Supplemental Tools and Supplies

SUPPLEMENTAL TOOLS AND SUPPLIES (BSG, XCI)

Lubricants

Part Number	Description
8R181	Drum Dusting Pouch
70H23	LO-17 Oil
70H44	Lubriplate
70P43	Molub 777 Lubricant

Consumables

Part Number	Description
5R112	Developer
6R233	"Toner" (2 lb)
1R53/1R62	Drum
4R53	Cleaning Blade

Cleaning Materials

Part Number	Description
600S4044	Cleaning Absorbent
35P1638	Cleaning Cloth
43P78	Cleaning Solvent
99P3024	Disposable Plastic Gloves
35P1737	Drop Cloth
43P61	Drum Eraser
600S5838	Drum Maintenance Kit
43P45	Film Remover
43P48	Formula "A" All Purpose Cleaner
43H66	Lens and Mirror Cleaner
8R33	Skiptoner Pads
35P3191	Towels
600T908/909	Trigger/Finger Sprayer
95P478	Vacuum Cleaner Bags
43P83	Cleaning Packets

Miscellaneous

Part Number	Description
95P501	Black Bag
117P7419	Corotron Wire
63P365	Glyptal
63P561	Loctite (nonpermanent)
600P84097	Installation Instructions
91S2560	Flip Cards
600T1165	Pin Extractor

Metric Supplemental Kit 600T1647

Part Number	Description
600T91616	Interlock Tool (6)
600T1225	Line Level
600T870	Tool Pouch
600T637	2 mm Hex Key
600T1449	2.5 mm Hex Key
600T639	3 mm Hex Key
600T1402	4 mm Hex Key
600T1451	5 mm Hex Key
600T1452	6 mm Hex Key
600T1566	7 mm Socket (1/4 inch drive)
600T682	7 mm Combination Wrench
600T1448	10 mm Socket
600T1447	10 mm Combination Wrench
600T1403	13 mm Socket (1/4 inch drive)
600T1404	13 mm Combination Wrench
600T1453	150 mm Rule
600T983	1/4 inch Male Drive
600T1505	Mini Test Probes

Paper Tray Accessories

Part Number	Description
9R64	Paper Tray (8 1/2 inches by 14 inches)
9R65	Paper Tray (8 1/2 inches by 11 inches)

3/83

SUPPLEMENTAL TOOLS AND SUPPLIES (RXL)

Lubricants

Part Number	Description
8R90139	Drum Dusting Pouch
70H23	LO-17 Oil
70H44	Lubriplate
70P43	Molub 777 Lubricant

Consumables

Part Number	Description
5R112	Developer
6R90052	"Toner" (2 lb)
1R53	Drum
4R53	Cleaning Blade

Cleaning Materials

Part Number	Description
35P1638	Cleaning Cloth
600T90311	Cleaning Solvent
8R90021	Disposable Plastic Gloves
35P90121	Drop Cloth
43P61	Drum Eraser
600S5287	Drum Maintenance Kit
43P48	Formula "A" All Purpose Cleaner
8R90178	Lens and Mirror Cleaner
8R33	Skiptoner Pads
35P3191	Towels
600T908/909	Trigger/Finger Sprayer
95P478	Vacuum Cleaner Bags
600S4372	Lint Free Cloth
43P69	Photoreceptor Polish (7 oz.)
600S4653	Polyurethane Pads
8R90019	"J" Cloth
43P83	Cleaning Packet
8R90166	Lens and Mirror Cleaner (Packet of 1)
8R90179	Antistatic Lens Cleaner

Miscellaneous

Part Number	Description
95P501	Black Bag
117P7419	Corotron Wire
63P365	Glyptal
6RT90352	Loctite (nonpermanent)

Metric Supplemental Kit 600T1647

Part Number	Description
600T91616	Interlock Tool
600T1225	Line Level
600T870	Tool Pouch
600T637	2 mm Hex Key
600T1449	2.5 mm Hex Key
600T639	3 mm Hex Key
600T1402	4 mm Hex Key
600T1451	5 mm Hex Key
600T1452	6 mm Hex Key
600T1566	7 mm Socket (1/4 inch drive)
600T682	7 mm Combination Wrench
600T1448	10 mm Socket
600T1447	10 mm Combination Wrench
600T1403	13 mm Socket (1/4 inch drive)
600T1404	13 mm Combination Wrench
600T90071	150 mm Rule
600T91229	1/4 inch Male Drive
600T1505	Mini Test Probes

Paper Tray Accessories

Part Number	Description
9R64	Paper Tray (8 1/2 inches by 14 inches)
9R65	Paper Tray (8 1/2 inches by 11 inches)

12/83

Remove the top cover - to check the RCS

What have you got to loose?

Adjustments

TOP COVER

Purpose

The purpose is to position the top cover around the control console.

Check

CHECK THAT THERE IS AN EVEN SPACE AROUND THE CONTROL CONSOLE (FIGURE 1).

Adjustment

1. DISCONNECT MAIN POWER CORD.
2. SCRIBE LOCATION OF BRACKETS AND LOOSEN THE SCREWS (FIGURE 2).
3. POSITION THE TOP COVER EVENLY AROUND THE CONTROL CONSOLE.

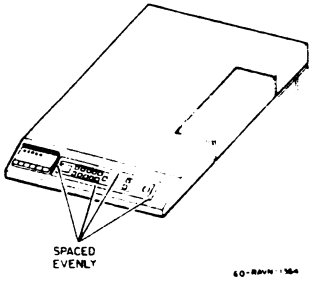


Figure 1. Top Cover Centered Around the Control Console

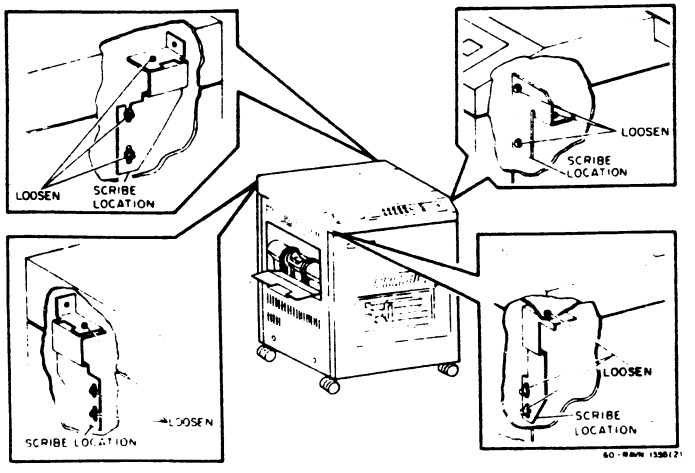


Figure 2. Adjustment of Top Cover

4. ADJUST COVER SO THAT DISTANCE FROM RIGHT SIDE OF FRAME IS 11.5± 4.5 mm AT FRONT AND REAR FRAMES (FIGURE 3).
5. ADJUST COVER SO THAT DISTANCE FROM REAR FRAME IS 72.5± 1.0 mm (FIGURE 4).
6. ADJUST COVER VERTICALLY BY RETURNING BRACKETS TO SCRIBE LINES.

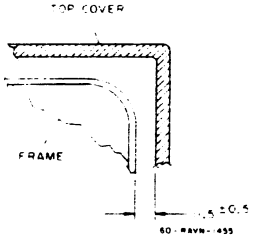
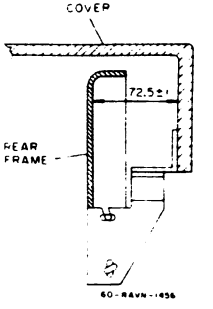


Figure 3. Adjusting the Right Side of Top Cover to Frames



Frame 4. Adjusting the Top Cover to Rear Frame

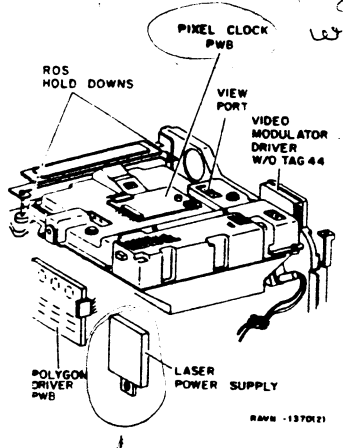
10 (HARRY pages coming through (that was in April 96 (
John does not think that a fuse is causing the problem.
Most likely the "START OF SCAN" is out of whack!

Still believe that this is where the problem is. Something is "just" slightly out of adjustment since the printer worked well before all major things must be in order.

ROS

Location of Major Components

RASTER OUTPUT SCANNER: WITH THE DUST COVER

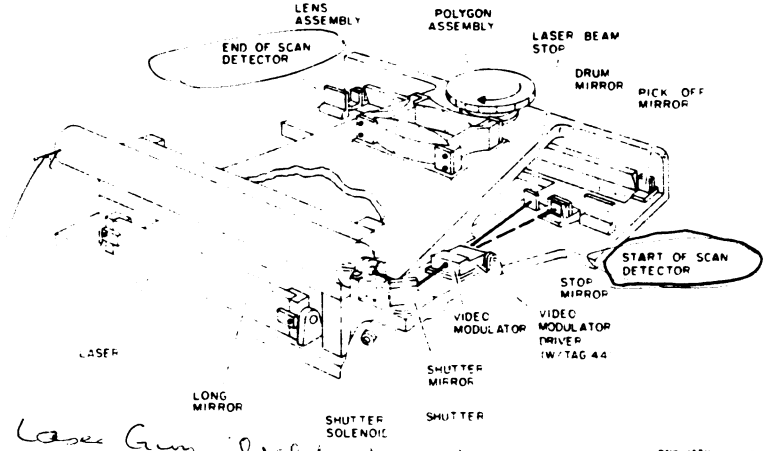


Sometimes it helps to gently move the wires on the pixel clock

We had a faulty one -

12/83

RASTER OUTPUT SCANNER: WITHOUT THE DUST COVER



Laser Gun, held down by a spring which can be adjusted. It will change the beam.
Once dust cover is removed, print test pattern (or selftest). As it starts printing blow a little "smoke" and you can clearly see the laser beams.

3/83

Service Notes

PRODUCT CODES 8040 ONLY

Throughout this documentation, you will see reference made to **B1 ONLY** or **B2**. You will be able to identify the differences in these builds by the following product codes:

US	60Hz	B1	876
US	60Hz	B2	909
XCI	60Hz		909C
RX	50Hz 220v		829

REMOVAL OF ROS MODULATOR DRIVER GROUND ISOLATION

The insulating gasket 35P87057, positioned between the modulator driver assembly and the ROS base casting, and the four isolating shoulder washers 28P20500 **have been eliminated** from the recent build of 62S20921 ROS Assemblies (Tag 101) and all SID ROS Assemblies, 62S1680. The elimination of this ground isolation will result in better EME standards for the Printer.

When servicing the Printer in this area, do not be concerned over the lack of this gasket and washers. Do, however, note the differences in the Service Data Procedures.

ROS INTERCHANGEABILITY

With the advent of the 920 series (62S20920 and 62S20921), ROS assembly questions have occurred concerning their interchangeability with the earlier 850 series ROS (mainly 62S20852). The following outline should help to eliminate this confusion.

62S20920/62S20921 are completely interchangeable with each other.

62S20920 - Major feature changes from the 850 series were the fixed mounting of the long mirror (M-3) and the modulator driver assembly being moved internal to the ROS assembly itself.

62S20921 - Changes mainly center around improvements in the manufacture of this assembly. The material for the scan detector brackets was changed to allow better adjustment over the complete vertical range. The optics cover was redesigned to give better clearance between internal optical components.

62S20920 and 62S20921 can be used in any earlier configuration Printer. Just remember that replacing an 850 series ROS with a 920 series ROS will result in extra components (external modulator driver and coaxial cable to pixel clock board) that were required to support the earlier configuration. These components can be removed and used as spares to support other Printers.

It is not recommended that any 920 series ROS be replaced with an earlier 850 series ROS. The 920 series ROS is a more reliable assembly. It has a fixed long mirror (M-3), which solves a possible beam-drift problem in the previous 850 configurations. Extra components (modulator driver, mounting hardware, and coaxial cable to pixel clock board) are also required when reverting back to the earlier 850 configuration series.

5/85

Repairs

RASTER OUTPUT SCANNER (ROS)

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE SIDE COVERS
3. REMOVE REAR COVER.
4. REMOVE TOP COVER.

WARNING HIGH VOLTAGE
Ground male power connector to printer frame. There may be a residual charge remaining on the laser tube.

5. REMOVE ROS.
   a. Remove laser cover (Figure 1)
   b Disconnect and short out the laser power connector (Figure 2).
   c. Disconnect shutter solenoid P/J30.
   d Disconnect the video cable and P/J29 from pixel clock PWB and swing pixel clock PWB over back of machine (Figure 1).
   e Disconnect J12 from the polygon driver PWB
   f Without Tag 44: Disconnect RF connector from video modulator driver.
   g. Loosen the two ROS hold-downs.
   h. Loosen the front adjustment setscrew.
   i. Remove hold-down clamp.

CAUTION
Be careful when disconnecting the lower ground wire so that you do not drop the nut and star washer.

   j. Disconnect the laser ground wire on the bottom of the casting.

REPLACEMENT

CHECK THE FOLLOWING:

Registration and Skew (8040).

Electrostatic Series.

ROS Skew (2700).

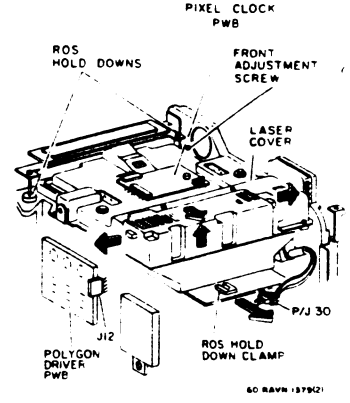


Figure 1. Removal of ROS

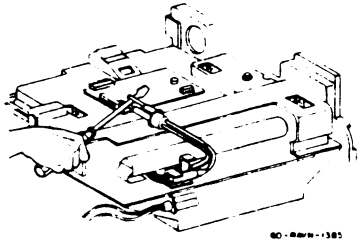


Figure 2. Shorting Out Power Connector

5/85

Repairs

POLYGON ASSEMBLY

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE TOP COVER.

CAUTION

Remove laser cover.

3. REMOVE THE DUST COVER.
4. DISCONNECT P/J39 (FIGURE 1).

CAUTION

Do not remove polygon cover.

5. REMOVE THE THREE HEX HEAD SCREWS AND POLYGON ASSEMBLY.

REPLACEMENT

SEE FIGURE 1.

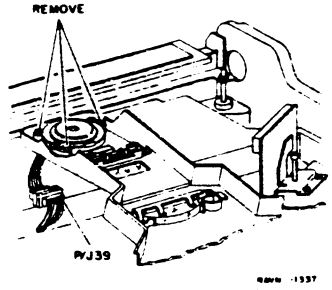


Figure 1. Removal/Replacement of Polygon Assembly

START OF SCAN/END OF SCAN DETECTORS

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE TOP COVER.

CAUTION,

Remove laser cover.

3. REMOVE THE DUST COVER.
4. REMOVE APPROPRIATE SCAN DETECTOR.
   a. Disconnect appropriate P/J.
   b. Remove the two screws and the scan detector (Figure 1).

REPLACEMENT

1. TURN ADJUSTING SCREW COUNTERCLOCKWISE UNTIL IT IS FLUSH WITH THE BOTTOM OF BRACKET.
2. PUSH THE SCAN DETECTOR TOWARD DEVELOPER HOUSING AND TIGHTEN MOUNTING SCREWS.
3. INSTALL THE DUST COVER AND THE LASER COVER.
4. ADJUST THE SCAN DETECTOR.

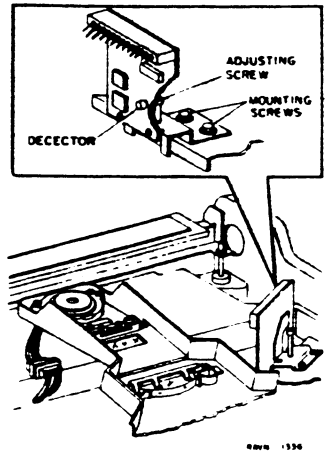


Figure 1. Removal of Detector

VIDEO MODULATOR DRIVER: WITHOUT TAG 44

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE TOP COVER.
3. DISCONNECT P/J26 (FIGURE 1).
4. DISCONNECT P/J42.
5. DISCONNECT P/J28.
6. REMOVE RTN CONTROL KNOB.
7. LOWER THE CONTROL CONSOLE.
8. REMOVE VIDEO MODULATOR DRIVER

REPLACEMENT

NOTE: The insulating material must be placed between the frame and video modulator driver.

1. CHECK FOR GREATER THAN 5K OHMS BETWEEN FRAME AND CASE OF VIDEO MODULATOR DRIVER WHEN SERVER IS CONNECTED.
2. CHECK THE ELECTROSTATIC SERIES

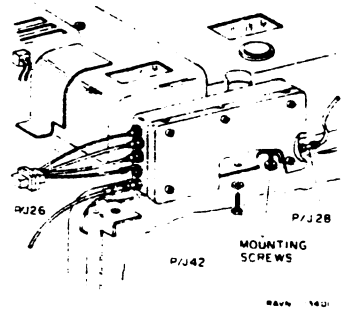


Figure 1. Removal of Video Modulator Driver

SHUTTER SOLENOID

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE LEFT SIDE COVER.
3. DISCONNECT P/J30 (FIGURE 1).
4. UNSCREW SHUTTER SOLENOID.

REPLACEMENT

NOTE: Discard plunger from new solenoid.

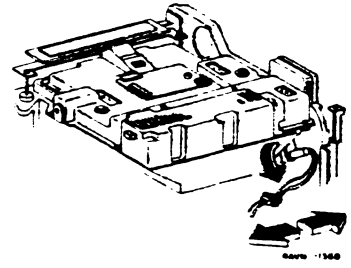


Figure 1. Removal of Shutter Solenoid

This page did not go thru — after cleaning / lubric

CALL me once you get this

Front of printer — behind door — shows "TAGS 4"

TAG 17 only

Adjustments

10. IF THE SCAN BEAM IS LOWER THAN THE INCOMING BEAM (FIGURE 4), TURN THE ADJUSTING SCREW CLOCKWISE TO BRING THE BEAM UP. THE INCOMING BEAM AND THE SCAN BEAM MUST BE THE SAME HEIGHT FOR PROPER ALIGNMENT, AS SHOWN IN FIGURE 5.
11. CHECK/ADJUST SOS AND EOS DETECTORS.
12. SWITCH OFF PRINTER POWER.
13. REPLACE ROS DUST COVER AND INSTALL THE PIXEL CLOCK PWB.
14. CHECK/ADJUST ELECTROSTATICS.
15. ASSEMBLE PRINTER AND MAKE FIVE PRINTS OF SETUP TEST PATTERN.

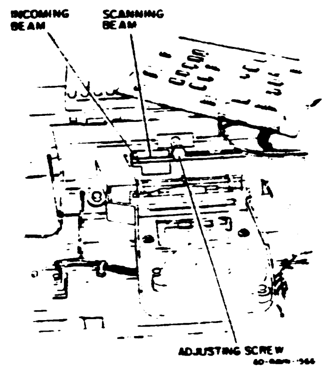


Figure 4. Scanning Beam Low

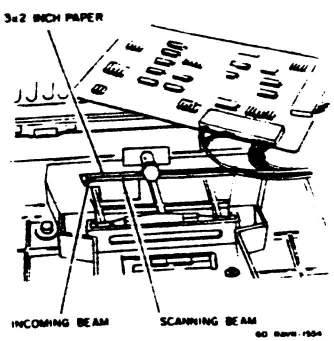


Figure 5. Scanning Beam Properly Aligned

Adjustments

START OF SCAN/END OF SCAN DETECTORS: WITHOUT TAG 17

Purpose

The purpose is to adjust the scan detector so that laser beam will cross detector at the center of the detector.

Adjustment

1. REMOVE TOP COVER.
2. CONNECT MULTIMETER BETWEEN TP1 AND J21 PIN 3 (FIGURE 1).
3. REMOVE THE SCAN DETECTOR ACCESS THE COVER.
4. ENTER INTERNAL DIAGNOSTIC PROGRAM:
   a. Without Tag 10 Printers: 5
   b. With Tag 10 Printers: 3-5.
5. ADJUST THE SCAN DETECTOR UNTIL METER READS GREATER THAN 4 VDC, THEN CONTINUE TO TURN SCREW 1/2 TURN (FIGURE 2).
6. CHECK THE MAGNIFICATION.

NOTE: When adjusting capacitor C20, use the specified voltage. However, during operation, voltage drifts between 5.5 VDC and 8.5 VDC are acceptable.

7. ADJUST C20 ON PIXEL CLOCK PWB TO READ 6.5 ± 0.5 VDC BETWEEN TP1 AND J21 PIN 3 (RET.).
8. CHECK/ADJUST REGISTRATION AND SKEW.

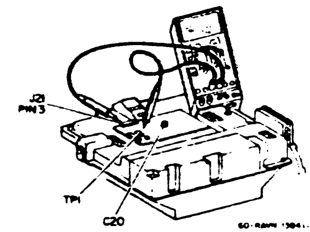


Figure 1. Connecting the Meter

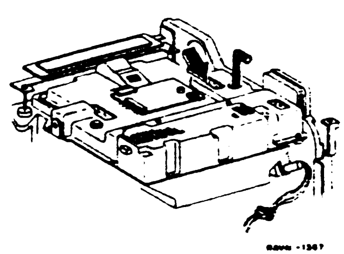


Figure 2. Adjusting the Scan Detector

Cleaning and Lubrication

ROS EXIT WINDOW/DRUM MIRROR

Material required (BSG):
- 43P78 cleaning solvent or
- 43P66 lens-mirror cleaner
- 35P2163 tissue paper
- 99P3024 (large) or
- 99P3051 (medium) or
- 99P3050 (small) PVC gloves

Material required (RXL):
- 8R90176 cleaning solvent
- 8R90015 lens wipes
- 8R90021 disposable gloves

CLEAN

1. DISCONNECT MAIN POWER CORD.

NOTE: Do not remove ROS dust cover or laser cover at this time.

2. REMOVE ROS ASSEMBLY FROM PRINTER.

3. CAREFULLY TURN ROS ASSEMBLY UPSIDE DOWN RESTING IT ON THE COVERS.

NOTE: Some ROS assemblies have five washers that are used as spacers between the exit window door and the bottom of the casting. Care must be taken when removing the exit window door to prevent losing the washers.

4. REMOVE THE EXIT WINDOW DOOR (FIVE SCREWS) (FIGURE 1).

5. CLEAN DRUM MIRROR (FIGURE 2).

   a. Use single tissue folded into a pad (about a 1.5-inch square or a 375-millimeter square).

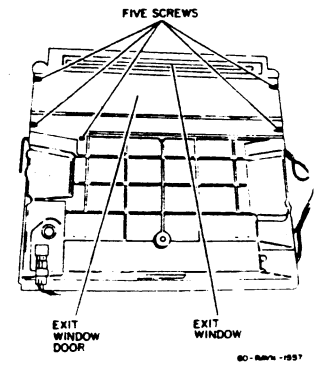


Figure 5. Bottom of ROS

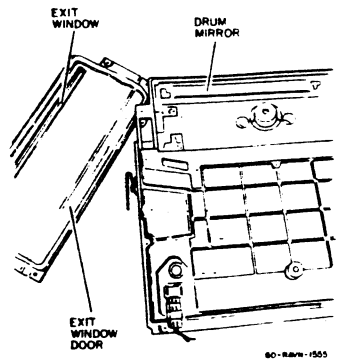


Figure 6. Exit Window Door Removed

WARNING

USE GLOVES TO PREVENT SKIN CONTACT WITH CLEANING SOLVENT 43P78.

   b. Lightly dampen tissue pad with lens-mirror cleaner or solvent.

   c. Wipe the surface of the drum mirror with one continuous, smooth motion (one direction only). Use each tissue pad only once.

   d. Wipe the drum mirror dry with a clean tissue pad before the cleaner completely evaporates.

   e. Tilt the ROS assembly to the light and inspect the drum mirror to make sure there are no smears or streaks from the cleaning solution.

6. CLEAN THE INSIDE AND OUTSIDE SURFACES OF THE EXIT WINDOW DOOR.

   a. Use single tissue folded into a pad (about a 1.5-inch square or a 375-millimeter square).

WARNING

USE GLOVES TO PREVENT SKIN CONTACT WITH CLEANING SOLVENT 43P78.

   b. Lightly dampen tissue pad with lens-mirror cleaner or solvent.

   c. Wipe the surface of the exit window with one continuous, smooth motion (one direction only). Use each tissue pad only once.

   d. Wipe the exit window dry with a clean tissue pad before the cleaner completely evaporates.

   e. Repeat procedure for the other side of the window surface.

   f. Tilt the exit window door to the light and inspect the window to make sure there are no smears or streaks from the cleaning solution.

7. REASSEMBLE EXIT WINDOW DOOR ON ROS.

NOTE: Don't forget the washer spacers if they were originally between the ROS and the casting.

8. INSTALL THE ROS ASSEMBLY ON THE PRINTER.

9. RECONNECT PRINTER POWER AND TURN PRINTER ON.

10. RUN BAR — TEST PATTERN TO CHECK THAT THERE ARE NO LINES ON PRINTS (IN DIRECTION OF PAPER TRAVEL) DUE TO CONTAMINATION.

Adjustments

LASER: WITH TAG 17

WARNING

Do not attempt to adjust laser on printers WITHOUT TAG 17.

Purpose

The purpose is to adjust the laser so that the beam enters the optics in the correct location.

Adjustment

1. CONNECT POWER CORD
2. ENTER INTERNAL DIAGNOSTIC MODE; PRESS **3**; PRESS **TEST**; PRESS **5**; PRESS **TEST**.
3. WHILE VIEWING THE LASER BEAM THROUGH THE VIEW PORT, TURN THE TWO ADJUSTING SCREWS TO ALIGN THE LASER BEAM WITH THE HOLE IN THE MODULATOR (FIGURE 1).
4. ADJUST METER TO 30 VOLT SCALE AND CONNECT METER TO LVPS J25 PIN 11 AND GROUND AND ADJUST MODULATOR GAIN VOLTAGE TO 15 VOLTS DC.
5. CHECK FOR MAXIMUM VOLTS ON START OF SCAN DETECTOR.
   a. Adjust meter to 15 volt scale and connect to P/J29 pin 7 and ground (Figure 2).
   b. Turn the two adjustment screws on laser to obtain maximum voltage (approximately 4-8 VDC).
6. CONNECT METER TO P/J29 PIN 8 AND GROUND AND CHECK THAT END-OF-SCAN DETECTOR IS WITHIN 10 PERCENT OF READING ON START OF SCAN DETECTOR.
7. IF VOLTAGE IS WITHIN 10 PERCENT, PERFORM ELECTROSTATIC SERIES.
8. IF VOLTAGE IS NOT WITHIN 10 PERCENT, GO BACK TO STEP 3.

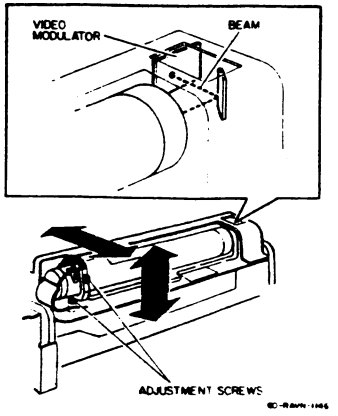


Figure 1. Adjusting the Laser

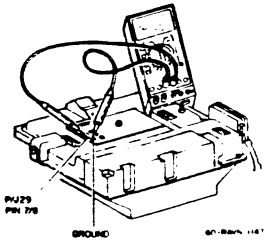


Figure 2. Connecting the Meter

12/83

START OF SCAN/END OF SCAN DETECTORS: WITH TAG 17

Purpose

The purpose is to align the scan detector with laser beam for proper sensing of start or end of scan.

Procedure

1. REMOVE TOP COVER.

CAUTION

Care must be taken when performing this adjustment. Turning the adjustment screw too far in a clockwise direction may deform the detector bracket.

2. ADJUST SCAN DETECTOR (FIGURE 1)

Start of Scan

a. Connect meter between J29-7 and J21-3 on Pixel Clock PWB

End of Scan

a. Connect meter between J29-8 and J21-3 on Pixel Clock PWB.
b. Enter the internal diagnostics.
   (8040 B1) 5.
   (2700/8040 B2) 3-5
c. Remove the scan detector access cover
d. Turn adjusting screw in a clockwise direction until a maximum reading on the meter is achieved and note the position of the hex key.
e. Continue to turn screw in a clockwise direction until the meter reading begins to decrease and note the position of the hex key
f. Turn screw in a counterclockwise direction until the screw (hex key) is in a position halfway between those positions noted in steps d and e above.

3. 2700: CHECK/ADJUST ROS SKEW AND MAGNIFICATION.
4. 8040: CHECK/ADJUST REGISTRATION AND SKEW.

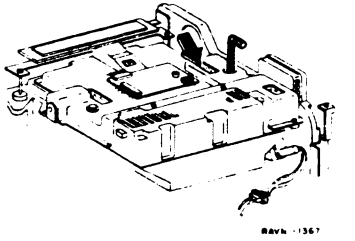


Figure 1. Adjusting the Scan Detector

5/85

Adjustments

ROS SKEW

Purpose

The purpose is to adjust the ROS so that the image is in the correct position on the print.

Check

1. ENTER THE 6012 REPAIR MODE.
2. MAKE THREE PRINTS OF TEST PATTERN 82P454 (dC4-6-3-1).
3. CHECK THAT SKEW IS WITHIN 1.25 mm (0.050 INCH) (FIGURE 1).
   a. Measure the distance from the lead edge to the skew lines on the top and bottom of test pattern.
   b. Check that top and bottom distance are within 1.25 mm (0.050 inch) of each other.

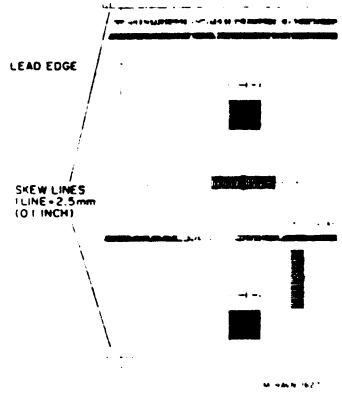


Figure 1. Checking the Skew

11/84

Adjustment

1. ADJUST ROS TO THE CORRECT SKEW (FIGURE 2).
   a. Remove top cover.
   b. Lower the control console.
   c. Loosen the two hold-down screws.
   d. Loosen front locking nut and turn adjusting screw several turns in a counterclockwise direction.
   e. Remove polygon driver PWB.
   f. Loosen rear locking nut and turn adjusting screw several turns in a counterclockwise direction.
   g. Install polygon driver PWB.
   h. Push ROS toward front of printer.
   i. Make prints and turn front adjusting screw in a clockwise direction until the correct registration is obtained.
   j. Retighten remaining adjustment and hold-down screws.

NOTE: If this does not correct the skew, go to SKEW FIP in chain 8 of your Functional Documentation.

2. CHECK/ADJUST MAGNIFICATION.

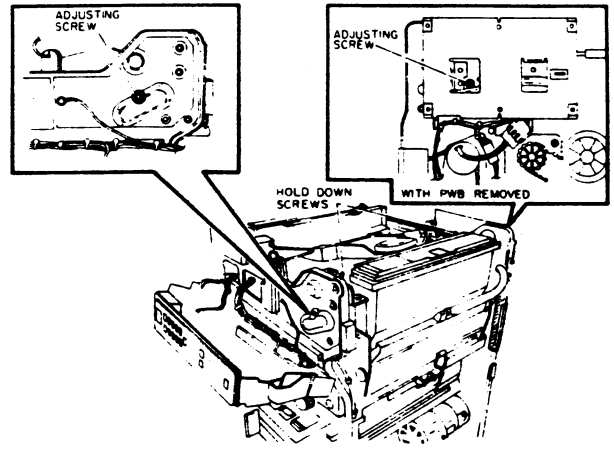


Figure 2. Adjusting the ROS

11/84

Adjustments

LONG MIRROR

Purpose

The purpose is to adjust the long mirror to achieve optimum scan line alignment.

Adjustment

WARNING,

REMOVE ALL JEWELRY (RINGS, WATCHES, BRACELETS, ETC.).

ONLY USE A BLACK FINISH WRENCH (13/32 INCH) OR THE BLACK TOOL PROVIDED WITH BULLETIN NO. 63013. NO OTHER TOOLS ARE REQUIRED.

DANGER: LASER RADIATION. AVOID DIRECT EXPOSURE TO BEAM. TO ENSURE THIS, KEEP YOUR EYE LEVEL AT LEAST 1 FOOT ABOVE THE PRINTER TOP SURFACE WHENEVER VIEWING THE INCOMING BEAM AND SCAN BEAM ON THE PAPER.

AVOID TOUCHING ANY MIRRORS WITHIN THE ROS ASSEMBLY.

DO NOT SMOKE WHILE THE ROS DUST COVER IS REMOVED. THE SMOKE CAN LEAVE A RESIDUE OR AN ASH ON THE MIRRORS THAT CANNOT BE REMOVED.

1. SWITCH OFF MAIN POWER.
2. REMOVE ALL COVERS.
   a. Disconnect video cable from Pixel Clock PWB.
   b. Swing Pixel Clock PWB to back of printer.
   c. Disconnect Laser Tube Interlock Connectors (one on each end of laser tube cover).
   d. Remove Laser Tube Cover and ROS Cover.
3. REPLACE LASER TUBE COVER AND RECONNECT LASER INTERLOCK CONNECTORS.
4. PLACE PIXEL CLOCK PWB ON TOP OF LASER TUBE COVER AND RECONNECT VIDEO CABLE FROM MODULATOR DRIVER TO PIXEL CLOCK PWB (FIGURE 1).

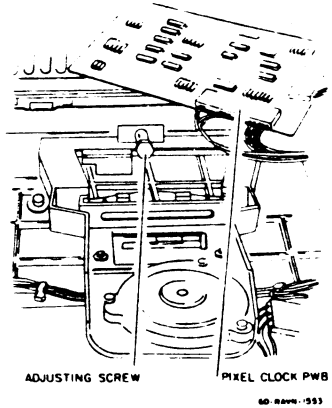


Figure 1. ROS Dust Cover Removed

5. TURN POWER ON, ENTER INTERNAL DIAGNOSTICS AND WAIT 7 MINUTES TO ENSURE LASER BEAM STABILIZATION.
6. ENTER 3, TEST, 5, TEST, (B2) OR 5, TEST FOR B1 PRINTERS.

WARNING

KEEP EYE LEVEL AT LEAST 1 FOOT ABOVE THE PRINTER TOP SURFACE AND OBSERVE INCOMING BEAM AND SCAN BEAM ON PAPER ONLY.

7. PASS A 3 x 2-INCH PIECE OF PAPER ALONG THE LONG MIRROR UNTIL IT JUST INTERSECTS WITH THE INCOMING BEAM (FIGURE 2).
8. CHECK THAT THE INCOMING BEAM AND THE SCAN BEAM ARE AT THE SAME HEIGHT FOR PROPER BEAM ALIGNMENT.

WARNING

ONLY USE A BLACK FINISH WRENCH (13/32 INCH) OR THE BLACK TOOL PROVIDED WITH BULLETIN NO. 63013.

9. IF THE SCAN BEAM IS HIGHER THAN THE INCOMING BEAM (FIGURE 3), TURN THE ADJUSTING SCREW COUNTERCLOCKWISE TO BRING THE BEAM DOWN. THE INCOMING BEAM AND THE SCAN BEAM MUST BE AT THE SAME HEIGHT FOR PROPER ALIGNMENT, AS SHOWN IN FIGURE 2.

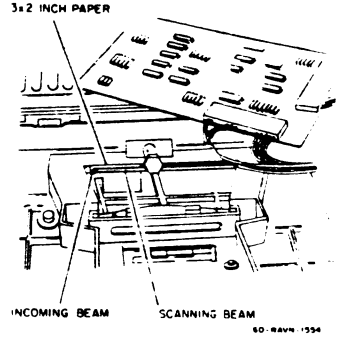


Figure 2. Scanning Beam Properly Aligned

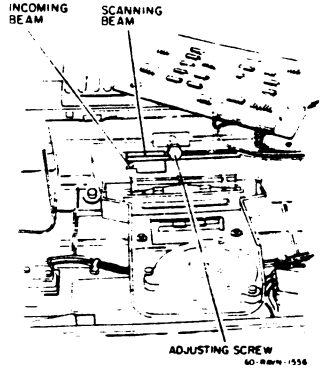
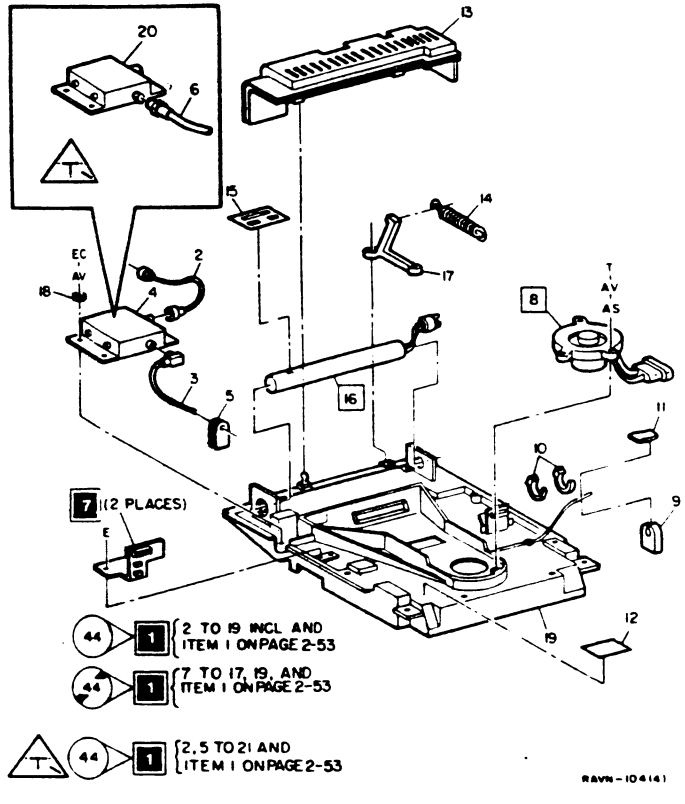


Figure 3. Scanning Beam High

Parts List

ROS ASSEMBLY (PART 2 OF 3)



5/84

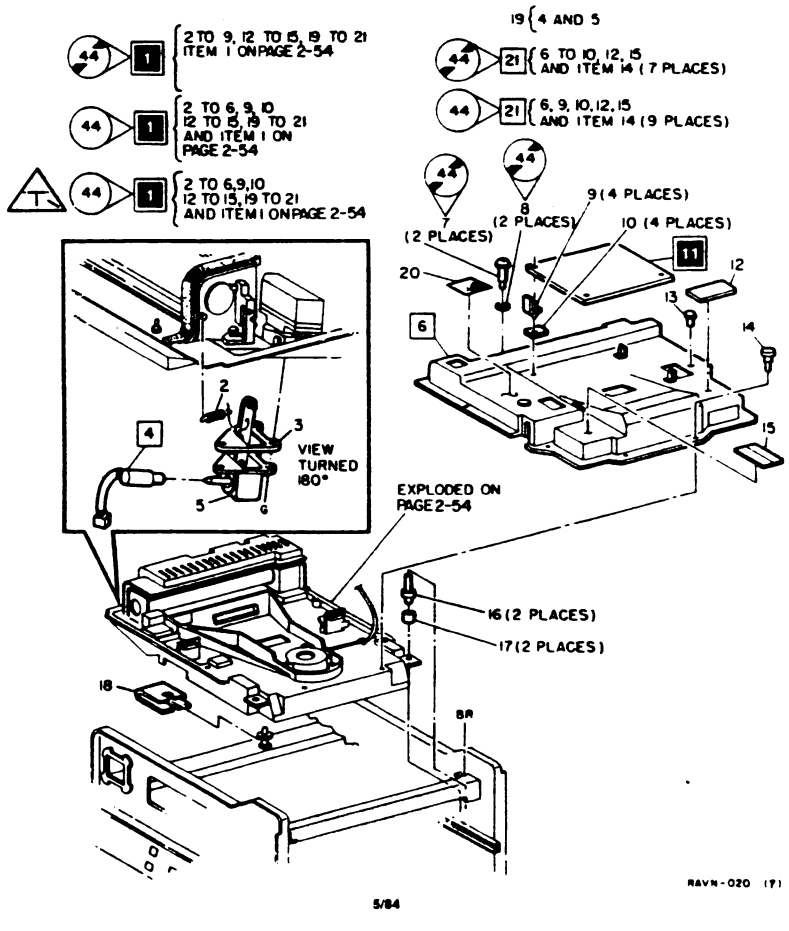
ITEM	PART	DESCRIPTION
1	—	PART OF OPTICS ASSEMBLY (INCLUDES ITEM 1 ON PAGE 2-53 AND PAGE 2-55)
2	117P87099	CABLE, SHIELDED (W/TAG 44)
3	117S23122	CABLE ASSEMBLY (W/TAG 44) (SEE NOTE)
—	117S23121	SUBSTITUTE PART (W/TAG 44)
4	101P4678	VIDEO MODULATOR DRIVER (W/TAG 44)
5	16P87031	GROMMET (W/TAG 44)
—	16P2126	GROMMET (SID ONLY)
6	117S9410	VIDEO DATA CABLE (W/TAG 44) (SID 8040 ONLY)
7	30S51002	SCAN DETECTOR (W/TAG 17)
8	62S20600	SUBSTITUTE PART
—	62S21040	POLYGON MOTOR ASSEMBLY
9	16P1651	GROMMET
10	420W10701	CABLE TIE
11	35P3143	SEAL
12	91P4876	LABEL (RADIATION)
13	2S28670	LASER COVER (W/O TAG 44)
—	2S51430	LASER COVER (W/ & W/O TAG 44)
14	—	SPRING (P/O ITEM 1)
15	—	DELETED
16	122P87143	LASER
17	—	SUPPORT (P/O ITEM 1)
18	28P87047	WASHER (W/TAG 44)
19	—	OPTICS BASE (P/O ITEM 1)
20	101P87265	MODULATOR DRIVER ASSEMBLY (W/TAG 44) (SID 8040 ONLY)

NOTE: ITEMS 3 AND 4 MUST NOT BE INSTALLED IN A SID 8040

5/85

Parts List

ROS ASSEMBLY (PART 1 OF 3)



5/84

ITEM	PART	DESCRIPTION
1	62S1880	OPTICS ASSEMBLY
—	62S20921	OPTICS ASSEMBLY (W/TAG 44) (INCL ITEM 1 ON PAGE 2-54 AND PAGE 2-55) (SEE NOTE)
2	9P87067	SPRING
3	35P3155	SEAL
4	121S21220	SOLENOID
5	—	SHUTTER HOUSING (P/O ITEM 19)
6	—	DUST COVER (P/O ITEM 21)
7	—	SCREW (W/O TAG 44) (P/O ITEM 21)
8	356W10453	RETAINER (W/O TAG 44)
9	116P2493	HOLDER
10	35P87036	FOAM SEAL
11	140S23762	PIXEL CLOCK
—	140S23761	SUBSTITUTE PART (B0 TO B2)
12	91P87381	LABEL
13	21P722	DUST CAP
14	26P20900	COVER SCREW
15	91P4998	LABEL (DANGER)
16	26P3792	SCREW
17	4P781	BUMPER
18	19P3956	SPRING CLIP
19	55S21080	SHUTTER SOLENOID ASSEMBLY
20	91P87318	MATRIX TAG LABEL (ROS ONLY)
21	2S28171	DUST COVER ASSEMBLY (W/O TAG 44)
—	2S51441	DUST COVER ASSEMBLY (W/TAGS 44)

NOTE: MUST NOT BE INSTALLED IN A SECURE INFORMATION DEVICE(SID) PRINTER.

Check — to clean fuser

There is some chance that heat problem is here

FUSING

Repairs

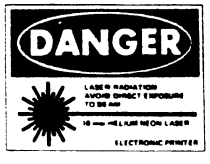
FUSER MODULE

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

1. DISCONNECT MAIN POWER CORD.



2. REMOVE LASER SHIELD.
   a. **Without Tag 4** (Figure 1)
   b. **With Tags 4 and 46** (Figure 2)

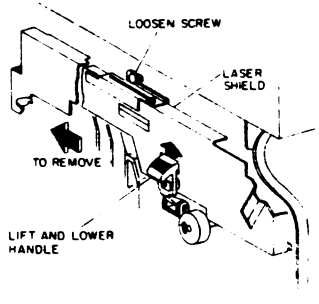


Figure 1. Removing the Laser Shield

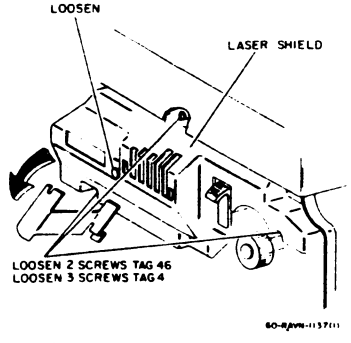


Figure 2. Removing the Laser Shield

3. REMOVE FUSER MODULE.
   a. Remove fuser shield (Figure 3).
   b. Disconnect the leads of the transfer and detack corotrons.
   c. Lower the prefuser transport.
   d. Disconnect P/J 14, P/J 15 and P/J 83 With Tag 13.
   e. Loosen the screw on bracket, and lower the bracket.

CAUTION

When pulling the fuser module out of printer, lift the feed roll shroud so that shroud does not hit the frame.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

   f. Remove fuser module.

REPLACEMENT

CAUTION

When pushing the fuser module into operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 4).

INSTALL FUSER.

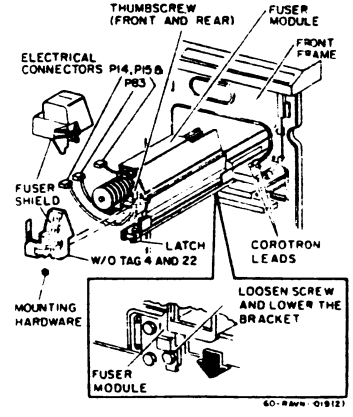


Figure 3. Removing the Fuser

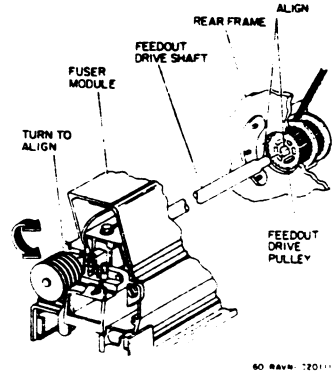


Figure 4. Alignment of Shaft and Pulley

Repairs

LOWER FUSER ASSEMBLY

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE UPPER FUSER BY LOOSENING THE TWO THUMBSCREWS.
3. RELEASE THE LOWER FUSER ASSEMBLY FROM THE SLIDE ASSEMBLY BY PUSHING DOWN ON THE SPRING CLIP (FIGURE 1).
4. PULL THE LOWER FUSER FORWARD AND LIFT THE ASSEMBLY OFF PINS.

REPLACEMENT

CAUTION

When pushing the fuser module into the operating position, check that the feedout drive shaft and feedout drive pulley are aligned (Figure 2).

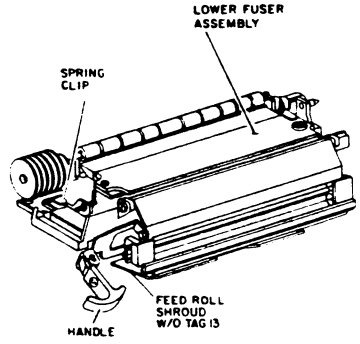


Figure 1. Removing the Lower Fuser

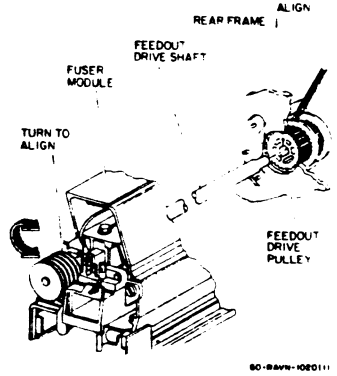


Figure 2. Alignment of Shaft and Pulley

UPPER FUSER ASSEMBLY

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE FRONT AND REAR THUMBSCREWS, AND REMOVE UPPER FUSER ASSEMBLY (FIGURE 1).

REPLACEMENT

CAUTION

When pushing the fuser module into the operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 2).

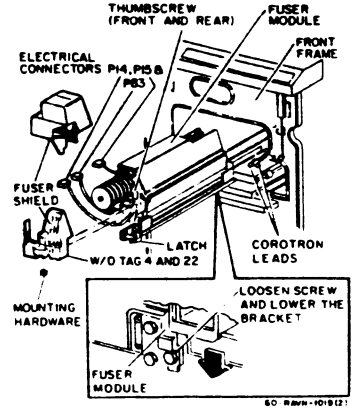


Figure 1. Removal of Upper Fuser Assembly

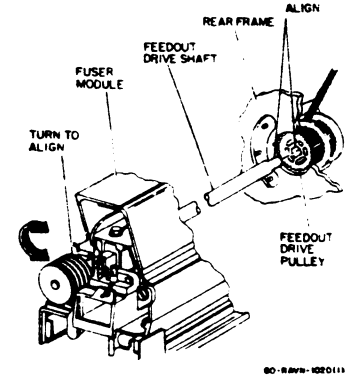


Figure 2. Alignment of Shaft and Pulley

Repairs

FUSER HEAT ROD (A3A2HTR1)

REMOVAL

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.

NOTE: The upper fuser is removed to prevent damage to the quartz filter.

2. REMOVE THE UPPER FUSER.
3. REMOVE QUARTZ FILTER (FIGURE 1).
4. REMOVE FUSER HEAT ROD (A3A2HTR1).

CAUTION

Damage to heat rod and quartz filter may occur from oil from fingers. Clean the heat rod and quartz filter with film remover to remove fingerprints. When installing the heat rod and the filter, hold them with a paper towel.

REPLACEMENT

1. CLEAN THE GOLD ELLIPTICAL REFLECTOR AND INSIDE OF QUARTZ SHIELD.
2. REPLACE FUSER HEAT ROD.

NOTE: Push heat rod away from quartz shield and toward the ellipse. Heat rod should just touch the top of the ellipse. Heat rod must not touch quartz shield.

3. INSTALL QUARTZ FILTER WITH COATED SIDE TOWARD HEAT ROD (FIGURE 2).

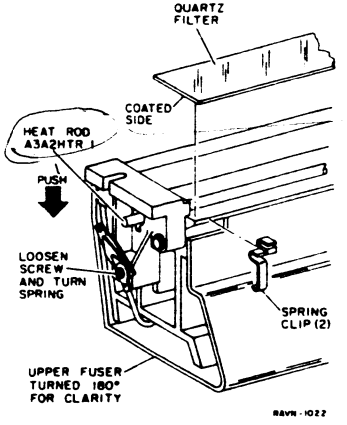


Figure 1. Removing the Quartz Filter

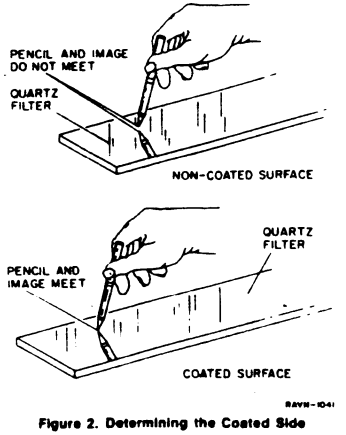


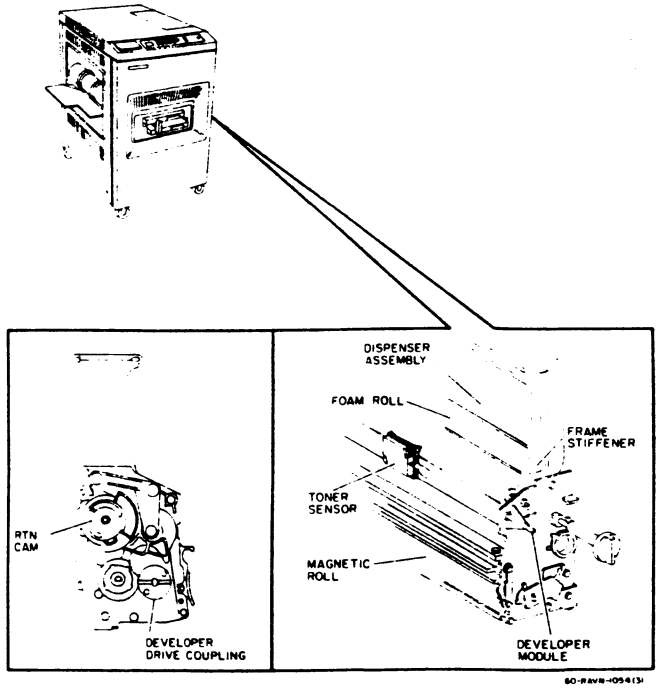
Figure 2. Determining the Coated Side

If the heat Rod is not positioned properly it could also cause problems

DEVELOPER MODULE

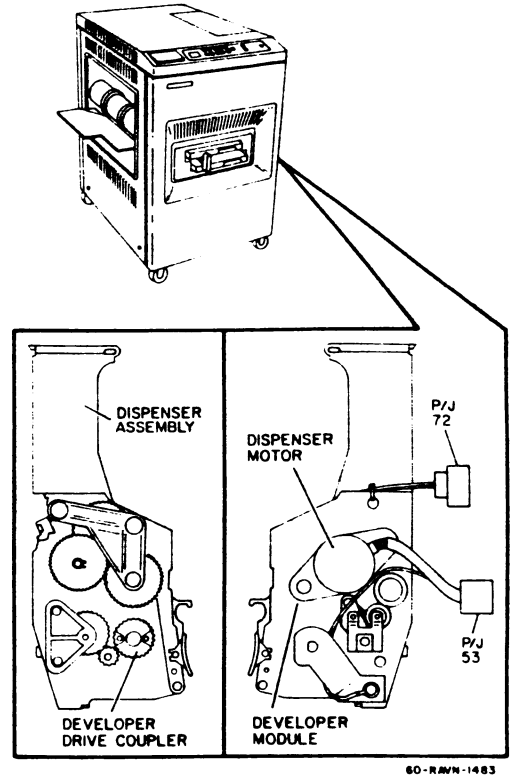
Location of Major Components

DEVELOPER MODULE (WITHOUT TAG 13)



3/83

DEVELOPER MODULE (WITH TAG 13)

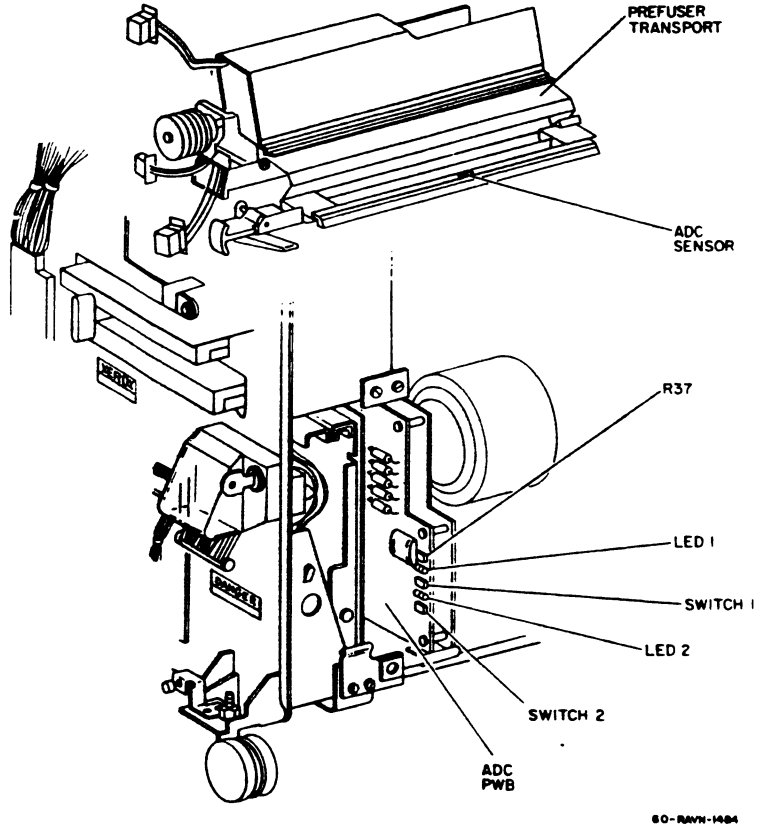


3/83

DEVELOPER MODULE

Location of Major Components

ADC COMPONENTS (TAG 13)



3/83

Service Notes

NPD FILTER CHANGE

EXCESSIVE CONTAMINATION RELATED PROBLEMS

Failure of NPD filter may result in contamination of printer cavity. This causes copy quality, paper feed, and other problems.

Change NPD Filter 54P1587 at every service call until contamination kit Tag 19 is available.

On printers without Tag 19, replace the NPD filter (54P1587) at every call until the Tag 19 contamination kit has been installed.

RTN RETURN TIME ERRATIC

Tag 6 is not complete.

RTN return time on Tag 6 Printer may be erratic. This is because a foam washer was installed in place of the 265W450 spring washer.

1. On next call or during install, look for Tag 6 Printers.
2. Remove right side cover and determine if foam washer was installed on RTN idler wheel shaft.
3. Replace foam washer with 256W450 spring washer.

Add P/O on contamination manifold from TD751

TAG 130 contamination manifold. The new contamination manifold has the entire outboard end open. This open end produces a large flow of air which mixes with the toner cloud exiting the developer module. This mixture is much less dense than the original toner cloud and is much less likely to clog the system. As the contamination filter becomes full the velocity of the air through the manifold will decrease allowing toner to escape through the open end. This escaping toner will be seen as contamination on the outboard end of the ROS Exit Window. Any toner disposit on the ROS Exit Window, of a Tag 130 machine should warrant a complete cleaning and check of the contamination control system including replacement of the filter bag.

TONER PADDLE

The use of "Toner" paddle (33P48) for stirring the "Toner" sump is recommended as a daily exercise.

Hold paddle near XEROX name end and gently insert paddle into "Toner" dispenser. Be careful not to go past agitator blades. Gently move paddle from one end of dispenser to the other. One or two strokes is all that is necessary.

Wipe off paddle and place it on developer cover, under top cover.

PRODUCT CODES (8040 ONLY)

Throughout this documentation, you will see reference made to **B1 Only** or **B2**. You will be able to identify the differences in these builds by the following product codes:

US	60 Hz		B1	876
US	60 Hz		B2	909
XCI	60 Hz			909C
RX	50 Hz	220v		829

Replacing the contaminated 'toner'

NOTE: The following procedure is to be used when an incorrect 'toner' has been added to the dispenser assembly.

a. Remove the brush dispenser (5-B8)

b. Using the Service Representative vacuum cleaner, remove all 'toner' from the brush dispenser, screen and dispenser assembly on the brush dispenser.

NOTE: After this procedure has been completed, the entire brush dispenser and dispener assembly must not have any residue of 'toner'.

c. Reinstall all assemblies and restore the printer to the operating condition.

5/85

DEVELOPER MODULE

Repairs

DEVELOPER MODULE: WITHOUT TAG 13

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE RIGHT SIDE COVER.
3. PREPARE TO REMOVE DEVELOPER MODULE (FIGURE 1).
   a. Remove developer bracket.
   b. Disconnect hose.
   c. Disconnect P/J 52 (B2).
   d. Disconnect wire 27.
   e. Release the developer module latch.

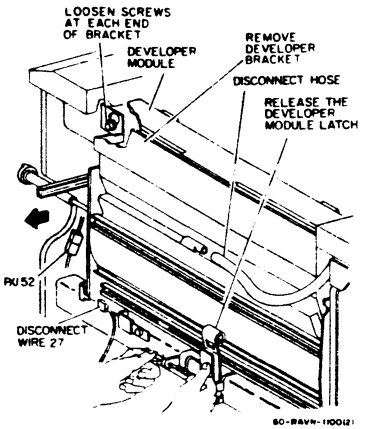


Figure 1. Preparing to Remove Developer Module

4. TURN DRIVE COUPLING UNTIL SLOT IN COUPLING IS PARALLEL TO FLOOR (FIGURE 2).
5. REMOVE DEVELOPER MODULE.

REPLACEMENT

NOTE: Before installing the developer module, visually check to ensure that shoes are in the correct position.

1. ENSURE THAT SLOT IN DRIVE COUPLING IS PARALLEL TO FLOOR.
2. INSTALL DEVELOPER MODULE.

NOTE: Before securing the developer latch, visually check the alignment of developer module with docking fork on drum module and assure shoes are in contact with the drum surface.

   a. Put module in operating position.
   b. Secure the latch.
   c. Connect wire 27.
   d. Connect P/J 52 (B2).
   e. Connect hose.
3. IF A NEW DEVELOPER MODULE IS BEING INSTALLED, ADJUST THE FOLLOWING:
   a. Developer drive coupling.
   b. RTN cam.
4. CHECK/ADJUST DEVELOPER MODULE LEVELING.

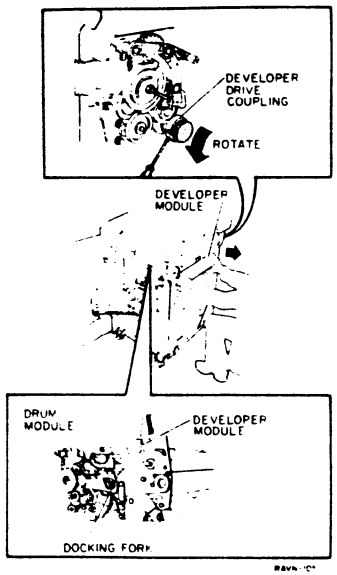


Figure 2. Removing/Installing the Developer Module

Repairs

DEVELOPER MODULE: WITH TAG 13

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE THE RIGHT SIDE COVER.
3. PREPARE TO REMOVE THE DEVELOPER MODULE (FIGURE 1).
   a. Remove the laser safety shield for the developer (without Tag 130).
   b. Disconnect hose.
      (1) Slide hose up until slot for contamination gate is exposed.
      (2) Insert contamination gate into slot.
      (3) Disconnect hose.
   c. Disconnect P/J 53.
   d. Disconnect P/J 72.
   e. Release the developer module latch.

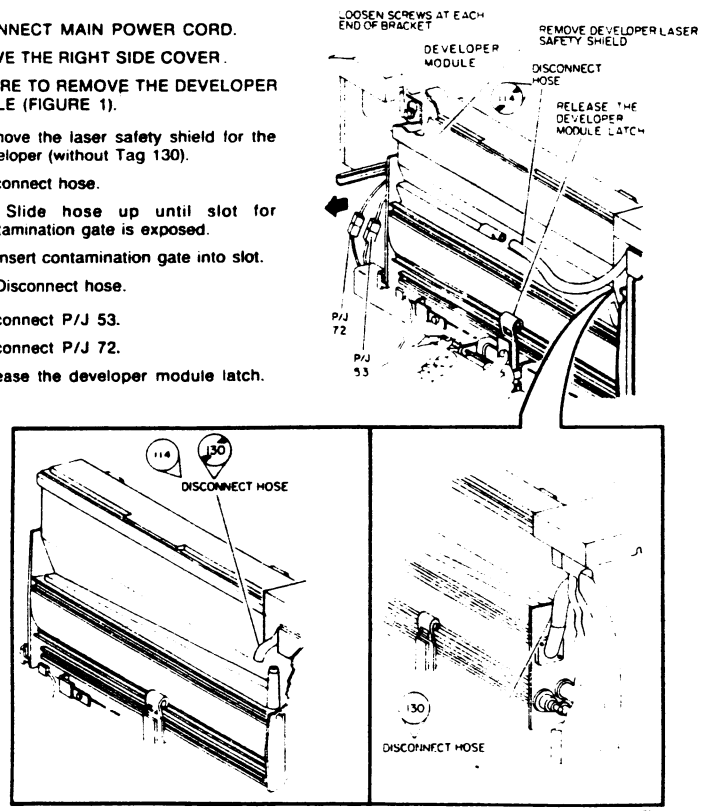


Figure 1. Preparing To Remove Developer Module

4. TURN THE DRIVE COUPLING UNTIL THE OPENING IN THE COUPLING IS PARALLEL TO FLOOR (FIGURE 2).
5. REMOVE DEVELOPER MODULE.

REPLACEMENT

NOTE: *Before installing the developer module, visually check to ensure that shoes are in the correct position.*

1. ENSURE THAT THE OPENING IN THE DRIVE COUPLING IS PARALLEL TO FLOOR.
2. INSTALL DEVELOPER MODULE.
   a. Put module in operating position.
   b. Secure the latch.
   c. Connect P/J 72.
   d. Connect P/J 53.
   e. Remove contamination gate while reconnecting hose. Ensure that the slot for the contamination gate is blocked by the manifold after hose has been reconnected (Tag 130).
3. IF A NEW DEVELOPER MODULE IS BEING INSTALLED, ADJUST THE FOLLOWING:
   a. Developer drive clutch.
   b. ADC setup.
4. CHECK/ADJUST DEVELOPER MODULE LEVELING.

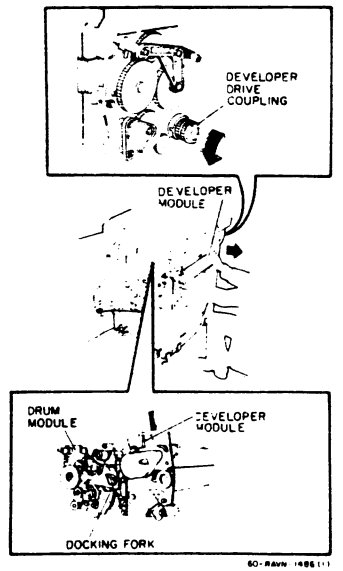


Figure 2. Removing/Installing the Developer Module

DEVELOPER MODULE

Repairs

DEVELOPER

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE THE **DRY IMAGER CONTROL** KNOB (WITHOUT TAG 13).
3. REMOVE DEVELOPER MODULE REMOVE CONTAMINATION CONTROL MANIFOLD (WITH TAG 130)
4. PUT DEVELOPER MODULE ON DROPCLOTH (FIGURE 1).
5. REMOVE PLUG.

CAUTION

Be careful when tilting the developer module on dropcloth. Tab for bias voltage wire and magnetic angle bracket may bend.

6. REMOVE DEVELOPER THROUGH PLUG HOLE WHILE MOVING THE MAGNETIC ROLL IN DIRECTION SHOWN (FIGURE 2).
7. REPLACE PLUG.
8. CLEAN AND REINSTALL CONTAMINATION CONTROL MANIFOLD (WITH TAG 130).

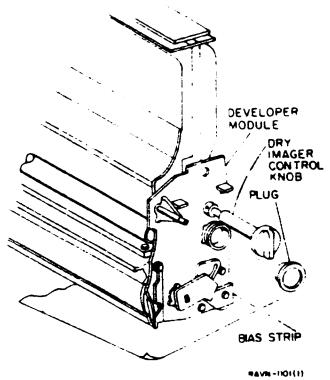


Figure 1. Putting the Developer Module on Dropcloth

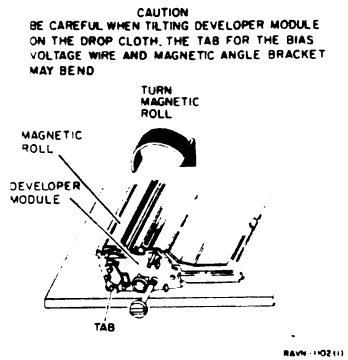


Figure 2. Removing the Developer

REPLACEMENT

NOTE: *The illustration for the following step shows a housing Without Tag 13. This step can also be performed on a housing With Tag 13. Ensure that the orientation of the housing is maintained as shown in the illustration.*

1. REPLACE DEVELOPER (FIGURE 3).
   a. Pour developer on magnetic roll, while turning the developer drive coupling counterclockwise.
   b. Turn five complete revolutions, after developer is on magnetic roll.
2. REPLACE DEVELOPER MODULE.

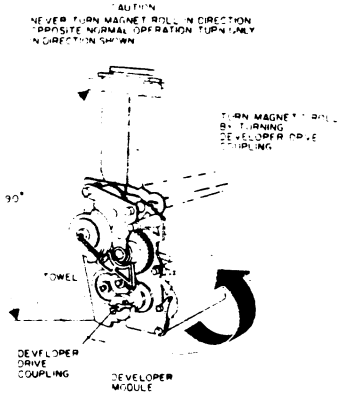


Figure 3. Putting the Developer onto Magnetic Roll

Repairs

DISPENSER ASSEMBLY

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE DEVELOPER MODULE.

CAUTION

When removing or installing the screws for securing the dispenser assembly to developer module, ensure that screws do not fall into sump. Damage to magnetic rolls could occur from screws.

3 REMOVE DISPENSER ASSEMBLY.

WITHOUT TAG 13:

a. Align timing mark on dispenser gear with timing mark on mixer gear (slots will be parallel to floor) (Figure 1).

b. Remove the two screws on dispenser assembly.

c. Loosen stiffeners on front and rear frames to allow removal of dispenser.

d. Move dispenser off developer module as shown.

WITH TAG 13, WITHOUT TAG 130:

a. Align mixer and dispenser slots parallel to floor.

b. Remove the two screws on dispenser assembly.

c. Move dispenser off developer module as shown (Figure 1).

CAUTION
WHEN REMOVING OR INSTALLING SCREWS FOR SECURING DISPENSER ASSEMBLY TO THE DEVELOPER MODULE, BE CAREFUL THE SCREWS DO NOT FALL INTO THE SUMP. DAMAGE TO MAGNETIC ROLLS MAY RESULT

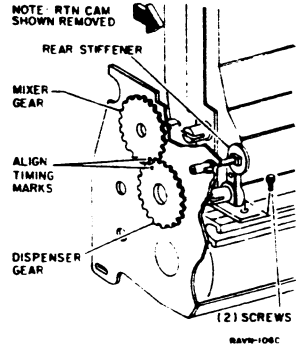


Figure 1. Removing the Dispenser Assembly

REPLACEMENT

1. PUT DISPENSER ONTO DEVELOPER MODULE (FIGURE 2).
2. INSTALL SCREWS, BUT DO NOT TIGHTEN SCREWS.
3. TURN DISPENSER GEAR UNTIL SLOTS IN BOTH SHAFTS ARE VERTICAL (FIGURE 3).
4. GENTLY PUSH DISPENSER ASSEMBLY TO ENGAGE SLOT IN TONER ROLL WITH TANG.
5. TIGHTEN THE SCREWS.
6. ADJUST FRONT AND REAR STIFFENERS (WITHOUT TAG 13).

CAUTION
WHEN REMOVING OR INSTALLING SCREWS FOR SECURING DISPENSER ASSEMBLY TO THE DEVELOPER MODULE, BE CAREFUL THE SCREWS DO NOT FALL INTO THE SUMP. DAMAGE TO MAGNETIC ROLLS MAY RESULT

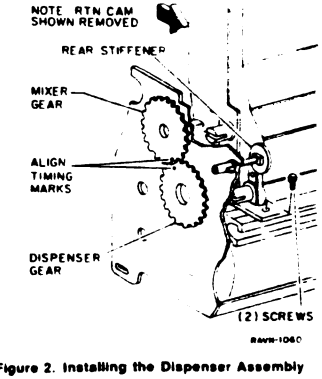


Figure 2. Installing the Dispenser Assembly

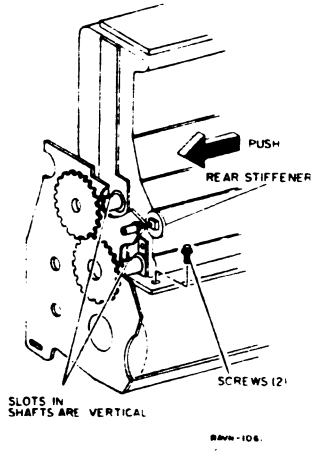


Figure 3. Aligning the Dispenser Assembly with Developer Assembly

Repairs

FOAM ROLL: WITHOUT TAG 130

CAUTION

Be careful when removing or installing the foam roll. You may break the foam roll when you bend it.

REMOVAL

1. PUT TAPE ON LID OF DISPENSER.
2. REMOVE DISPENSER ASSEMBLY.
3. REMOVE FOAM ROLL (FIGURE 1).

REPLACEMENT

1. INSTALL DRIVE END OF FOAM ROLL FIRST.
2. PREPARE FOAM ROLL BY PUTTING THE DISPENSER HOUSING IN A VERTICAL POSITION AND TURNING THE FOAM ROLL 15 COMPLETE REVOLUTIONS IN A COUNTERCLOCKWISE DIRECTION, USING A SCREWDRIVER IN DRIVE END OF ROLL.
3. INSTALL DISPENSER ASSEMBLY.
4. CHECK/ADJUST NEW FOAM ROLL DISPENSE RATE TIMING (WITHOUT TAG 13).

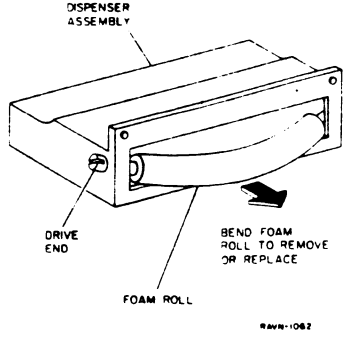


Figure 1. Removing and Replacing the Foam Roll

DISPENSER ASSEMBLY: WITH TAG 130

REMOVAL

1. REMOVE THE DEVELOPER MODULE.
2. REMOVE CONTAMINATION CONTROL MANIFOLD.
3. SECURE THE LID OF THE DISPENSER ASSEMBLY WITH WITH TAPE (FIGURE 1).

CAUTION

When removing or installing the screws that secure the dispenser assembly to the developer module, be careful that the screws do not fall into the sump. Damage to the magnetic roll and drum could be caused by the screws in the sump.

4. REMOVE THE TONER DISPENSER MOTOR
5. USE A SCREWDRIVER TO ROTATE THE DISPENSER ASSEMBLY SHAFT UNTIL THE SLOT IS VERTICAL WITH RESPECT TO THE HOUSING.
   a. Remove the screws securing the dispenser assembly to the developer module.
   b. Carefully remove the dispenser assembly by tilting it forward and pulling the bottom of the assembly in the opposite direction.

REPLACEMENT

NOTE: The dispenser assembly must be in the inverted position when the dispenser brush is rotated. If the dispenser assembly is not in this position, 'toner' will be dispensed.

1. ENSURE THAT THE SLOT IN THE DISPENSER ASSEMBLY SHAFT IS IN THE VERTICAL POSITION.

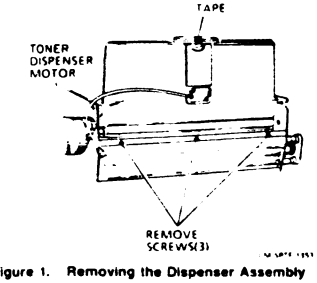


Figure 1. Removing the Dispenser Assembly

Repairs

2. INSERT THE FRONT OF THE BOTTOM EDGE OF THE DISPENSER ASSEMBLY INTO THE DEVELOPER MODULE AND POSITION THE ASSEMBLY FOR MOUNTING (FIGURE 2).

NOTE: The 0.050 mm shim is used as a spacer to ensure that there is clearance between the side plate and the yoke to prevent the yoke from binding. The dispenser assembly must be as close to the side plate as possible without causing interference between the plate and yoke. If the dispenser assembly is as close to the outboard as possible and the gap is greater than 0.050 mm, no further adjustment is needed.

3. PLACE A 0.050 mm SHIM BETWEEN THE OUTBOARD END OF THE SIDE PLATE OF THE DEVELOPER MODULE AND THE YOKE ON THE DISPENSER ASSEMBLY.
4. SECURE THE DISPENSER ASSEMBLY TO THE DEVELOPER MODULE WHILE GENTLY PUSHING THE ASSEMBLY TOWARD THE OUTBOARD END OF THE MODULE.
5. INSTALL THE TONER DISPENSER MOTOR.
   a. Ensure that the blade on the motor cam lines up with the slot in the dispenser assembly shaft.
   b. Secure the motor with two screws.
6. REMOVE THE TAPE FROM THE LID ON THE DISPENSER ASSEMBLY.
7. CLEAN AND REINSTALL CONTAMINATION CONTROL MANIFOLD.

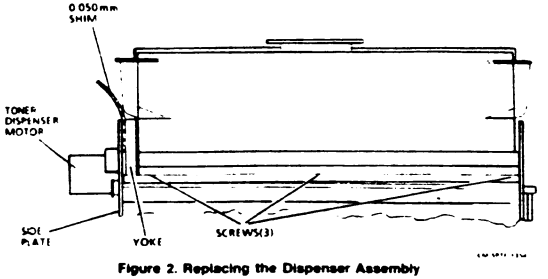


Figure 2. Replacing the Dispenser Assembly

BRUSH DISPENSER: WITH TAG 130

REMOVAL

1. SECURE THE LID OF THE DISPENSER ASSEMBLY WITH TAPE.
2. REMOVE THE DISPENSER ASSEMBLY.
3. PLACE THE DISPENSER ASSEMBLY ON A CLOTH OR PAPER (FIGURE 1).
4. REMOVE THE BRUSH DISPENSER (FIGURE 1).
   a. Pull the shaft of the brush dispenser toward the end of the assembly with the yoke.
   b. Lift the right end of the brush dispenser upward and away from the dispenser assembly.

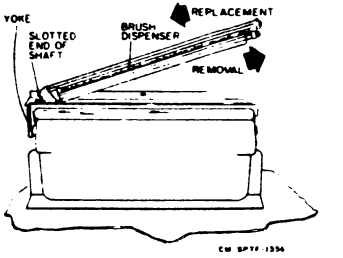


Figure 1. Removing the Brush Dispenser

REPLACEMENT

1. INSTALL THE SLOTTED OR DRIVE END OF THE BRUSH DISPENSER FIRST (FIGURE 1). ENSURE THAT THE FOAM SEALS ARE PROPERLY POSITIONED ON THE SHAFT OF THE BRUSH DISPENSER.
2. PUSH THE BRUSH DISPENSER SHAFT TO THE RIGHT AND AGAINST THE MOUNTING HOLE IN THE DISPENSER ASSEMBLY. ENSURE THAT THE BRUSH DISPENSER IS FULLY SEATED (FIGURE 2).
3. POSITION THE SLOT IN THE BRUSH DISPENSER SHAFT IN THE VERTICAL POSITION TO ENSURE THAT BRUSH CONTACTS THE SIDES OF THE DISPENSER ASSEMBLY. THIS WILL MINIMIZE 'TONER' LEAKAGE WHEN THE DISPENSER ASSEMBLY IS INSTALLED.
4. ENSURE THAT THE FOAM SEALS ON THE DISPENSER SHAFT ARE SEATED PROPERLY AND THAT NO GAPS EXIST BETWEEN THE SEALS AND THE DISPENSER ASSEMBLY.
5. INSTALL THE DISPENSER ASSEMBLY.

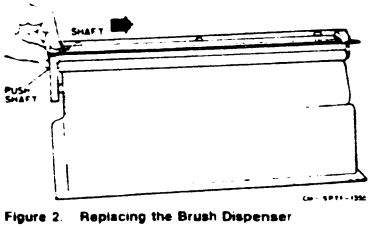


Figure 2. Replacing the Brush Dispenser

Adjustments

DEVELOPER DRIVE COUPLING: WITHOUT TAG 13

Purpose

The purpose is to properly position the coupling on drive clutch and developer drive.

Check

1. DISCONNECT MAIN POWER CORD
2. REMOVE THE RIGHT COVER
3. CHECK FOR A GAP OF 0.6 ± 0.4 mm BETWEEN THE DEVELOPER DRIVE COUPLING AND DEVELOPER DRIVE (FIGURE 1).

Adjustment

1. ADJUST GAP BETWEEN THE DEVELOPER DRIVE COUPLING AND DEVELOPER DRIVE (FIGURE 1)
2. **WITHOUT TAG 13**: CHECK THE DEVELOPER DRIVE CLUTCH

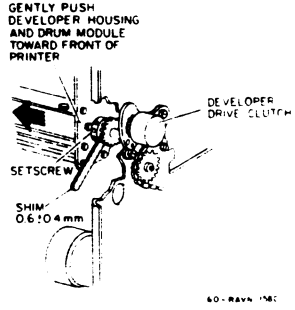


Figure 1. Check/Adjust Developer Drive Assembly

DEVELOPER MODULE LATCH

Purpose

The purpose is to adjust developer module latch in order to ensure that developer module is seated against drum.

Check

CHECK THE FORCE BEING APPLIED BY DEVELOPER MODULE LATCH (FIGURE 1).

NOTE: Ensure drum shoes are in contact with drum.

a. Put a piece of 20 lb or 80 gsm paper (13 mm to 16 mm wide) in center of the latch spring between block and the latch spring.

b. If paper can be removed without damage, adjustment is good.

c. If paper cannot be removed without damage, perform adjustment

Adjustment

ADJUST FORCE BEING APPLIED BY THE LATCH (FIGURE 1).

a. Loosen locknut and decrease all tension on the latch spring by turning the setscrew.

b. Put a piece of 20 lb paper (13 mm to 16 mm wide) in center of the latch spring between block and the latch spring.

c. While keeping the screw plate and the latch spring apart, turn setscrew until it just touches the latch spring.

d. Turn screw three additional revolutions

e. If paper can be removed without pulling the paper apart, go to step g.

f. If paper cannot be removed without damage, back off screw one half turn

g. While holding the setscrew, tighten locknut.

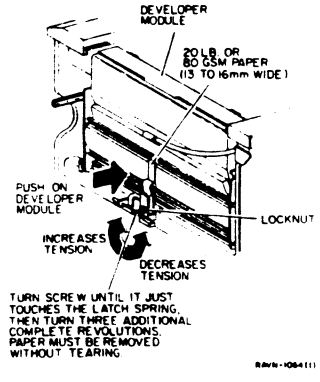


Figure 1. Checking/Adjusting the Force on Developer Module Latch

DEVELOPER MODULE LEVELING

Developer Module Latch

Purpose

The purpose is to adjust leveling screw in order to ensure that developer module is level with front frame.

Check

1. DISCONNECT MAIN POWER CORD.

NOTE: In the following step, if printer is not within 1/4 of bubble, move printer to new location and check again.

2. CHECK THAT PRINTER IS LEVEL WITHIN 1/4 OF BUBBLE. USING A MAXIMUM OF A 1.5 mm SHIM, AS SHOWN (FIGURE 1).
3. USE A LINE LEVEL 600T1225 ON FRONT FRAME AND ON DEVELOPER MODULE (FIGURE 2).
   a. If line level on developer module is within 1/4 of bubble of line level on front frame, adjustment is good.
   b. If not, perform adjustment.

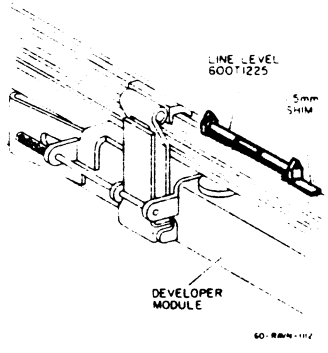


Figure 1. Checking that the Printer is Level

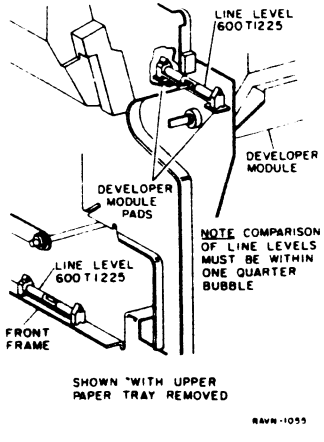


Figure 2. Comparison of Levels

Adjustment

1. RELEASE DEVELOPER LATCH.
2. POSITION A LINE LEVEL 600T1225 ON FRONT FRAME AND ON DEVELOPER MODULE (FIGURE 3).
3. TURN LEVELING SCREW CLOCKWISE UNTIL IT STOPS. ADJUST LEVELING SCREW UNTIL LINE LEVEL ON DEVELOPER MODULE IS WITH 1/4 BUBBLE OF LINE LEVEL ON FRONT FRAME (FIGURE 4).
4. TIGHTEN LOCKNUT
5. FASTEN DEVELOPER LATCH.
6. REPEAT THE CHECK

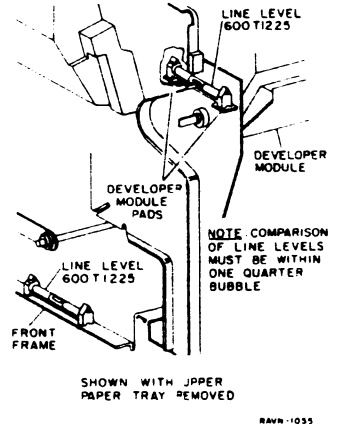


Figure 3. Comparison of Levels

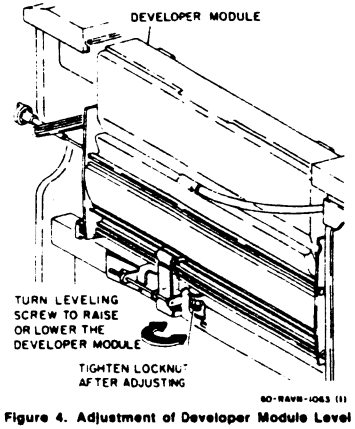


Figure 4. Adjustment of Developer Module Level

Adjustments

RTN CAM

Purpose

The purpose is to adjust RTN cam so that dispenser assembly will provide the correct amount of toner.

INTRODUCTION

This procedure contains three RTN cam adjustments:

a. High density correction, to correct for overdispensing.

b. Low density correction, to correct for underdispensing.

c. New foam roll dispense rate timing, to determine the RTN cam adjustment for a new foam roll.

These procedures should ONLY be performed when instructed to do so by Chain 9 in your Functional Documentation.

NOTE: The red light that you see when performing this procedure is an indirect light and will not cause an injury.

DENSITY CORRECTION

NOTE: If density of reference prints is darker than 1.3, perform High Density Correction procedure. If the density is lighter than 1.0, perform Low Density Correction procedure.

HIGH DENSITY CORRECTION

1. REMOVE DEVELOPER MODULE.
2. WITH THE **DRY IMAGER CONTROL** KNOB IN **NORMAL** POSITION, TURN DISPENSER CAM WHEEL UNTIL DISPENSER CAM FOLLOWER IS ONLY TOUCHING THE RTN CAM (FIGURE 1).

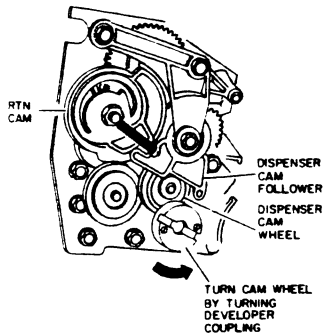


Figure 1. Positioning the Dispenser Cam Wheel

3. ADJUST RTN CAM (FIGURE 2).
   a. With a pencil, make a mark on RTN cam at its present location.
   b. Hold cam and loosen locknut.
   c. While pushing the pin upward, move cam two marks toward letter "L".
   d. Tighten locknut.
4. INSTALL DEVELOPER MODULE.
5. DECREASE PRINT DENSITY UNTIL IT IS BETWEEN 1.0 AND 1.3 (SAD).
   a. Turn the **DRY IMAGER CONTROL** to **LIGHTER** (fully counterclockwise).
   b. Make five dark dustings [8040 (dC-4-5-5-1-1-)], [2700 (dC-4-9-5-1)].
   c. Evaluate prints and repeat steps a through c until print density is between 1.0 and 1.3 (SAD).
6. PERFORM A CHECK AND RECORD THE QUANTITY OF PRINTS MADE, WHEN MIXER GEAR MAKES 1/2 REVOLUTION, IN THE MACHINE LOG (FIGURE 3).

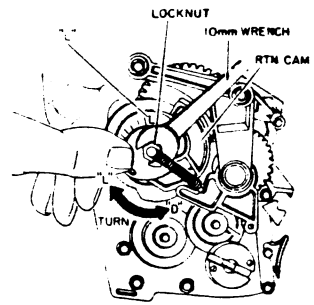


Figure 2. Adjusting the RTN Cam

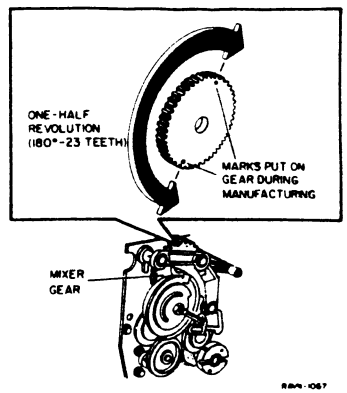


Figure 3. Checking the Mixer Gear

Adjustments

LOW DENSITY CORRECTION

1. WITH THE **DRY IMAGER CONTROL** KNOB IN **NORMAL** POSITION, MAKE FIVE PRINTS OF THE SETUP TEST PATTERN.
2. DETERMINE AVERAGE DENSITY OF PRINTS AND MAKE A RECORD.
3. PERFORM A CHECK AND MAKE A RECORD OF THE QUANTITY OF PRINTS MADE WHEN MIXER GEAR TURNS 1/2 REVOLUTION (FIGURE 4).

NOTE: In the following step, if unable to adjust cam the number of notches given on the table (Figure 5), replace the foam roll.

4. DETERMINE AMOUNT RTN CAM SETTING MUST INCREASE (FIGURE 5).
5. REMOVE DEVELOPER MODULE.

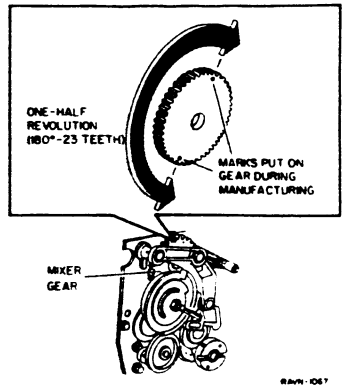


Figure 4. Checking the Mixer Gear

NUMBER OF PRINTS	DENSITY BEFORE ADJUSTMENT					
	20	30	45	60	75	90
8	REPLACE THE FOAM ROLL					4
10				10	6	3
12				8	5	2.5
14			11	7	4.5	2
16			9.5	6	4	2
18		13.5	8.5	5.5	3.5	1.5
20		12	7.5	5	3	1.5
23	15	10.5	6.5	4.5	2.5	1.5
26	13.5	9.5	6	4	2.5	1
29	12	8.5	5.5	3.5	2	1
32	11	7.5	5	3	2	1
35	10	7	4.5	3	2	1
40	8.5	6	4	2.5	1.5	1
45	7.5	5.5	3.5	2	1.5	.5
50	7	5	3	2	1	.5
PER 1/2 REVOLUTION OF FOAM ROLL	NUMBER OF MARKS TO ADJUST RTN CAM TOWARD "D"					

60-RAVN-1068 (2)

Figure 5. Table for Correcting the Low Density

6. ADJUST RTN CAM (FIGURE 6).
   a. With a pencil, make a mark on RTN cam at its present location.
   b. Hold cam and loosen locknut.
   c. While pushing the pin upward, adjust RTN cam toward "D" and **beyond required value**; then position the cam to value from table for correcting the low density.
   d. Tighten locknut.
7. INSTALL DEVELOPER MODULE.
8. MAKE FIVE PRINTS OF THE SETUP TEST PATTERN.
9. EVALUATE PRINTS.

   If density is less than 1.0, turn the **DRY IMAGER CONTROL** to **DARKER** (fully clockwise).

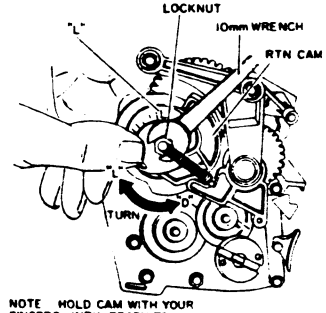


Figure 6. Adjusting the RTN Cam

Adjustments

10. MAKE PRINTS AND REPEAT EVALUATION OF PRINTS (STEP 9) UNTIL DENSITY IS BETWEEN 1.0 AND 1.3.
11. PERFORM A CHECK AND RECORD THE QUANTITY OF PRINTS MADE, WHEN MIXER GEAR TURNS 1/2 REVOLUTION, IN THE MACHINE LOG (FIGURE 7).

NEW FOAM ROLL DISPENSE RATE TIMING

NOTE: This procedure and chart on 4-E1 should only be used when installing a new foam roll.

NOTE: The red light that you see when performing this procedure is an indirect light and will not cause an injury.

NOTE: Before beginning this procedure, you must determine what area coverage the customer requires for printing needs.

1. USING A SAMPLE OF CUSTOMER'S ORIGINALS, COMPARE THEM WITH EXAMPLES (FIGURE 8) AND DETERMINE WHAT AREA COVERAGE IS REQUIRED BY CUSTOMER.

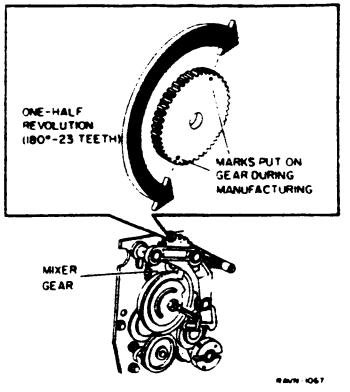


Figure 7. Checking the Mixer Gear

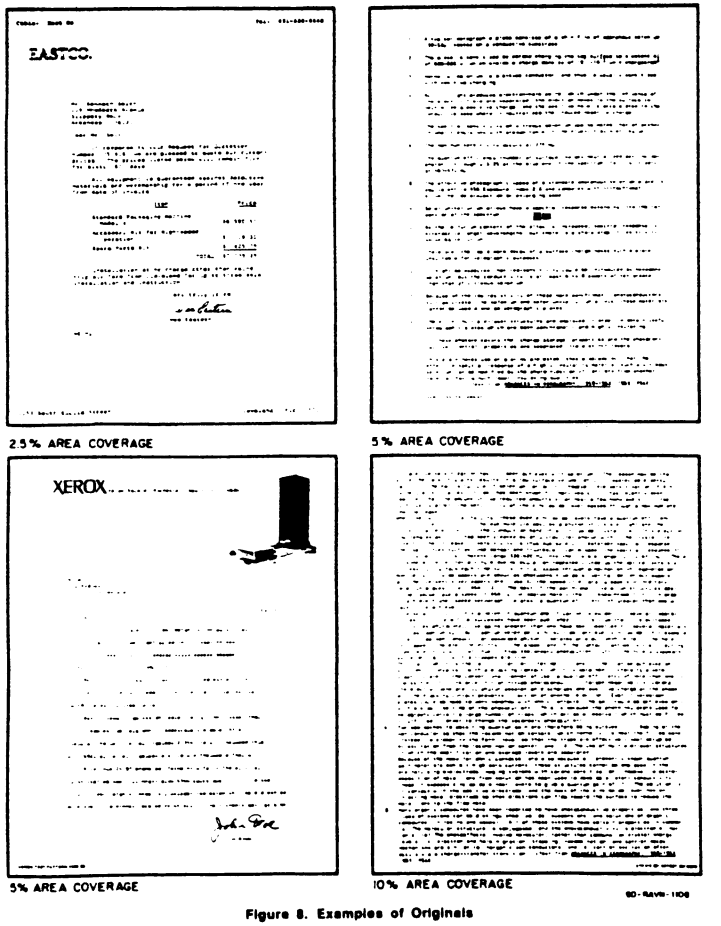


Figure 8. Examples of Originals

Adjustments

2. REMOVE RIGHT SIDE COVER.
3. PROGRAM FOR 50 PRINTS OF SETUP TEST PATTERN [8040 (82P431 dC-4-1-50-1-1)], [2700 (82P454 dC-4-6-50-1)].
4. WITH THE **DRY IMAGER CONTROL** KNOB IN **NORMAL** POSITION, PRESS **TEST** AND CHECK THE QUANTITY OF PRINTS MADE WHEN MIXER GEAR TURNS 1/2 REVOLUTION (FIGURE 9).
5. DETERMINE AMOUNT OF CHANGE REQUIRED FOR RTN CAM (FIGURE 10).
   a. Using the percent area coverage of customer's originals and quantity of prints made during 1/2 revolution of mixer gear, determine what amount of the change in setting for cam is required.
   b. If adjustment is required, go to step 6.
   c. If no adjustment is required, return the printer to normal operating condition.

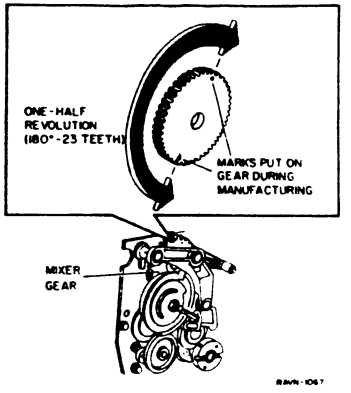


Figure 9. Checking the Mixing Gear

CUSTOMER AREA COVERAGE	10%	5%	2.5%
PRINTS REQUIRED TO MAINTAIN DENSITY DURING 1/2 REVOLUTION OF MIXER GEAR	11	22	40

TO OBTAIN THE ABOVE RTN CAM SETTING, USE THE TABLE BELOW TO DETERMINE HOW MUCH ADJUSTMENT IS REQURED.

PRINTS COUNTED DURING 1/2 REVOLUTION OF MIXER GEAR			
8	-6.0	-9.5	-12
10	-3.0	-7.0	-9
12	-1.0	-5.0	-7
15	+1.0	-3.0	-5
18	+2.0	-1.5	-4
20	+3.0	-1.0	-3
23	+4.0	0.0	-2.5
26	+4.5	+0.5	-2
29	+5.0	+1.0	-1.5
35	+5.5	+1.5	-0.5
40	+6.0	+2.0	-0.3
43	+6.5	+2.5	+0
60	+7.0	+3.0	+1
70	+7.5	+3.5	+1.2

NOTE: (+) MEANS TO MOVE CAM TOWARDS D
(-) MEANS TO MOVE CAM TOWARDS L

RAVN-1096 (2)

Figure 10. New Foam Roll Timing Table

Adjustments

2. IF PRINT DENSITY IS ABOVE 1.3, ADJUST TO SPECIFICATION (BETWEEN 1.0 AND 1.3).

   a. Run five dark dustings:
   [8040 (dC-4-5-5-1-1)],
   [2700 (dC-4-9-5-1)].

   b. Evaluate prints. If density is between 1.0 and 1.3, go to setp 3 of this adjustment. If density is above 1.3, repeat steps a and b.

3. ADJUST THE ADC.

   a. Run the printer in diagnostic mode 10-71.

   b. Actuate ADC PWB switch 1 once to enter ADC setup mode (LED 1 will be flashing, LED 2 will be full on or flashing) (Figure 3).

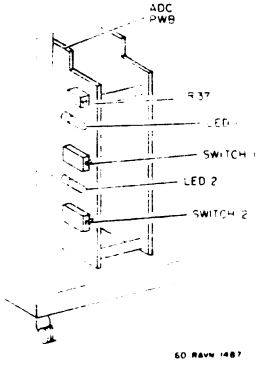


Figure 3. ADC Setup

NOTE: ADC is properly adjusted when LED 2 is at the tansition point of flashing to full on.

   c. If LED 2 is flashing, turn R37 counterclockwise until LED 2 stays on full.

   d. If LED 2 is on full, turn R37 clockwise until LED 2 flashes, then counterclockwise until LED 2 stays on full.

4. EXIT ADC SETUP MODE BY PRESSING ADC PWB SWITCH 1 ONCE (LED 1 OFF, LED 2 OFF).

5. RUN 20 TEST PRINTS OF THE SETUP TEST PATTERN:
   [8040 (dC-4-1-20-1-1)],
   [2700 (dC-4-6-20-1)].

NOTE: Density of copies must be between 1.0 and 1.3 when cycling of dispenser motor is being observed. If density is not within specifications at this time, repeat steps 3 through 6.

6. NOTE CYCLING OF DISPENSER MOTOR AND EVALUATE PRINTS.

   a. Check that cycling of dispenser motor is in the following sequence:
   Two cycles of 2.5 seconds on /2.5 seconds off, followed by at least 10 seconds (2 copies) on, followed by at least 10 seconds (2 copies) off.

   b. If motor does not cycle in sequence described in step a, run an additional 20 copies until motor does.

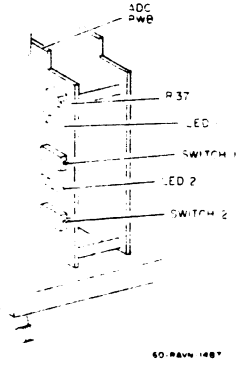


Figure 4. ADC Setup

Adjustments

FRONT AND REAR STIFFENERS: WITHOUT TAG 13

Purpose

The purpose is to adjust stiffeners to secure dispenser assembly in the position on developer module. This ensures an even toner dispense rate.

Adjustment

1. REMOVE DEVELOPER MODULE.
2. LOOSEN STIFFENERS ON FRONT AND REAR FRAMES OF MODULE, UNTIL STIFFENERS ARE NOT TOUCHING THE DISPENSER ASSEMBLY (FIGURE 1).
3. ADJUST STIFFENERS.
   a. Using a piece of 20 lb or 80 gsm paper, adjust gap between front and rear stiffeners and the sides of dispenser assembly.

CAUTION

Incorrect tightening of stiffeners can deflect sides of the developer module, causing erratic toner dispensing or stalling of the foam roll.

   b. Remove paper and turn both stiffener pads one-half to three-quarters of a revolution toward the dispenser.
   c. Tighten the locknut.
4. INSTALL DEVELOPER MODULE, AND RETURN THE PRINTER TO NORMAL OPERATING CONDITION.

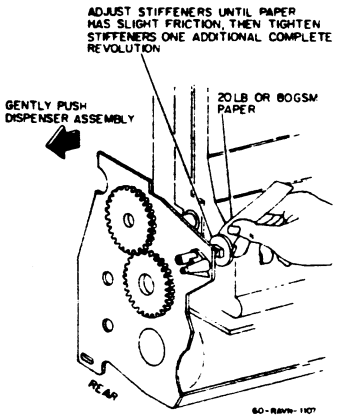


Figure 1. Adjusting the Stiffeners

3/83

RTN SHAFT SPACING: WITHOUT TAG 13

Purpose

The purpose is to position the RTN shaft collar to ensure free rotation of the RTN shaft.

Check

CHECK FOR A 0.05 mm MINIMUM SPACING BETWEEN THE RTN SHAFT COLLAR AND THE DEVELOPER SIDE FRAME (FIGURE 1).

Adjustment

1. ADJUST SPACING BETWEEN THE RTN SHAFT COLLAR AND THE DEVELOPER SIDE FRAME TO 0.05 mm (MINIMUM) (FIGURE 1).
   a. Loosen setscrew on RTN shaft collar.
   b. Slide collar to capture a 0.05 mm shim between the collar and the developer module side frame.
   c. Tighten the setscrew.
2. REPEAT THE CHECK.

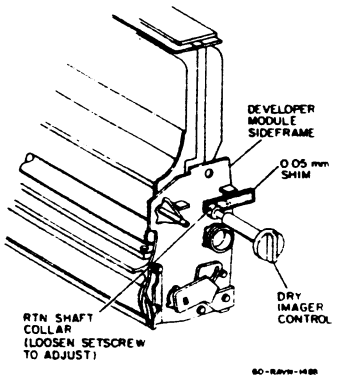
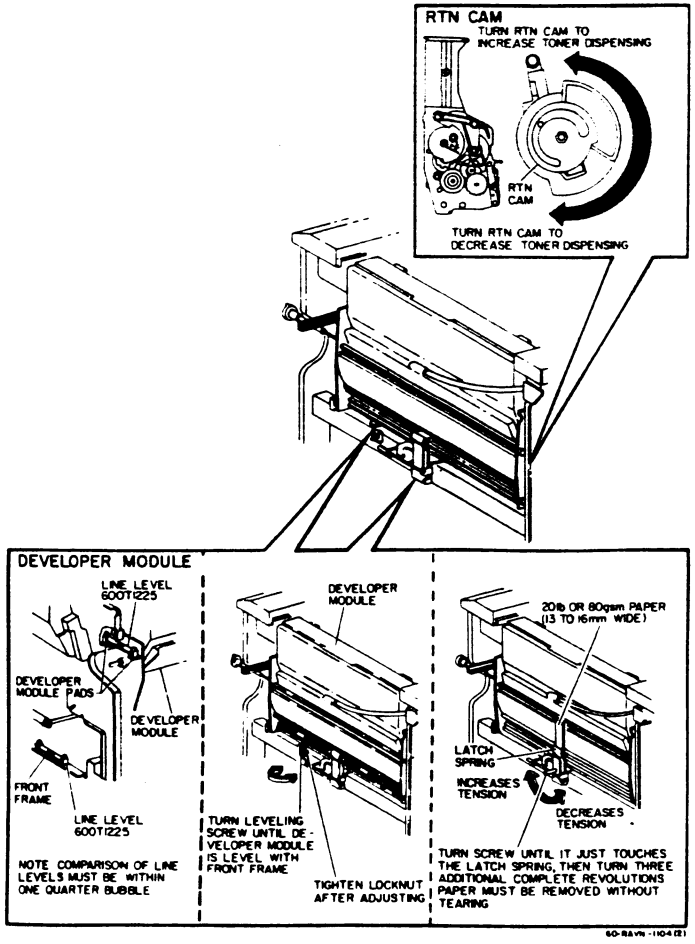


Figure 1. Checking/Adjusting the RTN Shaft Spacing

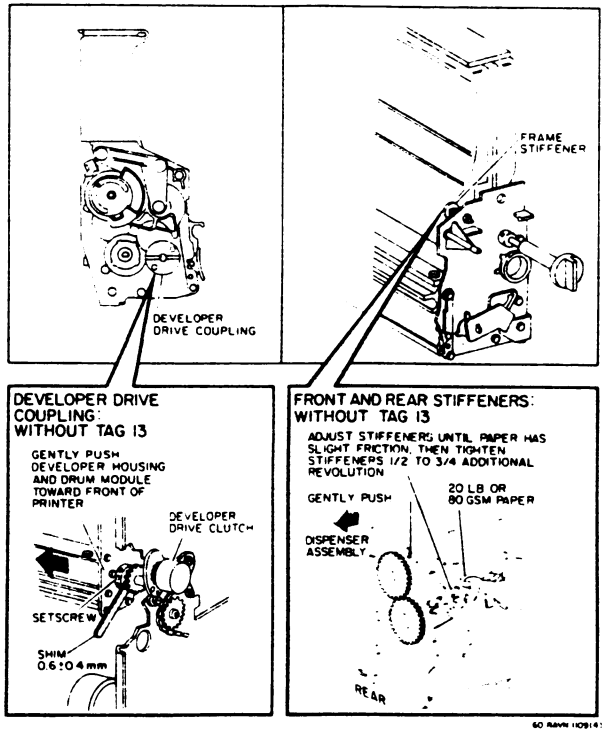
3/83

DEVELOPER MODULE

Adjustment Specifications

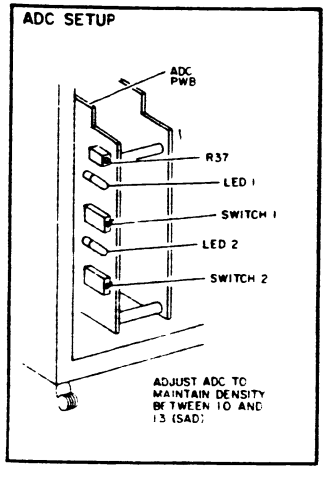


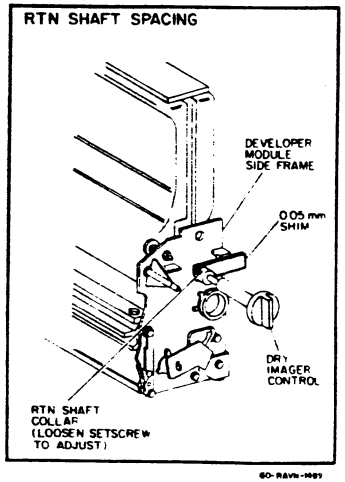
3/83



5/84

Adjustment Specifications



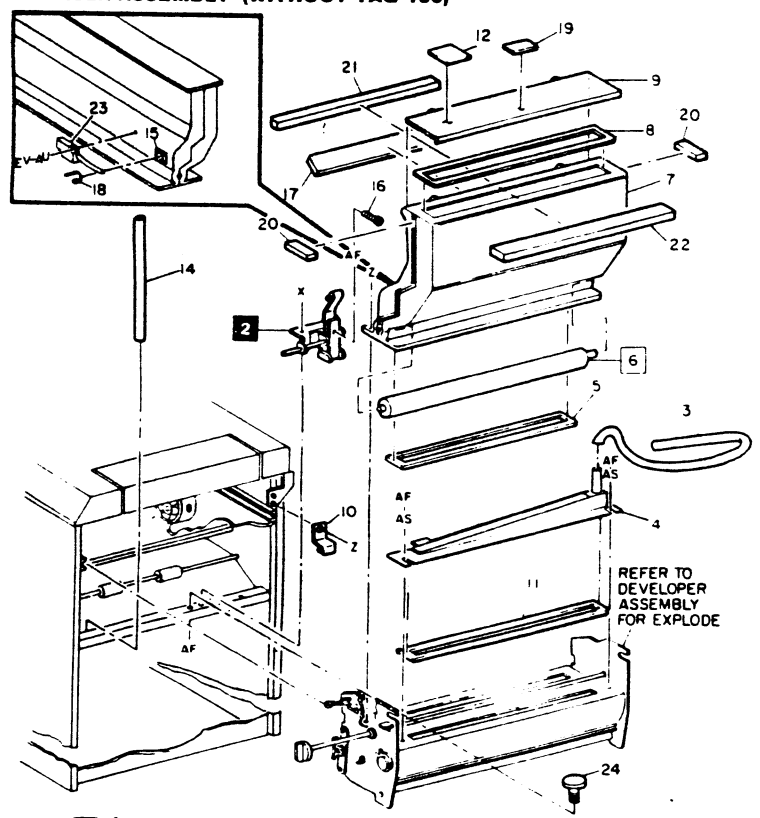


3/83

DEVELOPER MODULE

Parts List

DISPENSER ASSEMBLY (WITHOUT TAG 130)



5/84

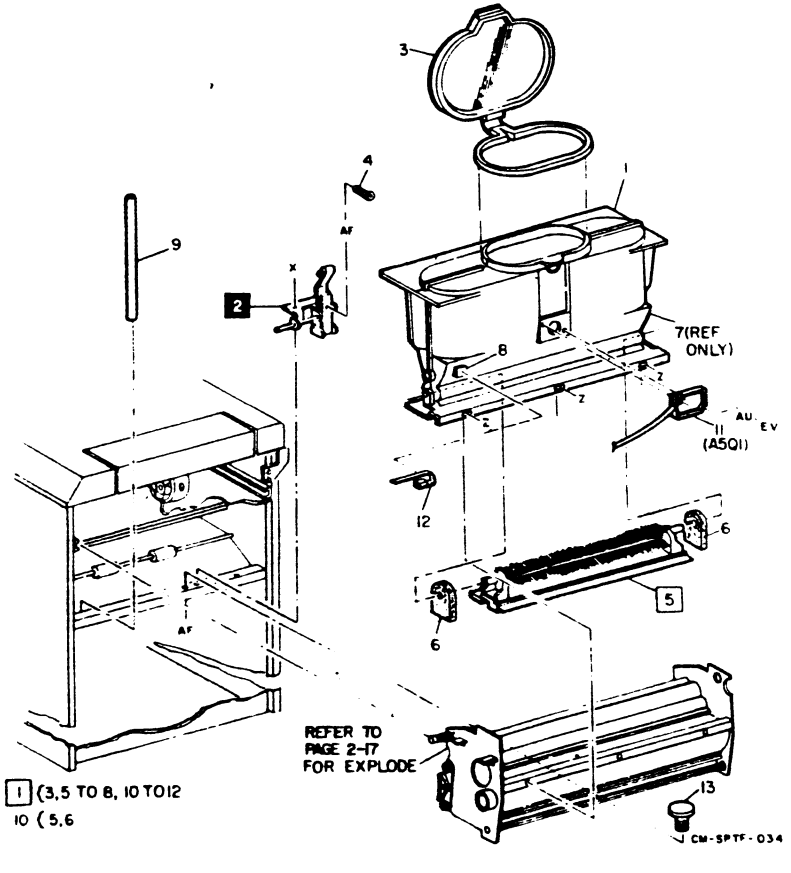
ITEM	PART	DESCRIPTION
1	94S20594	DISPENSER ASSEMBLY
—	94S20593	SUBSTITUTE PART
2	9S20113	LATCH
3	52P1806	HOSE (W/TAG 91) (W/O TAG 114)
—	52P1845	HOSE (W/TAGS 91 AND 114) (P/O ITEM 1 ON PL1-F6)
4	2P13365	VACUUM HOUSING
5	—	LOWER SEAL (P/O ITEM 13)
6	22S26250	FOAM ROLL
—	22S26260	FOAM ROLL (ALTERNATE)
7	—	SUMP (P/O ITEM 13)
8	—	LID SEAL (P/O ITEM 13)
9	2P11224	LID
10	30P36034	TUBING BRACKET (W/TAGS 36 AND 19)
11	35S3262	GASKET
12	—	TONER LABEL (REF ONLY)
13	94S20633	SUMP ASSEMBLY (W/TAG 35)
—	94S20632	SUBSTITUTE PART
—	94S20602	ALTERNATE
—	94S20601	SUBSTITUTE PART
14	30P42210	PROBE HOLDER
15	14P4420	CABLE TIE MOUNT
16	26P3818	SETSCREW
17	—	TAPE (W/TAG 35) (P/O ITEM 13)
18	420W10701	TIE WRAP (W/O TAG 19)
—	35S3199	SEAL (ALTERNATE)
19	—	TONER COVER LABEL
20	35S3301	SEAL
21	35P3048	SEAL
22	35S3261	SEAL
23	130S764	SENSOR ASSEMBLY (W/TAG 35)
24	26S20090	STIFFENER
25	55S21540	DISPENSER LID TAPE SEAL (NOT SHOWN)

5/85

DEVELOPER MODULE

Parts List

DISPENSER ASSEMBLY (TAG 130)



5/85

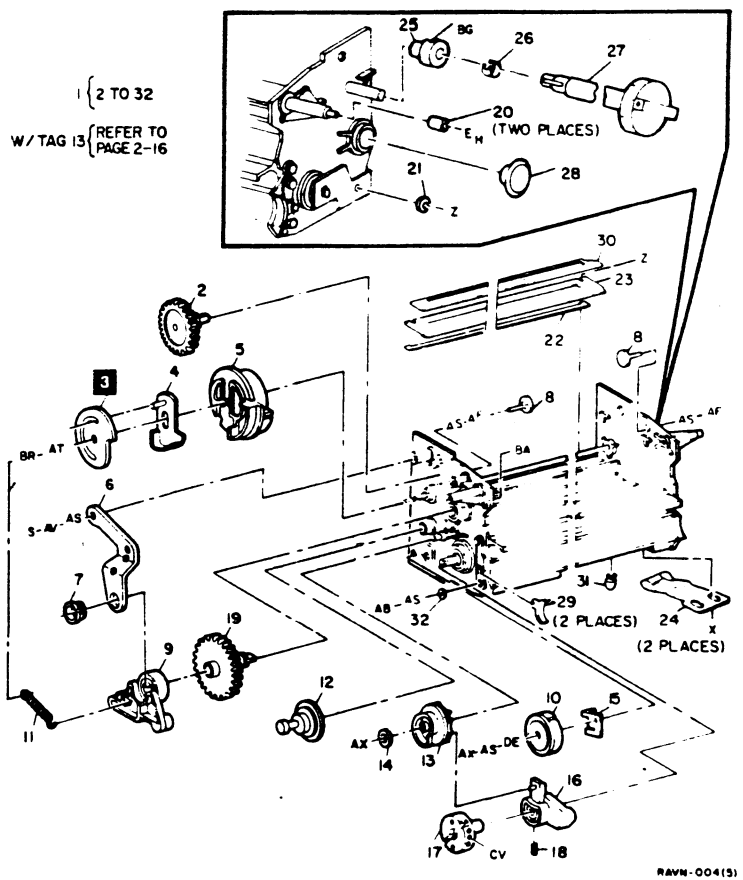
ITEM	PART	DESCRIPTION
1	94S360	DEVELOPER ASSEMBLY
2	9S20113	DEVELOPER MODULE LATCH
3	2P13966	LID
4	—	SETSCREW (REF ONLY)
5	—	BRUSH DISPENSER (P/O ITEM 10)
6	—	GASKET (P/O ITEM 10)
7	—	SUMP (P/O ITEM 1)
8	14P4420	CABLE TIE MOUNT
9	30P42210	PROBE HOLDER (B1 AND B2)
10	94S443	BRUSH DISPENSER ASSEMBLY
11	130S1490	LOW TONER SENSOR
12	420W10701	CABLE TIE
13	26S20090	STIFFENER

5/85

DEVELOPER MODULE

Parts List

DEVELOPER ASSEMBLY (W/O TAG 13)



9/83

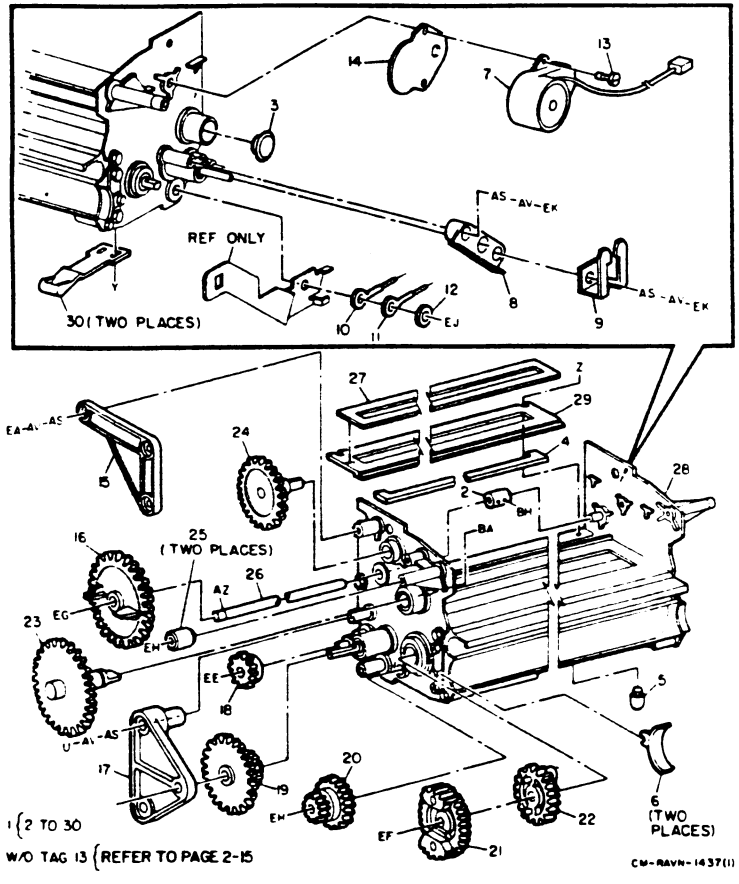
ITEM	PART	DESCRIPTION
1	2S50238	DEVELOPER ASSEMBLY (W/TAGS 41 AND 66)
2	7S3639	MIXER GEAR
3	8P1510	OUTER RETURN-TO-NORMAL CAM
4	15P6906	ADJUSTABLE CAM PLATE
5	8P1511	INNER RETURN-TO-NORMAL CAM
6	—	RETURN-TO-NORMAL BRACKET (P/O ITEM 1)
7	—	DELETED
8	26S20090	STIFFENER
9	8S20081	CAM FOLLOWER (W/TAG 66)
—	8S20082	CAM FOLLOWER (W/TAG 66) (ALTERNATE)
10	20S29590	RETURN-TO-NORMAL IDLER WHEEL (W/TAG 6)
11	9P4305	SPRING
12	20S28660	DRIVE WHEEL
13	8P1557	DISPENSER CAM WHEEL (W/TAG 41)
14	28P1840	THRUST WASHER
15	19P3902	SNUBBER PAD (W/TAG 6)
—	19P4076	SPRING CLIP (W/TAG 6) (ALTERNATE)
16	20S29580	DISPENSER DRIVE CAM (W/TAG 6)
17	5P3468	DEVELOPER DRIVE COUPLER
18	26P20308	SETSCREW
19	7S3328	DISPENSER GEAR
—	7S3806	DISPENSER GEAR (ALTERNATE)
20	13P2344	SLEEVE BEARING
21	28P133	WASHER
22	35S20501	SEAL
23	—	HOUSING COVER (P/O ITEM 1)
24	—	DELETED
25	5P3342	COLLAR
26	19P3776	CLIP
27	3P4406	KNOB
28	—	DELETED
29	19P3471	SHOE
30	35S3262	GASKET
31	—	DELETED
32	28P1883	WASHER

5/85

DEVELOPER MODULE

Parts List

DEVELOPER ASSEMBLY (W/TAG 13)



9/83

ITEM	PART	DESCRIPTION
1	600S8914	DEVELOPER MODULE REPAIR KIT (50HZ)
—	600S8917	DEVELOPER MODULE REPAIR KIT (60HZ)
2	5P3430	COUPLING
3	3P4248	PLUG
4	35S20920	UPPER SEAL ASSEMBLY
5	3P4176	BUTTON
6	19P3471	SHOE
7	127P2146	MOTOR
8	30P35933	SHAFT SUPPORT
9	1P7399	AUGER BIAS STRIP
10	117S22570	WIRE ASSEMBLY
11	—	WIRE ASSEMBLY (P/O ITEM 1)
12	28P133	WASHER
13	26P3924	SCREW
14	—	SHIELD (P/O ITEM 1)
15	30P37288	SUPPORT
16	7P3800	DRIVE GEAR
17	30P35743	SHAFT SUPPORT
18	7P3634	GEAR
19	7P3635	GEAR
20	7P3636	IDLER GEAR
21	5P3581	HUB (ALTERNATE)
—	5P3423	HUB
22	7S21340	INPUT GEAR ASSEMBLY
23	7S21242	GEAR ASSEMBLY
24	7S3639	AGITATOR GEAR
25	13P2344	BEARING
26	—	DRIVE SHAFT (P/O ITEM 1)
27	35S3262	GASKET
28	—	BASE (P/O ITEM 1)
29	—	SUPPORT ASSEMBLY (P/O ITEM 1)
30	30S36208	MAGNET ASSEMBLY

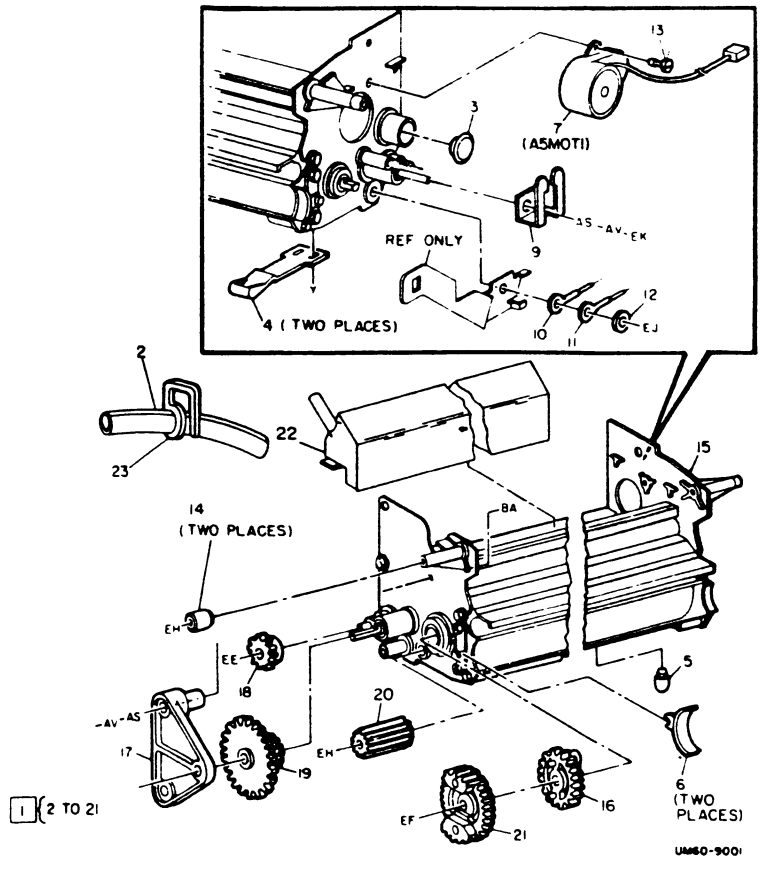
Restricted ? No R.P Code

5/85

DEVELOPER MODULE

Parts List

DEVELOPER ASSEMBLY (TAG 130)



5/85

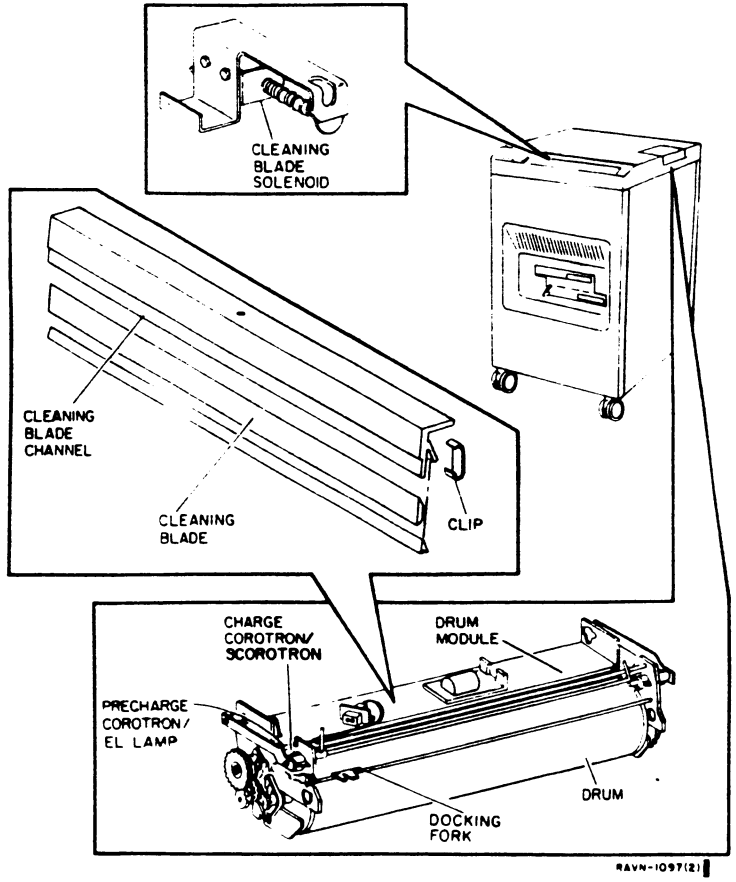
ITEM	PART	DESCRIPTION
1	2S14261	DEVELOPER HOUSING
—	2S14271	DEVELOPER MODULE (INCL TONER DISPENSER)
2	52P2006	TUBING
3	3P4248	PLUG
4	30S36208	MAGNET ASSEMBLY
5	3P4176	BUTTON
6	19P3471	DRUM SHOE
7	127P2316	TONER DISPENSING MOTOR (60 HZ)
—	127P2341	TONER DISPENSING MOTOR (50 HZ)
8	—	SHAFT SUPPORT (REF ONLY)
9	1P7399	AUGER BIAS STRIP
10	—	WIRE ASSEMBLY (REF ONLY)
11	—	WIRE ASSEMBLY (REF ONLY)
12	28P133	WASHER
13	—	SCREW
14	13P2344	BEARING
15	—	BASE (P/O ITEM 1)
16	—	INPUT GEAR ASSEMBLY (P/O ITEM 1)
17	—	SHAFT SUPPORT (REF ONLY)
18	7P3634	GEAR
19	7P3635	GEAR
20	—	IDLER GEAR (P/O ITEM1)
21	5P3423	HUB
22	44S31	VACUUM HOUSING
23	50P2765	CONTAMINATION GATE
24	600S8914	DEVELOPER ASSEMBLY REPAIR KIT (RXL ONLY)
—	600S8917	DEVELOPER ASSEMBLY REPAIR KIT (BSG ONLY)

5/85

DRUM MODULE

Location of Major Components

DRUM MODULE



5/85

Service Notes

WARNINGS FOR USAGE OF ELECTROMETER

DO NOT TOUCH PROBE WHEN YOU ARE MEASURING A VOLTAGE.

CAUTIONS FOR USAGE OF ELECTROMETER

1. SWITCH OFF ELECTROMETER WHEN YOU ARE NOT USING THE ELECTROMETER.
2. CLOSE PROBE WHEN YOU ARE NOT USING THE ELECTROMETER.
3. CALIBRATE ELECTROMETER EVERY 5 MINUTES DURING CONSTANT USAGE (MOD III ONLY).
4. DO NOT USE ELECTROMETER TO MEASURE VOLTAGES OF COROTRONS.
5. DO NOT TRY TO CLEAN THE PROBE.
6. DISCONNECT ELECTROMETER FROM MULTIMETER WHEN YOU ARE USING THE METER SEPARATELY.
7. WHEN YOU ARE NOT USING THE ELECTROMETER, PUT MIDDLE SWITCH TO LEFT POSITION; PUT **READ/HOLD** SWITCH TO **HOLD** POSITION; PUT WIRE AROUND CASE, AND SECURE PROBE TO CASE (MOD III ONLY).
8. AFTER MEASURING THE CHARGE VOLTAGE, MOVE ON/OFF SWITCH TO OFF POSITION BEFORE REMOVING THE PROBE FROM PRINTER, UNLESS REMOVING FOR A CHECK OF ELECTROMETER.

COROTRON END BLOCKS

Do not attempt repairing the charge corotron end blocks. They are adjusted in manufacturing and cannot be adjusted in the field.

PRODUCT CODES (8040 ONLY)

Throughout this documentation, you will see reference made to B1 only or B2. You will be able to identify the differences in these builds by the following product codes:

US	60 Hz		B1	876
US	60 Hz		B2	909
XCI	60 Hz			909C
RX	50 Hz	220v		829

USE OF PVC GLOVES DURING DRUM CLEANING

Bulletin 2128 (5-16-83) advised the use of two (2) gloves on the hand which applies the cleaning solvents, during photoreceptor maintenance.

Until all of the required service and customer literature can be updated, you should visit all your customers presently performing photoreceptor maintenance and, similarly, direct them to use two protective gloves when cleaning or pumicing the photoreceptor.

While this activity is of a precautionary nature, if a customer expresses any concern or has questions regarding the two-glove procedure, call Product Safety at 8°222-2177 or (716) 422-2177.

5/85

Repairs

PLASTIC "TONER" BAG

REMOVAL

CAUTION

When replacing a full toner bag, tap the fingers of the toner bag expander before removing bag. This will prevent the fingers from spraying toner around the work area.

1. TAP TUBE BEFORE REMOVING THE "TONER" BAG TO ENSURE NO OBSTRUCTION EXISTS IN TUBE.
2. REMOVE "TONER" BAG AND TIE TOP OF BAG TIGHTLY BEFORE DISCARDING THE BAG.
3. IF TONER BAG EXPANDER REQUIRES REPLACEMENT:
   a. Remove expander.
   b. Clean the drop tube outside surface with a clean dry cloth.
   c. Install expander to drop tube with narrow and wide sides of expander aligned with narrow and wide sides of drop tube.

REPLACEMENT

NOTE: For best results, vacuum drop tube before installing the bag.

1. GENTLY INFLATE BAG BEFORE INSTALLING THE BAG ON TUBE.
2. CHECK THAT THERE IS NO OBSTRUCTION IN NECK OF BAG.
3. SLIP BAG OVER BAG EXPANDER.
4. SECURE BAG TO DROP TUBE WITH ATTACHED TIE.

12/83

DRUM MODULE

Repairs

DRUM MODULE: WITHOUT TAG 24

REMOVAL

1. REMOVE DEVELOPER MODULE.
2. REMOVE DEVELOPER DRIVE COUPLING.
3. UNLATCH PREFUSER TRANSPORT HANDLE AT NUMBER 5.

CAUTION

Do not allow drum module to fall on leveling screw for developer module. Damage to the surface of drum may occur.

4. REMOVE DRUM MODULE (FIGURE 1).
   a. Remove plastic cover.
   b. Loosen drum lockdown levers (Without Tag 33).
   c. Pull pins.
   d. Disconnect corotrons, shield, and ground.

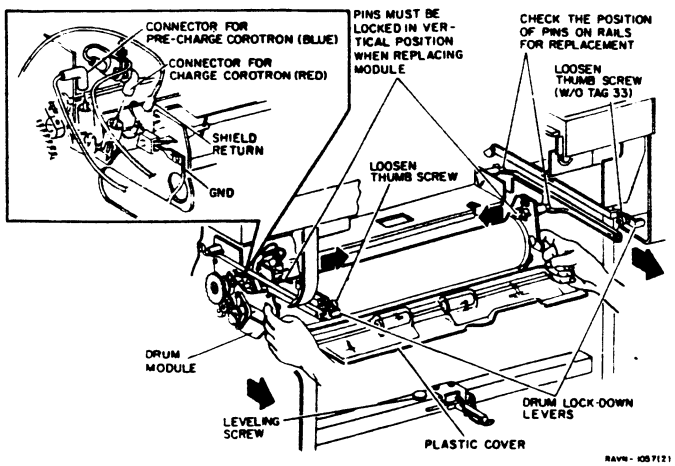


Figure 1. Removing the Drum Module

CAUTION

Do not allow cleaning blade to touch drum when removing the drum module from printer. Also, the drum is sensitive to the light and must be put into a black bag if drum will be exposed to the light for more than 5 minutes.

5. PROTECT DRUM MODULE (FIGURE 2).
   a. Install a rubber band or o-ring onto actuator arm for cleaning blade.
   b. Place module on its left side, as shown in Figure 2, to avoid damage to drum.
   c. Put entire module into black plastic bag that is stored in front cover.

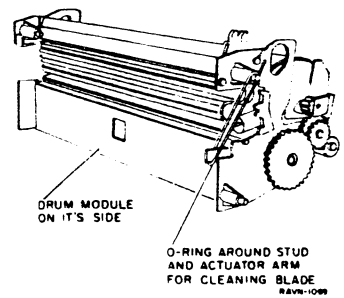


Figure 2. Protecting the Drum Module

Repairs

DRUM

CAUTION

Do not allow drum to be exposed to the light for more than 5 minutes. Store the drum or drum module in black plastic bag, stored in front of printer.

REMOVAL

1. REMOVE DRUM MODULE.
2. REMOVE CHARGE COROTRON.
3. REMOVE DRUM ASSEMBLY FROM DRUM MODULE (FIGURE 1).
4. REMOVE DRUM (FIGURE 2).

REPLACEMENT

NOTE: When installing a new drum, use only zinc stearate (8R181) to lubricate drum. Contamination of system and copy quality defects will be the result if Kynar is used.

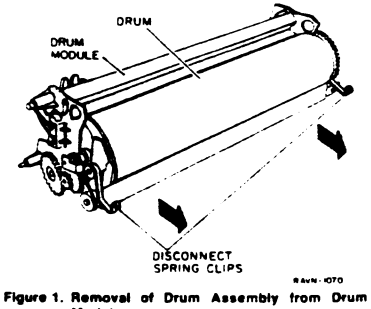


Figure 1. Removal of Drum Assembly from Drum Module

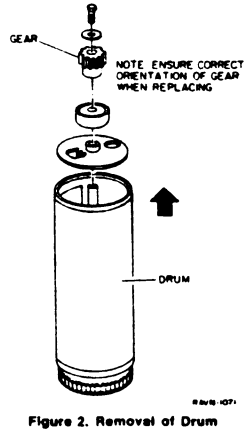


Figure 2. Removal of Drum

1. ASSEMBLE END BELLS ONTO DRUM (FIGURE 3).
2. BUFF SURFACE OF DRUM WITH ZINC STEARATE (FIGURE 4).
   a. Place a thin layer of stearate dust on surface of drum by tapping the bag over drum.
   b. With your hand at a 90 degree angle to drum, buff surface of drum with a clean polyurethane pad that has no moisture.
   c. Place a thin layer of stearate dust on surface of drum.
3. PERFORM THE FUNCTIONAL CHECK OF DOCTOR BLADE.
   a. Put drum in service position.
   b. Block the auger exit port.
   c. Manually rotate drum.
   d. Observe removal of zinc stearate.
   e. If streaking is observed, flip blade or replace.
   f. If winged printouts are observed, go to drum cleaning procedure.
4. DUST THE DRUM WITH ZINC STEARATE AND INSTALL DRUM MODULE IN PRINTER.
5. RETURN THE PRINTER TO NORMAL OPERATING CONDITION.
6. CHECK/ADJUST CLEANING BLADE SOLENOID.
7. MAKE 30 PRINTS OF TEST PATTERN.
8. PERFORM ELECTROSTATIC SERIES.

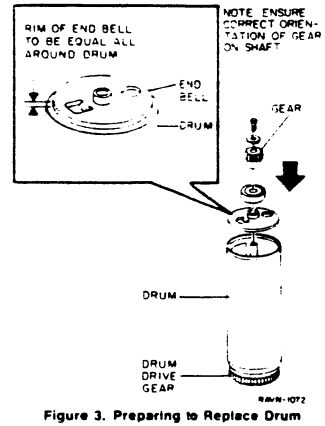


Figure 3. Preparing to Replace Drum

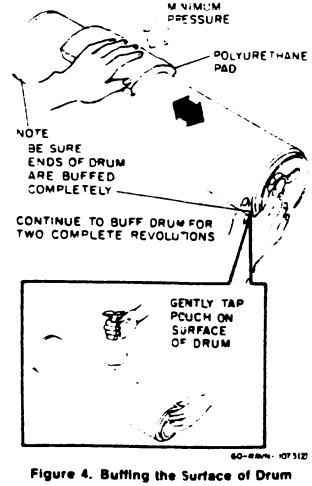


Figure 4. Buffing the Surface of Drum

Repairs

CLEANING BLADE

CAUTION

Do not use solvents or other cleaners on cleaning blade. Damage to the cleaning blade may occur. Refer to the cleaning blade procedure.

REMOVAL

1. REMOVE DRUM MODULE.
2. REMOVE DRUM ASSEMBLY FROM DRUM MODULE.
3. ACCESS THE SCREW (TAG 31 PRINTERS, REMOVE CONTAMINATION HOSE GROMMET AND BRACKET) (FIGURE 1).
4. REMOVE CLEANING BLADE (FIGURE 1).

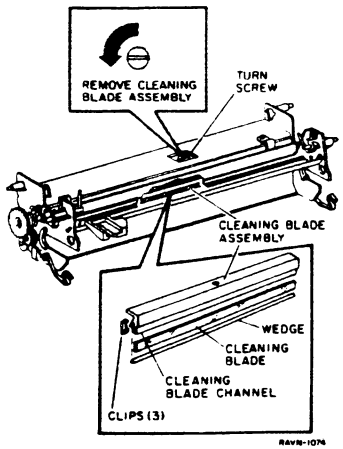


Figure 1. Removal of the Cleaning Blade

REPLACEMENT

NOTE: If blade will be reversed or if there is a damaged edge, cut out a piece of material from the damaged edge to identify it.

1. CLEAN THE CHANNEL BEFORE INSTALLING THE BLADE (FIGURE 2).

CAUTION

Do not touch edge of cleaning blade when handling the blade. Contamination of blade may occur because of oils from skin.

2. PLACE A THIN LAYER OF ZINC STEARATE ON EDGE OF BLADE.
3. INSTALL BLADE INTO CHANNEL, AND SECURE BLADE IN THE CORRECT POSITION WITH WEDGE.
4. INSTALL CLIPS, AND POSITION THE CLIPS IN ORDER TO SECURE WEDGE AGAINST BLADE (FIGURE 2).
5. INSTALL CHANNEL INTO DRUM MODULE.
6. INSTALL DRUM IN DRUM MODULE.
7. CHECK/ADJUST CLEANING BLADE SOLENOID.

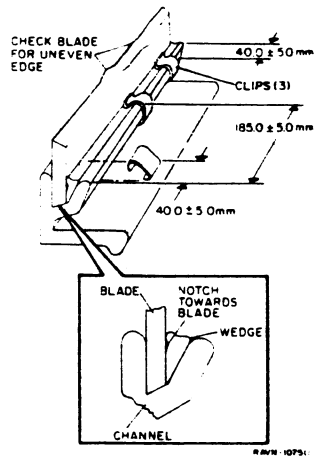


Figure 2. Installing the Cleaning Blade

Repairs

COROTRONS

REMOVAL

NOTE: Printers WITH TAG 24 will not have a precharge corotron.

NOTE: When replacing the corotron wire, use only tungsten wire (117P7419). Copy quality problems will occur if any other type of wire is used.

NOTE: Printing with Tag 193 will have a scorotron in place of the charge corotron. The scorotron is described in a separate proledure.

1. REMOVE DRUM MODULE.

CAUTION

Do not raise rear of corotrons more than 48.0 mm before removing the front end blocks from their mounting clips. You may break the end blocks.

2. REMOVE COROTRON(S) (FIGURE 1).
   a. Lift the rear of corotron from mounting clip.
   b. Remove front of corotron from mounting clip.
   c. Slide the plastic arc shield from corotron and remove foam seal (transfer and detack only).

REPLACEMENT

1. REPLACE COROTRON WIRE, IF REQUIRED (FIGURE 2).
2. REPLACE FOAM SEAL (TRANSFER AND DETACK ONLY), AND PLASTIC ARC SHIELD.
3. PRESS ON END BLOCKS OF COROTRONS WHEN INSTALLING THE COROTRONS INTO DRUM MODULE (FIGURE 1).
4. IF COROTRON WIRE OR CHARGE COROTRON WAS REPLACED, DO ELECTROSTATIC SERIES.

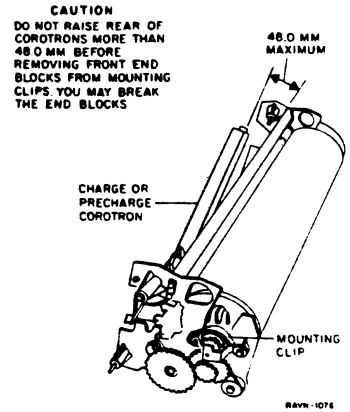


Figure 1. Removing and Replacing the Corotrons

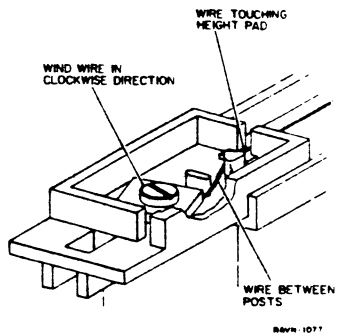


Figure 2. Replacing the Corotron Wire

DRUM MODULE

Repairs

DRUM MODULE: WITH TAG 24

REMOVAL

1. REMOVE DEVELOPER MODULE.
2. REMOVE DEVELOPER DRIVE GEAR.
3. UNLATCH PREFUSER TRANSPORT HANDLE AT NUMBER 5.

CAUTION

Do not allow drum module to fall on leveling screw for developer module. Damage to surface of drum may occur.

4. REMOVE DRUM MODULE (FIGURE 1).
   a. Remove plastic cover.
   b. Loosen drum lockdown lever (Without Tag 33).
   c. Pull pins.
   d. Disconnect corotron, scorotron, shield, EL lapm, and ground as required by machine configuration.

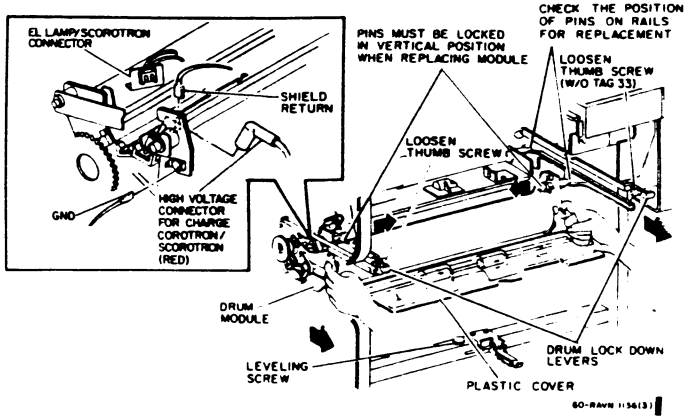


Figure 1. Removing the Drum Module

CAUTION

Do not allow cleaning blade to touch drum when removing the drum module from printer. Also, the drum is sensitive to the light and must be put into a black bag if drum will be exposed to the light for more than 5 minutes.

5. PROTECT DRUM MODULE (FIGURE 2).
   a. Install a rubber band or o-ring onto actuator arm for cleaning blade.
   b. Place module on its left side, as shown in Figure 2, to avoid damage to drum.
   c. Put entire module into black plastic bag that is stored in front cover.

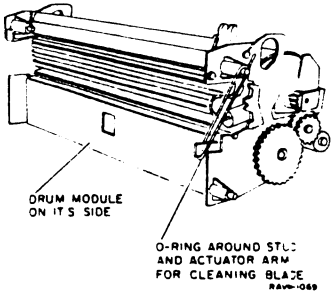


Figure 2. Protecting the Drum Module

Repairs

EL LAMP: WITH TAG 143

REMOVAL

1. DISCONNECT POWER CORD.
2. REMOVE DEVELOPER MODULE.
3. REMOVE DRUM MODULE.
4. REMOVE EL LAMP (FIGURES 1 AND 2).
   a. Remove EL lamp connector from bracket (Figure 1).
   b. Cut cable ties (2).
   c. Remove charge corotron.
   d. Remove and bag drum.
   e. Unlatch EL lamp from bracket and rotate up.
   f. Pry ends of lamp out to loosen doubleback tape holding EL lamp to bracket (Figure 2).
   g. Slide the lamp out of bracket.

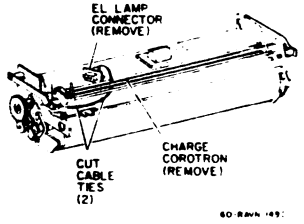


Figure 1. EL Lamp Removal Preparation

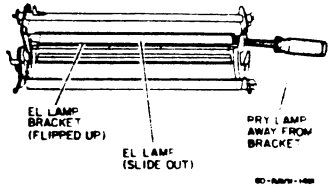


Figure 2. Lamp Removal

5/85

REPLACEMENT

1. CLEAN THE EL LAMP WITH A CLEAN DRY CLOTH
2. REMOVE BACKING FROM DOUBLEBACK TAPE ON NEW LAMP.
3. SLIDE THE LAMP INTO BRACKET (CENTER LAMP IN DRUM CAVITY) (FIGURE 3).

CAUTION

When latching the EL lamp in place, press on outer ends. Excessive force on inner portions of lamp bracket will bend bracket and cause drum damage.

4. LATCH THE EL LAMP IN PLACE (FIGURE 4).
5. REPLACE EL LAMP CONNECTOR.
6. REPLACE CABLE TIES (2).
7. REPLACE DRUM AND CHARGE COROTRON.
8. REPLACE DRUM MODULE.
9. REPLACE DEVELOPER MODULE.

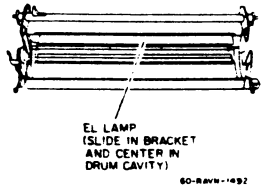


Figure 3. Replacing and Centering the EL Lamp

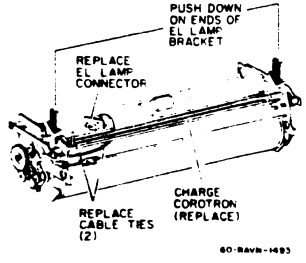


Figure 4. EL Lamp Replacement

3/83

Repairs

CHARGE SCOROTRON

REMOVAL

NOTE: When replacing the charge scorotron wire, use only tungsten wire (11P7419). Copy quality problems will occur if any other type of wire is used.

1. REMOVE THE DRUM MODULE

CAUTION

Do not raise the rear of charge scorotron more than 48.0 mm before removing the front end blocks from the mounting clips. Otherwise you may break the end blocks.

2. REMOVE THE CHARGE SCOROTRON (FIGURE 1).
   a. Lift the rear of the charge scorotron from the mounting clip.
   b. Remove the front of the charge scorotron from the mounting clip.

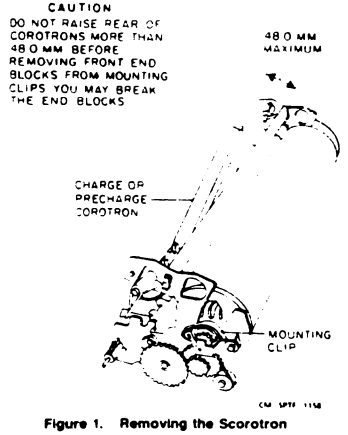


Figure 1. Removing the Scorotron

REPLACEMENT

CAUTION

Be careful not to bend the wire.

1. REPLACE THE CHARGE SCOROTRON WIRE, IF REQUIRED (FIGURE 2).
   a. Carefully slide the grid on the scorotron toward the outboard end to remove grid from assembly.
   b. Clean the scorotron before replacing the wire.
   c. Place a 3-3.5 mm shim or metric Allen key behind the spring.
   d. Wrap the wire between the washers and around the terminal.
   e. (Figure 2) Loop the wire through the hook on the end of the spring and then around the terminal again (wire must be between the washers).

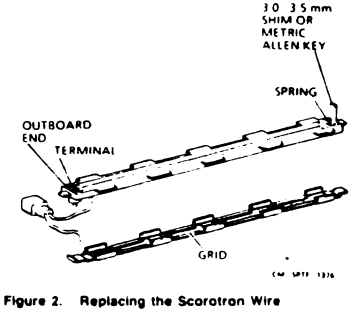


Figure 2. Replacing the Scorotron Wire

   f. Pull gently on the wire while tightening the screws.
   g. Make the tension on both wires the same by gently pressing the two wires down at the same time.
   h. Break off excess wire at the terminal. Remove the shim. The spring should not touch the housing. There should be a minimum gap of 0.5 mm between the spring and the housing.
   i. Clean the wires with a lint-free cloth and Film Remover. Ensure that no fibers remain on the wires.

CAUTION

Do not raise the rear of scorotron more than 48.0mm before reinstalling the front end block into the mounting clip. You may break the end block.

2. PRESS ON THE END OF THE SCOROTRON WHEN INSTALLING THE SCOROTRON INTO THE DRUM MODULE (FIGURE 3).

3. IF THE SCOROTRON WIRE OR THE CHARGE SCOROTRON WAS REPLACED, PERFORM ELECTROSTATIC SERIES (REFER TO THE FUNCTIONAL DOCUMENTATION, GENERAL PROCEDURES SECTION).

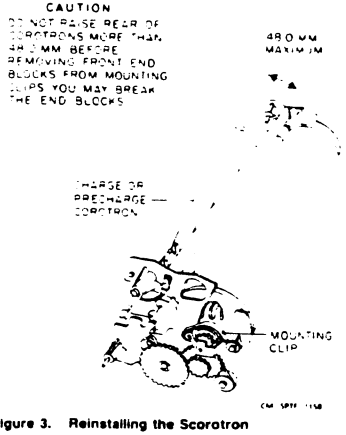


Figure 3. Reinstalling the Scorotron

Cleaning and Lubrication

DRUM MAINTENANCE

Consumables

Cleaning Absorbent (600S4044)
Cleaning Solvent (43P63)
Photoreceptor Polish (43P76)
Dusting Pouch (8R181)
Eraser (43P61)

Contents of Kit

Polyurethane Pads (2)
Compressed Sponges (2)
Disposable Plastic Gloves (2)
Disposable Plastic Bag (2)

WARNING

Check for enough ventilation when using the drum cleaning solvent (43P63). If you begin to not feel well, while washing the drum, stop the solvent washing of drum and get some fresh air before continuing the service call. Do not continue the solvent wash procedure under the same conditions. Either increase the ventilation or just use the polish procedure. When working with drum cleaning solvent, two gloves must be worn on each hand to avoid vapors from solvent touching the skin. Discard the pads and gloves in the plastic bags.

PREPARATION

1. REMOVE DEVELOPER MODULE.
2. REMOVE DRUM MODULE.
3. REMOVE DRUM.
4. GENTLY REMOVE "TONER" AND DEVELOPER FROM SURFACE OF DRUM USING A POLYURETHANE PAD THAT CONTAINS NO MOISTURE.

Procedure A: For removal of spots caused by "toner" or contaminants.

Procedure B: For removal of rough or fine scratches in limited area.

Procedure C: For removal of areas of crystallization or fine scratches.

Procedure D: For removal of "wing printouts" caused by drum surface defects.

12/83

Procedure A

1. WASH ENTIRE DRUM (FIGURE 1).
   a. Soak a large piece of the cleaning absorbent with the cleaning solvent.
   b. Wash drum from end to end with circular motions.
   c. Use a new side of the cleaning absorbent and continue washing the drum until the entire surface of drum appears clean.
   d. Allow enough time for air to dry the surface of drum.
2. APPLY A THIN LAYER OF ZINC STEARATE ON THE ENTIRE SURFACE OF DRUM BY TAPPING THE SIDE OF DUSTING POUCH OVER THE DRUM SURFACE (FIGURE 2).
3. BUFF THE DRUM SURFACE WITH THE CLEAN POLYURETHANE PAD THAT CONTAINS NO MOISTURE.
4. ENSURE THAT ENDS OF DRUM ARE BUFFED AS MUCH AS THE CENTER OF DRUM.
5. CONTINUE TO BUFF THE DRUM FOR THREE COMPLETE REVOLUTIONS.
6. MAKE 30 PRINTS OF TEST PATTERN.
7. CHECK THE COPY QUALITY USING YOUR FUNCTIONAL DOCUMENTATION.

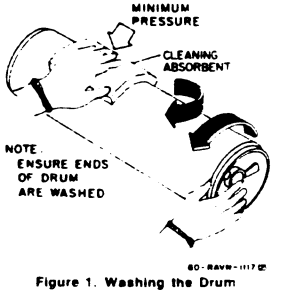


Figure 1. Washing the Drum

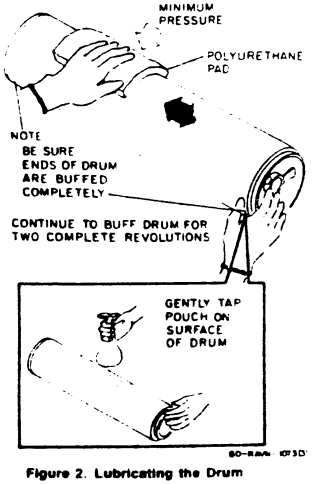


Figure 2. Lubricating the Drum

11/84

Cleaning and Lubrication

Procedure B

CAUTION

Do not allow compound to dry on drum. Small scratches on drum will occur.

1. REMOVE SCRATCHES BY USING THE ERASER (43P61) BEFORE PUTTING THE POLISH COMPOUND ON DRUM (FIGURE 3).
2. CLEAN THE ENTIRE DRUM WITH THE POLISH (FIGURE 4).
   a. Shake the container of polish completely.
   b. Put on plastic gloves.
   c. Put large amount of the polish on a clean polyurethane pad.
   d. Clean the drum as shown.

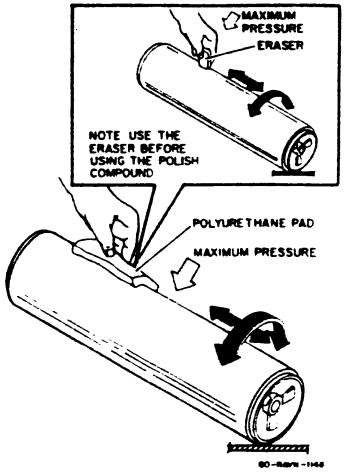


Figure 3. Removing the Scratches

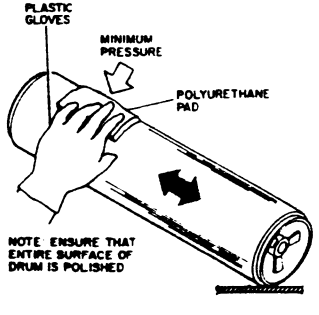


Figure 4. Polishing the Drum

3. CLEAN THE POLISH FROM DRUM (FIGURE 5).
   a. Use a damp sponge, then a slightly damp sponge.
   b. Buff the drum with the clean polyurethane pad.

CAUTION

Ensure dusting pouch has no contaminants on the outside. Contaminants may scratch the drum.

4. APPLY A THIN LAYER OF ZINC STEARATE ON ENTIRE SURFACE OF DRUM BY SOFTLY TAPPING THE DUSTING POUCH ON SURFACE OF DRUM (FIGURE 6).
5. BUFF DRUM SURFACE WITH THE CLEAN POLYURETHANE PAD THAT CONTAINS NO MOISTURE.
6. ENSURE THAT ENDS OF DRUM ARE BUFFED AS MUCH AS THE CENTER OF DRUM.
7. CONTINUE TO BUFF DRUM FOR THREE COMPLETE REVOLUTIONS OF DRUM.
8. MAKE 30 to 50 PRINTS OF SET-UP TEST PATTERN.
9. CHECK THE LAST THREE PRINTS FOR AREAS WHERE LINE THINNING HAS OCCURRED.

NOTE: If these areas do not meet restore darkness level, drum has been polished too deeply and must be replaced.

10. MAKE THREE LIGHT DUSTINGS AND CHECK FOR HIGH BACKGROUND AREAS. REPLACE DRUM IF HIGH BACKGROUND AREAS OCCUR.
11. CHECK THE COPY QUALITY USING YOUR FUNCTIONAL DOCUMENTATION.
12. CHECK/ADJUST ADC SET UP

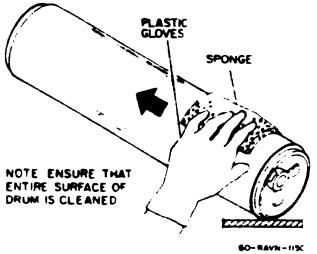


Figure 5. Removing the Polish

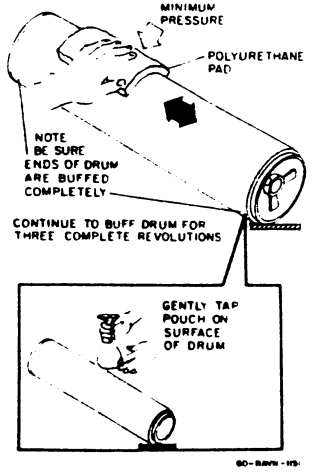


Figure 6. Lubricating the Drum

Cleaning and Lubrication

Procedure C

1. REMOVE FILM OR SCRATCHES (FIGURE 7).

CAUTION

Do not allow compounds to become dry on drum. Small scratches on surface of drum will occur.

   a. Shake the container of polish completely.
   b. Put on gloves.
   c. Put large amount of the polish on the clean polyurethane pad.
   d. Polish the drum as shown.

2. CLEAN THE POLISH FROM DRUM (FIGURE 8).
   a. Use a damp sponge, and then a slightly damp sponge.
   b. Buff drum with the clean polyurethane pad.

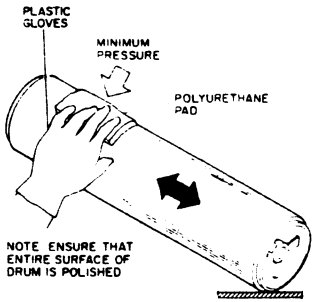


Figure 7. Removing the Filming or Scratches

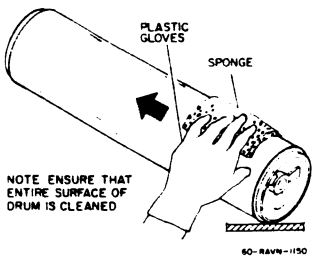


Figure 8. Taking Off the Polish

CAUTION

Ensure that the dusting pouch has no contaminants on the outside. Contaminants may scratch the drum.

3. APPLY A THIN LAYER OF ZINC STEARATE ON ENTIRE SURFACE OF DRUM BY SOFTLY TAPPING DUSTING POUCH ON SURFACE OF DRUM (FIGURE 9).
4. BUFF DRUM SURFACE WITH THE CLEAN POLYURETHANE PAD THAT CONTAINS NO MOISTURE.
5. ENSURE THAT ENDS OF DRUM ARE BUFFED AS MUCH AS THE CENTER OF DRUM.
6. CONTINUE TO BUFF DRUM FOR THREE COMPLETE REVOLUTIONS OF DRUM.
7. MAKE 30 TO 50 PRINTS OF CAM TEST PATTERN.
8. CHECK THE LAST THREE PRINTS FOR AREAS WHERE LINE THINNING HAS OCCURRED.

NOTE: If these areas do not meet restore darkness level, drum has been polished too deeply and must be replaced.

9. MAKE THREE LIGHT DUSTINGS AND CHECK FOR HIGH BACKGROUND AREAS. REPLACE DRUM IF HIGH BACKGROUND AREAS OCCUR.
10. CHECK THE COPY QUALITY USING YOUR FUNCTIONAL DOCUMENTATION.
11. CHECK/ADJUST ADC SET UP.

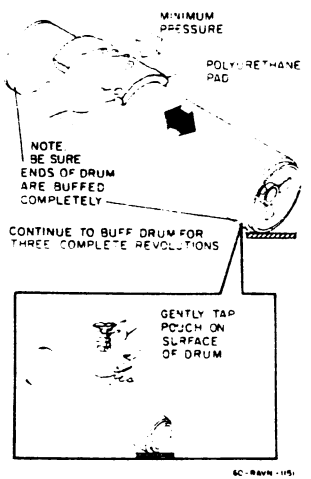


Figure 9. Lubricating the Drum

Cleaning and Lubrication

Procedure D

NOTE: When performing this procedure, if the drum is damaged, replace it.

REMOVE DEFECT FROM DRUM SURFACE.

a. Locate surface defect

b. Remove surface defect by gently breaking off with 0.020 shim stock, as shown (Figure 10).

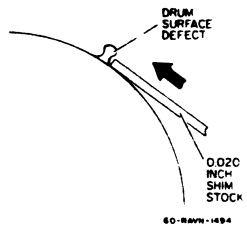


Figure 10. Removing the Drum Surface Defect

MAINTENANCE OF DRUM (RXL)

Consumables

Cleaning Solvent (8R90176)
Dusting Pouch (8R90139)
7 oz. Photoreceptor Polish (43P69)
4 oz. Photoreceptor Polish (43P76)
Eraser (43P61)

Kit (600S92127)

Disposable Plastic Bag and Tie (1 Packet of 2)
Disposable Plastic Gloves (8R90021) (1 Packet of 2)
Polyurethane Pads (1 Packet of 3)

Kit (600S92126)

Disposable Plastic Bag (10 Packets of 2)
Disposable Plastic Gloves (10 Packets of 2 pair)
J Cloth (10 Packets of 2)
Polyurethane Pads (10 Packets of 3)

WARNING

Check for enough ventilation when using the drum cleaning solvent (8R90176). If you begin to not feel well, while washing the drum, stop the solvent washing of drum and get some fresh air before continuing the service call. Do not continue the solvent wash procedure in the same condition. Either increase the ventilation or just use the polish procedure. Vapors from solvents must not touch the skin. Discard the pads, sponges, gloves, and erasers in the plastic bags provided.

Cleaning and Lubrication

PREPARATION

1. REMOVE DEVELOPER MODULE
2. REMOVE DRUM MODULE.
3. REMOVE DRUM.
4. GENTLY REMOVE "TONER" AND DEVELOPER FROM SURFACE OF DRUM USING A POLYURETHANE PAD THAT CONTAINS NO MOISTURE (FIGURE 1).
5. VISUALLY CHECK THE SURFACE OF DRUM.

CLEANING

1. PUT ON GLOVES.

CAUTION

Do not allow polish compound to become dry on drum. Small scratches on surface of drum will occur. If necessary, add a small amount of polish compound on a polyurethane pad to keep the compound on drum damp.

2. REMOVE SCRATCHES (FIGURE 2).
   a. Shake the container of polish compound completely.
   b. Put a small amount of polish compound on the clean side of polyurethane pad.
   c. Remove scratches as shown.

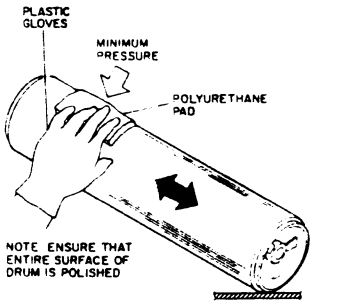


Figure 1. Cleaning the Drum

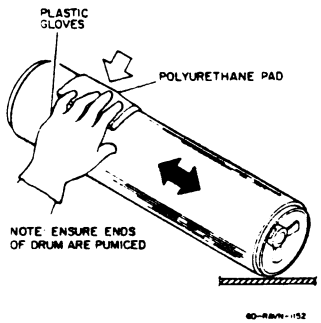


Figure 2. Removing the Scratches

3. CLEAN THE POLISH FROM DRUM USING THE J CLOTH (FIGURE 3).
4. BUFF DRUM WITH THE CLEAN POLYURETHANE PAD.

CAUTION

Ensure the dusting pouch has no contaminants on the outside. Contaminants may scratch the drum.

5. APPLY A THIN LAYER OF ZINC STEARATE ON ENTIRE SURFACE OF DRUM BY SOFTLY TAPPING DUSTING POUCH ON DRUM SURFACE (FIGURE 4).
6. BUFF DRUM SURFACE WITH THE CLEAN POLYURETHANE PAD THAT CONTAINS NO MOISTURE.
7. CONTINUE TO BUFF DRUM FOR THREE COMPLETE REVOLUTIONS OF DRUM.
8. MAKE 30 TO 50 PRINTS OF CAM TEST PATTERN.
9. CHECK THE LAST THREE PRINTS FOR AREAS WHERE LINE THINNING HAS OCCURRED.

NOTE: If these areas do not meet restore darkness level, drum has been polished too deeply and must be replaced.

10. MAKE THREE LIGHT DUSTINGS AND CHECK FOR HIGH BACKGROUND AREAS. REPLACE DRUM IF HIGH BACKGROUND AREAS OCCUR.
11. CHECK THE COPY QUALITY USING YOUR FUNCTIONAL DOCUMENTATION.
12. CHECK/ADJUST ADC SET UP.

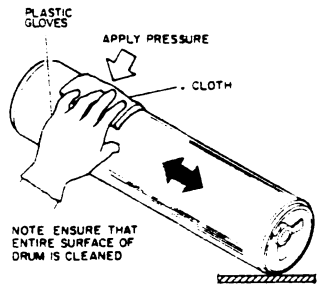


Figure 3. Removing the Polish

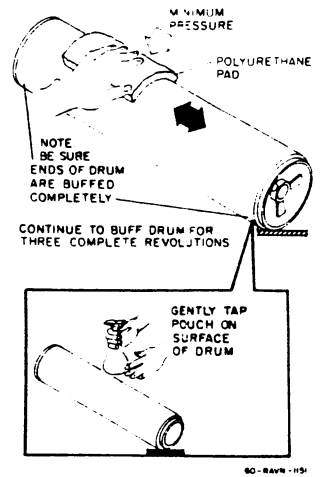


Figure 4. Lubricating the Drum

Cleaning and Lubrication

CLEANING BLADE

CAUTION

Do not use solvents or other cleaners on cleaning blade. Damage to the blade may occur.

CLEANING

1. CLEAN THE CLEANING BLADE WITH CLOTH FREE OF LINT.
2. PUT ZINC STEARATE ON CLEANING BLADE BEFORE INSTALLING THE BLADE.

COROTRONS

CLEANING

1. CLEAN THE COROTRONS WITH CLEANING CLOTH.
2. CLEAN THE COROTRON WIRES WITH CLOTH THAT IS FREE OF LINT AND SOAP AND WATER.

NOTE: Corotron wires must be completely dry or arcing will occur.

REPLACEMENT

NOTE: When charge corotron or charge corotron wire is replaced, perform Electrostatic Series.

CLEANING

CAUTION

When removing the screen from the charge scoro tron, do not press on the screen material. The screen material deforms easily and must be replaced if deformed.

1. REMOVE SCREEN.
2. REMOVE THE LOOSE 'TONER' WITH A BRUSH.

CAUTION

Scorotron and corotron wires must be completely dry before they can be used. Arcing of the wires will occur if they are not completely dry.

3. FOR HARD TO REMOVE MATERIAL, USE SOAP AND WATER.
4. CLEAN THE RESIDUE FROM THE WIRES
   a. Clean the wires with a cotton swab and Film Remover.
   b. Ensure that no fibers remain on the wires.
5. CLEAN THE TWO SIDES OF THE SCORO-TRON SCREEN WITH A BRUSH. ENSURE THAT NO FIBERS REMAIN ON THE SCREEN.
6. REINSTALL SCREEN.

Cleaning and Lubrication

EL LAMP TAG 24: WITHOUT TAG 143

CLEANING

1. CLEAN THE EL LAMP WITH CLOTH FREE OF LINT.
   a. Remove developer module.
   b. Put drum module in the position for service.
   c. Remove charge corotron.
   d. Raise EL lamp holder and clean the EL lamp.

CHARGE SCOROTRON: WITH TAG 143

CAUTION

When removing the screen from the charge scorotron, do not press on the screen material as it deforms easily and must be replaced if deformed

1 REMOVE LOOSE TONER WITH A BRUSH
   a Remove loose developer beads and toner being careful not to trap them under the halo baffle.
   b Remove the plastic arc shields, and clean the toner away with a brush.

CAUTION

Scorotron and corotron wires must be completely dry before use or arcing will occur

2 FOR HARD TO REMOVE MATERIAL, USE SOAP AND WATER

3 CLEAN THE RESIDUE FROM THE WIRES
   a Clean the wires with a cotton swab and film remover
   b Insure that no fibers remain on the wires

4 CLEAN BOTH SIDES OF THE SCOROTRON SCREEN WITH A BRUSH. INSURE THAT NO FIBERS REMAIN ON THE SCREEN

Adjustments

ELECTROSTATIC SERIES

Refer to Electrostatic Series Procedures in Functional Documentation

Adjustments

CLEANING BLADE SOLENOID

Purpose

The purpose is to adjust cleaning blade solenoid to ensure cleaning blade cleans the drum when solenoid is energized, and remains away from surface of drum when solenoid is deenergized.

Check

NOTE: Zinc stearate dust pouch part number is 8R181 (RXL, 8R20139).

1. DISCONNECT MAIN POWER CORD.
2. CHECK THE OPERATION OF CLEANING BLADE.
   a. Install interlock tool.
   b. Remove developer module.
   c. Remove drum module.
   d. Apply a thin layer of zinc stearate on surface of drum by tapping the dusting pouch on drum (Figure 1).
   e. Install drum module.
   f. Connect main power cord.
   g. Disengage engagement lever; **C3** will flash (Without Tag 33).
   h. Enter diagnostic mode 3-3 (code 3 for B1). (Cleaning blade is deenergized.) Check that zinc stearate is not removed from drum.
   i. If stearate is removed, perform adjustment.

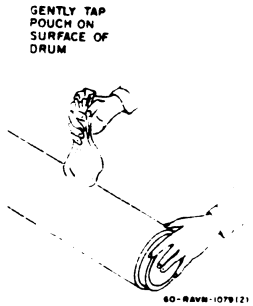


Figure 1. Lubricating the Drum

   j. Exist diagnostic mode 3-3 with mode 3-1. (Cleaning blade solenoid is energized.) Check that zinc stearate is removed from drum.
3. IF STEARATE IS REMOVED, RETURN THE PRINTER TO OPERATING CONDITION.
4. IF STEARATE IS PARTIALLY REMOVED, PERFORM ADJUSTMENT.

Adjustment

1. DISCONNECT POWER CORD.
2. REMOVE THE LASER SAFETY SHIELD LOCATED BEHIND THE CONTROL CONSOLE.
3. REMOVE FRONT DRUM LOCKING LEVER (WITHOUT TAG 33).
   a. Remove locking nut (disc).
   b. Remove nut securing lever pivot to frame.
   c. Remove lever.
4. ADJUST BODY OF SOLENOID (FIGURE 2).
   a. Energize solenoid with internal diagnostic code 9-1 (code 1 for B1).
   b. Adjust 2.4 ± 0.2 mm spacing between solenoid and bracket, as shown.
5. WITH SOLENOID ENERGIZED, ADJUST SOLENOID ASSEMBLY (FIGURE 3).
6. REPEAT THE CHECK.
7. INSTALL DRUM MODULE LOCKING LEVER.
8. INSTALL LASER SHIELD, RAISE THE CONTROL CONSOLE.

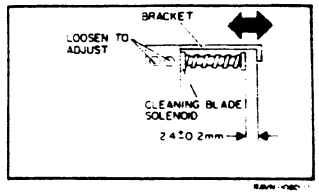


Figure 2. Adjustment of Body of Solenoid

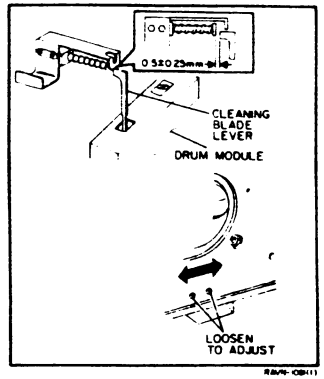
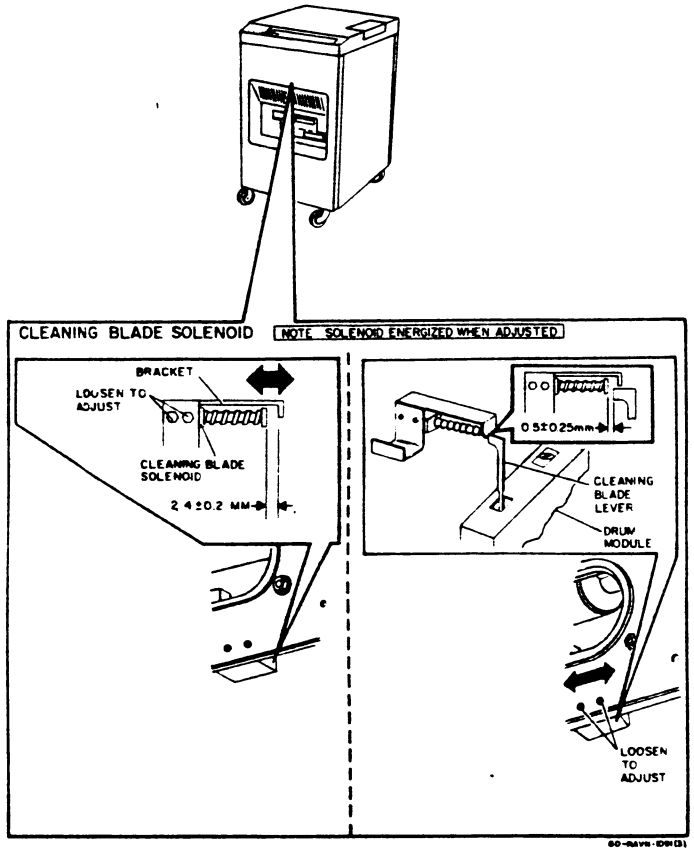


Figure 3. Adjustment of Solenoid

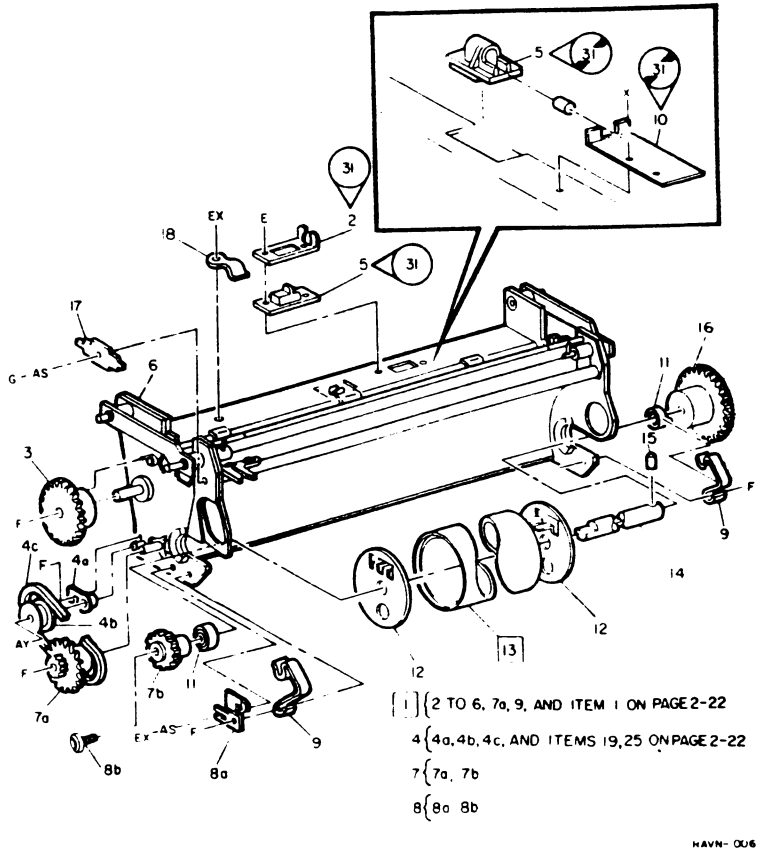
Adjustment Specifications



DRUM MODULE

Parts List

DRUM MODULE



5/85

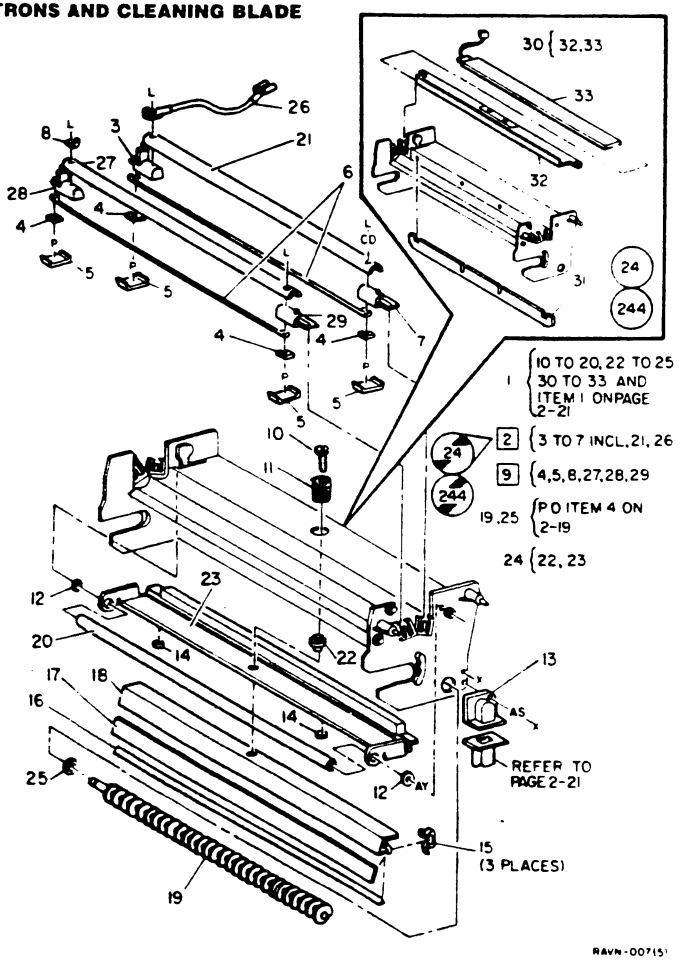
ITEM	PART	DESCRIPTION
1	2S50809	DRUM HOUSING ASSEMBLY (W/TAGS 32 AND 65) (W/OUT TAG 143)
—	2S15280	DRUM HOUSING ASSEMBLY (WITH TAG 143)
2	—	GROMMET PLATE (W/TAG 31) (REF ONLY)
3	7P3302	TRANSLATION GEAR
4	600S6510	AUGER REPAIR KIT (W/TAG 5)
4A	16P1716	BUSHING (W/TAG 5) (P/O ITEM 4)
4B	20P3293	PULLEY (W/TAG 5) (P/O ITEM 4)
4C	23P1282	BELT (W/TAG 5) (P/O ITEM 4)
5	16P1702	PLUG GROMMET (W/O TAG 31)
—	16P1711	GROMMET (W/TAG 31)
6	—	DRUM HOUSING (P/O ITEM 1)
7	600S7323	AUGER REPAIR KIT (W/TAG 65)
7A	7P3770	IDLER GEAR (W/TAG 65)
7B	—	DRUM GEAR DRIVE (W/TAG 65)
8	600S7325	GROUND DRUM STRIP REPAIR KIT (W/TAG 64) (SEE NOTE)
8A	115P460	GROUND DRUM STRIP (W/TAG 64)
8B	—	KNURLED SCREW (W/TAG 64)
9	19P3505	SPRING CLIP
10	30P36022	HOSE BRACKET (W/O TAG 31)
11	413W8505	BEARING
12	21P753	BELL END CAP
13	1R71	DRUM
—	1R62	SUBSTITUTE PART (B1 AND B2)
14	6S21732	SHAFT
15	271W3652	DOWEL PIN
16	7P3299	DRUM DRIVE GEAR
17	116P2486	TERMINAL
18	120P810	CLIP

NOTE INSTALL BOTH PARTS FROM KIT EVEN IF ONLY ONE HAS FAILED

5/85

Parts List

COROTRONS AND CLEANING BLADE



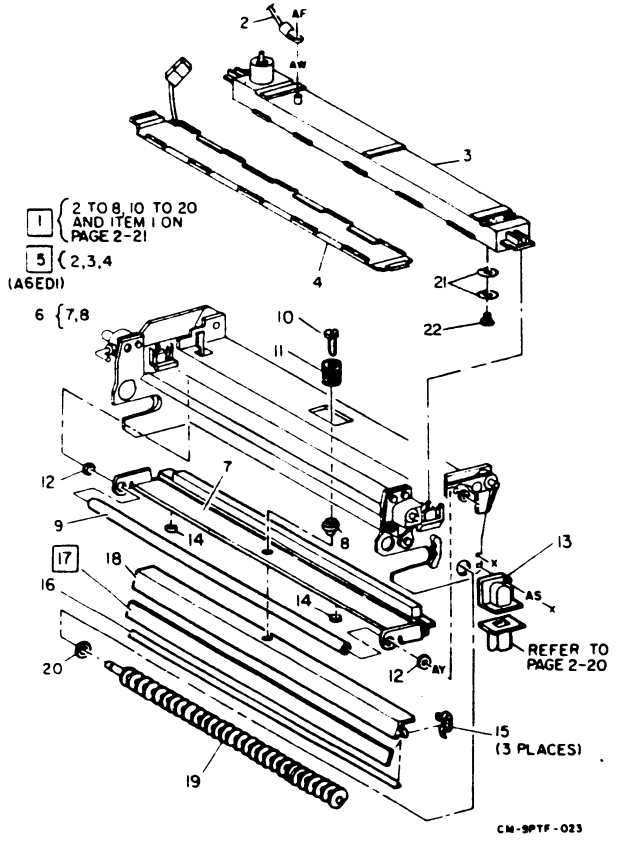
12/83

ITEM	PART	DESCRIPTION
1	—	PART OF DRUM HOUSING ASSEMBLY (ITEM 1 ON PAGE 2-21)
2	—	PRE-CHARGE COROTRON ASSEMBLY (W/O TAG 24 OR 244) (REF ONLY)
3	116S20061	FRONT BLOCK (W/O TAG 24 OR 244)
4	19P3506	WIRE CLAMP
5	55P3150	COROTRON SHIELD
6	117P7419	COROTRON WIRE
7	—	DELETED
8	—	GROUND TERMINAL (P/O ITEM 9)
9	125S20256	CHARGE COROTRON ASSEMBLY
10	26P3591	SCREW
11	9P3546	COMPRESSION SPRING
12	413W15355	BEARING
13	16P1628	TUBE ADAPTER
14	3P2118	BUTTON
15	9P3547	CLIP SPRING
16	19P3507	CLEANING BLADE CLAMP
17	4R59	CLEANING BLADE
18	30P34049	CLEANING BLADE SUPPORT
—	30P32598	CLEANING BLADE SUPPORT (ALTERNATE)
19	7S21091	AUGER (W/TAG 5) (P/O ITEM 4 ON PL1-F10)
	—	AUGER (W/O TAG 5) (P/O ITEM 4 ON PL1-F10)
20	—	SHAFT (P/O ITEM 1)
21	—	SHIELD (W/O TAG 24 OR 244) (P/O ITEM 2)
22	—	BUSHING (P/O ITEM 24)
23	—	BLADE (P/O ITEM 24)
24	30S29560	BRACKET ASSEMBLY (W/TAG 32)
25	35P3291	SEAL (W/TAG 5) (P/O ITEM 4 ON PL1-F10)
26	117S22080	WIRE ASSEMBLY (W/O TAG 24 OR 244)
27	—	SHIELD (P/O ITEM 9)
28	—	FRONT BLOCK (P/O ITEM 9)
29	—	REAR BLOCK (P/O ITEM 9)
30	125S451	LAMP HOLDER ASSEMBLY (W/TAG 24 OR 244)
31	55S3767	BAFFLE ASSEMBLY (W/TAG 24 OR 244)
32	—	EXTRUSION ASSEMBLY (W/TAG 24 OR 244) (P/O ITEM 30)
33	122S516	EL LAMP (W/TAG 24 OR 244) (P/O ITEM 30)

5/85

Parts List

SCOROTRON AND CLEANING BLADE



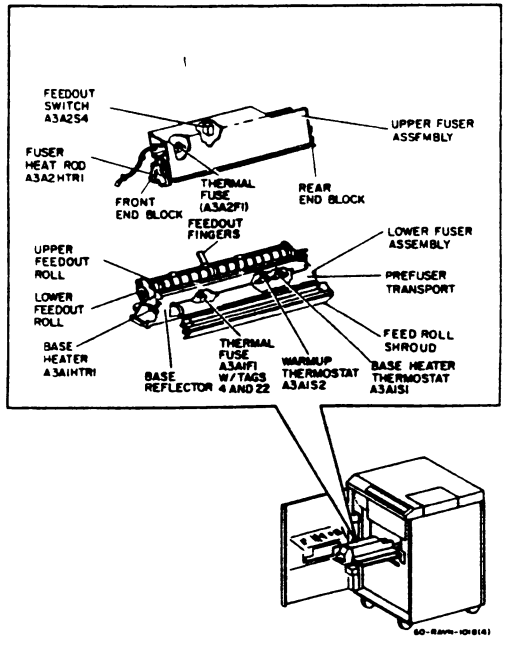
5/85

ITEM	PART	DESCRIPTION
1	—	PART OF DRUM HOUSING ASSEMBLY (ITEM 1 ON PAGE 2-21)
2	—	WIRE ASSEMBLY (P/O ITEM 5)
3	—	SCOROTRON HOUSING (P/O ITEM 5)
4	2S58270	SCREEN HOUSING ASSEMBLY
5	125S540	CHARGE SCOROTRON ASSEMBLY
6	30S29560	BRACKET ASSEMBLY
7	—	BLADE (P/O ITEM 6)
8	—	BUSHING (P/O ITEM 6)
9	—	SHAFT (P/O ITEM 1)
10	26P3591	SCREW
11	9P3548	COMPRESSION SPRING
12	413W15355	BEARING
13	16P1899	TUBE ADAPTER
14	3P2118	BUTTON
15	9P3547	CLIP SPRING
16	19P3507	CLEANING BLADE CLAMP
17	4R59	CLEANING BLADE
18	30P32598	CLEANING BLADE SUPPORT
19	7S21091	AUGER
20	35P3291	SEAL
21	28P1992	WASHER
22	113W8155	SCREW

5/85

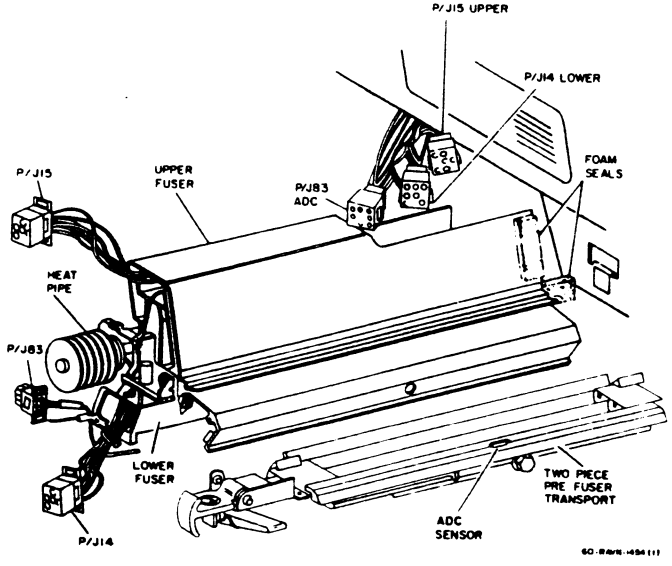
Location of Major Components

FUSER MODULE (8040 WITHOUT TAGS 54, 73, 22)



12/83

FUSER MODULE (2700 AND 8040 WITH TAG 13)



12/83

Repairs

FUSER MODULE

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

1. DISCONNECT MAIN POWER CORD.

2. REMOVE LASER SHIELD.
   a. **Without Tag 4** (Figure 1)
   b. **With Tags 4 and 46** (Figure 2)

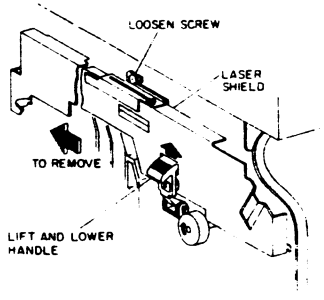


Figure 1. Removing the Laser Shield

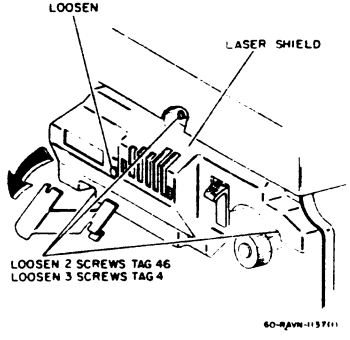


Figure 2. Removing the Laser Shield

3. REMOVE FUSER MODULE.
   a. Remove fuser shield (Figure 3).
   b. Disconnect the leads of the transfer and detack corotrons.
   c. Lower the prefuser transport.
   d. Disconnect P/J 14, P/J 15 and P/J 83 With Tag 13.
   e. Loosen the screw on bracket, and lower the bracket.

CAUTION

When pulling the fuser module out of printer, lift the feed roll shroud so that shroud does not hit the frame.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

   f. Remove fuser module.

REPLACEMENT

CAUTION

When pushing the fuser module into operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 4).

INSTALL FUSER.

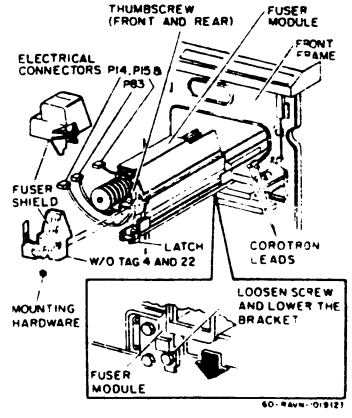


Figure 3. Removing the Fuser

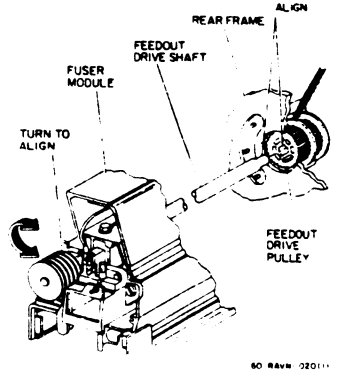


Figure 4. Alignment of Shaft and Pulley

Repairs

LOWER FUSER ASSEMBLY

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE UPPER FUSER BY LOOSENING THE TWO THUMBSCREWS.
3. RELEASE THE LOWER FUSER ASSEMBLY FROM THE SLIDE ASSEMBLY BY PUSHING DOWN ON THE SPRING CLIP (FIGURE 1).
4. PULL THE LOWER FUSER FORWARD, AND LIFT THE ASSEMBLY OFF PINS.

REPLACEMENT

CAUTION

When pushing the fuser module into the operating position, check that the feedout drive shaft and feedout drive pulley are aligned (Figure 2).

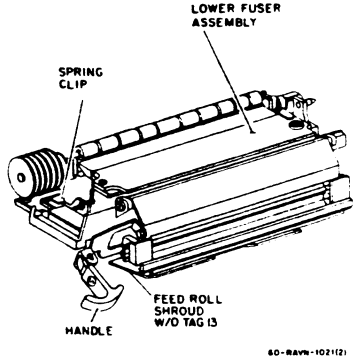


Figure 1. Removing the Lower Fuser

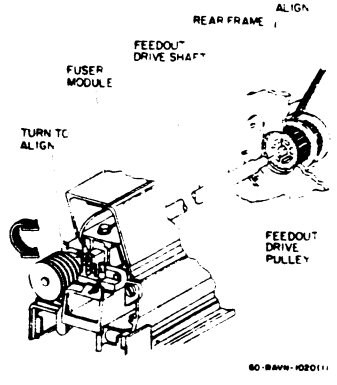


Figure 2. Alignment of Shaft and Pulley

UPPER FUSER ASSEMBLY

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE FRONT AND REAR THUMBSCREWS, AND REMOVE UPPER FUSER ASSEMBLY (FIGURE 1).

REPLACEMENT

CAUTION

When pushing the fuser module into the operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 2).

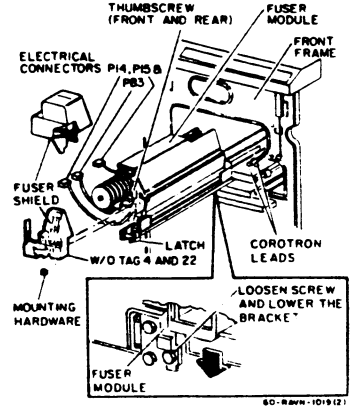


Figure 1. Removal of Upper Fuser Assembly

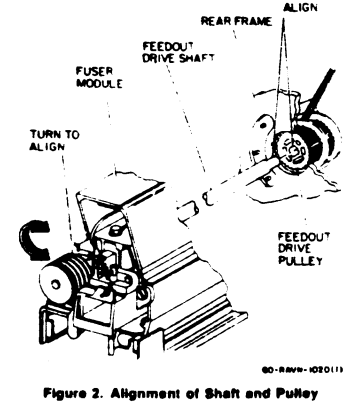


Figure 2. Alignment of Shaft and Pulley

Repairs

FUSER HEAT ROD (A3A2HTR1)

REMOVAL

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.

NOTE: The upper fuser is removed to prevent damage to the quartz filter.

2. REMOVE THE UPPER FUSER.
3. REMOVE QUARTZ FILTER (FIGURE 1).
4. REMOVE FUSER HEAT ROD (A3A2HTR1).

CAUTION

Damage to heat rod and quartz filter may occur from oil from fingers. Clean the heat rod and quartz filter with film remover to remove fingerprints. When installing the heat rod and the filter, hold them with a paper towel.

REPLACEMENT

1. CLEAN THE GOLD ELLIPTICAL REFLECTOR AND INSIDE OF QUARTZ SHIELD.
2. REPLACE FUSER HEAT ROD.

NOTE: Push heat rod away from quartz shield and toward the ellipse. Heat rod should just touch the top of the ellipse. Heat rod must not touch quartz shield.

3. INSTALL QUARTZ FILTER WITH COATED SIDE TOWARD HEAT ROD (FIGURE 2).

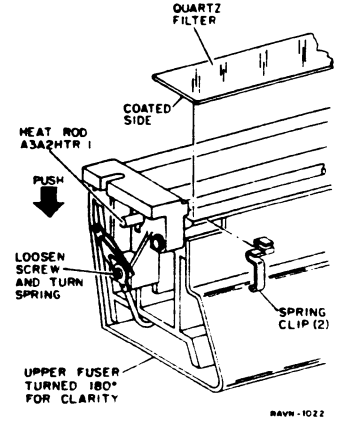


Figure 1. Removing the Quartz Filter

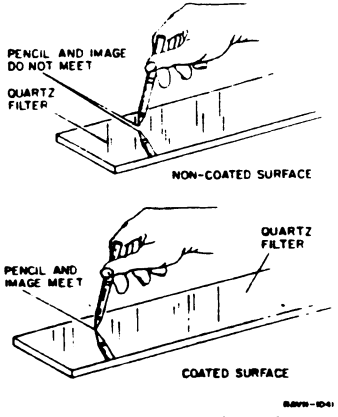


Figure 2. Determining the Coated Side

Repairs

FEEDOUT FINGERS: WITHOUT TAG 4

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE THE FEEDOUT FINGERS (FIGURE 1).
   a. Remove E-rings and gear.
   b. Push the feedout shaft toward the rear.
   c. Move the feedout fingers toward the front.

REPLACEMENT

NOTE: Position the new feedout fingers as shown (Figure 2).

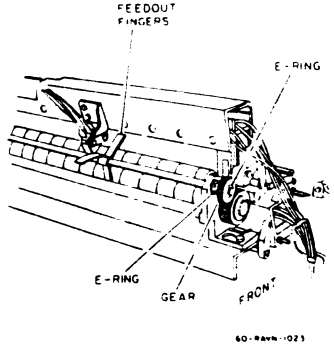


Figure 1. Removal of the Feedout Fingers

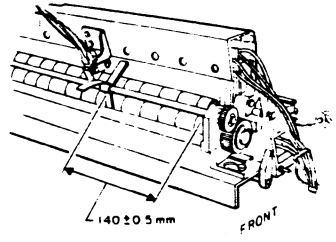


Figure 2. Installation of the Feedout Fingers

CAUTION

When pushing the fuser module into operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 3).

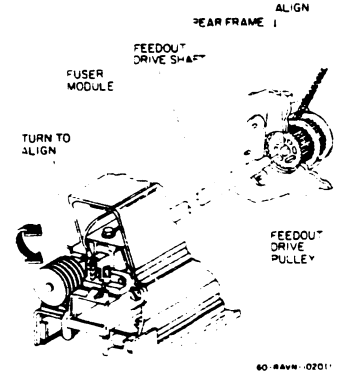


Figure 3. Alignment of Shaft and Pulley

Repairs

FEED ROLL SHROUD: WITHOUT TAG 13

REMOVAL

WARNING

The fuser module is hot after printer is switched off.

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE SHROUD (FIGURE 1)
   a. Pivot the handle away from shroud
   b. Loosen the top screw, and remove the bottom screw

NOTE: When removing the shroud, be careful not to lose the plastic stop.

   c. Remove plastic stop.
   d. Pull shroud toward front

REPLACEMENT

ADJUST THE FEED ROLL SHROUD.

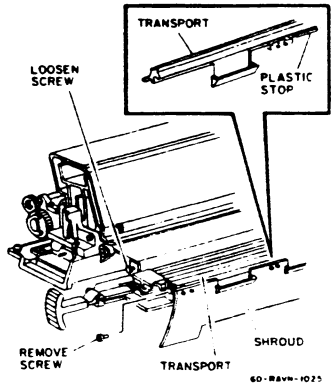


Figure 1. Removing the Feed Roll Shroud

FOAM SEALS

REMOVAL

B2 and 2700 Printers

CAUTION

When removing or installing the fuser module, pull toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE FUSER MODULE.
2. REMOVE FOAM SEALS (FIGURE 1)

REPLACEMENT

1. CLEAN THE AREA WITH FILM REMOVER.
2. REMOVE TAPE FROM FOAM SEALS.
3. REPLACE FOAM SEALS.

NOTE: Allow 5 to 10 minutes for adhesive to dry before installing the fuser module or the seals will not stay on.

4. INSTALL FUSER MODULE.

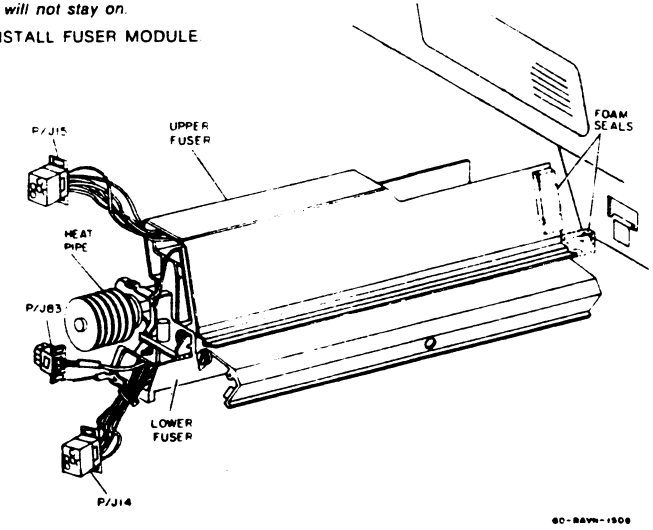


Figure 1. Removing/Replacing the Foam Seals

Repairs

PREFUSER TRANSPORT

REMOVAL

WARNING

THE FUSER MODULE STAYS HOT AFTER PRINTER IS SWITCHED OFF.

CAUTION

When removing or installing the fuser module, push it toward the right side to avoid interference from the switch and the plastic paper guides.

1. REMOVE THE FUSER MODULE.
2. WITH TAG 13, REMOVE THE GROUND WIRE AND ADC HARNESS FROM THE BASE FUSER ASSEMBLY (FIGURE 1).
3. REMOVE THE RETAINING CLIP FROM THE BASE FUSER ASSEMBLY.

CAUTION

The pivot screw and nut were adjusted by manufacturing. Do not remove or adjust the pivot screw or nut at the rear of the prefuser transport unless instructed to do so while performing the adjustment procedure.

4. REMOVE THE PIVOT SCREW AT THE FRONT OF THE PREFUSER TRANSPORT.
5. REMOVE THE PREFUSER TRANSPORT.

REPLACEMENT

1. REPLACE THE PREFUSER TRANSPORT.
2. INSTALL THE PIVOT SCREW AT THE FRONT OF THE PREFUSER TRANSPORT AND TIGHTEN THE PIVOT SCREW SECURELY.
3. WITH TAG 13, CONNECT THE GROUND WIRE AND ADC HARNESS TO THE BASE FUSER ASSEMBLY.
4. CHECK/ADJUST PREFUSER TRANSPORT.
5. REPLACE THE FUSER MODULE.

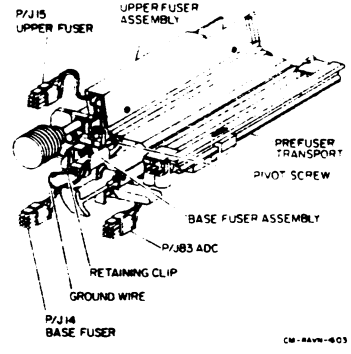


Figure 1. Removing/Replacing the Prefuser Transport

Cleaning and Lubrication

CLEANING OF FUSER MODULE

INTRODUCTION

The following procedure is to be used when cleaning the upper and lower fuser assemblies.

The fuser cleaning solvent pads, formerly (43P83), now (43P89), will replace the fuser base cleaning solvent (43P78). Extensive testing has shown it to be safe for use as a fuser base cleaner and that it will reduce cleaning time.

As with most cleaning solvents, it may pass through the skin causing irritation. **ONLY THE GLOVES SPECIFIED BELOW ARE TO BE WORN TO AVOID SKIN CONTACT,** since the chemicals in the solvent are known to degrade other glove materials to the extent that penetration of the glove material results. The solvent may irritate the eyes and the odor may be objectionable to some users. Be sure that there is adequate ventilation and avoid prolonged contact with the vapors or mist during the cleaning procedure.

This cleaner presents no health or safety hazard when used as directed, but **under no circumstances should it be used for a general purpose face or hand cleaner.** For this reason, it should be kept out of the reach of children.

MATERIALS (BSG):

Fuser Cleaning Solvent Pads (43P89, formerly 43P83) (50 packs per box)
Formula "A" Cleaner (43P48)
Film Remover (43P45)
Pumice Pads (600S1276) (50 pads per box)
Disposable Gloves (Urethane) (99P3082) (50 pair)
Disposable Plastic Bags (99P3023) (50 per pack)

CLEANING MATERIAL USE:

Formula "A" Cleaner - removes tars.
Fuser Cleaning Solvent Pads - removes "toner".
Film Remover - removes fingerprints.

PROCEDURE

WARNING

Fuser is hot. Be careful when cleaning the fuser.

NOTE 1: Fuser must be warm for the cleaning solvent to be effective.

NOTE 2: Remove fuser module from copier. Airborne particles of formula "A" may damage drum.

1. DISCONNECT POWER CORD.
2. REMOVE THE UPPER FUSER ASSEMBLY (5-B2).
3. REMOVE THE LOWER FUSER ASSEMBLY (5-B3).

WARNING

Always wear protective gloves while using the solvent to avoid skin irritation. Avoid contact with the eyes and do not breathe the vapors or mist. In case of accidental contact with the skin or eyes, wash thoroughly with water.

4. REMOVE CLEANING SOLVENT PAD FROM THE PACKET.

NOTE 3: It is important to keep the cavity for the heat rod clean. A light haze or film in this area greatly reduces the efficiency of the fuser.

NOTE 4: Do not allow the upper and lower reflectors to cool completely. The cleaning solvent requires that the upper and lower reflectors are warm during the entire cleaning procedure.

5. CLEAN THE UPPER REFLECTOR, THE LOWER REFLECTOR, AND THE FEEDOUT ROLLS.
   a. Using a clean solvent pad, clean the "toner" and paper tar deposits from the upper fuser roll, upper reflector, quartz shield, heat rod cavity, and fuser base. Apply a small amount of pressure to the quartz shield.
   b. If paper tar deposits cannot be removed with the cleaning pad, use soap and water or a small quantity of Formula "A" on a pumice pad and remove the deposits.

NOTE 5: If deposits cannot be removed from the quartz shield using the above method, carefully use the edge of a 6-inch rule to remove the deposits and repeat steps a and b above.

   c. Use pumice pad to remove excess solvents and the film left by the paper tar removal.

WARNING

Film remover is a flammable mixture that can generate vapors. Keep away from heat, sparks, or open flame. Soiled cleaning towels, cloths, and cotton containing film remover should be saturated with water and placed in a plastic bag (99P3023) before disposal.

CAUTION

Clean the surface of the quartz shield and fuser heat rod using film remover to remove any fingerprints. Fingerprints will create "Hot Spots" on the quartz shield and fuser lamp.

   d. Clean the upper fuser, heat rod cavity, and fuser base with film remover to eliminate any solvent or Formula "A" residue. The residue will cause blistering of the gold surface and will form a white filmy coating on the surface.

DO NOT USE A SECOND SOLVENT PAD UNLESS ABSOLUTELY NECESSARY.

6. CLEAN THE PREFUSER TRANSPORT.
   a. Apply the cleaning solvent to a clean pumice pad, or use a solvent cloth.
   b. Use more than minimum pressure on pad and clean the transport.
7. WHEN CURL BAFFLE FOR FEEDOUT ROLLS IS DIRTY, REPLACE BAFFLE.

NOTE: Do not use oil-coated (yellow) cloth to clean sensor. The cloth will leave residue that will attract "toner".

8. CLEAN ADC SENSOR USING A CLEAN DRY CLOTH OR SMALL PIECE OF COTTON.

Adjustments

LATCH BRACKET: WITH TAG 4

Purpose

The purpose is to ensure the correct tension on the latch bracket so that prefuser transport remains in the correct position to ensure the correct spacing between the drum and the corotrons.

Check

CHECK THAT PIN IN HANDLE OF PREFUSER TRANSPORT IS IN TOP OF SLOT (FIGURE 1).

Adjustment

1. REMOVE LASER SHIELD.
2. LOOSEN THE TWO SCREWS AND ADJUST AS SHOWN (FIGURE 1).

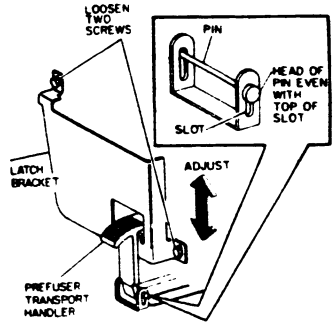


Figure 1. Checking and Adjusting the Latch Bracket

LATCH BRACKET: WITHOUT TAG 4

Purpose

The purpose is to ensure the correct tension on the latch bracket so that prefuser transport remains in the correct position to ensure that the spacing between the drum and the corotrons is correct.

Check

CHECK THAT PIN IN HANDLE OF PREFUSER TRANSPORT IS IN TOP OF SLOT (FIGURE 1).

Adjustment

1. REMOVE LASER SHIELD.
2. LOOSEN THE TWO SCREWS AND ADJUST AS SHOWN (FIGURE 1).

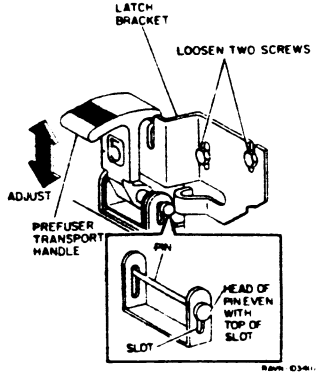


Figure 1. Checking and Adjusting the Latch Bracket

BASE REFLECTOR

Purpose

The purpose is to put the base reflector in the center of the lower fuser assembly to prevent moisture from forming on the edge of the base and to isolate the reflector from the edge of the casting to allow the base reflector to stay at the correct temperature.

Adjustment

1. REMOVE FUSER MODULE.
2. REMOVE UPPER FUSER.

NOTE. Perform adjustment 25 mm from both ends and at the bottom of base reflector.

3 PUT BASE REFLECTOR 0.75 mm +0.25, -0.1 mm FROM THE LOWER FUSER CASTING (FIGURE 1).

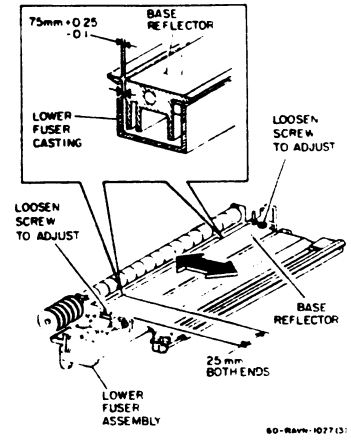


Figure 1. Adjusting the Base Reflector

Adjustments

FEEDOUT SWITCH (A3A2S4)

Purpose

The purpose is to adjust the position of the feedout switch so that the switch actuates and deactuates when a sheet of paper passes.

Adjustment

1. REMOVE FUSER MODULE.
2. REMOVE UPPER FUSER.
3. PUT FUSER ON FLAT SURFACE.
4. ADJUST SWITCH BRACKET (FIGURE 1).
   a. Loosen the two screws on switch and turn switch toward upper end of adjustment slots.
   b. Loosen the two screws on switch bracket.

WITHOUT TAG 4:

   c. Adjust switch bracket to obtain 8.0 ± 0.5 mm from the flat surface to the bottom of actuator.

WITH TAG 4:

   c. Adjust switch bracket to obtain 10.0 ± 0.5 mm from the flat surface to the bottom of actuator.

5. INSTALL UPPER FUSER.

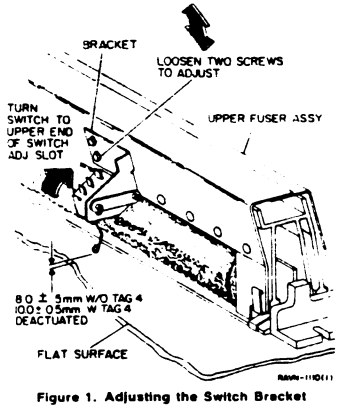


Figure 1. Adjusting the Switch Bracket

WITHOUT TAG 4:

6. ADJUST THE FEEDOUT SWITCH TO 8.0 ± 0.5 mm AT POINT OF ACTUATION TO THE LOWER FUSER ROLL (FIGURE 2).

WITH TAG 4:

6. ADJUST THE FEEDOUT SWITCH TO 12.0 ± 0.5 mm AT POINT OF ACTUATION TO THE LOWER FUSER ROLL (FIGURE 2).

7. CHECK THAT SWITCH DEACTUATES AT 6.5 mm OR MORE. IF SWITCH DEACTUATES AT LESS THAN 6.5 mm. REPLACE THE SWITCH.

CAUTION

When pushing the fuser module into operating position, check that the feedout drive shaft and the feedout drive pulley are aligned (Figure 3).

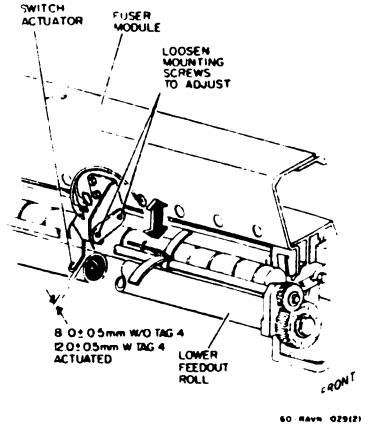


Figure 2. Adjusting the Feedout Switch (A3A2S4)

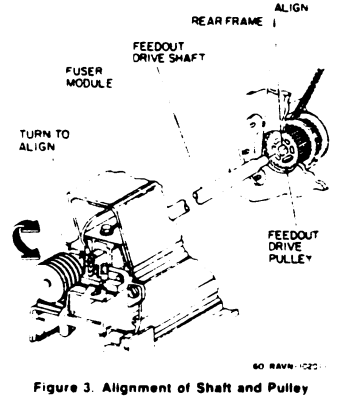


Figure 3. Alignment of Shaft and Pulley

Adjustments

FUSER END BLOCKS

Purpose

The purpose is to ensure that the upper and the lower fuser assemblies are parallel. This is achieved by ensuring that the end blocks touch the upper reflector and the 1 mm shims touch the end blocks.

Adjustment

1. REMOVE FUSER ASSEMBLY.
2. REMOVE THE UPPER FUSER ASSEMBLY BY REMOVING THE TWO THUMBSCREWS.

NOTE, Without Tag 107: The 1 mm shims must touch the end blocks. Push shims toward the reflector, when tightening the end blocks.

3. ADJUST THE FRONT AND REAR END BLOCKS ON THE UPPER FUSER ASSEMBLY (FIGURE 1).

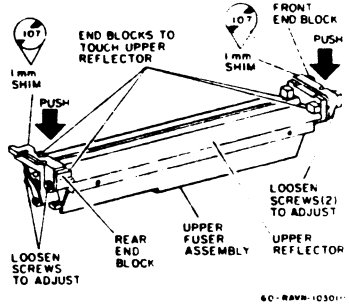


Figure 1. Adjusting the End Blocks

5/84

Adjustments

Adjustment

1. SWITCH OFF PRINTER.
2. ADJUST THE POTENTIOMETER FOR THE CONTROL OF FUSER TEMPERATURE (FIGURE 3).
   a. Lower the control console to the position for service.
   b. Disconnect the ribbon cable.
   c. Remove the control panel, and put panel across PWB 1.
   d. Connect ribbon cable.
3. INSTALL INTERLOCK TOOL.
4. SELECT DIAGNOSTIC MODE 1.
5. PREPARE TO MEASURE LINE VOLTAGE (FIGURE 4).
6. PRESS **TEST** AND MAKE A RECORD OF LOADED LINE VOLTAGE APPROXIMATELY (SECOND HEX NUMBER) 1 SECOND AFTER FUSER LIGHTS.

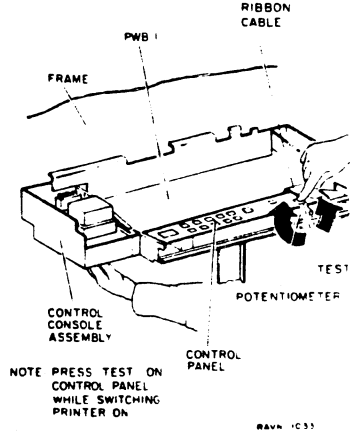


Figure 3. Adjusting the Potentiometer for Fuser

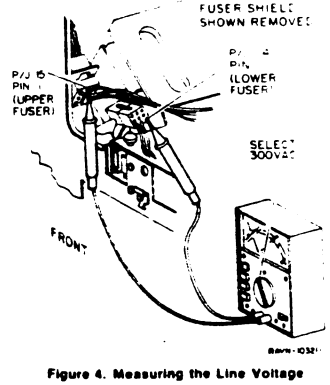


Figure 4. Measuring the Line Voltage

12/83

NOTE: Effects of adjustment of the potentiometer will be displayed during successive test run prints.

7. ADJUST POTENTIOMETER UNTIL THE CODES ON THE DISPLAY PANEL ARE WITHIN ± 1 UNIT OF THE CODE IN TABLE ON 5-C9, WHICH IS RELATED TO THE MEASURED LINE VOLTAGE (FIGURE 5).
8. CHECK THAT SECOND HEX CODE ON THE DISPLAY PANEL AGREES WITH CODES ON TABLE.

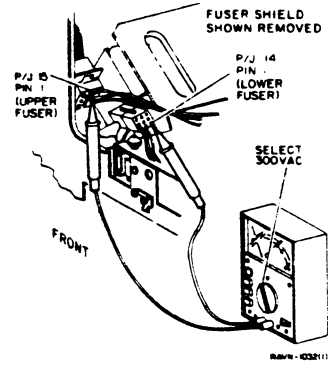


Figure 5. Measuring the Line Voltage

12/83

Adjustments

FUSER TEMPERATURE: WITHOUT TAG 4

Purpose

The purpose is to adjust potentiometer on PWB 1 to ensure that copies are correctly fused.

Check

1. SWITCH OFF PRINTER.
2. ENTER INTERNAL DIAGNOSTIC MODE 1 (FIGURE 1).
3. SELECT TEST MODE.

NOTE: Voltage must be measured with fuser lamp on.

4. PREPARE TO MEASURE LOADED LINE VOLTAGE (FIGURE 2).
5. PRESS **TEST**, AND MAKE A RECORD OF THE LINE VOLTAGE AND SECOND HEX CODE THAT APPEARS ON THE DISPLAY PANEL, AFTER THE FUSER LAMP HAS BEEN ON MORE THAN 1 SECOND.
6. REPEAT STEP 5 IN ORDER TO CHECK THE LINE VOLTAGE AND HEX CODE.
7. IF THE CODES ON THE DISPLAY PANEL ARE NOT WITHIN ± 2 UNITS OF THE CODES IN TABLE, PERFORM THE ADJUSTMENT.
8. EXIT THE DIAGNOSTIC MODE.

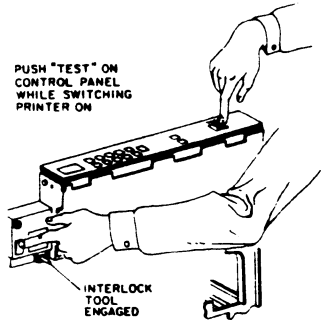


Figure 1. Selecting the Diagnostic Mode

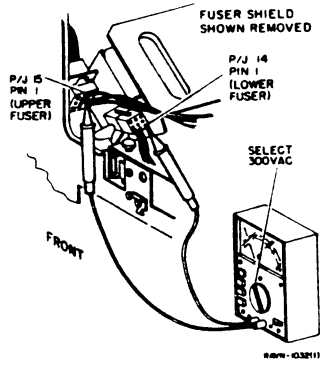


Figure 2. Measuring the Line Voltage

TABLE 1 CALIBRATING THE FUSER WITHOUT TAG 4

LOADED LINE (AC)	DISPLAY NUMBER		LOADED LINE (AC)	DISPLAY NUMBER	
85G	NUMBER		85G	NUMBER	
101.5	3F		118.8	22	
102.0	3E		119.3	21	
102.5	3d		119.8	20	
103.0	3C		120.4	1F	
103.7	3L		120.9	1E	
104.2	3A		121.4	1d	
105.0	39		122.1	1c	
105.5	38	↑	122.6	1L	↑
106.0	37		123.1	1A	
106.6	36		123.6	19	
107.3	35		124.1	18	
107.8	34		124.6	17	
108.6	33		125.0	16	
109.1	32		125.7	15	
109.6	31		126.3	14	
110.3	30		127.0	13	
111.0	2F		127.6	12	
111.5	2E		128.1	11	
112.0	2d	CLOCKWISE	128.5	10	CLOCKWISE
112.6	2c		129.0	0F	
113.2	2L		129.6	0E	
114.0	2A		130.1	0d	
114.7	29				
115.3	28				
115.9	27				
116.4	26				
116.8	25				
117.6	24				
118.2	23				

NUMBER ON DISPLAY MUST BE WITHIN TWO UNITS OF NUMBER IN TABLE WHICH IS RELATED TO MEASURED LINE VOLTAGE.

Adjustments

FEED ROLL SHROUD: WITHOUT TAG 13

Purpose

The purpose is to adjust the feed roll shroud to prevent interference with rear frame.

Check

1. REMOVE FUSER MODULE.
2. CHECK THE ENDPLAY OF THE FEED ROLL SHROUD (FIGURE 1).

Adjustment

PUT THE PLASTIC STOP INTO SLOT IN THE PREFUSER TRANSPORT TO ALLOW MAXIMUM ENDPLAY OF 1.0 mm (FIGURE 1).

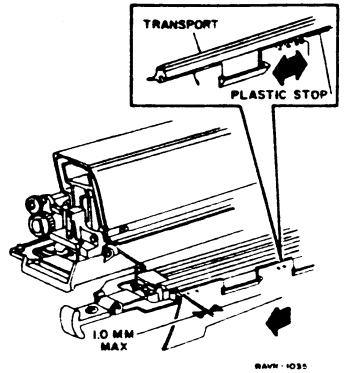


Figure 1. Check/Adjustment of the Feed Roll Shroud

3/83

FUSER TEMPERATURE: WITH TAG 4

Purpose

The purpose is to adjust the potentiometer on PWB 1 in order to ensure that prints are correctly fused.

Check

1. SWITCH OFF THE PRINTER.
2. ENTER THE INTERNAL DIAGNOSTIC MODE (FIGURE 1.)
3. SELECT CODE 10, AND PRESS TEST. THEN SELECT CODE 71, AND PRESS TEST.
4. MEASURE THE LOADED LINE VOLTAGE (FIGURE 2).
5. MAKE A RECORD OF THE NUMBERS THAT APPEAR ON THE DISPLAY PANEL. AFTER THE FUSER LAMP HAS BEEN ON MORE THAN 1 SECOND.

NOTE: Fuser decimal code and line voltage reading must be checked simultaneously

6. IF THE NUMBERS ON THE DISPLAY PANEL ARE NOT WITHIN ± 1 UNIT OF THE NUMBERS IN TABLE . PERFORM THE ADJUSTMENT
7. EXIT THE DIAGNOSTIC MODE.

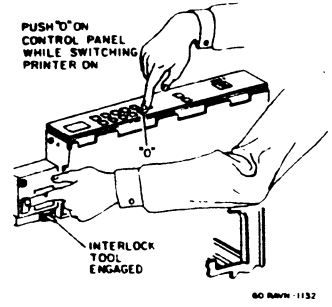


Figure 1. Selecting the Diagnostic Mode

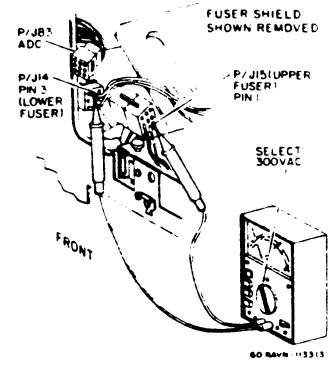


Figure 2. Measuring the Line Voltage

5/85

Adjustments

TABLE 1 CALIBRATING THE FUSER BSG/XCI: WITH TAG 4

LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL	LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL
BSG XCI		BSG XCI	
104.0	53	117.5	28
104.5	52	118.0	27
105.0	51	118.5	26
105.5	50	119.0	25
106.0	49	119.5	24
106.5	48	120.0	23
107.0	47	120.5	22
107.5	46	121.0	21
108.0	45	121.5	20
108.5	45	122.0	19
109.0	44	122.5	19
109.5	43	123.0	18
110.0	42	123.5	17
110.5	41	124.0	16
111.0	40	124.5	15
111.5	39	125.0	14
112.0	38	125.5	13
112.5	37	126.0	12
113.0	36	126.5	12
113.5	35	127.0	11
114.0	34	127.5	10
114.5	33	128.0	9
115.0	32	128.5	8
115.5	31	129.0	7
116.0	31	129.5	6
116.5	30	130.0	5
117.0	29		

CLOCKWISE

60-RAVN-1134(1)

12/83

TABLE 2 CALIBRATING THE FUSER RXL ONLY: WITH TAG 4

LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL	LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL
RXL		RXL	
198	58	225	32
199	56	226	32
200	55	227	31
201	55	228	30
202	54	229	29
203	53	230	28
204	52	231	27
205	51	232	26
206	50	233	25
207	49	234	24
208	48	235	23
209	47	236	23
210	47	237	22
211	46	238	21
212	45	239	20
213	44	240	19
214	43	241	18
215	42	242	17
216	41		
217	40		
218	39		
219	38		
220	37		
221	36		
222	35		
223	34		
224	33		

CLOCKWISE

60-RAVN-1135(1)

12/83

Adjustments

Adjustment

1. SWITCH OFF THE PRINTER.
2. ACCESS THE POTENTIOMETER FOR THE CONTROL OF FUSER TEMPERATURE (FIGURE 3).
   a. Lower the control console to the position for service.
   b. Remove the control panel, and put panel across PWB 1.
3. INSTALL INTERLOCK TOOL.
4. ENTER THE INTERNAL DIAGNOSTIC MODE.
5. SELECT CODE 10, AND PRESS **TEST**. THEN SELECT CODE 71, AND PRESS **TEST**.
6. MEASURE THE LOADED LINE VOLTAGE, WHEN FUSER LAMP HAS BEEN LIT FOR 1 SECOND (FIGURE 4).
7. MAKE A RECORD OF THE NUMBER CODES THAT APPEAR ON THE DISPLAY PANEL. AFTER THE PRINTER HAS MADE FIVE PRINTS.

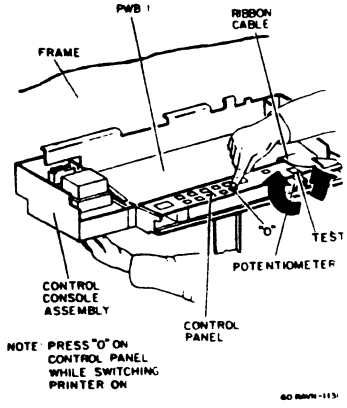


Figure 3. Adjusting the Potentiometer for Fuser

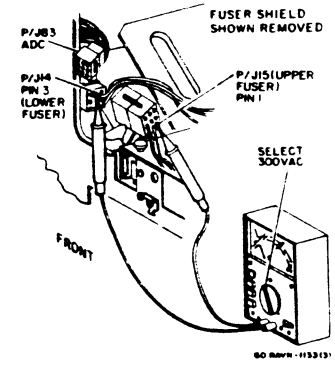


Figure 4. Measuring the Line Voltage

NOTE: Effects of adjustment of the potentiometer will be displayed during successive test run prints.

8. ADJUST POTENTIOMETER UNTIL THE CODES ON THE DISPLAY PANEL ARE WITHIN ± 1 UNIT OF THE CODE IN TABLE 1 OR 2 ON PAGE 1-80 WHICH IS RELATED TO THE MEASURED LINE VOLTAGE FROM STEP 6.
9. CHECK THAT NUMBERS ON THE DISPLAY PANEL AGREE WITH CODES ON TABLE.

Adjustments

SLIDE ASSEMBLY

Purpose

The purpose is to put the slide assembly in the correct position so that the fuser module slides in and out correctly.

Adjustment

1. REMOVE CONTAMINATION FILTER.
2. WITH THE FUSER MODULE INSTALLED IN THE MACHINE, LOOSEN SCREWS SECURING THE SLIDE ASSEMBLY TO THE FRONT AND REAR FRAMES (FIGURE 1).
3. ADJUST THE POSITION OF SLIDE ASSEMBLY.
   a. Hold the center of assembly and lift assembly in direction shown.
   b. Push up and tighten the front and rear screws.

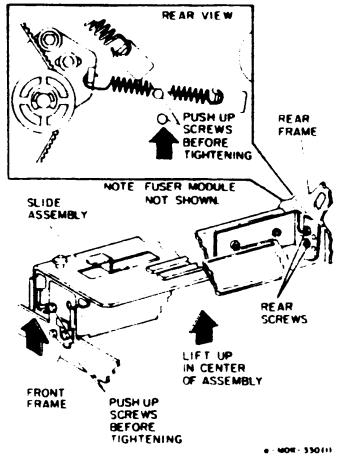


Figure 1. Adjusting the Slide Assembly

PREFUSER TRANSPORT

Purpose

The purpose is to adjust the prefuser transport to prevent paper jams and to prevent binding during latching.

Check

1. REMOVE THE BASE FUSER ASSEMBLY
2. ENSURE THAT THE FRONT PIVOT SCREW IS TIGHTENED SECURELY.
3. ENSURE THAT THE PREFUSER TRANSPORT PIVOTS FREELY.

Adjustment

1. LOOSEN THE REAR PIVOT SCREW AND NUT (FIGURE 1).
2. TIGHTEN THE REAR PIVOT SCREW. UNTIL THE PREFUSER TRANSPORT WILL NOT PIVOT.
3. LOOSEN THE REAR PIVOT SCREW 1/4 TO 1/2 OF A REVOLUTION. UNTIL THE PREFUSER TRANSPORT PIVOTS FREELY.
4. TIGHTEN THE NUT WHILE HOLDING THE REAR PIVOT SCREW IN PLACE.
5. ENSURE THAT THE PREFUSER TRANSPORT PIVOTS FREELY.
6. INSTALL THE BASE FUSER ASSEMBLY

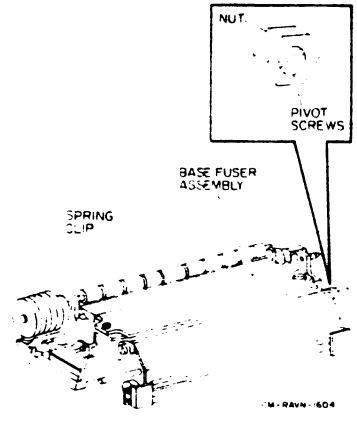
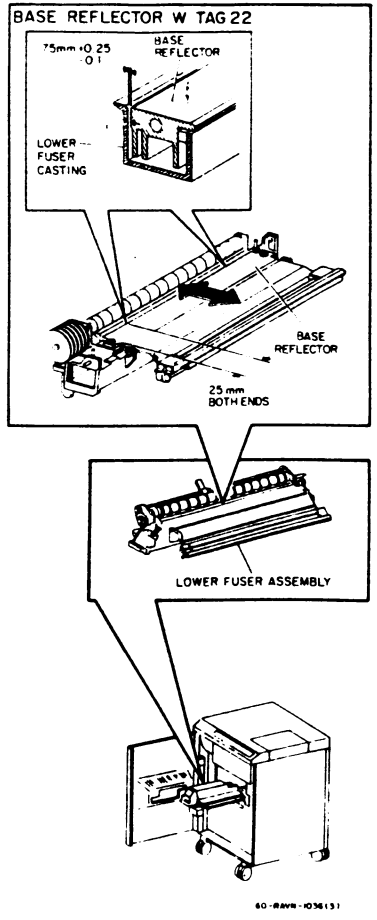
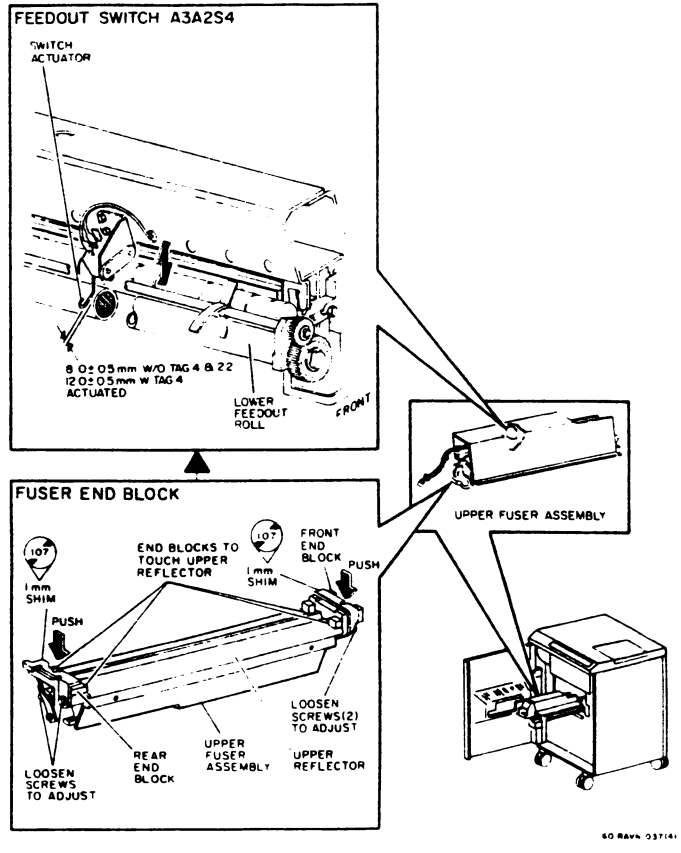


Figure 1. Adjustment of Prefuser Transport

Adjustment Specifications



3/83



5/84

Adjustment Specifications

FUSER TEMPERATURE W/OUT TAG 4

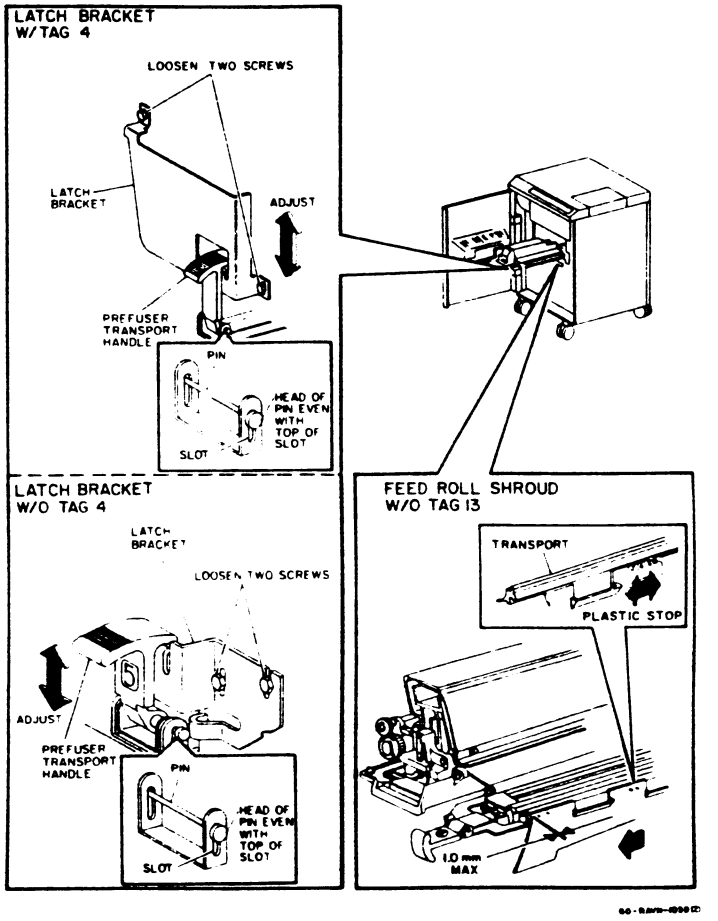
TABLE 1. CALIBRATING THE FUSER

LOADED LINE (AC)	DISPLAY NUMBER	LOADED LINE (AC)	DISPLAY NUMBER
BSG	NUMBER	BSG	NUMBER
101.5	3F	121.4	1d
102.0	3E	122.1	1c
102.5	3d	122.6	1L
103.0	3C	123.1	1A
103.7	3L	123.4	19
104.2	3A	124.1	18
105.0	39	124.6	17
105.5	38	125.0	16
106.0	37	125.7	15
106.7	36	126.2	14
107.2	35	127.0	13
107.8	34	127.6	12
108.6	33	128.1	11
109.1	32	128.5	10
109.8	31	129.2	0F
110.3	30	129.9	0E
111.0	2F		0d
111.5	2E		
112.0	2d		
112.7	2c		
113.1	2L		
113.7	2A		
114.1	29		
115.2	28		
115.9	27		
116.4	26		
116.8	25		
117.4	24		
118.2	23		
118.8	22		
119.3	21		
119.8	20		
120.4	1F		
120.9	1E		

NUMBER ON DISPLAY MUST BE WITHIN TWO DIGITS OF NUMBER IN TABLE WHICH IS RELATED TO MEASURED LINE VOLTAGE

CLOCKWISE

3/83



3/83

FUSER TEMPERTURE W/TAG 4

TABLE 1 CALIBRATING THE FUSER BSG/XCI

LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL	LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL
BSG XCI		BSG XCI	
104.0	53	117.5	28
104.5	52	118.0	27
105.0	51	118.5	26
105.5	50	119.0	25
106.0	49	119.5	24
106.5	48	120.0	23
107.0	47	120.5	22
107.5	46	121.0	21
108.0	45	121.5	20
108.5	45	122.0	19
109.0	44	122.5	19
109.5	43	123.0	18
110.0	42	123.5	17
110.5	41	124.0	16
111.0	40	124.5	15
111.5	39	125.0	14
112.0	38	125.5	13
112.5	37	126.0	12
113.0	36	126.5	12
113.5	35	127.0	11
114.0	34	127.5	10
114.5	33	128.0	9
115.0	32	128.5	8
115.5	31	129.0	7
116.0	31	129.5	6
116.5	30	130.0	5
117.0	29		

CLOCKWISE

60-RAVN-1139

3/83

FUSER TEMPERTURE W/TAG 4

TABLE 2 CALIBRATING THE FUSER RXL ONLY

LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL	LOAD LINE VOLTAGE (AC) (J15-1 TO J14-3)	FUSER DECIMAL
RXL		RXL	
198	58	225	32
199	56	226	32
200	55	227	31
201	55	228	30
202	54	229	29
203	53	230	28
204	52	231	27
205	51	232	26
206	50	233	25
207	49	234	24
208	48	235	23
209	47	236	23
210	47	237	22
211	46	238	21
212	45	239	20
213	44	240	19
214	43	241	18
215	42	242	17
216	41		
217	40		
218	39		
219	38		
220	37		
221	36		
222	35		
223	34		
224	33		

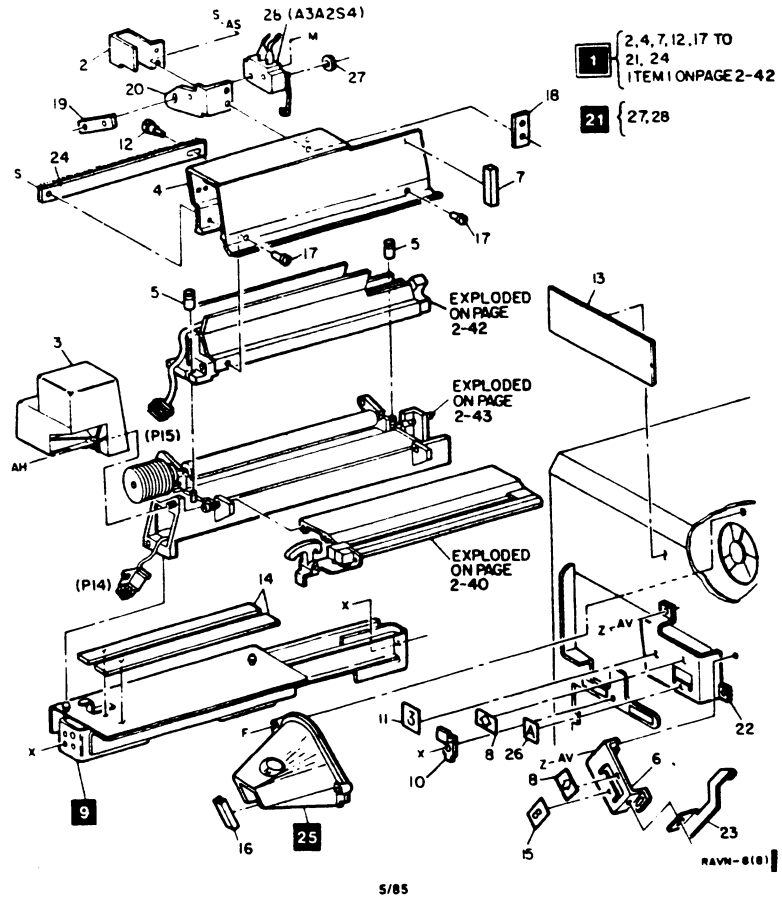
CLOCKWISE

50-RAVN-1140

3/83

Parts List

FUSER MODULE



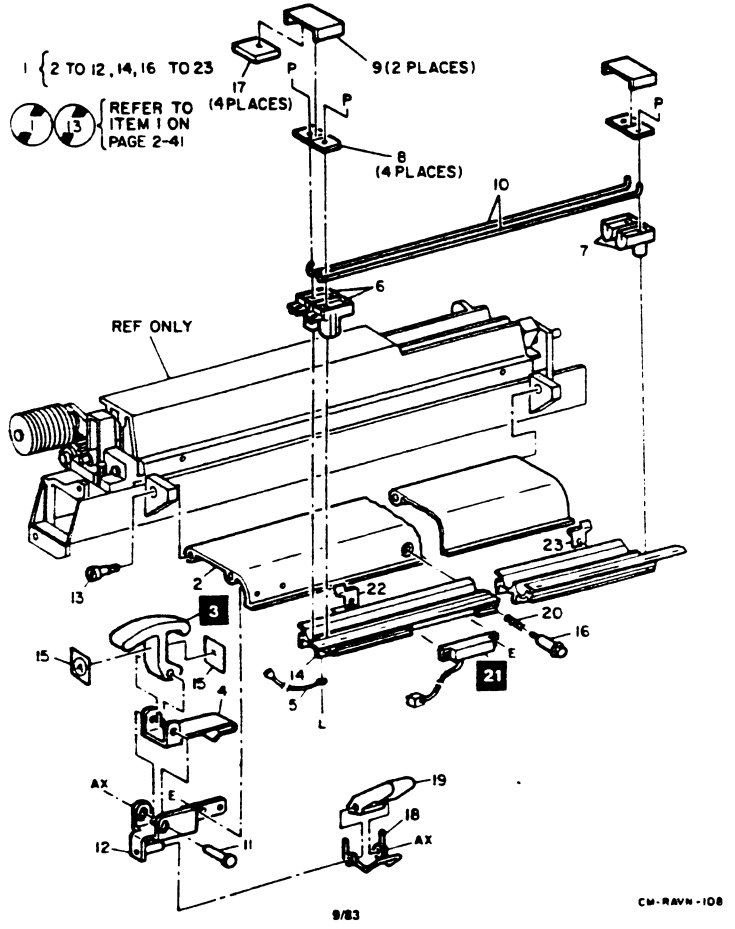
5/85

ITEM	PART	DESCRIPTION
1	—	PART OF UPPER FUSER ASSEMBLY (ITEM 1 ON PAGE 2-42)
2	2P12559	SWITCH COVER (W/O TAG 93) (RXL ONLY)
3	21P776	SHIELD (W/TAG 22)
4	54S20671	DUCT
5	27S20072	THUMB SCREW
—	27S20071	SUBSTITUTE PART
6	15P7857	LATCH PLATE (W/TAG 46) (W/O TAG 241)
7	35S20900	SEAL
8	91P4994	LABEL (ARROW) (W/TAGS 46 OR 241)
9	10S20452	SLIDE ASSEMBLY
—	10S20451	SUBSTITUTE PART
10	30P41330	STOP BRACKET
—	30P35943	SUBSTITUTE PART
11	—	LABEL (3) (REF ONLY)
12	26P3685	SHOULDER SCREW
13	91P5688	LABEL (CLEAR PAPER PATH) (BSG ONLY) (W/TAGS 46 OR 241)
14	35S1698	SEAL
15	91P5690	LABEL (B) (W/TAGS 46 OR 241)
16	35S20690	FAN DUCT SEAL
17	26P3674	SHOULDER SCREW
18	15P6811	PLATE
19	—	DELETED
20	—	BRACKET (P/O ITEM 29) (W/TAG 93)
21	110S20943	SWITCH ASSEMBLY (A3A254) (W/O TAG 43) (W/O TAG 93)
—	110S20944	SWITCH ASSEMBLY (A3A254) (W/TAG 43) (W/O TAG 93)
—	110S21741	SWITCH ASSEMBLY (W/TAG 93) (A3A254) (P/O ITEM 29)
22	2P12010	LATCH COVER (W/TAG 22)
23	30P36681	SUPPORT (W/TAG 241) (W/O TAG 46)
24	55P3873	CURL BAFFLE (W/TAG 49)
25	54P1513	FUSER DUCT
26	91P5689	LABEL (A) (W/TAGS 46 OR 241)
27	27H181	NUT CAP
28	—	SWITCH (P/O ITEM 21)
29	43P89	FUSER CLEANING PAD (NOT SHOWN)

5/85

Parts List

TWO-PIECE PREFUSER TRANSPORT (W/TAGS 1 AND 13)



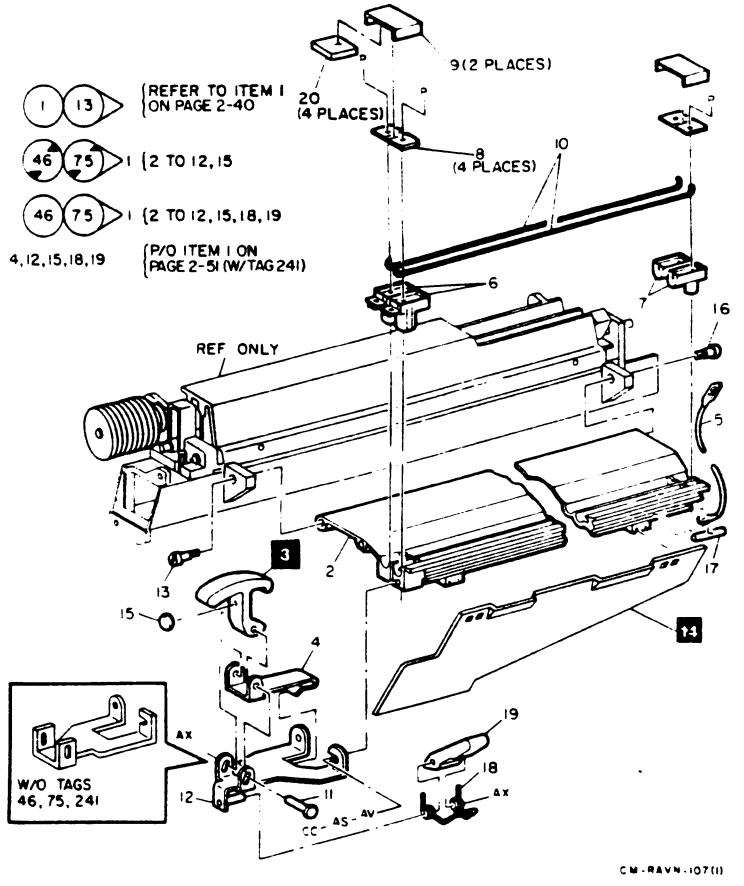
9/83

ITEM	PART	DESCRIPTION
1	22S27282	TWO-PIECE PRE-FUSER TRANSPORT
—	22S27281	SUBSTITUTE PART (W/TAG 1)
2	—	TRANSPORT FRAME ASSEMBLY (P/O ITEM 1)
3	3P4482	LATCH
4	9P5110	LATCH SPRING
5	117S8809	WIRE ASSEMBLY
6	116S20061	FRONT BLOCK ASSEMBLY
7	116S20080	LEFT BLOCK ASSEMBLY
8	19P3506	COROTRON CLAMP
9	55P3575	SHIELD
10	117P7419	COROTRON WIRE
11	29P4390	LATCH PIN
12	30S36835	LATCH BRACKET ASSEMBLY
13	26P3675	SCREW
14	1P7543	COROTRON TRANSPORT
15	91P5689	LABEL (A)
16	—	SHOULDER BOLT (REF ONLY)
17	—	BLOCK SEAL (REF ONLY)
18	9P5046	TORSION SPRING
19	11P1445	SUPPORT LEVER
20	—	SPRING (REF ONLY)
21	130P780	ADC SENSOR
22	14P4298	BLOCK (L H)
23	14P4297	BLOCK (R H)

5/85

Parts List

PREFUSER TRANSPORT (W/O TAGS 1 AND 13)



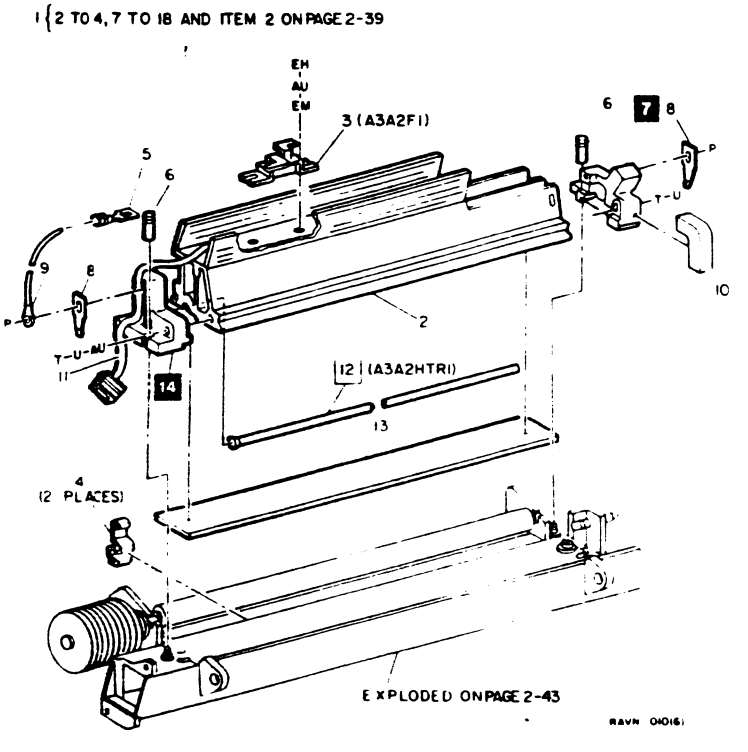
9/83

ITEM	PART	DESCRIPTION
1	22S23667	FUSER TRANSPORT ASSEMBLY (W/O TAGS 46 AND 75)
—	22S23668	FUSER TRANSPORT ASSEMBLY (W/TAGS 46 AND 75)
2	—	TRANSPORT (P/O ITEM 1)
3	3P4463	LATCH
4	9P4752	LATCH SPRING (W/O TAGS 46, 75, 241)
—	9P5109	LATCH SPRING (W/TAG 75) AND (W/TAG 46 OR 241)
5	117S22080	WIRE ASSEMBLY
6	116S20061	FRONT BLOCK
7	116S20080	REAR BLOCK
8	19P3506	CLAMP
9	55P3575	SHIELD
10	117P7419	COROTRON WIRE
11	29P4212	PIN (W/O TAGS 46,75)
—	29P4390	PIN (W/TAGS 46,75)
12	30P34909	LATCH BRACKET (W/O TAGS 46, 75, 241)
—	30S36837	LATCH BRACKET (W/TAGS 75) AND (W/TAG 46 OR 241)
13	26P3675	SHOULDER SCREW
14	55S22650	FEED ROLL SHROUD
15	91P5689	LABEL (A) (W/TAG 75) AND (W/TAG 46 OR 241)
—	—	LABEL (AREA 5) (REF ONLY) (W/O TAGS 46, 75 241)
16	32P1483	GUIDE
17	24P666	STOP
18	9P5120	SPRING (W/TAG 75) AND (W/TAG 46 OR 241)
19	11P1491	LATCH SUPPORT (W/TAG 75) AND (W/TAG 46 OR 241)
20	35P3439	BLOCK SEAL

5/85

Parts List

UPPER FUSER ASSEMBLY



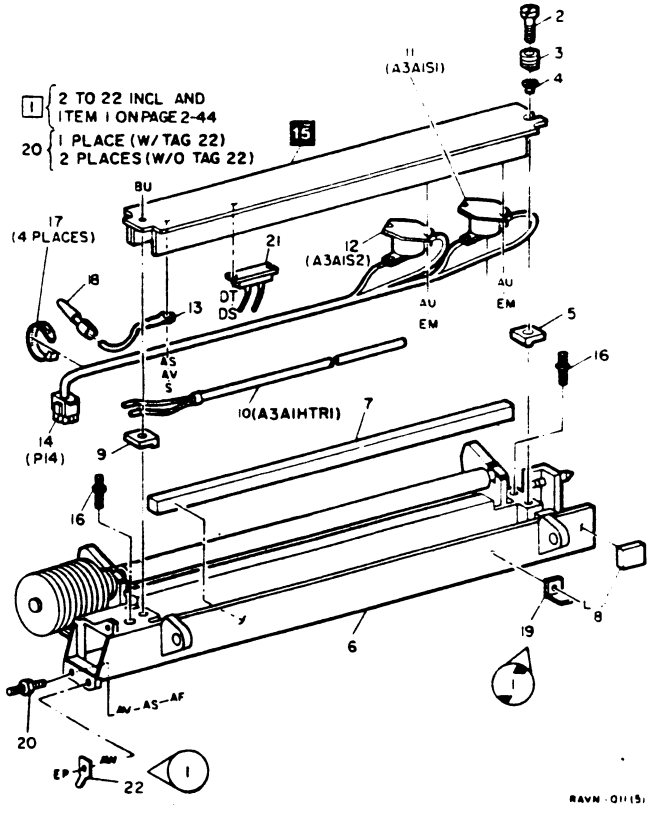
9/83

ITEM	PART	DESCRIPTION
1	126S20592	UPPER FUSER ASSEMBLY (INCLUDES ITEM 1 ON PAGE 2-39) (BSG ONLY) (W/O TAG 22)
—	126S20859	UPPER FUSER ASSEMBLY (INCLUDES ITEM 1 ON PAGE 2-39) (RXL ONLY) (W/TAGS 22,85,93,107)
—	126S20857	SUBSTITUTE PART (W/TAG 93)
—	126S20858	UPPER FUSER ASSEMBLY (INCLUDES ITEM 1 ON PAGE 2-39) (BSG ONLY) (W/TAGS 22,85,93,107)
—	126S20856	SUBSTITUTE PART (W/TAG 93)
2	62P1721	UPPER REFLECTOR (W/TAG 22)
3	130P844	THERMAL FUSE (A3A2F1) (W/TAG 85)
4	19P4054	CLIP (W/TAG 49)
5	—	TERMINAL (P/O ITEM 1)
6	—	THUMBSCREW(REF ONLY)
7	14S20260	REAR END BLOCK (W/O TAG 107)
—	14S4513	REAR END BLOCK (W/TAG 107)
8	116P2539	LAMP CONTACT
—	15P2029	LAMP CONTACT (ALTERNATE)
9	116P2472	TERMINAL
10	35S20301	END BLOCK SEAL
11	152S22891	UPPER HARNESS
12	126P396	FUSER HEAT ROD (W/O TAG 22) (BSG ONLY) (A3A2HTR1)
—	126P492	FUSER HEAT ROD (W/TAG 22) (BSG ONLY) (A3A2HTR1)
—	126P493	FUSER HEAT ROD (W/TAG 22) (RXL ONLY) (A3A2HTR1)
13	55P3672	QUARTZ SHIELD
14	14S3963	FRONT END BLOCK (W/O TAG 107)
—	14S4512	FRONT END BLOCK (W/TAG 107)

5/85

Parts List

LOWER FUSER ASSEMBLY



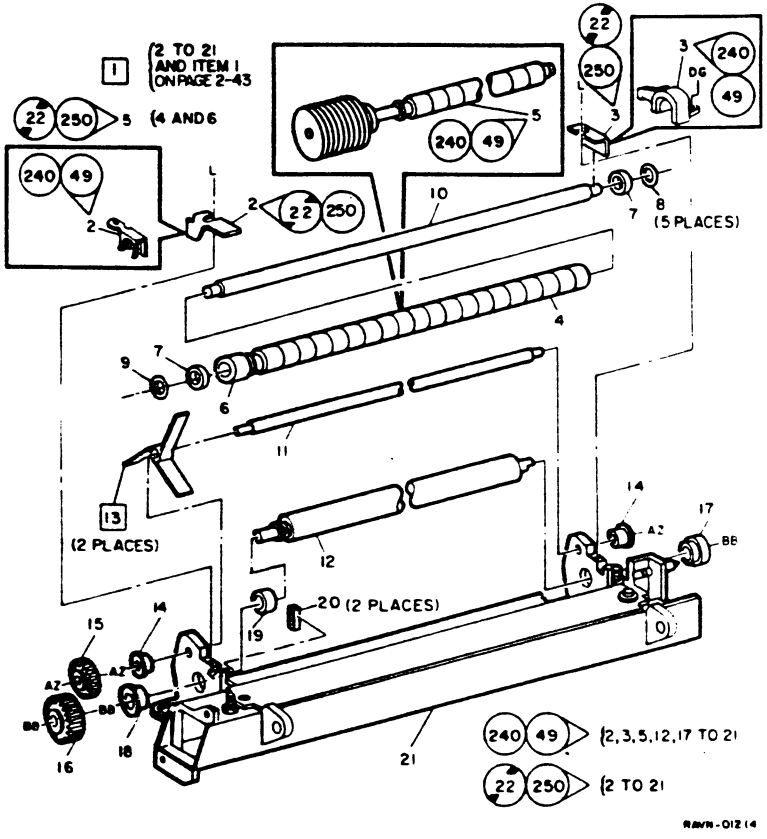
12/83

ITEM	PART	DESCRIPTION
1	126S20654	LOWER FUSER ASSEMBLY (INCLUDES ITEM 1 ON PAGE 2-44) (BSG ONLY) (W/O TAG 22)
—	126S20990	LOWER FUSER ASSEMBLY (INCLUDES ITEM 1 PAGE 2-44) (BSG ONLY) (W/TAGS 22,120,123)
—	126S20848	SUBSTITUTE PART
—	126S20991	LOWER FUSER ASSEMBLY (INCLUDES ITEM 1 PAGE 2-44) (RXL ONLY) (W/TAGS 22,120,123)
—	126S20849	SUBSTITUTE PART (W/TAG 85)
2	26P3626	SHOULDER SCREW
3	9P2802	COMPRESSION SPRING
4	5P2372	COLLAR
5	14P4154	REAR INSULATOR
6	—	LOWER FUSER CASTING (P/O ITEM 1)
7	35S20100	SEAL
8	35S20311	SEAL
9	14P4155	FRONT INSULATOR
10	126S20175	BASE HEATER (A3A1HTR1) (BSG ONLY) (W/O TAGS 4 AND 22)
—	126S20501	BASE HEATER (RXL ONLY) (W/TAGS 4 AND 22) (A3A1HTR1)
—	126S20500	BASE HEATER (BSG ONLY) (W/TAGS 4 AND 22) (A3A1HTR1)
11	130S21120	BASE HEATER THERMOSTAT (A3A1S1)
—	130P824	BASE HEATER THERMOSTAT (W/TAG 120)
12	130S21110	WARMUP THERMOSTAT (A3A1S2)
—	130P823	BASE HEATER THERMOSTAT (W/TAG 120)
13	116P2473	TERMINAL
14	713W2818	CONNECTOR (P14)
15	90P381	BASE REFLECTOR (W/TAG 120)
—	90P371	BASE REFLECTOR
16	26P3676	STUD
17	120P643	CABLE TIE
18	713W10418	CONTACT
19	—	SEE ITEM 22
20	26P3708	STUD
21	130S843	THERMAL FUSE ASSEMBLY (W/TAGS 22 AND 85) (W/O TAG 120)
—	130S851	THERMAL FUSE ASSEMBLY (W/TAG 120)
22	116P1750	TERMINAL (W/TAG 1)
23	152S2557	HARNESS

5/85

Parts List

FEED OUT ROLLS



2/83

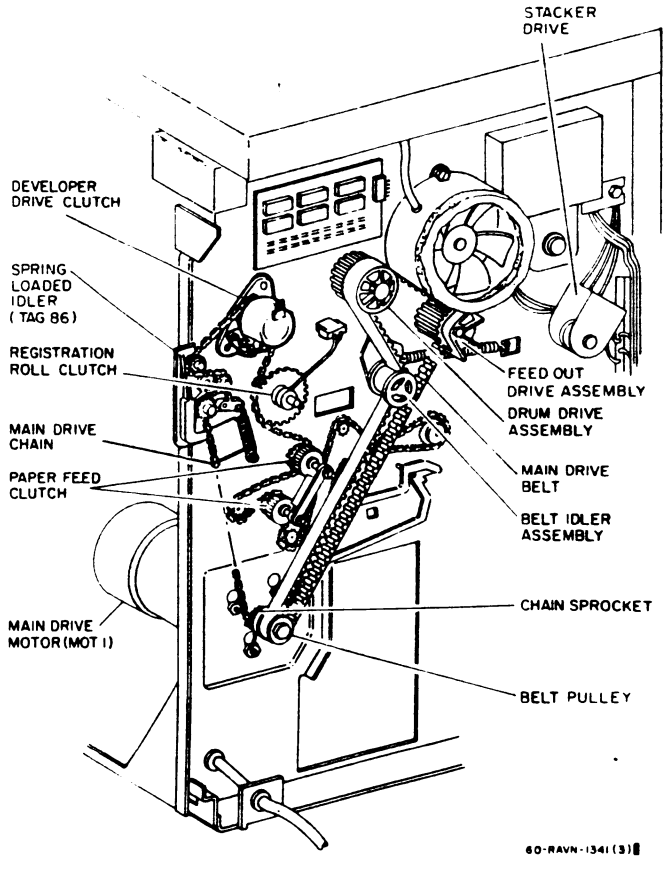
ITEM	PART	DESCRIPTION
1	—	PART OF LOWER FUSER ASSEMBLY (ITEM 1 ON PAGE 2-43)
2	30P36597	FRONT RETAINER (W/TAG 49 OR 240)
—	—	FRONT RETAINER (REF ONLY) (W/O TAG 22) (W/TAG 250)
3	21P785	REAR CAP (W/TAGS 49 OR 240)
—	—	REAR RETAINER (REF ONLY) (W/O TAG 22) (W/TAG 250)
4	—	UPPER FEEDOUT ROLL (W/TAG 250) (W/O TAG 22) (P/O ITEM 5)
5	22P4358	UPPER FEEDOUT ROLL (W/O EXTENSION, ITEM 6 NOT NEEDED) (W/O TAG 22) (W/TAG 250) (ALTERNATE)
—	22S4397	UPPER FEEDOUT ROLL ASSEMBLY (W/EXTENSION, ITEM 6) (W/O TAG 22) (W/TAG 250)
6	—	EXTENSION (P/O ITEM 5) (W/O TAG 22) (W/TAG 250)
7	413W6505	BEARING (W/O TAG 22) (W/TAG 250)
—	13P2400	BEARING (W/TAG 22)
8	28P20124	WASHER (W/O TAG 22) (W/TAG 250)
9	28P20123	WASHER (W/O TAG 22) (W/TAG 250)
10	6P6094	SHAFT (W/O TAG 22) (W/TAG 250)
11	6P7046	SHAFT (W/O TAG 22)
12	22S27220	LOWER FEEDOUT ROLL (W/O TAG 22) (W/TAG 250)
—	22S27240	LOWER FEEDOUT ROLL (W/O ITEM 19) (W/TAGS 22 AND 49)
13	33P412	FEEDOUT FINGER (W/O TAG 22)
14	413W35457	BEARING (W/O TAG 22) (W/TAG 250)
15	7P3373	GEAR (32T) (W/O TAG 22)
16	7P3372	GEAR (48T) (W/O TAG 22)
17	13P2396	BEARING
18	13P2357	FLANGE BEARING
19	—	SLEEVE (REF ONLY)
20	35S20301	SEAL
21	—	LOWER FUSER CASTING (P/O ITEM 1)
22	600S8059	UPPER FEEDOUT ROLL KIT(W/TAGS 49 OR 240)
22A	22S4365	UPPER FEED OUT ROLL (W/TAGS 49 OR 240)
23	22P5014	UPPER FEED OUT ROLL (W/O EXTENSION) (INCLUDES ITEM 4 AND 7 W/TAG 123)

5/85

MAIN DRIVES

Location of Major Components

MAIN DRIVES



5/85

Service Notes

PRODUCT CODES 8040 ONLY

Throughout this documentation, you will see reference made to B1 only or B2. You will be able to identify the differences in these builds by the following product codes:

US	60 Hz	B1	876
US	60 Hz	B2	909
XCI	60 Hz		909C
RX	50 Hz 220v		829

5/85

Repairs

MAIN DRIVE BELT

REMOVAL

1. DISCONNECT MAIN POWER CORD
2. REMOVE REAR COVER
3. **WITH TAG 19:** REMOVE CONTAMINATION FILTER.
4. DECREASE TENSION OF MAIN DRIVE BELT
   a. Loosen locking screws on belt idler (Figure 1).
   b. Turn idler assembly clockwise and tighten one locking screw.
5. PULL FUSER MODULE ON SLIDE ASSEMBLY OUT OF PRINTER (FIGURE 2)
6. REMOVE BELT

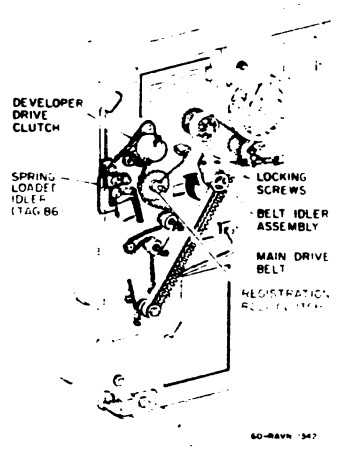


Figure 1. Removal of Main Drive Belt

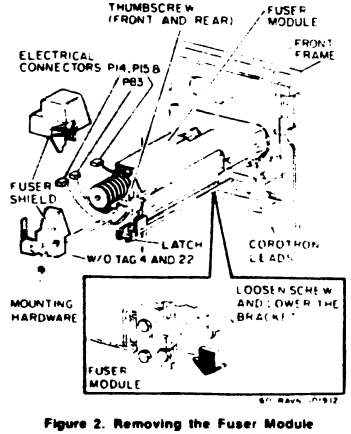


Figure 2. Removing the Fuser Module

12/83

REPLACEMENT

CAUTION

Check the alignment of the feedout drive shaft and the feedout drive pulley before pushing the fuser module into printer (Figure 3)

1. INSTALL MAIN DRIVE BELT.
2. INSTALL FUSER MODULE.
3. ADJUST MAIN DRIVE BELT.
4. **WITH TAG 19:** INSTALL CONTAMINATION FILTER.

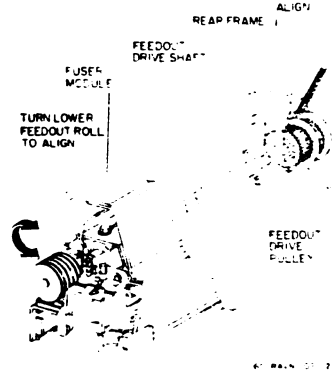


Figure 3. Alignment of Shaft and Pulley

5/85

Repairs

MAIN DRIVE CHAIN

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE REAR COVER.
3. **WITH TAG 19:** REMOVE CONTAMINATION FILTER.
4. REMOVE MAIN DRIVE BELT FROM BELT SPROCKET (FIGURE 1).
5. DECREASE TENSION ON MAIN DRIVE CHAIN (FIGURE 1)

   WITHOUT TAG 86:

   a. Loosen the four mounting nuts on main drive motor.

   b. Raise motor and tighten one nut.

   WITH TAG 86:

   Disconnect spring-loaded idler from the mounting screw.

NOTE: Some chains may have a master link.

6. REMOVE CHAIN.

   a. Disconnect P/J17 upper and P/J18 the lower paper feed clutch connectors.

   b. Disconnect P/J23 developer drive clutch connector.

   c. Remove connector P/J22 at registration switch.

   d. Remove cable clamps at frame and feed the wire harness through hole in rear frame.

   e. Remove chain guard if present.

   f. Remove Stacker Drive Belt.

   g. Remove Hose from Contamination Filter.

   h. Remove chain from sprockets.

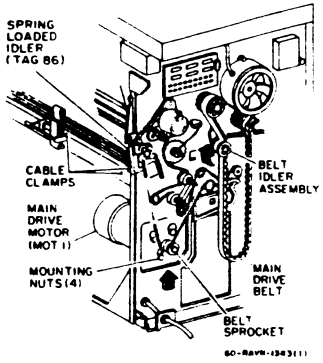


Figure 1. Removal of Main Drive Chain

5/85

REPLACEMENT

1 **WITHOUT TAG 86** ADJUST MAIN DRIVE CHAIN

NOTE: No adjustment is necessary on printer With Tag 86.

2 ADJUST MAIN DRIVE BELT

3 **WITH TAG 19:** INSTALL CONTAMINATION FILTER

5/85

Repairs

REGISTRATION ROLL CLUTCH

REMOVAL

1. DISCONNECT MAIN POWER CORD.
2. REMOVE REAR COVER.
3. DECREASE TENSION ON MAIN DRIVE CHAIN (FIGURE 1).

   WITHOUT TAG 86:

   a. Loosen the four mounting nuts on main drive motor.

   b. Raise motor and tighten one mounting nut.

   WITH TAG 86:

   Disconnect spring-loaded idler from the mounting screw.
4. REMOVE CLUTCH BRACKET.
5. REMOVE REGISTRATION ROLL CLUTCH.

   a. Disconnect P/J31.

   b. Loosen setscrew in collar.

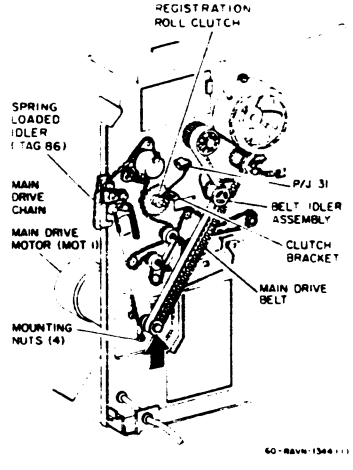


Figure 1. Removal of Registration Roll Clutch

REPLACEMENT

1. REPLACE REGISTRATION ROLL CLUTCH.
2. WITH TAG 46, REMOVE DEVELOPER MODULE AND TRAY.
3. PLACE 0.20 mm SHIM BETWEEN E-RING AND BEARING ON REGISTRATION ROLL SHAFT.

   WITHOUT TAG 46: FIGURE 2

   WTIH TAG 46: FIGURE 3
4. PUSH ON COLLAR AND TIGHTEN SETSCREW (FIGURE 4).
5. INSTALL CLUTCH BRACKET.
6. WITH TAG 46, REINSTALL DEVELOPER MODULE AND TRAY.
7. CONNECT P/J31.
8. **WITHOUT TAG 86:** ADJUST MAIN DRIVE CHAIN.

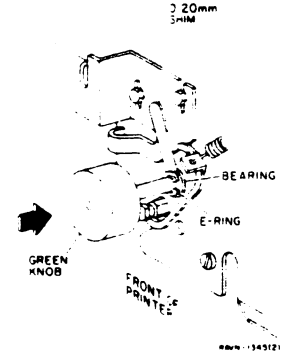


Figure 2. Location of 0.20 mm Shim Without Tag 46

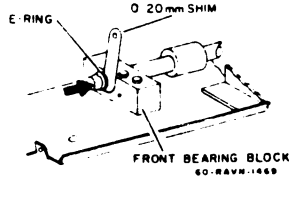


Figure 3. Location of 0.020 mm Shim: With Tag 46

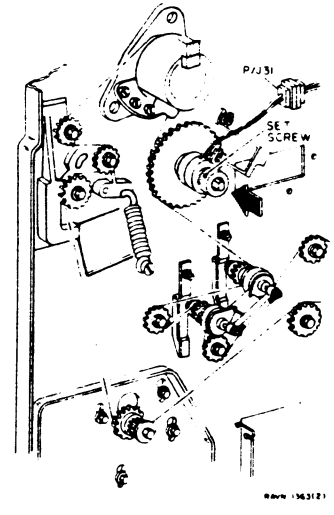


Figure 4. Adjustment of Registration Roll Clutch

MAIN DRIVES

Repairs

CONTAMINATION FILTER ASSEMBLY: WITH TAB 19/WITHOUT TAG 91

REMOVAL

1. SWITCH OFF PRINTER AND DISCONNECT POWER CORD.
2. REMOVE THE REAR COVER

CAUTION

Tap hoses with a screwdriver to remove the loose "toner" from hoses so that "toner" does not fall into printer.

3. DISCONNECT THE TWO HOSES AND INSERT PLUGS.
4. REMOVE THE TWO SCREWS ON FILTER COVER (FIGURE 1).
5. REMOVE THE CONTAMINATION FILTER ASSEMBLY.

REPLACEMENT

INSTALL THE CONTAMINATION FILTER ASSEMBLY.

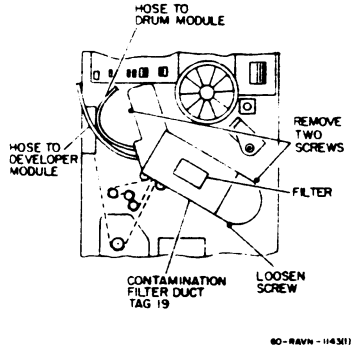


Figure 1. Removing and Installing the Contamination Filter

CONTAMINATION FILTER: WITH TAG 91

REMOVAL

1. SWITCH OFF PRINTER AND DISCONNECT POWER CORD.
2. REMOVE THE REAR COVER

CAUTION

Tap the hoses with a screwdriver to remove the loose "toner" from hoses so that "toner" does not fall into printer.

3. DISCONNECT THE TWO HOSES AND INSERT PLUGS (FIGURE 1).
4. REMOVE THE FILTER COVER BY LIFTING THE SIX LOCKING TABS.
5. REMOVE THE FILTER AND THE NOZZLE FROM FILTER BOX. REMOVE NOZZLE FROM FILTER.

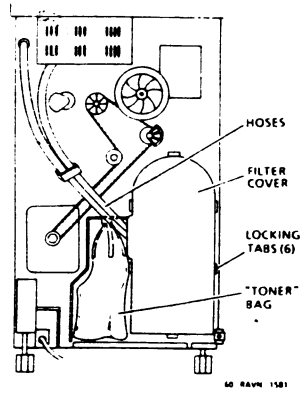


Figure 1. Removing and Installing the Contamination Filter

Adjustments

MAIN DRIVE CHAIN: WITHOUT TAG 86

Purpose

The purpose is to adjust main drive chain to prevent wear of sprockets, bearings, and chain

Adjustment

1. DISCONNECT MAIN POWER CORD
2. REMOVE REAR COVER
3. **WITH TAG 19:** REMOVE CONTAMINATION FILTER.
4. DECREASE TENSION OF MAIN DRIVE BELT (FIGURE 1).
   a. Loosen locking screws on belt idler assembly.
   b. Turn assembly clockwise to decrease tension on belt, and tighten one screw.
5. LOOSEN MOUNTING NUTS ON MAIN DRIVE MOTOR.
6. WHILE KEEPING THE MAIN DRIVE MOTOR LEVEL WITH FLOOR, ALLOW WEIGHT OF MOTOR TO APPLY TENSION TO MAIN DRIVE CHAIN.

NOTE: When securing the main drive motor to rear frame, tighten top nuts first.

7. TIGHTEN MOUNTING NUTS ON MAIN DRIVE MOTOR.

NOTE: With Tag 19: Do not install contamination filter at this time.

8. ADJUST MAIN DRIVE BELT

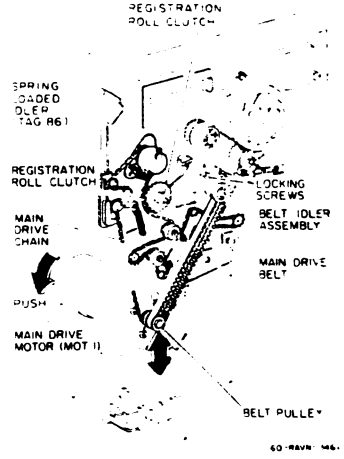


Figure 1. Adjusting the Main Drive Chain

Adjustments

MAIN DRIVE BELT

Purpose

The purpose is to adjust drive belt to prevent wear of bearings and belt.

Adjustment

NOTE Tension of main drive belt is adjusted automatically by tension spring on belt idler assembly

1 LOOSEN LOCKING SCREWS ON BELT IDLER ASSEMBLY (FIGURE 1)

2 ALLOW TENSION SPRING TO ADJUST TENSION OF BELT WHILE HANDCRANKING THE PRINTER

3 TIGHTEN LOCKING SCREWS ON BELT IDLER ASSEMBLY

4 **WITH TAG 19:** INSTALL CONTAMINATION FILTER

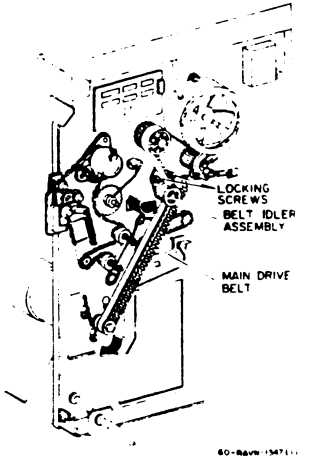


Figure 1. Adjusting the Main Drive Belt

12/83

REGISTRATION ROLL CLUTCH

Purpose

The purpose is to adjust endplay of registration roll shaft to prevent wear and binding.

Adjustment

1. DISCONNECT MAIN POWER CORD.
2. REMOVE REAR COVER.
3. LOOSEN SETSCREW SECURING THE COLLAR (FIGURE 1)
4. WITH TAG 46, REMOVE DEVELOPER MODULE AND TRAY.
5. PLACE A 0.20 mm SHIM BETWEEN E-RING AND BEARING ON REGISTRATION ROLL SHAFT.

   WITHOUT TAG 46: FIGURE 2

   WITH TAG 46: FIGURE 3
6. PUSH ON COLLAR AND TIGHTEN SETSCREW.
7. WITH TAG 46, REINSTALL DEVELOPER MODULE AND TRAY.

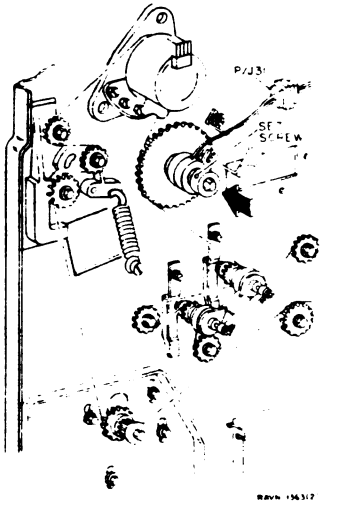


Figure 1. Adjustment of Registration Roll Clutch

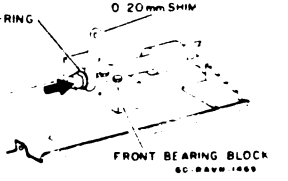


Figure 3. Adjustment of Registration Roll Clutch: With Tag 46

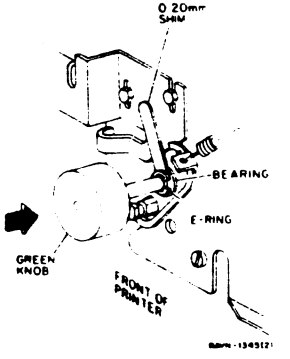


Figure 2. Adjustment of Registration Roll Clutch: Without Tag 46

5/85

Adjustments

DRUM DRIVE ASSEMBLY

Purpose

The purpose is to adjust backlash between drum drive gear and gear on drum drive assembly to prevent wear of gears.

Check

1. REMOVE DEVELOPER MODULE.

NOTE: A single layer of 20 lb. or 80 gsm paper is equal to 0.10 mm thickness.

2. FEED THE TWO 12.0 mm BY 100.0 mm LAYERS OF 20 LB. OR 80 GSM PAPER INTO NIP OF GEARS (FIGURE 1).
3. HANDCRANK THE MAIN DRIVE MOTOR UNTIL PAPER IS FED OUT OF NIP BETWEEN GEARS.
4. CHECK THAT PAPER IS SHARPLY CREASED BUT NOT PERFORATED.
5. IF THE CHECK IS GOOD, INSTALL DEVELOPER MODULE AND CHECK/ADJUST DEVELOPER DRIVE CLUTCH AND DEVLOPER DRIVE COUPLING.
6. IF THE CHECK IS NOT GOOD, PERFORM ADJUSTMENT.

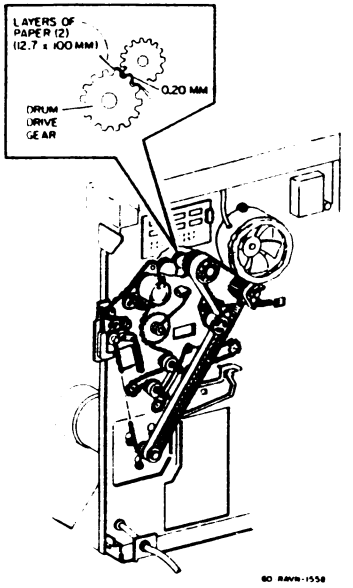


Figure 1. Checking the Gear Backlash

Adjustment

NOTE: A single layer of 20 lb. or 80 gsm paper is equal to 0.10 mm thickness.

1. **WITH TAG 19:** REMOVE CONTAMINATION FILTER ASSEMBLY.
2. FEED THE TWO 12.0 mm BY 100.0 mm LAYERS OF 20 LB. OR 80 GSM PAPER INTO NIP OF GEARS (FIGURE 2).
   a. Loosen the main drive belt.
   b. Push the drive assembly with enough force to make a sharp crease in the paper, but not make perforation cuts.
3. TIGHTEN MOUNTING SCREWS FOR DRUM DRIVE ASSEMBLY.
4. FEED THE PAPER OUT OF NIP BETWEEN GEARS, AND REMOVE PAPER FROM PRINTER.
5. INSTALL DEVELOPER MODULE.
6. CHECK/ADJUST DEVELOPER DRIVE CLUTCH.

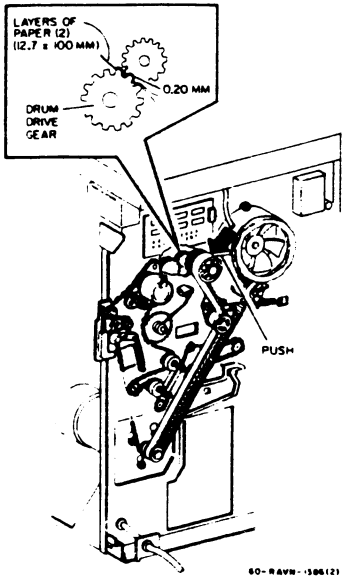


Figure 2. Adjusting the Gear Backlash

MAIN DRIVES

Adjustments

DEVELOPER DRIVE CLUTCH

Purpose

The purpose is to properly position the coupling on the drive clutch and developer drive.

Check

1. DISCONNECT MAIN POWER CORD.
2. CHECK THE ALIGNMENT BETWEEN THE DEVELOPER DRIVE COUPLING AND THE DEVELOPER DRIVE (FIGURE 1).

Adjustment

1. DECREASE TENSION OF MAIN DRIVE CHAIN AND MAIN DRIVE BELT.
2. ADJUST DEVELOPER DRIVE CLUTCH AS SHOWN (FIGURE 1).
3. **WITHOUT TAG 86:** ADJUST MAIN DRIVE CHAIN

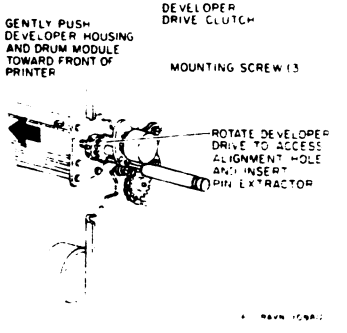
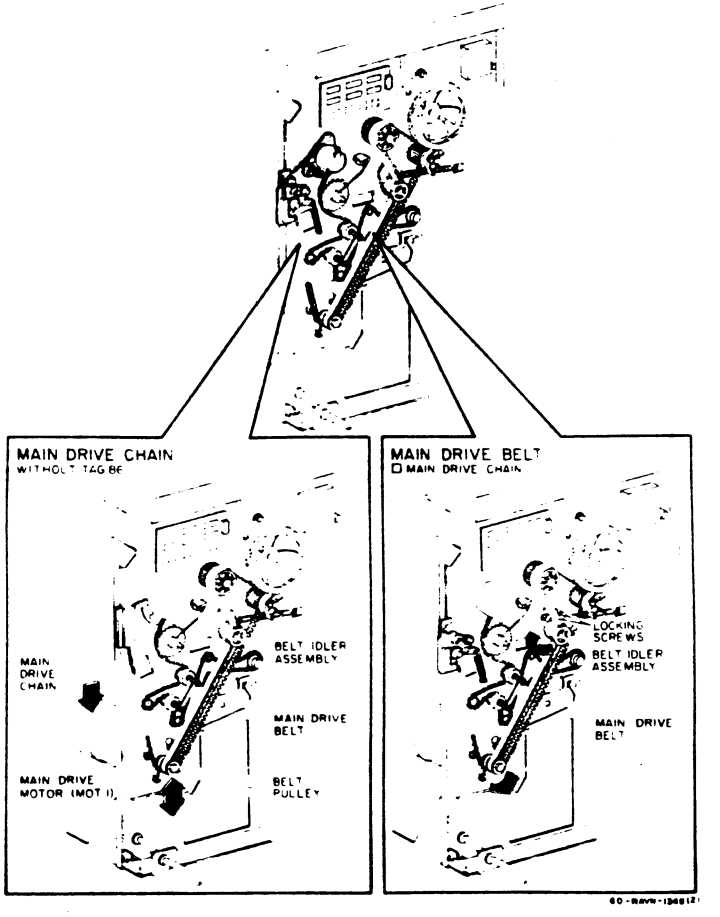


Figure 1. Check/Adjust Developer Drive Clutch

5/84

Adjustment Specifications

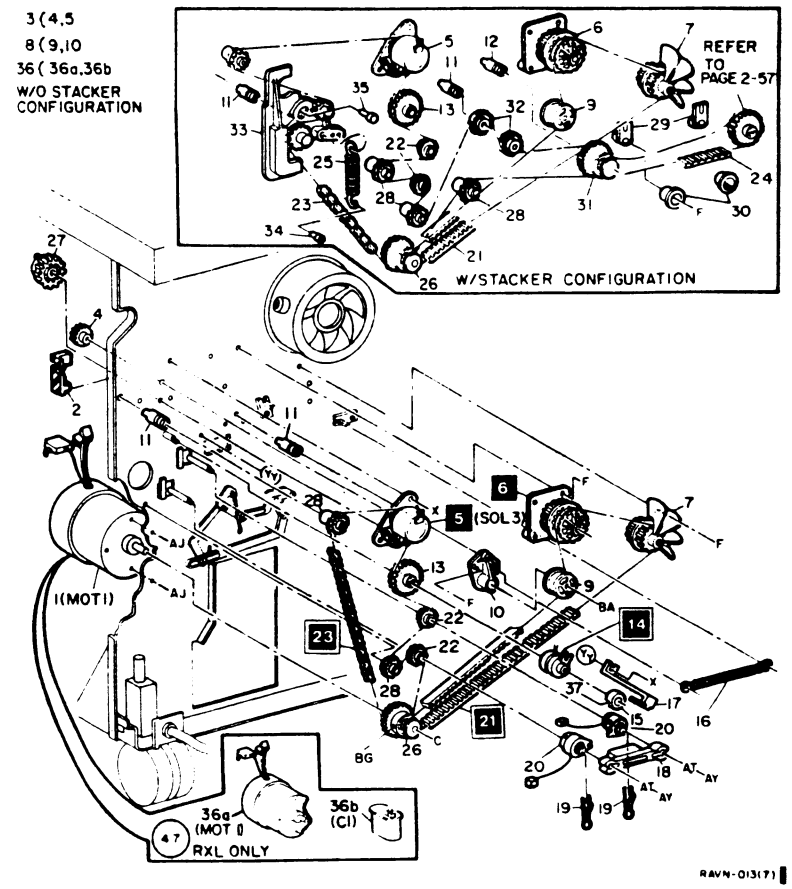


3/83

MAIN DRIVES

Parts List

MAIN DRIVES



5/85

ITEM	PART	DESCRIPTION
1	127S21021	MAIN DRIVE MOTOR (MOT1) (W/TAG 47) (RXL ONLY)
—	127S21020	MAIN DRIVE MOTOR (MOT1) (W/TAG 47) (BSG ONLY)
—	127S21022	MAIN DRIVE MOTOR (MOT1) (W/TAG 47) (BSG ONLY) (ALTERNATE)
2	—	CAUTION LABEL (REF ONLY)
3	121S21124	DEVELOPER DRIVE CLUTCH ASSEMBLY
—	121S21123	DEVELOPER DRIVE CLUTCH ASSEMBLY (ALTERNATE)
4	—	GEAR (P/O ITEM 3)
5	—	CLUTCH (P/O ITEM 3)
6	7S20520	DRUM DRIVE ASSEMBLY
7	30S23832	FEEDOUT DRIVE ASSEMBLY (W/TAG 81)
8	30S23820	BELT IDLER ASSEMBLY
9	20P2754	IDLER PULLEY
10	—	PLATE (P/O ITEM 8)
11	6P8321	SHAFT
—	26P3600	SUBSTITUTE PART
12	6P8322	SHAFT
—	26P3856	SUBSTITUTE PART
13	7P3503	SPROCKET (W/O TAGS 46 AND 241)
—	7P3757	SPROCKET (W/TAGS 46 OR 241)
14	121S21021	REGISTRATION CLUTCH ASSEMBLY (SOL6)
15	5P3867	COLLAR
16	9P6124	SPRING
17	30P32505	BRACKET
18	31P3245	STOP BRACKET
19	29P4600	HAIRPIN CLIP
20	121S20771	PAPER FEED CLUTCH ASSEMBLY (SOL1, SOL5)
—	121S20772	PAPER FEED CLUTCH ASSEMBLY (SOL1, SOL5) (ALTERNATE)
—	121S20773	PAPER FEED CLUTCH ASSEMBLY (SOL1, SOL5) (ALTERNATE)
21	23P1389	BELT
22	7P3504	SPROCKET
23	423W77203	MAIN DRIVE CHAIN (W/O STACKER) (172P)
—	423W85203	MAIN DRIVE CHAIN (W/STACKER) (W/O TAG 86)
—	423W86603	MAIN DRIVE CHAIN (W/STACKER) (W/TAG 86)
24	423W8702	BELT
25	9P2568	SPRING (W/TAGS 37 AND 86)
26	7P3258	PULLEY SPROCKET
27	7S21320	SLIDE GEAR
28	7P3585	SPROCKET (15T)
29	30P34533	SUPPORT
30	20P2922	PULLEY
31	7P3586	SPROCKET PULLEY
32	7P3584	SPROCKET (10T)
33	30S52350	IDLER ASSEMBLY (W/TAGS 37 AND 86)
34	26P4146	SHOULDER SCREW (W/TAG 86)
35	26P4147	SHOULDER SCREW (W/TAG 86)
36	600S8485	MAIN DRIVE MOTOR (MOT 1) REPAIR KIT (W/TAG 47) (RXL ONLY)
36A	127S21024	MAIN DRIVE MOTOR (MOT 1) (RXL ONLY)
36B	—	START CAPACITOR
37	26P20301	SET SCREW

5/85