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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.
INTRODUCTION

Your new Electronic Typewriter increases your typing efficiency through the use of the most advanced technology. This manual describes your typewriter’s functions, operating controls and procedures, and also explains how to replace the accessories. Read this manual carefully so that you will be able to use your new electronic typewriter efficiently.

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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. Doing so 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) Dust the typewriter lightly, using only a dry cloth. Never use water or solvents such as paint thinner, alcohol, etc., to clean your typewriter.

6) To turn off the power completely, be sure to remove the plug from the outlet.

7) Make sure that an easily-accessible power outlet is located close to the equipment.
PART NAMES AND FUNCTIONS

OPERATING PARTS

1. PLATEN ROLLER
   Rolls paper in and out.
2. PLATEN KNOB
   Used to manually rotate the platen.
3. PAPER BAIL
   Holds paper against the platen.
4. CARRIAGE
   Prints characters, and moves as it prints.
5. CARRYING HANDLE
   Used to carry the machine. Normally housed inside the bottom pan.

6. PAPER RELEASE KNOB
   Release paper so that it can be aligned properly.
7. MARGIN SCALE
   Provides numerical indication of printing position.
8. TOP COVER
   Remove to replace accessories.
9. POWER SWITCH
   Turns the power on and off.

CARRIAGE MECHANISM

10. PRINTWHEEL
    Element that contains characters for printing.
11. RIBBON CASSETTE
    Guides the correction tape.
12. CORRECTION TAPE GUIDE
    Guides the correction tape.
13. CORRECTION TAPE
    Used for replacing the printwheel.
14. PRINTWHEEL SET/RELEASE EVER

BASIC OPERATIONS

SETTING UP THE TYPEWRITER

Place the typewriter on a flat surface. Lift up the keyboard cover and remove. Before using your typewriter, be sure to remove the packing materials as described in the unpacking instructions.

Open the cord compartment cover on the rear of the typewriter and pull out the power cord. Place the power cord in one of the notches in the cord compartment and then close the cover. Plug the power cord into a suitable outlet.

TURN ON THE TYPEWRITER

Push the paper support up. Turn on the power switch located on the right side of the typewriter. Make sure the printwheel, ribbon cassette and correction tape are properly installed.

The typewriter will beep and the green power LED on the keyboard will light. The printwheel will turn and the carriage will move to the right, stopping at the programmed position.

INSERT PAPER

Insert a sheet of paper between the platen and the paper support. Turn the platen knob to feed the paper forward. When the leading edge of the paper becomes visible under the platen, lift up the paper bail. Continue to feed the paper forward until it is between the platen and the paper bail.

Push the paper release knob towards the rear of the typewriter to release the paper. Adjust the position of the paper so that it is straight.
HOW TO CHANGE ACCESSORIES

RIBBON CASSETTE

Remove the top cover. When installing a new ribbon, wind up all of the colored portion of the start of the ribbon. Insert the two projections on the rear of the ribbon cassette into the two holes in the ribbon cassette holder.

Carefully lower the front portion of the cassette so that the ribbon is located between the card holder and the print wheel. Press on the locations marked "A" until the ribbon cassette snaps into place.

Turn the ribbon take-up knob to the left until there is no slack in the ribbon. Close the top cover.

CORRECTION TAPE

Remove the top cover and the ribbon cassette. Unpack the correction tape and hold the two spools in both hands. Insert the correction tape behind the correction tape guide and the print wheel as shown in the diagram. Make sure that the powdered side of the correction tape is facing the card holder.

Mount the spool holding the bulk of the correction tape onto the spindle on the right side. Mount the left spool (with the knob) onto the left spindle.

Turn the left spool to the left and wind up the colored portion of the tape. Make sure that the correction tape passes behind both the left and right tape guides. Re-install the ribbon cassette and close the top cover.

PRINTWHEEL

Remove the top cover and the ribbon cassette. Gently grasp the edge of the print wheel and carefully lower it between the card holder and the print head. Be sure that the character faces point in the direction of the platen.

Press the printwheel set/release lever until it snaps into place, locking the printwheel in.

Re-install the ribbon cassette and close the top cover.

If the printwheel makes any unusual noise, or if the wrong character is printed, re-install the printwheel.

- To see the printwheel characters to the proper positions, press CODE+W.
KEY FUNCTIONS

MARGIN RELEASE KEY
Releases the margin setting so that you can type beyond the margin or change the margin settings.

TAB KEY
Moves the carriage to the next tab position.

SHIFT LOCK KEY
When typing a string of capital letters, press this key to lock the shift key. When locked, the Shift LED (red) lights. The lock can be released by pressing either of the Shift keys.

SHIFT KEY
Press this key to type in capital letters or to type the character on the upper portion of a key.

LEFT/RIGHT MARGIN KEYS
Sets a new margin. After moving the carriage to the position where you want to set the new margin, press either the Left or Right Margin key to set the new margin. When the typewriter is turned on, the margins are automatically set (auto margin) to 10 (left) and 75 (right).

CODE KEY
Press this key along with another key in order to use a special function. (See below the items)

LINE SPACING
This function allows you to set the line spacing. When a new setting is made, the typewriter beeps once. To change the line spacing, hold down the CODE key and then press the key corresponding to the desired line spacing:
CODE + 2 = 1
CODE + 3 = 1 1/2
CODE + 4 = 2

TYPE PITCH
This function sets the type pitch in accordance with the printwheel. When a new setting is made, the typewriter beeps once. To change the type pitch, hold down the CODE key and then press the key corresponding to the desired type pitch:
CODE + 5 = 10 (Pica)
CODE + 6 = 12 (Elite)
CODE + 7 = 15 (Micro)

PAPER EJECT <CODE + Q>
This function automatically ejects the paper.

HALF BACKSPACE <CODE + R>
To move the carrier a half space to the left, hold down the CODE key and press the BACK key.

AUTOMATIC CENTERING <CODE + C>
This function allows you to center your typing between the left and right margins. When this function is turned on, the carriage automatically moves to the center point between the two margins. After input the characters that you want to type, press the Return key. The text is printed in the center between the left and right margins, and the function is then released.
If you wish to change the text after inputting it, press the Correction key and then re-enter the text.
To cancel this function before printing anything, hold down the Code key and press the CENTER key.

BOLD TYPING <CODE + 0>
This function prints characters in bold type. When this function is set, the typewriter beeps once. To release (turn off) this function, press CODE + 0 again. The typewriter will beep twice, indicating that the function has been released.

AUTOMATIC FULL UNDERLINE <CODE + 8>
This function underlines all characters (including spaces) that are typed. When this function is set, the typewriter beeps once. To release (turn off) this function, press CODE + 8 again. The typewriter will beep twice, indicating that the function has been released.

DECIMAL TABULATION <CODE + TAB>
This function allows you to line up columns of numbers containing decimal points so that the decimal points are all in the same position in the column.
Set a tab at the decimal point position in each column. Return the carriage to the left margin. When this function is turned on, the carriage moves to the first tab position. Input text, a decimal point (Comma or Period), and text. Once the decimal point is input, the text prior to the decimal point is printed automatically.
The following methods can be used to print text:
• Press the Return key. The text is printed, and the carriage stops at that position.
• Press the Tab key. The text is printed and the carriage moves to the next tab position.
• Hold down the Code key and press the Tab key. The carriage moves to the next tab position, and the decimal tab function is activated.
If you wish to change the text after inputting it, press the Correction key and then re-enter the text.
To release (turn off) this function before it is completed, press the Correction key and then the Return key.

AUTOMATIC WORD UNDERLINE <CODE + 9>
This function underlines each word that is typed. When this function is set, the typewriter beeps once. To release (turn off) this function, press CODE + 9 again. The typewriter will beep twice, indicating that the function has been released.
CORRECTION KEY
Deletes characters. To delete a character, press the Correction key; the carriage moves back one space and the character is deleted. If the Correction key is held down, characters on that same line are deleted until the Correction key is released. To delete characters outside of the correction memory, move the carriage one space to the right of the character to be deleted. Press the Correction key and then press the key corresponding to the character to be deleted.

RELOCATION KEY
This key moves the carriage back to the last character that was typed, after it has been backspaced to make a correction or underline.

WHEEL SET <CODE + W >
After changing the printwheel, press the CODE key and the W key at the same time.

RIBBON SETTING
This function is used to indicate to the typewriter whether a multi-strike ribbon or a correctable ribbon is being used in the ribbon cassette.

To select multi-strike ribbon, hold down the Code key and press the key to the left of the Right shift key.

To select the correctable ribbon, hold down the Code key and press the second key to the left of the Right shift key.

SUPERSCRIPT
< CODE + REV INDEX >
This function prints characters a half-line above the current line. Press CODE + REV INDEX. The printing position now shifts up by half of a line. Type the superscript character. (Example: E=MC²).

The printing position then returns to the normal line.

IMPRESSION CONTROL
Impression control allows you to control the striking force of the print head as best suits the type of print wheel, ribbon or paper, or the number of carbon copies being printed. Determine the best value for each situation experimentally, choosing from the following settings.

- LOW: To select the Low setting, press the key immediately to the right of the Shift Lock key while holding the Code key.
- MEDIUM: To select the Medium setting, press the second key to the right of the Shift Lock key while holding the Code key.
- HIGH: To select the High setting, press the third key to the right of the Shift Lock key while holding the Code key.

You will hear a beep, whenever you change the impression setting.

BACKSPACE KEY
Press the Backspace key once to move the carrier one space to the left. Hold down the Backspace key down to move the carriage continuously to the left.

EXPRESS KEY
Press this key to move the carriage to the left margin without a line feed.

RETURN KEY
Pressing the Return key causes the paper to feed forward one line and causes the carriage to return to the left margin. In addition, the correction memory is cleared.

INDEX KEY
Feeds the paper forward without moving the carriage. The paper is fed one half of a line up (1/12") each time this key is pressed. If this key is held down, the paper is fed forward continuously. In addition, the correction memory is cleared.

REVERSE INDEX KEY
Feeds the paper backward without moving the carriage. The paper is fed one half of a line down (1/12") each time this key is pressed. If this key is held down, the paper is fed backwards continuously. In addition, the correction memory is cleared.

TAB SET/CLEAR KEY
This key is used to set and clear tabs. Move the carriage to the position where you want to set a tab and then press the Tab Set key. The typewriter then beeps to indicate that the tab has been set. Up to 12 tab positions can be set.

To clear a tab, move the carriage to the tab to be cleared and then press CODE + TAB SET/CLEAR. The typewriter then beeps to indicate that the tab has been cleared.

To clear all tabs, hold down CODE + TAB SET/CLEAR momentarily. The typewriter repeating beeps to indicate that all tabs have been cleared.

Key to symbols used on the following pages......

- Explanation of how to use a function
- Explanation of how to make a setting; number of beeps
- Explanation of how to release a setting; number of beeps
- Warning
- Notes
SPECIAL FUNCTIONS

WORD CORRECTION

- This typewriter is equipped with a 1-line correction memory. Text in the correction memory can be deleted word by word.

1) Using the backspace key or the space bar, move the carriage to the last letter in the word to be deleted. The word will be deleted all of the way to the next space.
2) While holding down the Code key, press the Correction key. The typewriter will beep intermittently.
3) Press the space bar, and the word will be deleted.
4) Type the new word.
5) Press the Relocation key. The carriage moves to the end of the current line.

It is also possible to delete a portion of a word.
- a) Move the carriage to the last character in the word that you want to delete.
- b) While holding down the Code key, press the Correction key.
- c) Type the first character that you want to delete. The specified portion of the word is deleted.

PARAGRAPH INDENTATION

- It is possible to set a temporary left margin.

1) Move the carriage to the position where you want to set the temporary left margin.
2) While holding down the Code key, press the Express (INDENT) key. The typewriter will beep once, indicating that the current position has now been set as a temporary margin.
3) Type the text that you want indented.

▼ To release the temporary left margin, hold down the Code key and press the Express (INDENT) key again. The typewriter will beep twice.

AUTOMATIC CARRIER RETURN

- This function makes it possible to type continuously without having to press the Return key at the end of each line.

1) While holding down the Code key, press the Return (AUTO RET) key. The typewriter will beep once, indicating that the Automatic Carrier Return function has been activated.
2) Once this function is activated, the typewriter will beep when the carriage enters the auto return zone (the five spaces to the left of the right margin). When a hyphen or space is typed, a return and line feed are executed automatically.

(For the typewriter with the USA or Canada French keyboard)

★ If a hyphen or a space is not typed within the auto return zone, the carriage will pass through the right margin.

▼ In order to release this function, hold down the Code key and press the Return (AUTO RET) key once again. The typewriter will beep twice.
REQUIRED HYPHEN AND REQUIRED SPACE

- This function allows you to input a hyphen or space within the autoreturn zone without triggering the autoreturn function.

- 1) When in the autoreturn zone, hold down the Code key and press the hyphen key or the space bar to type a required hyphen or a required space.

   2) When a hyphen or space is typed in this way, the carriage does not execute a return.

CAPS LOCK

- This function allows you to type uppercase letters without pressing the Shift key.

- While holding down the Code key, press the "1" (CAPS) key. The typewriter will beep once, indicating that the Caps Lock function has been activated.

- 1) In Caps Lock mode, pressing a letter key causes an uppercase character to be typed without pressing the Shift key.

   2) In the case of number keys and symbol keys, however, the lower number/symbol is still printed unless the Shift key is pressed.

- In order to release this function, hold down the Code key and press the "1" (CAPS) key. The typewriter will beep twice.

KEYBOARD II (SPECIAL CHARACTERS)

- The following method is used to type the upper right-hand characters shown on keys that display three characters.

- 1) While holding down the Code key, press the Margin Release (KB II) key. The typewriter will beep once, indicating that this function has been activated.

   2) While pressing the Shift key or with the Shift Lock key down, press the key containing the symbol that you want to type.

- In order to release this function, hold down the Code key and press the Margin Release (KB II) key again. The typewriter will beep twice.
SUPPLIES
PRINTWHEEL
This typewriter is equipped with a nonstandard printwheel. In addition to this printwheel, it is possible to mount a variety of other different types of printwheels on this typewriter.

RIBBON CASSETTE
1) Black Correctable Film Ribbon
   This typewriter is equipped with a correctable black carbon film ribbon. (This ribbon is not reusable.)
2) Multi-Strike Ribbon
   This type of ribbon can be used as an option. This ribbon can be re-used until the typed characters become faint.

CORRECTION TAPE
1) Lift-Off Correction Tape
   This typewriter is equipped with lift-off correction tape. This type of correction tape can only be used with the type correctable black carbon film ribbon that is included as the standard ribbon for this typewriter.
   This tape makes corrections by actually lifting the black carbon of typewritten characters off of the paper.
2) Cover-Up Correction Tape
   This type of tape can be used as an option, and is intended for use with multi-strike ribbon. This type of tape covers up incorrect characters on the paper.

CLEANING
Do not attempt to disassemble the typewriter for cleaning.
Dust the typewriter lightly, using only a dry cloth. Never use water or solvents such as paint thinner, alcohol, etc., to clean your typewriter.
Be careful not to drop or insert any items (especially pins, paper clips, nail files, etc.) into the typewriter when the top cover is opened. Doing so could damage the typewriter.

SERVICE
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?
• Has the ribbon cassette or the correction tape been used up?
• Are the carrier stopper or ribbon stopper piece took out?

If the typewriter still does not work properly after checking the above, contact your nearest authorized service center.
NOTES CONCERNING THE THAI KEYBOARD

On this typewriter, you can use the keyboard for two types of character-set corresponding to the installed printwheel; Thai or UK.

When the Thai printwheel is installed, the characters shown below are printed. (Blackened characters are not printed).

(Thai/UK)

---

Switching between Keyboard Layouts

The keyboard of this typewriter two layout: a Thai layouts for use with the Thai printwheel and an UK layout for use with the UK printwheel. The Thai printwheel is installed in the typewriter when it is shipped from the factory, and a UK printwheel is included in the package together with the typewriter. Please use the following procedures to switch between keyboard layouts. Please refer to the manual for HOW TO CHANGE ACCESSORIES.

To switch to the UK keyboard layout, hold down the Mode key and press the "U" key.
Next, remove the Thai printwheel from the typewriter and install the UK printwheel that is included in the package.

To switch back to the Thai keyboard layout, hold down the Mode key and press the "T" key.
Remove the UK printwheel from the typewriter and install the Thai printwheel.
Please make following corrections to your operating instructions manual.

P5  REVERSE INDEX KEY
While holding down the Code key, press the Index key ( ).

P5  SUPERSCRIPT/SUBSCRIPT
The Superscript/Subscript function cannot be used in either the Thai mode or the UK mode.

P7  CAPSLOCK
This function can be used to enable typing of characters in the upper half of key tops.

  
  CODE  +  
  
   * 1  
   ø

(Examples)

UK

  \[ \text{\textasciitilde} \]  =  " .

Thai

  \[ \text{1} \]  =  1

  \[ \text{0} \]  =  0

  CODE  +  
  
   * 1  
   ø

To cancel the function, press "1" (caps) together with CODE a second time. The buzzer sounds twice to indicate that the function is cancelled.

- As an additional function, backspacing is possible in 1/120-inch increments. Each time you press the Back Space Key while holding down the Code Key, the carriage moves 1/120 of an inch to the right, allowing very precise character positioning.
NOTES CONCERNING THE GREEK/LATIN KEYBOARD

On this typewriter, you can use the keyboard for two types of character-set corresponding to the installed printwheel; Latin or Greek/Latin.

When the Latin printwheel is installed, the characters shown below are printed. (Blackened characters are not printed).

When the Greek/Latin printwheel is installed, the characters shown below are printed. (Blackened characters are not printed).
Please make the following corrections to your operating instructions manual.

KEYBOARD II (SPECIAL CHARACTERS)

The instructions for this function should read:

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

1) Hold down the Code key and press the Margin Release (<Key>) key to activate the second keyboard.

2) To type the symbol on the lower right of the key, simply press the key with the desired symbol.

To type the symbol on the upper right of the key, hold down the Shift key (or Shift Lock key) and press the desired key.

3) To terminate the second keyboard, hold down the Code key and press the Margin Release (<Key>) key again.
NOTES CONCERNING THE ARABIC KEYBOARD

Switching between Keyboard Layouts
The keyboard of this typewriter two layouts: a Arabic layout for use with the Arabic printwheel, and an USA (English) layout for use with the USA printwheel. The Arabic printwheel is installed in the typewriter when it is shipped from the factory, and a USA printwheel is included in the package together with the typewriter.

1) Remove the Arabic printwheel from the typewriter and install the USA printwheel that is included in the package.
2) To switch to the USA (English) keyboard layout, hold down the Code key and press the "E" key. After doing so, you can type the English letters that appear on the left sides of the key tops.

1) Remove the USA printwheel from the typewriter and install the Arabic printwheel.
2) To switch back to the Arabic keyboard layout, hold down the Code key and press the "R" key. After doing so, you can type the Arabic characters that appear on the right sides of the key tops.

Using the Typewriter with the Arabic Keyboard Layout
Please note that the procedures for using the typewriter are somewhat different when using the Arabic keyboard layout. Procedures for using certain functions are different and some functions cannot be used.

Typewriter operation differs as follows when the Arabic keyboard layout is selected.
• The carrier moves from right to left as characters are printed. (When the USA layout is selected, the carrier moves from left to right.)
• Margin and tab positions are set with respect to the right end of the carriage, rather than with respect to the left end.
• When characters that are not in the correction memory are deleted, Hammer Off mode is set first and then the character is deleted.
  1) Move the carrier to the position of the characters to be deleted.
  2) While holding down the code key, press the "H" key. The typewriter is now in Hammer Off mode, and beeps once. When the typewriter is in this mode, the hammer does not strike even if a key is pressed.
  3) Type the characters to be deleted. Then hold down the code key and press the "H" key again. Hammer Off mode is now released, and the typewriter beeps twice.
  4) Press the correction of keys a number of times equal to the number of characters pressed in step 3. The characters are deleted.
• The character pitch setting is locked to proportional pitch, and the 10, 12 and 15 settings cannot be selected.
• Underline function
  1) While holding down the code key, press the "8" key. The typewriter is now in Underline mode.
  2) Type the text that you wish to be underlined. The underline is not printed at this time, however.
  3) Hold down the code key and press the "8" key again. Underline mode is turned off, and the typewriter underlines the text that was typed in underline mode and then beeps twice.
• Text is also underlined if you use Return, Index, Reverse Index, Tab, Decimal Tab, or Automatic Center functions before holding down the code key and pressing 7 in step 3) above.
• The case lock function cannot be used.
• As an additional function, backspacing is possible in 1/120-inch increments. Each time you press the Margin Release key while holding down the Code key, the carrier moves 1/120 of an inch to the right, allowing very precise character positioning.
Switching decimal points
You can select from among five different styles of decimal point. Each decimal point style uses one of the following five characters: ".", ".", "/", ".", and ".". To change the style of decimal point, hold down the code key and press SHIFT, then while still holding SHIFT, press the key for the character that you want to use as the decimal point.

① CODE + SHIFT + .
② CODE + SHIFT + /
③ CODE + SHIFT + :
④ CODE + SHIFT + .
⑤ CODE + SHIFT + :

The default decimal point style uses the "." character.

• Reverse Index key
  While holding down the Code key, press the Index key.

• Superscript/Subscript function
  The Superscript/Subscript function cannot be used in either Arabic mode or the USA mode.

In USA/Arabic mode, in order to use the functions shown in the CODE row, hold down the CODE key and then press the key in row A under the function to be used.

Example: To use the BOLD function

Press CODE + [Bold]. Press these keys again to release the BOLD function.

In USA/Arabic mode, in order to type the characters shown in the KB II row, hold down the KB II key and then press the key in row A under the character to be typed.

Example: To type the "£" character

Press CODE + $ . The "£" character is typed.

In addition, in order type characters shown in the sides of keys, hold down the KB II key and then press the key corresponding to the character to be typed.

Example: In order to type "ω" on the side of the key

Press CODE + . The "ω" character is typed.