

43 TELEPRINTER

DISASSEMBLY/REASSEMBLY

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1. GENERAL

1.01 This section provides disassembly and reassembly procedures for the 43 Teleprinters and their major components.

1.02 This section is reissued to include disassembly and reassembly procedures for the 5-level teleprinter and the tractor for 5- and 8-level teleprinter.

1.03 Disassembly and reassembly information for additional enclosures and paper handling parts is provided in the following paragraphs:

Part	Paragraph
Bustle Cover (Sprocket (Pin) Feed)	3.01
Bustle Cover (Friction Feed)	3.01
Bustle Cover (Tractor Feed)	3.01
Deflector (Sprocket (Pin) Feed)	3.01
Deflector (Tractor Feed)	3.01
Paper Holder (Sprocket Feed)	3.01
Paper Holder (Friction Feed)	3.01
Paper Holder (Tractor Feed)	3.01
Set Cover	3.04
Rear Frame	3.06

1.04 The procedures provided in this section break the terminal down into subcomponents. The appropriate parts section illustrates the arrangement of subcomponents and parts — Section 574-500-800, 43 Teleprinter 5- and 8-Level, Parts, and Section 574-503-800, 43 Enclosures and Paper Handling Parts.

Caution: Remove all power from the set before performing any component replacement.

1.05 When removing a major component or part from the terminal, do not pry or force parts to provide the necessary clearance for removal. Follow the removal procedure and note how each part is removed and the sequence of its removal so that proper reassembly can be accomplished. For reassembly, reverse the removal procedure except where different instructions are given.

1.06 Reference in the procedures to left and right and up or down and top or bottom, etc, refer to the 43 terminal in its normal operating position.

SECTION 574-500-720

1.07 Refer to Maintenance Tools, Section 574-005-800 for a complete listing of the various types of hand tools available for maintenance of Teletype Corporation equipment. For a listing of the tools required to perform the disassembly and reassembly procedures, refer to 2. TOOLS REQUIRED.

1.08 When ordering replaceable components, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP410205).

1.09 Some parts that are not listed in the parts sections are shown as necessary to the disassembly procedures such as screws, ring retainers, etc. Most of these parts are common to other Teletype Corporation product lines and, if needed, may already be available in field repair kits or can be ordered.

1.10 The keyboard circuitry can be damaged by static discharge. The 346392 static discharge ground strap is available for use by service personnel. Maintenance spares are provided in antistatic bags which should be saved for reuse when returning components for repair.

1.11 Containers and packing materials retained from maintenance spares should be saved and reused when returning defective components for repair.

1.12 Adjustment information is provided in Section 574-501-700, 43 Friction Feed and Sprocket Feed Printer Adjustment and Spring Tension, Section 574-501-701, 43 Tractor Feed Printer Adjustment and Spring Tension and Section 574-503-700, 43 Enclosures and Paper Handling Adjustments.

2. TOOLS REQUIRED

2.01 The following tools may be required when performing the station disassembly and reassembly procedures. Most of these items should normally be present in standard maintenance tool kits.

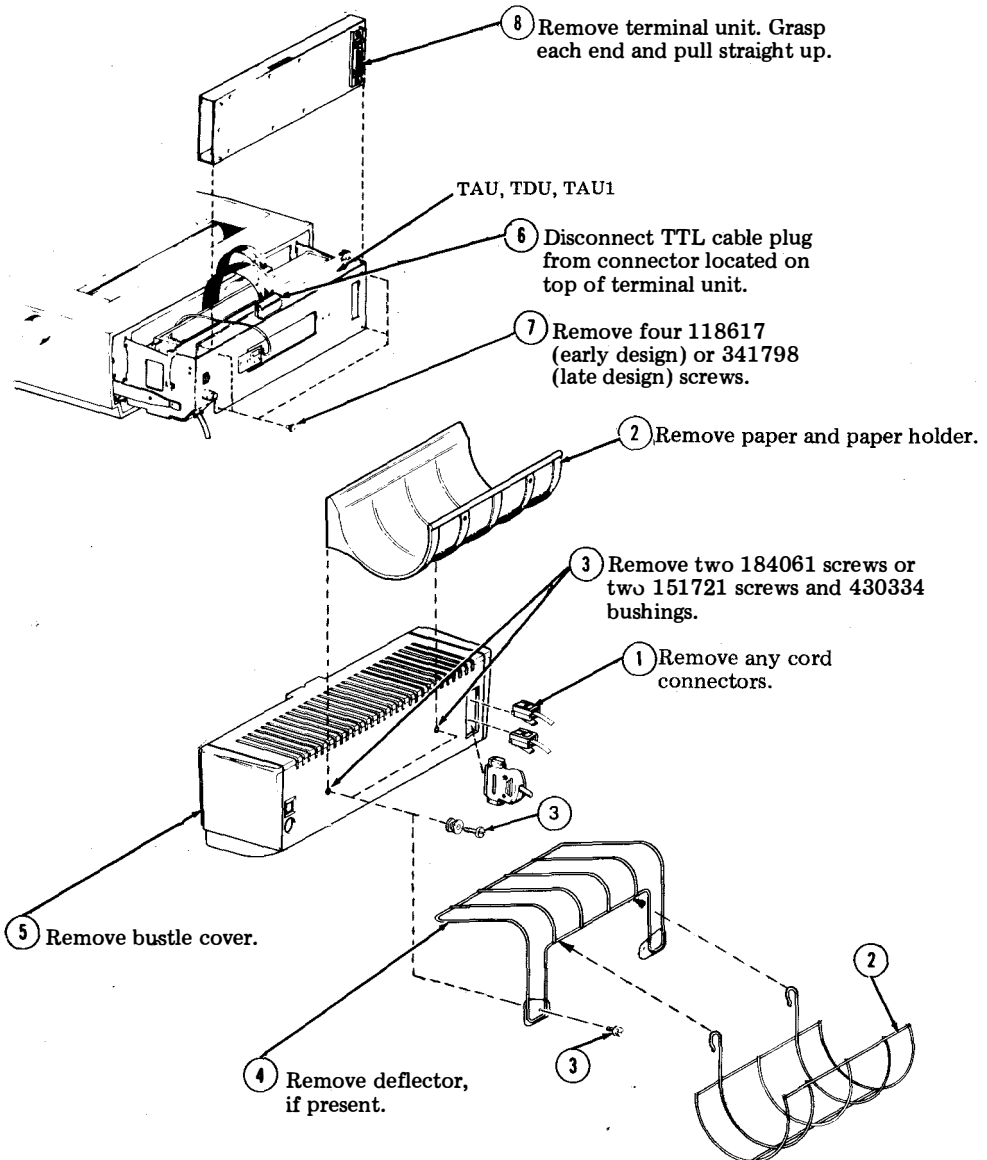
Part No.	Tools
129534	Wrench, Open End, 3/16 Inch and 1/4 Inch
135676	Handle
135677	Bit, 1/4 Inch Socket
135678	Bit, 5/16 Inch Socket
95368	Screwdriver, 1/8 Inch, 2 Inch Blade
100982	Screwdriver w/clip 1/4 Inch, 6 Inch Blade
346392	Strap, Static Discharge
407326	Extractor, I.C.

3. DISASSEMBLY/REASSEMBLY

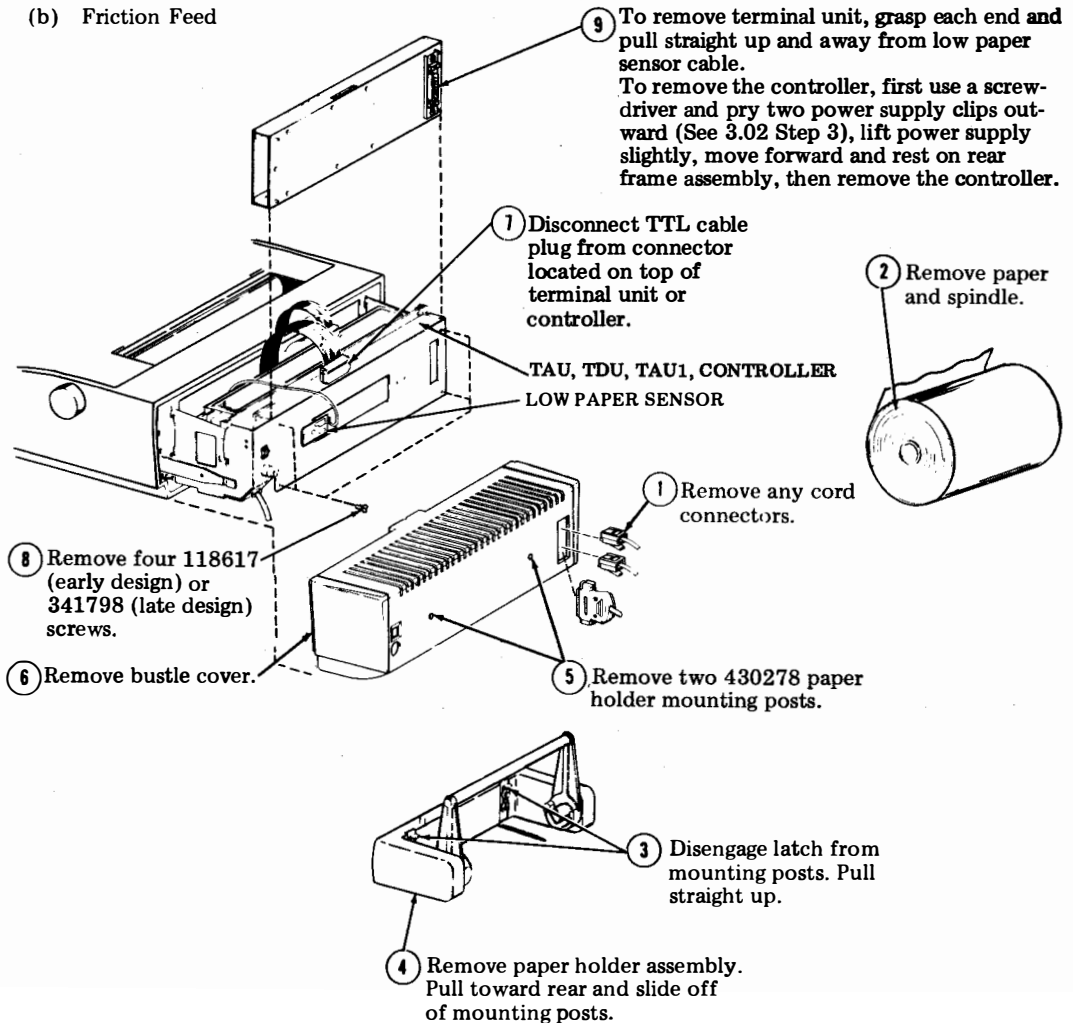
153A1 TERMINAL DATA UNIT (TDU), 861B1 TERMINAL AUXILIARY UNIT (TAU), 410755 TERMINAL AUXILIARY UNIT (TAU1) AND 411901 CONTROLLER CARD ASSEMBLY

3.01 To remove the terminal unit:

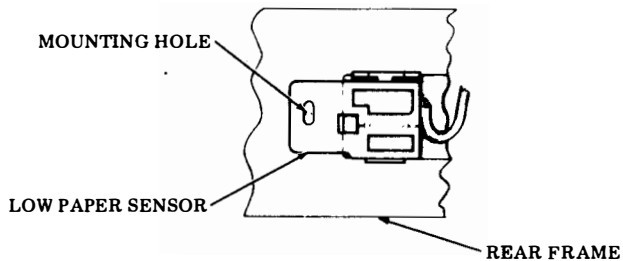
(a) Sprocket Feed



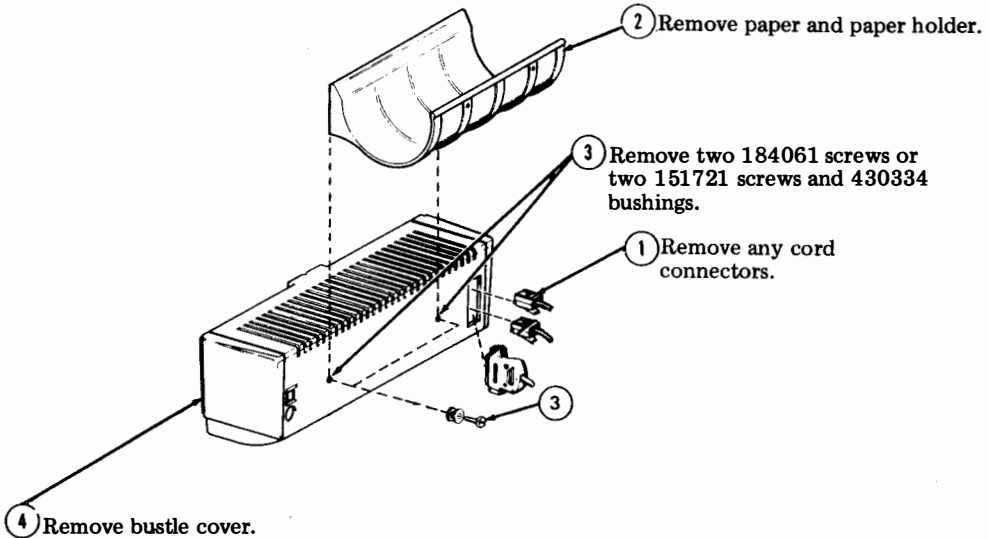
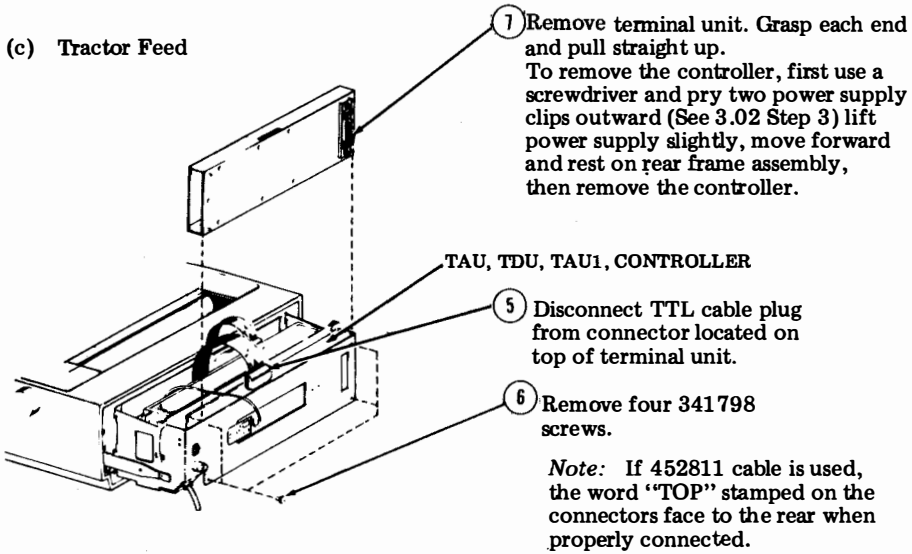
(b) Friction Feed



Note: In reassembly, align low paper sensor mounting hole with mounting hole in rear frame.



(c) Tractor Feed

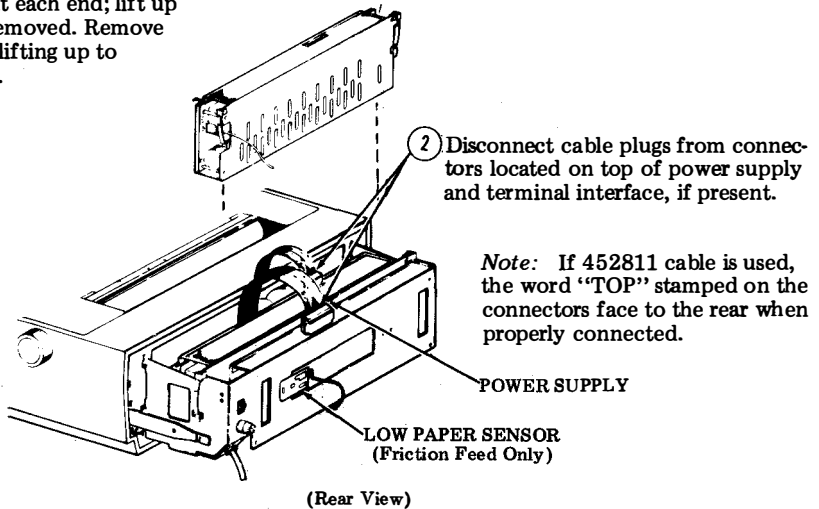


430700 or 430780 POWER SUPPLY

3.02 To remove power supply:

- ① For Sprocket Feed: Remove paper holder, deflector, if present, and bustle cover. Perform 3.01 Steps 1 through 5.
- For Friction Feed: Remove paper holder and bustle cover. Perform 3.01, Steps 1 through 6.
- For Tractor Feed: Remove Paper holder and bustle cover. Perform 3.01, Steps 1 through 4.

- ④ Grasp power supply at each end; lift up until ac plug can be removed. Remove ac plug and continue lifting up to remove power supply.

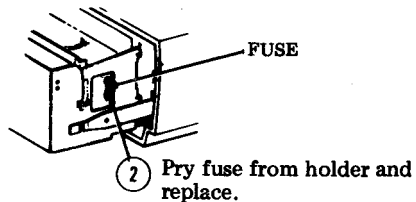
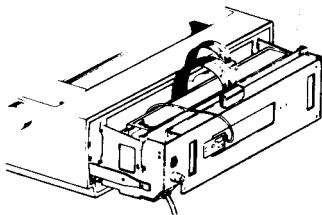


- ③ Use screwdriver and pry two clips (left and right) outward.-

120139 POWER SUPPLY FUSE

3.03 To remove the power supply fuse:

- ① For Sprocket Feed: Remove paper holder, deflector and bustle cover. Perform 3.01, steps 1 through 5.
- For Friction Feed: Remove paper holder and bustle cover. Perform 3.01, Steps 1 through 6.
- For Tractor Feed: Remove paper holder and bustle cover. Perform 3.01, Steps 1 through 4.



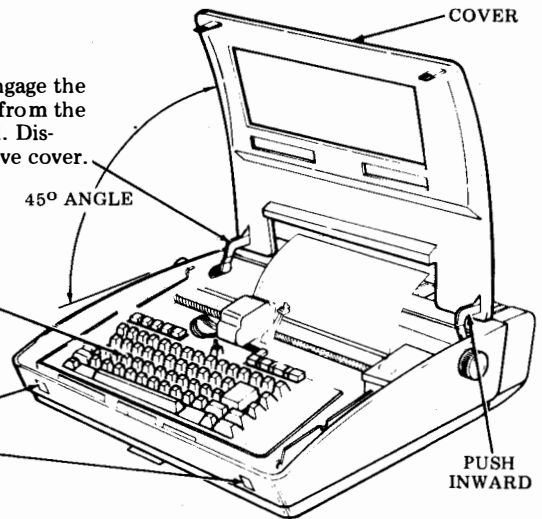
43 KEYBOARDS

3.04 To remove the keyboard:

- ② If cover is being removed, disengage the button end of one of the arms from the dovetail slot by pushing inward. Disengage the other side and remove cover.

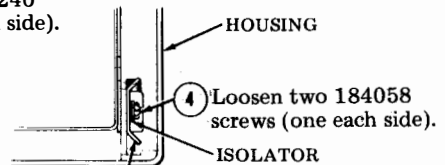
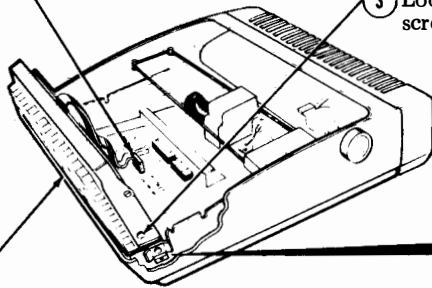
Character keys and some control keys are not present on RO keyboards.

- ① Depress locking tabs (part of cover) to release and lift cover. If cover is being removed, open to 45 degree angle and hold, otherwise open fully to rear.



- ⑥ Disconnect keyboard cable plug from logic card.

- ③ Loosen two 181240 screws (one each side).

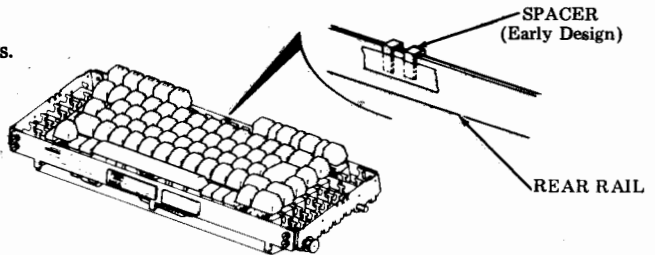


(Top View)

- ⑦ Tilt top of clamps outward, releasing front isolators connected to the keyboard.

- ⑤ Lift rear edge of keyboard and pivot it forward on front mounting bushings.

- ⑧ Move lower edge of keyboard rearward until isolators are free. Remove keyboard.



Note 1: In reassembly, perform the KEYBOARD TO COVER ALIGNMENT adjustment.

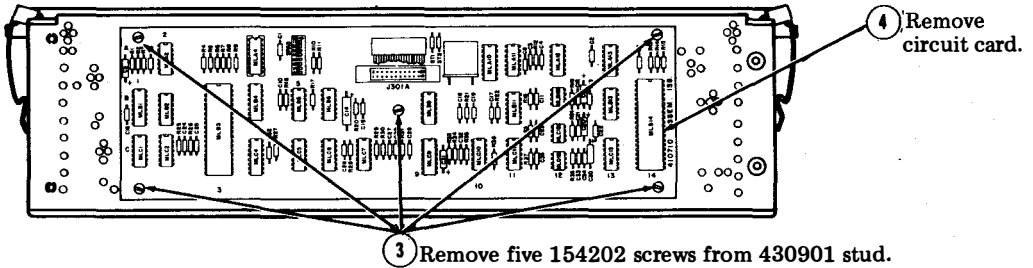
Note 2: When replacing the cover or indicator scale, perform the COLUMN INDICATOR POSITIONING adjustment.

Note 3: Loose keyboards are shipped with 181240 screws and 346397 isolators furnished in a loose envelope. These parts must be assembled to the keyboard before installing into the printer side frames.

410710 ANSWER-BACK CARD

3.05 To remove the answer-back card:

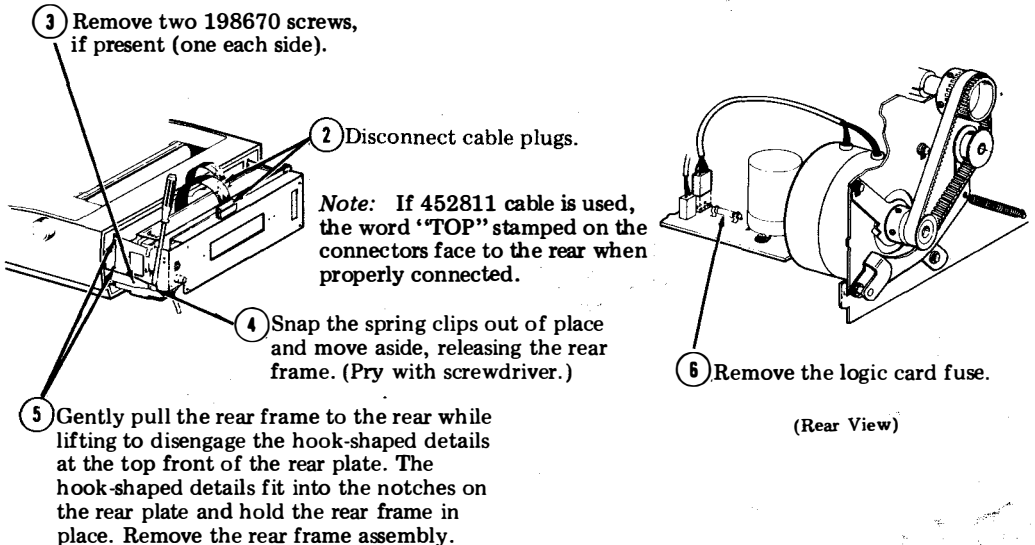
- ① Remove power supply. Perform 3.02.
- ② Remove logic card TTL cable.



143307 LOGIC CARD FUSE

3.06 To remove the logic card fuse:

- ① For Sprocket Feed: Remove paper holder, deflector and bustle cover. Perform 3.01, Steps 1 through 5.
For Friction Feed: Remove paper holder and bustle cover. Perform 3.01, Steps 1 through 6.
For Tractor Feed: Remove paper holder and bustle cover. Perform 3.01, Steps 1 through 4.



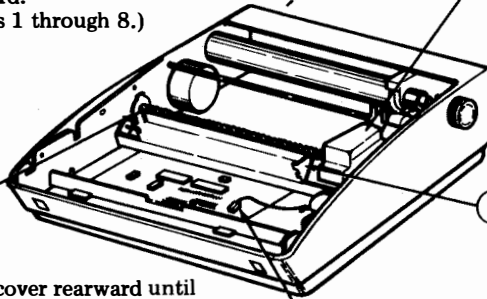
LOGIC CARD

3.07 To remove the basic or buffered teleprinter logic card:

② Remove the keyboard.
(Perform 3.04, steps 1 through 8.)

① Remove the rear frame assembly.
(Perform 3.06, steps 1 through 5.)

③ Move print head and carriage fully to the right.

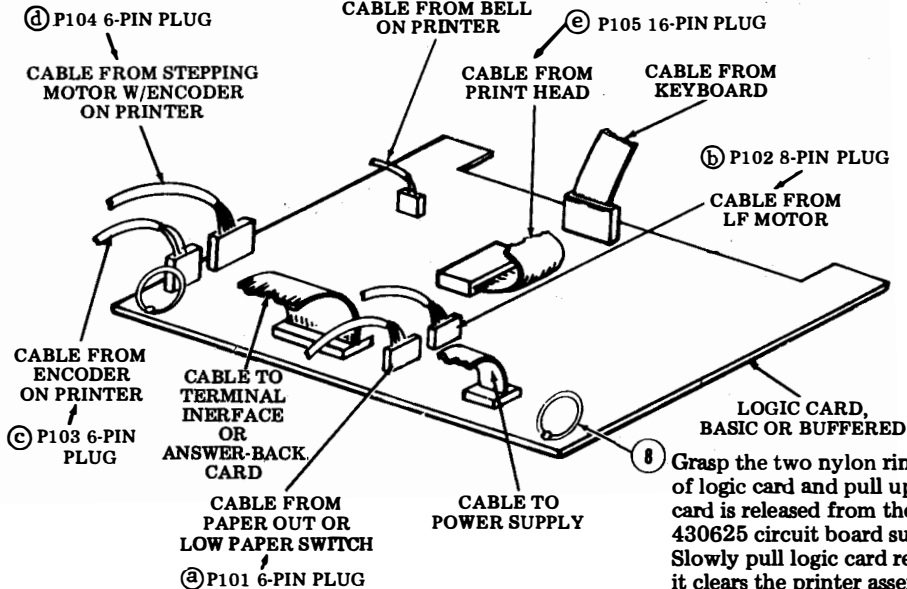


④ Grasp each end of the logic card front cover and push outward on the sides until the locking tabs are free of the logic card.

⑤ Slowly rotate cover rearward until extension on cover aligns with locking hole in side frame. Apply slight leftward pressure until the extension engages the hole in the side frame, locking the cover into position.

⑥ Disconnect bell cable from logic card.

⑦ Disconnect the following plugs located on the logic card:



LOGIC CARD,
BASIC OR BUFFERED

⑧ Grasp the two nylon rings at rear of logic card and pull up until card is released from the two 430625 circuit board supports. Slowly pull logic card rearward until it clears the printer assembly. Push down in middle of logic card, if components touch front cover.

(Rear View)

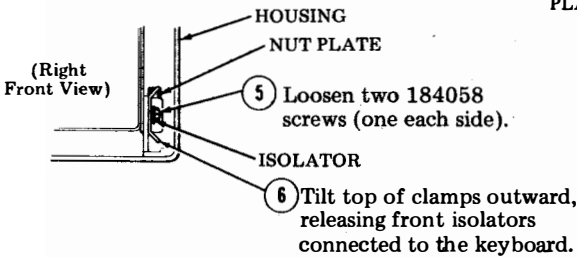
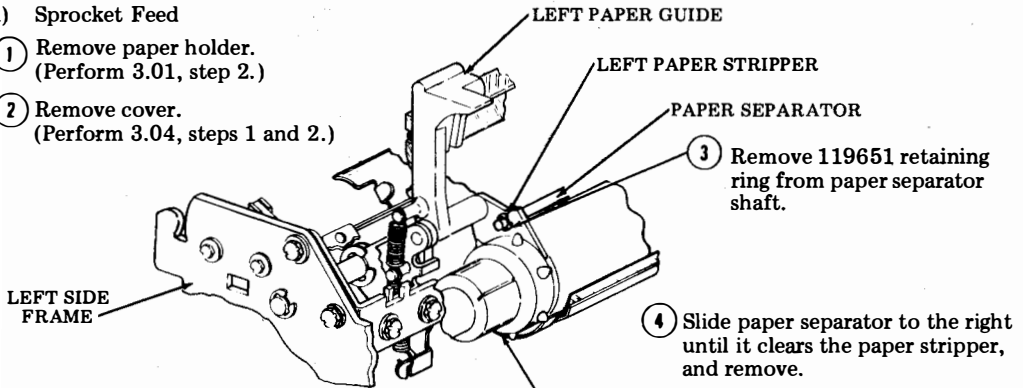
PRINTER

A. Removal

3.08 To remove the printer:

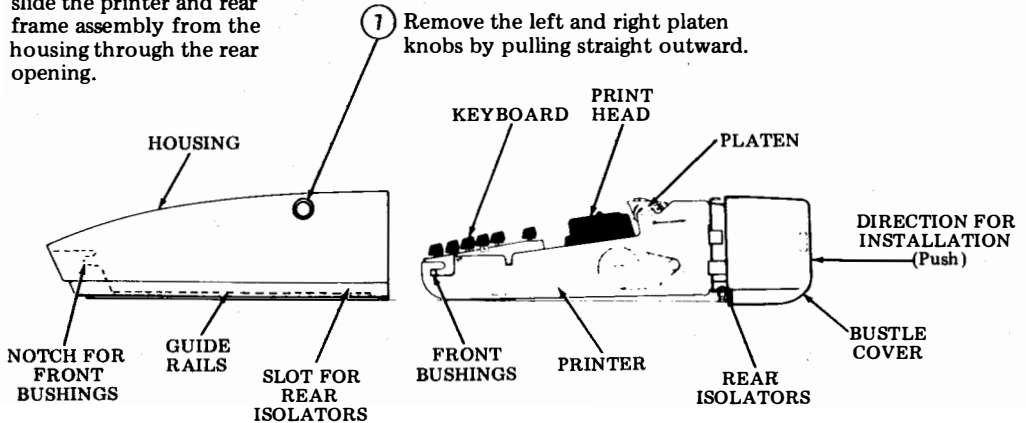
(a) Sprocket Feed

- ① Remove paper holder.
(Perform 3.01, step 2.)
- ② Remove cover.
(Perform 3.04, steps 1 and 2.)



- ③ Remove 119651 retaining ring from paper separator shaft.
- ④ Slide paper separator to the right until it clears the paper stripper, and remove.
- ⑨ Remove the rear frame assembly.
(Perform 3.06, steps 1 through 5.)
- ⑩ Remove the keyboard.
(Perform 3.04, steps 3, 5, 6 and 8.)

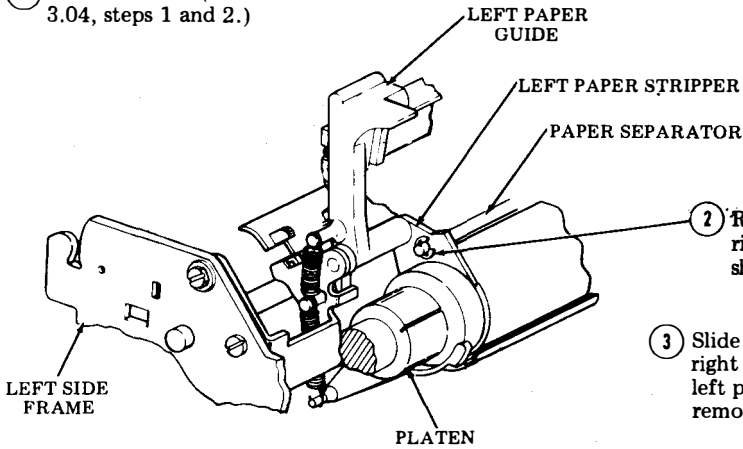
- ⑧ Grasp the bustle cover and slide the printer and rear frame assembly from the housing through the rear opening.



Note: To replace the printer, perform 3.09.

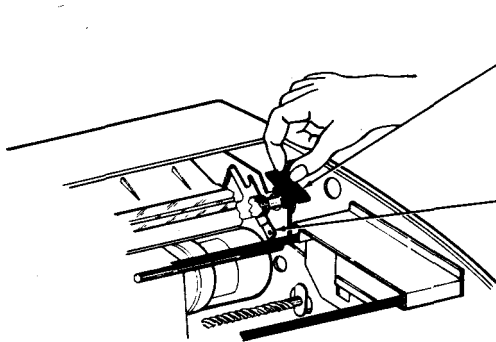
(b) Friction Feed

- ① Remove cover. (Perform 3.04, steps 1 and 2.)



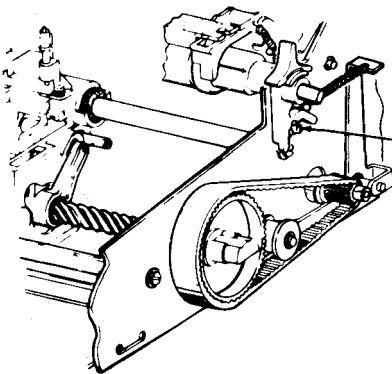
- ② Remove 119651 retaining ring from paper separator shaft.

- ③ Slide paper separator to the right until it clears the left paper stripper, and remove.

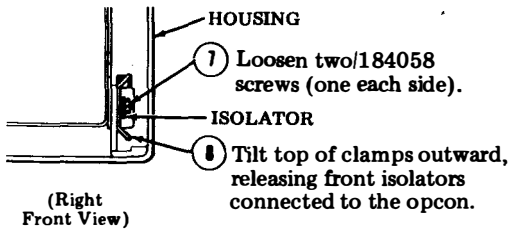


- ⑤ Push paper release to the rear.

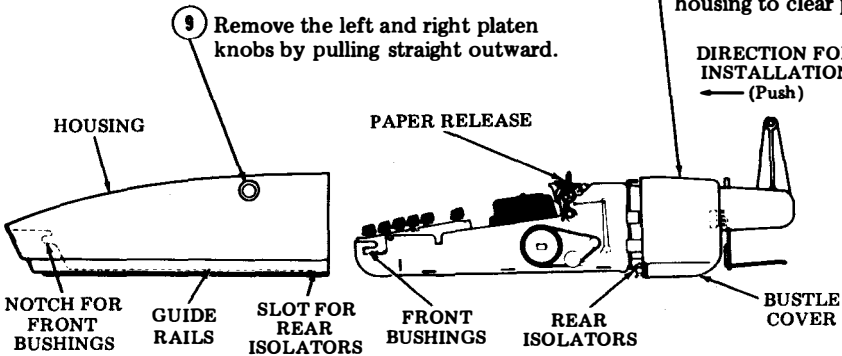
- ④ Push down and to the rear on roller bail lever.



- ⑥ Slide paper release to the right and slowly pull forward until paper release clears 119653 retaining ring on lever shaft.

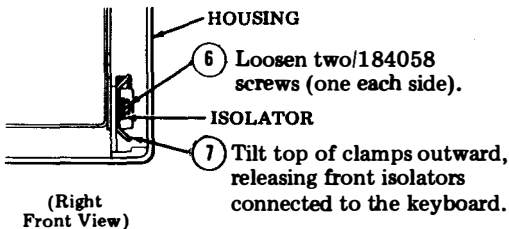
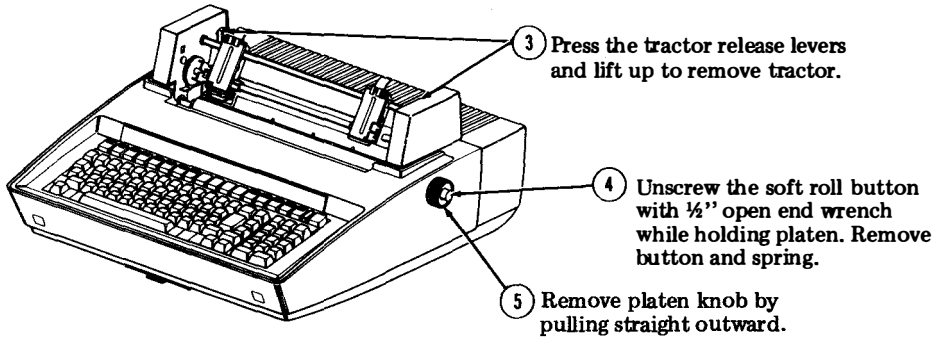


11 Remove the rear frame assembly. (Perform 3.06, steps 1 through 5.)



(c) Tractor Feed

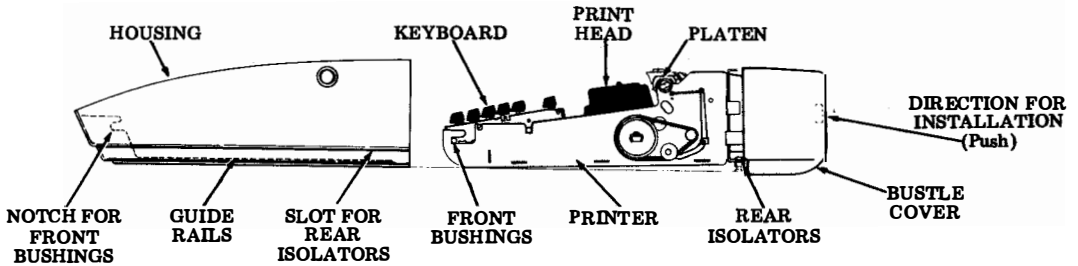
- 1 Remove paper holder. (Perform 3.01, Step 2)
- 2 Remove cover. (Perform 3.04, Steps 1 and 2)



8 Grasp the bustle cover and slide the printer and rear frame assembly from the housing through the rear opening.

9 Remove the rear frame assembly. (Perform 3.06, Steps 1 through 5.)

- ⑩ Remove the keyboard.
(Perform 3.04, Steps 3, 5, 6 and 8.)



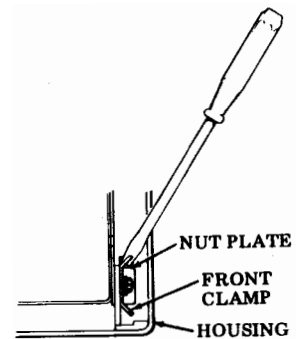
Note: To replace the printer, perform 3.09.

B. Replacement

3.09 To replace the printer:

(a) Sprocket and Friction Feed.

- ① Install the keyboard, if previously removed.
- ② Install the rear frame assembly, bustle cover and deflector, if present.
- ③ Push the printer and rear frame assembly into the housing through the opening in the rear of the housing. There are two molded guide rails in the bottom of the housing to steer the assembly into position.
- ④ Lock the printer and rear frame assembly into position. Insert a screwdriver into the square hole in the nut plate and gently twist (or pry) the screwdriver with enough force to draw the assembly forward.



(Right Front View)

Caution: Do not overtighten the screwdriver.

- ⑤ Tighten the clamp screws.

Note: The two front clamps should be loosely fastened to the nut plate before the assembly is pushed into the housing. Position each clamp so that the front bushings (keyboard) protrude through the large holes in their respective clamps.

- ⑥ Replace the paper separator and platen knobs.
- ⑦ Replace the paper release (friction-feed only).
- ⑧ Replace the cover and paper holder.
- ⑨ Perform the KEYBOARD TO COVER ALIGNMENT adjustment.

(b) Tractor Feed.

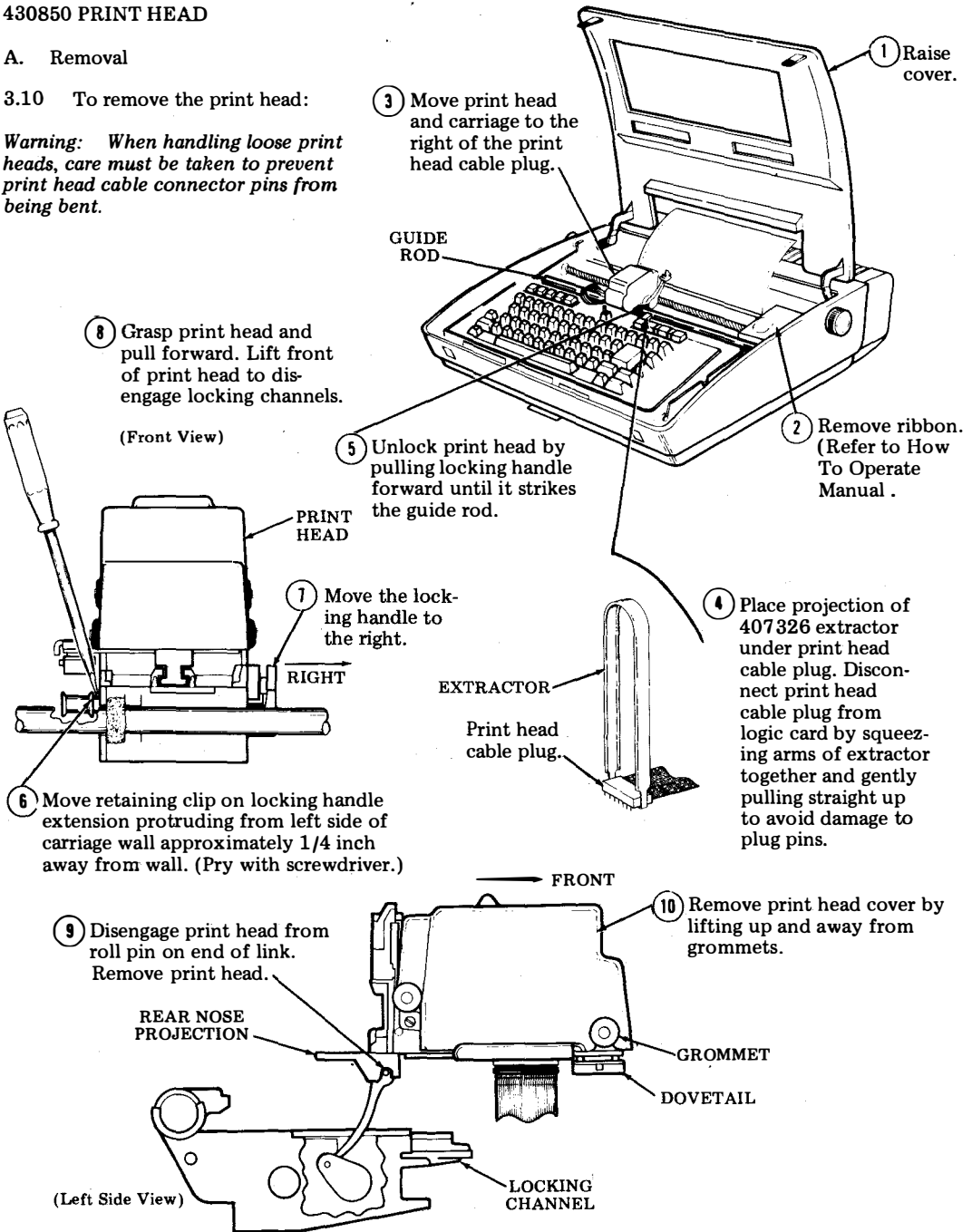
- ① Reverse disassembly procedure.

430850 PRINT HEAD

A. Removal

3.10 To remove the print head:

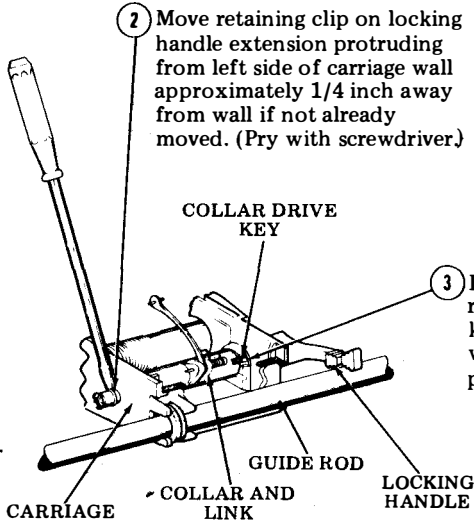
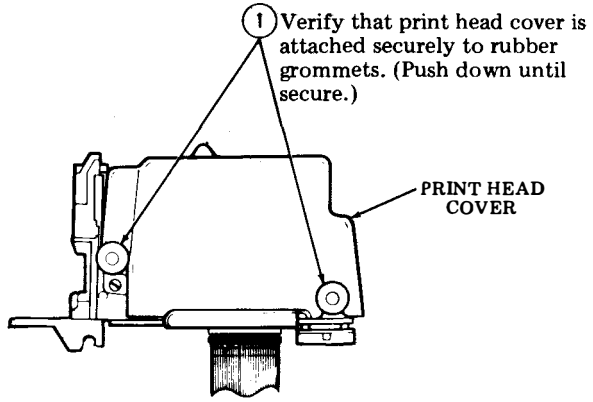
Warning: When handling loose print heads, care must be taken to prevent print head cable connector pins from being bent.



B. Replacement

3.11 To replace the print head:

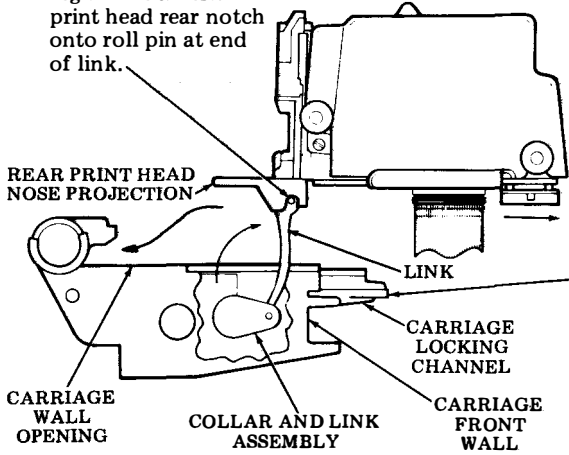
Warning: When handling loose print heads, care must be taken to prevent print head cable connector pins from being bent.



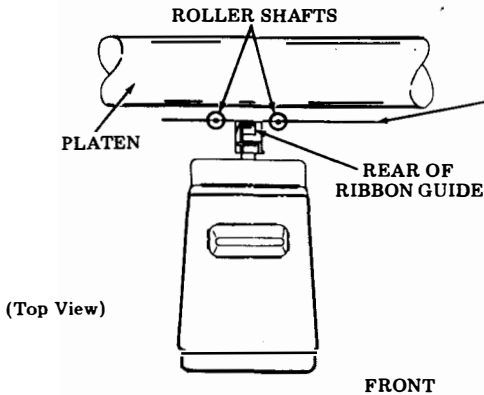
Note: Collar and link may snap rearward.

4 Collar and link must be manually rotated and held toward front of carriage wall by grasping the link. Install print head rear notch onto roll pin at end of link.

5 Hold collar and link forward (by pressing down on the print head) while inserting nose projection in carriage wall opening.

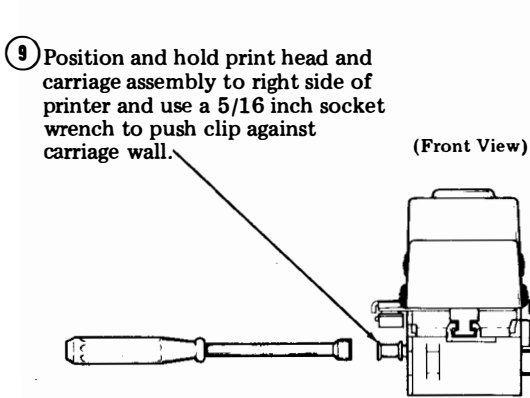


(Left View)



7 Slowly push print head rearward and further into the carriage locking channel until the rear of the ribbon guide is even with center of roller shafts. Apply continuous leftward pressure to locking handle at its pivot shaft, while slowly pulling print head forward until collar drive key on handle engages (snaps) into slot in collar.

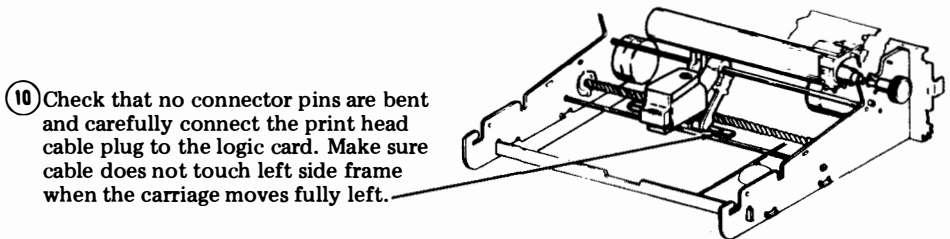
Note: Parts referred to were visible in step 3.



9 Position and hold print head and carriage assembly to right side of printer and use a 5/16 inch socket wrench to push clip against carriage wall.

8 Move the handle all the way to the rear, locking the print head in close proximity to the platen by the additional force necessary to detent the handle. If handle does not move to rear, the drive key did not properly engage the collar slot (step 7).

Note: Check to make sure there is some clearance between print head and platen before detenting handle. Check PRINT HEAD TO PLATEN adjustment.



10 Check that no connector pins are bent and carefully connect the print head cable plug to the logic card. Make sure cable does not touch left side frame when the carriage moves fully left.

11 Install ribbon.
(Refer to How to Operate Manual)