

# ***Basic Four<sup>®</sup> Model 325X Series Character Printer Operator's Guide***

**BFISD 5090**

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## Section 1 — Introduction

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### Overview

The purpose of this guide is to provide the operator with the specialized information needed for the successful operation of the Model 325X Series Character Printer.

The character printer produces single page and multipart printed documents, such as invoices, statements, checks, and reports.

### Scope

This guide is written for operators who have routine contact with character printers. It is also directed toward personnel involved with the routine maintenance of the character printer.

### Contents

The information in this guide includes:

- Section 2, "Routine Operations", describes the control switches and indicators on the printer and the procedure for routine operation.
  - Section 3, "Paper Control", details loading, adjusting, reloading, changing, and stacking paper.
  - Section 4, "Printer Ribbons", details the replacement of printer ribbon cartridges.
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## Section 2 — Routine Operations

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### Overview

This section describes the meanings and uses of the switches and indicators on the character printer. It also details the steps necessary for routine operation of the printer.

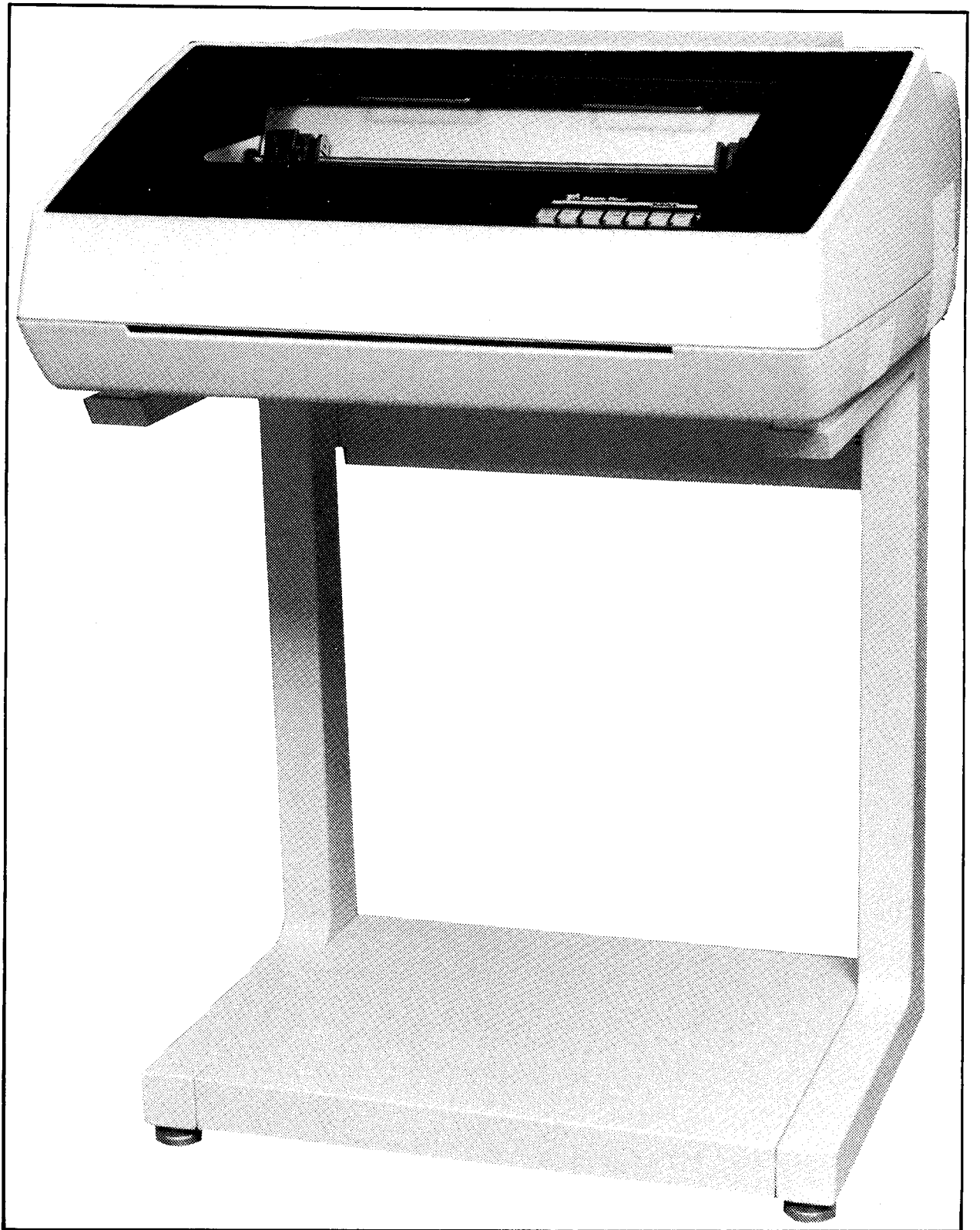


Figure 2-1. Character Printer

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## Control Switches and Indicators

The control switches and indicators are on top of the printer on the right front side and on the rear panel (see Figures 2-1, 2-2, and 2-3). The functions of the switches and indicators are described in Tables 2-1 and 2-2.

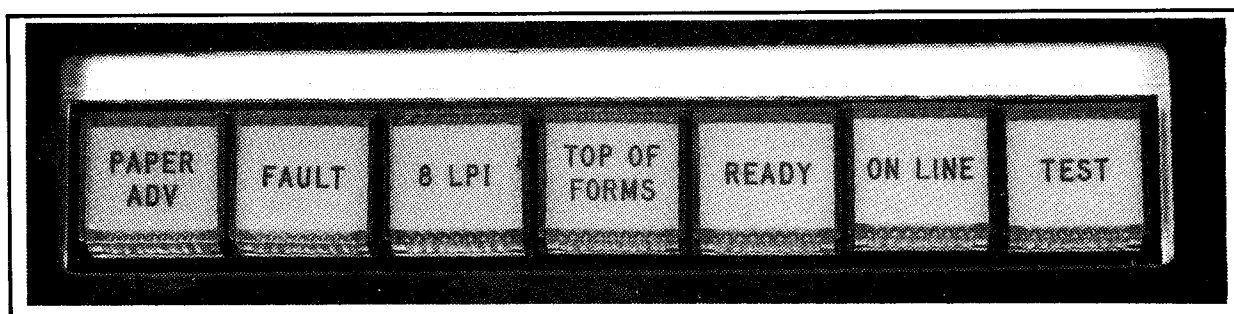


Figure 2-2. Printer Controls.

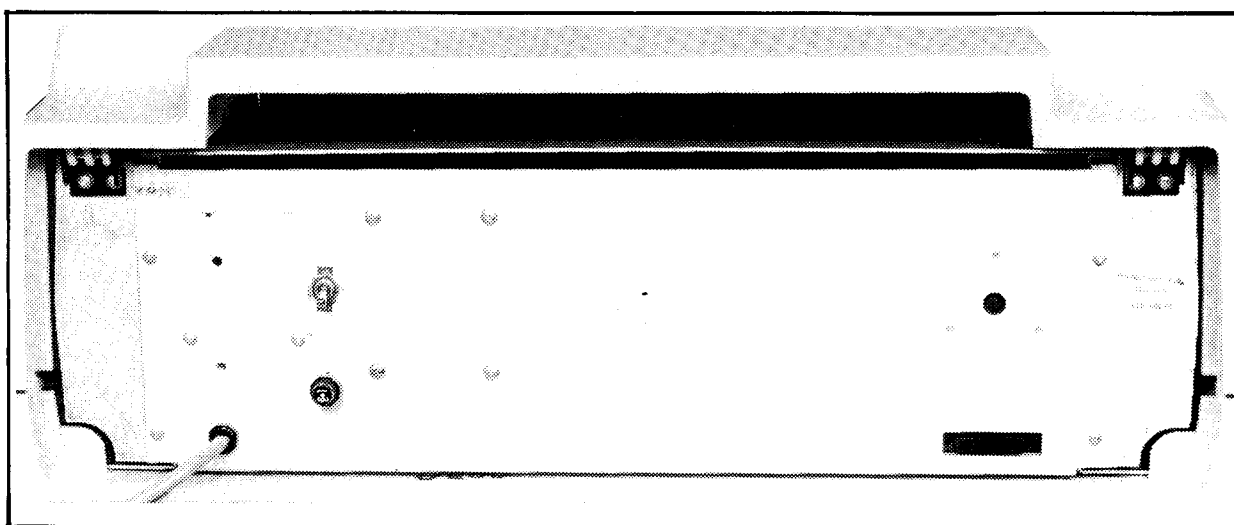


Figure 2-3. Rear Panel



**Table 2-1. Control Switches and Indicators**

**Rear Panel**

<b>Control/Switch</b>	<b>Function</b>
Power On/Off	Starts/stops AC power to the printer.
<b>Front Panel</b>	
<b>Control/Switch</b>	<b>Function</b>
PAPER ADVANCE	<p>A momentary action push button; when pressed and released, it advances the paper one line. When pressed and held, it advances the paper at the normal rate until the button is released.</p> <p>The line count is affected by paper moved with this button. This button is disabled when the printer is in either the ON LINE or the TEST mode.</p>
8LPI	<p>An alternate position push button which controls vertical line spacing. When it is lit, the Printer prints eight lines to the inch (0.125 vertical line spacing). When it is not lit, the Printer prints six lines to the inch (0.1667 vertical line spacing). This button is inactive when the Printer is online.</p>
TOP OF FORMS	<p>A momentary contact push button; when it is pressed, the Printer moves the paper to the first line of print on the following form. This button is inactive while the printer is online.</p>

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**Table 2-1. Controls (Continued)**

**Front Panel**

<b>Control/Switch</b>	<b>Function</b>
READY	A momentary contact push button; when pressed, it causes the paper advance mechanism to disengage. The paper now can be moved manually by turning the knob at the end of the tractor shaft. This button does not affect the line count and is automatically disabled when in the ON LINE or TEST modes.
ON LINE	A momentary action push button; when pressed, it switches the Printer between the online and offline modes. When the Printer is online, it can be accessed by the computer; when offline, the Printer cannot be accessed by the computer. In the online mode, (ON LINE indicator is lit), the following switches are disabled:  8LPI TEST PAPER ADVANCE TOP OF FORM
TEST	An alternate action push button; pressing it puts the Printer in the TEST mode and disables the <b>ON LINE</b> button. At this time, the Printer outputs a test pattern. This pattern consists of all of the characters, at 132 characters per line, printed continuously as long as the Printer is in the TEST mode. When the button is pressed a second time, the printer finishes the current line being printed and stops.

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**Table 2-2. Indicators**

POWER ON	When the primary power is on, the PAPER ADV and TOP OF FORMS indicators illuminate. This indicates that the Printer is totally initialized and ready to run.
FAULT	When lit, it indicates a hardware-related error, such as an incorrect cable, missing cable, paper jam, etc.
8LPI	When lit, it indicates the Printer is in the 8LPI mode. When not lit, it indicates the Printer is in the 6LPI mode.
TOP OF FORM	When lit, it indicates the Printer logic is at the TOP OF FORM position. The Printer logic automatically goes to this position when power is applied or reset.
READY	When lit, it indicates that the Printer is ready for operation.
ON LINE	When lit, it indicates the Printer is online.
TEST	When lit, it indicates the Printer is in the TEST mode and not online.

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## Operating Procedures

To operate the character printer:

1. Turn the power on by pushing the rear toggle switch up. When power is on, the PAPER ADV and TOP OF FORMS indicators light and the printer motor starts.
2. Load and adjust the paper by following the procedures in Section 3.
3. Press the **ON LINE** button. The printer is ready to be used.

## Section 3 — Paper Control

### Overview

This section details the procedures for working with the paper in the character printer. The following paper handling procedures are included:

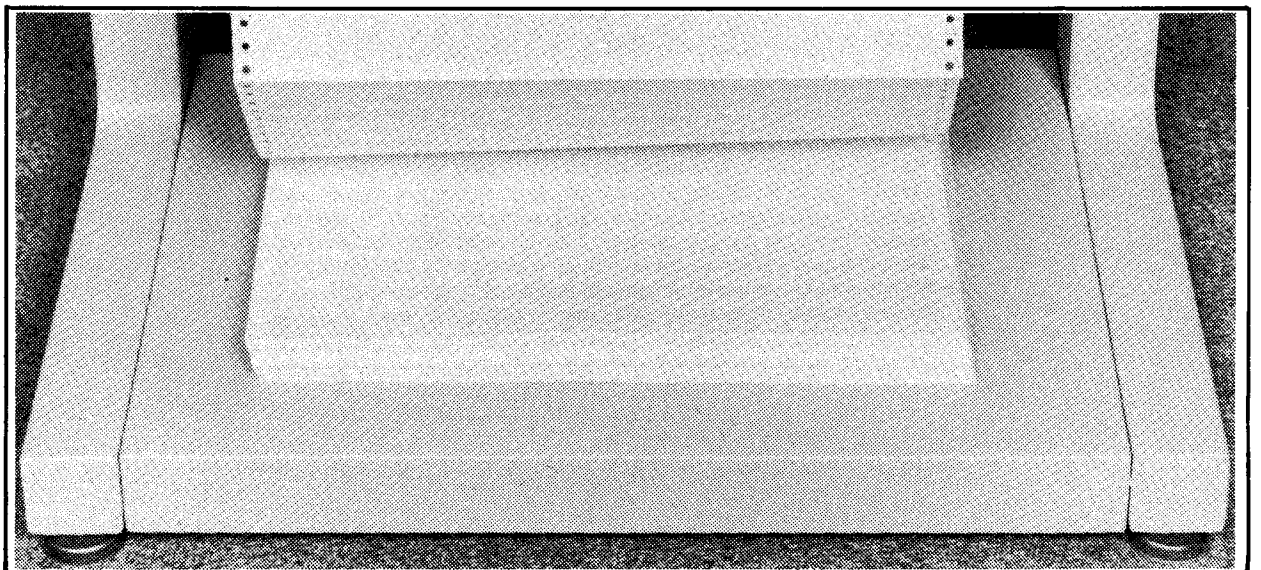
- Loading paper
- Adjusting paper to top of form
- Reloading paper during operation
- Adjusting for forms thickness
- Changing at the end of page
- Clearing a paper jam
- Moving to end of page
- Paper stacking

### Loading Paper

The character printer uses continuous pin-feed paper ranging in size from 3.5'' to 15'' wide. It prints an original and up to five copies (carbon or carbonless).

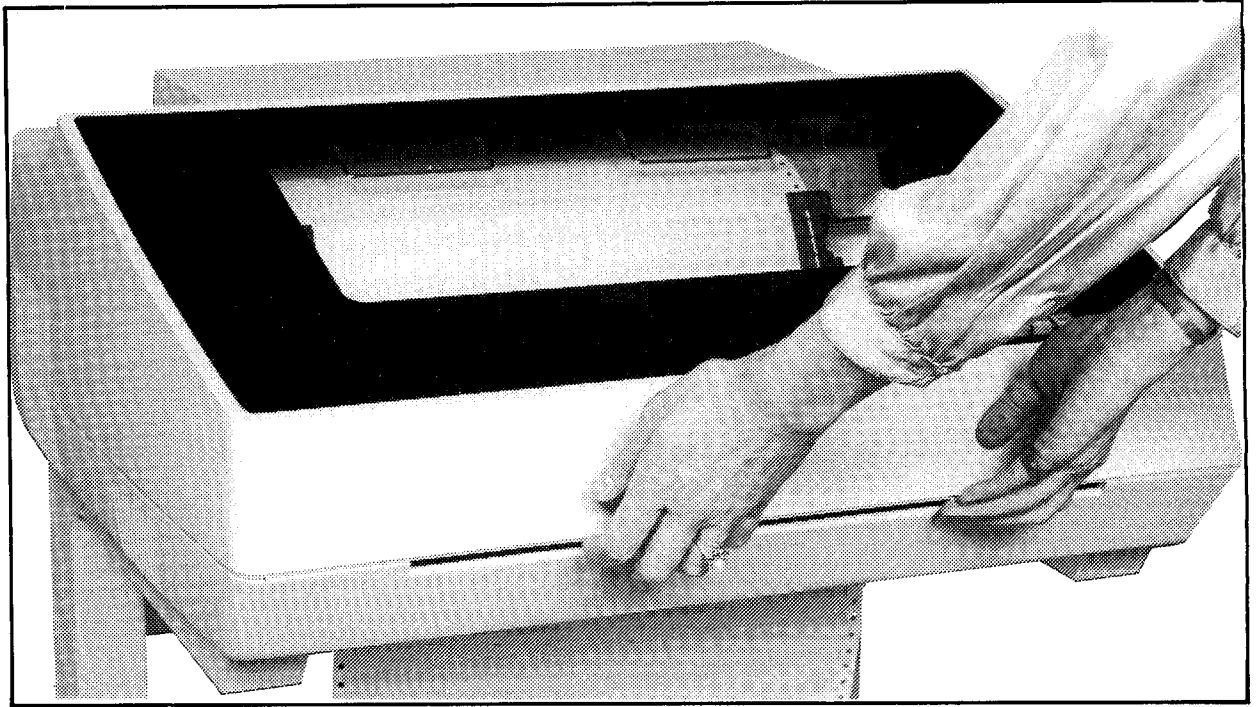
1. Be sure the printer POWER is on.
2. If the printer is online (ON LINE light is on), press the **ON LINE** button (ON LINE light goes out).

Place a stack of paper under the machine in the center of the base. The side to be printed should face you when you lift the top sheet (Figure 3-1).



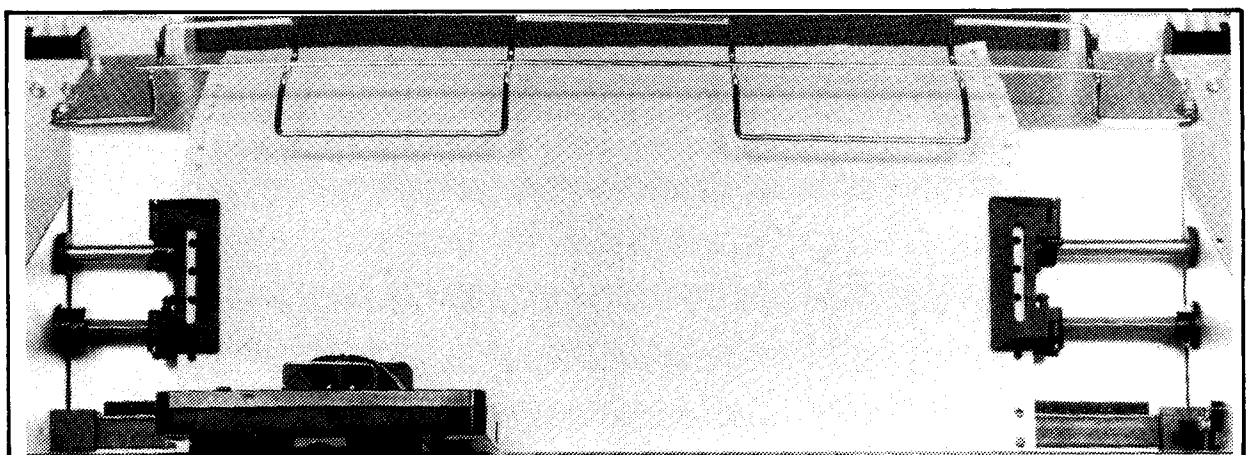
*Figure 3-1. Paper Stacked on Printer Base*

- 
3. Open the printer cover by lifting the top portion of the cabinet (Figure 3-2). There are no locks or latches to be released. Let the cover rest in the UP position.



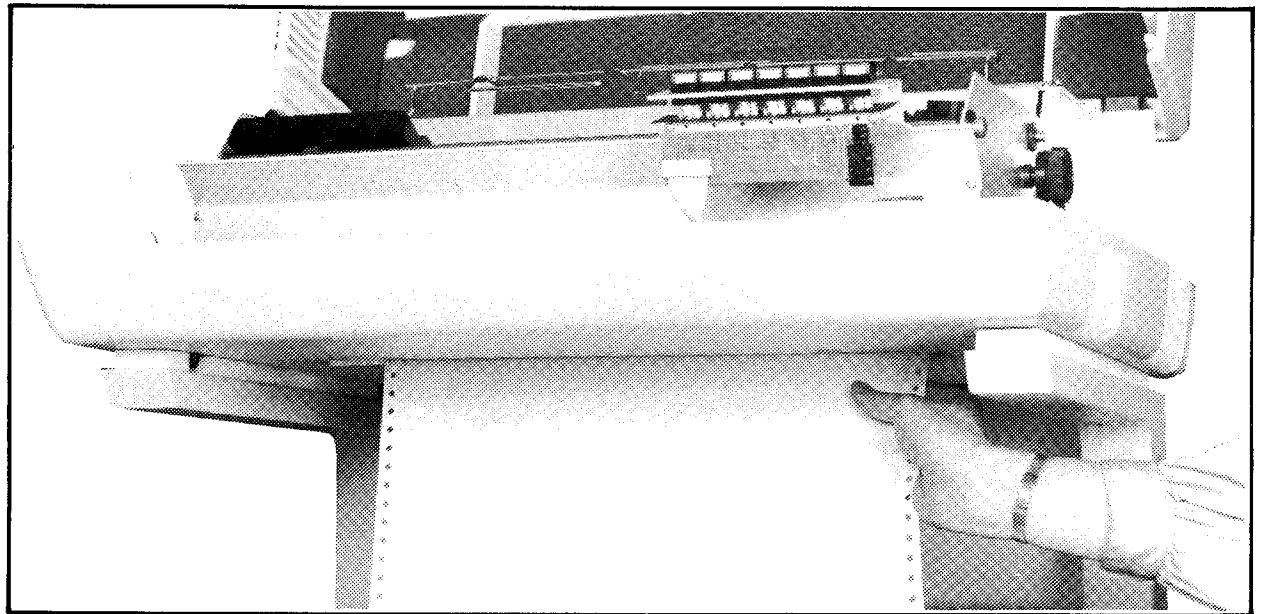
*Figure 3-2. Opening Printer Cover*

4. Two hinged clamps, or tractors, hold the paper securely. Lift these hinged tractors and remove any paper still in the printer (Figure 3-3).



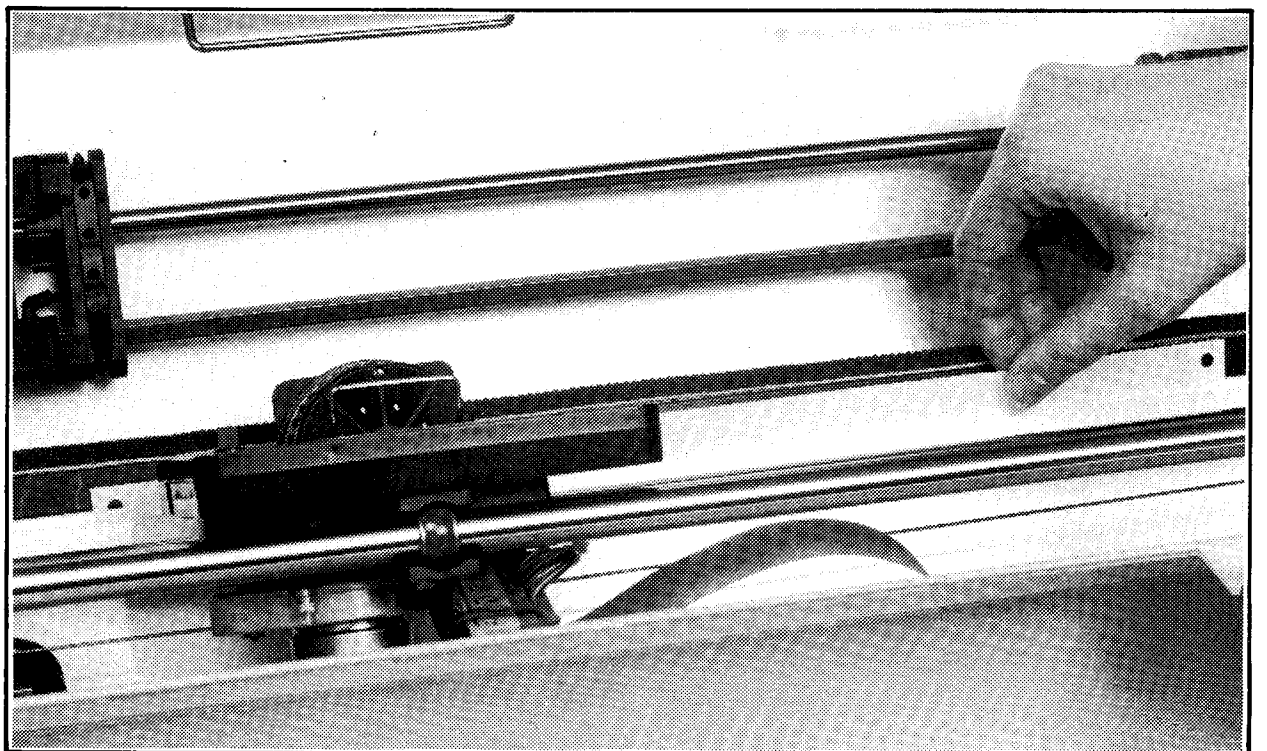
*Figure 3-3. Tractors Holding Paper*

- 
5. Insert the paper through the slot under the printer. Pull the paper through and thread the paper between the rods and under the platen (Figure 3-4).



*Figure 3-4. Inserting Paper From Below*

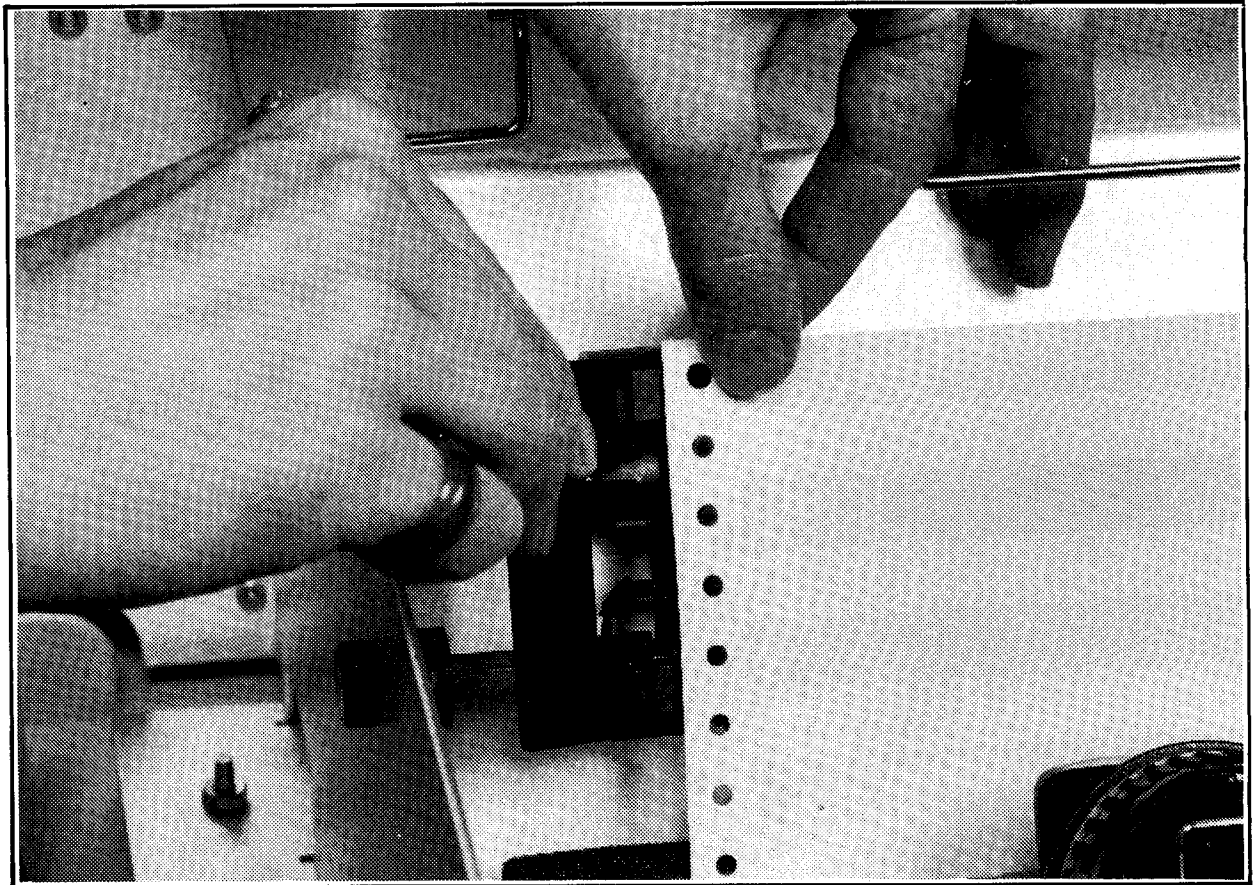
6. Feed the paper under the platen and pull one sheet through (Figure 3-5).



*Figure 3-5. Inserting Paper*

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7. Lay the paper back over the top of the tractors (open). The front of the paper should face you (Figure 3-6).



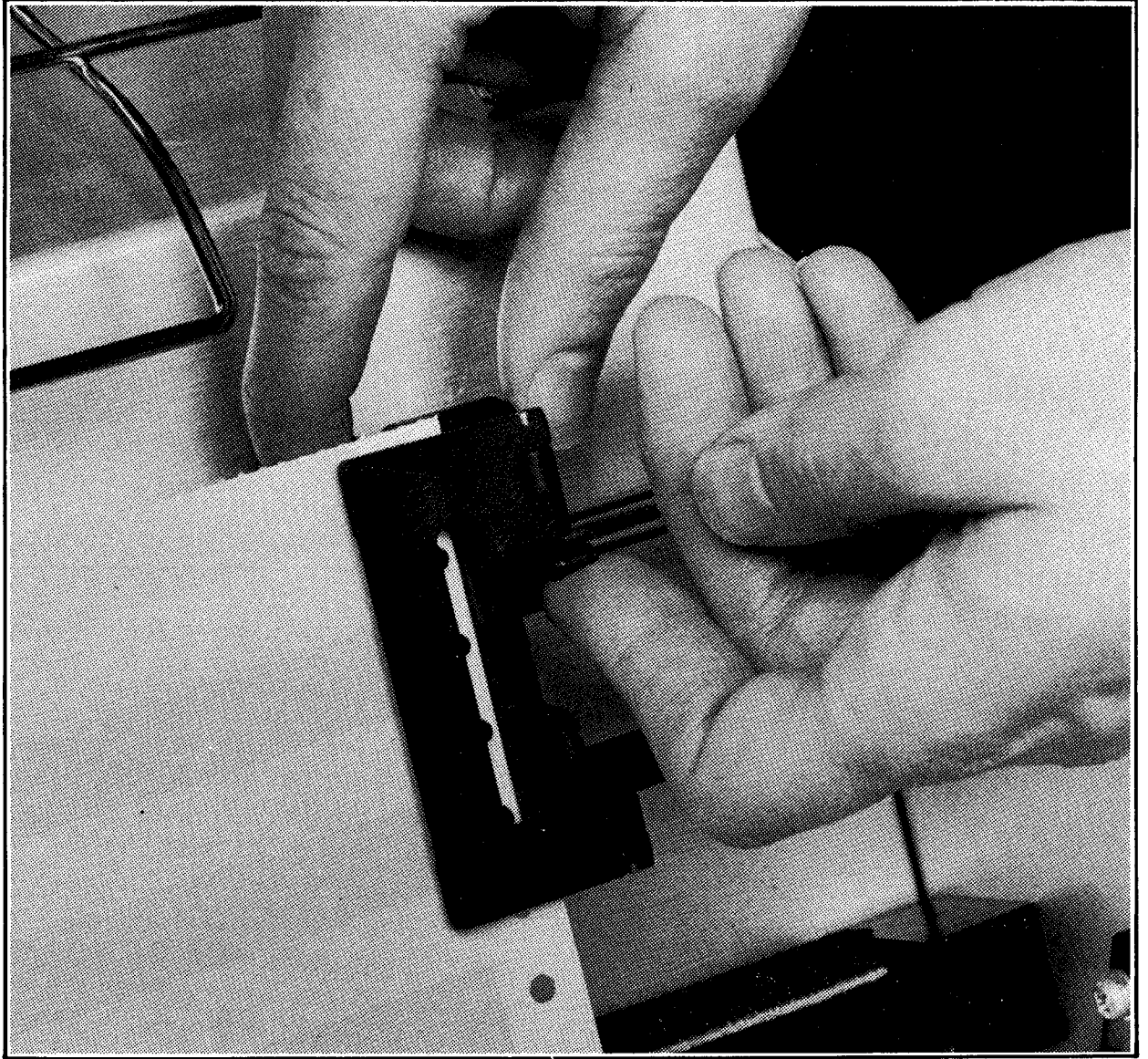
*Figure 3-6. Placing Paper Holes On Opened Tractor*

8. Align the sprocket holes in the paper over the left-hand tractor and close the tractor cover.
9. Align the sprocket holes in the paper over the right-hand tractor and close the tractor cover. If it is necessary to adjust the tractor sideways to the paper width, push the tractor positioning lever up. Return the lever to the down position after adjustment (Figures 3-7 and 3-8).



*Figure 3-7. Tractor Covers Closed.*

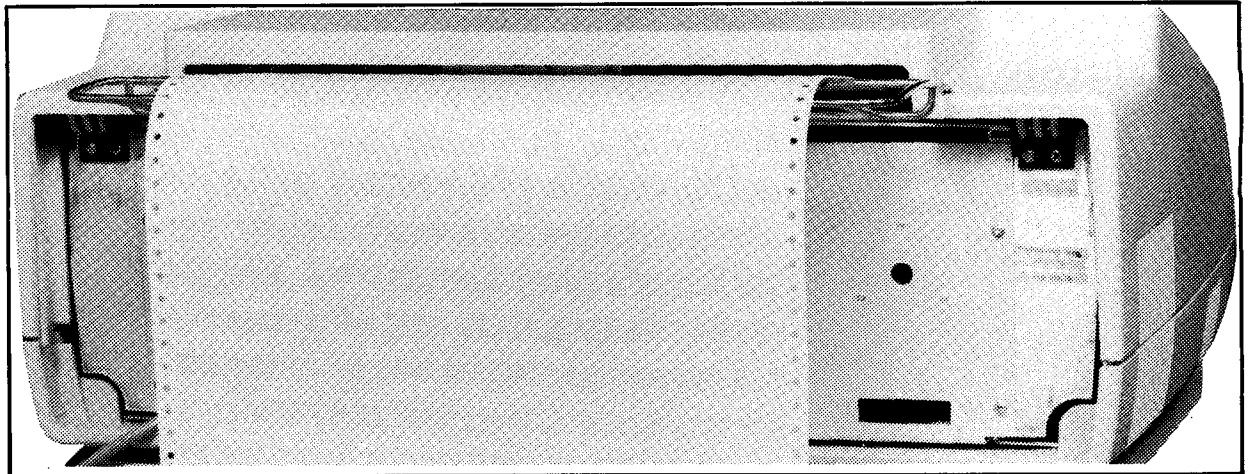




*Figure 3-8. Adjusting for Paper Width*

10. Be sure the sprocket holes in the paper are horizontally lined up in the same positions on the tractors on each side.

- 
11. Place the paper over the rod on the rack at the back of the printer (Figure 3-9).



*Figure 3-9. Threading Paper Back Over Top Rack*

12. Close the printer cover. Press the **TOP OF FORMS** button to check paper installation. The paper should advance one form at a time without tearing or bunching.
13. If the paper does not advance, the **ON LINE** button may be on. Turn off and press the **TOP OF FORMS** button again.

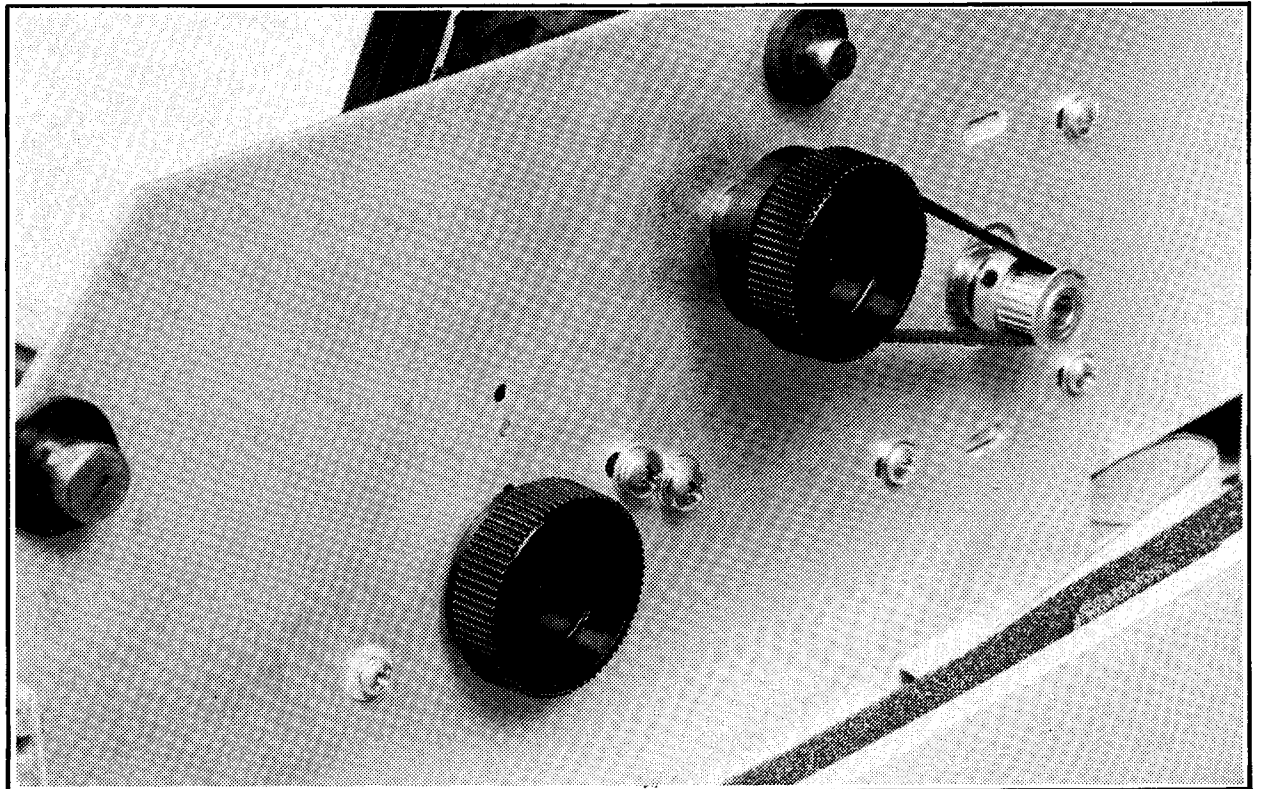
For continuous feed paper, each section separated by perforations across the width of the paper is considered a new form or page.

### **Adjusting Paper to Top of Form**

To move the paper to the top of the next page or to any desired position before printing, follow these steps:

1. Press the **ON LINE** button to place the printer offline.
2. Press the **TOP OF FORMS** button to move the paper to the top of the next page, or press the **PAPER ADV** button to move the paper to any desired forward position.

- 
3. For fine adjustments, press the **READY** button and use the paper feed knob. For a new page, make sure that a line of perforations in the paper is aligned with the top of the print head. The paper feed knob is located to the right of the platen (upper knob, Figure 3-10).
  4. Press the **ON LINE** button to place the printer online.



*Figure 3-10. Adjusting Paper Position*

### **Reloading Paper During Operation**

To avoid running out of paper while printing, check the paper supply before starting the print operation. If the paper supply runs out, however, the following occurs:

1. A high-pitched "BEEP" sound occurs and printing stops.
2. The FAULT indicator lights.
3. The ON LINE indicator light goes out.

### **Adjusting for Forms Thickness**

The 325X printer can print up to five copies plus the original. When using multiple copy forms, move the platen back, away from the print head. This adjustment may also be necessary to use papers of varying thickness or to compensate for ribbon wear.

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Turn the platen knob, located on the side of the frame, clockwise to move the platen closer to the print head, and counterclockwise to move the platen farther from the print head. Test the printer for proper performance, then adjust the knob again as needed (Figure 3-11).

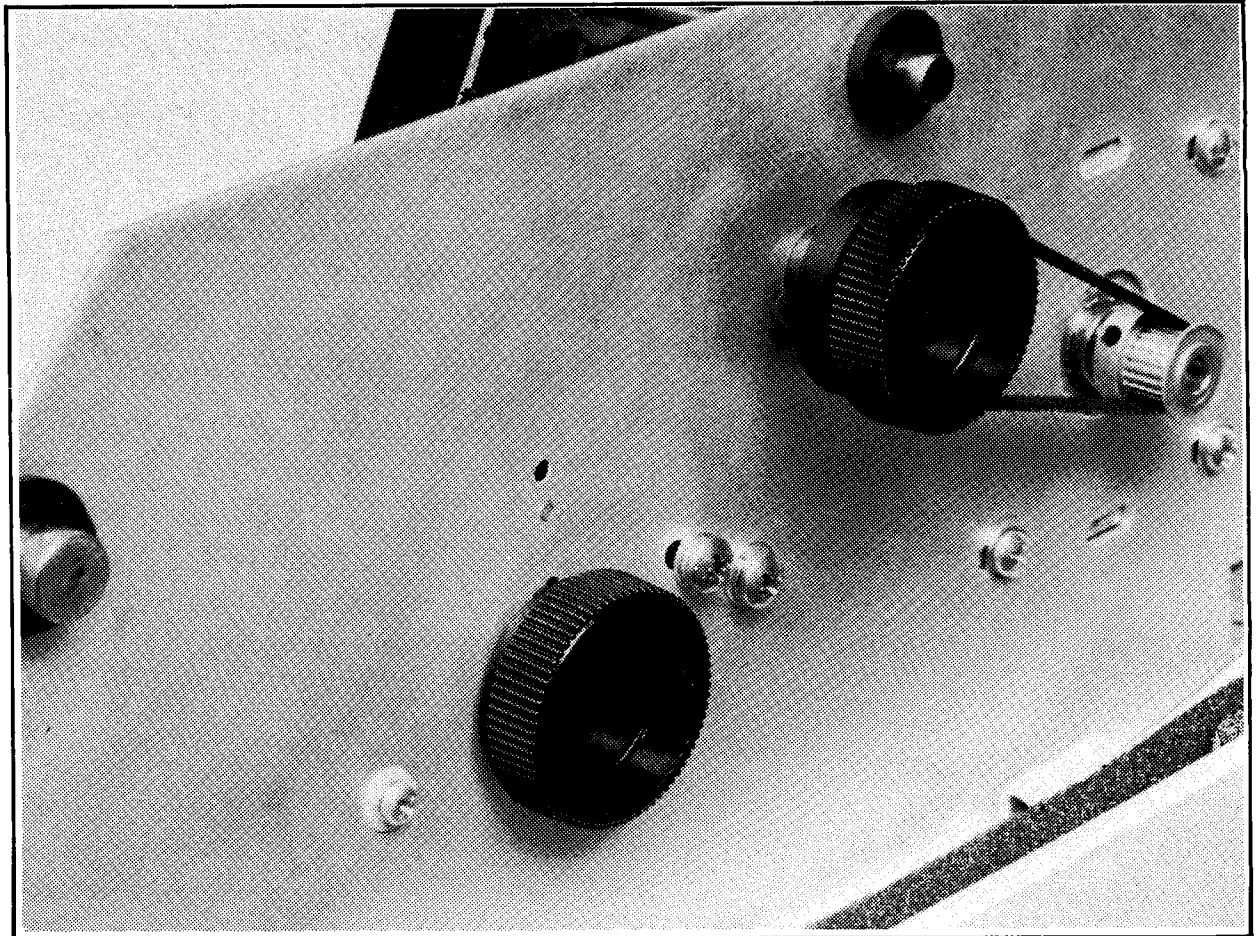


Figure 3-11. Adjusting for Forms of Different Thickness — Lower Knob

### Changing at End of Page

Inserting a new ribbon or adjusting the forms thickness can change the darkness of the print or letter density. Therefore, wait until the last line on a page is printed before making a change. Then press the **ON LINE** button. The ON LINE light will go off, and the printer will go offline.

### Clearing a Paper Jam

If the paper jams during an operation, stop the printer immediately by pressing the **ON LINE** button. Turn off the printer power if it is necessary to move the print carriage in order to clear the jam. **DO NOT MOVE THE CARRIAGE MANUALLY WITH THE POWER ON.**

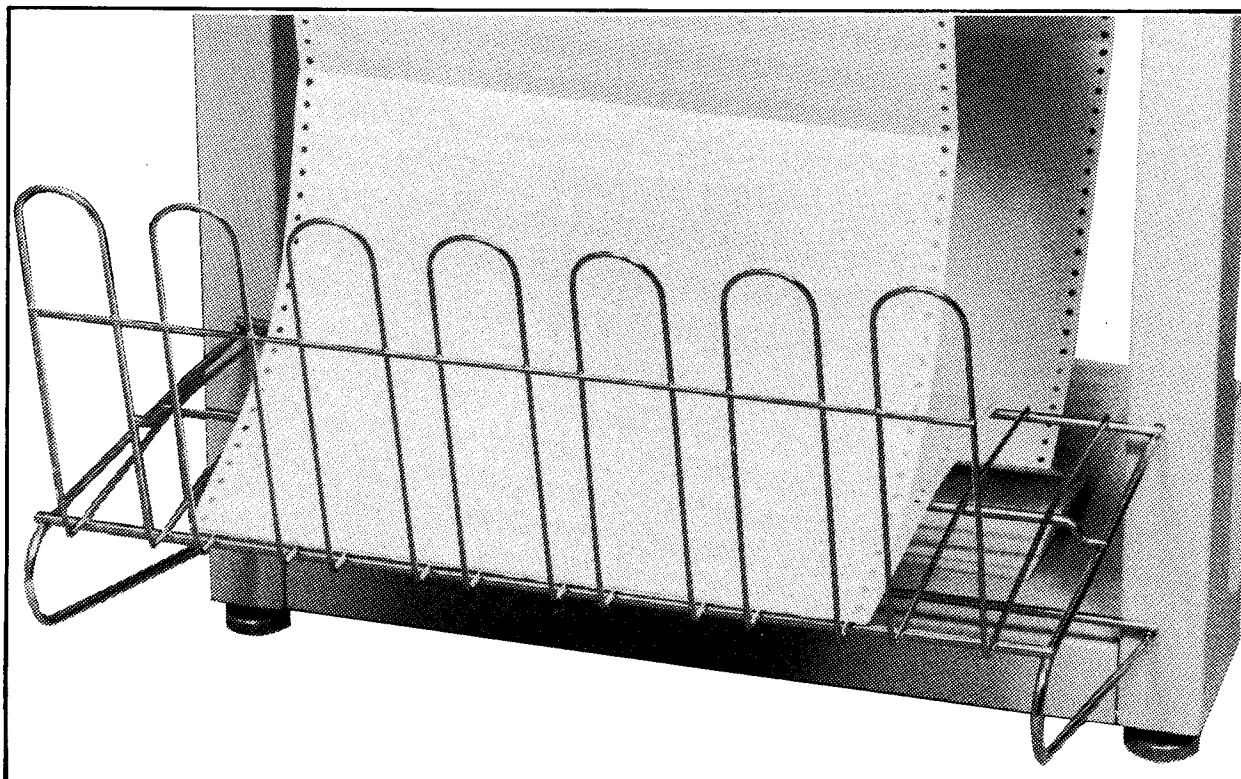
### Moving to End of Page

The paper can be stepped to the end of the page by pressing the **ON LINE**, then the **PAPER ADV** buttons. This momentarily selects, then deselects the printer, causing it to print one line at a time. After advancing the paper, press **ON LINE** again to allow the printer to continue from where it was stopped.

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## Paper Stacking

Long and short forms can be stacked safely on the lower metal stacker on the back of the printer stand. A paper guide, attached to the top of the printer, allows the printed forms to flow evenly down the back of the printer onto the paper stacker (Figure 3-12).



*Figure 3-12. Printed Report Stacker*

## Section 4 — Printer Ribbons

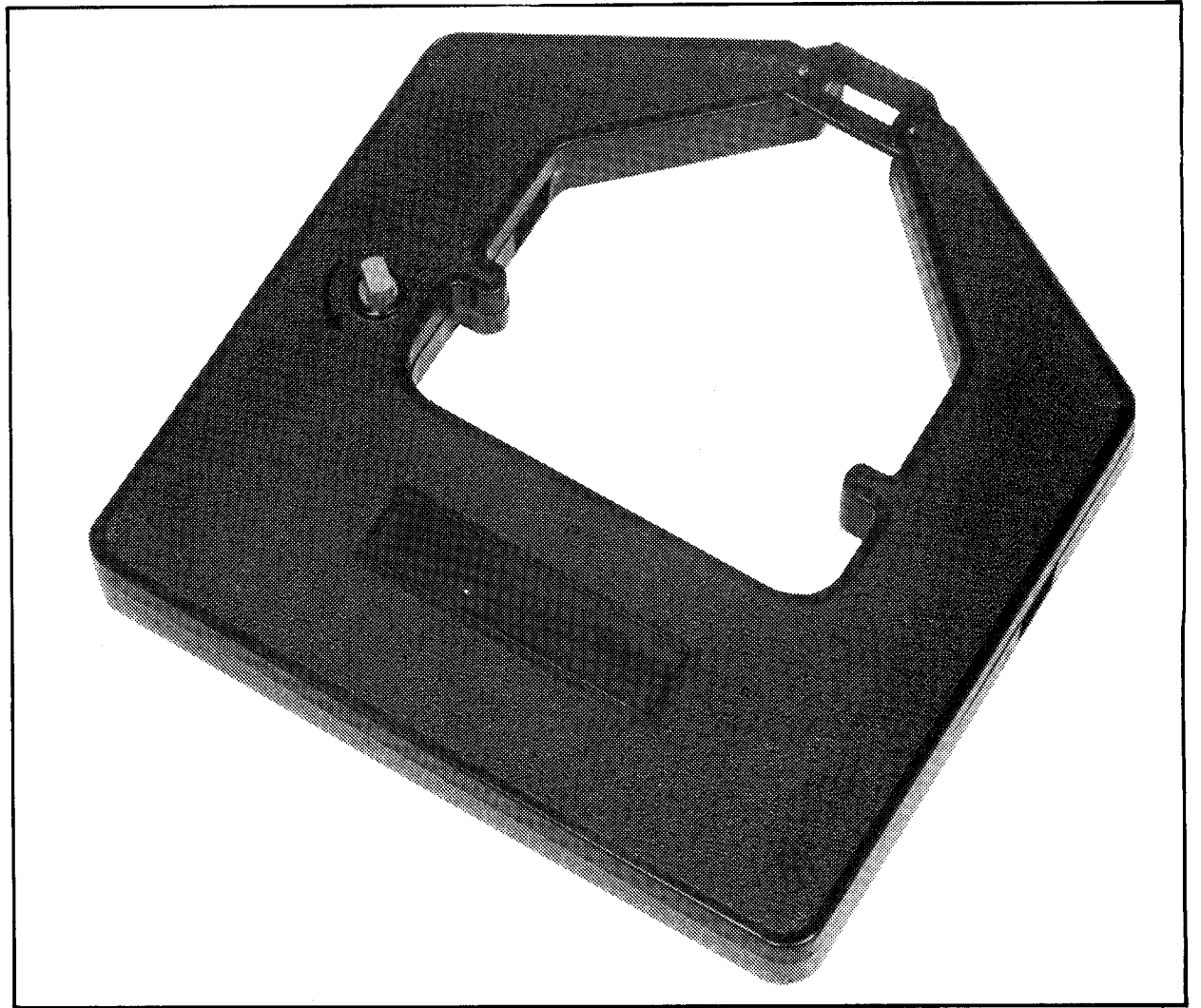
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### Overview

This section details the techniques for changing a printer ribbon.

### Replacing Ribbon

The printer ribbon is just like a typewriter ribbon. When the printed line becomes too faint, simply change the cartridge. The ribbon cartridge should be replaced after approximately 3 million characters of use. This figure varies, depending on the printing quality required and the number and distribution of characters printed on an average line (Figure 4-1).

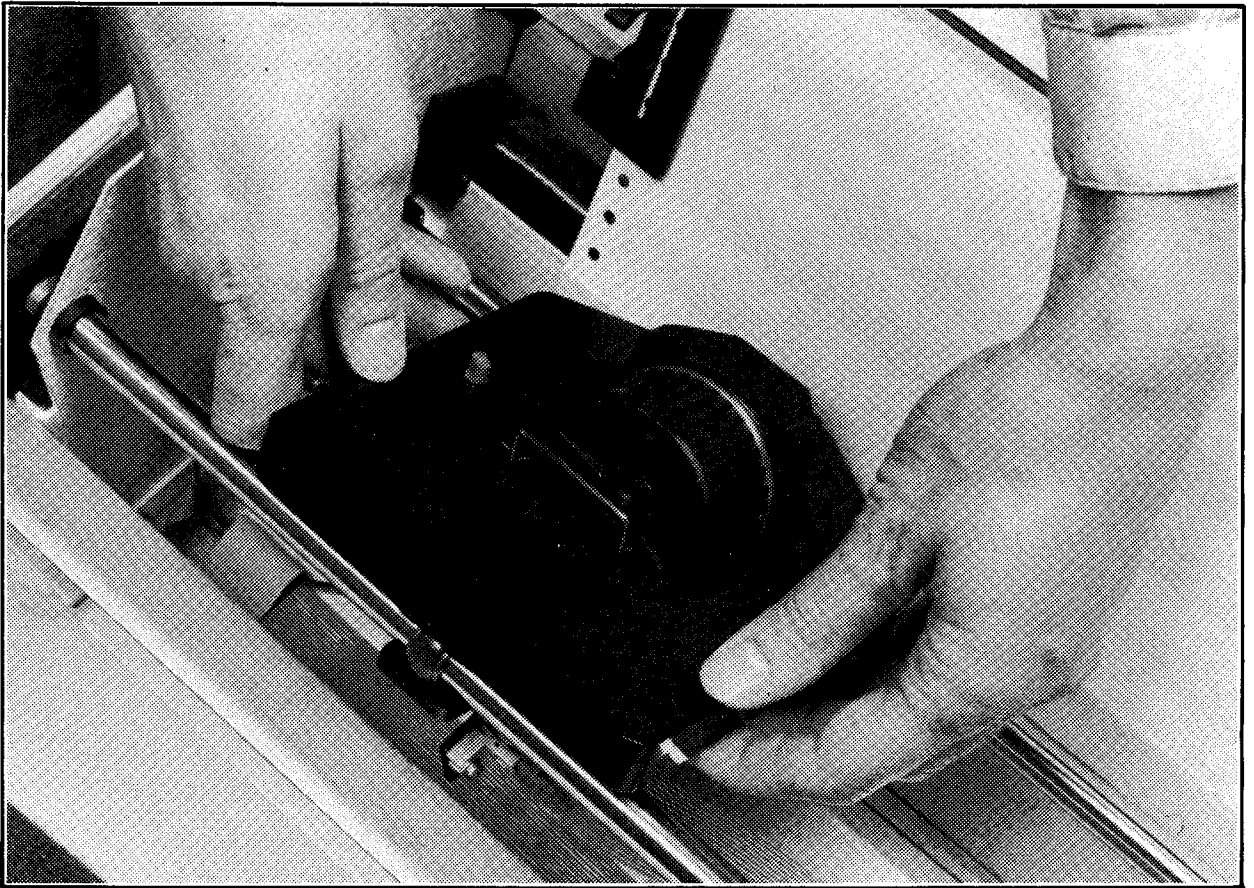


*Figure 4-1. The Ribbon Cartridge*

### Removal/Replacement Procedures

Turn off the printer power before removing the ribbon cartridge.

1. Turn the platen knob counterclockwise, moving the print head away from the paper.
2. Lift the old ribbon cartridge straight up and out and discard it (Figure 4-2).



*Figure 4-2. Removing The Old Cartridge*

3. Tighten the ribbon on the new ribbon cartridge by turning the ribbon advance knob. Place the cartridge on the alignment pins over the print head and press down. Turn the ribbon advance knob to assure that the drive key is aligned with the slot in the drive wheel.
4. Readjust the paper as required.
5. Turn on the printer power.

- 
6. Press the **TEST** button so that the light comes on. The printer automatically prints a test pattern (Figure 4-3). After you are satisfied that the new ribbon has been installed correctly, press the **TEST** button again to stop the printing. The TEST light goes out.

```
.MNOQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
NOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
OPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
PQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
QRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
RSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
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UVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
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_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@A
```

Figure 4-3. Printer Test Pattern

7. Press the **ON LINE** button. The printer is ready for use again.