Transmittal Page

Product	Title	Part Number
Xerox Wide Format 8850/510dp Series Printers	**Service Manual**	**701P47092**
Initial Issue This service manual issue supersedes 701P46789 dated March 2007.		Date **August 2007**

Change Highlights:

Section 1
Added hyperlinks to RAPs.
Section 2
Updated various RAPs.
Section 5
Updated references in the Parts Lists.
Section 6
Updated various General Procedures.

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XEROX

Xerox Wide Format 8850/510dp Series Printers Service Manual

CAUTION
Certain components in the 8850 Printer and SPS 510dp Series Printer are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

701P47092
August 2007

Introduction

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About this Manual

This manual is part of a documentation system that includes the training.

This manual contains Repair Analysis Procedures (RAPs), Repair Procedures, Adjustment Procedures, Parts List, Diagnostic Procedures, Installation Procedures, Wiring Data and BSDs.

This manual will enable the Service Representative to repair the 8850/510dp printer.

Organization

This manual consists of eight sections. The title and description of each section are listed below.

Section 1. - Service Call Procedures

This section contains the following:

- Call Flow Procedure
- Initial Actions/ System Checks
- Print Defect Isolation Procedure
- Workstation Checkout Procedure
- Status Code Entry Chart
- Message Display Entry Chart
- Maintenance Procedures
- Callback
- System Checkout/ Final Action

Call Flow Procedure

The Call Flow Procedure is a list of activities to be performed on each service call.

Initial Actions/ System Checks

This procedure is designed to identify and classify the problem and to refer you to the appropriate RAP in order to repair the problem. When the problem has been repaired, perform the Final Action.

Print Defect Isolation Procedure

This procedure directs the CSE to make test prints, perform test procedures to identify the cause of a print defect.

Workstation Checkout Procedure

This procedure is designed to ensure that the printer is correctly set up to run and communicate with other elements. It consists of a series of connection checks, configuration test prints, PING tests, and tests made from a laptop PC.

Status Code Entry Chart

This table provides a list of status codes, a description of the problem, the components that are affected, RAPs that may resolve the problem, as well as BSD references and Parts List references.

Message Display Entry Chart

This table contains a list of messages that may be generated by the printer, their cause, clearance procedures, and BSD references.

Maintenance Procedures

The Maintenance Procedures identifies functional checks and cleaning operations that must be performed on every Normal Call. It also identifies those activities that can be performed as needed or as scheduled.

Callback

This service is performed when the CSE has been called back to correct a problem that was thought to have been recently corrected. The Callback is a short procedure performed on only that subsystem that caused the original service cal

System Checkout / Final Action

This procedure is used to verify that the printer is operating correctly after a repair, and that the correct steps are taken to close out a service call.

Section 2. - Repair Analysis Procedures (RAPs)

This section contains the Repair Analysis Procedures (RAPs) necessary to repair the faults. When using a RAP, always exit the procedure when the fault is fixed. Do not perform the remaining steps.

Section 3. - Image Quality Repair Analysis Procedures (RAPs)

This section contains the Repair Analysis Procedures (RAPs) necessary to repair the image quality faults. Refer to "How to Use the Image Defect Definitions" to compare the image defect to the definitions. Once you have determined the definition that best describes the defect, go to the section contents page to find the appropriate RAP. When using a RAP, always exit the procedure when the fault is fixed. Do not perform the remaining steps.

Section 4. - Repair / Adjustment

This section contains the repair and adjustment procedures for the 8850/510dp Printer.

Section 5. - Parts List

This section contains the detailed Parts List for the 8850/510dp Printer.

Section 6. - General Procedures

This section contains Diagnostic Procedures, Installation Procedures, and General Information, which includes Product Specifications for the 8850/510dp Printer.

Section 7. - Wiring Data

This section contains the BSDs.

How to Use This Manual

The Service Call Procedures will direct you to the appropriate Section of the Service Manual.

You should begin the service call with the Initial Actions/ System Checks Procedure. From there, you will be referred to either Section 2, Status Indicator RAPs, Section 3, Image Quality RAPs, or Section 7 BSDs.

If you are sent to Section 3, compare the image defect to the print quality definitions. Once you have determined the definition that best describes the copy defect, go to the section contents. The section contents will direct you to an image quality RAP. The RAP has a list of probable causes and corrective actions. From these RAPs you may be referred to other sections of the manual to make checks, Adjustments, or to replace parts.

When you have made a Repair, always go to the Call Flow Procedure to finish the call.

Repair Analysis Procedures (RAPs)

A RAP is either a table of faults and possible solutions, or a series of steps designed to lead you to the cause of a problem. In each step, you will perform an action or observe an occurrence. For fault tree RAPS, at each step, a statement is made that has a Yes (Y) or No (N) answer.

If the answer is NO, perform the action following the NO. If the answer is YES, proceed to the next step.

When several items are listed, perform them in the order listed.

Proceed through the steps only until the observed problem is isolated and solved. Then evaluate the unit for proper performance. If a further defect is observed, go to the appropriate RAP and perform the steps it contains until the additional fault is located and repaired.

Repair / Adjustment Procedures

The repair procedures provide detailed steps on how to remove and replace components. The adjustment procedures provide detailed steps on how to check and adjust components. Some units have been modified by various design changes. Each change or modification is labeled with a Tag/ MOD (modification) number. The Tag/ MOD numbers are identified in the Change Tag/ MOD Index in Section 6 of this Service Manual.

When a modification affects how a particular procedure is performed, the procedure or steps are identified with either a **W/ Tag/ MOD** or a **W/ O Tag/ MOD** statement. Each procedure or step that is affected by a modification is identified with the statement, **W/ Tag/ MOD**, followed by the modification number. The **W/** in the statement indicates that this step must be performed on units that are assembled **with** that specific modification.

When the procedure or steps are not affected by a particular modification, they are identified with the statement, **W/ O Tag/ MOD**, followed by the modification number. The **W/ O** in the statement indicates that this step must be performed on units assembled **without** that specific modification.

(Figure 1): The following symbols are used in this document:

REFERENCE SYMBOLOGY

The following symbols are used in this document:

NOTE

This symbol is used to refer to Notes, usually on the same page.

Adjustment

This symbol is used to show that an Adjustment is required on the indicated component, and there is also a reference to the location of the Adjustment Procedure.

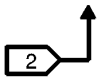
Voltage Source

This is an indication of the Source Voltage that is used for operation of a component. This voltage is distributed in the PWB and comes from the LVPS.

Status Code

The Status Code is represented by a box in the control logic section of the circuit diagram.

Flags



This symbol is used on the circuit diagrams and is pointing to a wirenet that has to be examined for a short circuit to the frame or an open circuit.

Component Control

The code [0403] is an example of an output diagnostic test.

Parts List

Reference to Exploded Drawing

PL 1.1 The spared component is found in this drawing in the Parts List.

Switches and Relay Contacts

Safety interlock switch that is open.

Safety interlock switch that is closed.

Switch or relay contacts with momentary contacts shown normally open.

Switch or relay contacts with momentary contacts shown normally closed.

T200002A-COB

Figure 1 Reference Symbology (1 of 2)

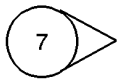
WARNING

A Warning is used to alert the personnel to an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in injury or loss of life.

CAUTION

A Caution is used to alert the personnel to an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of equipment.

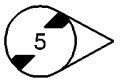
Tag / MOD Information



This symbol identifies the component or configuration of components in a circuit diagram that are part of a change identified with this Tag / MOD number.

This symbol identifies an entire circuit diagram that has been changed by this Tag / MOD number.

Tag / MOD Information

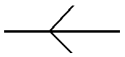


This symbol identifies the component or configuration of components in a circuit diagram that are not part of a change identified with this Tag / MOD number.

This symbol identifies an entire circuit diagram that has not been changed by this Tag / MOD number.

The Signal Flow

This symbol is used on circuit diagrams to indicate an interrupted signal in the horizontal direction.

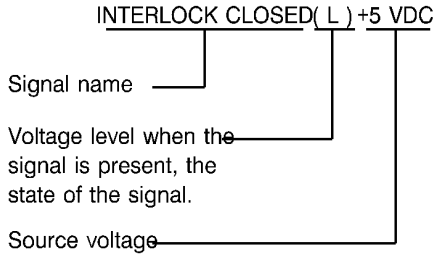


This symbol is used on circuit diagrams to indicate a recirculating signal.

This symbol is used on circuit diagrams to indicate a feedback signal.

Signal Name

The signal line is given a name that indicates the condition of the signal when the signal is present.



AC Voltage Specifications

ACH = 220 / 240 VAC (EO, USO)

DC Voltage Specifications

Table 1 shows the allowable range for the DC voltages.

Table 1. DC Voltage Specifications

Voltage	Specification
+5 VDC	+4.75 to +5.25 VDC
-5 VDC	-4.75 to -5.25 VDC
+12 VDC	
DC COM	0.0 to +0.8 VDC
(L)	0.0 to +0.8 VDC

T200003A-COB

Figure 2 Reference Symbology (2 of 2)

1 Service Call Procedures

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Call Flow

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Introduction

The Service Call Procedures are designed to assist the Service Representative to identify Printer faults, perform the necessary corrective action, and perform the correct Maintenance Procedures. The Service Call Procedures are designed to be used with the Printer Service Manual and is the entry level for all service calls.

- Call Flow Procedure - The Call Flow Procedure is a list of activities to be performed on each service call.
- Initial Actions - This procedure is designed to identify and classify the Printer problem and to refer you to the appropriate RAP in order to repair the problem. When the problem has been repaired, perform the System Checkout / Final Action.
- Print Defect Isolation Procedure - This procedure directs the CSE to make test prints, perform test procedures to identify the cause of a print defect.
- Workstation Checkout Procedure - This procedure is designed to ensure that the Printer is correctly set up to run and communicate with other elements. It consists of a series of connection checks, configuration test prints, PING tests, and tests made from a laptop PC.
- Status Code Entry Chart - This table contains a list of Status Codes, their related components, the corresponding RAP (Repair Analysis Procedure), BSD (Block Schematic Diagram), Component Code and Parts List reference. The chart is designed to direct you to the appropriate Clearance Procedure. When the Status Code problem has been repaired, refer to the Call Flow Diagram and continue the Service Call.
- Message Display Entry Chart - This table contains a list of messages that may be generated by the Printer, their cause, clearance procedures, and BSD references.
- Maintenance Procedures - This table contains a list of messages that may be generated by the Printer, their cause, clearance procedures, and BSD references.
- Callback - This service is performed when the CSE has been called back to correct a problem that was thought to have been recently corrected. The Callback is a short procedure performed on the subsystem that caused the original service call.
- System Checkout - The purpose of this procedure is to record the media feet count and to make a record in the machine log book of the service activities that were performed. The Final Action is designed to ensure that the print is transported correctly and to ensure that image quality is within specification.

Call Flow Procedure

Procedure

Perform the following:

1. Initial Actions.

There has been more than 5 customer work days or 500 feet (150 meters) since the last service call.

Y N

Perform the following:

1. Perform the Maintenance Procedures for the subsystem that caused the problem.
2. System Checkout

Perform the following:

1. Maintenance Procedures for all subsystems.
2. System Checkout .

Initial Actions/Systems Checks

1. Ask the operator to try to duplicate the problem.
2. Ask the operator to cancel all of the print jobs in the print queue.
3. Review the logbook for previous service on the system.
4. Check the Recent Fault Log for trends:
   a. **With a Controller** - Print out the Configuration Test Sheet through the Utilities Menu. The last 25 faults are listed on the upper-right side of the sheet.
   b. Enter [0391] and [0392]. Use the **Next** and **Previous** buttons to scroll through the fault logs and review the faults and frequency of occurrence.
   c. **Offline menu**: Reference the 8850/510dp Series Printer Operator Manual, Offline Setup Menu, Performing printer diagnostics, Viewing recent fault log to have the customer review the fault log.
5. Analyze the frequency of the fault codes and refer to the Status Code Entry Chart to troubleshoot the problem:
   a. C or E codes should occur no more frequently than once per 1000 linear feet.
   b. All Cutter faults should occur no more frequently than once per 10,000 linear feet.

NOTE: *E4-09, Cx-04, and Cx-05 are out-of-media codes and will occur once per 500 linear feet. Also, 001 and 002 codes are power on/off. Question the operator if the faults are excessive.*

6. Record the readings from the media length counter.

   NOTE: *Perform each of the following steps in sequence, unless directed elsewhere.*

7. If there is a fault indicator displayed, determine the type of fault.
   - If a status code is displayed, go to the Status Code Entry Chart in this Section.
   - If there is a message displayed, go to the Message Display Entry Chart in this Section
   - If the Drawer LEDs are flashing and no error code displayed:
     – Instruct operator to position the lead edge of the media above the center mark of the alignment window in the media drawer.
     – Check that the latest printer firmware is installed.
8. If there is a print quality problem, go to the Print Defect Isolation Procedure in this Section.
9. If the Printer Control Panel is blank, go to OF-1 Control Panel RAP in Section 2 of this service manual.
10. If the Printer Control Panel displays numbers during Printer warm up, go to OF-2 Power On Self Test (POST) RAP in Section 2 of this service manual.

Print Defect Isolation Procedure

Procedure

1. Go to Special Tests 0955 in Section 6 of this service manual. Select option 5 (600 mm print length on 36 inch wide paper) and make an internal test print.
2. If the defect is still present, go to Print Quality Initialization Procedure in Section 3 of this service manual.
3. Go to Workstation Checkout Procedure located in this Section.

Workstation Checkout Procedure

Initial Actions

1. Ensure that all connectors are seated correctly at the Controller.
2. Ensure that the SCSI cable from the Scanner is securely connected to the scanner connector on the Controller.
3. Print out a Configuration Test Print which will provide troubleshooting information that will be used later. Ensure that the communication parameters are set correctly.

Procedure

NOTE: *Do each of the steps in sequence, unless directed otherwise.*

1. Ask the customer to print a different file from the workstation. If the file prints OK, then the original file might be corrupt.
2. If the workstation is connected to a network, go to step 3. Otherwise, go to step 5.
3. Ask the customer to obtain the IP address of another device on the network. Ask the customer to go to the DOS prompt and to use the PING function to test the connection to the other device. If the PING test is successful, then go to step 4. Otherwise, notify the customer that there seems to be a network problem.
4. Obtain the IP address for the Controller from the Configuration Test Print. Ask the Customer to use the PING function to test the connection to the Controller. if the test is successful, then go to step 5. Otherwise, go to FRU (Field Replaceable Unit) Test in Section 2 of the Controller Service Manual.
5. Connect the laptop computer to the parallel port on the Controller. Open the Document Submission Tool. Insert the test file disk in the laptop. Send a test file to the Printer. If the defect is present, go to the FRU (Field Replaceable Unit) Test in Section 2 of the Controller Service Manual. Otherwise, ask the customer to reload the print drivers. If the problem still exists, there could be a defective cable.

Status Code Entry Chart

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
C1-01/ C2-01/ C3-01 RAP	**Roll Position Sensor error** The Roll 1, 2, or 3 Position Sensor did not actuate or deactuate.	• Roll 2 Position Sensor (Q2) Roll 1 Position sensor (Q1) Roll 3 Position Sensor (Q3) • Main PWB (A3) • Check media path for an obstruction. • Clean the Roll Position Sensor and check for damage. • Check connector A3P/ J609 on the Main PWB. ***NOTE: The sensors are interchangeable.***	BSD 7.2 BSD 7.3 BSD 7.4	PL 7.1
C1-04/ C2-04/ C3-04 RAP	**Media Registration Sensor error** The Media Registration Sensor did not actuate or deactuate when feeding from roll 1, 2, or 3.	• Media Registration Sensor (A21Q1) • Main PWB (A3) • Registration Rolls • Transport Driver Motor	BSD 8.2	PL 8.2
C1-05/ C2-05/ C3-05 RAP	**Motion sensor error** Motion was not detected or the media stopped moving when feeding from roll 1, 2, or 3.	• Roll 1 Motion Sensor (Q4) • Roll 2 Motion Sensor (Q5) • Roll 3 Motion Sensor (Q6) • Main PWB (A3) • Media Feed Rolls • Media Feed Drive Motor • Check the Motion Sensor and Encoder Disk for damage by rotating the Rewind Drive Sprocket. ***NOTE: The sensors are interchangeable.***	BSD 7.2 BSD 7.3 BSD 7.4	PL 7.2

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
C1-59 C2-59 C3-59 No RAP	This code appears when the end of the media roll is reached and the media is not taped to the roll core. The media can not rewind.	Install a new roll of media.	BSD 7.2BSD 7.3BSD 7.3	PL 7.2 PL 7.4
C2-07 No RAP	**Roll 1 Position Sensor error** Media was not detected at the Roll 1 Position Sensor when feeding from Roll 2.	Roll 1 Position Sensor Q1 Main PWB	BSD 7.2	PL 7.1
C3-06 No RAP	**Roll 2 Position Sensor error** Media was not detected at the Roll 2 Position Sensor when feeding from roll 3.	Roll 2 Position Sensor (Q2) Main PWB (A3)	BSD 7.3	PL 7.1
C3-07 No RAP	**Roll 1 Position Sensor error** Media was not detected at the Roll 1 Position Sensor when feeding from Roll 3.	Roll 1 Position Sensor (Q1) Main PWB (A3)	BSD 7.2	PL 7.1
C4-24 No RAP	Media **Registration Sensor error** The cut sheet does not reach the Media Registration Sensor in time.	• Media Registration Sensor (A21Q1) • Main PWB (A3) • Registration Rolls • Media Transport Drive Motor	BSD 8.1	PL 8.2 PL 1.1
C4-34 No RAP	**Sheet Feed Sensor error** The Sheet Feed Sensor deactuated too early while making a print. The operator may have removed the sheet media.	• Sheet Feed Sensor (Q2) • Main PWB (A3)	BSD 8.1	PL 10.7 PL 1.1
E2-01 RAP	**Media Registration Sensor error** The media trail edge jammed in the Media Registration Sensor area.	• Media Registration Sensor (A21Q1) • Main PWB (A3) • Intermittent problem with the Drum Drive Motor starting	BSD 8.2	PL 8.2 PL 1.1 PL 9.1
E2-09 No RAP	**This is a Firmware problem** This is a firmware problem. Press power off (0) then power on (1). If problem persists, replace the firmware.			
E2-11 No RAP	**Media Registration Sensor error** The Media Registration Sensor was detected to be actuated when the machine powered up.	• Media Registration Sensor (A21Q1) • Main PWB (A3)	BSD 8.2	PL 8.2 PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
E4-01 No RAP	**Fuser Exit Sensor error** The media trail edge jammed in the Fuser Exit Sensor area.	• Fuser Exit Sensor error (S3) • Main PWB (A3) • Exit Rollers and Drive • Interference between actuator and slot in cover.	BSD 10.3	PL 10.4 PL 1.1
E4-02 No RAP	**Fuser Exit Sensor error** Lead edge of media did not reach the Fuser Exit Sensor (S2) in the allowed time period.	• Fuser Exit Switch (S2) • Fuser Heat Roll, Pressure Roll, Vacuum and Media Transport • Fuser Drive Motor • Check Detack lace for damage. BTR/ Detack Corotron is functioning (GP 1). • Remove the Media Transport Module (REP 8.2). Perform the following: Check media path for burrs on the sheet metal and extrusions. De-burr with fine steel wool or polishing pad. Check for binding and damage to the belts pulleys, and idler pulleys. Reform the registration widow reforming, refer to TSB 8850, 057..	BSD 10.3	PL 10.4
E4-03 No RAP	**Stripper Finger Jam Switch error** The Stripper Finger Jam Switch (SW1) was actuated during the run mode.	• Stripper Finger Jam switch (SW1), Fuser Heat Roll, Pressure Roll, • Stripper Finger Damaged, Web Oiler • Worn Media Exit Drive Rolls	BSD 10.3	PL 10.4

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
E4-04 No RAP	**Stacker Full** The Stack Height Sensor was actuated during a run or was detected to be actuated when the machine powered	Stack Height Sensor	BSD 10.3	PL 14.2
E4-09 No RAP	**This is a Firmware problem** Press power off (0) then power on (1). If problem persists, replace the firmware.			
E4-11 No RAP	**Fuser Exit Sensor error** The Fuser Exit Sensor was detected to be actuated when the machine powered up. This requires the Fuser exit area to be opened, and the media to be removed.	• Fuser Exit Sensor (S2) • Main PWB (A3)	BSD 10.3	PL 10.4
E4-12 No RAP	**Sheet Feed Sensor error** The Sheet Feed Sensor was detected to be actuated when the machine powered up. This requires the Fuser exit area to be opened, and the media to be removed.	• Sheet Feed Sensor (A21Q2) • Main PWB (A3)	BSD 8.1	PL 10.7 PL 1.1
E4-13 No RAP	**Stripper Finger Jam Switch error** The Stripper Finger Jam Switch was actuated at power on.	• Stripper Finger Jam Switch • Main PWB (A3)	BSD 10.3	PL 10.4 PL 1.1
E5-03 No RAP	**Top Cover Interlock Switch error** The Top Cover was opened during print.	• Top Cover Interlock Switch (S26) • Main PWB (A3)	BSD 1.3	PL 14.5 PL 1.1
E5-04 No RAP	**Cutter Cover Interlock Switch error** The Cutter was opened during print.	• Cutter Cover Interlock Switch (S1) • Main PWB (A3)	BSD 1.3	PL 7.7 PL 1.1
E5-05 No RAP	**Please Close the Fuser Exit Door**. The Fuser Drawer was opened while a print job was in progress.	• Close the Fuser Drawer • Check that the Transport loop, connector A21P/J1 is fully seated	BSD 1.3	
E5-06 No RAP	**Front Door Interlock Switch error** The front door was opened during print.	• Front Door Interlock Switch (S21) • Main PWB (A3)	BSD 1.3	PL 14.3
E7-01	**Communication error** The IOT is unable to communicate with the Controller. The IOT Off-Line and Media menus will still function, but cannot print from the Controller or network.	Go to E701 RAP in Controller Service Manual.		

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
E7-02 No RAP	**Printer message display error** A required message is not available. Download the language software again.	Main PWB (A3)		PL 1.1
E9-XX	**Software shutdown** This error is of unknown cause. Escalate the service call.			
Fx-xx	**Refer to the Folder Service Manual for all F-codes.**			
J1-01 Undertoned Fault RAP	**Toner Sensor error** Logic detected that Printer is out of toner.	• Toner Sensor (Q1) • Toner Sensor circuitry • Toner / Developer Cartridge • Main PWB (A3)	BSD 9.7	PL 9.7 PL 1.1
J2-02 No RAP	Toner **Cartridge Home Sensor error** Toner cartridge could not find the home position.	• Toner Cartridge Home Sensor (Q2) • Cartridge Drive Motor (MOT1) / circuitry • Cartridge Drive Gears • Home Sensor (Q2) out of specification (ADJ 9.5) • Main PWB (A3)	BSD 9.7	PL 9.7PL 9.8 PL 1.1
LL-02 No RAP	**8850 Firmware error** This is a firmware problem. Press power off (0) then power on (1). If problem persists, replace the firmware.			
				PL 1.1
LL-05 No RAP	**Fuser Web Oiler error** NVM count of web encoder pulses indicates the Fuser Web Oiler has reached end of life.	Web Oiler Drive Motor (A23MOT1)	BSD 10.2	PL 10.5
LL-06 No RAP	**Fuser Web Oiler error** The Web Oiler Drive Motor or wiring harness to the Web Oiler Drive Motor is shorted.	Web Oiler Drive Motor (A23MOT1)	BSD 10.2	PL 10.5
LL-11 No RAP	**Communications error** Failed communications between the Main PWB (A3) and the Drum Drive and Fuser Heat Roll Drive Motors.	Main PWB (A3) **CAUTION: Fuser must be at operating temperature before switching on motors.**	BSD 4.1 BSD 4.3	PL 9.1 PL 10.1 PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL-12 No RAP	**Drum Drive Motor stall or will not start fault** signal detected.	• Drum Drive Motor (MOT3) • Drum Assembly, BTR Drive Gears • BTR Assembly. • Media Transport • Main PWB (A3) • Incorrectly installed Encoder (REP 9.23)	BSD 4.3, BSD 9.1, BSD 9.4 REP 9.23	PL 1.3 PL 8.3
LL-21 Charge/ Grid Fault RAP	**Charge Xerographic HVPS error**. Charge Scorotron HVPS fault signal detected.	• Xerographic HVPS (A25) • Charge Scorotron Assy • Contaminated Scorotron • Image Module • Main PWB (A3)	BSD 9.1	PL 9.1 PL 8.3
LL-22 Detack Fault RAP	**Clean voltage / Detack HVPS error**.BTR/ Detack corotron fault signal was detected	• Xerographic HVPS (A25) • BTR/ Detack Corotron • Slip Ring/ Leads/ Connectors • Main PWB (A3)	BSD 9.8 BSD 9.4	PL 1.3 PL 9.9
LL-23 No RAP	**+ 5 VDC Bulk error signal detected**	• LVPS (A5), Connectors, wires, • Main PWB (A3)	BSD 1.2	PL 1.1
LL-24	***NOTE:*** *Check that the Printer firmware is 02.03.06-16 (8850) or 03.03.06-16 (510) or higher.*			
LL-25 Charge Voltage V HIGH	**Charge voltage**, VHigh, exceeded -580 VDC	• Open in Grid circuit • Erase Lamp off • Drum ground open or contaminated	BSD 9.1 BSD 9.6	
LL-30 No RAP	**Cutter error** The Cutter did not leave or reach the Cutter Home Sensor. Turn power off, then on.	• Cutter Home Sensor (A8Q1) • Main PWB (A3) • Cutter Drive Motor	BSD 7.5	PL 7.8
LL-40 No RAP	**Fuser Communications error**. Serial communications between Printer and Fuser Controller could not be established or to many errors (intermittent communications	• Lose connector or faulty harness between A1P 7 and A3P 614. • AC Module (A1) • Main PWB (A3)	BSD 10.1	PL 1.1 PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL-41, LL-45, LL-81 Fuser Warm-up Fault RAP	**Fuser error.** LL-41 is displayed when the Fuser heat does not exceed 210 degrees F (99 degrees C) within two minutes.	• If declared at install, check the Line Service [0261] • Thermistor (RT2) or (RT3) does not touch the Fuser Heat Roll. • (RT2) or (RT3) has an open circuit or a short circuit to ground. ***NOTE:*** *Clean/Replace the Thermistor (RT2) or (RT3).* • Replace AC Module Assembly (A1).	BSD 10.1	PL 10.3 PL 10.2 PL 1.1
LL-42 No RAP	**Fuser error** The Fuser Heat Roll exceeded the allowable temperature for more than 30 seconds. The maximum temperature is 350 degrees F (177 degrees C). To reset: switch off, then on, the Main Power Switch.	• Thermistor (RT2) or (RT3) has a short circuit. • Fuser Temperature not set to specification (ADJ 10.1)	BSD 10.1	PL 10.2
LL-41, LL-45, LL-81 Fuser Warm-up Fault RAP	**Fuser temperature error** The Fuser was in full-power warm-up mode more than 10 minutes. To reset: switch off, then on, the Main Power Switch.	• Line Current Limit (ADJ 3.2) - Line Service is not correct for the electrical voltage used. Current limit set point is too low. Check the adjustment. • Thermistor (RT2) or (RT3) does not touch the Fuser Heat Roll. • Heat Rod (HR2), or the associated circuit, has an open or short circuit. • Clean/Replace the Thermistors (RT2) or (RT3) • Replace AC Module Assembly (A1).	BSD 10.1	PL 10.3 PL 10.2 PL 1.1
LL-50 No RAP	**Power supply error** 24 VDC Bulk power supply failure.	• Main PWB (A3) • LVPS (A5)	BSD 1.3	PL 1.1
LL-51 No RAP	**Power On Self Test fault** The internal RAM failed POST.	Replace Main PWB (A3)		PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL-52 No RAP	**Power On Self Test fault** **or** The external RAM failed POST.	Replace Main PWB (A3)		PL 1.1
LL-53 No RAP	**Power On Self Test fault** IOT firmware checksum error.	Replace Main PWB (A3)		PL 1.1
LL-54 No RAP	**Power On Self Test fault** An unknown device failed POST.	Replace Main PWB (A3)		PL 1.1
LL-55 No RAP	**Power On Self Test LVPS fault** The Analog to Digital Converter (ADC) failed POST	Replace the Main PWB (A3)	BSD 1.2	PL 1.1
LL-56 No RAP	**Power On Self Test ADC/ DAC (Digital to Analog Converter) fault** The ADC/DAC failed POST	Main PWB (A3)		PL 1.1
LL-57 No RAP	**Power On Self Test SCC fault**	Main PWB (A3)		PL 1.1
LL-58 No RAP	**Power On Self Test** Extra “Return Value” from the Operating System. Reboot (Power off / Power On).	Main PWB (A3)		PL 1.1
LL-60 No RAP	**Power On Self Test NVM Checksum fault** Try to run [0366} to record the existing NVM values. Run diagnostic [0360] to reset NVM to the default values. Manually restore the required NVM values.	Replace the Main PWB (A3)		PL 1.1
LL-61 No RAP	**Power On Self Test revision level fault** Power the Printer up in diagnostics and run [0360] to reset NVM to default values.	Replace the Main PWB (A3)		PL 1.1
LL-71 No RAP	**Fuser Fault - Line voltage out of Range**. - Line voltage during Fuser Calibration is too low or too high. - Open circuit in one or both of the Heat Rods or their associated wiring, - ACH input is too high or too low - To reset: switch the Main Power Switch off, then on,.	• Check that the Line Service (ADJ 3.2) is set to the correct amperage. • One or both of the Heat Rod circuits has developed an open circuit. • Replace the AC Module Assembly (A1)	BSD 10.1	PL 10.2 PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL-72 No RAP	-**Fuser Controller Faults - Line voltage time out**. This may occur if there are large variations in line current drawn during Fuser Calibration. -Fuser Relay (K3) is not closing or --+24 VDC is missing -ACH input is too low or too high - To reset: switch the Main Power Switch off, then on,.	• Check that the Line Service (ADJ 3.2) is set to the correct amperage. • Main PWB (A3) • Low voltage Power Supply • Replace the AC Module Assembly (A1)	BSD 10.1	PL 1.1 PL 10.2
LL-73 - LL-74 No RAP	**Fuser Warm-up Fault** - Edge Heat Rod (HR1) does not warm up. - Unstable Heat Rod current. To reset: switch off, then on, the Main Power Switch.	• (HR1) or associated wiring has an intermittent or open circuit. • AC Module Assembly (A1). If problem persists, escalate the service call	BSD 10.1	PL 1.1
LL-4F	**Firmware Problem**	Power off then on		
LL-7A No RAP	**Fuser Fault** Thermal Fuse (A27F1) is open due to severe over temperature of the Fuser Heat Roll. To reset: Repair the cause of the over temperature. Switch off the Main Power Switch.Replace the Thermal Fuse. Switch on the Main Power Switch.	• Check that the Thermistors (RT2) and (RT3) are touching the Heat Roll, clean/replace the Thermistors • Check/Adjust the Fusing Temperature (ADJ 10.1) • Heat Rod Controller failed. • Replace the Thermal Fuse (A27F1) • AC Module Assembly (A1).	BSD 10.1	PL 10.2 PL 1.1
LL-7B No RAP	**Fuser Controller PWB** - Cooling Fan failure.	AC Power Module (A1)	BSD 1.1 BSD 10.1	PL 1.1
LL-7D No RAP	**CRC Check Failure**	Replace the AC Module Assembly (A1).	BSD 10.1	PL 1.1
LL-7E No RAP	**Fuser Controller - Firmware Fault** Fuser locked in calibration mode due to a firmware fault. To reset: switch off, then on, the Main Power Switch.	Replace the AC Module Assembly (A1).	BSD 10.1	PL 1.1

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL -7F Fuser Overheat RAP	**Fuser Fault - Over temperature.** The firmware has detected a fuser over temperature condition. To reset: switch off, then on, the Main Power Switch.	Go to LL -7F Fuser Overheat RAP.	BSD 10.1	PL 10.1
LL-41, LL-45, LL-81 Fuser Warm-up Fault RAP	**Line input not set to correct current.**	• Line Current Limit (ADJ 3.2)- Country Configuration is not correct for the electrical voltage used. Current limit set point is too low. Check the adjustment. • Thermistor (RT2) or (RT3) does not touch the Fuser Heat Roll. • Heat Rod (HR1), or wiring, has an open circuit. • Clean/Replace the Thermistors (RT2) or (RT3) • Replace the AC Module Assembly (A1).	BSD 10.1	PL 10.2 PL 10.5 PL 1.1
LL-82, LL-83 No RAP	**Fuser Control PWB failure**	Line voltage time-out, unstable Heat Rod Current. 1. Check that customer power (use connector A1P5 on right side of AC Module to monitor) is steady for at least 30 seconds. 2. Check the Heat Rod connections for defects. 3. Check the Heat rods for a resistance of less then 5 ohms. 4. AC Module Assembly (A1) 5. Main PWB (A3)	BSD 10.1	PL 1.2 PL 1.1
LL-89 No RAP	**This is a Firmware problem** Press power off (0) then power on (1). If problem persists, reload the firmware.			

Table 1 Status Code Entry Chart

Status Code	Description	Components	BSD Ref	PL Ref
LL-90 Over-toned Fault RAP	**Overtoned fault** Toner concentration of the developer material is too high. Press power off (0) then power on (1).	• Cartridge Drive Motor (A22MOT1) • Cartridge Home Sensor (A22Q2) • Toner Sensor (A22Q1) • Main PWB (A3) • Toner Concentration not set to specification. (ADJ 9.3)	BSD 9.7	PL 9.8
LL-91 No RAP	**Broken Developer Drive System.** Check installation of Developer Module. Ensure that gears on Developer are fully engaged with the drive gear on the Developer Drive motor. To reset: switch off, then on, the Main Power Switch.	• Developer Module Drive Gears • Developer Drive Motor (MOT2) • Module Mixing Augers • Main PWB (A3)	BSD 9.3 BSD 4.2	PL 9.10 PL 9.8
LL-92 No RAP	**Analog to Digital Converter error**. All channels are reading the same thing. Press power off (O), wait several seconds, then on (1)	Switch the Printer off, wait 15 seconds, then switch the Printer on. Replace the Main PWB (A3)		PL 1.1

NOTE: *Substitute 1, 2, or 3 for X depending on which status code is displayed.*

Message Display Entry Chart

Table 1 Message Display Entry Chart

MESSAGE DISPLAYED	CAUSE	CLEARANCE PROCEDURE	BSD Ref
PRINTER IS WARMING UP (Continuously displayed)	No Fuser heat.	• Check the Fuser harness connections, especially the Fuser Heat Rods. • Perform ADJ 3.2.	BSD 10.1
ADJUSTING THE PRINT QUALITY (Continuously displayed)	Toner dispense problem or fuser warming problem	- - -	BSD 9.7 BSD 10.1
PLEASE CLOSE THE MEDIA DRAWER X (Refer to Note)	Drawer X Interlock switch is open.	Refer to the display on the Control Panel and follow the clearance procedure.	BSD 7.1
PLEASE CLOSE THE FRONT DOOR	Front Door Interlock Switch (S21) is open.	Refer to the display on the Control Panel and follow the clearance procedure.	BSD 1.3
PLEASE CLOSE THE TOP DOOR	Top Cover Interlock Switch (S26) is open.	Refer to the display on the Control Panel and follow the clearance procedure.	BSD 1.3
PLEASE CLOSE THE CUTTER DRAWER	Cutter Cover Interlock Switch (S1) is open.	Refer to the display on the Control Panel and follow the clearance procedure.	BSD 1.3
PLEASE CLOSE THE FUSER EXIT DOOR	Fuser Drawer Interlock Switch (S29) or Fuser Drive Interlock Switch (S30) is open	Refer to the display on the Control Panel and follow the clearance procedure.	BSD 1.3
NVM FAULT CALL FOR ASSISTANCE	Corrupted data in NVM.	Press power off (0) then power on (1). If problem persist run diagnostic program [0363] or [0360]. If problem persist replace the NVM.	

Table 1 Message Display Entry Chart

MESSAGE DISPLAYED	CAUSE	CLEARANCE PROCEDURE	BSD Ref
Re-feed Roll 1, Re-feed Roll 2, or Re-feed Roll 3 message is displayed.	Re-feed roll 1, 2, or 3 problem.	Re-feed the media message displayed, but media did not re-feed onto roll. A length of media from the registration sensor to the media roll needs to be rolled back on to the roll. Press power off (0) then power on (1) to try and re-feed the media. Re-feed the roll manually if power off/on did not work. Perform the following: • Run diagnostic 7-16-4 to operate the media drive in rewind mode and check for smooth operation of the drive components, sprockets, chain, drive motor. Check that the chain runs off the sprockets smoothly and are not catching on the teeth. Check sprockets for wobble, eccentricity, tooth wear warping. • Check the chain tension (ADJ 7.1) • Check that the Media Drive Motor is the latest. Identified by it's black, square body with red harness (PL 7.2). • Check that the Media Drive Motor PWB is the latest. Identified by a large heat sink on the PWB (PL 7.2).	BSD 7.2
Flashing 1, 2, 3, 4, 5, 6 or 7	Copier failed power on self-test.	Press power off (0) then power on (1). If problem persists, go to OF-2 Power On Self Test (POST) RAP.	
UNABLE TO CALIBRATE TONER SENSOR	The sensor did not calibrate when the code [0921-6] was entered.	Press power off (0), then power on (1). If problem persists, go to J1-01 Undertoned Fault RAP.	BSD 9.7
TONER FAULT CALL FOR ASSISTANCE	Excessive toner sensed problem.	Press power off (0), then power on (1). If problem persists, go to LL-90 Overtoned Fault RAP.	BSD 9.7
READY TO PRINT but the Printer is not operational	+24 VDC(FOR) circuit open in the Interlock chain	Refer to BSD 1.3 and check for an open in the +24 VDC(FOR) circuit.	BSD 1.3
ALL ROLLS ARE EMPTY	Media Registration Sensor failed to sense media.	Go to Status Code Entry Chart and check the C1-04, C2-04, C3-04 codes.	

Table 1 Message Display Entry Chart

MESSAGE DISPLAYED	CAUSE	CLEARANCE PROCEDURE	BSD Ref
Drawer LEDs flashing, no error code displayed		• Instruct operator to position the lead edge of the media above the center mark of the alignment window in the media drawer. • Check that the latest printer firmware is installed.	
09 04 Automatic ESV Setup Failed, Condition 1	Process Control system is unable to set Xerographics	Go to 09 04 Automatic ESV Setup Failed.	

Table 1 Image Module

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Check, clean, or repair spacing wheels as required.	Contaminated, dirty or worn spacing wheels or Drum ends cause print quality defects.	Clean or replace spacing wheels and the end surface of the Drum that the wheels ride on.
Normal Call	Check and clean, if required, the charge Scorotron.	Contaminated grid, bent or contaminated pins. Worn end blocks, are also causes for scorotron failure, which results in print quality defects.	**WARNING** **The scorotron pin arrays are very sharp. Use care when handling the assembly.** If contaminated, remove scorotron assembly and clean both sides of the grid with a brush. Examine pins and clean with brush Only if contaminated. Cleaning with a cloth can deposit lint that will cause print quality problems.
Normal Call	Clean the image bar.	Contamination causes print quality defects.	Clean the image bar with a lint free cloth and lens cleaner.
15K ft. 4.5Km	Clean the Scorotron Grid.	Contamination on the screen causes print quality defects	Remove the Scorotron Screen and clean it with a brush. ***NOTE:*** *Do not use a cloth to clean the Scorotron Grid as it can leave lint on the screen, causing print quality problems.*
As Required	Repair or replace the scorotron/ grid.	Contamination causes print quality defects.	**WARNING** **The scorotron pin arrays are very sharp. Use care when handling the assembly.** Replace the grid and/or pin array. Perform ADJ 9.2 Electrostatic Series.

Table 2 Drum/ Cleaner Module

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Clean the Drum/cleaner module. Clean the Erase Bar. Inspect the Drum for damage. Inspect components for vellum contamination. Inspect all seals for damage. Inspect the Cleaner Blade for damage.	Contamination can cause print quality problems. Contaminants can travel to the LED bar and scorotrons, which results in print quality problems. Fused toner on the bottom of the module can cause jams. Contamination reduces the effectiveness of the lamp to discharge the Drum. Contaminants from vellum - Cleaner failure - Contaminants to prints. Vellum contamination will contaminate and plug the cleaner auger at the ends.	Clean the toner from the housing and cleaner blade with a vacuum cleaner. ***NOTE:*** *Ensure that the vacuum cleaner does not contact the edge of the cleaner blade that touches the surface of the Drum.* Perform the Drum Cleaning Enhancement procedure in section 6. Use cleaning solvent to remove any fused toner from the bottom of the module. Replace the Drum if damaged. Clean the Erase Bar with a brush or dry lint free cloth. Replace any damaged xerographic module seals.
As Required	Check/clean the Drum.	Contamination/wear, scratches, or chips can generate print quality problems.	Inspect Drum surface for deep scratches, chips or excessive wear. Replace Drum if damaged. Apply zinc stearate to the cleaning blade and Drum. *Note 2 Clean Drum surface with Xerox Film Remover if contaminated. Apply zinc stearate when surface is dry.
As Required *Note 3	Check/clean the cleaning blade. Replace with the new Drum or as required.	Residual image, streaks, Drum scuffing can occur if the blade is worn or contaminated.	Vacuum clean the cleaning blade. *Note 1 Apply zinc stearate to the cleaning blade and Drum. *Note 2 Replace the blade if damaged.

Table 2 Drum/ Cleaner Module

30K ft. 9Km	Clean the inner module components.	If the customer is running a high percentage of vellum, outgassing of the vellum contaminates the cleaner auger and lower baffle surface resulting in poor cleaning and high dirt contamination. plugged cleaner auger	Remove the Drum to enable access. NOTE: ***Use caution not to touch or damage cleaning blade or seals.*** Vacuum the Module and Auger and then clean all contaminated areas with Film Remover.

NOTE: *1. Ensure that the vacuum does not contact the edge of the cleaner blade that touches the surface of the Drum.*

NOTE: *2. Raise the Drum/Cleaning Module to dust the Drum and the cleaning blade with zinc stearate to prevent the charge scorotron from being contaminated. Remove the Erase Bar to prevent it from being contaminated. The zinc stearate may contaminate the charge scorotron and Erase Bar and cause print quality defects.*

NOTE: *3. Install the complete cleaning blade kit when installing a new Drum.*

Table 3 Fuser Module

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Replace the Fuser Heat Roll at failure.	Smooth or worn Fuser Heat Roll loses ability to drive media.	Check/Adjust the Fuser Temperature (ADJ 10.1).
Normal Call	Check the Fuser Heat Roll for lack of oil.	Too little oil can cause media handling and offsetting print quality problems.	Check remaining fuser web life [1034] and adjust the Web Oiler rate [1032]. If the Fuser Heat Roll is dry, refer to BSD 10.2.
Normal Call	Inspect/clean the thermistor pad	Contamination can cause fuser heat problems.	Clean the thermistor pad with a brush or dry lint free cloth.
Normal Call	Clean the under side of the Fuser Module and Sheet Feed Pinch Rolls.	Reduce the airborne contaminants.	Wipe down with a lint free cloth and antistatic fluid.
Normal Call	Check and clean or replace the Stripper Fingers. Clean the Media Guides.	Bent Stripper Fingers may cause feed out jams and Fuser Heat Roll damage. Contaminated or damaged media guides can cause print quality defects.	Replace the damaged or contaminated Stripper Fingers.

Table 4 Media Transport and Lower Sheet Feed Assembly

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Clean the lower paper transports, turnaround baffle, Bead Catch Magnet, and Sheet Feed Rolls.	Contaminates can cause the media to slip resulting in print quality defects.	Clean the transport with antistatic fluid and a lint free cloth. Clean the Sheet Feed Roller with Formula A.
Normal Call	Vacuum clean the Bias Transfer Roll (BTR).	Improve toner transfer to media.	Rotate the Bias Transfer Roll in place as you vacuum. Clean loose toner/ debris with a vacuum. Just lightly touch the BTR as you move the vacuum tool over the roll, do not press the vacuum tool against the roll. This could tear and damage the BTR.
125K ft. 42Km	Replace the Bias Transfer Roll (BTR).	Prevent print quality defects due to a worn roll.	Remove the Bias Transfer Roll.
Normal Call	Check / repair BTR spacing wheels as required.	Contaminated, dirty or worn spacing wheels or Drum ends cause print quality defects.	Clean the spacing wheels and the end surface of the Drum that the wheels ride on.

Table 4 Media Transport and Lower Sheet Feed Assembly

Normal Call	Check and clean or replace the Detack Corotron Media Shields.	Contaminated or damaged Media Shields may cause media jams.	Clean or replace the damaged or contaminated Media Shields. To clean the area of the Media Shields, hold a vacuum tool close to the Shields and brush any contaminates or toner loose for the vacuum to pick up. Check the stainless steel shield on the rear of the Detack aluminum channel for a white powder. If a powder is present, replace the stainless shields.
60K Ft. or 20 Km 200K Ft or 66 Km	Replace the (black) Media Exit Drive Roll Replace the (blue-gray) Media Exit Drive Rolls	Roll wear causing wavy media and media jams.	Replace the Media Exit Drive Roll (PL 10.4).

Table 5 Media Feed

INTERVAL	TASK	REASON	TASK ENABLER
1st 10K ft. or 3K m	Check/adjust the Media Roll Chain tension (ADJ 7.1).	Feeding problems.	Loosen the feed motor hardware to allow the spring to tension the chain. Tighten the hardware.
40K ft. or 13K m	Check/adjust the Media Roll Chain tension (ADJ 7.1)	Feeding problems.	Loosen the feed motor hardware to allow the spring to tension the chain. Tighten the hardware.

Table 6 Developer Module

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Brush the developer from the Developer Seal and lower edge of the Developer Housing back into the Developer Mag Roll and then clean the Seal.	Image quality problems can occur.	Clean as required.
Normal Call	Check that the Developer Housing is level.	If the developer is not level, density may not be uniform side to side.	Developer material should not be uniform from end to end. Check the level of the copier.
Normal Call	Check the canister for proper rotation.	If the canister is not rotating correctly, the copies will be light.	Check the dry ink dispense motor for binding. Check that the cartridge is locked in the drive hub.
Normal Call	Check the Developer drives.	Worn gears will cause the housing to move up or down, which will cause print quality defects.	Check the gears for worn or broken teeth; replace the gears, if necessary. Ensure that the drive coupling is engaged.
Normal Call	Check, clean, or replace the Developer Housing spacing wheels, as required.	Contaminated or worn spacing wheels will cause print quality defects.	Clean or replace spacing wheels.
30K ft. 9 Km	Check the trickle tube and toner Y tube for obstruction.	An obstructed Y tube or trickle tube will clog the cleaning/trickle system.	Clean as required.
30K ft. 9 Km	Check the Pressure Equalization Tubes.	Increased contamination due to poor air flow in the Developer Housing.	Remove Developer Housing. Remove and vacuum Pressure Equalizer Tubes, vacuum lower holes for toner.
200 K ft. 60 Km	Replace Toner Dust Trap.	Minimize toner dust contamination.	Remove existing Trap. Install a new Trap.
200K ft. 60 Km	Replace Toner Dust Filter.	Minimize toner dust contamination.	Remove existing filter. Install new Filter.
200K ft. 60 Km	Check Vacuum Tube.	An obstruction in the Tube will clog the Dust Control System.	Clean as required.

Table 7 Covers

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Clean the covers.	Customer satisfaction.	Formula A and antistatic fluid

Table 8 Cutter

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Check the cam for lubrication.	To ensure correct Cutter operation. The Cutter will not provide a straight cut.	Place a light film of lubrication on the cam surface.
Normal Call	Clean the Cutter.	To ensure a straight, smooth cut on the lead edge of the media.	Vacuum the media dust and contamination from the Cutter Blade area.

Table 9 Media Drawers

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Clean the media drawer.	Customer satisfaction.	Clean the media dust and contamination from each of the media drawers with a vacuum cleaner.
400K feet or 122K meters	Lubricate the Roll Feed Media Drawer Latches (PL 7.5)	Machine operation - ensure that the drawers close completely.	Lubricate the Roll Feed Media Drawer Latches with very light coating of lubricant at interval specified.

Table 10 Ozone Filter

INTERVAL	TASK	REASON	TASK ENABLER
Normal Call	Check and replace the Ozone Filter if necessary.	To ensure correct air flow through machine, and to keep heat that is generated to a minimum.	Check the Ozone Filter at 40K prints, clean or replace as required. Replace the Ozone Filter at 120K prints.

Callback

Procedure

1. Perform the Subsystem Checks for the subsystem that caused the problem.
2. Functional Checks:
   a. Perform the Initial Actions.
   b. Check the Recent Faults listing (see Section 6 - under System Information). If any of the faults described in that section are listed, take the recommended steps to clear the fault.
   c. Replace any part or supply that is past its life.
3. Perform the Final Action. Do Not perform the Maintenance Procedures.

System Checkout / Final Action

Procedure

Enter diagnostic mode and make three (3) prints of internal test pattern from the Controller (if present). If a Controller is not present, print [0955-5] from the IOT. **Prints are delivered to the exit tray.**

Y N

Go to the Initial Actions to begin your repair.

Evaluate the prints using Print Defects in Section 3. **The print quality is acceptable.**

Y N

Go to the Print Defects in Section 3 and go to the appropriate print quality RAP.

Perform the following:

1. Clean the exterior of the Printer and provide print samples to the customer.
2. (Figure 1): Fill out the Service Call Report form including:

   Enter the Printer Menu, and scroll to Billing Meters. Enter Billing Meter and record Meter A and Meter B readings on the Service Call Report form.

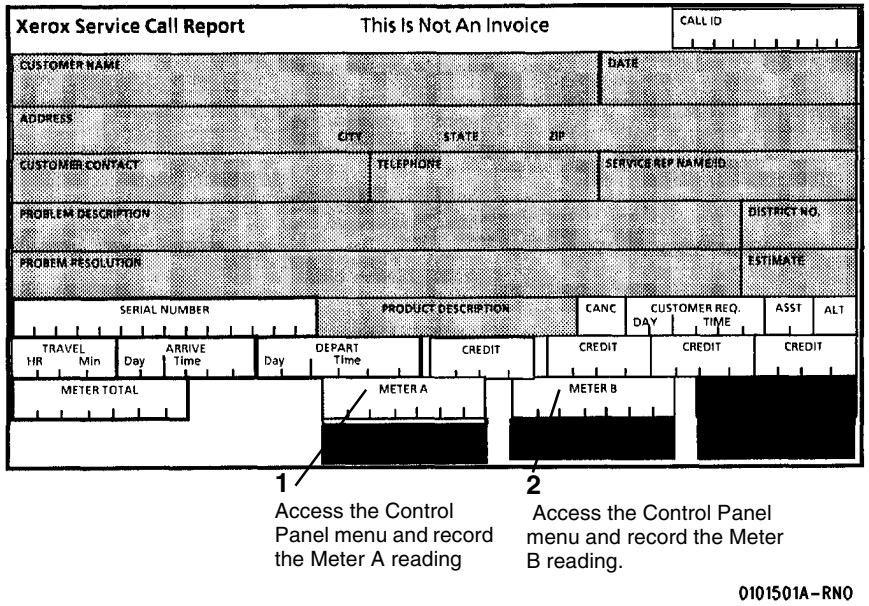

Figure 1 Recording the Print Count Readings

3. Record all activities in the Service Log.
4. Record the Print Count Readings on the Service Call Report.
5. Give appropriate credit to the Customer.

2 Status Indicator RAPs

Status Codes

C1-01/C2-01/C3-01 RAP 2-3
C1-04/C2-04/C3-04 RAP 2-4
C1-05/C2-05/C3-05 RAP 2-5
E2-01 RAP 2-6
J1-01 Undertoned Fault RAP 2-7
LL-21 Charge/Grid Fault RAP 2-9
LL-22 Detack Fault RAP 2-9
LL-25 Charge Voltage V HIGH 2-10
LL-41, LL-45, LL-81 Fuser Warm-up Fault RAP 2-11
LL -7F Fuser Overheat RAP 2-12
LL-90 Overtoned Fault RAP 2-13
09 04 Automatic ESV Setup Failed, Condition X RAP 2-15

Electrical Faults

1.1 AC Power RAP 2-16
1.2 DC Power RAP 2-17
1.3 Ground Fault Protector RAP 2-17

Message Raps

Endless FUSER IS CALIBRATING Fault RAP 2-18

Other Faults

OF-1 Control Panel RAP 2-19
OF-2 Power On Self Test (POST) RAP 2-19
OF-3 Bead Carry Out (BCO) RAP 2-20

Generic RAPs

Generic Clutch RAP 2-21
Generic Sensor RAP 2-21
Generic Switch RAP 2-22

C1-01/C2-01/C3-01 RAP

NOTE: *Roll x means Roll 1, 2, or 3.*

The Media Drive Motor (MOT1, BSD 7.1) was trying to feed the Roll x Media forward but a Media Positon Sensor (Q1,Q2, or Q3) failed to sense the media.

Initial Actions

- Check that the Media Drawer is fully closed and latched. Open the drawer and check the latching for damage. Reform the latch as required to ensure the drawer fully closes.
- Check the media roll support rollers are the latest configuration,either white with a green mark or black (PL 7.3).
- Check that the Media Drive Motor PWB is the newer configuration, identified by a large heatsink on the PWB. The PWBs with no heatsink should be replaced (PL 7.2).
- Check that the lastest Media Drive Motor W/Tag 48 is installed, identified by a square black body with a red harhess lead (PL 7.2).
- Check that the IOT firmware is updated to the latest version.
- Check the Media Roll (in the Drawer that was in use when the fault occurred).

Table 1 Media Roll

Roll 1	BSD 7.2
Roll 2	BSD 7.3
Roll 3	BSD 7.4

- Check that the Drive Chain, PL 7.2, is OK (BSD 7.1). Check/Adjust the tension on the chain (ADJ 7.1).
- Open the Cutter Drawer and check the Media Exit Guide for damage (PL 7.8).

Procedure

Enter DIAGNOSTICS (To Enter The Diagnostic Mode). Enter [0716] (ROLL DRIVE MOTOR and ROLL 1 FEED CLUTCH) and observe the Media Drive Motor. **The Media Drive Motor runs.**

Y N

Go to BSD 7.1, NOTE 2, and check the resistances of the windings of the Media Drive Motor (MOT1) **The resistances of the windings of the Media Drive Motor (MOT1) are OK.**

Y N

Replace the Media Drive Motor (MOT1), PL 7.2.

Go to BSD 7.1 and check the voltages at A7P1. **The voltages at A7P1 are OK.**

Y N

Check all wiring between A3P613 and A7P1. If the wiring is OK, replace the Driver PWB (A2).

NOTE: *The Drive Motor PWBs (A24), BSD 8.1, and (A7) are identical and can be exchanged with each other.*

Exchange the Motor PWBs. **The Media Drive Motor runs.**

A

Y N

Replace the Main PWB (A3) PL 1.1

Replace the Driver Motor PWB (A7) PL 7.2

While the Media Drive motor is running, check for smooth operation of the drive components, drive motor, sprockets, drive chain, and clutches.

- The drive chain runs of the 50 tooth sprokets smoothly without catching on the sprocket.
- Check the all the sprockets for wooble, warp, and out of round rotation.

The media drive components operate smoothly.

Y N

Repair/replace the component that is not operating smoothly.

Refer the the BSD (Table 1) for the drawer that the fault occurred. Check for +5 VDC at the sensor connector. **There is + 5VDC at the sensor connector.**

Y N

Check the harness damage, if there is no damage replace the Main PWB (PL 1.1).

Exchange the Position Sensor with one of the other Position sensors. **The problem moved to the drawer with the suspect sensor.**

Y N

Check the following:

- Check the Media Drawer for burrs on the sheet metal and remove them as required
- Carefully pry one end of the moveable bracket that is raised when inserting media to remove it. Polish with fine steelwool or polishing pad to remove any burrs or rough surfaces. Place the baffle on a flat surface to check the straigtness of the bracket.
- Check the Pinch Rolls and springs move freely without interference with a nearby component and there is no damage. Reinstall the bracket
- Examine the Media Feed Drive Roll for damage. Remove Drawer 1 for access to the Drive Roll. Clean rolls with cleaning fluid.

Replace the sensor (PL 7.1).

C1-04/C2-04/C3-04 RAP

NOTE: *Roll x means Roll 1, 2, or 3.*

The Media Drive Motor (MOT1, BSD 7.1) was trying to feed the Roll x Media forward to the registration position but the Media Registration Sensor (A21Q1, BSD 8.2) failed to sense the media.

Initial Actions

- Check that the Media Drawer is fully closed and latched. Open the drawer and check the latching for damage. Reform the latch as required to ensure the drawer fully closes.
- Check the media roll support rollers are the latest configuration,either white with a green mark or black (PL 7.3).
- Check that the Media Drive Motor PWB is the newer configuration, identified by a large heatsink on the PWB. The PWBs with no heatsink should be replaced (PL 7.2).
- Check that the lastest Media Drive Motor W/Tag 48 is installed, identified by a square black body with a red harhess lead (PL 7.2).
- Check that the IOT firmware is updated to the latest version.
- Check the Media Roll (in the Drawer that was in use when the fault occurred).

Table 1 Media Roll

Roll 1	BSD 7.2
Roll 2	BSD 7.3
Roll 3	BSD 7.4

- Open the Fuser Drawer and check the media path for a media jam or an obstruction in the media path.
- Manually rotate the Media Transport Drive Motor, BSD 8.1. Motor and Registration Drive Rolls should rotate smoothly.
- Check the Media Transport Assembly connector A21P/J21 to ensure that it is fully seated and not damaged. Check the pins for damage.
- Check the Media Registration Sensor connector on the Main PWB (A3P/J607) for damage and ensure that the pin are seated fully and not damaged.
- Check that the Drive Chain, PL 7.2, is OK (BSD 7.1). Adjust the tension on the chain (ADJ 7.1).
- Open the Cutter Drawer and check the Media Exit Guide for damage (PL 7.8).

Procedure

Enter DIAGNOSTICS (To Enter The Diagnostic Mode). Enter [0716] (ROLL DRIVE MOTOR and ROLL 1 FEED CLUTCH) and observe the Media Drive Motor. **The Media Drive Motor runs.**

Y N

Check that the Media Drawers are closed. Check the operation of the Drawer Interlock Switched as follows:

Enter [0713] for Drawer 1

Enter [0714] for Drawer 2

Enter [0715] for Drawer 3

Each Drawer Interlock switch functions correctly.

A

A

Y N

Go to BSD 7.1 and check the circuit of the Drawer Interlock Switch that does not function correctly. Check that the actuating magnet is not missing.

Go to BSD 7.1, NOTE 2, and check the resistances of the windings of the Media Drive Motor (MOT1) **The resistances of the windings of the Media Drive Motor (MOT1) are OK.**

Y N

Replace the Media Drive Motor (MOT1), PL 7.2.

Go to BSD 7.1 and check the voltages at A7P1. **The voltages at A7P1 are OK.**

Y N

Check all wiring between A3P613 and A7P1. If the wiring is OK, replace the Driver PWB (A2).

NOTE: *The Drive Motor PWBs (A24), BSD 8.1, and (A7) are identical and can be exchanged with each other.*

Exchange the Motor PWBs. **The Media Drive Motor runs.**

Y N

Replace the Main PWB (A3) PL 1.1

Replace the Driver Motor PWB (A7) PL 7.2

Go to BSD 8.2, Enter [0917] and then enter [1] on the keypad. Observe the Transport Drive Motor (A21MOT1). **The Transport Drive Motor (A21MOT1) runs.**

Y N

Go to BSD 8.2, NOTE 4, and check the resistances of the windings of the Transport Drive Motor (A21MOT1). **The resistances of the windings of the Transport Drive Motor (A21MOT1) are OK.**

Y N

Replace the Transport Drive Motor (A21MOT1),.

Go to BSD 8.2, NOTE 2, and check the voltages at A24P1. **The voltages at A24P1 are OK.**

Y N

Check all wiring between A3P613 and A24P1. If the wiring is OK, replace the Driver PWB (A2),.

NOTE: *Drive Motor PWBs (A24) and (A7), BSD 7.1, are identical and can be exchanged with each other.*

Exchange the Drive Motor PWBs. **The Transport Drive Motor runs.**

Y N

Replace the Main PWB (A3) PL 1.1

Replace the Driver Motor PWB (A7) PL 7.2

Go to BSD 8.2. Enter [0803] and check the Media Registration Sensor. **The Media Registration Sensor is OK.**

Y N

Check the wiring of the Media Registration Sensor (A21Q1). If the wiring is okay, replace the Media Registration Sensor PL 8.2.

Remove the Media Transport (REP 8.2). Check for mechanical binding or broken parts in the area of the Registration Drive Rolls and Pinch Rolls. Check for an obstruction in the media path. Check for burrs and rough surfaces in the media path and deburr or smooth the surfaces with fine steel wool or polishing pad.

C1-05/C2-05/C3-05 RAP

NOTE: *Roll x means Roll 1, 2, or 3.*

The Media Drive Motor (MOT1, BSD 7.1) was trying to feed the Roll x Media forward but a Roll x Motion Sensor (Q4,Q5, or Q6) failed to sense motion of the media roll or the media stopped moving when feeding from the media drawer.

Initial Actions

- Check that the Media Drawer is fully closed and latched. Open the drawer and check the latching for damage. Reform the latch as required to ensure the drawer fully closes.
- Check the media roll support rollers are the latest configuration,either white with a green mark or black (PL 7.3).
- Check that the Media Drive Motor PWB is the newer configuration, identified by a large heatsink on the PWB. The PWBs with no heatsink should be replaced (PL 7.2).
- Check that the lastest Media Drive Motor W/Tag 48 is installed, identified by a square black body with a red harhess lead (PL 7.2).
- Check that the IOT firmware is updated to the latest version.
- Check the Media Roll (in the Drawer that was in use when the fault occurred).

Table 1 Media Roll

Roll 1	BSD 7.2
Roll 2	BSD 7.3
Roll 3	BSD 7.4

- Check that the Drive Chain, PL 7.2, is OK (BSD 7.1). Check/Adjust the tension on the chain (ADJ 7.1).
- Open the Cutter Drawer and check the Media Exit Guide for damage (PL 7.8).

Procedure

Enter DIAGNOSTICS (To Enter The Diagnostic Mode). Enter [0716] (ROLL DRIVE MOTOR and ROLL 1 FEED CLUTCH) and observe the Media Drive Motor. **The Media Drive Motor runs.**

Y N

Go to BSD 7.1, NOTE 2, and check the resistances of the windings of the Media Drive Motor (MOT1) **The resistances of the windings of the Media Drive Motor (MOT1) are OK.**

Y N

Replace the Media Drive Motor (MOT1), PL 7.2.

Go to BSD 7.1 and check the voltages at A7P1. **The voltages at A7P1 are OK.**

Y N

Check all wiring between A3P613 and A7P1. If the wiring is OK, replace the Driver PWB (A2).

NOTE: *The Drive Motor PWBs (A24), BSD 8.1, and (A7) are identical and can be exchanged with each other.*

Exchange the Motor PWBs. **The Media Drive Motor runs.**

A

A

Y N

Replace the Main PWB (A3) PL 1.1

Replace the Driver Motor PWB (A7) PL 7.2

While the Media Drive motor is running, check for smooth operation of the drive components, drive motor, sprockets, drive chain, and clutches.

- The drive chain runs of the 50 tooth sprokets smoothly without catching on the sprocket.
- Check the all the sprockets for wooble, warp, and out of round rotation.

The media drive components operate smoothly.

Y N

Repair/replace the component that is not operating smoothly.

Refer the the BSD (Table 1) for the drawer that the fault occurred. Check for +5 VDC at the sensor connector. **There is + 5VDC at the sensor connector.**

Y N

Check the harness damage, if there is no damage replace the Main PWB (PL 1.1).

Exchange the Motion Sensor with one of the other Motion sensors. **The problem moved to the drawer with the suspect sensor.**

Y N

Check the following:

- Check the Media Roll Support Tube for bowing and damage especially on the ends where they are supported on the Support Rollers. If damaged or bowed, replace the Support Tube (PL 7.6).
- Check the Media Drawer for burrs on the sheet metal and remove them as required
- Carefully pry one end of the moveable bracket that is raised when inserting media to remove it. Polish with fine steelwool or polishing pad to remove any burrs or rough surfaces. Place the baffle on a flat surface to check the straigtness of the bracket.
- Check the Pinch Rolls and springs move freely without interference with a nearby component and there is no damage. Reinstall the bracket
- Examine the Media Feed Drive Roll for damage. Remove Drawer 1 for access to the Drive Roll. Clean rolls with cleaning fluid.

Replace the sensor (PL 7.2).

E2-01 RAP

The trail edge of the media jammed at the Registration Sensor (A21Q1) and did not clear the sensor in time.

Initial Actions

- Bypass the Front Door Interlock to enable the Printer to operate with the door open. Operate the Printer and observe the Drum Drive Motor. If the motor fails to start when the status code is displayed, first check that the Printer firmware is at the latest version. If not, upgrade the firmware. If it is at the latest version, replace the Drum Drive Motor (PL 9.1).

Procedure

Go to BSD 8.2, Enter [0917] and then enter [1] on the keypad. Observe the Transport Drive Motor (A21MOT1). **The Transport Drive Motor (A21MOT1) runs.**

Y N

Go to BSD 8.2, NOTE 4, and check the resistances of the windings of the Transport Drive Motor (A21MOT1). **The resistances of the windings of the Transport Drive Motor (A21MOT1) are OK.**

Y N

Replace the Transport Drive Motor (A21MOT1),.

Go to BSD 8.2, NOTE 2, and check the voltages at A24P1. **The voltages at A24P1 are OK.**

Y N

Check all wiring between A3P613 and A24P1. If the wiring is OK, replace the Driver PWB (A2),.

NOTE: *Drive Motor PWBs (A24) and (A7), BSD 7.1, are identical and can be exchanged with each other.*

Exchange the Drive Motor PWBs. **The Transport Drive Motor runs.**

Y N

Replace the Main PWB (A3) PL 1.1

Replace the Driver Motor PWB (A7) PL 7.2

Go to BSD 8.2. Check for +5 VDC at connector A3P/J607-10. **There is +5 VDC at pin 10.**

Y N

Replace the Main PWB (A3) PL 1.1.

Check the harness between the Main PWB and the Registration sensor for damage. If there is no damage to the harness, replace the Registration Sensor (PL 8.2).

While the Transport is removed, check the following:

- Check the belts, pulleys, and idler pulleys for any binding. Repair/replace as required (PL 7.2).
- Check for mechanical binding or broken parts in the area of the Registration Drive Rolls and Pinch Rolls
- Check for an obstruction in the media path.
- Check for burrs and rough surfaces in the media path and deburr or smooth the surfaces with fine steel wool or polishing pad.

J1-01 Undertoned Fault RAP

NOTE: *Go to BSD 9.7 while using this RAP.*

The status code J1-01 is displayed when the logic detects that the toner concentration is significantly less than the Control Point value.

The Toner Control System is designed to maintain the Toner Concentration within an acceptable operating range. The Control Point operating range is from 4.4 to 6.0 VDC. The Toner Sensor continuously senses the Toner Concentration. A change in the Toner Concentration results in a corresponding change of the Sensor signal. As the Toner Concentration decreases, the Toner Sensor signal voltage increases. The logic monitors the Toner Sensor signal.

J1-01 indicates that the logic detected that the Toner Sensor signal is 1.2 VDC or greater than the Control Point. This means that the decrease in toner concentration is greater than the allowable limit.

The problem may occur if there is a problem with the toner dispensing or the developer mixing systems.

Initial Actions

- Examine the Toner Cartridge to ensure that it is the correct Cartridge, that the Cartridge is not empty and that it is installed correctly.
- Check the Cartridge for damage and ensure that the seal is secured to the Cartridge in the correct location.
- (Figure 1) Ensure that the Developer Drive Coupling is in good condition and is engaged fully.

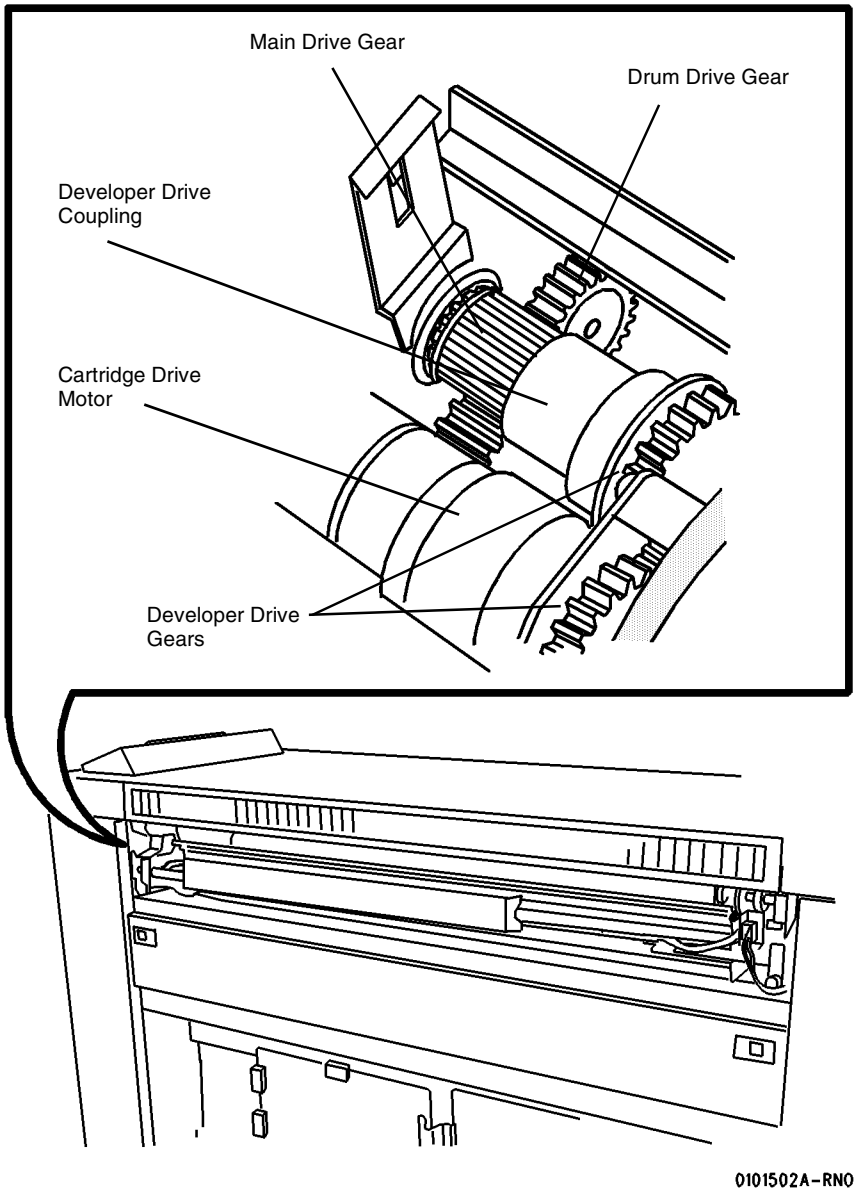

Figure 1 Location of Developer Drive Coupling

- (Figure 2) Ensure that the Developer Housing Auger and Drive Gears are not damaged and are installed correctly.

1. Ensure that the Rear Auger Drive Gear is positioned with the flange as shown.

2. Ensure that the Developer Housing Drive Gear is positioned with the flange as shown.

3. Ensure that the Front Auger Drive Gear is captured in position by the Rear Auger Drive Gear Flange and the Developer Housing Drive Gear flange.

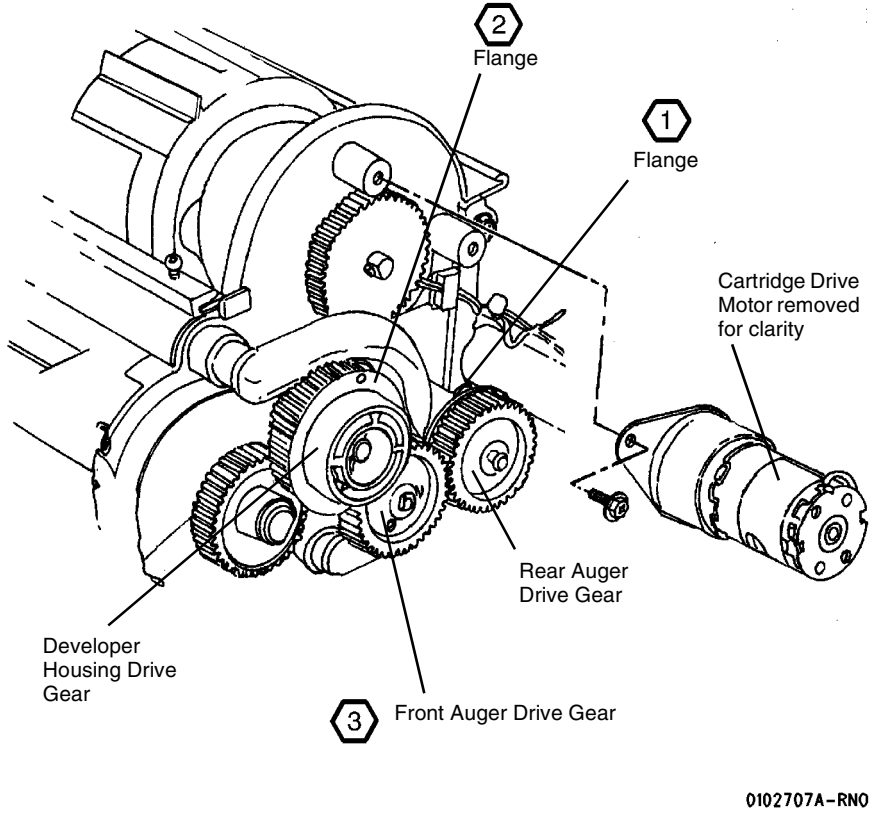

Figure 2 Developer Housing and Auger Drive Gears

- Check that all the connectors at the Toner Sensor, A22Q1P/J 1, and the Main PWB, A3P/J 606, are seated correctly.
- Check that the daughter PWB, that is mounted vertically on the HVPS, is fully seated.
- Perform [0904] Automatic ESV Setup [ADJ 9.2]. If an 0904 Automatic ESV Setup Failed, Condition X is displayed, go to [09 04 Automatic ESV Setup Failed].

Procedure

With the printer in an J1-01 fault condition, enter diagnostic code [9-22] and press YES, in order to enable the printer to function with an J1-01 fault condition. Enter the code [0361] in order to exit the diagnostics mode. **The Developer Housing Auger and Drive Gears are rotating as the prints are being made.**

Y N

Go to BSD 4.3, Drum Drive, to repair the drive circuit.

The J1-01 code is displayed as the prints are being made.

Y N

Complete the Service Call.

Use the last print to check the image density. **The image density of the Solid Square in the center of the Test Pattern [0955-5] is equal to or greater than the 1.20 Density Square on the Output Reference SIR 495.1.**

Y N

Perform the Tone-Up procedure [09-06]. If the printer does not tone up, perform the Image Density Adjustment. Go to ADJ 9.3

NOTE: : If unable to perform ADJ 9.3, replace the Developer and perform GP-8 Toner Control System Calibration Procedure.

Enter the code [9-21-4]in order to switch on the Main Drive Motor and the Toner Sensor circuit. Connect the (+) meter lead to the Main PWB A3J606-14 and the (-) meter lead to A3J606-13. **There is between +5.2 and +6.0 VDC present.**

Y N

Connect the (+) meter lead to the Toner Sensor A22Q1P1-1 and the (-) meter lead to ground. **There is less than +10 VDC present.**

Y N

Disconnect Toner Sensor A22Q1P1 from A22Q1J1. Connect the (+) meter lead to the Main PWB A3J606-16 and the (-) meter lead to ground. **There is less than +10.0 VDC present.**

Y N

Replace the Main PWB, A3, PL 1.1.

Check for an open or short circuit to ground in the wires connected to A22Q1P1-3 (ORN) and A22Q1P1-4 (YEL). If the wires are OK, replace the Toner Sensor, A22Q1, PL 9.7.Then perform GP 8 Toner Control System Calibration Procedure.

Check for an open or short circuit to ground in the wire connected to the A22Q1P1-3 (ORN). If the wire is OK, replace the Toner Sensor.

Replace the Main PWB, A3, PL 1.1. If the problem persists, enter the code [0926] to reset the NVM.

LL-21 Charge/Grid Fault RAP

This fault will occur when the Charge and/or Grid outputs either arc, short, or there is an open circuit. The High Voltage Power Supply (HVPS) can not always detect arcing from the Charge/Grid outputs. It depends on the severity and duration of the arcing. The software is set to filter out short fault signals from the HVPS and shut the Printer down when a significant fault occurs. If arcing occurs, it will result in a copy quality defect of black lines in the process direction or solid black copy

NOTE: Severe arching will cause the Control Panel LEDs to flash, the beeper to be heard, and a crackling/snapping sound in the area of the HVPS. Blue sparking may also be observed on the HVPS near the grid connection or the detack pin array.

Initial Actions

- Check that the Printer firmware is 02.03.06-16 (8850) or 03.03.06-16 (510) or higher. If not upgrade the Firmware to the latest version.
- Check that the Tag 6 High Voltage Power Supply is installed.

NOTE: *Refer to BSD 9.1 when using this RAP.*

Procedure

Table 1 LL-21 RAP

HVPS Output	Condition	Corrective Action
Charge Pin	Shorted	Check the Charge Corotron wiring for damage or a pinch point to a grounded surface. Check for contamination around the corotron that may provide a path to ground. If okay, refer to the GP 1 and check the High Voltage Power Supply.
	Arcing	Check/Clean the area in the area of the arcing. Check the Charge Scorotron pins for damage or proximity to a grounded surface. Repair as required. If the problem persists, refer to the GP 1 and check the High Voltage Power Supply.
	Open (bad connection)	Check to ensure all connections are fully seated.
Grid	Shorted	The HVPS may not reliably detect this condition. The Auto ESV routine (0904) will not function correctly resulting in: 09 04 Automatic ESV Setup Failed, Condition 1, or an image quality defect of blank lines or bands in the process direction, or solid black copies.
	Arcing	Most unlikely that the Grid will arc. Clean the area in the area of the arcing. Clean the Grid. Replace the Charge Scorotron Assembly (PL 9.9).
	Open (bad connection)	The Auto ESV routine (0904) will not function correctly resulting in: 09 04 Automatic ESV Setup Failed, Condition 3. Check to ensure all connections are fully seated.

LL-22 Detack Fault RAP

This fault will occur when the Detack or clean cycle of Bias Transfer Roll (BTR) outputs are shorted. A Transfer output will not cause this fault.

NOTE: Severe arching will cause the Control Panel LEDs to flash, the beeper to be heard, and a crackling/snapping sound in the area of the HVPS. Blue sparking may also be observed on the HVPS near the grid connection or the detack pin array.

Initial Actions

- Look for an excessive amount of developer material (beads) in the Developer area, media path, and corotrons. If present, go to OF-3 Bead Carry Out (BCO) RAP.
- Check that the Printer firmware is 02.03.06-16 (8850) or 03.03.06-16 (510) or higher. If not upgrade the Firmware to the latest version.
- Check that the Tag 6 High Voltage Power Supply is installed.

NOTE: *Refer to BSD 9.8 and BSD 9.4 when using this RAP.*

Procedure

Table 1 LL-22 RAP

HVPS Output	Condition	Corrective Action
Detack	Shorted	Check the Detack Corotron wiring for damage or a pinch point to a grounded surface. Check the wiring between the HVPS, A25P/J1-20 and the Main PWB (A3), A3P/J605-1 for a short circuit. If okay, refer to the GP 1 and check the High Voltage Power Supply.
	Arcing/Open/Bad Connection	Check for contamination around the corotron that may provide a path to ground.
BTR Clean	Shorted/Arcing/Open	• Check the BTR and harness for damage or contamination. Refer to the GP 1 and check the High Voltage Power Supply. • Ensure the Media Transport is biased towards the non drive side. • Check the BTR Clip.
BTR Transfer	Shorted/Arcing/Open	Will cause a blank or light copy or partial image. Refer to PQ 6 Blank Prints / Partial Image or PQ 13 Light Image. Can also cause toner spotting or streaks on back side of copy if clean output is not working.

LL-25 Charge Voltage V HIGH

This fault will occur if the charge voltage, V high, exceeds -580 volts. This generally is a result of the Erase Lamp being off, the Drum is not grounded the ESV 1 probe is not working, or there is an open circuit in the Grid on the Charge Scorotron.

Initial Actions

Refer to ADJ 9.2 and perform [0904].

Procedure

Enter [0966] and visually check that the Erase Lamp is on. **The Erase Lamp is on.**

Y **N**

Refer to BSD 9.6 and trouble shoot the Charge Erase circuitry.

Check the Drum ground for damage and contamination or an open or short circuit to ground. **There is a short or open or drum ground is damage or contaminated.**

Y **N**

Examine the Electrometer Probe (ESV 1) and the Probe Harness for damage, connectors not fully connected (BSD 9.1). **There is damage to the Probe and/or Harness.**

Y **N**

Check for an open in the Charge Scorotron Grid circuit (BSD 9.1).

Replace the Electrometer Probe and PWB (PL 9.9).

Clean/Repair the drum ground.

LL-41, LL-45, LL-81 Fuser Warm-up Fault RAP

This RAP is used when the FUSER does not warm up when the control logic in the Fuser Control PWB attempts to increase the heat.

LL-41 is displayed when the Fuser heat does not exceed 210 degrees F (99 degrees C) within two minutes.

LL-45 is displayed when the Fuser is in full warm-up mode for more than 10 minutes.

LL-81 is displayed when there is a Fuser warm-up fault with the Edge Heat Rod.

NOTE: *Refer to BSD 10.1 while using this RAP.*

Initial Actions

- Switch off, then switch on, the Printer, and confirm that the status code is displayed again.
- Enter the diagnostic mode and check that code [0261] (ADJ 3.2) is set the correct amperage.
- Switch off the Printer. Open the Fuser Drawer and check connector A27P/J1 for damage or indications that it is not seating fully. Install the Fuser Service Harness (PL 10.1) between A27P1 and A27J1.
- Ensure that the following connectors are properly seated: HR1P/J1, HR1P/J2, HR2P/J1, HR2P/J2, A0P/J1A, A1P/J7, and A3P/J614.

NOTE: *Refer to BSD 10.1 while using this RAP.*

Procedure

An LL-81 is displayed.

Y N

Remove the Web Oiler Assembly (REP 10.3) and access the Thermistors (REP 10.7). **The Thermistors RT2 and RT3 are touching the Heat Roll.**

Y N

Replace the Thermistor that is not in contact with the Heat Roll (REP 10.7).

The Thermistors RT 2 and RT3 are free of contamination.

Y N

Clean the Thermistors with a cleaning cloth.

Check the wiring between the Thermistors RT 2 and RT 3 for and open or short. **There is a short or open in the wiring.**

Y N

Check the wiring from Connector A4P/J9 on the AC Module to the Center Heat Lamp connectors HR2P/J1 and HR2P/J2 for and open or short. **There is an open or short in the wiring.**

Y N

Check the continuity between Connector L and Connector 1, and between Connector N and Connector 2 on Filter Module (A10).

The Filter Module has continuity.

Y N

Replace Filter Module A10 (PL 1.3).

A B C D

Check the continuity of the Center Heat Rod filament. **There is continuity in the Heat Rod filament.**

Y N

Replace the Center Heat Rod (HR2) (PL 10.2)

Replace the AC Module Assembly (A1) (PL 1.1).

Repair the wire harness.

Repair the Harness.

Check the wiring between the Heat Rod connectors HR1P/J1 and HR1P/J2 and the AC Module A4P/J9 for an open or short. **There is a short or open in the wiring.**

Y N

Check for continuity of the Edge Heat Rod filament. **There is continuity in the Heat Rod filament.**

Y N

Replace the Edge Heat Rod (PL 10.2).

Check the continuity between Connector L and Connector 1, and between Connector N and Connector 2 on Filter Module (A10).

The Filter Module has continuity.

Y N

Replace Filter Module A10 (PL 1.3).

There is +12 VDC present at Pin 8 of connector A1P/J7 on the AC Module.

Y N

Check the harness between A1P/J7 and A3P/J614 for and open or a short. If the harness is okay, refer to (1.2 DC Power RAP).

Replace the AC Module Assembly (A1) (PL 1.1).

Repair the wiring.

NOTE: *The harness the goes between A27P/J1 and A0P/J1A is spared (PL 10.1)*

LL -7F Fuser Overheat RAP

The firmware has detected a fuser over temperature condition.

Initial Actions

- Check/Adjust the Fusing Temperature (ADJ 10.1)

Procedure

Switch the power off, then on. **Code LL-7F is still present.**

Y N

- Ensure that the thermistors are wired correctly and not reversed (edge and center thermistors swapped).
- Ensure good mechanical/electrical connections for the Thermistors.
- Check that the Thermistors (RT2) and (RT3) are touching the Heat Roll, clean/ replace the Thermistors.
- Go to BSD 10.1 and ensure that the Edge Heat Rod circuit resistance is 5 ohms or less (A4P9 pins 1 and 2 and A4P9 pins 5 and 6).
- Replace the AC Module.

Set the meter to measure +24 VDC. Connect the meter between A4P8-8 and ground. **There is +24 VDC present.**

Y N

Go to BSD 10.1 and check the Thermal Fuse (F1) circuit for an open. Replace fuse or repair wiring as necessary. If Thermal Fuse blows again, replace the Thermal Fuse and AC Power Module.

Replace AC Power Module

LL-90 Overtoned Fault RAP

NOTE: *Go to BSD 9.7 while using this RAP.*

The status code LL-90 is displayed when the logic detects that the toner concentration is significantly greater than the Control Point value.

The Toner Control System is designed to maintain the Toner Concentration within an acceptable operating range. The Control Point operating range is from 4.4 VDC to 6.0 VDC. The Toner Sensor continuously senses the Toner Concentration. A change in the Toner Concentration results in a corresponding change of the Sensor signal. As the toner concentration increases, the Toner Sensor signal voltage decreases. The logic monitors the Sensor signal.

LL-90 indicates that the logic detected that the toner concentration increased to greater than the allowable limit.

The problem may occur if there is a problem with the toner dispensing or the developer mixing systems.

The problem may occur as a result of a J2-02 status code condition. The toner cartridge may have stopped with the dispense hole in the down position allowing toner to spill into the sump.

Initial Actions

- Check that the connectors between the Toner Sensor, A22Q1 P/J1, the Main PWB, A3 P606 are seated correctly and that the pins are seated fully.
- Examine the Developer Housing and check for a large amount of toner in the area of the Toner Dispenser.
- Ensure that the Toner Cartridge is not damaged or bowed and that the seal is secured to the Cartridge in the correct location.
- Check the Toner Cartridge drive side end cap for damage, slipping, not molded correctly causing the cartridge not to engage correctly.
- (Figure 1): Ensure that the Developer Housing Auger and Drive Gears are not damaged and are installed correctly.

1 Ensure that the Rear Auger Drive Gear is positioned with the flange as shown.

2 Ensure that the Developer Housing Drive Gear is positioned with the flange as shown.

3 Ensure that the Front Auger Drive Gear is captured in position by the Rear Auger Drive Gear Flange and the Developer Housing Drive Gear flange.

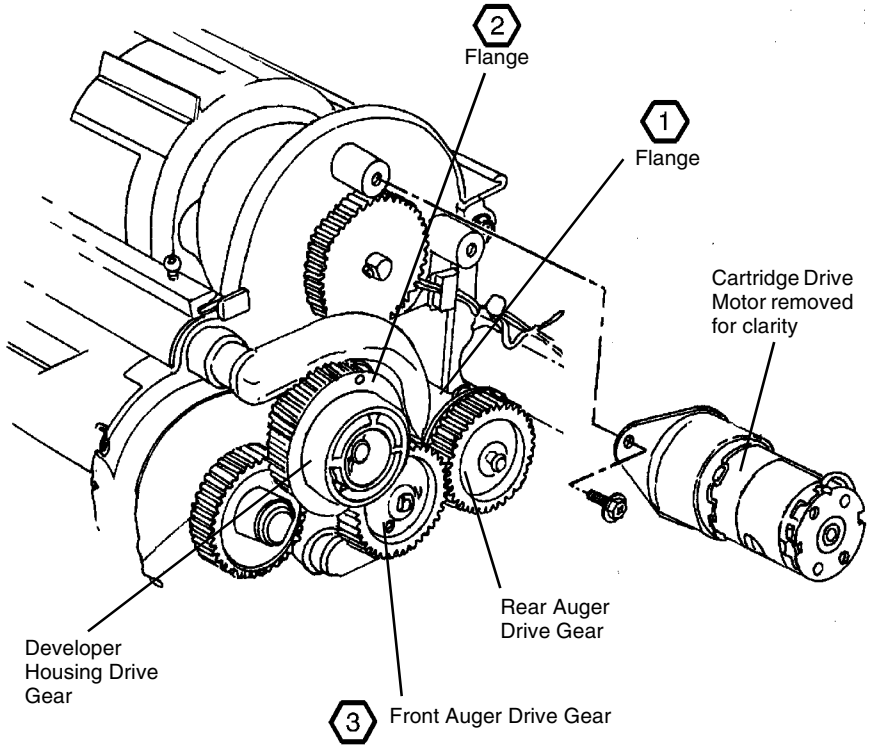

Figure 1 Developer Housing and Auger Drive Gears

- Clean the Pressure Equalizing Tubes with a vacuum cleaner in order to remove toner from inside the tubes. Clean the Augers and Magnetic Roll
- Ensure that the printer is level.
- Check that the mylar Toner Strip PL 9.7, Item 13 for damage.
- Run [09-21-4] to distribute the developer material.

Procedure

With the printer in an LL-90 fault condition, enter diagnostic code [9-22] and then press NEXT, in order to enable the printer to function with an LL-90 fault condition. Enter the code [0361] in order to exit the diagnostics mode. Re-enter Diagnostics and run 3 test prints [9-55 Pattern 5]. **The LL-90 code is displayed as the print is being made.**

Y N

Complete the service call.

Use the last print to check the image density. **The image density of the Solid Square in the center of the Test Pattern [0955-5] is equal to or less than the 1.40 Density Square on the Output Reference SIR 495.1.**

Y N

Enter diagnostic code [9-21-4] and observe the toner sensor output for a large variation in voltage (greater than 1.0 volts). **The voltage variation is greater than 1.0 volts.**

Y N

Perform the Tone-Down Procedure GP 9 Tone Down Procedure. If the printer does not tone-down, replace the Developer Material [REP 9.7].

Run [9-21-4] until the toner sensor output voltage variation is approximately 0.3 volts. **The toner sensor output voltage is less than the toner control point by 0.3 volts or more**

Y N

Complete the service call.

NOTE: *The Tone Down Procedure may have to be run up tp 3 times if the difference between the toner sensor output voltage and the Toner Control Point is greater tha 0.5 volts*

Perform the GP 9 Tone Down Procedure. If the printer does not tone-down, replace the Developer Material [REP 9.7].

Enter the code [9-21-4] in order to switch on the Main Drive Motor and the Toner Control Analog Signal. Connect the (+) meter lead to the Toner Sensor A22Q1P1-2 and the (-) meter lead to A22Q1P1-4. **There is +15 VDC present.**

Y N

Check for an open or short circuit to ground in the wires connected to A22Q1P 1-2 and A3P 606-15. If the wires are ok, replace the Main PWB, A3, PL 1.1.

Connect the (+) meter lead to the Main PWB A3606-4 and the (-) meter lead to ground. **There is +5.2 to +6.0 VDC is present.**

Y N

Connect the (+) meter lead to the Toner Sensor A22Q1-1 and the (-) meter lead to ground. **There is greater than +0.2 VDC present.**

A

Y N

Disconnect Toner Sensor A22Q1P1 from A22Q1J1. Connect the (+) meter lead to the Main PWB A3J303-16 and the (-) meter lead to ground. **There is greater than +0.2 VDC present.**

Y N

Replace the LVPS, A5, PL 1.1. If the problem persists, replace the Main PWB, A3,

Check for an open or short circuit to ground in the wires connected to A22Q1-2 and A22Q1-4. If the wires are OK, replace the Toner Sensor A22Q1, PL 9.9. Run [9-21-6] Toner Sensor Calibration.

Check for an open or short circuit to ground in the wire connected to A22Q1P1-3. If the wire is OK, replace the Toner Sensor A22Q1, PL 9.9. Run [9-21-6 Toner Sensor Calibration.

Replace the Main PWB, A3, PL 1.1.

A

09 04 Automatic ESV Setup Failed, Condition X RAP

The message 0904 AUTOMATIC ESV SETUP FAILED, CONDITION X (X being a numerical value) is displayed with the Printer in the Diagnostic Mode and when [0904] is entered.

The logic detects that the Process Control System failed to adjust the Xerographic Development Field (V Dev) or the Cleaning Field (V Clean) to printer specification. The Process Control System is designed to automatically monitor and adjust the Drum Electrostatics at each 5K linear feet (3K meters) of media run.

This fault may occur if there is a problem with the High Voltage Power Supply, Electrometer Probe (ESV1), the Electrometer Probe PWB (A31) or the related circuitry. A Condition 1 is declared if there is an open or short in the Charge Scorotron Grid or wiring. A Condition 3 will be declared if there is an open or short in the Coronode, Erase Lamp or the associated wiring.

NOTE: *The Charge Scorotron, BTR clean output, Detack Corotron, and Developer Housing Magnetic Roll are monitored independently by the Process Control System. If a fault is detected one of the following will occur:*

- *An LL.XX Status Code for the failed component will be displayed in the normal run mode. Refer to BSDs 9.1 and 9.8.*
- *Should the Image Bar LEDs fail, a Blank Print or Partial Image is produced. Go to Section 3 - Print Quality 6 - for information on how to troubleshoot LED problems.*

Initial Actions

- If the Electrometer (ESV 1) was removed, power the Printer off then on, then perform the 0904 (ADJ 9.2) again.
- Examine the Electrometer Probe (ESV1), the Electrometer Probe PWB (A31), and its harness for damage. Go to BSD 9.1.
- Ensure that the Electrometer Probe PWB (A31), connectors (A31P-2 and A31P-1) are seated correctly and that the pins are fully seated within the connectors.
- Ensure that the Electrometer Probe (ESV1) is not contaminated with toner or foreign matter. Clean as required.
- Check the wiring between the HVPS and the Charge Scorotron Coronode and Grid for an open circuit.
- Ensure that the HVPS (PS 3) connector (A25P1), Charge, Grid, Developer Magnetic Roll Bias, Bias Transfer Roll and Detack connectors are seated correctly and that the pins are fully seated within the connectors.
- Check that the daughter PWB, that is mounted vertically on the HVPS, is fully seated.

Procedure

Enter [0966] and visually check that the Erase Lamp is on.

Y N

Refer to BSD 9.6 and troubleshoot the Erase Lamp.

Refer GP 1 and check the voltage output for the Charge and Grid.

The output at PIN 1 and GRID is within the specification or fluctuating.

Y N

Connect the (+) meter lead to the Main PWB (A3) connector (A3P 601-16). Connect the (-) meter lead to (A3P 601-14), shown on BSD 9.1. **There is (+) 24 VDC present.**

A

Y N

Check for an open or a short circuit to ground in the wires connected to (A31P1) and (A3P601). Repair the wires as required.

Connect the (+) meter lead to the Main PWB (A3) connector (A3P 601-13). Leave the (-) meter lead at (A3P 601-14). Enter [0904] and press ENTER. **The meter reading varies between (0.08 and 2.4 VDC) as the Drum rotates.**

Y N

Go to BSD 9.1 and check the harness between the Electrometer Probe PWB and the Main PWB for broken or loose connections. **The harness is OK.**

Y N

Repair or replace the harness.

Replace the Electrometer Probe (ESV) and the Electrometer Probe PWB (A31) (PL 9.9).

Replace the Main PWB (A3) (PL 1.1).

Enter [0921-2] Check the voltage between J7 and A25P1/J1-16. **The voltage is low, less than 1 VDC.**

Y N

Check the Charge and Grid circuitry for an open or short. Check the coronode and grid for damage or contamination. Repair the wires, grid, or coronode as required. If there is no short or open, Replace the HVPS (PL 1.3).

NOTE: *Severe arcing will cause a crackling/snapping sound in the area of the HVPS. Blue sparking may also be observed on the HVPS.*

Replace the HVPS (PL 1.3).

1.1 AC Power RAP

This RAP is used for problems in the AC circuitry for primary distribution and control. The Control Panel may be illuminated, but the copier will not begin to initialize.

The problem may occur in the Filtered AC Receptacle, Main Power Switch, Ground Fault Protector, Surge Voltage Protector, a shorted Varistor, Noise Filter, or the Main PWB. In which case the AC Module Assembly (A1) will have to be replaced. The AC Module should not be opened to replace these items. If opened, the EMI protection will be compromised and may result in electrical noise problems within the Printer or in the Customer's site.

NOTE: *Refer to BSD 1.1 Main Power on (50 and 60 Hz) located in Section 7 of this manual as you go through this procedure.*

Initial Actions

- Check that the correct voltage is being applied to the printer from the wall outlet.
- Check that the Ground Fault Protection Device is not activated. If activated, switch off the Printer and reset the Ground Fault Protector. Switch on the Printer, if the Ground Fault Protector activates go to the 1.3 Ground Fault RAP.

Procedure

WARNING

High Voltage. Use extreme caution when working near the AC Module. Do not disconnect any plugs or wires while the Power Cord is plugged into the wall outlet and the Main Power Switch is switched on.

The Controller external LEDs are on.

Y N

There is ACH Voltage between Pin 1 and Pin 3 of connector A1P5.

Y N

Replace the AC Module Assembly (A1) (PL 1.1).

Check the harness between the AC Module and the Controller for an open or short circuit. If the harness is okay, refer to the AccXES Controller service manual to troubleshoot the AC voltage.

There is ACH voltage between Pin 1 and Pin 3 of connector A1P5.

Y N

Replace the AC Module Assembly (A1) (PL 1.1).

There is ACH voltage between Pin 1 and Pin 3 and Pin 6 and Pin 8 of connector A1P3.

Y N

Replace the AC Module Assembly (A1) (PL 1.1).

Check the harnesses between the AC Module Assembly (A1) and the Low Voltage Power Supplies for an open or short circuit. If okay, go to the 1.2 DC Power RAP.

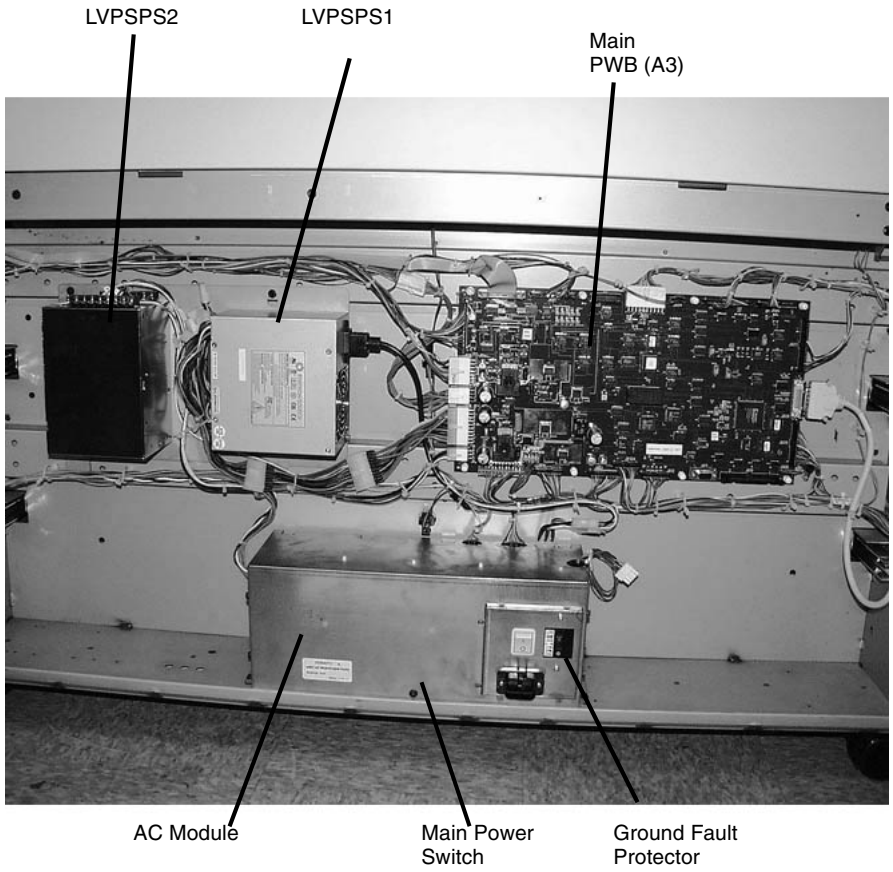

Figure 1 Input Power Components

1.2 DC Power RAP

This RAP is used to locate problems in the DC power generation and distribution circuitry.

The LEDs on the Main PWB (A3), when lit, indicate that the DC voltages are available on the Main PWB (A3). Refer to BSD 1.2 DC Power Generation when performing this procedure.

Initial Actions

- Check that connector A3P/J618 is fully seated.
- Ensure that ACH and ACN are present at A5P/J1 on the Low Voltage Power Supply (A5PS1).

Procedure

The +3.3V (CR 11), +12V (CR 12), +5V (CR 4) LEDs, and 5VSB (CR3) on the Main PWB are lit.

Y N

Check the wires between the Low Voltage Power Supply (A5PS1) for a short to the frame. If there is no short, replace the Low Voltage Power Supply (A5PS1) PL 1.1.

Connect the negative (-) meter lead to the machine frame and measure the following voltages.

Table 1 Voltage Checks

PIN (+)	Voltage	Tolerance
A3P618-1	+3.3 VDC	+\- 5%
A3P618-4, and 9	+5 VDC	+\- 5%
A3P618-10	+12 VDC	+\- 5%

A voltage is out of specification.

Y N

Replace the Main PWB (A3) PL 1.1.

Replace the Low Voltage Power Supply (A5PS1) PL 1.1.

1.3 Ground Fault Protector RAP

This RAP is used to locate and repair ground fault problems in the primary AC power distribution circuitry. You may have been directed to this RAP from another AC Power RAP that traced the loss of AC power to the GFP device.

The 8850/510dp Series Printer is equipped with a Ground Fault Protector (GFP) device that detects excessive current leakage to ground. If excessive leakage is detected, the device will remove all power to the printer. In addition, there is a varistor connected across the output side of the Ground Fault Protector to suppress electrical noise in order to meet EMI standards. If the Varistor fails in a shorted mode it will cause the GFP to continually activate.

Procedure

WARNING

High Voltage. Use extreme caution when working near the AC Module. Do not disconnect any plugs or wires while the Power Cord is plugged into the wall outlet and the Main Power Switch is switched on.

- Check that the correct voltage is being applied to the Printer from the wall outlet.
- Test the Ground Fault Protector (GFP). With the Power Cord plugged into the Wall outlet, and the Main Power Switch switched on; press the TEST button using a pointed tool. The GFP should switch to the off position. If not, replace the AC Module Assembly (PL 1.1).

Endless FUSER IS CALIBRATING Fault RAP

This RAP is used when, at power-on, the Control Panel Display indicates FUSER IS CALIBRATING for more than 30 seconds and the Fuser Heat Rods do not energize.

NOTE: *Refer to BSD 10.1 while using this RAP.*

Initial Actions

Switch off the Printer. Open the Fuser Drawer. Ensure that the two Fuser Heat Rods are correctly installed and connected, with the red Heat Rod connectors connected to the red power connectors (on drive side of Fuser Module).

Procedure

Set the Digital Multimeter to read resistance. Disconnect Connectors A27HR1P 1 and A27HR1P 2. Measure the resistance of the Edge Heat Rod (HR1).

The Edge Heat Rod has continuity.

Y N

Replace the Heat Rod.

Check the continuity between Connector L and Connector 1, and between Connector N and Connector 2 on Filter Module (A10).

The Filter Module has continuity.

Y N

Replace Filter Module A10.

Check the wiring between the output connector 1 on the Filter Module (A10) and Connector A27HR1P 1 for an open circuit. Similarly check the wiring between Output Connector 2 and A27HR1P 2.

NOTE: *The Fuser Drawer must be closed or a jumper installed to perform this check.*

The wiring has continuity.

Y N

Repair the wires.

Check the wiring between the Input Connectors L and N on the Filter Module (A10) and Connector A1P9 on the Fuser Control PWB (A4) for an open circuit.

The wiring has continuity.

Y N

Repair the wiring.

Check the wiring between Edge Fuser Thermistor (RT2) and Connector A1P 8 for a short circuit.

A short circuit is present.

Y N

Replace the AC Module Assembly (A1)(PL 1.1).

Repair the wiring, or replace the Edge Fuser Thermistor (RT2).

OF-1 Control Panel RAP

NOTE: *Go to BSD 2.1 while using this RAP, unless otherwise directed.*

This RAP is used when the Control Panel does not operate, or when the Control Panel operates incorrectly.

Initial Actions

- Make sure that AC power is applied to the machine.
- Check that the DC voltage LEDs are lit on the Main PWB (A3).
- Ensure that the 26-conductor ribbon cable, connected between the Main PWB A3J301 and the User Interface PWB A32J1 (located in the Control Panel), is seated fully at each connector.

Procedure

Table 1 Control Panel Probable Cause / Corrective Action

Control Panel	Probable Cause	Corrective Action
The Message Display is blank, no characters are displayed.	There is an input power problem. There is an open circuit in the ribbon cable between the Main PWB A3J301 and the User Interface PWB A32J1. There is an internal fault in the Control Panel or in the Main PWB A3.	Go to 1.1 AC Power RAP and 1.2 DC Power RAP. Check for continuity in all wires in the ribbon cable. Replace the Control Panel, PL 1.4. If the problem persists, replace the Main PWB, A3, PL 1.1.
The Message Display LEDs are on but no characters are displayed.	There is no +15 VDC to the Main PWB, A3. There is no +5 VDC (Bulk) to the Main PWB, A3.	Go to BSD 1.2 to troubleshoot the +15 VDC power to the Main PWB, A3. Go to BSD 1.2 to troubleshoot the +5 VDC (Bulk) power to the Main PWB, A3.
The Message Display LEDs are on but no characters, random characters, or black squares appear.	There is an open circuit in the ribbon cable between the Main PWB A3J301 and the User Interface PWB A32J1. There is an internal fault in the Control Panel or in the Main PWB A3.	Check for continuity in all wires in the ribbon cable. Replace the Control Panel, PL 1.4. If the problem persists, replace the Main PWB, A3, PL 1.1.

OF-2 Power On Self Test (POST) RAP

NOTE: *Go to BSD 1.2 and BSD 2.1 while using this RAP.*

This RAP is used when the logic detects a fault during the Power On Self-test (POST). The printer does not initialize and the Control Panel displays a **1**, **2**, **3**, **5**, **6**, or **7**.

Initial Actions

- Ensure that the NVRAM are seated fully on the Main PWB, A3.
- Ensure that the 26-conductor ribbon cable, connected between the Main PWB A3J600 and the Control Panel User Interface PWB A32J1, is seated fully at each connector.

Procedure

Table 1 Power On Self Test (POST) Probable Cause / Corrective Action

The number that is Displayed on the Control Panel.	Probable Cause	Corrective Action
1 or 2	There is a fault in the RAM memory.	Replace the Main PWB, A3, PL 1.1.
3	The contents of the Control EPROMs does not agree with the checksum. The Main PWB is defective.	Replace both Control EPROMs on the Main PWB, A3. Replace the Main PWB, A3, PL 1.1.
5	There is a fault in the Main PWB, A3.	Replace the Main PWB, A3, PL 1.1.
6	There is a +5 VDC fault in the Digital-to-Analog Converter .	Replace the Driver PWB, A2, PL 1.1A. If the problem persists, replace the Main PWB, A3, PL 1.1.
7	There is a fault in the printer port output circuitry.	Replace the Main PWB, A3, PL 1.1

OF-3 Bead Carry Out (BCO) RAP

Initial Actions

1. Clean the Registration Feed Baffle.
2. Clean the BTR and BTR channel.
3. Clean the Detack Corotron and channel. Check the corotron for bent or damaged pins and end block for arcing damage (scorching) damage.
4. Run 1 print of Test Pattern 1 and check the print for the following drum defect:
   - Light area in the Side-to-Side direction repeated approximately every 10.5 inches (may be with or without developer beads on the print).

Procedure

If an excessive amount of developer material (beads) are seen in the Developer area, media path, and/or corotrons, perform the following:

1. Ensure the Developer Housing is fully seated and pushed fully towards the drive side.
2. Check that the Developer seals are installed and in good condition. If not, install the Developer Seal kit (35E64851).
3. Ensure that Tag 3 Developer Housing is installed.
4. Check that the Tag 6 High Voltage Power Supply is installed.
5. Check to ensure that the printer is level front to back and left to right. Place the level on the Developer Housing. If the Printer is not properly leveled, the trickle system will not work properly and excessive developer could accumulate at the low points and leak out at the front ends of the Developer Housing.
6. Check for the proper operation of the Erase Bar (BSD 9.6, code 9-66).
7. Remove the Developer Housing and clean any contamination on the Housing and in the area of the Housing.
8. Perform ADJ 9.6 Augers. While performing the adjustment, clean the interior of the Developer Housing pressure balance return tubes.
9. Perform ADJ 9.2 Electrostatic Series.
10. If LL22 Codes are present after the above checks, got to LL-22 Detack Fault RAP.

Generic Clutch RAP

Initial Actions

NOTE: *This procedure can be used to check any clutch. Due to the generic format of this RAP there will be no specific ADJ, PL or Diagnostic codes identified. The PWB names, voltages, connectors, and pin numbers are fictitious. Refer to the appropriate BSD for the actual names and numbers*

Procedure

(Figure 1): Enter DIAGNOSTICS (General Procedures). Enter code [xxxx] to test the Clutch (Refer to appropriate BSD for the specific code). Actuate the Clutch. **The Clutch energizes.**

Y N

Deactuate the clutch. **There is +24 VDC at J209-12 (use the actual connector/pin number on the BSD) on the PWB (AX).**

Y N

Check the wire for an open circuit. If the wires are good, replace the Clutch (PL X.X).

Check the adjustment of the Clutch (ADJ X.X).
If the adjustment is good, replace the Clutch (PL X.X).

The Clutch and its circuit appear to be operating normally. Check the adjustment or alignment of the Clutch.

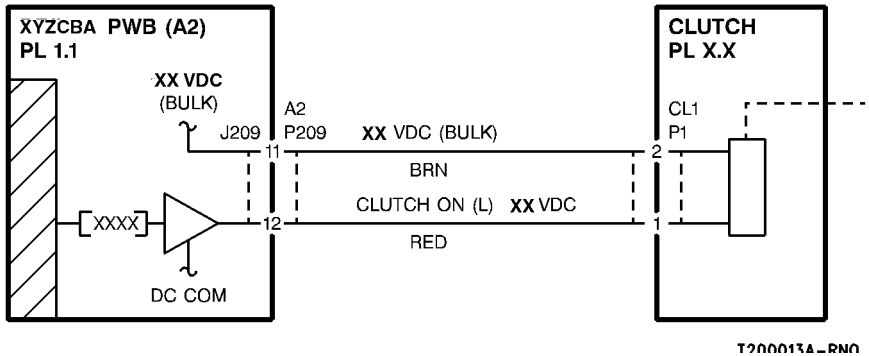

Figure 1 Clutch (Generic)

Generic Sensor RAP

Initial Actions

NOTE: *This procedure can be used to check any sensor. Due to the generic format of this RAP there will be no specific ADJ, PL or Diagnostic codes identified. The PWB names, voltages, connectors, and pin numbers are fictitious. Refer to the appropriate BSD for the actual names and numbers.*

- Ensure that the Sensor is not blocked.
- Clean the Sensor surfaces before using this procedure.

Procedure

(Figure 1): Enter DIAGNOSTICS (General Procedures). Enter code [xxxx] to test the Sensor (Refer to appropriate BSD for the specific code). Block the Sensor. **The Display toggles between [1] and [0].**

Y N

There is +5 +/-0.3 VDC at J60X/P60X pin X of the Main PWB.

Y N

The + 5 VDC LED on the Main PWB is on

Y N

Refer to the 1.2 DC Power RAP

Replace the Main PWB.

Check the wiring to the sensor for an open circuit.
If the wiring is good, replace the Sensor.

The Sensor and its circuit appear to be operating normally, check the adjustment or alignment of the Sensor.

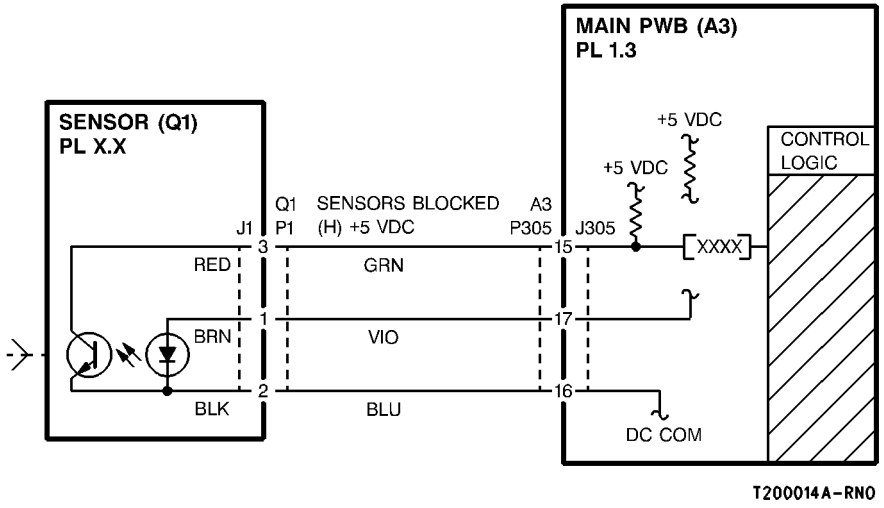

Figure 1 Sensor (Generic)

Generic Switch RAP

Initial Actions

NOTE: *This procedure can be used to check any switch. Due to the generic format of this RAP there will be no specific ADJ, PL or Diagnostic codes identified. The PWB names, voltages, connectors, and pin numbers are fictitious. Refer to the appropriate BSD for the actual names and numbers*

Procedure

(Figure 1): Enter DIAGNOSTICS (General Procedures). Enter code [xxxx] to test the switch (Refer to appropriate BSD for the specific code). Actuate the switch. **The switch toggles from H to L or from L to H.**

Y N

The message display indicates LOW all the time.

Y N

Actuate the switch. **The voltage at J1-1 (use the actual connector/pin number from the appropriate BSD) goes to less than 0.4 VDC.**

Y N

Check the wiring between the switch and the Main PWB (A2).
If the wiring is OK, replace the switch.

Replace the Main PWB (A2) (PL X.X)

Replace the Switch (PL X.X)

The switch and its circuit appear to be operating normally. check the adjustment or alignment of the switch.

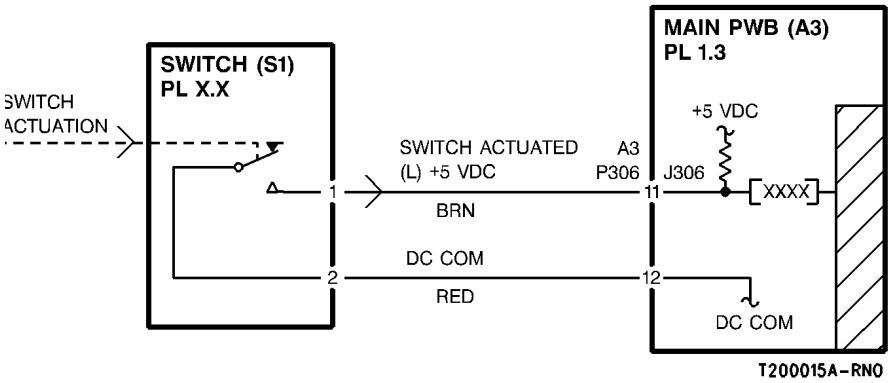

Figure 1 Switch (Generic)

3 Print Quality

Print Quality

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Print Quality Initialization Procedure

Prior to any print quality troubleshooting, validate that the problem is in the IOT by entering [9-55]. Select test pattern 5. Examine the test print for defects. If defects appear, complete the following checklist. If the defects are still present after completing the checklist, refer to the Image Quality Defects and Classification information on the following pages to classify and repair the problem.

1. Check Drum life, BTR life, Grid cleaning interval (Refer to Section 1, Maintenance).
2. Check that the Printer firmware is 02.03.06-16 or higher (8850), 03.03.06-16 or higher (510dp) .
3. Ensure that the Charge Scorotron and Grid are not damaged or contaminated.
4. Ensure that the BTR is not damaged or contaminated with debris or toner.
5. Reference GP 1 check the High Voltage Power Supply.
6. Ensure that the Image Module Spacing Roller contacts the Drum fully and does not exhibit abnormal wear or contamination.
7. Refer to ADJ 9.2, Electrostatic Series and check that the following voltages are within specification:
   - Charge Scorotron (V High)
   - Image Module LED Duty Cycle (V Low)

   NOTE: *If a 0904 ESV Setup Failed Condition 1 or 3 is displayed, refer to the 09 04 Automatic ESV Setup Failed, Condition X RAP in Section 2.*
8. Check that the Toner Concentration (TC) is calibrated correctly [9-21-4].

If the print quality defect is still present, go to the Print Defects in this section.

Print Defects

Print quality refers to the entire print. Defects can occur anywhere on the print. These defects could be damaged media or print quality defects.

Always eliminate problems that cause the damaged media before attempting to fix print quality problems. Some damaged media problems could cause print quality problems.

Compare the print defect to the definitions on this page and the next page. After you have determined the definition that best describes the print defect, go to the Section Contents page. The Section Contents page will direct you to a Print Quality Problem / Cause Table. The Problem / Cause Table lists the probable causes and corrective actions.

The PROBABLE CAUSES are arranged in order of most probable cause to least probable cause or the ease of the check. CORRECTIVE ACTIONS are given for each cause. Read all of the probable causes before taking any corrective action.

1. Start with the first PROBABLE CAUSE and continue through the list until you come to the cause that best applies to the image defect.
2. Perform the CORRECTIVE ACTION.
3. If the defect has been corrected, go to the Maintenance Activities in the Service Call Procedures in Section 1. If the defect is still present, continue with the other PROBABLE CAUSES.

Print Quality Definitions

The following terms are some of the most commonly used terms that describe image quality problems.

Background

Background occurs as darkness or dirtiness on the non-image areas of the print.

Black Print

This is a print that is entirely black except for the lead edge, trail edge and possibly the left and right edges.

Blank Print

This is a print entirely without an image.

Deletions

An area of the image where information has been lost. The areas of deletions could be localized or bands from top to bottom or side to side.

Density

The relative blackness between the image and non-image areas.

Fuser Fix

This is a measure of how the toner particles adhere to the media as a result of the fusing process.

Print Displacement

Part of the image information is being placed elsewhere on the print or it is completely missing. The area of the missing information is sharply defined. This is unlike deletions where the image is not sharply defined or clear.

Print Distortion or Skew

The image is skewed on the media. The image from side to side or lead edge to trail edge is not parallel to the edges of the print. There is also distortion of the image from one side of the copy to the other. These defects are a result of a this adjustment of the media transportation system components.

Light Image

These are prints where the density is lighter than the specified density for the Printer.

Line Darkness

This is the darkness and uniformity for a line.

Misregistration

This is when the distance from the lead edge of the image to the lead edge of the media is not within specification.

Offsetting

This is the transfer of toner from the print to the Fuser Heat Roll. Sometimes the toner is transferred back to the print or consecutive prints.

Media Damage

This is any physical distortion to the media that is used in making a print. This distortion may include folds, wrinkles, etc.

Media Handling

This is the process of transporting the media from the supply area through the xerographic and the fusing subsystems.

Resolution

The uniformity or clarity of fine line detail.

Residual Image

This is an image that is repeated onto the same print or consecutive prints. The image can either be a ghosting of the original image or a toner image. The repeated image is usually spaced 10.375 inches (265 mm) from the original image. This problem can be caused by poor cleaning of the Drum, a Drum that is worn, or offsetting by the Fuser.

Smear

This is any image defect that occurs in the direction that is perpendicular to media feed and caused by a difference in the relative motion between the Drum and media.

Solid Area Density

A measure of the blackness of the a solid black image area on the print.

Solid Area Uniformity

The measure of the blackness uniformity of one area of the solid black image to another area of the solid black image.

Spots

These are defects that are 0.2 inches (5 mm) or smaller in diameter.

Streak

This is any image defect that occurs in the direction of media feed.

Unfused Print

This is a print where the image can easily be wiped off the media. The image has not adhered to the media.

Print Quality General Diagnostics

It is important to understand the orientation of prints in order to troubleshoot image quality problems. The following terms will be used when referring to prints made on the Printer:

1. **Process direction** is in the media feed direction.
2. **Cross-process direction** is in the side-to-side direction.
3. Defect isolation procedure.

Determining the distance between defects could help isolate problems to a specific component. Defects that are 10.375 inches (265 mm) apart (lead edge of defect to lead edge of next defect) in the process direction may be caused by the Drum. The circumference of the Drum is 10.375 inches (265 mm).

Defects that are 2.9 inches (75 mm) apart (lead edge of defect to lead edge of next defect) in the process direction may be caused by the BTR.

Defects that are 7.075 inches (180 mm) apart (lead edge of defect to lead edge of next defect) in the process direction may be caused by the Fuser Heat Roll.

Print Quality Specifications

Test Patterns

There are nine internal test patterns that can be run from diagnostic mode [9-55]. (refer to Special Tests for details)

Test Pattern 1 is used while adjusting lead edge. trail edge and side edge erase.

Test Pattern 2 is used to produce horizontal black and white horizontal/vertical bands and resolution targets.

Test Pattern 3 is used to produce ROGM image targets and 1.25” solid area squares that are 97.5 mm apart.

Test Pattern 4 is used to produce a 49 mm wide horizontal black band that is 450 mm from the lead edge of the print.

Test Pattern 5 is used to produce solid area squares, ROGM image targets and a grid of thin horizontal and vertical lines.

Test Pattern 6 is used to produce diagonally placed small ROGM targets.

Test Pattern 7 is used to produce diagonal horizontal and vertical lines that are 16.25 mm apart.

Test Pattern 8 is used to produce solid blank vertical bands that are 93.5 mm wide.

Test Pattern 9 is used to produce various small ROGM patterns.

Solid Area Density (A)

This term refers to the image density of a totally black portion of the print.

(Figure 1) Use a wide roll of media and run test pattern

[9-55-5]. Select the black squares (A) and use the SIR 495.01 (PN 82P520) reference scale to measure the density.

SPECIFICATION:

Media - All sites between 1.2 and 1.4 Solid Area Density (SAD)

Film - All sites equal to or greater than TBD

Solid Area Density (A) Uniformity

This term refers to the image density of a totally black portions of the same print.

(Figure 1) Use a wide roll of media and run test pattern

[9-55-5]. Select the black squares (A) and use the SIR 495.01 (PN 82P520) reference scale to measure the density.

SPECIFICATION:

Bond Media - No more than 0.3 Solid Area Density (SAD) difference the black (A) squares.

Film - TBD

Image Density (Text)

This term refers to the image density of text on the same print.

(Figure 1): Use a wide roll of media and run test pattern

[9-55-5]. Select the image blocks and use the SIR 201.01 reference scale to measure the density.

SPECIFICATION:

Bond Media - Equal to or greater than density 28.5.

Film - Equal to or greater than density 20.6 in center of print.

Image Density (Text) Uniformity

This term refers to the uniformity of image density of text on the same print.

Use a wide roll of media and run test pattern [9 -55-5]. Select the image blocks and use the SIR 201.01 reference scale to measure the density

SPECIFICATION:

Bond Media - Equal to or greater than density 20.6 and less than 42.4.

Film - TBD.

Line Width (Minimum)

This term refers to the visual observation of lines.

(Figure 1) Use a wide roll of media and run test pattern

[9-55-5]. Select the image blocks and use the SIR 201.01 reference scale to measure the density

SPECIFICATION:

Bond Media - No breaks in horizontal or vertical lines.

Film - No breaks in lines.

Background

This term refers to the density of the print in any non-image area.

Use a wide roll of media and run test pattern

[9-55-5]. Examine the print using the Background Reference Scale 302.02.

SPECIFICATION:

All non-image area should be no greater than 3.7 at Printer installation and no greater than 5.9 over the life of the developer.

Skips

This term means that a print image is partially deleted or appears stretched at a right angle to the media feed direction.

Use a wide roll of media and run test pattern

[9-55-5]. Examine the 2.0 LP/mm vertical band located near the center o the print for skips or smears.

SPECIFICATION:

The 2.0 LP/mm lines should be resolved.

Resolution

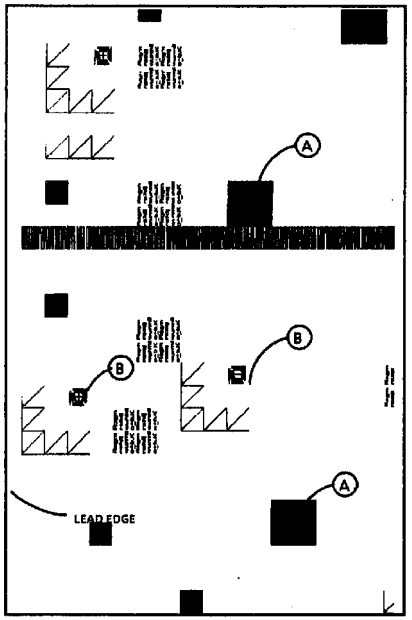
This term refers to the degree to which fine details of a print are reproduced, for example, lines.

(Figure 1) : Use a wide roll of media and run test pattern [9-55-5. Evaluate the resolution targets (B) at each corner and three central locations for a total of seven targets.

SPECIFICATION:

Bond Media: Using a (7X) magnifier the vertical and horizontal resolution for all targets should be equal to or greater than 4.0 LP/mm.

Film Media: Using a (7X) magnifier the vertical and horizontal resolution for all targets should be equal to or less than 3.2 LP/mm.



0101503A-RNO

Figure 1 Test Pattern [9-55-5]

Lead Edge Registration (A) (Figure 2)

This is the degree to which the lead edge of a print image is within a specified distance from the lead edge of the media.

Use a wide roll of media and run 4 prints of test pattern [9-55-7] and use the fourth print. Measure the distance from the lead edge of the media to the first horizontal line at the right side of the print and the center of the print.

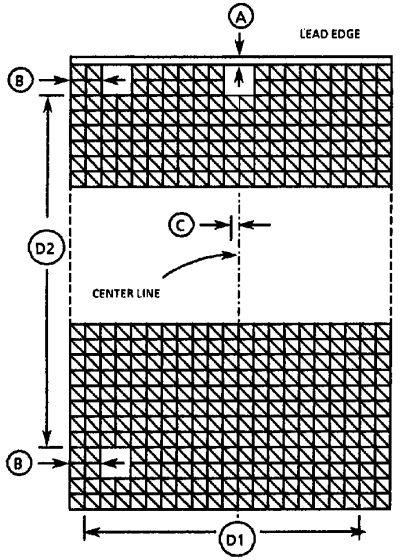
SPECIFICATION:

16.25 +2.25 / - 2.0 mm

Linearity of Lines

Linearity of lines refers to the straightness of the horizontal, vertical and diagonal lines.

(Figure 2) :Use a wide roll of media and run test pattern [9-55-7. Measure the straightness of a 50 block length in all three directions.



0101504A-RNO

Figure 2 Test Pattern [9-55-7]

SPECIFICATION: 1mm or less.

Magnification (D1, D2)

Magnification refers to the rate at which an original image is enlarged or reduced on a print. The change in image length is either in the media feed direction (vertical) or the side-to-side direction (horizontal).

Measure the length of 50 blocks (D1) from side-to-side (horizontal) and one block down from the lead edge.

Measure the length of 60 blocks in the media feed direction (vertical) and one block in from the side.

SPECIFICATION:

Horizontal (D1) 812.8 mm +/- 4.0 mm (50 blocks)

Vertical (D2) 975.4 mm +/- 5.0 mm (60 blocks)

Cut Accuracy

This is the dimension of variance from a true, horizontal cut.

SPECIFICATION:

+/- 2 mm

Damaged Media

Table 1 Damaged Media

Defect	probable cause	corrective action
1. Crease Marks A thin irregular line on the media caused by stressing the media.	1. This defect can be caused by incorrect handling of the media.	1. Ensure that the media is stored correctly and is not damaged when inserted in the Printer.
2. Dog Ears This is a corner of the lead edge of the print that has been bent back.	2. Curled media caused by a failed or damaged Detack Corotron.	2a. Try using a new roll of media. 2b. Check for an obstruction caused by a Detack Corotron.
3. Frayed Side Edge This is damage to the sides of the print.	3. Incorrect media side to side registration	3. Ensure that the media is loaded correctly. Check the media path for an obstruction.
4. Wrinkle This is damage that is probably caused by the fuser subsystem. This is a severe case of creases that runs in the direction of media travel.	4a. Damage or obstruction in the media path. 4b. Damp media 4c. Pressure Roll is contaminated or damaged. 4d. Incorrect fuser pressure. 4e. Fuser Heat Roll is contaminated or damaged. 4f. Pressure Roll is contaminated or damaged.	4a. Clear the media path of obstructions. 4b. Ensure that the Customer is storing the media correctly. Refer to BSD 10.3, BSD 7.2 and BSD 7.4 to check for correct operation of the Media heaters (HR1, HR3). 4c. Refer to BSD 10.3 and check that the Pressure Roll is not contaminated or damaged. 4d. Check that the Pressure Roll Springs (2) are not damaged and are installed correctly. 4e. Clean/ replace the Fuser Heat Roll (REP 10.2). 4f. Clean/ replace the Pressure Roll REP 10.8. 4g. Check that Tag 4 Media Corner Curl kit is installed.
5. Cockle The media has a rough surface like an orange peel. This damage could be caused by the fuser subsystem.	5a. Damage or obstruction in the media path 5b. Fuser is too hot. 5c. Damp media.	5a. Clear the media path of obstructions. 5b. Check Fuser Temperature (ADJ 10.1) 5c. Ensure that the Customer is storing the media correctly. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters.
6. Other Damage		6. If there are other defects on the print, go to Media Handling Problems on, following page.

Media Handling Problems

Introduction

Experience has shown that many media transportation problems have more than one cause and must be handled using a systematic approach. Media transportation problems appear as one of the following symptoms:

- Pre-fuser jams
- Bias Transfer Roll/transfer area jams
- Print quality defects
- Physical distortion of media

When these symptoms occur, perform the following checks of the media and Printer and perform the corrective actions.

Table 1 Media Check

Media Check	Corrective Action
1. Check the type of media: a. Bond media less than 20 lb may perform with less reliability than Xerox 20 lb. b. Other brands of media may have different design specifications than Xerox media and may not give acceptable performance in the Printer.	a. Use Xerox-qualified media. b. After all media checks, test with fresh Xerox media.
2. Check the storage of media: a. Media that is exposed to the environment may have damp areas. b. Media may have curled ends because of incorrect storage.	a. Suggest keeping the media in the package in which the Xerox media is shipped until the media is to be used. b. Suggest that the media should be stored correctly. c. Recommend keeping the Printer switched on overnight to help eliminate moisture buildup.

Table 2 Printer Check

Printer Check	Corrective Action
1. Contaminated or damaged Detack Corotron resulting in an open circuit or arcing. 2. An incorrect electrostatic value can cause jams or deletions. 3. Warped Media Transport Module frame. 4. Broken or damaged Media Shield 5. Check the stainless steel media Clips (PL 8.3) are seated fully (no space between the Clips and the wall of the Detack Corotron channel). 6. Check that Tag 4, Media Corner Curl Kit is installed.	1. Clean or replace if necessary (REP 9.9). 2. Check the following: a. Clean or replace the Detack Corotron as required (PL 8.3). 3. With a straight edge, check flatness of the extrusion wall between the BTR and Detack. Replace Detack and BTR Exreusion (PL 8.1) 4. Replace the Media Shield (PL 8.3) 5. Replace the Clips as required (PL 8.3) . 6. Install the Media Corner Curl Kit. (8850/510 Change Tag Information)

PQ 1 Background

Table 1 Background Symptom / Check

Symptom / check	Probable Cause	Corrective Action
Contamination of the blank area by toner particles on the print		
	1. Toner concentration too high.	1A. Perform Electrostatic Series (ADJ 9.2). 1B. Perform GP 1 Xerographic HVPS Checkout Procedure. 1C. Clean/Replace/Repair the corotrons.
	2. Developer Bias too high.	2A. Perform Electrostatic Series (ADJ 9.2). 2B. Perform GP 1 Xerographic HVPS Checkout Procedure.
	3. An incorrect electrostatic value	3. Perform Image Density (ADJ 9.3).
	4. Erase Bar operation.	4. Refer to BSD 9.6 and check for correct operation of the Erase Bar.
	5. Defective Cleaner Blade	6. Replace the Cleaner Blade (REP 9.4).
	6. Web Oil system not operating correctly.	7. Refer to BSD 10.2 and check Web Oil system for correct operation.
	7. Contaminated or defective Drum.	8. Replace the Drum (REP 9.3).
	9. Site environment is hot and humid.	9A. Install Developer Heater Kit 9B. Perform General Procedure GP 8 Toner Control System Calibration and set for humidity greater than 65%.

PQ 2 Dark Bands

Table 1 Bands Symptom / Check

Symptom/ checks	Probable Cause	Corrective Action
Bands are 1 mm or more wide and are in the media feed direction. High density bands are called black lines.		
	1. Contaminated charge scorotron Detack Corotron contaminated.	1. Clean / replace screen / pins (REP 9.8).
	2. Defective Cleaner Blade	2. Replace the Cleaner Blade (REP 9.4).
	3. Contaminated or damaged magnetic roll.	3. Check for foreign objects on the mag roll.
	4. Incorrect Electrostatic value.	4B. Perform Electrostatic Series (ADJ 9.2). 4C. Perform GP 1 Xerographic HVPS Checkout Procedure.
	5. Toner cloud from the Developer Module contaminating the Drum and corotrons.	5A. Ensure that the Pressure Equalizer Tubes are clean (REP 9.18). 5B. Check for toner buildup on the lower edge of the Developer Housing. 5C. Check that the Toner Dust Trap, Tubes are not plugged. Replace as required (PL 9.10). 5D. Check/Replace the Toner Filter (PL 9.10).
	6. Contaminated or defective Drum.	7. Replace the Drum (REP 9.3).
	7. Image Module LEDs operating incorrectly.	8. Enter [9-21-5] and check for correct operation. (Refer to BSD 6.1 and check for correct electrical connections to/from the Receiver PWB and the LED Image Bar).
	8. Photoreceptor Drive Motor Encoder not installed or operating correctly.	Check at the Encoder is installed correctly (REP 9.23). Replace the Encoder (PL 9.1).

PQ 3 Bands

Table 1 Bands Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Bands are 1 mm or more and are perpendicular to the media feed direction. High density bands are called black lines.		
	1. Defective or intermittent Charge Scorotron.	1A. Check / clean / replace the connections to the Charge Scorotron (PL 9.3). 1B. Perform Electrostatic Series (ADJ 9.2).
	2. Defective Detack Corotron.	2A. Check / replace the Detack Corotron. (REP 9.9). 2B. Ensure that the Corotron is installed in the correct position.
	3. Poor cleaning	3. Replace the Cleaner Blade (REP 9.4).
	4. Defective or contaminated Drum.	4A. Wash the Drum (GP 3 Drum Maintenance) 4B. Determine and fix the cause of the damage to the Drum. Replace the Drum (REP 9.3).
	5. Damaged or incorrectly installed Drum Encoder. Drum Drive Motor	5. Check that the Encoder is installed correctly (REP 9.23) Replace the Encoder or Drum Drive Motor (PL 9.1)

PQ 4 Black Lines

Table 1 Black Lines Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Black lines appear in the direction of media feed.		
	1. Contaminated, damaged or disconnected Charge Scorotron	1A. Clean/Replace the Detack Corotron (PL 8.3). 1B. Perform Electrostatic Series (ADJ 9.2).
	2. Developer Bias and Detack Corotron voltage set incorrectly	2. Clean/replace or check the connections to the charge scorotron (PL 9.3).
	3. Poor cleaning	3. Replace the Cleaner Blade (REP 9.4).
	4. The surface of the Heat/ Pressure Roll(s) is damaged.	4. Determine and fix the cause of the damage to the Rolls. Replace the rolls (REP 10.2, REP 10.8).
	5. The Drum surface is contaminated or damaged.	5. Determine and fix the cause of the damage to the Drum. Replace the Drum (REP 9.3).
	6. The fuser temperature is too high.	6. Adjust the Fuser temperature (ADJ 10.1)
	7. Contaminated or damaged mag roll.	7. Check for foreign objects on the mag roll.
	8. Defective Detack Corotron.	8. Check / replace the Detack Corotron. (PL 8.3).

PQ 5 Black Prints

Table 1 Black Prints Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
The print is totally black with no image.		
	1. Defective Charge Scorotron	1. Clean or replace the screen/pins (REP 9.8).
	2. Charge control circuit/ defective Harness	2. Perform GP 1 Xerographic HVPS Checkout Procedure.

PQ 6 Blank Prints / Partial Image

Table 1 Blank Prints / Partial Image Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
No image or a partial image is produced when making a print.		
	1. Developer Housing	1A. Ensure that the Developer Housing Module drive gears are engaged and the developer housing is turning. 1B. Ensure that the gear lock is released from the Developer Housing Drive Gear.
	2. Bias Transfer Roll (BTR)	2A. Check the BTR Roll and connections for damage / contamination. 2B. Perform GP 1, Xerographic HVPS Checkout Procedure.
	3. Defective Xerographic HVPS	3. Perform GP 1, Xerographic HVPS Checkout procedure.
	4. Image Module LEDs inoperative	4A. Enter [9-21-5] and check for correct operation. (Refer to BSD 6.1 and check for correct electrical connections to/ from the Receiver PWB and the LED Image Bar.) 4B. Ensure that all connectors are seated and voltages are correct to the LED, 5VDC, RS422, Signal Harness, Receiver PWB.
	5. No Drum drive / defective Drum.	5. Refer to BSD 4.3 and check for correct Drum drive. Replace the Drum (REP 9.3).

PQ 7 Blurred Image

Table 1 Blurred Image Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
The image is not clear or sharp.		
	1. Defective/ contaminated Image Module.	1A. Ensure the spacing rollers are touching the Drum. 1B. Ensure the spacing rollers and Drum ends are not contaminated/defective. 1C. Clean the LED Array with a lint-free cloth.
	2. Contamination on Detack Corotron	2A. Clean or replace as required. 2B. Perform GP 1, Xerographic HVPS Checkout Procedure.
	3. Defective drive gear	3. Check the following drive gears for damage: a. Drum drive gear b. BTR drive gear c. developer drive gear d. cleaner drive gear Replace as required.
	4. Defective Registration Pinch Roll	4. Replace as required (PL 8.2).

PQ 8 Deletions (bands) (Print Feed Direction)

Table 1 Deletions (bands) Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Deletion bands or very low image density in the print feed direction.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Defective or contaminated LED Image Bar.	2. Check / clean the LED Image Bar [9-21-5. (PL 9.3)
	3. Contaminated/ defective BTR	3. Clean/ replace BTR (REP 9.22).
	4. Developer Housing	4A. Ensure that the Developer Housing is latched securely. 4B. Check the mag roll for foreign material or contamination. Ensure that there is an even coating of developer material on the mag roll.
	5. Contaminated/ defective Detack Corotron	5. Clean/ replace or repair Detack Corotron (REP 9.9).
	6. Contaminated Erase Bar.	6. Clean with a lint free cloth.
	7. Fuser Heat Roll / Pressure Roll	7. Determine and fix the cause of the damage to the Rolls. Replace the rolls (REP 10.2, REP 10.8).
	8. Defective Drum	8. Replace the Drum (REP 9.3).
	9. Defective Xerographic HVPS	9. Perform GP 1, Xerographic HVPS Checkout Procedure.

PQ 9 Deletions (bands) (Non-feed Direction)

Table 1 Deletions (bands) Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Deletion bands or very low image density perpendicular to the print feed direction.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. BTR Transfer Arching	2A. Ensure all BTR contacts are aligned properly (Transport bias to drive side of machine 2B. Worn or damage BTR contacts.
	3. Defective Developer, Drum or BTR drive.	3A. Ensure that the housing is latched securely. Check the magnetic roll for damage or binding. 3B. Check for correct operation of the drive system. Repair or replace Drive gears.
	4. BTR Spacing Rollers not contacting Drum	4. Check/ clean/ replace as required (PL 8.3).
	5. Image Module spacing rollers/drum contaminated.	5. Check/ clean/ replace as required (PL 9.3).
	6. Incorrect Corotron operation.	6A. Check / Clean or replace the Detack corotron as required (REP 9.9). 6B. Perform GP 1 Xerographic HVPS Checkout Procedure.
	7. Defective Drum	7. Replace drum
	8. Damaged Drum Drive Encoder	8. Replace the Drum Drive Motor (PL 9.1)

PQ 10 Deletions (in solid and halftone areas)

Table 1 Deletions (in solid and halftone areas) Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Bands of deletion in the solid or halftone areas in the print feed direction.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Exposure	2A. Clean the Image Bar. (REP 9.18). 2B. Enter [9-21-5] and check for correct operation. (Refer to BSD 6.1 and check for correct electrical connections to/ from the Receiver PWB and the LED Image Bar).
	3. Contaminated/ defective BTR	3. Clean/ replace BTR (PL 8.3)
	4. The surface of the Fuser Heat Roll or Pressure Roll is damaged.	4. Determine and fix the cause of the damage to the Rolls. Replace the rolls (REP 10.2, REP 10.8).
	5. Defective Developer, Drum or BTR drive.	5A. Ensure that the housing is latched securely. Check the magnetic roll for damage or binding. 5B. Check for correct operation of the drive system. Repair or replace Drive gears.
	6. Incorrect Detack Corotron operation	6. Perform GP 1, Xerographic HVPS Checkout Procedure.

PQ 11 Deletions (spots)

Table 1 Deletions (spots) Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Localized areas of deletion in the solid or halftone areas in the print feed direction.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Insufficient toner resulting in developer bead carryover (BCO).	2A. Perform Electrostatic Series (ADJ 9.2). 2B. Perform Image Density (ADJ 9.3).
	3. BTR contaminated or damaged.	3. Clean/ replace BTR or Spacing Rolls, (REP 9.22).
	4. Developer Housing	4A. Ensure that the housing is latched securely. 4B. Check the mag roll for damage or binding.
	5. The surface of the Fuser Heat Roll and/or Pressure Roll is damaged. Could also be caused by Incorrect Oiler operation.	5. Determine and correct the cause of the damage to the Rolls. Replace the Roll(s) (REP 10.2)
	6. Defective Drum	6. Replace the Drum (REP 9.3).
	7. Detack Corotron	7. Perform GP 1, Xerographic HVPS Checkout Procedure.

PQ 12 Finger Marks

Table 1 Finger Marks Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Toner marks on the lead edge or trail edge of the print.		
	1. Defective or dirty Detack Corotron	1A. Clean or replace the Corotron (PL 9.4). 1B. Perform GP 1, Xerographic HVPS Checkout Procedure.
	2. Cleaner Seal	2. Check / clean as required. (PL 9.5)
	3. Web Oiler	3. Check/ Replace the Web Oiler (REP 10.5).
	4. Turnaround Baffle	4. Ensure that the baffle is free of contamination (PL 8.2).
	5. Fuser Heat Roll	5. Check / replace (REP 10.2)
	6. Incorrect speed of paper feed.	6. Check for incorrect software revision level.

PQ 13 Light Image

Table 1 Light Image Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Image area of a print has low density.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Incorrect Image Module LED duty cycle	2. Perform Electrostatic Series (ADJ 9.2).
	3. Incorrect Corotron operation	3A. Perform Electrostatic Series (ADJ 9.2) 3B. Perform GP 1, Xerographic HVPS Checkout Procedure.
	4. Incorrect Image Density adjustment	4A. Perform Electrostatic Series (ADJ 9.2). 4B. Perform Image Density (ADJ 9.3).
	5. Contaminated BTR, damaged drive gears or poor electrical connection	5. Check/ clean/ repair BTR Slip Ring connection. Check/ replace drive gears (PL 9.2). Clean/ replace BTR (REP 9.22),
	6. Defective Drum ground.	6. Ensure that the Drum is correctly grounded.
	7. Defective Drum.	7. Replace the Drum (REP 9.3).
	8. Developer Housing	8. Ensure the housing is latched securely.

PQ 14 Misregistration

Table 1 Misregistration Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
The registration of the image on the prints is incorrect from top to bottom or side to side.		
	1. Incorrect registration adjustment	1. Adjust Lead Edge Registration (ADJ 8.2).
	2. Damaged or worn components in the media feeding area	2. Check the components for damage or wear.
	3. Defective Media Registration Sensor	3. Refer to BSD 8.1 and check the operation of the Media Registration Sensor. Replace the sensor if required (REP 8.8).
	4. Incorrect Registration Pinch Roll nip	4. Clean or replace the Registration Pinch Roll (PL 8.2).
	5. Incorrectly loaded media	5. Instruct the operator on loading the media correctly.
	6. Incorrect media cut	6. Check the squareness of the cut (ADJ 8.4).

PQ 15 Residual Image

Table 1 Residual Image Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
This is an image that is repeated on the same print or consecutive prints. The image can either be a ghosting of the original image or a toner image. The repeated image is usually spaced 10.38 inches (265 mm) from the original image.		
Perform Panic Stop / Image on Drum procedure (Section 6), and examine the Drum for the defect.	1. The Cleaner Blade makes poor contact with Drum.	1. Replace the Cleaner Blade (REP 9.4).
	2. Defective Erase Bar	2. Refer to BSD 9.6 and check the Erase Bar. Replace the lamp if necessary (PL 9.2).
	3. Contaminated Drum	3. Replace the Drum (REP 9.3).
	4. Incorrect vellum	

PQ 16 Skewed Image

Table 1 Skewed Image Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
The image is skewed to one side on the print because the media is skewed.		
	1. Media is not loaded correctly.	1. Load the media correctly and instruct the operator on loading the media correctly.
	2. Defective or contaminated rollers in the media feed area	2. Check the rollers and other components in the media feed area.
	3. Incorrect Registration Pinch Roll nip	3. Clean or replace the Registration Pinch Roll (PL 8.2).
	4. Obstruction in media path	4. Check media path.
	5. Incorrect media cut	5. Check the squareness of the cut (ADJ 8.4).

PQ 17 Smears

Table 1 Smears Symptom / Check

Symptom/ check	Location of Smear	Probable Cause	Corrective Action
Areas of the image on the print are blurred. This occurs at the image transfer area and is caused by a difference of speed between the Drum and the media.			
	20 - 25 mm from the **Lead Edge** of the print	Media Guides missing or incorrectly installed.	Check / replace (PL 9.4)
	Random smears	BTR Drive Gears worn, contaminated or broken.	Check and clean BTR Drive Gears. Replace if broken. (REP 9.22).
	106 - 126 mm from the **Lead Edge** of the print	Worn (smooth) Fuser Heat Roll (PL 10.2)	Check / replace (REP 10.2)
	140 - 160 mm from the **Trail Edge** of the print	Cutter Fuser Speed	Check for loose Cutter Drive Pulley, Shim / replace (PL 7.8) Perform ADJ 8.5.

PQ 17A Smudge

Table 1 Smudge Symptom / Check

Symptom/ check	Location of Smudge	Probable Cause	Corrective Action
A smudge is a displacement of the toner image on the Drum or the media.			
Perform GP 2, Image on Drum to determine if the Smudge occurs on the media or the Drum.	Media	Fuser Heat Roll	Check for a worn (smooth) Fuser Heat Roll. Replace (REP 10.2)
	Media	Pressure Roll	Check for a worn/ contaminated Pressure Roll. (REP 10.8)
	Media	Excessive media curl (smudge appears 100 mm from lead or trail edge)	Ask the customer to replace the media.
	Media	Detack Corotron	Check for contamination or signs of arcing. Clean / replace (PL 9.4)
Vellum Smudge is a special defect that exhibits marginal fusing fix. Toner can chip off of the media and horizontal lines are broken (image displacement).	Combination of Vellum beam strength and low Fuser Heat Roll drive force. (The media is flexible enough that it buckles during fusing. The toner then melts and partially sticks to the Fuser Heat Roll. The image is displaced in front of it's correct position. The toner can also become a clump on the media and easily chip off of the media.)		Replace the Fuser Heat Roll and/ or Pressure Roll (REP 10.2, REP 10.8).
	Drum	Mechanical interference with the image on the Drum	Check for interference.
	Drum	Buildup of developer material on the lower extrusion of the developer housing rubbing the developed image on the Drum.	Push excess developer material back into the housing.

PQ 18 Spots

Table 1 Spots Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Circular black spots on the print.		
Perform Panic Stop/Image on Drum procedure (GP 2), and examine the Drum for the defect.	1. Defective, damaged or contaminated Drum	1A. Wash the Drum (GP 3 Drum Maintenance) 1B. If the Drum is damaged, determine and fix the cause of the damage to the Drum. 1C. Replace the Drum (REP 9.3).
Repetitive spots	2. Contaminated Fuser Heat and/ or Pressure Roll	2. Clean or replace the Heat/ Pressure roll (REP 10.2, REP 10.8).
	3. Contaminated fuser thermistor	3. Clean the thermistor (PL 10.4).
Random spots	4. Contaminated Web Oiler	4A. Check/ replace Web Oiler (REP 10.5). 4B. Check/ adjust oil dispense rate [10-32] (Special Tests).
	5. Defective Photoreceptor Seal	5. Check / replace (PL 9.3).
	6. Charge scorotron	6. Clean or replace the scorotron (REP 9.8).

PQ 19 Uneven Density

Table 1 Uneven Density Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Density and line thickness vary across the print.		
	1. LED Image Bar Roller not touching Drum	1. Repair as necessary
	2. Contaminated LED Image Bar	2A. Check / clean the Image Bar. . 2B. Check / clean the Pressure Equalizer Tubes (PL 9.9) 2C. Check that the Toner Dust Trap, Tubes are not plugged. Replace as required (PL 9.10). 2D. Check/Replace the Toner Filter (PL 9.10).
	3. Bent or bowed Charge Scorotron screen	3. Replace Charge Scorotron
	4. Drum installed incorrectly	4. Ensure the Serial number Label is located to the non drive side of the assembly (see REP 9.3)
	5. Contaminated/ damaged BTR	5. Clean/ replace BTR or Spacing Rollers (PL 8.3)
	6. Developer mag brush not contacting the Drum evenly.	6A. Clean Drum ends and the Spacer Rolls on the Developer Housing (PL 9.10). 6B. Ensure that the housing is latched securely.
	7. Machine level	7. Check the level of the machine. (See Installation Procedure in Section 6.
	8. Incorrect Corotron operation	8A. Perform Electrostatic Series (ADJ 9.2) 8B. Perform GP 1, Xerographic HVPS Checkout Procedure.
	9. Defective Drum	9. Clean or replace the Drum (REP 9.3).

PQ 20 Unfused Prints

Table 1 Unfused Prints Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Characters and image are easily rubbed off a print.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Incorrect fuser temperature	2. Adjust the fuser temperature (ADJ 10.1).
	3. Incorrect pressure applied to Fuser Pressure Roll	3. Check pressure springs for damage or deformation. Replace as required (PL 10.4).
	4. Defective Fuser Heat Roll	4. Replace the Fuser Heat Roll (REP 10.2)
	5. Defective Fuser Pressure Roll.	5. Replace the Pressure Roll (REP 10.8).

PQ 21 Wrinkle/Crease

Table 1 Wrinkle Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
This is damage that is probably caused by the fuser subsystem. This is a severe case of creases that runs in the direction of media travel.		
	1. Damp media	1A. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the Paper heaters. 1B. Ensure that the Customer is storing the media correctly.
	2. Damaged or contaminated pinch rolls	2. Clean / replace the pinch rolls (REP 7.3).
	3. Damaged or contaminated Fuser Heat Roll	3. Clean / replace the Fuser Heat Roll (REP 10.2).
	4. Incorrect pressure applied to Fuser Pressure Roll	4. Check pressure springs for damage or deformation. Replace as required (REP 10.4)
	5. Incorrect fuser temperature	5. Adjust Fuser Temperature (ADJ 10.1).
	6. Registration Rolls misaligned.	6. Replace the rolls as required (PL 8.2).
	7. Exit Rolls damaged or misaligned	7. Replace the Exit Rolls (PL 10.4)

PQ 22 Offsetting

Table 1 Offsetting Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Offsetting is the result of toner adhering to the Fuser Heat Roll and transferring to subsequent prints.		
	1. There is insufficient fuser oil on the Fuser Heat Roll.	1A. Check/replace the Web Oiler (REP 10.7). 1B. Check/adjust oil dispense rate [10-32].
	2. The fuser temperature is out of specification.	2. Check Fuser Temperature (ADJ 10.1).
	3. Incorrect pressure applied to Fuser Pressure Roll	3. Check pressure springs for damage or deformation. Replace as required (REP 10.4)
	4. Media is damp.	4A. Ensure that the media is stored correctly. 4B. Refer to BSD 7.1 and BSD 7.3 to check for correct operation of the paper heaters.
	5. Damaged or contaminated Fuser Heat Roll	5. Clean or replace the Fuser Heat Roll (REP 10.2).
	6. Damaged or contaminated Pressure Roll	6. Clean or replace the Pressure Roll (REP 10.8).

PQ 23 Verticle Magnification

Table 1 Verticle Magnificationg Symptom / Check

Symptom/ check	Probable Cause	Corrective Action
Magnification in the process direction (verticle) is incorrect.		
	Incorrect verticle magnification adjustment	Adjust the Verticle magnification (ADJ 8.1) and the Fuser Speed Adjustment (ADJ 8.5)
	Drum Motor Encoder is installed incorrectly or is not operating correctly.	Check/Repair the Encoder (REP 9.23).
	Drum Motor Cover is interferring with the Encoder shaft.	Remove the Cover and shim the cover away from the Encoder shaft using washers on the mounting screws between the cover and the housing.

4 Repairs and Adjustments

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REP 3.1 Main PWB (A3)

Parts List on PL 1.1

WARNING

Switch off the Controller and the Printer Main Power Switches. Disconnect the Printer Power Cord.

CAUTION

Electrostatic Discharge Damage (ESD) may occur. Use ESD procedures and Antistatic Wrist Strap to avoid damage to PWBs or components.

Removal

1. Attach a Static Wrist Strap between your wrist and the unpainted metal chassis of the Controller.
2. (Figure 1): Remove the Controller or (Figure 2): Remove the P193 Interface Cover.

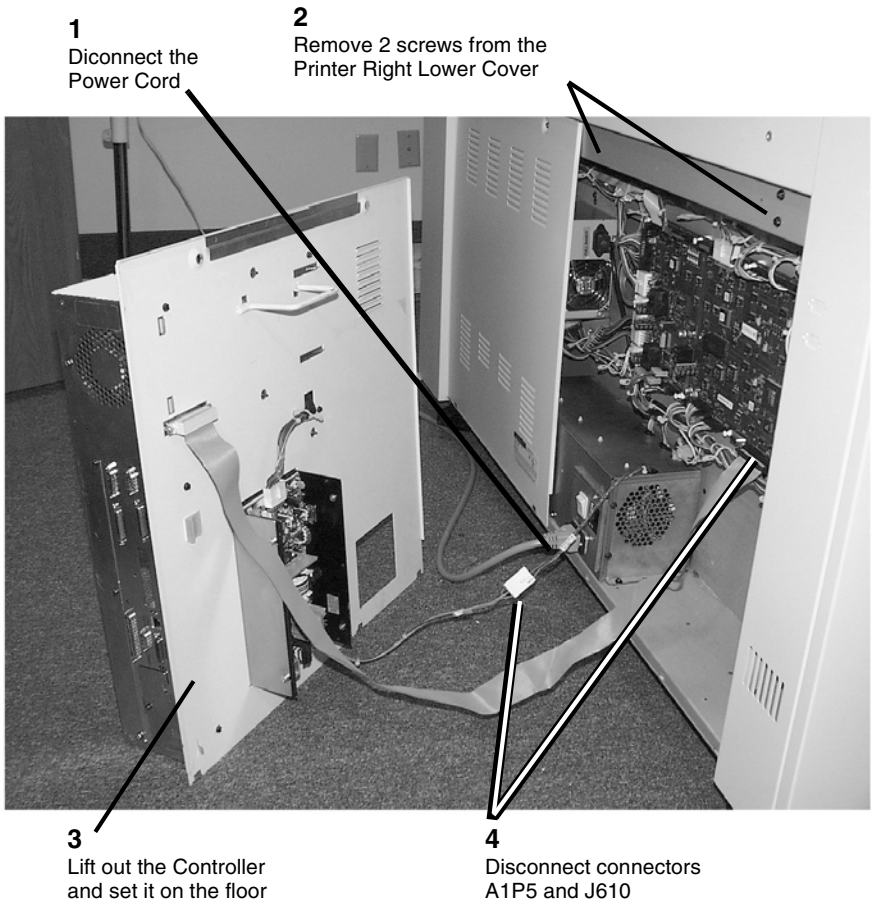

Figure 1 (8850) Removing the Controller

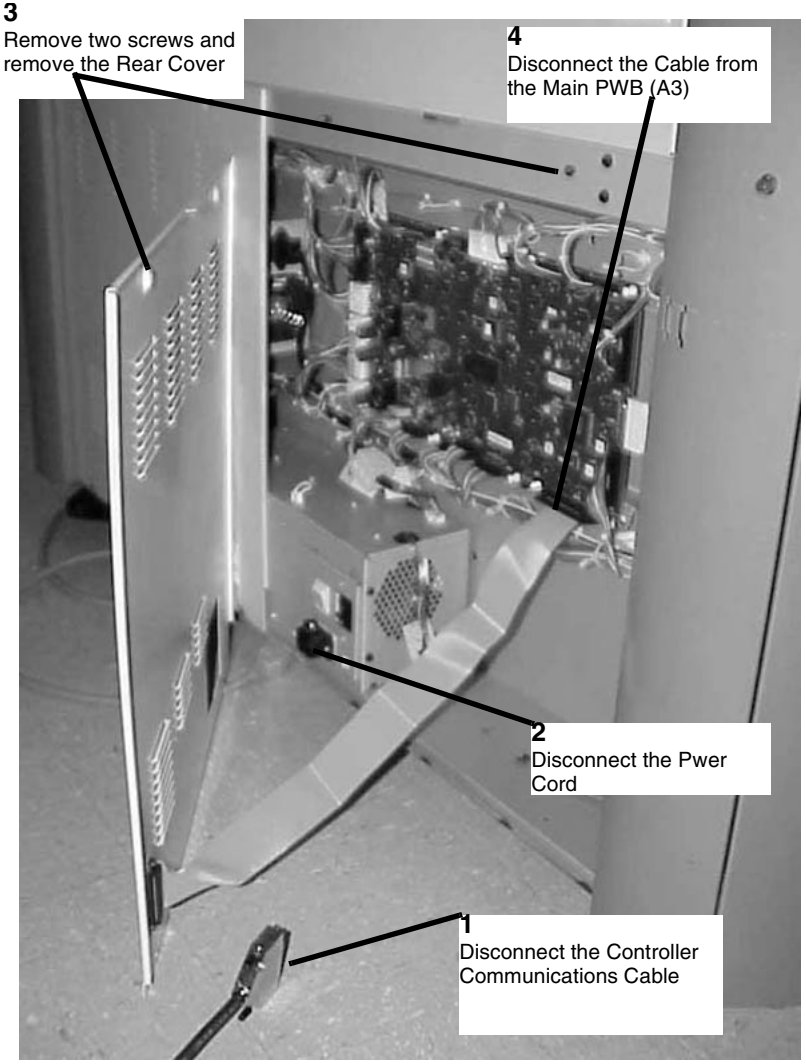

Figure 2 Remove the Rear Cover

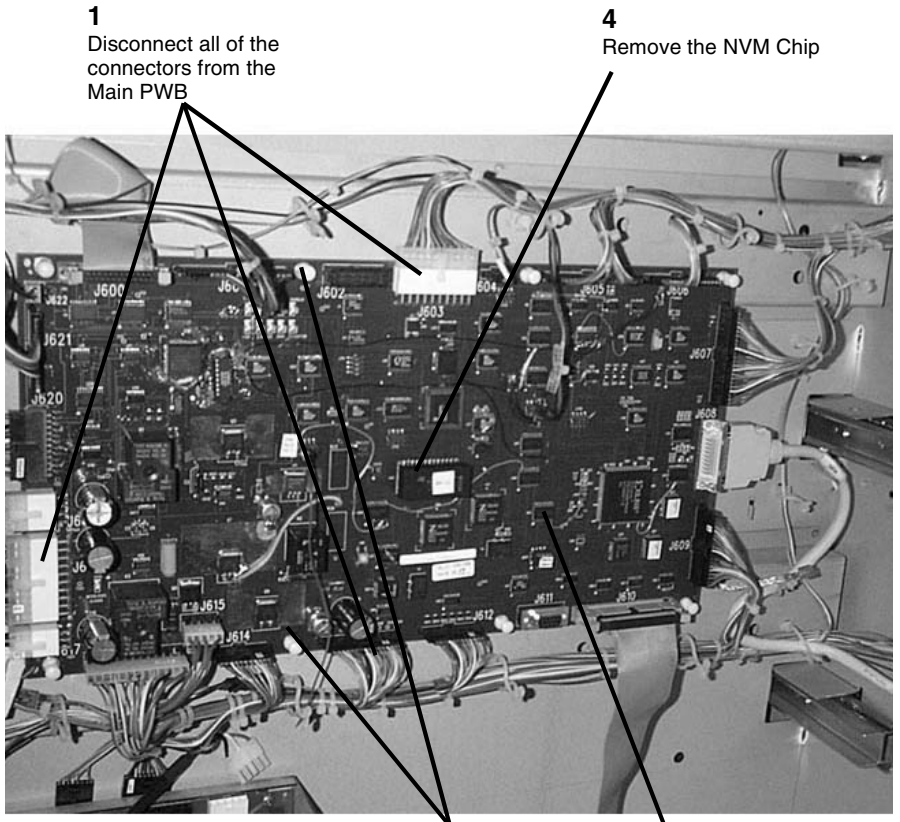

Figure 3 Removing the Main PWB (A3)

3. (Figure 3): Remove the Main PWB.(A3)

Replacement

1. Install the new Main PWB (A3) over the 8 standoffs. (Press down each plastic fastener to secure the Main PWB.)
2. Connect the connectors and the ground connector to the Main PWB.
3. Replace the NVM Chip on the new Main PWB with the NVM Chip removed from the old Main PWB.
4. Check the Xerox Technical Service Bulletins (TSBs) or current bulletins to determine the current version of software to be installed on the Main PWB.
5. Check the version of the firmware that is currently loaded onto the newly installed Main PWB by performing the following:
   a. Connect the Printer Power Cord.
   b. Hold down the 0 (zero) button on the Printer Control Panel and switch on the Printer. Continue to hold down the 0 button until the Control Panel has emitted two beeps;. The printer is now in the Diagnostic Mode.
   c. Observe the Printer Control Panel Display during the power-up sequence:
      - If the firmware version IS NOT the current version, download the latest software.
      - If the firmware version IS the current version, switch off the printer and continue on with this procedure.
6. Connect Connectors 608A and A1P5.
7. Reinstall the Controller.
8. While holding down the 0 key on the Printer Control Panel, switch on the printer and the controller. Continue to hold down the key until two beeps are heard.
9. Enter the diagnostic code Chain 09 Test 55, and select Plot 5. A test print should be generated.
10. Enter the diagnostic code Chain 03 Test 00 to leave the Diagnostic Mode and resume normal operation.
11. (510dp): Reinstall the Print Speed and Drawer Options Feature Keys if any speed or drawer options are pressent.

REP 3.2 Xerographic High Voltage Power Supply (HVPS 1)

Parts List on PL 1.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.

CAUTION

Do not handle the HVPS using the Daughter PWB. the Daughter PWB may pull out of it's connector damaging the Daughter and/or the HVPS. Handle the HVPS using the Relay Cases.

2. (Figure 1): Remove the Xerographic High Voltage Power Supply.

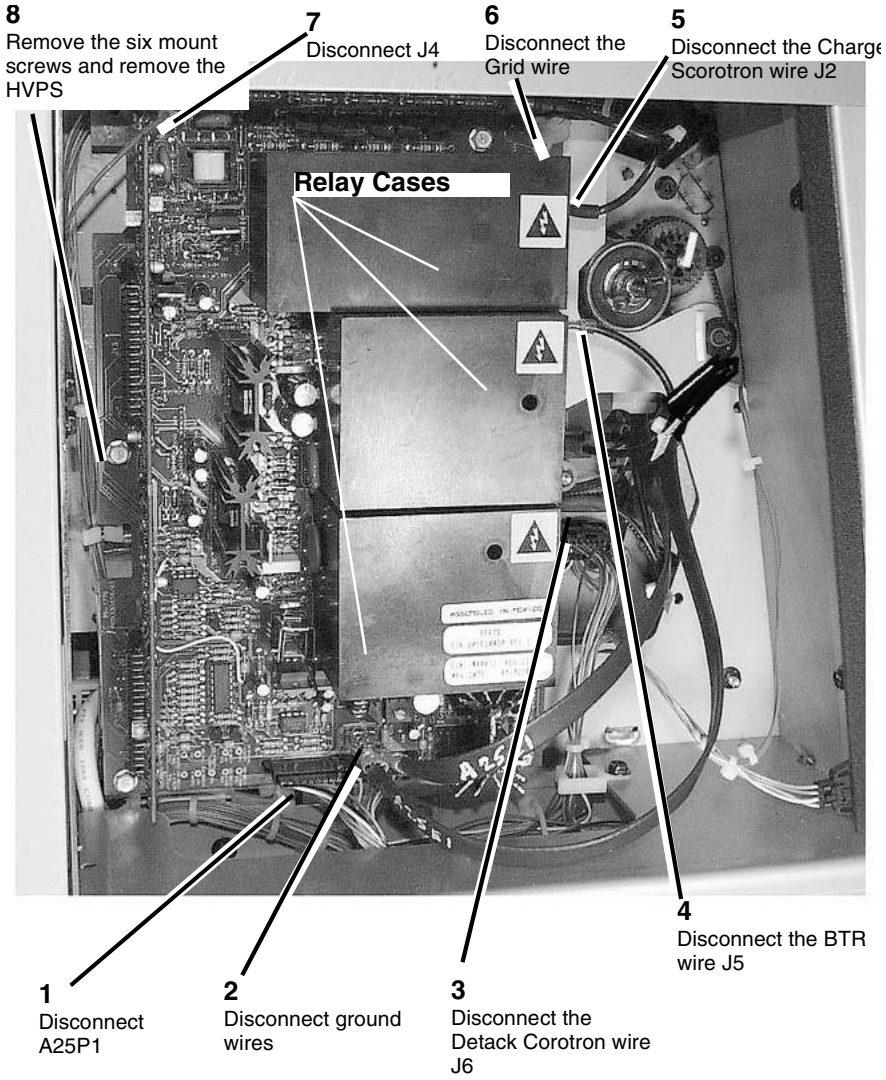

Figure 1 Removing the Xerographic High Voltage Power Supply

Replacement

1. Replacement is the reverse of the Removal procedure.

   NOTE: *(FIgure 1): Ensure that the Developer Harness, located at the upper left corner of the Xerographic HVPS, is not pinched by the mount screw upon reinstalling the HVPS.*

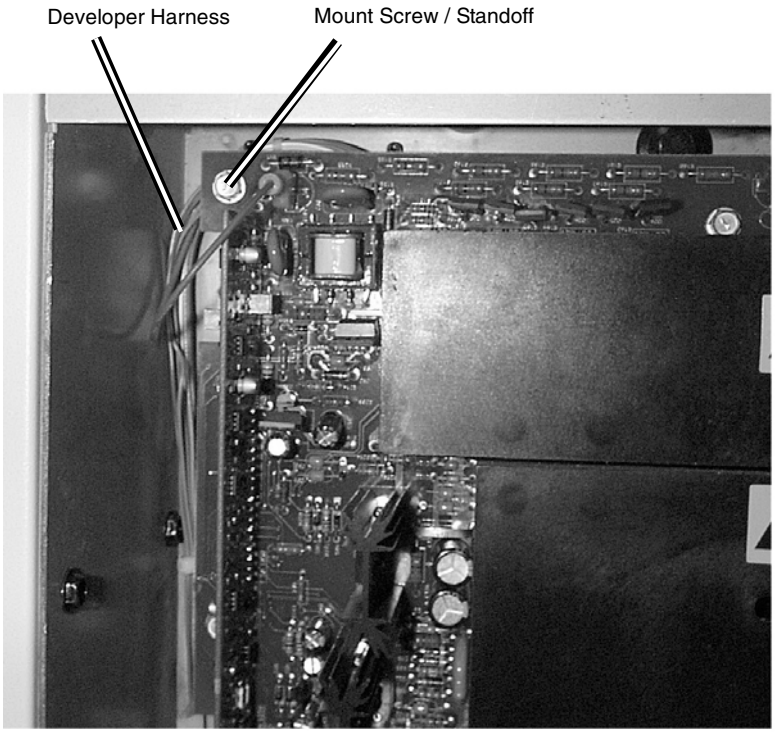

Figure 2 Reinstalling the Xerographic HVPS

2. If a new Xerographic High Voltage Power Supply is being installed, perform the Electrostatic Series ADJ 9.2.

REP 3.3 SPS 510dp Control Panel

Parts List on PL 1.4

Removal

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

1. Raise the Top Cover.
2. (Figure 1) : Remove the Control Panel

   NOTE: *Hold on to the Control Panel before removing the last screw.*

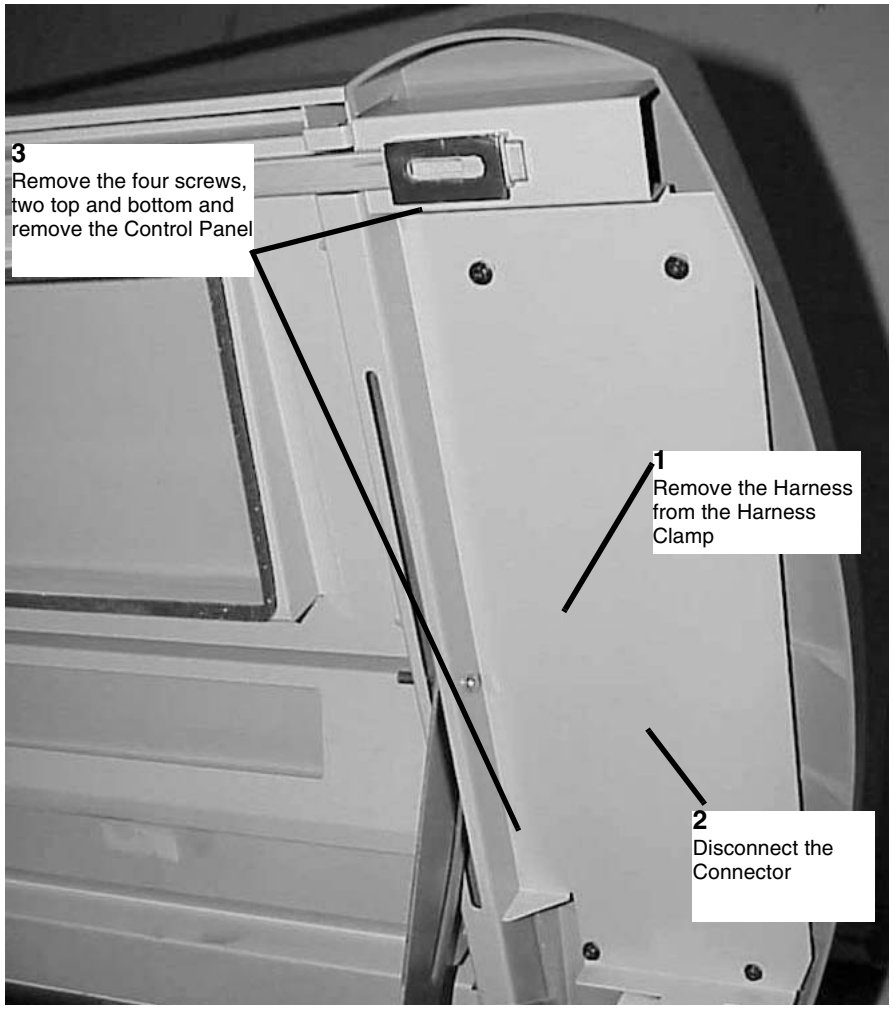

Figure 1 Preparing to Remove the Control Panel Panel

Replacement

The replacement is the reverse of the removal.

REP 7.1 Roll Media Supply Drawer

Parts List on PL 7.1

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *(510dp): Drawers 2 and 3 are optional and Drawer 2 must also be installed in order to have Drawer 3.*

1. Open the Roll Media Supply Drawer that is to be removed.
2. (Figure 1): Remove the Cover.

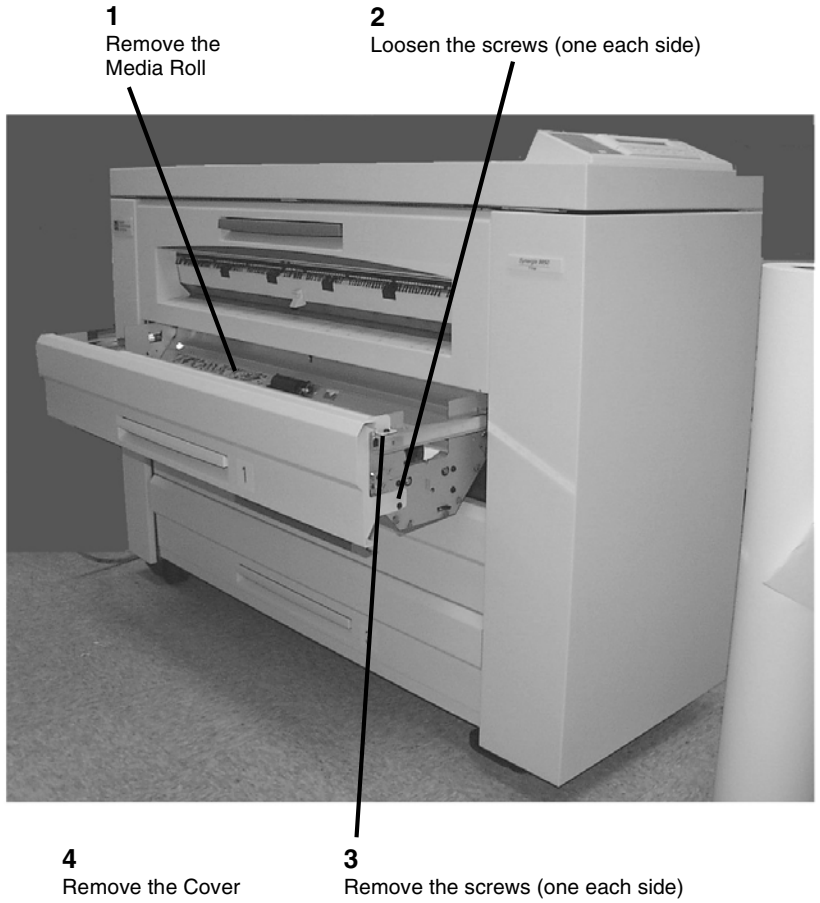

Figure 1 Removing the Cover

3. (Figure 2): Remove the Roll Media Supply Drawer.

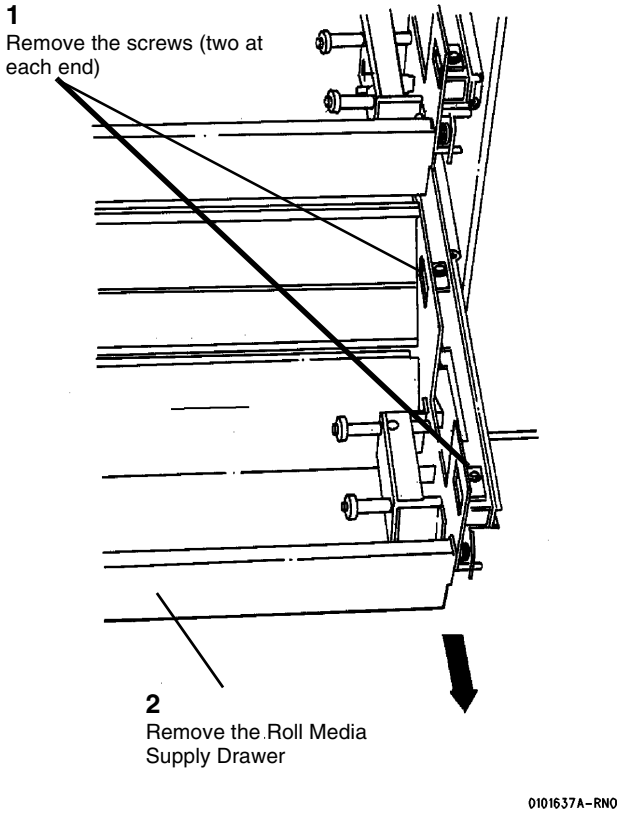

Figure 2 Removing the Roll Media Supply Drawer

REP 7.2 Rewind Gear and Rewind Internal Gear

Parts List on PL 7.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *All three Rewind Gears and Rewind Internal Gear Assemblies are removed the same way.*

Removal

1. Pull out the Roll Media Supply Drawer.
2. Remove the roll of media.
3. (Figure 1): Remove the Rewind Gear and the Rewind Internal Gear.

REP 7.3 Roll Feed Pinch Rolls

Parts List on PL 7.5

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *All three Roll Feed Pinch Roll Assemblies are removed the same way.*

Removal

1. Open the Roll Media Supply Drawer.
2. (Figure 1): Remove the Roll Feed Pinch Rolls.

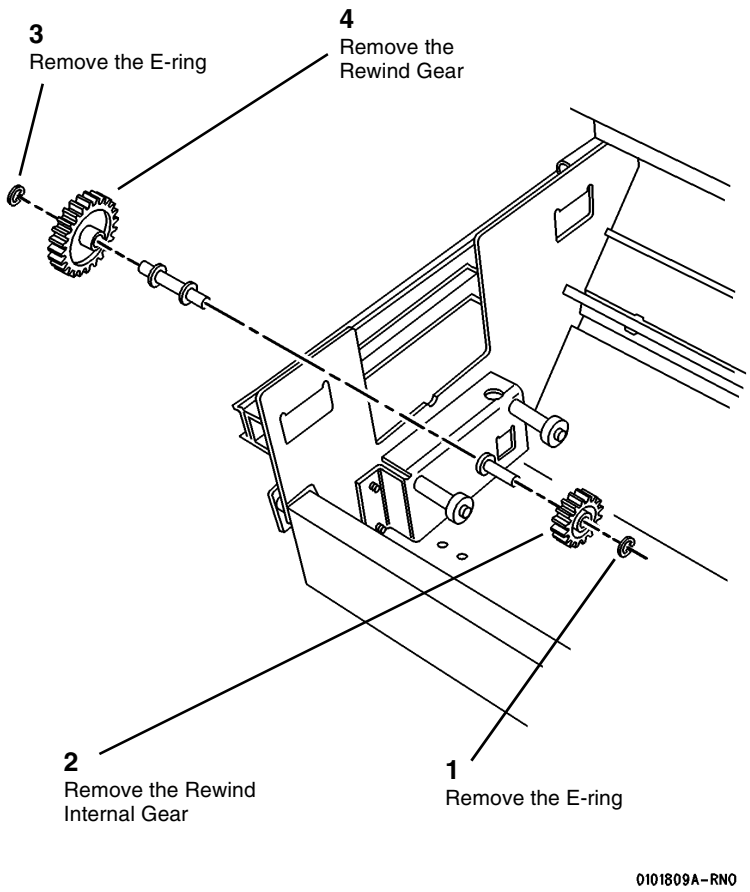

Figure 1 Removing the Rewind Gears

REP 7.4 Roll Feed Drive Roll

Parts List on PL 7.1

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *All three Roll Feed Drive Roll assemblies are removed the same way.*

Removal

1. Remove the appropriate Roll Media Supply Drawer (REP 7.1).
2. Remove the Feed Clutch (REP 7.5).
3. Remove the Toner Waste Container.
4. (Figure 1): Remove the Roll Feed Drive Roll.

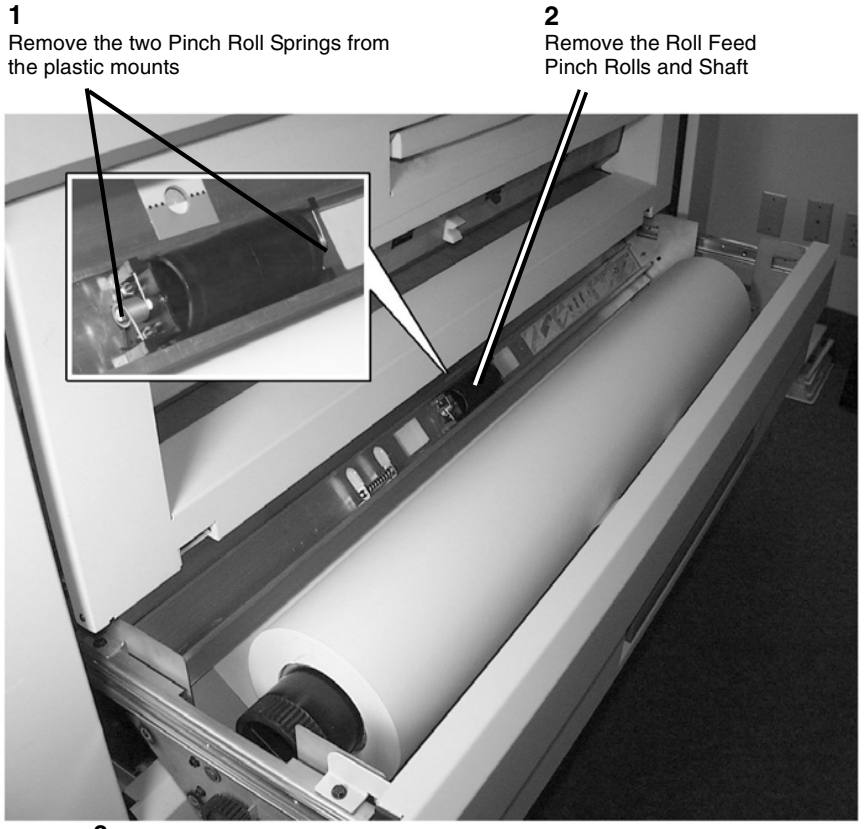

Figure 1 Removing the Roll Feed Pinch Rolls

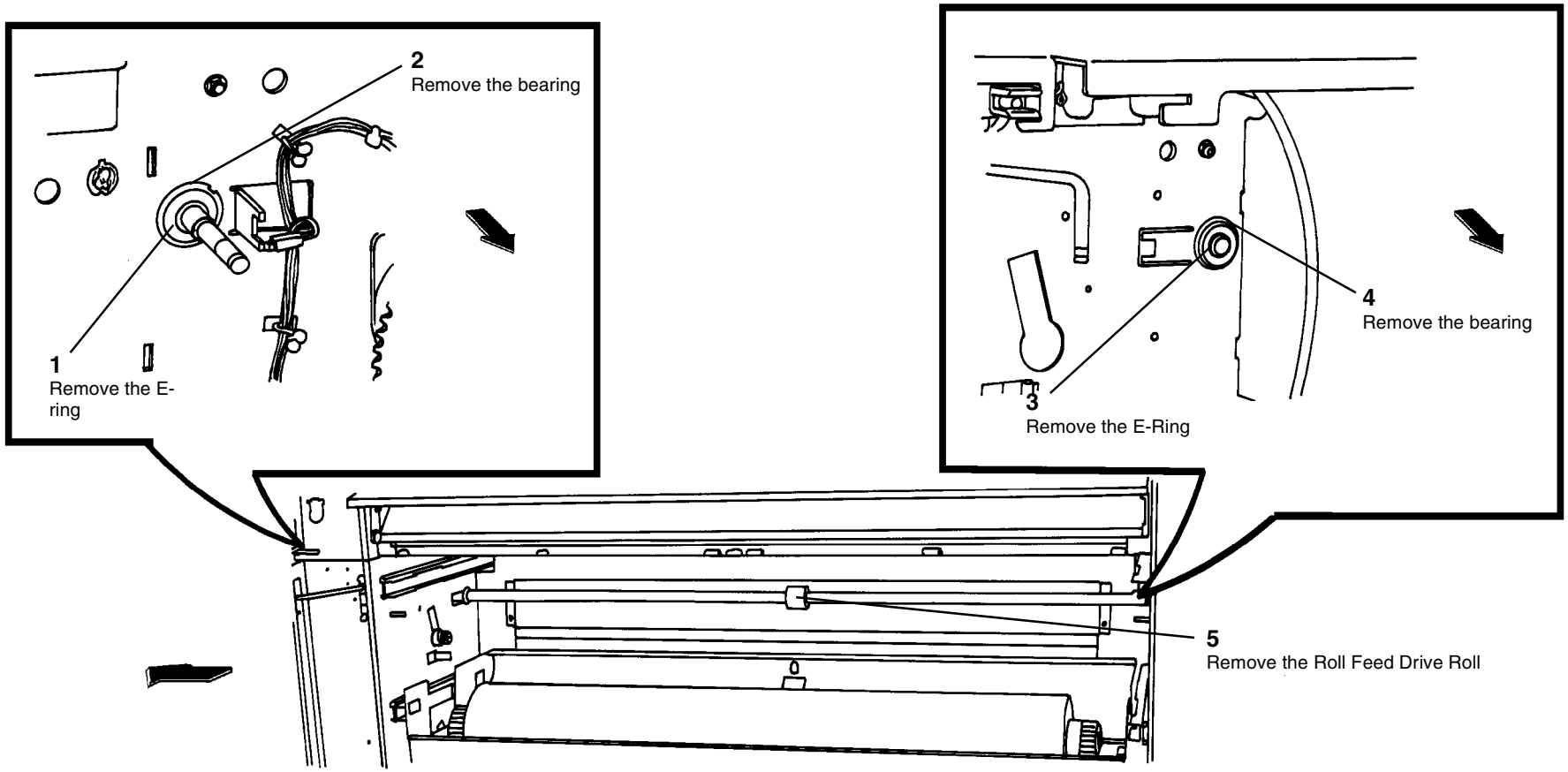

Figure 1 Removing the Roll Feed Drive Roll

REP 7.5 Feed Clutch

Parts List on PL 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. (Figure 1): Remove the Feed Clutch.

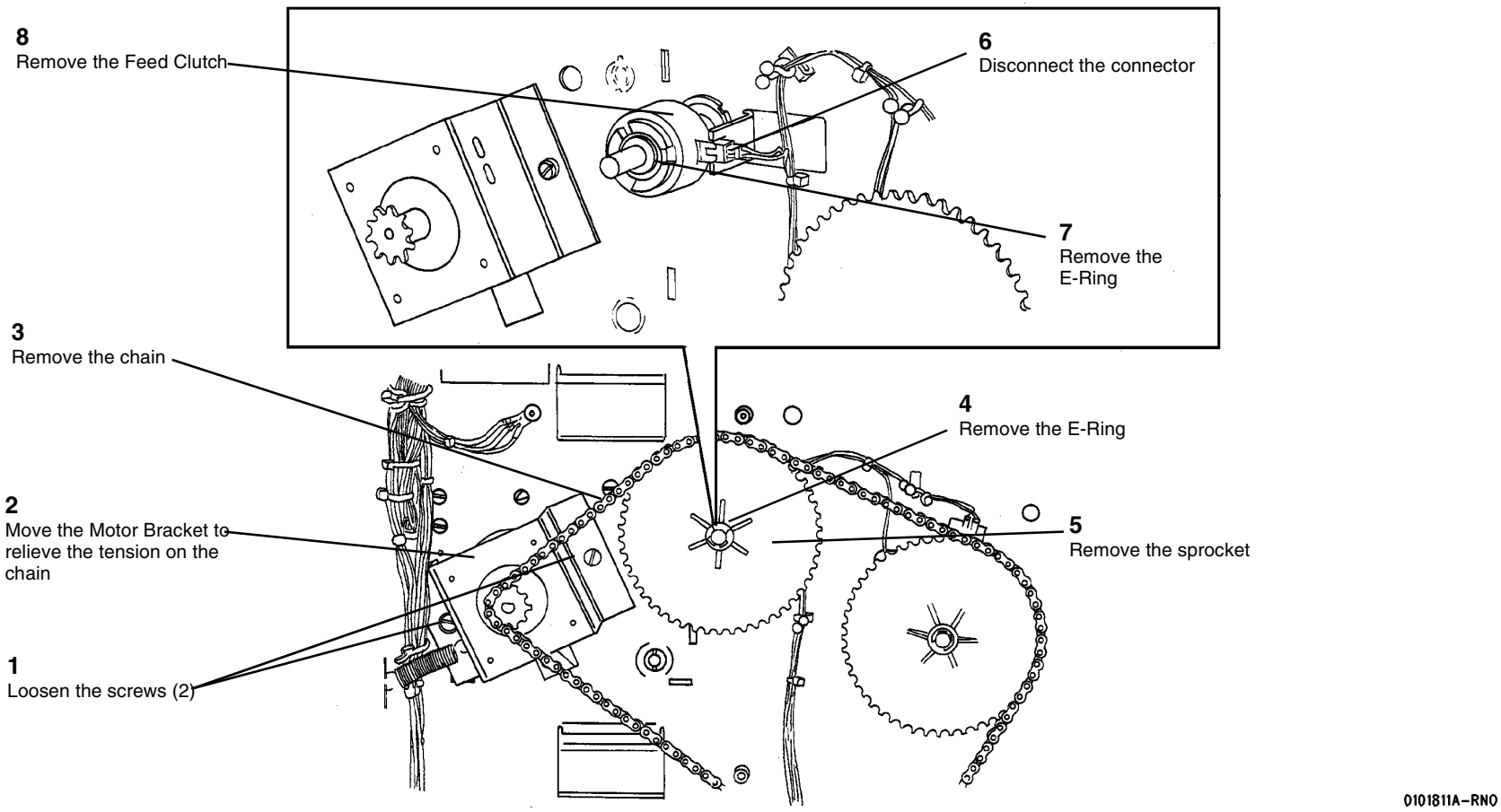

Figure 1 Removing the Feed Clutch

REP 7.6 Rewind Clutch

Parts List on PL 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. (Figure 1): Remove the Rewind Clutch.

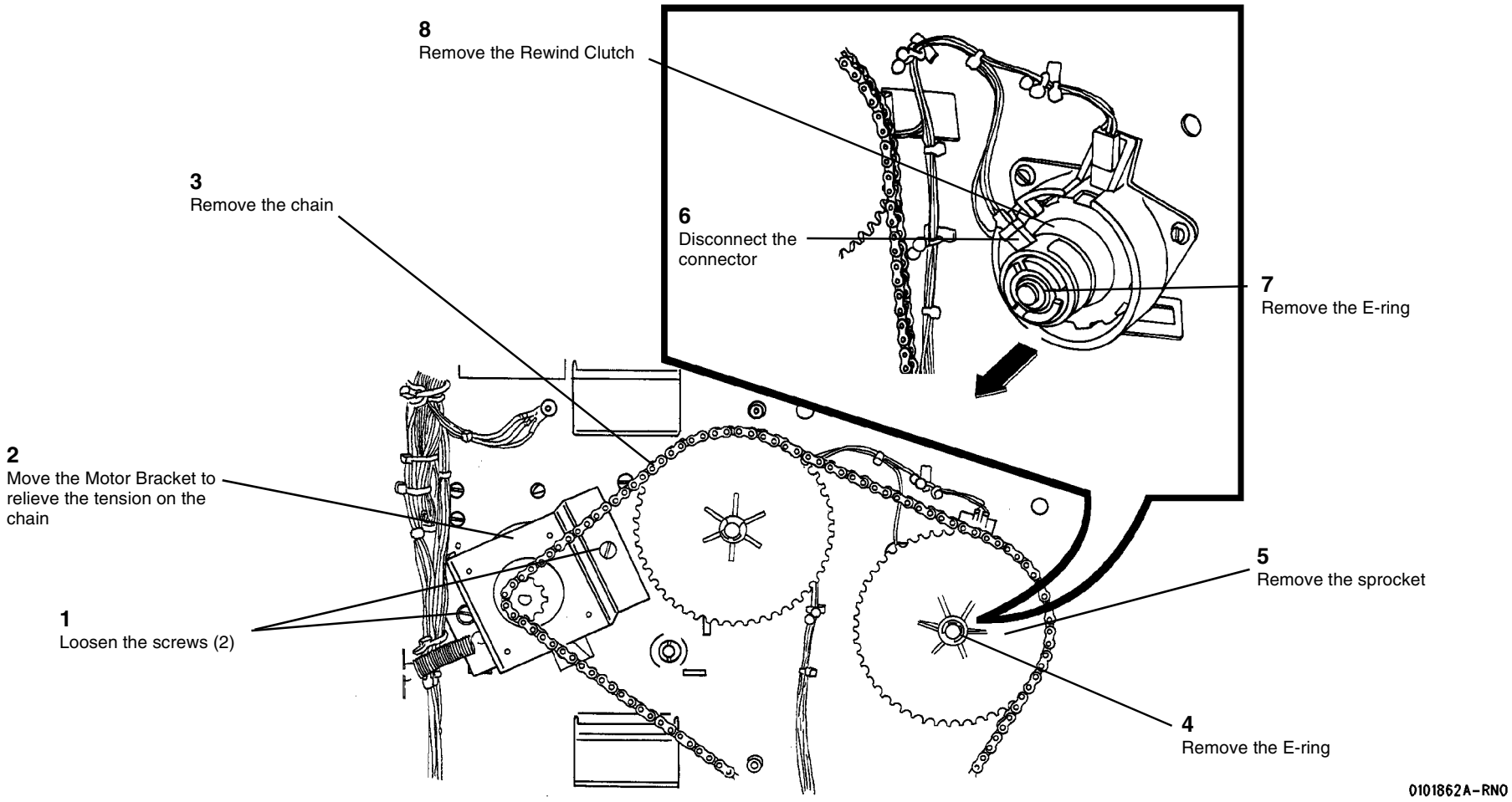

Figure 1 Removing the Rewind Clutch

REP 7.7 Motion Sensor

Parts List on 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. Remove the Rewind Clutch (REP 7.6).
3. (Figure 1): Remove the Motion Sensor.

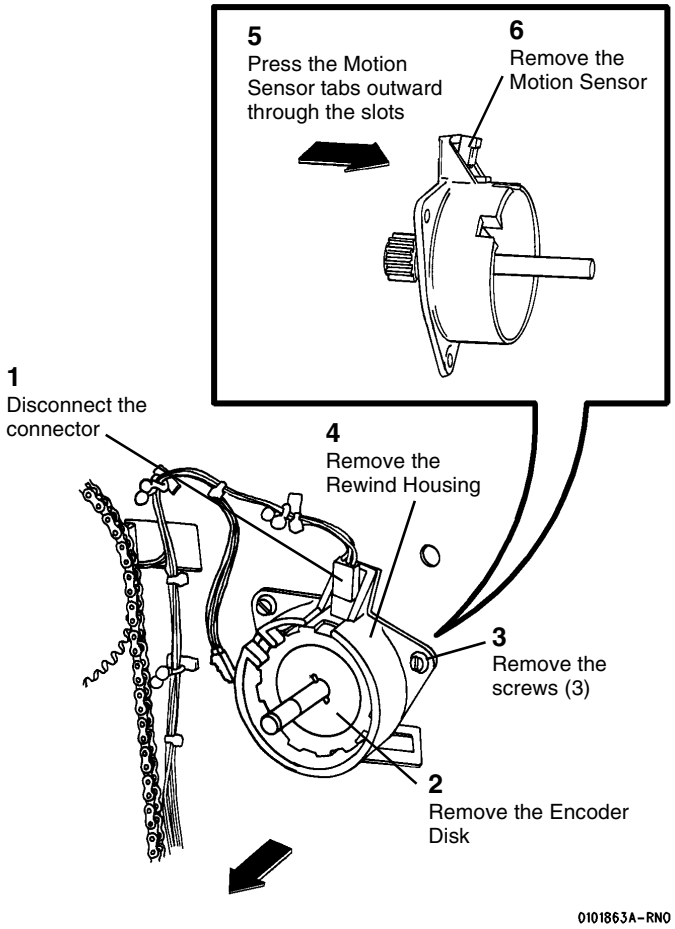

Figure 1 Removing the Motion Sensor

Replacement

1. Reinstall the Motion Sensor and the Rewind Housing.
2. (Figure 2): Reinstall the Encoder Disk.

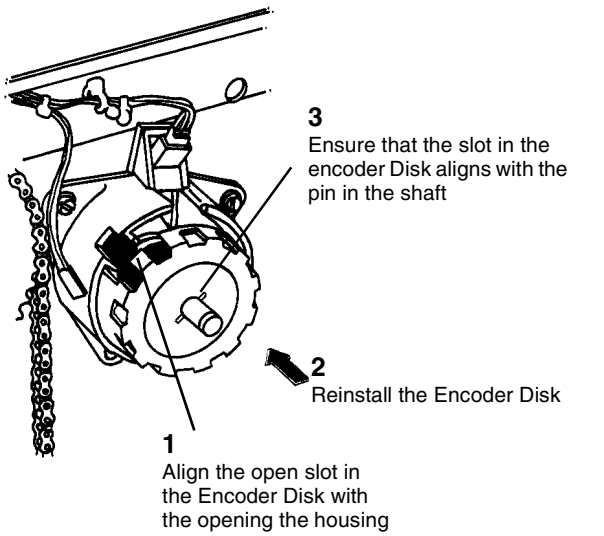

Figure 2 Reinstalling the Encoder Disk

REP 7.9 Roll Drive Motor

Parts List on PL 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. (Figure 1): Remove the Roll Drive Motor Assembly.

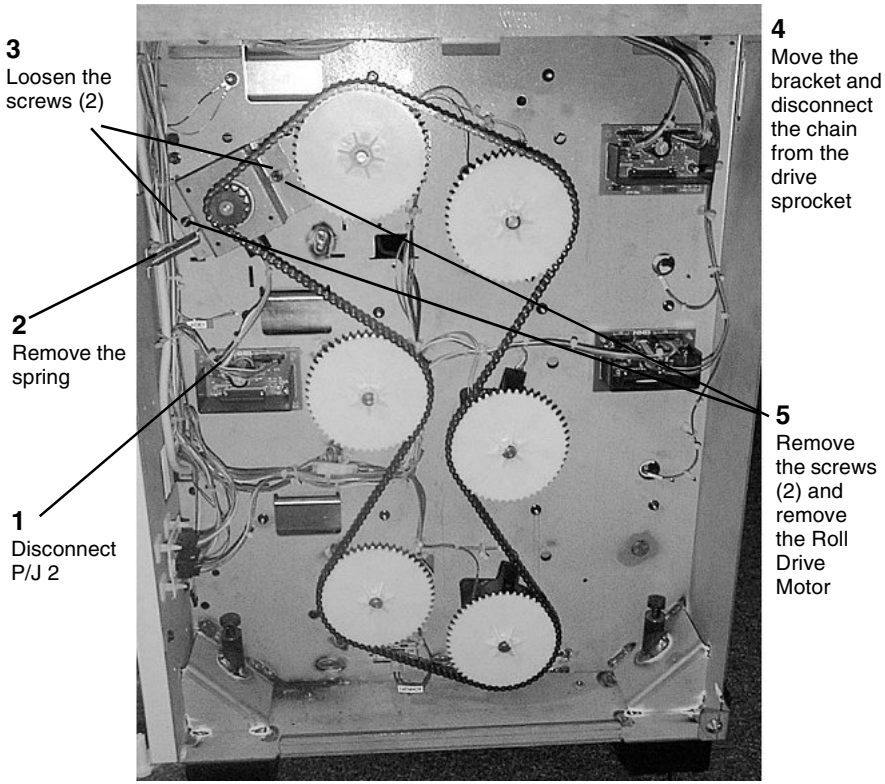

Figure 1 Removing the Roll Drive Assembly

3. (Figure 2): Remove the bracket from the Roll Drive Motor.

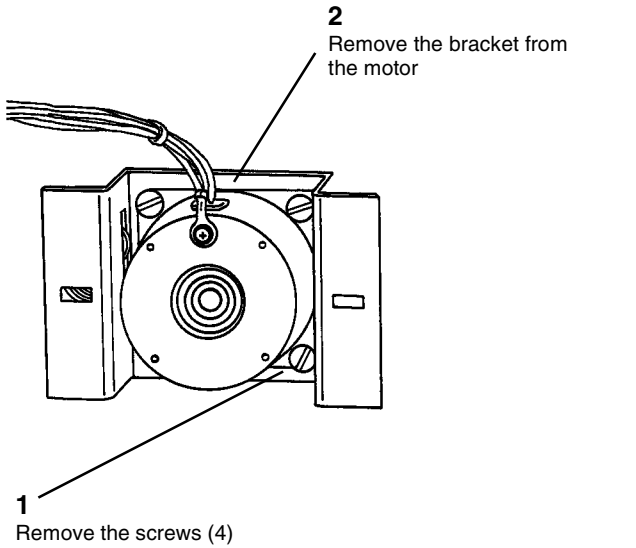

Figure 2 Removing the Roll Drive Motor Bracket

Replacement

After installing the Roll Drive Motor, **W/O Tag 11**, allow the spring to adjust the chain tension then tighten the screws. 8850 W/Tag 11 and 510dp, adjust the Media Roll Drive Chain (ADJ 7.1)

REP 7.10 Lower Media Roll Heater

Parts List on PL 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. (Figure 1): Remove the Lower Media Roll Heater.

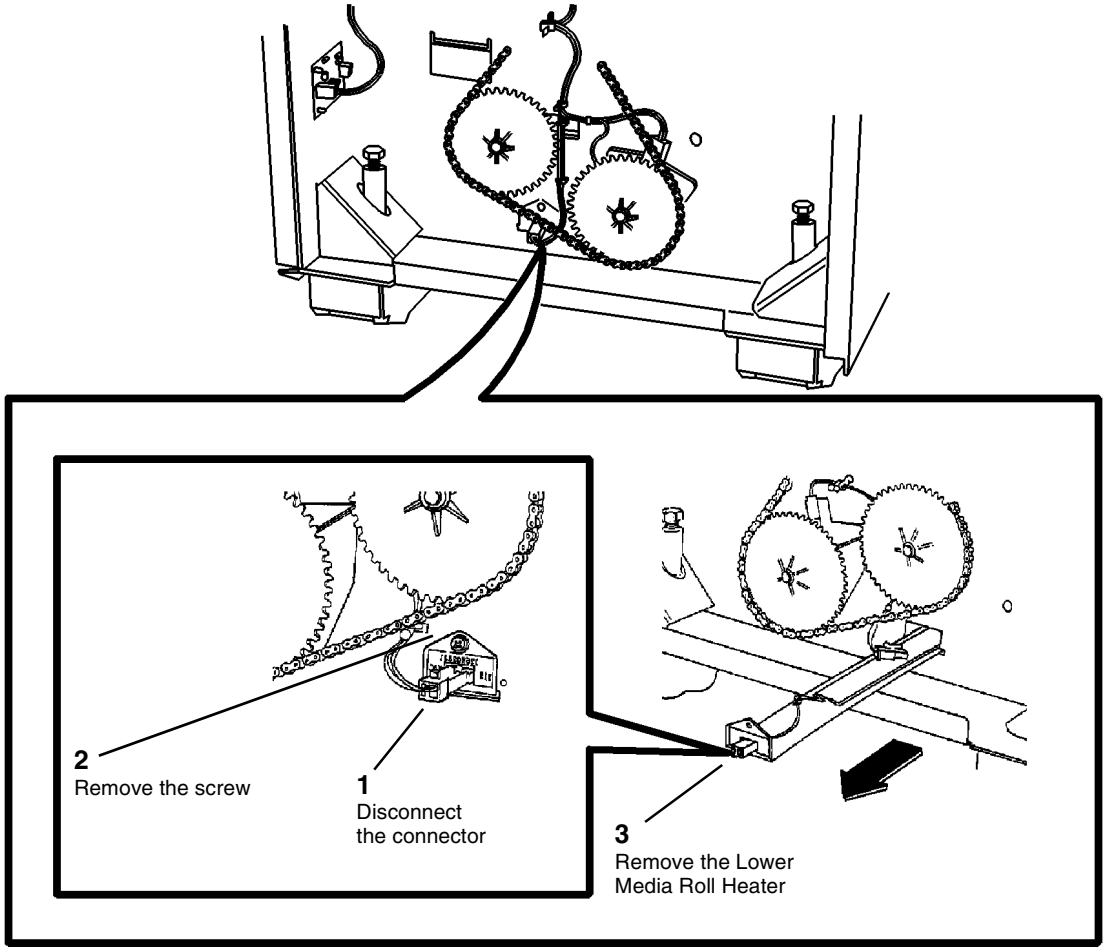

Figure 1 Removing the Lower Media Roll Heater

REP 7.11 Upper Media Roll Heater

Parts List on PL 7.1

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove Roll Media Supply Drawer 1 (REP 7.1).

CAUTION

Be sure to support the Media Roll Heater/Guard with your hand while removing the mounting screws in the next step.

2. (Figure 1): Remove the Upper Media Roll Heater.

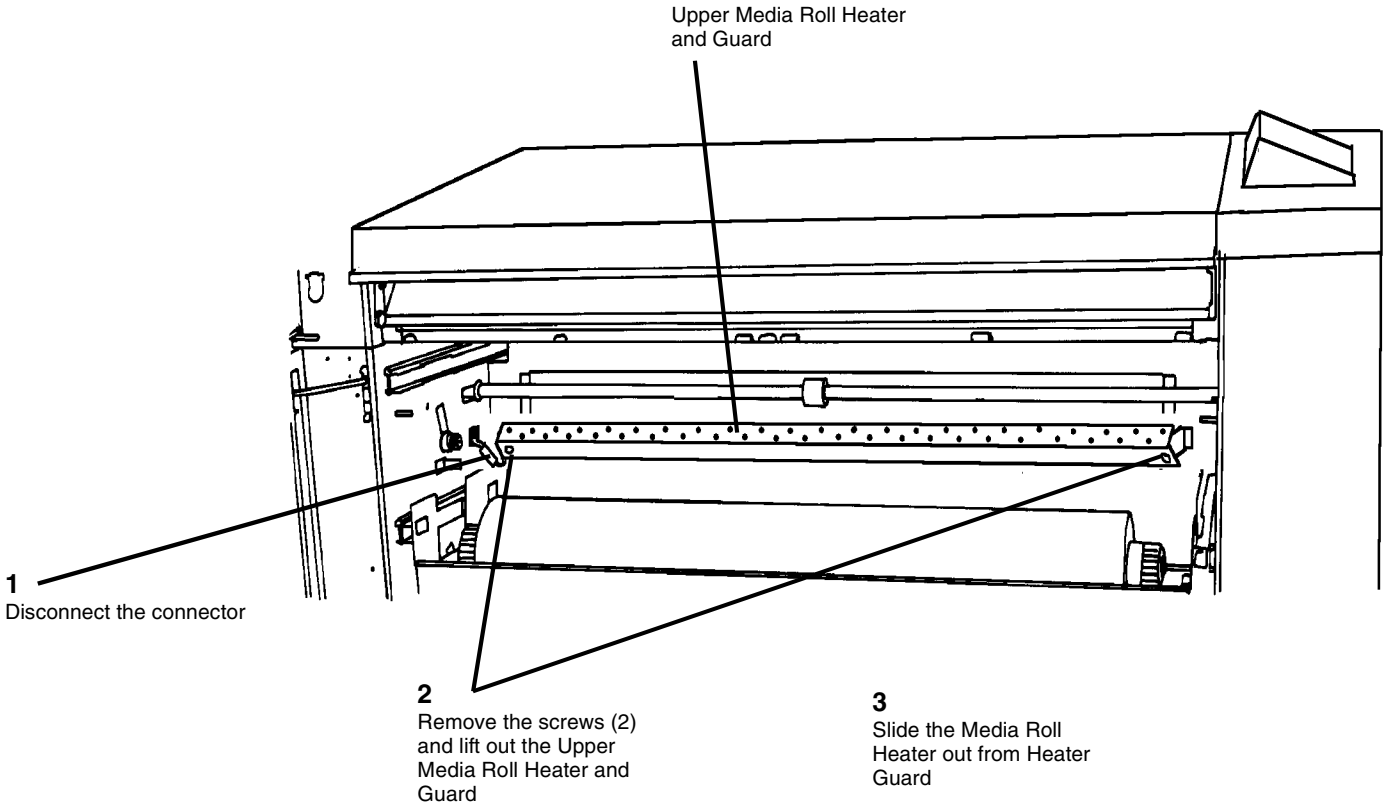

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Figure 1 Removing the Upper Media Roll Heater

REP 7.12 Encoder Disk

Parts List on PL 7.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Door.
2. Remove the Rewind Clutch (REP 7.6).
3. (Figure 1): Remove the Encoder Disk.

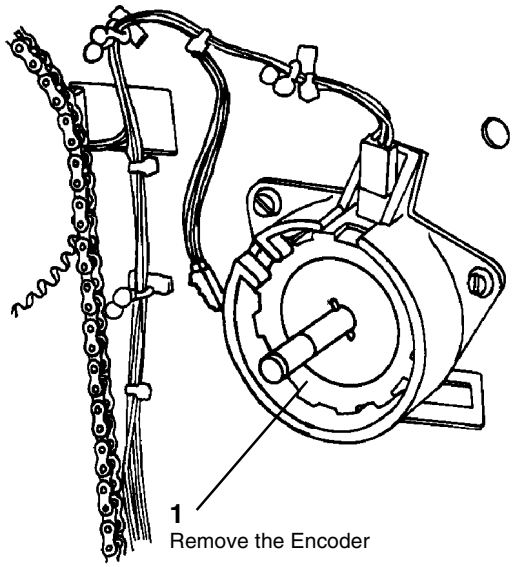

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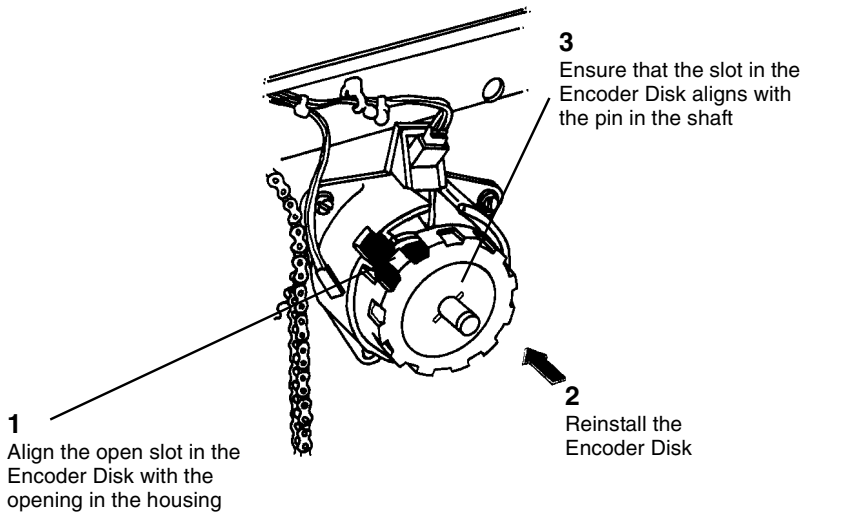
Figure 1 Removing the Encoder Disk

Replacement

1. Reinstall the Motion Sensor and the Rewind Housing.
2. (Figure 2): Reinstall the Encoder Disk.



0101865A-RNO

Figure 2 Reinstalling the Encoder Disk

REP 7.14 Sheet Feed Pinch Rolls

Parts List on PL 10.6

Removal

NOTE: *In the following steps, the terms "left" and "right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side of the Printer.*

1. (Figure 1): Access the Fuser Module.

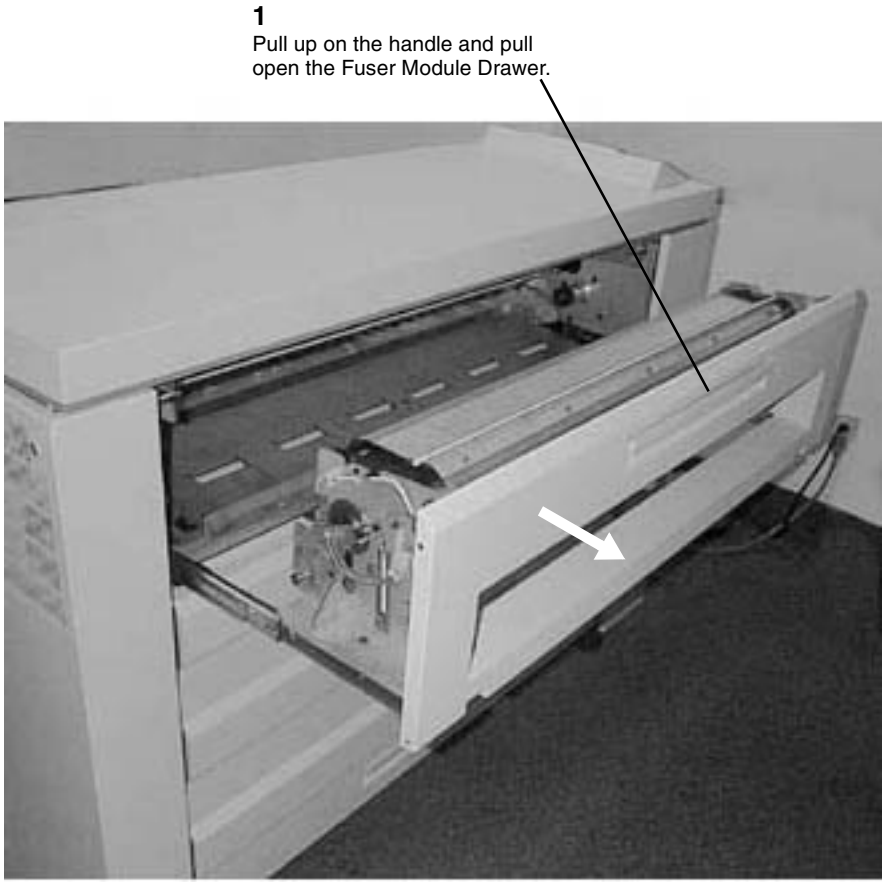


Figure 1 Accessing the Fuser Module

2. (Figure 2) Prepare to remove the Upper Sheet Feed Housing from the Fuser.

NOTE: *Place your hand under the area where the screws will be removed to support the Upper Sheet Feed Housing. This will prevent it from falling off the fuser.*

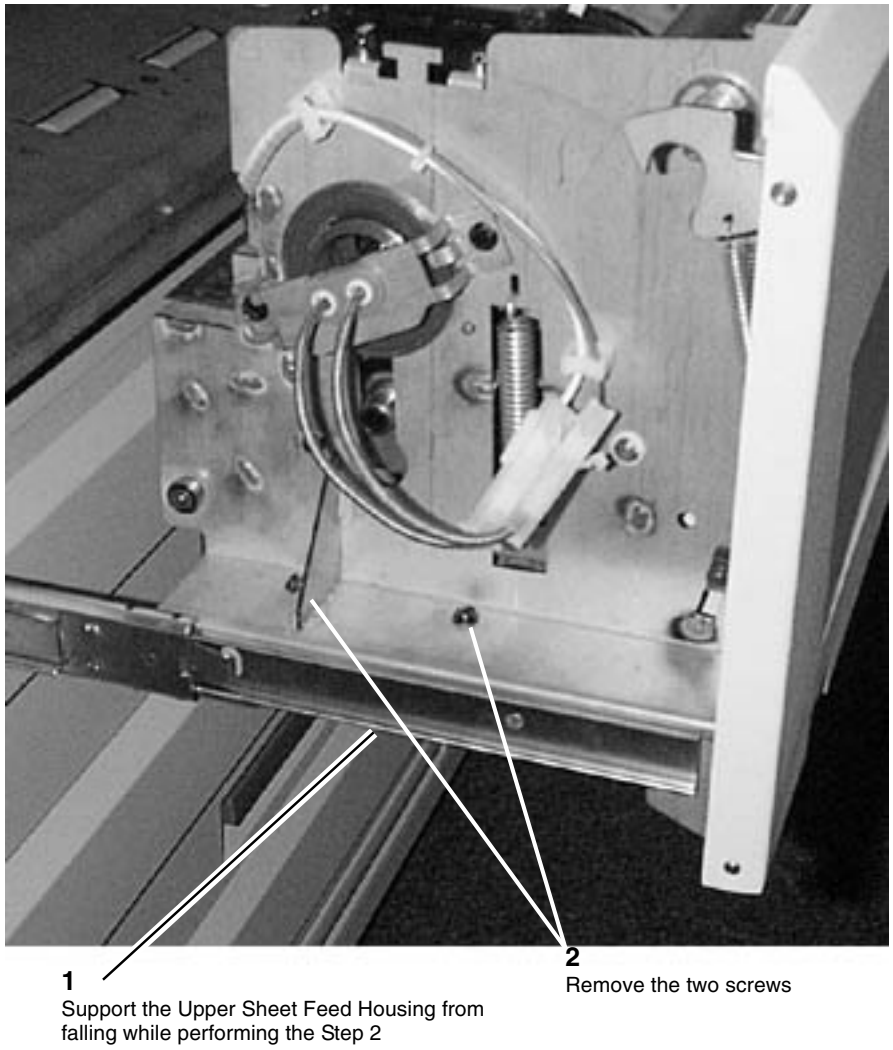
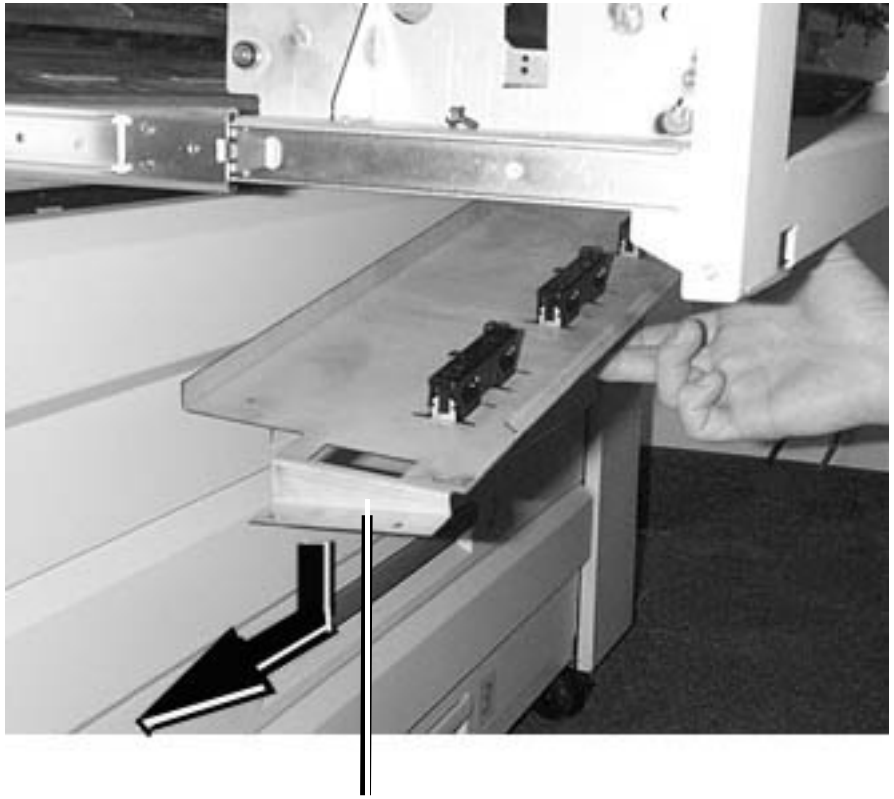


Figure 2 Preparing to Remove the Upper Sheet Feed Housing

3. (Figure 3): Remove the Upper Sheet Feed Housing.



1
Lower the Upper Sheet Feed Housing and pull to the left to remove the tabs from the right side frame

Figure 3 Removing the Upper Sheet Feed Housing

4. (Figure 4): Remove the Pinch Roll Cover

NOTE: *Be careful not to lose the spring when removing the Cover*

2
Remove the Cover

1
Release the Tabs on each side of the Cover

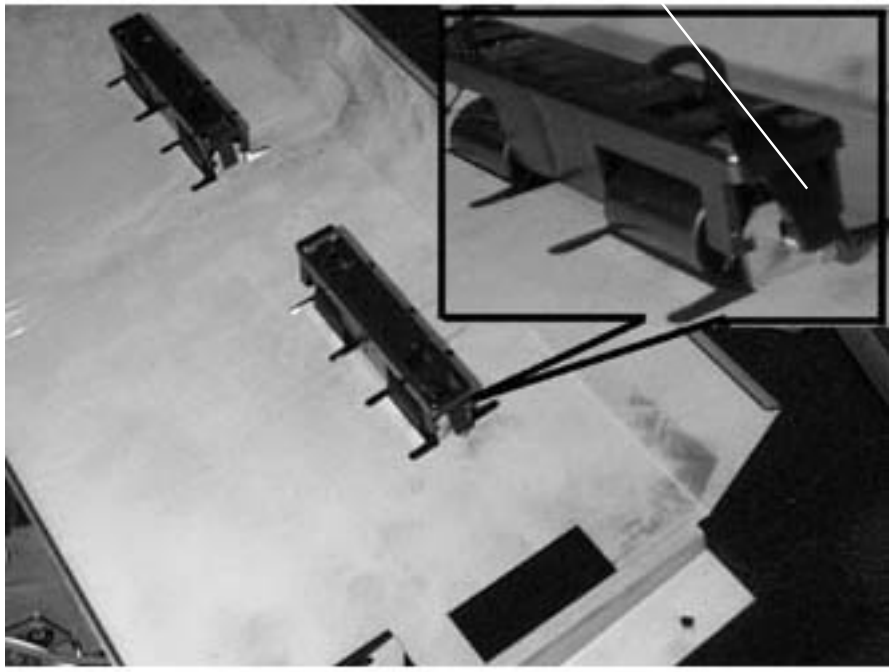


Figure 4 Removing the Pinch Roll Cover

5. (Figure 5): Remove the Pinch Rolls.

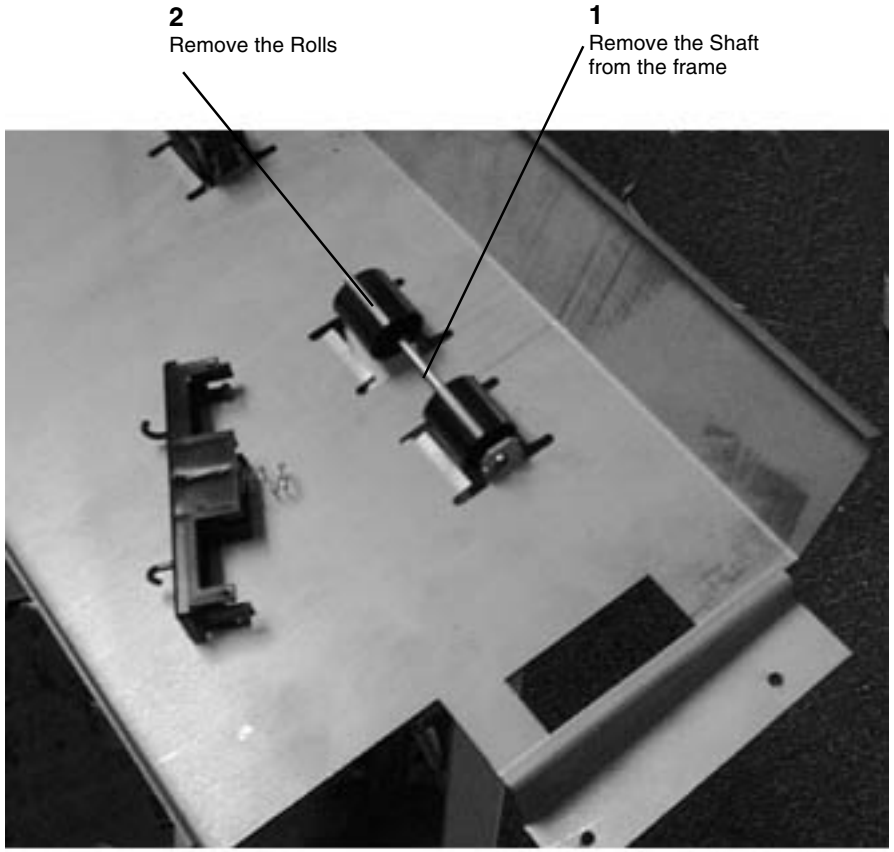


Figure 5 Removing the Pinch Rolls

Replacement

The replacement is the reverse of the removal. Ensure that the spring is applying pressure on the shaft.

REP 8.1 Lower Sheet Feed Assembly

Parts List on PL 10.7

WARNING

Switch off the Printer Power Switch. Disconnect the Printer Power Cord.

Removal

1. Remove the Xerographic Module. Perform REP 9.1 Xerographic Module.

   NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side.*

2. (Figure 1): Look down into the area previously occupied by the Xerographic Module. Prepare the left side of the Lower Sheet Feed Assembly for removal.

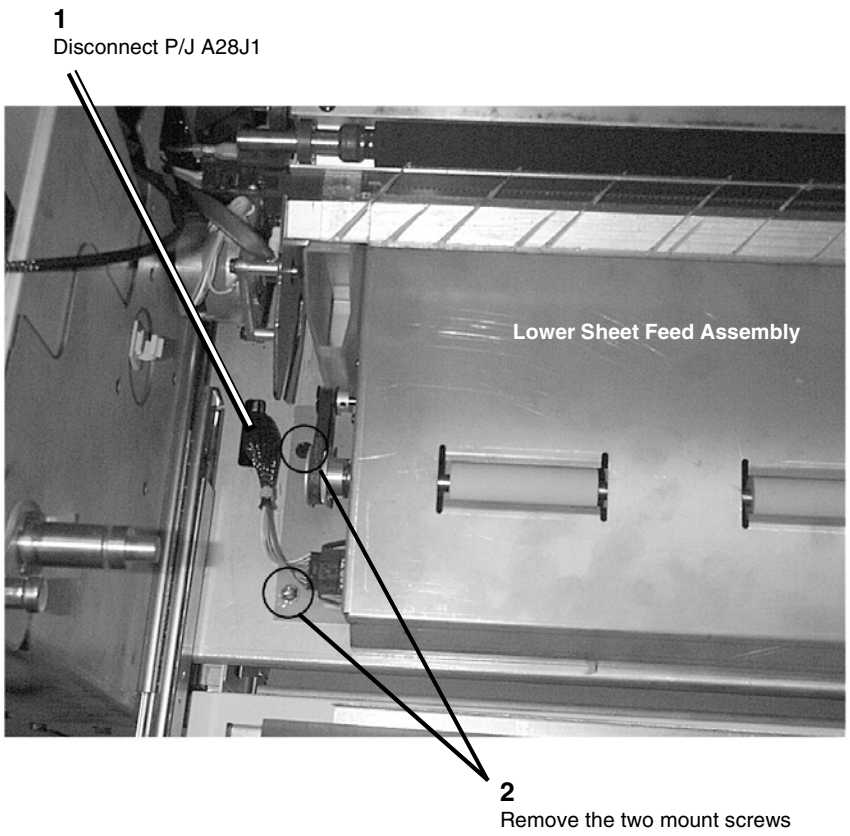


Figure 1 Preparing the Lower Sheet Feed Assembly for Removal (Left Side)

3. (Figure 2): Prepare the right side of the Lower Sheet Feed Assembly for removal.

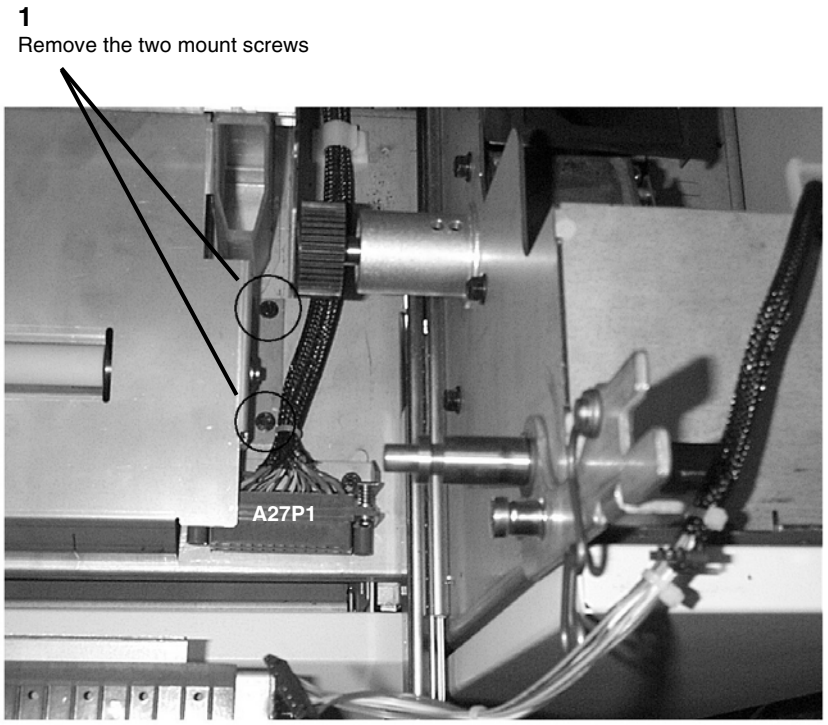
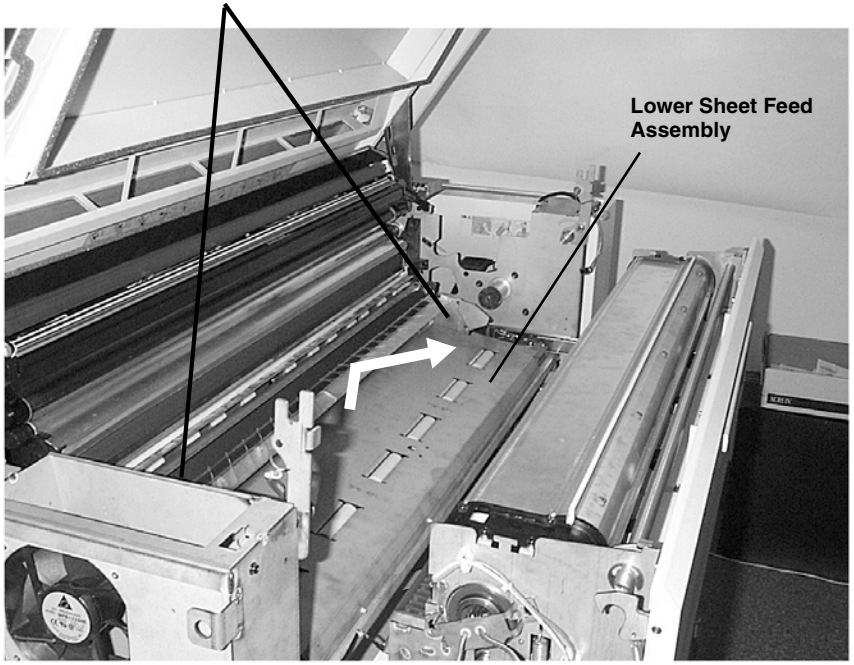


Figure 2 Preparing the Lower Sheet Feed Assembly for Removal (Right Side)

4. (Figure 3): Remove the Lower Sheet Feed Assembly from the Printer.

1
Grasp the Lower Sheet Feed Assembly by the two air ducts, located at either side of the Lower Transport Frame



2
Lift the Lower Sheet Feed Assembly free of the Air Duct holes, and guide the assembly forward and out of the Printer

Figure 3 Removing the Lower Sheet Feed Assembly From the Printer

5. Place the Lower Sheet Feed Assembly on a clean, flat surface.

Replacement

1. (Figure 4): Prepare the Lower Sheet Feed Assembly for reinstallation into the Printer.

1
Ensure that the baffles are correctly seated into the Lower Sheet Feed Assembly frame

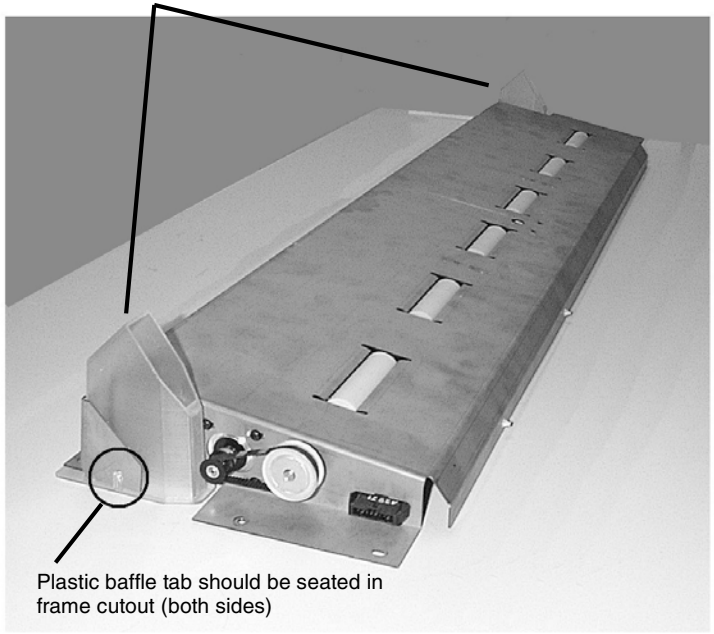
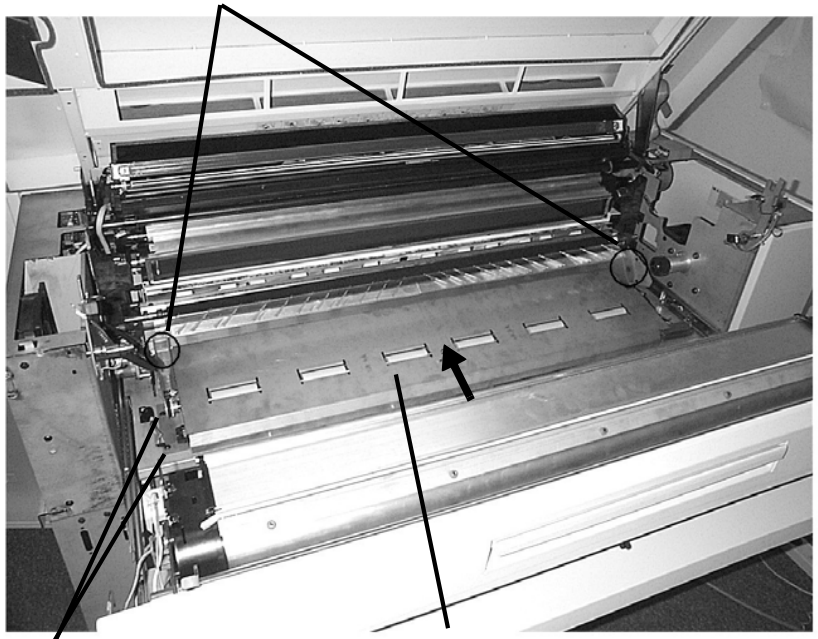


Figure 4 Preparing the Lower Sheet Feed Assembly

2. (Figure 5): Reinstall the Lower Sheet Feed Assembly on the Printer.

2
Grasp the plastic baffles and nudge them back and forth slightly until they seat in their mount holes



3
Reinstall the four screws that fasten the Lower Sheet Feed Assembly to the Printer (two screws per side)

1
Place Lower Sheet Feed Assembly on printer floor plate and slide it inward

Figure 5 Reinstalling the Lower Sheet Feed Assembly

3. (Figure 6): Reconnect P/J A28J1 on the left side of the Lower Sheet Feed Assembly.

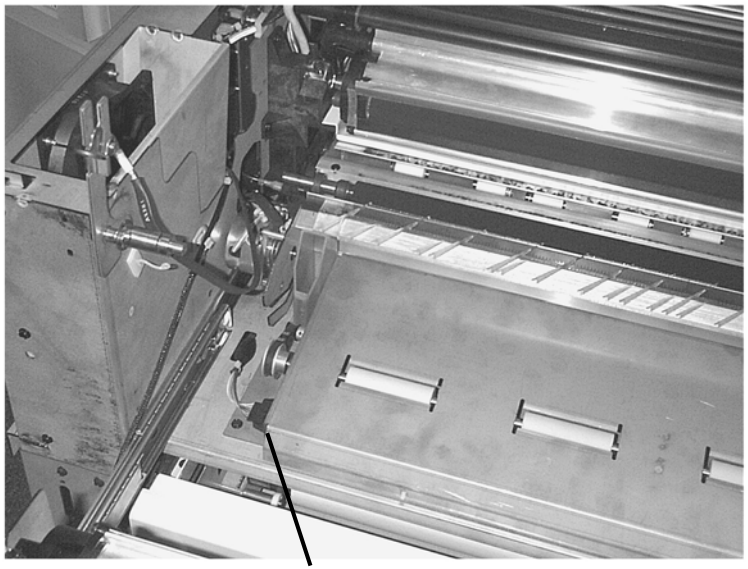


Figure 6 Reconnecting P/J A28J1

4. Reinstall the Xerographic Module. Perform REP 8.1 Xerographic Module.
5. Close the Printer Top Cover.
6. Return the Printer to normal operation.

REP 8.2 Media Transport Module

Parts List on PL 8.1

WARNING

Switch off the Printer Power Switch. Disconnect the Printer Power Cord.

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side.*

1. Ensure that the Fuser Drawer is opened.
2. Remove the Lower Sheet Feed Assembly. Perform REP 8.1 Lower Sheet Feed Assembly.

   NOTE: *Technical Representatives may find it helpful to remove the Developer Module prior to attempting the removal of the Media Transport Module, as it allows better visibility. Removing the Developer Assembly and its Plastic Baffle is therefore optional for the completion of this procedure.*

   NOTE: *Opening the Cutter Drawer will also make removing the Media Transport Module easier.*

3. (Figure 2): Remove the Fuser Drive Gear from the Printer.

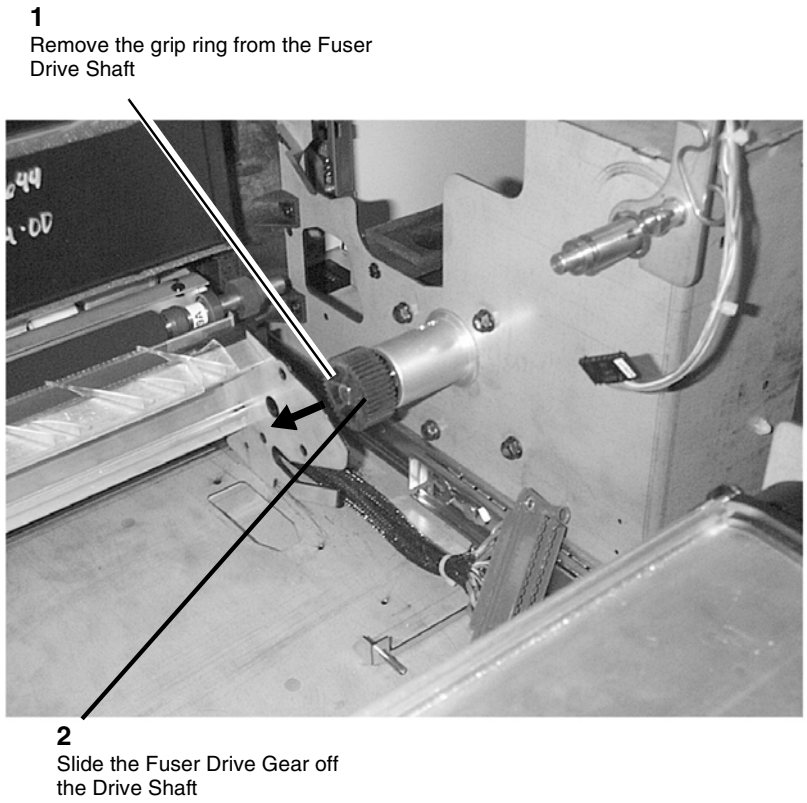


Figure 1 Removing the Fuser Drive Gear from the Printer

4. (Figure 3): Remove the following connectors and ground strap from the left of the Media Transport Module (view from paper feed side of Printer).

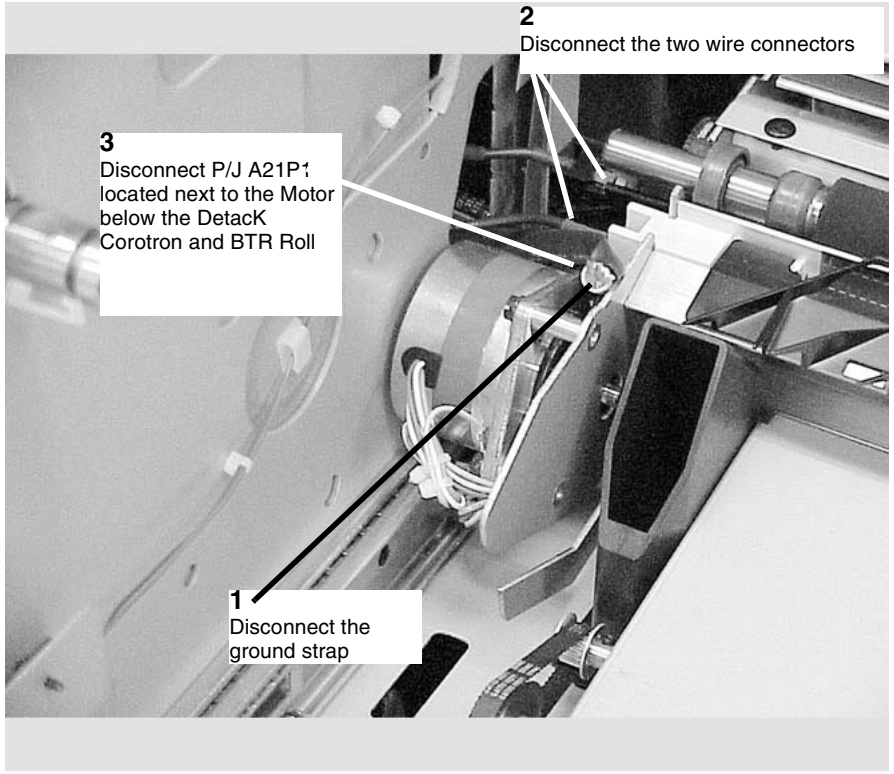


Figure 2 Disconnecting the Connectors

5. (Figure 4): Remove the Media Transport Module from the Printer.

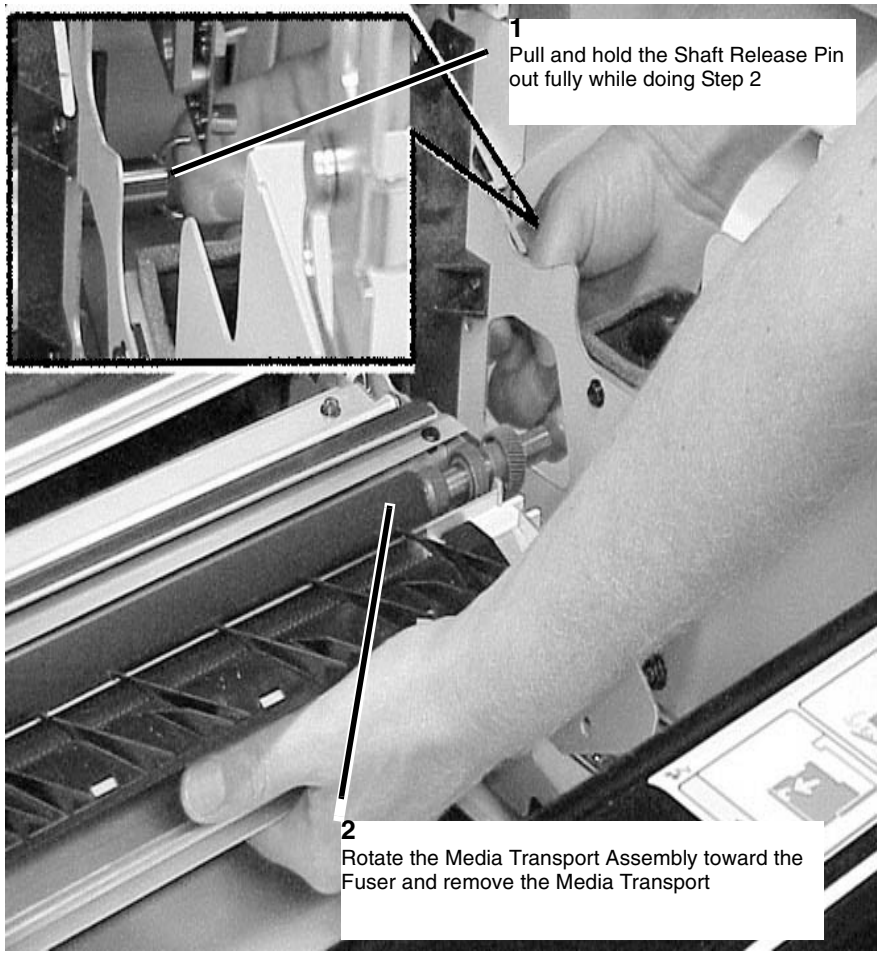


Figure 3 Removing the Media Transport Module

Replacement

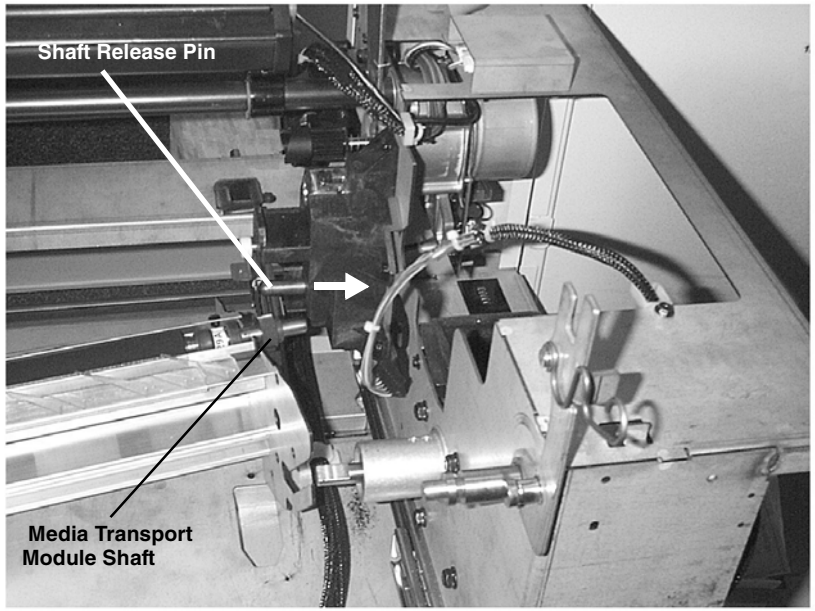
CAUTION

Ensure that the Top Cover and the Image Module of the Printer are in the raised position prior to beginning this replacement procedure.

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

1. Set the Media Transport Module back onto the floor plate of the printer.
2. (Figure 5): Align the right side of the Media Transport Module Shaft with the spring-loaded Shaft Release Pin. Reinstall the Media Transport Module

3
As the Shaft Release Pin is compressed, swing the left side of the Media Transport Module Shaft inward, and into the retaining slot in left side of the Printer frame



1
Align Media Transport Module Shaft with spring-loaded Shaft Release Pin

2
Press the Media Transport Module Shaft into the Shaft Release Pin, compressing it

Figure 4 Reinstalling the Media Transport Module

3. (Figure 3): Reattach the connectors on the left side of the Media Transport Module.
4. Reinstall the Fuser Drive Gear.

5. (Figure 6): Secure the Shaft Release Pin, locking the Media Transport Module in position.

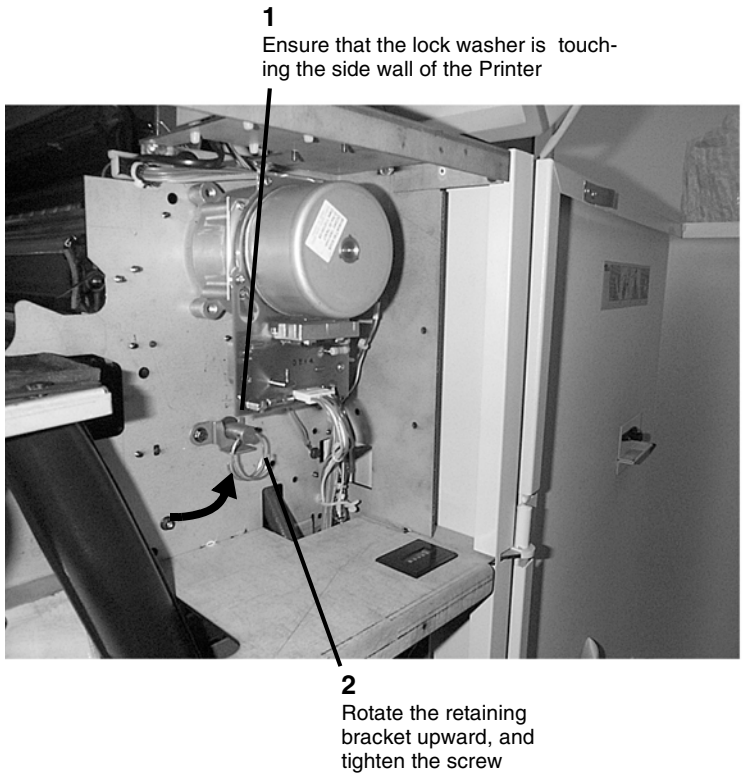


Figure 5 Locking the Media Transport Module in Position

6. Reinstall the plastic Developer Baffle (if removed).
7. Reinstall the Developer Module (if removed).
8. Reinstall the Lower Sheet Feed Assembly.
9. Return the Printer to normal operation.

REP 8.3 Sheet Feed Sensor

Parts List on PL 10.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Lower Sheet Feed Assembly from the Printer. Perform REP 8.1.
2. (Figure 1): Remove the Vacuum Baffles from the Lower Sheet Feed Assembly.

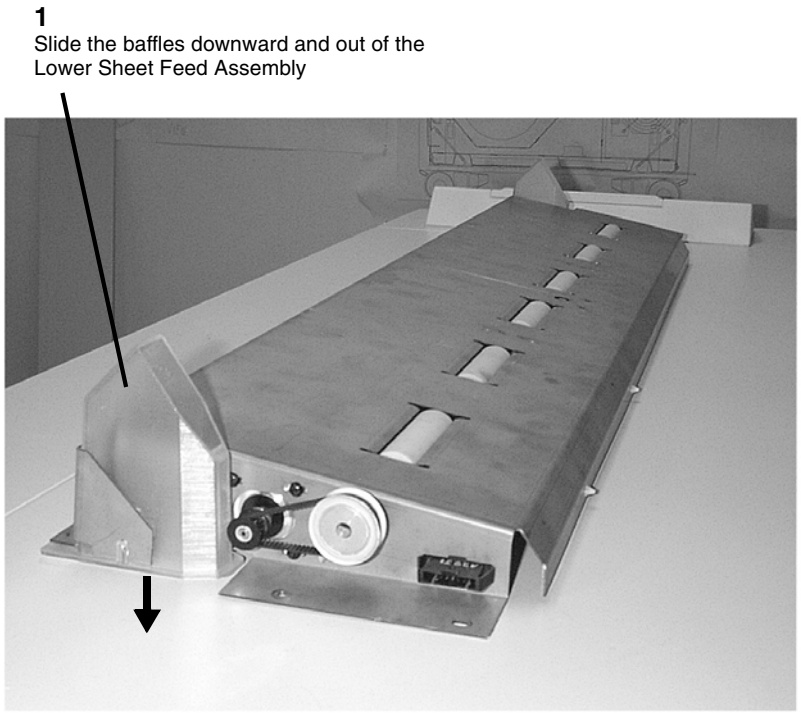
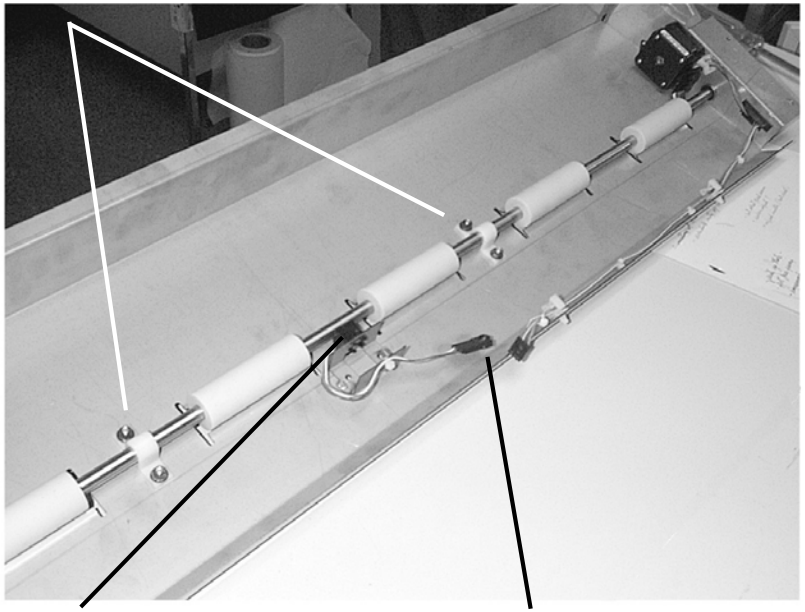


Figure 1 Removing the Vacuum Baffles

3. Turn the Lower Sheet Feed Assembly over.

4. (Figure 2): Remove the Sheet Feed Sensor.

2
Remove the two plastic retainers
by removing the four hex nuts



3
Disengage the Sheet Feed Sensor from
the Lower Transport frame and remove

1
Disconnect P/J xxx

Figure 2 Removing the Sheet Feed Sensor

REP 8.4 Stack Height Sensor

Parts List on PL 14.2

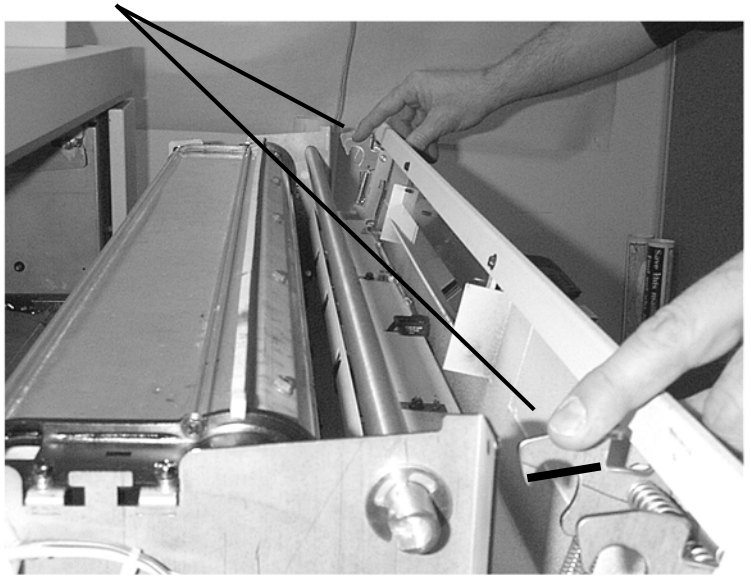
WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Pull out the Fuser Module drawer.
2. (Figure 1): Release the latches at the top of the Fuser Module.

1
Compress spring tabs

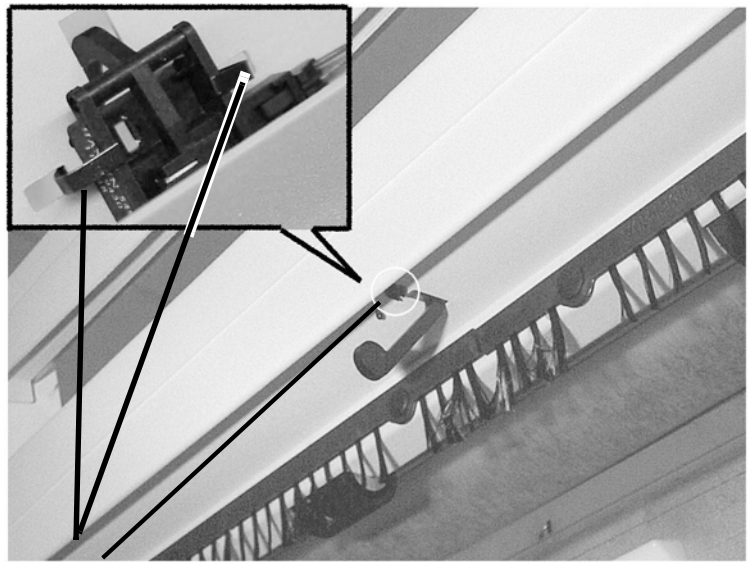


2
Allow Fuser Module Cover to
drop downward

Figure 1 Releasing the Fuser Drawer Latches

3. (Figure 2): On the underside of the Fuser Module, locate and detach the Stack Height Sensor.

   NOTE: *On newer Printers the Stack Height Switch is also secured with a Spring Clip. The insert in Figure 2 shows the Spring Clips that are located on the inside of the Fuser Module Cover.*

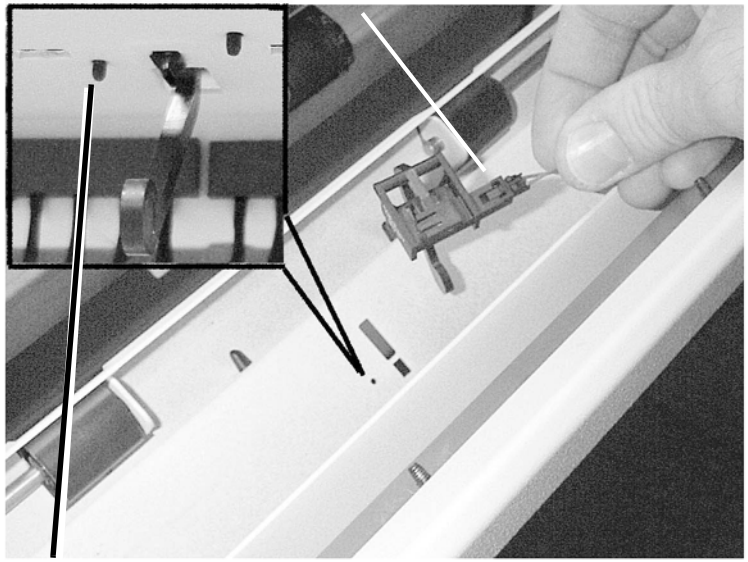


1
Remove the Spring Clips by lifting and rotating the clips off the swich

Figure 2 Detaching the Stack Height Sensor

4. (Figure 3): Remove the Stack Height Sensor from the Printer.

2
Disconnect P/J Q2P1



1
Push on both tabs to remove the Stack Height Sensor

Figure 3 Removing the Stack Height Sensor

REP 8.5 Sheet Feed Drive Motor (MOT 1)

Parts List on PL 10.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Lower Sheet Feed Assembly. Perform REP 8.1 Lower Sheet Feed Assembly.
2. Turn the Lower Sheet Feed Assembly over.
3. (Figure 1): Prepare the Sheet Feed Drive Motor for removal.

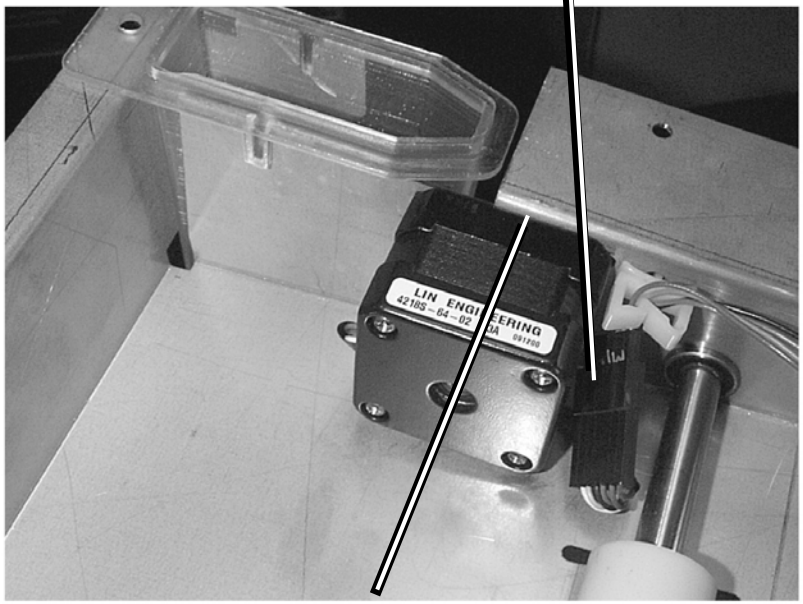


Figure 1 Preparing the Sheet Feed Drive Motor for Removal

4. (Figure 2): Turn the Lower Sheet Feed Assembly over and remove the Sheet Feed Drive Motor.

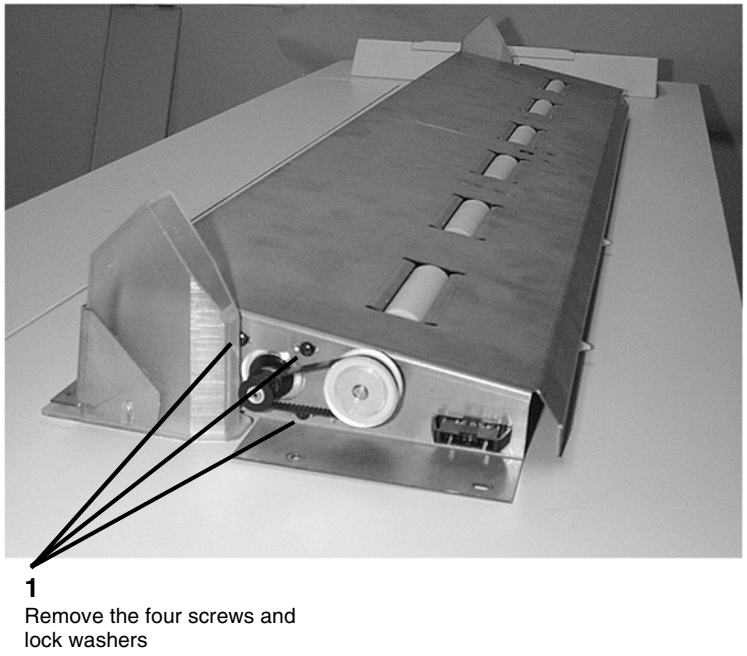


Figure 2 Removing the Sheet Feed Drive Motor

REP 8.6 Sheet Feed Drive Belt

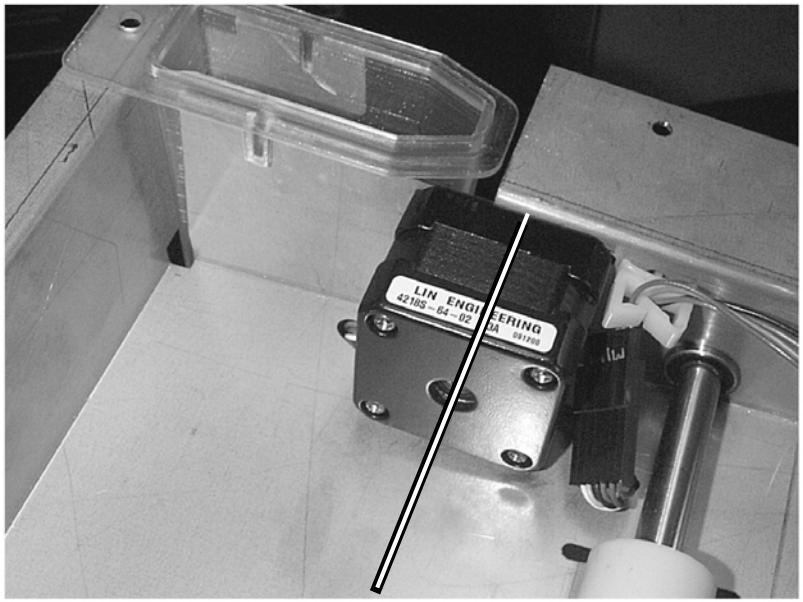
Parts List on PL 10.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Lower Sheet Feed Assembly. Perform REP 8.1 Lower Sheet Feed Assembly.
2. Turn the Lower Sheet Feed Assembly over.
3. (Figure 1): Prepare to remove the Sheet Feed Drive Belt.



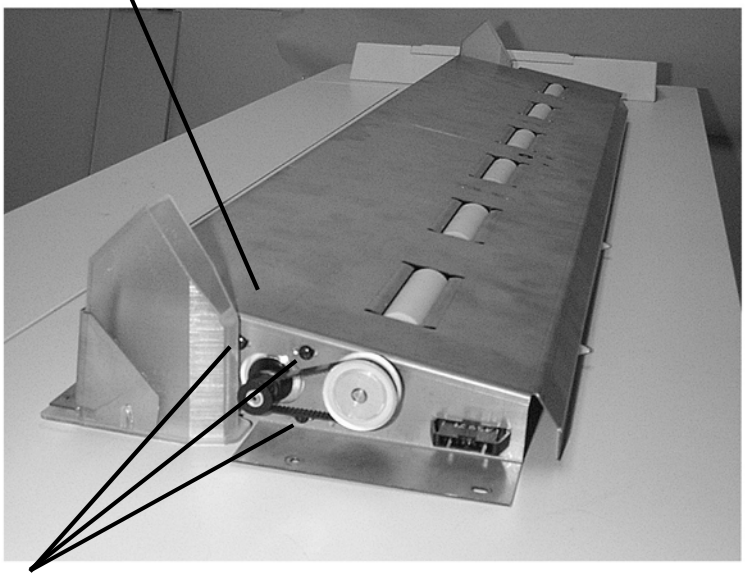
1
Outline the Sheet Feed Drive Motor's position on the Lower Transport Frame with a pencil

Figure 1 Preparing to Remove the Sheet Feed Drive Belt

4. (Figure 2): Turn the Lower Sheet Feed Assembly over and remove the Sheet Feed Drive Belt.

2
Slide the Sheet Feed Motor towards the Drive Shaft

3
Disengage the Drive Belt from the gears



1
Loosen the four screws on the Sheet Feed Motor

Figure 2 Removing the Sheet Feed Drive Motor

Replacement

NOTE: *After positioning the Sheet Feed Drive Belt back on the two gears, be sure to reposition the Sheet Feed Drive Motor inside the pencil lines drawn in Figure 1 prior to tightening down the four mount screws. This will ensure correct belt tension.*

REP 8.7 Sheet Feed Drive Roll

Parts List on PL 10.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side of the Printer.*

1. Remove the Lower Sheet Feed Assembly. Perform REP 8.1 Lower Sheet Feed Assembly.
2. (Figure 1): Remove the Vacuum Baffles from the Lower Sheet Feed Assembly.

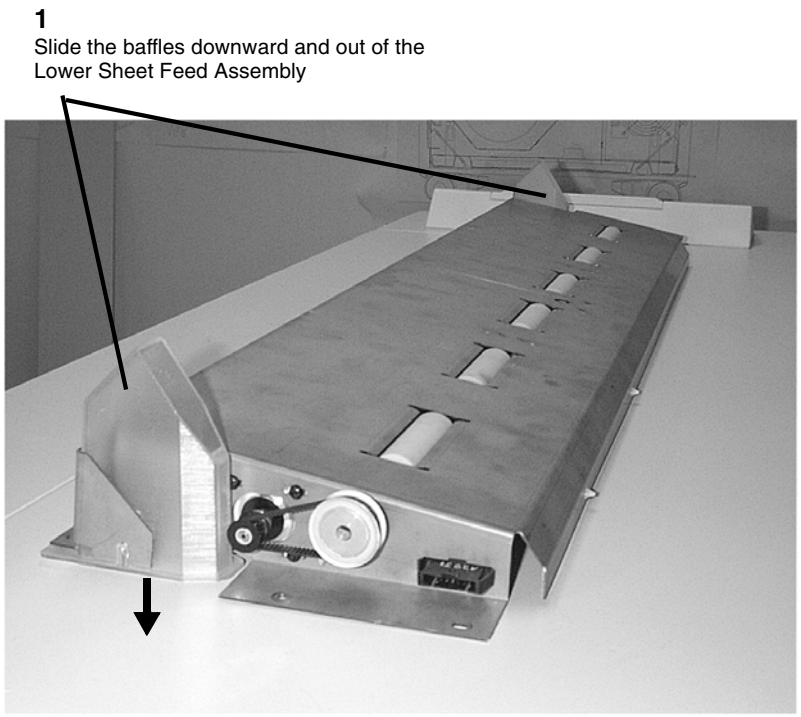


Figure 1 Removing the Vacuum Baffles

3. (Figure 2): Remove the Sheet Feed Drive Roll Gear.

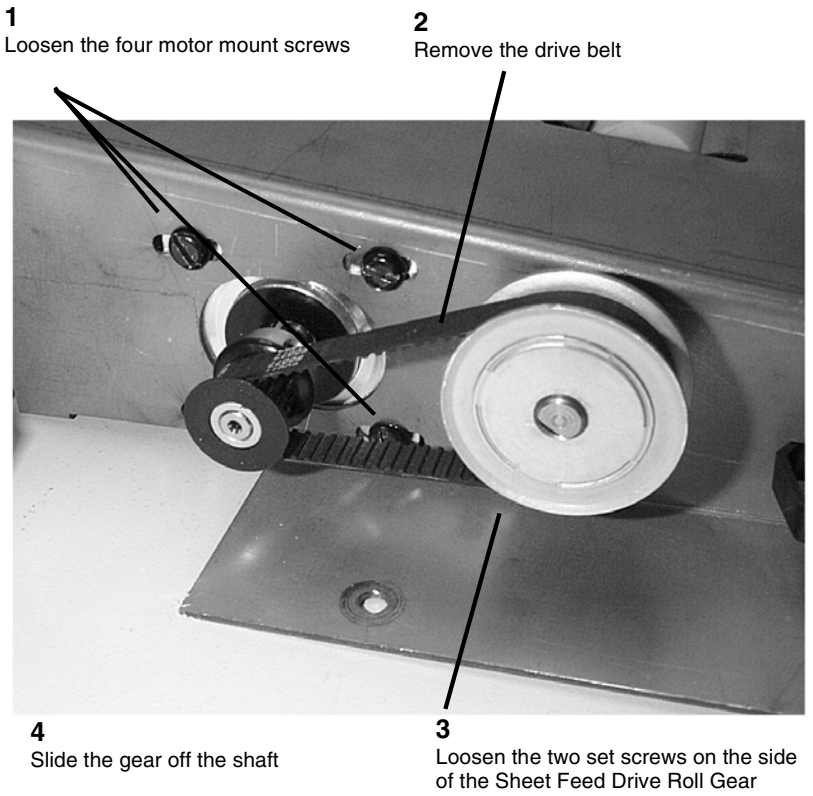


Figure 2 Removing the Sheet Drive Roll Gear

4. (Figure 3): Remove the mounting hardware from the left side of the Sheet Feed Drive Roll Shaft.

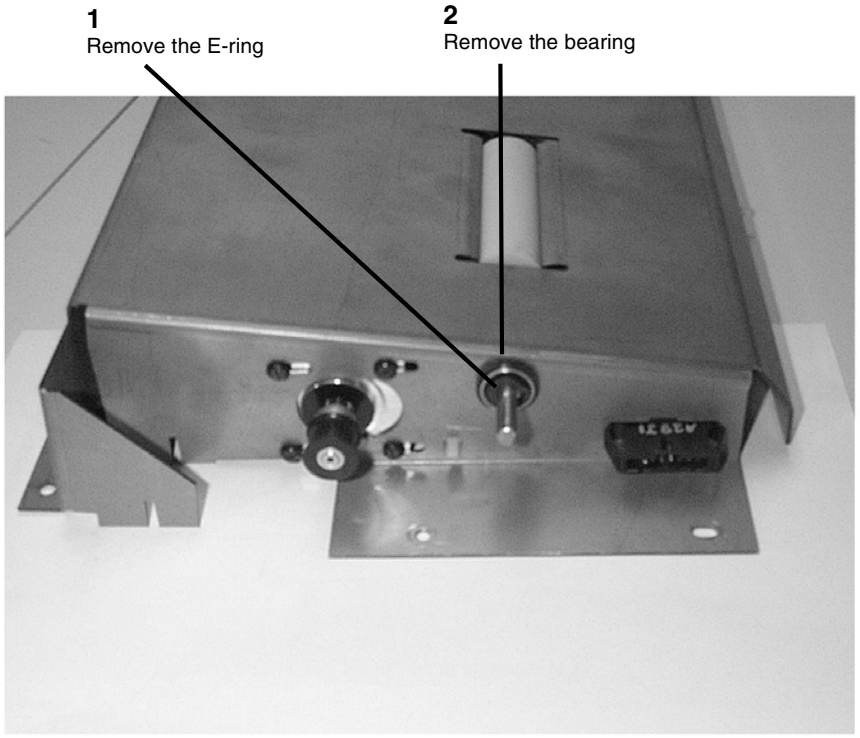


Figure 3 Removing the Mounting Hardware from the Left Side

5. (Figure 4): Remove the mounting hardware from the right side of the Sheet Feed Drive Roll Shaft.

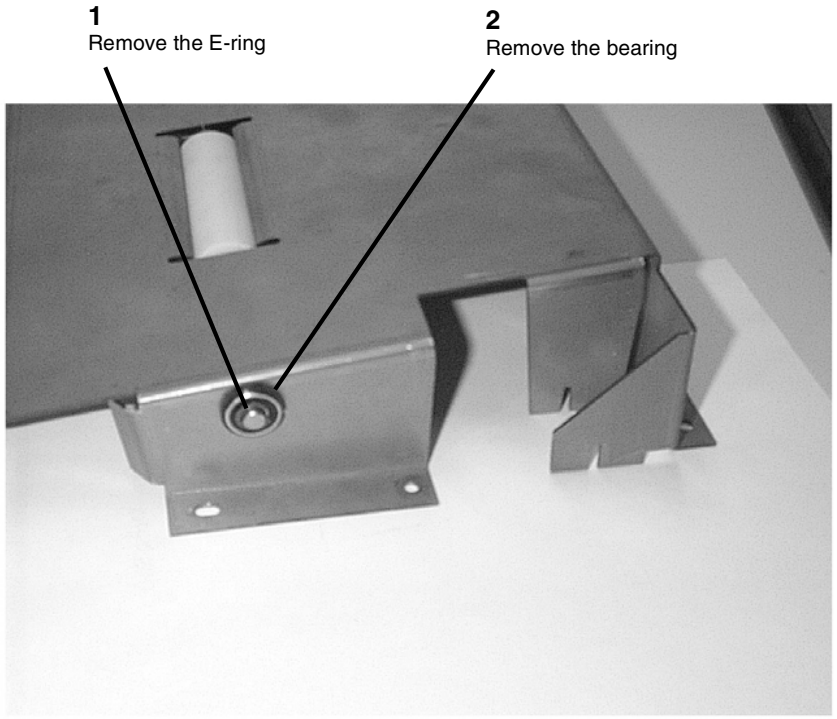


Figure 4 Removing the Mounting Hardware from the Right Side

6. Turn the Lower Sheet Feed Assembly over.

7. (Figure 5): Prepare to remove the Sheet Feed Drive Roll.

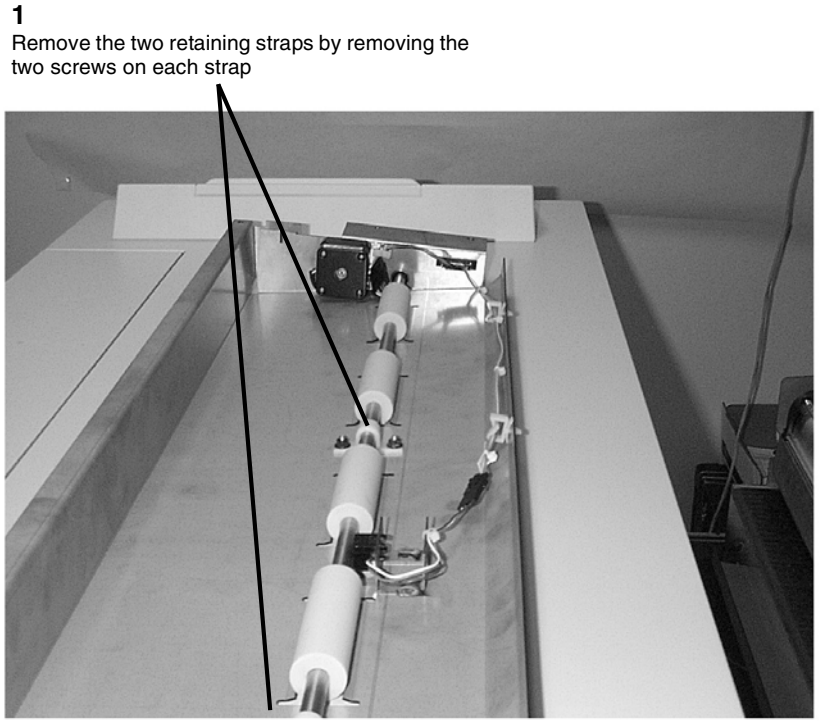


Figure 5 Preparing to Remove the Sheet Feed Drive Roll

8. (Figure 6): Remove the Sheet Feed Drive Roll from the Lower Sheet Feed Assembly.

Figure 6 Removing the Sheet Drive Roll

REP 8.8 Media Registration Sensor

Parts List on PL 8.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Media Transport Module. Perform REP 8.2 Media Transport Module.
2. (Figure 1): Remove the Media Registration Sensor from the rear of the Media Transport Module.

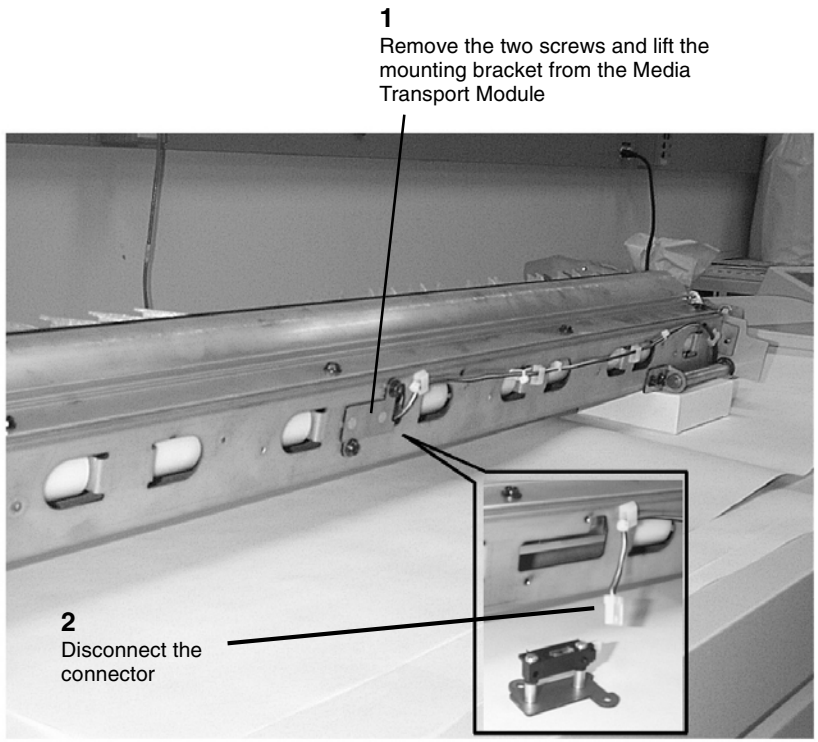


Figure 1 Removing the Media Registration Sensor

REP 8.12 Registration Pinch Rolls

Parts List on PL 8.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Media Transport Module. Perform REP 8.2 Media Transport Module.
2. (Figure 1): Standing at the rear of the Media Transport Module, remove the Baffle.

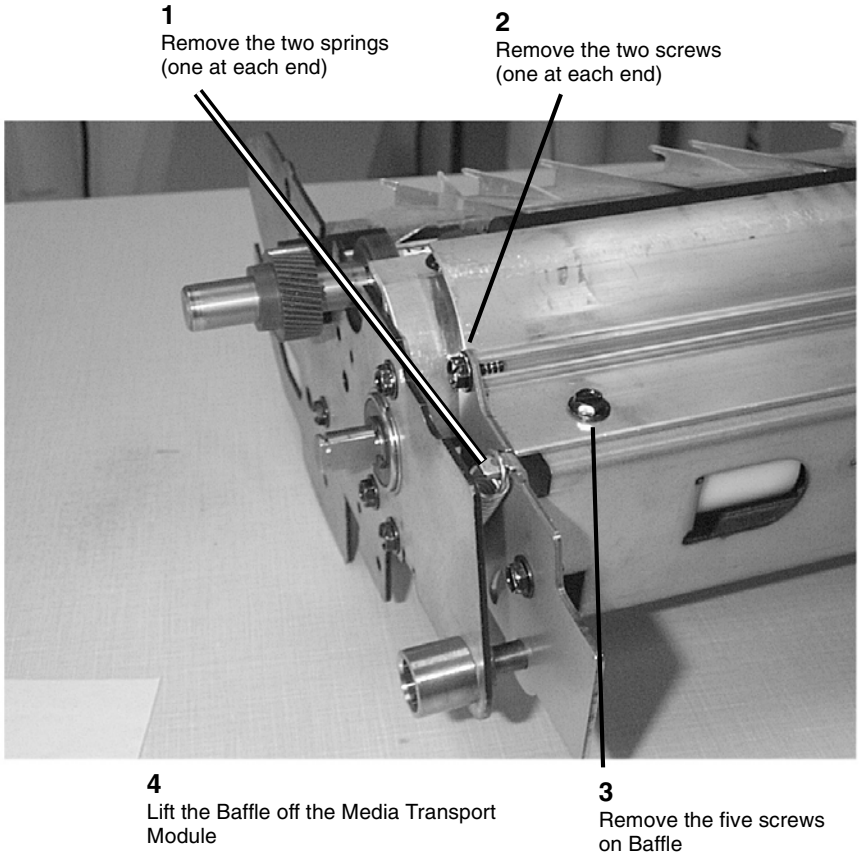


Figure 1 Removing the Baffle

3. (Figure 2): Rotate the Registration Support Assembly back to expose the Registration Pinch Rolls.

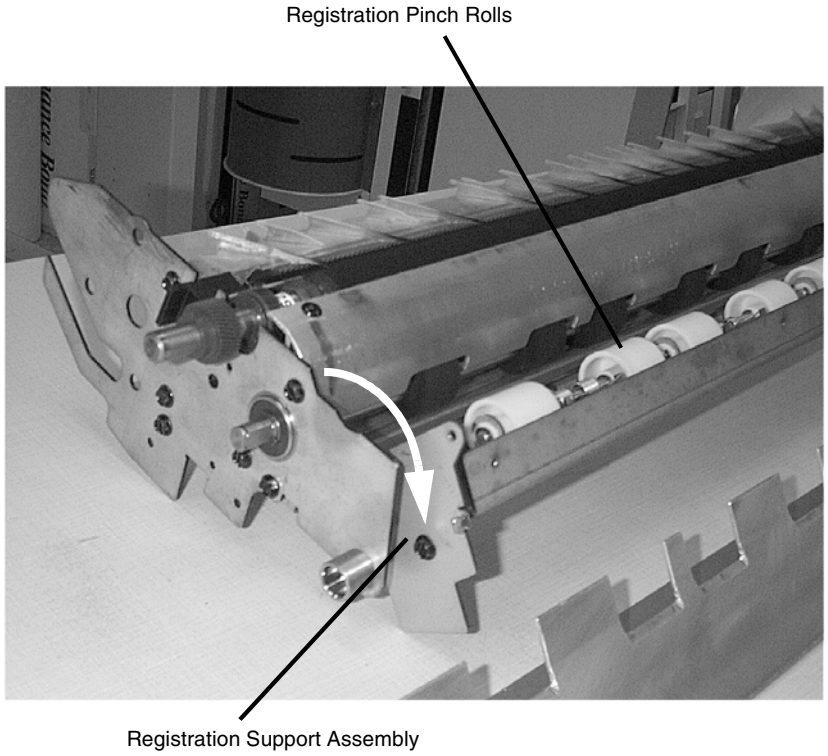


Figure 2 Rotating the Registration Support Assembly

4. (Figure 3): Remove the Registration Pinch Rolls.

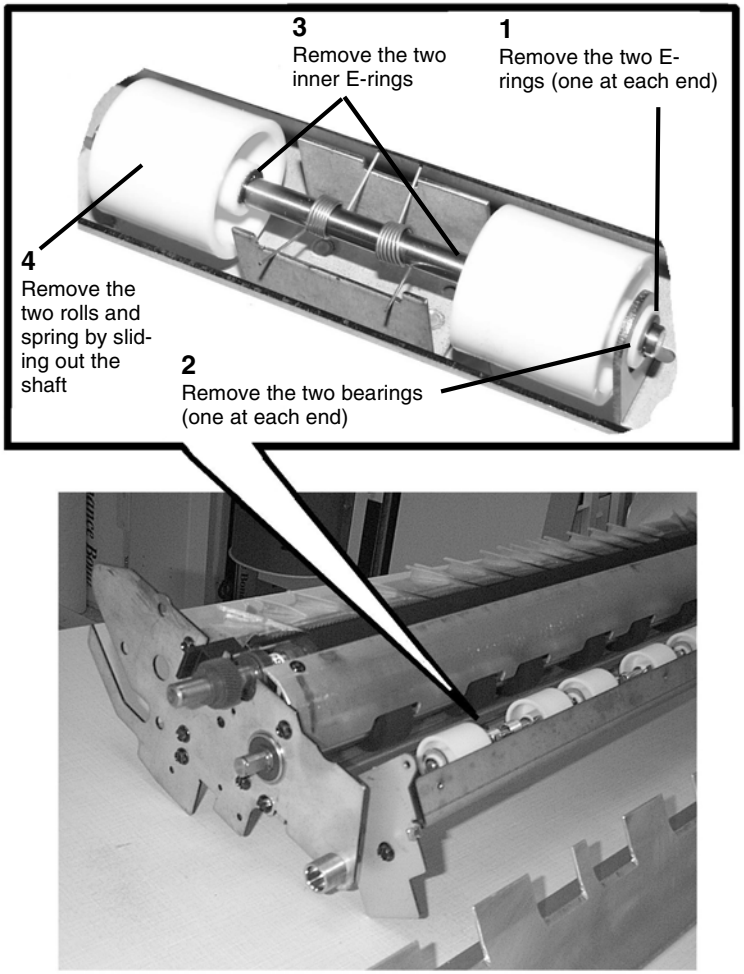


Figure 3 Removing the Registration Pinch Rolls

Replacement

1. Slide the Pinch Roll Spring onto the Pinch Roll Shaft.
2. Slide the Pinch Rolls onto each end of the Pinch Roll Shaft and work the parts back into the registration frame.

   NOTE: *Ensure that the Pinch Roll Spring is reinstalled exactly as pictured below, with the spring ends captured in theirs respective slots on the registration frame. The Springs on the two middle Pinch Roll pairs are different then the outer four Pinch Roll pairs. The middle Springs provide a higher pinch force then the outer four pair of Pinch Rolls.*

3. (Figure 4): Reinstall the Registration Pinch Roll Assembly.

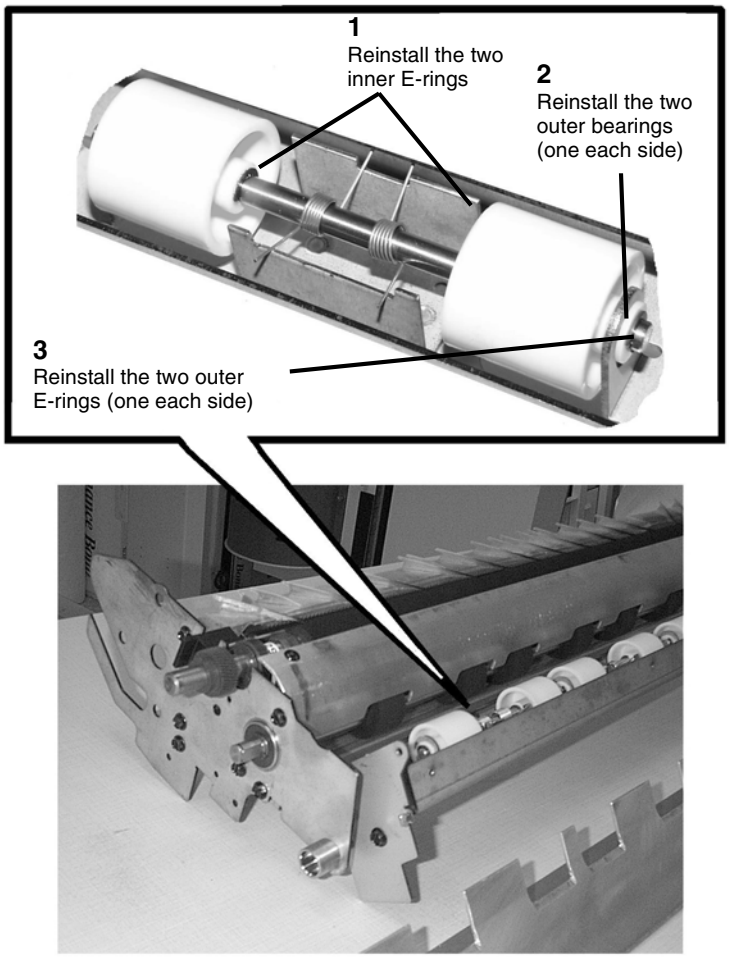


Figure 4 Reinstalling the Registration Pinch Roll Assembly

4. (Figure 5): Rotate the Registration Support Assembly forward to its original position.

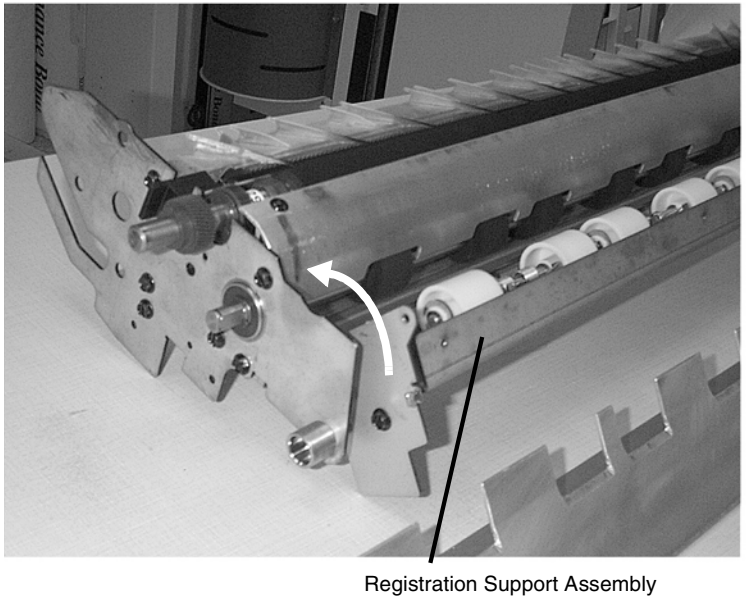


Figure 5 Rotating the Registration Support Assembly Forward

5. (Figure 6): Reinstall the springs.

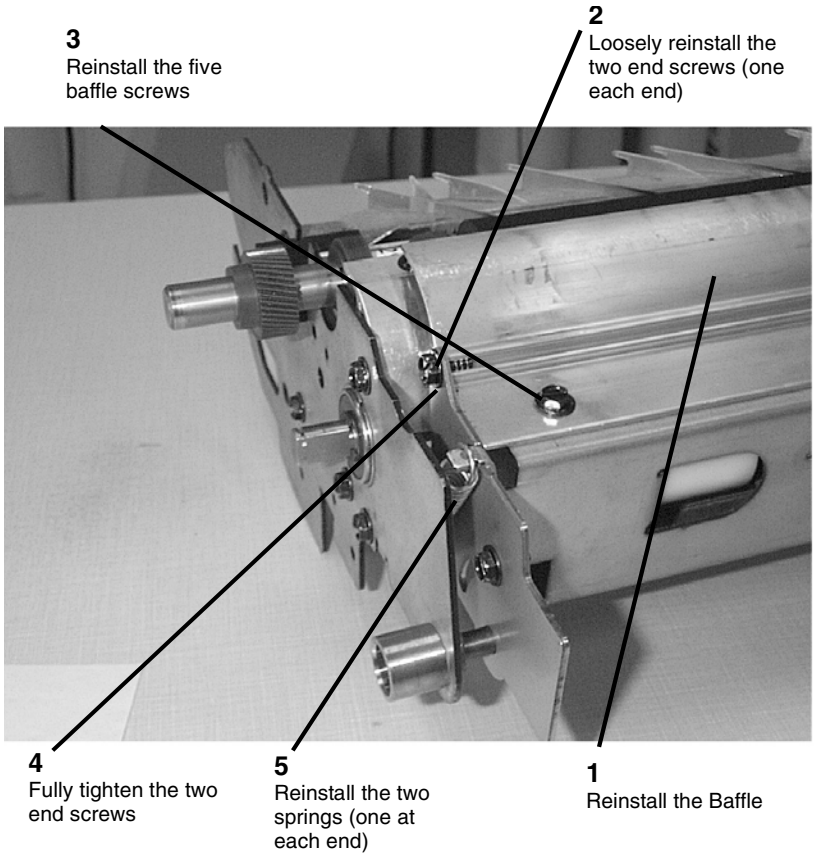


Figure 6 Reinstalling the Springs

6. Complete the reassembly of the Printer and perform the following:
   a. Fuser Temperature (NVM) ADJ 10.1.
   b. Vertical Magnification ADJ 8.1.
   c. Lead Edge Registration ADJ 8.2.
   d. Cut Length ADJ 8.3.

REP 8.13 Media Transport Drive Motor and Belt

Parts List on PL 8.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *This procedure is primarily concerned with removal of the Media Transport Drive Belt. Since the Media Transport Drive Motor is also removed in the process, it is also included in the procedure title.*

Removal

1. Remove the Media Transport Module. Perform REP 8.2 Media Transport Module.
2. (Figure 1): Remove the Media Transport Drive Motor and Belt.

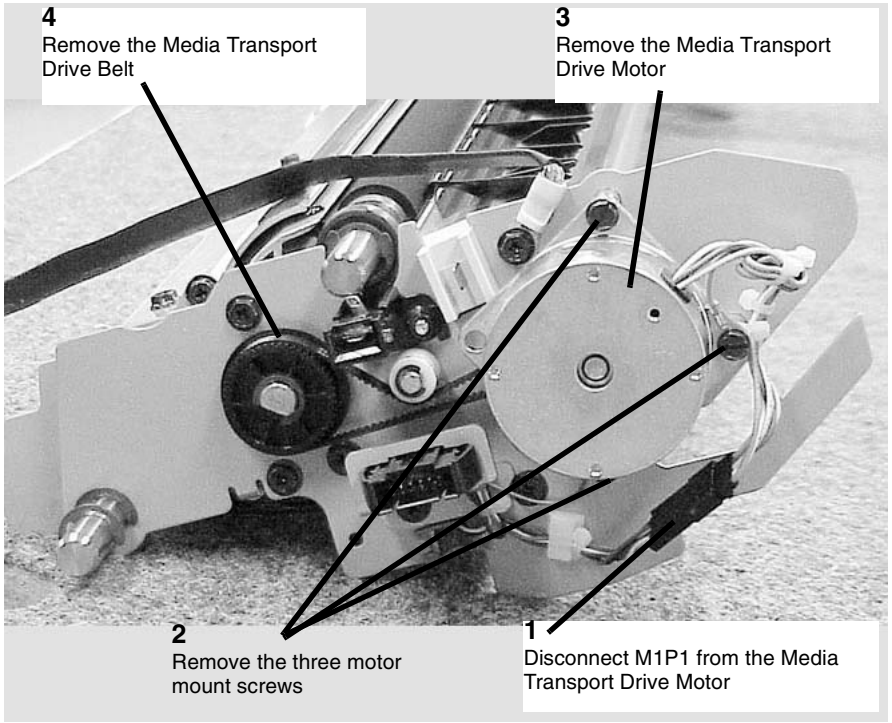


Figure 1 Removing the Media Transport Drive Motor and Belt

Replacement

NOTE: *On reinstallation, ensure that the Media Transport Drive Belt is routed UNDER the Idler Pulley and that the Idler turns freely.*

1. Reinstallation is the reverse of the Removal procedure.

REP 8.14 Cutter Home Sensor

Parts List on PL 7.8

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Open the Cutter Drawer.
2. (Figure 1): Remove the Cutter Home Sensor.

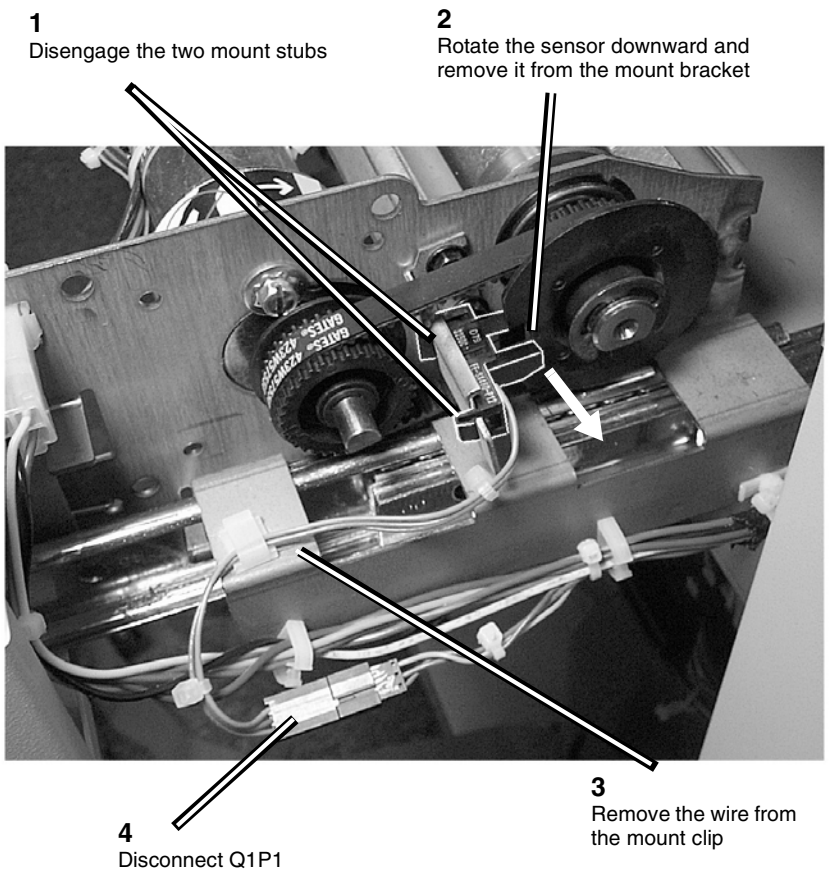


Figure 1 Removing the Cutter Home Sensor

Replacement

1. Center the disc of the Cutter Drive Pulley in the Cutter Home Sensor during reinstallation of that sensor.

REP 8.15 Media Exit Pinch Roll

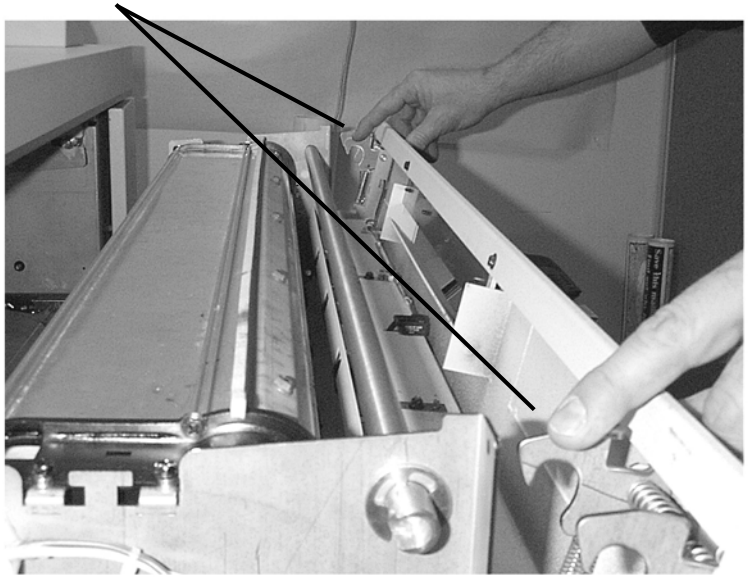
Parts List on PL 14.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

1. Open the Fuser Drawer (located above media drawers).
2. (Figure 1): Release the latches at the top of the Fuser Module.

1
Compress spring tabs



2
Allow Fuser Module Cover to drop downward

Figure 1 Releasing the Fuser Drawer Latches

3. (Figure 2): Prepare to remove the Media Exit Pinch Roll.

NOTE: *There are two Media Exit Pinch Rolls on the 8850/510dp Printer. The removal procedure is the same for both.*

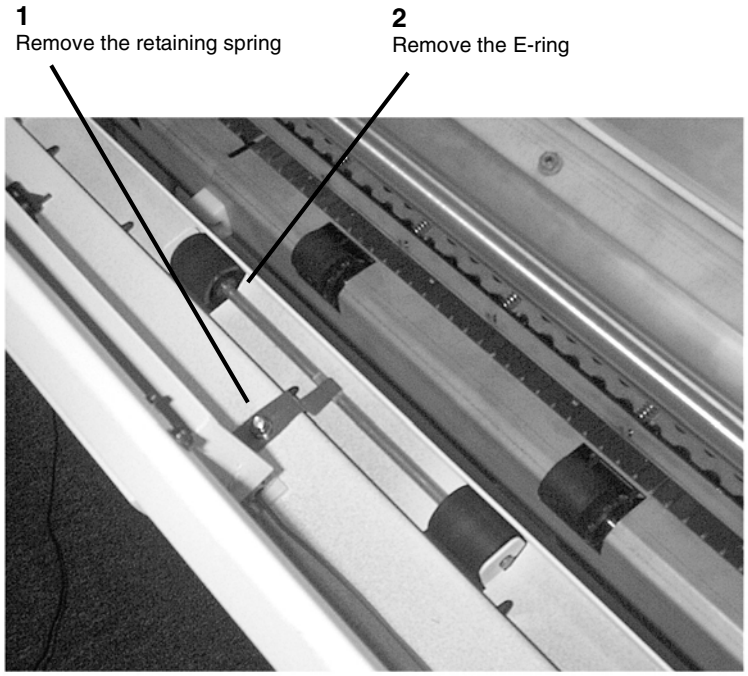


Figure 2 Preparing to Remove the Media Exit Pinch Roll

4. (Figure 3): Remove the Media Exit Pinch Roll.

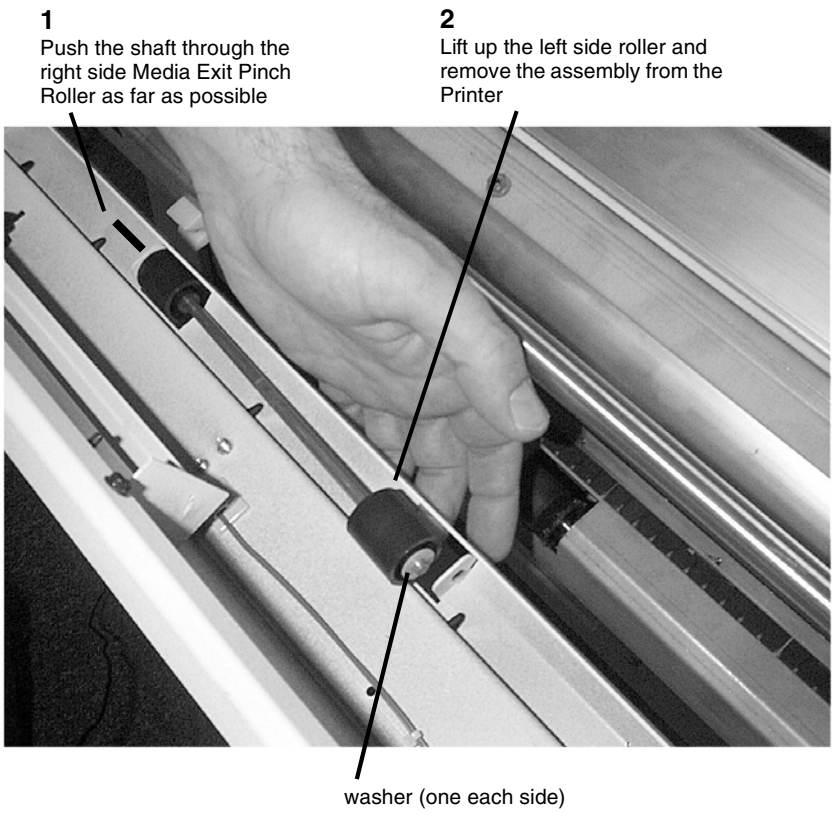


Figure 3 Removing one of the Media Exit Pinch Rolls

Replacement

1. Reinstall the Media Exit Pinch Roll into the Printer, ensuring that the washers and E-ring are correctly mounted.
2. (Figure 4): Reinstall the Retaining Spring on the Media Exit Pinch Roll.

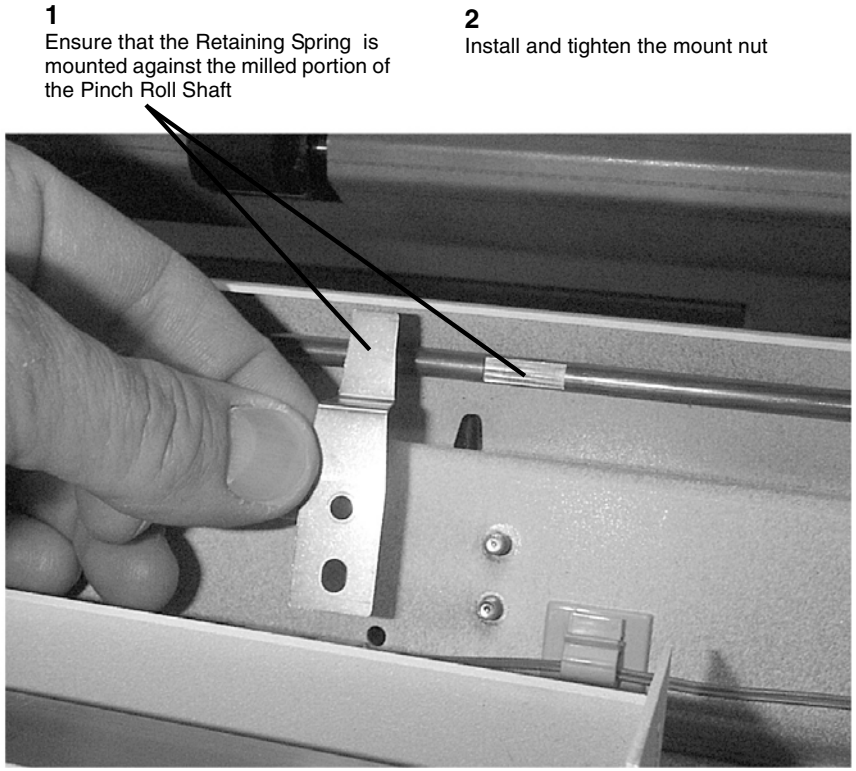


Figure 4 Reinstalling the Retaining Spring

3. Swing the Fuser Module Front Cover closed.
4. Close the Fuser Module Drawer.

REP 8.16 Media Exit Drive Roll

Parts List on PL 10.4

WARNING

Switch off the Main Power Switch. Disconnect the power cord.

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side.*

1. Open the Fuser Drawer (located above media drawers).
2. (Figure 1): Release the latches at the top of the Fuser Module.

1
Compress spring tabs

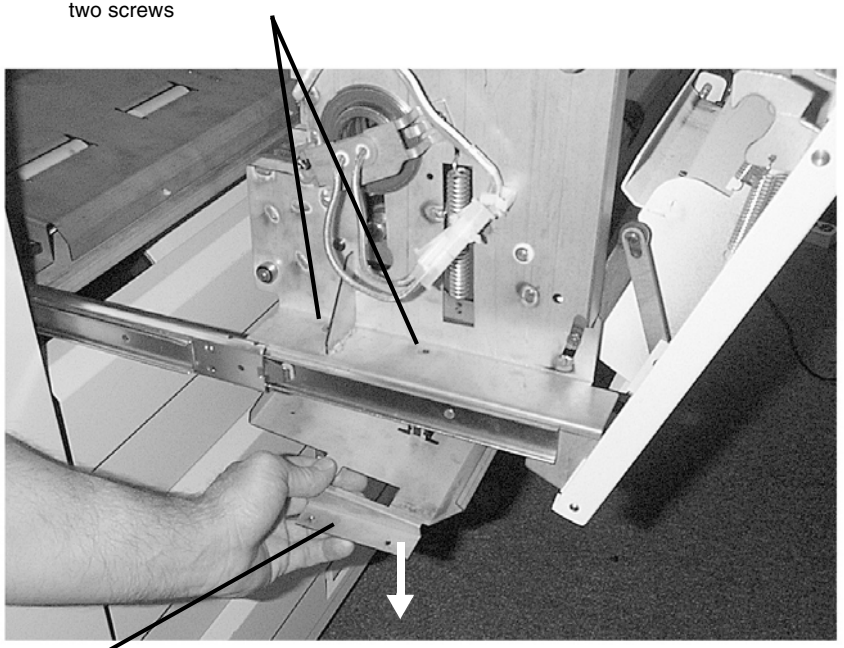
2
Allow Fuser Module Cover to drop downward

Figure 1 Releasing the Fuser Drawer Latches

3. (Figure 2): Remove the Upper Sheet Feed Housing.

NOTE: *The Upper Sheet Feed Housing is held in position by three retaining prongs on the bottom of the right side of the housing, and two hex head screws on the left side.*

1
While supporting the left side of the Upper Sheet Feed Housing, remove the two screws



2
Lower the left side of the Upper Sheet Feed Housing and remove it from the Printer

Figure 2 Removing the Upper Sheet Feed Housing

4. (Figure 3): Remove the Fuser Exit Sensor from beneath the Fuser Module.

Figure 3 Removing the Fuser Exit Sensor

5. (Figure 4): Remove the following Printer right side hardware.

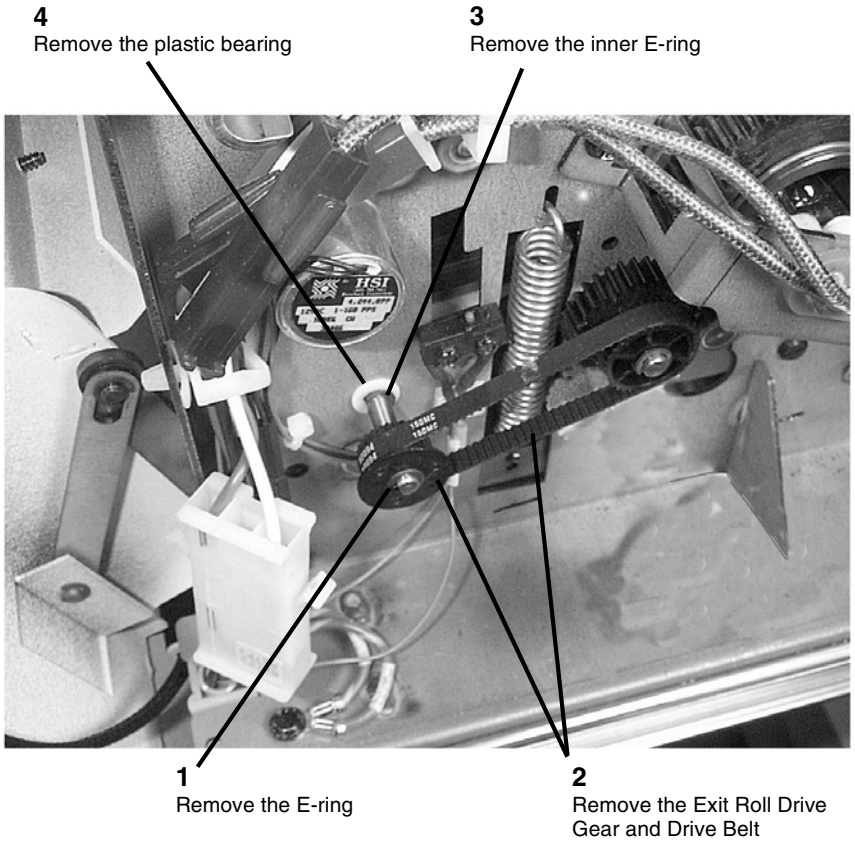


Figure 4 Removing the Printer Right Side Hardware

6. (Figure 5): Remove the following Printer left side hardware.

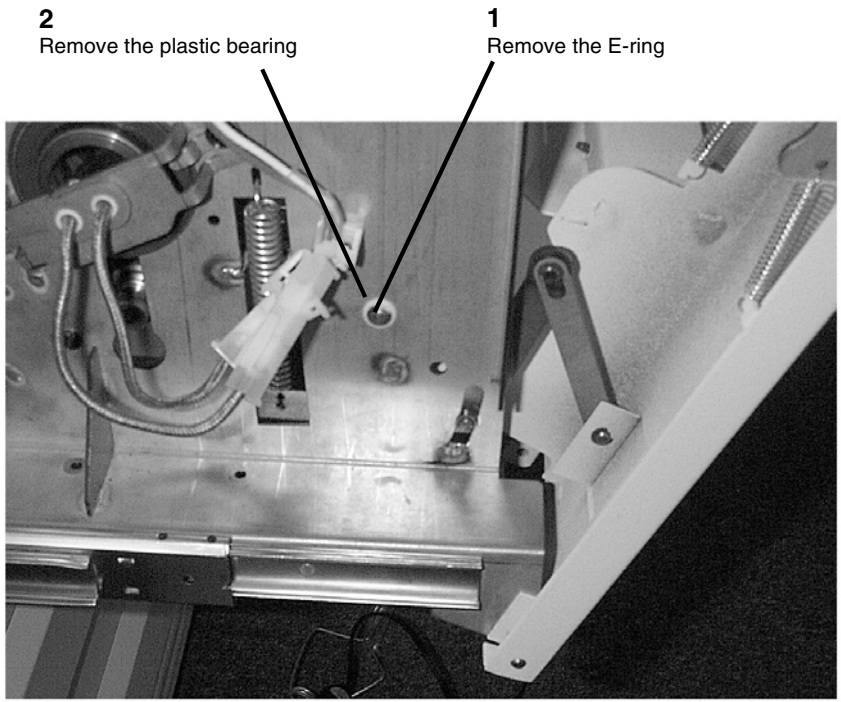


Figure 5 Removing the Printer Left Side Hardware

7. Remove the Media Exit Drive Roll from the Printer.

Replacement

1. (Figure 6): Reinstall the Media Exit Drive Roll in the Printer.

   NOTE: *The drive side (right side) of the Media Exit Drive Roll Shaft can be identified by the presence of one E-ring groove and a milled flat for the Media Exit Drive Pulley and bearing.*

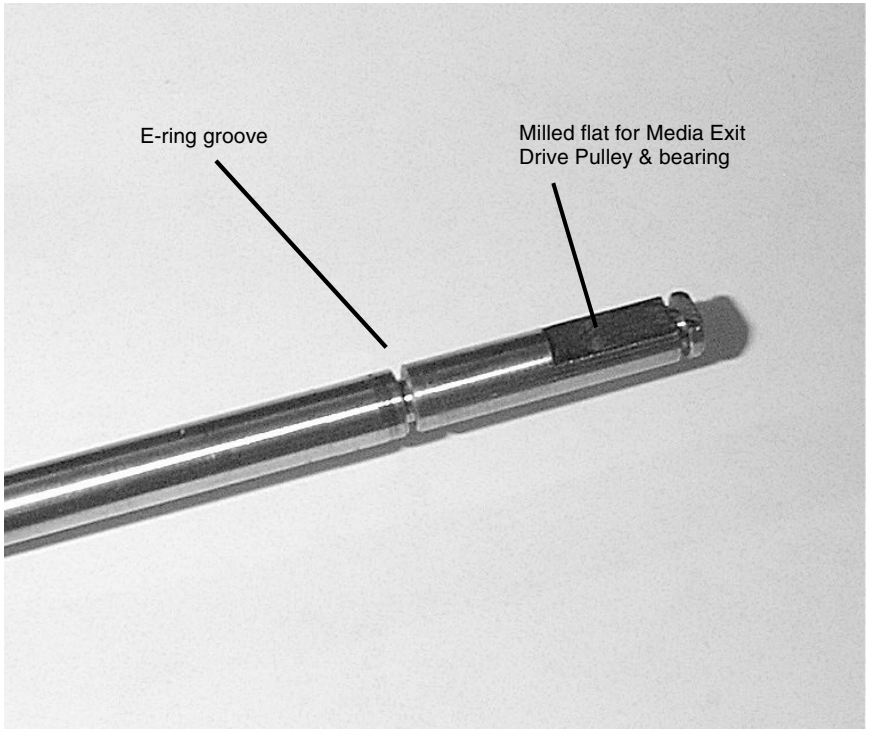


Figure 6 Identifying the Right Side of Exit Drive Roll Shaft

2. (Figure 7): Reinstall the Fuser Exit Sensor.

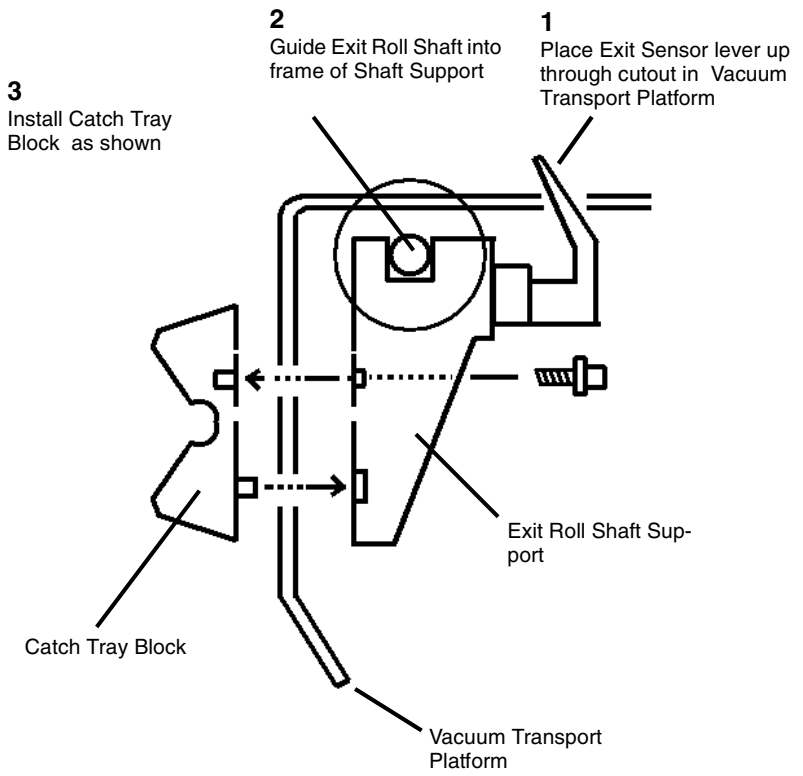


Figure 7 Reinstalling the Fuser Exit Sensor (Cutaway view from Printer Right Side)

3. Reconnect P/J Q1P1 to the Fuser Exit Sensor.
4. Reinstall the plastic bearing and E-ring on the left side of the Printer Exit Roll.
5. (Figure 8): Reinstall the Printer right side hardware.

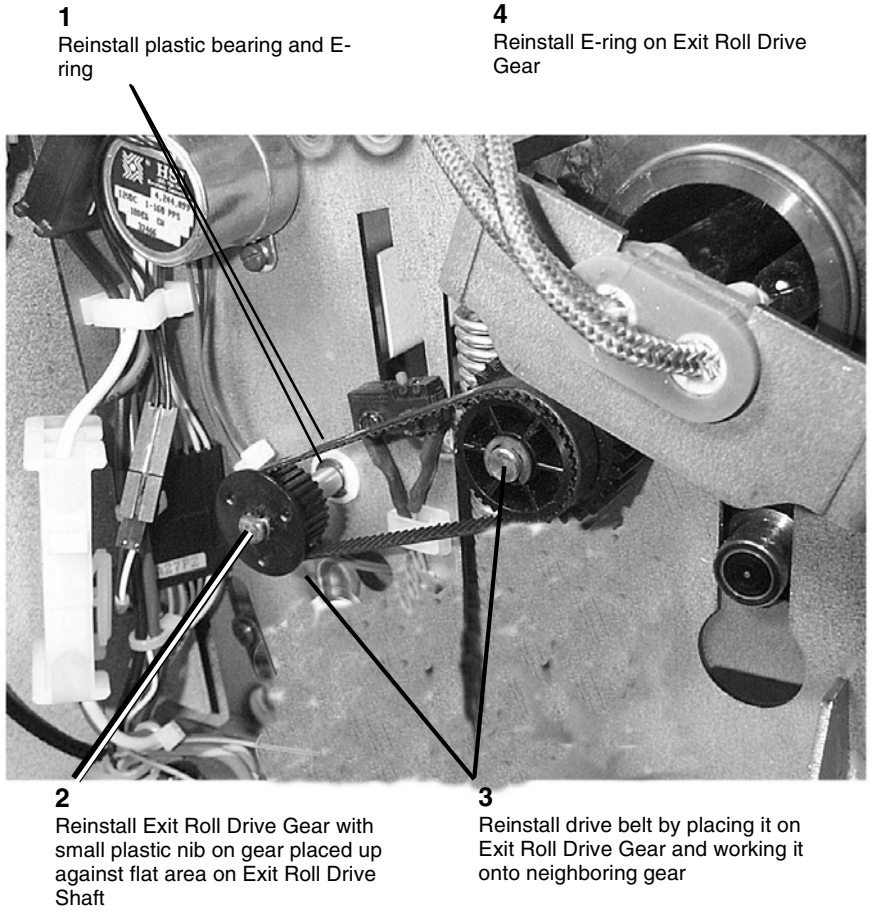


Figure 8 Reinstalling the Printer Right Side Hardware

6. Reinstall the Upper Sheet Feed Housing.
7. Swing closed the Fuser Module Front Cover.
8. Close the Fuser Module Drawer.
9. Return the Printer to normal operation.

REP 8.17 Registration Drive Roll

Parts List on PL 8.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side of the Printer.*

1. Remove the Media Transport Module. Perform REP 8.2 Media Transport Module.
2. (Figure 1): Remove the springs and pivot back the extrusion that holds the Registration Pinch Rollers.

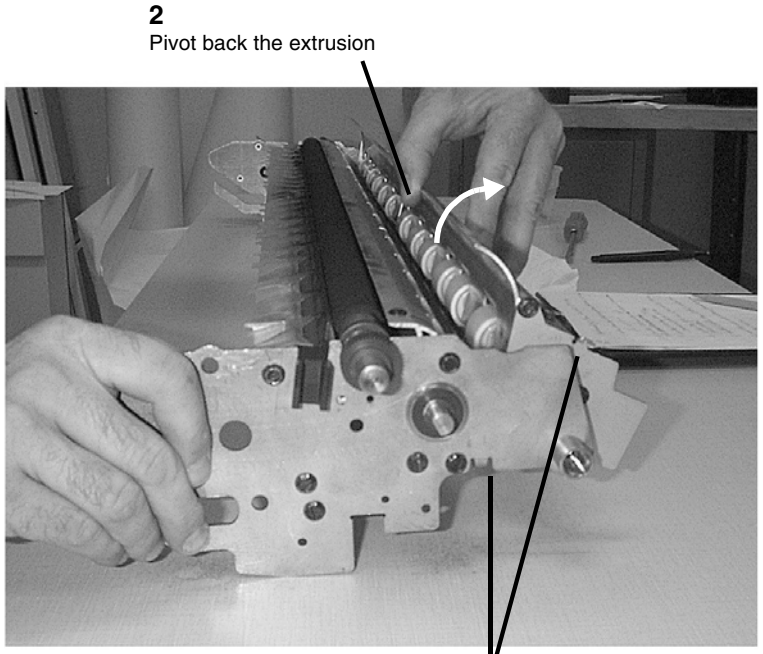


Figure 1 Pivoting Back the Registration Pinch Roller Extrusion

3. (Figure 2): Remove the Front and Rear Media Shields.

NOTE: *In the following procedure, the Front and Rear Media Shields will be removed from the Media Transport Module. These shields are held in position by five tabs that are molded into the underside of each Shield.*

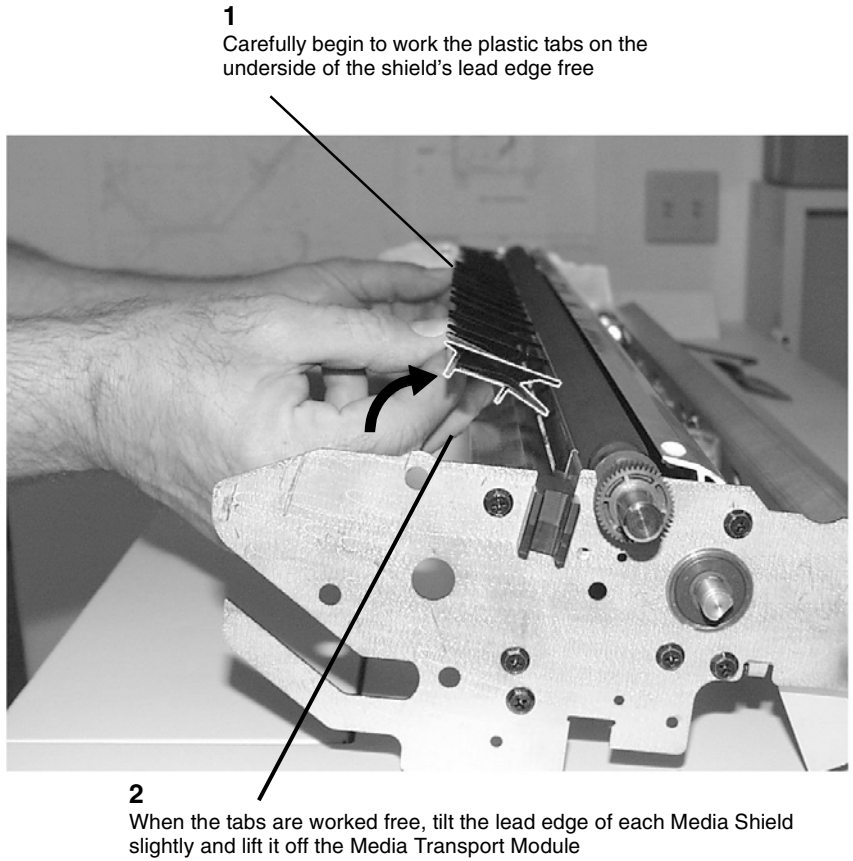


Figure 2 Remove the Front and Rear Media Shields

4. (Figure 3): Remove the Detack Corotron and End Blocks from the Upper Transport Assembly.

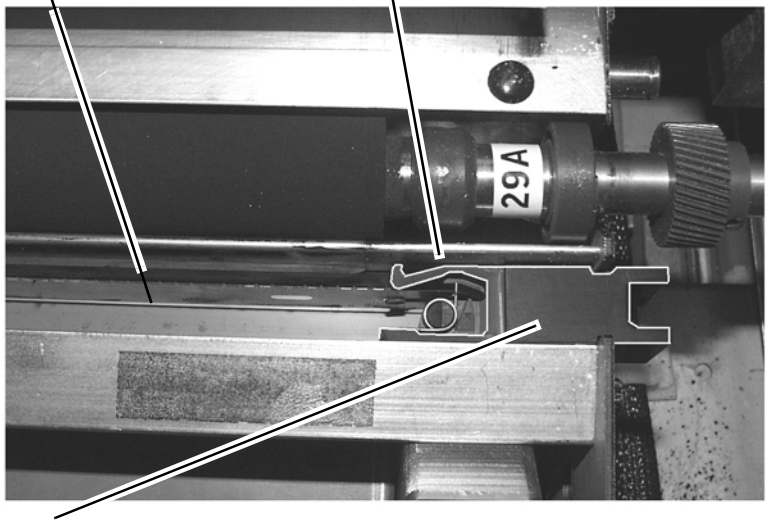


Figure 3 Removing the Detack Corotron and End Blocks

5. (Figure 4): Remove the Bias Transfer Roll (BTR) and BTR Extrusion from the Upper Transport Assembly.

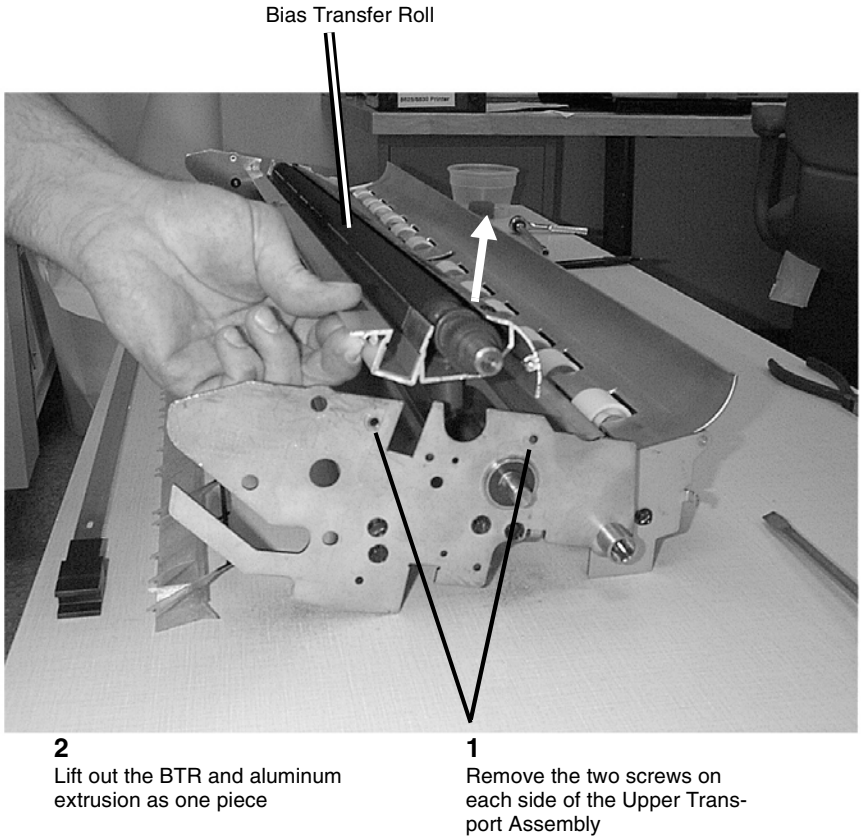


Figure 4 Removing the Bias Transfer Roll and BTR Extrusion

6. (Figure 5): Remove the Registration Drive Roll from the Upper Transport Assembly.

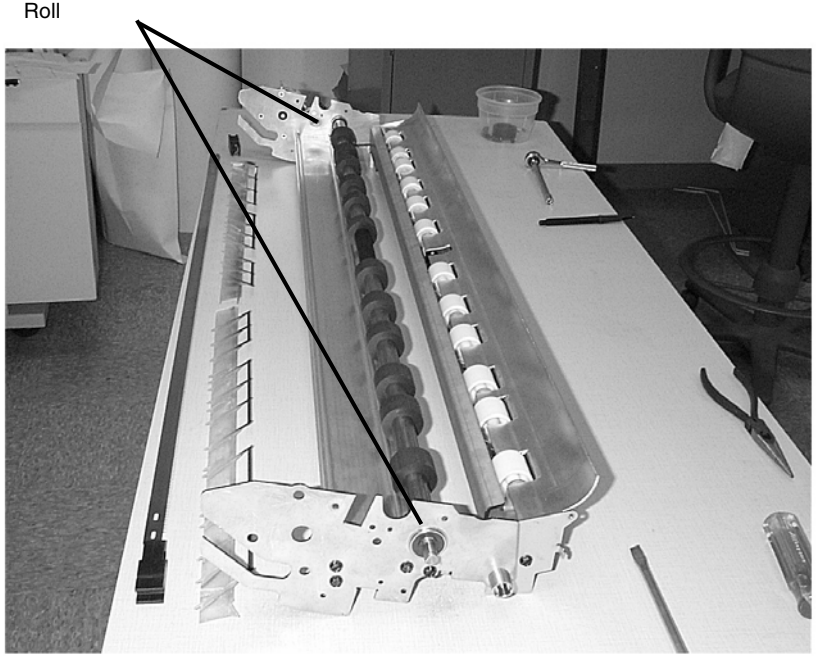


Figure 5 Removing the Registration Drive Roll

Replacement

1. Reinstall the Registration Drive Roll in the Upper Transport Assembly.
2. Remount the Bias Transfer Roll and BTR Extrusion into the Upper Transport Assembly. Reinstall the two mount screws on each side.
3. (Figure 6): Reinstall the Detack Corotron onto the Right and Left End Blocks prior to reinstalling the Detack Corotron into the Upper Transport Assembly.

NOTE: *Ensure that the End Blocks are mounted into the Printer exactly as pictured, with the electrical connection on the left and the drive side on the right.*

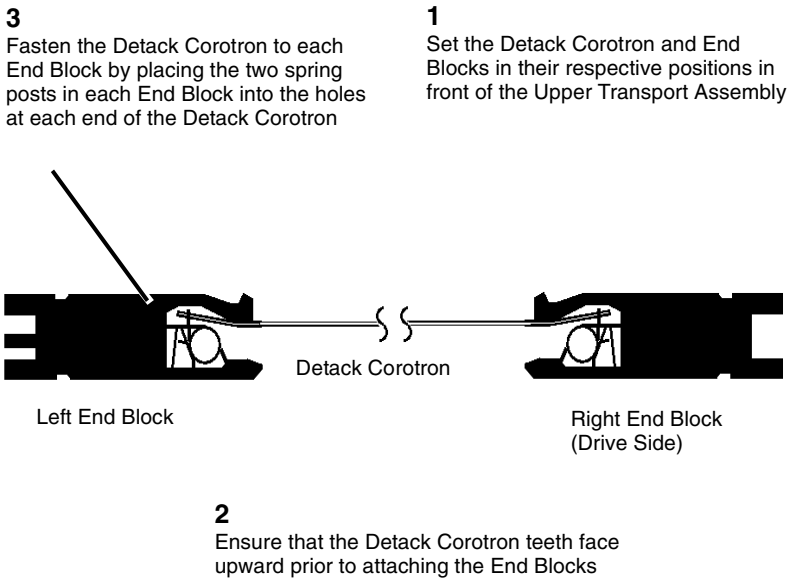


Figure 6 Reinstalling Right and Left End Blocks on the Detack Corotron

4. Reinstall the assembled Detack Corotron / End Blocks onto the Upper Transport Assembly.
5. Reinstall the Front and Rear Media Shields.
6. Pivot forward the extrusion holding the Registration Pinch Rollers, and replace the two retainer springs.
7. Replace the Media Transport Module.

REP 8.18 Detack Corotron/BTR Extrusion

Parts List on PL 8.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side of the Printer.*

1. Remove the Media Transport Module (REP 8.2).
2. Remove the Bias Transfer Roll (REP 9.22).
3. Remove the Detack Corotron (REP 9.9).
4. (Figure 1): Remove the two screws from the Left Side End Plate.

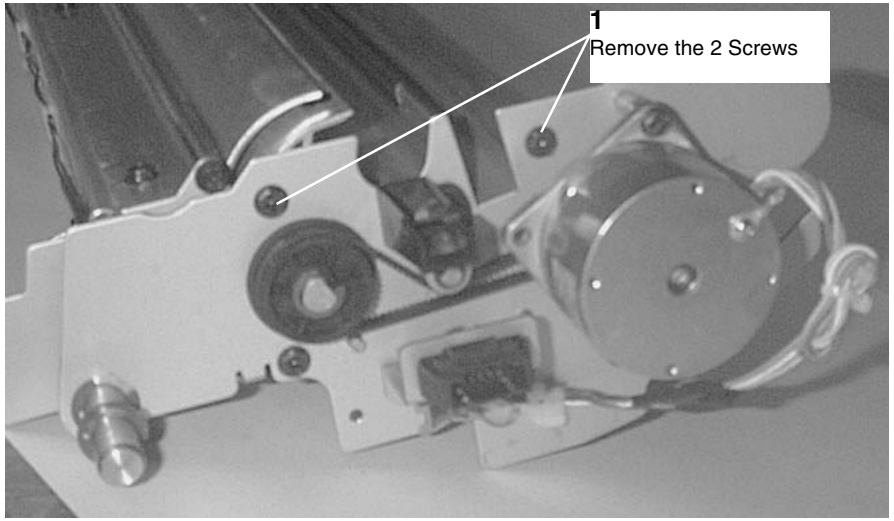


Figure 1 . Removing the Left Side Screws

5. (Figure 2): Remove the Fthe two screws from the Right Side End Plate.

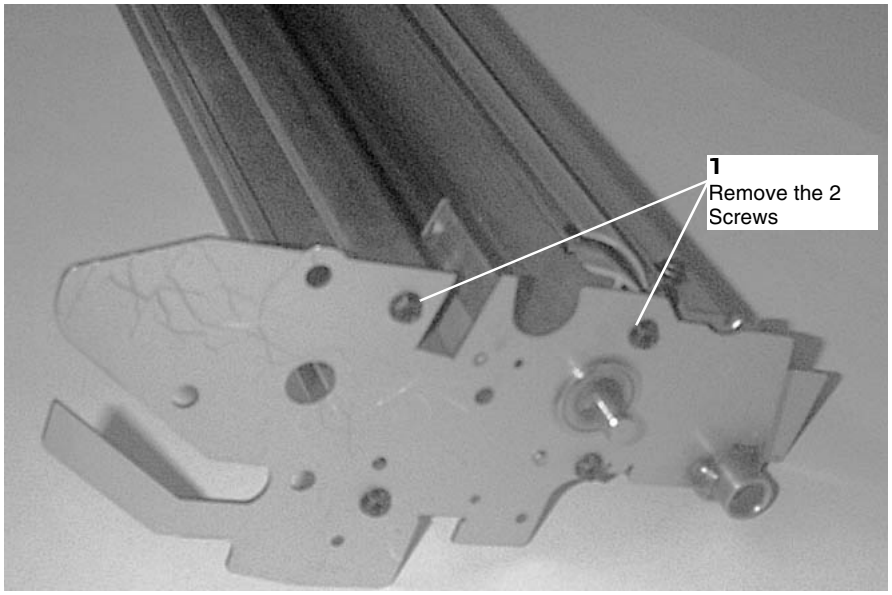


Figure 2 . Removing the Right Side Screws

6. (Figure 3): Remove the Detack Corotron and End Blocks from the Upper Transport Assembly.

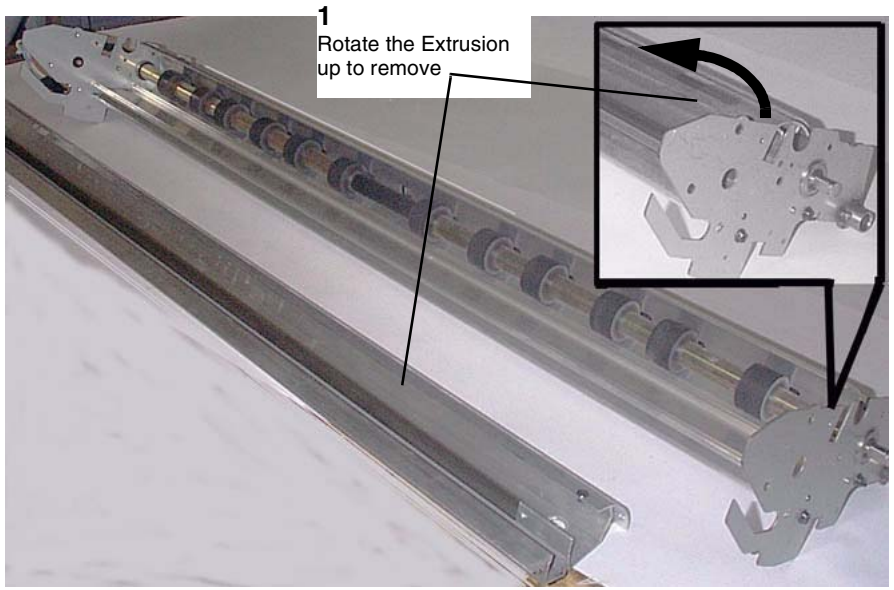


Figure 3 Removing the Detack Corotron/BTR Extrusion

Replacement

1. The replacement is the reverse of the Removal.

REP 9.1 Xerographic Module

Parts List on PL 9.1

WARNING

Switch off the Controller and the Printer Main Power Switches. Disconnect the Printer Power Cord.

Removal

1. Perform REP 9.2 Drum Assembly.
2. (Figure 1): Remove the Xerographic Module from the Printer.

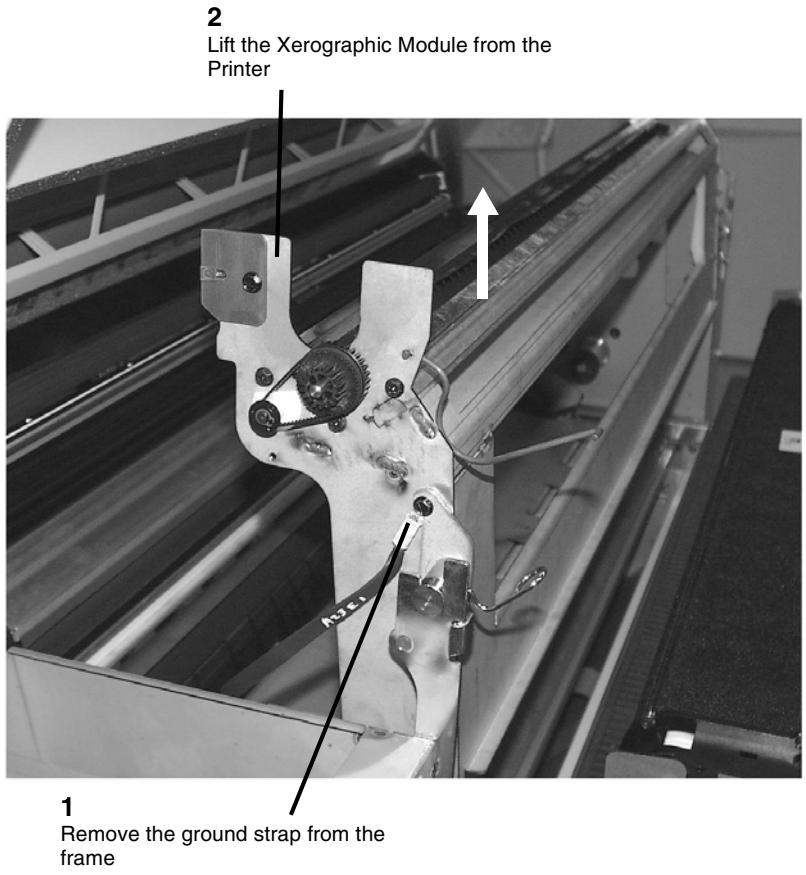


Figure 1 Removing the Xerographic Module

REP 9.2 Drum Assembly

Parts List on PL 9.1

WARNING

Switch off the Controller and the Printer Main Power Switches. Disconnect the Printer Power Cord.

NOTE: *When cleaning the Xerographic area with a vacuum hose ensure that the hose does not accidentally come into contact with the Drum, as this will cause image deletion problems. If the vacuum hose DOES accidentally come into contact with the Drum, use film remover to remove the smudges.*

NOTE: *If a simple cleaning of the Xerographic area is all that's desired, perform the first five steps of this REP, lift out the entire Xerographic Module and vacuum the Xerographic area.*

Removal

1. Open the Printer Top Cover. Perform REP 14.1 Top Cover.
2. (Figure 1): Lift the Printer Image Module.

Figure 1 Lifting the Image Module

3. (Figure 2): Partially extend the Fuser Drawer.

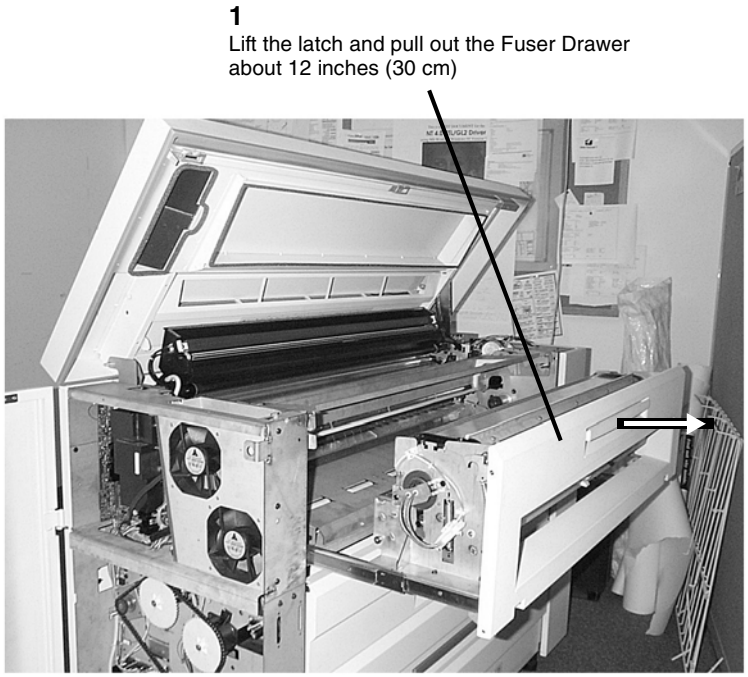


Figure 2 Partially Extending the Fuser Drawer

4. (Figure 3): Release the spring tension on the brackets located at either end of the Xerographic Module.

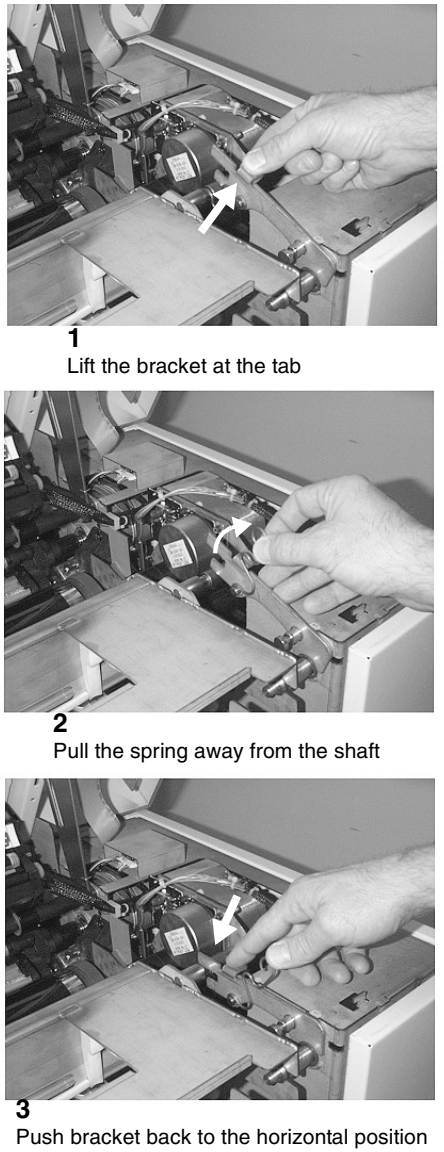


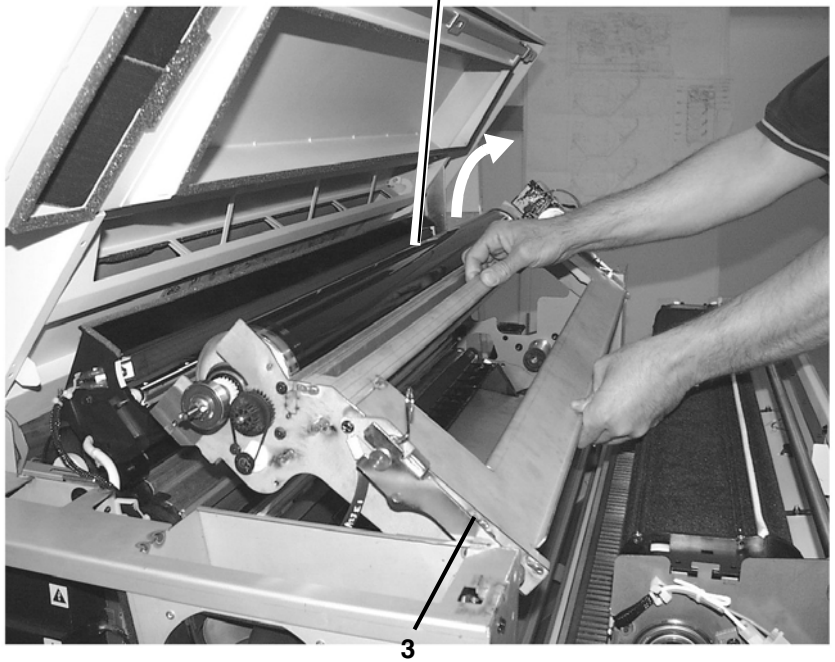
Figure 3 Releasing the Spring Tension on the Bracket

NOTE: *The latches that secure the Xerographic Module to the Printer Frame are spring-loaded and will automatically engage the holes in the frame when it is lifted upright. When performing the following procedure, listen for the latches to engage.*

5. (Figure 4): Raise the Xerographic Module to the service position.

1
With the Xerographic Module lying horizontally, slide it towards the manual infeed area

2
Carefully raise the Xerographic Module to the upright position



3
Listen for positive engagement of the latches at the base of the brackets prior to releasing the Xerographic Module

Figure 4 Elevating the Xerographic Module to Service Position

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

6. (Figure 5): Loosen the Bearing Retainer from the left side of the Xerographic Module. (It is a wire spring that goes over the top of the left Bearing.)

1
Push the Bearing Retainer inward to remove it from the bearing

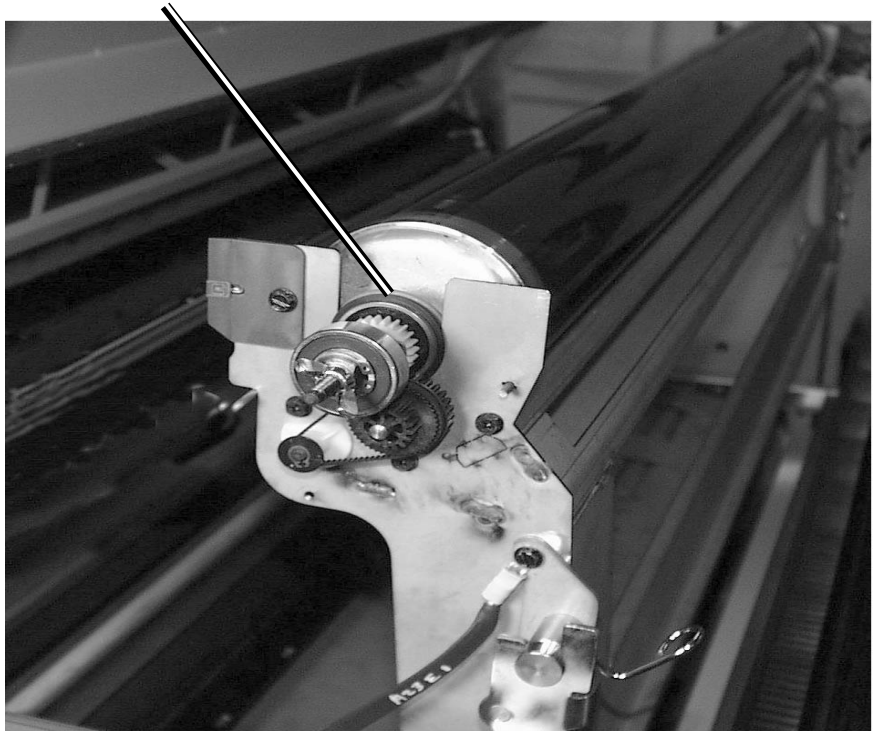


Figure 5 Loosen the Bearing Retainer

7. (Figure 6): Rotate the bearing retainer off the bearing.

Figure 6 Releasing the Bearing (Left Side) out of the Frame

8. (Figure 7): Move the bearing out of the right side of the Xerographic Module Frame.

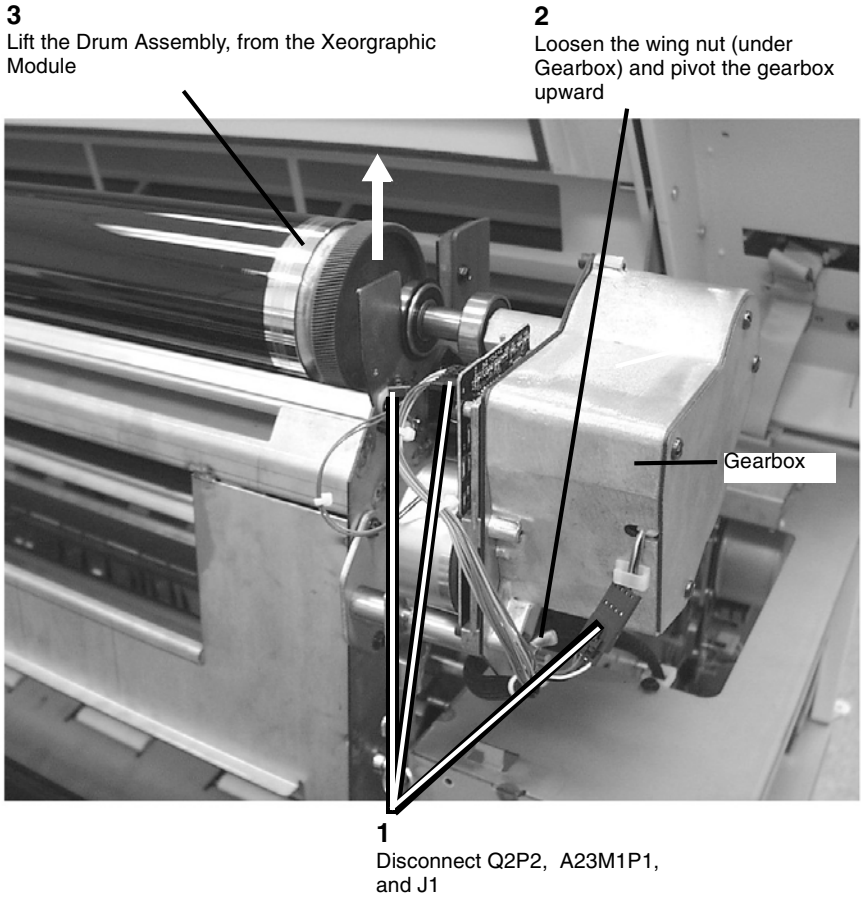


Figure 7 Removing the Drum Assembly

CAUTION

In the following step avoid placing the Drum Assembly in areas where it may be accidentally knocked over or exposed to bright sunlight.

9. (Figure 8): Carefully remove the Drum Assembly from the Printer and place it, Gear Box down, in a safe area in the room.

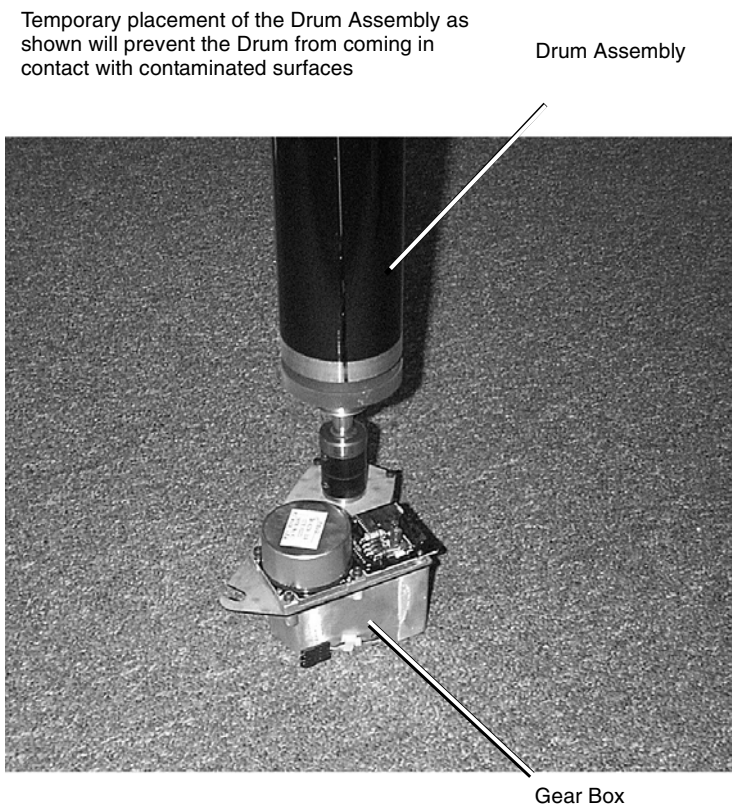


Figure 8 Temporary Placement of the Drum Assembly

REP 9.3 Drum

Parts List on PL 9.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *When the Drum is replaced, install a Cleaner Blade Kit (REP 9.4).*

1. Remove the Drum Assembly (REP 9.2).
2. (Figure 1): Carefully place the Drum Assembly, Gear Box down, in a safe place on the floor.

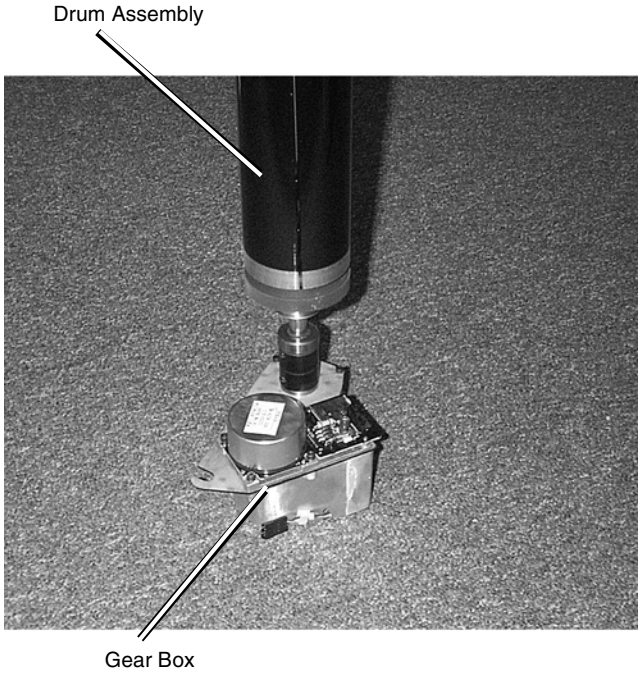


Figure 1 Temporary Placement of the Drum Assembly

3. (Figure 2): Remove the Drum from the Shaft Assembly.

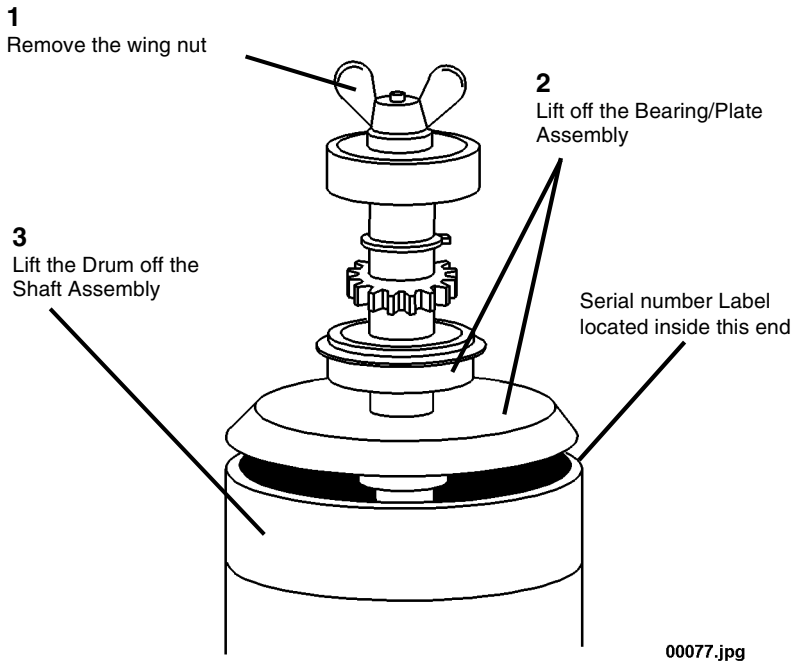


Figure 2 Removing the Drum from the Shaft Assembly

4. If the Drum is being replaced, install a Cleaner Blade Kit (REP 9.4).
5. Reassemble the Drum Assembly with the Serial number Label located to the non drive side of the assembly.
6. Perform (GP 4) Drum Cleaning Enhancement procedure.
7. Reinstall the Drum Assembly.
8. Perform the Electrostatic Series (ADJ 9.2).

REP 9.4 Cleaner Blade Kit

NOTE: *These are the instructions to install the Cleaner Blade Kit. The kit contains the following items:*

- *Right-hand Seal (57 mm wide)*
- *Left-hand Seal (41 mm wide)*
- *Cleaner Blade*
- *Photoreceptor Seal*
- *Blade Retainer (3)*

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side of the Printer.*

1. Remove the Drum Assembly (REP 9.2).
2. (Figure 1): Remove the Photoreceptor Seal, Right-hand Seal, Left-hand Seal, Cleaner Blade, and the three Blade Retainers from the Xerographic Module.
3. Use a vacuum cleaner to clean the channels and the areas where the new parts will be installed.

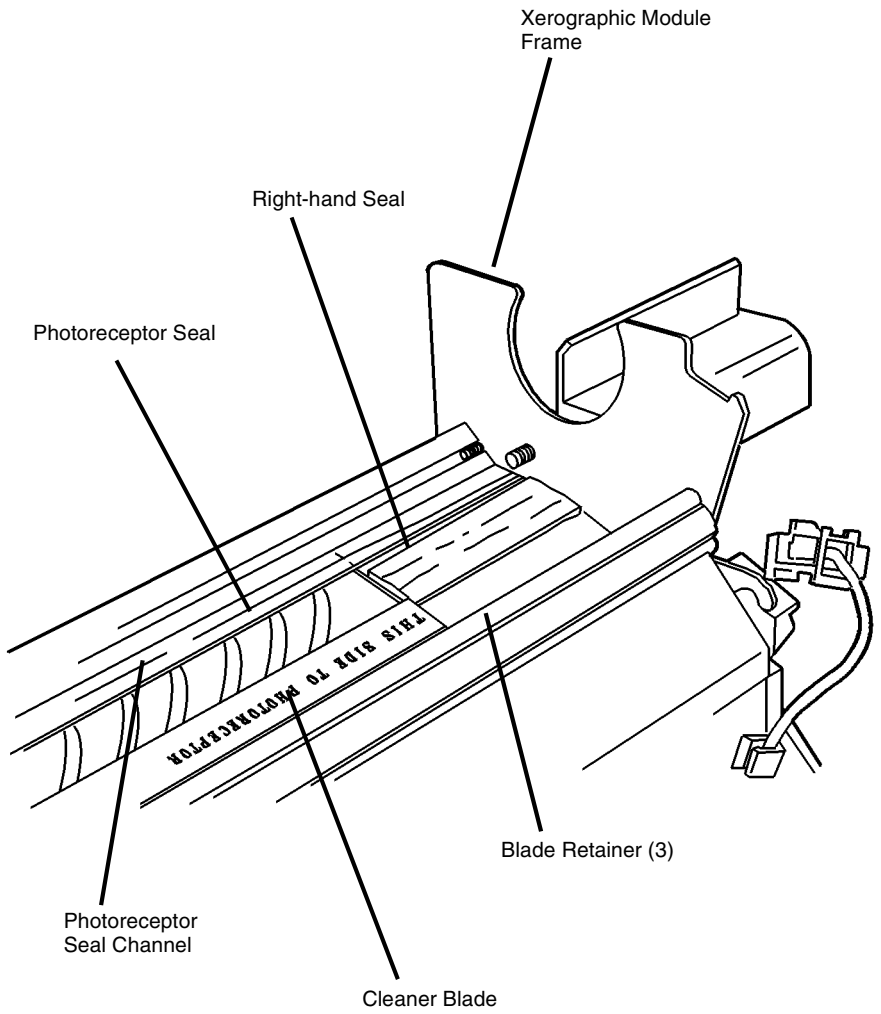


Figure 1 Removing the Cleaner Blade

Replacement

1. (Figure 2): Replace the Photoreceptor Seal.
   a. Carefully fold the Photoreceptor Seal along the perforations.
   b. Slide the Photoreceptor Seal into the channel, smaller side up, so that the edge of the Photoreceptor Seal forms a seal with the inside lip of the channel.
   c. Using a soft, straight tool (a piece of shimstock works well), carefully push the seal into the channel, across the entire width of the Xerographic Module.
2. Replace the Right-hand Seal.
   a. Insert the red stripe end of the Right-hand Seal underneath the folded Photoreceptor Seal.
   b. Install the seal fuzzy side up.
   c. Ensure that the seal is flush against the Xerographic Module Frame.
3. Replace the Cleaner Blade.
   a. Start the Cleaner Blade flush against the left edge of the Right-hand Seal.
   b. Ensure that the marking, **THIS SIDE TO PHOTORECEPTOR**, is to the right.
   c. Push the Cleaner Blade into the channel, with the Arrow marking to the left.
   d. Ensure that the blade is fully seated in the channel.
4. Install the first of the three Blade Retainers approximately one inch from the Xerographic Module Frame, working to the left.

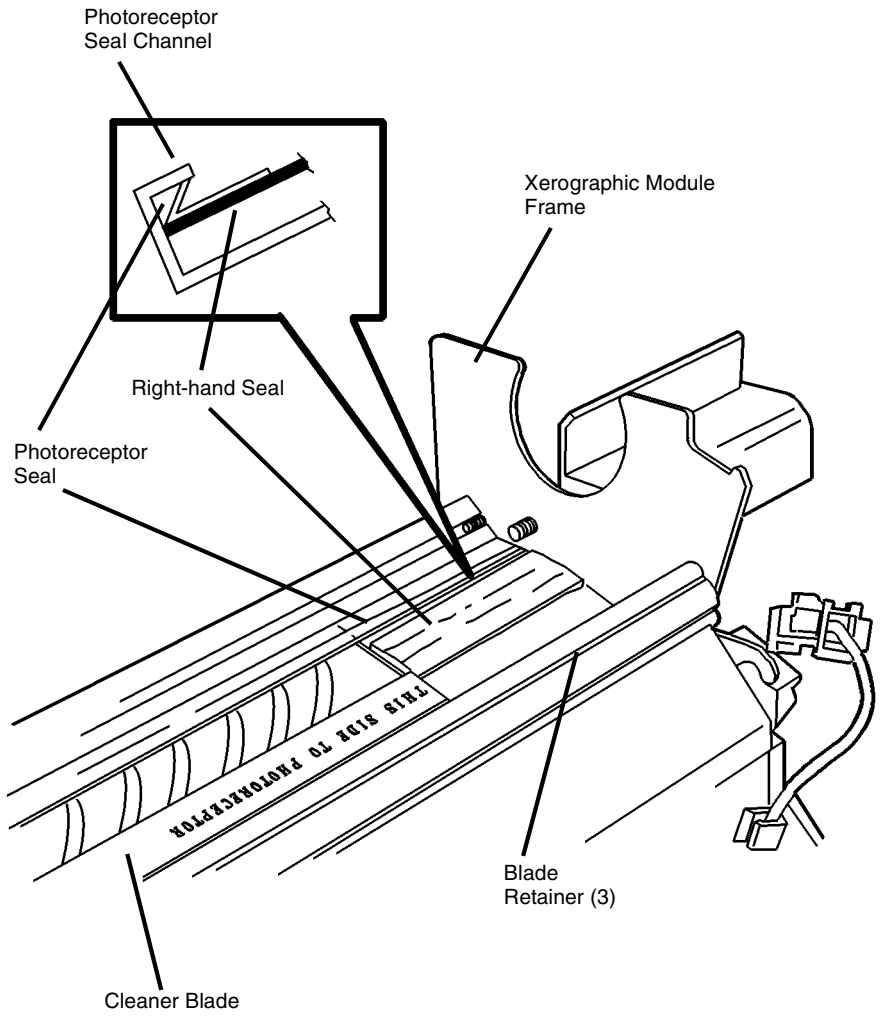
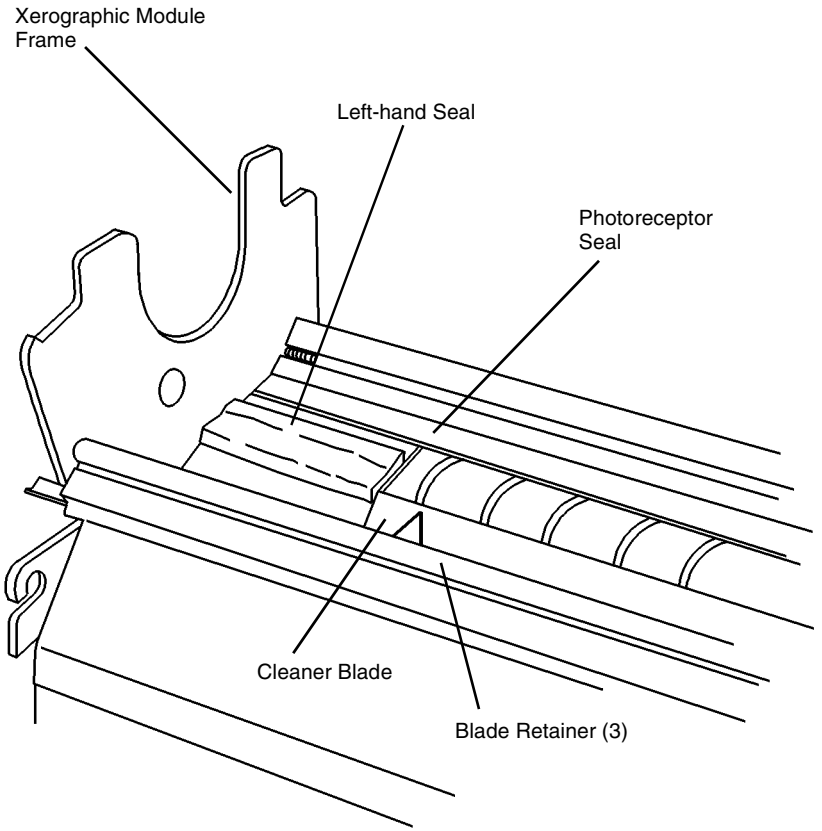


Figure 2 Installing the Cleaner Blade Kit

5. (Figure 3): Complete the installation of the remaining two Blade Retainers, positioning them, one at a time, to the left of the first one.
6. Replace the Left-hand Seal.
   a. Insert the red stripe end of the Left-hand Seal underneath the folded Photoreceptor Seal.
   b. Install the seal fuzzy side up.
   c. Ensure that the seal is flush against the Xerographic Module Frame.
7. Perform GP 4 Drum Cleaning Enhancement procedure.



0103013A-RNO

Figure 3 Installing the Cleaner Blade Kit

REP 9.5 Developer Module

Parts List on PL 9.6

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *In the following steps the terms "left" and "right" describe machine locations as observed when facing the Roll Media Supply Drawer side of the Printer.*

NOTE: *If the Developer Module is being replaced with a new one, new Developer Material must be installed. Refer to (REP 9.7) Developer Material.*

Removal

CAUTION

Before removing the Developer Module, ensure that there is a clean area on which to place the assembly.

1. Loosen the screws and open the Rear Cover.
2. Raise and latch the Top Cover.
3. Raise and hold the Developer Module Cover while lifting and removing the Rear Developer Cover.
4. Lower the Top Cover.

NOTE: *In the following step, tape the Toner Cartridge dispense holes in order to prevent toner from pouring out when the Toner Cartridge is tipped up for removal.*

5. (Figure 1): Remove the Toner Cartridge.

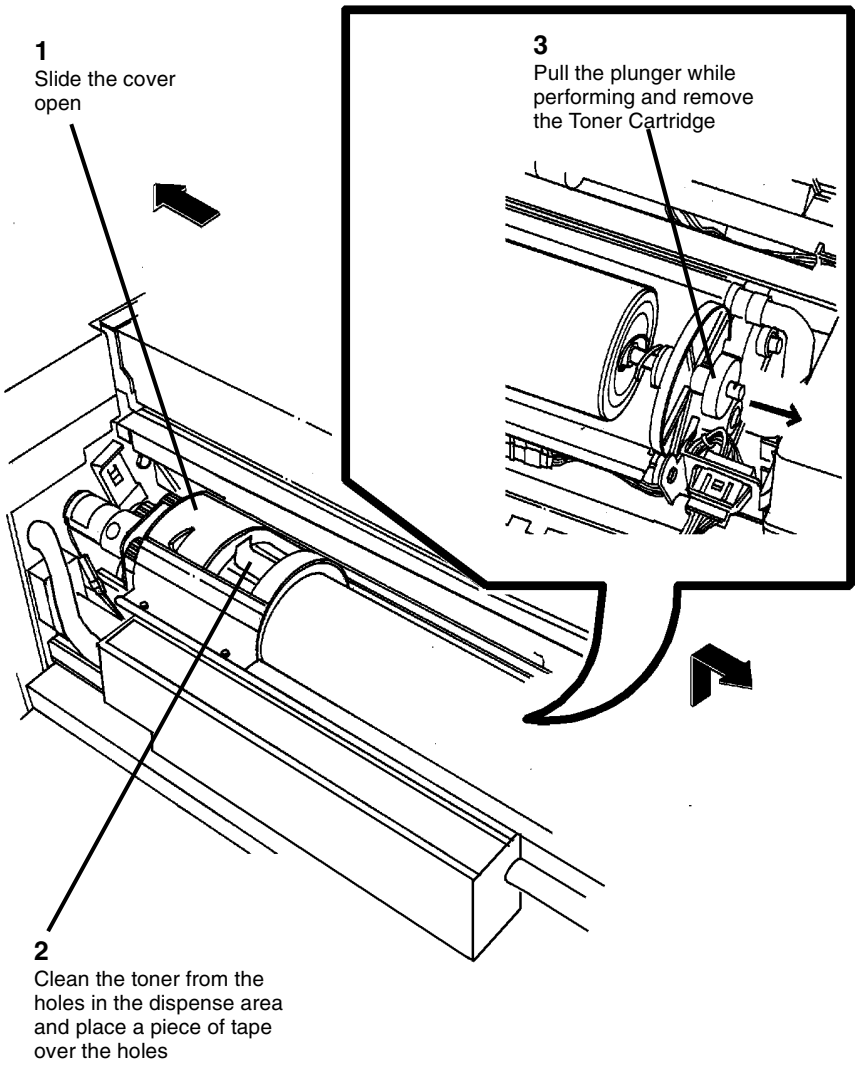


Figure 1 Removing the Toner Cartridge

CAUTION

Ensure that the two Clamp Bars (located at either end of the Developer Module) are rotated downward prior to removing the Developer Module. This will prevent them from getting in the way as the Developer Module is removed from the Printer.

CAUTION

The Developer Module must be kept in the same relative position as it is being removed from the Printer. Excessive rotation or lateral swaying of the module can cause the Developer Material to shift, resulting in diagnostic or image quality faults.

6. (Figure 2): Remove the Developer Module.

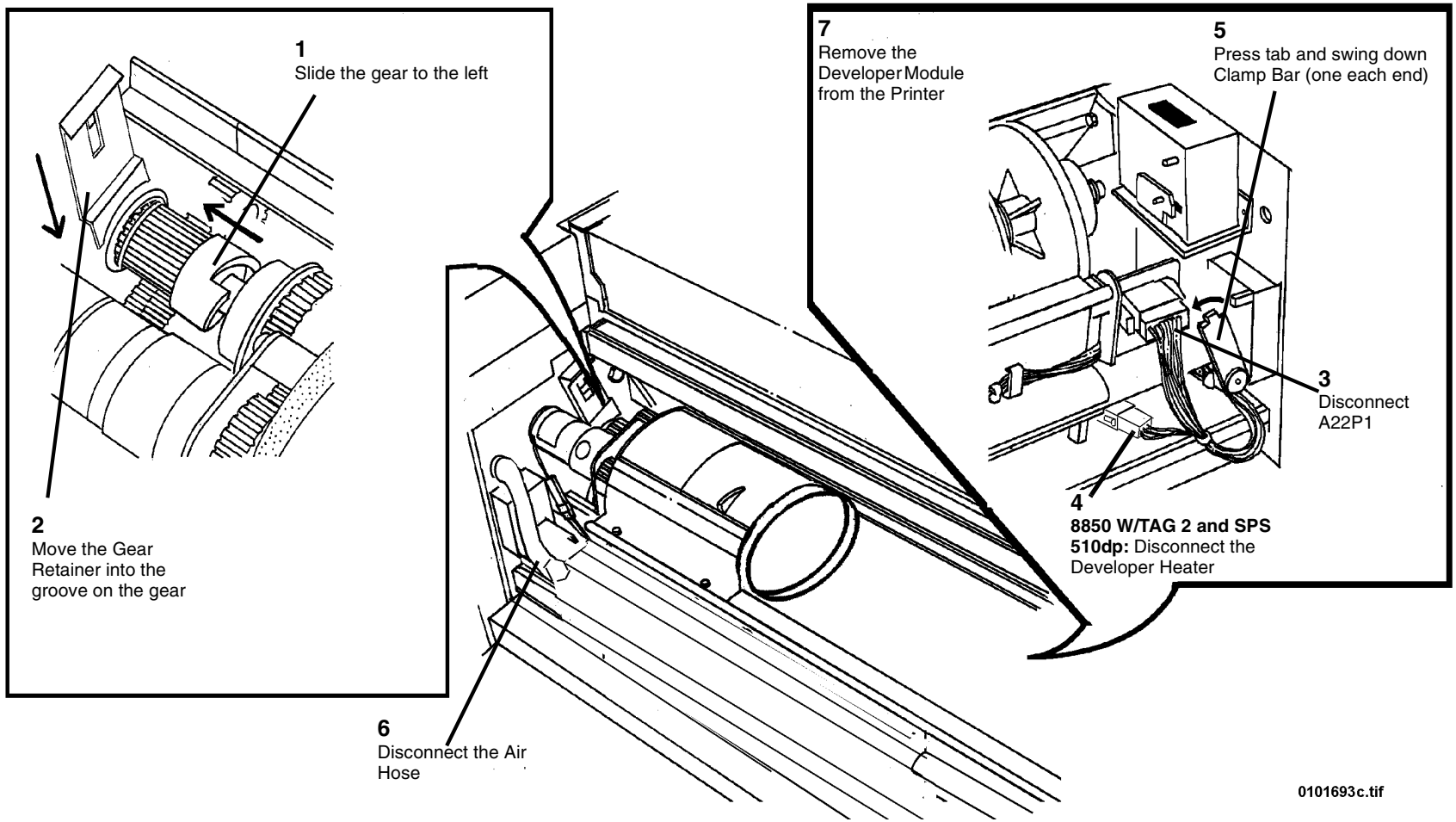


Figure 2 Removing the Developer Module

Replacement

CAUTION

Ensure that the Developer Module is fully reinstalled in the brackets. Push the Module fully to the left (drive side). A slight drop may be felt as the Module goes into position.

CAUTION

Ensure that the gear is free to engage the Developer Module drive gears.

1. (Figure 3): Reinstall the Developer Module.

NOTE: *If a new Developer Module is being installed, a new charge of Developer Material must be installed. Refer to (REP 9.7) Developer material.*

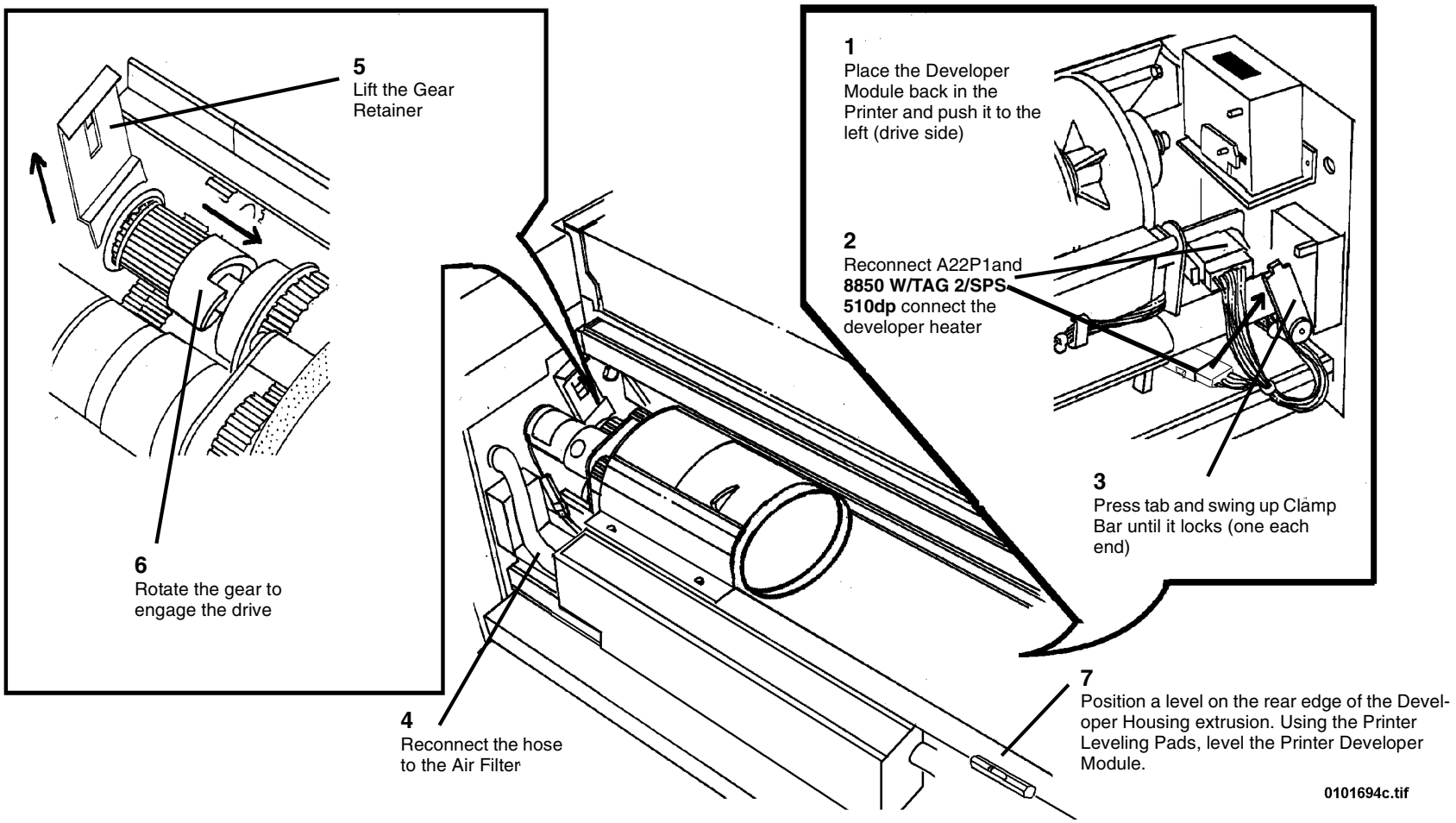


Figure 3 Reinstalling the Developer Module

2. (Figure 4): Reinstall the Toner Cartridge.

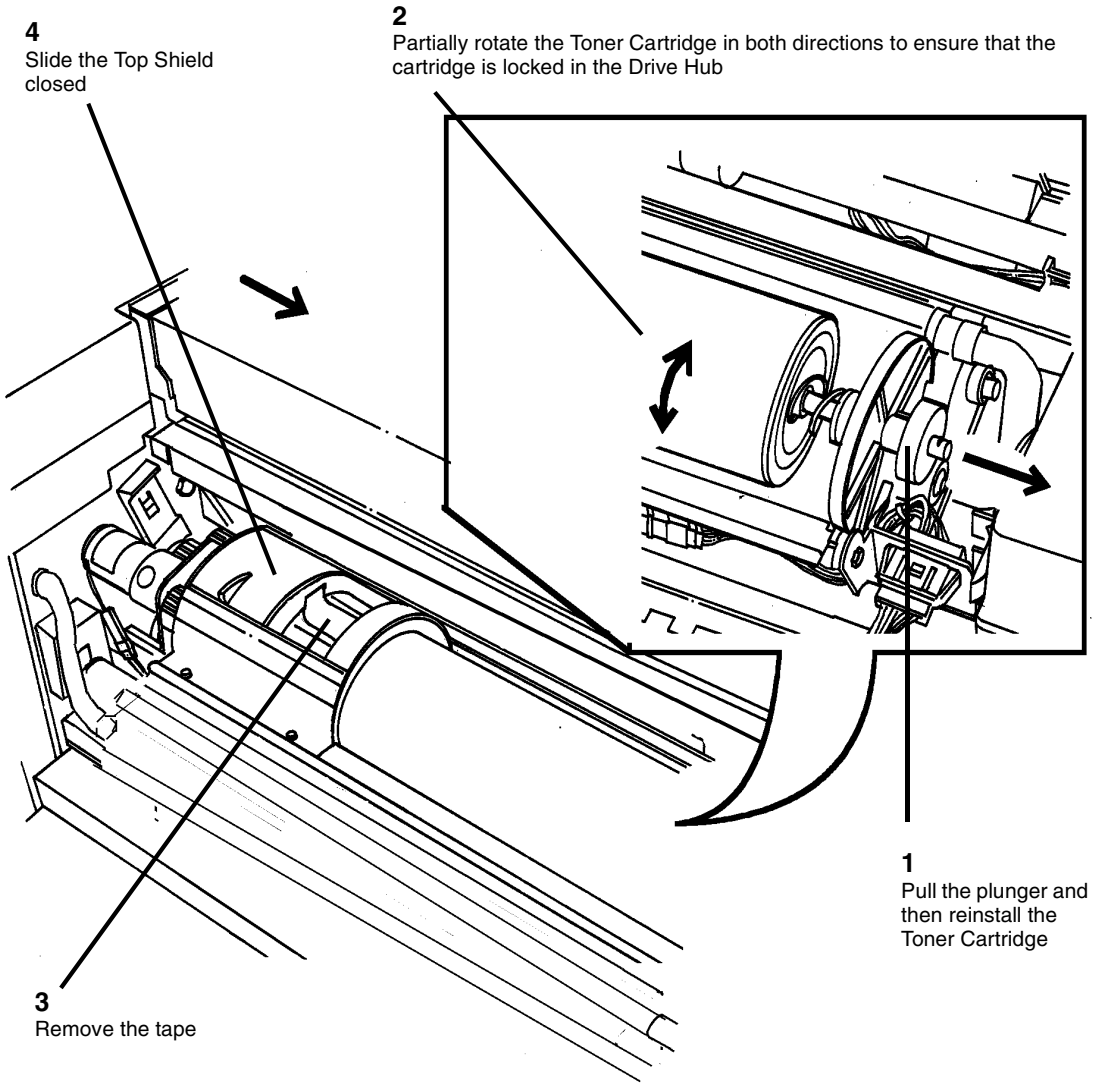


Figure 4 Reinstalling the Toner Cartridge

3. If new Developer Material has been installed, perform GP 8, Toner Control System Calibration.

REP 9.6 Cartridge Drive Motor

Parts List on PL 9.8

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module. Perform REP 9.5 Developer Module.
2. (Figure 1): Remove the Cartridge Drive Motor from the Developer Module.

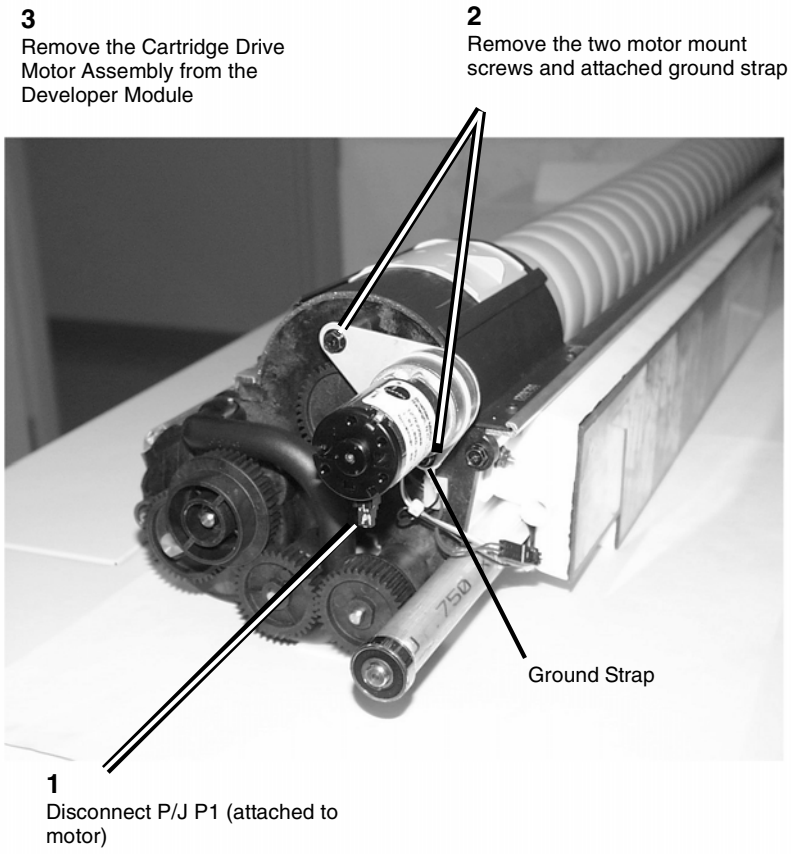


Figure 1 Removing the Cartridge Drive Motor

3. (Figure 2): Remove the Cartridge Drive Motor from the Mounting Plate.

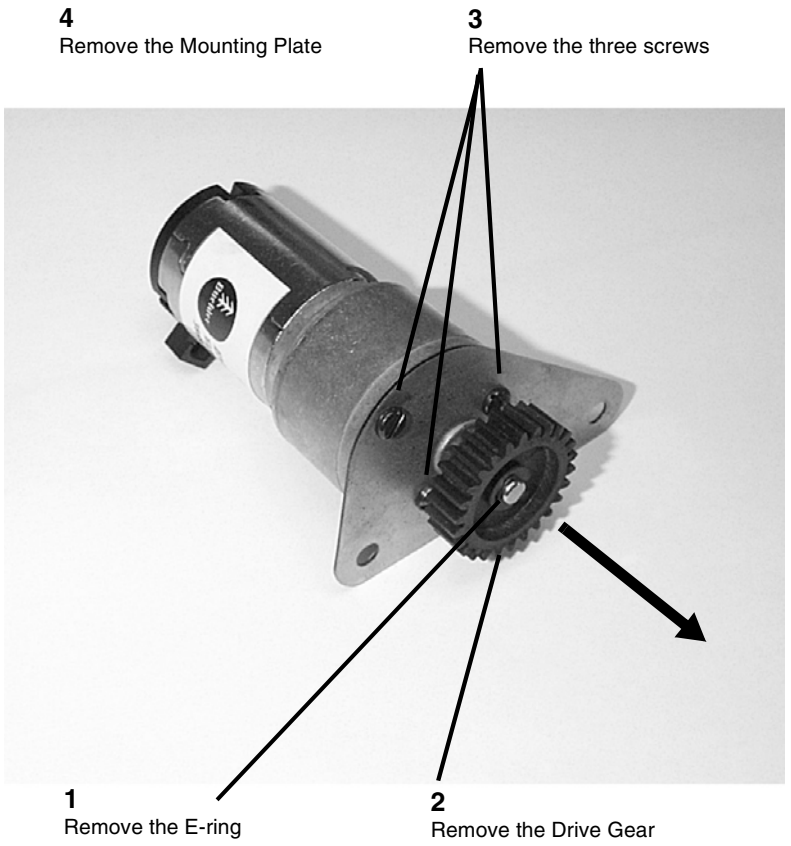


Figure 2 Removing the Cartridge Drive Motor from the Mounting Plate

REP 9.7 Developer Material

Parts List on (Refer to General Tools and Supplies (NACO), General Tools and Supplies (EO) Machine Consumables, Section 6.)

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module (REP 9.5).

CAUTION

Do not rotate the Developer Module in the vertical position. This may cause Developer Material to get into the Toner Cartridge Clutch (located at the end of the Developer Module).

2. Place the Developer Module on a drop cloth on the floor.
3. (Figure 1): Remove the Sump Shield from the Developer Module.

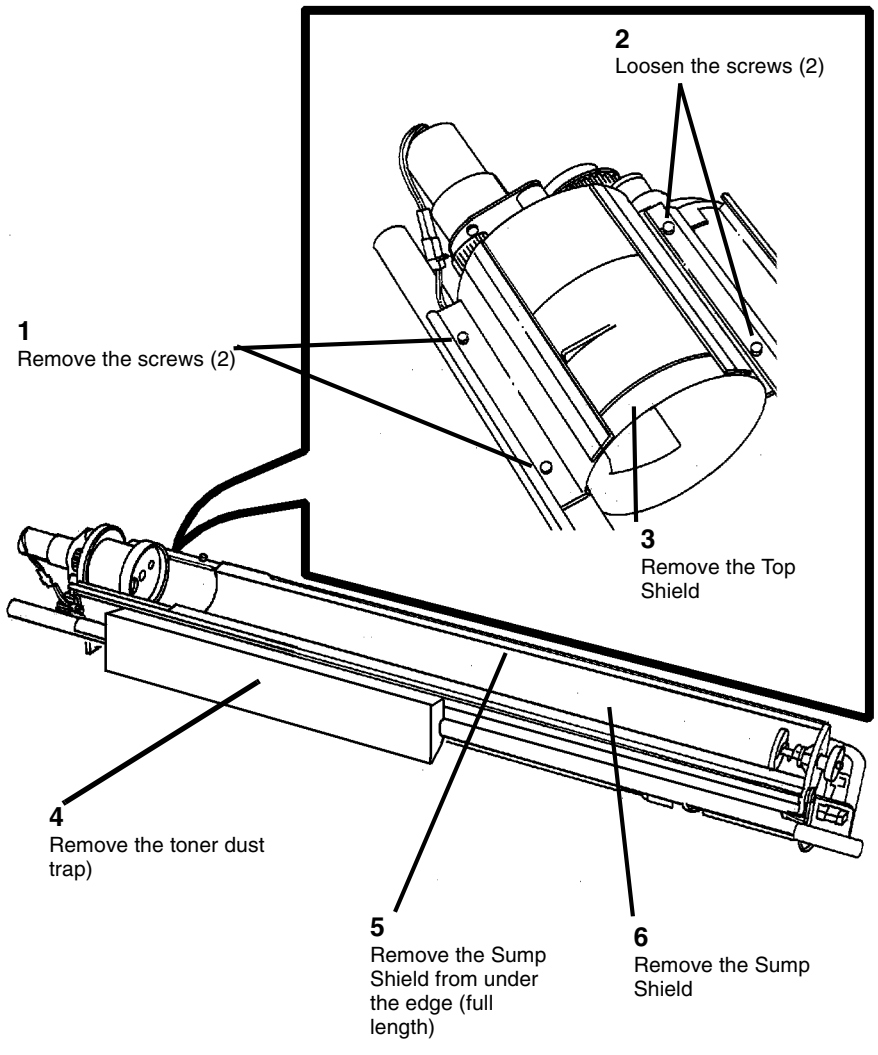


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Figure 1 Removing the Sump Shield from the Developer Module

NOTE: *In the following step rotate the Developer Module away from the Magnetic Roll.*

4. (Figure 2): Dump the Developer Material.

CAUTION

Do not rotate the Auger Gears individually more than the slight amount required for removal or to mesh the teeth during reinstallation. If the factory setting of the augers is changed during the procedure, perform the adjustment procedure, Augers (ADJ 9.6).

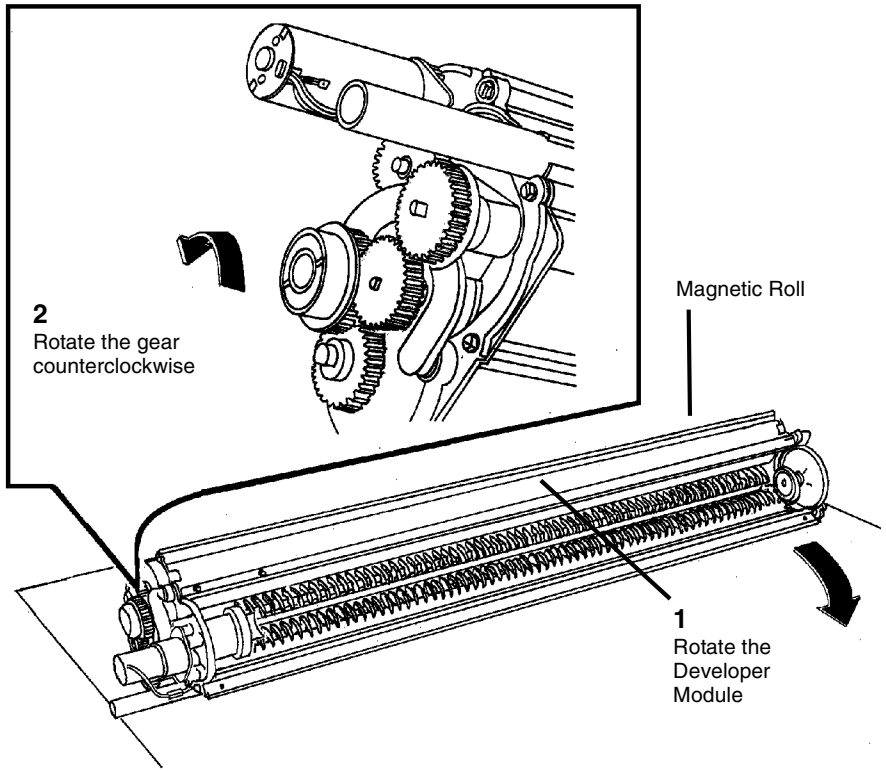


Figure 2 Dumping the Developer Material

5. (Figure 3): Remove the Pressure Equalizer Tubes.

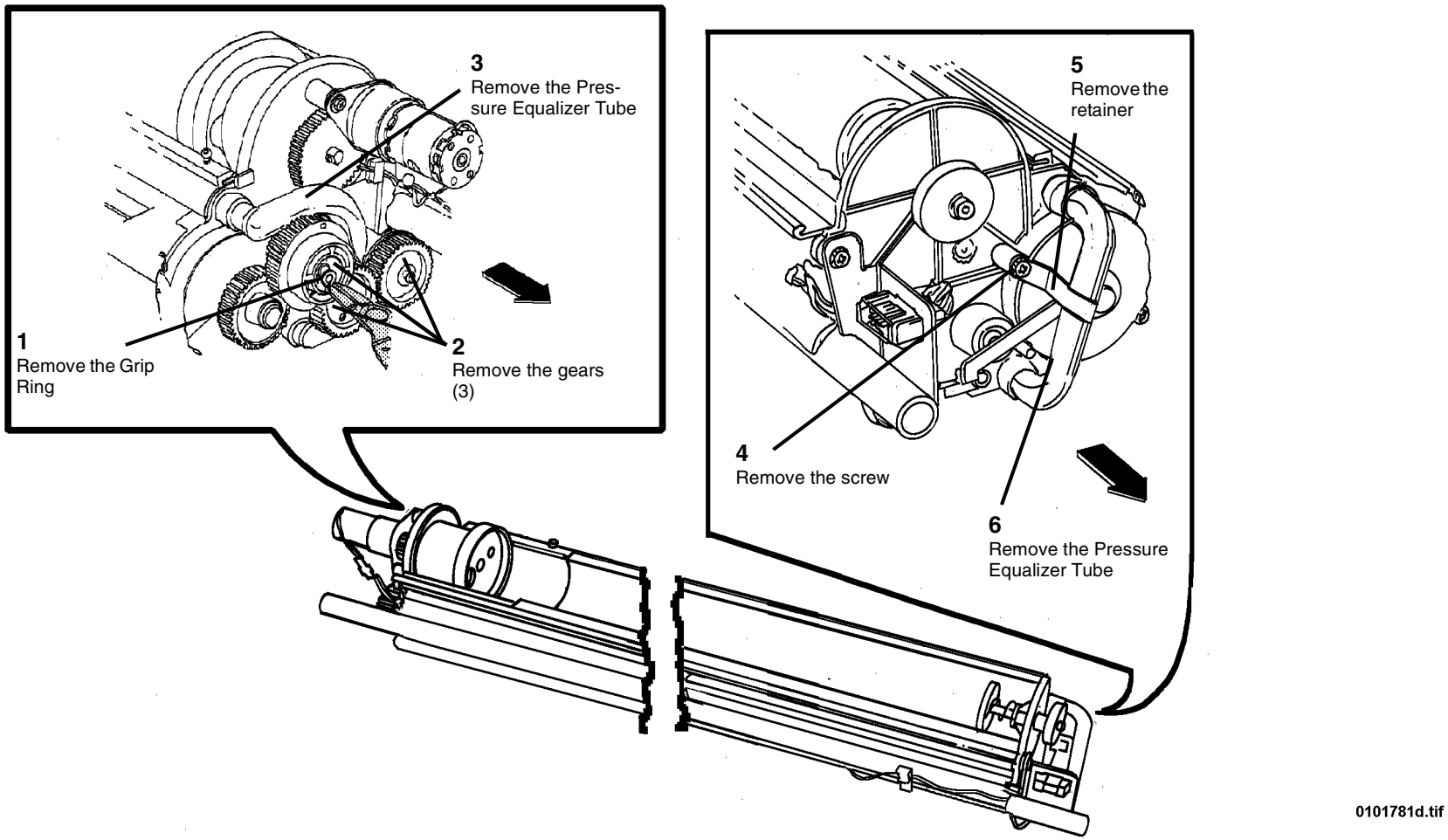


Figure 3 Removing the Pressure Equalizer Tubes

6. Using a vacuum cleaner, clean the entire Developer Module, Magnetic Roll, and Pressure Equalizer Tubes thoroughly.

CAUTION

Ensure that the entire length of the tube on the Developer Module is clear of any developer.

7. Using a vacuum cleaner, clean the housing where the Pressure Equalizer Tubes attach.

Replacement

CAUTION

Do not rotate the Auger Gears individually more than the slight amount required for removal or to mesh the teeth during reinstallation. If the factory setting of the augers is changed during the procedure, perform the adjustment procedure, ADJ 9.6 Augers.

NOTE: *Ensure that the gears are reinstalled with the flanges as shown to ensure that all the gears are secured.*

NOTE: *To ensure that the Toner Cartridge is correctly engaged in the Drive Plate, rotate the cartridge in both directions until the gears rotate correspondingly.*

NOTE: *The Developer Module must be kept in the same relative position as it is being removed the Printer. Excessive rotation or lateral swaying of the module can cause the Developer material to shift, resulting in diagnostic or image quality faults.*

1. (Figure 5): Reinstall the Pressure Equalizer Tubes.

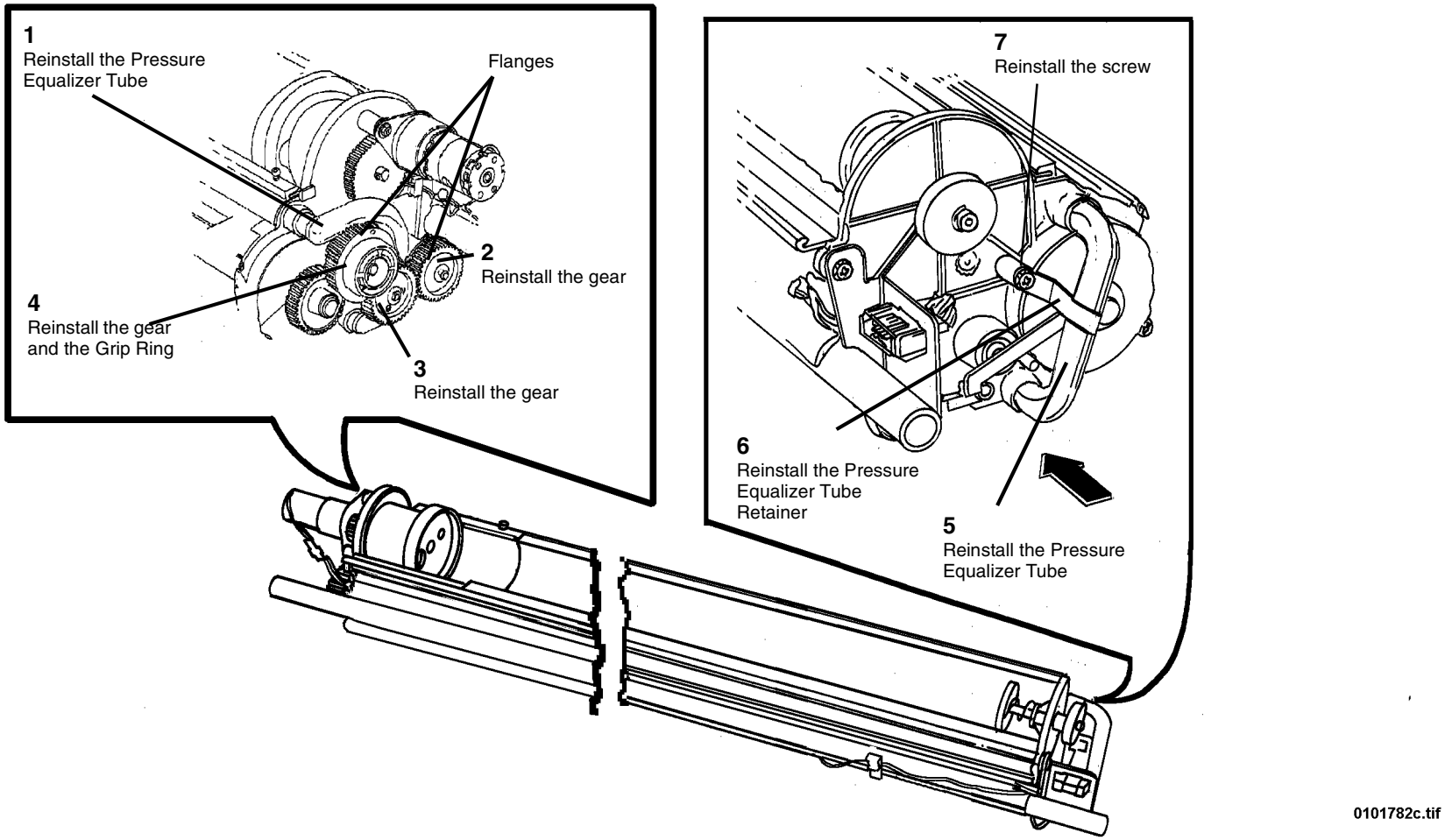


Figure 4 Reinstalling the Pressure Equalizer Tubes

NOTE: *In the following procedure, pour the Developer Material evenly from one side to the other across the full length of the Rear Auger, depositing any remaining Developer Material evenly close to the NON-DRIVE side of the Developer Module. The Developer Material should be kept away from the Toner Sensor and trickle port when the material is installed to allow the augers time to distribute and mix the material before passing the sensor. Also, if a large amount of material is poured in the Front Auger, it may be not get distribute evenly and be lost down the trickle port that will deplete the amount of material in the sump. The calibration of the Toner Sensor and life of the material would be affected.*

NOTE: *There is no need to manually spread the Developer with brushes, sticks, etc. as this can cause foreign materials to be introduced into the Developer Module, causing print quality problems.*

2. (Figure 4): Install the Developer Material and record the batch number in the Machine Log.

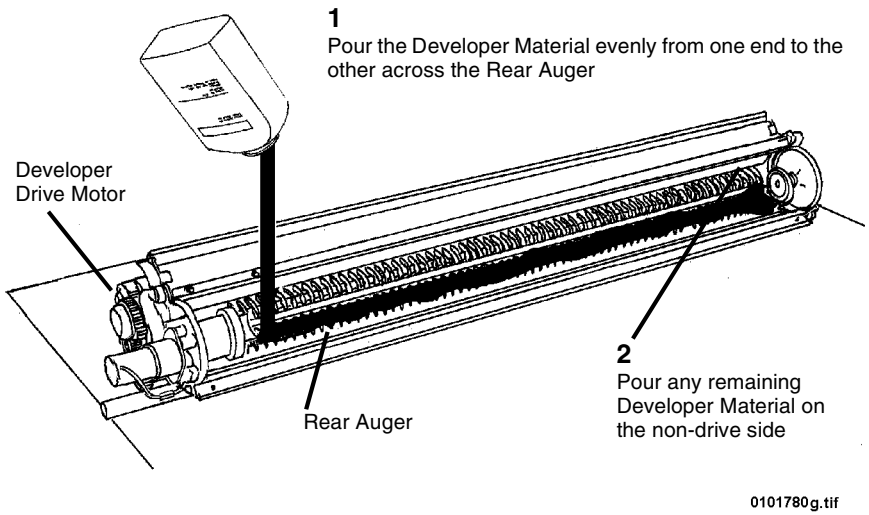


Figure 5 Installing the Developer Material

3. (Figure 6): Reinstall the Sump Shield in the Developer Module.

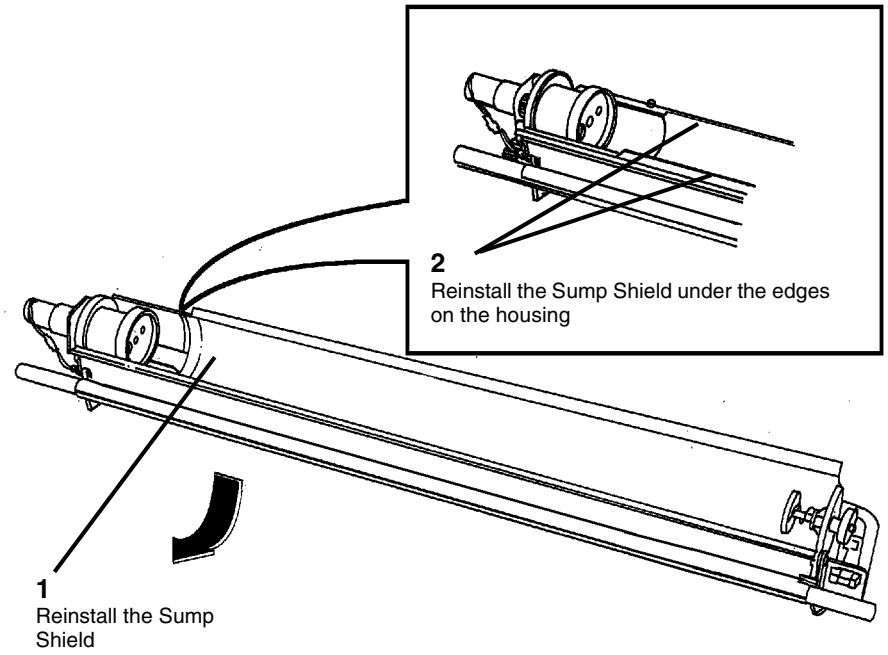


Figure 6 Reinstalling the Sump Shield in the Developer Module

4. Reinstall the Air Filter on the back of the Developer Module (2 screws).

5. (Figure 7): Reinstall the Top Shield, taking care not to overtighten the screws.

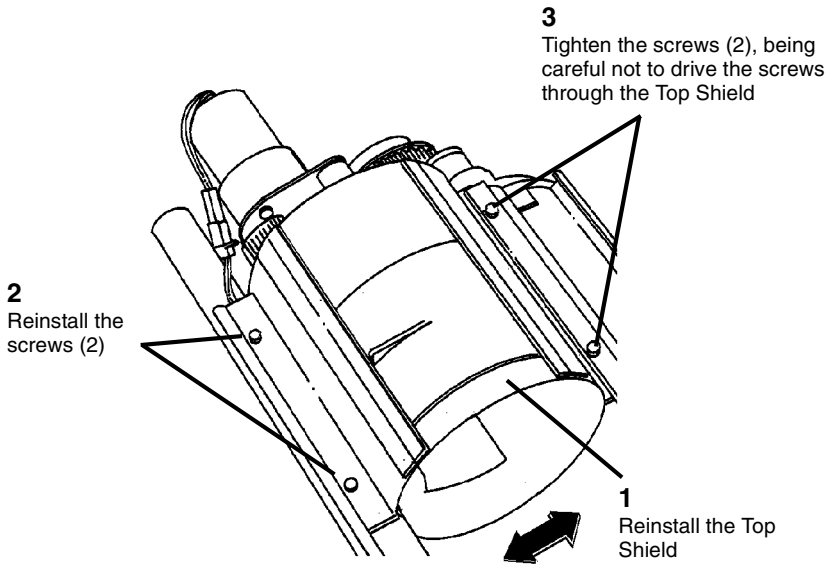


Figure 7 Reinstalling the Top Shield

6. (Figure 1): Reinstall the Sump Filter onto the Developer Module.
7. Reinstall the Developer Module (REP 9.5).

8. (Figure 8): Reinstall the Toner Cartridge.

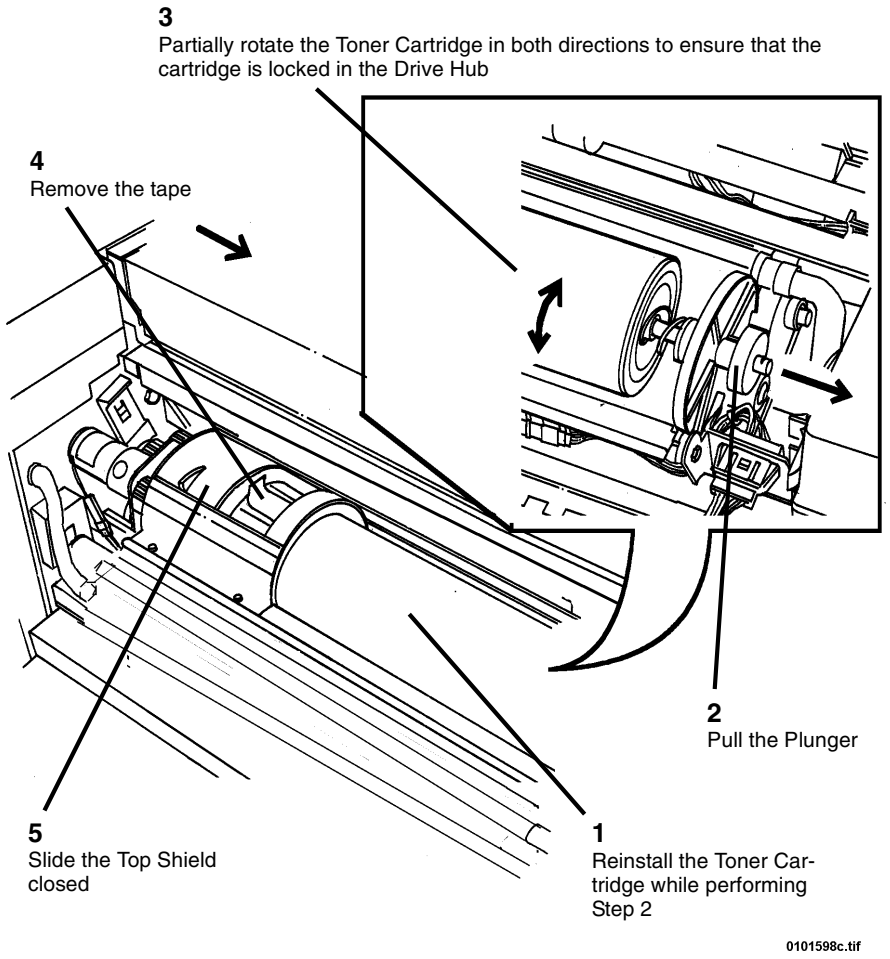


Figure 8 Reinstalling the Toner Cartridge

9. Switch on the Printer and after warm-up, run diagnostic [9 - 21- 4] for sixty seconds.
10. Refer to Section 6 and perform GP 8 Toner Control System Calibration.

REP 9.8 Scorotron Pin Kit

Parts List on PL 9.9

NOTE: *These are the instructions to install the Scorotron Pin Kit. The kit contains the following items:*

- *Pin Array*
- *Torsion Spring (2)*
- *Container*

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Loosen the screws and open the Rear Cover.
2. Raise and latch the Top Cover.
3. Rotate the Image Module to the Service Position.
4. (Figure 1): Remove the Scorotron Assembly from the Printer and place it on a flat surface.

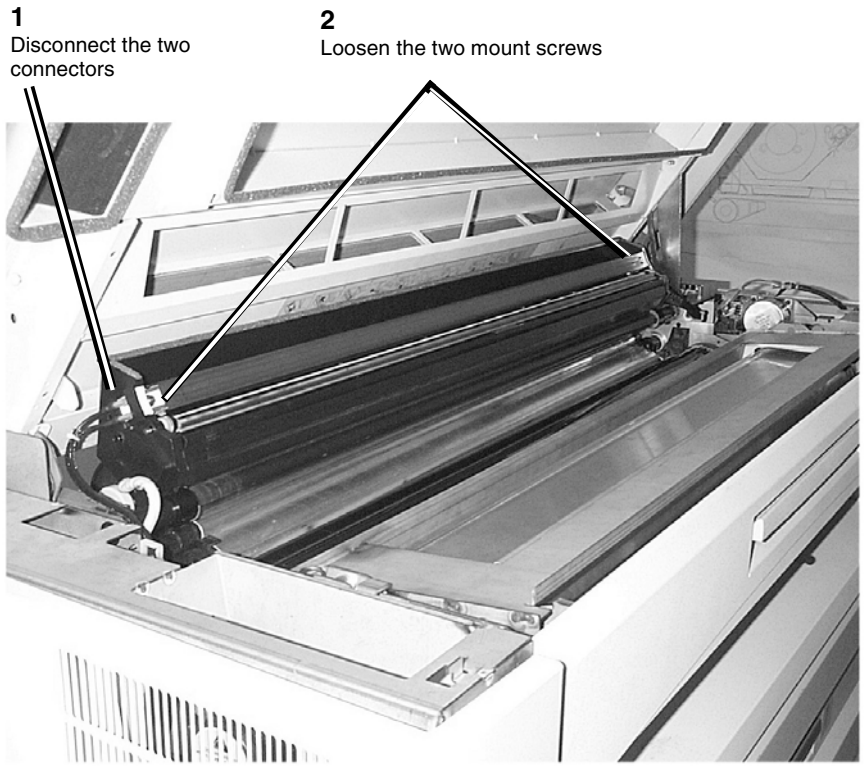


Figure 1 Removing the Scorotron Assembly

5. (Figure 2): Remove the Scorotron Grid.

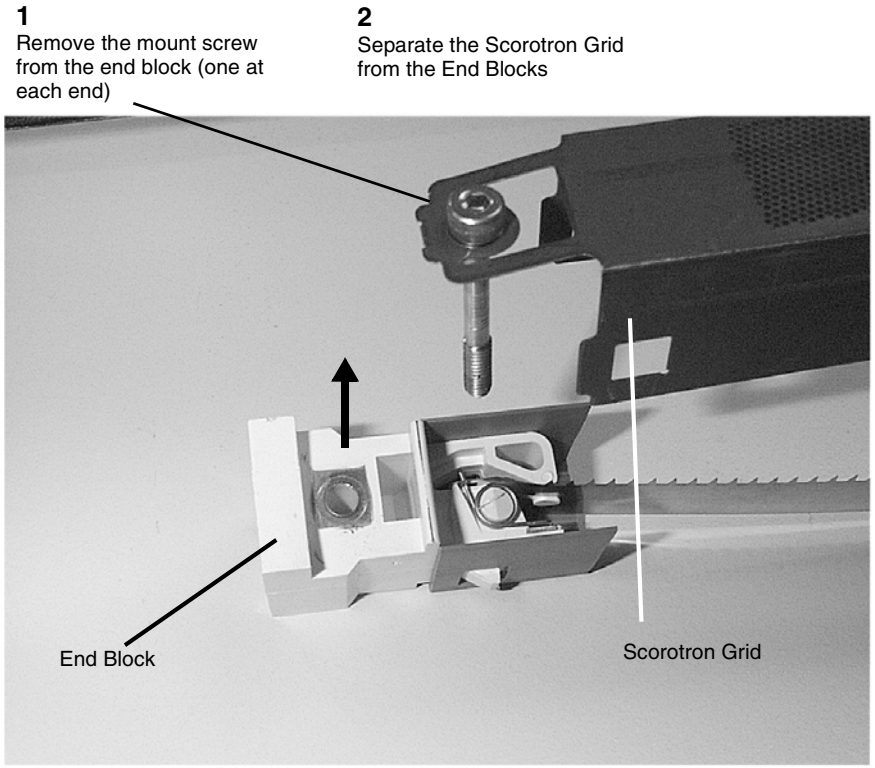


Figure 2 Removing the Scorotron Grid

WARNING

Exercise extreme care when handling the Pin Array. It contains very sharp pins and can cause cuts or punctures if handled carelessly.

6. (Figure 3): Remove the Scorotron Pin Array.

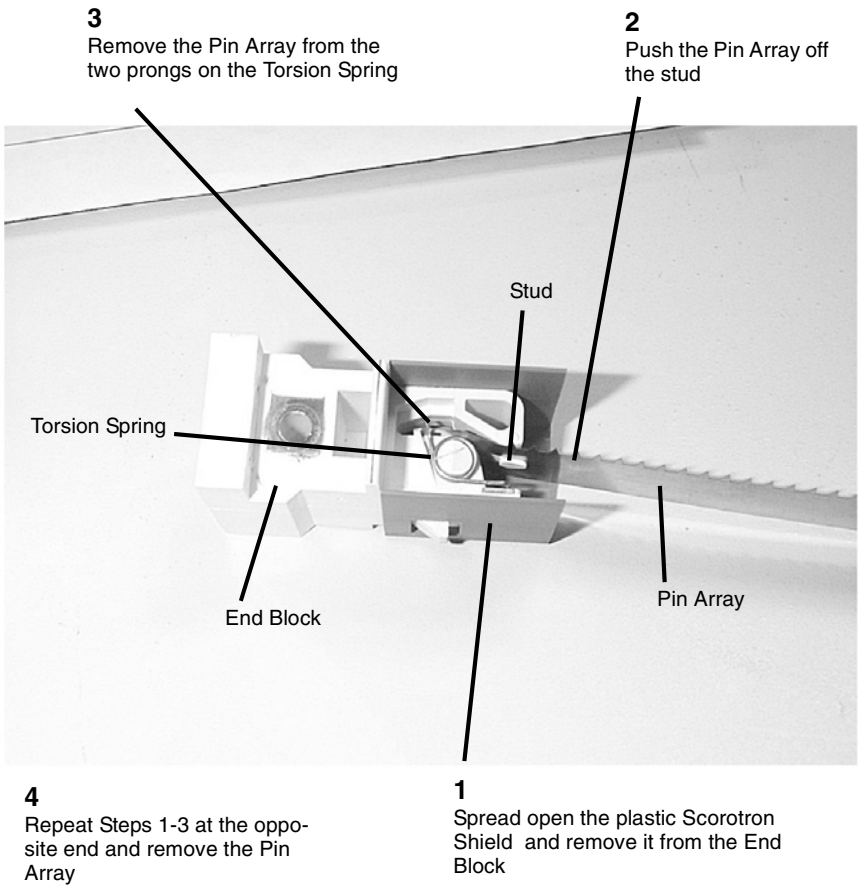


Figure 3 Removing the Scorotron Pin Array

7. Remove the Torsion Springs from the End Blocks.

Replacement

1. Install the Torsion Springs from the repair kit onto the End Blocks.

CAUTION

Be careful not to damage the tips of the new Pin Array. Bent tips can cause Print Quality problems.

2. Install the Pin Array from the repair kit into the End Blocks.

   NOTE: *Hold the Pin Array by the left and right End Blocks and stretch the Pin Array to its maximum width prior to reinstalling it on the Scorotron Grid.*

3. Reinstall the End Blocks and Pin Array into the Scorotron Grid.
4. Reinstall the Scorotron Grid onto the Image Module.
5. After completing the reassembly, package the old Pin Array for return.

REP 9.9 Detack Corotron

Parts List on PL 8.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *In the following steps, the terms "left' and "right" describe machine locations as observed when facing the Roll Media Supply Drawer of the Printer.*

Removal

1. Open and latch the Top Cover.
2. Remove the Xerographic Module. Perform REP 9.1 Xerographic Module.
3. (Figure 1): Place a small pencil mark on the Lower Sheet Feed Assembly at the point where the plastic Media Shields meet. This mark will prove helpful when reinstalling the shields.

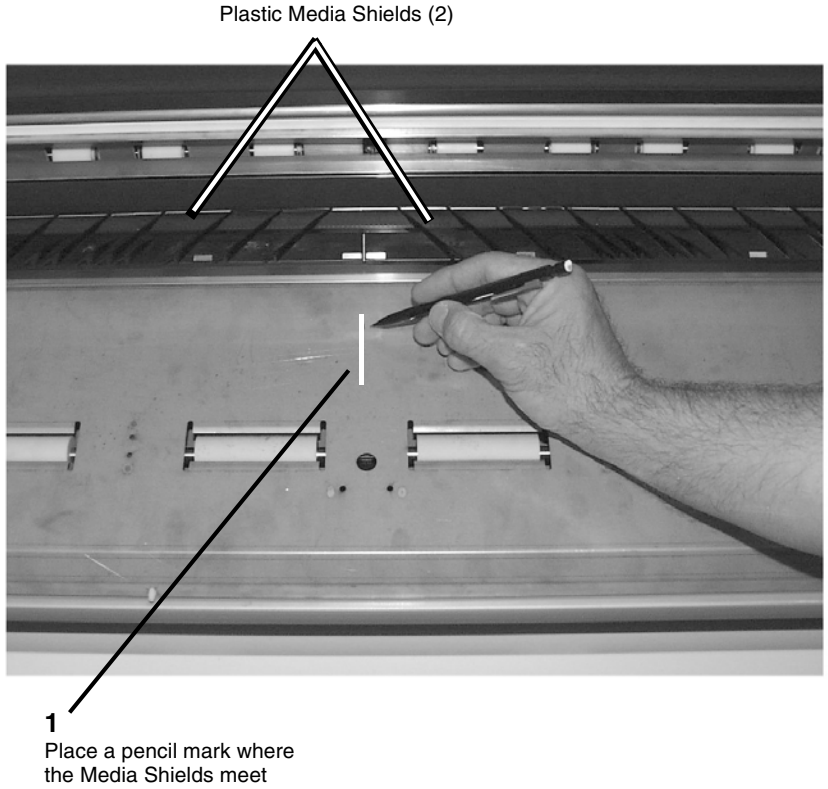


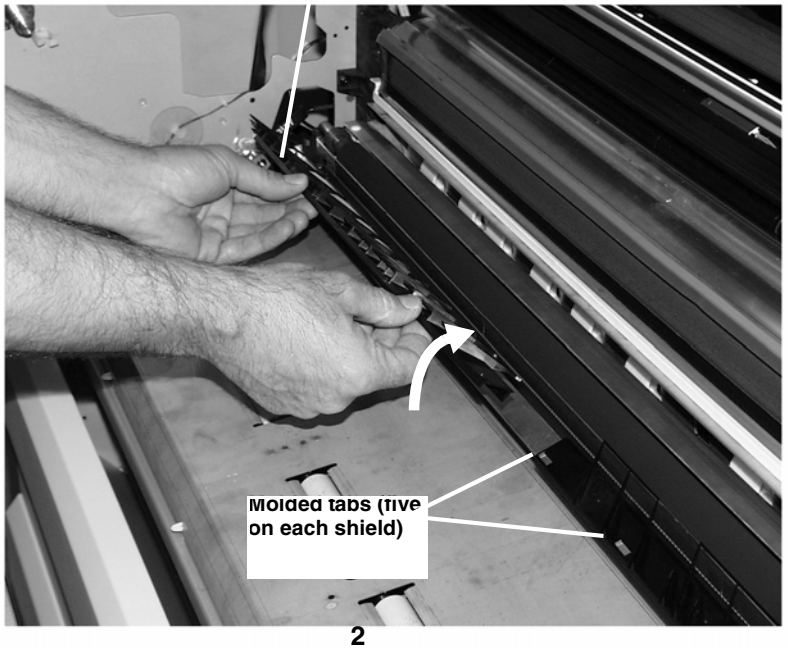
Figure 1 Marking the Location of the Media Shields

CAUTION

The Media Shields are very fragile and are held in place by five plastic tabs molded on the lead edge of each shield. Exercise caution when removing and reinstalling these two shields.

4. (Figure 2): Remove the two plastic Media Shields from the ledge in front of the Bias Transfer Roll.

1
Grip each Media Shield by its lead edge and gently work the five molded tabs free



2
Lift the Media Shield free of the lead edge of the extrusion and remove it from the Printer

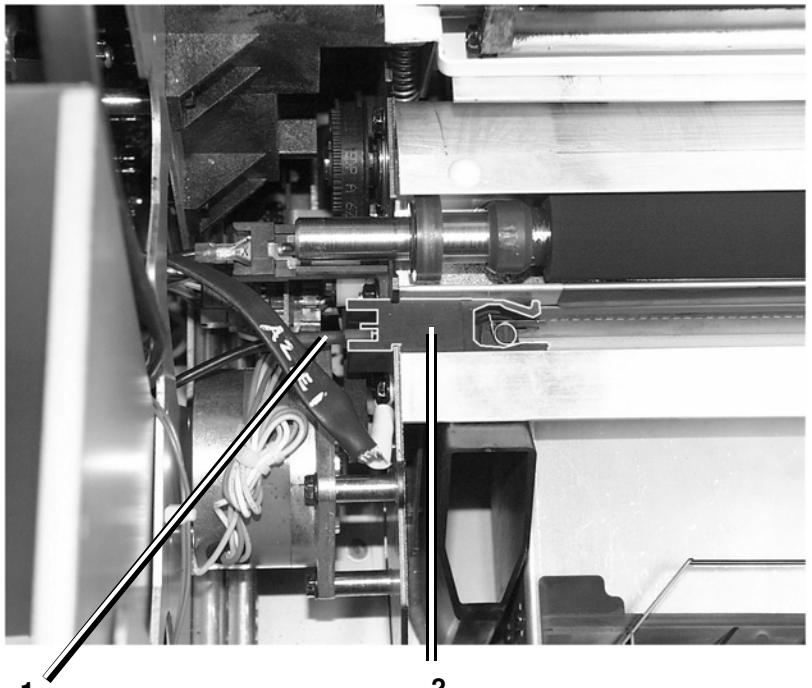
Figure 2 Removing the Plastic Media Shields

5. (Figure 3): Remove the Detack Corotron from the Printer. (The Detack Corotron is comprised of the Left and Right End Blocks and the Pin Array.)

NOTE: *It is possible to resintall the End Blocks upside down. Pay particular attention to the orientation of the End Block in the following illustration prior to removal from the Printer.*

NOTE: *Hold the Detack Corotron by the left and right End Blocks and stretch the Pin Array to its maximum width prior to removing or reinstalling it on the Printer.*

3
Slide both the left and right End Blocks out of the extrusion, freeing the Detack Corotron



1
Remove the voltage lead from the Left End Block

2
Grip the left and right End Blocks and stretch the Pin Array to its maximum width

Figure 3 Removing the Detack Corotron

6. Set the Detack Corotron on a clean, flat surface.

Replacement

1. Reinstallation is the reverse of the Removal procedure.

   NOTE: *(Figure 1): When reinstalling the Media Shields It may prove helpful to align the inner edge of each shield with the pencil mark drawn in Step 3 of the Removal Procedure.*

REP 9.11 Toner Sensor

Parts List on PL 9.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module. Perform REP 9.5 Developer Module.

CAUTION

The Developer Material must be removed before removing the Toner Sensor. Failure to perform this task can lead to excessive contamination of the work area.

2. Remove the Developer Material. Perform REP 9.7 Developer Material.
3. (Figure 1): Remove the Toner Sensor and the spacer.

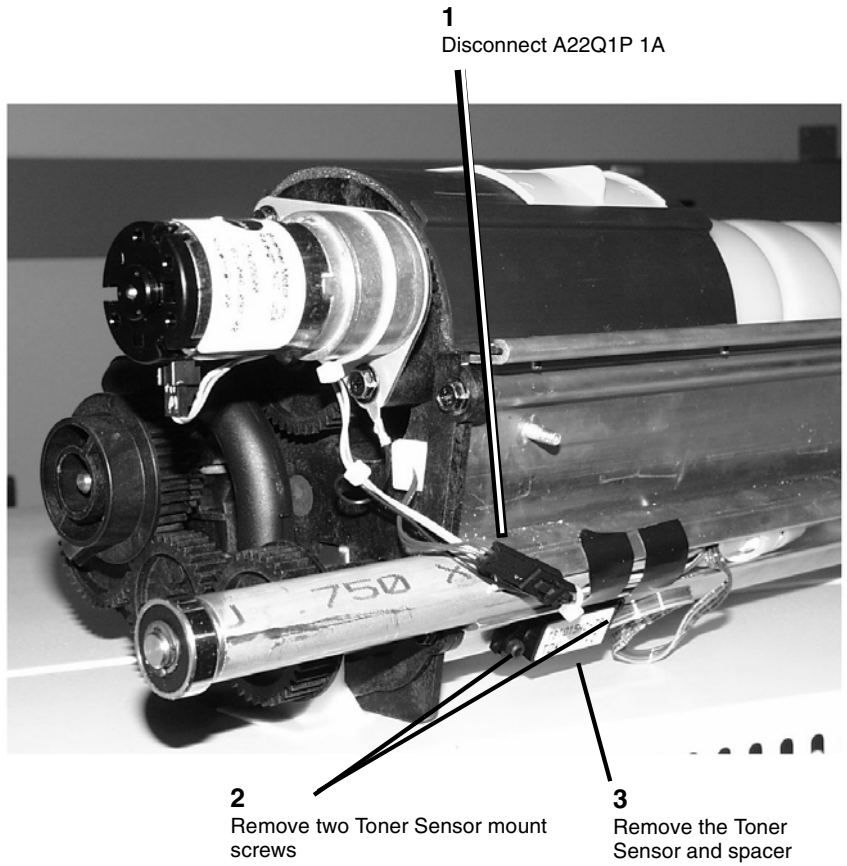


Figure 1 Removing the Toner Sensor

Replacement

1. Reinstall the Toner Sensor and spacer.

CAUTION

If a new Toner Sensor is being installed, new Developer Material must also be installed.

2. Reinstall the Developer Material. Perform REP 9.7 Developer Material.

CAUTION

Do not run prints before calibrating the Toner Sensor. Running prints before performing the calibration may cause toner faults or print defects.

3. If a new Toner Sensor has been installed, perform GP 8 Toner Control System Calibration.
4. Perform the Electrostatic Series. Perform ADJ 9.2 Electrostatic Series.

REP 9.12 Toner Cartridge Home Sensor

Parts List on PL 9.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module (REP 9.5).
2. Remove the Cartridge Drive Plate (REP 9.14).

NOTE: *The Toner Home Sensor is threaded. The wires must be straightened in order to rotate the sensor for removal.*

3. (Figure 1): Remove the Toner Cartridge Home Sensor.

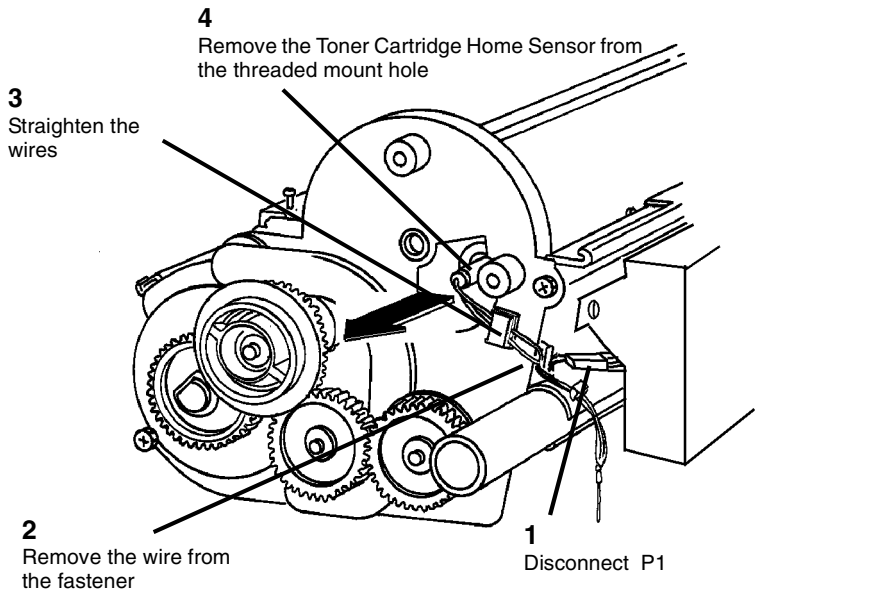


Figure 1 Removing the Toner Cartridge Home Sensor

Replacement

1. Reinstall the Toner Cartridge Home Sensor.
2. Perform the Toner Cartridge Home Sensor Adjustment (ADJ 9.5).

CAUTION

To avoid damage to the Drive Plate Seal, always rotate the drive plate in the direction shown in [Figure 2].

3. (Figure 2): Reinstall the Cartridge Drive Plate.

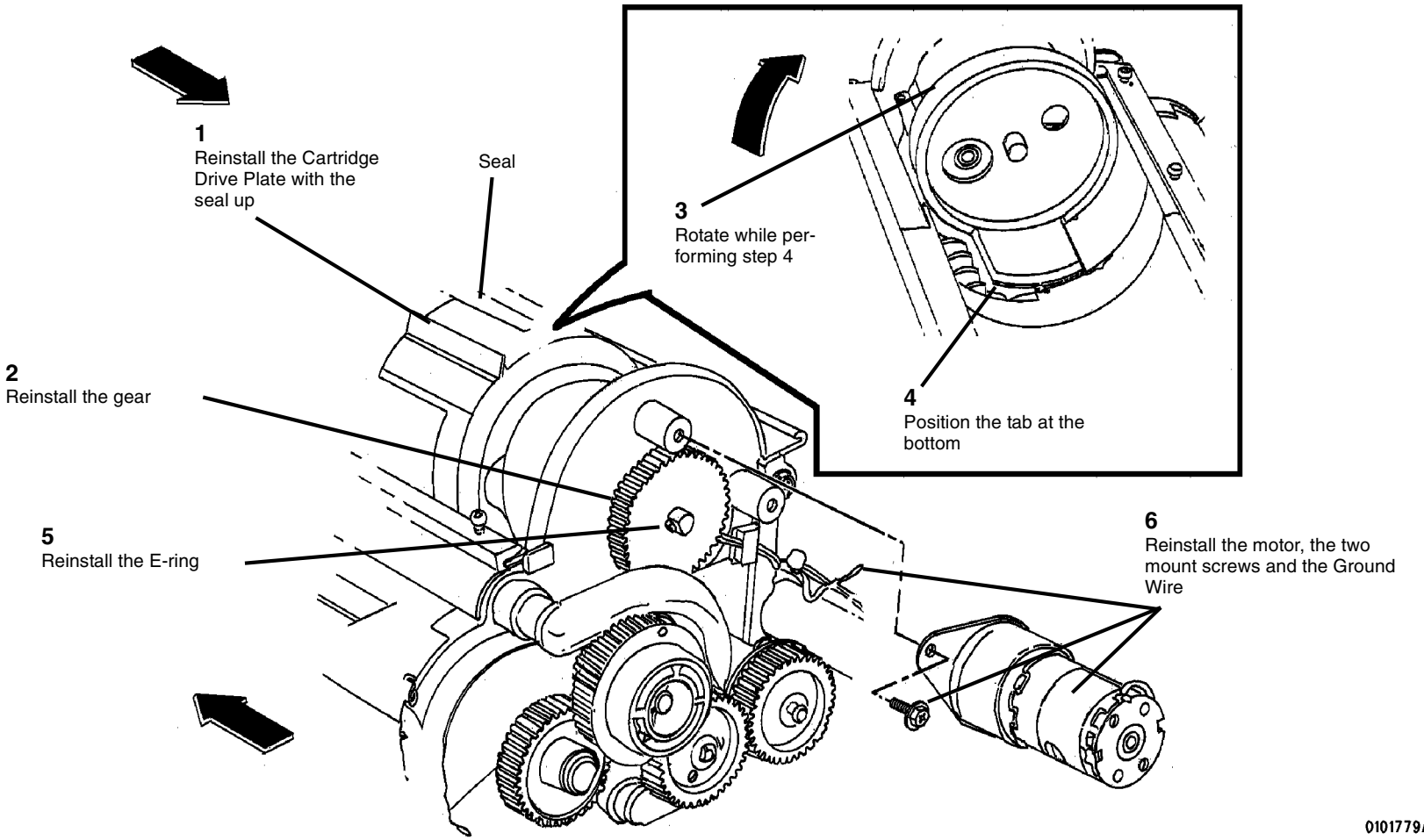


Figure 2 Reinstalling the Cartridge Drive PLate

4. (Figure 3): Reinstall the Top Shield, taking care not to overtighten the screws.

CAUTION

In the following step take care not to overtighten the two screws on the interior side of the Developer Module, as this can cause the screws to puncture the Top Shield.

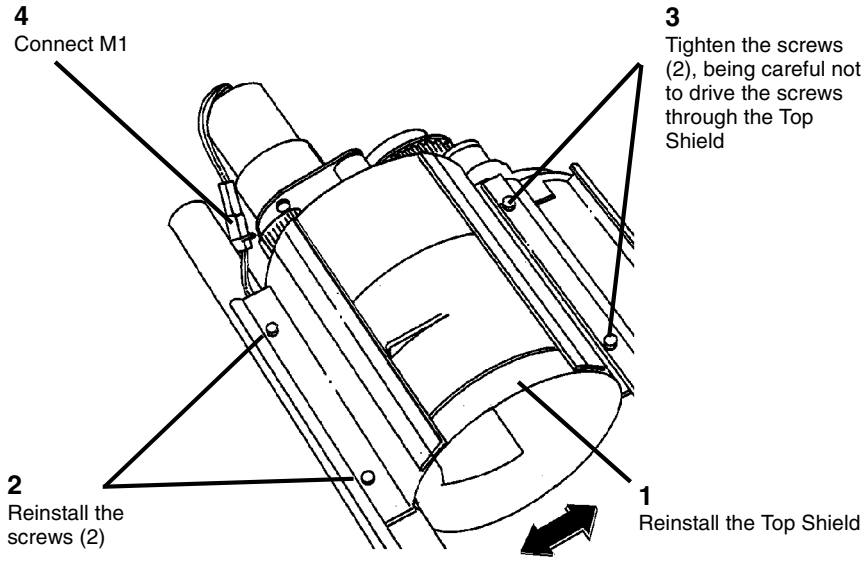


Figure 3 Reinstalling the Top shield

5. Reinstall the Developer Module (REP 9.5).

REP 9.13 Sump Shield

Parts List on PL 9.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module and Toner Cartridge (REP 9.5).
2. (Figure 1): Remove the Sump Shield.

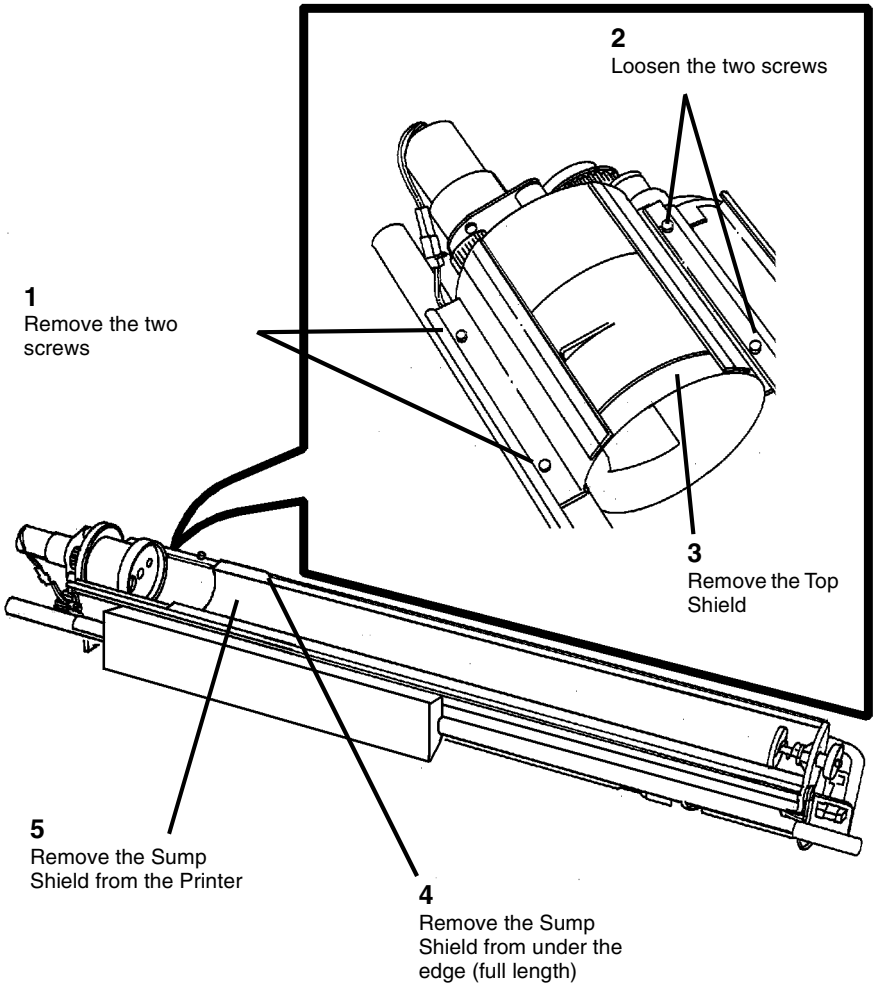


Figure 1 Removing the Sump Shield from the Developer Module

Replacement

CAUTION

Ensure that the full length of the edge of the Sump Shield is under the edge of the housing.

1. (Figure 2): Reinstall the Sump Shield on the Developer Module.

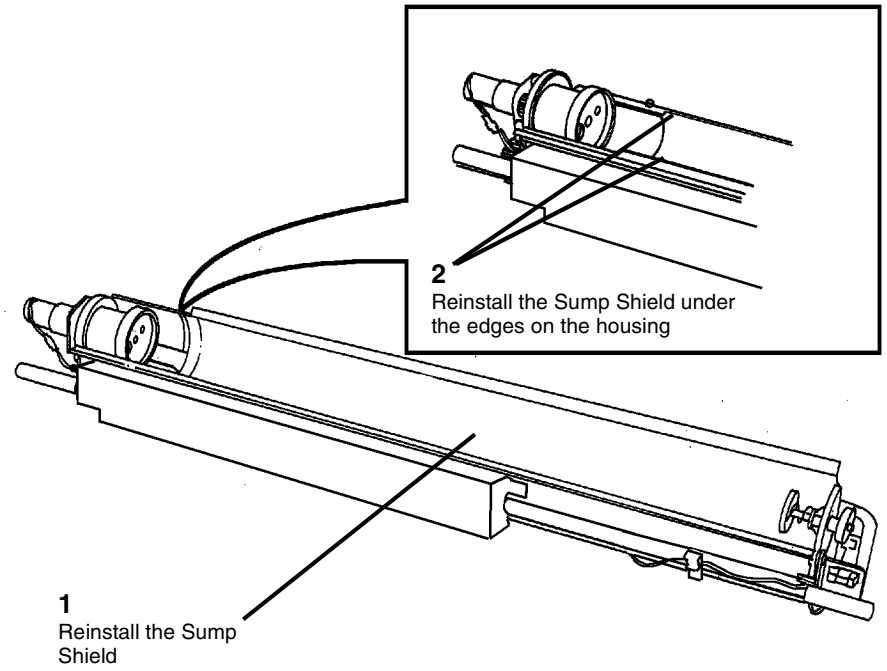


Figure 2 Reinstalling the Sump Shield in the Developer Module

REP 9.14 Cartridge Drive Plate

Parts List on PL 9.7

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module. Perform REP 9.5 Developer Module.
2. (Figure 1): Remove the Cartridge Drive Plate.

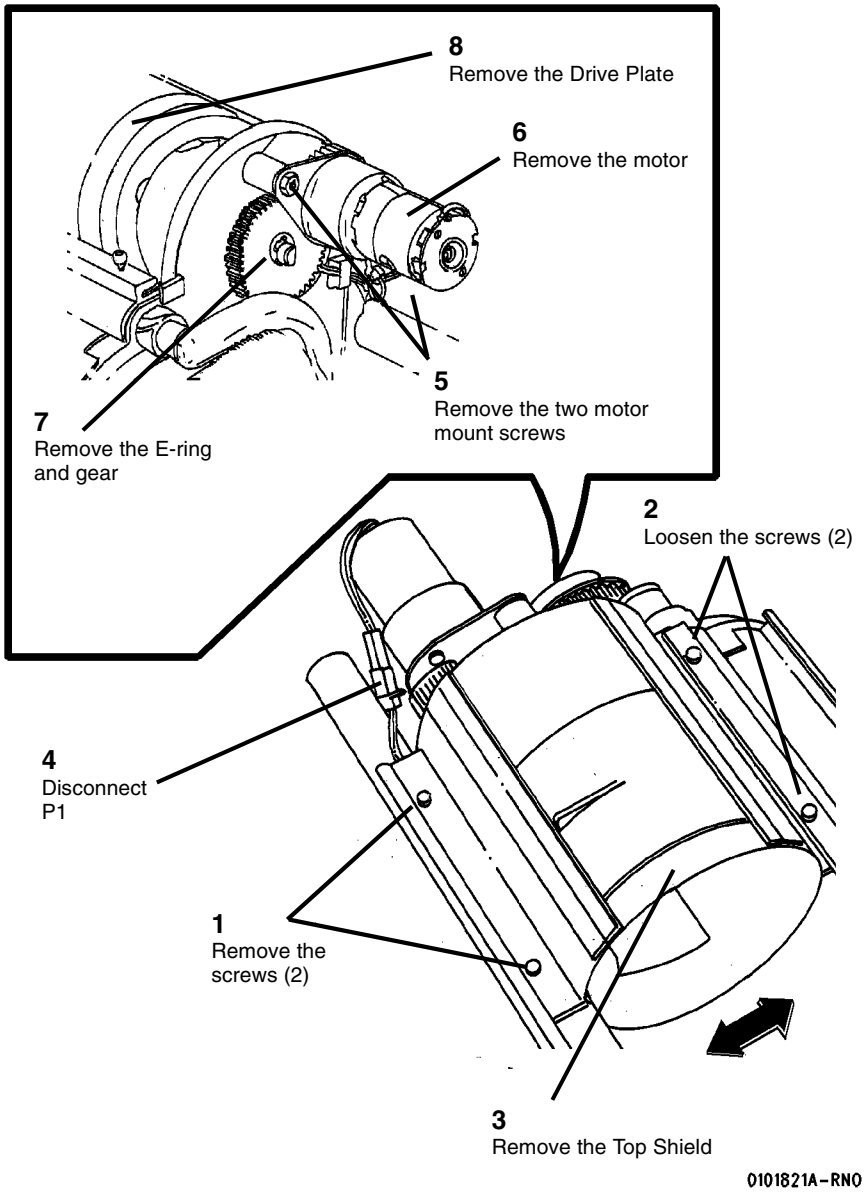


Figure 1 Removing the Cartridge Drive Plate

Replacement

CAUTION

To avoid damage to the Drive Plate Seal, always rotate the drive plate in the direction shown in (Figure 2.)

1. (Figure 2): Reinstall the Cartridge Drive Plate.

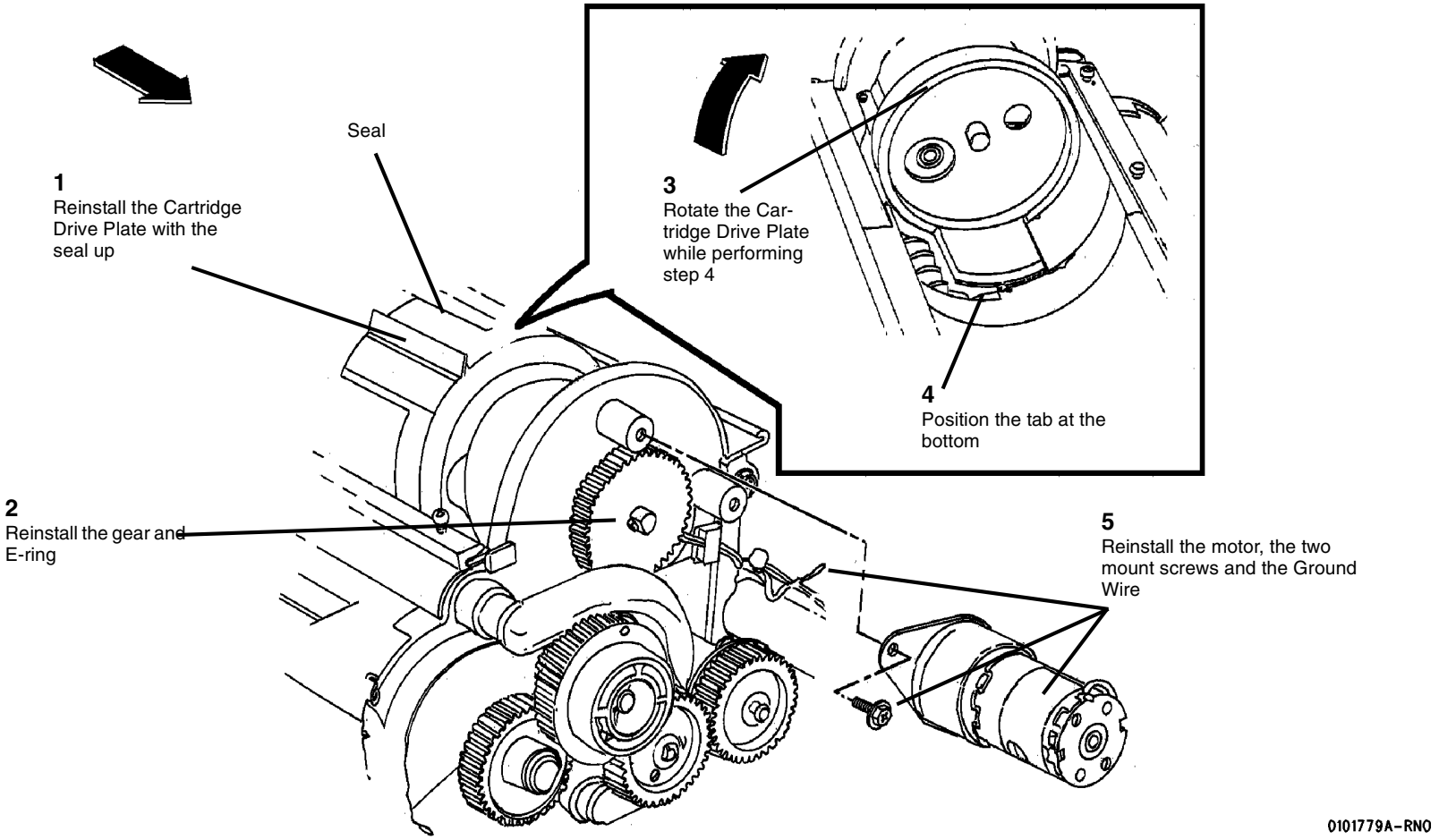


Figure 2 Reinstalling the Cartridge Drive Plate

2. (Figure 3): Reinstall the Top Shield, taking care not to overtighten the screws.

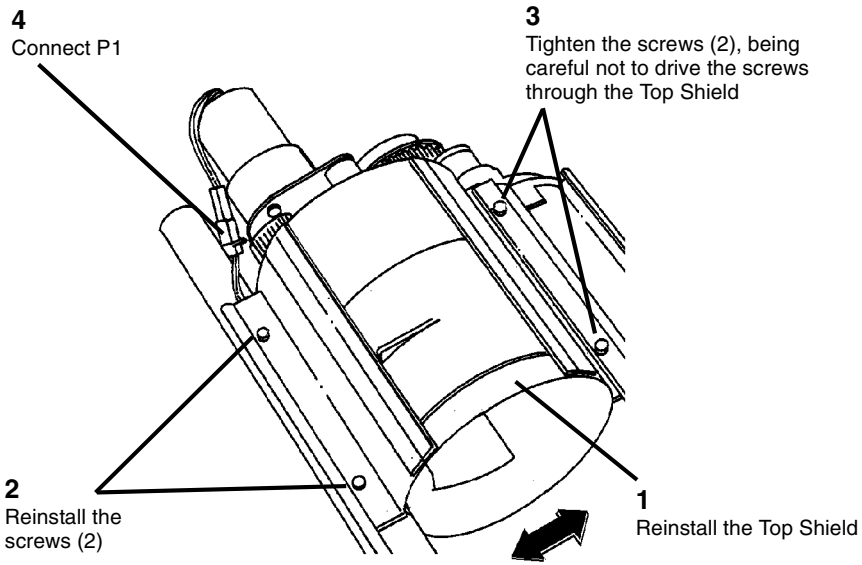


Figure 3 Reinstalling the Top Shield

3. Reinstall the Developer Module (REP 9.5).

REP 9.18 Pressure Equalizer Tubes

Parts List on PL 9.7, PL 9.8

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module (REP 9.5).

CAUTION

Do not rotate the Auger Gears individually more than the slight amount required for removal or to mesh the teeth during reinstallation. If the factory setting of the augers is changed during the procedure, perform ADJ 9.6 Augers.

2. (Figure 1): Remove the Pressure Equalizer Tubes.
3. Using a vacuum cleaner, remove the impacted Developer Material from the Housing where the Pressure Equalizer Tubes are attached. Pay special attention to the inside of the bottom channel.

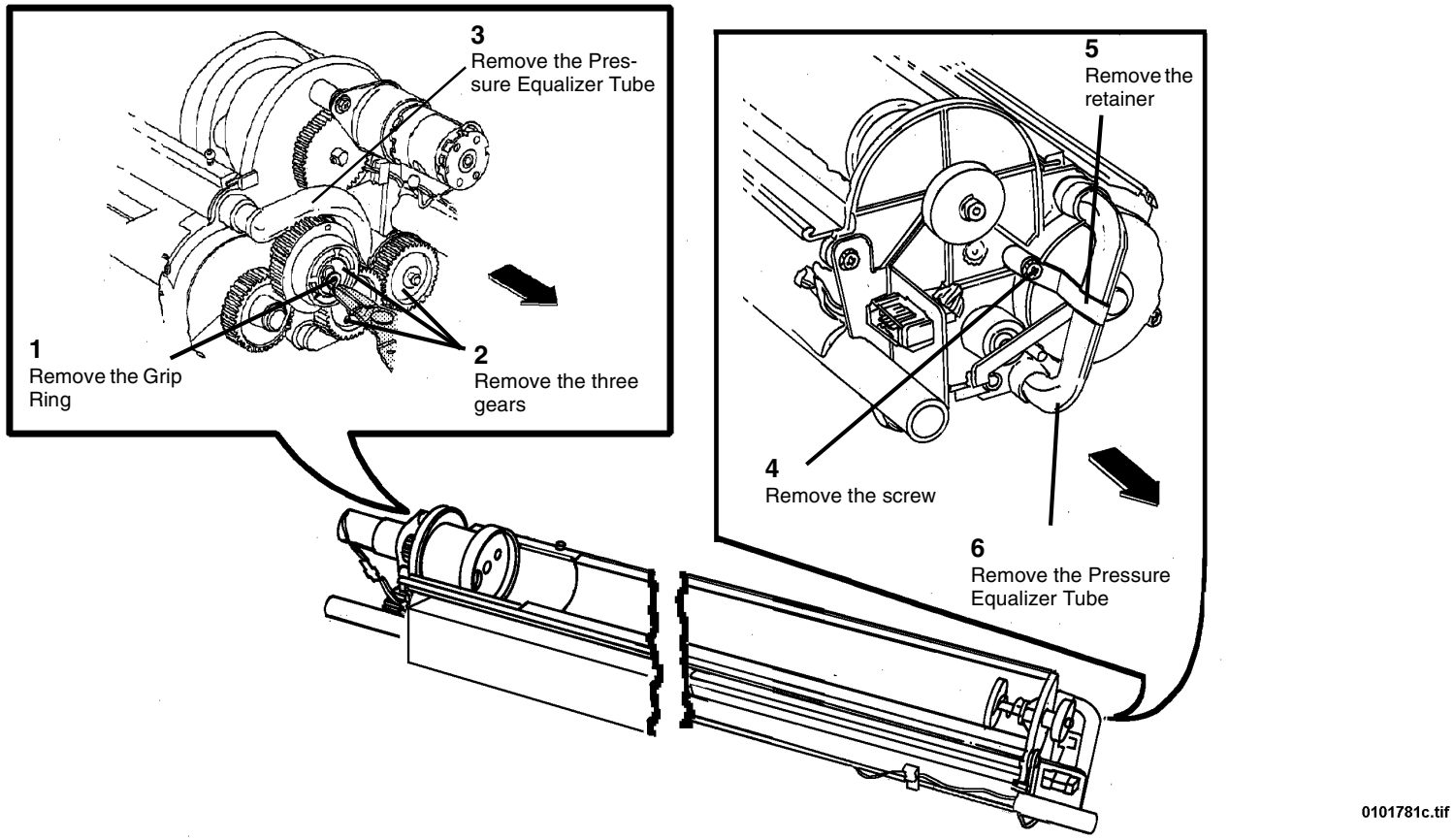


Figure 1 Removing the Pressure Equalizer Tubes

Replacement

CAUTION

Do not rotate the Auger Gears individually more than the slight amount required for removal or to mesh the teeth during reinstallation. If the factory setting of the augers is changed during the procedure, perform ADJ 9.6 Augers.

***NOTE:** The gears must be reinstalled with the flanges as shown in order to ensure that all the gears are secured.*

1. (Figure 2): Reinstall the Pressure Equalizer Tubes.

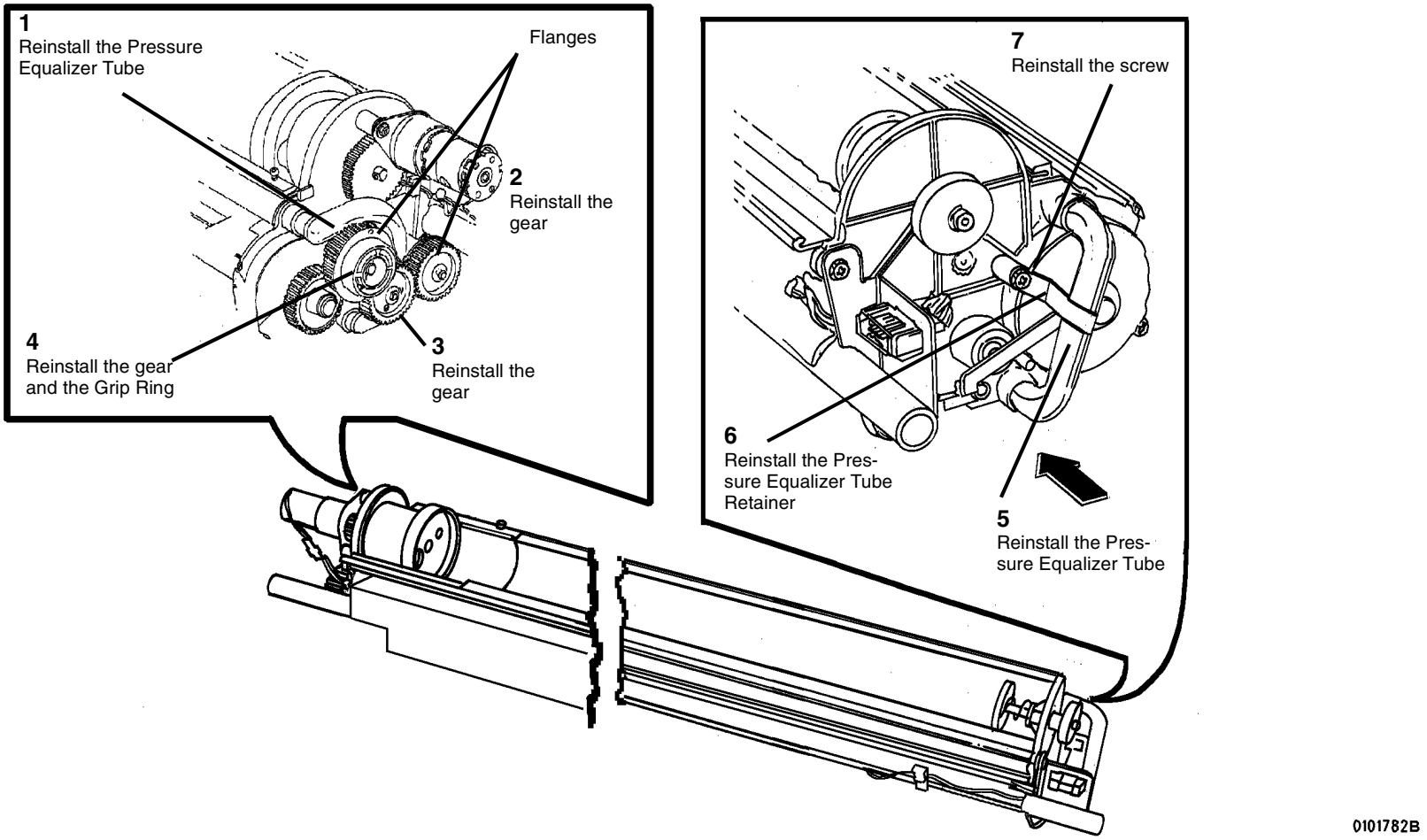


Figure 2 Reinstalling the Pressure Equalizer Tubes

2. Reinstall the Developer Module (REP 9.5).

REP 9.19 Roller Kit

Parts List on PL 9.9

NOTE: *These are the instructions to install Roller Kit 600K58740. The kit contains the following items:*

- *Rollers (2)*
- *Pins (2)*

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Raise and secure the Top Cover.
2. Open the Image Module.
3. (Figure 1): Remove the Front and Rear Rollers.

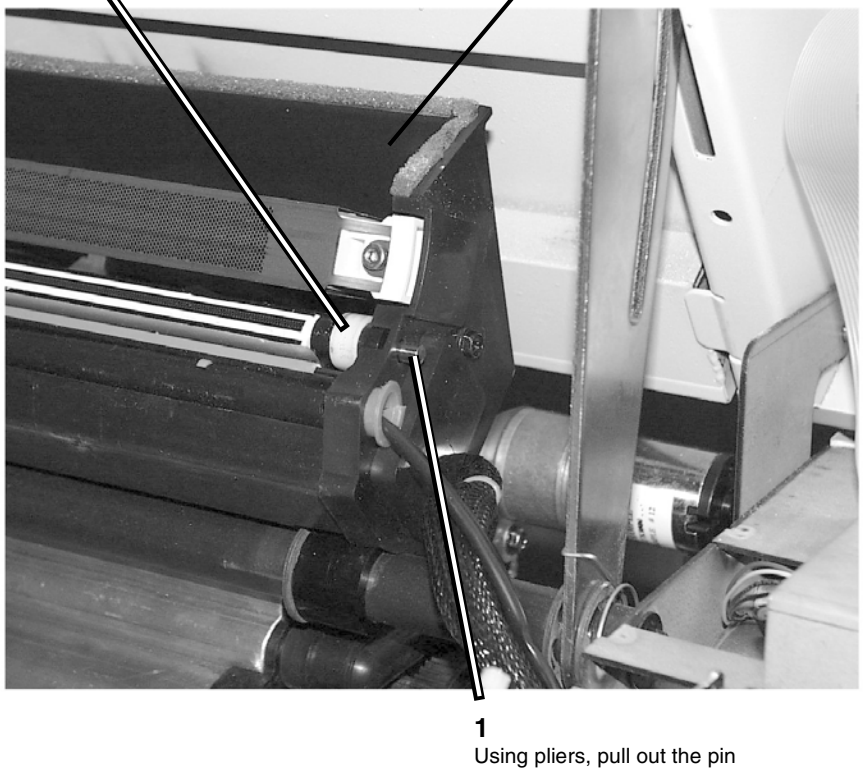


Figure 1 Removing the Front and Rear Rollers

Replacement

1. Replace the roller and pin with parts from the kit.
2. Repeat the procedure at the rear of the Image Module.

REP 9.20 Image Module

Parts List on PL 9.9

NOTE: *These are the instructions to install the Image Module Assembly Kit 600K58760. The kit contains the following:*

- *Image Module Assembly*

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Remove the Developer Module (REP 9.5).
2. Remove the Developer Baffle (PL 9.8).
3. Remove the following:
   a. Rear Door (PL 14.1)
   b. Front Door (PL 14.3)
   c. Right Side, Left Lower Cover (PL 14.3)
   d. Right Side, Right Lower Cover (PL 14.3)
   e. Right Side, Left Cover (three screws, two top, one bottom) (PL 14.3)
   f. Right Side, Right Cover (three screws, one top, two bottom) (PL 14.3)
4. Remove the High Voltage Power Supply (REP 3.2).

NOTE: *In the following steps, cut cable ties as necessary in order to remove the harness.*

5. (Figure 1): (**8850**) Prepare to remove the Top Cover (Front).
   (**510dp)**j Remove the Control Panel (REP XX.x

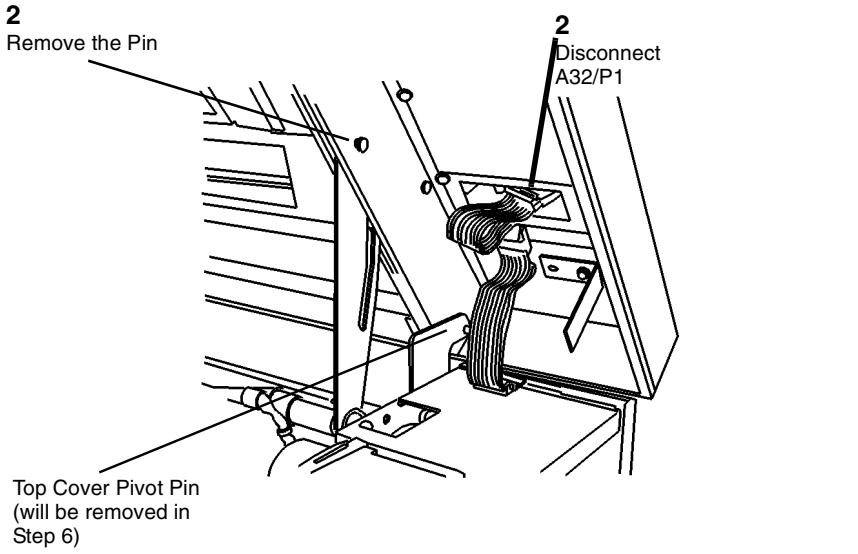


Figure 1 Preparing to Remove the Top Cover (Front)

NOTE: *(Figure 2): Observe the way that the Top Cover Pivot Pin engages the hole in the Interlock Plate. This may be a difficult area during reassembly.*

6. Close the Top Cover, open the Developer Module Cover, and remove the two pivot pins shown in Figure 1 and Figure 2.

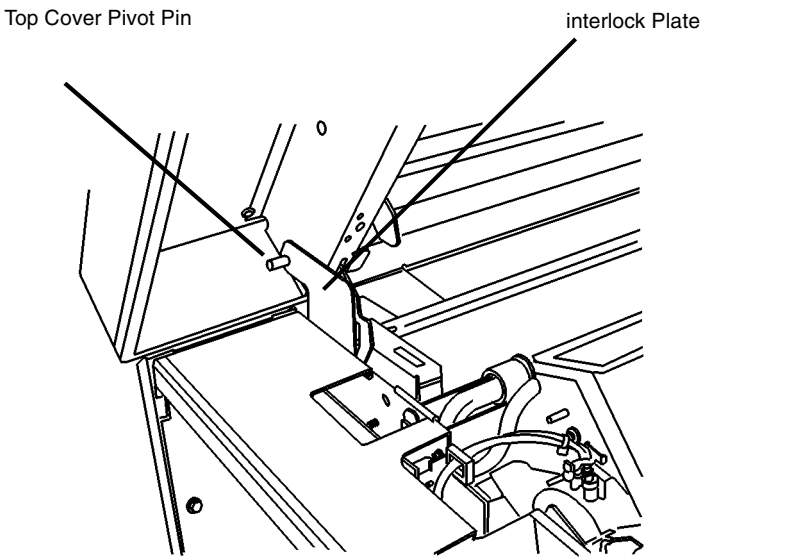


Figure 2 Top Cover Interlock Plate

7. Close the Developer Module Cover and lift off the Top Cover, being careful to disengage the small pin from the Interlock Plate.
8. Open the Cutter Drawer.
9. (Figure 3): Disconnect the Video Cable Connector J608A from the Main PWB and push the connector through the hole in the frame.

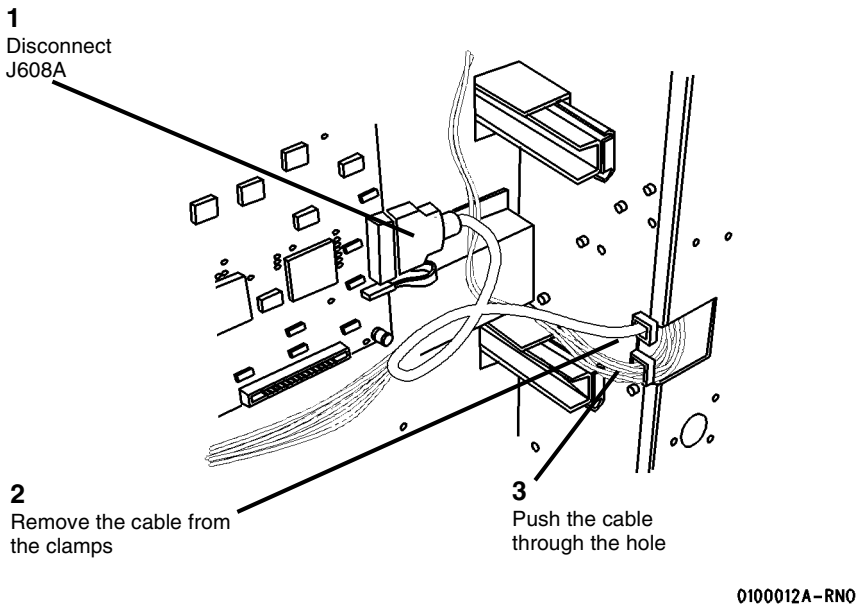


Figure 3 Disconnecting the video cable

10. (Figure 4): Release the Video Cable from the cable clamps and push it through the hole in the frame.

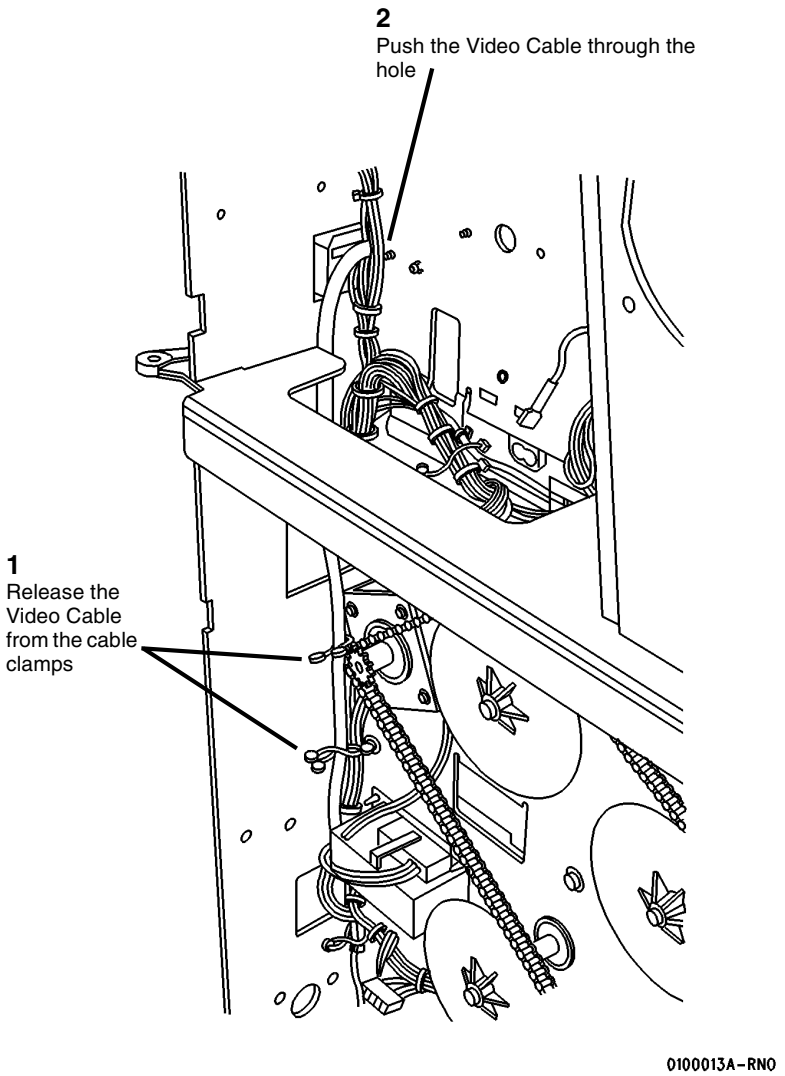


Figure 4 Preparing the Video Cable for Removal

11. (Figure 5): Pull the Video Cable through the hole in the frame.

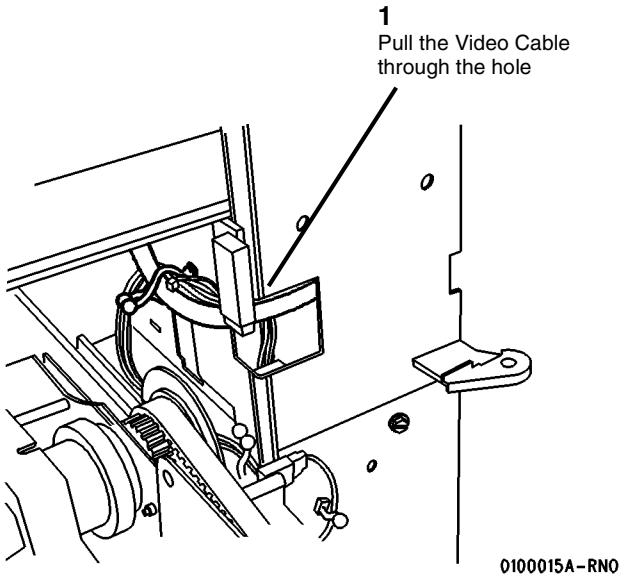


Figure 5 Pull the Video Cable through the Hole in Frame

12. (Figure 6): Continue to pull the Video Cable through the hole after releasing it from the cable guides.

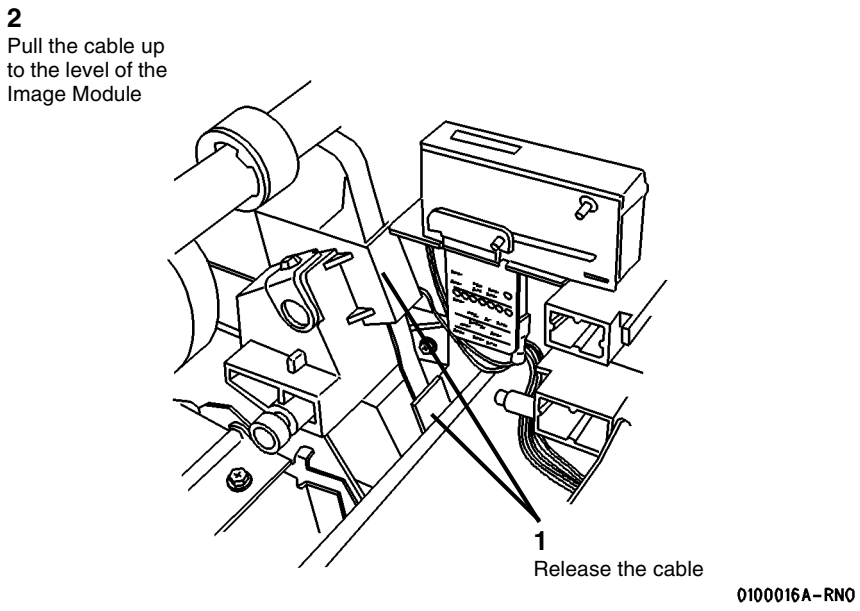


Figure 6 Preparing the Video Cable

13. (Figure 7): Disconnect A5P2 and prepare the harness for removal.

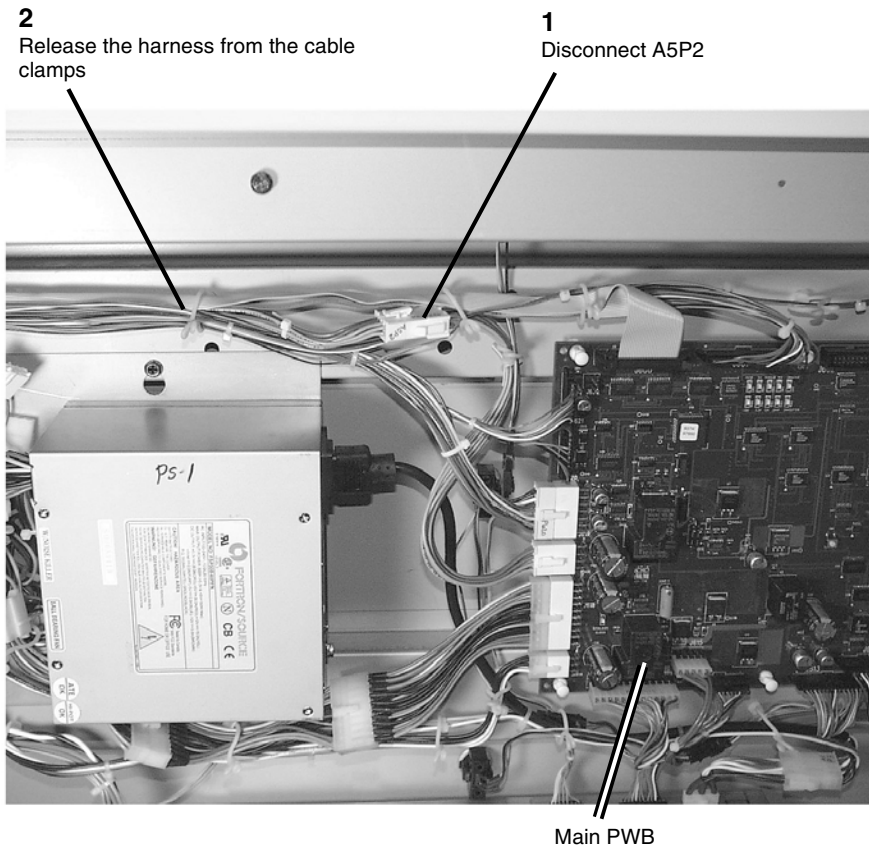
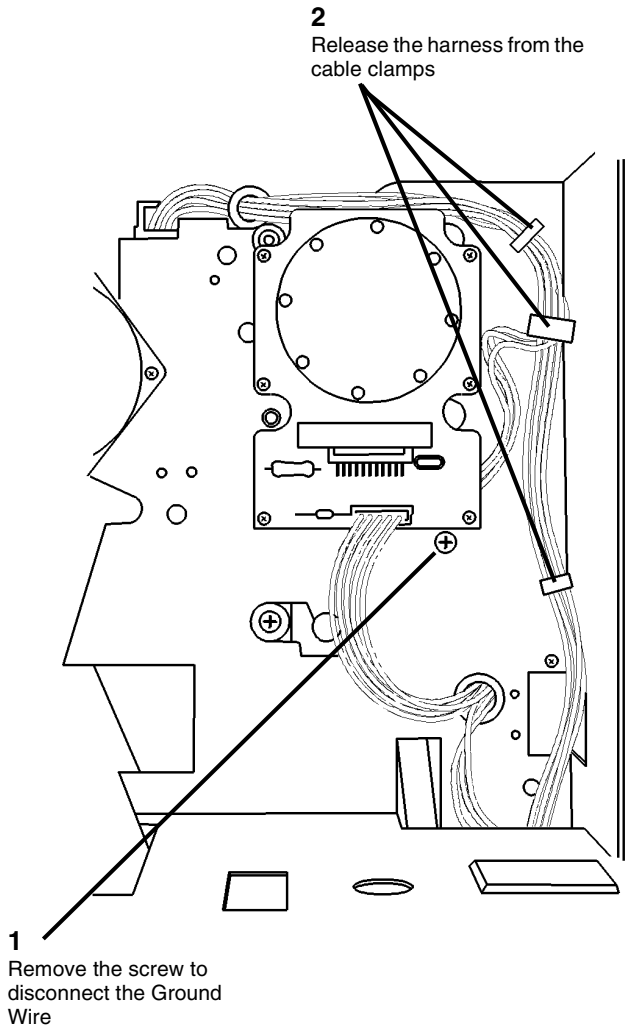


Figure 7 Preparing the Harness for Removal

14. (Figure 8): Disconnect the Ground Wire and release the harness from the cable clamps.

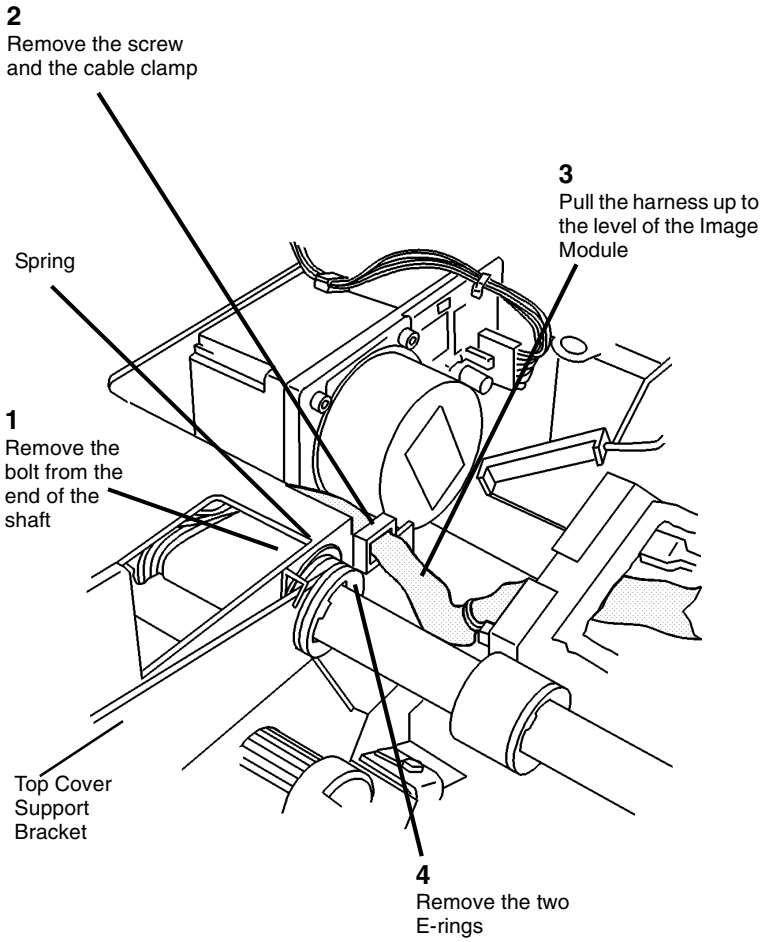


0100003A-RNO

Figure 8 Preparing the Harness for Removal

NOTE: *Observe the way that the spring rests on the frame, underneath the cable clamp. This is how the reassembled parts must fit.*

15. (Figure 9): Complete the removal preparation on the front area of the Image Module Assembly.



0100004A-RNO

Figure 9 Preparing to Remove the Image Module Assembly (View looking at the Front from the Right Side)

16. (Figure 10): Continue to pull the Video Cable through the hole after releasing it from the cable guides.

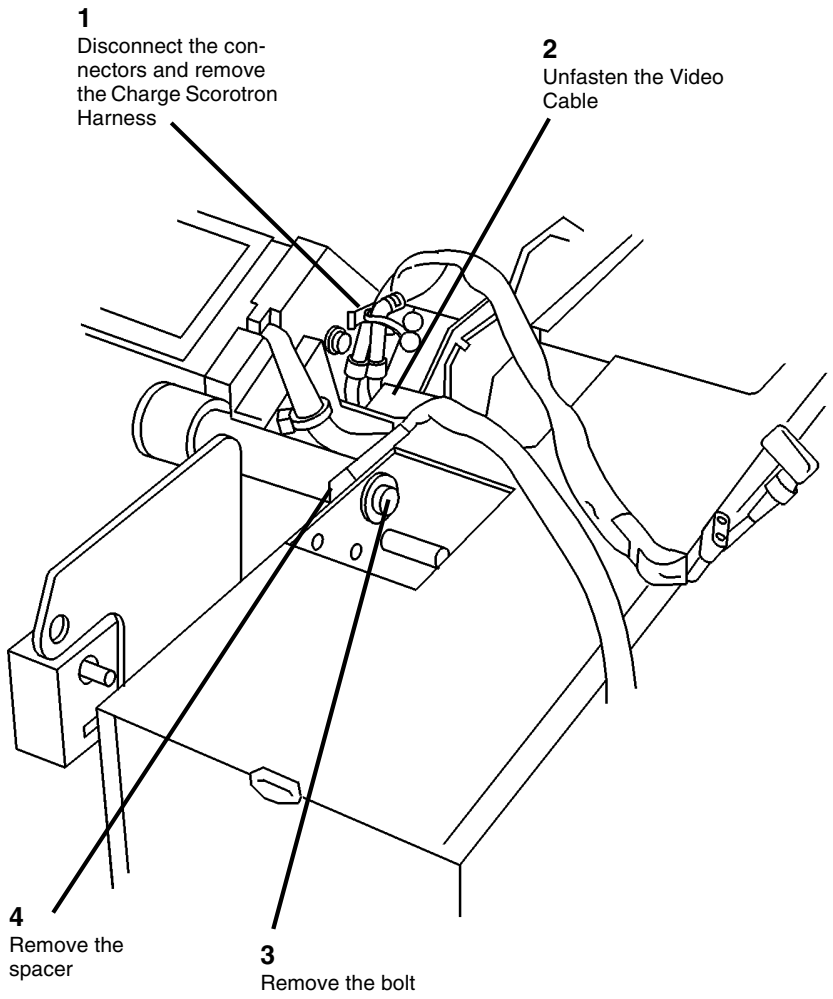


Figure 10 Preparing to Remove the Image Module Assembly (View looking at the Rear from the Right Side)

17. Lift out the Image Module Assembly / Pivot Bar combination.

Replacement

1. Reverse the removal steps for replacement of the Image Module Assembly.
2. Enter the diagnostics [0903] and input the LED rating designated on the new image module, then press Enter.
3. Perform Electrostatic Series (ADJ 9.2).

REP 9.21 Erase Bar

Parts List on PL 9.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

Removal

1. Remove the Printer Drum Assembly. Perform REP 9.2 Drum Assembly.
2. (Figure 1): Remove the Erase Bar, located on the right side of the Xerographic Module.

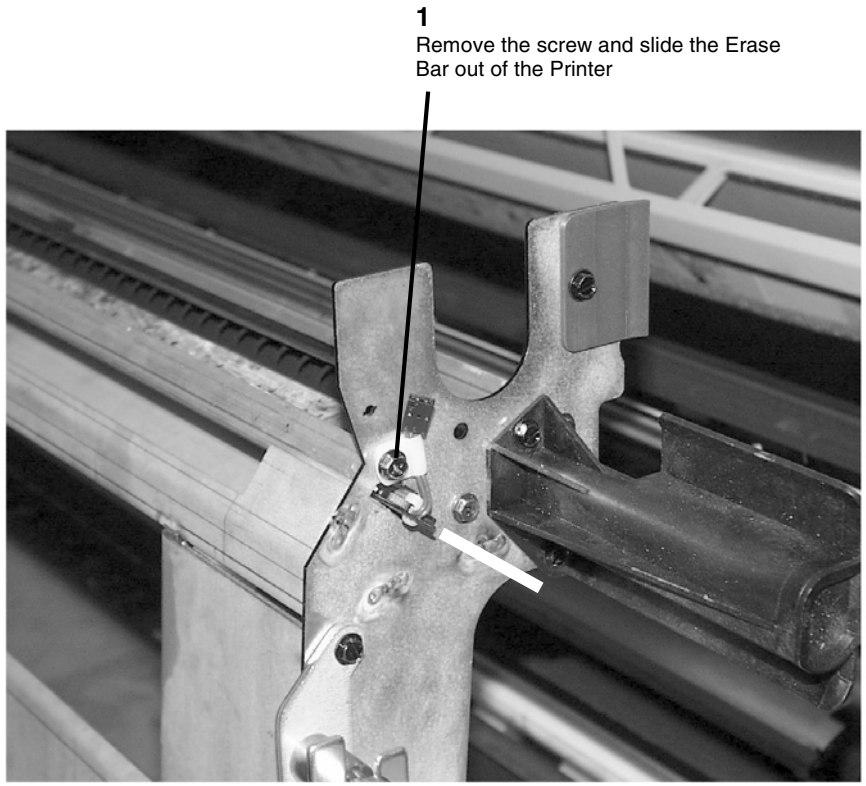


Figure 1 Removing the Erase Bar

REP 9.22 Bias Transfer Roll (BTR)

Parts List on PL 8.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. Elevate the Xerographic Module to the service position, per REP 9.2.

   NOTE: *The following procedure can be accomplished as shown, or it can be made easier by first removing the Xerographic Module (REP 9.1).*

2. (Figure 1): Remove the two Media Shields from the Printer.

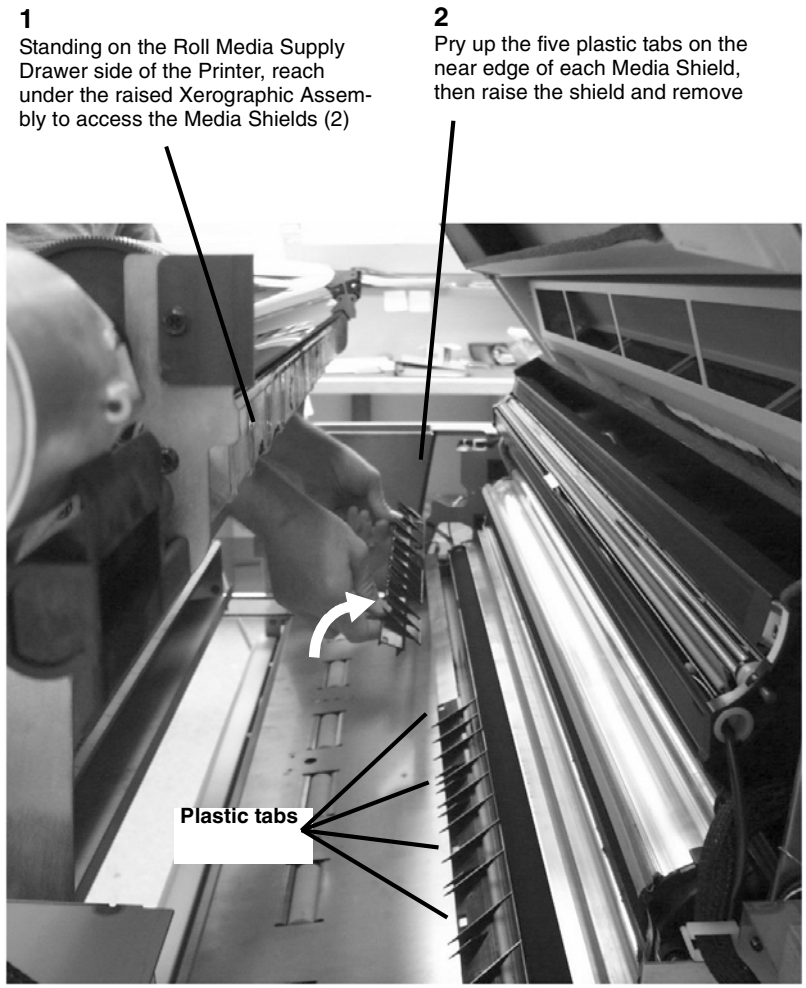
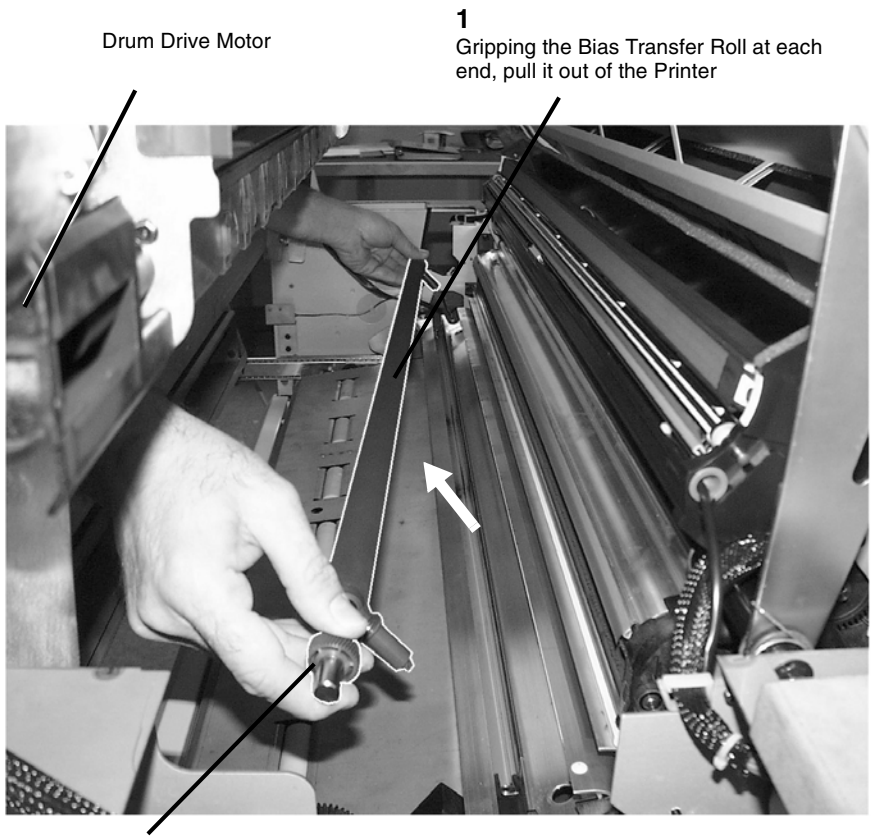


Figure 1 Removing the two Media Shields

3. (Figure 2): Remove the Bias Transfer Roll from the Printer.



NOTE: *When reinstalling the Bias Transfer Roll ensure that the geared end of the BTR is located on the same side as the Drum Drive Motor*

Figure 2 Removing the Bias Transfer Roll (BTR)

Replacement

1. The Replacement is the reverse of the Removal procedure.
2. After replacing the Bias Transfer Roll into the Printer the following adjustments must be performed for bond, vellum, and film.
   a. ADJ 8.1 Vertical Magnification.
   b. ADJ 8.2 Lead Edge Registration
   c. ADJ 8.3 Cut Length
3. Return the Printer to normal operation.

REP 9.23 Drum Encoder Assembly

Parts List on PL 9.1

WARNING

Switch off the Controller and the Printer Main Power Switches. Disconnect the Printer Power Cord.

Removal

1. Open the Printer Top Cover. Perform REP 14.1 Top Cover.
2. (Figure 1): Lift the Printer Image Module.

Figure 1 Lifting the Image Module

3. (Figure 2): Pull open the Fuser Drawer.

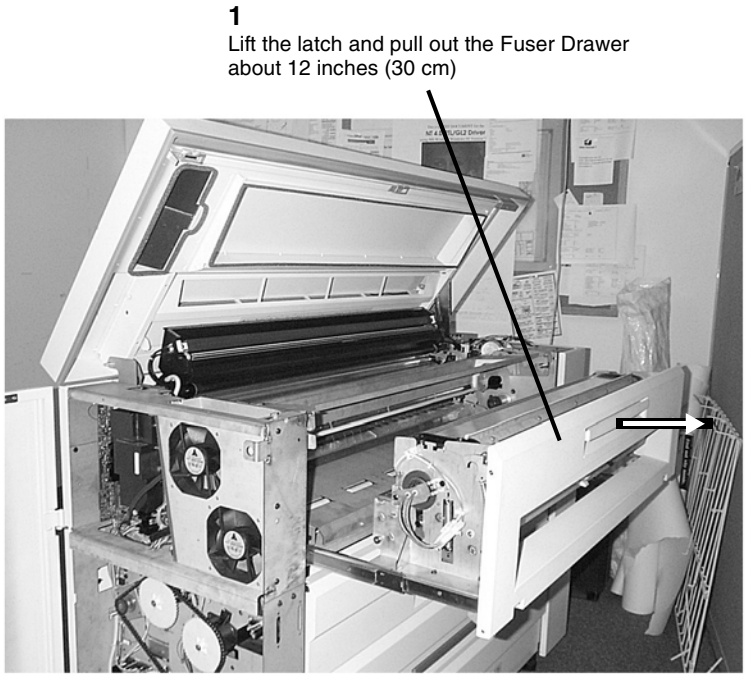
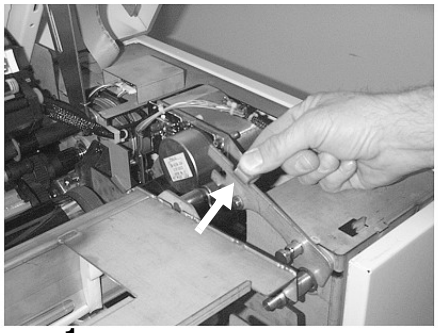
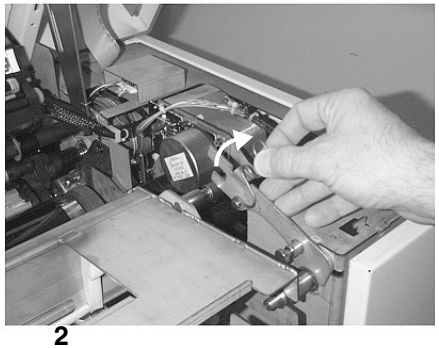


Figure 2 Partially Extending the Fuser Drawer

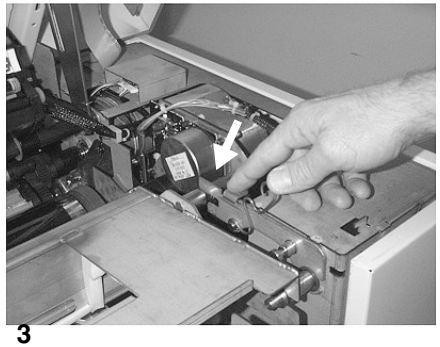
4. (Figure 3): Release the spring tension on the brackets located at either end of the Xerographic Module.



1
Lift the bracket at the tab



2
Pull the spring away from the shaft



3
Push bracket back to the horizontal position

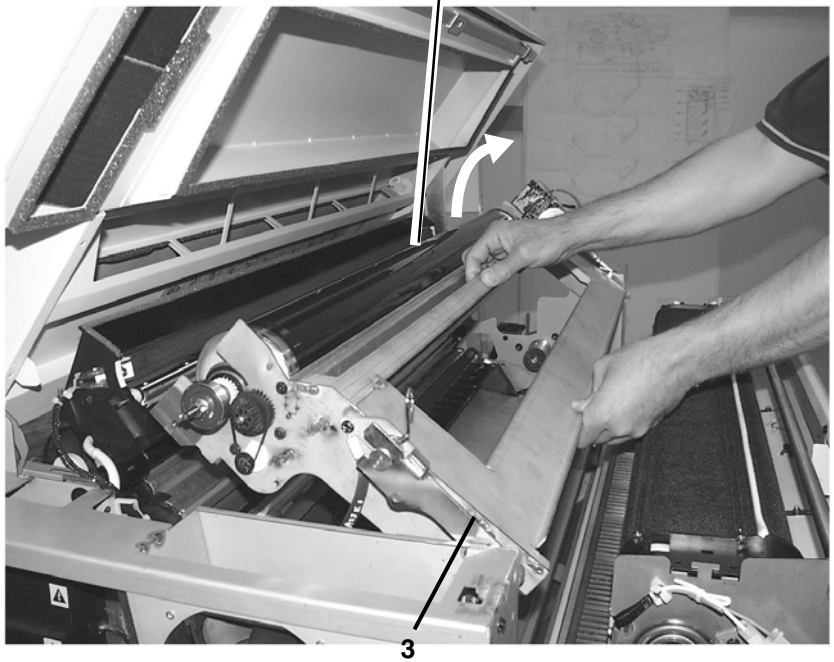
Figure 3 Releasing the Spring Tension on the Bracket

NOTE: *The latches that secure the Xerographic Module to the Printer Frame are spring-loaded and will automatically engage the holes in the frame when it is lifted upright. When performing the following procedure, listen for the latches to engage.*

5. (Figure 4): Raise the Xerographic Module to the service position.

1
With the Xerographic Module lying horizontally, slide it towards the manual infeed area

2
Carefully raise the Xerographic Module to the upright position



3
Listen for positive engagement of the latches at the base of the brackets prior to releasing the Xerographic Module

Figure 4 Elevating the Xerographic Module to Service Position

6. (Figure 5): Remove the Drum Drive Motor (MOT 3) cover.

NOTE: *To lossen the Setscrew ,use the set-key wrench provided with the Encoder Kit.*

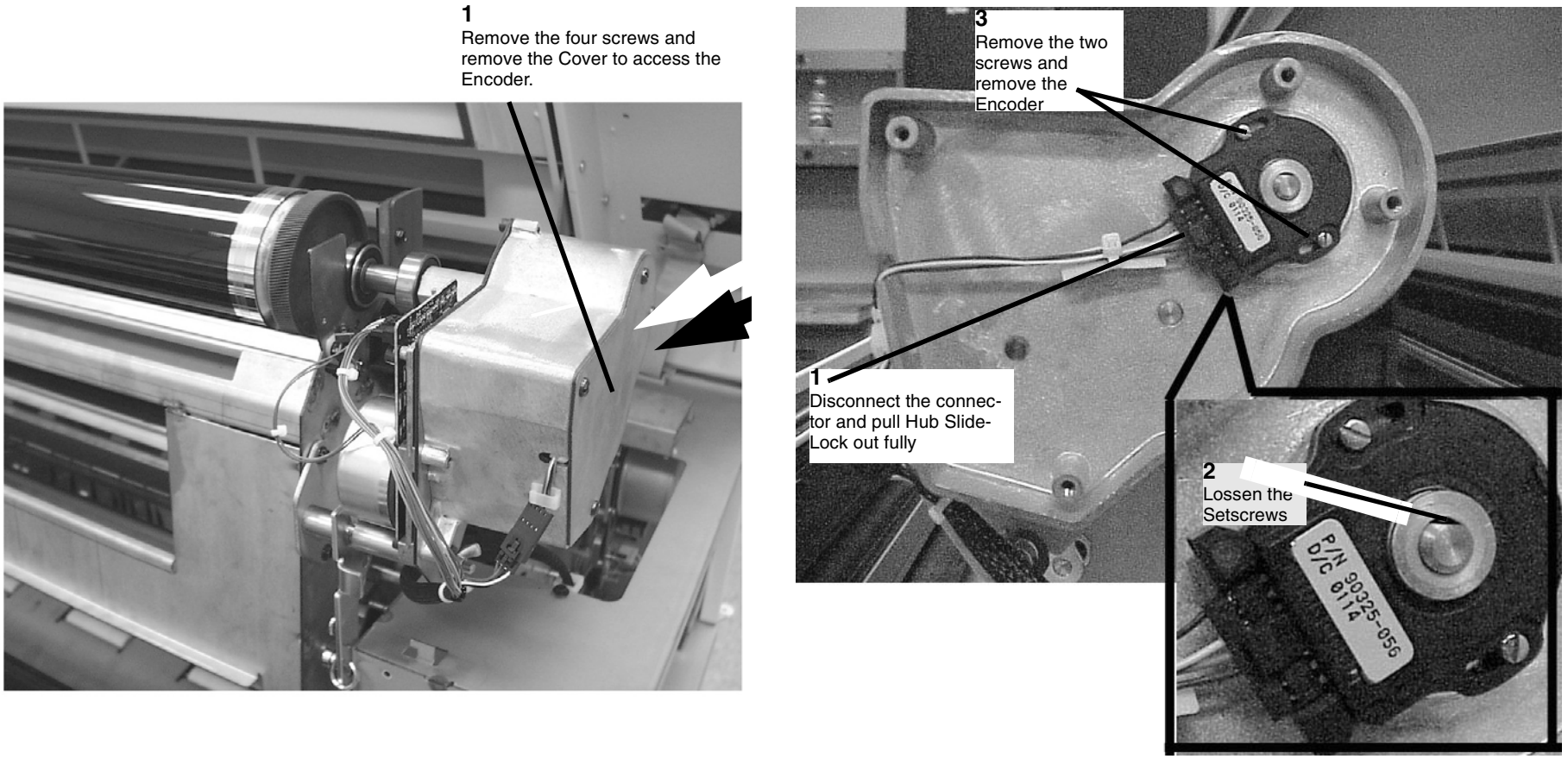


Figure 5 Removing the Drum Motor Cover

7. (Figure 6): Remove the Encoder.

Replacement

1. Install the Encoder.

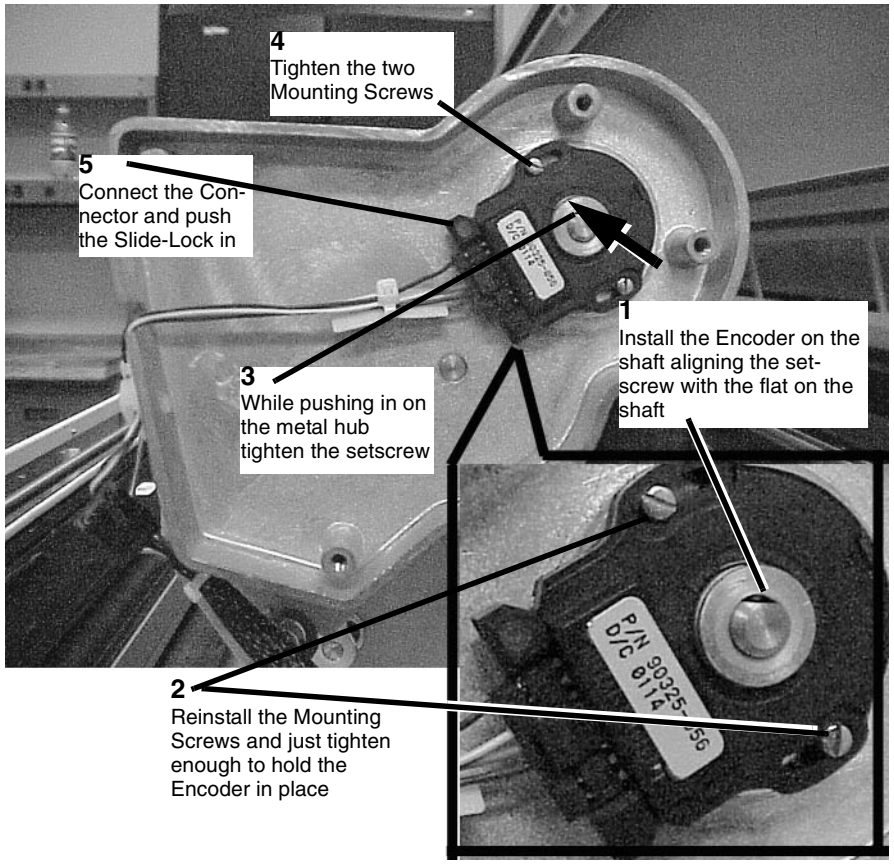


Figure 6 . Installing the Encoder

2. After replacing the Drum Encoder Assembly, the following adjustments must be performed for bond, vellum, and film.
   a. ADJ 8.1 Vertical Magnification.
   b. ADJ 8.2 Lead Edge Registration
   c. ADJ 8.3 Cut Length
3. Return the Printer to normal operation.

REP 9.24 Electrometer Probe (ESV 1)

Parts List on PL 9.9

Removal

1. Switch off the Printer before replacing the Electrometer Probe.
2. The Electrometer Probe and the Electrometer Probe PWB must be replaced together.

   NOTE: *The Printer must be power off then on before doing the Electrostatic Series adjustment aftger replacing the Electrometer Probe. If it is not powered off , the 0904 Automatic ESV Setup Failed, Condition 1 may be declared.*

3. Perform the Electrostatic Series adjustment (ADJ 9.2).

REP 9.25 Ozone Filter (SPS 510dp)

Parts List on PL 9.9

Removal

1. Switch off the Printer.
2. Open the Rear Cover and raise the Top Cover.
3. (Figure 1): Remove the Rear Top Cap.

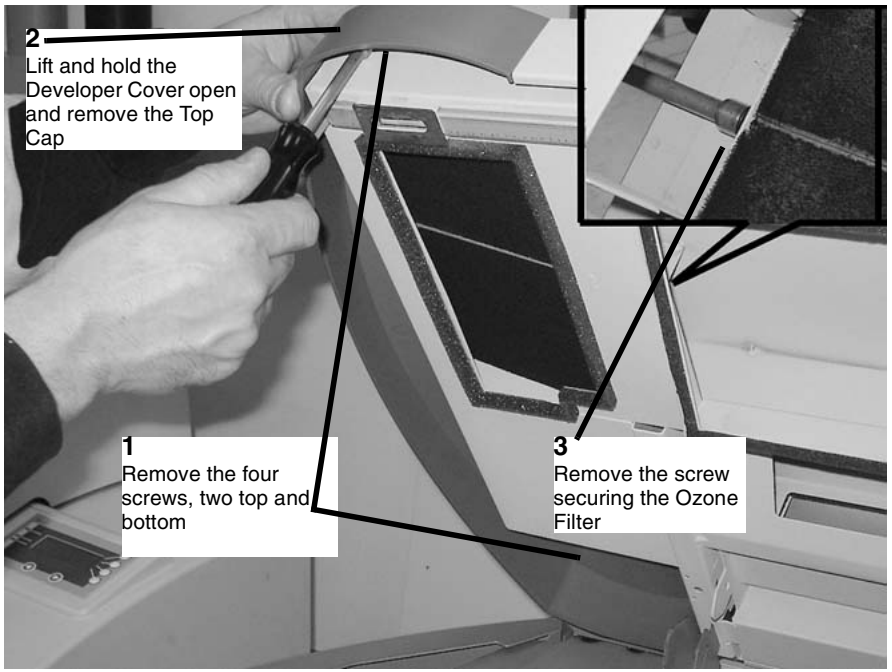


Figure 1 Removing the Top Rear Cap

4. (Figure 2): Remove the ozone filter.

Replacement

1. (Figure 3): Install the Ozone Filter

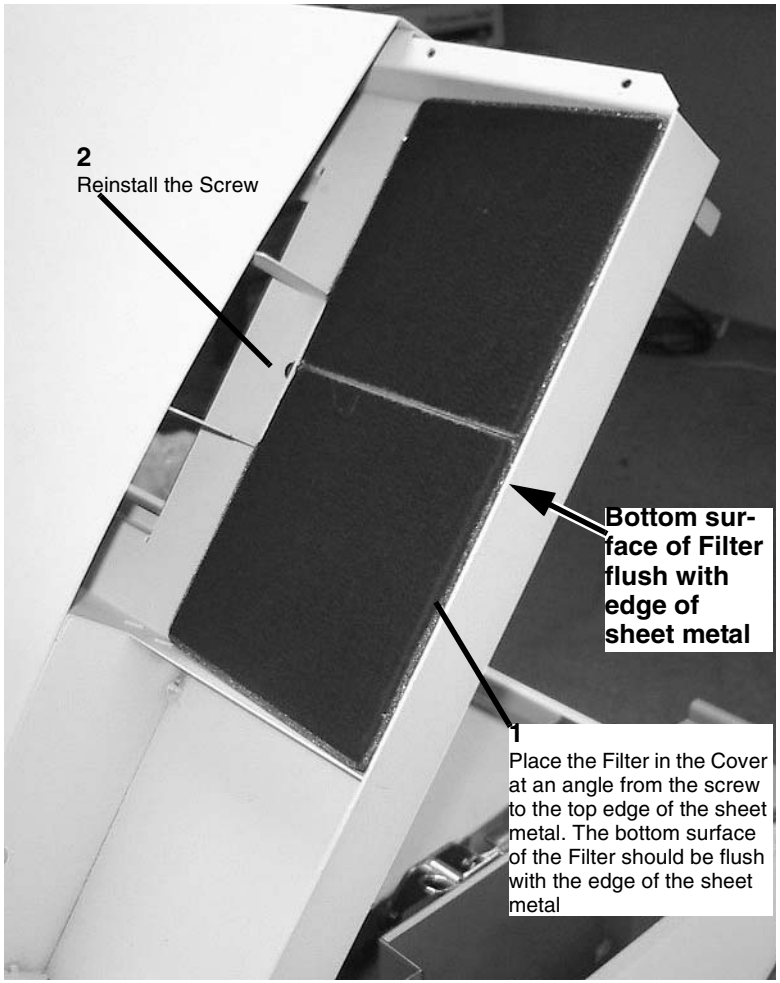


Figure 2 Installing the Ozone Filter

REP 9.26 ESV Extrusion

Parts List on PL 9.9

Removal

WARNING

Switch off the Controller and Printer Main Power Switches. Disconnect the Printer Power Cord.

1. Open the Printer Top Cover. Perform REP 14.1 Top Cover.
2. Lift the Printer Image Module.
3. (Figure 1): Pull the ESV Probe and harness out of the extrusion and place to the side.

Figure 1

4. (Figure 2): Use a pocket screwdriver or similar tool to pry the right end of the extrusion away from the mounting channel and remove the old extrusion.

Figure 2

5. (Figure 3): Press the copper ground strip in the areas that have pulled away from the extrusion channel. The ground strip should be smooth and against the surface of the channel.

Figure 3

6. (Figure 4): Clean the remaining glue from the extrusion channel with Film Remover and a lint free cloth.

Figure 4

7. (Figure 5): Remove the backing tape from the new extrusion.

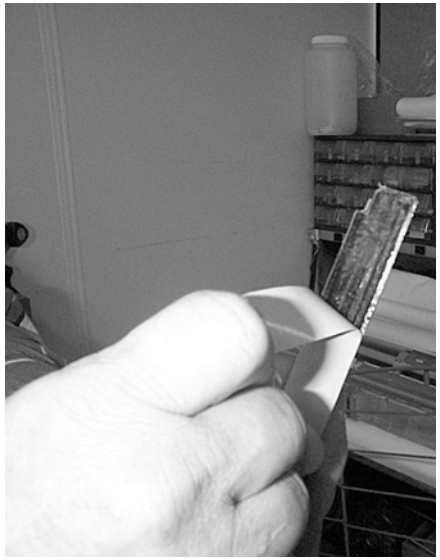


Figure 5

8. (Figure 6): To correctly align the new extrusion, align the cutout with the edge of the roller

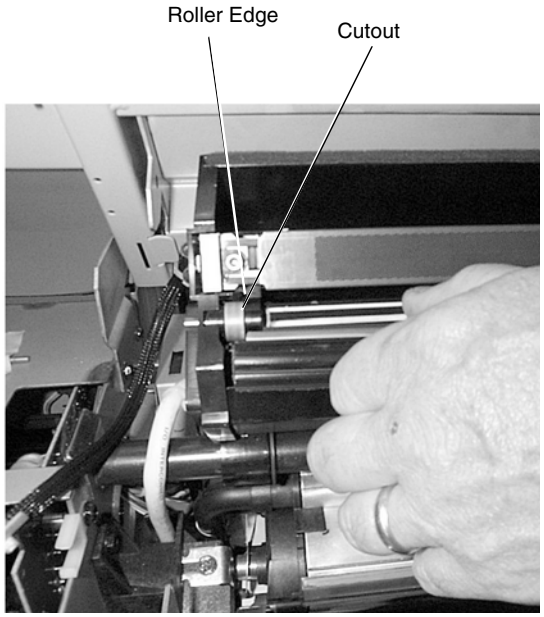


Figure 6

9. (Figure 7): Press the new extrusion into the channel while keeping the top of the extrusion against the SELFOC Lens assembly.

Figure 7

10. (Figure 8): Finish the installation by pressing the center of the extrusion the entire length to ensure correct adhesion.

Figure 8

11. (Figure 9): Reinstall the ESV probe into the extrusion by aligning the locating tabs to the alignment holes. Then place the ESV harness into the extrusion channel.

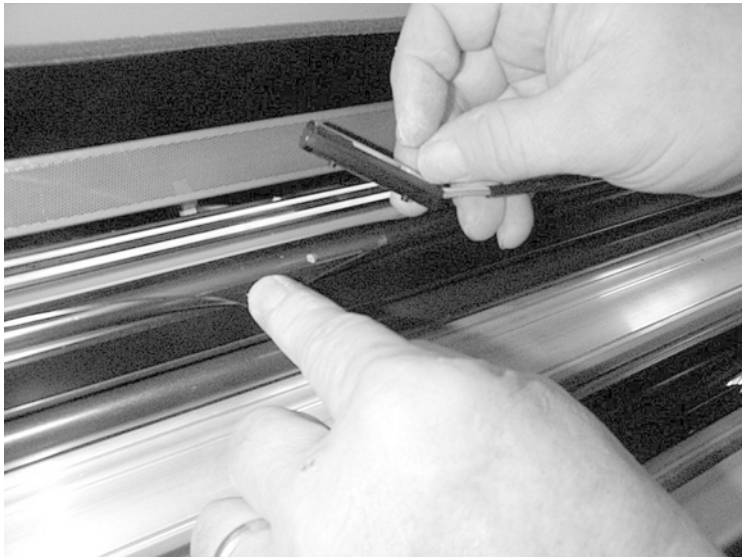


Figure 9

12. Restore the printer to normal operating condition.

REP 10.1 Heat Rods, Edge (HR 1) and Center (HR 2)

Parts List on PL 10.2

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord. Allow the Fuser Assembly to cool before the procedure is performed.

Removal

1. (Figure 1): Access the Fuser Module.

Figure 1 Accessing the Fuser Module

NOTE: *In the following steps, the terms "Left" and "Right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

2. (Figure 2): Disconnect the Heat Rod and remove the bracket (Left side).

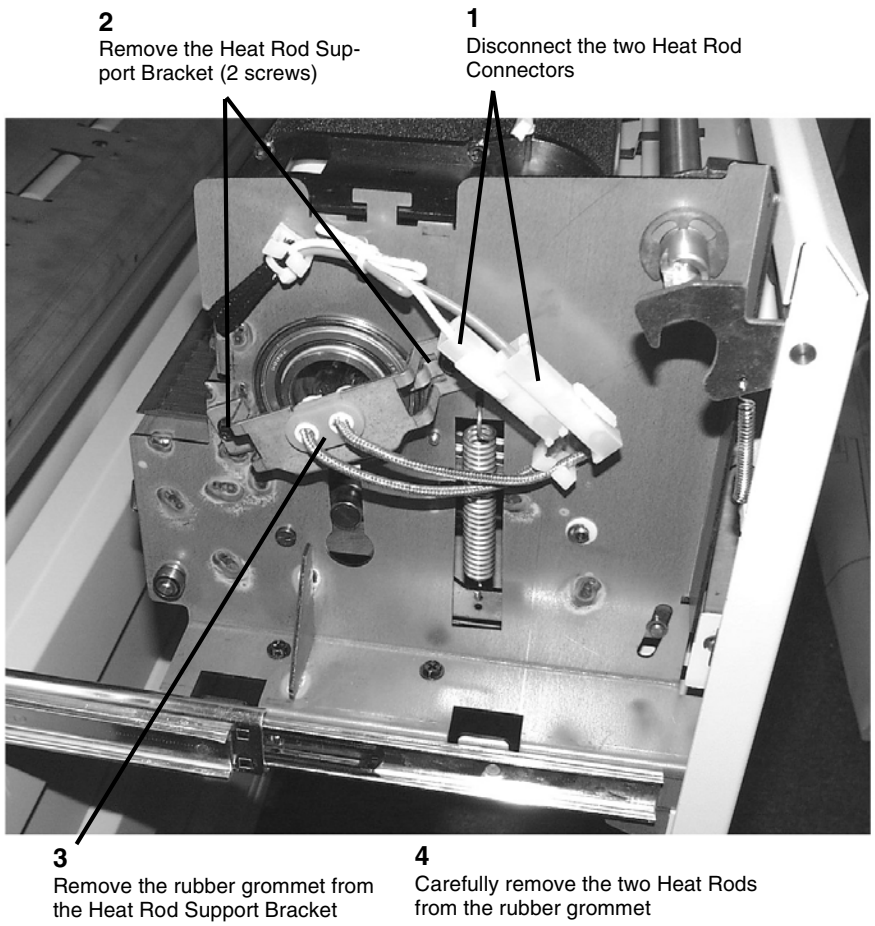


Figure 2 Removing the Bracket (Left side)

3. (Figure 3): Disconnect the Heat Rods and guide them into the Fuser Heat Roll (Right Side).

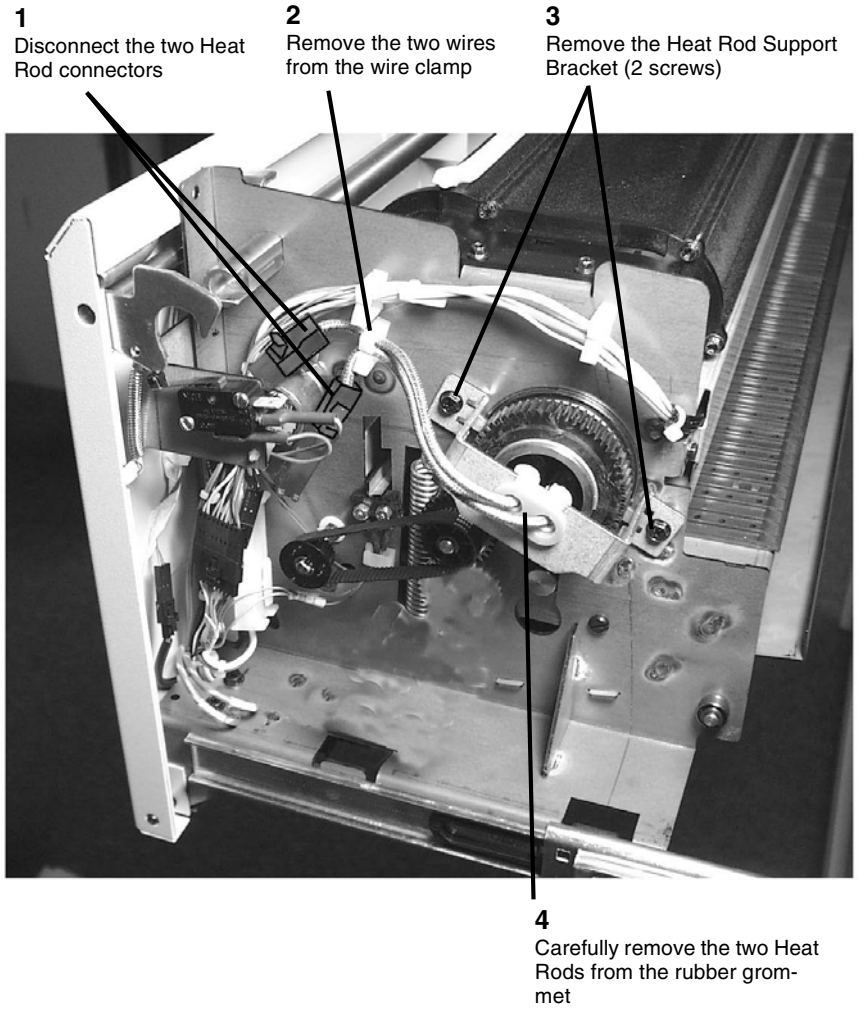


Figure 3 Guiding the Heat Rods into the Fuser Heat Roll (Right Side)

CAUTION

Wear gloves or wrap a sheet of paper around the Heat Rod when handling the Heat Rod. Do not touch the glass section of the Heat Rod. Oil from fingers can cause damage to the Heat Rod.

4. (Figure 4): Remove the Heat Rod(s).

NOTE: *The heat rods can be removed from either side of the Fuser Module. If the rods are not damaged, but are only being removed to do another repair, use a sheet of paper to hold the rods. Do not touch the rods, oils from your hand will contaminate them and cause a premature failure.*

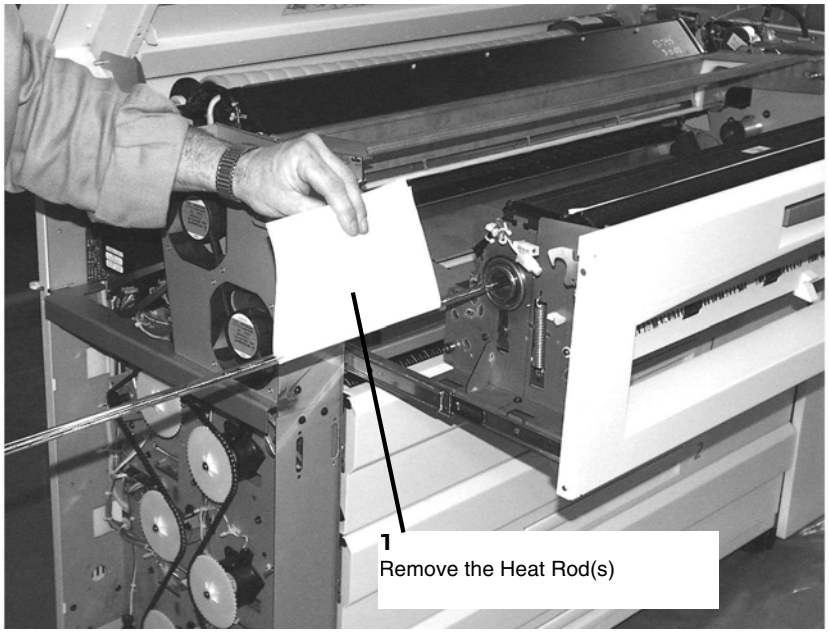


Figure 4 Removing the heat rod(s)

Replacement

CAUTION

Wear gloves or wrap a sheet of paper around the Heat Rod when handling the Heat Rod. Do not touch the glass section of the Heat Rod. Oil from fingers can cause damage to the Heat Rod.

CAUTION

The connectors on the Fuser Heat Rods are color- coded. Ensure that the red connectors on the Fuser Heat Rods are connected to the red connectors on the Fuser Harness (located on the drive side of the Fuser Assembly).

NOTE: *Do not remove the connectors from the wires on the ends of the Heat Rod.*

NOTE: *Step 1: If this procedure is being done as a result of replacing the Heat Rods, the Sup-port Bracket will have been removed. If it is a result of doing an install, the bracket will need to be removed.*

1. (Figure 5): Unfasten the rear Fuser Heat Rod Bracket from the Fuser Assembly and sep-arate the grommet from the bracket.

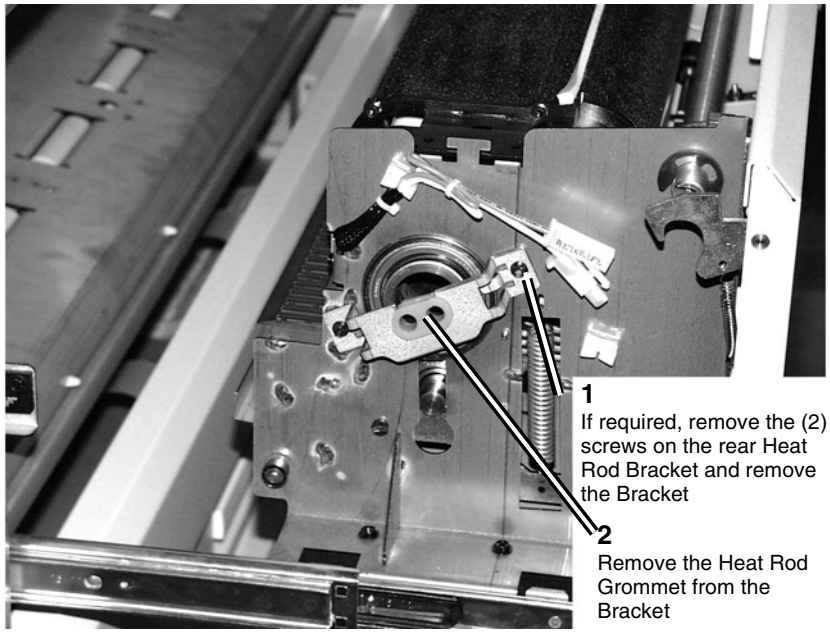


Figure 5 Removing the Grommet from the Bracket

2. (Figure 6):Remove the Heat Rod Grommet located on the front of the Fuser Assembly (drive side).

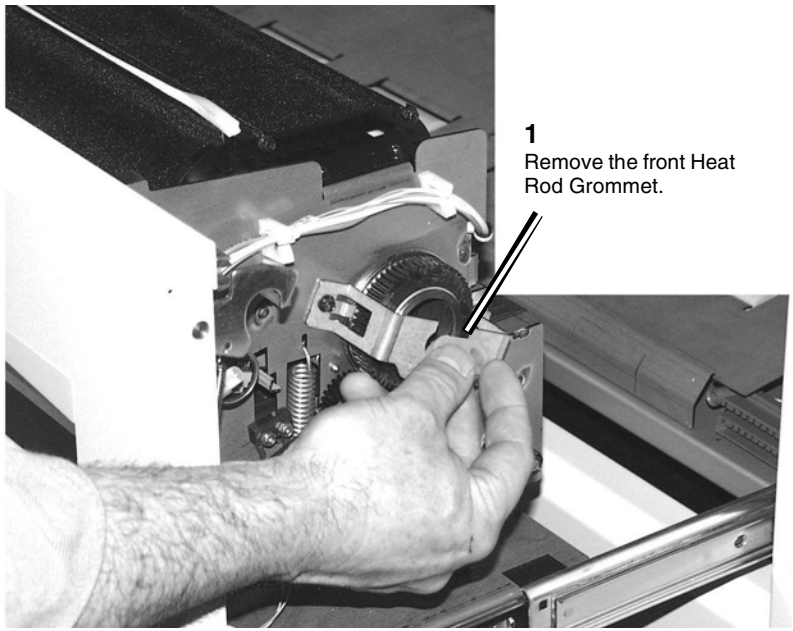


Figure 6 Removing the front Fuser Heat Rod Grommet

3. Straighten any bends in the wires on both Fuser Heat Rods.

   NOTE: *Examine the color and shape of the connectors on both the Fuser Heat Rods and their corresponding connectors on the Printer. Note the following:*

   - *The connectors are color-coded.* ***Red connectors go on the drive side of the Fuser Assembly. White connectors go on the non-drive side****.*
   - *The shapes of the connectors are molded to eliminate the possibility of crossing wires on one side of the Fuser Assembly or the other.*
   - *Lateral orientation of either of the Fuser Heat Rods within the Fuser Heat Roll (edge or center) does not matter, so long as the red connectors are placed on the drive side of the Fuser Assembly.*

CAUTION

*When installing the Heat Rods be sure to insert the **red connectors** into the Heat Roll. The **red connectors** should be on the **drive side** of the Fuser Drawer. Installing them incorrectly will cause a Printer fault code and possibly damage a fuser component.*

4. (Figure 7): Pick up one end of one Heat Rod by the wire. Wrap a sheet of paper around the glass and hold both ends of the paper with one hand. Use one hand on the rear, white wire and the other holding the paper to guide each Heat Rod into the fuser from the rear.

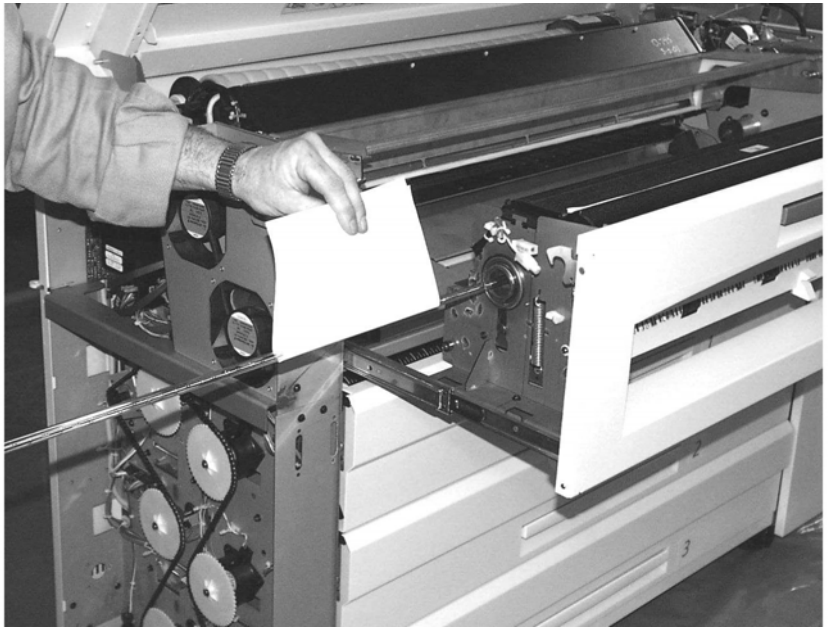


Figure 7 Inserting a Heat Rod into the rear of the fuser

5. As the Heat Rod wire exits the front of the fuser, place the front fuser grommet on the front wire of the rod.
6. Repeat (Step 5 and Step 5.) for the remaining Heat Rod.
7. With the Heat Rods wires inserted, press the fuser grommet into the front fuser bracket.
8. Place the rear fuser grommet on the wires on the rod ends protruding from the rear of the fuser.
9. With the Heat Rod wires inserted, press the fuser grommet into the rear fuser bracket.
10. Holding the rear fuser bracket, push the rods towards the front of the Printer until the ceramic necks of the rods are positioned in the front fuser grommet.
11. Holding the rear fuser wires, push the rear fuser bracket to position the ceramic necks of the rods in the rear fuser grommet.
12. Fasten the rear fuser bracket to the Fuser Assembly.
13. (Figure 8): Attach the Heat Rod wire connectors to the front (red to red) and rear (white to white) wire connectors on the Fuser Assembly.

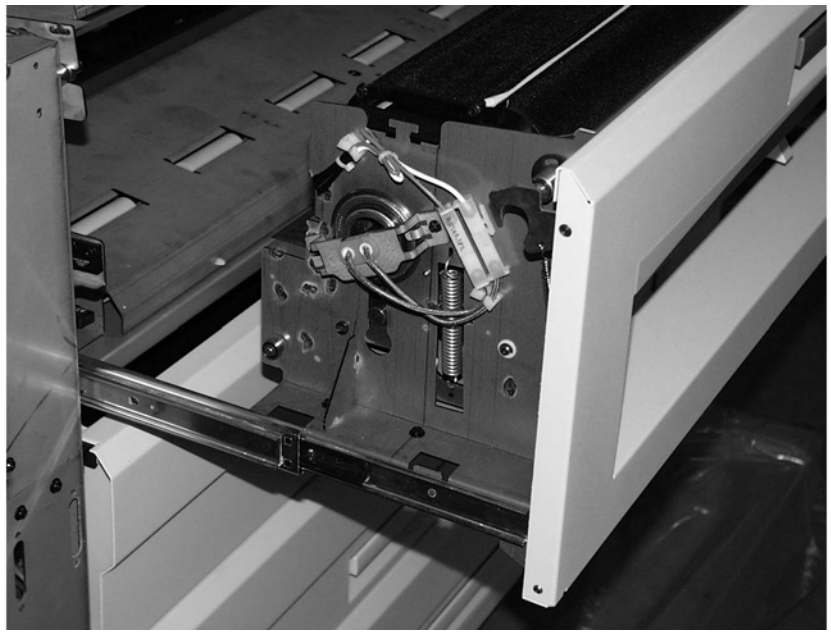


Figure 8 Attaching and dressing the fuser wires and connectors.

14. Dress the wires and connectors, as shown in Figure 12, to avoid contact with the Printer when the Fuser Assembly is closed.
15. The remainder of the replacement is the reverse of the removal.
16. Perform (ADJ 10.1) Fuser Temperature.

REP 10.2 Fuser Heat Roll

Parts List on PL 10.2

Removal

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord. Allow the Fuser Assembly to cool before the procedure is performed.

1. (Figure 1): Access the Fuser Module.

1
Pull up on the handle and pull open the Fuser Module Drawer

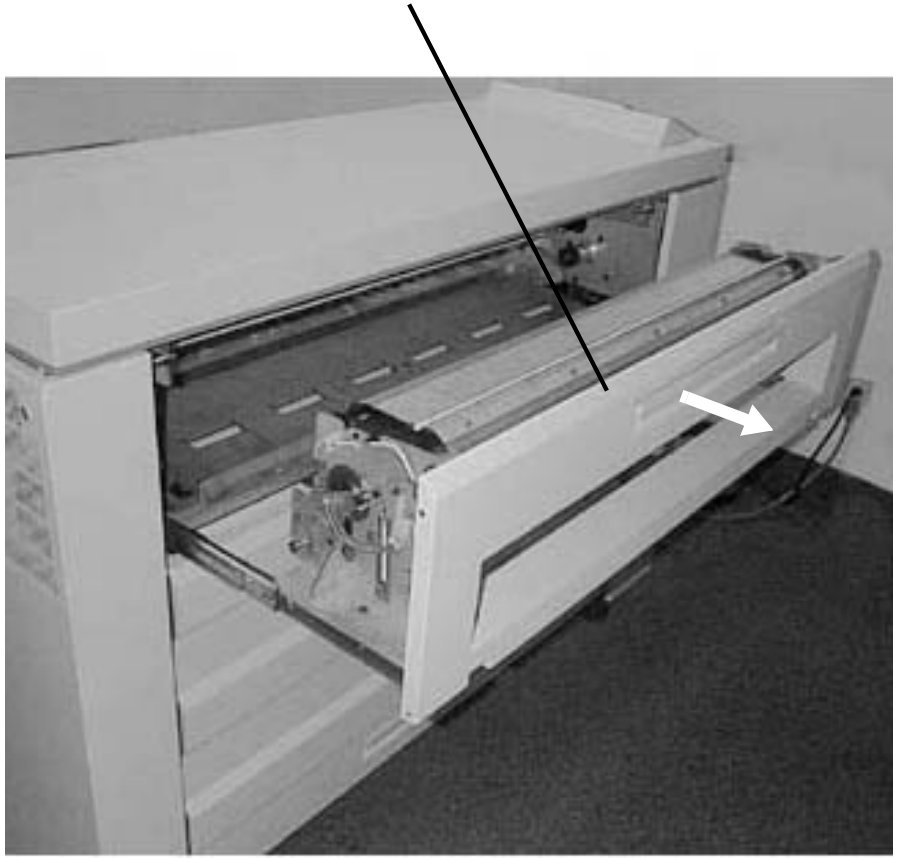


Figure 1 Accessing the Fuser Module

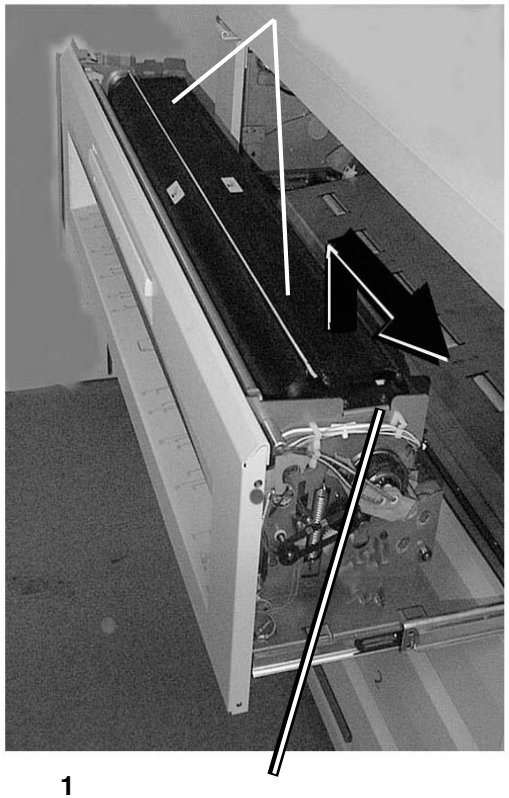
2. Remove the Heat Rods (REP 10.1).

WARNING

Wear protective gloves when handling parts with silicone oil on them. Do not allow silicone oil to contact your eyes. Silicone oil can cause severe eye irritation. Wash your hands immediately after handling any component covered with silicone oil.

3. (Figure 2): Remove the Web Oiler Assembly.

2
Slightly lift the Oil Assembly and move to the right to clear the left side tabs



1
Remove the two right side screws

Figure 2 Removing the Web Oiler Assembly

CAUTION

In the following procedure care must be taken to remove the Stripper Finger Assembly exactly as described. Damage to the Fuser Heat Roll may result if this procedure is not followed.

4. (Figure 3): Prepare to remove the Stripper Finger Assembly.

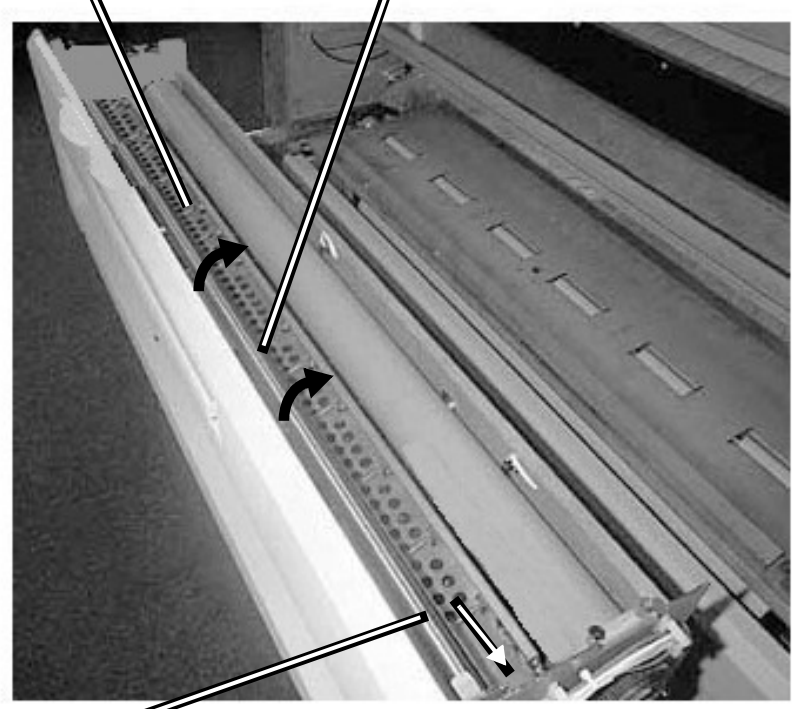
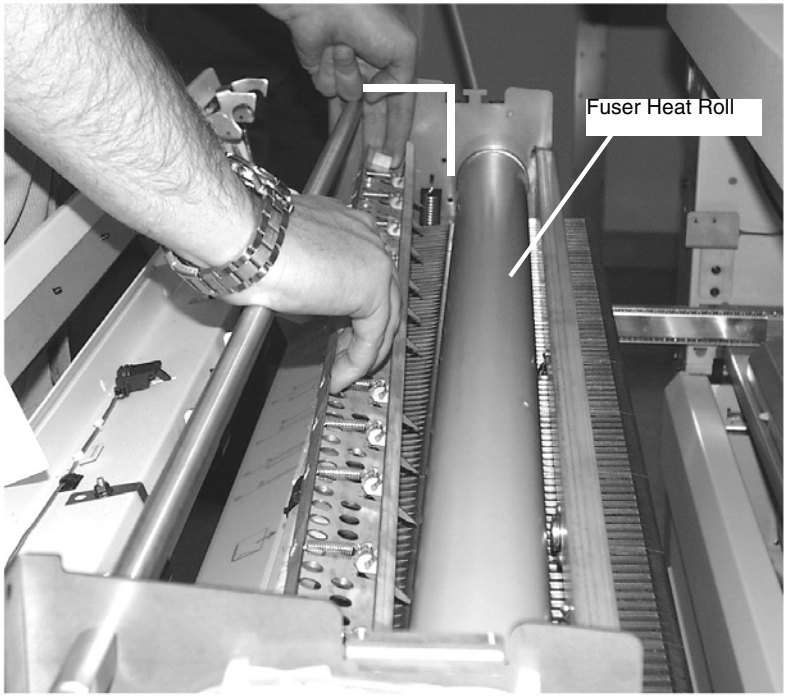


Figure 3 Preparing to Remove the Stripper Finger Assembly

5. (Figure 4): While maintaining the pressure on the right side of the Stripper Finger Assembly, remove the assembly from the Printer.

1
Raise the left side of the Stripper Finger Assembly and pull it away from the Fuser Heat Roll



2
Remove the Stripper Finger Assembly from the Printer

Figure 4 Removing the Stripper Finger Assembly

6. (Figure 5): Release the Cover Latches.

NOTE: *In the following steps to remove the Heat Roll Bearings and Fuser Heat Roll, it will be necessary to remove the force of the Pressure Roll from the Fuser Heat Roll. This is done by releasing the two Latches on the Latching Cover and lowering the Latching Cover.*

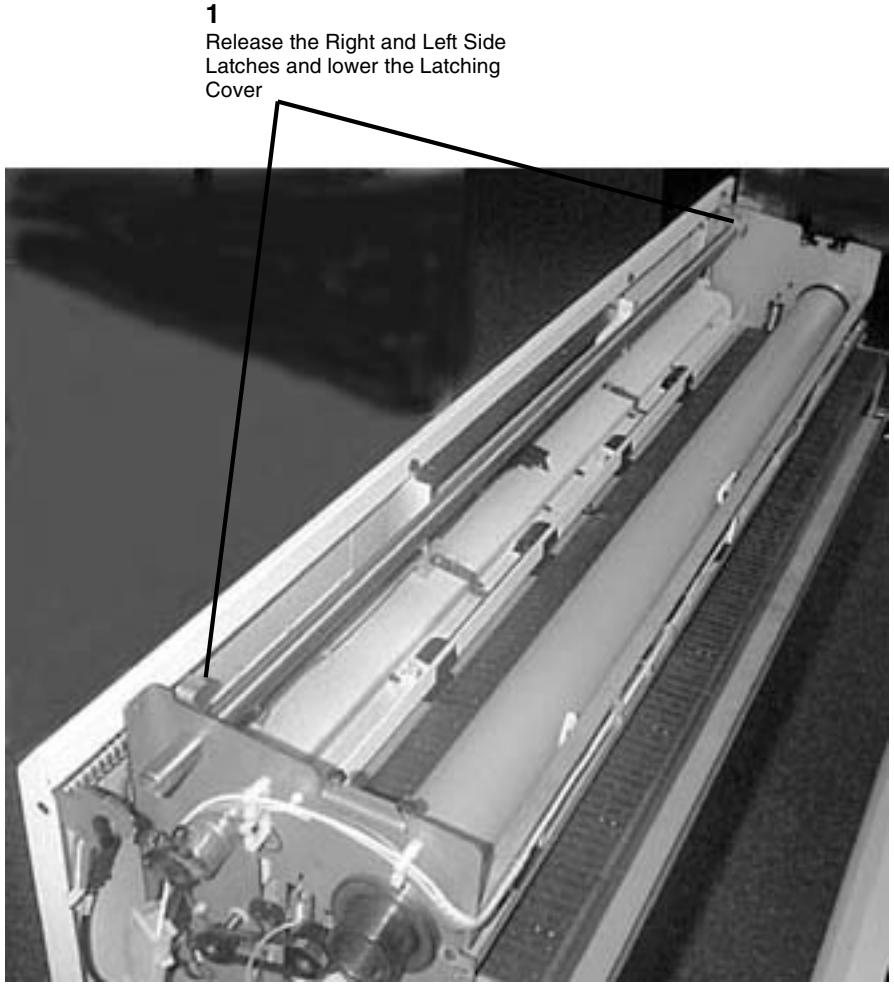


Figure 5 Releasing the Cover Laches

7. (Figure 6): Remove the Fuser Heat Roll Drive Gear and Bearing (right side).

NOTE: *If the Fuser Bearing is difficult to remove, lower the Latching Cover more to remove the force of the Pressure Roll.*

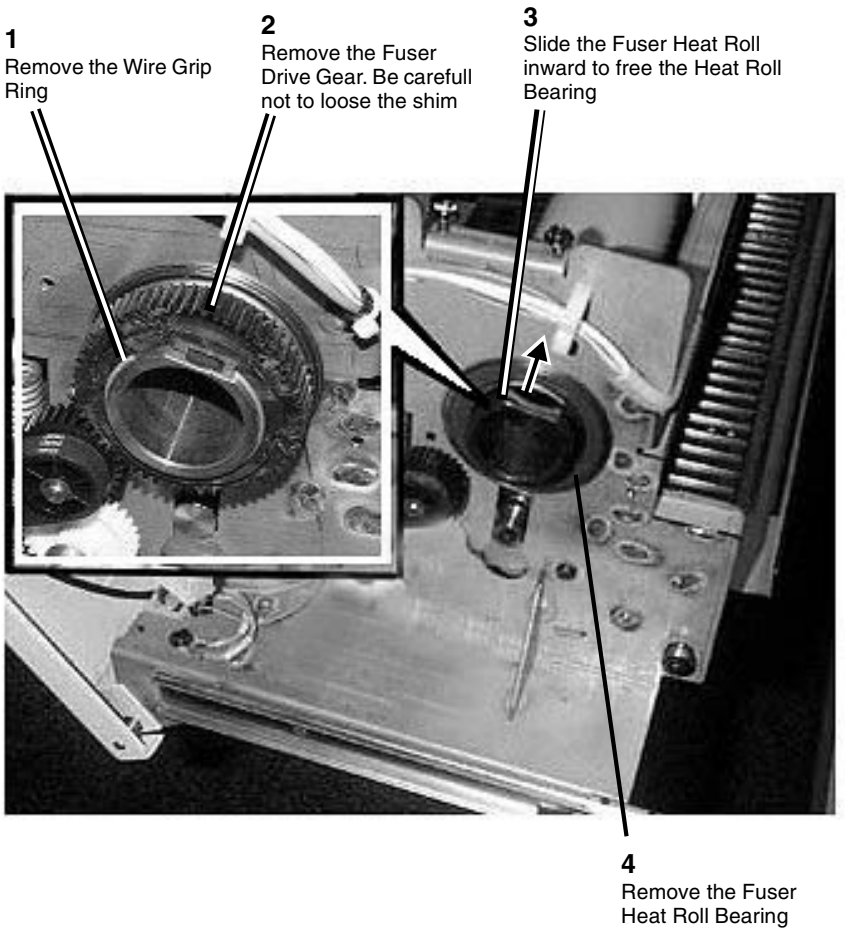


Figure 6 Removing the Fuser Heat Roll Drive Gear and Bearing (right side)

8. (Figure 7): Remove the left side Fuser Heat Roll Bearing.

NOTE: *If the Fuser Bearing is difficult to remove, lower the Latching Cover more to remove the force of the Pressure Roll.*

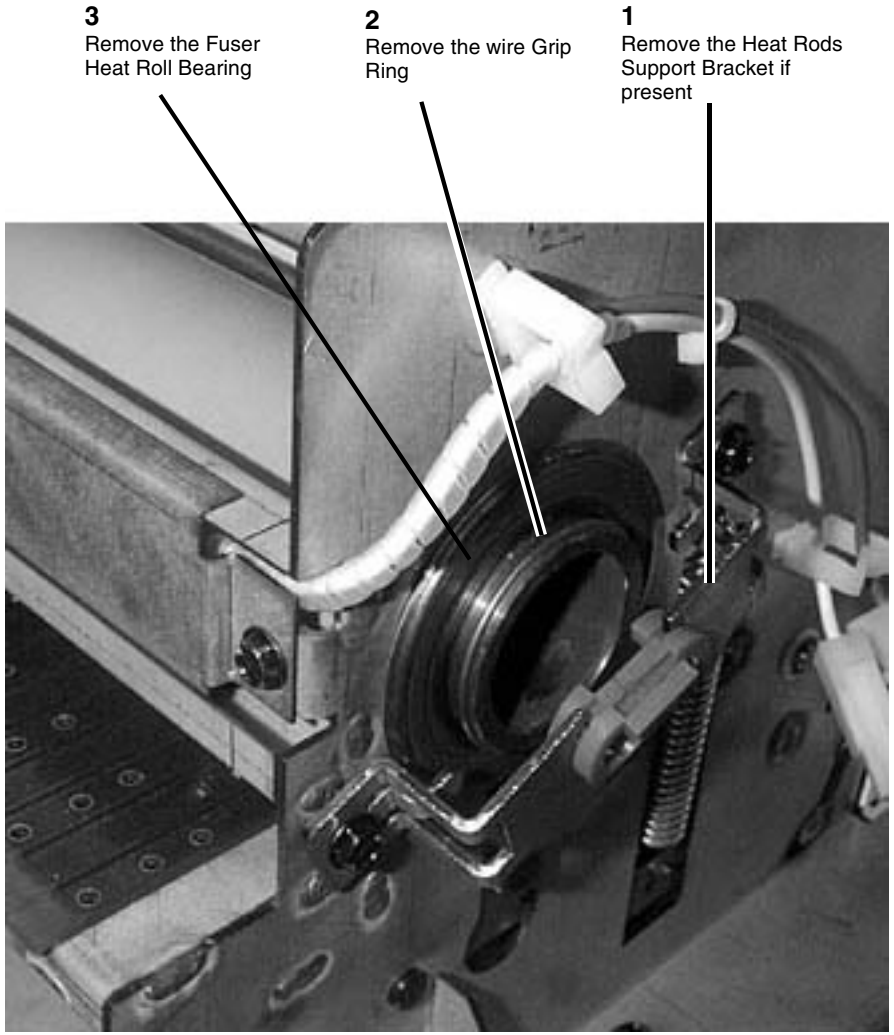


Figure 7 Removing the Left Side Fuser Heat Roll Bearing

NOTE: *Do not pull the Heat Roll through the frame to remove. Only slide it enough to clear the frame then move in the opposite direction to remove.*

9. (Figure 8): Remove the Fuser Heat Roll.

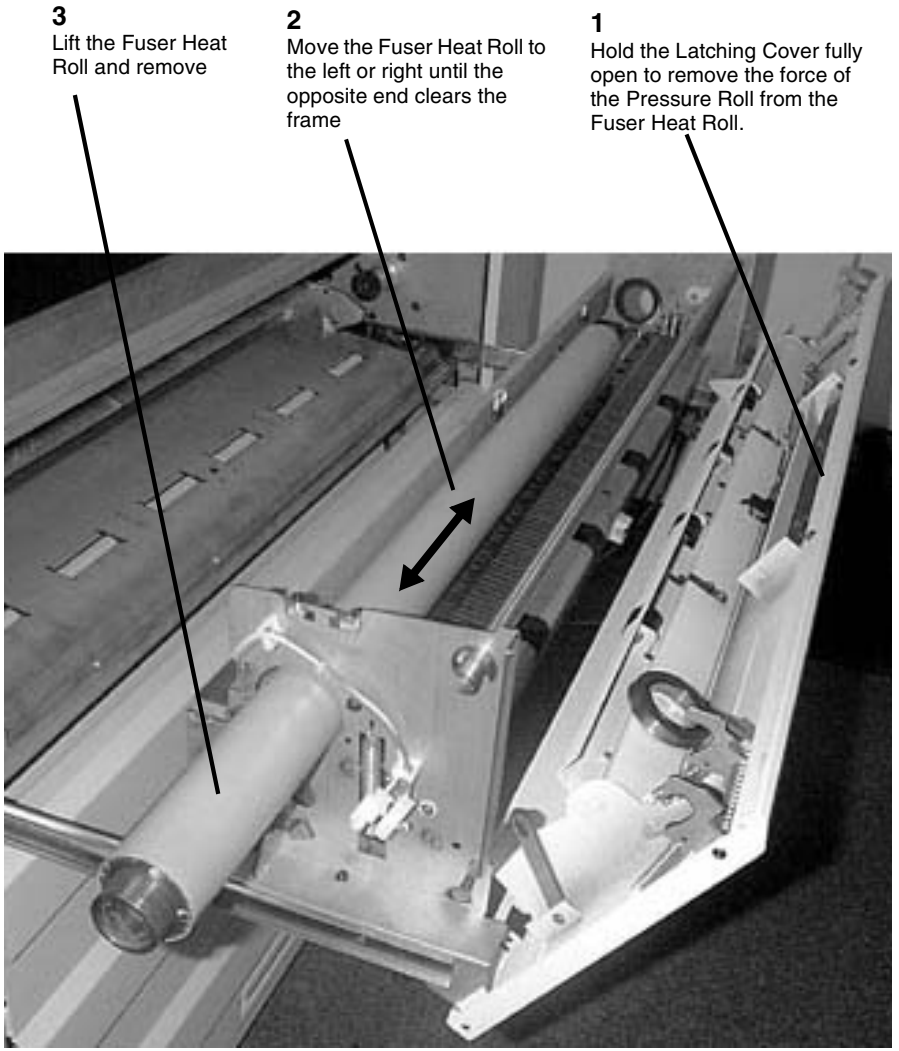


Figure 8 Removing the Fuser Heat Roll

Replacement

1. (Figure 9): Install the Fuser Heat Roll.

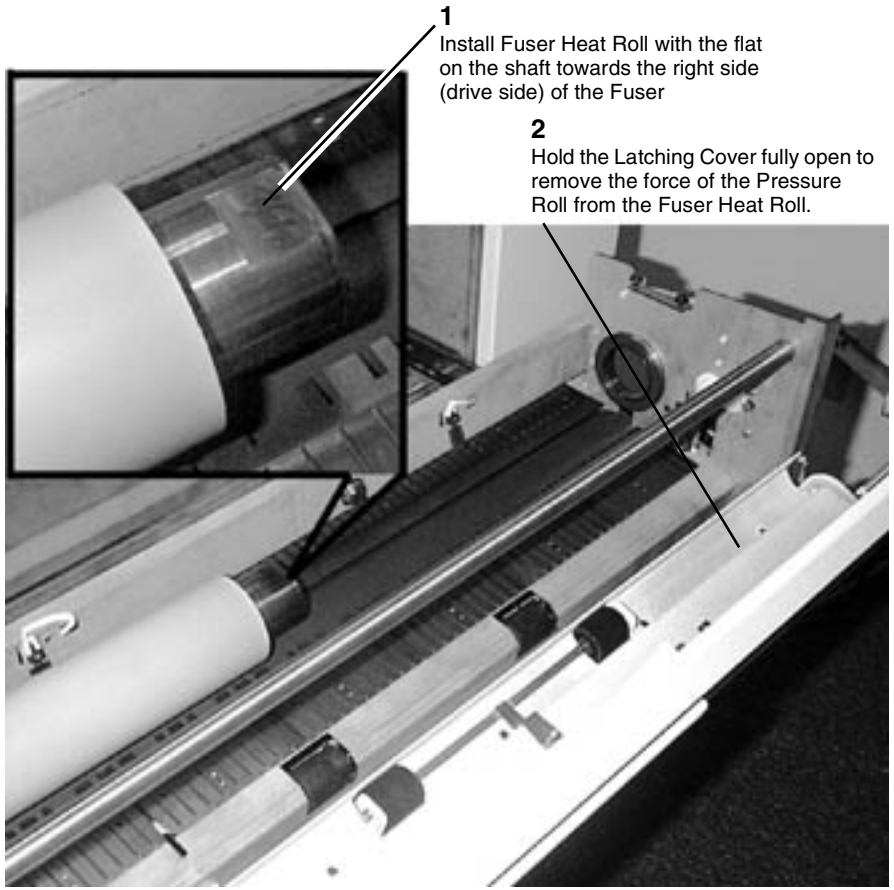


Figure 9 Installing the Fuser Heat Roll

2. The remainder of the replacement is the reverse of the removal.

   NOTE: *If the Fuser Heat Roll Bearings are difficult to install, lower the Latching Cover more to remove the force of the Pressure Roll on the Fuser Heat Roll.*

   NOTE: *Be sure to reinstall the shim on the flat before reinstalling the Drive Gear*

REP 10.3 Web Oiler Assembly

Parts List on PL 10.5

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Removal

1. (Figure 1): Access the Fuser Module.

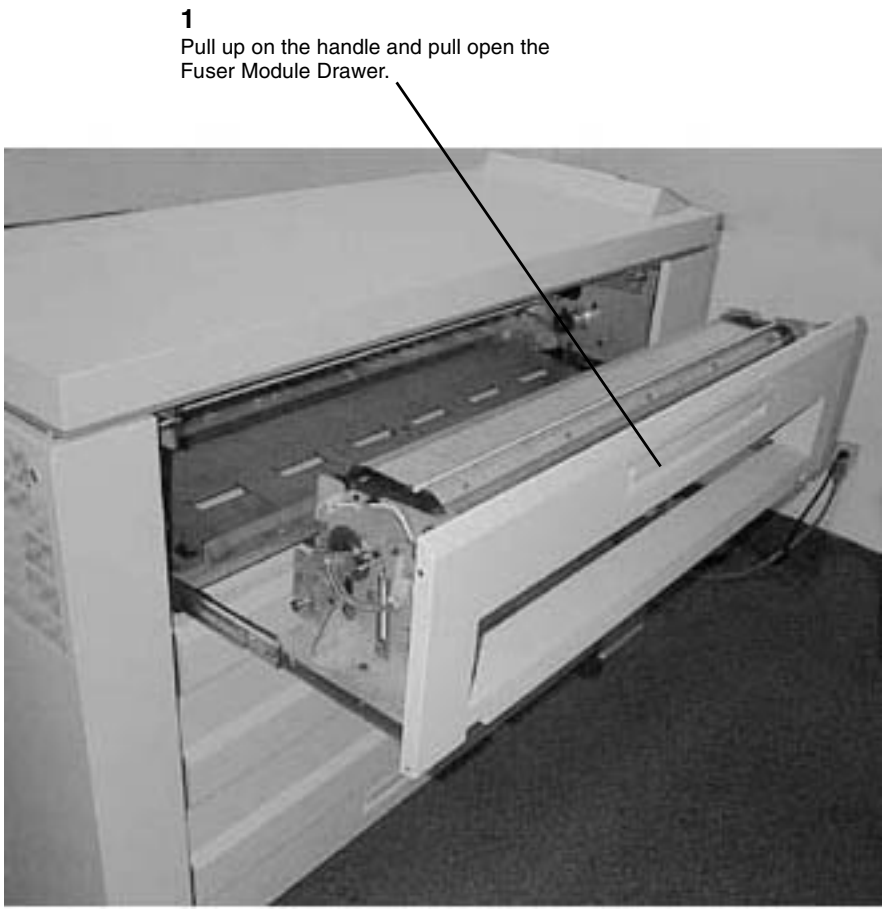


Figure 1 Accessing the Fuser Module

2. Ensure that there is a clean, flat surface on which to place the Web Oiler Assembly after it is removed.

WARNING

Wear protective gloves when handling parts with silicone oil on them. Do not allow silicone oil to contact your eyes. Silicone oil can cause severe eye irritation. Wash your hands immediately after handling any component covered with silicone oil.

3. (Figure 2): Remove the Web Oiler Assembly.

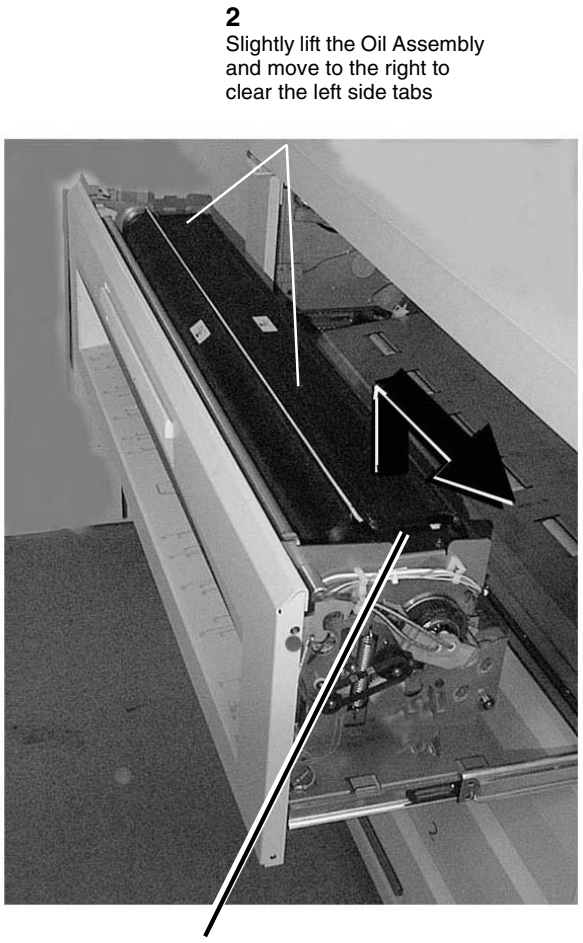


Figure 2 Removing the Web Oiler Assembly

Replacement

1. (Figure 3): Reinstall the Web Oiler Assembly on the Printer.

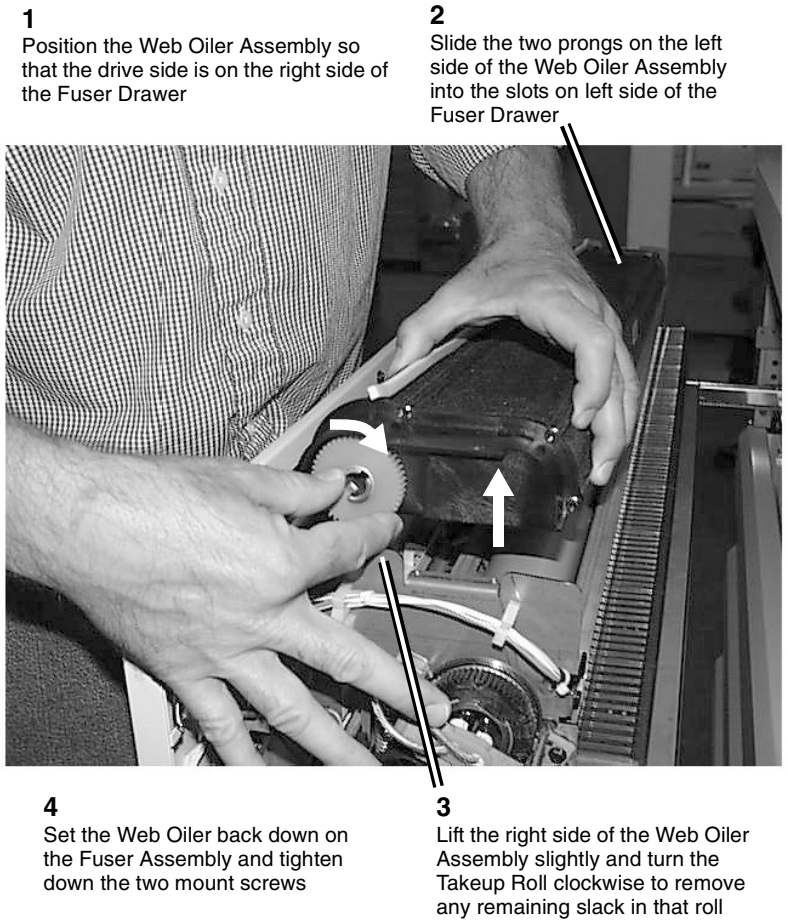


Figure 3 Reinstalling the Web Oiler Assembly

2. Return the Printer to normal operating condition.
3. Enter the Printer diagnostics and perform the following:
   a. 10-30 Web Oiler Parameters Reset - to reset the meter if a new Web Oiler is installed.
   b. 10-31 Partial Web Oiler Parameters Reset - to reset the parameters for a partially used Web. Measure the diameter of the remaining web on the Supply Roll in millimeters and enter this value.

REP 10.4 Stripper Fingers

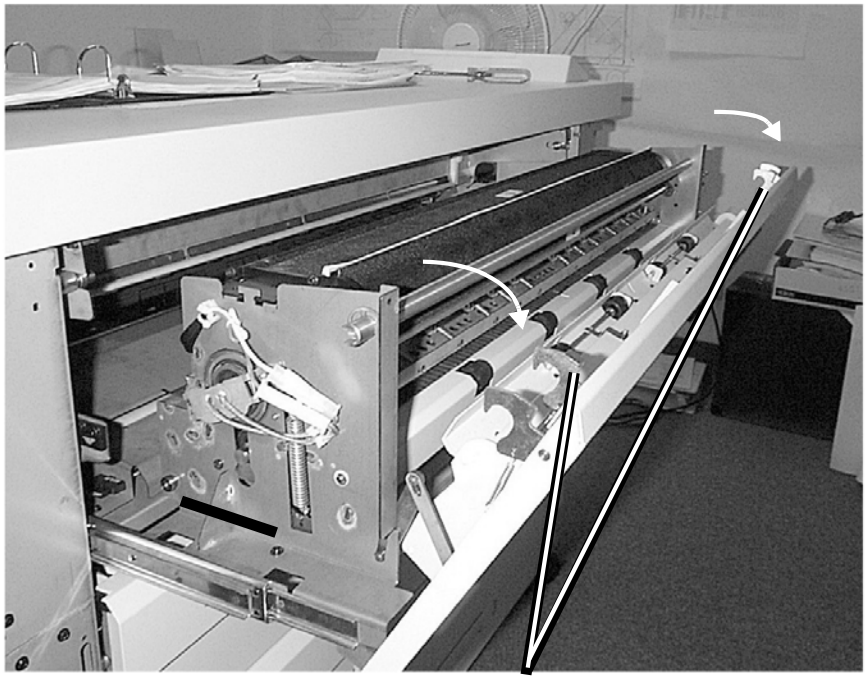
Parts List on PL 10.3

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord. Allow the Fuser Assembly to cool before the procedure is performed.

Removal

1. (Figure 1) Access the Stripper Finger Assembly.



1
Pull open the Fuser Module Drawer

2
Release the two latches and lower the Fuser Drawer Cover

Figure 1 Accessing the Stripper Finger Assembly

2. Perform REP 10.3 to remove the Web Oiler Assembly.

CAUTION

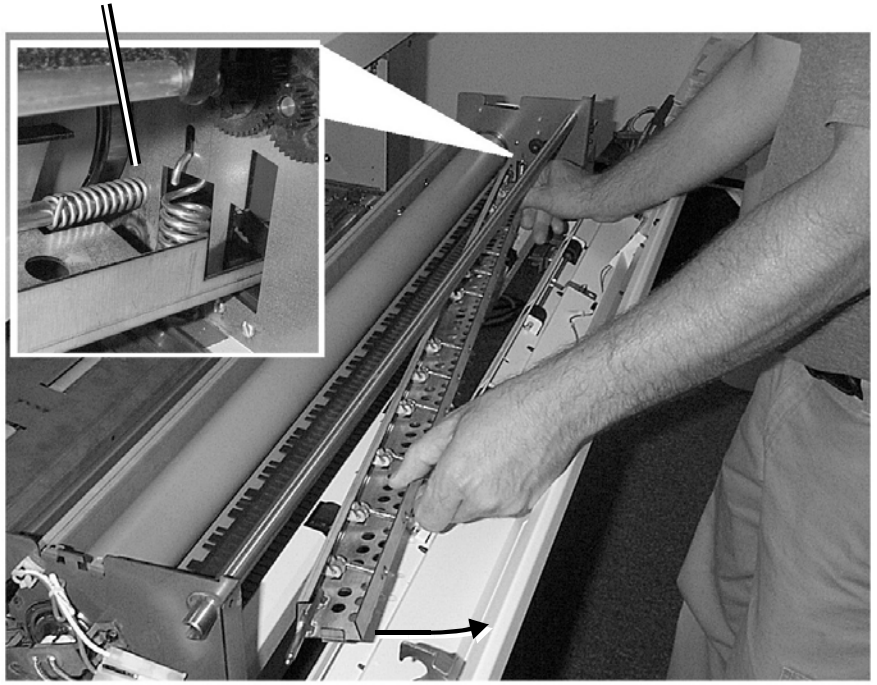
In the following procedure care must be taken to remove the Stripper Finger Assembly exactly as described. Damage to the Fuser Heat Roll may result if this procedure is not followed.

3. (Figure 3): Remove the Stripper Finger Assembly from the Printer.

***NOTE:** In the following steps the terms "left" and "right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

1
Note the location of the Stripper Shaft mount holes on the right and left sides of the Fuser Assembly

2
Bias the Stripper Finger Assembly to the right until the spring compresses completely, freeing the left side from the frame



4
Carefully remove the Stripper Finger Assembly from the Printer and place it on a clean, flat surface

3
Swing the left side of the assembly free of the Printer

Figure 2 Removing the Stripper Finger Assembly

4. (Figure 4): Remove the Stripper Fingers.

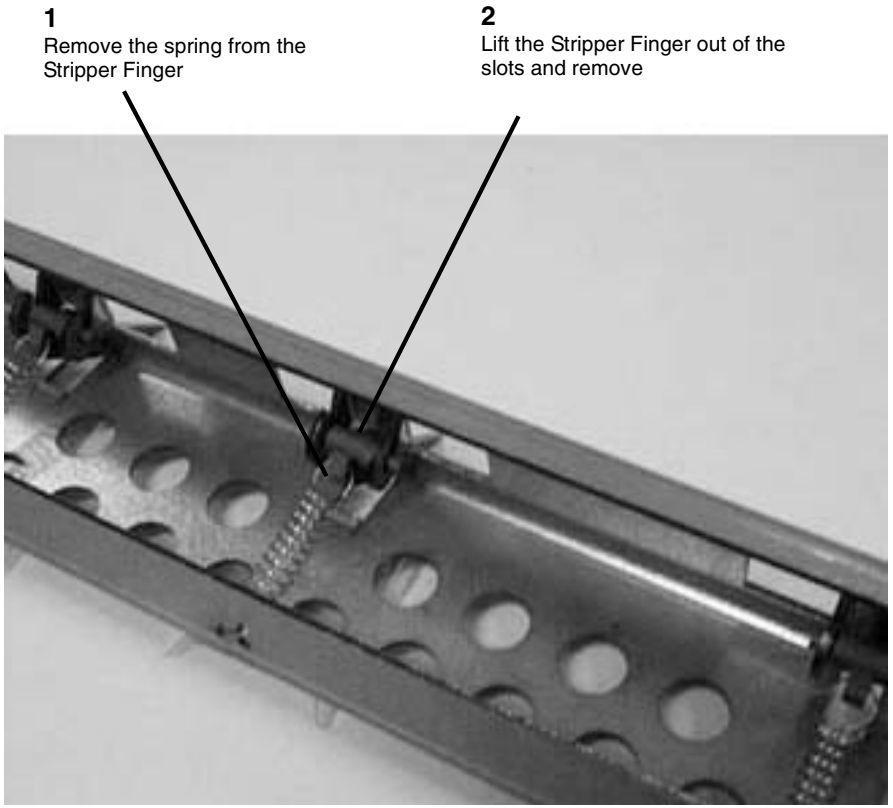


Figure 3 Removing the Stripper Finger

Replacement

CAUTION

Be careful not to damage the point of the fingers as they are being installed.

NOTE: *The Stripper Fingers are spared as a kit that contains enough fingers to replace all of them. Replace all of the fingers.*

1. Replace ALL the Stripper Fingers on the Stripper Finger Assembly.
2. Reinstall the Stripper Finger Assembly on the Printer.
3. Reinstall the Web Oiler Assembly on the Printer.
4. Close the Fuser Drawer Cover, and slide the Fuser Assembly back into the Printer.
5. Return the Printer to normal operation.

REP 10.5 Web Oiler

Parts List on PL 10.5

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

WARNING

Wear protective gloves when handling parts with silicone oil on them. Do not allow silicone oil to contact your eyes. Silicone oil can cause severe eye irritation. Wash your hands immediately after handling any component covered with silicone oil.

Removal

NOTE: *The Web Oiler Assembly can be secured upside-down on top of the Fuser Assembly to work on it.*

1. Remove the Web Oiler Assembly (REP 10.3) and place it upside-down on a flat surface.
2. (Figure 1): Remove the left side (non-drive side) grip ring.

1
Remove the Grip Ring
from the Supply Roll

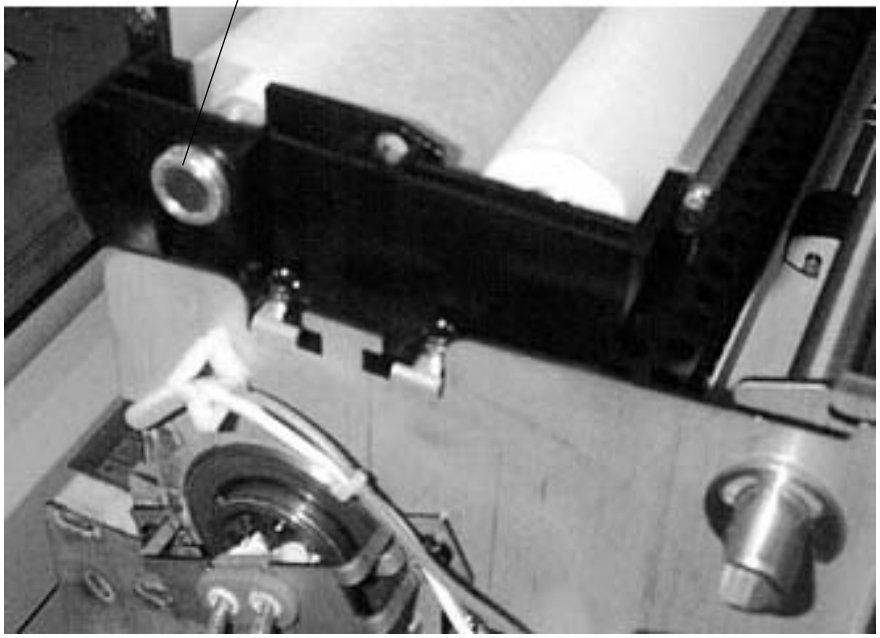
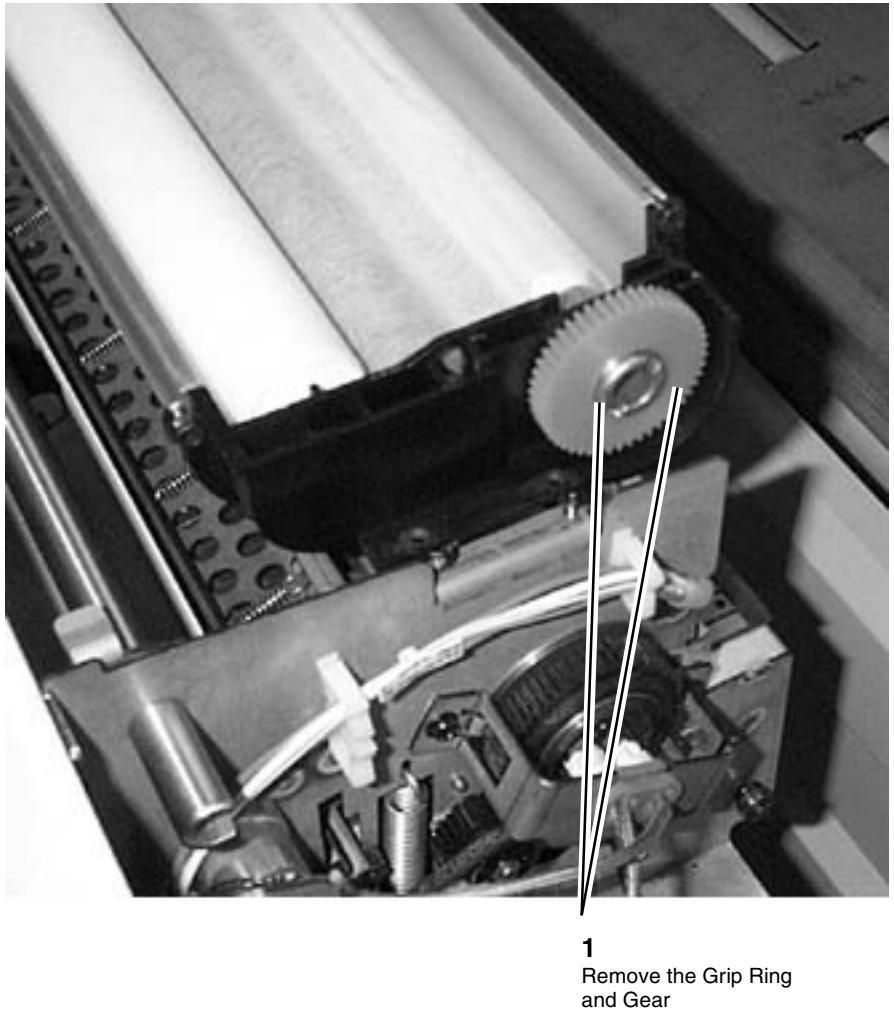


Figure 1 Removing the Grip Ring

3. (Figure 2): Remove the Grip Ring and Gear



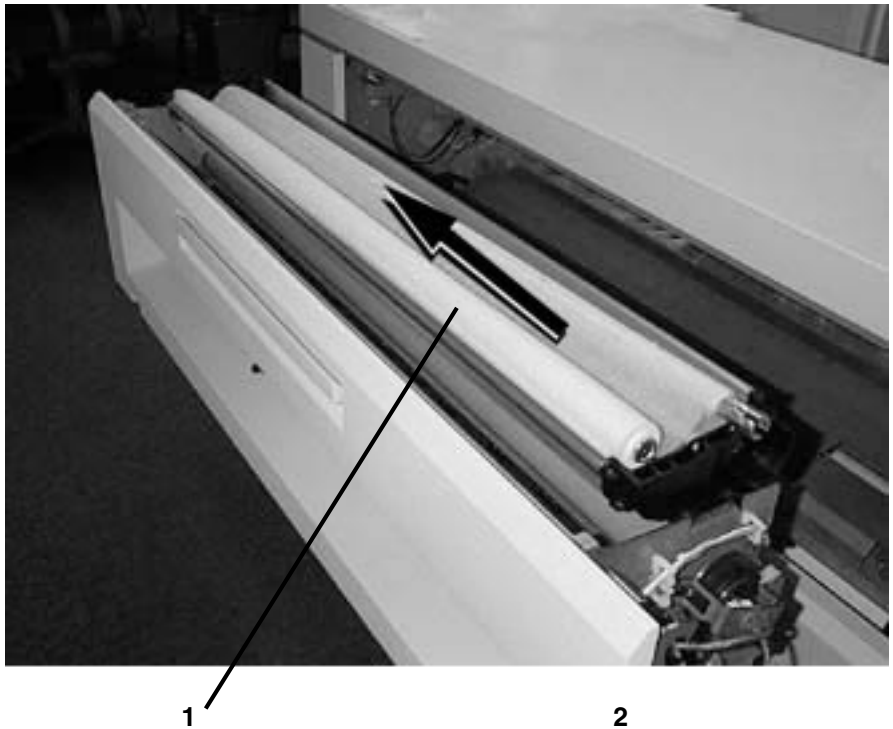
1
Remove the Grip Ring and Gear

Figure 2 Removing the Takeup Roll

NOTE: *Be careful not to lose the Roll Take-up Spring when removing the Web Oiler.*

4. (Figure 3): Remove the Web Take up and Supply Rolls.

NOTE: *It may be necessary to loosen the right side frame screws (4) to enable the removal of the rolls from the frame*



1
Push the Supply Roll to the left until the Roll clears the Support Hub then lift to remove

2
Push the Take-up Roll to the left until the roll clears the frame and lift to remove

Figure 3 Removing the Web Takeup and Supply Rolls

Replacement

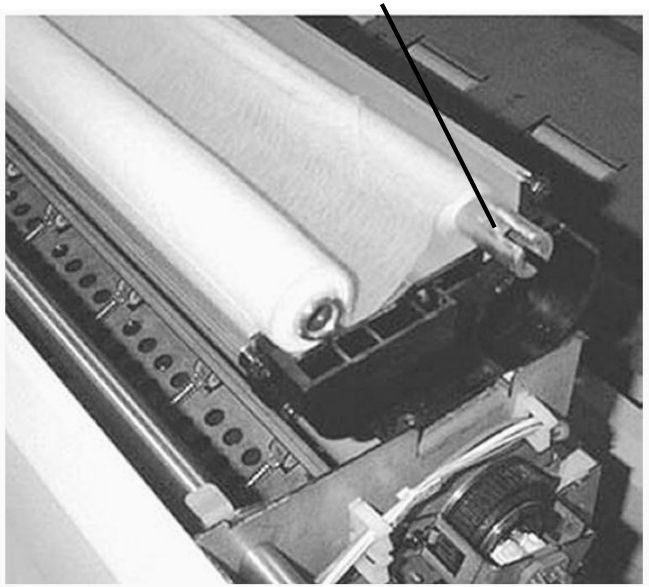
1. (Figure 4): Reinstall the Web Oiler.

NOTE: *If the frame screws had to be loosened to remove the rolls, tighten the four screws.*

NOTE: *Step 1: Install the Web Oiler so that the web is coming off the bottom of the Supply Roll as shown with the Web Oil Assembly laying up-side-down.*

3
Push the Rolls to the left and insert them in the frame

2
Install the Take Up Roll with the slot on the right side (drive side)



1
Install the Web Oiler as shown in this diagram

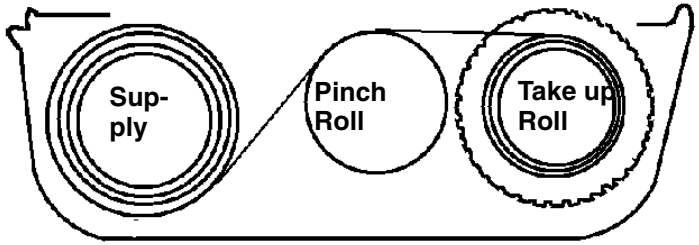
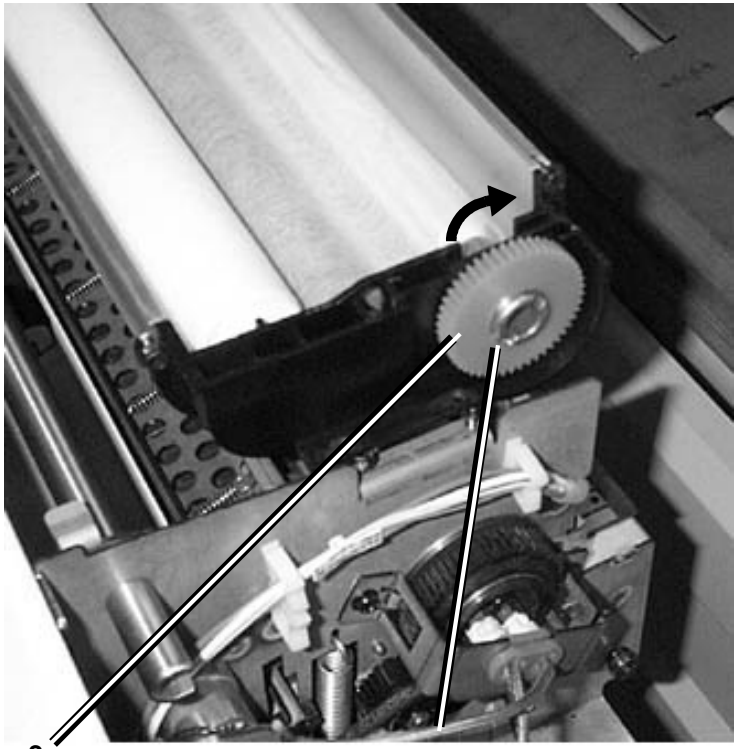


Figure 4 Reinstalling the Web Oiler

CAUTION

Ensure that there are no wrinkles in the Web when tensioning the web in the following procedure. Wrinkles can cause print quality problems.

2. (Figure 5): Reinstall the Takeup Roll Gear.



2
Carefully remove any excess play in the Web by rotating the gear in the direction shown

1
Install the gear with the raised hub towards the frame

Figure 5 Reinstalling the Gear

3. (Figure 6): Reinstall the Web Oiler Assembly on the Printer.

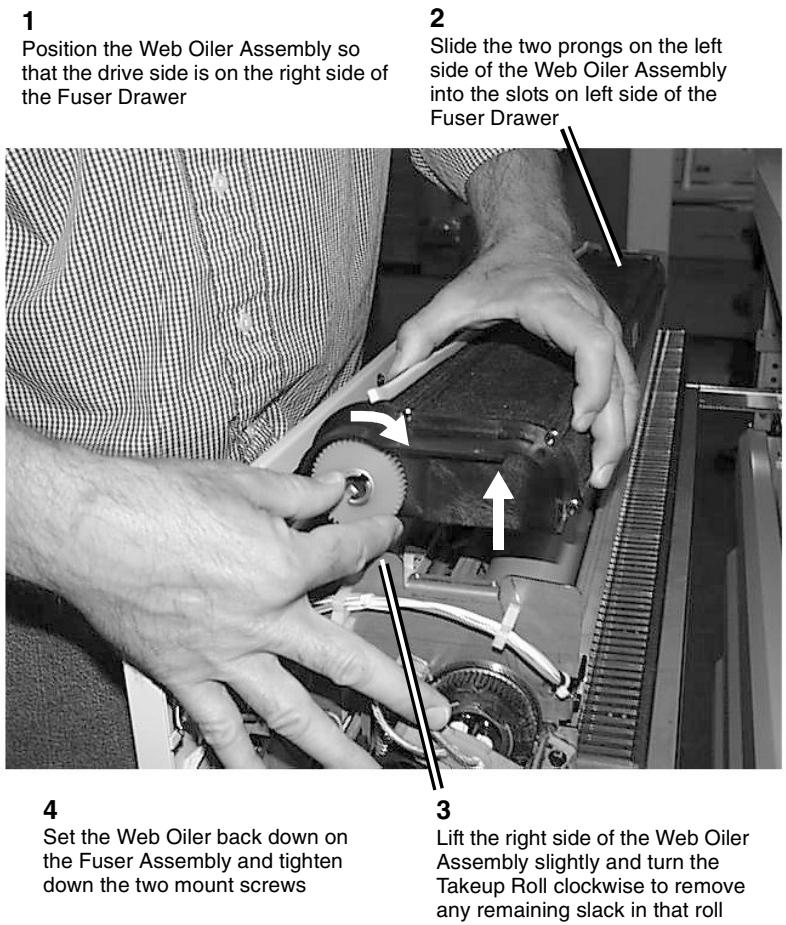


Figure 6 Reinstalling the Web Oiler Assembly

4. Return the Printer to normal operating condition.
5. Enter the Printer diagnostics and perform the following:
   a. 10-30 Web Oiler Parameters Reset - to reset the meter if a new Web Oiler is installed.
   b. 10-31 Partial Web Oiler Parameters Reset - to reset the parameters for a partially used Web. Measure the diameter of the remaining web on the Supply Roll in millimeters and enter this value.

REP 10.6 Thermal Fuse (F1)

Parts List on PL 10.2

Removal

1. (Figure 1): Access the Fuser Module.

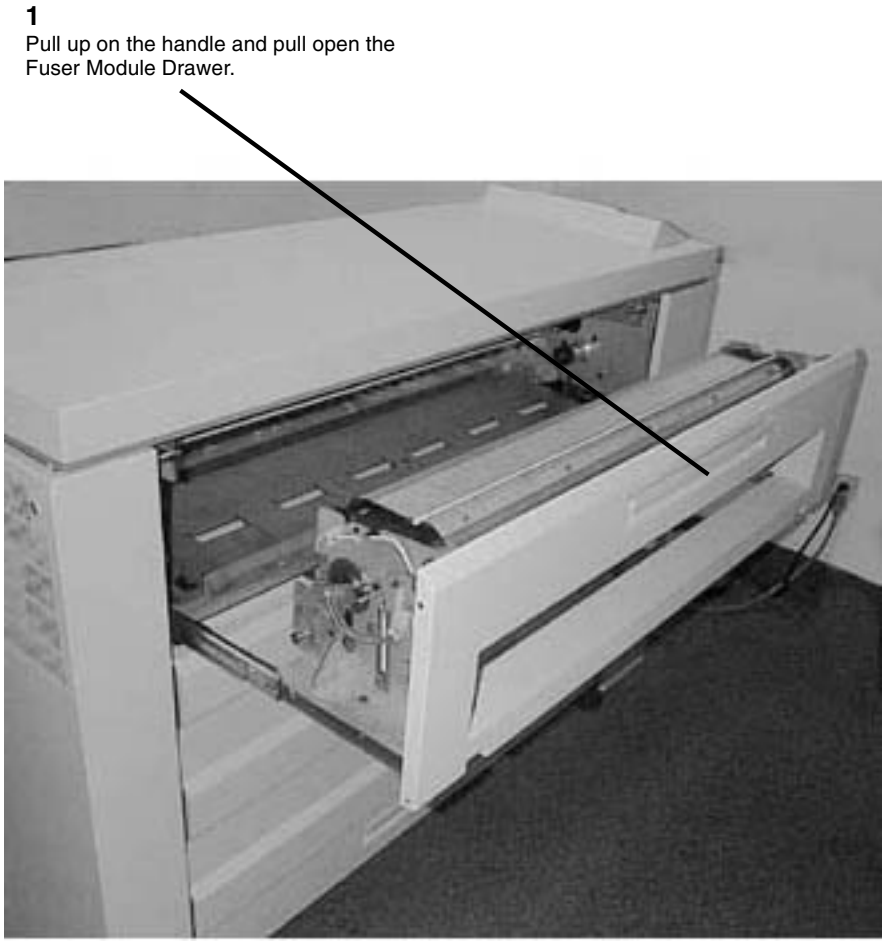


Figure 1 Accessing the Fuser Module

2. Remove the Fuser Heat Roll (REP 10.2).

3. (Figure 2): Access the Thermal Fuse (F1) wires.

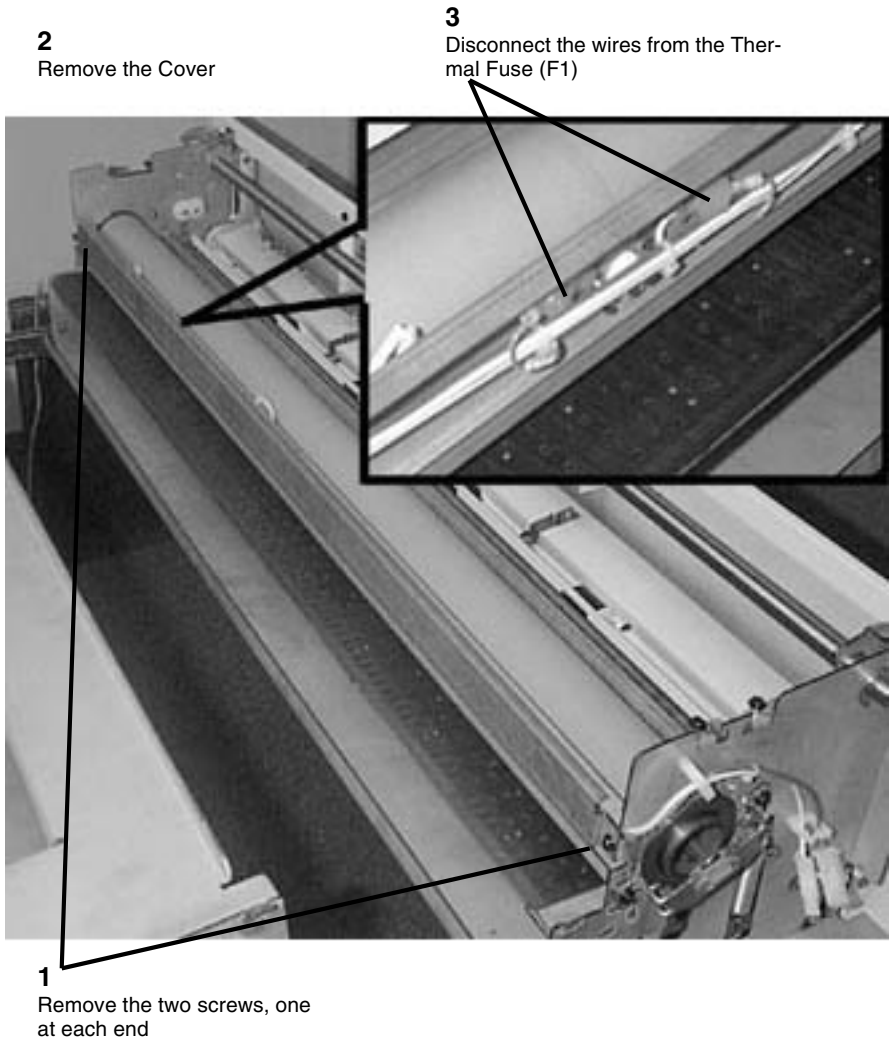


Figure 2 Accessing the Thermal Fuse (F1)

4. (Figure 3): Remove the Thermal Fuse (F1).

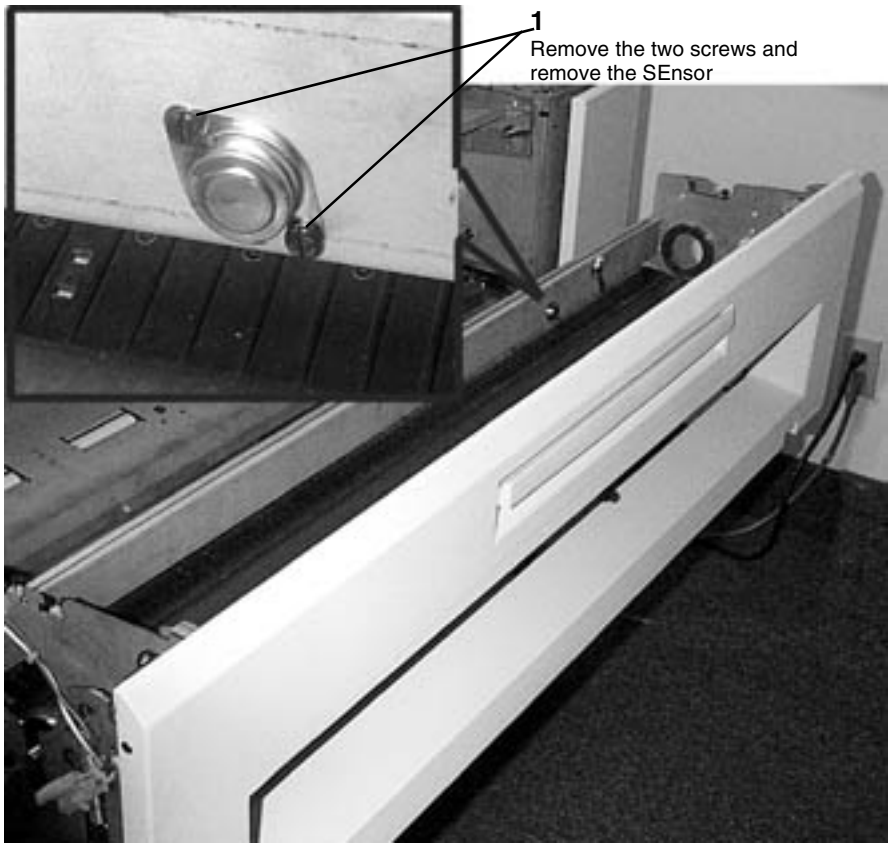


Figure 3 Removing the Thermal Fuse (F1)

REP 10.7 Edge and Center Thermistors (RT 2) and (RT 3)

Parts List on PL 10.3

Removal

1. (Figure 1): Access the Fuser Module.

1
Pull up on the handle and pull open the Fuser Module Drawer.

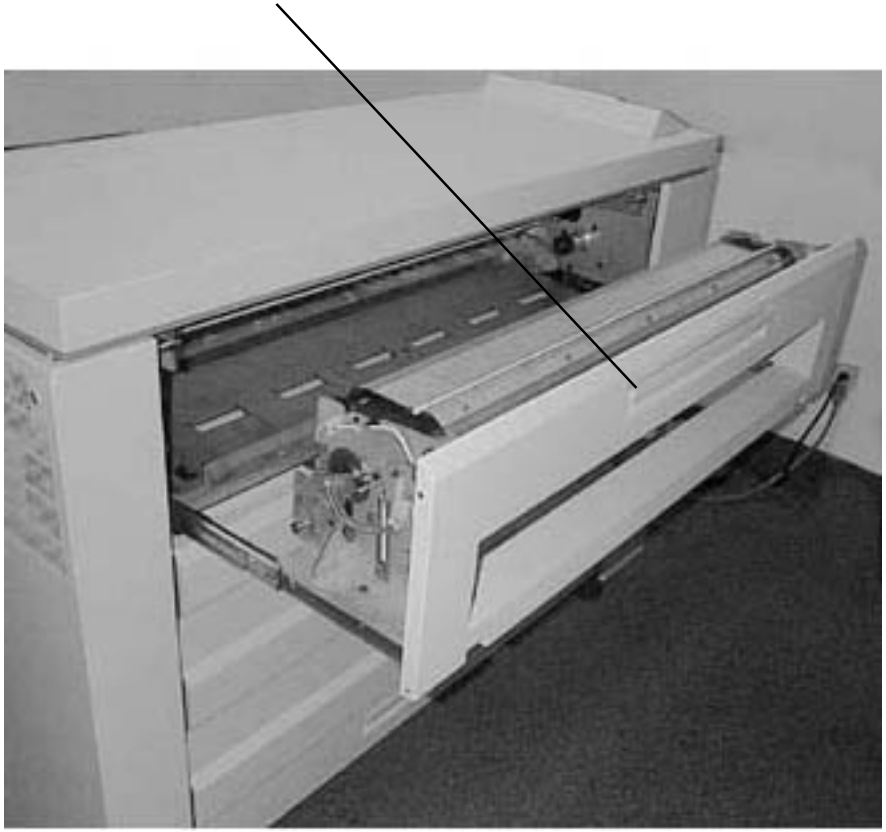
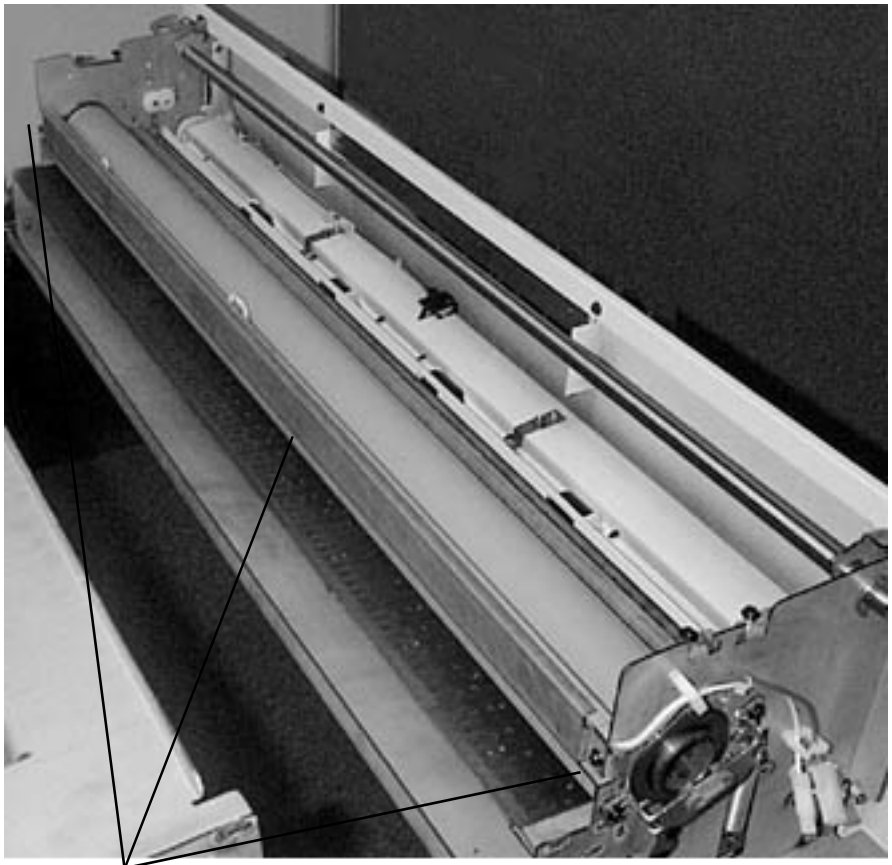


Figure 1 Accessing the Fuser Module

2. Remove the Fuser Heat Roll (REP 10.2)
3. (Figure 2): Access the Edge (RT 2) or Center (RT3) Thermistor.



1
Remove the two screws, one each side and remove the Cover

Figure 2 Accessing the Edge and Center Thermistors

4. (Figure 3): Remove the Edge (RT 2) or (RT 3) Thermistor.

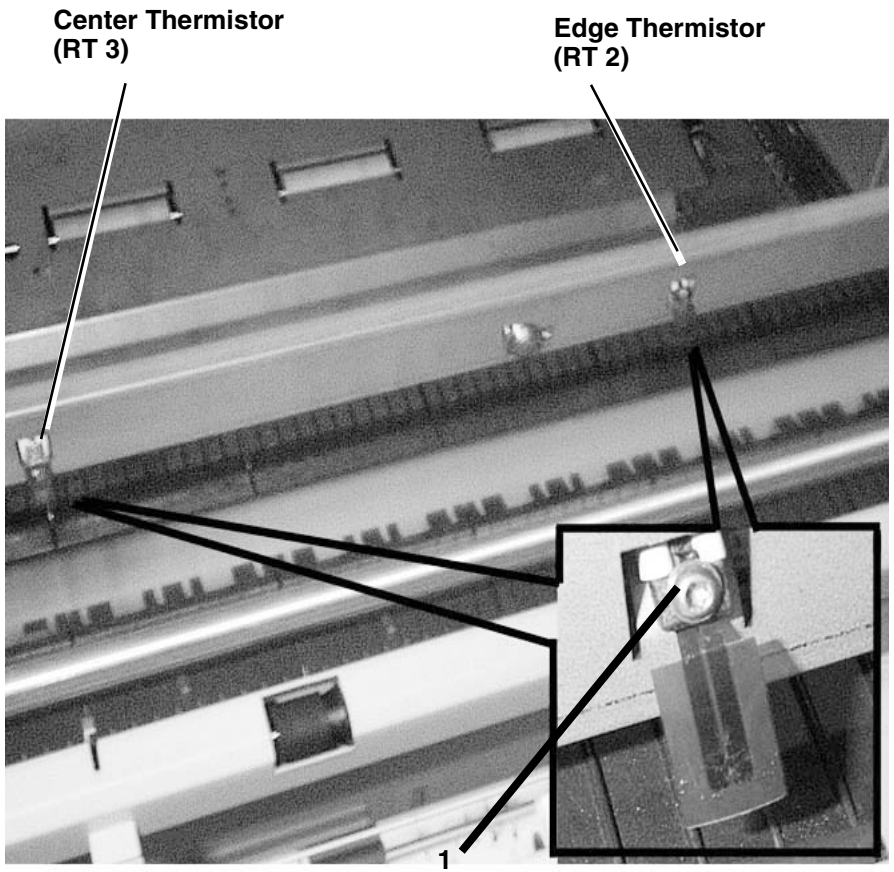


Figure 3 Removing the Edge or Center Thermistor

REP 10.8 Pressure Roll

Parts List on PL 10.4

Removal

NOTE: *In following procedure the terms "left" and "right" describe machine locations as observed from the Roll Media Supply Drawer side of the Printer.*

1. (Figure 1): Access the Fuser.

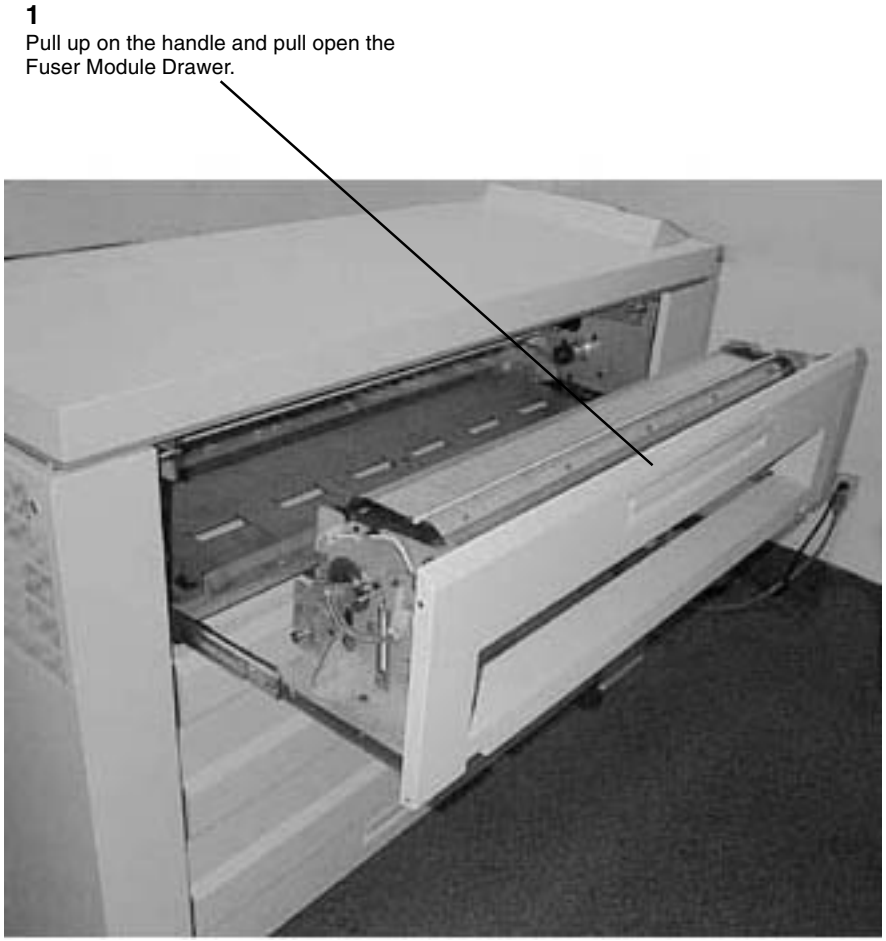


Figure 1 Accessing the Fuser

2. (Figure 2) and (Figure 3): Remove the Upper Sheet Feed Housing of the Fuser.

   NOTE: *Place your hand under the area where the screws will be removed to support the Upper Sheet Feed Housing to prevent it from falling off the fuser.*

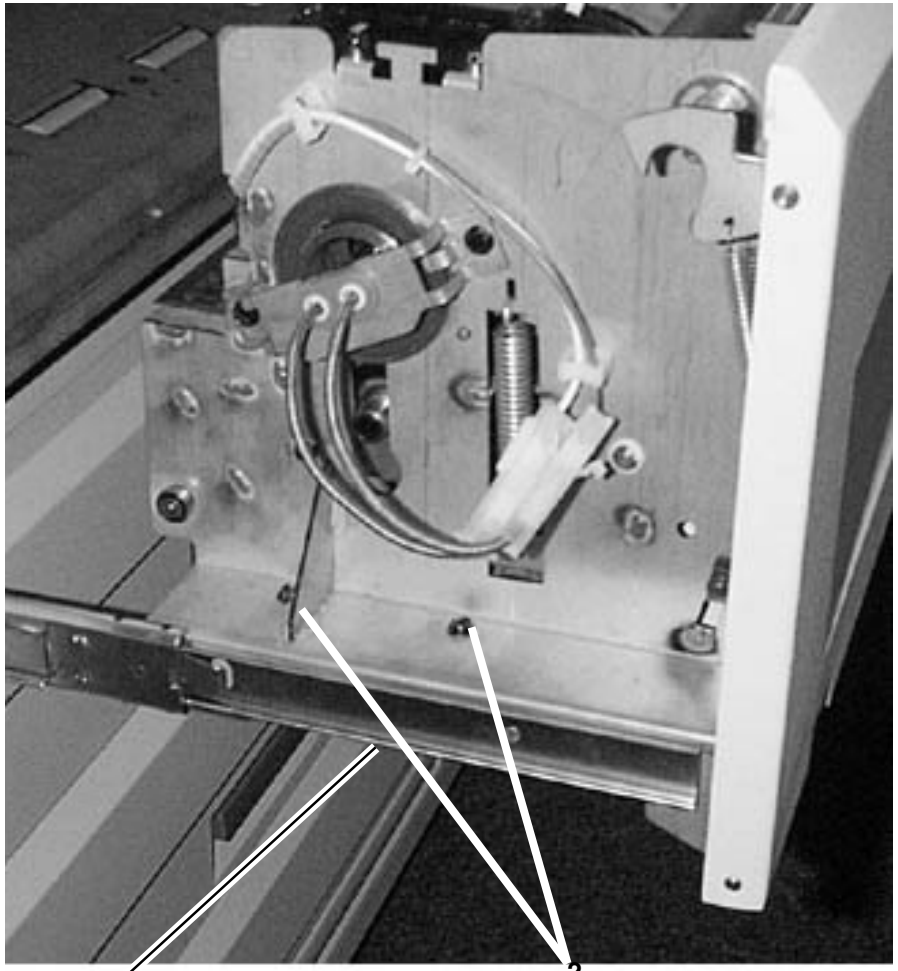


Figure 2 Removing the screws securing Upper Sheet Feed Housing

3. (Figure 3): Remove the Upper Sheet Feed Housing.

Figure 3 Removing the Upper Sheet Feed Housing

4. (Figure 4): Prepare to remove the Pressure Roll left side.

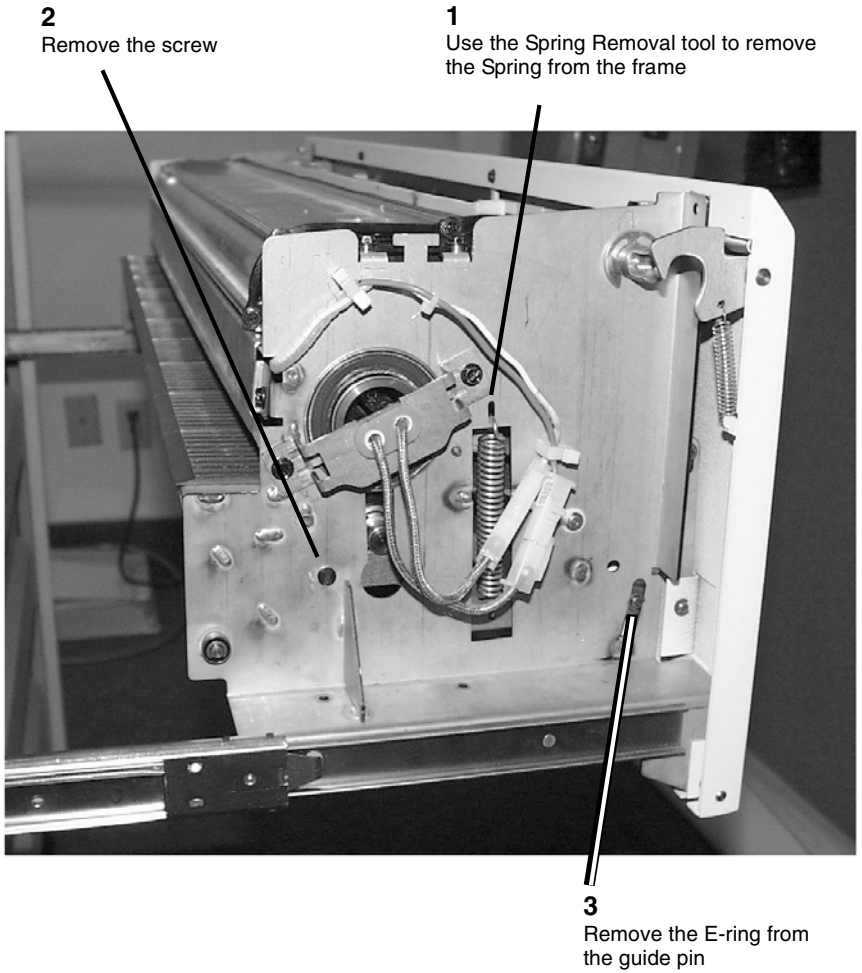


Figure 4 Preparing to Remove the Pressure Roll

5. (Figure 5): Remove the Pressure Roll from the Printer.

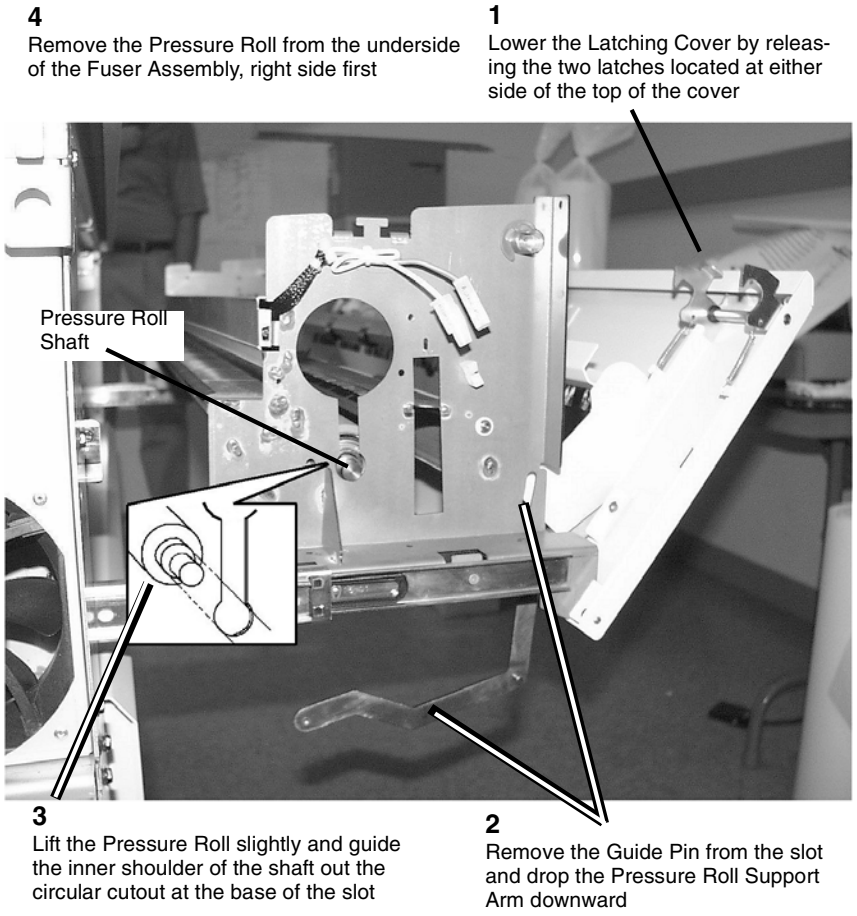


Figure 5 Removing the Pressure Roll from the Printer

6. (Figure 6): Remove the Pressure Roll from the Shaft.

NOTE: *Keep the he Bearings and Spacers they will be installed in the new Pressure Roll.*

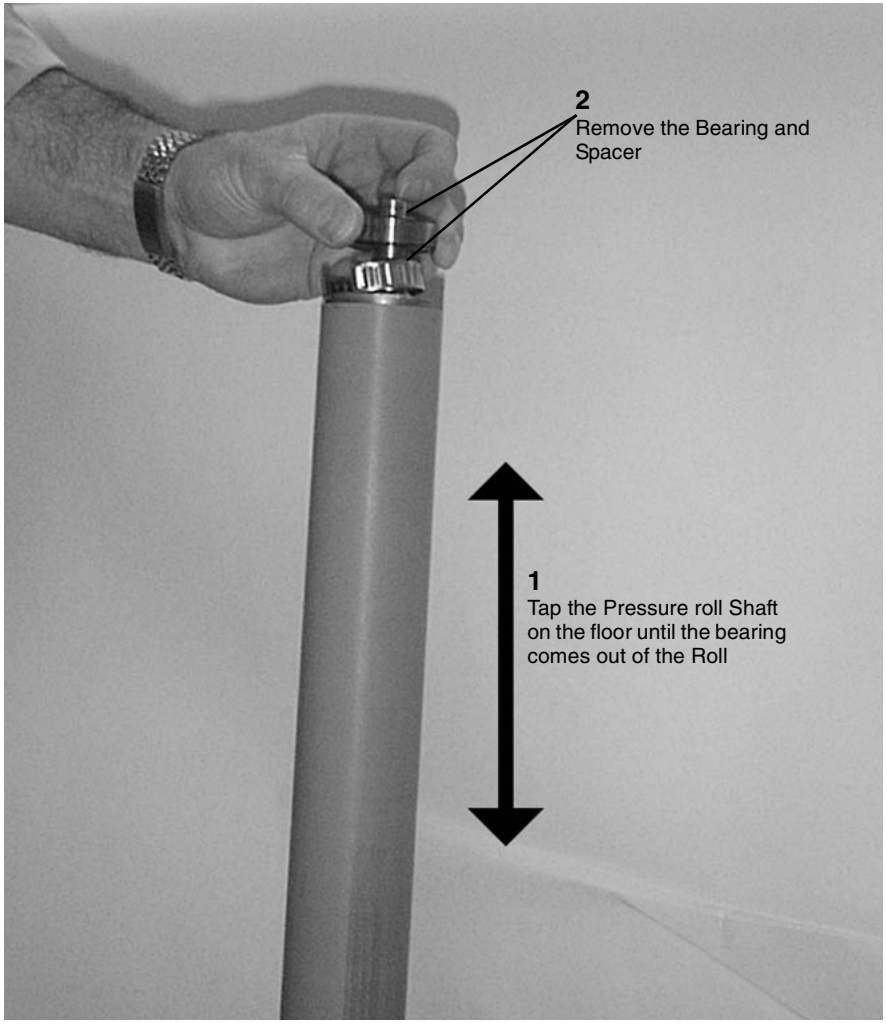


Figure 6 Removing the Pressure Roll Bearing

7. (Figure 7): Remove the Bearing from the Opposite end.

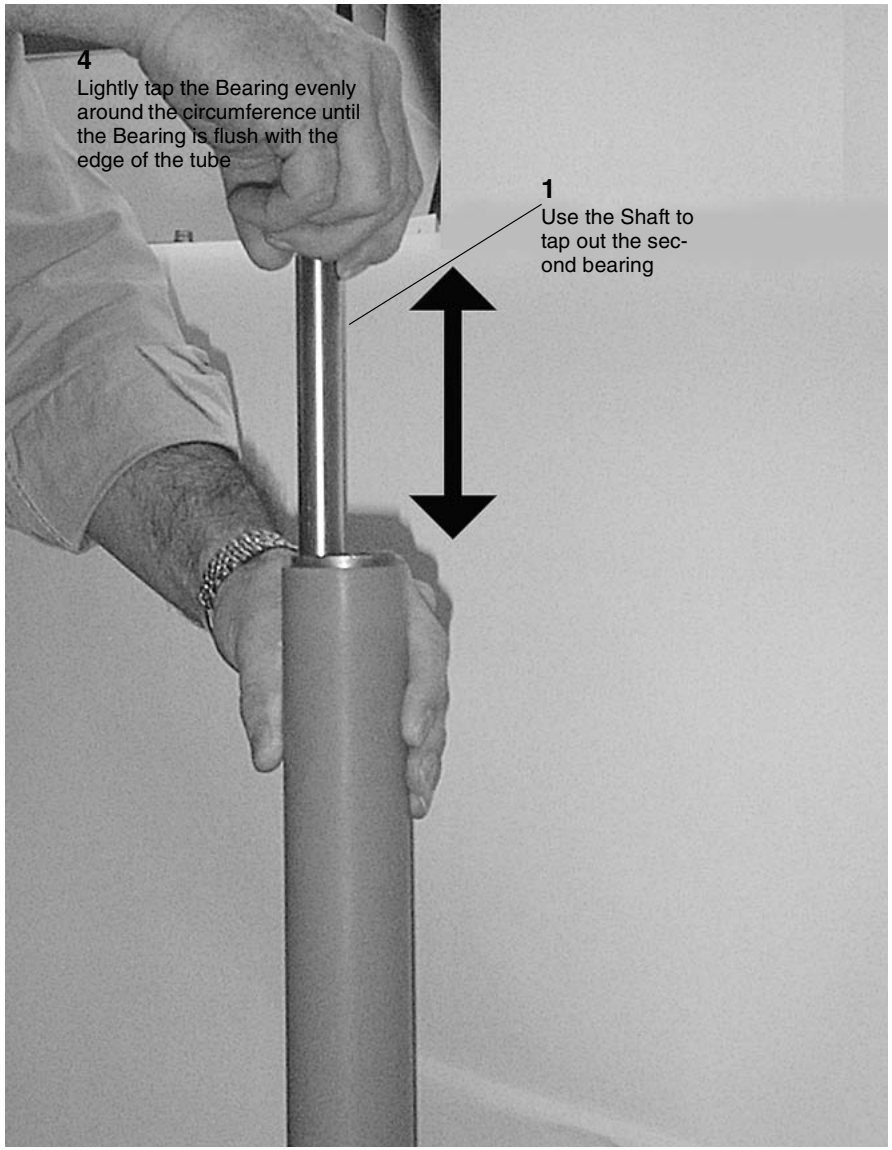


Figure 7 Removing the Second Bearing

Replacement

1. (Figure 8): Install the Bearing in the new Pressure Roll.

NOTE: *If a block of wood or flat object is available to place over the Bearing, use it to seat the Bearing*

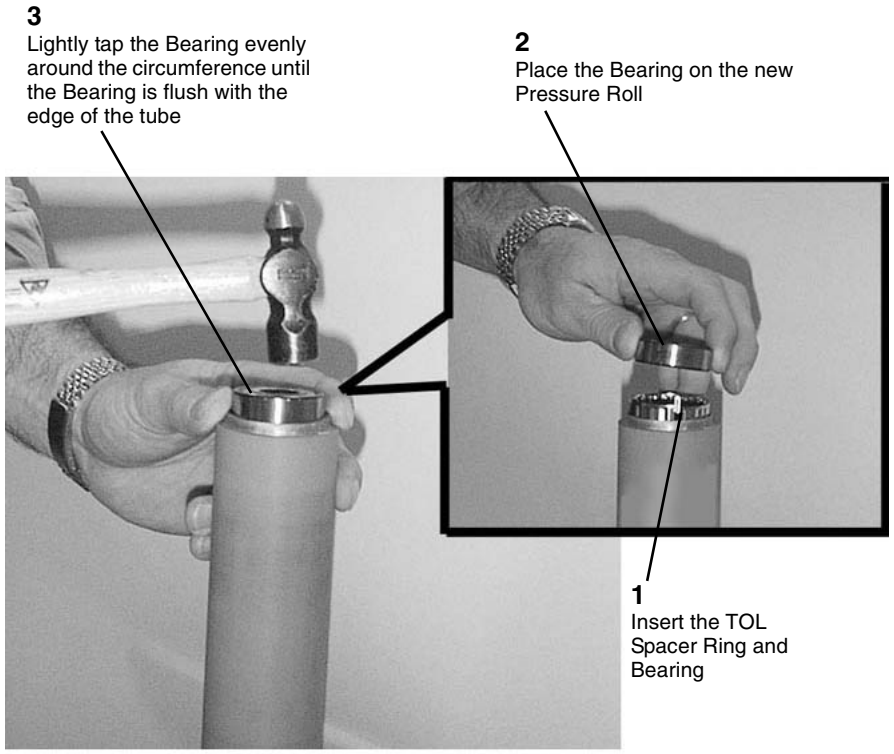


Figure 8 Installing the Bearing

2. (Figure 9): Install the second Bearing.

NOTE: *If a 3/4 inch or 13 mm socket is available place it over the Shaft to tap the Bearing in place.*

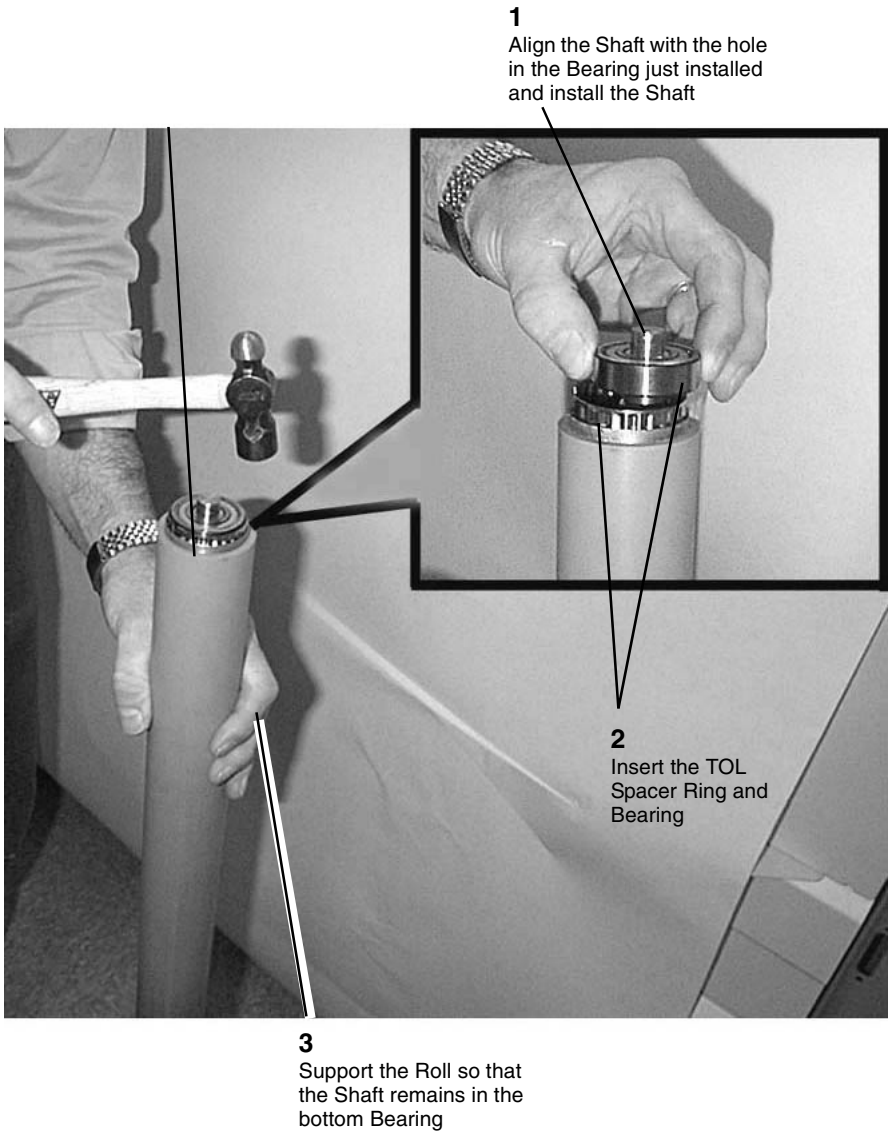
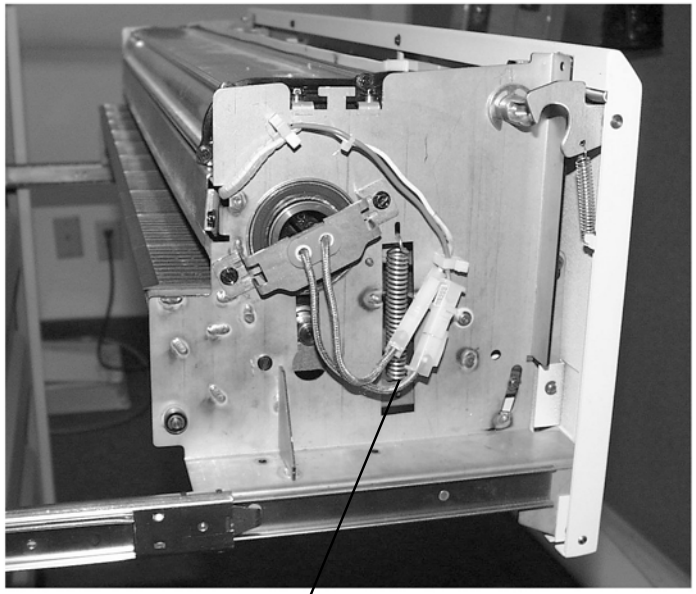


Figure 9 Installing the Second Bearing

3. The replacement is the reverse of the removal.

4. (Figure 10): Reinstalling the Pressure Roll Spring.



1
Insert the spring in the top hole of the Pressure Roll Arm

Figure 10 Reinstalling the Spring

REP 10.9 Fuser Exit Switch (S2)

Parts List on PL 10.4

Removal

1. (Figure 1): Access the Fuser.

1
Pull up on the handle and pull open the Fuser Module Drawer

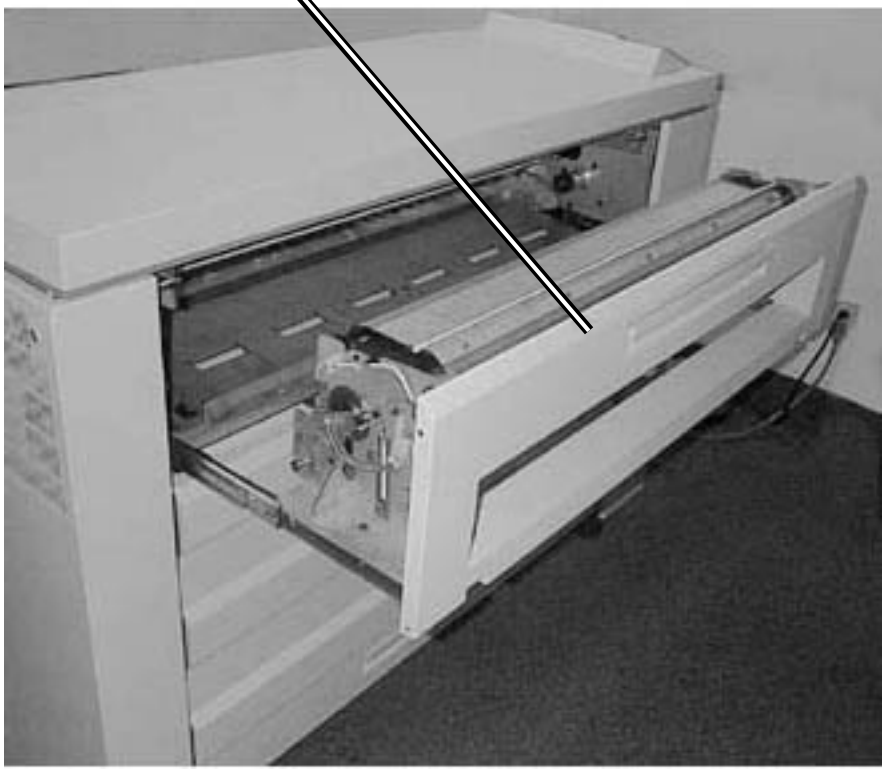
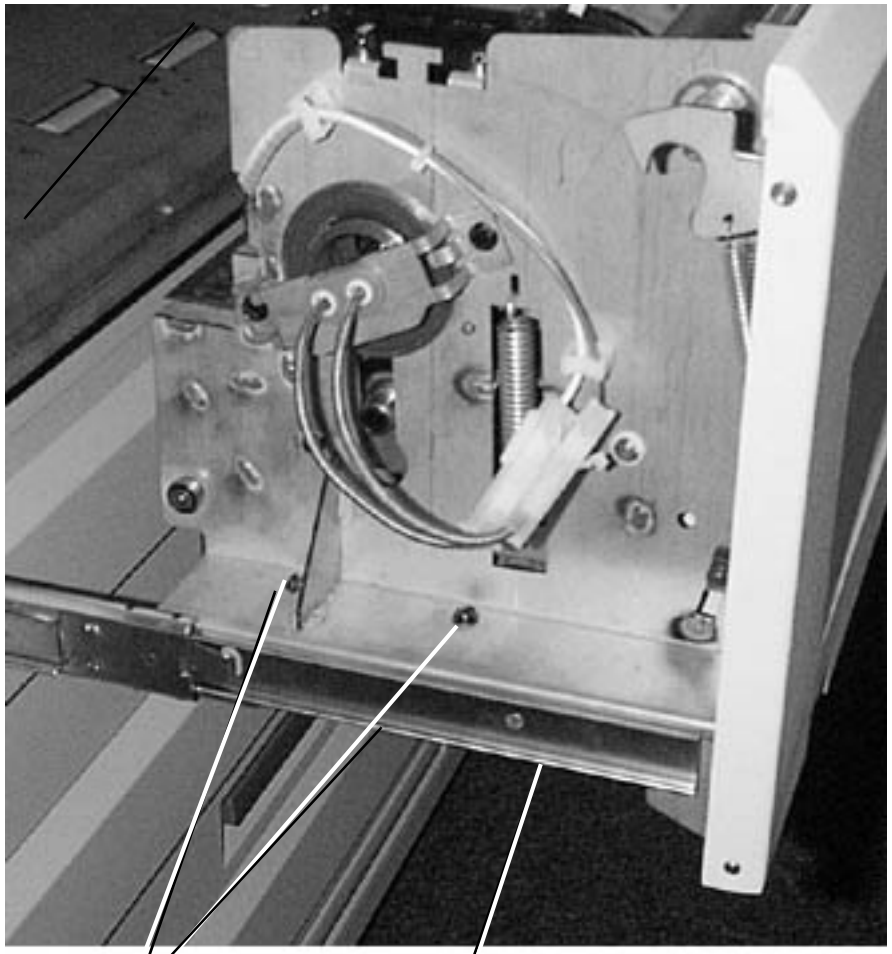


Figure 1 Accessing the Fuser

2. (Figure 2) and (Figure 3): Remove the Upper Sheet Feed Housing off the Fuser



2
Remove the two screws

1
Support the Upper Sheet Feed Housing from falling

Figure 2 Removing the Screws Securing The Upper Sheet Feed Housing

3. (Figure 3): Remove the Upper Sheet Feed Housing.

1
Lower the Upper Sheet Feed Housing and pull to the left to remove the tabs from the right side frame

Figure 3 Removing the Upper Sheet Feed Housing

4. (Figure 4): Remove the Fuser Exit Sensor.

NOTE: *The view in Figure 4 is looking under the Fuser Module. On the newer Printers the Sensor is also mounted with a Spring Clip*

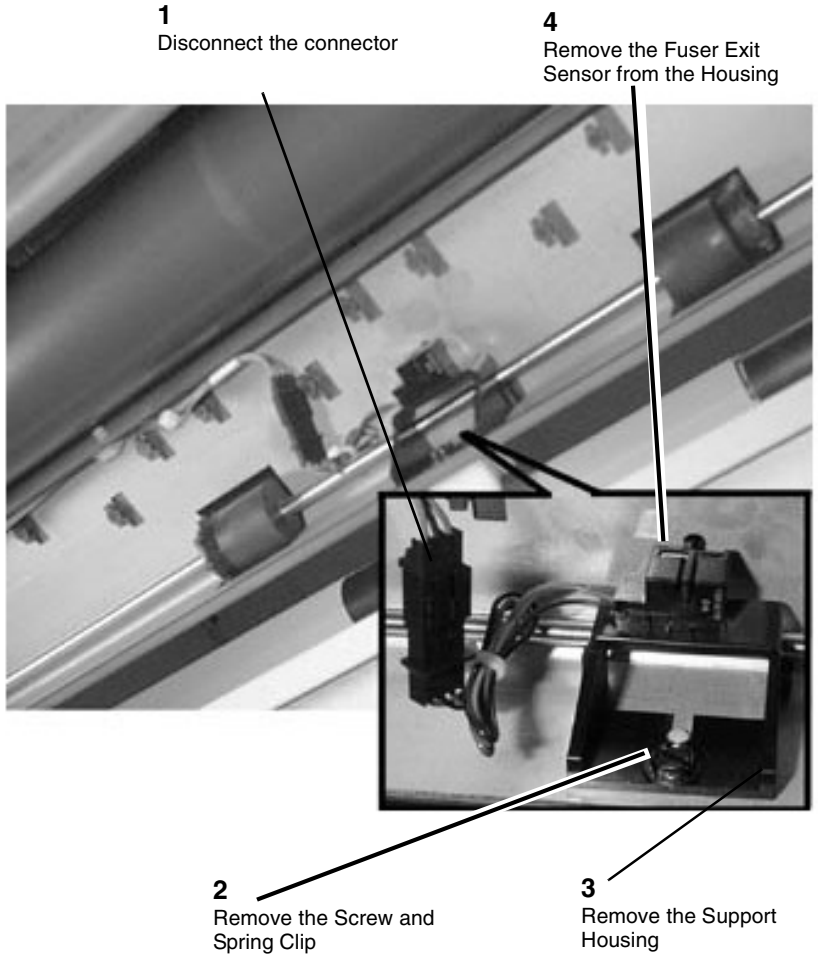


Figure 4 Removing the Fuser Exit Sensor

REP 10.11 AC Module (A1)

Parts List on PL 1.1

Removal

1. Remove the Controller and the Rear Covers.

2. (Figure 1): Remove the AC Module Front.

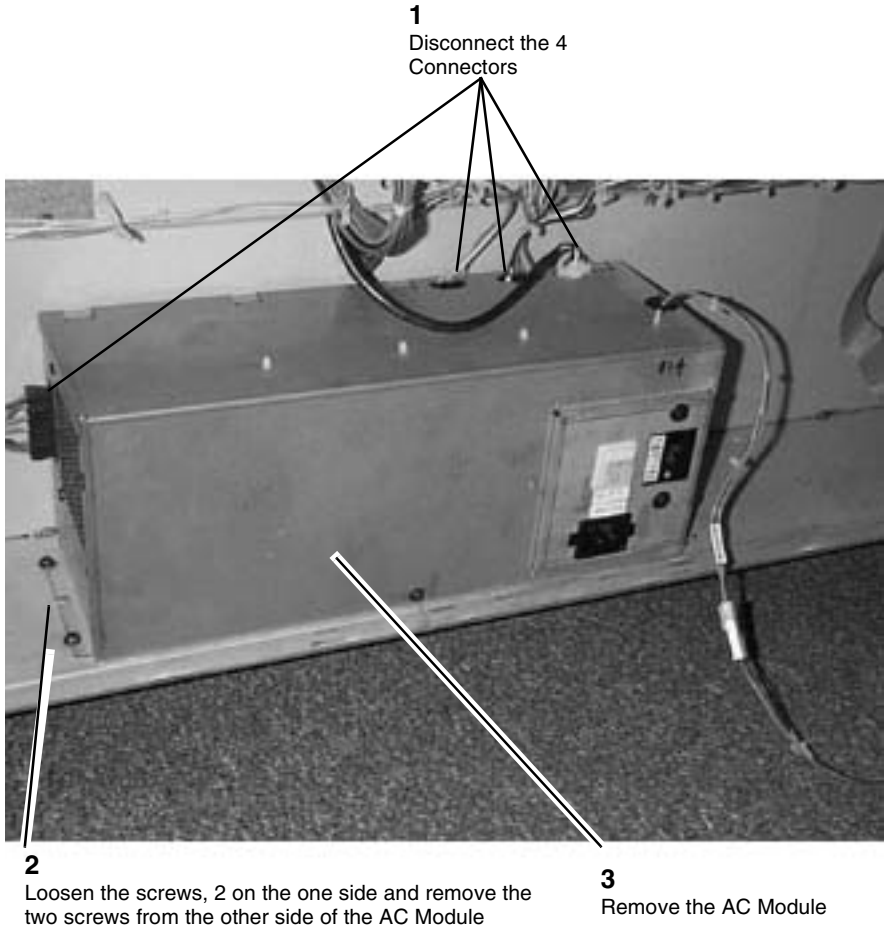


Figure 1 Removing the AC Module

Replacement

1. The replacement is the reverse of the removal. Be sure to connect J1, J2 and the ground and fan wires.
2. Check/Adjust the Fusing Temperature. Perform ADJ 10.1 Fuser Temperature (NVM).

REP 14.1 Top Cover

Parts List on PL 14.5, SPS 510dp PL 14.6

WARNING

Switch off the Controller and the Printer Main Power Switches. Disconnect the Printer Power Cord.

Removal

1. (Figure 1): Open the Printer Rear Door.

Figure 1 Opening the Printer Rear Door

2. (Figure 2): Lift and latch the Printer Top Cover.

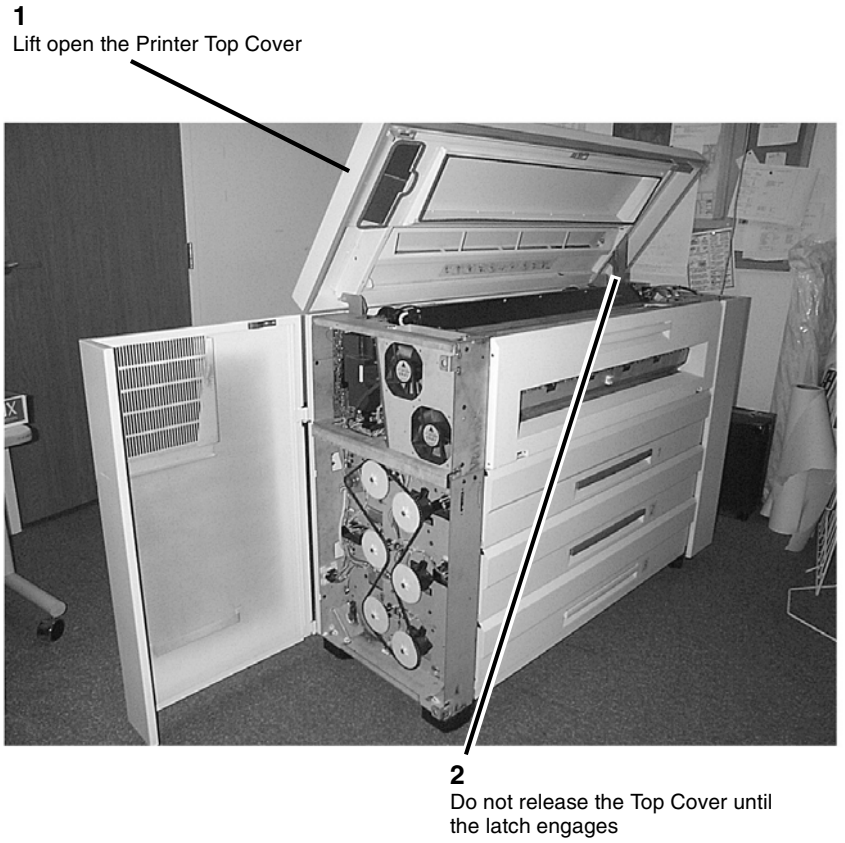


Figure 2 Latching the Printer Top Cover

3. **(510dp)**: Remove the Control Panel (REP 3.3).

4. (Figure 3): Prepare to remove the Top Cover (Front).

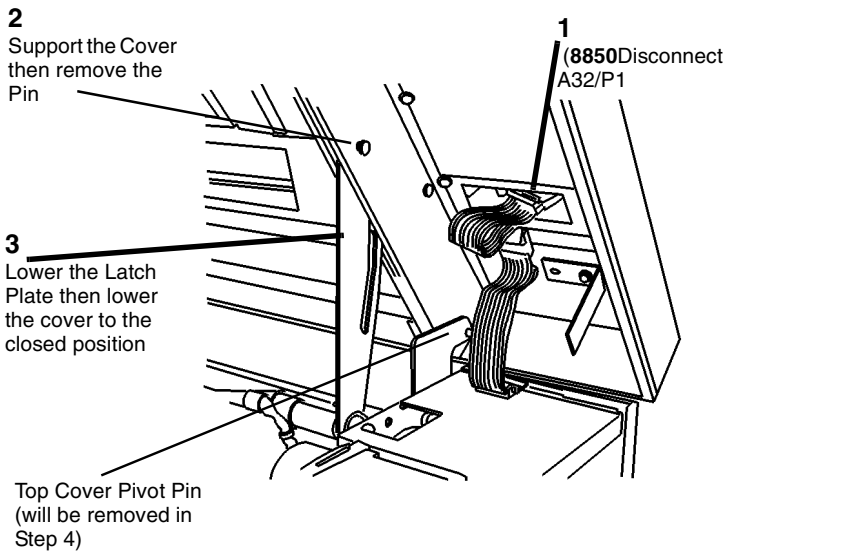


Figure 3 Preparing to Remove the Top Cover (Front)

NOTE: *(Figure 2): Observe the way that the Top Cover Pivot Pin engages the hole in the Interlock Plate. This may be a difficult area during reassembly.*

5. Open the Developer Module Cover, and remove the two pivot pins shown in Figure 3 and Figure 4.

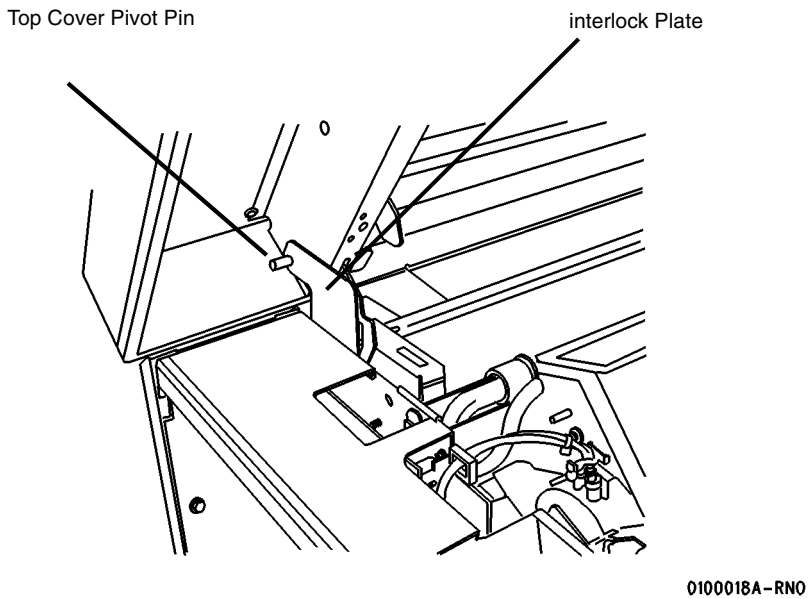


Figure 4 Top Cover Interlock Plate

6. Close the Developer Module Cover and lift off the Top Cover, being careful to disengage the small pin from the Interlock Plate.

Replacement

1. (Figure 3): Lower the Printer Top Cover.

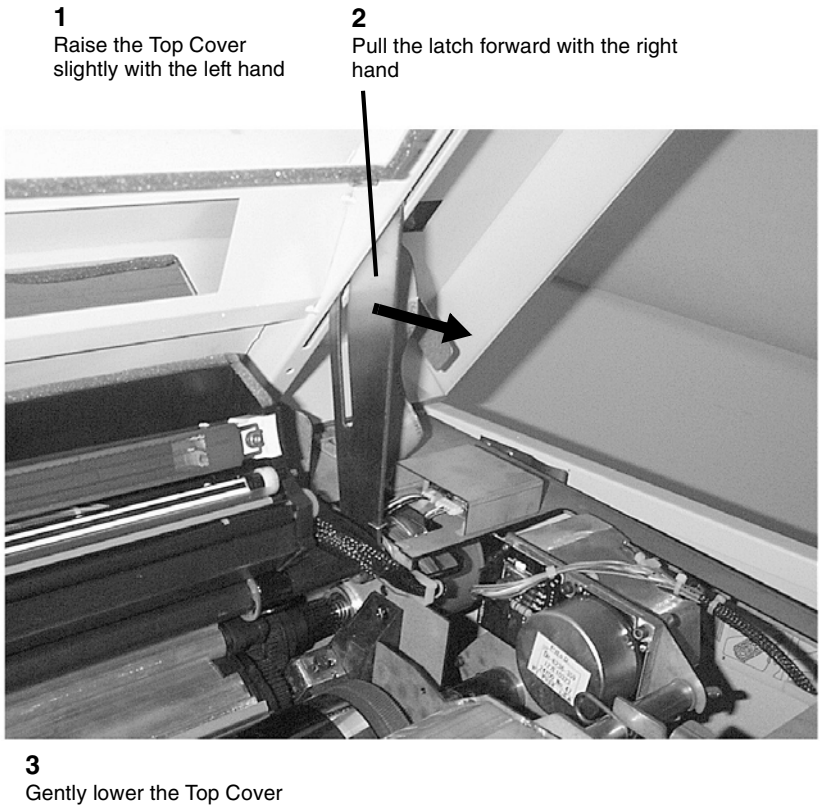


Figure 5 Lowering the Printer Top Cover

2. Close and secure the Rear Door.
3. Return the Printer to normal operation.

ADJ 3.2 Line Current Limit and Billing Type

Purpose

The purpose is to set the Line Service (Input Power) and Billing Type (Billing Meter) configurations according to the customer's requirements.

Check

1. Enter diagnostics.
2. Enter code [**0261**] LINE SERVICE.
3. (Figure 1): Using the numeric keypad, set the line service current by entering the **Current Limit** value from Table 1. The range is 8 to 20 amperes (AMPS).

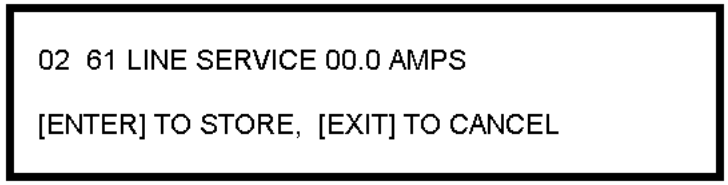


Figure 1 Setting the Line Service

Table 1 Line Service

Market Area	AC Power Rating	Current Limit
United States/Canada	115 V, 20 Amps (510dp 5 and 7 D-size cpm only) 208 - 240 Volts @ 20 amps 208 - 240 Volts @ 15 amps	17.6 amps 17.6 amps 13.2 amps
European Operations (Common Market)	220 - 240 Volts @ 16 amps	16.0 amps
United Kingdom	220 - 240 Volts @ 13 amps	13.0 amps
Switzerland	220 Volts @ 10 amps	10.0 amps
Central and South America	220 - 240 Volts @ 20 amps	15. 0 amps

   a. Press the **Enter** button in order to store the value in NVM.
   b. Press the **Exit** button.
4. Enter code [**0263**] BILLING TYPE.
5. (Table 2): Set the Billing Type.
   a. Use the **Next** or **Previous** button to change the **NOW** setting.
   b. Press the **Enter** button in order to store the value in NVM.
   c. Press the **Exit** button two times.

Table 2 Billing Type

Selections	Configuration
00	FEET
01	METRIC

6. Exit the diagnostics mode.

ADJ 7.1 Media Roll Supply Drive Chain (510dp, 8850 W/Tag 11)

Purpose

The purpose is to adjust the media roll supply drive chain to ensure there is no delay in feeding the media.

Introduction

The 8850 must have Tag 11 which is a new mounting bracket for the Media Roll Drive Motor. Refer to the Change Tag Index for the kit number.

Check

1. Switch off the printer and unplug the power cord.
2. Open the Rear Cover.
3. (Figure 1) Align a scale with the top of the chain.

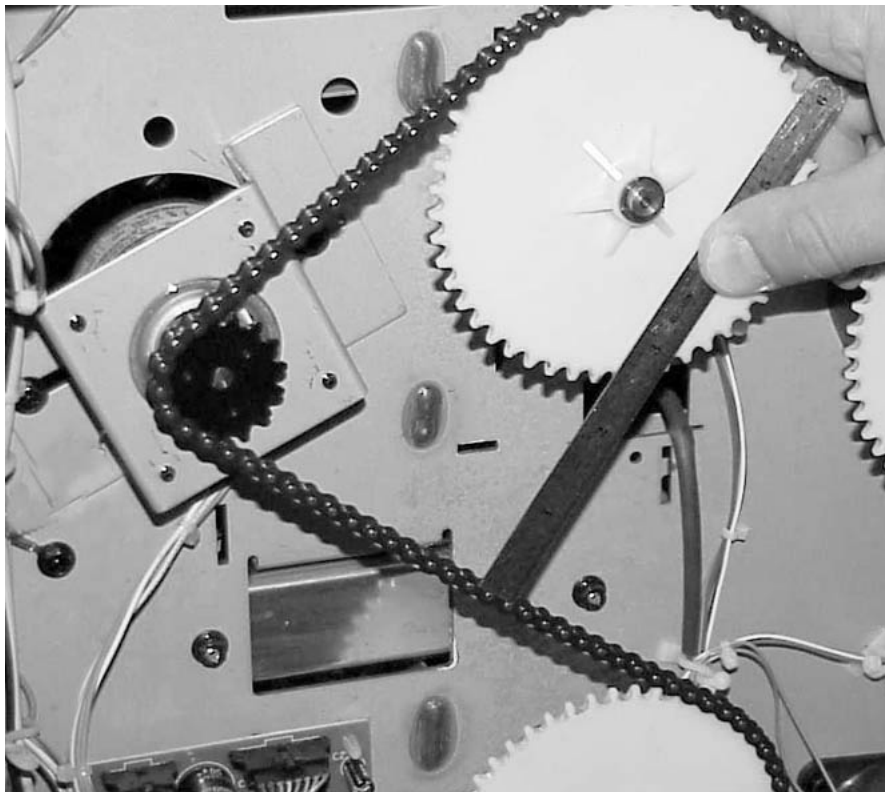


Figure 1 Aligning the Scale with the Drive Chain

4. (Figure 2)Check that the Chain deflects by 1/4 to 3/8 inches (6 to 9 mm).

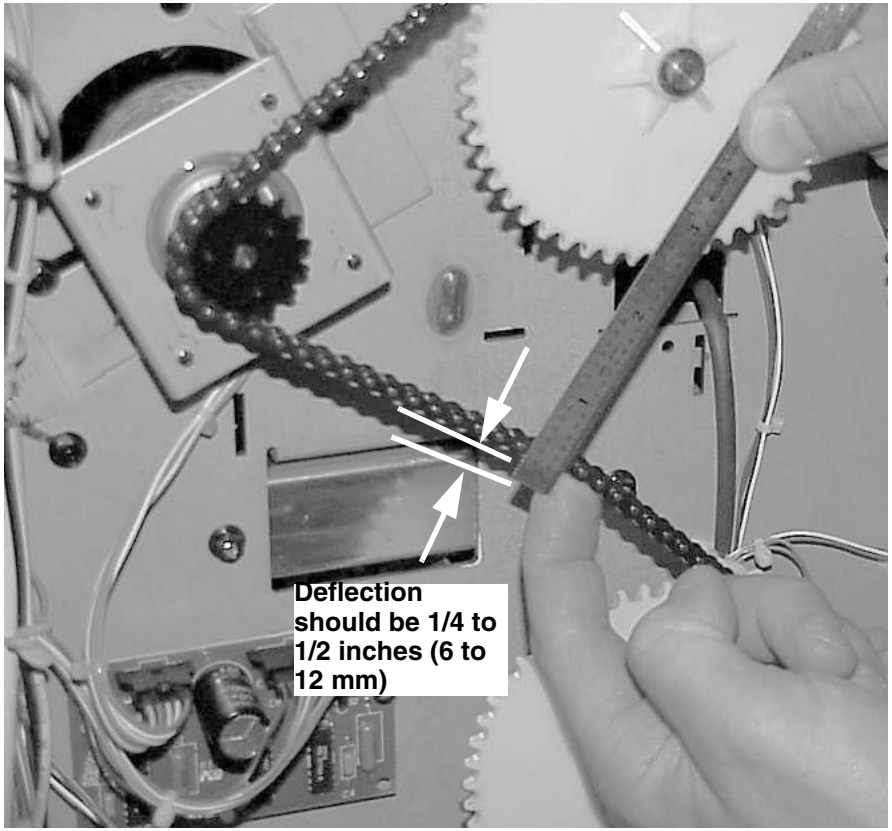


Figure 2 Checking the Chain Deflection

Adjustment

1. (Figure 3) Adjust the Chain tension.

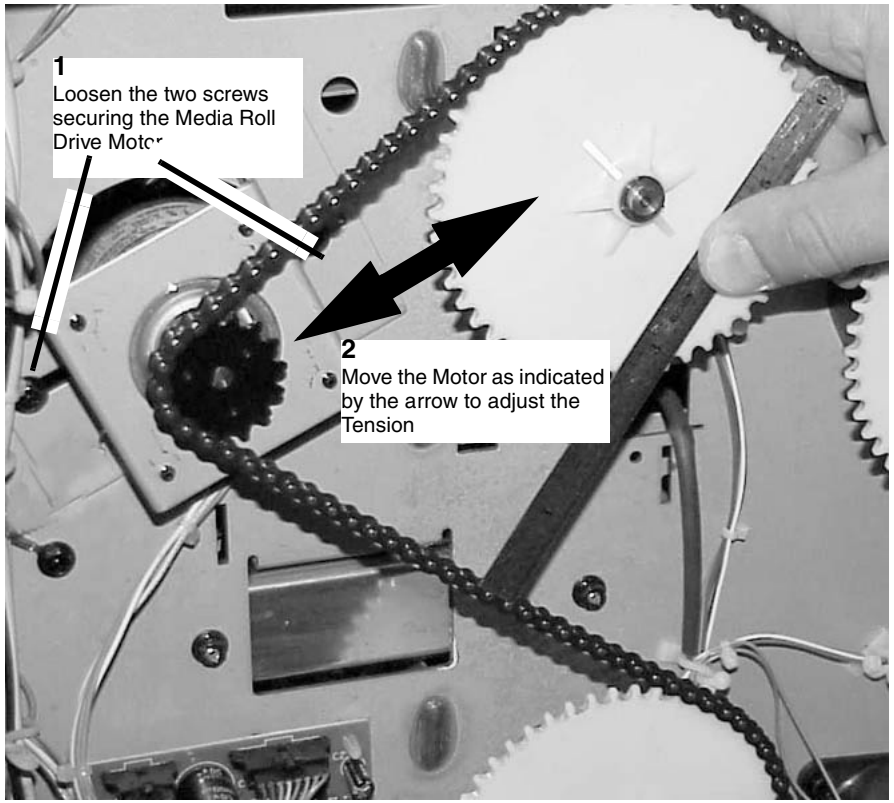


Figure 3 Adjusting the Chain Tension

2. Perform the Check again.

ADJ 8.1 Vertical Magnification

Purpose

The purpose is to calibrate the printer to produce the correct length images for each media type.

NOTE: *For media rolls that are 24" and wider, diagnostic 6-2 adjusts the vertical magnification throughout the entire document. For media rolls that are narrower than 24", diagnostic 6-3 adjusts the vertical magnification throughout the entire document.*

Check

1. Enter diagnostics.
2. Enter code [**0955**] and make three 1200 mm prints of Test Pattern #7 onto BOTH a wide (greater than 24") and narrow (less than 24") media roll of the media that is to be optimized. Select the last copy of each test print set.
3. Allow the prints to cool for five minutes.
4. (Figure 1): Check that 60 blocks in the paper feed direction measure 975 mm +/- 5.0 mm.

   NOTE: *Each block is 16.25mm square, 256 pixels.*

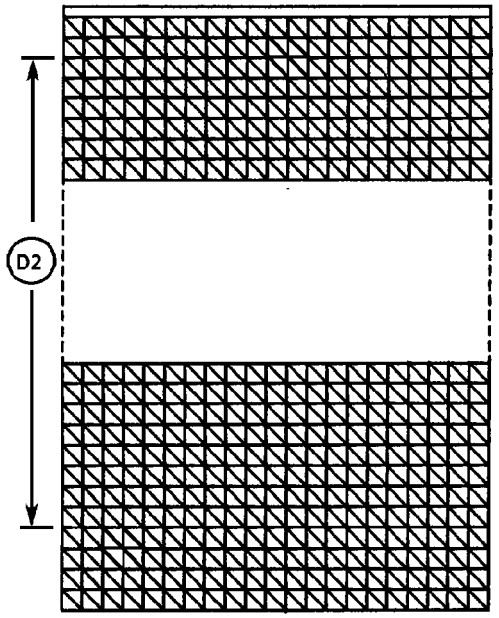


Figure 1 Checking the Vertical Magnification

Adjustment

For media rolls 24" and Wider

1. (Figure 2): Enter code [**0602**] in order to adjust the Vertical Magnification for wide media. The following message will be displayed.

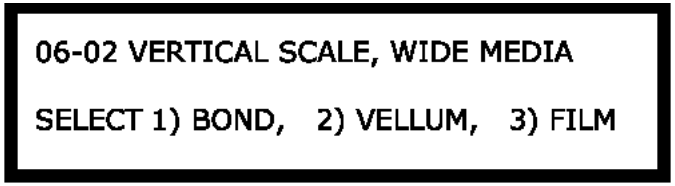


Figure 2 Media Selection Screen

2. (Figure 3): Select the type of media. The following message is displayed. (In this example, bond paper media has been selected.)

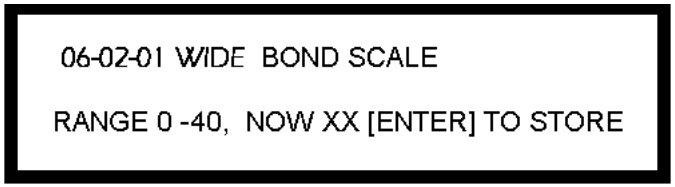


Figure 3 Adjusting the Magnification for Bond

NOTE: *The range of adjustment is 0 to 40. Each step equals approximately 1 mm.*

3. Adjust the Vertical Magnification using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the Set Point, which will decrease the Image Length.
   b. Use the **Next** button to increase the Set Point, which will increase the Image Length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. Repeat the check for all the types of media used by the customer.
5. Check/Adjust the Lead Edge Registration (ADJ 8.2).

For media rolls narrower than 24"(Optional)

1. (Figure 4): Enter code [**0603**] in order to adjust the Vertical Magnification for narrow media. The following message will be displayed.

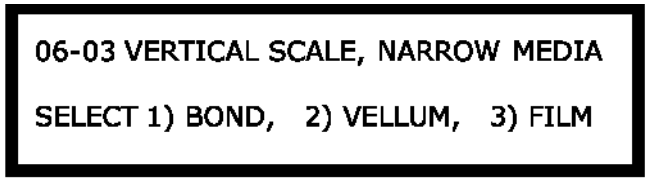


Figure 4 Media Selection Screen

2. (Figure 5): Select the type of media. The following message is displayed. (In this example, bond paper media has been selected.)

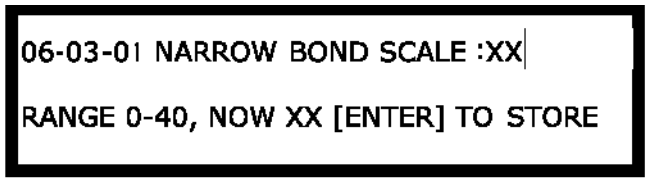


Figure 5 Adjusting the Magnification for Bond

NOTE: *The range of adjustment is 0 to 40. Each step equals approximately 1 mm.*

3. Adjust the Vertical Magnification using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the Set Point, which will decrease the Image Length.
   b. Use the **Next** button to increase the Set Point, which will increase the Image Length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. Repeat the check for all the types of media used by the customer.
5. Check/Adjust the Lead Edge Registration (ADJ 8.2).

ADJ 8.2 Lead Edge Registration

Purpose

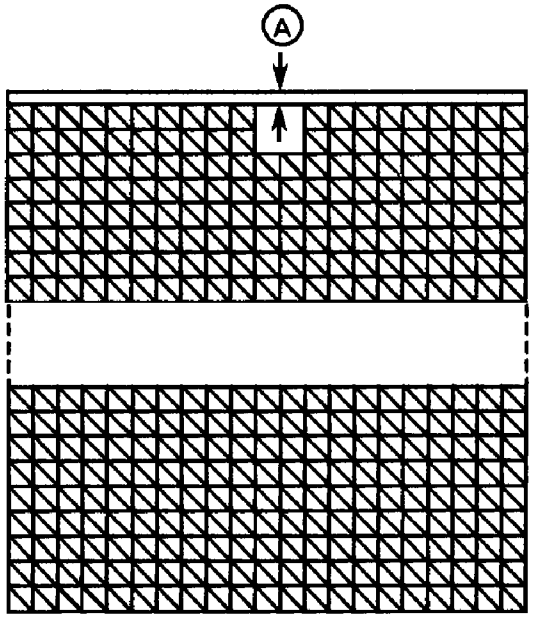
The purpose is to adjust the print media to the image on the drum for Lead Edge Registration within specification.

Prerequisite

1. Check the following:
   a. Fuser Temperature (NVM) (ADJ 10.1)
   b. Fuser Speed (ADJ 8.5)
   c. Vertical Magnification (ADJ 8.1)

Check

1. Enter diagnostics.
2. Enter code [**0955**] and make four 210 mm prints of Test Pattern #7.
3. Allow the prints to cool for five minutes.
4. (Figure 1): Using the last print, check that the distance from the lead edge to the first horizontal line is 16.25mm ± 2 mm.



0101507A-RN0

Figure 1 Checking the Lead Edge Registration

Adjustment

1. (Figure 2): Enter code [**0860**] in order to adjust the Lead Edge Registration. The following message is displayed.

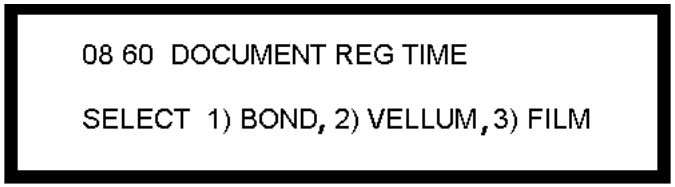


Figure 2 Selecting the Media Type

2. (Figure 3): Select the type of media. The following message is displayed. (In this example, bond paper media has been selected.)

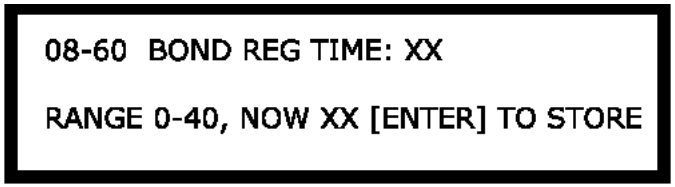


Figure 3 Media Selection

NOTE: *The range of adjustment is 0 to 40. Each step equals approximately 1 mm.*

3. Adjust the Lead Edge Registration using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the set point, which will move the image closer to the lead edge.
   b. Use the **Next** button to increase the set point, which will move the image away from the lead edge.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. Repeat the check for all the types of media used by the customer.

ADJ 8.3 Cut Length

Purpose

The purpose is to calibrate the Printer to produce the correct length prints for each media type.

Prerequisite

1. Check the following:
   a. Fuser Temperature (NVM) (ADJ 10.1)
   b. Vertical Magnification (ADJ 8.1)
   c. Lead Edge Registration (ADJ 8.2)

Adjustment

1. Enter diagnostics.
2. Enter code [**0955**] and make one 600 mm print and one 1200 mm print of Test Pattern #7.
3. Allow the prints to cool for five minutes.
4. (Figure 1): Measure the two prints in the paper feed direction.

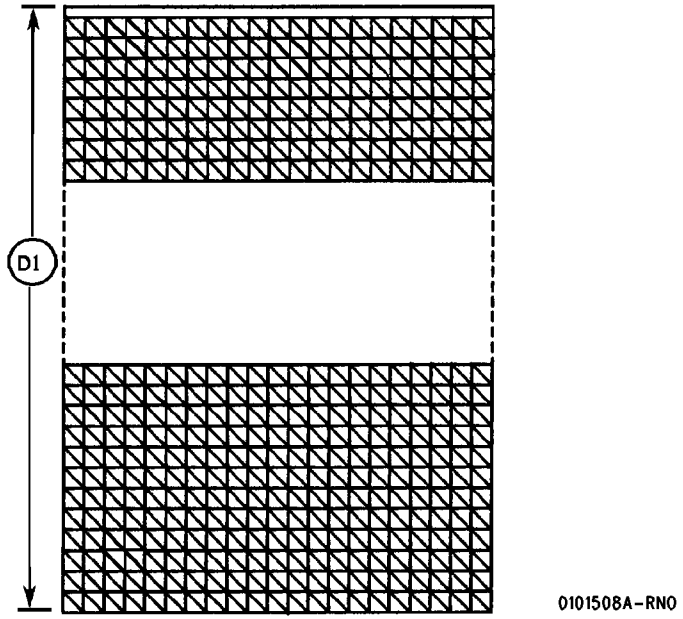


Figure 1 Checking the Print Length

5. (Figure 2): Enter code [**0700**] in order to adjust the Cut Length. Enter [**1**] to adjust.

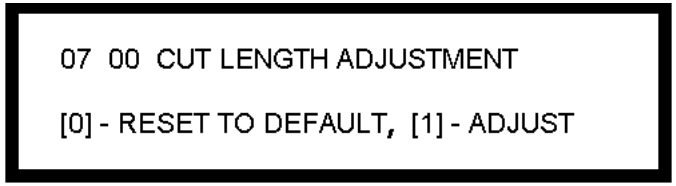


Figure 2 Adjusting the Cut Length

6. (Figure 3): Select the media type to be adjusted.

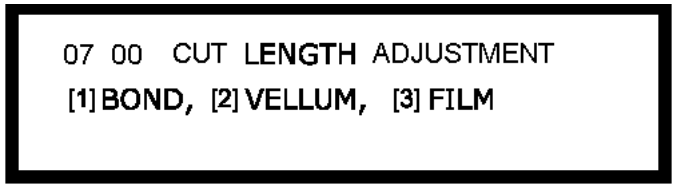


Figure 3 Selecting the Media to Adjust

7. (Figure 4): Enter the measurement of the 600 mm print and press the **Enter** button.

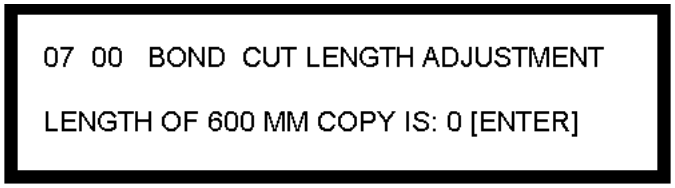


Figure 4 Entering the 600 MM Length

8. (Figure 5): Enter the measurement of the 1200 mm print and press the **Enter** button.

Figure 5 Print Length

9. (Figure 6): Confirm the length adjustments.

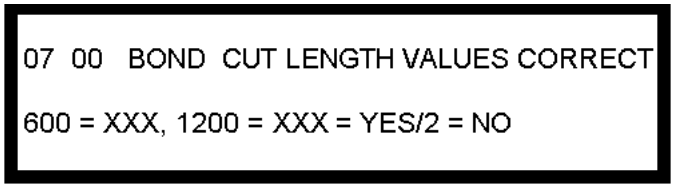


Figure 6 Confirming the Media Measurements

10. Repeat the check for the other types of media used by the customer.

ADJ 8.4 Cut Skew

Purpose

The purpose is to adjust the Cutter Assembly to correct for lead edge skew caused by the Cutter.

Introduction

Order the Uneven Cut Repair Kit 604K13450 to obtain the shims required to perform this adjustment.

Prerequisite

Ensure that the Printer is leveled, particularly that the front and rear are level to each other.

Check

1. Ensure that there is a roll of 36 inch (914mm) bond media in the Printer.
2. Enter the diagnostic mode.
3. Enter [0955] and make three consecutive 600 mm prints of test pattern 7.
4. Mark the prints 1 through 3 as they exit the printer. Also mark the lead edge of each print.
5. Discard print 1. Take print 3 and turn it over onto print 2 so that the images are facing one another and aligned lead edge to lead edge.
6. Using the Lead Edge of the prints as the references very carefully align the left edge (Figure 1) of print 3 with the left edge of print 2. The left corner of the prints must be square to each other
7. Check the cut skew, the lower right corner lead edges are aligned with each other to within 2.0 mm. If not, perform the adjustment.

Adjustment

1. (Figure 1): If the top sheet is shorter than the bottom sheet, the motor side of the Cutter the must be shimmed. If the top sheet is longer than the bottom sheet, the Cutter end opposite the motor must be shimmed.
2. To determine the shim thickness, measure the skew (Figure 1). The measurement will be twice the skew. For example: A measurement of 3.0 mm equals 1.5 mm skew. A shim of 1.5 mm thickness will be required to correct the cut skew of 3.0 mm.

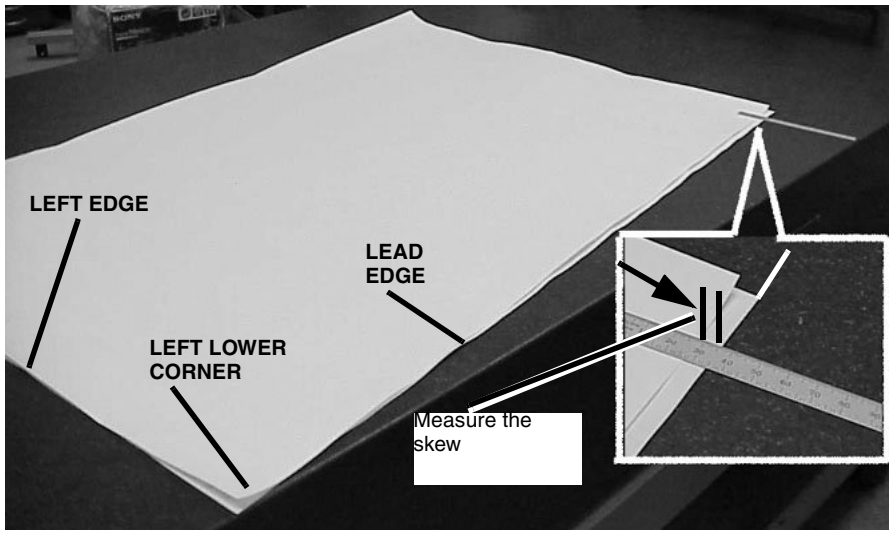


Figure 1 Measuring the Cut Skew

NOTE: *If only a 0.5 mm shim is required (as determined in Adjustment Steps 1 and 2), the original screws can be used. If a thicker shim is required, screws from the kit will have to be used.*

3. (Figure 2): Loosen the Cutter Assembly mounting screws on the side requiring the shim.

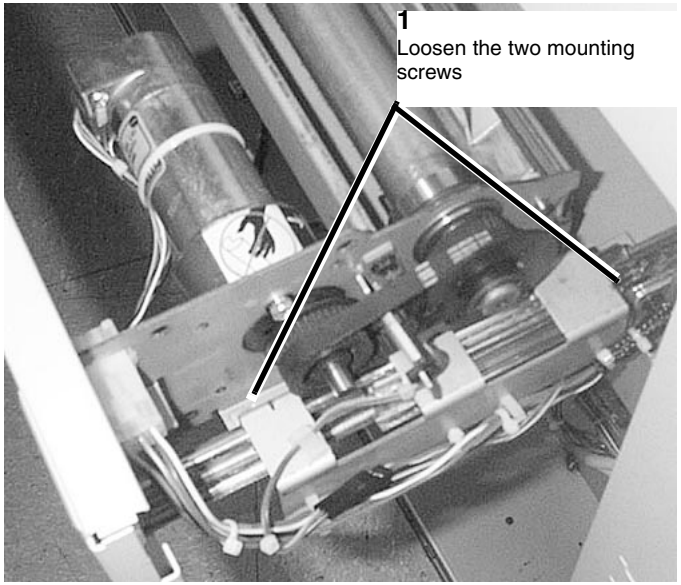


Figure 2 Preparing to Install the Shim

4. (Figure 3): Install the shim (as determined in Adjustment Steps 1 and 2) by placing the shims between the Cutter frame and the slide rail.

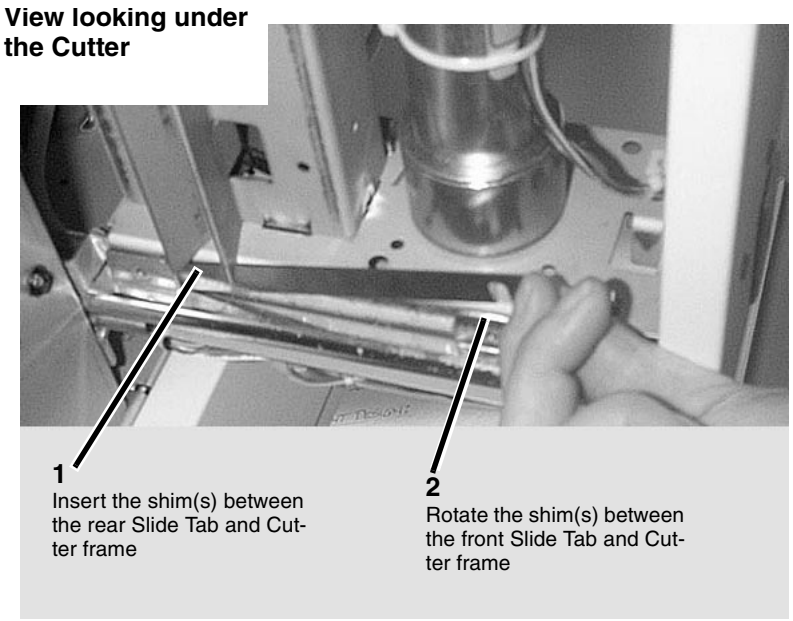


Figure 3 Installing the Shim

ADJ 8.5 Fuser Speed Adjustment

Purpose

The purpose of this adjustment is to adjust the fuser speed to correct the following:

- When a smear or evidence is seen that the media is rubbing while printing. The fuser speed should be increased to minimize any buckling that may be happening between the Fuser and Photoreceptor during printing.
- When getting inconsistent vertical magnification print to print. Increase the fuser speed as indicated in the Fuser Speed Adjustment procedure to provide tension between the fuser and Photoreceptor while printing.

NOTE: *The previous default speed for Wide Bond and Film was equal to 62. Narrow Bond, Film and all Vellum were equal to 50.*

- *The default for Bond and Film (Narrow and Wide) is now 62.*
- *The default for Vellum is 50.*

Adjustment

Fuser speed adjustment for media rolls narrower than 24"

1. (Figure 1) Enter code [0610] in order to adjust the Fuser Speed for Narrow Media. The following message will be displayed.

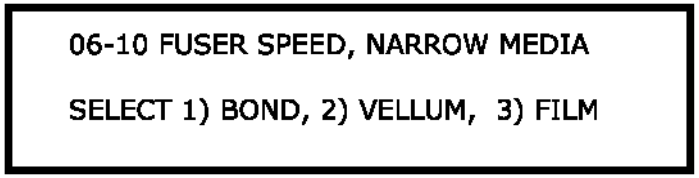


Figure 1

2. (Figure 2) Select the type of media. The following message is displayed. (In this example, Bond paper media has been selected.)

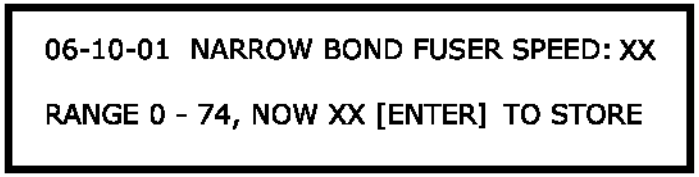


Figure 2

NOTE: *The default for Bond and Film is 62. The default for Vellum is 50. Make changes in 12 counts increments, which is 0.25ips.*

3. Adjust the Fuser Speed using the **Previous** / **Next** buttons.
   a. Use the Previous button to decrease the set point value. This increases fuser speed, which increases the image length and cut length.
   b. Use the Next button to increase the set point value. This decreases the fuser speed, which decreases the image length and cut length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. Repeat the check for all types of Media used by the customer.
5. When the Speed settings are changed or different for narrow and wide Media, check the Vertical magnification.

Fuser speed adjustment for media rolls 24" and wider

1. (Figure 3) Enter code [0611] in order to adjust the Fuser Speed for Wide Media. The following message will be displayed.

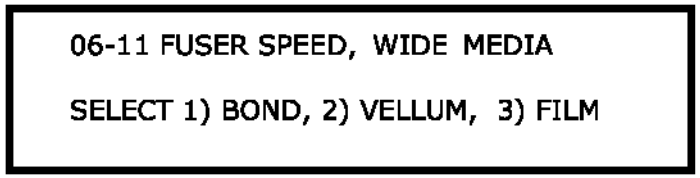


Figure 3

2. (Figure 4) Select the type of media. The following message is displayed. (In this example, Bond paper media has been selected.)

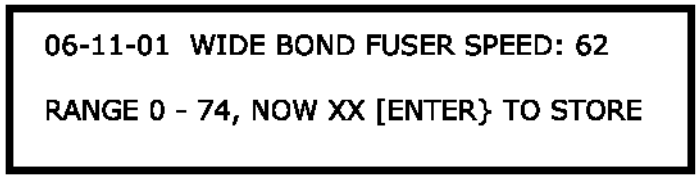


Figure 4

NOTE: *The default for Bond and Film is 62. The default for Vellum is 50. Make changes in 12 counts increments, which is 0.25ips.*

3. Adjust the Fuser Speed using the **Previous** / **Next** buttons.
   a. Use the Previous button to decrease the set point value. This increases fuser speed, which increases the image length and cut length.
   b. Use the Next button to increase the set point value. This decreases the fuser speed, which decreases the image length and cut length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. Repeat the check for all types of Media used by the customer.
5. When the Speed settings are changed or different for narrow and wide Media, check the Vertical magnification (ADJ 8.1).

ADJ 8.6 Lead and Trail Edge Magnification

Purpose

This procedure is for customers who desire the most precise lead and trail edge magnification possible with this equipment. This is a precise setup and will require some time to achieve desired results.

NOTE: *For media rolls narrower than 24", diagnostic 6-20 adjusts the lead edge magnification and diagnostic 6-25 adjusts the trail edge magnification. For media rolls 24" and wider, diagnostic 6-21 adjusts the lead edge magnification and diagnostic 6-26 adjusts the trail edge magnification.*

Prerequisite

1. Check the following:
   a. Fuser Speed (ADJ 8.5)
   b. Vertical Magnification (ADJ 8.1)

Check

1. Enter diagnostics.
2. Enter code [**0955**] and make four 1200 mm prints of Test Pattern #7 onto the width of the media you want to optimize. Select the last of the three test prints.
3. Allow the prints to cool for five minutes.
4. Check each of the first 8 and last 6 blocks on the print for length. Each box should measure 16.25mm.
5. Block size can also quickly be checked by comparing the first 8 or last 6 blocks of the print by overlaying it on to the center section of another print and comparing block sizes.

Adjustment

Magnification adjustment of Lead Edge for media rolls narrower than 24"

1. (Figure 1): Enter code [**0620**] in order to adjust the Lead Edge for narrow media. The following message is displayed.

Figure 1

NOTE: *Default is 130. Adjusting the value to 128 effectively disables lead edge compensation. Make changes in multiples of 5 counts, this is about 0.25mm over the first 8 blocks.*

2. Adjust the Narrow Lead Edge Scale using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the set point, which will decrease the image length.
   b. Use the **Next** button to increase the set point, which will increase the image length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
3. Run another print and check lead edge blocks for size. Repeat procedure until block size is correct.
4. Vertical Magnification will now have to be checked. If Vertical Magnification needs to be reset then Lead Edge blocks will have to be checked and may need to be readjusted.
5. Repeat procedure until desired results are achieved.

Magnification adjustment of Lead Edge for media rolls 24" and wider

1. (Figure 2): Enter code [**0621**] in order to adjust the Lead Edge for wide media. The following message is displayed.

Figure 2

NOTE: *Default is 150. Adjusting the value to 128 effectively disables lead edge compensation. Make changes in multiples of 5 counts, this is about 0.25mm over the first 8 blocks.*

2. Adjust the Wide Lead Edge Scale using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the set point, which will decrease the image length.
   b. Use the **Next** button to increase the set point, which will increase the image length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
3. Run another print and check lead edge blocks for size. Repeat procedure until block size is correct.
4. Vertical Magnification will now have to be checked. If Vertical Magnification needs to be reset then Lead Edge blocks will have to be checked and may need to be readjusted.
5. Repeat procedure until desired results are achieved.

Magnification adjustment of Trail Edge for media rolls narrower than 24"

1. (Figure 3): Enter code [**0625**] in order to adjust the Lead Edge for narrow media. The following message is displayed.

Figure 3

NOTE: *Default is 115. Adjusting the value to 128 effectively disables lead edge compensation. Make changes in multiples of 5 counts, this is about 0.25mm over the last 6 blocks.*

2. Adjust the Narrow Trail Edge Scale using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the set point, which will decrease the image length.
   b. Use the **Next** button to increase the set point, which will increase the image length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
3. Run another print and check trail edge blocks for size. Repeat procedure until block size is correct.
4. Vertical Magnification will now have to be checked. If Vertical Magnification needs to be reset then Trail Edge blocks will have to be checked and may need to be readjusted.
5. Repeat procedure until desired results are achieved.

Magnification adjustment of Trail Edge for media rolls 24" and wider

1. (Figure 4): Enter code [**0626**] in order to adjust the Trail Edge for wide media. The following message is displayed.

Figure 4

NOTE: *Default is 130. Adjusting the value to 128 effectively disables lead edge compensation. Make changes in multiples of 5 counts, this is about 0.25mm over the last 6 blocks.*

2. Adjust the Wide Trail Edge Scale using the **Previous** / **Next** buttons.
   a. Use the **Previous** button to decrease the set point, which will decrease the image length.
   b. Use the **Next** button to increase the set point, which will increase the image length.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
3. Run another print and check trail edge blocks for size. Repeat procedure until block size is correct.
4. Vertical Magnification will now have to be checked. If Vertical Magnification needs to be reset then Trail Edge blocks will have to be checked and may need to be readjusted.
5. Repeat procedure until desired results are achieved.

ADJ 9.2 Electrostatic Series

Purpose

The purpose is to set the photoreceptor drum voltage, exposure, and developer bias voltage to obtain good print quality as specified in Section 3 of this Service Manual.

Adjustment

NOTE: *If a failure occurs during this procedure, go to 09 04 Automatic ESV Setup Failed RAP.*

1. Enter the diagnostic mode.

   NOTE: *This process is done automatically using the built-in electrometer and default values for Vgrid and Vbias. To maintain print quality, the [0904] routine is run automatically every 5K feet of media. However, it can be run at anytime if necessary. The electrostatic values Vhigh, Vlow, Vbias and exposure are set during this process.*

2. (Figure 1): Enter **[0904]** in order to start the xerographic setup process. The following message will be displayed which is then followed by a Step 2. message.

Figure 1 Electrostatic Setup screen

3. (Figure 2): Wait for the process to complete. The following message will be displayed.

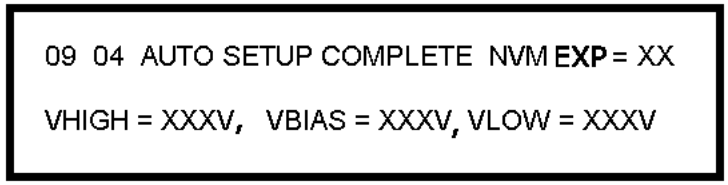


Figure 2 Electrostatic Setup Complete

4. Record the values for: V High, V Bias, and V Low in the 8850/510dp Service Log.
5. Press the **Exit** button to exit the process.

ADJ 9.3 Image Density

Purpose

The purpose is to set the toner concentration to maintain good print quality as specified in Section 3 of this Service Manual.

Prerequisite

Perform the Electrostatic Series (ADJ 9.2).

Check

1. Enter diagnostics.
2. Enter [0907] and check if the Printer is in **STANDARD** or **RECOVERY** mode. If the Printer is in **RECOVERY**, run [0955-5] until Printer returns to **STANDARD**.
3. Enter code [**0955**] and make one print of Test Pattern #5.
4. Using S.I.R. 495.01 (82P520), evaluate the darkness squares at the lower right center and the upper left from the lead edge.
5. If the darkness squares are not between 1.2 and 1.4, perform the adjustment.

Adjustment

1. Enter diagnostics.
2. (Figure 1): Enter code [**0921-4**]. The following message is displayed.

   NOTE: *RAW SENSOR X.X VOLTS is the sensor output voltage and VBIAS X.X VOLTS is the sensor input voltage. The RAW SENSOR X.X volts will change as the CONTROL POINT voltage is changed. VBIAS is unaffected by 0921-4. The CONTROL POINT has an inverse relationship to the image density. As the CONTROL POINT voltage is increased, the toner concentration and image density decreases and the RAW SENSOR voltage increases .*

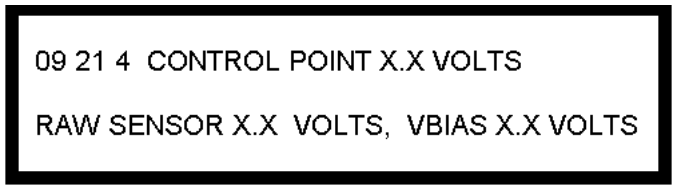


Figure 1 Adjusting the Image Density

   a. Use the **Next** key to increase the CONTROL POINT voltage which will decrease the image density.

      Use the **Previous** key to decrease the CONTROL POINT voltage which will increase the image density.

   b. Make 20 D-size prints then perform the **Check** again. Then repeat Steps a and b until the density is within specification

3. To increase or decrease the density to meet customer requirements do the following: **Printer Offline > Printer Menu > Printer Adjustments > Density (Range 1-10) Default 5** and adjust the range higher to increase the density or lower the range to decrease the density. This will affect the density of the output plots in [**0955**]. This step can also be done using the WebPMT with out affecting the output plots in [**0955**]. The adjustment will be done in the AccXES Controller.

ADJ 9.5 Toner Cartridge Home Sensor

Purpose

The purpose is to set the Toner Cartridge Home Sensor to the correct distance from the magnet on the Toner Cartridge.

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Check

1. Remove the Developer Module (REP 9.5).
2. Remove the Cartridge Drive Plate (REP 9.14).
3. (Figure 1): Ensure that the tip of the Toner Cartridge Home Sensor is 2.5 (+/- 0.5) mm from the plate.

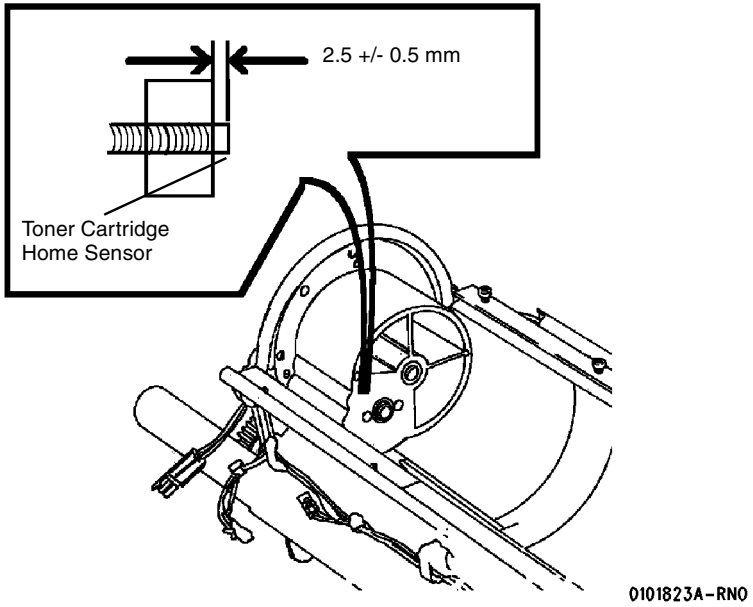


Figure 1 Checking the Position of the Toner Cartridge Home Sensor

Adjustment

1. Perform the check.

NOTE: *The Toner Cartridge Home Sensor is threaded. The wires must be disconnected and straightened in order to rotate the sensor for adjustment.*

2. (Figure 2): Adjust the Toner Cartridge Home Sensor to 2.5 (± 0.5) mm from the plate.

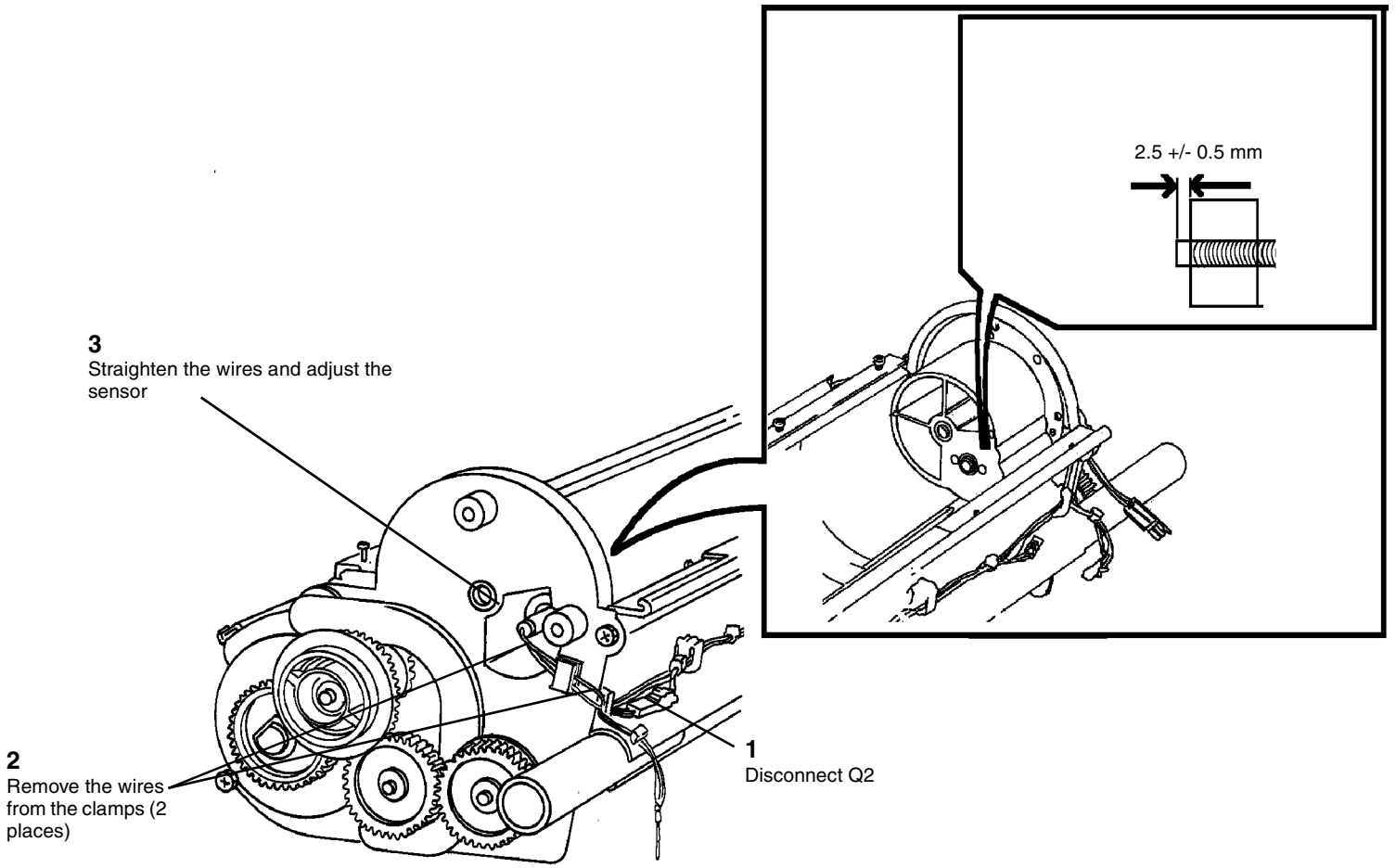


Figure 2 Adjusting the Toner Cartridge Home Sensor

ADJ 9.6 Augers

Purpose

The purpose is to set the Developer Auger and the Mix Auger to the correct angles in order to ensure correct operation of the Developer Module.

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord.

Check

NOTE: *In order to see the flats on the augers, remove the Sump Shield using the Developer Material removal procedure (REP 9.7).*

1. Remove the Sump Shield.
2. (Figure 1): Check for the correct orientation of the augers.
   a. The flats are at the end opposite the gears, approximately one inch from the ends of the augers.
   b. Expose the flats using a brush to move the Developer Material.
   c. Looking down on the augers, check that the Developer Auger is pointing towards the Magnetic Roll at an approximate 45 degree angle.
   d. Check that the last flats on the last two flutes on the Mix Auger are approximately horizontal.

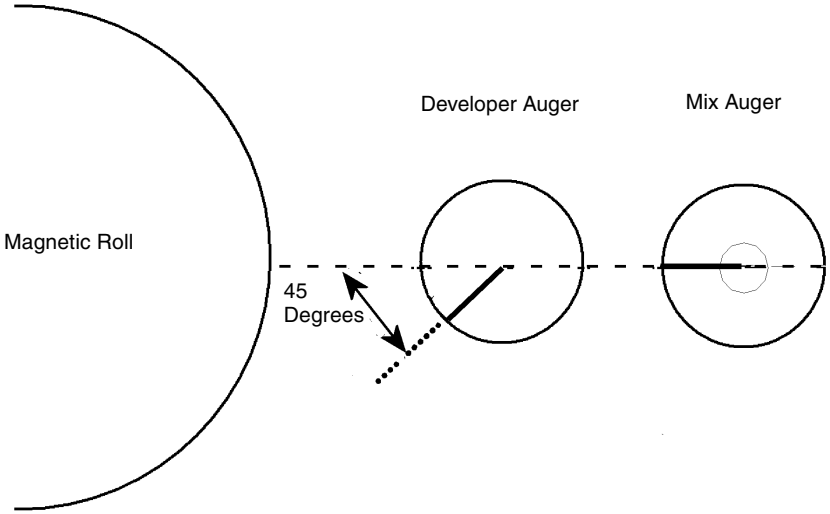


Figure 1 Checking for the Correct Orientation of the Augers

Adjustment

NOTE: *In order to position the flats on the augers, the Developer material must first be removed. In order to rotate the augers individually, the gears at the drive end of the Developer module must be removed.*

1. Remove the Developer Material (REP 9.7).
2. (Figure 1): Position the flats on the augers by rotating the appropriate gear at the drive end of the Developer Module.
   a. The flats are at the end opposite the gears, approximately one inch from the ends of the augers.

      NOTE: *A sheet of paper is used in the photographs so that the auger can be seen. The Toner Cartridge Support Hub is also removed for clarity.*

   b. Looking down on the augers, position the Developer Auger to point towards the Magnetic Roll at an approximate 7 o'clock position (45 degree angle).

1
Rotate the Developer Auger until the flat on the auger flute is at the 7

Figure 2 Adjusting the Developer Auger

c. Position the flats on the last two flutes of the Mix Auger are approximately horizontal.

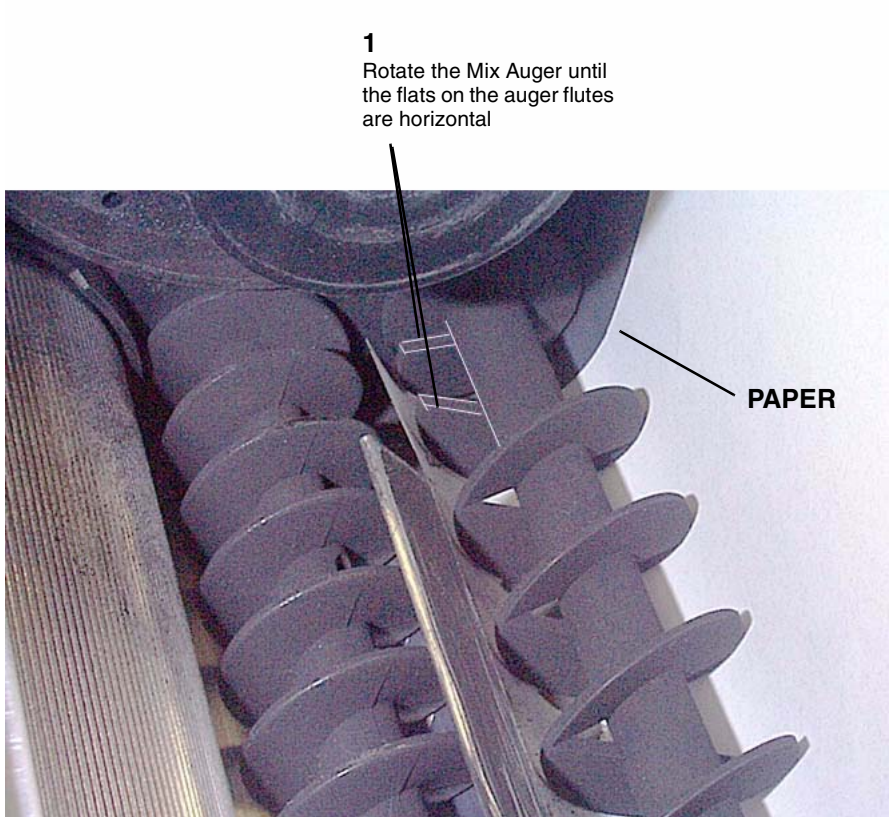


Figure 3 Adjusting the Mix Auger

ADJ 10.1 Fuser Temperature (NVM)

Purpose

The purpose is to adjust the temperature of the Fuser Heat Roll in order to obtain the correct fusing temperature for the media type that is being used. The actual surface temperature of the Heat Roll will be 20 degrees hotter than the set point values.

Introduction

The fusing temperature is limited to a range of 300 to 400 degrees Fahrenheit (149 to 204 degrees Celsius). The **SETPOINT** value displayed in [1060], [1062], and [1063] is the last two digits of the Fahrenheit temperature. For example: **1060 FUSER TEMPERATURE SETPOINT: 50** is 350 degrees Fahrenheit which correlates to a heat roll surface temperature of 370 degrees F (187.7 C). The fusing temperature can be adjusted in 1 degree increments from 300 to 400.

Adjustment

1. Ensure that the Fuser Thermistors are in contact with the Fuser Heat Roll.
2. Enter diagnostics.
3. (Figure 2): Enter code [**1060**] in order to adjust the Fuser Temperature for bond paper to 350. The following message is displayed.

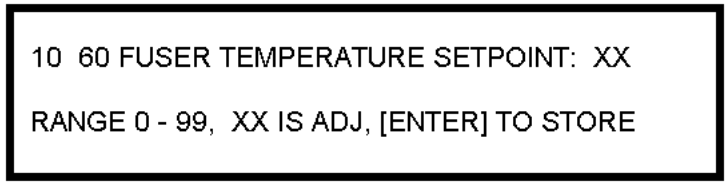


Figure 1 Fuser Set point Screen

   a. Use the **Previous** button to decrease the Set Point, lowering the fusing temperature.
   b. Use the **Next** button to increase the Set Point, raising the fusing temperature.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
4. (Figure 3): Enter code [**1062**] in order to adjust the Fuser Temperature for vellum to 350. The following message is displayed.

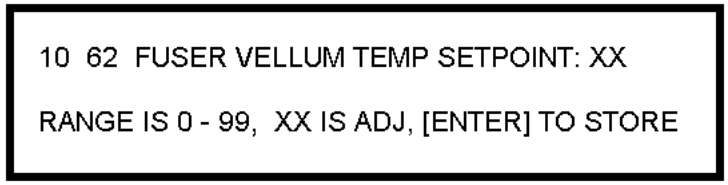


Figure 2 Vellum Temperature Set point

   a. Use the **Previous** button to decrease the Set Point, lowering the fusing temperature.
   b. Use the **Next** button to increase the Set Point, raising the fusing temperature.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
5. (Figure 4): Enter code [**1063**] in order to adjust the Fuser Temperature for film to 350. The following message is displayed.

Figure 3 Film Temperature

   a. Use the **Previous** button to decrease the Set Point, lowering the fusing temperature.
   b. Use the **Next** button to increase the Set Point, raising the fusing temperature.
   c. Press the **Enter** button in order to store the value in NVM.
   d. Press the **Exit** button two times.
6. Check the following:
   a. Lead Edge Registration (ADJ 8.2)
   b. Cut Length (ADJ 8.3)

ADJ 10.2 Fuser Drive Interlock Switch 8850 W/O Tag 8

Adjustment

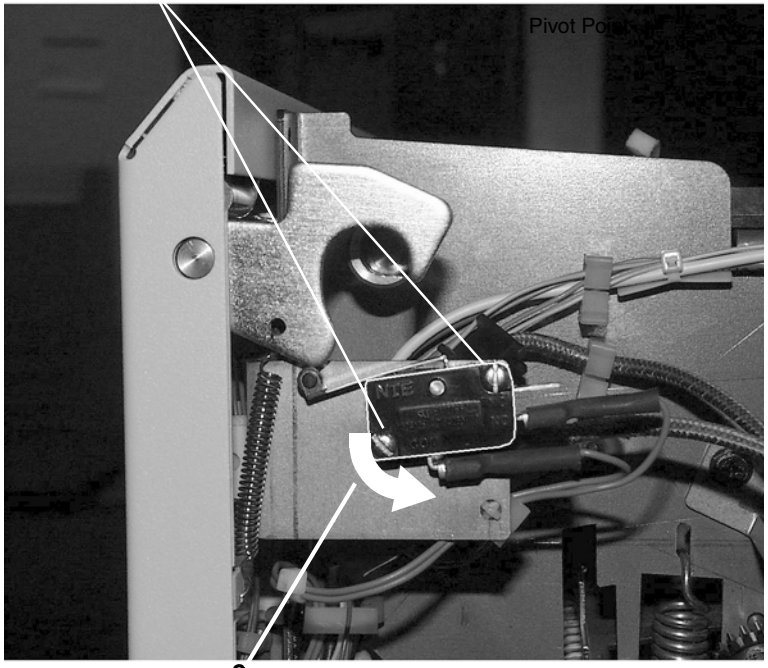
WARNING

Switch off the Main Power Switch. Disconnect the Power Cord

NOTE: *In the following procedure the terms "left" and "right" describe machine locations as observed when facing the Printer from the Roll Media Supply Drawer side.*

1. Pull out the Fuser Drawer. The Fuser Drive Interlock Switch is located on the right side of the drawer.
2. (Figure 1): Prepare the switch for adjustment.

1
Loosen the two mount screws

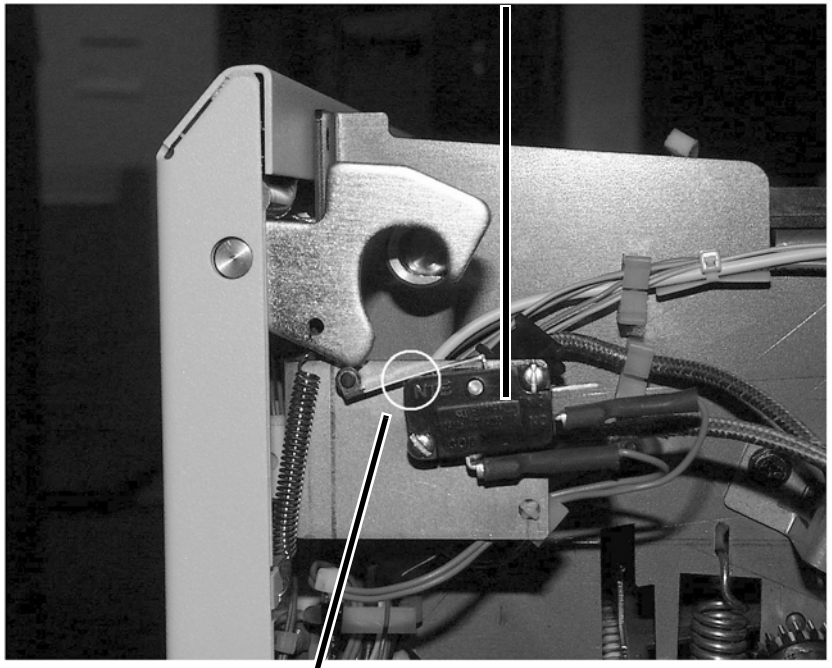


2
Pivot the switch downward prior to adjustment

Figure 1 Preparing the Switch for Adjustment

3. (Figure 2): Perform the adjustment.

2
Hold the switch in the adjusted position and tighten the mounting screws



1
Rotate the switch up until the switch body touches the actuator arm

Figure 2 Performing the Adjustment

ADJ 10.3 Fuser Drive Motor (510 Only)

Adjustment

The purpose of this adjustment is to adjust the correct mesh between the Fuser Drive Gear and the gear on the Heat Roll to provide a positive Fuser drive.

WARNING

Switch off the Main Power Switch. Disconnect the Power Cord

1. Cut two strips of 20 lb. (80 gsm) paper into 1.5 by 6 inches (38 by 150 mm) strips.
2. Remove the Xerographic Module (REP 9.1). Leave the Fuser Drawer open in order to access the Fuser Drive Motor mounting nuts
3. (Figure 1): Prepare the Fuser Motor for adjustment.

   NOTE: *The pivot point will be around the bottom front nut. The other three mounting points are in slots in the frame.*

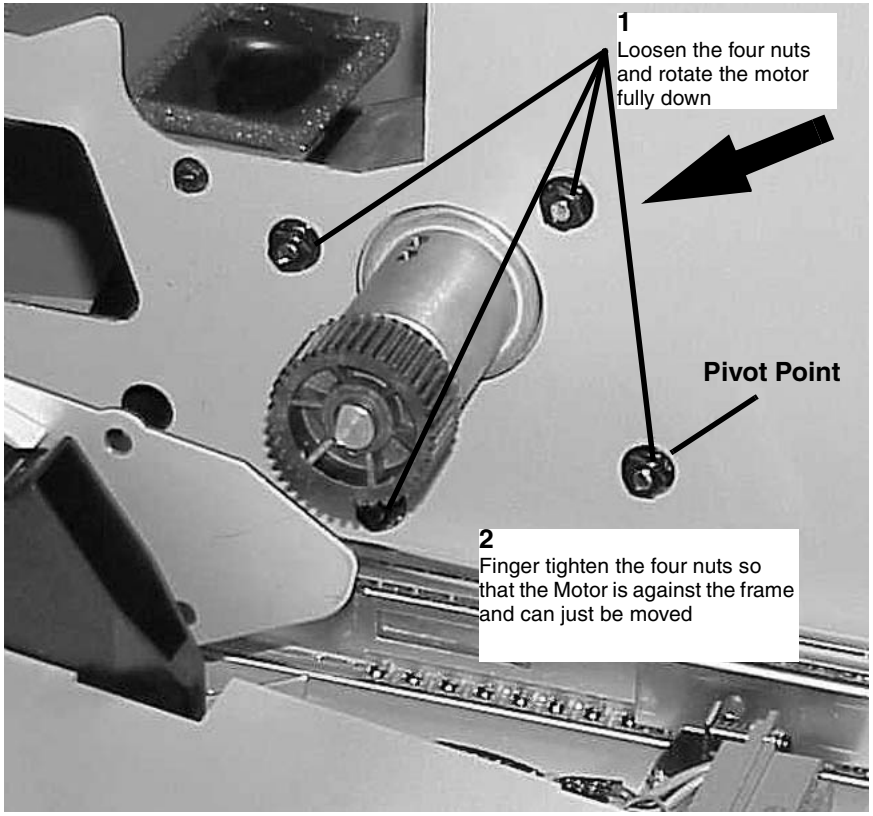


Figure 1 Preparing the Fuser For Adjustment

4. (Figure 2): Position the strips of paper.

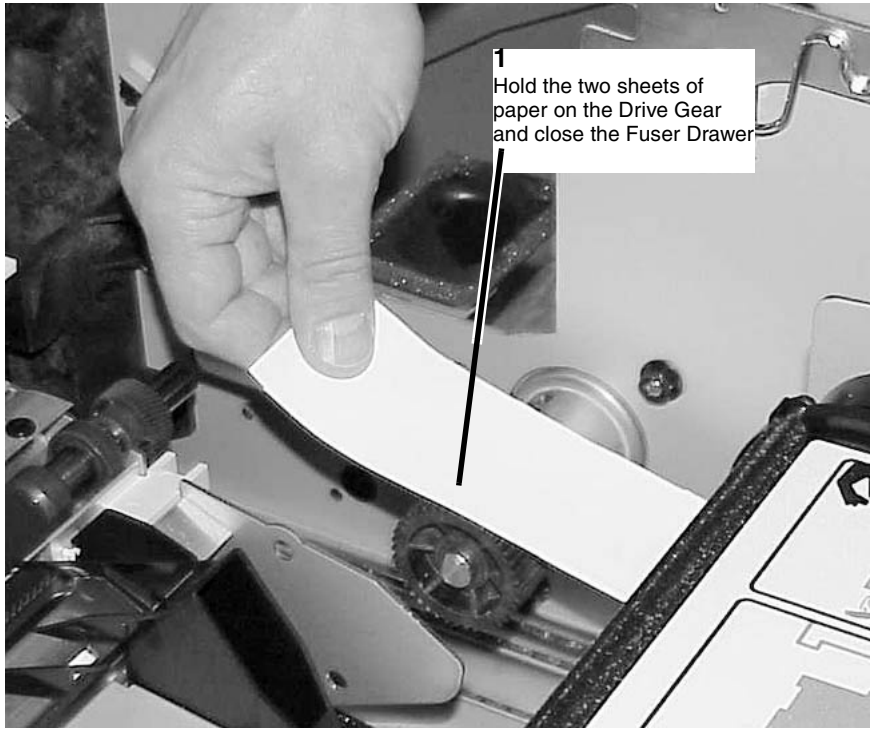


Figure 2 Positioning the Paper Strips

5. (Figure 3): Adjust the mesh of the Fuser Drive Gears.

NOTE: *Do not pull the gears together by pulling on the Fuser Dive Motor. Pull on the aluminum extrusion near the drive gear or on the Drive Gear. Pulling on the Motor could cause an uneven mesh between the gears*

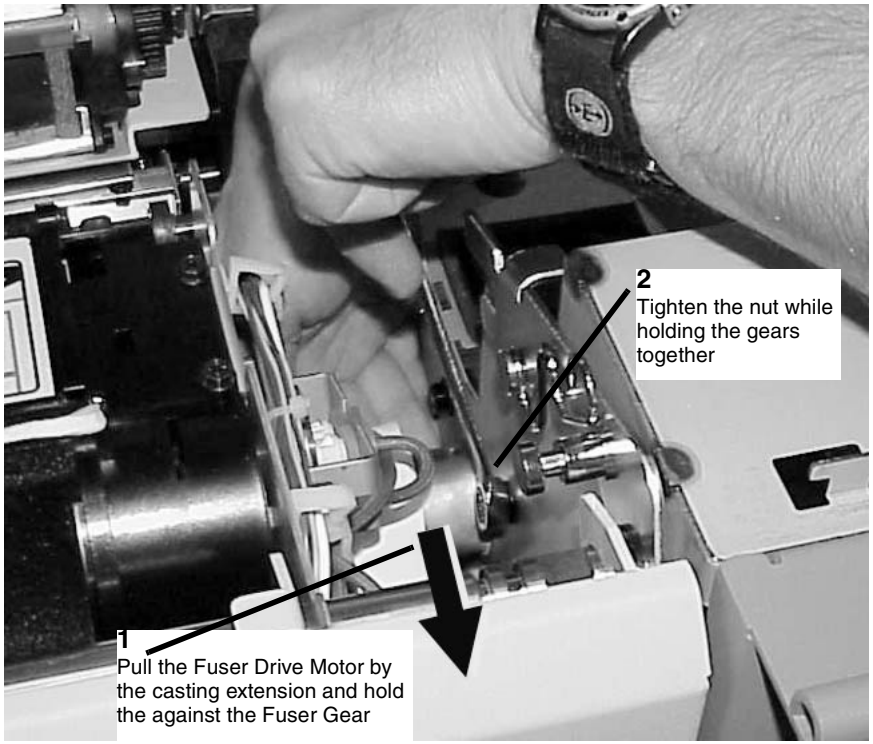


Figure 3 Adjusting the Mesh of the Fuser Drive Gears

6. Open the Fuser Drawer and tighten the four nuts.
7. Check the paper, the gears should have indented the paper with out tearing the paper. If the paper is torn, repeat the adjustment using less force when pulling the gears together.
8. Close the Fuser Drawer.
9. Check for movement between the Fuser Drive gears.
    a. Hold the Gear that is on the Heat Roll from moving.
    b. Rotate the drive gear on the Fuser Motor, there should only be slight movement of the gear relative to the gear on the Heat Roll.
    c. Rotate the drive gear a quarter turn by spinning the Fuser Motor Shaft and repeat steps a and b again.
    d. Rotate the drive gear another quarter and repeat steps a and b.

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Introduction

Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

Organization

Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

Part Number Index

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

Other Information

Abbreviations

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

Table 1

Abbreviation	Meaning
A3	297 x 594 Millimeters
A4	210 x 297 Millimeters
A5	148 x 210 Millimeters
AD	Auto Duplex
AWG	American Wire Gauge
EMI	Electro Magnetic Induction
GB	Giga Byte
KB	Kilo Byte
MB	Mega Byte
MM	Millimeters
MOD	Magneto Optical Drive
NOHAD	Noise Ozone Heat Air Dirt
PL	Parts List
P/O	Part of

Table 1

Abbreviation	Meaning
R/E	Reduction/Enlargement
REF:	Refer to
SCSI	Small Computer Systems Interface
W/	With
W/O	Without

Table 2

	Operating Companies
Abbreviation	**Meaning**
AO	Americas Operations
NASG - US	North American Solutions Group - US
NASG - Canada	North American Solutions Group - Canada
XE	Xerox Europe

Symbology

Symbology used in the Parts List section is identified in the Symbology section.

Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

Subsystem Information

Use of the Term “Assembly”

The term “assembly” will be used for items in the part number listing that include other itemized parts in the part number listing. When the word “assembly” is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

Tag

The notation “W/Tag” in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as “W/Tag”, install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

Symbology

A Tag number within a circle pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1). Information on the modification is in the Change Tag Index.

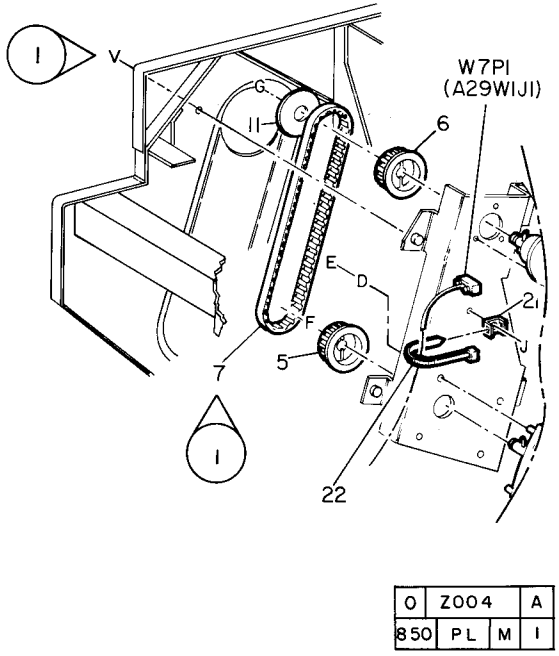


Figure 1 With Tag Symbol

A Tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the Tag number within the circle (Figure 2).

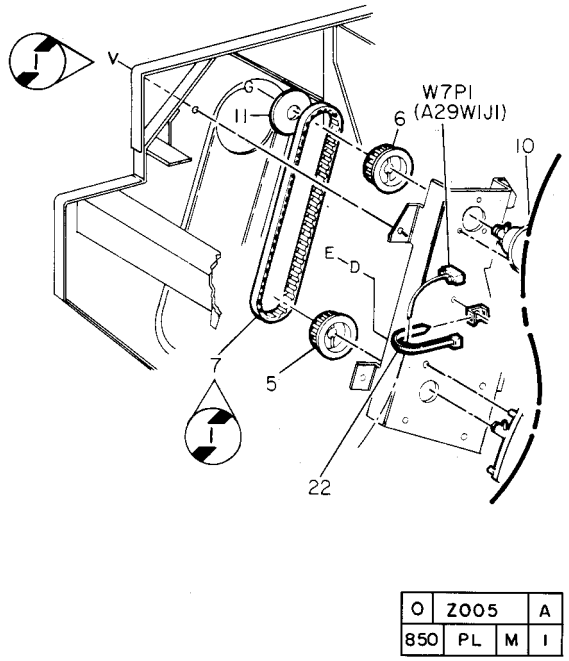


Figure 2 Without Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3). Information on the modification is in the Change Tag Index.

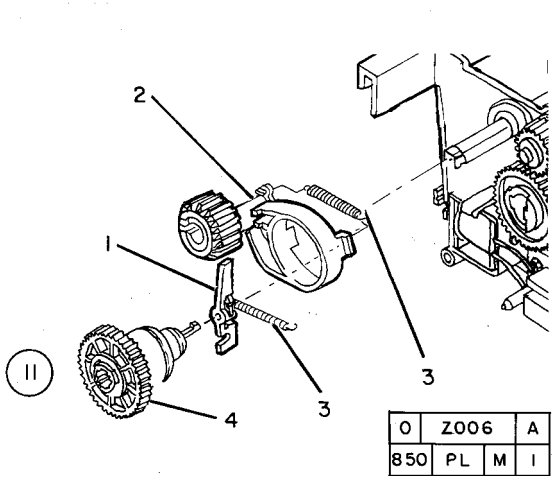


Figure 3 Entire Drawing With Tag Symbol

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4).

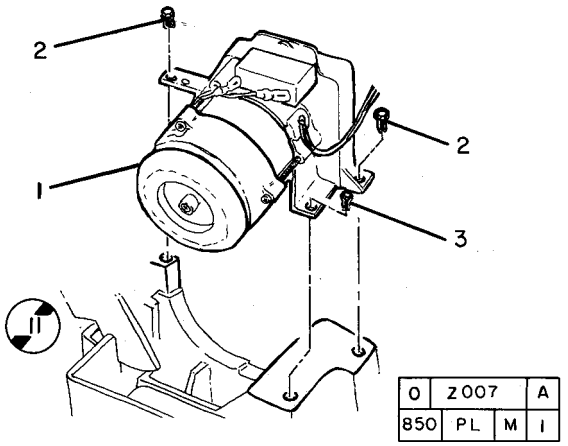
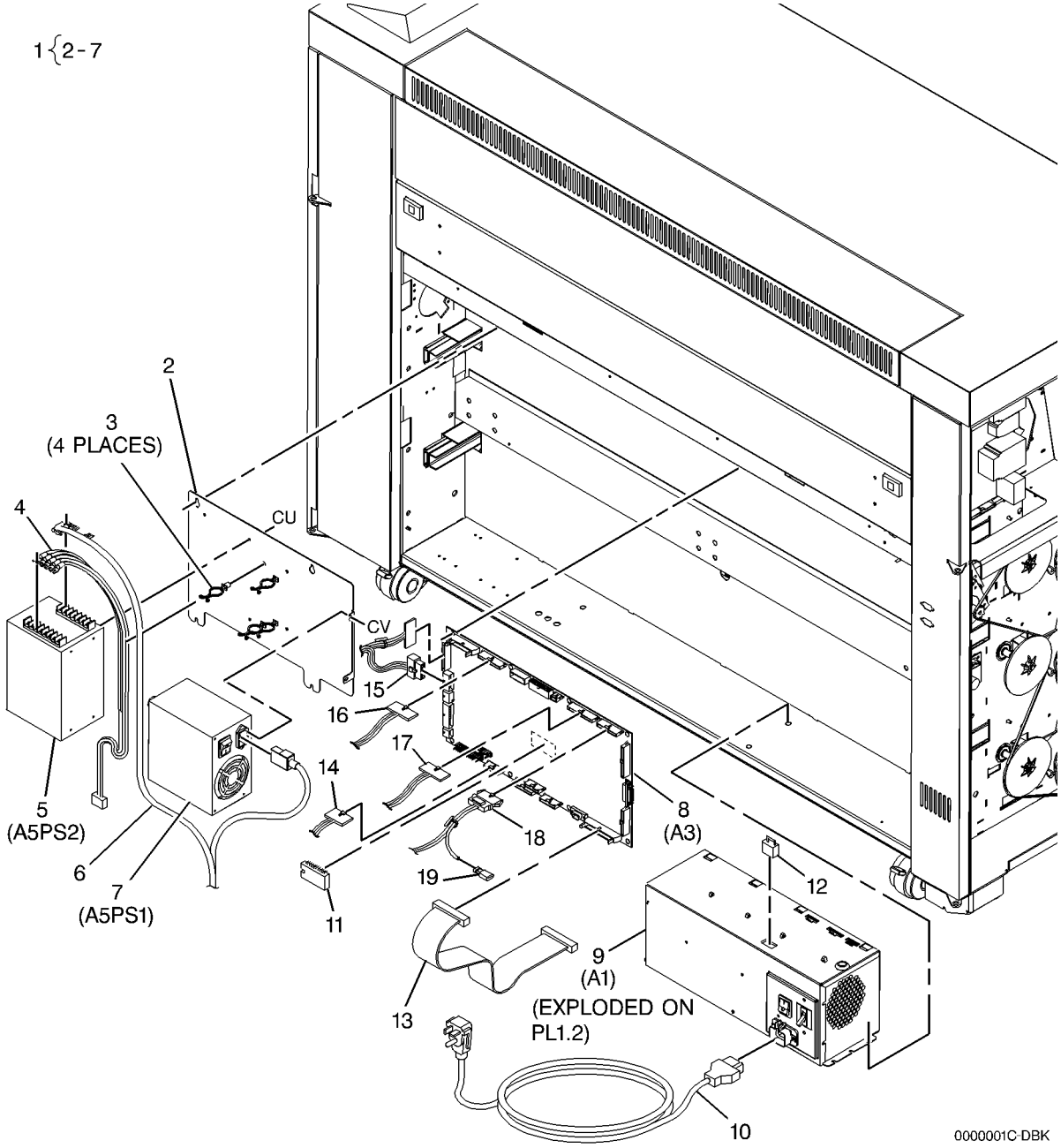


Figure 4 Entire Drawing Without Tag Symbol

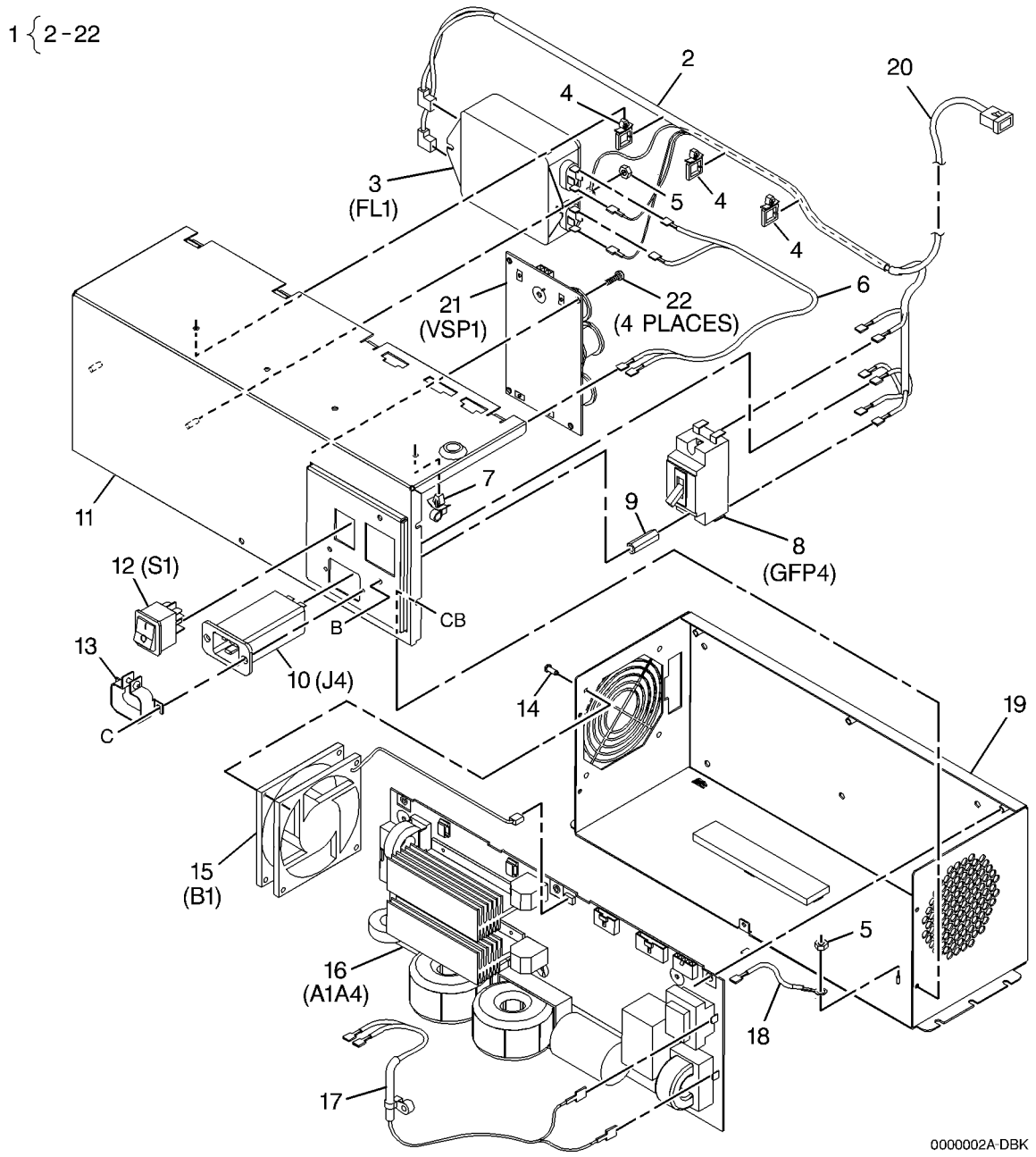
PL 1.1 Electrical Control Components/DC Power Generation

Item	Part	Description
1	105K25952	Low Voltage Power Supply Assembly (LVPS) (W/TAG 1) (**Non RoHS**)
–	105K29350	Low Voltage Power Supply Assembly (LVPS) (W/TAG 1) (**RoHS**)
2	–	LVPS Chassis (P/O Item 1)
3	–	Twist Clamp (P/O Item 1)
4	–	LVPS DC Output Harness (P/O Item 1)
5	–	Power Supply (24V DC) (A5PS2) (P/O Item 1)
6	–	LVPS AC Power Harness (P/O Item 1)
7	105E15060	Power Supply (5V DC) (A5PS1) (**Non RoHS**)
–	105E18580	Power Supply (5V DC) (A5PS1) (**RoHS**)
8	960K10722	Main PWB (A3) (510dp) (REP 3.1) (**Non RoHS**)
–	960K33270	Main PWB (A3) (510dp) (REP 3.1) (**RoHS**)
9	101K42715	AC Module Assembly (A1) (W/TAG 7, TAG 46, TAG 49) (**Non RoHS**)
10	117E23751	Power Cord (220V) (**Non RoHS**)
–	117E25890	Power Cord (120V/20A) (**Non RoHS**)
–	117K39560	Power Cord (110V) (**Non RoHS**)
–	117E29550	Power Cord (120V/20A) (**Non RoHS**)
–	117E23750	Power Cord (220V) (**Non RoHS**)
–	117E23752	Power Cord (220V) (**RoHS**)
–	152S05100	Power Cord (250V/16A) (Europe) (**Non RoHS**)
–	152S05101	Power Cord (240V/13A) (United Kingdom) (**Non RoHS**)
11	733W05871	SRAM (**Non RoHS**)
12	113K03370	Jumper (**RoHS**)
13	962K56440	Ribbon Cable (**RoHS**)
14	962K00330	RFC Harness (8850) (**Non RoHS**)
–	962K21070	RFC Harness (510dp) (**Non RoHS**)
–	962K56250	RFC Harness (510dp) (**RoHS**)
15	962K00351	Motor Control Harness (**Non RoHS**)
–	962K56100	Motor Control Harness (**RoHS**)
16	962K00341	Fuser Mod Interface Harness (**Non RoHS**)
–	962K56090	Fuser Mod Interface Harness (**RoHS**)
17	962K00320	DC Rear Harness (8850) (**Non RoHS**)
18	–	Developer Harness (Not Spared)
19	716W01003	Terminal (**Non RoHS**)



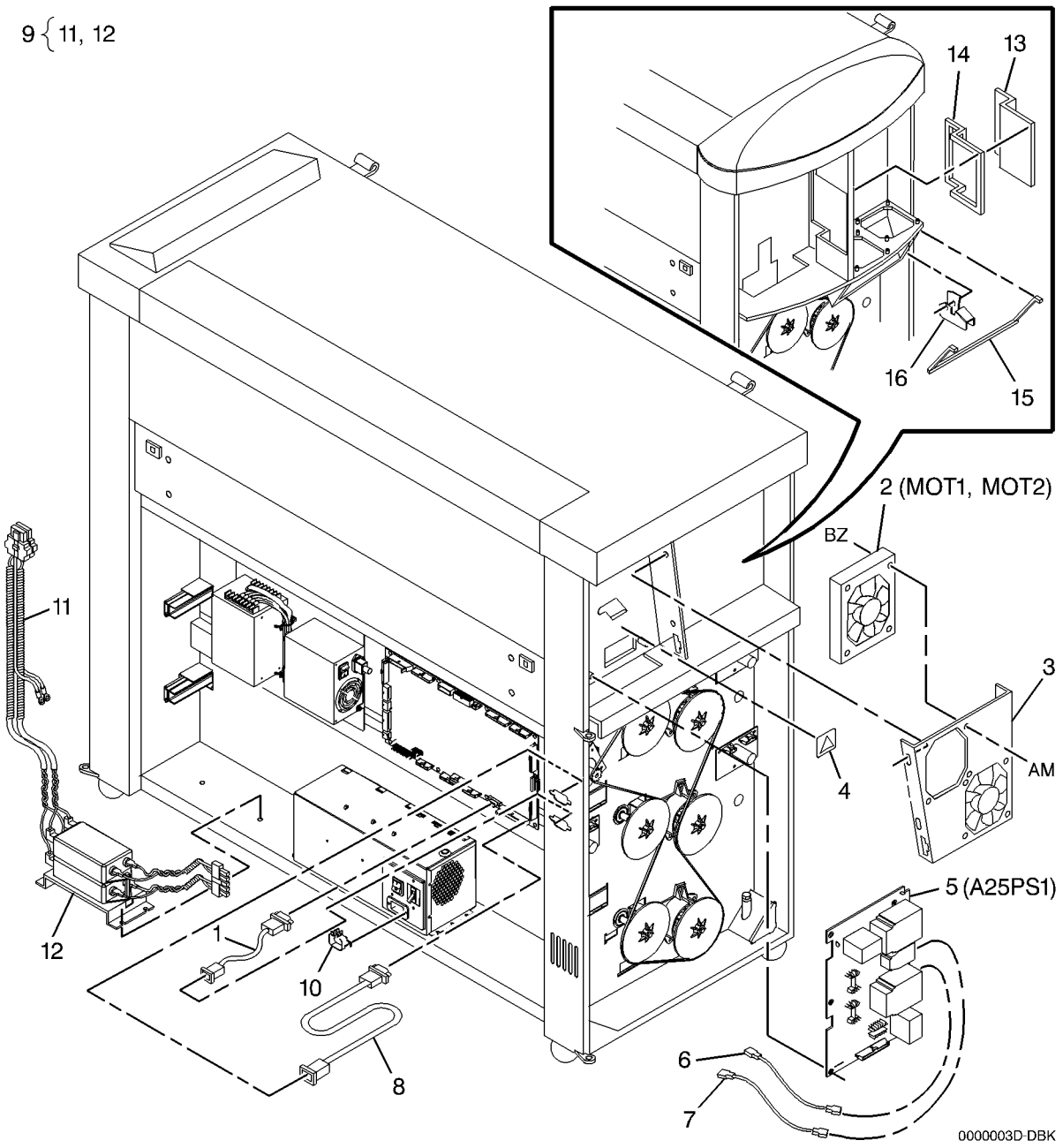
PL 1.2 AC Module Assembly (A1)

Item	Part	Description
1	101K42715	AC Module Assembly (**Non RoHS**)
–	101K57190	AC Module Assembly (W/TAG 46, TAG 49) (**RoHS**)
2	–	AC to Filter Harness (P/O Item 1)
3	142K01540	EMI Filter (20A) (**Non RoHS**)
–	142K02080	EMI Filter (**RoHS**)
4	–	Wire Saddle (P/O Item 1)
5	–	Nut (P/O Item 1) (8-32)
6	–	AC to Access Harness (P/O Item 1)
7	–	Wire Tie Push Mount (P/O Item 1)
8	108E05310	Circuit Breaker (20A) (**Non RoHS**)
–	108E06720	Circuit Breaker (20A) (**RoHS**)
9	–	Hex Standoff (P/O Item 1)
10	114E18410	AC Filtered Inlet (**Non RoHS**)
–	114E24120	AC Filtered Inlet (**RoHS**)
11	–	Chassis Front Bracket (P/O Item 1)
12	110E06020	Power Switch
13	019E52800	Retaining Clamp (**Non RoHS**)
–	019E74750	Retaining Clamp (**RoHS**)
14	029E39280	Snap Rivet
15	–	Fan (P/O Item 1)
16	–	Fuser PWB Control (P/O Item 1)
17	–	Harness (P/O Item 1)
18	117K32480	Ground Wire (**Non RoHS**)
–	117K45110	Ground Wire (**RoHS**)
19	–	Chassis Rear Bracket (P/O Item 1)
20	–	Harness (P/O Item 1)
21	–	AC Mod/Fuser Surge (P/O Item 1)
22	–	Screw (P/O Item 1)



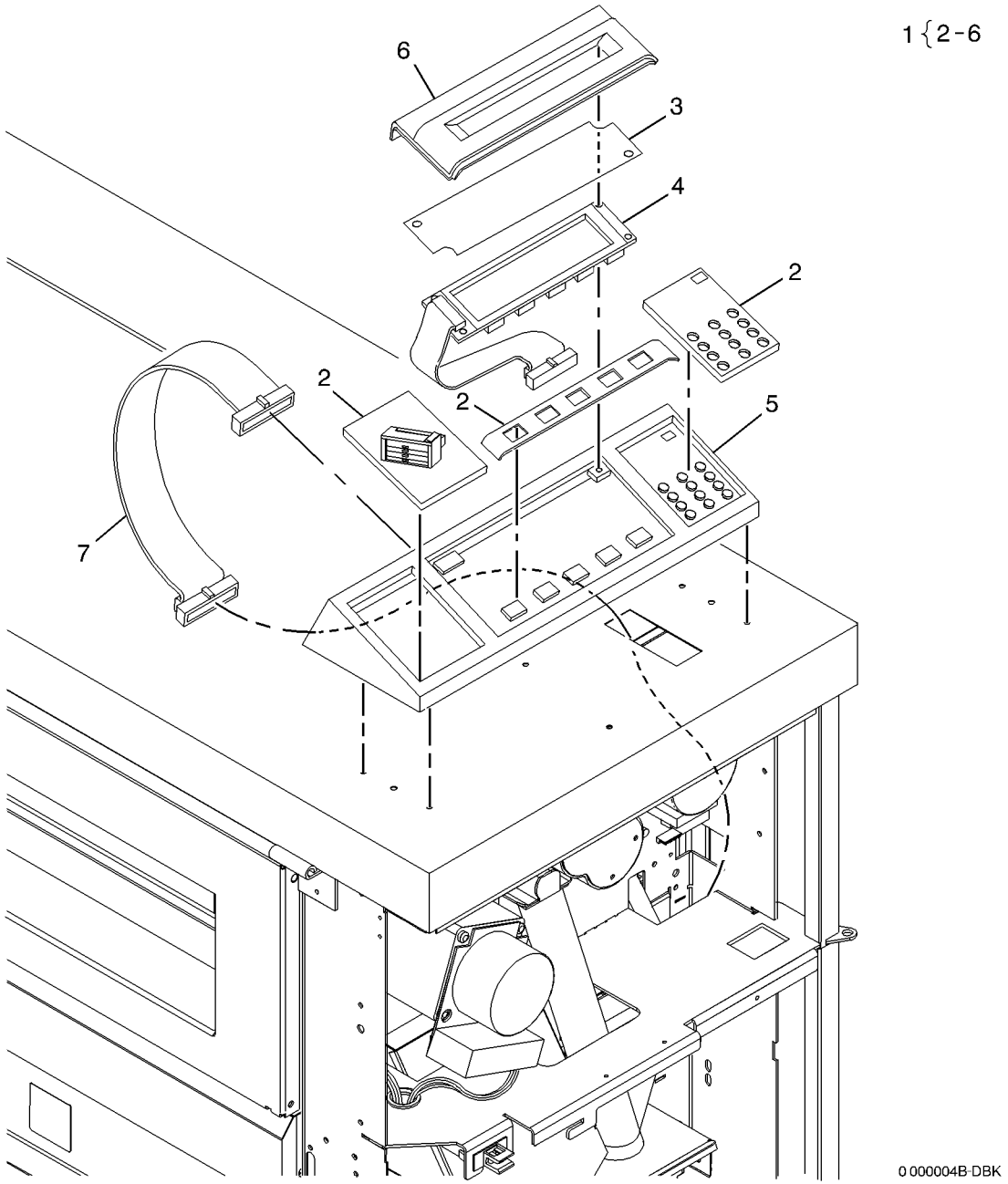
PL 1.3 DC Electrical Components

Item	Part	Description
1	–	Harness (Not Spared)
2	127E11240	Cooling Fan Motor (MOT1, MOT2) (**Non RoHS**)
–	127E15380	Cooling Fan Motor (MOT1, MOT2) (**RoHS**)
3	054K12300	Fan Duct (**Non RoHS**)
4	–	Charge Corotron Label (Red Arrow) (Not Spared)
5	105E15365	High Voltage Power Supply (A25PS1) (W/TAG 6) (REP 3.2, ADJ 9.2) (**Non RoHS**)
–	105E18540	High Voltage Power Supply (A25PS1) (W/TAG 6) (REP 3.2, ADJ 9.2) (**RoHS**)
6	117K39571	Detack Corotron Harness (**Non RoHS**)
–	117K45120	Detack Corotron Harness (**RoHS**)
7	117K39582	Transfer Corotron Harness (**Non RoHS**)
–	117K45130	Transfer Corotron Harness (**RoHS**)
8	–	Folder Enablement Harness (Not Spared)
9	101K57200	Filter Assembly (**Non RoHS**)
–	962K57020	AC to Fuser Harness (Replaces Item 11 & 12) (**RoHS**)
10	019E74715	Clamp (8850) (**Non RoHS**)
–	019E74750	Clamp (510dp)
11	962K07390	Load Harness (**Non RoHS**)
12	–	EMI Filter/Line Harness (P/O Item 9)
13	–	Access Cover (Not Spared)
14	035E71080	Access Cover Seal
15	035E71090	Bottom Duct Seal
16	003E69450	Latch (**RoHS**)
–	003E77950	Latch (**RoHS**)



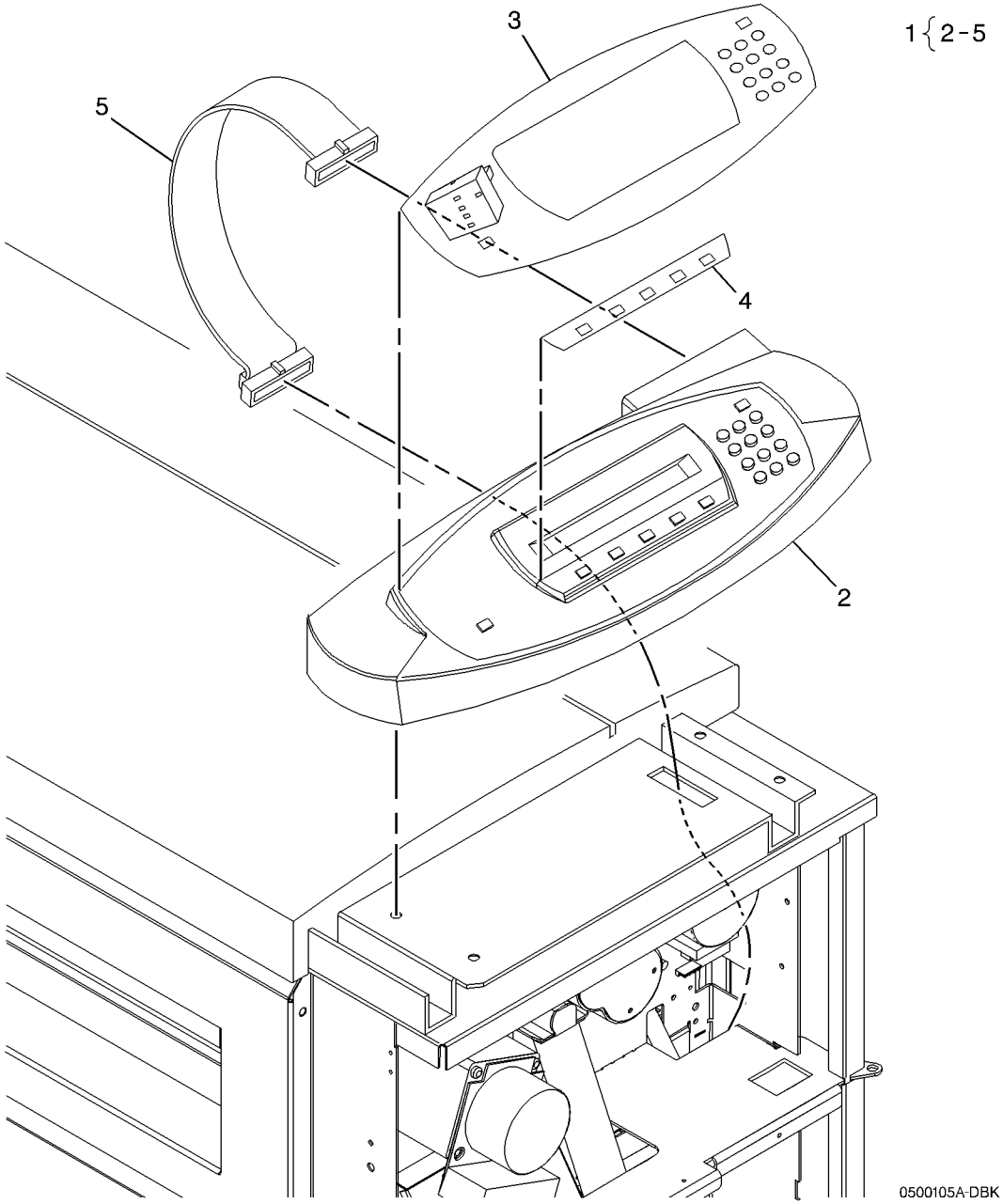
PL 1.4 Control Panel (8850)

Item	Part	Description
1	101K26083	Control Panel (**Non RoHS**)
2	096E78252	Control Panel Label (**Non RoHS**)
3	–	ESD Insulator (P/O Item 1)
4	–	Display (P/O Item 1)
5	–	Control Console Housing (P/O Item 1)
6	–	Display Housing (P/O Item 1)
7	162K23421	Control Console to Main PWB (A3) (**Non RoHS**)
–	962K56450	Control Console to Main PWB (A3) (**RoHS**)



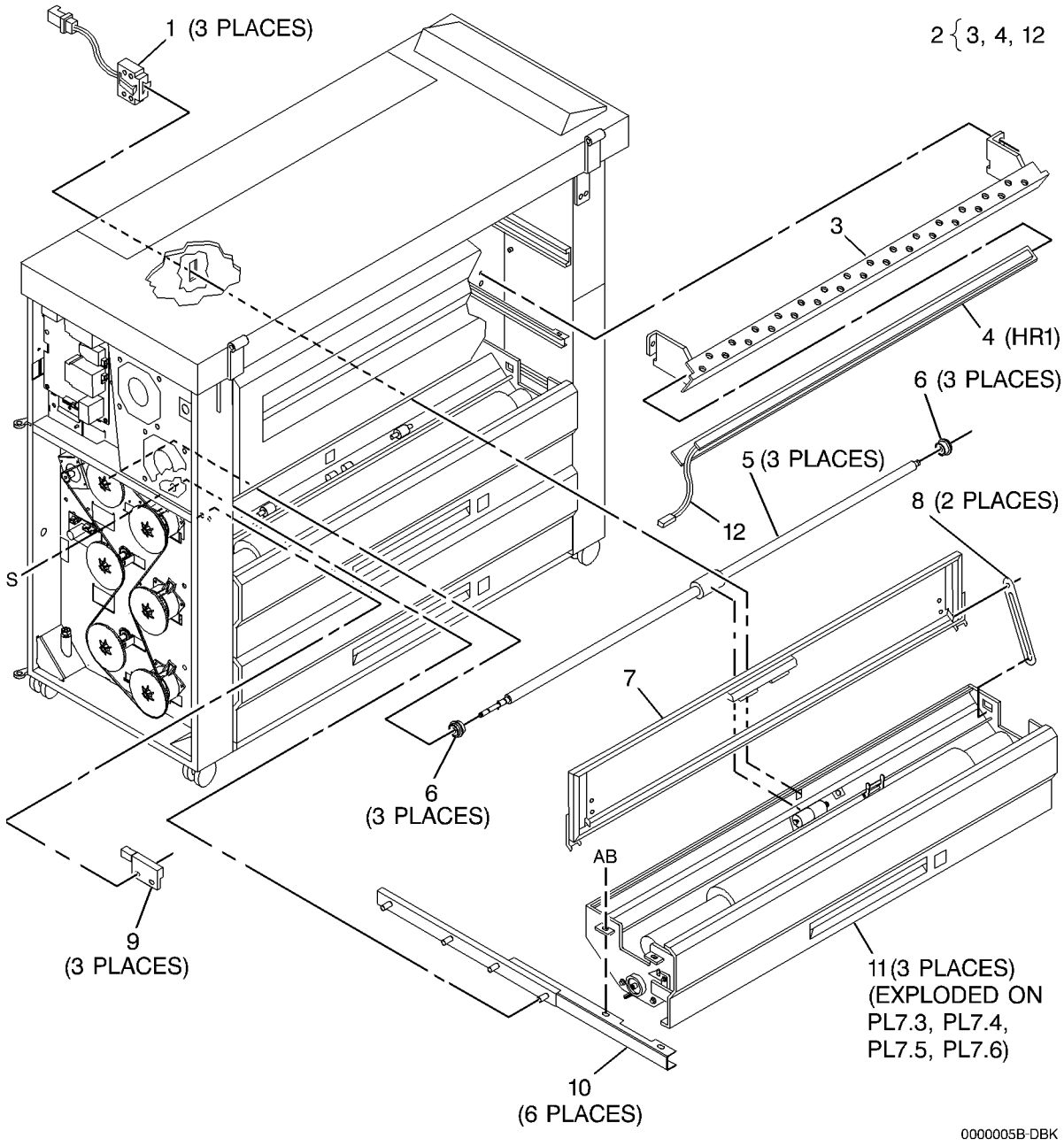
PL 1.5 Control Panel (510dp)

Item	Part	Description
1	101K48842	Control Panel Assembly (**Non RoHS**)
–	101K56120	Control Panel Assembly (White) (**Non RoHS**)
–	101K57150	Control Panel Assembly (510dp) (**RoHS**)
2	–	Control Panel (P/O Item 1)
3	892E94680	UI Label (**Non RoHS**)
–	893E48200	UI Label (White) (**RoHS**)
4	892E94690	UI Button Label (**Non RoHS**)
5	162K23421	Control Console to Main PWB (A3) (**Non RoHS**)
–	962K56450	Control Console to Main PWB (A3) (**RoHS**)



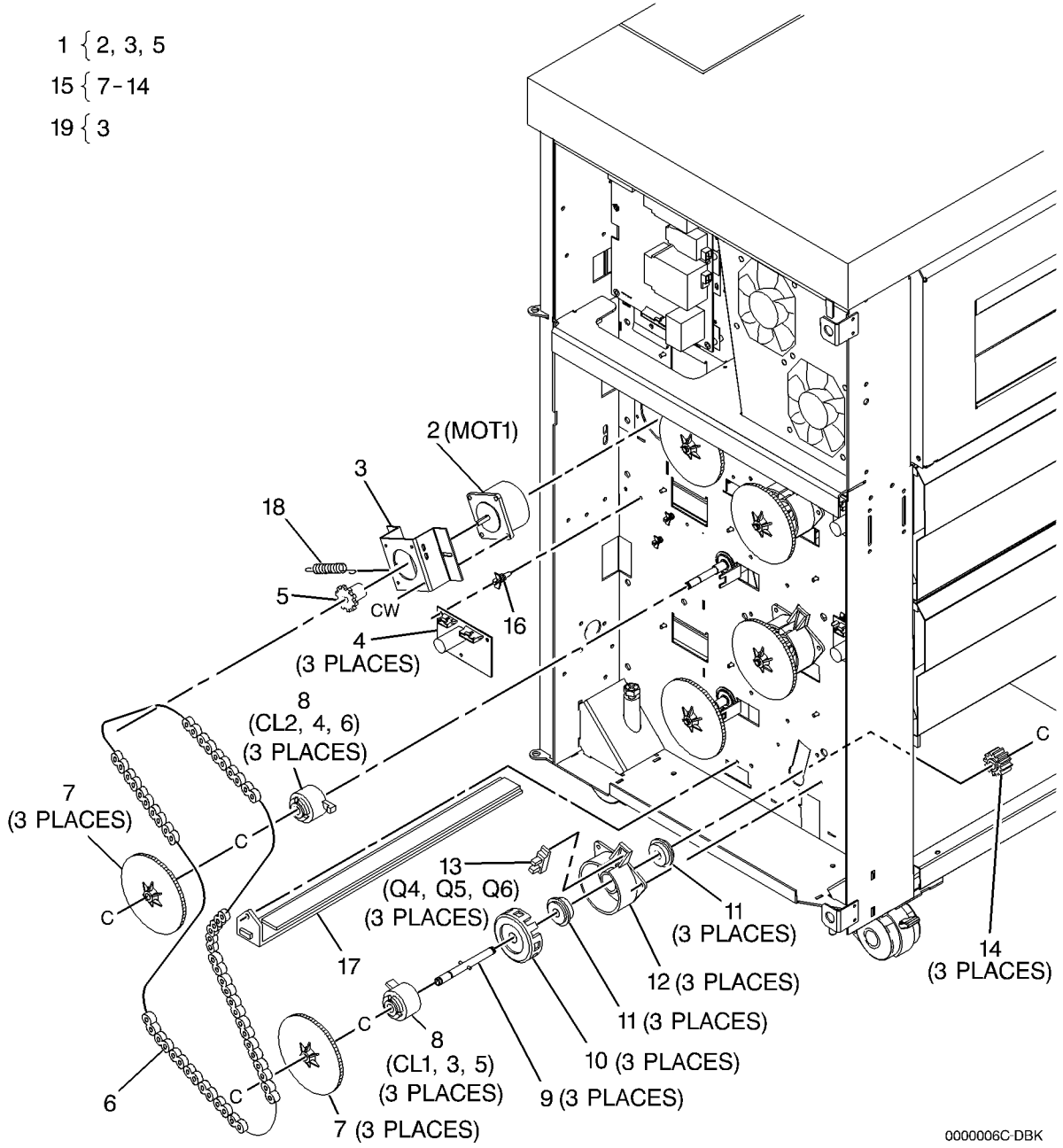
PL 7.1 Roll Supply Feed Assembly

Item	Part	Description
1	130K51801	Position Sensor
2	–	Heater Assembly (Not Spared)
3	–	Heater Housing (Not Spared)
4	126K07330	Upper Heater (Roll 1) (HR1) (REP 7.11) (**Non RoHS**)
–	126K23340	Upper Heater (Roll 1) (HR1) (**RoHS**)
5	059K52970	Roll Feed Drive Roll (**RoHS**)
–	022K79970	Roll Feed Drive Roll (REP 7.4) (**Non RoHS**)
6	413W31054	Bearing
7	802K39400	Drawer Cover (**Non RoHS**)
8	830E76230	Link (**Non RoHS**)
9	130E02271	Drawer Interlock Switch (**Non RoHS**)
–	130E12140	Drawer Interlock Switch (**RoHS**)
10	010K01351	Slide (**Non RoHS**)
–	010K04590	Slide (**RoHS**)
11	050K52841	Sealed Roll Media Drawer Assembly (8850) (REP 7.1) (**Non RoHS**)
–	–	Unsealed Roll Media Drawer Assembly (Not Spared) (510dp) (REP 7.1)
12	162K28610	Jumper Harness (**Non RoHS**)
–	962K56480	Jumper Harness (**RoHS**)



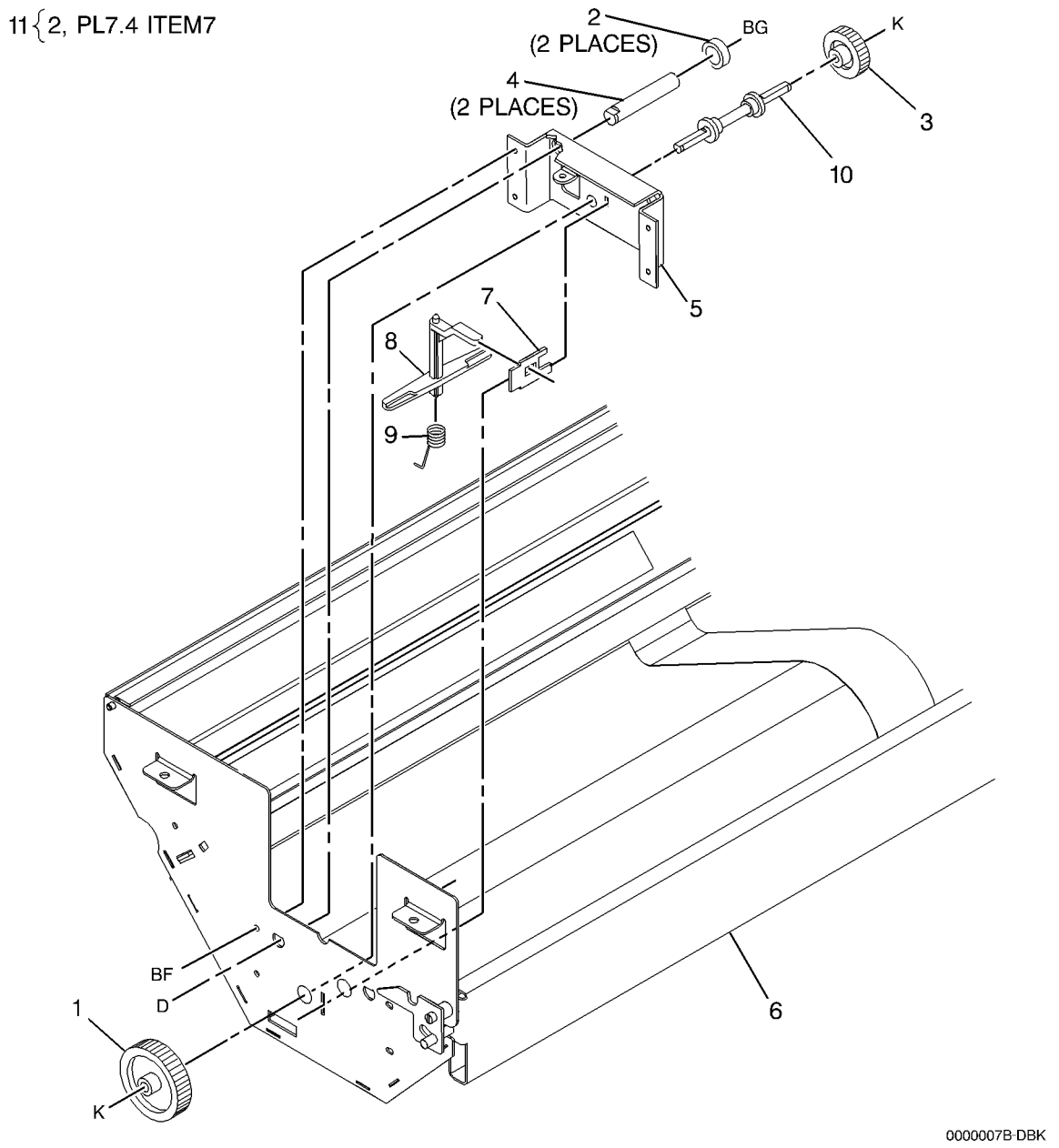
PL 7.2 Roll Supply Drives

Item	Part	Description
1	007K12593	Roll Drive Motor Assembly (W/TAG 44, TAG 48) (**Non RoHS**)
–	007K14390	Roll Drive Motor Assembly (W/TAG 44, TAG 48) (**RoHS**)
2	127K44221	Roll Drive Motor (MOT1) (W/TAG 48) (REP 7.9) (**Non RoHS**)
–	127K54850	Roll Drive Motor (MOT1) (W/TAG 48) (REP 7.9) (**RoHS**)
3	–	Bracket (P/O Item 1)
4	140K15954	Drive Motor PWB (W/TAG 44) (**Non RoHS**)
–	960K27750	Drive Motor PWB (W/TAG 44) (**RoHS**)
5	–	Main Drive Sprocket (P/O Item 1) (15T)
6	–	Chain (Not Spared)
7	007E19072	Sprocket (50T)
8	121E20440	Clutch (CL1-6) (REP 7.5 7.6)
9	–	Rewind Shaft (Not Spared)
10	005E06810	Encoder Disk (REP 7.12)
11	413W30854	Bearing
12	–	Rewind Housing (Not Spared)
13	130E03250	Motion Sensor (Q4, Q5, Q6) (REP 7.7)
14	007E14610	Rewind Drive Gear (12T)
15	007K05760	Rewind Drive Assembly (**Non RoHS**)
–	007K14361	Rewind Drive Assembly (**RoHS**)
16	–	Standoff (Not Spared)
17	126K07340	Lower Media Roll Heater (Roll 3) (REP 7.10) (**Non RoHS**)
–	126K23330	Lower Media Roll Heater (Roll 3) (**RoHS**)
18	809E46680	Motor Spring
19	604K16990	Motor Bracket Repair Kit (W/TAG 11) (**Non RoHS**)



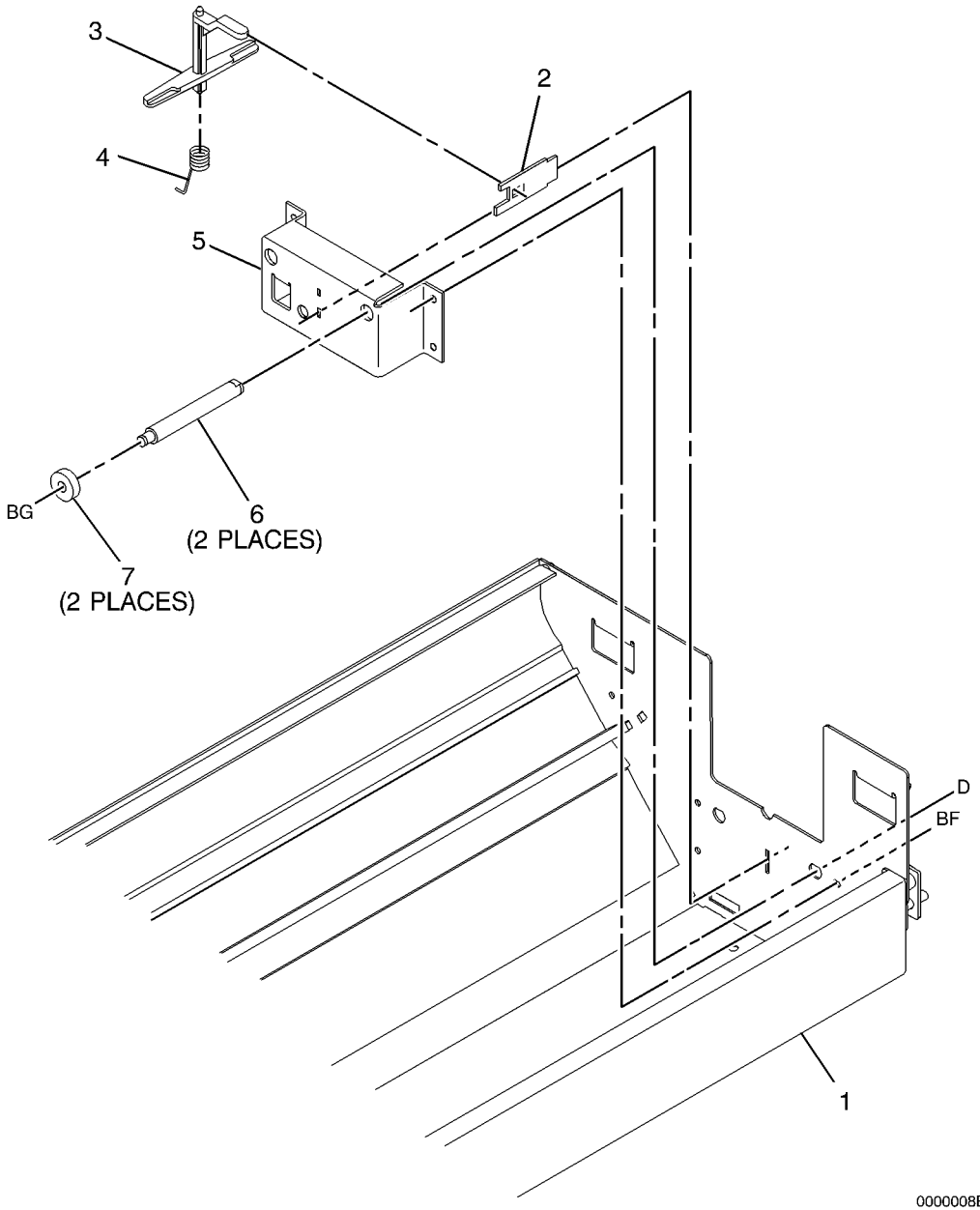
PL 7.3 Roll Supply Drawer Components (Part 1 of 4)

Item	Part	Description
1	007E14600	Rewind Gear (32T) (REP 7.2)
2	022E11540	Support Roller
3	007E14650	Rewind Internal Gear (20T) (REP 7.2)
4	029E14760	LH Support Pin
5	–	LH Cradle Bracket (P/O PL7.1 Item 11)
6	–	Drawer Frame (P/O PL7.1 Item 11)
7	–	LH Roll Lock (P/O PL7.1 Item 11)
8	003E17610	Roll Lock
9	009E27340	Roll Lock Spring (**Non RoHS**)
10	029E12930	Rewind Shaft
11	604K17800	Support Roller Kit (**Non RoHS**)



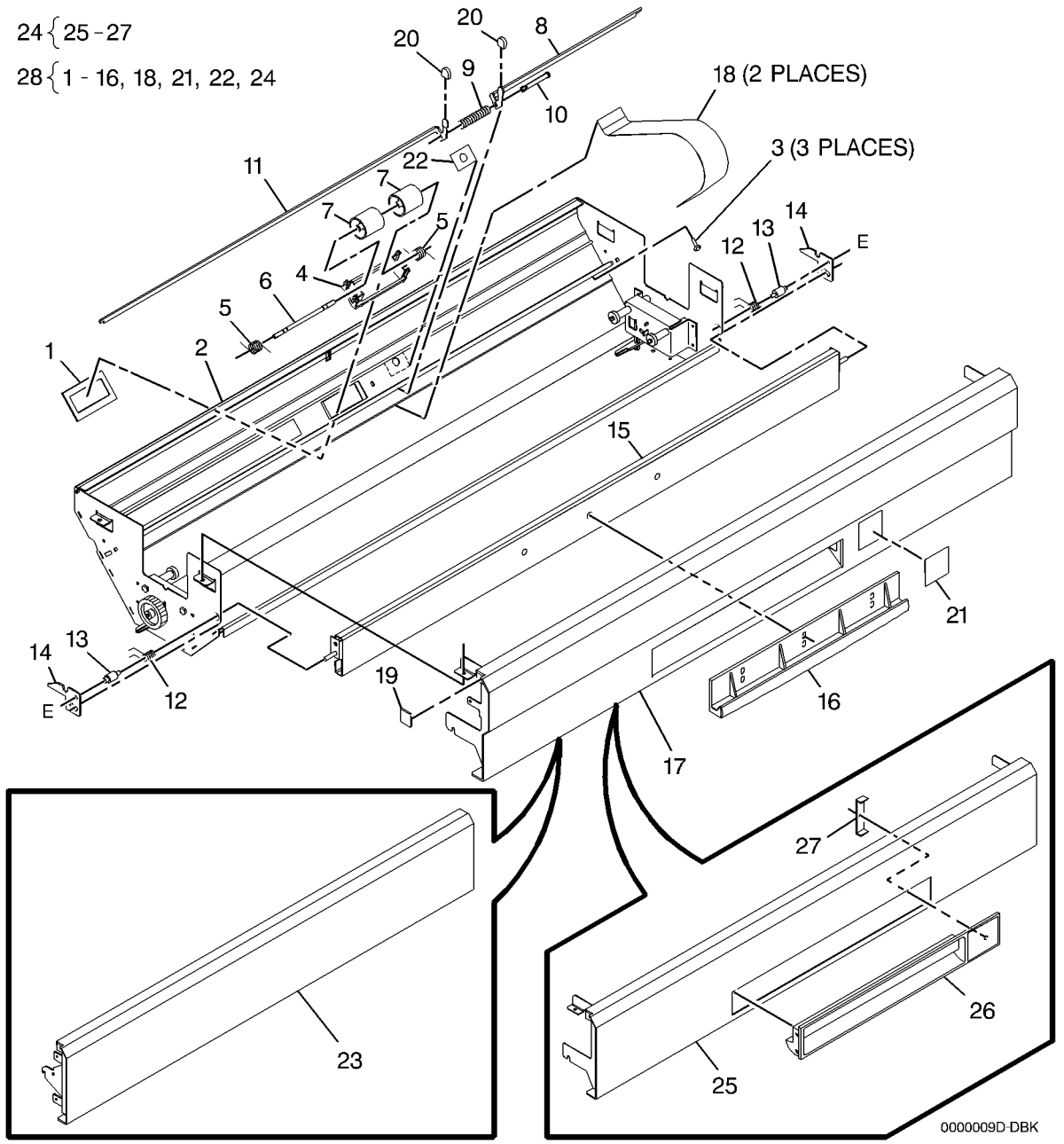
PL 7.4 Roll Supply Drawer Components (Part 2 of 4)

Item	Part	Description
1	–	Drawer Frame (P/O PL7.1 Item 11)
2	–	RH Roll Lock (P/O PL7.1 Item 11)
3	003E17610	Roll Lock
4	009E27340	Roll Lock Spring (**Non RoHS**)
5	–	RH Cradle Bracket (P/O PL7.1 Item 11)
6	029E14750	RH Support Pin
7	022E11540	Support Roller



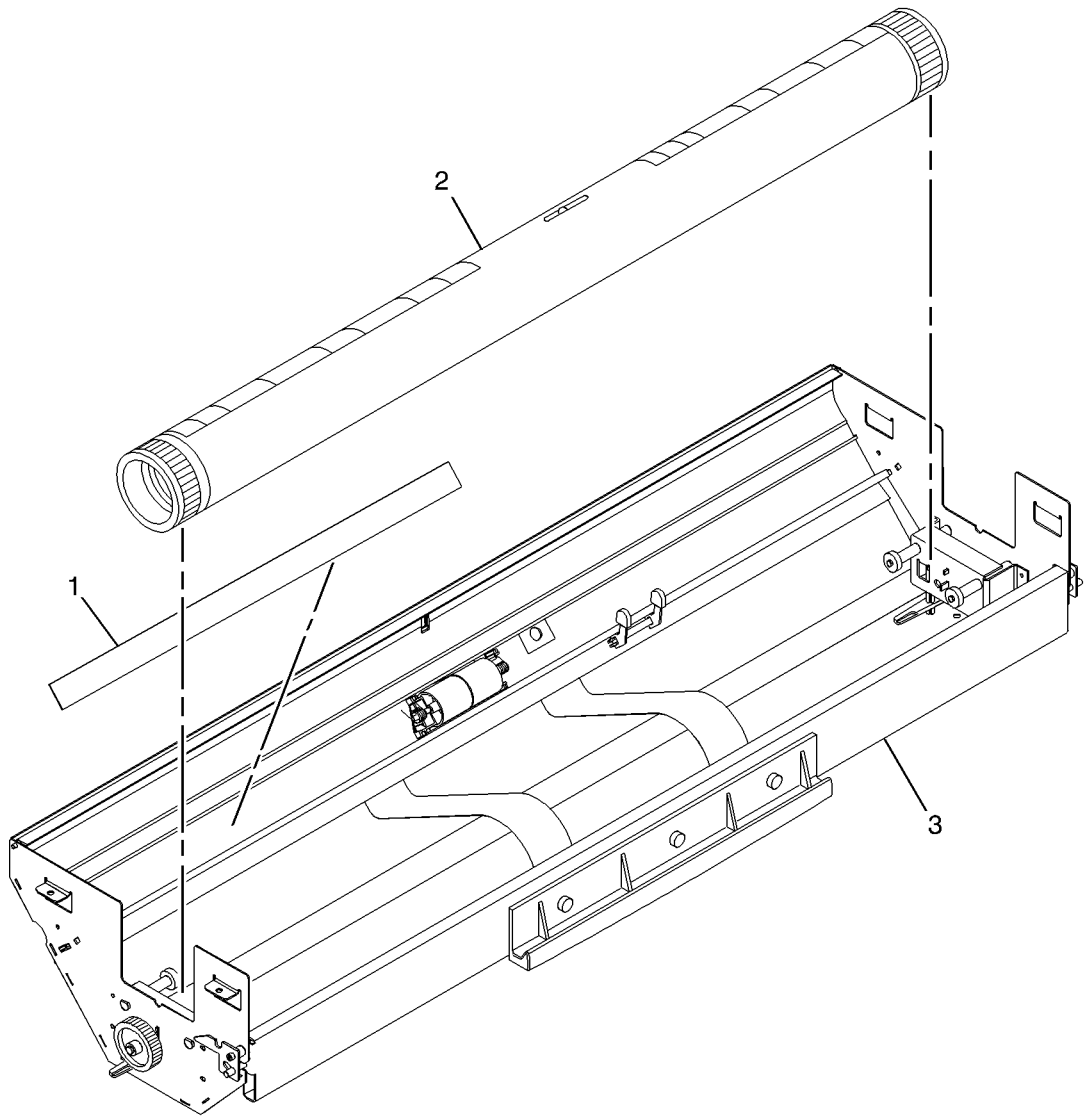
PL 7.5 Roll Supply Drawer Components (Part 3 of 4)

Item	Part	Description
1	035E61780	Gasket
2	–	Drawer Frame (P/O PL7.1 Item 11)
3	–	Baffle Stop (P/O PL7.1 Item 11)
4	830E63720	Bracket
5	809E45230	Pinch Roll Spring
6	–	Pinch Roll Shaft (P/O PL7.1 Item 11)
7	022E10060	Roll Feed Pinch Roll (REP 7.3)
8	–	RH Pinch Shaft (P/O PL7.1 Item 11)
9	009E32790	Lock Spring
10	029E14460	Retainer
11	–	LH Pinch Shaft (P/O PL7.1 Item 11)
12	009E27330	Drawer Latch Spring
13	029E13701	Latch Pin (**Non RoHS**)
–	029E49930	Latch Pin (**RoHS**)
14	–	Supply Drawer Latch (P/O PL7.1 Item 11)
15	003K19960	Bracket (**RoHS**)
–	030K74790	Bracket (**Non RoHS**)
16	003K07581	Handle (8850) (**Non RoHS**)
–	003E71730	Handle (510dp-White) (**RoHS**)
–	003E69900	Handle (510dp) (**Non RoHS**)
–	003E70260	Handle (**Non RoHS**)
17	802K39390	Drawer Cover (8850) (**Non RoHS**)
18	038K09190	Paper Guide
19	121E07680	Magnet
20	–	Handle (P/O PL7.1 Item 11)
21	893E48290	Drawer Label (1) (510dp-Quartz White) (**RoHS**)
–	893E48300	Drawer Label (1, 2, 3) (510dp-Quartz White) (**RoHS**)
–	892E95810	Drawer Label (1) (510dp-Purple) (**RoHS**)
–	892E95820	Drawer Label (2 & 3) (510dp-Purple) (**Non RoHS**)
22	–	Label (Lead Edge) (Not Spared)
23	802K81730	False Front (**Non RoHS**)
–	802K95160	False Front (**RoHS**)
24	050K54630	Drawer Cover Assembly (Gray) (**Non RoHS**)
–	050K59440	Drawer Cover Assembly (White) (**Non RoHS**)
–	050K62260	Drawer Cover Assembly (**RoHS**)
25	–	Drawer (P/O Item 24)
26	050E21750	Bezel Drawer (**Non RoHS**)
–	050E22880	Bezel Drawer (White)
27	019E62030	Clip
28	050K53430	Unsealed Drawer Kit (**Non RoHS**)
–	050K67300	Unsealed Drawer Kit (**RoHS**)



PL 7.6 Roll Supply Drawer Components (Part 4 of 4)

Item	Part	Description
1	–	Label (Media Load) (P/O PL7.1 Item 11)
2	052K03581	Roll Support Tube Assembly (**Non RoHS**)
–	052K09330	Roll Support Tube Assembly (**RoHS**)
3	–	Drawer Frame (P/O PL7.1 Item 11)



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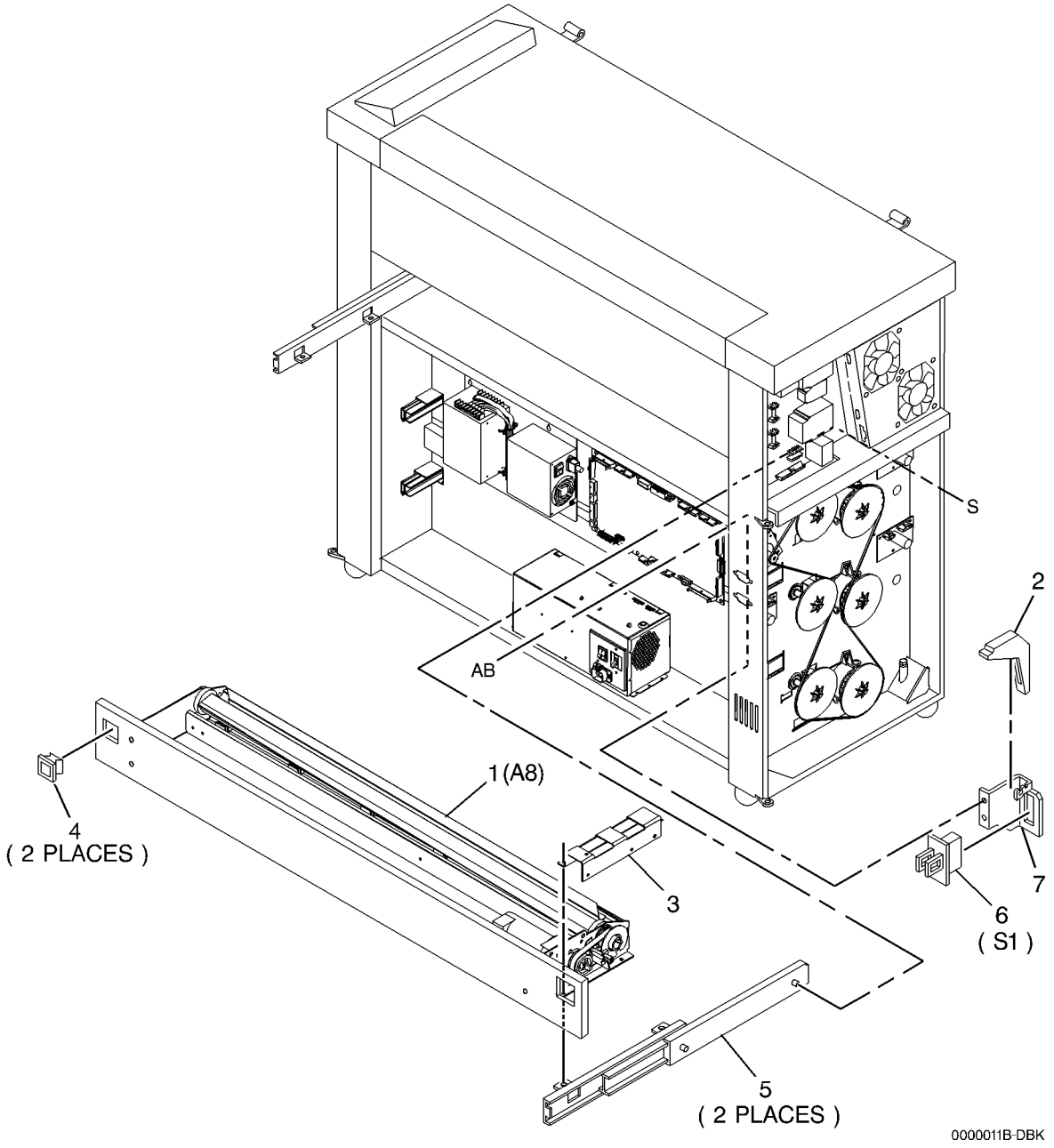
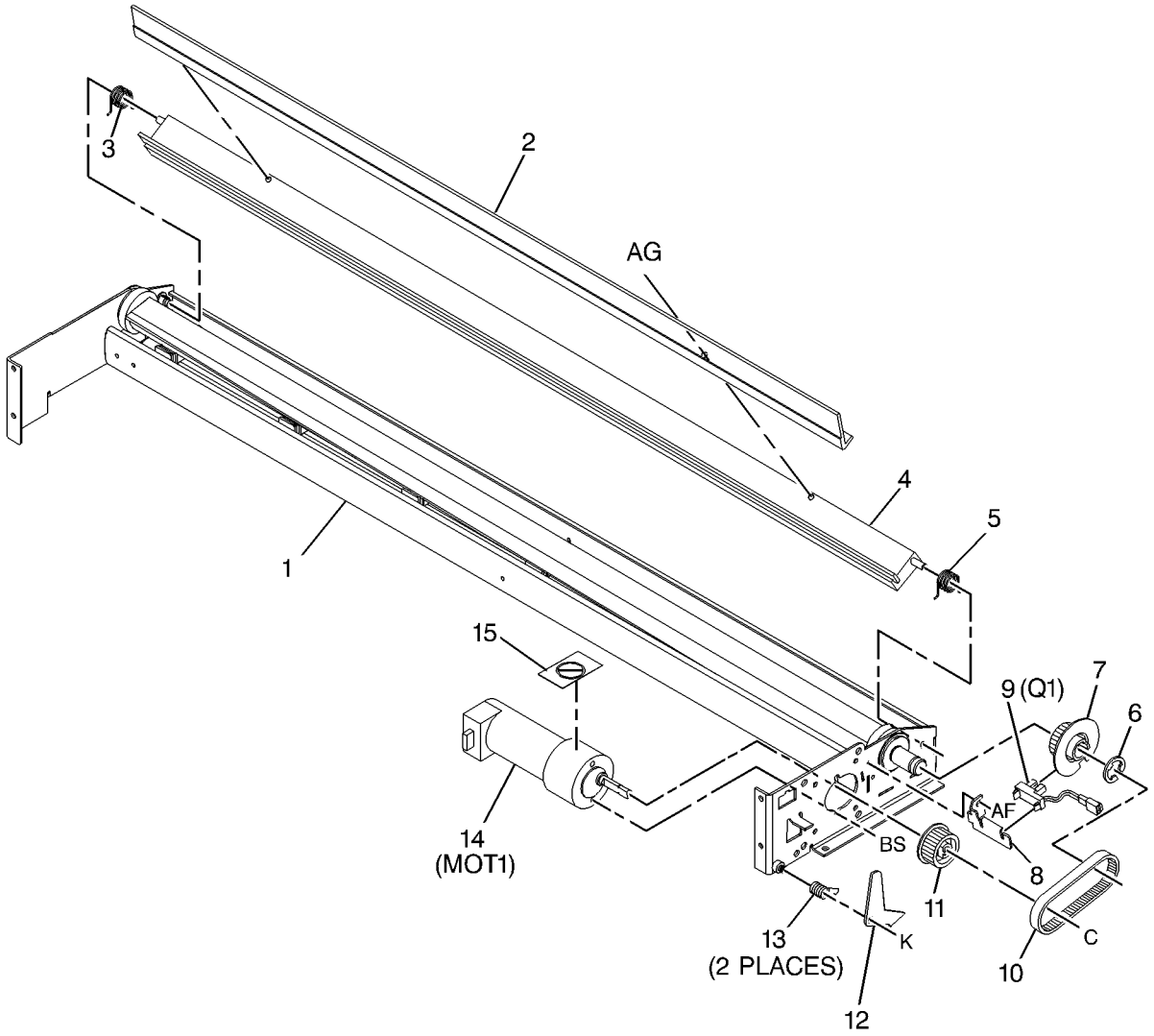
PL 7.7 Media Cutter Assembly

Item	Part	Description
1	037K01320	Media Cutter Assembly (8850) (ADJ 7.1) (**Non RoHS**)
–	037K01380	Media Cutter Assembly (510dp) (**Non RoHS**)
–	037K01440	Media Cutter Assembly (ADJ 7.1) (**RoHS**)
2	011E04470	Cutter Interlock Actuator Lever
3	–	Bracket (Not Spared)
4	003E18781	Latch
5	010K01360	Media Cutter Slide (**Non RoHS**)
–	010K04600	Media Cutter Slide (**RoHS**)
6	110E02640	Media Cutter Drawer Interlock Switch (S1)
7	–	Bracket (Not Spared)



PL 7.8 Media Cutter Components

Item	Part	Description
1	–	Media Cutter Frame (P/O PL7.7 Item 1)
2	038K14020	Media Exit Guide (**Non RoHS**)
–	038K17170	Media Exit Guide (**RoHS**)
3	009E30860	LH Blade Spring (**Non RoHS**)
–	009E30861	LH Blade Spring (**RoHS**)
4	–	Cutter Stationary Bar (P/O PL7.7 Item 1)
5	009E30870	RH Blade Spring (**Non RoHS**)
–	009E30871	RH Blade Spring (**RoHS**)
6	028E07430	Retaining Ring (**RoHS**)
7	020E18830	Cutter Drive Pulley (34T) (**Non RoHS**)
–	020E48220	Cutter Drive Pulley (34T) (**RoHS**)
8	–	Sensor Bracket (P/O PL7.7 Item 1)
9	130K66730	Cutter Home Sensor (Q1) (REP 8.14) (**Non RoHS**)
–	130K75150	Cutter Home Sensor (Q1) (**RoHS**)
10	423W57550	Drive Belt
11	–	Drive Pulley (34T) (P/O PL7.7 Item 1)
12	003E16521	Cutter Latch (**Non RoHS**)
13	009E27340	Latch Spring (**Non RoHS**)
–	009E27341	Latch Spring (**RoHS**)
14	127K26580	Cutter Drive Motor (MOT1) (ADJ 8.3) (**Non RoHS**)
–	127K54880	Cutter Drive Motor (MOT1) (**RoHS**)
15	–	Label (Hand Cut Caution) (Not Spared)



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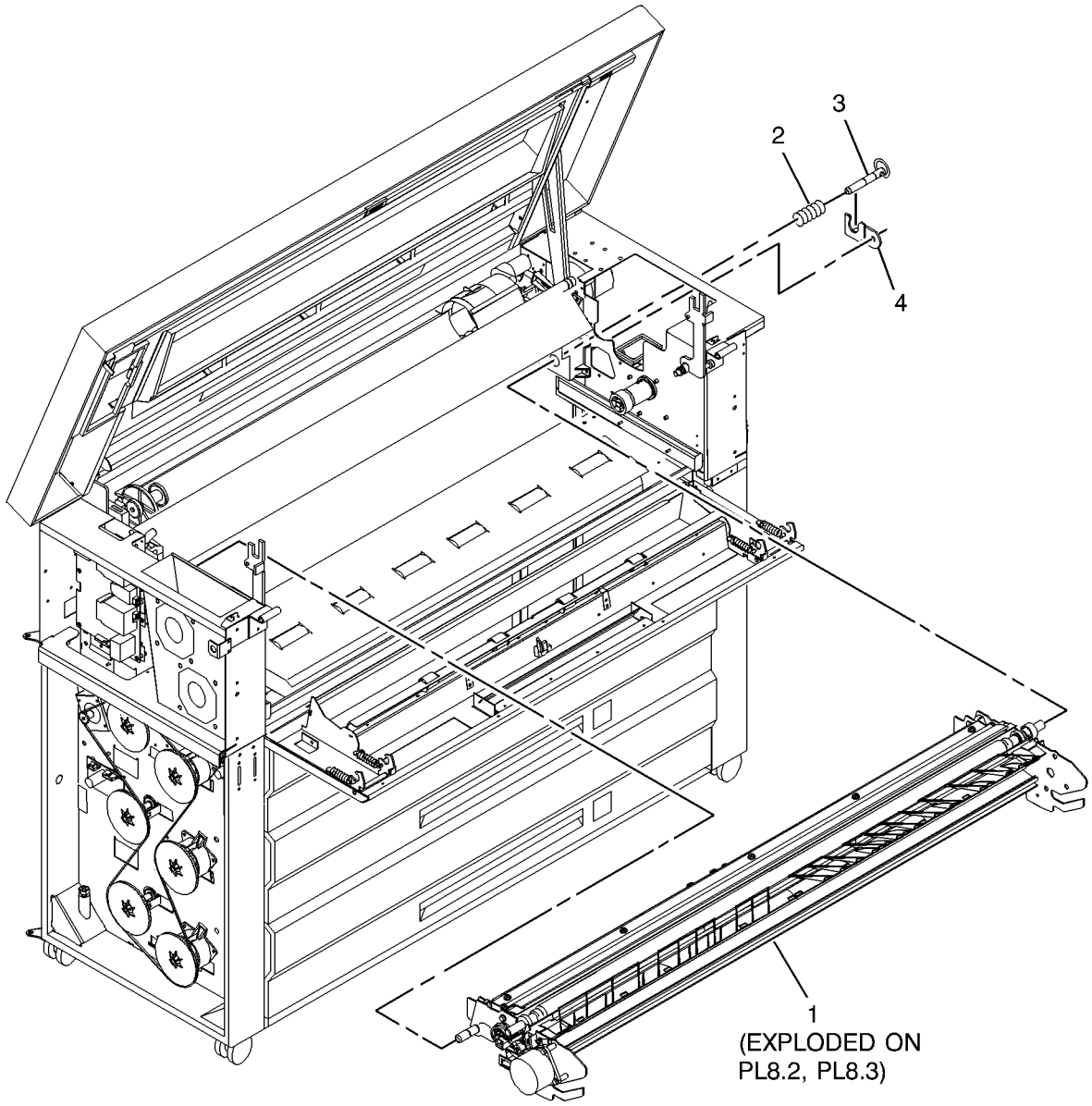
PL 8.1 Media Transport Module

Item	Part	Description
1	059K27832	Media Transport Module (W/TAG 45, TAG 46) (REP 8.1, ADJ 8.1) (**Non RoHS**)
–	059K51860	Media Transport Module (REP 8.1, ADJ 8.1) (**RoHS**)
–	059K51861	Media Transport Module (REP 8.1, ADJ 8.1) (**RoHS**)
2	009E32510	Compression Spring
3	029K01111	Pin (**Non RoHS**)
–	029K04390	Pin (**RoHS**)
4	849E21220	Clamp (**Non RoHS**)
–	849E76340	Clamp (**RoHS**)



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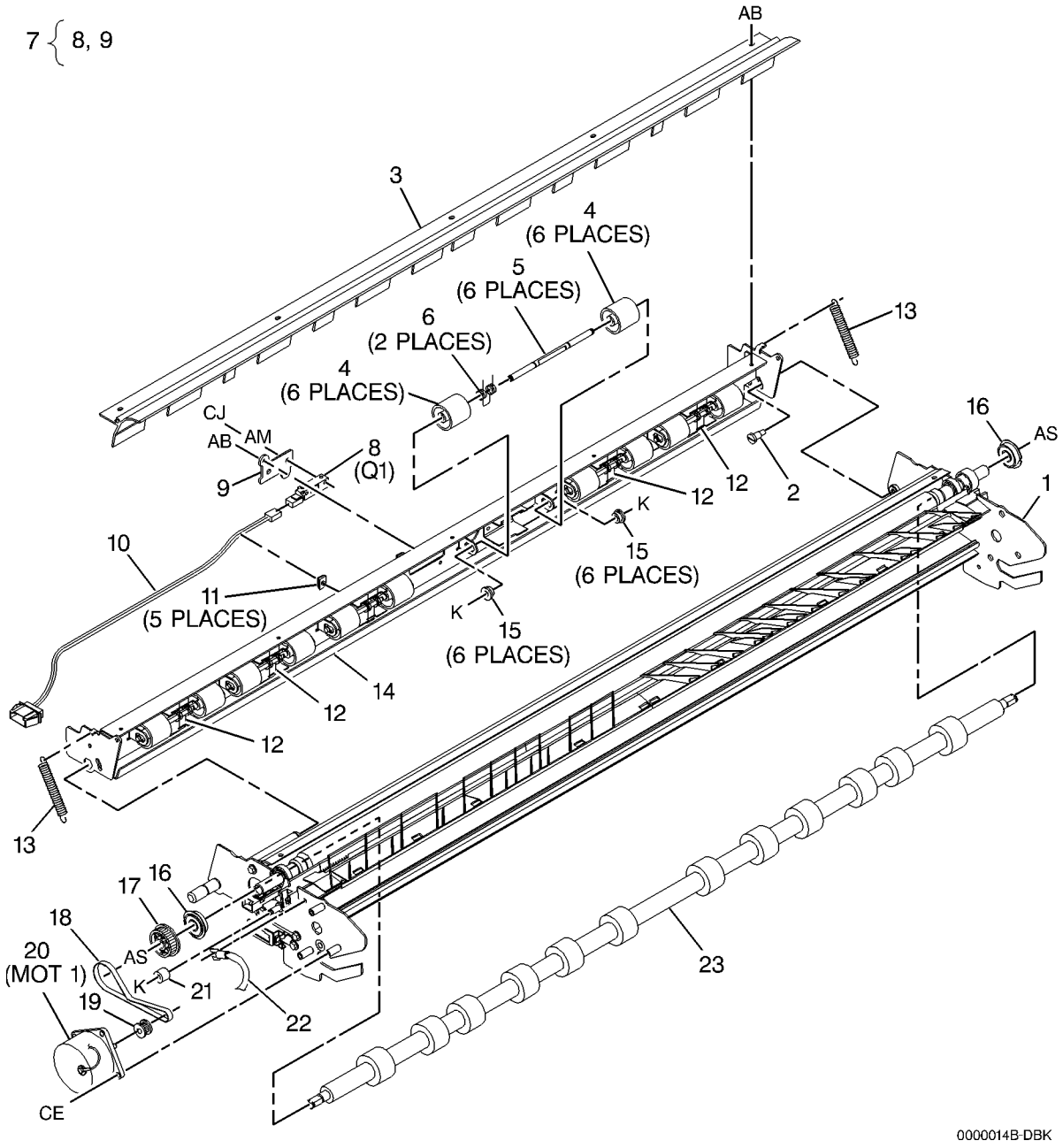
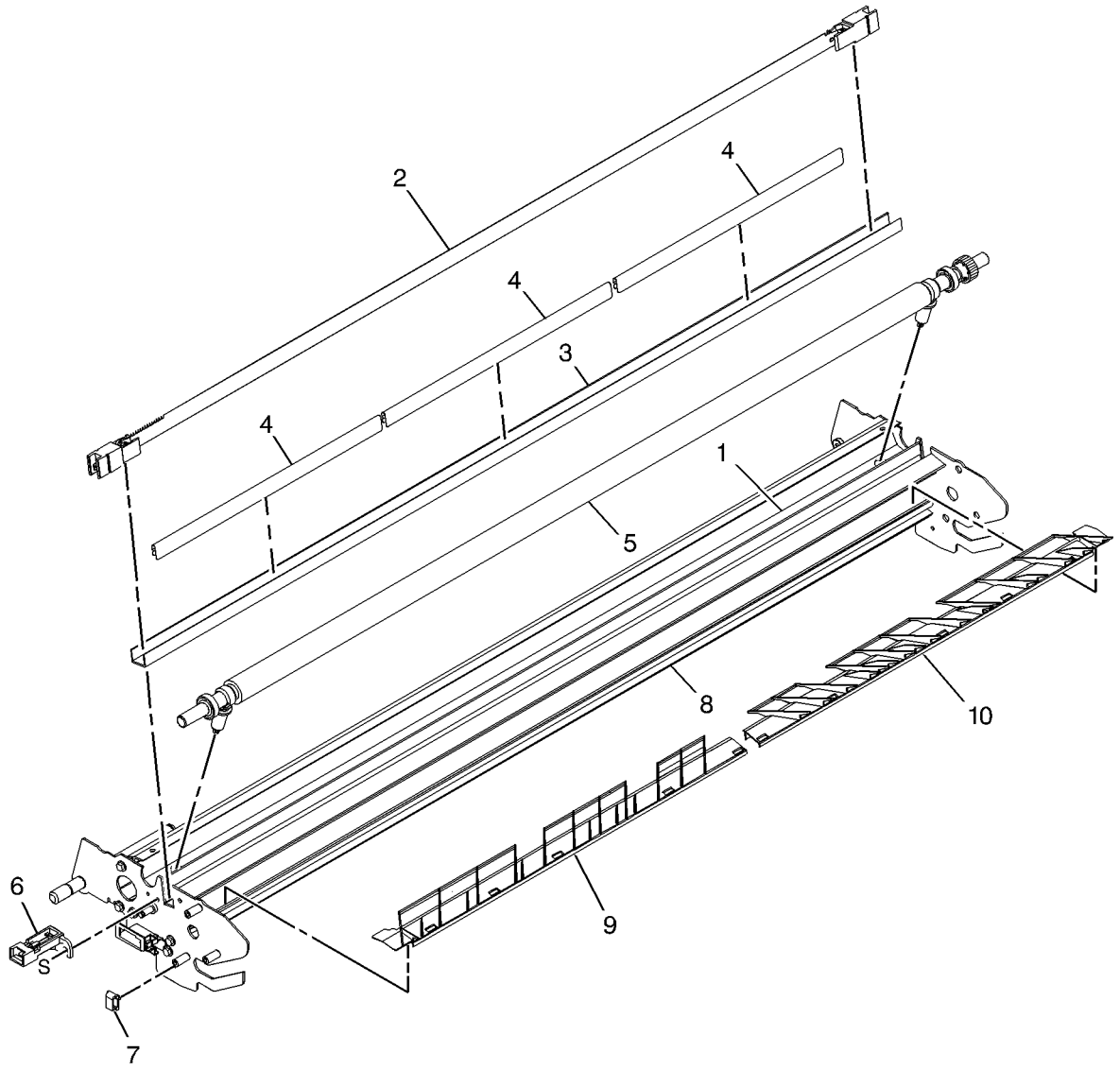
PL 8.2 Media Registration Components (Part 1 of 2)

Item	Part	Description
1	–	Media Transport Frame (P/O PL8.1 Item 1)
2	026E11970	Shoulder Screw (**Non RoHS**)
–	826E32810	Shoulder Screw (**RoHS**)
3	–	Turnaround Baffle (P/O PL8.1 Item 1)
4	022E10531	Registration Pinch Roll (REP 8.12)
5	–	Pinch Roll Shaft (P/O PL8.1 Item 1)
6	009E32500	Pinch Roll Spring
7	015K57430	Media Registration Sensor Assembly (**Non RoHS**)
–	015K77690	Media Registration Sensor Assembly (**RoHS**)
8	130E10090	Media Registration Sensor (Q1) (REP 8.8)
9	–	Plate (P/O PL8.1 Item 1)
10	–	Paper Transport Harness (P/O PL8.1 Item 1)
11	019E07100	Cable Clip (P/O Item 2) (**Non RoHS**)
–	019E73930	Cable Clip (P/O Item 2) (**RoHS**)
12	–	Pinch Roll Spring (Not Spared)
13	–	Registration Support Spring (Not Spared)
14	–	Registration Support (P/O PL8.1 Item 1)
15	016E06020	Bushing
16	413W31054	Bearing
17	020E38730	Pulley (48T)
18	023E23580	Registration Drive Belt (REP 8.13)
19	020E13603	Drive Motor Pulley (18T)
20	127K04293	Media Transport Drive Motor (MOT1) (REP 8.13, ADJ 8.1 8.2) (**Non RoHS**)
–	127K53520	Media Transport Drive Motor (MOT1) (**RoHS**)
21	022E11441	Idler
22	117K40140	Ground Strap (**Non RoHS**)
–	117K45150	Ground Strap (**RoHS**)
23	006K26701	Registration Drive Roll (REP 8.17) (**Non RoHS**)
–	006K30940	Registration Drive Roll (REP 8.17) (**RoHS**)



PL 8.3 Media Registration Components (Part 2 of 2)

Item	Part	Description
1	038K14001	BTR Extrusion (ADJ 8.1)
2	029K03530	Detack Corotron (REP 9.9) (**Non RoHS**)
–	029K04360	Detack Corotron (REP 9.9) (**RoHS**)
3	–	Shield (P/O PL8.1 Item 1)
4	809E45020	Clip
5	006K26760	Bias Transfer Roll (REP 8.18) (**Non RoHS**)
–	006K30950	Bias Transfer Roll (REP 8.18) (**RoHS**)
6	030K73120	BTR Contact (**Non RoHS**)
–	068K47400	BTR Contact (**RoHS**)
7	019E07100	Cable Clip (**Non RoHS**)
–	019E73930	Cable Clip (**RoHS**)
8	–	Media Transport Frame (P/O PL8.1 Item 1)
9	055E49380	Left Media Shield
–	055E49381	Left Media Shield
10	055E49390	Right Media Shield
–	055E49391	Right Media Shield



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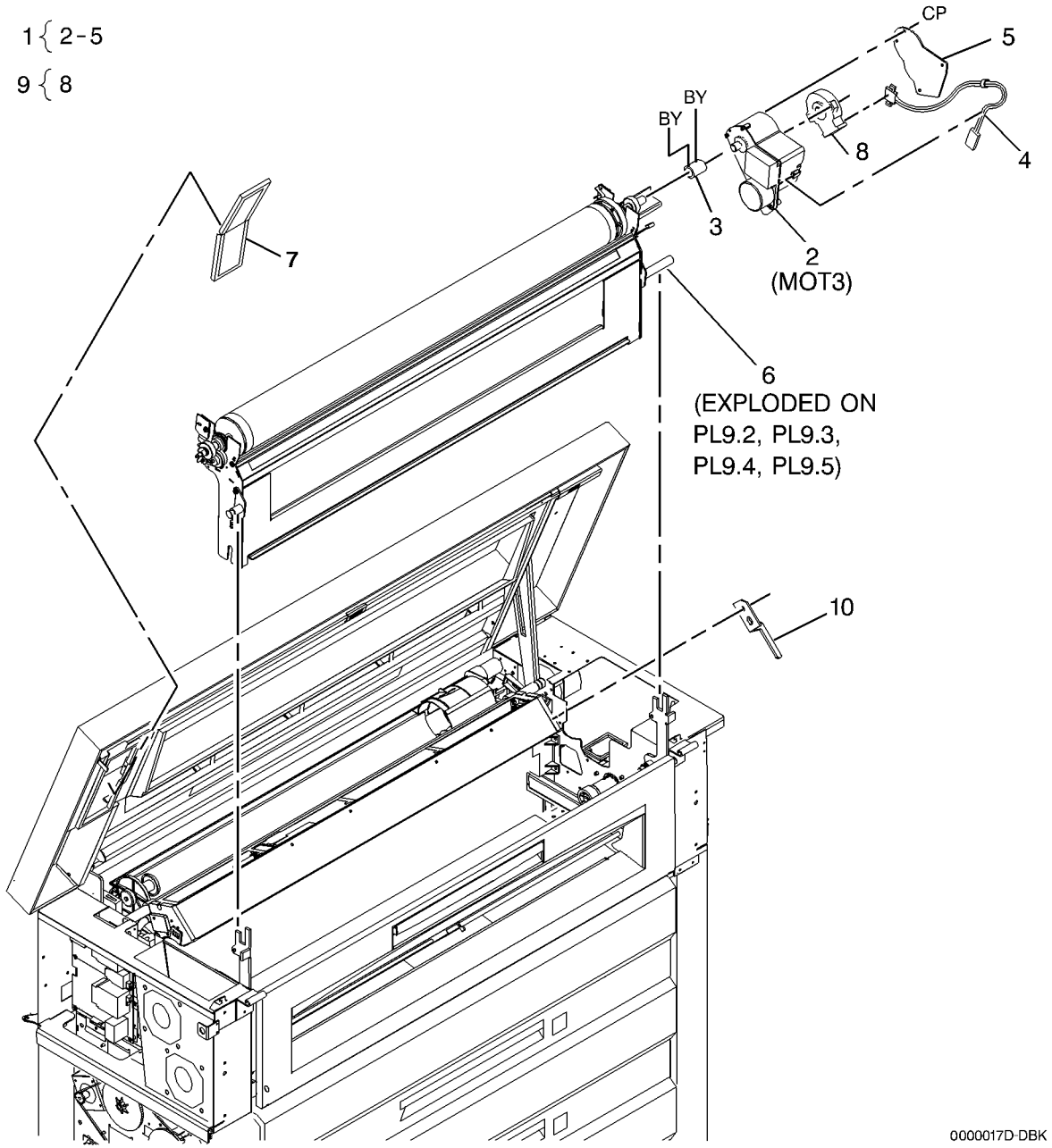
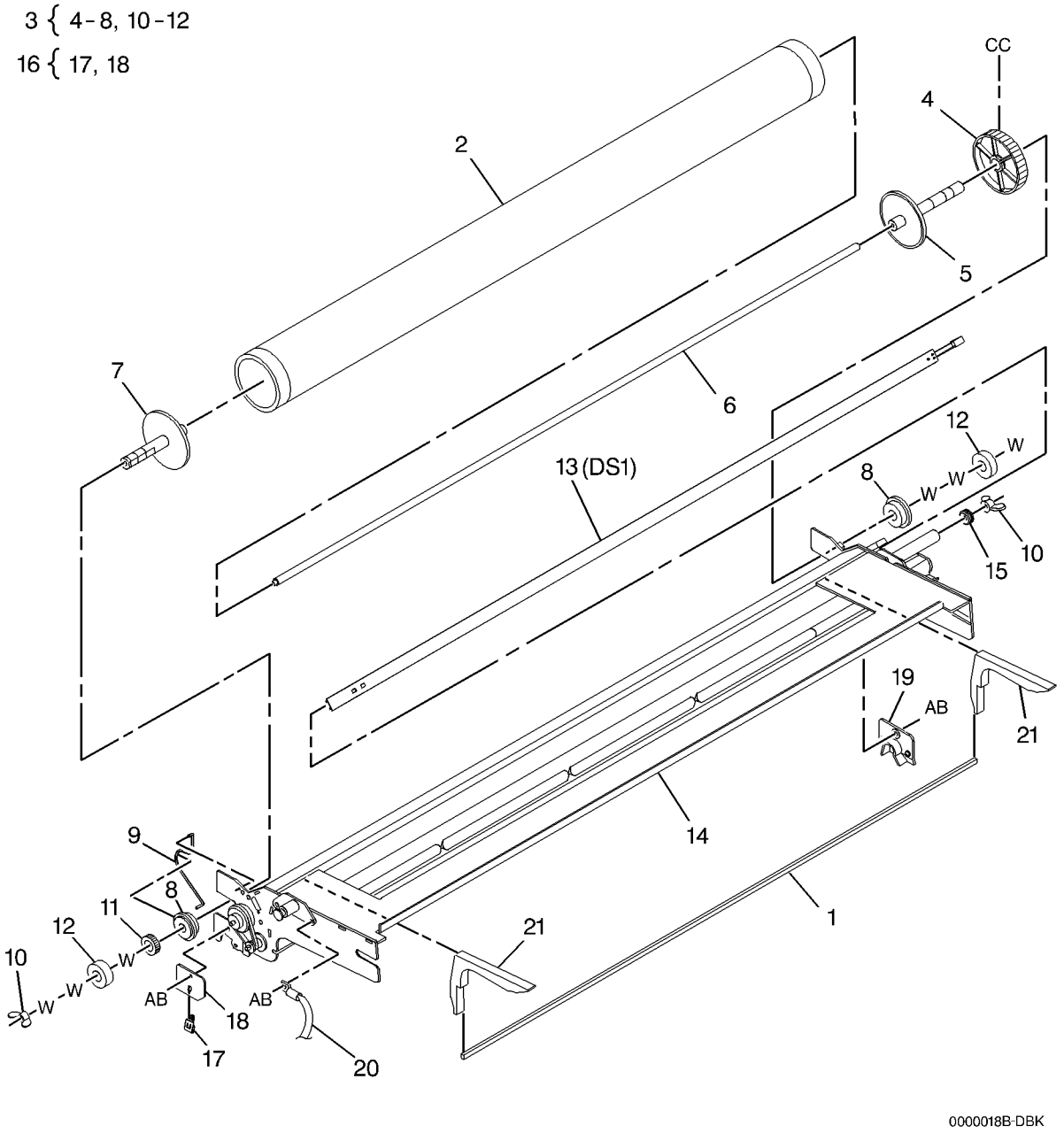
PL 9.1 Xerographic Module Assembly

Item	Part	Description
1	127K44210	Drum Drive Assembly (**RoHS**)
–	127K54900	Drum Drive Assembly (**RoHS**)
2	–	Drum Drive Motor (MOT3) (P/O Item 1)
3	005K04151	Coupling
4	–	Encoder Harness (P/O Item 1)
5	–	Cover (P/O Item 1)
6	–	Xerographic Module Assembly (Not Spared) (REP 9.1)
7	053E04750	Ozone Filter
8	–	Encoder (P/O Item 9) (REP 9.23, ADJ 8.1)
9	604K13460	Encoder Kit (**Non RoHS**)
10	030E16161	Ground Bracket



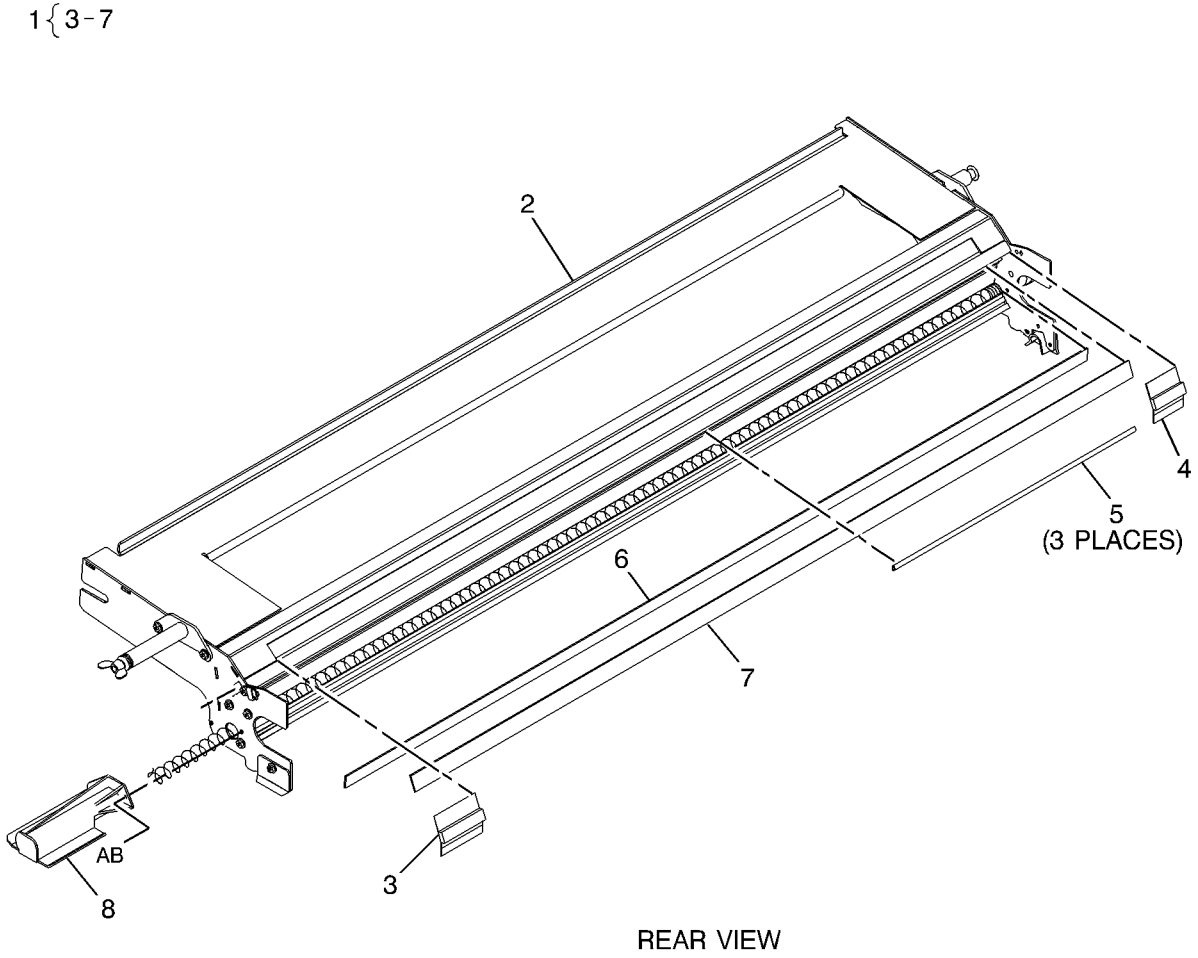
PL 9.2 Photoreceptor

Item	Part	Description
1	055E48470	NOHAD Air Seal
2	001R00535	Photoreceptor Drum (REP 9.2 9.3)
3	006K26690	Shaft Assembly (**Non RoHS**)
–	006K30930	Shaft Assembly (**RoHS**)
4	–	BTR Gear (P/O Item 3)
5	–	Right Hub (P/O Item 3)
6	–	Shaft (P/O Item 3)
7	–	Left Hub (P/O Item 3)
8	–	Bearing (P/O Item 3)
9	809E45000	Bearing Retainer
10	–	Wing Nut (P/O Item 3)
11	007E01340	Toner Auger Drive Gear
12	–	Bearing (P/O Item 3)
13	101K43880	Erase Bar (DS1) (**Non RoHS**)
–	101K57130	Erase Bar (DS1) (**RoHS**)
14	–	Xerographic Frame (P/O PL9.1 Item 6)
15	004E10130	Damper
16	013K04360	Non-Drive Bearing Assembly (510dp) (**RoHS**)
17	115E11571	Contact
18	–	Non-Drive Bearing (P/O Item 16)
19	013E21510	Drive Bearing
20	117K40130	Ground Strap (**Non RoHS**)
–	117K45140	Ground Strap (**RoHS**)
21	035E64440	NOHAD Air Seal
22	604K35000	BTR Gear Kit (**Non RoHS**)



PL 9.3 Drum Cleaning (Part 1 of 3)

Item	Part	Description
1	600K59060	Cleaner Blade Repair Kit (**Non RoHS**)
2	–	Xerographic Frame (P/O PL 9.1 Item 6, Item 1)
3	–	Blade Seal (P/O PL 9.1 Item 6, Item 1)
4	–	Blade Seal (P/O PL 9.1 Item 6, Item 1)
5	–	Cleaner Blade Retainer (P/O PL 9.1 Item 6, Item 1)
6	035K05790	Photoreceptor Seal (REP 9.17)
7	–	Cleaner Blade (P/O PL 9.1 Item 6, Item 1) (REP 9.4)
8	021K02160	Toner Exit Cap



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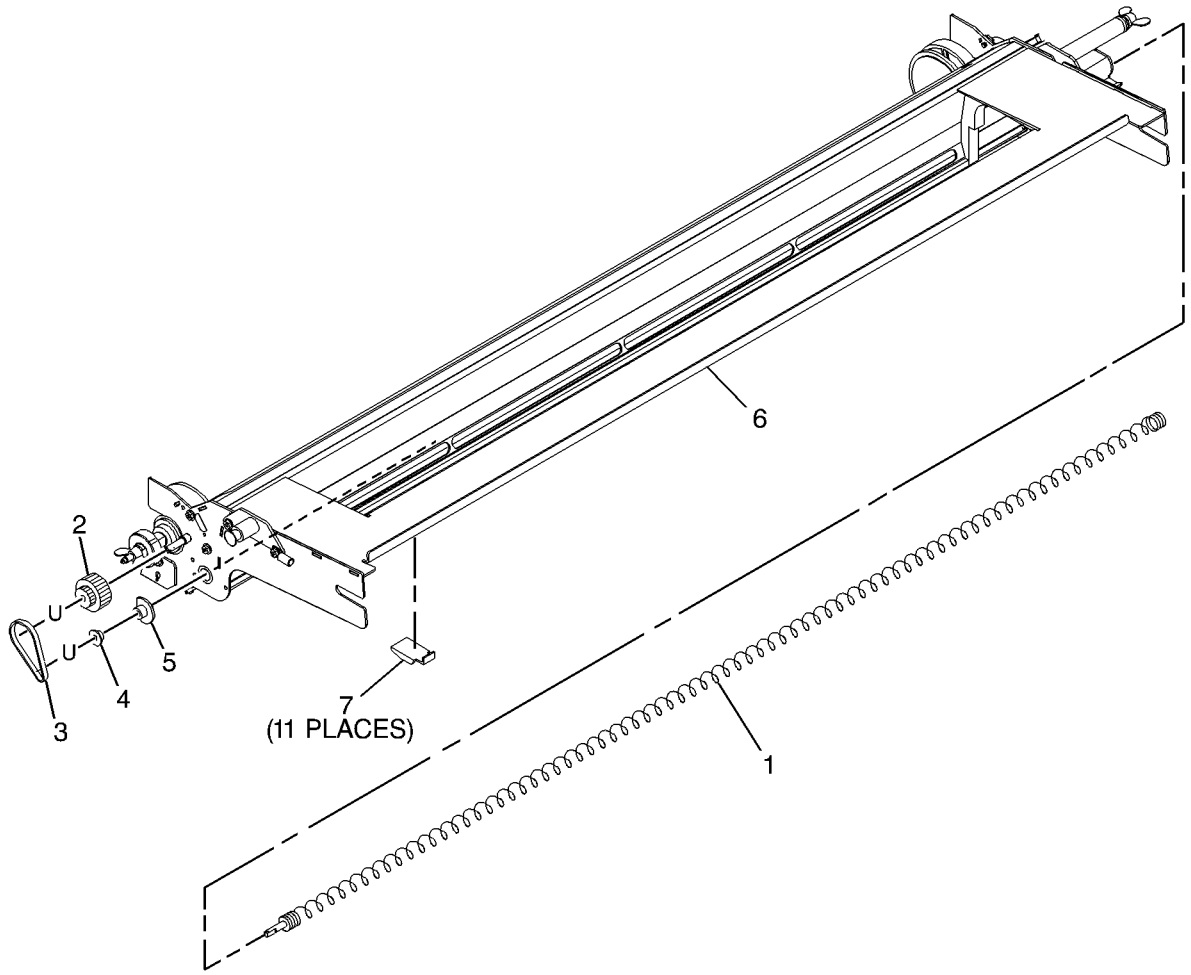
PL 9.4 Drum Cleaning (Part 2 of 3)

Item	Part	Description
1	094K00085	Waste Toner Auger
2	007E05221	Drum Drive Gear
3	023E01620	Auger Drive Belt
4	020E04350	Auger Pulley
5	013E00803	Auger Bearing (**Non RoHS**)
–	013E00804	Auger Bearing (**RoHS**)
6	–	Xerographic Frame (P/O PL9.1 Item 6)
7	038K04860	Media Guide
–	038K04861	Media Guide (**RoHS**)



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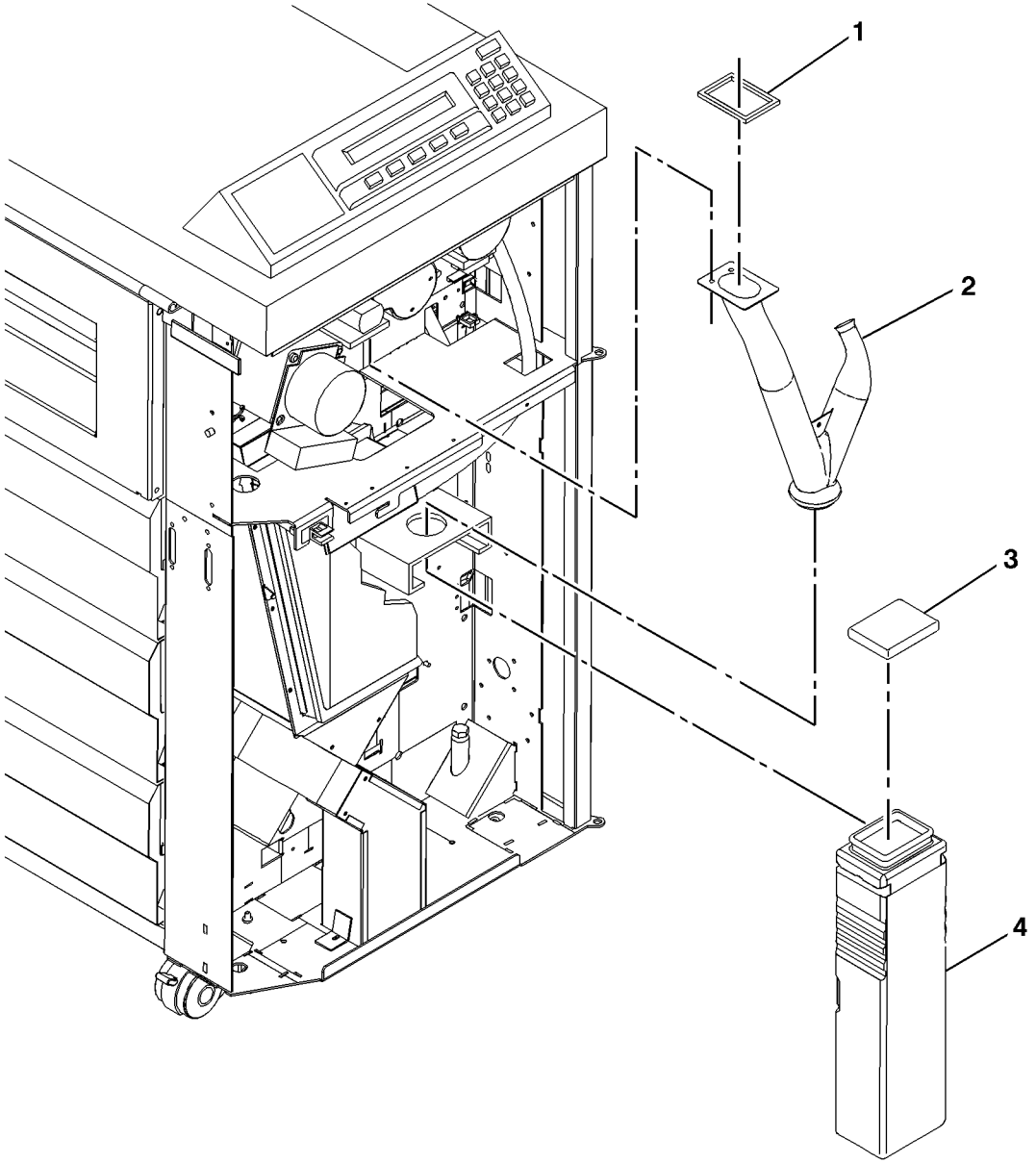
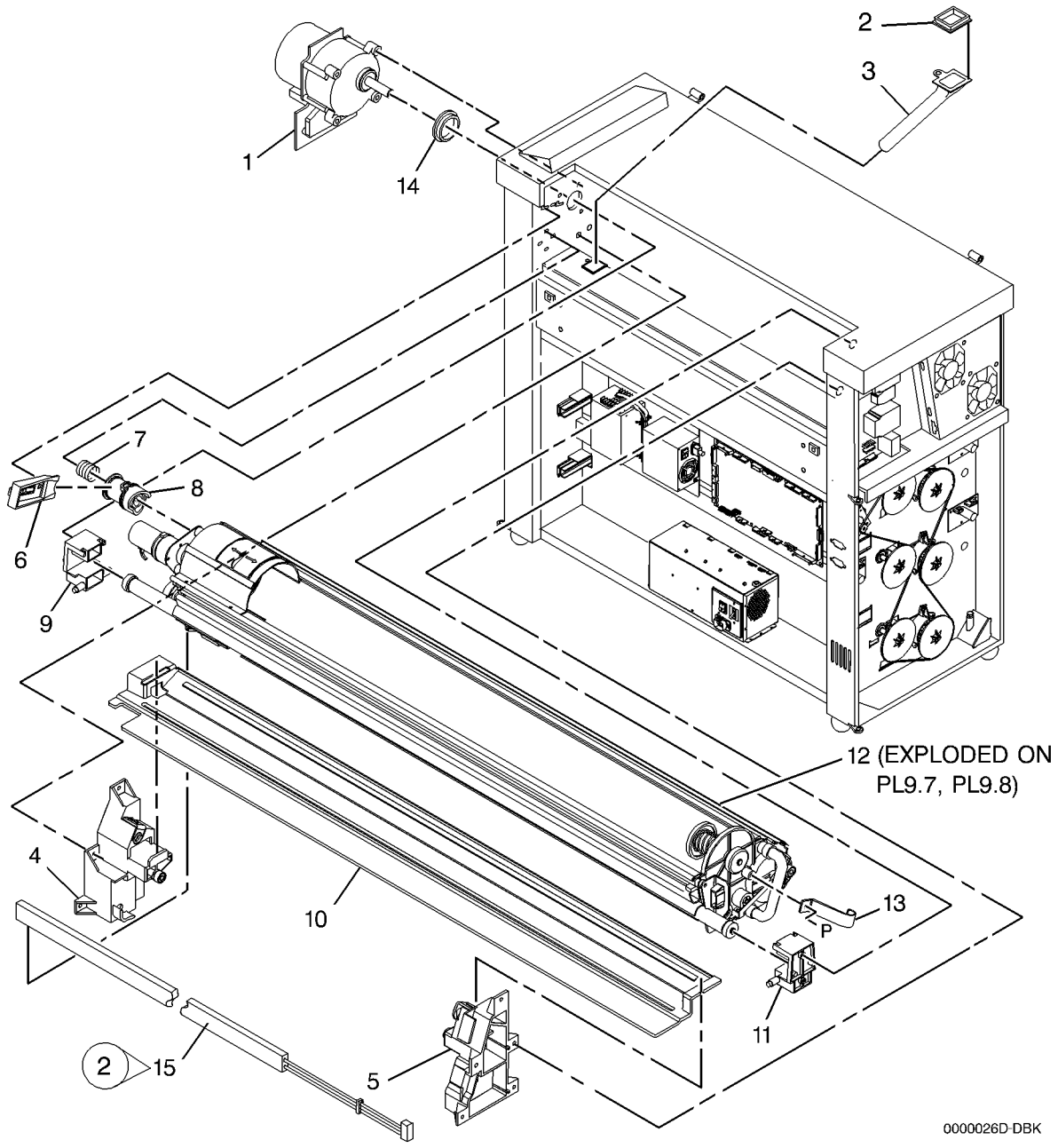
PL 9.5 Drum Cleaning (Part 3 of 3)

Item	Part	Description
1	035K05950	Toner Exit Seal
2	054E06533	Waste Toner/Developer Collection Tube
3	035K05941	Waste Bracket Seal
4	–	Bottle (Not Spared)



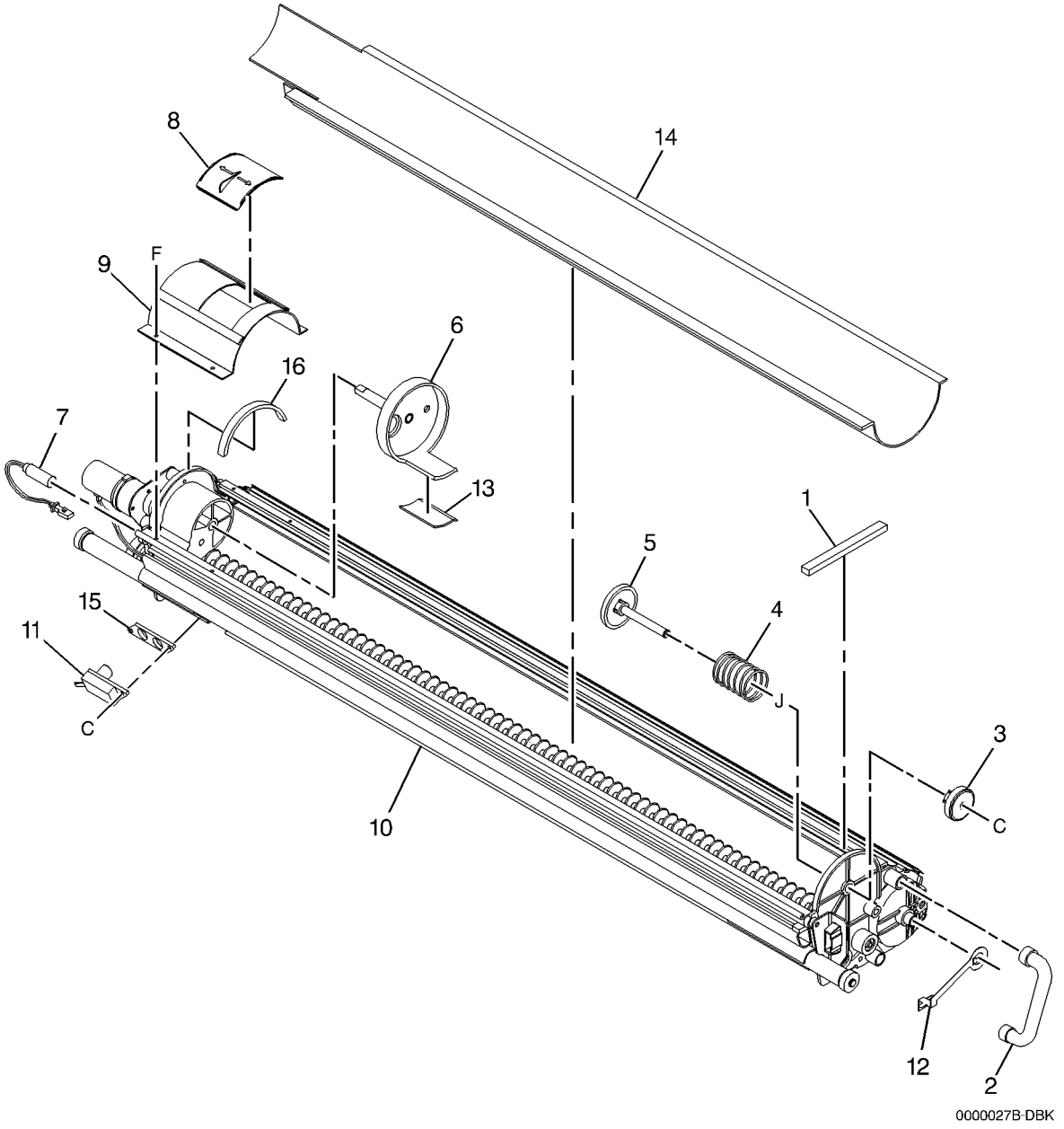
PL 9.6 Developer Module Assembly

Item	Part	Description
1	127E13620	Drum/Developer Drive Motor (**Non RoHS**)
–	127E15450	Drum/Developer Drive Motor (**RoHS**)
2	035K05900	Gasket
3	–	Trickle Waste Collection Tube (Not Spared)
4	014K04740	Developer Support (**Non RoHS**)
–	014K09920	Developer Support (**RoHS**)
5	014K04730	Developer Support (**Non RoHS**)
–	014K09910	Developer Support (**RoHS**)
6	028E07771	Drive Gear/Coupling Retainer
7	009E41251	Coupling Spring (**Non RoHS**)
–	809E78600	Coupling Spring (**RoHS**)
8	007K13520	Drive Gear/Coupling (**Non RoHS**)
–	007K14220	Drive Gear/Coupling (**RoHS**)
9	030K56160	Developer Support (**Non RoHS**)
–	068K48450	Developer Support (**RoHS**)
10	050E20871	Bead Tray
11	030K56150	Developer Support (**Non RoHS**)
–	068K48440	Developer Support (**RoHS**)
12	121K44731	Developer Module Assembly (510dp) (W/TAG 2, TAG 3, TAG 5) (REP 9.5, ADJ 9.3 9.6) (**RoHS**)
–	121K25993	Developer Module Assembly (8850/510dp) (W/TAG 2, TAG 3) (W/O TAG 5) (REP 9.5, ADJ 9.3 9.6) (**Non RoHS**)
13	–	Clip (Not Spared)
14	016E16620	Bushing
15	126E02380	Heater (W/TAG 2)



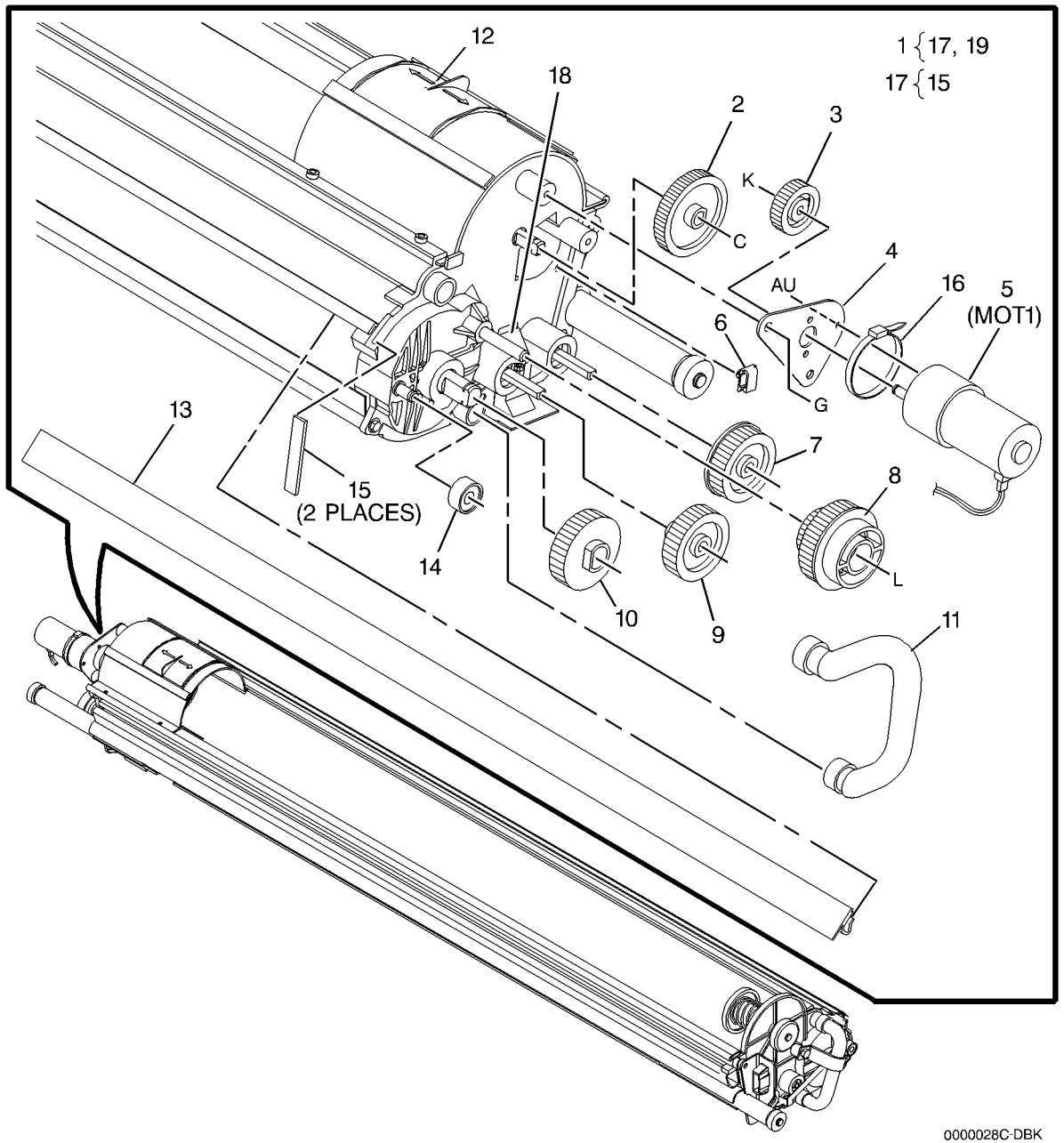
PL 9.7 Developer Module Components (Part 1 of 2)

Item	Part	Description
1	–	Sump Gasket (P/O PL9.6 Item 12)
2	054E03181	Pressure Equalizer Tube (REP 9.18)
3	003E19330	Cartridge Knob
4	–	Spring (P/O PL9.6 Item 12)
5	005K01351	Cartridge Hub
6	006K30190	Cartridge Drive Plate
–	006K30910	Cartridge Drive Plate (REP 9.14) (**RoHS**)
7	130K30381	Toner Cartridge Home Sensor (8850) (REP 9.12, ADJ 9.5)
–	130K75020	Toner Cartridge Home Sensor (510dp) (REP 9.12, ADJ 9.5)
8	002E40470	Top Shield Door
9	055K13840	Top Shield
10	–	Developer Frame (P/O PL9.6 Item 12)
11	130K65900	Toner Sensor (REP 9.11, ADJ 9.3) (**Non RoHS**)
–	130K74650	Toner Sensor (**RoHS**)
12	019E15551	Bias Clip
13	001E23080	Toner Strip
14	055K13830	Sump Shield (REP 9.13)
15	014E46450	Sensor Spacer
16	035E12210	Seal



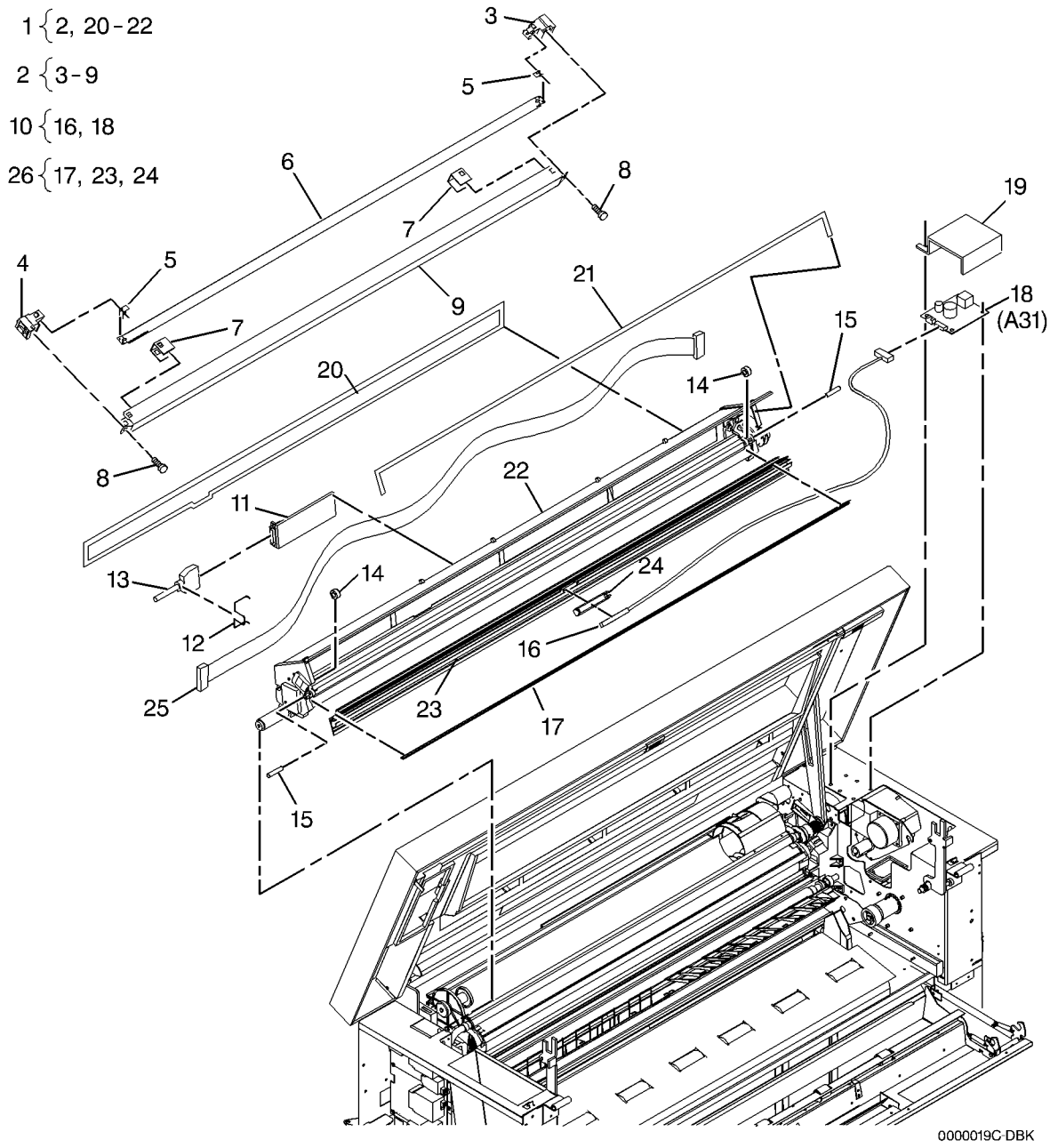
PL 9.8 Developer Module Components (Part 2 of 2)

Item	Part	Description
1	604K13350	LL-24 Code and Seal Kit (**Non RoHS**)
2	007E16330	Cartridge Gear (44T)
3	007E16341	Cartridge Drive Gear (26T)
4	–	Motor Mounting Plate (P/O PL9.6 Item 12)
5	127K22600	Cartridge Drive Motor (MOT1) (REP 9.6) (**Non RoHS**)
–	127K54840	Cartridge Drive Motor (**RoHS**)
6	–	Cable Clip (Not Spared)
7	007E14690	Auger Drive Gear (37T)
8	007K05260	Developer Drive Gear (43T/25T)
9	007E14700	Auger Drive Gear (37T)
10	007E14710	Magnetic Roll Drive Gear (40T)
11	054E03491	Pressure Equalizer Tube (REP 9.18)
12	–	Developer Frame (P/O PL9.6 Item 12)
13	035K04581	Seal (**Non RoHS**)
–	035K08410	Seal (**RoHS**)
14	–	Roller (P/O PL9.6 Item 12)
15	035E64851	Seal
16	–	Cable Wrap (Not Spared)
17	604K12900	Seal Kit (6/Kit) (**Non RoHS**)
18	010E04190	Trickle Slide
19	–	8850 Service Tools CD (Not Shown) (P/O Item 1)



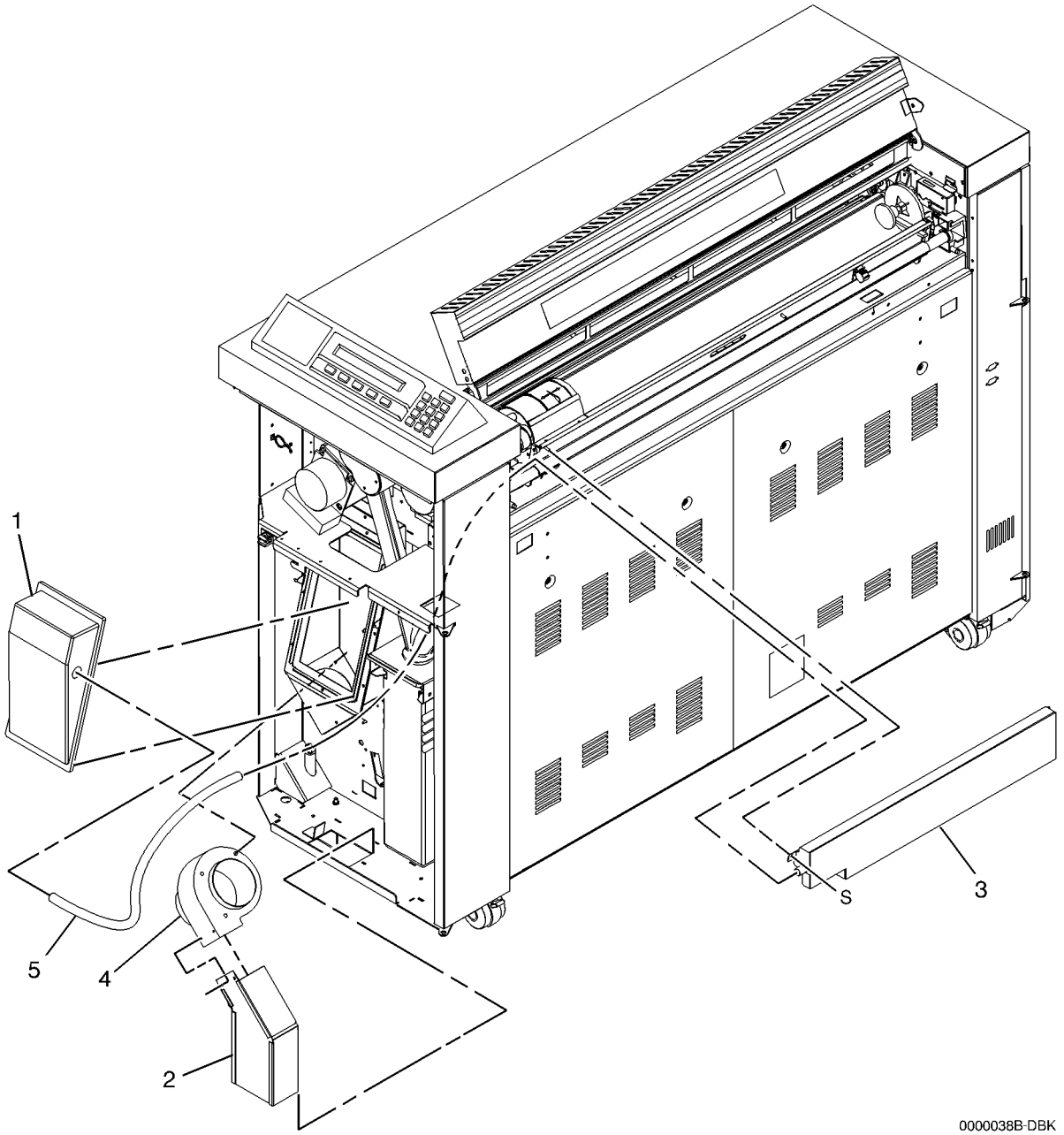
PL 9.9 Image Module Assembly

Item	Part	Description
1	122K02630	Image Module Assembly (W/O TAG 4) (REP 9.20, ADJ 9.2) (**RoHS**)
–	122K02631	Image Module Assembly (W/TAG 4) (**RoHS**)
–	122K02101	Image Module Assembly (W/O TAG 4) (REP 9.20, ADJ 9.2) (**Non RoHS**)
2	125K03490	Scorotron Assembly (**Non RoHS**)
–	125K04600	Scorotron Assembly (**RoHS**)
3	–	Right End Block (P/O Item 2)
4	–	Left End Block (P/O Item 2)
5	–	Spring (P/O Item 2)
6	029E23870	Pin Array (REP 9.8)
7	–	Scorotron Shield (P/O Item 2)
8	026E57690	Screw
9	062E14680	Scorotron Grid (Screen)
10	130K66400	Electrometer Probe (ESV) (**Non RoHS**)
–	130K74660	Electrometer Probe (ESV) (**RoHS**)
11	160K85370	Interface PWB (RS422) (**Non RoHS**)
12	809E45781	Cable Clip (**RoHS**)
–	809E45780	Cable Clip (**Non RoHS**)
13	–	Signal Harness (Not Spared)
14	–	Roller (Not Spared) (REP 9.19)
15	–	Pin (Not Spared)
16	960K33320	ESV Sensor and Cable (P/O Item 10)
17	035K07561	Seal
18	–	Electrometer Probe PWB (A31) (P/O Item 10)
19	–	ESV PWB Cover (Not Spared)
20	035E70260	Top Seal
21	035E66330	Strip Seal
22	–	Image Module Housing (P/O Item 1)
23	113K03410	ESV Extrusion
24	113E42081	Holder
25	962K00360	LED Bar Jumper Power Harness (**Non RoHS**)
–	962K56110	LED Bar Jumper Power Harness (**RoHS**)
26	130K75370	ESV Extrusion Assembly (**RoHS**)



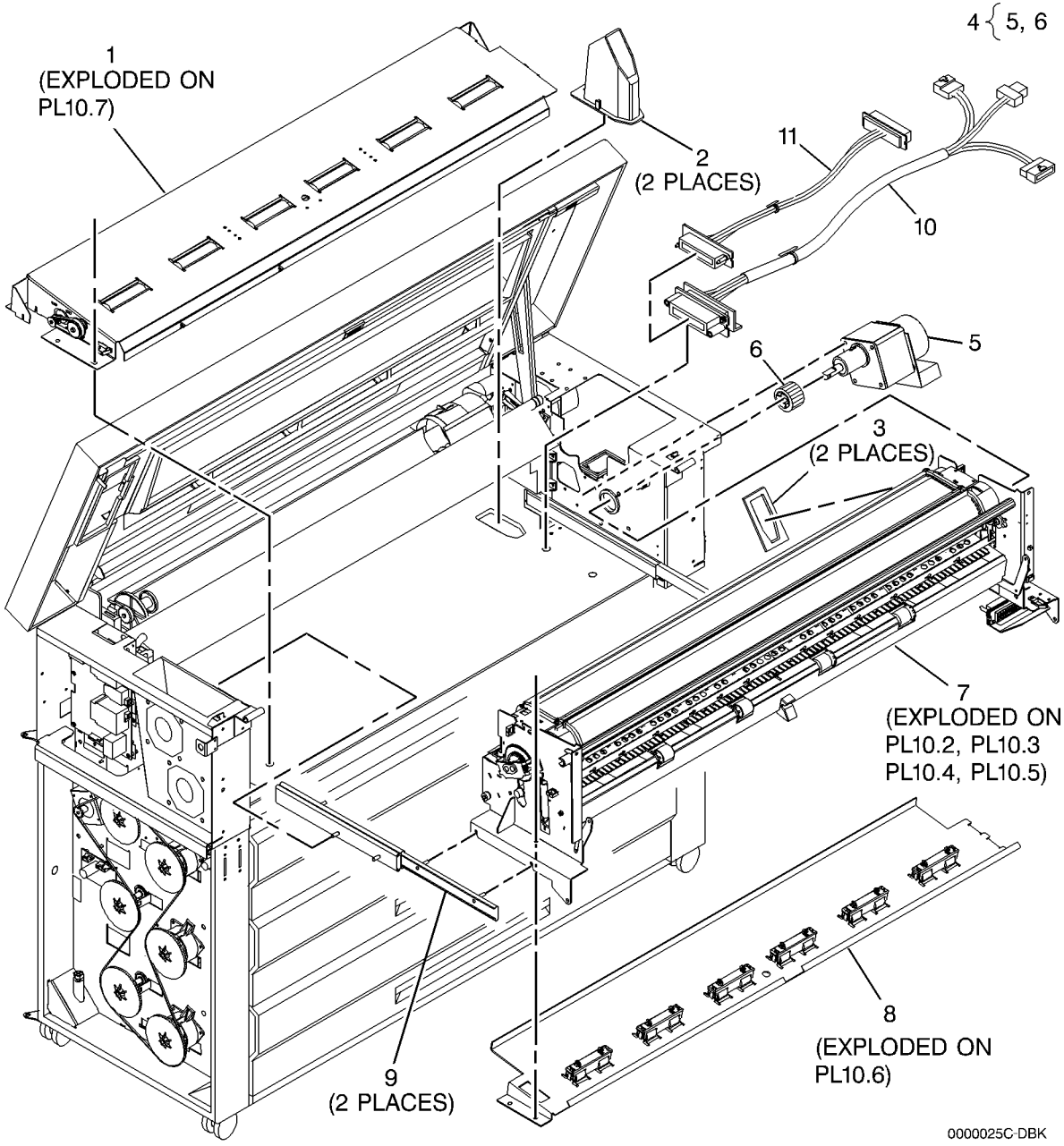
PL 9.10 Toner Dust Control

Item	Part	Description
1	053K04180	Toner Filter Assembly
2	054K25000	Exhaust Duct (**Non RoHS**)
–	054K37740	Exhaust Duct (**RoHS**)
3	055K33190	Toner Dust Trap (**Non RoHS**)
–	055K36960	Toner Dust Trap (**RoHS**)
–	055K36950	Toner Dust Trap (**RoHS**)
4	127E13650	Vacuum Fan (**Non RoHS**)
–	127E15680	Vacuum Fan (**RoHS**)
5	052E24241	Vacuum Tube



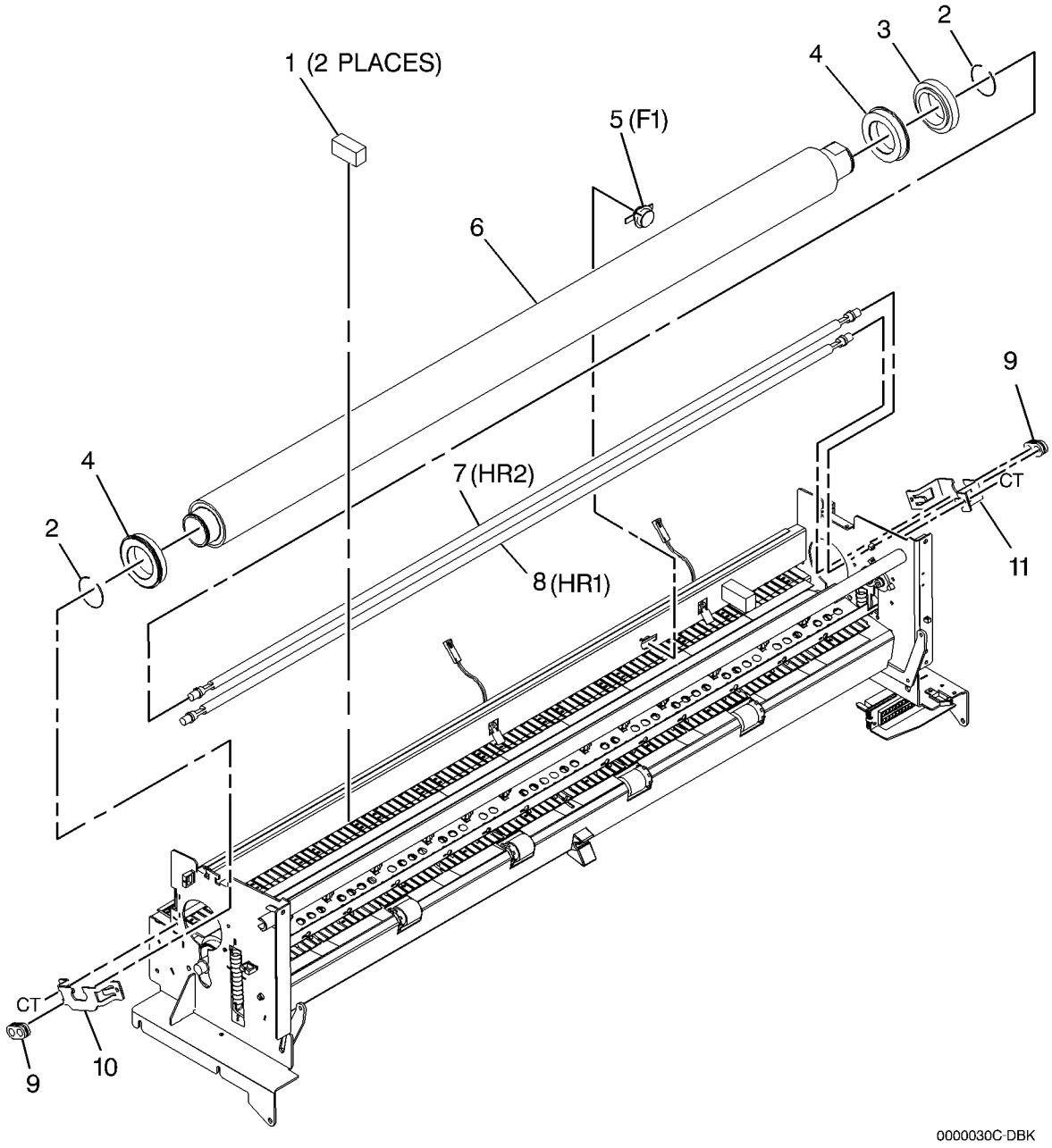
PL 10.1 Two Roll Fuser Assembly

Item	Part	Description
1	059K27880	Lower Bypass Assembly (8850) (**Non RoHS**)
–	059K35070	Lower Bypass Assembly (510dp) (**Non RoHS**)
2	054E21440	Vacuum Duct
3	035E64770	Gasket
4	127K41541	Fuser Motor Assembly (ADJ 10.3) (**Non RoHS**)
–	127K54870	Fuser Motor Assembly (**RoHS**)
5	–	Fuser Motor (P/O Item 4)
6	007E44391	Fuser Drive Gear 40T
7	–	Two Roll Fuser Assembly (Not Spared)
8	055K32731	Upper Baffle Assembly (8850) (REP 8.1) (**Non RoHS**)
–	055K34360	Upper Baffle Assembly (510dp) (REP 8.1) (**Non RoHS**)
9	010K03380	Fuser Slide (**Non RoHS**)
–	010K04610	Fuser Slide (**RoHS**)
10	962K00640	Fuser Main Frame Harness (**Non RoHS**)
–	962K56140	Fuser Main Frame Harness (**RoHS**)
11	962K02830	Fuser Service Harness (NOTE: Service Diagnostic Tool) (**Non RoHS**)



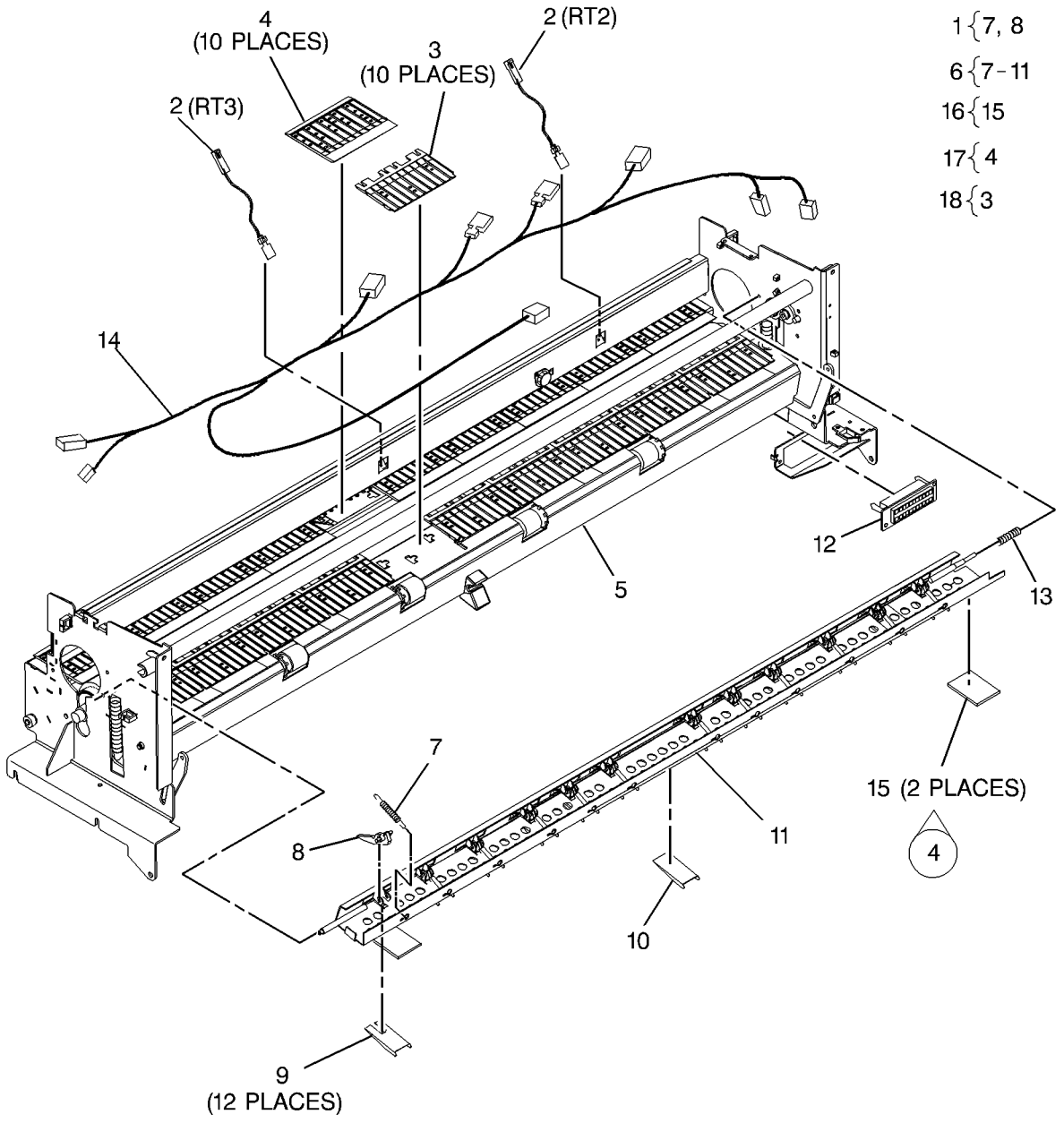
PL 10.2 Fuser Components (Part 1 of 4)

Item	Part	Description
1	014E49090	Foam Block
2	028E14590	Retainer Clip (**Non RoHS**)
–	028E16920	Retainer Clip (**RoHS**)
3	807E23010	Heat Roll Drive Gear (60T
4	013E20970	Bearing
5	130K66680	Thermal Fuse (A27F1) (REP 10.6) (**Non RoHS**)
–	130K74590	Thermal Fuse (A27F1) (REP 10.6) (**RoHS**)
6	022K79111	Fuser Heat Roll (REP 10.2) (**Non RoHS**)
–	059K53130	Fuser Heat Roll (REP 10.2) (**RoHS**)
7	122K02020	Center Heat Rod (HR2) (REP 10.1, ADJ 10.1)
8	122K02030	Edge Heat Rod (HR1) (REP 10.1, ADJ 10.1)
9	016E16200	Lamp Grommet
10	830E72250	Lamp Bracket (Non-Drive Side) (8850) (**Non RoHS**)
–	849E99210	Lamp Bracket (Non-Drive Side) (510dp) (**RoHS**)
11	830E72260	Lamp Bracket (Drive Side) (8850) (**Non RoHS**)
–	849E99200	Lamp Bracket (Drive Side) (510dp)



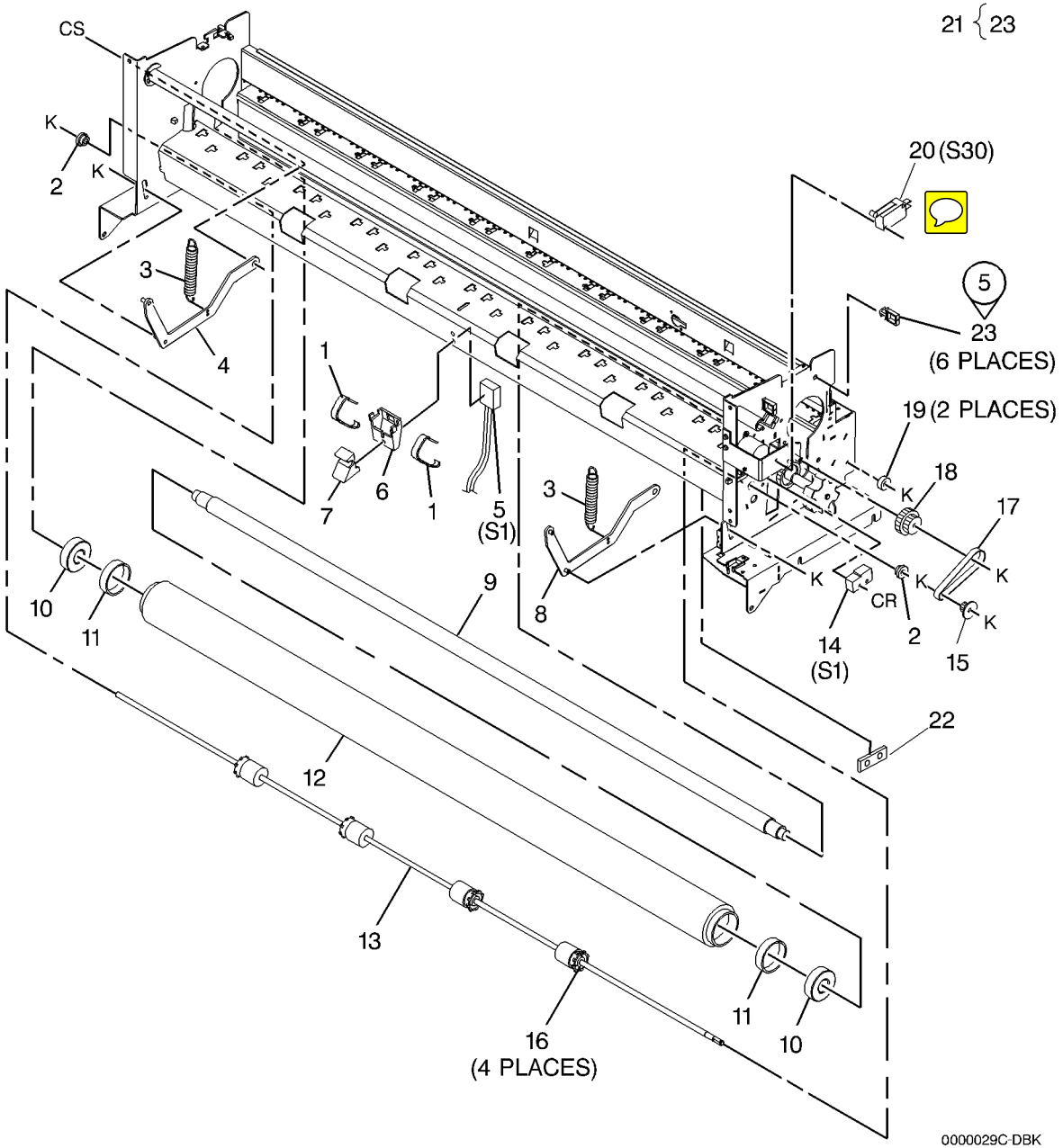
PL 10.3 Fuser Components (Part 2 of 4)

Item	Part	Description
1	604K04460	Stripper Finger Kit (Kit contains 12 Springs and 12 Stripper Fingers) (**Non RoHS**)
2	130K66560	CenterThermistor (RT3), Edge Thermistor (RT2) (REP 10.7) (**Non RoHS**)
–	130K74690	CenterThermistor (RT3), Edge Thermistor (RT2) (**RoHS**)
3	038E27721	Vacuum Transport Exit Guide
4	038E27710	Media Transport Guide
5	–	Fuser Housing (P/O PL10.1 Item 7)
6	030K71183	Stripper Finger Assembly (**Non RoHS**)
–	068K47390	Stripper Finger Assembly (**RoHS**)
7	809E43260	Stripper Finger Spring
8	019E51260	Stripper Finger (REP 10.4)
9	035E64530	Media Guide
10	038K11070	Media Guide
11	–	Stripper Support (P/O Item 6)
12	962K02921	Fuser Harness Adapter (**Non RoHS**)
–	962K56160	Fuser Harness Adapter (**RoHS**)
13	009E38060	Stripper Shaft Spring
14	962K00542	Fuser Harness (**Non RoHS**)
–	962K56120	Fuser Harness (**RoHS**)
15	038K14960	Media Guide (W/TAG 4)
16	604K12770	Stripper Repair Kit (Tag 4) (2/Kit) (**Non RoHS**)
17	604K04480	Entrance Guide Kit (10/Kit) (**Non RoHS**)
18	604K04470	Exit Guide Kit (10/Kit) (**Non RoHS**)



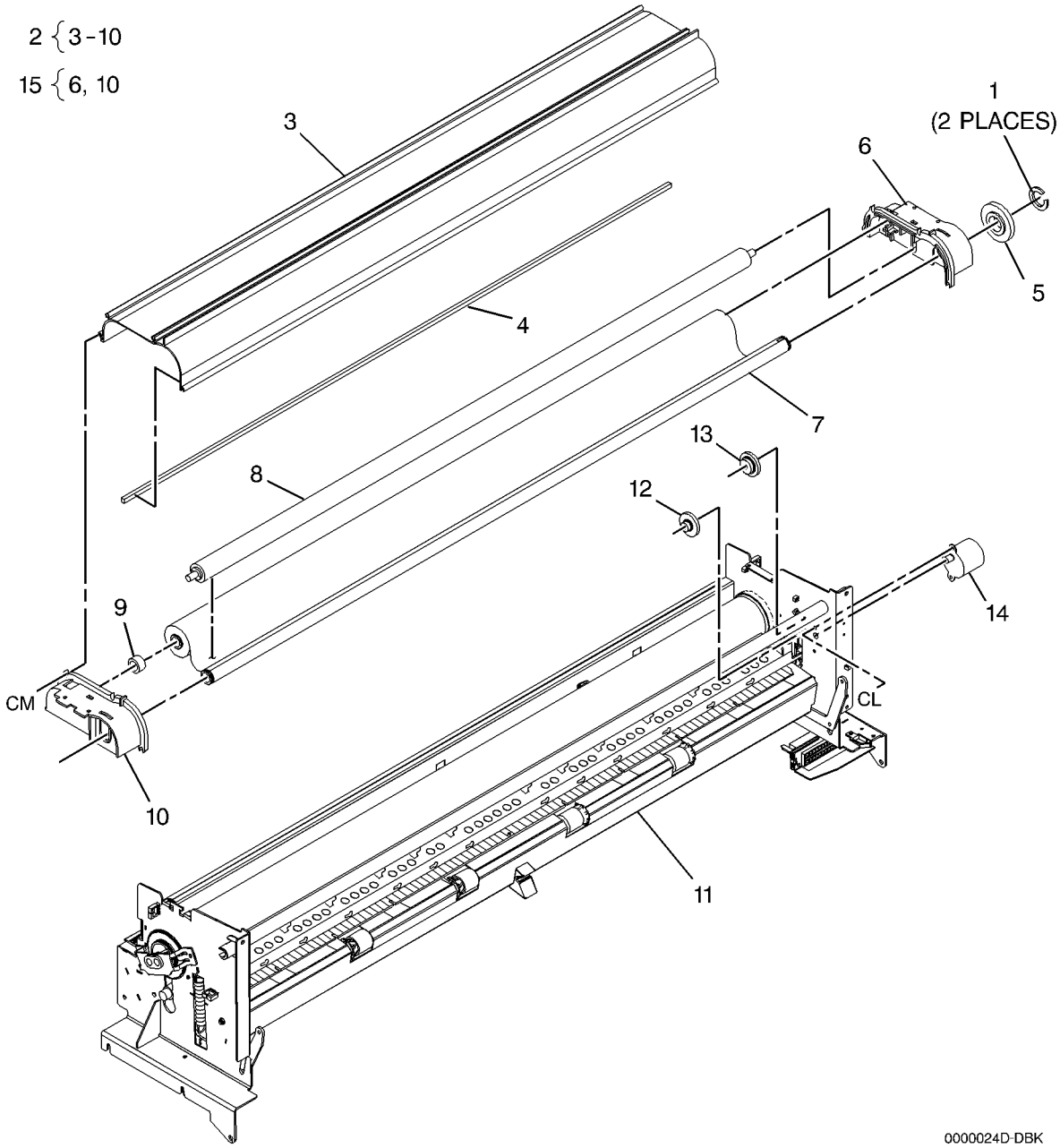
PL 10.4 Fuser Components (Part 3 of 4)

Item	Part	Description
1	019E11700	Spring Clip
2	016E06020	Bushing
3	809E43281	Pressure Roll Spring (**Non RoHS**)
–	809E78290	Pressure Roll Spring (**RoHS**)
4	031K06990	Left Pressure Control Arm (**Non RoHS**)
–	031K08560	Left Pressure Control Arm (**RoHS**)
5	110K03340	Media Exit Switch (S1) (REP 10.9) (**RoHS**)
–	110K15700	Media Exit Switch (S1) (REP 10.9) (**RoHS**)
6	830E96350	Exit Shaft Support (**RoHS**)
7	014E47501	Catch Tray Block (8850) (**RoHS**)
–	014E50070	Catch Tray Block (510dp) (**Non RoHS**)
8	031K07000	Right Pressure Control Arm (**Non RoHS**)
–	031K08670	Right Pressure Control Arm (**RoHS**)
9	–	Pressure Roll Arm (P/O PL10.1 Item 7)
10	013E20980	Pressure Roll Bearing
11	028E14600	TOL Ring
12	022K78981	Pressure Roll (REP 10.8) (**Non RoHS**)
–	059K53120	Pressure Roll (**RoHS**)
13	006K26281	Media Exit Drive Roll (REP 8.16) (**Non RoHS**)
–	006K30920	Media Exit Drive Roll (REP 8.16) (**RoHS**)
14	110E05500	Stripper Finger Jam Switch (S1)
15	020E39601	Media Exit Drive Pulley (NASG/XBRA/XCL)
16	022E22890	Kicker (**Non RoHS**)
17	023E24190	Exit Drive Belt
18	020E26340	Gear Pulley (30T)
19	–	Bearing (P/O PL10.1 Item 7)
20	–	Fuser Drive Interlock Switch (S30) (P/O PL10.1 Item 7)
21	604K12880	Wire Saddle Kit (6/Klt) (W/TAG 5) (**Non RoHS**)
22	815E16870	Switch Plate (**Non RoHS**)
–	815E34420	Switch Plate (**RoHS**)
23	120P60583	Wire Saddle (**Non RoHS**)



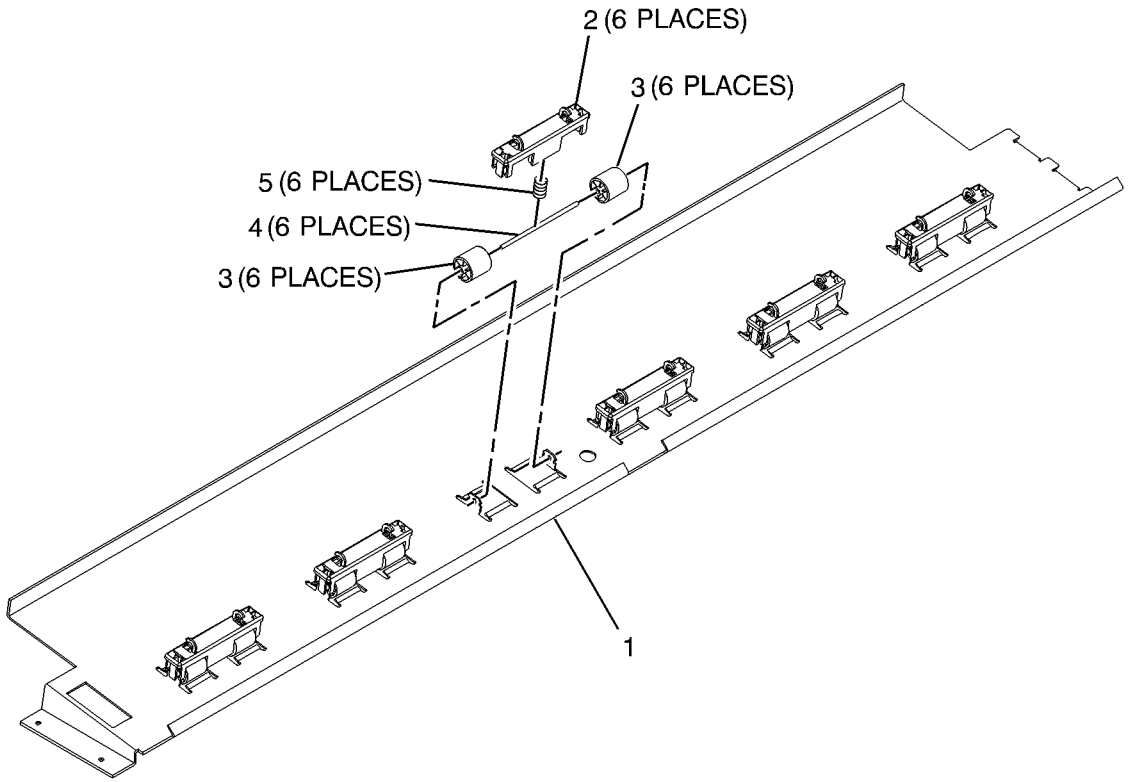
PL 10.5 Fuser (Web Oiler) Components (Part 4 of 4)

Item	Part	Description
1	028E14580	Web Retainer Clip (**Non RoHS**)
–	028E16910	Web Retainer Clip (**RoHS**)
2	094K04900	Web Oiler Assembly (W/TAG 13) (REP 10.3) (**RoHS**)
–	094K04324	Web Oiler Assembly (W/TAG 13) (REP 10.3) (**Non RoHS**)
3	–	Web Oiler Cover (P/O PL10.1 Item 7)
4	055E48470	Fuser Long Seal
5	007E69360	Gear (48T)
6	–	Support (Drive Side) (P/O PL10.1 Item 7)
7	022K79002	Web Oiler (REP 10.5)
8	059K53100	Oiler Pressure Roll (**RoHS**)
–	022K79010	Oiler Pressure Roll (**Non RoHS**)
9	–	Roll Take-Up Spring (P/O PL10.1 Item 7)
10	–	Support (P/O PL10.1 Item 7)
11	–	Fuser Housing (P/O PL10.1 Item 7)
12	007E69390	Gear (16T)
13	007E69380	Gear (12T)
14	127E13610	Web Oiler Drive Motor (**Non RoHS**)
–	127E15520	Web Oiler Drive Motor (**RoHS**)
15	604K21840	Bracket Support Kit (W/TAG 47)



PL 10.6 Upper Baffle Assembly

Item	Part	Description
1	–	Upper Sheet Feed Housing (P/O PL10.1 Item 8)
2	–	Retainer Housing (P/O PL10.1 Item 8)
3	–	Sheet Feed Pinch Roll (P/O PL10.1 Item 8) (REP 7.14)
4	–	Shaft (P/O PL10.1 Item 8)
5	–	Spring (P/O PL10.1 Item 8)



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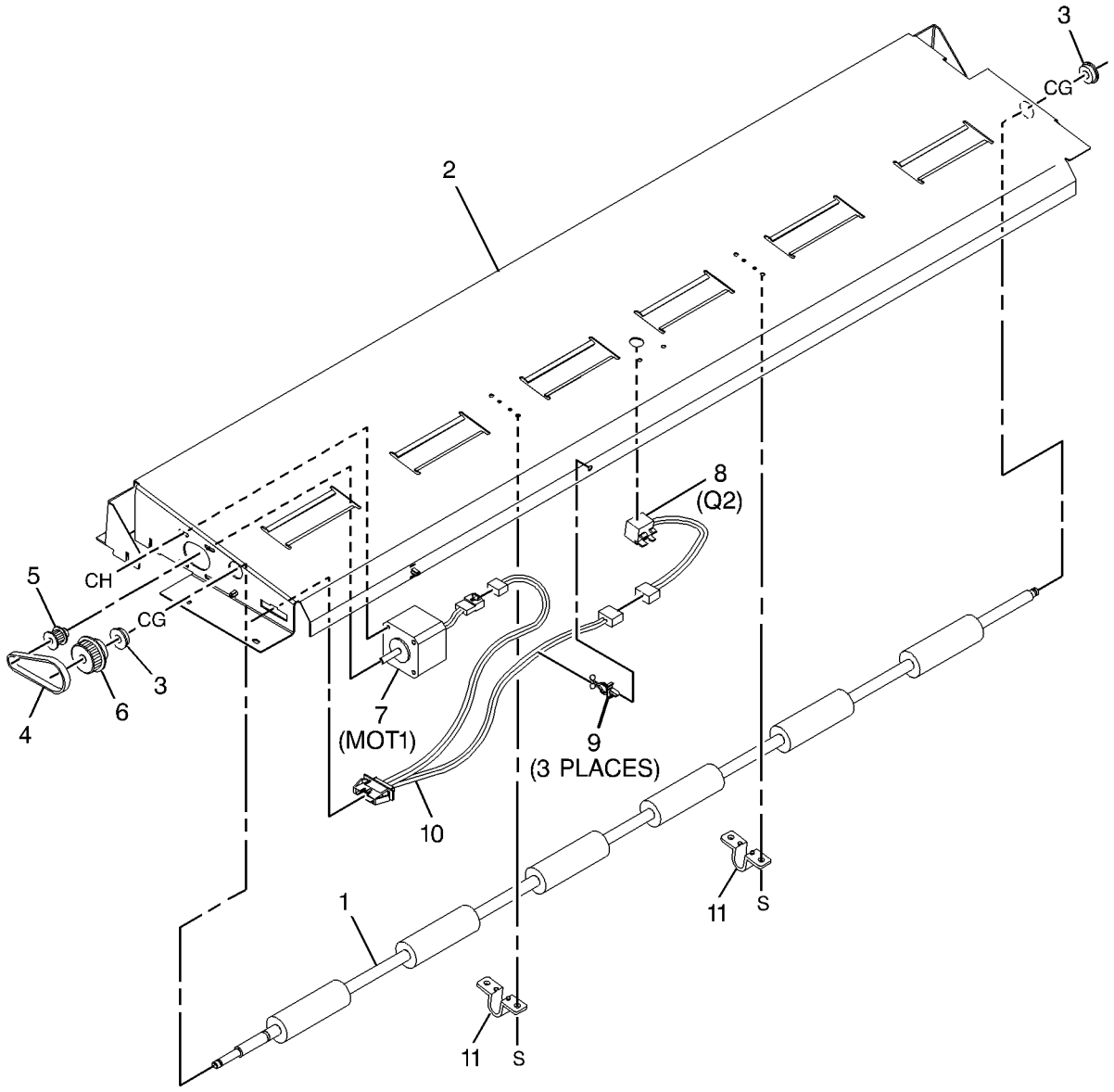
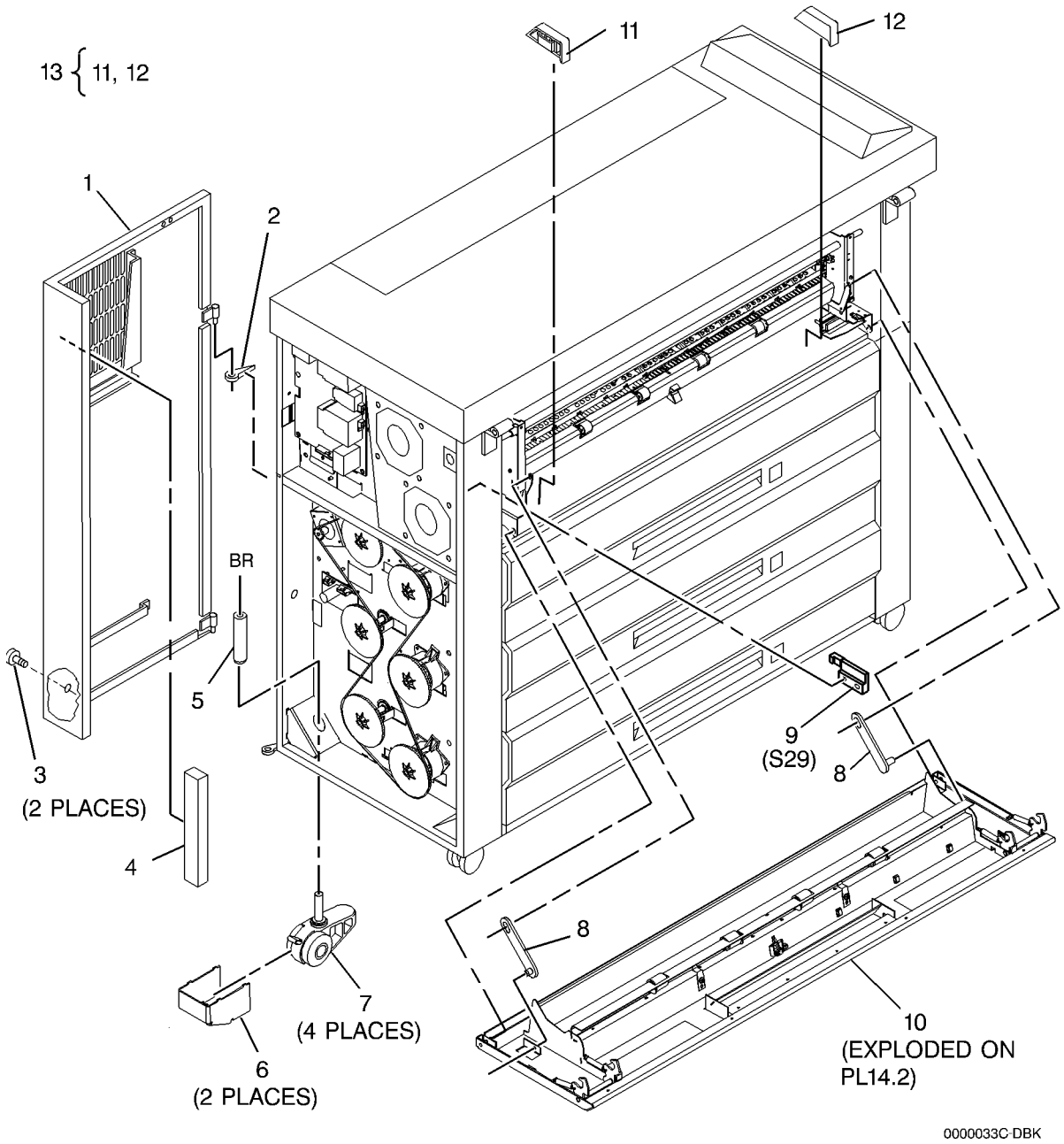
PL 10.7 Lower Bypass Assembly

Item	Part	Description
1	059K27890	Sheet Feed Drive Roll (REP 8.7)
2	–	Lower Sheet Feed Housing (P/O PL10.1 Item 1)
3	–	Bearing (P/O PL10.1 Item 1)
4	023E23590	Sheet Feed Drive Belt (REP 8.6)
5	020E38740	Pulley (18T) (**Non RoHS**)
–	020E48640	Pulley (18T) (**RoHS**)
6	020E38750	Pulley (24T) (**Non RoHS**)
–	020E48650	Pulley (24T) (**RoHS**)
7	127K41090	Sheet Feed Drive Motor (MOT1) (REP 8.5) (**Non RoHS**)
–	127K54860	Sheet Feed Drive Motor (MOT1) (**RoHS**)
8	–	Sheet Feed Sensor (Q2) (P/O PL10.1 Item 1) (REP 8.3)
9	–	Wire Tie (P/O PL10.1 Item 1)
10	962K00630	Harness (**Non RoHS**)
–	962K56130	Harness (**RoHS**)
11	–	Retainer (P/O PL10.1 Item 1)



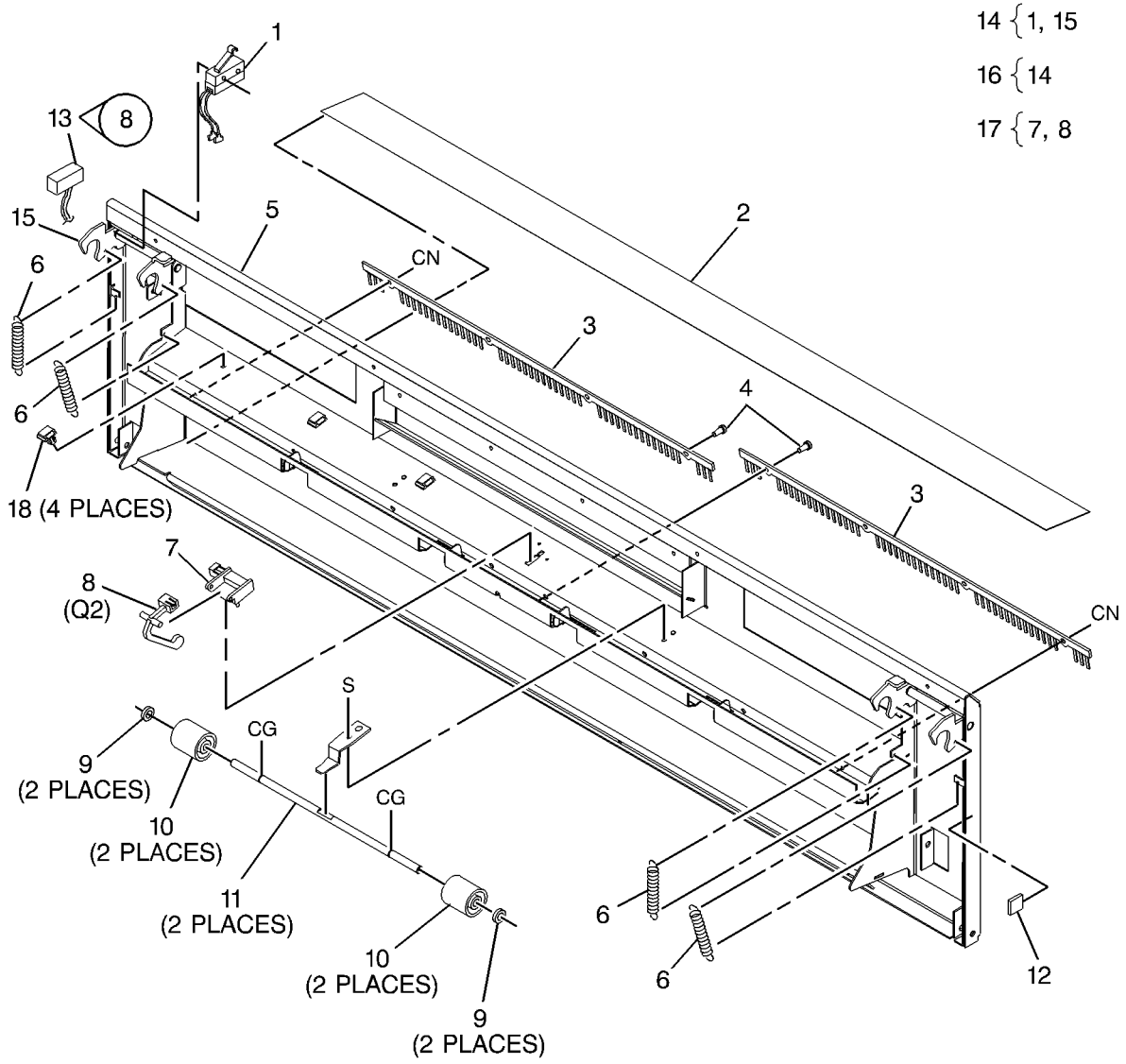
PL 14.1 Transport Latching Cover and Rear Door

Item	Part	Description
1	048K47700	Rear Door (**Non RoHS**)
2	014E20541	Left Hinge Spacer (**Non RoHS**)
3	029E28060	Fastener (**Non RoHS**)
4	035E41160	Gasket (**Non RoHS**)
5	–	Castor Tube Support (Not Spared)
6	–	Ramp Bracket (Not Spared)
7	017K01120	Caster
8	–	Bracket (Not Spared)
9	130E02271	Fuser Drawer Interlock Switch (S29) (**Non RoHS**)
–	130E12140	Fuser Drawer Interlock Switch (S29) (**RoHS**)
10	802K40243	Transport Latching Cover Assembly (8850) (W/TAG 8) (**Non RoHS**)
–	848K00510	Transport Latching Cover Assembly (510dp-White) (W/TAG 2) (**RoHS**)
–	802K81750	Transport Latching Cover Assembly (510dp-White) (W/TAG 2) (**Non RoHS**)
–	802K61141	Transport Latching Cover Assembly (510dp) (W/TAG 8) (**Non RoHS**)
–	848K00511	Transport Latching Cover Assembly (510dp-White) (W/TAG 2) (**RoHS**)
11	038K14990	Left Side Guide (8850) (**Non RoHS**)
–	038K15460	Left Side Guide (510dp)
12	038K15000	Right Side Guide (8850) (**Non RoHS**)
–	038K15470	Right Side Guide (510dp) (**Non RoHS**)
13	604K12740	Side Guide Kit (**Non RoHS**)



PL 14.2 Transport Latching Cover Components

Item	Part	Description
1	110K14080	Fuser Door Switch (W/TAG 8) (**Non RoHS**)
–	110K15690	Fuser Door Switch (W/TAG 8) (**RoHS**)
2	892E50830	Label (Bypass Feed Widths) (8850) (**RoHS**)
–	892E95830	Label (Bypass Feed Widths) (510dp) (**Non RoHS**)
3	115E01410	Static Eliminator (**RoHS**)
4	–	Fastener (P/O PL14.1 Item 10)
5	–	Cover (P/O PL14.1 Item 10)
6	003E67220	Latch Spring
7	–	Stack Height Switch (Q2) (P/O Item 17) (REP 8.4)
8	–	Actuator (P/O Item 17)
9	–	Washer (P/O PL14.1 Item 10)
10	–	Media Exit Pinch Roll (P/O PL14.1 Item 10) (REP 8.15)
11	–	Idler Shaft (P/O PL14.1 Item 10)
12	121E18340	Magnet
13	962K03180	Paper Stack Sensor Harness (**Non RoHS**)
–	962K56170	Paper Stack Sensor Harness (**RoHS**)
14	–	Switch Assembly (Not Spared) (W/TAG 8)
15	–	Latch (P/O Item 14)
16	604K17530	Fuser Interlock Switch Kit (8850) (W/TAG 8) (**Non RoHS**)
17	110K09430	Switch Read Assembly (**Non RoHS**)
–	110K09431	Switch Read Assembly (**RoHS**)
–	110K15710	Switch Read Assembly (**RoHS**)
18	130E10970	Cable Clip



REAR VIEW

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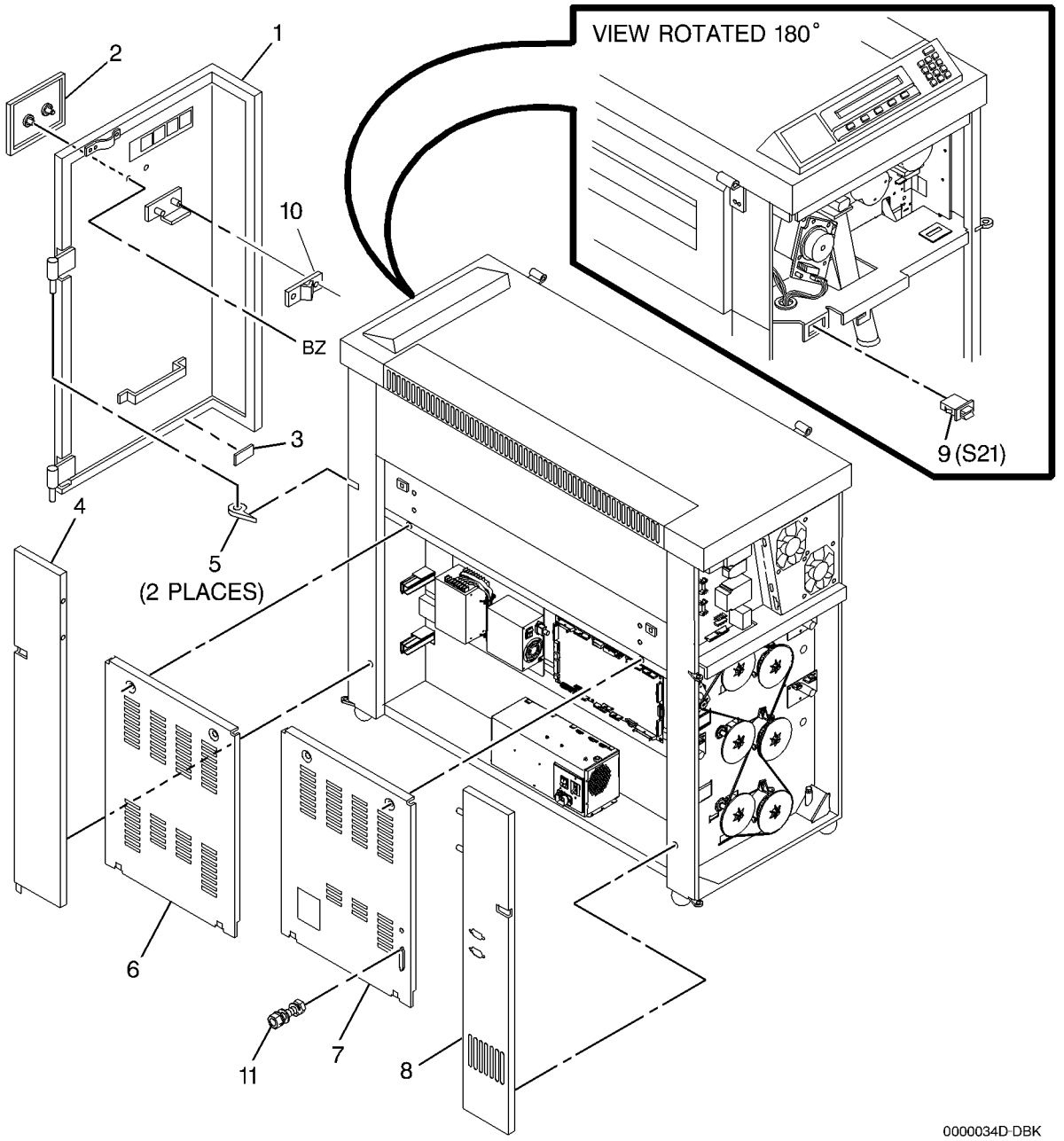
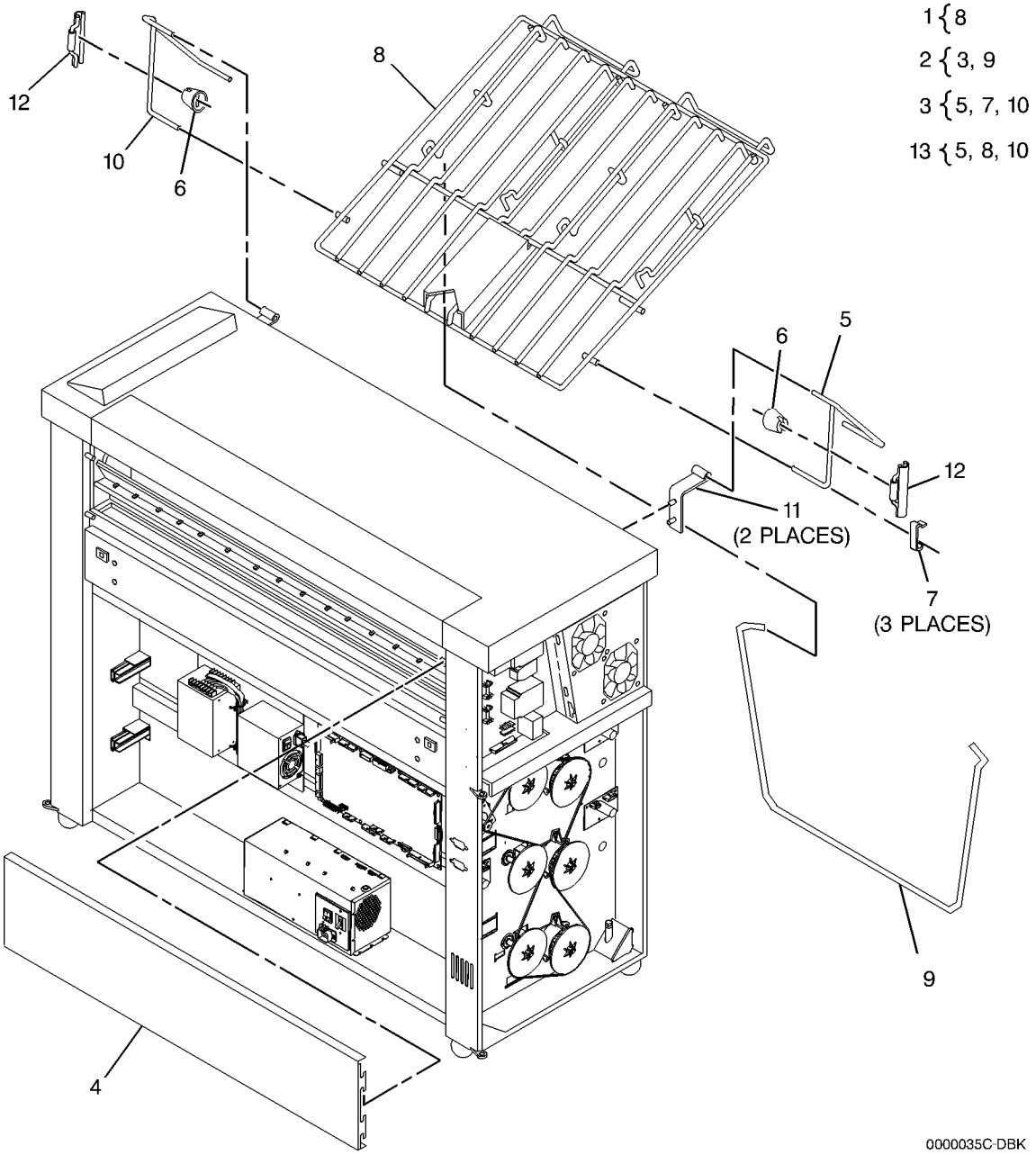
PL 14.3 Front Door and Right Side Covers

Item	Part	Description
1	802K62850	Front Door (**Non RoHS**)
2	056K02740	Logo Plate (**Non RoHS**)
–	848K06221	Logo Badge (**RoHS**)
–	056K02810	Logo Plate (**RoHS**)
3	121E10610	Magnet (**Non RoHS**)
4	048K47710	Right Side, Left Cover (**Non RoHS**)
5	014E20551	Right Hinge Spacer (**Non RoHS**)
6	048K47680	Right Side, Left Lower Cover (8850) (**Non RoHS**)
–	802K61120	Right Side, Left Lower Cover (510dp) (**Non RoHS**)
7	048K47692	Right Side, Right Lower Cover (**Non RoHS**)
–	802K95150	Right Side, Right Lower Cover (**RoHS**)
8	048K44401	Right Side, Right Cover (**Non RoHS**)
9	110E02640	Front Door Interlock Switch (S21)
10	003E13010	Keeper
11	713W80837	D-Subminiature Connector (**Non RoHS**)



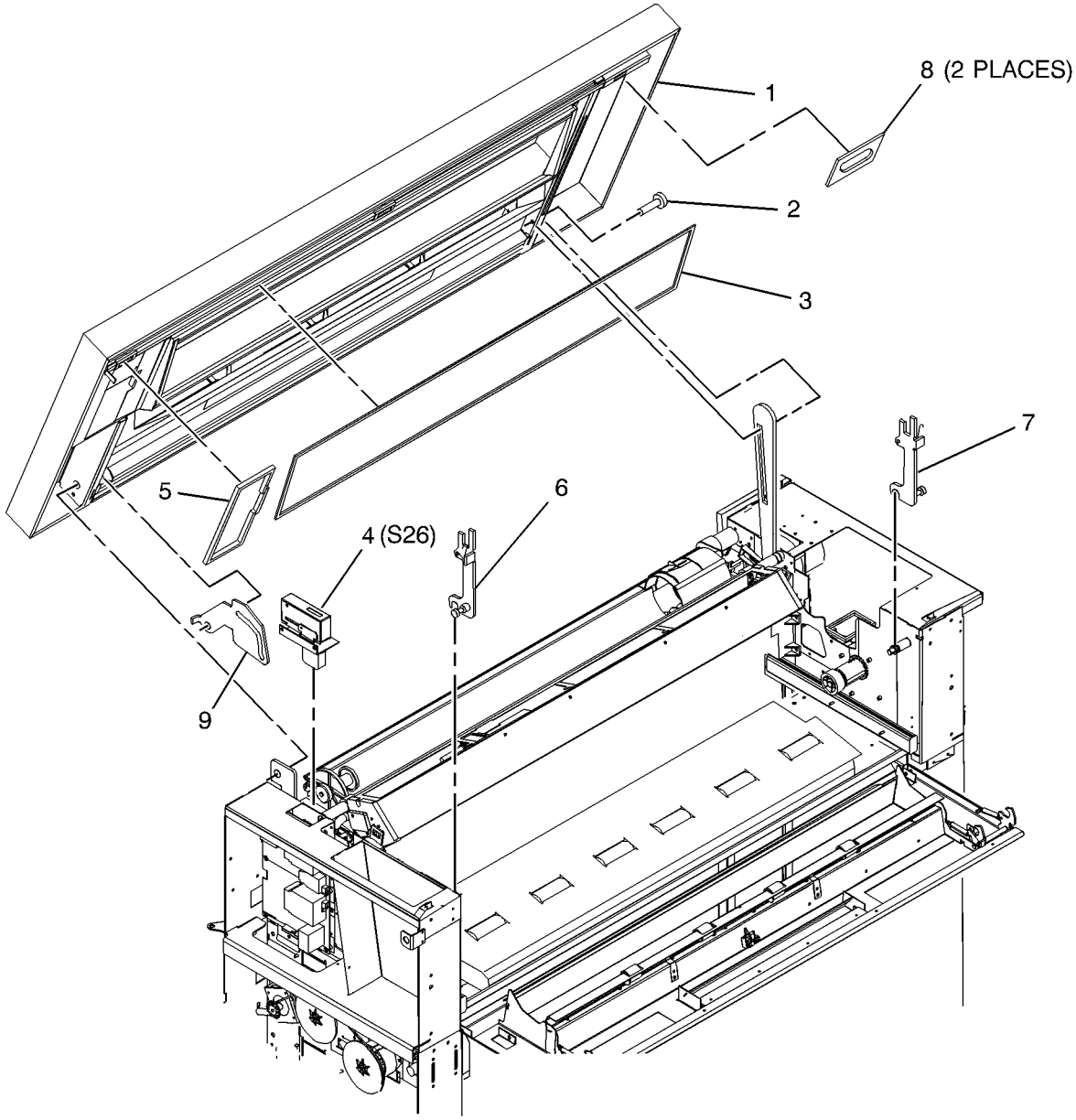
PL 14.4 Developer Cover and Catch Tray

Item	Part	Description
1	673K99610	Catch Tray Kit (8850) (**Non RoHS**)
2	673K99770	Support Kit (8850) (**Non RoHS**)
3	073E13352	Tray Support Kit (8850) (**Non RoHS**)
4	048E51410	Rear Developer Cover (8850) (**Non RoHS**)
–	802E59040	Developer Cover (510dp) (**Non RoHS**)
–	849E76310	Rear Developer Cover (8850) (**RoHS**)
5	068K43660	Left Support
6	004E21600	Bumper (**Non RoHS**)
7	019E55991	Support Clip (**Non RoHS**)
8	–	Catch Tray (P/O Item 1)
9	–	Catch Tray Support (P/O Item 2)
10	068K43650	Right Support
11	030K73130	Catch Tray Bracket (**Non RoHS**)
12	119E00800	Support Wrap (**Non RoHS**)
13	675K43210	Catch Tray Kit (510dp-White) (**RoHS**)
–	675K21710	Catch Tray Kit (510dp-White) (**Non RoHS**)
–	675K10130	Catch Tray Kit (510dp) (**Non RoHS**)



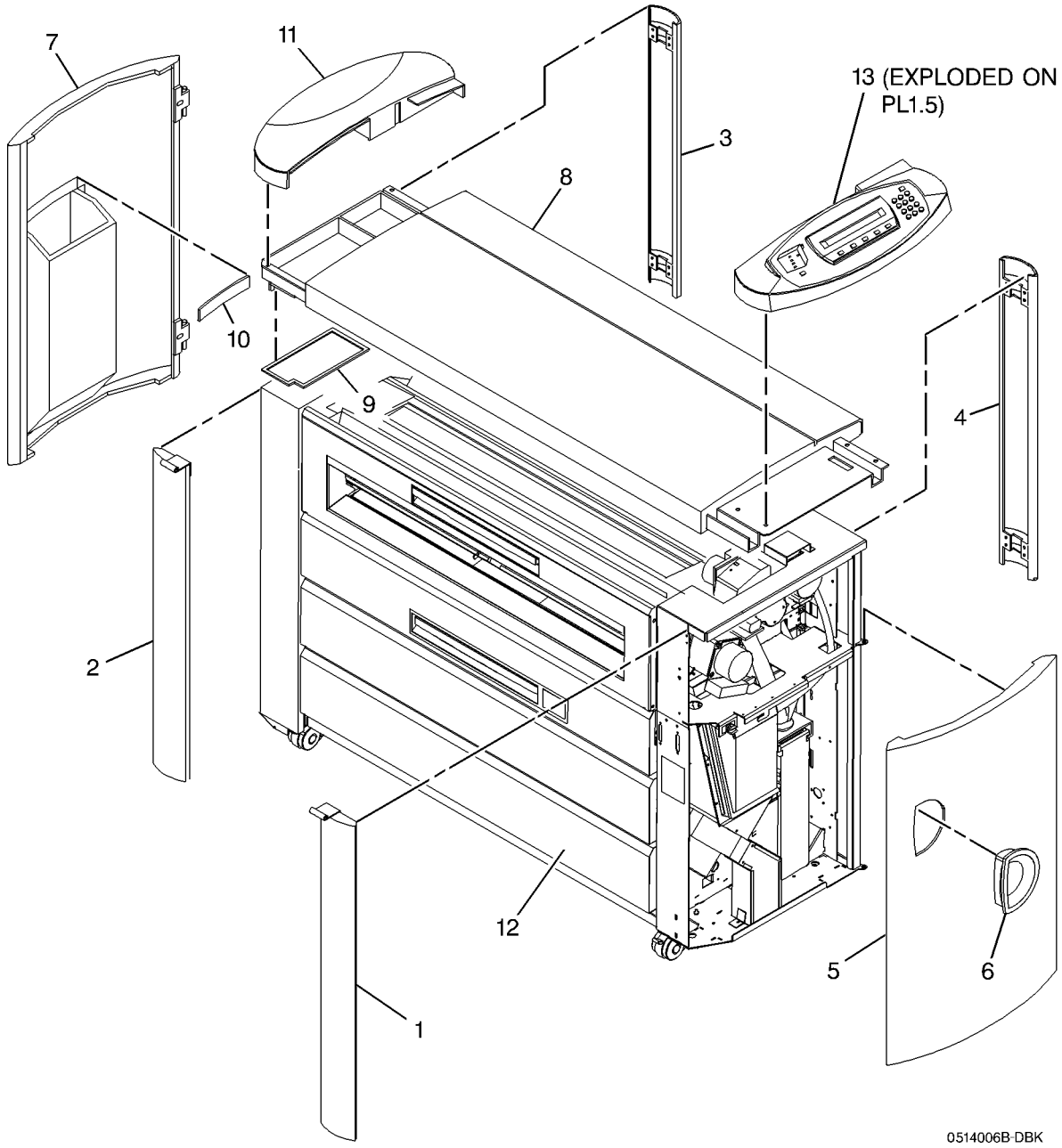
PL 14.5 Top Cover and Catch Tray Brackets

Item	Part	Description
1	802K40200	Top Cover (REP 14.1) (**Non RoHS**)
2	029E23670	Pin (**Non RoHS**)
3	035E37240	Gasket (8850) (**RoHS**)
–	035E64660	Gasket (510dp) (**RoHS**)
4	110K08970	Top Cover Interlock Switch (S26) (**Non RoHS**)
–	110K15740	Top Cover Interlock Switch (S26) (**RoHS**)
5	035E41150	Gasket (**Non RoHS**)
6	030K57191	Right Service Bracket (8850) (**Non RoHS**)
–	030K79860	Left Service Bracket (**Non RoHS**)
–	068K48860	Left Service Bracket (**RoHS**)
7	030K57181	Right Service Bracket (**Non RoHS**)
–	068K48430	Right Service Bracket (**RoHS**)
8	055E38100	Shielding Pad
9	008E06000	Cam Bracket (8850) (**Non RoHS**)
–	008E07620	Cam Bracket (510dp) (**Non RoHS**)
–	008E08320	Cam Bracket (510dp) (**RoHS**)



PL 14.6 Covers

Item	Part	Description
1	017K03820	Front Left Pillar (**Non RoHS**)
–	017K04010	Front Left Pillar (White) (**Non RoHS**)
–	017K04290	Front Left Pillar (**RoHS**)
2	017K03840	Front Right Pillar (**Non RoHS**)
–	017K04280	Front Right Pillar (White) (**RoHS**)
–	017K04000	Front Right Pillar (White) (**Non RoHS**)
3	017K03851	Rear Left Pillar (**Non RoHS**)
–	017K04260	Rear Left Pillar (White) (**RoHS**)
–	017K03980	Rear Left Pillar (White) (**RoHS**)
4	017K03831	Rear Right Pillar (**Non RoHS**)
–	017K03990	Rear Right Pillar (White) (**Non RoHS**)
–	017K04270	Rear Right Pillar (White) (**RoHS**)
5	802K60701	Front Door (**Non RoHS**)
–	848K00520	Front Door (**RoHS**)
–	802K69330	Front Door (White) (**Non RoHS**)
6	802E58520	Front Door Handle (**Non RoHS**)
–	802E82160	Front Door Handle (White) (**RoHS**)
7	802K60691	Rear Door (**Non RoHS**)
–	848K00530	Rear Door (**RoHS**)
–	802K69340	Rear Door (White) (**Non RoHS**)
8	802K60711	Top Cover (**Non RoHS**)
–	802K69350	Top Cover (White) (**Non RoHS**)
–	848K00540	Top Cover (**RoHS**)
9	035E71070	Seal Cover Airbox
10	035E70990	Door Seal
11	802E58490	Rear Top Cover (**Non RoHS**)
–	802E82170	Rear Top Cover (White) (**RoHS**)
12	802K60750	False Front Cover (**Non RoHS**)
13	–	Control Panel



Common Hardware

Item	Part	Description
A	112W11655	Hex Screw (M6 X 16)
B	112W07455	Screw (M4 X 12)
C	354W21052	Retaining Ring (7-9mm)
D	354W21252	Retaining Ring (9-12mm)
E	153W23352	Screw (M2.9 X 6.5)
F	132W00253	Screw (M3 X 6LG)
G	156W27555	Screw (M4.2 X 14)
H	156W27655	Screw (M4.2 X 16)
J	251W10856	Plain Washer
K	354W20852	Retaining Ring (5-7mm)
–	354W24251	Alternate
–	654W20852	Retaining Ring (5-7mm) (**RoHS**)
L	356W02502	Retaining Ring
M	251W10455	Washer (M4)
N	256W20454	Lockwasher (M4)
P	112W27255	Screw (M4 X 8)
R	351W12551	Retaining Ring (M25)
S	220W00450	Nut (M4)
T	251W10655	Washer (M6)
U	351W10651	Retaining Ring (M6)
–	651W10651	Retaining Ring (M6) (**RoHS**)
V	121W30455	Set Screw (M4 X 6)
W	351W11551	Retaining Ring (M15)
X	112W27355	Screw (M4 X 10)
Y	286W03954	Spiral Pin (3 X 22)
Z	259W30351	Lockwasher (M4)
AA	131W37153	Screw (M4 X 8)
AB	153W27452	Screw (M4.2 X 9.5)
AC	131W37553	Screw (M4 X 16)
AD	131W37853	Screw (M4 X 30)
AE	131W40253	Screw (M5 X 10)
AF	153W17552	Screw (M4.2 X 9.5)
AG	112W07255	Screw (M4 X 8)
AH	156W27455	Screw (M4.2 X 9.5)
AJ	156W23355	Screw (M2.9 X 6.5)
AK	286W02354	Spring Pin (2-19mm)
AL	113W06455	Screw (M3 X 10)
AM	251W10355	Washer (M3)
AN	113W50555	Screw (M5 X 12)
AP	256W20554	Lockwasher (M5)
AR	236W00651	Speed Nut
AS	354W21152	Retaining Ring (8-11mm)
AT	112W27655	Screw (M4 X 16)
AU	113W06355	Screw (M3 X 8LG)
AV	220W00650	Nut (M6)
AW	112W27455	Screw (M4 X 12)
AX	153W23452	Screw (M2.9 X 9.5)
AY	251W22602	Flat Washer (No 10)
AZ	153W42353	Screw (M4 X 12)
BA	153W17451	Screw (M4.2 X 9.5)
BB	201W00455	Nut (M4 HEX)
BC	265W00650	Lockwasher (M6)
BD	236W00851	Speednut
BE	265W00850	Lockwasher (M8)
BF	153W27552	Screw (M4.2 X 13)
BG	354W00555	Retaining Ring (6mm)
–	654W00555	Retaining Ring (**RoHS**)
BH	113W13802	Screw (2-56 X 1/2)
BJ	354W20752	Retaining Ring (4-5mm)
BK	215W10102	Nut (8-48)
BL	113W54055	Screw (M3 X 4LG)
BM	153W27952	Screw (M4.2 X 25LG)
BN	153W17752	Screw (M4.2 X 19)
BP	141W30553	Setscrew (M4 X 6)
BR	131W20853	Screw (M10 X 30-1)
BS	102W10355	Flathead Screw (M4 X 8)
BT	158W17452	Screw (M4 X 8)
BU	113W10355	Screw (M4 X 8)
BV	354W20652	Retaining Ring (3-4mm) (**Non RoHS**)
–	654W20652	Retaining Ring (3-4mm) (**RoHS**)
BW	158W21752	Screw (M6 X 16)
BX	132W03653	Capscrew (M4 X 14)
BY	320W34301	Rivet
BZ	236W00251	Speednut
CA	112W05255	Screw (M3 X 8)
CB	153W17452	Screw (M4.2 X 9/5)
CC	286W04054	Pin (M3 X 24)
CD	354W21352	Retaining Ring (10-14mm)
CE	158W17852	Screw (M4 X 20)
CF	113W54255	Screw (M3 X 6)
CG	354W20952	Retaining Ring (6-8mm)
CH	113W06255	Screw (M3 X 6)
CJ	113W06855	Screw (M3 X 20)
CL	153W15451	Screw (3.5 X 9.5)
CM	–	Screw (4 X 20) (158W47059)
CN	–	Screw (M4 X 8) (158W20459)
CP	113W10455	Screw (M4 X 10)
CR	113W05555	Screw (M4 X 12)
CS	136W32050	Screw (M4 X 2)
–	636W32050	Screw (M4 X 2) (**RoHS**)
CT	158W40459	Screw (M4 X 8)
CU	112W24410	Screw (6-32 X 1/4)
CV	112W05158	Screw (M3 X 6)
CW	158W20659	Screw (**Non RoHS**)
–	658W20659	Screw (**RoHS**)

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002E40470	PL 9.7
003K07581	PL 7.5
003E13010	PL 14.3
003E16521	PL 7.8
003E17610	PL 7.3
003E17610	PL 7.4
003E18781	PL 7.7
003E19330	PL 9.7
003K19960	PL 7.5
003E67220	PL 14.2
003E69450	PL 1.3
003E69900	PL 7.5
003E70260	PL 7.5
003E71730	PL 7.5
003E77950	PL 1.3
004E10130	PL 9.2
004E21600	PL 14.4
005K01351	PL 9.7
005K04151	PL 9.1
005E06810	PL 7.2
006K26281	PL 10.4
006K26690	PL 9.2
006K26701	PL 8.2
006K26760	PL 8.3
006K30190	PL 9.7
006K30910	PL 9.7
006K30920	PL 10.4
006K30930	PL 9.2
006K30940	PL 8.2
006K30950	PL 8.3
007E01340	PL 9.2
007E05221	PL 9.4
007K05260	PL 9.8
007K05760	PL 7.2
007K12593	PL 7.2
007K13520	PL 9.6
007K14220	PL 9.6

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007K14361	PL 7.2
007K14390	PL 7.2
007E14600	PL 7.3
007E14610	PL 7.2
007E14650	PL 7.3
007E14690	PL 9.8
007E14700	PL 9.8
007E14710	PL 9.8
007E16330	PL 9.8
007E16341	PL 9.8
007E19072	PL 7.2
007E44391	PL 10.1
007E69360	PL 10.5
007E69380	PL 10.5
007E69390	PL 10.5
008E06000	PL 14.5
008E07620	PL 14.5
008E08320	PL 14.5
009E27330	PL 7.5
009E27340	PL 7.3
009E27340	PL 7.4
009E27340	PL 7.8
009E27341	PL 7.8
009E30860	PL 7.8
009E30861	PL 7.8
009E30870	PL 7.8
009E30871	PL 7.8
009E32500	PL 8.2
009E32510	PL 8.1
009E32790	PL 7.5
009E38060	PL 10.3
009E41251	PL 9.6
010K01351	PL 7.1
010K01360	PL 7.7
010K03380	PL 10.1
010E04190	PL 9.8
010K04590	PL 7.1
010K04600	PL 7.7
010K04610	PL 10.1
011E04470	PL 7.7
013E00803	PL 9.4

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Part Number	Part List
013E00804	PL 9.4
013K04360	PL 9.2
013K04630	PL 9.2
013E20970	PL 10.2
013E20980	PL 10.4
013E21510	PL 9.2
014K04730	PL 9.6
014K04740	PL 9.6
014K09910	PL 9.6
014K09920	PL 9.6
014E20541	PL 14.1
014E20551	PL 14.3
014E46450	PL 9.7
014E47501	PL 10.4
014E49090	PL 10.2
014E50070	PL 10.4
015K57430	PL 8.2
015K77690	PL 8.2
016E06020	PL 10.4
016E06020	PL 8.2
016E16200	PL 10.2
016E16620	PL 9.6
017K01120	PL 14.1
017K03820	PL 14.6
017K03831	PL 14.6
017K03840	PL 14.6
017K03851	PL 14.6
017K03980	PL 14.6
017K03990	PL 14.6
017K04000	PL 14.6
017K04010	PL 14.6
017K04260	PL 14.6
017K04270	PL 14.6
017K04280	PL 14.6
017K04290	PL 14.6
019E07100	PL 8.2
019E07100	PL 8.3
019E11700	PL 10.4
019E15551	PL 9.7
019E51260	PL 10.3
019E52800	PL 1.2

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019E62030	PL 7.5
019E73930	PL 8.2
019E73930	PL 8.3
019E74715	PL 1.3
019E74750	PL 1.2
019E74750	PL 1.3
020E04350	PL 9.4
020E13603	PL 8.2
020E18830	PL 7.8
020E26340	PL 10.4
020E38730	PL 8.2
020E38740	PL 10.7
020E38750	PL 10.7
020E39601	PL 10.4
020E48220	PL 7.8
020E48640	PL 10.7
020E48650	PL 10.7
021K02160	PL 9.3
022E10060	PL 7.5
022E10531	PL 8.2
022E11441	PL 8.2
022E11540	PL 7.3
022E11540	PL 7.4
022E22890	PL 10.4
022K78981	PL 10.4
022K79002	PL 10.5
022K79010	PL 10.5
022K79111	PL 10.2
022K79970	PL 7.1
023E01620	PL 9.4
023E23580	PL 8.2
023E23590	PL 10.7
023E24190	PL 10.4
026E11970	PL 8.2
026E57690	PL 9.9
028E07430	PL 7.8
028E07771	PL 9.6
028E14580	PL 10.5
028E14590	PL 10.2
028E14600	PL 10.4

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028E16920	PL 10.2
029K01111	PL 8.1
029K03530	PL 8.3
029K04360	PL 8.3
029K04390	PL 8.1
029E12930	PL 7.3
029E13701	PL 7.5
029E14460	PL 7.5
029E14750	PL 7.4
029E14760	PL 7.3
029E23670	PL 14.5
029E23870	PL 9.9
029E28060	PL 14.1
029E39280	PL 1.2
029E49930	PL 7.5
030E16161	PL 9.1
030K56150	PL 9.6
030K56160	PL 9.6
030K57181	PL 14.5
030K57191	PL 14.5
030K71183	PL 10.3
030K73120	PL 8.3
030K73130	PL 14.4
030K74790	PL 7.5
030K79860	PL 14.5
031K06990	PL 10.4
031K07000	PL 10.4
031K08560	PL 10.4
031K08670	PL 10.4
035K04581	PL 9.8
035K05790	PL 9.3
035K05900	PL 9.6
035K05941	PL 9.5
035K05950	PL 9.5
035K07561	PL 9.9
035K08410	PL 9.8
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035E41150	PL 14.5
035E41160	PL 14.1

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035E64440	PL 9.2
035E64530	PL 10.3
035E64660	PL 14.5
035E64770	PL 10.1
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035E66330	PL 9.9
035E70260	PL 9.9
035E70990	PL 14.6
035E71070	PL 14.6
035E71080	PL 1.3
035E71090	PL 1.3
037K01320	PL 7.7
037K01380	PL 7.7
037K01440	PL 7.7
038K04860	PL 9.4
038K04861	PL 9.4
038K09190	PL 7.5
038K11070	PL 10.3
038K14001	PL 8.3
038K14020	PL 7.8
038K14960	PL 10.3
038K14990	PL 14.1
038K15000	PL 14.1
038K15460	PL 14.1
038K15470	PL 14.1
038K17170	PL 7.8
038E27710	PL 10.3
038E27721	PL 10.3
048K44401	PL 14.3
048K47680	PL 14.3
048K47692	PL 14.3
048K47700	PL 14.1
048K47710	PL 14.3
048E51410	PL 14.4
050E20871	PL 9.6
050E21750	PL 7.5
050E22880	PL 7.5
050K52841	PL 7.1
050K53430	PL 7.5
050K54630	PL 7.5

Table 1 Part Number Index

Part Number	Part List
050K59440	PL 7.5
050K62260	PL 7.5
050K67300	PL 7.5
052K03581	PL 7.6
052K09330	PL 7.6
052E24241	PL 9.10
053K04180	PL 9.10
053E04750	PL 9.1
054E03181	PL 9.7
054E03491	PL 9.8
054E06533	PL 9.5
054K12300	PL 1.3
054E21440	PL 10.1
054K25000	PL 9.10
054K37740	PL 9.10
055K13830	PL 9.7
055K13840	PL 9.7
055K32731	PL 10.1
055K33190	PL 9.10
055K34360	PL 10.1
055K36950	PL 9.10
055K36960	PL 9.10
055E38100	PL 14.5
055E48470	PL 10.5
055E48470	PL 9.2
055E49380	PL 8.3
055E49381	PL 8.3
055E49390	PL 8.3
055E49391	PL 8.3
056K02740	PL 14.3
056K02810	PL 14.3
059K27832	PL 8.1
059K27880	PL 10.1
059K27890	PL 10.7
059K35070	PL 10.1
059K51860	PL 8.1
059K51861	PL 8.1
059K52970	PL 7.1
059K53100	PL 10.5
059K53120	PL 10.4
059K53130	PL 10.2

Table 1 Part Number Index

Part Number	Part List
062E14680	PL 9.9
068K43650	PL 14.4
068K43660	PL 14.4
068K47390	PL 10.3
068K47400	PL 8.3
068K48430	PL 14.5
068K48440	PL 9.6
068K48450	PL 9.6
068K48860	PL 14.5
073E13352	PL 14.4
094K00085	PL 9.4
094K04324	PL 10.5
094K04900	PL 10.5
096E78252	PL 1.4
101K26083	PL 1.4
101K42715	PL 1.1
101K42715	PL 1.2
101K43880	PL 9.2
101K48842	PL 1.5
101K56120	PL 1.5
101K57130	PL 9.2
101K57150	PL 1.5
101K57190	PL 1.2
101K57200	PL 1.3
105E15060	PL 1.1
105E15365	PL 1.3
105E18540	PL 1.3
105E18580	PL 1.1
105K25952	PL 1.1
105K29350	PL 1.1
108E05310	PL 1.2
108E06720	PL 1.2
110E02640	PL 14.3
110E02640	PL 7.7
110K03340	PL 10.4
110E05500	PL 10.4
110E06020	PL 1.2
110K08970	PL 14.5
110K09430	PL 14.2
110K09431	PL 14.2
110K14080	PL 14.2

Table 1 Part Number Index

Part Number	Part List
110K15690	PL 14.2
110K15700	PL 10.4
110K15710	PL 14.2
110K15740	PL 14.5
113K03370	PL 1.1
113K03410	PL 9.9
113E42081	PL 9.9
114E18410	PL 1.2
114E24120	PL 1.2
115E01410	PL 14.2
115E11571	PL 9.2
117E23750	PL 1.1
117E23751	PL 1.1
117E23752	PL 1.1
117E25890	PL 1.1
117E29550	PL 1.1
117K32480	PL 1.2
117K39560	PL 1.1
117K39571	PL 1.3
117K39582	PL 1.3
117K40130	PL 9.2
117K40140	PL 8.2
117K45110	PL 1.2
117K45120	PL 1.3
117K45130	PL 1.3
117K45140	PL 9.2
117K45150	PL 8.2
119E00800	PL 14.4
120P60583	PL 10.4
121E07680	PL 7.5
121E10610	PL 14.3
121E18340	PL 14.2
121E20440	PL 7.2
121K25993	PL 9.6
121K44731	PL 9.6
122K02020	PL 10.2
122K02030	PL 10.2
122K02101	PL 9.9
122K02630	PL 9.9
122K02631	PL 9.9
125K03490	PL 9.9

Table 1 Part Number Index

Part Number	Part List
125K04600	PL 9.9
126E02380	PL 9.6
126K07330	PL 7.1
126K07340	PL 7.2
126K23330	PL 7.2
126K23340	PL 7.1
127K04293	PL 8.2
127E11240	PL 1.3
127E13610	PL 10.5
127E13620	PL 9.6
127E13650	PL 9.10
127E15380	PL 1.3
127E15450	PL 9.6
127E15520	PL 10.5
127E15680	PL 9.10
127K22600	PL 9.8
127K26580	PL 7.8
127K41090	PL 10.7
127K41541	PL 10.1
127K44210	PL 9.1
127K44221	PL 7.2
127K53520	PL 8.2
127K54840	PL 9.8
127K54850	PL 7.2
127K54860	PL 10.7
127K54870	PL 10.1
127K54880	PL 7.8
127K54900	PL 9.1
130E02271	PL 14.1
130E02271	PL 7.1
130E03250	PL 7.2
130E10090	PL 8.2
130E10970	PL 14.2
130E12140	PL 14.1
130E12140	PL 7.1
130K30381	PL 9.7
130K51801	PL 7.1
130K65900	PL 9.7
130K66400	PL 9.9
130K66560	PL 10.3
130K66680	PL 10.2

Table 1 Part Number Index

Part Number	Part List
130K66730	PL 7.8
130K74590	PL 10.2
130K74650	PL 9.7
130K74660	PL 9.9
130K74690	PL 10.3
130K75020	PL 9.7
130K75150	PL 7.8
130K75370	PL 9.9
140K15954	PL 7.2
142K01540	PL 1.2
142K02080	PL 1.2
152S05100	PL 1.1
152S05101	PL 1.1
160K85370	PL 9.9
162K23421	PL 1.4
162K23421	PL 1.5
162K28610	PL 7.1
413W30854	PL 7.2
413W31054	PL 7.1
413W31054	PL 8.2
423W57550	PL 7.8
600K59060	PL 9.3
604K04460	PL 10.3
604K04470	PL 10.3
604K04480	PL 10.3
604K12740	PL 14.1
604K12770	PL 10.3
604K12880	PL 10.4
604K12900	PL 9.8
604K13350	PL 9.8
604K13460	PL 9.1
604K16990	PL 7.2
604K17530	PL 14.2
604K17800	PL 7.3
604K21840	PL 10.5
604K35000	PL 9.2
673K99610	PL 14.4
673K99770	PL 14.4
675K10130	PL 14.4
675K21710	PL 14.4
675K43210	PL 14.4

Table 1 Part Number Index

Part Number	Part List
713W80837	PL 14.3
716W01003	PL 1.1
733W05871	PL 1.1
802K39390	PL 7.5
802K39400	PL 7.1
802K40200	PL 14.5
802K40243	PL 14.1
802E58490	PL 14.6
802E58520	PL 14.6
802E59040	PL 14.4
802K60691	PL 14.6
802K60701	PL 14.6
802K60711	PL 14.6
802K60750	PL 14.6
802K61120	PL 14.3
802K61141	PL 14.1
802K62850	PL 14.3
802K69330	PL 14.6
802K69340	PL 14.6
802K69350	PL 14.6
802K81730	PL 7.5
802K81750	PL 14.1
802E82160	PL 14.6
802E82170	PL 14.6
802K95150	PL 14.3
802K95160	PL 7.5
807E23010	PL 10.2
809E43260	PL 10.3
809E43281	PL 10.4
809E45000	PL 9.2
809E45020	PL 8.3
809E45230	PL 7.5
809E45780	PL 9.9
809E45781	PL 9.9
809E46680	PL 7.2
809E78290	PL 10.4
809E78600	PL 9.6
815E16870	PL 10.4
815E34420	PL 10.4
826E32810	PL 8.2
830E63720	PL 7.5

Table 1 Part Number Index

Part Number	Part List
830E72250	PL 10.2
830E72260	PL 10.2
830E76230	PL 7.1
830E96350	PL 10.4
848K00510	PL 14.1
848K00511	PL 14.1
848K00520	PL 14.6
848K00530	PL 14.6
848K00540	PL 14.6
848K06221	PL 14.3
849E21220	PL 8.1
849E76310	PL 14.4
849E76340	PL 8.1
849E99200	PL 10.2
849E99210	PL 10.2
892E50830	PL 14.2
892E94680	PL 1.5
892E94690	PL 1.5
892E95810	PL 7.5
892E95820	PL 7.5
892E95830	PL 14.2
893E48200	PL 1.5
893E48290	PL 7.5
893E48300	PL 7.5
960K10722	PL 1.1
960K27750	PL 7.2
960K33270	PL 1.1
960K33320	PL 9.9
962K00320	PL 1.1
962K00330	PL 1.1
962K00341	PL 1.1
962K00351	PL 1.1
962K00360	PL 9.9
962K00542	PL 10.3
962K00630	PL 10.7
962K00640	PL 10.1
962K02830	PL 10.1
962K02921	PL 10.3
962K03180	PL 14.2
962K07390	PL 1.3
962K21070	PL 1.1

Table 1 Part Number Index

Part Number	Part List
962K56090	PL 1.1
962K56100	PL 1.1
962K56110	PL 9.9
962K56120	PL 10.3
962K56130	PL 10.7
962K56140	PL 10.1
962K56160	PL 10.3
962K56170	PL 14.2
962K56250	PL 1.1
962K56440	PL 1.1
962K56450	PL 1.4
962K56450	PL 1.5
962K56480	PL 7.1
962K57020	PL 1.3

6 General Procedures

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To Enter The Diagnostic Mode

The diagnostic mode is entered by pressing and holding the zero (0) button while switching on the Printer. The Diagnostic Mode may also be entered from the Control Panel by entering the Printer Menu > Diagnostics, and entering the password (6789).

When entering the diagnostic mode, the Message Display will indicate the Copyright message, the message ROM configuration, and the software revision level.

(Figure 1): The following message will be displayed when the diagnostic mode is entered.

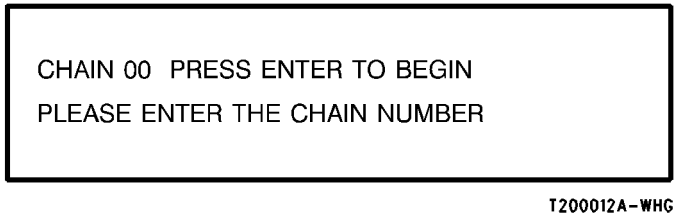


Figure 1 Control Panel Buttons

Enter the first two digits of the code and press **Enter** button, then enter the second two digits of the code, and press the **Enter** button to begin the test.

(Figure 2): The Control Panel buttons are identified in the following diagram:

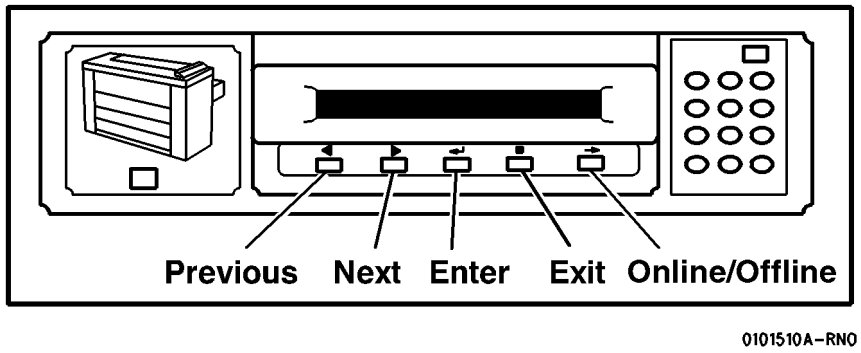


Figure 2 Control Panel Buttons

The code entered will be displayed on the Control Panel. The test name will be in the bottom line of the display along with test feedback information. There also may be additional information displayed depending on the test being run.

The **Exit** button is used to stop the tests.

The **Exit** button is used to clear the entry.

The Test Codes consist of a chain number and a test number. The chain numbers correspond to the same chain numbers that are used in the Service Manual to identify functional areas in the Printer. The test numbers are sequential numbers to identify the tests within a chain.

The chain numbers used are listed below in Table 1.

Table 1

Chain Number	Functional Area
01	Standby Power
02	User Interface (Control Panel)
03	Printer Run Control
04	Drives
06	Exposure
07	Media Supply
08	Media Transportation
09	Xerographics
10	Fusing/Print Transportation
11	Finishing
14	Communication

To Exit The Diagnostic Mode

Enter the test [0361] or switch the Printer power off, wait 5 seconds, then switch it on.

Input Diagnostic Test Procedure

1. Enter the Diagnostic Mode
2. Enter the Test Code
3. Press the **Enter** button to begin the test.
4. Manually operate the component that is to be tested.
5. The condition of the component will be indicated in the message display window. The state of the component is indicated by a **0** for low state and a **1** for high state.
6. Press the **Exit** button to stop the diagnostic test.
7. Press the **Exit** button again to clear the chain.

Input Diagnostic Test Codes

Table 1 Input Test Codes

Code	Component Tested	Value
[0101]	Front Door Interlock	0 is Open
[0105]	Fuser Exit Door Interlock	0 is Open
[0106]	Top Cover Interlock	0 is Open
[0202]	Keyboard Test	key value is ##H
[0701]	Module Loop Interlock (Fuser Assembly and Xero Mod installed)	1 is In 0 is Out
[0702]	Cutter Drawer Interlock	0 is Open
[0707]	Roll 1 Lead Edge Sensor	0 is Active
[0708]	Roll 2 Lead Edge Sensor	0 is Active
[0709]	Roll 3 Lead Edge Sensor	0 is Active
[0710]	Roll 1 Motion Sensor	0 is Active
[0711]	Roll 2 Motion Sensor	0 is Active
[0712]	Roll 3 Motion Sensor	0 is Active
[0713]	Roll 1 Drawer Sensor	0 is Open
[0714]	Roll 2 Drawer Sensor	0 is Open
[0715]	Roll 3 Drawer Sensor	0 is Open
[0721]	Cutter Home Sensor	1 is Active
[0801]	Sheet Feed Sensor	0 is Active
[0803]	Media Registration Sensor	0 is Active
[0807]	Exit Sensor	1 is Active
[0808]	Stack Height Sensor	1 is Full
[0901]	Toner Cartridge Home Sensor	0 is Active
[0902]	Drum Motor Stall Sensor	0 is Stalled
[1005]	Fuser Jam Switch	0 is Active

Output Diagnostic Test Procedure

The Output Diagnostic Test is used verify correct operation of output components. The output diagnostic test allows the operation of the individual or multiple (chaining) output component(s) in order to verify operation.

Go To Enter Multiple Tests (Chaining) for instructions on how to enter multiple tests.

1. Enter the Diagnostic mode.
2. Enter the chain number (first two numbers on the code).
3. Press the **Enter** button.
4. Enter the test number (last two numbers of the code).
5. Press the **Enter** button to begin the test.
6. Observe the component for the correct operation. If the component and its circuitry are functioning correctly, the component will operate. If they are not, refer to the documentation to isolate the problem.
7. Press the **Exit** button to stop the Diagnostic Test.
8. To exit the diagnostic mode, enter the test **[0361]** or switch the Printer power off, wait 5 seconds, then switch it on.

NOTE: *The Fuser must be at operating temperature before making voltage checks or operating the diagnostics.*

Output Diagnostic Test Codes

Table 1 Output Test Codes

Code	Component Tested	Value
[0201]	Display Test (individual LEDs)	LEDs sequentially light
[0210]	Control Panel LEDs	All LEDs On
[0716-1,2,3]	Roll Drive Motor and Roll 1 Feed Clutch (CL1) (See Note below)	Roll Drive Motor (Forward) and Roll 1 Feed Clutch on Output = 1493 default
[0717- 1,2,3]	Roll Drive Motor and Roll 2 Feed Clutch (CL3) (See Note below)	Roll Drive Motor (Forward) and Roll 2 Feed Clutch on Output = 1493 default
[0718- 1,2,3]	Roll Drive Motor and Roll 3 Feed Clutch (CL5) (See Note below)	Roll Drive Motor (Forward) and Roll 3 Feed Clutch on Output = 1493 default
[0716- 4]	Roll Drive Motor and Roll 1 Rewind Clutch (CL2) (See Note below)	Roll Drive Motor (Reverse) and Roll 1 Rewind Clutch on
[0717- 4]	Roll Drive Motor and Roll 2 Rewind Clutch (CL4) (See Note below)	Roll Dive Motor (Reverse) and Roll 2 Rewind Clutch on
[0718- 4]	Roll Drive Motor and Roll 3 Rewind Clutch (CL6) (See Note below)	Roll Drive Motor (Reverse) and Roll 3 Rewind CLutch on
[0720]	Cutter Brake	Off or On
[0723]	Cutter Drive Motor (1 cycle)	Status = ##
[0727]	Roll 1 Rewind Clutch (CL2)	Engaged
[0728]	Roll 2 Rewind Clutch (CL4)	Engaged
[0729]	Roll 3 Rewind Clutch (CL6)	Engaged
[0730]	Roll 1 Forward (Feed) Clutch (CL1)	Engaged
[0731]	Roll 2 Forward (Feed) Clutch (CL3)	Engaged
[0732]	Roll 3 Forward (Feed) Clutch (CL5)	Engaged
[0733]	Bypass Drive Motor and Clutch	Output = 1493 default
[0751]	Media Heater	1 is Active
[0905]	Cartridge Drive Motor	Engaged
[0914]	Cooling Fans	Switches Cooling Fans on at full speed for 3 seconds then slow speed if Fuser is cold
[0917]	Transport Drive Motor - Reg Roll Stepper	Output = 1807 default
[0925]	Toner Cartridge	Rotates 1 revolution
[0956]	Test Pattern - additional delay	0.1-25.5 seconds
[0957]	Display area coverage of last print made.	percent
[0966]	Erase Bar	Bar lights

NOTE: *When using Codes [0716], [0717], and [0718] you must also select the media code (1) Bond, (2) Vellum, and (3) Film to select the feed rate for the media type loaded in the Media Drawer. To check the Rewind Clutch and reverse the Drive Motor, you must enter (4). The (4) is not displayed on the Control Panel display.*

To Enter Multiple Tests (Chaining)

The Media button is used when entering more than one test. To chain one code to another, perform the following:

1. Enter the desired code for the first test.
2. Press the MEDIA button, then enter the additional code(s) for additional tests.

To Exit from Multiple Tests

Multiple tests can be switched off by two methods.

1. Enter the codes in the reverse sequence from the way they were initially entered, pressing the EXIT button after each code.
2. Press and hold the DOT (.) button while pressing the EXIT button. This will clear all of the codes that were entered.

Special Tests

The following tables give special diagnostic tests that are used to enable or disable features or to change the operating parameters of the Printer. To enter a Special Test, the Printer must first be in the diagnostic mode

Each special test has a value that is stored in non-volatile memory (NVM). If there is a default value, it is found in the Value column.

NVM values may be changed by entering the Special Test mode, pressing the ENTER button, and then using the PREVIOUS and NEXT arrow keys to select the desired NVM value. To enter the selected value, press the ENTER button again. To exit the test, press the EXIT button.

NOTE: *If there is a reference to a procedure, the procedure must be followed in order to perform the test correctly.*

Table 1 Special Tests

Code	Description	Value
[0200]	Online Mode	
[0211]	Language ROM Test	0 = Both Language ROMs are defective. 1 = Secondary Language ROM is defective 4 = Primary Language ROM is defective 5 = Neither Language ROMs are defective
[0261]	Maximum Line Current Limit Set (dependent on service)	**US/Canada:** 17.6 amps = 220 VAC, 20 amp. service 13.2 amps = 220 VAC, 15 amp. service **EO:** 16.0 amps = 230-240 VAC, 16.0 amp. service **UK:** 13.0 amps = 230-240 VAC, 13.0 amp. service **Switzerland:** 10.0 amps = 220 VAC, 10 amp. service Central and South America: 20.0 amps = 220 - 240 Volts @ 15 amps,
[0263]	Billing Meter Count This code is used to select the billing in meters or inches.	NACO: 0 = inch EO: 1 = metric (meters)
[0300]	Jump 0.	Restarts the IOT.
[0301]	Enter IOT Firmware Update Mode	Download the latest software.

Table 1 Special Tests

Code	Description	Value
[0360]	NVM Reset to Default. Entering the number 1 or 3 resets all the NVM values to the default values. Entering the number 2 allows the electronic billing to be reset to any desired value.	1 = NACO NVM Default 2 = Billing 3 = EO NVM Defaults ***NOTE:*** *If the web oiler is not new, run [1031] to set the counter value to reflect the remaining length.*
[0361]	Watchdog Timer Test. This code can be used to exit the Diagnostic mode	
[0362]	Diagnostic Time-out interval. This code allows the adjustment of the time interval that the Printer will stay in the Diagnostic mode.	0-50 minutes
[0363]	NVM Reset This code allows the NVM values to be reset to the previously adjusted values. The software compares the NVM values to a backup file and will reset the values that are not the same as the values in the backup file.	
[0364]	Reset NVM Check Sum	
[0365]	NVM Printout of NVM contents in hex format.	
[0366]	NVM Dump of Adjustable Settings. NOTE: This information is accessible through the Printer Main PWB, J611.	Refer to GP 7, NVM Dump of Adjustable Settings, later in this section.
[0391]	Recent Fault Log Displays the last 99 faults that have occurred.	Displays the fault code, how many events ago it occurred, and the billing meter reading at the time the fault was originally displayed. Log entries are numbered from 1 to 99, with 1 being the most recent.
[0392]	Fault History Log	Displays, in alphabetical order, the number of occurrences of each of the fault codes since the log was last cleared.
[0602]	Vertical Magnification Go to ADJ 8.1 Vertical Magnification Adjustment	0-40mm
[0700]	Cut Length Adjustment Go to ADJ 8.3 Cut Length.	600mm is ###mm
[0750]	Adjust Heater on RH setpoint.	0-99 RH

Table 1 Special Tests

Code	Description	Value
[0760]	Delay Between Prints (Film) Increases the time delay between making prints on Film Media	1-30 Secs
[0809]	Enable/Disable Stack Height Sensor	00# 00#
[0860]	Image Registration Go to ADJ 8.2 Lead Edge Registration.	0-40mm
[0903]	Imaging Bar configuration NVM setup	Numeric keypad entry of LED Bar power to be used/recorded for algorithum usage to determine the power output in ergs.
[0904]	Automatic ESV Setup.	Sequentially steps through test, displays values when complete.
[0906]	Tone Up/Tone Down (Automatically adjusts toner concentration until the control set point is reached).	Desired sensor voltage = #.# volts Actual sensor voltage = #.# volts
[0907]	Current Dispense Mode.	TDK or Sleep
[0920]	Displays Run Time.	#.# Hours
[0921]	Electrostatic Setup This code is used adjust the electrostatics. When in this code, specific tests can be run by pressing the following buttons: 1 AC/Transfer on Xerographic HVPS 2 Clean Voltage Measurement 3 Adjust Vlow (obsoleted by [0904]) 4 Adjust Image Density (ADJ 9.3), Toner Sensor Vbias 5 LED Image Bar Illumination Test. 6 Calibrates the Toner Control Sensor. 7 Humidity Sensor control point setting.	 Xerographic High Voltage Power Supply On 060-175 0-20 0-6.0 Observe Bar IOT reveals >65% RH 1=yes, 2=no
[0922]	This code disables toner faults so that the Printer will continue to operate.	**[Yes]** for running with toner faults.
[0926]	Resets the Toner Control Bias to default value	#.# volts
[0955]	IOT Internal Test Pattern Print	test patterns: 1-9 roll select: 1-3 length of print: 210-50000mm quantity of prints: 1-255

Table 1 Special Tests

Code	Description	Value
[0970]	Adjust test patterns for code [0921-5]. Use two different pattern numbers to see the LED bar change in code [0921-5].	1-9
[1004]	Fuser Run Temperature Display. This code switches the fuser heat rod on and increases the fuser heat roll temperature to the run temperature. The run temperature is displayed in degrees (F) and degrees (C). At run temperature, the Drum/ Developer and Fuser Drive Motors are switched on.	Edge Temp ###°C ###°F Center Temp ###°C ###°F The following conditions may exist when the message **FUSER CAN NOT BE TURNED ON, CONDITION XX** is displayed: 03 Developer Cover is open. 04 Cutter Cover is open 05 Xerographic Interlock is open. 06 Right side door is open. 07 Document Handler interlock is open. 08 Fuser status problem. Turn power off and try again. 09 Illumination status problem. Turn power off and try again.
[1006]	Display Fuser Temperature (Analog)	Status = ###, Volts=###, Amp = ##.# Center = ###.#°C, ###°F Edge = ###.#°C, ###°F
[1026]	Reset the Fuser Control NVM to default values.	
[1030]	Reset Oil Web. Resets the web counter when a new web has been installed.	
[1031]	Specify Oil Web Position. Used if the NVM fails or is reset. This sets the controls for web use.	Enter the diameter of the Take Up spool in millimeters.
[1032]	Specify Web Oil Rate.	This is used to adjust the web oil rate from 50% to 200%. (A 100% setting is nominal.) This setting directly impacts the life of the Oil Web. 50% means that 1/2 as much web is used.
[1033]	Advance Oil Web. Used to tension the web correctly when the oil assembly is removed and reinstalled. It is also used to check motor operation.	Note: Very slow method on the 8850/ 510dp/510dp. Remove oil assembly and manually remove slack.
[1034]	Estimate Oiler Web Life.	Displays the remaining web life in print feet or meters.

Table 1 Special Tests

Code	Description	Value
[1060]	Fuser Temperature bond media adjustment.	350° F (177° C) with 36 inch wide bond media. Go to **ADJ 10.1** Fuser Temperature.
[1062]	Fuser Temperature vellum media adjustment:	350° F (177° C). Go to ADJ 10.1 Fuser Temperature
[1063]	Fuser Temperature film media adjustment:	350° F (177° C). Go to ADJ 10.1 Fuser Temperature
[1101]	Folder Status	### ###
[1401]	Loopback Test for Remote Access Interface	0 is Pass
[1402]	Loopback Test for Controller Command / Status	0 is Pass
[1403]	Loopback Test for Finisher Port	0 is Pass
[1404]	ESS Communications Test	Start (Does not return to Dynastic Mode)

GP 1 Xerographic HVPS Checkout

The purpose of this checkout procedure is to verify correct operation of the Xerographic High Voltage Power Supply.

(Figure 1): The location of the Xerographic HVPS Test Points is shown in the drawing.

NOTE: *Connect the Black (-) lead to the 24V RET lead connector (J7) when measuring all voltages. Failure to use this test point can cause incorrect readings.*

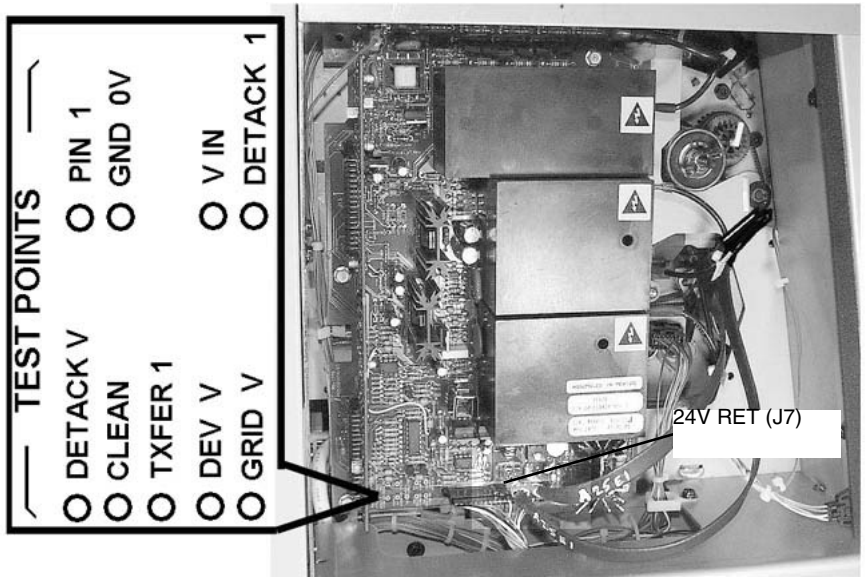


Figure 1 Location of Xerographic High Voltage Power Supply Test Points

1. Check that the Tag 6 HVPS is installed. If not, install the Tag 6 HVPS.
2. Reference Table 1 and check that Vin is in specification. If okay continue. If not, check the wiring between A25P/J1 of the HVPS and A3P/J605. If the wiring is good, go to the DC Power RAP in Section 2.
3. Enter the [0921] code indicated for the voltage to be checked as shown in TABLE 1. If a voltage is present (even if voltage is fluctuating,) continue with Step 4.

   If a voltage is not present (steady at less than 0.1VDC), as shown in the Printing column, check for an open in the wiring for the component being checked. If there is no open, replace the HVPS (PL 1.3).

Table 1 Xerographic High Voltage Power Supply Voltage Checks

COM Meter Lead	V-Ohms Meter Lead	Standby Measured Voltage	Printing Measured Voltage	Diag-nostic Code
24V RET	Vin	24.0 +/- 1.5 VDC	24.0 VDC	[0921-1]
24V RET	PIN I	Less than 0.05 VDC	2.3 + 0.3 -0.1 VDC	[0921-2]
24V RET	GRID V	Less than 0.05 VDC	4.1 to 5.5 VDC	[0921-2]
24V RET	DEV V	Less than 0.05 VDC	2.1 to 2.9 VDC ***NOTE:*** *-210 to -290 VDC at developer housing*	[0921-2]
24V RET	TXFER1	Less than 0.05 VDC	0.60 ± 0.01 VDC	[0921-1]
24V RET	DETACK1	Less than 0.05 VAC	0.80 ± 0.1 VAC	[0921-1]
24V RET	CLEAN	Less than 0.05 VDC	1.85 + 0.15 - 0.05 VDC	[0921-2]
24V RET	DETACKV	Less than 0.05 VDC	-3.4 + 1.0 -0.1 VDC	[0921-1]

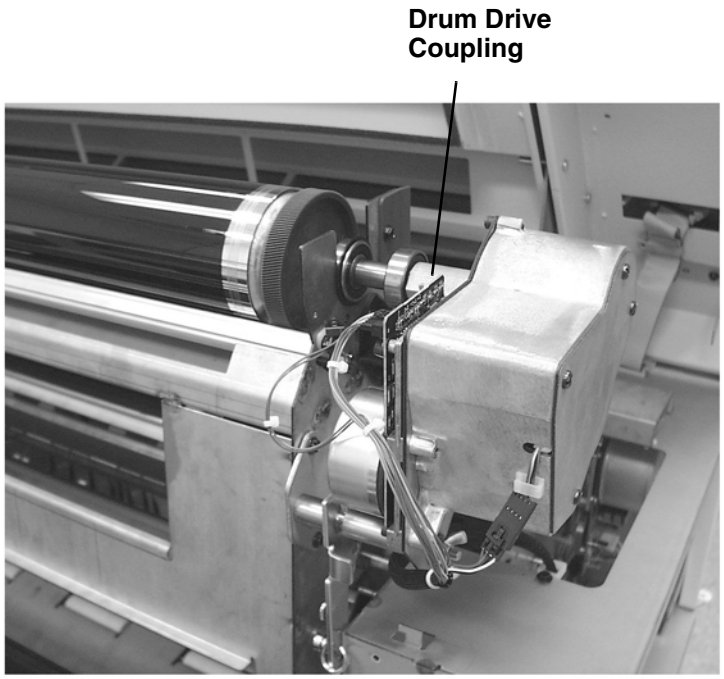
4. Check the fault monitor line for the output being checked: Development, A25P/J1-15; Charge/Grid, A25P/J1-16; and Detack/Clean, A25P/J25-20. If the voltage is less than 1.6 VDC, check the wiring to the respective xerographic component for an open or a short. If the wiring is okay, replace the HVPS (PL 1.3).
5. If the problem persists refer to the respective RAP:
   - LL-21 Charge/Grid Fault RAP
   - LL-22 Detack Fault RAP
   - LL-25 Charge Voltage V HIGH

   NOTE: *If you were referred here from one of the above RAPS, the HVPS is okay, and the problem persists, escalate the call.*

GP 2 Image on Drum (Panic Stop) Procedure

This procedure allows the isolation of print quality problems by observing the image on the Drum before the transfer of the toner to the media. If the defect is visible on the Drum before the transfer, the defect is related to the charge, the imaging, or the developer. If the defect is visible on the print after the transfer, the defect is related to the transfer or fuser.

1. Open the Front Door and install an Interlock Cheater Tool in the interlock
2. Locate the Drum Drive Coupling between the Drum Drive Motor and the Drum (Figure 1). Figure 1 shows the Xerographic Module raised in order to see the location of the Drum Drive Coupling. The Xerographic Module needs to be in the operating position for this procedure.



NOTE: *In the next step, you will need to stop the Drum by hand in order to prevent the Drum from moving (coasting) by the Developer Module and putting s reverse image on the Drum. The Drum Drive Motor is a low torque motor and will stop easily. Place your hand lightly on the Drum Drive Coupling in preparation to stop the Drum then open the interlock.*

3. Make a test print. Open the right door interlock and immediately grip the Drive Coupling to stop the Drum when the test pattern is almost half way beyond the Drum (Print is just starting to exit from the Printer).
4. Remove the Developer Module.
5. If the defect is visible on the developed image, the defect cause is related to the charge, the imaging or the developer. If the defect is not visible, the defect cause is related to the transfer or the fuser.

GP 3 Drum Maintenance

WARNING

When performing this drum maintenance, do the following:

- **Ensure that there is adequate ventilation in the area.**
- **Use protective gloves at all times.**
- **Do not smoke.**
- **Wash your hands when the procedures are completed.**

CAUTION

These procedures must be completed in the shortest possible time in order to reduce the effects of light shock.

Washing Procedure

Washing Materials:

- Drum Maintenance Kit
- Film Remover

1. Remove the Drum Assembly from the Xerographic Module (REP 9.2).
2. Put on gloves.
3. Gently remove any dry ink/toner and developer from the surface of the drum, using a dry polyurethane pad.
4. Apply Film Remover to a clean polyurethane pad.
5. (Figure 1): Wash the drum from end to end, using a circular motion.

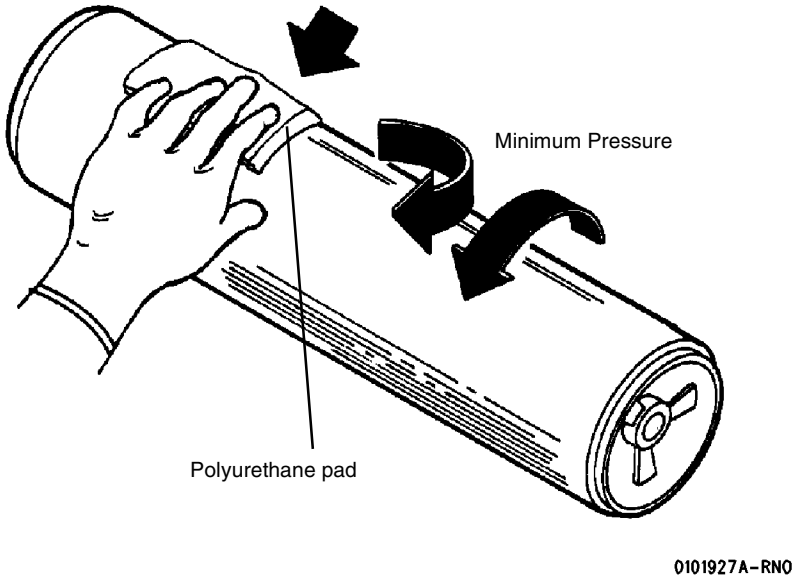


Figure 1 Washing the Drum

NOTE: *Ensure that the ends of the drum are washed.*

6. Using the clean side of the polyurethane pad, continue washing the drum until the entire surface of the drum is covered with film remover.
7. Allow enough time for the air to dry the surface of the drum.
8. Use the dusting pouch to apply a thin layer of Zinc Stearate (8R181) over the entire surface of the drum.
9. Buff the surface of the drum using the clean side of the dry polyurethane pad.

NOTE: *Ensure that the ends of the drum are buffed as well as the center of the drum.*

10. Continue to buff the surface of the drum for three complete revolutions of the drum.
11. Apply a final thin layer of Zinc Stearate over the entire surface of the drum.
12. Reinstall the drum.
13. Enter the diagnostic mode. Enter test [10-04] and allow the Printer to run for five more minutes.
14. Place the used washing materials in the disposal bag.
15. Wash your hands.

GP 4 Drum Cleaning Enhancement

1. Remove the Drum Assembly (REP 9.2).
2. Use the dusting pouch (8R181) to apply a thin layer of Zinc Stearate over the entire surface of the drum.
3. With a new lint-free cloth (600S4372), wipe the entire surface of the drum, using moderately heavy pressure. Use a back and forth motion of 6 - 10 strokes while revolving the drum three revolutions.
4. Repeat steps 2 and 3 one time and then continue with step 5.
5. Apply a thin layer of Zinc Stearate over the entire surface of the drum.
6. Reinstall the drum assembly.
7. Rotate the Drum manually to clean off excess zinc stearate.

GP 5 Communication Loopback Test

NOTE: *In order to perform this test, it is necessary to use the Loopback Kit (600K43210).*

1. Remove the Controller and disconnect the ribbon cable J610 from the IOT Main PWB.
2. Connect the 152K59420 loopback cable to J610 on the IOT Main PWB.
3. Connect the loopback tool 114E4680 to the loopback cable.
4. Enter [1402} to run the communication test.
5. If the test passes, a 0 will be displayed. The problem is then in the ribbon cable or the Controller. Go to the E7-01 RAP in the AccXES Controller Service Manual.
6. If the test fails (1), replace the IOT Main PWB (REP 3.1).

GP 7 NVM Dump of Adjustable Settings

The purpose of this procedure is to enable the service representative to access a listing of current NVM (Non-Volatile Memory) settings resident in the 8850/510dp Printer. If desired, this information may be saved to a laptop. This information can be of great value in recreating the customer's Printer settings in the event of a component failure. Information can also be recorded in the Service Log.

NOTE: *Ensure that the Printer and Controller are powered off prior to beginning this procedure.*

1. Remove the two screws at either side of the Printer Lower Right Side Cover. Tilt the cover (with Controller attached) backward and gently set the Controller on the floor.
2. (Figure 1): Connect a null-modem cable between the Serial Port of the laptop and either the Diagnostic Remote Port of the Printer (if installed) or J611 on the Printer Main PWB.

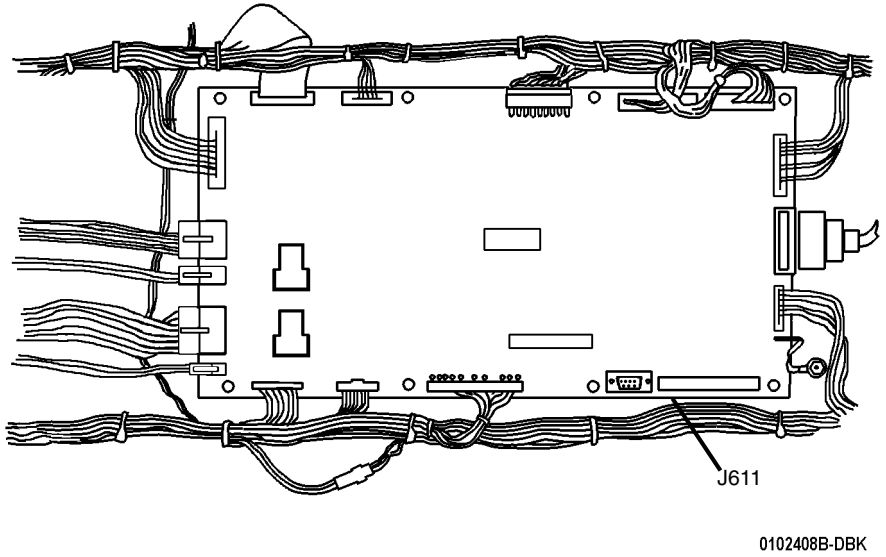


Figure 1 Serial Port Connection - Printer Main PWB

3. Access the terminal emulator software on the laptop.
4. Using the terminal emulator software on the laptop, set the serial port for the following configuration:
   - Baud rate: 19,200
   - 1 Stop Bit
   - No parity
   - Data bits: 8
5. Hold down the zero button on the 8850/510dp Printer Control Panel, and turn on the Controller and the Printer.
6. Set the terminal emulation program on the laptop for capturing text.
7. Enter the diagnostic code [0366] and hit the Enter key.
8. The NVM settings are received by the laptop. Stop the text capture on the laptop. The NVM settings can be saved to a file on the laptop and used in the future.

Table 1 NVM Values Printed by GP 7

Diagnostic Code	Default Value	Description	Range of Values
2-63	0	BILLING TYPE	0-Feet 1-Meters
3-60-2	0	AREA IN <FEET> SQUARED	
3-60-2	0	LENGTH IN <FEET>	
3-62	05	DIAGNOSTICS TIMEOUT	0-50 Minutes
6-2-1	20	BOND SCALE ADJUST	0-40
6-2-2	20	VELLUM SCALE ADJUST	0-40
6-2-3	20	FILM SCALE AJUST	0-40
7-16-1	1493		ROLL BOND
7-16-2	1493		ROLL VELLUM
7-16-3	1493		ROLL FILM
7-60	00	FILM STACKING DELAY TIME	0-30 Seconds
8-9	001 001	STACKER FULL DETECTION	1 is ENABLED
8-60-1	10	BOND REG TIME	RANGE 0-40
8-60-2	12	VELLUM REG TIME	RANGE 0-40
8-60-3	13	FILM REG TIME	RANGE 0-40
9-3	0.85	LED BAR POWER RATING	0.2-1.50 uW
9-17-1	1807	REG ROLLS BOND	
9-17-2	1807	REG ROLLS VEL-LUM	
9-17-3	1807	REG ROLLS FILM	
9-20	0	RUN TIME	Hours
9-21-2	107	V(HIGH)	
9-21-3	20	V(LOW)	
9-21-4	5.6	CP VOLTS.	VOLTS
9-21-6	0.0	BIAS OFFSET VOLTAGE	VOLTS

Table 1 NVM Values Printed by GP 7

Diagnostic Code	Default Value	Description	Range of Values
9-56	00.0	ADDED DELAY BETWEEN PRINTS	0.0 - 25.5 Seconds
10-32	100	FUSER OIL WEB RATE ADJUST-MENT.	50-200
10-34	200000	ESTIMATED OIL WEB REMAINING LIFE	PRINT <FEET>
10-60	50	FUSER BOND TEMP SETPOINT	0-99
10-62	50	FUSER VELLUM TEMP SETPOINT	0-99
10-63	50	FUSER FILM TEMP SETPOINT	0-99

GP 8 Toner Control System Calibration

Introduction

This procedure should only be run when new developer material is installed or when the developer housing, toner sensor, or NVM are replaced. If there is a need to run it at any other time, the number of feet of print that have been run on the material must be maintained as indicated on the Display. Do NOT reset the INPUT FEET ON DEVELOPER to zero. This information is important because the permeability of the developer increases as the developer ages, and increases the toner concentration. The bias voltage of the toner sensor is adjusted to compensate for these age changes to maintain the toner concentration at a set level. The developer age is also important to determine additional bias voltage compensation adjustments in low humidity conditions. When the system is set for less than 65% humidity, additional compensations are made at 20,000 and 30,000 feet. When the humidity is set above 65%, no additional adjustments are performed. The meter will never exceed 30,000 feet (10,000 meters) because no adjustments are made after the 30,000 feet (10,000 meters) life point is reached.

Purpose

The purpose is to calibrate the toner control system in order to maintain good print quality as specified in Section 3 of this Service Manual.

Prerequisite

Electrostatic Series ADJ 9.2 must be performed before the Image Density is adjusted.

Adjustment

1. Enter diagnostics.
2. (Figure 1): Enter code [**0921-7**]. The following message is displayed.

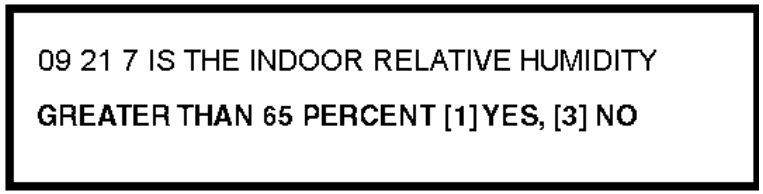


Figure 1 Entering the Humidity Condition

a. (Figure 2): Estimate the humidity in the customer's site then answer the question by entering 1 or 3 using the numeric key pad. The following message will be displayed.

Figure 2 Confirming the Humidity Setup

b. Press **Exit** to accept the setting.

3. (Figure 3): Enter [**0921-6** the number of feet or meters run on the developer is displayed. If the developer is new, press the clear key **/C** on the numerical keypad to reset the count to zero. If the developer is not new, leave the INPUT FEET as is and press **Enter** to continue.

   NOTE: *Depending on the Country Code billing type, the message shown in Figure 3 or Figure 4 will be displayed.*

Figure 3 Entering the Number of Feet

Figure 4 Entering the Number of Meters

4. Wait approximately two minutes for the Printer to stabilize. The following messages will be displayed (Figure 5 and Figure 6).

Figure 5 Printer Stabilizing

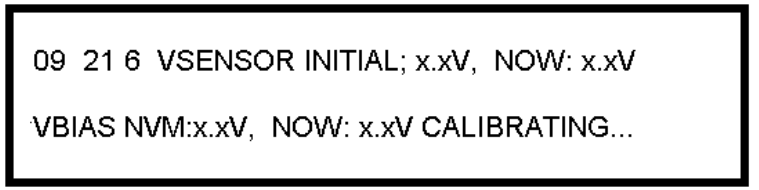


Figure 6 Toner Sensor Calibration and Bias Adjustment

5. (Figure 7): Press the **Enter** button to save the calibration values. When the values are saved, the message indicated in Figure 8 will be displayed

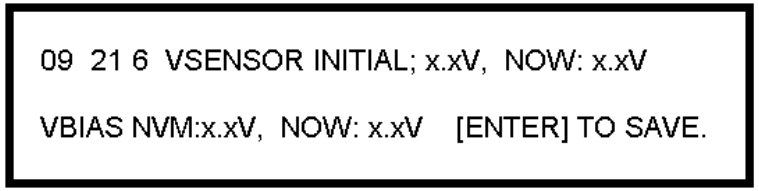


Figure 7 Saving the Calibration Values

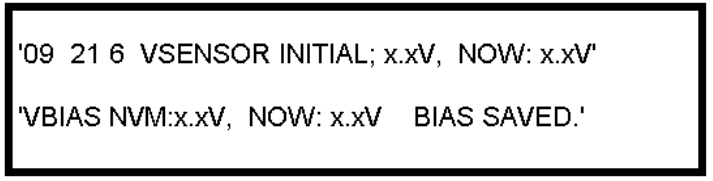


Figure 8 Confirming the Calibrated Values

6. Press the **Exit** button to end the process.
7. Enter code [**0955**] and make one print of Test Pattern #5.
8. Using S.I.R. 495.01 (82P520), evaluate the darkness squares at the lower right center and the upper left from the lead edge.
9. If the darkness square is not between 1.2 and 1.4, perform the adjustment again, starting at Step 2..
10. Enter **[0921-4]** and make a record of the CONTROL POINT VOLTS and the RAW SENSOR VOLTS in the Printer Log Book.

GP 9 Tone Down Procedure

Purpose

The purpose is to reduce the amount of toner in the Developer Sump in order to reduce the image density.

Adjustment

1. Refer to [ADJ 9.3] Image Density and increase the Control Point to 6.2 volts
2. Enter [0955-1] and make 10 to 20 prints to reduce the toner concentration.
3. Refer back to[ADJ 9.3] and run 3 prints of [0955-5] then check the density on the third print.
4. If the density is within specification, exit the diagnostic mode and allow the Printer to operate at the new Control Point. If the density is too light, decrease the Control Point in 0.2 volt increments until the density is within specification and allow the printer to operate at the new control point.

Purpose

The purpose is to identify the components and module required to install the 8850 DS/SPS 510dp.

Table 1 8850 DS/ SPS 510dp Components and Modules

Description	Part Number/Product Code	Printer	Synergix 8850 Digital Solution with 2 inch/ second	Synergix 8850 Digital Solution with 4 inch/ second and SPS 510dp
8850 Printer 50/60 Hz 510dp Printer 50/60 Hz	CYK	S (Standard)	S	S
AccXES 2.0 LC Controller HFT Controller	CNG	S S	S	S S
Nationalization Kits	**8850** / **SPS 510dp** United Stated - 650S33009 / 650S35120 Great Britain - 650S33012 / 650S35121 France - 650S33013 / 650S35122 Germany - 650S33014 / 650S35123 Italy- 650S33015 / 650S35124 Spain - 650S33016 / 650S35125 Europe (English) - 650S33017 / 650S35126 AO Spanish / 650S35127 AO Portuguese - 650S33008 / 650S35128	S	S	S
AccXES Controller Install Kit	E - 673K80931 FR - 673K80931 IT - 673S80931 DE G - 673K80931 PT - 673K80931	S	S	S
Synergix Scanner	NY5	N/A (Not Applica-ble)	S	S
Synergix Scanner Stand	98S94336/ NY6	N/A	S	S
Synergix Stacker	98S04456/ WP3	N/A	S	S
Synergix Scanner User Interface (UI)	97S02553/ WP6	N/A	S	S
Synergix UI Nationalization Kit	E - 650K16080 FR - 650K16090 IT - 650K16100 DE - 650K16110 ES - 650K16120 PT - 650K16130	N/A	S	S
Synergix Scanner Nationalization Kit	E - 650K16140 E GB - 650K16150 Euro - 650K16160	N/A	S	S
Firewire Card for Synergix Scanner	97K45130	N/A	S	S
4 inch per second (IPS) Feature Enablement Kit	98S04455/ WL7	N/A	O (Optional)	S O(510dp)
Scan to Net Enablement Kit	97S02336/ KF8	N/A	O	O
8850 Stacker (required for film) Stacker 1000 Nationalization Kit	97S02788/ GVD GB - 650S18200 Euro - 650S18201	O	O	O

Table 1 8850 DS/ SPS 510dp Components and Modules

Description	Part Number/Product Code	Printer	Synergix 8850 Digital Solution with 2 inch/ second	Synergix 8850 Digital Solution with 4 inch/ second and SPS 510dp
8850 Tracing Paper Humidity Kit	98S04620/ GGV	O	O	O
Synergix Scanner Compact Catch Tray	98S04457/ WP4	O	O	O
88XX Series Folder		O	O	O
VPI 20 Ft. Shielded Cable	98K39960	O	O	O
VPI 50 Ft. Shielded Cable	98K39970	O	O	O
VPI 200 Ft. Shielded Cable	98K39980	O	O	O
SCSI 1 to SCSI 2 Cable	98K45390	O	O	O
SCSI 2 to SCSI 2 Cable 9 Ft.	98K53460	O	O	O
SCSI 2 to SCSI 2 Cable 15 Ft.	98K43610	O	O	O
Additional SDRAM - 64 Mb (2.0 LC and Tower	98S04046/ P2H	O	O	O
External Print Server	98N01098/ HP6	O	O	O
External Print Server Cable (USO)	98K89460	O	O	O
External Print Server Cable (GB)	98K89840	O	O	O
External Print Server Cable (Euro)	98K89830	O	O	O
High Density Centronics Cable	98S02558/ H4W	O	O	O
High Density Centronics Cable	098K58930	O	O	O

Installation Procedure

NOTE: *Except where specified, the install procedure is common to both the 8850 and the 510dp Printers. Photographs and illustration are mainly of the 8850.*

Power Requirements for the Printer

CAUTION

Before installing the Printer, check for the correct voltage, polarity, and the grounding of the AC outlet that is provided by the customer. Use the Digital Multimeter. Incorrect voltage applied to the Printer could result in poor performance or damage to the Printer.

NOTE: *The power line outlet must be a dedicated line (wired directly to the circuit breaker panel), with the correct current rating (ampheres) as indicated in (ADJ 3.2) Line Current, with no shared neutral, and a different phase from the lighting circuits.*

CAUTION

If the supply AC voltage specifications are not met, the AC outlet may be wired or grounded incorrectly. Inform the customer and request that a licensed electrician correct the problem. DO NOT attempt to make the correction yourself.

NOTE: *The Power Cord is the disconnect device for this equipment. Ensure that the installation is near the outlet and is easily accessible.*

- (Figure 1): Check for 220 AC input voltage at the wall outlet:
  - Check for 208 - 240 VAC between the AC Hot (ACH) terminals.
    Check for 110 - 120 VAC between each AC Hot (ACH) terminal and Ground.

    NOTE: *110 VAC input voltage can only be used when the customer's copy speed requirements are 5 or 7 D(A1)-size per minute. If 10 D (A1)-size per minute is required, 220 VAC must be used.*

    Check for 110 VAC input voltage at the wall outlet:
  - Check for 105-125 VAC between AC Hot and AC neutral.
    Check for 105-125 between AC Hot and AC ground
    Check for less than 2 VAC between AC neutral and ground.

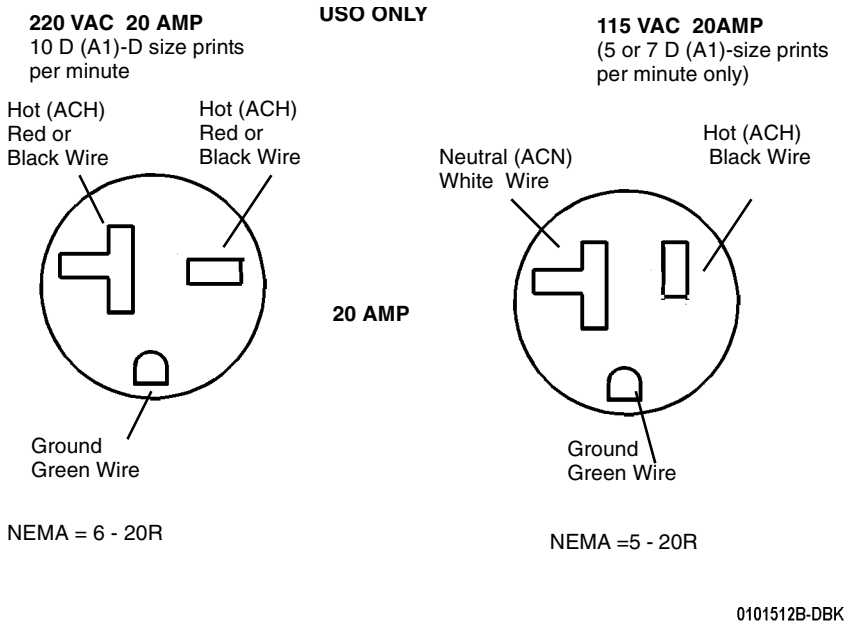


Figure 1 Checking the Ground and AC voltages

Floor Space Requirements

WARNING

This product will produce ozone during operation. The ozone that is produced is dependent on the print volume and is heavier than air. Providing the correct environmental parameters as specified in Xerox installation procedures will ensure that concentration levels meet safe limits

- The minimum space requirement is 116.75 inches (292 cm) x 85 inches (212.5 cm).

USO Only: If additional information concerning ozone is needed, request the Xerox publication **600P83222**, Ozone by calling 1-800-828-6571.

(Figure 2): IOT Dimensions.

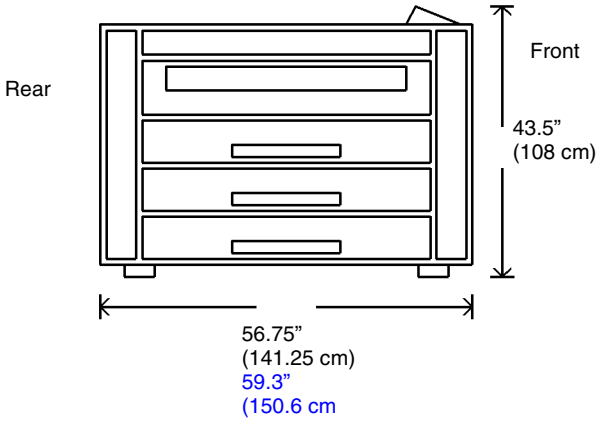


Figure 2 IOT Dimensions

(Figure 3): Minimum Space Requirements.

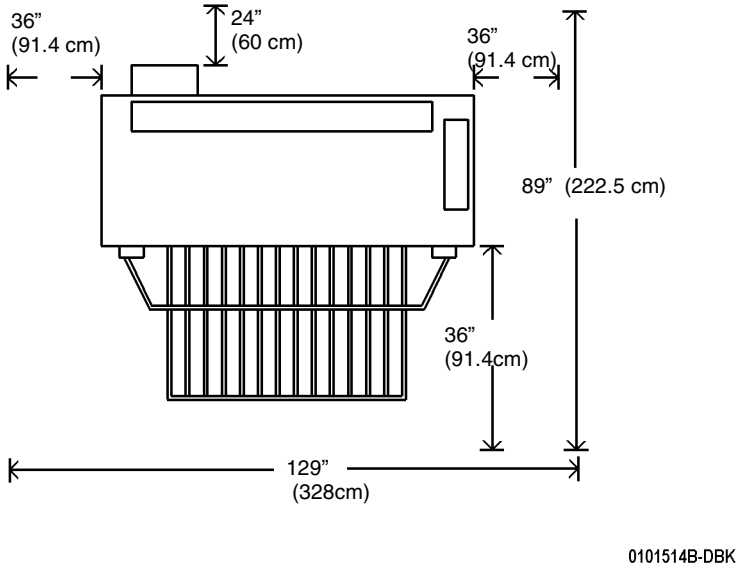


Figure 3 8850 Minimum Space Requirements

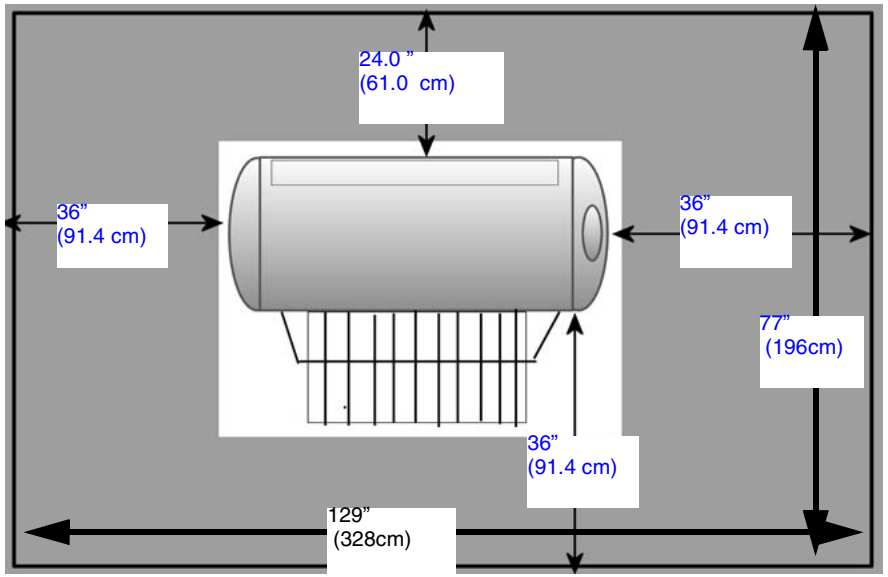


Figure 4 510dp Minimum Floor Space Requirements

Install the Printer

1. (Figure 5): Prepare the Printer for installation.

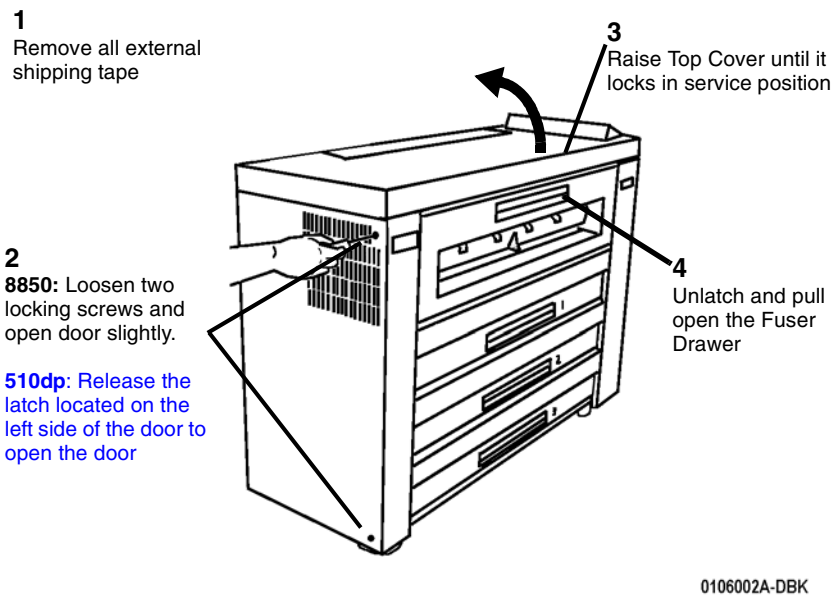


Figure 5 Preparing the Printer for Installation

2. (Figure 6): Lower the Fuser Drawer Cover and remove the packaging.

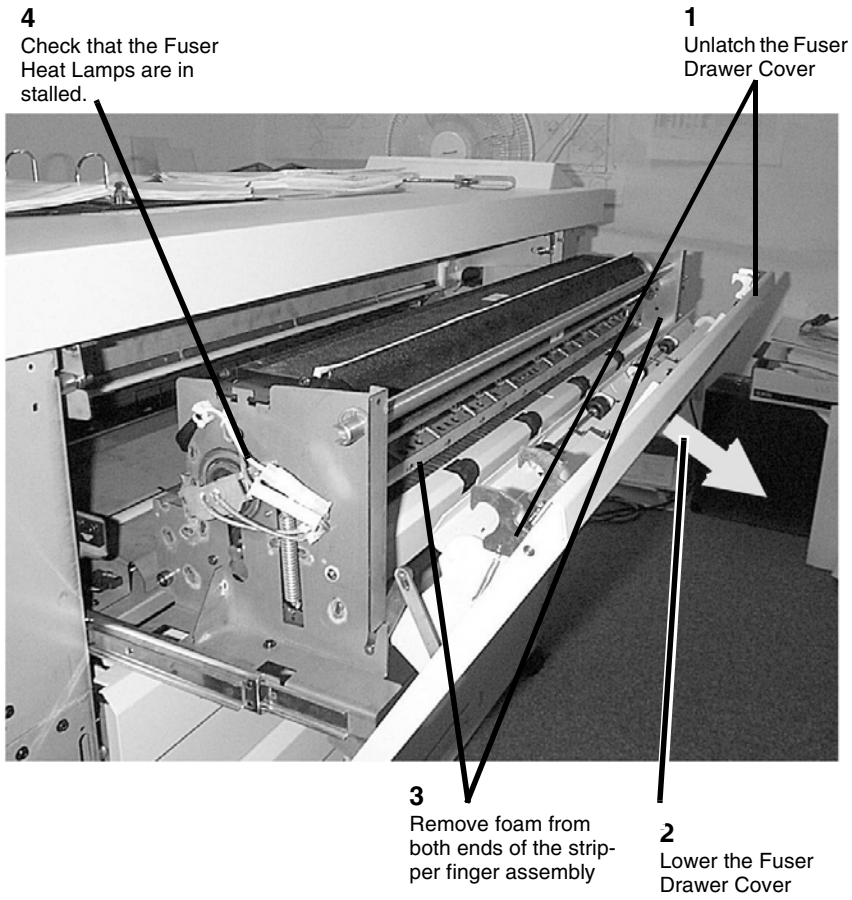


Figure 6 Removing the Fuser Packaging

3. (Figure 7) Adjust the Web Oiler tension.

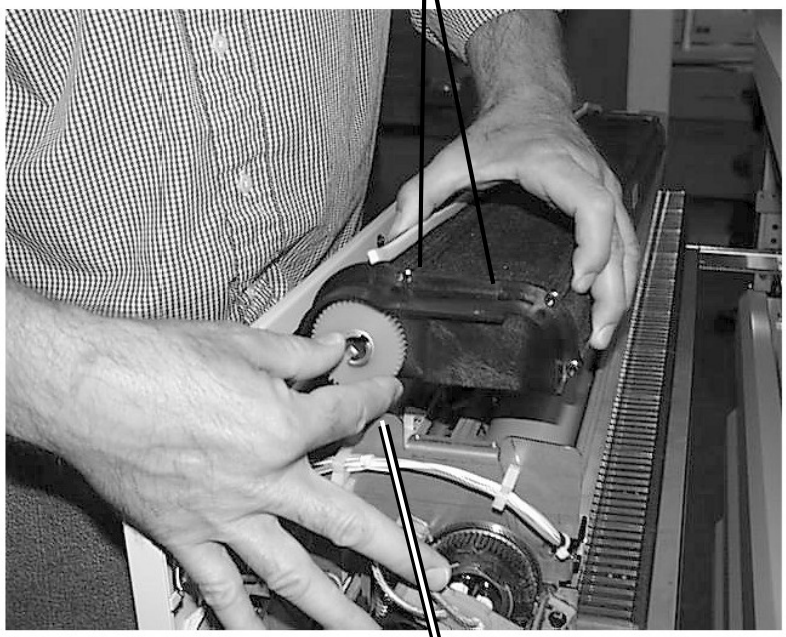


Figure 7 Reinstalling the Web Oiler Assembly

4. (Figure 8): Remove the shipping pads located near the ends of the image module.

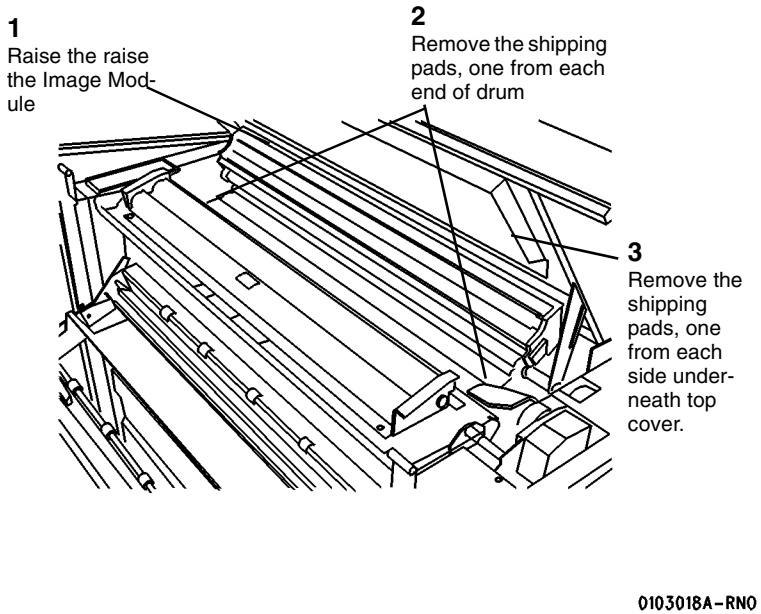


Figure 8 Removing the shipping pads

5. Slide the Fuser Assembly back into the Printer.
6. (Figure 9): Disengage the developer module shipping brackets.

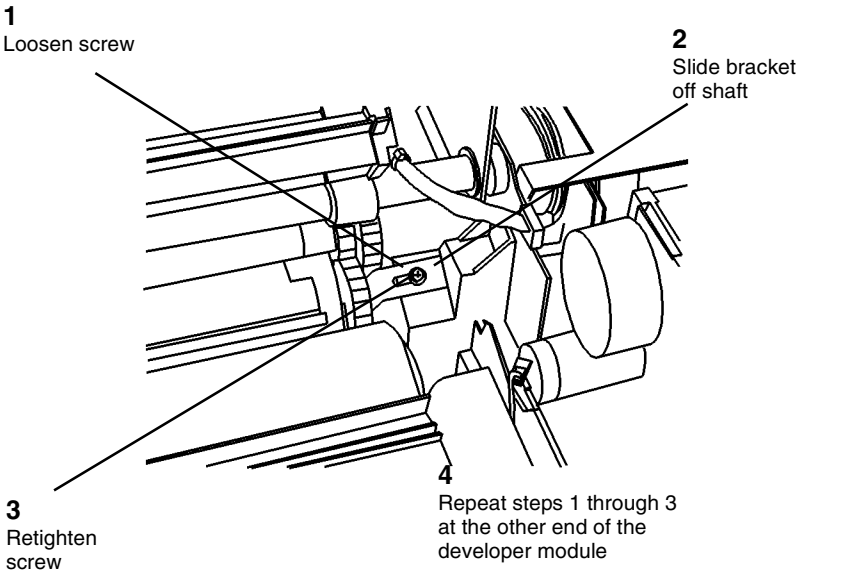


Figure 9 Disengaging the shipping brackets

7. Close the image module.
8. Open the Roll Media Supply Drawers and remove the packaging.
9. Hold the Top Cover open enough to enable the removal of the Rear Developer Cover. Then close the Top Cover.

NOTE: *Filling the developer module with developer without removing the developer module from the Printer requires experience. If not experienced with the following procedure, go to REP 9.5 to gain experience in removing and replacing the developer module components.*

10. Lift open the developer module door, located on the top right side of the Printer.
11. Remove the toner cartridge from the developer module.

12. (Figure 16): Remove the Sump Shield.

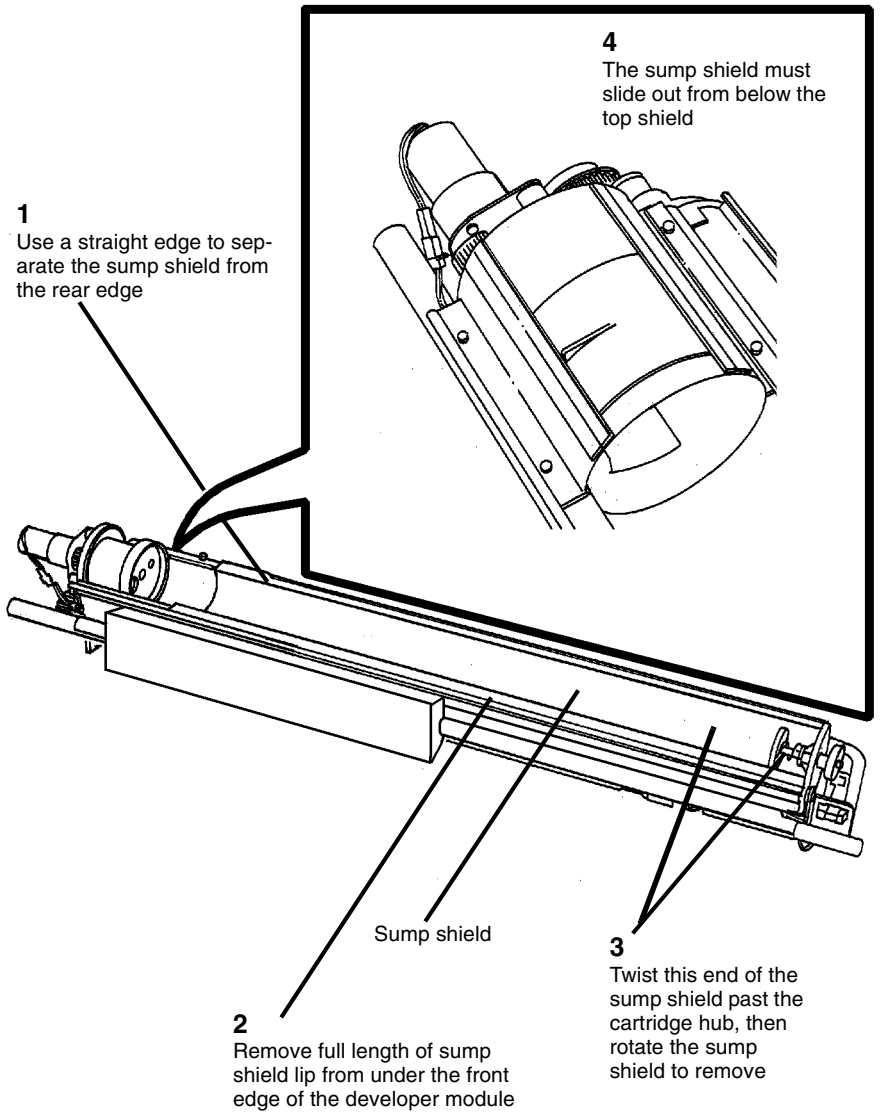


Figure 10 Removing the sump shield

13. Locate the bottle of developer material that is stored inside the front or rear door.

    NOTE: *The developer material that is shipped with the Printer must be installed in the Printer. The toner sensor was calibrated in the factory using this material.*

14. (Figure 17): Install the Developer Material and record the batch number in the Machine Log.

    NOTE: *Pour the Developer Material evenly from one side to the other across the full length of the Rear Augers, depositing any remaining Developer Material on the NON-DRIVE side of the Developer Module.*

    NOTE: *Do not manually spread the Developer with brushes, sticks, etc., this could cause foreign materials to be introduced into the Developer Module, causing print quality problems.*

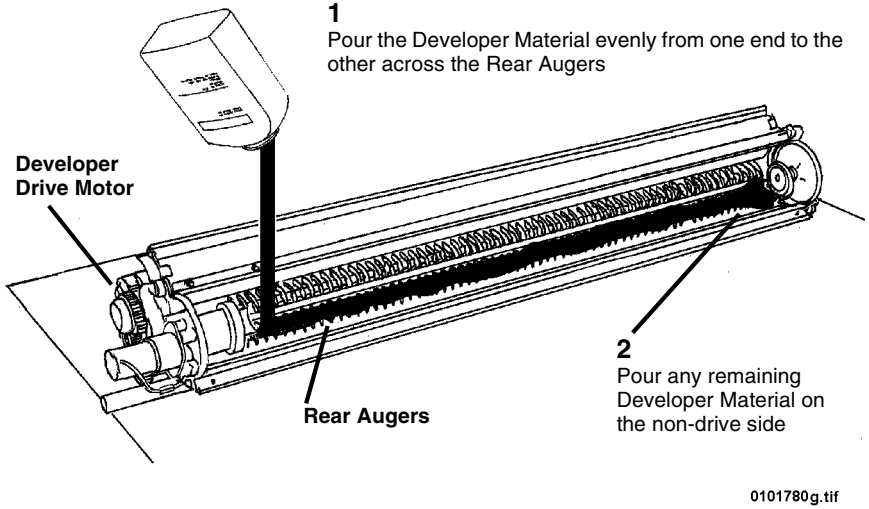


Figure 11 Installing the Developer Material

15. (Figure 12): Reinstall the sump shield, dispenser end first.

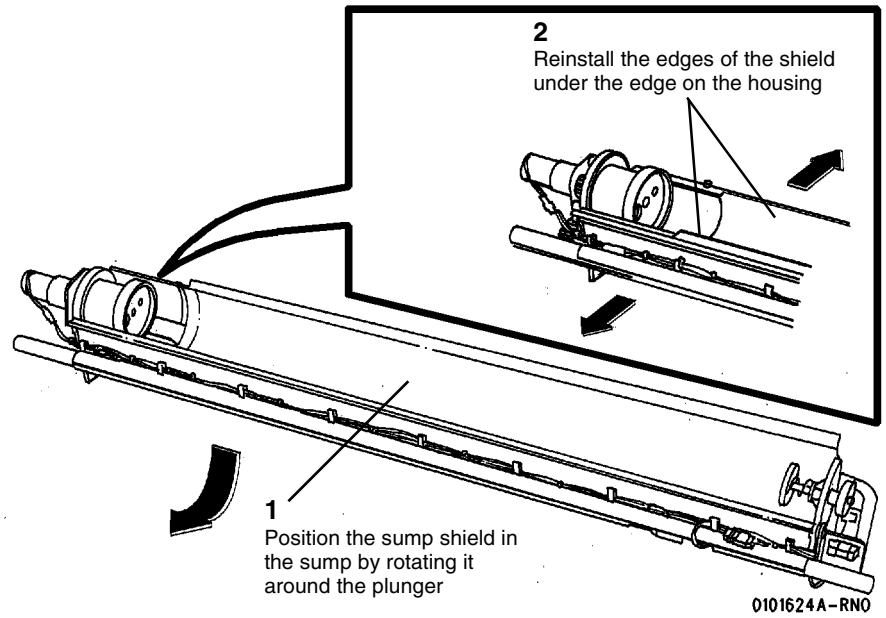


Figure 12 Reinstalling the sump shield

16. (Figure 13): Disengage the Developer drive.

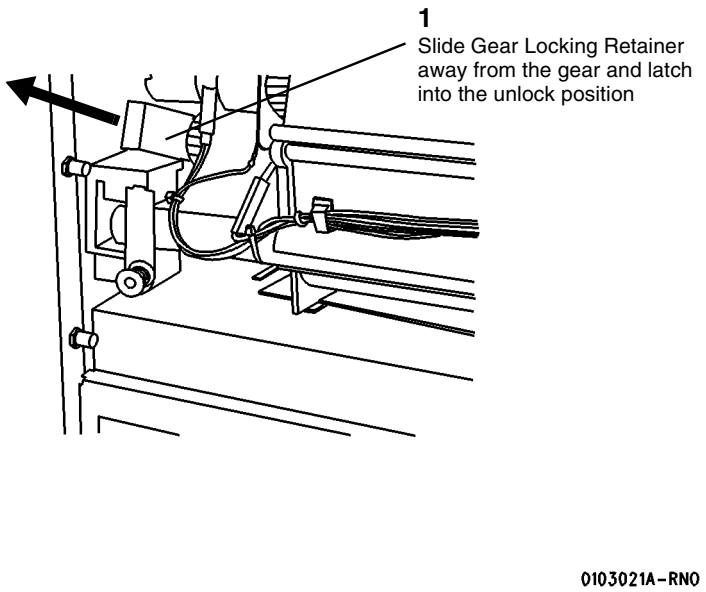


Figure 13 Disengaging the Developer Drive

17. (Figure 14): Reinstall the toner cartridge.

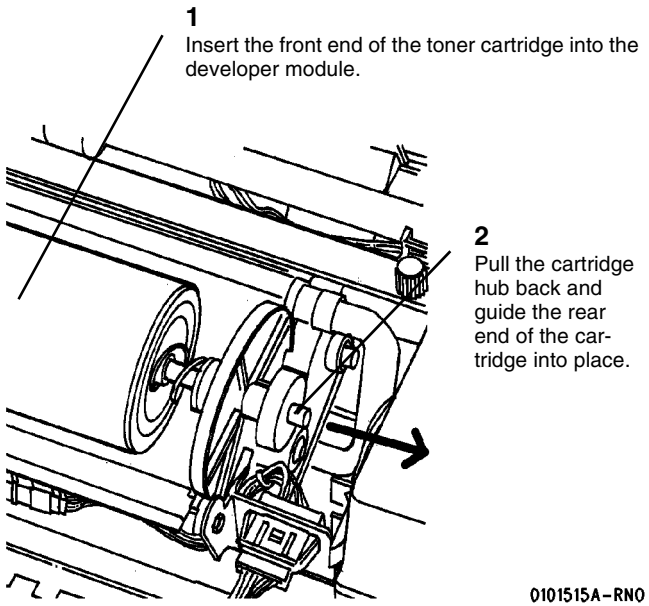


Figure 14 Reinstalling the toner cartridge

18. (Figure 15): Complete the toner cartridge installation.

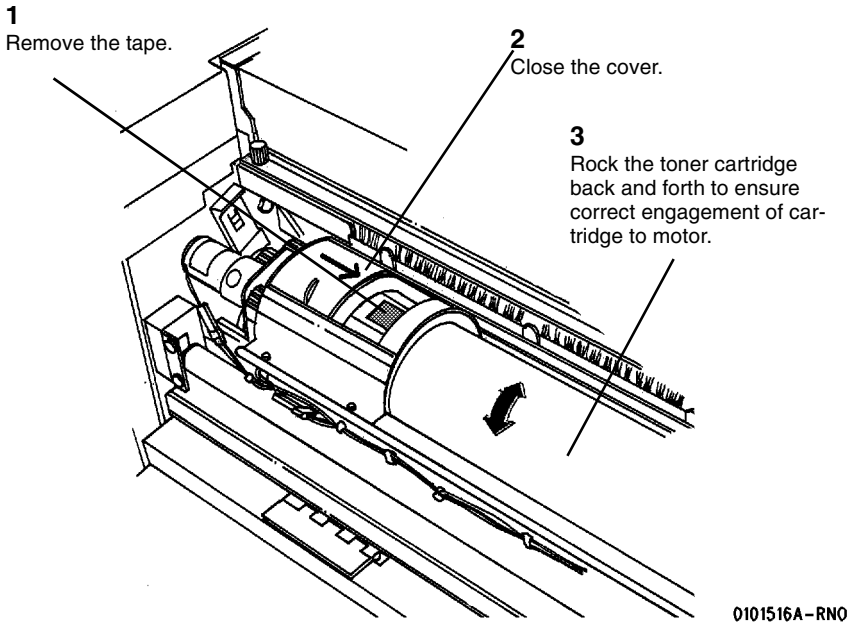


Figure 15 Completing the toner cartridge installation

19. Close the developer module cover.
20. Raise and hold the top cover while reinstalling the rear developer cover.

21. (Figure 16): Prepare to level the Printer. Rotate the leveling bolts (located inside the front and rear doors) fully counterclockwise.

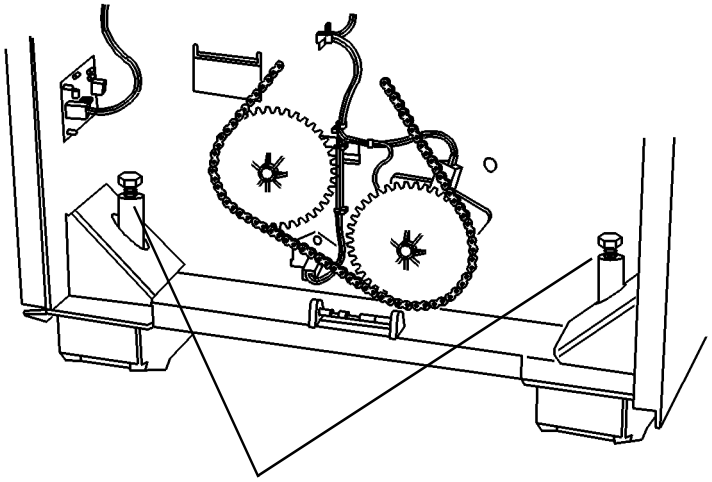


Figure 16 Preparing to level the Printer

22. (Figure 17): Check the front-to-rear level of the Printer.

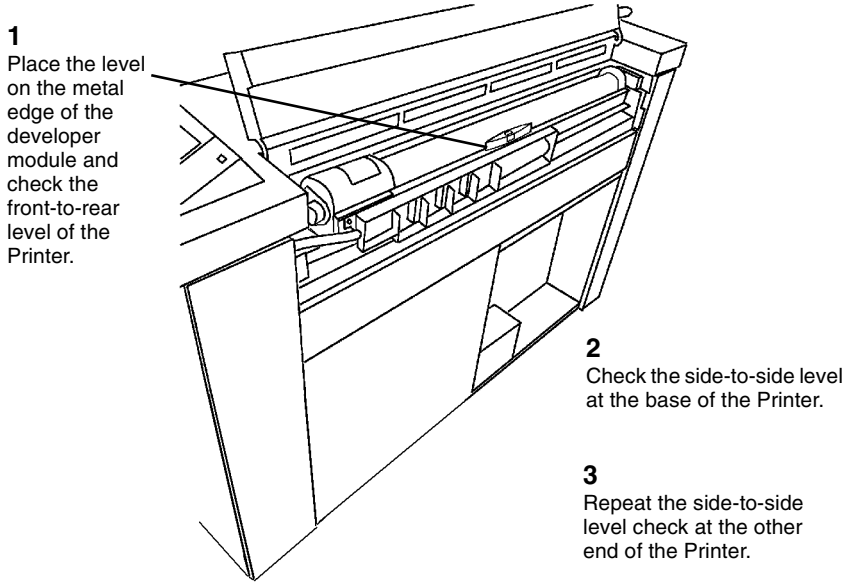


Figure 17 Checking the level of Printer

NOTE: *To ensure that the Printer frame is not twisted, use a level on both end frames to perform the side-to-side level check.*

NOTE: *Adjust the end that is farthest out of level first.*

23. (Figure 18): Adjust the side-to-side level of the Printer.

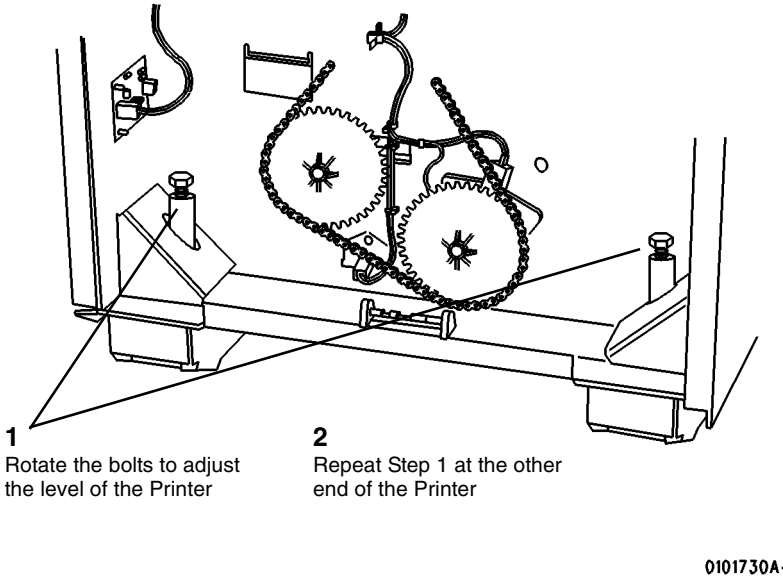


Figure 18 Adjusting the side-to-side level

24. (Figure 19): Adjust the front-to-rear level of the Printer.

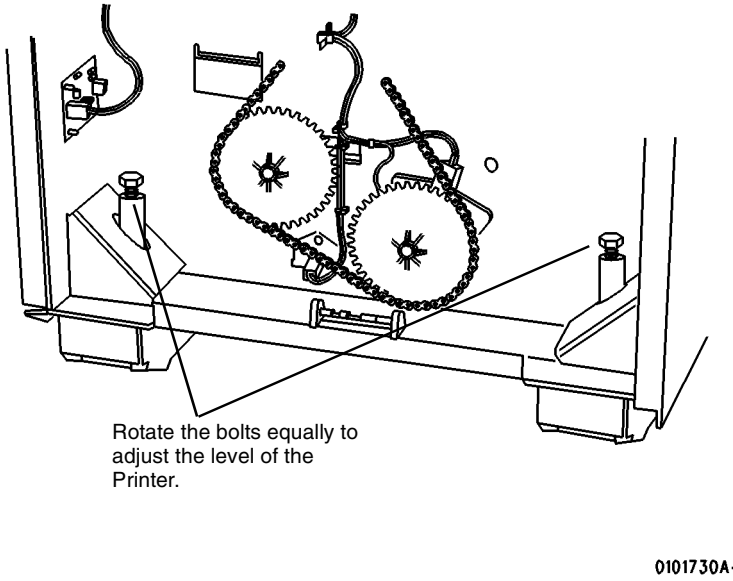


Figure 19 Adjusting the front-to-rear level of the Printer

25. (Figure 20): Check the level of the Printer.

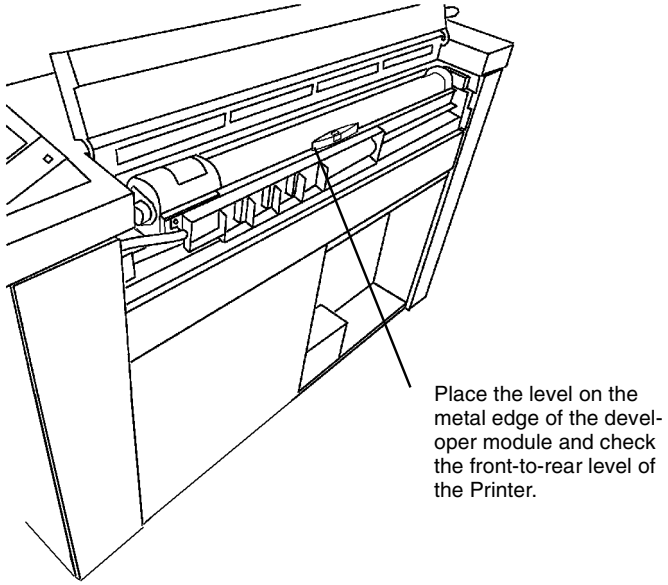


Figure 20 Checking the front-to-rear Printer level

26. Repeat the Printer leveling (Steps 23 through 27) until the Printer is level.
27. Lock the Printer casters.
28. Close the top cover.
29. **8850:** Close the rear door and tighten the locking screws(2). **SPS 510dp**: Close and latch the rear door.
30. Install a roll of 36 inch (A0) Bond media in Roll 1 Media Supply Drawer. Refer to the User Guide as required.
31. Refer to the appropriate AccXES Controller Service Manual, 8825. 8830. and 8850 Controller Installation to install the Controller.
32. Prepare to install the Printer Power Cord.
    a. Remove the lower right side cover with the P193 interface connector.
    b. (Figure 22): Loosen the retaining screw on the Power Cord bracket.

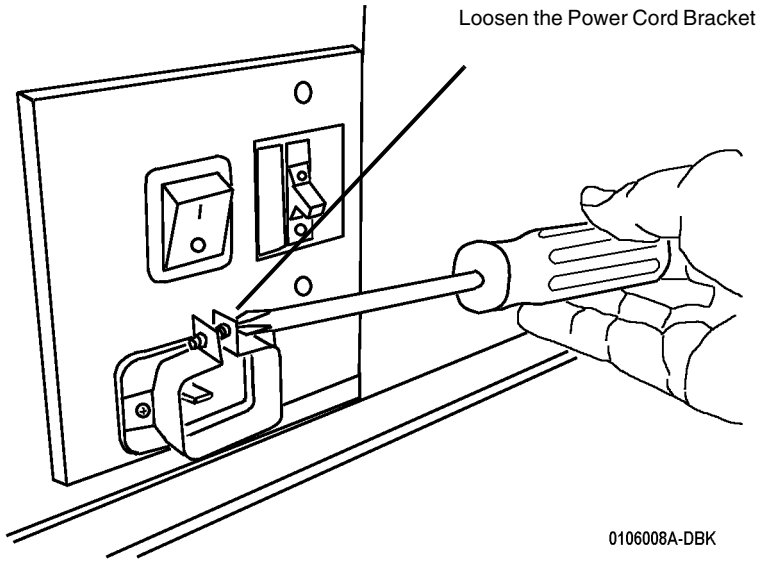


Figure 21 Preparing to install the Power Cord

    c. (Figure 23): Pass the Power Cord through the opening in the cover and connect it to the Printer.

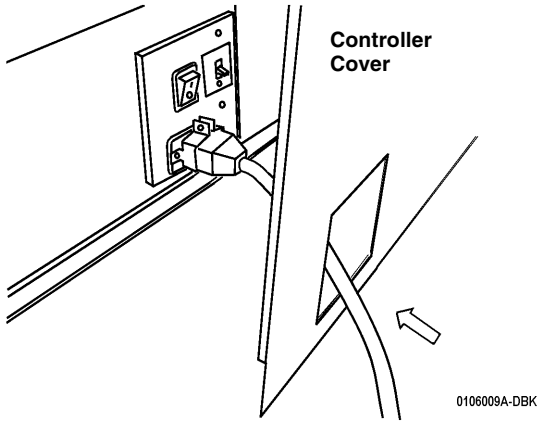


Figure 22 Connecting the Power Cord to the Printer

d. Insert the power cord into the power cord bracket and firmly seat into the AC Module.
e. Tighten the retaining screw on the power cord bracket.
f. Place the Controller on the floor next to the Printer.

33. Connect the power cord to the AC power outlet and switch on the Printer.
34. Install FLASH updates on the Printer Main PWB (if required).
35. Provide the following to the Systems Administrator (required for obtaining the software feature keys for options):
    - Printer serial number
    - Controller serial number
    - Hardware address of the Ethernet Advanced Port
36. If the Printer is being installed as part of the 8850 DS/SPS 510dp, proceed to the Synergix Scanner Service Manual, Section 6, Installation. Otherwise, continue on with the next step.
37. Install the catch tray or folder. Go to the installation procedure of that service manual.

Functional Checks

1. Check to ensure that the latest software is available and compatible for installation on the 8850/SPS 510dp Printer. Reference the Configuration Matrix Technical Services Bulletin (TSB) for the 8850/SPS 510dp Printer, or reference one of the websites: http://xww.xes-info.world.xerox.com (Xerox internal) or http://www.xeserv.com.
2. Switch on the Controller and the Printer. Then enter the Diagnostic mode (See To Enter The Diagnostic Mode, at the front of this section).

CAUTION

When starting to operate the Printer, do not run diagnostic code 9-21-6. The Developer Material in this machine has already been initialized. There is no need to run this program again.

3. Perform the following in the order listed:
    a. Line Current (ADJ 3.2)
    b. Humidity Set Point [0921-7]
    c. Initialize the Web Oiler [1030] (At initial install only)
    d. Run TC Measurement Test [0921-4]

    NOTE: *Run [0921-4] for one minute. Make no adjustments. Running the TC Measurement test for one minute distributes the developer.*

    e. Electrostatic Series (ADJ 9.2)
    f. Fuser Temperature NVM(ADJ 10.1)
    g. Vertical Magnification (ADJ 8.1)
    h. Lead Edge Registration (ADJ 8.2)
    i. Cut Length (ADJ 8.3)
    j. Fuser Speed Adjustment (ADJ 8.5) (Optional)
    k. Lead Edge and Trail Edge Magnification (ADJ 8.6) (Optional)
    l. Image Density Adjustment (ADJ 9.3)
4. Make three test prints using [0955-5] and [0955-7].
5. Check the print quality. Go to Print Quality Initialization Procedure in Section 3 of this Service Manual.
6. Exit the Diagnostic mode.
7. Make a test print from the Controller.
8. Inform the operator that the following adjustments are Operator Adjustments and can be changed to fit individual needs. Refer to the User Guide and demonstrate the following adjustments.
    - Power Saver Mode (EO: Low Power Mode)
    - Standby Mode
    - Timers
    - Audible indicators
    - Print density
    - Controller: Settings, Menu, Printing a Test Pattern
9. Make a print of the Configuration Sheet. Check to see that the required Feature Keys are installed. If not, ask the customer for the feature coupon, and install the required feature key by redeeming the feature coupon.

    510dp: Check for the Speed Key and the Drawer Key to make sure that the correct keys are install to meet the customers Printer configuration for print speed and number of media drawers. If not, ask the customer for the coupons and enable the features by redeeming the coupon.
10. Place a print of the Configuration Sheet inside the Front Door.
11. Record the following on the Printer Installation Quality Report card:
    - Print count readings, Meter A and Meter B
    - Printer serial number
    - Installation date
    - Comments

Optional Bypass Sheet Feeder Install

Inspect the shipment at the customer's site for the following items.

- · Upper Baffle Assembly
- · Lower Bypass Assembly
- · Driver PWB
- · PWB Standoffs (3)
- · Bypass Feed Label

Installation

CAUTION

Observe all ESD procedures to avoid electrical damage to the Printer components.

WARNING

Switch off the Controller and Printer Main Power Switches. Disconnect the Printer Power Cord.

1. (Figure 1): Pull open the Fuser and remove the 2 screws. Remove and discard the Upper Baffle Assembly.

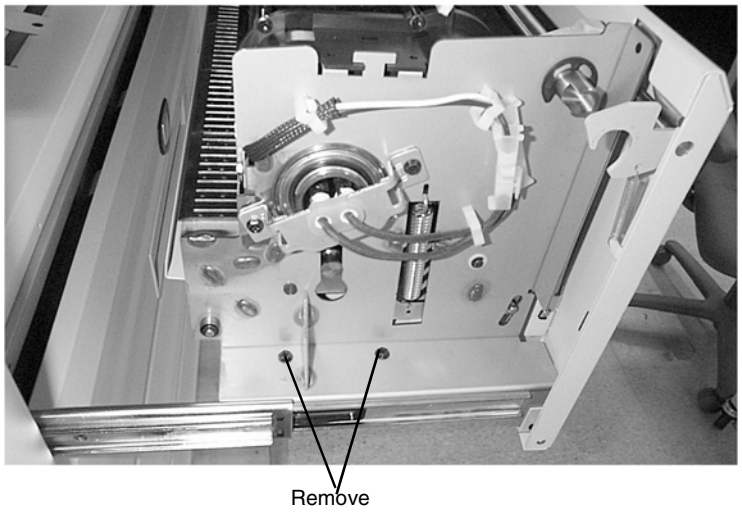


Figure 1

2. Install the new Upper Baffle Assembly using the 2 screws retained from the last step.
3. (Figure 2): Open the Fuser and move the A28P1 harness to the side. The harness will be connected to the new Lower Bypass Assembly.
4. (Figure 2): Remove 4 screws (2 each side) and remove the Lower Bypass Assembly. Remove the ducts.

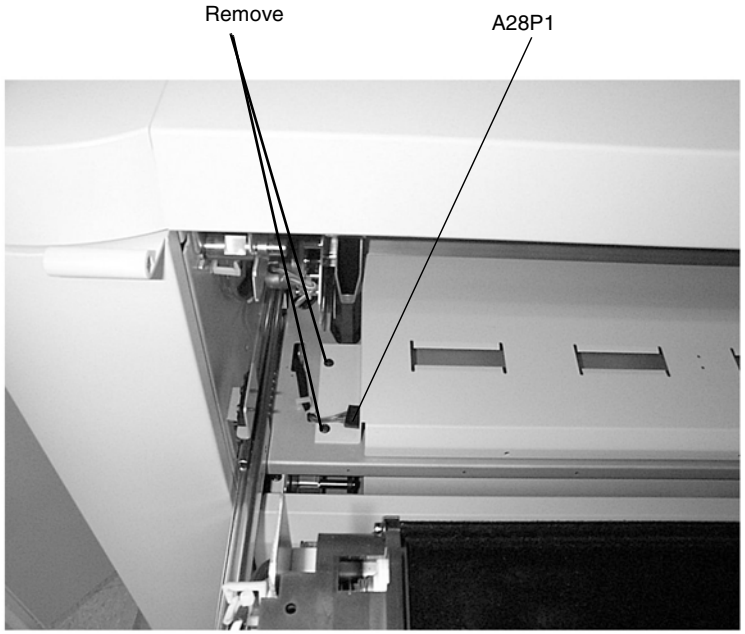


Figure 2

5. (Figure 3): Install the new Lower Bypass Assembly using the 4 screws retained in step 4.
6. Connect A28P1 to the Lower Bypass Assembly.

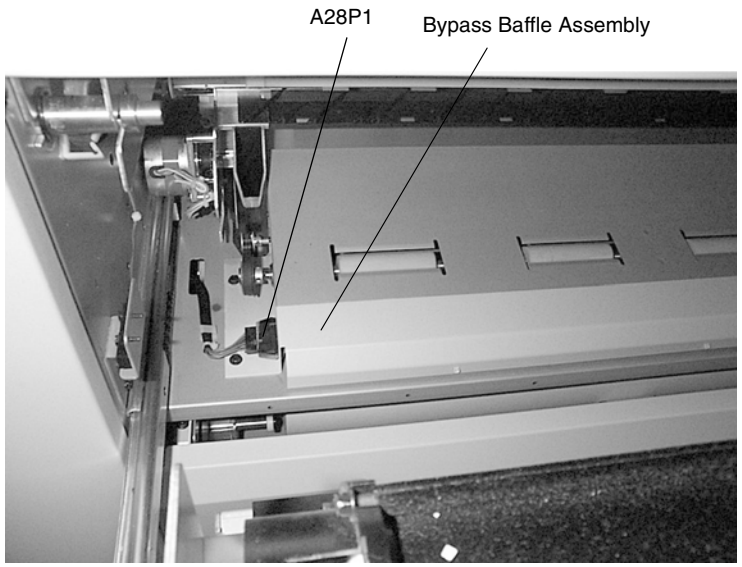


Figure 3

7. (Figure 4): Close the Fuser and install the new Bypass Label.

Figure 4

8. (Figure 5): Remove the bottom right cover and remove the jumper plug from J612A on the Main PWB and discard. Connect A3P612A.

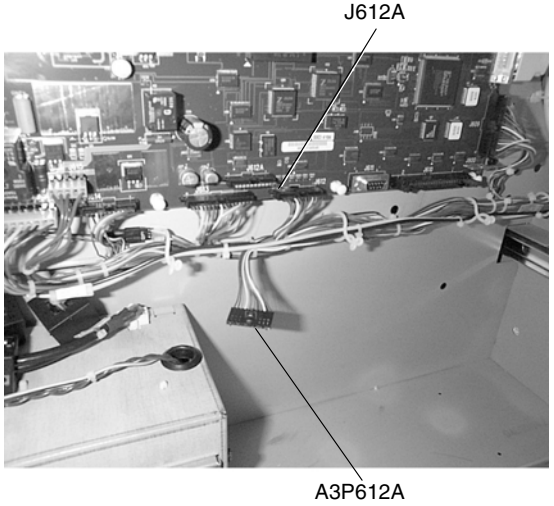


Figure 5

9. (Figure 6): Install the Driver PWB using the standoffs and then connect A9P1 and A9P2.

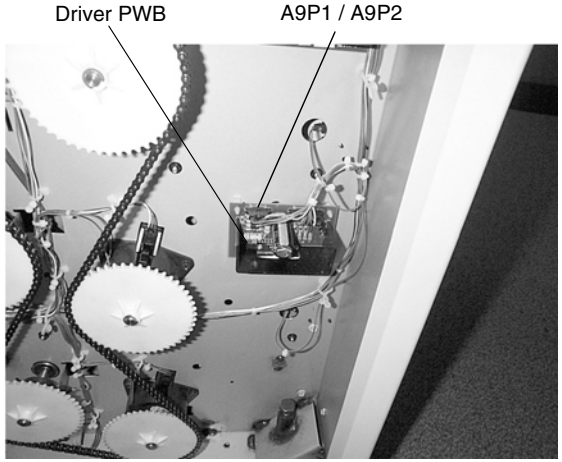


Figure 6

10. Power on printer, reboot or power on controller. Verify manual feed type on configuration Page. Offline>enter>utilities>test print>printer configuration>enter>offline. Verify bypass operation: Offline>enter>printer menu>diagnostics>test plots>bypass>enter.

    Insert sheet media to verify bypass operation.

Optional Media Drawer Install

WARNING

Switch off the Controller and Printer Main Power Switches. Disconnect the Printer Power Cord.

1. (Figure 1): Open the Front and Rear Doors to locate the 4 screws (2 each side) to remove the left cover enclosing the Media Drawer opening and remove the cover.

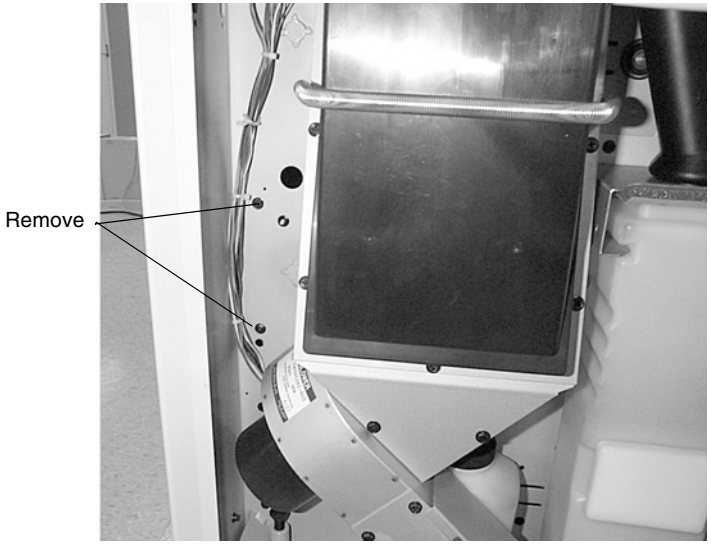


Figure 1

2. (Figure 2): Remove the two cable ties securing the drawer slides and extend the slides.

Figure 2

3. (Figure 3): Place the new Media Drawer on the extended slides and secure with the screws provided

Figure 3

4. Return the printer to normal operating condition and install the Optional Drawer Feature Key.

Product Demonstration

To demonstrate the capabilities of the Printer, refer to the User Guide. Perform the following procedures to train an operator.

1. Getting to know your Printer.
2. Control Console.
3. Loading the media.
4. Making prints using roll media.
5. Adding Toner and how to clear the J1 Status Code.
6. Problem solving status codes.
7. Clearing the Printer.

Installation Checklist

Site Preparation

1. Supply voltage check.
2. Space requirements.

Installation

1. Remove the packing material.
2. Tension the oil web.
3. Remove the toner cartridge.
4. Adding developer material.
5. Install the toner cartridge.
6. Level the Printer.
7. Install the Optional Media Drawer and/or the Optional Bypass Sheet Feeder as necessary.
8. Enable the correct language.

Functional Check

CAUTION

When starting to operate the Printer, do not run 9-21-6. The Developer Material in this machine has already been initialized. There is no need to run this program again.

1. Switch on the Printer and allow the Printer to warm up.
2. Set the Line Current (ADJ 3.2).
3. Humidity Set Point [0921-7].
4. Initialize the Web Oiler [1030].
5. Run TC Measurement Test [0921-4].

   NOTE: *Run [0921-4] for one minute. Make no adjustments. Running the TC Measurement Test for one minute distributes the developer.*

6. Run the Electrostatic Series (ADJ 9.2).
7. Set the Vertical Magnification (ADJ 8.1).
8. Set the Lead Edge Registration (ADJ 8.2).
9. Set the Cut Length (ADJ 8.3).
10. Fuser Speed Adjustment (ADJ 8.5) (Optional)
11. Lead Edge and Trail Edge Magnification (ADJ 8.6) (Optional)
12. Image Density Adjustment (ADJ 9.3).
13. Make three test prints using [0955-5] and [0955-7].
14. Check the print quality using Section 3 of this Service Manual.
15. Exit the Diagnostic mode.
16. Make a test print from the Controller.
17. Make a print of the Configuration Sheet and check that the Feature Keys are install to meet the customer's desired configuration.
18. Check the operator adjustments.

Product Demonstration Checklist

1. ON/OFF switch, Print Count Meter, and serial number plate.
2. Control Console.
3. Replacing the Toner Cartridge.
4. Problem solving status codes.
5. Clearing the Printer.

Removal Procedure

Purpose

The purpose is to repack the Printer and the Controller for removal by Delivery / Removal Carriers.

Printer Repack Kit 600K59540

Kit Contents

Inspect the shipment for the following items:

- Poly Tape
- Bubble Pack
- Foam Pads (2
- Cable Ties (2)
- Tape
- Box
- Bag (Poly)
- Bag (36 x 36)
- Bag (Jiffy)
- Photoreceptor End Caps (L & R)

Controller Repack Kit 673K34340

Kit Contents

Inspect the shipment for the following items:

- Tape
- Box
- Bag (Anti-static)
- End Caps (Top & Bottom)

Preparation

1. Switch off the main power switch and disconnect the power cord.
2. Remove all rolls of media and leave them with the customer. Tape down the roll support tubes in each drawer.
3. Remove the power cord and place it in a Roll Media Supply Drawer.
4. Remove the catch tray and the catch tray supports.
5. Place the catch tray into the (36 x 36)bag and secure the bag with tape in three places. Put the bag in the box and seal the flaps with tape.
6. Put the two catch tray supports into the Poly Bag, close the flap, and secure the bag with tape.
7. Put the bag into the Jiffy bag, close the flap, and secure the bag with tape in three places.
8. Repack the Controller:
   a. Remove the Controller by removing the two screws and lifting it off the groove at the bottom of the of Printer.
   b. Disconnect A1J3 on the Controller panel from A1P3 AC assembly on the Printer.
   c. Disconnect the Controller ribbon cable from J307B on the Main PWB.
   d. Place the Controller in the Anti-static Bag, install the Top and Bottom End Caps, and place the assembly into the box.
   e. Secure the box with tape.
9. Using the developer material procedure (REP 9.7), remove the developer material.
10. Reassemble the developer module and reinstall it into the Printer. Engage the drive gear lock.
11. Reinstall the developer module side cover.
12. Unlock the casters.
13. Open the front door and the rear door.
14. (Figure 1): Raise the leveling bolts.

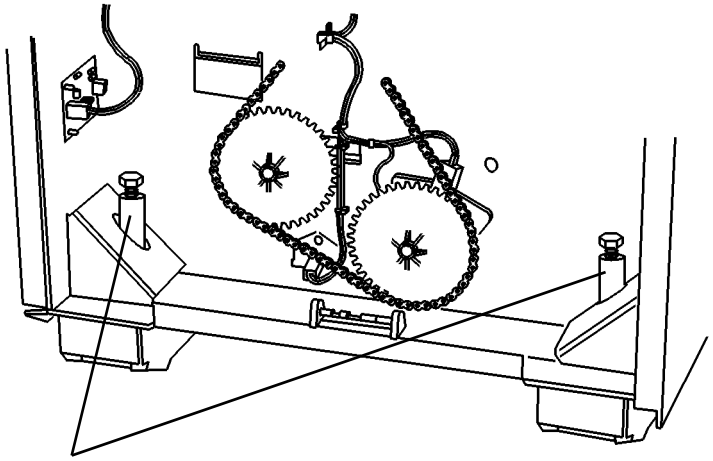


Figure 1 Raising the Leveling Bolts

15. Raise and latch the top cover.

16. (Figure 2): Raise the image module and engage the developer module shipping brackets.

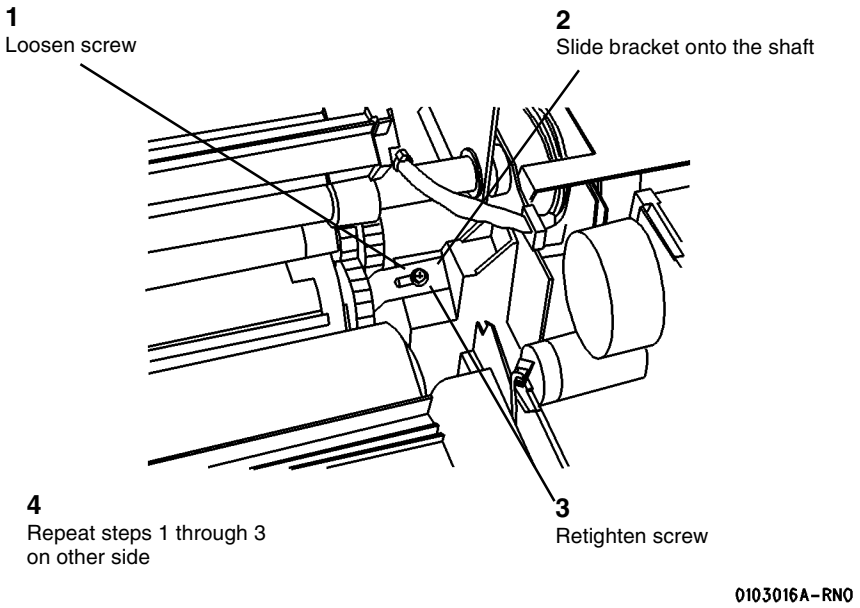


Figure 2 Engaging the Shipping Brackets

17. (Figure 3): Install the shipping pads.

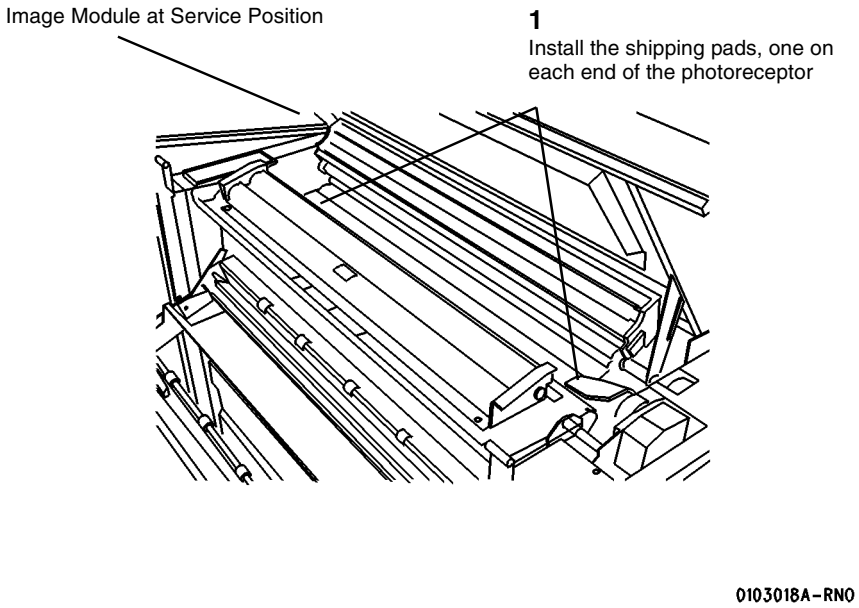


Figure 3 Installing the Shipping Pads

18. (Figure 4): Install the shipping pads.

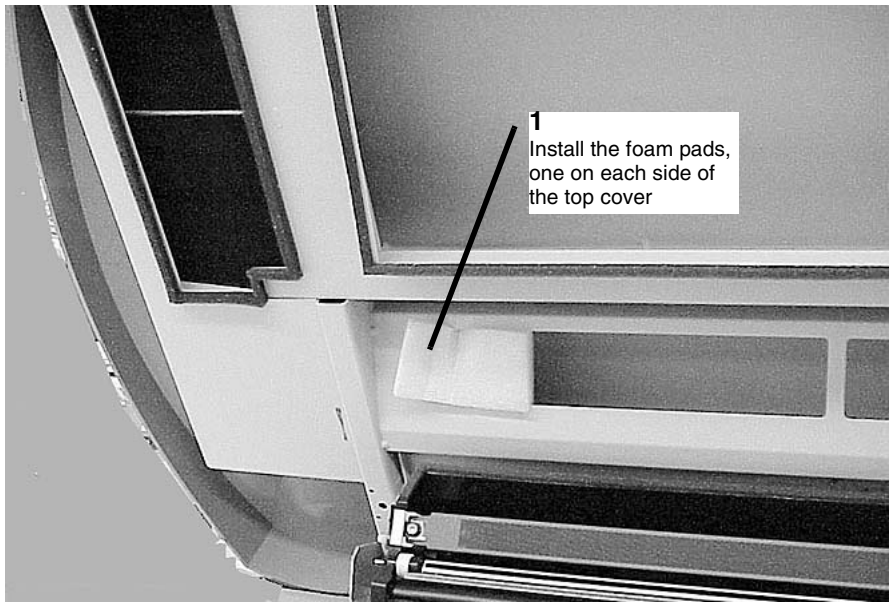


Figure 4 Installing the Shipping Pads

19. (Figure 5): Unlatch the Fuser Drawer Cover and secure the Stripper Finger Assembly with foam and tape.

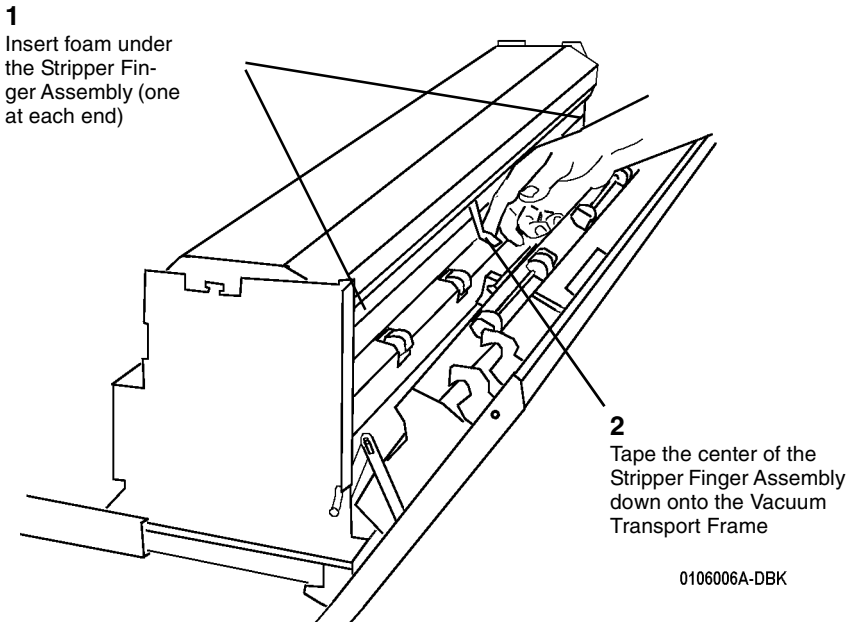


Figure 5 Securing the Stripper Finger Assembly

20. Close the Fuser Drawer Cover.
21. Close the front door and the rear door.
22. Secure the front and rear doors with tape.
23. Secure the developer module door with tape.

General Tools and Supplies (NACO)

Table 1 Supplies

Supplies	
Description	**Part**
Service Manual Binder	600P88124

Table 2 Tools

Tools	
Description	**Part**
Basic Multinational Tool Kit	600T1835
Supplemental Tool Kit	600T1837
Metric Supplemental Tool Kit	600T1836
Digital Multimeter	600T2020
DMM Test Lead Kit	600T1923
Test Leads (required for 600T2020)	600T1660
Red Adapter Plug	499T9567
Black Adapter Plug	499T9568
Electrometer	600T1620
Temperature Probe Set (Probe and Sensor)	499T9570
Thermal Sensor (straight)	499T9572
Light Shield	600T1198
Stackable Jumper Lead (Electrometer)	600T1652
Interlock Tool	600T91616
Vacuum Cleaner	600T1820
Vacuum Cleaner Bags (10)	93E3270
Vacuum Cleaner Filter Module	600T1832
Electrometer Probe Wing	600T1728
Screwdriver Blade (6” x 3/16”)	600T40203
Pocket Screwdriver	600T40205
5.5 mm Wrench	600T40501
7 mm Wrench	600T40502
5.5 mm Socket	600T40701
7 mm Socket	600T40702
Longnose Pliers	600T40901
Diagonal Cutting Pliers	600T40903
Metric Hex Key Set	600T41101
Retaining Ring Pliers	600T41401
150 mm Rule	600T41503
2 Meter Tape Measure	600T41505
Line Level	600T41510
Round File, 6 inch	600T41801
Flat File, 6 inch	600T41802

Table 2 Tools

Cleaning Brush	600T41901
Scribing Tool	600T41903
Magnetic Pickup and Mirror	600T41911
Socket Driver	600T1751
Metric Feeler Gauge Set	600T41509
Screwdriver Handle	600T40212
13 mm Wrench	600T40505
10 mm Wrench	600T40504

Table 3 Image Reference Pattern

Image Reference Pattern	
Solid Area Fill	82P520
Image Darkness	82E7030
Background	82P502

Table 4 Machine Consumable

Machine Consumable	
Description	**Part**
Photoreceptor	1R535
Toner Cartridge (with Reclaim Bottle)	6R989
Developer (7 lb. bottle)	5R633
Dusting Pouch	8R181

Table 5 Cleaning Materials

Cleaning Materials	
Description	**Part**
Cleaning Solvent	43P10
Disposable Gloves	99P3024
Drop Cloth	35P1638
Film Remover	43P45
Formula A	43P48
Heavy Duty Towels	35P3191
Lint-free Cloth	600S4372
Polyurethane Pads (40)	600S4653
Photoreceptor Maintenance Kit	600S5838

Table 6 Other Tools and Supplies

Other Tools and Supplies	
Description	**Part**
20 lb. Roll Bond Media	22E630
Oil Tube (8 cc)	93E811
Log Holder	600P293
Media Message	600P60017

Table 6 Other Tools and Supplies

Machine Log	611P22478

Table 7 Special Tools

Special Tools	
Description	**Part**
Serial Loopback Tools Kit	600K60890
Fuser Harness Tool	962K02830

General Tools and Supplies (EO)

Table 1 Tools

Tools	
Description	**Part**
Screwdriver Blade (6-inch x 3/16-inch)	600T40203
Pocket Screwdriver	600T40205
5.5 mm Combination Spanner	600T40501
7 mm Combination Spanner	600T40502
5.5 mm Socket	600T40701
7 mm Socket	600T40702
Longnose Pliers	600T40901
Diagonal Cutting Pliers	600T40903
Gland Nut Pliers	600T40904
Hex Key Set	600T91702
Retaining Ring Pliers	600T41401
150 mm Rule	600T41503
2-Meter Tape Measure	600T41505
Line Level	600T41510
Round File (6 inch)	600T41801
Flat File (6 inch)	600T41802
Cleaning Brush	600T41901
Scribing Tool	600T41903
Magnetic Pickup and Mirror	600T41911
Handle Male (1/4-inch drive)	600T1751
Metric Feeler Gauge Set	600T41509
Interlock Cheater	600T91616
Screwdriver Handle	600T40212
Vacuum Cleaner	600T91720
Vacuum Cleaner Bags (10)	603T80130
13 mm Combination Spanner	600T40505
Light Shield	600T1198
Digital Multimeter	600T2020
DMM Test Lead Kit	600T1923
Test Leads (required for 600T2020)	600T1660
Electrometer	600T1620
Electrometer Probe Wing	600T1728

Table 2 Machine Consumable (EO)

Machine Consumable (EO)	
Description	**Part**
Photoreceptor	1R535
Toner	6R989

Table 2 Machine Consumable (EO)

Developer	5R633

Table 3 Cleaning Materials (EO)

Cleaning Materials (EO)	
Description	**Part**
Dusting Pouch	8R90139
Photoreceptor Maintenance Kit	600S92126
Photoreceptor Wash Solvent / General Cleaning Solvent	8R90176
Cleaning Cloth	8R90019
Cleaning Cloth, Treated (Not for use on Corotrons)	35P1638
Lint-free Cloth (Rayon)	600S4372
Cleaner, General Purpose	8R90175
Formula A	43P48

Table 4 Image Reference Pattern

Image Reference Pattern	
Solid Area	82P520
Image Darkness	82E7030
Background	82P502

Table 5 Branch Tools (EO)

Branch Tools (EO)	
Description	**Part**
Temperature Probe Assembly	499T9570
Straight Temperature Probe (Use with 499T9570)	499T9572
Adapter Plugs	600T91711

Other Tools and Supplies (EO)

Table 6 Lubricants

Lubricants	
Description	**Part**
Oil Tellus	8R90180
Grease Alvania No 2	600T90340
Silicone Grease	600T90429

Table 7 Nationalization Kits

Nationalization Kits	
Generic Contents	**Part**
User Guide	Ref. Only
Safety Label (Non-English)	Ref. Only
Safety Label, Rails (Non-English)	Ref. Only

Table 7 Nationalization Kits

Power Cord	Ref. Only
Log Book	Ref. Only
PROMs (Message Sets)	Ref. Only
Media, A0 Roll 80 GSM Bond	Ref. Only
Media Starter Pack (A1)	Ref. Only

Table 8 Special Tools

Special Tools	
Description	**Part**
Serial Loopback Tools Kit	600K60890
Fuser Harness Tool	962K02830

Molex Connector Repair Procedure

Purpose

The purpose of this procedure is to show the approved method of repair or replacement of the wire terminals in either the Pin Housing Connectors or the Socket Housing Connectors without damaging them.

CAUTION

The Molex connectors will break easily. Use only approved tools and procedures when extracting modules or terminals, or resetting the terminal locking tabs.

Items Required

600T1825 Extraction Tool

Procedure

1. (Figure 1): Familiarize yourself with the Molex Extraction Tool components.

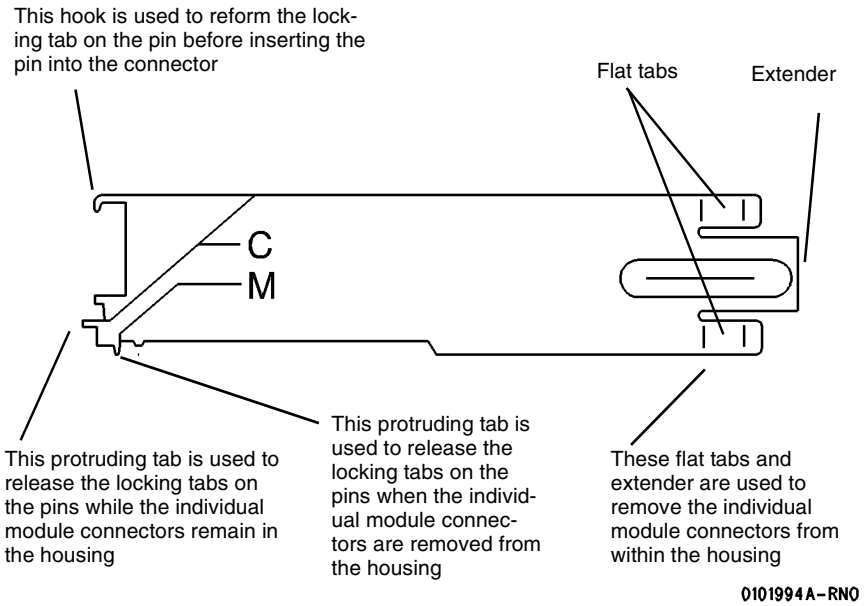


Figure 1 Molex Extraction Tool Components

CAUTION

Note the location of the individual module connectors in the housing before removing them. This will ensure that they are reinstalled correctly after the repair to the terminals is complete. Failure to position the individual connectors correctly will cause the Printer to malfunction, causing damage.

CAUTION

Use caution when forcing the housing body away from the module connector. Too much force could cause damage to the housing body.

2. (Figure 2): Remove the individual module connectors from the housing.

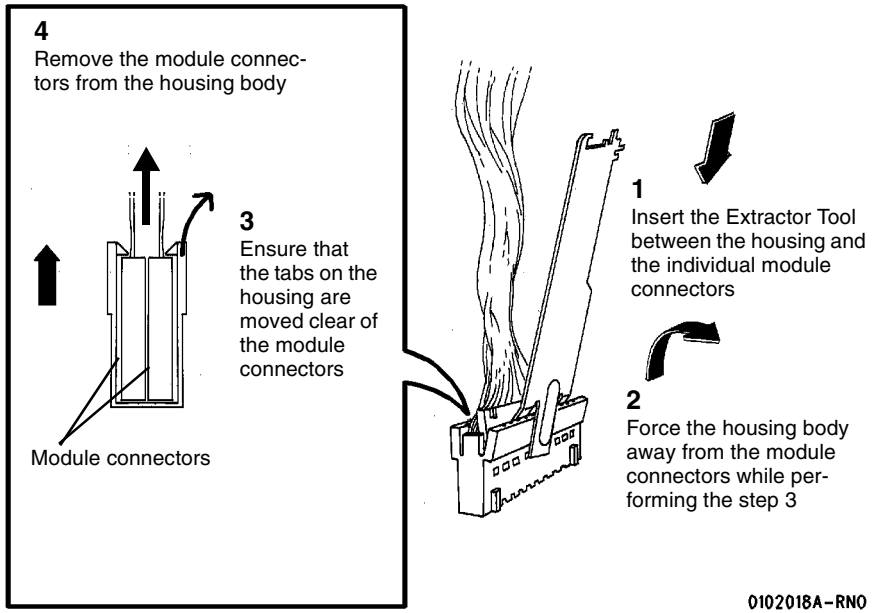


Figure 2 Removing the Module Connectors

NOTE: *Insert the Extractor Tab until the face of the tool is flush with the connector housing.*

3. (Figure 3):Remove the terminal from the connector.

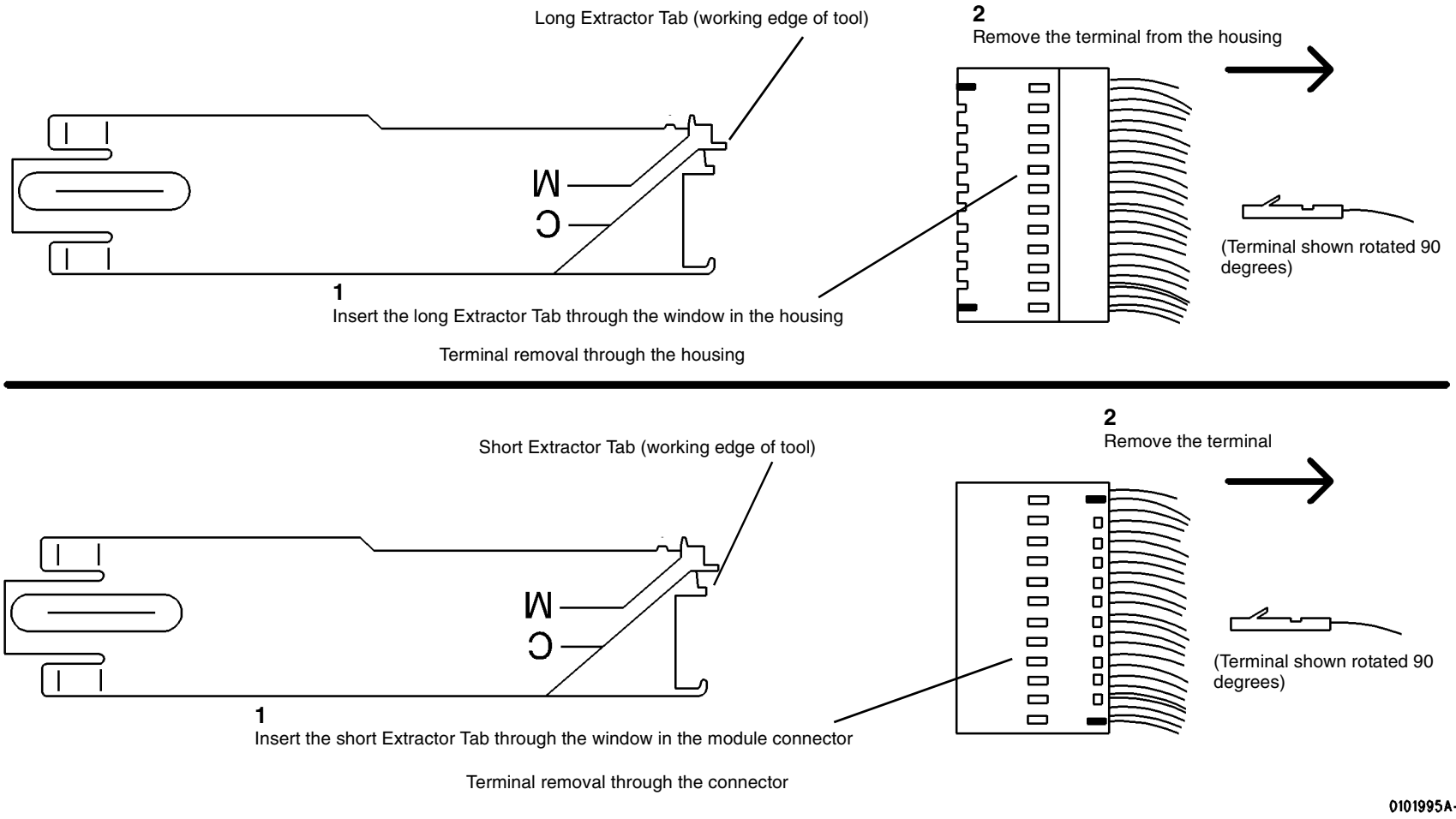


Figure 3 Removing the Terminal from the Connector

4. (Figure 4): Reform the Terminal Locking Tab.

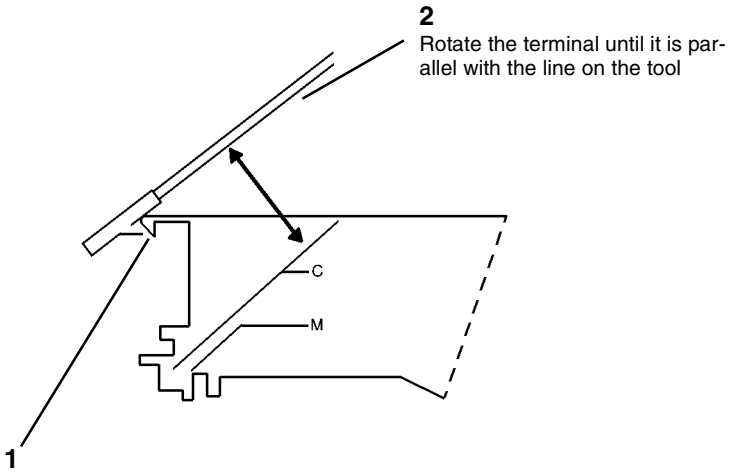


Figure 4 Removing the Locking Tab

5. Reinstall the terminal to the pin position from which it was removed.
6. Reinstall the individual module connectors to the correct locations noted at the beginning of this procedure. Refer to Section 7 for detail of connector configuration.

Product Specifications

Physical Characteristics

Table 1 Physical Characteristics

Printer Dimensions		
	8850	**510dp**
Weight	575 lbs (261 kg)	575 lbs (261 kg)
Height	42.5 inches (1080 mm)	42.2 inches (1073 mm)
Width	23 inches (584 mm)	22.5 inches (572 mm)
Depth	57 inches (1450 mm)	59.3 inches (1505 mm)
Product Code	CYK	3 drawer - MTT 2 drawer - MTR 1 drawer - MDH

(Figure 1): Printer front dimensions

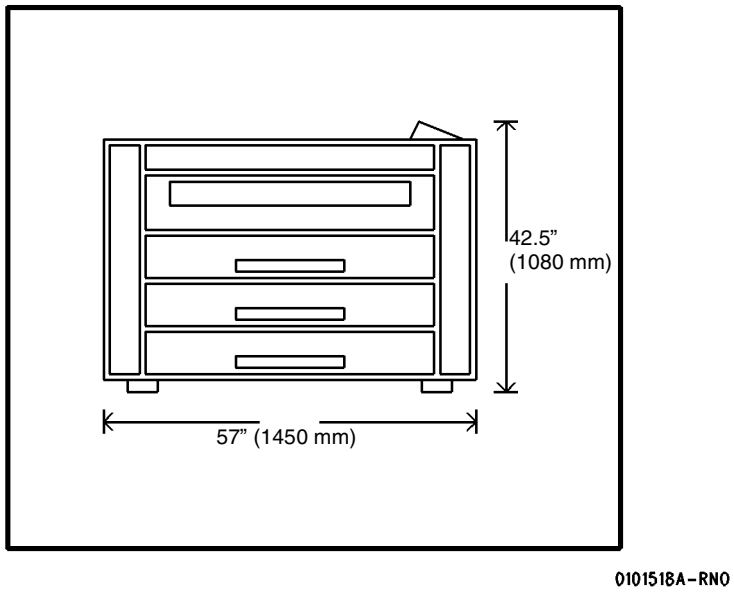


Figure 1 Printer Front Dimensions

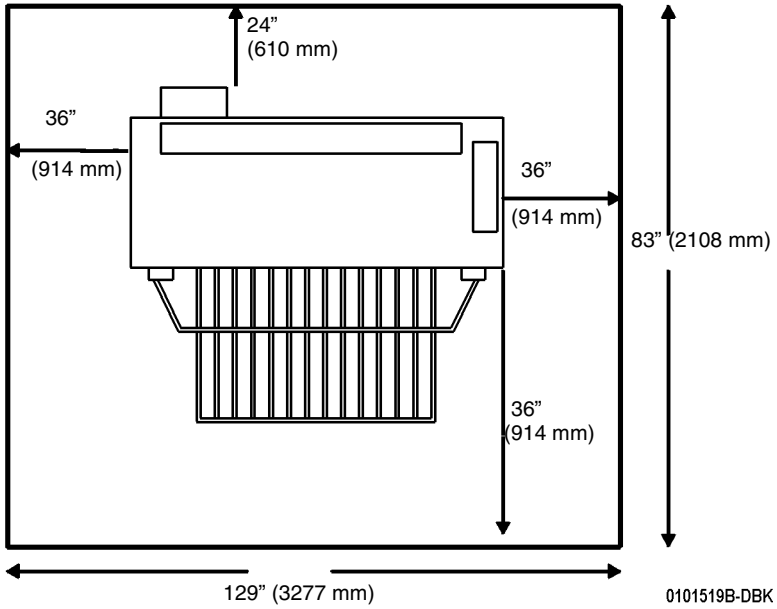


Figure 2 Printer Footprint

Minimum Space Requirements

(Figure 2): Printer footprint

Electrical Specifications

The Printers operate within the following specifications in their respective markets. The Diamondback Printer is not sensitive to the AC power service frequency.

Table 2

Market Area Current Rating	
US/Canada	115 V, 20 Amps (510dp 5 and 7 D-size cpm only) 208-240V, 20 Amps 208-240V, 15 Amps
EO - Common Market	220-240V, 16 Amps
United Kingdom	220-240V, 13 Amps
Switzerland	220V, 10 Amps
Central/South America	220-240V, 20 Amps

Table 3

Power Consumption of 220V, 20A. Service:		
	8850	**510dp**
Rest	60 Watts	110 Watts
Standby	1000 Watts	1000 Watts
Warm-up	3872 Watts	3900 Watts
Running	2100 Watts	2200 Watts

Power Cord Length: 10 feet (3.0 m)

Environmental Conditions

Temperature:

Maximum 80°F (27°C)

Minimum 60°F (10°C)

Humidity:

Maximum 80%

Minimum 20%

Maximum Elevation:

10,000 feet (3048 m)

Table 4

Heat Emission (BTU/Hr):		
	8850	**510dp**
Standby	4,000	3500
Running	7,200	7600

Table 5

Media Specifications	
Bond	20 Lb.
Vellum	20 Lb.
Film	4 mil
Tracing	4 mil

Roll Size Width: 11” (279.4 mm) 36” (914.4 mm)

Roll Size Diameter: 3” (76.2 mm) to 6.7” (170.2 mm)

Output Print Specifications:

Cut Sheet Minimum Size - 8.5 X 11” (216 X 279 mm) Portrait)

Roll Sheet Minimum Size - 11” X 8.5” (279 X 216 mm) Landscape

Maximum Size 36” X 48 feet (914 mm X 12.2 m)

80 feet (24.4 m) Optional

8850/510 Change Tag Information

Introduction

The purpose of this section is to list the Change Tag Index.

All important modifications are identified by a Tag number on a matrix card attached to the machine.

This section describes all of the Tags as well as multinational applicability, classification codes, and permanent or temporary modification information.

Classification Codes

A Tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures. A Tag number may also be required to identify the presence of optional hardware, special non-volatile memory programming, or if mandatory modifications have been installed.

Each Tag number is given a classification code to identify the type of change the Tag has made:

M - Mandatory
N - Not installed in the field
O - Optional
R - Repair

TAG: 1 (510 Only)

CLASS: S
USE: ALL
MFG SERIAL NUMBERS:
NAME: **8850 TAGS**
PURPOSE: To indicate that all 8850 tags that are applicable are built into the SPS510dp.
KIT NUMBER: N/A
REFERENCE: N/A

TAG: 2 (8850 Only)

CLASS: O
USE: All
MFG SERIAL NUMBERS:
NAME: **Developer Heater**
PURPOSE: To control the temperature of the developer material to prevent a low tribo condition (Sleep Mode) in high humidity conditions.
KIT NUMBER: 605K11690
REFERENCE: N/A

TAG: 3 (8850 Only)

CLASS: R
USE: All
MFG SERIAL NUMBERS:
NAME: **Developer Housing Update**
PURPOSE: Copy quality and Developer Image correction
KIT NUMBER: 121K25992 and above
REFERENCE: N/A

TAG: 4 (8850 Only)

CLASS: R
USE: All
MFG SERIAL NUMBERS:
NAME: **Media Corner Curl**
PURPOSE: To provide two guides to be installed on the Stripper Finger Assembly to eliminate damage to the lead edge corners of large media.
KIT NUMBER: 604K12770
REFERENCE: N/A

TAG: 5 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **Fuser Wire Insulation**

PURPOSE: To provide a new fuser lamp harness with better insulation properties to with stand the fuser heat.

KIT NUMBER: 604K12880

REFERENCE: N/A

TAG: 6 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **HVPS**

PURPOSE: To resolve LL-24 problems.

KIT NUMBER: 604K12880

REFERENCE: N/A

TAG: 7 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **Fuser Control Gate**

PURPOSE: To provide a new fuser lamp harness with better insulation properties to with stand the fuser heat.

KIT NUMBER: 604K12880

REFERENCE: N/A

TAG: 8 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **Fuser Latch Switch Location**

PURPOSE: To ensure a more positive actuation of the Latch Switch in order to avoid having to repeatedly shut the Fuser Drawer to actuate the switch.

KIT NUMBER: 604K12880

REFERENCE: N/A

TAG: 10 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **Fuser Latch Switch**

PURPOSE: To provide the necessary Latches and shims t for the Fuser Drive Motor to correct the Fuser Drive Gears engagement.

KIT NUMBER: 604K16910

REFERENCE: N/A

TAG: 11 (8850 Only)

CLASS: R

USE: All

MFG SERIAL NUMBERS:

NAME: **Media Drive Bracket**

PURPOSE: To provide a new Media Rolls Drive Motor bracket that provides a better adjustment of the Media Rolls Drive Chain.

KIT NUMBER: 604K16990

REFERENCE: N/A

TAG: 13 (8850 Only)

CLASS: R
USE: All
MFG SERIAL NUMBERS:
NAME: **Oiler End Caps**
PURPOSE: The purpose is to provide an oiler end cap made of different material and add a hole in the Fuser frame to accommodate the lamp wiring
KIT NUMBER: 604K21840
REFERENCE: PL 10.5

TAG: 44 (8850/510)

CLASS: S
USE: All
MFG SERIAL NUMBERS:
NAME: **Media (Roll) Drive Motor PWB**
PURPOSE: The purpose is to provide a new Stepper Motor PWB to solve media feed problems status code E2-01.
KIT NUMBER: 140K15954
REFERENCE: PL 7.2

TAG: 45 (8850/510)

CLASS: S
USE: All
MFG SERIAL NUMBERS:
NAME: **Media Transport Extrusion**
PURPOSE: The purpose is to provide a new Media Transport with an improved extrusion to solve a media feed problem status codes CX-01 and E2-01.
KIT NUMBER: N/A
REFERENCE: PL 8.1

TAG: 46 (8850/510)

CLASS: S
USE: All
MFG SERIAL NUMBERS:
NAME: **AC Module**
PURPOSE: The purpose is to provide an improved AC Controller
KIT NUMBER: 101K42714
REFERENCE: PL 1.2

TAG: 47 (8850/510)

CLASS: R
USE: All
MFG SERIAL NUMBERS:
NAME: **Fuser Oiler End Caps**
PURPOSE: The purpose is to provide an oiler end cap made of higher heat resistance material.
KIT NUMBER: 604K21840 Repair Kit
REFERENCE: N/A

TAG: 48 (8850/510)

CLASS: R
USE: All
MFG SERIAL NUMBERS:
NAME: **Media (Roll)Drive Motor**
PURPOSE: The purpose is to provide a new Media Drive Motor to solve the media feed problems status code E2-0.
KIT NUMBER: N/A
REFERENCE: PL 7.2

TAG: 49 (8850/510)

CLASS: S
USE: All
MFG SERIAL NUMBERS:
NAME: **AC Module**
PURPOSE:
KIT NUMBER:
REFERENCE:

7 Wiring Data

Block Schematic Diagrams

Level 1 BSD

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Level 1 BSD 7-4

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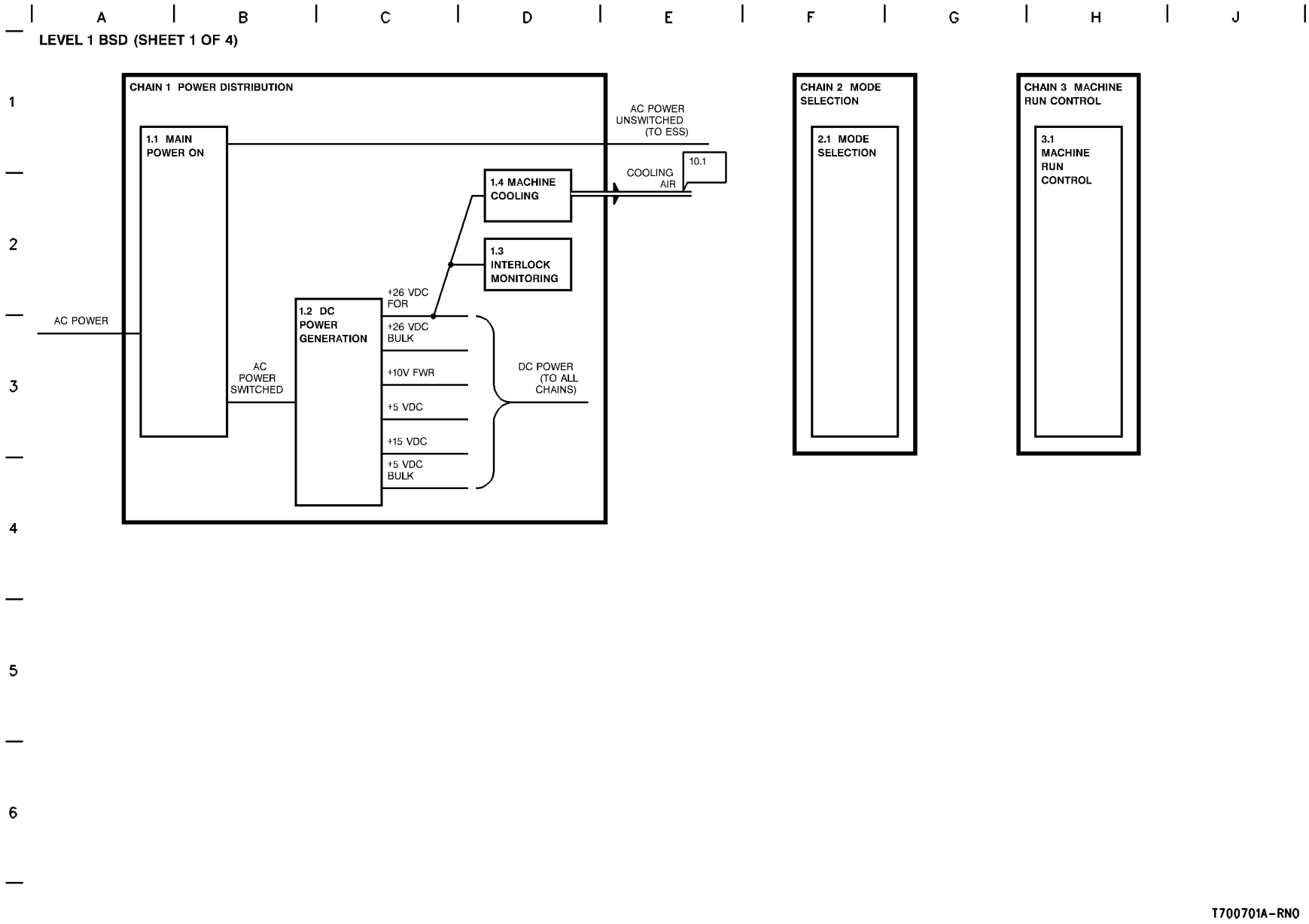
How To Use BSDs

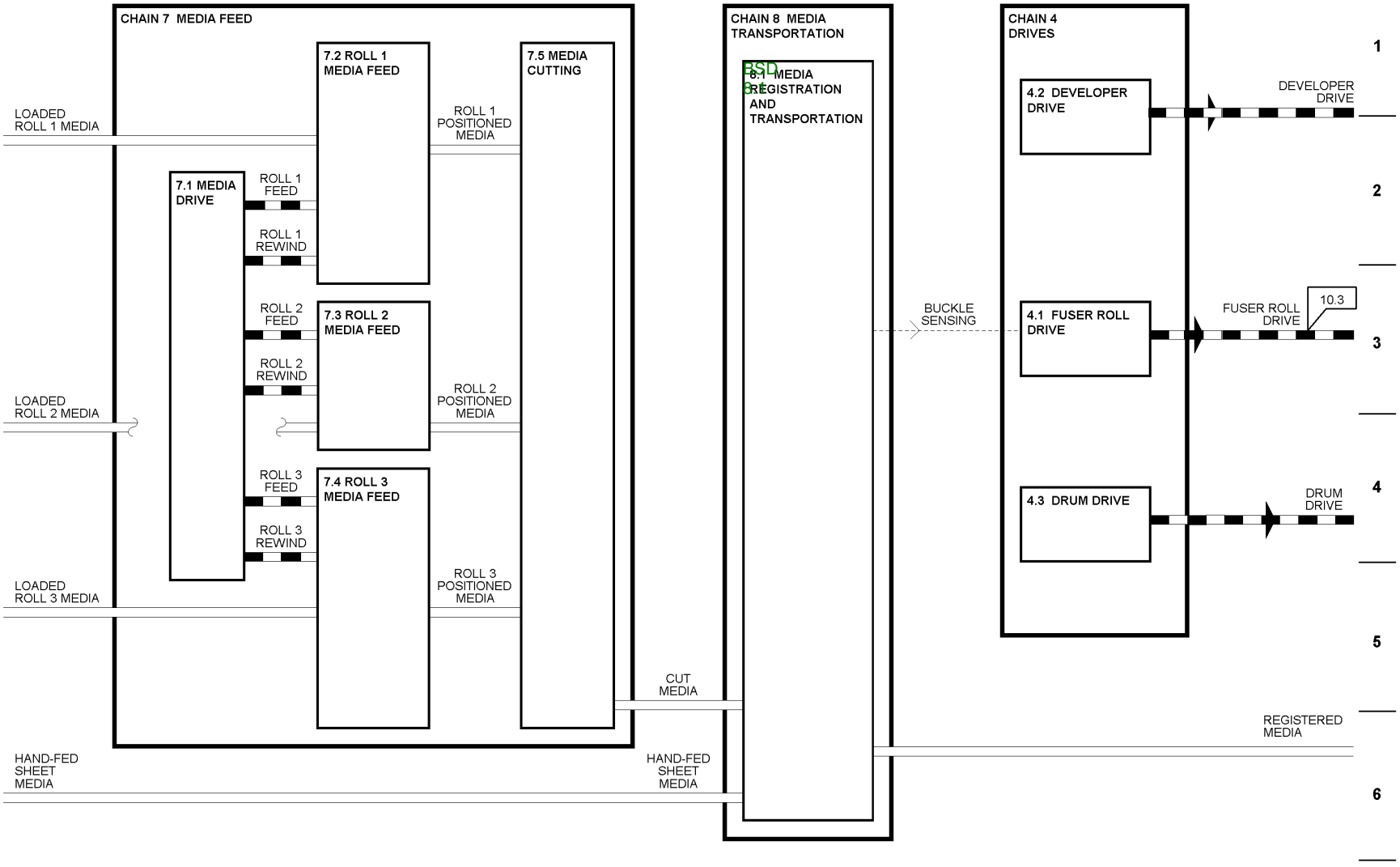
Normally, you will be directed to a specific BSD from your Level 1 Entry Procedure. If you have a problem that is not identified in Level 1, then refer to the following Level 1 BSD to determine an entry point for troubleshooting. Note that the Level 1 BSD shows the “standard” Chains 1, 2, 3, 4, 6, 7, 8, 9, and 10. Each Level 2 BSD is shown within the Level 1 BSD. For example, Chain 6, Imaging, contains two Level 2 Chains: Chain 6.1 Imaging (Right Side) and Chain 6.2, Imaging (Left Side). All of the necessary inputs and outputs for each Chain and for each Level 2 BSD are shown in the Level 1 BSD.

For example, if the User Interface is not functioning properly, refer to the Level 1 BSD, Sheet 1, and observe that Chain 2, Mode Selection is the “most likely” place to start. Then, you should proceed to BSD 2.1 and use that information to diagnose your problem. Each BSD contains the necessary wiring information, physical location of components information, and Diagnostic Code information to assist you in identifying the specific fault.

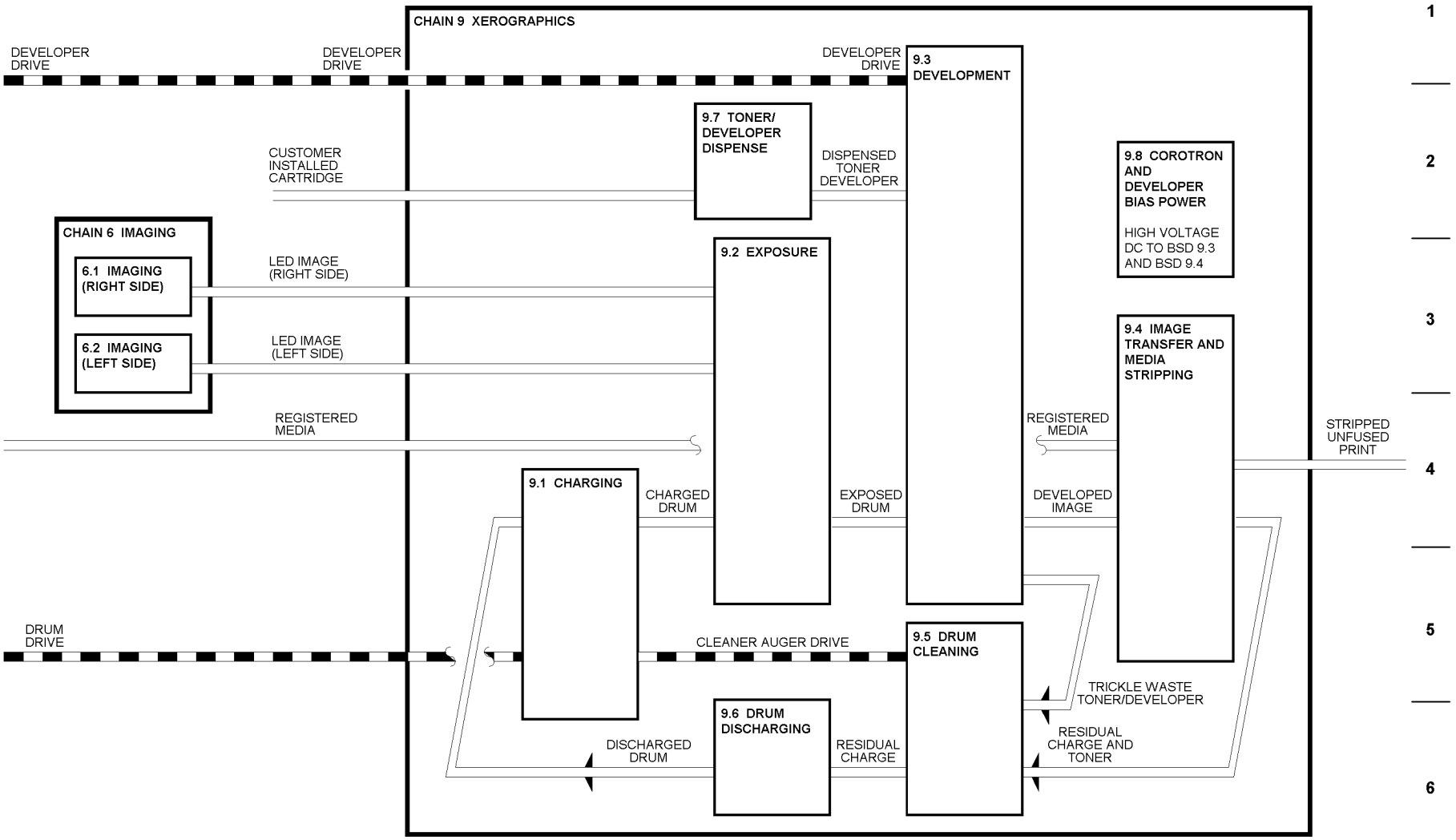
NOTE: *In the Block Schematic Diagrams that follow, FOR = Forever (unswitched), BULK = switched.*


A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
LEVEL 1 BSD (SHEET 1 OF 4)
CHAIN 1 POWER DISTRIBUTION
1.1 MAIN POWER ON
1.2 DC POWER GENERATION
1.3 INTERLOCK MONITORING
1.4 MACHINE COOLING
AC POWER
AC POWER SWITCHED
AC POWER UNSWITCHED (TO ESS)
COOLING AIR
10.1
+26 VDC FOR
+26 VDC BULK
+10V FWR
+5 VDC
+15 VDC
+5 VDC BULK
DC POWER (TO ALL CHAINS)
CHAIN 2 MODE SELECTION
2.1 MODE SELECTION
CHAIN 3 MACHINE RUN CONTROL
3.1 MACHINE RUN CONTROL
T700701A-RNO

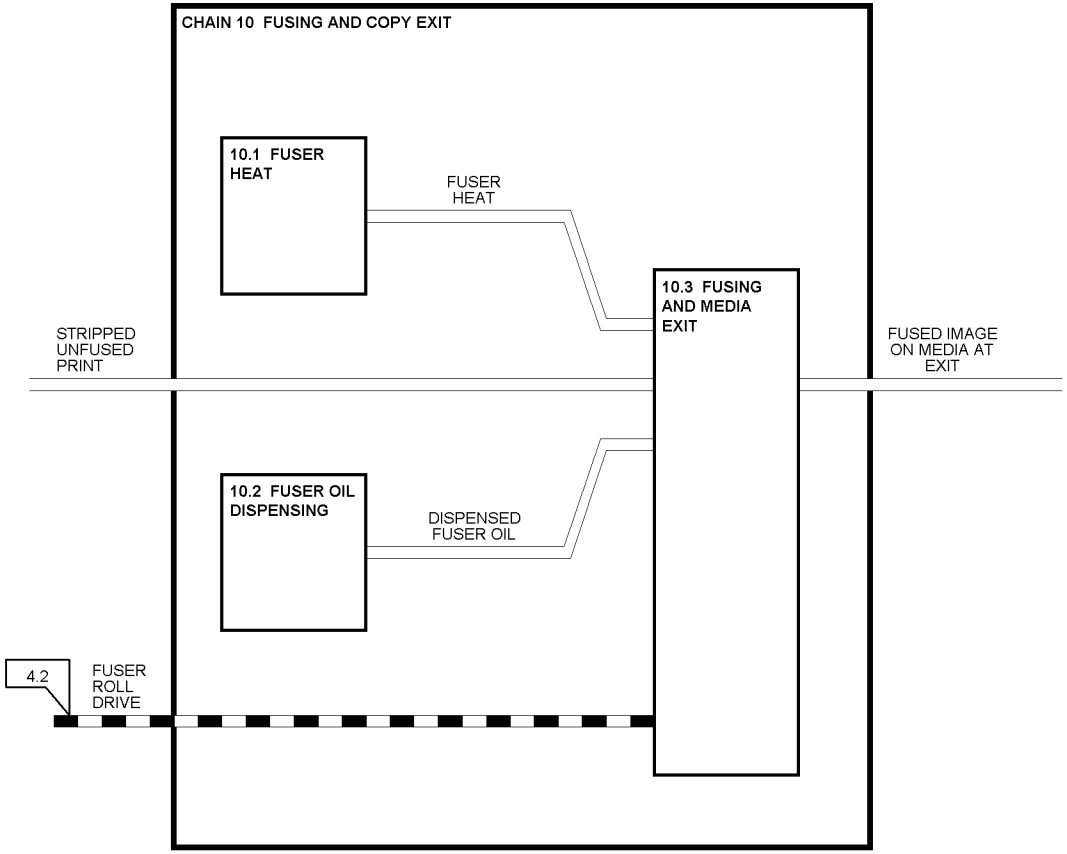
LEVEL 1 BSD (SHEET 2 OF 4)

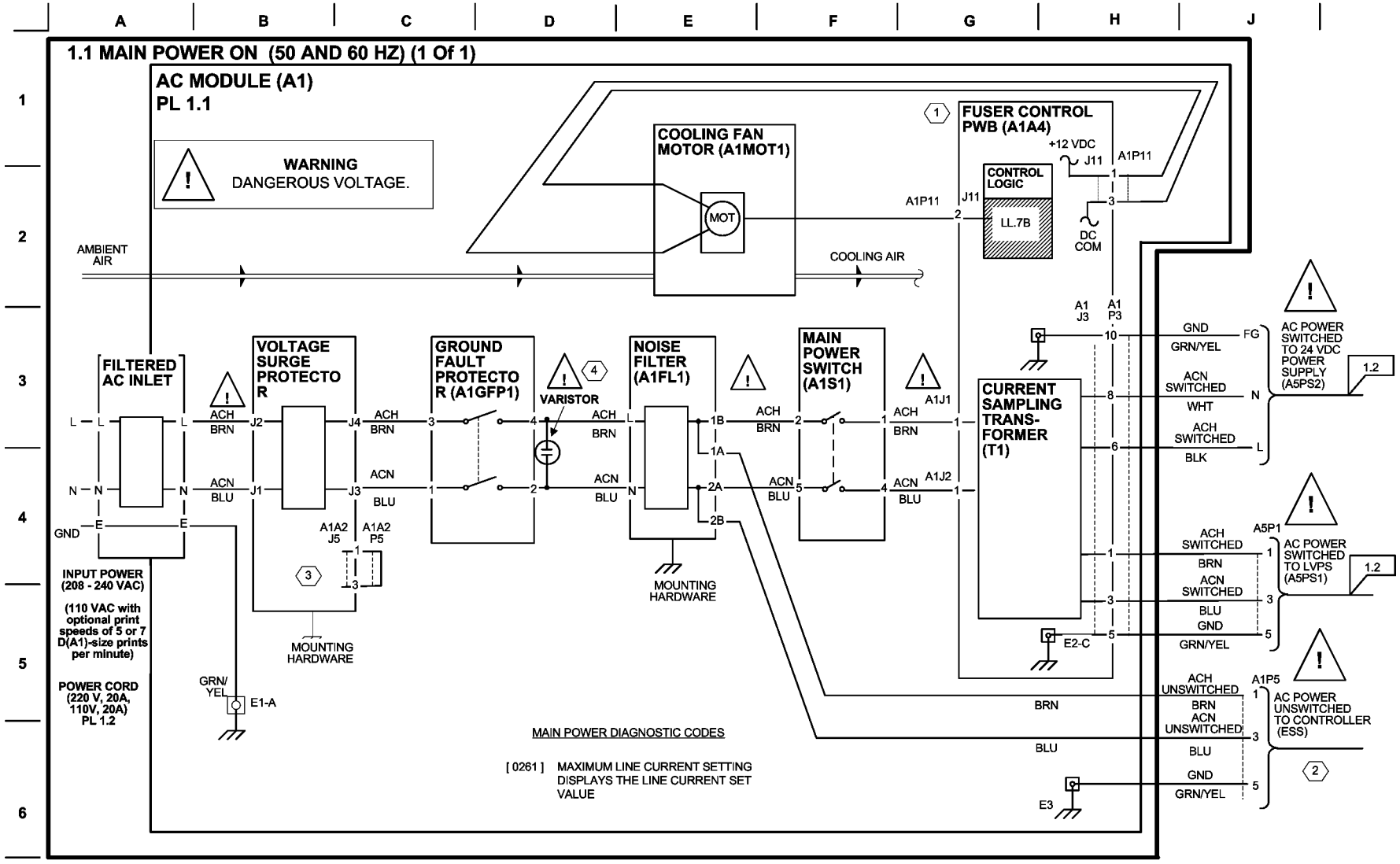


LEVEL 1 BSD (SHEET 3 OF 4)



LEVEL 1 BSD (SHEET 4 OF 4)




1.1 MAIN POWER ON (50 AND 60 HZ) (1 Of 1)
AC MODULE (A1)
PL 1.1
WARNING
DANGEROUS VOLTAGE.
COOLING FAN MOTOR (A1MOT1)
MOT
FUSER CONTROL PWB (A1A4)
CONTROL LOGIC
LL.7B
+12 VDC
J11
A1P11
DC COM
AMBIENT AIR
COOLING AIR
FILTERED AC INLET
VOLTAGE SURGE PROTECTOR
GROUND FAULT PROTECTOR (A1GFP1)
VARISTOR
NOISE FILTER (A1FL1)
MAIN POWER SWITCH (A1S1)
CURRENT SAMPLING TRANS-FORMER (T1)
ACH BRN
ACN BLU
A1J1
A1J2
A1A2 J5
A1A2 P5
MOUNTING HARDWARE
INPUT POWER (208 - 240 VAC)
(110 VAC with optional print speeds of 5 or 7 D(A1)-size prints per minute)
POWER CORD (220 V, 20A, 110V, 20A) PL 1.2
GRN/YEL
E1-A
E2-C
E3
A1 J3
A1 P3
GND GRN/YEL FG
ACN SWITCHED WHT N
ACH SWITCHED BLK L
AC POWER SWITCHED TO 24 VDC POWER SUPPLY (A5PS2)
1.2
A5P1
ACH SWITCHED BRN
ACN SWITCHED BLU
GND GRN/YEL
AC POWER SWITCHED TO LVPS (A5PS1)
A1P5
ACH UNSWITCHED BRN
ACN UNSWITCHED BLU
GND GRN/YEL
AC POWER UNSWITCHED TO CONTROLLER (ESS)
MAIN POWER DIAGNOSTIC CODES
[0261] MAXIMUM LINE CURRENT SETTING DISPLAYS THE LINE CURRENT SET VALUE

BSD 1.1 Main Power On (50 and 60 HZ)(2 of 2)

NOTE: *1: Refer to BSD 10.1 for the circuit of the Fuser Control PWB (A4).*

NOTE: *2: Refer to the Controller Service Manual.*

NOTE: *3: This Jumper is used by the manufacturer to test the Voltage Surge Protector. Do not remove the connector.*

NOTE: *4: The Varistor has been added to provide additional electrical noise suppression. If it fails in a shorted condition, it will cause the Surge Voltage Protector to continually trip.*

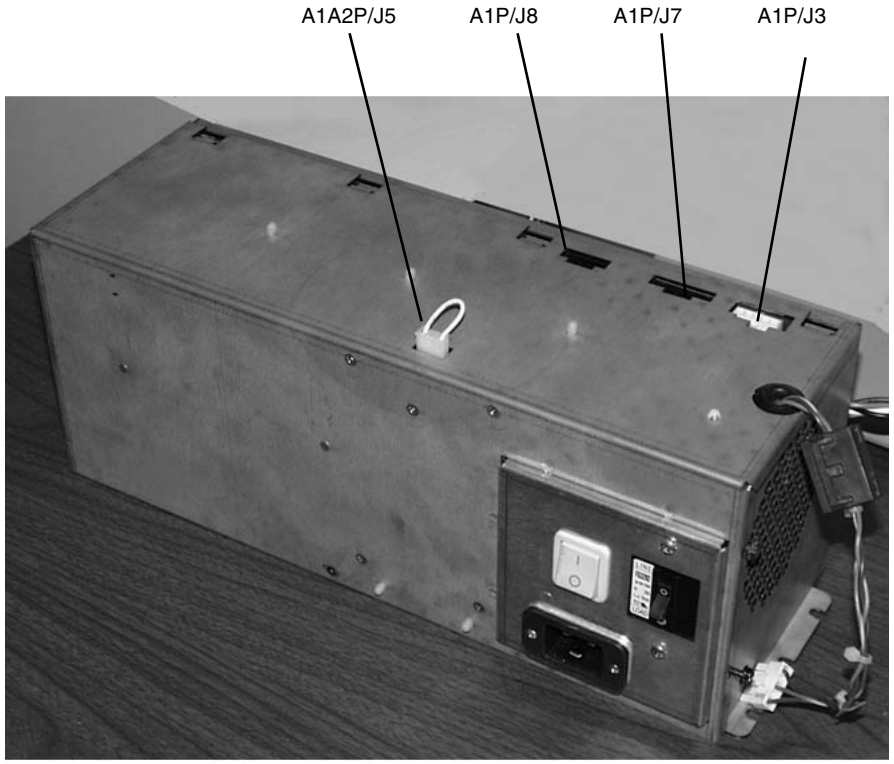
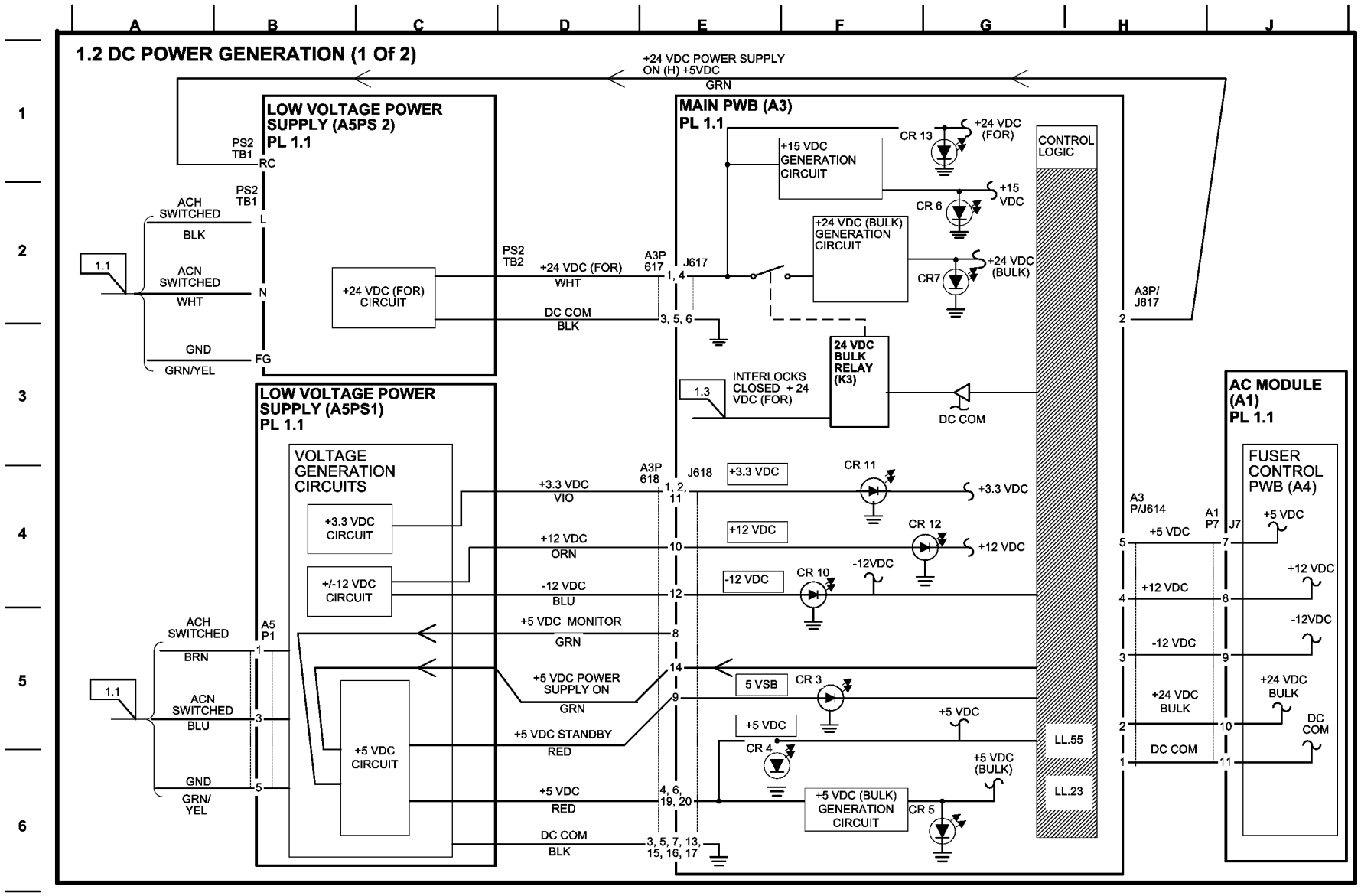
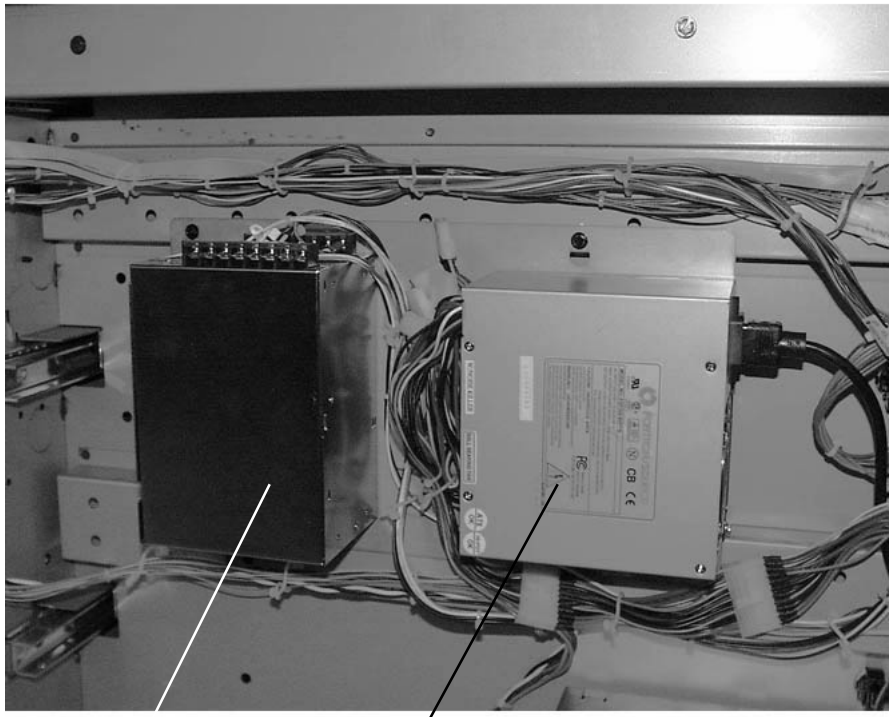


Figure 1 AC MODULE

BSD 1.2 DC Power Generation (1 of 3)





24 VDC POWER SUPPLY (A5PS2)

LVPS (A5PS1)

Figure 1 Low Voltage Power Supplies

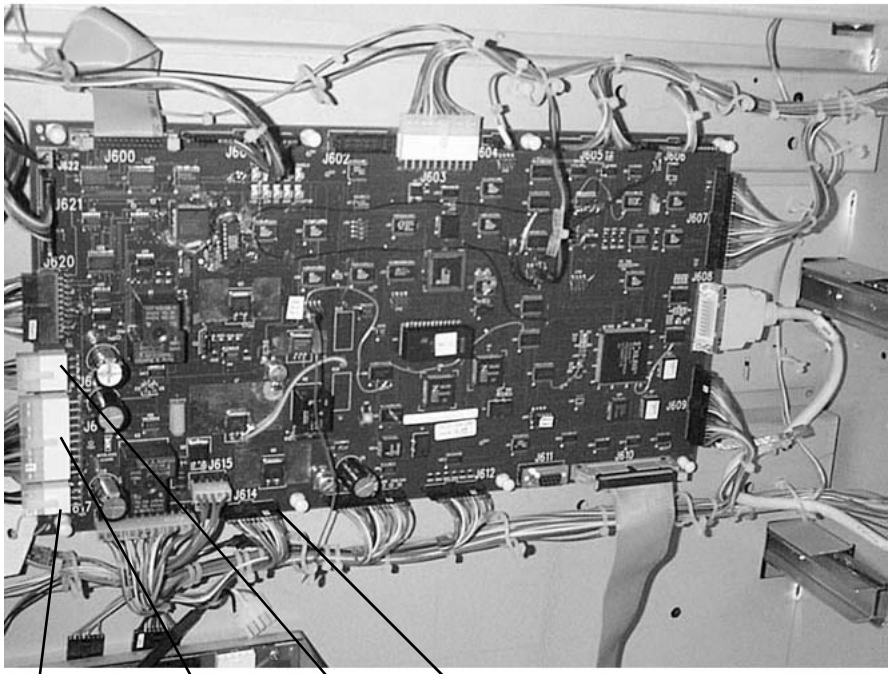
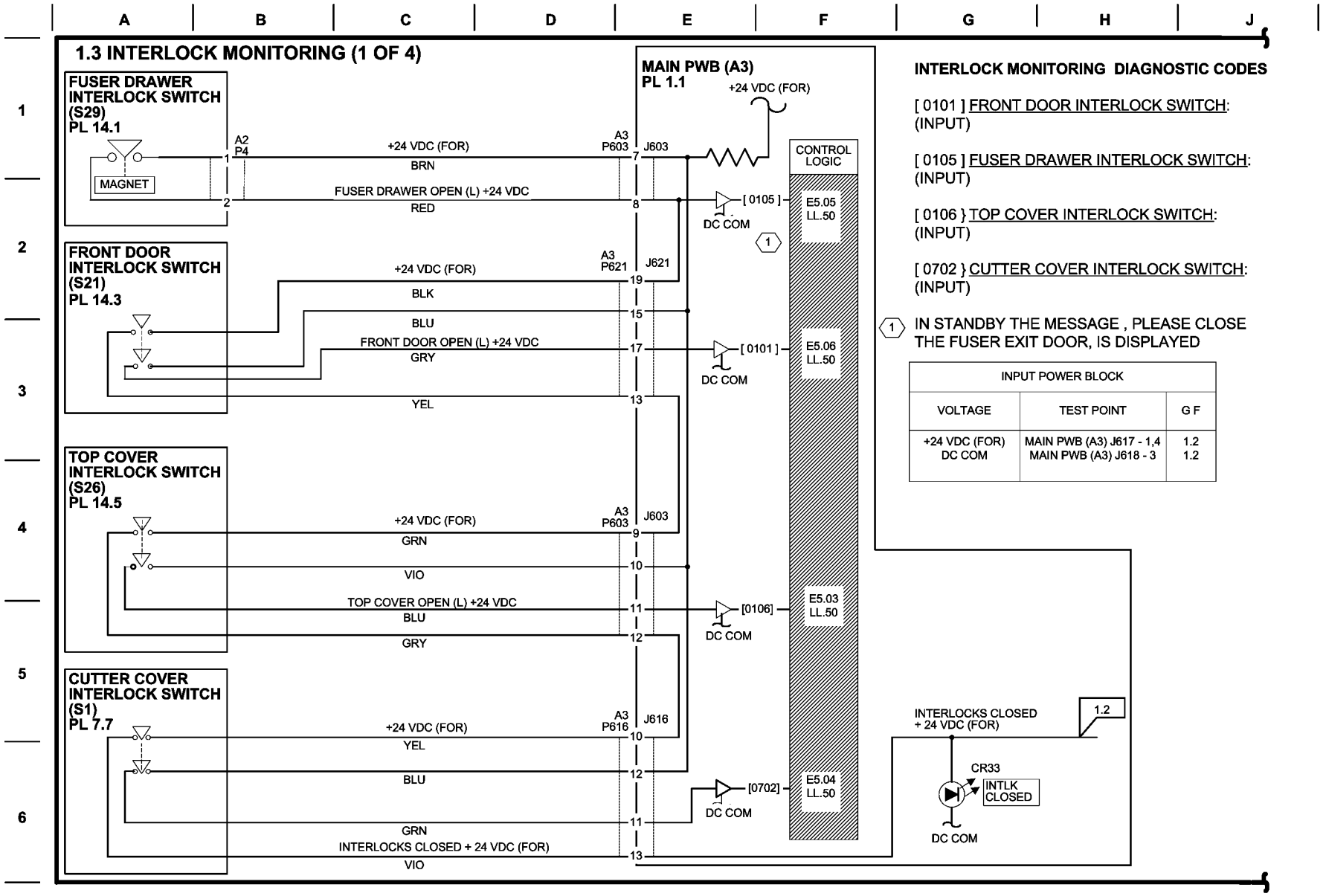
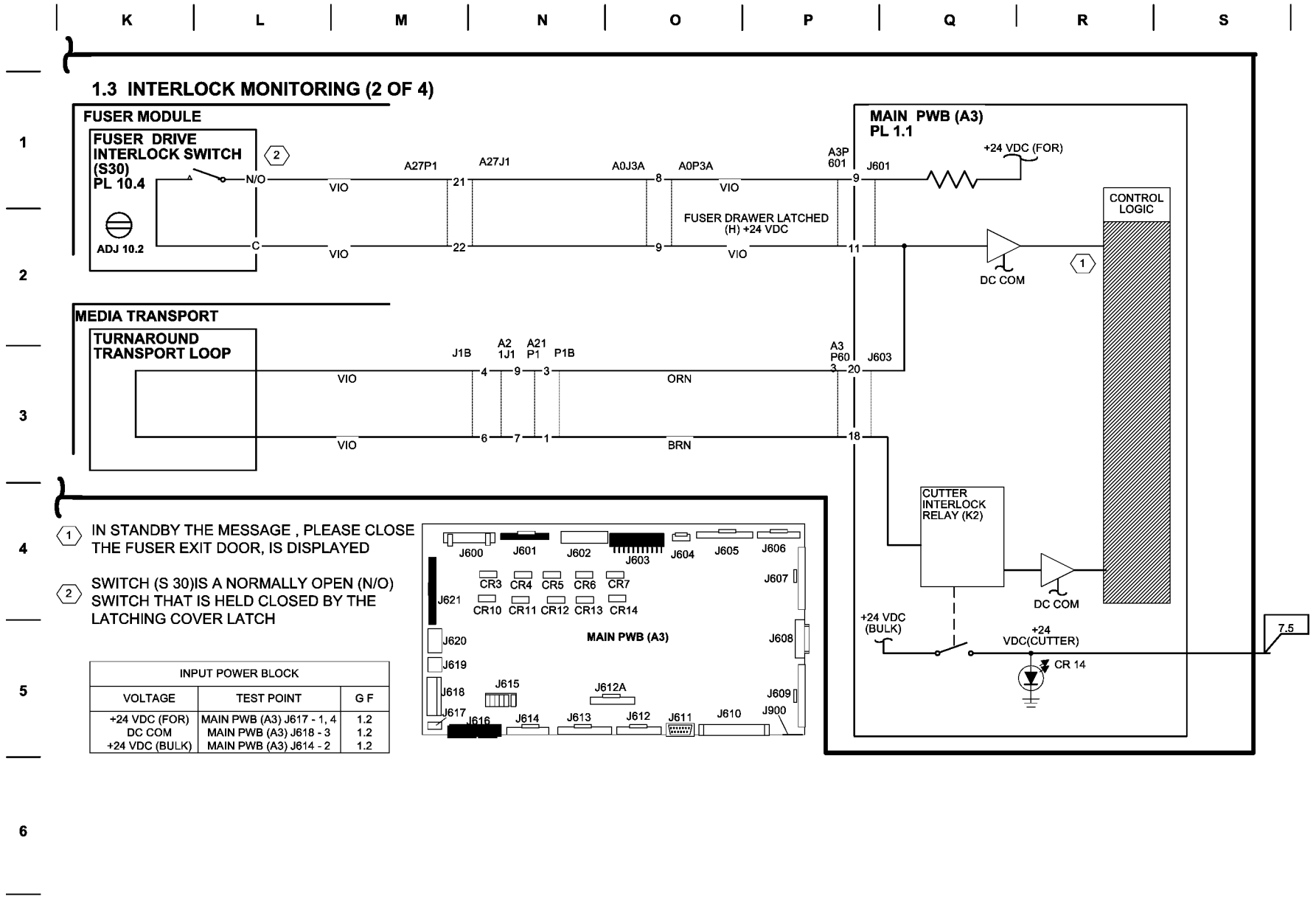


Figure 2 Main PWB(A3)

Table 1 INPUT POWER BLOCK

VOLTAGE	TEST POINT	GF
+3.3 VDC	MAIN PWB (A3) J618 - 1	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
+5VDC (BULK)	MAIN PWB (A3) J619 - 1	1.2
+12 VDC	MAIN PWB (A3) J618 - 10	1.2
-12 VDC	MAIN PWB (A3) J618 - 12	1.2
+24 VDC (FOR)	MAIN PWB (A3) J617 - 1	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2


1.3 INTERLOCK MONITORING (1 OF 4)
MAIN PWB (A3)
PL 1.1
+24 VDC (FOR)
CONTROL LOGIC
FUSER DRAWER INTERLOCK SWITCH (S29)
PL 14.1
MAGNET
A2 P4
A3 P603
J603
+24 VDC (FOR)
BRN
FUSER DRAWER OPEN (L) +24 VDC
RED
[0105]
DC COM
E5.05 LL.50
FRONT DOOR INTERLOCK SWITCH (S21)
PL 14.3
A3 P621
J621
+24 VDC (FOR)
BLK
BLU
FRONT DOOR OPEN (L) +24 VDC
GRY
YEL
[0101]
DC COM
E5.06 LL.50
TOP COVER INTERLOCK SWITCH (S26)
PL 14.5
A3 P603
J603
+24 VDC (FOR)
GRN
VIO
TOP COVER OPEN (L) +24 VDC
BLU
GRY
[0106]
DC COM
E5.03 LL.50
CUTTER COVER INTERLOCK SWITCH (S1)
PL 7.7
A3 P616
J616
+24 VDC (FOR)
YEL
BLU
GRN
INTERLOCKS CLOSED + 24 VDC (FOR)
VIO
[0702]
DC COM
E5.04 LL.50
INTERLOCKS CLOSED + 24 VDC (FOR)
1.2
CR33
INTLK CLOSED
DC COM
INTERLOCK MONITORING DIAGNOSTIC CODES
[0101] FRONT DOOR INTERLOCK SWITCH: (INPUT)
[0105] FUSER DRAWER INTERLOCK SWITCH: (INPUT)
[0106] TOP COVER INTERLOCK SWITCH: (INPUT)
[0702] CUTTER COVER INTERLOCK SWITCH: (INPUT)
1 IN STANDBY THE MESSAGE , PLEASE CLOSE THE FUSER EXIT DOOR, IS DISPLAYED
INPUT POWER BLOCK
VOLTAGE | TEST POINT | G F
+24 VDC (FOR) | MAIN PWB (A3) J617 - 1,4 | 1.2
DC COM | MAIN PWB (A3) J618 - 3 | 1.2


K
L
M
N
O
P
Q
R
S
1
2
3
4
5
6
1.3 INTERLOCK MONITORING (2 OF 4)
FUSER MODULE
FUSER DRIVE INTERLOCK SWITCH (S30) PL 10.4
ADJ 10.2
N/O
C
2
VIO
A27P1
21
22
A27J1
A0J3A
8
9
A0P3A
VIO
VIO
A3P 601
J601
9
11
MAIN PWB (A3) PL 1.1
+24 VDC (FOR)
FUSER DRAWER LATCHED (H) +24 VDC
CONTROL LOGIC
DC COM
1
MEDIA TRANSPORT
TURNAROUND TRANSPORT LOOP
J1B
A2 1J1
A21 P1
P1B
4
9
3
6
7
1
VIO
VIO
ORN
BRN
A3 P60
J603
3
20
18
CUTTER INTERLOCK RELAY (K2)
DC COM
+24 VDC (BULK)
+24 VDC(CUTTER)
CR 14
7.5
1 IN STANDBY THE MESSAGE , PLEASE CLOSE THE FUSER EXIT DOOR, IS DISPLAYED
2 SWITCH (S 30)IS A NORMALLY OPEN (N/O) SWITCH THAT IS HELD CLOSED BY THE LATCHING COVER LATCH
J600
J601
J602
J603
J604
J605
J606
J607
J608
J609
J610
J611
J612
J612A
J613
J614
J615
J616
J617
J618
J619
J620
J621
J900
CR3
CR4
CR5
CR6
CR7
CR10
CR11
CR12
CR13
CR14
MAIN PWB (A3)
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+24 VDC (FOR)
MAIN PWB (A3) J617 - 1, 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
+24 VDC (BULK)
MAIN PWB (A3) J614 - 2
1.2

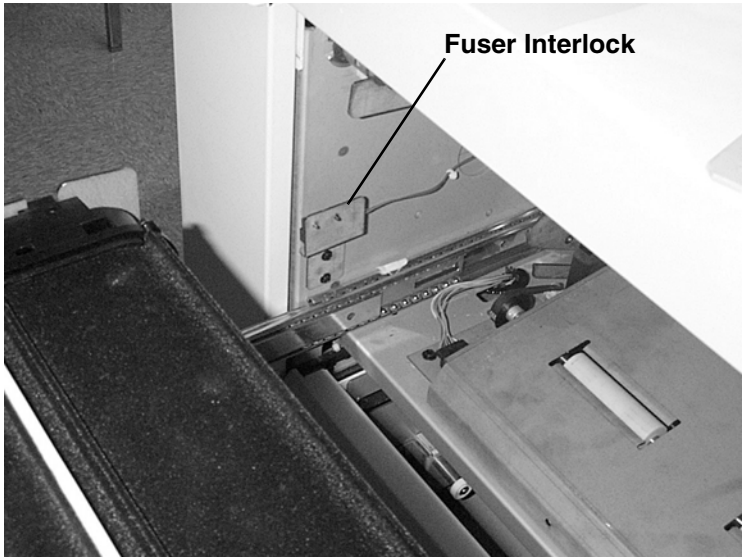


Figure 1 Fuser Drawer Interlock

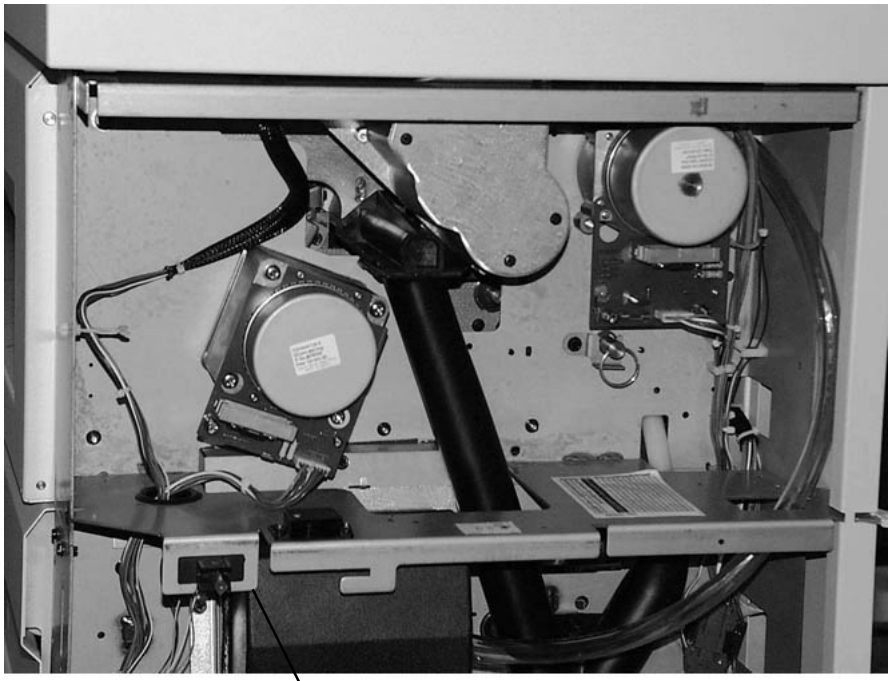


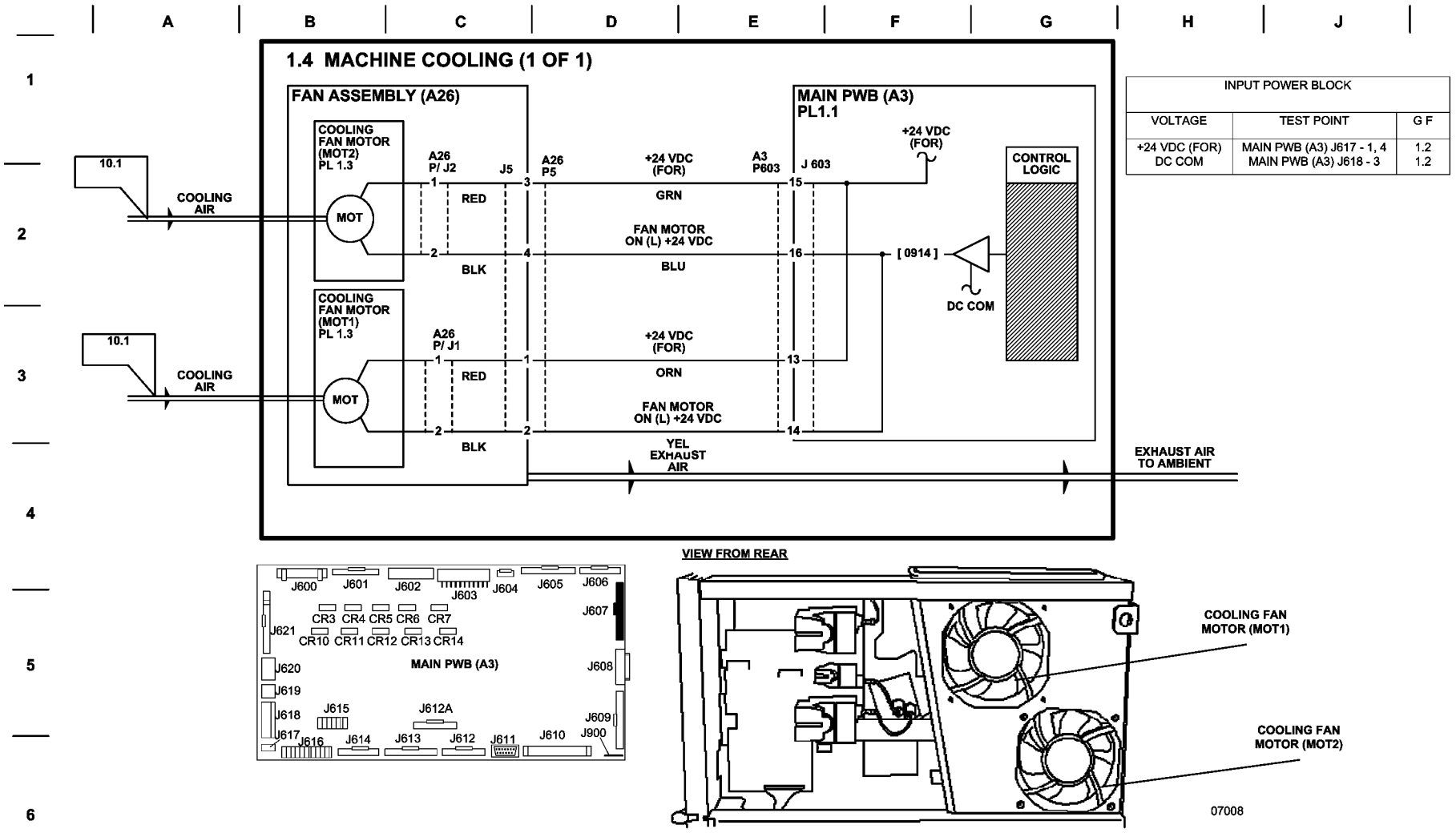
Figure 2 Front Door Interlock

TOP COVER INTER-
LOCK

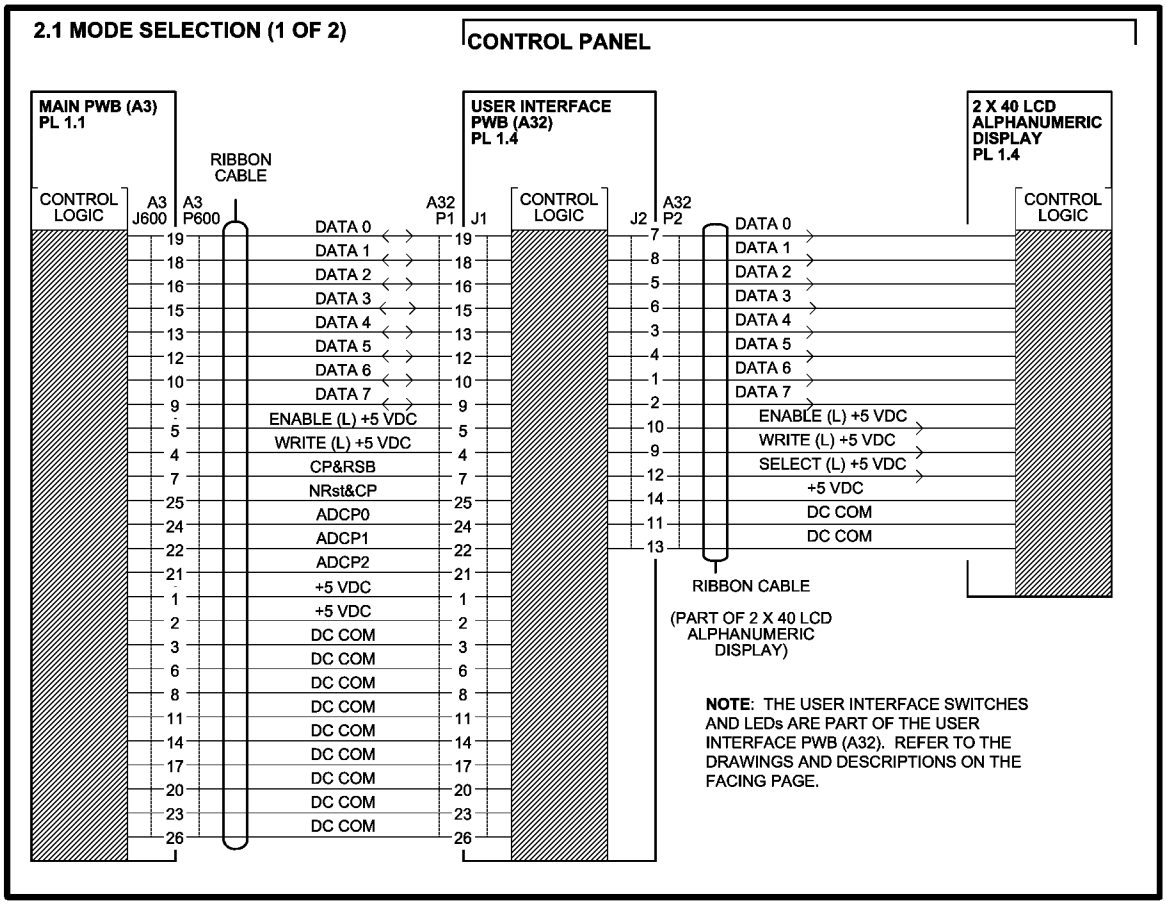
Figure 3 Top Cover Interlock

CUTTER DRAWER
INTERLOCK

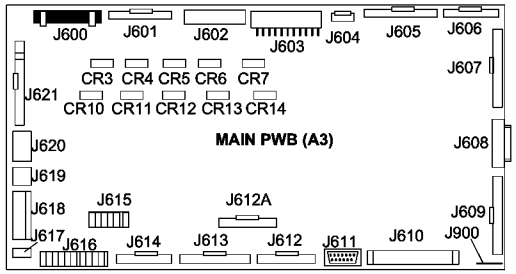
Figure 4 Cutter Drawer Interlock


A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
1.4 MACHINE COOLING (1 OF 1)
FAN ASSEMBLY (A26)
MAIN PWB (A3)
PL1.1
COOLING FAN MOTOR (MOT2) PL 1.3
COOLING FAN MOTOR (MOT1) PL 1.3
MOT
10.1
COOLING AIR
A26 P/ J2
A26 P/ J1
J5
A26 P5
A3 P603
J 603
+24 VDC (FOR)
RED
BLK
GRN
BLU
ORN
YEL
FAN MOTOR ON (L) +24 VDC
[0914]
DC COM
CONTROL LOGIC
EXHAUST AIR TO AMBIENT
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+24 VDC (FOR)
MAIN PWB (A3) J617 - 1, 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
VIEW FROM REAR
J600
J601
J602
J603
J604
J605
J606
J607
J608
J609
J610
J611
J612
J613
J614
J615
J616
J617
J618
J619
J620
J621
J612A
J900
CR3
CR4
CR5
CR6
CR7
CR10
CR11
CR12
CR13
CR14
MAIN PWB (A3)
COOLING FAN MOTOR (MOT1)
COOLING FAN MOTOR (MOT2)
07008

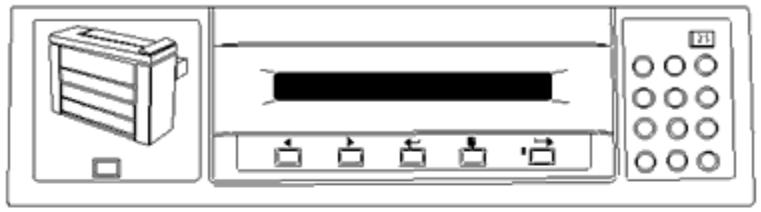
BSD 2.1 Mode Selection



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC DC COM	MAIN PWB (A3) J618-4 MAIN PWB (A3)J618-3	1.2 1.2

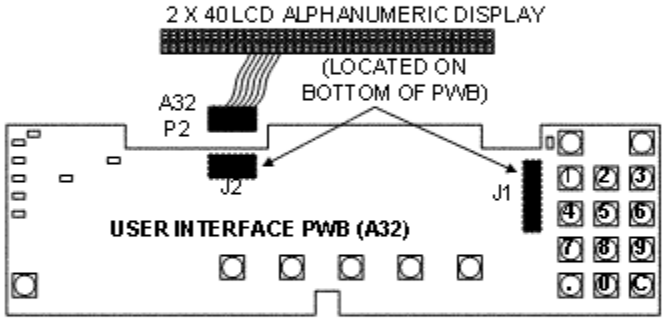


2.1 MODE SELECTION (2 OF 2)



CONTROL PANEL

07009



MODE SELECTION DIAGNOSTIC CODES

[020] DISPLAY TEST: CHECKS EACH SEGMENT OF THE LCD, ONE SEGMENT AT A TIME.

[020] KEYBOARD TEST: AS EACH KEY IS PRESSED, THE FOLLOWING VALUE SHOULD BE DISPLAYED:

KEY	DISPLAY	KEY	DISPLAY
1	01H	0	00H
2	02H	MEDIA	11H
3	03H	ON LINE	12H
4	04H	PREVIOUS	13H
5	05H	NEXT	14H
6	06H	ENTER	15H
7	07H	(NOT USED)	16H
8	08H	C	17H
9	09H	.	18H

[021] LED TEST: LIGHTS ALL LEDS AT THE SAME TIME.

[021] MESSAGE ROM TEST: RETURNS A CODE INDICATING WHICH MESSAGE ROMS ARE GOOD AS FOLLOWS (X = GOOD ROM):

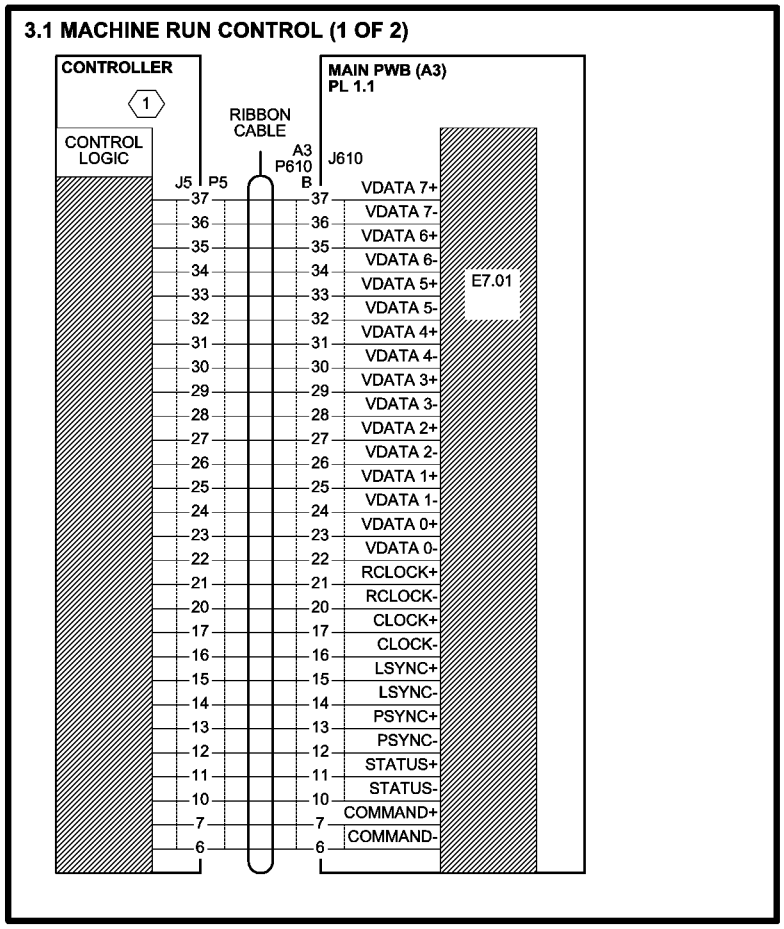
RESULT CODE	0	1	2	3
ROM 1 GOOD	X		X	
ROM 2 GOOD		X	X	

NOTE: THE DESIRED RESULT CODE IS 3 (BOTH ROMS GOOD).

[026] MACHINE CURRENT LIMIT

[026] BILLING TYPE: SELECTS ENGLISH OR METRIC.
0 = FEET
1 = 0.1 METRIC
2 = 1 METER

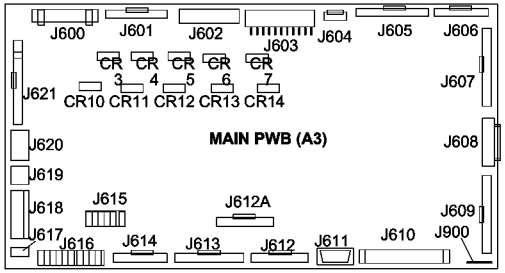
BSD 3.1 Machine Run Control



NOTE:

1 REFER TO THE CONTROLLER SERVICE MANUAL OR TO THIRD PARTY SERVICE DOCUMENTATION TO SERVICE THE CONTROLLER.

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2



3.1 MACHINE RUN CONTROL (2 OF 2)

MACHINE RUN CONTROL DIAGNOSTIC CODES

[0300] JUMP 0: RESTARTS THE IOT.

[0360] NVM RESET TO NOMINAL NVM:

[1]. RESETS ALL OF THE BASIC NVM TO NOMINAL FOR A US MARKET CONFIGURATION (DOES NOT AFFECT THE AUDITRON ACCOUNTS). IT REQUIRES **ENTER** TO CONFIRM.

[2]. ALLOWS THE SERVICE REPRESENTATIVE TO SEE AND THEN CHANGE THE ELECTRONIC BILLING METER AND AREA METER TO ANY DESIRED VALUE. IT REQUIRES **START** TO CONFIRM THE NEW VALUE AND AFFECTS THE EIGHT LOCATIONS OF THE NVM. THE NVM ARE COPY _COUNTER_xxxxER_NVM FOR THE BILLING METER AND AREA_COUNTER_xxxER_NVM FOR THE AREA METER

[3]. RESETS ALL OF THE BASIC NVM TO NOMINAL CONDITION FOR AN E0, 220 VOLT MACHINE (DOES NOT AFFECT THE AUDITRON ACCOUNTS). IT REQUIRES START TO CONFIRM AND IS IDENTICAL TO [1] ABOVE EXCEPT FOR THE FOLLOWING LOCATIONS: 21, 22, 23, 29, 99, AND 9A.

AFTER RESETTING NVM TO NOMINAL VALUES, THE TECH REP SHOULD EXECUTE [1031] TO UPDATE OILER WEB COUNTERS IF THE INSTALLED WEB IS NOT NEW.

MACHINE RUN CONTROL DIAGNOSTIC CODES

[0361] WATCH DOG TIMER: RESTARTS THE IOT.

[0362] TIMEOUT INTERVAL FOR EXITING DIAGNOSTICS.

[0363] NVM RESET: RESETS TO NOMINAL THE LOCATIONS THAT DO NOT MATCH BETWEEN DATA AND SHADOW.

[0364] NVM RESET: RESETS CHECKSUM (DOES NOT AFFECT NVM DATA).

[0365] NVM PRINTOUT: PRINTS OUT THE ENTIRE CONTENTS OF NVM (IN HEX FORMAT). THE BAUD RATE IS DEPENDENT UPON NVM.

[0366] PRINTOUT OF NVM: PRINTS OUT THE CONTENTS, IN A SERVICE REPRESENTATIVE FRIENDLY FORMAT, OF THE SERVICE REPRESENTATIVE ADJUSTABLE NVM VALUES

[0391] SERVICE EVENT DISPLAY: THIS TEST ALLOWS THE SERVICE REPRESENTATIVE TO SCROLL THROUGH ALOG OF THE MOST RECENT 99 EVENTS THAT HAVE BEEN RECORDED. AN EVENT IS DEFINED AS A FAULT, A POWER-UP OF THE IOT, OR A DIAGNOSTIC POWER-UP OF THE IOT. THE INFORMATION DISPLAYED FOR EACH FAULT INCLUDES HOW MANY EVENTS ELAPSED SINCE THE FAULT CODE WAS ORIGINALLY DISPLAYED. THE **NEXT** AND **PREVIOUS** KEY ARE USED TO SCROLL THROUGH THE LOG. THE C KEY CAN BE USED TO CLEAR THE LOG.

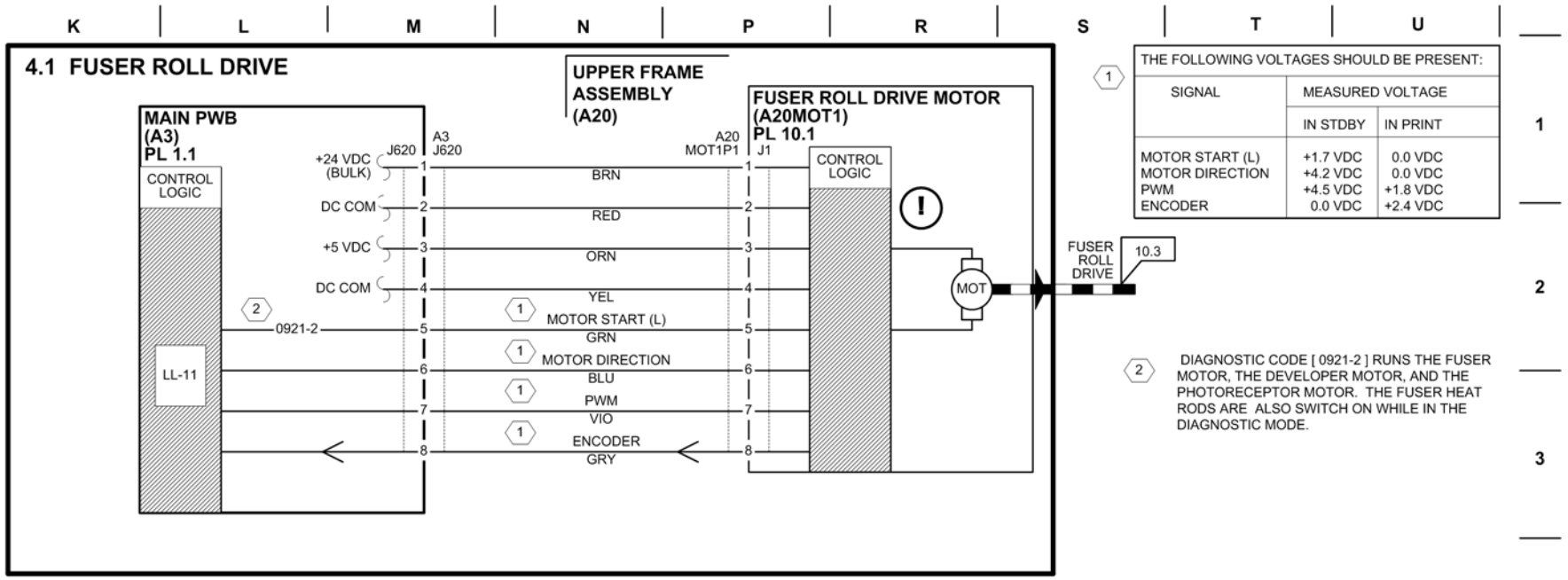
[0392] SERVICE HISTORY DISPLAY: THIS TEST ALLOWS THE SERVICE REPRESENTATIVE TO SCROLL THROUGH A LOG SHOWING THE NUMBER OF OCCURENCES OF EACH RECORDED FAULT SINCE THE LOG WAS LAST CLEARED. THE LOG IS ARRANGED ALPHABETICALLY BY FAULT CODE.

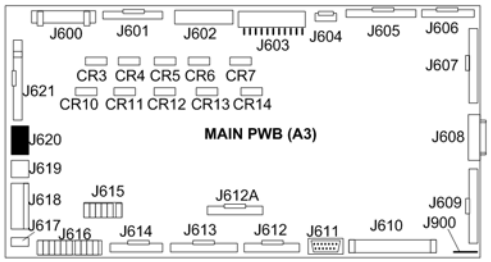
YOU WILL BE PRESENTED WITH THE BILLING METER COUNT AT WHICH THE HISTORY WAS LAST CLEARED. YOU WILL BE ABLE TO SCROLL THROUGH THE LIST OF EVENTS USING THE **NEXT** AND **PREVIOUS** KEY. WHEN EXITING FROM THIS DIAGNOSTIC, YOU WILL BE PROMPTED TO CLEAR THE FAULT HISTORY. IF YOU CHOOSE TO CLEAR THE FAULT HISTORY, THE CURENT BILLING METER WILL BE RECORDED AND PRESENTED THE NEXT TIME [0392] IS RUN.

[1403] FOLDER COMMUNICATIONS LOOPBACK TEST FOR FOLDER RS-232C PORT, COMMUNICATIONS CABLE, AND FOLDER.

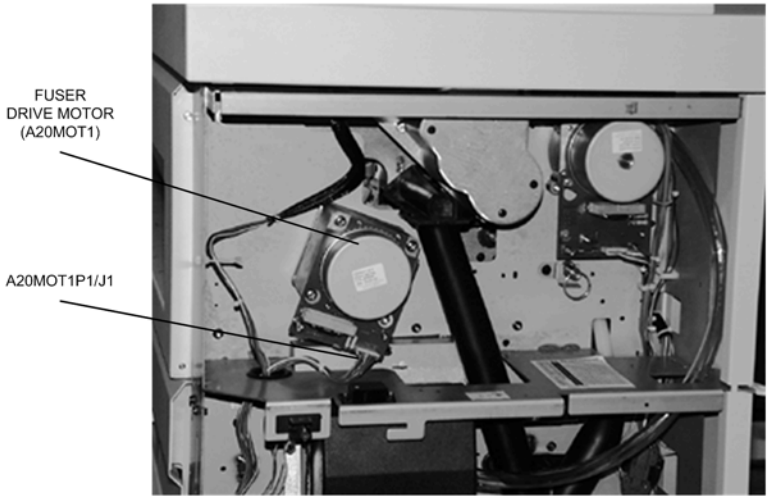
[1404] CONTROLLER COMMUNICATIONS TEST.

BSD 4.1 Fuser Heat Roll Drive



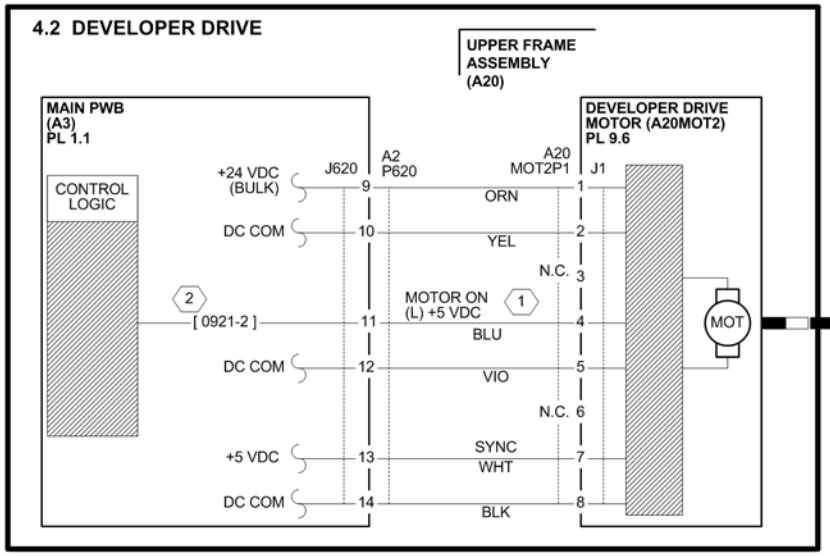


INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+5 VDC	MAIN PWB (A3) J618 - 4	1.2



PRINTER FRONT

BSD 4.2 Developer Drive

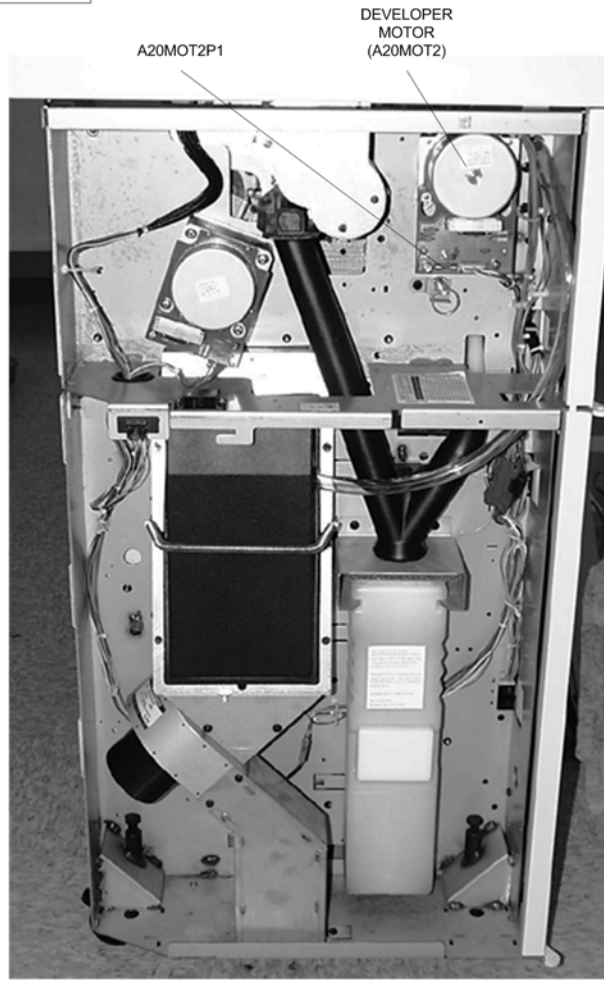


NOTE:

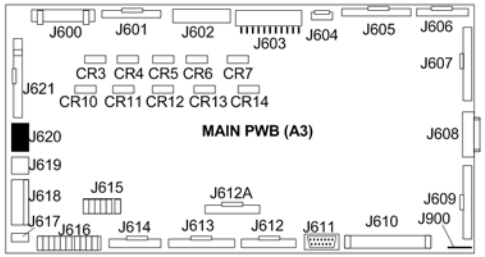
1 THE FOLLOWING VOLTAGES SHOULD BE PRESENT:

SIGNAL	MEASURED VOLTAGE	
	IN STDBY	IN PRINT
MOTOR ON (L) +5 VDC	+5.2 VDC	0.0 VDC

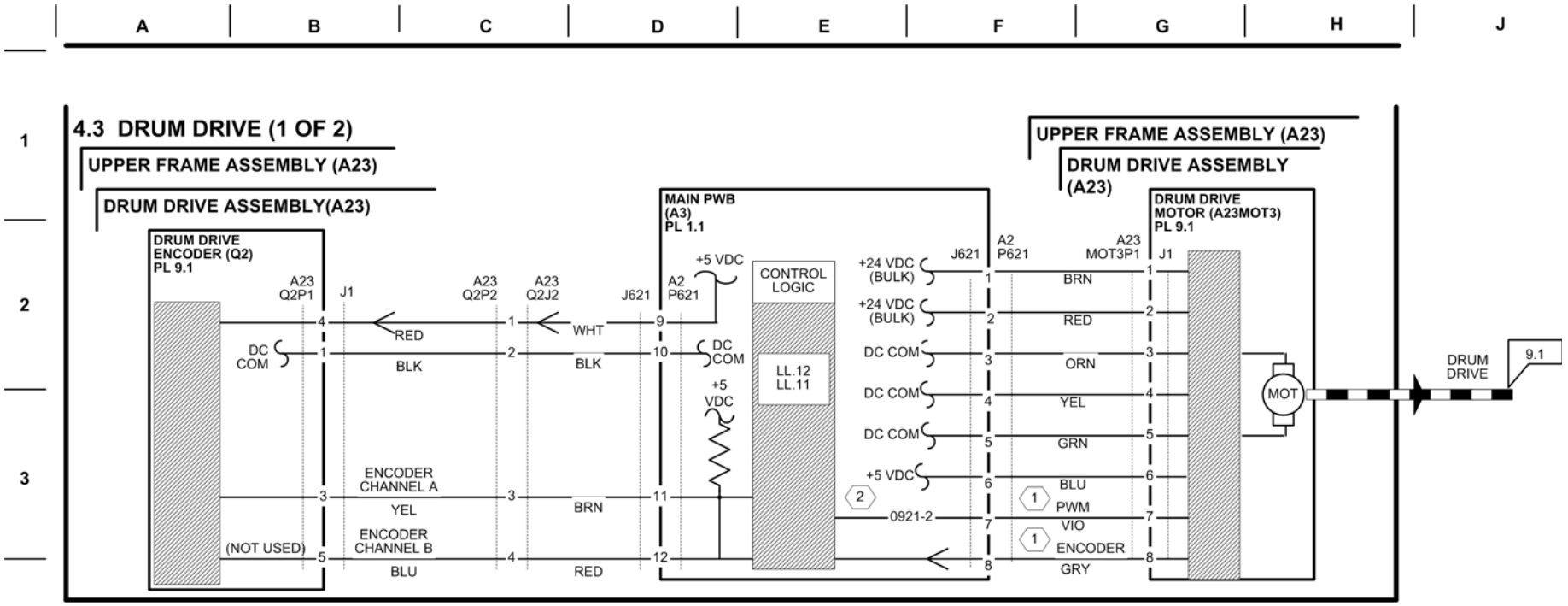
2 DIAGNOSTIC CODE [0921-2] RUNS THE FUSER MOTOR, THE DEVELOPER MOTOR, AND THE PHOTORECEPTOR MOTOR. THE FUSER HEAT RODS ARE ALSO SWITCH ON WHILE IN THE DIAGNOSTIC MODE.



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+5 VDC	MAIN PWB (A3) J618 - 4	1.2



BSD 4.3 Drum Drive

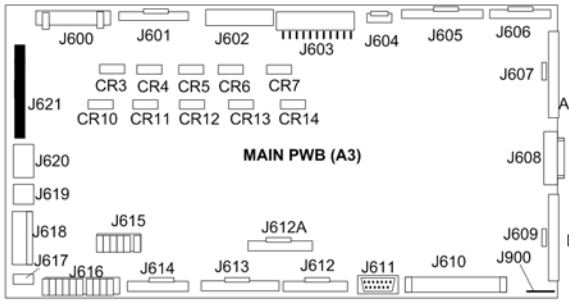


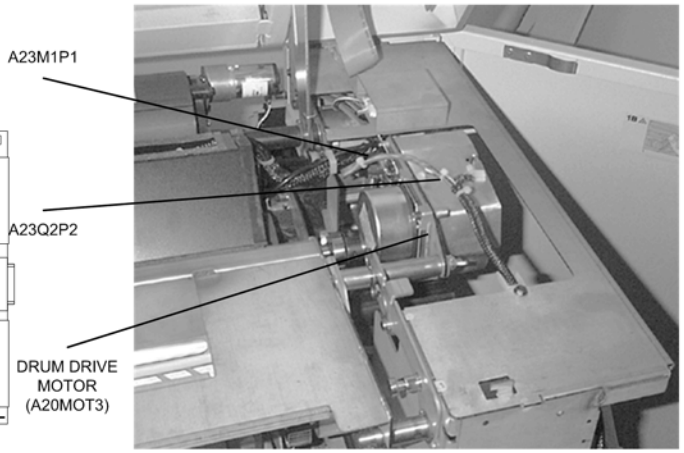
NOTE:

(1) THE FOLLOWING VOLTAGES SHOULD BE PRESENT:

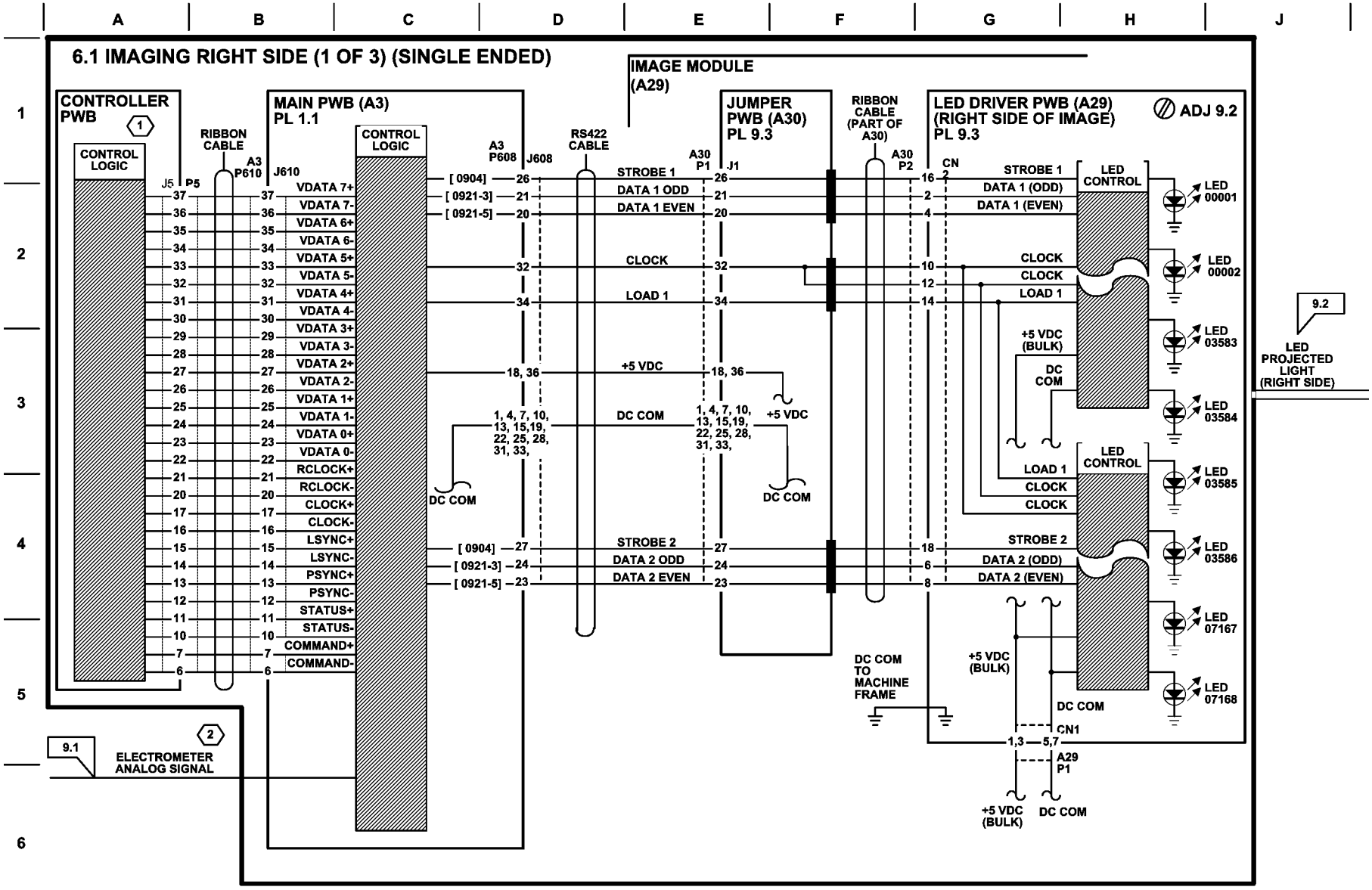
SIGNAL	MEASURED VOLTAGE	
	IN STDBY	IN PRINT
PWM	+5.0 VDC	+3.1 VDC
ENCODER	0 VDC	+2.6 VDC

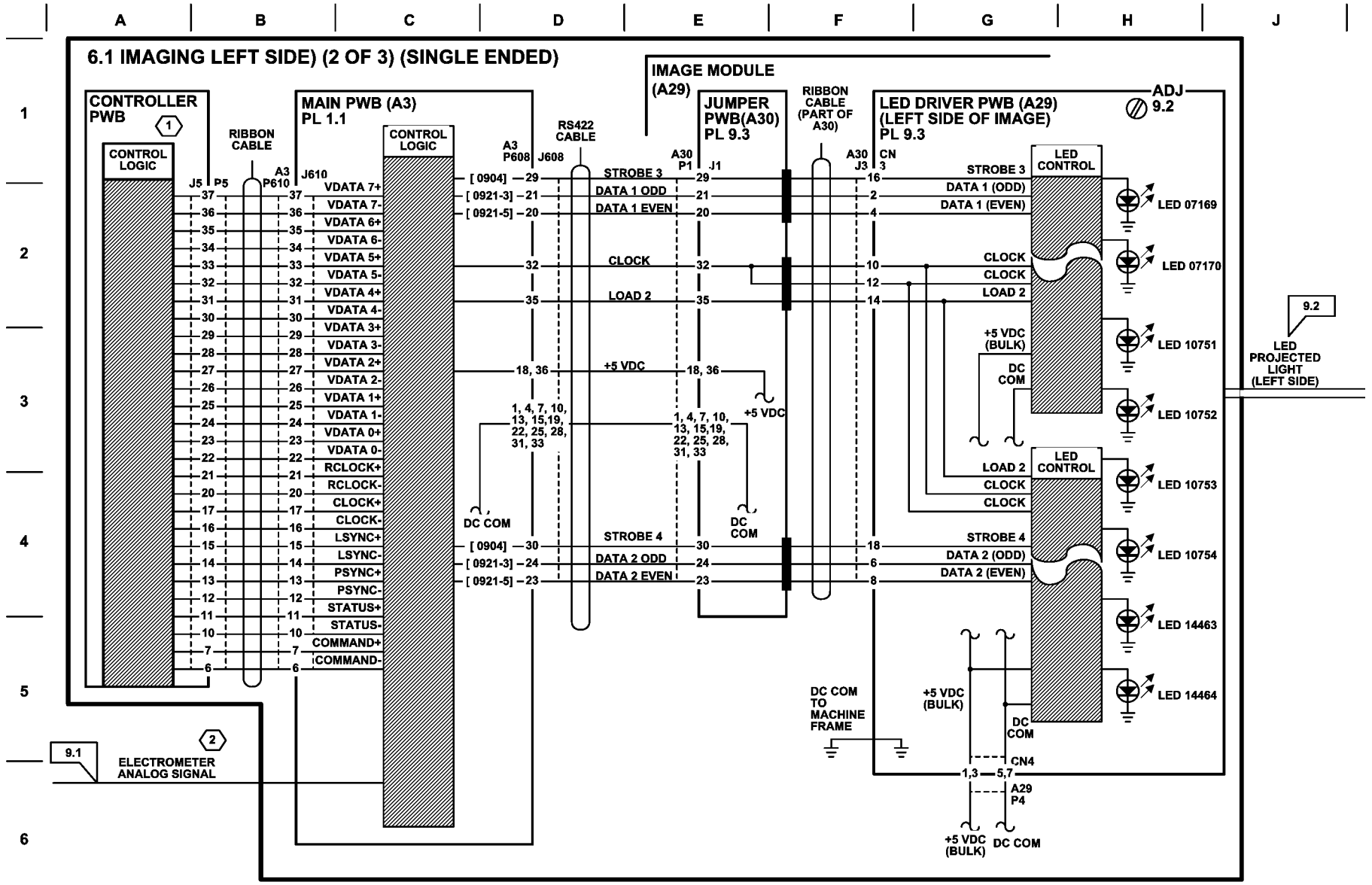
(2) DIAGNOSTIC CODE [0921-2] RUNS THE FUSER MOTOR, THE DEVELOPER MOTOR, AND THE PHOTORECEPTOR MOTOR. THE FUSER HEAT RODS ARE ALSO SWITCH ON WHILE IN THE DIAGNOSTIC MODE.





INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+5 VDC	MAIN PWB (A3) J618 - 4	1.2


6.1 IMAGING RIGHT SIDE (1 OF 3) (SINGLE ENDED)
IMAGE MODULE (A29)
CONTROLLER PWB
CONTROL LOGIC
RIBBON CABLE
A3 P610
J610
MAIN PWB (A3) PL 1.1
CONTROL LOGIC
A3 P608
J608
RS422 CABLE
JUMPER PWB (A30) PL 9.3
A30 P1
J1
RIBBON CABLE (PART OF A30)
A30 P2
CN 2
LED DRIVER PWB (A29) (RIGHT SIDE OF IMAGE) PL 9.3
ADJ 9.2
J5 P5
VDATA 7+
VDATA 7-
VDATA 6+
VDATA 6-
VDATA 5+
VDATA 5-
VDATA 4+
VDATA 4-
VDATA 3+
VDATA 3-
VDATA 2+
VDATA 2-
VDATA 1+
VDATA 1-
VDATA 0+
VDATA 0-
RCLOCK+
RCLOCK-
CLOCK+
CLOCK-
LSYNC+
LSYNC-
PSYNC+
PSYNC-
STATUS+
STATUS-
COMMAND+
COMMAND-
[0904]
[0921-3]
[0921-5]
STROBE 1
DATA 1 ODD
DATA 1 EVEN
CLOCK
LOAD 1
+5 VDC
DC COM
1, 4, 7, 10, 13, 15,19, 22, 25, 28, 31, 33,
STROBE 2
DATA 2 ODD
DATA 2 EVEN
LED CONTROL
STROBE 1
DATA 1 (ODD)
DATA 1 (EVEN)
CLOCK
CLOCK
LOAD 1
+5 VDC (BULK)
DC COM
LOAD 1
CLOCK
CLOCK
STROBE 2
DATA 2 (ODD)
DATA 2 (EVEN)
LED 00001
LED 00002
LED 03583
LED 03584
LED 03585
LED 03586
LED 07167
LED 07168
9.2
LED PROJECTED LIGHT (RIGHT SIDE)
DC COM TO MACHINE FRAME
+5 VDC (BULK)
DC COM
CN1
1,3
5,7
A29 P1
+5 VDC (BULK)
DC COM
9.1
ELECTROMETER ANALOG SIGNAL


6.1 IMAGING LEFT SIDE) (2 OF 3) (SINGLE ENDED)
CONTROLLER PWB
CONTROL LOGIC
RIBBON CABLE
MAIN PWB (A3) PL 1.1
CONTROL LOGIC
IMAGE MODULE (A29)
RS422 CABLE
JUMPER PWB(A30) PL 9.3
RIBBON CABLE (PART OF A30)
LED DRIVER PWB (A29) (LEFT SIDE OF IMAGE) PL 9.3
ADJ 9.2
LED CONTROL
LED PROJECTED LIGHT (LEFT SIDE)
9.2
9.1
ELECTROMETER ANALOG SIGNAL
DC COM TO MACHINE FRAME
+5 VDC (BULK)
DC COM
CN4
A29 P4
LED 07169
LED 07170
LED 10751
LED 10752
LED 10753
LED 10754
LED 14463
LED 14464
STROBE 3
DATA 1 (ODD)
DATA 1 (EVEN)
CLOCK
LOAD 2
STROBE 4
DATA 2 (ODD)
DATA 2 (EVEN)
VDATA 7+
VDATA 7-
VDATA 6+
VDATA 6-
VDATA 5+
VDATA 5-
VDATA 4+
VDATA 4-
VDATA 3+
VDATA 3-
VDATA 2+
VDATA 2-
VDATA 1+
VDATA 1-
VDATA 0+
VDATA 0-
RCLOCK+
RCLOCK-
CLOCK+
CLOCK-
LSYNC+
LSYNC-
PSYNC+
PSYNC-
STATUS+
STATUS-
COMMAND+
COMMAND-

6.1 IMAGING LEFT AND RIGHT SIDE (3 OF 3) (DIFFERENTIAL)

IMAGING (EXPOSURE) DIAGNOSTIC CODES

[0904] XEROGRAPHIC AUTOMATIC SET UP PROGRAM: RUN WHEN PERFORMING (ADJ 9.2). USES ELECTROMETER ANALOG SIGNAL TO: SET-UP (V HIGH) BY REGULATING SCOROTRON GRID VOLTAGE.

SET-UP (V LOW) BY REGULATING IMAGE BAR LED DUTY CYCLE.
SET-UP (V BIAS) BY REGULATING DEVELOPER MODULE MAG ROLL VOLTAGE.

[0921-3] IMAGE BAR LED DUTY CYCLE: ALLOWS DRUM (V LOW) ADJUSTMENT
BY ALTERING LED DUTY CYCLE.

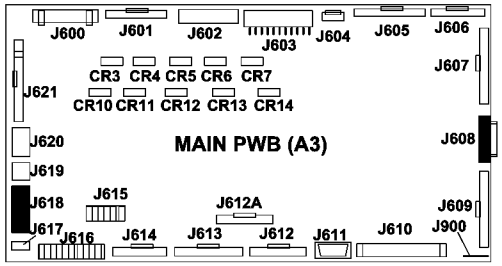
[0921-5] IMAGE BAR LED DIAGNOSTIC TEST: SWITCHES LEDS ON AND OFF WHILE ALTERNATELY DISPLAYING TWO DIFFERENT TEST PATTERNS. TEST MAY BE RUN WITH INTERLOCKS OPEN.
.

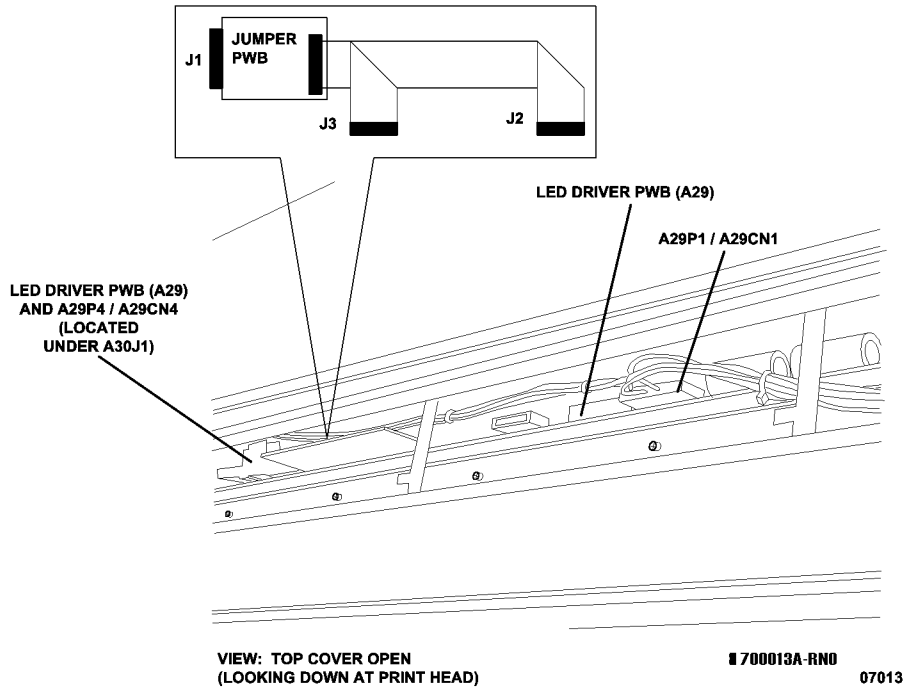
NOTES:

1. REFER TO THE CONTROLLER (ESS) SERVICE MANUAL TO SERVICE THE CONTROLLER PWB.

2. ELECTROMETER ANALOG SIGNAL IS USED BY PROCESS CONTROL SYSTEM TO AUTOMATICALLY ADJUST IMAGE BAR LED DUTY CYCLE THAT SETS DRUM V (LOW) AT 10K FOOT (3K M) INTERVALS AND BY [0904] WHEN PERFORMING ADJ 9.2.
DRUM VOLTAGE (V LOW): (APPROX. - 50 VDC)

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC DC COM	MAIN PWB (A3) J618 - 4 MAIN PWB (A3) J618 - 3	1.2 1.2

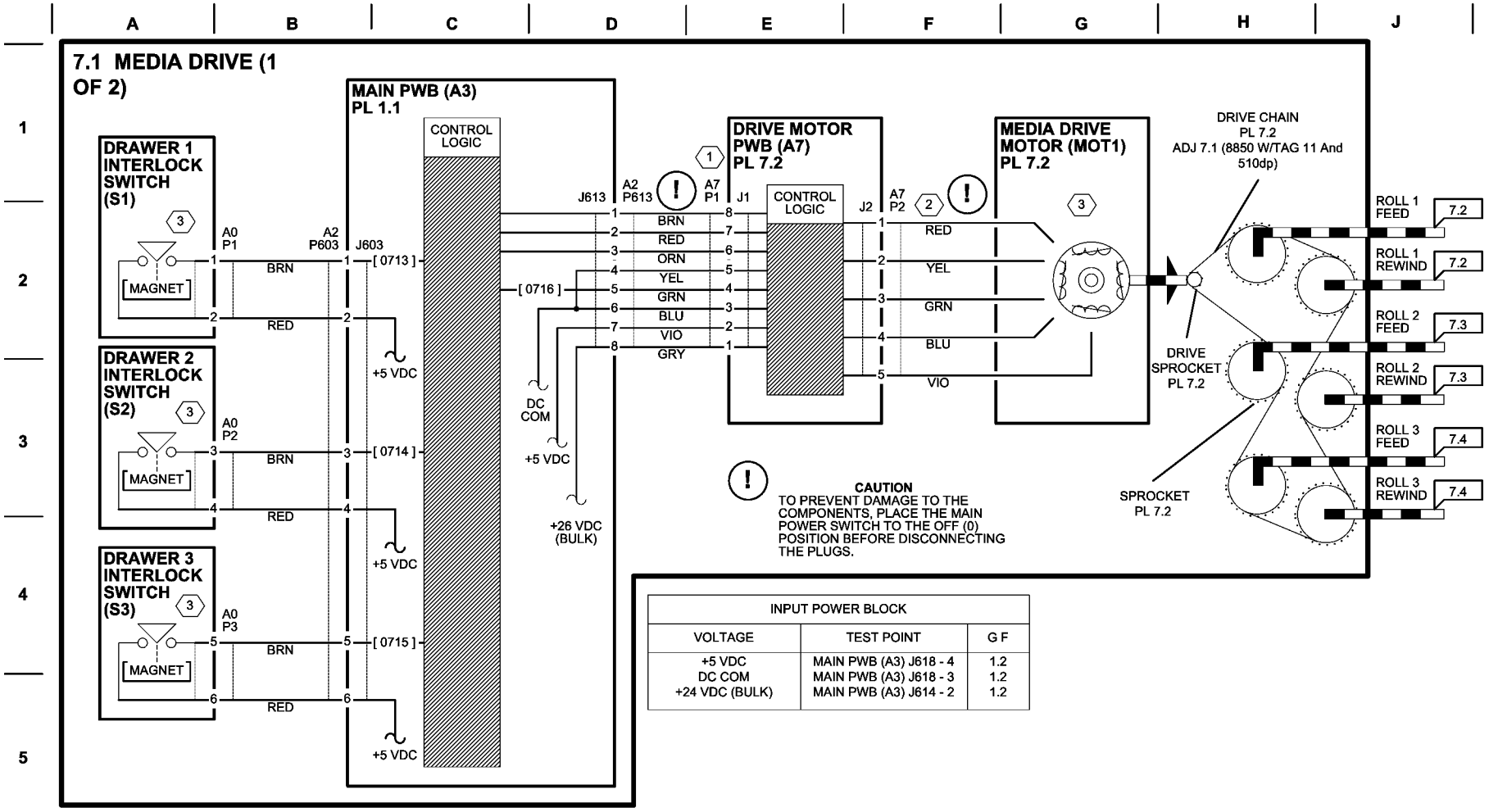




VIEW: TOP COVER OPEN
(LOOKING DOWN AT PRINT HEAD)

700013A-RN0
07013

BSD 7.1 Media Drive



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2

7.1 MEDIA DRIVE (2 OF 2)

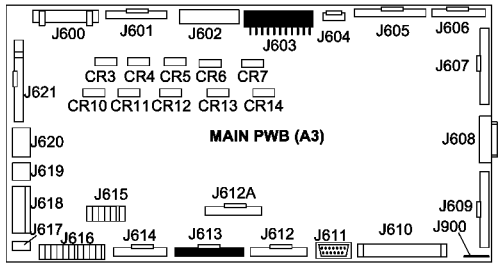
(1) A7P1 APPROXIMATE VOLTAGES: A7P1 DISCONNECTED FROM DRIVE MOTOR PWB (A7)

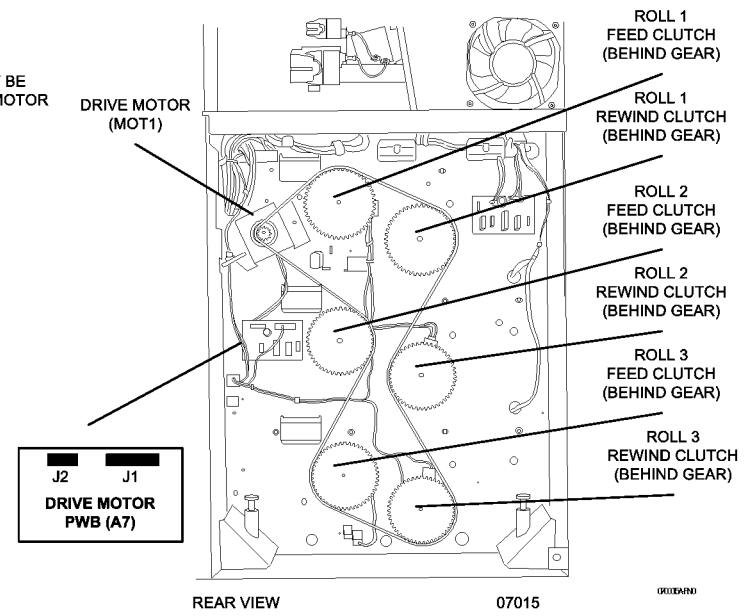
CAUTION: TO PREVENT DAMAGE TO THE MOTOR COMPONENTS, TURN OFF THE POWER SWITCH (0) BEFORE DISCONNECTING ANY PLUGS.

PIN	STANDBY VOLTAGE	[0703] VOLTAGE	[0704] VOLTAGE
A7P1-8	+3.8 VDC	+0.1 VDC	+3.8 VDC
A7P1-7	+3.8 VDC	+3.8 VDC	+3.8 VDC
A7P1-6	+0.1 VDC	+0.1 VDC	+0.1 VDC
A7P1-4	+1.8 VDC	+1.8 VDC	+1.8 VDC

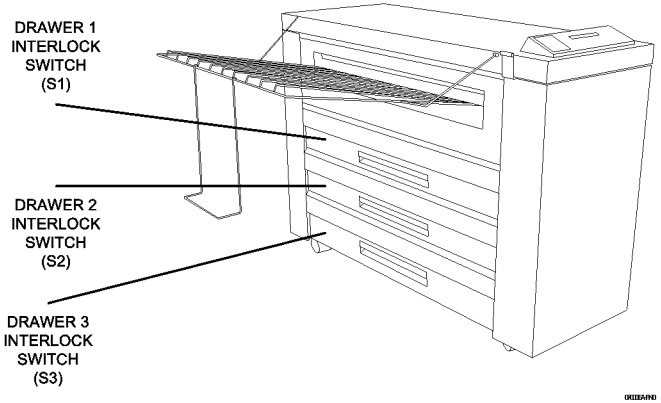
(2) WITH A7P2 DISCONNECTED FROM THE DRIVE MOTOR PWB (A7), THE APPROXIMATE RESISTANCES OF THE DRIVE MOTOR (MOT1) ARE AS FOLLOWS:
A7P2-1 TO A7P2-2 = 3.5 OHMS.
A7P2-3 TO A7P2-4 = 3.5 OHMS.

(3) ALL THREE DRAWER INTERLOCK SWITCHES MUST BE ACTUATED (CLOSED) BEFORE THE MEDIA DRIVE MOTOR WILL OPERATE.

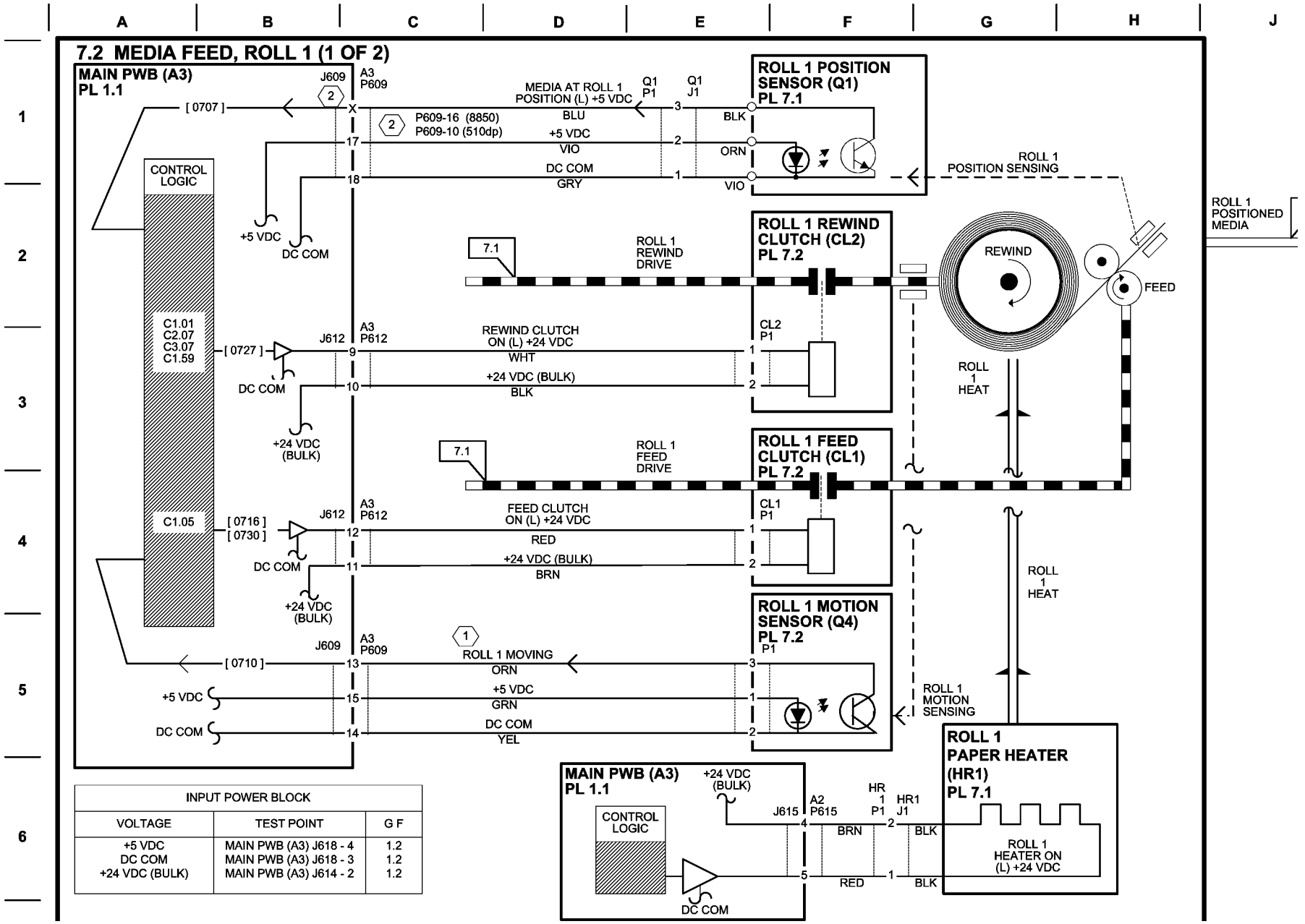




REAR VIEW 07015



LEFT SIDE 07016


7.2 MEDIA FEED, ROLL 1 (1 OF 2)
MAIN PWB (A3)
PL 1.1
ROLL 1 POSITION SENSOR (Q1)
PL 7.1
ROLL 1 REWIND CLUTCH (CL2)
PL 7.2
ROLL 1 FEED CLUTCH (CL1)
PL 7.2
ROLL 1 MOTION SENSOR (Q4)
PL 7.2
ROLL 1 PAPER HEATER (HR1)
PL 7.1
CONTROL LOGIC
C1.01
C2.07
C3.07
C1.59
C1.05
MEDIA AT ROLL 1 POSITION (L) +5 VDC
P609-16 (8850)
P609-10 (510dp)
+5 VDC
DC COM
ROLL 1 POSITION SENSING
ROLL 1 POSITIONED MEDIA
ROLL 1 REWIND DRIVE
REWIND CLUTCH ON (L) +24 VDC
+24 VDC (BULK)
REWIND
FEED
ROLL 1 HEAT
ROLL 1 FEED DRIVE
FEED CLUTCH ON (L) +24 VDC
ROLL 1 MOVING
ROLL 1 MOTION SENSING
ROLL 1 HEATER ON (L) +24 VDC
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
MAIN PWB (A3) J618 - 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
+24 VDC (BULK)
MAIN PWB (A3) J614 - 2
1.2

7.2 MEDIA FEED, ROLL 1 (2 OF 2)

MACHINE RUN CONTROL DIAGNOSTIC CODES

0707] ROLL 1 SENSOR (INPUT)

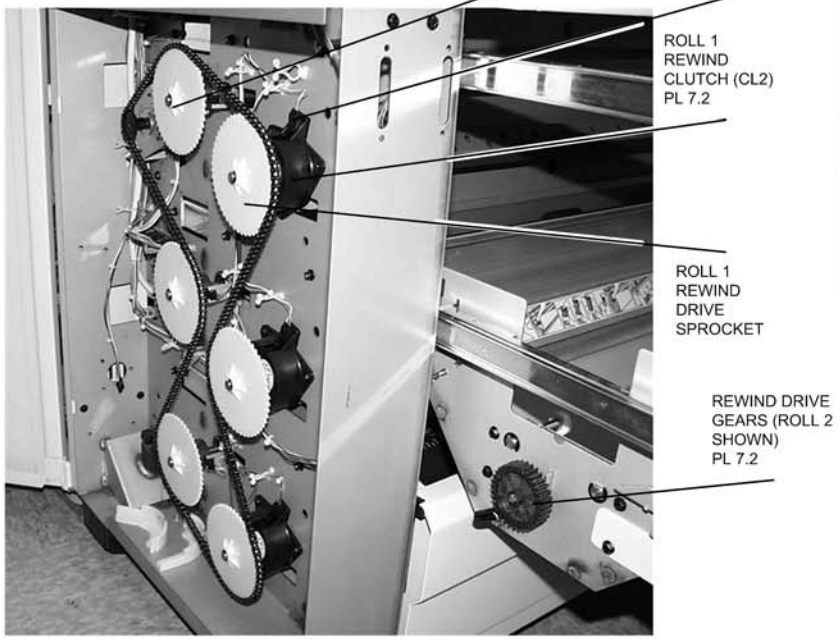
0710] ROLL 1 MOTION SENSOR (INPUT)

0716] ROLL 1 CONTROL (OUTPUT): ENERGIZES THE MEDIA DRIVE MOTOR (MOT1) AND CONTROLS FEED AND REWIND CLUTCHES.

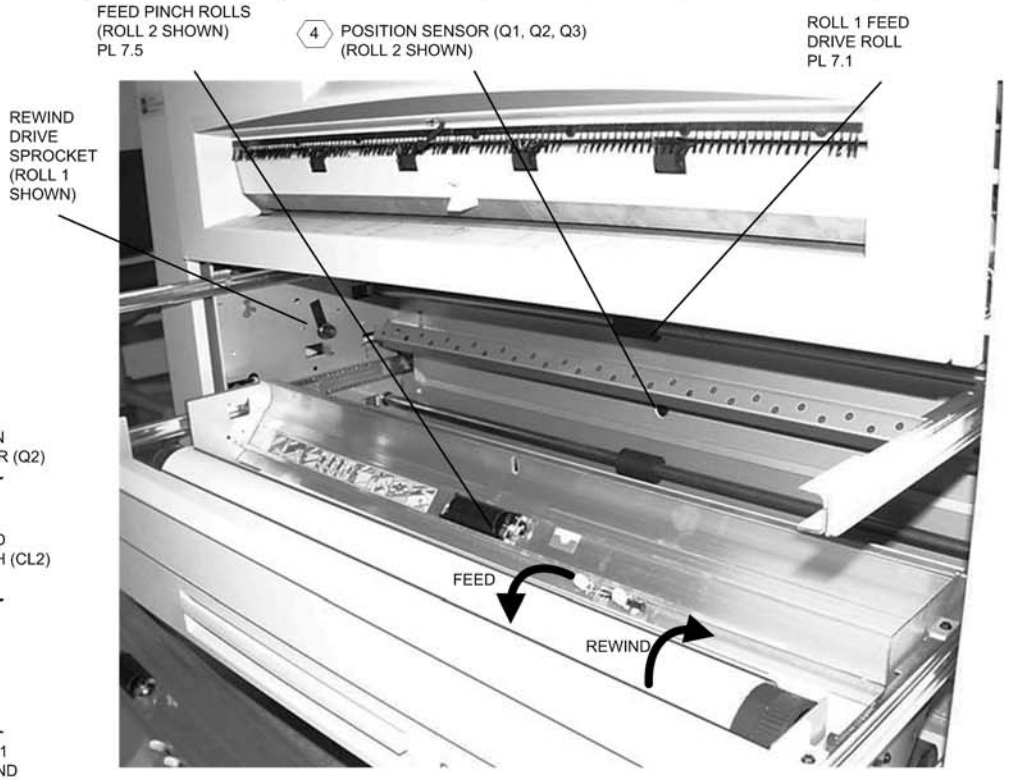
0727] ROLL 1 REWIND CLUTCH (OUTPUT)

0730] ROLL 1 FORWARD CLUTCH (OUTPUT)

(1) MEASURE THE ROLL 1 MOVING SIGNAL AS FOLLOWS:
MOVING = +2.4 VDC.
STOPPED = 0 VDC OR +5 VDC



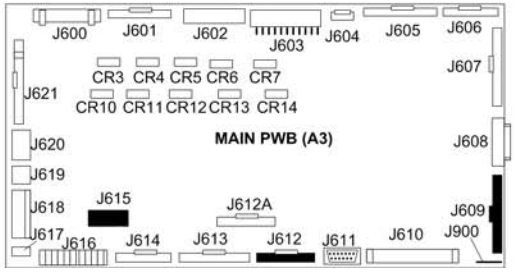
REAR VIEW

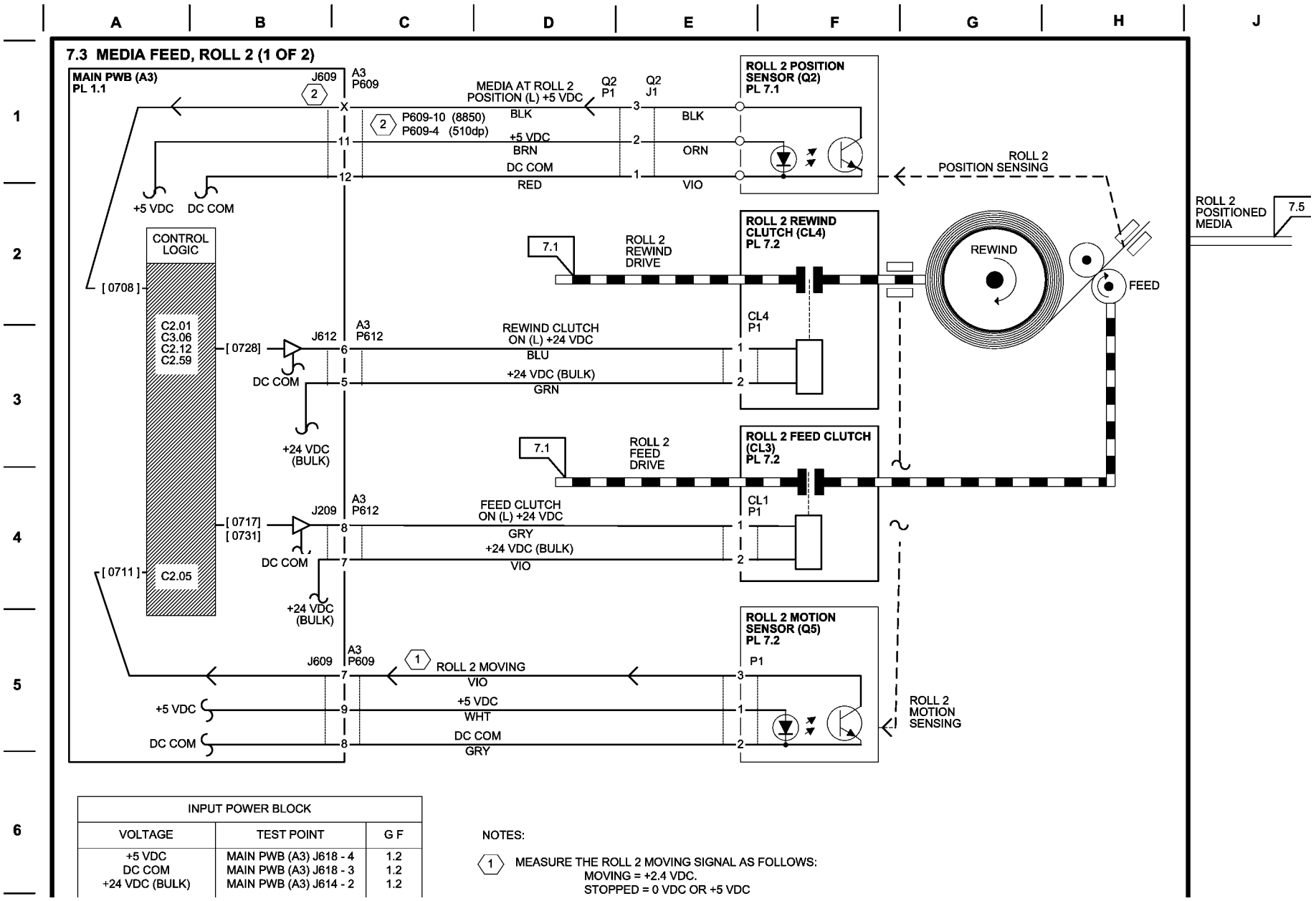


(2) P609-16 (8850)
P609-10 (510dp)

(3) NOTE: THE FEED AND REWIND DRIVE COMPONENTS ARE THE SAME FOR THE 3 DRAWERS. DRAWERS 1 AND 2 ARE SHOWN FOR ILLUSTRATION PURPOSES. DRAWER 1 IS SHOWN REMOVED.

(4) THE ROLL POSITION SENSORS (Q1, Q2,Q3) ARE ACCESSIBLE FROM THE RIGHT SIDE OF THE MACHINE (BETWEEN THE LVPS (A5PS1) AND THE MAIN PWB).





INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2

NOTES:

(1) MEASURE THE ROLL 2 MOVING SIGNAL AS FOLLOWS:
MOVING = +2.4 VDC.
STOPPED = 0 VDC OR +5 VDC

7.3 MEDIA FEED, ROLL 2 (2 OF 2)

MACHINE RUN CONTROL DIAGNOSTIC CODES

[0708] ROLL 2 SENSOR (INPUT)

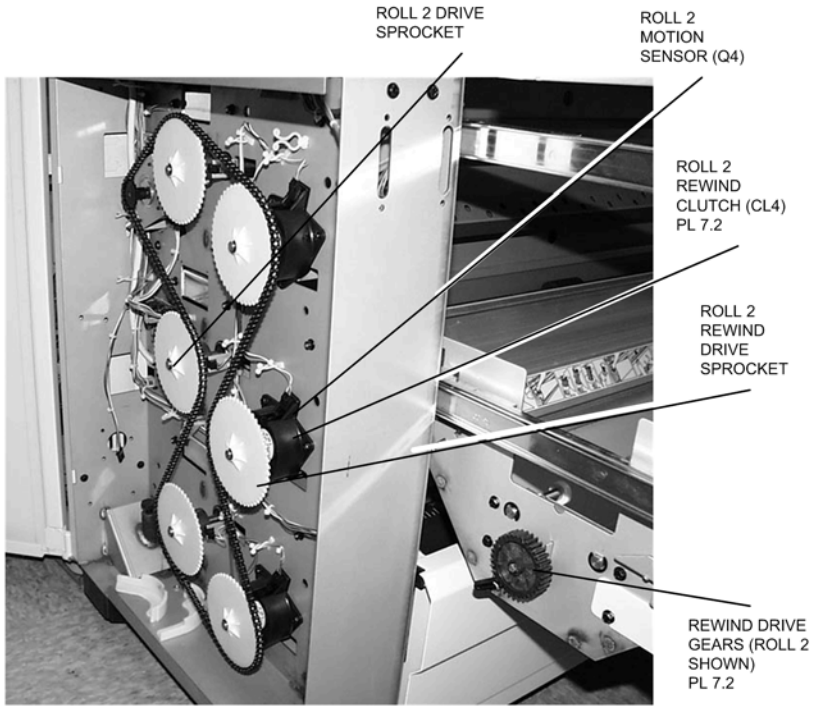
[0711] ROLL 2 MOTION SENSOR (INPUT)

[0717] ROLL 2 CONTROL (OUTPUT): ENERGIZES THE MEDIA DRIVE MOTOR (MOT1) AND CONTROLS FEED AND REWIND CLUTCHES.

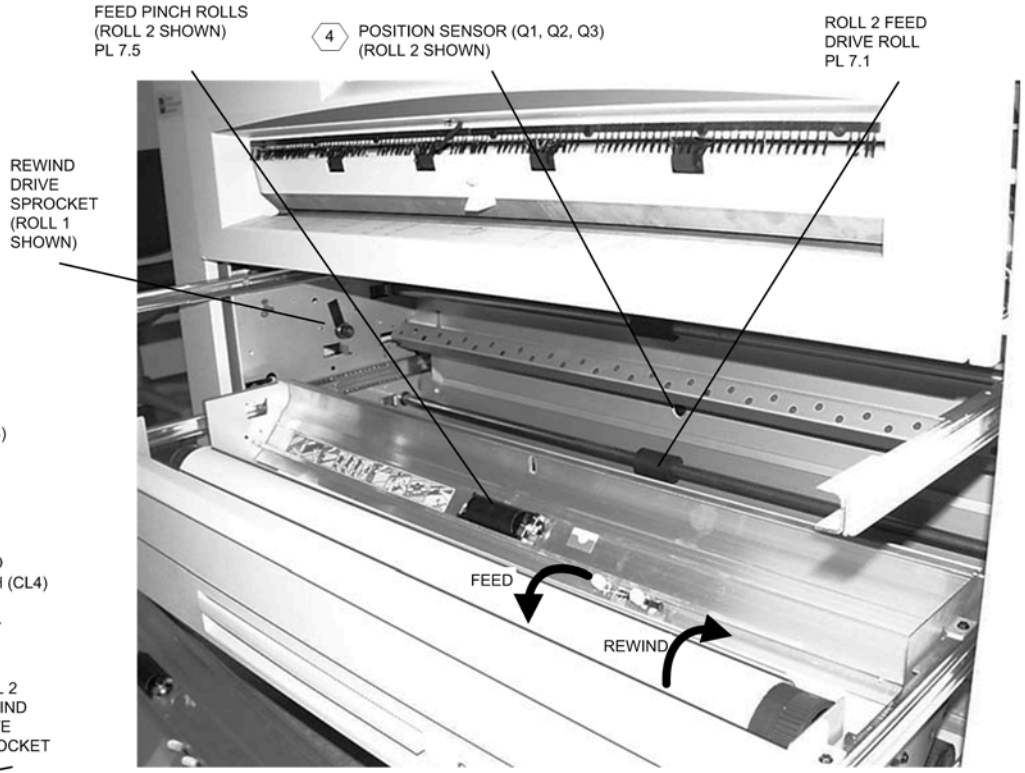
[0728] ROLL 2 REWIND CLUTCH (OUTPUT)

[0731] ROLL 2 FORWARD CLUTCH (OUTPUT)

1 MEASURE THE ROLL 1 MOVING SIGNAL AS FOLLOWS:
MOVING = +2.4 VDC.
STOPPED = 0 VDC OR +5 VDC

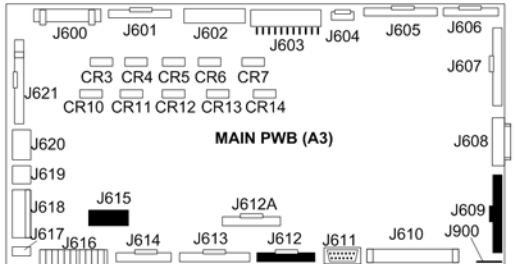


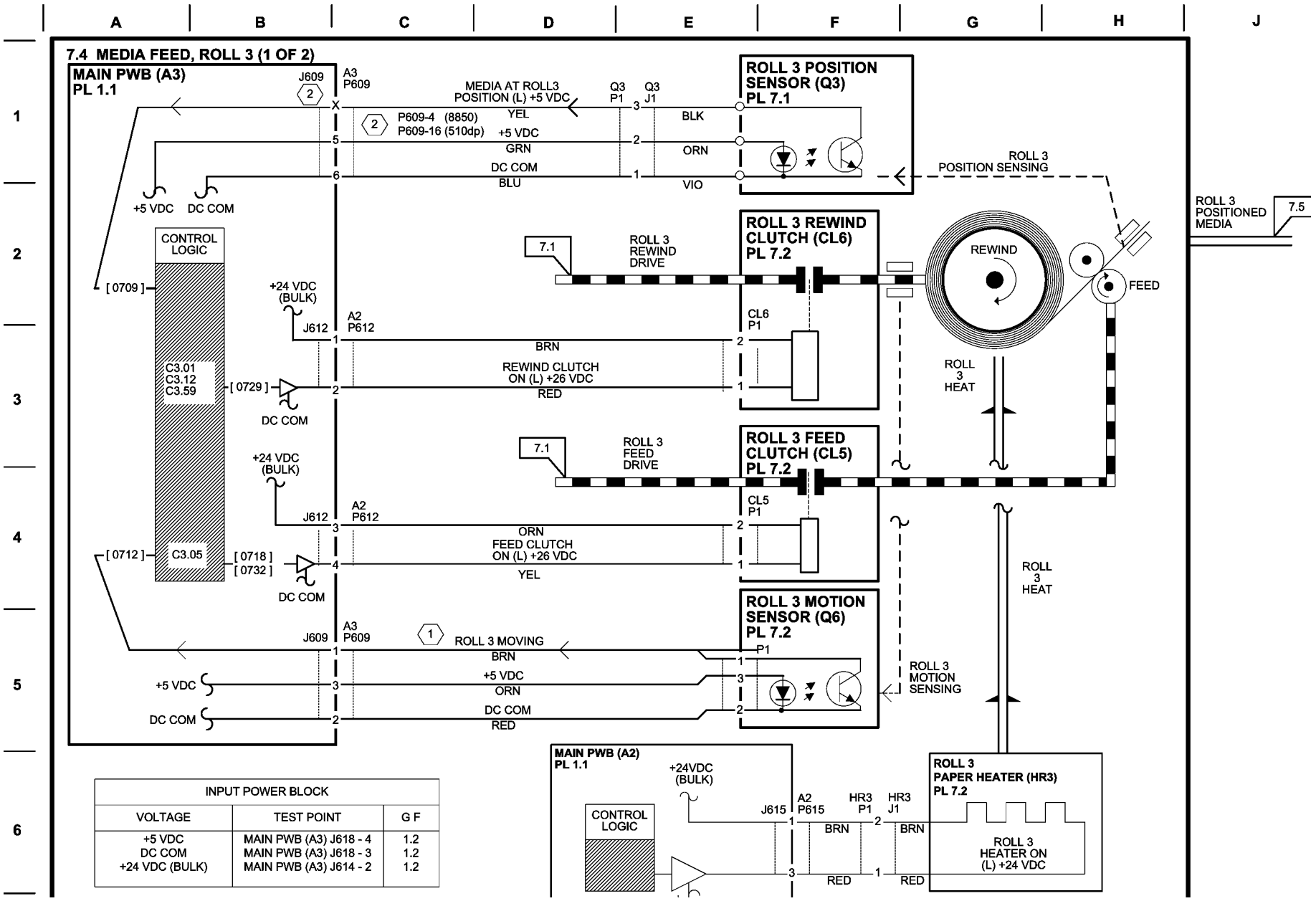
REAR VIEW



3 THE FEED AND REWIND DRIVE COMPONENTS ARE THE SAME FOR THE 3 DRAWERS. DRAWERS 1 AND 2 ARE SHOWN FOR ILLUSTRATION PURPOSES. DRAWER 1 IS SHOWN REMOVED.

4 THE ROLL POSITION SENSORS (Q1, Q2,Q3) ARE ACCESSIBLE FROM THE RIGHT SIDE OF THE MACHINE (BETWEEN THE LVPS (A5PS1) AND THE MAIN PWB).




7.4 MEDIA FEED, ROLL 3 (1 OF 2)
MAIN PWB (A3)
PL 1.1
J609
A3
P609
MEDIA AT ROLL3
POSITION (L) +5 VDC
YEL
P609-4 (8850)
P609-16 (510dp)
+5 VDC
GRN
DC COM
BLU
Q3
P1
Q3
J1
BLK
ORN
VIO
ROLL 3 POSITION
SENSOR (Q3)
PL 7.1
ROLL 3
POSITION SENSING
+5 VDC
DC COM
CONTROL
LOGIC
[0709]
C3.01
C3.12
C3.59
C3.05
[0712]
[0729]
[0718]
[0732]
DC COM
+24 VDC
(BULK)
J612
A2
P612
BRN
REWIND CLUTCH
ON (L) +26 VDC
RED
7.1
ROLL 3
REWIND
DRIVE
ROLL 3 REWIND
CLUTCH (CL6)
PL 7.2
CL6
P1
REWIND
FEED
ROLL
3
HEAT
ROLL 3
FEED
DRIVE
ROLL 3 FEED
CLUTCH (CL5)
PL 7.2
CL5
P1
ORN
FEED CLUTCH
ON (L) +26 VDC
YEL
ROLL 3
POSITIONED
MEDIA
7.5
ROLL 3 MOTION
SENSOR (Q6)
PL 7.2
ROLL 3 MOVING
BRN
+5 VDC
ORN
DC COM
RED
ROLL 3
MOTION
SENSING
MAIN PWB (A2)
PL 1.1
+24VDC
(BULK)
CONTROL
LOGIC
J615
A2
P615
HR3
P1
HR3
J1
BRN
RED
ROLL 3
PAPER HEATER (HR3)
PL 7.2
ROLL 3
HEATER ON
(L) +24 VDC
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
MAIN PWB (A3) J618 - 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
+24 VDC (BULK)
MAIN PWB (A3) J614 - 2
1.2

7.4 MEDIA FEED, ROLL 3 (2 OF 2)

MACHINE RUN CONTROL DIAGNOSTIC CODES

[0709] ROLL 3 SENSOR (INPUT)

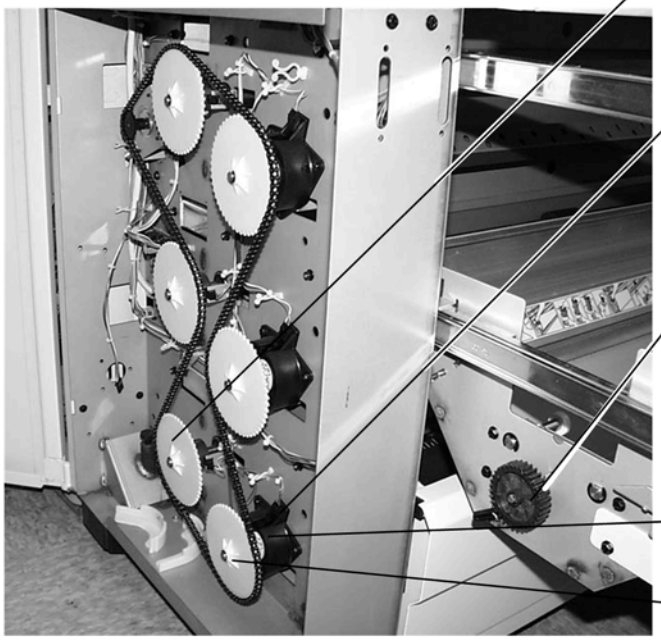
[0712] ROLL 3 MOTION SENSOR (INPUT)

[0718] ENERGIZES THE MEDIA DRIVE MOTOR (MOT1) AND THE ROLL 3 CONTROL (OUTPUT): CONTROLS FEED AND REWIND CLUTCHES.

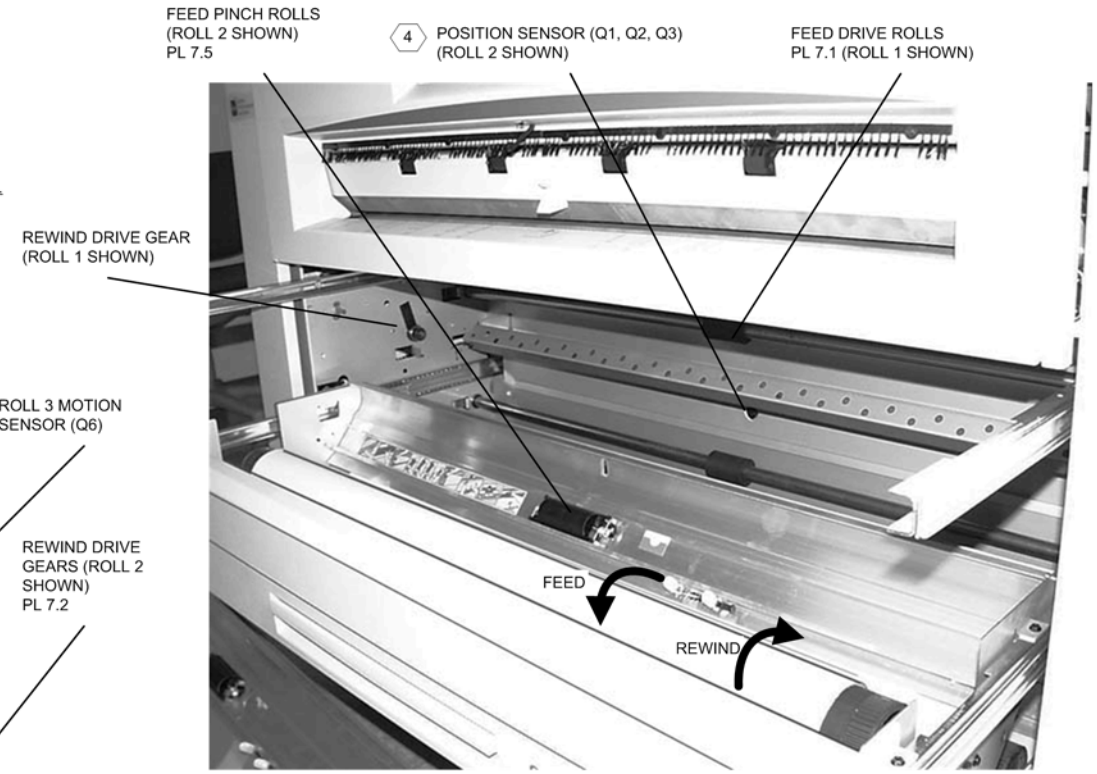
[0729] ROLL 3 REWIND CLUTCH (OUTPUT)

[0732] ROLL 3 FORWARD CLUTCH (OUTPUT)

1 MEASURE THE ROLL 3 MOVING SIGNAL AS FOLLOWS:
MOVING = +2.4 VDC.
STOPPED = 0 VDC OR +5 VDC

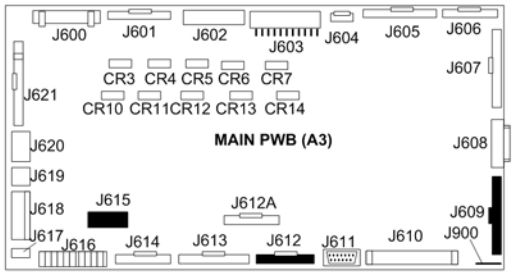


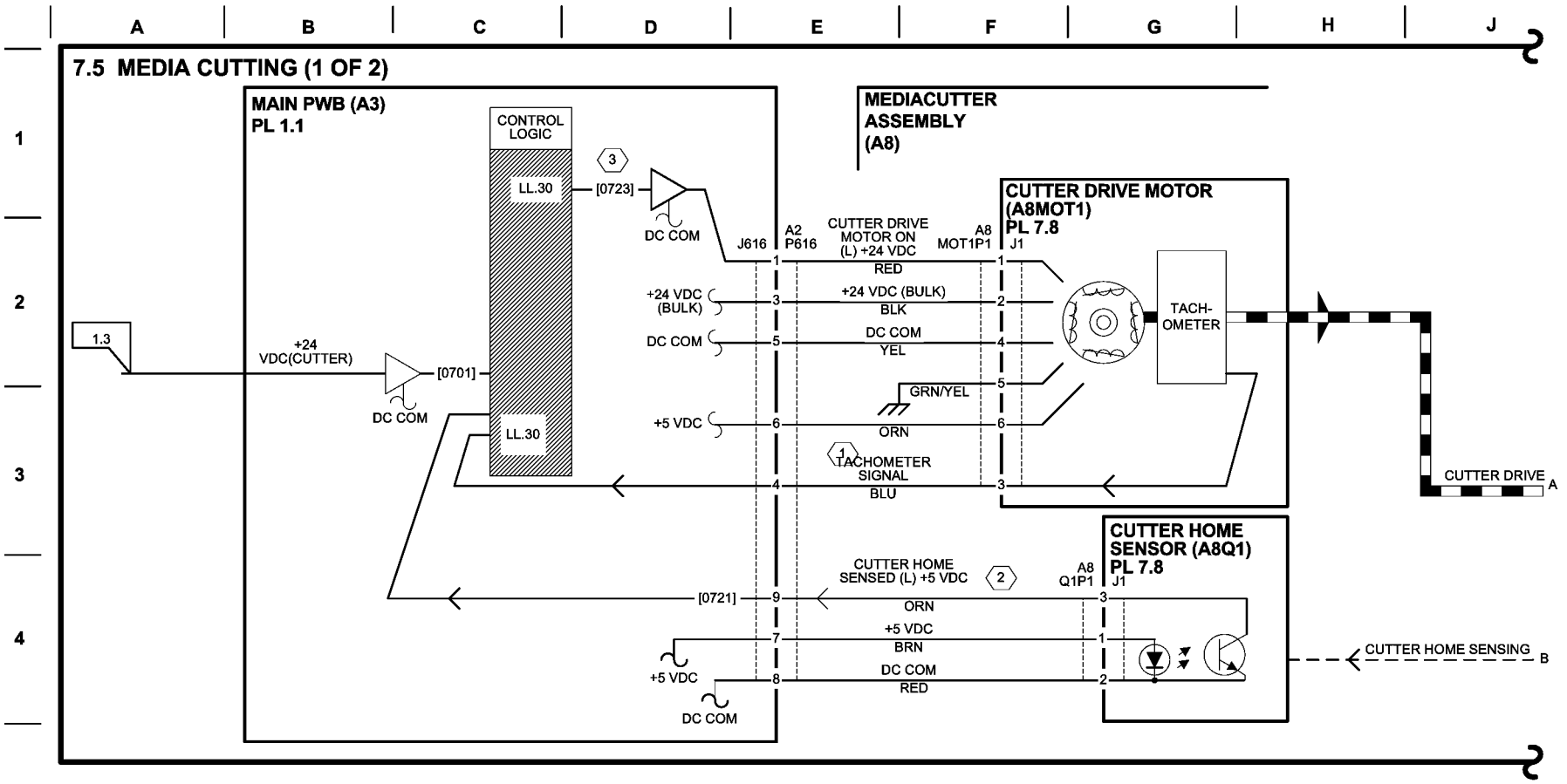
REAR VIEW



3 THE FEED AND REWIND DRIVE COMPONENTS ARE THE SAME FOR THE 3 DRAWERS. DRAWERS 1 AND 2 ARE SHOWN FOR ILLUSTRATION PURPOSES. DRAWER 1 IS SHOWN REMOVED.

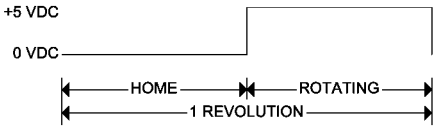
4 THE ROLL POSITION SENSORS (Q1, Q2,Q3) ARE ACCESSIBLE FROM THE RIGHT SIDE OF THE MACHINE (BETWEEN THE LVPS (A5PS1) AND THE MAIN PWB).





1. THE TACHOMETER FEEDBACK SIGNAL IS AN ANALOG VOLTAGE SIGNAL AT APPROXIMATELY +0.6 VDC.

2. THE CUTTER HOME SENSED SIGNAL IS AS FOLLOWS:

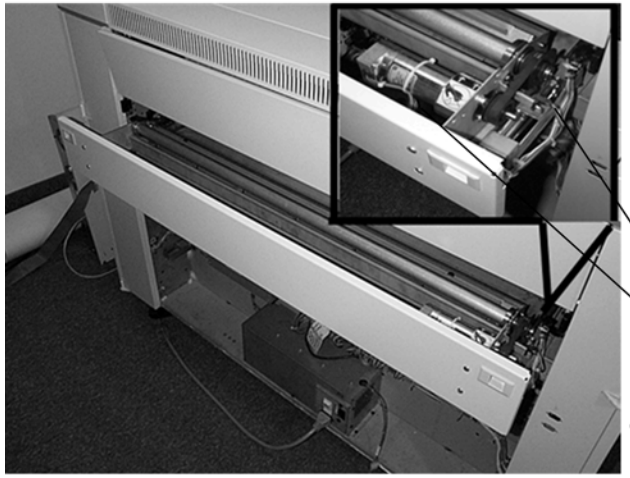


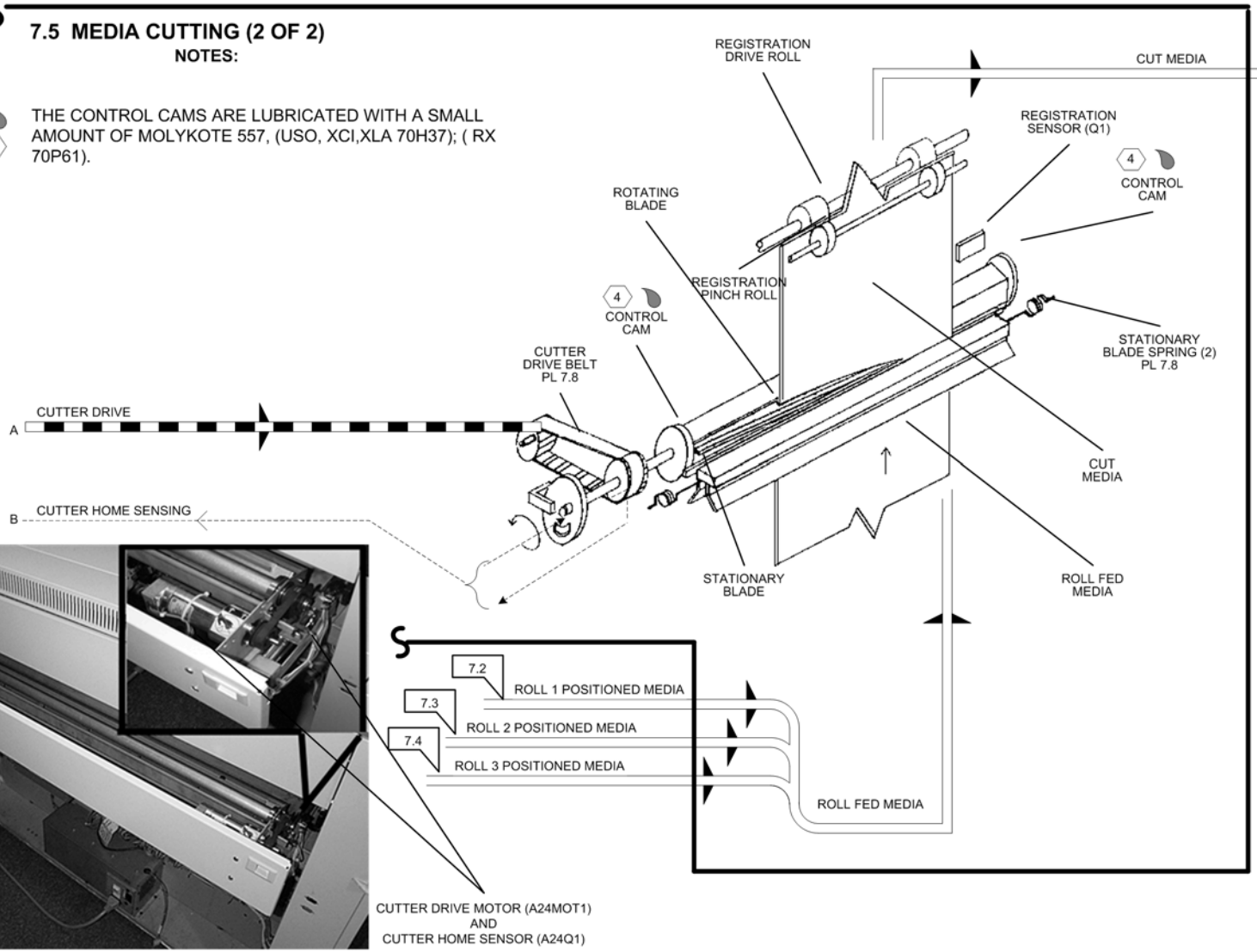
3. [0723] ENERGIZES THE CUTTER DRIVE MOTOR (MOT1). THE MOTOR DRIVES THE CUTTER BAR ONE COMPLETE REVOLUTION AND STOPS THE BAR AT HOME.

7.5 MEDIA CUTTING (2 OF 2)

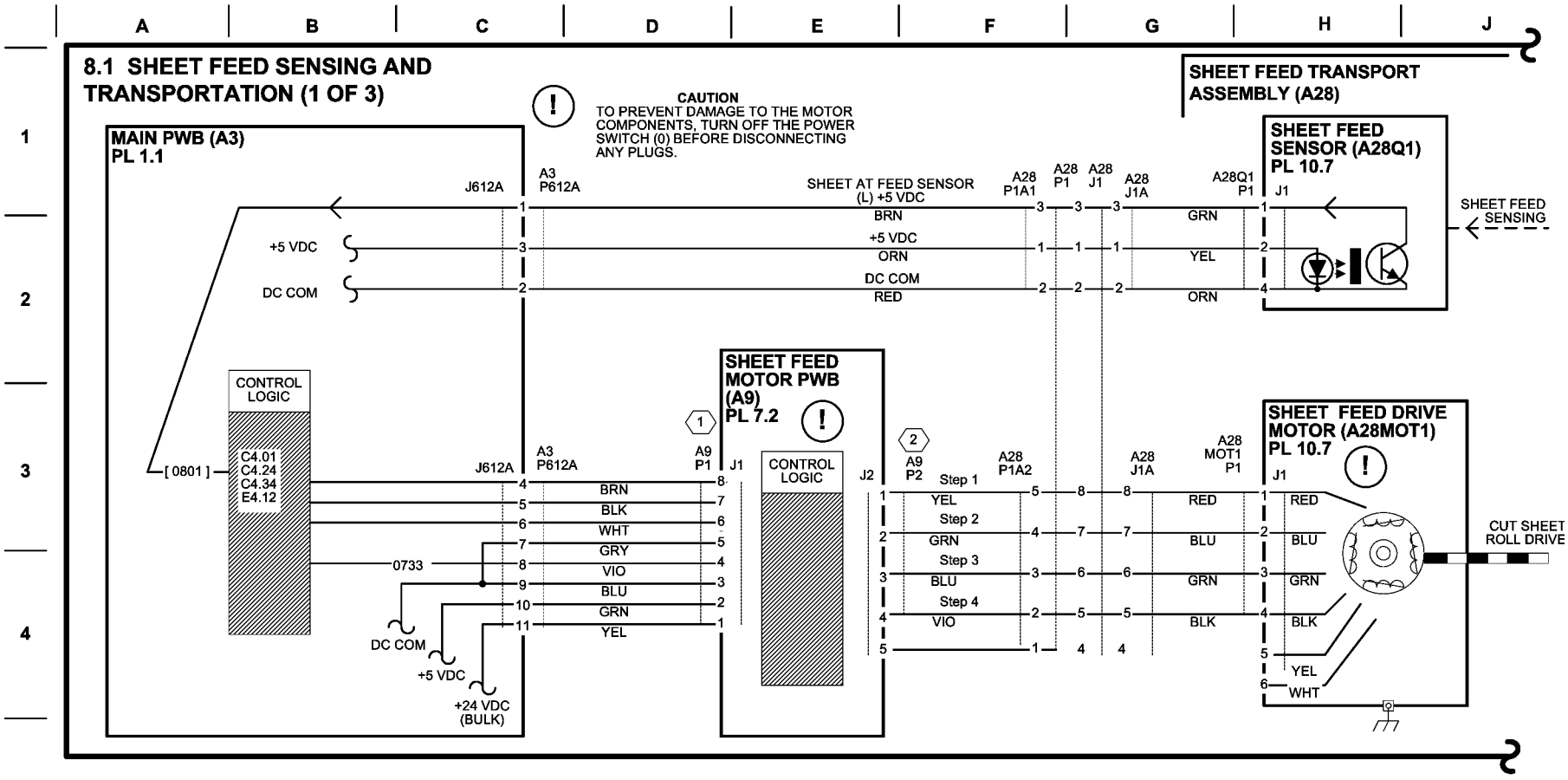
NOTES:

4 THE CONTROL CAMS ARE LUBRICATED WITH A SMALL AMOUNT OF MOLYKOTE 557, (USO, XCI,XLA 70H37); (RX 70P61).





BSD 8.1 Sheet Feed Registration and Transportation (1 of 3)

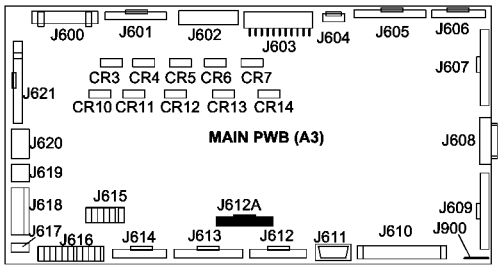


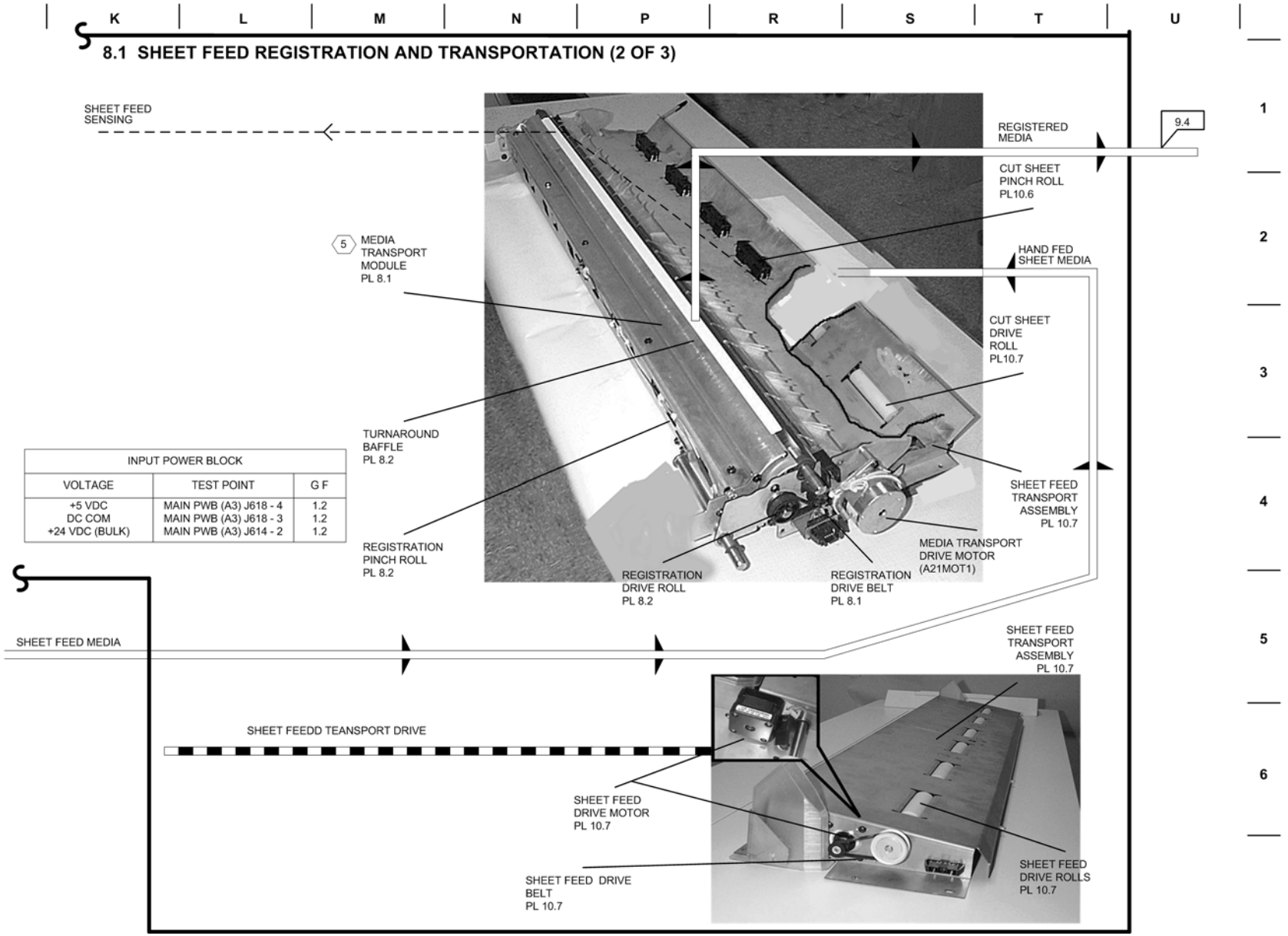
1 A24P1 APPROXIMATE VOLTAGES: A24P1 DISCONNECTED FROM DRIVE MOTOR PWB (A24)

PIN	STANDBY VOLTAGE	[0703] VOLTAGE
P1-8	+3.8 VDC	+3.8 VDC
P1-7	+3.8 VDC	+3.8 VDC
P1-6	0 VDC	0 VDC
P1-4	+3.8 VDC	+3.8 VDC

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2

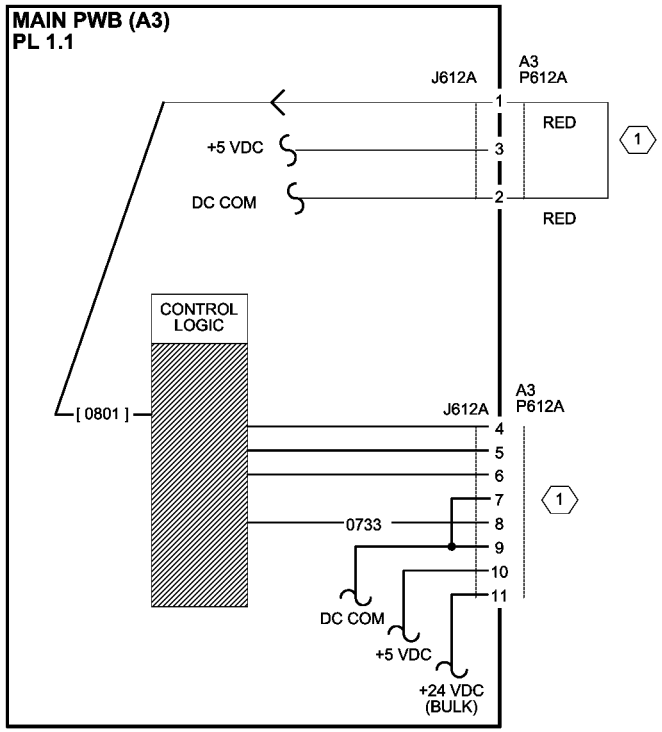
2 A9P2 APPROXIMATE RESISTANCE: A9P2 DISCONNECTED FROM SHEET FEED MOTOR PWB (A9)
PIN 1 TO PIN 2 = 3.4 OHMS
PIN 3 TO PIN 4 = 3.5 OHMS




K
L
M
N
P
R
S
T
U
8.1 SHEET FEED REGISTRATION AND TRANSPORTATION (2 OF 3)
SHEET FEED SENSING
REGISTERED MEDIA
9.4
CUT SHEET PINCH ROLL PL10.6
5
MEDIA TRANSPORT MODULE PL 8.1
HAND FED SHEET MEDIA
CUT SHEET DRIVE ROLL PL10.7
TURNAROUND BAFFLE PL 8.2
SHEET FEED TRANSPORT ASSEMBLY PL 10.7
REGISTRATION PINCH ROLL PL 8.2
MEDIA TRANSPORT DRIVE MOTOR (A21MOT1)
REGISTRATION DRIVE ROLL PL 8.2
REGISTRATION DRIVE BELT PL 8.1
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
DC COM
+24 VDC (BULK)
MAIN PWB (A3) J618 - 4
MAIN PWB (A3) J618 - 3
MAIN PWB (A3) J614 - 2
1.2
1.2
1.2
SHEET FEED MEDIA
SHEET FEED TRANSPORT ASSEMBLY PL 10.7
SHEET FEEDD TEANSPORT DRIVE
SHEET FEED DRIVE MOTOR PL 10.7
SHEET FEED DRIVE BELT PL 10.7
SHEET FEED DRIVE ROLLS PL 10.7
1
2
3
4
5
6

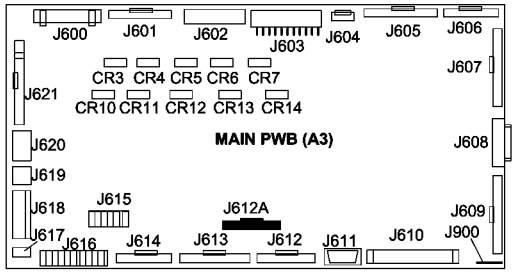
8.1 SHEET FEED SENSING AND TRANSPORTATION WITHOUT MANUAL SHEET FEED OPTION (3 OF 3)

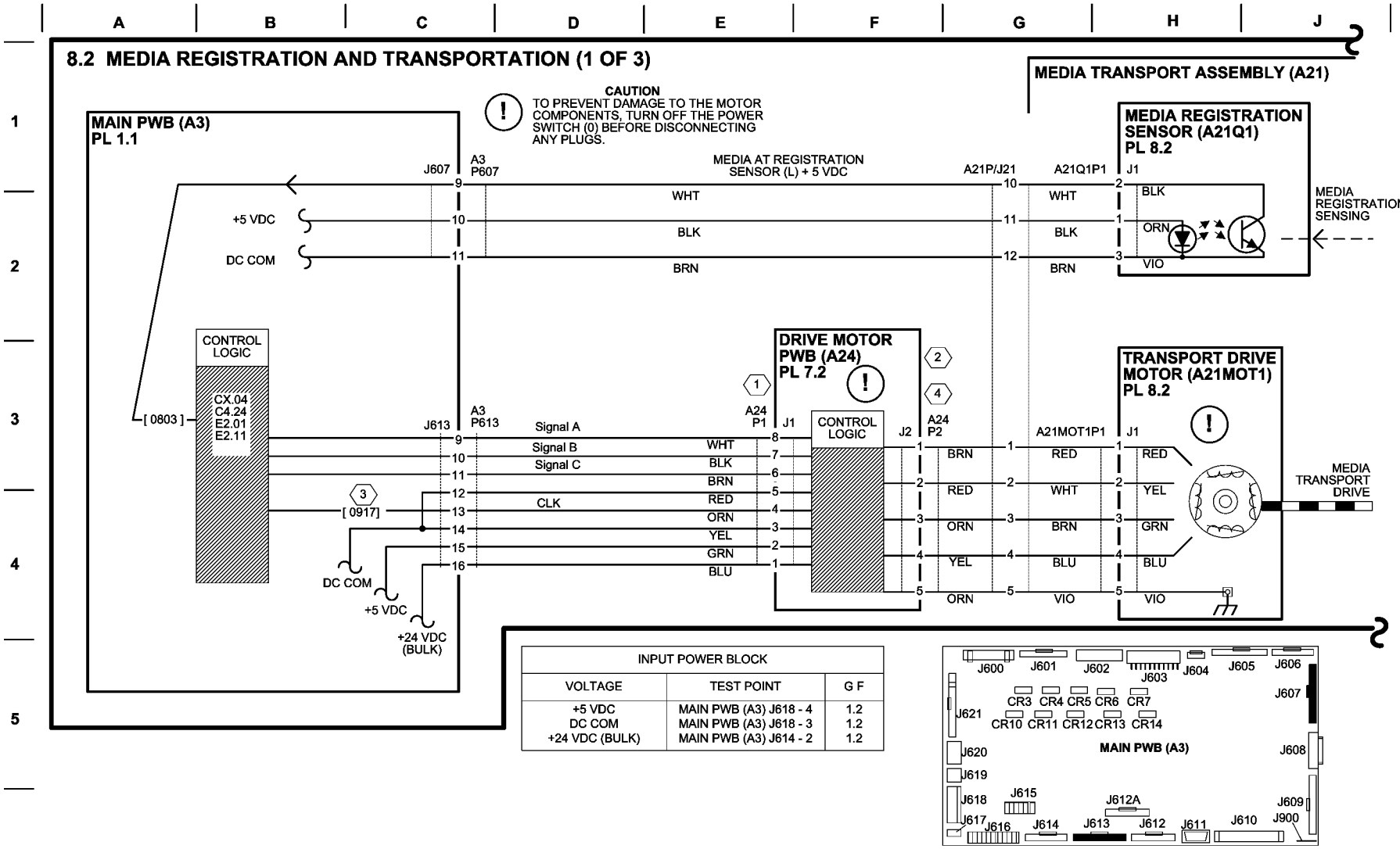
CAUTION
TO PREVENT DAMAGE TO THE MOTOR COMPONENTS, TURN OFF THE POWER SWITCH (0) BEFORE DISCONNECTING ANY PLUGS.

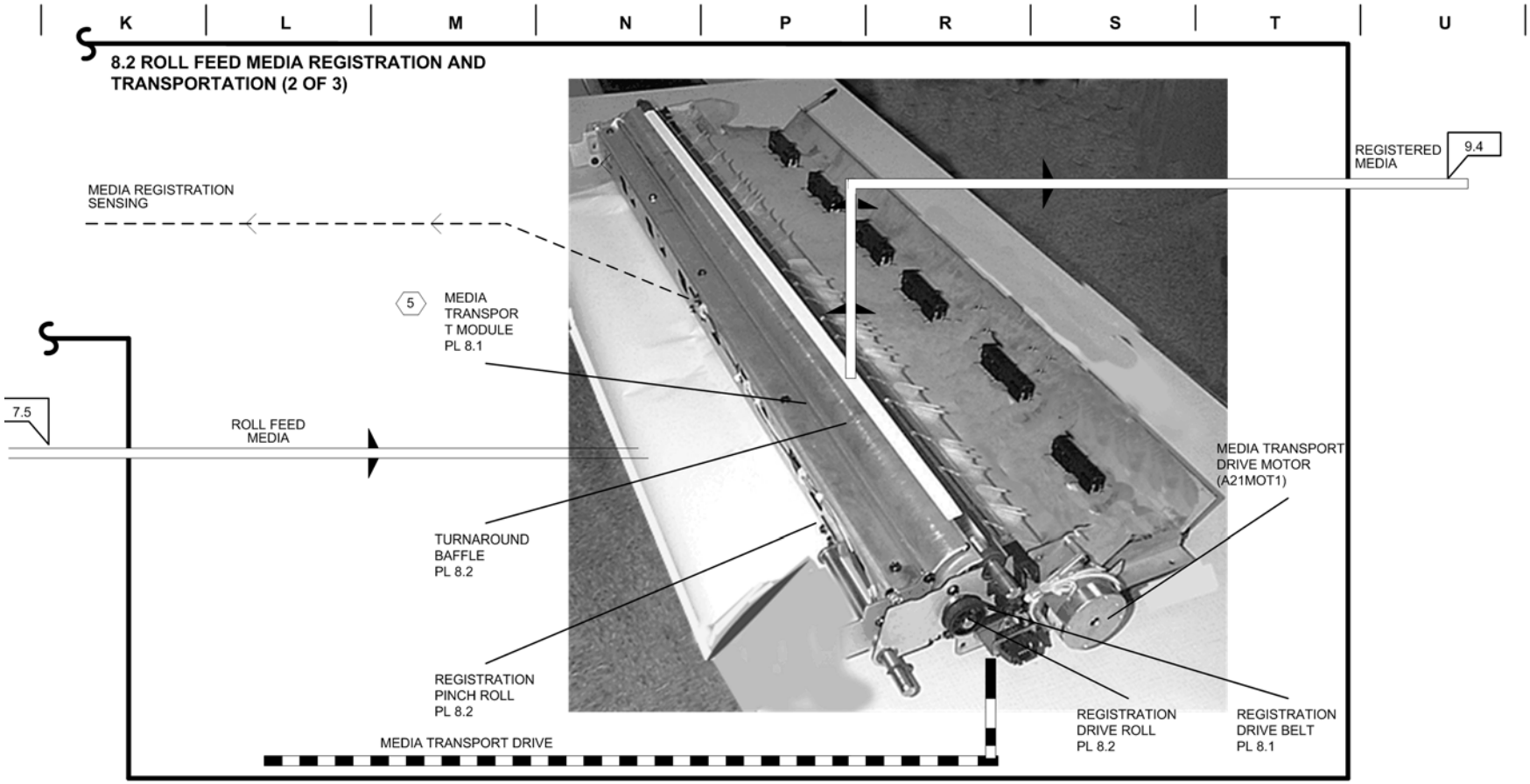


(1) FOR PRODUCT CODE MDH-G ONLY. THE HARNESS FOR P612A IS USED FOR THE MANUAL SHEET FEED ASSEMBLY. THE ASSEMBLY WAS REMOVED IN 2004 FROM THE BASE CONFIGURATION AND OFFERED AS A CUSTOMER PURCHASED UPGRADE KIT. THE HARNESS REMAINS IN THE MACHINE AND IS USED WHEN THE MANUAL SHEET FEED OPTION IS INSTALLED.

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2




8.2 MEDIA REGISTRATION AND TRANSPORTATION (1 OF 3)
CAUTION
TO PREVENT DAMAGE TO THE MOTOR COMPONENTS, TURN OFF THE POWER SWITCH (0) BEFORE DISCONNECTING ANY PLUGS.
MAIN PWB (A3)
PL 1.1
MEDIA TRANSPORT ASSEMBLY (A21)
MEDIA REGISTRATION SENSOR (A21Q1)
PL 8.2
MEDIA REGISTRATION SENSING
MEDIA AT REGISTRATION SENSOR (L) + 5 VDC
+5 VDC
DC COM
WHT
BLK
BRN
ORN
VIO
CONTROL LOGIC
CX.04
C4.24
E2.01
E2.11
[0803]
[0917]
DRIVE MOTOR PWB (A24)
PL 7.2
TRANSPORT DRIVE MOTOR (A21MOT1)
PL 8.2
MEDIA TRANSPORT DRIVE
Signal A
Signal B
Signal C
CLK
RED
YEL
GRN
BLU
+24 VDC (BULK)
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
MAIN PWB (A3) J618 - 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
+24 VDC (BULK)
MAIN PWB (A3) J614 - 2
1.2
MAIN PWB (A3)



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2

8.2 MEDIA REGISTRATION AND TRANSPORTATION (3 OF 3)

1. A24P1 APPROXIMATE VOLTAGES: A24P1 DISCONNECTED FROM DRIVE MOTOR PWB (A24)

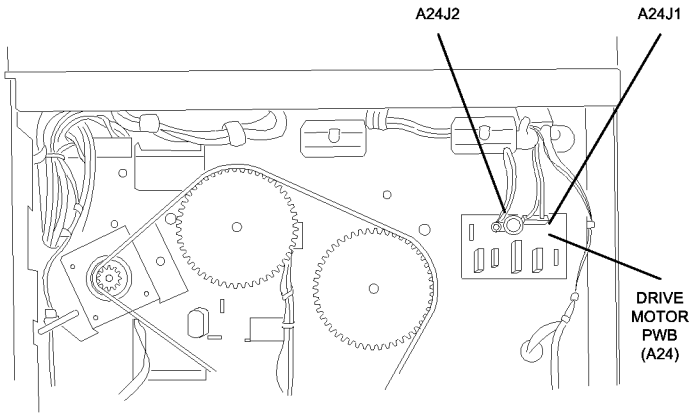
PIN	STANDBY VOLTAGE	[0703] VOLTAGE
P1-8	+3.8 VDC	+3.8 VDC
P1-7	+3.8 VDC	+3.8 VDC
P1-6	0 VDC	0 VDC
P1-4	+3.8 VDC	+3.8 VDC

2. CAUTION: TO PREVENT DAMAGE TO THE MOTOR COMPONENTS, TURN OFF THE POWER SWITCH (0) BEFORE DISCONNECTING ANY PLUGS.

3. [0917 - BOND] ENERGIZES THE TRANSPORT DRIVE MOTOR (MOT1) AND THE MOTOR ROTATES IN THE MEDIA FEED DIRECTION.

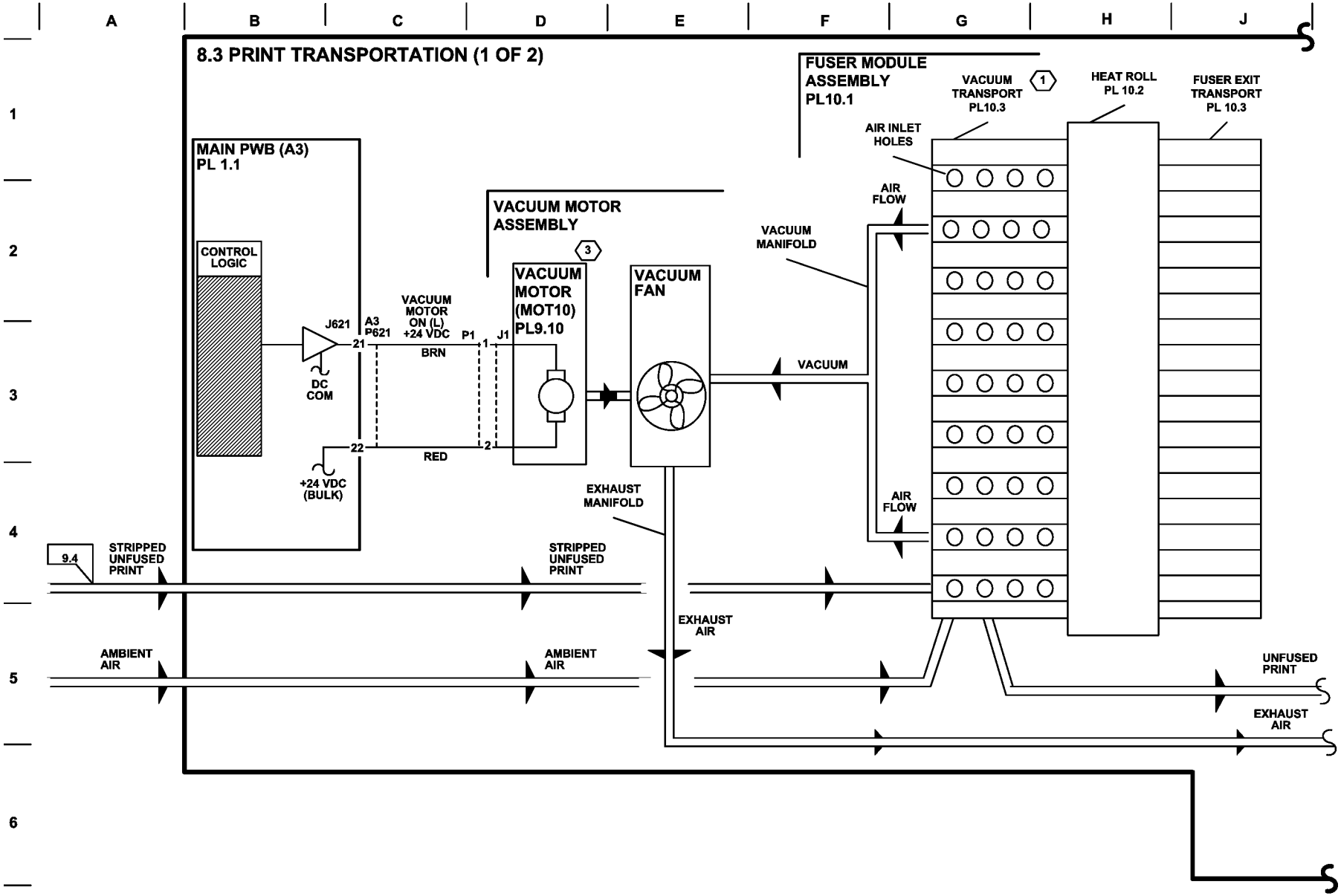
4. A24P2 APPROXIMATE RESISTANCE: A24P2 DISCONNECTED FROM DRIVE MOTOR PWB (A24)
   PIN 1 TO PIN 2 = 3.4 OHMS
   PIN 3 TO PIN 4 = 3.5 OHMS

5. THE MEDIA TRANSPORT MODULE AND SHEET FEED TRANSPORT ASSEMBLIES ARE SHOWN REMOVED FOR CLARITY. THE CUT SHEET PINCH ROLLS ARE MOUNTED UNDER THE FUSER ASSEMBLY.



VIEW: REAR

07018


A
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C
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G
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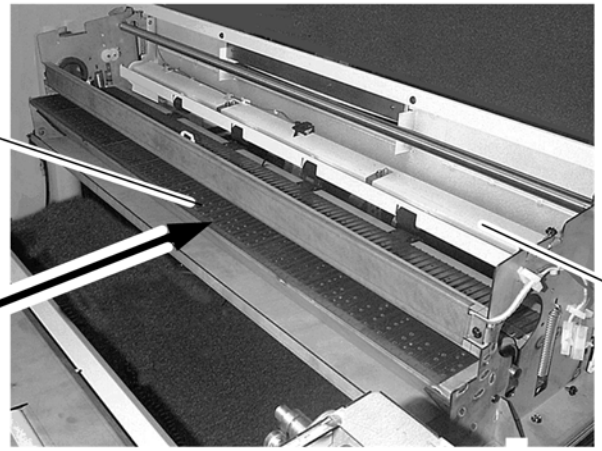
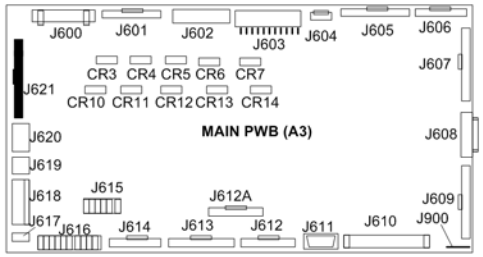
J
1
2
3
4
5
6
8.3 PRINT TRANSPORTATION (1 OF 2)
FUSER MODULE ASSEMBLY PL10.1
VACUUM TRANSPORT PL10.3
1
HEAT ROLL PL 10.2
FUSER EXIT TRANSPORT PL 10.3
AIR INLET HOLES
AIR FLOW
MAIN PWB (A3) PL 1.1
CONTROL LOGIC
VACUUM MOTOR ASSEMBLY
3
VACUUM MOTOR (MOT10) PL9.10
VACUUM FAN
VACUUM MANIFOLD
J621
A3 P621
VACUUM MOTOR ON (L) +24 VDC
P1
J1
21
BRN
1
DC COM
22
RED
2
+24 VDC (BULK)
VACUUM
EXHAUST MANIFOLD
AIR FLOW
9.4
STRIPPED UNFUSED PRINT
STRIPPED UNFUSED PRINT
EXHAUST AIR
AMBIENT AIR
AMBIENT AIR
UNFUSED PRINT
EXHAUST AIR

8.3 PRINT TRANSPORTATION (2 OF 2)

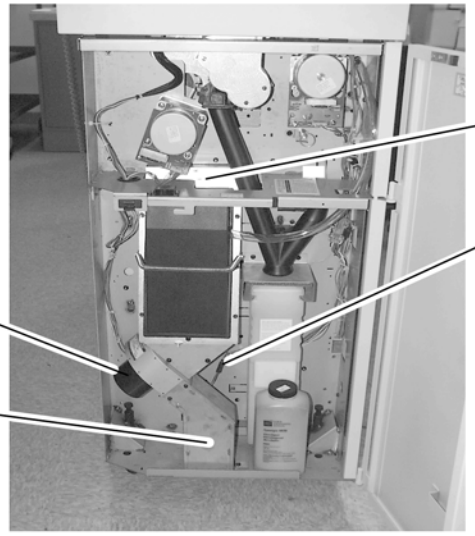


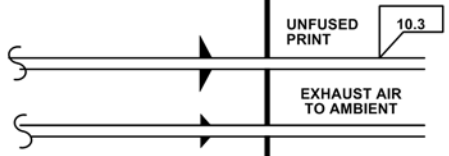
NOTES:

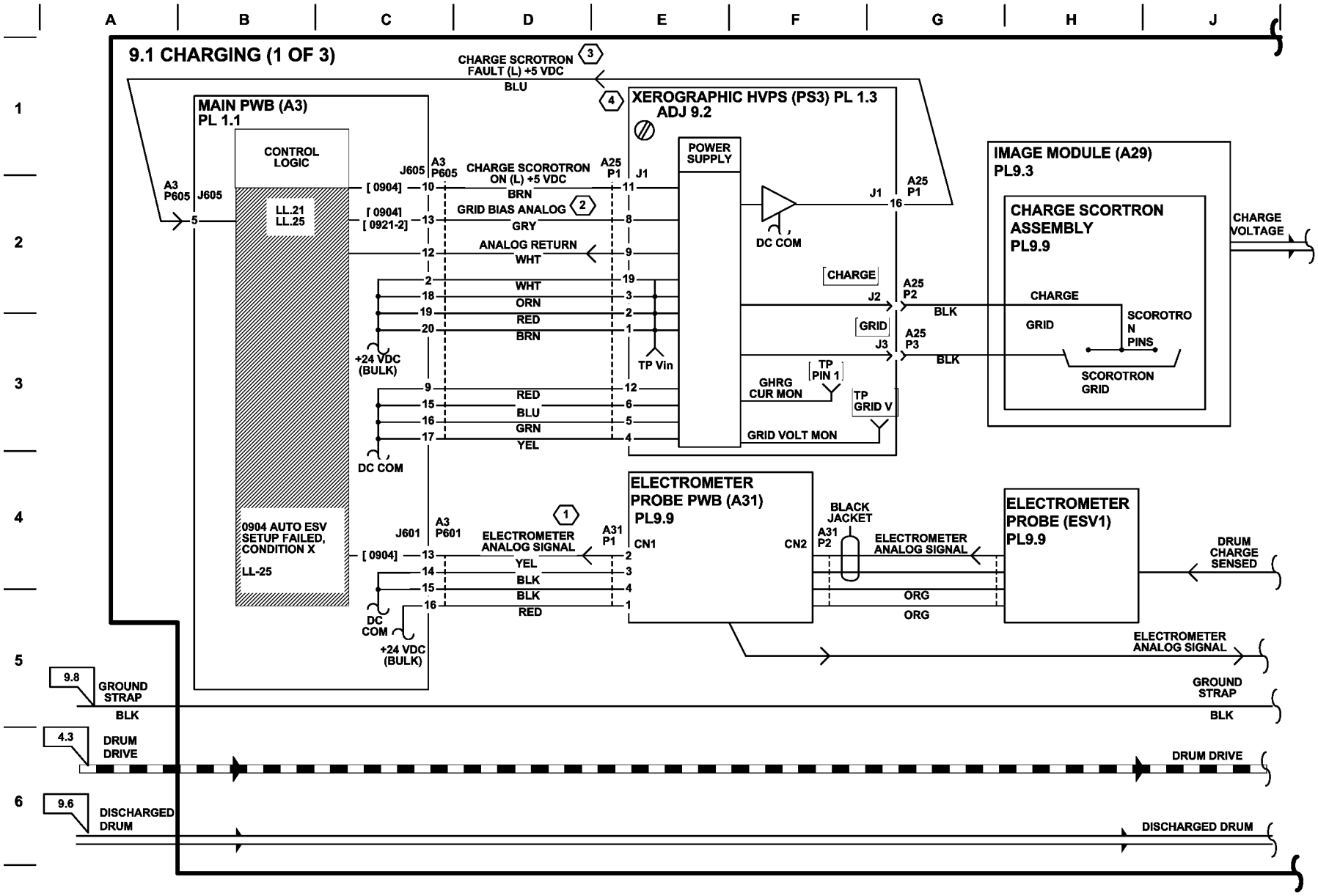
1. VACUUM SECURES THE NON - IMAGE SIDE OF THE UNFUSED PRINT TO THE TRANSPORT AS THE PRINT IS FED INTO THE FUSER ROLLS.
2. FUSER MODULE IS SHOWN WITH HEAT ROLL REMOVED IN ORDER TO SHOW THE VACUUM TRANSPORT.
3. VACUUM MOTOR (MOT 10) ALSO SUPPLIES VACUUM TO DEVELOPER MODULE TONER DUST TRAP SHOWN ON BSD 9.3 (3 of 4).



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK) DC COM	MAIN PWB (A3) J614-2 MAIN PWB (A3) J614-1	1.2 1.2






A
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J
1
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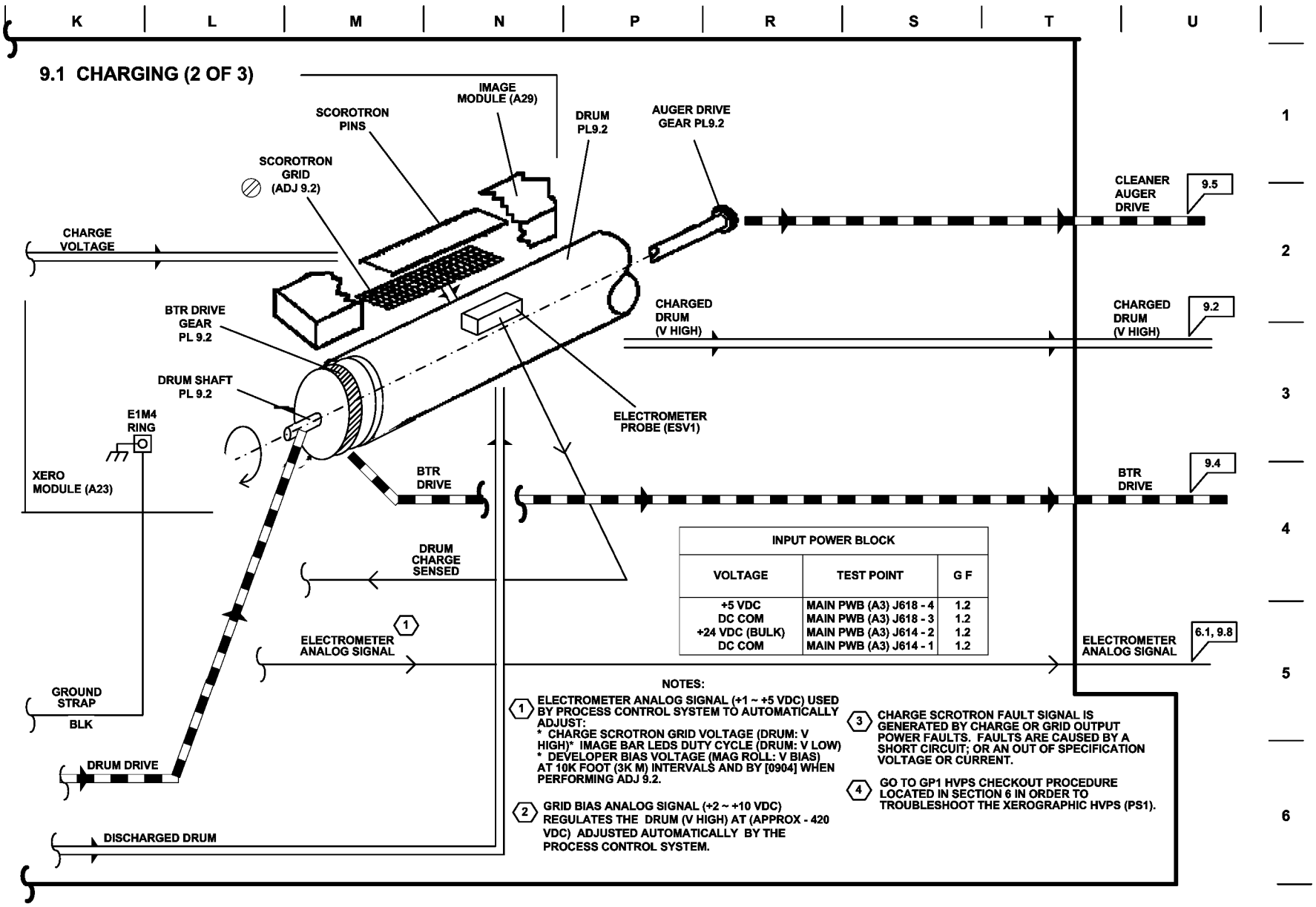
4
5
6
9.1 CHARGING (1 OF 3)
CHARGE SCROTRON FAULT (L) +5 VDC
BLU
3
4
MAIN PWB (A3)
PL 1.1
CONTROL LOGIC
LL.21
LL.25
0904 AUTO ESV SETUP FAILED, CONDITION X
LL-25
A3 P605 J605
5
J605
[0904] 10
[0904] 13
[0921-2]
12
2
18
19
20
9
15
16
17
13
14
15
16
+24 VDC (BULK)
DC COM
J601
A3 P601
CHARGE SCOROTRON ON (L) +5 VDC
BRN
GRID BIAS ANALOG
2
GRY
ANALOG RETURN
WHT
WHT
ORN
RED
BRN
RED
BLU
GRN
YEL
1
ELECTROMETER ANALOG SIGNAL
YEL
BLK
BLK
RED
A25 P1 J1
11
8
9
19
3
2
1
12
6
5
4
2
3
4
1
A31 P1
CN1
TP Vin
XEROGRAPHIC HVPS (PS3) PL 1.3
ADJ 9.2
POWER SUPPLY
DC COM
CHARGE
GRID
GHRG CUR MON
TP PIN 1
TP GRID V
GRID VOLT MON
J1 16
A25 P1
J2
A25 P2
BLK
J3
A25 P3
BLK
IMAGE MODULE (A29)
PL9.3
CHARGE SCORTRON ASSEMBLY
PL9.9
CHARGE
GRID
SCOROTRON PINS
SCOROTRON GRID
CHARGE VOLTAGE
ELECTROMETER PROBE PWB (A31)
PL9.9
CN2
A31 P2
BLACK JACKET
ELECTROMETER ANALOG SIGNAL
ORG
ORG
ELECTROMETER PROBE (ESV1)
PL9.9
DRUM CHARGE SENSED
ELECTROMETER ANALOG SIGNAL
9.8
GROUND STRAP
BLK
GROUND STRAP
BLK
4.3
DRUM DRIVE
DRUM DRIVE
9.6
DISCHARGED DRUM
DISCHARGED DRUM


K
L
M
N
P
R
S
T
U
1
2
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4
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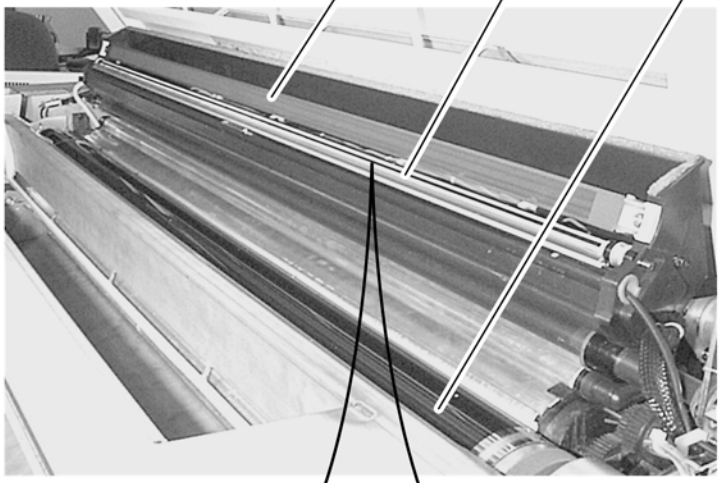
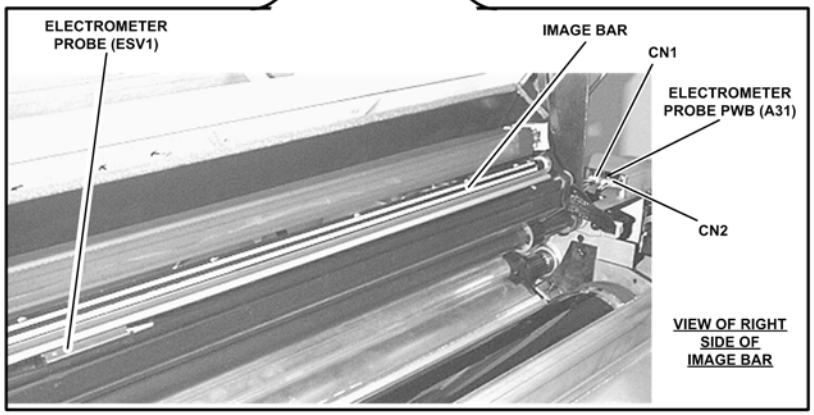
6
9.1 CHARGING (2 OF 3)
IMAGE MODULE (A29)
SCOROTRON PINS
DRUM PL9.2
AUGER DRIVE GEAR PL9.2
SCOROTRON GRID (ADJ 9.2)
CLEANER AUGER DRIVE
9.5
CHARGE VOLTAGE
BTR DRIVE GEAR PL 9.2
CHARGED DRUM (V HIGH)
CHARGED DRUM (V HIGH)
9.2
DRUM SHAFT PL 9.2
E1M4 RING
ELECTROMETER PROBE (ESV1)
XERO MODULE (A23)
BTR DRIVE
BTR DRIVE
9.4
DRUM CHARGE SENSED
ELECTROMETER ANALOG SIGNAL
ELECTROMETER ANALOG SIGNAL
6.1, 9.8
GROUND STRAP
BLK
DRUM DRIVE
DISCHARGED DRUM
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
MAIN PWB (A3) J618 - 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
+24 VDC (BULK)
MAIN PWB (A3) J614 - 2
1.2
DC COM
MAIN PWB (A3) J614 - 1
1.2
NOTES:
1 ELECTROMETER ANALOG SIGNAL (+1 ~ +5 VDC) USED BY PROCESS CONTROL SYSTEM TO AUTOMATICALLY ADJUST:
* CHARGE SCROTRON GRID VOLTAGE (DRUM: V HIGH)* IMAGE BAR LEDS DUTY CYCLE (DRUM: V LOW)
* DEVELOPER BIAS VOLTAGE (MAG ROLL: V BIAS)
AT 10K FOOT (3K M) INTERVALS AND BY [0904] WHEN PERFORMING ADJ 9.2.
2 GRID BIAS ANALOG SIGNAL (+2 ~ +10 VDC) REGULATES THE DRUM (V HIGH) AT (APPROX - 420 VDC) ADJUSTED AUTOMATICALLY BY THE PROCESS CONTROL SYSTEM.
3 CHARGE SCROTRON FAULT SIGNAL IS GENERATED BY CHARGE OR GRID OUTPUT POWER FAULTS. FAULTS ARE CAUSED BY A SHORT CIRCUIT; OR AN OUT OF SPECIFICATION VOLTAGE OR CURRENT.
4 GO TO GP1 HVPS CHECKOUT PROCEDURE LOCATED IN SECTION 6 IN ORDER TO TROUBLESHOOT THE XEROGRAPHIC HVPS (PS1).

9.1 CHARGING (3 OF 3)

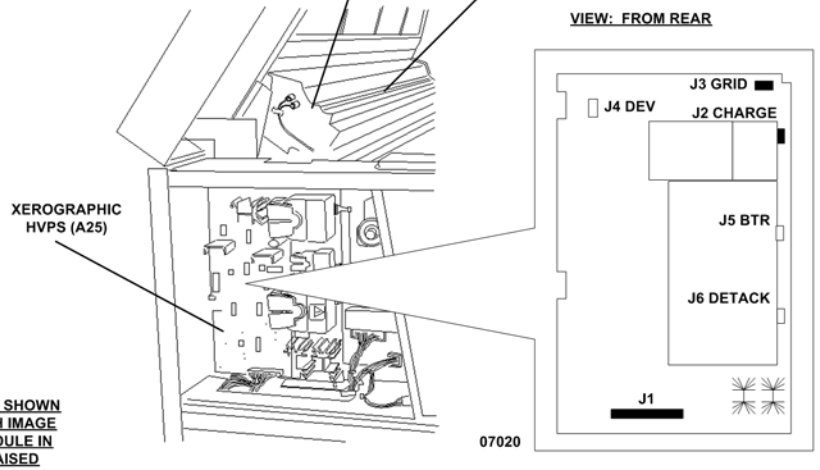


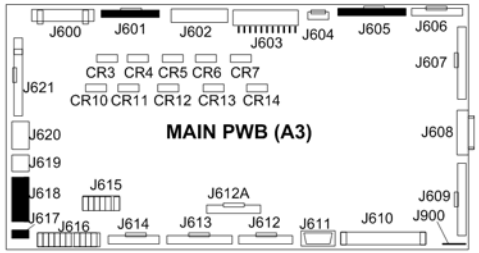
Db02928.bmp



Db02936.bmp

VIEW SHOWN WITH IMAGE MODULE IN RAISED POSITION



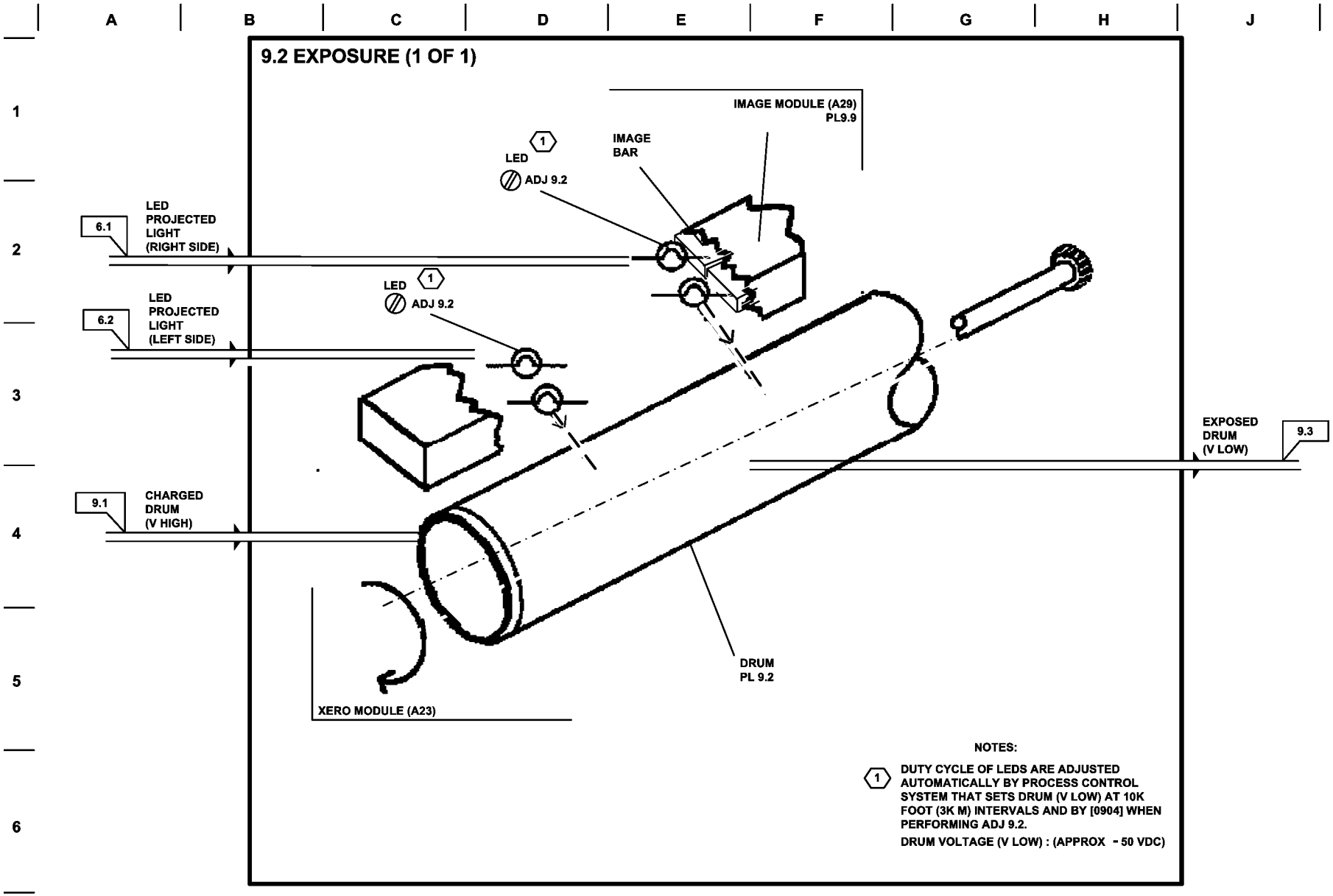


XEROGRAPHIC SET-UP AND CHARGING DIAGNOSTIC CODES

[0904] XEROGRAPHIC AUTOMATIC SET UP PROGRAM: RUN WHEN PERFORMING (ADJ 9.2). USES ELECTROMETER ANALOG SIGNAL TO:

SET-UP (V HIGH) BY REGULATING SCOROTRON GRID VOLTAGE.
SET-UP (V LOW) BY REGULATING IMAGE BAR LED DUTY CYCLE.
SET-UP (V BIAS) BY REGULATING DEVELOPER MODULE MAG ROLL VOLTAGE.

[0921-2] GRID BIAS ANALOG VOLTAGE: ALLOWS FOR DRUM (V HIGH) VOLTAGE ADJUSTMENT.


A
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C
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E
F
G
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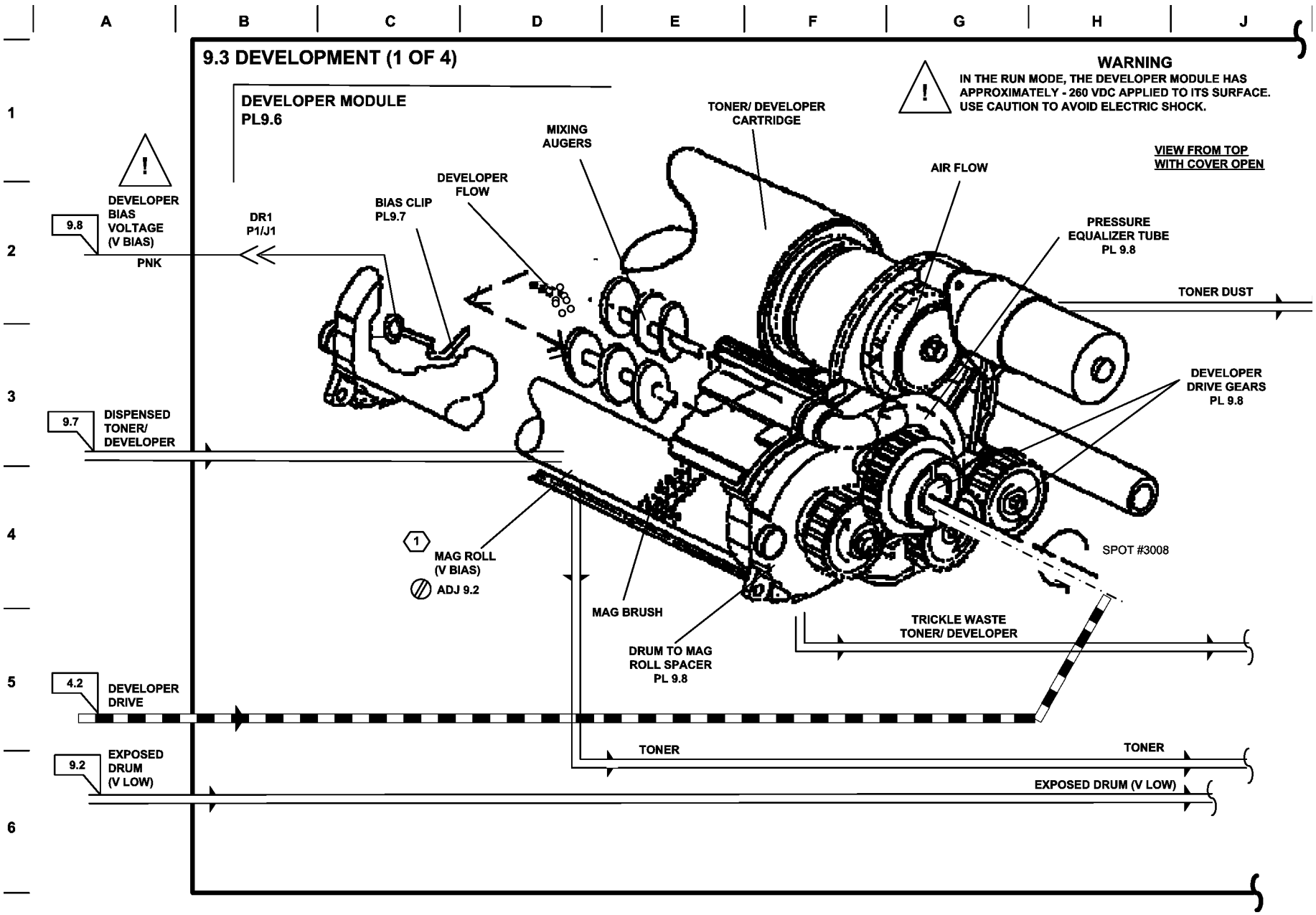
J
1
2
3
4
5
6
9.2 EXPOSURE (1 OF 1)
IMAGE MODULE (A29)
PL9.9
IMAGE
BAR
1
LED
ADJ 9.2
6.1
LED
PROJECTED
LIGHT
(RIGHT SIDE)
LED
ADJ 9.2
6.2
LED
PROJECTED
LIGHT
(LEFT SIDE)
EXPOSED
DRUM
(V LOW)
9.3
9.1
CHARGED
DRUM
(V HIGH)
DRUM
PL 9.2
XERO MODULE (A23)
NOTES:
1
DUTY CYCLE OF LEDS ARE ADJUSTED AUTOMATICALLY BY PROCESS CONTROL SYSTEM THAT SETS DRUM (V LOW) AT 10K FOOT (3K M) INTERVALS AND BY [0904] WHEN PERFORMING ADJ 9.2.
DRUM VOLTAGE (V LOW) : (APPROX - 50 VDC)


9.3 DEVELOPMENT (1 OF 4)
DEVELOPER MODULE
PL9.6
WARNING
IN THE RUN MODE, THE DEVELOPER MODULE HAS APPROXIMATELY - 260 VDC APPLIED TO ITS SURFACE. USE CAUTION TO AVOID ELECTRIC SHOCK.
VIEW FROM TOP WITH COVER OPEN
TONER/ DEVELOPER CARTRIDGE
MIXING AUGERS
AIR FLOW
DEVELOPER FLOW
BIAS CLIP PL9.7
DR1 P1/J1
PRESSURE EQUALIZER TUBE PL 9.8
TONER DUST
DEVELOPER DRIVE GEARS PL 9.8
9.8 DEVELOPER BIAS VOLTAGE (V BIAS)
PNK
9.7 DISPENSED TONER/ DEVELOPER
1 MAG ROLL (V BIAS)
ADJ 9.2
SPOT #3008
MAG BRUSH
TRICKLE WASTE TONER/ DEVELOPER
DRUM TO MAG ROLL SPACER PL 9.8
4.2 DEVELOPER DRIVE
9.2 EXPOSED DRUM (V LOW)
TONER
TONER
EXPOSED DRUM (V LOW)
A
B
C
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J
1
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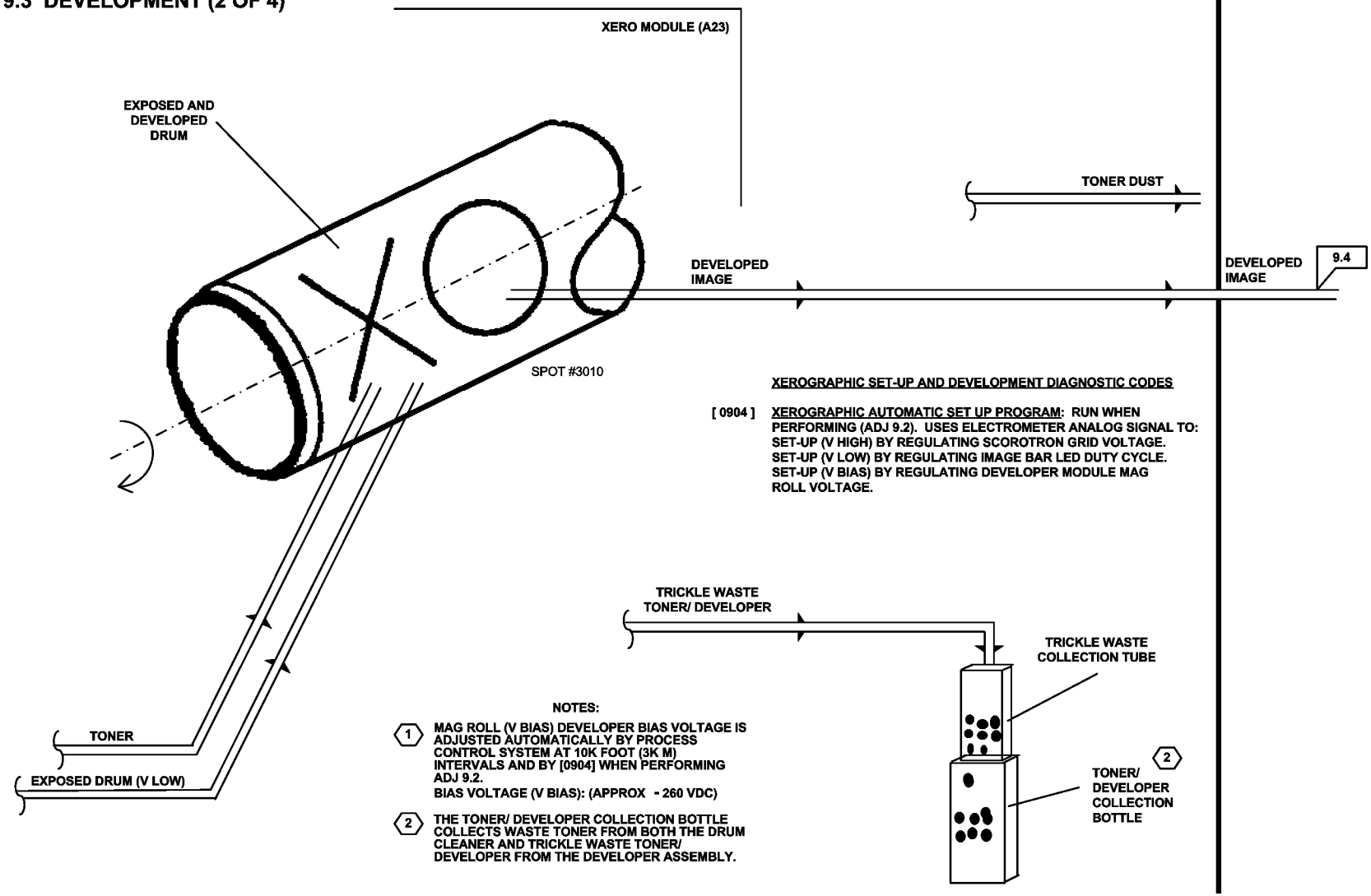
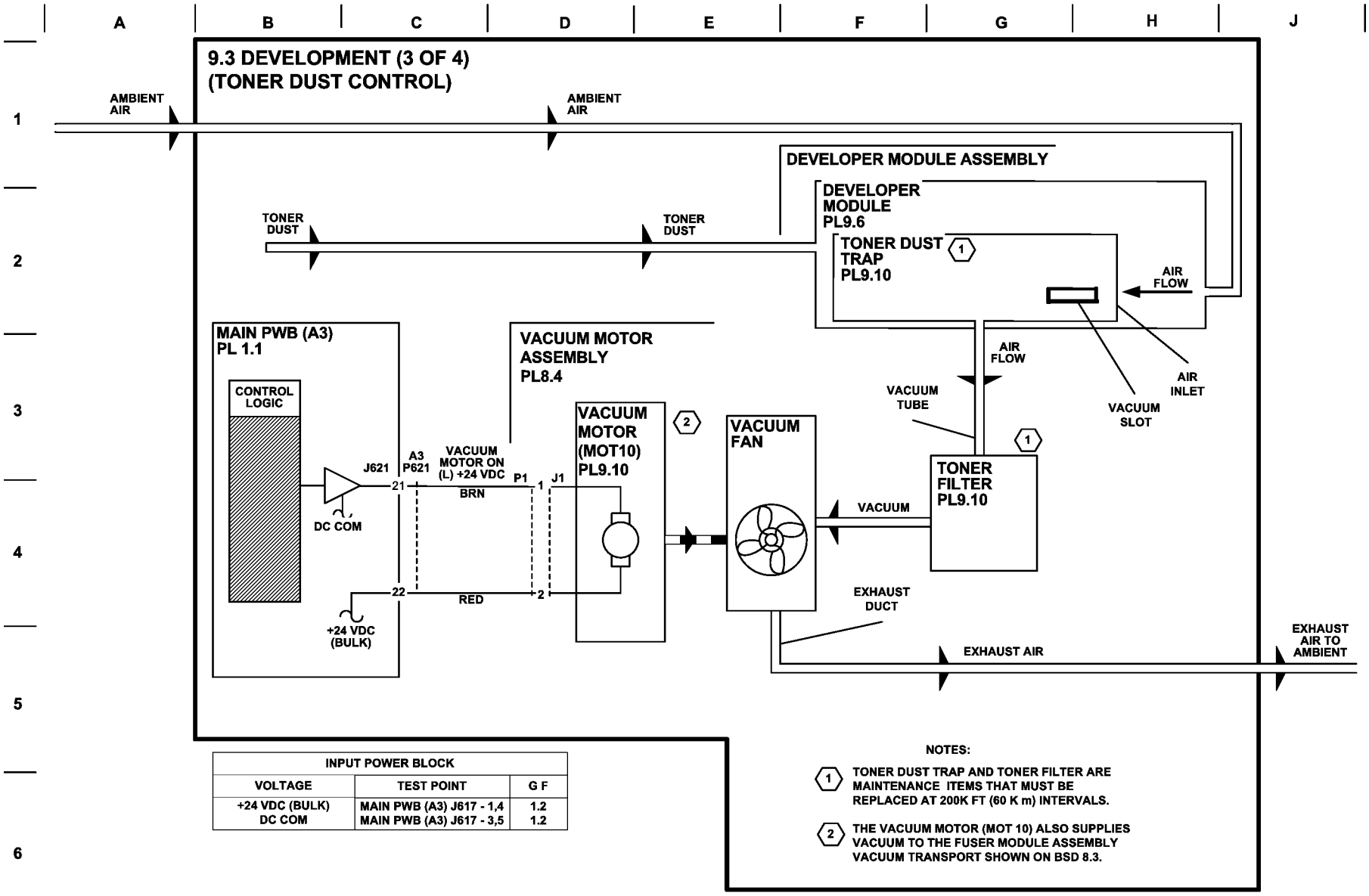
6

9.3 DEVELOPMENT (2 OF 4)





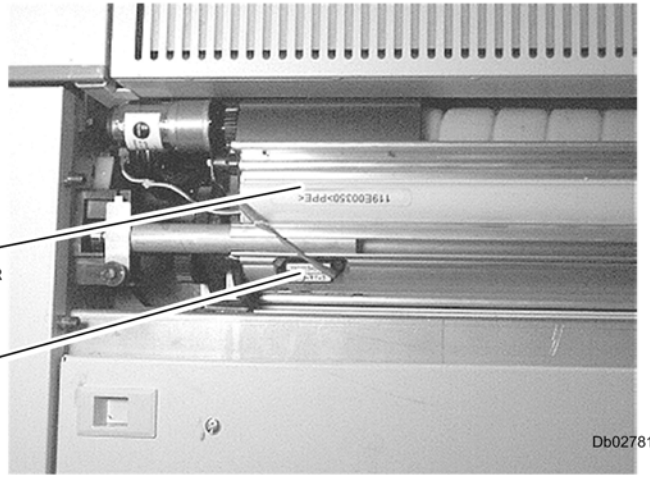
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK) DC COM	MAIN PWB (A3) J617 - 1,4 MAIN PWB (A3) J617 - 3,5	1.2 1.2

9.3 DEVELOPMENT (4 OF 4)

WARNING

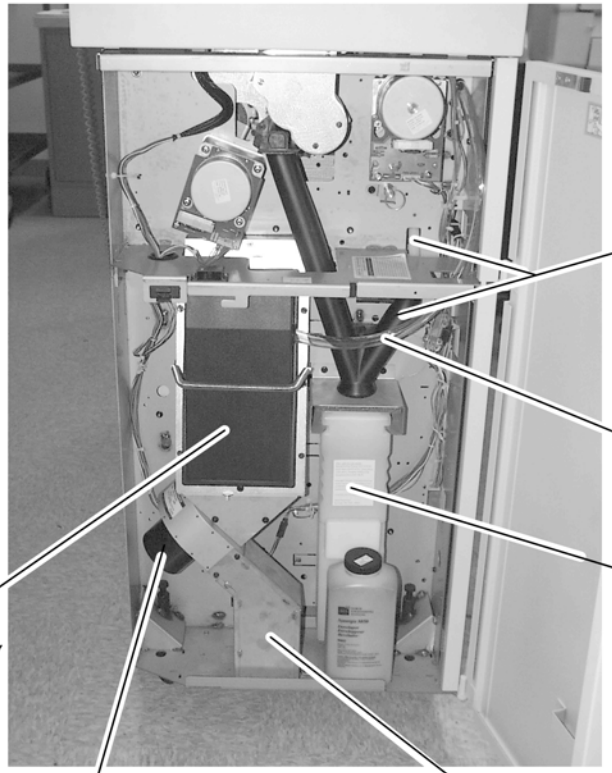
IN THE RUN MODE, THE DEVELOPER MODULE HAS APPROXIMATELY - 260 VDC APPLIED TO ITS SURFACE. USE CAUTION TO AVOID ELECTRIC SHOCK.

VIEW FROM LEFT REAR OF DEVELOPER HOUSING WITH TONER DUST TRAP REMOVED

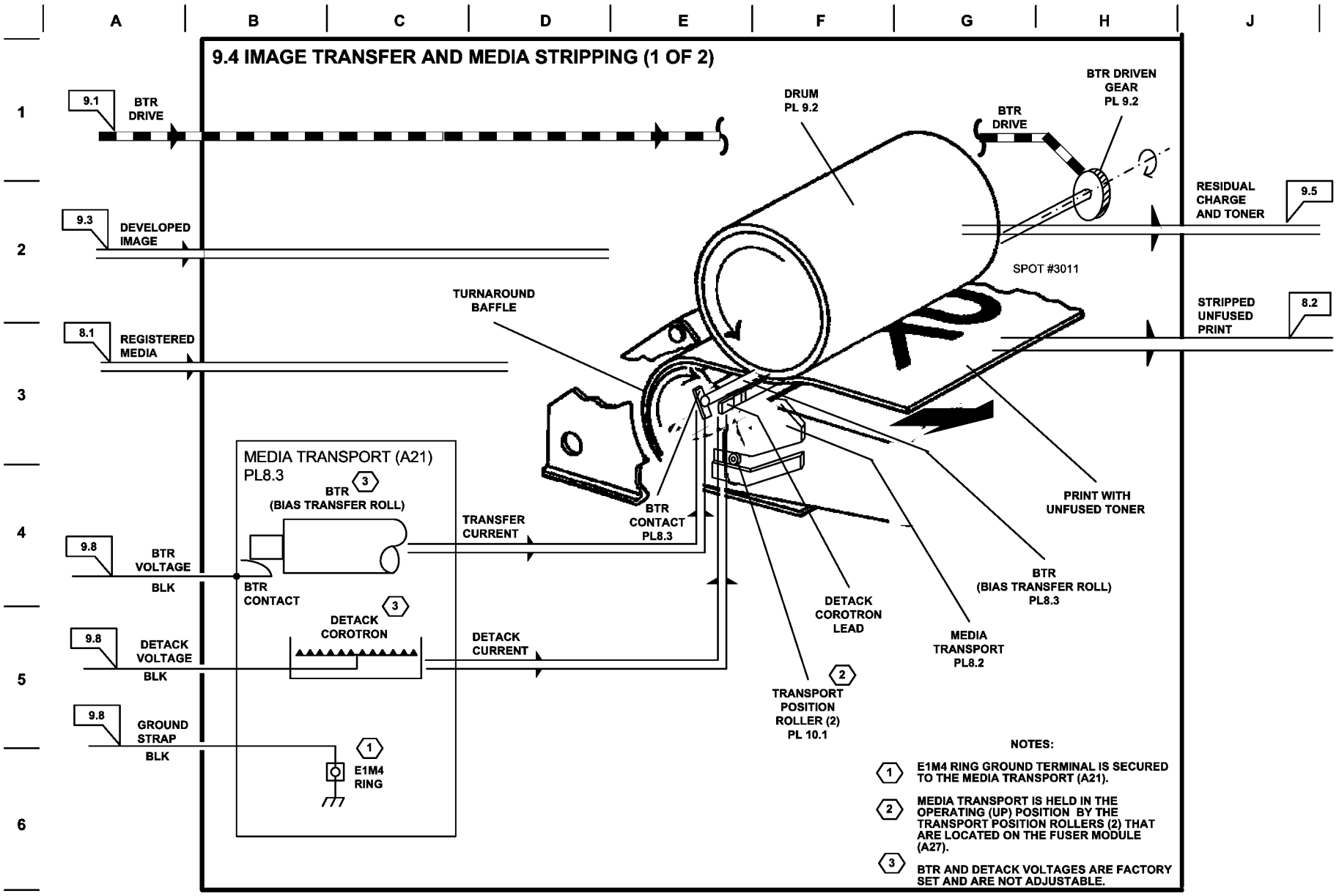


VIEW FROM LEFT REAR OF DEVELOPER HOUSING

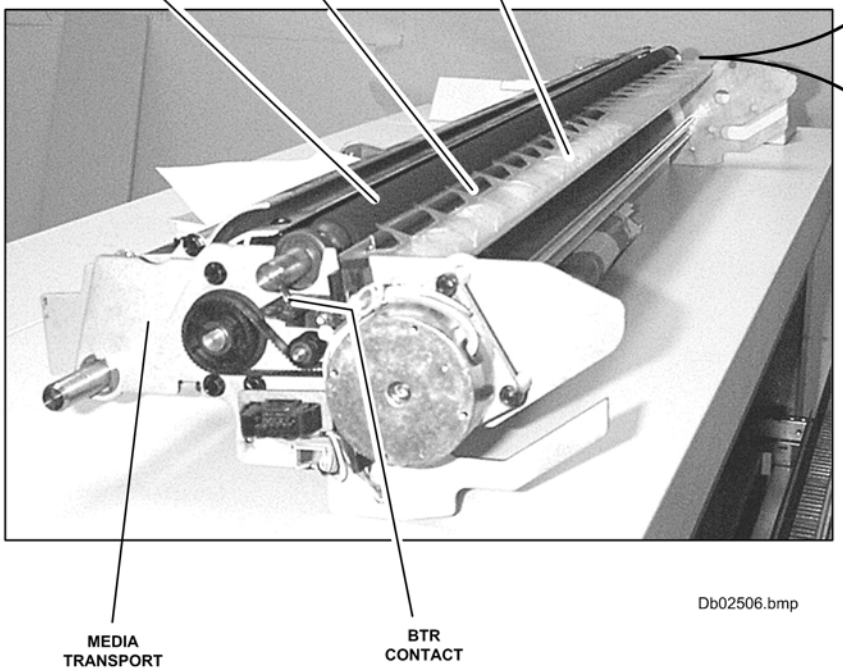
VIEW FROM FRONT WITH FRONT DOOR OPEN

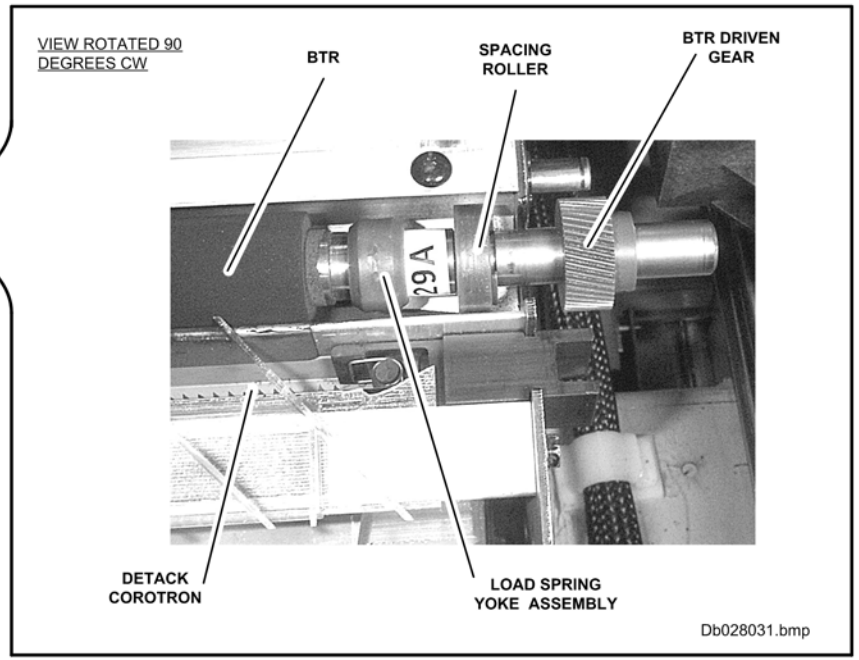


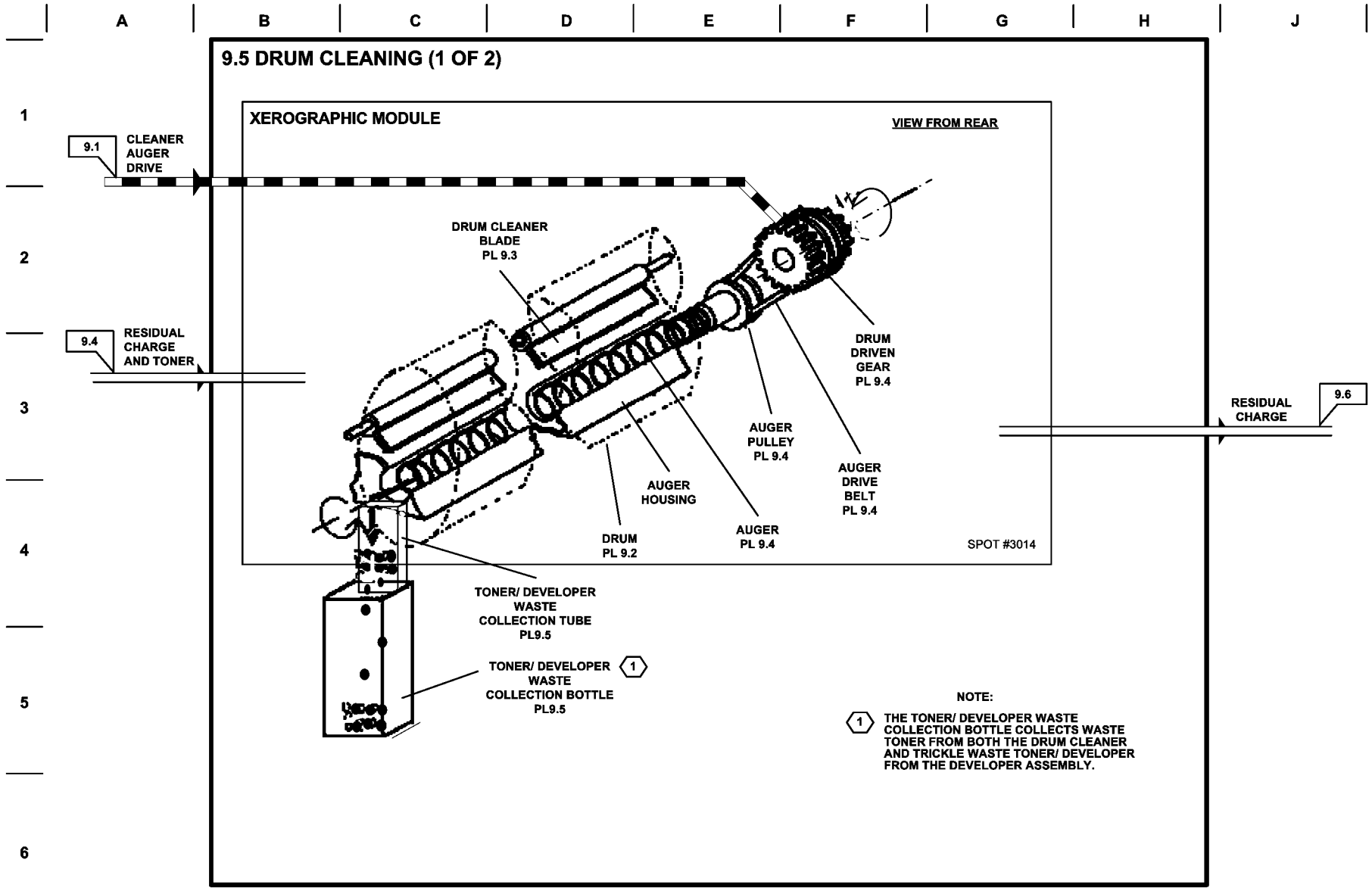
BSD 9.4 Image Transfer and Media Stripping



9.4 IMAGE TRANSFER AND MEDIA STRIPPING (2 OF 2)






A
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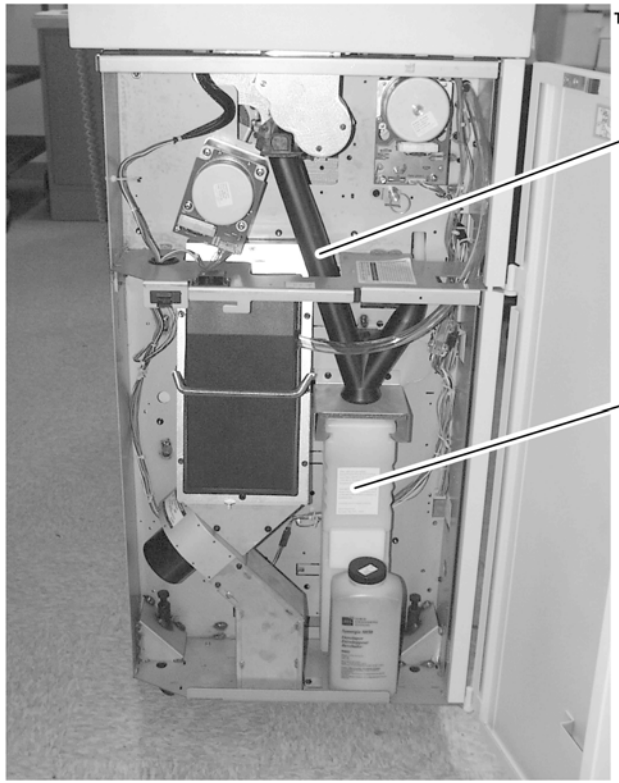
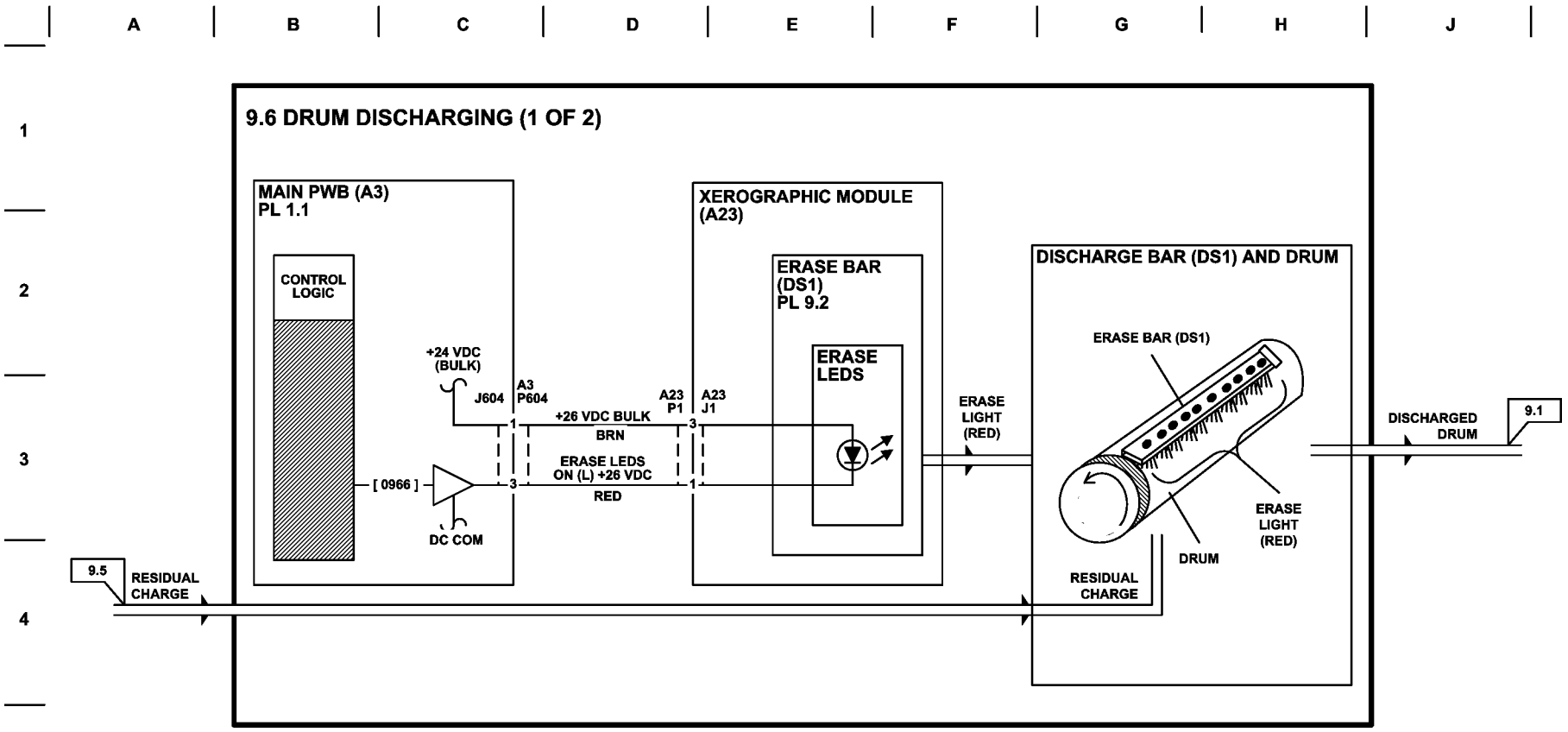
9.5 DRUM CLEANING (1 OF 2)
XEROGRAPHIC MODULE
VIEW FROM REAR
9.1
CLEANER AUGER DRIVE
9.4
RESIDUAL CHARGE AND TONER
DRUM CLEANER BLADE PL 9.3
DRUM DRIVEN GEAR PL 9.4
AUGER PULLEY PL 9.4
AUGER DRIVE BELT PL 9.4
AUGER HOUSING
DRUM PL 9.2
AUGER PL 9.4
SPOT #3014
RESIDUAL CHARGE
9.6
TONER/ DEVELOPER WASTE COLLECTION TUBE PL9.5
TONER/ DEVELOPER WASTE COLLECTION BOTTLE PL9.5
1
NOTE:
1 THE TONER/ DEVELOPER WASTE COLLECTION BOTTLE COLLECTS WASTE TONER FROM BOTH THE DRUM CLEANER AND TRICKLE WASTE TONER/ DEVELOPER FROM THE DEVELOPER ASSEMBLY.

9.5 DRUM CLEANING (2 OF 2)

VIEW FROM FRONT WITH FRONT DOOR OPEN



BSD 9.6 Drum Discharging

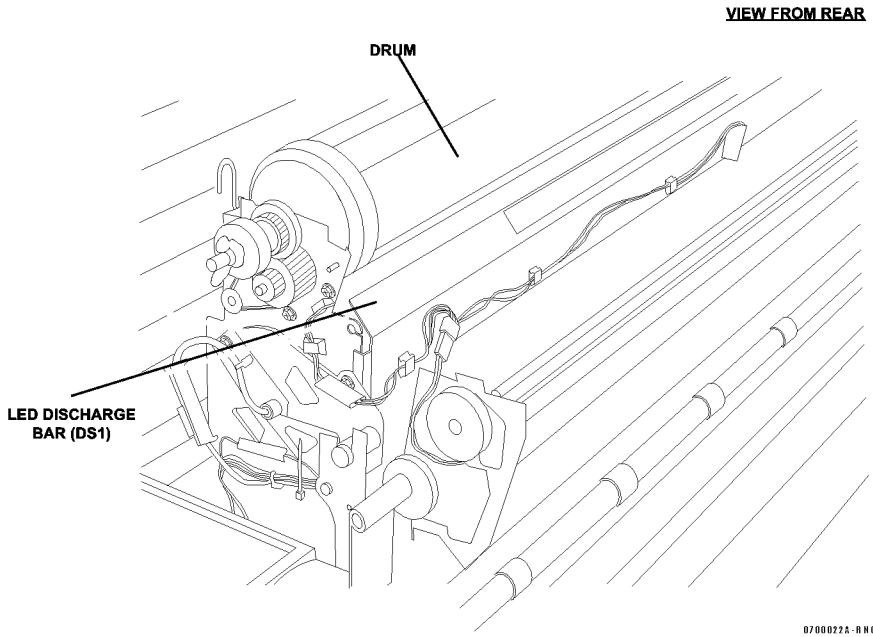


INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PWB (A3) J614 - 2	1.2
DC COM	MAIN PWB (A3) J614 - 1	1.2

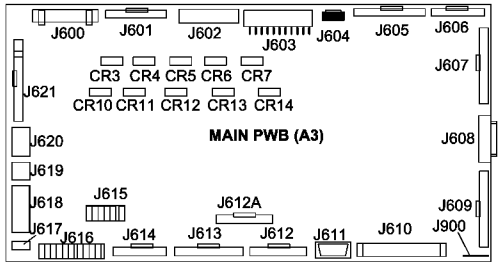
DIAGNOSTIC CODES

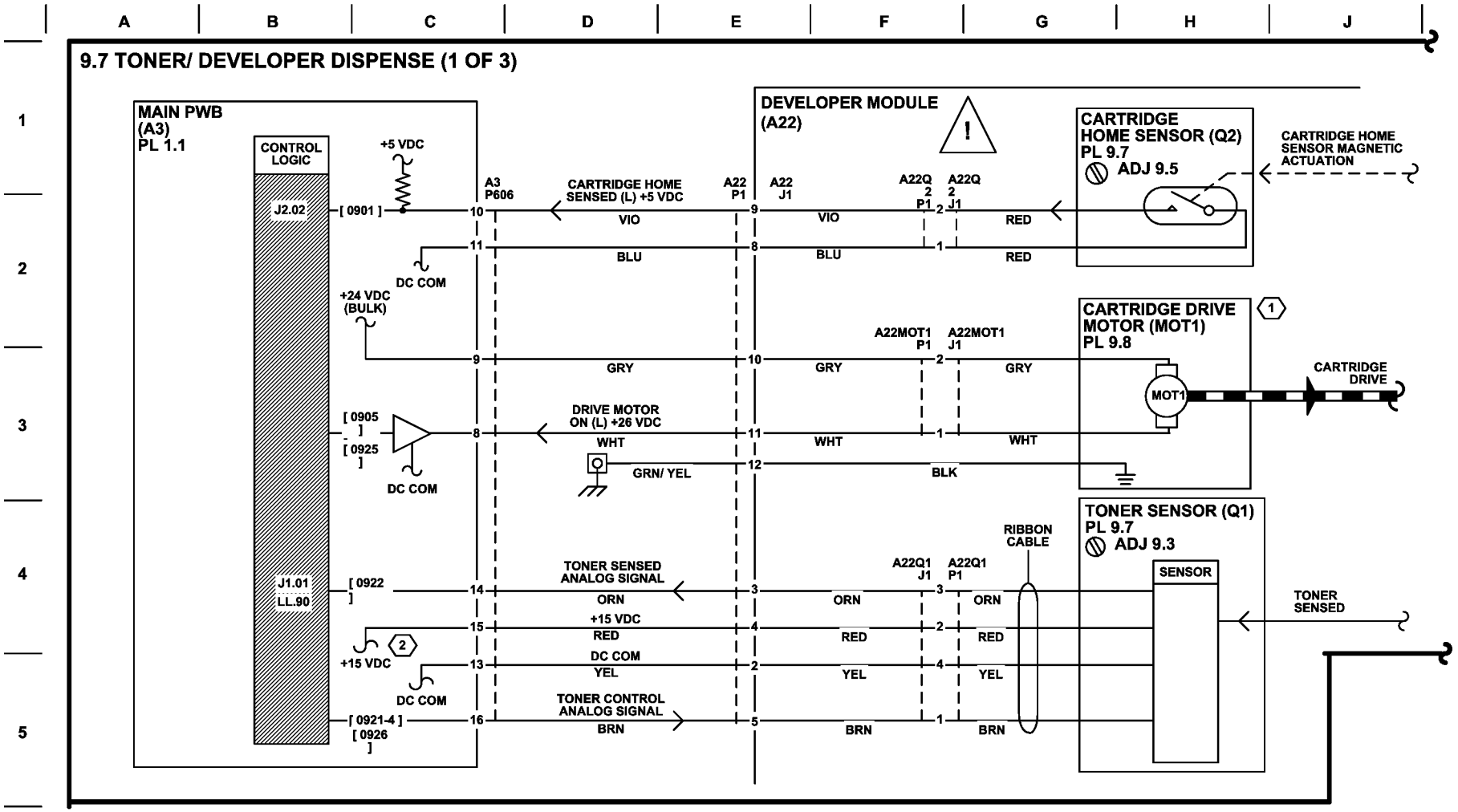
[0966] ERASE BAR OUTPUT: SWITCHES ON THE ERASE LEDS IN ORDER TO REMOVE RESIDUAL CHARGE ON THE DRUM.

9.6 DRUM DISCHARGING (2 OF 2)



07022




A
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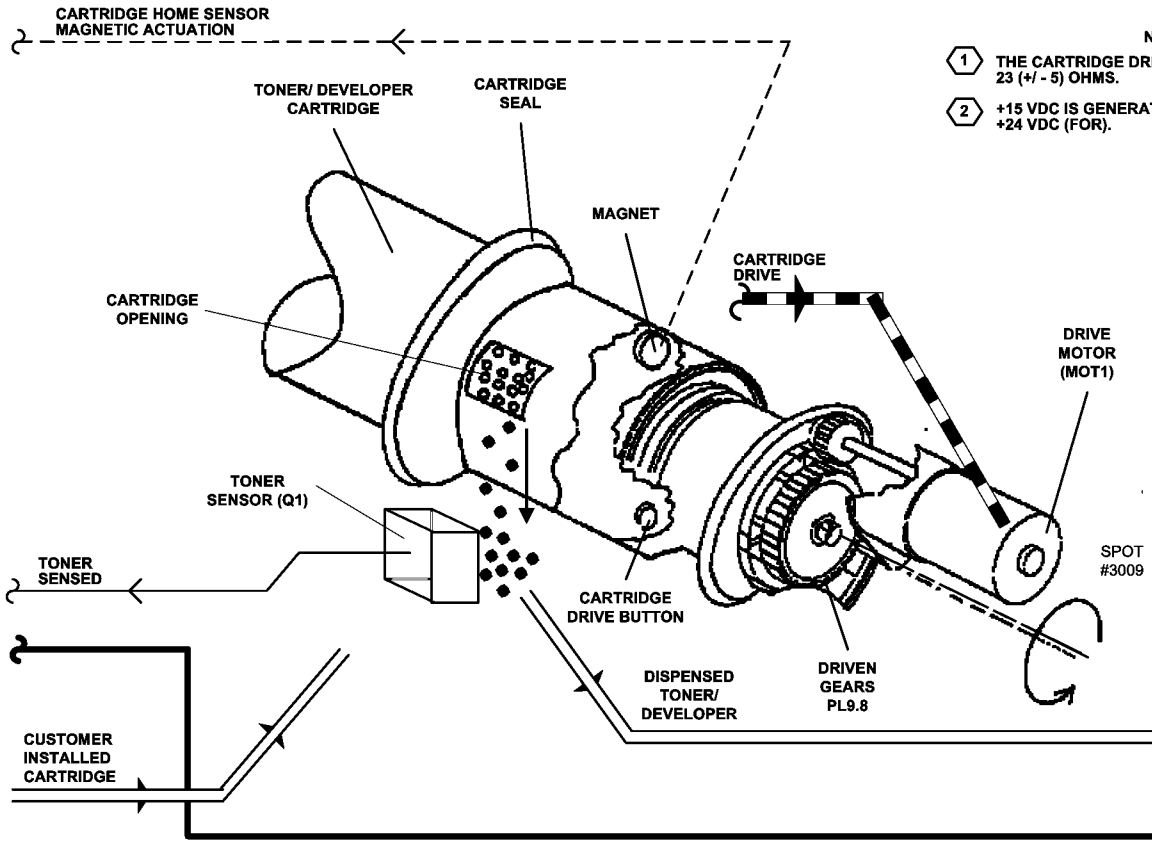
9.7 TONER/ DEVELOPER DISPENSE (1 OF 3)
MAIN PWB
(A3)
PL 1.1
CONTROL LOGIC
J2.02
J1.01
LL.90
+5 VDC
[0901]
DC COM
+24 VDC (BULK)
[0905]
[0925]
DC COM
[0922]
+15 VDC
2
DC COM
[0921-4]
[0926]
A3 P606
10
11
9
8
12
14
15
13
16
CARTRIDGE HOME SENSED (L) +5 VDC
VIO
BLU
GRY
DRIVE MOTOR ON (L) +26 VDC
WHT
GRN/ YEL
TONER SENSED ANALOG SIGNAL
ORN
+15 VDC
RED
DC COM
YEL
TONER CONTROL ANALOG SIGNAL
BRN
DEVELOPER MODULE
(A22)
A22 P1
A22 J1
A22Q 2 P1
A22Q 2 J1
A22MOT1 P1
A22MOT1 J1
A22Q1 J1
A22Q1 P1
RIBBON CABLE
CARTRIDGE HOME SENSOR (Q2)
PL 9.7
ADJ 9.5
CARTRIDGE HOME SENSOR MAGNETIC ACTUATION
CARTRIDGE DRIVE MOTOR (MOT1)
PL 9.8
MOT1
CARTRIDGE DRIVE
TONER SENSOR (Q1)
PL 9.7
ADJ 9.3
SENSOR
TONER SENSED
RED
BLK
BRN

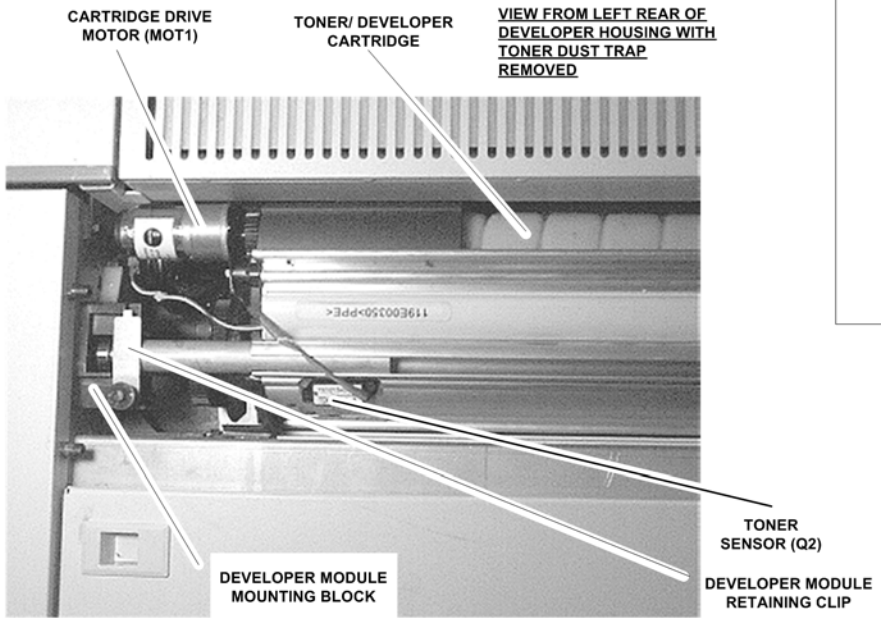
9.7 TONER/ DEVELOPER DISPENSE (2 OF 3)

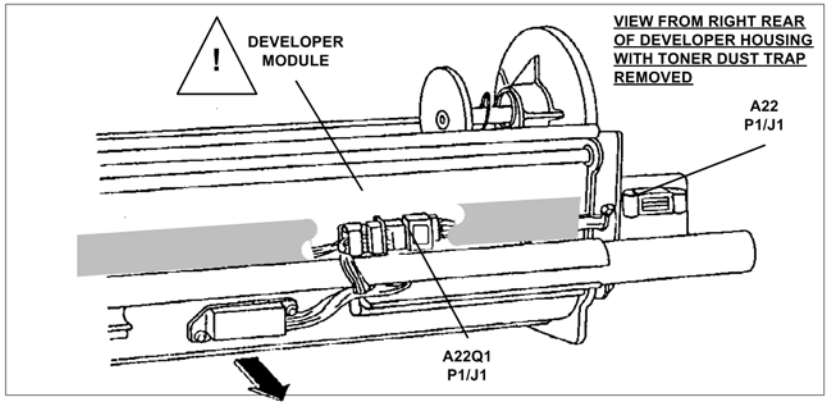
WARNING
THE DEVELOPER MODULE HAS APPROXIMATELY (- 260 VDC) APPLIED TO ITS SURFACE WHEN PROCESSING. USE CAUTION AND DO NOT TOUCH THE MODULE WHEN A PRINT IS BEING PROCESSED.

NOTES:
1. THE CARTRIDGE DRIVE MOTOR RESISTANCE = 23 (+/ - 5) OHMS.
2. +15 VDC IS GENERATED ON MAIN PWB (A3) FROM +24 VDC (FOR).



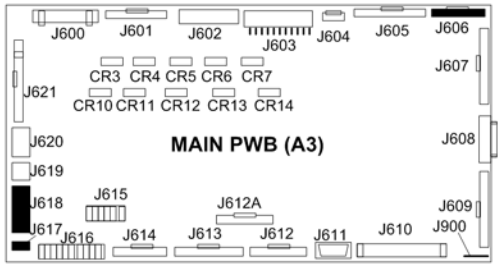
9.7 TONER/ DEVELOPER DISPENSE (3 OF 3)





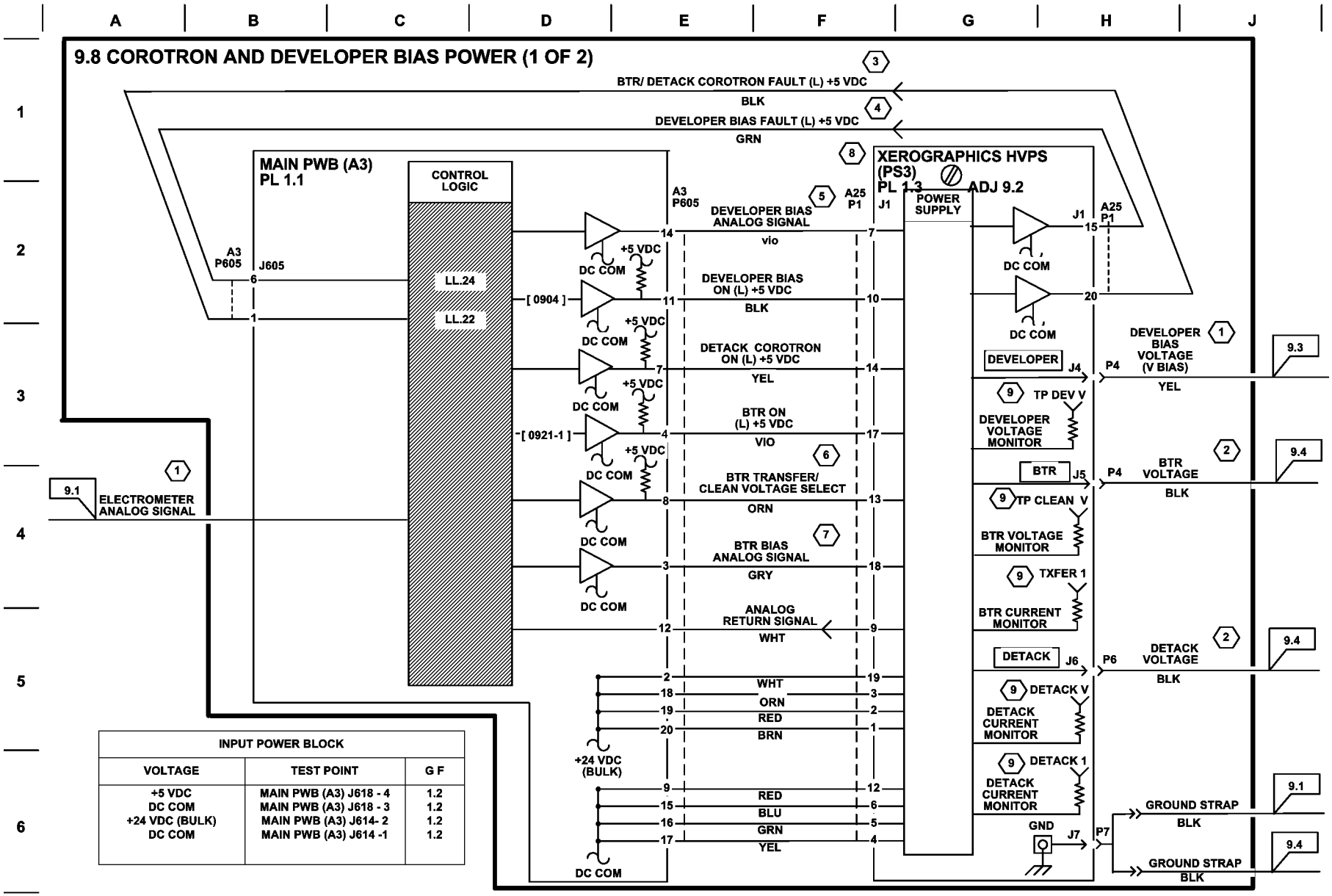
SPOT #01489A

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2
+24 VDC (FOR)	MAIN PWB (A3) J617 - 1	1.2
DC COM	MAIN PWB (A3) J617 - 5	1.2

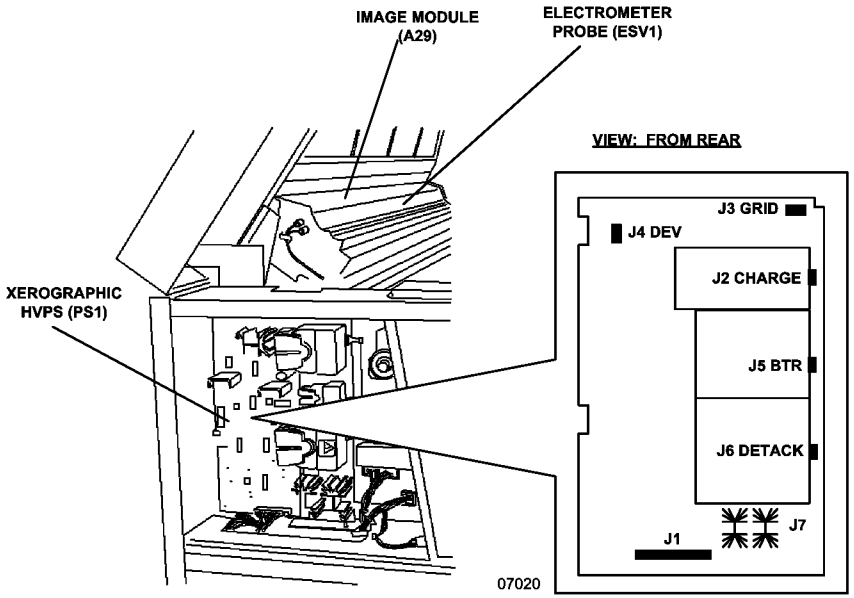


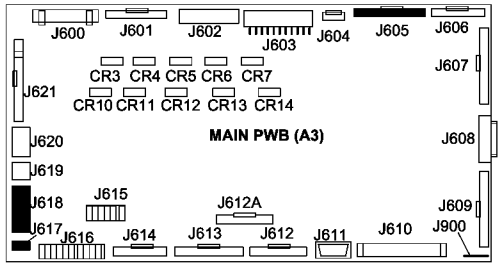
TONER DISPENSE DIAGNOSTIC CODES

[0901] CARTRIDGE HOME SENSOR (Q2): (INPUT)
[0905] CARTRIDGE DRIVE MOTOR (MOT1): (OUTPUT)
CONTINUOUSLY RUN.
[0906] CARTRIDGE DRIVE MOTOR (MOT1): (OUTPUT)
AUTOMATICALLY ADDS OR REMOVES TONER UNTIL TONER
CONTROL POINT IS ACHIEVED.
[0922] DISABLE OF TONER FAULTS: ENABLES PRINTER TO RUN WHEN TONER CONCENTRATION (TC) IS OUT OF SPECIFICATION.
LOGIC AUTOMATICALLY RESETS WHEN (TC) IS I OPERATING RANGE.
[0925] CYCLE TONER / DEVELOPER CARTRIDGE: (OUTPUT)
SWITCHES ON MOTOR (MOT1) FOR ONE CARTRIDGE ROTATION.
CARTRIDGE STOPS ROTATING IN THE HOME POSITION.
[0921-4] TONER CONCENTRATION ADJUSTMENT:
DISPLAYS CONTROL POINT VOLTAGE AND ALLOWS FOR IMAGE DENSITY ADJUSTMENT (ADJ 9.3) BY ADJUSTING TONER
SENSOR CONTROL POINT.
[0926] RESET NVM VALUES TO DEFAULT VALUES.


9.8 COROTRON AND DEVELOPER BIAS POWER (1 OF 2)
BTR/ DETACK COROTRON FAULT (L) +5 VDC
BLK
DEVELOPER BIAS FAULT (L) +5 VDC
GRN
MAIN PWB (A3)
PL 1.1
CONTROL LOGIC
LL.24
LL.22
XEROGRAPHICS HVPS (PS3)
PL 1.3 ADJ 9.2
POWER SUPPLY
DEVELOPER BIAS ANALOG SIGNAL
vio
DEVELOPER BIAS ON (L) +5 VDC
BLK
DETACK COROTRON ON (L) +5 VDC
YEL
BTR ON (L) +5 VDC
VIO
BTR TRANSFER/ CLEAN VOLTAGE SELECT
ORN
BTR BIAS ANALOG SIGNAL
GRY
ANALOG RETURN SIGNAL
WHT
+5 VDC
DC COM
[0904]
[0921-1]
+24 VDC (BULK)
WHT
ORN
RED
BRN
RED
BLU
GRN
YEL
DEVELOPER
BTR
DETACK
J1
J4
J5
J6
J7
P4
P6
P7
TP DEV V
DEVELOPER VOLTAGE MONITOR
TP CLEAN V
BTR VOLTAGE MONITOR
TXFER 1
BTR CURRENT MONITOR
DETACK V
DETACK CURRENT MONITOR
DETACK 1
DETACK CURRENT MONITOR
GND
DEVELOPER BIAS VOLTAGE (V BIAS)
BTR VOLTAGE
DETACK VOLTAGE
GROUND STRAP
ELECTROMETER ANALOG SIGNAL
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
DC COM
+24 VDC (BULK)
DC COM
MAIN PWB (A3) J618 - 4
MAIN PWB (A3) J618 - 3
MAIN PWB (A3) J614- 2
MAIN PWB (A3) J614 -1
1.2
1.2
1.2
1.2

9.8 COROTRON AND DEVELOPER BIAS POWER (2 OF 2)





XEROGRAPHIC SET-UP AND DIAGNOSTIC CODES

[0904] **XEROGRAPHIC AUTOMATIC SET UP PROGRAM**: RUN WHEN PERFORMING (ADJ 9.2). USES ELECTROMETER ANALOG SIGNAL TO:
SET-UP (V HIGH) BY REGULATING SCOROTRON GRID VOLTAGE.

SET-UP (V LOW) BY REGULATING IMAGE BAR LED DUTY CYCLE.
SET-UP (V BIAS) BY REGULATING DEVELOPER MODULE MAG ROLL VOLTAGE.

[0921-1] **BTR AND DETACK VOLTAGE**: OUTPUT

(9)

HIGH VOLTAGE POWER SUPPLY (HVPS) CHECKS				
COM METER LEAD	V- OHM METER LEAD	STANDBY VOLTAGE	PRINTING VOLTAGE	DIAGNOSTIC CODE
24 V RET (J7)	DEV V	>0.05 VDC	-2.50+/- 0.05 VDC	[0921-2]
	TXFER 1	>0.05 VDC	0.61+/- 0.05 VDC	[0921-1]
	DETACK 1	>0.05 VDC	0.80 +/- 0.1 VAC	[0921-1]
	CLEAN	>0.05 VDC	1.85 +/- 0.05 VDC	[0921-2]
	DETACK V	>0.05 VDC	-3.4 +/- 0.3 VDC	[0921-1]
IF THE VOLTAGE IS PRESENT BUT FLUCTUATING, CHECK FOR AND OPEN OR SHORT IN COMPONENT CIRCUIT. IF OKAY, REPLACE HVPS.				

NOTES:

(1) ELECTROMETER ANALOG SIGNAL IS USED BY PROCESS CONTROL SYSTEM TO AUTOMATICALLY ADJUST DEVELOPER BIAS VOLTAGE (V BIAS) AT 10K FOOT (3K M) INTERVALS AND BY [0904] WHEN PERFORMING ADJ 9.2.
BIAS VOLTAGE (V BIAS): (APPROXIMATELY - 260 VDC)

(2) BTR AND DETACK VOLTAGES ARE FACTORY SET AND ARE NOT ADJUSTABLE.
BTR VOLTAGE: REFER TO NOTE 6.
DETACK VOLTAGE: (12000 VAC) WITH (-100 TO -500 VDC) OFFSET.

(3) BTR/ DETACK COROTRON FAULT SIGNAL IS ACTIVATED BY BTR OR DETACK COROTRON OUTPUT POWER FAULTS. FAULTS ARE CAUSED BY A SHORT CIRCUIT; OR AN OUT OF SPECIFICATION VOLTAGE OR CURRENT.

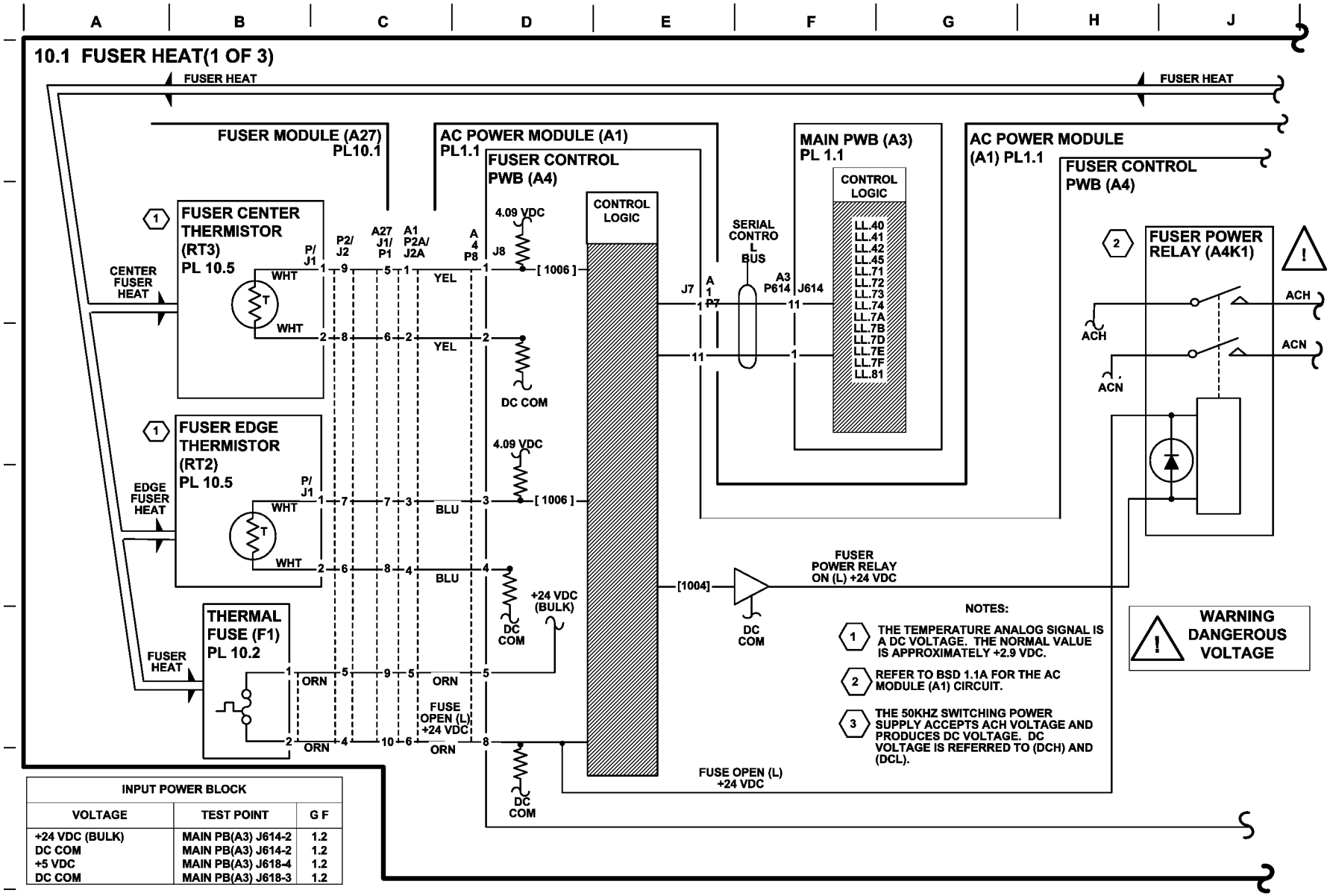
(4) DEVELOPER BIAS FAULT SIGNAL IS ACTIVATED BY DEVELOPER BIAS OUTPUT POWER FAULTS. FAULTS ARE CAUSED BY A SHORT CIRCUIT; OR AN OUT OF SPECIFICATION VOLTAGE.

(5) DEVELOPER BIAS ANALOG SIGNAL: (+1.0 TO +6.5 VDC). CONTROLS DEVELOPER BIAS VOLTAGE OUTPUT AT J4.

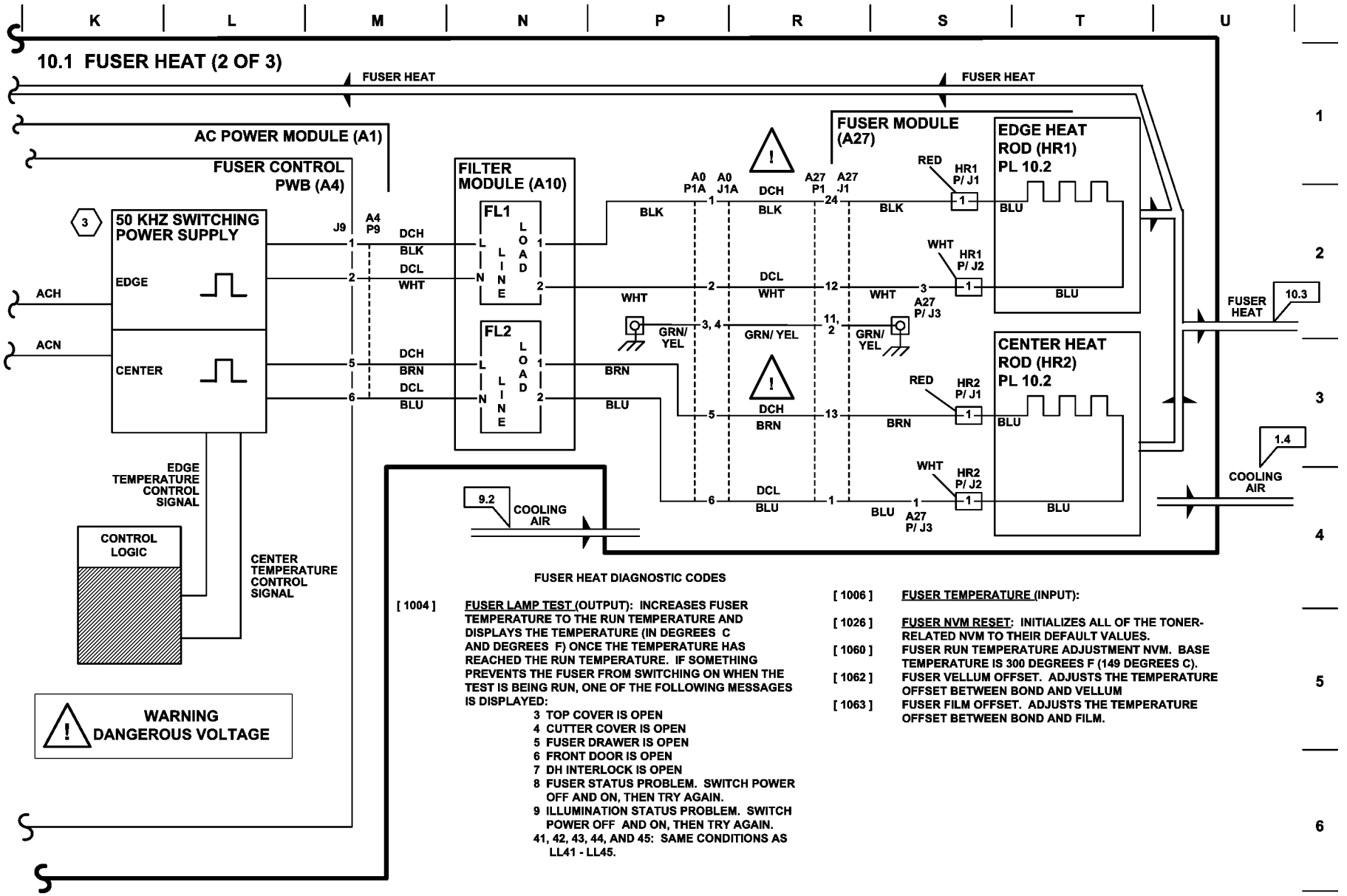
(6) BTR TRANSFER/ CLEAN VOLTAGE ON SIGNAL CONTROLS BTR VOLTAGE OUTPUT AT J5.
WITH SIGNAL (L) TRANSFER VOLTAGE IS SUPPLIED TO BTR: (+200 TO +3600 VDC).
WITH SIGNAL (H) CLEANING VOLTAGE IS SUPPLIED TO BTR: (-1000 TO -1400 VDC).

(7) BTR BIAS ANALOG SIGNAL: (+1.0 TO +4.0 VDC). CONTROLS BTR TRANSFER VOLTAGE OUTPUT AT J5.

(8) GO TO GP1 HVPS (PS1) CHECKOUT PROCEDURE LOCATED IN SECTION 6 TO TROUBLESHOOT THE HVPS (PS1).



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK)	MAIN PB(A3) J614-2	1.2
DC COM	MAIN PB(A3) J614-2	1.2
+5 VDC	MAIN PB(A3) J618-4	1.2
DC COM	MAIN PB(A3) J618-3	1.2



FUSER HEAT DIAGNOSTIC CODES

[1004] FUSER LAMP TEST (OUTPUT): INCREASES FUSER TEMPERATURE TO THE RUN TEMPERATURE AND DISPLAYS THE TEMPERATURE (IN DEGREES C AND DEGREES F) ONCE THE TEMPERATURE HAS REACHED THE RUN TEMPERATURE. IF SOMETHING PREVENTS THE FUSER FROM SWITCHING ON WHEN THE TEST IS BEING RUN, ONE OF THE FOLLOWING MESSAGES IS DISPLAYED:

- 3 TOP COVER IS OPEN
- 4 CUTTER COVER IS OPEN
- 5 FUSER DRAWER IS OPEN
- 6 FRONT DOOR IS OPEN
- 7 DH INTERLOCK IS OPEN
- 8 FUSER STATUS PROBLEM. SWITCH POWER OFF AND ON, THEN TRY AGAIN.
- 9 ILLUMINATION STATUS PROBLEM. SWITCH POWER OFF AND ON, THEN TRY AGAIN.
- 41, 42, 43, 44, AND 45: SAME CONDITIONS AS LL41 - LL45.

[1006] FUSER TEMPERATURE (INPUT):

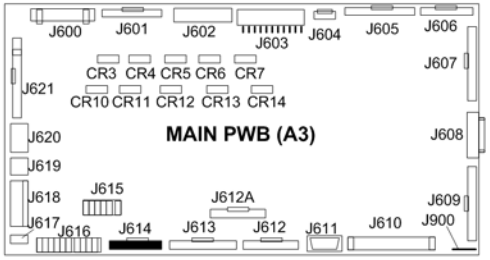
[1026] FUSER NVM RESET: INITIALIZES ALL OF THE TONER-RELATED NVM TO THEIR DEFAULT VALUES.

[1060] FUSER RUN TEMPERATURE ADJUSTMENT NVM. BASE TEMPERATURE IS 300 DEGREES F (149 DEGREES C).

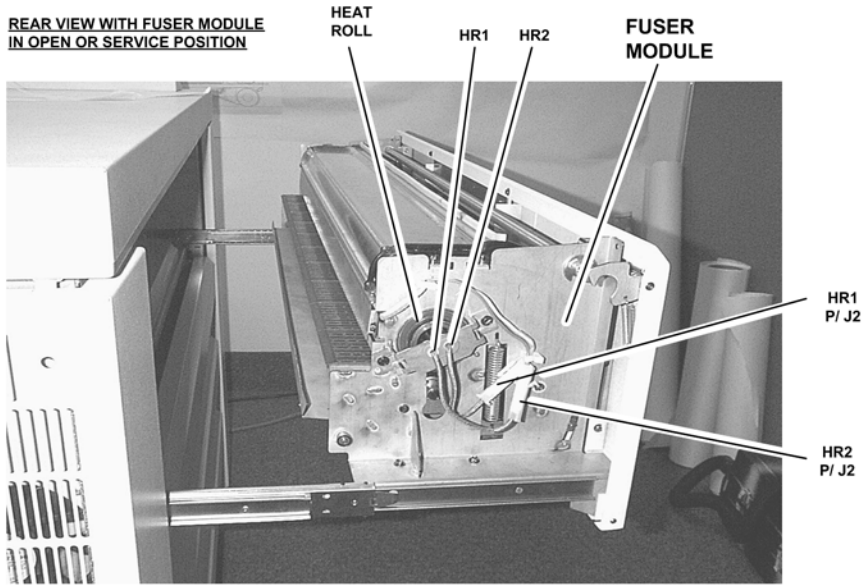
[1062] FUSER VELLUM OFFSET. ADJUSTS THE TEMPERATURE OFFSET BETWEEN BOND AND VELLUM

[1063] FUSER FILM OFFSET. ADJUSTS THE TEMPERATURE OFFSET BETWEEN BOND AND FILM.

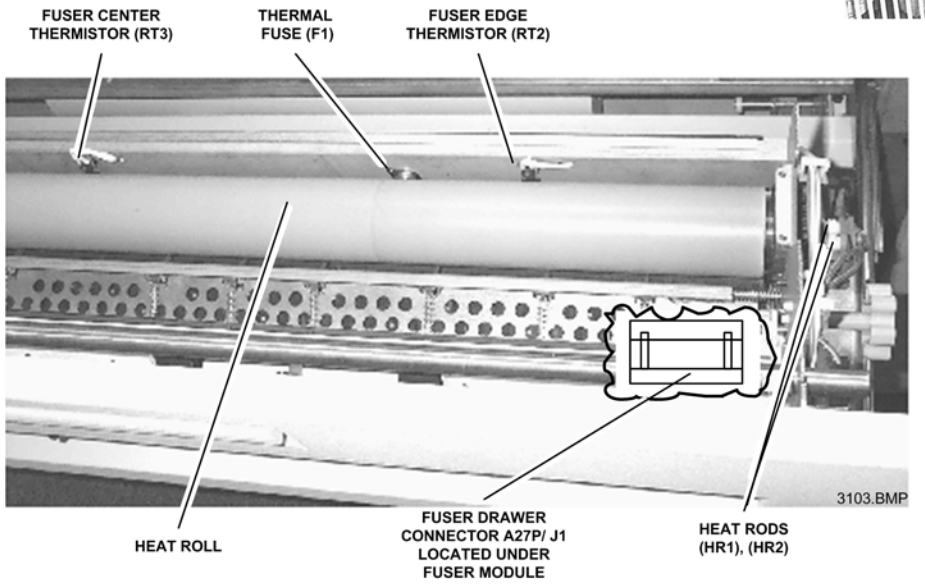
10.1 FUSER HEAT (3 OF 3)

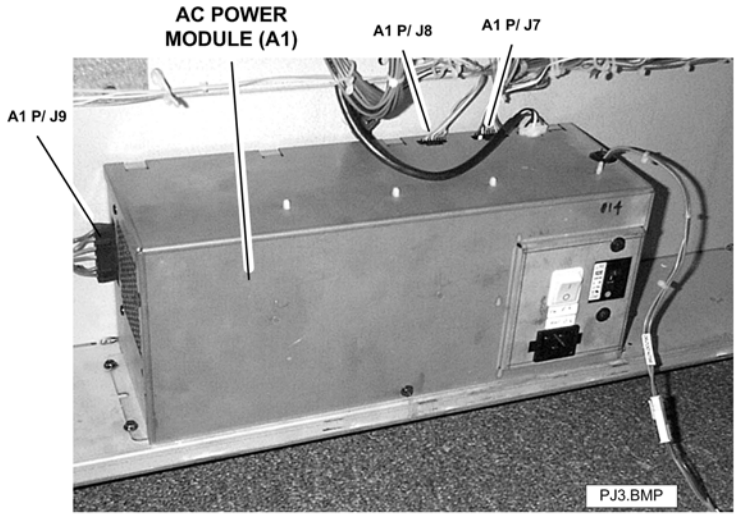


REAR VIEW WITH FUSER MODULE IN OPEN OR SERVICE POSITION

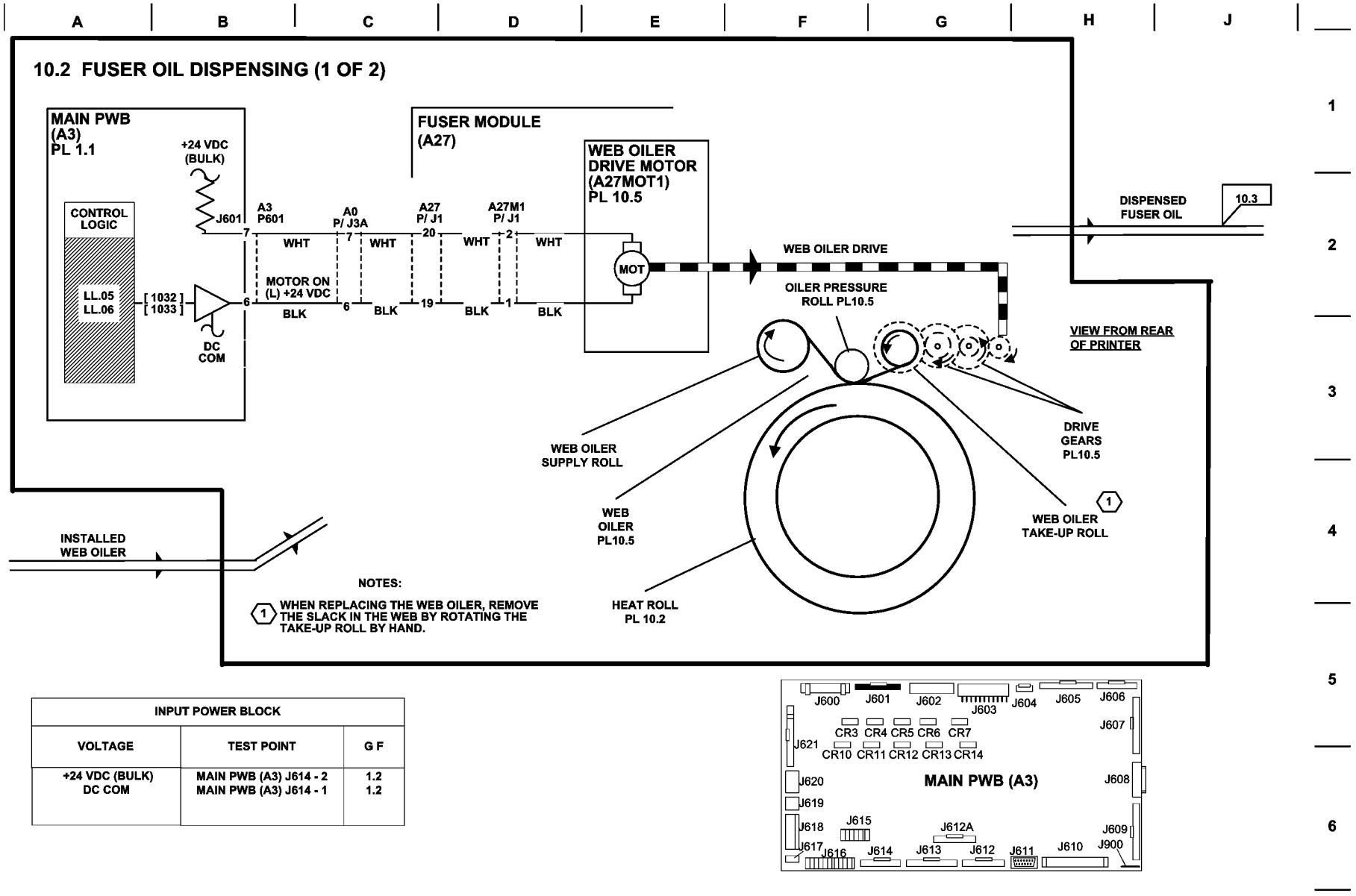


TOP VIEW OF FUSER MODULE WITH WEB OILER REMOVED



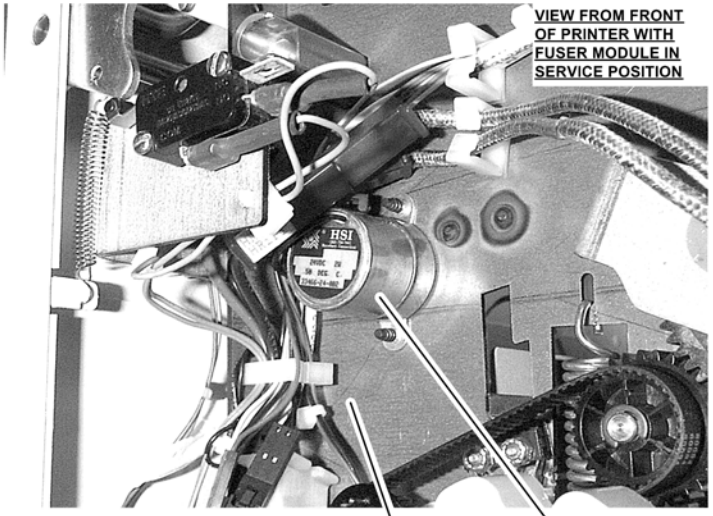


BSD 10.2 Fuser Oil Dispensing

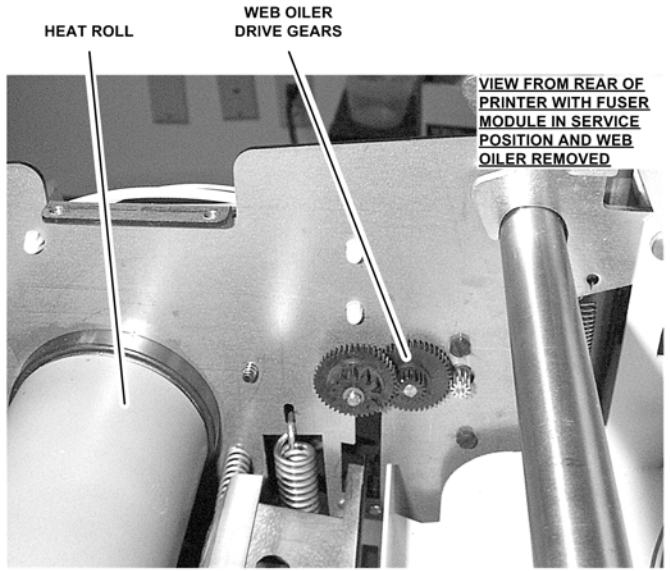


INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+24 VDC (BULK) DC COM	MAIN PWB (A3) J614 - 2 MAIN PWB (A3) J614 - 1	1.2 1.2

10.2 FUSER OIL DISPENSING (2 OF 2)



00341.BMP



00342.BMP

FUSER OIL DISPENSING DIAGNOSTIC CODES

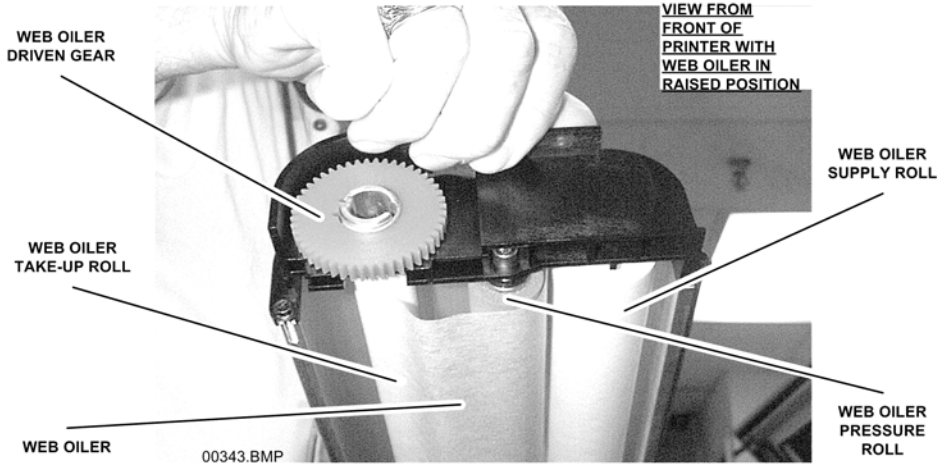
[1030] **RESET FUSER OIL DISPENSING TO ZERO:** THIS DIAGNOSTIC SETS THE WEB COUNTER TO ZERO AND SHOULD ONLY BE USED AS PART OF PROCEDURE TO INSTALL A NEW OIL WEB.

[1031] **SPECIFY OIL WEB POSITION:** THIS DIAGNOSTIC RESETS WEB COUNTER AFTER NVM HAS BEEN CORRUPTED OR WHEN A PARTIALLY USED WEB IS INSTALLED.

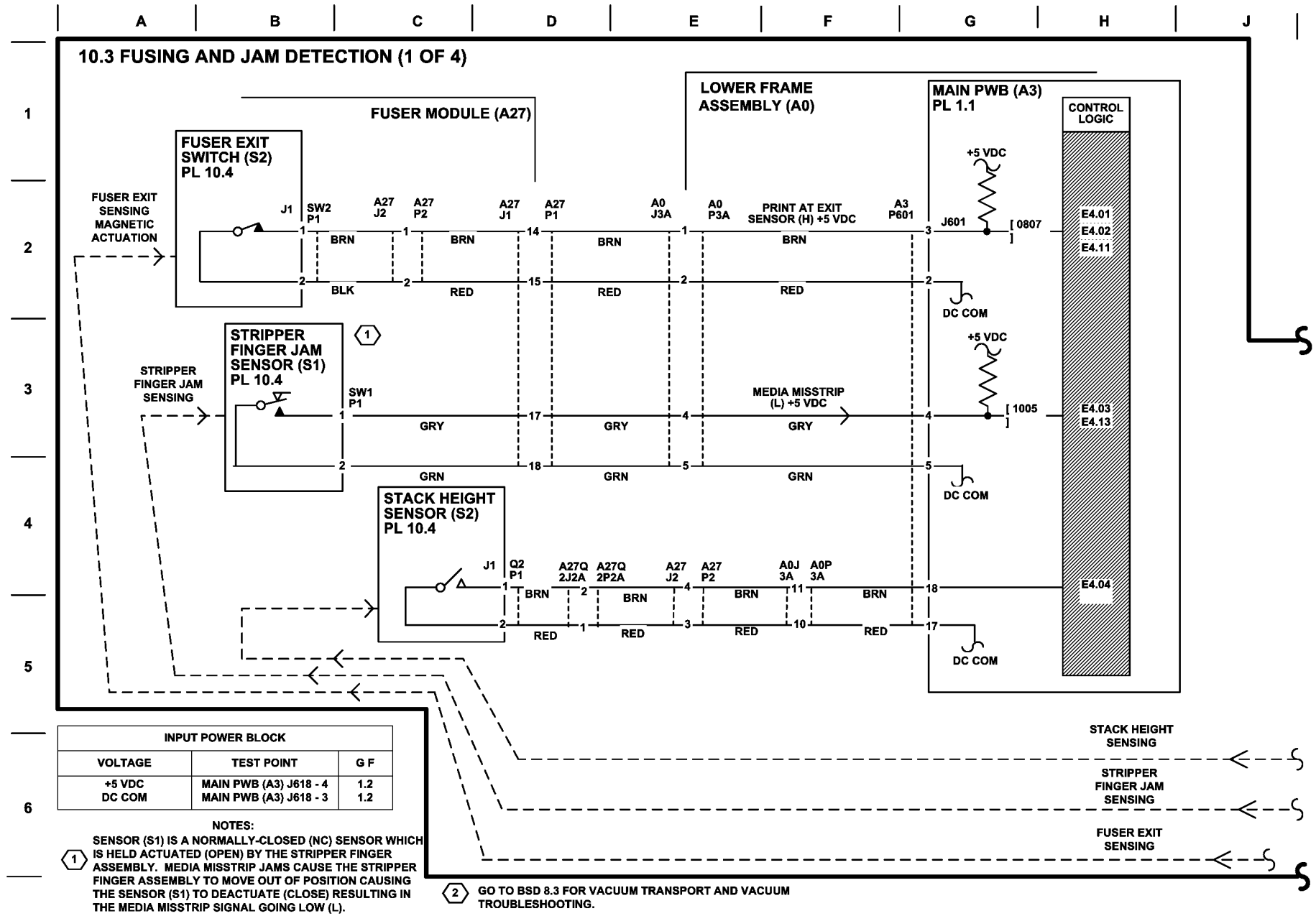
[1032] **ADJUST OIL WEB RATE:** ALLOWS FOR WEB DISPENSE RATE TO BE ADJUSTED FROM 50% TO 200% OF NOMINAL VALUE. ADJUSTMENT IS MADE IN INCREMENTS OF 10% AND DISPLAYED AS A VALUE FROM 50 TO 200 WITH 100 BEING NOMINAL (100%).

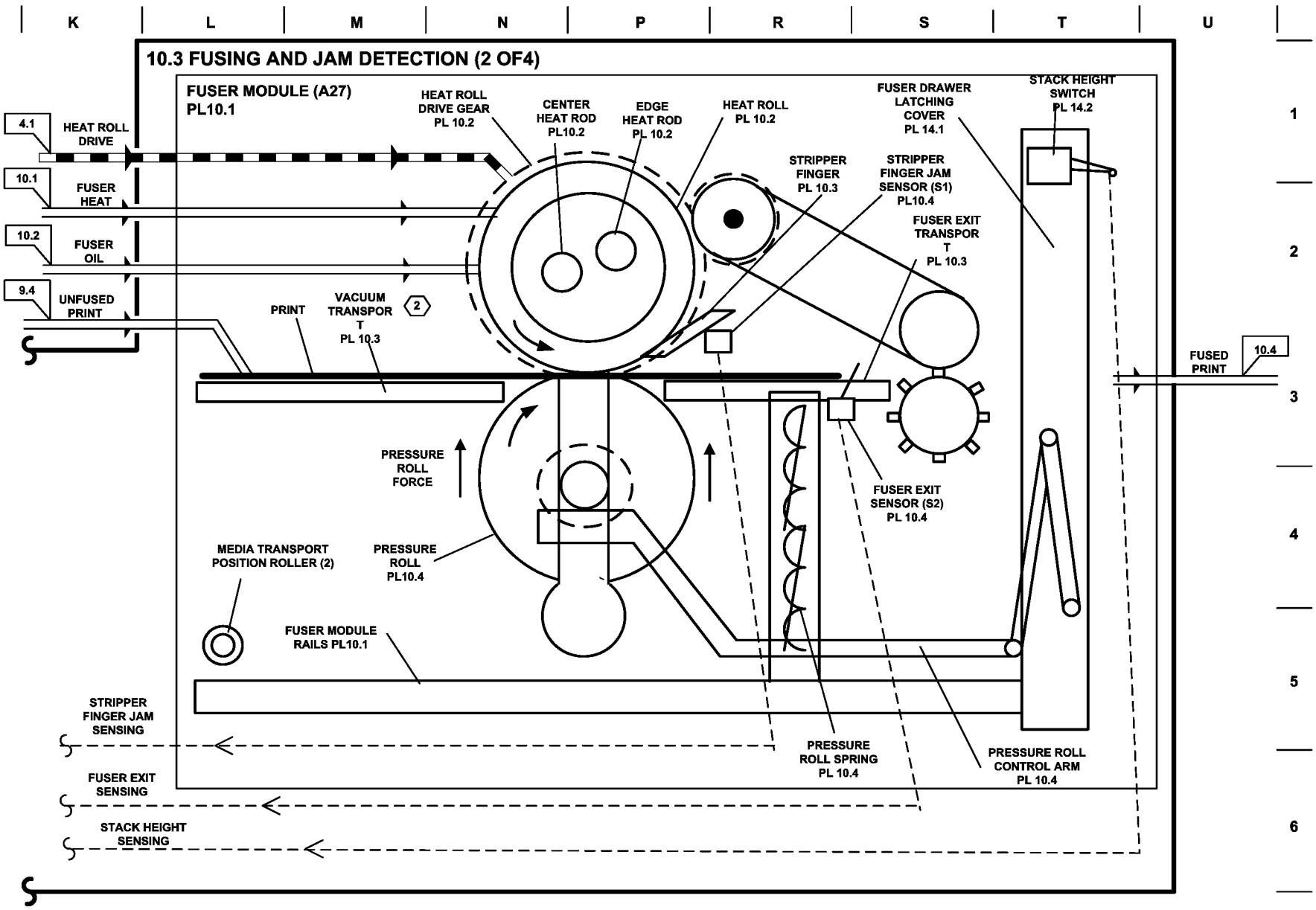
[1033] **ADVANCE THE OIL WEB:** THIS DIAGNOSTIC ADVANCES THE OIL WEB AT A FAST RATE UNTIL [EXIT] IS PRESSED. THIS IS USEFUL FOR TAKING UP ANY SLACK IN A WEB AND FOR VERIFYING THE OPERATION OF THE WEB DRIVE SYSTEM.

[1034] **REMAINING OIL WEB LIFE:** DISPLAYS AN ESTIMATE OF THE NUMBER OF FEET (OR METERS) OF 36-INCH WIDE PRINTS THAT CAN BE MADE WITH THE CURRENT WEB.



00343.BMP


10.3 FUSING AND JAM DETECTION (1 OF 4)
FUSER MODULE (A27)
LOWER FRAME ASSEMBLY (A0)
MAIN PWB (A3) PL 1.1
CONTROL LOGIC
FUSER EXIT SWITCH (S2) PL 10.4
FUSER EXIT SENSING MAGNETIC ACTUATION
PRINT AT EXIT SENSOR (H) +5 VDC
+5 VDC
DC COM
STRIPPER FINGER JAM SENSOR (S1) PL 10.4
STRIPPER FINGER JAM SENSING
MEDIA MISSTRIP (L) +5 VDC
STACK HEIGHT SENSOR (S2) PL 10.4
STACK HEIGHT SENSING
STRIPPER FINGER JAM SENSING
FUSER EXIT SENSING
INPUT POWER BLOCK
VOLTAGE
TEST POINT
G F
+5 VDC
MAIN PWB (A3) J618 - 4
1.2
DC COM
MAIN PWB (A3) J618 - 3
1.2
NOTES:
1 SENSOR (S1) IS A NORMALLY-CLOSED (NC) SENSOR WHICH IS HELD ACTUATED (OPEN) BY THE STRIPPER FINGER ASSEMBLY. MEDIA MISSTRIP JAMS CAUSE THE STRIPPER FINGER ASSEMBLY TO MOVE OUT OF POSITION CAUSING THE SENSOR (S1) TO DEACTUATE (CLOSE) RESULTING IN THE MEDIA MISSTRIP SIGNAL GOING LOW (L).
2 GO TO BSD 8.3 FOR VACUUM TRANSPORT AND VACUUM TROUBLESHOOTING.


K
L
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1
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3
4
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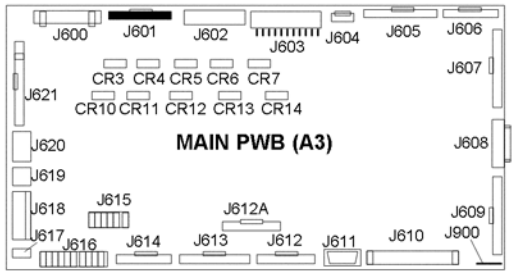
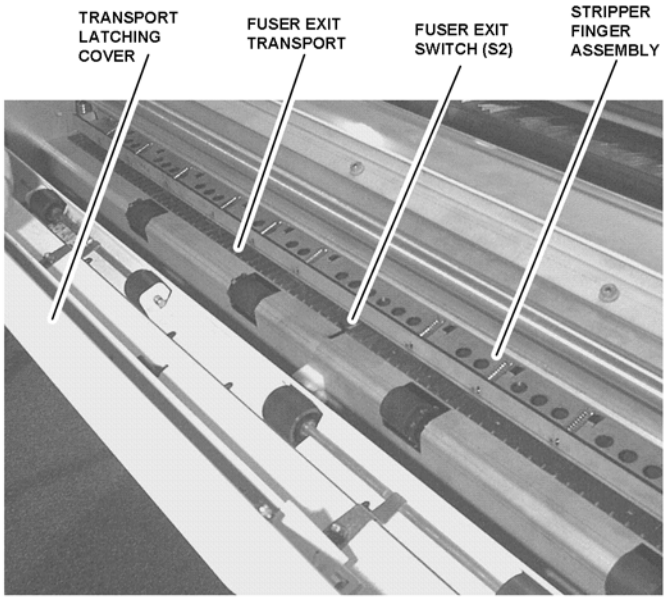
6
10.3 FUSING AND JAM DETECTION (2 OF4)
FUSER MODULE (A27)
PL10.1
4.1
HEAT ROLL DRIVE
10.1
FUSER HEAT
10.2
FUSER OIL
9.4
UNFUSED PRINT
HEAT ROLL DRIVE GEAR PL 10.2
CENTER HEAT ROD PL10.2
EDGE HEAT ROD PL 10.2
HEAT ROLL PL 10.2
FUSER DRAWER LATCHING COVER PL 14.1
STACK HEIGHT SWITCH PL 14.2
STRIPPER FINGER PL 10.3
STRIPPER FINGER JAM SENSOR (S1) PL10.4
FUSER EXIT TRANSPORT PL 10.3
PRINT
VACUUM TRANSPORT PL 10.3
2
FUSED PRINT
10.4
PRESSURE ROLL FORCE
FUSER EXIT SENSOR (S2) PL 10.4
MEDIA TRANSPORT POSITION ROLLER (2)
PRESSURE ROLL PL10.4
FUSER MODULE RAILS PL10.1
STRIPPER FINGER JAM SENSING
FUSER EXIT SENSING
STACK HEIGHT SENSING
PRESSURE ROLL SPRING PL 10.4
PRESSURE ROLL CONTROL ARM PL 10.4

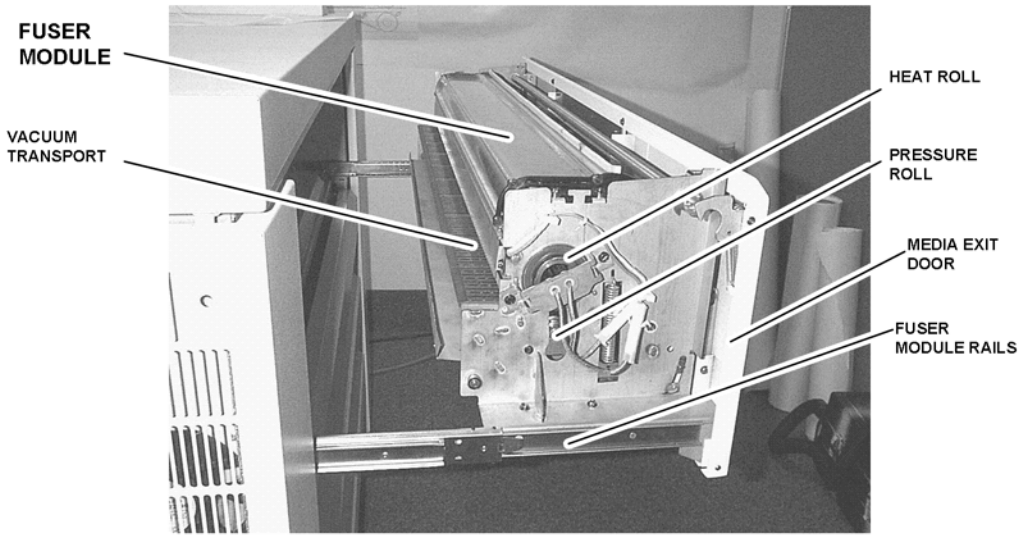
10.3 FUSING AND JAM DETECTION (3 OF 4)



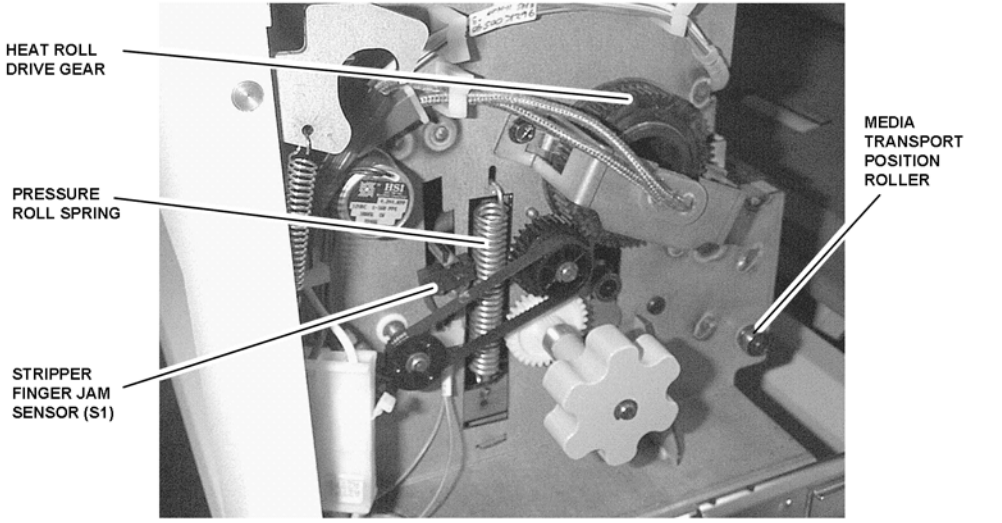
VIEW SHOWN WITH TRANSPORT LATCHING COVER IN OPEN POSITION



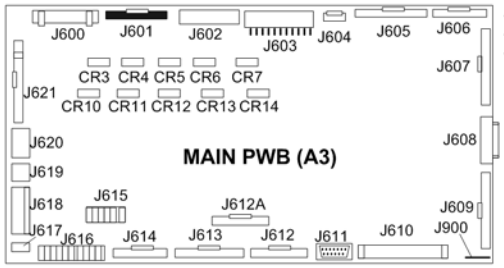
REAR VIEW WITH FUSER MODULE IN OPEN OR SERVICE POSITION



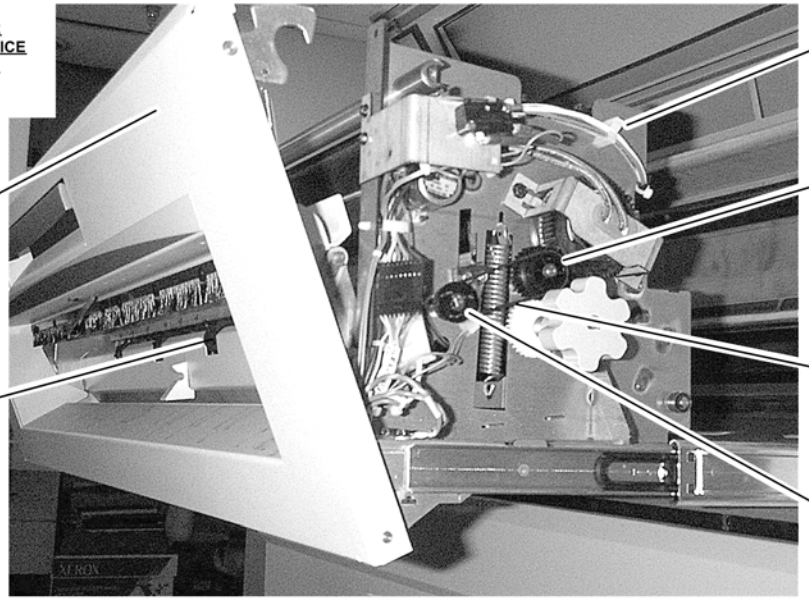
FRONT VIEW WITH FUSER MODULE IN OPEN OR SERVICE POSITION



10.3 FUSING AND JAM DETECTION (4 OF 4)

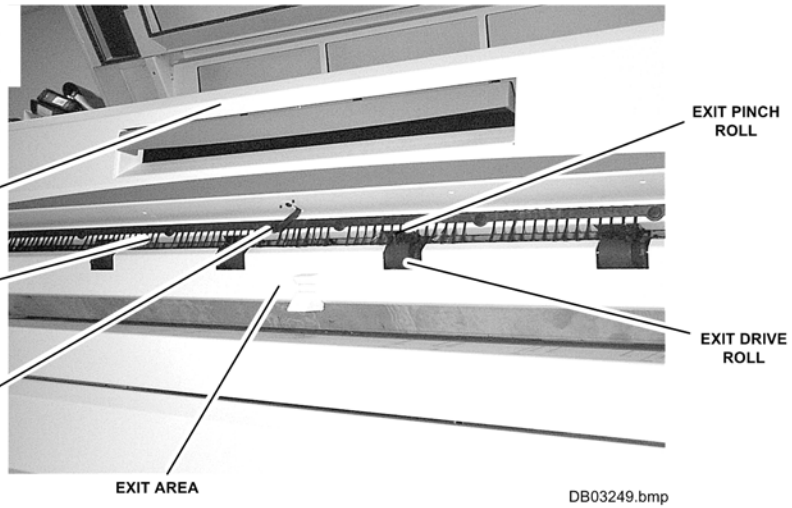


FRONT VIEW WITH FUSER MODULE SHOWN IN SERVICE POSITION AND LATCHING COVER OPEN



DB03246.bmp

LEFT SIDE VIEW



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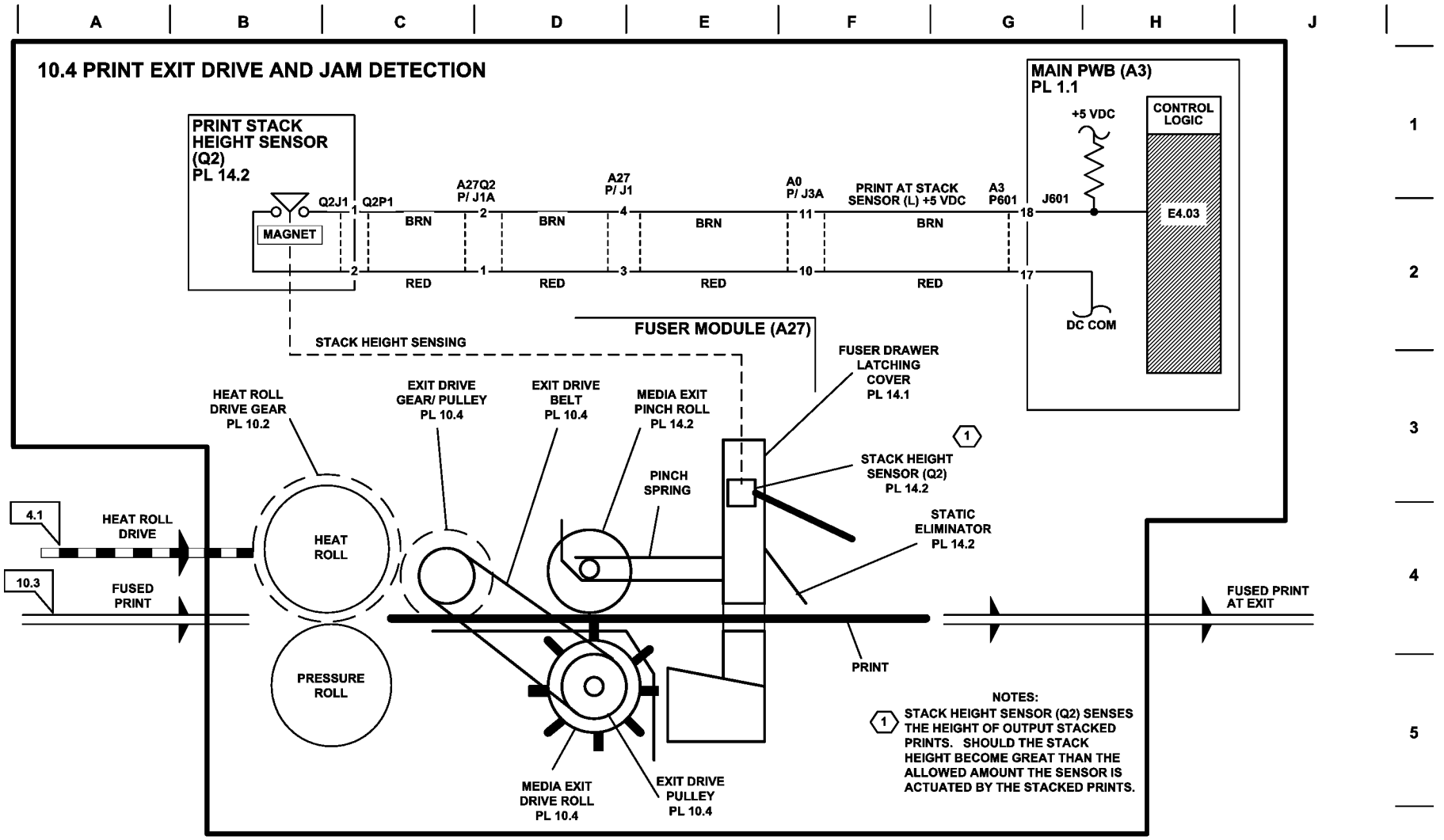
BSD 10.4 Print Exit Drive and Jam Detection



INPUT POWER BLOCK		
VOLTAGE	TEST POINT	G F
+5 VDC	MAIN PWB (A3) J618 - 4	1.2
DC COM	MAIN PWB (A3) J618 - 3	1.2

Plug/Jack List

The following list is provided as an aid in locating plugs and jacks and other components. Refer to the referenced Block Schematic Diagram (BSD) for component location.

Table 1 Plug/Jack

Plug/Jack or Component	Brief Description	BSD	Figure No.
A0P/J1A	Fuser Haarness	BSD 10.1	Figure 8
A0P/J2A	Fuser Haarness	BSD 10.1	Figure 8
A0P/J3A	Web Oiler	BSD 10.2, BSD 10.3	Figure 8
A0B1P1/J1	Vacuum Transport Fan Motor		Figure 8
A0L1P1/J1	Roll 1 Feed Clutch (L1)	BSD 7.2	Figure 6
A0L2P1/J1	Roll 1 Rewind Clutch (L2)	BSD 7.2	Figure 6
A0L3P1/J1	Roll 2 Feed Clutch (L3)	BSD 7.3	Figure 6
A0L4P1/J1	Roll 2 Rewind Clutch (L4)	BSD 7.3	Figure 6
A0L5P1/J1	Roll 3 Feed Clutch (L5)	BSD 7.4	Figure 6
A0L6P1/J1	Roll 3 Rewind Clutch (L5)	BSD 7.4	Figure 6
A0Q1P1J1	Roll 1 Paper Position Sensor (Q1)	BSD 7.2	Figure 5
A0Q2P1/J1	Roll 2 Paper Position Sensor (Q2)	BSD 7.3	Figure 5
A0Q3P1/J1	Roll 3 Paper Position Sensor (Q3)	BSD 7.4	Figure 5
A0Q4P1/J1	Roll 1 Motion Sensor (Q4)	BSD 7.2	Figure 6
A0Q5P1/J1	Roll 2 Motion Sensor (Q5)	BSD 7.3	Figure 6
A0Q6P1/J1	Roll 3 Motion Sensor (Q6)	BSD 7.4	Figure 6
A1	AC Module	BSD 1.1	Figure 1
A1FL1	Noise Filter	BSD 1.1	Figure 2
A1GFP1	Ground Fault Protector	BSD 1.1	Figure 2
A1J1	AC Power Module	BSD 1.1	Figure 3
A1J2	AC Power Module	BSD 1.1	Figure 3
A1P3/J3	AC Power Module	BSD 10.1	Figure 1
A1P5/J5	Controller Power Cord	BSD 1.1	Figure 1
A1P7/J7	AC Power Module	BSD 1.1 BSD 1.2	Figure 1
A1P8/J8	AC Power Module	BSD 1.1	Figure 1
A1P9/J9	AC Power Module	BSD 1.1	Figure 1
A1P11/J11	AC Power Module Cooling Fan	BSD 1.1	Figure 3
A1S1	Main Power Switch	BSD 1.1	Figure 1, Figure 2
A3P600/J600	Main PWB to Control Panel	BSD 2.1	Figure 4
A3P601/J601	Main PWB	BSD 2.1	Figure 4

Table 1 Plug/Jack

A3P602/J602	Main PWB to Finishing Device		Figure 4
A3P603/J603	Main PWB to NOHAD Fans, Developer Cover Interlock, and Media Drawer Switches	BSD 9.7	Figure 4
A3P604/J604	Main PWB to Erase Bar		Figure 4
A3P605/J605	Main PWB to High Voltage Power Supply	BSD 4.1	Figure 4
A3P606/J606	Main PWB to Developer Module	BSD 10.1	Figure 4
A3P607/J607	Main PWB to Media Registration Sensor	BSD 6.1	Figure 4
A3P608/J308	Main PWB to LED Bar	BSD 3.1	Figure 4
A3P609/J609	Main PWB to Roll Feed Sensors (Q1 - Q3) and Motion Sensors (Q4 - Q6)	BSD 7.2 BSD 7.3 BSD 7.4	Figure 4
A3P610/J610	Main PWB to P193 Interface	BSD 3.1	Figure 4
A3P611/J611	Main PWB to RS 232 Interface		Figure 4
A3P612/J612	Main PWB to Roll Feed (L1, L3, L5) and Rewind (L2, L4, L6) Clutches	BSD 7.2 BSD 7.3 BSD 7.4	Figure 4
A3P612A/J612A	Main PWB to Lower Transport and Prefeed Sensor		Figure 4
A3P613/J613	Main PWB to Media Transport Drive and Media Roll Feed Drive	BSD 3.1	Figure 4
A3P614/J614	Main PWB	BBSD 1.2	Figure 4
A3P615/J615	Main PWB to Paper Heater	BSD 7.2 BSD 7.4	Figure 4
A3P616/J616	Main PWB to Cutter Assembly	BSD 7.5	Figure 4
A3P617/J617	Main PWB from Low Voltage Power Supply	BSD 1.2	Figure 4
A3P618/J618	Main PWB from Low Voltage Power Supply	BSD 1.2	Figure 4
A3P619/J619	Main PWB to LED Bar	BSD 6.1	Figure 4
A3P619A/J619A	Main PWB to LED Bar	BSD 6.1	Figure 5
A3P620/J620	Main PWB to Fuser and Developer Drive Motors	BSD 4.2	Figure 4
A3P621/J621	Main PWB to Drum Drive Motor, Front Door Interlock Switch, and Vacuum Transport Vacuum Fan	BSD 4.3 BSD 1.3 BSD 8.3	Figure 4
A3P622/J622	Main PWB to Print Count Meter		Figure 4
A3J900	Main PWB to Ground		Figure 4
A5P1/J1	LVPS	BSD 1.2	Figure 5
A7P1/J1	Media Drive Motor PWB	BSD 7.1	Figure 6
A7P2/J2	Media Drive Motor PWB	BSD 7.1	Figure 6

Table 1 Plug/Jack

A8M1P1/J1	Cutter Drive Motor	BSD 7.5	Figure 7
A8Q1P1/J1	Cutter Home Sensor	BSD 7.5	Figure 7
A9P1/J1	Sheet Feed Drive Motor PWB	BSD 8.1	Figure 6
A9P2/J2	Sheet Feed Drive Motor PWB	BSD 8.1	Figure 6
A20M1P1/J1	Fuser Roll Drive Motor	BSD 4.1	Figure 8
A20M2P1/J1	Developer Drive Motor	BSD 4.2	Figure 12
A20P2J2	Electronic Volt Meter (ESV)	BSD 9.1	Figure 12
A21P1/J1	Media Transport	BSD 8.2	Figure 8
A21Q1P1/J1	Media Registration Sensor	BSD 8.1	Figure 10
A22M1P1/J1	Toner Cartridge Drive Motor	BSD 9.7	Figure 9
A22P1/J1	Developer Assembly	BSD 9.7	Figure 8
A22Q1P1/J1 A22Q1P1A/J1A	Toner Sensor	BSD 9.7	Figure 11, Figure 12
A22Q2P1/J1	Toner Cartridge Home Sensor	BSD 9.7	Figure 12
A23P1/J1	Erase Bars	BSD 9.6	Figure 14
A23M3P1/J1	Drum Drive Motor	BSD 4.3	Figure 12
A23Q2P1/J1	Drum Drive Motor Encoder	BSD 4.3	Figure 12
A24P1/J1	Media Transport Drive	BSD 8.1	Figure 6
A24P2/J2	Media Transport Drive	BSD 8.1	Figure 6
A25P1/J1	Xerographic HVPS	BSD 9.1	Figure 15
A25P2/J2 (CHARGE)	Xerographic HVPS	BSD 9.1	Figure 15
A25P3/J3 (GRID)	Xerographic HVPS	BSD 9.1	Figure 15
A25P5/J5 (BIAS TRANSFER ROll)	Xerographics HVPS	BSD 9.8	Figure 15
A25P6/J6 (DETACK)	Xerographics HVPS	BSD 9.8	Figure 15
A25P7/J7 (GROUND)	Xerographic HVPS	BSD 9.8	Figure 15
A27F1	Thermal Fuse	BSD 10.1	Figure 16
A27HR1J1/P1	Fuser Edge Heat Rod	BSD 10.1	Figure 16
A27HR2J1/P1	Fuser Center Heat Rod	BSD 10.1	Figure 17
A27M1P1/J1	Web Oiler Drive Motor	BSD 10.2	Figure 16
A27P2/J2	Stripper Fingers Jam Switch	BSD 10.3	Figure 16
A27P3/J3	Heat Rods Connector	BSD 10.1	Figure 16
A27P1/J1	Fuser Drawer Connector	BSD 10.1 BSD 10.3	Figure 18
A27Q1P1/J1	Fuser Exit Sensor	BSD 10.3	Figure 19

Table 1 Plug/Jack

A27Q2P1/J1	Stack Height Sensor	BSD 10.3	Figure 19
A27RT2P1/J1	Edge Thermistor Pad	BSD 10.1	Figure 16
A27RT3P1/J1	Center Thermistor Pad	BSD 10.1	Figure 16
A28Q1P1/J1	Sheet Feed Sensor	BSD 8.1	Figure 20
A29CN2/A30P2	LED Driver (Data)	BSD 6.1	Figure 21
A29CN3/A30J3	LED Driver (Data)	BSD 6.1	Figure 21
A29P1/CN1	LED Drive (Power)	BSD 6.1	Figure 21
A29P4/CN4	LED Driver (Power)	BSD 6.1	Figure 21
A30J3/A29CN3	LED Driver (Data)	BSD 6.1	Figure 21
A30P1/J1	Receiver PWB to Main PWB	BSD 6.1	Figure 21
A30P2/A29CN2	Receiver PWB to LED Driver PWB	BSD 6.1	Figure 21
A32P1/J1	User Interface PWB to Main PWB	BSD 2.1	Figure 22
A32P2/J2	User Interface PWB to 2x40 Display	BSD 2.1	Figure 22
MOT1-3 and -4	Cooling Fan Motor	BSD 1.4	
MOT2-1 and -2	Cooling Fan Motor	BSD 1.4	
S1	Cutter Cover Interlock Switch	BSD 1.3	
S1	Drawer 1 Reed Switch	BSD 7.1	
S2	Drawer 2 Reed Switch	BSD 7.1	
S3	Drawer 3 Reed Switch	BSD 7.1	
S21	Front Door Interlock Switch	BSD 1.3	Figure 8
S26	Top Cover Interlock Switch	BSD 1.3	Figure 1, Figure 2

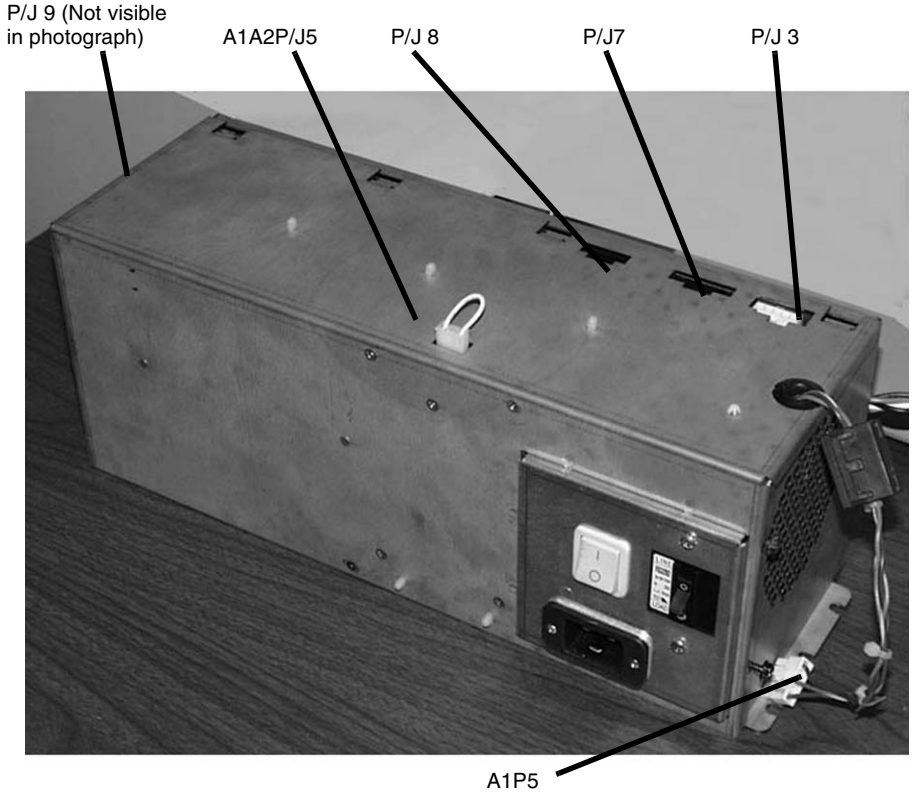


Figure 1 AC Module (A1)

AC Power Module (A1) Interior (1 of 2)

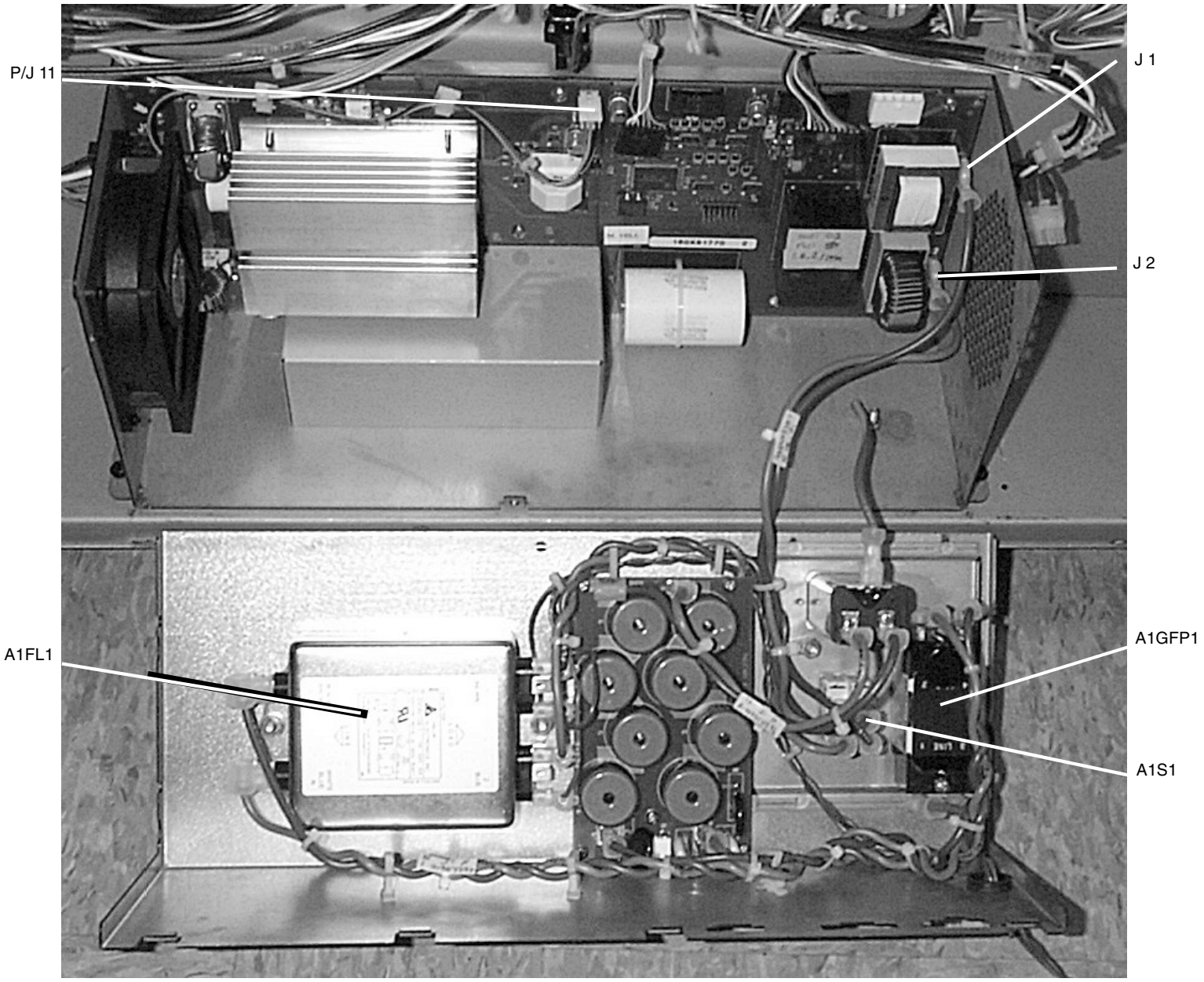


Figure 2 AC Module Interior

AC Power Module (A1) Interior (2 of 2)

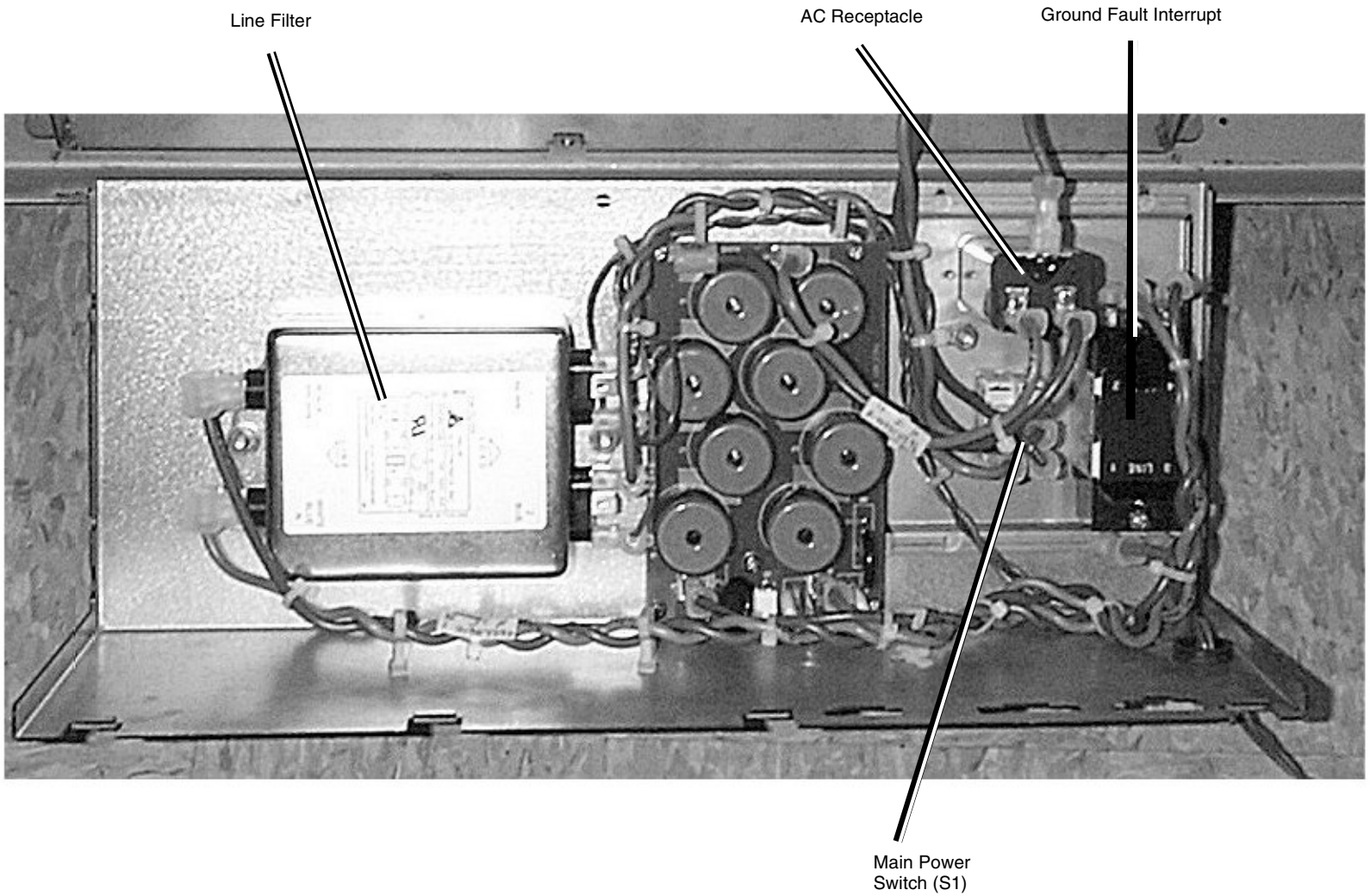


Figure 3 AC Power Module (A1)

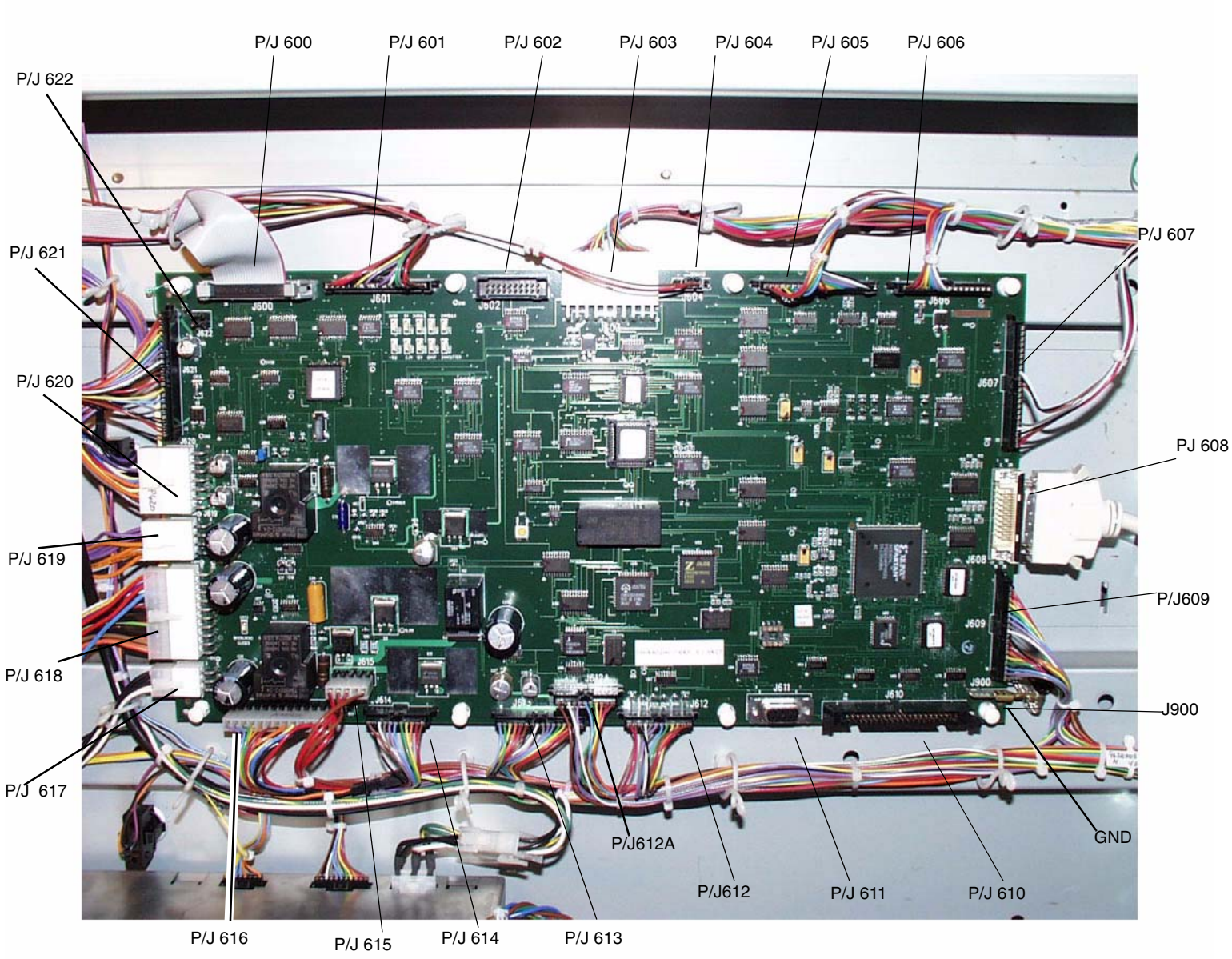


Figure 4 Main PWB Connectors (A3)j

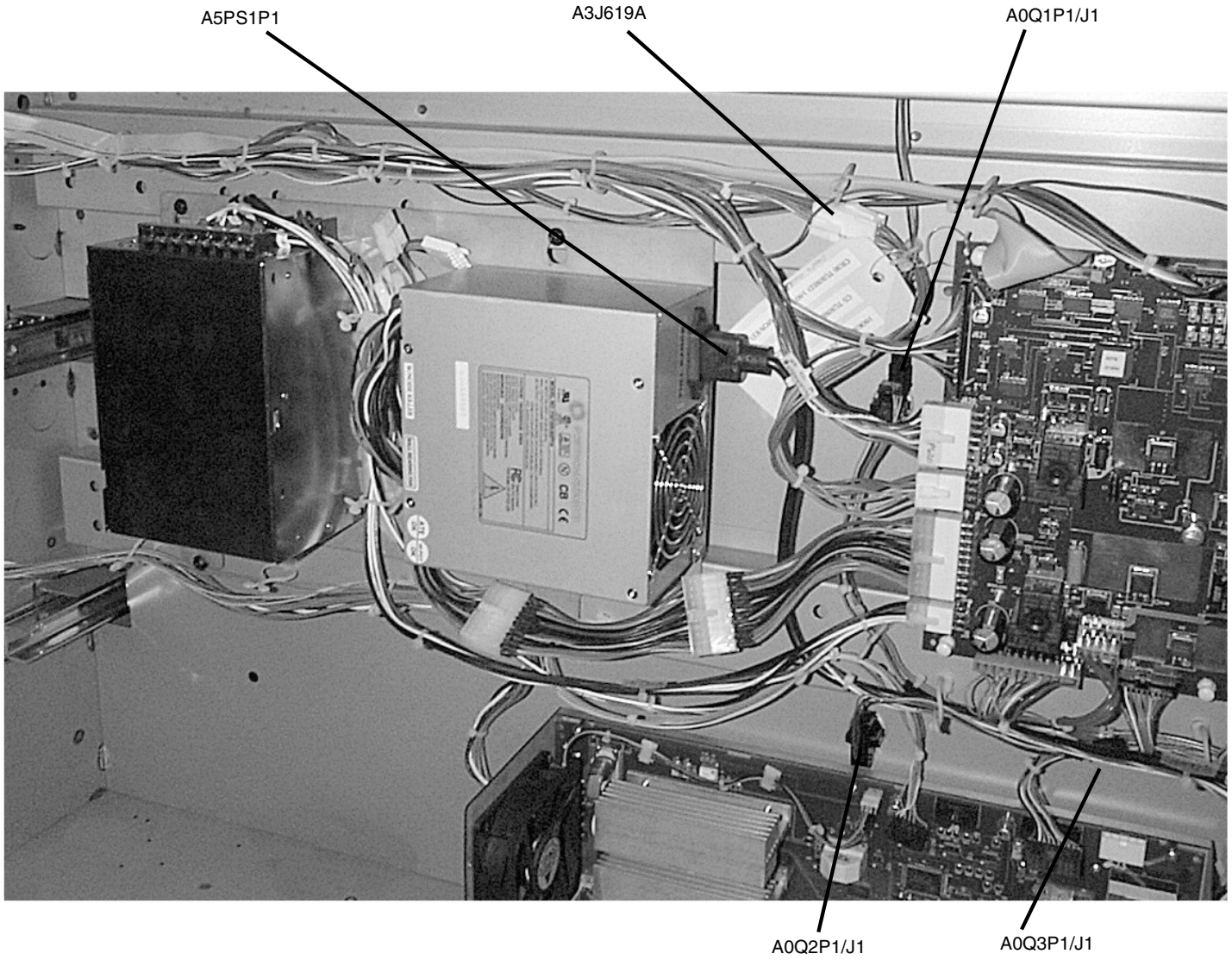


Figure 5 LVPS and Roll Feed Sensors

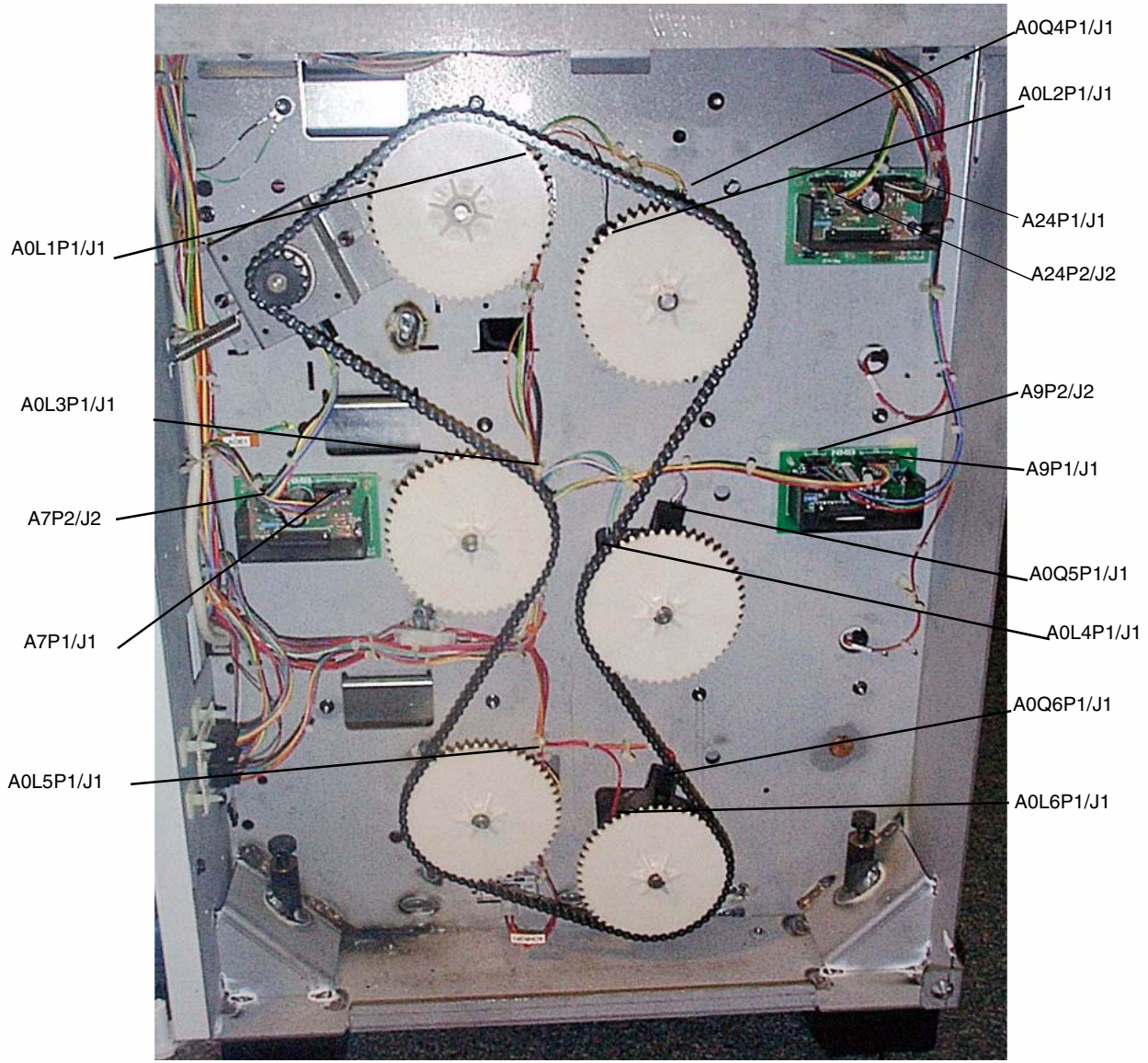


Figure 6 Rear Lower Frame Assembly Media Roll Drives

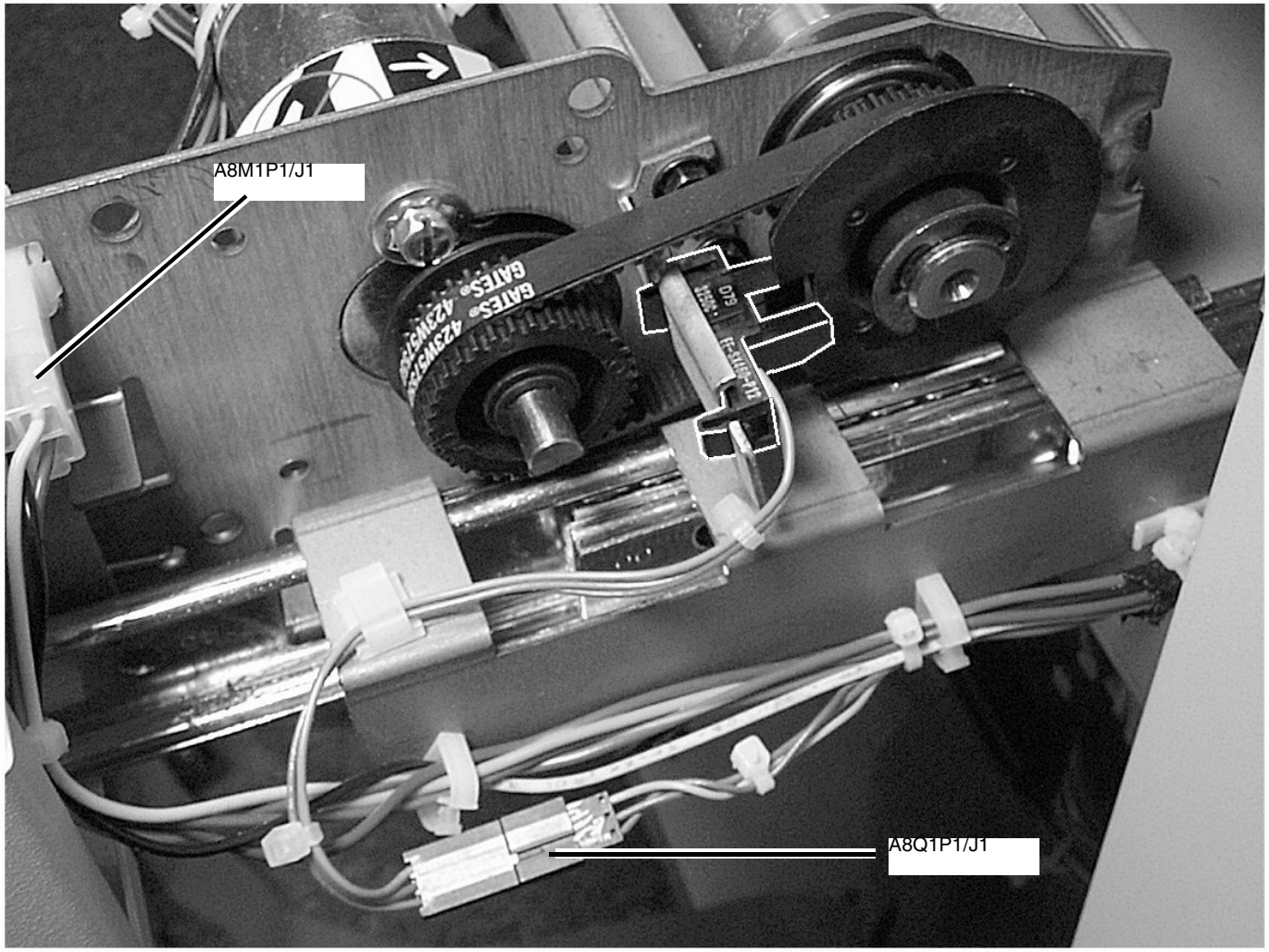


Figure 7 Cutter Motor (A8)

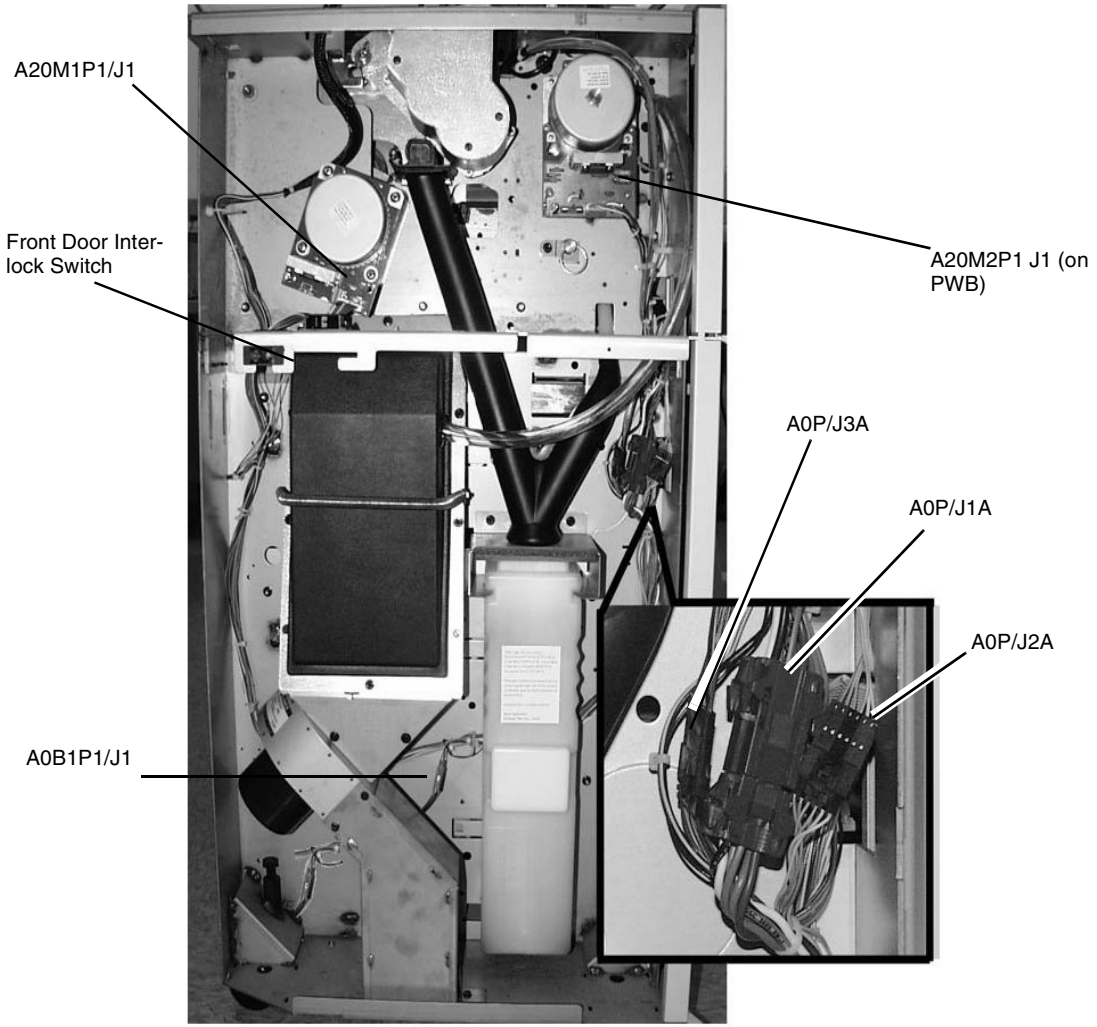


Figure 8 Fuser/Developer Drives and Vacuum Transport Fan

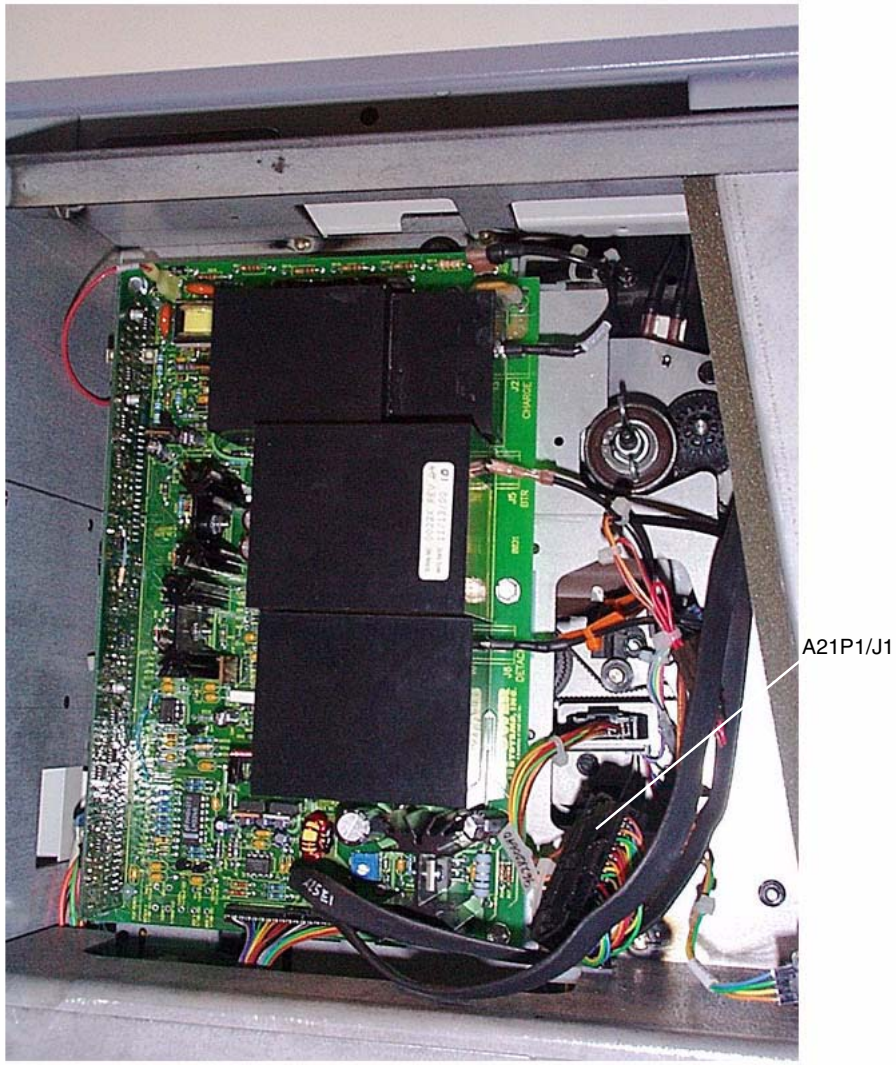


Figure 9 Media Transport

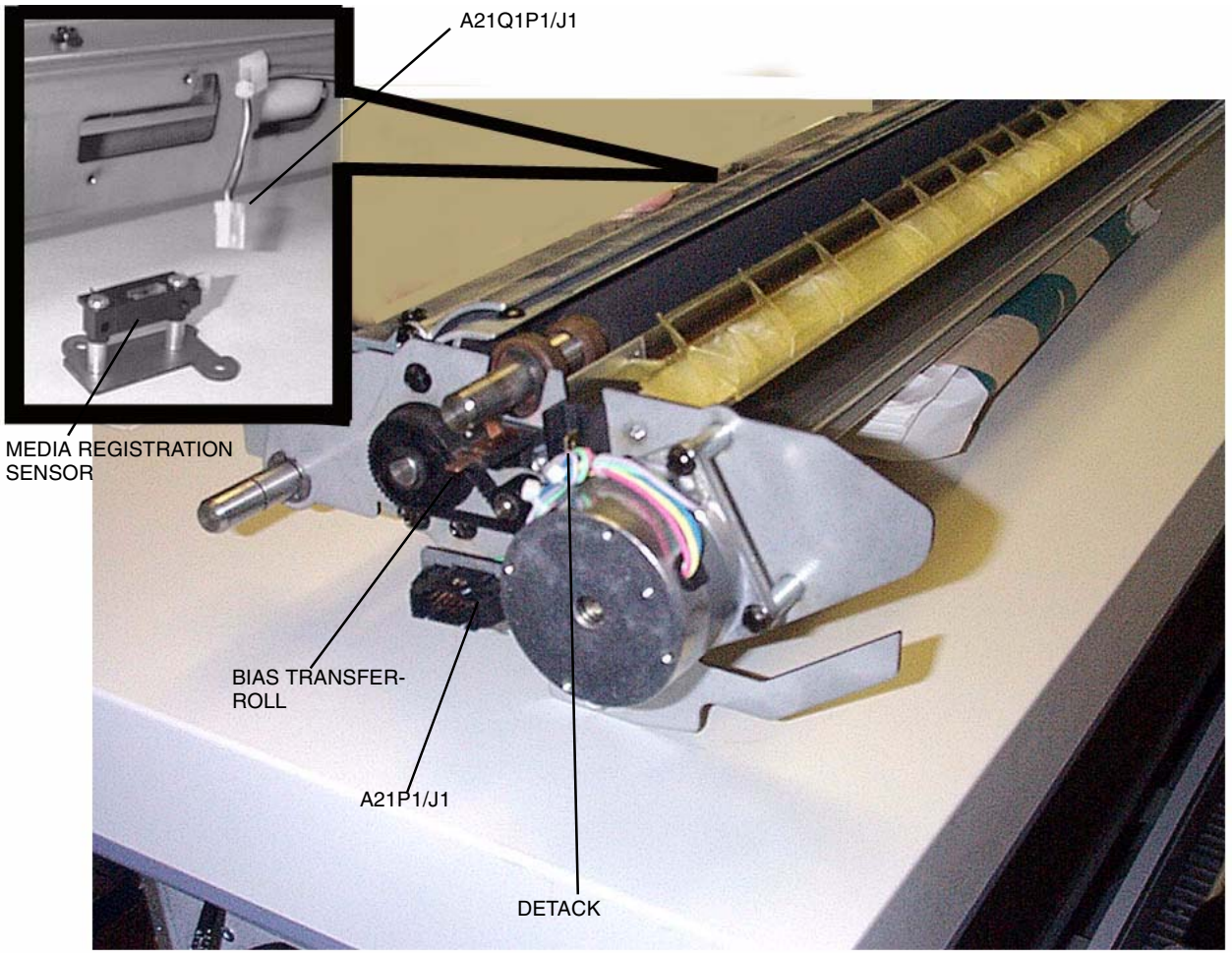


Figure 10 Media Transport

Developer Module (A22)

NOTE: *A22Q1 and Q2 connectors are shown out of the harness channel for clarity.*

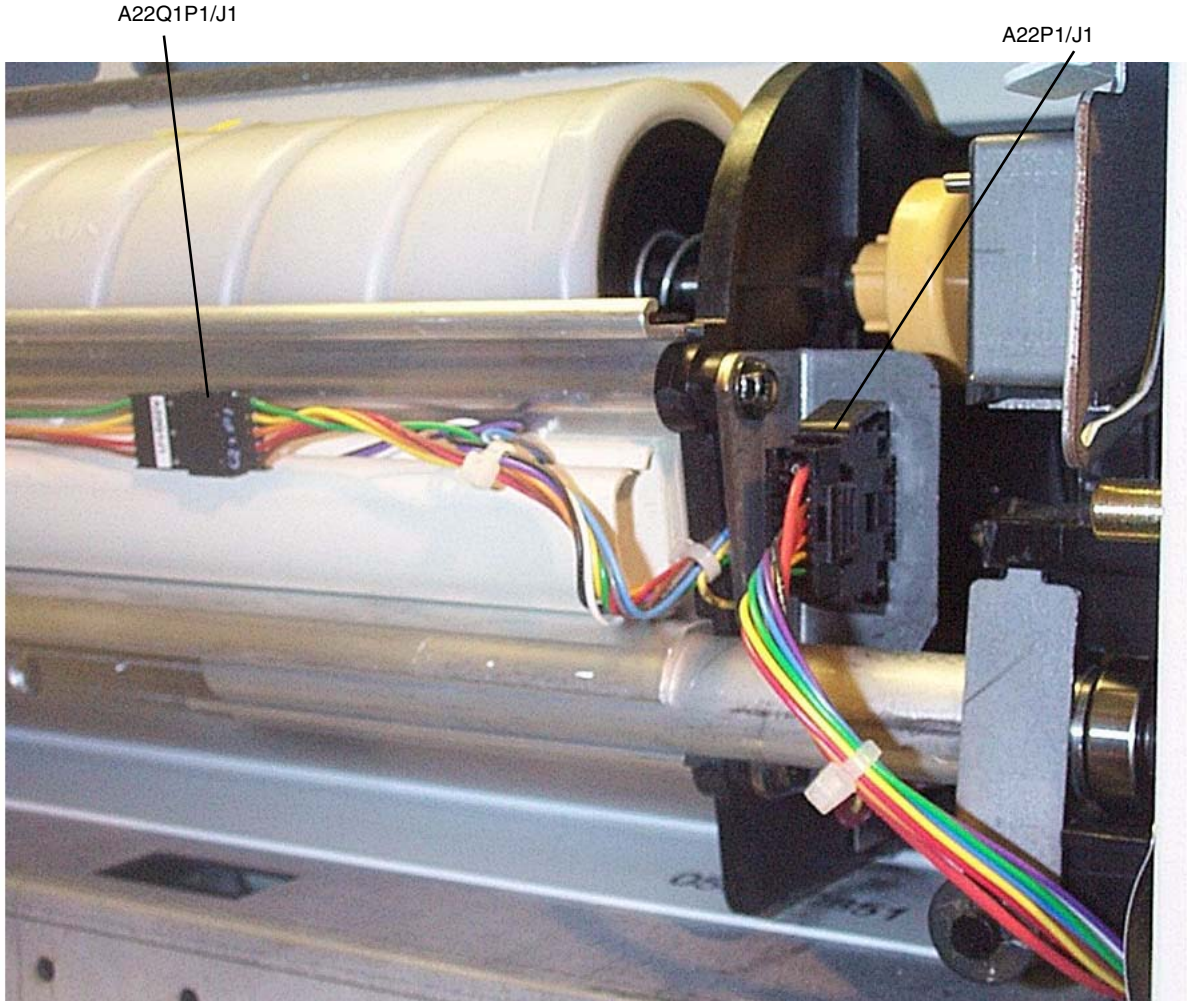


Figure 11 Developer Right Side

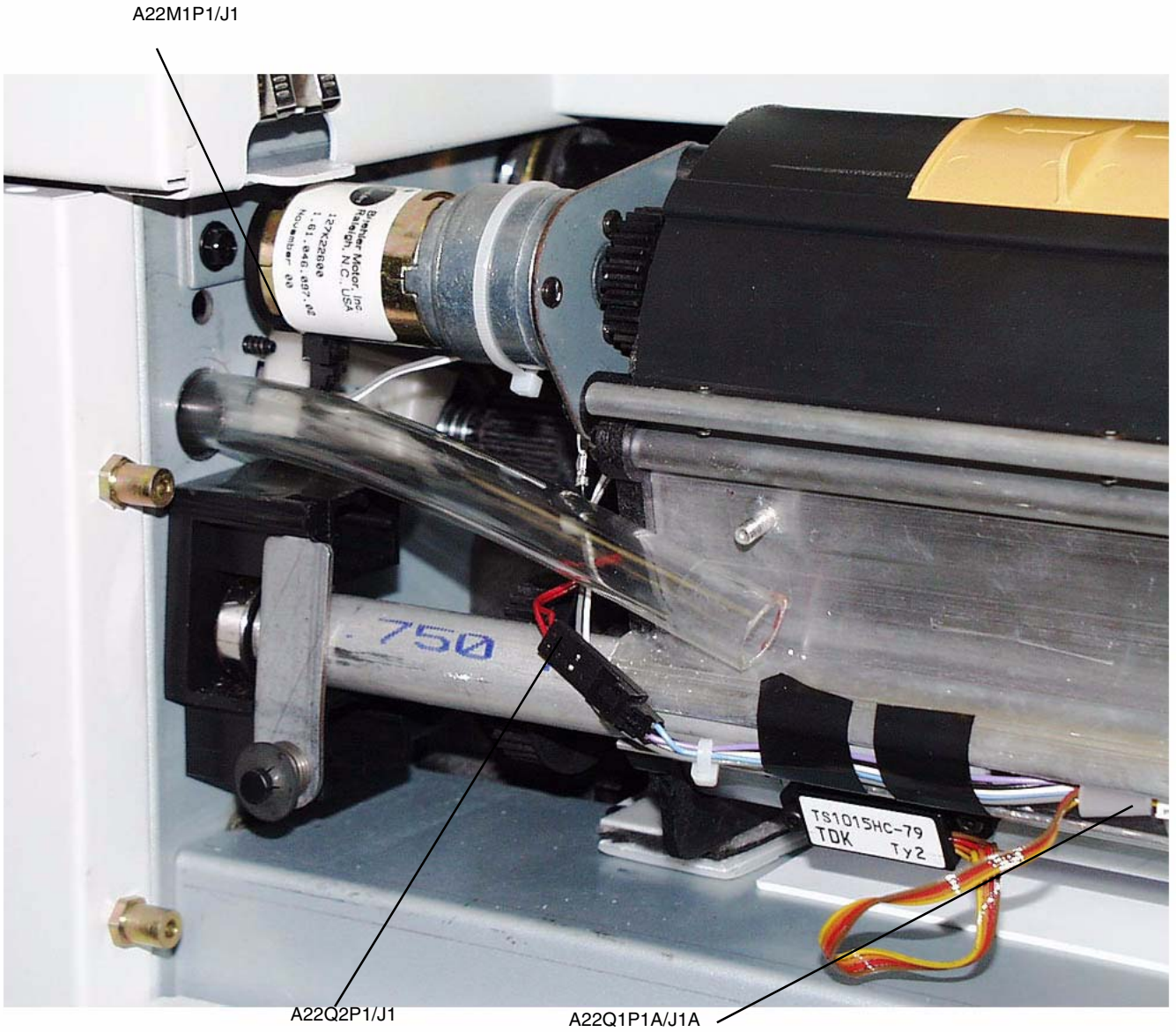


Figure 12 Toner Dispenser Motor

Drum Drive Motor (A23) and ESV (A29)

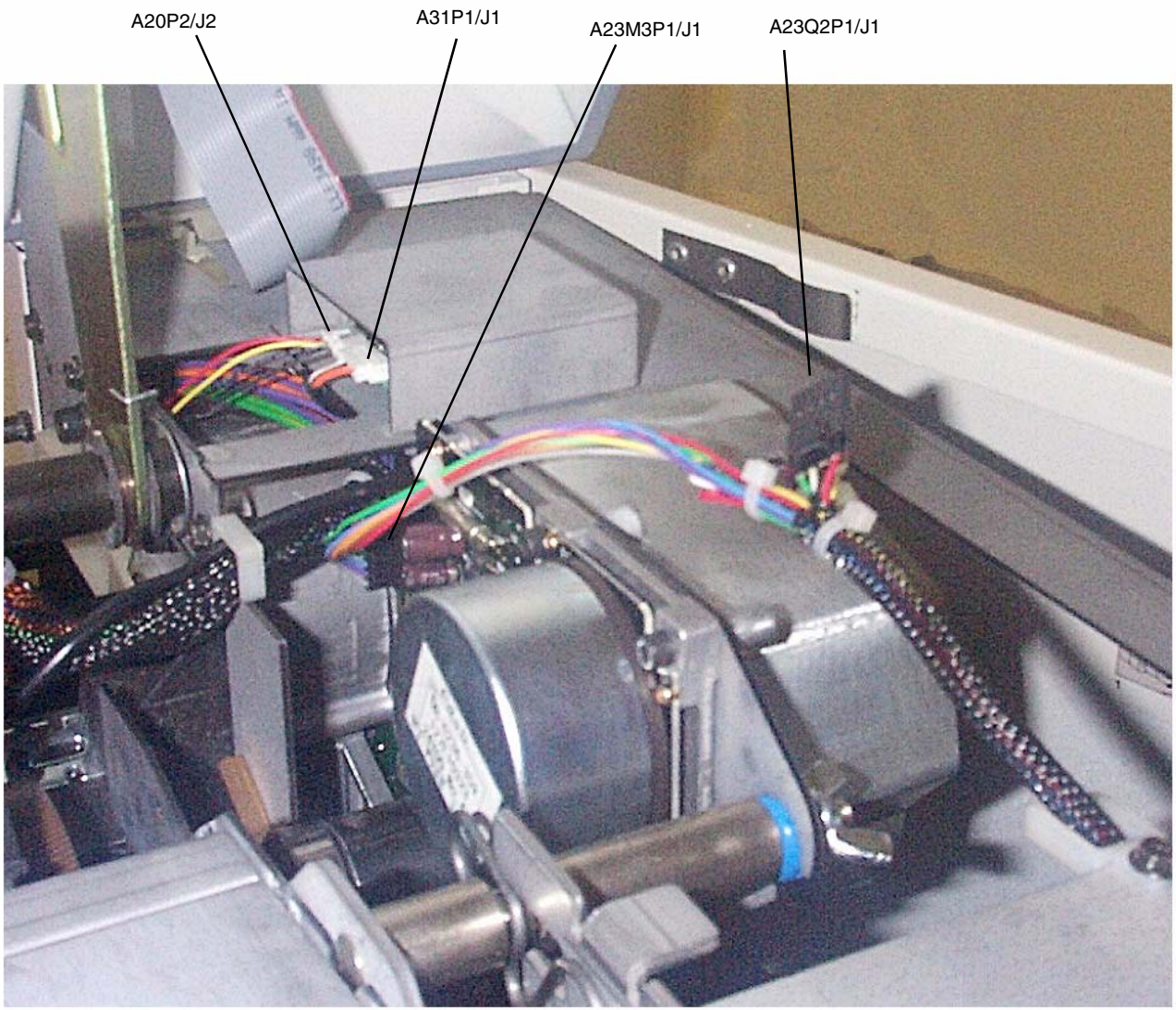


Figure 13 Drum Drive Motor and ESV

Figure 14 Erase Bar Connector

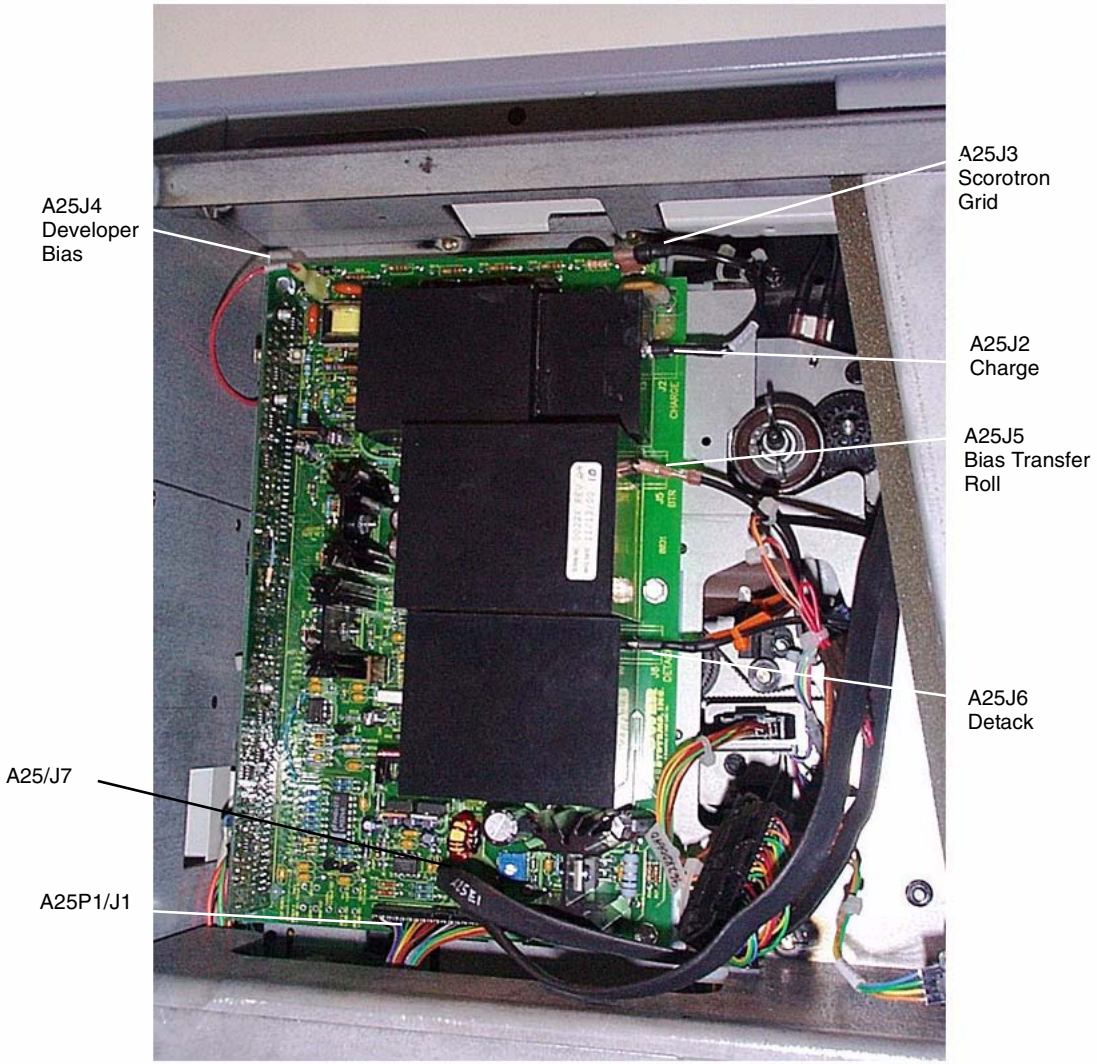


Figure 15 High Voltage Power Supply

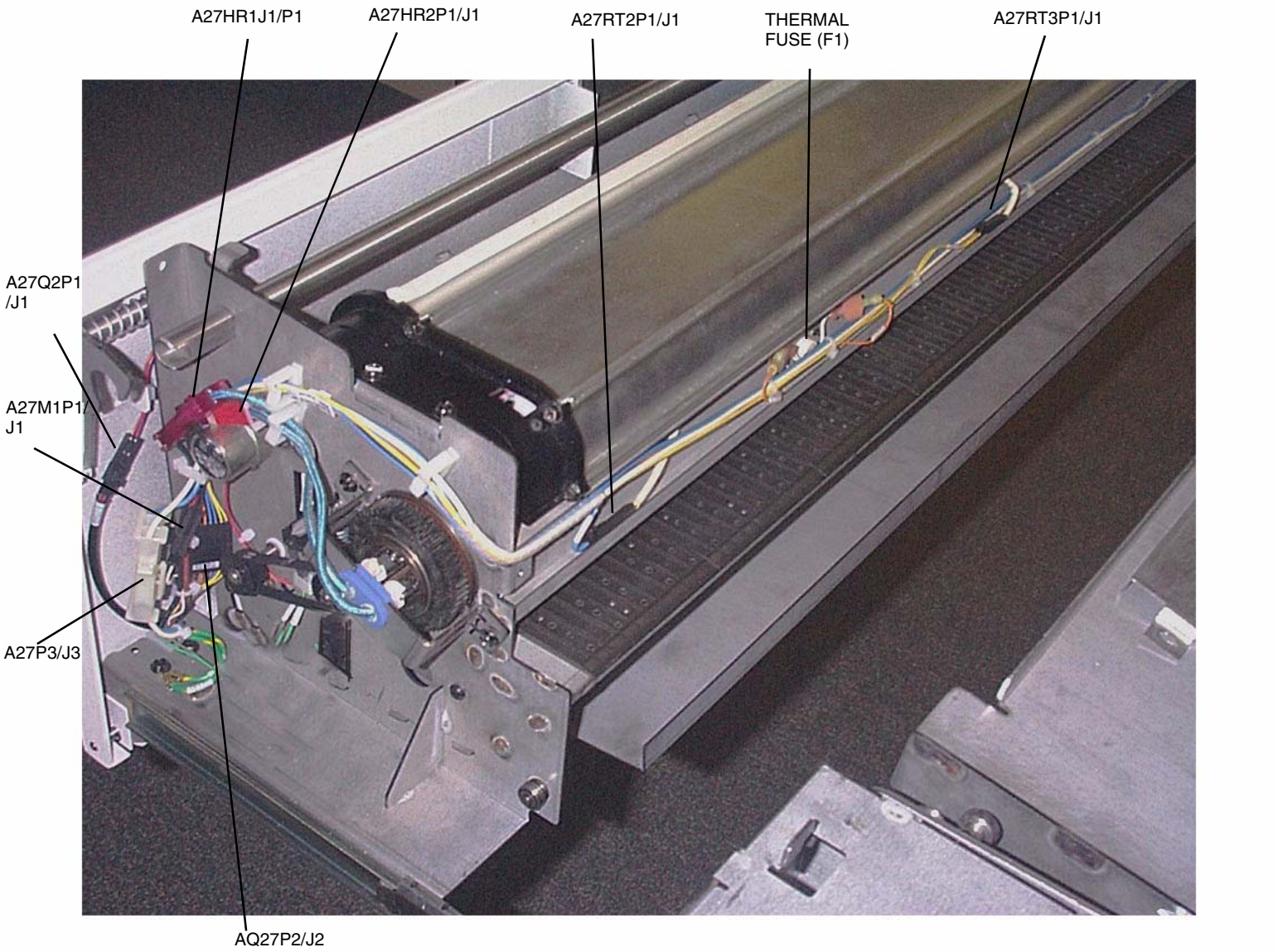


Figure 16 Fuser Assembly (A27)

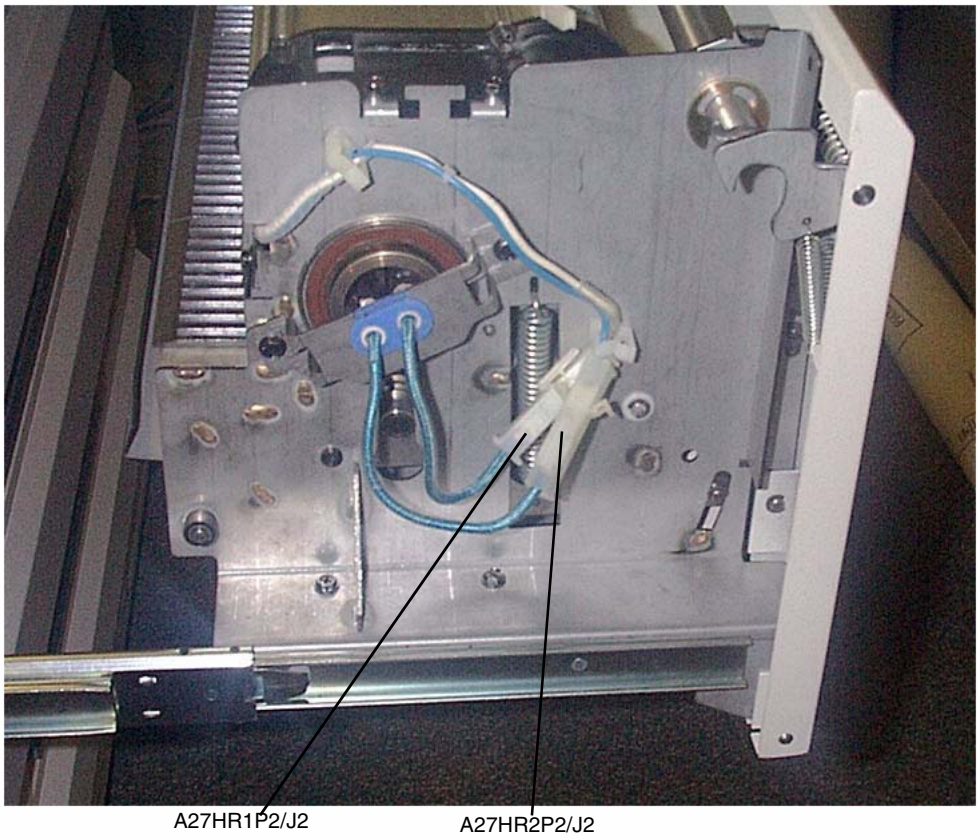


Figure 17 Fuser Left Side

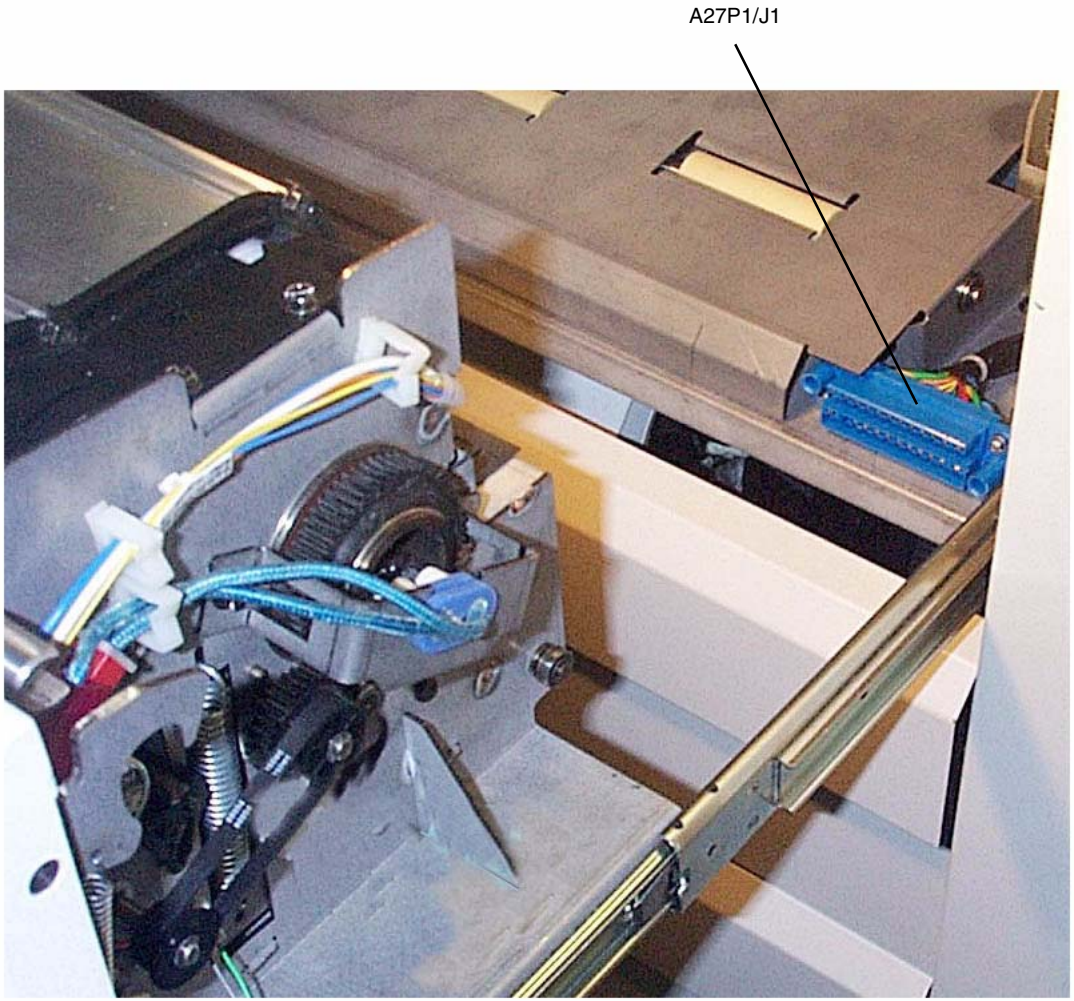


Figure 18 Fuser Drawer Connector

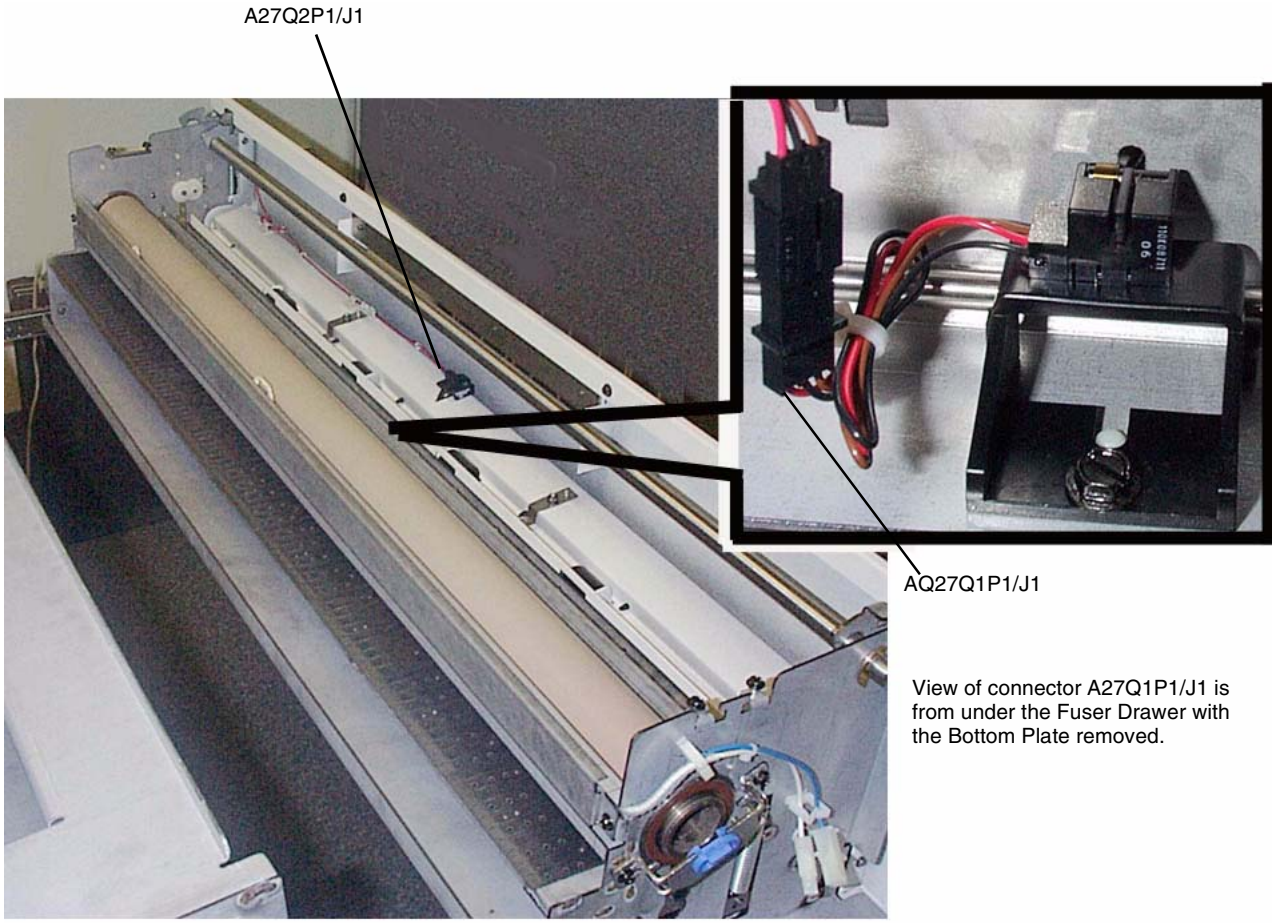


Figure 19 Fuser Exit and Stack Height Sensors

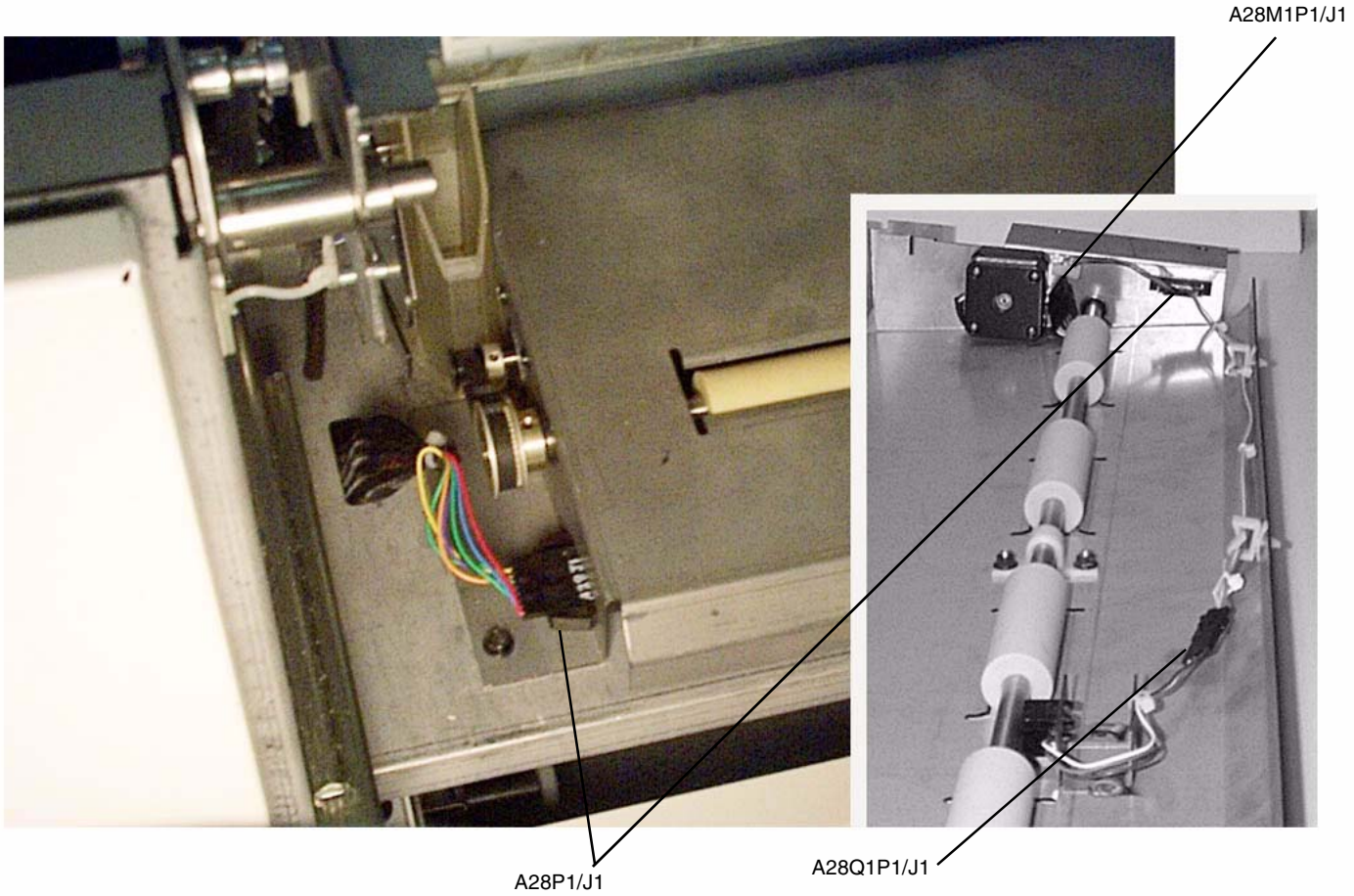


Figure 20 Lower Sheet Feed Assembly (A28)

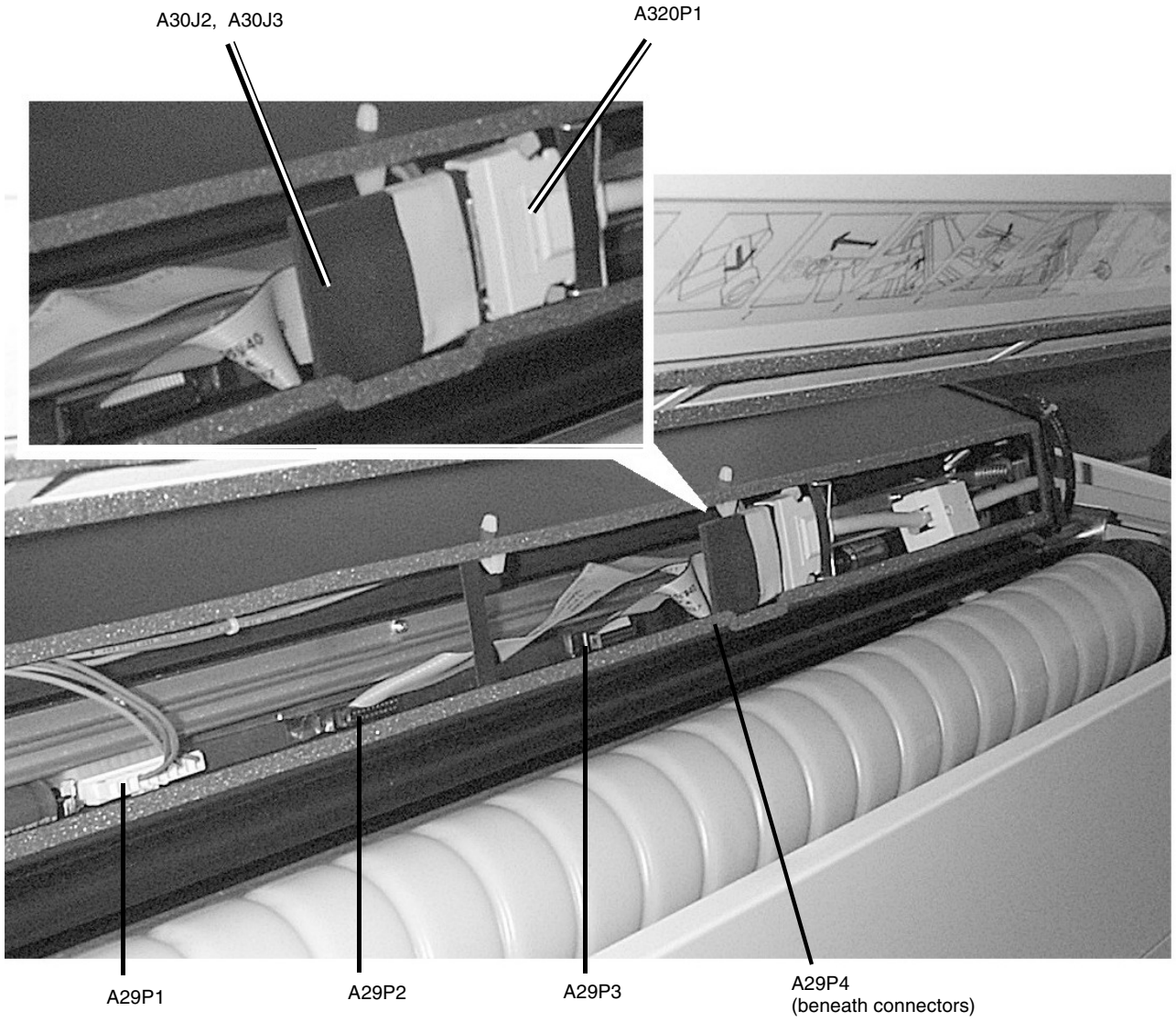


Figure 21 LED Bar and LED Jumper PWB (view through rear of Printer with Top Cover and Developer Cover raised)

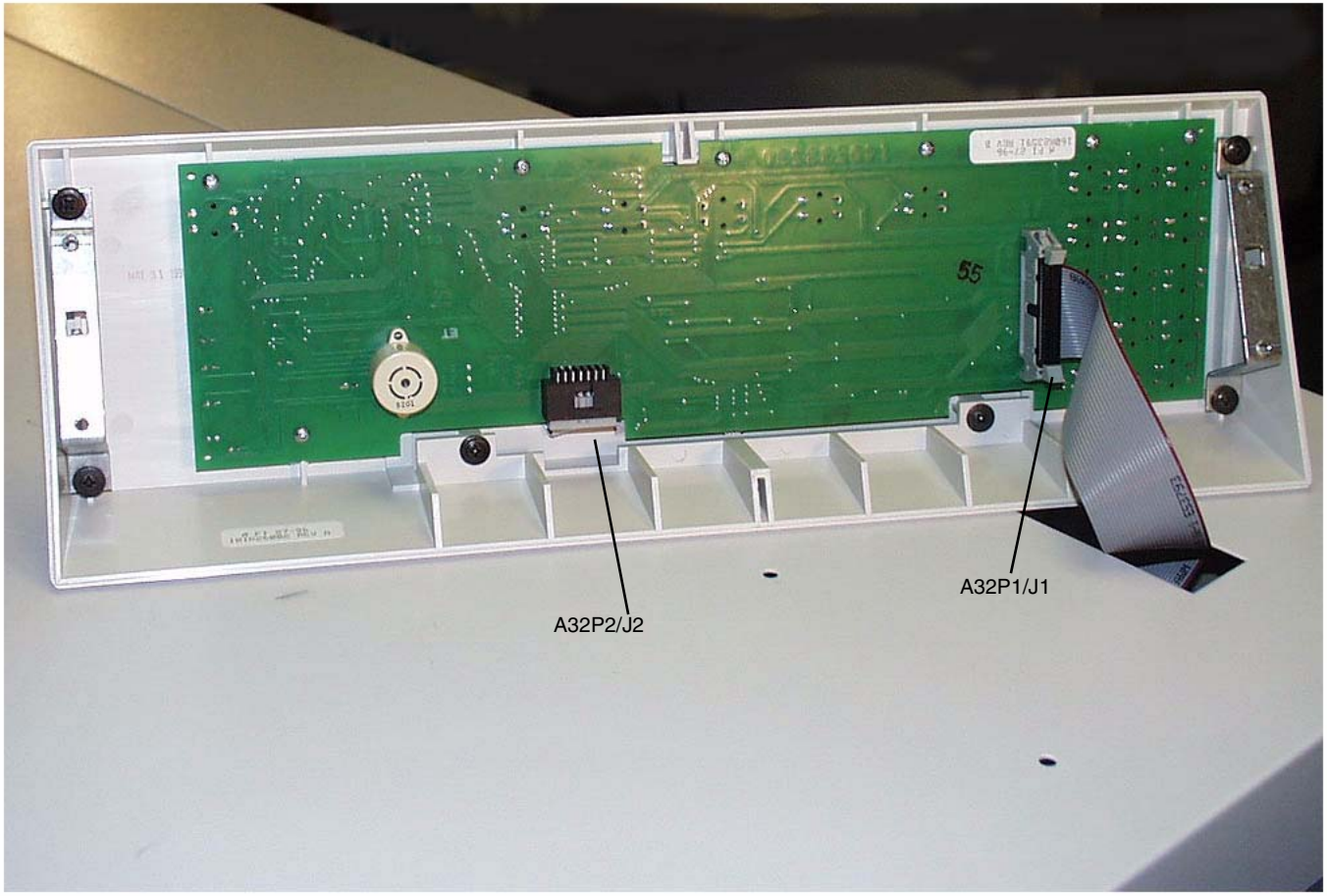


Figure 22 Control Panel Connectors