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.6, Box 20)

Capital (p.4, Box 10)

Indent (p.6, Box 18)

Underline (p.5, Box 16)

Subscript (p.4, Box 11)

Superscript (p.4, Box 11)

Tabs (p.5, Box 15)

Centring (p.6, Box 19)

Bold (p.5, Box 17)

Line Spacing (p.3, Box 5)

January 7th 1994

Dear Sir:

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.

Item	Suggestion	Page line
HC_3	H_2O	25/15
$e = m^2c$	$e = mc^2$	57/19
sodium $(C_{20}H_{42})$	eicosane $(C_{20}H_{42})$	59/20

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

Institute of chemistry and physics
100 Metro Street
New York, N. Y.

Yours sincerely,

J. Newton

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

1 Repeat Keys

The following keys will automatically repeat when held down.

All Character key	⇤		✿ + ⊼	✿ + ⊻
[-] (hyphen)	⇤	✿⊠		
[SPACE BAR]	→			

(carrier moves from one tab to the next)

2 Inserting and Moving Paper

To insert paper: Insert a sheet of paper and press ✿ + ⊻ . Paper will advance to approximately one inch from the top edge of the paper. Press ⇤ to position the carrier on the left margin.

To move paper: Press ✿ + ⊻ to raise the paper by 1/12 inch. Press ⇤ ✿ + ⊼ 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.

✿ + ⊻

✿ + ⊻

✿ + ⊼
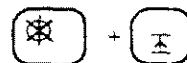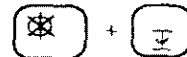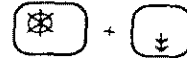
3 Viewing Mode

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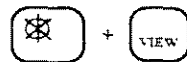
✿ + VIEW

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 ⇤ or [SPACE] .

ALT + ⟨}⟩

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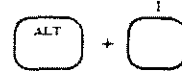
ALT +

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

ALT +

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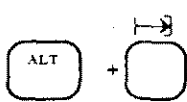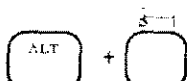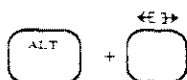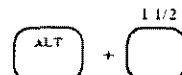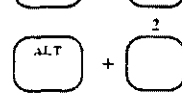
5 Line Spacing

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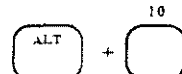
One and a half space: Press [ALT] + [LINE 1 1/2].

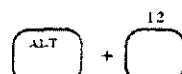Double space: Press [ALT] + [LINE 2].

6 Pitch

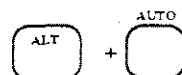Pica (10 characters per inch): Press [ALT]+ [PITCH 10].

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

7 Returning the Carrier

To return the carrier manually: Simply press ⎰. 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 ✿ + [SPACE BAR].
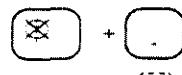
Permanent hyphen: If you want to type a hyphen in the hot zone without activating an auto carrier return, press ✿ + [HYPHEN].
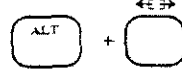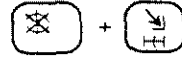
Typing past a margin: If you want to type a few characters outside of a margin, press [ALT] + ⊀⋟ when the carrier is on the margin.

9 Backspacing

To move back one space at a time: Press ⎰. To move continuously to the left, hold this key down. See also "12 Superimposing Characters" on page 4.
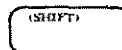
To move the carrier quickly to the left margin: Press ✿ + ⎰.

To move back half a space: Press ✿ + ⎰. 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 ⬆ (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 ✿ + ⬆ (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.


Superscripts and subscripts are used mainly for scientific text composition (for instance, exponents, chemical symbols, or reference to footnotes).
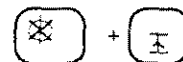
To print a superscript: Press ✿ + 𝕏 to lower the paper by 1/12 inch, and then type the character that you want in superscript.
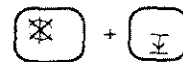
To print a subscript: Press ✿ + �𝕏 to raise the paper by 1/12 inch, and then type the character that you want in subscript.

To restart normal typing: After typing a superscript, press ✿ + �𝕏 . After typing a subscript, press ✿ + 𝕏 . 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 ✿ + 𝕏 or ✿ + �𝕏 is pressed more than two times, the correction memory is cleared.

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12 Superimposing Characters

Some characters not found on your keyboard can be created. For example, if you want the symbol for Japanese yen:
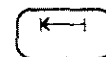
Type the letter Y and press ⊷ . You may now type the symbol "=" to obtain "¥".

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

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13 Extra Character Set

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

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14 Dead key

The character keys of the keyboard differ slightly from country to country in order to provide the accented letters that are frequently used. If an accentuated letter is not available on the keyboard, you can type it using the dead key.

To type the dead key: Press the dead key, and then type the character under the accent.

15 Tabs

To set tab stops: Move the carrier to the desired position using [SPACE BAR] or ⊬ , then press [ALT] + [T+] to set a normal tab stop. A maximum of 8 tab stops can be set. Repeat the above step to set each tab stop.
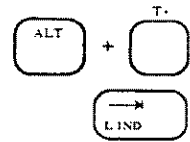
The right and left margins, as well as the right and left ends of the platen, are considered tab positions.
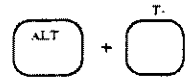
To type tables: Press →‖ to space to the next tab and type the word(s).

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

Press ⊬ to move to the beginning of the next line and proceed as for the first line to complete the table.
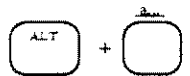
To clear tab stops: Use the →‖ key to move the carrier to the tab stop you want to clear.

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

Caution: If you press [ALT] + [T-] 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] + [a...]. You will hear two beeps.

Type your text. If the underline function is on, all characters and spaces are underlined.
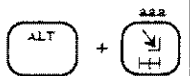
To cancel the automatic underlining function: Press [ALT] +[a...] again.

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 ✿ , however, are underlined.

17 Bold

To turn on the bold face function: Press [ALT] + [aaa]. You will hear two beeps.
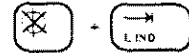
Type your text. If the bold function is on, all characters are bolded.

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

18 Indenting

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

19 Centering
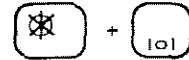
First move the carrier to the left margin.

Press ⊗ + |O| . The carrier will ad-
vance 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 →| , |←⌐ , or ⊗ + |O| .

*If you make a mistake, press ⟨X| or ⟨XX| 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 ⊗ + |O| 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 ⊗ + a| . 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 →| , |←⌐ , or ⊗ + a| .

*If you make a mistake, press ⟨X| or ⟨XX| 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 ⊗ + a| .
The carrier will then return to the left margin.
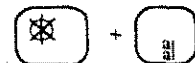
21 Automatic Corrections on the Current Line

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

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

To erase one character: Press ⟨⊠⟩ . The incorrect character will be erased and you can type the correct character.

To erase a series of characters, simply hold down ⟨⊠⟩ . The carrier will backspace and correct continuously until you release the key.

To erase one word: Press ⟨axa⟩ . 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 ↘ 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.
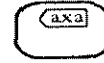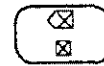
22 Corrections outside of the Correction Memory

Press ⊢⊣ or, [SPACE BAR], ✿ + ⊥ or ✿ + ⊤ to move the carrier to the character to be corrected.

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

Type in the correct character.
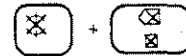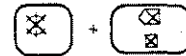
23 Half Backspace

$$\boxed{\text{�֎}} + \boxed{\text{⤓}}$$

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").
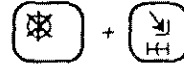
Delete the entire misspelled word.

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 ֎ + ◁| to move the carrier half a space to the left.

24 Reset

$$\boxed{\text{�֎}} + \boxed{\text{//}}$$

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.

Description

Paper Supporter

Top Cover

Paper Release Lever

Cassette Ribbon

Cassette Daisy Wheel

Daisy Wheel
Lock Lever

Correction Tape

Platen Knob

Power Switch

Keyboard

Carrier

Carrying Handle
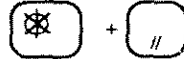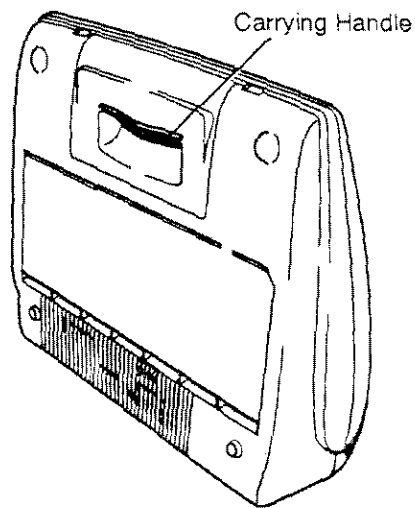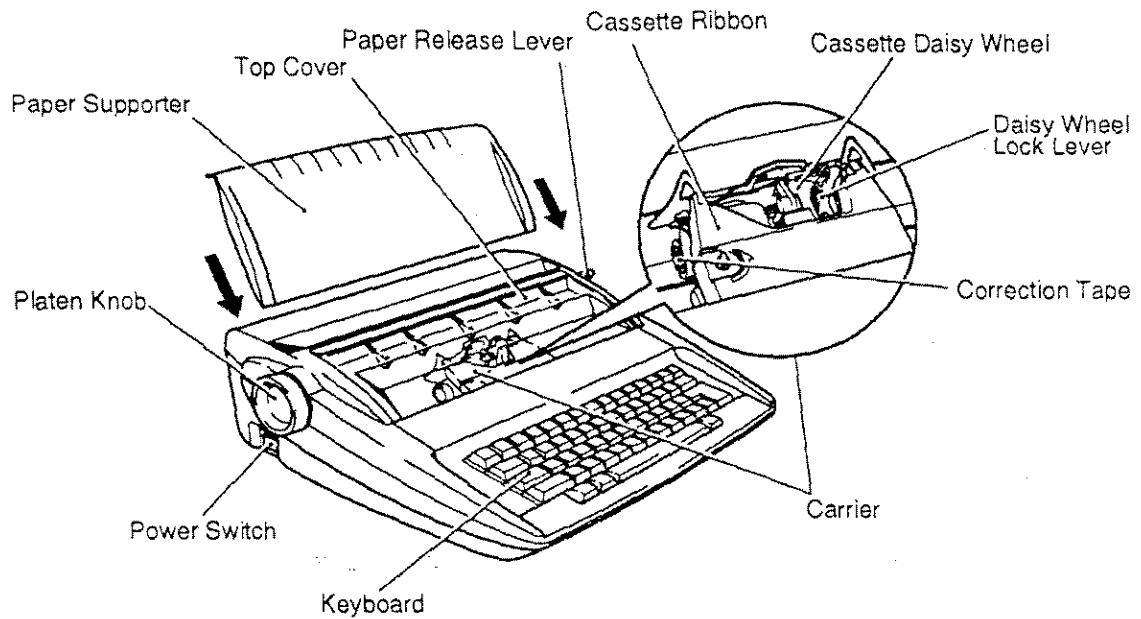
Paper Release Lever: Pushing this lever loosens tension on the paper so it can be adjusted if necessary.
Paper Supporter: Keyboard Cover can be used as a paper supporter as illustrated above.

Replacing the cassette ribbon

Two types of ribbons are available:

Ribbon Types	Brother Model
Correctable film ribbon	1030 / 1230
Nylon ribbon	1032

To replace the cassette ribbon:

1) Use **[SPACE BAR]** or |←⊣ to move the carrier to the centre 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 ✿ + // to move the carrier to the previous position.
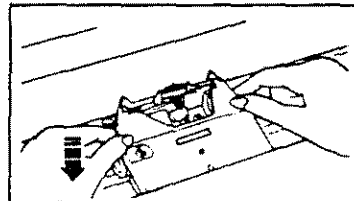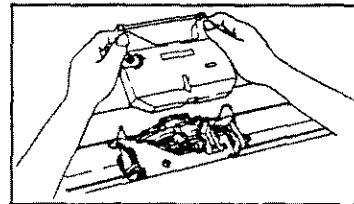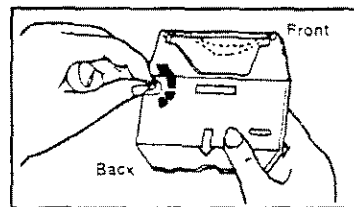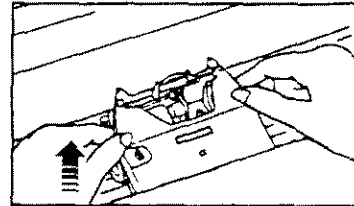
- *The amount of tape remaining can be checked through the viewing hole on the right side of the cassette.*

- *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 correctable film ribbon.
- Cover-up correction tape, to be used nylon ribbon.

To replace the correction tape:

1) Use **[SPACE BAR]** or ⊢⊣ to move the carrier to the centre 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 🏵 + // to move the carrier to the previous position.
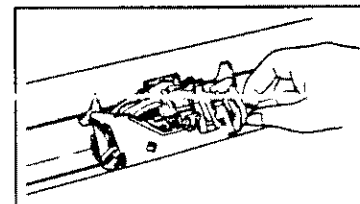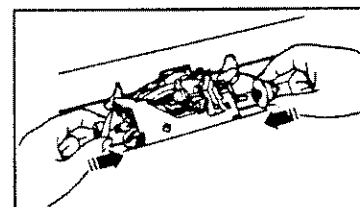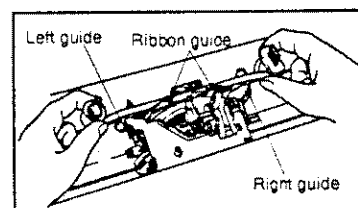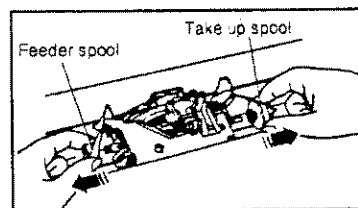
Replacing the cassette daisy wheel

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.

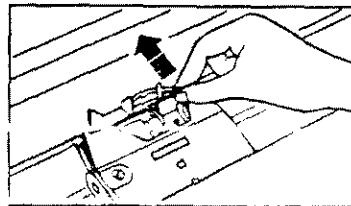7) Press ✿ + // to move the carrier to the previous position.

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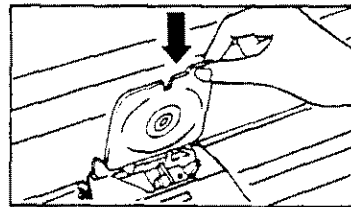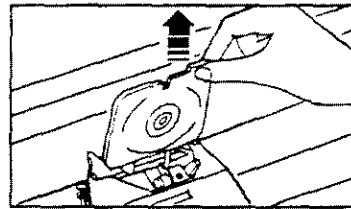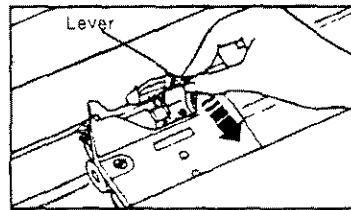
* Make sure the cassette daisy wheel is not inserted backwards. The "ear" should always be on the upper right.

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

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* 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.

Type A   Type B
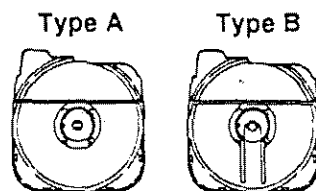
General Information

Your typewriter comes with the following items:
- Cassette ribbon
- Cassette daisy wheel
- 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.

Power Cord Compartment

Power Cord

Care of the Unit

Beware of tiny objects   Take precautions to prevent anything from slipping into the type-
writer 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
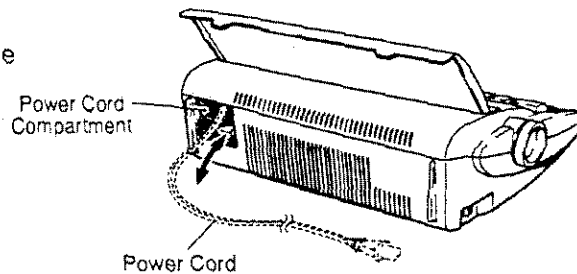exterior surface of the typewriter. Use only a soft cloth dampened
with a mild detergent solution.

Location   Do not expose your typewriter to direct sunlight, heat or intense
vibration. Be sure to replace the keyboard cover when the type-
writer 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 ⊛ + // keys after replacing cassette ribbon, correction tape or daisy wheel?
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" (326.90mm)
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 Ribbon 1032 Nylon Ribbon
Correction tapes	3010 / 3015 Lift-off correction tape for use with correctable film ribbon 4010 cover-up correction tape for use with nylon ribbon
Dimensions	16.4" x 15.1" x 5.3" (417 mm x 383 mm x 134 mm)
Weight	9.9lb (4.5kg)