

# WORD JUGGLER™

**Quark™**

# **WORD JUGGLER™ USER'S MANUAL**

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## SPECIAL NOTES ON VERSION 2.4 OF WORD JUGGLER

Version 2.4 of Word Juggler has a few changes and additions not in the manual for earlier versions of Word Juggler. They are discussed here.

### MANUAL CHANGES

Page 1-2 In the paragraph beginning "You will be taken...", note that pressing right and left arrow while the cursor is positioned on the "PRINTER DRIVER" line will have no effect unless there are two or more character drivers installed (which is usually not the case).

### EPSON PRINTER FILTERS

Two special filters have been added to the Word Juggler disk to use the capabilities of the Epson MX series printers. One filter is for standard Epsos or Epsos with Graftrax. The other is for Epsos with Graftrax **plus**.

If you have a regular Epson, you should rename the file "WJ.EPSON" on the Word Juggler disk to "WJ.USER". You should then boot the Word Juggler disk and use "EDIT CONFIGURATION" to set the "PRINTER FILTER" parameter to "USER". This special Epson filter will give you double strike printing and underlining. The Word Juggler pitch commands (1Ø PITCH, 12 PITCH and 15 PITCH) may also be used to select type size. 1Ø PITCH gives double wide print, 12 PITCH gives normal print and 15 PITCH gives condensed print.

If you have an Epson with Graftrax **plus**, you should rename the file "WJ.EPSONGP" on the Word Juggler disk to "WJ.USER". You should then boot the Word Juggler disk and use "EDIT CONFIGURATION" to set the "PRINTER FILTER" parameter to "USER". The Graftrax plus filter will give you double strike printing and underlining. The Word Juggler pitch commands (1Ø PITCH, 12 PITCH and 15 PITCH) may also be used to select type size. 1Ø PITCH gives double wide print, 12 PITCH gives normal print and 15 PITCH gives condensed print. The Graftrax plus filter allows you to do superscripting and subscripting. Read the warning in your Graftrax plus manual about the anomalies associated with subscripting. The Graftrax plus filter will allow you to print italics. If you use "EDIT CONFIGURATION" to set the "STRIKE COUNT" to 3, all bold text will print in italics rather than double strike.

**Remember to put a write protect tab back on the Word Juggler disk after performing this operation.**

### NEC LETTER QUALITY PRINTERS

Use the filter called "DIABLO/XEROX/QUME/NEC" for NEC letter quality printers having a model number ending in 5 (such as the 3515, 5515, 7715).

Use the filter called "NEC (551Ø/771Ø PROTOCOL)" for NEC letter quality printers having a model number ending in Ø (such as the 351Ø, 551Ø, 771Ø, 353Ø, etc.)

### KEYBOARD LAYOUT DEFINITION

On old versions of Word Juggler, a change in the keyboard layout required that you run the program called MAKE.PARAMS to correct the ordering of the top row of keys (see page 1-1). This procedure was to insure that the order of functions on the top row of keys didn't get scrambled.

Recent advances in Computer Science make this procedure unnecessary.

# TABLE OF CONTENTS

CHAPTER 1 - INTRODUCTION & SETUP . . . . .	1-1
SETTING UP FOR A HARD DISK . . . . .	1-3
USING THIS MANUAL . . . . .	1-4
REPAIR AND REPLACEMENT . . . . .	1-5
SHIPPING DISKETTES . . . . .	1-5
SOFTWARE UPDATES . . . . .	1-5
COMMENTS AND SUGGESTIONS . . . . .	1-6
CHAPTER 2 - TUTORIAL . . . . .	2-1
LESSON 1 . . . . .	2-1
LESSON 2 . . . . .	2-6
LESSON 3 . . . . .	2-9
POST SCRIPT . . . . .	2-13
CHAPTER 3 - REFERENCE . . . . .	3-1
GENERAL . . . . .	3-2
THE MENU . . . . .	3-3
EDITING KEYS . . . . .	3-6
EDITING KEYS ON THE NUMERIC KEYPAD . . . . .	3-9
TYPING MODE . . . . .	3-14
PRINT-OUT ENHANCEMENTS . . . . .	3-15
VARIABLES . . . . .	3-16
PRINT-OUT CONTROL COMMANDS . . . . .	3-17
CHAPTER 4 - DATA FILE MERGE . . . . .	4-1
CREATING A DATA FILE . . . . .	4-1
PRINTING A FORM LETTER . . . . .	4-2
ADDING A FIELD . . . . .	4-3
PRINTING MAILING LABELS . . . . .	4-3
SORTING A DATA FILE . . . . .	4-3
STORAGE CAPACITY . . . . .	4-4
SELECTING PORTIONS OF THE DATA FILE . . . . .	4-4
CHAPTER 5 - SPELLING CHECKER . . . . .	5-1
APPENDICES	
APPENDIX A - BACKUP . . . . .	A-1
APPENDIX B - ERRORS & RECOVERY . . . . .	B-1
ERROR MESSAGES . . . . .	B-1
RECREATING THE "WJ.PARAMS" FILE . . . . .	B-6
APPENDIX C - FILE FORMATS . . . . .	C-1
NORMAL WORD JUGGLER DOCUMENT FILES . . . . .	C-1
FORMAT OF * FILES USED BY WORD JUGGLER . . . . .	C-3
FORMAT OF DATA FILES FOR PRINT FORM . . . . .	C-3

APPENDIX D - USER PRINTER FILTERS . . . . .	D-1
CREATING YOUR OWN PRINTER FILTERS . . . . .	D-1
FILTER STRUCTURE . . . . .	D-1
TEMPORARY AND PARAMETER STORAGE . . . . .	D-4
WORD JUGGLER SUPPORT ROUTINES . . . . .	D-5
ADDITIONAL CONSIDERATIONS . . . . .	D-5
SAMPLE FILTERS . . . . .	D-6

GLOSSARY

INDEX

1 INTRODUCTION  
& SET UP

# CHAPTER 1

## INTRODUCTION & SETUP

**NOTE:** This manual does not cover use of the Apple /// computer. It assumes that you are familiar with certain terms used to describe its operation such as "boot" and "diskette". If you are not familiar with the basics of operating the system refer to your Apple /// Owner's Guide.

When you purchased Word Juggler you should have received the following:

- 1) This manual
- 2) A master Word Juggler diskette
- 3) A Word Juggler diskette labeled "BACKUP"
- 4) A Warranty Registration/Quick Reference card
- 5) Some diskette write protect tabs
- 6) A "square" template for labeling the keypad
- 7) A "long" template which fits above the keyboard

**IMPORTANT:** You must fill out and return the Warranty Registration card. If you do not, no warranty service of any kind can be given. It is not essential that you send it in immediately. In fact, some of the questions it asks assume that you have used the Word Juggler program for awhile. But send it in as soon as you feel you can adequately answer the questions. This card is the only mechanism we have of providing warranty service and of informing you about updates to Word Juggler, new products and improved versions of Word Juggler.

The diskettes supplied are copy resistant and can not be copied by normal means. Take good care of them. The section on "Repair and Replacement" tells what to do should one of these diskettes fail to function properly. Take special note of the instructions of proper shipping of diskettes. PLEASE!

Remove the "square" template and place it around the numeric keypad. Then place the "long" template above the main section of the keyboard. The word "COMMAND" should be above the ESCAPE key. Separate the Warranty Registration card from the Word Juggler Quick Reference. Stand the Quick Reference card up in the "gutter" behind the Apple /// keyboard. Make sure the side labeled "WORD JUGGLER" in large letters is facing outwards.

The first thing you must do before you can fully use Word Juggler on your system is configure it to use your printer. If your printer uses the serial port and works at 1200 baud, you are probably set, so you can ignore the rest of this paragraph. Otherwise, you must change the SOS.DRIVERS file using the SCP program on your Apple /// System Utilities diskette. If you are unfamiliar with this procedure, ask your dealer to help you. DO NOT just copy the drivers from another diskette onto the Word Juggler diskette. Word Juggler has a few special requirements. If you observe them, configuring the diskette will be easy. First, if you initially load drivers from a diskette other than the Word Juggler diskette, make sure that the character set is set to INVERSE. Make sure you have a copy of the .FMTD1 driver loaded. If you use any keyboard layout other than the standard SHOLES layout you will have to boot up Business BASIC and run the MAKE.PARAMS program to describe the layout of the top row of keys. Make sure that you remove all unnecessary drivers (like .GRAPHICS). Unused

drivers just consume memory and therefore reduce the size of the documents you can edit. You may have drivers for more than one printer loaded if you intend to switch between several different printers.

Now you are ready to set a few parameters in Word Juggler. Start by removing the write protect tab from your Word Juggler master diskette. Then insert the diskette into the internal drive of the Apple /// and boot the system. After a few seconds you will be put into Word Juggler's menu. Type an "E" (for EDIT CONFIGURATION) and press the RETURN key. If you type the wrong letter and haven't pressed RETURN, press the DELETE PREVIOUS CHARACTER key to remove it (this key is the "-" on the keypad).

You will be taken to a printer configuration menu. If this is not where you are press the ESCAPE key to return to the main menu and try again (if you typed "n", "N", "1", "r", "R" or "9" you should reboot Word Juggler by holding down the CONTROL key and pressing RESET). Once in the configuration menu, you can set up Word Juggler for your printer. Press the down arrow key several times and observe the effect. Now do the same with up arrow. Now using one of these keys position the cursor to the "PRINTER DRIVER" line. Press the right arrow key several times. Then do the same for the left arrow. This will change the printer driver. Using right and left arrow, set the printer driver. If you are using the serial port you will probably want to set it to ".PRINTER".

Now use the down arrow key to position the cursor on the "PRINTER FILTER" line. If you are using a Qume, Diablo, Xerox or NEC printer (except NEC 5510/7710 type), set the filter parameter to "DIABLO/XEROX/QUME/NEC". If you are using a NEC 5510, 7710 or other printer that uses the same escape sequences, set the parameter to "NEC (5510/7710 PROTOCOL)". If your printer has the capability to do a backspace for overstriking, set the parameter to "OTHER (WITH BACKSPACE)" (The Silentype is an example of such a printer). If your printer can do a carriage return without a linefeed, set the parameter to "OTHER (W/O BSP & NO AUTO LF)" (The MX-80 is an example of such a printer). If your printer forces a linefeed after a carriage return, set the parameter to "OTHER (W/O BSP & WITH AUTO LF)". There is an additional filter called the USER filter. Certain user filters are supplied on the diskette. They are for the Anadex 9500/9501, IDS-560 and Silentype printers. Refer to Appendix D for more information. It is also possible for you to write your own filter in assembly language to make optimum use of your printer. Refer to Appendix D for details.

You can only do super/subscripting on Qume, Diablo, Xerox and NEC printers. (These printers are called "Micro-spacing" printers because of their ability to move in 1/120" increments.) Underlining and bold printing can not be done on printers of type "OTHER (W/O BSP & WITH AUTO LF)". If you are using the USER filter, the capabilities you will have are determined by that filter.

Move the cursor to the SPACE UNDERLINE line. If you usually underline the spaces in a phrase (e.g. all spaces are underlined), set this parameter to "YES". If you rarely underline spaces (e.g. spaces are not underlined), set this parameter to "NO".

Move the cursor to the "PITCH" line. If your printer prints 10 characters per inch set, it to "10". If your printer normally prints 12 characters per

inch, set this line to "12". If it prints 15 characters per inch, set it to "15". Most printers print 10 characters per inch, however, the Qume comes with a 12 pitch print wheel. If in doubt, use "10".

The other parameters merely select what values Word Juggler uses as defaults for its page format. You may come back to the configuration menu at any time and adjust them to whatever suits you. However, until you are more familiar with the Word Juggler program it is probably best to leave them alone.

Word Juggler is now configured. Press the space bar to store your configuration back on the diskette. Remove the diskette and put on a new write protect tab (some are supplied). Do not use the old one as it won't hold on as well and may fall off inside your drive sometime.

You should probably now reconfigure your BACKUP diskette in the same way.

### **SETTING UP FOR A HARD DISK**

If you are blessed with a hard disk, there is a special procedure you should perform to make your use of the data file merge procedure easier. When Word Juggler needs to perform the form letter print function it loads in an assembly language program from the Word Juggler diskette to do the job. This means that the Word Juggler diskette must be installed (at least temporarily) in order to print form letters.

If you have a hard disk you can move this program over to your hard disk to avoid the problem. To do this boot the Apple /// System Utilities disk and copy the file "WJ.EXT." from the Word Juggler diskette to some directory on the hard disk (you may also wish to copy the BASIC programs named "SORT" and "MAKE.PARAMS"). Then you boot up BASIC and run the "MAKE.PARAMS" program. Select the "DEFINE EXTERNAL PROCEDURE PATH" option and supply the path name for the directory containing "WJ.EXT." (e.g. ".PROFILE" if "WJ.EXT." is stored in the root directory).

## USING THIS MANUAL

Chapter 1 is this chapter.

Chapter 2 is a three lesson tutorial on using Word Juggler. Read through it first and follow all the instructions. You may even want to repeat some of the lessons. Even if you're a real hot shot you should at least do lesson 3.

Chapter 3 is reference material. There are certain sections which you will want to read after you have finished the tutorial. These sections are mentioned at the end of chapter 2.

Chapter 4 is a tutorial for the primitive data file merge capability that is supplied with Word Juggler.

Chapter 5 is reserved for information on the spelling checker option.

Appendix A discusses the importance of backup and describes various schemes you may wish to use. Read it before you create any great amount of information using Word Juggler and decide what kind of backup scheme you will use.

Appendix B lists all error messages that Word Juggler may produce and describes each one. For certain errors it describes how to avoid the error.

Appendix C defines the format of document files that are used by Word Juggler.

Appendix D describes how to install the special printer filters supplied with Word Juggler. It also gives information on how to write your own user printer filter if you are so inclined. Listings for the 3 filters contained on the Word Juggler disk are also provided.

The Glossary gives definitions of certain common terms.

**REPAIR AND REPLACEMENT**  
**OR**  
**WHAT TO DO IF YOUR WORD JUGGLER DISKETTE DOESN'T WORK**

The first page of this manual gives your LIMITED WARRANTY. Read it carefully. Basically it says this: If within 90 days of purchase either of your Word Juggler diskettes fail to function properly through some error on our part, we will "repair" or replace it at our option. It should be returned to us postpaid and properly packed (see below) along with the following:

- 1) Prove of purchase and purchase date
- 2) A description of the problem (and whose fault you think it is)
- 3) A description of the system on which the program is being used

This applies only to the original purchaser, and does not apply to any product which has been used prior to its sale by any dealer or distributor.

In the event that we have not received the Warranty Registration card, no warranty service will be provided.

After the 90 day period (or in the event that the failure is not our fault), the diskette will be recopied, if returned postpaid, for a charge of \$10. If the diskette must be replaced, the charge will be \$20. Enclose \$10 with your disk to avoid C.O.D. and shipping charges. If your disk must be replaced, you will be billed C.O.D. for any unpaid charges. **You cannot obtain a replacement diskette without returning one of the Word Juggler diskettes.**

**SHIPPING DISKETTES**

When mailing a diskette, do not just put it in an envelope. Not even a padded envelope. The post office has a tendency to bend things. This usually destroys diskettes. You should sandwich the diskette between two pieces of **corrugated** cardboard and then put it in an envelope. Write the magic incantation "DO NOT BEND" on both sides of the envelope in some color that stands out. Alternatively you may purchase special diskette mailers from your local dealer, such as the ALF Products Floppy mailer or Floppy Armor.

**SOFTWARE UPDATES**

Fill out and mail in the Warranty Registration card supplied with this manual. If it becomes necessary for Quark to provide a corrected version of your software you will receive a letter stating the errors that are being fixed and any new features which you may get as a side effect. You may then send in your diskettes and the new software will be returned to you. If you do not wish to be without both diskettes at the same time, you may mail one and wait for its return before mailing the other.

This card will also put you on our mailing list for new products and upgrades to Word Juggler.

## COMMENTS AND SUGGESTIONS

If you have suggestions for changes or improvements on the current product, or suggestions for a new product, just drop us a line. Your comments are always welcome.

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2 TUTORIAL

# CHAPTER 2

## TUTORIAL

### LESSON 1

You are going to start learning about Word Juggler by using it to type a simple letter. In order to continue with this lesson you will need a blank diskette. Make sure there is not a write protect tab on the diskette. If there is it probably means someone has important information on the diskette, so either pick another diskette, or remove the write protect tab and continue (remembering that all information on the diskette will be erased).

Start by inserting the Word Juggler diskette in the Apple's internal drive, and turning on the power (if the power is already on, you should hold down the CONTROL key and press RESET). A message will appear on the screen as the word processor is loaded into memory. After the loading is complete, remove the Word Juggler diskette and put it away. You are now in a menu which allows you to perform various special functions.

At this point you can type in the number or name of the function you wish to perform and press RETURN. Type in the number 11 and press RETURN. It beeps. Only numbers from 1 to 9 are allowed. If you make a mistake in typing, the key labeled DELETE PREVIOUS CHARACTER (the "-" key on the numeric keypad) may be used to erase the character you typed last.

You will use the FORMAT function to make a diskette for document storage. Type "FORMAT" (don't type the quotes) and press the RETURN key. You may type the word all in lower case letters if you wish. Actually, you only need to type "F". Word Juggler will inform you that it is about to format the diskette installed in the internal drive, and will ask you for a volume name to use for the diskette. Put the blank diskette in the internal drive and type "TUTORIAL" (don't type the quotes) and then press RETURN. You may type "TUTORIAL" either in capital letters or not, Word Juggler will make them into capitals anyway. If you get an error (indicated by the flashing word "ERROR" in the lower left corner of the screen) you will have to try re-entering the volume name. Turn to Appendix B to determine the cause of the error. Then press the ESCAPE key and begin again at the start of this paragraph.

If you don't get an error, Word Juggler will ask you to press the space bar to continue with the formatting process. If you don't want to format the diskette you can press the ESCAPE key and you will be returned to the menu (in fact, ESCAPE will almost always return you to the menu unless you are entering text). You want to format the diskette, so press the space bar. It takes about 30 seconds to format the diskette, then you will be returned to the menu.

If you get an error, it is probably either of two errors. A "WRITE PROTECTED DISK" error indicates that your diskette has a write protect tab on it. If this is the diskette you really want to format, remove the write protect tab from the diskette and put it back in the drive. An "I/O ERROR" indicates that there is a problem reading information on the diskette. Remove the diskette and make sure it is installed with the proper

orientation. Insert the diskette gently until it clicks into position, then close the door. Press the ESCAPE key to clear the error condition and return to the menu. Try formatting the diskette again. If it still fails, the diskette is probably bad, so get another diskette and format it.

A brief note on errors. The ESCAPE key always clears an error. Whenever you see an error with which you are unfamiliar you may wish to refer to Appendix B. This appendix gives a more detailed description of the error and in some cases gives a probable cause or suggests a fix.

You should now be in the menu and have a newly formatted diskette in the internal drive. Get a catalog of the diskette by typing "CAT" (or "C" or "2") and pressing RETURN. When you are asked "CATALOG OF WHICH DIRECTORY?" type ".D1" and then RETURN (you could also just press RETURN and ".D1" will be assumed). Since you haven't stored any documents on this diskette, Word Juggler tells you that there are no documents on the diskette and indicates that you should press the space bar to continue. It also tells you that the name of the directory (in this case the disk) is "TUTORIAL", and that there are 273 blocks of free storage on the diskette. Press the space bar to return to the menu.

Now you are going to learn about some of the functions involved in entering text into Word Juggler. Start by pressing the RETURN key to put you in text entry mode. The screen is cleared except for a line at the bottom called the status line and a flashing plus sign in the upper left hand corner, called the cursor. Without pressing the RETURN key type the following:

Now is the time for all good men to come to the aid of their country.

You may use the DELETE PREVIOUS CHARACTER key to correct any mistakes you may make. Note what happens to the cursor. Note also that the column number in the status line at the bottom of the screen changes as you type.

If the ALPHA LOCK key is down, all the letters will have come out as capitals. If this happened, press the ALPHA LOCK key to release it, delete all the characters using the DELETE PREVIOUS CHARACTER key (just hold down the key until the beeping starts) and then enter the line again.

Use the left pointing arrow key to back up to the first letter of the word "men". Now type "women and ". The letters are inserted. Go forward to the word "their" using the right pointing arrow key, and press the DELETE CHARACTER key 6 times to remove the word "their ", then type the word "my ". Go back to the word "and" and press the DELETE WORD key twice. Behold, the words "and" and "men" have vanished. Finally, back up to the start of the line and press the DELETE TO EOL key (you will have to hold down the SHIFT key to do this). The whole line disappears.

In a moment you are going to type in this letter (but don't start yet):

Mr. Johnston  
1234 Elm St.  
Lakewood, CO 80215

Dear Mr. Johnston,

Our records indicate that your account is now overdue by 30 days. We must receive your payment for the outstanding balance of \$0.03 by no later than January 23, 1981 (that's only 7 days, Mr. Johnston). If we have not received payment by that date we will be forced to turn your account over to our collection agency.

If you have any questions in this matter please contact us immediately. Your prompt attention to this matter is greatly appreciated.

Sincerely,

Martha P. Hornblower  
Harassment supervisor

What you will see on the screen is not the same thing that will ultimately be printed out. When you enter text, it always goes from the far left edge of the screen to the far right edge. You put instructions (called commands) into the middle of the text to control such things as margin settings, centering and page ejects. When you tell Word Juggler to print a copy of your document it will readjust the text to take all these things into account.

Before you begin typing the letter there are a few things that we should do (like make sure we're all using the same page format). Press the ESCAPE key. The bottom line of the screen now says "PRESS A COMMAND KEY". A command key is any one of the keys above the keyboard (labeled on the "long" template). Press the LEFT MARGIN key ("("). When you are asked "LEFT MARGIN?" type "1" and press RETURN. Now press ESCAPE and then press the "WIDTH" key (")"). When you are asked "WIDTH?" type "68" and then RETURN. These "commands" set the left margin and the width of the printed portion of the text. Don't worry about exactly what they are doing. We will discuss them in more detail later. Add a few more commands: put in PAGE LENGTH of 66, LENGTH of 54 and TOP MARGIN of 7. If you make any mistakes move the cursor to the line containing the incorrect command using the arrow keys and press the DELETE TO EOL key, then put in the command again.

Move the cursor to the line following all the commands. Start the letter by typing in "Mr. Johnston", then pressing the RETURN key. An arrow (called an "end of line marker") appears on the display to indicate the end of line. Type in each line of the address followed by a RETURN. The press RETURN to leave a blank line. Then type "Dear Mr. Johnston," and press RETURN. Press the RETURN key again to leave a blank line. Now type in the first paragraph. Do not press the RETURN key until you are through with the paragraph. Press the RETURN key after you have entered the entire

paragraph. Press it once more to leave a blank line. Type in the last paragraph then press the RETURN key twice.

Use either the right arrow key or the space bar to move over to column 38 (use the column number at the bottom of the screen to tell when you get there). Hold down the SHIFT key and press the TAB key. You have just set a tab at column 38. Type "Sincerely," and press RETURN three times. Press the TAB key to get to column 38. Type "Martha P. Hornblower" and press RETURN. Press TAB, type "Harassment supervisor" and finally press RETURN.

Press and hold down the left arrow key. The cursor starts to back up. If you press it softly it moves about 10 characters/second. If you press hard, it moves at about 33 characters/second. Note that when it gets to the beginning of a line it goes to the end of the previous line and continues backing up. The right arrow key works similarly, but goes in the opposite direction.

The upward and downward pointing arrows may be used to move the cursor up or down one line. Move the cursor to the "H" in the word "Harassment". Press the up arrow key twice. When you pressed it the second time, the cursor jumped over to the far left. This is because Word Juggler will not normally let you move the cursor past the end of a line.

Hold down the CONTROL and SHIFT keys and press down arrow. The cursor will be moved to the end of the letter. Hold down CONTROL and SHIFT and press the up arrow key. The cursor will move to the start of the letter. Move the cursor to line 10 (the line number at the bottom of the screen will tell you when you get there). CONTROL SHIFT right arrow moves the cursor to the last character in the current line. Try it. CONTROL SHIFT left arrow moves the cursor to the left edge of the screen. Try this too.

Move to the end of the letter, then hold down the SHIFT key and press the left arrow key several times. It moves you to the start of the previous word. Similarly, holding SHIFT and pressing right arrow moves you to the start of the next word. Try it.

At first, all the functions that can be performed by the arrow keys may be hard to remember, so a special "help" menu is provided to remind you until you learn them. To activate the help menu press the DISPLAY KEY DEFINITIONS key. The top eight lines of the display now describe the various functions for the arrow keys and tell how to use tabs. Use the up arrow key to move to the top of the letter, then move to the bottom using the down arrow key. Word Juggler behaves exactly as it did before, except that you can see fewer lines on the display. If you ever want to get rid of the help menu, just press DISPLAY KEY DEFINITIONS again.

Note that the CONTROL versions of the arrow keys have the same descriptions as the regular arrow keys except for the star after their descriptions. The only difference between the CONTROL arrow keys and the regular ones, is that the CONTROL versions allow you to go past the end of a line. Move the cursor to one of the lines with only an end of line marker on it (a left pointing arrow). If you pressed the right arrow key now you would be moved down one line. Instead, hold down the CONTROL key and press right arrow. You move past the end of the line. Move to column 20 using CONTROL right arrow. Still holding CONTROL use the up and down arrow keys to go first to

the top of the letter, and then to the bottom. The cursor will not be readjusted to the end of the short lines!!

There is another function that can be performed by the DISPLAY KEY DEFINITIONS key. Hold SHIFT and press DISPLAY KEY DEFINITIONS. A line at the top of the screen is now dedicated to showing where your tabs are set. Set and clear a few tabs for the fun of it. Pressing SHIFT DISPLAY KEY DEFINITIONS again turns off the tab display. Leave the cursor on line 10 when you are through.

Let's see what your letter will look like when it's printed. Just press the DISPLAY DOCUMENT key and presto, the first 23 lines of the letter are displayed. A normal page has 66 lines on it, so press the space bar and the next 23 lines will be shown. Press space again to show the last 20 lines, and press it yet again to return to text entry mode. Note that the cursor is still on line 10. Press DISPLAY DOCUMENT again to show the first 23 lines. Now press the ESCAPE key. You will be returned to text entry mode, but the cursor is no longer on line 10, its at the end of the letter. When you press ESCAPE in DISPLAY DOCUMENT, the cursor is left at the point where you stopped the display. This allows you to display your document on the screen, and whenever you see an error, you can press ESCAPE and the cursor will be left in the general vicinity of the error (you will probably have to go up some to find it).

Now, let's store this letter on diskette so you can refer to it later. Press the GO TO MENU key. Then type "STORE" (or "S" or "4") and press the RETURN key to store the document. Word Juggler will ask for the name of the document by asking "PATH NAME?". Path name is just a secret code word for document name (actually, a path name can be considerably more complex than a simple document name). Type "LETTER" and press the RETURN key. You may type the name in lowercase letters if you wish, Word Juggler will uppercase them for you. The letter will now be stored on the blank diskette and you will be returned to the menu.

Get a catalog of the diskette (this time just press RETURN when you are asked "CATALOG OF WHICH DIRECTORY?"). Sure enough, "LETTER" is there. Press space to return to the menu.

SPECIAL NOTE: Never store documents on the Word Juggler diskette. First, it probably has a write protect tab on it. Second, you cannot back it up. Third, if you ever return the diskette to us for a software upgrade or update, all your files on the diskette will be lost.

Do a NEW command (enter "NEW" or "N" and press RETURN). You are returned to text entry mode and the letter is deleted from memory. The letter is still on the diskette. Prove it by going back to the menu and using LOAD to get the letter back (type "LETTER" and press RETURN when you are asked for the path name). Note that the name of your document is now in the status line. Word Juggler will display the name of the current document here if it knows it.

This is the end of your first lesson. You may wish to go back and repeat it. If so, just use the same diskette again. If not, save the diskette for lesson 2.

## LESSON 2

If you are going right on from lesson 1, you may skip this paragraph. Otherwise, boot the Word Juggler diskette. Then put your diskette in the drive and load "LETTER". To do this type "L" and press RETURN. Then when you are asked for the path name, type "LETTER" and press RETURN.

Suppose you wish to send similar letters to Mr. Brown and Mr. Green. You must change the name everywhere it occurs. Changing the name is easy. Press the  $\uparrow$  CHANGE AUTOMATIC key (you need to use SHIFT). When Word Juggler says "SEARCH FOR?" type "Mr. Johnston" and press RETURN. When Word Juggler says "REPLACE WITH?" type "Mr. Brown" and press RETURN. If the letter was correct, and you answered the questions correctly, the letter should now be to Mr. Brown. If you got a "STRING NOT FOUND" error, you either mis-typed "Mr. Johnston" when Word Juggler said "SEARCH FOR?" or the name is wrong in the letter itself. Use ESCAPE to clear the error and try again.

Note that there are four different kinds of changes. CHANGE AUTOMATIC is just like  $\uparrow$  CHANGE AUTOMATIC except that it only changes things from the cursor to the end of the document.  $\uparrow$  CHANGE AUTOMATIC changes things everywhere in the document.  $\uparrow$  CHANGE and CHANGE are like the corresponding automatic change keys except that whenever a match with the search string is found, you must tell Word Juggler whether you want that particular change made or not. Press the  $\uparrow$  CHANGE key and replace "Mr. Brown" with "Mr. Green". On each occurrence of "Mr. Brown" you are asked to press either RETURN to make the change or space to go on to the next one. Press RETURN each time. If you were doing this on a long document with many changes and you decided you didn't want to continue changing you could press ESCAPE to abort the CHANGE command.

Now, print your new letter by using the PRINT DOCUMENT key. If your printer is turned on, properly connected and properly configured, the letter will be printed. If nothing is printed, your printer may not be properly connected and configured (Refer chapter 1 for proper printer configuration).

You may also want to print the address on an envelope (if your printer can't print envelopes, skip this paragraph). Put an envelope in your printer and position it vertically to the correct position for printing an address. Position it horizontally so that the left edge of the envelope is at the farthest left position at which your printer can print. Move the cursor to the "Mr. Green" line. Press the 2 key on the numeric keypad. The first line of the address has been printed! Observe that the cursor has moved down a line. Press the 2 key again to transmit the next line to the printer. Then press it once more to send the last line of the address. The 2 key is called TRANSMIT LINE, and is one of the typing mode functions. They are covered in more detail in chapter 3.

You may send letters like this every day. It would be unpleasant if you had to go in and change the names and amounts every time. It would be nicer if Word Juggler would ask for the name and the amount when it needed them. Press the  $\uparrow$  CHANGE AUTOMATIC key. When "SEARCH FOR?" appears, enter "Mr. Green". When "REPLACE WITH?" appears, hold down the OPEN APPLE key and press "<" (i.e. hold down OPEN APPLE and SHIFT and press the comma key). Then type "name", then hold down OPEN APPLE and press ">". This bizarre thing enclosed by an inverse "<" and an inverse ">" is called a variable.

Press RETURN to make the replacements. When you print the letter Word Juggler will ask for a value for "NAME". If you type in "Mr. Green", it will substitute that everywhere it sees the variable "name". Now move to the "O.03". Delete it and replace it with a variable named "amount" (remember the inverse "<" and ">"). Replace the address line with the variable "address", and the city/state line with the variable "city.state.zip". Print the letter. Answer the questions with whatever suits your fancy.

You will be printing out this letter many times during the remainder of this lesson. Answering the questions every time would get to be quite tedious. So you don't have to answer these questions in the subsequent work, go back to the menu and LOAD the old version of LETTER you stored. You have made changes to the letter in memory which have not been stored on diskette. Word Juggler will warn you that if you continue with the LOAD the changes in memory will be lost. You don't care, so tell it that it is OK to continue. Then, you will be asked for the name of the document to load. Note that if you just press the RETURN key "LETTER" will be loaded. Just press RETURN.

If you are using the Qume printer (and certain other printers). You can underline text or print it as "bold". Suppose you wish to emphasize the phrase "by no later than January 23, 1981" by underlining it. Position the cursor on the "b" in "by". Hold down the OPEN APPLE key and press "u". An inverse "U" appears. This indicates that underlining is on. Now move the cursor to the space after "1981". Hold down the OPEN APPLE key and press "U" (capital U). An inverse "U" with a slash through it appears. This turns off underlining. Print the letter. If you want the phrase printed in bold too, position the cursor over the inverse "U" and hold OPEN APPLE and press "b". Then move to the inverse slashed "U", hold down OPEN APPLE and press "B" (capital B). Print the letter again. Suppose you only want the bold. Eliminate the inverse "U" and its slashed relative using the DELETE CHARACTER key and print the letter again.

Display the letter using the DISPLAY DOCUMENT key. Note that the bold section is shown in inverse. In fact, even if it were underlined, it would be shown in inverse. This is a limitation of the Apple /// computer. All print-out enhancements will always be shown as inverse when displayed. Go back to text entry mode (remember, ESCAPE aborts the DISPLAY DOCUMENT).

There is a problem with this letter. The text is all the way over at the left edge of the paper. You solve this by setting the left margin to something besides one. Press CONTROL SHIFT up arrow, then press DELETE TO EOL to remove the old left margin setting (DELETE TO EOL is the only way to remove "commands" (almost)). Now press the ESCAPE key. The status line changes to "PRESS A COMMAND KEY". Press the LEFT MARGIN key (you will need to use SHIFT). "LEFT MARGIN?" appears in the status line. Type "10" and press RETURN. A line is inserted which gives the new left margin. Print the letter again. There are now nine blanks in front of every line.

Suppose you want the words to line up at the right margin as well as at the left. Move the cursor to the line after the LEFT MARGIN, press the ESCAPE key, then press the JUSTIFY key. Print the letter again.

Suppose the left margin should have been set at 15. You will need to change it. To do this press CONTROL SHIFT up arrow, then ESCAPE, LEFT MARGIN, and

"15" RETURN. Unfortunately, the "LEFT MARGIN 10" is still there. To remove it, move the cursor to that line and press the DELETE TO EOL key.

You can double space your letter by using the DOUBLE SPACE command. Try it. You probably don't want the closing of the letter double spaced, so put a SINGLE SPACE command just before the closing. Display the letter.

If you would like the printed area of the letter to be wider or narrower, you can use the WIDTH command. Move the cursor to the old WIDTH line. Delete it using DELETE TO EOL. Press ESCAPE then the WIDTH key. When Word Juggler asks for the width, type "80" then RETURN. Press the DISPLAY DOCUMENT key. Only the leftmost 80 characters of the letter are shown. You may use the left and right arrow keys at this point to "scroll" the document from side to side so you can view it all.

Delete the WIDTH command using DELETE TO EOL (Remember to get out of the DISPLAY DOCUMENT first). Put in a new WIDTH command with a setting of 50. Display the document and note what happens to the closing. Since it is wider than 50 characters, Word Juggler must make it into two lines. Remove the WIDTH and LEFT MARGIN commands using DELETE TO EOL and replace them with settings which look good to you (you may have to move the closing one way or the other. Insert or delete spaces to do this).

If you are printing on letterhead, you may need to move the text down a few lines before you begin printing. There are two ways to do this. The easiest way is to insert a SKIP command to leave blank lines. Move to the "Dear ..." line and press ESCAPE then the SKIP key, and enter the number of blank lines to leave. Display the letter. This works well if you only want the blank lines on the first page. If you need them at the top of each page you should probably reset the top margin. To do this delete the SKIP command and the old TOP MARGIN command, then enter a TOP MARGIN command (ESCAPE then the TOP MARGIN key) and use a margin of 15.

Display the document. Word Juggler will give you an "INVALID PAGE LENGTH PARAMETER". A page has 66 lines (you may change this using the PAGE LENGTH command). The top margin is 7 (printing begins on the 7th line of the page). The printed text is 54 lines long (LENGTH), so you print on lines 7 through 60. When you changed TOP MARGIN, you were trying to use lines 15 through 68. There is no line 67 or 68, so Word Juggler gave an error.

Press ESCAPE to clear the error. The cursor is positioned to the place where the error was detected. Put in a LENGTH command with a value of 50 (remember to remove the old one). Now you have a two line bottom margin. Check that everything works by doing a display document.

Go to the menu and enter "S" to store the new letter. You can just press the RETURN key if you want to use the same name you used last time. Press RETURN. After a moment Word Juggler will ask you if you really want to purge the old document and replace it with the new one. If you didn't want to do the replacement, you would type "NO" or just "N", or you could even press ESCAPE. Answer, "YES" or just "Y". You could also have pressed simply RETURN and Word Juggler would have assumed that you meant yes.

And so we come to the end of another thrilling lesson with Word Juggler. Tune in next lesson for more exciting adventures in word processing.

### LESSON 3

If you went right from lesson 2 to this lesson, you may skip the instructions in the rest of this paragraph. If not, boot the Word Juggler diskette.

Now you are going to edit a document which is mostly complete, but has several problems. Remove your diskette and insert the Word Juggler diskette (if required). Do a CATALOG of the Word Juggler diskette. Try to load the document named "SOS.KERNEL". You get a "FILE TYPE MISMATCH" error. Not everything that appears in the catalog is a document. Press ESCAPE to clear the error and load the document named SAMPLE. Put your own diskette back in the drive. Print a copy of SAMPLE. **NOTE:** this document is two pages long. If you are using single sheets instead of continuous form paper, press ESCAPE and then the PAUSE key. This will put a command into the document which will cause it to stop printing at the end of every page. You may then put in a new sheet of paper and press the space bar to have the next page printed.

A brief observation may be in order here. The word "command" is used in two distinct contexts in this manual. One context is to refer to editing commands like FIND and CHANGE. The other is to refer to commands that control print-out, like TOP MARGIN and LENGTH. The first kind of command is on the numeric keypad and should not be preceded by an ESCAPE. The second kind of command is on the template above the main keyboard, and **must** be preceded by an ESCAPE.

Back to our sample document... The first problem is that the title for section 2 occurs at the bottom of the first page. Move the cursor to "SECTION 2" using the FIND key (Just press FIND and when it says "SEARCH FOR?" enter "SECTION 2"). Everything looks OK. It just happens that there was enough space for the title on the page and not enough for even one line of that section. You **could** solve this problem by starting a new page before section 2. But if you later expanded section 1 by 4 or 5 lines, you would get the last few lines of section 1 on the second page and section 2 would start on the third page. You could insert a few blank lines in front of section 2, but then if you shortened section 1, the title might move back onto the bottom of the page. The NEED command solves this dilemma. In order to print the section title, you must insure that there are at least three lines remaining on the page (one for the title, one for the blank line and one for the first line of the section). Press ESCAPE then the NEED key and enter "3". Use DISPLAY DOCUMENT to observe the effect. Put NEED 3's in front of the other two section titles as well in case they develop similar problems later on.

The section titles should be centered. Position the cursor to the first section title. Press ESCAPE then the CENTER key. This turns on centering. Display the document. Clearly, centering must be turned off after the title has been centered. Position the cursor on the line after the section title. Put in a JUSTIFY command to turn off centering and turn on justification. Do the same thing to the other two section titles and observe your handy work using DISPLAY DOCUMENT.

The right margins don't have to be smooth. Replace all JUSTIFY commands with RAGGED RIGHT commands (use ESCAPE and then "@") and observe the result (use DELETE TO EOL to remove the JUSTIFY commands).

In section 2, the phrase "bold printing" should be printed in bold face. Move the cursor to the "b" in "bold". Hold OPEN APPLE and press "b". Move the cursor after the word "printing", hold OPEN APPLE and press "B". Underline the word "underlining" using OPEN APPLE "u" and OPEN APPLE "U".

Now, the formulas just below require some changes. If you are using a Qume Sprint 5 or similar printer, you will be able to do superscripting and subscripting (If not, the remainder of the paragraph probably doesn't apply to you). The "2" after "MC" should be a superscript. Position the cursor over the "2". Hold OPEN APPLE and press the up arrow key. An inverse up arrow will be displayed and superscripting will be turned on. Press the right arrow to move over one space. Hold OPEN APPLE and press down arrow. An inverse down arrow will be displayed and superscripting will be turned off. Now, the "6", "12" and "6" in "C6H12O6" should be subscripts. Position the cursor to the "6". Hold OPEN APPLE and press down arrow to start subscripting. Press right arrow. Hold OPEN APPLE and press up arrow to turn off subscripting. Move to the "12". Make it into a subscript in a similar way, then do the same to the other "6". These formulas should probably be centered. Put in a CENTER command. Don't forget to go back to RAGGED RIGHT before the next line. Print the document.

Actually, all the text before section 1 is supposed to be a title page. Move the cursor to just before the CENTER for "SECTION 1" and press ESCAPE and the NEW PAGE key.

The "Basic instruction..." line on the title page should probably be in all capital letters. You could delete the old title and type in the new one. But then you would need to remember the old title. A simpler way to do it is this: Move the cursor to the "Basic instruction..." line. Press the ALPHA LOCK key (this will automatically make all letters capital). Press the REPLACE MODE key. The cursor is no longer a flashing plus sign, it alternates between the character it is over and an inverse version of that character. Retype the title. As you type the new characters will replace the old characters rather than being inserted. When you are through, press the INSERT MODE key to go back to inserting and release the ALPHA LOCK key.

The entire first paragraph in section two is somewhat tongue-in-cheek and is probably not really appropriate. Move the cursor to the start of that paragraph. Press down the DELETE WORD key and hold it until the beeping starts, then let go. The entire sentence was deleted except for one space. This works well if you always use two spaces after your periods (or question marks or exclamation marks). But you need to delete the whole paragraph. Press the DELETE TO ← key. Now use DELETE CHARACTER to get rid of the extra two end of line markers.

Look at the third from the last line of your print-out. The word "Apple" has been mis-spelled as "Apxle". Move the cursor over the "x". The most obvious way to correct this is to press the DELETE CHARACTER key to remove the "x" and then type in a "p". Hold down the CLOSED APPLE key and press the "p" instead. The "x" is replaced by the "p". The CLOSED APPLE key is called the "Strike over" key and is used for this very purpose. (However,

if you are in replace mode when you use the "Strike over" key, it inserts the characters you type rather than replacing them.)

If you look again at the third from the last line of your print-out, you will notice that Word Juggler printed the word "Apple" at the end of one line and the word(?) "///" at the beginning of the next. Probably you would like "Apple ///" all on the same line. However, since "Apple" and "///" are separated by a space, Word Juggler thinks of them as two words. Change the space between "Apple" and "///" to a tilde (the little squiggle on the key above the RETURN key). Now "Apple ///" is all one word, but there's a squiggle in it. You can tell Word Juggler to print a space whenever it sees a tilde by using the REPLACE command. Press CONTROL SHIFT up arrow, then ESCAPE and the REPLACE key. When Word Juggler says "REPLACE?" press the tilde key. When it says "WITH?" press the space bar. Check your work using DISPLAY DOCUMENT. Use ↑ CHANGE to change all occurrences of "Apple ///" to use the tilde.

The change was on page three. You had to press the space bar to skip through pages 1 and 2! Yuk! Hold down the CONTROL key and press DISPLAY DOCUMENT. When Word Juggler says "FIRST PAGE TO DISPLAY?" enter "3". The display starts with page 3.

Suppose you want two copies of only page 2. Hold down the CONTROL key and do a PRINT DOCUMENT (you should hold down both the CONTROL and SHIFT keys and press the "." key on the keypad). Answer the three questions you are asked with "2", "2", and "2".

There are still a few more problems with this document. Look at the numbered list in section three. Each of the items has two lines. It would be nice if the second line of each item was indented 3 spaces. Move the cursor to the first item and put in an INDENT command with a value of three. Use the CONTROL key and DISPLAY DOCUMENT to look at page 3.

Clearly, the indenting should be turned off after the list is complete. Move the cursor to the line after the list and do an INDENT of zero.

Now you need to number the pages. Press CONTROL SHIFT up arrow. Press ESCAPE then the TEXT LINE/COL. key. For "TEXT AT LINE?" enter "64". For "TEXT AT COLUMN?" enter "35". This command must be followed by a line of text. The line that follows the TEXT command will be printed at line 64, column 35 of every page. Type "GEORGE" and press RETURN. Press DISPLAY DOCUMENT. Observe that "GEORGE" occurs at the bottom of every page.

Delete the old TEXT command and put in a new one for line 1, column 1. Using display document observe where "GEORGE" appears. Now try line 20, column 1. Note that "GEORGE" does not appear on line 20. You can only put this kind of text in the top and bottom margins. Change the TEXT command back to line 64, column 35.

This is nice for putting headings on pages, but it doesn't number pages. Fortunately, Word Juggler has a special variable for page numbering (remember variables?). Move the cursor up to "GEORGE" and delete it using the DELETE TO ← key. Hold down OPEN APPLE and press "<", then type "page" then hold OPEN APPLE and press ">". Use DISPLAY DOCUMENT to observe the effect. This time, instead of pressing the space bar to show the next 23

lines of the document, press the down arrow key and observe the effect. Remember that the key will automatically repeat if you hold it down!

The page numbering is nice, but you probably don't want the title page numbered. The TEXT command and the line following it should really be moved right after the NEW PAGE command that starts page 2. Hold down the SHIFT key and press the 5 key on the numeric keypad. The status line changes to "POSITION CURSOR TO START OF BLOCK TO MOVE AND PRESS SPACE.". Move the cursor to the TEXT command and press the space bar. The status line changes to "POSITION CURSOR TO END OF BLOCK AND PRESS SPACE.". Press the down arrow key followed by a CONTROL SHIFT right arrow. This is the last of the characters you want to move, so press the space bar. The screen jumps and the lines you wanted to move are gone. The status line now reads "POSITION CURSOR TO LOCATION TO INSERT BLOCK AND PRESS SPACE.". Move the cursor to the line following the NEW PAGE and press space. Presto! The lines have been moved. Observe the effect using DISPLAY DOCUMENT.

But now the page numbering starts at 2! Word Juggler numbered the first page as 1 even though it didn't print a number on it. To make numbering start at 1 you must reset the page number to 1 using the LET command. To do this move the cursor to just after the NEW PAGE command and press ESCAPE then the LET key, then hold OPEN APPLE and press "<" then type "page" then OPEN APPLE ">" followed by "=1" and RETURN. Observe the effect.

If you would like dashes on either side of your page number, go up to the line with the "page" variable on it (the one following the TEXT, not the one following LET) and put dashes on either side of that. If you want "1-" to precede the page number, just put "1-" in front of the "page" variable. If you want page numbering to start with "54325", change the "1" in the line following LET to "54325". Try some of these.

There are more complicated things you can do with page numbering and LET. They are covered in more detail in chapter 3.

Print out the document as it sits so far.

There is only one more major problem with this document. Section 3 should logically precede sections 1 and 2. It is easy to change the section numbers, but you have to move all the text too. You could just use the BLOCK MOVE procedure we used earlier, but there is something else you should learn. Word Juggler provides you with a method to store a portion of your document onto diskette, and then a way to load it back to any place you like. There are actually four functions that can be performed by the BLOCK LOAD/BLOCK STORE key (two are unlabeled). You will use one of these unlabeled functions. You will use the BLOCK STORE & DELETE function to store section 3 onto the diskette. This function will also delete the section from memory. Then you will use BLOCK LOAD to put it back in front of section 1.

Hold down CONTROL and press BLOCK STORE (you should be holding down CONTROL and SHIFT and pressing the "4" key on the numeric keypad). Move the cursor to the start of section 3 (the NEED command) and press the space bar. Now you should move the cursor to the end of section 3 and press the space bar. Word Juggler will ask you for a name to store this block with. Type "temp". Section 3 will now be stored on the diskette and deleted from memory.

To load section 3 back, position the cursor to the start of section 1 (the NEED command). Press the BLOCK LOAD key and specify that the document name is "temp". Section 3 will be inserted before section 1. Now you just have to change the numbers on the sections and you are done!!! Using BLOCK MOVE would have been much easier. This procedure is useful primarily when you want to move blocks of text from one document to another.

#### POST SCRIPT

This is the end of the Word Juggler tutorial. There are several capabilities that have not been covered in this chapter. Notably, 10 PITCH, 12 PITCH, 15 PITCH, TRIPLE SPACE, INSERT DOCUMENT, COMMENT, PRINTER CONTROL, RAGGED LEFT, BLOCK COPY, BLOCK STORE, and BLOCK DELETE as well as some of the ramifications of FIND, CHANGE, TEXT, LET, and replace mode. You should review the material on these functions in chapter 3. In the case that you have a functioning internal clock chip for your Apple ///, check out the section on pre-defined variables in chapter 3 also.

The information in chapter 3 on typing mode is very important. It tells you how to type directly onto the printer. This allows you to perform simple typing tasks without the necessity of making a special document for them. Study this section carefully!

If you intend to be inserting reports created by VisiCalc, PFS or a similar program into Word Juggler documents, you should read note 1 in the GENERAL section of Chapter 3. Also read the sections on LOAD, BLOCK LOAD and INSERT DOCUMENT in that chapter.

A tutorial on the data file merge capability is provided in Chapter 4.

3 REFERENCE

# CHAPTER 3

## REFERENCE

This chapter is divided into 8 sections. They are:

- 1) **GENERAL** - This mentions a few general facts which you should remember because you will be using them all the time.
- 2) **THE MENU** - This goes through the functions that can be performed in the menu one at a time.
- 3) **EDITING KEYS** - This covers the arrow keys, the TAB key, RETURN and CONTROL RETURN as well as the "Strike over" key.
- 4) **EDITING KEYS ON THE NUMERIC KEYPAD** - This section describes the functions available on the numeric keypad in text entry mode.
- 5) **TYPING MODE** - This tells about the four typing mode functions.
- 6) **PRINT-OUT ENHANCEMENTS** - This tells how to invoke bold printing, underlining and super/subscripting.
- 7) **VARIABLES** - This section describes the functioning of variables as well as the pre-defined variables for accessing date and time information.
- 8) **PRINT-OUT CONTROL COMMANDS** - This section gives information on the various commands which can be inserted into the text of a document.

## GENERAL

Here are a few facts you should know. They are presented in a purely arbitrary order.

- 1) TEXT files not created by Word Juggler can be loaded or (INSERT DOCUMENTed) by preceding the path name of the file with "\*". Reports created by any Apple /// program that has the ability to print to disk can be inserted into Word Juggler documents in this manner. PFS and VisiCalc are examples of such programs.
- 2) When answering a yes or no question, only the first letter is significant. It must be either a "Y" or "N" (lowercase works too). Also, pressing just the RETURN key will be taken as a "yes" response.
- 3) Document names may be up to 15 characters long. They must start with a letter and may contain only letters, digits and dots. If you use lowercase letters, they will be converted to uppercase.
- 4) You may access drive 2 by adding ".D2/" to the beginning of a document name, or typing ".D2" in response to "CATALOG OF WHICH DIRECTORY?". Only that access will go to drive 2. To set drive 2 as the drive to be used normally, use DEFINE PREFIX. If no drive is specified, the drive given by DEFINE PREFIX will be used. You can actually use full blown path names everywhere in Word Juggler. For a discussion of path names, see Chapter 2. (The FORMAT command **always** formats on drive 1.)
- 5) The ESCAPE key will clear error conditions or abort most operations in the middle and return you to either text entry mode, or the menu. There are several exceptions to this. One is if you have started the REBOOT procedure. Another is if you are in text entry mode (here, ESCAPE is used to enter commands). Also, certain operations such as FIND and CHANGE cannot be stopped.
- 6) The ESCAPE key can also be used to abort a print-out. However, the Apple /// maintains an internal "buffer" of characters which must be cleared out before the print-out will actually stop. Thus it may be a relatively long time after you have pressed ESCAPE until the print-out actually stops.
- 7) When you are entering data in response to a question, the only editing keys that work are: left arrow, right arrow and DELETE PREVIOUS CHARACTER. Only characters to the left of the cursor are counted as part of the response.
- 8) On a 128K machine you can have a document that contains about 799 lines of **text** (less any space used by variables). On a 256K machine, you can have 1536 **total lines**.
- 9) A newly formatted diskette contains 273 blocks. This is enough space for at least 1700 lines of text. This represents at least 34 typewritten pages using 10 pitch and 6 lines/inch on a page with 1 inch top and bottom margins and 1/2 inch left and right margins.

## THE MENU

When Word Juggler is first booted you are put into the menu. This menu contains several options for allowing you to perform special functions. To select an option you merely enter its number and press RETURN. You may also enter the first letter of its name (e.g. "L" or "l" for LOAD, "C" or "c" for CATALOG, etc.). To go to the text entry mode you just press RETURN.

### Go to text entry mode (RETURN)

This will put you into the text entry mode. You may return to the menu by pressing the ENTER key on the numeric keypad.

### NEW (N or 1)

This will delete all text currently in memory and then go to the text entry mode. You will be put into insert mode, all tabs will be cleared and the document name will be left undefined. You will be warned if the document you are about to erase has any changes in it that have not been stored.

### CATALOG (C or 2)

This will list the names of all the files stored in the specified directory. ALL files are listed not just Word Juggler documents. You will be asked for the directory name of the directory you want to view. Use ".D1" for the root directory of drive 1, ".D2" for drive 2, ".PROFILE" for the hard disk, etc. If you just press RETURN the directory given by DEFINE PREFIX will be displayed. The catalog display gives the directory name at the top of the screen and then lists the files in the directory (up to 75 per page). If the directory is the root directory for the volume, the number of free blocks on the volume is also given.

You may also print the directory on the printer by preceding the directory path name with an exclamation mark. To print the default directory, just type "!" and press RETURN. The print-out will not include the free block count even for the root directory.

### LOAD (L or 3)

This will erase the document currently stored in memory and load in the specified document from disk. Tab settings are loaded along with the document. A full blown path name may also be used if you wish to load the document from a different directory than the one given by DEFINE PREFIX. You will be warned if the document in memory has any changes in it that have not been stored.

The normal Word Juggler documents you will be loading contain special control codes for things such as the end of paragraph mark, the Bold mark, and the commands such as CENTER, LEFT MARGIN, etc. It is also possible to LOAD a normal BASIC text file (Pascal ASCII file). This will allow you to load "printer files" as a document (VisiCalc can produce such a file, for example). To do this, just precede the file name with an asterisk (\*).

You can also do a CATALOG from inside LOAD by typing a question mark followed by the directory name. If you want a catalog of the default directory just type "?" and press RETURN. The free block count will not be displayed even for the root directory. Also, if the directory contains more than 75 entries, only the first 75 will be displayed.

**STORE** (S or 4)

This will store the document in memory onto the disk. Tab settings are stored along with the document. A full blown path name may also be used if you wish to store the document in a different directory than the one given by DEFINE PREFIX.

Word Juggler documents normally contain special control codes for things such as the end of paragraph mark, the Bold mark, and the commands such as CENTER, LEFT MARGIN, etc. It is also possible to do a STORE that creates a normal BASIC text file (Pascal ASCII file). This will allow you to create a simple text file that is easily manipulated by a BASIC or Pascal program (see Appendix C for a description of the contents of such a file). To do this you just precede the name of the file with an asterisk (\*).

You can also do a CATALOG from inside STORE by typing a question mark followed by the directory name. If you want a catalog of the default directory just type "?" and press RETURN. The free block count will not be displayed even for the root directory. Also, if the directory contains more than 75 entries, only the first 75 will be displayed.

**PURGE** (P or 5)

This will purge the specified file from the disk. A full blown path name may also be used if you wish to purge the document from a different directory than the one given by DEFINE PREFIX. Note that you can purge files which are not Word Juggler document files, so BE CAREFUL!

You can also do a CATALOG from inside PURGE by typing a question mark followed by the directory name. If you want a catalog of the default directory just type "?" and press RETURN. The free block count will not be displayed even for the root directory. Also, if the directory contains more than 75 entries, only the first 75 will be displayed.

**FORMAT** (F or 6)

This will initialize a diskette for document storage. The diskette to be formatted must be in the internal drive (drive 1). You must supply a "VOLUME NAME". The volume name should be selected to uniquely identify the things you will be putting on your diskette. This operation totally erases the previous contents of the diskette, so BE VERY CAREFUL.

**DEFINE PREFIX** (D or 7)

This allows you to select the default drive (or directory) that will be accessed whenever you do a disk operation such as LOAD, STORE or PURGE. The prefix is initially set to ".D1", the root directory of drive 1. You can set it to ".D2" to make drive 2 the default, or whatever. It can also be set to a volume name or a sub-directory path name.

## EDIT CONFIGURATION

(E or 8)

This will allow you to define printer parameters and the default settings for certain commands. You modify fields by moving the cursor to the field you wish to change using up arrow and down arrow, then using the left and right arrow keys to change the value.

The first parameter you must specify is the printer driver. It basically tells which Apple /// interface is being used to communicate with the printer. In most cases this parameter will be set to .PRINTER. It should never be set to "<NONE>". **WARNING:** If you are using the .RS232 driver to drive your printer, and it is a micro-spacing printer (Qume, etc.) you must NOT configure .RS232 to use ENQ/ACK handshaking.

The second parameter describes the type of printer you have connected. If you have a Qume Sprint 5, Diablo 630 or similar printer, set this parameter to "DIABLO/XEROX/QUME/NEC". If your printer is made by NEC and does not use DIABLO compatible escape sequences, set it to "NEC (5510/7710 PROTOCOL)". If your printer has backspace for overstriking and underlining use "OTHER (WITH BACKSPACE)". If your printer can do a carriage return without a linefeed, use "OTHER (W/O BSP & NO AUTO LF)". If your printer forces a carriage return after a linefeed, use "OTHER (W/O BSP & WITH AUTO LF)". Finally, if your printer is using a special filter which you have constructed (or we have supplied), the parameter will be set to "USER". Details on the capabilities of USER filters is given in Appendix D.

The STRIKE COUNT parameter tells how many times a character should be struck to produce a bold character. This parameter is ignored by printers such as the Qume which do bold printing in a special way.

The SPACE UNDERLINE parameter determines whether spaces are underlined in an underlined phrase.

The LEFT MARGIN, WIDTH, PITCH, PAGE LENGTH, TOP MARGIN, LENGTH and SPACING parameters determine the assumed value that will be used for these commands during print-out (unless they are specifically overridden). They should be set to the values you use most commonly. The setting of PITCH also sets the default typing mode left margin to either 40 for 10 pitch, 48 for 12 pitch or 60 for 15 pitch when the system is booted. If you don't have a micro-spacing printer, this parameter only affects the default typing mode margin.

## REBOOT

(R or 9)

This will reboot the system from the diskette installed in the internal drive. The only advantage to using this option as opposed to just pressing CONTROL RESET is that if the document currently has any changes in it which have not been stored on disk, you will be warned and given a chance to store the document before rebooting.

## EDITING KEYS

The functions of most editing keys not labeled on the keypad are defined by the help display you can get by pressing the DISPLAY KEY DEFINITIONS key. The exceptions to this are the RETURN key, the CONTROL RETURN key, and the "Strike over" key. Take special note of their functions.

### Up arrow

This key moves the cursor up one line (nearer to the start of the text). If the result of the move would put the cursor past the end of that line, it will be readjusted to point to the last character in the line.

### CONTROL up arrow

This key moves the cursor up one line. The cursor will not be readjusted to the end of that line as may be done by up arrow.

### SHIFT up arrow

This key puts the cursor in the upper left corner of the text area and then displays the previous 23 lines of text (15 if the key definitions are displayed). If there are fewer than 23 (15) lines above the top line on the screen, the cursor moves to the start of the text.

### CONTROL SHIFT up arrow

This key moves the cursor to the start of the text.

### Down arrow

This key moves the cursor down one line (nearer the bottom of the text). It will not let the cursor move past the end of the text. If the result of the move would put the cursor past the end of that line, it is readjusted to point to the last character in the line. When displaying a document, it causes the document to be advanced by one line.

### CONTROL down arrow

This key moves the cursor down one line. The cursor will not be readjusted to the end of that line as may be done by down arrow.

### SHIFT down arrow

This key puts the cursor in the upper left corner of the text area and then displays the next 23 lines of text (15 if the key definitions are displayed). If there are fewer than 23 (15) lines after the last line on the screen, the cursor moves just past the last line of the text.

### CONTROL SHIFT down arrow

This key positions the cursor just past the end of text. The last line is positioned roughly in the center of the screen.

**Right arrow**

This key moves the cursor right one position. If that movement would move the cursor past the end of the line, the cursor moves down one line and to the far left. However, if the next line is empty or contains a command and the current line does not end with an end of line marker, the cursor may go past the last character of the line. During document display, it causes the document to scroll horizontally right by one.

**CONTROL right arrow**

This key moves the cursor right one position. If that movement would go off the right edge of the screen, the cursor moves down one line and to the far left. However, if the length of the current line is 80, the cursor moves to column 81.

**SHIFT right arrow**

This key moves the cursor to the start of the next word.

**CONTROL SHIFT right arrow**

This key moves the cursor to the end of the current line. If the last character in the line is an end of line marker, the cursor will come to rest over it. Otherwise the cursor will be positioned just beyond the end of the line.

**Left arrow**

This key moves the cursor left one position. If that movement would move the cursor past the start of the line, the cursor moves up one line and to the last character of that line. During document display, it causes the document to scroll horizontally left by one.

**CONTROL left arrow**

This key moves the cursor left one position. If that movement would go off the left edge of the screen, the cursor moves up one line and to column 80. However, if that line is 80 characters long, the cursor moves to column 81.

**SHIFT left arrow**

This key moves the cursor to the start of the previous word.

**CONTROL SHIFT left arrow**

This key moves the cursor to the far left edge of the screen.

**SHIFT TAB**

This key sets a tab at the current position.

**CONTROL TAB**

This key clears a tab which may exist at the current position.

**TAB**

This key goes to the next position to the right of the current position at which a tab is set.

**CONTROL SHIFT TAB**

This key goes to the next position to the right of the current position at which a tab is set. Unlike TAB, however, it inserts spaces as it goes.

**RETURN**

This key puts an end of line marker in the text.

**CONTROL RETURN**

This key is virtually the same as down arrow followed by a CONTROL SHIFT left arrow.

**The "Strike over" key (CLOSED APPLE)**

The CLOSED APPLE key is called the Strike over key because it allows you to replace characters even when in insert mode. If you are in insert mode and hold down the CLOSED APPLE key any key you type replaces the character the cursor is over (just like being in replace mode). If you are in replace mode, any character you type is inserted (just like being in insert mode).

## EDITING KEYS ON THE NUMERIC KEYPAD

All editing keys are labeled either on the keyboard templates or the Quick Reference card.

### DISPLAY KEY DEFINITIONS (0)

This key turns on and off a display which briefly describes the various functions for the arrow keys and the tab key. When the display is turned on the text area is reduced from 23 lines to 15 lines. Other than reducing the size of the text area (and therefore the number of lines skipped by SHIFT up and down arrow), there is no difference in the functioning of Word Juggler.

### DISPLAY TAB SETTINGS (SHIFT 0)

This key turns on and off a one line display which shows where your tabs are set. It also effects the number of lines skipped by SHIFT up and down arrow.

### DELETE PREVIOUS CHARACTER (-)

This key does almost the same thing as left arrow followed by a DELETE CHARACTER.

### GO TO MENU (ENTER)

This key goes to the Word Juggler menu. This menu allows files to be loaded and stored, allows a catalog to be obtained, allows the system to be configured and a variety of other functions. See the section on the menu for a complete description of the functions available.

### REPLACE MODE (7)

This key turns on replace mode (turns off insert mode). Replace mode is distinguished by a cursor which alternates between the character it is over and the inverse of that character. In replace mode any character entered replaces the character the cursor is over. If a command is entered, it replaces the entire line on which the cursor resides. If a character is put on a command line, the entire command line is replaced by that one character.

### INSERT MODE (SHIFT 7)

This key turns on insert mode (turns off replace mode). Insert mode is distinguished by a cursor which alternates between the character the cursor is over and an inverse plus sign. In insert mode each character or command is inserted into the text between the character preceding the cursor and the cursor.

### DELETE CHARACTER (8)

This key deletes the character under the cursor. It has no effect on a command line.

**DELETE TO EOL****(SHIFT 8)**

This key deletes all characters from the cursor to the end of the line the cursor is on, then text from following lines is packed in to fill the void. If the cursor is at the left edge of the screen, it will delete the command on that line.

**DELETE WORD****(9)**

This key deletes the word the cursor is on. The cursor must be over some non-blank sequence of characters. A word is defined as any non-blank sequence of characters including commas, periods, parenthesis, etc. and ending with a blank or an end of line marker. DELETE WORD will delete the blank following the word if there is one. Note that if you follow your periods, exclamation marks, and question marks with two spaces, pressing and holding down this key will delete to the end of a sentence.

**DELETE TO ←****(SHIFT 9)**

This key deletes all characters from the position of the cursor up to the first end of line marker (not including the end of line marker) or up to the first command.

**FIND****(1)**

This key is used to find a character string. It asks for the string to locate and then begins its search with the character at the cursor. When the string is found the cursor comes to rest on the first character of the string. An exact match is required, thus if you tell Word Juggler to find "her", it will not find "Her" or "HER". It will, however, find "hers", "here", or "there" since they all contain "her". To avoid this latter problem, you may wish to use " her ". However, this will not find "her" at the end of a sentence since then it would have to match " her.". Note that you may use the OPEN APPLE key to enter print-out enhancements into the search string.

**↑ FIND****(SHIFT 1)**

This key is used to find a character string. It asks for the string to locate and then begins its search at the start of text. Note that you may use the OPEN APPLE key to enter print-out enhancements into the search string.

**CHANGE****(3)**

This key is used to change one string to another. It asks for the string to find and a replacement string. The search starts from the character at the cursor. Every time a match is found you are given the option of either replacing this occurrence or just continuing (you press space to continue and RETURN to replace). Then it checks for more occurrences of the string. ESCAPE may be used to abort this command anytime it is waiting for a response.

Note that if you are using the technique of searching for something with blanks around it (as mentioned in FIND) the replacement should probably

have blanks around it too. Note also that you may use the OPEN APPLE key to enter print-out enhancements into both the search and replace strings.

**↑ CHANGE (SHIFT 3)**

This key is the same as the CHANGE key (see above) except that it begins at the start of the text.

**CHANGE AUTOMATIC (6)**

This key is the same as the CHANGE key except that it assumes that you want all of the changes made. All strings which match the search string are replaced with the replacement string. Once the search and replacement has begun it cannot be stopped.

**↑ CHANGE AUTOMATIC (SHIFT 6)**

This key is the same as the CHANGE AUTOMATIC key except that it begins at the start of the text.

**BLOCK COPY (5)**

This key has you mark the first character or command in a block of text you wish to copy. Then you mark the last character or command in the block you wish to copy. Then you position the cursor to the place you wish to insert a copy of the block.

**BLOCK MOVE (SHIFT 5)**

This key has you mark the first character or command in a block of text you wish to move. Then you mark the last character or command in the block you wish to move. The block is then **deleted** and you position the cursor to the place you wish to insert the block.

**BLOCK LOAD (4)**

This key asks for the name of a document and then inserts the text of the document at the position of the cursor. If there are any tab settings in the document file, they are ignored.

The normal Word Juggler documents you will be loading contain special control codes for things such as the end of paragraph mark, the Bold mark, and the commands such as CENTER, LEFT MARGIN, etc. It is also possible to do a BLOCK LOAD using a normal BASIC text file (Pascal ASCII file). This will allow you to insert "printer files" into your document (VisiCalc can produce such a file, for example). To do this, just precede the file name with an asterisk (\*).

**BLOCK STORE (SHIFT 4)**

This key has you mark the first character or command in a block of text you wish to store. Then you mark the last character or command in the block you wish to store. Then you specify the name to be used for the block. No tab settings are stored with the block. If there is already a document by that name, you will be asked if you wish to replace it.

Word Juggler documents normally contain special control codes for things such as the end of paragraph mark, the Bold mark, and the commands such as CENTER, LEFT MARGIN, etc. It is also possible to do a BLOCK STORE that creates a normal BASIC text file (Pascal ASCII file). This will allow you to create a simple text file that is easily manipulated by a BASIC or Pascal program (see Appendix C for a description of the contents of such a file). To do this you just precede the name of the file with an asterisk (\*).

**BLOCK DELETE** (CONTROL 4)

This key has you mark the start and end of the block you wish to delete.

**BLOCK STORE & DELETE** (CONTROL SHIFT 4)

This key does the same thing as BLOCK STORE except that after the store has been successfully completed, the block is deleted.

**DISPLAY DOCUMENT** (.)

This key displays the document on the screen 23 lines at a time like it will be printed. Pressing the space bar shows the next 23 lines. A solid line indicates where a new page begins. The down arrow key allows you to go through the document one line at a time, and the left and right arrow keys may be used to horizontally scroll documents that are wider than 80 columns. Any characters that are underlined, bold or are used as superscripts or subscripts are shown in inverse video. Justification is done by inserting spaces (as opposed to the micro-spaces that will be used on micro-spacing printers).

**SPECIAL DISPLAY DOCUMENT** (CONTROL .)

This key behaves the same as the display document key, except that it asks for a page number to start the display with. In this context page number does not refer to the page numbers that appear on the output, but rather to the sequential number of the page.

**PRINT DOCUMENT** (SHIFT .)

This key prints the document on the printer.

**SPECIAL PRINT DOCUMENT** (CONTROL SHIFT .)

This key prints the document on the printer. It allows you to specify the number of the first and last pages to be printed, and the number of copies to print. In this context page number does not refer to the page numbers that appear on the output, but rather to the sequential number of the page. If you just press RETURN for "FIRST PAGE TO PRINT?", "1" will be used. If you just press RETURN for "LAST PAGE TO PRINT?", it will print to the end of the document. If you just press RETURN for "NUMBER OF COPIES?", only one copy will be printed.

## PRINT FORM

(CLOSED APPLE .)

This key loads in an assembly language program for printing form letters. It asks for the path name of the data file containing the list of names (or whatever) and then prints the document in memory for each name in the file. The IF command may be used in the document to suppress printing of certain names or to print special messages for only certain individuals.

The assembly language program is generally loaded from the Word Juggler diskette. If you have a hard disk you may put the program there to avoid disk swapping (see Chapter 1). The assembly language program will remain in memory (not have to be reloaded) unless you have performed a DISPLAY DOCUMENT, a BLOCK MOVE or a BLOCK COPY since the last time PRINT FORM was used.

## **TYPING MODE**

Typing mode is used to disconnect the Apple /// keyboard from the word processor and type directly on the printer. Typing mode functions can only be accessed from the text entry mode. All typing mode functions are accessed through the "2" key on the numeric keypad.

### **TYPEWRITER (CONTROL SHIFT 2)**

This will prompt you with "TYPEWRITER:". You may then type characters and use the arrow keys to move around on the paper. (The DELETE PREVIOUS CHARACTER key works the same as the left arrow.) On some printers, the up arrow will not work. On other printers, neither the up arrow nor the left arrow will work. You may set tabs using SHIFT TAB, clear tabs using CONTROL TAB, and move to a tab by pressing TAB. These tabs are independent of the tabs that are set for your document. The left margin is set at one. When you are through just press ESCAPE to go back to editing your document.

### **TRANSMIT LINE (2)**

If the cursor is on a line of text, the contents of the line from the cursor to the end of line will be printed. If the line contains any variables, you will be asked for their values. The left margin used will be that specified by the TYPING MODE LEFT MARGIN function (see below).

This is particularly useful for extracting addresses from letter headings and putting them on envelopes. You just position the cursor to the start of the address, put an envelope in the printer and press TRANSMIT LINE once for each line of address. If you are using a Qume or similar printer, the pitch used will be that specified in by EDIT CONFIGURATION. The left margin is determined by the TYPING MODE LEFT MARGIN command. The default TYPING MODE LEFT MARGIN is about right for printing addresses on envelopes. If the line transmitted turns on bold, underlining, or super/subscripting, they will be turned off after the transmit has completed (i.e. the next line transmitted will not print as bold or whatever unless it explicitly turns it on).

### **TYPE (SHIFT 2)**

This will prompt you with "TYPE?". You may type any line up to 74 characters long and send it to the printer. Then Word Juggler will prompt you with "TYPE?" again. You may type as many lines as you like. When you have nothing more to type, press ESCAPE. If you are using a Qume or similar printer, the pitch used will be that given in EDIT CONFIGURATION. You may adjust the left margin using TYPING MODE LEFT MARGIN.

### **TYPING MODE LEFT MARGIN (CONTROL 2)**

This will ask you to set the left margin that is used in typing mode. If you don't set the left margin it will be set to either 40, 48 or 60 depending on the pitch setting in the EDIT CONFIGURATION section. This is about right for printing addresses on envelopes. Note that the TYPING MODE LEFT MARGIN is not used by the TYPEWRITER function.

## PRINT-OUT ENHANCEMENTS

Word Juggler has the capability to generate print-out with underlined or bold text as well as the ability to generate superscripts and subscripts. These enhancements may also be used in any combination desired. All these enhancements display a unique symbol to indicate whether they are being turned on or off at a given point. Each enhancement control is accessed by holding down the OPEN APPLE key, then pressing the key for the desired function. These keys are:

<u>KEY</u>	<u>FUNCTION</u>	<u>DISPLAYED SYMBOL</u>
u	Underline on	Inverse U
U	Underline off	Inverse slashed U
b	Bold on	Inverse b
B	Bold off	Inverse slashed b
↑	Superscript on	Inverse up arrow
	Subscript off	
↓	Subscript on	Inverse down arrow
	Superscript off	

If the SPACE UNDERLINE parameter in the EDIT CONFIGURATION menu is set to "NO", spaces are not underlined. In this case, use the underline character in place of space if you want spaces underlined. Note, however, that this turns the underlined text into a single word which cannot be split up across a line.

A special note about using these functions in tables. They take up a position on the display, but they don't take up a position when printed. So if some rows in a table use these functions and others don't, the rows may not line up on the screen. It is best to build the table first and get things lined up, then go back in and add the print-out enhancements.

## VARIABLES

Word Juggler provides a convenient method for doing fill-in-the-blank operations in your document. Any place you want to insert some information that changes, you use a variable. When Word Juggler sees this variable it will ask for text to substitute for it. Further, if the same variable occurs later in the document, it will substitute the same thing you entered earlier. You may have up to 127 distinct variables. If you are printing more than one copy of a document, you will be asked only once for the variables and the same text will be used on all copies (you can ask for new text for a variable on each copy, see the LET command for details).

To enter a variable hold OPEN APPLE and press "<", then type the variable name, then hold OPEN APPLE and press ">". The variable will appear as a name enclosed by an inverse "<" and an inverse ">". A variable name may be up to 78 characters in length and may not include blanks, print-out enhancement characters or end of line markers. Lowercase and uppercase are interchangeable, so the variables "Name", "NAME", and "name" are the same.

A variable named PAGE is automatically defined by Word Juggler to contain the current page number (PAGE does not count as one of your 127 variables). PAGE is initially set to "1" and is incremented by one at the end of every page. Use of the PAGE variable allows for numbering of pages (see the TEXT command). Page numbers which start at something other than "1", or which are more complex than just a simple number can also be handled. See the TEXT and LET commands for more details.

**NOTE:** For every variable you use with a distinct name there must be at least two lines of free memory. Also there must be two lines of memory for the PAGE variable whether you use it or not. During print-out (or display) this memory is temporarily used by Word Juggler. For example, if you are using the variables NAME, ADDRESS and JUNK, the "FREE" count in the status line must read at least 8 (2 times 3 for the variables plus 2 more for PAGE).

### PRE-DEFINED VARIABLES

There are ten pre-defined variables that give you access to the Apple ///'s internal clock. (If you don't have an internal clock, just wait awhile.) They are entered just like normal variables. Unlike other variables they do not use up memory (if you have a working internal clock).

<u>VARIABLE NAME</u>	<u>DESCRIPTION</u>
\$DATE	Gives date in the form MM/DD/YY (e.g. 01/31/84)
\$YEAR	Gives a 4 digit year (e.g. 1984)
\$YR	Gives a 2 digit year (e.g. 84)
\$MONTH	Gives the month name (e.g. January)
\$MON	Gives a 3 letter all caps month abbreviation (e.g. JAN)
\$MONTH#	Gives the month number (1 to 12)
\$DAY	Gives the day name (e.g. Monday)
\$DAY#	Gives the day of the month (1 to 31)
\$TIME	Gives the time (e.g. 2:30 AM or 4:45 PM)
\$TIME24	Gives time on a 24 hour clock (e.g. 02:30 or 16:45)

## PRINT-OUT CONTROL COMMANDS

These commands are accessed from text entry mode by pressing ESCAPE followed by the appropriate command key. They take up a whole line. If you are in the middle of a line of text and in insert mode, entering a command will break the line into two parts at the cursor. During print-out there is an implied end of line marker before these commands if one is not present on the text line preceding the command.

### PAGE LENGTH nn (ESCAPE "8")

The PAGE LENGTH command is used to specify the total number of lines on a page. A value of 66 for PAGE LENGTH corresponds to an 11 inch page (assuming 6 lines/inch). PAGE LENGTH will take any value from 1 to 127.

### TOP MARGIN nn (ESCAPE "9")

The TOP MARGIN command is used to tell where on the page the text is to begin. A value of one will cause text to be printed on the very first line of the page, two will leave one blank line in front of the text, and so on. TOP MARGIN will take any value from 1 to 127.

### LENGTH nn (ESCAPE "0")

The LENGTH command is used to tell how many lines are available for printing text. The LENGTH setting cannot be such that text would have to be printed past the end of the page (i.e. an error will occur if TOP MARGIN plus LENGTH minus 1 is greater than PAGE LENGTH). LENGTH will take any value from 1 to 127.

### LEFT MARGIN nn (ESCAPE "(")

The LEFT MARGIN command is used to set where the left margin for the text begins. If LEFT MARGIN is set to one, text will be printed starting at the far left of the page, if it is set to two, one blank will precede the text, and so on. LEFT MARGIN will take any value from 1 to 127.

### WIDTH nn (ESCAPE ")")

The WIDTH command is used to specify the number of characters wide the text can be. WIDTH will take any value from 15 to 254.

### PAUSE (ESCAPE "\*")

The PAUSE command tells the program to pause at the end of every page when printing a document so that single sheets may be fed. Once PAUSE has been specified the remainder of the document will be printed with pauses at every page break.

### SINGLE SPACE (ESCAPE "7")

SINGLE SPACE causes all subsequent text to be single spaced (no blank lines between lines of text).

**DOUBLE SPACE****(ESCAPE "&")**

DOUBLE SPACE causes all subsequent text to have a single blank line placed between each line of text.

**TRIPLE SPACE****(ESCAPE CONTROL "7")**

TRIPLE SPACE causes all subsequent text to have a two blank lines placed between each line of text.

**10 PITCH****(ESCAPE "4")**

The 10 PITCH command is only necessary when using a micro-spacing printer such as the Qume. It specifies that the print wheel being used is designed to produce 10 characters per inch.

**12 PITCH****(ESCAPE "\$")**

The 12 PITCH command is only necessary when using a micro-spacing printer such as the Qume. It specifies that the print wheel being used is designed to produce 12 characters per inch.

**15 PITCH****(ESCAPE CONTROL "4")**

The 15 PITCH command is only necessary when using a micro-spacing printer such as the Qume. It specifies that the print wheel being used is designed to produce 15 characters per inch.

**INDENT nn****(ESCAPE "6")**

The INDENT command is used to specify the amount of indentation that is to occur on all lines **except** the first line of a paragraph. The default setting for INDENT is zero. You cannot indent so much that the width reduced by the indent parameter would be less than 10. INDENT will take any value from 0 to 127.

**NEW PAGE****(ESCAPE "^")**

The NEW PAGE command ejects the current page if there is any text printed on it.

**SKIP nn****(ESCAPE "-")**

The SKIP command is used primarily to leave a contiguous blank space for figures, diagrams, etc. If the indicated number of blank lines will not fit on the current page, a new page will be started before the blank lines are skipped. SKIP will take any value from 1 to 127.

**NEED nn****(ESCAPE "\_")**

The NEED command is used primarily to keep titles from being put at the very bottom of a page. NEED checks that there are at least the indicated number of lines left on the current page. If not, a new page is started. NEED will take any value from 1 to 127.

**RAGGED RIGHT****(ESCAPE "@" )**

The RAGGED RIGHT command specifies that text will be printed so the left margin lines up, but the right margin will be allowed to wander. RAGGED RIGHT may be overridden by RAGGED LEFT, CENTER or JUSTIFY. RAGGED RIGHT is the default mode.

**RAGGED LEFT****(ESCAPE CONTROL "2" )**

The RAGGED LEFT command specifies that text will be printed so the right margin lines up, but the left margin will be allowed to wander. RAGGED LEFT may be overridden by RAGGED RIGHT, CENTER or JUSTIFY.

**JUSTIFY****(ESCAPE "2" )**

The JUSTIFY command specifies that text will be printed so that both the left and right margins line up (if possible). This is done by inserting spaces (or small portions of spaces on micro-spacing printers) at appropriate points. JUSTIFY may be overridden by RAGGED RIGHT, RAGGED LEFT or CENTER.

**CENTER****(ESCAPE "1" )**

The CENTER command specifies that text will be printed so each line is centered between the left margin and the right margin. CENTER may be overridden by RAGGED RIGHT, RAGGED LEFT or JUSTIFY.

**TEXT AT LINE nn, COLUMN nn** **(ESCAPE "#" )**

The TEXT command is used to put a line of text (possibly including page numbers, dates, times, etc.) into either the top or bottom margin. The line number tells on which line on the page the text is to occur and may range from 1 to 127. The column number tells in which column the text should be printed (relative to the left edge of the page, not the left margin). The column number may range from 1 to 254. The line immediately following the TEXT command is the text that will be used (the line should end with an end of line marker). There may be up to ten such text lines active at any one time, but each must refer to a different line in the top or bottom margin. Performing a subsequent TEXT command with the same line number overrides the previous TEXT command for that line. To deactivate a text line just enter a TEXT command using that line number and follow it with a blank line (a line containing only an end of line marker).

Note that you can even do bold printing, underlining, etc. in TEXT lines.

**LET****(ESCAPE "3" )**

The LET command allows you to perform a variety of fun functions. It may be used to define or redefine the values of variables, including the PAGE variable. You may not change the value of the pre-defined date and time variables using LET, however. The line following the LET describes the variable to be assigned as well as what value is to be assigned. The line should start with the variable to be assigned, then, if you merely wish to enter a new value from the keyboard, follow that with a "?" then a RETURN. If you wish to set the variable to some particular value, follow the

variable with an "=" then the value you want the variable to have then a RETURN. Note that the new value may itself contain variables. If these variables are defined, their current value will be used. If they are undefined, you will be asked for their values.

The PAGE variable is somewhat special. Just before a new page is started the value of page is incremented. Actually, Word Juggler looks at PAGE for the rightmost sequence of digits. This sequence is incremented. If the number of digits stays the same, that is all that is done. If the number of digits increases (e.g. 999+1=1000), then one of the following is done: If there is a space to the left of the digits, the overflow digit goes there. If there is a space to the right of the digits, the space is removed from there and the overflow digit is inserted in front of the digit sequence. If there is no space on either side, the overflow digit is inserted in front of the digit sequence.

As mentioned in the **VARIABLES** section, it is possible to use the LET command to cause variable values to be requested for each copy of a document when you are getting multiple copies via SPECIAL PRINT DOCUMENT. To do this you put a LET command for each variable at the start of your document. The line following the LET should just be a variable name followed by a "?" and a RETURN. This has an additional advantage over just putting the variables in the document wherever they occur because it asks for all the variable values at the beginning and not when they are first encountered.

It may also be desirable to have all the variable values requested at the beginning of the document, but not have new values requested for each copy. To do this, put a LET command at the beginning of the document for each variable, and just assign the variable to itself.

One last caution about the LET command. If you intend to print multiple copies of a document using SPECIAL PRINT DOCUMENT and have all of them use the same variable values, do not use LET to change the value of a variable that has been input from the keyboard or you will get unexpected results.

### REPLACE "c" WITH "c" (ESCAPE "5")

The REPLACE command allows any character to be printed as any other character. Its primary function is to prevent a group of words from being split up across a line. For example, the text "Apple ///" is, in a sense, all one word. But if you use a space to separate "Apple" and "///", it is possible that "Apple" will occur at the end of one line, and "///" at the beginning of the next. So, the solution is to put in a REPLACE command like:

```
REPLACE "@" WITH " "
```

Then, rather than typing "Apple ///" you type "Apple@///". The program will treat this as one word, so it cannot be broken across a line, but it will print the @ as a space. Of course, if you have any other @'s in your document after the REPLACE, they will be printed as spaces too, so you should either pick some unused character, or turn off the REPLACE. Turning off a REPLACE is accomplished by replacing the character with itself. A reasonable choice to use as a space replacement is the tilde

(the tilde is the little squiggle on the key above the RETURN key). You may also wish to have a replacement for the hyphen key. Word Juggler will break words up at the hyphen. Of course phone numbers (237-4516) look not unlike hyphenated words. Replacing the hyphen with a \ will solve this problem.

### INSERT DOCUMENT

(ESCAPE "%")

The INSERT DOCUMENT command inserts a sequence of text and commands at the point immediately following the INSERT DOCUMENT. The line following the INSERT DOCUMENT must be the name of the document to be inserted followed by an end of line marker. Note that an inserted document starts out with the parameter settings (such as LEFT MARGIN and WIDTH) currently defined for the main document, not the normal default settings. Also, any changes the inserted document makes in any of these settings are transmitted back to the main document when the end of the inserted document is reached. You may insert as many documents as you wish, anywhere you wish, but an inserted document may not itself contain an INSERT DOCUMENT command unless that command is the last thing in the inserted document. If you wish to insert a document from a specific drive, the name should be preceded by a ".D1/", ".D2/", or whatever.

Word Juggler documents normally contain special control codes for things such as the end of paragraph mark, the Bold mark, and the commands such as CENTER, LEFT MARGIN, etc. It is also possible to insert a normal BASIC text file (Pascal ASCII file) into your document during print-out. This will allow you to insert "printer files" (VisiCalc can produce such a file, for example). To do this, just precede the file name with an asterisk (\*).

### COMMENT

(ESCAPE "c")

The COMMENT command allows you to insert non-printing comments into the text. The line following the COMMENT is completely ignored by Word Juggler.

### PRINTER CONTROL

(ESCAPE "p")

The PRINTER CONTROL command allows you to send an arbitrary sequence of characters to the printer. It is intended to allow you to send special escape or control sequences to the printer. The line following the PRINTER CONTROL contains the characters to be sent. To send control characters type a \$ followed by the 2-digit hexadecimal code for the character (e.g. escape is "\$1B", Control P is "\$10", etc.). If you want to send a dollar sign type "\$\$".

Note that you are forced to send control sequences at the end of a paragraph. Thus you cannot print a single word in a sentence in red, or double wide, or whatever. Be careful not to send sequences which effect something Word Juggler is attempting to control as this may produce anomalous results. For example, don't change line spacing in the middle of a page. You may change line spacing at the start of a page, however, if you adjust the PAGE LENGTH. For example, using PRINTER CONTROL you may set line spacing to 8/inch on a Qume or similar printer by sending "\$1B\$1E\$07" and then setting PAGE LENGTH to 88 for a normal 11 inch page.

**IF****(ESCAPE "=")**

The IF command allows you to conditionally print certain portions of a document. The line following the IF must contain an expression defining when to print the text following the IF and preceding the END IF. If an ELSE occurs between the IF and END IF, the text between the IF and ELSE will be printed if the expression is true, and the text between the ELSE and END IF will be printed if the expression is false. IF's may be nested up to 127 deep.

Expressions consist of comparisons of variables to literals and variables to variables using the following comparison operators:

< > <= >= = <>

Literals are defined as any string of characters enclosed in single (') or double (") quote marks. A string enclosed in double quotes may not contain a double quote and a string enclosed in single quotes may not contain a single quote. The items being compared are strings, not numbers. Thus, numbers will not be accurately compared unless they both have the same number of digits before and after the decimal point (if there is one).

These comparisons may be compounded using the binary operators "&" (AND) and "|" (OR). "-" is a unary NOT operator. Order of evaluation is strictly left to right unless modified by the use of parenthesis.

**ELSE****(ESCAPE CONTROL "=")**

See IF.

**END IF****(ESCAPE "+")**

See IF.

4 DATA FILE  
MERGE

# CHAPTER 4

## DATA FILE MERGE

The data file merge capability gives you a simple way to produce form letters from a list of names and addresses (or any other information) stored on disk. It can also be used to produce mailing labels (1 up only) and a variety of other interesting things.

The data file merge capability provided with Word Juggler is not intended to provide a comprehensive solution to all types of problems one would like to solve with such a capability. Rather, it is a simple solution to some of the smaller, more common problems. A more general solution is provided by the Quark Mail List Manager Interface. This accessory to Word Juggler, allows you to access files created by Apple's Mail List Manager.

### CREATING A DATA FILE

You'll start out with a simple example for producing form letters from a list of names and addresses. A simple form for an address has five pieces of information in it, name, address, city, state and zip code. Begin by booting the Word Juggler diskette. When Word Juggler has finished booting, go to text entry mode (press RETURN). There are five pieces of information, so type "5" and press RETURN. Then you need to type in the names for each of the five pieces of information (called "fields" in computer jargon). After you have typed in each field name, press RETURN. When you are through, the document should look like this:

```
5 ←  
NAME ←  
ADDRESS ←  
CITY ←  
STATE ←  
ZIP.CODE ←
```

You can use lower case letters if you like. You should not use a space to separate the words "ZIP" and "CODE", use a "." instead.

Now you're going to put in some addresses. The first address is:

```
Mark Q. Randall  
515 SW 5th  
Lakewood, CO 80218
```

Since the file has 5 fields you must use five lines to type it in. Thus you should type:

```
Mark Q. Randall ←  
515 SW 5th ←  
Lakewood ←  
CO ←  
80218 ←
```

Now, type in the following addresses in a similar fashion:

Mr. P. Yakamoto  
432 P Street  
Coral Gables, FL 33134

Victor Jellison  
36 2nd St. East  
Baton Rouge, LA 70806

Anette Haller  
3396 El Camino Ave.  
Indianapolis, IN 46204

Dan Jimson  
19517 Bismuth Drive  
New York, NY 10017

If you typed five lines for each address, pressing CONTROL SHIFT down arrow should leave you on line 32.

This is your mailing list. You can now add names and addresses to it, change them, and delete them. Remember that you will always have to add or delete 5 lines at a time. Find a disk with some extra space on it. Store this list on the disk as "MAIL.LIST" Use the hard disk if you have it, if not use a disk in drive 2 if you have 2 drives, this will avoid a lot of disk swapping since you can just leave the Word Juggler disk in drive 1.

#### PRINTING A FORM LETTER

Insert the Word Juggler master diskette in drive 1 and load the file named "FORM.LETTER". Notice the use of the variables NAME, ADDRESS, CITY, STATE and ZIP.CODE. The plot thickens.

Now you need a way to print one copy of this letter for each name in "MAIL.LIST" substituting the information in the file for the appropriate variables. A special key is provided for this very purpose. First, however, if you are not using continuous form paper, put a PAUSE command at the top of the document. Now, with the Word Juggler diskette installed in drive 1, hold down the CLOSED APPLE key and press the DISPLAY DOCUMENT key (called the PRINT FORM key). When you do this Word Juggler loads in a special program whose purpose in life is to print form letters. The status line should now say "PATH NAME?". If you have only one drive, put the diskette containing "MAIL.LIST" into drive 1 and type "MAIL.LIST". Otherwise, enter the appropriate path name for the "MAIL.LIST" file. Word Juggler should now produce a copy of the form letter for each of the five addresses stored in "MAIL.LIST".

**NOTE:** Almost everytime you wish to use the form letter print function you will have to have the Word Juggler master diskette in drive 1 before pressing PRINT FORM (CLOSED APPLE DISPLAY DOCUMENT). If you use the form letter print function twice in a row, you will not have to re-install the Word Juggler diskette unless you have done a DISPLAY DOCUMENT, a BLOCK COPY, or a BLOCK MOVE since the last time you used it. If you have a hard disk drive, you are indeed blessed and may avoid this problem entirely by copying the file "WJ.EXT." to the hard disk using the Apple /// System Utilities program. Then you can run the BASIC program called MAKE.PARAMS on the Word Juggler diskette to instruct Word Juggler of the location of "WJ.EXT." (Use the "DEFINE EXTERNAL PROCEDURE LOCATION" option).

## ADDING A FIELD

But suppose you wanted to store a past due amount too. Load "MAIL.LIST". Adding the field "PAST.DUE" means there are six fields. Change the "5" in line 1 to a "6". Add the field name "PAST.DUE" after the "ZIP.CODE" line (remember the RETURN). Now insert a line after each zip code which gives a past due amount (e.g. \$12.34) for each individual (go ahead, make some up).

If you now press CONTROL SHIFT down arrow the line number should be 38. Store "MAIL.LIST" back on the disk. Load "FORM.LETTER" from the Word Juggler diskette. If you were to print the letters out now, an identical set of letters would result. Insert the word "of" and the variable "PAST.DUE" right after "If we do not receive payment for the past due amount". Put in a PAUSE command at the top of the letter (even if you don't need one). Press PRINT FORM (CLOSED APPLE DISPLAY DOCUMENT). Enter the path name for "MAIL.LIST". The first letter will be printed. Swell, huh? If you want to print the next letter, press space. Otherwise, press ESCAPE to stop the print out of the other letters.

## PRINTING MAILING LABELS

Now that you know how to print form letters you'll need to know how to print mailing labels for the envelopes. Go to the menu and do a NEW command. Now we'll build a very short document to print labels. If you use the normal 1 up continuous form labels, each label is six lines long. Put in a PAGE LENGTH of 6, a LENGTH of 6 and a TOP MARGIN of 1. Put in a LEFT MARGIN of 8. Type the following (read bold "<" and ">" marks as variable markers):

```
<NAME> <
<ADDRESS> <
<CITY>, <STATE> <ZIP.CODE> <
```

If you have continuous form labels put some in the printer. If not use your imagination. Press PRINT DOCUMENT and answer all the questions. This will allow you to check the alignment of the label. Adjust the alignment if required. You may also wish to use a different LEFT MARGIN setting. Now press PRINT FORM and give the path name for "MAIL.LIST". Zap! Your labels are printed.

## SORTING A DATA FILE

If you are doing large mailings you will want the labels printed in zip code order though. Hmmm. Never fear, there is a special BASIC program on the Word Juggler diskette to do this. First store this label printer as "LABEL" on the same disk as "MAIL.LIST". Then boot the BASIC disk (preferably BASIC v1.1). Run the program named SORT on the Word Juggler diskette by removing the BASIC disk, inserting the Word Juggler disk and typing:

```
RUN .D1/SORT
```

"SORT" will ask for the path name of the file you want to sort. Put in the disk containing "MAIL.LIST" and type "MAIL.LIST" with the appropriate drive spec (e.g. ".D1/", ".D2", etc.) in front. You will then be given a list of the fields in the file. Put in the number of the field you want to sort by ("5" for zip code). After a time your file will be sorted in zip order.

Press space to continue. You can now either sort other files or enter "0" to exit. Enter "0".

Boot Word Juggler. Put the disk containing "MAIL.LIST" and "LABEL" back in (if it isn't already). Load the file "LABEL". Then, with the Word Juggler diskette installed in drive 1, press the PRINT FORM key (CLOSED APPLE DISPLAY DOCUMENT). Give the path name for the "MAIL.LIST" file and press RETURN (make sure the right disk is installed). The labels are now printed in zip order.

That was more than a little complicated. Hopefully, you won't need to re-sort your files very often.

### STORAGE CAPACITY

You may build data files like the "MAIL.LIST" file which have from 1 to 99 fields. Field names have the same restrictions as variable names. They may not contain spaces, print-out enhancements (e.g. Bold), and they may not be more than 78 characters in length. Lowercase letters are treated the same as their uppercase counterparts.

If you have a 128K machine you can store about 799 lines. This allows you to manipulate a file of 129 6-field entries using Word Juggler (252 with a 256K machine). The general formula for the number of entries you can manipulate in a file containing F fields is  $\text{INT}(796/F-3)$  for a 128K machine and  $\text{INT}(1535/F-1)$  for 256K (Actually, for a 128K machine the "797" may be smaller if the number of free lines you have after a NEW command is less than 799).

If you need more entries than this, the only solution is to break the information up into multiple files.

### SELECTING PORTIONS OF THE DATA FILE

Word Juggler has one more feature that can be used to good effect with the data file merge capability. A command is provided which allows you to selectively print portions of documents depending on the values of certain variables. This allows you to add or remove paragraphs from the print-out for only certain individuals, or even to entirely suppress print-out of the form letter.

If you have been following the lesson in this chapter you should now have the "LABEL" document in memory. Suppose you only want to print a label for someone if their zip code is less than 50000. Press CONTROL SHIFT up arrow. Press ESCAPE and then the "=" key. The command IF appears. How strange! The line following the IF tells which labels to print. Type the following (read bold "<" and ">" as variable markers):

```
<ZIP.CODE><"50000"<
```

This bizarre thing following the IF is called an expression. Now press CONTROL SHIFT down arrow. Press ESCAPE and then "+". END IF appears. Now everything between the IF and the END IF will be printed whenever the zip code is less than 50000. Or, put another way, things between IF and END IF are printed whenever the expression is true. Press PRINT FORM to prove

this. You could also print the label only for numbers greater than or equal to 50000 by changing the "<" to ">=". Try it. In fact, you can do all sorts of comparisons, namely, "<" (less than), ">" (greater than), "<=" (less than or equal to), ">=" (greater than or equal to), "=" (equal to), and "<>" (not equal). You could also have used a single quote instead of a double quote around the value. This is necessary if the value in quotes contains a double quote mark.

But the fun doesn't stop here. Suppose, instead, that you wanted to print only labels for people in either Colorado or New York. Replace the expression after the IF with the following:

```
<STATE>="CO" | <STATE>="NY"
```

The vertical bar is read as OR. The OR is called an operator. Print out the labels to make sure this works too.

You have another operator. The "&" (read as AND) can be used in place of the "|". Replace the "|" with "&" and print out the labels. Nothing is printed! That's because no one is simultaneously in both Colorado AND New York. Change the part of the expression after the "&" to <PAST.DUE><>"\$0.00". Now print the labels. Labels will be printed for accounts in Colorado which have a non-zero balance.

Suppose you had text after the END IF. This would be printed everytime. So you can use IF and END IF to print a special message only to certain individuals. There is also a way to use IF to select between two messages. One will be printed when the expression after the IF is true, and the other will be printed if it is false. The command that lets you do this is called ELSE. You enter an ELSE by pressing ESCAPE and then CONTROL "=".

Load the file "FORM.LETTER2" from the Word Juggler diskette. It illustrates a complex use for IF and also demonstrates the ELSE command.

Those of you who are familiar with programming have immediately recognized the IF. Here are a few additional facts that might be of interest to you.

- 1) IFs may be nested up to 127 deep.
- 2) Order of evaluation in expressions is left to right unless modified by parenthesis.
- 3) There is a unary operator "-" which does a boolean not.
- 4) All comparisons are done as string comparisons. This means that numbers only compare properly if the numbers being compared both have the same number of digits before and after the decimal point (if there is one).

Reference information is provided for the IF statement in Chapter 3.



# CHAPTER 5

## SPELLING CHECKER

The spelling checker is an extra cost option for the Word Juggler package.

A BACKUP

# APPENDIX A

## BACKUP

THIS IS A VERY SHORT APPENDIX. IT OCCURS AS A SEPARATE APPENDIX ONLY BECAUSE THE CONCEPT OF BACKUP IS SO IMPORTANT. **READ THIS APPENDIX CAREFULLY!**

Occasionally, a diskette containing your documents will be destroyed, either through simple wear or by some accident such as spilling coffee on it or dropping it in a meat grinder. To prevent important documents from being lost you should periodically duplicate any important diskettes which have been changed since they were last duplicated. This process is called backup.

To duplicate a diskette you follow the procedure described in your Apple /// owner's guide for copying diskettes. If you are doing a single drive copy, you should put a write protect tab on the diskette you are copying from. This will insure that you don't accidentally erase your diskette by putting it in at the wrong time. When you have finished the copy, you may remove the write protect tab.

A simple backup procedure requires that you maintain both a normal version of a diskette and a backup version. If the normal version goes bad you may either copy the backup version onto the normal version, or discard the normal version and copy the backup onto a new diskette which will become the normal version. The decision of whether the old diskette is still usable is not always an easy one to make. If in doubt, use a new diskette and recycle the old one in an application where long term storage of data is not a consideration.

For optimum recovery from diskette problems, you should backup a diskette after every change or set of changes. However, this is often impractical. The next best solution is to backup any diskettes with changes that either would be very time consuming to re-enter, or that are important and may be forgotten if you have to reconstruct the document from an older version on a backup diskette. When possible, it is best to keep a paper record of the changes made to a diskette until a backup is made. Just keep the copy of the text you wrote your changes on. Write the date the changes were made and indicate where the document is stored on the copy. If you maintain a log specifying the date each diskette was backed up, you should have little trouble reconstructing the lost documents USING the backup diskette and your paper record.

Backup your diskettes just before you leave for the evening while you still remember which diskettes have been changed. You may only wish to do your backups once every few days, or once a week. It's up to you.

All this may sound overly complex. If you trust your memory, or you aren't making important changes to your documents, you can dispense with a lot of it. Probably, after the first few diskette failures, you will have a good idea of how extensive your backup procedure should be.

To minimize the number of diskettes you will have to duplicate, divide your documents up by category. You should backup important diskettes whenever you feel that the work to recreate your changes from an old backup would be

excessive. Also, you should probably have a couple of diskettes for random documents that will only be used once or twice. These "scratch" diskettes will probably not need to be backed up. You may also wish to print-out the catalog of a disk whenever you have added a new file to it. Keep this with your disk as a remainder of its contents and as an indicator of how important it is.

**B** ERRORS  
& RECOVERY

# APPENDIX B

## ERRORS & RECOVERY

An error is denoted by the flashing word ERROR in the lower left hand corner of the screen. This appendix describes in detail the meaning of all possible error messages, and in some cases, possible remedies.

To clear out an error press the ESCAPE key. If you were in text entry mode, you will be returned there. If you were in one of the menu functions, pressing ESCAPE will return you to the menu.

### ERROR MESSAGES

#### AT MOST 127 VARIABLES ALLOWED

You have used more than 127 variables with distinct names (not counting the variable "PAGE").

#### BLOCK TOO LARGE

You have attempted to perform a BLOCK COPY or a BLOCK MOVE and the block is too large. You will have to copy or move it in several smaller pieces. Try moving about 50 or 60 lines at once.

#### CAN'T ASSIGN TO PRE-DEFINED VARIABLE

You cannot use LET to change the value of the pre-defined time and date variables (e.g. \$TIME, \$DATE, etc.).

#### DEVICE NOT CONNECTED

You have attempted to access a device (usually a printer) that is not properly connected to the Apple /// or is non-functional (possibly the power is turned off).

#### DIRECTORY BAD

The directory you have attempted to access has been destroyed by unknown forces inimical to magnetic media. You should strongly consider using your backup for the damaged disk. You may first wish to salvage as many good files from the disk as you can and then replace the files that were lost from your backup.

#### DIRECTORY FULL

You have stored more files in the directory than are allowed (64 for the root directory). You must either find a directory with enough space for the current document, or format a new diskette on which to store the document.

#### DISK FULL

There is not enough space left to store the current document. You must either find a disk with enough space for the current document, or format a new diskette on which to store the document.

#### DISK SWITCHED

You have switched disks in the middle of an operation. Naughty, Naughty!

#### DUPLICATE VOLUME

You have two disks installed with the same volume name. Remove one of them and continue.

#### EMPTY BLOCK SPECIFIED

When using a BLOCK MOVE, BLOCK COPY, BLOCK STORE, BLOCK DELETE, or BLOCK STORE & DELETE command, the end of the block must follow the start of the block.

#### FILE LOCKED

The file you were attempting to purge has been locked by a LOCK command from BASIC. You will not be able to purge the document unless you unlock it.

#### FILE NOT FOUND

The indicated file (or document) is not in the specified directory. If you believe that you spelled the name correctly, use the CATALOG option to check which documents are in this directory.

#### FILE TYPE MISMATCH

The file you are attempting to access is not of the right type for the operation you wish to perform. If you were attempting to load a document, this means that the file is not a document.

#### FIRST PAGE CANNOT BE GREATER THAN LAST PAGE

The number of the first page to print in SPECIAL PRINT must be less than or equal to the number of the last page to print.

#### .FMTD1 DRIVER NOT LOADED

The SOS.DRIVER file that was loaded when you booted Word Juggler did not contain the .FMTD1 driver. You will not be able to format diskettes. You must use SCP on the Apple /// System Utilities diskette to add it.

#### I/O ERROR

The disk has a "bad" spot on it which SOS cannot read. Occasionally this error occurs as a result of an improperly centered diskette. You may wish to try opening the door on the drive giving the error and closing it again (without removing the diskette). This recenters the diskette, so you may then be able to successfully repeat the operation. If this helps, the diskette may have been mis-manufactured, or the hub in the disk drive may be defective. If not, transfer all the documents which don't give I/O errors onto another disk by loading them from the old disk and storing them onto the new one. If you can't even do a CATALOG (on the root directory) without getting an I/O ERROR the entire contents of the disk may well be lost forever (so use your backup).

#### IMPROPER COMMAND KEY

The key which you pressed in response to the prompt "PRESS A COMMAND KEY" did not represent a valid command. The only keys which represent valid commands are the labeled keys along the top row of the main keyboard, and "p", "c", "=", "+", CONTROL "2", CONTROL "4", CONTROL "7" and CONTROL "=".

#### IMPROPER CONTROL STRING

The character following a "\$" in a PRINTER CONTROL STRING is neither a second "\$" nor a valid two digit hexadecimal number.

#### IMPROPER EXPRESSION

The expression following an IF is not syntactically correct. Refer to Chapter 3 for details on how to structure expressions for the IF command.

#### IMPROPER FILE FORMAT

The data file being used by PRINT FORM is not correctly structured. The most common cause of this is that one or the sets of data has either too many or too few lines. The number of lines minus one should be divisible by the number of fields.

#### IMPROPER 'IF' STRUCTURE

No corresponding END IF has been found for a particular IF.

#### IMPROPER PATH NAME

The path name that was supplied was syntactically invalid. Possibly one of the file names in the path is longer than 15 characters, contains characters other than letters digits or dots, or starts with a dot. It is also possible that the total length of the path exceeds 60 characters.

#### IMPROPER VARIABLE

The variable name is longer than 78 characters, does not end with an inverse ">", or contains illegal characters. Illegal characters are: space and any of the print-out control characters (e.g. bold or no underline). Also, a variable name may not be split across a line.

#### IMPROPER VOLUME NAME

The volume name you have given to FORMAT is invalid. Volume names may contain at most 15 characters and must be composed of only letters, digits and dots. The first character must be a letter.

#### 'INSERT DOCUMENT' IN MIDDLE OF INSERTED DOCUMENT

A document which is being inserted into the main document cannot contain an INSERT DOCUMENT command except as the last command in the inserted document. You will have to redesign the scheme you are using to link documents together to avoid this problem.

#### INSERT DOCUMENT NOT ALLOWED IN THIS CONTEXT

An INSERT DOCUMENT is not allowed in a document you are printing with the PRINT FORM key (CLOSED APPLE ".").

#### INVALID EXTERNAL PROCEDURE

Someone has attempted to produce an external procedure for Word Juggler and has blown it.

#### INVALID INDENT PARAMETER

The width of the printed text must be at least 10. The INDENT command has attempted to reduce the width of the printed area and has found that the resulting width is less than 10.

#### INVALID PAGE LENGTH PARAMETER

The defined length of the text area would cause printing to go past the end of the page. This occurs if the TOP MARGIN plus the LENGTH minus one is greater than the PAGE LENGTH (normally 66).

#### INVALID PITCH

The specified pitch is not allowed for the kind of printer you have. This error can only occur if you are using a USER filter. It indicates that the number of micro-spaces/inch is not divisible by the pitch number. The programmer of the filter can doubtless explain the reason.

#### INVALID REQUEST

Word Juggler has made a request that SOS cannot comply with. This may happen if the SOS.DRIVER file is fouled up. Try using SCP on the Apple /// System Utilities disk to put in a good copy of the drivers.

#### LINE 1536 NOT EMPTY

You are allowed at most 1536 lines in your document. If line 1536 contains text, it is not possible to add anything to the document.

#### LINE NOT TEXT

The line following a TEXT, LET, INSERT DOCUMENT, PRINTER CONTROL, IF, or COMMENT command does not contain text. Or, the line the cursor was positioned on when a transmit line command was executed does not contain text. If you are unclear on the use of these commands, read the sections describing their operation in Chapter 3.

#### MISSING '=' OR IMPROPER '?'

The character following the variable name in a LET statement must be a "?" followed by a return, or an "=".

#### NO PRINTER SELECTED

The PRINTER DRIVER parameter in the EDIT CONFIGURATION menu is set to <NONE>. This probably occurred when Word Juggler was booted and it could not read the WJ.PARAMS file or that file contained invalid information. You may wish to see the section on recreating WJ.PARAMS later in this Appendix.

#### NO SUCH VOLUME

You have attempted to access a volume which is not installed in the system. It could also be that you have attempted to access a disk drive in which no disk is installed.

#### NON-EXISTANT DEVICE

You have attempted to access a device for which there is no driver loaded. You may also have misspelled a device name (e.g. ".S1" instead of ".D1").

#### NOT BLOCK DEVICE

You have attempted to do a LOAD, STORE, CATALOG or similar operation on a device which is not a disk (e.g. you can't LOAD from .PRINTER).

#### NOT SOS DISK

The disk you have attempted to access is not formatted like a normal SOS disk.

#### OUT OF MEMORY

There are no more lines available for text. If your document requires more than about 799 lines of text (1536 for 256K apples), you will have to break it into at least two pieces and link them together using the INSERT DOCUMENT command. This error can also occur during print-out if there is not enough free memory for the variables you wish to use.

#### PATH NOT FOUND

The path you have specified does not exist.

#### SOS ERROR \$dd

The two characters following the "\$" are a two digit hexadecimal number corresponding to a SOS error with which Word Juggler is not familiar. You will probably never get this error. If you do, check the manuals for any special devices you have connected to your system to see if they list an error with the appropriate error code. If you can't figure it out, give us a call.

#### STRING NOT FOUND

The indicated sequence of characters was not found before the end of the document was reached.

#### TEXT AREA FULL

You are allowed to have at most 10 TEXT commands for different lines in the top and bottom margin active at one time. Also, the sum of the lengths of the active TEXT commands may not exceed 245 characters.

#### VALUE OUT OF RANGE

The numeric value given was out of the range of legal values. Check the section in Chapter 3 on the command you were attempting to determine the proper range for values.

#### VARIABLE ASSIGNED MORE THAN 80 CHARACTERS

You have attempted to set a variable to a value which contains more than 80 characters. Check the indicated LET command very carefully to determine the cause. This error can also occur in rare instances at the start of a new page if the PAGE variable contains exactly 80 characters (and the increment would increase the number of digits in the page number).

#### WRITE PROTECTED DISK

The disk you are using is write protected (has a write protect tab installed). FORMAT, PURGE, STORE, STORE DOCUMENT, and STORE & DELETE DOCUMENT will not work on such a disk. If you truly wish to change information on this disk, remove the write protect tab and repeat the operation. Note that this error can also occur when Word Juggler is attempting to update the configuration information on one of the Word Juggler diskettes.

## RECREATING THE "WJ.PARAMS" FILE

There is a file on the Word Juggler master diskette which contains the information about how your system is configured. If this file is damaged or lost you may be unable to use your printer, the command keys (e.g. CENTER, LET, etc.) may be scrambled or you may be unable to use the PRINT FORM key (CLOSED APPLE "."). If your parameter settings in the EDIT CONFIGURATION menu are not being correctly loaded at boot up (particularly the DRIVER parameter), or you can't change the parameters using EDIT CONFIGURATION, or you can't access the PRINT FORM function, you probably need to recreate "WJ.PARAMS". The BASIC program called "MAKE.PARAMS" on the Word Juggler diskette allows you to recreate this file.

To run the program, just boot up the Business BASIC disk (preferably the 1.1 version). Then remove the write protect tab from your Word Juggler master diskette and insert it in drive 1. Then type:

```
RUN .D1/MAKE.PARAMS
```

Select the "RECREATE FILE" option and answer its questions as appropriate for your system. When you are through, enter "0" to exit.

C FILE FORMATS

# APPENDIX C

## FILE FORMATS

Word Juggler document files are stored as BASIC TEXT files (Pascal ASCII files). There are two formats that are used. The first is the normal format which contains the character sequences for encoding Word Juggler commands. The second is the format that is used when the path name is prefixed by an asterisk (\*). The data files used by the PRINT FORM command are also text files. They can be created by Word Juggler. Their format is also described.

### NORMAL WORD JUGGLER DOCUMENT FILES

A normal Word Juggler document file is stored so that each line on the screen is a line in the text file followed by a carriage return. There may also be a line preceding this which contains the tab settings for the document. If a line contains an end of line marker, the marker is stored as a STX (control B) in the file. Enhancement control bytes are encoded as follows:

<u>Enhancement</u>	<u>Stored as:</u>
Underline	S0 (control N)
No underline	SI (control O)
Bold	DLE (control P)
No bold	DC1 (control Q)
Superscript	DC2 (control R)
Subscript	DC3 (control S)
Start of variable	ETB (control W)
End of variable	EM (control Y)

The tab definition line which may optionally precede the text consists of a DC4 (control T) followed by 80 ASCII zero's and one's. One's correspond to positions where tabs are set. The line is followed by a carriage return (naturally). So the tab definition line will always take 82 bytes in the file if it is present. It is only put in the file during a STORE if at least one tab is set. It is never put in the file for a BLOCK STORE or a BLOCK STORE & DELETE.

Commands are stored as a line which begins with an Escape (and ends with a carriage return). The character following the Escape tells which command the line represents (see table below). Following this command character there may be either 0, 1 or 2 2-digit hexadecimal numbers which specify the parameter values. In the case of commands with two parameters (e.g. REPLACE and TEXT), the parameter which appears leftmost on the screen occurs first in the file.

<u>COMMAND</u>	<u>COMMAND CHARACTER</u>	<u># OF PARAMETERS</u>
10 PITCH	4	0
12 PITCH	\$	0
15 PITCH	4+128	0
CENTER	1	0
COMMENT	c	0
DOUBLE SPACE	&	0
ELSE	=+128	0
END IF	+	0
IF	=	0
INDENT	6	1
INSERT DOCUMENT	%	0
JUSTIFY	2	0
LEFT MARGIN	(	1
LENGTH	0	1
LET	3	0
NEED		1
NEW PAGE	^	0
PAGE LENGTH	8	1
PAUSE	*	0
PRINTER CONTROL	p	0
RAGGED LEFT	2+128	0
RAGGED RIGHT	@	0
REPLACE	5	2
SINGLE SPACE	7	0
SKIP	-	1
TEXT	#	2
TOP MARGIN	9	1
TRIPLE SPACE	7+128	0
WIDTH	)	1

In the above table the "+128" on some of the command characters indicates that the character stored in the file has an ASCII code which has the high bit set (e.g. the code for TRIPLE SPACE is generated by CHR\$(ASC("7")+128) in BASIC).

Thus command lines will always take either 3, 5 or 7 bytes in the file (including the trailing carriage return) depending on the number of parameters they have. Note that the encoding scheme for command characters corresponds to the characters that are actually used to enter the commands from a keyboard with a standard layout. However, even if you change the keyboard layout the same encoding will be used.

This is the format of the file created by Word Juggler. Should you wish to create a Word Juggler document you have a little more freedom, however. Word Juggler will strip out any control characters it doesn't understand. The high bit of the character code will be ignored except for command characters. Carriage returns are only required after the tab definition line, after an end of line marker (control B), and after commands. Also, if the line preceding a command should end with a carriage return (which it normally will anyway). Commands which contain improper command characters or where parameter values are out of range are ignored.

## FORMAT OF \* FILES USED BY WORD JUGGLER

When you prefix a path name with an asterisk during a STORE, BLOCK STORE or BLOCK STORE & DELETE, Word Juggler automatically strips out the commands and the print-out enhancement bytes as it stores the file. The inverse "<" and ">" used for variable markers are converted into normal "<" and ">". It also removes the text line following certain commands, namely IF, LET, TEXT, COMMENT, INSERT DOCUMENT, and PRINTER CONTROL. Tab settings are never stored. No carriage returns are put in the file except when an end of line marker is encountered. (A carriage return will also be added if a text line preceding a command does not end with an end of line marker.)

This means that only the printing text is stored in the file. And each paragraph appears as a single line in the file. This is exactly the form one would like to use to store a report.

When you wish to load a report that was produced by some other program it is more than likely that you will use the \* in front of the report path name. This will put an end of line marker at the end of every line of the report.

When you load a file using \*, it is possible for it to contain tab settings, commands, print-out enhancements, and variable markers (if you create it yourself). They have the same form as in a normal Word Juggler document file.

## FORMAT OF DATA FILES FOR PRINT FORM

The files used by PRINT FORM are simple text files. PRINT FORM reads in the first line from the file and expects to see a number from 1 to 99. This is used as the field count. It expects the next N lines (where N is the field count) to be the field names. Every set of N lines thereafter are taken as a set of field values. Lines in the file which start with a control T or an Escape are ignored.

Field names may be up to 78 characters long and may not contain any spaces. Lowercase characters are converted to uppercase. Field values may not exceed 80 characters. Any control characters (except CR) or characters whose ASCII value exceeds 126 are ignored. This means that variable markers and print-out enhancement codes are stripped out of field values.

This is the format that PRINT FORM expects. The SORT program is not so lenient about the inclusion of control characters. It will ignore control B's at the end of a line and it will skip any initial lines containing control T's or Escapes, but after it has read the field count, it expects all lines to contain valid information.

**D** USER PRINTER  
FILTERS

# APPENDIX D

## USER PRINTER FILTERS

You can install assembly language printer filters to support printers which can't use one of the standard filters. Three such filters are provided on the Word Juggler diskette. One is for the Anadex 9500/9501 printers, one is for the Silentye and one is for the IDS-560 printer.

The Anadex filter is stored in a file named "WJ.ANADEX1" on the Word Juggler diskette. It merely adds a nicer (and faster) underlining procedure than you get by using the "OTHER (W/O BSP & NO AUTO LF)" filter. "WJ.ANADEX" uses ASCII code 30 to turn on underlining and ASCII code 31 to turn it off.

The Silentye filter is stored in a file named "WJ.SILENTYPE". It adds the ability to do superscripting and subscripting.

The IDS-560 filter is stored in a file named "WJ.IDS560". It adds the ability to do superscripting and subscripting. It also makes the 10 PITCH and 12 PITCH command change the print size to either 10 or 12 pitch.

If you merely wish to install one of the standard USER filters on the Word Juggler diskette, you merely rename it to be "WJ.USER". Then you boot Word Juggler and use EDIT CONFIGURATION to change the FILTER parameter to "USER". Remember, you must remove the write protect tab so the updated configuration can be stored on disk. Then put on a new write protect tab. In the special case of the Silentye, you must also add the .SILENTYPE driver using SCP.

### CREATING YOUR OWN PRINTER FILTERS

You may wish to write your own filter if your printer has special features for underlining, bold printing, etc. which are not supported by any Word Juggler filters. You write this filter using the TLA assembler supplied with the Apple /// Pascal system.

512 bytes are allocated for your filter. A filter is an absolute assembly language file. It must be stored on the Word Juggler master disk and named "WJ.USER". To actually use this filter, you must go to the EDIT CONFIGURATION menu in Word Juggler, and set the filter to USER. Note that you can't set the filter to USER unless a user filter is loaded!

### FILTER STRUCTURE

Your filter must be an ABSOLUTE code file ORGed to \$A200, and may contain at most 512 bytes and may not reference external procedures. Word Juggler does not check that these conditions are satisfied, so be careful.

You must provide four routines in your filter. The first 12 bytes should be jumps to these routines. The four routines are:

- 1) Reset filter
- 2) Set horizontal motion index
- 3) Perform super/subscripting
- 4) Output character

The reset filter routine is called just before every copy of a document is printed and also just before every line is transmitted or typed in typing mode. This routine should insure that the printer is in normal printing mode, should initialize any temps you will require later and should return in the A register a filter type telling Word Juggler the capabilities of the printer. The filter types are as follows:

<u>FILTER TYPE</u>	<u>MEANING</u>
0	Printer has backspace and the capability to print small fractions of a space.
1	Printer has only backspace.
2	Printer can't backspace and doesn't force a line feed after a carriage return.
3	Printer can't backspace and forces a line feed after a carriage return.

Printers of type 0 are called micro-spacing printers. For micro-spacing printers, you may also wish to define the number of micro-spaces/inch (MSPI) and possibly the number of micro-spaces/character (MSPC). For printers where the micro-spacing capability is defined in terms of a fixed number of increments per inch (e.g. the ANADEX), just set MSPI. For a printer where either the width of a character or the inter-character gap is divided into a number of increments based solely on character width, set MSPI to zero and MSPC to the number of increments in a character. Just do an RTS when you are through. You may use any registers you like, but be sure that the interrupt and decimal flags are unmodified.

The set horizontal motion index routine is only used by micro-spacing printers. If your filter is not for a micro-spacing printer (type 0), routine 2 will never be called (fill in its three byte area with RTS, NOP, NOP).

On entry to the set HMI routine, the X register contains the width in micro-spaces of subsequent characters. You should set the printers horizontal motion index (or inter-character gap) accordingly. Just do an RTS when you are through. You may use any register you like, but be sure that the interrupt and decimal flags are unmodified.

The perform super/subscripting routine must do either a linefeed, reverse linefeed, half linefeed, or reverse half linefeed. The X register specifies which to perform as follows:

<u>Value of X</u>	<u>Operation</u>
0	Reverse line feed (Special. See below)
1	Reverse half linefeed
2	Half linefeed
4	Half linefeed
6	Linefeed
8	Reverse half linefeed
9	Reverse linefeed

Just do an RTS when you are through. You may use any register you like, but be sure that the interrupt and decimal flags are unmodified. In the special

case that X is 0 you should return with carry clear if you did the reverse linefeed and carry set if you did not (this value is only sent when a reverse linefeed is requested in TYPEWRITER).

If your printer can't do super/subscripting, just set the three byte area for this routine to SEC, RTS, NOP.

The output character routine receives the character to print in the A register. Unlike the other routines, the value of the X register must be the same when your routine finishes as when it was called. X contains information on the kind of enhancements that should be applied to the character (this byte is called the enhancements byte). In most cases, the value in X is probably uninteresting since Word Juggler performs the underlining, and bold printing. The bits of X are defined as follows:

7	6	5	4	3	2	1	0
-	-	-	-	-	-	Bold	Under- lined

Bits 7 through 2 are undefined. Do not assume that they have any particular value. Bit 0 is set if the character should be underlined and bit 1 is set if the character should be printed as bold.

The carriage return and linefeed characters will have X set to 0. The only character codes that will be passed into this routine by Word Juggler are: backspace (filter types 0 or 1 only), carriage return, line feed and the ASCII characters from 32 to 126. The character codes generated by the PRINTER CONTROL command bypass the filter and are sent directly to the printer.

If your filter is for a printer of type 2 ("OTHER (W/O BSP & NO AUTO LF)"), Word Juggler will automatically do the line overprinting to generate underlining and bold printing. If you are doing the underlining yourself (see, for example, the ANADDEX filter), you should set the value of the "ULPTR" temp to zero when you receive a carriage return. If you are doing the bold printing yourself, you should set the value of "BOLDPTR" to zero when a carriage return is received. If you are handling both underlining and bold printing yourself, you should be using a type 3 filter.

**SPECIAL NOTE:** If you have a printer which can print small fractions of spaces but which can't do a backspace, you may still want to write a filter of type 0. All you have to do is set a flag when you are passed a backspace code. Then when the next character is received, you just don't print it. Note that you will also need to clear this flag when the filter reset routine is called. You will have to handle bold printing and underlining by yourself. **WARNING:** this technique doesn't properly stop the use of the backspace character in TYPEWRITER.

## TEMPORARY AND PARAMETER STORAGE

The following basepage temps are allocated for use by your filter:

<u>NAME</u>	<u>LOCATION</u>	<u>USE</u>
PITCH	OF0	This location contains the current pitch setting (10, 12 or 15). Do not modify this location.
MSPI	OF1	Number of micro-spaces per inch for a micro-spacing printer. The number of micro-spaces per character is derived by dividing this value by the pitch setting. If the value for your printer is not 120, you should set it in the filter reset routine. The number should be divisible by the default pitch setting, and should probably also be divisible by 10, 12 and 15. Bold face will be accomplished by printing a character, setting the horizontal motion index to one less than the width of that character and then backspacing and printing the character again. Never modify this location except in your filter reset routine.
HMI	OF2	The horizontal motion index for the character currently being printed. Do not modify this location. There is probably no reason for you to ever use it.
MSPC	OF3	Number of micro-spaces per character for type 0 filters. If MSPI is non-zero, this is calculated as MSPI divided by the pitch setting. If you set MSPI to zero in your filter reset routine, you should set MSPC to the appropriate value. Never modify this location except in your filter reset routine.
ULPTR	OF4	Points to the last underlined character in the underlined character list (type 2 and 3 filters only). Set to zero when a carriage return is received if you don't wish your type 2 filter to underline by overstriking.
BOLDPTR	OF5	Points to the last bold character in the bold character list (type 2 and 3 filters only). Set to zero when a carriage return is received if you don't wish your type 2 filter to do bold printing by overstriking.
PRSTRIKE	OF6	This contains a copy of the value of the STRIKE COUNT parameter. You may use it or ignore it as you see fit. If you don't use it you may use this location as an additional temp.
	OF7-OFF	General usage temps. Their values will not be set or modified by Word Juggler during the printing of a document. However, their values are undefined when the reset routine is first entered.

As mentioned earlier, you have all memory from \$A200 to \$A3FF at your disposal. If you have any temps that must survive from one printing of a document to the next or you need more temps, they should be stored somewhere in this area.

### WORD JUGGLER SUPPORT ROUTINES

Two routines are provided which you will want to use in writing your filter. Do not use any other routines which you may accidentally discover. Most routines in Apple /// ROM are not compatible with Word Juggler, and the position of any Word Juggler routines except those described may vary from version to version. You will have difficulty doing any SOS calls because Word Juggler maintains fairly tight control of memory and file usage.

<u>NAME</u>	<u>LOCATION</u>	<u>PURPOSE IN LIFE</u>
PCOUT	OOEA	Outputs the byte in the A register to the printer driver. If ESCAPE has been pressed, the print-out is aborted. Use this routine whenever possible. The test for ESCAPE is made before the byte is transmitted.
PCOUTO	OOED	Outputs the byte in the A register to the printer driver. This routine ignores the ESCAPE key. It should be used when you wish to transmit an uninterruptable sequence of characters (such as to set HMI).

The X and Y registers return unscathed. The A register returns garbled. There is no guarantee as to the contents of the status register (except that the interrupt and decimal flags are unmodified).

### ADDITIONAL CONSIDERATIONS

There are two additional properties your filter must have. First, the filter must not have any infinite loops. Second, if the filter sends multi-character sequences to control printer functions, it must not give up in the middle of such a sequence (i.e. it should send them using PCOUTO) unless the reset routine is capable of clearing out any partially completed sequence.

## SAMPLE FILTERS

There are three sample filters provided on the diskette. A brief discussion of each is given below.

### **ANADEX 9500/9501**

This filter works almost exactly like the "OTHER (W/O BSP AND NO AUTO LF)" filter. The only difference is that it monitors the least significant bit of the X register in the output character routine. Whenever this bit changes, either an underline on or an underline off code is sent to the printer. Note that the filter sets ULPTR to zero at carriage return to stop underlining by overprinting. Also note that the filter reset routine turns off underlining.

### **SILENTYPE**

This filter works almost exactly like the "OTHER (W/O BSP AND NO AUTO LF)" filter. The only difference is that it supports superscripting and subscripting. Note that if the super/subscript routine is passed a code of 0 in X (reverse linefeed from TYPEWRITER), carry is set to refuse the request. This was done because the Silentype printer cannot reverse linefeed very far without fear of jamming.

### **IDS-560**

This filter works almost exactly like the "OTHER (W/O BSP AND NO AUTO LF)" filter. It allows super/subscripting and, unlike the Silentype filter, allows reverse linefeed. It also looks for a change in the pitch before every character and adjusts the printer appropriately.

The IDS-560 printer is a micro-spacing printer of sorts. If one were so inclined, a type 0 filter could be written. The things to remember about writing such a filter are that MSPI should be set to 0 and MSPC should be set to 24. Also, you must go out of your way to suppress characters printed after a backspace. Note that you would then have to do bold printing and underlining yourself. Also note that you cannot produce anything even vaguely resembling a continuous underline if you use such a scheme.

```

0000| .PROC ANADEX
Current memory available: 11244
0000| ;
0000| ; ANADEX 9500/9501 FILTER
0000| ;
0000| ; .ORG 0A200
A200| ;
A200| ; CONSTANTS
A200| ;
A200| 000D CR .EQU 13. ;Carriage return
A200| 001E ULON .EQU 30. ;Underline on code
A200| 001F ULOFF .EQU 31. ;Underline off code
A200| ;
A200| ; WORD JUGGLER ROUTINES AND TEMPS
A200| ;
A200| 00EA PCOUT .EQU 0EA ;Character print routine
A200| 00F4 ULPTR .EQU 0F4 ;Underline buffer pointer
A200| 00F7 ULFLAG .EQU 0F7 ;Underline state temp
A200| ;
A200| 4C **** JMP RESET ;Filter reset
A203| 60 RTS ;Set HMI entry (not used)
A204| EA NOP
A205| EA NOP
A206| 38 SEC ;Do super/subscripting
A207| 60 RTS
A208| EA NOP
A209| 4C **** JMP COUT ;Character output
A20C| ;
A20C| A9 00 RESET LDA #0 ;Turn off underlining
A20E| 85 F7 STA ULFLAG
A210| A9 1F LDA #ULOFF
A212| 20 EA00 JSR PCOUT
A215| A9 02 LDA #2 ;Type 2 filter
A217| 60 RTS
A218| ;
A218| 48 COUT PHA ;Save character
A219| 8A TXA
A21A| 45 F7 EOR ULFLAG
A21C| 29 01 AND #1
A21E| FO** BEQ COUT1 ;If same underline status; skip
A220| 45 F7 EOR ULFLAG ;Else update underline flag
A222| 85 F7 STA ULFLAG
A224| A8 TAY ;Change printer underline status
A225| B9 **** LDA ULTAB,Y
A228| 20 EA00 JSR PCOUT
A22B| 68 COUT1 PLA ;Recover character
A22C| C9 0D CMP #CR
A22E| DO** BNE COUT2 ;If not CR; skip
A230| A0 00 LDY #0 ;Else stop overprint underlining
A232| 84 F4 STY ULPTR
A234| 4C EA00 COUT2 JMP PCOUT ;Print the character
A237| ;
A237| 1F 1E ULTAB .BYTE ULOFF,ULON
A239| ;
A239| .END

```

```

0000|                                     .PROC IDS560
Current memory available: 11244
0000|                                     ;
0000|                                     ;   IDS-560 FILTER
0000|                                     ;
0000|                                     ;   .ORG 0A200
A200|                                     ;
A200|                                     ;   CONSTANTS
A200|                                     ;
A200| 001D   TEN   .EQU 1D
A200| 001E   TWELVE .EQU 1E
A200| 001F   FIFTEEN .EQU 1F           ;Actually this is 16.8 CPI
A200|                                     ;
A200|                                     ;   WORD JUGGLER ROUTINES AND TEMPS
A200|                                     ;
A200| 00EA   PCOUT .EQU 0EA           ;Character print routine
A200| 00F0   PITCH .EQU 0F0          ;Current pitch setting
A200| 00F7   LAST  .EQU 0F7          ;Last known pitch
A200|                                     ;
A200| 4C ****   JMP RESET           ;Filter reset
A203| 60       RTS                   ;Set HMI entry (not used)
A204| EA       NOP
A205| EA       NOP
A206| 4C ****   JMP SS               ;Do super/subscripting
A209| 4C ****   JMP COUT            ;Character output
A20C|                                     ;
A20C| A9 0A   RESET  LDA #10.         ;Set to ten pitch
A20E| 85 F7   STA LAST
A210| A9 1D   LDA #TEN
A212| 20 EA00 JSR PCOUT
A215| A9 02   LDA #2                 ;Type 2 filter
A217| 60       RTS
A218|                                     ;
A218| BD ****   SS    LDA SSTAB,X
A21B| 20 EA00 JSR PCOUT
A21E| BD ****   LDA SSTAB,X
A221| 10**    BPL SS1
A223| 20 EA00 JSR PCOUT
A226| 18     SS1  CLC
A227| 60     RTS
A228|                                     ;
A228| 99 19 14 2A 14 SSTAB .BYTE "Y"+40,"Y"-40,"T"-40,"*", "T"-40
A22D| 2A 94 2A 19 99 .BYTE "*", "T"+40,"*", "Y"-40,"Y"+40
A232|                                     ;
A232| 48     COUT  PHA                 ;Save character
A233| A5 F0   LDA PITCH
A235| C5 F7   CMP LAST
A237| F0**    BEQ COUT1             ;If no pitch change; skip
A239| 85 F7   STA LAST             ;Else change pitch
A23B| 4A     LSR A                 ;(Using sneaky trick)
A23C| A8     TAY
A23D| B9 ****   LDA PTAB-5,Y
A240| 20 EA00 JSR PCOUT
A243| 68     COUT1 PLA              ;Recover and print character
A244| 4C EA00 JMP PCOUT
A247|                                     ;
A247| 1D 1E 1F PTAB .BYTE TEN,TWELVE,FIFTEEN
A24A|                                     ;
A24A|                                     .END

```

```

0000|                                     .PROC SILENTYPE
Current memory available: 11244
0000|                                     ;
0000|                                     ; SILENTYPE FILTER
0000|                                     ;
0000|                                     .ORG 0A200
A200|                                     ;
A200|                                     ; CONSTANTS
A200|                                     ;
A200| 0002 DELTA .EQU 2 ;Super/subscript feed distance
A200|                                     ;
A200|                                     ; WORD JUGGLER ROUTINES AND TEMPS
A200|                                     ;
A200| 00EA PCOUT .EQU OEA ;Character print routine
A200|                                     ;
A200| 4C **** JMP RESET ;Filter reset
A203| 60 RTS ;Set HMI entry (not used)
A204| EA NOP
A205| EA NOP
A206| 4C **** JMP SS ;Do super/subscripting
A209| 4C **** JMP COUT ;Character output
A20C|                                     ;
A20C| A9 1B RESET LDA #1B ;CR expansion off
A20E| 20 EA00 JSR PCOUT
A211| A9 65 LDA #"e"
A213| 20 EA00 JSR PCOUT
A216| A9 02 LDA #2 ;Type 2 filter
A218| 60 RTS
A219|                                     ;
A219| 8A SS TXA
A21A| F0** BEQ SS1 ;If reverse lf request; skip
A21C| A9 1B LDA #1B
A21E| 20 EA00 JSR PCOUT
A221| A9 56 LDA #"V"
A223| 20 EA00 JSR PCOUT
A226| BD **** LDA SSTAB,X
A229| 4C EA00 JMP PCOUT
A22C| 38 SS1 SEC
A22D| 60 RTS
A22E|                                     ;
A22E| 00 FE 02 00 02 SSTAB .BYTE 0,256.-DELTA,DELTA,0,DELTA
A233| 00 04 00 FE FC .BYTE 0,DELTA+DELTA,0,256.-DELTA,256.-DELTA-DELTA
A238|                                     ;
A238| 4C EA00 COUT JMP PCOUT
A23B|                                     ;
A23B|                                     .END

```

GLOSSARY  
& INDEX

# GLOSSARY

This glossary contains the definitions of some common terms which may not be familiar to you. It also presents additional interesting information whenever it seems appropriate.

## **BLOCK**

The word "block" has two meanings in this manual. The most common usage is when referring to an arbitrary section of text. Word Juggler provides certain commands for moving blocks of text around (see BLOCK COPY, BLOCK LOAD, etc.). Block is also a unit of storage on a disk. A block can contain 512 characters (or bytes) of information. When you do a CATALOG of a root directory you are told how much free space is on a disk in blocks. When you get ready to do a STORE, you are told how many blocks of storage are required.

## **BOOT**

The term "boot" (or "boot up") is a computer science buzz-word. It generally refers to the process of starting up from scratch and allegedly originated with the idea of pulling oneself up by one's bootstraps. The boot process is initiated whenever you turn the computer on or right after you press the CONTROL key and RESET.

## **CLOSED APPLE**

The CLOSED APPLE key (also called the SOLID APPLE key) is the key just to the left of the ON light. It has two distinct uses. If you press and hold any key, it will repeat at a rate of 10 characters/second. If you subsequently press CLOSED APPLE (while holding down the original key), the key will repeat at a rate of about 33 characters/second. The second use of the key is when you press it before you press another key. In this case, it behaves like a kind of "shift" key which a programmer can use to modify the meaning of a character. In the case of Word Juggler, the CLOSED APPLE key is used to momentarily switch from INSERT MODE to REPLACE MODE (or the other way around). In this context it is called the "Stike over" key. It is also used to load external assembly language programs to perform special functions. PRINT FORM is an example of such a program.

## **DIRECTORY**

A directory is a repository for file names. In the simplest case, you refer to a directory everytime you get a CATALOG of ".D1".

## **DOCUMENT**

A document is just a Word Juggler text file. It has no other special meaning. Word Juggler document files can even be accessed from BASIC and Pascal programs. See Appendix C for details.

## **FILE**

A file is a named container of information (generally stored on a disk). It is vaguely analogous to a file folder (the file) stored in a file cabinet (a disk). A wide variety of types of information may be stored in a file. Some of the files you see when you do a CATALOG are Word Juggler documents, some are computer programs and others contain data of a nature so esoteric that it is only meaningful to computer science Gurus. A file may even be a directory (which contains files (which may contain a directory (which contains files...))).

## **FILE NAME**

A 1 to 15 character name by which one can refer to a file. The name must be composed of only letters, digits and dots. The first character must be a letter. Lowercase letters are converted to uppercase.

## **HEXADECIMAL**

Referring to a number in base 16. Hexadecimal numbers have 6 digits in addition to the normal 0 through 9. They are A through F (A having a value of 10, B of 11, ...F having a value of 15). To convert a number from hexadecimal to decimal, first convert each digit into its decimal value from 0 to 15. Then multiply the value of the first (left hand) digit by 16 and add in the value of the second digit.

## **LOWERCASE**

The non-capital letters. abcdef...z.

## **MEAT GRINDER**

A common household device used for destroying diskettes. Units are available in either manual or electrically operated versions. (See page A-1 for details).

## **OPEN APPLE**

The OPEN APPLE key is the key just to the right of the ALPHA LOCK key. Its function is defined by the programmer. In the case of Word Juggler, it is used to enter the print-out enhancement characters (e.g. Bold, Underline, etc.) and the variable markers (inverse "<" and ">").

## **PATH NAME**

A path name is a name which uniquely specifies a file. The file name by itself may not be sufficient since there may be two files with the same name on different disks (volumes). Thus, you must specify which volume the file resides on (e.g. ".D1", "/WORD.JUGGLER", etc.). If the file resides in a sub-directory which is in the root directory you must also give the sub-directory name. Thus to access the file "GEORGE" on the volume "DEMO" in sub-directory "X", you use "/DEMO/X/GEORGE". If "GEORGE" is mounted in drive 1, you could also refer to the file as ".D1/X/GEORGE". Since you can have a sub-directory inside the sub-directory, this can get even more complicated.

It is not always necessary to give the volume name (or drive name). If your path name doesn't begin with either a "." or a "/", the "prefix" is added in front of your path name. Thus, if you type "SEYMOUR" and the prefix has been set to ".D1", the file accessed is actually ".D1/SEYMOUR". Refer to your Apple /// Owner's Guide for more details.

**PREFIX**

The prefix allows you to select a default directory which will be accessed if you only type in a file name (or a partial path name). If your path name doesn't begin with either a "." or a "/", the prefix is added in front of your path name. Thus, if you type "SEYMOUR" and the prefix has been set to ".D1", the file accessed is actually ".D1/SEYMOUR". Refer to your Apple /// Owner's Guide for more details.

**ROOT DIRECTORY**

This is the main directory associated with a particular volume. It may contain up to 64 files. The root directory may contain files which are themselves directories (called sub-directories).

**SOLID APPLE**

Another name for CLOSED APPLE.

**SUB-DIRECTORY**

Any directory that is not the root directory (e.g. a directory contained in the root directory, or a directory contained in a directory contained in the root directory, or ...).

**UPPERCASE**

The capital letters. ABCDEF..Z.

**VOLUME**

This is another name for a disk (more or less).

**VOLUME NAME**

The name by which you refer to a volume (or a disk). When you format a diskette, you give a name to the disk called the volume name. You can subsequently refer to the diskette either by referring to the device in which it is mounted (e.g. ".D1", ".D2", etc.) or by using the name of the volume preceded by a "/" (e.g. "/WORD.JUGGLER"). Volume names consist of from 1 to 15 characters. The name must be composed of only letters, digits and dots. The first character must be a letter. Lowercase letters are converted to uppercase.

# INDEX

10 PITCH 1-2,3-18  
12 PITCH 1-2,3-18  
15 PITCH 1-3,3-18

## A

ALPHA LOCK 2-2

## B

Block GL-1  
BLOCK COPY 3-11  
BLOCK DELETE 3-12  
BLOCK LOAD 2-12,3-11  
BLOCK MOVE 2-12,3-11  
BLOCK STORE 3-11  
BLOCK STORE & DELETE 2-12,3-12  
Bold printing 2-7,3-15  
Boot GL-1

## C

CATALOG 2-2,2-5,3-3  
CENTER 2-9,3-19  
CHANGE 2-6,3-10  
↑ CHANGE 2-6,2-11,3-11  
CHANGE AUTOMATIC 2-6,3-11  
↑ CHANGE AUTOMATIC 2-6,3-11  
Clearing tabs (See CONTROL TAB)  
CLOSED APPLE GL-1  
Commands 2-9,3-17  
COMMENT 3-21  
CONTROL down arrow 2-4,3-6  
CONTROL left arrow 2-4,3-7  
CONTROL right arrow 2-4,3-7  
CONTROL SHIFT down arrow 2-4,3-6  
CONTROL SHIFT left arrow 2-4,3-7  
CONTROL SHIFT right arrow 2-4,3-7  
CONTROL SHIFT TAB 3-8  
CONTROL SHIFT up arrow 2-4,3-6  
CONTROL TAB 3-7,3-14  
CONTROL up arrow 2-4,3-6  
Cursor 2-2,3-9

## D

Date (see Pre-defined variables)  
DEFINE PREFIX 3-4  
DELETE CHARACTER 2-2,3-9  
DELETE PREVIOUS CHARACTER 1-2,  
2-1,3-9  
DELETE TO ← 2-10,3-10  
DELETE TO EOL 2-2,2-3,2-7,3-10  
DELETE WORD 2-2,2-10,3-10  
Directory GL-1  
DISPLAY DOCUMENT 2-5,3-12  
DISPLAY KEY DEFINITIONS 2-4,3-9  
DISPLAY TAB SETTINGS 2-5,3-9

DOUBLE SPACE 2-8,3-18  
Down arrow 1-2,2-4,3-4,3-6  
Drivers 1-1,3-5

## E

EDIT CONFIGURATION 1-2,3-5,D-1  
ELSE 3-22,4-5  
END IF 3-22,4-5  
End of line (See CONTROL SHIFT  
right arrow)  
End of line marker 2-3  
End of text (See CONTROL SHIFT  
down arrow)  
End Of Variable Marker 2-7,3-16  
Error conditions B-1  
ESCAPE 2-1,2-2,2-3,2-9,3-17,B-1

## F

Fields 4-1  
15 PITCH 1-3,3-18  
File GL-2  
File name GL-2  
FIND 2-9,3-10  
↑ FIND 3-10  
Form letters 4-1  
FORMAT 2-1,3-4

## G

GO TO MENU 2-5,3-9

## H

Hard disk 1-3,4-2  
Hexadecimal B-5,GL-2  
Horizontal scrolling 2-8,3-7,3-12

## I

INDENT 2-11,3-18  
INSERT DOCUMENT 3-21,B-3  
INSERT MODE 2-10,3-9

## J

JUSTIFY 2-9,3-19

## K

Keyboard templates 1-1

## L

Left arrow 1-2,2-2,3-7  
LEFT MARGIN 2-3,2-7,3-17  
LENGTH 2-3,2-8,3-17  
LET 2-12,3-19  
LOAD 2-5,3-3  
Loading non-document files 3-3,C-3  
Lowercase GL-2

## M

Meat grinder A-1, GL-2, INDEX  
Menu 1-2, 2-1, 3-3  
Micro-spacing printers 1-2, D-2

## N

NEED 2-9, 3-18  
NEW 2-5, 3-3  
NEW PAGE 2-12, 3-18  
Next page (See SHIFT down arrow)  
Next word (See SHIFT right arrow)

## O

OPEN APPLE GL-2

## P

PAGE LENGTH 2-3, 2-8, 3-17  
Page numbering 2-11, 3-16, 3-19  
Path name GL-2  
PAUSE 2-9, 3-17, 4-2, 4-3  
PFS 2-13, 3-2  
Pre-defined variables 3-16  
Prefix 3-4, GL-3  
Previous page (See SHIFT up arrow)  
Previous word (See SHIFT right  
arrow)  
PRINT DOCUMENT 2-6, 3-12  
PRINT FORM 3-13, 4-2  
Print-out enhancements 2-7, 3-15,  
C-1, C-3, D-3  
Printer configuration 1-2  
PRINTER CONTROL 3-21  
Printer drivers 1-1  
PURGE 3-4

## Q

Questions 3-2

## R

RAGGED LEFT 3-19  
RAGGED RIGHT 2-10, 3-19  
REBOOT 3-5  
Repair 1-5  
Replace (See CHANGE and ↑ CHANGE)  
REPLACE 2-11, 3-20  
REPLACE MODE 2-10, 3-9  
RETURN 1-2, 2-3, 3-8  
Right arrow 2-2, 3-7  
Root directory 3-3, GL-3

## S

Search (See FIND and ↑ FIND)  
Search and replace (See CHANGE,  
etc.)  
Service 1-5  
Setting tabs (See SHIFT TAB)  
SHIFT down arrow 3-6  
SHIFT left arrow 2-4, 3-7  
SHIFT right Arrow 2-4, 3-7  
SHIFT TAB 2-4, 3-7, 3-14  
SHIFT down arrow 3-6  
SINGLE SPACE 2-8, 3-17  
SKIP 3-18  
Software updates 1-5  
SOLID APPLE (see CLOSED APPLE)  
SPECIAL DISPLAY DOCUMENT 2-11, 3-12  
SPECIAL PRINT DOCUMENT 3-12  
Start of line (See CONTROL SHIFT  
left arrow)  
Start of text (See CONTROL SHIFT  
up arrow)  
Start of Variable Marker 2-6, 3-16  
Status line 2-2  
STORE 2-5, 3-4  
"Strike over" key 2-10, 3-8  
Sub-directory GL-3  
Subscripting 2-10, 3-15  
Superscripting 2-10, 3-15

## T

TAB 2-4, 3-8, 3-14  
Templates 1-1  
10 PITCH 1-2, 3-18  
TEXT 2-11, 3-19  
TEXT ENTRY MODE 2-2, 3-3  
TEXT LINE/COL. 2-11, 3-19  
Time (see Pre-defined variables)  
TOP MARGIN 2-3, 2-8, 3-17  
TRANSMIT LINE 2-6, 3-14  
TRIPLE SPACE 3-18  
12 PITCH 1-2, 3-18  
TYPE 3-14  
TYPEWRITER 3-14  
Typing mode 2-6, 3-14  
TYPING MODE LEFT MARGIN 3-5, 3-14

## U

Up arrow 1-2, 2-4, 3-6  
Underlining 1-2, 2-7, 3-15

## V

Variables 2-6, 3-16, 3-19, 3-22, 4-2  
VisiCalc 2-13, 3-2, 3-3, 3-11, 3-21  
Volume GL-3

## W

WIDTH 2-3, 2-8, 3-17

**Quark**

# Helpful Hints

## Preparing to Use Profile With Apple III

(Use only with System Utilities, Version 1.1)

### Powering Up And Checking Out ProFile

Now that you have unpacked your drive, you are ready to hook it up and see it work. Don't panic -- it's really quite easy if you observe the following steps.

1. Turn OFF power switches on Apple III, ProFile, and the monitor
2. Remove the Apple III's cover
3. Install the ProFile interface card in slot 4 of the Apple III
4. Replace the Apple III's cover
5. Connect AC power cables to ProFile, Apple III, and monitor; connect interface cable between Apple III and Profile
6. Connect video cable between Apple III and monitor
7. Turn ON power switches on ProFile, Apple III, and monitor
8. Wait until the ProFile indicator light is on steady (not blinking)
9. Insert Demonstration Program diskette in Apple III's built-in drive
10. Boot Apple III -- hold CONTROL key down and press RESET
11. The monitor screen displays ProFile Demonstration Program -- indicator flashes rapidly to show activity

### Unlocking Files

If the SOS.DRIVER file of your boot diskette is locked (Write Protected), you must unlock it before you can add the ProFile driver.

1. Insert System Utilities diskette in built-in drive
2. Boot Apple III -- hold CONTROL key down and press RESET
3. Type F
4. Type W
5. Remove Utilities diskette and insert boot diskette
6. Type .D1/SOS.DRIVER and press RETURN
7. Type N (this unlocks the file)
8. Remove boot diskette from the built-in drive

### Reformatting Your ProFile

Using this procedure, you can recover all of the available space on ProFile without having to individually erase each file and subdirectory. However, you will lose all links to data previously recorded on ProFile.

1. Add the ProFile device driver to the SOS.DRIVER file of your backup System Utilities diskette. See **HELPFUL HINTS** for **Adding the ProFile Device Driver**
2. Insert the System Utilities diskette in the built-in drive
3. Boot the Apple III -- hold CONTROL key down and press RESET
4. Type D
5. Type F
6. Type .PROFILE and press RETURN
7. Type PROFILE and press RETURN

### Copying a Boot Diskette

You can make a backup copy of each of your boot diskettes (Business BASIC, Pascal, etc.) by following these steps. You cannot make a backup copy of copy protected diskettes such as Visicalc.

1. Insert System Utilities diskette in built-in drive
2. Boot Apple III -- hold CONTROL key down and press RESET
3. Type D
4. Type C
5. Remove Utilities diskette and insert boot diskette
6. Type .D1 and press RETURN
7. Type .D1 and press RETURN twice
8. Swap source (boot) and destination (blank) diskettes in built-in drive, as directed by monitor prompts, until copy is made

You should store your original boot diskettes in a safe place and use only your backup boot diskettes for all future operations. However, if your diskette is copy protected, you will have to use the original.

## Adding the ProFile Device Driver

Before your ProFile can communicate with the Apple III, you must add the ProFile driver to your boot diskettes (Business BASIC, Pascal, Visicalc, System Utilities, etc.). It's easy to do if you follow these simple steps and observe the prompts on the monitor screen.

### Note

*Before adding the ProFile driver to the SOS.DRIVER file of the System Utilities diskette, you must increase the available space on the diskette by creating two Utilities diskettes. This operation is described in the Apple III Standard Device Drivers handbook in the appendix entitled "Two-Stage Bootstrap Utilities".*

1. Insert System Utilities diskette in built-in drive
2. Boot Apple III -- hold CONTROL key down and press RESET
3. Type S
4. Type R
5. Remove Utilities diskette and insert boot diskette
6. Type .D1/SOS.DRIVER and press RETURN
7. Remove boot diskette and insert ProFile driver diskette
8. Type .D1/PROFILE.DRIVER and press RETURN (notice that .PROFILE has been added to the current driver configuration)
9. Remove ProFile driver diskette and insert Utilities diskette
10. Press ESCAPE
11. Type C
12. Type 2
13. Type number appearing to left of .PROFILE and press RETURN

14. Type a number from 1 to 4 (must correspond to slot in Apple III where you installed interface card) and press RETURN
15. Press ESCAPE twice
16. Type G
17. Remove Utilities diskette and insert boot diskette
18. Type .D1/SOS.DRIVER and press RETURN
19. If the message "Driver File too Large" appears on the monitor screen, delete any unnecessary driver files as described in the **HELPFUL HINTS** for **Deleting a Driver** and start over again at step 1. If the message "No Room on Volume" appears, delete any unnecessary driver or data files and start over again at step 1. Otherwise, go to the next step
20. Boot the Apple III -- hold the CONTROL key down and press RESET
21. To verify that ProFile will communicate with the Apple III, use the appropriate command to display the directory of the ProFile drive (This command will differ depending on the programming language being used) For Business BASIC, the command is CATALOG .PROFILE

## Deleting a Driver

You may find it necessary to delete one or more drivers from the SOS.DRIVER file of your boot diskette before you can add your ProFile driver. Do this as follows.

1. Insert System Utilities diskette in built-in drive
2. Boot Apple III -- hold CONTROL key down and press RESET
3. Type S
4. Type R
5. Remove Utilities diskette and insert boot diskette
6. Type .D1/SOS.DRIVER and press RETURN
7. Press ESCAPE
8. Remove the boot diskette and insert the Utilities diskette
9. Type D
10. Type the number of the driver you wish to delete and press RETURN
11. Type Y (for yes)
12. Press ESCAPE
13. Type G
14. Remove Utilities diskette and insert boot diskette
15. Type .D1/SOS.DRIVER and press RETURN
16. Type Y (for yes)
17. Remove boot diskette from the built-in drive

# WORD JUGGLER

## FUNCTION

## KEY SEQUENCE

### UNLABELED FUNCTIONS ON THE NUMERIC KEYPAD

Block	Copy Move Delete Store & Delete	5 SHIFT 5 CONTROL 4 CONTROL SHIFT 4
Special Display Document		CONTROL .
Special Print Document		CONTROL SHIFT .
Transmit Line		2
Set Typing Mode Margin		CONTROL 2
Type		SHIFT 2
Typewriter		CONTROL SHIFT 2

### UNLABELED EDITING FUNCTIONS

Go to start of next line "Strike over" key	CONTROL RETURN CLOSED APPLE
---	--------------------------------

### UNLABELED PRINT-OUT CONTROL COMMANDS

RAGGED LEFT	ESCAPE CONTROL 2
15 PITCH	ESCAPE CONTROL 4
TRIPLE SPACE	ESCAPE CONTROL 7
PRINTER CONTROL	ESCAPE p
COMMENT	ESCAPE c

### PRINT-OUT ENHANCEMENTS

Bold	OPEN APPLE b
No Bold	OPEN APPLE B
Underline	OPEN APPLE u
No Underline	OPEN APPLE U
Superscript (No Subscript)	OPEN APPLE ↑
Subscript (No Superscript)	OPEN APPLE ↓

### SPECIAL FUNCTIONS

Data File Merge	CLOSED APPLE .
MLM Interface Option	CLOSED APPLE 0
Lexicheck Option	CLOSED APPLE 7
TypeFace Option	CLOSED APPLE 9

## FUNCTION

## KEY SEQUENCE

---

### VARIABLES

(The variable PAGE is used for page numbering.)

Start of Variable Marker  
End of Variable Marker

OPEN APPLE <  
OPEN APPLE >

## PRE-DEFINED VARIABLES

### VARIABLE NAME

### DESCRIPTION

---

\$DATE	Gives date in the form MM/DD/YY
\$YEAR	Gives a 4 digit year (e.g. 1984)
\$YR	Gives a 2 digit year (e.g. 84)
\$MONTH	Gives the month name (e.g. January)
\$MON	Gives a 3 letter month abbreviation (e.g. JAN)
\$MONTH#	Gives the month number (1 to 12)
\$DAY	Gives the day name (e.g. Monday)
\$DAY#	Gives the day of the month (1 to 31)
\$TIME	Gives time (e.g. 2:30 PM)
\$TIME24	Gives time on a 24 hour clock (e.g. 14:30)

**Quark**

TAPE HERE

FOLD & SEAL

PLACE  
STAMP  
HERE

# Quark

## WARRANTY REGISTRATION

1433 Williams, Suite 1102  
2525 West Evans, Suite 220 Denver CO 80219  
(303) 934-2211

TAPE HERE

# WARRANTY REGISTRATION

NAME CRAIG GORDON WALL  
ADDRESS 2900 WESTHILL DRIVE  
CITY & STATE AUSTIN, TEXAS ZIP 78704  
PURCHASED FROM COMPUTER CENTER  
CITY & STATE AUSTIN, TEXAS 78746 DATE PURCHASED 9/17/83

What is your intended use for this product? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## SYSTEM CONFIGURATION

Memory capacity \_\_\_\_\_ 128K 256K  
Quantity of floppy disk drives (including internal drive) \_\_\_\_\_  
Do you have a hard disk drive? \_\_\_\_\_ YES NO  
If yes, what kind? \_\_\_\_\_  
If no, do you plan to get one? \_\_\_\_\_ YES NO  
What kind? \_\_\_\_\_ When? \_\_\_\_\_  
What kind of printer do you have? \_\_\_\_\_

Do you have a parallel interface? \_\_\_\_\_ YES NO  
Do you have joysticks? \_\_\_\_\_ YES NO

Other equipment: \_\_\_\_\_

What computer magazines do you read (in order of preference)? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What software would you like to see in the future? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments and Suggestions \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Quark office automation tools for the Apple III and IIe

---

**Quark**<sup>™</sup>  
INCORPORATED  
Office Automation  
Tools

2525 West Evans, Suite 220  
Denver CO 80219  
(303) 934-2211

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Discourse, Terminus, and Typeface are trademarks of Quark, Incorporated.

**Quark**<sup>™</sup>  
INCORPORATED

# Quark products for the Apple III

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## Terminus™ Communications Program.

---

Terminus is a communications program invoked from within Word Juggler. It allows communication between your Apple III and other RS232 devices. Terminus is ideally suited for electronic mail, as well as other communications applications.

- Allows you to predefine the protocols necessary for communicating with as many as 14 different systems.
- Each protocol provides 26 keyboard macros.
- Can provide autodial and logon on some modems.
- Supports baud rates from 110 to 9600.
- Several file transmission modes are available. Including an "error-free" mode when communicating with another Terminus.
- Text may be compressed to decrease transmission time when communicating with another Terminus.

## TypeFace™ Typesetting Interface.

---

Allows you to interface Word Juggler with computerized typesetting equipment.

Typeface works with any typesetting machine that can receive ASCII information over an RS232 link and which has "translation table" capability. A document formatted for the typesetter may be sent through a direct RS232 connection or via modem over the phone. It may also be stored directly on Apple III format disk.

# Quark System Enhancement Programs

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## Catalyst™ Hard Disk Boot.

---

Now you can boot from your hard disk. No more swapping of floppies. With Catalyst practically all your Apple III programs can be put on the hard disk. Once you have used Catalyst to set up your hard disk you can lock your copy of Word Juggler, VisiCalc etc. in a vault for safekeeping.

Simply boot the Catalyst diskette whenever you turn on your Apple. Catalyst will display a menu of available programs. After selection, programs are instantly loaded from the hard disk. If you want to select a different program, a simple key sequence will return you to the Catalyst menu.

Catalyst works with Word Juggler, Lexicheck and all other Quark software for the Apple III.

Plus:

BASIC Language	Business Graphics
Pascal Language	QuickFile
COBOL	Senior Analyst III
VisiCalc	Backup III
Advanced VisiCalc	Versaform
Mail List Manager	AppleWriter III
Great Plains Accounting	Access III
PFS	Desktop Plan
PFS: Graph	

See your dealer for information about the many other compatible programs.

## Discourse™ Software Spooler.

---

A software spooler designed for use with an Apple III and a hard disk (such as ProFile) or external floppy drive.

- Works with any printer connected to the serial port or Apple's Universal Parallel card.
- Can queue up to 14 reports for printout.
- Special spooler status option allows you to edit spooler queue.
- Uses 5K of memory (9K with spooler status option).
- 256K Apple III recommended.

# Quark products for the Apple IIe

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## Word Juggler™ IIe Word Processor.

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Word Juggler is easy to use. Virtually nothing to memorize. Special keyboard template and nineteen, easy-to-install replacement keycaps identify principal editing functions.

Written entirely in assembly language. Comes on a single diskette containing word processing program and utilities. A back-up disk is also provided.

- Single keystroke deletes characters, words, paragraphs.
- Block move and copy make it easy to cut and paste.
- Bold printing and underlining on most printers.
- Super/subscripting and microspace justification on most letter quality printers.
- Keyboard template labels commands for changing formatting parameters.
- Single keystroke displays your document as it will print out.
- Handles documents up to 254 columns wide; horizontal scrolling allows you to view documents wider than 80 columns.
- Automatic page numbering.
- Document print-out takes a single keystroke.
- Print form letters using "fill-in-the-blank" feature.

## Lexicheck™ IIe Spelling Checker.

---

A high performance spelling checker designed especially for use with Word Juggler. Allows you to eliminate virtually all typographical errors and common misspellings

When you check a document, Lexicheck will highlight in context the first occurrence of each word it doesn't recognize. You may elect to skip the word, if it is correct, replace it with the correct spelling, or add it to your own personal dictionary.

- 50,000 word dictionary.
- Accessed within Word Juggler with a single keystroke.
- Documents checked at 8,000 wpm.
- You can add your own terms to a personal dictionary.

# Quark products for the Apple III

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- Super/subscripting and microspace justification on most letter quality printers.
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- Single keystroke displays your document as it will print out.
- Handles documents up to 254 columns wide; horizontal scrolling allows you to view documents wider than 80 columns.
- Automatic page numbering.
- Document print-out takes a single keystroke.
- VisiCalc reports can be inserted anywhere.
- Print form letters using "fill-in-the-blank" feature.

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When you check a document, Lexicheck will highlight in context the first occurrence of each word it doesn't recognize. You may elect to skip the word, if it is correct, replace it with the correct spelling, or add it to your own personal dictionary.

- 50,000 word dictionary.
- Accessed within Word Juggler with a single keystroke.
- Documents checked at 10,000 wpm. (14,000 wpm if the dictionary is stored on a hard disk.)
- You can add your own terms to a personal dictionary.

## Legal Dictionary

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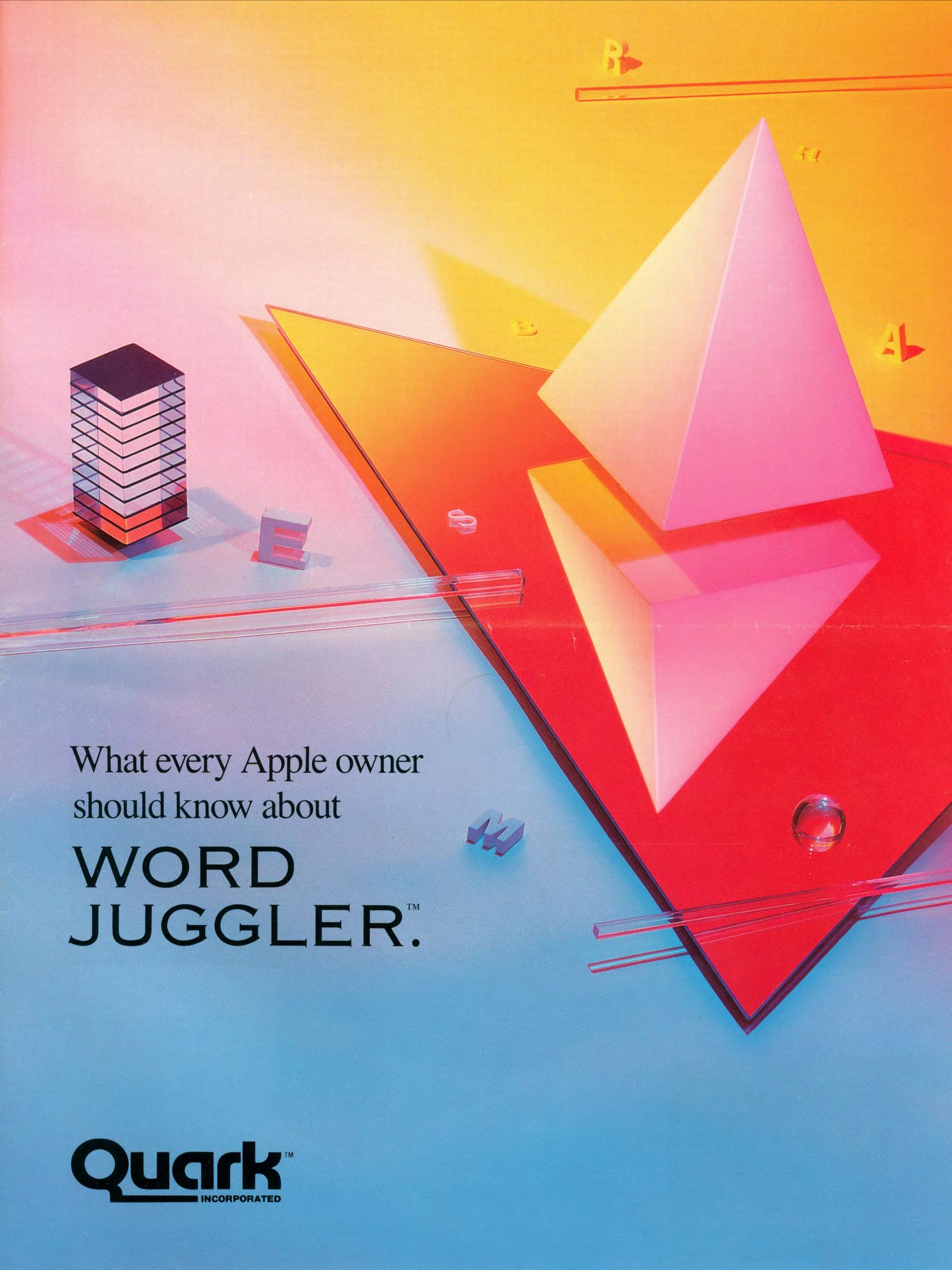
An accessory to Lexicheck. It adds 8,000 legal terms to the basic 50,000 word Lexicheck dictionary.

## Mail List Manager Interface

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An accessory for Word Juggler which allows it to access files created by Apple's Mail List Manager.

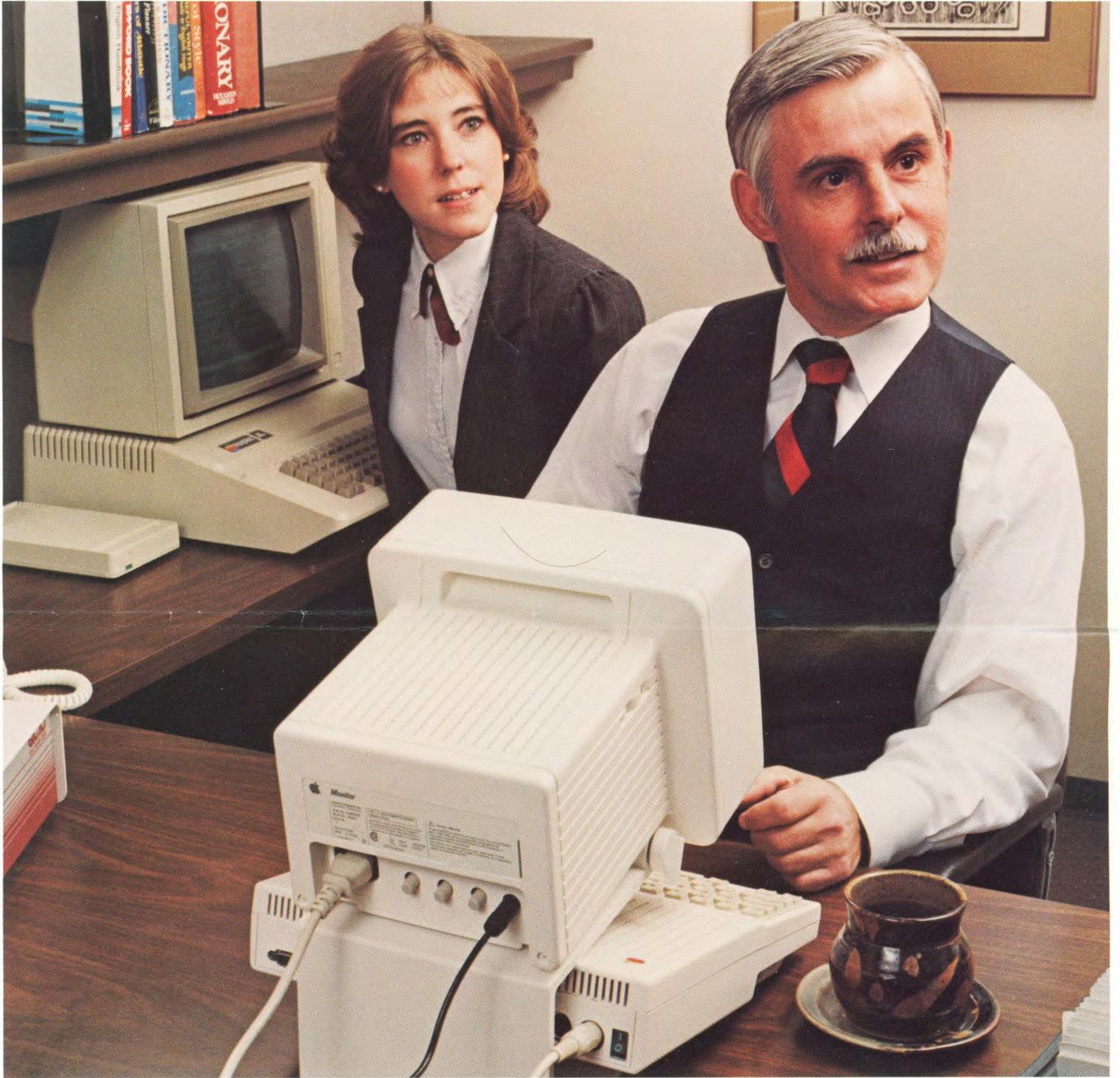
It's easy to print form letters for each person in your mailing list. You can also print letters just for selected individuals. And Mail List Manager Interface allows you to tailor correspondence to the special needs and interests of each individual.



What every Apple owner  
should know about

# WORD JUGGLER.™

**Quark**™  
INCORPORATED



## What every adult should know about word processing.

If you've never used a word processor before, there are a few things we'd like you to know. Because word processing is far more than simply glorified typing. It's an entirely different way of expressing your thoughts in writing. And while at first glance many competing programs can *appear* to be similar, the differences can be enormous.

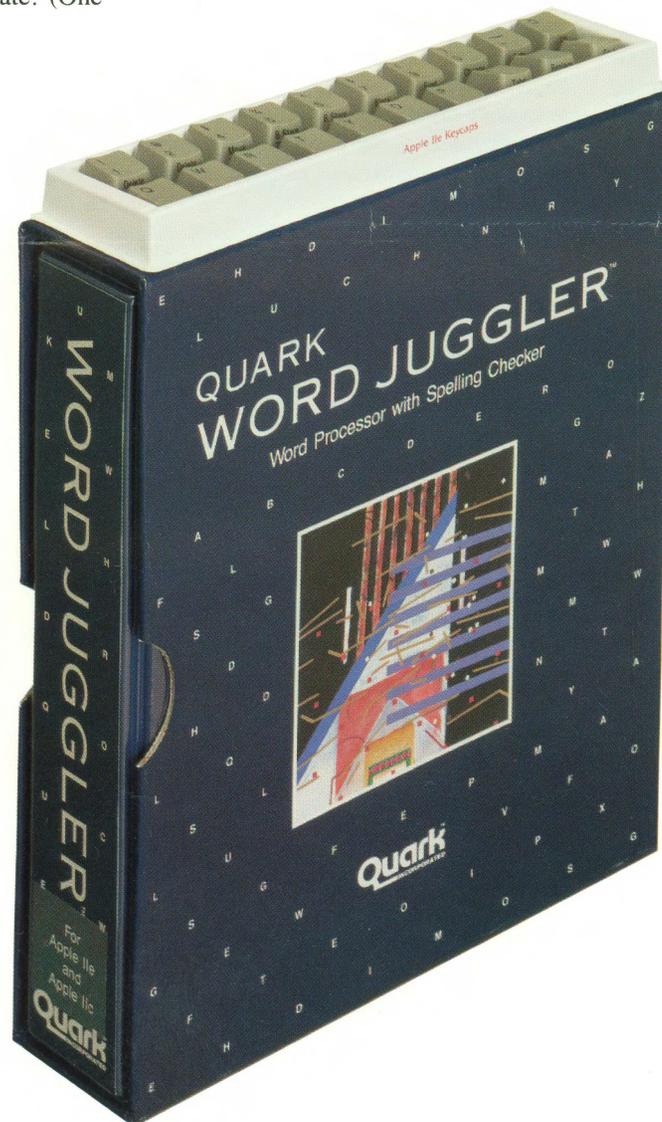
With a few exceptions, there are generally two kinds of word processors. Some are indeed easy to use — because only basic features are offered. Others are indeed powerful — but are extremely difficult to learn and operate. (One

program, for instance, makes you memorize the commands “CONTROL P” — “?” — “PDO” — “NP” — “PD#” just to display your document on the screen.)

So it's very important for you to look at more than one program before you invest your time and money. In fact, ask your dealer to give you in-depth demonstrations of at least three word processors, so you can see these differences for yourself. And make sure that one of the programs you evaluate is Quark's Word Juggler.

Because Word Juggler is one of the most powerful word processing programs you can buy. Yet it's so easy to use that even the most complex operations can be accomplished with a single keystroke. And there's virtually *nothing* to memorize.

Plus, no other word processing program offers you both a powerful spelling checker *and* a telecommunications mode. So you can write it — proof it — and send it. With just one program.



## Write it with Word Juggler.™

Simply put, the main reason you should buy a Word Juggler is that it combines power with ease of use. We'll come back to *power* shortly, but first let's talk about *ease of use*.

With Word Juggler, everything is literally spelled out for you. The program comes with twenty replacement keycaps which identify principal editing functions. And a keyboard strip which shows you the simple commands you need to format a document for printing.

Just as important, the program is **intuitive** — which means it's designed for the way you think and write, not to suit the whims of some software wizard, living on a houseboat off the coast of Madagascar. The display is uncluttered yet informative. And comprehensive help is always just a keystroke away.

As a matter of fact, most everything is just a keystroke away.

Which brings us back neatly to the concept of *power*. That's a word you hear a lot in the computer biz. So often, in fact, that perhaps it's become a cliché. So let's call it *functionality*; meaning what the program is capable of doing — and how fast.

Word Juggler can perform even the most complex editing and formatting tasks. You can easily copy, move or delete: characters, words, lines, para-

graphs, even entire blocks of text. You can automatically — or selectively — change words and phrases throughout a document. And you have extraordinary flexibility in determining exactly how your printed document will look.

Plus, you'll not only be able to easily perform virtually every major word processing function, but Word Juggler will accomplish these tasks at speeds that make most other programs look anemic. Because Word Juggler is written in assembly language. That's computer jargon again, for the *native* language of the machine.

Other word processors use programming languages which need to be "translated" within the computer; and the effect is sort of like going to Lithuania and ordering an Italian dinner in French. It can be done, yet it takes some time.

But since Word Juggler speaks your Apple's language, it communicates directly with the machine. So speed is limited only by the capacity of the computer.

There's not room here to describe all of Word Juggler's features, because they range from essential word processing functions to sophisticated form letter capabilities. In fact, it would take an entire booklet just to give you all the details.

So we wrote one.

Just ask us — or your dealer — for a copy of Quark's *Comparatively Speaking*. This booklet goes through our program feature-by-feature, command-by-command — and then contrasts these with the way competitive programs work. Guess who wins.



## Proof it with Lexicheck.™

**W**ord Juggler comes with a spelling checker which has a 50,000 word dictionary, highly compressed on a single disk. It's called Lexicheck, and it helps you correct typos and common misspellings.

One keystroke allows you to check the spelling in your document at the rate of 8,000 words per minute. It also tells you the total number of words, and the number of unique words.

Then, each word the program does not recognize is highlighted *in context*. You choose whether to skip the word if it's, say, industry jargon or an abbreviation — use the special Word Guess Plus™ feature to view alternatives if you are unsure of the spelling — replace it with the correct spelling throughout your document — or add it to your personal dictionary. (Put *that* in your Funk and Wagnalls.)

Word Guess Plus also lets you check the spelling of a word while you're writing with Word Juggler. So if you're not certain of a spelling, one keystroke will display possible alternatives directly from the dictionary. This feature will be especially meaningful to those who have been forced to ask a supervisor how to spell "résumé."

## Send it with our special telecommunications mode.

**Y**ou've heard how the electronic transfer of information is changing the way we communicate. At a very low cost, you can send documents around the world as easily as you would to a printer. And Word Juggler puts this new technology in your hands with an easy-to-use telecommunications mode

based on our popular Terminus communications program.

You'll be able to easily access THE SOURCE, or other common electronic mail service, and instantly transmit any Word Juggler document you've prepared. There are four user-definable protocols, plus auto-dial and logon —

which is a nasty, high-tech way of saying that you can set up the program for as many as four different services and access them automatically. In fact, once you've set up this feature for the systems to which you subscribe, using the program can be less complicated than dialing the telephone.

## See it at your favorite dealer.

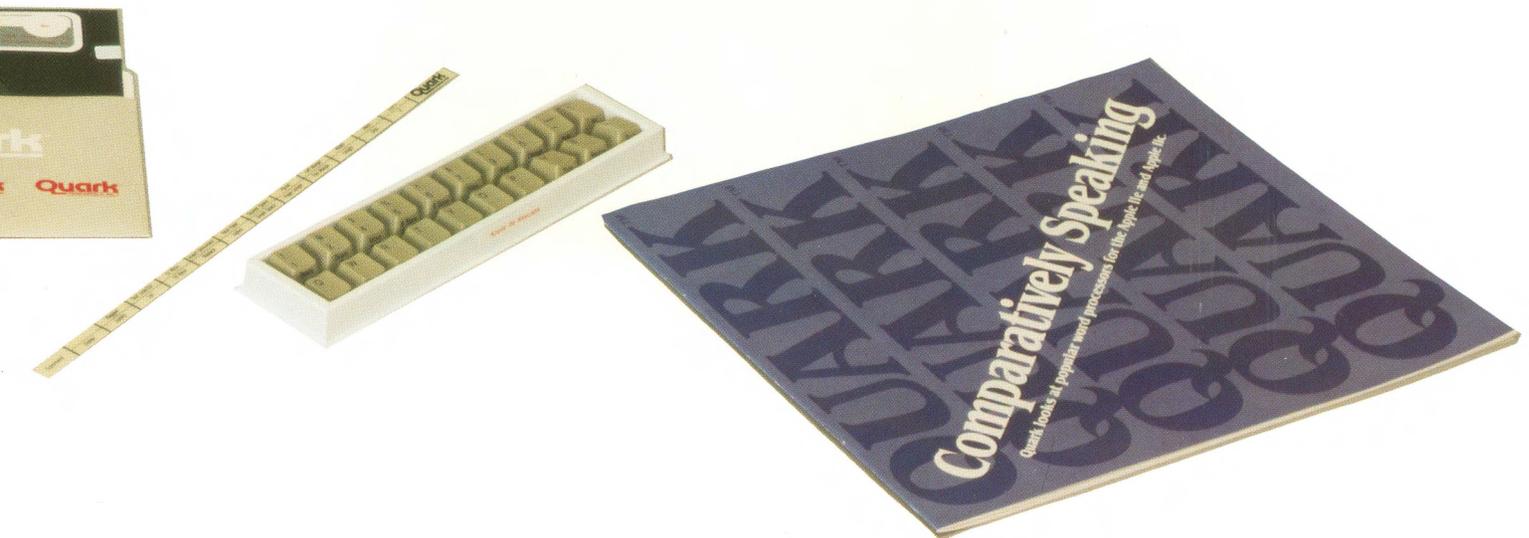
**T**he rest of this admittedly biased brochure will walk you through the development of a sales letter using Word Juggler. We'll show you how some of the features we've talked about — and some we haven't — can put the *functionality* of word processing to productive use in your business.

And as we mentioned earlier, our *Comparatively Speaking* booklet can give you even more details.

But the best way to evaluate Word Juggler is to see it work. And that means you should visit your favorite dealer soon for a complete demonstration.

If you don't have a favorite dealer, but would like one, just call us at 1 (800) 543-7711.

We'll fix you up.



# Working with Word Juggler.

Word Juggler (version 2.8)

Options:

1. NEW - Erases all text and goes to text entry mode.
2. CATALOG - Lists all files in a directory.
3. LOAD - Loads a document from disk and goes to text entry mode.
4. STORE - Stores document on disk.
5. DELETE - Removes a file from disk.
6. FORMAT - Allows a diskette to be formatted.
7. PREFIX - Defines the prefix to be used for disk access.
8. EDIT CONFIGURATION - Allows printer and default parameter selection.
9. QUIT - Exits Word Juggler.

Which option (Press RETURN to edit text)? █

Let's say we're a travel agency called Lost Horizons, and we want to make some money. So we're going to use Word Juggler to generate a letter which will, in turn, generate some sales. First, we go to Word Juggler's main menu. From here we'll select from the options that deal with the way documents are handled. To start, we'll select Option 1 — so we can begin writing.

Dear █

█  
█ Lost Horizons Travel has a special deal for you. Two weeks in warm, sunny  
Hawaii for just \$1,299, double occupancy. █

█  
█ Winter is just around the corner. And you know what that means in New  
Jersey, don't you? Three feet of snow █

Line 7 Column 38 Use OPEN-APPLE-? for help. Free 760

Word Juggler's simple, yet informative, screen allows us to focus on creating the letter, not mastering the software. There's nothing to distract us from the task at hand, because Word Juggler's keycaps and keyboard strip identify virtually all the editing and formatting commands we'll need. And if we want even more reassurance, comprehensive help is a keystroke away. We'd simply press OPEN-APPLE "?", just like it says on the information line at the bottom of the screen.

Top Margin 6  
Left Margin 5  
Single Space  
Justify

Dear ☺

☺  
☺ Lost Horizons Travel has a special deal for you. Two weeks in warm, sunny Hawaii for just **\$1,299**, double occupancy. ☺

☺ Winter is just around the corner. And you know what that means in New Jersey, don't you? Three feet of snow on the driveway. Ice on your windshield so thick even a blowtorch won't melt it. And temperatures so cold even your snowman will turn blue. But don't despair. ☺

Line 13 Column 44 Use OPEN-APPLE-? for help. Free 758

The four lines at the top of the screen represent formatting commands which we've entered with just a few keystrokes. So when the document is printed, the margins will be perfect for our letterhead. And the single-spaced paragraphs and justified right margins will give it precisely the look we want. We could have decided to have double-, or triple-, spaced paragraphs, with a "ragged" right margin. We just didn't.

Top Margin 6  
Left Margin 5  
Single Space  
Justify

Dear ☺

☺ Lost Horizons Travel has a special deal for you. Two weeks in warm, sunny Hawaii for just **\$1,299**, double occupancy. ☺

☺ Winter is just around the corner. And you know what that means in New Jersey, don't you? Three feet of snow on the driveway. Ice on your windshield so thick even a blowtorch won't melt it. And temperatures so cold even your snowman will turn blue. But don't despair.

Move to end of block and press Space.

After looking at what we've written, we decide that maybe it would be better to move the first paragraph to another part of the letter — and make the first sentence of the second paragraph stand alone. Word Juggler's MOVE command makes this easy. As you can see, Word Juggler is asking us to identify the text we wish to "cut and paste." This will automatically be highlighted from the beginning of the block to the end of the block — to keep us from making the wrong move.

Top Margin 6  
Left Margin 5  
Single Space  
Justify

Dear ☐

☐ Winter is just around the corner! ☐

☐ And you know what that means in New Jersey, don't you? Three feet of snow on the driveway. Ice on your windshield so thick even a blowtorch won't melt it! And temperatures so cold even your snowman will turn blue! ☐

☐ But don't despair! Lost Horizons Travel has a special deal for you ■ Two weeks in warm, sunny Hawaii for just **\$1,299**, double occupancy. ☐

RETURN to change, or Space to continue.

After moving the two blocks of text, we realize that additional emphasis is needed. We decide to change a few of the periods to exclamation points. So we're using Word Juggler's CHANGE command to take us to each period in the document, and ask us whether we want to make it an exclamation point — or leave it as it is. This feature works with words, short phrases and numbers, as well. So we *could* change \$1,299 to \$1,999. But we don't believe in excessive profits.

Dear

Winter is just around the corner!

And you know what that means in New Jersey, don't you? Three feet of snow on the driveway. Ice on your windshield so thick even a blowtorch won't melt it! And temperatures so cold even your snowman will turn blue!

But don't despair! Lost Horizons Travel has a special deal for you. Two weeks in warm, sunny Hawaii for just **\$1,299**, double occupancy.

Press Space to Continue

This is how the letter will look when it's printed. We know. Because we used Word Juggler's DISPLAY command. You'll find this especially handy, because the time to make changes or find mistakes is *before* you print. On longer documents, you can even see page breaks. This gives you further control over the appearance — and effectiveness — of your printed piece.

Lexicheck (version 2.1)

Options:

? - Guess word.

RETURN - Replace word.

Space - Skip word.

Similar words:

Jersey

Unrecognized word: Jursey

**Justify**

Dear ☼

☼

Winter is just around the corner! ☼

☼

And you know what that means in New **Jursey**, don't you? Three feet of snow on the driveway. Ice on your windshield so thick even a blowtorch won't melt it! And temperatures so cold even your snowman will turn blue!  
RETURN to change, or Space to continue.

So far so good. But we know that what a document says is more important than the way it looks. And misspellings have a way of detracting from even the most brilliant prose. So to play it safe, we're using Word Juggler's Lexicheck spelling checker. And Lexicheck has not only identified the incorrect spelling of "Jersey," but the Word Guess **Plus** feature has provided us with the right spelling as well. Another victory for good P.R.

Word Juggler (version 2.8)  
Edit Configuration

Printer slot: **1**

Printer card: Super Serial (Apple//c)

Auto linefeed: Yes

Filter: Apple LQP/Diablo/Xerox/Qume/NEC

Strike count: 4

Space underline: Yes

Left margin: 5

Width: 65

Pitch: 12

Page length: 66

Top margin: 6

Length: 54

Spacing: Single space

Use up & down arrows to select field

Use left & right arrows to alter field

Press Space to Continue

This is the Edit Configuration Menu. That sounds intimidating, but it's very simple to use. Here you can set up Word Juggler to: work with your particular printer; establish standard margins, page lengths and spacing; and determine other essential printing details. And there's nothing to type. Because the options are built-in to the program — and the four arrow keys make selections quick and easy.

Telecommunications (version 2.0)

Protocols available:

1. CompuServe
2. THE SOURCE
3. MCI Mail

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Which protocol (ESCAPE to exit)? █

This is the menu for Word Juggler's special telecommunications feature. We're using this because some of these sales letters will be sent via an electronic mail service, rather than through the Post Office. From this menu we'll decide which of the systems we subscribe to will be best for this particular job.

Top Margin 6  
Left Margin 5  
Single Space

Justify

<Name>

<Address>

<City> <State>

Dear <Name>

Winter is just around the corner!

**If**

<State>= "Hawaii"

And you know that means tourist season in Hawaii. All those loud, vulgar folks from the mainland driving prices through the roof -- and you to distraction.

But don't despair! Lost Horizons Travel has a special deal for you. Two weeks in the enchanted, winter-wonderland of scenic New Jersey! For just **\$1,299** double occupancy.

**Else**

And you know what that means in New Jersey, don't you? Three feet of snow

Line 1 Column 1 Use OPEN-APPLE-? for help. Free 745

There's only one problem with our sales letter so far. What about the people in Hawaii? After all, it would be quite an achievement to sell them a two week trip to their own state. Yet we can't ignore such an important and lucrative market. So we create a special offer, just for them. And using Word Juggler's *variable* commands we write two special paragraphs directed to Hawaiian residents. In fact, using this feature we could send as many different letters — to as many different states — as we wish.

Now comes the really hard part — printing the document. We sit very straight, take a deep breath and press OPEN APPLE “P.” And the document prints out beautifully, exactly the way we want it to look.



### Lost Horizons Travel

1100 Airport Road  
Riverton, Wyoming 82501

Steve McGarret, Esq.  
Book M. Danno Productions  
4355 Kamehameha Road  
Honolulu, Hawaii 96813

Dear Steve:

Winter is just around the corner.

And that means tourist season in Hawaii. All those loud, vulgar folks from the mainland driving prices through the roof -- and you to distraction.

But don't despair! Lost Horizons Travel has a special deal for you. Two weeks in the enchanted, winter-wonderland of scenic New Jersey! For just **\$1,299**, double occupancy!

Just send us a deposit of five hundred, fully-refundable dollars per person, and we'll reserve your seats for the vacation of a lifetime. Or write us for our free brochure: "GET ME THE HECK OUT OF HERE."

Remember, your new horizons are at Lost Horizons. I look forward to hearing from you.

Cheerfully yours,

Sebastian Melmouth  
Travel Specialist

## A few key differences between Word Juggler and the competition.

	<b>Word Juggler IIe</b>	<b>Apple Writer IIe</b>	<b>Word Handler (version 4.0)</b>
Block move	<p><b>Move</b> key prompt: Move to start of block to move prompt: Move to end of block prompt: Move to insertion point</p>	<p><b>CTRL-D</b> (sets direction) <b>delete as many characters or words as necessary</b> (using OPEN APPLE ← or CTRL-W) reposition cursor</p> <p><b>CTRL-D</b> (resets direction) <b>retrieve as many characters or words as necessary</b> (using OPEN APPLE → or CTRL-W)</p>	<p><b>CTRL-C</b> (to define start of block) <b>CTRL-D</b> (to delete text after copy) <b>copy as many words or lines as necessary</b> (using CTRL-W or CTRL-L, note: only entire words can be copied or moved) → (to accept block) reposition cursor <b>OPEN APPLE I</b> (to insert) <b>CTRL-C</b> (to copy text)</p>
Find	<p><b>Find</b> key prompt: Find what? <b>string to find</b></p>	<p><b>CTRL-D</b> (sets direction) <b>CTRL-F</b> prompt: [F]ind: &lt;delimiter&gt; <b>string to find</b> &lt;delimiter&gt;</p>	<p>go to beginning of document → (sets direction) <b>CTRL-T</b> (for search 'Til) prompt: Forward til: <b>string to find</b> (individual characters cannot be located)</p>
Automatic change	<p><b>Auto Change</b> key prompt: Find what? <b>string to find</b> prompt: Change to? <b>string to change to</b></p>	<p><b>CTRL-D</b> (sets direction) <b>CTRL-F</b> prompt: [F]ind: &lt;delimiter&gt; <b>string to find</b> &lt;delimiter&gt; <b>string to change to</b> &lt;delimiter&gt; A</p>	N/A

<b>PFS:Write</b>	<b>Screen Writer II (version 2.2)</b>	<b>Super Text Professional</b>	<b>Format II (version 1.16)</b>
<p><b>CTRL-L</b> (label block of text) <b>define amount of text to be affected</b> (using cursor movement keys) <b>CTRL-R</b> (remove block) position cursor <b>CTRL-D</b> (insert duplicated block)</p>	<p>{from insert/change mode} <b>CTRL-G</b> (get buffer, start of text) <b>define text to be affected</b> (using arrow keys or CTRL-Z) reposition cursor <b>CTRL-W</b> (writes buffer to new location) reposition cursor {from command mode} <b>G</b> (get buffer, start of text) <b>define text to be affected</b> (using K, -K, J, or -J, must be defined one character at a time) <b>D</b> (deletes block of text) reposition cursor <b>W</b> (writes buffer to original location)</p>	<p>{from cursor mode} <b>CTRL-V</b> (enter beginning block marker) position cursor <b>CTRL-V</b> (enter ending block marker) position cursor <b>ESC V</b> (invoke block operations) prompt: (C)opy (S)ave (D)elete (U)nmark (M)ove <b>M</b> (move block)</p>	<p>{from format mode} <b>G</b> (to go to text buffer) prompt: Copy or Remove text <b>R</b> (for remove) prompt: Define start of block <b>position cursor</b> (using N for up, M for down, S for start of paragraph, Z for end) prompt: Define end of block <b>position cursor</b> (using N for up, M for down, S for start of paragraph, Z for end) reposition cursor <b>L</b> (to load text from buffer) prompt: Load Overwrite or Insert <b>I</b> (to insert text from buffer)</p>
<p><b>CTRL-G</b> (go to beginning of document) <b>B</b> (specify beginning) <b>CTRL-S</b> (search for string) prompt: SEARCH FOR : <b>string to find</b> prompt: REPLACE WITH: (ignore for find) <b>CTRL-C</b> (accept operation)</p>	<p>{from insert/change mode} go to beginning of document <b>CTRL-F</b> prompt: WORD TO FIND? <b>string to find</b> {from command mode} go to beginning of document <b>F</b> <b>string to find</b></p>	<p>{from cursor mode} + (sets direction) <b>F</b> (must be in upper case) prompt: + Find: <b>string to find</b> — or — <b>CTRL-F</b> prompt: + Find: <b>string to find</b></p>	<p>{from format mode} <b>F</b> prompt: Find : <b>words to find</b> ←or→(sets direction)</p>
<p><b>CTRL-G</b> (go to beginning of document) <b>B</b> (specify beginning) <b>CTRL-S</b> (search for string) prompt: SEARCH FOR : <b>string to find</b> prompt: REPLACE WITH: <b>string to change to</b> <b>TAB</b> (to reach automatic flag) <b>A</b> (set automatic flag) <b>CTRL-C</b> (accept operation)</p>	<p>{from insert/change mode} N/A {from command mode} go to beginning of document <b>OR</b> (0 means replace all occurrences) <b>string to find</b> <b>CTRL-R</b> (as a delimiter) <b>string to change to</b> <b>CTRL-R</b> (to accept operation)</p>	<p>{from cursor mode} + (sets direction) <b>R</b> prompt: + Repl: <b>string to find</b> prompt: + With: <b>string to change to</b> prompt: All? (Y or N) <b>N</b> (must answer in capital letter) — or — <b>CTRL-R</b> prompt: + Repl: <b>string to find</b> prompt: + With: <b>string to change to</b> prompt: All? (Y or N) <b>N</b> (must answer in capital letter)</p>	<p>{from format mode} <b>E</b> (for edit) prompt: Edit : <b>words to find</b> prompt: to : <b>words to change to</b> <b>A</b> (for all)</p>

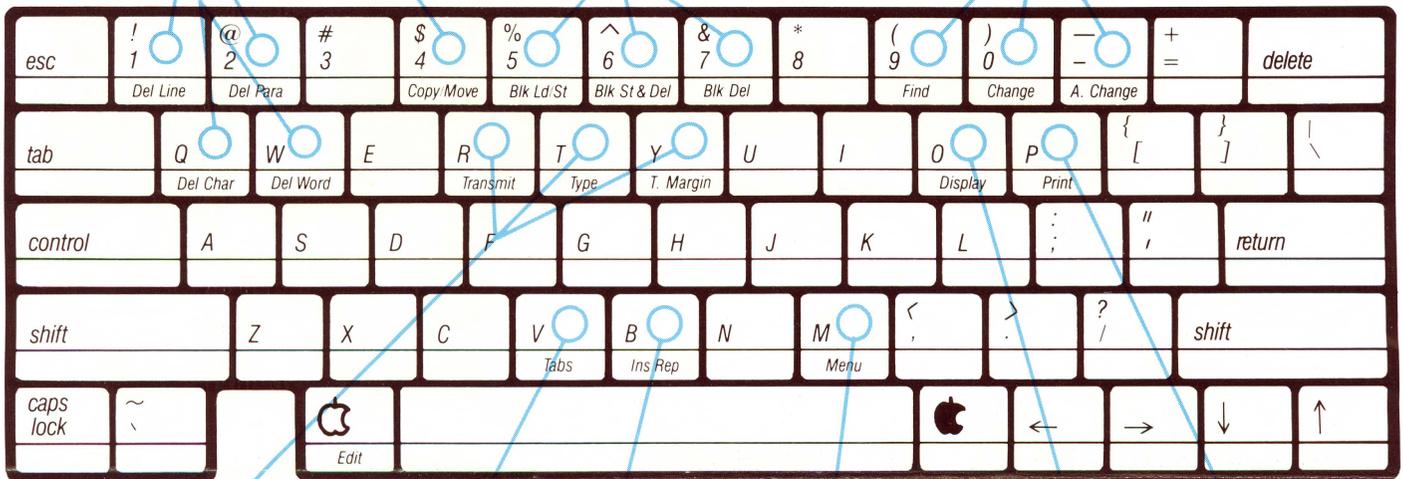
## Word Juggler Keycap Special Functions

These keys delete characters, words, lines, even entire paragraphs.

This key lets you move or copy as much text as you need to.

These keys let you load/store/delete blocks of text.

These keys let you find and/or change — automatically or selectively — any word, number or phrase in your document.



These keys turn your computer into a sophisticated typewriter.

Displays tabs.

Lets you select either Replace or Insert mode.

Takes you to Word Juggler's main menu.

Prints your document.

Displays your document (up to 254 characters wide) as it will be printed.

## Command Line: Keyboard Strip

Centers text.

Selects ragged or justified right margin.

Selects placement and value of first page number.

Double or single space printing. (Triple spacing available.)

Pauses between pages during printing or determines page length.

Sets Left or Top Margins.

Command	Center	Ragged Justify	Text Line/Col Let	12 Pitch 10 Pitch	Insert Document Replace	New Page Indent	Double Space Single Space	Pause Page Length	Left Margin Top Margin	Width Length	Need Strip	End If	Quark
---------	--------	----------------	-------------------	----------------------	----------------------------	--------------------	------------------------------	----------------------	---------------------------	-----------------	---------------	--------	-------

12 or 10 Pitch printing (15 pitch available).

Inserts another document during printing.

Starts a new page or indents text.

Determines Width or Length of text on page.

Controls placement of text on page.

Special commands for form letters.



This brochure is not intended to show you everything that Word Juggler can do for you and your business. There are many other features; most of them limited only by your own creativity and imagination. But we hope we've shown you enough for you to take the next, most important step — to see your dealer for a complete demonstration. You'll see first hand how Word Juggler can help you do more work — more efficiently — in less time. And after all, that's what productivity is all about.



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Denver, CO 80219-5554

Cover photography by Barbara Kasten.  
Art Direction by Suzanne Morin.

Inside photography by Bill Holcomb.  
Art Direction by Bob Kennedy.

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COMMAND	CENTER	RAGGED	TEXT LINE/COL.	12 PITCH	INSERT DOCUMENT	NEW PAGE	DOUBLE SPACE	PAUSE	LEFT MARGIN	WIDTH	NEED	END IF
		JUSTIFY	LET	10 PITCH	REPLACE	INDENT	SINGLE SPACE	PAGE LENGTH	TOP MARGIN	LENGTH	SKIP	IF

	INSERT MODE	DELETE TO EOL	DELETE TO ←	
	REPLACE MODE	DELETE CHARACTER	DELETE WORD	
BLOCK STORE				↑ CHANGE AUTOMATIC
BLOCK LOAD				CHANGE AUTOMATIC
↑ FIND				↑ CHANGE
FIND				CHANGE
TAB SETTINGS				PRINT DOCUMENT
KEY DEF.				DISPLAY DOCUMENT
	DELETE PREVIOUS CHARACTER	GO TO MENU		
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