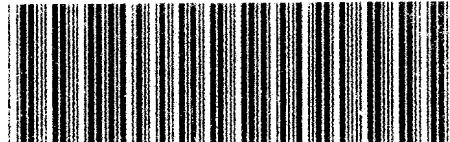


What You Get Out Of Your IBM Typewriter Depends On What You Put Into It.

Lexmark manufactured the ribbon that came with your IBM Wheelwriter Typewriter when it was new. Lexmark designs IBM ribbons in tandem with the machines that use them. The result is high-yield printing of the highest quality. Remember when it's time to replace your ribbon, buy IBM supplies by Lexmark.

IBM Supplies by
LEXMARK

SA40-0825-00



P/N 1419147

Form No. SA40-0825-00

E.C. 534958

Printed in U.S.A.

7/94



IBM
WHEELWRITER 1000
BY LEXMARK

User's Guide

LEXMARK

REFERENCE

Dealer Name	
Dealer Phone Number	

PRODUCT INFORMATION

Typewriter Name	IBM Wheelwriter 1000
Machine Type *	
Serial Number (S/N) *	

HELP / ASSISTANCE

Technical Problems	Contact your local dealer
Lexmark Technical Support (US)	606-232-3000
Lexmark Dealer Referral (US)	800-358-5835
Comments?	Return card at back of manual or write to us at the address below

* Machine Type and Serial number can be found inside the typewriter as shown under "Serial Number" on page 3-15.

Note: Intentionally removing, destroying or altering the Lexmark serial number may be a violation of consumer laws. Further, Lexmark will not honor warranty claims for machines without the original, factory affixed serial numbers. If your typewriter does not have a factory affixed serial number, you should contact the dealer that sold you the machine immediately.

Lexmark International, Inc.
Typewriter Customer Satisfaction, Dept. J30/005
740 New Circle Road NW
Lexington, KY 40511 USA

Congratulations!

You have just purchased one of the best typewriters ever made! The IBM Wheelwriter Typewriter by Lexmark is designed to be easy to use and to provide you with many years of dependable service. We are sure you will be pleased with its quality, from the easy to use functions to its outstanding print quality. For your continued satisfaction with print quality, you should always use genuine IBM ribbons and printwheels by Lexmark for your typewriter.

Please fill out the Reference and Product Information on the opposite page for future use (should you ever need service or help with any of the typewriter's operations).

Please help us learn more about your typing needs by completing the customer response card (U.S. only) that was included with your typewriter. For customers outside the U.S., please write to us at the address shown on the opposite page. Your input helps us continuously improve our products for future customers. If you have any comments later, please write to us at the address inside the front cover.

IBM typewriters have led the industry with outstanding features, quality and reliability for over half a century. Lexmark International, Inc. was created in 1991 from a division of IBM and is an independent company that develops, manufactures and markets IBM typewriters, IBM personal and network printers, information processing supplies, notebook computers and keyboards.

Thank you for being our customer and enjoy your new typewriter!

The Lexmark Typewriter Team

About Your Typewriter

You are about to experience typing with your new IBM® Wheelwriter® 1000 Typewriter.

Designed with you in mind, this typewriter includes many functions such as Word Underline, Word Erase, Right Flush, Bold Print and Spell Check. These functions give you excellent typing quality and make your work more enjoyable.

Paper and carrier movement keys, located to the right of the keyboard, allow you to move quickly and easily—up, down, left, or right to any location on the paper.

The Reprint function allows you to print additional copies of text from the correction memory so you can correct your text and then print a final copy.

Your typewriter has a PowerWise™ mode which conserves energy when the typewriter is ON but not in use. The typewriter reduces power consumption when inactive for more than a 10-minute time interval.

You can enhance your IBM Wheelwriter 1000 Typewriter by adding the following options:

- Printer Option
- Dust Cover
- Sound Hood.

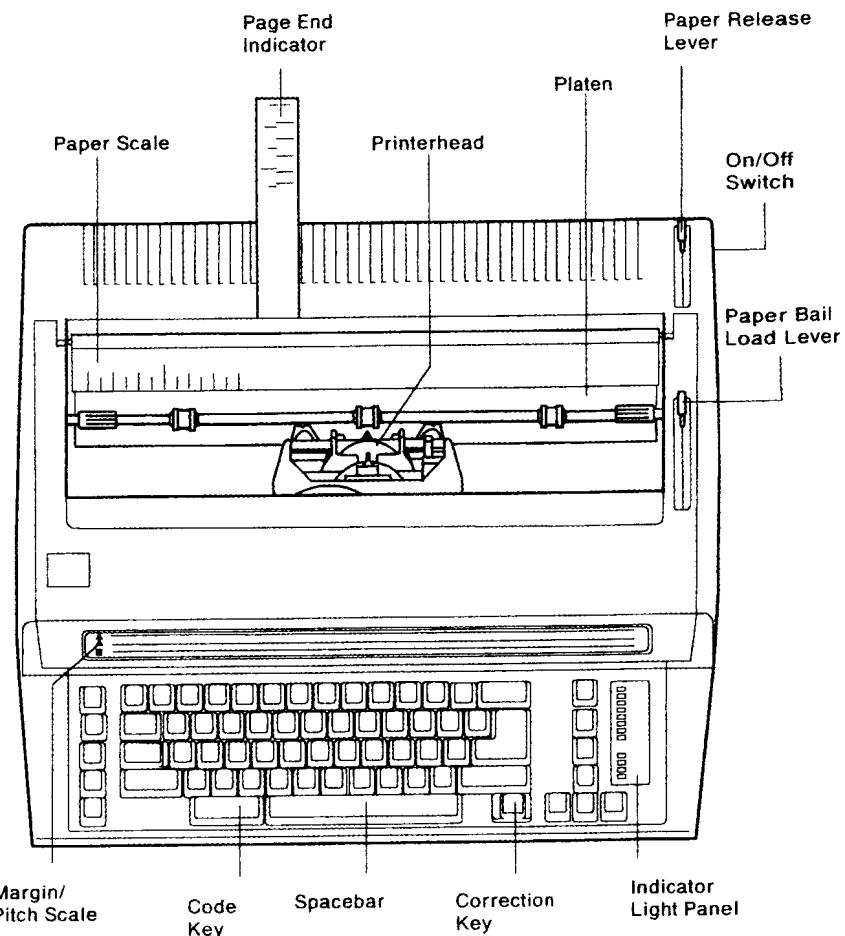
Contents

Congratulations!	iii
About Your Typewriter	iv
Basic Operations	1-1
Parts of the Typewriter	1-1
Keyboard Layout — U.S.	1-2
Keyboard Layout — United Kingdom	1-3
Indicator Light Panel	1-4
Code Key	1-5
Typematic (Repeat) Keys	1-6
Page End Indicator and Scale	1-7
Inserting and Removing Paper	1-8
Paper and Carrier Movement Keys	1-9
Line Space Key	1-10
Shift and Lock Keys	1-10
Caps Key	1-10
Impression Control	1-10
Cardholder	1-11
Automatic Pitch Selection	1-12
Margin/Pitch Scale	1-12
Margins and Tabs	1-13
Erasing Automatically in 10, 12, and 15 Pitch	1-14
Erasing Manually in 10, 12, and 15 Pitch	1-15
Inserting an Extra Character	1-16
Erasing in Proportional Spacing (PS)	1-17
Relocate Key	1-18
PowerWise Mode (U.S. Only)	1-19
Advanced Operations	2-1
Automatic Carrier Return	2-1
Changing the Top Margin	2-2
Required Space	2-2
Underlining	2-3
Centering	2-4
Right Flush	2-5
Subscripts and Superscripts	2-6
Bold Print	2-6
Indenting	2-7

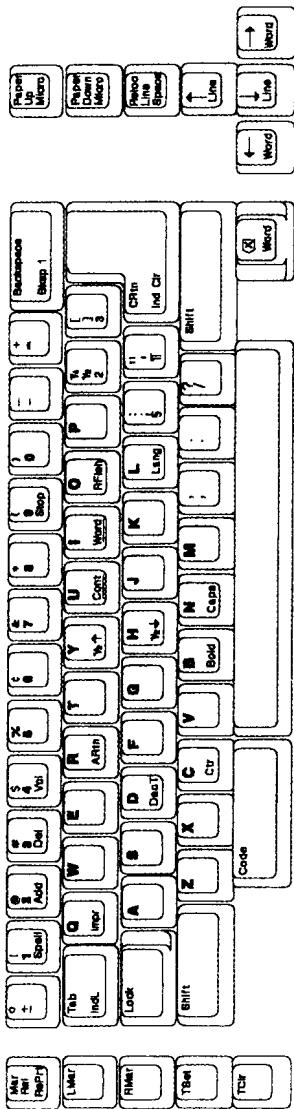
Decimal Tabulation	2-8
Special Characters (U.S. Keyboard Only)	2-9
Stop Instruction	2-10
Reprint	2-11
Spell Check	2-13
Alternate Keyboards	2-15
Keyboard Charts	2-17
Reference	3-1
Ordering IBM Supplies (U.S. and Canada only)	3-1
Typestyle Samples	3-1
Typestyle Samples and Pitches - U.S.	3-2
Typestyle Samples and Pitches - United Kingdom	3-5
Printwheel Application Recommendations	3-7
Changing the Printwheel	3-9
Ribbon Removal and Installation	3-10
Batteries	3-12
Cleaning the Typewriter Cover	3-14
Serial Number	3-15
Problem Determination	4-1
Beep and Light Signals	4-2
Typing Problems	4-4
Erase Problems	4-5
Print Problems	4-6
Spell Check Problems	4-7
Appendix A. Safety/Compliances	A-1
Index	X-1

Basic Operations

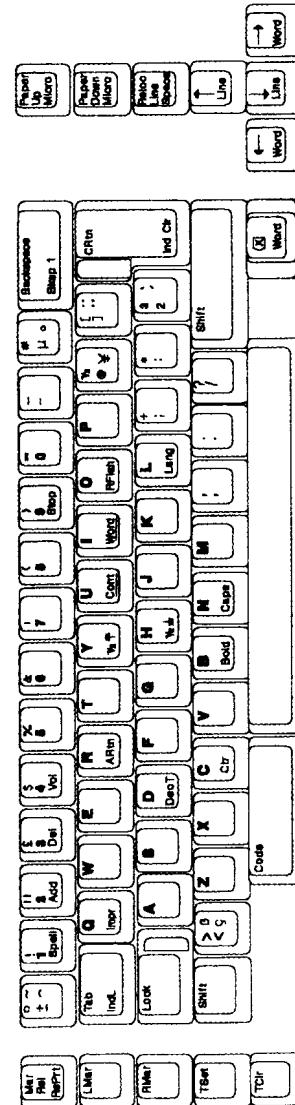
Parts of the Typewriter



Keyboard Layout — U.S.

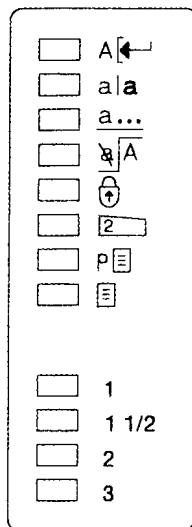
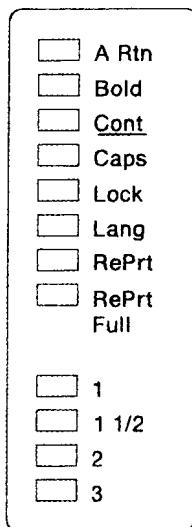


Keyboard Layout — United Kingdom



Indicator Light Panel

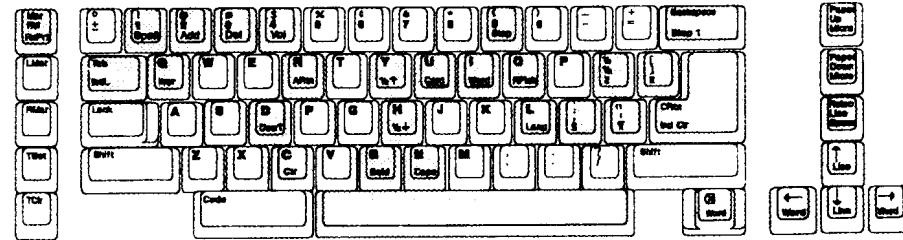
The indicator light panel to the right of the keyboard shows you if a function is on or off and if operator action is required. Your specific typewriter has one of the indicator light panels shown below.



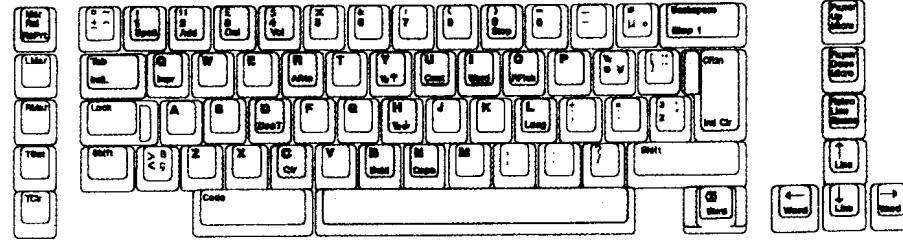
Code Key

The keys with green lettering (shaded in the chart below) are used in combination with the **Code** key to print special characters and turn special functions on and off. You can also use the **Spacebar** and the **Paper Bail Load Lever** with the **Code** key.

U.S. Keyboard



United Kingdom Keyboard

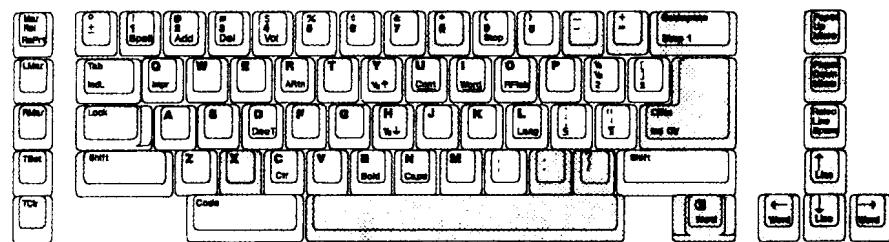


To use these key combinations, hold down **Code** while you press the function key.

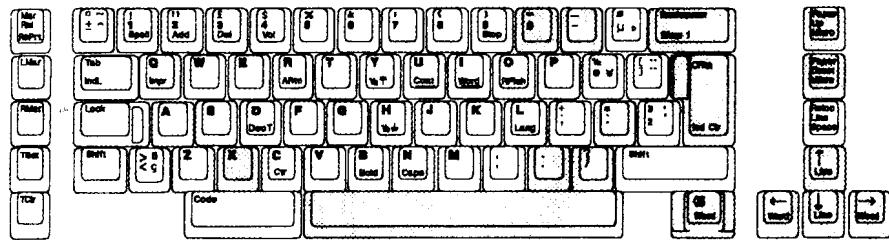
Typematic (Repeat) Keys

Typematic keys have both a single and *repeat* action. Press a typematic key once for a single action or hold the key down for repeat action. Typematic keys are shaded in the chart below.

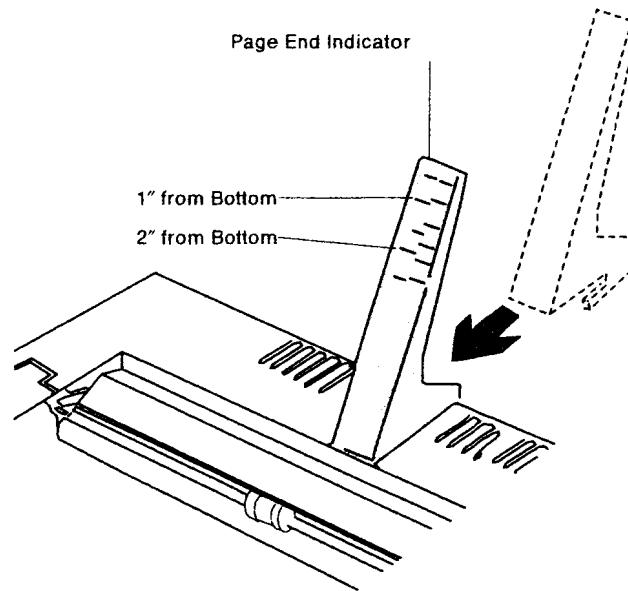
U.S. Keyboard



United Kingdom Keyboard



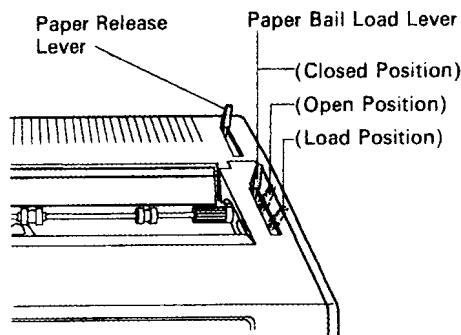
Page End Indicator and Scale



Insert the page end indicator by sliding the indicator into the air vents on top of the typewriter. Make sure you slide the indicator all the way forward.

- As you type, the top of the paper comes out of the typewriter and moves up to the indicator.
- The lines on the indicator tell you approximately how much space remains to the bottom of the paper.
- The left side of the scale is marked in inches. It tells you approximately how much space remains to the bottom of 11 inch (279) paper.
- The right side of the scale is marked in centimeters. It tells you approximately how much space remains to the bottom of A4 paper (297 mm (11.7 inch)).

Inserting and Removing Paper



Inserting Paper

Use the **Paper Bail Load Lever** to load paper semiautomatically. The lever has three positions: closed, open, and load.

1. Turn the typewriter on.
2. Push the **Paper Release Lever** all the way back.
3. Place the paper in the typewriter.
4. Pull the **Paper Bail Load Lever** to the load position. When the paper begins to feed, release the **Paper Bail Load Lever**. The paper feeds to the top margin position.
5. Push the **Paper Bail Load Lever** back until it holds the paper against the platen.

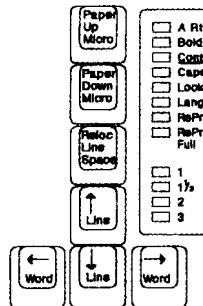
You can also use the **Paper Bail Load Lever** to change the top margin setting. See "Changing the Top Margin" on page 2-2.

Removing Paper

1. Pull the **Paper Bail Load Lever** to the open position.
2. Pull the **Paper Release Lever** toward you, then lift the paper out of the typewriter.
3. Push the **Paper Release Lever** and **Paper Bail Load Lever** back to the closed position.

Paper and Carrier Movement Keys

The paper and carrier movement keys allow you to move rapidly from one point to another. You now have the advantage of express movement both right and left as well as up and down on a page.



To move the paper:

- Press **Paper Up** or **Paper Down** to move paper one-half line. Hold down **Paper Up** or **Paper Down** to move quickly up or down the page.
- Hold down **Code** while you press **Paper Up (Micro)** or **Paper Down (Micro)** to move the paper one micro-index (1/48 in) for precise alignment.
- Press **↑** or **↓** to move paper the number of lines determined by the line space setting. Hold down **↑** or **↓** to move quickly from line to line on a page.
- Hold down **Code** while you press **↑ (Line)** or **↓ (Line)** to move from the current line, across blank space on the page, to the next line of existing text.

To move the carrier:

- Press **←** or **→** to move across the current line. Hold down **←** or **→** to move quickly across a line.
- Hold down **Code** while you press **→ (Word)** to move to the next word.
- Hold down **Code** while you press **← (Word)** to move to the previous word.
- If you have moved the carrier to previously typed text, press **Reloc (Relocate)** to return to the last typing position. You can now continue typing.

Line Space Key

To set line spacing, hold down **Code** while you press **Reloc (Line Space)** until the desired **Line Space** light comes on. You can set the line spacing to 1, 1½, 2, or 3. The line space setting is saved when you turn the typewriter off.

Shift and Lock Keys

Use the **Shift** or **Lock** key to type *all* characters in uppercase. **Lock** allows you to type continuously in uppercase without pressing **Shift** for each capital letter.

1. Press **Lock** to type in uppercase. The **Lock** light comes on.
2. Press either **Shift** key to return to normal typing. The **Lock** light goes off.

Note: Turning on the **Caps** function cancels the **Lock** function.

Caps Key

When **Caps** is on, *only* the alphabetic characters (a through z) are capitalized. All other characters print in lowercase. Hold down **Code** while you press **N (Caps)** to turn **Caps** on or off. The **Caps** light comes on when **Caps** is on.

Impression Control

You can set the impression control to one of three settings to suit your typing needs. To set the impression control, hold down **Code** while you press **Q (Impr)** until the desired setting is selected.

- The **1 Line Space** light comes on to indicate *light* impression.
- The **2 Line Space** light comes on to indicate *normal* impression.
- The **3 Line Space** light comes on to indicate *heavy* impression.

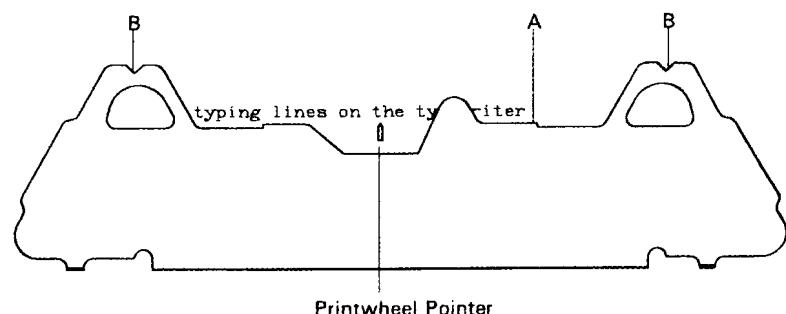
Type with the impression set at **1 (light)** to achieve the highest quality corrections, or change the setting to **3 (heavy)** to type carbon copies. When you turn the typewriter on, the impression control is set to **2 (normal)**.

Cardholder

The cardholder holds paper, cards, and envelopes against the platen.

The printwheel pointer shows where the next character will print.

The top edge (A) of the cardholder indicates the base of the typing line. As the characters print, the bottom of each character rests just above the line.



Use the notches (B) to draw vertical lines. Move to the point where you want to draw a line, then hold a pencil against one of the notches while pressing **Paper Up**, **Paper Down**, **↑** or **↓** to move the paper.

Automatic Pitch Selection

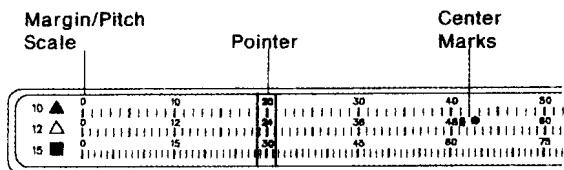
The typewriter automatically selects the correct pitch when you install a printwheel. Pitch determines the number of characters typed per horizontal inch.

Pitch (Type Size)	Characters Per Inch	Pitch Symbol	Print Example
10P (Pica)	10	▲	This is a sample.
12P (Elite)	12	△	This is a sample.
PS (Proportional Spacing)	Varies in Width	●	This is a sample.
15P (Micro Elite)	15	■	This is a sample.

A 10-, 12-, or PS-pitch printwheel prints six lines per vertical inch. A 15-pitch printwheel prints eight lines per vertical inch.

Margin/Pitch Scale

The typewriter has three margin/pitch scales: 10▲, 12△, and 15■. Use the scale line that matches the pitch symbol on your printwheel. When using a PS ● printwheel, use the margin scale for 12△ pitch.



An orange pointer moves along the margin/pitch scale to show where the next character will print. The margin/pitch scale also contains centering marks. When the left paper edge lines up with zero on the margin/pitch scale:

- marks the approximate center of paper 215.90 mm (8.50 in) wide.
- marks the approximate center of paper 210 mm (8.27 in) wide.

Margins and Tabs

For each setting, move the carrier to the desired point, and press the key(s) indicated:

- **LMar** to set the left margin.
- **RMar** to set the right margin.
- **MarRel** to release the left margin, then **Backspace** or ← to move left of the margin.
- **TSet** to set a tab. You can set up to 26 tabs. Permanent tabs exist at the left and right margins. You cannot clear these tabs.
- **TCir** to clear a tab.
- **TCir + CRtn** to clear all tabs.

The carrier does not lock at the right margin. The typewriter beeps when the carrier is about five spaces before the right margin. You can type or space through the right margin. Margin and tab settings are saved when the typewriter is turned off.

Erasing Automatically in 10, 12, and 15 Pitch

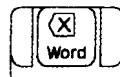
The typewriter has a correction memory of approximately one page. Correction memory allows you to easily and automatically erase and correct characters before you remove the paper.

After typing, proofread the page **before** removing it from the typewriter. The correction memory is cleared if you:

- Turn your typewriter off.
- Use the **Paper Ball Load Lever** to insert paper and then type a character or a Stop instruction. Stop instructions are explained in Chapter 2. Typing causes previous text in memory to erase.

When the correction memory is nearly full, the typewriter beeps three times and the **RePrt Full** light blinks to indicate that the typewriter is about to lose text. If you continue typing and the **RePrt Full** light stays on, you have lost text from the beginning of correction memory.

Erasing a Character



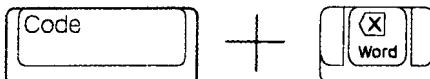
Correction
Key

- Press the **Correction** key once to erase one character.
- Hold down the **Correction** key to erase characters repeatedly.

If the typewriter does not automatically erase a character when you press the **Correction** key, you may be out of the correction memory. See "Erasing Manually in 10,12, and 15 Pitch" on page 1-15.

Erasing a Word

Hold down **Code** while you press the **Correction** key to erase the entire word.



Erasing Manually in 10,12, and 15 Pitch

To erase characters outside the correction memory:

1. Position the printwheel pointer at the last incorrect character in the word. Align the carrier on the line of type and not between the lines. Use **Code + Paper Up (Micro)** or **Code + Paper Down (Micro)** for precise vertical alignment. Use **Code + Backspace (Bksp 1)** for precise horizontal alignment.

You may need to erase one or several characters.

Position Printwheel Pointer Here

2. Press the **Correction** key and the printwheel spins.
3. Type the incorrect character. The character is erased.
4. Repeat steps 2 and 3 to erase each incorrect character. Do not press **Backspace** when erasing from right to left.
5. Type the correct characters.

Helpful Hints

- If you use a proportional spacing printwheel, see page 1-17.
- If you use manual erase after reinserting your document, you cannot print additional copies. See "Reprint" on page 2-11.
- Turn **Bold Print** on to manually erase bold text.
- Turn **Continuous Underline** on to manually erase underlined text.
- When manually erasing a word, always erase from right to left.

Inserting an Extra Character

1. Move the carrier to the incorrect word and erase it entirely.
2. Hold down **Code** while you press **Backspace (Bksp 1)** two or three times to move the carrier back two or three units of space.
3. Type the correct word.

Practice

Type the first line of the example exactly as printed below. Follow the steps above to insert the / in the word *should*:

The letters should be
The letters be
The letters should be

Erasing in Proportional Spacing (PS)

Read this section *only* if you are typing with a proportional spacing (PS) printwheel.

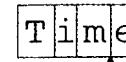
In 10, 12, or 15 pitch, all characters take up the same space; for example, an *i* takes up the same space as an *m*. In *proportional spacing*, the space allotted to each character depends on its width in units. For example, a lowercase *m* is seven units wide and a lowercase *i* is three units wide.

In proportional spacing, it is usually easier to erase the entire word containing an incorrect character, and then retype the word correctly. Use Word Erase (see page 1-11) to erase an entire word quickly.

Erasing Manually in Proportional Spacing

1. Position the printwheel pointer at the left edge of the *last* character in the incorrect word.

Example



Position the printwheel pointer here to erase the *e*.

2. Press the **Correction** key and the printwheel spins.
3. Type the character exactly as you typed it the first time.

If the character does not erase completely, hold down **Code** while you press **Backspace** to reposition the printwheel pointer at the left edge of the *last* character in the word. Repeat steps 2 and 3.
4. Press the **Correction** key, then type the previous character in the word. The carrier backs up and erases the character.
5. Repeat step 4 for each character in the word, then type the correct characters.

Notes

- When using proportional spacing, do not type a lowercase letter *L* for the number 1. Always use the number 1.
- When manually erasing a word, always erase from right to left.

Relocate Key



If you have moved the carrier to previously typed text, press **Reloc** (**Relocate**) to return the carrier to the last typing position after you have made a correction.

Practice

Type the following sentence.

Try the Reloc key to move to the last typing position.

1. Hold down **Code** while you press **←** to move to the word *Try*.
2. Hold down **Code** while you press the **Correction** key to erase the word *Try*.
3. Type the word *Use*.
4. Press **Reloc** to return to the last typing position.

Note: The printwheel spins if there is no last typing position.

PowerWise Mode (U.S. Only)



Your typewriter conserves energy when the typewriter is ON but not in use. The typewriter reduces power consumption when inactive for more than a 10-minute time interval.

After the time interval, the typewriter blinks the **Line Spacing 3** light to show it is saving energy.

To continue typing, press any key.

To change the time interval, hold down **Code** while you press **X** followed by a number (1 through 90) to set the number of minutes.

To disable the PowerWise Mode, hold down **Code** while you press **X** followed by 0.

Examples:

- | | |
|----------------------|---------------------------------------|
| Code + X + 3 | sets the time interval to 3 minutes. |
| Code + X + 25 | sets the time interval to 25 minutes. |
| Code + X + 0 | disables the PowerWise Mode. |

Helpful Hints

- The typewriter beeps if you enter a time interval greater than 90 minutes. The time interval will not change.

Note: The PowerWise Mode is available on typewriters with the U.S. Keyboard Layout (ID 001) shown on page 1-2.

Advanced Operations

Automatic Carrier Return

With Automatic Carrier Return on, the carrier automatically returns when you type a space followed by a character near the right margin. You do not have to press the **CRtn** (Carrier Return) key at the right margin.

Turn Automatic Carrier Return off when typing tables, columns, or forms.

Turning Automatic Carrier Return On and Off

Hold down **Code** while you press **R (ARtn)** to turn Automatic Carrier Return on or off. The **ARtn** light comes on when you turn Automatic Carrier Return on.

Practice

Insert a 12-pitch printwheel, then set **LMar 24** and **RMar 65**. Type the paragraph below with Automatic Carrier Return on.

Just keep typing and you will see when
your new typewriter automatically returns
the carrier for you.

Helpful Hints

- The carrier does not return automatically if you type only spaces with the **Spacebar**, or if you type characters without spacing.
- Press **CRtn** to end a line *before* the right margin.
- The carrier does not return automatically if text already exists on the following line, even though the **ARtn** light stays on.

Changing the Top Margin

When you insert paper, it feeds to the top margin position (first writing line). You can change the position of this top margin.

1. Always use the **Paper Bail Load Lever** to insert a sheet of paper. An incorrect top margin position results if you do not use the **Paper Bail Load Lever**.
2. Position the paper at the desired new first writing line.
3. Hold down **Code** while you pull the **Paper Bail Load Lever** forward. The printwheel spins as the top margin is set.
4. Push the **Paper Bail Load Lever** all the way back and release **Code**. The new top margin is saved when you turn the typewriter off.

Required Space

Use required spaces near the right margin (when Automatic Carrier Return is on) if you do not want to break the text you are typing. For example, use required spaces when typing names, dates, or certain numbers that must stay on the same line.

Words typed *without* required spaces:

Victoria's birthday is January
22, 1988.

Words typed *with* required spaces:

Code + Spacebar Code + Spacebar
| |
Victoria's birthday is January 22, 1988.
|
Right Margin

Typing a Required Space

1. When the right margin beep sounds as you near the right margin, finish the word you are typing, then hold down **Code** while you press **Spacebar**.
2. Type the next word. Type required spaces between all words you want kept together.
3. When you type the last word you want on the line, press **Spacebar**, then continue typing.

Underlining

Continuous Underline

1. Hold down **Code** while you press **U (Cont)** to begin underlining. The **Cont** light comes on.
2. Type the text you want underlined. All words and spaces are underlined as you type.
3. Hold down **Code** while you press **U (Cont)** to end underlining. The **Cont** light goes off.

Word Underline

1. Type the word you want underlined. Do not type the space following the word.
2. Hold down **Code** while you press **I (Word)**. Word Underline goes off after underlining the word.
 - The carrier may be positioned at any character in a word or the space following the word when Word Underline is used.
 - The carrier backs up to the first character in the word and underlines the entire word.
3. Type the space following the word and repeat the steps for each word you want underlined.

Centering

Centering between Margins

1. Set margins, then move the carrier to the left margin.
2. Hold down **Code** while you press **C (Ctr)**. The carrier centers between the margins.
3. Type the text. The carrier backs up but does not print.
4. Hold down **Code** while you press **C (Ctr)** to print the text.
(Pressing **CRtn**, **Tab**, or **DecT** also causes text to print.)

Centering at Any Point on a Line

1. Move the carrier to the desired center point.
2. Hold down **Code** while you press **C (Ctr)**.
3. Type the text. The carrier backs up but does not print.
4. Hold down **Code** while you press **C (Ctr)** to print the text.

Note: The typewriter prevents you from typing over previously typed text, and beeps each time you press a keybutton.

Right Flush

Use Right Flush to type text with an even (flush) right margin.

Example

XYZ Corporation
740 Anytown Road
Anytown, KY 00110

Typing Text Flush to the Right Margin

1. Set left and right margins, then move the carrier to the left margin.
2. Hold down **Code** while you press **O (RFish)**.
3. Type the text. The carrier backs up but does not print.
4. Hold down **Code** while you press **O (RFish)**. The text aligns and prints to the right margin.

Typing Text Flush Right to Any Point on a Line

1. Move the carrier to the point where you want to align the text.
2. Hold down **Code** while you press **O (RFish)**.
3. Type the text.
4. Hold down **Code** while you press **O (RFish)**. The text aligns and prints to the selected point.

Helpful Hints

- The rightmost character prints *one space to the left* of the right margin or right flush point.
- Text does not appear right aligned if you type a space after the last character.
- Use the Right Flush and Underline functions together to type text aligned right flush and underlined at the same time.
- The typewriter prevents you from typing over previously typed text, and beeps each time you press a keybutton.
- The **Paper Up (Micro)**, **Paper Down (Micro)**, **↑**, **↓**, and **Backspace** keys do not work while Right Flush is on.

Subscripts and Superscripts

Subscripts print below the typing line (for example, CuSO₄). Superscripts print above the typing line (for example, Happy Living⁵).

Typing Subscripts

Hold down **Code** while you press **H** ($\frac{1}{2} \downarrow$). The paper moves one-half line below the typing line. Type the subscript character and the paper moves back to the typing line.

Typing Superscripts

Hold down **Code** while you press **Y** ($\frac{1}{2} \uparrow$). The paper moves one-half line above the typing line. Type the superscript character and the paper moves back to the typing line.

Helpful Hints

- You cannot underline subscripts and superscripts automatically. You can underline them manually using the **Underline/Hyphen** key.
- Do not use paper movement keys to type subscripts or superscripts.

Bold Print

Hold down **Code** while you press **B** (**Bold**) to turn Bold Print on or off. The **Bold** light comes on when Bold Print is on. Text prints in bold as you type.

Note: You can use Bold Print in centered, decimal tab, and right flush text. For recommended readability in Bold Print, see "Printwheel Application Recommendations" on page 3-7.

Indenting

The Indent function allows you to set a temporary left margin either inside or outside the current left margin. The temporary margin remains active until you turn the Indent function off.

Example

Your new typewriter is designed to make typing easier and more enjoyable.

Temporary Left Margin

For example, centering, underlining, and indenting are done automatically on this new typewriter.

Code + CRtn

Try using these new functions to help you with your work!

CRtn

1. At the *first* line you want indented, move the carrier to the desired position, then hold down **Code** while you press **Tab** (**IndL**) to set a temporary left margin.
2. Type the indented lines. The carrier returns to the temporary left margin after each line is typed.
3. Hold down **Code** while you press **CRtn** (**Ind Clr**) to clear the temporary left margin. The carrier returns to the original left margin.

Note: The Indenting function can also be used to set a temporary left margin to the *left* of the permanent left margin setting.

Note: The temporary margin is not saved when the machine is turned off.

Decimal Tabulation

Use the Decimal Tab function to type numbers in vertical columns, aligning the numbers on decimal points or at the column's right edge.

Set Tab Here	Set Tab Here	Set Tab Here	Set Tab Here
234.56	456.79	1.32	1.50
2.87	20.13	.5	45.67
26,745	87,453	873	5%
387	3,498	34	234-

Typing Numbers with Decimals

1. Turn Automatic Carrier Return off.
2. Set a tab for each column, then move to the left margin.
3. Hold down **Code** while you press **D (DecT)** to move to the first tab stop.
4. Type the numbers up to the decimal point. The carrier moves backward but does not print.
5. Type the decimal point. The numbers and the decimal point print.
6. Type any numbers or characters that follow the decimal point.
7. Hold down **Code** while you press **D (DecT)** to move to the next column.
8. Repeat steps 4 through 7 for each column. Press **CRtn** after the last column at the end of each line.

Typing Numbers without Decimals

1. Repeat steps 1 through 3 above, then type the number and any characters which follow it. The carrier moves backward but does not print.
2. Hold down **Code** while you press **D (DecT)**. The text prints and the carrier moves to the next decimal tab position.

Pressing **CRtn** or **Tab** also causes text to print. If you press **CRtn**, the text prints and a **CRtn** is performed. If you press **Tab**, the text prints and the carrier moves to the next tab position. Hold down **Code** while you press **D (DecT)** to move the carrier to the next tab position for decimal tabulation.

3. Repeat steps 1 and 2 for each column. Press **CRtn** after the last column at the end of each line.

Underlining Numbers in a Column

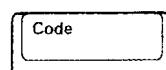
1. Before typing the *last line* of the columns, hold down **Code** while you press **U (Cont)** to turn Continuous Underlining on.
2. Hold down **Code** and press **D (DecT)** to move to first tab stop.
3. Press **Spacebar** to type any underlined spaces in front of the number.
4. Type the number.
5. Hold down **Code** and press **D (DecT)** to move to next column.
6. Repeat steps 3 through 5 for each column.
7. Hold down **Code** while you press **U (Cont)** to turn Continuous Underlining off.

Double Underlining Numbers in a Column

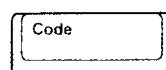
1. Repeat steps 1 through 7 above for the first underline.
2. Press **CRtn** after the last number.
3. To position the paper, press **↑** once, then hold down **Code** while you press **Paper Up** twice.
4. Move the carrier to the position where Underlining begins, then hold down **Shift** while you press **— (Underscore)** repeatedly to underline the numbers.
5. Repeat step 4 for each column.
6. Hold down **Code** while you press **↑ (Line)** to realign to the previous typing line.
7. Press **CRtn**.

Special Characters (U.S. Keyboard Only)

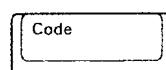
Using **Code** key combinations, you can type four special characters without changing the printwheel.



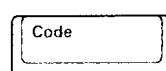
A section symbol (\$) prints.



A paragraph symbol (¶) prints.



An exponent (²) prints.



An exponent (³) prints.

Stop Instruction

The Stop instruction allows you to change the printwheel or ribbon when printing centered, right flush, decimal tab, and reprinted text.

Hold down **Code** while you press **9 (Stop)** to insert a Stop instruction when you want to change the printwheel or ribbon.

Code + C Code + C
Code + 9 Code + 9
IBM "Wheelwriter" Typewriter

As the text prints, the typewriter stops at the Stop instruction. For centered, right flush, and decimal tab text, press any key to resume printing. For **RePrt** text, hold down **Code** while you press **RePrt**.

Helpful Hints

- Do not insert text when the typewriter stops at a Stop instruction. Use Stop instructions *only* to stop printing for printwheel or ribbon changes.
- Do not use a Stop instruction when you change printwheel pitch or language. The typewriter automatically supplies a Stop instruction in these cases.
- Stop instructions at the beginning of a job are ignored when you are reprinting.

Reprint

The Reprint function (**RePrt**) allows you to print additional copies of a single page. The maximum length of the page to be reprinted is determined by the pitch and format used.

Typing the Original

1. Insert paper using the **Paper Bail Load Lever**. This prepares your typewriter for new text. Do not use the **Paper Up** or **↓** keys to insert the paper.
2. Type the text. If the typewriter beeps three times and the **RePrt Full** light blinks while you are typing, your page is nearly full. Complete the current line, make corrections, and reprint. If you continue typing and the **RePrt Full** light comes on solid, the correction memory is full and you have lost text.

Correcting Text

You can correct errors automatically while typing text or after reprinting is complete.

- Proofread the copy *before* removing it from the typewriter. Move the carrier to the error you want to correct and erase it. See "Erasing Automatically in 10, 12, and 15 Pitch" on page 1-14.
- If you remove the paper from the typewriter before making corrections, follow the instructions in "Starting Reprint" on page 2-12, steps 1 through 3. You must wait until the reprint is complete before making corrections.

Note: If you use manual erase after reinserting your document, the correction memory is cleared and you cannot print additional copies.

Starting Reprint

1. Insert paper with the **Paper Ball Load Lever**. *Do not* begin typing new text. New text will replace the text you want to reprint.
2. Position the paper on the line where you want to begin reprinting.
3. Hold down **Code** while you press **MarRel (RePrt)** to start reprinting. The **RePrt** light comes on. When your copy is printed, the **RePrt** light goes off. To correct errors, you must finish reprinting and then use the paper movement keys to move back to the text you want to correct.
4. Remove the paper using the **Paper Release Lever**.
5. Repeat steps 1 through 4 for additional copies.

Interrupting and Resuming Reprint

1. Press any key except the **Code**, **Lock**, or **Shift** keys to *stop* reprinting. The **RePrt** light blinks when printing is stopped. Reprint stops automatically at Stop instructions and for printwheel pitch and language changes.
2. Hold down **Code** while you press **MarRel (RePrt)** to *resume* reprinting.

Cancelling and Restarting Reprint

Pull the **Paper Ball Load Lever** all the way forward to *cancel* Reprint. The **RePrt** light goes off, the paper moves up, and printing stops. You can reprint as many copies as you need by repeating the steps in "Starting Reprint."

Clearing Reprint

To clear Reprint, do *either* of the following:

- Type a character after the **Paper Ball Load Lever** has been pulled all the way forward.
- Turn the typewriter off.

Note: If you overstrike a character using a different printwheel of the same pitch, you will be unable to reprint the text correctly.

Spell Check

Spell Check allows the typewriter to check spelling as you type. After you type a word, spelling is checked against a main dictionary and a supplemental dictionary. The main dictionary contains approximately 50,000 words. The supplemental dictionary can contain up to 300 words.

Only words containing 23 characters or less are checked. Spell Check beeps to indicate an error when a word with more than 23 characters is typed. The word is checked when you type a space or punctuation after the word.

When you type a word that is not found in either dictionary, the spelling beep sounds. The spelling beep has a different tone from the normal typewriter beep. Some correctly spelled words—such as proper names, abbreviations, and technical terms—may cause a spelling beep because they are not in either dictionary. You can create a supplemental dictionary that does not treat these words as spelling errors.

Use the **1**, **2**, **3**, and **4** keys with the **Code** key to begin the various Spell Check functions.



Using Spell Check

You can use your typewriter with Spell Check on or off. The Spell function setting is saved when you turn the typewriter off.

To turn Spell Check on, hold down **Code** while you press **1 (Spell)**. The spelling beep sounds. To turn Spell Check off, hold down **Code** while you press **1 (Spell)**. The printwheel spins.

If you type a word not found in either the main or supplemental dictionary, the spelling beep sounds. You can ignore the beep and continue typing, correct the word, or add the word to the supplemental dictionary.

Supplemental Dictionary

You create the supplemental dictionary for words that you use often that are not in the main dictionary, such as proper names or technical terms. The supplemental dictionary is saved when you turn the typewriter off as long as good batteries are installed.

Unlike the main dictionary, the supplemental dictionary can only check a word *exactly* as you typed it. Words are not checked for plurals, prefixes, or suffixes. For example, if you add the word *frog* to the supplemental dictionary, typing *frogs* causes the spelling beep to sound as if it were misspelled.

Each time you add a word to the supplemental dictionary or type a word already in the supplemental dictionary, that word becomes the first word in the dictionary. Therefore, the most recently used words are in the front of the dictionary. The supplemental dictionary can hold up to 300 words. When the supplemental dictionary is full and you add a word, the last word in the dictionary is deleted.

Adding a Word to the Supplemental Dictionary

If the last word you typed caused the spelling beep to sound, and it is 23 characters or fewer, you can add it to the supplemental dictionary. You must end the word with a space or punctuation before adding it to the dictionary. The carrier must rest to the right of, and not on, the selected word.

Hold down **Code** while you press **2 (Add)** to add the last word you typed to the supplemental dictionary. The printwheel spins when the word is added.

Deleting a Word from the Supplemental Dictionary

You can delete a word from the supplemental dictionary. You must end the word with a space or punctuation before you can delete it.

Hold down **Code** while you press **3 (Del)** to delete the last word you typed from the supplemental dictionary. The printwheel spins when the word is deleted.

Changing the Sound of the Spelling Beep

You can change the sound of the spelling beep to a tone that is different from that of the typewriter next to you, or to a volume that is more suitable to the noise level in your work area.

Hold down **Code** while you press **4 (Vol)** repeatedly until the spelling beep has the desired sound. The tone you select is saved when you turn the typewriter off.

Alternate Keyboards

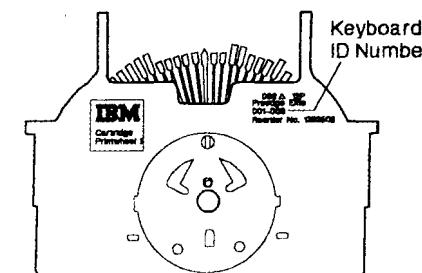
Read this section *only* if you have a printwheel for other languages, ASCII (PC), or Latin Supplemental ISO.

Your typewriter has primary and alternate keyboards. You have already been using your primary keyboard. The primary keyboard allows you to type in your own language. The typewriter automatically sets your primary keyboard to match the keybuttons on your typewriter.

With alternate keyboards and the appropriate printwheels, you can type in other languages or use special application keyboards such as ASCII (PC) and Latin Supplemental ISO.

Matching Printwheels and Keyboards

Printwheels for alternate keyboards contain characters not printed on the typewriter keybuttons. A keyboard ID is printed on each printwheel; for example, the keyboard ID for the United States is 001. When more than one set of numbers is shown, use the number with the keyboard in "Keyboard Charts" on page 2-17.



Using Alternate Keyboards

1. Select a keyboard for a country or special application from the charts on pages 2-17 through 2-23.
2. Insert the country or special application printwheel. Match the keyboard ID number from the chart to the number on the printwheel.
3. Hold down **Code** while you press **L (Lang)** and type the keyboard ID number. The **Lang** light comes on and the alternate keyboard is selected.
4. Use the keyboard chart that matches your keyboard ID to locate the characters you want to type.
5. Type the job. When you finish typing in the alternate keyboard, hold down **Code** while you press **L (Lang)**. The **Lang** light goes off and the primary keyboard is selected.
6. Remove the country or special application printwheel and install your primary printwheel.

Note: If you hold down **Code** while you press **L (Lang)** and do not type a keyboard ID number, Latin Supplemental ISO (ID 099) is selected for the U.S.. Japan (English) (Keyboard ID 069) is selected for the United Kingdom.

Helpful Hints

- The **Lang** light blinks when the carrier is positioned over text of a different language. To overstrike a character using a different language, you must clear the correction memory by turning the machine off and then on again. You will not be able to reprint your original text when the correction memory is cleared.
- The alternate keyboard charts show some keybuttons with special characters. See "Special Characters (U.S. Keyboard Only)" on page 2-9.
- Many alternate keyboards contain accent marks (dead keys) that print without advancing the carrier to the next space. To type accent marks over alphabetic characters:
 1. Type the accent mark. The carrier does not move.
 2. Type the alphabetic character.

Keyboard Charts

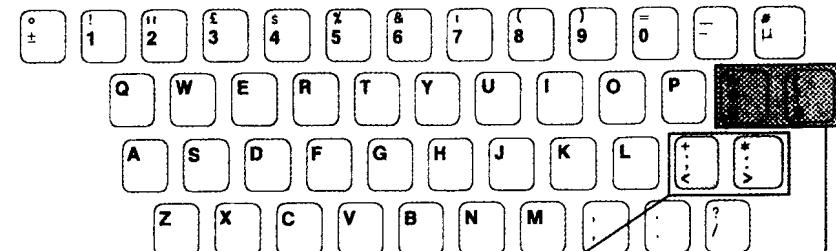
The keyboard charts show the keyboard ID numbers and character locations for each alternate keyboard. The charts are arranged numerically.

Keyboard Charts for Typewriters Without the U.S. Keyboard

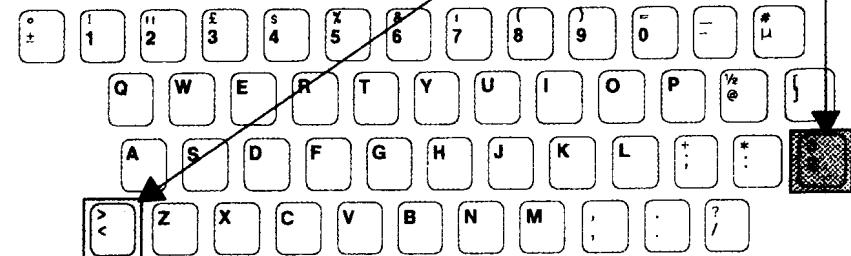
The keyboard charts beginning on the following page show the keyboard layout for the U.S. keyboard shown on page 1-2. This keyboard has 46 keybuttons. All other keyboards have 48 keybuttons.

If you have a 48 keybutton keyboard, use the following diagram as a guide to determine which characters appear on the two (2) additional keybuttons.

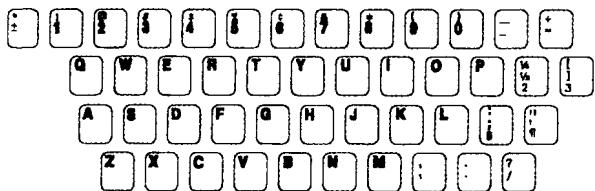
46 Keybutton Layout



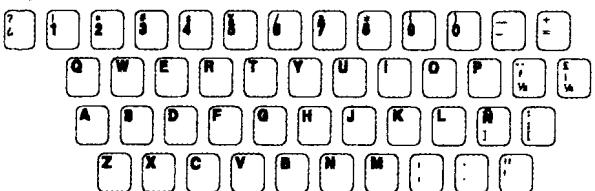
48 Keybutton Layout



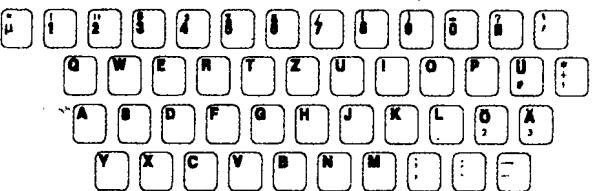
Keyboard ID 001 — Australia, New Zealand, United States



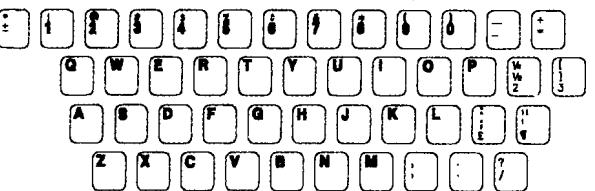
Keyboard ID 025 — Latin America



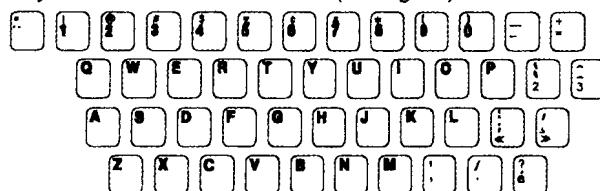
Keyboard ID 029 — Austria, Germany



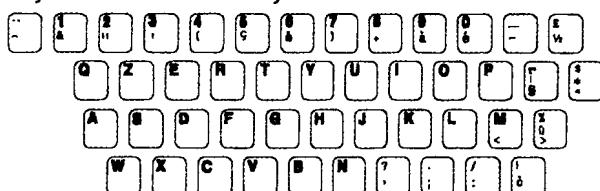
Keyboard ID 037 — Canada (English)



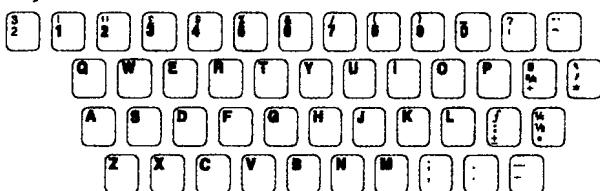
Keyboard ID 039 — Canada (Bilingual)



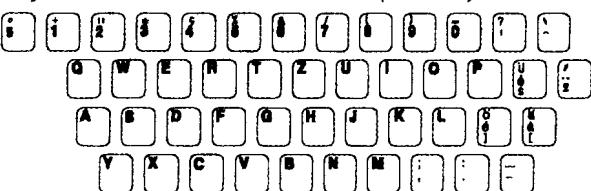
Keyboard ID 041 — Italy



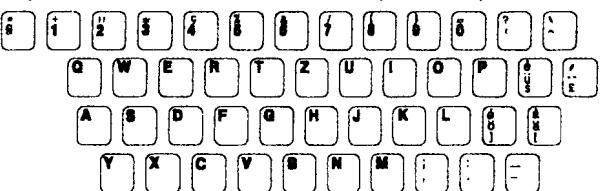
Keyboard ID 043 — Netherlands



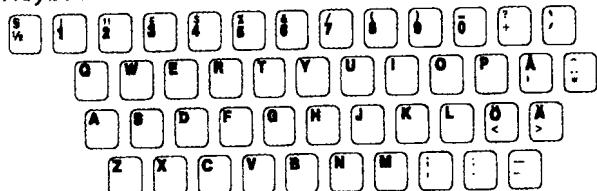
Keyboard ID 049 — Switzerland (French)



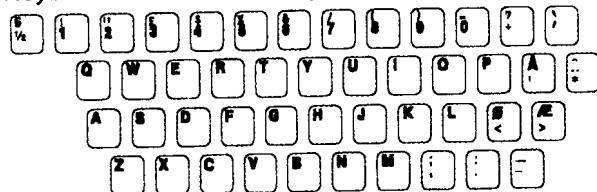
Keyboard ID 051 — Switzerland (German)



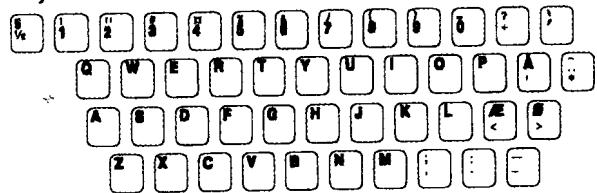
Keyboard ID 053 — Finland, Sweden



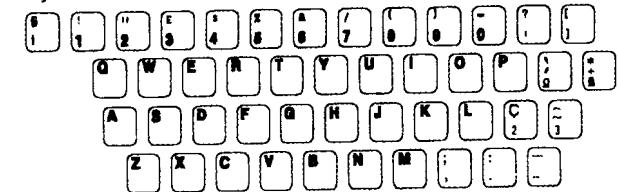
Keyboard ID 055 — Norway



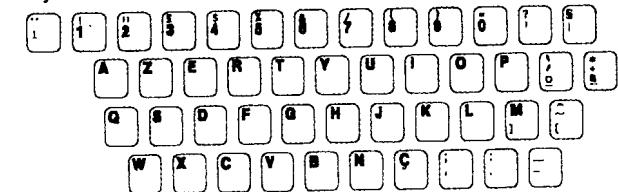
Keyboard ID 059 — Denmark



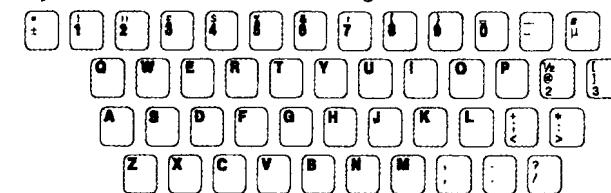
Keyboard ID 061 — Brazil



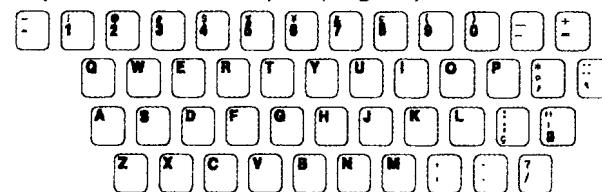
Keyboard ID 063 — Portugal



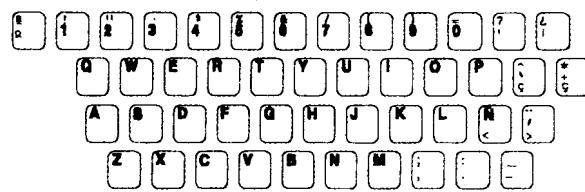
Keyboard ID 067 — United Kingdom



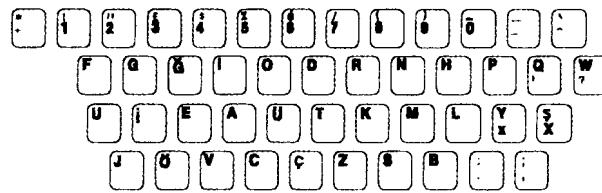
Keyboard ID 069 — Japan (English)



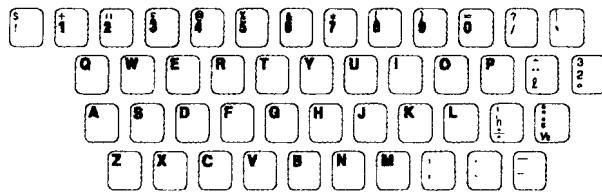
Keyboard ID 070 — Spain



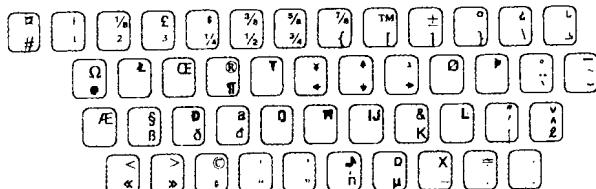
Keyboard ID 079 — Turkey



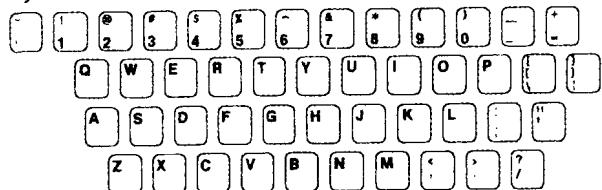
Keyboard ID 081 — South Africa



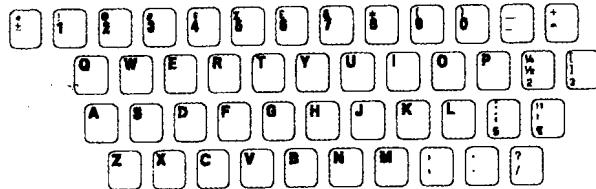
Keyboard ID 099 — Latin Supplemental ISO



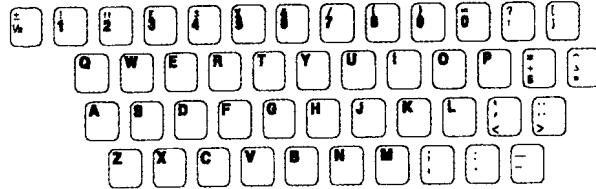
Keyboard ID 103 — U.S. ASCII (PC)



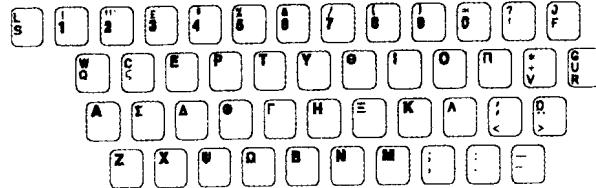
Keyboard ID 119 — Hong Kong



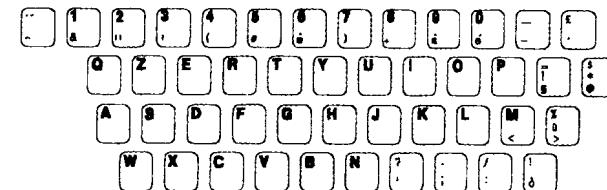
Keyboard ID 207 — Greece (Latin)



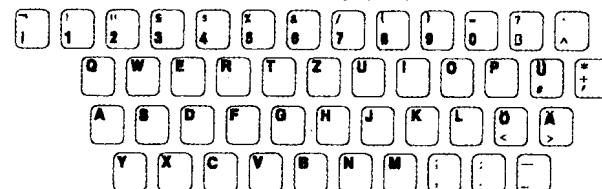
Keyboard ID 219 — Greece (Greek)



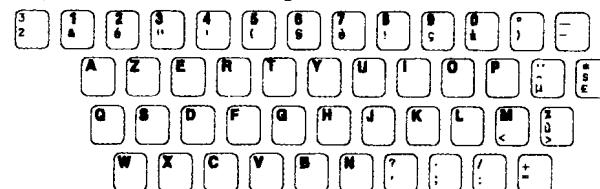
Keyboard ID 247 — Italy (PC)



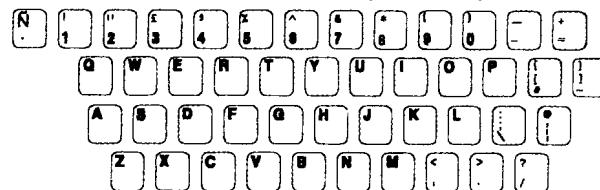
Keyboard ID 249 — Germany (PC)



Keyboard ID 251 — Belgium, France



Keyboard ID 252 — United Kingdom (PC)



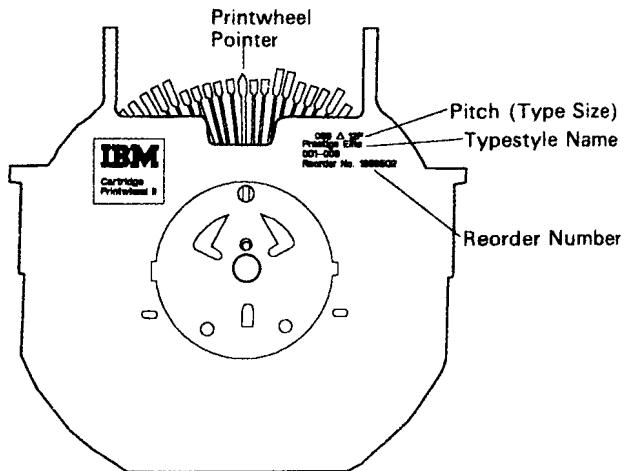
Reference

Ordering IBM Supplies (U.S. and Canada only)

To order IBM supplies, contact an authorized dealer or in the U.S. call toll free **1-800-438-2468**. In Canada, please call an authorized dealer or call toll free **1-800-663-7662**.

Typestyle Samples

Your typewriter uses an IBM Cartridge Printwheel II, available in a variety of different typestyles and pitches. When ordering printwheels, see the location of the reorder number below. Personal computer, foreign language, and symbol character printwheels are also available.



Note: Because of the differences between printed and typewritten impressions, use the typestyle samples on the following pages only as a guide.

Note: The U.S. typestyles beginning on page 3-2 are for use with the U.S. keyboard shown on page 1-2. The United Kingdom typestyles beginning on page 3-5 are for use with the United Kingdom keyboard shown on page 1-3.

Typestyle Samples and Pitches - U.S.

10 Pitch

▲ Advocate 1353845	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Artisan 10 1353520	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Bookface Academic 1353844	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Courier 10 1353511	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Delegate 1353843	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Manifold 1353846	ABCDEFGHIJKLMNOPQRSTU VWXYZ ABCDEFGHIJKLMNOPQRSTU VWXYZ	12345 67890
▲ OCR-A 1353246	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ OCR-B 1353247	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Pica 1353829	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Presentor 1353015	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Prestige Pica 1353503	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
▲ Rhetoric 1353736	ABCDEFGHIJKLMNOPQRSTU VWXYZ ABCDEFGHIJKLMNOPQRSTU VWXYZ	12345 67890
▲ 1403 OCR 1353075	ABCDEFGHIJKLMNOPQRSTU VWXYZ ABCDEFGHIJKLMNOPQRSTU VWXYZ	12345 67890

Typestyle Samples and Pitches - U.S.

12 Pitch

△ Adjutant 1353047	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Artisan 1353050	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Auto Elite 1353080	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Courier 12 1353523	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Courier 12 Italic 1353890	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Dual Gothic 1353055	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Elite 1353861	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Letter Gothic 1353514	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Light Italic 1353764	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Olde World 1353875	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Prestige Elite 1353502	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890
△ Script 1353778	ABCDEFGHIJKLMNOPQRSTU VWXYZ abcdefg hijklmnopqrstuvwxyz	12345 67890

Typestyle Samples and Pitches - U.S.

15 Pitch

■ Courier 15 1353796	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz	12345 67890
■ Gothic 15 1353719	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz	12345 67890
■ Prestige 15 1353655	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz	12345 67890

Proportional Spacing

● Boldface 1353504	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Boldface Italic 1353059	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Essay 1353526	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Essay Italic 1353750	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Modern 1353517	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Thesis 1353953	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890
● Title 1353952	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12 abcdefghijklmnopqrstuvwxyz 34567890

Typestyle Samples and Pitches - United Kingdom

10 Pitch

▲ Bookface Academic 1353046	ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234 abcdefghijklmnopqrstuvwxyz 6789
▲ Courier 10 1353567	ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234 abcdefghijklmnopqrstuvwxyz 6789
▲ Prestige Pica 1353583	ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234 abcdefghijklmnopqrstuvwxyz 6789

12 Pitch

△ Courier 12 1353607	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12345 abcdefghijklmnopqrstuvwxyz 67890
△ Letter Gothic 1353623	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12345 abcdefghijklmnopqrstuvwxyz 67890
△ Light Italic 1353767	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12345 abcdefghijklmnopqrstuvwxyz 67890
△ Prestige Elite 1353575	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12345 abcdefghijklmnopqrstuvwxyz 67890
△ Script 1353781	ABCDEFGHIJKLMNOPQRSTUVWXYZ 12345 abcdefghijklmnopqrstuvwxyz 67890

Typestyle Samples and Pitches - United Kingdom

15 Pitch

■ Courier 15 1353800	ABCDEF HIJKLMNOPQRSTUVWXYZ abcdef ghijklmnopqrstuvwxyz	12345 67890
■ Prestige 15 1353683	ABCDEF HIJKLMNOPQRSTUVWXYZ abcdef ghijklmnopqrstuvwxyz	12345 67890

Proportional Spacing

● Boldface 1353591	ABCDEF HIJKLMNOPQRSTUVWXYZ 12 abcdef ghijklmnopqrstuvwxyz 34567890
● Essay 1353631	ABCDEF HIJKLMNOPQRSTUVWXYZ 12 abcdef ghijklmnopqrstuvwxyz 34567890
● Title 1353041	ABCDEF HIJKLMNOPQRSTUVWXYZ 12 abcdef ghijklmnopqrstuvwxyz 34567890

Legend:

- ▲ = 10 pitch
- △ = 12 pitch
- = 15 pitch
- = proportional spacing

Printwheel Application Recommendations

Typestyle	1 – 3 Carbon Copies	3 – 5 Carbon Copies	Stencils	Bold Print
10 Pitch:				
Advocate	A	A	A	C
Artisan 10	A	A	A	A
Bookface Academic	B	C	B	A
Courier 10	A	A	B	A
Delegate	A	A	B	B
Manifold	A	A	B	A
Pica	A	A	A	C
Prestige Pica	A	B	B	A
Rhetoric	B	C	B	A
Rhetoric Presentor	B	C	B	A
Symbol 10	B	C	C	B
12 Pitch:				
Adjutant	A	A	B	B
Artisan 12	A	A	B	A
Auto Elite	A	A	A	A
Courier 12	A	A	B	A
Courier 12 Italic	A	A	B	A
Dual Gothic	A	B	B	C
Elite	A	A	A	C
Large Elite	A	A	A	C
Letter Gothic	A	A	B	A
Light Italic	A	A	A	B
Olde World	A	C	NR	A
Prestige Elite	A	B	A	A
Scribe	A	A	A	B
Script	B	C	C	B
Symbol 12	C	C	C	B

Ratings:

A – Good; B – Fair; C – Marginal; NR – Not Recommended
(Based on proper selection of ribbon, carbon paper, and stencils)

Typestyle	1–3 Carbon Copies	3–5 Carbon Copies	Stencils	Bold Print
15 Pitch:				
Courier 15	A	B	B	A
Gothic 15	B	C	B	A
Prestige 15	A	B	A	C
Symbol 15	C	C	C	B
PS Pitch:				
Boldface	B	C	B	A
Boldface Italic	B	C	B	A
Essay	A	B	B	A
Essay Italic	A	B	B	A
Modern	A	B	B	A
Thesis	A	B	B	A
Title	A	B	B	A

Ratings:

A – Good; B – Fair; C – Marginal; NR – Not Recommended

(Based on proper selection of ribbon, carbon paper, and stencils)

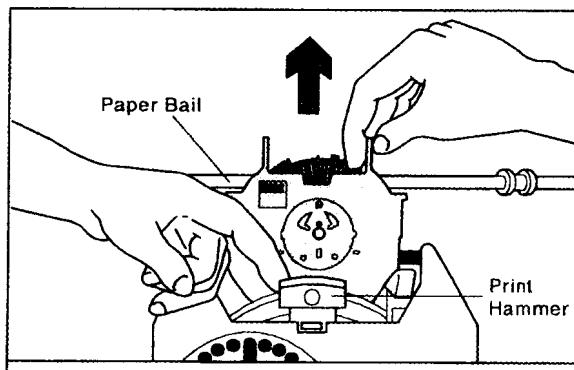
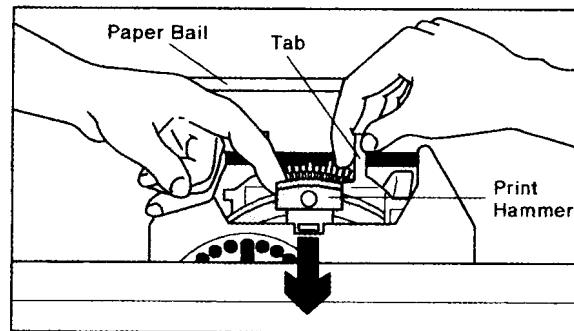
Note: There are three symbol printwheels: Symbol 10, Symbol 12, and Symbol 15. For best results, use a symbol printwheel that matches the pitch of your regular printwheel.

Changing the Printwheel

CAUTION:

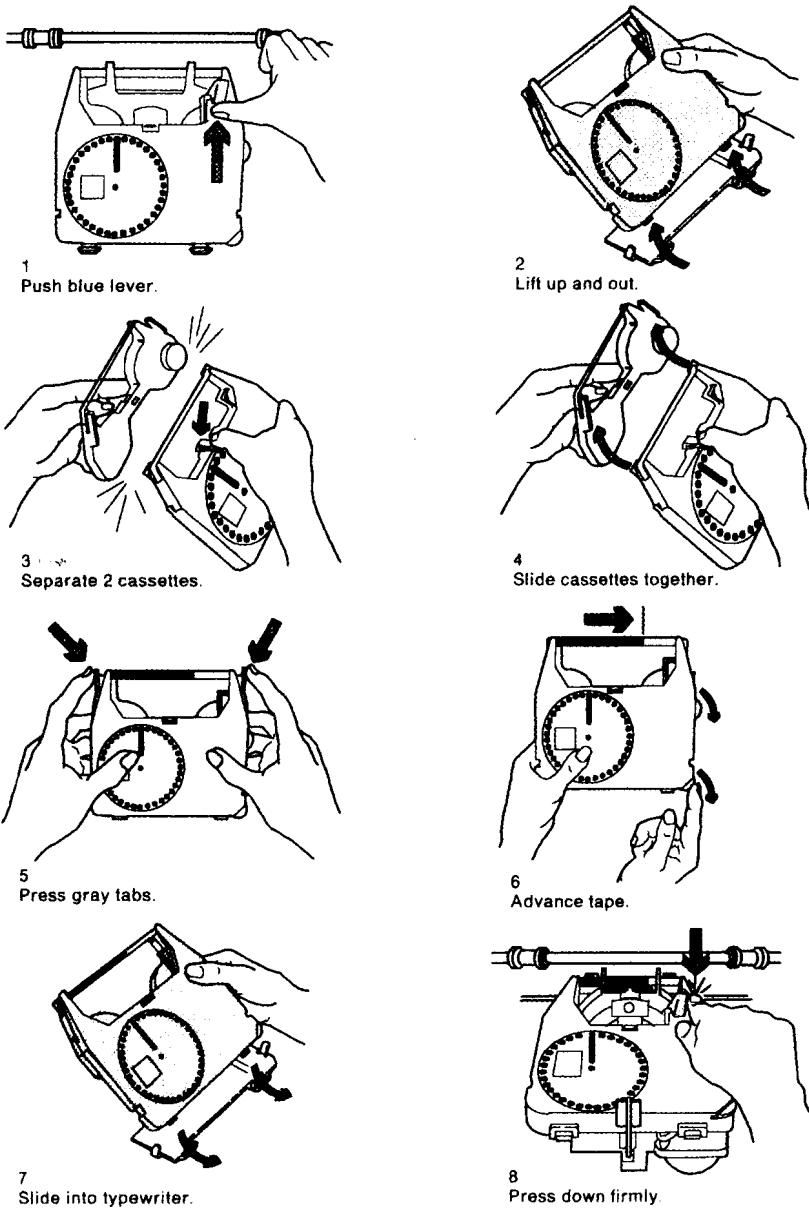
To prevent unwanted carrier motion, make sure the Paper Ball Load Lever is in the closed position.

1. Pull the print hammer all the way forward and hold it.
2. Grasp the printwheel tab and lift the printwheel straight up and out of the slot. Do not scratch the ribbon.
3. Release the print hammer.



4. If the replacement printwheel is new, remove the yellow shipping seal from its center.
5. Hold the printwheel so the letters IBM are in the upper left corner.
6. Pull the print hammer all the way forward and hold it.
7. Lower the printwheel into the slot. Do not scratch the ribbon.
8. Release the print hammer.
9. Press the **Code** key. The printwheel spins.

Ribbon Removal and Installation



IBM Easystrike® Ribbons

Applications	Multipurpose	High ¹ Yield Correctable	Fabric	Superior ² Write Correctable
Correspondence				
Legal	●	●	NR	●
Executive	●	●	NR	●
General	●	●	●	●
Hard-to-Image Originals ³	●	NR	●	●
OCR	●	NR	NR	NR
Speech Writing ⁴	●	NR	●	●
Negotiable Instruments (checks and stocks)	●	NR	●	NR
Erasable Bond ³	●	NR	NR	●
Quality of Original				
1 - 3 Carbons	Good	Good	Good	Good
3 - 5 Carbons	Fair	Marginal	Fair	Fair
Reorder Number	1337764	1299845	1356000	1380999
Correction Tape				
Lift-Off Tape - 1337765		●	None	●
Cover-Up Tape - 1337766	●		None	

● = Recommended NR = Not Recommended

The IBM Easystrike Correctable Ribbon Cassette is available in brown (1337762) and blue (1337763).

- 1 Long-life correctable film ribbon; recommended for general correspondence.
- 2 Recommended for bold and dark print, especially on difficult-to-image papers.
- 3 The receptivity of the surface of these materials varies widely; therefore, for best results, use care in selecting a specific material to be typed on, and in selecting typestyle, impression control, and ribbon. The IBM Easystrike Superior Write Correctable Ribbon is recommended for most hard-to-image applications. However, there are some special coated or treated surfaces where the multipurpose ribbon must be used. When in doubt, prepare samples first.
- 4 Best results with Rhetoric and other large typestyle printwheels are obtained by using the IBM Easystrike Multipurpose Ribbon.

Batteries

The typewriter uses two size AA alkaline batteries to save margins, tabs, and other settings when you turn the typewriter off. Change the batteries at least once every year (before they run down).

The following settings are saved when you turn the typewriter off, if good batteries are installed:

- Top Margin
- Line Space
- Automatic Carrier Return
- Active Keyboard
- Spell Check
- Supplemental Dictionary.

Use only size AA alkaline batteries (for example, Duracell⁵ type MN 1500, Eveready⁶ type E91, Ray-O-Vac⁷ type 815, or equivalent). *Do not use rechargeable batteries.*

Checking the Batteries

If the beep sounds three times and the **Line Space** lights blink continuously when you turn the typewriter on, do the following while the *typewriter is on*:

1. Check the batteries for correct installation. If correctly installed, the batteries may be weak or dead.
2. Replace all batteries. *Do not turn the typewriter off while replacing batteries.* If you do, margins and other settings will be lost.

Replacing Batteries

Warning: Do not turn the typewriter off while replacing batteries. If you do, margins and other settings will be lost.

All battery holders contain three openings. Be sure to place the batteries in *only* the two holder positions that contain springs.

1. Turn the typewriter on and raise the cover.
2. Locate the black plastic battery holder at the right front of the typewriter.
3. Remove the holder by putting your finger under it and pulling up. Carefully pull the holder out as far as it can go.
4. Push the batteries against the spring ends of the holder and pop them out.

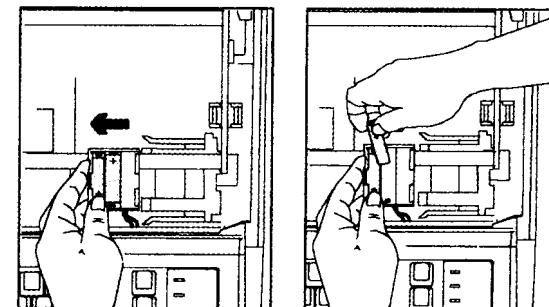


Figure 3-1. Removing Batteries

5. Install the new batteries in the holder. Match the plus (+) signs on the batteries to the plus signs inside the holder.
6. Place the battery holder back in the typewriter.

⁵ Trademark of Duracell, Inc.

⁶ Trademark of the Union Carbide Corp.

⁷ Trademark of the Ray-O-Vac Corp.

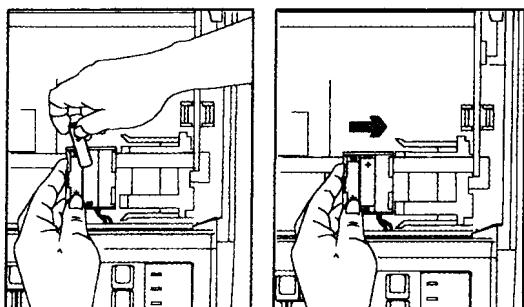


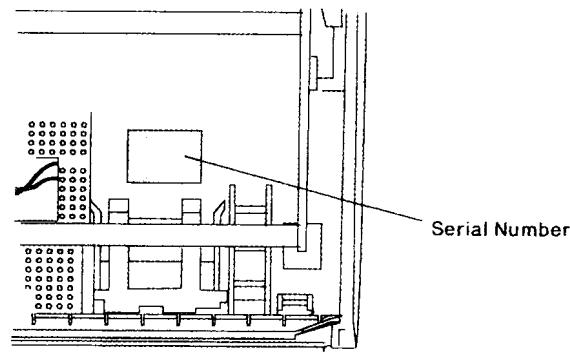
Figure 3-2. Installing Batteries

Note: The batteries will *not* save margins and other settings unless each battery is properly installed.

Cleaning the Typewriter Cover

Important: Use only a damp cloth and mild detergent to clean the typewriter cover and keybuttons. Certain cleaning fluids may be harmful. *Do not use IBM cleaning fluid.*

Serial Number



To locate the serial number on your typewriter, look on the right side of the inside bottom cover. The serial number is on the voltage label behind the batteries. Machine type and model number are also on this label.

Intentionally removing, destroying or altering the Lexmark serial number may be a violation of consumer laws. Further, Lexmark will not honor warranty claims for machines without the original factory affixed serial number label similar to the one shown below.

LEXMARK™

Manufactured by Lexmark International Inc.
Lexington, Ky USA

Machine Type: SN:
100-240v.- 50/60Hz 0.8-0.4A

Programs © Copyright Lexmark International, Inc.
All Rights Reserved 19xx.19xx



HOMOLOGA
D.G.E.I.
GMO-0040

This device complies with part 15 of the FCC Rules. FCC ID: XXXXXX
Operation is subject to the following conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference that may cause undesired operation.

Problem Determination

This chapter describes problems or questions you may have while using your typewriter. Use this chapter to correct problems yourself, saving service costs and avoiding unnecessary downtime.

1. Find the problem in the index below and turn to the page referenced.
2. Complete as many steps as needed to correct the problem.
3. For assistance, call an authorized dealer. You will need serial number, machine type, and model number when you call. See "Serial Number" on page 3-15 for the location of this information.

Problem Determination Index

Beep and Light Signals	4-2
Typewriter Beeps Three Times While Typing	4-2
Typewriter Beeps Three Times and Line Space Lights Blink	4-2
Typewriter Beeps Six Times and One or More Lights Blink	4-2
All Lights Stay On	4-3
No Lights Come On	4-3
All Lights Off Except Line Spacing 3 Blinking	4-3
Typing Problems	4-4
Typewriter Operates Hot	4-4
Typewriter Operates Too Noisily	4-4
Line Spacing Aligns Incorrectly	4-4
Paper Feeds Incorrectly	4-4
Wrong Characters Print or Space Incorrectly	4-5
Erase Problems	4-5
Correction Key Does Not Completely Erase Character	4-5
Typewriter Beeps Instead of Erasing	4-5
Printwheel Spins Instead of Erasing	4-5
Print Problems	4-6
Characters Do Not Print	4-6
Characters Print Too Lightly	4-6
Characters Do Not Print Clearly	4-6
Characters Print Incorrectly During Reprint	4-6
Spell Check Problems	4-7
Spelling Beep Sounded Three Times When You Turned the Typewriter On	4-7
Typewriter Beeps Five Times - Line Space Lights Blinking	4-7

Beep and Light Signals

Typewriter Beeps Three Times While Typing

1. Wait until the typewriter stops printing, then continue typing.
2. If the **RePrt Full** light is blinking, the page is nearly full. Complete the current line, make corrections, and reprint. If the **RePrt Full** light comes on solid, the typewriter has lost text.

Typewriter Beeps Three Times and Line Space Lights Blink

If the typewriter beeps three times and the **Line Space** lights blink when the typewriter is turned on, there is a possible battery problem:

- a. If all the **Line Space** lights blink together, the batteries have failed and machine settings have been lost.
- b. If the **Line Space** lights blink in sequence, (1, 1½, 2, 3), the batteries are low, but no machine settings have been lost.
- c. If the **Line Space** 1 and 3 lights blink followed by the **Line Space** 1½ and 2, the batteries are good, but the machine settings have been lost.

For either a or b, do the following while the *typewriter is on*.

1. Check the batteries for correct installation.
2. If the batteries are installed correctly, replace *all* batteries. Do not turn the typewriter off while replacing the batteries, or margins and other settings will be lost.

For c, you will have to re-enter your desired machine settings.

Typewriter Beeps Six Times and One or More Lights Blink

1. Make sure the printwheel and ribbon are installed correctly.
2. Turn the typewriter off, then on again. If the problem recurs, install another printwheel.
3. Turn the typewriter off, then on again. If the problem recurs, call for service.

All Lights Stay On

Turn the typewriter off, wait 30 seconds, then turn the typewriter on again. If all the lights are still on, call for service.

No Lights Come On

1. Make sure the typewriter cord is securely plugged into the back of the typewriter and into a wall outlet.
2. Make sure other equipment plugged into the same wall outlet works.
3. Make sure the wall outlet does not turn off with the room lights.
4. Turn the typewriter off, then on again.

All Lights Off Except Line Spacing 3 Blinking

The typewriter is in an energy saving mode. Press any key to continue typing. See "PowerWise Mode (U.S. Only)" on page 1-19.

Typing Problems

Typewriter Operates Hot

1. Make sure nothing is blocking the typewriter vents.
2. Place the typewriter at least 75 mm (3 in) from the wall on all sides.
3. Make sure the typewriter is not near a heater.

Typewriter Operates Too Noisily

1. Make sure the cover and soundhood (if you have a soundhood) are closed tightly.
2. Move any objects touching the typewriter cover.
3. Look for objects in the typewriter.
4. Remove any material placed under the typewriter.
5. Check the typing table or desk. Metal tables can make the typewriter sound noisy.

Line Spacing Aligns Incorrectly

1. Look for objects inside the typewriter.
2. Look at the number of carbon copies used (five maximum).
3. Push the *Paper Release Lever* all the way back.

Paper Feeds Incorrectly

1. Check the number of carbon copies used (five maximum).
2. Make sure carbon copies are correctly inserted.
3. Look for labels or paper caught under the platen.
4. Push the *Paper Release Lever* all the way back.
5. Make sure the platen is latched down at both ends.
6. If you change the top margin setting at any time, check it before feeding paper. See page 2-2.

Wrong Characters Print or Space Incorrectly

1. Turn the typewriter off, then turn the typewriter on again and try typing.
2. Turn the **Lang** light off if it is on.
3. If there is a language change, change the printwheel.
4. Look for objects in the path of the carrier.

Erase Problems

Correction Key Does Not Completely Erase Character

1. Make sure the ribbon and correction tape cassettes are fastened together correctly.
2. Make sure the correction tape matches the ribbon. Make sure the ribbon and correction tape cassettes are correctly installed.
3. Try a lighter impression setting.
4. Try a new correction tape and type any character to reset the correction system.
5. Look for folds in the paper.
6. Try plain bond paper.
7. Make sure the typewriter is on a level surface.
8. Use the same printwheel for both typing and erasing.
9. Turn Bold Print on if erasing bold characters.

Typewriter Beeps Instead of Erasing

You are trying to erase using the wrong pitch or language. If the **Lang** light is not blinking, install the correct pitch printwheel. If the **Lang** light is blinking, select the correct language keyboard and install the correct printwheel.

Printwheel Spins Instead of Erasing

The character is outside the correction memory and you must erase it manually.

Print Problems

Characters Do Not Print

1. Make sure you are using the correct pitch or language.
2. Make sure the printwheel and ribbon are installed correctly.
3. Make sure the platen is latched down at both ends.
 - Pull the *Paper Release Lever* all the way toward you.
 - Push down firmly on each end of the platen. Then push the *Paper Release Lever* all the way back.
4. Try a new ribbon or printwheel.

Characters Print Too Lightly

1. Make sure the ribbon is installed correctly.
2. Look for folds in the ribbon and paper.
3. Change the impression control. See page 1-10.
4. Try plain bond paper.
5. Try a new ribbon or printwheel.

Characters Do Not Print Clearly

1. If excess ink particles from the ribbon appear on the paper, try a lower impression control setting.
2. Try a new ribbon or printwheel.

Characters Print Incorrectly During Reprint

1. Use the same pitch printwheel used when the text was typed.
2. Insert another sheet of paper and reprint the text again.

Spell Check Problems

If Spell Check does not work, one of the following might cause the problem:

- Spell Check is turned off.
- Another typewriter function is active which prevents Spell Check from operating (for example, the Printer Option).
- You did not end the word with a word ending.
- You are trying to add a word that is already in a dictionary.
- You are trying to delete a word from the *main* dictionary.

Spelling Beep Sounded Three Times When You Turned the Typewriter On

There was a supplemental dictionary error and the dictionary has been erased from memory. If you selected a spelling beep tone, it is erased from memory and will have to be selected again.

Typewriter Beeps Five Times - Line Space Lights Blinking

Check the probable causes of a Spell Check problem above. If the problem is not corrected, contact an authorized dealer.

Appendix A. Safety/Compliances

Federal Communications Commission (FCC) Statement

Note: The IBM Wheelwriter Typewriter 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 your authorized dealer or service representative for additional suggestions.

Neither IBM nor the manufacturer is responsible for any radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

Note: To comply with FCC regulations on electromagnetic interference for a Class B computing device, the printer cable must be shielded and properly grounded.

To assure compliance with FCC regulations for a Class B computing device, use a properly shielded and grounded IBM cable. Part number 1043561 is for the parallel interface cable. Use of a substitute cable not properly shielded and grounded may result in violation of FCC regulations.

Canadian Department of Communications Compliance Statement

This equipment does not exceed Class B limits per radio noise emissions for digital apparatus, set out in the Radio Interference Regulation of the Canadian Department of Communications.

Avis de conformité aux normes du ministère des Communications du Canada

Cet équipement ne dépasse pas les limites de Classe B d'émission de bruits radioélectriques pour les appareils numériques, telles que prescrites par le Règlement sur le brouillage radioélectrique établi par le ministère des Communications du Canada.

The United Kingdom Telecommunications Act 1984

This apparatus is approved under the General Approval Number NS/G/1234/J/100003 for the indirect connections to the public telecommunications systems in the United Kingdom.

Safety Information

- If your product is NOT marked with this symbol,  , it MUST be connected to an electrical outlet that is properly grounded.
- The power cord must be connected to an electrical outlet that is near the product and easily accessible.
- Refer service or repairs, other than those described in the operating instructions, to a professional service person.

Index

Numerics

- 1 (Spell) 2-13
2 (Add) 2-13
3 (Del) 2-13
4 (Vol) 2-13

A

- accent marks 2-16
advanced operations 2-1
aligning text to the right margin 2-5
alternate keyboards 2-15
applications, printwheel 3-7
applications, ribbon 3-11
ARtn key 2-1, 2-8
ARtn light 2-1
automatic carrier return 2-1
automatic erase 1-14
automatic pitch selection 1-12

B

- B (Bold)** key 2-6
Backspace (Bksp 1) key 1-15
basic operations 1-1
batteries
 checking 3-12
 installing 3-13
 replacing 3-13
battery recommendations 3-12
beep signals 4-2
blinking light signals 4-2
Bold light 2-6
bold print 2-6

C

- C (Ctr)** key 2-4
canceling reprint 2-12
Caps key 1-10
Caps Lock light 1-10
cardholder 1-11
care and maintenance 3-14
carrier movement keys 1-9
centering 2-4
centering marks 1-12
changing line spacing 1-10
changing top margin 2-2
character erase 1-14
characters per horizontal inch 1-12
charts, keyboard 2-17
checking the batteries 3-12
cleaning the typewriter cover 3-14
clearing correction memory 1-14
clearing reprint 2-12
clearing tabs 1-13
clearing temporary margin 2-7
Code key 1-5
Cont key 2-3
Cont light 2-3
continuous underline 2-3
Correction (Word) key 1-14
correction memory 1-14
 clearing 1-14
 erasing outside of 1-15
CRtn (Ind Clr) key 2-7

D

- D (Dect)** key 2-8
dead keys 2-16
decimal tabs 2-8, 2-10
dictionary, supplemental 2-14

double underlining numbers in a column 2-9
drawing vertical lines 1-11

E
energy saver 1-19
erasing 1-14
 in proportional spacing 1-17
 manually in proportional spacing 1-17
 problems 4-5
even right margin 2-5
extra character, inserting 1-16

F
flush right 2-5
function keys 1-5

H
H ($\frac{1}{2}$ \downarrow) key 2-6

I
I (**Word**) key 2-3
ID number, keyboard 2-15
impression control 1-10
Ind Clr key 2-7
indenting 2-7
index, problem determination 4-1
indicator light panel 1-4
IndL key 2-7
inserting an extra character 1-16
inserting paper 1-8
installing batteries 3-13
installing printwheel 3-9
installing ribbon 3-10
interrupting reprint 2-12

K
Key, Relocate 1-18
keyboard
 alternate 2-15
 charts 2-17
 identification numbers 2-15
 layout — U.S. 1-2
 layout — United Kingdom 1-3
 primary 2-15
keys
 function 1-5
 paper and carrier
 movement 1-9
 typematic 1-6

L
L (Lang) key 2-16
Lang light 2-16
left margin, releasing 1-13
left margin, temporary 2-7
lights, indicator 1-4
 ARtn 2-1
 Bold 2-6
 Caps Lock 1-10
 Cont 2-3
 Lang 2-16
 Line Space 1-10
 RePrt 2-11
 RePrt Full 2-11
 Shift Lock 1-10
Line Space key 1-10
lines per vertical inch 1-12
LMar key 1-13
Lock and **Shift** keys 1-10

M
machine type 3-15
maintenance and care 3-14
manual erase 1-15

margin, temporary 2-7
margin/pitch scale 1-12
margins
 centering between 2-4
 setting 1-13
 setting top 2-2
MarRel key 1-13
matching printwheels and keyboards 2-15
micro-index defined 1-9
model number 3-15
moving paper in the typewriter 1-9
moving the carrier 1-9

N
N (Caps) key 1-10

O
O (RFish) key 2-5
overstriking characters 1-12, 2-16

P
page end indicator 1-7
page end scale 1-7
paper
 inserting 1-8
 removing 1-8
Paper Bail Load Lever 1-8
Paper Down (Micro) key 1-9
paper movement keys 1-9
Paper Release Lever 1-8
Paper Up (Micro) key 1-9
parts of the typewriter 1-1
pitch selection, automatic 1-12
pitch symbols 1-12
Powerwise Mode 1-19
primary keyboard 2-15
print hammer 3-9
print problems 4-6

printing line 1-11
printwheel
 applications 3-7
 changing 3-9
 identification numbers 2-15
 installing 3-9
 pitch chart 1-12
 pointer 1-11
 removing 3-9
problem determination 4-1
 erase 4-5
 index 4-1
 print 4-6
 Spell Check 4-7
 typewriter 4-4
 typing 4-4
proportional spacing defined 1-17
proportional spacing, erasing manually 1-17

Q
Q (Impr) key 1-10

R
reference 3-1
releasing the left margin 1-13
Reloc (Line Space) key 1-10
Relocate Key 1-18
removing paper 1-8
removing printwheel 3-9
removing ribbons 3-10
reorder numbers, ribbon 3-11
repeat keys 1-6
replacing batteries 3-13
reprint 2-11
 canceling and restarting 2-12
 clearing 2-12
 correcting text 2-11
 interrupting and resuming 2-12
 typing the original 2-11

RePrt Full light 2-11

RePrt key 2-11

RePrt light 2-11

required space 2-2

ribbon

 applications 3-11

 installation 3-10

 latching cassettes together 3-10

 removal 3-10

 reorder numbers 3-11

ribbon release lever 3-10

right flush 2-5

RMar key 1-13

S

safety information A-2

samples, typestyles 3-1

saver, energy 1-19

scale, margin/pitch 1-12

serial number 3-15

setting impression level 1-10

setting margins 1-13

setting tabs 1-13

Shift and - (Hyphen) 2-9

Shift and **Lock** keys 1-10

Shift key 1-10

Shift Lock light 1-10

space, required 2-2

Spacebar 2-2

special characters 2-9

Spell Check 2-13

 problems 4-7

 spelling beep 2-15

 supplementary dictionary, adding

 and deleting words 2-14

 using 2-13

stop instruction 2-10

subscripts and superscripts 2-6

supplementary dictionary 2-14

supplies, ordering procedures 3-1

T

tabs

 clearing 1-13

 setting 1-13

TCIr key 1-13

temporary left margin 2-7

temporary margin, clearing 2-7

top margin, changing 2-2

TSet key 1-13

turning automatic carrier return on
or off 2-1

type size, on printwheel label 3-1

typematic keys 1-6

typestyle name, on printwheel

 label 3-1

typestyle samples 3-1

typewriter problems 4-4

typing numbers in columns 2-8

typing problems 4-4

Y

Y (½ ↑) key 2-6

U

U (Cont) key 2-3

underlining

 continuous 2-3

 numbers in columns 2-9

 word 2-3

V

vertical lines, drawing 1-11

Voltage label 3-15

W

word backward 1-9

word erase 1-14

word forward 1-9

word underline 2-3

IBM WHEELWRITER 1000 BY LEXMARK
TYPEWRITER USER'S GUIDE
ORDER NUMBER SA40-0825-00

**Reader's
Comment
Form**

You may use this form to communicate your comments about this publication, with the understanding that Lexmark may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

1. Did you find the book well organized?
Yes No

2. Was the content of the book accurate and complete?
Yes No

3. Was the book easy to use?
Yes No

4. What can we do to improve the book?

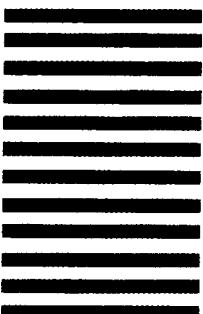
5. What is your job title?

Questions or comments about supplies, service, applications, and so on will slow response time considerably. Please refer those questions or comments to your authorized dealer or point of purchase.

Note: Please direct all requests for copies of publications to your point of purchase. Publications are not stocked at the location to which this form is addressed.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 2659 LEXINGTON, KY

POSTAGE WILL BE PAID BY ADDRESSEE

Lexmark International Inc.
Department F95, Building 035-3
740 NEW CIRCLE ROAD NW
LEXINGTON KY 40511-9954



Fold Here

Cut Along Line

IBM WHEELWRITER 1000 BY LEXMARK
TYPEWRITER USER'S GUIDE
ORDER NUMBER SA40-0825-00

Reader's Comment Form

You may use this form to communicate your comments about this publication, with the understanding that Lexmark may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

1. Did you find the book well organized?
Yes No
2. Was the content of the book accurate and complete?
Yes No
3. Was the book easy to use?
Yes No
4. What can we do to improve the book?

5. What is your job title?

Questions or comments about supplies, service, applications, and so on will slow response time considerably. Please refer those questions or comments to your authorized dealer or point of purchase.

Note: Please direct all requests for copies of publications to your point of purchase. Publications are not stocked at the location to which this form is addressed.

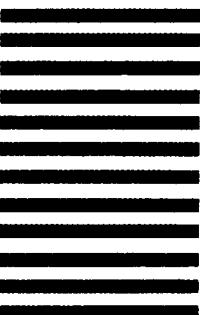
BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 2659 LEXINGTON, KY

POSTAGE WILL BE PAID BY ADDRESSEE

Lexmark International Inc.
Department F95, Building 035-3
740 NEW CIRCLE ROAD NW
LEXINGTON KY 40511-9954

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



Fold Here

Cut Along Line

First Edition (July 1994)

The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law: LEXMARK INTERNATIONAL, INC. PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

References in this publication to products, programs, or services do not imply that the manufacturer intends to make these available in all countries in which it operates. Any reference to a product, program, or service in this publication is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any existing intellectual property right may be used instead.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions of the publication. Improvements and/or changes in the product(s) and/or the program(s) described in this publication may be made at any time.

IBM, Wheelwriter, and Easystrike are registered trademarks of the International Business Machines Corporation in the United States and/or other countries and are used under license.

Lexmark, PowerWise and the PowerWise logo are trademarks of Lexmark International, Inc.

Publications are not stocked at the address given below; requests for publications should be made to your point of purchase.

A form for reader's comments is provided at the back of this publication. If the form has been removed, comments may be addressed to Lexmark International, Inc., Department F95/035-3, 740 New Circle Road, Lexington, Kentucky 40511, U.S.A. Lexmark may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

© Copyright Lexmark International, Inc. 1993, 1994.
All rights reserved.

UNITED STATES GOVERNMENT RESTRICTED RIGHTS

This software and documentation are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and in applicable FAR provisions: Lexmark International, Inc., Greenwich, CT 06836.