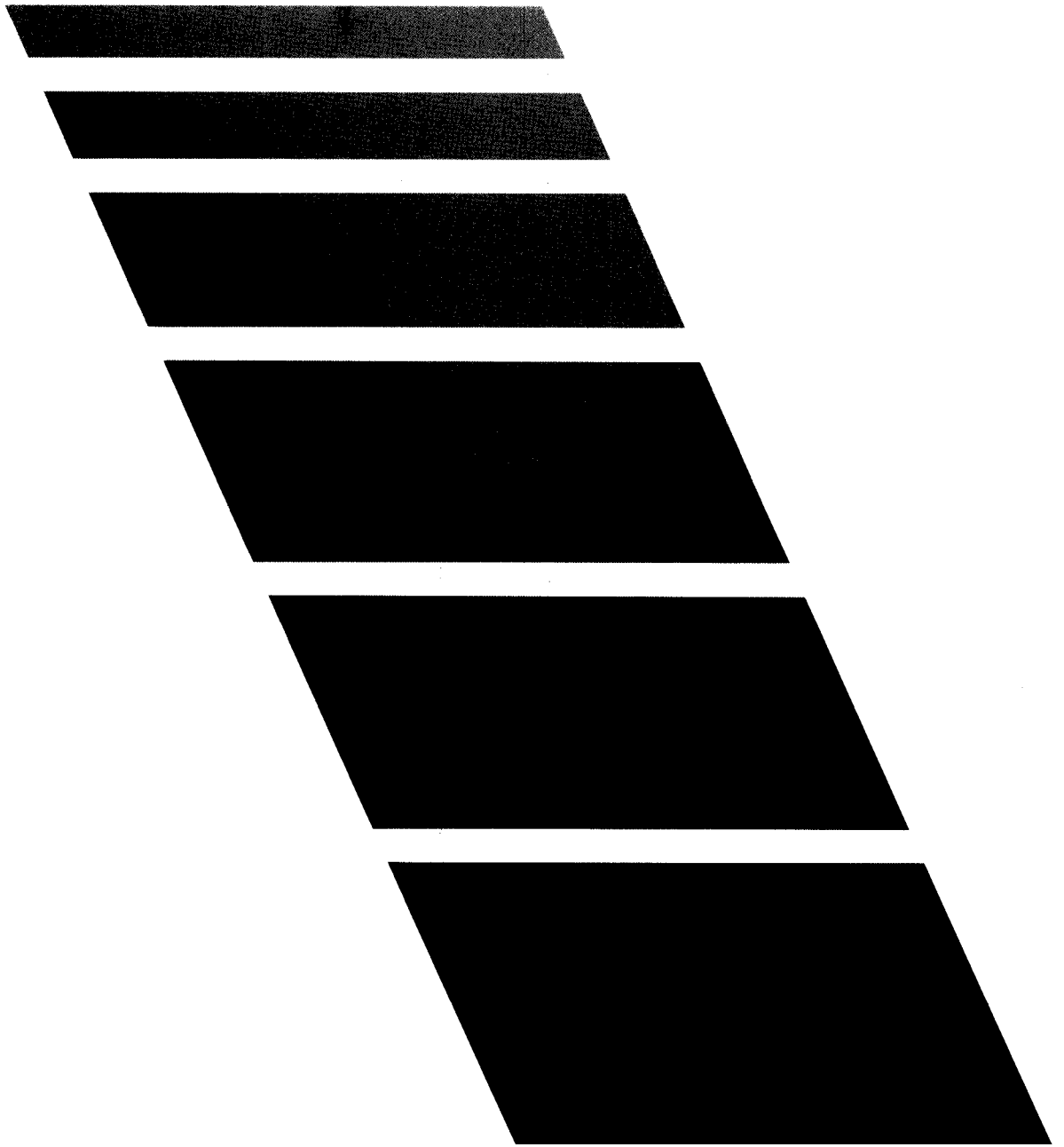


INSTRUCTION MANUAL

electronic typewriter



For USA only

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING:

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Use a shielded interface cable.

FCC	ID: DCS7C9AE830
MADE IN JAPAN	

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Your new Electronic Typewriter increases your typing efficiency through use of the most advanced technology. Some of the many outstanding features of your typewriter are:

- **16,000-character memory**
- **17.0 inch paper capacity**
- **40-character liquid crystal display**
- **Four modes:normal print/line print/justify print/store**
- **Easy-to-change 100-character printwheel**
- **Full page correction memory (500 characters max.)**
- **Pitch selector: 10, 12, 15 and proportional spacing**
- **Line space selector: 1, 1 1/2, 2 and 3 lines**
- **Programmable paper insert**
- **Paper clearance control**
- **Full electronic tabulation (30 positions resettable)**
- **Decimal/center/flush right tabulation**
- **Column layout**
- **Search and replace**
- **Block copy/move/delete**
- **Block print**
- **Automatic full page relocation**
- **Automatic centering**
- **Optional spell check**
- **Optional interface**

This manual describes your typewriter's functions, operating controls, procedures and replacement of its accessories. Thorough study of these instructions will facilitate and maximize the efficient use of your new electronic typewriter.

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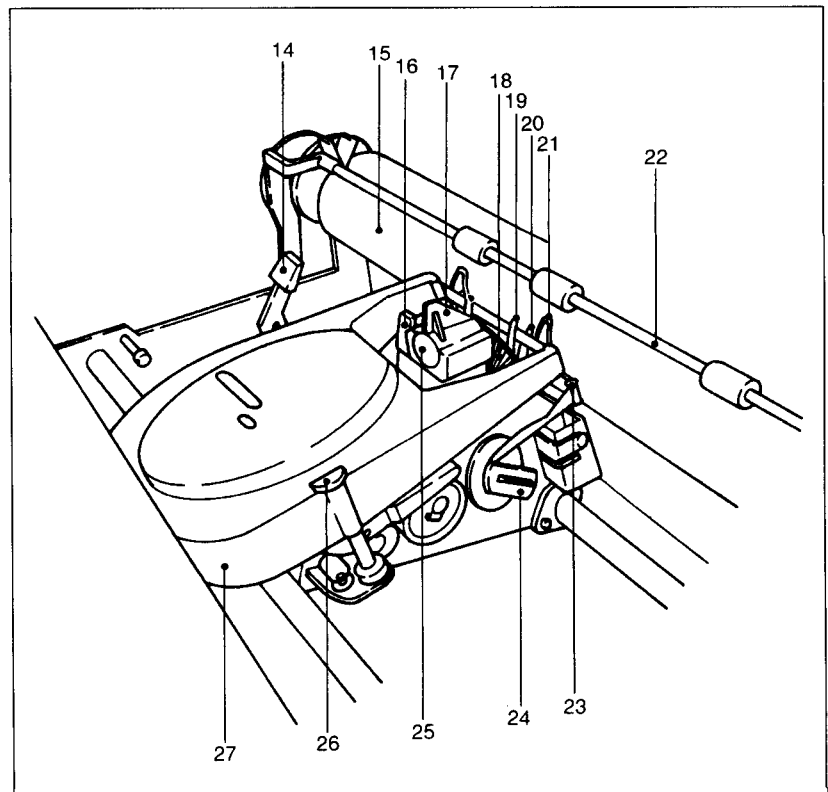
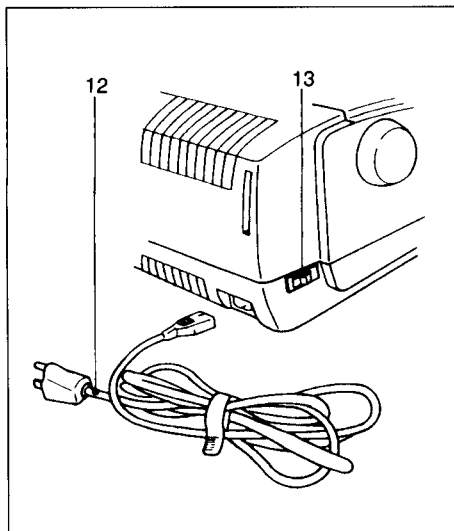
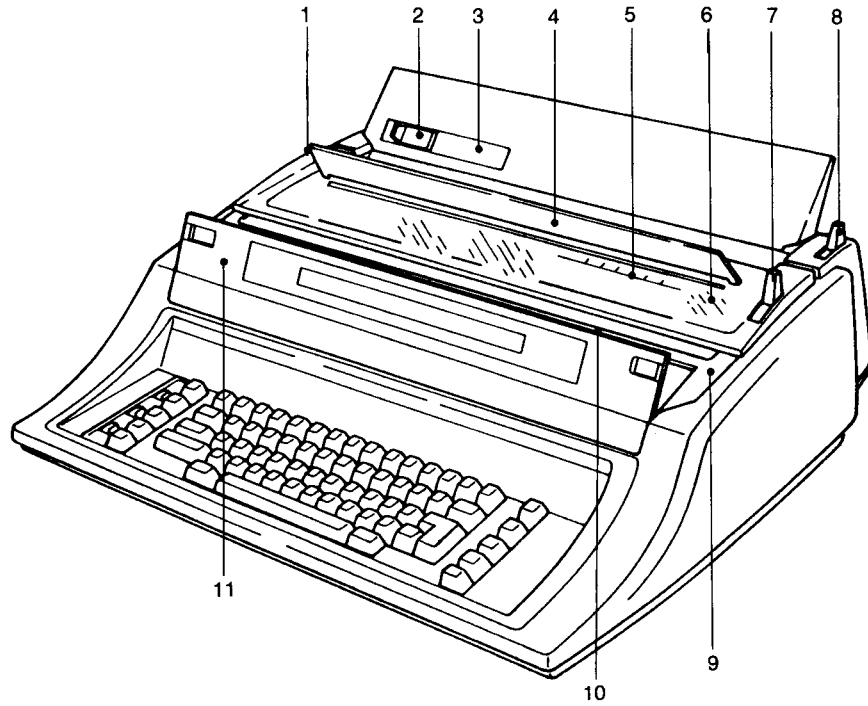
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RULES FOR SAFE OPERATION

- 1) Make sure you are using the proper power as stated on the name plate at the back of the typewriter.
- 2) Your typewriter is a highly sophisticated mechanism. Never attempt to repair it yourself. If repair becomes necessary, take it to the nearest authorized service center.
- 3) Never insert metal objects such as a screwdriver, paper clip, nail file, etc., inside the typewriter. This could cause damage to the typewriter and/or electrical shock.
- 4) Do not leave your typewriter unattended when it is turned on. Always turn off the typewriter when you have finished typing.
- 5) Be sure to turn off the typewriter when you need to open the top cover for changing accessories or removing platen.

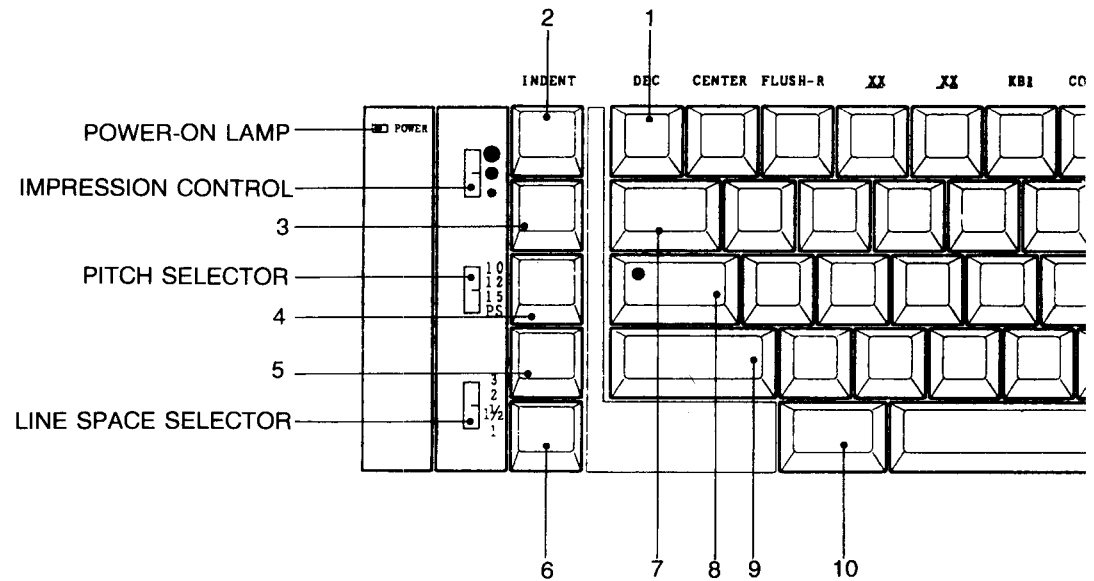
PART NAMES AND FUNCTIONS

1 Operating parts



1. **PLATEN KNOB**
Used to turn the platen.
2. **PAPER GUIDE**
Provides consistent placement of paper.
3. **PAPER SUPPORT PANEL**
Supports paper.
4. **GLARE SHIELD**
Blocks direct light from typing line.
5. **MARGIN SCALE**
Provides numerical indication of carrier position.
6. **NOISE COVER**
Buffers the sound of typing.
7. **PAPER BAIL LEVER**
Lifts the paper bail. Pulled to insert paper automatically.
8. **PAPER RELEASE LEVER**
Releases paper for alignment.
9. **TOP COVER**
Open to replace accessories.
10. **CONTRAST CONTROL**
Adjusts the contrast of display.
11. **TILT-UP DISPLAY**
Displays typed characters.
12. **POWER CORD**
13. **POWER SWITCH**
Turns power on and off.
14. **PAPER CLEARANCE CONTROL LEVER**
Adjusts the clearance between carrier and platen.
15. **PLATEN**
Rolls paper in and out.
16. **PRINTWHEEL SET/RELEASE LEVER**
Used for replacing printwheel.
17. **PRINT POINT INDICATOR**
Indicates print position.
18. **PRINTWHEEL**
19. **RIBBON GUIDE**
Guides ribbon.
20. **CORRECTION TAPE GUIDE**
Guides correction tape.
21. **CARD HOLDER**
Holds paper against the platen.
22. **PAPER BAIL**
Holds paper against the platen.
23. **GUIDE ROLLER**
Guides correction tape.
24. **CORRECTION TAPE**
25. **PRINT HEAD**
Strikes against printwheel.
26. **RIBBON TAKEUP KNOB**
Used to take up any slack in ribbon.
27. **RIBBON CASSETTE**

2 Key functions



1. MARGIN RELEASE KEY

Releases the margins to type beyond them or set new ones.

2. LEFT MARGIN KEY

Sets the left margin.

3. RIGHT MARGIN KEY

Sets the right margin.

4. TAB SET/CLEAR KEY

Sets/clears tabs.

5. MODE KEY

Changes the modes.

6. CODE KEY

Activates special functions in conjunction with other keys.

7. TAB/BACK TAB KEY

Moves carrier or cursor to a tab forward or backward.

8. SHIFT LOCK KEY

Locks the Shift key to type a series of capital letters. The red lamp on the key lights up when it's locked. Release it by touching either Shift key.

9./13. SHIFT KEY

Enables typing a capital letter or a symbol on the upper half of a key.

10. REPEAT KEY

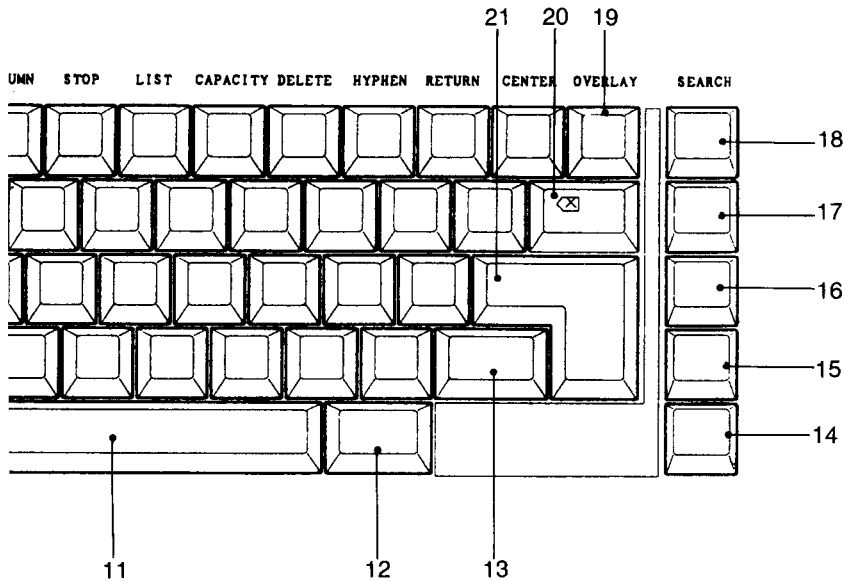
Repeats typing one character or such key functions as spacing and correction.

11. SPACE BAR

Moves carrier or cursor ahead one space. Hold it down for repeat spacing.

12. HALF SPACE KEY

Moves carrier one half space to the right.



14. PRINT KEY

Prints text on the display. Recalls (prints) a file stored in memory.

15. REVERSE INDEX KEY

Retracts paper downward by the half-line (1/12") without moving carrier. Hold it down to retract paper continuously.

16. INDEX KEY

Advances paper upward by the half-line (1/12") without moving carrier. Hold it down to advance paper continuously.

17. RELOCATION KEY

Moves carrier one space after the last character in page.
 Moves cursor next to the last character in line or file on the display.

18. EXPRESS KEY

Returns carrier to the left margin without line spacing.
 Moves cursor forward one space on the display. Hold it down for repeat spacing.

19. BACKSPACE KEY

Moves carrier or cursor backward one space. Hold it down for repeat backspacing.

20. CORRECTION KEY

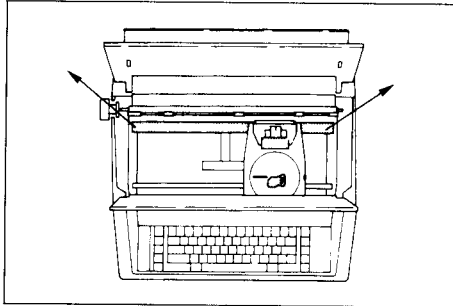
Corrects characters. Hold it down for repeat correction.

21. RETURN KEY

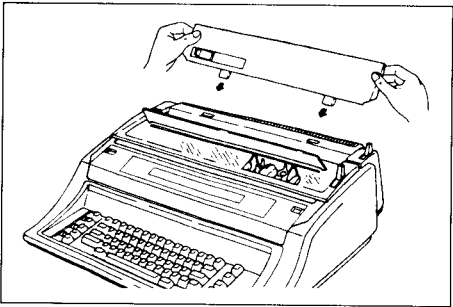
Returns carrier or cursor to the left margin on the next line.

BASIC OPERATIONS

1. PREPARATION

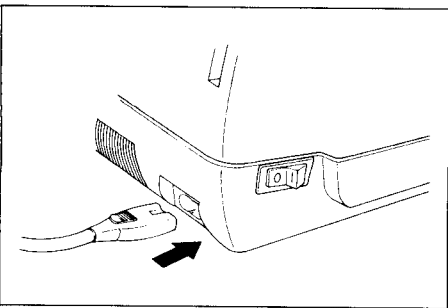


- 1) If this is the first time you have used this machine, be sure to release the carrier before any operation by following the unpacking instructions.

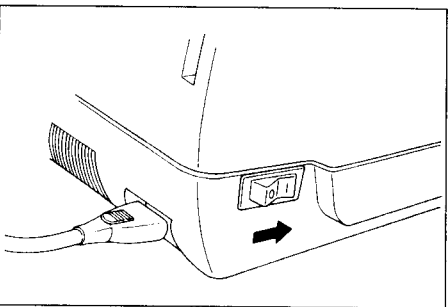


- 2) Insert the paper support panel.

2. TURNING ON TYPEWRITER



- 1) Plug one end of the power cord into the machine and the other end into an outlet of the voltage/frequency specified on the name plate at the back of the typewriter.

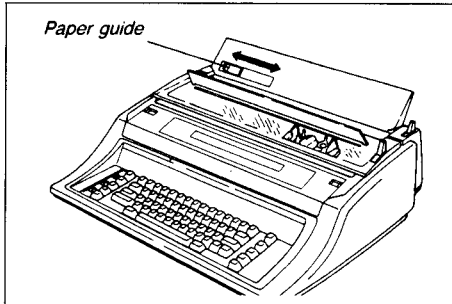


- 2) Turn on the power switch located at the left rear of the typewriter. The following initial operations occur:
 1. A beep sounds and the power-on lamp (green) on the keyboard lights up.
 2. The carrier moves to the extreme left side and then moves to the left margin. The printwheel rotates and stops at the programmed position.

While the above operations are occurring, all other typewriter functions stop. Start the next operation only after the initial operations are completed.

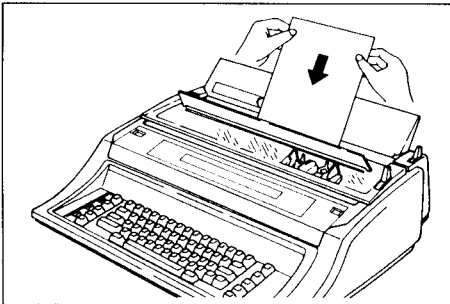
- Make sure the printwheel, ribbon cassette and correction tape are properly installed.

3. INSERTING/EJECTING PAPER

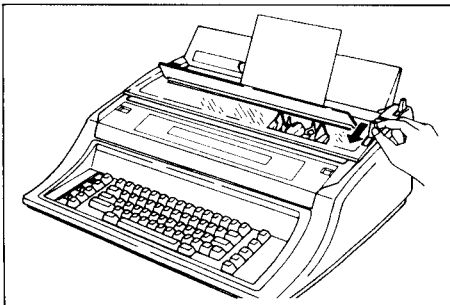


1 Inserting paper

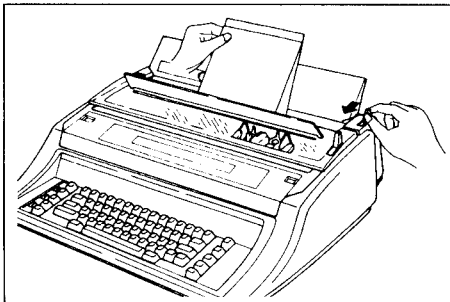
- 1) Move the paper guide on the paper support panel to the desired position to assure consistent placement of paper. Set it at the 8-1/2" mark for 8-1/2" width paper.



- 2) Insert paper into the back of the platen along the paper guide.



- 3) Pulling the paper bail lever halfway raises the paper bail away from the platen. When the lever is pulled further to you, paper is automatically inserted according to the top of form setting. (Refer to the next page.)

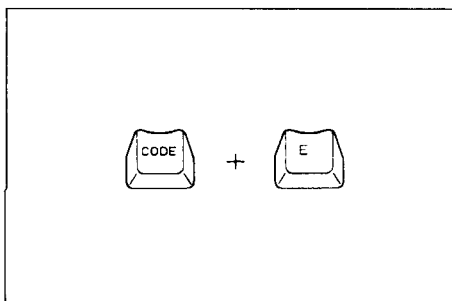


- 4) Pull the paper release lever toward you to release and straighten the paper.

- 5) Return the paper release lever and paper bail lever to the rear before typing.

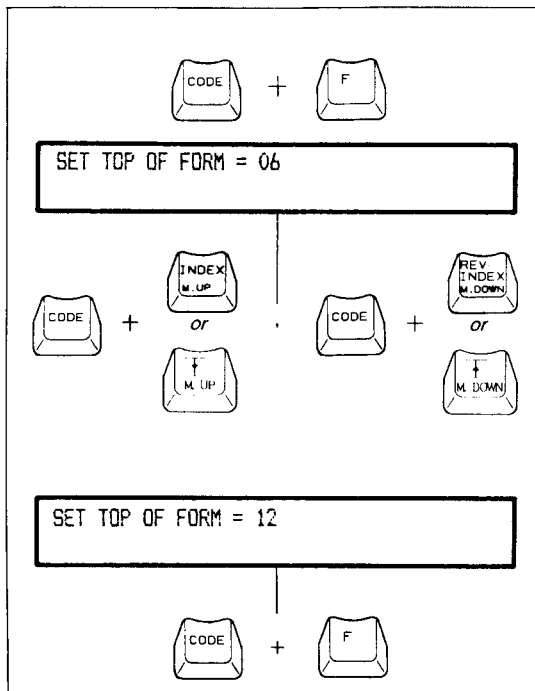
2 Ejecting paper

Hold down the Code key and press the "E" key to eject the paper.



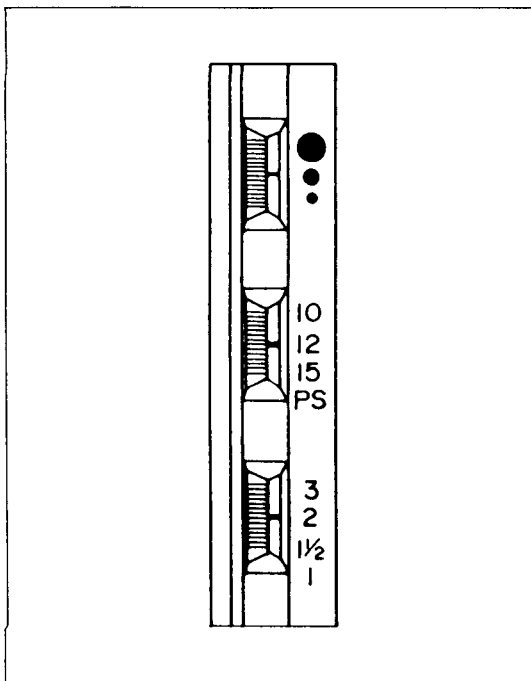
4. SETTING TOP OF FORM (PAPER INSERT)

This function sets the number of lines in top of form for the automatic paper insertion.



- 1) Hold down the Code key and press the "F" key. "SET TOP OF FORM = 06" appears on the display.
 - "06" is the factory setting for inserting paper one inch (6 lines) from the top of form (paper).
- 2) Hold down the Code key and press the Index key to increase the number, or hold down the Code key and press the Reverse Index key to decrease the number.
 - If you set the number "00", paper is fed continuously until the paper bail lever is released.
- 3) Hold down the Code key and press the "F" key again. The setting you have made is stored in the memory and retained even after you turn off the typewriter.

5. TYPING CONTROLS



1 Impression control

Print impression may vary depending on the voltage supply, the type of printwheel, ribbon, paper being used, or the number of carbon copies being made. Adjust this control for best print quality. The largest dot represents the heaviest impact.

2 Pitch selector

The pitch selector should be set to match the printwheel being used. Typing can be done with different pitches on the same line.

10: PICA pitch – 10 characters per inch

12: ELITE pitch – 12 characters per inch

15: MICRO pitch – 15 characters per inch

PS: Proportional pitch – spacing varies according to the character.

3 Line space selector

3: triple spacing (2 lines per inch)

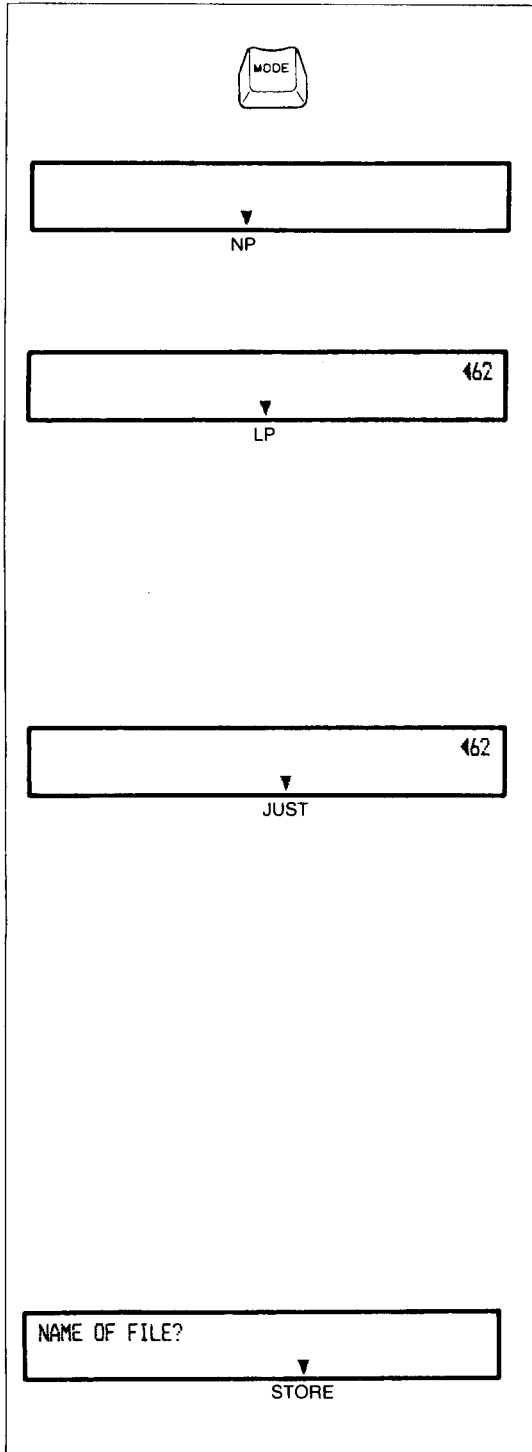
2: double spacing (3 lines per inch)

1-1/2: one-and-a-half spacing (4 lines per inch)

1: single spacing (6 lines per inch)

6. FOUR MODES (NP/LP/JUST/STORE)

Your typewriter has four different modes: Normal Print (NP), Line Print (LP), Justified Print (JUST) and Store (STORE). The mode in use is indicated on the display by a "▼", and it's changed each time the Mode key is pressed.



1 Normal print mode (NP)

When power is first turned on, the typewriter is in the normal print (NP) mode. In this mode characters are immediately typed on paper without appearing on the display.

2 Line print mode (LP)

This mode is used to print characters line by line. Characters appear on the display as you type them, enabling you to correct any typed entry on the display. They are printed on paper when you press the Return, Tab/back tab or Print key. You can type in new text on the display while the previous line is being printed.

- The counter at the right side of the display indicates the remaining number of spaces to the right margin.

3 Justified print mode (JUST)

This mode is used to justify lines, i.e., evenly position the words between the left and right margins. Characters appear on the display as you type them, enabling you to correct any typed entry on the display. When you type a character of any word exceeding the right margin, preceding words are automatically printed on paper, justified between the left and right margins, and the carrier returns to the left margin. The word whose character exceeded the right margin will remain on the display to start the next line (word-wrap). You can type new text on the display while the previous line is being printed.

- If you press the Return, Tab/back tab or Print key while typing in a line, text will be printed out immediately and will not be justified.

4 Store mode (STORE)

This mode is used to store text into the typewriter memory. For the explanation of details, refer to the following section of "Memory functions".

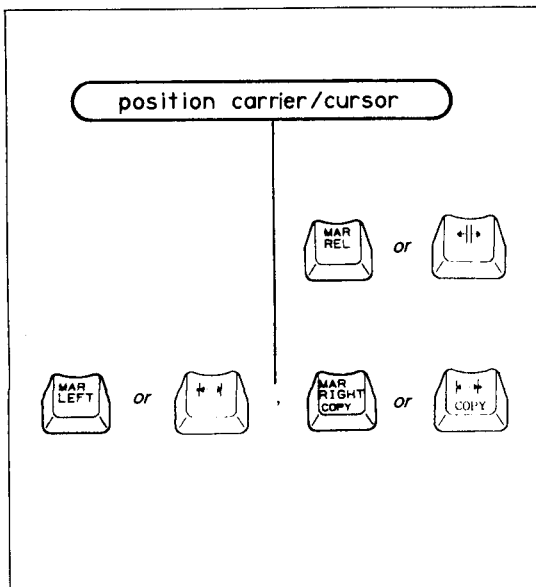
7. MARGINS

1 Auto margins (standard pre-set margins)

The following auto margins are permanently stored in this typewriter.

	Left margin	Right margin
10 pitch (PICA)	20	85
12 pitch (ELITE)	24	102
15 pitch (MICRO)	30	128
PS pitch	24	102

When the power is first turned on, the carrier moves to the left margin. A beep sounds 5 spaces before the right margin to remind you that the carrier (or cursor) is nearing the right margin. A second beep sounds when the carrier (or cursor) reaches the right margin.



2 Setting a new margin

- 1) Position the carrier (or cursor) at the point where you want to set a new margin by using the Space bar and/or Backspace key.
 - To set a new margin beyond either of the present margins, press the Margin release key while the carrier (or cursor) is at that margin, then move the carrier (or cursor) to the desired point.
- 2) Press the Left or Right margin key to set the new margin. A beep will signal it has been set. When you set a new left or right margin, the respective auto margin is automatically cleared.
 - Be sure to clear display before setting a margin.
 - The left and right margins must be at least one inch apart.

3 Typing beyond margin

- 1) To type beyond the right margin, press the Margin release key when the carrier (or cursor) stops at the right margin and continue typing.
- 2) To type beyond the left margin, press the Margin release key at the left margin, and press the Backspace key to move the carrier (or cursor) to the position where you want to start typing.

8. TAB

Setting tabs makes aligning columns or tables easy.

1 Setting a tab

- 1) Position the carrier (or cursor) at the point where you want a tab by using the Space bar or Backspace key.
- 2) Press the Tab set/clear key. A beep sounds signaling that a tab has been set. A maximum of 30 tabs can be set.

- Be sure to clear the display before setting a tab.

2 Clearing a tab

- 1) Position the carrier (or cursor) at the tab you want to clear.
- 2) Hold down the Code key and press the Tab set/clear key. A beep will confirm that the tab has been cleared.

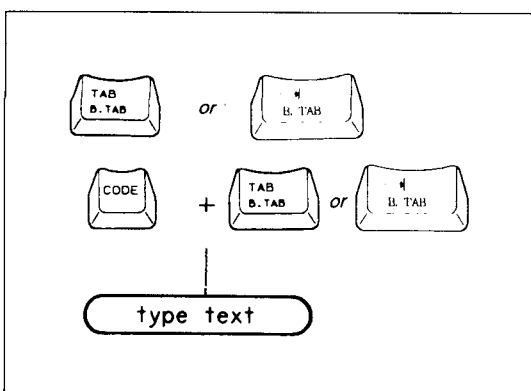
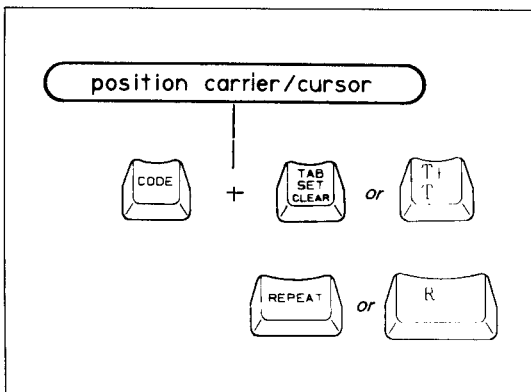
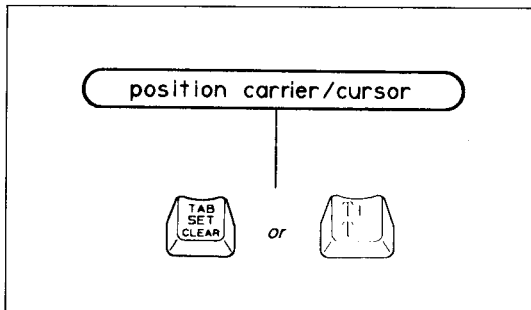
- If you want to clear all tabs, first hold down the Code key and press the Tab set/clear key then press the Repeat key at any position. Repeating beeps will confirm that all tabs have been cleared.

3 Using a tab

- 1) Press the Tab/back tab key to advance the carrier (or cursor) to the next tab on the right.
or
Hold down the Code key and press the Tab/back tab key. The paper is fed one line and the carrier (or cursor) moves to the previous tab on the left.

- 2) Type text.

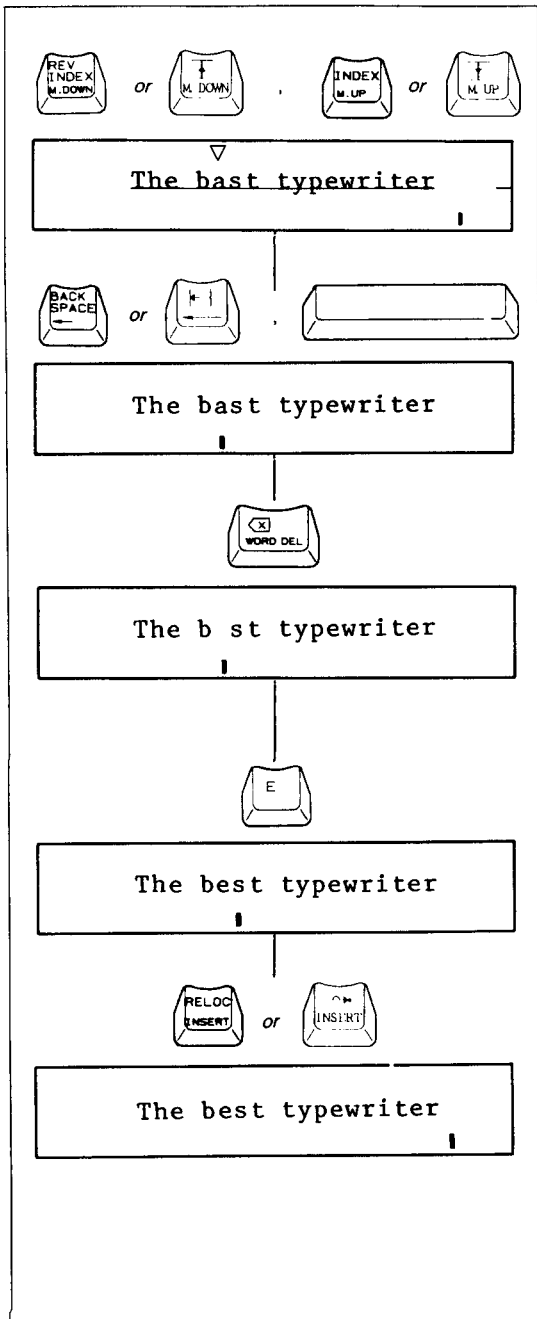
- Text remained on the display will be printed when the Tab/back tab key is pressed.



- Margin and tab settings are retained in the back-up memory for a minimum of five years with the power switch off.
- Five beeps sound when power is turned on if the back-up battery is completely drained, and the margin and tab settings have been cleared. Please contact your nearest service center in this case.

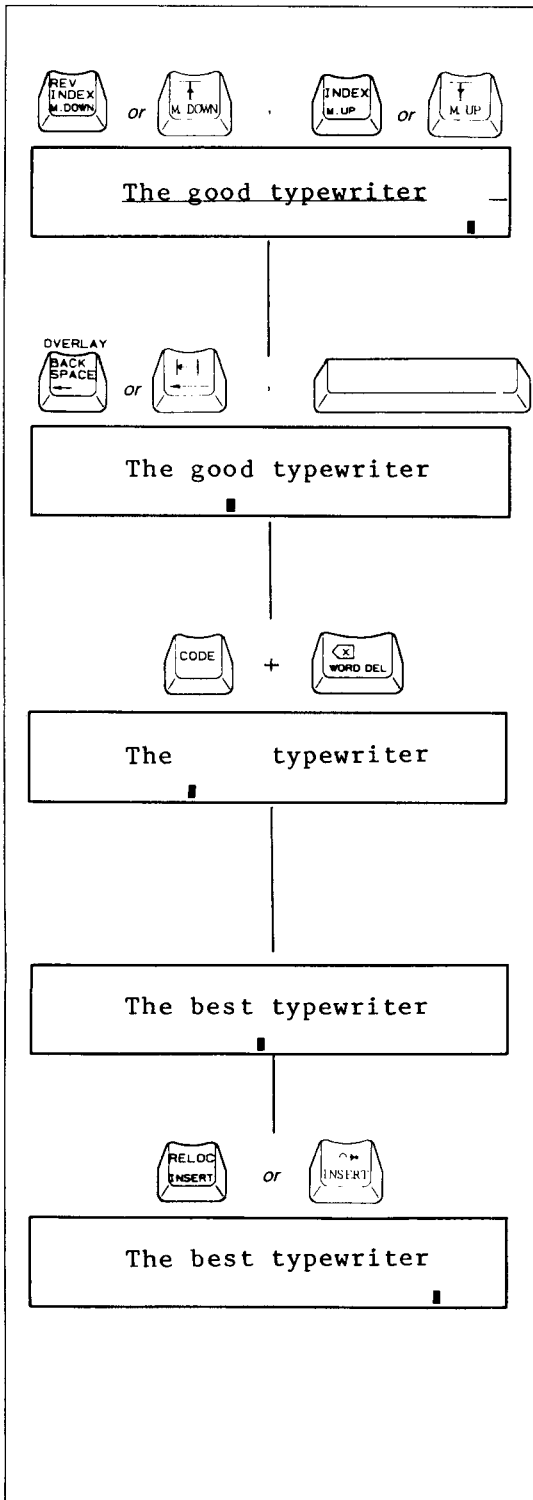
9. CORRECTIONS ON PAPER

Your typewriter has a 500-character automatic correction memory. The machine remembers up to 500 characters typed in the current page and will correct any or all of those characters. Characters beyond the correction memory can also be corrected easily with a few extra steps.



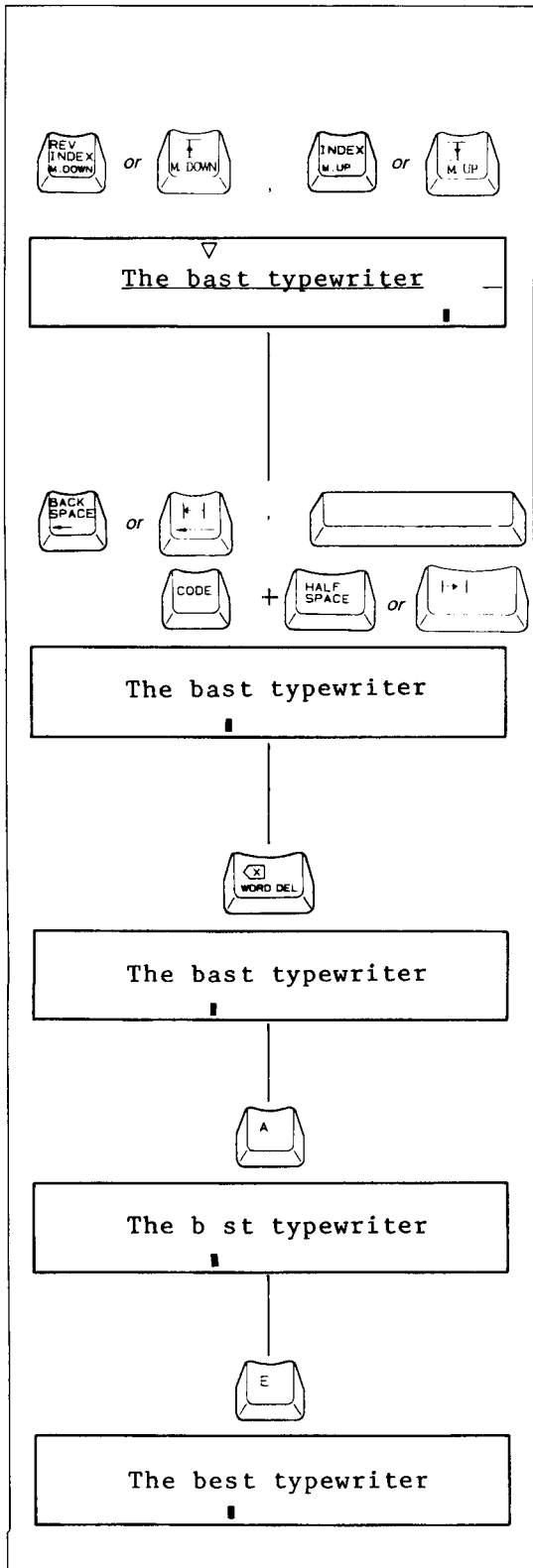
1 Correcting character(s) within the correction memory (Automatic correction)

- 1) Align the card holder edge below the line which contains the character to be corrected, by pressing the Reverse index key or Index key. Do not use the platen knob to align the line.
- 2) Position the print point indicator on the character to be corrected, using the Backspace key and/or Space bar.
- 3) Press the Correction key to erase the character.
 - Hold down the Correction key to correct more than one character. Correction will be repeated in the correction memory range until the Correction key is released.
- 4) Type the correct character(s).
- 5) Press the Relocation key to quickly return the print point indicator to the right of the last character typed in the current page.
 - The last typed character can be deleted by simply pressing the Correction key without positioning the print point indicator.
 - If the print point indicator is on a space when you press the Correction key, the typewriter automatically backspaces and deletes the preceding character.



2 Correcting word(s) within the correction memory (Automatic correction)

- 1) Align the card holder edge below the line which contains the word to be corrected, by pressing the Reverse index key or Index key. Do not use the platen knob to align the line.
- 2) Position the print point indicator at any point in the word to be corrected or at the following space(s), using the Backspace key and/or Space bar.
- 3) Hold down the Code key and press the Correction key to erase the word.
- 4) Type the correct word.
- 5) Press the Relocation key to quickly return the print point indicator to the right of the last character in the current page.



3 Correcting character(s) outside the correction memory (Manual correction)

1) Align the card holder edge below the line which contains the character(s) to be corrected by pressing the Reverse index key or Index key.

- For accurate alignment, hold down the Code key and press the Index or Reverse index key. The paper moves 1/96" up or down each time you press either key.

2) Position the print point indicator one space to the right of the character to be corrected, using the Space bar and/or Backspace Key.

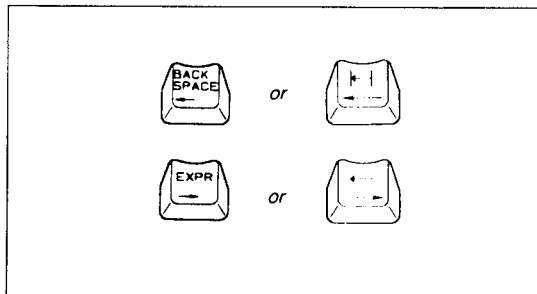
- For accurate alignment, hold down the Code key and press the Half space key. The print point indicator moves 1/120" backward each time you press the key.

3) Press the Correction key. The print point indicator will backspace to the character to be corrected.

4) Press the character key to be erased. The character is erased but the print point indicator does not move.

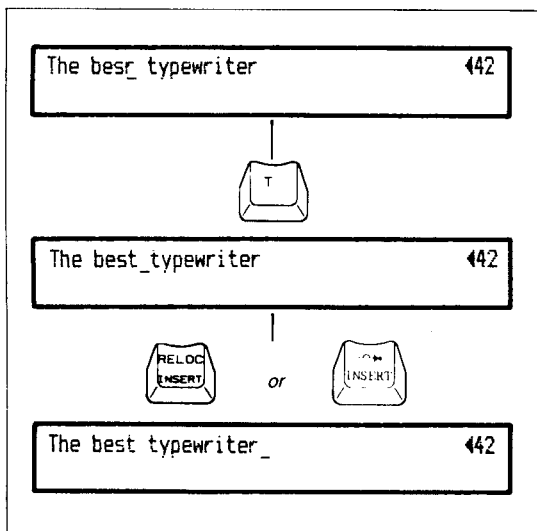
5) Type the correct character.

10. CORRECTIONS ON DISPLAY



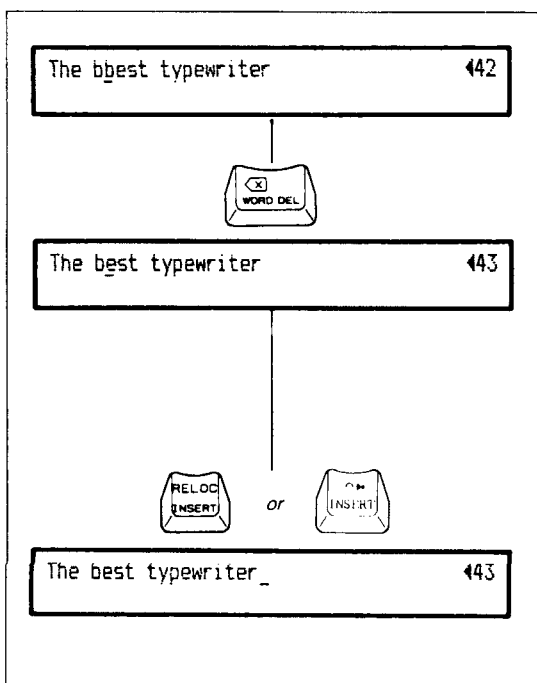
1 Moving the cursor

- 1) Press the Backspace key to move the cursor one space to the left.
 - 2) Press the Express key to move the cursor one space to the right.
- Hold down either key, or press the Repeat key after pressing either key, for continuous movement.



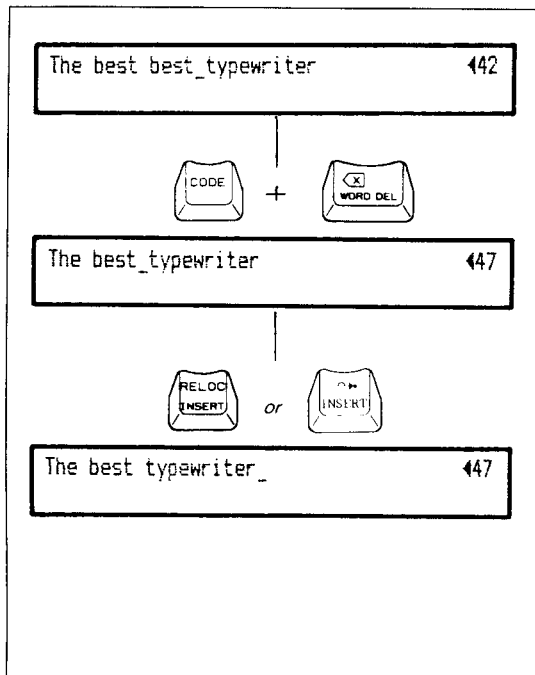
2 Overstriking character

- 1) Position the cursor under the character you want to correct, using the Backspace and/or Express key.
- 2) Type the correct character. The character is automatically replaced.
- 3) Press the Relocation key to quickly return the cursor next to the last character.



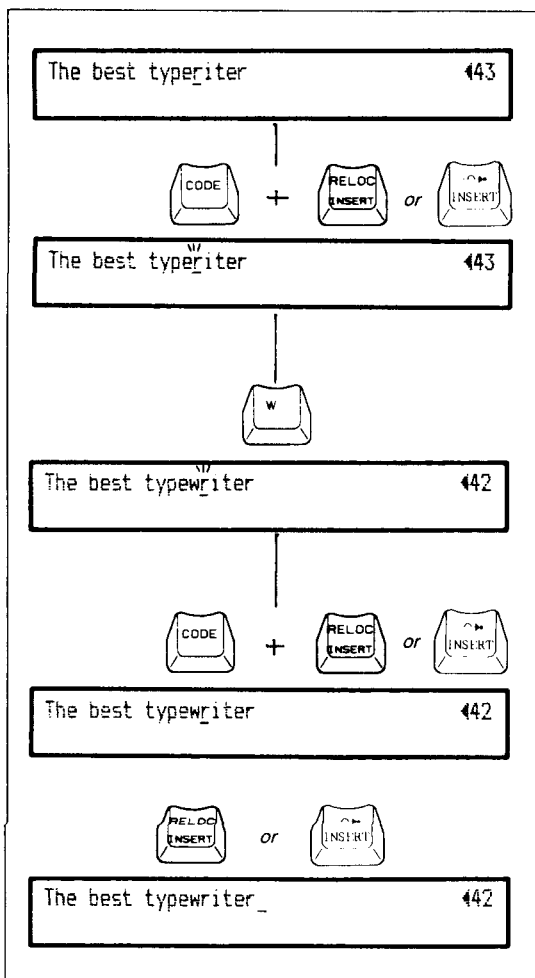
3 Deleting a character

- 1) Position the cursor under the character to be deleted, using the Backspace and/or Express key.
- 2) Press the Correction key to delete the character(s). Each time the Correction key is pressed, the character above the cursor is deleted, and the following text is pulled to the left.
 - The last character can be deleted by simply pressing the Correction key without positioning cursor.
 - Press the Repeat key or hold down the Correction key to quickly delete a number of characters.
- 3) Press the Relocation key to quickly return the cursor next to the last character.



4 Deleting word

- 1) Position the cursor under the following space(s) of the word to be deleted.
- 2) Hold down the Code key and press the Correction key. The word is deleted. The cursor and the following text is pulled to the left.
- 3) Press the Relocation key to quickly return the cursor next to the last character.
 - If you position the cursor anywhere under the word, two spaces will remain between the words on either side of the deleted word.



5 Inserting a character

- 1) Position the cursor under the right character of insert position, using the Backspace and/or Express key.
- 2) Hold down the Code key and press the Relocation key. The character above the cursor will alternately flash with a box mark (■).
- 3) Type desired character(s) and/or space(s). It is inserted at the cursor position. Each time a character is inserted, the cursor and the following characters move one space to the right.
- 4) Hold down the Code key and press the Relocation key again. The insert mode is terminated.
 - or
 - Press the Relocation key. The insert mode is terminated and the cursor returns to the next to the last character.

TYPING FUNCTIONS

Centering between margins (6)

"Tools for Everyone"
Consolidated Tool Co., Inc.
138 Elm Boulevard
Chicago, Illinois 60690

June 3, 1997

Everyday Hardware, Inc.
10301 Main Street
Portland, Oregon 98645

Right margin flush (7)

Dear Sir;

Thank you very much for your letter of May 23 and for your inquiry as to any developments in our product line for next year.

As a favored customer we are at present offering you a 10% discount on all products ordered. We certainly understand your position and we realize that recently the market for our products has been somewhat slow. Therefore to thank you for your continued patronage, we have decided that we can offer an additional 5% discount. We hope that this will help the situation.

We are not standing still but continually attempting to improve our line and to meet the changing needs of the market. We are planning to introduce several new sets with different combinations of tools aimed at satisfying the needs of the increasing number of people just starting to become involved in home improvements. We feel that this will be a substantial market in years to come.

The following passage from **Tools Today** typifies our feelings on the matter.

Bold typing (13)

Full underlining (12)

Paragraph indentation (1)

"The market will continually grow as the expense of hiring out home improvements increases. Consumers will be forced to do whatever is necessary and this fact offers a grand opportunity to all those involved in this area!"

Please look under the following areas in the Company Prospectus inserted which describes our goals for the coming years:

Word underlining (12)

Caps lock (14)

Section Title

Section

Pages

Flush right tabulation (4)

MEETING THE NEW MARKETS
OUR ANSWER
WHAT WE CAN DO TOGETHER

2.3-2
11.6
18.14

31 - 46
93 - 102
209 - 234

Decimal tabulation (2)

Thank you again for your continued use of our products. We wait for your reply.

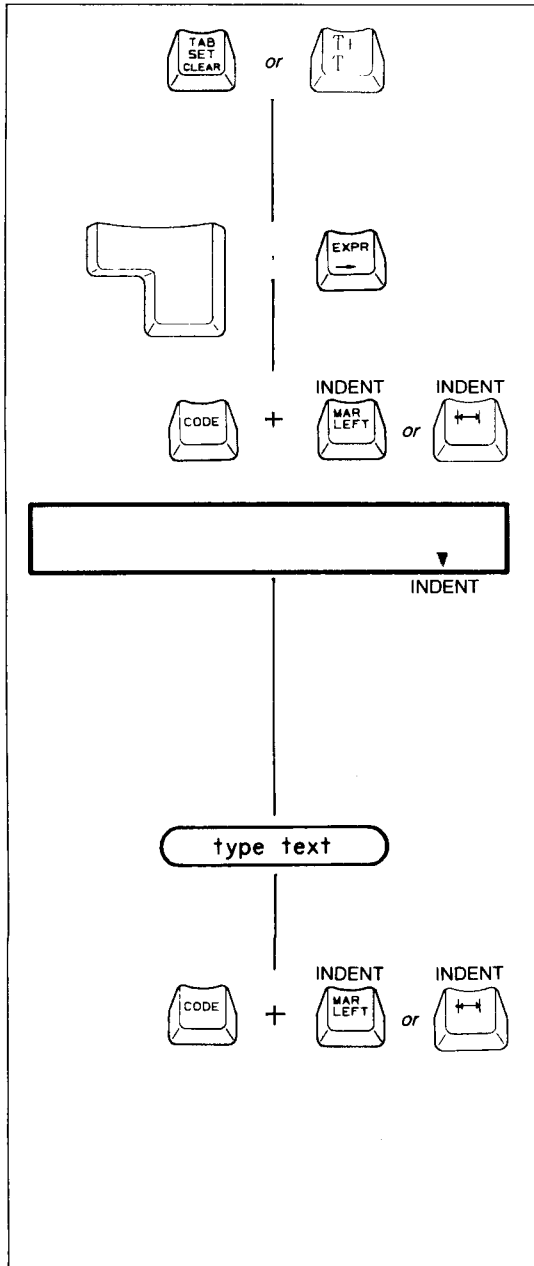
Sincerely Yours,

James Harrison
Assistant Sales Manager

Center tabulation (3)

1. PARAGRAPH INDENTATION

This function sets a temporary left margin in order to indent an entire paragraph.



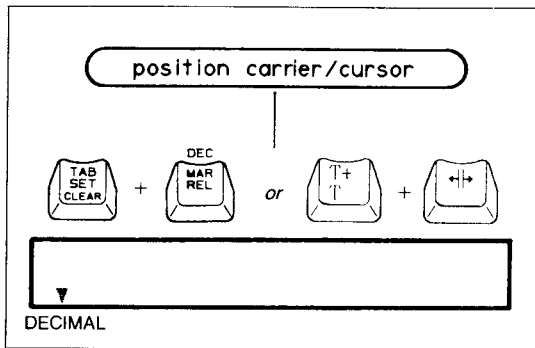
- 1) Set a tab at the position where you want to set paragraph indent.
- 2) Press the Return key or Express key to return the carrier (or cursor) to the left margin.
- 3) Hold down the Code key and press the Left margin key.
- 4) A "▼" appears above "INDENT" on the display. The carrier (or cursor) will advance to the first tab setting and this becomes the temporary left margin.
 - If other tabs have been set preceding your target tab, continue holding down the Code key and press the Left margin key as many time as desired to reach it.
- 5) Type the text to be indented.
- 6) To terminate paragraph indentation, hold down the Code key and press the Left margin key at any time. The "▼" above "INDENT" on the display disappears.

2. DECIMAL TABULATION

This function aligns text by their decimal point at a tab position. It allows you to type statistical text easily.

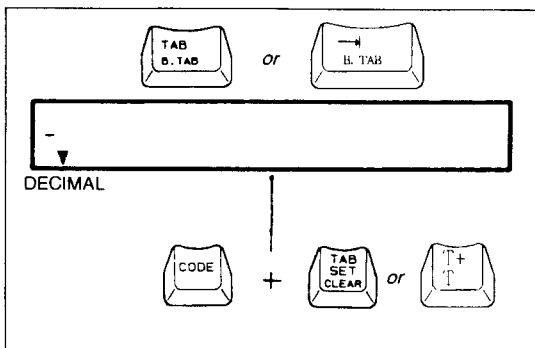
1 Setting a decimal tab

- 1) Position the carrier (or cursor) at the point where you want a decimal tab.
- 2) Hold down the Tab set/clear key and press the Margin release key. A "▼" appears above "DECIMAL" on the display while you press both keys, then disappears.



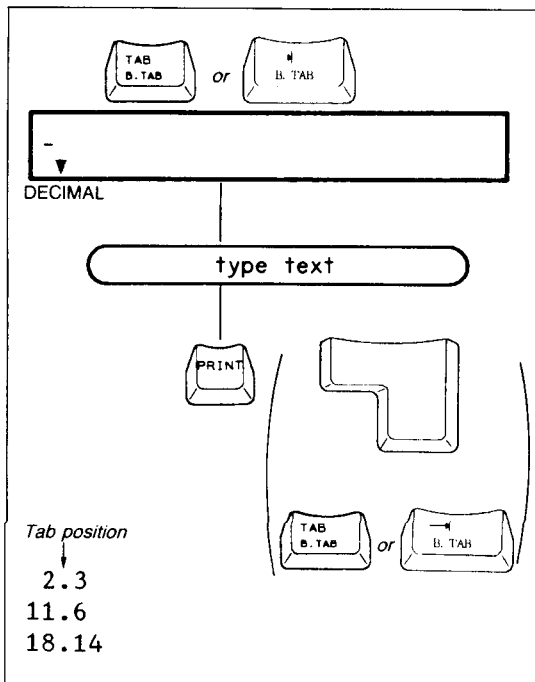
2 Clearing a decimal tab

- 1) Press the Tab/back tab key to move the carrier (or cursor) to the decimal tab position you want to clear.
- 2) Hold down the Code key and press the Tab set/clear key. The "▼" above "DECIMAL" on the display disappears.



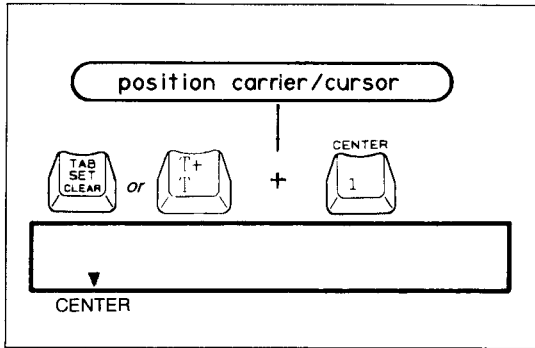
3 Using a decimal tab

- 1) Press the Tab/back tab key to move the carrier (or cursor) to the decimal tab position. A "▼" appears above "DECIMAL" on the display.
- 2) Type the text. It appears on the display. Make corrections while in this step.
- 3) Press the Print key. The text is printed aligned its decimal point with the tab position.
 - Pressing the Return or Tab/back tab key also prints the text then the carrier (or cursor) moves respectively.
- 4) Repeat the same procedure for each line.



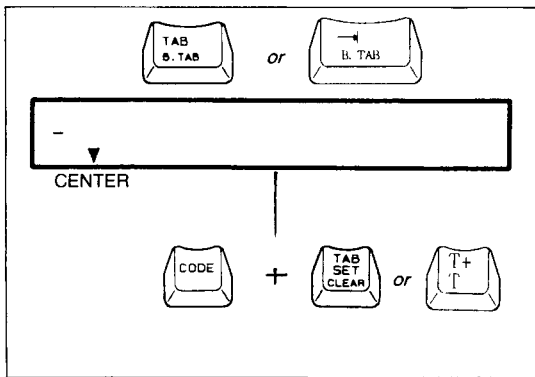
3. CENTER TABULATION

This function centers text at a tab position.



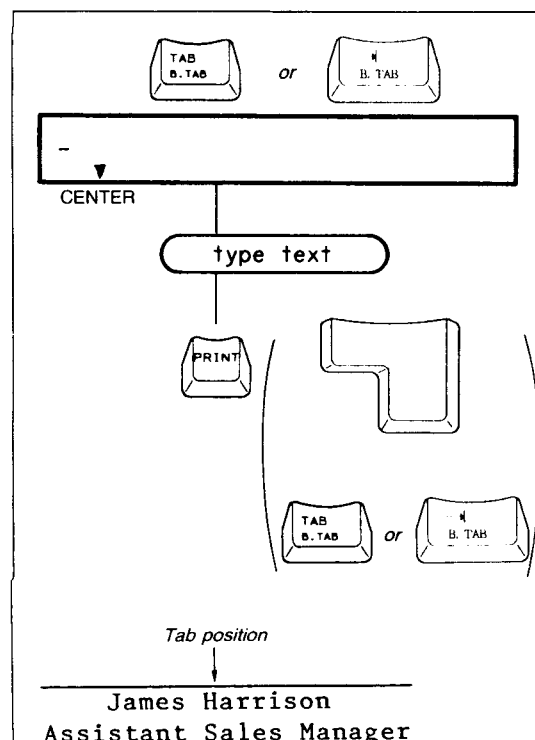
1 Setting a center tab

- 1) Position the carrier (or cursor) at the point where you want a center tab.
- 2) Hold down the Tab set/clear key and press the "1" key. A "▼" appears above "CENTER" at the left of the display while you press both keys, then disappears.



2 Clearing a center tab

- 1) Press the Tab/back tab key to move the carrier (or cursor) to the center tab position you want to clear.
- 2) Hold down the Code key and press the Tab set/clear key. The "▼" above "CENTER" disappears.



3 Using a center tab

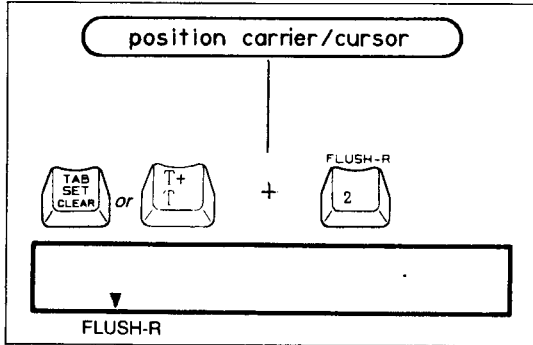
- 1) Press the Tab/back tab key to move the carrier (or cursor) to the center tab position. A "▼" appears above "CENTER" on the left of the display.
- 2) Type the text. It appears on the display. Make corrections while in this step.
- 3) Press the Print key. The text is printed centered at the tab position.
 - Pressing the Return or Tab/back tab key also prints the text, then the carrier (or cursor) moves respectively.
- 4) Repeat the same procedure for each line.

4. FLUSH RIGHT TABULATION

This function aligns text endings at a tab position.

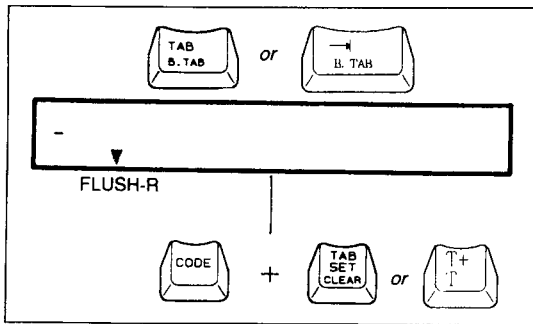
1 Setting a flush right tab

- 1) Position the carrier (or cursor) at the point where you want a flush right tab.
- 2) Hold down the Tab set/clear key and press the "2" key. A "▼" appears above "FLUSH-R" on the display while you press both keys, then disappears.



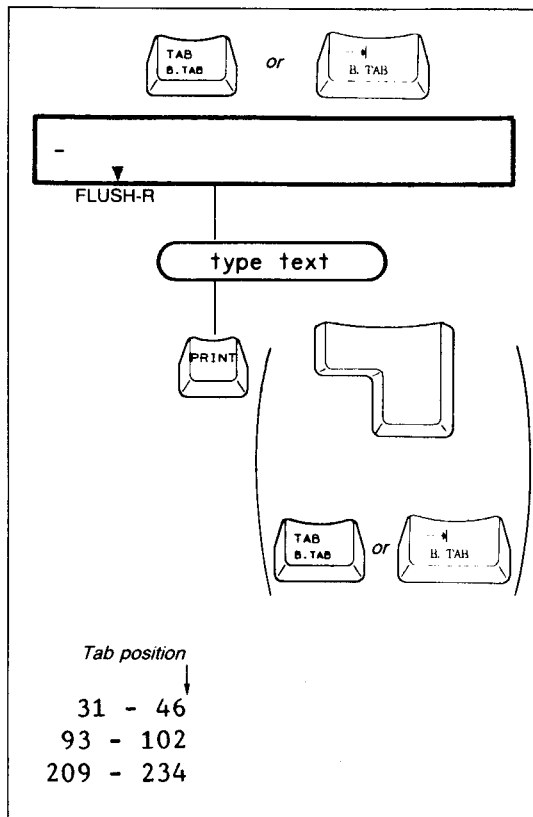
2 Clearing a flush right tab

- 1) Press the Tab/back tab key to move the carrier (or cursor) to the flush right tab position you want to clear.
- 2) Hold down the Code key and press the Tab set/clear key. The "▼" above "FLUSH-R" disappears.

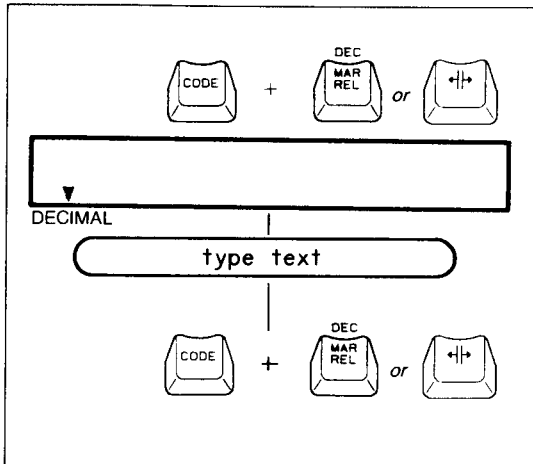


3 Using a flush right tab

- 1) Press the Tab/back tab key to move the carrier (or cursor) to the flush right tab position. A "▼" appears above "FLUSH-R" on the display.
- 2) Type the text. It appears on the display. Make corrections while in this step.
- 3) Press the Print key. The text is printed aligned its ending with the tab position.
 - Pressing the Return or Tab/back tab key also prints the text, then carrier (or cursor) moves respectively.
- 4) Repeat the same procedure for each line.



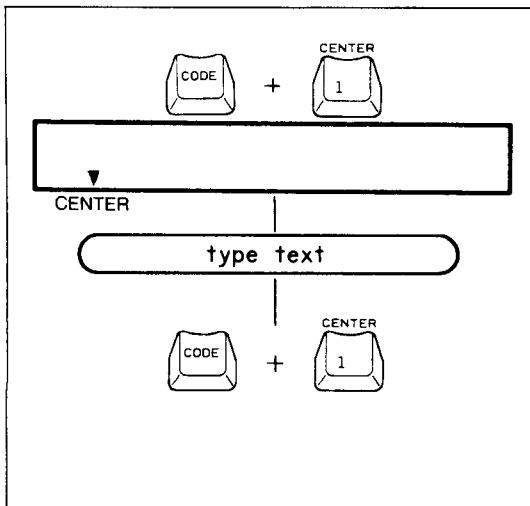
5. GROUP TABS



1 Group decimal tab

- 1) Hold down the Code key and press the Margin release key. A "▼" appears above "DECIMAL" on the display. All present tabs become decimal tabs.
- 2) Type text using the decimal tabs. Simply pressing Tab set/clear key sets a new decimal tab.
- 3) To terminate group decimal tab, hold down the Code key and press the Margin release key again. The "▼" above "DECIMAL" on the display disappears.

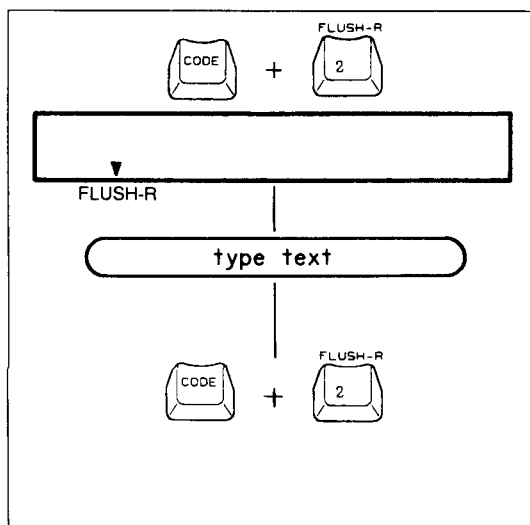
- All tabs return to their former tab type respectively and newly set tabs in step 2) become normal tabs.



2 Group center tab

- 1) Hold down the Code key and press the "1" key. A "▼" appears above "CENTER" on the left of the display. All present tabs become center tabs.
- 2) Type text using the center tabs. Simply pressing Tab set/clear key sets a new center tab.
- 3) To terminate group center tab, hold down the Code key and press the "1" key again. The "▼" above "CENTER" on the left of the display disappears.

- All tabs return to their former tab type respectively, and newly set tabs in step 2) become normal tabs.



3 Group flush right tab

- 1) Hold down the Code key and press the "2" key. A "▼" appears above "FLUSH-R" on the display. All present tabs become flush right tabs.
- 2) Type text using the flush right tabs. Simply pressing Tab set/clear key sets a new flush right tab.
- 3) To terminate group flush right tab, hold down the Code key and press the "2" key again. The "▼" above "FLUSH-R" on the display disappears.

- All tabs return to their former tab type respectively, and newly set tabs in step 2) become normal tabs.

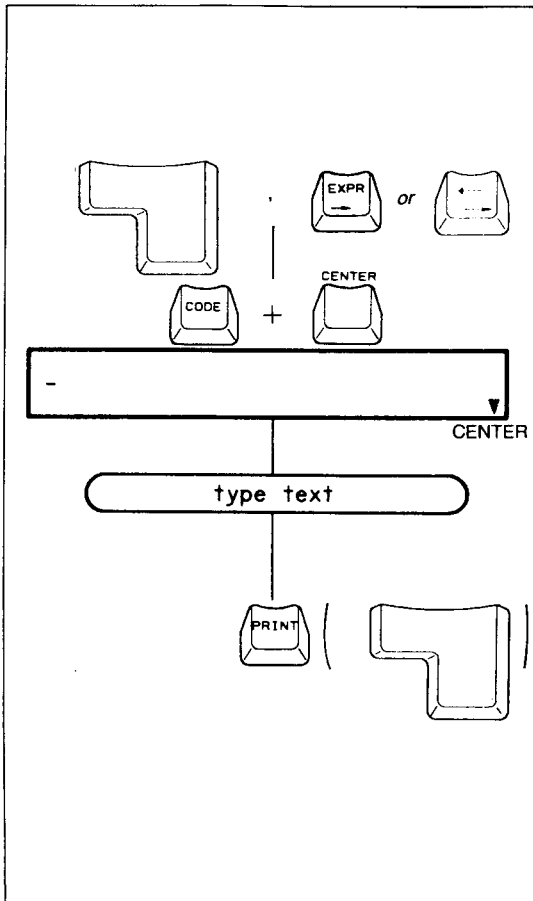
6. AUTOMATIC CENTERING

1 Centering between margins

This function centers text evenly between the left and right margins.

- 1) Press the Return key or Express key to position the carrier (or cursor) at the left margin.
- 2) Hold down the Code key and press the "CENTER" key at the right in the top row.
- 3) A "▼" appears above "CENTER" on the right of the display. The carrier (or cursor) automatically advances to the center of the margin settings.
- 4) Type text to be centered. It appears on the display. Make corrections while in this step.
- 5) Press the Print key. The text is printed centered between the left and right margins. The "▼" above "CENTER" disappears.

- Pressing the Return key also prints the text and the carrier (or cursor) returns to the left margin on the next line.
- To cancel the automatic centering, first clear the text on the display using the Correction key then press the Print key or hold down the Code key and press the "CENTER" key.

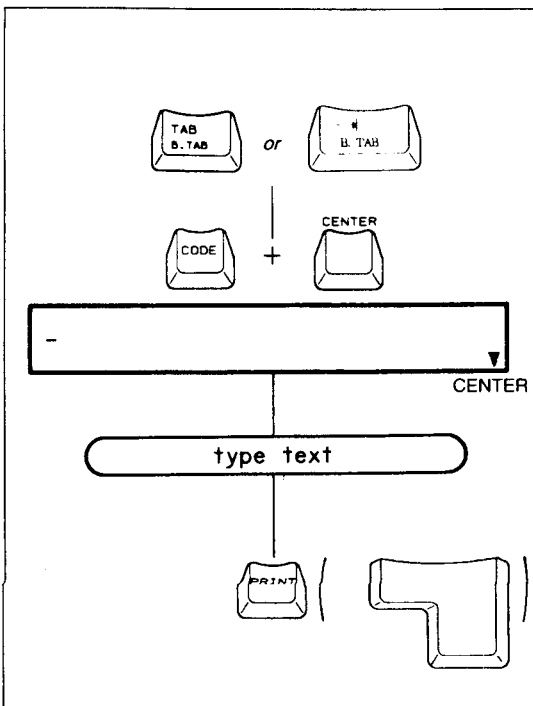


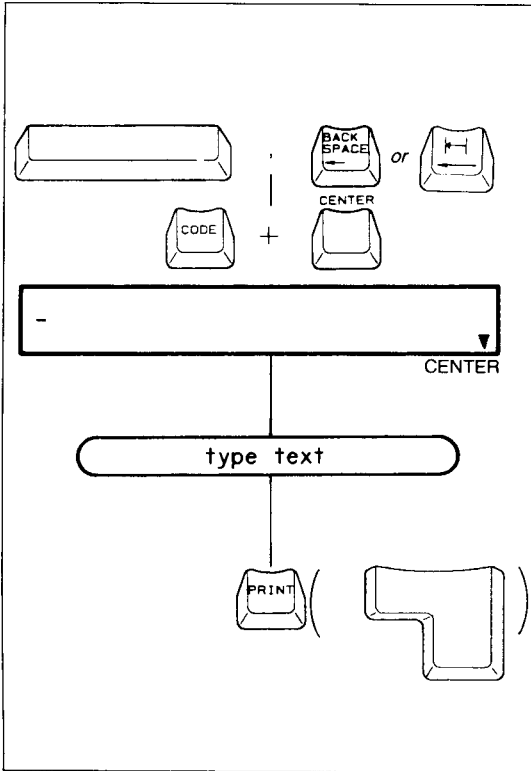
2 Centering between tabs

This function centers text evenly between tabs.

- 1) Position the carrier (or cursor) at the left one of two tabs, with pressing the Tab/back tab key.
- 2) Hold down the Code key and press the "CENTER" key at the right in the top row.
- 3) A "▼" appears above "CENTER" on the right of the display. The carrier automatically advances to the center of the present tab and the next tab on the right.
- 4) Type the text. It appears on the display. Make corrections while in this step.
- 5) Press the Print key. The text is printed centered between two tabs. The "▼" above "CENTER" disappears.

- Pressing the Return key also prints the text, and the carrier (or cursor) returns to the left margin on the next line.



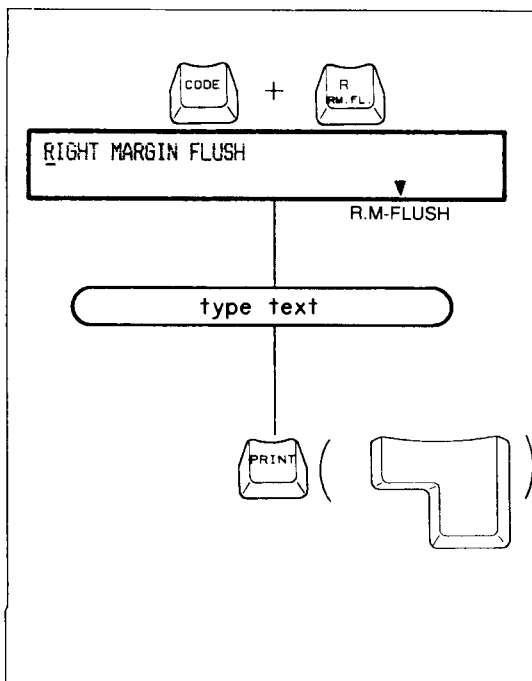


3 Centering at the desired position

This function centers text at the desired position.

- 1) Position the carrier (or cursor) at the desired position by using the Space bar or Backspace key.
- 2) Hold down the Code key and press the "CENTER" key at the right in the top row. A "▼" appears above "CENTER" on the right of the display.
 - Be sure to clear display before activating.
- 3) Type the text. It appears on the display. Make corrections while in this step.
- 4) Press the Print key. The text is printed centered at the current carrier (or cursor) position.
 - Pressing the Return key also prints the text and the carrier (or cursor) returns to the left margin on the next line.

7. RIGHT MARGIN FLUSH

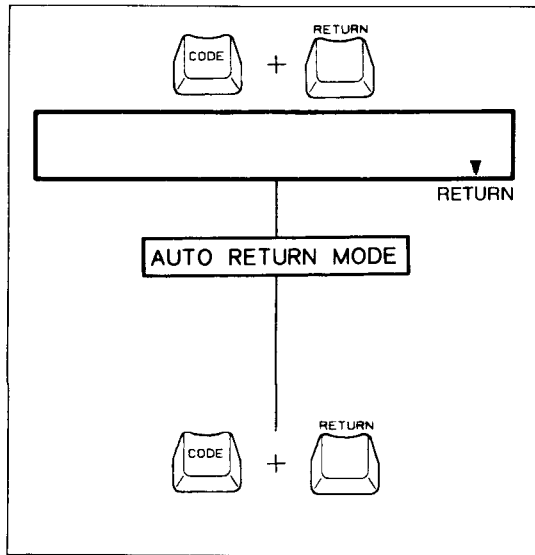


This function aligns text with right margin.

- 1) Hold down the Code key and press the "R" key.
- 2) A "▼" appears above "R.M-FLUSH" and "RIGHT MARGIN FLUSH" appears on the display. The carrier (or cursor) moves to the right margin.
- 3) Type the text. It appears on the display. Make corrections while in this step.
- 4) Press the Print key. The text is printed aligned its ending with the right margin.
 - Pressing the Return key also prints the text and the carrier (or cursor) returns to the left margin.
 - To cancel the right margin flush, first clear the text on the display using the Correction key, then press the Print key or hold down the Code key and press the "R" key.

8. AUTOMATIC RETURN

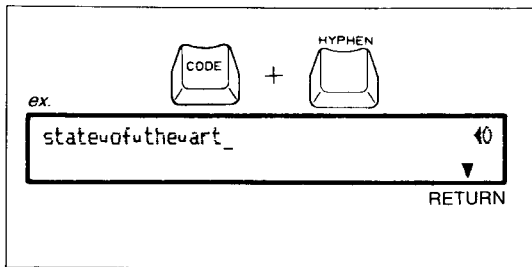
This function automatically returns carrier (or cursor) at the end of each line without pressing the Return key.



- This function is automatically activated in store mode, and cannot be used in justified print (JUST) mode.
- 1) Hold down the Code key and press the "RETURN" key at the right in the top row. A "▼" appears above "RETURN" on the display.
 - 2) Once activated, the carrier (or cursor) automatically returns when you type a hyphen or space in the hot zone.
 - If a hyphen or space is not typed in the hot zone, the carrier will stop and a beep will sound when the carrier reaches the right margin. Press the Margin release key to continue typing beyond the right margin.
 - 3) To terminate the automatic return, hold down the Code key and press the "RETURN" key again. The "▼" above "RETURN" on the display disappears.

9. REQUIRED HYPHEN

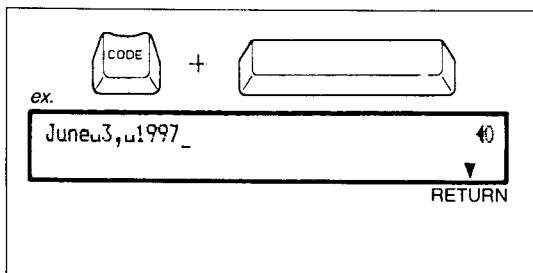
This function is used to type a hyphen that will not trigger the automatic return in the hot zone. It's useful to type a series of words that you do not want to separate by automatic return.



- 1) To type a required hyphen, hold down the Code key and press the "HYPHEN" key at the right in the top row.
- A required hyphen is indicated on the display by the symbol " _".

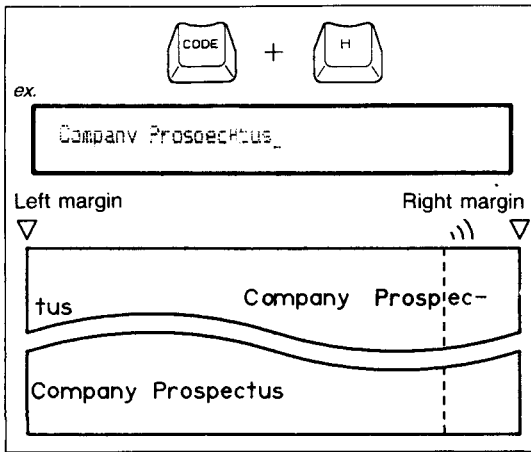
10. REQUIRED SPACE

This function is used to type a space that will not trigger an automatic return in the hot zone. It's useful to type a series of words that you do not want to separate by automatic return.



- 1) To type a required space, hold down the Code key and press the Space bar.
- A required space is indicated on the display by the symbol " _".

11. SYLLABLE HYPHEN

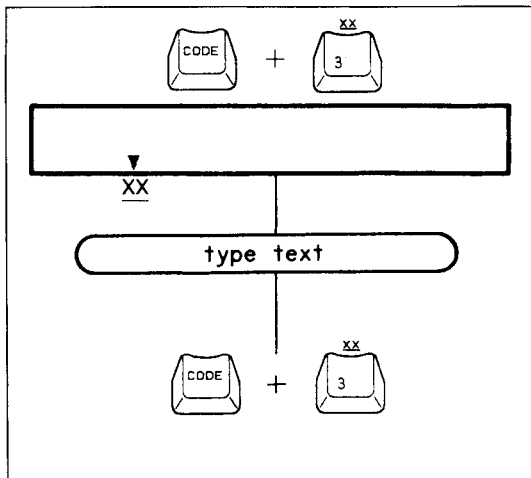


This function is used to type a hyphen that will be printed only when it falls in the hot zone to temporarily divide a word at the right margin.

- 1) To type a syllable hyphen, hold down the Code key and press the "H" key.
- A syllable hyphen can be used when in store mode only and it's indicated on the display by the symbol " H ".
- 2) At the printing time, a syllable hyphen is printed when it falls in the hot zone and will trigger a carrier return. Otherwise, it will be ignored and nothing is printed.

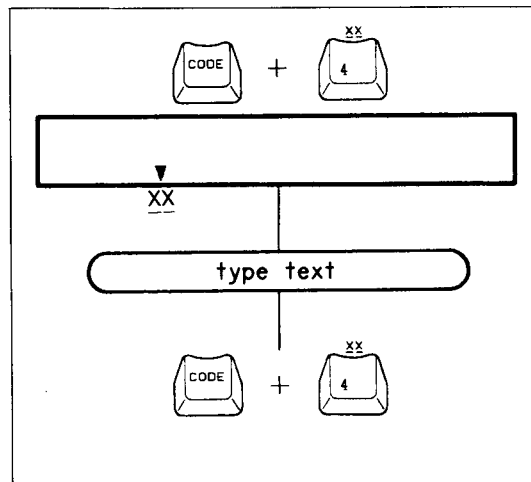
12. AUTOMATIC UNDERLINING

This function underlines all text (including spaces) or individual words (all text except spaces) as you type.



1 Automatic full underlining

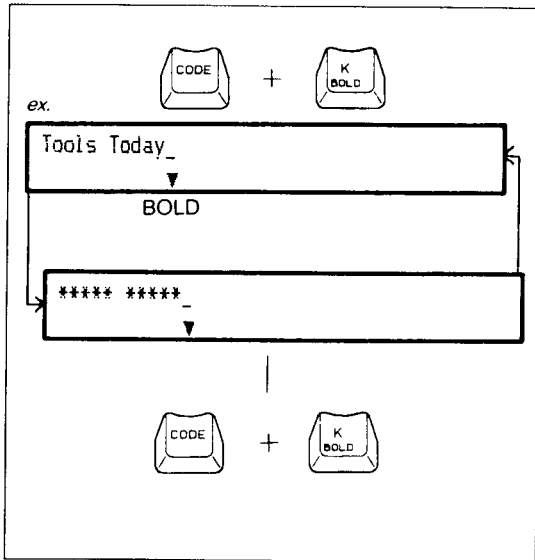
- 1) Hold down the Code key and press the "3" key. A "▼" appears above "XX" on the display.
- 2) Type in the text to be underlined.
- 3) To terminate the full underlining, hold down the Code key and press the "3" key again. The "▼" above "XX" on the display disappears.



2 Automatic word underlining

- 1) Hold down the Code key and press the "4" key. A "▼" appears above "XX" on the display.
- 2) Type in the text to be underlined.
- 3) To terminate the word underlining, hold down the Code key and press the "4" key again. The "▼" above "XX" on the display disappears.

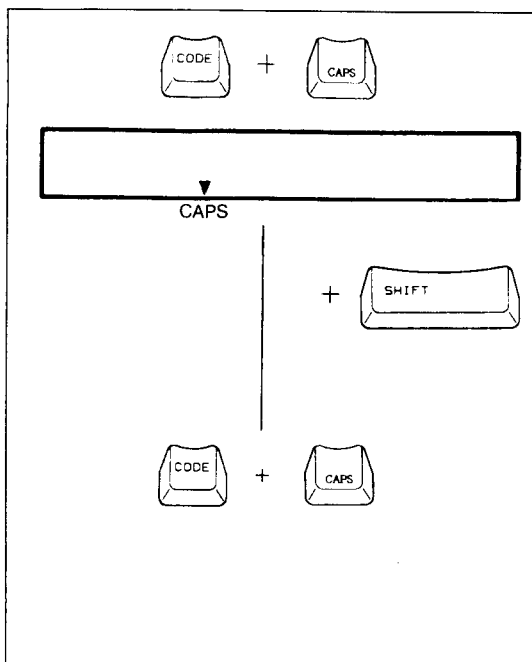
13. BOLD TYPING



This function makes words stand out from the rest of the text. It's useful for emphasizing titles, critical information, etc.

- 1) Hold down the Code key and press the "K" key. A "▼" appears above "BOLD" on the display.
- 2) Type in the text.
 - Characters to be bolded flash alternately with asterisks on the display to distinguish them from other text.
- 3) To terminate bold typing, hold down the Code key and press the "K" key again. The "▼" above "BOLD" on the display disappears.

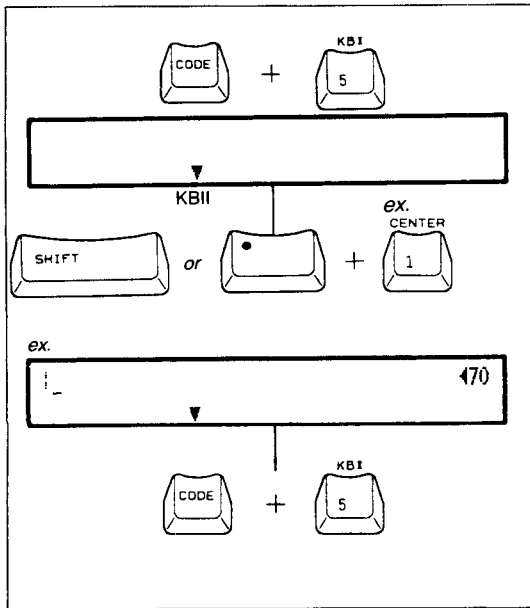
14. CAPS LOCK



This function enables typing a series of capital letters with numbers.

- 1) Hold down the Code Key and press the "CAPS" key. A "▼" appears above "CAPS" on the display.
- 2) While in caps lock mode, alphabetic characters are capitalized without pressing the Shift key. The number/symbol keys are still printed in lower case.
 - Alphabetic characters are printed in lower case and the number/symbol keys are printed in upper case, if you press the key with pressing the Shift key.
- 3) To terminate the caps lock mode, hold down the Code Key and press the "CAPS" key again. The "▼" above "CAPS" on the display disappears. All characters are printed normally.

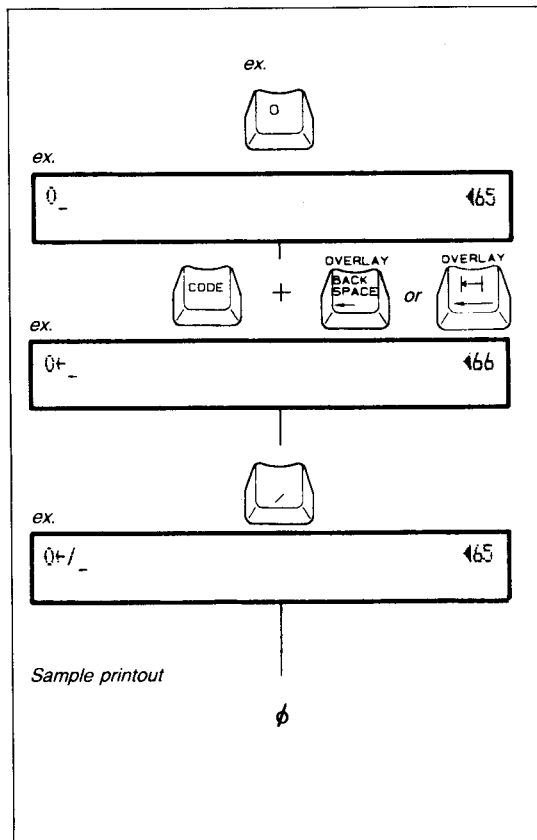
15. SECOND KEYBOARD (SPECIAL CHARACTERS)



The symbols located at the upper right side of the three-character keys can be typed with the following procedure.

- 1) Hold down the Code key and press the "5" key. A "▼" appears above "KBII" on the display.
- 2) With holding down the Shift key or pressing the Shift lock key, type the key with the desired symbol.
- 3) To terminate the second keyboard, hold down the Code key and press the "5" key again. The "▼" above "KBII" on the display disappears.

16. OVERLAY

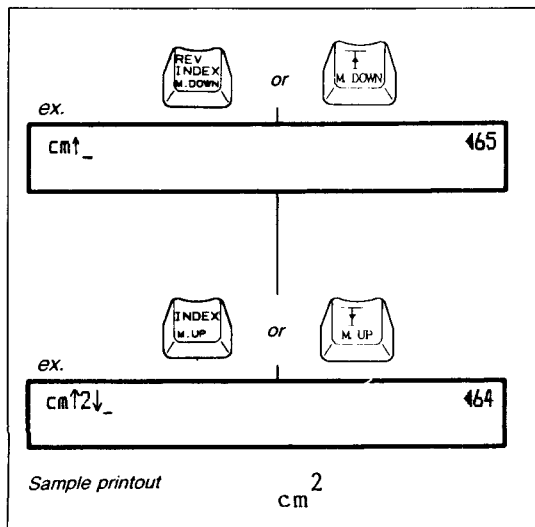


This function is used to automatically print one character on top of another.

- This function can not be performed in normal print (NP) mode.
- 1) First press the desired key. The character appears on the display.
 - 2) Hold down the Code key and press the Backspace key. A "←" appears on the display.
 - 3) Press the key you want to type over the first character.
 - 4) When the text is printed, characters are all printed at the same position.

17. SUPERSCRIP/T/SUBSCRIPT

This function performs superscript and subscript.

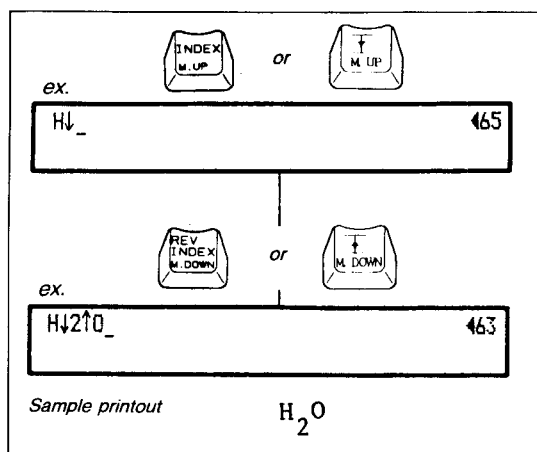


1 Superscript

- 1) Press the Reverse index key at the position to type a superscript. The print position moves half line upward, or the symbol "↑" appears on the display.
 - 2) Type character(s) for superscript.
 - 3) Press the Index key to return to former line. On the display, the symbol "↓" appears instead.
- The superscript performed on the display is printed as shown in sample printout.

2 Subscript

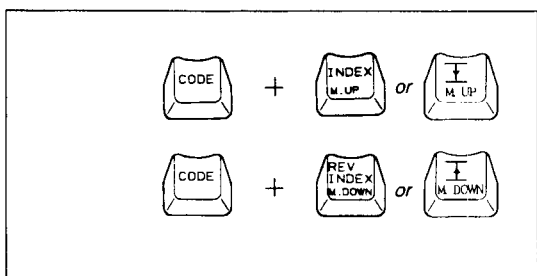
- 1) Press the Index key at the position to type a subscript. The print position moves half line downward, or the symbol "↓" appears on the display.
 - 2) Type character(s) for subscript.
 - 3) Press the Reverse index key to return to former line. On the display, the symbol "↑" appears instead.
- The subscript performed on the display is printed as shown in sample printout.



18. MICRO UP/MICRO DOWN

This function is used to align the print point indicator for correcting something previously typed or on a preprinted form.

- This function cannot be used in the store mode. Be sure to clear display before activating function.
- 1) Hold down the Code key and press the Index key to advance paper 1/16 line (1/96") at a time.
 - 2) Hold down the Code key and press the Reverse index key to retract paper 1/16 line (1/96") at a time.



19. COLUMN LAYOUT

This function is used to automatically format tables, evenly spacing the columns of words or numbers for a well-balanced appearance.

1 Setting tabs for columns

1) Hold down the Code key and press the "6" key. A "▼" appears on the display above "COLUMN" and "HOW MANY COLUMNS 00←" is displayed.

● The previously set tabs are all cleared.

2) Type the desired number of columns and press the Return key.

3) "TAB TYPE FOR COL.01" appears on the display.

4) Enter the desired tab type for the first column, by setting a corresponding tab.

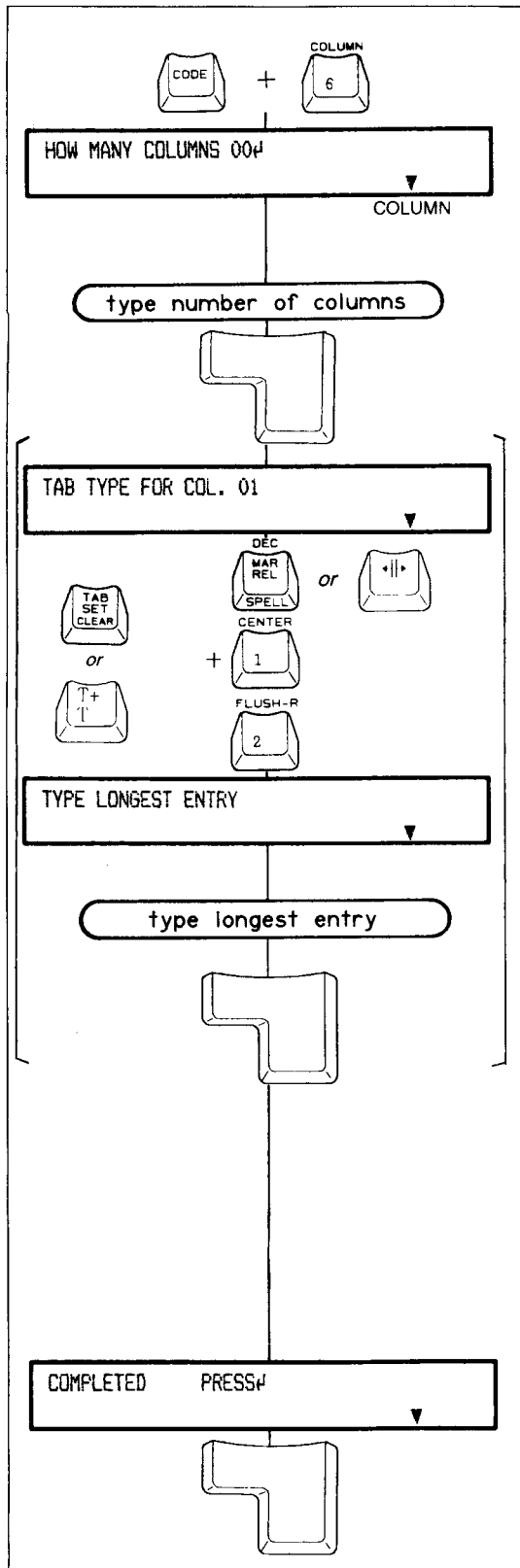
5) "TYPE LONGEST ENTRY" appears on the display.

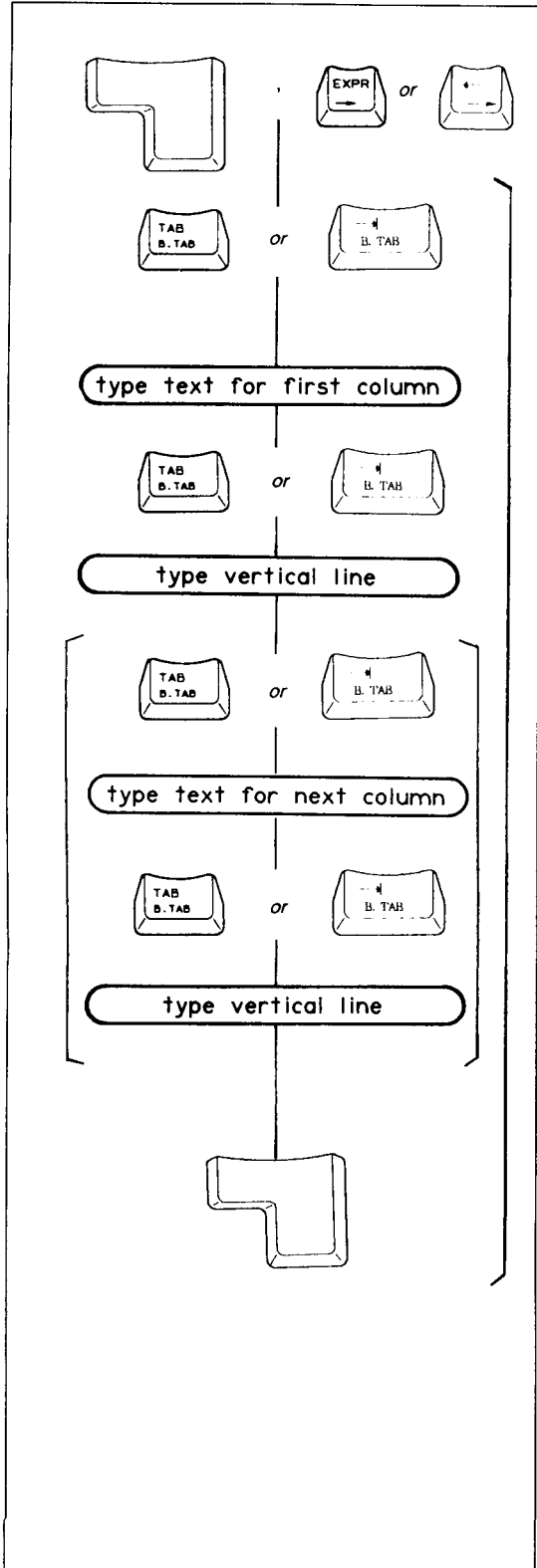
6) Type the longest word or number which is to be typed in that column, and press the Return key. (The text is not printed at this time.)

7) "TAB TYPE FOR COL.02" then appears on the display.

8) Repeat the same procedure from step 3) to step 6) for each column.

9) "COMPLETED PRESS ←" appears on the display when the data for all columns has been completed and the "▼" above "COLUMN" disappears.





2 Typing text in columns

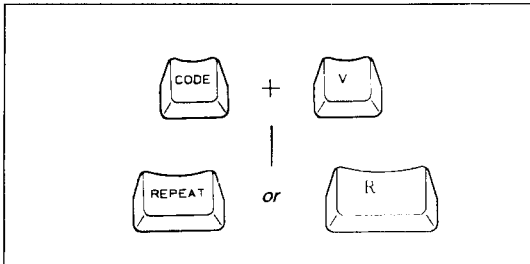
- 1) Press the Return key or Express key to position the carrier (or cursor) at the left margin.
- 2) Press the Tab key to advance the print point indicator to the first tab stop.
- 3) Type the text for the first column and press the Tab key. The print point indicator moves to a position between the center of the first and second columns.
- 4) Type a vertical line if you wish to make line between the columns. Press the Tab key to advance to the next column.
- 5) Repeat the same procedure of step 3) and step 4) for each column until the last column is typed.
- 6) Press the Return key to advance to the left margin on the next line in the table.
- 7) Repeat the same procedure from step 2) to step 5) for each line in the table.

20. FRAMING

This function draws frames consisting of vertical and horizontal lines.

1 Vertical line

- 1) Hold down the Code key and press the "V" key. A vertical line is printed. The print point indicator does not move.
- 2) Hold down the Repeat key. A series of vertical lines is printed continuously until the Repeat key is released.



2 Framing

- 1) First draw the top and bottom horizontal lines of frame. (Hold down the Shift key and press the Hyphen key, then hold down the Repeat key for a horizontal line.)
 - Setting margins at the desired width makes it easier to type horizontal lines of the same length.

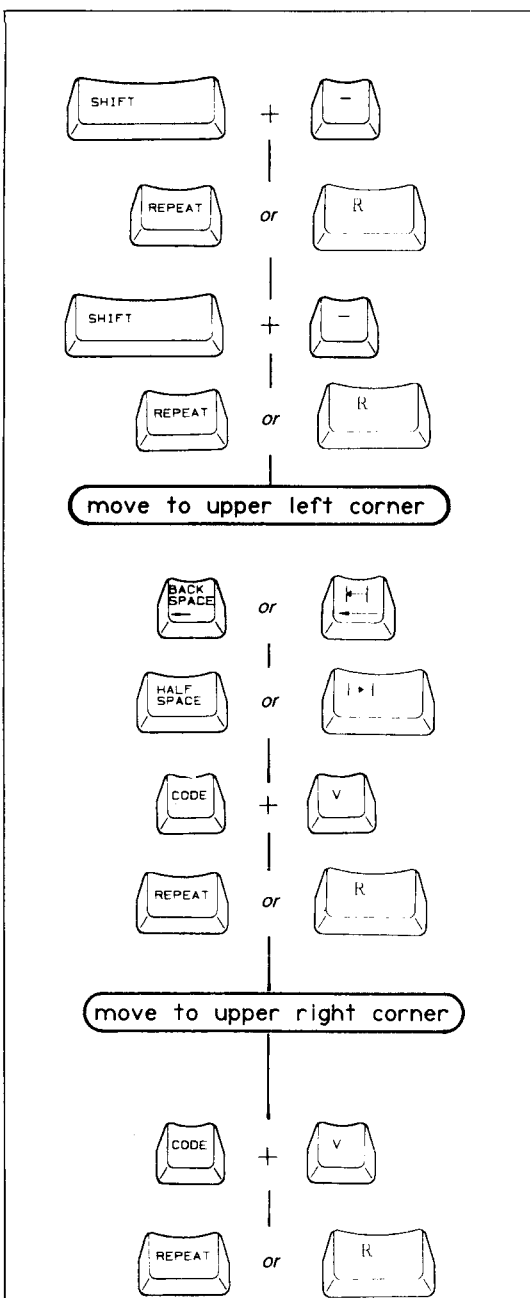
- 2) Next return to one line below the upper left corner.

- 3) Press the Backspace key and press the Half space key to exactly align the print point indicator with the left end of the top horizontal line.

- 4) Hold down the Code key and press the "V" key. A vertical line is printed. Then hold down the Repeat key until it reaches the bottom horizontal line.

- 5) Move to one line below the upper right corner.

- 6) Hold down the Code key and press the "V" key, then hold down the Repeat key until it reaches the bottom horizontal line.



MEMORY FUNCTIONS

The memory function is used to store text such as entire letters and repetitive phrases for later review, modifying and printout. You can also store just a series of positions on a preprinted form or line format such as margins and tabs without typing text.

The memory contains 16,000 characters, dividing into a maximum of 100 separate files. Then contents of memory are maintained by a back-up battery for about five years, even when the power is turned off.

1. STORING TEXT FILE

Text file is used to store text such as letters and documents including the margin and tab settings.

There are three ways to store a text file:

1. Display mode

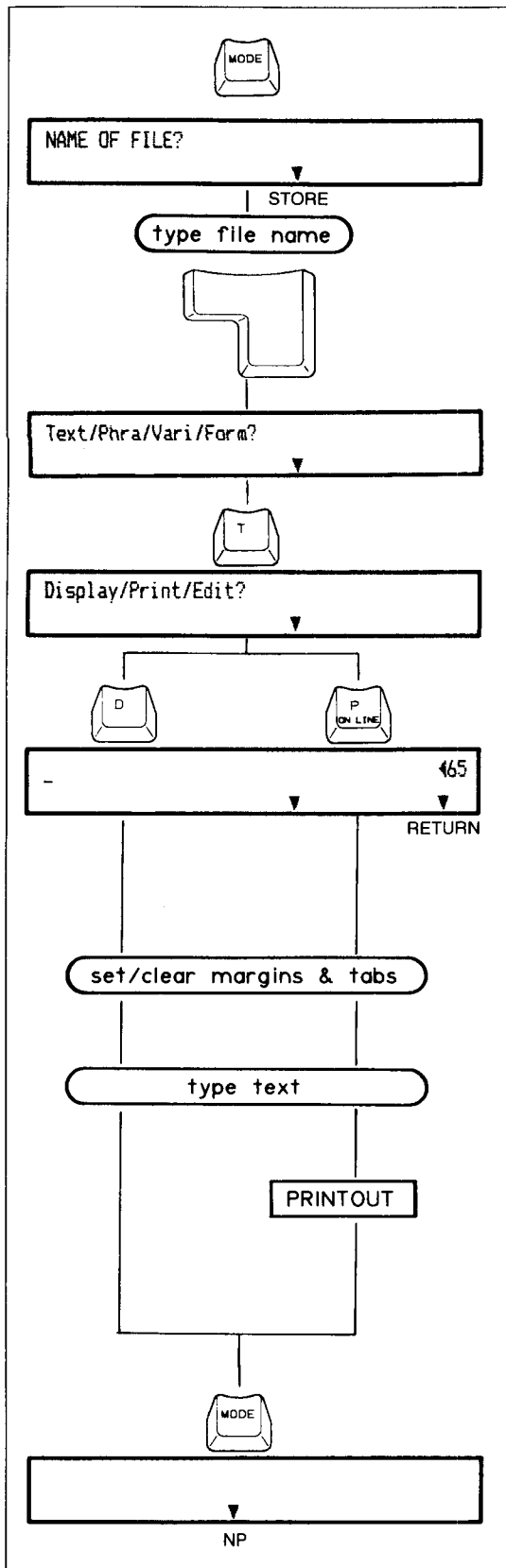
Text is typed and stored line by line using margins just as you type on paper, but nothing is printed.

2. Print mode

Text is typed and stored line by line using margins as in the display mode above, but it's printed on paper.

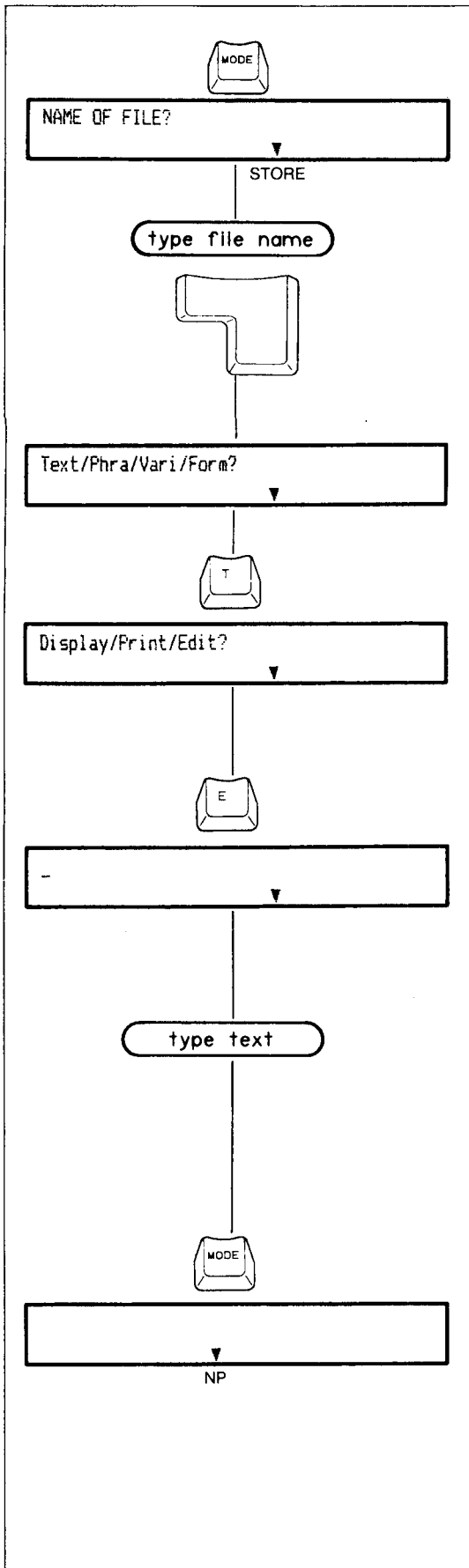
3. Edit mode

Text is typed continuously through a file and stored without being printed on paper. You can move to any place in the file for review or modification.



1 Storing a text file by the display/print mode

- 1) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
- 2) Type the file name (maximum of five letters/numbers). Then press the Return key.
 - You can exit the store mode by pressing the Mode key at any time.
- 3) "Text/Phra/Vari/Form?" appears on the display.
- 4) Press the "T" key to choose the text file. The paper is fed one line and the carrier returns to the left margin. "Display/Print/Edit?" appears.
- 5) Press the "D" key to choose the display mode, or press the "P" key to choose the print mode. The display is cleared and the counter indicating the number of spaces to the right margin appears. The automatic return function is automatically activated.
- 6) Set and clear any margins and tabs as you want.
- 7) Type text. It appears on the display (and printed in the print mode) line by line, according to the present margin settings. Once the line is changed, you cannot return to the previous line.
 - Make corrections on the display before changing line, or you cannot correct it unless you exit the store mode.
 - Most typing functions can be also used and stored.
- 8) Press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

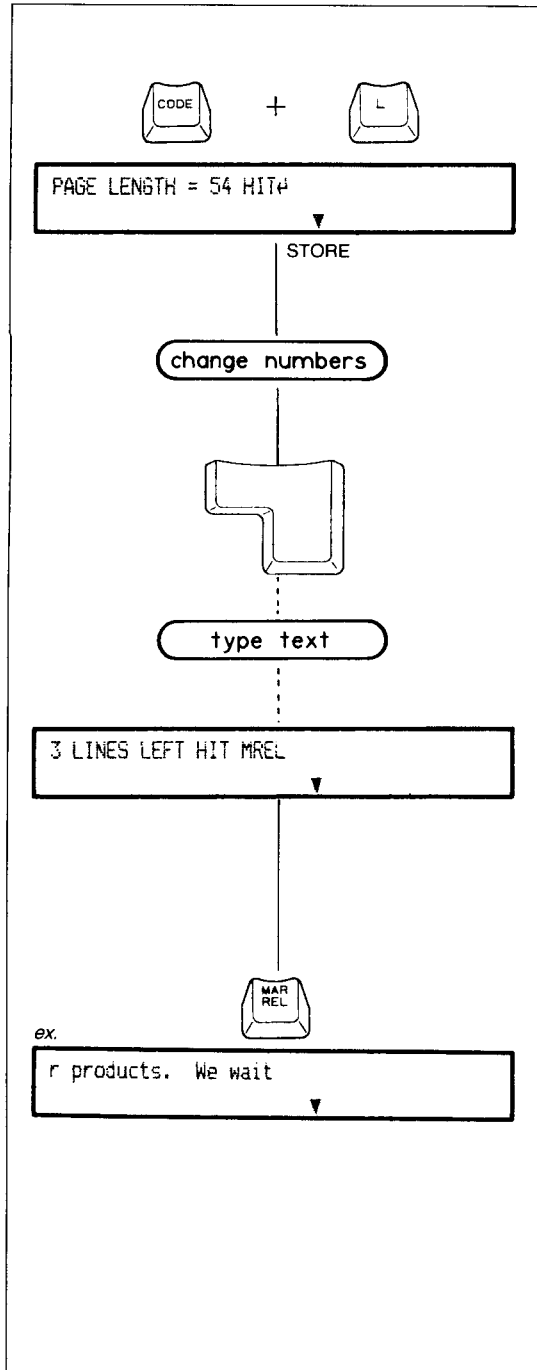


2 Storing a text file by the edit mode

- 1) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
- 2) Type the file name (maximum of five letters/numbers). Then press the Return key.
 - You can exit the store mode by pressing the Mode key at any time.
- 3) "Text/Phra/Vari/Form?" appears on the display.
- 4) Press the "T" key to choose the text file. The paper is fed one line and the carrier returns to the left margin. "Display/Print/Edit?" appears.
- 5) Press the "E" key to choose the edit mode. The display is cleared.
- 6) Type text. It appears on the display continuously as a one-line-text. Most of all key operations and functions are indicated by the symbols. For the details, refer to "Modifying a stored file by the edit mode".
- 7) Press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

2. SETTING PAGE LENGTH OF TEXT FILE

This function sets the number of lines in a page for a text file. It also indicates the page ending at the foot of each page. When printing, the typewriter will pause after the number of lines are printed for the flesh paper insertion.



- 1) Hold down the Code key and press the "L" key. "PAGE LENGTH = 54 HIT ←" appears on the display.
 - "54" is the factory setting for well-balanced printout on 11" long paper.
- 2) Type the number of lines for page length as you want.
- 3) Press the Return key to complete the setting.
- 4) After you typed text in 4th line from the bottom of the page, "3 LINES LEFT HIT MREL" appears on the display. This informs you only three more lines are remained in the current page.
- 5) Press the Margin release key. The last 20 characters you typed reappears on the display. Continue typing text until the last line, ending text properly as far as the bottom of the page.
- 6) Continue typing text for the next page.

3. STORING PHRASE FILE

Phrase file is used to store often-used phrases or terminology. Since no margins and tabs are stored, you can print it out at any location.

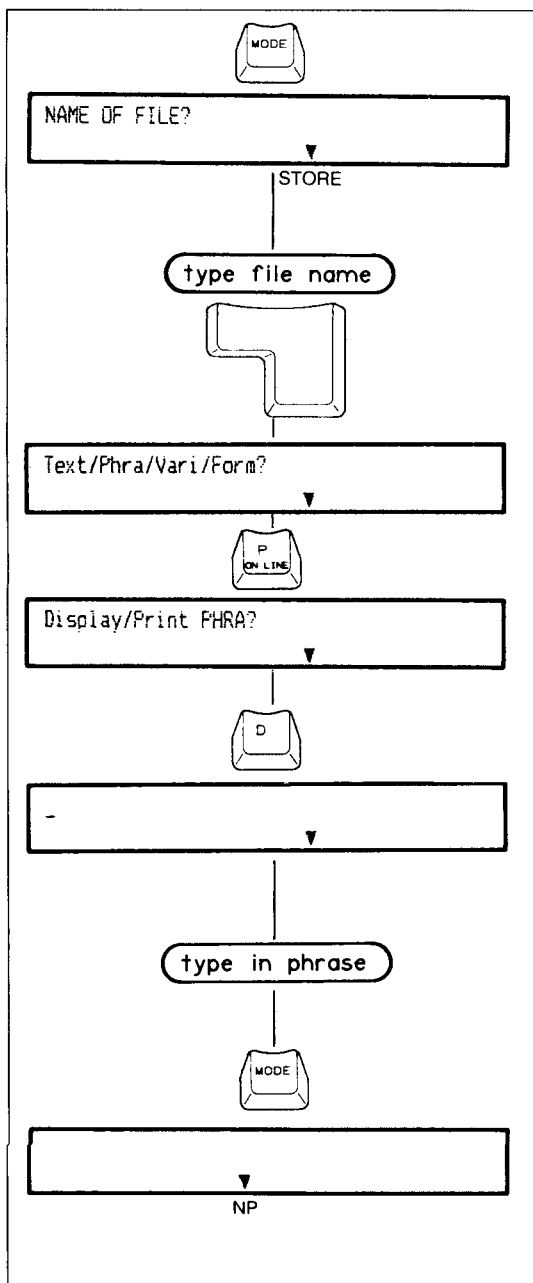
There are two ways to store a phrase file:

1. Display mode

Phrase is stored without being printed on paper.

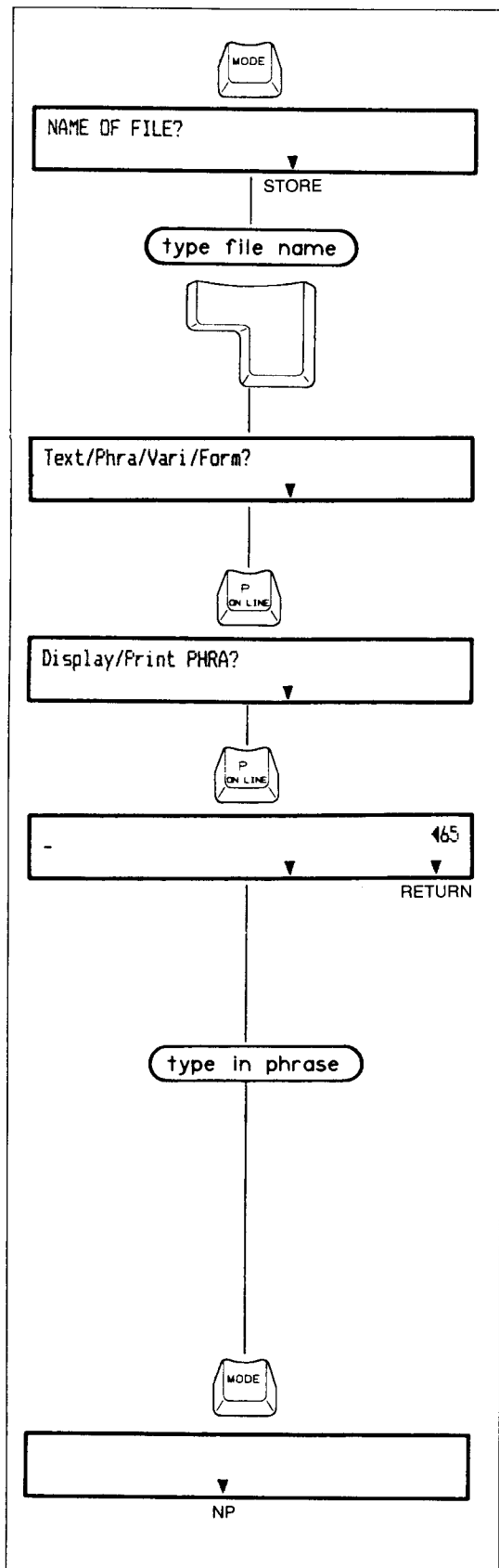
2. Print mode

Phrase is stored with being printed on paper.



1 Storing a phrase file by the display mode

- 1) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
- 2) Type the file name (maximum of five letters/numbers). Then press the Return key.
 - You can exit the store mode by pressing the Mode key at any time.
- 3) "Text/Phra/Vari/Form?" appears on the display.
- 4) Press the "P" key to choose the phrase file. "Display/Print PHRA?" appears.
- 5) Press the "D" key to choose the display mode. The display is cleared.
- 6) Type in phrase through the end of it. It appears on the display continuously as a one-line-phrase.
- 7) Press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

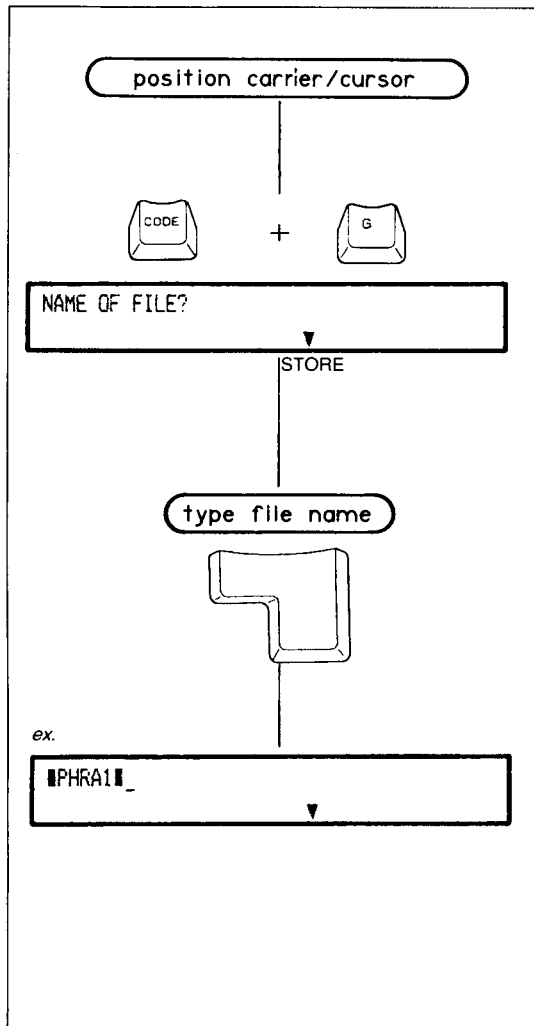


2 Storing a phrase file by the print mode

- 1) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
 - You can terminate the store mode by pressing the Mode key at any time.
- 2) Type the file name (maximum of five letters/numbers). Then press the Return key.
 - "Text/Phra/Vari/Form?" appears on the display.
- 3) "Text/Phra/Vari/Form?" appears on the display.
- 4) Press the "P" key to choose the phrase file. "Display/Print PHRA?" appears.
- 5) Press the "P" key to choose the print mode. The display is cleared and the counter indicating the number of spaces to the right margin appears. The automatic return is automatically activated.
- 6) Type in phrase. It's displayed and printed on paper line by line according to the present margins, but it's stored as a one-line-phrase and no margins are stored.
 - Make corrections before being printed on paper, or you cannot correct it unless you exit the store mode.
- 7) Press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

4. GETTING PHRASE FILE INTO TEXT FILE

This function inserts a phrase file into a text file. At the time of printout of the text file, the contents of the phrase file is printed.

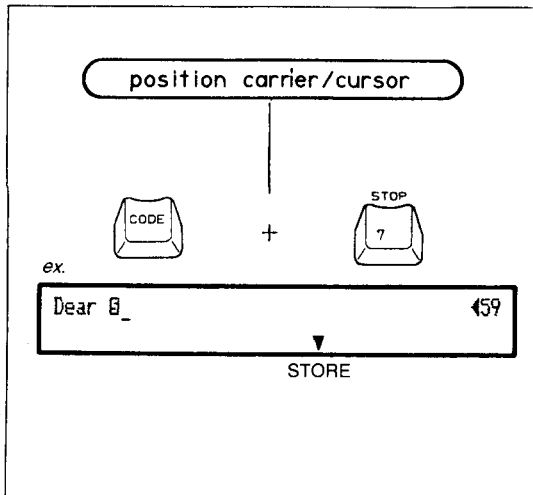


- 1) Position the cursor at the location in a text file where you want to insert a phrase file.
- 2) Hold down the Code key and press the "G" key. "NAME OF FILE?" appears on the display.
- 3) Type the name of the phrase file. Then press the Return key.
- 4) The file name is inserted at the cursor position, sandwiched between two boxes.
 - The contents of the phrase file will not appear at this time.
 - To delete the phrase file inserted, press the Correction key with the cursor under the first box.
- 5) At the printing time of the text file, the contents of the phrase file are printed at the location in the text file.
 - If the phrase file you inserted does not exist in the memory, printing is paused and "NOT FOUND HIT ↵" appears along with the file name. Press the Return key to terminate the print function.

5. STOP CODE

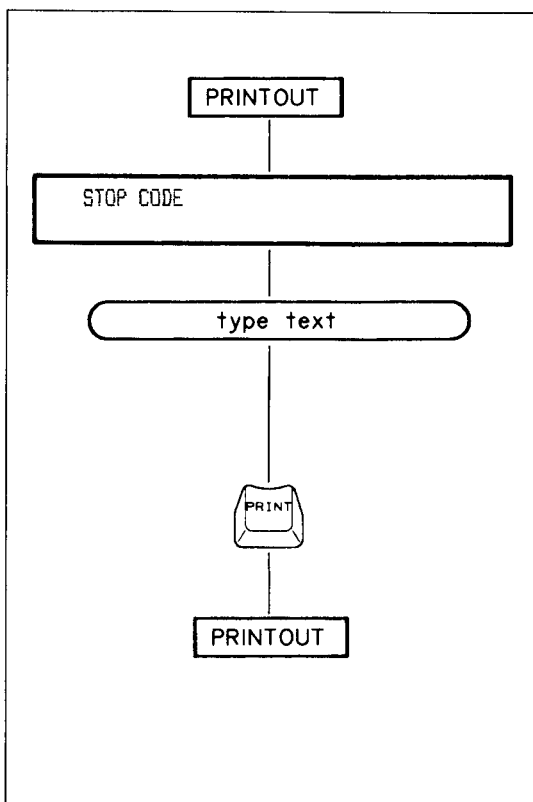
To stop printing at locations in a file in order to type words or phrases during printout, enter a stop code while storing or modifying the file.

- The stop code can be used in conjunction with the decimal/center/flush right tab, automatic center or right margin flush function.



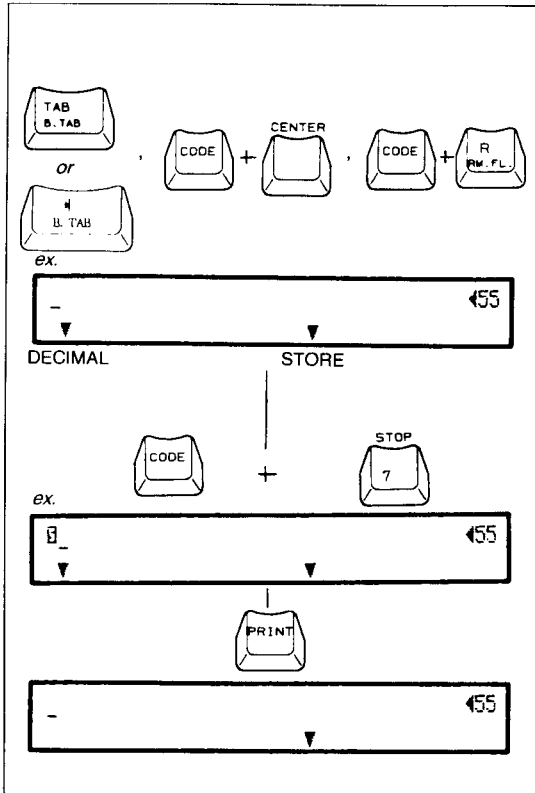
1 Entering a stop code

- 1) Position the cursor on the point where you want to enter a stop code.
 - 2) Hold down the Code key and press the "7" key. A highlighted "S" appears on the display.
- When you store/modify a file by the print mode, a "X" is printed at the position where you enter a stop code.



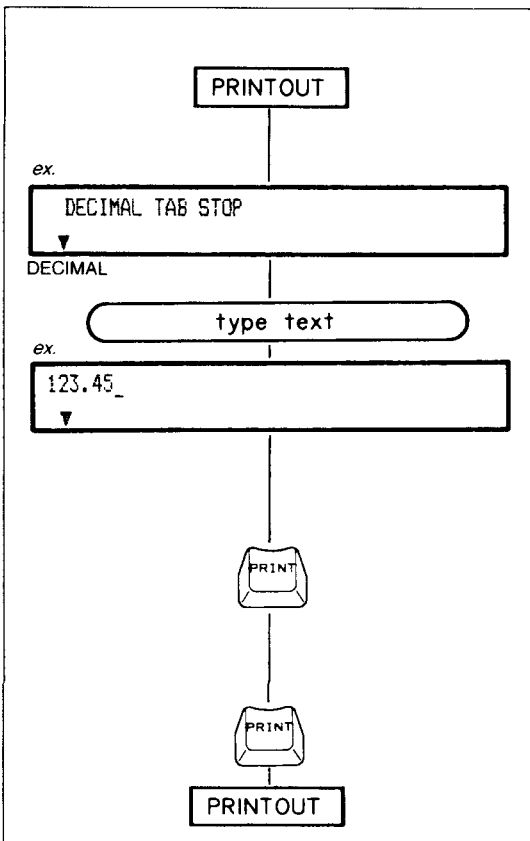
2 Using a stop code

- 1) While printing, the typewriter will stop at any stop code in the file and "STOP CODE" appears on the display.
- 2) Type text. It is printed on paper.
- 3) Press the Print key to restart printing.



3 Entering a stop code at the decimal/center/flush right tab, auto center or right margin flush position

- 1) Press the Tab/back tab key to move the cursor to the desired tab position where you want enter a stop code.
or
Hold down the Code Key and press the "CENTER" key at the right in the top row to activate the auto center function.
or
Hold down the Code Key and press the "R" key to activate the right margin flush function.
- 2) Hold down the Code key and press the "7" key. A highlighted "S" appears on the display.
- 3) Press the Print key. The respective function mode is terminated and you can continue typing text.



4 Using a stop code at the decimal/center/flush right tab, automatic center or right margin flush function

- 1) When the printing stops at the respective stop code, "DECIMAL TAB STOP", "CENTER TAB STOP", "FLUSH RIGHT TAB STOP", "AUTO CENTER STOP" or "FLUSH RIGHT STOP" appears.
- 2) Type text. It appears on the display.
- 3) Press the Print key. It is printed in the manner of respective function.
- 4) Press the Print key again to restart printing.

6. MODIFYING STORED FILE

You can modify the text file and phrase file stored in memory.

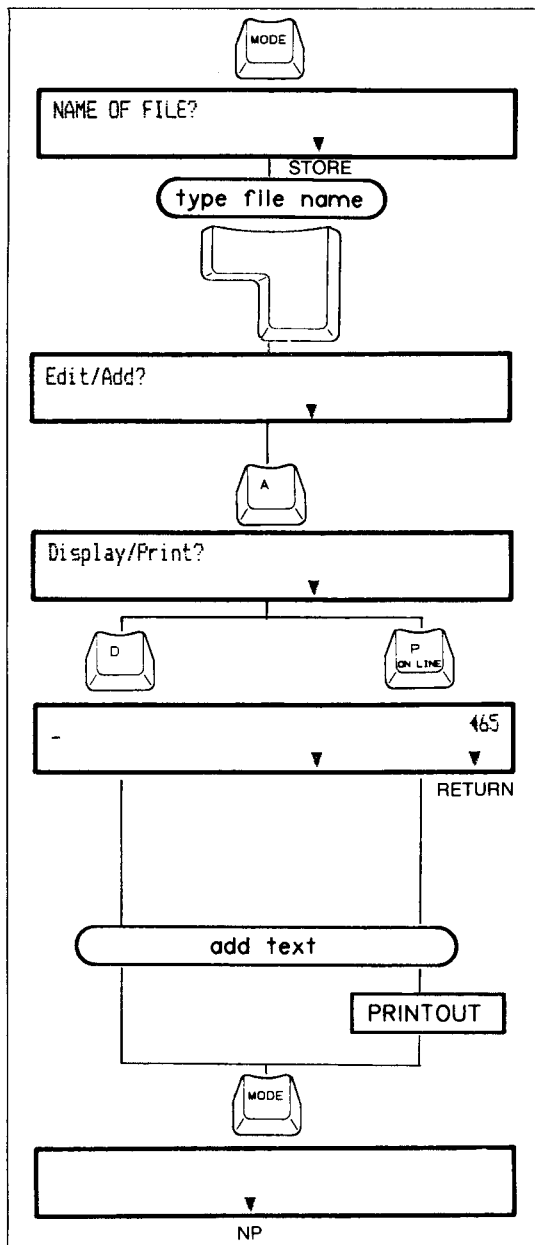
There are two ways to modify the file:

1. Add mode

Text can be added to the end of file line by line with or without printing. (It's the same manner as when storing text file by display/print mode.)

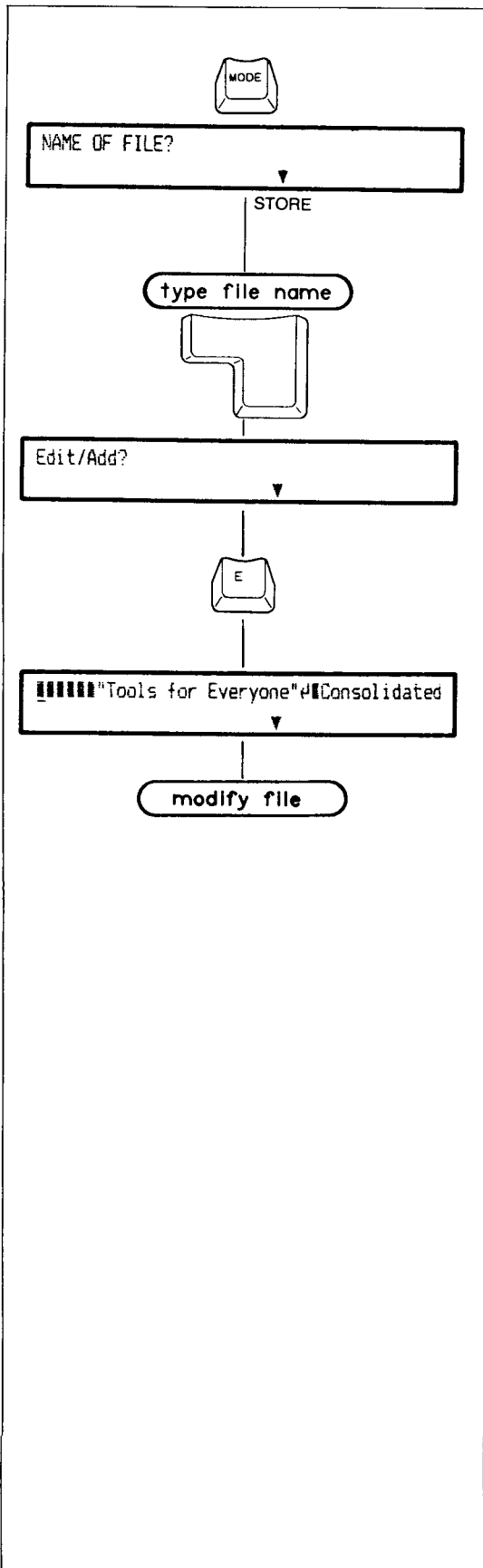
2. Edit mode

The contents of file are displayed as an one-line-text. You can move to any place in the file for modification.



1 Adding text to the end of a text file stored

- 1) Press the Mode key until a "▼" appears on the display above "STORE".
- 2) Type the file name you want to add text to. Then press the Return key.
- 3) "Edit/Add?" appears on the display.
- 4) Press the "A" key to choose the add mode. "Display/Print?" appears.
- 5) Press the "D" key to choose the display mode or press the "P" key to choose the print mode. The last line of the file is displayed with the cursor located at the end of file.
- 6) Add some text in the same manner as when storing text by display/print mode.
- 7) Press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

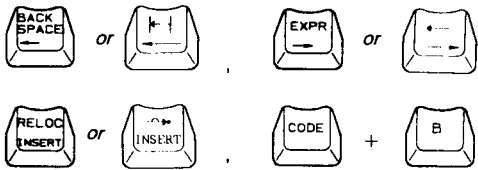


2 Modifying a stored file by the edit mode

- 1) Press the Mode key until a "▼" appears on the display above "STORE".
- 2) Type the file name you want to modify. Then press the Return key.
- 3) "Edit/Add?" appears on the display.
- 4) Press the "E" key to choose the edit mode.
- 5) The beginning of the file appears on the display. The contents of file are displayed as a one-line-text. Move to any place in the file for modification.
 - a) Symbols for key operations
Most of all key operations are indicated by the symbols as follows:

Space	□ Required hyphen
← Return	H Syllable hyphen
→ Tab	← Overlay
← Back tab	↑ Index (Subscript)
□ Required space	↓ Reverse index (Superscript)
 - b) Box marks for functions
Most of all functions are indicated by the box marks which alternate with function names as follows:

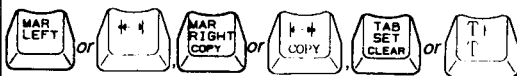
■ ↔ LEFT MARGIN SET	■ ↔ DECIMAL TAB SET
■ ↔ RIGHT MARGIN SET	■ ↔ CENTER TAB SET
■ ↔ MARGIN RELEASE	■ ↔ FLUSH RIGHT TAB SET
■ ↔ TAB SET	■ ↔ GROUP DECIMAL TAB
■ ↔ TAB CLEAR	■ ↔ GROUP CENTER TAB
■ ↔ ALL TABS CLEARED	■ ↔ GROUP FLUSH-R TAB
■ ↔ MOVE CARRIER TO	■ ↔ AUTO CENTER
■ ↔ INDENT	■ ↔ RIGHT MARGIN FLUSH
■ ↔ NEXT INDENT	■ ↔ COLUMN LAYOUT



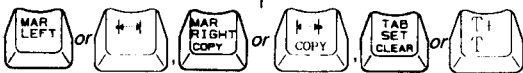
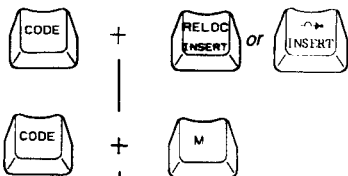
- c) Moving cursor
 Press the Backspace key and Express key to move the cursor. Besides, press the Relocation key to quickly move to the end of file or hold down the Code key and press the "B" key to move to the top of file. Use the search and replace function to quickly move to the desired location in file. (Refer to the next page.)

- d) Corrections of characters
 Make corrections as explained under "Corrections on the display".

- e) Setting margins/tabs
 Press the Left or right margin key or Tab set key. Two box marks appear. Right one alternates with "LEFT MARGIN SET", "RIGHT MARGIN SET" or "TAB SET". Left one alternates with "MOVE CARRIER TO xx", whose number indicates the position of margin/tab. Change the number to specify the position where you want to set margin/tab. Press Index key to increase number or Reverse index key to decrease it with the cursor under the box.

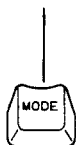


LEFT MARGIN SET
 RIGHT MARGIN SET
 TAB SET
 MOVE CARRIER TO xx



- When you set margin/tab in the middle of text, first hold down the Code key and press the Relocation key to activate the insert mode. Hold down the Code key and press the "M" key to put the first box (MOVE CARRIER TO xx) then press the Left or right margin, Tab set key to put the second box. Change the number as desired.

ex.
 on the matter.¶¶¶¶"The following passag



NP

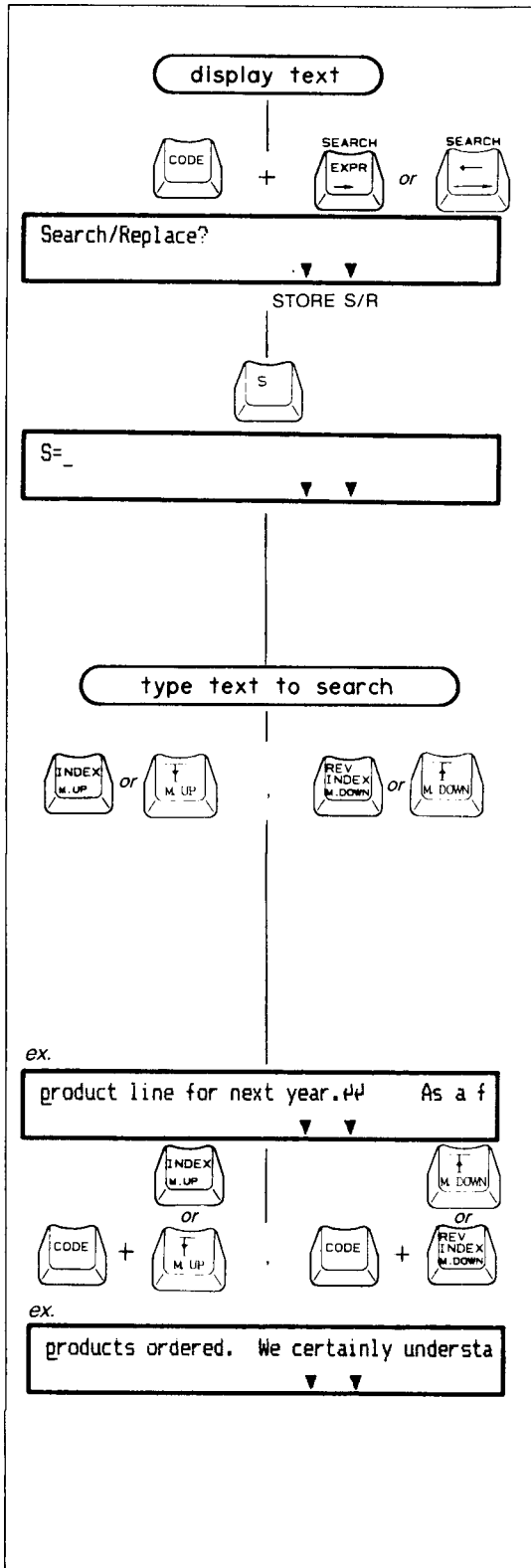
- 6) After modifying file, press the Mode key to terminate the store mode. The typewriter automatically returns to the normal print (NP) mode.

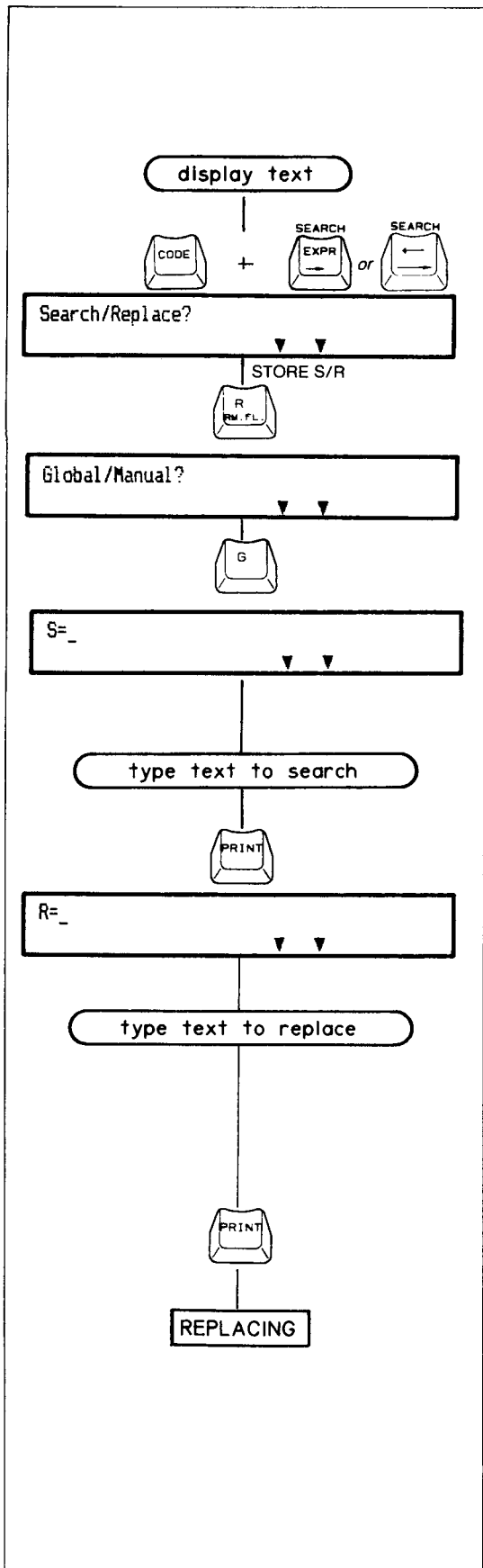
7. SEARCH AND REPLACE

This function moves cursor quickly to any place in file to find or automatically change word(s).

1 Searching

- 1) Display the text of file by the edit mode.
- 2) Hold down the Code key and press the Express key. A "▼" appears on the display above "S/R" and "Search/Replace?" appears.
- 3) Press the "S" key. "S=" appears on the display.
- 4) Type the characters you want to search (maximum of 18 characters).
- 5) Press the Index key to search for it toward the end of file from the cursor position.
or
Press the Reverse index key to search for it toward the beginning of file from the cursor position.
- "NOT FOUND PRESS ←" will appear on the display if the text to be searched is not found. Press the Return key to terminate the function.
- 6) The first occurrence of the characters appears on the left end of the display.
- 7) Hold down the Code key and press the Index key to search for the next occurrence toward the end of file.
or
Hold down the Code key and press the Reverse index key to search for the next occurrence toward the beginning of file.
- "NOT FOUND PRESS ←" appears on the display after the last occurrence is found. Press the Return key to terminate the function. The "▼" above "S/R" disappears.

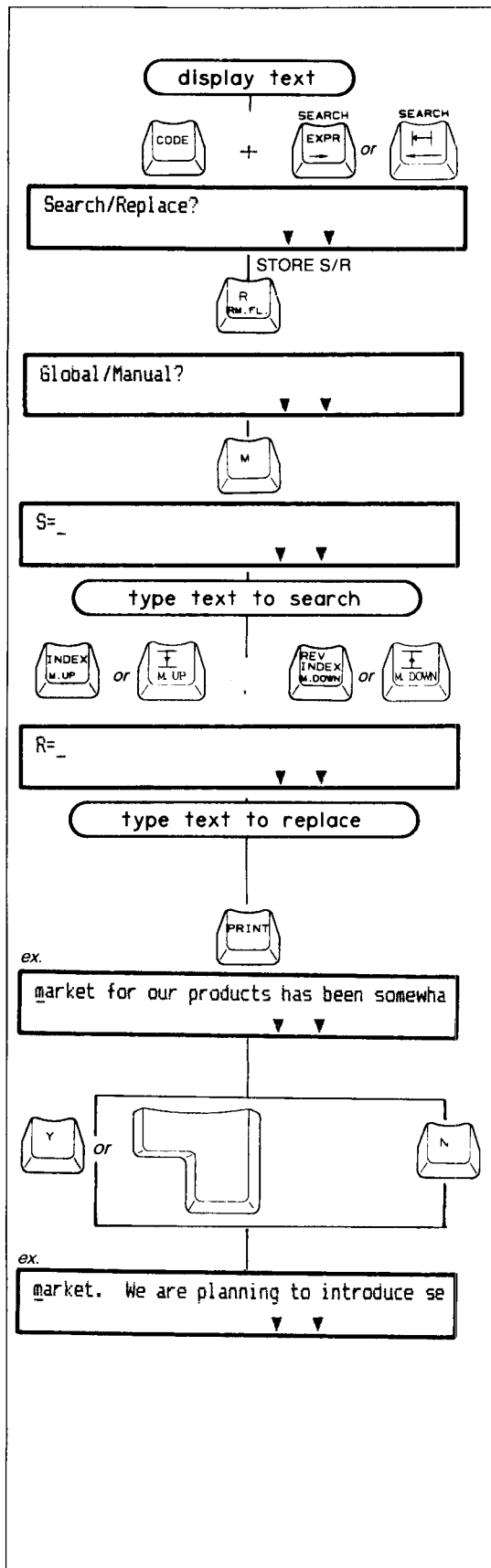




2 Global replacing

This function replaces particular text throughout a file immediately.

- 1) Display the text of file by the edit mode.
- 2) Hold down the Code key and press the Express key. A "▼" appears on the display above "S/R" and "Search/Replace?" appears.
- 3) Press the "R" key. "Global/Manual?" appears on the display.
- 4) Press the "G" key. "S=" appears.
- 5) Type the characters you want to search (maximum of 18 characters).
- 6) Press the Print key. "R=" appears.
- 7) Type the characters you want to replace (maximum of 18 characters).
 - Leaving it blank deletes all occurrences of the searched characters.
- 8) Press the Print key again. All occurrences of the characters are replaced automatically, regardless of whether they are part of a word or an entire word. The "▼" above "S/R" disappears.
 - If you want to replace just the occurrences of an entire word, put the spaces both before and after the word when you type the characters to search and to replace.
 - "NOT FOUND PRESS ←" will appear if the characters to be searched is not found in the file. Press the Print key to display "S=" again to retype, or press the Return key to terminate the function.

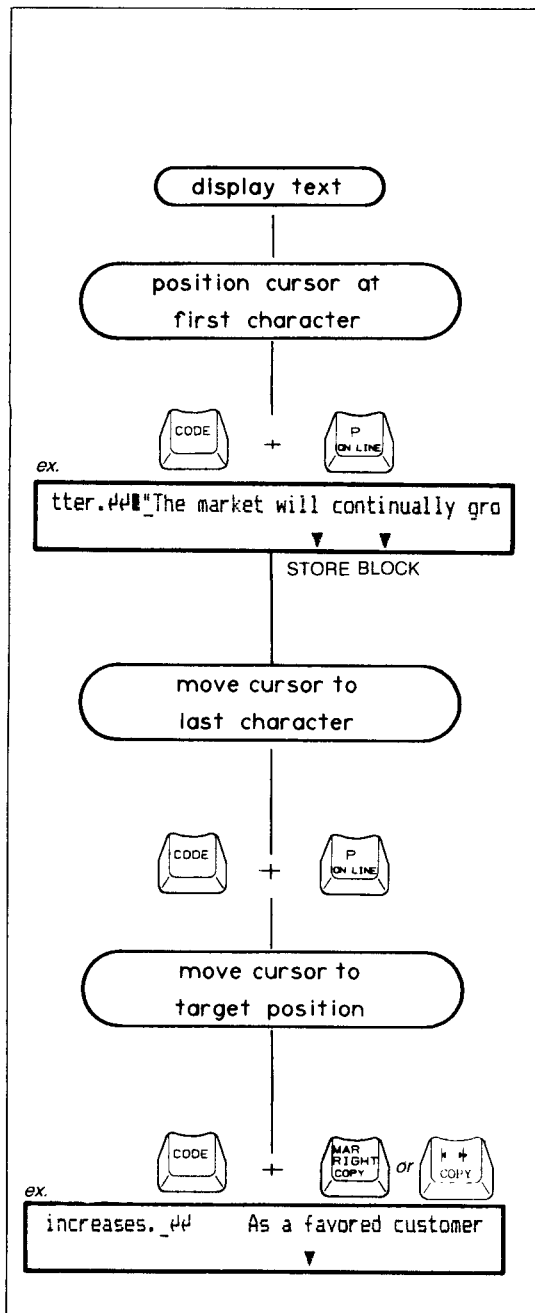


3 Manual replacing (Individual replacing)

This function replaces the specified text one by one.

- 1) Display the text of file by the edit mode.
- 2) Hold down the Code key and press the Express key. A "▼" appears on the display above "S/R" and "Search/Replace?" appears.
- 3) Press the "R" key. "Global/Manual?" appears on the display.
- 4) Press the "M" key. "S=" appears.
- 5) Type the characters you want to search (maximum of 18 characters).
- 6) Press the Index key to search for it toward the end of file from the cursor position.
or
Press the Reverse index key to search for it toward the beginning of file from the cursor position.
- 7) "R=" appears on the display. Type the characters you want to replace (maximum of 18 characters).
- 8) Press the Print key. The first occurrence of the characters appears on the left end of the display.
- "NOT FOUND PRESS ←" will appear on the display if the text to be searched is not found in the file. Press the Print key to display "S=" again to retype, or press the Return key to terminate the function.
- 9) Press the "Y" key or Return key to replace.
or
Press the "N" key to skip without replacing.
- 10) Next occurrence of the characters appears on the display. Repeat the same procedure of step 9).
- Press the "C" key to terminate this function in the middle of file. Two beeps will sound to indicate it.
- "NOT FOUND PRESS ←" appears on the display after the last occurrences is replaced or skipped. Press the Return key to terminate the function. The "▼" above "S/R" disappears.

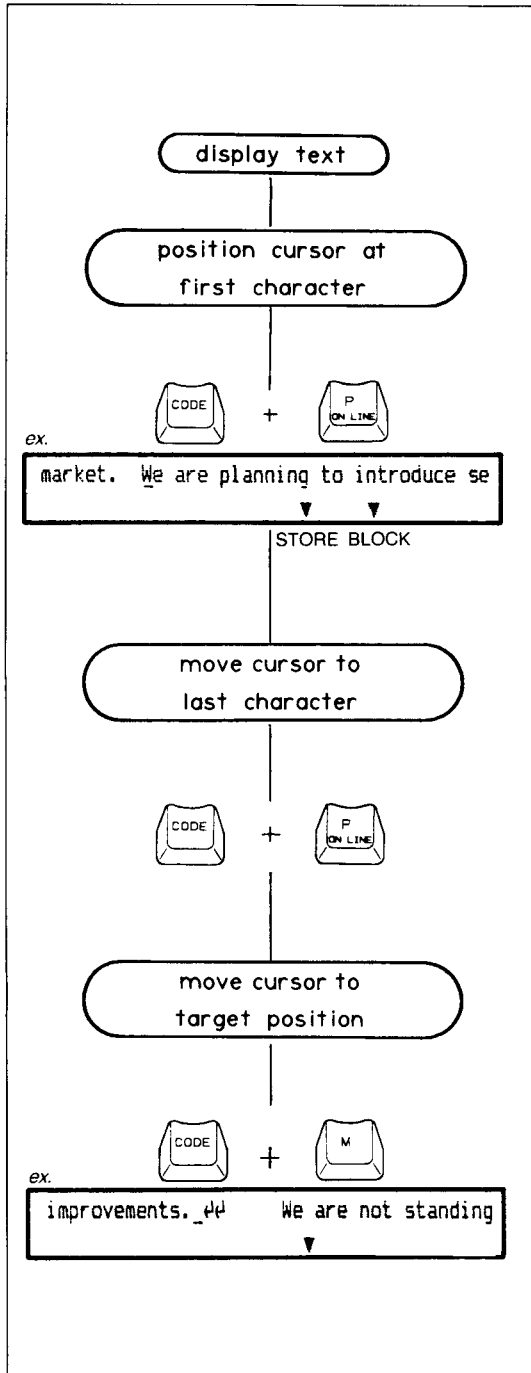
8. COPYING, MOVING AND DELETING BLOCK TEXT



1 Copying block text

This function copies a block text to the another position, remaining it at the original position.

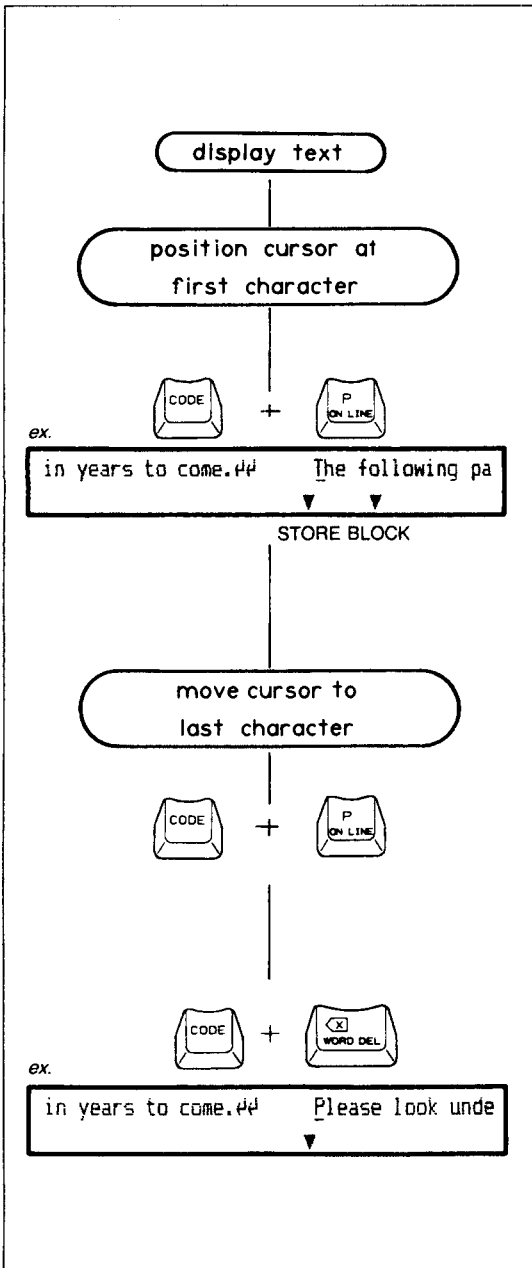
- 1) Display the text of file by the edit mode.
- 2) Position the cursor on the first character of block text to be copied.
- 3) Hold down the Code key and press the "P" key to mark the beginning of the block. Two beeps sound, a "▼" appears on the display above "BLOCK" and the character begins blinking.
- 4) Move the cursor to the last character of block text. As you move the cursor, characters included in the block begins blinking.
- 5) Hold down the Code key and press the "P" key to mark the end of the block. Two beeps sound again.
- 6) Move the cursor to the position where you want to copy the block text.
- 7) Hold down the Code key and press the Right margin key. The block text is copied at the target position. The "▼" above "BLOCK" disappears.



2 Moving block text

This function moves a block text to the another position.

- 1) Display the text of file by the edit mode.
- 2) Position the cursor on the first character of block text to be moved.
- 3) Hold down the Code key and press the "P" key to mark the beginning of the block. Two beeps sound, a "▼" appears on the display above "BLOCK" and the character begins blinking.
- 4) Move the cursor to the last character of block text. As you move the cursor, characters included in the block begins blinking.
- 5) Hold down the Code key and press the "P" key to mark the end of the block. Two beeps sound again.
- 6) Move the cursor to the position where you want to move the block text.
- 7) Hold down the Code key and press the "M" key. The block text is moved to the target position. The former position of the block text is filled up with the following text. The "▼" above "BLOCK" disappears.



3 Deleting block text

This function deletes a block text.

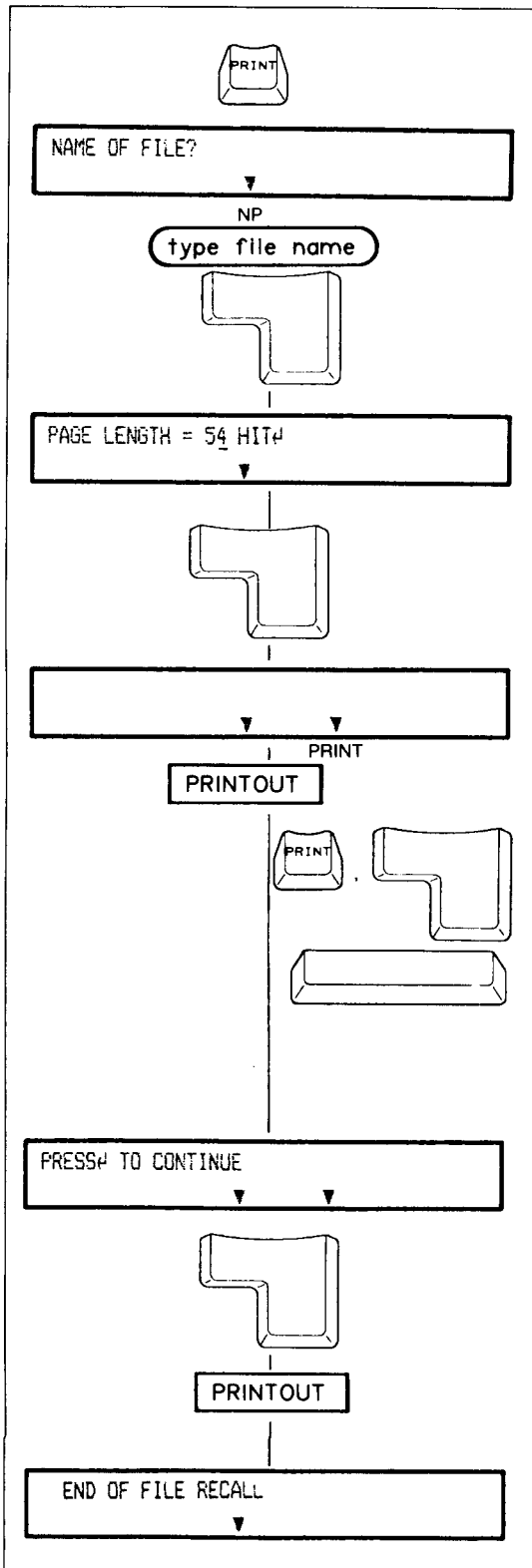
- 1) Display the text of file by the edit mode.
- 2) Position the cursor on the first character of block text to be deleted.
- 3) Hold down the Code key and press the "P" key to mark the beginning of the block. Two beeps sound, a "▼" appears on the display above "BLOCK" and the character begins blinking.
- 4) Move the cursor to the last character of block text. As you move the cursor, characters included in the block begins blinking.
- 5) Hold down the Code key and press the "P" key to mark the end of the block. Two beeps sound again.
- 6) Hold down the Code Key and press the Correction key. The block text is deleted and the following text is pulled to fill up the empty space. The "▼" above "BLOCK" disappears.

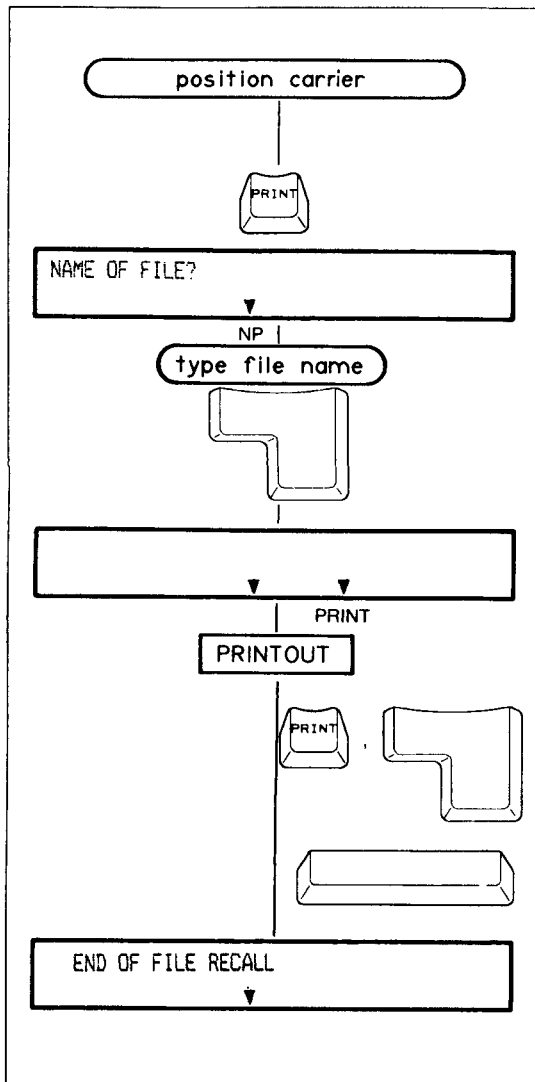
9. PRINTING FILE

This function prints stored file on paper with normal print (NP) mode or justified print (JUST) mode. You can print either a single file or up to 40 files continuously.

1 Printing a single text file

- 1) Press the Print key. "NAME OF FILE?" appears on the display. Type the file name and press the Return key.
- 2) The carrier will move to the left margin position of that particular file and "PAGE LENGTH = XX HIT ←" appears on the display, indicating the number of lines in a page.
- 3) Press the Return key to start printing.
- 4) A "▼" appears above "PRINT" on the display and the typewriter prints the file in both directions (bi-directional printing.) Lines which have underlined or bold type text are printed from the left to right only.
 - To temporarily stop printout, press the Print or Return key. "PAUSE PRESS ←" appears on the display. Restart printing by pressing the Print or Return key again.
 - You can cancel the print function at any time after starting a printout by pressing the Space bar. "END OF FILE RECALL" appears on the display.
- 5) The typewriter will stop after printing the specified number of lines, and "PRESS ← TO CONTINUE" appears on the display. Press the Return key to restart printing.
- 6) When the printout of file has been completed, "END OF FILE RECALL" appears on the display.





2 Printout a single phrase file

- 1) Position the carrier at the point to start printout on paper.
- 2) Press the Print key. "NAME OF FILE?" appears on the display. Type the file name and press the Return key.
- 3) A "▼" appears on the display above "PRINT" and the carrier will start printing from its present position, according to the margins which are presently set.
 - To temporarily stop printout, press the Print key or Return key. "PAUSE PRESS ←" appears on the display. Restart printing by pressing the Print or Return key again.
 - You can cancel the print function at any time after starting a printout by pressing the Space bar. "END OF FILE RECALL" appears on the display.
- 4) When the printout of file has been completed, "END OF FILE RECALL" appears on the display.

3 Printout several files continuously (Chain recall)

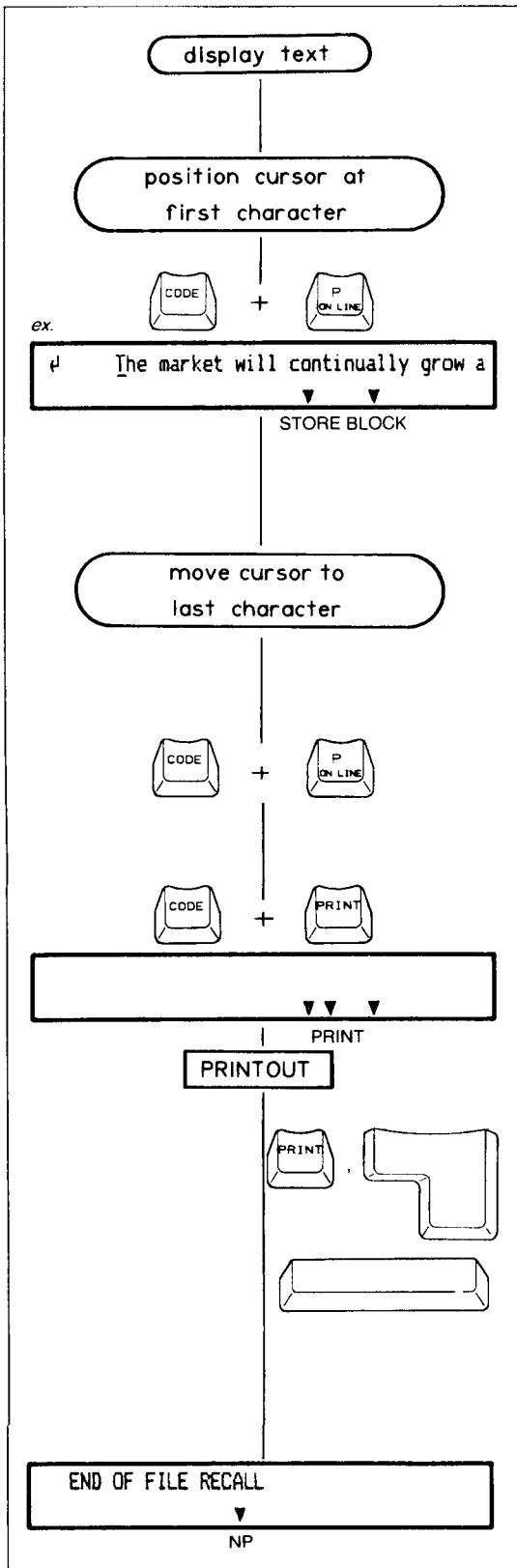
To printout several files continuously, type those file name connecting them with a comma (,) between each of them.

- None of the files will be printed if any one of them is not stored in the memory.

10. PRINTING BLOCK TEXT

This function prints out a specified block of text in a text file or phrase file.

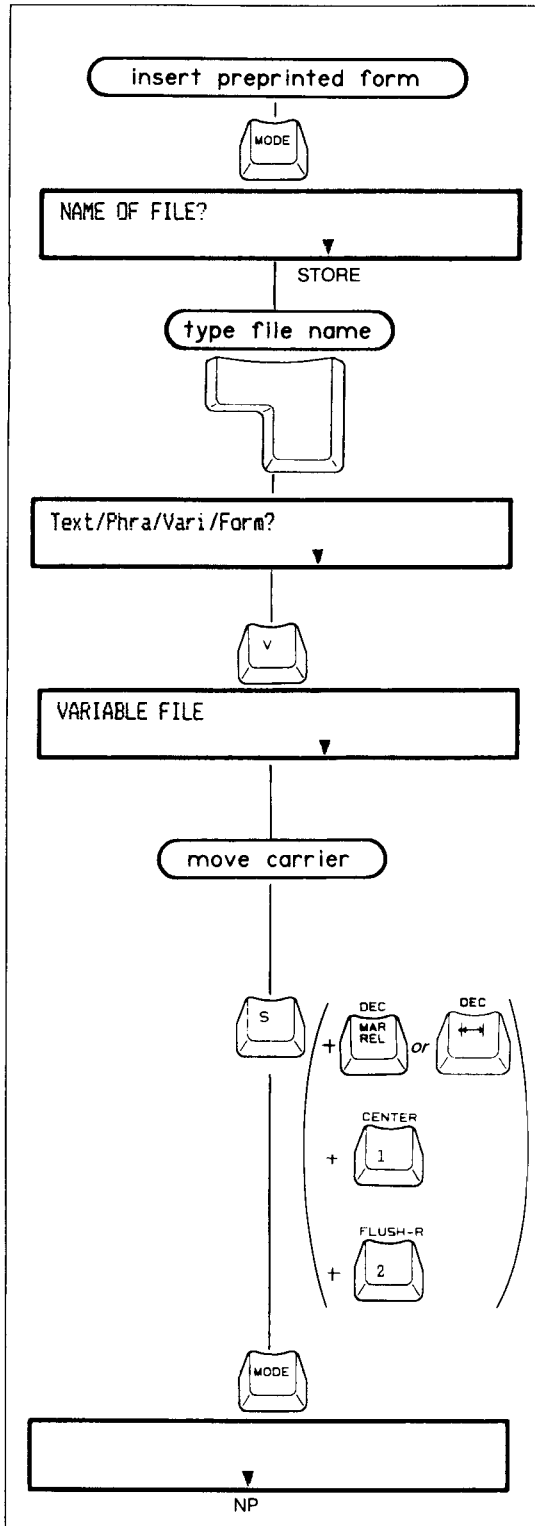
- 1) Display the text of file by the edit mode.
- 2) Position the cursor on the first character of block text to be printed.
- 3) Hold down the Code key and press the "P" key to mark the beginning of the block. Two beeps sound, a "▼" appears on the display above "BLOCK" and the character begins blinking.
- 4) Move the cursor to the last character of block text. As you move the cursor, characters included in the block begins blinking.
- 5) Hold down the Code key and press the "P" key to mark the end of the block. Two beeps sound again.
- 6) Hold down the Code key and press the Print key. A "▼" appears on the display above "PRINT" and the block text will be printed.
 - The block text in a text file is printed from the certain position stored in file. The block text in a phrase file is printed from the present carrier position.
- 7) When the printout of block text has been completed, "END OF FILE RECALL" appears on the display and the typewriter returns to the normal print (NP) mode.



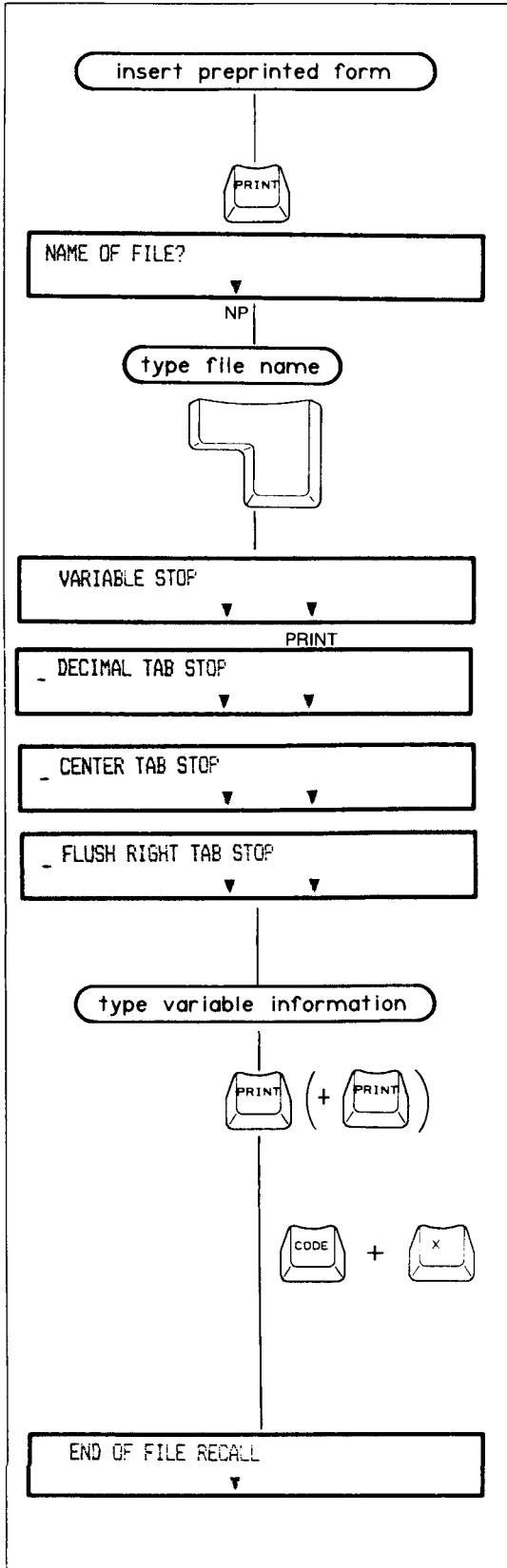
11. VARIABLE FILE

The variable file is used to store page formats of preprinted form. A series of stop positions can be stored in order to quickly move the carrier when you type variable information at each position on the preprinted form later.

1 Storing a variable file



- 1) Insert a preprinted form in the typewriter. Align the left edge of the form at "0" position.
- 2) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
- 3) Type the file name (maximum of five letters/numbers). Then type the Return key.
 - You can exit the store mode by pressing the Mode key at any time.
- 4) "Text/Phra/Vari/Form?" appears on the display.
- 5) Press the "V" key. "VARIABLE FILE" appears on the display. The paper is advanced one line and the carrier returns to the left end of the carriage. The margins are expanded to the extreme left and right ends.
- 6) Move the carrier to the position to be stored, with pressing the Space bar, Backspace, Return, Index, Reverse index, Tab/Back tab and Express keys. The Repeat key can be used to repeat any key function.
- 7) Press the "S" key to store the stop position in file. If you wish to make it any of decimal, center or flush right stop position, hold down the "S" key and press the Margin release, "1" or "2" key respectively.
 - All tabs set before entering store mode automatically become normal tabs, and can be set/cleared/used as in other modes.
 - Press the Correction key to clear a stop position you set. The carrier returns to the previous stop position.
- 8) Press the Mode key to terminate the store mode. The file is stored, then the typewriter automatically returns to the normal print (NP) mode.
 - A variable file cannot be modified after being stored.



2 Using a variable file

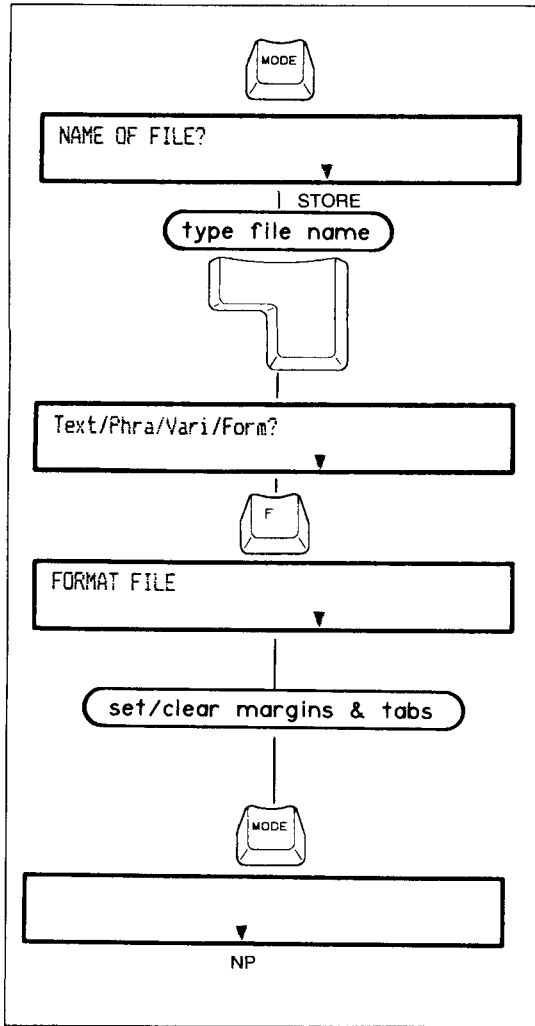
- 1) Insert the preprinted form in the typewriter.
- 2) Press the Print key. "NAME OF FILE?" appears on the display. Type the file name and press the Return key.
 - A variable file cannot be used in the line print (LP) mode.
- 3) A "▼" appears on the display above "PRINT", and the carrier moves to the first stop position. One of "VARIABLE STOP", "DECIMAL TAB STOP", "CENTER TAB STOP" or "FLUSH RIGHT TAB STOP" appears on the display according to the type of stop position you set.
- 4) Align the first position on the form with the current carrier position manually. Move the platen manually or release the form to align it.
- 5) Type the variable information. Press the Print key to go to the next stop position. Repeat this procedure for each stop position in the file.
 - When the variable information is displayed on the display, press the Print key to print it and press the Print key again to go to the next stop position.
 - Hold down the Code key and press the "X" key to terminate the function at any time.
- 6) "END OF FILE RECALL" appears on the display after you go to the last stop position.

12. FORMAT FILE

The format file is used to store margins and tabs (line format) only. It saves time and trouble of setting the commonly used format each time.

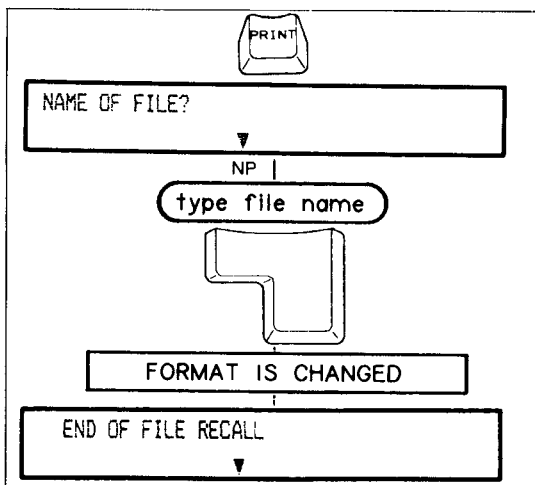
1 Storing a format file

- 1) Press the Mode key until a "▼" appears above "STORE" on the display. "NAME OF FILE?" appears.
- 2) Type the file name (maximum of five letters/numbers). Then press the Return key.
 - You can exit the store mode by pressing the Mode key at any time.
- 3) "Text/Phra/Vari/Form?" appears on the display.
- 4) Press the "F" key. "FORMAT FILE" appears on the display. The paper is advanced one line and the carrier returns to the current left margin.
- 5) Set the left and right margins and tabs at any position as you would in any other mode. Clear any unnecessary tabs.
 - If you don't change any margins or tabs, currently set margins and tabs are stored in file.
- 6) Press the Mode key to terminate the store mode. The file is stored, then the typewriter automatically returns to the normal print (NP) mode.
 - Margins and tabs before you entered store mode are automatically restored.

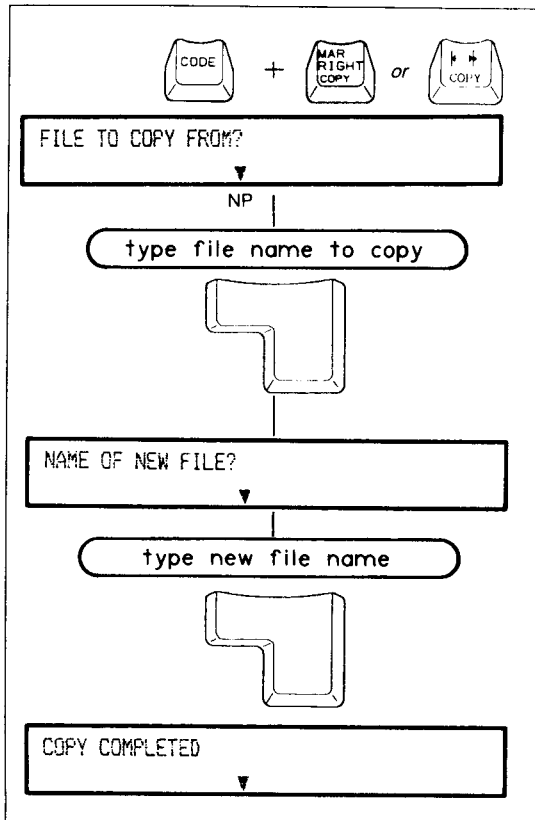


2 Using a format file

- 1) Press the Print key. "NAME OF FILE?" appears on the display. Type the file name and press the Return key.
 - A format file cannot be used in the line print (LP) mode.
- 2) The margin/tab format on the typewriter is immediately changed, and "END OF FILE RECALL" appears on the display.



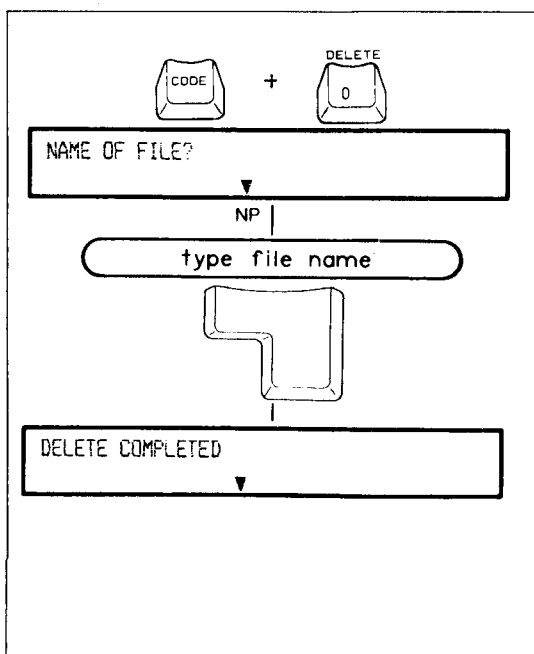
13. FILE COPY



This function copies an existing file with a new name. It is very handy when you want to make a variation of a letter or invoice without changing the original version.

- This function cannot be used while in the store mode. Exit the store mode and clear display before activating function.
- 1) Hold down the Code key and press the Right margin key. "FILE TO COPY FROM?" appears on the display.
 - 2) Type in the name of the file to copy and press the Return key.
 - 3) "NAME OF NEW FILE?" appears on the display. Type in the new file name and press the Return key.
 - 4) "COPY COMPLETED" appears on the display informing you the file has been copied.
- "FILE EXISTS PRESS ←J" will appear on the display if the new file name you typed has already been used in the memory. Press the Return key, type in another name and press the Return key again.

14. FILE DELETION



This function is used to delete any unnecessary files or to make room for new files in the memory.

- This function cannot be used while in the store mode. Exit the store mode and clear display before activating function.
- 1) Hold down the Code key and press the "0" key. "NAME OF FILE?" appears on the display.
 - 2) Type in the file name and press the Return key.
 - 3) "DELETE COMPLETED" will appear on the display informing you the file has been deleted.
- You can cancel the file deleting function at any time by pressing the Return key when there is no file name on the display. Use the Correction key to delete file name on the display if necessary.

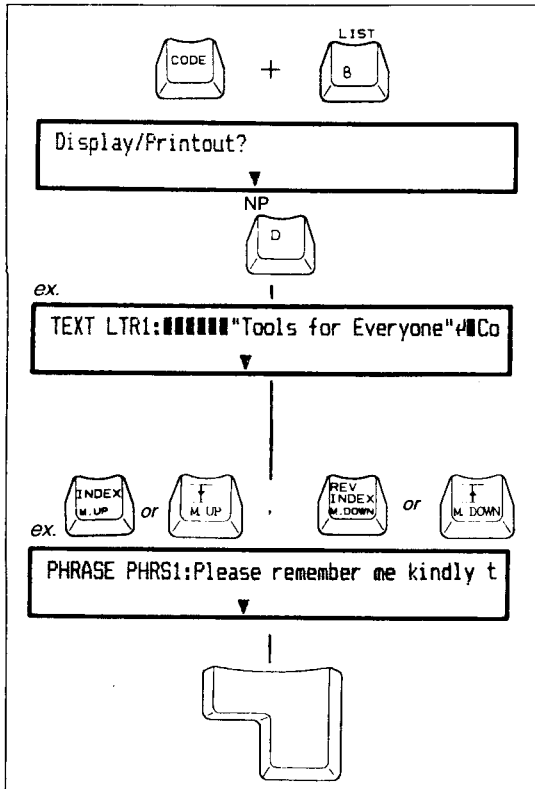
15. LIST OF FILES IN MEMORY

This function allows you to either display or print the list of stored files.

- This function cannot be used while in the store mode. Exit the store mode and clear display before activating function.

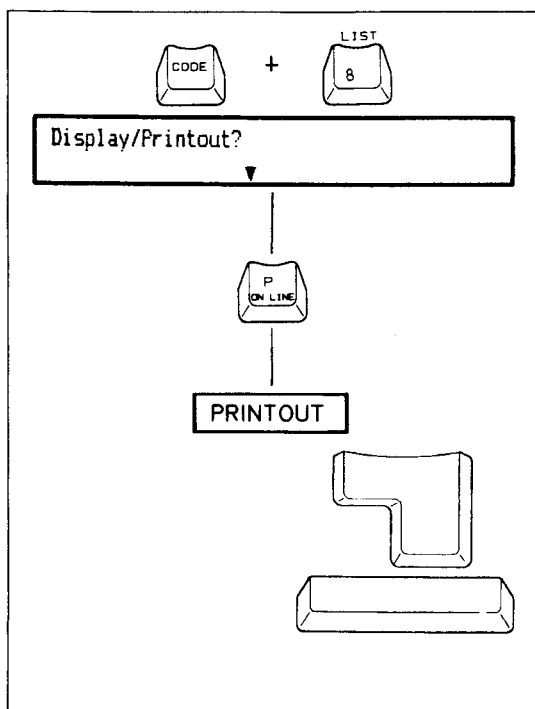
1 Display the list of files

- 1) Hold down the Code key and press the "8" key. "Display/Printout?" appears on the display. Press the "D" key.
 - "NO FILES STORED ←" appears if there are no files in the memory.
- 3) The type of file, file name and beginning text in the file appear on the display. The contents of the entire file can be looked at by moving the cursor to the right with the Express key (→) and to the left with the Backspace key (←).
- 4) Press the Index key to display the next file. Press the Reverse index key to redisplay the previous file.
 - If you press the Index key after reaching the last file, the first file is displayed again.
- 5) Press the Return key to terminate the list function.

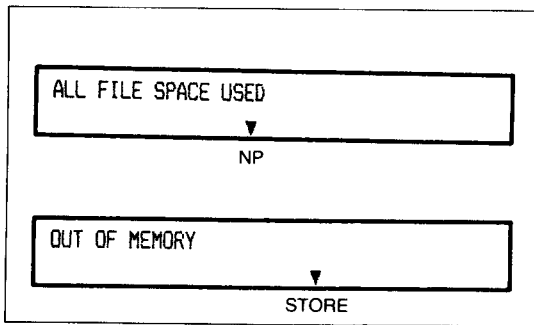


2 Printout the list of files

- 1) Hold down the Code key and press the "8" key. "Display/Printout?" appears on the display.
- 2) Press "P" key.
- 3) The type of file, file name and first 40 characters in the file are printed. The number of characters remaining (available) in the memory and number of files already in memory are printed at the end of this list.
 - To temporary stop printing, press the Return key. "PAUSE PRESS ←" appears on the display. Restart printing by pressing the Return key again.
 - Press the Space bar to terminate this function while printing.

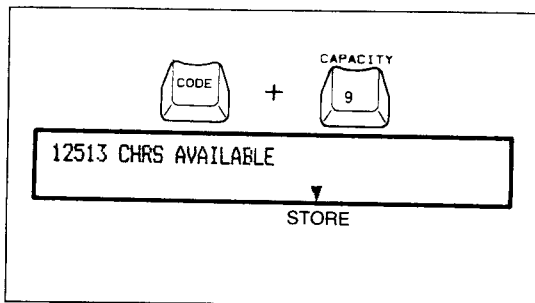


16. MEMORY OVERFLOW



- 1) If you try to make a new file while there are already 100 files in the memory, "ALL FILE SPACE USED" appears on the display. In this case, one file must be deleted to create a new file.
- 2) If you run out of memory, "OUT OF MEMORY" appears on the display. In this case, press the Mode key to exit the store mode. Unneeded file(s) must be deleted to make room in the memory for your present file.

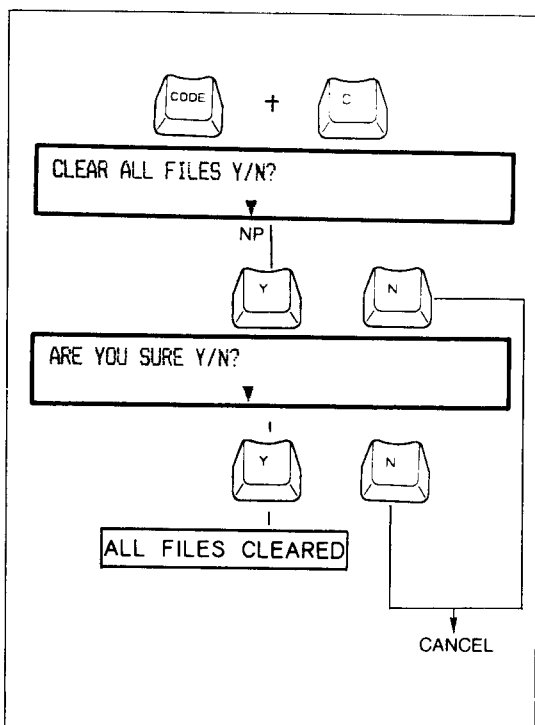
17. AVAILABLE MEMORY CAPACITY



This function is used to see exactly how much memory is still available.

- 1) Hold down the Code key and press the "9" key.
- 2) The amount of memory still available is displayed on the display.
- 3) Press the Return key to terminate the function.

18. MEMORY ALL CLEAR

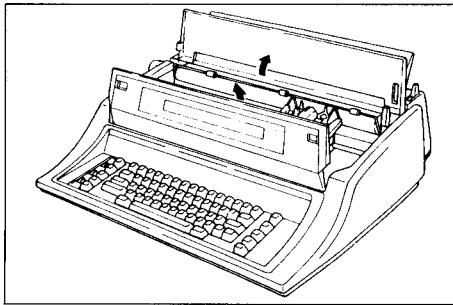


This function deletes all files in the memory.

- This function cannot be used while in the store mode. Exit the store mode and clear display before activating function.
- 1) Hold down the Code key and press the "C" key. "CLEAR ALL FILES Y/N?" appears on the display.
 - 2) Press the "Y" key. "ARE YOU SURE Y/N?" appears on the display asking for confirmation.
 - 3) Press the "Y" key again to clear all files in memory.
- The function is canceled when the "N" key is pressed after the first or second prompt.

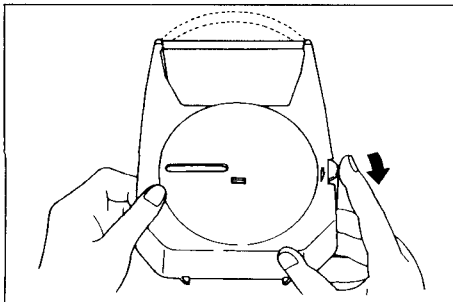
HOW TO CHANGE ACCESSORIES

1. RIBBON CASSETTE



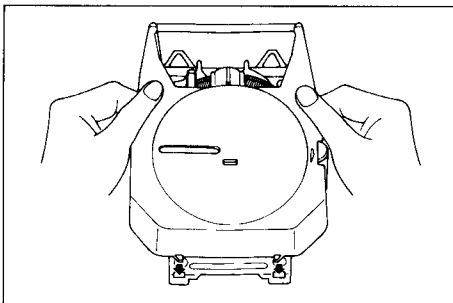
1 Removing ribbon cassette

- 1) Turn off the typewriter, and open the noise cover and top cover.
- 2) Remove the ribbon cassette by pulling up the cassette arms.

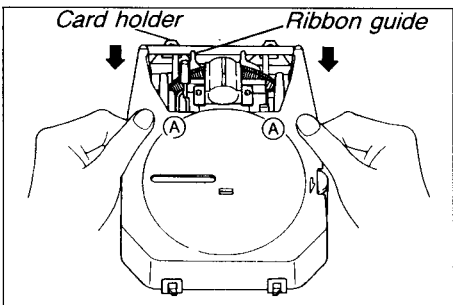


2 Installing ribbon cassette

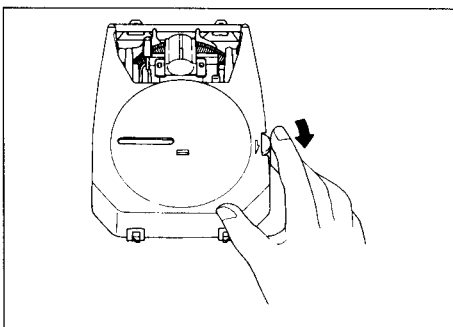
- 1) Before installing the ribbon cassette, always take up any slack in the ribbon by winding the ribbon takeup knob clockwise.
 - When installing a new ribbon, wind past the lead portion of the cassette.



- 2) Fit the two tabs at the back of the ribbon cassette into the two holes of the ribbon cassette base.



- 3) Carefully lower the front of the cassette so that the ribbon fits between the ribbon guides and the card holder. Press the positions marked "A" in the illustration until the ribbon cassette snaps into place.

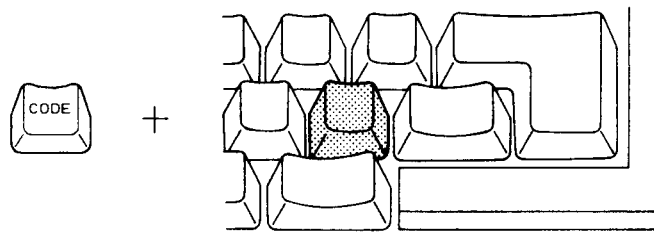


- 4) Turn the ribbon takeup knob to take up any slack that may have occurred when installing the ribbon cassette.
- 5) Close the top cover and noise cover.
 - Before typing, verify the amount of remaining ribbon through the cassette window. Replace the ribbon cassette if you see colored tape in the cassette window.

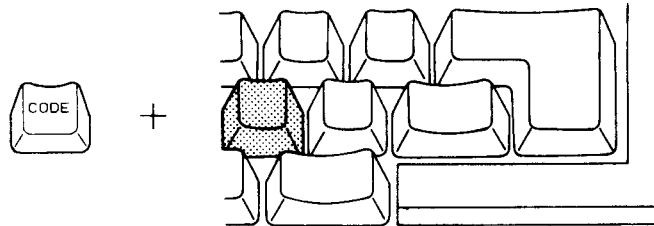
3 Ribbon cassette selection

After you change the ribbon cassette, select the proper ribbon setting in accordance with the new ribbon. (The typewriter has been set to use correctable ribbon when it is shipped).

- 1) To select the multi-strike ribbon, hold down the Code key and press the key to the left of the right Shift key. A beep sounds to indicate the setting.

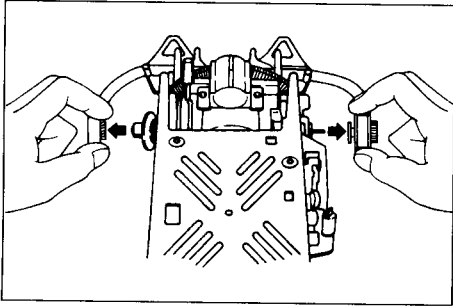


- 2) To select the correctable carbon ribbon, hold down the Code key and press the second key to the left of the right Shift key. A beep sounds to indicate setting.



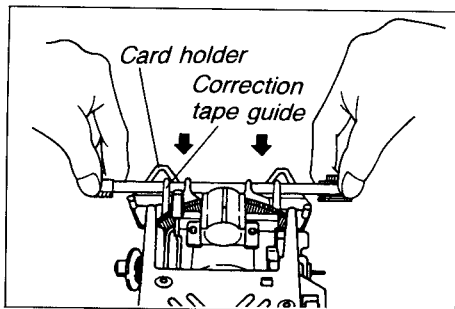
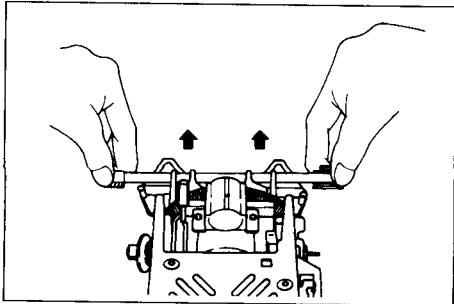
- If the proper setting is not selected, it will result in poor print quality or wasted ribbon (since the ribbon feed differs according to ribbon type).
- This setting is protected by the backup battery when power is turned off.

2. CORRECTION TAPE



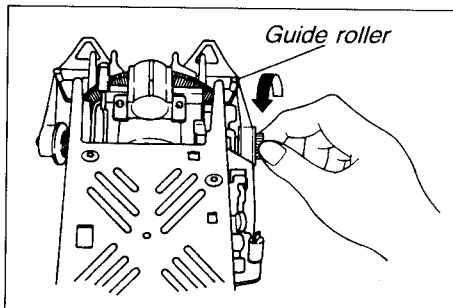
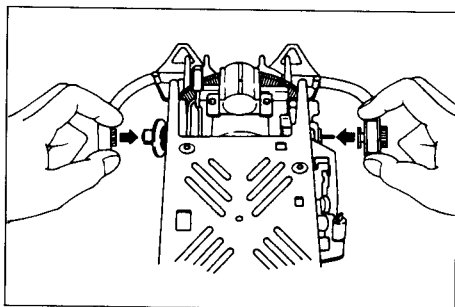
1 Removing correction tape

- 1) Turn off the typewriter. Open the top cover and noise cover. Remove the ribbon cassette as explained under "Removing ribbon cassette".
- 2) Remove the left and right spools from the spindles.
 - Be sure not to pull on the spindle hub when removing the left spool.
- 3) Grasp both spools and bring back to a position that is parallel with the guide rollers. Pull on the correction tape to take up any slack and lift it out of the typewriter.

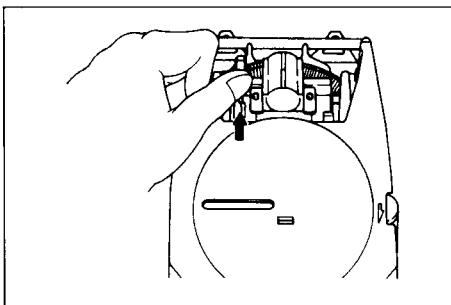
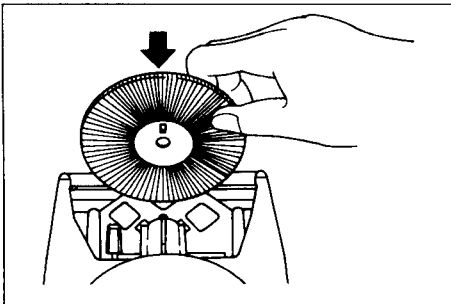
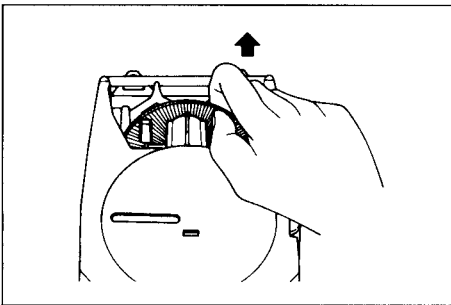
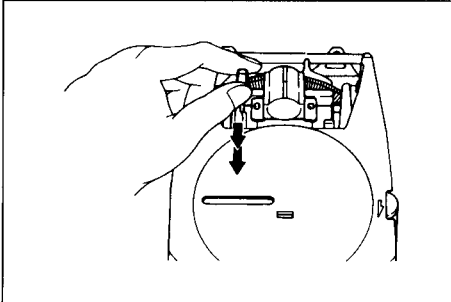


2 Installing correction tape

- 1) Unwind the correction tape, holding the two spools in your hands. Carefully lower the correction tape in between the correction tape guides and the card holder.
 - Make sure that the coated side of the correction tape faces the platen.
- 2) Fit the full spool of correction tape onto the left supply spindle, and press the spool until it snaps into place. Then fit the right spool (the one with the knob) onto the right take-up spindle.
- 3) Turn the right spool toward you until the colored portion of the tape disappears.
 - Check to make sure that the correction tape has been fed properly behind the left and right guide rollers.
- 4) Replace the ribbon cassette and close the top cover and noise cover.



3. PRINTWHEEL



1 Removing printwheel

- 1) Turn off the typewriter. Open the noise cover and top cover.
- 2) Pull the printwheel set/release lever. The whole print head shifts toward you. Pull the set/release lever again to release the printwheel.

- 3) Lightly grasp the top of the printwheel and carefully pull it up.

- Be careful not to bend the top of the ribbon guides.

2 Installing printwheel

- 1) Lightly grasp the edge of the printwheel. Carefully lower it in between the print head and ribbon guides.

- Make sure that the typeface (the side with typing style indicated) faces the platen.

- 2) Press the printwheel set/release lever. The whole print head shifts back and the printwheel snaps into place.

- Press the lever as far as it goes again to make sure the printwheel has been locked into place completely.

- 3) Close the top cover and noise cover.

- Remount the printwheel if any abnormal noise is emitted or incorrect characters are printed.

SUPPLIES

1 Cassette ribbon

There are two types of ribbons that can be used on your typewriter.

1) Correctable carbon ribbon

Your typewriter comes equipped with this ribbon. This ribbon provides excellent correction performance with the lift-off correction tape. The carbon surface of the ribbon is transferred to the paper as you type. Therefore, it is not reusable.

2) Multi-strike ribbon

This optional ribbon enables you to type more characters at a lower cost. This ribbon is not reusable either.

- When you use a new ribbon cassette, make sure to select the proper ribbon setting. (Refer to "Ribbon select setting" in How To Change Accessories).

2 Correction tape

There are two types of correction tapes that can be used on your typewriter.

1) Lift-off correction tape

Your typewriter comes equipped with this type of correction tape. This correction tape is used only with correctable carbon type of ribbon which was installed on your typewriter. This type of correction tape lifts the carbon film ink off the paper.

2) Cover-up correction tape

This optional correction tape covers up the error. This is used only with multi-strike ribbon.

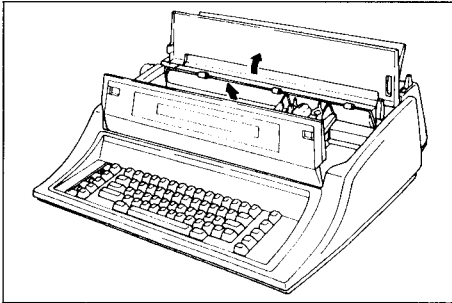
3 Printwheel

Your typewriter comes with a standard printwheel. Besides this typestyle, a variety of printwheels, with different typestyles, are available for your typewriter.

MAINTENANCE AND SERVICE

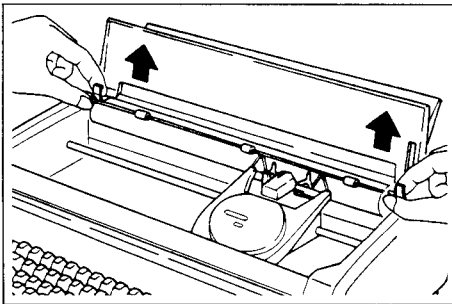
1. REMOVING PLATEN

The platen is removable, making it easier to clean or remove jammed paper.



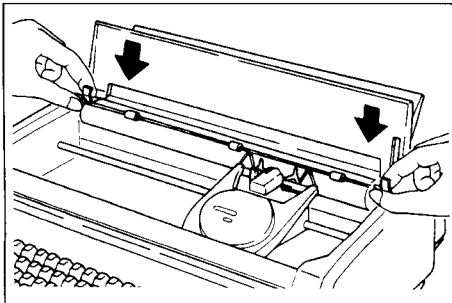
1 Removing the platen

- 1) Be sure to turn off the typewriter and unplug the power cord. Open the noise cover and the top cover.
- 2) Pull open the paper bail and raise the erasure table away from the platen.
- 3) Hold the tabs at both ends of the platen. Push the front tabs and pick them up to disengage.
- 4) Pull up the platen, holding the both tabs.



2 Installing the platen

- 1) Open the paper bail and raise the erasure table.
- 2) Reposition the platen on the cradle, holding the both left and right tabs.
- 3) First set the left tabs in the groove then set the right tabs.
- 4) Push down the both tabs until they snap into place.
- 5) Return the paper bail and erasure table then close the top cover and noise cover.



2. CLEANING

- 1) Do not attempt to disassemble the typewriter to clean it.
- 2) Dust the typewriter lightly, using only a dry cloth.
- 3) Never use water or solvents such as thinner, alcohol, etc., to clean your typewriter.
- 4) Be sure not to drop items such as a pin, paper clip, nail file, etc., into the typewriter when the top cover is opened. They may damage the typewriter.

3. SERVICE

- 1) It is recommended that your typewriter be serviced at least once a year by a qualified service technician. Any malfunction caused by maintenance performed by anyone other than authorized service personnel will void the warranty.
- 2) If the typewriter fails to function or does not function properly, check the following:
 - Is the typewriter plugged into a live socket?
 - Is the typewriter switched on?
 - Is the printwheel properly installed?
 - Are the ribbon cassette and the correction tape properly installed?
 - Have the ribbon cassette or correction tape been used up?

If the typewriter still does not work properly after checking the above, contact an authorized service center.

