

TALLY



SERIES 2000 PRINTER

operator's manual

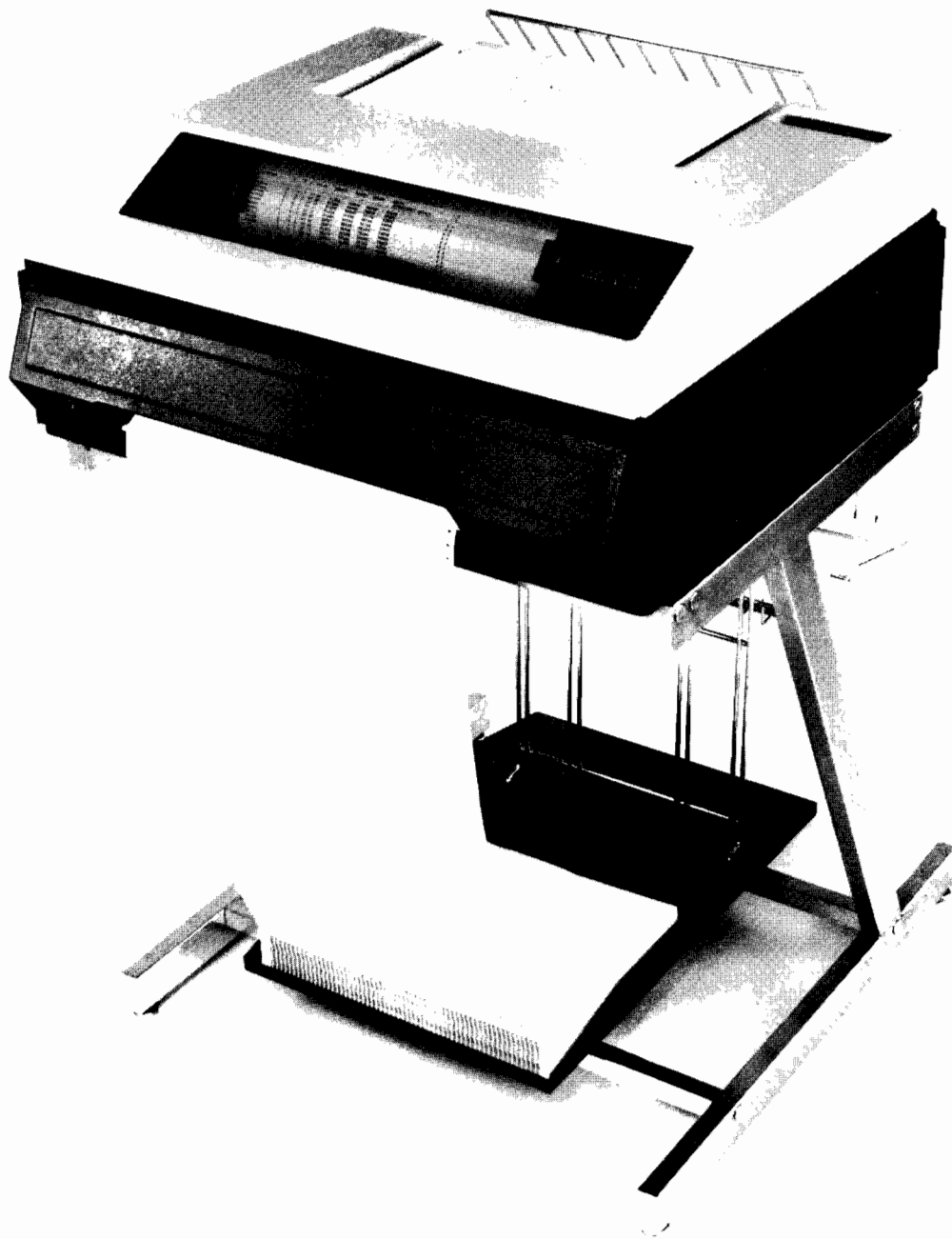


Figure 1
SERIES 2000 LINE PRINTER

INTRODUCTION

The Tally Series 2000 Line Printer is easy to operate and no maintenance other than routine cleaning and ribbon changing is required. No tools are required to change the ribbon and form loading takes only seconds

once the operator is familiar with the process. Format control is accomplished by means of a vertical format unit (VFU) using standard eight channel paper tape.

CONTROLS

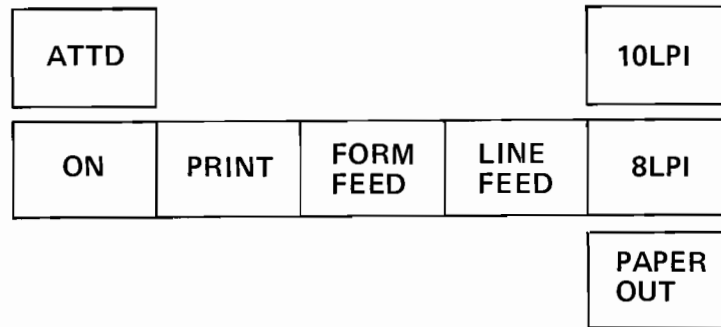


Figure 2
SWITCHES AND INDICATORS

GENERAL

The combinations of controls for the printer are shown in figure 2. Each printer has a circuit breaker located on its back panel which may be used to remove all power from the unit.

CONTROL FUNCTIONS

ON Switch

When active (down), the ON switch applies power to the printer and the switch illuminates.

ATTD Switch

The ATTD (attended) switch appears on a printer using a serial interface. When active (down), it illuminates and power is applied to the printer. When inactive (up), power may be remotely applied to the printer.

PRINT Switch

When the PRINT switch is active (down), the printer is ready to print provided the ON switch is active. If the printer has an ATTD switch, activating the PRINT

switch readies the printer for printing regardless of the position of the ATTD switch. De-activating (raising) the PRINT switch disables printing.

FORM FEED Switch

The FORM FEED switch is momentarily activated (depressed) to advance paper to the top of the next form. This switch is inoperative when the PRINT switch is active (down).

LINE FEED Switch

The LINE FEED switch is momentarily activated (depressed) to advance paper one line. This switch is inoperative when the PRINT switch is active.

8 LPI Switch

The 8 LPI switch appears on printers configured to print both six and eight lines per inch. When active (down), the switch illuminates and the printer prints eight lines per inch. When inactive (up), the printer prints six lines per inch.

10 LPI Switch

The 10 LPI switch appears on printer configured to print both seven and one half and ten lines per inch. When active (down), the switch illuminates and the printer prints ten lines per inch. When inactive (up), the

printer prints seven and one half lines per inch.

PAPER OUT Indicator

The PAPER OUT indicator appears on printers configured to print six lines per inch only. It illuminates when the printer is about to run out of paper.

Audio Alarm

The alarm sounds when the printer is about to run out of paper or when the platen is open provided the PRINT switch is active. Raising the PRINT switch silences the alarm.

Form Thickness Knob

The form thickness knob is used to adjust for various form (pack) thicknesses. This knob should be adjusted while printing in order to optimize print quality. The knob is shown in figure 3.

Fine Print Adjuster

The location of print on a form is fine tuned by varying the position of the VFU punch/fine print adjuster in its holder. Pushing the adjuster toward the back of the printer lowers the position of print and pulling the adjuster toward the front of the printer raises the position of print. (See figure 3.)

OPERATING INSTRUCTIONS

CHECK LIST

The following check list represents information presented later in this manual. Once the operator is familiar with the printer, this check list should be sufficient to assure proper operating procedure.

1. Clean the printer after every eight hours of operation.
2. Check that the printer is connected to AC power, the circuit breaker is in the on position and the ON switch (if applicable) is active.

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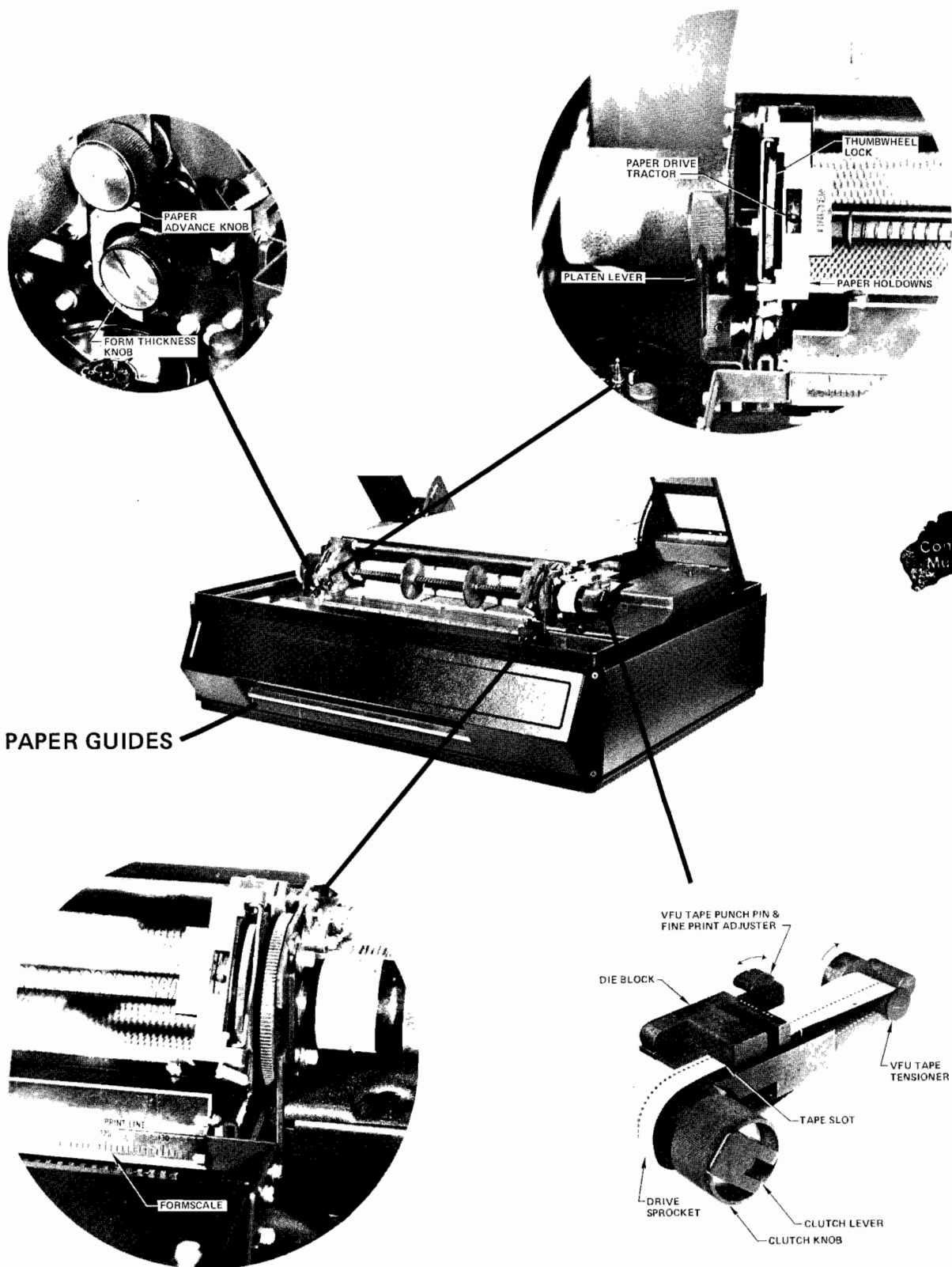


Figure 3
PAPER CONTROL DEVICES

3. Select the desired lines of print per inch (if applicable).
4. Load the printer with paper.
5. Be sure the correct VFU tape is installed.
6. Adjust the paper for correct registration of print.
7. Activate the PRINT switch.
8. Adjust the form thickness knob for optimum print quality.
9. Be sure paper is feeding and stacking properly.

PAPER LOADING

To load paper, refer to figure 3 and proceed as follows:

1. Open the formscale and both paper hold downs.
2. Open the platen using the platen lever.
3. Loosen the thumbwheels for the left and right paper drive tractors.
4. Insert the paper through the paper guides. Advance the paper until it appears above the print mechanism. (CAUTION: Do not attempt to move the paper opposite its normal direction of travel.)
5. Grasp the leading edge of the paper and install the left edge of it on the left paper drive tractor. Position the left drive tractor for the correct

left margin and tighten its thumbwheel.

6. Position the right tractor so there is slight tension across the width of the paper and tighten the right thumbwheel.
7. Close the formscale, platen and both paper holdowns.
8. Arrange the paper supply for proper feeding.
9. If the Tally paper stacker is used, adjust the basket height for the forms to be printed. When printing begins, guide the printed paper across the top of the printer and through the stacker guide until it begins to stack in the basket.

VFU TAPE LOOP INSTALLATION

Be sure the tape loop is correct for the form to be used. Tape loop construction is explained later in this manual. To install the tape loop refer to figure 3 and proceed as follows:

1. See that printer power is off.
2. Install the tape loop so the sprocket holes are towards the right side of the printer.
3. Be sure the tape sprocket holes engage the drive sprocket feed pins.
4. Route the tape loop around the tensioner and adjust the tensioner for slight tension on the loop.

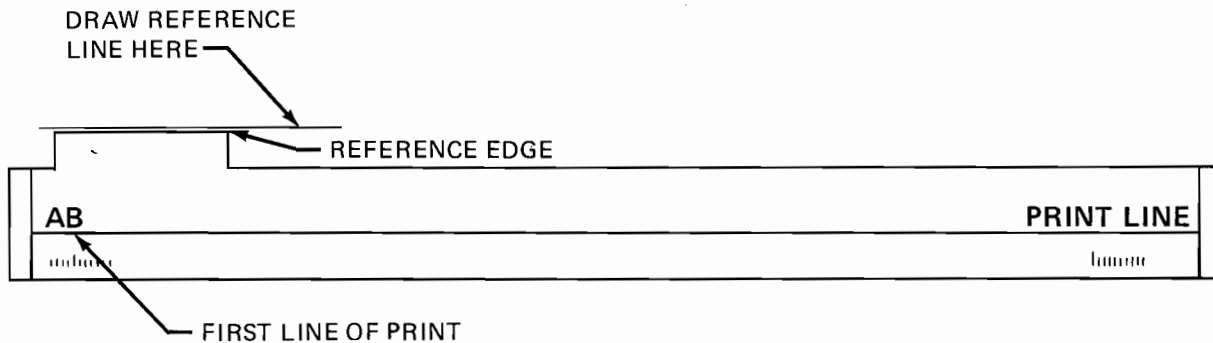


Figure 4
FORMSCALE



PRINT ADJUSTMENTS

VFU Tape Alignment

1. Be sure the ON switch is active (down), the PRINT switch is inactive (up) and the VFU tape is installed. Center the VFU punch pin in its holder (see figure 3).
2. Open the VFU clutch lever.
3. Momentarily activate the FORM FEED switch while holding the paper advance knob to prevent paper motion. This positions the VFU loop for the top of the form.
4. Position the paper so the bottom of the first line to be printed on the form is just above the PRINT LINE on the formscale as shown in figure 4.
5. Draw a reference line on the paper immediately above the reference edge of the formscale as shown in figure 4.
6. Using the clutch knob, shown in figure 3, move the paper backwards until the reference line drawn in step 5 is a little below the PRINT LINE on the formscale. Then advance the paper until the reference line drawn on the paper is just above the PRINT LINE on the formscale.
7. Close the VFU clutch lever.
8. The VFU tape loop is now aligned for the first line of print.
9. Fine tune the location of print on a form by moving the VFU tape punch/fine print adjuster: pushing it toward the back of the printer lowers the location of print, pulling it toward the front of the printer raises the location of print.

OPERATOR SUPPORT

CLEANING

The following operations should be performed after approximately every eight hours of printing.

1. Remove any paper bits and dust using a soft brush or air.
2. Remove residue from the paper feed tractors, formscale and ribbon guides using air or paper tissues.
3. Inspect the tape loop in the vertical format unit for excessive wear. Replace it if necessary.
4. Inspect the print. If it is uniformly smudged or faint, perform the following steps in order as necessary:
 - A. Adjust the form thickness knob for optimum print quality.
 - B. If the ribbon half being used appears worn in relation to the half not being used, exchange the left and right ribbon spools with each other in order to use the unworn half.
 - C. If the entire ribbon appears worn, replace it.

RIBBON CHANGING

1. Turn off power.
2. Remove paper from the printer to prevent smudging.
3. Open the formscale and platen.
4. Move both brake arm levers past their stops.
5. Remove the old ribbon and spools.
6. When installing the new ribbon, be sure each spool has at least 10 inches of ribbon on it. This insures that the reverse eyelet at each end of the ribbon is properly located.
7. Route the ribbon according to the instructions labeled on the printer. Be sure the ribbon is between the print comb and clear plastic ribbon guard.
8. Move the brake arms to their operating positions, and see that they ride against the ribbon on each spool.
9. Install paper and close the platen and formscale.

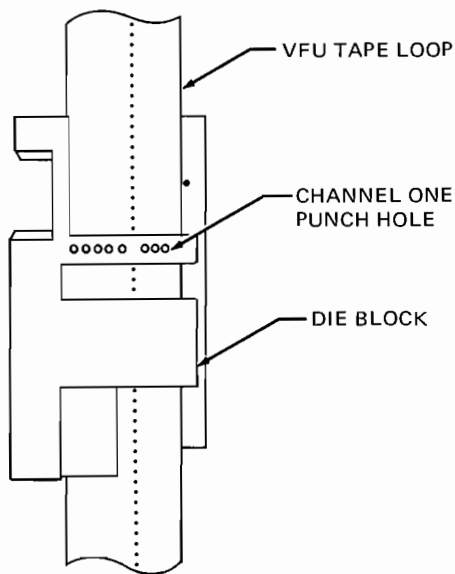


Figure 5
DIE BLOCK LOCATIONS
FOR PUNCHING VFU TAPE LOOPS

VFU TAPE LOOP CONSTRUCTION

The vertical format unit uses eight channel paper tape with 10 sprocket holes per inch. The tape must be no less than 12 inches long (120 sprocket holes) and no more than 19 inches long (190 sprocket holes). The VFU tape loop length must correspond to the form length for proper forms handling. The printer is shipped with a VFU tape loop for 11 inch forms and it is punched for top of form control only.

The printer accessory package contains a supply of paper tape (Part No. 603709-9), mylar splices (Part

No. 400825-10) and a splicing slide (Part No. 603628-1).

To prepare a VFU tape loop, load the desired forms in the printer and proceed as follows:

1. Be sure the printer power is OFF. Insert a suitable length of VFU tape and begin feeding it into the VFU.
2. Using the clutch knob, advance the paper to the top of the first form. Remove the punch pin from its holder and punch a hole in channel one by pushing the pin into channel one of the die block. (See figure 5.)
3. Rotate the form to the top of the next form, and again punch a hole in channel one.
4. Repeat step 3.
5. Three top-of-form holes are now punched in the tape. Remove it from the VFU.
6. To splice the tape, align and overlap the first and last top-of-form holes. Keep the tape aligned and cut through the tape at any convenient point where the two ends of the tape overlap. Discard that portion of the tape containing the third top-of-form hole. Apply a Mylar splicing patch, joining the remaining tape end-to-end in a butt splice as shown in figure 6. Make certain the sprocket holes in the tape are aligned with those in the Mylar patch.
7. The tape now contains two top-of-form holes separated by equal lengths of tape.

NOTE: Do not attempt to use an overlap splice, as it will not feed properly through the VFU.

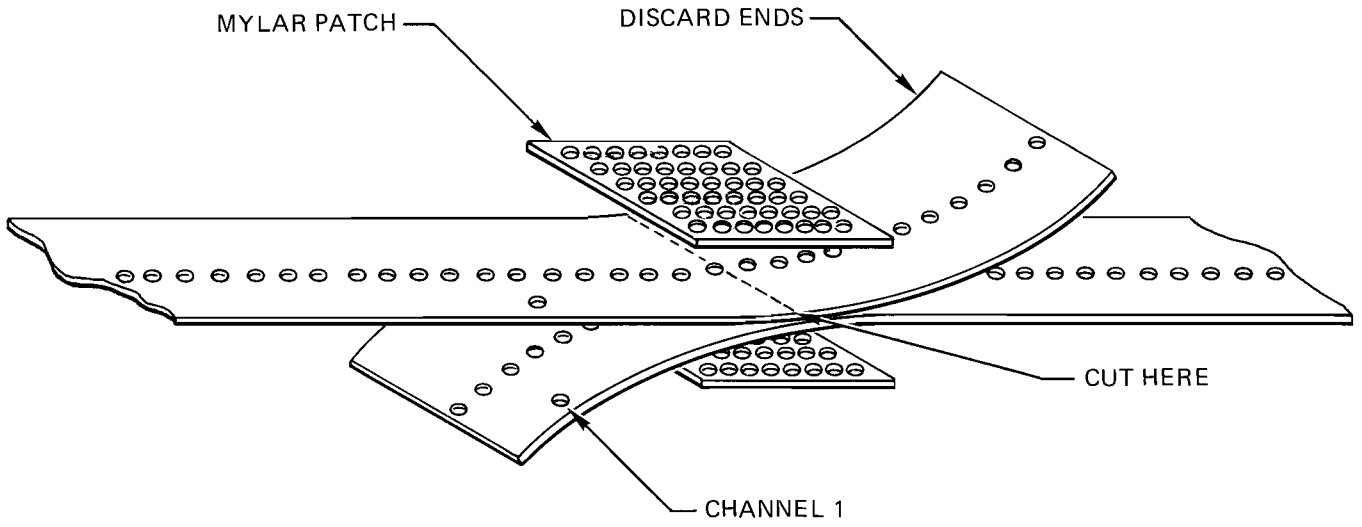


Figure 6
VFU TAPE LOOP SPLICE

Notes

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