC or PF4 to reach the end of your file in one step. The cursor will come to rest just past the last typed character.

Repeating Commands



 $^{\wedge}\mathbf{QQ}^{\wedge}$ can be combined with most commands to repeat the function until you press another key. For example, if you press $^{\wedge}QQ^{\wedge}C$, the cursor will move gradually toward the end of your file, a screenful at a time. You can combine $^{\wedge}\mathbf{QQ}^{\wedge}$ with all cursor movement and deletion commands.



OO repeats *characters* as well as commands. So if you want $^{\land}$ C repeated, for example, make sure you hold down the control key while you type C. Otherwise, you will get a row of C's across your page!



You can control the speed of all $^{\wedge}QQ^{\wedge}$ _ commands by following the command with a number. The range is 1-9 with 1 the fastest, 9 the slowest. Unless you specify otherwise. Portable WordStar sets the speed at 3.

USE SPACE BAR TO STOP REPE-TITION

Typing any character other than a number halts the repetition. Using the SPACE bar is best because it's a safe target. If you hit an alphabetic character while your finger is still on the control key you may generate a new command. The space bar halts the process without generating a command, even when the control key is pressed.

Finding Your Place

If you find yourself facing a blank screen and you don't know where you are or where your text has gone, look for a signpost to guide you. The best guide may be the status line or the flag at the end of a line, which tell you where you are in relation to your text. Use $^QQ^R$ or $^QQ^C$ to run backward or forward through the file until you find your place.

SLOWING DOWN

You may be surprised by how long the computer sometimes takes to execute a cursor movement command, especially when you are editing on the microcassette tape. The further you are from where you're going, the longer it takes. For example, when you're near the beginning of your text, the execution of $^{\wedge}QC$ takes longer than when you're near the end.

Backward movement takes longer than forward movement. You'll be wise to avoid long, backward moves whenever possible.



Time differences are almost imperceptible in a short file, but in a long file, you may wonder if your command has registered. Look for the command in the upper left of the status line before entering another command.



Interpret a computer slowdown as a warning. Your drive may be getting too full. You can find out by running the program STAT.COM from CP/M. Refer to your PX-8 User's Manual for information.

You'll find suggestions for avoiding and solving the slowdown problem in Chapter 4.

INSERTING TEXT

As you edit, you can easily add any amount of text by inserting it in the file.

Insertion On and Off



Use $^{\text{V}}$ to turn the insertion toggle switch on or off. With insertion on, Portable WordStar creates space for new text as necessary. With insertion off, Portable WordStar simply types over existing text.

The insertion switch will be on each time you begin a new editing session. Type $^{\wedge}V$ once to turn the switch off; type $^{\wedge}V$ again to turn the switch back on. When insertion is on, Portable WordStar displays **INSERT** in the status line.

EFFECT OF ^V ON EDITING TEXT When you enter text, turning insertion on or off is a matter of personal preference. Either choice offers its own advantages for correcting certain typing errors. For example, you may want to change **The white bull** to **The brown bull**. With insertion off, you simply type the word **brown** over **white**. With insertion on, Portable WordStar inserts the word, which gives you **The brownwhite bull**. The following examples show what happens, character by character, as you type:

The white bull won a prize The bhite bull won a prize The brite bull won a prize The brote bull won a prize The browe bull won a prize The brown bull won a prize The brown bull won a prize

The white bull won a prize The byhite bull won a prize The brwhite bull won a prize The browhite bull won a prize The brow white bull won a prize The brownwhite bull won a prize The brownwhite bull won a prize

INSERT OFF

INSERT ON

Insert OFF uses a typeover mode. **Brown** and **White** are the same length, so you can just type the correction. Portable WordStar pushes text right of the cursor to make room for new text. You must delete **white** to correct the text.

EFFECT OF ^V WHEN INSERT-ING TEXT

For contrast, suppose you want **The brown and white** bull. With insertion off you type over any text that follows **The**. You may have to retype lost text. With insertion on, Portable WordStar creates space for the additional words:

The white bull won a prize The brown and whitea prize The white bull won a prize
The brown and white bull won a prize

INSERT OFF

Some text is lost.

INSERT ON

Portable WordStar creates space . . . and saves this text.

Using the Space Bar

HOW DO SPACE CHARACTERS WORK?

When you use the space bar on your keyboard, you're actually entering space characters in your text. Spaces are treated like any other character, whether insertion is on or off. Each time you press the space bar, the cursor moves one position to the right. With insertion on, spacing inserts a new space character each time you press the bar, which pushes text to the right of the cursor further right. With insertion off, spacing replaces existing text with a space character.

In the following example, assume that the cursor is positioned on the letter **T** at the beginning of the sentence. Then the space bar is pressed six times:

The white bull won a prize
te bull won a prize
The white bull won a prize
The white bull won a prize

INSERT OFF

INSERT ON

Spaces typed over this text.

Spaces inserted.

Tab Stops

Insertion affects what happens when you use the tabulator key or $^{\Lambda}I$ to skip the cursor to the next tab stop. $\longrightarrow 6-8$

TABBING MEANS SPACING

With insertion on, tabbing moves the cursor to the next tab stop, inserting a space at every character position the cursor passes. Text on the line is pushed one space to the right for each space inserted.

Normally, the cursor does not move outside the existing text. For example, you cannot move the cursor down a line $(^{\Lambda}X)$ if the new line is beyond the last character you typed in the document. However, you can use the tab key, even at the end of the document.

DELETING TEXT

You can remove pieces of text of various sizes ranging from one character to an entire file.

Be sure to position the cursor carefully before inserting or deleting text. All text corrections, insertions, and deletions depend on the current position of the cursor. For example, $^{\wedge}\mathbf{QY}$ deletes characters from the cursor (including any character under the cursor) to the right end of the line.

Deleting Characters

Use ${}^{\wedge}\mathbf{G}$ to delete the character at the cursor's position. Characters to the right of the cursor shift one position to the left each time ${}^{\wedge}\mathbf{G}$ is pressed. If you press the keys repeatedly, ${}^{\wedge}\mathbf{G}$ continues to delete characters until the end of the line is reached. At the end of a line, ${}^{\wedge}\mathbf{G}$ deletes the carriage return, if any, and then pulls up text from the following line and continues deleting characters.





As an example, take another look at the **brownwhite bull**. When you finish typing **brown**, the cursor stops over the second w. To change the animal into a **brown bull**, type ${}^{\wedge}G$ five times:

The brownwhite bull won a prize
The brownhite bull won a prize
The brownte bull won a prize
The brownte bull won a prize
The browne bull won a prize
The brown bull won a prize

If you accidentally hit $^{\wedge}G$ a sixth time, the animal becomes a **brownbull**. If insertion is on, press the space bar to convert him back to a **brown bull**. If insertion is off, pressing the space bar will turn him into a **brown ull**, with the cursor on the letter **u**. To rescue the poor animal, either set insertion on ($^{\wedge}V$) and type the letter **b**, or leave insertion off and retype the rest of the sentence.

The deletion key (labeled DEL) removes the character to the left of the cursor, shifting the cursor left by one position. Any characters to the right of the cursor also shift left.

If you press the DELete key repeatedly, you'll continue deleting characters and shifting the cursor to the left. When the beginning of the line is reached, the DELete key jumps to the right end of the line above and continues deleting characters, including the carriage return, if any. When it jumps up a line, characters to the right of the cursor jump up with it.

At the Opening Menu, you can use DELete, ^S, ^H, or BACKSPACE to delete the character to the left. When you're editing a file at the Main Menu, however, ^S, ^H, and BACKSPACE simply move the cursor to the left without deleting characters.

DEL



Deleting Words



Delete a word and any spaces that follow by pressing $^{\wedge}T$. If the cursor is within a word, use $^{\wedge}T$ to delete the characters from the cursor to the end of the word (but not the following spaces). When the cursor is between words, use $^{\wedge}T$ to delete spaces up to the next word.

If you want to delete a carriage return and any spaces that follow the last word in a line, position the cursor just past the last word, and press $^{\uparrow}$ T. Similarly, if you want to delete an overprint control ($^{\uparrow}$ P RETURN) set for a line, position the cursor just past the last word in the line and press $^{\uparrow}$ T.

Again, assume that you have just typed **brown**, resulting in the word **brownwhite**. With the cursor positioned on the second w, typing ^T three times gives you the following result:

The brownwhite bull won a prize The brown bull won a prize The brownbull won a prize The brown won a prize

HOW ^T LO-CATES A WORD

What is a "word"? To the program, a word is a string of characters that starts after a space or punctuation mark and ends with a space or punctuation mark, or both. The following punctuation marks are recognized between words, even if there's no space:

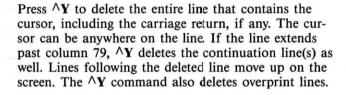
, : ; ! ?

In the following example, the initial letter of each new word is boldfaced:

When is a word not a word? Never, you say.

Note that spaces and punctuation are included in the identification of each word, as is the typing error which omitted a space between "is" and "a." To move one word at a time with $^{\wedge}A$ or $^{\wedge}F$, means to move from one boldfaced letter to the next. To delete a word with $^{\wedge}T$ means to delete all characters, starting with one in boldface and stopping at the next.

Deleting Lines of Text and Files



Press $^{\wedge}QY$ to delete all characters from the cursor to the right end of the line. $^{\wedge}QY$ does not delete a carriage return at the end of a line, nor does it delete an overprint line.

Press $^{\wedge}\mathbf{Q}$ and the DELete key to delete all characters left of the cursor back to the beginning of the line. The remainder of the line then shifts to the left margin.







The following chart compares the effects of $^{\wedge}Y$, $^{\wedge}OY$, and $^{\wedge}Q$ DEL:

The brown and white bull won a prize

The brown and white bull won a prize The brown and whill

The brown and white bull won a prize to bull won a prize



Enter $^{\wedge}QQ^{\wedge}Y$ to tell Portable WordStar to delete the line containing the cursor, update the screen, then repeat the command until you stop it.



Use $^{\wedge}$ **KY** to delete a marked portion (block) of text. \longrightarrow 4-9



When you are at the Portable WordStar Opening Menu, type Y to delete a whole file. (WordStar will also accept $^{\text{Y}}$ at this point.) When you're editing a file, use $^{\text{K}}$ J. \longrightarrow 9-8

RE-FORMING PARAGRAPHS



Place the cursor on the first line of a paragraph that needs re-forming and press $^{\land}\mathbf{B}$ to justify text to current right and left margins.

Here is an example of a re-formed paragraph:

This sample paragraph was typed first with narrow margins, then reformed with wide margins.

This sample paragraph was typed first with narrow margins, then reformed with wide margins.

Before

After

After re-forming a paragraph, you'll find the cursor at the end of the paragraph. The end is defined by a hard carriage return, the end of the file, or a line-feed character ($^{\text{PJ}}$). \longrightarrow 7-31

USES FOR ^B

Your use of $^{\land}B$ also involves current margin settings, line spacing ($^{\land}OS$), and the Portable WordStar toggle switch that controls justification ($^{\land}OJ$), all discussed in Chapter 6.

Thus, you use $^{\mathsf{A}}\mathbf{B}$ to perform the following:

- · Correcting and changing margins
- · Changing line spacing
- Eliminating or adding right justification within a paragraph

CORRECTING MARGINS CHANGED BY EDITING A common use for $^{\land}B$ is to re-form a paragraph that has become messy because of additions and deletions made in the course of editing. For example, inserting text near the beginning of a line pushes the remainder of the line to the right, often down to the next screen line. After editing the whole paragraph, move the cursor back to the beginning (or to the first messy line), and press $^{\land}B$ to re-form the paragraph.

EFFECTS OF CHANGING MARGINS

Always remember that you'll use **current** margin settings when re-forming a paragraph. If you enter text that requires frequent margin changes and then edit that text, check margin settings on the ruler line before using $^{\land}B$. Use $^{\land}OF$ to change margin settings quickly. \longrightarrow 6-10



If you want text (or dot commands) to appear in the margins, exercise care when using $^{\wedge}\mathbf{B}$. Avoid reforming marginal text into the body of your document. Be especially careful if you speed up re-forming with $^{\wedge}\mathbf{QQ}^{\wedge}\mathbf{B}$. Also consider the capabilities of your printer; don't generate text lines wider than it can print.

^B, in conjunction with related commands and toggle switches, allows you to change margins, spacing, and



justification at any time, even in the middle of a paragraph. The ability to make these changes simplifies layout problems such as making space to insert a picture or diagram.

You can alter the margins to insert a diagram as you enter text, or you can wait to edit the text until you know the size of the artwork to be inserted.

CURSOR POSI-TIONING

In general, you can re-form an entire paragraph by positioning the cursor anywhere in the first line and entering $^{\mathsf{A}}\mathbf{B}$. When the left margin is not in column 1, however, re-forming won't affect text to the left of the cursor on the first line of a paragraph. Thus, paragraph numbers left of the margin are not always moved by $^{\mathsf{A}}\mathbf{B}$. If you want to pull the numbers into the paragraph, you must position the cursor at the paragraph number.

The following examples show the effect of three different cursor positions with ^B: (2) (3) In general, you can reformat an entire paragraph by positioning the cursor anywhere in the first line and entering ^B. Before ^B In general, you can reformat an entire paragraph by positioning the cursor anywhere in the first line and entering ^B.

(1)

After ^B (1)

you can reformat an entire paragraph In general, by postioning the cursor anywhere in the first line and entering AB.

After ^B (2)

In general, you can reformat an entire paragraph by positioning the cursor anywhere in the first line and entering $^{\Lambda}B$.

After ^B (3)

When you move the left margin to the left and reform indented text, Portable WordStar will remove the soft spaces used to form the indentation. Otherwise, the re-formed paragraph would contain large gaps where the spaces fell between words.



Pressing ^{QQ}B tells WordStar to re-form the current paragraph and to continue forward through the file, re-forming each paragraph to the current margin settings. The process will continue until you press a key or until the end of the file is reached.



You can control the speed of the $^{\wedge}\mathbf{QQ}^{\wedge}\mathbf{B}$ operation by following the command with a number, 1-9, with 1 the fastest and 9 the slowest.

ENTERING HARD CARRIAGE RETURNS

There are two ways to insert a hard carriage return into your text: press RETURN or $^{\wedge}N$.



Use RETURN whenever you want a fixed line break—for a new line at the end of a paragraph, a space between lines in a table, or the spaces after headings and titles. When you need a new line while entering text within a paragraph, don't use RETURN; let word wrap do the work.

When you press RETURN, the cursor moves to the beginning of the next line. The result of pressing RETURN, however, also depends on whether the insertion toggle switch ($^{\wedge}$ V) is on or off.

RETURN WITH INSERTION ON

If you press RETURN with insertion on, you insert blank space—a whole line if the cursor is at the beginning of the line, a partial one if the cursor is midline. The hard carriage return appears on the line wherever the cursor is positioned before you press RETURN, and any text following the cursor moves along with it.

Here is an illustration:

When insertion is on, pressing RETURN here will move text, too.

Before

When insertion is on, pressing RETURN here will move text, too.

After

RETURN WITH INSERTION OFF

When you press RETURN with insertion off, you move the cursor to the beginning of the next line without inserting a blank space, leaving text as-is and moving only the cursor to the next line. However, pressing RETURN with insertion off changes the carriage returns from soft to hard, making it impossible to reform the paragraph.

If you set the line spacing greater than 1, pressing RETURN will insert multiple hard carriage returns. Line spacing is set with $^{\wedge}$ OS. \longrightarrow 6-4



When you use $^{\Lambda}N$, you always insert one carriage return, leaving the cursor exactly where it is. Blank space is inserted the same way it is with RETURN, a whole line if the cursor is at the beginning of a line, a partial line if the cursor is mid-line.

There is one major difference between the effect of RETURN and of $^{\wedge}N$. $^{\wedge}N$ leaves the cursor where it is and moves text down, but RETURN moves the cursor as well as the text. $^{\wedge}N$ works the same way with insertion on or off.

Here is an illustration of $^{\land}N$:

When you see ^N, the cursor remains, the text moves.

Before

When you use ^N, the cursor remains, the text moves.

After

SUMMARY TABLE: CURSOR MOVEMENT		
COMMAND	FUNCTION	
^ D	Moves cursor right one character	
^ F	Moves cursor right one word	
^ Q D	Moves cursor to right end of current line	
^ s	Moves cursor left one character	
^н	Moves cursor left one character	
^ A	Moves cursor left one word	
^as	Moves cursor to beginning of current line	
^ E	Moves cursor up one line	
^ QE	Moves cursor up to top of screen	
^w	Leaves cursor in same position; new line appears at top of screen, and window on text moves up one line	
^ R	Leaves cursor in same position; previous screen reappears	
^QR	Moves cursor back to beginning of file	
^ x	Moves cursor down one line	
^ QX	Moves cursor down to bottom of screen	
^ z	Leaves cursor in same position; new line appears at bottom o screen, and window on text moves down one line	
^ c	Leaves cursor in same position; next screen appears	
^QC	Moves cursor forward to end of file	
^ 00 ^	Repeats any cursor movement or scrolling command continu- ously until stopped	

Arrow Keys				
	Alone	Shifted	With CTRL	
→	Cursor right character		Cursor right word	
+	Cursor left character		Cursor left word	
t	Cursor up line	Scroll up line	Scroll up screen	
+	Cursor down line	Scroll down line	Scroll down screen	

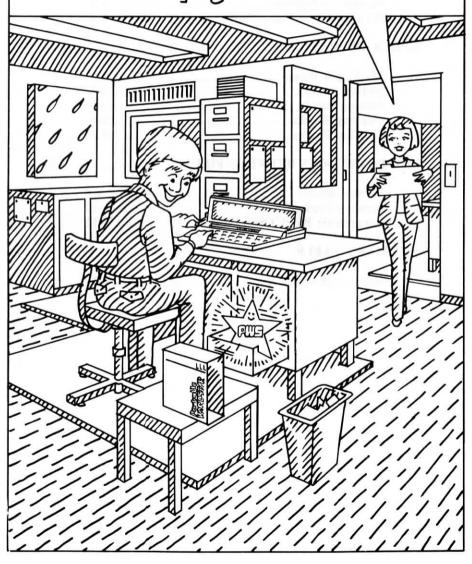
SUMMARY TABLE: ENTERING AND EDITING TEXT		
COMMAND	FUNCTION	
^ v	Turns insertion on/off	
^ G	Deletes character at cursor position	
DEL	Deletes character to left of cursor position	
^T	Deletes word from cursor position to the right	
^γ	Deletes entire line in which cursor is located	
^ QY	Deletes all characters from cursor position to the right end of the same line	
^Q DEL	Deletes a all characters from cursor position to the beginning of the same line	
^B	Re-forms paragraphs between current margins	
RETURN	Inserts a hard carriage return, leaving cursor at beginning of next line (insertion: on)	
^N	Inserts a hard carriage return, leaving cursor where it is	

CHAPTER 4. MARKING AND MOVING TEXT

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Please move chapter six to eight, delete chapter nine, renumber all of the pages and then...



4. Marking and Moving Text

While editing a document, you can insert many characters that are not part of the text and won't appear in your printed results. Among these characters are place markers, which speed up cursor movement within your text, and block markers, which help you move marked text to a new place in your file or to another file.

PLACE MARKERS

WHAT ARE PLACE MARKERS?

Place markers identify text at particular locations in your document. You can return to a marked place with a simple command. Although place markers stay in your file after a save-and-resume command (^KS), they will disappear after any other save command.

There are up to ten place markers available, numbered **0-9**, and you can use each number once in a file. You must set each marker in your file before you can use it. If you try to return to a marker that's not set, you'll see the following message:

To set place marker number 1 at your current cursor

* * * MARKER NOT SET * * * Press ESC Key

Press ESCape to return to editing.

position, enter the following command:

Setting the Markers



PRESS ^K1

through

SEE <1>



It is not actually part of your file, and you cannot move the cursor into the columns where it appears. Text moves to the right of the marker if you try to type over it.

To move the same marker to another portion of text, re-issue the command and the same number at the new location. The original location will cease to be marked.

HOW TO HIDE PLACE MARKERS

To remove a place marker from the screen, place the cursor in the first column to the right of the marker and press ${}^{\wedge}\mathbf{K}$, followed by the number. The marker will disappear from the screen, but it will be assigned to the same portion of text until you reassign it. The marker will reappear when you move to it from elsewhere in the text.

Returning to a Place Marker



To return to the place previously marked <1>, enter the following command:

through

PRESS ^Q1



The cursor will move to the first position following the marker.

You can move either forward or backward through a document. If, for example, you are editing concurrently several places in a file, mark each location and move from one to another by pressing $^{\wedge}\mathbf{Q}$ and the respective place number.



Remember that moving backward through long documents is slow and may cause drive-full errors.

BLOCK OPERATIONS

WordStar block commands enable you to perform various editing tasks automatically—moving a sentence, deleting a page, or copying a paragraph to another part of the document or to another file, for example.

WHAT IS A BLOCK?

A block is a portion of text ranging in length from one word to several pages. You can mark the beginning and end of a Portable WordStar block, then move, copy, or delete it, and write it to or read it from another file. You can mark only one block at a time, but you can change its size and content at any time before or after an operation upon it.

IS BLOCK SIZE LIMITED?

Block size is the total number of characters from the beginning to the end of the block, including spaces and carriage returns. The amount of text that can be moved or copied at one time varies with the size of your RAM disk—the smaller the RAM disk, the larger the maximum block size. If your block is too large, an error message will appear. Simply divide a large block into two or more smaller portions and move or copy them separately.

Marking a Block

HOW TO MARK BLOCKS

Marking a block is similar to setting a place marker. Keep the following points in mind:

- Only one beginning marker () and one end marker (<K>) can exist at a time.
- The block markers may be moved by simply resetting them, which also deletes them at the original location.
- The beginning and end markers can be set in either order, and they remain in effect until reset, whether used or not.

- Block operations require that the beginning marker precede the end marker in the text.
- You may enter other commands during or after marking a block.



Mark the beginning of the Block with ^KB. Move the cursor to the appropriate spot.

PRESS ^KB SEE

The symbol will not print as part of your document.



To move the cursor quickly to the beginning marker, press ^QB. The marker, if hidden by ^KH or ^KB (explained in this chapter), will reappear.



Mark the end of a block with $^{\land}KK$. The symbol < K > will appear on the screen to mark the spot.



To move the cursor quickly to the end marker, press ^QK. If the marker has been hidden, it will reappear.

WHERE SHOULD MARKERS BE PLACED?

If the last line of the block is a complete line, ending with a carriage return, place the end marker at the beginning of the next line to include the carriage return. Beginning and end markers may also be set in the middle of a line to extract a sentence or other phrase from the middle of a paragraph.

Hiding a Block



Use $^{\wedge}$ KH, the block Hiding command, to remove block markers from your display. If the block is already hidden, use $^{\wedge}$ KH to restore markers to the display. An alternative method is to place the cursor in the position following the marker and enter $^{\wedge}$ KB (to hide a beginning marker) or $^{\wedge}$ KK (to hide an end marker). The marker can be restored by entering $^{\wedge}$ KB or $^{\wedge}$ KH again.

You cannot perform a block operation while the marked block or one of the markers is hidden. You'll see the following message:

*** BEGINNING NOT MARKED (OR UNDISPLAYED) *** Press ESC Key

This interruption gives you a chance to protect your document against accidental block operations. Press ESCape. Then use ^KH or reset the beginning and end markers until both appear. Repeat your previous command.

Moving Blocks



Use ^KV to moVe all text in a marked block to the current cursor position. The remaining text will move up to fill the space left by the moved block.

The destination of your block may be anywhere in the text area—between paragraphs or in the middle of a line. Place the cursor wherever you want to move the block, and press ^KV.

Here is an example:

Before

After

HOW MANY CHARACTERS MOVE?

The beginning and end markers move with the block and remain in the display. After the move, use ^KH to hide the markers, both to remove the distraction from the screen, and to protect against block commands typed inadvertently. Place markers (0-9) in the marked block do not move with the block; they remain at the block's former place.



When Portable WordStar print control or dot commands are within a marked block of text, they move to the block's new location, too. If any of these commands are toggle switches, check both the block and the block's previous location for matching pairs.

With ^KV, characters move exactly as they are, without any reformatting. Use regular editing commands to make changes or corrections at the block's new location.

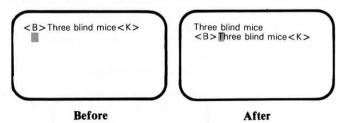


Use $^{\wedge}\mathbf{QV}$ to position the cursor back at the beginning marker's location preVious to moving, copying, or deleting a block. Then check to verify that the movement was what you intended, and use regular editing commands as necessary to reformat the original area.

Copying Blocks



Use ^KC to Copy a marked block at the cursor's location. The block will appear both at the cursor position and in its original position. You can copy the block successively by pressing ^KC several times.

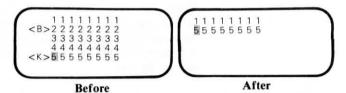


Deleting Blocks



Use ^KY to delete a marked block. The beginning and end markers will be hidden but set at the position where the deleted text was. The cursor rests in the first column to their right.

Look at this example:



CAUTION

To avoid accidental deletions, keep the markers hidden between block operations. You cannot stop ^KY once it has been initiated. Save or copy your document before using deletion commands.

You can divide a block into two or more smaller portions. Then, after reducing the number of lines in each block, you can repeat the operation until the original block is moved.

MOVING BLOCKS BETWEEN FILES

You can copy marked blocks from one file to another when you use the block writing (^KW) and file reading (^KR) commands.

Writing Blocks



Use ^KW to Write text from the file you're editing to another file. After marking the beginning and end of your block, follow this procedure:

PRESS ^KW

SEE

NAME OF FILE TO WRITE MARKED TEXT ON?

TYPE filename

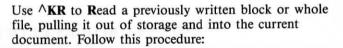


When the cursor returns to your previous place in the file, a copy of the block will be in the named file. You can thus save a portion of text as though it were a separate document without moving the cursor or altering the text.

If you name a file that already exists, Portable Word-Star will erase and replace (overwrite) all the text in the existing file with the text in the marked block.

To reduce chances of overwriting, use file extensions, such as .DOC for documents and .TMP for temporary files used only while moving text around within documents.

Reading Files



PRESS ^KR

SEE

NAME OF FILE TO READ?

TYPE filename



You'll see a copy of the named file appear at the cursor's present location. The original contents of the file you're editing will shift down to make room for the new text. The contents of the file you read are unchanged.







COMMON USES OF ^KW AND ^KR

When there are standard paragraphs or sections of text that you use frequently, write each into a small, separate file with ^KW or by normal text entry. Then, whenever necessary, use ^KR to copy a small file to the cursor position in the document you're currently editing.

NOTE: You can read files created with Portable Calc (the PX-8 spreadsheet program) into Portable Word-Star files, as long as the files are saved in a special way. See the Portable Calc manual for details.

Large-Scale Block Operations



When you move or copy a block a long distance within a file, the command may be executed very slowly. You run the risk of a drive-full error because so much file space is necessary to perform the operation. To avoid this problem, use the following method for transferring text a long distance within one file. This combination of block writing and file reading commands is also used to move and copy text when the source and destination are in separate files.

HOW TO MOVE BLOCKS BE-TWEEN FILES

STEP 1 Edit the first document.

STEP 2 Mark the desired block of text (^KB and ^KK).

STEP 3 Write the block (^KW) into a temporary file.

STEP 4 Exit from the first document.

STEP 5 Open the second document and put the cursor where you want the text.

STEP 6 PRESS ^KR

TYPE filename used in STEP 3.



Use $^{\wedge}$ **KJ** to conserve space by deleting any temporary file as soon as you finish using it. \longrightarrow 9-8

SUMMARY TABLE: BLOCK COMMANDS		
COMMAND	FUNCTION	
^K 0-9	Marks a place in the text with single digit	
^Q 0-9	Returns cursor to previously marked place	
^ KB	Marks the beginning of a block of text 	
^QB	Moves cursor to beginning block marker	
^ KK	Marks the end of a block of text <k></k>	
^ QK	Moves cursor to end block marker	
^ KH	Hides (or restores) block markers	
^ KV	Moves a marked block (including block markers) to cursor position	
^ QV	Moves cursor back to previous position (position of beginning marker in block operations, position at end of last command executed in find or find-and-replace commands)	
^кс	Copies a marked block (including block markers) to cursor position with no change in original text	
^ KY	Deletes a marked block from document	
^ KW	Writes a marked block to another file with no change in original text	
^ KR	Inserts (read) another file at cursor position in the file currently being edited	

CHAPTER 5. FINDING AND REPLACING TEXT

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The client is in Minneapolis not St. Paul! Please fix every reference in this report. Have it ready by four o'clock. Ps-s-s-s-t! That's easy

5. Finding and Replacing Text

You can locate, locate and change, or locate and delete any word or phrase (string of characters) in your text using the find and find-and-replace commands. Your find string can be as long as 30 letters, numbers, or symbols. Use options to the find commands and variable (wild-card) characters to help track down similar words or phrases.

FINDING WORDS AND PHRASES



Press ^QF to Find any word or phrase. The cursor will appear at the first character of the first occurrence of your string. Nothing will have changed except the cursor location and the portion of text displayed on the screen.

HOW TO FIND A PHRASE

To issue a find command without options, follow this simple procedure:

STEP 1 PRESS ^QF

SEE FIND?

STEP 2 TYPE your string (up to 30 characters)

STEP 3 PRESS ESC

When the cursor appears at the first occurrence of your string, you have three choices:

- To continue work at the cursor's present location
- To repeat the find command with ^L (explained in this chapter)
- To return to your previous location with ^QV (also in this chapter)



If there is a lot of text between the cursor and the first occurrence of your find string, be patient. The operation may take a few moments to finish.

Your find operation ends when you see this message:

* * * NOT FOUND: (your string) * * * Press ESC Key

The message indicates one of two conditions:

- There are no occurrences of your find string in the file.
- There are no further occurrences between the cursor position (when you began the operation) and the end of the file.

When you press ESCape, the cursor will appear at the end of your file.

FINDING AND REPLACING



Press ^QA (Find-And) to locate and change a word or phrase in your text. You can order this find-and-replace operation from anywhere in your document, and a combination of options can help you to replace a word or phrase throughout your entire file.

HOW TO REPLACE A PHRASE

To issue a find-and-replace command without options, follow this simple procedure:

STEP 1 PRESS ^QA

SEE FIND?

STEP 2 TYPE your present string (up to 30 characters)

SEE REPLACE WITH?

STEP 3 TYPE your new string (up to 30 characters)

PRESS ESC

The cursor will appear at the *next* occurrence of the find string, and a prompt in the upper right corner of the screen will ask you to approve the replacement.

NOTE: You must position the cursor at the beginning of your file in order to find the first occurrence of your find string.

You'll see a flashing cursor at the first character in your find string and another after **REPLACE** (Y/N) in the upper right corner of your screen. Portable WordStar will perform the replacement *only* if you type Y (for Yes).

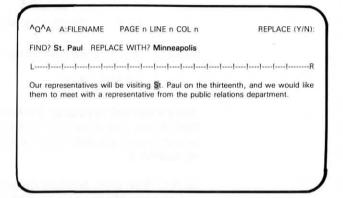
After your command is executed, you'll have three choices:

- To continue work at your present location
- To repeat the find-and-replace with ^L
- To return to your previous location with △QV

Here's an example:

If you type Y, St. Paul will be deleted, and Minneapolis will be inserted in its place automatically. If you type N, the cursor will move to the end of the string, awaiting your next command.

Here's an example:



HOW TO DELETE A PHRASE

If you simply want to delete your present string from the text, don't type the replacement string. If you type nothing, you'll produce a *null* string. Just press ESCape, and the operation will be underway.

Repeating the Last Command



Press ^L to repeat your Last find or find-and-replace operation. When you use ^QF or ^QA without certain options, the operation is performed only once, and the cursor is left at the first occurrence in the text. When you enter ^L, the cursor moves forward to the next occurrence of your string. You initiate the same search as before, with the same options.

You can use ^L to move through your files quickly and examine or change specific sections of text. When no further occurrences of your string can be located, you'll see this prompt:

* * * NOT FOUND: (your string) * * * Press ESC Key

Press ESCape and the cursor will appear at the end of your file.

Returning to Your Work Point



Press $^{\wedge}$ QV to return the cursor to your preVious place in the text. This spot is *not* the same as your cursor's *original* position except when only one occurrence of your string is found. If you're going to use $^{\wedge}$ L many times, mark your original position in the text with a place marker so that you can return there quickly. \longrightarrow 4-3

OPTIONS IN FIND COMMANDS

Six options help you to define the scope of your find or find-and-replace operation, each in a specific way. When you answer the question FIND?, you tell Portable WordStar to look for an *exact* string of characters. The search is normally conducted forward from the cursor position, once only, but the options give you considerably more flexibility.

You can choose none, one, several, or all of the options with most find or find-and-replace commands.

In the simple ^QF and ^QA procedures just covered, you avoided the options question before it was asked by pressing ESCape. If you use RETURN, rather than ESCape, you'll see the options prompt.

TYPE your string (up to 30 characters)



SEE OPTIONS? (? FOR INFO)

VIEW YOUR OPTIONS To view the options, respond with a question mark (?) and press RETURN. You'll see the following display:

number, B = Backwards, W = whole words, U = any case, N = No ask, G = Global

If you now decide against using options, simply press either ESCape or RETURN. If you do want options, type the letter or number for each at this point. You can enter upper or lowercase letters with or without spaces between them; it doesn't matter. Then press RETURN, and the operation with options will begin.

Here are the specific descriptions of each option.

Finding n Occurrences



The number option works differently with $^{\wedge}\mathbf{QF}$ and $^{\wedge}\mathbf{QA}$.

NUMBER OPTION WITH ^QA

With ^QA, enter any whole number as an option, and the find-and-replace operation will locate that number of occurrences of your string. This option is useful, whether you want to locate the next ten ocurrences of a particular word or you want to search the rest of the file without having to press ^L after each occurrence.

Use a number greater than the number of words in your file (99999, for instance) to insure that ^QA will find all occurrences of your string between the cursor location and the end of the file. When the not-found message tells you that you've reached the end, press ESCape.

NUMBER OPTION WITH ^QF

With ^QF, enter any whole number as an option, and the find-only operation will locate that occurrence of your string. For example, if the string is St. Paul and you enter 10 as an option, the cursor will appear at the tenth occurrence of St. Paul.

Searching Backward



Use **B** (Backward) to reverse the usual order of the ^QF or ^QA operation. The search will start at any cursor location and proceed ("backward") toward the beginning of your file.

If the cursor is almost at the end of your file, for example, and you want to find or find-and-replace an item just a few paragraphs or pages back, you can save time by choosing option **B**.

Searching backward through a long file may produce drive-full problems if your file is very long. To search the whole file, first use $^{\wedge}$ KS to return the cursor to the beginning of your file. $\longrightarrow 9-3$

Whole Words Only

Use W to look for Whole words only. Similar but different words or phrases are left alone. For example, St. Paulette contains the character string St. Paul, and a standard search will locate this phrase, unless you specify whole words only by choosing option W.

If St. Paul lies at the very beginning of your file, the string won't have a space in front of it; under option W, Portable WordStar won't consider it the string you want to locate. Always check the first word of a file when you choose W.

Upper or Lowercase

Use U to change your instructions to read, "The difference between Upper and lowercase doesn't matter this time." You'll see all occurrences of the string, regardless of which letters are capitalized.

No Approval Needed

Use N (No ask) to replace occurrences of your string automatically. In a find-and-replace operation (^QA) without options, you must approve each replacement of your present string. If you know that you want to replace each and every occurrence of your string, choose option N. Portable WordStar will perform the replacement automatically, no questions asked.

Option N has no effect on ^QF.











Global Replacement



Use G (Global) to search your entire file, from beginning to end. The cursor doesn't have to be at the beginning of the file; it returns automatically to start the hunt. You will see the approval prompt before each replacement:

REPLACE (Y/N): ■

Answer Y or N. After executing your instructions, the cursor moves to the next occurrence of your string automatically; you needn't use $^{\text{L}}$.

As with all ongoing operations, you can halt a global find or find-and-replace operation with $^{\wedge}U$ (interrupt). The cursor will stop wherever it is in your file when you interrupt. \longrightarrow 1-14

There are two variations on the global theme:

- When you choose the global option (G) in conjunction with the backward option (B), a ^QA command sends the cursor to the end of the file and searches from there to the beginning.
- 2. If you use the global option (G) in conjunction with the no-approval option (N), Portable Word-Star will go to the first character in your file and change each and every occurrence of the string in your file, moving on to the next without seeking your approval.

FAST GLOBAL OPERATIONS

You can speed through global operations if you don't care to watch every replacement take place. During a global search and replacement, Portable WordStar spends most of the time showing you the changes being made.

To suppress the ongoing display, press any non-printing key (like ^X or ESCape). The global operation will be completed at top speed. Why should you press a non-printing key? Because any printable character you type will be added to the end of your document.

VARYING CHARACTERS IN FIND STRINGS

You can introduce certain special cases for variations on your string by using "wild-card" characters with ^QA and ^QF. Use them as substitute characters when you answer the prompt, FIND?.

Any Character



Enter $^{\Lambda}$ (Any) into your string by pressing $^{\Lambda}$ P $^{\Lambda}$ A. Your find operation will locate strings with any single character in place of the wild card. For example, the find string R $^{\Lambda}$ AM will locate RAM, ROM, RUM, R.M, R2M, R@M, etc.

Any Symbol



Enter ^S (Symbol) into your string by pressing ^P^S. Your find operation will locate strings with any character not a letter or a digit in place of the wild card. R^SM will locate R&M, R@M, R#M, R\$M, R%M, R*M, etc.

Other Than



Enter an exception into your find string by pressing $^{\wedge}O$ and then the character you want ignored (x). You'll brand that character as Off-limits. For example, defining a string $R^{\wedge}O=M$ will find every variation of R_M except R=M.

Carriage Return and Line Feed



Enter N into your find string by pressing N . You'll include a carriage return and line feed in your string. For example, you can answer FIND? with $St.(\text{space})^{N}Paul$ to locate these two words whenever the end of a line separates them.



The wild-card characters $^{\Lambda}P^{\Lambda}A$, $^{\Lambda}P^{\Lambda}S$, and $^{\Lambda}N$ should not be confused with the print control characters in Chapter 7. $^{\Lambda}PA$, $^{\Lambda}PS$, and $^{\Lambda}PN$ cannot be entered into a find string. The characters look similar on the screen, but are *not* interchangeable in practice.

SPACES AND RETURNS IN STRINGS

When you enter a character string in response to the question, FIND?, you must be precise because Portable WordStar will search for exactly what you type next. For instance, if you type St. Paul and then order a search without options, Portable WordStar will examine each and every character—in order—from the cursor location toward the end of the file until it finds the first St. Paul with a single space between the two words.

If word wrap or justification have inserted soft spaces or soft carriage returns between the two words in order to make a line come out even, the phrase is no longer St. (single space and no carriage return or line feed)Paul, and will therefore be ignored. You didn't say you wanted to find St.(space space)Paul or St.(space and carriage return and line feed)Paul.



Character strings are taken literally.

How do you replace all instances of St. Paul, regardless of soft spaces or soft carriage returns? Search for St.(space) only, since this word isn't likely to show up elsewhere. Have WordStar replace St.(space) with Minneapolis. Search again (backward, if you like) for Paul and replace this word with a null string. When the correction is completed, use $^{\wedge}QQ^{\wedge}B$ to tidy up the text. \longrightarrow 3-20

APPLICATION: INSERTING A PHRASE AUTOMATICALLY

If you intend to use a particular word or phrase often in a document—bilateral conundrum, for example—you can use ^QA to make your work easier. Move the cursor to the point in your text where you want to insert your phrase, and follow this procedure:

STEP 1 PRESS ^QA

STEP 2 SEE FIND?

PRESS

Pressing RETURN enters a null string, which effectively says, "Find the cursor's present location."

SEE REPLACE WITH?

STEP 3 TYPE bilateral conundrum RETURN

SEE OPTIONS? (? FOR INFO)

STEP 4 TYPE N (No ask) RETURN

REPEAT THE PROCEDURE

The phrase bilateral conundrum will appear in your text at the cursor location. Wherever and whenever in the text you want the phrase to appear again, press $\wedge L$.

Each time, Portable WordStar will insert the phrase at the cursor location. If you write highly technical or legal documents or science fiction, you'll find this trick a time-saver.

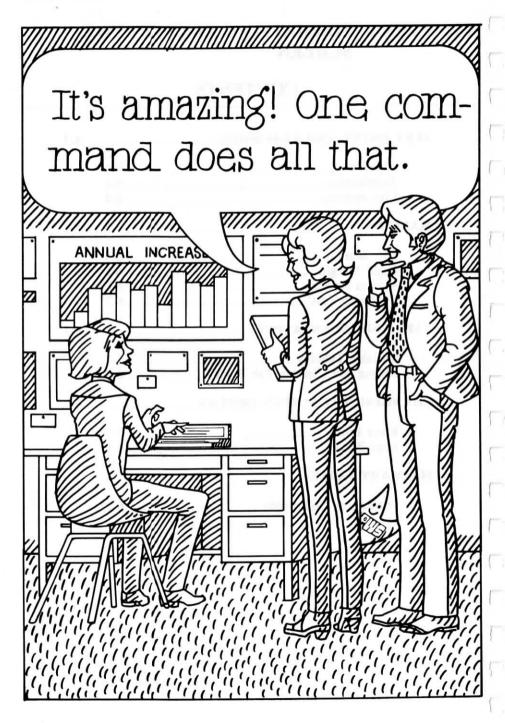
SUMMARY TABLE: FIND, FIND-AND-REPLACE COMMANDS AND OPTIONS

COMMAND	FUNCTION	
^QF	Finds a string of specified characters	
^QA	Finds one string and replaces it with another	
^L	Repeats the last find or find-and-replace command	
^ QV	Returns cursor to position prior to execution of last command	
	Options:	
?	List options	
n	Finds nth occurrence of string	
В	Searches backward	
W	Finds whole words only	
U	Ignores difference between upper and lowercase	
N	Replaces string with no approval	
G	Searches entire file	
	Variable characters:	
^ P ^ A	Substitutes any character	
^P^S	Substitutes any symbol not a character or number	
^Ox	Substitutes any character other than x	
^N	Includes a carriage return and line feed	

CHAPTER 6. FORMATTING TEXT ON THE SCREEN

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6. Formatting Text on the Screen

You can arrange the text on your electronic page as easily as you enter and correct it. The Onscreen formatting commands (^O_) presented in this chapter enable you to change margins or justification, for example, even after typing your document. You can also modify displays on the screen, such as the ruler line, with onscreen toggle switches.

Each time you use $^{\circ}$ O to turn a toggle switch on or off, the Onscreen Menu reflects the change. You will see "now ON" after the description of a command when the toggle switch is on, and "now OFF" when it is off.

TEXT ENTRY AND RE-FORMING

Various features that work as you enter lines of text include word wrap, justification, and line spacing.

Word Wrap



Use **\^OW** to turn Word wrap on or off. (Default: on.) Word wrap is an aid to normal text entry, but you may want to turn it off, for instance, when you type tables. When word wrap is off, you must enter a hard carriage return at the end of each line you type.

Turning word wrap off also activates tab stops set outside the current margins. This feature may be useful, for instance, when you number paragraphs.

Justification



Use $^{\wedge}$ OJ to turn Justification on or off. (Default: on.) This feature is frequently turned off to type letters. If you type a paragraph with justification on and then turn it off and re-form the paragraph ($^{\wedge}$ B), you'll see the soft spaces eliminated and the right margin become uneven.

Line Spacing



Use ^OS to specify spacing between lines. For normal text entry and re-forming, the default is single spacing. When you give the command, you'll see the following prompt:

LINE SPACING (1-9):

Type a number to change the spacing before or after you enter text. Press the SPACE bar to leave the spacing as previously specified. Portable WordStar displays $\mathbf{LnSp}\ n$ at the right end of the status line. Word wrap and paragraph re-forming will conform to the line spacing you enter.

^OS also affects hard carriage returns. For example, when the command ^OS 5 is in effect, each RETURN you enter will result in five hard carriage returns.

MARGINS

The border you leave to the left and the right of your text can be changed at any time. You can reset the margins and then re-form paragraphs or center text between those margins. Word wrap will use the new margins to format text as you enter it. You can also release the margins and place text outside the current margins.

Left Margin

or PF1

Use $\wedge OL$ to set a new Left margin. You will see this prompt:

LEFT MARGIN COLUMN (ESC for cursor col)?

Enter a number, or press ESCape to set the margin to the current cursor position, shown in the **COL** entry of the status line. The left margin can be set at any column, 1-240. Portable WordStar begins with the left margin set at column 1.

The PF1 function key can be used to set the left margin at the cursor column. In other words, pressing PF1 is the same as pressing OL ESC.

If you set the left margin to a column number higher than 1, you'll create a wide border to the left of the paragraph. As you edit on the screen, your cursor will still move to column 1 after a carriage return or when you use $^{\wedge}\mathbf{E}$ or $^{\wedge}\mathbf{X}$ to cross a line containing only a hard carriage return. As soon as you type any character other than a period, though, the cursor will jump to the specified left margin and resume normal text entry.

If the first character you type is a period, the cursor moves to the right, one space at a time, so that you can enter a dot command. \longrightarrow 7-5

Right Margin



Use ^OR to set the Right margin. You will see this prompt:

RIGHT MARGIN COLUMN (ESC for cursor col)?

Enter a number, or press ESCape to set the margin at the current cursor column position. You can also use **PF5** to set the margin to the cursor column. The right margin is initially set at column 65 (to produce printed text 6-1/2 inches wide), but you can set it at any number up to 240.

If you set the right margin higher than column 79, the ruler line will take up an extra line (or more) on the screen and display a plus sign (+) in the flag column. A line of text that extends past column 79 will wrap to one or more "continuation line(s)" and will also display a "+" flag. When the cursor is in a continuation line, the status line reflects the column of the printed page.

LIMITS ON MAR-GIN SETTINGS

Since most Epson printers cannot print a line with more than 80 pica size characters, you should stay within this limit for printed results. If you use another print size, the maximum line length will be different. \longrightarrow 7-18

Margin Release



Use ^OX to release current margins. The left margin is reset at column 1, the right margin is released, and word wrap is turned off. Margin release remains in effect until you turn it off by entering another ^OX or by moving the cursor within the margins from a position outside. When margin release is in effect, you'll see MarRel in the status line.

^OX activates any tab stops that lie outside the currently set margins. The ruler line displays! characters without hyphens to indicate tab stops outside the margins, as in the following illustration:



Centering Text



Use $^{\wedge}\mathbf{OC}$ to Center text between currently set margins on the line containing the cursor. After you type the text to be centered, position the cursor anywhere in the same line, and enter $^{\wedge}\mathbf{OC}$. You'll see the words move to the center of the line. Spaces entered before or after the text will be ignored.

Type this:

Center This Heading

Press ^OC and see this:

Center This Heading

TABS AND INDENTATION

You may want to indent paragraphs or align columns within the borders of your text. You can use various tabbing commands to arrange your text on the screen.

Variable Tabbing



Use $^{\wedge}$ OV if you want to turn off Variable tabbing. (Default: on.) Variable tabbing is standard for most text entry and formatting; the alternative is fixed tabbing, which is the default in non-document mode. $\longrightarrow 10-8$

Variable tabbing means that you can set tab stops any place you want. These tab stops always appear in the ruler line. If you turn variable tabbing off, the ruler line continues to show variable tab settings even though they're not operative, *not* fixed tabs.

Setting and Clearing Tab Stops



Use ^OI to set a tab, just as you would to Indent a line on a typewriter. You'll see the following prompt:

SET TAB AT COLUMN (ESC for cursor col)?

Enter a number, 1-240, to indicate the column where a tab is to be set. Otherwise, press ESCape to set a tab at the cursor's current column, as indicated by the COL display of the status line.

You'll see an exclamation point (!) appear in the ruler line at the column you specify.



Use $^{\wedge}$ **ON** to clear a tab stop. You'll see the following prompt:

CLEAR TAB AT COLUMN (ESC for cursor col; A for all)?

Enter a number, 1-240, to indicate the column where a tab is to be cleared. Otherwise, press ESCape to clear a tab at the cursor's current column, as indicated by the COL display in the status line.

The character! in the ruler line shows where tabs have been set. If you want to clear a tab but aren't certain what column it's in, move the cursor to the column—using the tab key, if you like—and then press ^ON and press ESCape.



Enter the letter A, rather than a column number, to clear All tabs with one command.



Use $^{\mathsf{I}}$ to skip the cursor to the next tab stop. You can use tab stops only by pressing $^{\mathsf{I}}$ or the tab key.

With insertion on, tabbing adds a space character in every column the cursor passes over, pushing remaining text on the line to the right. With insertion off, tabbing moves the cursor to the next tab stop without affecting existing text.

Here is an example:

INSERTION ON:

L	
The text moves	with the cursor.

INSERTION OFF:

			1		
he curso	r moves over the	e text withou	It changing the	text.	

With $^{\Lambda}I$, you skip only to tab stops within current margins, except when word wrap is off ($^{\Lambda}OW$) or the margins are released ($^{\Lambda}OX$). With margins released, you can use $^{\Lambda}I$ to skip to every tab stop that is set.

If skipping to the next tab stop takes the cursor past the last character of the document, pressing $^{\Lambda}I$ will extend the document with enough spaces to allow it to reach the next stop. If the next tab stop is not on the current line, pressing $^{\Lambda}I$ will generate a carriage return. As long as you press $^{\Lambda}I$, you'll continue to extend the document with spaces and carriage returns, even with insertion off.

CHANGING THE SCREEN DISPLAY

Some Portable WordStar features help you to gauge how your work will fit on the printed page. These options, the ruler line, and the page break display, can be turned on or off.

Ruler Lines

You can use a line from the text area as the model for a new ruler line. The following text lines are all valid for setting a new ruler line:

- 1. Mary had a little lamb! Its fleece was
- 2. ××××××!×××!×××!×××

The first line sets the margins and one tab stop. The second sets the margins and three tab stops. The last line sets the same margins and tab stops as the second, but the hyphens also clear any other tab stops that may be set. When you need specific tab stops as you enter text, you'll avoid confusion by using a format similar to the third line for your ruler line.

The standard ruler line (default) sets the left margin at column 1, the right margin at column 65, and tab stops at every fifth column (columns 6, 11, 16, 21, and so on through column 56). While editing, you can alter the ruler line by changing margins (^OL and ^OR) and tabs (^OI and ^ON).



Use ^OF to change ruler lines quickly by setting the ruler line equal to another line in your text file. Follow this procedure:

STEP 1 Position the cursor anywhere in the desired text line.

STEP 2 PRESS ^OF

STEP 3 SEE the ruler line change to the same margins as in the text line.

If the line happens to contain the character !, ^OF will set tabs at the corresponding columns.

In a text line, a hard hyphen is the only other character that is significant in the ^OF command. Each hyphen represents a text column without a tab stop. Thus a hyphen in the text line clears a tab stop in the corresponding column of the ruler line.

HOW TO PRE-VENT RULER LINES FROM PRINTING One way to prevent the printing of a ruler line typed into your text is to connect it to a non-printing comment line. Before typing your ruler line, position the cursor in column 1 of a blank line; then follow this procedure:

TYPE .

PRESS ^P RETURN (to overprint the next line)

SEE hyphen (-) in the flag column and cursor in the second blank line

TYPE your ruler line RETURN

Another way to store a ruler line is to keep it in a separate file. When you want to change margins and tabs, use $^{\wedge}$ KR to read in the file containing the ruler. Then use $^{\wedge}$ OF to change the ruler line, and delete the line in your text. \longrightarrow 4-10



Use $^{\wedge}$ OT to turn the ruler line display on and off. (Default: on.)

Page Breaks



Use ^OP to turn the display of Page breaks on and off. (Default: on.) When on, this toggle switch inserts a line of hyphens, followed by the letter P in the flag column, to indicate when page breaks will occur in the printed text. Here is an illustration:



This toggle switch also changes the status line display. When it's on, the status line shows **PAGE** and **LINE** numbers. When it's off, the status line shows the total number of File Characters (FC=nnnn) and File Lines (FL=nnnn) up to the current cursor position.

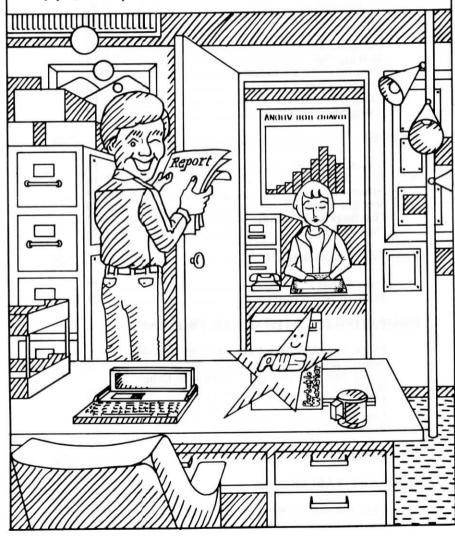
SUMMARY TABLE: FORMATTING COMMANDS		
COMMAND	FUNCTION Turns word wrap on/off (default: on)	
^ow		
^OJ	Turns justification on/off (default: on)	
^os	Sets spacing between lines	
^OL	Sets left margin	
^OR	Sets right margin	
^ox	Releases margins	
^oc	Centers text on line in which cursor is located	
^ ov	Turns variable tabbing on/off (default: on)	
^01	Sets tab stops	
^ON	Clears tab stops	
^1	Skips cursor to next tab stop	
^OF	Copies format of a text line into ruler line	
^ OT	Turns display of ruler line on/off (default: on)	
^OP	Turns display of page breaks on/off (default: on)	

CHAPTER 7. DESIGNING THE PRINTED PAGE

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What a beautiful page design! Thanks Portable WordStar!



7. Designing the Printed Page

As you work inside a Portable WordStar file, you prepare text for the printed result. With print controls and dot commands, you give instructions about the appearance of your document.

Portable WordStar is designed for printing with the FX-80, RX-80, and certain other Epson printers. (Contact your dealer to find out which ones.) If you plan to use standard WordStar to print your files, check the summary chart at the end of this chapter for details on some of the print control commands. You should also see Appendix A ("Printing Portable WordStar Files with Standard WordStar").

PRINT CONTROLS AND DOT COMMANDS

WHAT IS A PRINT CONTROL?

A print control is a command entered into a Portable WordStar file by holding down the control key as you type **P** and then another letter. You won't see the **P** on the screen, but you will see the control symbol (^) and the letter. On the printed page, you'll see only the results of the executed command, such as boldfacing or underlining.



HOW TO ENTER PRINT CONTROL COMMANDS

Follow these steps to enter a print control into a file. (^PB is the boldfacing command described later in the chapter.)

STEP 1 PRESS ^P

STEP 2 TYPE B

SEE ^B

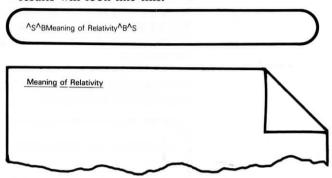
In the previous example, $^{\land}\mathbf{B}$ does not print but tells the printer to begin boldfacing at that location and continue until another $^{\land}\mathbf{B}$ is encountered.



Consider the following points when using print controls:

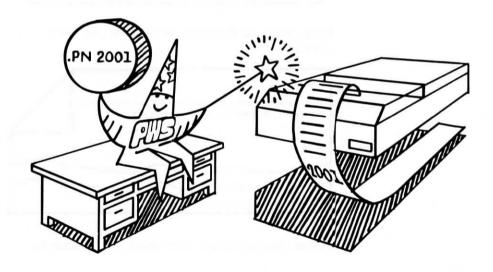
- Many print controls are toggle switches. When you enter the print control for underlining (^PS), for example, you turn that switch on. You must enter ^PS again to turn the switch off at the appropriate place, or Portable WordStar will underline every character you enter. ______ 7-8
- A print control forces lines of text to extend past the margin. This extension is only a temporary onscreen distortion; print controls occupy space on the screen but not on paper.
- If you re-form a paragraph which contains print control characters, the characters will stay with the words they precede and follow.
- You can use print controls anywhere in a file, line, or word.
- You can delete print control characters just as you delete ordinary characters.

 You can combine several print control characters to create several special effects. If you enter both boldface and underline commands, for example, the results will look like this:



WHAT IS A DOT COMMAND?

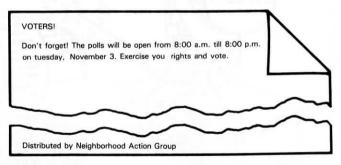
A dot command is a print command which is entered into a Portable WordStar file by typing a period ("dot") in the first column, followed by two characters in upper or lowercase. This two-letter code, which the program recognizes, can be followed by more characters—often whole numbers or words.



Sometimes, as in the dot command for a page break, there is no text after the command. When there is text, it varies from command to command. Words could indicate whether a toggle switch is on or off or could provide text for headings and footings. A number (n) might specify the length of your page or the column in which you want a page number to appear, for example.

The following example shows the placement of dot commands in a document.

Here's what the document would look like when printed:



Follow these guidelines when using dot commands:

Always begin a dot command in the first column.
 Then type the required two-letter code followed by an optional space.



- End the line which precedes a dot command with a hard carriage return (unless the command is on line
 1) to avoid moving the command out of column 1 when re-forming.
- Always follow a dot command with a hard carriage return.
- Use dot commands as needed in a document. Once entered, a dot command stays in effect on every page you print unless you turn it off or return to the default.

HOW TO ENTER DOT COMMANDS

To enter a dot command, keep in mind the following points:

• Even if the left margin is set at a column other than the first, when the first character typed in a line is a dot, it will appear in the first column, allowing you to enter your dot command. (If you later re-form the document with ^QQ^B, however, the dot commands will move to the new margin.)

For example, if your left margin is set at 5 and you begin a new line by typing a period, the period will appear in column 1.

- The placement of some dot commands is both logical and strategic. For example, the command for a new page is placed in the exact spot in the text where you want one page to end and another to begin.

 Dot commands take up space on the screen but not on your printed page. Notice that the status line displays the same number for a dot command line as the line below. The column number, however, is accurate.

NOTE: Don't be alarmed to see "a" instead of "an" in front of dot commands beginning with vowels—

OP, for example. Simply read such a command as "a dot O P command."



Sometimes a period within your text falls in column 1. This may happen when you use ellipses or decimals. The line will be read as a dot command and will not print out, unless you displace the period from column 1 by preceding it with two print controls which are toggle switches (such as ^PB ^PB). The print controls will cancel each other out and will not affect the printed page, and the period will print in column 1.

SPECIAL EFFECTS

The special effects that enhance your printed page are often created by print controls which are toggle switches and must be used in pairs. If you use a single print control to turn on a special effect and fail to use another to turn it off, you'll accidentally "enhance" the rest of your document.

You can use any number of special effects in sequence.



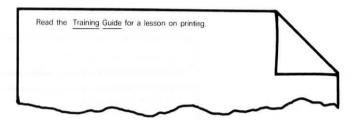
OT PF3

Underscoring

Use **PS** or the function key **PF3** before and after any letters, words, or phrases that you want underlined (underScored). **PS** does not underline blank spaces.

Here is an example:





To produce continuous underlining of both characters and spaces, use one of the following methods:

First method:

STEP 1 PRESS **PS** (at beginning and end of section to be underlined)

STEP 2 TYPE underline (in spaces between words)

Although on the screen you see only the underlining you entered, the entire section will be underlined when you print.

Second method:

STEP 1 PRESS \(^{\mathbb{P}}\) \(\text{RETURN}\) (at end of line to be underlined)

STEP 2 TYPE underline (continuously across the entire line)

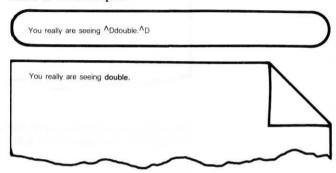
Portable WordStar will print this line under the previous line when you print your document. (Other uses of P RETURN are described later in this chapter.) \longrightarrow 7-13

Double Striking



Use ^PD to produce Double striking, a light boldface for emphasizing words or phrases. The printer will strike over the characters twice. Enter ^PD before and after the words you want to emphasize.

Here is an example:

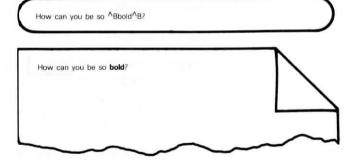


Boldfacing



Enter ^PB before and after the words you want to emphasize with Boldfaced print. The printer will strike over the characters three times.

Here is an example:





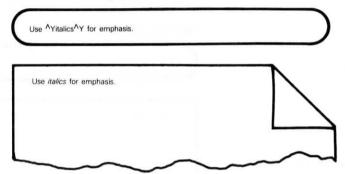


^PB is a toggle switch. Don't forget to turn boldfacing off, or your whole document will be outrageously bold.

Using Italics

Use **PY** before and after the words you want printed in italics. Of course, your printer must be capable of italic print to use this command.

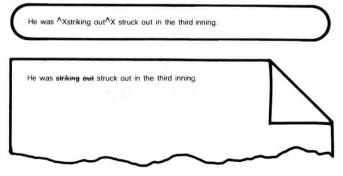
Here is an example:



Striking Out

Use ^PX before and after characters to be crossed out with hyphens but still readable. ^PX is useful for making corrections visible. Revisions of legal documents, for example, often include deleted text with a line through it.

Here is an example:





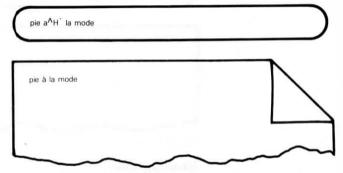
NOTE: ^PX prints hyphens over characters but not blank spaces.

Printing Over a Character



Use **^PH** to instruct the printer to backspace and print a character where one already exists. Insert the command immediately after the character to be printed over. You can use this feature to put an accent mark over a letter or to create a special symbol that does not exist on your keyboard.

See this example:



If you enter a series of ^PH commands several characters will land on top of an existing character.

Look at this example:

TYPE H
PRESS ^PH
SEE H^H
TYPE I
PRESS ^PH

SEE H^HI^H

TYPE N

PRESS ^PH

SEE H^HI^HN^H

TYPE Z

SEE H^HI^HN^HZ

In the previous example, the letters H, I, N, and Z produce this symbol on paper:

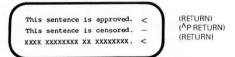
Printing Over a Line

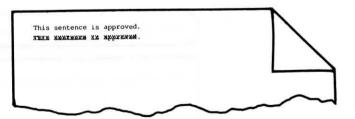


Use $\wedge P$ RETURN to make a line of text print on top of the preceding line. This command forces the printer to print one line over the preceding line. Use $\wedge P$ RETURN at the end of the line you want to print over and repeat the command to overprint more than one line.

When you use ^P RETURN you will see a hyphen (-) in the flag column on the right side of your screen.

Here is an example:





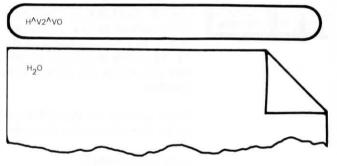
When you assign one line to overprint another, the two lines are, in a sense, connected. To delete one line without deleting the other requires that you delete the ^P RETURN (a hyphen in the flag column). Position the cursor in the last column of the first line; then press ^T. You'll see the hyphen disappear and the second line move up. Use ^Q DEL to delete the "first" line (on the left) or ^QY to delete the "second" line (on the right).

Using Subscripts



Use **^PV** to print subscripts for scientific notation and mathematical equations. Characters between **^PV** commands will be printed one-half line below the given line of text.

Here is an example:

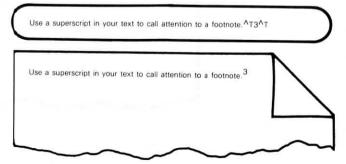


Using Superscripts



Use ^PT before and after the characters which you want printed one-half line above a given line of text. Superscripts are useful for footnotes and mathematical equations.

Here is an example:

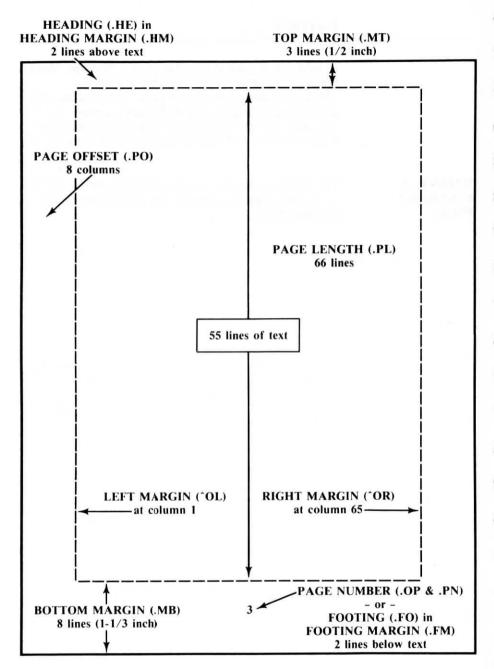


LAYOUT

In addition to special printing effects, Portable Word-Star provides many other features to help you produce an attractive printed page. The program will automatically arrange text and space on paper for you. But you can also design your own layout by issuing commands to change certain layout features.

WHAT IS A STANDARD PAGE?

The following are the program defaults for an $8-1/2 \times 11$ inch page, as shown in the illustration of the standard page.



STANDARD PAGE (With Commands for Changing Layout)

If you want to change this layout, use the commands described in the sections which follow. Often you'll see only the command and not the change on screen, but when you begin to print, presto! Everything will fall into place.

Most layout commands are dot commands.

Character Pitch

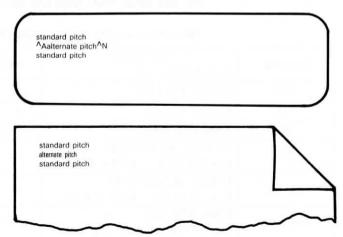


Use ^PA to tell Portable WordStar to select an Alternate character pitch. Portable WordStar requires a corresponding command, ^PN, to return to the standard pitch. The alternate pitch will be elite type (12 characters per inch). The characters will not only be closer together, they will also be thinner.



Use ^PN at the place in your text where you want to return to Normal character pitch. The standard pitch will be pica type (10 characters per inch).

In the following example, ^PA and ^PN are used to alternate between pica and elite type. Notice that spaces and the right margin following these commands would also expand or shrink with the indicated pitch. To change pitch within a document, you must reset the right margin to compensate.







Use ^PQ to tell Portable WordStar you want compressed print. When you use compressed mode, the characters will be even closer together (17.16 characters per inch) than in elite pitch. WordStar requires a corresponding command, ^PW, to return to normal print mode.



Use ^PE at the place in your text where you want enlarged print to begin, and use ^PR to return to normal print mode. Enlarged mode gives you stretched out letters with more space between them (5 characters per inch).

The preceding pitches for compressed and enlarged print modes apply when standard character pitch is in effect. If you select alternate pitch (^PA) in combination with enlarged mode (^PE), you will get another type size, enlarged elite, with a pitch of 6 characters per inch.

Setting compressed mode while in alternate pitch does not work, however. Standard pitch must be in effect to use $^{\wedge}PQ$.

Finally, you can combine enlarged and condensed print to get still another type size, enlarged condensed, and pitch, 8.58 characters per inch.

Here are examples of the various type sizes:

Command	Print sample ← 1 inch →	Pitch	Maximum cahracters per line
∧PN	PICA PRINT	10	80
۸PA	ELITE PRINT	12	96
∧PQ	COMPRESSED PRINT	17.16	132
ΛPE	ENLARGED PICA PRINT	5	40
^P A ^PE	ENLARGED ELITE PRINT	6	48
^PQ ^PE	ENLARGED COMPRESSED PRINT	8.58	68
	← 1 inch →		

Printing an entire document in condensed or enlarged mode is very simple: Simply place the command to begin the print mode at the beginning of the document. You don't even have to cancel the command at the end.

HOW TO CHANGE PRINT SIZES

Switching print sizes within a document, however, requires a few extra steps. Switching to condensed or enlarged print will affect the position of your left margin unless you cancel the command in the same line in which you begin it. If you want several lines printed in condensed or enlarged mode you can insert the commands to begin and end on each line.

You can also use a .PO (page offset) command to compensate for the shift in your left margin. Experiment until you find the right value to use in the command.

If you are using headings or footings in your document you must cancel condensed or enlarged mode before the page break. Otherwise, your heading or footing will be affected.

NOTE: Centering (^OC) does not work properly with condensed or enlarged print.

Spaces

When you design your page, the spaces are as important as the text. Examples include the spacing of certain words in a paragraph and maintaining columns when you re-form a paragraph or a table. Spacing can make the difference between a clear or confusing presentation, and certain Portable WordStar commands help you to control where blank space falls on the page.



Use **PO** for a non-break space when you want to keep two words together as you re-form a paragraph. **PO** keeps two words together with justification on or off during paragraph re-form.

Look at this example:

Without APO the king might fall off the edge of a line when you re-form the paragraph he sits in. Suppose old Henry VIII had landed at line's end in re-forming.

If you enter **PO** to keep **Henry** and **VIII** together, the screen will look like the following:

Without ^PO the king might fall off the edge of a line when you re-form the paragraph he sets in. Suppose old Henry^OVIII had landed at line's end in reforming

The result on paper would be the following:

Without ^PO the king might fall off the edge of a line when you re-form the paragraph he sits in. Suppose old Henry VIII had landed at line's end in re-forming.

Vertical Page

You can adjust the number of lines per page and the size of the top and bottom margins on your page. The flexibility of the program thus enables you to design pages other than the standard $8\ 1/2 \times 11$ inches and to build intricate forms.

Align your paper properly in the printer to get the vertical page layout you want.



DOT COMMANDS FOR VERTICAL PAGE

The following dot commands, described fully in this section, control vertical page layout:

.PL	Page Length
.MT & .MB	Top and Bottom Margins
.HM	Heading Margin
.FM	Footing Margin

You can put these commands anywhere in your file between lines of text. However, because .PL, .MB, and .MT affect the page break display on your screen, putting them at the beginning of your document lets you see the page breaks as they will occur in your printed document.

If you put the commands elsewhere in your text, you'll see a warning message on the line and a question mark in the flag column, but you can leave the command where it is—if that's where you want it. The command will take effect at print time even though you can't see the effect on the screen.



Use .PL n to specify Page Length by number of lines. If your page has more or less than 66 lines (11 inches), indicate its length with .PL, followed by the total number of lines on the page. If your paper is legal size (14 inches), for example, your dot command would be .PL 84.

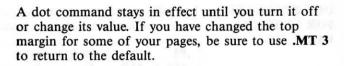
Out of the total lines for a specified paper length, the number that will actually print depends on the other commands you give Portable WordStar. If no others are given, Portable WordStar tells the printer to leave the standard margins. If you use .MT, .MB, .HM, or .FM, WordStar will subtract the number of lines specified in each command from the total length in the .PL command; be sure to enter .MT and .MB commands before entering .PL.



Use .MT n to specify the number of blank lines at the Top of the page. The default is three blank lines and includes the page heading and the heading margin. To increase the amount of text on the page, decrease the top margin; to decrease the amount of text, increase the top margin.







Use .MB n to specify the number of blank lines below your text at the Bottom of the page. The default is eight blank lines and includes the page number or footing and the footing margin.



Use .HM n to specify the Heading Margin, i.e., the number of blank lines from the page heading to the body of the text. The default is two blank lines. If you use .HE to specify a single-line heading, there will be two blank lines below the heading, making a total of three blank lines at the top of the page—the default for the top margin.



Heading lines are counted as part of your top margin. If you add a heading without adjusting the default margin (three lines), two blank lines will appear between the header and your text.



Use .FM n to specify the number of blank lines between the body of your text and the Footing or page number. This command positions the footing within the bottom margin. The default of two blank lines is unaffected even when you change the bottom margin.

Headings and Footings

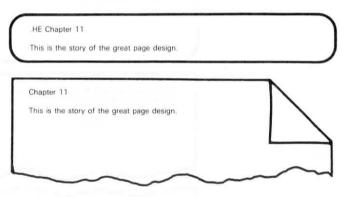
Headings and footings are single lines of text which are included in the top and bottom margins with the heading and footing margins. You only need to enter these dot commands once, at the start of the file, and your headings and footings will be repeated on every page of a document. The default is no heading and automatic page numbering as footing.



Use .HE to insert a single line of Heading within the top margin of the page. After typing .HE, beginning in the first column, type a space (optional), then text or spaces. You can also use special print controls for custom page numbering. \longrightarrow 7-25

When you want to return to the default of no heading, use .HE alone. If you want the heading to appear flush with the left margin, do not type more than one space between .HE and the text.

Here is an example:



Notice that the printed text appears in a position four spaces to the left of its screen position. On the screen the heading is pushed over four spaces by the dot command, which does not print, and by the space (optional) following it.

A dot command occupies space on the screen but not on paper.

You can move the heading closer to or farther from the body of the text by changing the heading margin.



Use .FO to put a single line of Footing within the bottom margin below the text. After typing .FO, beginning in the first column, enter a space (optional), then text or spaces. You can also use special print controls. \longrightarrow 7-25



The footing appears on every page until you enter .FO alone to return to the default, a centered page number. If you want the footing to appear flush with the left margin, do not type more than one space between .FO and the text.

Here is an example:

FO 121. Bridges v. California, 314 U.S. 252

In this legal document, the dot command for a footing is put at the top of the file, but the footing itself appears at the buttom of the printed page.

In this legal document, the dot command for a footing is put at the top of the file, but the footing itself appears at the bottom of the printed page.

121. Bridges v. California, 314 U.S. 252

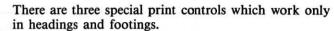
If you change the footing margin, the footing moves up or down on the page, but the number of lines of text on the page remains the same.

No footing will be printed if the bottom margin is set to zero.

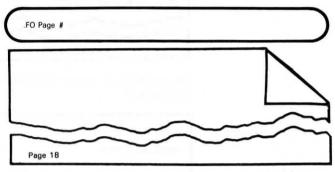
When a command for a heading or footing is given, the character pitch currently in effect stays in effect. However, if you use ^PA or ^PN within the heading or footing, the pitch in effect at the time the heading or footing is printed will affect the command lines as well as the text.

The print control commands for special effects like boldfacing can be used in headings and footings without affecting the body of the text. Conversely, special effects in the text do not affect headings or footings.

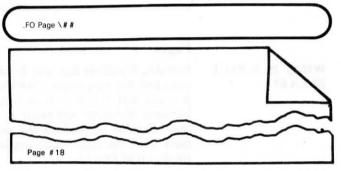




Use # to print the current page number in a heading or footing. Here is an example:



Use \ to specify that the next character entered is to be printed exactly as it appears on the screen. Here is an example with the back slash:



Use ^PK to print headings and footings for evennumbered pages on the left and for odd-numbered pages on the right.

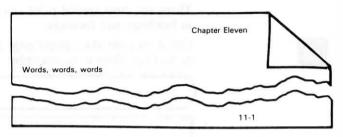
The following example illustrates how ^PK works on odd and even-numbered pages.



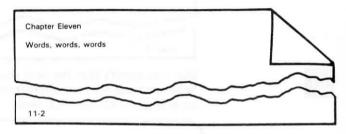
Odd-numbered pages will look like the following illustration:







Even-numbered pages will look like the following illustration:



Pages

WHAT IS A PAGE BREAK?

Portable WordStar lets you decide where one page ends and the next begins. With no commands from you and with 8 1/2 × 11 inch paper in the printer, Portable WordStar will begin a new page every 66 lines. Because vertical margins account for eleven of these lines, the page break display on your screen shows up at line 55.

Two Portable WordStar commands, .PA and .CP n, can help you to avoid page breaks that would produce the following awkward results:

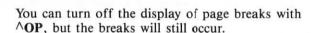
- The first line of a paragraph stranded at the bottom of the page
- The last line of a paragraph sitting alone at the top of the following page
- · A chart or a table cut in two



Use .PA to insert a PAge break wherever you want it.

When it encounters .PA, Portable WordStar directs the printer to roll to a new page. Type .PA, beginning in the first column on any line in a document file, and then press RETURN. The dotted line of the page break display immediately appears on the next line.

.PA



The status line at the top of your screen always reports the cursor position. When you type .PA, the status line reports the line number at which you are commanding a page break. If you move the cursor just below the page break display, the status line reports the new page number and starts again at line 1.

Use .CP n to insert a Conditional Page break. .CP n tells Portable WordStar: "Unless there are n lines remaining for text on this page, print the next n lines of text on the next page."

If less than n lines remain on the page, a page break display appears below the \cdot CP command to indicate where the new page begins.

Here is an example in which .CP prints all the lines of a chart on one page:

CP 6

CALIFORNIA NATIVE PLANTS

COMMON NAME Larkspur Fire-Cracker Flower Footsteps-of-spring BOTANICAL NAME Delphinium patens Dichelostemnia ida-maia Sanicula arctopoides

In this example, the six lines of the table will always print on the same page.

When you do a lot of editing, .CP n is a safeguard. No matter how much you change your document, the lines you want kept together stay with the .CP command.







PAGE NUM-BERING

Three dot commands, .OP, .PN, .PC, offer you page numbering options. The default is sequential numbers printed in column 33.



Use .OP to Omit Page numbers. Put .OP, beginning in the first column, at the top of your file. Even if your document has several pages, none will be numbered. This command is unnecessary if you use a footing. Your footing can specify numbered or unnumbered pages. \longrightarrow 7-23



Use .PN to restore Page Numbers after you have used .OP to omit them. Don't worry about setting the number; Portable WordStar automatically picks up sequential numbering. Suppose, for example, that you have a ten-page document file; use .OP at the beginning of the file and insert .PN on page 6. When you print, you'll see five pages unnumbered and five pages numbered consecutively, 6, 7, 8, 9, 10.

Use .PN n to set the page number at n. Portable WordStar automatically puts sequential numbers on subsequent pages. For example, if you put .PN 217 at the top of a page, 218 will automatically be printed on the next page.

NOTE: When you choose the option that allows you to begin printing at a specified page number, use the number from the sequence specified by the .PN command. For example, if you put .PN O25 at the top of a file and want to begin printing at the third page of that file, type 27 in response to the page number prompt. However, if you choose to set .PN 1 after a couple of pages of preface and then try to begin printing at page 1, your whole file will print because there will be two page 1's. \longrightarrow 9-22



Use .PC n to specify the Column number in which the Page number appears at the bottom of the page. .PC n will only work when you are not using a footing and have not omitted page numbers. The character pitch used is that of the character pitch in effect when the command is given.

PRINTER PERFORMANCE

Portable WordStar can control mechanical aspects of printing, such as pauses and movement of the print head.

Page Offset



Use .PO n to specify Page Offset, the column in which the print head actually begins to print. This command offsets the entire document to the specified column (n). The default is eight columns from the left edge of the paper. To move the text to the left edge of the printer carriage, use .PO 0 at the start of the document.

Starting and Stopping

HOW TO MAKE THE PRINTER PAUSE You can start and stop your printer with its own toggle switches, or you can control it from the Opening Menu with **P** or the Main Menu with ^**KP**.



Use **PC** to pause anywhere in the printing of a document file—in the middle of a line or several times in the same line.

When you print the document which contains ^PC, you will see this message above the Opening Menu:

PRINT PAUSED PRINTING A:FILENAME not editing

On the Opening Menu you will see:

P CONTINUE PRINT

To resume printing, type P.

NOTE: If you print a file to a drive there will be no pause. \longrightarrow 9-21

COMPATIBILITY WITH OTHER PROGRAMS

Using Standard WordStar to Print Portable WordStar Files

You may wish to transmit Portable WordStar files to a desktop computer which runs standard WordStar, then print them with a letter-quality printer. You can do this via microcassette tape, or via floppy disk if you have disk drives on your PX-8, or by using the transmit command (T), which is explained in Chapter 9.

Certain dot commands can be entered into your files which will only take effect when printed in this manner. These commands control such things as line height, pitch, and microjustification. They are described briefly in the table at the end of this chapter. See the standard WordStar manual for more complete explanations of their use.

Using Portable WordStar Files with Other Programs

You may enter special control characters into your files to produce useful effects in other programs. Any letter you press after $^{\wedge}P$ will be entered as a control character, whether or not it is on the Print Menu.

For example, other software may make use of three ASCII characters, ^I, J, and ^L, which are not normally used by Portable WordStar. If you wish to edit or print a Portable WordStar file with another program, you may need to insert these characters into your document, using the commands ^PI, ^PJ, and ^PL. You won't see these commands on the Print Menu.

Fixed Tab

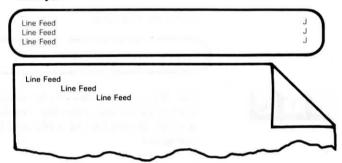


Use $^{\wedge}$ PI, the ASCII fixed-tab character, to shift to fixed tabbing. $^{\wedge}$ PI enters $^{\wedge}$ I as one unit, eight characters long, into a file. The effect is the same as pressing $^{\wedge}$ I in non-document mode. \longrightarrow 10-9

Line Feed



Use ^PJ, the command for the ASCII line-feed character, to direct the printer to move to the line below without returning to column 1. You'll see J in the flag column at each line feed, as in the following example:



A line feed advances the paper in your printer one line. Unlike the carriage return on a typewriter, which causes a RETURN and a line feed, a carriage return on a computer can be distinct from a line feed. To make Portable WordStar compatible with other text programs, you may want to give a separate command for a line feed.

Form Feed



Use ^PL, the command for the ASCII form-feed character, to direct the printer to roll up the distance of the form being printed, usually a standard 8 1/2 × 11 inch page. ^PL causes a page break to occur on the screen, beginning at the column where ^PL is entered. Look at the following example:

Put ^PL at the end of	this sentence.^LP

COMMENT LINES



Use two dots, beginning in column 1, to add lines of text which will not print. You can also use multiple comment lines in succession and type up to a practical limit of 240 characters after the two dots.

Here's an example:

..Edited by J.R. 12/9/82



Use .IG to add a line of text which WordStar will IGnore at print time. Like the two dots, .IG can be used as often as you like in a file and has a limit of 240 characters.

Here's an example:

.IG Print two double-spaced copies.

COMMAND	FUNCTION	
	Special Effects:	
^PS	Underlines all characters (not spaces) between first and second occurrence	
^PD	Double strikes all characters between first and second occurrence, producing a light boldface	
^РВ	Boldfaces all characters between first and second occurrence	
^ PX	Prints hyphens () over all characters (not spaces) between first and second occurence	
^РН	Causes next character to print over preceding character	
^P RETURN	Causes next line to print over present line	
∧PY	If printer allows, prints characters between first and second occurrence in italics	
^ PV	Prints characters between first and second occurrence a half line below other text, producing subscript	
^PT	Prints characters between first and second occurrence a half line above other text, producing superscript	
^ PF	For letter-quality printers, prints a character not seen on keyboard (phantom character)	
· ^PG	For letter-quality printers, prints a character not seen on keyboard (phantom rubout) — continued —	

^{*} These commands are effective only when files are transmitted (via tape, disk or the transmit command) to a computer running standard Word-Star, then printed on a letter-quality printer. See your standard WordStar manual to learn more about these commands.

SUMMARY TABLE: PRINT CONTROL COMMANDS (continued)		
COMMAND	FUNCTION	
	Layout:	
^ PA	Sets pitch at 12 characters per inch (elite)	
^ PN	Sets pitch at 10 characters per inch (pica) or—with ^PA—at pitch set by .CW	
^PE	Begins enlarged print mode	
^PR	Ends enlarged print mode	
^PQ	Begins condensed print mode	
^PW	Ends condensed print mode	
^ PO	Inserts a non-break space between two characters, preventing word wrap or paragraph re-forming from separating two words	
#	In heading (.HE) and footing (.FO) lines only, prints the current page number	
\	In headings and footings only, prints the symbol immediately following the slash, rather than interpreting it as a program function	
^PK	In headings and footings only, causes text or page numbers to alternate position on left-and-right or odd-and-even pages	

Stops printing until you press P again at Opening

Inserts ASCII character for a line feed

Inserts ASCII character for a page break

Inserts ASCII character for a fixed tab that prints as

Others:

Menu

eight spaces

^PC

^PI

^PJ ^PL

CO	OMMAND	FUNCTION
		Layout:
*	.CW n	For letter-quality printers, sets character width to $n/120$ inch (default: $12/120$ inch, 10 characters per inch)
*	.UJ OFF	Turns microjustification off to print all spaces exactly as they appear on screen (default: on)
*	.UJ ON	Turns microjustification on, distributing spaces in a line by 1/120 inch increments
	.PL <i>n</i>	Identifies number of lines on entire page (default: 66 lines, 6 lines per inch on an 11-inch page)
*	.LH n	For letter-quality printers, sets line height to $n/48$ inch (default: $8/48$ inch, 6 lines per inch)
	.MT <i>n</i>	Sets number of lines from top of page to beginning of text (default: 3)
	.MB <i>n</i>	Sets number of lines from end of text to bottom of page (default: 8)
	.HM <i>n</i>	Sets number of blank lines between heading (.HE) line and first line of text (default: 2)
	.FM <i>n</i>	Sets number of blank lines between last line of text and footing (.FO) line (default: 2)
	.HE text	Prints one given line of text as heading on every paguntil .HE is used again without text or with a new line of text (default: no heading)
	.FO text	Prints one line of text as footing on every page until .FO is used again without text or with a new line of text (default: page number, centered) — continued —

^{*} These commands are effective only when files are transmitted (via tape, disk or the transmit command) to a computer running standard Word-Star, then printed on a letter-quality printer. See your standard WordStar manual to learn more about these commands.

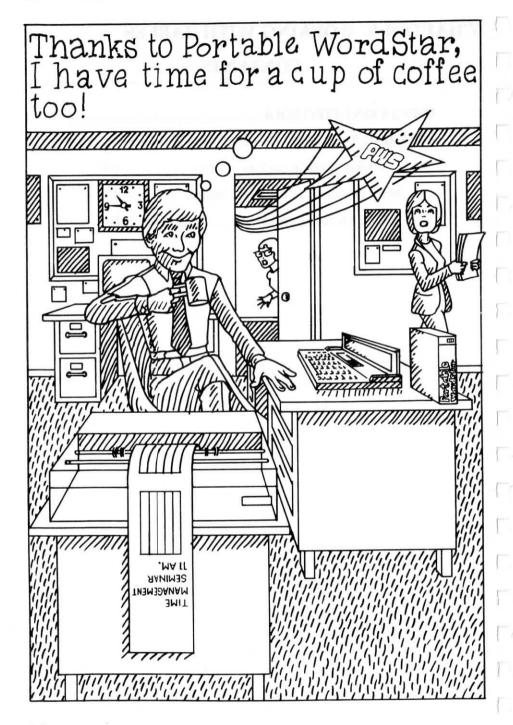
SUMMARY TABLE: DOT COMMANDS (continued)		
CO	MMAND	FUNCTION
		Layout, (continued):
	.PA	Starts new page at indicated line (default: 55 lines of text before a page break)
	.CP <i>n</i>	Specifies number of lines in which no page break is to occur; n lines will stay together on subsequent page
	.OP	Omits page numbers (default: consecutive page numbers
	.PN	Returns to accurate page numbers after OP
	.PN <i>n</i>	Sets page number at <i>n</i> and numbers subsequent pages consecutively
	.PC n	Sets column at which page number prints when no footing (.FO) is specified (default: column 33)
		Others:
*	.SR n	For letter-quality printers, rolls the printer carriage $n/48$ inch before printing a sub or superscript
*	.BP OFF	For letter-quality printers, prints every line from left to right (default: on)
*	.BP ON	For letter-quality printers, permits alternate lines to print right to left
	.PO n	Sets number of columns to indent all lines of document from printer's left margin—in addition to all other indentation in the file (default: 8)
	or .IG	Identifies line of text immediately following as onscreen comment line only, not to be printed

^{*} These commands are effective only when files are transmitted (via tape, disk or the transmit command) to a computer running standard Word-Star, then printed on a letter-quality printer. See your standard WordStar manual to learn more about these commands.

CHAPTER 8. WORKING WITH TABLES

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8. Working with Tables

During normal text entry, you use various Portable WordStar features, such as tabs and margin settings. When you enter tabular material, however, your editing will be more precise if you turn off or adapt many features, such as insertion and word wrap.

GENERAL GUIDELINES

Follow these general guidelines:

- Turn insertion off (^NV). When this toggle switch is off, a change in one column will not affect other columns on the same line.

 3-11

- Define a ruler line for the table. If you are editing an existing table, be sure the ruler line matches the data. Reset the margins, if necessary, (^OL and ^OR). Clear all tab stops (^ONA), then set the tab stops needed for this table (^OI).

 → 6-5
- Use the SHIFT and NUM GRPH keys to turn a portion of your keyboard into a numeric keypad.
 See the PX-8 User's Manual for details.

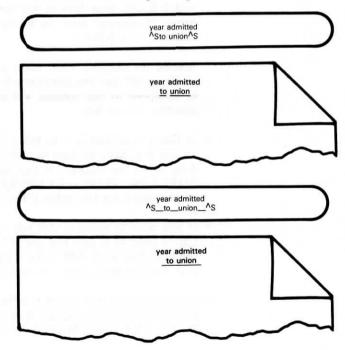
USING PRINT CONTROLS

HEADINGS

Table headings frequently require special printing effects such as underscoring ($^{\text{PS}}$) or boldfacing ($^{\text{PB}}$). The commands for these effects push text to the right on the screen, making it difficult to align column headings properly. To avoid confusion, simply type the headings and enter print control commands after aligning headings. \longrightarrow 7-4

When underscoring a heading, especially one with multiple lines, remember that Portable WordStar underscores only characters, not blanks. You must type underscores in the spaces between words.

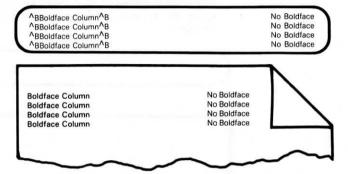
Look at the following examples:



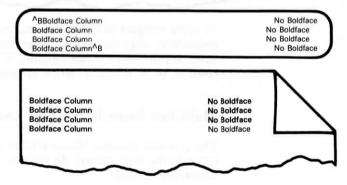
If you use the same or similar headings for several different tables, you can save copies of the headings in a separate file and avoid retyping.

COLUMNS

To make sure that the print control commands for a single column affect only that column you must enter a pair of commands on *each line* of the column that requires special printing as in these examples:

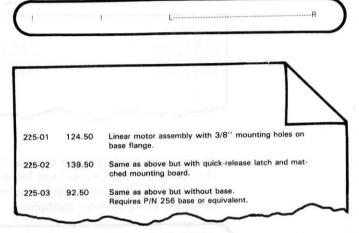


If you place the beginning command on one line and the end command several lines below, you may accidentally boldface or underline information in other columns. Look at these examples:



ENTERING TABLES WITH MULTI-LINE ITEMS

Frequently columns in a table contain items that require more than one line, as you see in the following example:



To align unequal columns, use slightly different procedures, depending upon where the multi-line items appear—in the last column, in the first column, or in several different columns.

Multi-line Items in the Last Column

The previous example shows a table with multi-line items in the last column. To type this kind of table, follow these steps:

- STEP 1 Press **OX** to release margins and to display tab stops to the left of left margin.
- STEP 2 Define the Portable WordStar ruler by clearing all tab stops and then setting just those you need, as you see here:

L------R

(This ruler was set for the table in the previous example.)

- STEP 3 Tab to the first stop and type the first item.

 Tab to the second tab stop and type the second item.
- STEP 4 PRESS ^OX to restore margins.
- STEP 5 Type the third item. RETURN
- STEP 6 Repeat steps 1 and 3-5 until you complete the table.

Multi-line Items in the First Column

When you are typing a table with multi-line items in the first column, follow these steps:

STEP 1 Define the Portable WordStar ruler by clearing all the tab stops and then setting the ones you need, as you see here:

Linear motor with 3/8" mounting holes on 225-01 124.50 base flange. Chromed bazel.

NOTE: Make sure to set the right margin a few columns short of the second tab stop.

- STEP 2 Type the first item of the first entry, allowing word wrap to position the text within the margins.
- STEP 3 Move the cursor to the end of the first line, release the margin (^OX), tab to the first tab stop, and type the second item. Continue tabbing and entering until you have completed the entry for each column. Don't press RETURN.
- STEP 4 Move the cursor past the right margin in the last line of the first column, then press RETURN twice. Repeat steps 2-4 until you have completed the table.

Several Multi-line Items

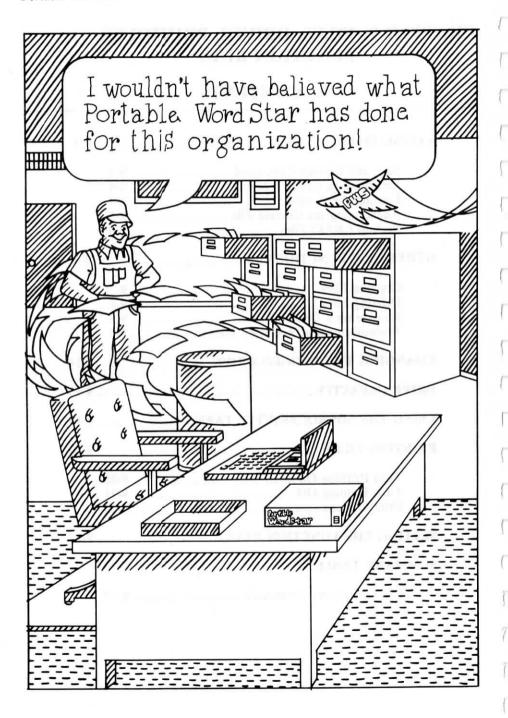
You can create a table with several multi-line items by avoiding word wrap after the first multi-line item has been typed.

One way to avoid word wrap is to type the first line in each item of the entry, then the second line, and so on. End each entry line with a hard carriage return before the line overflows into the next column.

CHAPTER 9. FILES, DRIVES, PRINTOUTS, FUNCTION KEYS

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9. Files, Drives, Printouts, Function Keys

In addition to editing your work inside Portable WordStar document files, you use many program features which work on whole files as units. You can save, copy, and delete files; you can work on alternate drives; and you can print the contents of one file while editing another.



When you're working with whole files at the Opening Menu, it's best to think through what you want to do before issuing commands. An accidental "Delete File" operation, for instance, could create a lot of extra work for you.

SAVING FILES

WHY SAVE YOUR FILES?

The ability to save your files is one of the advantages of a word-processing system over a typewriter. You never have to type anything twice—provided you save your work. Saving your work periodically allows you to retrieve a recent copy, should the latest version suddenly become garbled or non-existent.

Save-and-Resume Command



Press **KS** to save and reSume work on the same file. The current version of your file will be written onto the drive, and the cursor will go back to the beginning of your file. Enter this save command at any point while working in your file.

PRESS ^KS

SEE

SAVING FILE: FILENAME.EXT



Press ^QP if you want to return to your Place in the file before you used ^KS. Otherwise, resume work at the beginning of your file.

You can speed through the save-and-resume operation by holding down the control key and pressing the keys **KSQP** in quick succession. After the Saving message has appeared on your screen, your work is protected, and you're still at the same place in your file.



Do not use $^{\wedge}$ **KS** while working in a file on drive H. \longrightarrow 9-17

Returning to Opening Menu



Press ^KD if your work in the current file is Done and you're ready to move on to another task. You save your current file and return to the Opening Menu.

Leaving the Program



Type X at the Opening Menu to eXit from Portable WordStar. You'll return to your operating system and see the cursor at the operating system prompt.

You cannot leave Portable WordStar while a file operation, such as printing, is in progress. The **X** command will take effect after the operation is completed.



Press ^KX if you're finished working on a file and you want to eXit to your operating system. You save the current file, and the cursor appears at your operating system prompt.

STOPPING WORK

Although you don't have to exit to the operating system (X or ^KX) before turning off your computer, it's a good habit to develop. If you turn off the computer (without pressing CTRL) before exiting from Portable WordStar, the unshifted function keys will still produce Portable WordStar commands—even in another program—when you turn the computer on again.



Abandoning the Current File

Press ^KQ to Quit editing the current version of a file without saving your changes. The current copy disappears, but the original file—without your latest changes—remains on your drive. If you have not previously saved the file, ^KQ will remove all traces of it, even the file name in the directory.

Suppose a misdirected command produces confusion in the working copy of your file. Abandoning the current version in favor of the original is probably easier than trying to undo a major mistake. Press ^KQ. You'll see this prompt:

ABANDON FILE A: FILENAME.EXT ? (Y/N):

Answer Y if you're sure you want to quit. You have a chance to think about it first, though.

 $^{\wedge}$ **KQ** throws out *all* of the current version, not just the ruined portions. If you have entered other new text that you do want to save, use $^{\wedge}$ **KW** to copy it as a block to a separate file. Then quit the current editing session. \longrightarrow 4-9

If you answer N, the cursor will return to where it was in the file when you pressed ^KQ; nothing is changed. If you answer Y and abandon the current edited version of your file, the cursor will return to the Opening Menu.



Backup (.BAK) Files

HOW TO CREATE A .BAK FILE

When you open an existing file from the Opening Menu, a working copy is written into your computer's working memory. The permanent file remains on your drive, unaltered.

After editing, when you press ^KS, ^KD, or ^KX, the working copy is written onto the drive and assumes the name of the previous permanent file. The old file becomes a WordStar backup file with the extension .BAK (filename.BAK). Here's what happens on your drive:

- 1. Your working copy of *filename.EXT* (including current changes) is written from RAM; it becomes the "permanent" file for your next editing session.
- 2. Your permanent *filename.EXT* (without current changes) is renamed *filename.BAK*.
- 3. Filename.BAK (if any) is erased.

The first time you save a new file, you'll have only one permanent file. After subsequent save commands, however, each subsequent permanent file becomes the next backup file.

NOTE: You can't edit .BAK files. You can rename them (using your operating system's REN command), though, before editing. In this chapter you'll learn how to use .BAK files to recover files. \longrightarrow 9-9

Portable WordStar helps protect your work by creating a .BAK file at every opportunity. If, however, a tape wears out, the system is initialized, or the size of the RAM disk is reduced, a file could still be lost. Avoid these mishaps by making additional copies on separate tapes or disks. See PX-8 User's Manual for procedures.



Pressing \(^KS \QP\) takes only moments of your time and protects the work you're editing.

OTHER FILE FUNCTIONS

You can copy or delete a file at the Opening Menu, and you can also delete files while you are editing. The operating system has commands to perform these functions, too, but you must exit from Portable WordStar to use them. In most cases, the Portable WordStar commands are more convenient.

Copying Files

At the Opening Menu, type **O** to c**O**py a file. You'll see the following prompt:

NAME OF FILE TO COPY FROM?

TYPE filename.EXT (a valid file currently on your system)

SEE

NAME OF FILE TO COPY TO?

TYPE filename.EXT



You may copy files to and from drives other than the logged drive by entering the full name of the file, e.g., A:filename.EXT. However, you cannot copy files to drives B or C (ROM).

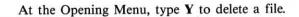
If you tell Portable WordStar to copy into an existing file, WordStar will overwrite the file. In other words, the existing file on the drive to which you are copying will be erased and replaced by the file you are copying.

You can copy only one file at a time.



Deleting Files







Use ^KJ to delete one file while you're editing another. You can't delete the file you're currently editing.

When you enter either of these commands, you'll see the following prompt:

NAME OF FILE TO DELETE?

TYPE filename.EXT RETURN



Be very careful with this command. You can easily delete the wrong file by mistake, especially when several files have similar names. If you change your mind, cancel the deletion command by pressing ESCape or RETURN as your response to the prompt, or use $^{\wedge}U$ to interrupt.

Using Y and ^KJ commands, you can only delete one file at a time. Deleting *filename.EXT* leaves *filename.BAK*. When you intentionally delete a document, you should also delete the backup file to conserve space. On the other hand, if you accidentally delete a file, the .BAK file allows you to recover it, at least partially.

Recovering a Deleted File

Use .BAK files to recover files you accidentally delete. The process is simple. To recover the erased file *file-name.EXT*, type **O** at the Opening Menu. You'll see the following prompt:

NAME OF FILE TO COPY FROM?

TYPE filename.BAK



SEE

NAME OF FILE TO COPY TO?

TYPE filename.EXT

Name the copy with the name of the file you deleted. Remember that you won't have the most recent edit of your file.

RETURN

Transmitting and Receiving Files

At the Opening Menu, use the T command to Transmit a file to another computer and the C command to receive a file from another computer.

USES FOR T AND

For example, you can send a memo or report to a desktop computer running standard WordStar and use its sophisticated formatting and print commands to improve the look of your document. You could also use MailMerge, SpellStar, or StarIndex (standard WordStar options that are not available for the PX-8) to merge data, proofread or index your document, or create a table of contents.

Likewise, the PX-8 can receive documents created in a desktop computer or another PX-8. If you want to review a report that a co-worker has been writing on a desktop computer with standard WordStar, for instance, you can send the entire file into your PX-8.

9-9



You can receive files on a floppy disk, the RAM disk, or a cassette tape. You can then carry the PX-8 with you and edit or make comments on the report at home or while travelling.

You are not limited to transferring only Portable WordStar documents. You can send a Portable Calc spreadsheet to another computer for incorporation in a document. In fact, you can transfer any file—even a program—from any drive.

The transmit and receive commands have an error-correction feature that helps to assure that a transmitted file will be identical to the one sent.

WHAT YOU NEED

To transmit from or receive a file on the PX-8, you need another computer with a program that is compatible with Portable WordStar's T and C commands. The two computers must be close enough to connect them with a cable. The T and C commands are designed for use with a cable, and not with a modem. It is helpful to position the computers right next to each other since you will need to type commands and see the displays on both of them.

PREPARING TO TRANSMIT A FILE

There are several steps you must follow to prepare the computers for transmitting a file. The instructions for completing these steps will be fairly technical—more so than anything else you have read in this manual—but you should have no difficulty if you follow them in the order given. Some of the unfamiliar terms will be defined here and they can be found in the glossary (Appendix C) as well.

STEP 1 Connect a cable between the RS-232C port on the PX-8 and the RS-232C port on the other computer. This cable may have to be specially wired, depending on the hardware properties of the other computer. The RS-232C port is a fairly standard connection for communication between two pieces of hardware.

STEP 2 Run the program CONFIG.COM on each computer (if both are PX-8s), and select number 8 (RS-232C) from the Main Menu. If the other computer is not a PX-8, use its corresponding configuration program to make the following settings.

Set the RS-232C ports of both computers to the same bit rate. The bit rate (also called baud rate) is a measurement of the speed at which the computers transmit and receive information. If it is not possible to set the same bit rate, you cannot complete the file transfer.

The PX-8 can transfer data at up to 19.2 kilobaud (19,200 bits per second) over its RS-232C port, but the other computer may need to be run at a lower bit rate. For fastest transmission, use the highest bit rate you can.

Set both computers to use 8 data bits and set parity to NONE for both.

You may use any number of stop bits, but they must be identical for the two computers.

Make sure that the SI/SO (shift in/shift out) and XON/XOFF features of both computers are off.

STEP 3 Check to see that there is sufficient space on the drive that will be receiving the file. If there is not enough space to receive the file, the transfer cannot be completed. You can determine the size of the file and the amount of space remaining on the drive by using the CP/M (operating system) command STAT, supplied with your PX-8. If the other computer does not use CP/M, its operating system will probably have an equivalent way of doing this.

HOW TO TRANS-MIT A FILE

The following example of the use of the transmit and receive commands assumes that you are transmitting a file between two PX-8s. If the other computer's compatible program operates differently, you will have to study the instructions for that program and substitute appropriate commands.

- On the receiving computer, use the Opening STEP 1 Menu command to change the logged drive (L), selecting the drive where you wish the received file to be placed. Of course, this is not necessary if the drive you want is already the logged drive.
- On the receiving computer, follow this STEP 2 procedure:

PRESS C

SEE

This command is for receiving a file from another computer.

STEP 3 After completing step 2, follow this procedure on the sending computer:

PRESS T

SEE

This command is for sending a file to another computer.

NAME OF FILE TO TRANSMIT?

TYPE filename



When you press RETURN the transmission begins. When it is completed, the transmitted file will be on the logged drive of the receiving computer.



If a file of the same name as the one you are sending exists on the logged drive of the receiving computer, it will be overwritten with no warning.

If you mistype the file name or the file is not present on the selected drive, you will see the following message:

FILE A: filename NOT FOUND

If the transfer progresses normally you will see a series of dots appear on the screens of both computers. Each dot indicates that 128 bytes of information have been transmitted. If you see a T instead of a dot, this means that the receiving computer has not received any information from the sending computer for thirty seconds. A series of Ts instead of dots may mean there is a problem with the serial ports, cables, or the program on the receiving computer. However, Ts will also appear when the receiving computer is taking a long time to store the information just sent to it. This could happen when sending a file to the microcassette tape.

If you see Ts, and there is no indication that the receiving computer is storing the transmitted information (the tape is not moving or the disk drive is silent), then you should check your connections and start again.

HOW TO INTER-RUPT TRANSMISSION

You can interrupt a transmission in progress at any time by pressing ^U and ESCape. The receiving computer will contain a file of the same name as the sending file, but it will be only a partial copy of the original file, and you should delete it.

If the drive you are transmitting to becomes full, you will get an error message and will have to start again, after you delete files to make space, or insert a new disk or tape.

If your sending computer can transmit a succession of files with the same command, the PX-8 is capable of receiving them without repeating the command. However, the PX-8 can send only one file per command.

You cannot transmit a file to drives B or C, nor can you receive one on those drives.



There are other methods for exchanging a file between two PX-8s. You may place the file on a microcassette tape and run the tape in the other computer. Also, if you have the optional disk drives, your disks can be used in the other machine.



When you use a Portable WordStar file in a computer running standard WordStar, some of the print commands in the file may give different results than you intended. For example, in a file created with Portable WordStar, ^PY is used for italic print. When printed with standard WordStar on a letter-quality printer, however, ^PY would be interpreted as the command to change ribbon color. Other commands that may produce unexpected results are: ^PQ and ^PW (condensed print) and ^PE and ^PR (enlarged print).

Similarly, when a PX-8 receives a file created with standard WordStar that contains any of those same print commands, they will give the effects they are designed for on the PX-8 when printed. Also, if the file contains any soft hyphens they should be deleted before transmission. On the PX-8, a soft hyphen will print as an underline character (even if it occurs in the middle of a line).

CHANGING THE LOGGED DRIVE



At the Opening Menu, type L to change the Logged drive, where the computer's work is currently being done. You'll want to work on a second drive whenever your currently logged drive is getting too full.



Use $^{\wedge}$ **KL** to change the logged drive while you're editing a file.

When you enter either of these commands, you'll see the following prompt:

LOGGED DRIVE IS NOW A:
NEW LOGGED DRIVE (letter, colon, RETURN)?



Enter the letter of another drive in your system and press RETURN. If you enter any letter other than A-H after you type L or ^KL, you'll cause an error which requires you to reenter Portable WordStar.

DRIVE CAPACITY

HOW TO AVOID A "FULL" DRIVE

Files in a personal computer system serve the same purpose as filing cabinets in the traditional office; they store information so you can retrieve it easily. Unlike a filing cabinet, however, which almost always seems to have a little more room, a drive which is full is really full. Either you'll be unable to add more data, or worse, you'll inadvertently erase other files when you try.

See the explanation of Error E12 in Appendix B for suggestions on what to do if your drive fills up while you are editing a file.



Whenever a file has outlived its usefulness, delete it or copy it to another drive or a storage disk or tape. Use the operating system command for directory display (DIR) to find out what is on the drive. Remember the following guidelines for the best use of space:

- To avoid exceeding drive capacity, use the operating system command that measures either space in use or remaining space on any drive.
- Check to see how much drive space you have before creating or editing any large file.
- Leave yourself and your system room to work. Keep in mind that Portable WordStar may use temporary files during an editing session.
- Try always to have enough space to store three copies
 of the file you're editing. Remember that you actually
 create two copies of the file (the permanent file and
 the .BAK file) if you save your text as frequently as
 you should. The additional space provides a safety
 margin for Portable WordStar temporary files while
 you're editing.

 Whenever possible, break up a very large document into several smaller files.

You can use Portable WordStar to check the size of your current file. Use $^{\wedge}QC$ to go to the end of the file and $^{\wedge}OP$ to turn off the page break display; then read the status line:

- FC= the number of characters from the beginning of the file to the current cursor location.
- FL= the number of lines from the beginning of the file to the current cursor line.

TEMPORARY FILES

Very large files don't fit in the memory of your computer. For portions of your file, Portable WordStar creates temporary files, usually with the extension .\$\$\$ (filename.\$\$\$). You don't usually need to be concerned with temporary files. If you're working with a very large file, however, the temporary files can exhaust all remaining space.



Portable WordStar never alters your permanent file until you save your work. If you want to return to the beginning from the end of a long file ($^{\land}$ QR), Portable WordStar is forced to write most of the document to a temporary file. \longrightarrow 3-8



When you use ${}^{\wedge}\mathbf{Q}\mathbf{R}$, a sluggish response time probably means that it's time to break up your large file. If you cannot divide file contents despite limited drive space, simply avoid ${}^{\wedge}\mathbf{Q}\mathbf{R}$. Return to the beginning of the file by saving it with ${}^{\wedge}\mathbf{K}\mathbf{S}$. Saving the file is safer and faster since most of the text may already be in a temporary file that can be renamed as the newly saved file.

OTHER SHORTCUTS

Try the following commands to move quickly through large files:

Before a global find-and-replace command (^QA) in a long file, save it with ^KS.

- Perform block movement and copying commands in large files with the block writing (^KW) and reading (^KR) commands.
- If possible, save the file (^KS) rather than moving backward through a long file.

If you don't have disk drives, you should use drive A (RAM disk) rather than H (tape) whenever possible, because it operates much faster. However, drive A can fill up pretty quickly, so you must be aware of how much space you have left. For example, if the RAM disk is set to 15K, approximately 7 pages of text will fill it up. When you exceed the space available on drive A, you can copy files onto drive H for storage. \longrightarrow 1-11

If you are working with a file that is too large to edit on drive A (because it takes up more than half the space available), you must copy it to drive H and continue work on it there. After copying the file, delete the file and its backup from drive A, then edit on drive H with drive A as the destination for saving the file. \longrightarrow 9-19

WHEN TO CHANGE DISKS

You can change disks safely at the following times:

- if you're at the Opening Menu and not printing
- if you're at your operating system prompt

You may need to reset your system if you open the door to your disk drive at any other time.

USING THE MICROCASSETTE TAPE

The microcassette tape (drive H) in the PX-8 can be used to store files. You can also transfer files on a tape to another PX-8 simply by putting the tape in the other machine (just as you would with a floppy disk).

Before using a tape, you must "directory initialize" it. This procedure is very similar to formatting a floppy disk—it helps to insure that information will be properly recorded on the tape. See your PX-8 User's Manual for instructions on performing a directory initialization.



Before using the microcassette tape, press CTRL HELP to get the System Display, and set the tape (MCT) to "stop" mode. Do not change this setting at any time when using the tape in Portable WordStar, to avoid causing problems with your files. Also, to use Portable WordStar to edit or read (^KR) a Portable Calc file on tape, you must save the file in stop mode while in Portable Calc.

While at the System Display, you may set the tape either to "verify" or "nonverify." Consult the PX-8 User's Manual for an explanation of these two modes.

Place an initialized tape in your computer and log onto drive H. You will probably see the tape wind backwards, then forwards.

Working on the tape drive is quite a bit slower than working on the RAM disk or on a floppy disk. Scrolling through a long file will take a while. You can type ahead during the delay without losing key strokes, until you get an error message (exclamation points on the screen).

You cannot save files onto the microcassette tape. The only way to store files on drive H is to copy (O) or write (^KW) them there from another drive. To edit a file on a tape, you must save the file on the RAM disk (drive A) or a floppy disk (drive D or E). Type D at the Opening Menu, and when you see the prompt, type the file name followed by a space and the drive to which the file will be saved. — 1-18

After you press RETURN, the tape will wind some more before the files is displayed. If you haven't specified another drive for saving the file, you will not be able to enter the file and you will see the following message:

CAN'T EDIT WITH CASSETTE AS DESTINATION OR USE ROM FILES: filename

If you try to save a file to a drive that contains another file with the same name, you will get an error message. You cannot overwrite the file on the other drive.

When you complete your work in the file and are ready to save it, press ^KD. Your file will be saved on drive A and your backup file will be on drive H. To edit the file again, first delete (Y) the backup file from the tape, copy (O) the file from drive A to drive H, and delete the file from drive A. Then follow the preceding steps for editing.

It is not wise to create a new document while logged onto drive H. You would have to save it on another drive, so you may as well log onto that drive in the first place. Doing so will save you some time.

Do not use ^KS while working in a file on the microcassette tape. You will get the same effect as if you had pressed ^KD: Your work will be saved (on the drive you specified earlier) and you will be returned to the Opening Menu.

Deleting the last file copied to a side of the microcassette tape will give you more room on the tape. Deleting earlier files will not.

Also, only the last file copied to a side of the tape can be overwritten with the copy or block write commands. For this reason, and to make using drive H faster, you may want to store only one file per side.

When you are finished working with a tape and wish to take it out of the drive, you must press SHIFT and PF1 while at the System Display. Do not remove the tape until it stops moving and the menu reappears. You could damage the files on the tape (and even damage the next tape you use) if you remove the tape without completing this step.





PRINTING FILES



At the Opening Menu, type P to Print a file.



Use ^KP to print one file while you're editing another. Momentary interruptions caused by Portable WordStar doing two jobs at once do not affect your editing. Although simultaneous printing and editing functions each take a little longer, the net effect can still save time.



Your computer may not have enough memory to edit and print at the same time. If not, you'll see an error message before your second command is cancelled. $\longrightarrow B-10$

Turn Printing On

HOW TO START PRINTING

Type **P** at the Opening Menu, or press **KP** while editing a file; you'll see the following prompt:

NAME OF FILE TO PRINT?

TYPE filename



SEE list of print options, one at a time

Here's the whole list:

DRIVE FILE OUTPUT (Y/N): START AT PAGE NUMBER (RETURN for beginning)? USE FORM FEEDS (Y/N): SUPPRESS PAGE FORMATTING (Y/N): PAUSE FOR PAPER CHANGE BETWEEN PAGES (Y/N): READY PRINTER, PRESS RETURN:

When each option appears, you can respond as indicated or press RETURN for the default. If you want defaults in response to every option on the list, press ESCape instead of RETURN after typing your file name. Printing will begin without the appearance of the options list.

If you name a file that is not on your logged drive, you'll see an error message:

FILE A: filename. EXT NOT FOUND

Enter a file name that Portable WordStar can locate. If the file *filename.EXT* exists only on another drive, for instance, you can enter *H:filename.EXT*.

Turn Printing Off

HOW TO STOP PRINTING

P and $^{\wedge}$ **KP** are toggle switches that initiate or halt printing. If you try to print the same file you're editing, you'll see an error message. \longrightarrow *B-11*

If you press **P** or ^**KP** during printing, you'll interrupt the operation. Although Portable WordStar stops sending text to the printer immediately, printing may continue briefly while the printer empties its buffer memory. When you stop printing, you'll see the following prompt:

Y = ABANDON, N = RESUME, ^U = HOLD:

Type Y if you don't want to continue printing the current file. There may be delay after you enter this command. During the delay you will not be able to enter text or commands.

Type N to resume printing immediately.

Press ^U to suspend printing. The current position in the file is marked so that printing can resume at the same place later. You might want to hold printing, for example, if your system runs too slowly when you print and edit at the same time. You can enter any number of other commands before you resume printing. When you're ready, enter P or ^KP.

Print Options

Five print options offer you special functions such as pausing between pages, beginning at a page number of your choice, and others. After you respond to each option prompt, the next appears.

OUTPUT TO DISK

Drive file output (Y/N):

Type Y to direct output to a drive file rather than a printer. You'll see the following prompt:

Output file name?

TYPE filename.EXT

The resulting file will be a modified image of the printed text file; many formatting commands will not take effect. (Using the O command is usually a quicker way to copy the file.) Default: No. \longrightarrow 9-7

Enter any response other than Y for normal output to the printer.

PAGE NUMBERS

START AT PAGE NUMBER (RETURN for beginning)?

Type a particular page number, followed by RETURN or ESCape.

Type 0 or 1 or press RETURN alone to start printing at the beginning of the document.

If you enter anything but a number, the prompt will stay on your screen. Default: 1.

When you tell Portable WordStar to start printing near the end of a long document, say on page 30 of 35 pages, there will be a significant pause before printing starts. Portable WordStar formats, but does not print, the entire document up to page 30 before printing.

NOTE: If you use .PN to renumber the pages in your document, the printed pages will be numbered according to your command. \longrightarrow 7-28

FORM VS. LINE FEED

USE FORM FEEDS (Y/N):

Type Y if the length of your page varies; the printer will advance to the top of each page before printing it.

This form-feed option sends a single machinelanguage character (OC hex) to the printer, rather than the usual series of line-feed characters.

Enter any response other than Y for normal instructions. Portable WordStar will send to the printer the correct number of line-feed characters to advance the paper to the top of the next page. Default: No.

CHECKING DOT COMMANDS

SUPRESS PAGE FORMATTING (Y/N):

Type Y to see dot commands printed, as if they were text, instead of performing their page formatting function. This option can be useful for proofreading. Default: No.

Your text and dot commands will print out, line after line, right across folds in the paper unless you force page breaks with $^{\land}PL$; print control characters do work. \longrightarrow 7-31

ONE PAGE AT A TIME

PAUSE FOR PAPER CHANGE BETWEEN PAGES (Y/N):

Type Y if you need to use single sheets—letterhead, for example—instead of continuous paper. At the end of each printed page, you'll see the message **PRINT PAUSED** in the status line on your terminal. After you change paper, resume printing by pressing P (if at the opening menu) or ^KP (if editing a file).

Enter any response other than Y to print continuously. Default: No.

Inserting $^{\wedge}PC$ into your file will cause the printer to pause at that point. \longrightarrow 7-29

GO!

READY PRINTER, PRESS RETURN:

Check the printer to be certain that it's plugged in, turned on, and ready to print. Be sure the paper is correctly positioned. When everything is ready, press RETURN (or any key) to begin printing.

Printing usually begins at once, but it may be delayed if you choose a starting point other than page 1. During printing, you'll see the Opening Menu or the file you're editing, depending on where you started.

SETTING THE FUNCTION KEYS

The five function keys on the top row of the PX-8 keyboard—labeled **PF1** through **PF5**—are preset to commonly used Portable WordStar commands:

PORTABLE WORDSTAR FUNCTION KEYS

Key	Command	Function
PF1	^OL ESC	Set left margin at cursor column
PF2	^QR	Cursor to top of file
PF3	^PS	Begin/end underscore
PF4	^QC	Cursor to end of file
PF5	^OR ESC	Set right margin at cursor column

The preceding settings cannot be changed, but you can set the function keys so that when used with the SHIFT key they will perform any command, or series of commands, you choose. They can also be set to insert a word or phrase in your text.

HOW TO SET FUNCTION KEYS

To set your custom function keys, use the CONFIG. COM program while in the operating system. Select 2 (CP/M function key) from the Main Menu of the program. Then select any of the function keys numbered PF6 through PF10 (which correspond to PF1 through PF5 when shifted) that you wish to set, by typing a number 6-10.

Type in the desired command, string (series) of commands, or word(s). Enter the commands exactly as if you were using them in Portable WordStar, pressing CTRL and RETURN whenever needed. When you press RETURN it appears as ^M on the screen. At the end of each string, press HELP.

See PX-8 User's Manual for more details on using CONFIG.COM.

EXAMPLES OF SETTINGS

Here is an example of a string of commands that will set your margins to 10 and 55, and give you double spacing.

TYPE 6

SEE PF6

TYPE ^OL10 RETURN

^OR55 RETURN

^OS2

SEE ^O^L10^M^O^R55^M^O^S2

PRESS HELP

To get the preceding series of commands while working in a file, you would press SHIFT and PF6.

Another useful string of commands to set to a function key might be **D** (open a document file), the name of a frequently used file, RETURN, ^QC (cursor to end of file). You would use this function key at the Opening Menu to open a file and scroll to the end of it.

NOTE: There is a limit of 15 keystrokes that can be set to one function key. Any key but HELP can be used.



If you set the shifted function keys for use in Portable WordStar, the settings you choose will still be in effect when you enter another program. Likewise, you may set the keys with commands for another program, which would not give you the same effect in Portable WordStar. Be careful not to use a custom key except in the program it's meant for, or you may get some unexpected results!

SUMMARY TABLE: FILE OPERATIONS COMMANDS				
COMMAND	FUNCTION			
	While editing a file:			
^ks	Saves work and returns to present file			
^QP	Returns cursor to position before last command			
^KD	Saves work and exits to Opening Menu			
^KX	Saves work and exits to operating system			
^ KQ	Abandons without saving work in present file			
^KJ	Deletes any file except the present file			
^KL	Changes logged disk drive			
^ KP	Starts or stops printing			
	At the Opening Menu:			
0	Copies a file			
Ý	Deletes a file			
L	Changes logged disk drive			
X	Exits to operating system			

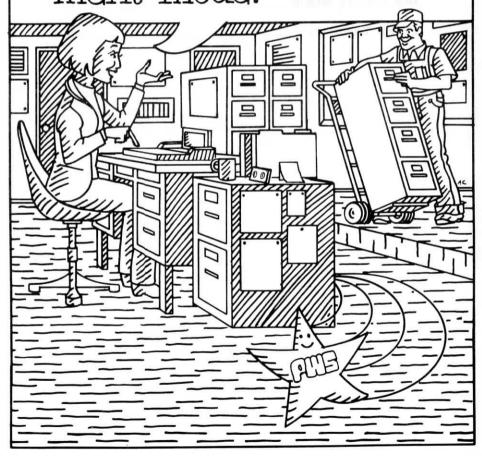
CHAPTER 10. NON-DOCUMENT FILES

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USING NON-DOCUMENTS	10-4
CHARACTERISTICS OF NON-DOCUMENT MODE	10-5
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CONVERTING NON-DOCUMENTS TO DOCUMENT MODE	10-6
FIXED TARRING	10-8

You can take those filing cabinets away.

Now we have our customer list in a datafile thanks to non-document mode!



10. Non-Document Files

The Portable WordStar non-document mode enables you to create files, such as datafiles or computer programs, for use outside Portable WordStar. In document mode, many special features assist you in your word processing; in non-document mode, the same features are switched off or altered to simplify your work with data.

DEFINING NON-DOCUMENTS

Non-document files are simply lists of data. They can be mailing lists, accounting entries in an electronic ledger, or the ordered instructions that make up a computer program.

Document files are different; Portable WordStar adds computer-language bits of information to your document text to operate special functions, such as word wrap and justification. If these bits of information were inserted in non-document mode, the resulting files would be misread by some software. You don't need to exit from Portable WordStar to create non-document files, but you should keep the changed functions in mind.

Non-document datafiles serve as common reservoirs of data that link various kinds of software together.

In Portable WordStar, any file not created in document mode is a non-document.

Computer programs written in hexadecimal code are neither document nor non-document, but a third category, non-text. Do not attempt to edit them with Portable WordStar. Read the appropriate assembler or compiler manual for instructions on editing such files.





USING NON-DOCUMENTS



To edit in Non-document mode, press N instead of D at the Opening Menu. You can still open any file on your disk, even a file written in document mode. But because Portable WordStar handles non-document files differently, you should avoid editing document files in this mode.

You can take advantage of non-document features to write and edit files to use with many programs. Here are some examples of non-document files:

EXAMPLES OF NON-DOCUMENT FILES

- Datafiles created for use with other programs, such as MailMerge, DataStar, ReportStar, and CalcStar.
 If you have standard WordStar for use on another computer, you may have some of these programs.
 (Follow the directions in their manuals to write files for these programs.)
- · Computer programs in text form
- · Any file created in WordStar non-document mode

Portable WordStar can manipulate all text files once they're converted to WordStar's language. Converting non-documents to document mode will be covered later in this chapter.

CHARACTERISTICS OF NON-DOCUMENT MODE

In non-document mode, many word processing features are turned off. You can turn some of them back on, but if you do, you defeat the purpose of the mode. Here are the changes in standard features of document mode:

ALTERED FEATURES

- No right margin
- · Word wrap off
- · Justification off
- · Ruler line display off
- · Pagination not working
- · Page break display not working
- Paragraph re-forming (^B) not working
- Dot command errors not checked or flagged
- · Variable tabbing replaced by fixed tabbing

UNCHANGED FEATURES

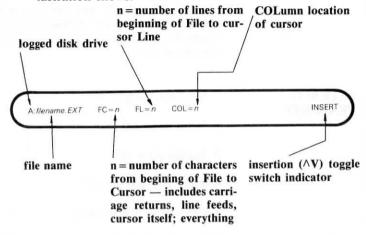
Here are some standard features that do not change:

- Left margin at column 1
- Insertion unchanged from last editing session (as long as you don't exit from Portable WordStar)



The Non-Document Screen

The top of your screen looks different in non-document mode. The status line is altered, as this illustration shows:





A handy way to find the length of your file is to press $^{\wedge}QC$, which moves the cursor to the end of the file. Then read FC=n and FL=n in the status line.

CONVERTING NON-DOCUMENTS TO DOCUMENT MODE

When you want to edit a non-document file in document mode, you must reformat it. If you have a file created with another program, for instance, you may need to convert carriage returns within a paragraph from hard to soft. In document mode, hard returns always indicated the end of a paragraph.

You can use either document or non-document mode to convert hard carriage returns. The capability of paragraph re-forming—not available in non-document mode—makes document mode a better choice.

Simply position the cursor at the beginning of the first paragraph you're converting, and then follow these steps:

HOW TO CON-VERT FILES

STEP 1 PRESS ^QA

SEE

FIND?

STEP 2 PRESS AN RETURN

SEE

REPLACE WITH?

STEP 3 TYPE a single space

RETURN

SEE

OPTIONS? (? FOR INFO)

STEP 4 TYPE N RETURN

(Your N entry tells Portable WordStar to replace without asking for your approval.)

Portable WordStar finds the first carriage return and changes it to a single space, joining the first and second lines. Then press ^L to find and change the next carriage return. Continue pressing ^L until you reach the end of the paragraph.

Don't convert the final return.



You've created a single, very long line with a hard carriage return at the end. To Portable WordStar, the line is a paragraph. If you've been working in document mode, press $^{\wedge}B$.

As you watch, Portable WordStar will rework the paragraph, justifying text between the margins and then positioning the cursor at the end.

Press ^L to reach the first carriage return in the next paragraph. Repeat the procedure for every paragraph you want to convert.

FIXED TABBING

WHAT IS FIXED TABBING?

Fixed tabbing is a standard feature in non-document mode. Because it is a feature designed mainly for programmers, it should be used with caution by others. Most operating system editors operate with fixed tabs.

Fixed tabbing and variable tabbing (the default for document mode) differ in the following ways:

VARIABLE TABS	FIXED TABS	
Defau	ılts	
Tab stops every 5 columns	Tab stops every 8 columns	
(1, 6, 11, 16, 21, etc)	(1,9,17,25,33,etc.)	
Tab stops can be reset	Tab stops can be reset	
Insertio	n On	
TAB inserts 5 individual spaces	TAB inserts 8 "connected" spaces	
Spaces inserted by TAB are deleted	Spaces inserted by TAB are deleted	
1 at a time	8 at a time	
New text entered to the left of a	New text entered to the left of a	
stop pushes old text to the right 1	stop pushes old text to the right	
space at a timé	8 spaces at a time	
Insertio	n Off	
TAB moves cursor 5 spaces to the	TAB moves cursor 8 spaces to the	
right	right	
New text overprints old text and tab	New text overprints old text and	
stops	tab stops	

Any text that follows a *variable* tab stop lies at the right edge of five individual spaces. Any text that follows a *fixed* tab stop lies at the right edge of a "single character" eight columns wide.

When you delte a fixed tab stop, the cursor jumps to the left across this single chracter of eight spaces. When you press TAB while the cursor is to the left of a fixed stop, any text following that stop jumps one eight-space character to the right. Text entered with insertion on also pushes text that follows fixed tab stops to the right. With insertion off, new text overprints tab stops and spaces alike, as always.

Use $^{\wedge}$ **OV**, a toggle switch, to turn fixed tabbing on and off in document or non-document mode. \longrightarrow 6-7

Use $^{\wedge}$ PI to enter an Individual fixed tab into your file when you're otherwise using variable tabs. \longrightarrow 7-30

APPENDICES

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Portable WordStar

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Appendix A

Printing Portable WordStar Files with Standard WordStar

Since some of Portable WordStar's commands work differently than they do in the default installation of standard WordStar (for example, the commands for various print sizes or italic print), you need to make some adjustments to standard WordStar when you use it to print Portable WordStar files. This appendix contains information necessary to install standard WordStar for an Epson RX-80 or FX-80 printer. When you transmit files (through the transmit command, microcassette tape, or floppy disk) to a computer equipped with standard WordStar that has been installed in the following manner, the Portable WordStar commands will give the expected printed results.

Protocol method: none

CP/M's LST: driver is used with a printer busy test using a BIOS call. (Set HAVBSY to FF.)

Overprint method: carriage return overprint

Sub/superscript method: half-line-feed

Backspacing method: simulate using carriage return overprint

Non-break Space: ^O Space Phantom Space: ^F Space

Boldface strikes: 3

User print functions:

1: 0FH Set condensed mode
2: 12H Cancel condensed mode
3: ESC W 1 Set continuous enlarged mode

4: ESC W 0 Cancel enlarged mode

CRLF string: CR, LF, CR, LF

CR only string: CR

CR and half line feed string: CR, LF

General

Patching

Roll up carriage string: none Roll down carriage string: none

Backspace string: ^H

Alternate character width string: ESC, M Standard character width string: ESC, P

Alternate ribbon color string: ESC 4 Italics Standard ribbon color: ESC 5 Cancel italics

Patch PSCRLF and PSHALF as for half-line-feed printer. Patch as follows:

PALT:	2,ESC,'M'	
PSTD:	2,ESC,'P'	
USR1:	1,0FH	
USR2:	1,12H	
USR3:	3,ESC,'W1'	
USR4:	3,ESC,'W0'	
PSINIT:		
	ESC,'A',6	;LINE HITE 1/2 NORMAL
	ESC,'P'	;REGULAR PITCH RX-80
	12H	;DC2: CANCEL CONDENSED
		MODE.
	ESC, 'W0'	CANCEL ENLARGED MODE.
	ESC,'F'	;CANCEL "EMPHASIZED"
		RX-80, FX-80.
	ESC,'H'	;CANCEL "DOUBLE STRIKE"
		RX-80, FX-80.
	ESC,'5'	CANCEL ALTERNATE MODE
		RX-80, FX-80.
PSFINI:		
	ESC,'A',12	RESTORE NORMAL LINEHITE
	ESC,'P'	REGULAR PITCH RX-80
	12H	;DC2: CANCEL CONDENSED
		MODE.
	ESC, 'W0'	;CANCEL ENLARGED MODE.
	ESC,'F'	;CANCEL "EMPHASIZED"

RX-80, FX-80.

RX-80, FX-80.

RX-80, FX-80.

ESC,'H'

ESC,'5'

;CANCEL "DOUBLE STRIKE"

CANCEL ALTERNATE MODE

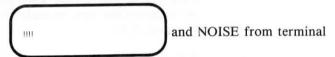
Appendix B

Error Messages

The following list shows error, warning, and informational messages that may appear on your terminal screen as you work in Portable WordStar. The messages, listed alphabetically here, include explanations and recommendations for appropriate action.

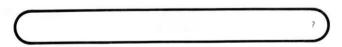
Occasionally you'll see the description "Fatal Error" in a message—a colorful way of saying that you're going to lose the work done in your current editing session. Simply reset your system before continuing. The loss will be minimal if you're in the habit of saving your work often.

Some messages require that you press the ESCape key before continuing. Doing so ensures that Portable WordStar does not proceed to the next command, even if you have typed ahead. Pressing the ESCape key does not affect your document.



Situation. You are typing too fast, and there is no more space to store characters for later processing. Keystrokes are being lost. The exclamation points appear continously at the cursor position.

Action. Stop typing or release the key you're repeating. When the computer has stopped making entries, continue editing.



Situation. A question mark appears in the flag column, opposite incomplete or apparently invalid dot commands.

Action. Check for correct letters, missing numeric arguments, or numbers greater than 255, except with the .PN command. The question mark appears as you enter a command; disregard it until your command is complete.

BAD FILE NAME: A:filename

Situation. The name you entered cannot be accepted by Portable WordStar. Some character in the name may not be acceptable to your system.

Action. Enter a new file name. You'll find file-naming guidelines in this manual.

BDOS ERR R/O

Situation. This operating system message or something similar may appear when you change disks at an inappropriate time or neglect to type $^{\land}$ C after changing disks.

Action. Refer to the section on changing disks in your PX-8 User's Manual.

Can't copy a file while printing.

Situation. You are trying to copy (O) a file while printing.

Action. Wait until printing is completed before copying.

Can't display page breaks in a non-document file

Situation. The command to display page breaks (^OP) has no effect in non-document editing.

Action. Proceed with your editing.

Can't edit .BAK or .\$\$\$ file

Situation. When the **D** or **N** command is selected from the Opening Menu, you cannot enter a file name that ends in .BAK or .\$\$\$. The Opening Menu remains on the screen.

Action. Using the operating system command PIP, rename the file or, for a file of moderate size, open a new file, and then read the .BAK or .\$\$\$ file into it with the file reading command (^KR). (Copying too large a file may give you a disk-full error.)

CAN'T EDIT WITH CASSETTE AS DESTINATION OR USE ROM FILES

Situation. You are trying to edit a file on a ROM drive, save a file to the microcassette tape or ROM drive, or edit on the microcassette drive without naming another drive for saving the file.

Action. You can't edit files at all on a ROM drive, unless it's a file from another drive, for example, A: filename. If you get this error message while logged on a ROM drive, log onto another drive. If you are already on a drive other than ROM, choose the RAM disk or a floppy disk for saving the file.

Can't transmit or receive a file while printing.

Situation. You are trying to use the transmit (T) or receive (C) command while printing.

Action. Wait until printing is completed before transmitting or receiving a file.

```
*** ERROR E5: MARKER NOT SET *** Press ESC Key
```

Situation. The marker indicated wasn't set during current editing.

Action. Press the ESCape key to continue. Set the marker using $^{\wedge}$ K 0-9.

```
*** ERROR E6: BEGINNING NOT MARKED (OR UNDISPLAYED).

*** Press ESC Key
```

Situation. The beginning marker has not been set on the block of text you're attempting to move (^KV), copy (^KC), delete (^KY), or write (^KW). This message will also appear if the beginning marker is hidden by either ^KB or ^KH.

Action. Set the beginning marker using $^{\wedge}$ **KB**, or redisplay the marker with $^{\wedge}$ **KH**.

```
*** ERROR E7: END NOT MARKED (OR UNDISPLAYED).
*** Press ESC Key
```

Situation. The end marker has not been set on the block of text you're attempting to move (K V), copy (K C), delete (K Y), or write (K W), or the marker is hidden with K H.

Action. Set the end marker using ^KK, or redisplay the marker with ^KH.

*** ERROR E8: END BEFORE BEGINNING *** Press ESC Key

Situation. When the end marker is placed earlier in the document than the beginning marker, Portable WordStar can't find the block to move, copy, delete, or write.

Action. Correct the markers and then reissue the command.

*** ERROR E9: BLOCK TOO LONG *** Press ESC Key

Situation. The amount of text between markers is more than Portable WordStar can move or delete. The larger the memory that is available for Portable WordStar to use, the larger the block you can move or delete. (The block-write command isn't subject to any size limitation.)

Action. Divide the large block into smaller pieces, and move or delete them one at a time.

*** ERROR E12: DRIVE FULL *** Press ESC Key

Situation. You have run out of space on your current drive or the drive to which you are trying to save your file.

Action. Stop entering text and follow one or more of these suggestions to save your work. You may be able to continue entering text without taking remedial action first, but it will make the situation worse. The screen may scroll a few lines after this message appears—simply wait until it stops before you try to do anything.

 If the cursor position is near the beginning of a large file when you receive this message and you haven't already tried to save the file, you may be able to move the cursor nearer the end. Then try to save the file with ^KS.

- 2. If this message appears when the cursor is toward the end of the file or while saving the file, delete (^KJ) any unnecessary files or any files that you can replace later from another drive or storage medium. Then continue editing. Remember, if you are trying to save to another drive, the destination drive is the one from which you want to delete files.
- If deleting files doesn't allow you to finish the editing and you don't have much work to lose, stop editing, make more space available by moving some files, and repeat your editing.
- 4. If you have made substantial changes and don't want to lose your editing but can't get enough space to finish, take one of the following actions:
 - a. Use the block-write command (^KW) to put changed portions of the file on any extra space on another drive. Recombine the document in later editing.
 - b. Delete unchanged portions of the document, then recover them from the .BAK file or from a previous backup copy.
- 5. If the drive-full message results from a block-write command (^KW), the above suggestions won't work. Delete (^KJ) the incomplete file. Then arrange additional space, repeat the block-write command, and continue editing.

If the message reappears when you press ESCape, your editing is lost. To avoid running out of space, use the system's file status utility frequently to check your file sizes and drive space.

*** ERROR: BAD TRANSFER *** Press ESC Key

Situation. A transmission error has occurred while transmitting a file using the commands T and C.

Action. Check to see that RS-232C ports are set to same bit rate and other parameters on both computers. Check cable connection. Try transmission again.

* * * FATAL ERROR F25: NOT ENOUGH MEMORY

Situation. Not enough memory is available to operate Portable WordStar.

Action. See your dealer.

* * * FATAL ERROR F27: DIRECTORY FULL

Situation. You have exceeded 64 file directory entries, which is all the drive can hold.

Action. Keep track of the number of files per drive, especially if you have many small files. Large files (over 16K) require an additional entry for each 16K.

* * * FATAL ERROR F28: CLOSE FAILURE

Situation. Portable WordStar has encountered one of three problems:

- 1. An operating system error has occurred.
- 2. You have changed the disk in a drive while editing.
- You have deleted either the input file or the work file with ^KJ.

Action. You will be returned to the operating system and your file will not be saved. Enter Portable Word-Star and begin work again.

File A:filename not found.

Situation. The file named in response to the transmit, read, copy, or print command does not exist.

Action. Enter the corrected name, including the drive, if necessary, or press RETURN to discontinue the command.

Finishing print ...

Situation. You entered X from the Opening Menu, or ^KX while editing, at the same time you were printing. OR You gave a save command while printing the .BAK file of the file currently being edited. OR You gave a save command (^KD, ^KS, ^KX) while printing the same file concurrently.

Action. The Portable WordStar program waits for printing to finish, then exits to the operating system or saves the file.

- *** INTERNAL ERROR I15: BAD COPY LEN *** Press ESC Key
- *** INTERNAL ERROR I16: ADDR IN HOLE (TSTADR) * * Press ESC Key
- *** INTERNAL ERROR I17: MEM FULL (MAK256) *** Press ESC Key
- *** INTERNAL ERROR I18: MEM SHORTAGE (MKSP) *** Press ESCAPE Key
 - * * INTERNAL ERROR I19: PTR > 64K FROM CRSR (PPTOAD)
- ** * Press ESCAPE Key

Situation. These are internal errors, which rarely occur during normal operations.

Action. Save your work immediately, and exit to the operating system. To further protect your file, make a copy of the backup file. Then re-enter Portable Word-Star and check your file. Please report these errors to your dealer.

* * * INTERRUPTED * * * Press ESC Key

Situation. You pressed ^U to interrupt the command in progress or to discard additional characters typed ahead.

Action. Press the ESCape key and continue editing.

* * * NOT FOUND: _____ * * * Press ESC Key

Situation. The find (^QF), replace (^QA) or find/replace again (^L) command can't locate the specified string between the cursor position and the end of the document.

Action. If you haven't located all occurrences of the specified string, reposition the cursor to search from an earlier point in the file, and repeat the search.

*** PRINT OUTPUT DRIVE FULL ***

Situation. The drive containing the print output file is full and printing is automatically halted.

Action. Use either or both of the following solutions:

- 1. To continue printing, make additional drive space available, then press ^KP.
- 2. To abandon printing, type **PPY** at the Opening Menu, or, while editing, type ^ **KP**^**KPY**. You can then delete the print output file which is currently incomplete.

PUT AT TOP FOR GOOD PAGE DISPLAY!

Situation. If the page break display is on, this message will appear in the text when you enter .PL, .MT, or .MB, after the beginning of a file. The command entered into the file may be misinterpreted by the print function. The message is on the screen only and is not printed.

Action. To avoid the problem, move the dot command to the beginning of your file.

Too little memory to edit and print at same time.

Situation. You can't select **D** or **N** from the Opening Menu while printing or you can't give the print command (^KP) during an edit, because there is not enough memory available to perform both functions at once.

Action. Finish one operation before performing the other.

*** WARNING: DRIVE FULL DELETING OLD .BAK FILE

Situation. Your drive may be filling up, or the files are so large that two to three files fill one drive.

Action. Save the document you're working on, and make more space available by deleting unwanted files or by moving some files to new drives.

WARNING: Editing and printing same file!

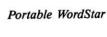
Situation. If you have begun editing during printing, Portable WordStar will not allow you to save the edited version until the print has completed or has been abandoned. If you are printing with ^KP while editing, the last saved version will be printed, not reflecting unsaved changes. Furthermore, Portable WordStar will not allow you to save the file being edited while the print is in progress.

Action. Finish printing before you save your current editing.

*** WARNING: Word too long

Situation. There are too many characters to fit between the currently set left and right margins with no word break. The message also appears during paragraph re-forming (^B) when a word is too long. The Portable WordStar program looks about 10 characters beyond the margin for a break and allows the word to project into the right margin if it finds the break. If no break is found, the word is split at the margin.

Action. You can leave the line wide, or delete the excess characters.



Appendix C

Glossary of Terms and Concepts

APPLICATIONS

Specific uses for a program. With Portable WordStar, for example, you can create letters, proposals, resumes, reports, timetables, etc.

ASCII

American Standard Code for Information Interchange. This character coding technique enables computers made by different manufacturers to interpret patterns of bits in the same way.

BACKUP FILE

A duplicate of another file, which you create for safekeeping. A special kind of backup file, BAK, is automatically created by Portable WordStar when you save the file you've been editing. You can't edit a BAK file until you rename it.

BAUD

A measurement (in bits per second) of the speed with which information is transmitted between two computer devices, a computer and a printer, for example. If the transfer rate of a computer is 9,600 baud, 9,600 bits of information can be transmitted between the computer and the printer each second.

BINARY

Belonging to a system of numbers having 2 as its base. A bit, which is a binary digit, has a value of 0 or 1.

BIT

A short form of "binary digit." A bit is the smallest unit of data and has a value of 0 or 1.

BLOCK

A portion of text ranging in length from one word to several pages. During editing, you mark blocks in order to move, copy, or delete text.

BUFFER

An area for temporary storage of data. Information coming into a printer, for example, is often placed in a buffer to await processing.

BYTE

A sequence (or group) of binary bits used to represent one character of information. A byte consists of 8 bits. The PX-8 is an 8-bit computer; it processes one byte at a time.

CARRIAGE RETURN

In word processing, the return of the cursor to the beginning of the next line. When you press the RETURN key, you enter a hard carriage return, which remains in place even when Portable WordStar reforms text.

Word wrap adds soft carriage returns and deletes them automatically when text is re-formed.

The RETURN key is also used to signify that you have finished typing the answer to a question when executing a command.

CHARACTER

A single digit, letter, punctuation mark, space, or other symbol which the computer can read or write.

COMMAND

An instruction transmitted to your computer when you press specified keys. See Control Commands and Dot Commands.

CONTROL COMMANDS

Commands issued to the computer when you press a key (or keys) while holding down the control key.

CONTROL KEY (CTRL)

A key, often represented by the caret symbol (^), used with other keys to command the computer to perform specific functions.

CP/M

The operating system used by your computer.

CURSOR

A small rectangle or line on the screen, marking your place in the text.

DATA

Information stored or processed by the computer.

DATAFILE

A group of related pieces of information, called *records*, stored together. A record consists of *fields*, single items of information. If a datafile consisted of a mailing list, for example, a record might contain all the information about a single addressee. One field within that record might contain the name, another the street address, another the city, etc.

DEFAULT

A pre-set value or condition in a program, which you can change or allow to stand.

DISK

A round, magnetic piece of plastic enclosed in an envelope, used to store information processed by your computer. Also called floppy disk or diskette.

DOT COMMANDS

Print commands which begin with a period ("dot") typed in the first column (at left margin) of a Portable WordStar file.

DRIVE

A component of your computer where information is placed by the manufacturer or stored by you. Normally, drive A is RAM, drives B and C are ROM, drives D-G are optional floppy disk drives, and drive H is the microcassette tape.

The *logged drive* is the default drive, or the drive that is assumed unless some other is specified.

ERROR MESSAGE

A statement that appears on your screen when your computer is unable to continue processing. The message tells you what the problem is and how to solve it.

FIELD

See Datafile.

FILE

A storage unit for information that has been entered into your computer in the form of text, data, or programs. A file is identified by a unique name.

A document file contains text or other information entered in document mode. A non-document file contains information entered in non-document mode.

See Datafile.

FLAG

A symbol relating to text format which appears in the last column to the right on your screen, the "flag column." The symbol for hard carriage return (<) appears there, for example.

FORM FEED

A form feed advances the paper in your printer to the top of the next page.

FORMAT

The way you arrange text on your screen, using com-

mands for setting margins, centering text, etc.

FUNCTION CODES Coded directions to the terminal or printer to perform specific actions such as setting tabs, backspacing, or positioning the cursor on the terminal screen.

HARD COPY

Your printed copy as opposed to the copy stored on a disk or cassette tape.

HARDWARE

The mechanical and electronic components of a computer system.

HEXADECIMAL (hex)

A numbering system with a base of 16 (as opposed to the decimal system, with a base of 10).

INPUT/OUTPUT

Input refers to any information coming into the computer. Output refers to processed information going out of a computer.

INSERT

Add characters or spaces to your text.

JUSTIFICATION

The alignment of text within given margins. The left margin is justified as you enter your text. Word wrap justifies the right margin by adding space between words and characters.

K (SPACE ON DISK) The abbreviation for kilobyte. 1K is equal to 1,024 bytes (or 1,024 characters) of memory. The more bytes of memory a computer has, the more information it can store.

LETTER-QUALITY PRINTER

A printer, often equipped with a "daisy wheel," that has capacities for backspacing and microjustification as well as interchangeable printing elements.

LOAD

Transfer data or programs into a computer's memory.

MEMORY

See RAM, ROM, and Buffer.

MENU

A screen display that lists options or commands from which you can choose, just as you would select courses from a restaurant menu.

.....

MODE

The set of features operating while you work on a file. In Portable WordStar's document mode, for example, various program features (such as fixed tabbing and word wrap) speed up the job of word processing. In non-document mode, on the other hand, the same features are turned off.

OPERATING SYSTEM

A collection of programs that "runs" the computer. Using your operating system, you can tell your computer the name of the program you want to run—in this case, Portable WordStar. The system finds Portable WordStar and begins its operation. Your operating system also determines when and how information is sent to your terminal, printer, disk drives, and other components. Your operating system is CP/M.

PAGE BREAK

A place in text where one page ends and another begins. You can direct Portable WordStar to place a page break between two blocks of text so that they will print on separate pages.

A conditional page break occurs only after a prescribed number of text lines. For example, the dot command .cp4 directs Portable WordStar to start a new page if the following four lines of text cannot fit on the current page.

PAGE OFFSET

A page format command which sets the number of columns that the printer skips to the default left margin. For example, if the left margin is set to 1 (the default setting), and the page offset is 5 (.po5), then the left margin will be 5 columns wide on the printed page.

PARALLEL INTERFACE

Also called *parallel transmission*. The mode in which information is transmitted between locations one byte at a time. Parallel transmission is usually faster but more complicated than serial transmission. See **Serial Interface**.

PLATEN

The roller that moves paper through the printer—like the platen on a typewriter.

PORT

A connection between the computer and another component. For example, your computer sends information to the printer through one of its ports.

PROGRAM

A coded set of instructions which tells a computer what to do and how to do it. By changing the code, you can alter the functioning of a program.

To program a computer means to write the coded instructions for its operation.

PROMPT

A question or statement that appears on your screen, indicating that the computer is ready to process your instructions.

RAM

Random Access Memory. An area of computer memory where information can be read or written. RAM is measured in K bytes; e.g., the PX-8 computer has 64K RAM, or 65,536 bytes of random access memory.

RAM DISK UNIT

RAM Disk Unit is an optional unit provided for the Epson PX-8, and adds extra Random Access Memory to the PX-8.

READ

Copy information from a disk or other drive into RAM.

RE-FORM

Align text between right and left margins.

ROM

Read Only Memory. You cannot write in the ROM portion of your computer, only run programs stored there. Information is stored once in ROM (by the manufacturer) and cannot be changed.

ROM CAPSULE

A capsule which you can insert into and remove from the computer. It contains read only memory and is used to store applications programs.

SAVE

To store information in an area of the computer (floppy disk, RAM disk, or microcassette tape) from which it can be retrieved.

SCROLL

Move the screen view (or "window") up or down. You can scroll one line or one whole screen at a time.

SERIAL INTERFACE Also called *serial transmission*. The mode in which information is transmitted one bit at a time between the computer and another component (terminal or

printer).

SOFTWARE

Programs written to be used on a computer.

STRING

A sequence of letters, numbers, or other characters.

TOGGLE SWITCH

A command key that, when pressed once, turns a feature on (or off) and when pressed again, gives the opposite result.

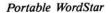
UTILITY PROGRAM A program designed to do a routine task. Utility programs help you move or examine files and check that the components of your computer system (computer, printer, disk drives, etc.) are set up properly. Utility programs are supplied to you with your operating system.

WORD WRAP

A Portable WordStar feature that automatically moves words to the beginning of the next line when you type beyond the right margin.

WRITE

Copy information from RAM onto a drive.



Appendix D

Memory Requirements for Using Portable WordStar with Other Programs

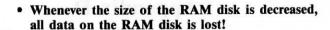
There are several things you should know about the way memory is used in the PX-8. Within certain limits, you may choose the sizes of two areas of RAM (random access memory): the RAM disk and USER BIOS. The RAM disk can be used for storing files created with Portable WordStar, Portable Calc, or BASIC. USER BIOS stores Portable Scheduler messages. If your system has the optional RAM Disk Unit, you need not be concerned with any of the following information, because the size of your RAM disk will be fixed.

- You can select the size of the RAM disk and USER BIOS at System Initialization, or by running the utility program, CONFIG.COM.
- The size of your RAM disk and USER BIOS is listed on the System Display (press CTRL + HELP).
- Possible RAM disk sizes range from 0-24K.
- Possible USER BIOS sizes range from 0-16 pages.
 Four pages are equal to 1K, so the range in bytes is 0-4K.
- The combined size of the RAM disk and USER BIOS cannot exceed 24K at any time. For example, if the RAM disk is set to 22K, you will not be able to set USER BIOS any larger than 8 pages (2K).
- Portable WordStar runs properly no matter what RAM disk or USER BIOS size is selected.
- Portable Calc runs properly as long as an 18K combined RAM disk and USER BIOS area is not exceeded. If this limit is exceeded, the program may run, but there will not be much room to accept data.

Portable WordStar









· Any time you lower the size of USER BIOS, your Portable Scheduler messages will be erased. The next alarm will still go off, but subsequent alarms must be reset.



- · All Scheduler messages will be erased whenever you initialize the system by using the reset hole on the side of the PX-8 and pressing the SHIFT and NUM GRPH kevs.
- The number of Scheduler messages you can store depends on the size of the RAM disk and the length of the messages.
- The following chart suggests RAM disk sizes for using some PX-8 programs. If you will be using both Portable Calc and Portable WordStar, use the RAM disk size suggested for Portable Calc.

PORTABLE SCHEDULER

with	Heavy use	Moderate use	Not in use
PORTABLE CALC	14 or 15K	16 or 17K	18K
PORTABLE WORDSTAR	20 or 21K	22 or 23K	24K

Appendix E

Quick Guide

The steps below will guide you through a simple path to creating a document in Portable WordStar, saving it, and printing it.

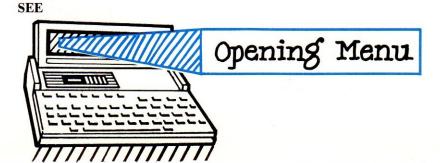
1. Entering Portable WordStar At the system prompt TYPE:

B:WS RETURN

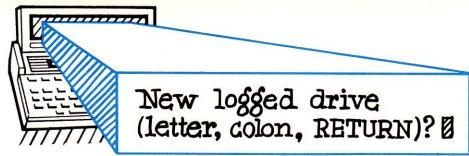
or

At the System MENU screen, select WS.COM

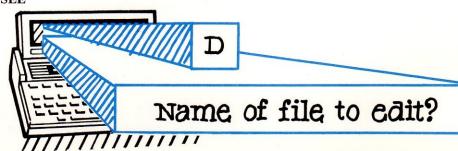
- 2. Changing Drives
 At the Opening Menu
 TYPE:
 - L
 - (drive name): RETURN
- 3. Opening a Document At the Opening Menu TYPE:
 - D
 - (filename) RETURN



SEE



SEE

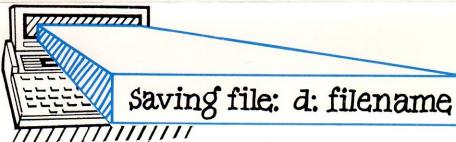


4. Entering Text and Saving Your Work TYPE:

^KD

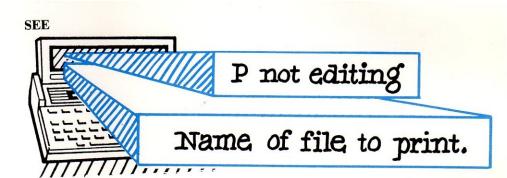
SEE

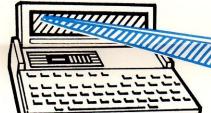
SEE



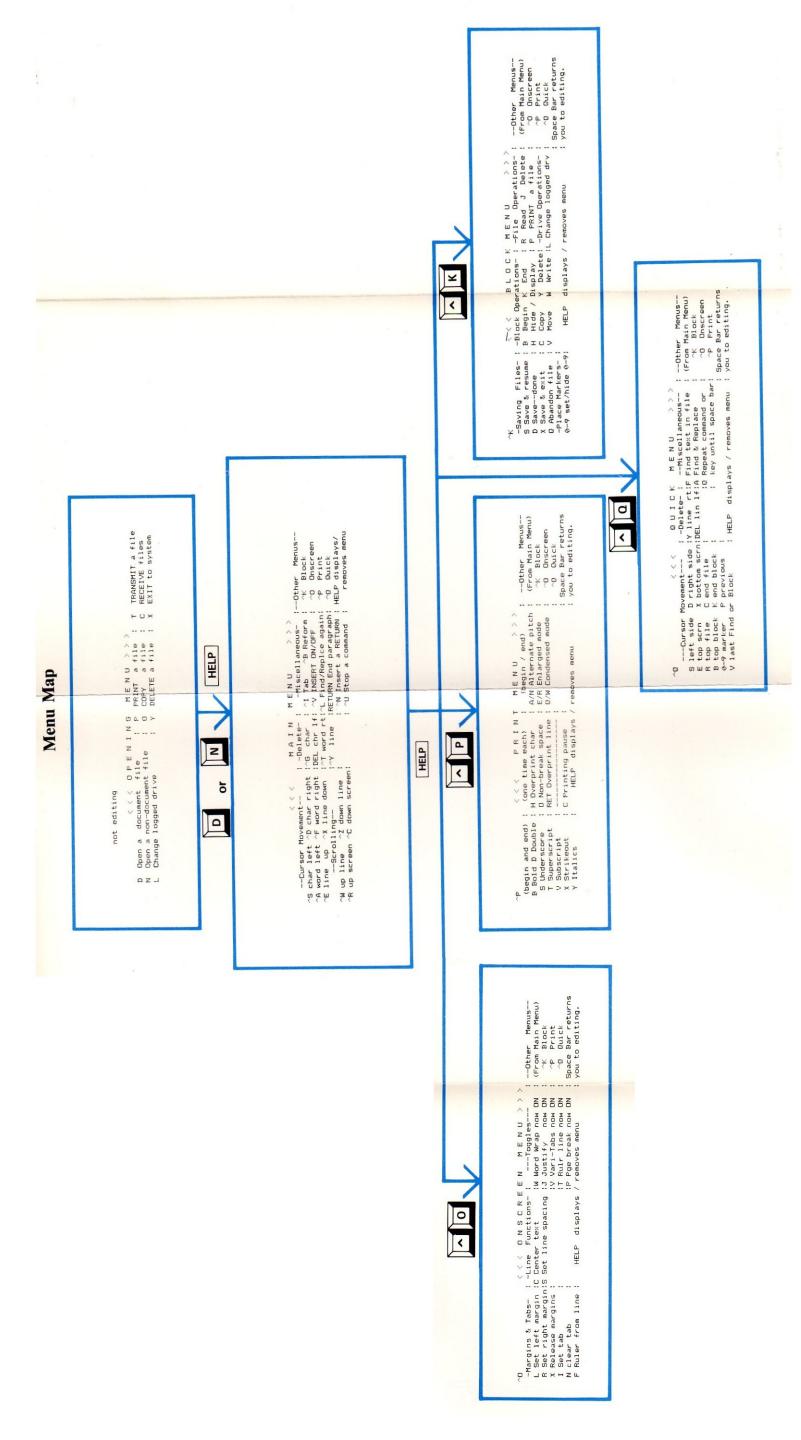
- 5. Printing Your Document At the Opening Menu TYPE:
 - P
 - (filename) ESCape
- 6. Leaving Portable WordStar At the Opening Menu TYPE:

*7





A>



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Note: Boldfaced page number references tell you where to find the principal treatment of a subject.

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