

brother.

ELECTRONIC TYPEWRITER

USER'S GUIDE

AMERICAN

Thank you for choosing a Brother electronic typewriter! This product is designed to deliver years of reliable operation.

Some of the outstanding features of this typewriter are illustrated in the letter below. The numbers in brackets refer to the page and box where you can find further information explaining a feature. For example, Margins (p.2, Box 4) means that this feature is explained in box 4, on page 2.

Ribbon replacement is explained on page 10.

Margins (p.2, Box 4) _____

Right Margin Flush (p.7, Box 20) _____ January 7th 1994

Capital (p.4, Box 10) _____ Dear Sir:

Indent (p.6, Box 18) _____ Thank you for your interesting paper on chemical formulas. Most people are no longer familiar with them.

_____ I understand you did not have time to proofread the final copy, which accounts for the typing mistakes on pages 25, 57, and 59.

_____ There are some minor changes I would like to suggest that might contribute to the clarity of your paper.

Underline (p.5, Box 16) _____

<u>Item</u>	<u>Suggestion</u>	<u>Page/Line</u>
Subscript (p.4, Box 11) _____ HO_2	H_2O	25/15
Superscript (p.4, Box 11) _____ $e = m^2c$	$e = mc^2$	57/19
Tabs (p.5, Box 15) _____ sodium ($\text{C}_{20}\text{H}_{42}$) / eicosane ($\text{C}_{20}\text{H}_{42}$) /		59/22

_____ Did my secretary think of sending you our new address? Just in case she did not, allow me to give it to you:

Centering (p.6, Box 19) _____ Institute of chemistry and physics
100 Metro Street

Bold (p.6, Box 17) _____ **New York, N. Y.**

Line Spacing (p.3, Box 5) _____ Yours sincerely,
O. Newton

Special note: In this Guide, the "+" sign between two keys, like [CODE] + [REV] means that you press [CODE] and hold it down while pressing [REV].

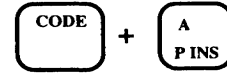
1 Repeat Keys

The following keys will automatically repeat when held down.

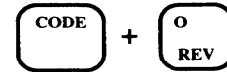
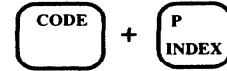
All Character keys	[RETURN]	[CODE] + [REV]
[-] (hyphen)	[BACKSPACE]	[CORRECT]
[SPACE BAR]	[CODE] + [INDEX]	[TAB](carrier moves from one tab to the next)

2 Inserting and Moving Paper

To insert paper: Insert a sheet of paper and press [CODE] + [P INS]. Paper will advance to approximately one inch from the top edge of the paper. Press [RETURN] to position the carrier on the left margin.



To move paper: Press [CODE] + [INDEX] to raise the paper by 1/12 inch. Press [CODE] + [REV] to lower the paper by 1/12 inch.

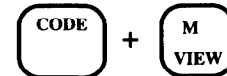


To move the paper continuously in either direction, hold down the appropriate key(s) for more than half a second.

If you raise/lower the paper more than 1/12 inch, the correction memory is cleared.

3 Viewing Mode

Press [CODE] + [VIEW] to turn the viewing mode on or off.



This function automatically moves the paper upwards 1/12 inch (one half line) after typing so you can easily see the typed characters.

Viewing Mode ON

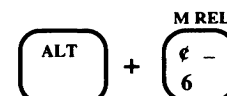
During continuous typing, the paper remains constant with the print unit on the typing line. When typing stops for more than 1 second, the paper moves upward so that you can easily view what you have typed. When typing continues, the paper automatically returns to the correct typing line.

Viewing Mode OFF

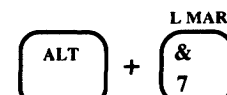
During continuous typing and during viewing, the paper remains at the typing position.

4 Margins

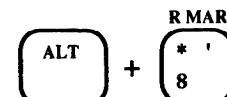
Move the carrier to the desired position for the new left or right margin using [BACKSPACE] or [SPACE].



To move beyond the position of a current margin, first position the carrier on the margin and press [ALT] + [M REL].



When the carrier is on the desired position, press [ALT] + [L MAR] (if you are setting the left margin), or [ALT] + [R MAR] (if you are setting the right margin).



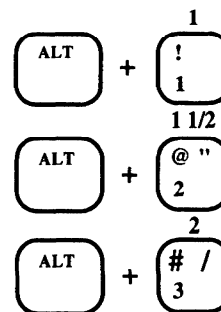
The minimum distance between the left and right margin is two (2) inches, i.e. either 20 characters (Pica pitch) or 24 characters (Elite pitch).

5 Line Spacing

Single space: Press [ALT] + [LINE 1].

One and a half space: Press [ALT] + [LINE 1 1/2].

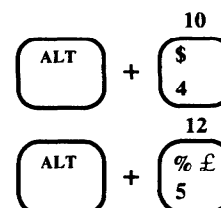
Double space: Press [ALT] + [LINE 2].



6 Pitch

Pica (10 characters per inch): Press [ALT] + [PITCH 10].

Elite (12 characters per inch): Press [ALT] + [PITCH 12].

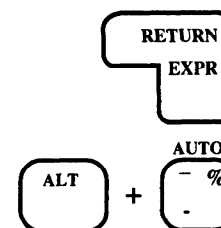


7 Returning the Carrier

To return the carrier manually: Simply press [RETURN]. Holding down this key will feed the paper repeatedly.

To activate the auto carrier return function: Press [ALT] + [AUTO] (you will hear two beeps). The carrier will return automatically every time the [SPACE BAR] or [HYPHEN] is pressed in the hot zone. To turn this function off, press the same [ALT] + [AUTO] again.

The hot zone starts six (6) spaces before the right margin and extends to the right margin. A warning beep will sound when the hot zone is reached.

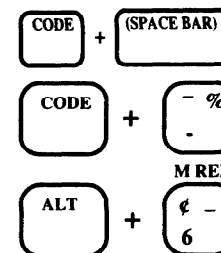


8 Typing Tips

Permanent space: If you want to type a space in the hot zone without triggering a carrier return, press [CODE] + [SPACE BAR].

Permanent hyphen: If you want to type a hyphen in the hot zone without activating an auto carrier return, press [CODE] + [HYPHEN].

Typing past a margin: If you want to type a few characters outside of a margin, press [ALT] + [M REL] when the carrier is on the margin.

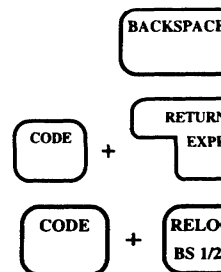


9 Backspacing

To move back one space at a time: Press [BACKSPACE]. To move continuously to the left, hold this key down. See also "12 Superimposing Characters" on page 4.

To move the carrier quickly to the left margin: Press [CODE] + [EXPR].

To move back half a space: Press [CODE] + [BS 1/2]. See also "23 Half Backspace" on page 8 for more details.

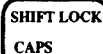


10 Uppercase characters

To type uppercase characters: Hold down either the right or left [SHIFT] key (the SHIFT lamp will blink while the key is held down). Releasing this key returns the keyboard to the lowercase mode.

For continuous uppercase typing: Press [SHIFT LOCK] (the SHIFT lamp will blink and all the keys will be set in uppercase mode). To return to lowercase typing, press either the right or left [SHIFT] key.

For continuous capital letter typing: Press [CODE] + [CAPS] (the SHIFT lamp will blink quickly and the letter keys only, not the number keys, will be set in uppercase mode). Press the same keys to return to normal typing.

SHIFTSHIFT LOCK
CAPSCODE

+

SHIFT LOCK
CAPS

11 Superscripts & Subscript

Superscripts and subscripts are used mainly for scientific text composition (for instance, exponents, chemical symbols, or reference to footnotes).

To print a superscript: Press [CODE] + [REV] to lower the paper by 1/12 inch, and then type the character that you want in superscript.

To print a subscript: Press [CODE] + [INDEX] to raise the paper by 1/12 inch, and then type the character that you want in subscript.

After typing a superscript, press [CODE] + [INDEX]. After typing a subscript, press [CODE] + [REV]. This will move the paper back to normal position.

In super/subscript mode, the carrier will always move by 1/12 inch, regardless of the current line spacing. If [CODE] + [REV] or [CODE] + [INDEX] is pressed more than two times, the correction memory is cleared.

CODE

+

O
REVCODE

+

P
INDEX

12 Superimposing Characters

Some characters not found on your keyboard can be created. For example, if you want the symbol for Japanese yen:

Type the letter Y and press [BACKSPACE]. You may now type the symbol "¥" to obtain "¥".

To erase superimposed characters, you may use the automatic correction function (See "21 Automatic Corrections on the Current Line" on page 7) for the second character, but you have to use the manual method (See "22 Corrections outside of the Correction Memory" on page 7) for the first character.

BACKSPACE

13 Extra Character Set

To type the special characters and symbols marked in green on the bottom of certain keys, hold down [CODE] and press the desired key.

(EXAMPLE)

CODE

+

Z
\$ β

14 Dead Keys

You can type the accented letter by using the dead key function.

Press the dead key to type the accent. The carrier does not move.
Type the character under the accent.

15 Tabs

To set tab stops: Move the carrier to the desired position using [SPACE BAR] or [BACKSPACE], then press [ALT] + [T SET] to set a normal tab stop. A maximum of 8 tab stops can be set. Repeat the above step to set each tab stop.

The right and left margins, as well as the right and left ends of the platen, are considered tab positions.

To type tables: Press [TAB] to space to the next tab and type the word(s).

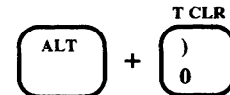
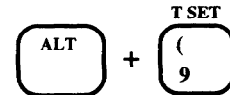
Repeat the steps above to complete a line of your table.

Press [RETURN] to move to the beginning of the next line and proceed as for the first line to complete the table.

To clear tab stops: Use the [TAB] key to move the carrier to the tab stop you want to clear.

Press [ALT] + [T CLR] to clear the tab.

Caution: If you press [ALT] + [T CLR] for more than half a second, all tab stops will be deleted. A beep will sound three times.



16 Underline

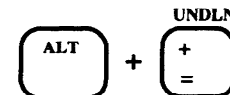
To turn on the automatic underlining function: Press [ALT] + [UNDLN]. You will hear two beeps.

Type your text. If the underline function is on, all characters and spaces are underlined.

To cancel the automatic underlining function: Press [ALT] + [UNDLN] again.

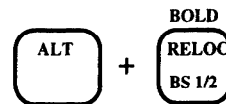
The spaces that trigger a carrier return in the automatic carrier return mode are not underlined.

Permanent spaces or hyphens, i.e. spaces or hyphens typed while holding [CODE], however, are underlined.



17 Bold

To turn on the bold face function: Press [ALT] + [BOLD]. You will hear two beeps.



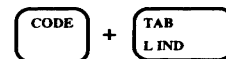
Type your text. If the bold function is on, all characters are bolded.

To cancel the bold function: Press [ALT] + [BOLD] again.

This function can be used together with the automatic centering, underlining and the right margin flush functions. However, you should set the bold mode on before entering the centering, or right margin flush mode.

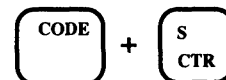
18 Indenting

To indent a line, move the carrier to the left margin and press [CODE] + [L IND]. The carrier will move five spaces to the right of its current position.



19 Centering

First move the carrier to the left margin.



To center the text of a new line: Press [CODE] + [CTR]. The carrier will advance to a point halfway between both margins.

Type the text. The characters are not printed immediately, but the carrier positions itself at the printing position.

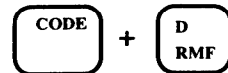
To print the text, press [TAB], [RETURN], or [CODE] + [CTR].

If you make a mistake, press [CORRECT] or [W OUT] before printing the text. These keys will delete the whole line from the memory and will return the carrier to the initial printing position.

To cancel centering: Press one of the above keys or [CODE] + [CTR] without typing any text. The carrier will then return to the left margin.

20 Right Margin Flush

First move the carrier to the left margin.



To automatically align text to the right margin: Press **[CODE] + [RMF]**. The carrier will advance to the right margin.

Type the text. The characters are not printed immediately, but the carrier positions itself at the printing position.

To print the text, press **[TAB]**, **[RETURN]**, or **[CODE] + [RMF]**.

*If you make a mistake, press **[CORRECT]** or **[W OUT]** before printing the text. These keys will delete the whole line from the memory and will return the carrier to the initial printing position.*

To cancel right margin flush: Press one of the above keys or **[CODE] + [RMF]**. The carrier will then return to the left margin.

21 Automatic Corrections on the Current Line

This typewriter has a 65 character correction memory. It erases the errors on the current line.

First, use **[BACKSPACE]** or **[SPACE BAR]** to line up the carrier with the error.

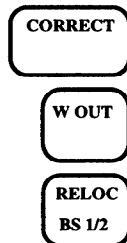
To erase one character: Press **[CORRECT]**. The incorrect character will be erased and you can type the correct character.

*To erase a series of characters, simply hold down **[CORRECT]**. The carrier will backspace and correct continuously until you release the key.*

To erase one word: Press **[W OUT]**. The word is erased and the carrier is now on the space previously occupied by the first character of the erased word. You can now retype the word.

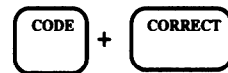
If the carrier is positioned in the middle of a word, only the letters from that position to the beginning of the word will be erased.

*The **[RELOC]** key moves you to the end of your typing line rapidly. Press that key to take the carrier back to the position it occupied before the correction.*



22 Corrections outside of the Correction Memory

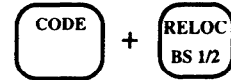
Press **[BACKSPACE]**, **[SPACE BAR]**, **[CODE] + [INDEX]** or **[CODE] + [REV]** to move the carrier the character to be corrected.



Press **[CODE] + [CORRECT]**, then retype the wrong character (use the **[SHIFT]** key for uppercase characters). The incorrect character will be erased.

Type in the correct character.

23 Half Backspace



The half backspace function is used to fit a correct word in a line after erasing a misspelled word that was one character shorter or longer than the correct word (example: replacing "fomulas" with "formulas" or "minnor" with "minor").

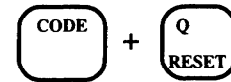
Delete the entire misspelled word.

If the deleted word was shorter than the correct word, align the carrier up with the first letter of the deleted word; if it was longer, align the carrier with the second letter of the deleted word.

Press [CODE] + [BS 1/2] to move the carrier half a space to the left.

Type in the correct word. Because of the half-backspace function, the corrected word is perfectly centered within the blank space left by the deleted word.

24 Reset



This function allows you to move the carriage to the previous position without clearing correction memory. Make sure that you do this procedure after replacing cassette ribbon, correction tape and daisy wheel.

BROTHER TYPEWRITER ONE YEAR WARRANTY A LIMITED WARRANTY

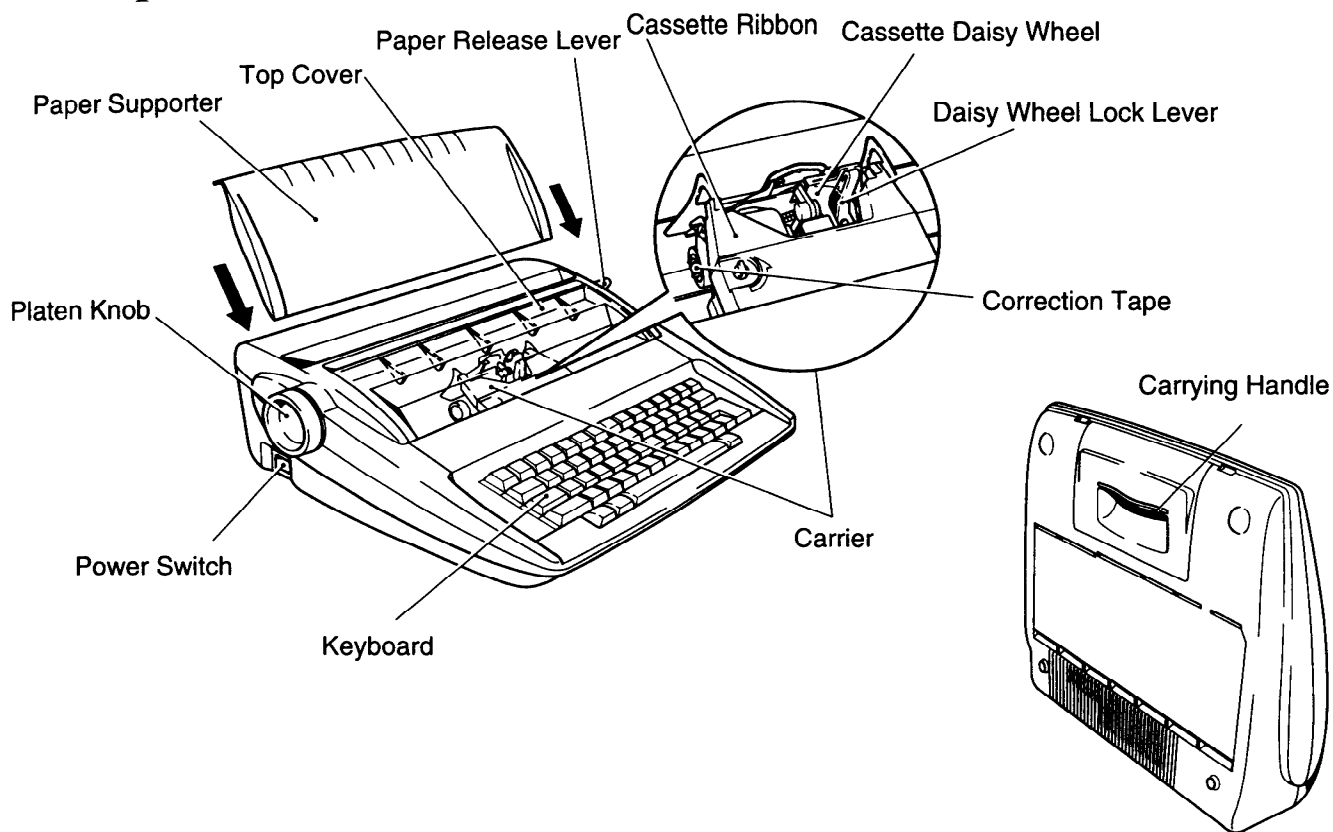
For 90 days from the date of purchase, Brother International Corporation, or its authorized service centers, will repair this typewriter free of charge if defective in material or workmanship. After 90 days and until one year from date of purchase, Brother will furnish, free of charge, a replacement part for the defective part of the typewriter, you pay for labor. The replacement of free parts does not include covers, platen rubber parts, ribbon, printing element or carrying case. This limited warranty also does not include cleaning, or any damage caused by accident, neglect, or misuse and ceases when you sell, rent or otherwise dispose of this typewriter. Brother ribbons, daisy wheels and other supplies are recommended for use with this product. The use of other supplies not specifically sold by, or approved by Brother may affect the performance of this product and may void the Brother product warranty. Warranty service is available at any of Brother's authorized service centers throughout the United States. The typewriter must be delivered or shipped freight prepaid to the nearest authorized service center together with your copy of the warranty card and/or proof of purchase in the form of a sales slip.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

* For the name and location of your nearest service center call toll free 1-800-284-4357.

Brother International Corporation
Somerset, New Jersey

Description



Paper Release Lever: Pushing this lever loosens tension on the paper so it can be adjusted if necessary.

Paper Supporter: Keyboard Cover can be used as a paper supporter as illustrated above.

FCC NOTICE

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.

Changes or modifications not expressly approved by Brother Industries, Ltd. could void the user's authority to operate the equipment.

DOC NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

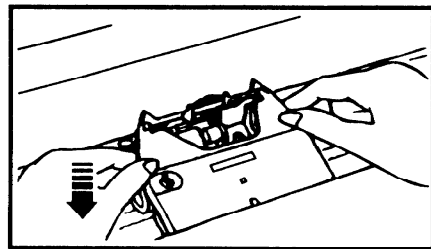
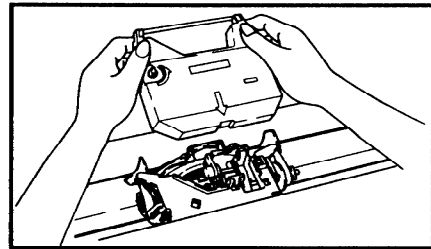
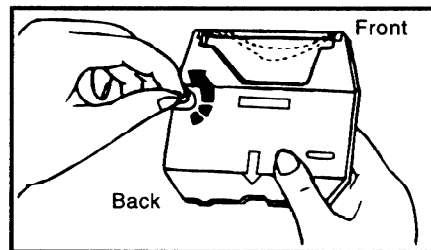
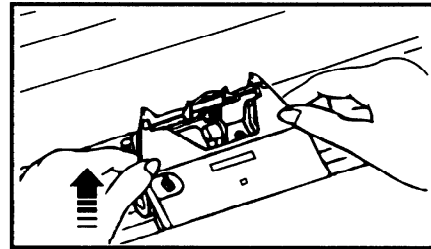
Replacing the cassette ribbon

Three types of ribbons are available:

Ribbon Types	Brother Model
Correctable film ribbon	1030 or 1230
Multi strike ribbon	1031
Nylon ribbon	1032

To replace the cassette ribbon:

- 1) Use **[SPACEBAR]** or **[BACKSPACE]** to move the carrier to the center of the platen.
- 2) Open the top cover.
- 3) Holding the cassette with both hands, lift the front of the cassette up and out.
- 4) Move the cassette towards the platen to remove it.
- 5) Turn the feed knob (on the left side of the cassette) counter-clockwise to tighten the ribbon in the new cassette.
- 6) Align the arrow on the cassette with the arrow on the cassette holder. Use both hands to ease the cassette into the holder, back first.
- 7) Gently press down on the front of the cassette until it clicks into place.
- 8) Again turn the feed knob counter-clockwise to take up any slack.
- 9) Close the top cover.
- 10) Press **[CODE]** + **[RESET]** to move the carrier to the previous position.



- *The amount of tape remaining can be checked through the viewing hole on the right side of the cassette.*
- *Make sure to use only Brother-authorized cassette ribbons, correction tapes and cassette daisy wheels. Brother cannot be held responsible for difficulties caused by the use of unauthorized supplies.*

Note: Please do not touch the keyboard during replacing the daisy wheel, cassette ribbon or correction tape in order to avoid carrier movement.

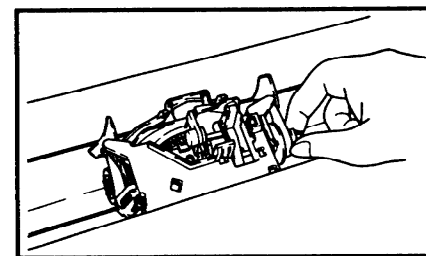
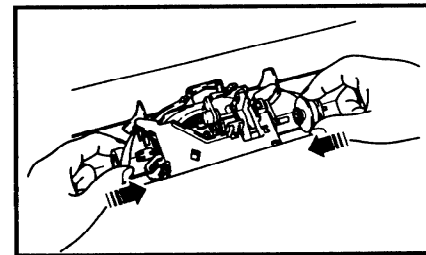
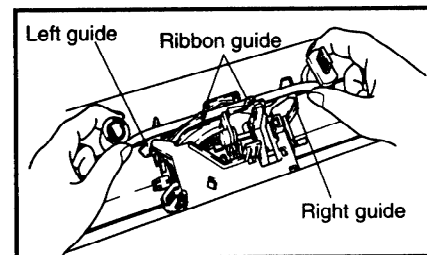
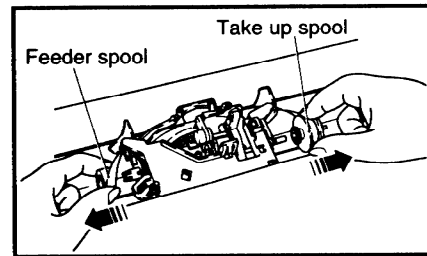
Replacing the correction tape

Two types of correction tape are available:

- Lift-off correction tape, to be used with correctable film ribbon.
- Cover-up correction tape, to be used with nylon and multi strike ribbons.

To replace the correction tape:

- 1) Use **[SPACE BAR]** or **[BACKSPACE]** to move the carrier to the center of the platen.
- 2) Open the top cover.
- 3) Remove the cassette ribbon, if installed.
- 4) Pull off both spools, pressing against the correction tape with your thumbs. Bring it back to a position parallel with the platen, and lift it up and out.
- 5) Pass the new tape through the left guide, behind the ribbon guide, and out through the right guide. The rough (sticky) side of the tape should face the platen.
- 6) Attach the feeder spool to the pin on the left.
- 7) Attach the take-up spool to the pin on the right.
- 8) Turn the take-up spool counter-clockwise until a small amount of white tape has wound around it.
- 9) Replace the cassette ribbon and close the top cover.
- 10) Press **[CODE]** + **[RESET]** to move the carrier to the previous position.

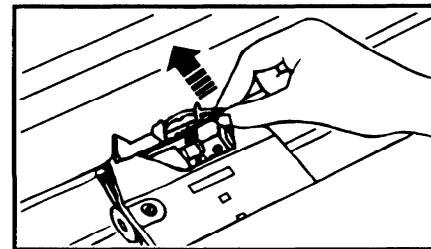
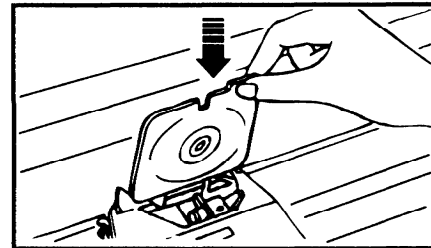
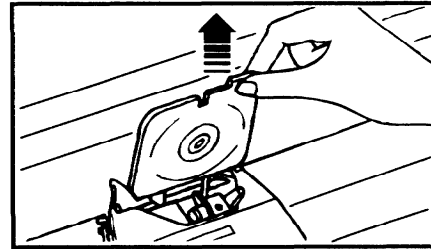
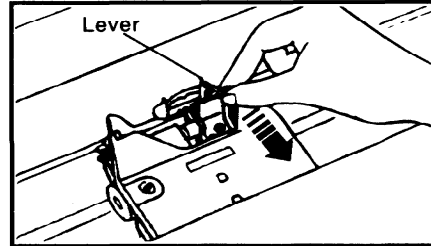


Replacing the cassette daisy wheel

The daisy wheel is housed in a clear plastic cassette for easy, damage-free handling and quick typeface changes.

To replace the cassette daisy wheel:

- 1) Open the top cover.
- 2) Pull the lever towards you to release the daisy wheel lock.
- 3) Remove the cassette daisy wheel by pulling it out of the machine by the protruding "ear" on the top right.
- 4) Insert the desired cassette daisy wheel into the slot and press down gently.
- 5) Slide the lever back to its original position to lock the cassette daisy wheel in place. Make sure to press the lever firmly.
- 6) Close the top cover
- 7) Press **[CODE]** + **[RESET]** to move the carrier to the previous position.

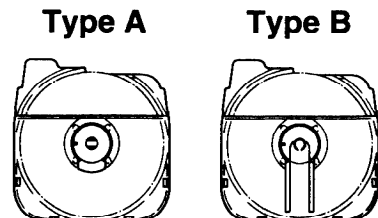


• *Make sure the cassette daisy wheel is not inserted backwards. The "ear" should always be on the upper right.*

• *Improper insertion of the cassette daisy wheel may cause malfunction and incorrect printing.*

• *It is not necessary to remove the cassette ribbon when replacing the daisy wheel.*

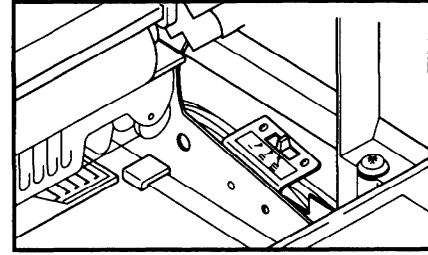
Note: Please check the shape of your daisy wheel cassette before replacing the daisy wheel. The daisy wheel cassette type B cannot be used with this machine.



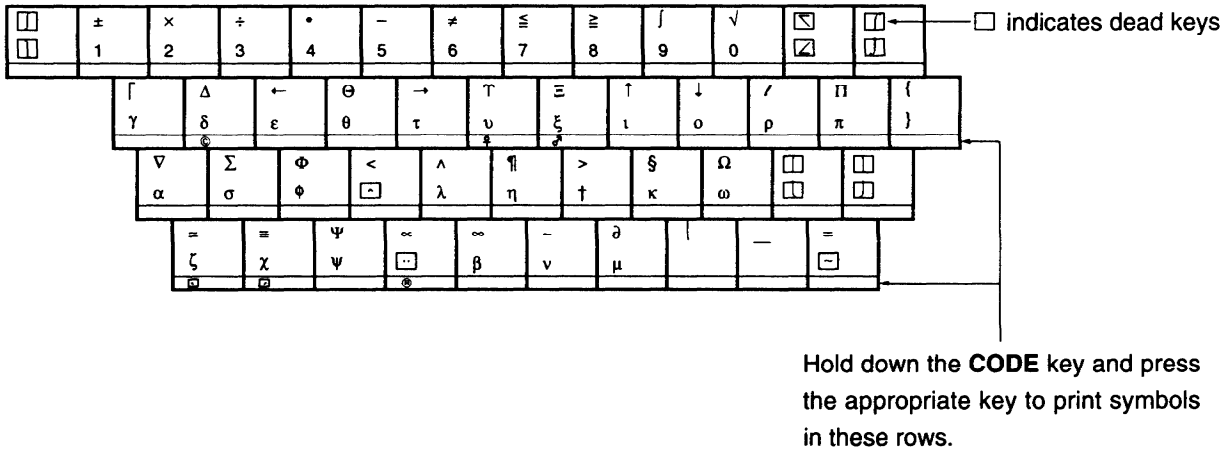
Selecting keyboards

The keyboard switch is used to select the desired character set. It is located under the top cover on the right side of the bottom. The setting corresponds to the following keyboards.

- I Standard
- II International
- III Symbols



- Use the proper daisy wheel:
 - I : Standard cassette daisy wheel (the wheel that is installed when the unit was purchased.)
 - II : International cassette daisy wheel
 - III : Symbol cassette daisy wheel (option)
- Characters on the right side of the keys are printed when the International keyboard is selected and an international daisy wheel is installed.
- When using the symbol keyboard, affix the included symbols labels to the appropriate keys as shown in the layout below.



Dead keys on the Symbol keyboard are used for both accents and to create special symbols. For example, Σ is a combination of \angle and ∇ .

Be sure to install the proper daisy wheel when switching keyboard selectors. The daisy wheel installed must correspond to the selected keyboard.

Note: Press [CODE] + [RESET] every time you change the keyboard switch and daisy wheel, otherwise incorrect characters will be printed.

General Information

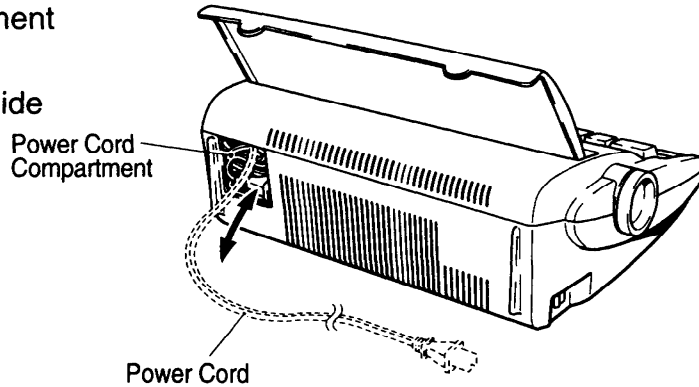
Your typewriter comes with the following items:

- Cassette ribbon
- Cassette daisy wheels Brougham 10 M411 (Standard) & Prestige 1012 M452 (International)
- Correction tape

Please make sure that these items are included with the machine.

The power cord is stored in a compartment on the back of the machine.

The power switch is located on the left side of the typewriter near the rear.



Care of the Unit

Beware of tiny objects

Take precautions to prevent anything from slipping into the typewriter or between the keys. Be especially careful of metal objects such as paper clips and staples.

Cleaning

Never use volatile liquids such as thinner or benzine to clean the exterior surface of the typewriter. Use only a soft cloth dampened with a mild detergent solution.

Location

Do not expose your typewriter to direct sunlight, heat or intense vibration. Be sure to replace the keyboard cover when the typewriter is not in use.

Ventilation

Do not block the ventilation slits provided at the back of the unit to prevent overheating.

Troubleshooting

Problem	Possible cause
Nothing happens when power switch is turned on	1. Is the power cord plugged in?
Poor printing performance or printout is impossible	1. Is the daisy wheel properly installed? (Has the lever been pressed firmly?) Is the correct daisy wheel installed? 2. Have you run out of ribbon? 3. Have you pressed [CODE] + [RESET] after replacing cassette ribbon, correction tape or daisy wheel and keyboard switch ?
Poor correction performance	1. Has the correction tape been properly installed? 2. Have you run out of correction tape? 3. Are you using the proper correction tape?

Specifications

Paper capacity	12.87" (326.9mm)
Typing capacity	9.0" (228.6mm)
Typing speed	12 characters per second
Typing pitches	10, 12
Number of character keys	46
Line spacing	1, 1 1/2, 2
Tab set	8 tabs
Copies	Original + 4 copies
Ribbons	1030, 1230 Correctable Film Ribbons 1031 Multi Strike Ribbon 1032 Nylon Ribbon
Correction tapes	3010 Lift-off correction tape for use with correctable film ribbons 4010 cover-up correction tape for use with multi strike and nylon ribbons
Dimensions	16.4" x 15.1" x 5.3" (417mm x 383mm x 134mm)
Weight	9.9lb (4.5kg)
CAUTION: Changes or modifications not expressly approved by Brother Industries, Ltd. could void the users authority to operate the equipment.	

For operational assistance you may call our customer service representatives at (901) 373-6256.

To order brochures on other Brother products or to locate your nearest Authorized Service Center or Authorizes Dealer, you may call our automated voice response system at (800) 284-4357.

To order Brother accessories by Visa, Discover or MasterCard, you may call (800) 284-4357, or complete the order from included in the typewriter packaging material and fax both sides of it to (800) 947-1445.

Compatible Accessories

Starter kit

Item No.	Description
SK-100	3 Correctable Film Ribbons 1 Script 1012 Daisy Wheel 1 Lift-off Correction Tape

Cassette Ribbons/Correction Tapes

Item No.	Description
1030	Correctable Film Ribbon
1230	Correctable film ribbon (2 packs)
1031	Multi strike ribbon
1032	Nylon Ribbon
3010	Lift-off Correction tapes (2 pieces) (to be used with 1030, 1230 ribbons)
4010	Cover-up Correction tape (2 pieces) (to be used with 1031, 1032 ribbons)

Cassette Daisy Wheels

Item No.	Description	Type Pitch
M401	American Pica 10	10
M402	American Prestige 10/12	10, 12
M403	American Elite 12	12
M405	American Script 10/12	10, 12
M408	American Grande 10	10
M409	American Quadro 10/12	10, 12
M411	American Brougham 10	10
M412	American Brougham 12	12
M414	Prestige Italic 10/12	10, 12
M415	American OCR B 10	10
M416	American OCR. A 10	10
M417	American Letter Gothic 12	12
M419	Super Grande 10	10
M421	Legal Prestige 10	10
M422	Super Grande II 10	10