WordStar

Getting WordStar Started

In order to start WordStar, place the WordStar diskette in drive
A and a formatted diskette in drive B, then press **RETURN**. The
diskette in drive B will be used to store text files you generate.

Once WordStar is running the message

editing no file

appears at the top of the screen with a menu of WordStar opera-
tions below it. Each operation is identified by a single letter
which you press to select the desired operation. Pressing **CTRL**
is not necessary when you enter commands from the No-File
menu—in fact this is the only menu from which WordStar uses
non-control letters as commands. Here is the No-File menu you
will see:

```
              editing no file
  ─────────────────── NO-FILE MENU ───────────────────

  D=edit DOCUMENT      O=COPY a file    R=RUN program
  N=edit NON-DOCUMENT  E=RENAME a file  P=Print a file
  X=EXIT to CP/M       Y=DELETE a file  M=MERGE-PRINT
  H=set HELP level     L=LOG drive      F=files off (ON)

  ─


  DIRECTORY of disk A:
    AUTOST.COM    WS.COM         MAILMRGE.OVR
    WSMSGS.OVR    WSOVLY1.OVR
```

Initiate the following operations by pressing the letter indicated:

CREATE OR EDIT A DOCUMENT — *creates or retrieves a document file*

D is used for general word processing. A file name is requested. Supplying a new file name causes a new file to be created under the specified name. Entering an existing file name causes the specified file to be fetched from the current drive and displayed on the screen.

EDIT A NON-DOCUMENT — *creates or retrieves a nontext file*

N is used to create or edit a data file for merge-printing. The non-document mode is generally used by programmers to create source-program files.

MERGE-PRINT — *initiates merge-printing of a file*

M initiates a merge-print operation. Merge-print merges files during printing, thereby generating form letters, boilerplate text, mailing lists, and large documents.

DISPLAY DIRECTORY — *toggles appearance of file directory*

F turns the file directory OFF or ON again. The menu displays the current status. When the file directory is ON, the names of all text files on the logged drive are displayed.

CHANGE LOGGED DISK DRIVE — *activates alternate disk drive*

L selects the "logged" or "active" drive; WordStar assumes that all text files are on the diskette in this drive. When you press **L**, a message asks you to select the drive to activate. Type the drive letter followed by a colon, and press **RETURN**.

RUN A PROGRAM — *runs a program from the No-File menu*

R runs a program without exiting from WordStar. You can execute CP/M Plus programs, such as DIR and SHOW, by supplying their file names to the **COMMAND?** prompt.

HELP SET — *establishes the level of assistance displayed on the screen*

H selects the level of information the menus display. As you become more experienced with WordStar, you may want to decrease the level of assistance displayed in the menus at the top of the screen.

EXIT TO SYSTEM — *relinquishes control to CP/M*

X exits WordStar and returns control to the CP/M operating system.

PRINT A FILE — *toggles printing of a named file*

P initiates and halts printing of a text file. The name of the file to print is requested, followed by prompt questions regarding the print operation. The current print status is displayed on the screen.

DELETE A FILE — *deletes the specified file*

Y deletes a file from the diskette in the currently active drive. A file name is requested, and the named file is subsequently deleted.

FILE COPY— *copies a file*

O copies a file from source to destination. The name of the file to be copied, and the name of the file where the copy is to be transferred are requested. If the destination file name exists, it will be erased unless the command is abandoned.

FILE RENAME— *renames a file*

E assigns a new name to a specified file. The existing file name is requested; when the name is supplied, the new file name is requested. Supplying the new file name and pressing **RETURN** completes the renaming process.

Block Operations

An entire section of text may be moved, copied, deleted, or written to another file. All these operations are performed by block commands. To manipulate a section of text, you must first "block" it. To block a section of text, place the cursor at the beginning of the text to be blocked and type **^KB**; a **< B >** will appear on the screen to indicate the position of the beginning marker. Next, move the cursor to the end of the text you wish to enclose within the block and type **^KK**. The entire marked block will be displayed in half intensity so it is easy to distinguish.

You can set a beginning and end block marker in the middle of a paragraph to manipulate a sentence, or in the middle of a sentence to manipulate a word. A feature for manipulating columns of text is also provided. **^KN** turns this column block feature ON or OFF.

You can have only one marked block in your text file at a time. A new **^KB** or **^KK** command will replace any previous block beginning or end marker, if one exists. The marked block is always the implied source for any block operation. Those block commands that require a destination assume the cursor position as the location. Following are the BLOCK commands:

BLOCK MARK BEGINNING—*defines the beginning of a block*

^KB marks the beginning of a block at the cursor position. The beginning block marker is displayed as a **< B >**. Alternatively, **^KB** hides the displayed marker.

BLOCK MARK END—*defines the end of a block*

^KK marks or hides the ending of a block. It is used with the beginning block marker to enclose a section of text so you can perform block operations on it.

BLOCK COLUMN—*specifies a column block*

^KN switches between column block and normal block modes. When in column block mode, a block extends from the column in the line of the beginning marker to the column in the line of the end marker. The usual block commands are used to manipulate the marked block.

BLOCK COPY — *copies a block from source to destination*

^KC

copies the currently marked block of text to where the cursor is positioned. The original text remains unaltered. The block markers move with the text.

To copy a text block, place the cursor at the desired destination and type **^KC**. The current block is then copied to the cursor position. The cursor stays at the beginning of the copy.

The block markers are transferred with the copy of the block and remain displayed. The command **^KH** hides the block markers following a block operation.

You may make as many copies of the block as you desire by typing **^KC** as many times as necessary. Copies may be made in different locations by moving the cursor to the desired position between copy commands.

Using **^QV** after a block copy returns you to the source of the block.

After copying a block, you may use the REFORM command, **^B**, to reformat the text.

NOTE

Unlike Block markers, Place markers do not move with the marked block.

BLOCK DELETE—*removes a block from a file*

^KY   deletes the currently marked block. The block must be visible (not hidden) for **^KY** to delete it. Since large amounts of text can be deleted by accident, it is recommended that a block be hidden when you're not operating on it.

When a block is deleted, both block markers are hidden and left at the position of the deleted text. You can use the **^QV** command to move the cursor to the delete location.

BLOCK MOVE—*moves a block to the desired position*

^KV   moves a block to the cursor position. Place the cursor at the desired destination and type **^KV**. The cursor is left at the beginning of the moved text.

The block markers move with the block and remain displayed. The command **^KH** hides the block markers after the block operation.

Following a BLOCK MOVE, the **^QV** command returns to the source of the block. Also, the REFORM command, **^B**, can be used to reformat text after the block is moved.

NOTE

There is a limit to the size of block you can move or copy. If a BLOCK-TOO-LONG error occurs, divide the block into smaller sections and perform the BLOCK operation on each section.

BLOCK WRITE TO FILE — *sends content of block to a named disk file*

^KW   transfers the contents of a block to another file on the logged drive, or drive specified. The name of the file where the block is to be transferred is requested, the contents of the block are then written to the named file. The entire contents of any existing file with the same name will be erased. To prevent unintended erasures, if the file name that is specified already exists, WordStar responds:

`FILE d:name.typ EXISTS....OVERWRITE? (Y/N):`

Pressing **Y** causes the BLOCK WRITE function to write over the previous contents of the specified file; pressing **N** causes the file name to be requested again.

BLOCK WRITE lets you extract text from a document and save it as a separate document. BLOCK WRITE may also be used to move a section of text large distances within a file: write the block to a temporary file, then move the cursor where you want the block moved and read the file containing the block with **^KR**.

BLOCK HIDE/REDISPLAY — *toggles display of a block*

^KH
hides a text block so that no BLOCK operations can be performed on it. Though hidden, the text remains blocked until another section of text is blocked. Alternatively, the **^KH** command redisplays the hidden marked block making it once again subject to BLOCK operations.

Changing the Logged Disk Drive

The standard procedure for starting WordStar involves activating the disk drive where files will be stored. After you place the WordStar program's diskette in drive A and press **RETURN**, the A drive is activated (logged). What this means is that, unless you append the drive identifier B:, any files you create or edit will be stored on the program's diskette in drive A.

"Logging onto" the B drive provides the most convenient method of managing your files. You should log onto drive B before issuing any other command from the No-File menu. Subsequently, all your files will be stored and retrieved from the logged drive B. Here is a summary explanation of the command used to log drives:

CHANGE LOGGED DISK DRIVE — *activates alternate disk drive*

^KL
(**L** from the No-File menu) changes the logged drive where files will be stored. The currently active drive is identified, and you are asked which drive to log. The file directory reflects the contents of the currently active drive.

After you type ^KL (or L), the name of the drive where files are currently being stored is displayed. You are asked to identify the disk drive to activate. Enter the drive letter followed by a colon (A: or B:). Files will subsequently be written to, and read from this drive.

Remember, WordStar will always read from and write to files on the currently logged disk drive unless you explicitly specify the other drive by appending a disk identifier (A: or B:) to the front of a file name.

Cursor Motion

Cursor-motion commands move the cursor within a document. Basic cursor movement is accomplished using six control characters positioned according to the direction they move the cursor:
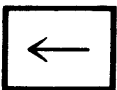
^{E}
$$^A\ \ ^S\ \ ^D\ \ ^F$$
^{X}

The arrow keys, as well as a variety of other commands, also move the cursor to specific locations in the file. Following are the cursor-motion commands:

CURSOR LEFT A CHARACTER—*moves cursor left one character*

^S, ^H,

or $\boxed{\leftarrow}$ each move the cursor one character position to the left. The cursor will move to the end of the preceding line if it is located at the beginning

of the current line. These commands are used
to backspace over characters and to make
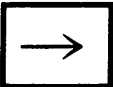corrections.

CURSOR LEFT A WORD — *moves cursor left a word*

^A moves to the beginning of the word to the left
of the cursor. A word is a string of characters
separated by a punctuation mark (. , : ; ! ?, a
space, or a carriage return).

CURSOR LEFT EDGE OF SCREEN — *moves cursor to left edge of screen*

^QS moves the cursor to the far left of the screen.

CURSOR RIGHT A CHARACTER — *moves cursor right one character*

^D

or $\boxed{\longrightarrow}$ moves the cursor one character position to the
right. If the cursor is positioned at the end of
the current line, it will go to the beginning of
the next line.

CURSOR RIGHT A WORD — *moves cursor one word to the right*

^F moves the cursor to the beginning of the
next word.

CURSOR RIGHT END OF LINE—*moves cursor to the end of a line*

^QD   moves the cursor to the end of the current line of text. To get the cursor to move beyond the actual characters at the right end of a line, you must space or tab over to the desired column.

CURSOR UP A LINE—*moves the cursor up one line*

^E   moves the cursor to the next line above. The cursor remains in or near the same column.

or ⬆

CURSOR DOWN A LINE—*moves the cursor down a line*

^X   moves the cursor down to the beginning of the next line in the document. The cursor remains in the same column, but will move to the left to avoid landing beyond an end of a line; the cursor will also jog around print-control characters when necessary.

or ⬇

CURSOR TO BEGINNING OF FILE—*positions cursor at file's beginning*

^QR   moves the cursor to the beginning of the file being created or edited. If the document involved is a large one, and you are near the end, use the FILE SAVE command, **^KS**, since it is faster and uses up less temporary diskette file space.

CURSOR TO END OF FILE—*positions cursor at file's end*

^QC   moves the cursor to the end of file. The cursor ends up in the position following the last character of the document.

CURSOR TO SCREEN BOTTOM—*moves the cursor to the screen bottom*

^QX   moves the cursor to the bottom of the text displayed on the screen. The cursor remains in its current column position.

CURSOR TO SCREEN TOP—*moves the cursor to the screen top*

^QE   moves the cursor to the top of the currently displayed text.

CURSOR TO BLOCK BEGINNING—*moves cursor to block's beginning*

^QB   moves the cursor to the beginning of the currently marked block. If the text block is hidden, the beginning marker is redisplayed.

CURSOR TO BLOCK END—*moves cursor to the end of a block*

^QK   moves the cursor to the end of the currently marked text block. If the block is hidden, the end-block marker will be redisplayed.

CURSOR TAB—*moves the cursor to the next tab stop*

^I or

TAB   advances the cursor to the next tab stop when INSERT is OFF, or inserts spaces up to the next tab stop when INSERT is ON.

CURSOR TO PLACE MARKER—*moves cursor to indicated place marker*

^Q0

to ^Q9   moves the cursor to any of the ten place markers. Each PLACE MARKER is identified by a number. To send the cursor to a previously set place marker, type **^Q** and the number of the marker (0–9).

CURSOR FIND—*moves cursor to a specified string of characters*

^QF   moves the cursor to a specified word or phrase. The word or phrase is requested through a prompt. The cursor moves to the first occurrence of the specified word or phrase. **^QF** can be used with the FIND/REPLACE AGAIN command, **^L**, to find all occurrences of a given word. When you type **^QF**, WordStar asks for the word to be located using the prompt

FIND?

This question will appear below the menu, moving the top of the file display area down one line. Respond by typing any sequence of characters that you wish to locate, then press **RETURN**. (This function is further discussed in the FIND command.)

Send the cursor to the position it occupied before the last FIND or REPLACE by using the CURSOR-TO-LAST-FIND command, **^QV**.

CURSOR TO PREVIOUS POSITION—*moves cursor to previous position*

^QP   moves the cursor to where it was when the last command was issued. The **^QP** command is frequently used to continue editing after saving a file with **^KS**. This command is also used following a paragraph REFORM, **^B**, to return to the position where you were making editing changes.

CURSOR TO SOURCE—*moves cursor to source of last BLOCK or FIND operation*

^QV   moves the cursor to the position it occupied before the last FIND or REPLACE operation, or to the source of the last block operation.

Deletions

DELETE A CHARACTER RIGHT—*eliminates characters at the cursor*

^G   deletes one character at the cursor position. Text, spaces, and carriage returns are deleted. Characters to the right of the deletion are drawn to the cursor position and replace the deleted characters.

DELETE A CHARACTER LEFT—*eliminates characters to the left*

^–   deletes one character to the left of the cursor. When the left end of the line is encountered, the cursor eliminates the carriage return and starts deleting on the next line up.

DELETE A WORD RIGHT—*eliminates a word from the right*

^T deletes a word or portion of word to the right of the cursor. If the cursor is in the middle of a word, the part of the word to the right of the cursor is deleted.

You can delete spaces between words by placing the cursor between the characters you wish to join and pressing **^T**. If the cursor is set at the end of a line, the carriage return and any following spaces will be deleted.

DELETE TO BEGINNING OF LINE—*deletes to beginning of line*

^Q ^- deletes all characters from the cursor position leftward to the beginning of the line. This command, however, does not delete the carriage return at the end of the line.

DELETE TO END OF LINE—*deletes to end of line*

^QY deletes all characters to the end of the line from where the cursor is positioned. Carriage returns and any overprint lines will not be deleted at the end of this line.

DELETE A LINE—*eliminates the current cursor line*

^Y   deletes the entire line containing the cursor. The line below moves up and takes the place of the deleted line. Screen continuation lines and associated overprint lines are also deleted.

DELETE A BLOCK—*eliminates the currently marked block*

^KY   deletes the currently marked block of text. (See BLOCK DELETE.)

DELETE A FILE—*deletes a specified file*

^KJ   (or Y from the No-File menu) asks for the name of the file to be deleted and then deletes the specified file.

Display Commands

DISPLAY PAGE BREAK—*toggles appearance of page break line*

^OP   hides or displays the line used to illustrate where one page ends and the next begins. It also changes the status line to display the num-

ber of the cursor character (FC=cursor charac-
ter number from beginning of file) and the line
number (FL=line number from beginning of
document). The page break line is ON until the
^OP command is issued. The current status of
the page break line is displayed on the ^O
prefix menu.

DISPLAY PRINT-CONTROL
CHARACTERS—*toggles appearance of print-control characters*

^OD

hides or displays print-control characters.
Print-control characters are initially displayed
while you're entering them into text; however,
the ^OD command can conceal them from the
screen display and thus show how your text
should look when it is printed. You can exam-
ine the current status of the print-control
feature on the ^O prefix menu.

DISPLAY RULER LINE—*toggles appearance of ruler line*

^OT

displays or hides the ruler line. The ruler line is
normally displayed until hidden.

DISPLAY DIRECTORY—*toggles appearance of file directory*

^KF (or F from the No-File menu) hides or displays a directory listing all files contained on the diskette in the currently logged drive. The prefix menu indicates whether the directory display is ON or OFF.

File Manipulations

You can enter a file or exit WordStar from the No-File menu. The No-File menu also provides options that allow you to copy, delete, read, or rename files using the appropriate command. You can also undertake these file manipulations from within an open file. To manipulate files between drives, append a drive identifier followed by a colon to the file name. You can toggle the directory of the currently active drive ON or OFF by using the FILE DIRECTORY command **^KF**, or temporarily display it during a file manipulation by pressing **^F** after initially issuing a file manipulation command. Following are the commands used to manipulate files:

EDIT A DOCUMENT—*creates or retrieves a file*

D creates a new file or opens an existing file for editing. A file name is requested. If the specified file does not exist, then a new file is created. If a file with the specified name exists, it is retrieved so you can edit it. The file may be on another drive, in which case the drive letter and a colon must precede the file name.

EDIT A NONDOCUMENT — *creates or retrieves a nontext file*

N creates or retrieves a nontext file for editing. Dynamic pagination is disabled, and a different set of defaults is in effect. This command is typically used to prepare input for other text formatters, to enter data for application programs, or to edit program source files. Do not use the **N** command for general word processing.

NOTE

Programmers should not reform (^B) the contents of nondocument program files.

EDIT ABANDON — *closes file without saving current version*

^KQ abandons the file being created or edited without saving a copy. A backup copy will remain only if the file is being edited after previously being created. If the file is just being created, no copy of it will exist following this command.

EXIT TO SYSTEM — *relinquishes control to CP/M*

^KX

leaves WordStar and returns control to the CP/M Plus operating system. When you issue **^KX**, the current file is saved before leaving WordStar. (Similar to the No-File command **X**.)

FILE COPY — *copies a named file*

^KO

(or O from the No-File menu) copies a file from its source to a specified destination. Prompts ask for the name of the file to copy and the destination where the copy is to be sent. You can copy from one drive to another by preceding the file name with the letter and colon of the drives involved. (Performs the same function as the CP/M program PIP.COM.)

When you type **^KO** or **O**, the following prompts occur:

NAME OF FILE TO COPY FROM?

NAME OF FILE TO COPY TO?

Enter the name of the file that you wish to copy and press **RETURN**. Next, enter the name of the file where the copy is to be transferred. To make copies from one drive to another, add the appropriate drive identifier and a colon to the front of the file name, (e.g., **A:copyfrom, B:copyto**).

FILE DELETE—*erases a named file from the directory*

^KJ   (or Y from the No-File menu) erases a named file from the current file directory. A drive identifier specifies a file on the inactive drive. This command performs the same function as the CP/M command ERA (also see DELETE A FILE).

FILE READ—*reads a named file into the currently open file*

^KR   transfers and inserts the contents of a specified file to the cursor position of the file being created or edited. A file name is requested by WordStar as follows:

> **NAME OF FILE TO READ?**

The contents of the indicated file is inserted into the current file at the cursor position.

FILE RENAME—*renames a disk file*

^KE   (or E from the No-File menu) asks for the name of the file to rename and then assigns the new name to the specified file. These prompts occur:

> **NAME OF FILE TO RENAME?**
>
> **NEW NAME?**

To change the name of a file, supply its name, and press **RETURN**. Then enter the name with

which you want the file identified in the future.
This command performs the same function as
the CP/M command REN.

Find Functions

The FIND command, **^QF**, moves the cursor to a given word or
phrase within the file. The FIND, REPLACE command, **^QA**,
locates a specific word or phrase and replaces it with another.
After the desired word or phrase has been located and/or
replaced, you may proceed to the next occurrence of the word
or phrase by issuing the FIND/REPLACE AGAIN command, **^L**.

FIND— *locates a given word or phrase*

^QF   finds the first occurrence of a specified word or
phrase. A prompt asks for the word or phrase
to search for:

<p align="center">`FIND?`</p>

Reply by typing the word or phrase you wish
to locate, then press **RETURN**. The cursor
moves to the indicated word or phrase. Certain
options are defined in the FIND REPLACE
command below.

FIND, REPLACE— *locates and replaces a given string*
with another

^QA   finds the first occurrence of a specified word or
phrase and replaces it with another. Prompts
ask for the word or phrase you're searching for,

as described above. After you have entered the
string that you wish to locate and have pressed
RETURN, WordStar asks:

REPLACE WITH?

Respond by entering the replacement charac-
ters and pressing **RETURN**. WordStar
then asks:

OPTIONS (? FOR INFO)

The "OPTIONS" question allows you to specify
certain options, such as matching whole words
only, ignoring the distinction between upper-
case and lowercase letters, or searching back-
wards instead of forwards. A question mark (?)
will display a list of FIND options; use it to
help refresh your memory. You can ignore the
"OPTIONS" question by pressing **RETURN**, or
you can answer it with one or more of the
following option codes:

> **#,** when specified with the FIND com-
> mand, locates the #th occurrence of the
> specified word or phrase. Used in the
> FIND, REPLACE command, it locates and
> replaces the specified word or phrase that
> number of times.

> **G,** when used with the FIND, REPLACE
> command, replaces every occurrence of the
> specified word or phrase from the cursor
> position to the end of the file. A (Y/N)
> prompt allows selection of each replace-
> ment as it appears. When used with the
> FIND command, it will search for the last
> occurrence.

N replaces words or phrases without asking the (Y/N) question.

U causes the find or replacement operation to ignore the distinction between uppercase and lowercase letters.

W matches only whole words during a FIND or REPLACE.

^P (control character) Control characters can be entered in response to the OPTIONS question. Some specialized ones follow:

B Instead of the search progressing towards the end of the file, as it usually does, this option causes the file to be searched backwards to the beginning of the file.

A matches any single character.
S matches any character other than a letter or digit.
O precedes a character so that a match will occur with any character but the one following **^O**.
N causes a match to be made with a carriage return or line feed.

NOTE

You can eliminate the "OPTIONS" question by pressing **ESC** *following either the "FIND" or "REPLACE" questions.*

After you've issued the FIND, REPLACE command (^QA), WordStar will search for the word or phrase to replace. On finding the word or phrase, WordStar will display the following prompt at the upper right side of the screen:

REPLACE (Y/N)?

The cursor flashes on and off to indicate that a decision is required. If you want to replace the word or phrase that is located, press Y for YES. If you do not wish to replace that particular occurrence of the word or phrase, press any other key. To repeat the most recent REPLACE command from the current cursor position, use the abbreviated FIND/REPLACE AGAIN command, ^L.

NOTE

You may use the INTERRUPT command, ^U, to stop a FIND or REPLACE operation while it is in progress.

FIND/REPLACE AGAIN — *continues a previous FIND or REPLACE function*

^L   repeats the most recent FIND or REPLACE command and supplies identical responses for the options.

Flag Characters

All the columns on the screen, except the rightmost column, are available for text. This column is reserved for FLAG characters that indicate the status of text on the current file line as follows:

(blank) in the last column indicates that the line ends with a soft carriage return. This condition may be changed following a WORD WRAP or REFORM operation.

< indicates that the line ends with a hard carriage return. WORD WRAP or REFORM operations do not change this line break.

─ means that the following line will be printed over the current line. This PRINT function creates special effects.

● indicates that the current screen line is below the existing text. This character will also appear at the end of the last text line if there is not a carriage return at the end of this line.

●
● appears if the current text line is above or before the beginning of the document.

✛ indicates that the next screen line is a continuation of the initial line.

P   appears only when the PAGE BREAK display is on: it indicates that a new page begins with the next line.

?   is displayed when a line contains an unrecognized or possibly erroneous DOT command. It also appears while a DOT command line is being typed. You may ignore this character until entry is complete.

J   indicates that the line ends in a line feed without a carriage return. This format is non-standard and is never created during normal WordStar usage.

M   indicates a line contains a MERGE-PRINT DOT command.

HELP Commands

HELP menus are shown at the top of the screen. You can eliminate them by degree as you become more adept at using the system. Also, WordStar provides further information to assist you in learning; certain commands display detailed information about the more involved WordStar functions. The ^J prefix menu explains the following list of subjects:

^JD   explains print directives such as DOT commands and PRINT controls.

^JI   explains command index for entering text.

^JM explains margins, line spacing, justification, and tabs.

^JB explains paragraph reform.

^JP explains place markers.

^JV explains moving text.

^JR explains the ruler line.

^JS explains the status line.

^JF explains flag characters.

HELP SET— *establishes the level of assistance displayed on the screen*

^JH, **or H** from the No-File menu, displays the current help level and requests a new setting. You can set the help level between 0, the least amount, or 3, the greatest amount of help. The amount of information displayed on the help menus corresponds to the help-level setting.

After you type the HELP SET command, a description of help levels and the current help-level setting are displayed. The display requests a new help-level setting.

As you gain experience using WordStar, you may reduce the level of assistance to coincide with your experience and ability. Help level 0 provides the least assistance and gives you the most screen area for file display.

Hyphens

WordStar has two kinds of hyphens: the soft hyphen, which indicates a syllable break, and the hard hyphen, which separates words or phrases.

A soft hyphen at the end of a text line separates a word that is too long to fit on the current line. The hyphen divides the word into syllables and continues it on the next line. The soft hyphen prints only if the divided word appears at the end of a line; if the word ends up in another position following some operation such as a REFORM, the hyphen will not be printed.

Generally, you enter soft hyphens by using the HYPHEN HELP feature, but you may enter them explicitly by turning ON the SOFT-HYPHEN ENTRY. Soft hyphens that you type when the SOFT-HYPHEN ENTRY is ON will divide a word only if it appears at the end of a line.

Hard hyphens, on the other hand, are used whenever a fixed divider is required between characters, strings, or phrases. A hard hyphen will always be printed, no matter where it appears in the text. A hard hyphen is entered automatically if the SOFT-HYPHEN ENTRY is OFF and HYPHEN HELP is not engaged. ^P- unconditionally enters a hard hyphen.

To distinguish soft from hard hyphens, type ^OD, which turns the print-control display ON and OFF. When this display is OFF, soft hyphens will not show up in the file document.

HYPHEN HELP— *toggles HYPHEN HELP feature ON or OFF*

^OH

turns HYPHEN HELP ON or OFF. When ON, the PARAGRAPH REFORM process pauses and positions the cursor at each instance where a word can be hyphenated. The ^O prefix menu displays whether HYPHEN HELP is ON.

HYPHEN HELP checks that the word contains two syllables, and selects the proper position for the hyphen. You can then decide if the word should or should not be hyphenated at the selected position.

When using HYPHEN HELP, make sure that margins, line spacing, and justification are properly selected. Place the cursor at the begin-ning of a paragraph and press ^B. When the hyphen position is located, the following mes-sage is displayed:

TO HYPHENATE. PRESS -. Before

pressing the -, you may move the cursor:

^ S = cursor left. ^ D = cursor right.

You can enter a hyphen at the suggested loca-tion, or you can move the cursor to the position where you want the hyphen to appear. If you do not want to hyphenate the word at all, press ^B and the REFORM process will continue down the text.

SOFT-HYPHEN ENTRY— *toggles interpretation of hyphens*

^OE   turns SOFT-HYPHEN ENTRY ON or OFF.
When ON, hyphens are temporary and will not
be printed unless they fall at the end of a line.
Soft hyphens are highlighted, but the **^OD**
command causes only hyphens that will be
printed to be displayed in half intensity.

Interrupt Execution

INTERRUPT— *stops command execution*

^U   stops any commands currently in progress. You
can also enter this command in response to
prompt questions, such as "FIND?", to abort
the command making the request. When you
press **^U**, the following message is displayed:

* * * INTERRUPTED * * *

All commands issued before the INTERRUPT
are aborted and must be reentered if needed.

Insertions

INSERTION— *toggles character insertion ON and OFF*

^V   toggles the INSERTION function to either
insert text to the left of the cursor position
or replace text at the current cursor position.

When INSERTION is ON, it inserts typed
characters to the left of the cursor while the
cursor moves text to the right. When INSER-
TION is OFF, typed characters replace those at
the cursor position. The status line displays the
current state of insertion.

You can determine if INSERTION is ON or OFF
by looking at the STATUS LINE at the top of
the display for the words INSERT ON.

INSERT CARRIAGE RETURN— *establishes a fixed carriage return*

^N
or ^M

insert fixed carriage returns. Any text to the
right of the cursor moves to the beginning of
the next line. Neither WORD WRAP nor any
other operation can alter a hard carriage return.
A hard carriage return will always appear in
the printed version of a document.

The difference between these two commands
is that ^M moves the cursor with the text,
whereas ^N leaves the cursor in its current
position.

Layout

You can format a document in many ways using the WordStar
layout commands. These commands allow you to control the
way text is displayed. All the following commands can affect
already existing text when they're used with the PARAGRAPH
REFORM command:

REFORM PARAGRAPH— *reorganizes a paragraph with new specifications*

^B

reforms the paragraph below the cursor so that words are spaced evenly after editing. You can also use the REFORM command to change margins or line spacing, justify or unjustify text, or assist in hyphenation.

JUSTIFICATION— *toggles interpretation of text alignment*

^OJ

when ON, aligns text with the right margin. When JUSTIFICATION is OFF, lines of text end in various columns. The ^O prefix menu displays the current state of justification. You determine if this function is ON or OFF by pressing ^O and looking at the menu.

WORD WRAP— *toggles carriage return requirements between lines*

^OW

turns the WORD WRAP feature ON or OFF. This feature, which is normally ON, allows entry of text without the need for carriage returns except between paragraphs. Turn WORD WRAP OFF if you want to terminate every line with a carriage return as you would on an average typewriter.

CENTER CURSOR LINE— *centers current line between margins*

^OC

centers the line containing the cursor within the margins. This command is generally used to center headings. To use this command, place the cursor anywhere on the line you wish to center and type ^OC. This command deletes any spaces and tabs set at the beginning of the line, then enters the appropriate number of hard spaces needed to center the line.

LINE SPACING— *sets the line spacing*

^OS

sets the number of blank lines that separate text lines. When you type ^OS, WordStar will request a number between 1 and 9 that represents the number of carriage returns placed between text lines.

The LINE SPACING command also determines the number of line advances following every RETURN. You can change line spacing at any time by entering ^OS, and reformatting the document (using the REFORM command).

RULER LINE— *toggles display of the ruler line*

^OT

toggles the display of the RULER LINE below the menu. This dotted line shows the margin and tab formatting that is in effect. Left and

right margins are illustrated by an "L" and "R".
Exclamation marks indicate variable tab stops.
Decimal tab stops are shown as # signs.

When a margin is set at a tab stop, the tab sym-
bol is displayed. If the margin is temporarily
moved in with the PARAGRAPH TAB com-
mand, **^OG**, the ruler display will show the
extent of the temporary margin.

Tabs set outside the margins are not displayed
until the margins are released or WORD WRAP
is OFF. When the margin is set larger than the
screen display, the RULER LINE doubles to
show the current margin setting. You can hide
the RULER LINE by typing the DISPLAY/HIDE
RULER LINE command **^OT**. When the
RULER LINE is hidden, a line of S's is dis-
played to separate the file directory from the
file document.

You can specify margins in a text file by using
the RULER LINE to identify where to set the
margins. To enter a RULER LINE that will set
the margins, type a line into the document
with an exclamation point (!) at each column
where a tab should be set, a number sign (#) at
each column where a decimal tab should be set,
and a hard hyphen (-) in every other column
between the desired left and right margins. You
can then enter this RULER LINE into the docu-
ment by placing the cursor anywhere in the line
and typing the MARGINS FROM FILE LINE
command, **^OF**.

When you have entered this line, the desired
tabs and margins will be set while all other
default settings are cleared. The RULER LINE

may be kept from appearing in the printed document by preceding it with two periods (see PRINT DOT COMMENT command).

NOTE

The ^O menu shows whether the following features are currently ON or OFF:

> *HYPHEN HELP*
> *VARIABLE TABBING*
> *PAGE BREAK DISPLAY*
> *WORD WRAP*
> *JUSTIFICATION*
> *PRINT-CONTROL DISPLAY*
> *SOFT-HYPHEN ENTRY*
> *RULER DISPLAY*

Margin Arrangement

MARGIN LEFT— *establishes the left margin*

^OL sets the left margin between column 1 and column 240. You can specify the left margin setting by entering the column number of the new margin, or pressing ESC to set it at the cursor column. The current column number is displayed on the STATUS LINE. To set the left margin at the cursor position, press ESC following the **^OL** command.

MARGIN RIGHT— *establishes right margin*

^OR

sets the right margin. To answer the request for a right margin, you may enter a column number, or press ESC to specify the current cursor position.

NOTE

You may change margins at any time by reforming the existing text with the new margin settings.

MARGINS FROM FILE LINE—*mimics existing margins*

^OF

sets the margins to match those of the existing document. To set the margins with this command, place the cursor anywhere in the existing line and type ^OF. The margins automatically set to the width of the current file line.

MARGIN RELEASE— *disengages existing margins*

^OX

temporarily disengages the current margin settings. Text entered following the ^OX command can extend beyond the established margins. The margins remain released until the

cursor returns within the bounds of the original margin setting. **MAR REL** appears on the STATUS LINE while the margins are released. You can reset the margins with the same ^OX.

Place Markers

PLACE MARKERS—*mark a position for later reference*

^K0–
^K9

mark a position within the text where the cursor may be sent. There are ten PLACE MARKERS (0–9). You can set any of these markers within the file and subsequently reference them. The numbered marker will show up at the specified position, but it is not actually part of the document. Each numbered marker may be returned to by using the CURSOR TO MARKER command, ^Q, followed by the number of the marker (0–9).

You can hide a PLACE MARKER by moving the cursor to the desired location and issuing the same command used to set the marker. In other words, this command acts as a toggle that alternately sets or hides the marker. Though hidden, a set marker is still in effect and will be redisplayed after it is accessed.

Print-Control Characters

You can insert control characters into a text file—by typing **^P**, followed by the print-control character—to control printing.

Displayed print-control characters tend to distort text. However, editing commands ignore print-control characters, and they are not printed.

Print-Control Toggle Commands.

Toggle-control characters are those that must be placed on both sides of the affected text. The first toggle character initiates a control effect and the second toggle character terminates the effect. Listed here are the toggle commands:

STRIKEOUT TOGGLE

^PX prints dashes over the specified characters. Use this command to illustrate deleted text in the revised version of a document.

SUBSCRIPT TOGGLE

^PV prints the enclosed characters as subscripts. The subscripted characters will be positioned below the surrounding text. Determine the degree of subscript using the DOT command .**SR**. On printers without fractional lines, the next line must be blank.

SUPERSCRIPT TOGGLE

^PT   prints enclosed characters as superscripts so they will appear slightly higher than the surrounding text.

BOLDFACE TOGGLE

^PB   offsets slightly and overstrikes on daisywheel printers or any other printer capable of incremental motion. **^PB** multistrikes each character on teletype printers.

DOUBLE-STRIKE TOGGLE

^PD   strikes each character twice with no offset. This command produces a lighter version of "boldface." This control character, used with a carbon ribbon, produces an extremely sharp impression of the entire document.

UNDERSCORE TOGGLE

^PS   is placed on both sides of the section of text you want to underline. Only nonblank characters are underlined.

Other Print-Control Commands

Following are the control-character commands that control the printer:

LEFT/RIGHT, HEADING/FOOTING CONTROL

^PK is used with heading and footing DOT commands to produce headings, page numbers, etc., that print on the left-hand side of even-numbered pages and on the right-hand side of odd-numbered pages. **^PK** formats headings and page numbers so they will always appear on the side of the page farthest from the binding in loose-leaf binders. Use this print-control character with the DOT commands **.HE** and **.FO**.

ALTERNATE CHARACTER PITCH

^PA is used with daisywheel printers to change the character width from 10 (pica) to 12 (elite) characters per inch.

STANDARD CHARACTER PITCH

^PN selects a standard 10-characters-per-inch width (pica) on daisywheel printers.

BACKSPACE

^PH makes the next character overprint the preceding character on the line. Use it to place accent marks over letters or to create special symbols by overprinting multiple characters. This control character is placed where the backspace is desired; it may be affected when text is reformed or justified.

NONBREAK SPACE

^PO prints a space, but the space is not treated as such for line breaks or justification during line formatting.

PHANTOM RUBOUT

^PG prints the character on a daisywheel printer that is associated with code 7F hex. This code prints a "not sign," "double underline," or graphic that is associated with the hex code.

PHANTOM SPACE

^PF prints the character, normally a space code, associated with hex code 20 on daisywheel printers.

STOP PRINT

^PC halts printing. This function gives you a chance to change ribbons or type fonts. You can use this control character within a line as often as needed. When printing stops, the prompt **PRINT PAUSED** appears on the status line. You can restart the printer by typing the PRINT command **^KP** (or **P**).

TAB

^PI displays and prints spaces to advance to the next multiple of eight columns; normally you don't enter it into the text except in VARIABLE TAB mode.

USER PRINT FUNCTION (1–4)

^PQ,
^PW,
^PE,
^PR

are USER PRINT FUNCTIONS for special printer operations that WordStar does not otherwise perform. You have to establish each of these functions when you install WordStar. Each function can send a sequence of one to four characters to the printer.

FORM FEED

^PL   causes a form feed to be entered into the text.

CARRIAGE RETURN

^PM   is the same as a carriage return. Causes the current line to print over the preceding line. The flag character (-) appears in the rightmost column to indicate an overprint.

LINE FEED

^PJ   is the same as line feed.

Print DOT Commands

The DOT commands are special characters you embed in text to control the final format of the printed text. DOT commands alter default formats. DOT commands are displayed but they are not printed.

A DOT command consists of a period in the first column of a line, a two-letter code, and optionally a number or some other argument. When you enter a period in the first column of a line, WordStar expects a DOT command and the left margin temporarily disengages; this is indicated by a ? prompt on the current screen line.

Most DOT commands may be placed anywhere in a text file, but the dynamic page break display requires that certain DOT commands appear at the beginning of a file.

The following five sections describe the various DOT commands:

Vertical Page Layout

The following vertical-page-layout DOT commands have to appear at the beginning of the file for page breaks to correctly interpret them.

LINE HEIGHT

.LH*n*
sets the line height in 1/48ths of an inch on daisywheel printers and provides an alternative or supplement to the single, double, or triple spacing the PRINT CONTROL command **^OS** gives. Don't use this DOT command on printers that can't print incrementally. The default is 6 lines per inch.

PAPER LENGTH

.PL*n*
determines the number of lines per page, including the top and bottom margins. The paper length must match the forms specification. The default is 66 lines.

TOP MARGIN

.MT*n*
specifies the number of lines from the top of the paper to the beginning of the text. The default is 3 lines from the top.

BOTTOM MARGIN

.MB*n* specifies the number of lines not to be used for text at the bottom of the page. The page number or footing, if present, is printed within the bottom margin. The default is 8 lines.

HEADING MARGIN

.HM*n* determines the number of blank lines that will appear between a page heading and the body of the text.

FOOTING MARGIN

.FM*n* sets the number of lines between the last text line of the page and the page number or footing. The default for the HEADING and FOOTING margins is 2 lines.

Horizontal Page Layout

Most horizontal formatting is an integral part of text editing and does not involve DOT commands. However, the following DOT commands cover special print operations.

PAGE NUMBER COLUMN

.PC*n* determines the column at which the page number is printed when neither the **.FO** or the **.OP** command is in effect. You can place the page number to the left or right of a page, but you must take the current character pitch into account.

PAGE OFFSET

.PO*n* sets the number of columns that the entire document will be indented from the printer's left margin, to offset text from the tractor-feed holes at the left of the paper. This feature allows you to load narrow paper near the center of wide printer carriages. The default is 8 columns.

Pagination

PAGE

.PA starts a new page unconditionally.

CONDITIONAL PAGE

.CP*n* starts a new page if there are less than *n* lines left on the current page. This keeps blocks of text together and suppresses pagination after a title, in the middle of a table, etc.

Page Heading, Footing, and Page Number

TEXT HEADING

.HE begins a line that will serve as a heading for each page until another heading is specified. Headings may be changed as often as necessary. To print a heading on the first page, put an **.HE** command in front of all text in the file.

TEXT FOOTING

.FO The rest of a line beginning with this command serves as a page footing for the current and following pages of a document. A document may contain numerous footing commands. Text specified in the most recently encountered footing command is printed.

If no footing is specified, or if an **.FO** command has no text following it, page numbers will be printed in the footing line at the column specified by the PAGE NUMBER COLUMN command, **.PC**. Page numbers are not automatically printed when a TEXT FOOTING DOT command is in effect. You can place a **#** symbol at the location where you wish a page number to appear.

The following 3 characters have special meaning within TEXT HEADING and FOOTING commands:

prints the current page number. Use it to position page numbers wherever you want, at the top or bottom of the page.

\ prints the next character without special interpretation so that control characters may be printed as text.

^K is used with the **.HE** or **.FO** DOT commands. This control character directs printing to format a heading or page number depending on whether a page number is odd or even. All spaces following the ^K character are ignored if the page number is even so that the heading or page number will be printed on the right-hand side of odd-numbered pages and on the left-hand side of even-numbered pages. Use this feature if your document will be printed on both sides.

OMIT PAGE NUMBERS

.OP suppresses printing of page numbers when no footing has been given. This DOT command has no effect if footing has been specified.

NUMBER PAGES

.PN turns page numbering back ON following a previous **.OP** command that turned it OFF. Page numbering will begin with the number 1, unless otherwise specified. (See **.PN** *n* below.)

PAGE NUMBER

.PN*n* turns page numbering back ON following a previously issued **.OP** DOT command. Page numbering will begin with the number you specify after **.PN**. The page numbers are printed at the bottom of the page unless a # character specifies otherwise.

Miscellaneous DOT Commands

CHARACTER WIDTH

.CW*n* sets the character width in increments of 1/120ths of an inch. The default standard pitch is 10 characters to the inch, and the default alternate pitch is 12 to the inch. This command only works with printers that have programmable character widths. CW 12 is the default.

SUB/SUPERSCRIPT ROLL

.SR*n* specifies the amount in 1/48ths of an inch that the carriage rolls before printing a super-scripted or subscripted word. The default is 3/48ths of an inch or .SR3.

ON (1) OR OFF (0) MICROJUSTIFICATION

.UJ turns off microjustification which is normally ON. Microjustification spreads words evenly by adding soft spaces. When microjustification is OFF, the text will be printed as it appears on the display with soft spaces and returns. Turning microjustification OFF may be useful to make a columnar table print with the columns aligned as they appear on the screen, even with soft spaces inadvertently supplied by WORD WRAP or REFORM.

ON (1) OR OFF (0) BIDIRECTIONAL PRINT

.BP either enables or prevents the printer from printing back and forth across the page. Use it when you have a problem with the printer.

IGNORE TEXT

.IG   allows display, but not printing, of commentary text in a file line.

After using the appropriate print-control characters and DOT commands to direct the printer, use the print command described below to print your file.

Printing a File

PRINT A FILE—*toggles printing of a file ON and OFF*

^KP   (or P from the No-File menu) outputs the contents of a file to the printer. The same **^KP** or **P** commands halt the print operation. The current status of this command is displayed in the **^K** prefix menu.

These PRINT A FILE commands toggle printing so that, when first issued, the name of the file to be printed is requested. When this file name has been supplied, several print option questions are asked. You may simply press **RETURN** in response to each question if you wish to use the default settings, or press **ESC** to prevent the options from being offered. These option questions are:

DISK FILE OUTPUT (Y/N) sends the file to a diskette.

START AT PAGE NUMBER (RETURN for beginning) lets you specify a page number where printing should begin.

STOP AFTER PAGE NUMBER (RETURN for end) asks for a page number where printing should stop.

USE FORM FEED (Y/N) outputs form-feed controls to the printer.

SUPPRESS PAGE FORMATTING (Y/N) sends an exact replica of the screen display, including DOT commands, to the printer if you answer YES. No formatting is performed on the text before it is printed when page formatting is suppressed.

PAUSE FOR PAPER CHANGE BETWEEN PAGES (Y/N) stops the printer at the end of each page if you answer with YES. This option allows you to change paper between pages.

Ready printer, press RETURN indicates that text is ready to be printed. The specified file will output to the printer when you press **RETURN**.

To halt printing, reissue the **^KP** (or **P**) command, and the following messages appear:

TYPE Y TO ABANDON PRINT,

N TO CONTINUE, ^ U TO HALT

If you respond with **Y,** the print operation will stop. Pressing **N** causes the print operation to

resume immediately. Pressing **^U** temporarily
suspends printing; subsequently you can use
the **^KP** (or **P**) command to resume printing.
The STATUS LINE will display the prompt
message PRINT PAUSED while printing is
suspended.

Prompt-Question Control Characters

Special control characters entered in response to prompt ques-
tions perform specific functions. These control characters
follow:

^X or ^Y erases the entire answer in order to enter
another answer (no file menu).

^S, ^H, or [←] erase one character to the left (no file
menu).

^D moves the cursor to the right and displays any previ-
ously erased character. This function will also display the
character that was entered the last time that the question
was asked (no file menu).

^R restores the erased answer, or the answer you entered
the last time you received the current question (no file
menu).

^F displays a file directory of the currently logged disk
drive for the duration of the command (main menu, with
^K).

^Z or ^W scrolls the file directory up (**^Z**) or down (**^W**)
to bring additional files into view (main menu, with **^K**).

- enters a SOFT HYPHEN if the SOFT-HYPHEN ENTRY has been turned ON. Also permits using SOFT HYPHENS in response to a "FIND?" question prompt. (Use **^P** to search for a hard hyphen.)

^N, ^S, ^A, or ^O have special meaning only with the "FIND" question prompts. (See the FIND FUNCTION.)

^U interrupts and terminates the command in progress. (See the INTERRUPT command.)

Repeat a Command

REPEAT NEXT COMMAND—*repeatedly executes a command*

^QQ

(command) causes the command following it to be executed repeatedly until you press the SPACE bar. You can specify a rate of execution between 0 (slowest) and 9 (fastest). First type the command **^QQ**, then type the command that is to be repeated.

Run a Program

RUN A PROGRAM—*runs a program from the No-File menu*

R

runs a specified program. Enter the name of the program in response to a prompt, and the indicated program executes. You can examine

the amount of disk space, run a spelling program, etc. Pressing **R** displays the following prompt:

`COMMAND?`

Answer this prompt question by entering the name of the program you want to run (i.e., SHOW) and then press **RETURN**. Precede the program file name with a drive identifier if it exists on a drive other than is currently logged.

Save Procedures

You can transfer a file to a disk and save it by using one of the following SAVE commands.

SAVE DONE—*saves file and returns to the No-File menu*

^KD   saves the file currently being created or edited, then transfers to the No-File menu.

SAVE REEDIT—*saves file without closing it*

^KS   saves the current file, then returns to the beginning of the saved file. This command should be used periodically to protect your file from accidental loss by saving it in increments. After the file has been saved, editing of the same file can continue.

The cursor will go to the beginning of the saved file, but you may return it to the position it oc-

cupied when you saved the file with the CUR-
SOR PREVIOUS POSITION command, **^QP**.
Also, the SAVE REEDIT command is the fastest
method of moving long distances to the begin-
ning of a file.

SAVE EXIT—*saves file and exits to CP/M*

^KX   saves the current file and exits from WordStar
to CP/M. This command performs the same
function as the EXIT TO SYSTEM command, **X**,
from the No-File menu, except that **^KX** saves
the file before leaving WordStar.

Scroll Commands

The SCROLL commands, which follow, move the screen display
down or up a line, or move the entire display down or up one
screen's distance.

SCROLL DOWN LINE—*scrolls display down a line*

^W   moves the entire screen display down one line.

SCROLL DOWN SCREEN—*scrolls downward a screen's distance*

^R   moves displayed text down one screen's dis-
tance so the text above is displayed. This com-

mand causes the portion of the file that is being displayed to move upward and disappear while text below takes its place.

SCROLL UP LINE—*scrolls up a line*

^Z   moves the screen display up one line.

SCROLL UP SCREEN—*scrolls upward a screen's distance*

^C   causes text currently occupying the screen to be replaced by an equal amount of text below it.

CONTINUOUS SCROLL—*scrolls upward or downward till stopped*

QW   scrolls the display continuously up or down.
or QZ

NOTE

REPEAT NEXT COMMAND, ^QQ, may be placed before any of the scroll commands to move the display continuously in either direction (see REPEAT NEXT COMMAND).

Status Line

The STATUS LINE at the top of the screen displays various information pertinent to the file being edited. The information displayed from left to right on the STATUS LINE is: the currently active drive, a colon, the name of the file being edited, the number of the page being edited, the line number, and the column number where the cursor is positioned.

When you issue a command, it will be displayed at the upper far left of the STATUS LINE until the command has been executed. If the INSERTION function is ON, it will be indicated at the upper far right of the STATUS LINE. (See INSERTION.)

Certain messages are displayed on the status line when appropriate. These messages are:

> **WAIT** is displayed when a file is being read or written. No data should be entered while this message is displayed.

> **MAR REL** indicates that margins have been released.

> **LINE SPACING** *n* shows what line spacing is in effect, unless it is set to the default of one line per inch.

> **PRINT PAUSED** is displayed when printing is suspended.

> **REPLACE** is displayed when the FIND REPLACE function is in effect.

Tab Arrangement

TAB SET—*establishes tab stops*

^O TAB or
^OI

sets a tab stop anywhere on a line to format a document or arrange columnar data. To set the tab, type the SET TAB STOP commands, **^O and TAB** or **^OI**, and a prompt question will ask for the column number where the tab should be set.

Typing a column number will set the tab at the specified column. Pressing **ESC** will set the tab at the cursor column, indicated on the STATUS LINE. All tab stops that are in effect are displayed on the RULER LINE as an exclamation point (!).

NOTE

Decimal tabs will align columns of numbers on the decimal point, or right align text on a tab stop. After you tab to a decimal tab stop, characters entered move to the left, pushing the entire field to the left of the decimal tab setting. The cursor will remain at the tab position. This right alignment function may be terminated at any time by typing a period.

Decimal tabs may be set by using either of the methods for setting tab stops. When using the **^OI** command, you type a # sign before entering the column number or pressing **ESC**. The decimal tab may also be set in the RULER LINE by placing a # sign instead of a ! sign at the column where you want the decimal tab stop.

Decimal tabbing is only active when variable tabbing is ON. You may determine if the VARIABLE TABBING is ON or OFF by pressing **^O** and examining the menu.

TABBING VARIABLE—*toggles from fixed to variable tabs*

^OV

turns variable tabbing ON or OFF. When ON, variable tab stops are in effect and spaces are entered into the files for tabs. When OFF, fixed tabs are in effect. Fixed tabs are not usually used during standard word-processing operations; this feature is used when writing computer programs. When variable tabbing is OFF, tab characters **^I** (09 hex) are used in the file and are displayed with fixed stops every 8 columns; multiple spaces are entered into the file when using variable tabbing. Variable tabbing should be turned OFF when programs are being developed under the CP/M text editor or Micropro Wordmaster.

When the variable-tabbing mode is turned OFF, each tab is a single character that edits differently than those used when the variable-tabbing mode is ON. The cursor cannot be placed within the white space on the screen, representing the TAB; the cursor advances over

the tab. Text that is inserted before a tab will appear in front of the tab until enough text has been entered to force the text to move to the next tab position.

TAB ADVANCEMENT —*moves to the next tab stop*

^I or
TAB | advances the cursor to the next tab stop. If no tab stops are encountered on a line, the cursor advances to the first tab on the following line. Only tab stops set within the current margins are used unless WORD WRAP is OFF or the margins have been released.

When INSERTION is ON, **^I** or **TAB** inserts spaces to the tab stop and positions the text to the right of the tab stop.

When INSERTION is OFF, the TAB command will advance the cursor over the existing text. A document line will be extended with spaces or a hard carriage return as an advance to the next tab stop occurs.

TAB PARAGRAPH —*temporarily relocates the margin to the next tab*

^OG
temporarily sets the left margin in one tab stop from its present setting. This command indents a paragraph or other section of text. This temporary margin setting will remain in effect until you press **RETURN**, issue another margin command, or move the cursor above (before) the indented text. **^OG** commands issued in succession further indent text.

TAB CLEAR—*disengages specified tab stops*

^ON clears the tab at a specified, prompted location. You can release all tabs by typing **A**, then pressing **RETURN** in response to the prompt.

MailMerge DOT Commands

MERGE-PRINT—*initiates merge-printing of files*

M initiates printing in the same manner as the print command, but additionally interprets MailMerge DOT commands. You are asked for the name of the file to be merge-printed, and are provided with the following options:

`NAME OF FILE TO MERGE-PRINT?`

`DISK FILE OUTPUT (Y/N)?`

`START AT PAGE NUMBER (RETURN for beginning)?`

`STOP AFTER PAGE NUMBER (RETURN for end)?`

`NUMBER OF COPIES (RETURN for 1)?`

`USE FORM FEEDS (Y/N)?`

`SUPPRESS PAGE FORMATTING (Y/N)?`

`PAUSE FOR PAPER CHANGES BETWEEN PAGES (Y/N)?`

`Ready printer, press RETURN:`

The various DOT commands used to control merge-print operations are described below:

DATA FILE—*specifies the data file*

.DF   identifies the data file that contains information to be printed in place of keywords when the calling file is merge-printed.

Format:

.DF d:filename [CHANGE]

The named data file provides the text for key-words in the calling file. The data file will be expected on the currently active drive unless another drive is specified.

Each record in a data file contains fields of information to be supplied for one printed document, such as a form letter. A comma separates each field of information to be printed for a keyword from the next. A data record provides replacement text for all keywords in the calling file. An **.RV** command in the calling file lists keywords in the sequence that text from the data file will be assigned.

The calling file is reprocessed once for every record in the data file. It ends when data has been taken from the last data-file record. You can access only one data file at a time.

To display a prompt message asking for a disk-ette change, place the word **CHANGE** at the end of the **.DF** command. CHANGE, the name

of the expected data file, and the drive where it is expected are all displayed when the CHANGE option appears in a **.DF** command.

Examples:

.DF DATA.FYL

specifies that text variables listed in **.RV** will come from a data file named DATA.FYL.

.DF B:DATA.FYL2 CHANGE

asks that the diskette in drive B be changed.

READ VARIABLES—*reads data for variable keywords (with .DF)*

.RV lists keywords in the order that text fields from the data file are selected and assigned to them.

Format:

.RV keyword, keyword

The sequence with which keywords are listed in the **.RV** command must correspond to the order that text fields are listed within records in the data file.

The first text field in a record line is assigned to the first keyword listed in **.RV**, and so on. Usually one **.RV** is sufficient to list all keywords in a file, but you can use multiple **.RV**s when necessary.

If a text field is missing from a record in the data file, **.RV** will use the next available text field. Extra text fields are ignored. Processing of a document always starts at the beginning of the next record line.

Example:

.RV NAME, ADDRESS, STREET, COMPANY

ASKS VARIABLES—*requests data to be assigned to keywords*

.AV

asks for data to be entered from the keyboard that will be assigned to a corresponding keyword. Each **.AV** DOT command corresponds to a keyword and an optional message. Data entered at the keyboard is printed in place of the keyword wherever it appears in the file.

Format:

.AV ["message"] , variable identifier, [max-length]

The keyword and a question mark ask for data to be input from the keyboard. Optionally, a prompt message may be displayed: type the desired message within quotation marks in front of the keyword.

You can specify the maximum number of text characters an **.AV** prompt accepts. To do so, place a comma and this maximum number at the end of the **.AV** command. No more than the maximum specified will be displayed or printed.

The following CONTROL characters—**^S** (erase character), **^Y** (erase answer), and **^R** (restore previous answer for this question)—can edit keyboard entries. Press **RETURN** after you supply the appropriate data for the displayed prompt.

To halt printing while **.AV** is asking for data, enter the requested input, then press **RETURN** and **P** in quick succession. This maneuver causes the "STOP" print command, **P**, to be received before the next **.AV** is processed.

Examples:

.AV "Enter First, Last Name", NAME

.AV "City, State", ADDRESS

.AV ZIPCODE, 5

SETS VARIABLE—*establishes text for keywords*

.SV   assigns a fixed piece of information to a keyword.

Format:

.SV keyword, data

Data represents text that is permanently assigned to the keyword. Data, up to 200 characters long, may include keywords, providing they have had text previously assigned. You can enter a carriage return into the data with a **^N**.

Examples:

> .SV DATE, Dec 20, 1981
>
> .SV PARTY1, John Doe
>
> .SV ADDRESS, 22334 55th St. ^NHayward, CA, 94545
>
> .SV PARTIES, &Party1& and &Party2&

FILE INSERT — *references a file to be inserted*

.FI

inserts and processes a named file in its entirety at the point where the .FI command is encountered. All commands in the inserted file are processed, including those that reference further insertions.

Format:

.FI d:filename [CHANGE]

Files you insert using .FI should end with a carriage return to separate text in the inserted file from text in the calling file. After the inserted file has been processed, processing of the calling files continues where it left off.

Inserted files may include .FI commands. This process of referencing files is called nesting. Files can be nested to a maximum of eight levels. An unlimited number of files can be nested when .FI is the last command in each file. A keyword in the .FI command allows you to enter a file name from the keyboard; you must set up the calling file with the appropriate .AV command.

Examples:

.FI DOC.FYL

.FI B:LETTER.FYL

.FI CHAPTER &KEYWORD&

REPEAT PROCESSING — *reprocesses a file*

.RP causes a file to be reprocessed.

Format:

.RP [n]:

A file containing the **.RP** command is processed until all the text in the associated data file has been used; or until it has been processed the specified number of times. If the number specified is larger than the number of records in a data file, processing continues reusing the records of the data file.

Example:

.RP 20 <causes file to be processed 20 times>

DISPLAY MESSAGE — *displays a message on the screen*

.DM displays a message on the screen. If you don't specify a message, a blank line appears. Each message is displayed on the next free line. If the screen is full, existing messages scroll up a line to make room. Keywords can form part of the message, providing you've previously assigned text to the keywords.

Format:

.DM (message)

Examples:

.DM (produces blank line on screen)

.DM This file prints form letters

.DM Printing letter to &NAME&

.DM Load special paper and press P

.DM Insert data diskette in drive B:

CLEAR SCREEN — *clears the screen*

.CS

clears all accumulated messages from the screen. An optional message can be displayed following clearance of the screen by placing the desired message after .CS.

Format:

.CS [message]

Messages that follow a .CS command are displayed on the first blank line at the top of the screen. When the screen fills with messages, the entire display scrolls up one line to make room for the next message. You can place references to keywords in the message, providing you've previously defined data for the keywords.

Examples:

.CS clears message area of screen

.CS Press **RETURN**, P to stop, or enter data for next letter

PRINT FORMATTER—*controls print-time line formatting*

.PF

turns the print-time line formatter ON, OFF, or to default.

Formats:

.PF OFF:

This form suppresses print-time line formatting. Inserted text is printed without being formatted to accommodate the length of keywords.

.PF ON:

You must turn print-time line formatting ON before you can use other DOT commands to format printed text. Print-time line formatting remains ON until you issue a **.PF OFF:** or a **.PF DIS:** command.

Print-time line formatting with other DOT commands reformats text before it is printed.

.PF DIS: (default)

This form leaves print-time line formatting to the discretion of merge-print. Print-time line formatting is automatically turned ON when a variable identifier is detected, and is turned OFF when the next carriage return, line feed, form feed, or end of file is encountered.

RIGHT MARGIN — *sets right margin*

.RM affects the right margin setting during merge-printing.

Formats:

.RM *n:*

A number between 1 and 240 specifies the column at which the right margin is set for the printed text.

NOTE

Print-time line formatting must be ON before .RM will have any effect. (See the .PF command.)

.RM DIS: (default)

This form uses the right margin you specified when you created the file.

LEFT MARGIN — *sets left margin*

.LM specifies the left margin setting.

Formats:

.LM *n:*

When **.LM** and a number between 1 and 240 oc-
cur during merge-printing, the left margin is
affected as specified. If the document contains
hanging indentations or text that extends to the
left of a desired margin setting, don't use the
.LM command.

NOTE

*Print-time line formatting must be
turned ON before **.LM** commands will
work. Print-time line formatting is
turned ON when a variable identifier is
detected in the current paragraph, or
when the DOT command **.PF ON:** is
encountered.*

.LM DIS: (default)

.LM DIS: uses the left margin setting you spec-
ified when you created the file.

LINE SPACING — *sets line spacing*

.LS establishes line spacing during merge-printing.

Formats:

.LS n

You can specify line spacing between 1 and 9.
.LS has no effect unless print-time line format-
ting is ON, as described for **.LM**.

.LS DIS: (default)

.LS DIS: causes document to be printed with
the line spacing used when you created the
document file.

INPUT JUSTIFICATION—*determines input justification*

.IJ determines whether the input scanner inter-
prets input as justified.

Formats:

.IJ ON:

.IJ ON: interprets input text margins as
justified.

.IJ OFF:

.IJ OFF: assumes that input text will not be
justified.

.IJ DIS: (default)

.IJ DIS: leaves input text right margins as you
specified them when you created the file.

Small variations in the right margin indicate
ragged right. A constant right margin and soft
spaces between words indicate justification.

NOTE

When you intend to justify output from ragged-right input, or vice versa, use the .IJ DOT command.

OUTPUT JUSTIFICATION—*determines output justification*

.OJ   right-justifies printed text.

Formats:

.OJ ON:

.OJ ON: prints text with the right margin aligned.

.OJ OFF:

.OJ OFF: prints text with a ragged right margin.

.OJ DIS: (default)

.OJ DIS: prints text using the right margin you specified when you created the file.

NOTE

.OJ has no effect unless print-time line formatting is ON, as described for .LM.

Conditional Expressions

IF CONDITION —*initiates printing if a condition is met*

.IF   The .IF command is used to specify that providing a certain condition is met, skip to the END command and begin printing.

Format:

.IF &keyword& comparison character "expression" GOTO [/ B] [;]

The expression dictates the conditions under which printing will be initiated. The expression contains:

• a keyword enclosed in ampersands

• a comparison character

=	"equal"
<>	"not equal"
<	"less than"
>	"greater than"
<=	"less than or equal to"
=<	"equal to or less than"
>=	"greater than or equal to"
=>	"equal to or greater than"

• a variable data item enclosed in quotation marks

• option for searching backward, a label or comment.

The comparison characters compare strings of any type characters. The strings are read in a

sequence defined by the (ASCII Collating Se-
quence) a sample of which is shown below:

lowest   →   highest
0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz

You can take advantage of this hierarchal
sequencing in an expression to select only a
portion of data file for printing.

A /B placed after the GOTO in a conditional
command, causes MailMerge to search back-
wards through the file for the end-of-file
command .EF.

A label can be used to branch to a specific .EF
command identified by the same label. The
label option can be any string consisting of 20
characters as long as there are no spaces and
the first character is not a number.

A comment is entered after a space and a semi-
colon at the end of a conditional command.
These comments do not get printed but are
displayed on the screen.

EXCEPT CONDITION —*resumes printing except when a condition is met*

.EX

The .EX command is used to specify that except
when a certain condition is met, skip to the
END command and begin printing.

Format:

.EX &keyword& comparison character "expression" GOTO [/B] [;]

The expression dictates the conditions under which printing will be resumed. The expression contains:

• a keyword enclosed in ampersands

• a comparison character

    =   "equal"
    <> "not equal"
    <   "less than"
    >   "greater than"
    <= "less than or equal to"
    =< "equal to or less than"
    >= "greater than or equal to"
    => "equal to or greater than"

• a variable data item enclosed in quotation marks

• option for searching backward, a label or remark.

A /B placed after the GOTO in a conditional command, causes MailMerge to search backwards through the file for the end-of-file command .EF.

A label can be used to branch to a specific .EF command identified by the same label. The label option can be any string consisting of 20 characters as long as there are no spaces and the first character is not a number.

A comment is entered after a space and a semi-colon at the end of a conditional command. These comments do not get printed but are displayed on the screen.

END OF FILE—*specifies the end of a file*

.EF

Format:

.EF [Label]

The .EF concludes processing of MailMerge commands and initiates printing. The "End Of File" command only works in a document file that contains a conditional command. There is no limit to the number of .EF commands that can be used in the file as long as there is a corresponding conditional command. Never place an .EF command directly under a conditional command; there should always be a carriage return separating them. An optional label which corresponds to that used in a conditional expression may be used.

WordStar Default Values

	D Option	N Option
Left margin	column 1	column 2
Right margin	column 50	column 50
Variable tab stops	6, 11, 16, etc.	9, 17, 25, etc.
Word wrap	ON	OFF
Justification	ON	OFF
Ruler display	ON	OFF
Page break display	ON	OFF
Print-control display	ON	OFF
Soft-hyphen entry	OFF	ON
Hyphen-Help	ON	OFF
Insert mode	ON	OFF