1. GENERAL

1.01 This section covers disassembly and reassembly procedures for the 43 tractor feed printer. Refer to Section 574-501-720 for the 43 friction and sprocket (pin) feed printer Disassembly/Reassembly.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 The printer is not considered a field replaceable item. Any trouble can be corrected by adjustments or by replacement with maintenance spares or other parts listed in Section 574-501-801, 43 Tractor Feed Printer, Parts.

1.04 Procedures are provided to remove individual assemblies and parts and are intended to directly access any assembly or part, insofar as possible, without total disassembly of the unit.

1.05 When removing a subassembly or part from the printer, follow the removal procedure and note the sequence of removal to enable proper reassembly. For reassembly, reverse the procedure except where different instructions are given. Perform any adjustments indicated using Section 574-501-701.

1.06 Disassembly of printer parts except the print head will require the removal of the set housing and rear frame. Refer to Teleprinter Disassembly/Reassembly, Section 574-500-720 for set housing and rear frame removal and replacement procedures.

1.07 Disassembly of the printer motors will require the removal of the logic card.

1.08 Disassembly of the printer lead screw, carriage with post assembly, lead screw nuts, and collar with link will require the removal of the keyboard, if present.

1.09 After replacing printer parts, refer to the lubrication procedures in Section 574-501-711 and lubricate any parts requiring lubrication.

1.10 Some parts that are not listed in the parts sections are shown as necessary to the disassembly procedures such as screws and ring retainers, etc. 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.
1.11 When ordering replaceable parts or components, unless otherwise specified, prefix each part number with the letters “TP” (i.e., TP410055).

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

2. TOOLS REQUIRED

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

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>75765</td>
<td>Hook, Pull Spring</td>
</tr>
<tr>
<td>95368</td>
<td>Screwdriver, 1/8 Inch, 2 Inch Blade</td>
</tr>
<tr>
<td>100704</td>
<td>Screwdriver w/Clip, 10 Inch Blade</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>100982</td>
<td>Screwdriver w/Clip, 1/4 Inch 6 Inch Blade</td>
</tr>
<tr>
<td>108285</td>
<td>Pliers, Long-Nose</td>
</tr>
<tr>
<td>110271</td>
<td>Wrench, Hex Key</td>
</tr>
<tr>
<td>124682</td>
<td>Wrench, Hex Key</td>
</tr>
<tr>
<td>125752</td>
<td>Wrench, 3/16 Inch Socket</td>
</tr>
<tr>
<td>129534</td>
<td>Wrench, Open End, 3/16 Inch and 1/4 Inch</td>
</tr>
<tr>
<td>129536</td>
<td>Wrench, Open End, 7/16 Inch and 1/2 Inch</td>
</tr>
<tr>
<td>135676</td>
<td>Handle</td>
</tr>
<tr>
<td>135677</td>
<td>Bit, 1/4 Inch Socket</td>
</tr>
<tr>
<td>135678</td>
<td>Bit, 5/16 Inch Socket</td>
</tr>
<tr>
<td>142554</td>
<td>Hook, Pull Spring</td>
</tr>
<tr>
<td>142555</td>
<td>Hook, Push Spring</td>
</tr>
<tr>
<td>151392</td>
<td>Tweezers</td>
</tr>
<tr>
<td>152835</td>
<td>Wrench, Open End, 5/16 Inch and 3/8 Inch</td>
</tr>
</tbody>
</table>
3. DISASSEMBLY/REASSEMBLY

PRINT HEAD WITH COVER

3.01 To remove the print head with cover:

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

*Note*: Print head removal and replacement is also shown in Teleprinter Disassembly/Reassembly, Section 574-500-720.

1. Grasp print head and pull forward. Lift front of print head to disengage locking channels.

(Front View)

2. Remove ribbon. (Refer to How To Operate Manual)

3. Move print head and carriage to the right of the print head cable plug.

4. Place projections of 407326 extractor under print head cable plug. Disconnect print head cable plug from logic card by squeezing arms of extractor together and pulling straight up to avoid damage to plug pins.

5. Unlock print head by pulling locking handle forward until it strikes the guide rod.

6. Move retaining clip on locking handle extension protruding from left side of carriage wall approximately 1/4 inch away from wall. (Pry with screwdriver.)

7. Move the locking handle to the right.

8. Grasp print head and pull forward. Lift front of print head to disengage locking channels.

9. Disengage print head from roll pin on end of link. Remove print head.

10. Remove print head cover by lifting up and away from grommets.

(Left Side View)

LOCKING CHANNEL

LOCKING DOVETAIL

GROMMET

REAR NOSE PROJECTION

GUIDE ROD

PRINT HEAD CABLE

EXTRACTOR
3.02 To replace the print head with cover:

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

1. Verify that print head cover is attached securely to rubber grommets. (Push down until secure.)

2. Move retaining clip on locking handle extension protruding from left side of carriage wall approximately 1/4 inch away from wall if not already moved. (Pry with screwdriver.)

3. Rotate locking handle frontward until it strikes the guide rod then pull locking handle to the right until collar drive key on locking handle engages slot in right carriage side wall. Observe interaction of these parts for use when performing step 7.

   **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.

6. Pivot front of print head down to carriage locking channel.

(Last 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 or label under cover.)
**SPACING MOTOR BELT**

3.03 To remove the spacing motor belt:

1. Push top of spring tension arm rearward to remove belt tension.
2. Remove belt.

**SIGNAL BELL**

3.04 To remove the signal bell:

1. Remove plug from logic card.
2. Remove 184055 screw and 181461 gong.
3. Push to the left to remove 430409 coil assembly, 430411 striker and 430410 spring assembly from 430408 bracket.
4. Remove plunger from coil assembly.
5. Remove 430410 spring from plunger.
6. Remove 453240 Bell Assembly
SPACING MOTOR WITH CABLE AND ENCODER

3.05 To remove the spacing motor:

1. Remove the logic card (if present). Refer to Section 574-500-720.

2. Remove tension arm post and 88857 spring washer.

3. Remove motor belt.

4. Remove 119852 retaining ring.

5. Remove tension arm.

6. Remove spring from spring post.

7. Remove two 112485 mounting screws and two 2191 lockwashers.

8. Remove motor and encoder.

9. Remove cable assembly by lifting upward.

10. Remove 151685 screw, 130683 lockwasher, 104807 flat washer, and 151880 nut.

11. Remove cover.

12. Remove encoder disc assembly. (Insert screwdriver under housing bridge and under bottom hub of encoder. Hold encoder disc with thumb and gently pry screwdriver outward, removing disc. Retain the fastener which is part of the disc assembly.)

13. Remove three 172632 screws and three 130683 lockwashers.

14. Remove housing.

15. Pull pulley with clip off end of shaft.

(Right Side View)

*Note:* In reassembly, make sure disc does not rub on encoder assembly.

*Warning:* Do not pull on metal disc edges as this will deform encoder disc causing it to rub against the encoder.

Page 7
LINE FEED MOTOR

3.06 To remove the line feed motor:

1. Remove the logic card (if present). Refer to Section 574-500-720.

2. Remove 184058 screw.

3. Remove idler gear and bracket assembly.

4. Remove 430470 idler post, two 184067 screws and 430309 spacer.

5. Remove 430480 motor with cable and 10T pinion.

PLATEN

3.07 To remove the platen:

1. Remove release button and platen knob.

2. Loosen two set screws.

3. Remove 163765 retainer.

4. Disengage lever from bearing.

5. Remove 119655 ring and 163765 retainer.


7. Remove platen assembly.

8. Remove gear, lever and right bearing.

9. Remove inner platen shaft and clutch drive* assembly.

10. Remove coupler set screws and remove coupler*, gear and left bearing.

*Clutch drive must be engaged with coupler when coupler set screws are tightened.

Perform PLATEN ENDPLAY adjustment.

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LEAD SCREW

3.08 To remove the lead screw:

1. Remove keyboard if present. (Refer to Section 574-500-720.)

4. Push in right bearing housing to clear right frame. Rotate 90 degrees and spring will force bearing and housing away from side frame. Remove housing with bearing, inner bearing or shim, and spring.

2. Remove spacing belt.

5. Unscrew lead screw from carriage nut and remove through hole in right side frame. Retain left inner bearing, is used, which will be free when lead screw is removed.

(Right Side View)
CARRIAGE WITH POST ASSEMBLY

3.09 To remove the carriage with post assembly:

1. Remove keyboard, if present.
   (Refer to Section 574-500-720.)

2. Remove print head and lead screw
   (perform 3.01 and 3.08).

3. Move carriage to left margin.
   Remove carriage cable from
   logic card.

4. Remove screw and washer
   from each guide rod.

6. Spread clamp with cover and disengage from
   logic card (if present). Spread left side frame
   outward to disengage left end of lower guide
   rod, then pull toward the front to remove lower
   guide rod, two felt washers and clamp with cover.

5. Remove nut and lockwasher
   from each guide rod.

LEAD SCREW NUT

3.10 To remove the lead screw nut:

1. Remove keyboard, if present.
   (Refer to Section 574-500-720.)

2. Remove print head and lead screw
   (perform 3.01 and 3.08).

3. Tilt lead screw nut
   handle outward to
clear retaining
   notch in carriage.
   Rotate counterclockwise (CCW) until
   tabs on nut align
   with opening in
   carriage. Spring
   will force nut
   away from carriage.

4. Remove springs and nuts.

Note: The lead screw nuts are
keyed and must be engaged when
properly installed.

Note: The upper guide rod must be
nickel plated. The lower guide rod may be
nickel plated or black oxide.

Spread left side frame and
remove upper guide rod
and carriage.

LEAD SCREW NUT HANDLE
COLLAR WITH LINK

3.11 To remove the collar with link:

1. Remove keyboard, if present. (Refer to Section 574-500-720.)
2. Remove print head and carriage (perform 3.01 and 3.09).
3. Remove compression ring.
4. Push locking handle to the left and rotate locking handle and collar fully counterclockwise (forward). Pull the handle to the right while slowly rotating handle and collar clockwise (rearward) until key on handle aligns with slot in carriage. Locking handle will pop out.
5. Remove collar with link.

PAPER TRAY

3.12 To remove the paper tray:

1. Remove two paper tray springs, one on each side.
2. Remove pressure roller spring.
3. Remove shaft ring and pull shaft left to remove.
4. Remove pressure roller assembly.
5. Holding switch lever down, move paper tray down and forward (to disengage bracket) and remove tray.

PAPER TRAY
3.13 (a) To remove the tractor mechanism:

Push down on the left and right tractor release levers and lift off the tractor mechanism.

3.13 (b) To disassemble the tractor mechanism:

Push down on the cover latch and pull cover away from tractor mechanism.
Remove the 152871 spring.

Remove 3598 nut, 2191 lockwasher and 7002 flat washer.

Remove side frame.

Remove two 430341 screws.

Remove the 180926 ring retainer, spring and 76450 shim.

Remove 76450 shim, thumb wheel and 143040 ring retainer.

Squeeze the tractor release levers together and slide the tractor assembly off its guide rods.
3.12 (c) To reassemble the tractor mechanism:

1. Squeeze the tractor release levers together and slide the right tractor assembly onto the guide rod and the spline shaft. Be sure the release lever is facing the right side frame.

2. Squeeze the tractor release levers together and slide the left tractor assembly onto the guide rod and the spline shaft. When sliding onto the spline shaft, make sure the pins are aligned horizontally as shown below.

3. Reassemble the remainder of the components removed in (b).