

WANG

The Reference Manual

WangwriterTM

The Wangwriter Reference Manual (Interim)

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WHY AN INTERIM MANUAL?

It has become standard policy for Wang Laboratories, Inc., to prepare an Interim User Manual for new products. Due to the planning, writing, screening, and printing procedures that each manual undergoes and the fact that an initial manual is generally written while a product is still under development, it is often impossible to provide a polished manual at the time a new product is delivered.

Therefore, the Interim Manual is provided to give you a working knowledge of the software and to give the Technical Writing Staff of Wang Laboratories, Inc., the opportunity to prepare a polished manual whose quality is equal to the quality of the software. Any comments regarding the contents of an Interim Manual would be greatly appreciated and should be forwarded to the Corporate Publications Department using the Customer Comment Form included as the last page of this manual.

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1. SYSTEM OVERVIEW

Equipment	1
Screen Information	2
Keyboard	4
Workflow	11

2. SYSTEM START-UP PROCEDURES

Minidiskettes	1
Minidiskette Insertion and Removal	2
System Start-up	4
Trouble Shooting	7

3. THE START-UP MENU

Start-up Menu Activities	1
Trouble Shooting	4

4. FORMAT

The Format Line	1
Format Operations	10
Trouble Shooting	23

5. LOCATE

Locate Operations	1
Trouble Shooting	4

6. EDIT

Highlighting/Dehighlighting	1
Edit Operations	2
Trouble Shooting	16

7. PRINT

Printer Operation	1
Printing a Document	3
Print Document Menu	6
Canceling a Print Request	11
Hot Print	12
Trouble Shooting	14

8. MINIDISKETTE MAINTENANCE

Preparing an Archive Minidiskette	1
Deleting a Document	3
Copying a Document	4
Document Index	9
Trouble Shooting	11

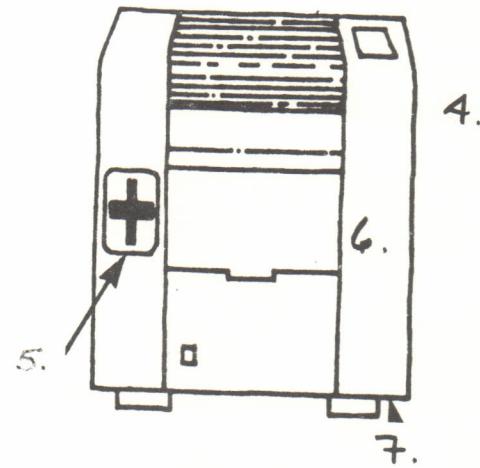
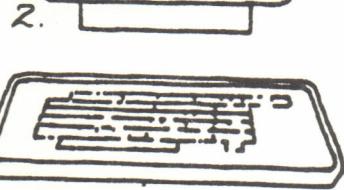
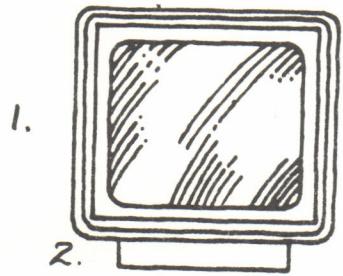
9. EQUIPMENT MAINTENANCE

Equipment Safeguards	1
Do's and Don'ts of Minidiskette Care and Handling	2
Parts of a Minidiskette	3
Changing a Print Wheel	5
Removing a Ribbon Cartridge	6
Installing a Ribbon Cartridge	7

10. APPENDICES

Error Messages -- Appendix B	
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SYSTEM OVERVIEW



EQUIPMENT

Parts of the Wangwriter

The Wangwriter has seven parts that are important to the performance and operation of the equipment. Many of these parts can be adjusted by the operator to meet their individual level of comfort. Refer to the illustration on the opposite page when reading the following description.

1. Adjustable screen -- The screen displays text as it is entered into the word processor. The screen can be tilted to minimize glare from overhead lighting and also to meet a comfortable eye level.
2. Brightness/contrast control -- The brightness and contrast of the text displayed on the screen is controlled with rotating thumbwheel dials. Brightness and intensity can be adjusted to meet individual comfort.
3. Movable keyboard -- The keyboard allows text to be entered into the system. It has standard character keys and operations keys. The keyboard is movable, which allows it to be positioned comfortably.
4. Daisy printer unit -- The printer allows documents to be printed in order to obtain a "hard" or paper copy. It operates at approximately 20 characters per second and prints bidirectionally. Also, since the printer is separate from the workstation, a document can be printed while another is created or edited.
5. Minidiskette drive -- The minidiskette drive houses minidiskettes and allows existing information to be read from a minidiskette and new information to be written onto it.
6. Paper bin -- The paper bin provides a large catch area for printed documents. Pages are automatically ejected from the printer and dropped into the bin.
7. Electronic intelligence -- The electronic intelligence is activated each time the system is turned on. This is where the word processing operating instructions (that are stored on the system minidiskette) are translated into a computer language the Wangwriter understands.

SCREEN INFORMATION

System Status Line

The System Status Line provides information on the location of the cursor within a document.

- a. Document XXXXXXXX -- specifies the assigned name of the document presently on the screen.
 - b. Now on Page ## -- specifies the page that is presently on the screen.
 - c. Line ## -- specifies the line at which the cursor is presently located on the screen.
 - d. Position ## -- specifies the character at which the cursor is presently located.
 - e. The blank space to the right of the Document Status Line is reserved for displaying prompts. For an explanation of prompts see Appendix A.

Format Line

The Format Line provides a means of controlling the layout of text both on the screen and at printing. The Format Line specifies a left-hand margin, the vertical spacing, tab settings, and a right-hand margin. Additional information about the Format Line and its settings is provided in the FORMAT section of this reference manual.

Message Line

The message line provides a means of communication between the Wangwriter and the operator. The message line displays information messages which remind and inform the operator of system actions. For detailed information on messages see the Trouble Shooting charts at the end of each section or see Appendix B.

Screen Graphics

Screen graphics appear on the screen each time a format key is pressed. These graphics can be removed from the document when it is displayed on the screen providing an accurate depiction of how the document will look when printed.

To remove the screen graphics from the screen press COMMAND + REPLC. To return the screen graphics to the screen press COMMAND + REPLC again.

If screen graphics have been removed, they will automatically redisplay each time editing procedures are used (i.e. when inserting, deleting, copying or moving text.)

Key to Screen Graphics

<u>Key pressed:</u>	<u>Screen displays:</u>
---------------------	-------------------------

!FORMAT!

FORMAT LINE

!TAB!



!RETURN!



!INDENT!



!CENTER!



!DEC!

!TAB!

!SPACE!

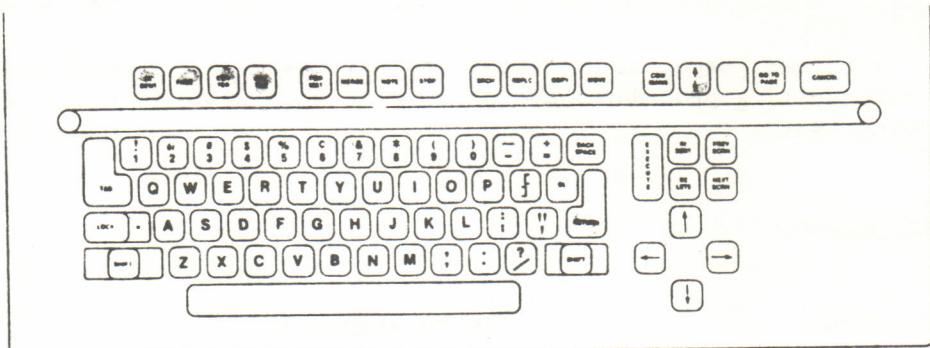


!BAR!

KEYBOARD

Format Keys

Purpose: To establish a layout that is specific to the requirements of each document.



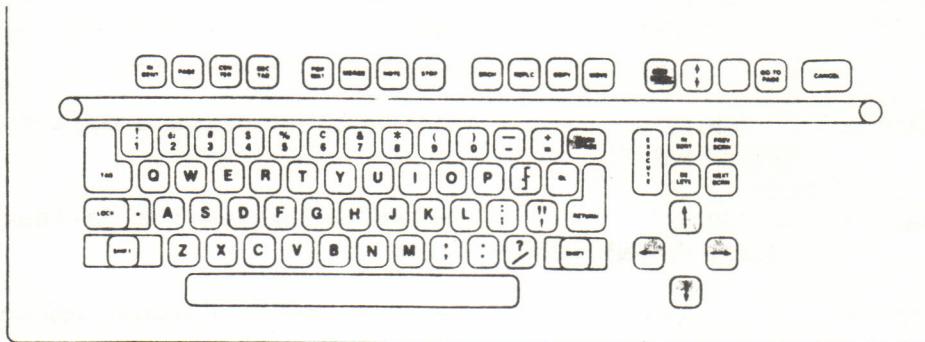
<u>Key</u>	<u>Function</u>
!FORMAT!	displays a Format Line.
!TAB!	moves the cursor directly to the next tab position established in the Format Line.
!RETURN!	ends the current line and moves the cursor to position 1 of the next line.
!INDENT!	creates a temporary left margin at the tab positions established in the Format Line.
!CENTER!	automatically centers text within the margins established in the Format Line.
!PAGE!	ends the current page/creates the next page.
!DEC! !TAB!	automatically aligns whole, negative, or decimal numbers; or letters on specific tab positions established in the Format Line.
!SUPER! !SUB!	moves a character up or down one-half-line.

Format Keys (Continued)

<u>Key</u>		<u>Function</u>
!COMMAND!	+ !SHIFT! !UNDRSCR!	automatically underscores a defined amount of text including characters, punctuation, and spaces.
!COMMAND!	+ !SHIFT! !RIGHT PAREN!	double underscores a defined amount of text.
!COMMAND!	+ !SHIFT! !LEFT PAREN!	bolds (emphasizes) a defined amount of text.
!COMMAND!	+ !SLASH!	strikes thru a defined amount of text with the slash character (/).

Locate Keys

Purpose: To position the cursor directly to a general and/or specific location within a document.



<u>Key</u>	<u>Function</u>
!NORTH!	moves the cursor up through text one line at a time.
!SOUTH!	moves the cursor down through text one line at a time.
!EAST!	moves the cursor to the right through text one character at a time.
!WEST!	moves the cursor to the left through text one character at a time. *1
!BACK! !SPACE!	moves the cursor to the left through text one character at a time. BACKSPACE skips over "empty" space, moving the cursor directly to the next character to the left. *1
!COMMAND! + !BACK! !SPACE!	moves the cursor <u>forward</u> one character at a time, avoiding "empty" space and overriding screen boundaries. *2 *3

Locate Keys (Continued)

!NEXT!
!SCRN!

advances the cursor to the first character, first line of the next screenload of text. *4

!PREV!
!SCRN!

positions the cursor to the last character, last line of the previous screenload of text. *4

!GO TO!
!PAGE!

provides random access to a specific page number.

*1

Both the west cursor key and the BACKSPACE key move the cursor to the left one character at a time. The difference between using the west cursor key and the BACKSPACE key is that the BACKSPACE key skips over "empty" space and the west cursor key does not.

*2

Pressing COMMAND + BACKSPACE once activates the feature of forward motion, after which, each time the BACKSPACE key is pressed singularly, the forward motion continues. When the BACKSPACE key is in forward motion, the cursor skips over "empty" space. To cancel the forward motion, press any key on the keyboard.

*3

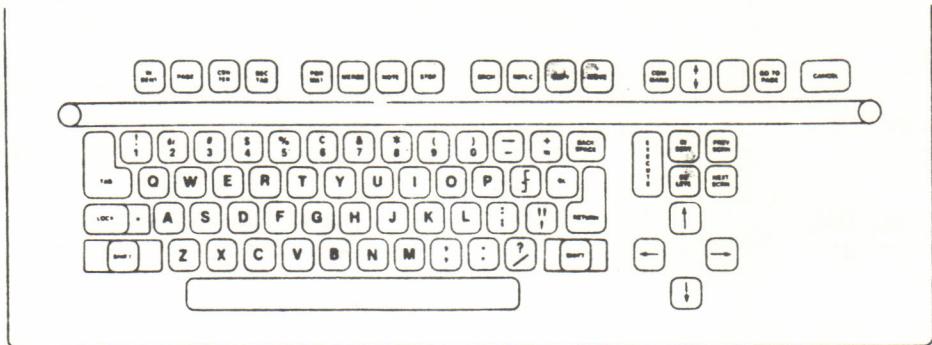
If the cursor is on the last line, last character of a screen, pressing COMMAND + BACKSPACE once will cause the cursor to move to the next screen (or page) of text.

*4

If the cursor is within the three line overlap (i.e. last three lines of a screen or first three lines of a screen), when NEXT SCRN or PREV SCRN is pressed the cursor remains at the same character position when the new screen displays.

Edit Keys

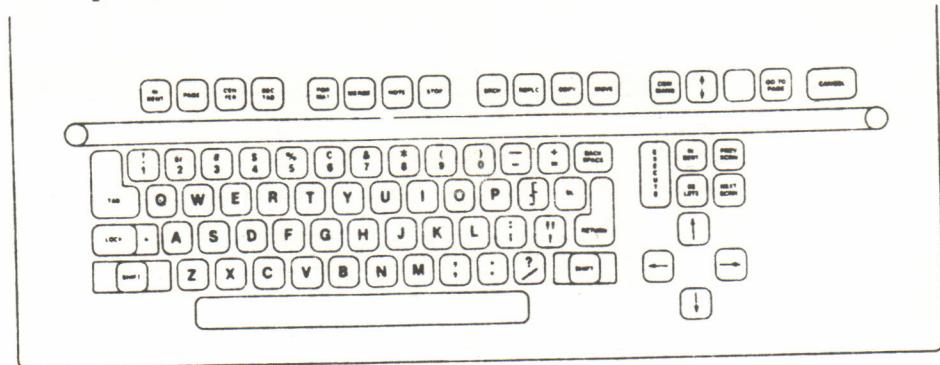
Purpose: To change, add, remove, relocate, or duplicate text in a document



<u>Key</u>	<u>Function</u>
!INSERT!	allows text to be added to existing text.
!DELETE!	removes a defined amount of information from existing text.
!COPY!	duplicates a defined amount of text and inserts it at a new location within a document.
!MOVE!	removes a defined amount of text and inserts it at a new location within a document.

Transaction Keys

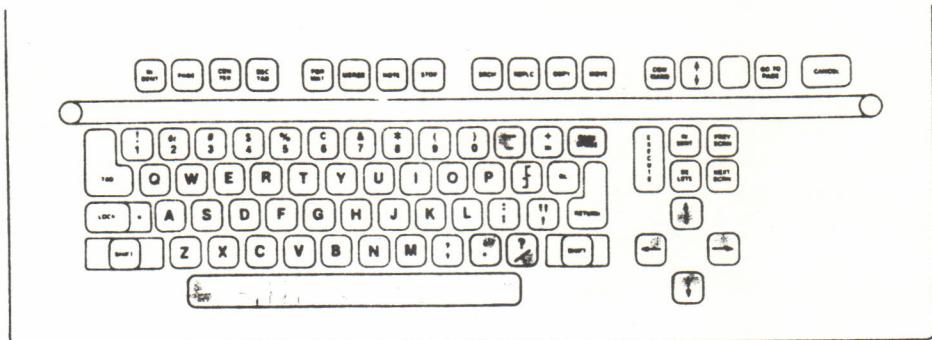
Purpose: To inform the system either to complete or cancel an activity or operation.



<u>Key</u>	<u>Function</u>
!CANCEL!	terminates the activity currently in process.
!EXECUTE!	completes an activity.

Repeating Keys

Purpose: To continuously repeat the action of character keys and cursor position keys by holding the key down.



<u>Key</u>	<u>Function</u>
!PERIOD!	period
!HYPHEN!	hyphen
!UNDRSCR!	underscore
!NORTH!	north cursor
!SOUTH!	south cursor
!EAST!	east cursor
!WEST!	west cursor
!BACK!	backspace
!SPACE!	space bar
!BAR!	
!/!	slash

WORKFLOW

Purpose: To track the route that text travels within the system ensuring that information is not lost.

The flow of information is different when creating a new document than when editing a document. It is important to know where information is held within the system so that the meaning of particular actions is understood ensuring that information is not lost.

1. The Wangwriter is powered on.
2. The system minidiskette is inserted.
3. Word processing instructions are copied into the memory.
4. An archive minidiskette is inserted.
5. An activity is selected:

edit

create

a copy of the first page displays. a blank page displays.

6. Text is entered:

edit

create

changes are made to existing text. new text is entered.

7. The text displayed on the screen is held in the Wangwriter's memory:

edit

changes are made to the copy of the page held in the memory.

create

all text displayed on the screen is held in the memory.

8. A new or different page is brought to the screen:

edit

the changed version of the previously displayed page is recorded over the original version on the archive minidiskette.

create

the text of the previously displayed page is recorded on the archive minidiskette for the first time.

The next existing page displays on the screen.

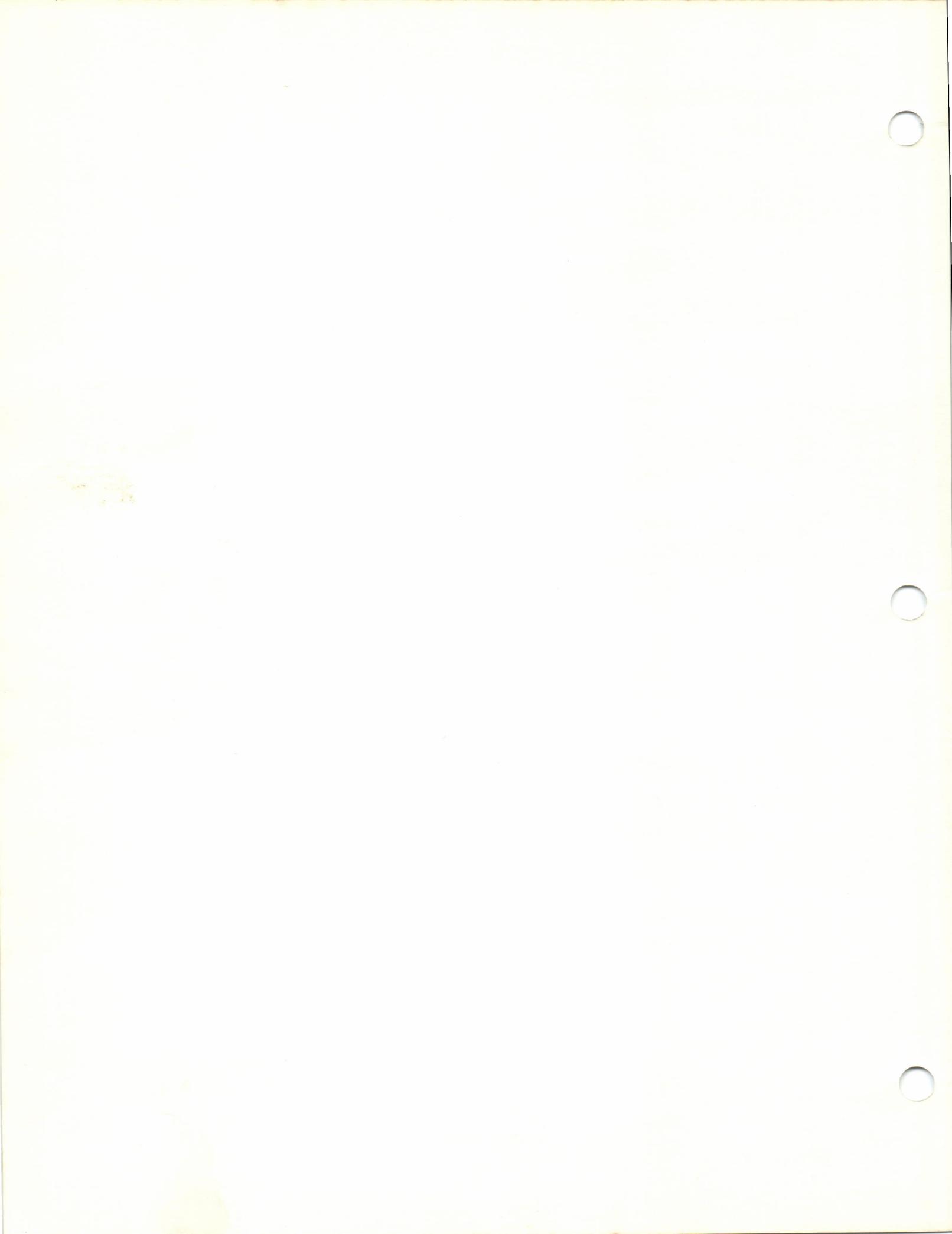
A new blank page displays on the screen.

9. The process continues as each page is created or changed.

10. When the document is complete, it is stored (CANCEL + EXECUTE) on the archive minidiskette.

11. The Start-up menu displays on the screen.

SYSTEM START-UP PROCEDURES



MINIDISKETTES

Wangwriter Minidiskettes

<u>Name</u>	<u>Description</u>
System minidiskette	Contains instructions that enable the system to perform word processing operations.
Archive minidiskette	Stores up to 75 pages of text.
Training minidiskette	Contains training exercises that are used interactively with <u>The Training Workbook</u> .

MINIDISKETTE INSERTION AND REMOVAL

Inserting a Minidiskette

Purpose: To correctly insert a minidiskette into the minidiskette drive.

The system minidiskette must be inserted properly to ensure that the instructions are correctly read into the system memory. The archive minidiskette must also be inserted properly so that text can be both read from and safely recorded onto it.

IMPORTANT: Be careful not to touch the magnetic portion of the minidiskettes when handling them. The magnetic portions are those areas of the minidiskette that are not covered by the black protective cover.

- | <u>Sequence</u> | <u>Results</u> |
|---|--|
| 1. Open the minidiskette drive by gently pulling the door latch toward you. | |
| 2. Remove the diskette from the paper dust jacket -- not the permanent protective shield. | |
| 3. Check to be sure that the Write/Protect slot <u>is</u> covered with a tab. | You can write text onto the minidiskette only when the slot is covered. |
| 4. Insert the minidiskette into the open minidiskette drive. | The minidiskette is labeled with arrows indicating the proper direction for insertion. |
| 5. Gently push the minidiskette into the minidiskette drive until it catches into place. | |
| 6. Close the minidiskette drive by pushing the door latch until it clicks. | |

! ! ! PICTURE ! !				
! 1 ! ! 2 ! !	! 3 ! ! 4 ! !	! 5 ! ! 6 ! !		
! ! ! PICTURE ! !				
! 6 ! !				

Removing a Minidiskette

Purpose: To unlock the minidiskette drive door and to correctly remove the minidiskette from the drive.

Before removing an archive minidiskette, the "Remove Archive Disk" activity is selected at the Start-up menu. The door latch remains locked until this activity is selected. This activity prevents accidental damage to an archive minidiskette by removing the read/write head from the surface of the minidiskette.

After completing this activity, the red indicator light on the minidiskette drive extinguishes indicating that the read/write head has been deactivated. Watch to see that the red indicator light extinguishes.

IMPORTANT: Do NOT force the door latch open as it will cause damage to the minidiskette drive. If the minidiskette drive will not open, turn the Wangwriter off and then remove the minidiskette.

Sequence

1. Return to the Start-up menu.
2. Position the Acceptance Block at "Remove Archive Disk" on the Start-up menu and and press EXECUTE.
3. Open the minidiskette drive by pulling the door latch toward you.
4. Remove the archive minidiskette from the minidiskette drive.

Results

The red indicator light on the minidiskette drive extinguishes.

The message "Remove disk" displays in the message line.

! PICTURE !	! PICTURE !	! PICTURE !	! PICTURE !
! 1 !	! 2 !	! 3 !	! 4 !
! !	! !	! !	! !

SYSTEM START-UP

Starting-up the System

Purpose: To turn on the Wangwriter, load the word processing instructions from the system minidiskette, and insert an archive minidiskette in order to reach operational mode.

IMPORTANT: The Wangwriter must be turned on before inserting the system minidiskette.

Sequence

1. Press the "1" on the ON/OFF switch.
2. Open the minidiskette drive door latch.
3. Insert the system minidiskette into the open minidiskette drive.
4. Close the minidiskette drive door latch.
5. Remove the system minidiskette and return it to the paper dust jacket.
6. Insert an archive minidiskette and close the minidiskette drive door latch.

Results

The POWER indicator light, on the printer control panel, illuminates.

The minidiskette is labeled "Wangwriter System Disk."

The red indicator light on the minidiskette drive illuminates.

The Start-up menu displays on the screen.

The red indicator light on the minidiskette drive extinguishes.

The minidiskette is labeled "Wangwriter Archive Diskette."

! !	! !	! !	! !	! !
! PICTURE!				
! 1 !	! 2 !	! 3 !	! 4 !	! 5 !
! !	! !	! !	! !	! !

! !	! !
! PICTURE!	!
! 6 !	!
! !	!

Resetting the System

Purpose: To restore the Wangwriter to normal operation following a temporary malfunction.

On occasion, the Wangwriter may not respond properly to standard operating procedures. This situation is sometimes represented by the cursor locking into position or responding improperly to operator instructions. Typically, this is a temporary malfunction that can be brought on by:

1. Low power or power failure.
2. Static electricity.
3. Incorrect insertion of the system minidiskette

These situations can be corrected by turning off the Wangwriter and repeating the system start-up procedures. This is referred to as resetting the system.

<u>Sequence</u>	<u>Results</u>
1. If the malfunction occurs during initial start-up procedures, check to see if the system minidiskette is properly inserted. If not, remove the system minidiskette and insert it properly.	The Wangwriter does <u>not</u> have to be turned off when performing this step.
2. If the malfunction occurs when text is on the screen, try to return to the Start-up menu by pressing CANCEL + EXECUTE. Position the Acceptance Block at "Remove Archive Disk" and press EXECUTE.	If this step is not possible, proceed to step 3. *1
3. Remove the minidiskette from the minidiskette drive.	The message "Remove disk" displays in the message line.
4. Turn the Wangwriter off by pressing the "0" on the ON/OFF switch.	

Resetting the System (Continued)

5. Turn the system on by pressing the "1" on the ON/OFF switch.
The POWER indicator light on the printer control panel illuminates.
6. Insert the system minidiskette and close the minidiskette drive door.
The Start-up menu displays on the screen.
7. Remove the system minidiskette and insert the desired archive minidiskette.
8. Press EXECUTE.
The message "Press EXECUTE when Archive disk is in drive" displays in the message line.
9. The system is now in operational mode. *2

*1

If you were not able to return to the Start-up menu, when you reaccess the page of the document that was displayed on the screen at the time of the malfunction, you might have lost the changes to the page (if you were editing a document) or the entire page (if you were creating a new document).

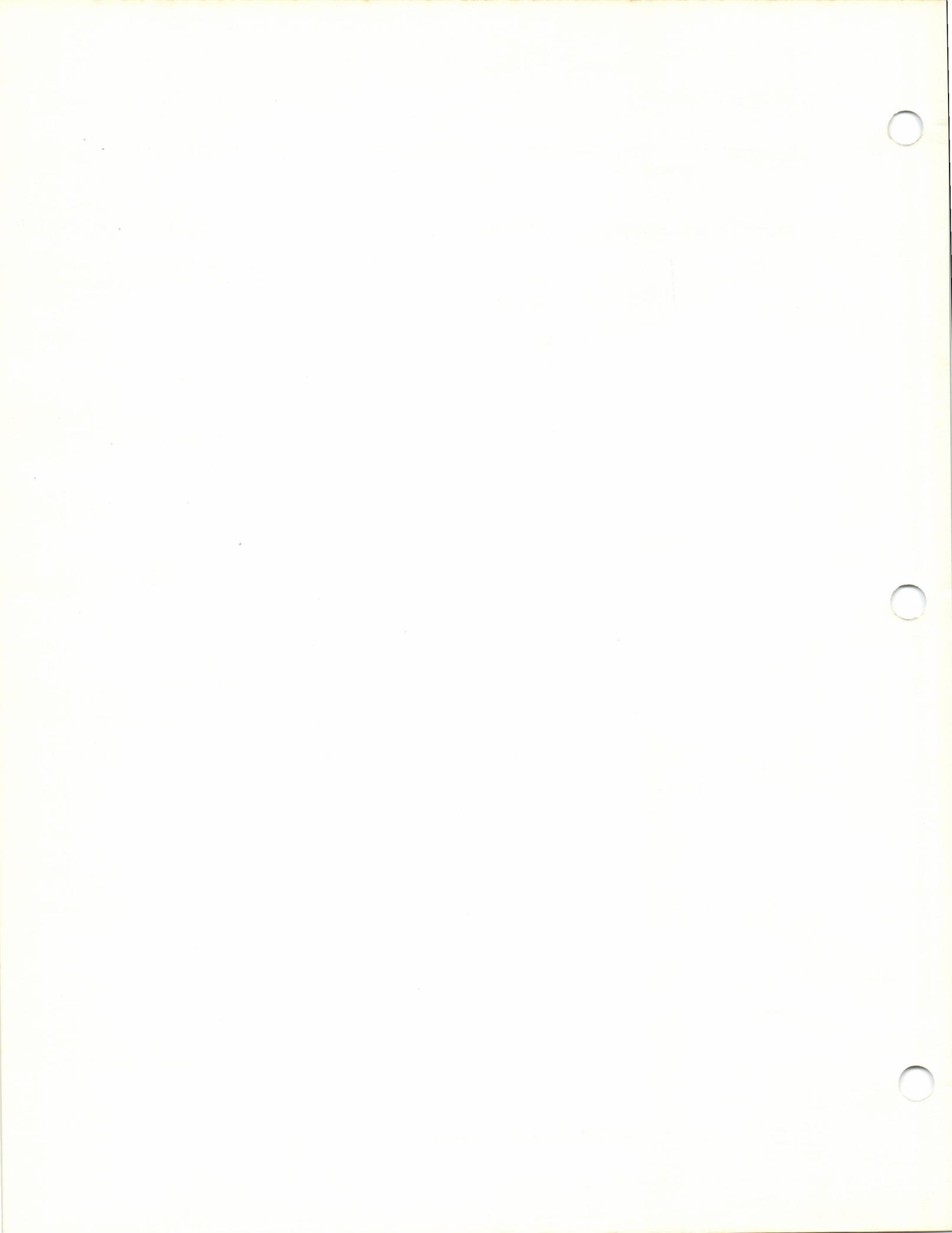
*2

If this procedure fails to restore the system to operational mode, check the red malfunction display located on the back of the printer console. If any letter other than an inverted letter "A" appears, contact your local Wang Customer Engineer and report the information.

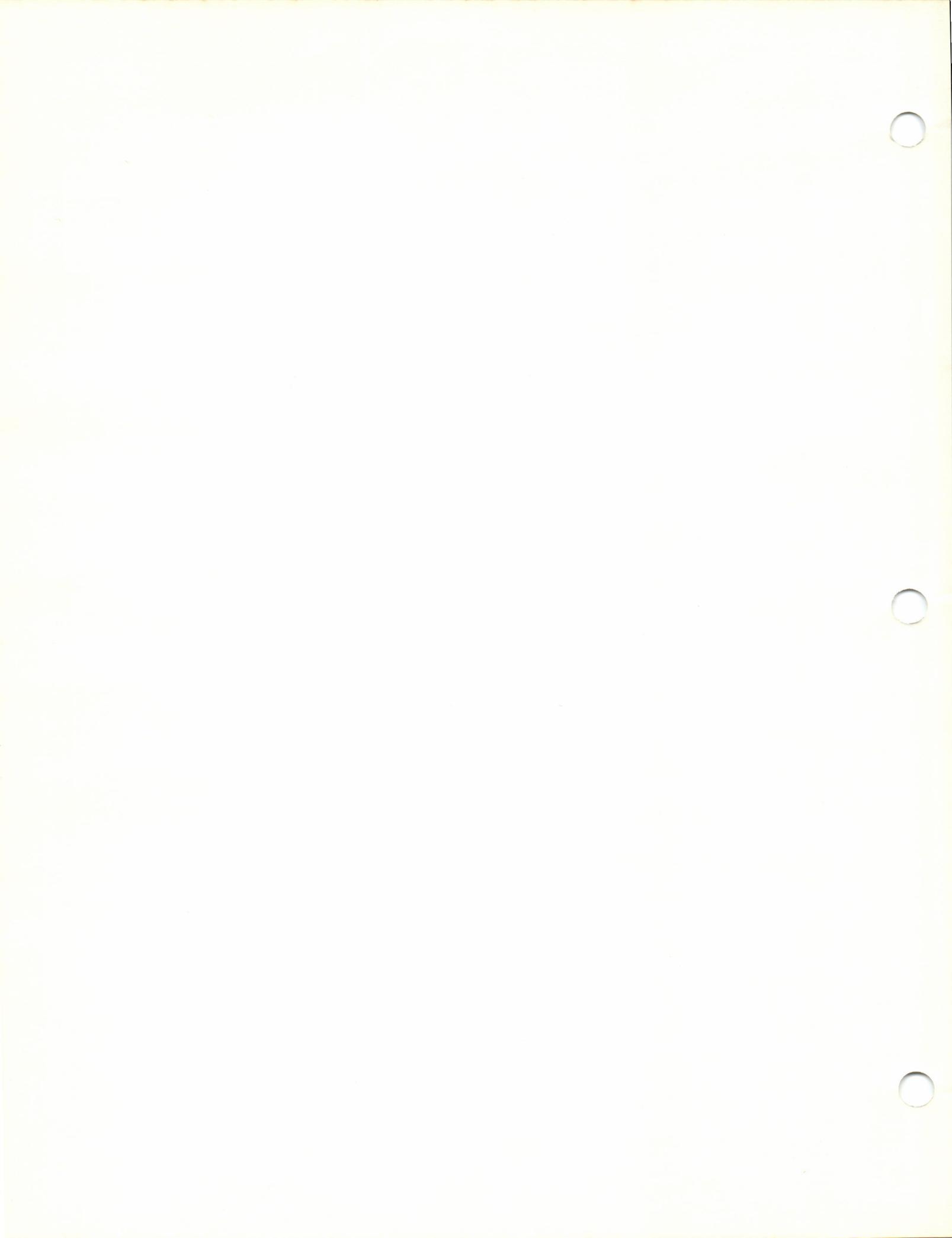
TROUBLE SHOOTING

Purpose: To correct an error that might occur during System Start-up procedures.

<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
blank	<ul style="list-style-type: none">-- the system minidiskette has been improperly inserted.-- the system minidiskette has been damaged.-- there has been a system malfunction.-- the brightness and contrast controls have been turned down.-- an archive minidiskette has been inserted during initial system start-up procedures.	<p>Remove the system minidiskette and insert it properly.</p> <p>Remove the system minidiskette and insert a different system minidiskette.</p> <p>Check the red malfunction display located on the back of the printer console. If any letter other than an inverted letter "A" appears, contact your local Wang Customer Engineer and report the information.</p> <p>Turn the brightness and contrast thumbwheel dials to see if the screen illuminates.</p> <p>Remove the archive minidiskette and insert a system minidiskette.</p>
with the message "Document(s) still in use"	<ul style="list-style-type: none">-- the "Remove Archive Disk" activity has been selected while a document was printing.	<p>Either cancel the print request, or wait until the document is finished printing before removing the archive minidiskette.</p>
with the message "Drive not ready"	<ul style="list-style-type: none">-- the archive minidiskette has been improperly inserted.	<p>Remove the archive minidiskette and reinsert it properly.</p>



START-UP MENU



THE START-UP MENU ACTIVITIES

The Start-up menu is a list of activities that are available each time you use the Wangwriter. The Start-up menu displays on the screen when the word processing instructions are read into the Wangwriter's memory, and then each time a menu activity is terminated (CANCEL) or completed (CANCEL + EXECUTE).

The Start-up menu displays on the screen as follows.

- Edit Old Document
- Create New Document
- Print Document
- Special Print Functions
- Document Index
- Utilities
- Glossary Functions
- Remove Archive Disk

Defining the Start-up Menu Activities

Edit Old Document -- This activity is used to recall an existing document to the screen to review or edit it.

Create New Document -- This activity is used to create a new document under a unique document name.

Print Document -- This activity is used to access the Print Document menu allowing a document to be sent to the printer. For additional information see PRINT.

Special Print Functions -- This activity is used to access the Special Print Functions menu in order to cancel a print request or print a Document Index. For additional information see PRINT.

Document Index -- This activity is used to display the Document Index -- a list of documents contained on an archive minidiskette. For additional information see MINIDISKETTE MAINTENANCE.

Utilities -- This activity is used to access the Document Utilities menu in order to delete a document, copy a document, or prepare a new archive minidiskette. For additional information see MINIDISKETTE MAINTENANCE.

Glossary Functions -- This activity is used to access the Glossary Functions menu in order to create, edit, or verify glossary documents. For additional information see Wangwriter Glossary User Manual.

Remove Archive Disk -- This activity is used to unlock the minidiskette drive door in order to remove an archive minidiskette.

Selecting a Start-up Menu Activity

Each activity on the Start-up menu is selected by positioning the Acceptance Block next to the activity you wish to use and then pressing EXECUTE.

The Acceptance Block is positioned by pressing either the SPACE BAR or the first letter of an activity as it appears on the Start-up menu.

If you by-pass an activity, continue to press the SPACE BAR, or press the BACKSPACE key, or the first letter of the activity until the Acceptance Block is at the proper position.

If an Archive minidiskette has just been inserted, when a menu activity is selected, the prompt "Press EXECUTE when Archive disk is in drive" displays in the message line. This is a reminder ensuring that you have remembered to insert an archive minidiskette in the minidiskette drive. If this message displays, press EXECUTE.

In addition, if an Archive minidiskette is write protected (the write/protect slot is not covered with a write/protect tab), when a menu activity is selected, the message "Write protected" displays in the message line. If this message displays, press EXECUTE.

Terminating a Start-up Menu Activity

The Edit Old Document and Create New Document activities are terminated by pressing the CANCEL key and then the EXECUTE.

The Print Document activity is terminated by selecting the Cancel Print Request activity from the Special Print Functions menu.

The remainder of Start-up menu activities are terminated by pressing the CANCEL key.

In all cases, after a Start-up menu activity is terminated, the Start-up menu displays on the screen.

Naming a Document

Each time a document is created the operator assigns a unique document name -- that is, at least one letter/number must be different from all other existing document names.

A document name can be from 1 - 8 characters and have any combination of letters and/or numbers; you cannot use spaces or punctuation (i.e. , ? / " ' : ; [] * ! @ # \$ () % \ & - _ + =.)

Entering a Document Name

Each time the Edit or Print Document activities are selected, the prompt "Enter Document Name: _____" displays below the Start-up menu.

The Wangwriter automatically displays the name of the document that was last selected unless the system has been turned off. If this is the name of the document you wish to use, press EXECUTE. If you wish to change the name that appears, type over the existing letters/numbers with the desired name. To eliminate extra characters to the right of the name, position the cursor under the first character to be deleted and press DELETE once for each character to be erased. You cannot press the SPACE BAR to remove these characters.

Pressing the NEXT SCRN key while the "Enter Document Name: _____" prompt is displayed causes each document name that is stored on this archive minidiskette to display alphabetically, in ascending order. The PREV SCRN key causes each document name that is stored on this archive minidiskette to display alphabetically, in descending order.

If the first letter of the document name is entered in the "Enter Document Name _____" field and then the NEXT SCRN or PREV SCRN key is pressed, each document beginning with that letter displays alphabetically, in either ascending or descending order.

In order to access a particular document, the document name must be entered exactly as it was entered during the document creation mode, being attentive to the placement of uppercase and lowercase letters.

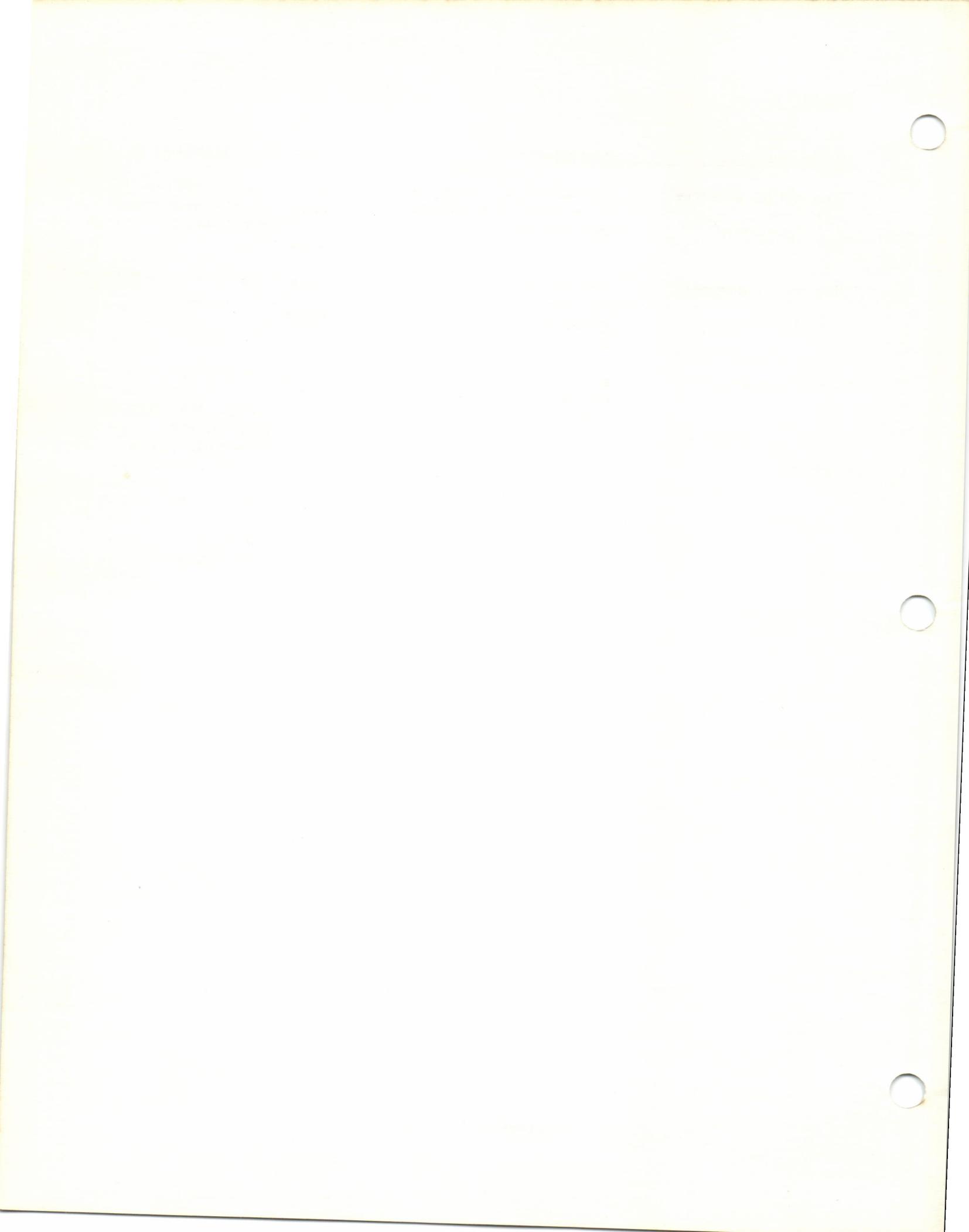
TROUBLE SHOOTING

Purpose: To correct an error that might occur when selecting a Start-up menu activity.

<u>If the message:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Document exists"	a document name has been assigned that was not unique.	Enter a new document name that is different from all existing document names.
"Document in use"	-- you have attempted to access a document that was printing. -- the Remove Archive Disk activity has been selected while a document was printing.	Select the printer by pressing the SELECT switch. If the document begins printing you may wish to cancel the print request. Either cancel the print request or wait until the document is finished printing before removing the archive minidiskette.
"Document not found"	a document name has been entered incorrectly or was not on that archive minidiskette.	View the Document index or enter the first letter, if known, and press the NEXT or PREV SCRН key to establish the exact document name. Reenter the correct document name.
"Drive not ready"	-- a Start-up menu activity has been selected and a minidiskette was not in the minidiskette drive.	Insert an archive minidiskette and press EXECUTE.
"Execute or Cancel"	a key other than EXECUTE or CANCEL has been pressed at a time when the only keys that can be pressed are the EXECUTE or CANCEL key.	Press either the CANCEL or EXECUTE key, which ever is applicable to the desired action.
"Invalid name"	a space or punctuation mark has been entered in a document name.	Remove the spaces and/or punctuation.
"No room in catalog"	a document has been created and no space remains on the archive minidiskette	Remove that archive minidiskette and insert a different archive minidiskette.

Trouble Shooting (Continued)

<u>If the message:</u>	<u>This means:</u>	<u>Take the following action.</u>
"No room on diskette"	a document has been created on an archive minidiskette that was full.	Remove that archive minidiskette and insert a different archive minidiskette.
"Not an archive disk" --	a Start-up menu activity has been selected and a system minidiskette was in the minidiskette drive.	Insert an archive minidiskette and press EXECUTE.
"Write protected"	a Start-up menu activity has been selected and the archive minidiskette was write protected (i.e. the write protect slot was <u>not</u> covered with a write protect tab.)	You may continue editing the document however, the changes will <u>not</u> be stored on the archive minidiskette or, to save the changes, return to the Start-up menu, remove the archive minidiskette and place a write protect tab over the write protect slot.



FORMAT

THE FORMAT LINE

The Format Line controls the appearance of the text that follows it. Vertical spacing; tab, indent, and decimal tab positions; and right-hand margin positions are established in the Format Line.

Primary Format Line

The Format Line that displays at the top of page one is called the Primary Format Line. There is only one Primary Format Line per document.

Alternate Format Line

All other Format Lines that appear in a document are called Alternate Format Lines. Alternate Format Lines may be created at any point within a document and as many times as necessary, provided that they are separated by at least one screen graphic or character. Each time a new Format Line is created, any of the settings can be changed.

If Alternate Format Lines are created within a page, when a new page is created, the Format Line at the top of the that page displays with the settings of the previous Alternate Format Line.

When editing a document, changing the Format Line on a previous page does not automatically change the Format Lines on subsequent pages -- each page must be manually changed. This ensures that Format Lines, created for specific page requirements, are not accidentally destroyed.

Format Line Settings



- a. Left-Hand Margin -- The left-hand margin, as indicated by a vertical bar (|), is always at position 1.
 - b. Vertical Spacing -- Vertical spacing, specified by either a number or letter, determines how many lines of text per vertical inch are printed. The vertical spacing choices are:

- 1 - single (6 lines/inch)
- W - one and one-half (4 lines/inch)
- 2 - double (3 lines/inch)
- 3 - triple (2 lines/inch)

Although vertical spacing always displays on the screen as single spacing, the line position indicator in the System Status Line increases by the line size indicated in the vertical spacing setting. The text will print in the vertical spacing set in the Format Line.

- c. Tab Stops/Indents/Decimal Tabs -- Tab, indent, and decimal tab settings, as indicated by tab graphics (►), determine where the cursor is positioned each time TAB, INDENT, or DEC TAB is pressed. A tab setting can be placed anywhere in the Format Line except for position one (the left-hand margin) or position two (the vertical spacing setting.)
 - d. Right-hand Margin -- The right-hand margin position, as indicated by a return graphic (◀), specifies the maximum number of characters that can be typed on one line. As text is typed into the Wangwriter, each line automatically wraps to the next line when this maximum is reached. The right-hand margin cannot exceed 158 characters.

!FORMAT! Revising a Primary or Alternate Format Line

Purpose: To move the cursor into an existing Format Line and change the vertical spacing, tab stops and right-hand margin.

Sequence

1. Position the cursor anywhere on the page below the Format Line to be changed.
2. Press SHIFT + FORMAT or, if the cursor is under the character immediately following the Format Line, press FORMAT.
3. To change the vertical line spacing:
 - a. Press BACKSPACE once.
 - b. Strike over the existing setting with one of the choices.
4. To clear the Format Line, press RETURN.

Results

The cursor moves to the third cursor position of the last previous Format Line.

The cursor moves to the second cursor position of the Format Line.

The cursor moves to the third cursor position.

The right-hand margin position (return graphic) moves to the third position.

Revising a Primary or Alternate Format Line (Continued)

5. To create tab stops:

- a. Press the east cursor key
key until the cursor
reaches the desired
tab location.

*1

- b. Press TAB.

Tab graphics mark the position
of TAB, DEC TAB, and INDENT.

- c. Repeat steps a. and b.
to set additional tab
stops.

6. To remove the tab stops,
position the cursor
under the tab graphic
and press the SPACE BAR.

Tab graphics are replaced by
space bar graphics.

7. To set the right-hand margin:

- a. Press the east cursor key until
the cursor reaches the desired
right-hand margin position.

*1

- b. Press RETURN.

The RETURN graphic and cursor
display at the indicated
character position.

8. Press EXECUTE.

The cursor moves out of the
Format Line and returns to its
original location in the page
prior to performing this
procedure.

*1

When determining the Format Line settings,
watch the character position indicator in
the System Status Line for the desired
character position.

!FORMAT! Creating an Alternate Format Line

Purpose: To create an Alternate Format Line within a page.

Sequence

1. Position the cursor where an alternate Format Line is needed.
2. Press FORMAT.
3. Change the settings in the Format Line as necessary.
4. Press EXECUTE.

Results

There must be at least one screen graphic or character between two Format Lines.

*1 *2

The Format Line displays identical to the previous Format Line.

The cursor moves to the third character position of the Format Line.

The cursor moves out of the Format Line and returns to its original location in the page prior to performing this procedure.

*1

It is not necessary to press INSERT when creating a new Format Line.

*2

If the cursor keeps returning to the previous Format Line, check to be sure that the SHIFT key is not LOCKED.

!FORMAT! Recalling a Copy of the Primary Format Line

Purpose: To create an Alternate Format Line that is identical to the Primary Format Line (the Format Line at the top of page 1.)

This procedure can be performed on any Format Line within a document. Each time this procedure is performed the Format Line being changed will always reflect the settings of the Format Line at the top of page 1.

Sequence

1. Position the cursor anywhere on the page below the Format Line to be changed.
2. Press SHIFT + FORMAT or, if the cursor is under the character immediately following the Format Line, simply press FORMAT.
3. Press FORMAT again.
4. Press EXECUTE.

Results

- The cursor moves to the third cursor position of the last previous Format Line.
- The Primary Format Line is recalled.
- The cursor moves out of the Format Line and returns to its original location in the page prior to performing this procedure.

!FORMAT! Deleting an Alternate Format Line

Purpose: To delete an Alternate Format Line within a page. *1

Sequence

1. Position the cursor anywhere on the page below the Format Line to be deleted.
2. Press SHIFT + FORMAT or, if the cursor is under the character immediately following the Format Line, simply press FORMAT.
3. Press DELETE.

Results

The cursor moves to the third cursor position of the last previous Format Line.

The Alternate Format Line is deleted.

The text automatically adjusts to the settings of the previous Format Line.

The cursor returns to its original location in the page prior to performing this procedure.

*1

A Primary Format Line cannot be deleted.
In addition, the Format Line at the top of a page cannot be deleted unless the whole page (including text) is deleted.

!FORMAT! Copying a Format Line Within a Document

Purpose: To duplicate a Format Line from one location in a document to another location in the same document. (To copy a Format Line to another document, see Super Copy.)

Sequence

1. Position the cursor under the first character following the Format Line to be copied.
2. Press COPY.
3. Press FORMAT.
4. Press EXECUTE.
5. Using the location keys, move the cursor to the position where the Format Line is to be copied.

Results

- *1
- *2
- The prompt "Copy what?" displays in the System Status Line.
- The character is highlighted.
- The message "Format Copied" displays in the message line.
- The prompt "To where?" displays in the System Status Line.

Copying a Format Line Within a Document (Continued)

6. Press EXECUTE.

The Format Line is duplicated at the new location.

7. Delete the extra character that was copied if it is not needed.

*1

The Format Line cannot be copied when the cursor is located within it. Therefore, the cursor must be positioned on the character immediately following the Format Line. This character is copied during this operation. If the character is not needed at the new location, delete it after the copy operation is complete.

*2

Using the MOVE key (instead of the COPY key) will accomplish the same task, however, when the MOVE key is used, the Format Line is not deleted from its original location as is the case during a normal move procedure, rather, the Format Line is duplicated.

FORMAT OPERATIONS

!RETURN! Using the Return Key

Purpose: To:

- To end a paragraph and return the cursor to the beginning of the next line.
- To create blank lines between paragraphs.
- To end a row of tabular data.
- To set the right margin in the Format Line. *1

The RETURN key is not used to end each line because of the automatic word wraparound feature. When the cursor reaches the last character position of a line (as indicated in the Format Line) and the last character is not a space, the entire word that is being typed is "wrapped around" to the next line.

Sequence

1. Press RETURN

Results

The return graphic (◀) displays.

*1

The RETURN key is also used to move forward from field to field in the Print Document menu.

!TAB! Tabbing Text

Purpose: To:

- indent the first line of a paragraph
- enter columnar text at specific tab stops. *1

Sequence

1. Set the tab stops as needed in the Format Line.
2. Press TAB.
3. Enter text and/or press TAB again.

Results

The tab graphic (►) displays on the screen each time TAB is pressed. *2

Text can be entered at each tab stop or only at selected tab stops. *3

*1

The TAB key is also used to move forward from field to field in the Print Document menu.

*2

The tab graphic displays one character before the tab set in the Format Line. The first character of the text aligns on the tab position.

*3

If TAB is pressed and no tab stops remain in the Format Line, a tab graphic displays at that character position and the cursor automatically wraps to the beginning of the next line.

!DEC TAB! Decimally Aligning Text

Purpose: To automatically align columns of numbers or text (whole or negative numbers, or numbers or text enclosed in parenthesis) on decimal separators.

A decimal separator is a character, that when entered in the decimal alignment mode, causes the text to appear to the right of the decimal tab setting. The decimal separators are: decimal point (.), right parenthesis ()), or a space ().

A decimal ender is a screen graphic, that when entered in the decimal alignment mode, ends the current column and moves the cursor to the next tab setting. The decimal enders are: tab (►), indent (→), return (◀), center (◆), decimal tab (L) or end of text (.). In addition, when a tab column becomes entirely full, text that is entered becomes a decimal ender.

Sequence

1. Set the tab stops in the Format Line in the exact position where you want the decimal separator to align.

2. Press DEC TAB.

3. Type in the text.

4. Press DEC TAB as many times as necessary to enter additional tabbed information on that line.

5. Press RETURN to end each line.

Results

The decimal tab graphic (L) displays.

The characters move to the left of the decimal tab setting unless or until a decimal separator is entered. The decimal separator appears at the tab setting set in the Format Line. Characters typed after the decimal separator appear to the right of the tab position.

The cursor moves to the decimal tab position of the next column.

!INDENT! Indenting Text

Purpose: To establish a temporary left-hand margin that automatically indents consecutive lines of text. *1

Sequence

1. Set the tab stops as needed in the Format Line prior to using the indent function.
2. Press INDENT one or more times. at the beginning of the paragraph.
3. Enter the text.
4. Press RETURN.

Results

The indent graphic (→) displays each time INDENT is pressed.

All subsequent lines of text automatically wraparound to the tab position where the indent graphic is entered until RETURN is pressed.

The indent operation stops and the cursor moves to character position 1 of the next line.

*1

The INDENT key is also used to move the cursor backwards from field to field in the Print Document menu.

!CENTER! Centering Text

Purpose: To automatically center a new line of text between the left and right-hand margins. *1

Sequence

1. Position the cursor at the left-hand margin, and press CENTER.

2. Enter the text.

3. Press RETURN.

Results

The center graphic (♦) displays at the left-hand margin.

The cursor moves to the center of the line.

For every two characters entered, one character moves to the left.

The center operation stops and the cursor moves to character position 1 of the next line.

*2

*1

If indent is pressed prior to pressing CENTER, the center graphic displays next to the indent graphic, and the text centers between the temporary left-hand margin (indent) and the right-hand margin.

*2

All editing features can be performed on a centered line. When information is inserted or deleted, the line automatically recenters.

!PAGE! Creating Pages in a Document

Purpose: To end a page/begin a new page.

Sequence

1. End the last line of text by
pressing the RETURN key to
position the cursor at the
left margin.

2. Press PAGE.

Results

*1

The end of text graphic(.)
displays after the last
character or graphic on the
page.

The message "(Page End)"
displays in the lower left-hand
corner of the screen.

A new page automatically
displays on the screen.

The cursor displays on the
newly created page.

The Status Line indicates the
new page number.

*1

A page cannot exceed 4,000 characters or
124 lines.

A document cannot exceed 15 pages.

!UNDRSCR! Underscoring Small Amounts of Text

Purpose: To underscore a small amount of text that has been entered.

<u>Sequence</u>	<u>Results</u>
1. Position the cursor under the first character where underscoring is to begin.	*1
2. Hold down the SHIFT key while pressing the UNDERSCORE key once for each letter to be underscored.	
3. To remove underscoring, repeat steps 1 and 2 above or strike over each character with the same character.	

*1

Underscore cannot be entered in the "empty" space between tabs or in the area to the left of indented text. If underscore is necessary in these areas, separate columns using spaces instead of tab graphics.

!COMMAND! Underscoring an Entire Block of Text
!UNDRSCR!

Purpose: To underscore a large block of text that has been entered.

<u>Sequence</u>	<u>Results</u>
1. Position the cursor under the first character where underscoring is to begin	
2. Press COMMAND.	The prompt "Which Command?" displays in the System Status Line.
3. Hold down the SHIFT and press the underscore key once.	The prompt "Underscore what?" displays in the System Status Line.
4. Highlight the text to be underscored.	*1
5. Press EXECUTE.	The message "(Rearranging)" displays in the System Status Line.
6. To remove underscoring, repeat steps 1 - 5 above or, strike over each character with the same character.	The text appears underscored.

*1

Underscore will not appear in the "empty" space between tabs or in the area to the left of indented text. If underscore is necessary in these areas, separate columns using spaces instead of tab graphics and then underscore them.

!COMMAND! Double Underscoring Text
!RIGHT!
!PAREN!

Purpose: To double underscore text that has been entered.

Sequence

1. Position the cursor under the first character where double underscoring is to begin.
2. Press COMMAND.
3. Press SHIFT + RIGHT PARENTHESIS.
4. Highlight the text to be double underscored.
5. Press EXECUTE.
6. To remove double underscore, repeat steps 1 - 5 above or, strike over each character with the same character.

Results

The prompt "Which Command?" displays in the System Status Line.

The prompt "Double under what?" displays in the System Status Line.

The message "(Rearranging)" displays in the System Status Line.

The double underscored text displays with an underscore above and below each character.

!COMMAND! Bolding Text
!LEFT!
!PAREN!

Purpose: To emphasize text or headings by boldfacing the text when printed.

<u>Sequence</u>	<u>Results</u>
1. Position the cursor under the first character where bold type is to begin.	
2. Press COMMAND.	The prompt "Which Command?" displays in the System Status Line.
3. Press SHIFT + LEFT PARENTHESIS.	The prompt "Bold what?" displays in the System Status Line.
4. Highlight the text to be bolded.	
5. Press EXECUTE.	The message "(Rearranging)" displays in the System Status Line.
6. To remove bold, repeat steps 1 - 5 above or, strike over each character with the same character.	The bolded text displays in reverse video (black letters enclosed in a green block).

!COMMAND! Striking Thru Text
!SLASH!

Purpose: To strike thru text with a slash.

Sequence

1. Position the cursor under the first character where the strike thru is to begin.

2. Press COMMAND.

3. Press SLASH (/).

4. Highlight the text to be struck-thru.

5. Press EXECUTE.

6. To remove the strike thru characters (/), repeat steps 1 - 5 above or, strike over each character with the same character.

Results

The prompt "Which Command?" displays in the System Status Line.

The prompt "Strike Thru what?" displays in the System Status Line.

The message "(Rearranging)" displays in the System Status Line.

The struck-thru text displays with vertical lines through each character.

!SUPERSCRIPT! Superscripting Characters

Purpose: To display and print characters 1/2-line above the normal printing line.

<u>Sequence</u>	<u>Results</u>
1. Type the character to be superscripted.	
2. Using the BACKSPACE or west cursor key, move the cursor under the character.	
3. Hold the SHIFT key and press the SUPERSCRIPT key.	The character moves up 1/2 line. *1
4. To return a superscripted character to the normal printing level, repeat steps 1 - 3 above or strike over each character with the same character.	

*1

You cannot use this feature to raise characters more than one level (1/2-line). Attempting to enter a superscript over an already superscripted character returns the character to the normal printing line.

!SUBSCRIPT! Subscripting Characters

Purpose: To display and print characters 1/2-line below the normal printing line.

Sequence

1. Type the character to be subscripted.
2. Using the BACKSPACE or west cursor key, move the cursor under the character.
3. Press SUBSCRIPT.
4. To return a subscripted character to the normal printing level, repeat steps 1 - 3 above or strike over each character with the same character.

Results

The character moves down 1/2 line. *1

*1

You cannot use this feature to lower characters more than one level (1/2-line). Attempting to enter an additional subscript over a subscripted character returns the character to the normal printing line.

TROUBLE SHOOTING

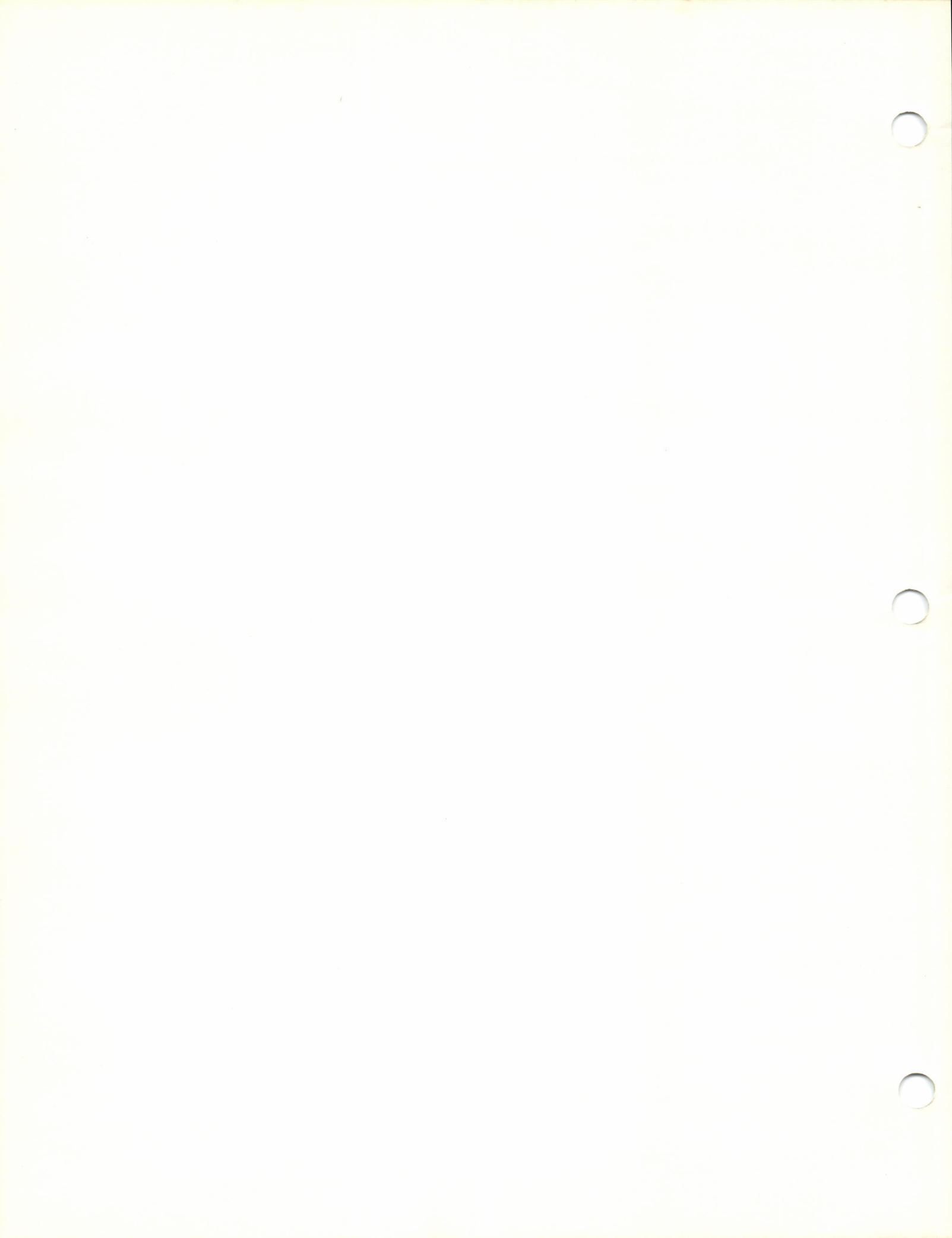
Purpose: To correct an error that might occur when creating and formatting pages in a document.

<u>If the message:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Character Limit Exceeded"	the page limit of 4,000 characters per page has been reached.	Position the cursor at the character position where a desirable page break can be made.
"Invalid Keystroke"	-- you have attempted to enter a number or graphic in the Format Line that was either invalid or was entered at an invalid position. -- you have attempted to enter a numeric vertical spacing that is not valid. -- you have attempted to delete a Format Line at the top of a page or a Primary Format Line.	Press PAGE. This moves all the text following the cursor to the newly created page. Be sure that either the TAB key or RETURN key is being used to enter tab positions and the right margin.
"Line Limit Exceeded"	the line limit of 124 lines per page has been reached.	Check the System Status Line to be sure of the correct character position. Check to see if the SHIFT key is LOCKED.
"Move Cursor"	you have attempted to enter underscore in "empty" space between tabs or in the area to the left of indented text.	These Format Lines cannot be deleted. Position the cursor at the character position where a desirable page break can be made. Press PAGE. This moves all text following the cursor to the newly created page.

Trouble Shooting (Continued)

<u>If the message:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Option not available"	a key has been pressed that is not operational on the Wangwriter.	
"Too many pages"	the limit of 15 pages per document has been reached.	Begin a new document that will contain the remainder of pages within that document.
"Unknown command"	the COMMAND key has been pressed with a key that was not a valid command.	Check that the intended key was pressed; or, check to see if the SHIFT key is LOCKED or unlocked.

LOCATE



LOCATE OPERATIONS

!NEXT SCRN! Moving to the Next Screen of Text

Purpose: To:

- view the next screen of text.
- view document names, in ascending order, when the "Enter Document Name: - - - - -" prompt is displayed.

Sequence

1. Press NEXT SCRN.

Results

The cursor moves to the first character in the first line of the next screenload of text. *1

*1

If the cursor is within the three line overlap (i.e. last three lines of a screen), when NEXT SCRN is pressed the cursor remains at the same character position when the new screen displays.

!PREV SCRN! Moving to the Previous Screen of Text

Purpose: To:

- view the previous screen of text.
- view document names, in descending order, when the "Enter Document Name: - - - - - " prompt is displayed.

Sequence

1. Press PREV SCRN.

Results

The cursor moves to the last character in the last line of the previous screenload of text.

*1

If the cursor is within the three line overlap (i.e. first three lines of a screen), when PREV SCRN is pressed the cursor remains at the same character position when the new screen displays.

!GO TO PAGE! Moving to Another Page

Purpose: To position the cursor directly to a specific location on a specified page.

Sequences

!GO TO! (+) !NORTH!
!PAGE!

!GO TO! (+) !SOUTH!
!PAGE!

!GO TO! (+) !EAST!
!PAGE!

!GO TO! (+) !WEST!
!PAGE!

!GO TO! (+) !##! (+) !EXE!
!PAGE! **!CUTE!**

!GO TO! (+) !##! !NORTH!
!PAGE!

!GO TO! (+) !##! !SOUTH!
!PAGE!

!GO TO! (+) !##! !EAST!
!PAGE!

!GO TO! (+) !##! !WEST!
!PAGE!

Results

The cursor moves to the first character in the first line of the current page (home position.)

The cursor moves to the last character in the last line of the current page (reverse home position.)

The cursor moves to the last character position of the current line.

The cursor moves to the first character position of the current line.

The cursor moves to the first character in the first line of a specified page.

The cursor moves to the first character in the first line of a specified page (home position.)

The cursor moves to the last character in the last line of a specified page (reverse home position.)

The cursor moves to the last character in the first line of a specified page.

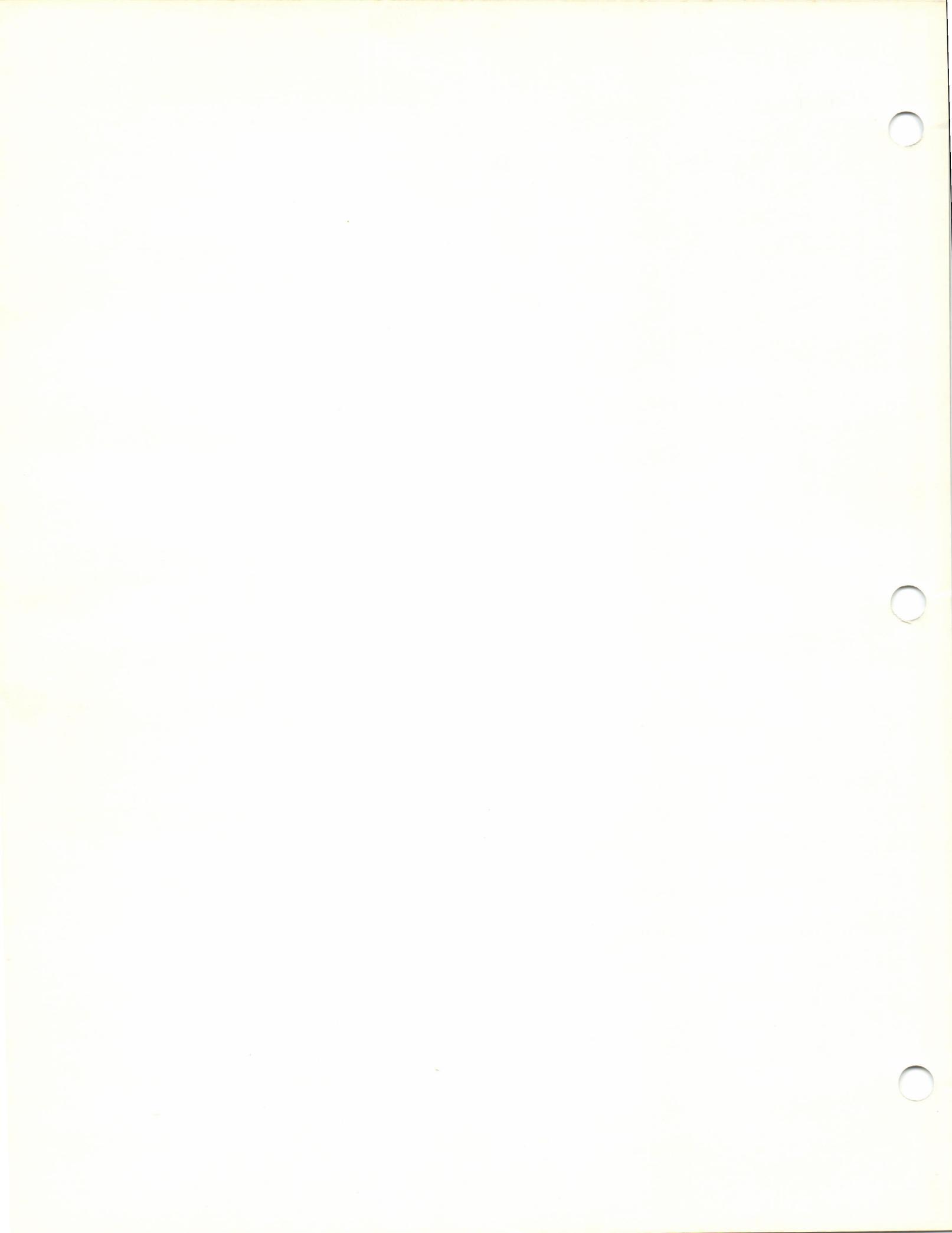
The cursor moves to the first character in the first line of a specified page.

TROUBLE SHOOTING

Purpose: To correct an error that might occur when locating text.

<u>If the message:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Invalid keystroke"	The GO TO PAGE key has been pressed with an entry other than a number.	Check to see if the SHIFT key is LOCKED.
"No next screen"	The NEXT SCRN key has been pressed and no additional screens of text remain.	
"No previous screen"	The PREV SCRN key has been pressed and no additional screens of text remain.	

EDIT



HIGHLIGHTING/DEHIGHLIGHTING

Text can be highlighted using any of the following methods. *1

- Character by character, by pressing DELETE, COPY, or MOVE.
- Character by character, by pressing COMMAND + BACKSPACE.
- Word by word, by pressing the SPACE BAR.
- By a particular character, by typing the character.
- By screen graphic, by pressing the appropriate key.
- By cursor, by pressing east and/or south cursor position keys.
- Over screen boundaries, by pressing NEXT SCRN.
- To the end of a page, by pressing PAGE.

Text can be dehighlighted by using any of the following methods. *1

- Entirely, by pressing CANCEL
- Character by character, by pressing BACKSPACE
- By cursor, by pressing the west and/or north cursor position keys.
- Over screen boundaries, by pressing PREV SCRN.

*1

The GO TO PAGE key cannot be used to highlight or dehighlight text.

EDIT OPERATIONS

Striking over Text

Purpose: To strike over characters or screen graphics on a one-for-one basis in order to:

- correct text or graphics when typing or editing.
- change modifiable fields in the Print Document menu.
- change settings in a Format Line.
- to remove format attributes from text (i.e.underscore, double underscore, bold, superscript, subscript.)

You can strikeover any character or graphic. You cannot strikeover blank space between tabs or decimal tabs, words within menus, or in the space between indented text and the left-hand margin. Text can be added in the space between tabs, decimal tabs, and to the left of indented text using the insert procedure.

Sequence

1. Position the cursor under the character or graphic to be changed.
2. Enter the new character or graphic.

Results

The new character or graphic appears.

!DELETE! Deleting Text

Purpose: To delete any number of consecutive characters or graphics from a document.

Sequence

1. Position the cursor under the first character to be deleted.
2. Press DELETE.
3. Highlight the text or graphic to be deleted.
4. Press EXECUTE.

Results

The prompt "Delete what?" displays in the System Status Line.

The character above the cursor is highlighted.

The highlighted text is deleted from the screen.

Remaining text automatically adjusts to the change.

!INSERT! Inserting Text

Purpose: To insert additional text or graphics into an existing document.

Sequence

1. Position the cursor where the first character of the new text is to begin.

2. Press INSERT.

3. Enter the new text/graphics.

4. Press EXECUTE.

Results

The cursor should be under the first character that will follow the inserted text.

The prompt "Insert what?" displays in the System Status Line.

The screen clears all characters to the right of the cursor and the first 29 characters following the insert are shown at the bottom of the screen.

The text being inserted is highlighted. *1 *2

Text automatically adjusts to the change.

*1

If a mistake is made while inserting text, it can be corrected by striking over the error during the insert operation, finishing the insert and then making the correction, or by cancelling the insert operation and starting over.

*2

Be careful not to insert an amount of text that, when combined with existing text, will exceed the maximum page size of either 124 lines or 4,000 characters.

!COPY! Copying Text

Purpose: To copy text from one location in a document to another location in the same document. (The copied text remains in its original location.)

<u>Sequence</u>	<u>Results</u>
1. Position the cursor under the first character/graphic to be copied	
2. Press COPY.	The prompt "Copy what?" displays in the System Status Line.
	The first character/graphic is highlighted.
3. To retain the format of the original text, press FORMAT.	The message "Format Copied" displays in the message line.
4. Highlight the text to be copied.	*1 *2
5. Press EXECUTE.	The prompt "To where?" displays in the System Status Line.
6. Using the location keys position the cursor to the location where text is to be copied.	

Copying Text (Continued)

7. Press EXECUTE.

The message "(Rearranging)" displays in the System Status Line.

Text is copied to the new location.

The copied text automatically adjusts to the settings of the previous Format Line in the new location, unless the original Format Line was also copied.

*1

Be careful not to copy (highlight) an amount of text that, when combined with existing text, will exceed the maximum page size of either 124 lines or 4,000 characters.

*2

Text cannot be highlighted over page boundaries. If several pages must be copied, each page must be copied with a separate copy operation.

!SHIFT! Super Copy -- Copying Text From One Document to Another
!COPY!

Purpose: To copy text from one document to another location in a second document. (The super copied text remains in its original location.)

Sequence

1. Be sure the archive minidiskette that is in the minidiskette drive holds both documents that will be worked with -- the one being copied from and the one being copied to.

2. Position the cursor at the location in the document where text is to be super copied to.

3. Press SHIFT + COPY

4. Enter the name of the document from which the text is to be super copied and press EXECUTE.

5. Position the cursor under the first character/graphic to be super copied.

6. Press EXECUTE.

7. To retain the format of the original text, press FORMAT.

8. Highlight the text to be super copied.

Results

The prompt "Document: _____" displays in the System Status Line.

The cursor moves to page 1 of the document.

The prompt "From where?" displays in the System Status Line.

Text can be located with the following location keys; (cursor position keys, NEXT SCRН, and PREV SCRН.)

The prompt "Copy what?" displays in the System Status Line. *1

The message "Format Copied" displays in the message line.

*2 *3

Super Copy -- Copying Text From One Document to Another (Continued)

9. Press EXECUTE.

The message "(Rearranging)" displays in the System Status Line.

The system automatically returns to the original document and displays the super copied text.

The super copied text automatically adjusts to the settings of the previous Format Line in the new location, unless the original Format Line was also super copied.

*1

If EXECUTE is pressed at an incorrect character position, the super copy operation must be canceled and the procedure must be started over in order to correctly define the starting character.

*2

Be careful not to super copy (highlight) an amount of text that, when combined with existing text, will exceed the maximum page size of either 124 lines or 4,000 characters.

*3

Text cannot be highlighted over page boundaries. If several pages must be super copied, each page must be super copied with a separate super copy operation.

!MOVE! Moving Text

Purpose: To move text from one location in a document to another location in the same document. (The moved text is deleted from its original location.)

Sequence

1. Position the cursor under the first character/graphic to be moved.
2. Press MOVE.
3. To retain the format of the original text, press FORMAT.
4. Highlight the text to be moved.
5. Press EXECUTE.
6. Using the location keys position the cursor to the location where text is to be moved.

Results

The prompt "Move what?" displays in the System Status Line.

The first character/graphic is highlighted.

The message "Format Copied" displays in the message line.

*1 *2

The highlighted text is removed and the screen redisplays.

The prompt "To where?" displays in the System Status Line.

Moving Text (Continued)

7. Press EXECUTE.

The message "(Rearranging)" displays in the System Status Line.

Text is moved to the new location.

The moved text automatically adjusts to the settings of the previous Format Line in the new location, unless the original Format Line was also moved.

*1

Be careful not to move (highlight) an amount of text that, when combined with existing text, will exceed the maximum page size of either 124 lines or 4,000 characters.

*2

Text cannot be highlighted over page boundaries. If several pages must be moved, each page must be moved with a separate move operation.

!SHIFT! Super Move -- Moving Text From One Document to Another
!MOVE!

Purpose: To move text from one document to another location in a second document. (The super moved text is deleted from its original location.)

Sequence

1. Be sure the archive minidiskette that is in the minidiskette drive holds both documents that will be worked with -- the one being moved from and the one being moved to.
2. Position the cursor at the location in the document where text is to be super moved to.
- 3.. Press SHIFT + MOVE
4. Enter the name of the document from which the text is to be super moved from and press EXECUTE.
5. Position the cursor under the first character/graphic to be super moved.
6. Press EXECUTE.
7. To retain the format of the original text, press FORMAT.
8. Highlight the text to be super moved.

Results

The prompt "Document: _____" displays in the System Status Line.

The cursor moves to page 1 of of the document.

The prompt "From where?" displays in the System Status Line.

Text can be located with the following location keys; (cursor position keys, NEXT SCRН, and PREV SCRН.)

The prompt "Move what?" displays in the System Status Line. *1

The message "Format Copied" displays in the message line.

*2 *3

Super Move -- Moving Text From One Document to Another (Continued)

8. Press EXECUTE.

The message "(Rearranging)" displays in the System Status Line.

The system automatically returns to the original document and displays the super moved text.

The super moved text automatically adjusts to the settings of the previous Format Line in the new location, unless the original Format Line was also super moved.

*1

If EXECUTE is pressed at an incorrect character position, the super move operation must be canceled and the procedure must be started over in order to correctly defined the starting character.

*2

Be careful not to super move (highlight) an amount of text that, when combined with existing text, will exceed the maximum page size of either 124 lines or 4,000 characters.

*3

Text cannot be highlighted over page boundaries. If several pages must be super moved, each page must be super moved with a separate super move operation.

!PAGE! Adding a Page Between Two Existing Pages

Purpose: To add a page between two existing pages.

Sequence

1. Position the cursor at the bottom of the page that is to appear before the new page.
2. Press PAGE.

Results

*1

The cursor displays on the newly created page.

Subsequent pages of text are renumbered.

*1

It is not necessary to press the INSERT key when adding a page to an existing document.

!PAGE! Deleting a Page

Purpose: To delete an entire page from a document. *1

Sequence

1. Position the cursor at the top of the page to be deleted.

2. Press DELETE.

3. Press PAGE.

4. Press EXECUTE.

Results

The prompt "Delete what?" displays in the System Status Line.

The first character is highlighted.

The cursor moves to the last character of the page.

The entire page of text is highlighted.

The page is deleted.

The text on subsequent pages moves forward.

The pages automatically renumber.

*1

The text end graphic cannot be deleted unless the entire page is deleted. If only part of a page is highlighted along with the text end graphic, the text is deleted but the text end graphic remains.

!PAGE! Standardizing the Number of Lines on a Page

Purpose: To standardize the number of lines on a page after text has been added to a page. *1

1. Position the cursor under the first character to appear on the next page.

2. Press PAGE.

*2

The cursor displays on the newly created page.

The text following the cursor displays on the newly created page.

Subsequent pages of text are renumbered.

*1

If text has been deleted from a page, text can be brought forward from subsequent pages using the move operation.

*2

It is not necessary to press the INSERT key when adding a page to an existing document.

TROUBLE SHOOTING

Purpose: To correct an error that might occur when editing a document.

If this message appears: This means:

Take the following action.

"Character Limit Exceeded" the page limit of 4,000 characters per page has been reached during an insert, copy, or move operation.

Create a new page for the additional text.

"Document in use"

a super copy or super move operation has been attempted on a document that was printing or on the document currently displayed.

Either cancel the print request or wait until the document has finished printing before attempting to super copy or super move text.

If you wish to move or copy text from within the document currently displayed on the screen, use the move or copy operation rather than the super copy or super move operation.

"Finish Copy"

another operation has been attempted while copying text.

Complete or cancel the copy operation before using another operation.

"Finish Delete"

another operation has been attempted while deleting text.

Complete or cancel the delete operation before using another operation.

"Finish Insert"

another operation has been attempted while inserting text.

Complete or cancel the insert operation before using another operation.

"Finish Move"

another operation has been attempted while moving text.

Complete or cancel the move operation before using another operation.

"Invalid keystroke"

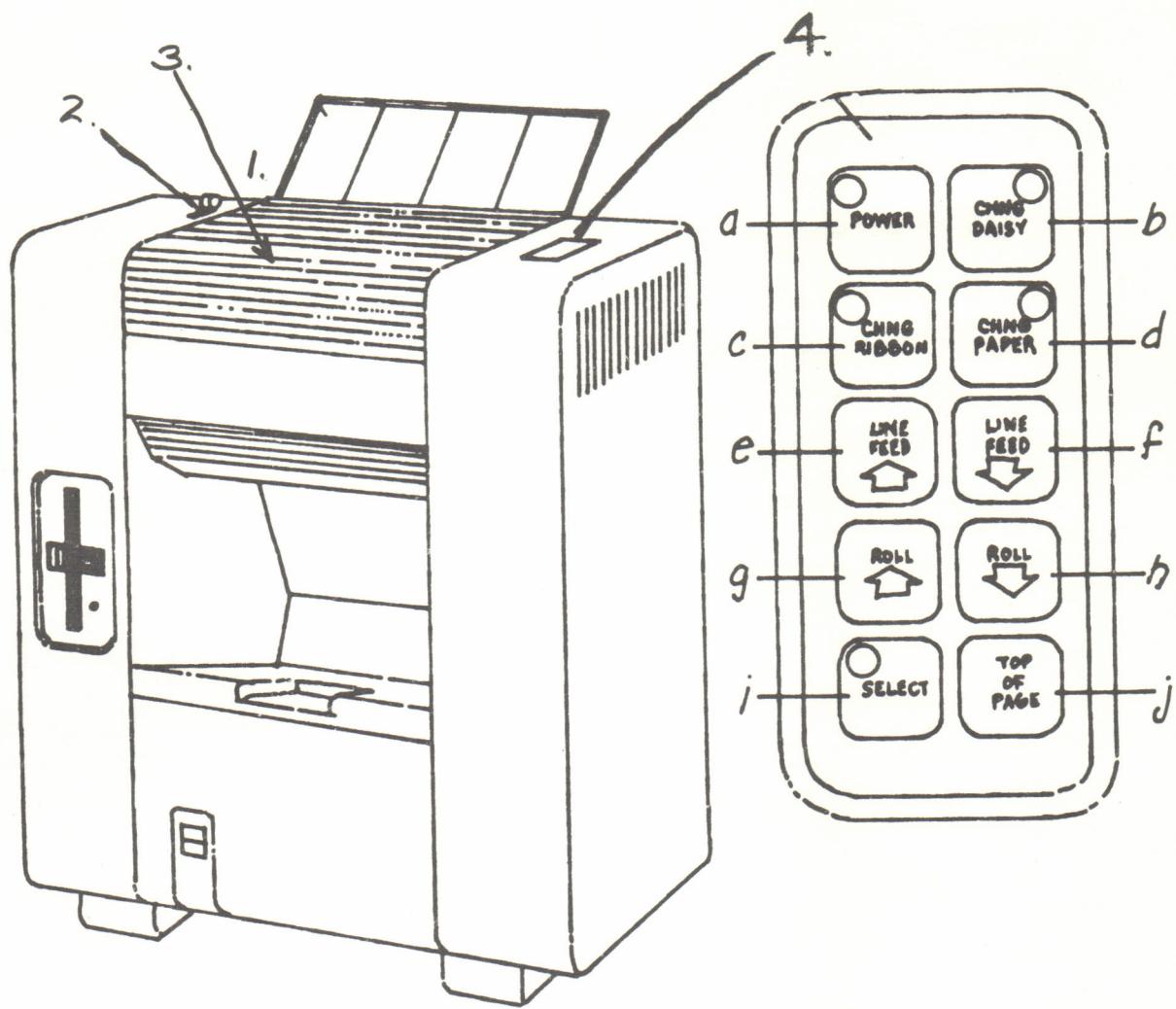
the GO TO PAGE key has been pressed while highlighting text.

Use the south cursor key to highlight text to the bottom of a page. Text cannot be highlighted beyond a page boundary (i.e. beyond the text end graphic.)

Trouble Shooting (Continued)

<u>If this message appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Line Limit Exceeded"	the line limit of 124 lines per page has been reached during an insert copy, or move operation.	Create a new page for the additional text.
"Move cursor"	text has been entered in "empty" space between tabs, decimal tabs, or in the space to the left of indented text.	If text is needed in this area, use the insert operation.
"Option not available"	a key has been pressed that is not operational on the Wangwriter.	
"Too many pages"	the limit of 15 pages per document has been reached.	Begin a new document for the remainder of pages within that document.
"Write protected"	a document has been edited that was write protected (i.e. the write protect slot was <u>not</u> covered with a write protect tab.)	You may continue editing the document however, the changes will <u>not</u> be stored on the archive minidiskette or, to save the changes, return to the Start-up menu, remove the archive minidiskette and place a write protect tab over the write protect slot.

PRINT



PRINTER OPERATION

Parts of the Printer

1. Paper Guide/Sensor -- The paper guide is used to align the printing material with the left margin as it is being loaded into the printer. The left edge of the paper must be aligned directly against the left-most edge of the paper guide/sensor to insure that the sheet is loaded into the printer.
2. Paper Loading Lever -- The paper loading lever, when pulled forward, automatically loads each sheet of printing material into the printer. Each page rolls into the printer providing a one-inch header margin at the top of each page. A page cannot begin printing less than one-inch from the top of the page. The ROLL UP and LINE UP buttons can be used to adjust the paper to a desired starting line position greater than one-inch. This lever will not operate until a document is sent to the printer.
3. Paper Bail -- The paper loading lever controls the paper bail. When the paper loading lever is pulled forward, the paper bail also moves forward allowing the paper to be loaded. When the paper loading lever is released, the paper bail rests against the paper. Remember to hold the paper loading lever (paper bail) forward long enough to allow the paper to be completely loaded before releasing it. This prevents the paper from misaligning or tearing as it rolls into place.

Parts of the Printer (Continued)

4. Printer Control Panel -- The printer control panel contains switches and indicator lights for controlling printer operations and for establishing a starting line position for each page. The purpose for each of the switches and indicator lights is described below.

Power Indicator -- The POWER indicator light illuminates when the main power switch is turned on.

Change Daisy -- Not functional.

Change Ribbon Indicator -- The CHANGE RIBBON light illuminates to indicate that the ribbon should be changed. The printer stops, is automatically deSELECTed and the Change Ribbon Indicator light illuminates. After changing the ribbon, touch the SELECT switch to finish the current line and continue printing the remainder of the page.

Change Paper Indicator -- When the printer reaches the end of a printed page, the page is automatically ejected either up or down. The CHANGE PAPER light illuminates if additional pages remain to be printed. Insert the next sheet of paper and touch the SELECT switch to continue printing the next page.

Line Feed Up Switch -- Allows the paper to be moved up one line at a time to establish a desired printing position.

Line Feed Down Switch -- Allows the paper to be moved down one line at a time to establish a desired printing position.

Roll Up Switch -- Allows the paper to be moved up 1/48" at a time to establish a desired printing position.

Roll Down Switch -- Allows the paper to be moved down 1/48" at a time to establish a desired printing position.

Select Switch -- The SELECT switch initially activates the printer or restarts the printer after it has been manually or automatically deSELECTed. When the red indicator light is illuminated, it indicates that the printer is selected. When the red indicator light is extinguished, it indicates that the printer is deselected.

Top of Page Switch -- After the printer is deselected, the TOP OF PAGE switch ejects the paper either up or down (as indicated in the Print Document menu) causing the CHANGE PAPER indicator light to illuminate. Insert a new sheet of paper and select the printer. The page that was interrupted begins to print from the top. This procedure allows a misprinting page to begin printing again from the top of a page without having to resend the document to the printer.

PRINTING A DOCUMENT

Purpose: This activity permits access to the Print Document menu and sends a document to the printer.

Sequence

1. Make sure the printer is deSELECTed before beginning to print a document.
2. Position the Acceptance Block at "Print Document" on the Start-up menu and press EXECUTE.
3. Enter the specific document name and press EXECUTE.
4. Make the desired changes to the fields in the Print Document menu.
5. Press EXECUTE.
6. Insert the paper in the printer by pulling the paper loading lever forward.
7. Adjust the page to the desired starting line position using the LINE FEED UP or ROLL UP switches on the printer control panel.

Results

The printer is deselected if the red indicator light on the SELECT switch is extinguished.

This step prevents the printer from starting to print immediately after the paper has been loaded. This allows time to perform any adjustments to the top margin of the paper using the switches on the printer control panel.

The prompt "Enter Document Name" ----- displays on the screen.

The Print Document menu displays on the screen.

The CHANGE PAPER indicator illuminates.

Be sure the paper is aligned with the left-most edge of the paper guide.

The CHANGE PAPER indicator light extinguishes.

*1

Printing a Document (Continued)

8. Select the printer by pressing the SELECT switch on the printer control panel. The printer begins printing.
9. When the page is finished printing, it is automatically ejected up or down as indicated in the Print Document menu. *2
10. a. If there are additional pages remaining to be printed, deselect the printer by pressing the SELECT switch on the printer control panel.
- b. Insert a new sheet of paper and adjust it to the desired starting line position using the LINE FEED UP ROLL UP switches on the printer control panel.
- c. Select the printer by pressing the SELECT switch on the printer control panel. Repeat step 10 for each additional page in the document.

*3

*1

There cannot be less than a one-inch header margin at the top of a printed page. Pressing the ROLL DOWN or LINE FEED DOWN switches on the printer control panel to move the starting line position to less than one-inch is ignored and the paper remains in its current position.

*2

The printer cannot print beyond a one-half inch footer margin. If a page contains a number of lines that exceeds the one-half inch footer margin the printer creates a second page to accomodate the excess lines of text. Example:

66 lines	(11" paper)
- 6 lines	(1" header margin)
<u>- 3 lines</u>	(1/2" footer margin)
57 lines	(lines of text per page)

In this example, if the number of lines per page exceeds 57 lines, the printer will create a second page to accomodate those lines in excess of 57.

*3

To terminate the printing of a document, select the "Cancel Print Request" activity on the Special Print Functions menu.

PRINT DOCUMENT MENU

PRINT DOCUMENT

Document Name: XXXXXXXX
From Page: 01
Thru Page: XX

No. of Originals: 01
Paper Length: 66
Left Margin: 05

Pitch	Lines/Inch	Eject	Justification
Ten	Six	Up	None
- Twelve	Eight	Down	Partial
Fifteen			Complete

Character Set	Page Width
- Set one	Over six inches
Set two	Under six inches

Moving to a Different Field

To move to the next field in the Print Document menu, press the RETURN or TAB key. If you wish to reset a field or if you have by-passed a field, continue pressing the RETURN or TAB key (to move forward) or the INDENT key (to move backwards) until the cursor is in the appropriate field.

Changing the Fields

To change a field that allows a range of numbers, place the cursor under the number to be changed and strikeover the original number with the desired number.

To change a field that allows you to select one of several predetermined options, move the Acceptance Block by pressing the SPACE BAR until it is at the proper selection. If you by-pass a selection, continue to press the SPACE BAR until the Acceptance Block returns to the proper selection.

From Page: This setting informs the printer of the page number to begin printing with. The default menu setting is 01. Valid settings can range from 01 - 15. *1

Thru Page: This setting informs the printer of the page number, inclusively, to stop printing with. The default menu setting is always the last page of that particular document. Valid settings can range from 01 - 15. *1

No. of Originals: This setting informs the printer how many copies of a document you wish to print. The default menu setting is 01. Valid settings can range from 01 - 99.

Paper Length: This setting informs the printer how long the sheet of paper is in lines and, as a result, how much it must advance a page to eject it. If a standard sheet of paper (8 1/2" x 11") is used, the default setting of 66 lines is correct. This field must be modified if legal size paper, index cards, or envelopes are used. To set this field, a good rule of thumb to follow is:

Length of Paper in Inches
x Number of Lines Per Inch (6 or 8, as selected in the Lines/inch field)
Paper Length in Lines

*1

The From Page field and the Thru Page field can help to limit the number of pages that are reprinted after editing takes place (e.g. if only one page needs to be reprinted, indicate the same number in the From Page field and the Thru Page field; if several consecutive pages need to be reprinted, indicate the range of the pages within these two fields; if several intermittent pages need to be reprinted, send a separate print request for each separate page.)

Left Margin:

This setting informs the printer where to start printing the first character of a line on the paper. The printer cannot print in the first half-inch of the left margin of the paper. Be sure to take this into consideration when determining this setting. *1 *2

The default menu setting is 05. Valid settings can range from 01 - 158.

*1

Position zero on the printer begins 1/2" from the left-hand margin on the paper.
That is, position zero

in 10-pitch begins printing at position 5 on the paper.

in 12-pitch, begins printing at position 6 on the paper.

in 15-pitch, begins printing at position 7 on the paper.

*2

To center margins on a page use the same formula that is used when working with a standard typewriter:

Width of paper in characters
- Number of characters per line
Excess margin characters

Excess margin characters / 2 = Desired left margin

Pitch

This setting determines the number of characters printed per inch. The default menu setting is 12 characters per inch. Other menu choices are ten and fifteen. The print wheel mounted on the printer unit should match the choice selected on the Print Document menu (i.e., print wheels are available in 10, 12, 15 pitch).

The length of the printer carriage is 11-inches. Therefore, the maximum right margin that can be printed with each of the pitch choices is as follows (these figures assume the left margin setting is 0):

10-pitch	110 characters
12-pitch	132 characters
15-pitch	165 characters

Lines/Inch

This setting determines the number of lines that are printed per vertical inch. The default menu setting is 6 lines per inch. Generally, 6 lines per inch is chosen when working with 10 or 12 pitch print wheels. The setting of 8 lines per inch is typically used when working with a 15-pitch print wheel. Because the characters on a 15-pitch print wheel are not only smaller horizontally, but also vertically, more lines of text can fit per printed vertical inch.

Eject

This setting determines the direction that the paper ejects when a page has either completed printing or when printing is terminated. The menu setting defaults to the Down direction. After printing stops, the pages are dropped into the paper bin located at the bottom of the printer console. The alternative setting is the Up direction when, after printing stops, the pages roll back to the top of the printer and rest on the paper guide.

Justification

This setting informs the printer whether to print the document with a ragged (None), Partial, or Completely justified right-hand margin. The menu setting defaults to None which means that the printed copy appears just as it did on the screen. Partial justification causes the printer to add enough space to even out the right-hand margin but does not make each line end exactly even. Fully justified text causes the printer to add enough spaces between words to make the right-hand margin flush right.

Page Width

This setting informs the printer (paper sensor) of the width of the paper that is being used. The Under six inches choice can generally be used for small and large index cards, envelopes, and labels. The Over six inches choice can generally be used for standard size paper, over sized paper and business envelopes.

CANCELLING A PRINT REQUEST

Purpose: To terminate the printing of a document that has been sent to the printer.

Sequence

1. Position the Acceptance Block at "Cancel Print Request" on the Special Print Functions menu and press EXECUTE.
2. To exit the Special Print Functions menu press CANCEL.

Results

The message "Print Request Canceled" displays in the message line.

The current print request will automatically cancel and the sheet of paper currently in the printer automatically ejects.

The Start-up menu displays on the screen.

HOT PRINT

Printing a Document Page While Displayed on the Screen

Purpose: To print a page or part of a page while it is displayed on the screen.

Sequence

1. With the page displayed on the screen, position the cursor under the first character where printing is to begin.
2. Press the BLANK key.
3. Highlight the text to be hot printed.
4. Press EXECUTE.
5. Modify the Print Document menu fields.
6. Press EXECUTE.
7. Insert a sheet of paper in the printer by pulling the paper release lever forward.
8. Select the printer by pressing the SELECT switch on the printer control panel.
9. Resume editing the same page or another page of the document that is printing or any other document.

Results

The prompt "Hot Print what?" displays in the System Status Line.

*1 *2

The Print Document menu displays on the screen. *3

The document page redisplays on the screen.

The CHANGE PAPER indicator light illuminates.

The CHANGE PAPER indicator light extinguishes.

*4

The page begins printing from the first highlighted character.

*5

Printing a Document Page While Displayed on the Screen (Continued)

*1

Text cannot be highlighted beyond a page boundary (i.e. beyond the text end graphic.)

*2

The Hot Print activity may be canceled at any time before EXECUTE is pressed by pressing the CANCEL key.

*3

The From Page field and the Thru Page field have been replaced by one field -- Starting as Line: ## -- in the Hot Print Document menu. Enter the line number on which the text should begin printing.

*4

All buttons and switches (i.e. SELECT, ROLL UP, ROLL DOWN, LINE UP, LINE DOWN) work the same as under the normal print activity.

*5

The Hot Print activity may be canceled after EXECUTE is pressed by selecting "Cancel Print Request" from the Special Print Functions menu.

TROUBLE SHOOTING

Purpose: To correct an error that might occur when printing a document.

<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Disk Error, Print Cancelled"	a disk error has occurred when the system was reading the document from the archive minidiskette for printing.	Cancel the print request and send the document to the printer again.
"Drive dropped ready"	the minidiskette drive door has been opened while text was being read from or written to a minidiskette.	Close the door and try the activity again. If the message occurs when the minidiskette drive door has <u>not</u> been opened, call your Wang Customer Engineer.
"Drive malfunction"	there has been a temporary hardware error of unde- termined status.	Try the prior activity again. If the error occurs again call your Wang Customer Engineer.
"File not open"		Note the circumstances that caused this error to appear and contact the Wang Technical Support Center at 1-800-225-0979.
"Finish Hot Print"	another operation has been used while highlighting hot printed text.	Complete or Cancel the Hot Print operation before using another operation.
"Illegal carriage position"		Try the last activity again. If the message occurs again call your Wang Customer Engineer.

Trouble Shooting (Continued)

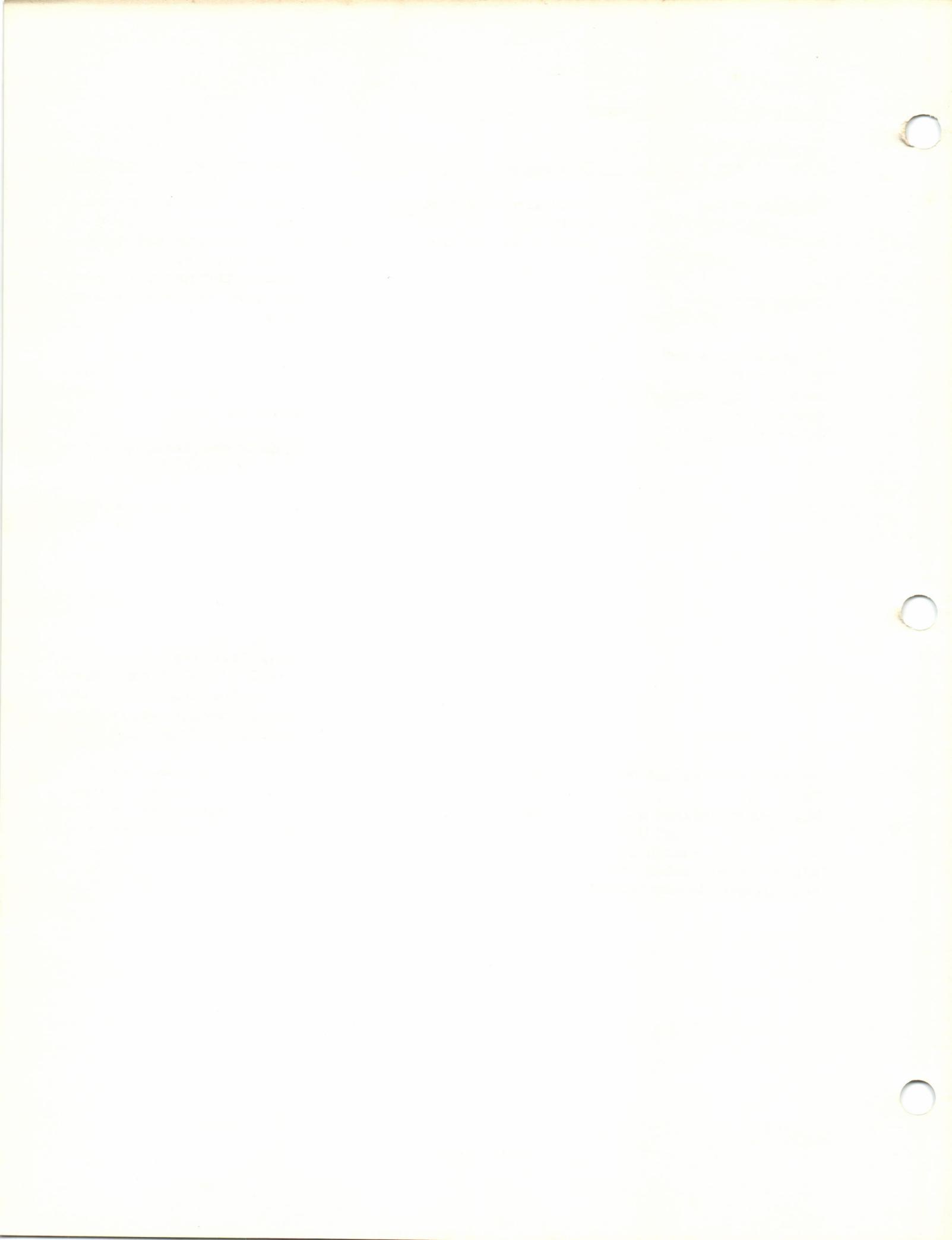
<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Illegal Page Width"	you have attempted to print a page beyond the physical boundaries of the printer carriage (i.e. 11".)	Reevaluate the length of the line you are attempting to print -- (Length of Format Line + Left Margin setting.) Check to see that the number of characters per line does <u>not</u> exceed the maximum number of characters permitted in the selected pitch.
		Cancel the print request by selecting the "Cancel Print Request Activity" from the Special Print Functions menu.
		Send the document to the printer again with either a shorter Format Line (less characters per line) or a smaller left-hand margin.
"Invalid Daisy Position"	The daisy printwheel has misaligned while a document is printing.	Check the last line of printed text.
		If it appears as garbled text deselect the printer, press the TOP OF FORM switch, insert a new sheet of paper and select the printer again.
		If the last line of text appears correctly, deselect and then select it again. The printer will continue printing the page.
"Invalid from page number"	a page number larger than the last page number of a document has been entered in the From Page field in the Print Document menu.	Press CANCEL to leave the Print Document menu. View either the document or the Document Index to find the last page number of the document.

Trouble Shooting (Continued)

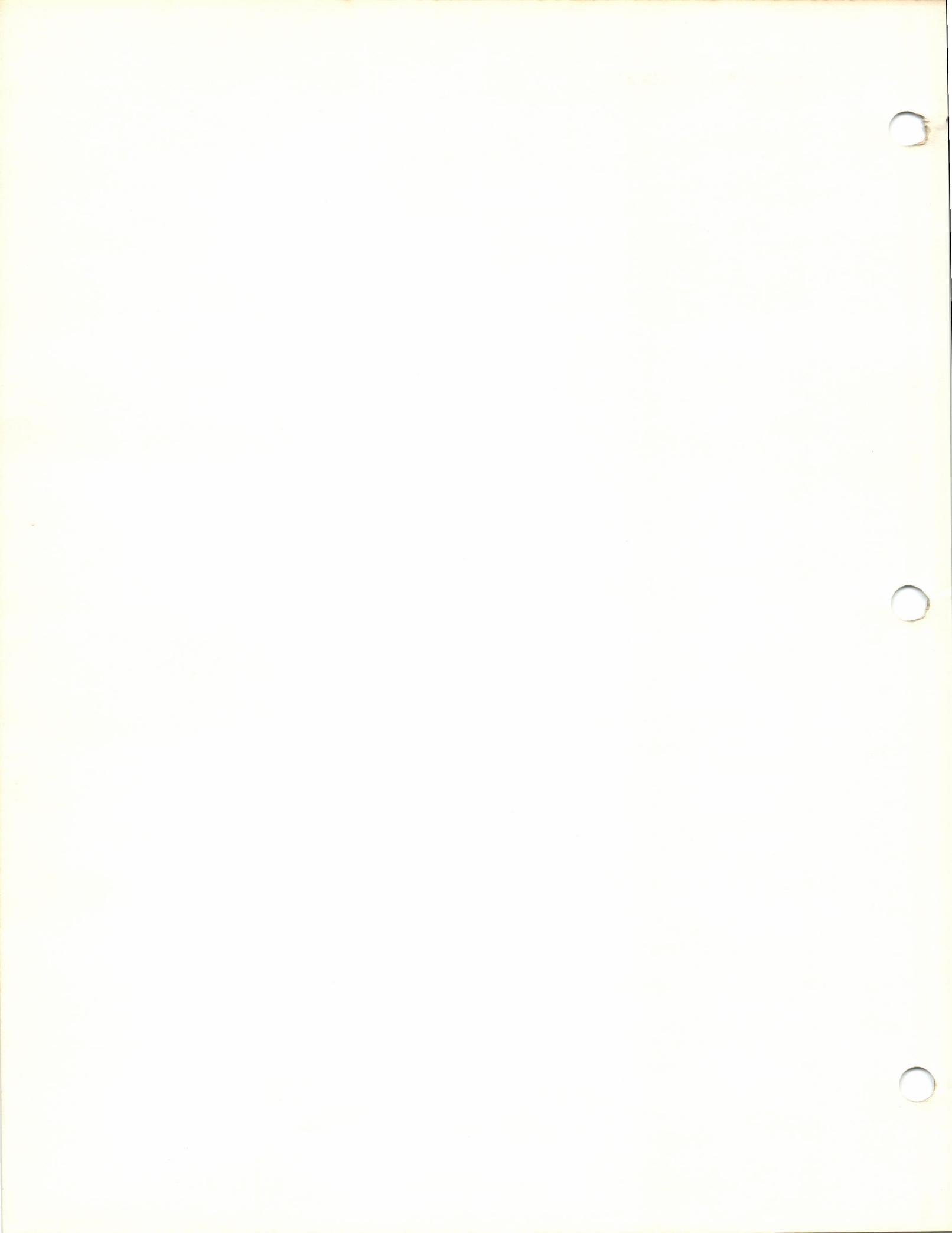
<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Invalid left margin"	A number greater than 255 has been entered in the Left Margin field in the Print Document menu.	Cancel the print request. Send the document to the printer again making sure to change the Left Margin field to a number less than 256.
"Invalid number of originals"	the number 0 has been entered in the Number of Originals field in the Print Document menu.	Cancel the print request. Send the document to the printer again making sure to change the Number of Originals field to a number greater than 0.
"Invalid page length"	A number greater than 255 has been entered in the Page Length field in the Print Document menu.	Cancel the print request. Send the document to the printer again making sure to change the Page Length field to a number less than 256.
"Invalid Page Range"	the From Page field and the Thru Page field have been entered incorrectly or in an illogical sequence.	Check to see that the numbers have been entered correctly, in an ascending sequence.
"Invalid thru page number"	a page number larger than the last page number of a document has been entered in the Thru Page field in the Print Document menu.	Press CANCEL to leave the Print Document menu. View either the document or the Document Index to find the last page number of the document.
"No print request"	the "Cancel Print Request" activity has been selected and a document was not printing.	
"Printer Cover Open"	the printer cover has been raised after a document has been sent to the printer.	Close the printer cover press CANCEL, and select the printer to resume printing the document.

Trouble Shooting (Continued)

If the screen appears:	This means:	Take the following action.
"Printer in use"	a document has been sent to the printer while another was already printing.	Wait until the document has finished printing and then send the next document; or, cancel the print request and send the new document to the printer.
"Programming error" "Invalid FRN" "Invalid Page number" "Queue overflow" "Queue underflow"		If text is currently displayed on the screen attempt to return to the Start-up menu.
		Remove the archive minidiskette.
		Turn the system off and reset the system by performing the System Start-up procedures.
		Try the prior activity again. If the message occurs again, call the Wang Technical Center at 1-800-225-0979 and report the situation. Note the circumstances leading up to the error.
"Daisy Sensor Failed On" "Daisy Sensor Failed Off" "Left Sensor Failed On" "Left Sensor Failed Off" "Right Sensor Failed On" "Right Sensor Failed Off" "Both Margin Sensor Failed"	a possible hardware error has been determined.	Try the last activity again. If this message occurs again call your Wang Customer Engineer.



MINIDISKETTE MAINTENANCE



PREPARING AN ARCHIVE MINIDISKETTE

Purpose: To prepare a new archive minidiskette so that text can be stored or to prepare a minidiskette for reuse after the documents are no longer needed.

Sequence

1. Cover the write/protect slot with a write/protect tab.
2. Insert the archive minidiskette in the minidiskette drive.
3. Position the Acceptance Block at "Utilities" on the Start-up menu and press EXECUTE.
4. Position the Acceptance Block at "Prepare Archive Disk" on the Document Utilities menu and press EXECUTE.
5. Enter an 8 character/digit minidiskette name and press EXECUTE.
6. Press EXECUTE.
7. Press EXECUTE.

Notes

An archive minidiskette cannot be prepared unless the write/protect slot is covered.

The Document Utilities menu displays on the screen.

The prompt "Enter Disk Name: _____" displays on the screen.

*1

The prompt "Press EXECUTE when Archive disk is in drive displays in the message line.

The message "Existing documents will be lost. Press EXECUTE to continue" displays in the message line. *2

The message "(Formatting)" displays in the message line.

The message "Initialization done" displays in the message line.

Preparing an Archive Minidiskette (Continued)

8. Press CANCEL.

The Document Utilities menu displays on the screen.

9. Press CANCEL to exit the Utilities menu

The Start-up menu displays on the screen.

*1

A minidiskette name can be from 1 - 8 characters and have any combination of letters and/or numbers; spaces or punctuation cannot be used.

*2

This is a built-in safety factor ensuring that you do not prepare an archive minidiskette in error. You may choose to cancel the operation.

DELETING A DOCUMENT

Purpose: To delete a document from an archive minidiskette.

Sequence

1. Position the Acceptance Block at "Utilities" on the Start-up menu and press EXECUTE.
2. Position the Acceptance Block at "Delete Document" on the Document Utilities menu and press EXECUTE.
3. Enter the name of the document to be deleted.
4. Press EXECUTE.
5. Press CANCEL to exit the Document Utilities menu.

Notes

The Document Utilities menu displays on the screen.

The prompt "Enter Document Name _____" displays on the screen.

The prompt "Press EXECUTE to begin delete" displays in the top left-hand corner of the screen. *1

The message "Document deleted" displays in the message line.

*2

The Start-up menu displays on the screen.

*1

This is a built-in safety factor to ensure that you do not delete a document in error. Check to see that the correct document name is entered, if not enter the correct document name.

*2

A document cannot be deleted from a write protected archive minidiskette. If you attempt to delete a write protected document, the system will appear to have accomplished the delete procedure and the message "document deleted" will display in the message line, however, the document remains on the archive minidiskette unharmed.

COPYING A DOCUMENT

Copying a Document to Another Archive Minidiskette

Purpose: To copy a document from one archive minidiskette to another archive minidiskette.

Sequence

1. Position the Acceptance Block at "Utilities" on the Start-up menu and press EXECUTE.
2. Position the Acceptance Block at "Copy Document" on the Document Utilities menu and press EXECUTE.
3. Insert the archive minidiskette from which the document is to be copied and press EXECUTE.
4. To view the Document Index of the archive minidiskette in the minidiskette drive, position the Acceptance Block at "display index of this disk" and press EXECUTE.
5. Press CANCEL to exit the Document Index.
6. If an incorrect archive minidiskette was inserted, position the Acceptance Block at "Copy document from another disk" and press EXECUTE.
7. Remove the archive minidiskette and insert the correct archive minidiskette and press EXECUTE.
8. To begin copying the document position the Acceptance Block at "Copy document from this disk" and press EXECUTE.

Notes

The Document Utilities menu displays on the screen.

The Document Copy Utility menu displays on the screen.

The Document Index displays on the screen.

The Document Copy Utility menu displays on the screen.

The message "Press EXECUTE when Archive disk is in drive" displays in the message line.

The Document Copy Utility menu displays on the screen.

The prompt "Enter Document Name: _____" displays on the screen.

Copying a Document to Another Archive Minidiskette (Continued)

9. Enter the exact document name of the document to be copied and press EXECUTE.
The message "(Reading Document)" displays in the message line.
10. Position the Acceptance Block at "Copy document to another disk" and press EXECUTE.
The Document Copy Utility menu displays on the screen.
11. Remove the archive minidiskette from the minidiskette drive and insert the archive minidiskette to which the document is to be copied and press EXECUTE.
The prompt "Press EXECUTE when Archive disk is in drive" displays in the message line.
12. Position the Acceptance Block at "Copy document to this disk" and press EXECUTE.
The Document Copy Utility menu displays on the screen.
13. Enter either a new document name or keep the same document name.
The prompt "Enter Document Name: _____" displays on the screen.
14. Press EXECUTE.
*1
15. a. Press EXECUTE to begin copy activity again.
b. Press CANCEL to terminate the copying activity.
The message "(Copying Document)" displays on the message line.
The message "Document copy complete" displays in the message line.
The prompt "Press EXECUTE to continue -- CANCEL to terminate" displays in the upper right-hand corner of the screen.
The Document Copy Utility menu displays.
- Remove the archive minidiskette from the minidiskette drive, insert a system minidiskette in the minidiskette drive and press EXECUTE.
The prompt "Insert SYSTEM disk and press EXECUTE" displays in the message line.
The message "Please wait for menu" displays in the message line.
The Start-up menu displays on the screen.

Copying a Document to Another Archive Minidiskette (Continued)

*1

Since the document is going to a different archive minidiskette, the document name can remain the same. It can, however, be changed to reflect the fact that it is a copy of an existing document.

In either case, if the name assigned to the copy already exists on the destination disk the message "Document exists" displays in the message line and the prompt "Press EXECUTE to re-create -- CANCEL to choose another name" displays in the top right-hand corner.

If EXECUTE is pressed, the destination document is updated to the source document (i.e. if the documents differ before the copy, they will be identical after the copy).

If CANCEL is pressed, you then have the option of entering a name different than all names existing on the destination disk (you may view the document index.)

Copying a Document to the Same Archive Minidiskette

Purpose: To make an additional copy of a document on the same archive minidiskette.

Sequence

1. Complete steps 1 - 9 under "Copying a Document to Another Archive Minidiskette."
2. Position the Acceptance Block at "Copy document to this disk" and press EXECUTE.
3. Enter a document name that is different from all other document names on that archive minidiskette and press EXECUTE.
4. a. Press EXECUTE to begin copy activity again.
b. Press CANCEL to terminate the copying activity.

Remove the archive minidiskette from the minidiskette drive, insert a System minidiskette in the minidiskette drive and press EXECUTE.

Notes

The message "Enter Document Name: _____" displays in the lower center portion of the screen.

*1

The message "(Copying Document)" displays in the message line.

The message "Document copy complete" displays in the message line.

The prompt "Press EXECUTE to continue -- CANCEL to terminate" displays in the upper right-hand corner of the screen.

The Document Copy Utility menu displays.

The message "Insert SYSTEM disk and press EXECUTE" displays in the message line.

The message "Please wait for menu" displays in the message line.

The Start-up menu displays on the screen.

Copying a Document to the Same Archive Minidiskette (Continued)

*1

If the same name is entered, the prompt "Press EXECUTE to re-create -- CANCEL to enter a new name" displays in the top right-hand corner of the screen.

If EXECUTE is pressed, the system writes the copy of the document over the same copy (the document remains in only one place on the disk.)

If CANCEL is pressed, a new document name can be entered that is different from all other document names on that archive minidiskette (you may view the document index.)

DOCUMENT INDEX

(a)

Index of Archive Disk: XXXXXXXX

Press CANCEL to Exit

(b)	(c)	(d)
Name	CL	PG

XXXXXXX	D	##
XXXXXXX	G	##

(e)

page(s) available on disk

- a. Index of Archive Disk: XXXXXXXX -- specifies the name of the archive minidiskette currently in the minidiskette drive.
- b. Name -- specifies the document names on the archive minidiskette, in alphabetical order *1.
- c. CL -- specifies the class of a document, that is, whether the document is of a document classification (D) or of a glossary classification (G.)
- d. PG -- specifies the number of pages contained in each document.
- e. ## page(s) available on disk -- specifies the number of pages, of the 75 pages available, that remain for use on the archive minidiskette.

*1

All document names beginning with an uppercase letter are listed first, alphabetically, in ascending order and are followed by all document names beginning with a lowercase letter, listed alphabetically, in ascending order.

Generating an Index of an Archive Minidiskette

Purpose: To view the Document Index of an archive minidiskette.

Sequence

1. Position the Acceptance Block next to "Document Index" on the Start-up menu.
2. Press EXECUTE.

Notes

The Document Index displays on the screen.

TROUBLE SHOOTING

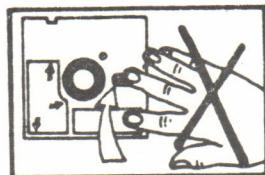
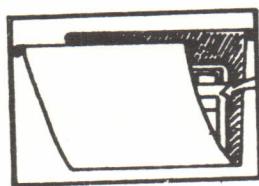
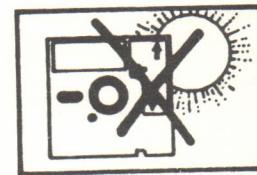
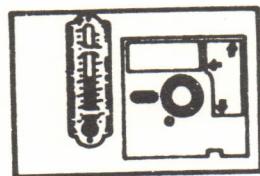
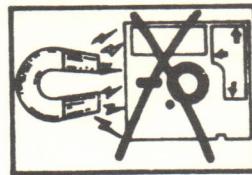
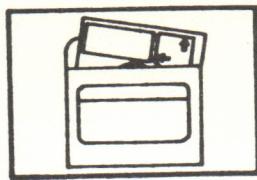
Purpose To correct an error that might occur when copying or deleting a document; or when preparing a new archive minidiskette.

<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Disk format error"	you have attempted to copy a document onto an unprepared archive minidiskette.	Cancel the copy activity and prepare the archive minidiskette.
"Document exists"	the name selected for a document during the copy operation already exists on that archive minidiskette.	View the Document Index to select a document name that is different from all other document names on that archive minidiskette.
"Document in use"	-- a document copy or delete operation has been performed on a document that was sent to the printer. -- the Prepare Archive disk activity has been performed on a document that was sent to the printer.	Either cancel the print request or wait until the document is finished printing before beginning the next activity.
"Document not found"	a document name has been entered incorrectly or the incorrect archive minidiskette has been inserted during the document copy or delete operations.	Either cancel the print request or wait until the document is finished printing before beginning the next activity.
"Execute or Cancel"	a key other than EXECUTE or CANCEL has been pressed at a time when the only keys that can be pressed are the EXECUTE or CANCEL key.	Press either the CANCEL or EXECUTE key, which ever is applicable to the desired action.
"Invalid Class"	Programming error.	Turn the Wangwriter off. Reset the system by performing the basic System Start-up procedures.
		Try the last activity again.

Trouble Shooting (Continued)

<u>If the screen appears:</u>	<u>This means:</u>	<u>Take the following action.</u>
"Invalid name"	a space or punctuation mark has been entered in a minidiskette name.	Remove the space(s) or punctuation mark(s).
"No room on diskette" --	you have attempted to copy a document onto an archive minidiskette that is full.	Remove that archive minidiskette and insert a different archive minidiskette.
"Not an Archive disk"	a system minidiskette was inserted during a copy or delete document operation.	Remove the system minidiskette, insert an archive minidiskette and press EXECUTE.
"Not a System disk"	you have attempted to return to the Start-up menu after copying a document without reinserting the System minidiskette (as prompt requested.)	Insert a system minidiskette and press EXECUTE.
"Page lost -- deleted"	there was a disk error encountered when writing a document page to the archive minidiskette -- therefore, the page has been deleted.	Edit the document and retype the information onto the deleted page.
"Write protected"	a document is being copied to an archive minidiskette that is write protected (the write/protect slot is <u>not</u> covered with a write/protect tab.)	Cancel the copy activity and either remove the archive minidiskette and cover the write protect slot with a write protect tab or, insert a different archive minidiskette.

EQUIPMENT MAINTENANCE



EQUIPMENT SAFEGUARDS

If your work area does not have static-free carpeting, spray the carpet around the Wangwriter periodically with an antistatic spray. Static charges can interfere with the electronic operation of the Wangwriter and cause system failure.

Keep liquids and foods away from the Wangwriter. Spilled liquids can cause short circuits and serious damage to the Wangwriter's internal electronics.

Keep fingers, hair, and jewelry away from the printer unit when it is printing. The printer moves quite fast. If fingers, hair, or jewelry gets caught in the mechanism, there could be serious damage to you, the jewelry, and the printer.

Do not plug other equipment into outlets used by the Wangwriter, even if an outlet is available. It does affect the electric current delivered to the Wangwriter, and may cause operating problems.

Do not use alcohol to clean the platen or feed rollers. Use platen cleaner.

Do not use platen cleaner to clean plastic parts. Clean plastics with alcohol.

Under normal operating conditions, the print wheel does not need to be cleaned. If necessary, clean the print wheel with alcohol.

DO'S and DONT'S OF MINIDISKETTE CARE AND HANDLING

Do return minidiskettes to the dust jacket when not in use.

Do not store minidiskettes near a magnetic field.

Do store minidiskettes in an environment between 50 F and 125 F, with a relative humidity between 8% and 80%.

Do not expose minidiskettes to sunlight.

Do store minidiskettes in pendafile or plastic file holders in an upright position. They must be supported so they do not slump, bend, or develop permanent disfiguration.

Do not toss minidiskettes in a desk drawer or leave them lying around on a desk. Dirt, dust, and environmental contaminants are likely to create problems.

Do write on the identification label before applying it to the minidiskette.

Do not let the adhesive of the labels touch the exposed inner disk.

Do use Felt tip pen if you must write on the label after it is on the minidiskette. Ball point pen or pencil pressure may damage minidiskettes.

Do not place any objects on top of minidiskettes.

Do not touch exposed areas of minidiskettes. Natural oils on hands (or added ones, such as hand lotions) may harm minidiskettes.

Do not try to clean minidiskettes with erasers or liquid solutions.

Do not insert a minidiskette you know is damaged in the drive. It could affect the mechanism that reads and writes text, much as a stereo needle can be ruined by playing damaged records.

Do not attach anything to minidiskettes -- such as paper clips.

PARTS OF A MINI-DISKETTE

1. Paper dust cover (to be removed)
2. Identification label
3. Protective black covering (not to be removed)
4. Magnetic minidiskette
5. Write/Protect Slot
6. Read/write access slot

1. Paper dust cover

The paper dust cover is provided to protect the minidiskette from dust, dirt, and scratches. The minidiskette should be removed from the paper cover before being inserted in the minidiskette drive and stored in this cover when not in use.

2. Identification label

A supply of paper labels is enclosed in each box of minidiskettes so that the contents of a minidiskette can be labeled for fast and easy identification. You may choose to indicate any important information about a minidiskette such as the minidiskette name assigned during preparation, the date you began using the minidiskette, or the document names that have been stored on a minidiskette.

3. Protective black covering

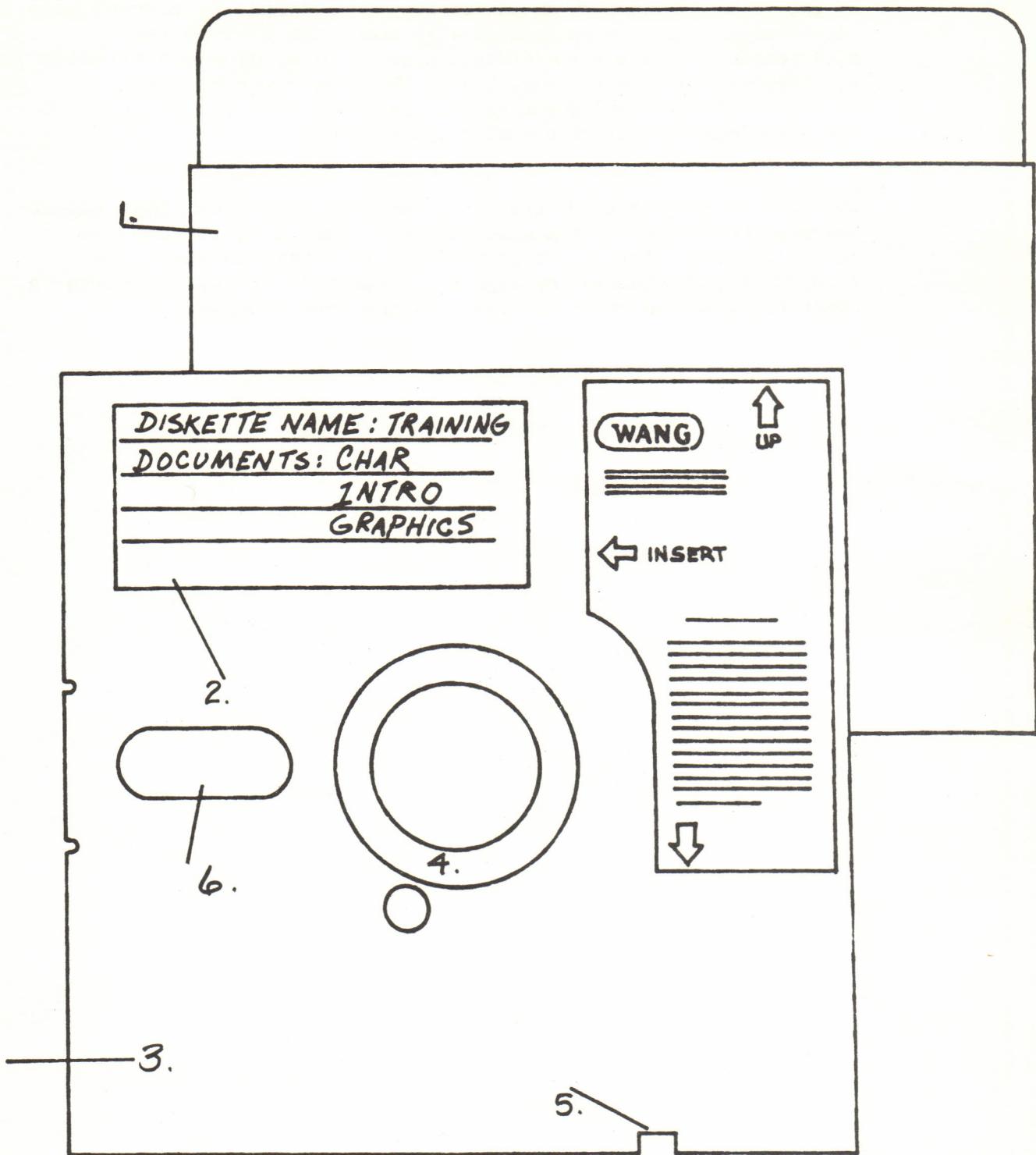
Substances such as surface dirt, hand cream, dust and sharp surfaces can be damaging to a minidiskette. The heavy protective black covering prevents the magnetic portion of the minidiskette from being damaged during routine handling.

4. Magnetic minidiskette

The magnetic portion of the diskette is where the text is actually stored. It looks much like a stereo record that is floppy. This portion of the minidiskette is very vulnerable to damage and should never be touched.

5. Write/Protect slot

The Write/Protect slot is the small notched area of the minidiskette that is used to tell the Wangwriter whether or not to store the information on the minidiskette. The Write/Protect slot provides a means of protecting stored text from being altered.



PARTS OF A MINI-DISKETTE (Continued)

If the Write/Protect slot on an archive minidiskette is covered with a Write/Protect tab, the Wangwriter will store the text on the minidiskette. If the Write/Protect slot of an archive minidiskette is not covered with a Write/Protect tab, the Wangwriter will not store text on the minidiskette and the text will be lost. You should never cover the Write/Protect slot of a system minidiskette.

6. Recording slot

The heavy black protective lining has an oval shaped cut that exposes the magnetic surface of the minidiskette. This area is known as the recording slot. This is the part of the minidiskette where the read/write head accesses the magnetic portion of the minidiskette in order to store text on it or read existing text from it.

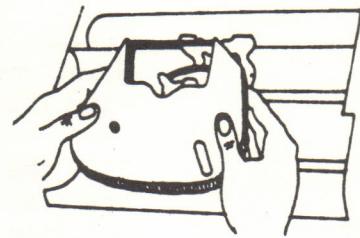
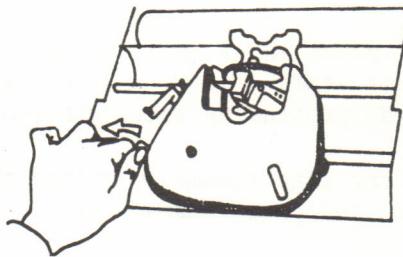
CHANGING A PRINTWHEEL

1. Move the inner carriage assembly to the center of the printer console by pushing the entire assembly to the right.
2. Tilt the inner carriage assembly away from the platten by grasping the print hammer and pulling the entire mechanism toward the front of the printer console.
3. Remove the print wheel by grasping the rubber hub and gently pulling the print wheel upwards and away from the printer.
4. Install the new print wheel by pushing it firmly onto the end of the print wheel motor shaft. Be sure the alignment slot on the printwheel fits into the tab protruding from the shaft hub.
5. Tilt the inner carriage assembly toward the back of the printer console and push down on the print hammer until it clicks into operating position.
6. Select the printer by pressing the SELECT switch on the printer control panel. The red indicator light on the SELECT switch illuminates.

! PICTURE !				
! 1 !	! 2 !	! 3 !	! 4 !	! 5 !
!	!	!	!	!
! PICTURE !				
! 6 !				
!	!			

REMOVING A RIBBON CARTRIDGE

1. Push Lever B toward the back of the printer console until it clicks securely open.
2. Press firmly downward and toward the left on Lever A until the ribbon cartridge releases.
3. Remove the used ribbon cartridge by gently pulling it up and out.



INSTALLING A RIBBON CARTRIDGE

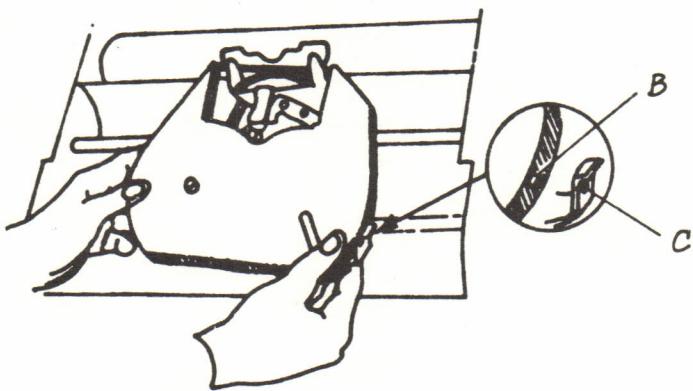
1. Remove the ribbon slack by turning the ribbon take up knob in the direction of the arrow. *1
2. Lower the right-hand side of the ribbon cartridge and insert the right-hand cartridge release tab into the right-hand release hatch.
3. Lower the ribbon cartridge into place while guiding the ribbon over the ribbon guide posts.
4. Press firmly on the left-hand side of the ribbon until the left-hand release hatch snaps into place.
5. Push Lever A toward the back of the printer console until Lever B snaps into place.

*1

Once the ribbon is installed in the printer, the ribbon slack cannot be tightened unless Lever B is open.



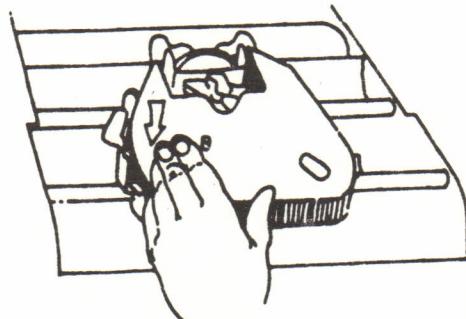
1.



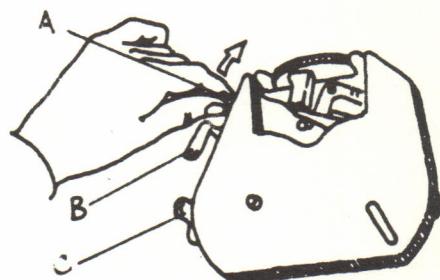
2.



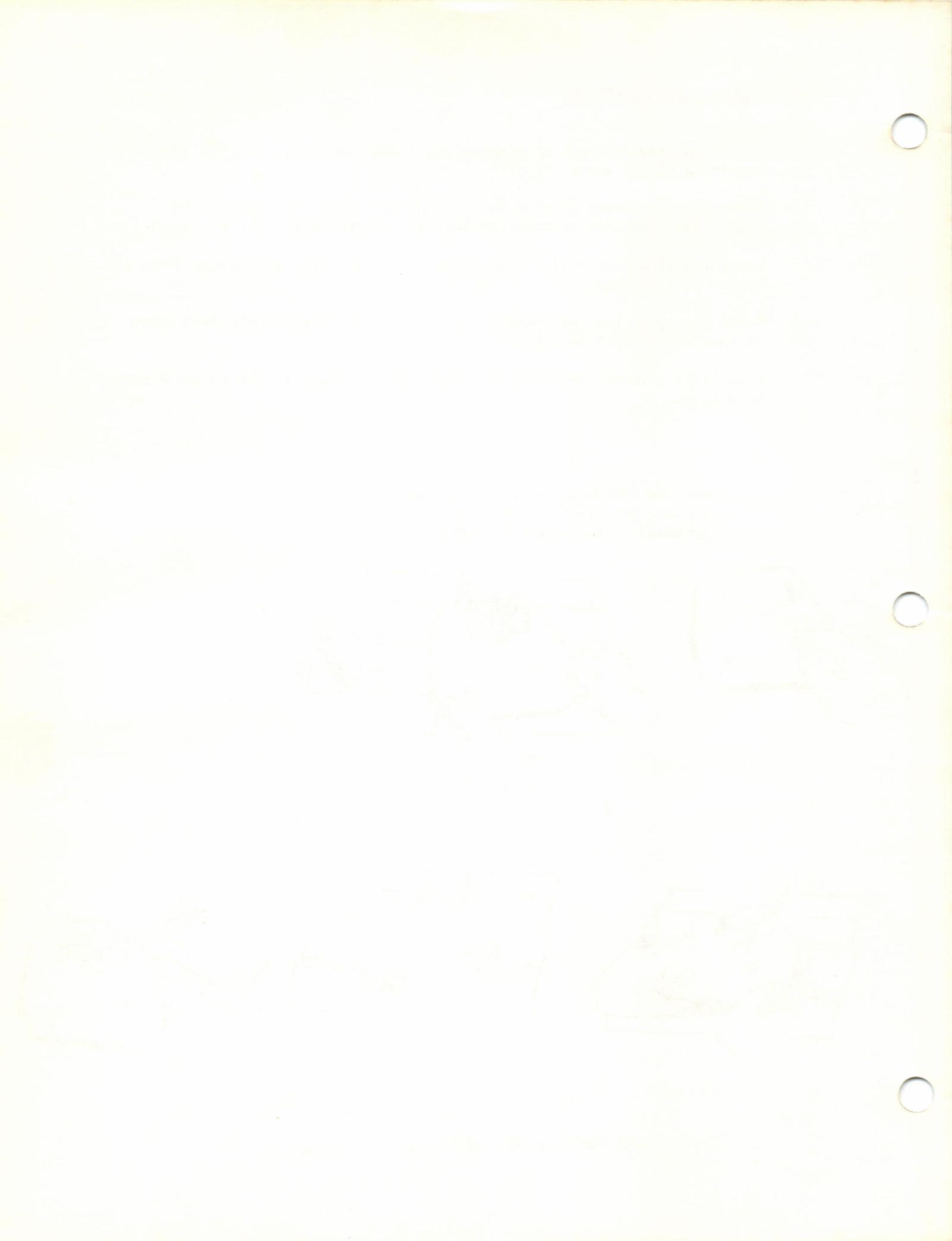
3.



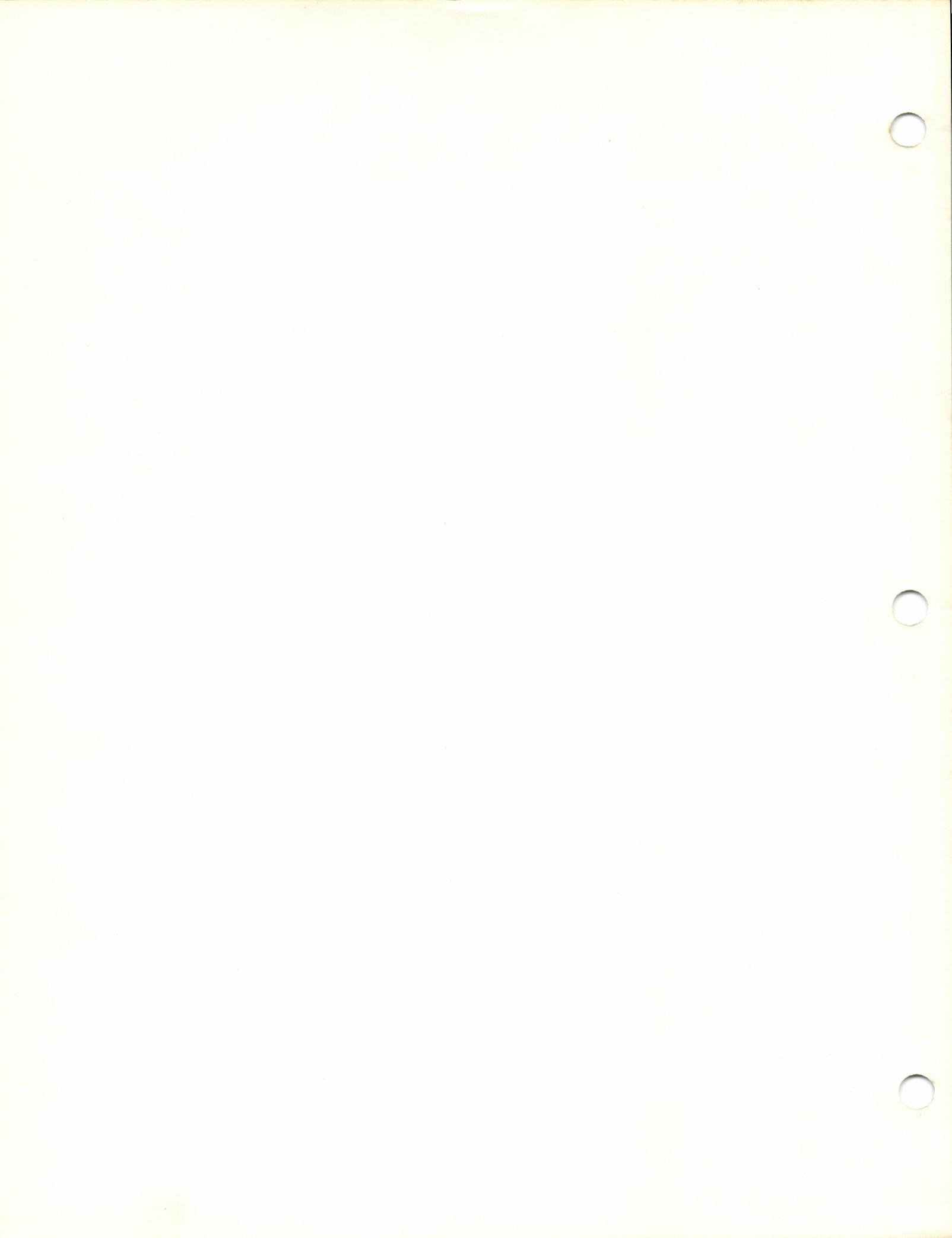
4.



5.



Appendix A is not available for Interim version.



APPENDIX B

WANGWRITER ERROR MESSAGES

Error Message	Section	Page Number
blank screen	System Start-up Procedures	Page 7
Both Margin Sensor Failed	Print	Page 17
Character Limit Exceeded	Format Edit	Page 23 Page 16
Daisy Sensor Failed Off	Print	Page 17
Daisy Sensor Failed On	Print	Page 17
Disk Error Print Cancelled	Print	Page 14
Disk format error	Minidiskette Maintenance	Page 11
Document exists	Start-up Menu Minidiskette Maintenance	Page 4 Page 11
Document in use	Start-up Menu Edit Minidiskette Maintenance	Page 4 Page 16 Page 11
Document not found	Start-up Menu Minidiskette Maintenance	Page 4 Page 11
Document(s) still in use	System Start-up Procedures	Page 7
Drive dropped ready	Print	Page 14
Drive malfunction	Print	Page 14
Drive not ready	System Start-up Procedures Start-up Menu	Page 7 Page 4
Execute or Cancel	Start-up Menu Minidiskette Maintenance	Page 4 Page 11
File not open	Print	Page 14

Finish Copy	Edit	Page 16
Finish Delete	Edit	Page 16
Finish Hot Print	Print	Page 14
Finish Insert	Edit	Page 16
Finish Move	Edit	Page 16
Illegal Page Width	Print	Page 15
Illegal carriage position	Print	Page 14
Invalid Class	Minidiskette Maintenance	Page 11
Invalid Daisy Position	Print	Page 15
Invalid FRN	Print	Page 17
Invalid keystroke	Format Locate Edit	Page 23 Page 4 Page 16
Invalid Page Range	Print	Page 16
Invalid Page number	Print	Page 17
Invalid from page number	Print	Page 15
Invalid left margin	Print	Page 16
Invalid name	Start-up Menu Minidiskette Maintenance	Page 4 Page 12
Invalid number of originals	Print	Page 16
Invalid page length	Print	Page 16
Invalid thru page number	Print	Page 16
Left Sensor Failed Off	Print	Page 17
Left Sensor Failed On	Print	Page 17
Line Limit Exceeded	Format Edit	Page 23 Page 17

Move cursor	Format Edit	Page 23 Page 17
No next screen	Locate	Page 4
No previous screen	Locate	Page 4
No print request	Print	Page 16
No room in catalog	Start-up Menu	Page 4
No room on diskette	Start-up Menu Minidiskette Maintenance	Page 5 Page 12
Not a System disk	Minidiskette Maintenance	Page 12
Not an Archive disk	Start-up Menu Minidiskette Maintenance	Page 5 Page 12
Option not available	Format Edit	Page 24 Page 17
Page lost -- deleted	Minidiskette Maintenance	Page 12
Printer Cover Open	Print	Page 16
Printer in use	Print	Page 17
Programming Error	Print	Page 17
Queue overflow	Print	Page 17
Queue underflow	Print	Page 17
Right Sensor Failed Off	Print	Page 17
Right Sensor Failed On	Print	Page 17
Too many pages	Format Edit	Page 24 Page 17
Unknown command	Format	Page 24
Write protected	Start-up Menu Edit Minidiskette Maintenance	Page 5 Page 17 Page 12

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700-6574A

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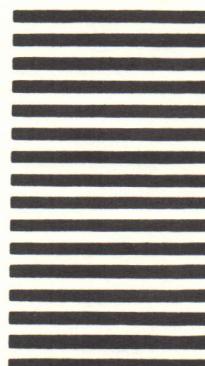
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	Tampa	Baton Rouge	St. Louis	Akron	Texas
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Sacramento		Massachusetts	Bloomfield	Oregon	Newport News
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San Francisco	Arlington Heights	Burlington	Edison	Portland	Richmond
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Vienna	Paris	West Germany	
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