

Notes:

Search



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.

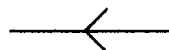


This symbol identifies an entire circuit diagram that has not been changed by this Tag/MOD number.

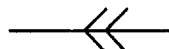


The Signal Flow

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



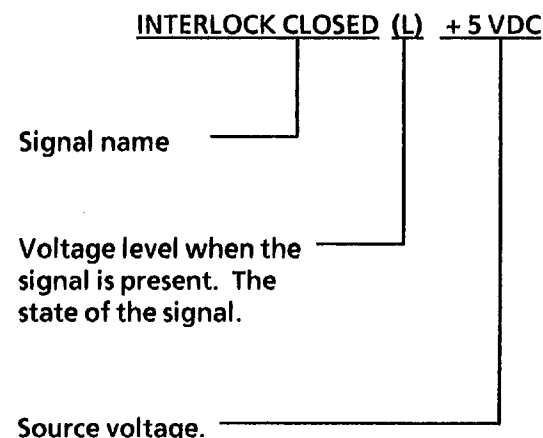
This symbol is used on circuit diagrams to indicate a recirculating signal.



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.



DC Voltage Specifications

Voltage	Specification
+ 5 VDC	+ 4.75 TO + 5.25 VDC
10 VFWR	2.5 TO 14 VDC
+ 15 VDC	+ 14.25 TO + 15.75 VDC
+ 26 VDC	+ 24.7 TO + 27.3 VDC
DC COM	0.0 TO + 0.8 VDC
(L)	0.0 TO + 0.8 VDC

Reference Symbolology

The following symbols are used in this document:



NOTE

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

10.1



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.

C1.01

Status Code

The status code is represented by a box in the control logic section of the circuit diagram. This example is the code for the Roll 1 position sensor.



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 frame or an open circuit.

[0403]

Component Control

The code [0403] is the output diagnostic test for the copier drum/developer motor.

Parts List

PL 1.1 This is the reference to the parts list exploded drawing where the spared component is found.



Indicates that the part has a repair procedure listed in the Repair/Adjustment section of this manual.



Indicates that the part has an adjustment procedure listed in the Repair/Adjustment section of this manual.



Indicates that the part has an adjustment procedure and a repair procedure listed in the Repair/Adjustment section of this manual.

Switches and Relay Contacts



Safety interlock switch that is open.



Safety interlock switch that is closed.



Switch/ relay contacts with momentary contacts shown normally open.



Switch/ relay contacts with momentary contacts shown normally closed.

NOTE:



Refer to the Change Tag/ MOD Index for information on how to determine whether or not a copier has a particular Tag /MOD number.

FOR EXAMPLE:

**THERMISTOR (RT1) REPAIR PROCEDURE
WARNING**

1. Switch off the copier and disconnect the power cord.

W/ Tag/MOD 5: Remove the Xerographic Module.

In the step 1, the **W/ Tag/MOD 5** statement refers to the modification number 5. If the copier that is being serviced does have Tag/MOD 5, perform this step.

If the copier does not have Tag/MOD number 5, ignore the **W/ Tag/MOD 5** instruction. In this situation, do not remove the xerographic module.

2. Lower the transport latching cover.
3. Lower the front cover.

In the steps 2 and 3, no reference is made to either the with or without Tag/MOD 5 modification. Therefore, perform the instructions whether the copier has or does not have Tag/MOD 5.

1. Service Call Procedures

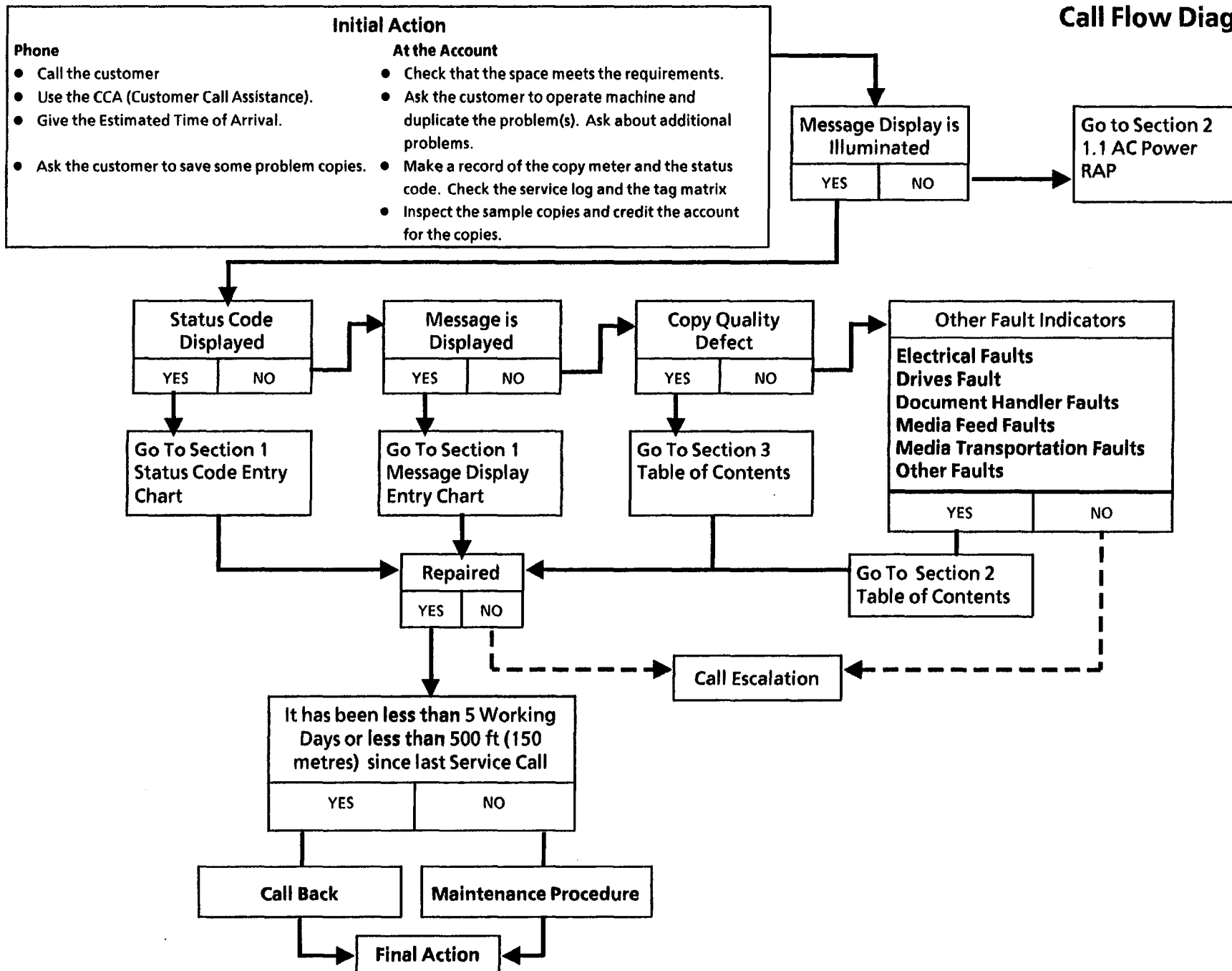
Section Contents

Introduction	1-2
Call Flow Diagram	1-3
Status Code Entry Chart	1-4
Message Display Entry Chart	1-9
Maintenance Procedures	1-10
Document Handler	1-10
Xerographic Module	1-11
Media Transport	1-13
Media Feed	1-14
Developer Module	1-15
Covers	1-16
Cutter	1-16
Media Supply Drawer	1-16
Call Back	1-17
Final Action	1-17

Introduction

The Service Call Procedures are designed to assist the Service Representative to identify copier faults, perform the necessary corrective action and perform the correct Maintenance Procedures. The Service Call Procedures are designed to be used with the 3030 Service Manual and is the entry level for all service calls.

- **Call Flow Diagram** - This diagram outlines the major activities that are performed when a service call is made. The **Initial Actions** assist the Service Representative through the customer interface and help to identify the problem. The diagram also directs the Representative to verify, classify, repair the problem and perform the correct Maintenance Procedure.
- **Status Code Entry Chart** - The chart contains a list of **Status Codes**, their **Cause**, the corresponding **Clearance Procedure** and the **Go to RAPs** (Repair Analysis Procedures). The chart is designed to direct the Representative to the appropriate Clearance Procedure. If the Procedure does not clear the Status Code, the Representative refers to the **Go to RAP in Section 2** column. This column contains the name of the RAP that must be followed, in order to repair the problem. When the Status Code problem has been repaired, refer to the **Call Flow Diagram** and continue the Service Call.
- **Call Back** - After correcting the problem that resulted in the call back, go to the **Final Action** and perform the activities indicated.
- **Maintenance Procedure** - This procedure contains the tasks that are performed after the main cause for the service call has been corrected. The tasks identified in the procedure are performed at the Interval indicated. The Interval may be after a specific number of feet, for example 10K. The Interval may also be specified as a Normal Call (NC). Normal Call activities are designed to be performed on all service calls. The specific interval and Normal Call activities include cleaning and replacing parts that require more frequent service and inspections. The Maintenance Procedure activities are designed to restore the copier to an initially clean and functional condition.
- **Final Action** - 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. Final Action is designed to stress test the image quality and repair any image quality problems. A copy of test pattern 82E5980 is made and compared with the image copy quality specifications located in Section 3 of the manual.



STATUS CODE	CAUSE	CLEARANCE PROCEDURE	GO TO RAP IN SECTION 2
A1.02	Front Document Sensor was actuated at Power On.	Refer to the display on the control panel and follow the clearance procedure.	A1.02 Document Handler RAP
A1.03	Rear Document Sensor was actuated at Power On.	Refer to the display on the control panel and follow the clearance procedure.	A1.03 Document Handler RAP
A1.25	Document did not reach the Rear Document sensor.	Refer to the display on the control panel and follow the clearance procedure.	A1.25 Document Handler RAP
A1.26	Document reached the Rear Document sensor too early.	Refer to the display on the control panel and follow the clearance procedure.	A1.26 Document Handler RAP
A1.33	Front Document Sensor did not actuate during rescan of the document. Document was removed after copy scan, but before rescan.	Refer to the display on the control panel and follow the clearance procedure.	A1.43 Document Handler RAP
A1.38	Operator did not press the Partial Copy button a second time in order to start or stop the copying of a partial copy.	Refer to the display on the control panel and follow the clearance procedure.	Instruct the operator how to use the Partial Copy feature.
A1.43	Front Document Sensor did not actuate when the document exited out the front of the copier.	Refer to the display on the control panel and follow the clearance procedure.	A1.43 Document Handler RAP
A1.46	Rear Document Sensor did not deactuate when the document exited the front or rear of the copier.	Refer to the display on the control panel and follow the clearance procedure.	A1.46 Document Handler RAP
A1.64	The Rear Document Sensor deactuated before the Front Document Sensor.	Refer to the display on the control panel and follow the clearance procedure.	A1.64 Document Handler RAP
A1.65	Front Document Sensor deactuated too early. Document was too short.	Refer to the display on the control panel and follow the clearance procedure.	A1.65 Document Handler RAP

Note: For document scan problems that are not indicated by a status code proceed to **OF 2 Document Does Not Scan RAP**

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
C1.01	The Roll Position Sensor did not actuate or deactuate.	Refer to the display on the control panel and follow the clearance procedure.	C1.01 and C1.05 Media Feed RAPs
C1.04	Media Registration Sensor did not actuate or deactuate.	Refer to the display on the control panel and follow the clearance procedure.	C1.04 Media Feed RAP
C1.05	Motion was not detected or the media stopped moving before it was scheduled to stop. Possibly caused by an out of Media condition.	Refer to the display on the control panel and follow the clearance procedure.	C1.05 Media Feed RAP
C4.01	The Sheet Feed Sensor was actuated during a copy when Cut Sheet was not selected.	Refer to the display on the control panel and follow the clearance procedure.	C4.01 Sheet Feed RAP
C4.24	The cut sheet does not reach the Sheet Feed Sensor in time.	Refer to the display on the control panel and follow the clearance procedure.	C4.24 Sheet Feed RAP
C4.34	The Sheet Feed sensor deactuated too early while making a copy. The operator may have to remove the cut sheet media.	Refer to the display on the control panel and follow the clearance procedure.	C4.01 Sheet Feed RAP

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
E2.01	The media trail edge jammed in the Media Registration Sensor area.	Refer to the display on the control panel and follow the clearance procedure.	E2.01 Media Transportation RAP
E4.01	The media trail edge jammed in the Media Exit Switch area.	Refer to the display on the control panel and follow the clearance procedure.	E4.01 Media Transportation RAP
E4.02	Lead edge of media did not reach the Media Exit Switch in time.	Refer to the display on the control panel and follow the clearance procedure.	E4.02 Media Transportation RAP
E4.03	Media jammed in the fuser area.	Refer to the display on the control panel and follow the clearance procedure.	E4.03 Media Transportation RAP
E5.03	Upper Rear Door is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.03 Upper Rear Door Open RAP
E5.04	Cutter is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.04 Cutter Cover Open RAP
E5.05	Cut Sheet Feed-in Shelf is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.05 Cut Sheet Feed-in Shelf Open RAP
E5.06	Right Side Door is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.06 Right Side Door Open RAP
E5.07	The Document Handler is out of position.	Reinstall the Document Handler.	E5.07 Document Handler Open RAP
E6.00	The Stop button was pressed, or the Media Supply Drawer was opened while a copy was being made in the Roll Feed mode.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Drawer Open RAP
E6.01	The Stop button was pressed, or the Media Supply Drawer was opened while a copy was being made in the Cut Sheet mode.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Drawer Open RAP

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
J1.01	Recurring out of toner.	Replace the toner cartridge.	J1.01 Out of Toner RAP
J2.02	Toner Cartridge could not find home position, probably is not installed correctly.	Check the toner cartridge for correct installation.	J2.02 Toner Cartridge Home Position RAP
LL.10	Failure in the interlock circuit.	Press power off (0) then power on (1).	LL.10 Cutter Interlock Loop Open RAP
LL.26	Exposure Lamp intensity is detected as too low when running a copy.	Press power off (0) then power on (1).	LL.26 Loss of Illumination RAP
LL.30	Cutter could not return to the home position, or did not move off the home position.	Refer to the display on the control panel and follow the clearance procedure. Then, press power off (0) then power on (1).	LL.30 Cutter Fault RAP
LL.41	Fuser fault. The fuser is unable to warm to 110° F (44° C) in one minute or less.	Press power off (0) then power on (1).	LL.41 Fuser Warm up Fault RAP
LL.42	Fuser fault. The Fuser Roll temperature is greater than the maximum allowable temperature for more than thirty seconds. Maximum temperature is currently 348° F (176° C). A possible cause is that a large amount of narrow copies were made.	Press power off (0) then power on (1). Then allow the copier time to cool to the operating temperature before turning power back on.	LL.42 Thermal Control RAP
LL.43	Fuser temperature has exceeded the temperature limit. This can also occur because the 26 VDC Bulk Power Supply has failed.	Press power off (0) then power on (1).	LL.43 Fuser Overtemperature RAP
LL.44	1. Fuser fault. Fuser Temperature exceeded 420° F (215° C). 2. Switching power off and on too quickly.	1. Press power off (0) then power on (1). Then allow time for the Fuser to cool to the operating temperature before switching the power back on. 2. Wait at least 5 seconds before switching the power on.	LL.44 Fuser Too Hot RAP

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
LL.45	Fuser was in the warm up mode for too long a period of time.	Press power off (0) then power on (1).	LL.45 Fuser Warmup Fault RAP
LL.50	26 VDC Bulk Power Supply failure.	Press power off (0) then power on (1).	LL.50 26 VDC Bulk Power supply RAP.
LL.90	Toner concentration of the developer material is too high.	Press power off (0) then power on (1).	LL.90 Excessive Toner Fault RAP
LL.91	Toner concentration of the developer material is too low.	Press power off (0) then power on (1).	LL.91 Low Toner Fault RAP
U1.01	Copy counter is disconnected.	Connect the copy counter.	U1.01 Copy Counter RAP

MESSAGE DISPLAYED	CAUSE	CLEARANCE PROCEDURE	GO TO RAP IN SECTION 2
PLEASE CLOSE THE MEDIA SUPPLY DRAWER	Media Supply Door Interlock Switch (S28) is open.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Door Open RAP
PLEASE CLOSE THE CUT SHEET FEED-IN SHELF	Cut Sheet Feed-in Shelf Interlock Switch (S29) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.05 Sheet Feed Shelf Open RAP
PLEASE CLOSE THE RIGHT SIDE DOOR	Right Side Door Interlock Switch (S21) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.06 Right Side Door Open RAP
PLEASE CLOSE THE DOCUMENT HANDLER	Document Handler Interlock Switch (S30) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.07 Document Handler Open RAP
PLEASE CLOSE THE UPPER REAR COVER	Upper Rear Cover Interlock Switch (S26) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.03 Upper Rear Door Open RAP
PLEASE CLOSE THE CUTTER DRAWER	Cutter Drawer Interlock Switch (S1) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.04 Cutter Cover Open RAP
NVM FAULT CALL FOR ASSISTANCE	Corrupted data in NVM.	Press power off (0) then power on (1).	LL.60/ LL.61/ LL.62 NVM Fault RAP
Refeed Roll	Refeed Roll problem.	Press power off (0) then power on (1).	Refeed Roll RAP
Flashing 1, 2, 3, 4, 5, 6 or 7	Copier failed power on self-test.	Press power off (0) then power on (1).	2.2 POST 2, 3, 4, 5, 6 and 7 RAP
UNABLE TO CALIBRATE TONER SENSOR	While performing the code [9 21 6] the sensor did not calibrate.		J1.01 Out of Toner RAP

Maintenance Procedures

Perform the Tasks at the Interval indicated in the tables. Perform NC (Normal Call) tasks on every call. The task with specific intervals should be done only at the interval indicated.

DOCUMENT HANDLER

INTERVAL	TASK	REASON	TASK ENABLER
NC [Normal Call]	Clean the platen.	Spots on platen cause lines on copy. Dust and other contaminants lower light transmission.	Clean both sides of platen with antistatic cleaner on a white cloth.
NC	Clean the lower document feed rolls and optics cavity	Dirty feed rolls can cause the original to slip. Contaminants in optics can cause C.Q. defects.	Clean the rolls and cavity using the Formula A on a towel or cloth.
NC	Clean the exposure lamp and lens.	Contamination on lamp and lens result in copy quality defects.	Apply a small amount of antistatic cleaner to a towel.
NC	Clean Upper Document Handler, Top Platen, Top Platen Idler Rolls.	CQ problems.	Clean platen with Formula A on a white cloth.
NC	Clean the Document Front and Rear Sensors	Document handling problems.	Clean the sensors with Formula A on a white cloth.
NC	Clean the Static Eliminator Brushes	Document handling problems. Static on the document	Clean with film remover or replace if damaged.

(Continued)

XEROGRAPHIC MODULE

INTERVAL	TASK	REASON	TASK ENABLER
NC (Normal Call)	Check, clean, repair or replace the charge corotron. Replace corotron if 25K or more. Clean the Erase LED PWB.	Contamination, loose or broken wires, or damaged end blocks cause C.Q. defects. Contamination reduces the effectiveness of the LEDs to discharge the photoreceptor drum.	Remove contamination. Clean the corotron with a brush. Clean the Erase LEDs with a brush or dry lint free cloth.
NC	Clean the xerographic module.	Contamination (toner or other) can cause copy quality problems. Contaminants can travel to optics and corotrons which results in C.Q. problems. Fused toner on the bottom of module can cause jams.	Clean the toner from the housing and cleaner blade with a vacuum cleaner. <i>NOTE: Ensure that the vacuum cleaner does not contact the edge of cleaner blade that touches the surface of the photoreceptor drum.</i> Perform the <i>Photoreceptor Cleaning Enhancement procedure</i> (section 6). Use the cleaning solvent to remove any fused toner from the bottom of module.
NC	Check / replace the stripper fingers	Bent stripper fingers may cause feed out jams and fuser roll damage.	Replace the damaged or contaminated stripper fingers.
NC	Check /clean / replace the oil dispenser assembly.	A contaminated wick, pads, or oil dispense roll will not apply fuser oil reliably to the fuser roll.	Replace the wick, pads if they are contaminated or if customer is running erasable vellum. Replace the wick and pads at 10K feet (3K meters). Clean the oil dispense roll with film remover.
NC	Clean / replace fuser roll, fabric guide.	Smooth or worn fuser roll loses ability to drive the media. Contaminated fabric guide causes too much resistance to media which results in jams / deletions/wrinkles/media handling problems.	Clean fuser the roll with film remover . Clean the fabric guide with formula A and film remover. Replace if worn or damaged Perform the Initialization Procedure for the fuser roll.
NC	Check the fuser roll for lack of oil.	Too little oil can cause media handling and offsetting copy quality problems.	Replace the wick/ oil pads.Clean the oil dispense roll with film remover. If the fuser roll is dry, perform the Initialization Procedure for the fuser roll.

(Continued)

XEROGRAPHIC MODULE (Continued)

INTERVAL	TASK	REASON	TASK ENABLER
10K ft 3K m	Replace the oil pads.	Copy quality defects. Oil pads are dry.	Replace the oil pads. Clean the oil dispense roll with film remover.
30K ft 9K m	Replace the wick.	Copy quality defects. Wick is contaminated.	Replace the wick. Clean the oil dispense roll with film remover.
25K ft 7K m	Repair or replace the corotrons.	Contamination on the wires or damaged or worn out end blocks, are causes for corotron failure, which results in copy quality defects / jams, etc.	Repair or replace the corotron. Perform ADJ 9.2 Electrostatic Series.
30K ft 9K m	Check / clean the cleaning blade.	Residual image, streaks, drum scuffing can occur if blade is worn or contaminated.	Vacuum clean the cleaning blade (<i>NOTE 1</i>). Apply zinc stearate to the cleaning blade and photoreceptor drum (<i>NOTE 2</i>). Replace the blade if damaged.
30K ft 9K m	Replace the Fabric Guide.	Jams, deletions, wrinkles, media handling problems	Refer to REP 8.9

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

NOTE 2: Where possible, dust the drum and the cleaning blade with zinc stearate away from the xerographic module to prevent the charge corotron from being contaminated. If the drum and blade must be dusted while in the xerographic module, remove the charge corotron. The zinc stearate will contaminate the charge corotron and cause copy quality defects.

MEDIA TRANSPORT

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean the lower paper transports, turnaround baffle, paper feed rolls.	Contaminants can cause the media to slip resulting in copy quality defects or media handling problems.	Clean the transport with antistatic fluid and a cloth. Clean the feed roller with Formula A.
NC	Clean the under side of the transport.	Reduce airborne contaminants.	Vacuum clean, then wipe down with a lint-free cloth.
NC	Empty the condensation reclaim bottle.	Prevent the bottle from overflowing.	Empty the bottle into a sink.
NC	Check the Transfer/Detack Corotron. Replace corotron if 25k or more.	Contamination, loose or broken wires, media guides not installed correctly, damaged end blocks cause copy quality defects.	Clean, repair, or replace the corotron. Clean the corotron using a brush. Install media guide correctly or replace if damaged.
25K ft 7K m	Repair or replace the corotron.	Contamination, loose or broken wires, damaged end blocks cause copy quality defects.	Replace or repair the corotron.
NC	Clean the Static Eliminator Brushes	Media handling problems, static on the media.	Clean with film remover or replace if damaged.
NC	Clean the Copy Exit Support	Contamination and static problems.	Clean with anti static fluid.

(Continued)

MEDIA FEED

INTERVAL	TASK	REASON	TASK ENABLER
1st 10K ft 3K m	Remove the Drive Chain slack.	Feeding problems.	Loosen the Roll Feed motor hardware to allow the spring to tension the chain. Tighten the hardware.
40K ft 11K m	Remove the Drive Chain slack.	Feeding problems.	Loosen the Roll Feed motor hardware to allow the spring to tension the chain. Tighten the hardware.

(Continued)

DEVELOPER MODULE

INTERVAL	TASK	REASON	TASK ENABLER
NC	Check that the developer housing is level.	If the developer is not level, density may not be uniform side- to- side.	Developer material should be uniform from end- to- end. Check the level of the copier.
NC	Check the toner cartridge for proper rotation.	If toner cartridge 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.
NC	Check the developer drives.	Worn gears will cause the housing to move up and down, which will cause copy quality defects.	Check the gears for worn or broken teeth; replace the gears, if necessary. Ensure that the drive coupling is engaged.
40K ft 11K m	Replace the developer.	Worn developer will cause excess toner usage, higher dirt levels, and copy quality defects.	Replace the developer. (NOTE 1) Clean the Pressure Equalizing Tubes with a vacuum cleaner in order to remove toner inside the tubes. Vacuum clean the area around the augers and the magnetic roll.

Note 1: Write the developer batch number on the Service Log.

(Continued)

COVERS

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean the covers.	Customer satisfaction.	Formula A and antistatic fluid on the document and sheet feed in shelves.
NC	Reduce static build-up.	Document handling and document and media stacking problem.	Clean the following with antistatic cleaner: <ul style="list-style-type: none">• Document and Media Feed- in Shelves• All the plastic document and media guides

CUTTER

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

MEDIA DRAWERS

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean the media drawer	Customer satisfaction.	Clean the media dust and contamination from the media drawer with a vacuum cleaner.

Call Back

Final Action

1. Follow the Call Flow Diagram and resolve the problem that caused the Call Back.
 2. Perform the Final Action, do not perform the Maintenance Procedures.
1. Make a record of the copy count meter in the service log.
 2. Make one D (A1) size copy on 20 lb (80 gsm) bond paper of Test Pattern 82E5980 in the Copy Contrast Normal mode (the middle Copy Contrast lamp is lit).
 - a. Evaluate the copy and ensure that the copy meets the Image Quality Specifications as specified in the Image Quality Specifications area of Section 3.
 - b. If the copy is not to specification, refer to the appropriate Copy Quality (CQ) defect RAP and follow the procedure to eliminate any defects.
 - c. Evaluate the copy for any visible defects.
 - d. If the copy exhibits any visible defects, refer to the appropriate Copy Quality (CQ) defect RAP and follow the procedure to eliminate the defects.
 4. Make a copy with cut sheet media, using the Cut Sheet feature.
 5. Check that the copy count meter has advanced.
 6. Refer to Figures 1 and 2 and fill out the Service Call Report. Record all activities in the service log.
 7. If new developer material was installed, write the developer batch number in the Service Log.
 8. Give appropriate copy credits to the customer.

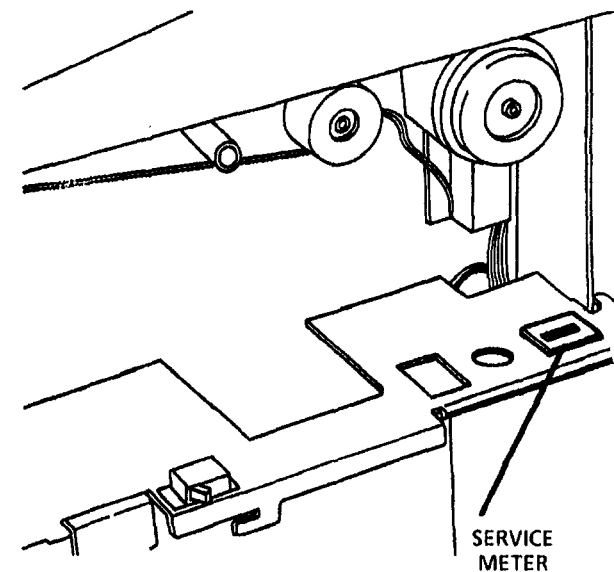
Xerox Service Call Report										This Is Not An Invoice										CALL ID																																																											
CUSTOMER NAME																				DATE																																																											
ADDRESS																				CITY										STATE										ZIP																																							
CUSTOMER CONTACT																				TELEPHONE										SERVICE REP NAME/ID																																																	
PROBLEM DESCRIPTION																				DISTRICT NO.																																																											
PROBLEM RESOLUTION																				ESTIMATE#																																																											
SERIAL NUMBER										PRODUCT DESCRIPTION										CANC										CUSTOMER REQ. TIME										ASST										ALT																													
TRAVEL										ARRIVE										DEPART										CREDIT										CREDIT										CREDIT										CREDIT																			
HR										Min										Day										Time										Day										Time																													
METER TOTAL										METER A										METER B																																																											

02059

B
ENTER THE READING FROM
THE SERVICE METER
(REFERENCE FIGURE 2)

A
ENTER CUSTOMIZED
PROGRAM **P15** AND RECORD
THE METER A READING

Figure 1: Service Call Report



2649

Figure 2. Service Meter Location

2. Status Indicator Repair Analysis Procedures

Section Contents

Status codes

A1.02	Document Handler RAP	.....	2-6
A1.03	Document Handler RAP	.....	2-4
A1.25	Document Handler RAP	.....	2-4
A1.26	Document Handler RAP	.....	2-4
A1.43	Document Handler RAP	.....	2-6
A1.46	Document Handler RAP	.....	2-4
A1.64	Document Handler RAP	.....	2-8
A1.65	Document Handler RAP	....	2-12
C1.01	Media Feed RAP	.....	2-14
C1.04	Media Transportation RAP	..	2-16
C1.05	Media Feed RAP	.....	2-20
C4.01	Sheet Feed RAP	.....	2-22
C4.24	Sheet Feed RAP	.....	2-26
C4.34	Sheet Feed RAP	.....	2-22
E2.01	Media Transportation RAP	..	2-30
E4.01	Media Transportation RAP	..	2-34
E4.02	Media Transportation RAP	..	2-34
E4.03	Media Transportation RAP	..	2-38

Status codes

E5.03	Upper Rear Cover Open RAP	2-42
E5.04	Cutter Cover Open RAP	..... 2-44
E5.05	Cut Sheet Feed-in Shelf Open RAP	..... 2-46
E5.06	Right Side Door Open RAP	.. 2-48
E5.07	Document Handler Open RAP	2-50
E6.00	Media Supply Drawer Open RAP	..... 2-52
J1.01	Out of Toner RAP	..... 2-54
J2.02	Toner Cartridge Home Position RAP	..... 2-56
LL.10	Cutter Interlock Loop Open RAP	..... 2-58
LL.26	Loss of Illumination RAP	.... 2-62
LL.30	Cutter Fault RAP	..... 2-64
LL.41	Fuser Warmup Fault RAP	... 2-70
LL.42	Thermal Control RAP	..... 2-79

Status codes

LL.43	Fuser Overtemperature RAP	2-84
LL.44	Fuser Too Hot RAP	..... 2-90
LL.45	Fuser Warmup RAP	..... 2-69
LL.50	Bulk Power Supply RAP	..... 2-93
LL.60/LL.61/LL.62	NVM Fault RAP	... 2-97
LL.90	Excessive Toner Fault RAP	.. 2-98
LL.91	Low Toner Fault RAP	..... 2-100
U1.01	Copy Counter RAP	..... 2-102

Message displays

Refeed Roll RAP 2-104
-----------------	-------------

Continued on 2-3

Notes:

Section Contents

Electrical faults

1.1	AC Power RAP	2-108
1.3	The Cooling Fans RAP	2-114
1.4	Main Power Interlock RAP	2-118
1.5	DC Power RAP	2-124
1.6	Ground Fault RAP	2-128
2.1	Control Panel RAP	2-134
2.2	POST 2, 3, 4, 5, 6 and 7 RAP	2-138

Drives

4.1	Main Drive Motor RAP	2-140
-----	----------------------	-------

Document handler

5.1	Document Handler RAP	2-145
-----	----------------------	-------

Media feed

7.1	Roll Feed RAP	2-150
-----	---------------	-------

Media transportation

8.1	Media Transport RAP	2-156
-----	---------------------	-------

Other faults

OF 1	Media Heater RAP	2-162
OF 2	Document Does Not Scan RAP	2-166
OF 3	Media Does Not Feed RAP	2-170
OF 4	Component Failure with No Status Code RAP	2-175
OF 5	Cleaner Blade Positioning Motor RAP	2-176

A1.03/ A1.25/ A1.26/ A1.46 Document Handler RAP

The status code A1 is displayed when the logic detects that there is a document handler problem. As the document is scanned and then rescanned, the Rear Document Sensor is actuated and deactuated, causing the sensor signal to change state. The logic detects a change in the state of the Rear Document Sensor signal.

A1.03 Indicates that the logic detected that the Rear Document Sensor was actuated at Power On. When the Power On button was pressed, the sensor signal was LOW.

A1.25 Indicates that the logic detected that the document did not reach the Rear Document Sensor. As the document was being scanned, the sensor signal did not change state from HIGH to LOW.

A1.26 Indicates that the logic detected that the document reached the Rear Document Sensor too early. As the document was being scanned, the sensor signal changed state too fast from HIGH to LOW.

A1.46 Indicates that the logic detected that the document was not driven out of the rear or rescanned to the front of the document handler. As the document was being scanned or rescanned, the Rear Document Sensor did not change state from LOW to HIGH.

The problem may occur if one of the following conditions exist:

- the Document Handler has an excessive static condition.
- the document is not in good condition.
- there is a problem with the Document Drive Motor or the motor control circuitry.
- the Document Static Eliminator Brush is dirty.

Initial Actions

- Remove the Upper Document Handler. Ensure that the Rear Document Sensor is not blocked or damaged. Clean with Anti Static Cleaner.
- Ensure that the connectors for the Rear Document Sensor (Q26 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Ensure that the Static Eliminator Brush is clean. Clean or replace the Brush as required. (PL5.2)

Procedure

Enter the code [0503] to check the Rear Document Sensor.

Block the Rear Document Sensor.

When the sensor is blocked, the Control Panel display changes from (01) to (00)

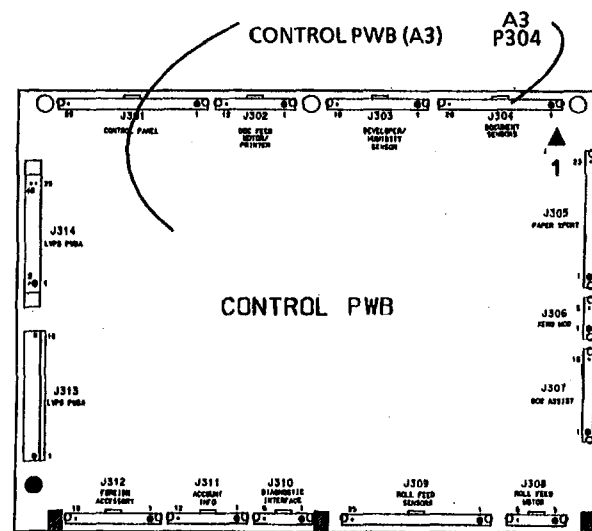
Y N

Go to FLAG 1 and check the wiring between the sensor and the Control PWB for an open circuit or a short circuit to ground.

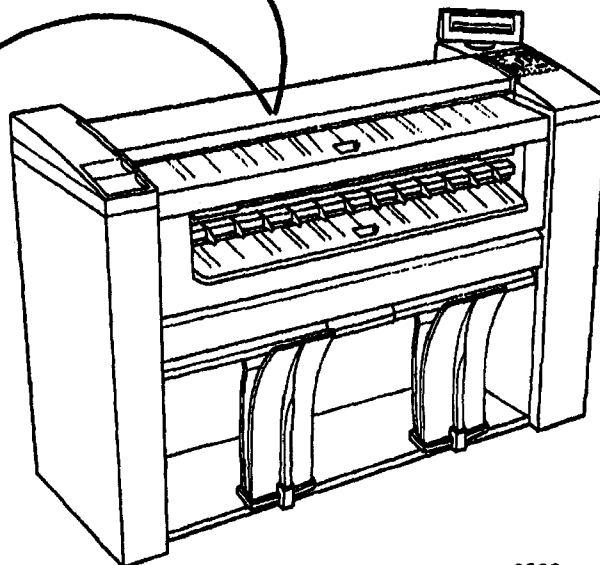
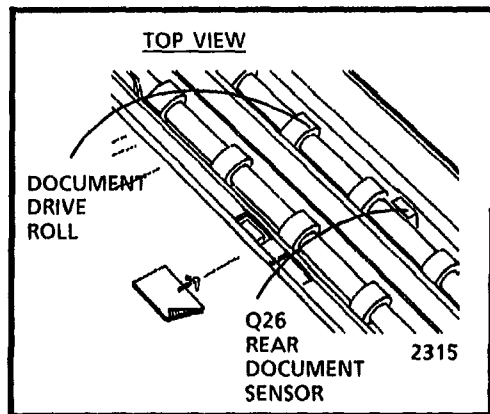
If there is no problem with the wiring, replace the Rear Document Sensor (Q26).

If the problem persists, replace the Control PWB (A3).

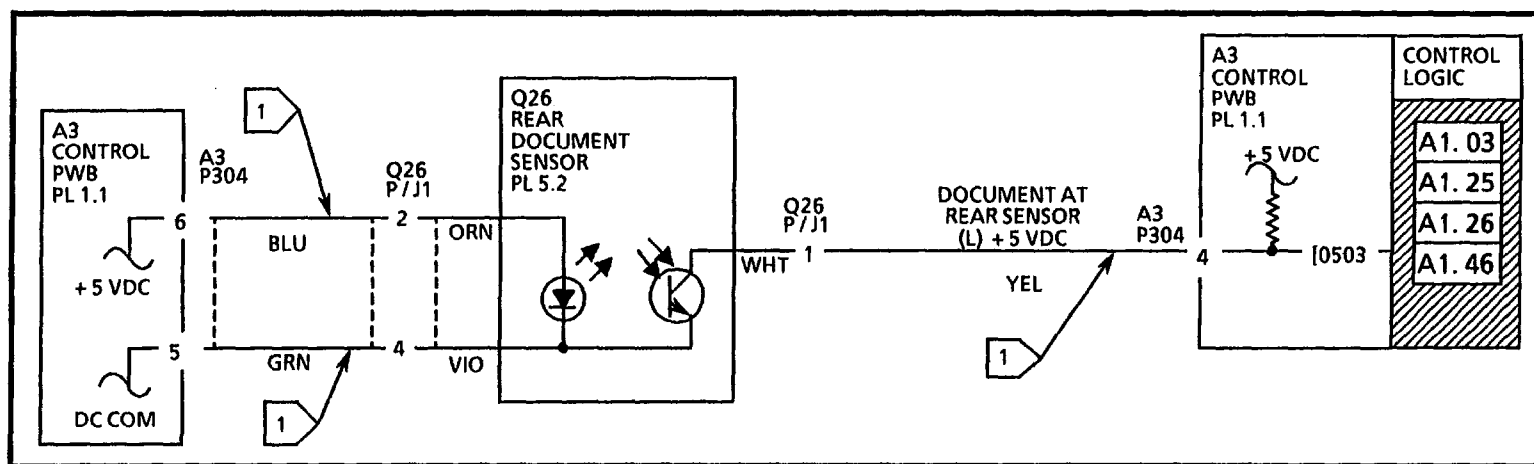
Go to the 5.1 Document Handler RAP.



1590



2338



A1.02/ A1.43 Document Handler RAP

The status code A1 is displayed when the logic detects that there is a document handler problem. As the document is rescanned, the Front Document Sensor is actuated, causing the sensor signal to change state. The logic detects a change in the state of the Front Document Sensor signal.

A1.02 Indicates that the logic detected that the Front Document Sensor was blocked at Power On. When the Power On button was pressed, the sensor signal was LOW.

A1.43 Indicates that the logic detected that the document did not reach the Front Document Sensor when the document was being rescanned. As the document was being rescanned, the sensor signal did not change state from HIGH to LOW.

The problem may occur if one of the following conditions exist:

- the Document Handler has an excessive static condition.
- the document is not in good condition.
- there is a problem with the Document Drive Motor or the motor control circuitry.
- the Document Static Eliminator Brush is dirty.

Initial Actions

- Remove the Upper Document Handler. Ensure that the Front Document Sensor is not blocked or damaged. Clean with Anti Static Cleaner.
- Ensure that the connectors for the Front Document Sensor (Q22 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Ensure that the Static Eliminator Brush is clean. Clean or replace the Brush as required. (PL5.2)

Procedure

Enter the code [0502] to check the Front Document Sensor.

Block the Front Document Sensor.

The Control Panel display changes from (01) to (00) when the sensor is blocked.

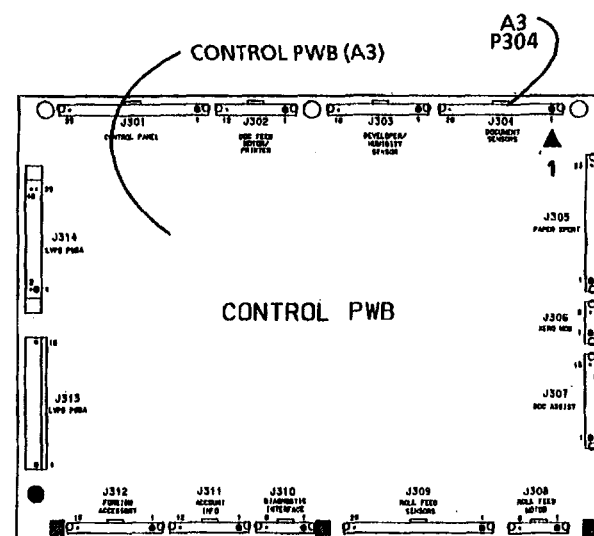
Y N

Go to FLAG 1 and check the wiring between the Front Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

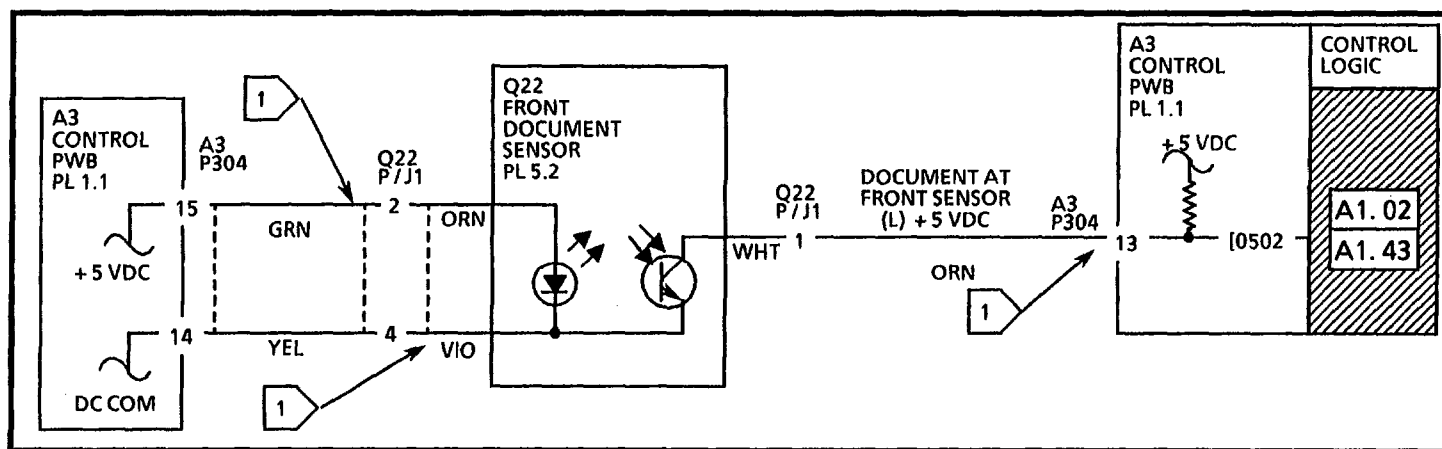
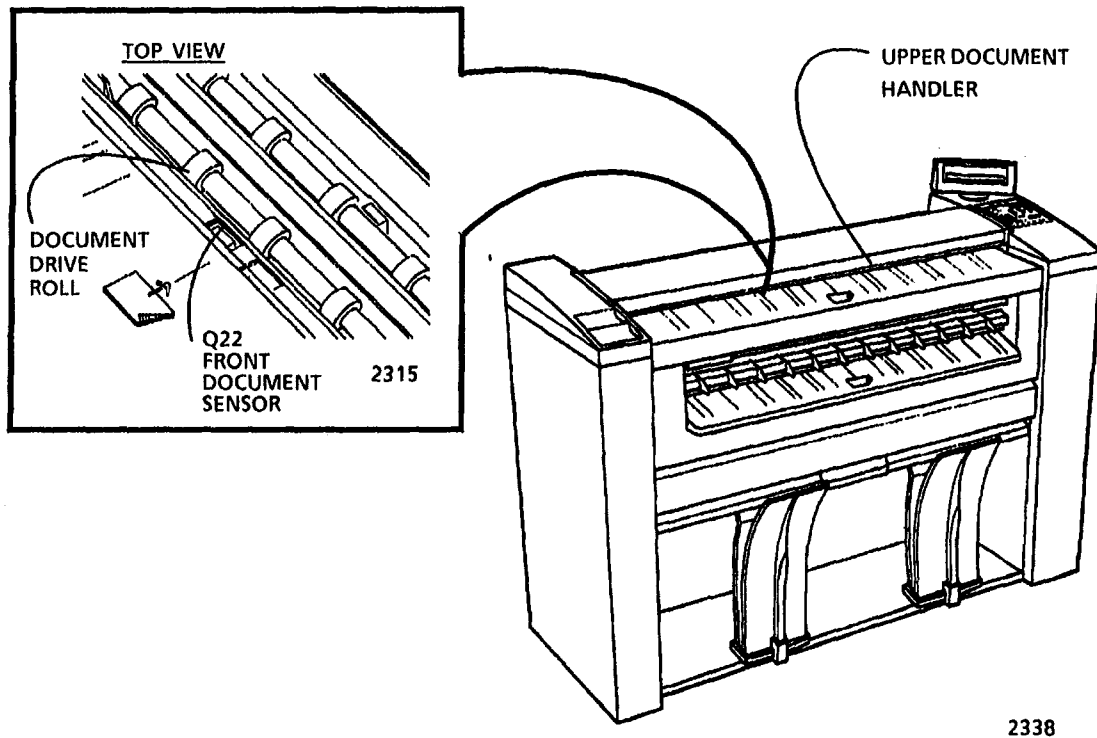
If there is no problem with the wiring, replace the Front Document Sensor (Q22).

If the problem persists, replace the Control PWB (A3).

Go to the 5.1 Document Handler RAP.



1590



A1.64 Document Handler RAP

The status code A1 is displayed when the logic detects that there is a document handler problem. As the document is scanned and then rescanned, the Rear Document Sensor and the Front Document Sensor are actuated and deactuated, causing the sensor signals to change state. The logic detects a change in the state of the Rear Document Sensor and the Front Document Sensor signals.

A1.64 Indicates that the logic detected that the Rear Document Sensor deactuated before the Front Document Sensor deactuated. The Rear Document Sensor signal changed state from LOW to HIGH before the Front Document Sensor signal changed state from LOW to HIGH.

The problem may occur if one of the following conditions exist:

- the Document Handler has an excessive static condition.
- the document is not in good condition.
- there is a problem with the Document Drive Motor or the motor control circuitry.
- the Document Static Eliminator Brush is dirty.

Initial Actions

- Remove the Upper Document Handler. Ensure that the Rear Document Sensor and the Front Document Sensor are not blocked or damaged.
- Ensure that the connectors for the Rear Document Sensor (Q26 P1), the Front Document Sensor (Q22 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Ensure that the Static Eliminator Brush is clean. Clean or replace the Brush as required. (PL5.2)

Procedure

Enter the code [0503] in order to check the Rear Document Sensor.

Block the Rear Document Sensor.

The display changes from (01) to (00) when the sensor is blocked.

Y N

Go to FLAG 1 and check the wiring between the Rear Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no problem with the wiring, replace the Rear Document Sensor (Q26).

If the problem persists, replace the Control PWB (A3).

Enter the code [0502] in order to check the Front Document Sensor.

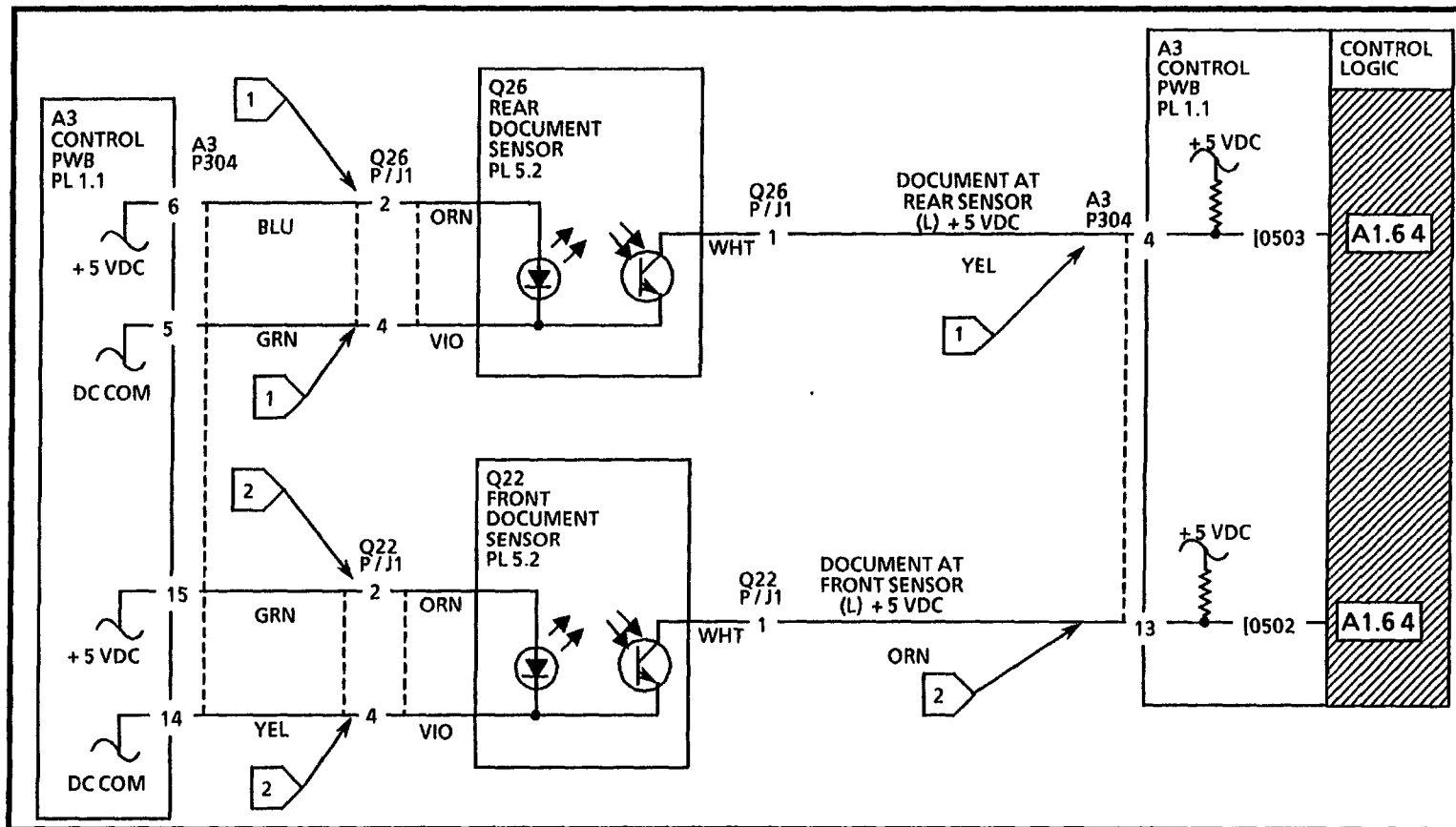
Block the Front Document Sensor.

The display changes from (01) to (00) when the sensor is blocked.

Y N

A B

Notes:



A1.65 Document Handler RAP

The status code A1 is displayed when the logic detects that there is a document handler problem. As the document is scanned and then rescanned, the Front Document Sensor is actuated and deactuated, causing the sensor signal to change state. The logic detects a change in the state of the Front Document Sensor signal.

A1.65 Indicates that the logic detected that the Front Document Sensor deactuated too early when the document was being scanned. The Front Document Sensor signal changed state from a LOW to HIGH too early as the document was being scanned.

The problem may occur if one of the following conditions exist:

- the Document Handler has an excessive static condition.
- the document is less than 11.0 inches (279 mm) in length.
- the document is not in good condition.
- there is a problem with the Document Drive Motor or the motor control circuitry.
- the Document Static Eliminator Brush is dirty.

Initial Actions

- Remove the Upper Document Handler. Ensure that the the Front Document Sensor is not blocked or damaged.
- Ensure that the connector for the Front Document Sensor (Q22 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Ensure that the Static Eliminator Brush is clean. Clean or replace the Brush as required. (PL5.2)

Procedure

Enter the code [0502] to check the Front Document Sensor.

The Control Panel display changes from (01) to (00) when the sensor is blocked.

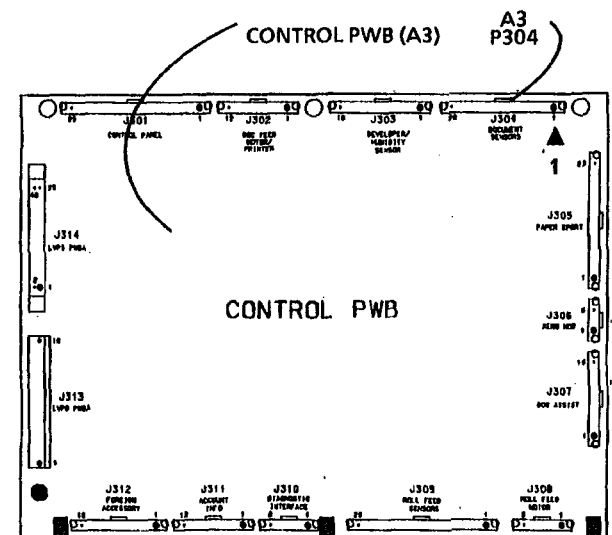
Y N

Go to FLAG 1 and check the wiring between the Front Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

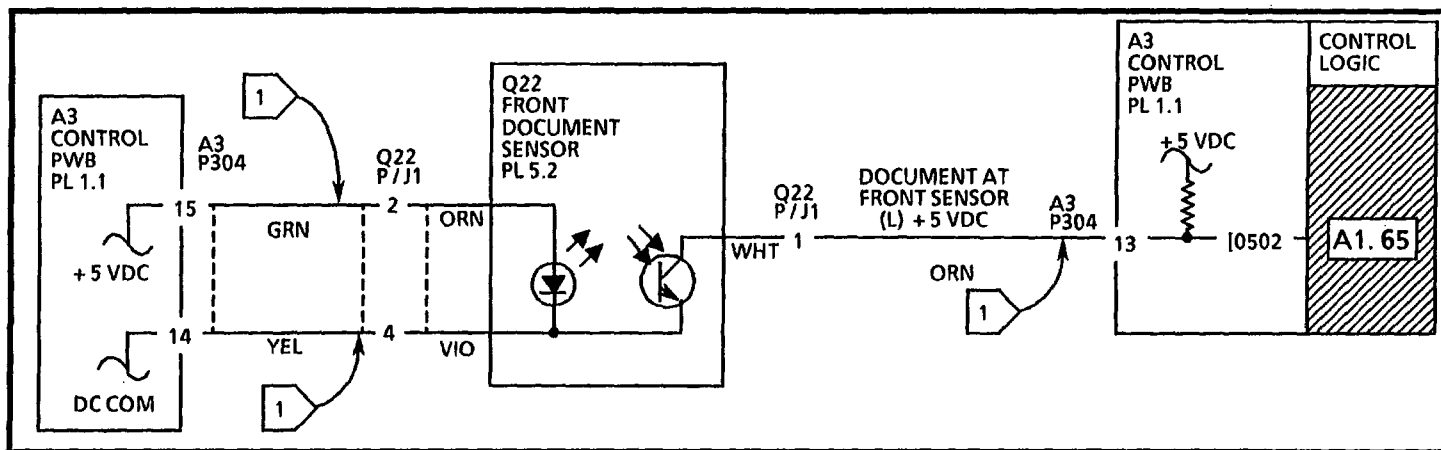
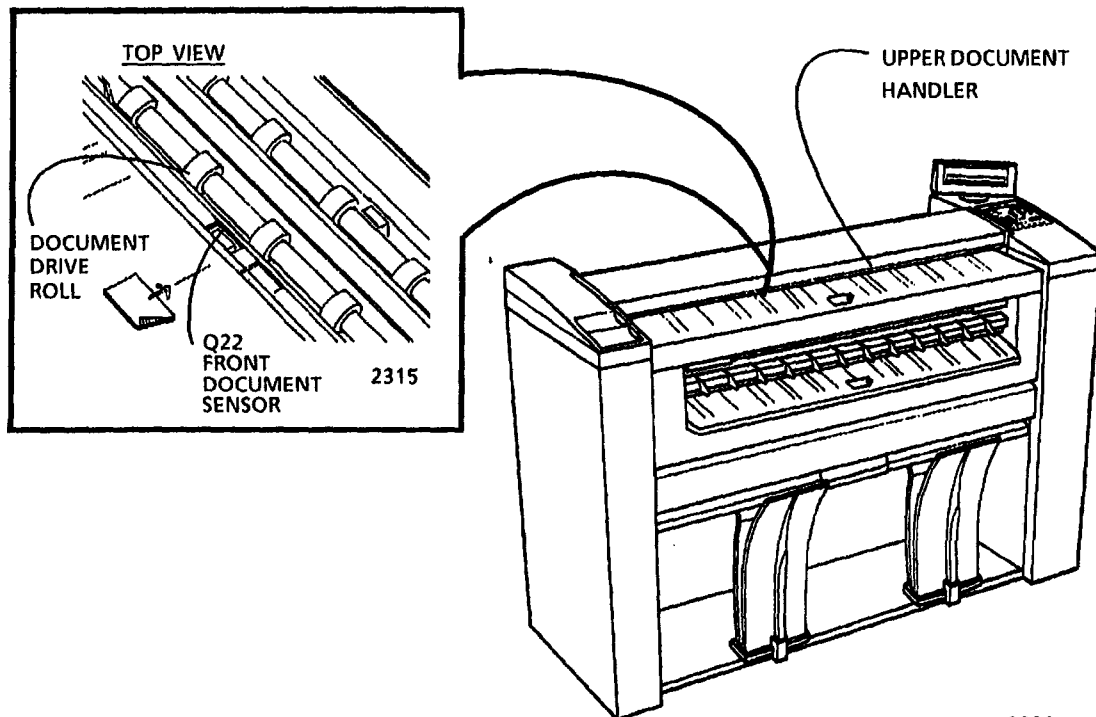
If there is no problem with the wiring, replace the Front Document Sensor (Q22).

If the problem persists, replace the Control PWB (A3).

Go to the 5.1 Document Handler RAP.



1590



C1.01 Media Feed RAP

The status code **C1.01** is displayed when the logic detects that there is a media feed problem. As media is fed or rewound along the media path, the Roll Position Sensor is blocked and not blocked, causing the sensor signal to change state. The logic detects a change in the state of the Roll Position Sensor signal.

C1.01 Indicates that the logic detected that either media was not fed to, or media was not fed or rewound past, the Roll Position Sensor. The sensor signal does not change state from a HIGH to LOW or from a LOW to HIGH as the media is being fed from Roll.

The problem may occur if there is a problem with the roll drive motor or the motor control circuitry.

Initial Actions

- Pull out the Media Supply Drawer. Check the media path for obstructions.
- Remove the rear covers and the Roll Position Sensor (Q1) from the rear frame. Clean the Roll Position Sensor by wiping the face of the sensor with a clean cloth. Check the connectors for the Roll Position Sensor for damage. Ensure that the connectors and pins are seated correctly. Reinstall the Sensor.
- Check the connector for the Control PWB (A3 P309) for damage. Ensure that the connector and pins are seated correctly.

Procedure

Enter the code [0707] in order to check the Roll Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

Pull out the Drawer and ensure that media is not positioned in the sensor window. Close the drawer, a (01) is displayed.

Pull out the Drawer and position the media so that the media is located in the sensor window. Close the drawer, a (00) is displayed.

The display changes from (01) to (00) when the media is positioned in the sensor window.

Y N

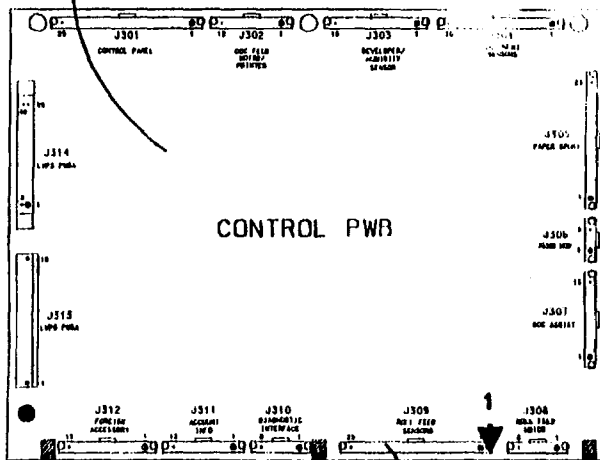
Go to FLAG and check the wiring between the Roll Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll Position Sensor (Q1).

If the problem persists, replace the Control PWB (A3).

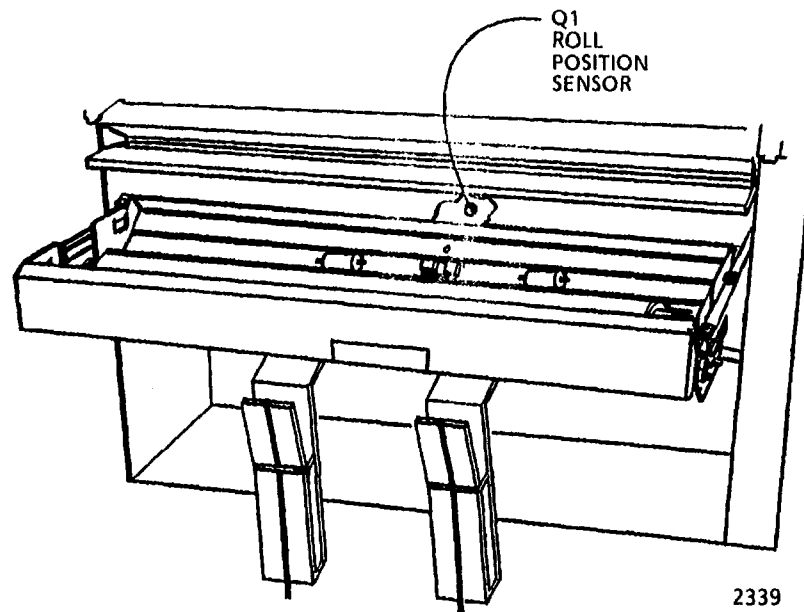
Go to the 7.1 Roll Feed RAP.

CONTROL PWB (A3)

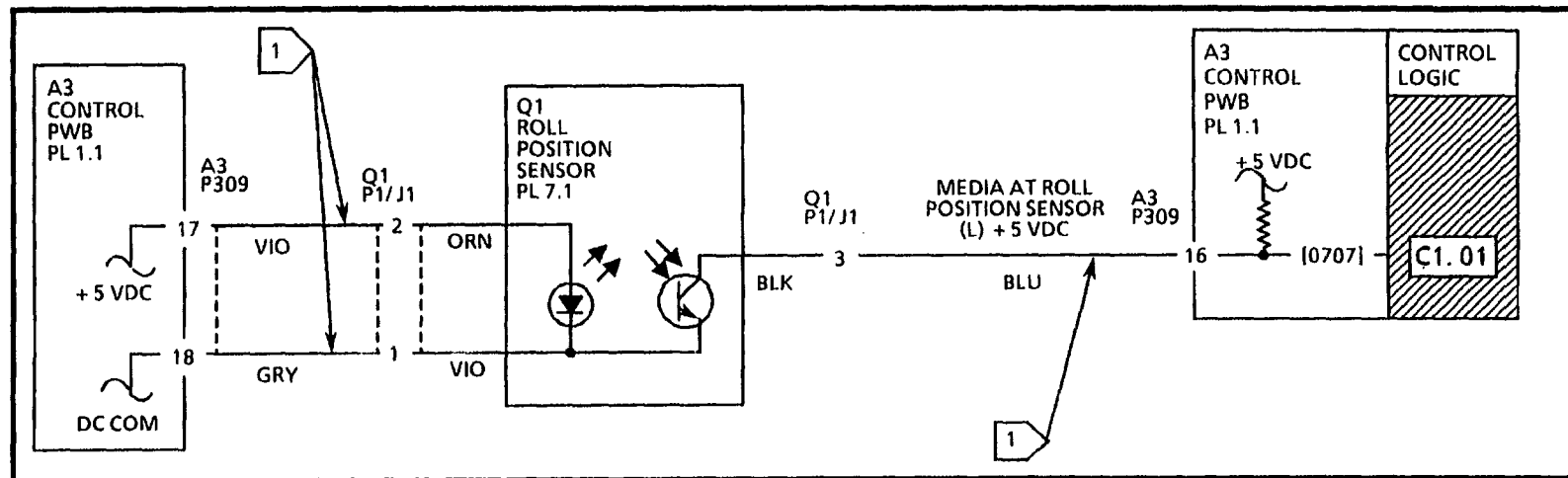


1590

A3
P309



2339



C1.04 Media Transportation RAP

The status code **C1.04** is displayed when the logic detects that the media is jammed in the registration area of the Media Transport. The media that is moving through the Media Transport, alternately blocks and clears the Media Registration Sensor, causing the sensor signal to change state. The logic detects a change in the state of the Media Registration Sensor signal.

C1.04 Indicates that the logic detected that the media did not reach the Media Registration Sensor. The sensor signal did not change state from HIGH to LOW as the media was being fed from the Roll.

The problem may occur if there is a problem with either the Roll Feed or Media Transport mechanical components, the Drive Motor, or the motor control circuitry.

NOTE: If the media is jammed in the Media Transport, ensure that the entire sheet of media is removed from the copier.

NOTE: The component locator drawings and the circuit diagrams are located on the three following pages.

Initial Actions

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Sheet Feed-in Shelf. Check the Media Transport for a media jam. Remove any obstructions in the media path.
- Clean the Media Registration Sensor by wiping the face of the sensor with a clean, dry cloth.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Media Registration Sensor (A3 P305) for damage and ensure that the connector and pins are seated correctly.
- Check the Cutter Media Guide for damage and replace as necessary.

Procedure

Enter the code [0803] in order to check the Media Registration Sensor.

With the Sheet Feed-in Shelf in the lowered position, place a clean strip of bond media over the Media Registration Sensor.

The display changes from (01) to (00) when the sensor is blocked.

Y N

Go to FLAG 1 and check for an open circuit or a short circuit to ground in the wires to the Media Registration Sensor.

If there is no problem with the wiring, replace the Media Registration Sensor (Q1).

If the problem persists, replace the Control PWB (A3).

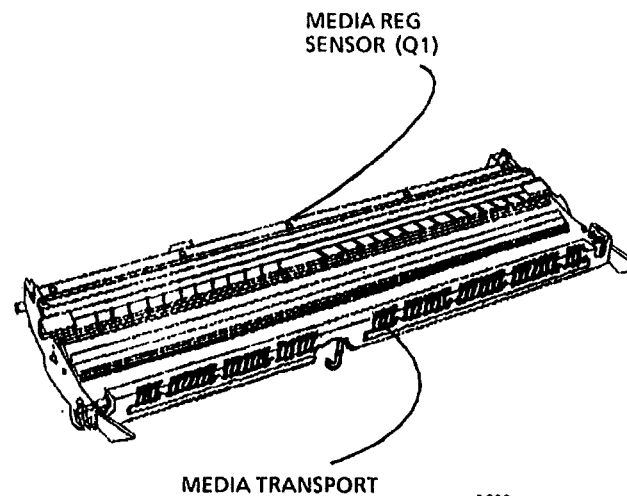
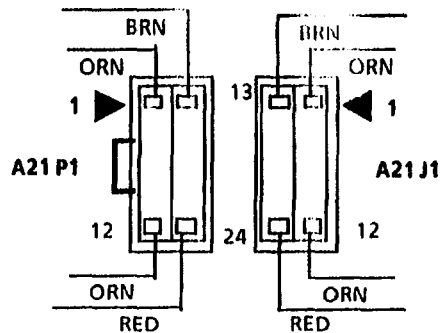
The problem may be caused by either the Roll Feed or Media Transport components.

Go to the 7.1 Roll Feed RAP.

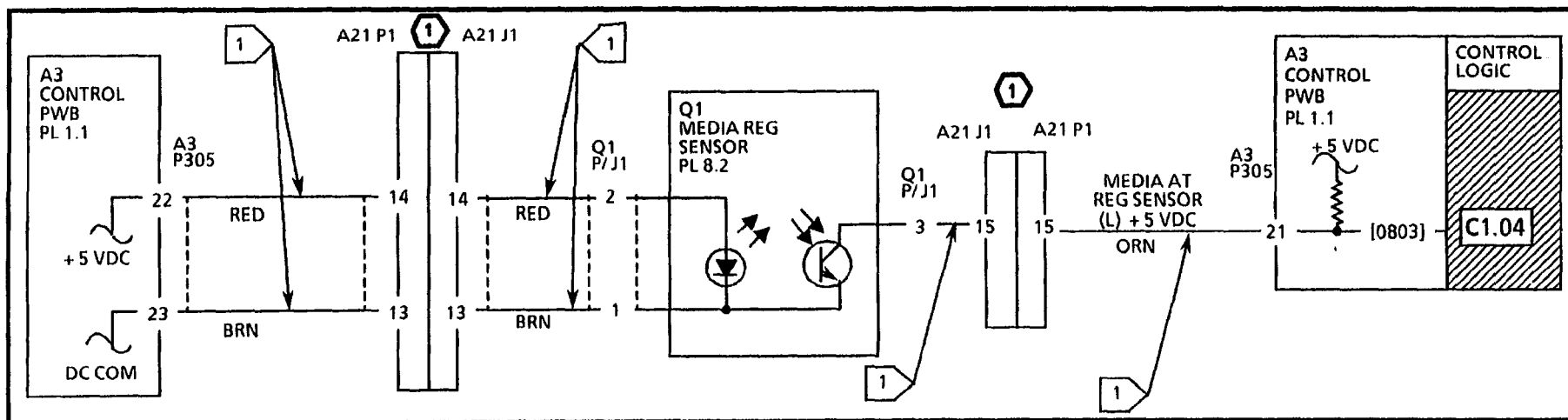
If the problem persists, go to the 8.1 Media Transport RAP.

NOTE:

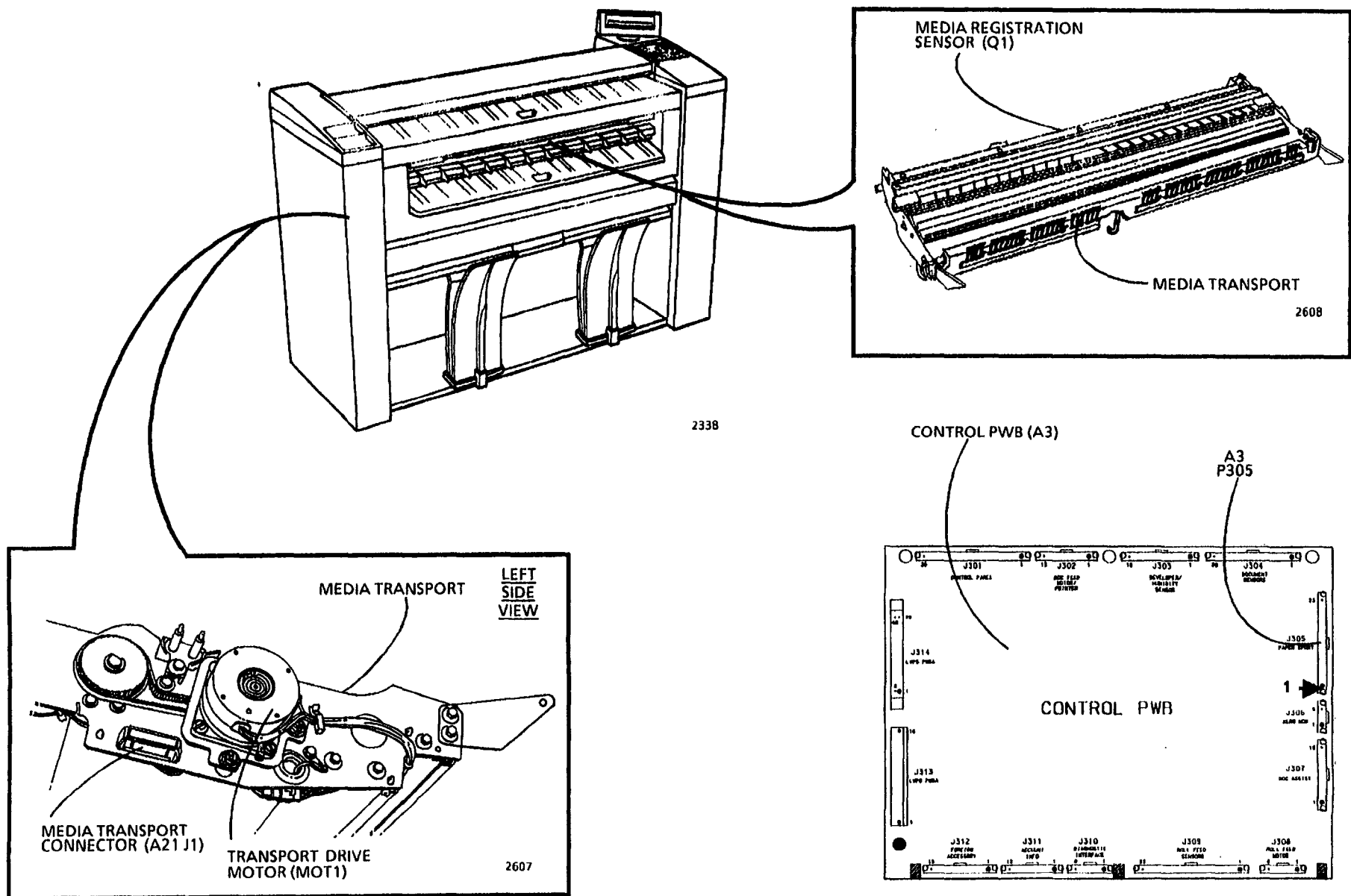
- 1 CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



2608



Notes:



C1.05 Media Feed RAP

(03/29/94)

The status code **C1.05** is displayed when the logic detects that there is a Roll media feed problem. As media is fed from Roll or rewind onto the Roll; the roll rotates, causing the Roll Motion Sensor to be alternately blocked and not blocked by the rotating encoder disk. The logic senses a change in the state of the Roll Motion Sensor signal.

C1.05 Indicates that no motion is detected by the logic from the Roll Motion Sensor. The sensor signal does not continuously change state from a HIGH to LOW as the media is being fed or rewind.

The problem may occur if there is a problem with the roll drive motor or the motor control circuitry.

Initial Actions

- Open the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Rewind Drive Sprocket in the forward and reverse directions.
- Check the connectors for the Roll Motion Sensor (Q4 P1) and the Control PWB (A3 P309) for damage and ensure that they are seated correctly.

Procedure

Enter the code [0710] in order to check the Roll Motion Sensor. Beeps will be heard when the roll is rotated.

Reach under the left side of the Media Drawer and locate the Rewind Drive Gear for the media roll. Manually rotate the Gear slowly. The rotating Gear causes the Media Roll and the Roll encoder Disk to rotate.

Beeps are heard when the roll is rotated.

Y N

Go to FLAG and check the wiring between the Roll Motion Sensor and the Control PWB for an open circuit or a short circuit to ground.

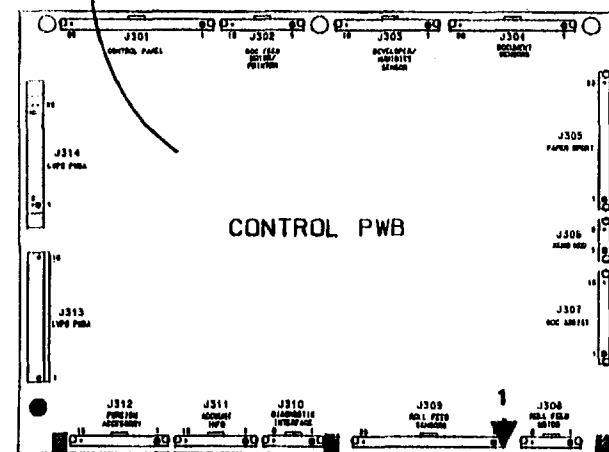
If there is no problem with the wiring, replace the Roll Motion Sensor (Q4).

If the problem persists, replace the Control PWB (A3).

Go to the **C1.01 Media Feed RAP**.

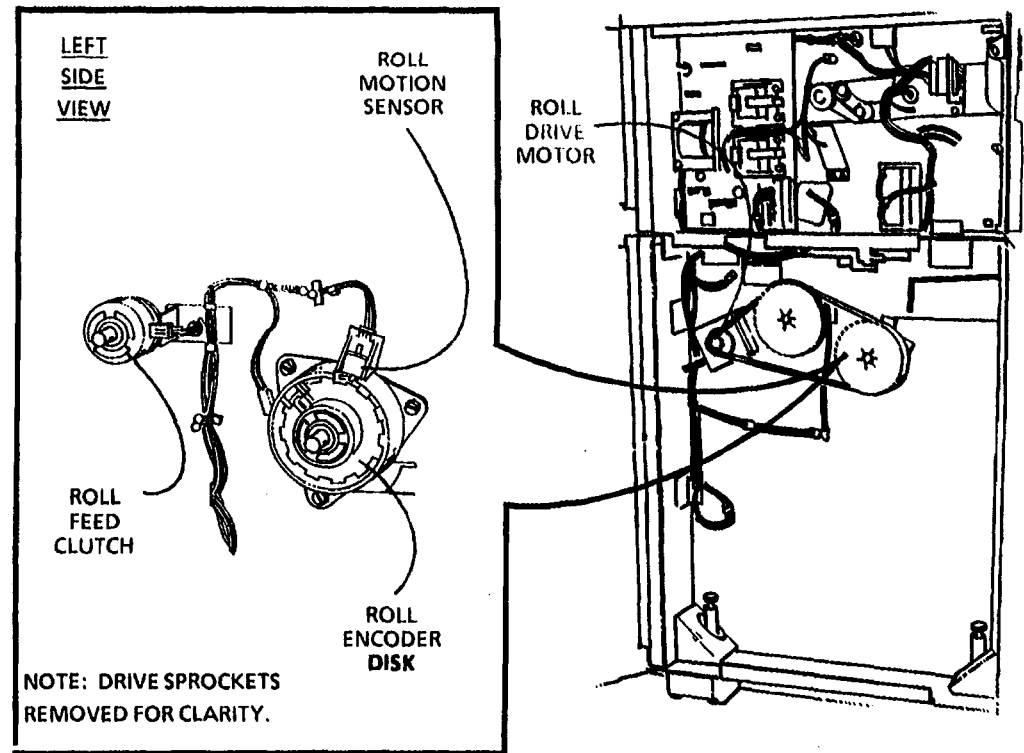
If the problem continues, go to the **7.1 Roll Feed RAP**.

CONTROL PWB (A3)

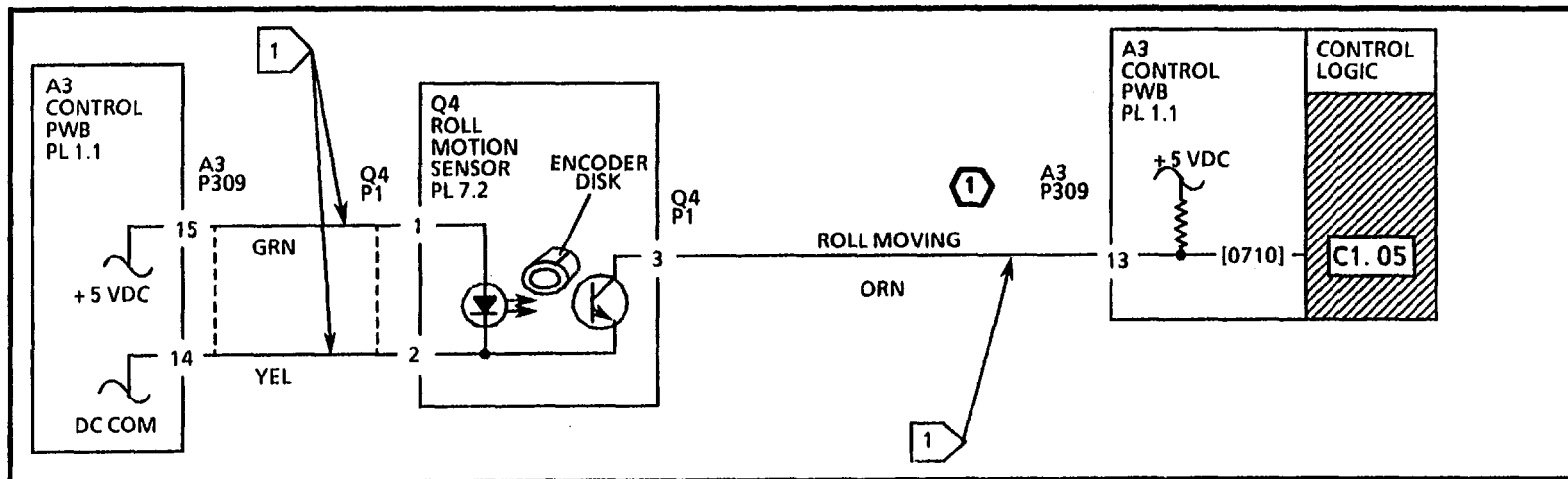


NOTES:

- ① THE ROLL MOVING SIGNAL IS EITHER + 5 VDC OR 0 VDC WHEN THE ROLL IS NOT MOVING. THE SIGNAL IS APPROXIMATELY + 2.4 VDC WITH THE ROLL MOVING.



2341



C4.01/ C4.34 Sheet Feed RAP

The status code **C4** is displayed when the logic detects that there is a sheet feed problem. The Sheet Feed Sensor is actuated when sheet media is inserted into the copier. The logic detects a change in the state of the Sheet Feed Sensor signal.

C4.01 Indicates that the logic detected that the sheet media is blocking the Sheet Feed Sensor at Power On. The sensor signal is HIGH when the Power On switch was pressed.

C4.34 Indicates that the logic detected that the sheet media was removed from the copier when the copier was feeding the sheet media from the registration position to the drum. The Sheet Feed Sensor changed state from HIGH to LOW as the sheet was being fed.

The problem may occur if the sheet media is damaged.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor, or the motor control circuitry.

Initial Actions

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Sheet Feed-in Shelf. Check the Media Transport for a sheet media jam. Remove any obstructions in the sheet media path.
- Check the actuator of the Sheet Feed Sensor for binding or damage.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Ensure that the Control PWB connector for the Sheet Feed Sensor (A3 P305) is not damaged and ensure that the connector and pins are seated correctly.

Procedure

Enter the code [0801] to check the Sheet Feed Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

With the Sheet Feed-in Tray in the lowered position, place a clean sheet of media into the Media Transport in order to actuate the Sheet Feed Sensor.

The display changes from (00) to (01) when the sensor is actuated.

Y N

Go to FLAG 1 and check for an open circuit or a short circuit to ground in the wires to the Sheet Feed Sensor.

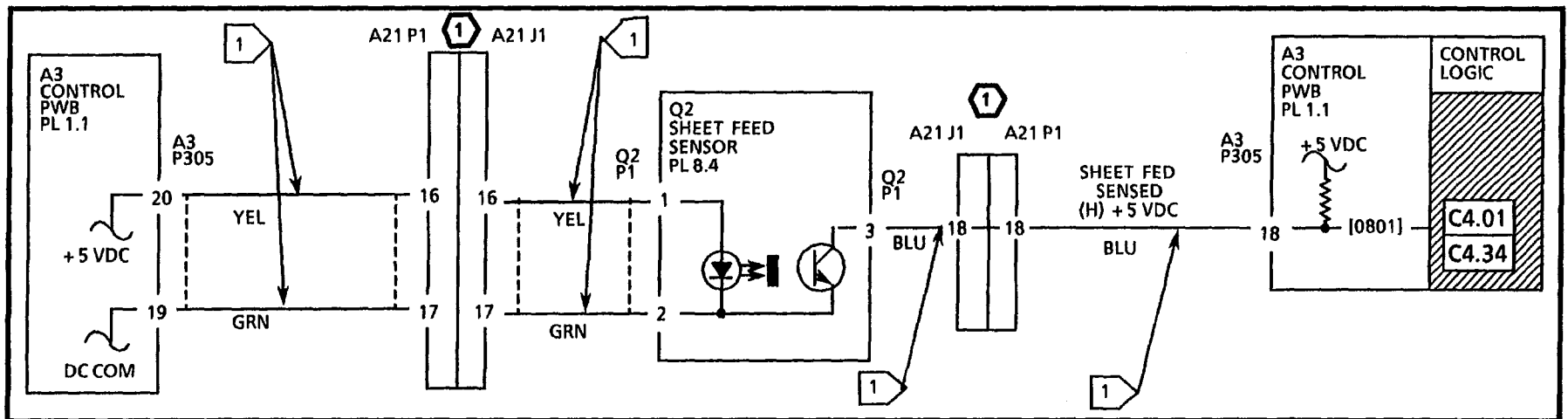
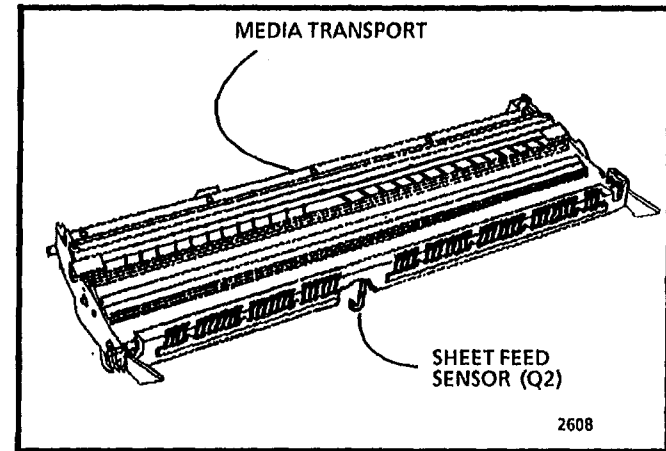
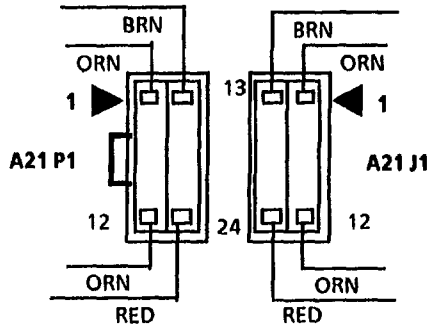
If there is no problem with the wiring, replace the Sheet Feed Sensor (Q2).

If the problem persists, replace the Control PWB (A3).

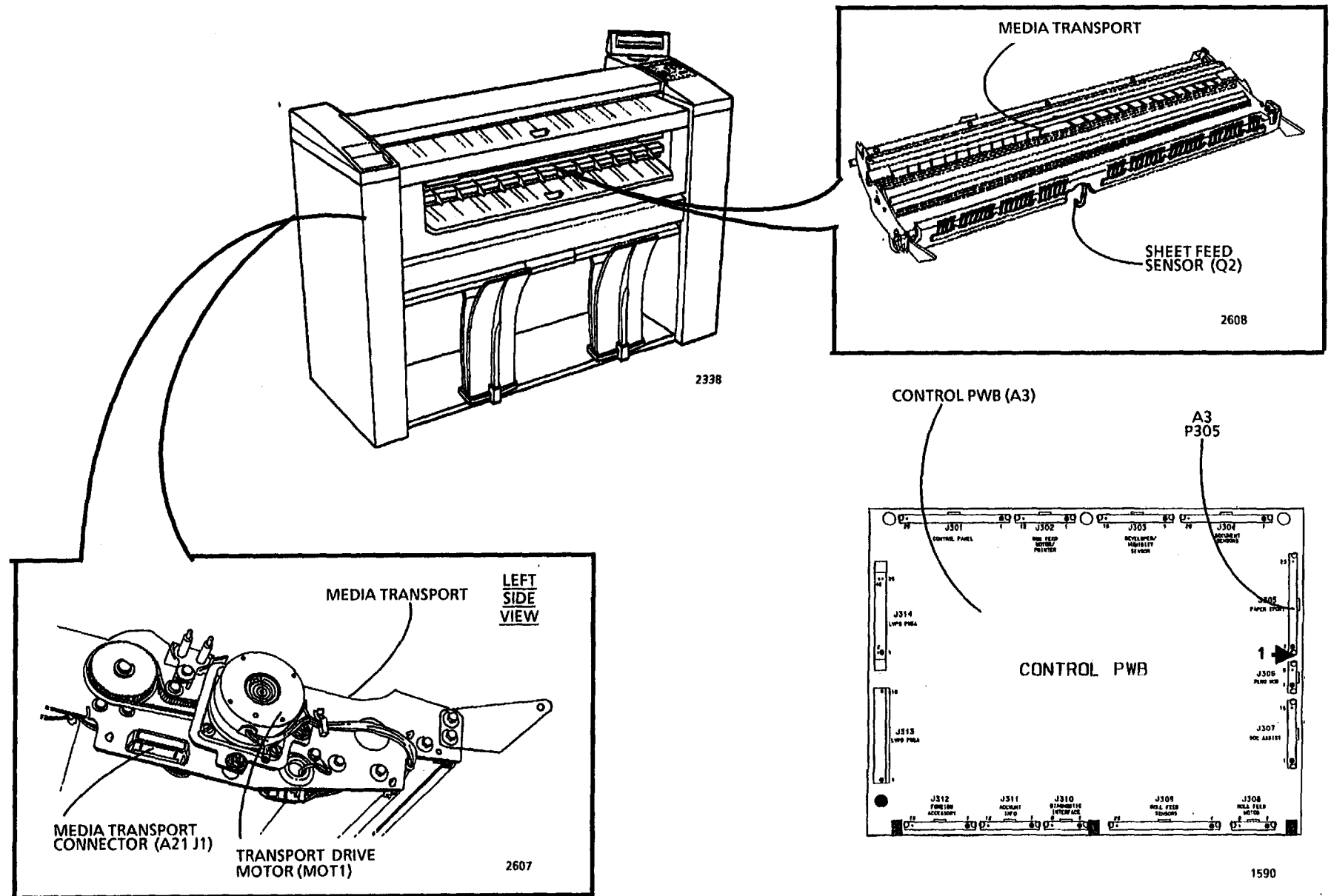
Go to the **8.1 Media Transport RAP**.

NOTE:

- 1 CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



Notes:



C4.24 Sheet Feed RAP

The status code **C4.24** is displayed when the logic detected that there is a sheet feed problem. The Sheet Feed Sensor is actuated when sheet media is inserted into the copier. As the sheet media moves through the Media Transport, the Media Registration Sensor is alternately blocked and cleared, causing the sensor signal to change state. The logic detects a change in the state of both the Sheet Feed Sensor and the Media Registration Sensor signals.

C4.24 Indicates that the logic detected that sheet media was inserted into the copier and the media did not reach the Media Registration Sensor in the allowed time period. The Sheet Feed Sensor signal was HIGH and the Media Registration Sensor remained HIGH for too long a time period after the Sheet Feed Sensor signal went HIGH.

The problem may occur if the sheet media is not in good condition.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor, or the motor control circuitry.

Initial Actions

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Sheet Feed-in Shelf. Check the Media Transport for a media jam. Remove any obstructions in the sheet media path.
- Clean the Media Registration Sensor by wiping the face of the sensor with a clean, dry cloth.
- Check the actuator of the Sheet Feed Sensor for binding or damage.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Ensure that the Control PWB connector for the Sheet Feed Sensor (A3 P305) is not damaged and ensure that the connector and pins are seated correctly.

Procedure

Enter the code **[0803]** in order to check the Media Registration Sensor. The Control Panel display indicates a **(00)** when the sensor is actuated.

With the Sheet Feed-in Shelf in the lowered position, place a clean strip of bond media over the Media Registration Sensor.

The display changes from **(01)** to **(00)** when the sensor is blocked.

Y N

Go to FLAG 1 and check for an open circuit or a short circuit to ground in the wires to the Media Registration Sensor.

If there is no problem with the wiring, replace the Media Registration Sensor (Q1).

If the problem persists, replace the Control PWB (A3).

Enter the code **[0801]** in order to check the Sheet Feed Sensor. The Control Panel display indicates a **(01)** when the sensor is actuated.

Move the Sheet Feed-in Shelf to the raised position. Place a clean sheet of media into the Media Transport, in order to actuate the Sheet Feed Sensor.

The display changes from **(00)** to **(01)** when the sensor is actuated.

Y N

A B

A B

Go to FLAG 2 and check for an open circuit or a short circuit to ground in the wires to the Sheet Feed Sensor.

If there is no problem with the wiring, replace the Sheet Feed Sensor (Q2).

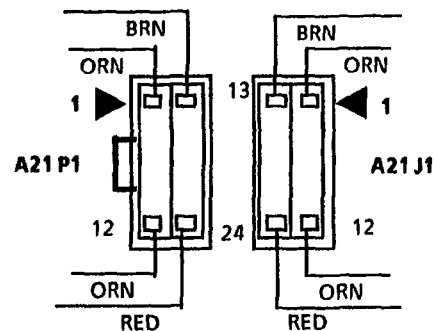
If the problem persists, replace the Control PWB (A3).

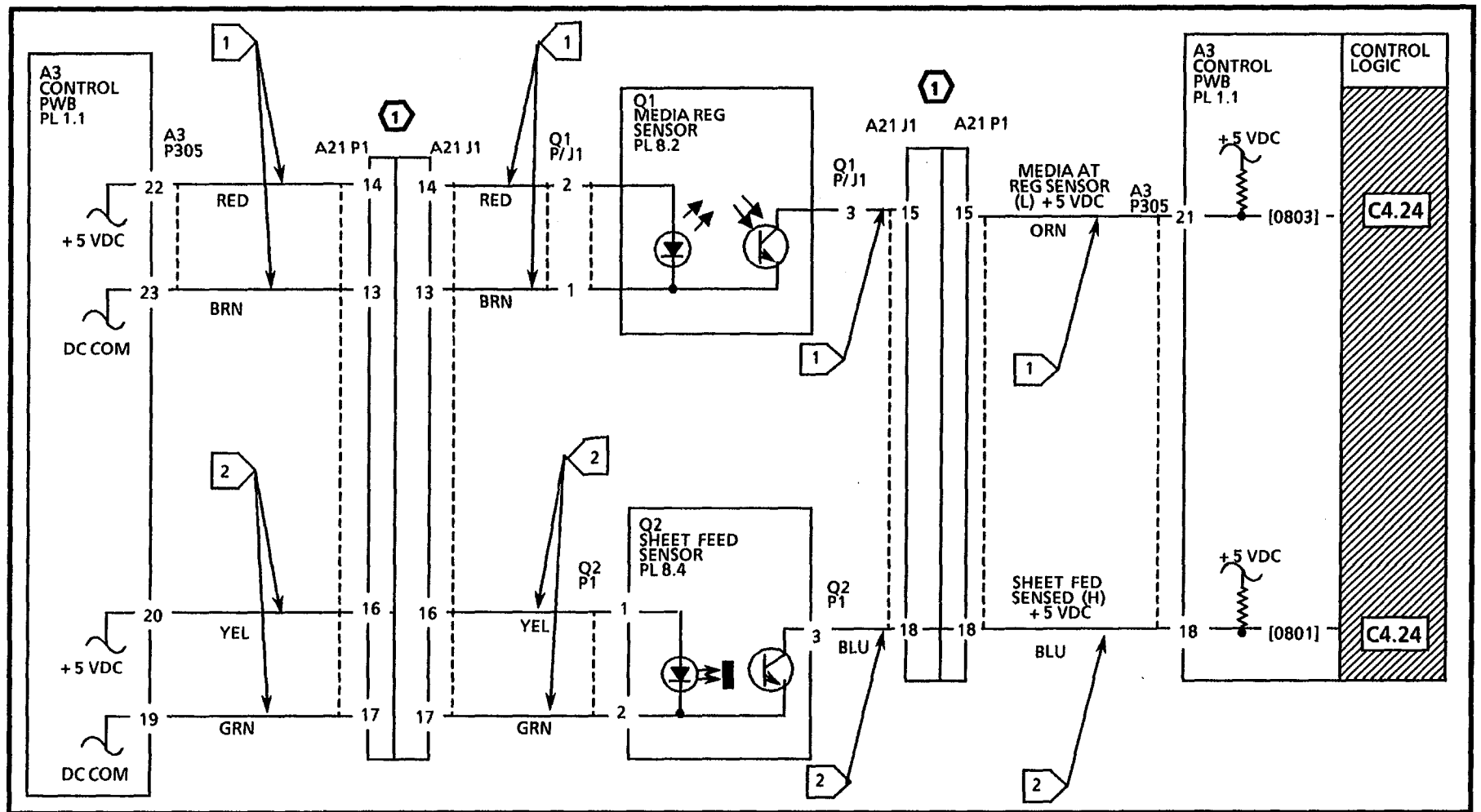
Go to the 8.1 Media Transport RAP.

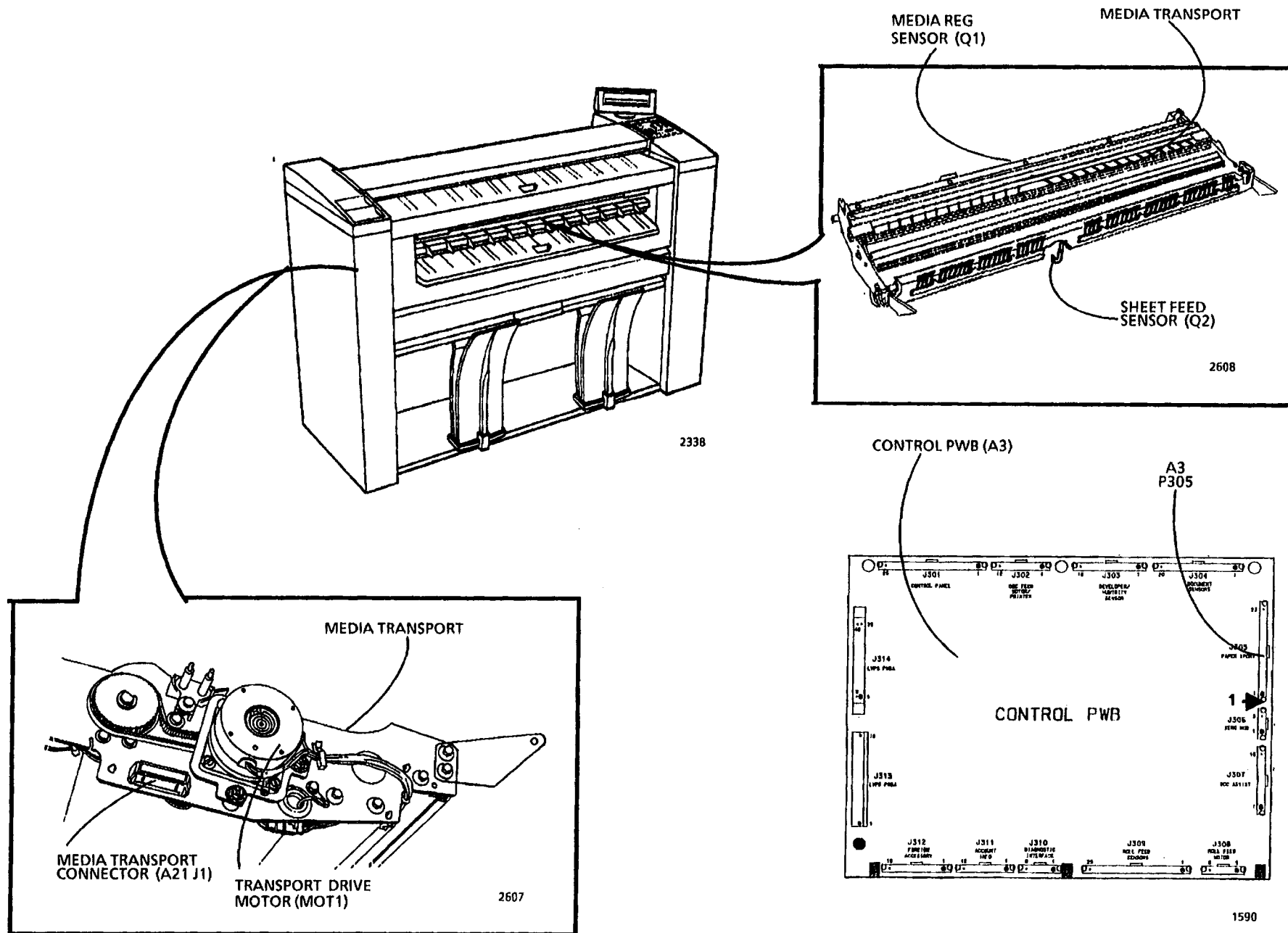
NOTE:



CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.







E2.01 Media Transportation RAP

The status code E2.01 is displayed when the logic detects that the media is jammed in the registration area of the Media Transport. The media that is moving through the Media Transport, alternately blocks and clears the Media Registration Sensor, causing the sensor signal to change state. The logic detects a change in the state of the Media Registration Sensor signal.

E2.01 Indicates that the logic detected that :

- (a) the media is blocking the Media Registration Sensor at Power On. The sensor signal is LOW when the Power On switch was pressed.

(OR)

- (b) during the run mode, the media was not driven past the Media Registration Sensor. The sensor signal did not change state from LOW to HIGH as the media was being fed.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor, or the motor control circuitry.

NOTE: If the media is jammed in the Media Transport, ensure that the entire sheet of media is removed from the copier.

NOTE: The component locator drawings and the circuit diagrams are located on the following pages.

Initial Actions

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Sheet Feed-in Shelf. Check the Media Transport for a media jam. Remove any obstructions in the media path.
- Clean the Media Registration Sensor by wiping the face of the sensor with a clean, dry cloth.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Media Registration Sensor (A3 P305) for damage and ensure that the connector and pins are seated correctly.
- Check the Cutter Media Guide for damage.

Procedure

Enter the code [0803] in order to check the Media Registration Sensor. The Control Panel display indicates a (00) when the sensor is actuated.

With the Sheet Feed-in Tray in the lowered position, place a clean strip of bond media over the Media Registration Sensor.

The display changes from (01) to (00) when the sensor is blocked.

Y N

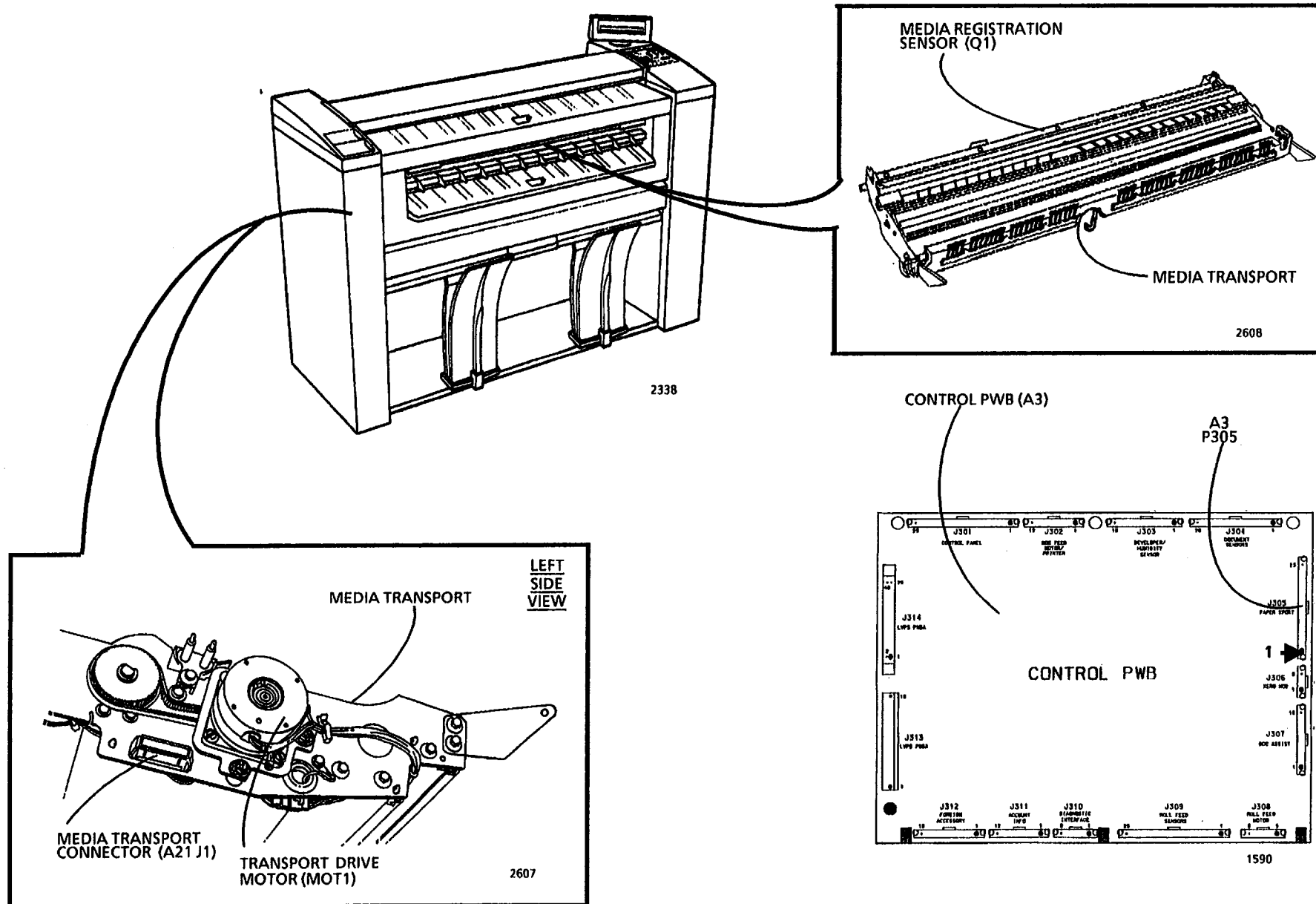
Go to FLAG 1 and check for an open circuit or a short circuit to ground in the wires to the Media Registration Sensor.

If there is no problem with the wiring, replace the Media Registration Sensor (Q1).

If the problem persists, replace the Control PWB (A3).

Go to the 8.1 Media Transport RAP.

Notes:



E4.01/ E4.02 Media Transportation RAP

03/17/94

The status code E4 is displayed when the logic detects that the media is jammed in the exit area of the Media Transport. As the media moves through the Media Transport, the media alternately actuates and deactuates the Media Exit Switch.

E4.01 Indicates that the logic detected that :

(a) the media is blocking the Media Exit Switch at Power On. The switch signal is HIGH when the Power On switch was pressed.

(OR)

(b) during the run mode, trail edge of the media did not clear the Media Exit Switch. The switch signal does not change state from HIGH to LOW as the media moves through the Media Transport.

E4.02 Indicates that the logic detected that the lead edge of the media did not reach the Media Exit Switch. The switch signal does not change state from LOW to HIGH as the media moves through the Media Transport.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor, or the motor control circuitry.

NOTE: If the media is jammed at the Media Transport exit area, ensure to remove the entire sheet of media from the copier.

NOTE: The component locator drawings and the circuit diagrams are located on the next two pages.

Initial Actions

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Sheet Feed-in Shelf. Check the Media Transport for a media jam. Remove any obstructions in the media path.
- Check the actuator of the Media Exit Switch for binding or damage.
- Check the Media Transport connector (A21 P/J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Media Exit Switch (A3 P305) for damage. Ensure that the connector and pins are seated correctly.

Procedure

Enter the code [0807] in order to check the Media Exit Switch. The Control Panel display indicates a (01) when the switch is actuated.

Manually actuate the Media Exit Switch.

The display changes from (00) to (01) when the switch is actuated.

Y N

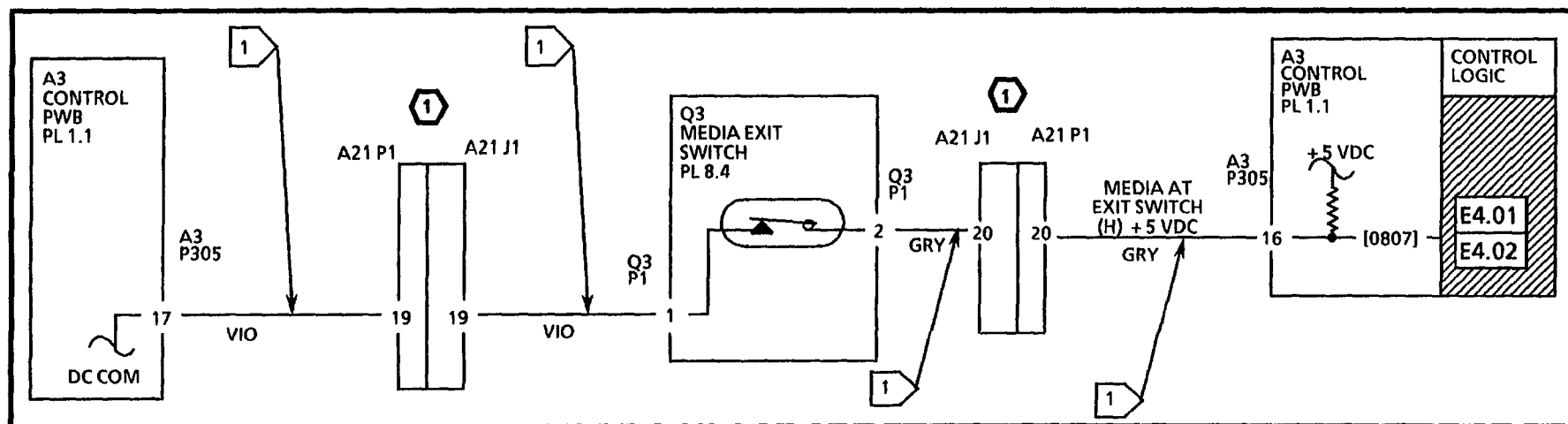
Go to FLAG 1 and check for an open or a short circuit to ground in the wires to the Media Exit Switch.

If there is no problem in the wiring, replace the Media Exit Switch (Q3).

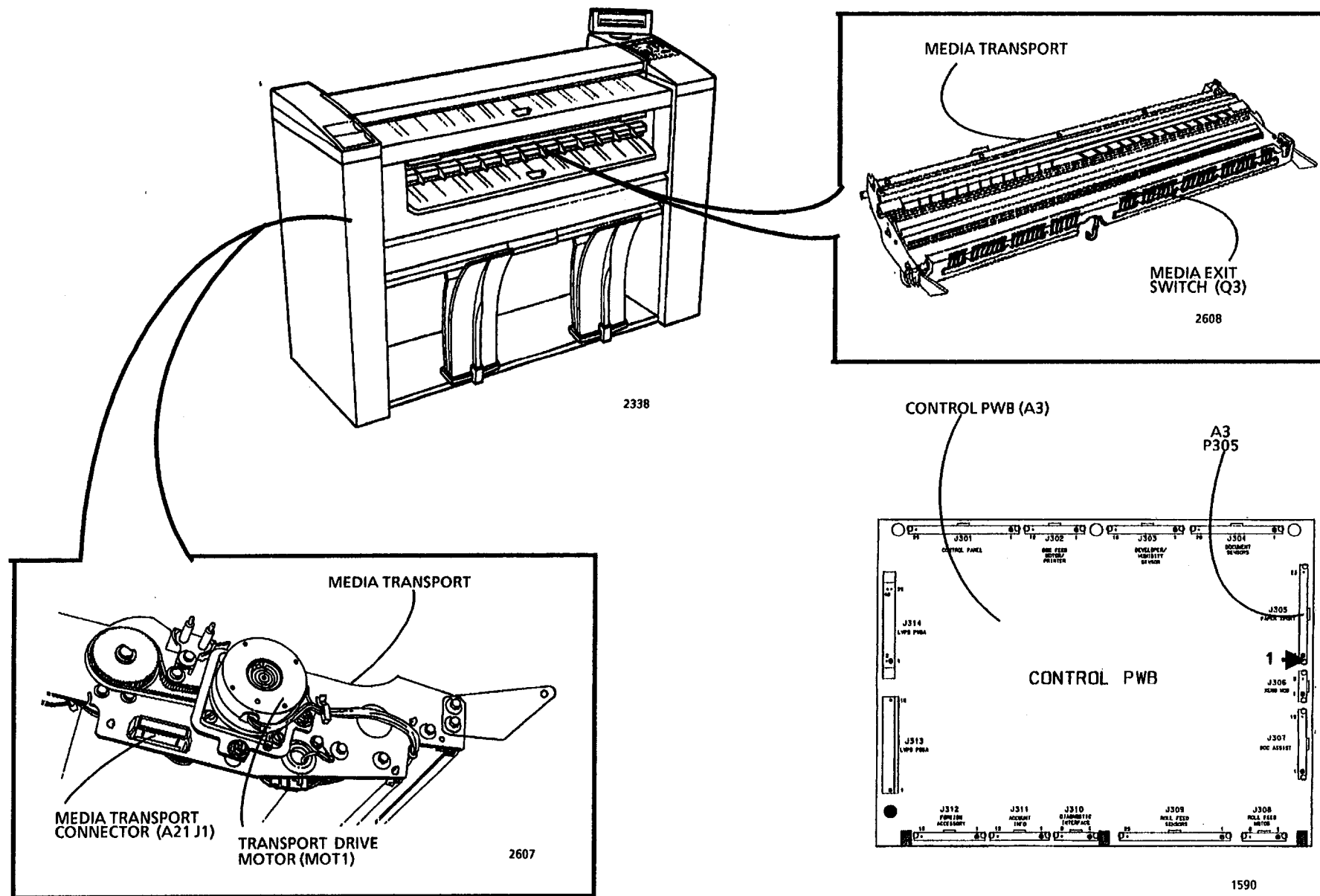
If the problem persists, replace the Control PWB (A3).

The problem may be caused by the Stripper Finger Jam Switch (S1). Go to the E4.03 Media Transportation RAP.

The diagram shows the wiring for two relays, A21 P1 and A21 J1. The A21 P1 relay has terminals 1, 12, 13, and 24. The A21 J1 relay has terminals 1, 12, 13, and 24. The wiring shows connections for BRN, ORN, and RED wires.



Notes:



E4.03 Media Transportation RAP

03/17/94

The status code E4.03 is displayed when the logic detects that the media is jammed in the Fuser area of the Media Transport. As the media moves through the Media Transport, the image on the media is fused by the Fuser Heat Roll. The media is held against the Heat Roll by the Fabric Guide. The Stripper Fingers assist in the removal of the media from the Heat Roll. When the media is not removed from the Heat Roll, the Stripper Finger Jam Switch (S1) is deactuated.

E4.03 Indicates that the logic detected that the media is jammed against a Stripper Finger causing the Finger Assembly to move out of position. When the Finger Assembly moves out of position, the Stripper Finger Jam Switch (S1) deactuates, causing the Media Misstrip signal to go LOW (L).

The Stripper Finger Jam Switch (S1) is normally held actuated by the Stripper Finger Assembly, as media is driven through the Media Transport. The Media Misstrip signal remains HIGH (H) as media is successfully driven through the Media Transport.

The problem may occur if there is a damaged Stripper Finger Assembly, the roll media is not positioned correctly on the Media Roll Support Tube or the lead edge of the media is damaged.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor, or the motor control circuitry.

Notes: 1. If the media is jammed in the Fuser Heat Roll area, ensure to remove the entire sheet of media from the copier carefully without damaging the Stripper Fingers.

2. The component locator drawings and the circuit diagrams are located on the following pages.

Initial Actions:

WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Cut Sheet Feed-in Shelf. Check the Fuser Heat Roll, Stripper Fingers and Media Transport for a media jam. Remove any obstructions in the Stripper Finger area and media path. Use caution and do not damage the Stripper Fingers.
- Check the actuator of the Stripper Finger Jam Switch (S1) for binding or damage.
- Ensure that the Stripper Finger Assembly is seated correctly and that the fingers are not damaged.

- Ensure that the Static Eliminator Brush is clean. Clean or replace the Brush as required.
- Ensure that the Media Exit Baffle is clean. Clean the baffle as required.
- Check that the Roll Media is installed correctly on the Roll Support Tube. Ensure that the edges of the Roll are aligned with the correct alignment marks on the Roll Support Tube.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Stripper Finger Jam Switch (A3 P305) for damage. Ensure that the connector and pins are seated correctly.

Procedure

Enter the code [1005] in order to check the Stripper Finger Jam Switch (S1). The Control Panel display indicates a (01) when the switch is actuated.

With the Cut Sheet Feed-in Shelf in the normal operating position, the Jam Switch (S1) is actuated by the Stripper Finger Assembly and a (01) is displayed.

With the Cut Sheet Feed-in Shelf in the lowered position, the Jam Switch (S1) is deactuated and a (00) is displayed.

A (01) is displayed with the Cut Sheet Feed-in Shelf in the normal operating position, and the display changes from (01) to (00) when the shelf is in the lowered position.

Y N

Go to FLAG 1 and check for an open or a short circuit to ground in the wires to the Stripper Finger Jam Switch (S1).

If there is no open or short circuit, replace the Finger Jam Switch (S1) (REP 8.14).

If the problem persists, replace the Control PWB (A3).

A

A

With the Cut Sheet Feed-in Shelf in the normal operating position, lift the bottom of the Stripper Finger Assembly slightly so that, the Assembly is lifted off the Jam Switch (S1) and the switch is deactuated.

A (01) is displayed with the Stripper Finger Assembly in the normal operating position, and the display changes from (01) to (00) when the Assembly is in the raised position.

Y N

Check that the Stripper Finger Assembly is installed correctly and that there is no obstruction restricting the movement of the Finger Assembly (REP 10.6).

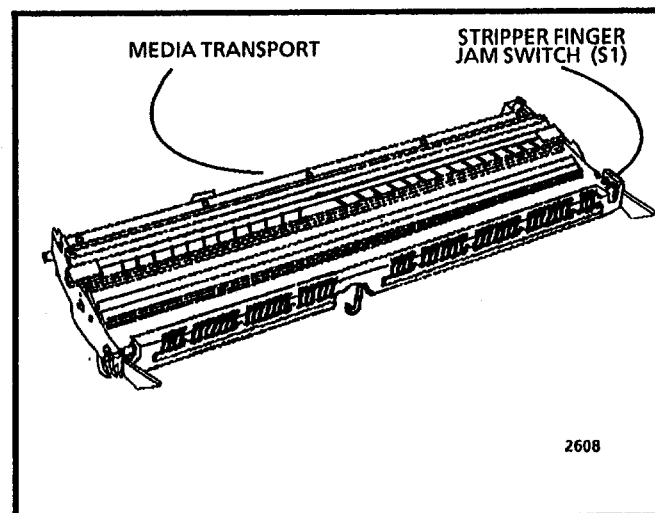
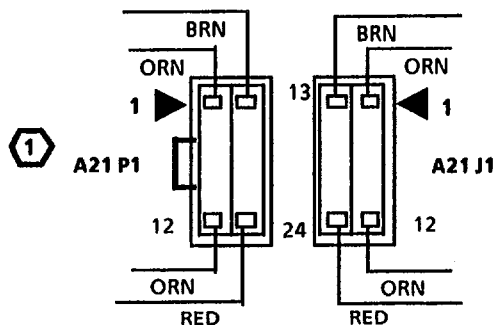
Check that the Stripper Fingers are installed correctly (REP 10.8).

If the checks are good, replace the Stripper Finger Jam Switch (S1) (REP 8.14).

Go to the 8.1 Media Transport RAP.

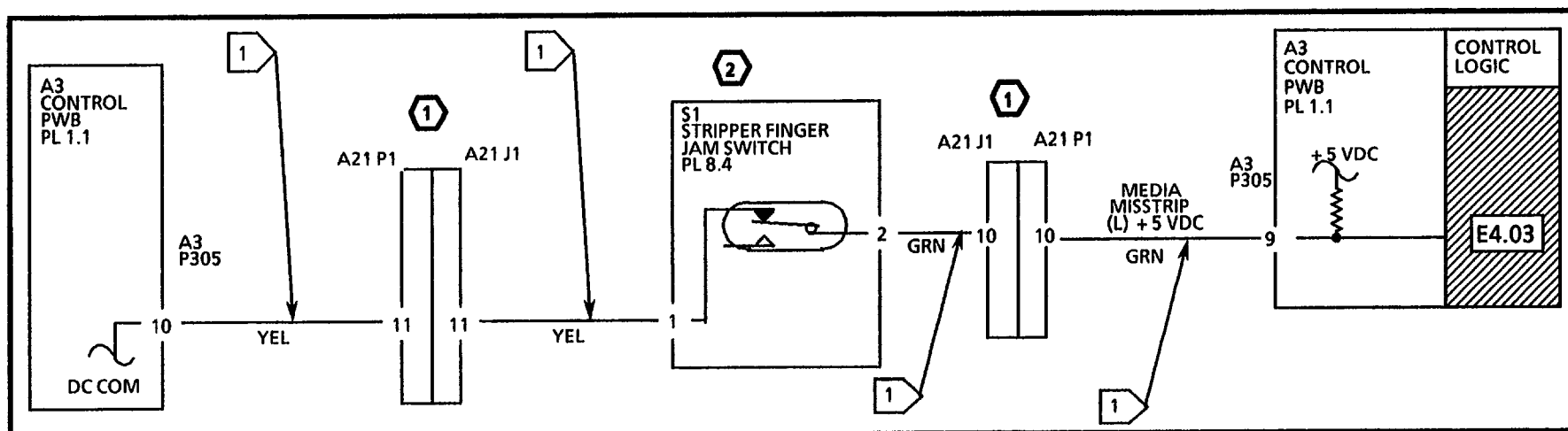
NOTES:

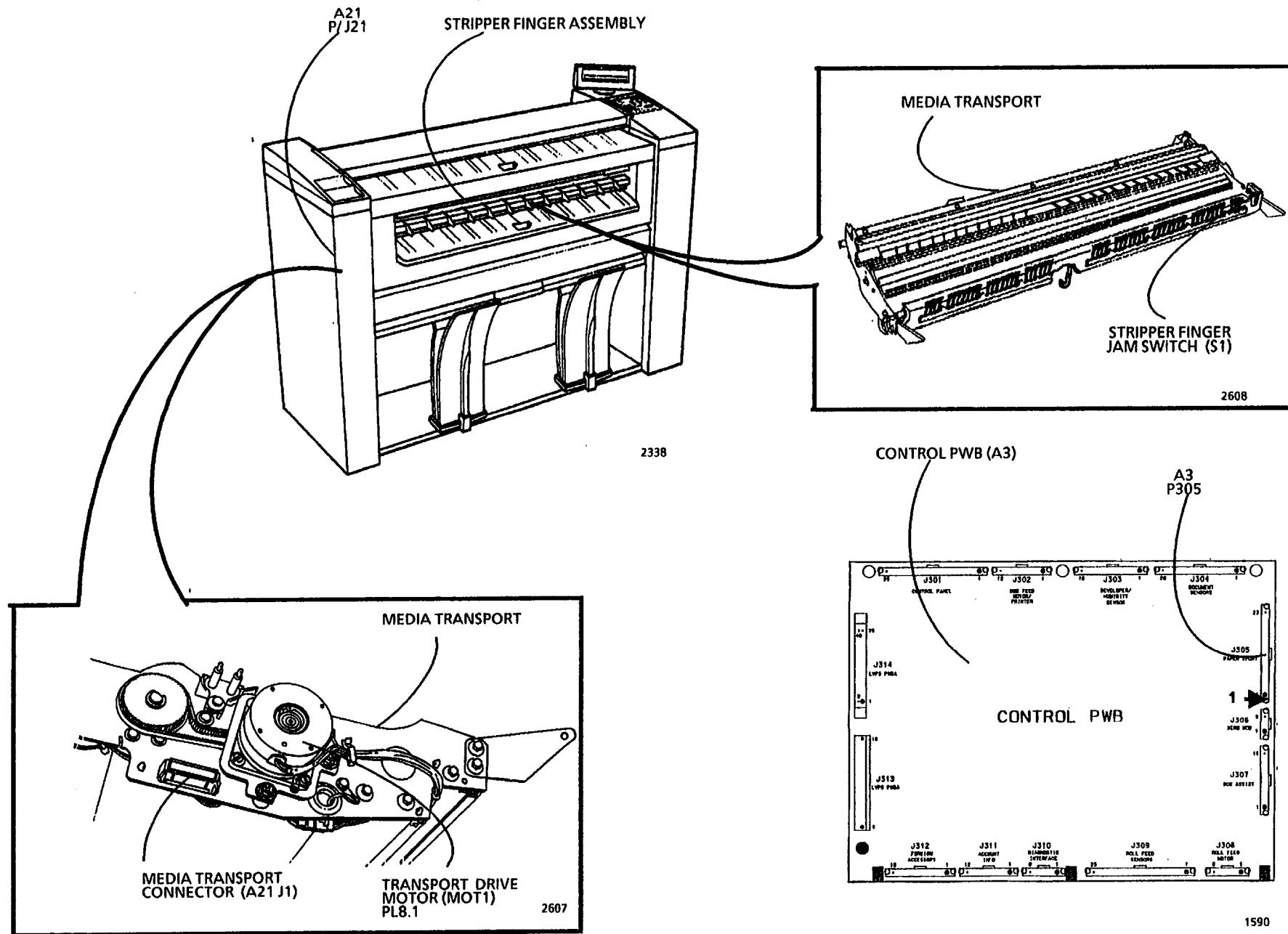
- ① CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



2608

- ② SWITCH (S1) IS A NORMALLY CLOSED (NC) SWITCH 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 SWITCH (S1) TO DEACTUATE (CLOSE) RESULTING IN THE MEDIA MISSTRIP SIGNAL TO GO LOW (L).





E5.03 Upper Rear Cover Open RAP

This RAP is used to locate problems in the interlock circuitry for the Upper Rear Cover.

The problem may occur if there is a malfunction in the Upper Rear Cover Interlock Switch S26 or the associated wires.

Initial Actions

- Check the connectors A2 P201 on the LVPS/ Driver PWB (A2) and S26 P1 on the Upper Rear Cover Interlock Switch for damage, and ensure that the connectors are seated correctly.
- Ensure that the Actuator on the Upper Rear Door correctly actuates the switch.

Procedure

Disconnect S26 P1. Set the DMM to read continuity. Connect the (+) lead to Pin 4 of the Upper Rear Cover Interlock Switch (S26). Connect the (-) lead to pin 3. Manually actuate the switch.

The switch has continuity.

Y N

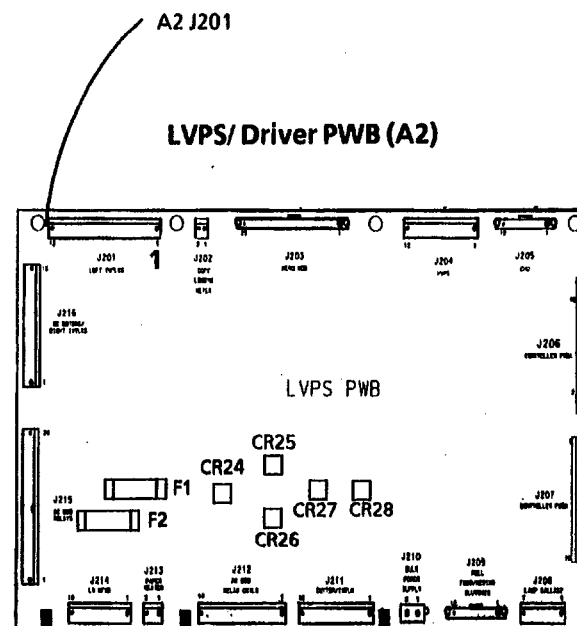
Replace the Upper Rear Cover Interlock Switch (S26).

A

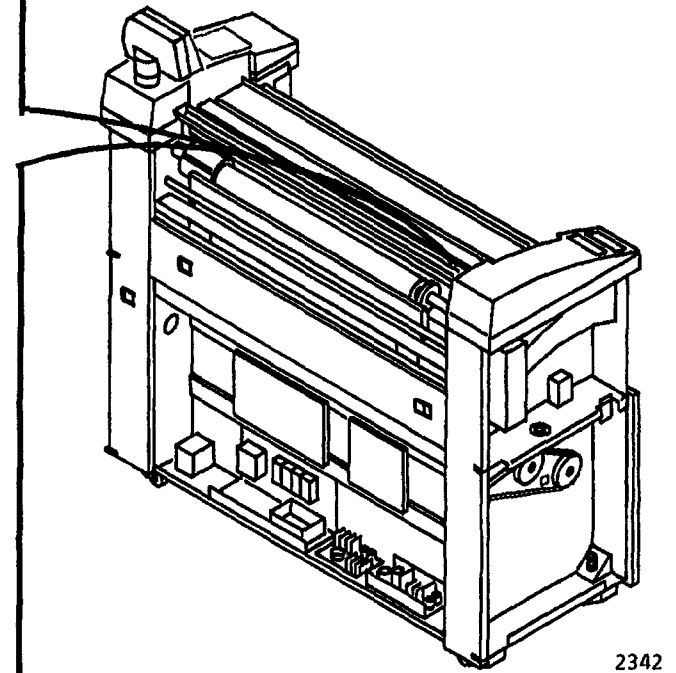
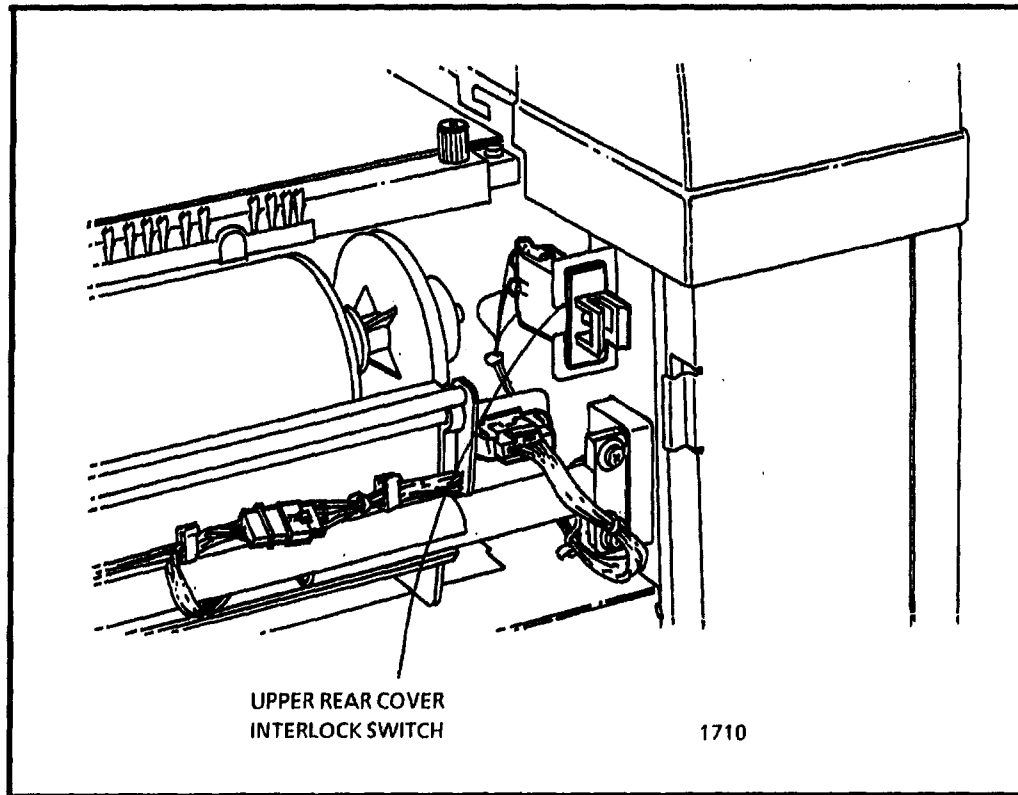
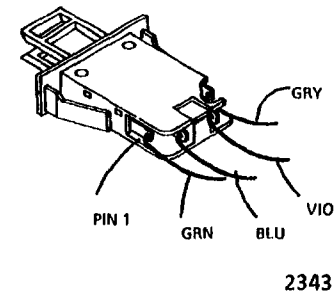
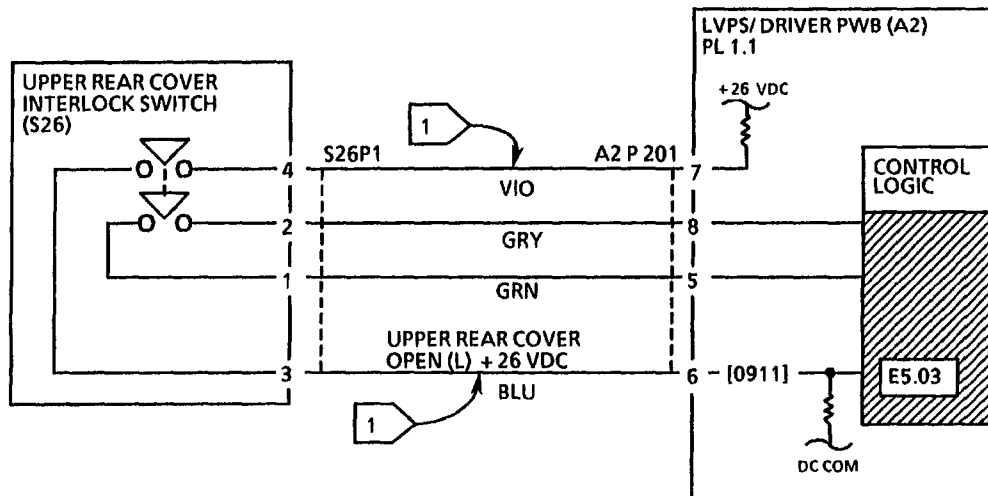
A

Go to FLAG 1 and check the wires for an open circuit.

If the problem still exists, replace the LVPS/ Driver PWB (A2).



1591



E5.04 Cutter Cover Open RAP

This RAP is used to locate problems in the interlock circuitry for the Cutter Cover.

The problem may occur if there is a malfunction in the Cutter Cover Interlock Switch S1 or the associated wires.

Initial Actions

- Check the connectors A2 P211 on the LVPS/ Driver PWB (A2) and S1 P1 on the Cutter Cover Interlock Switch for damage, and ensure that the connectors are seated correctly.
- Ensure that the Actuator on the Cutter Cover correctly actuates the switch.

Procedure

Disconnect S1 P1. Set the DMM to read continuity. Connect the (+) lead to Pin 4 of the Cutter Cover Interlock Switch (S1). Connect the (-) lead to pin 3. Manually actuate the switch.

The switch has continuity.

Y N

Replace the Cutter Cover Interlock Switch (S1).

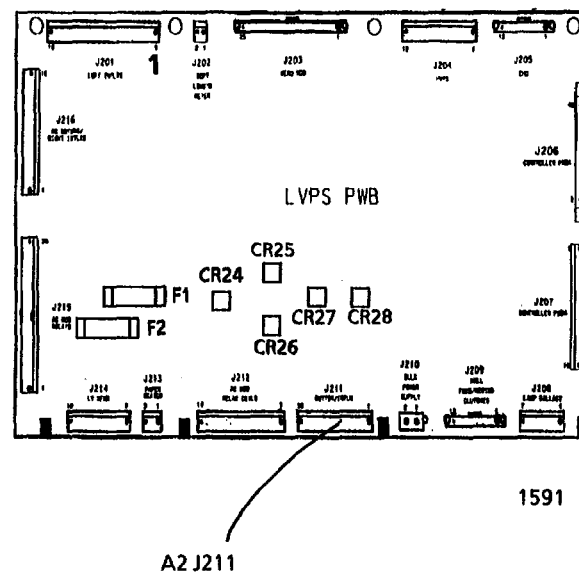
A

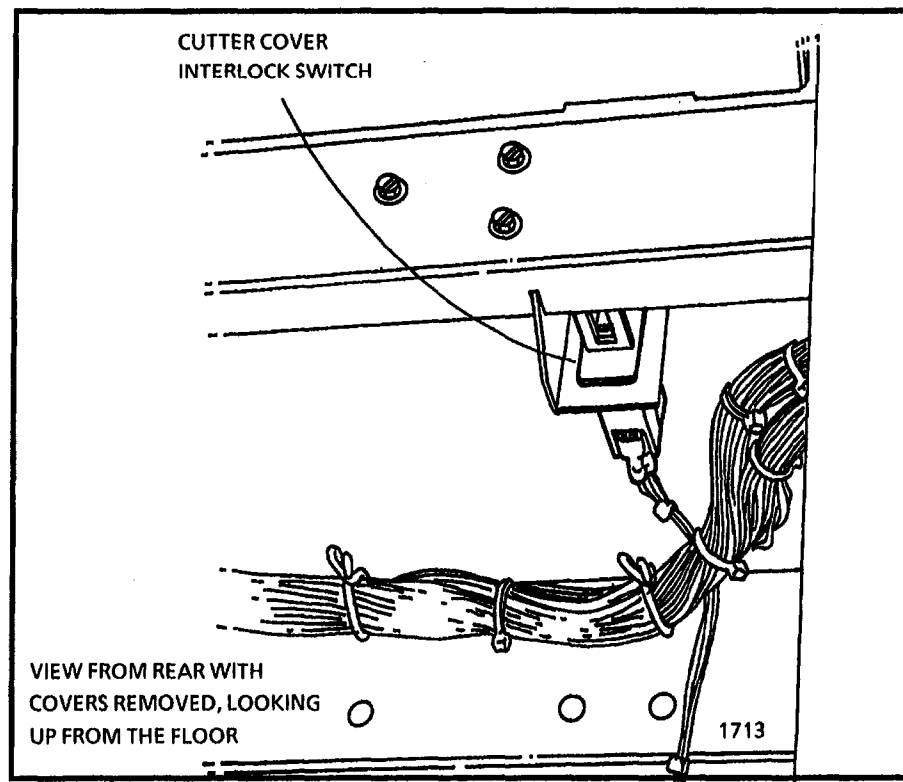
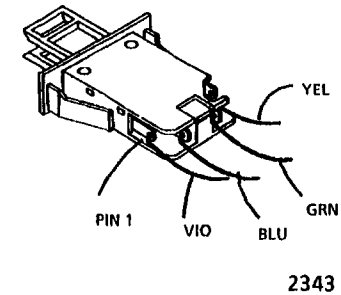
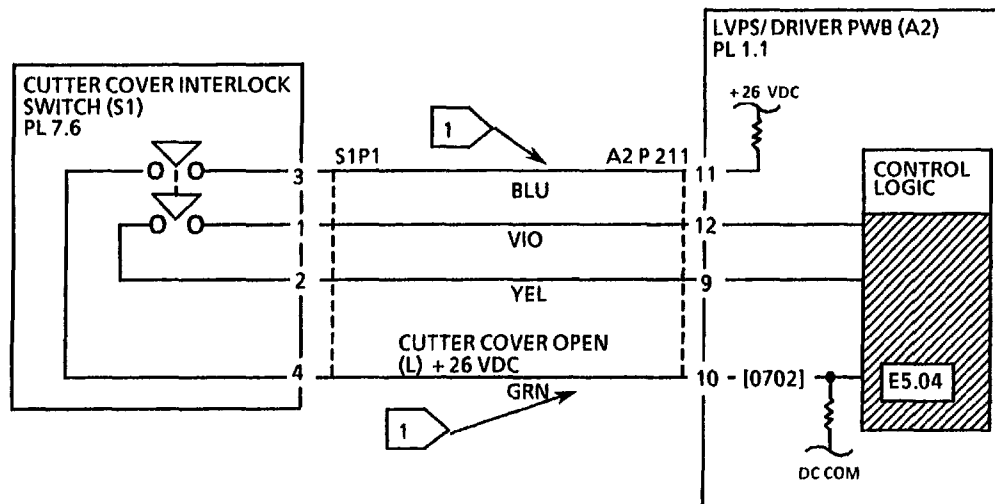
A

Go to FLAG 1 and check the wires for an open circuit.

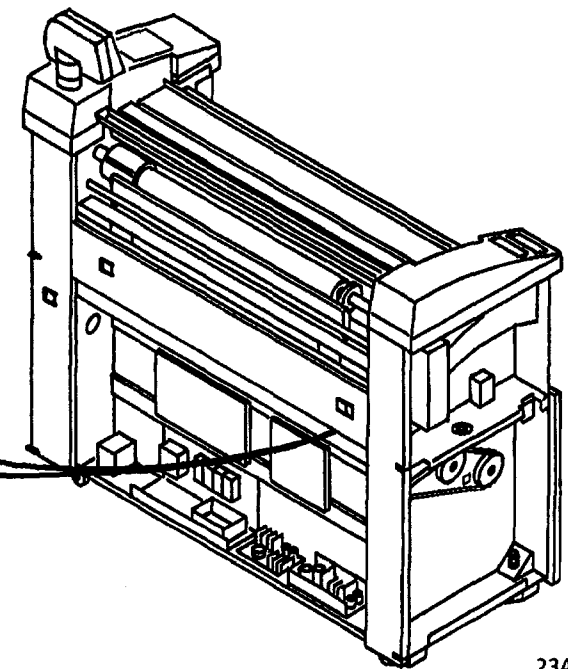
If the problem still exists, replace the LVPS/ Driver PWB (A2).

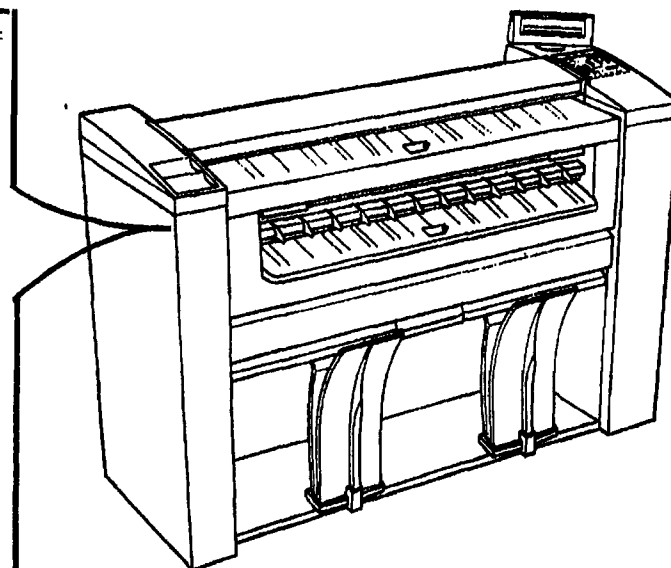
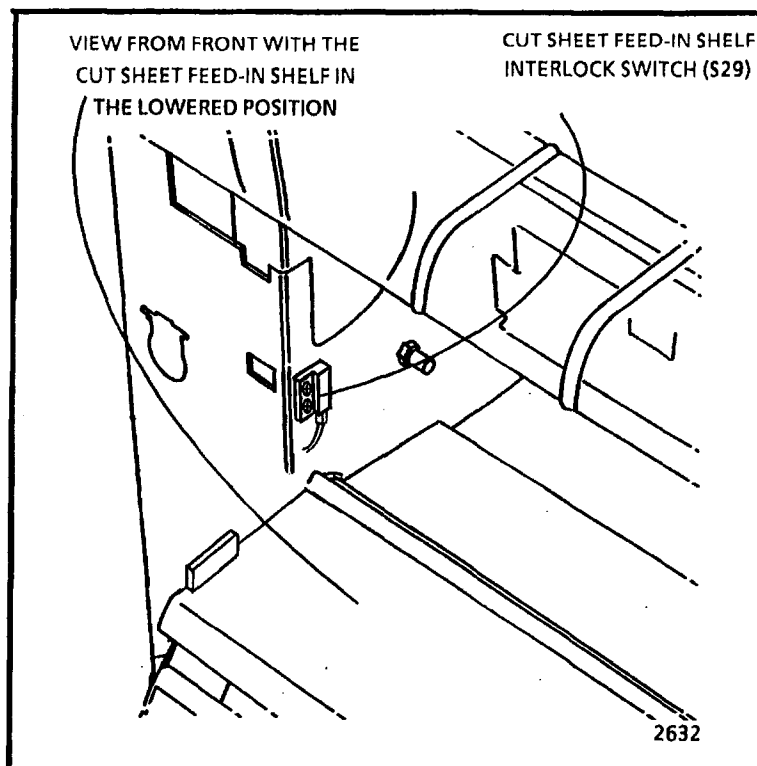
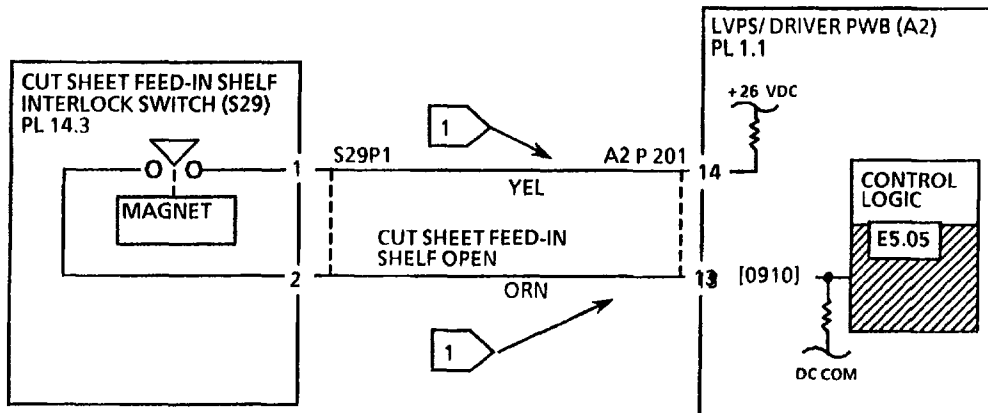
LVPS/ DRIVER PWB (A2)



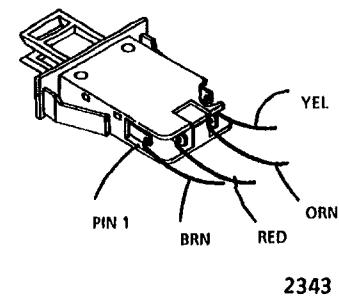
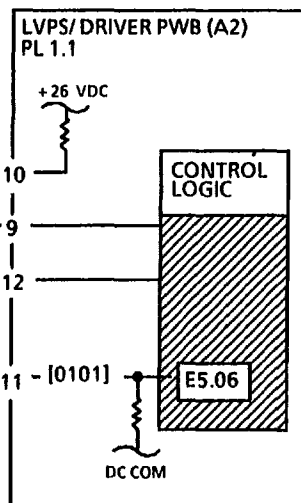
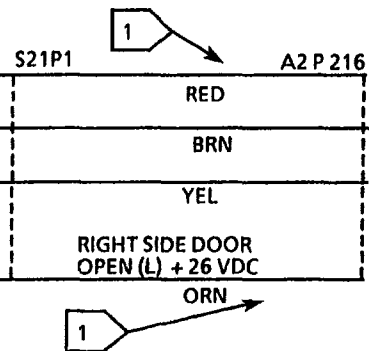
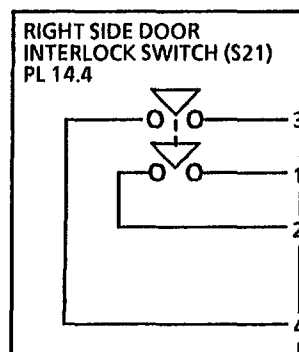


VIEW FROM REAR WITH COVERS REMOVED

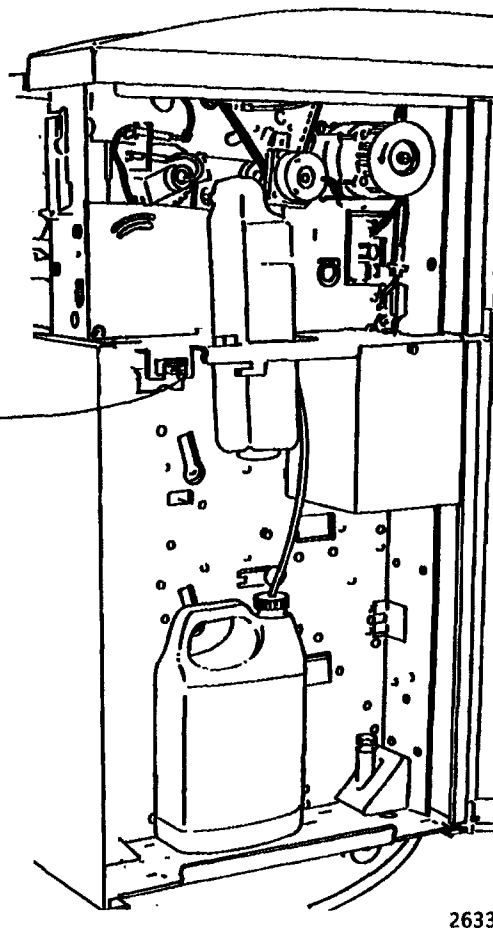




2338



RIGHT SIDE DOOR
INTERLOCK SWITCH



E5.07 Document Handler Open RAP

This RAP is used to locate problems in the interlock circuitry for the Document Handler.

The problem may occur if there is a malfunction in the Document Handler Interlock Switch S30 or the associated wires.

Initial Actions

- Check the connectors A2 P201 on the LVPS/ Driver PWB (A2) and S30 P1 on the Document Handler Interlock Switch for damage, and ensure that the connectors are seated correctly.
- Ensure that the Actuator on the Document Handler correctly actuates the switch, and that the End Caps are not damaged.

Procedure

Disconnect S30 P1. Set the DMM to read continuity. Connect the (+) lead to Pin 4 of the Document Handler Interlock Switch (S30). Connect the (-) lead to pin 3. Manually actuate the switch.

The switch has continuity.

Y N

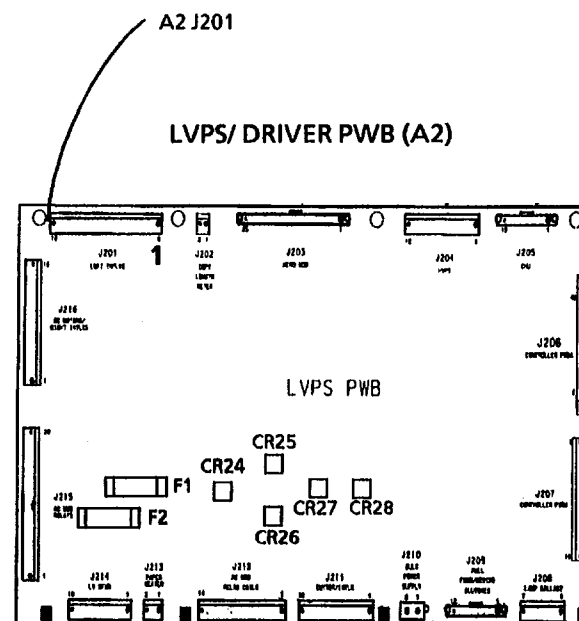
Replace the Document Handler Interlock Switch (S30).

A

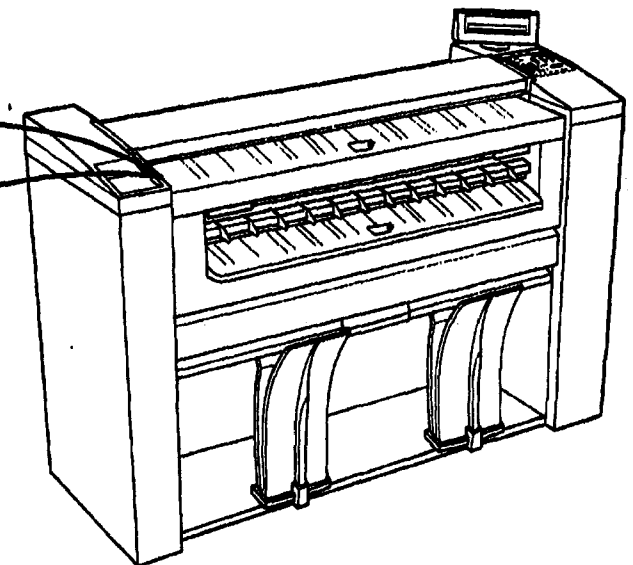
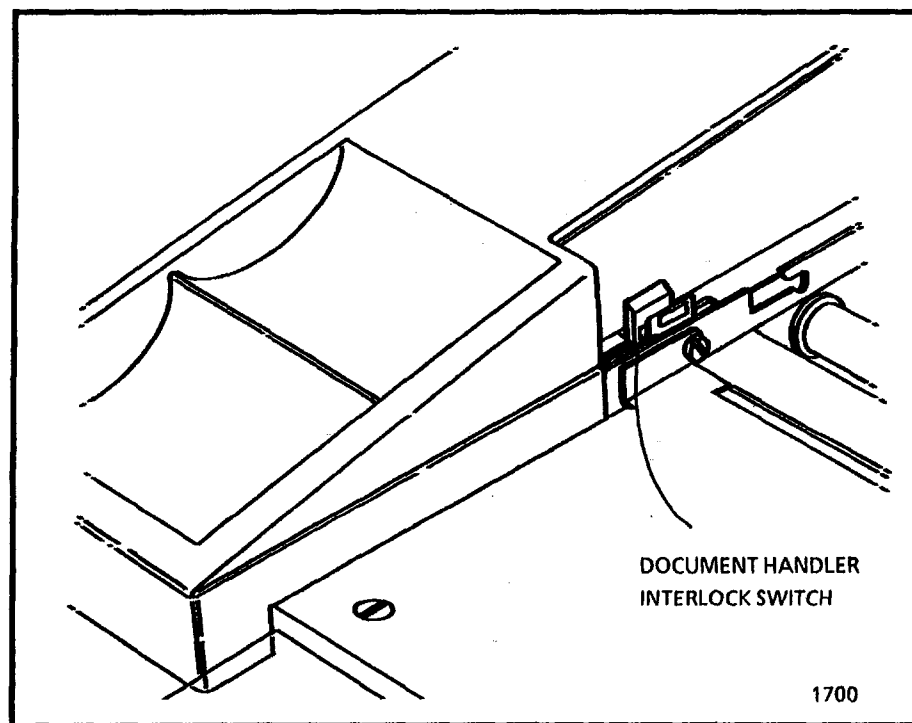
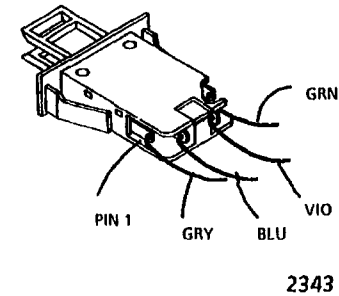
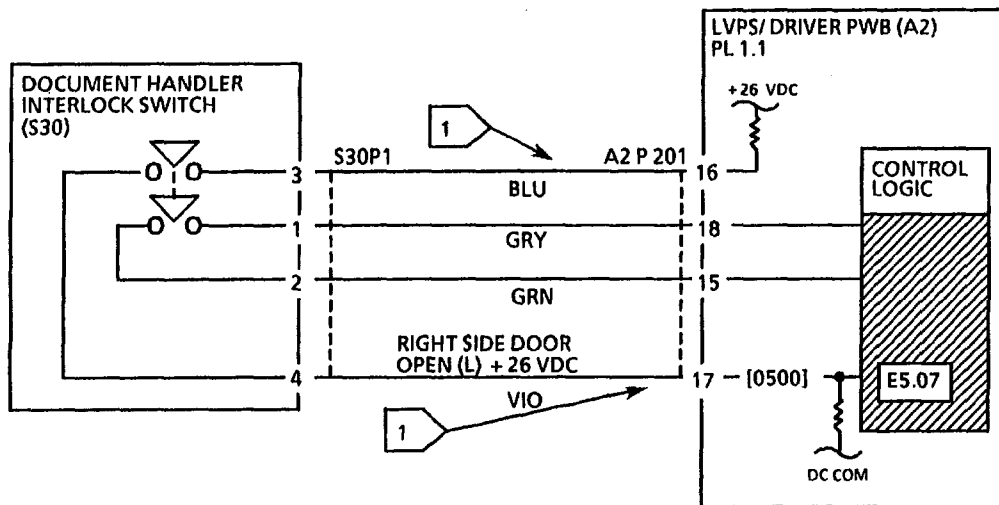
A

Go to FLAG 1 and check the wires for an open circuit.

If the problem still exists, replace the LVPS/ Driver PWB (A2).



1591



E6.00 Media Supply Drawer Open RAP

The status code E6.00 is displayed when the logic detects that the Media Supply Drawer Interlock Switch (S28) is open.

This RAP is used to locate problems in the interlock circuitry.

The problem may occur if the Media Supply Drawer magnet is not positioned correctly. A problem may also exist, if there is a malfunction in the Media Supply Drawer Interlock Switch (S28) and the associated wires.

Initial Actions

- Ensure that the magnet, which is located on the drawer, is positioned directly in front of the interlock switch.
- Check the connectors A2 P201 and A2 P216 on the LVPS/ Driver PWB (A2) for damage.
- Check the connector S28 P1 on the Media Supply Drawer Interlock Switch (S28) for damage.

Procedure

Enter the code [0110] in order to check the Media Supply Drawer Interlock Switch.

Open the drawer and then slowly close the drawer.

The display changes from (00) to (01) when the drawer is closed.

Y N

There is +26VDC at A2 P216 pin 13 of the LVPS/ DRIVER PWB (A2).

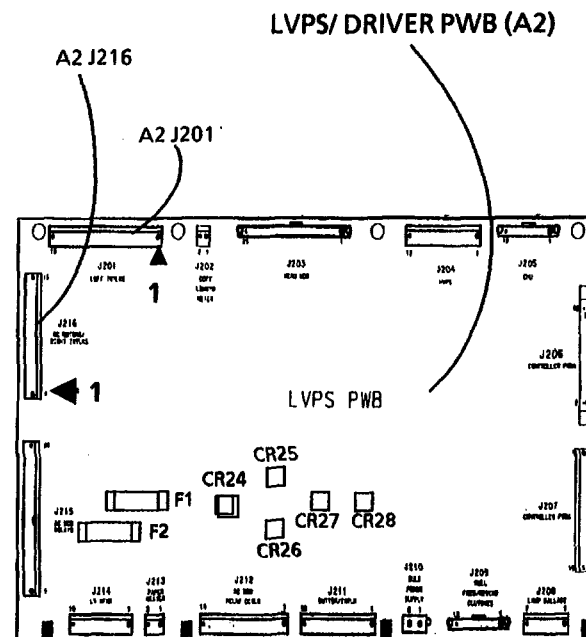
Y N

Go to FLAG 1 and check the wiring for an open circuit to the Media Supply Drawer Interlock Switch (S28).

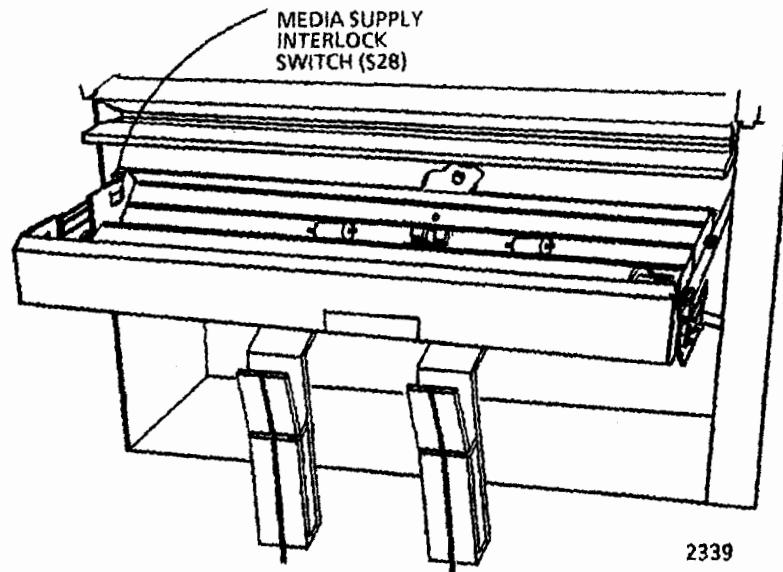
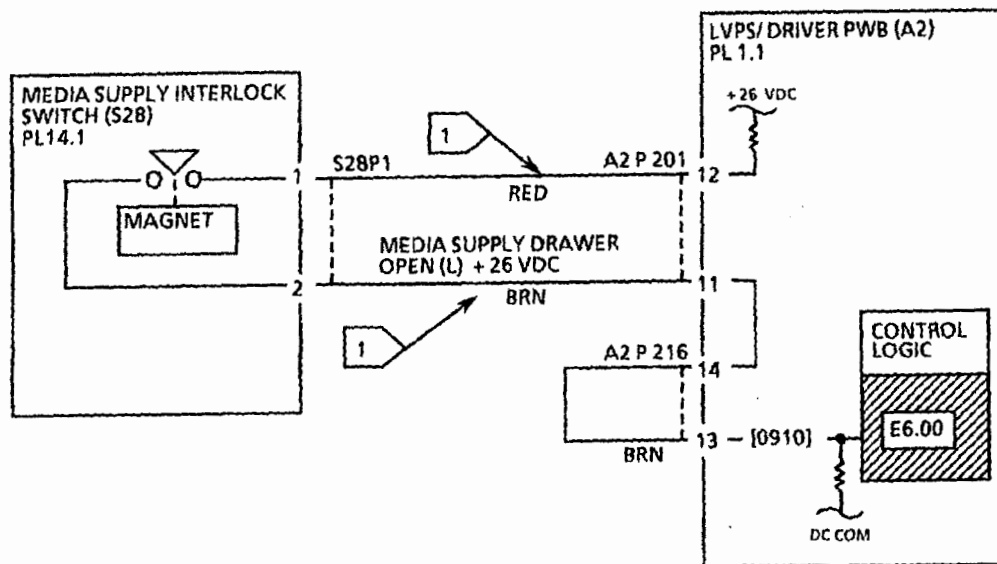
If there is no open circuit, replace the Media Supply Drawer Interlock Switch (S28).

Replace the LVPS/ Driver PWB (A2).

If the problem persists, replace the LVPS/ Driver PWB (A2).



1591



J1.01 Out of Toner RAP

(04/04/94)

The status code **J1.01** is displayed when the logic detects that there is a Toner control problem.

J1.01 Indicates that the logic detected that the toner concentration decreased significantly lower than the set value.

The problem may occur if there is a problem with the toner dispensing system mechanical components, the developer mixing system, the Toner Sensor or the control circuitry.

Initial Actions

Note: If you were directed to this RAP after entering the code [0921-06] and the message: **UNABLE TO CALIBRATE TONER SENSOR**, is displayed; go to the Procedure and begin with step "C".

- Ensure that the Toner Cartridge is not empty and is installed properly.
- Ensure that the Toner Cartridge is not defective and that a sufficient amount of toner is dispensed into the developer housing.
- Ensure that the Developer Housing Drive Gear is in the correct position.
- Ensure that the customer's document does not have excessive area coverage.
- Go to REP 9.7 and ensure that the developer material is being mixed correctly.
- Ensure that the Developer Housing Auger Gears are not defective.

Procedure

Enter the diagnostic code [0921-4] and compare the toner sensor reading to the control point voltage.

The sensor voltage is at least 1.1 VDC higher than the control point voltage.

Y N

Enter the code [0926] and reset the toner control NVMs.

The sensor voltage is at least 1.1 VDC higher than the control point voltage.

Y N

A B C

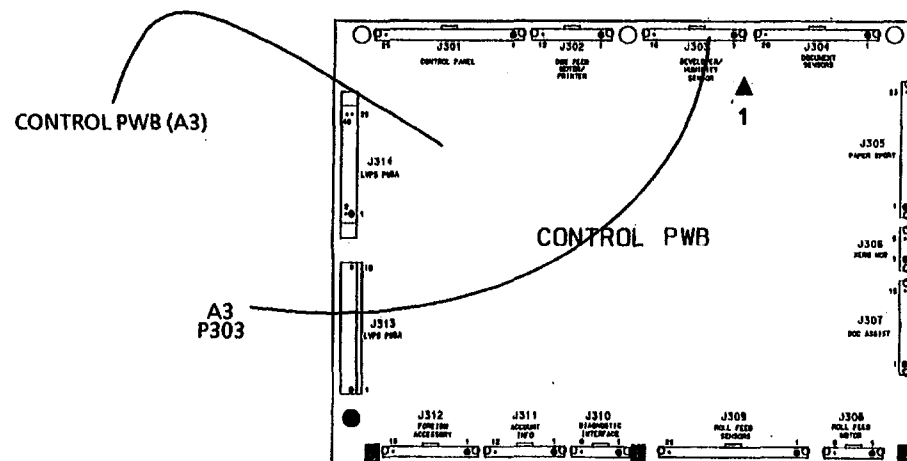
A B C

Go to Flag 1 and check the wiring for an open or a short circuit in the wires to ground. If there are no open or short circuits, replace the following components one at a time beginning with "a". After replacing the component, enter the code [0921-06] in order to calibrate the Toner Control System.

- Developer Material
- Toner Sensor
- NVM
- Control PWB (A3)

Perform the Final Actions in order to complete the Service Call.

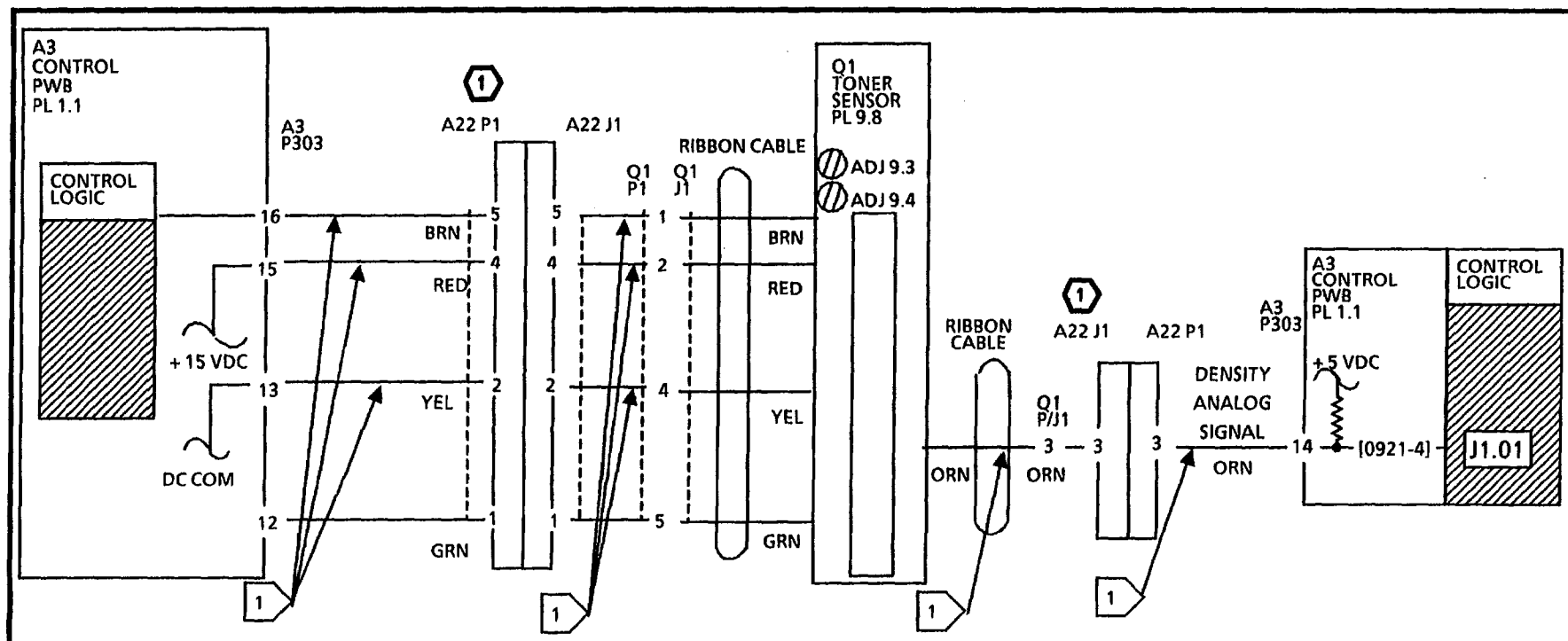
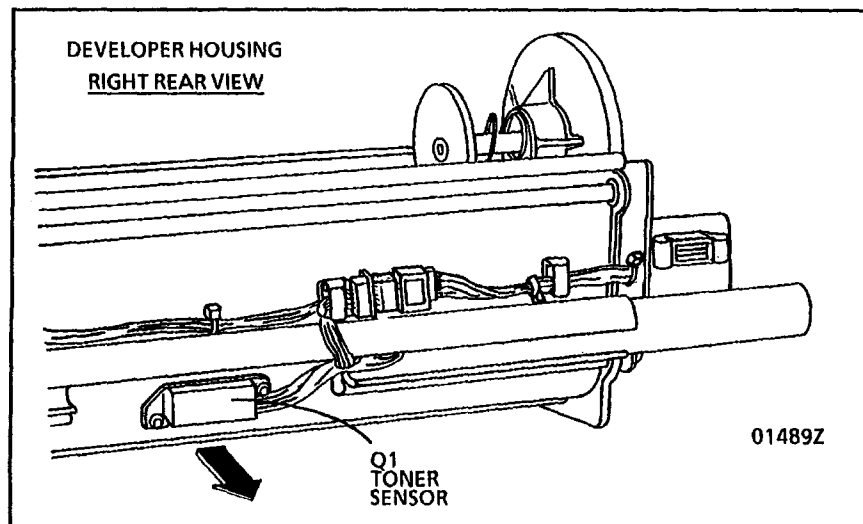
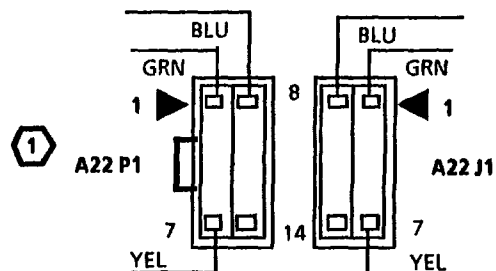
Go to the Electrostatic Series (ADJ 9.2, Initial Density Adjustment section) adjustment to check/ adjust Image Density. Perform the Final Actions in order to complete the service call.



1590

NOTE:

- ① CONNECTOR A22 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



J2.02 Toner Cartridge Home Position RAP

1/28/94

The status code J2.02 is displayed when the toner cartridge can not find, or does not leave the home position.

Initial Actions

- Ensure that the toner cartridge is installed properly.
- Ensure that the toner cartridge is not defective.
- Ensure that the Developer Drive motor and the Cartridge Home Switch are plugged in.
- Inspect the developer drives for damage.

Procedure

Enter the diagnostic mode.

Enter the code [0925] to energize the cartridge drive motor. The cartridge drive motor rotates one revolution (refer to note).

Y N

The cartridge drive motor rotates for more than one revolution (refer to note).

Y N

There is 26 VDC at A3 P303 Pin 9.

Y N

Replace the Control PWB (A3).

A B C

A B C

There is 26 VDC at A3 P303 Pin 8.

Y N

Go to FLAG 1 and check the wires for an open or a short circuit. If there is no open or short circuit, replace the Cartridge Drive Motor.

Unplug A22M1 P/J1 and check the resistance of the motor. If the resistance is not 23 Ohms (± 5 Ohms), replace the Cartridge Drive Motor.

Enter the code [0901] to monitor the operation of the Cartridge Home Switch. Pass the pickup magnet from your tool kit over the sensor. The switch opens and closes.

Y N

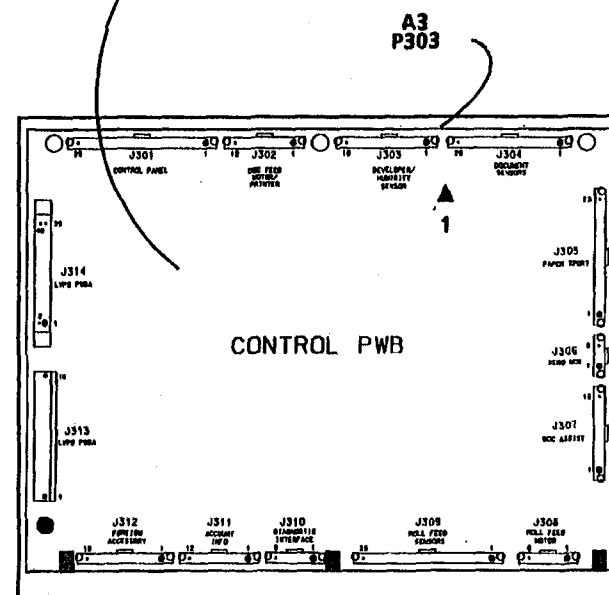
Go to FLAG 2 and check the wires for an open or short circuit. If there is no open or short circuit, adjust or replace the Cartridge Home Switch.

Replace the Control Board (A3).

Wrap up the service call.

Note: If the cartridge magnet is missing or not positioned properly, the cartridge drive motor may rotate for more than one revolution when diagnostic code [0925] is entered.

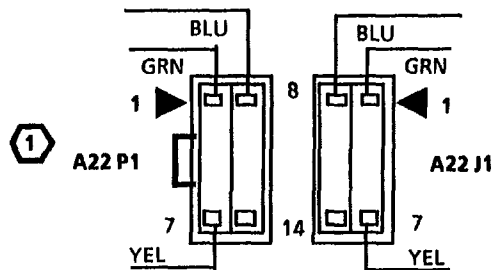
CONTROL PWB (A3)



0	1590	A
0JR	SM 2	X 0

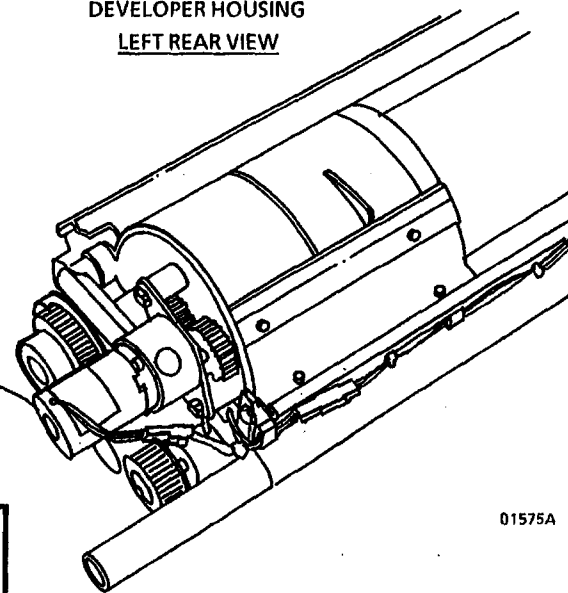
NOTE:

① CONNECTOR A22 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



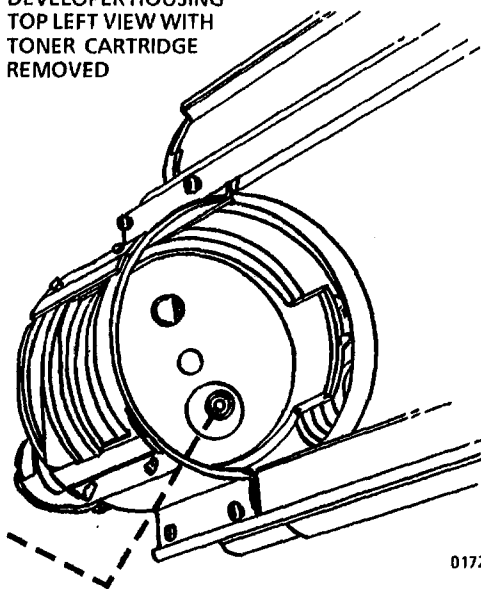
CARTRIDGE DRIVE MOTOR (M4)

DEVELOPER HOUSING
LEFT REAR VIEW

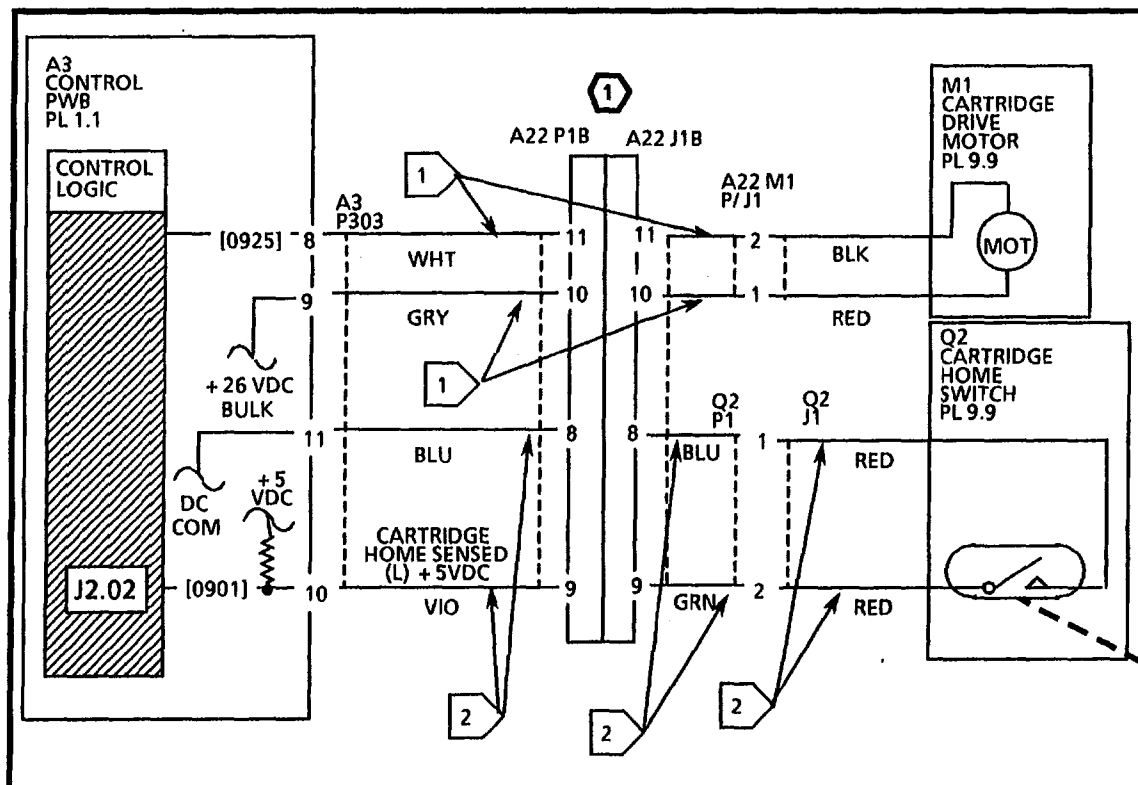


01575A

DEVELOPER HOUSING
TOP LEFT VIEW WITH
TONER CARTRIDGE
REMOVED



01724A



LL.10 Cutter Interlock Loop Open RAP

The Status Code LL.10 is displayed when the logic detects that there is a problem with the interlock loop circuitry for the Cutter Motor.

The problem may occur if there is a malfunction in the connectors A23P/J2, A21P/J1, A2P203, A2P201, or A2P211, or if there is a short circuit or an open circuit in the wires of the interlock loop

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Check the following connectors for damage: A2P201, A2P203 and A2P211 on the LVPS/ Driver PWB (A2) and the Media Transport connector A21P/ J1 and the Xerographic Module connector A23P/ J2 located on the left side of the copier. Ensure that the connectors are seated correctly.
- Switch off, then switch on the copier. If the problem persists, perform the procedure below.

Procedure

CR27 on the LVPS/ Driver is lit.

Y N

Set the DMM to measure +26 VDC. Connect the (+) lead to pin 23 of A2P203 on the LVPS/ Driver PWB (A2). Connect the (-) lead to Pin 3 of A2P211.

A B

A B

There is +26 VDC.

Y N

Replace the LVPS/ Driver PWB (A2).

Connect the (+) lead to pin 3 of connector A2P201.

There is +26 VDC

Y N

Go to FLAG 1 and check for an open circuit in the wires.

Connect the (+) lead to pin 1 of connector A2P201.

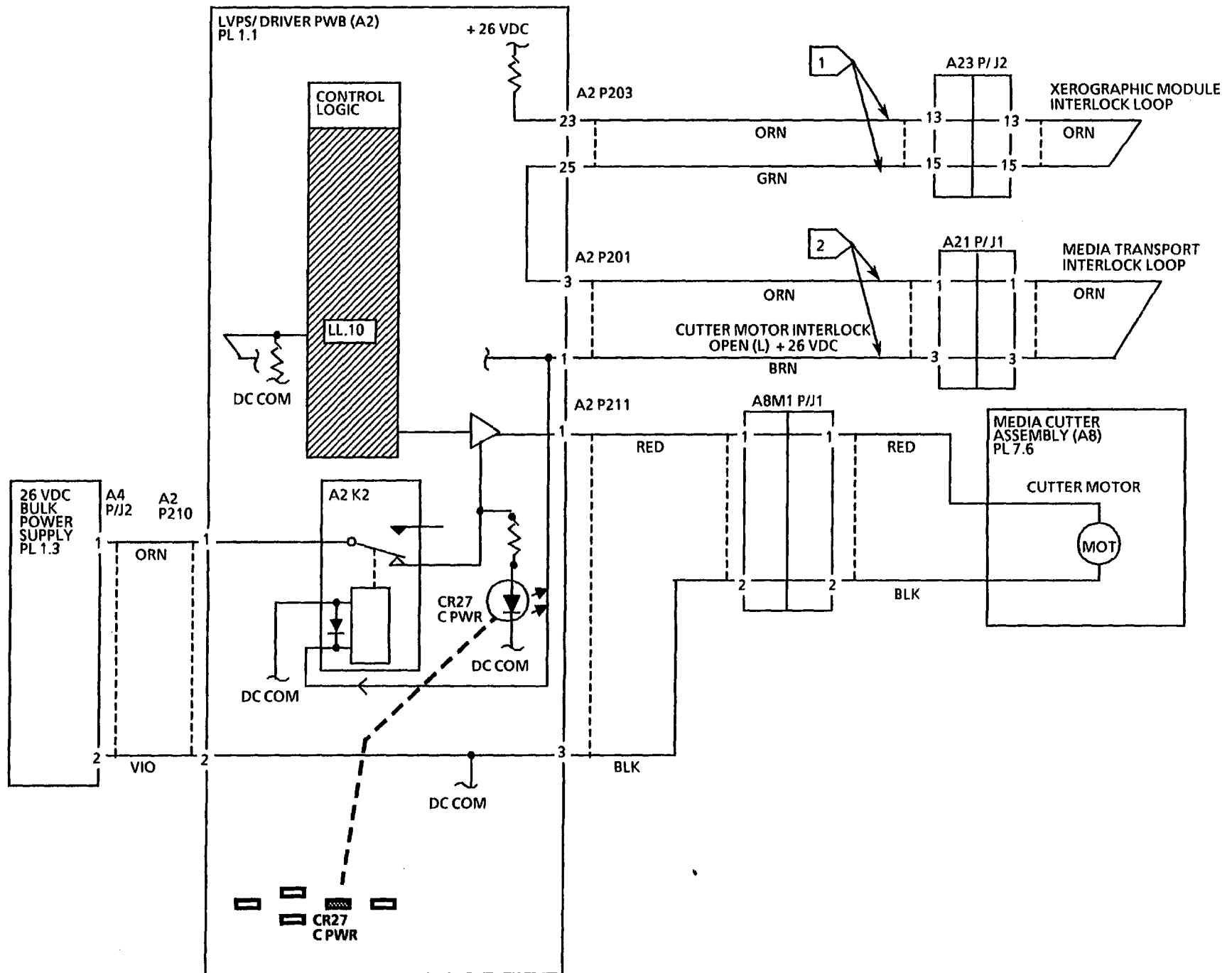
There is 26 VDC.

Y N

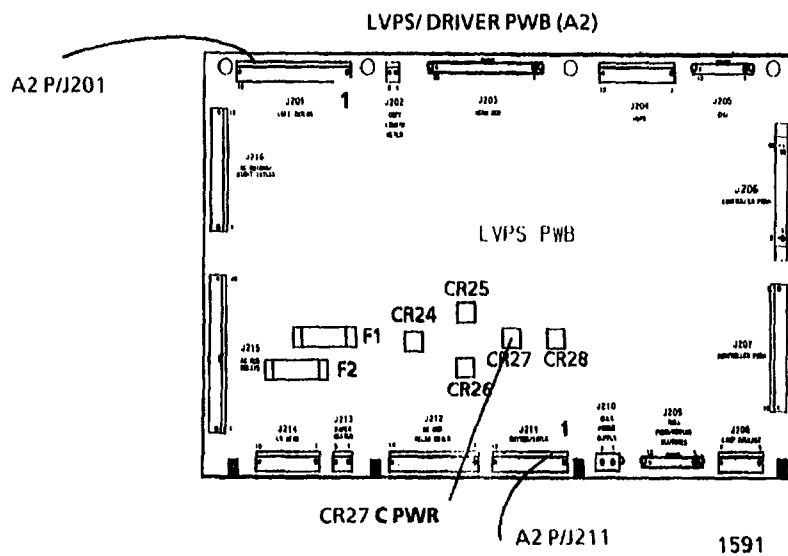
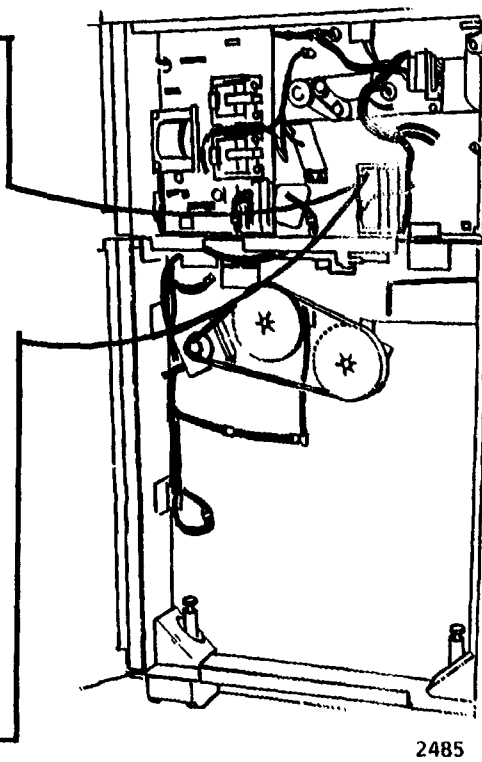
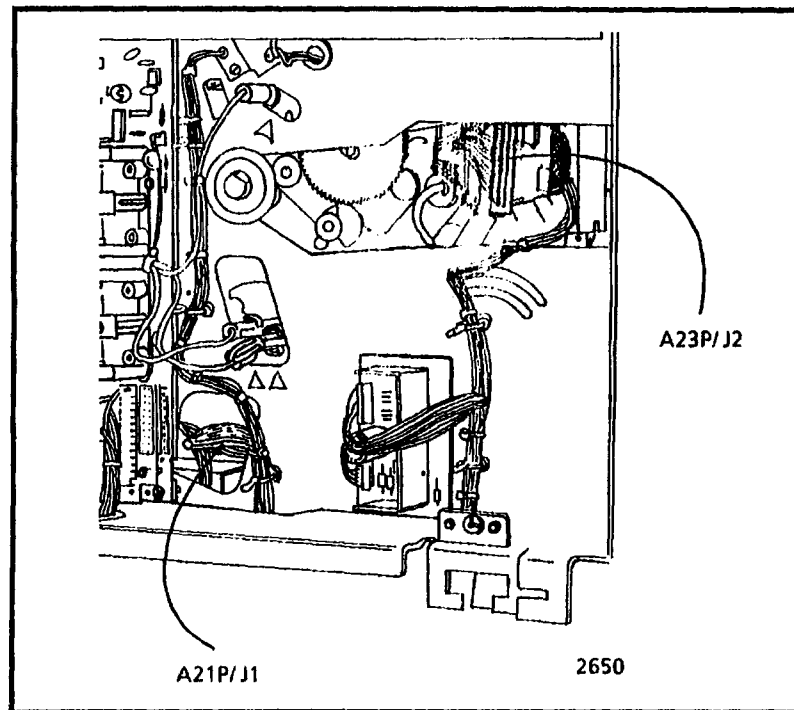
Go to FLAG 2 and check for an open circuit in the wires.

Replace the LVPS/ Driver PWB.

Replace the LVPS/ Driver PWB.



Notes:



LL.26 Loss of Illumination RAP

(04/ 04/ 94)

The Status Code LL.26 is displayed when the logic detects that there is an Illumination problem. The problem may be caused by the Exposure Lamp, Illumination sensor, the wiring, or a PWB failure.

Initial Actions

- Ensure that connectors A5 P22 and P21 of the Lamp Ballast are seated correctly.
- Ensure that the exposure lamp sockets are not damaged and the Lamp is seated correctly.
- Ensure that the Lamp jacket is positioned correctly.
- Ensure that the Illumination Sensor is seated correctly.
- Ensure that the LVPS and Controller PWB connectors are seated correctly.

WARNING! The Exposure lamp, HVPS, Erase Lamp, Main Drive Motor, Fuser, and the Drum Cleaning Blade are energized when diagnostic code [0921-05] is entered.

Procedure

Enter the diagnostic code [0921-05].

The Exposure Lamp lights.

Y N

There is (+ 26 VDC Bulk) between A2 P208 Pin 1 and Pin 3 (DC Com) of the LVPS PWB (A2).

Y N

Replace the LVPS PWB (A2).

A B

A B

Press STOP, in order to cancel the code.

There is approximately (+ 26 VDC) at A2 P208 Pin 4 of the LVPS PWB (A2).

Y N

Replace the Lamp Ballast (A5).

Enter the code [0921] while observing the DMM.

The voltage at A2 P208 Pin 4 changes from approximately (+ 26 VDC) to less than (1.0 VDC).

Y N

Replace the LVPS PWB (A2). If the problem persists, replace the Control PWB (A3).

Press STOP, in order to cancel the code.

There is approximately (+ 26 VDC) at A2 P208 Pin 6 of the LVPS PWB (A2).

Y N

Replace the Lamp Ballast (A5).

Enter the code [0921-05].

When the copier enters the READY condition, the voltage at A2 P208 Pin 6 changes from approximately (+ 26 VDC) to less than (1.0 VDC).

Y N

C D E

C D E

Replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3).

Press STOP, in order to cancel the code. Enter the code [0921-5].

The voltage at A2 P208 pin 7 is greater than 14.0 VDC.

Y N

Go to FLAG 4 and check for a short circuit to ground in the wiring. If there is no short circuit, replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3).

Replace the Lamp Ballast PWB (A5).

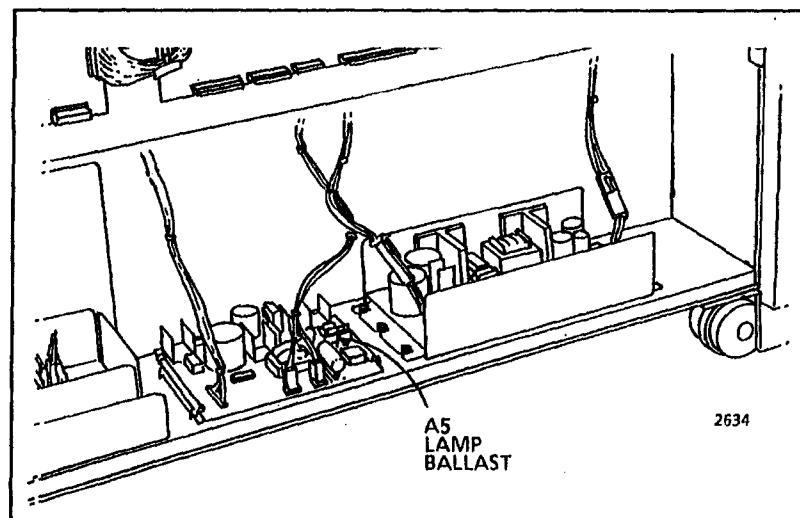
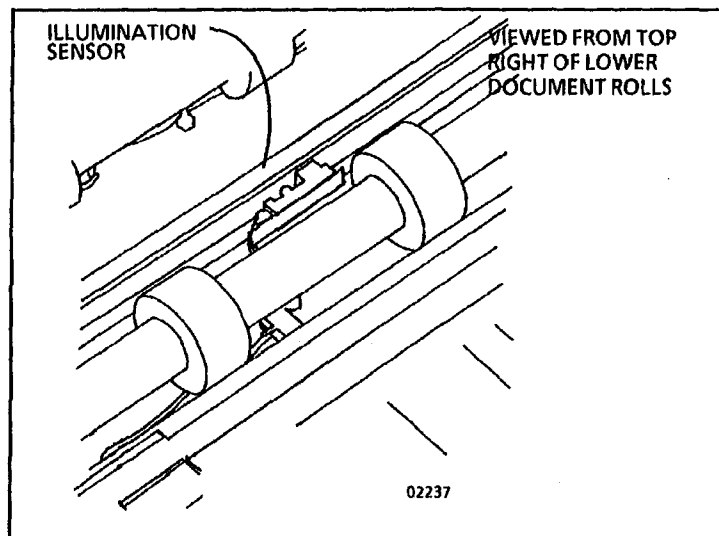
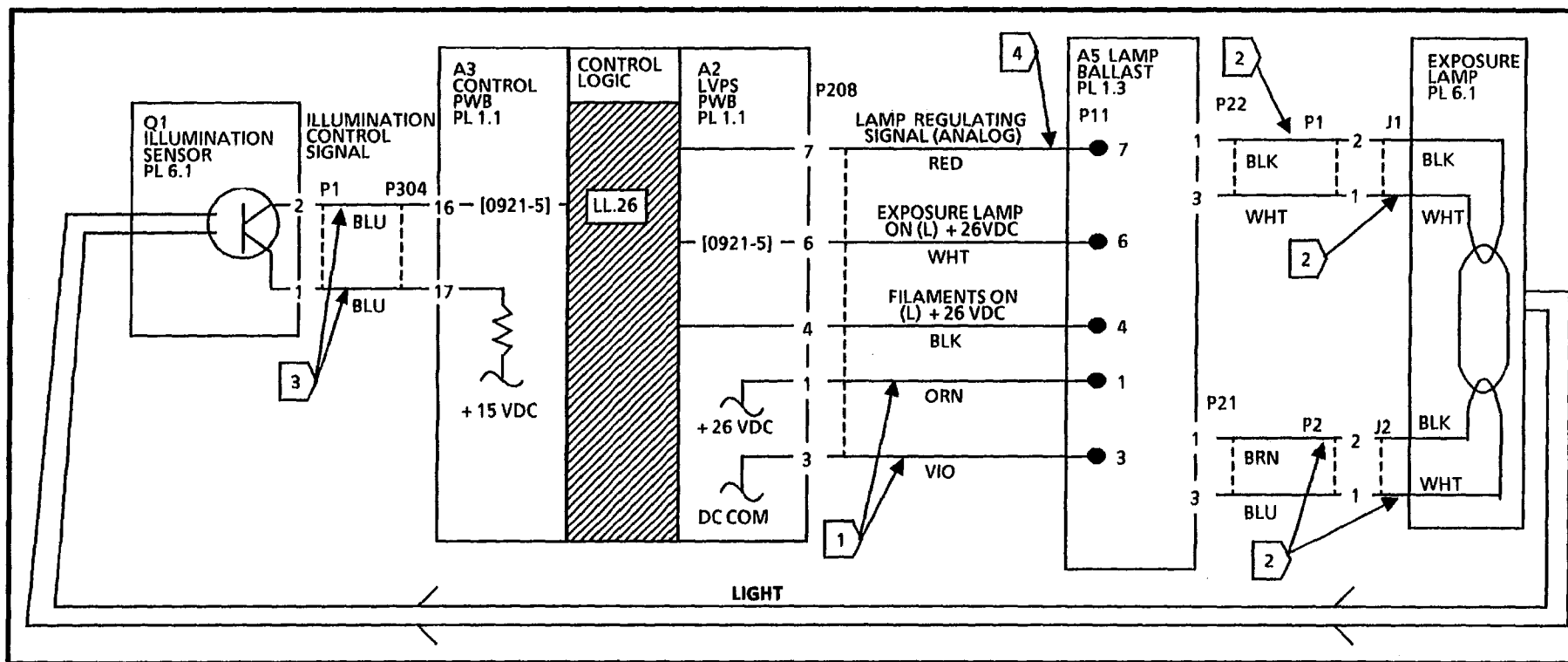
The Exposure Lamp Illuminates.

Y N

Go to FLAG 2 and check the wiring for an open or short circuit to ground in the wires. Repair the wires as required. If the problem still exists, replace the Exposure lamp.

Perform the Final Actions in order to complete the Service Call.

Go to FLAG 3 and check the wiring for an open circuit. If there are no open circuit, replace the Illumination Sensor (Q1). If the problem persists, replace the Control PWB (A3).



LL.30 Cutter Fault RAP

The status code LL.30 is displayed when the logic detects that there is a media cutter problem. As the cutter bar rotates to cut the media, the Cutter Home Sensor is blocked and not blocked by the rotating encoder disk. The logic detects a change in the state of the Cutter Home Sensor signal.

LL.30 Indicates that no motion is detected by the logic from the Cutter Home Sensor. The sensor signal did not change state from a HIGH to LOW or from a LOW to HIGH as the media is being cut.

The problem may occur if there is a problem with the cutter mechanical components, the Cutter Drive Motor or the motor control circuitry.

NOTE: *If the Drive Motor fails during a copy cycle, the media must be cut manually at the supply roll. The media is then pulled out of the copier from the fuser exit area or from the Cutter Drawer area.*

NOTE: *The component locator drawings and the circuit diagrams are located on the next five pages.*

Initial Actions

WARNING

The Cutter blade is sharp. Be careful and do not touch the blade when working on the cutter.

CAUTION

Do not touch the Cutter Control Cams. The cams are coated with a lubricant that is essential for the correct cutter operation.

- Pull out the Cutter Drawer. Check the Cutter Drive Belt and sprockets for damage.
- Disconnect the Cutter Motor connector and check the Encoder Disk for damage by rotating the cutter in a forward and reverse direction. Check the Encoder and Cutter for binding or damage.
- Check the connectors for the Cutter Home Sensor (Q1 P1), the Cutter Drive Motor (MOT1 P1), and the LVPS/Driver PWB (A2 P211) for damage and ensure that the connectors are seated correctly.
- Remove any strips of media that are present.

Procedure

Enter the code [0721] in order to check the Cutter Home Sensor. The Control Panel display indicates a (00) when the sensor is actuated, and the window in the disk is aligned with the sensor.

Disconnect the Cutter Drive Motor connector (MOT1 P/ J1). Manually rotate the Encoder Disk to align the window in the disk with the sensor. Then rotate the disk so that the disk is not in alignment with the sensor.

The display changes from (00) to (01) when the disk is rotated.

Y N

Go to FLAG 1 and check for an open circuit in the wires to the Cutter Home Sensor.

If there is no open circuit, replace the Cutter Home Sensor (Q1).

If the problem persists, replace the LVPS/DRIVER PWB (A2).

Reconnect the Cutter Drive Motor connector (MOT1 P/ J1). Disconnect the Cutter Home Sensor connector (Q1 P1). Close the Cutter Drawer. Enter the code [0723] in order to check the Cutter Drive Motor.

The rotation of the cutter bar can be heard.

Y N

Press the Stop button.

The LED CR27, located on the LVPS/Driver PWB (A2), is lit.

Y N

A B C

A B C

Go to the E5.04 RAP.

NOTE: In the next step the Cutter Home Sensor connector (Q1 P1) must be disconnected. There will be +26 VDC present momentarily, when the code [0723] is entered and the Start button is pressed.

In order to obtain an accurate measurement, set the Multimeter to V, DC, PEAK HOLD, +, 200V. Connect the (+) lead to A2 P211 pin 1 of the LVPS/ Driver PWB. Connect the (-) lead to the GND test point. Enter the code [0723] in order to check the motor signal.

There is approximately + 26 VDC at pin 1 of A2 P211 when the motor is energized.

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 2 and FLAG 3, check for an open circuit in the wires to the Cutter Drive Motor connector.

If there is no open circuit, manually rotate the Cutter Bar in order to ensure that the Cutter bar rotates without binding.

If the bar is binding, clean the control cams and stationary blade in the area where the blade is in contact with the cams. Then, lubricate the cams with a small amount of Molykote 557 (USO, XCI, XLA 70H37; RX 70P61).

If the problem continues, replace the Cutter Drive Motor (MOT 1).

A

Press the Stop button. Prepare to check the feedback signal that is generated by the Cutter Drive Motor tachometer. The tachometer generates a voltage. Set the Multimeter to V, DC, PEAK HOLD, +, 2V. Connect the (+) lead to A2 P211 pin 4 of the LVPS/ Driver PWB. Enter the code [0723] in order to check the tachometer feedback signal.

The voltage is approximately +1.7 VDC at pin 4 of A2 P211 when the motor is energized.

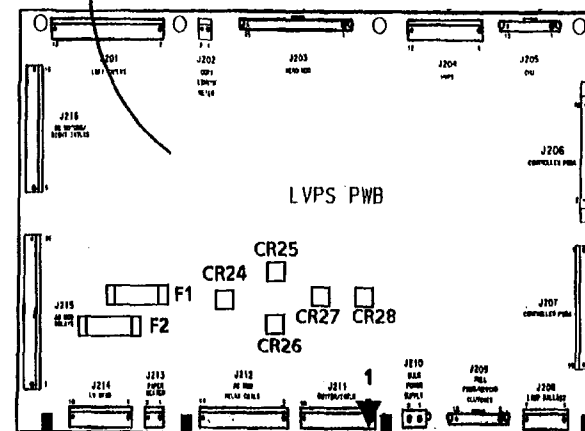
Y N

Go to FLAG 3 and check for an open circuit in the wire to the Cutter Drive Motor connector.

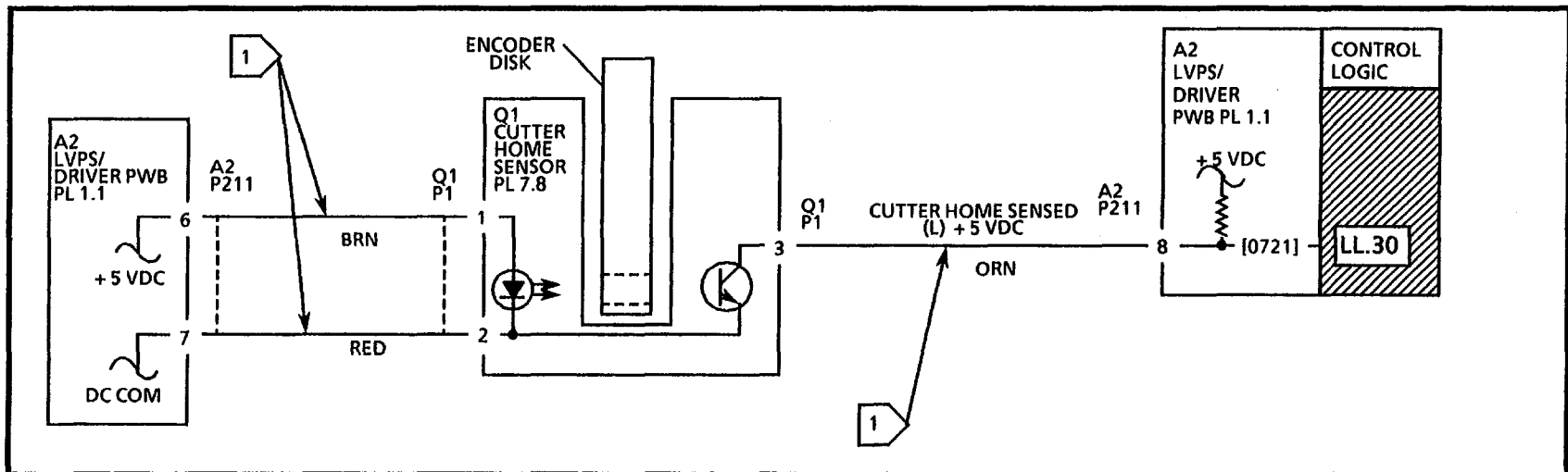
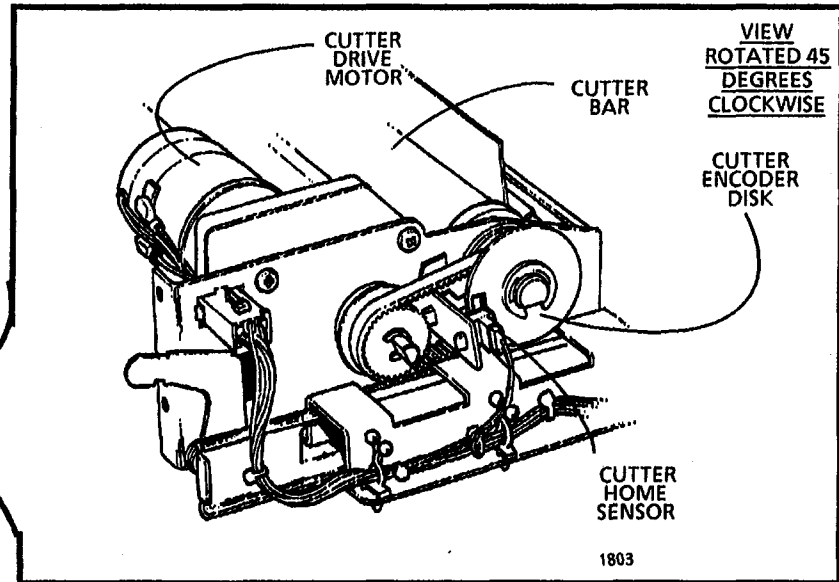
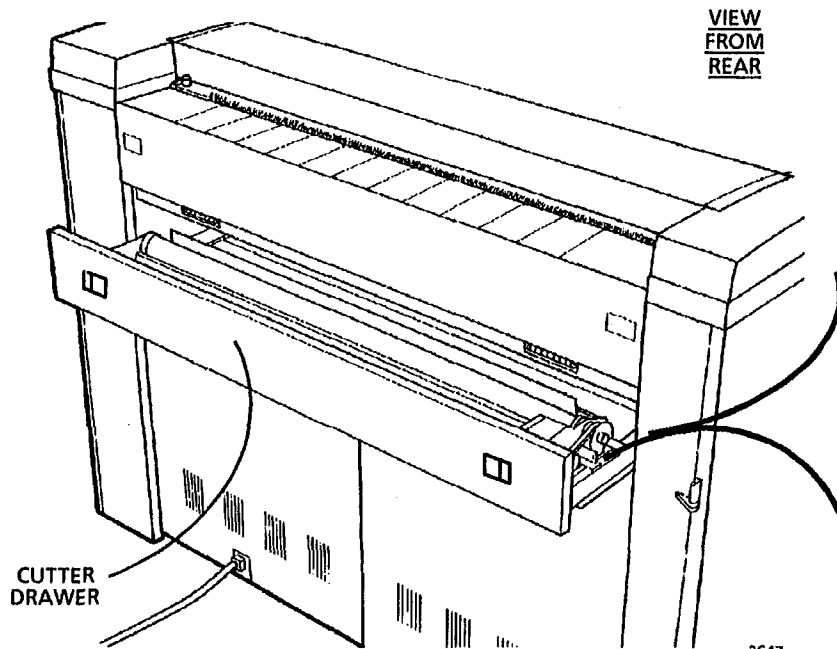
If there is no open circuit, replace the Cutter Drive Motor (MOT 1). Ensure to reconnect the Cutter Home Sensor connector (Q1 P1).

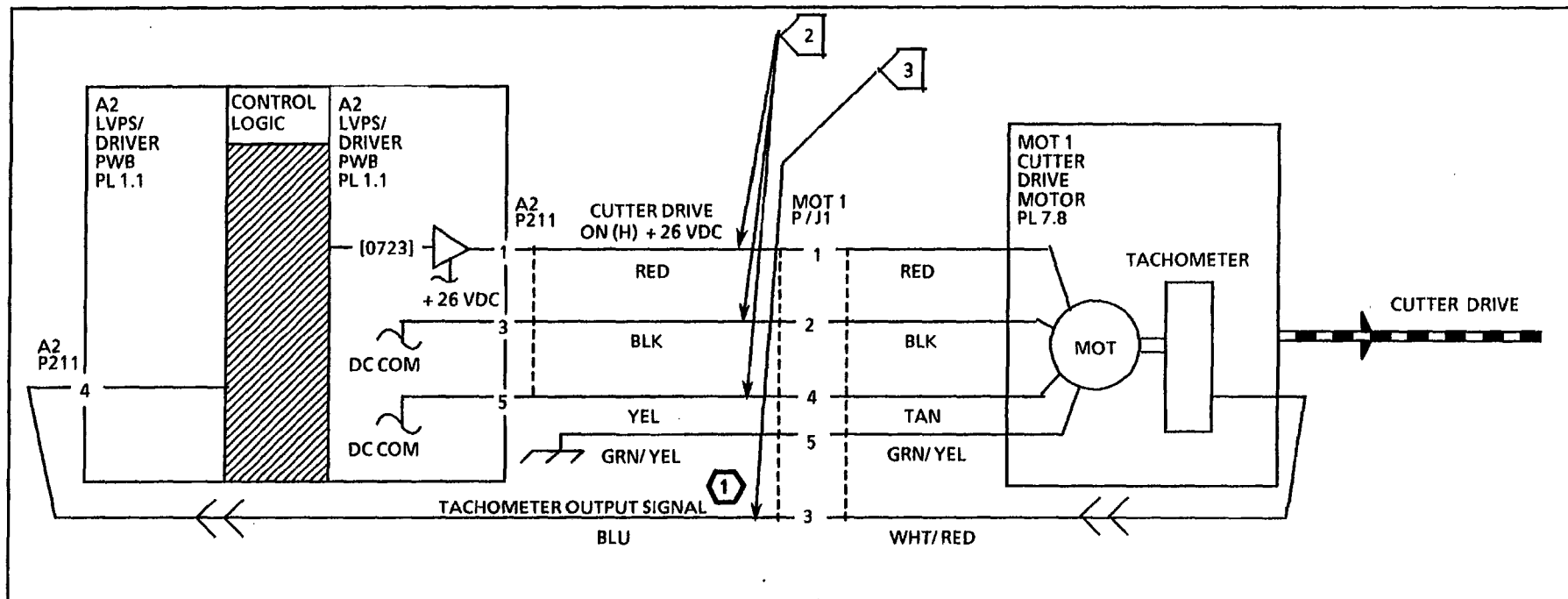
Replace the LVPS/ Driver PWB (A2). Ensure to reconnect the Cutter Home Sensor connector (Q1 P1).

LVPS/ DRIVER PWB (A2)



A



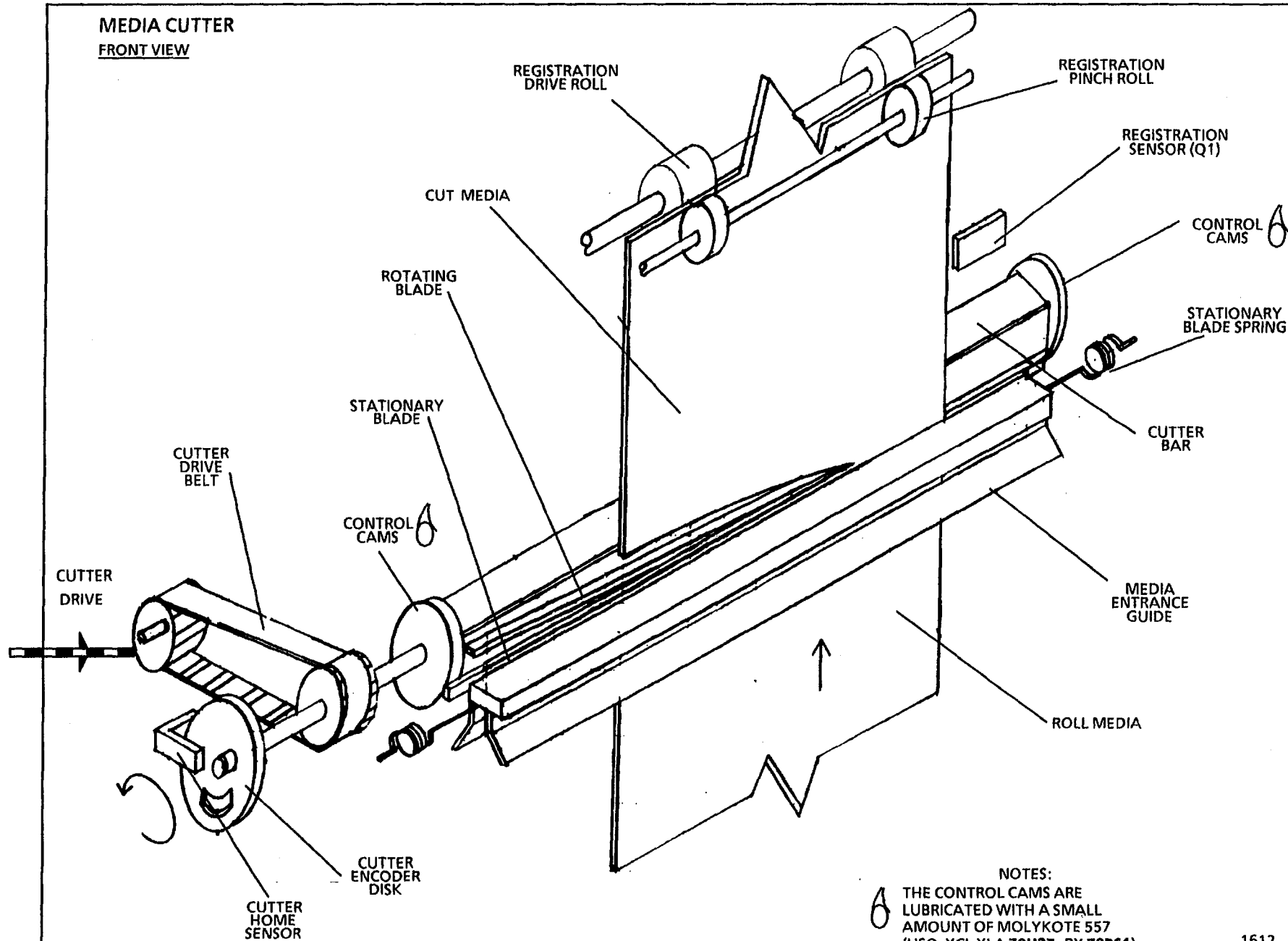


NOTE:

- 1 OUTPUT SIGNAL IS GENERATED BY CUTTER DRIVE (SERVO) MOTOR. SIGNAL VOLTAGE READING IS APPROXIMATELY + 1.7 VDC

Notes:

MEDIA CUTTER
FRONT VIEW



1612

LL.41, LL.45 Fuser Warmup Fault RAP

(01/21/94)

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

LL.41 is displayed when the Fuser heat does not increase to 110° F (43° C) within one minute.

LL.45 is displayed when the Fuser temperature is greater than 110° F (43° C) but does not reach the setpoint temperature within the specified time period.

Initial Actions

Ensure that the following connectors are properly seated:

- A23 P/J1, HR1P1 and HR1P2 on the Fuser Heat Rod, A2 P212, A23 A1P1, A23J2, and A3P306.
- Ensure that the correct heat rod is installed.
- Check the wall outlet for proper line voltage



WARNING
Dangerous Voltage.

Procedure

NOTE: After entering the code [1004], the Fuser Power Relay (K2) and CR25 are energized for approximately five minutes.

Switch on the copier. Enter the diagnostic code [1004] to test the operation of the Fuser.

After 10 seconds, the Fuser Heat Rod is still on.

Y N

A B

A B

Switch off the copier, and disconnect the Power Cord. Set the DMM to read 30 ohms. Disconnect A23P/J1. Connect the (+) lead to A23J1-3. Connect the (-) lead to A23J1-1.

The resistance is less than 30 ohms.

Y N

Go to FLAG 7 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Replace the Heat Rod.

Disconnect the leads, and connect A23P/J1. Set the DMM to read ACH. Go to FLAG 1 and connect the leads. Cheat the Right Side Door Interlock. Connect the Power Cord and switch on the copier. Wait 10 seconds.

ACH is present.

Y N

Go to FLAG 2.

ACH is present.

Y N

Repair the wires.

Set the DMM to read 26 VDC. Go to FLAG 3. Switch off, then switch on, the copier.

There is 26 VDC.

Y N

A C D E

A C D E

Connect the (+) lead to A2P212-1. Connect the (-) lead to A2P212-3. Switch off, then switch on, the copier.

There is 26 VDC.

Y N

Replace the LVPS/Driver PWB (A2).

Repair the wires.

Replace the Fuser Power Relay (K2).

Connect the (+) lead to A23P1-3. Connect the (-) lead to Relay K2, pin 8. Switch off, then switch on, the copier.

ACH is present.

Y N

Repair the wire between A23P1-3 and pin 4 on the Fuser Power Relay (K2).

Go to FLAG 8 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Go to FLAG 9 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

A F

LL.41, LL.45 Fuser Warmup Fault RAP

(01/21/94)

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

LL.41 is displayed when the Fuser heat does not increase to 110° F (43° C) within one minute.

LL.45 is displayed when the Fuser temperature is greater than 110° F (43° C) but does not reach the setpoint temperature within the specified time period.

Initial Actions

Ensure that the following connectors are properly seated:

- A23 P/J1, HR1P1 and HR1P2 on the Fuser Heat Rod, A2 P212, A23 A1P1, A23J2, and A3P306.
- Ensure that the correct heat rod is installed.
- Check the wall outlet for proper line voltage



WARNING
Dangerous Voltage.

Procedure

NOTE: After entering the code [1004], the Fuser Power Relay (K2) and CR25 are energized for approximately five minutes.

Switch on the copier. Enter the diagnostic code [1004] to test the operation of the Fuser.

After 10 seconds, the Fuser Heat Rod is still on.

Y N
A B

A B

Switch off the copier, and disconnect the Power Cord. Set the DMM to read 30 ohms. Disconnect A23P/J1. Connect the (+) lead to A23J1-3. Connect the (-) lead to A23J1-1.

The resistance is less than 30 ohms.

Y N

Go to FLAG 7 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Replace the Heat Rod.

Disconnect the leads, and connect A23P/J1. Set the DMM to read ACH. Go to FLAG 1 and connect the leads. Cheat the Right Side Door Interlock. Connect the Power Cord and switch on the copier. Wait 10 seconds.

ACH is present.

Y N

Go to FLAG 2.

ACH is present.

Y N

Repair the wires.

Set the DMM to read 26 VDC. Go to FLAG 3. Switch off, then switch on, the copier.

There is 26 VDC.

Y N

A C D E

A C D E

Connect the (+) lead to A2P212-1. Connect the (-) lead to A2P212-3. Switch off, then switch on, the copier.

There is 26 VDC.

Y N

Replace the LVPS/Driver PWB (A2).

Repair the wires.

Replace the Fuser Power Relay (K2).

Connect the (+) lead to A23P1-3. Connect the (-) lead to Relay K2, pin 8. Switch off, then switch on, the copier.

ACH is present.

Y N

Repair the wire between A23P1-3 and pin 4 on the Fuser Power Relay (K2).

Go to FLAG 8 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Go to FLAG 9 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

A F

A H L M N

Replace the LVPS/ Driver PWB (A2).

Repair the wires.

Replace the Ballast Relay (K5).

Switch off the copier and disconnect the Power Cord. Reconnect the wire to the G terminal on Triac (Q1). The procedure is complete.

The Thermistor Pad on the Thermal Controller PWB (A32A1) touches the Fuser Roll.

Y N

Replace the Thermal Controller PWB (A23A1).

The Thermistor Pad is free of contamination.

Y N

Clean the pad with a white cloth.

Go to FLAG 6 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires

O

O

Disconnect A23A1P1 on the Thermal Controller PWB (A23A1). Set the DMM to read 200K ohms. Connect the (+) lead to A23A1J1-2. Connect the (-) lead to A23A1J1-1.

The resistance is less than 200K ohms.

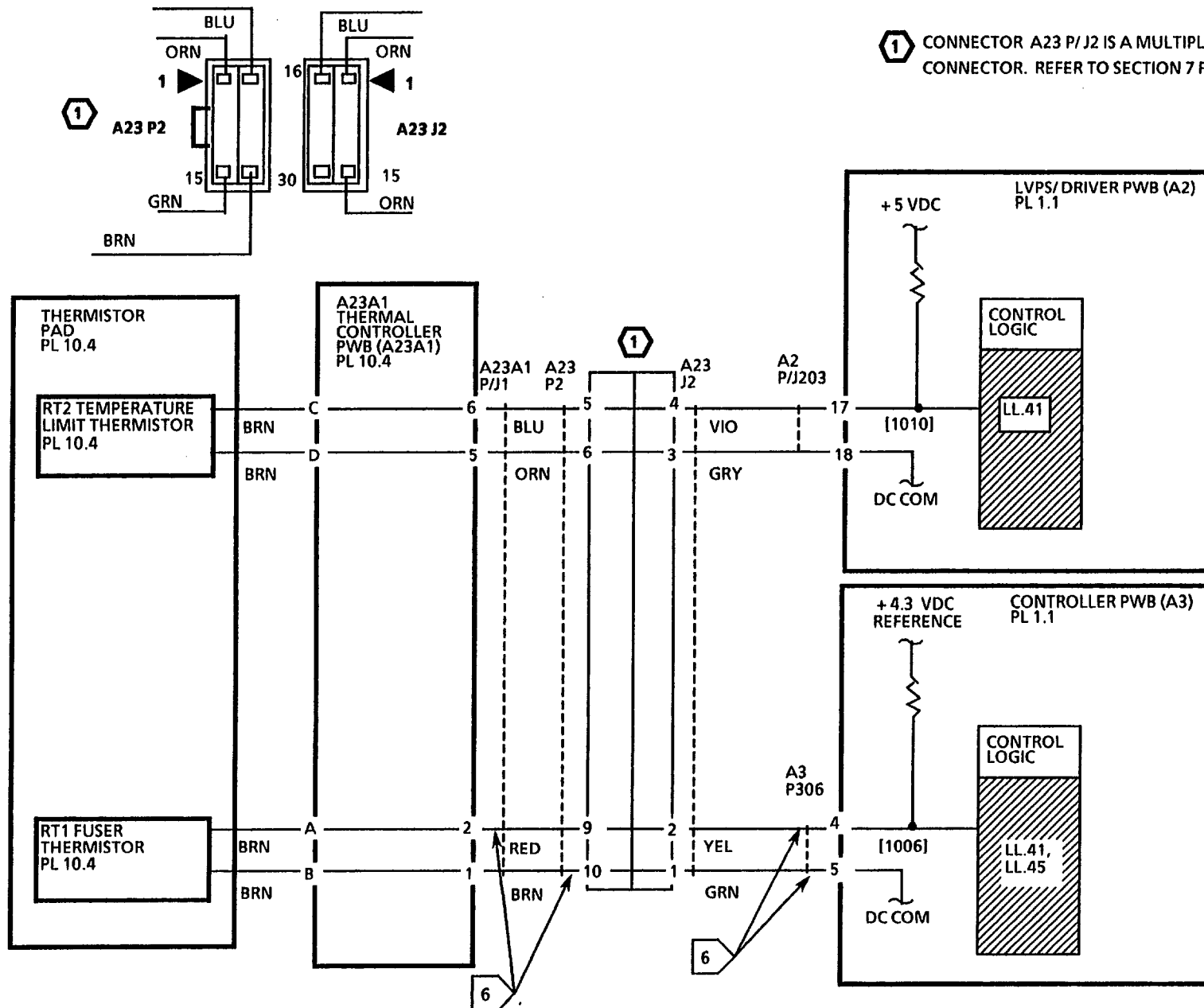
Y N

Replace the Thermal Controller PWB (A23A1).

Replace the Controller PWB (A3).

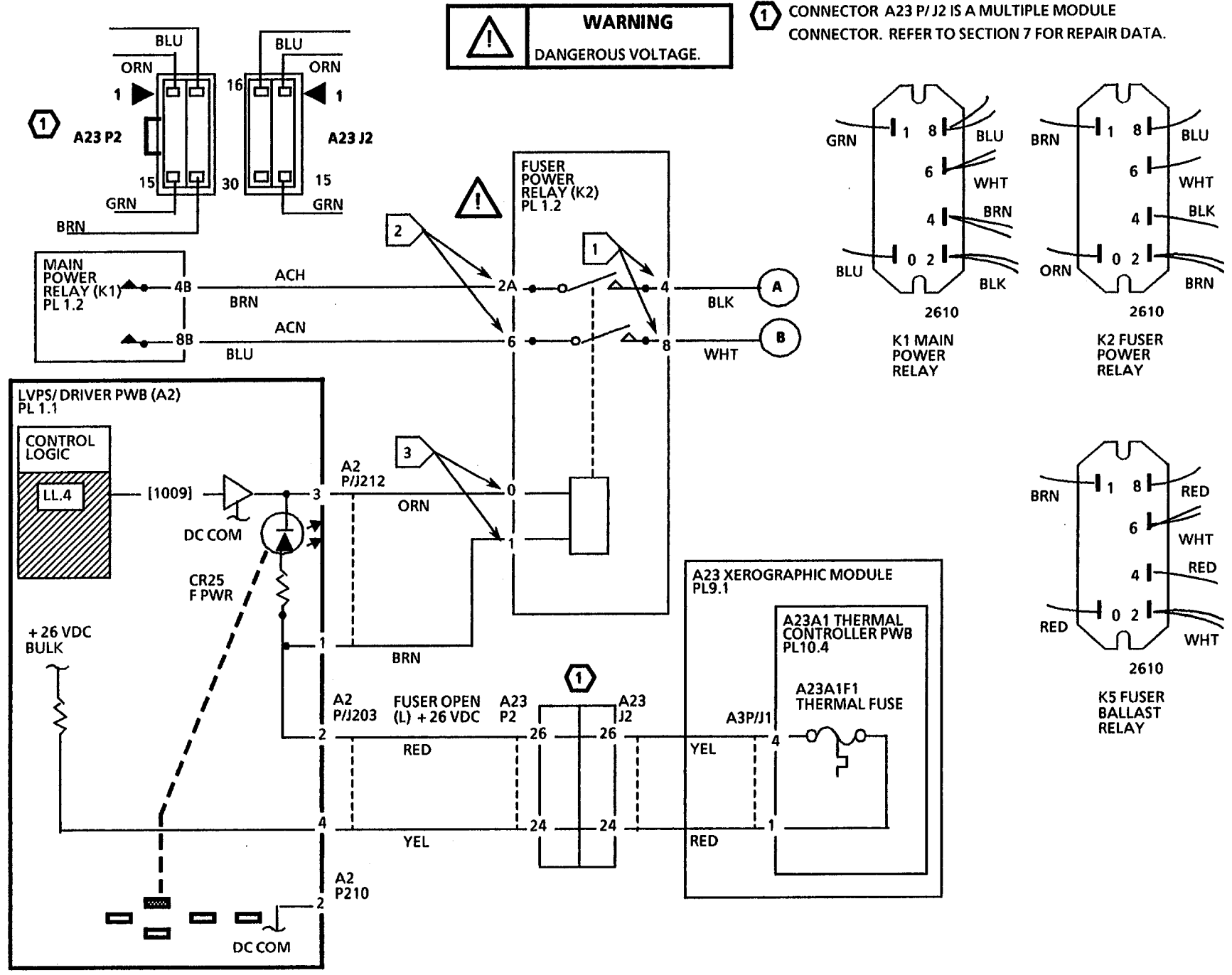
NOTES:

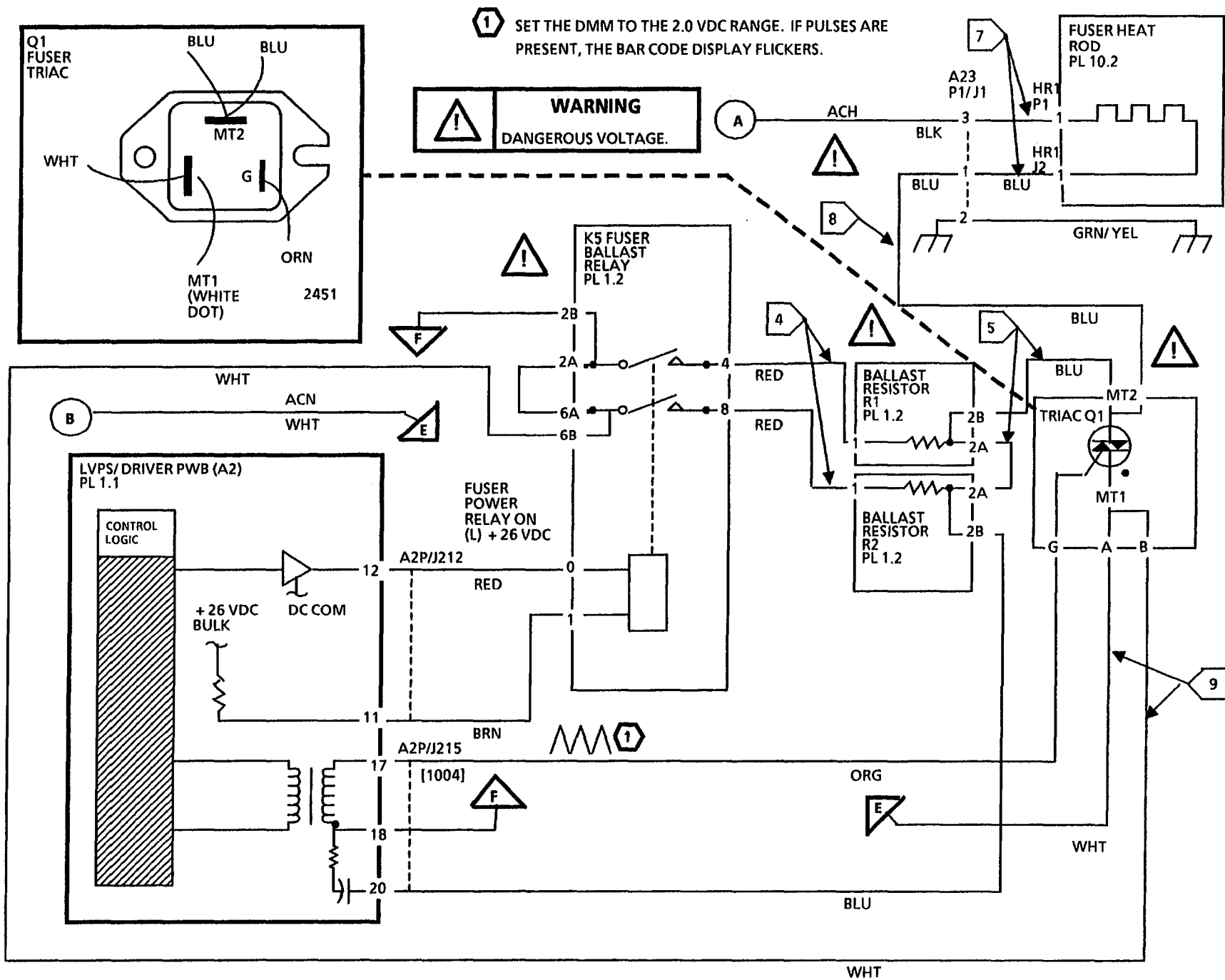
① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.

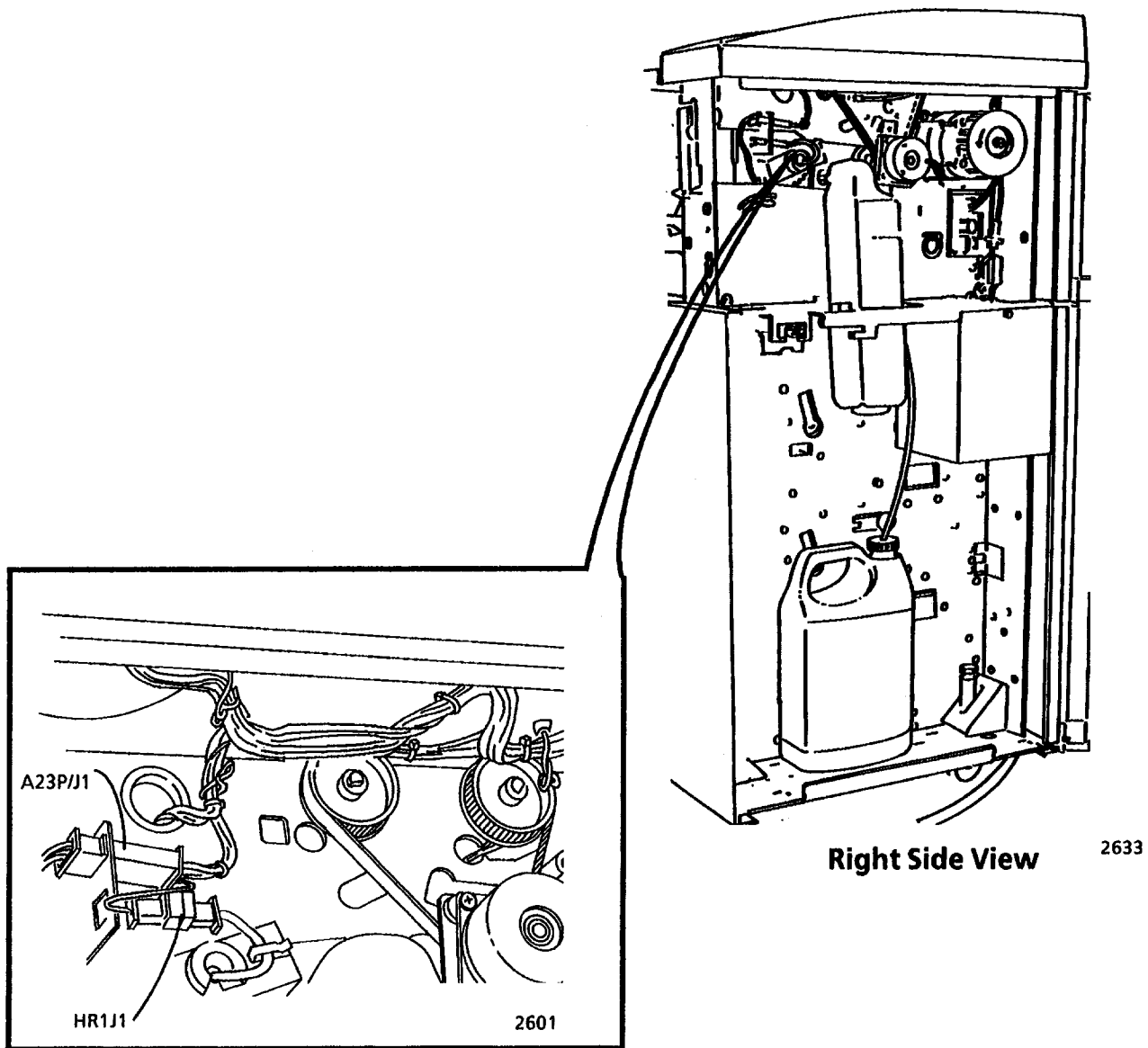


WARNING
 DANGEROUS VOLTAGE.

1 CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.

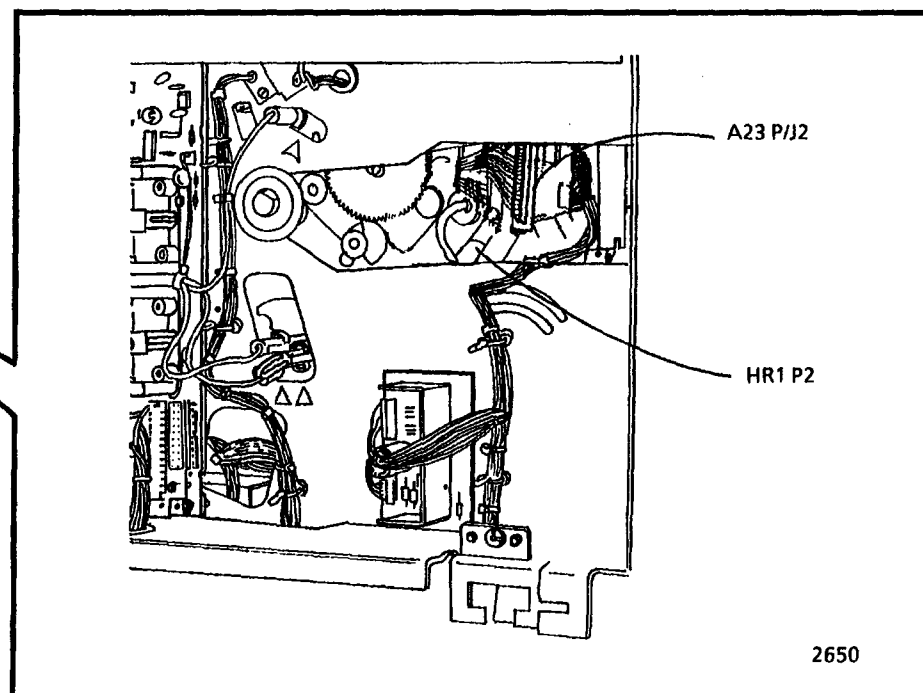
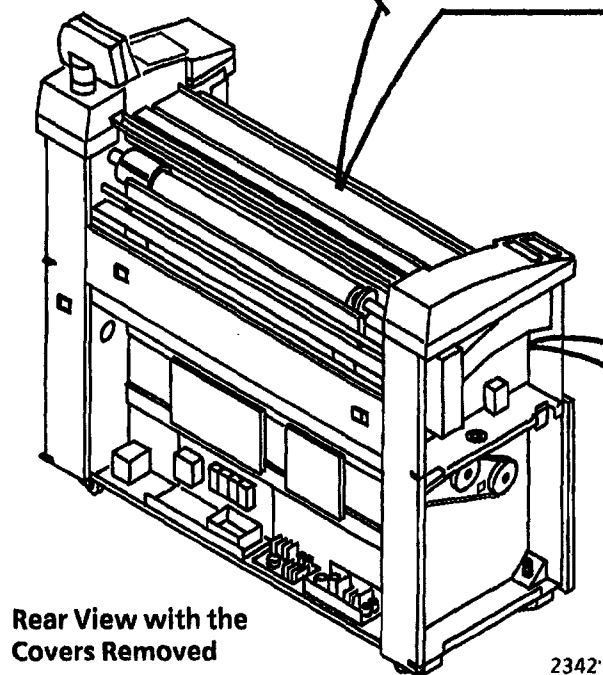
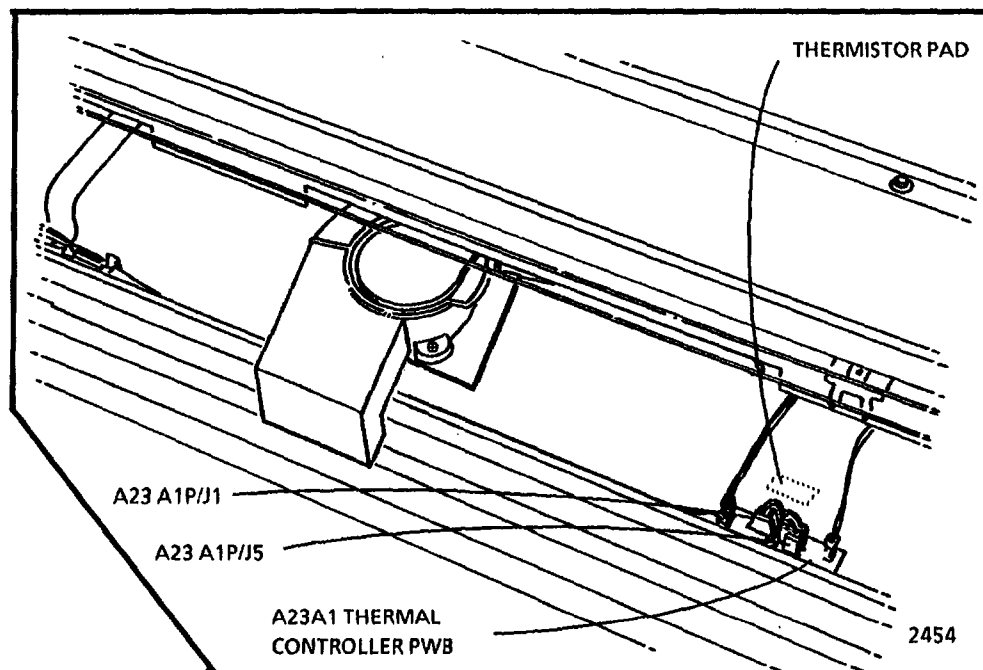


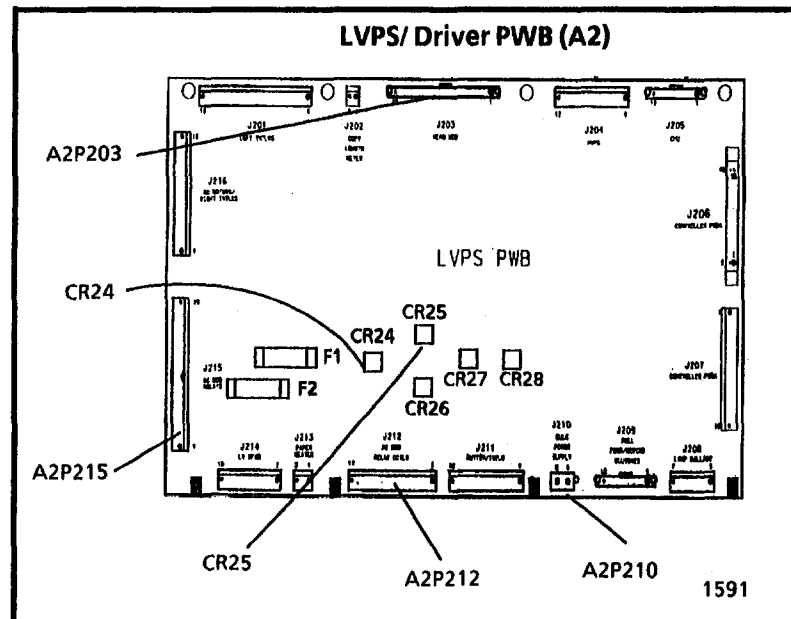




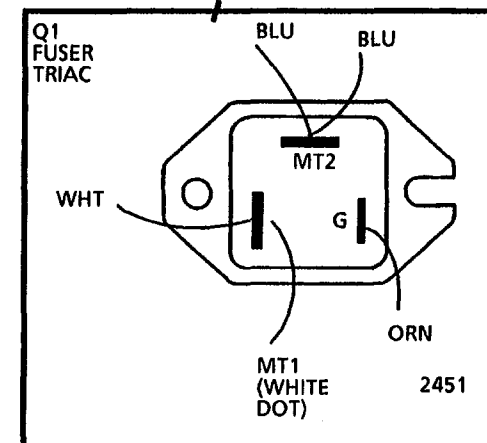
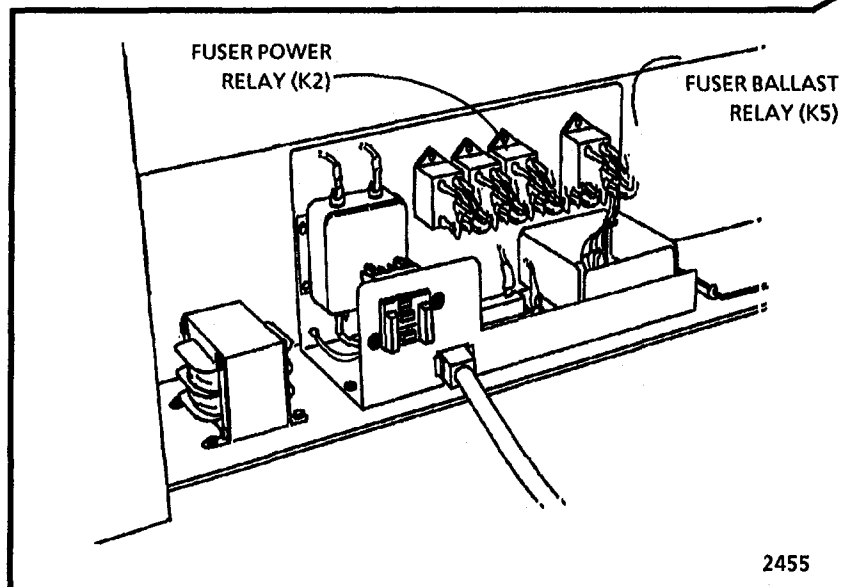
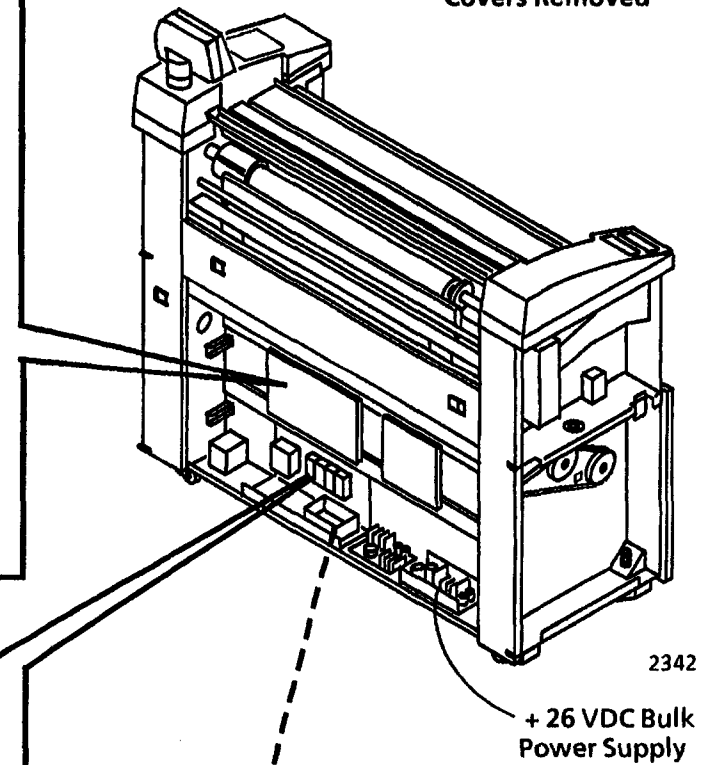
NOTES:

- ① THERMISTOR PAD CONTAINS THE FUSER THERMISTOR (RT1), AND THE TEMPERATURE LIMIT THERMISTOR (RT2). THE THERMAL CONTROLLER PWB CONTAINS THE THERMISTOR PAD AND THE THERMAL FUSE (A23A1F1).





**Rear View with the
Covers Removed**



LL.42 Thermal Control RAP

This RAP is used to locate certain problems in the thermal control circuitry in the Fuser area.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Switch off, then switch on the copier. If the problem still exists, perform the procedure below.

Procedure

Switch off the copier, and disconnect the Power Cord. Disconnect the wire to the G lead on Triac Q1. Connect the Power Cord and switch on the copier. Wait 10 seconds.

After 5 seconds, the Fuser Heat Rod is off.

Y N

Replace Triac (Q1).

Switch off the copier. Disconnect A23A1P1. Set the DMM to read 100 ohms. Connect the (+) lead to A23A1J1-2. Connect the (-) lead to A23A1J1-1.

The resistance is greater than 100 ohms.

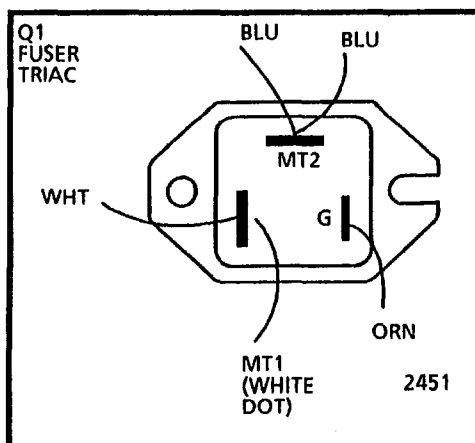
Y N

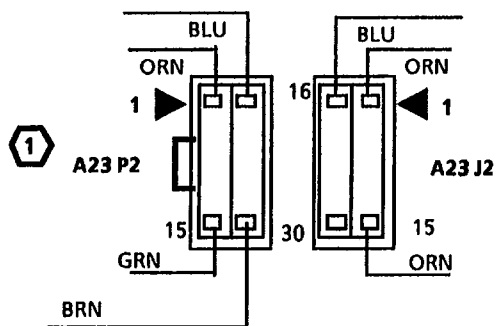
A B

A B

Replace the Thermal Controller PWB (A23A1).

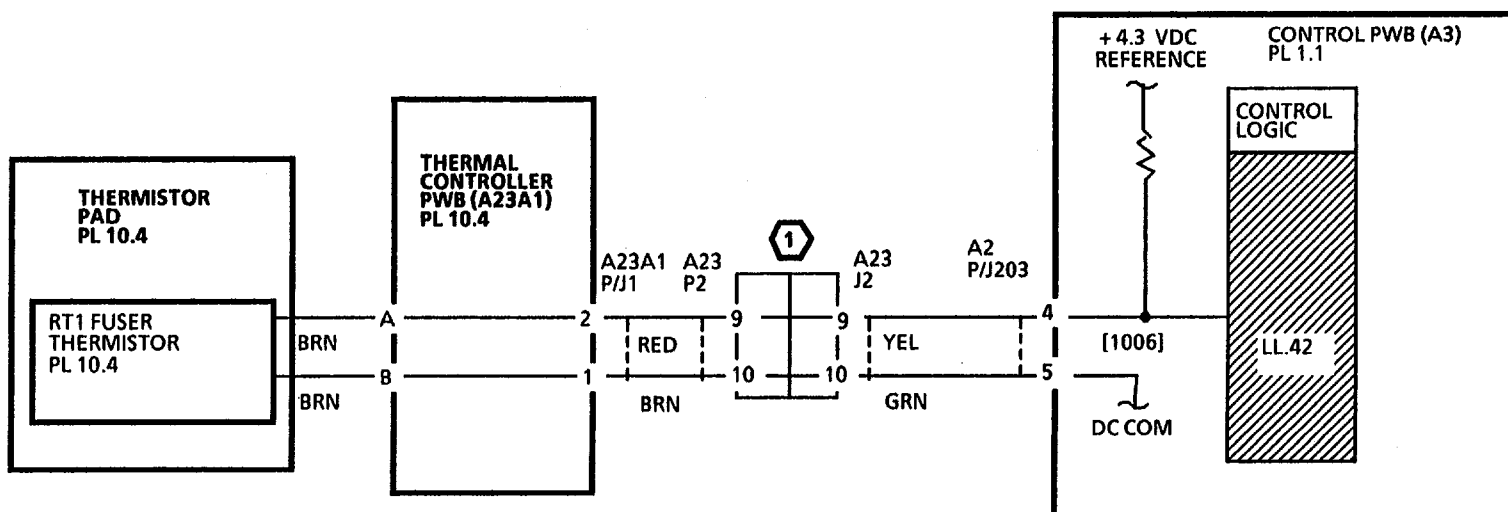
Replace the Control PWB (A3).

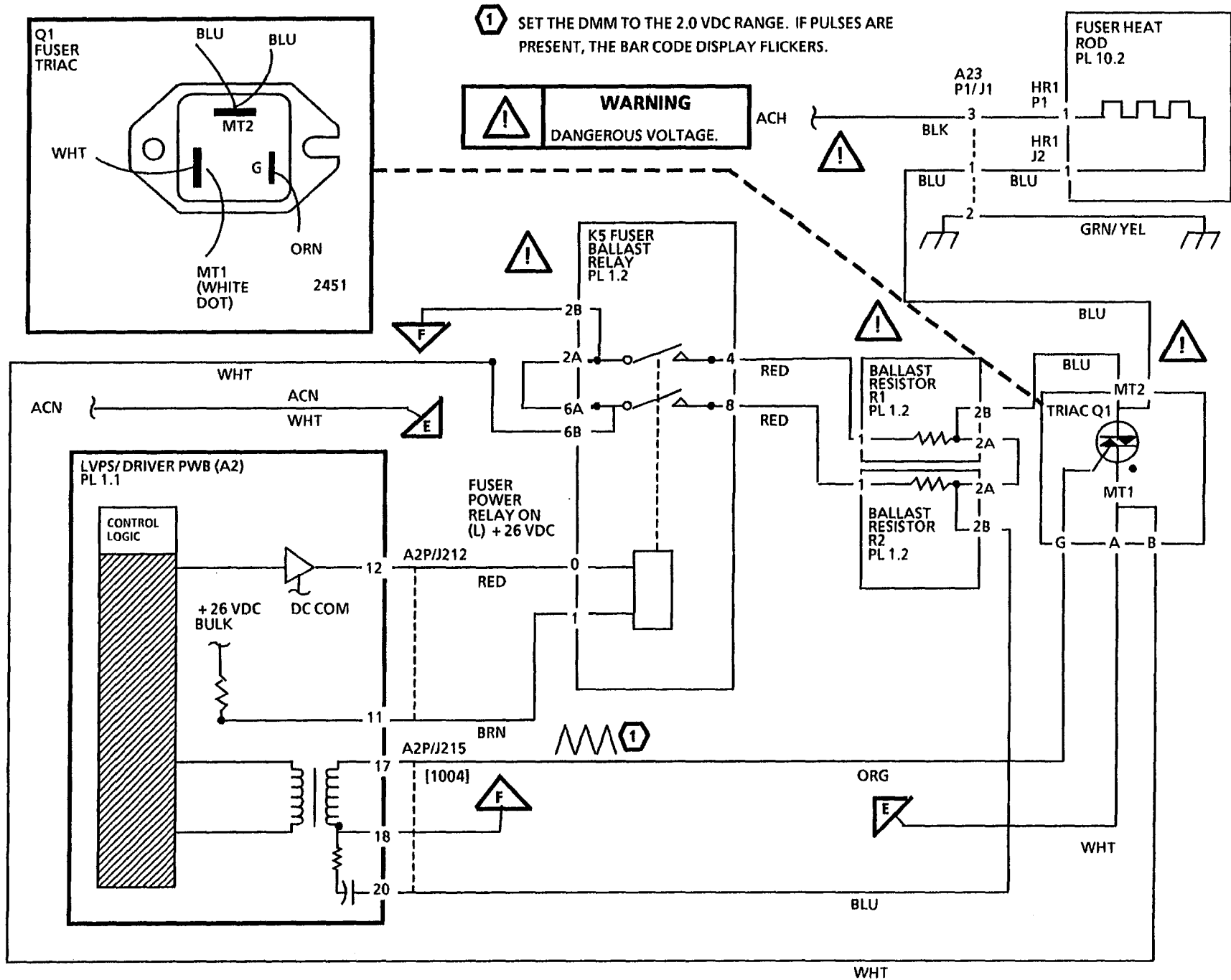




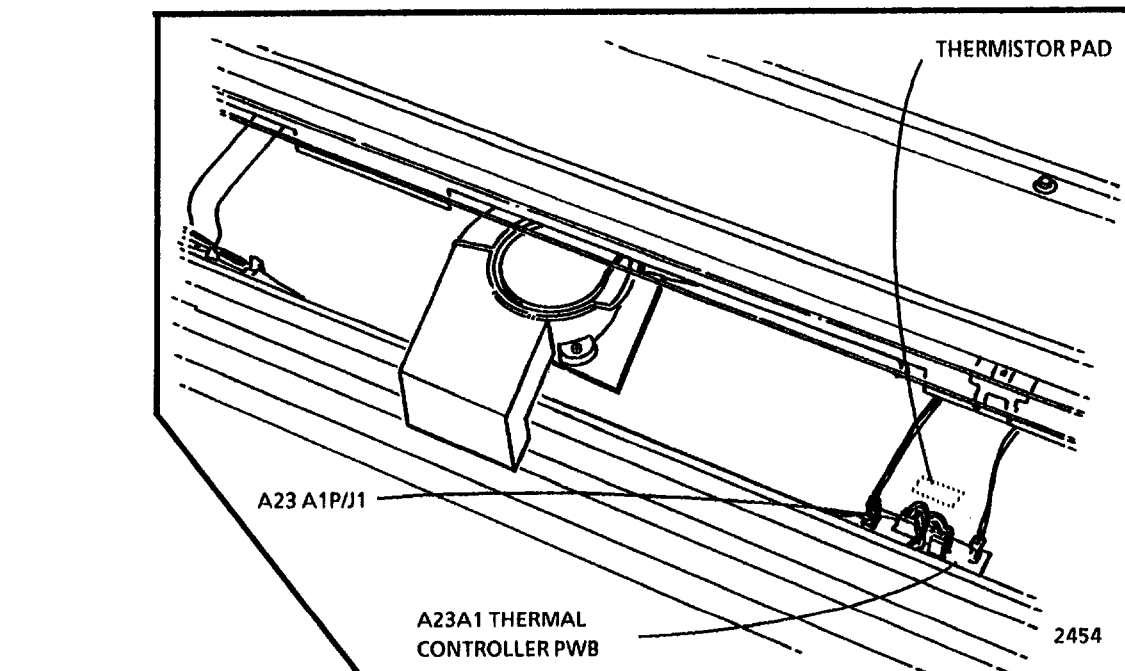
NOTES:

- ① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



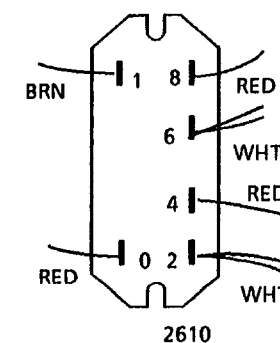


Notes:

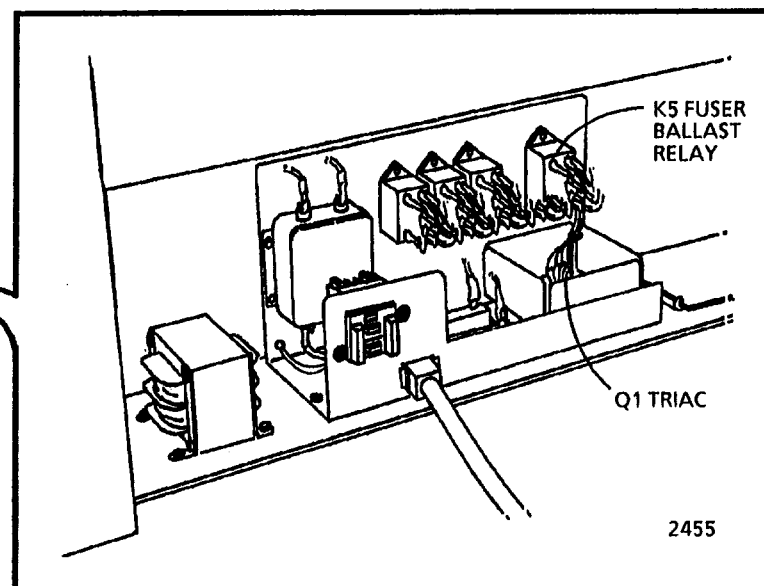
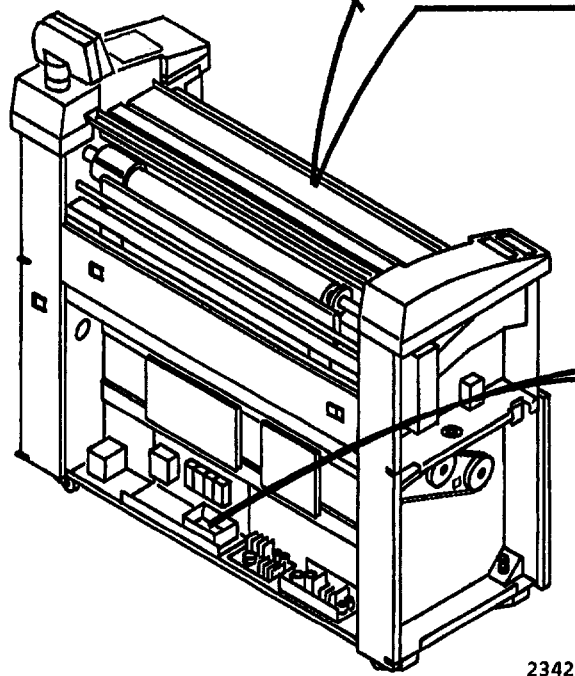


NOTES:

- ① THERMISTOR PAD CONTAINS THE FUSER THERMISTOR (RT1), AND THE TEMPERATURE LIMIT THERMISTOR (RT2). THE THERMAL CONTROLLER PWB CONTAINS THE THERMISTOR PAD AND THE THERMAL FUSE.(A23A1F1).



K5 FUSER
BALLAST
RELAY



LL.43 Fuser Overtemperature RAP

(01/19/94)

The Status Code LL.43 is displayed when the logic detects that there is a problem with the Fuser temperature and an overtemperature condition has caused the Thermal Fuse (A23A1F1) to open.

NOTE: The circuit diagram and the component locator drawings are on the following pages.



WARNING
Dangerous Voltage.

Initial Actions

- Ensure that connectors A2 P212, A2P210 AND A2P203 on the LVPS/Driver PWB (A2), A23A1P5 on the Thermal Controller PWB (A23A1), and A23P/J2 are correctly installed and fully seated.
- Ensure that both cooling fans are working. If not, go to the 1.3 Cooling Fan RAP.
- Ensure that all interlocks are closed.

Procedure

There is 26 VDC at A2P203-2.

Y N

A B

A B

Disconnect A23A1P5. Set the DMM to read continuity. Connect the (+) probe to A23A1J5-4. Connect the (-) probe to A23A1J5-2.

There is continuity.

Y N

Switch off the copier, and disconnect the Power Cord. Replace the Thermal Fuse (A23A1F1). Disconnect the blue and white wires from the Triac (Q1). Set the DMM to measure 2K ohms, and measure the resistance across the connections from which the wires were removed. If the resistance is not infinite, replace the triac. Measure the resistance from each terminal on the triac to frame ground. If the resistance is not infinite, replace the triac. Reconnect the wires. Reconnect the power cord.

There is 26 VDC at A2P203-4.

Y N

Replace the LVPS/Driver PWB (A2).

Go to FLAG 2 and check the wires for an open circuit.

The wires have continuity.

Y N

Repair the wires.

Switch off the copier. Disconnect A23A1P1 on the Thermal Controller PWB. Set the DMM to read 200K ohms. Go to Flag 4 and check the resistance.

The resistance is less than 200K ohms.

Y N

A C D

A C D

Replace the Thermal Controller PWB A23A1.

Go to FLAG 4 and check the wires for an open circuit.

All wires have continuity.

Y N

Repair the wires.

Replace the LVPS/Driver PWB (A2).

Go to A2 P212-3. Enter the diagnostic code [1009] to turn on the Fuser Power Relay (K2). The voltage goes from + 26 VDC to less than 1 VDC.

Y N

Go to FLAG 3 and check the wires for an open circuit. The wires have continuity.

Y N

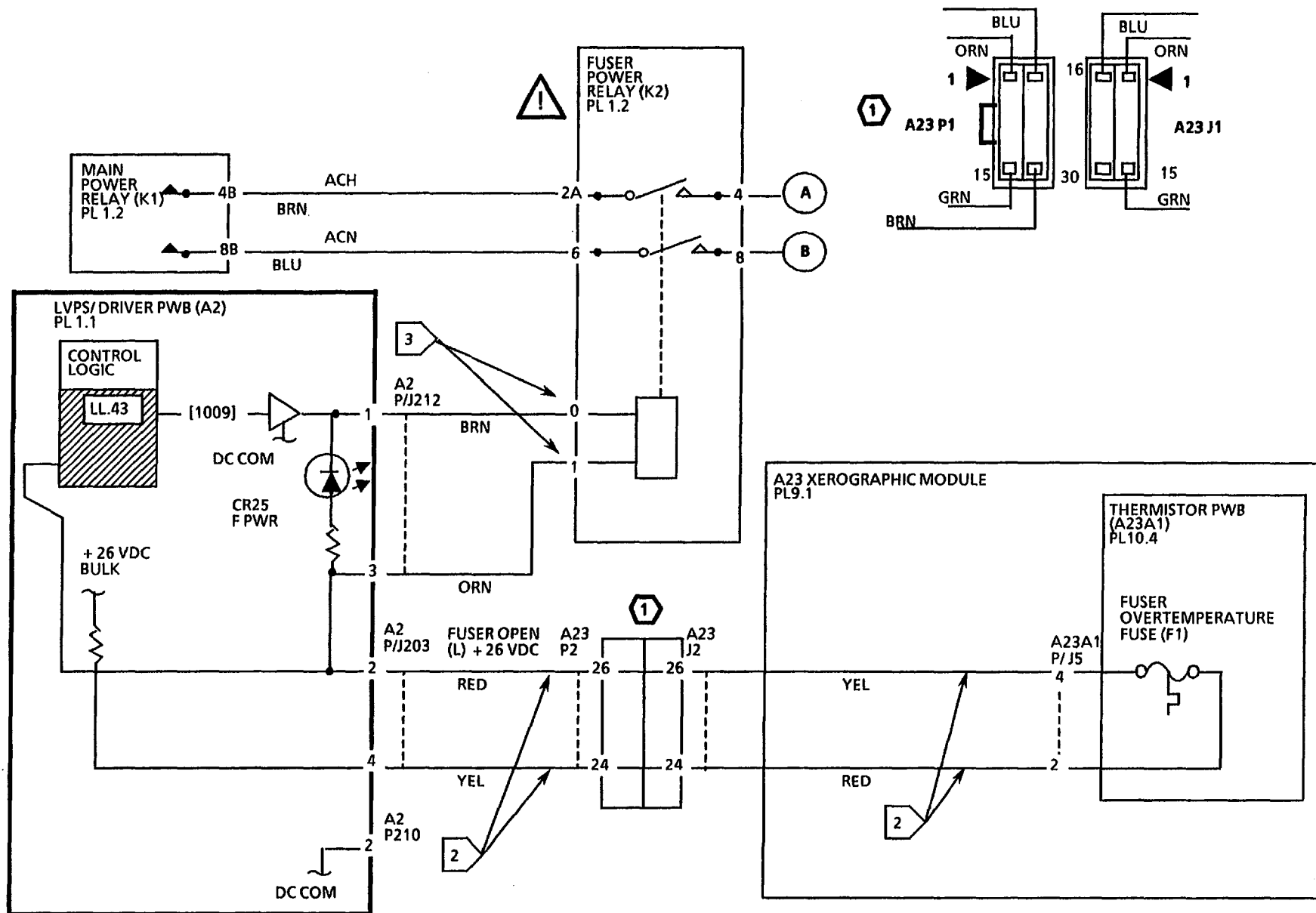
Repair the wires.

Replace the LVPS/Driver PWB (A2). If the problem persists, replace the Control PWB (A3).

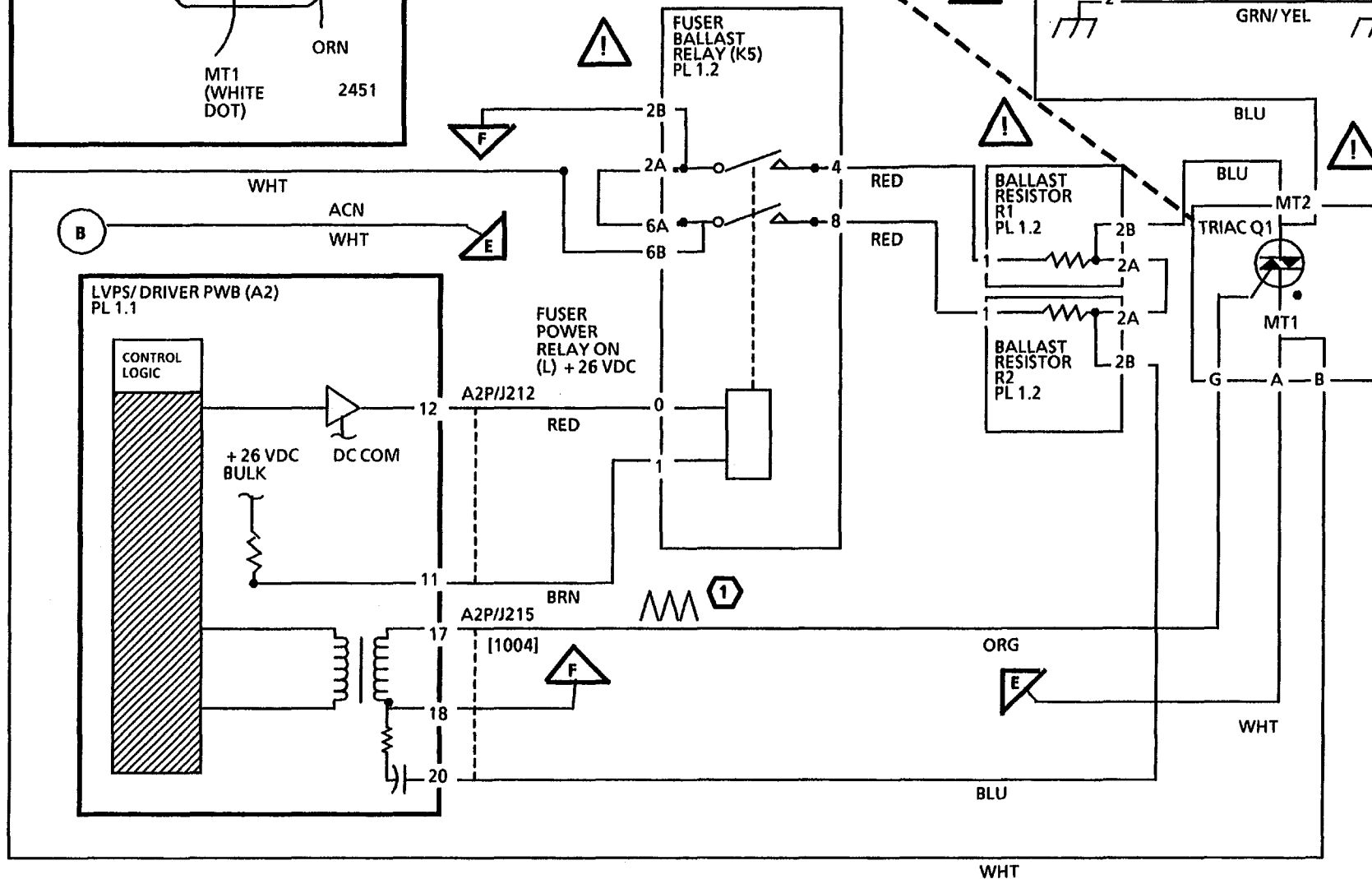
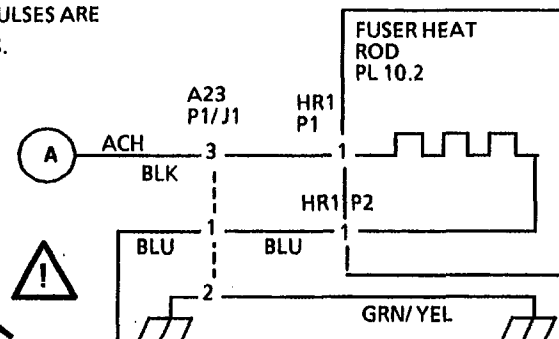
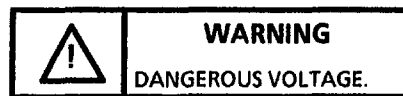
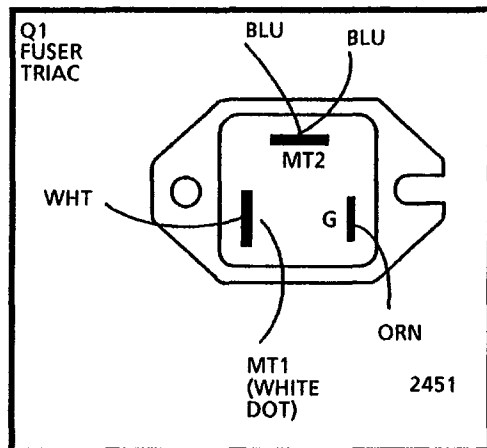
Replace the Fuser Power Relay (K2).



① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.

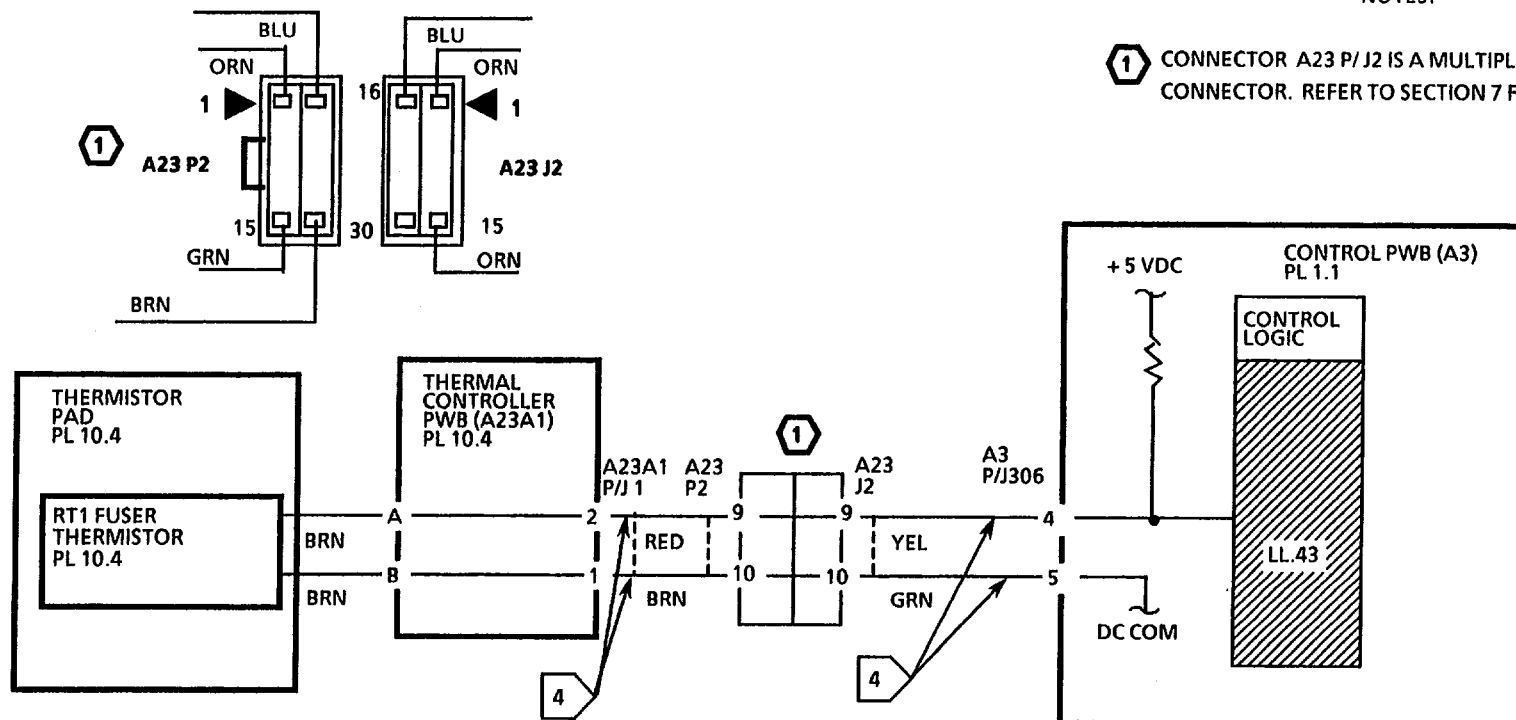


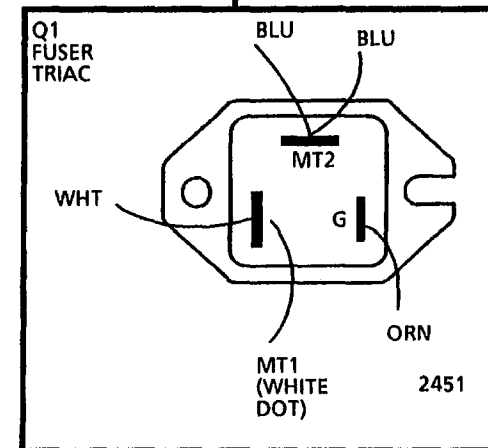
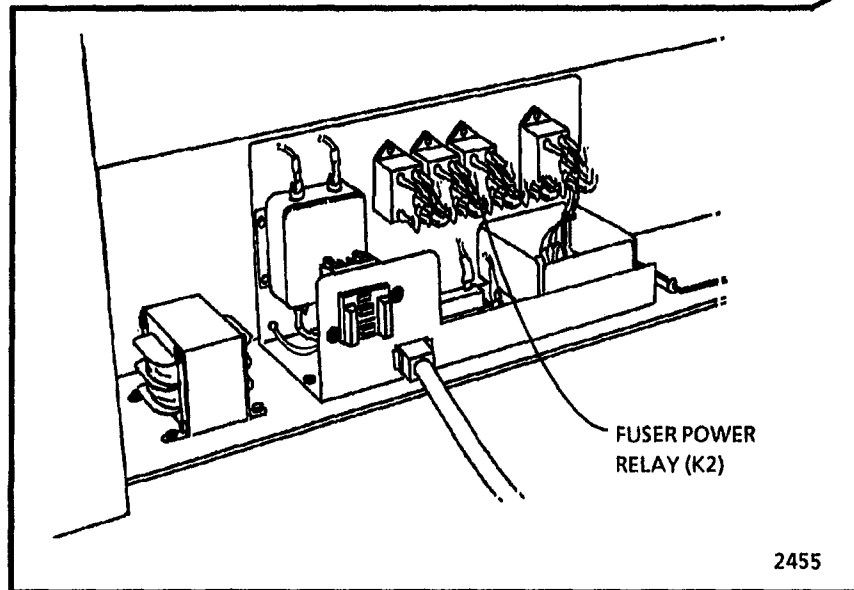
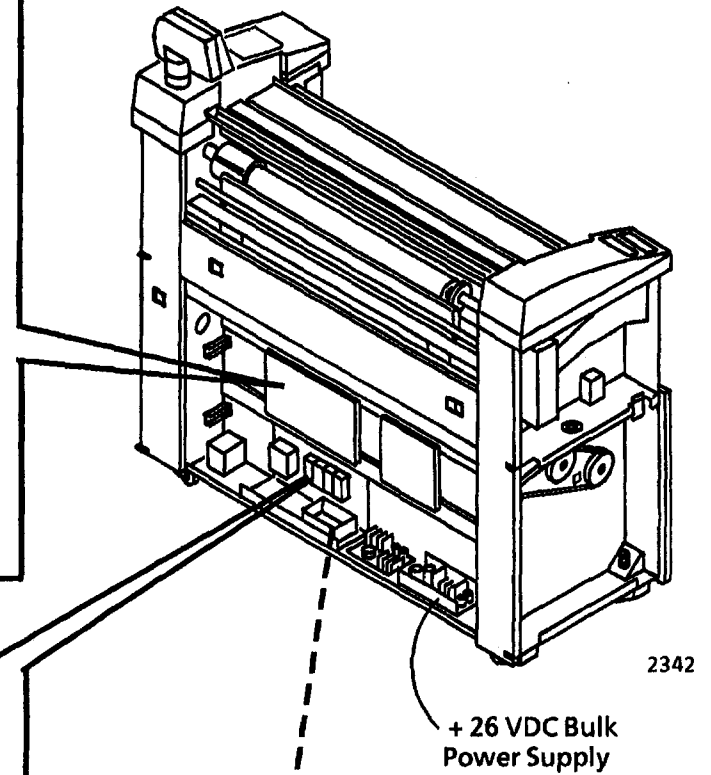
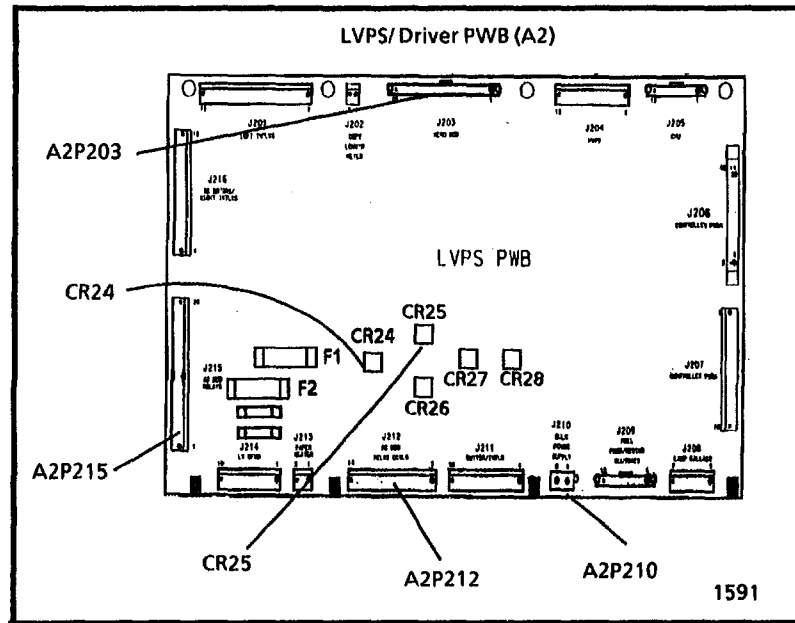
1 SET THE DMM TO THE 2.0 VDC RANGE. IF PULSES ARE PRESENT, THE BAR CODE DISPLAY FLICKERS.

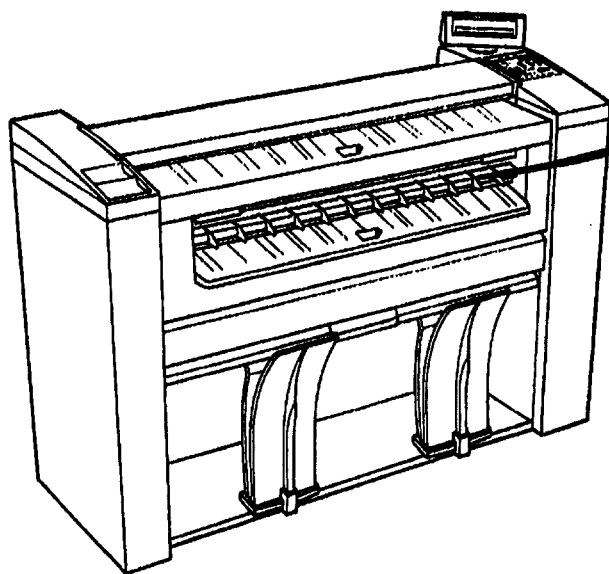


NOTES:

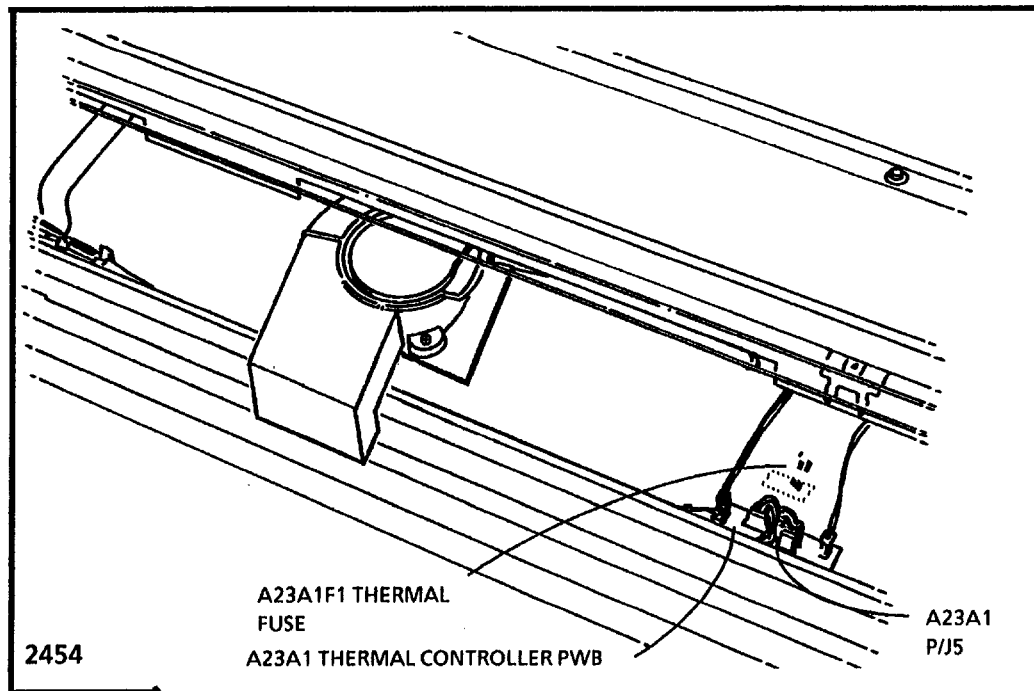
① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.







2454



2338

LL.44 Fuser Too Hot RAP

(02/15/94)

This RAP is used when the Fuser temperature exceeds 420 degrees F. (216 degrees C), the maximum allowed temperature.

The status code may also be displayed if the Temperature Limit Thermistor (RT2) has a malfunction or is contaminated, or if there is a fault in the wires between the Control PWB and the Thermistor Assembly.

Initial Actions

Allow the temperature of the Fuser to decrease. Switch off, then switch on, the copier. If the problem still exists, perform the following procedure.



WARNING
Dangerous Voltage.

Procedure

Switch off the copier, and disconnect the Power Cord. Disconnect the blue and white wires from the Triac (Q1). Set the DMM to measure 2K ohms, and measure the resistance across the connections from which the wires were removed. If the resistance is not infinite, replace the triac. Measure the resistance from each terminal on the triac to frame ground.

The resistance is infinite.

Y N

A B

A B

Replace the Triac. Reconnect the wires.

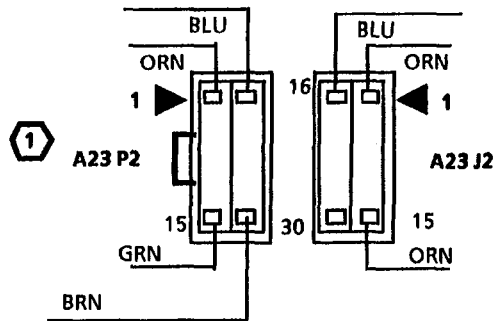
Disconnect A2P203 on the LVPS/ Driver PWB (A2). Connect the (+) lead to A2P203-17. Connect the (-) lead to A2P203-18.

There is 5VDC present.

Y N

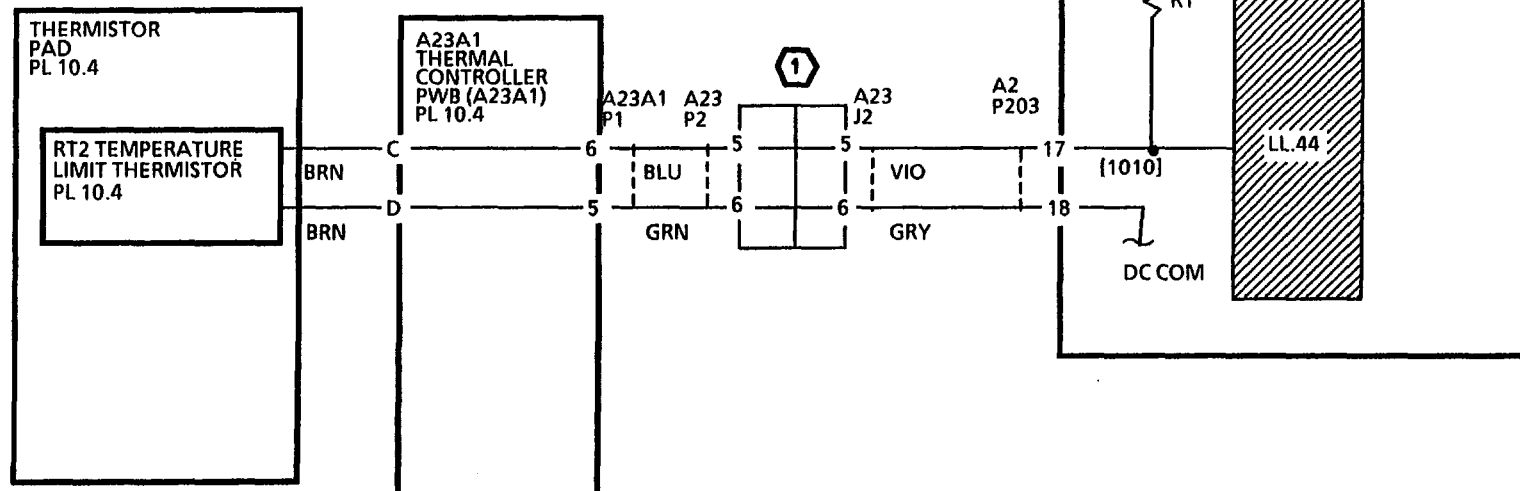
Replace the LVPS/Driver PWB (A2).

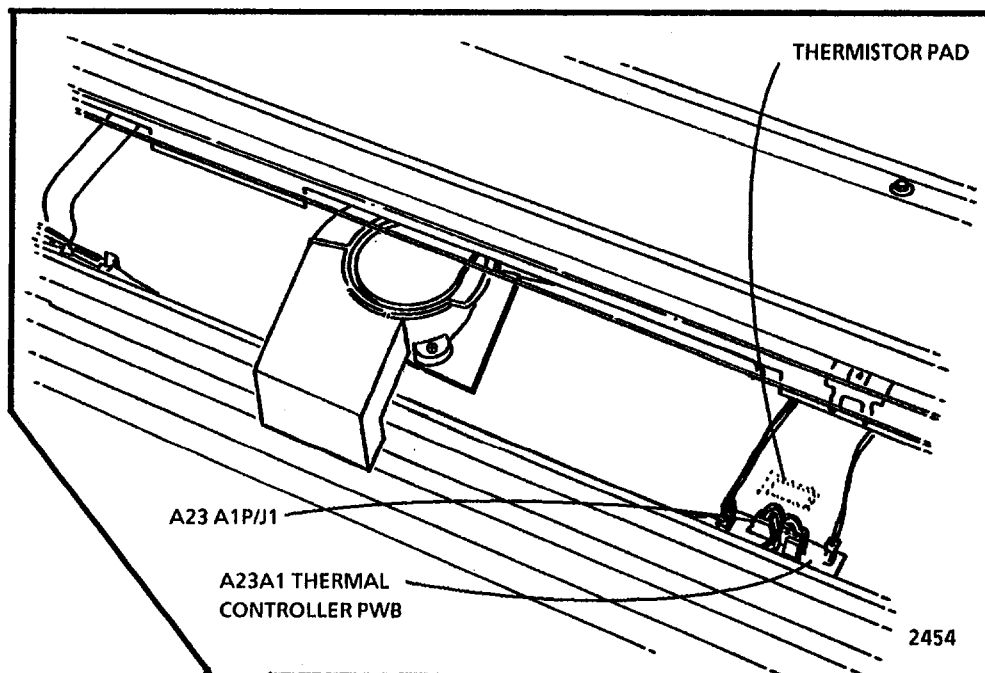
Check the wires between A23 P203-17 and 18 and A23A1 P1-5 and 6 for an open or short circuit to ground. If there is no open or short circuit, replace the Thermal Controller PWB (A23A1).



NOTES:

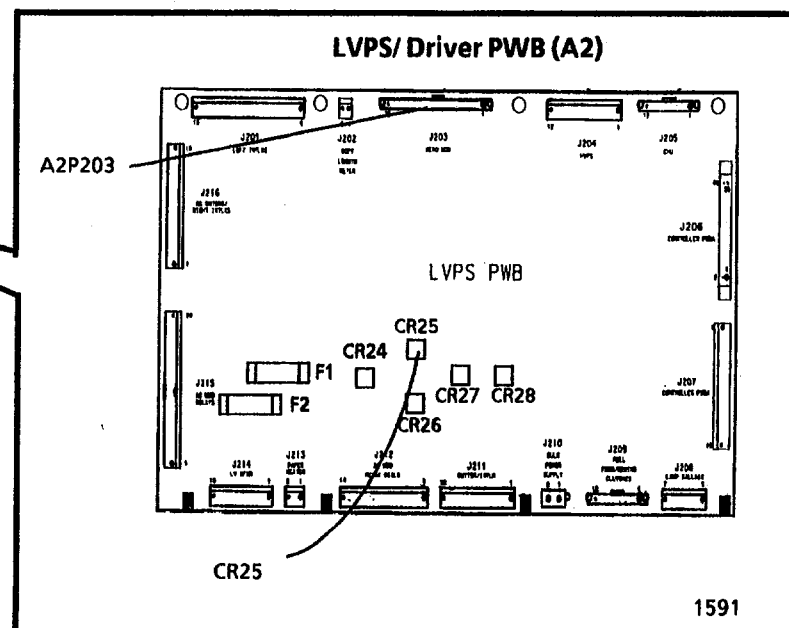
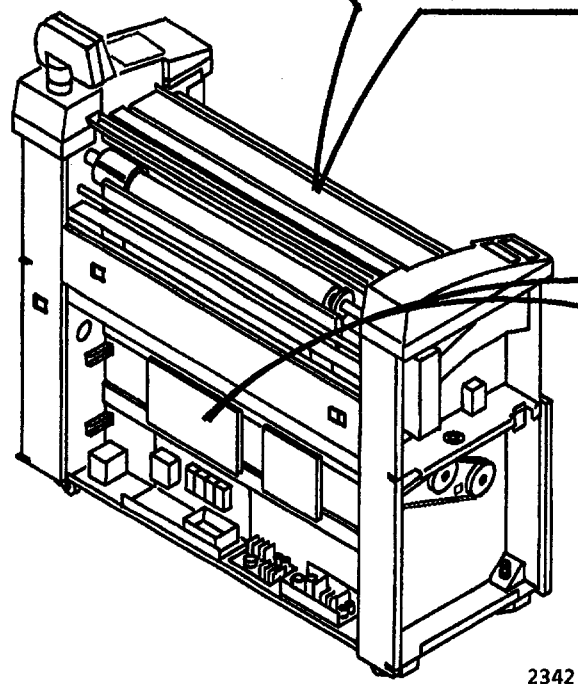
- ① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.





NOTES:

- ① THERMISTOR ASSEMBLY CONTAINS FUSER THERMISTOR (RT1) AND TEMPERATURE LIMIT THERMISTOR (RT2).



LL.50 Bulk Power Supply RAP

This RAP is used when a fault has occurred in the +26 VDC Bulk Power Supply.

NOTE: The circuit diagram and the component locator drawings are on the following pages.

Initial Actions



WARNING
Dangerous Voltage.

- Ensure that connectors A4P1 and A4P2 on the +26 VDC Bulk Power Supply are correctly installed and fully seated.
- Ensure that Fuse FU2 on the +26 VDC Bulk Power Supply has continuity. If not, the power supply has an internal fault. Replace the power supply.
- Before troubleshooting, ensure that all AC Interlocks are closed. An open Interlock will cause the Main Power relay to open.

Procedure

Switch on the copier. There is +26 VDC at A4P/J210 Pins 1 and 2.

Y N

Set the DMM to read ACH. There is ACH between A4P/J1 Pins 2 and 3.

Y N

A B C

A B C

Switch off the copier. Go to FLAG 1 and check for an open circuit. If there is no open circuit, go to the 1.4 Main Power Interlock RAP.

There is +26 VDC at A4P/J2 Pins 1 and 2.

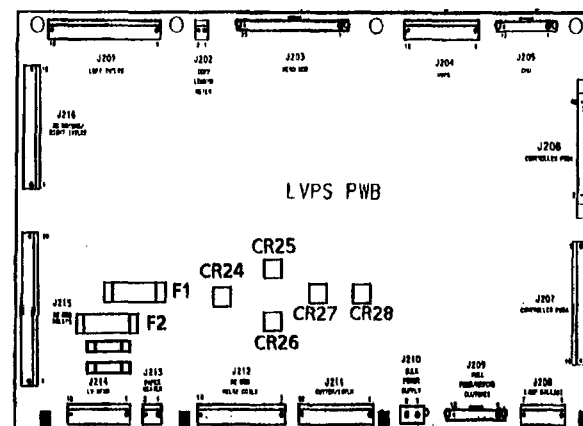
Y N

Replace the +26 VDC Bulk Power Supply.

Go to FLAG 2 and check the wiring for an open circuit. If there is no open circuit replace the LVPS/Driver PWB (A2).

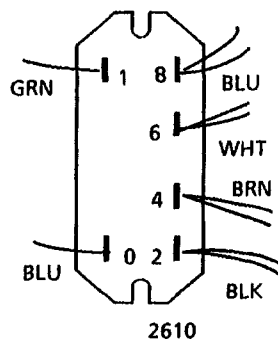
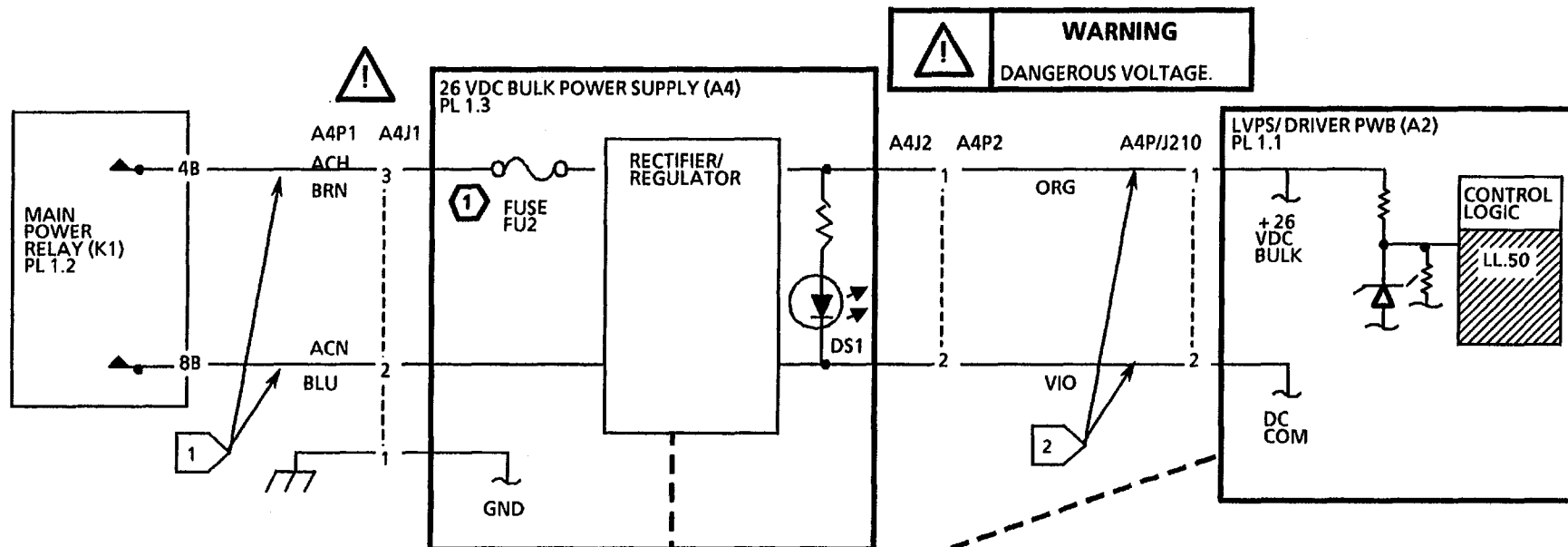
Replace the LVPS/ Driver PWB (A2). If the problem persists replace the Controller PWB.

LVPS/ Driver PWB (A2)



A2P210

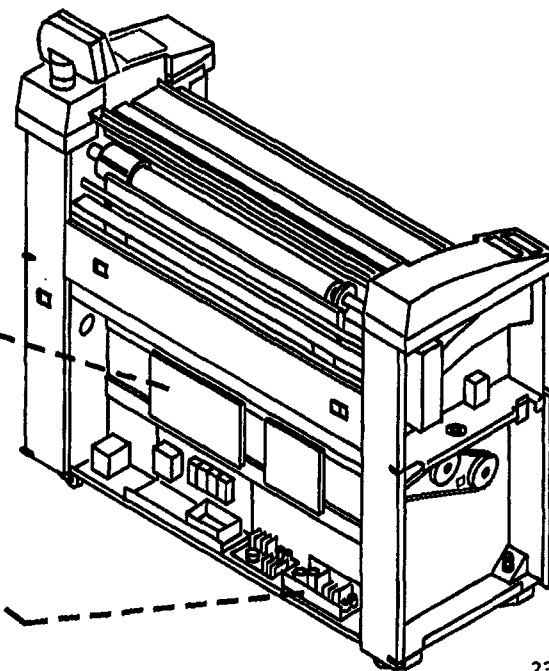
1591



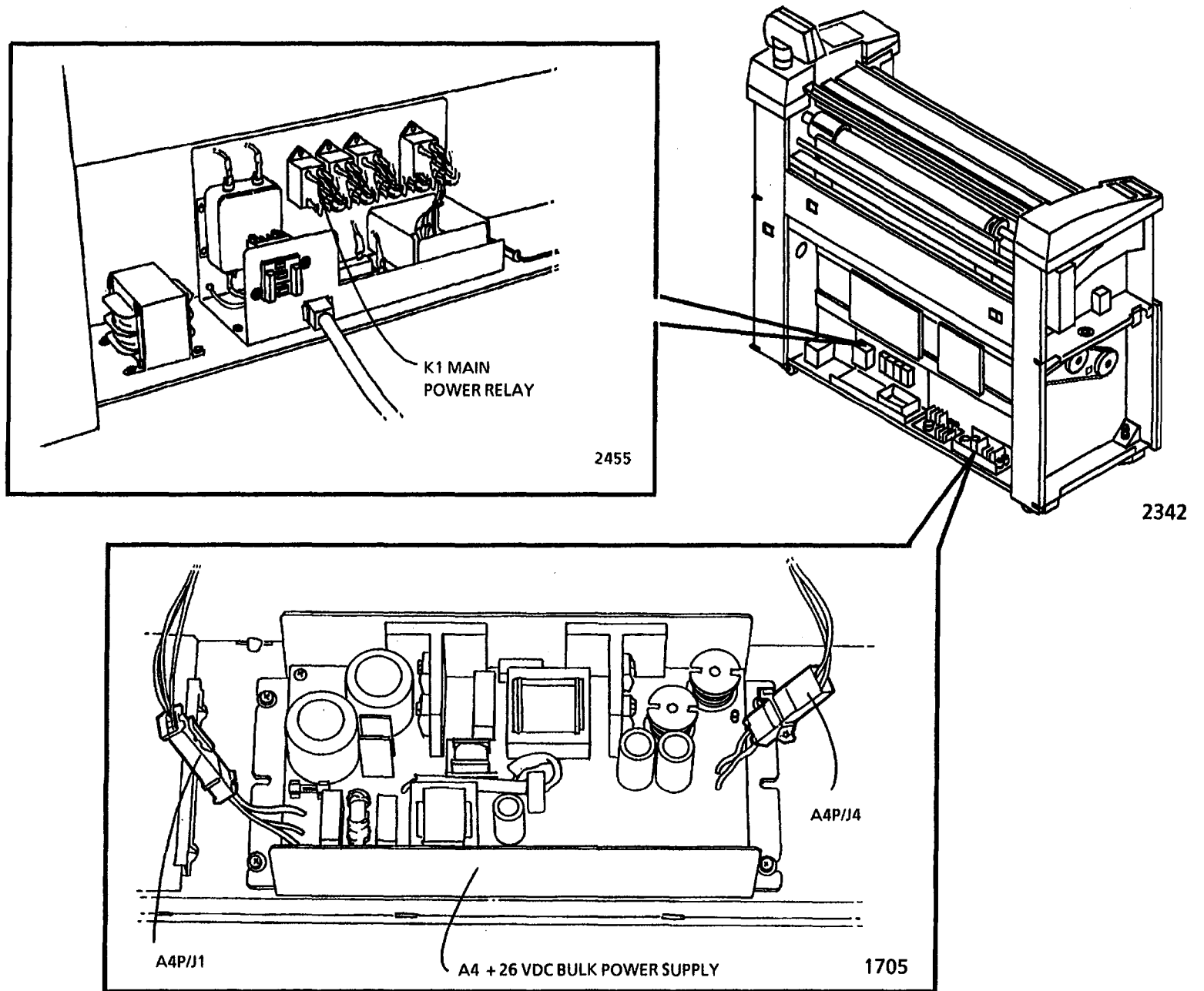
K1 MAIN
POWER
RELAY

NOTE:

- 1 IF THIS FUSE IS OPEN, DO NOT REPLACE. THIS IS AN INDICATION OF A SERIOUS POWER SUPPLY FAULT. REPLACE THE 26 VDC BULK POWER SUPPLY



2342



Notes:

LL.60/ LL.61/ LL.62 NVM Fault RAP

This RAP is used for NVM (Non-Volatile Memory) problems that are indicated by a status code or a message display. The Control Panel displays the message **NVM Fault Call for Assistance**. The Quantity window may display an **LL.60, 61, or 62**.

The problem may be caused when the NVM data are corrupted or partially corrupted. The contents of the NVM do not agree with the checksum, or the contents of the NVM do not agree with the shadow contents.

LL.60 - This status code indicates corrupted data in NVM. Perform steps 1 thru 4 of the procedure.

LL.61 - This status code is an indication that an older version of firmware has been installed. Ensure that the newest version of Firmware has been installed. If the problem persists, perform steps 1 thru 4 of the procedure.

LL.62 - This status code indicates an Auditron NVM problem. Enter the special test code **[0370]** to reset Auditron values to default.

Procedure

The purpose of this procedure is to restore the copier to normal operation condition. Refer to the SPECIAL TEST codes located in Section 6 while performing this procedure.

1. Enter the following SPECIAL TEST codes and record the corresponding data values displayed on the control panel:

[0261]	Country Configuration value
[0360-2]	Electronic Billing Meters value
[0860]	Registration value
[0862]	Cut length value
[0921-3]	Illumination (Exposure) value

2. Enter the SPECIAL TEST code, (USO copiers **[0360-1]**, [EO copiers **[0360-3]**) in order to reset the contents of the NVM to the factory default values.

3. Compare the values recorded in step 1 to previously recorded values for this machine. Enter the codes listed in step 1 and change the default values as required.

NOTE: If any value recorded in step 1 appears to be incorrect, use the previously recorded value. If there is no previously recorded value, retain the default value.

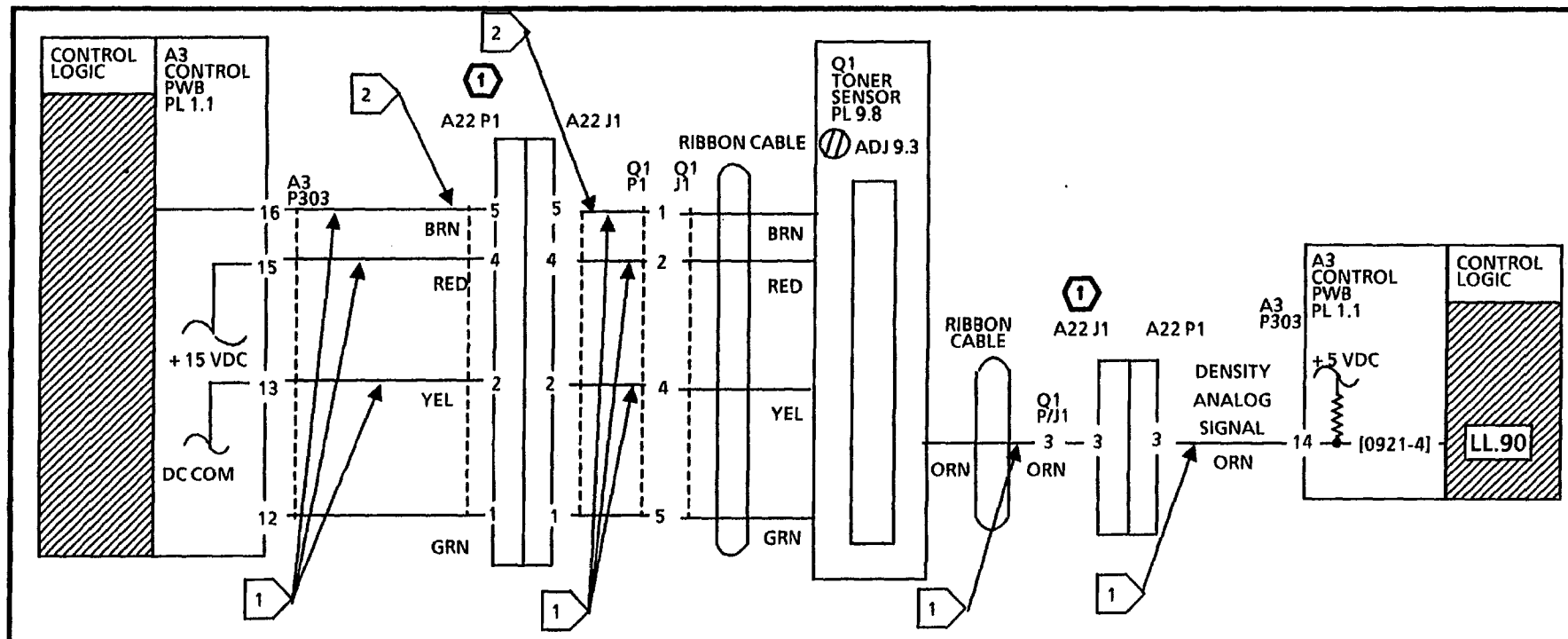
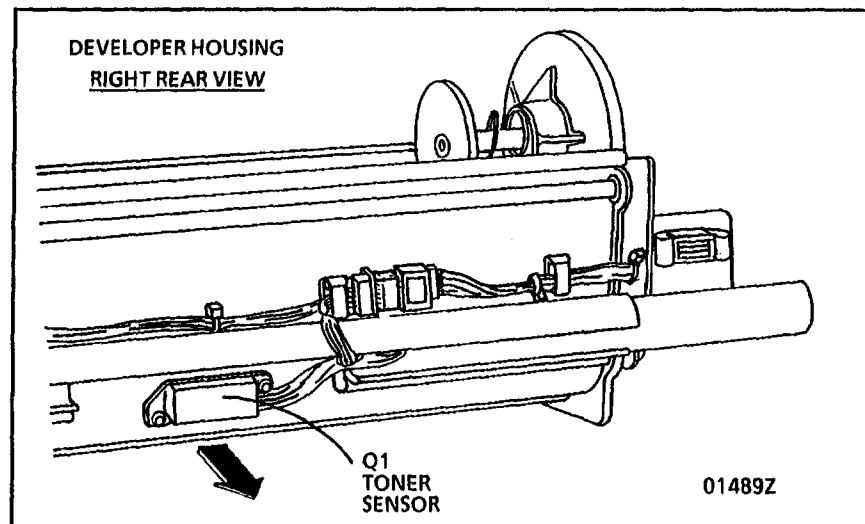
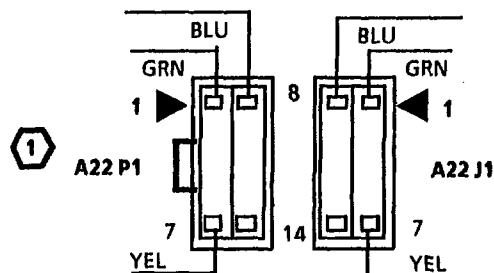
4. Check/ adjust the following:

ADJ 5.1	Copy Size Adjustment
ADJ 8.1	Image Registration
ADJ 8.2	Auto Length
ADJ 9.2	Electrostatic Series
ADJ 10.1	Fuser Temperature

NOTE: If the values entered are not retained, replace the NVM (PL 1.1) and perform steps 2 - 4 again.

NOTES:

- ① CONNECTOR A22 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



LL.91 Low Toner Fault RAP

02/09/94

The status code LL.91 is displayed when the toner concentration is lower than the nominal setpoint.

This status code may occur if there is a problem with the toner dispensing or the mixing of the developer material. The Initial Actions deal with the most likely mechanical causes for the LL.91 code.

Initial Actions

- Proceed to REP. 9.5 and ensure that the developer material is being mixed properly.
- Ensure that the developer level is correct, minimum of 7.0 lbs..
- Ensure that the toner cartridge is not defective and that enough toner is dispensed into the developer housing.

Note: Enter diagnostic code [0922] to enable the copier to run a Copy with the copier in an LL fault condition. Enter the code [0361] to exit diagnostics.

Procedure

Enter the code [0921-4] and compare the control point voltage to the sensor reading.

The sensor voltage is greater than or equal to (+) 8 VDC.

Y N

Enter the code [0926] in order to reset the toner control NVM values to default. Enter [921-6] to calibrate the toner control system.

The LL.91 Code is displayed after a copy run.

Y N

Proceed to wrap up the call.

Go to FLAG 1 and check the wiring for an open or short circuit.

The LL.91 Code is displayed after a copy run.

Y N

Proceed to wrap up the call.

Replace the Toner Sensor (Q1). Enter [921-6] to calibrate the toner control system. If the problem is not corrected, Replace the NVM and enter [921-6]. If the problem persists, replace the Control PWB (A3). Then perform [921-6].

Go to FLAG 1 and check the wiring for an open or short circuit.

The LL.91 Code is displayed after a copy run.

Y N

Proceed to wrap up the call.

A

A

Enter the code [0926] in order to reset the toner control NVM values to default. Enter [921-6] to calibrate the toner control system.

The LL.91 code is still present.

Y N

Proceed to wrap up the call.

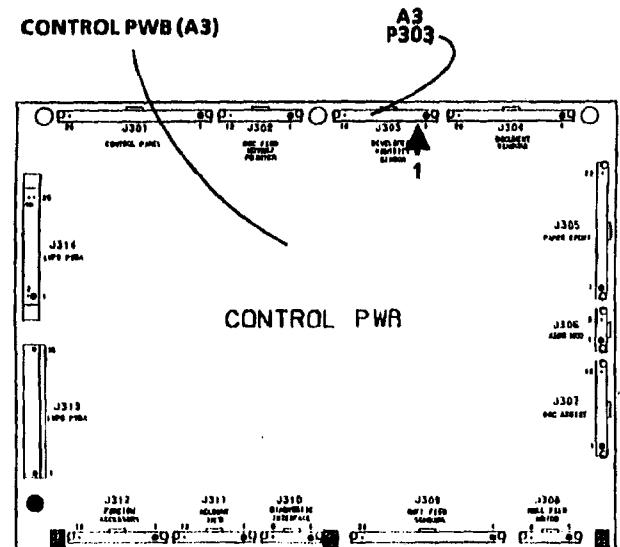
Replace the Developer material (REP 9.7) and enter [921-6] to calibrate the toner control system. If problem persists, replace the Toner Sensor (Q1). Enter [921-6] to calibrate the toner control system.

The LL.91 code is still present.

Y N

Proceed to wrap up the call.

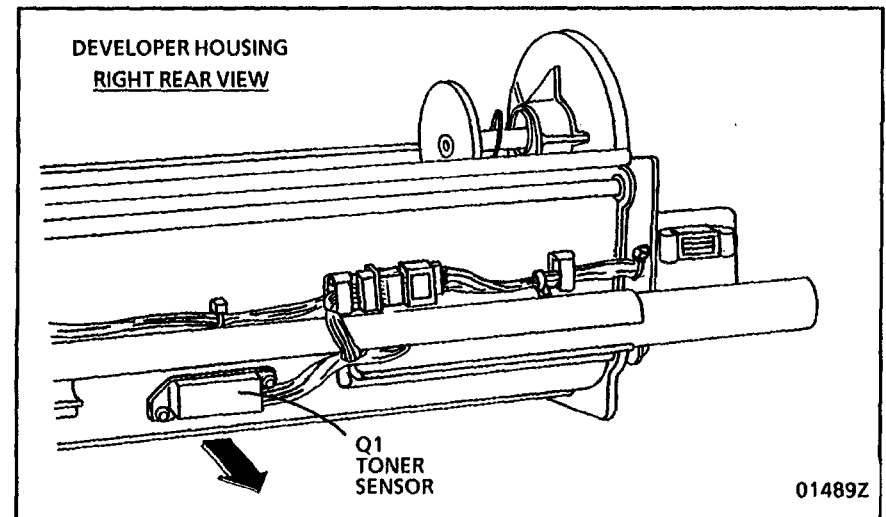
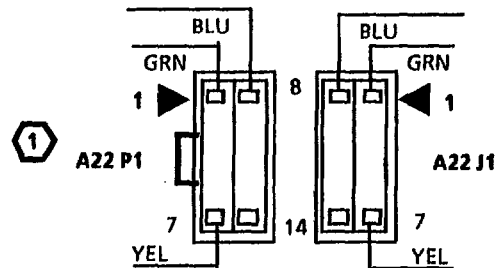
Replace the NVM. Enter [921-6] to calibrate the toner control system. If the problem persists, replace the Control PWB (A3). Then perform [921-6].



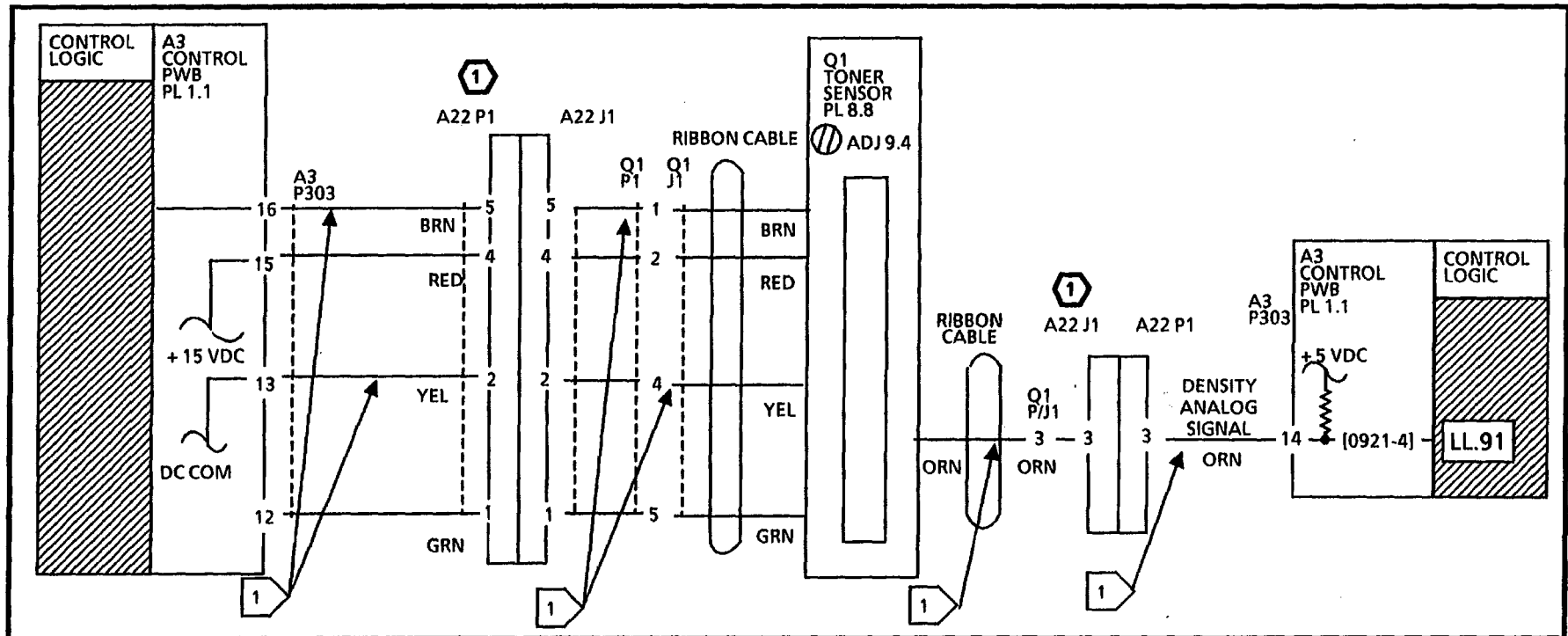
1590

NOTES:

- 1 CONNECTOR A22 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



01489Z



U1.01 Copy Counter RAP

This RAP is used to locate problems with the Copy Counter and associated circuitry.

Initial Actions

- Ensure that Connector A2P202 on the Low Voltage Power Supply (A2) is correctly installed and fully seated.

Procedure

Open the right side door and cheat the right side door interlock switch (S21).

While entering the diagnostic code [0203] note the movement of the Copy Count meter.

The Copy Count meter advances.

Y N

There is + 26 VDC at A2 P202 Pin 2.

Y N

There is + 26 VDC at A2 P202 Pin 1.

Y N

Replace the LVPS Driver PWB (A2).

Replace the Copy Count meter.

A B

A B

Enter the diagnostic code [0203].

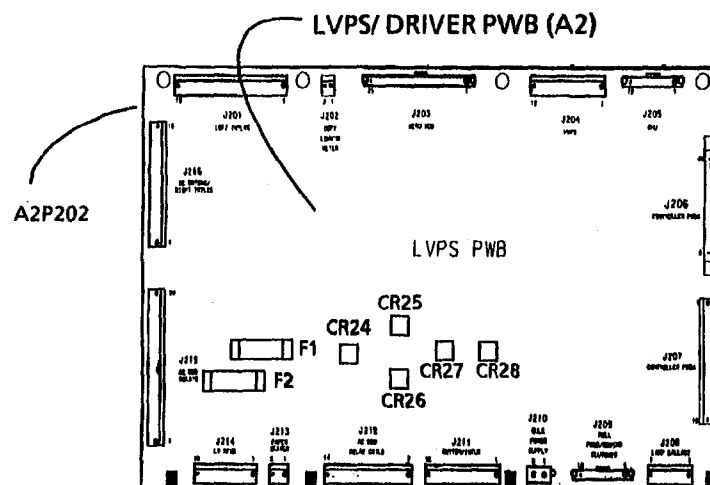
The voltage goes from + 26 VDC to less than + 1 VDC at Pin 2 of A2 P202.

Y N

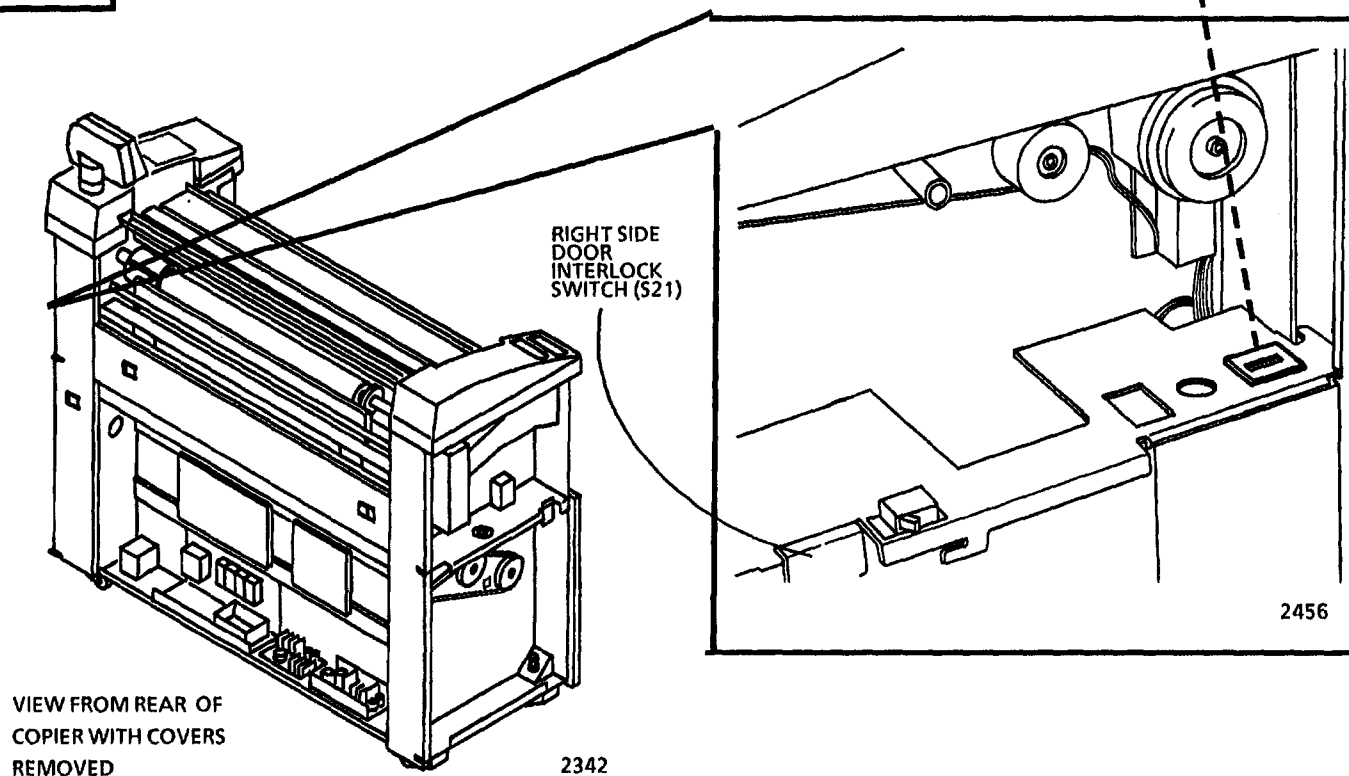
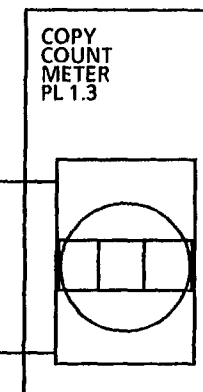
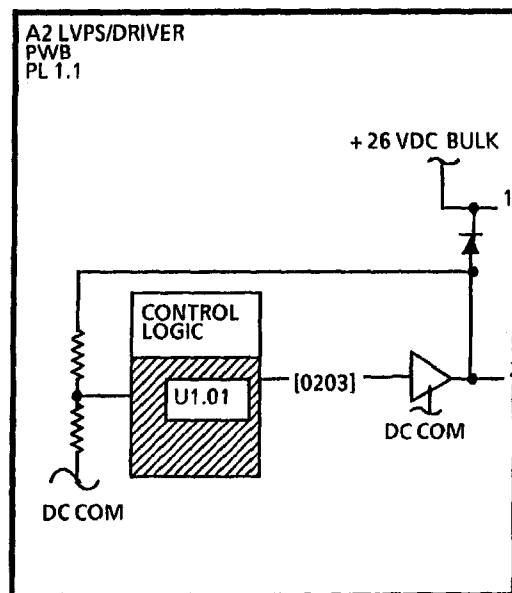
Replace the LVPS Driver PWB (A2).

Replace the Copy Count meter.

If the problem persists replace the Control PWB (A3).



1591



Refeed Roll RAP

This RAP is used for Roll Media Feed problems that are not indicated by a status code and the Control Panel displays the message "REFEED ROLL".

The problem may occur if there is a problem with the media sensors, mechanical components, the roll drive motor, the motor control circuitry or poor quality media.

NOTE: The component locator drawings and the circuit diagram are on the next four pages.

Initial Actions

- Pull out the Roll Supply Drawer. Ensure that there is an adequate supply of media, the media is in good condition and is loaded correctly.
- Check the Feed Drive Rolls, Feed Pinch Rolls, and the Pinch Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check that the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the roll media feed path for obstructions.

- Open the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Rewind Drive Sprocket in the forward and reverse directions.
- Check the connectors for the Roll Motion Sensor (Q4 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Remove the rear covers and the Roll Position Sensor (Q1) from the rear frame. Clean the Roll Position Sensor by wiping the face of the sensor with a clean cloth.
- Check the connectors for damage for the Roll Position Sensor (Q1 P1) and the Control PWB (A3 P309). Ensure that the connectors and pins are seated correctly.
- Reinstall the Sensor.
- Ensure that the customer is running media that meets the type and size specifications.

Procedure

Enter the code [0710] in order to check the Roll Motion Sensor. Beeps will be heard when the roll is rotated.

Reach under the left side of the Media Drawer and locate the Rewind Drive Gear for the media roll. Manually rotate the Gear slowly. The rotating Gear causes the Media Roll and the Roll encoder Disk to rotate.

Beeps are heard when the roll is rotated.

Y N

Go to FLAG 1 and check the wiring between the Roll Motion Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no problem with the wiring, replace the Roll Motion Sensor (Q4).

If the problem persists, replace the Control PWB (A3).

Enter the code [0707] in order to check the Roll Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

Pull out the Media Drawer and ensure that media is not positioned in the sensor window. Close the drawer, a (01) is displayed.

A

A

Pull out the Drawer and position the media so that the media is located in the sensor window. Close the drawer, a (00) is displayed.

A (01) is displayed when media is not positioned in the sensor window and a (00) is displayed when media is positioned in the sensor window.

Y N

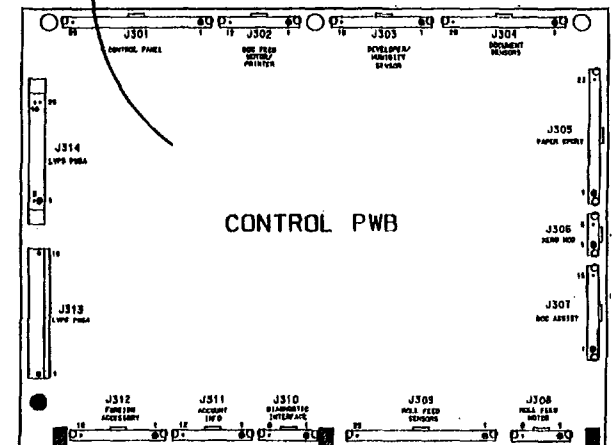
Go to FLAG 2 and check the wiring between the Roll Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no problem with the wiring, replace the Roll Position Sensor (Q1).

If the problem persists, replace the Control PWB (A3).

Go to the 7.1 Roll Feed RAP.

CONTROL PWB (A3)

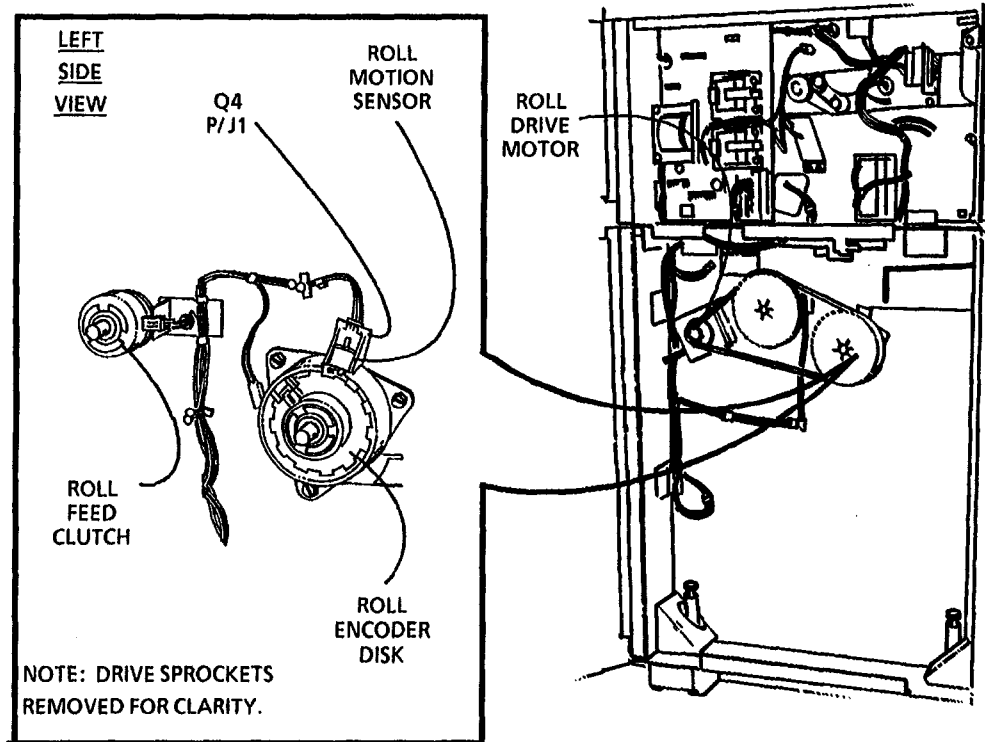


A3
P309

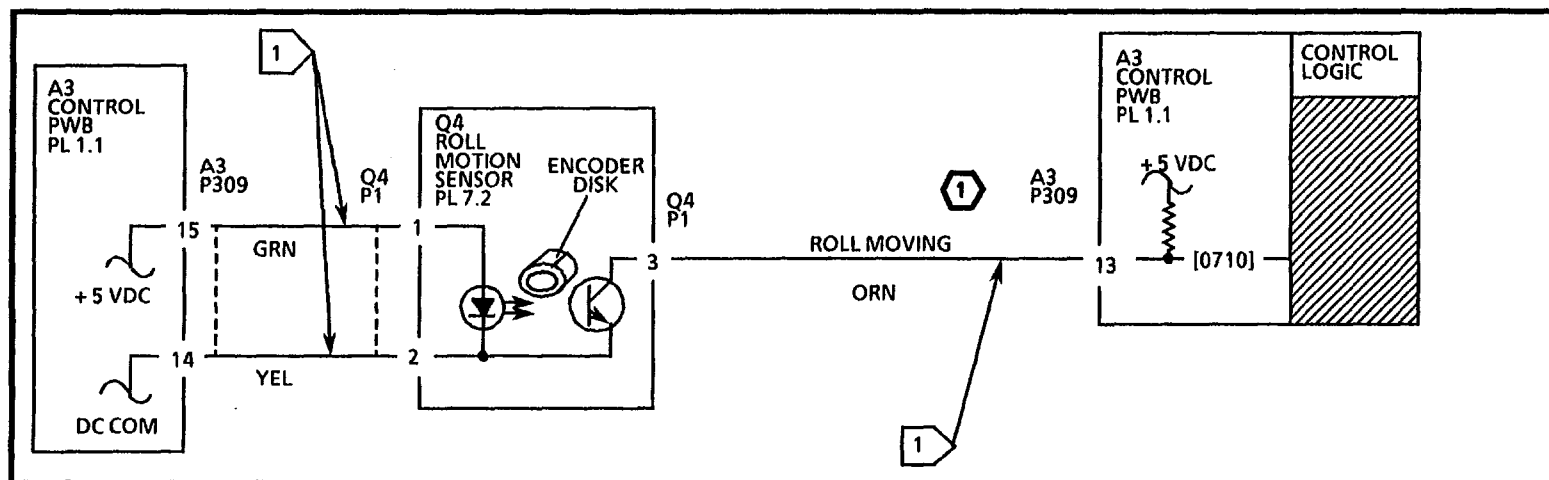
1590

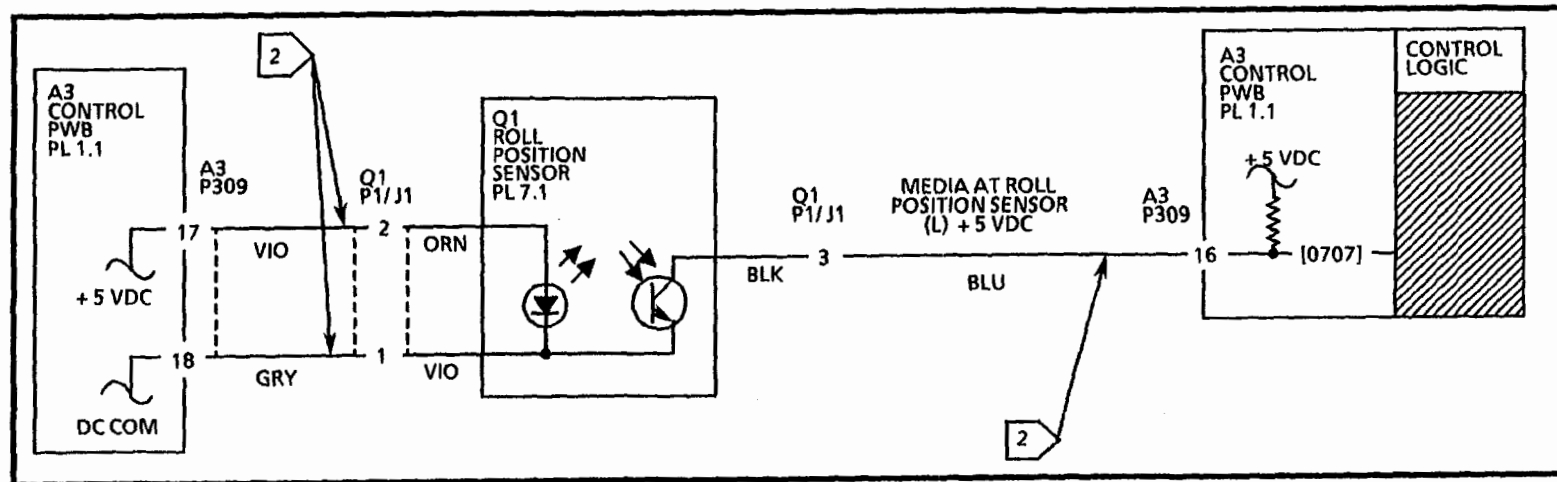
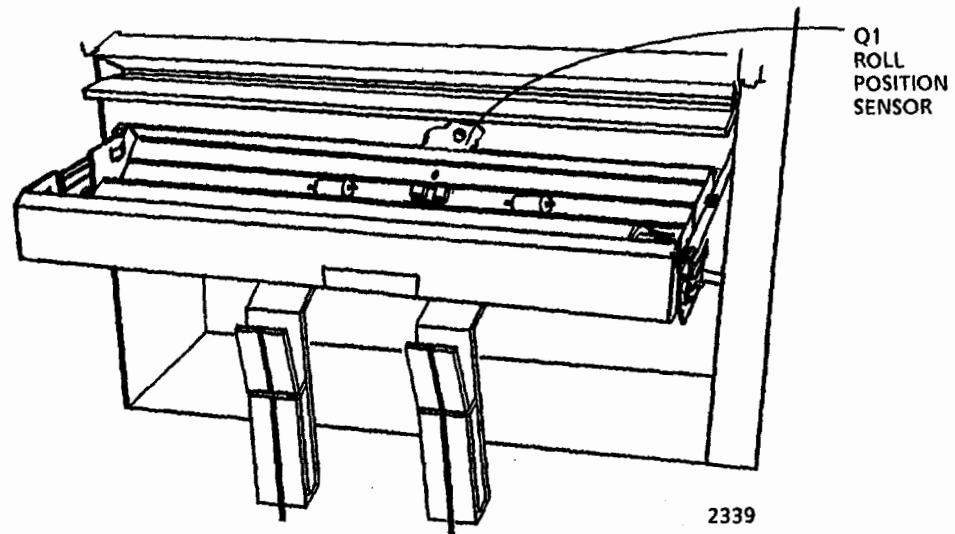
NOTES:

- ① THE ROLL MOVING SIGNAL IS EITHER + 5 VDC OR 0 VDC WHEN THE ROLL IS NOT MOVING. THE SIGNAL IS APPROXIMATELY + 2.4 VDC WITH THE ROLL MOVING.



2341





1.1 AC Power RAP

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

The problem may occur if there is a malfunction in the Main Power Relay (K1), the Main Power Switch (S1), the Noise Filter (FL1), Fuse F2 located on the LVPS/ Driver PWB (A2), Main Transformer (T1) or a ground fault exists.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Check that the correct voltage is being applied to the copier.
- Ensure that the LVPS/ Driver PWB (A2) Connectors A2P215 and A2P214 are correctly installed and fully seated.
- If the Ground Fault Protection Device is activated (Red Flag not visible), go to the 1.6 Ground Fault RAP.

Procedure

Switch on the copier.

The Control Panel illuminates.

Y N

There is ACH between pins 2 and 6 of the Main Power Relay (K1).

Y N

There is ACH between pins 1 and 2 of the Noise Filter (FL1).

Y N

There is ACH at the Line side of the Ground Fault Protector.

Y N

Replace the power cord.

Go to FLAG 3 and check the wiring to the Noise Filter (FL1) for an open circuit.

If there is no open circuit, go to the 1.6 Ground Fault RAP.

There is ACH between pins 2 and 5 of the Main Power Switch (CB1/S1).

Y N

Go to FLAG 2 and check the wiring to the Main Power Switch for an open circuit.

If there is no open circuit, replace the Noise Filter (FL1).

Go to FLAG 1 and check the wiring to the Main Power Relay (K1) for an open circuit.

If the problem persists replace the Main Power Switch (S1).

A B

A B

There is ACH between pins 1 and 4 of P/J214 at the LVPS/ Driver PWB.

Y N

Check the Fuse, F2, for an open on the LVPS/ Driver PWB (A2).

If there is no open, go to FLAG 4 and check the wiring for an open circuit.

There is 22 VAC between pins 6 and 9 of P/J 214 at the LVPS/ Driver PWB.

Y N

Replace the Main Transformer (T1).

Go to the 1.5 DC Power RAP.

There is +26 VDC between pins 1 (+) and 0 (-) of the Main Power Relay (K1).

Y N

Go to 1.4 Main Power Interlock RAP.

There is ACH between pins 2 and 3 of A4P/J1 of the +26 VDC bulk power supply.

Y N

Go to FLAG 6 and check the wiring to the +26 VDC bulk power supply for an open circuit.

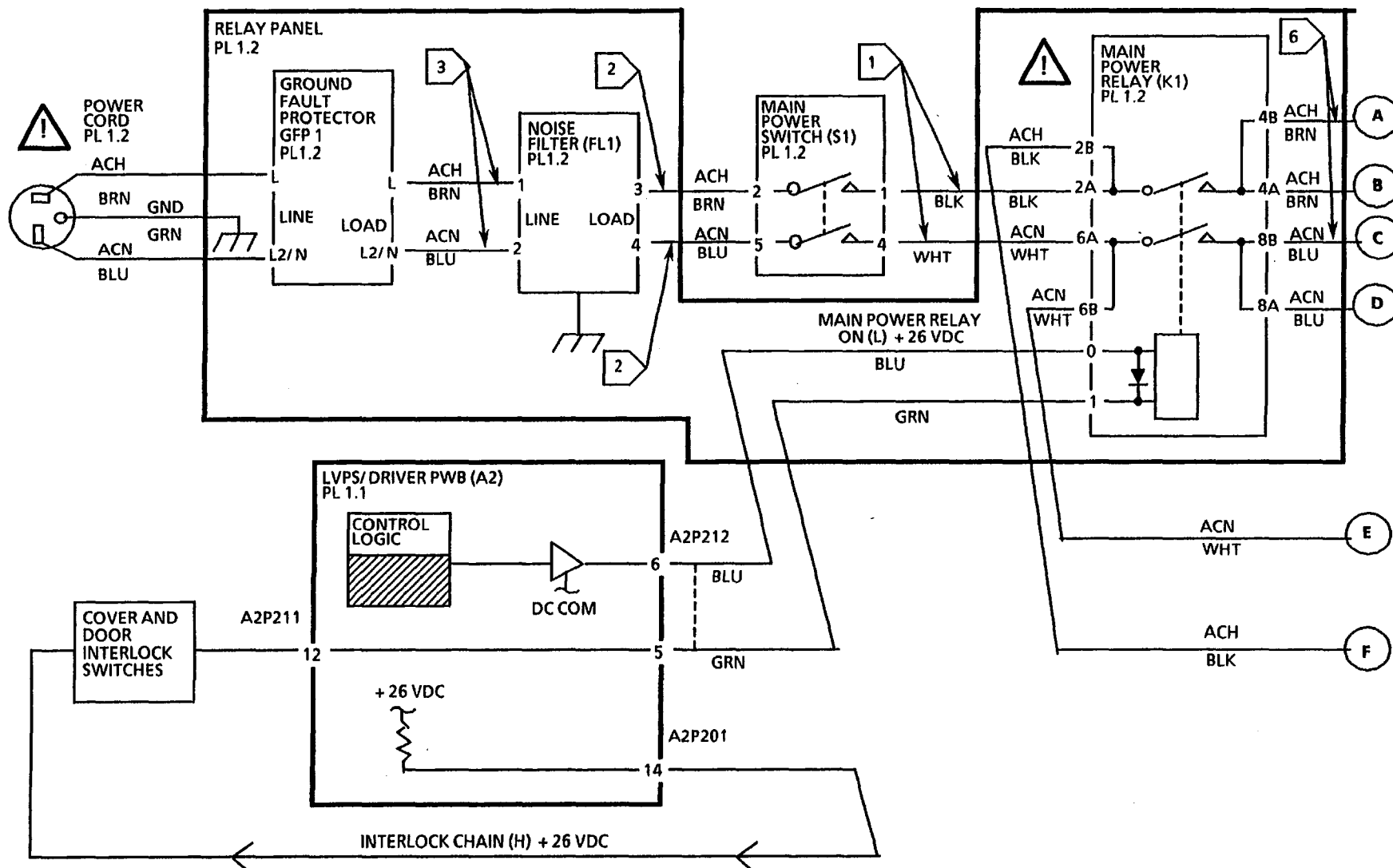
If there is no open circuit, replace the Main Power Relay (K1).

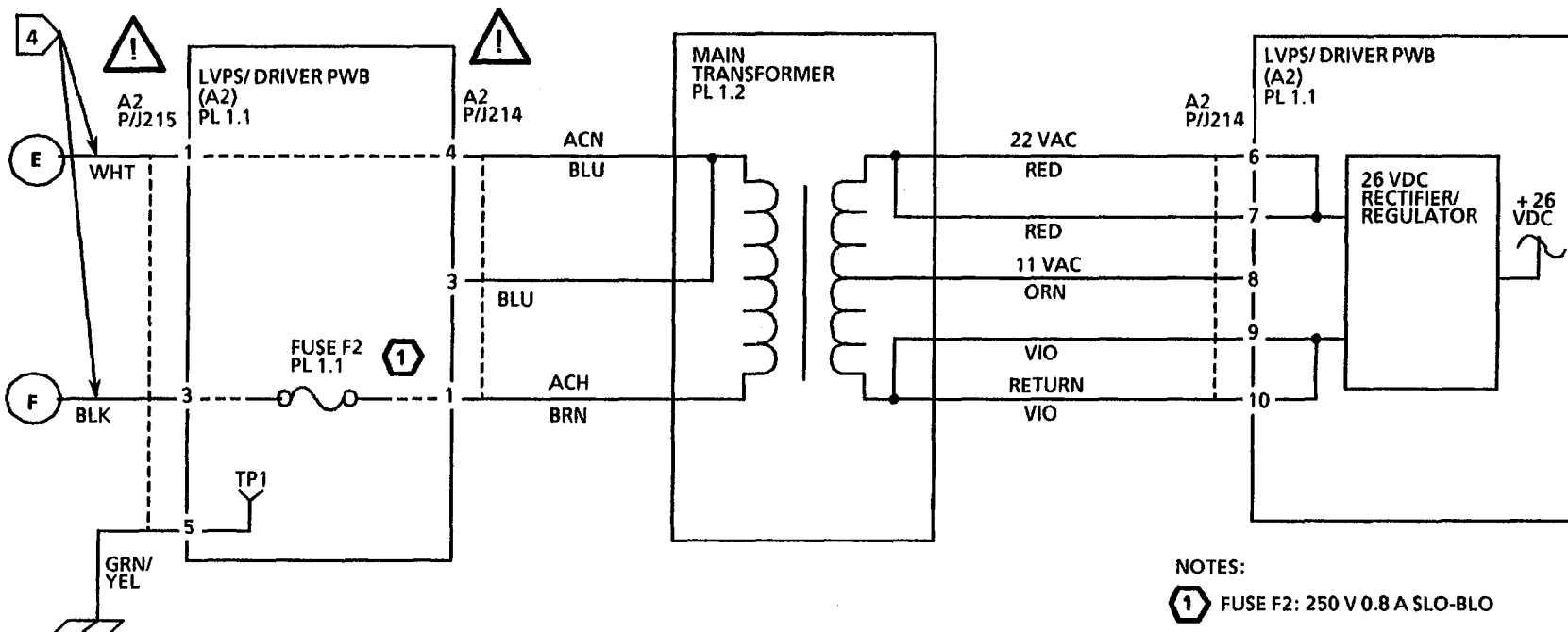
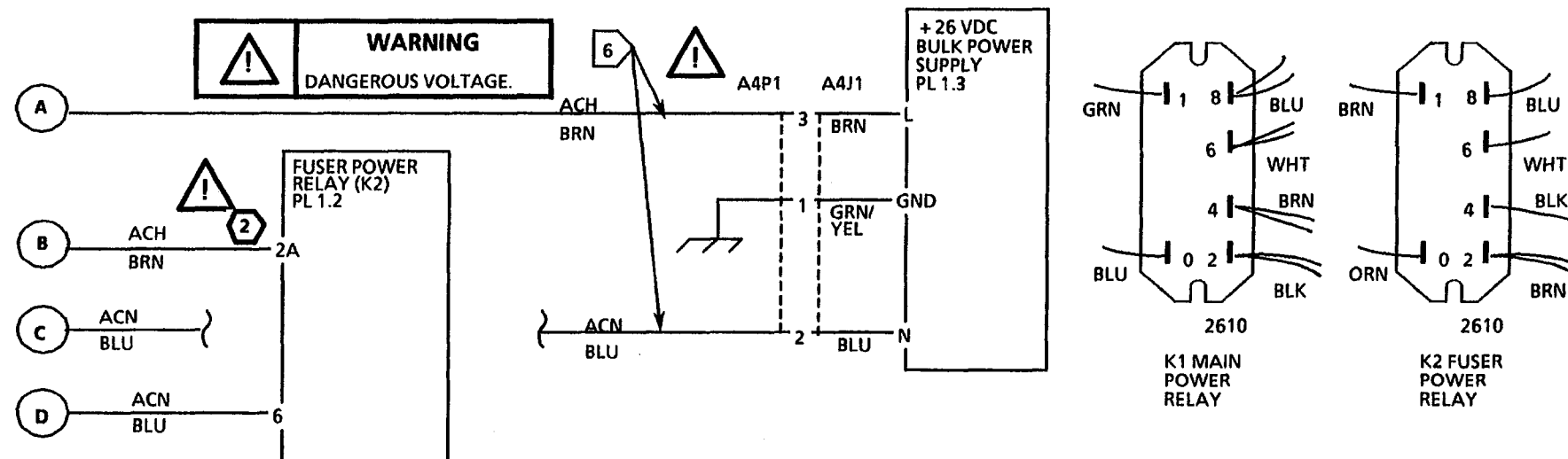
Go to the LL.43 Fuser Overtemperature RAP.

ACH VOLTAGE = 115 VAC



WARNING
DANGEROUS VOLTAGE.





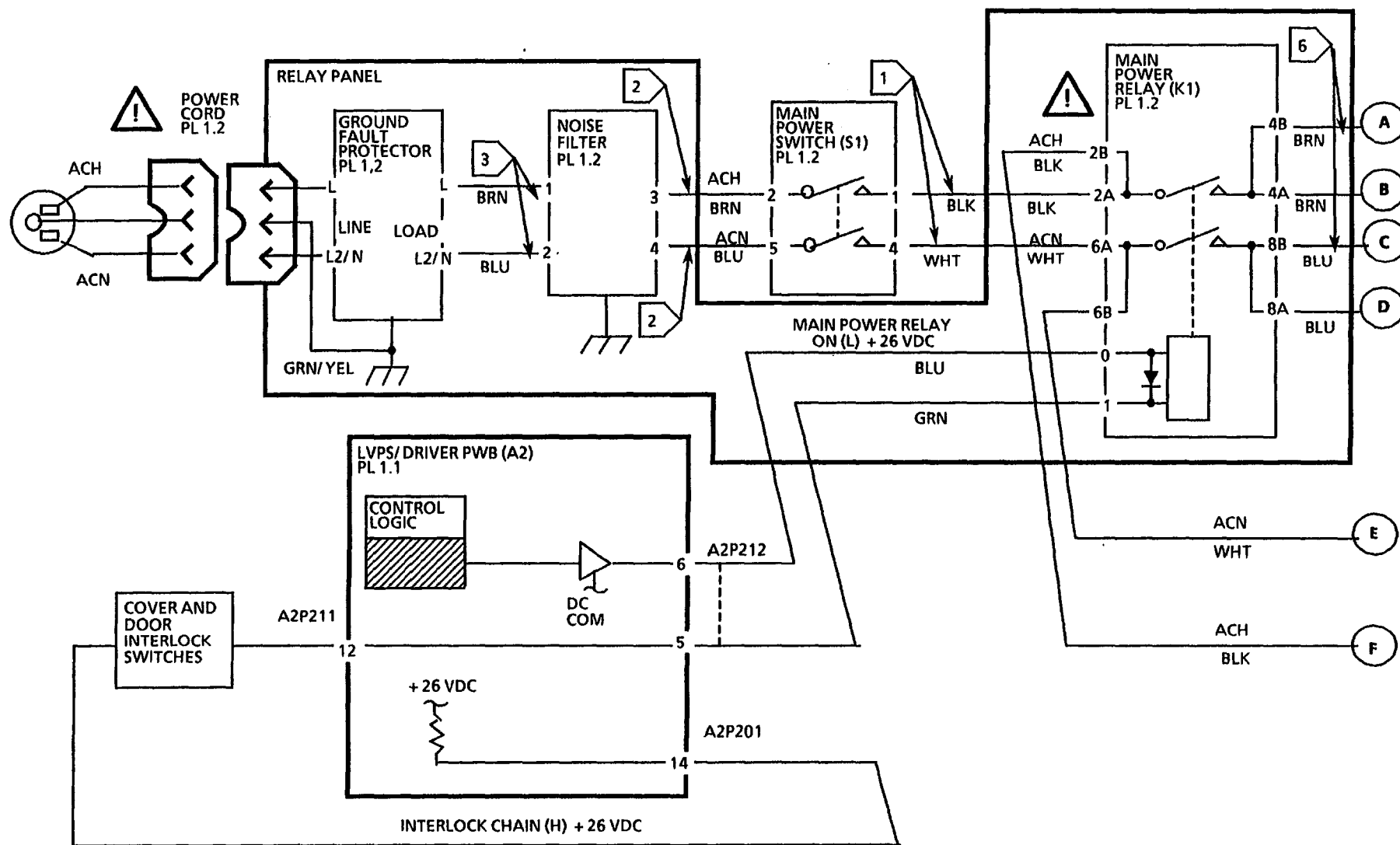
NOTES:

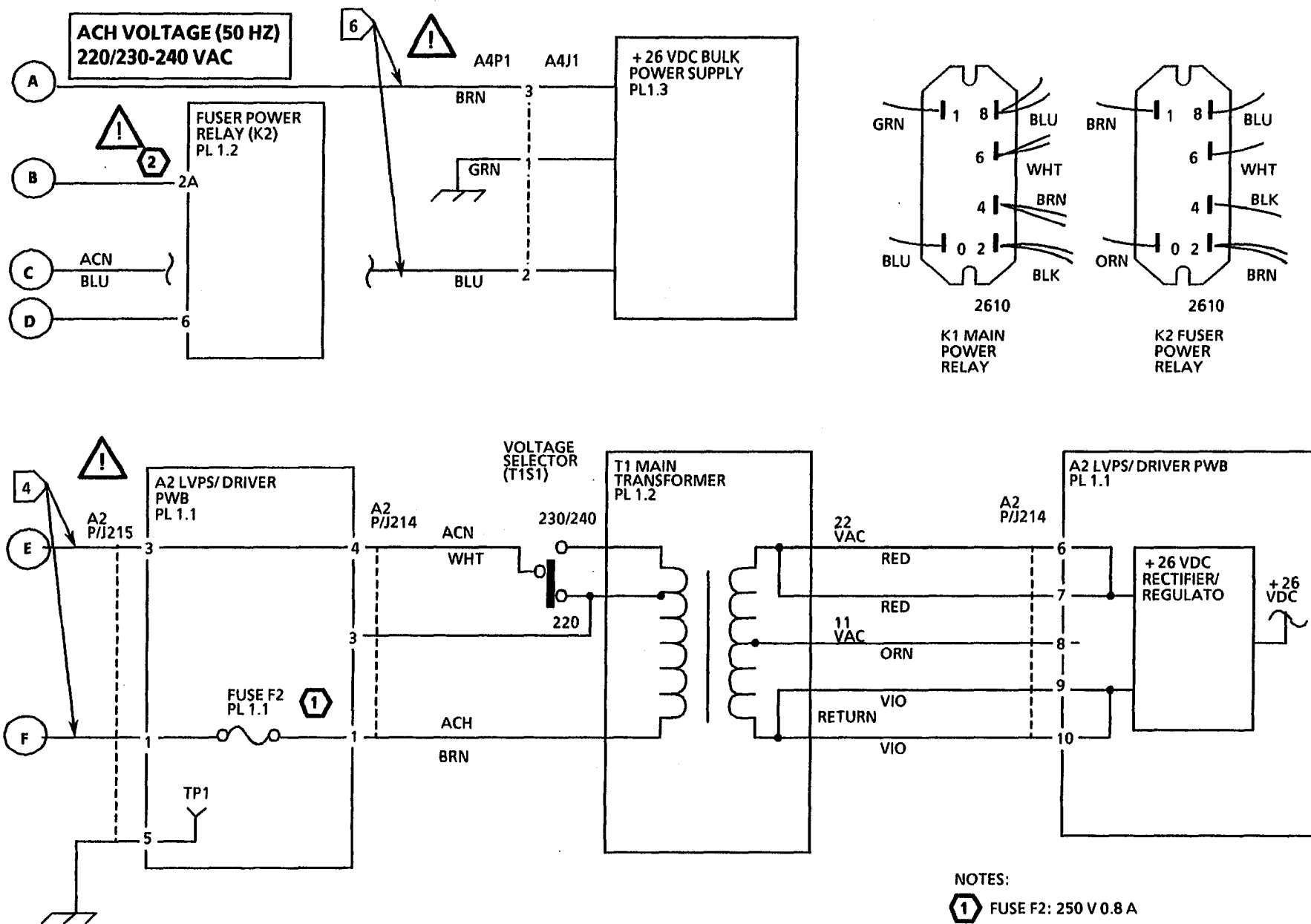
- 1** FUSE F2: 250 V 0.8 A SLO-BLO
- 2** THIS ACH SIGNAL IS ALSO CONNECTED TO THE MAIN DRIVE MOTOR RELAY (K3).

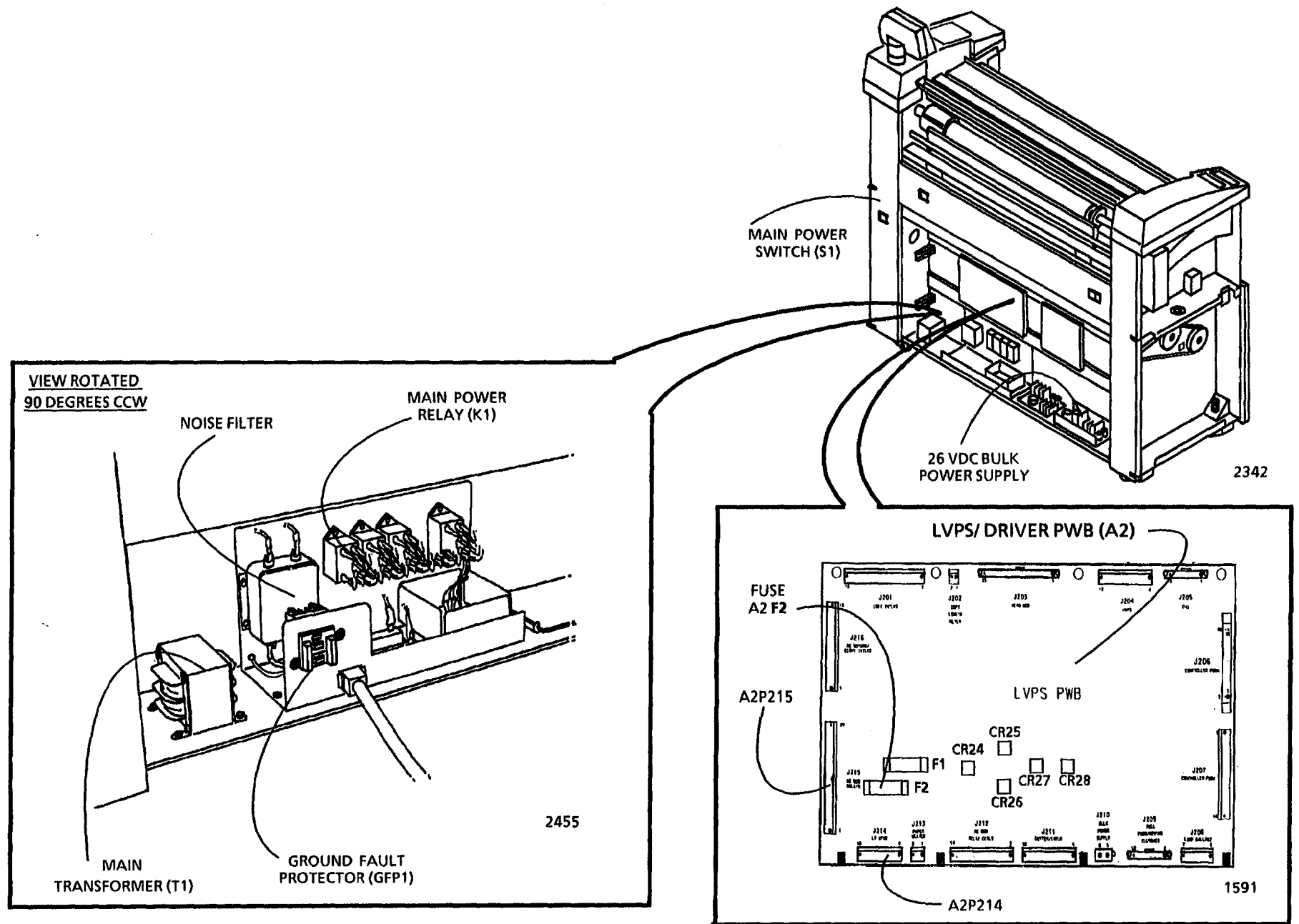
**ACH VOLTAGE (50 HZ)
220/230-240 VAC**



WARNING
DANGEROUS VOLTAGE.







1.3 Cooling Fans RAP

This RAP is used to locate problems in the + 26 VDC circuits for the Cooling Fans.

The problem may occur if there is a malfunction in the fan motors, the wiring to the motors, the Thermal Controller PWB (A23A1), or the LVPS/ Driver PWB (A2).

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Check the Connectors A1P1, A1P2, A1P3, A1P4, A2P203, and A23P2 on the Xerographic Assembly (A23) for damage, and ensure that the connectors are seated correctly.
- If one of the fans still operates, perform the following initial check:
Switch off the copier. Connect A1P3 to A1J4. Connect A1P4 to A1J3. Switch on the copier. If the same fan still operates, replace the fan that fails to operate. Otherwise, perform the procedure below.

Procedure

Switch off, then switch on the copier.

The Left Cooling Fan operates.

Y N

A B

A B

Set the DMM to read + 26 VDC. Connect the (+) lead to pin 15 of Connector A2 P203. Connect the (-) lead to frame ground. Enter the diagnostic mode.

The voltage at pin 15 goes LOW.

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 1 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Replace the Thermal Controller PWB (A23A1).

The Right Cooling Fan operates.

Y N

Set the DMM to read + 26 VDC. Connect the (+) lead to pin 13 of Connector A2 P203. Connect the (-) lead to frame ground. Enter the diagnostic mode.

The voltage at pin 13 goes LOW.

Y N

C D E

C D E

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 2 and check the wires for an open circuit.

The wires have continuity.

Y N

Repair the wires.

Replace the Thermal Controller PWB (A23A1).

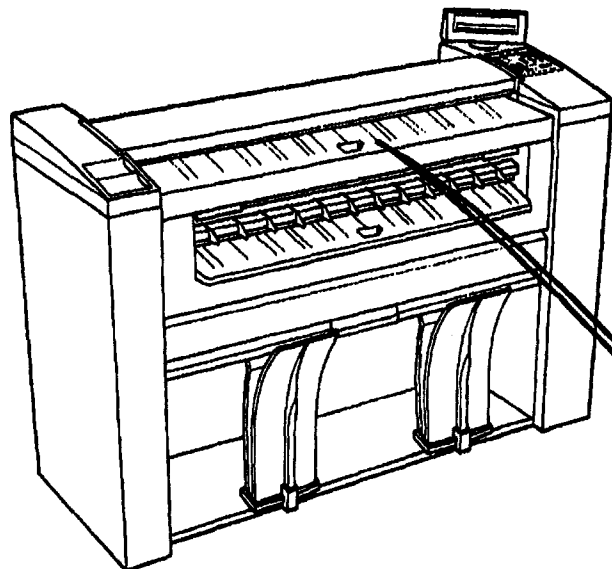
Enter the diagnostic mode. Enter the code [0914] and observe the sound of the fans.

The Cooling Fans operate at high speed for approximately 2 seconds, then operate at low speed.

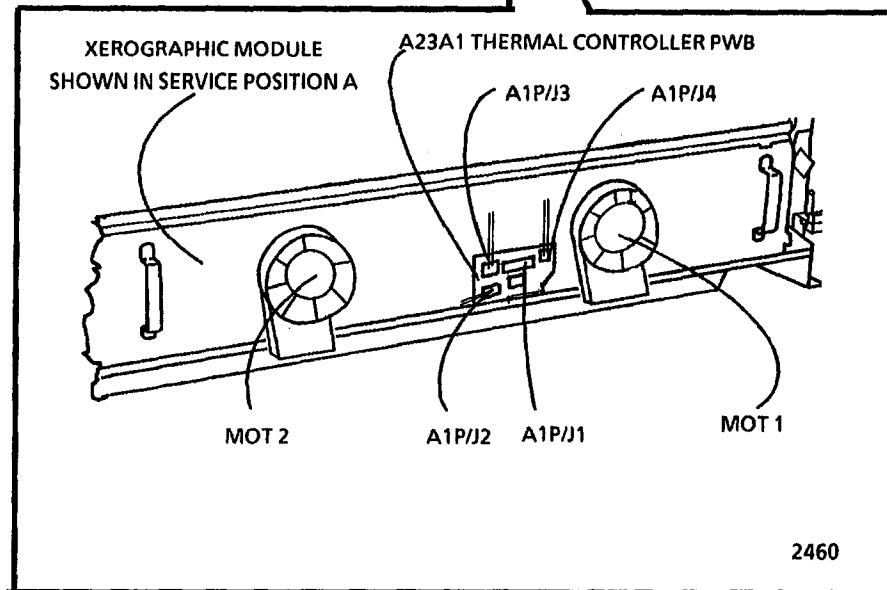
Y N

Replace the LVPS/ Driver PWB.

The Cooling fans operate correctly. Return to normal operation.



2338



2460

1.4 Main Power Interlock RAP

Use this RAP to locate problems in the interlock circuitry that controls the coil circuit for the Main Power Relay (K1).

Except for the Cut Sheet Feed-in Shelf Interlock Switch (S29), each interlock switch in the chain has two poles. One set of poles is connected in series with the Cut Sheet Feed-in Shelf Interlock Switch and to the coil of the Main Power Relay (K1).

The other pole on each switch is individually connected to +26 VDC and to the logic. When the switch is opened, the +26 VDC is removed from logic, telling the logic which interlock switch was opened. The logic then displays a message.

The +26 VDC output from the single pole of the Cut Sheet Feed-in Shelf Interlock Switch is also monitored by the logic; the loss of this signal produces status code [E5.05] if the copier is in the run mode at the time.

The problem may occur if there is a malfunction in one of the poles, that is wired in series, of any of the interlock switches or in the associated wires.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Check the connectors on each interlock switch for damage, and ensure that each connector is seated correctly.

- Ensure that the actuator on the Upper Rear Cover correctly actuates the switch.

Procedure

Switch off, then switch on, the copier.

CR24 on the LVPS/ Driver PWB (A2) is lit.

Y N

Check that all of the following interlock switches are actuated:

- Right Side Door
- Upper Rear Cover
- Document Handler
- Cutter Cover

Set the DMM to read +26 VDC. Connect the (–) lead to frame ground.

Check that +26 VDC is present at each of the following places:

Connector	Interlock Switch
• A2 P216-9	Right Side Door
• A2 P201-8	Upper Rear Cover
• A2 P201-15	Document Handler
• A2P211-12	Cutter Cover

If +26 VDC is not present at the indicated pin, check the indicated interlock switch for continuity while you manually actuate the switch.

If the switch does not have continuity, replace the switch. If the switch has continuity, check the associated wires for an open circuit.

A

A

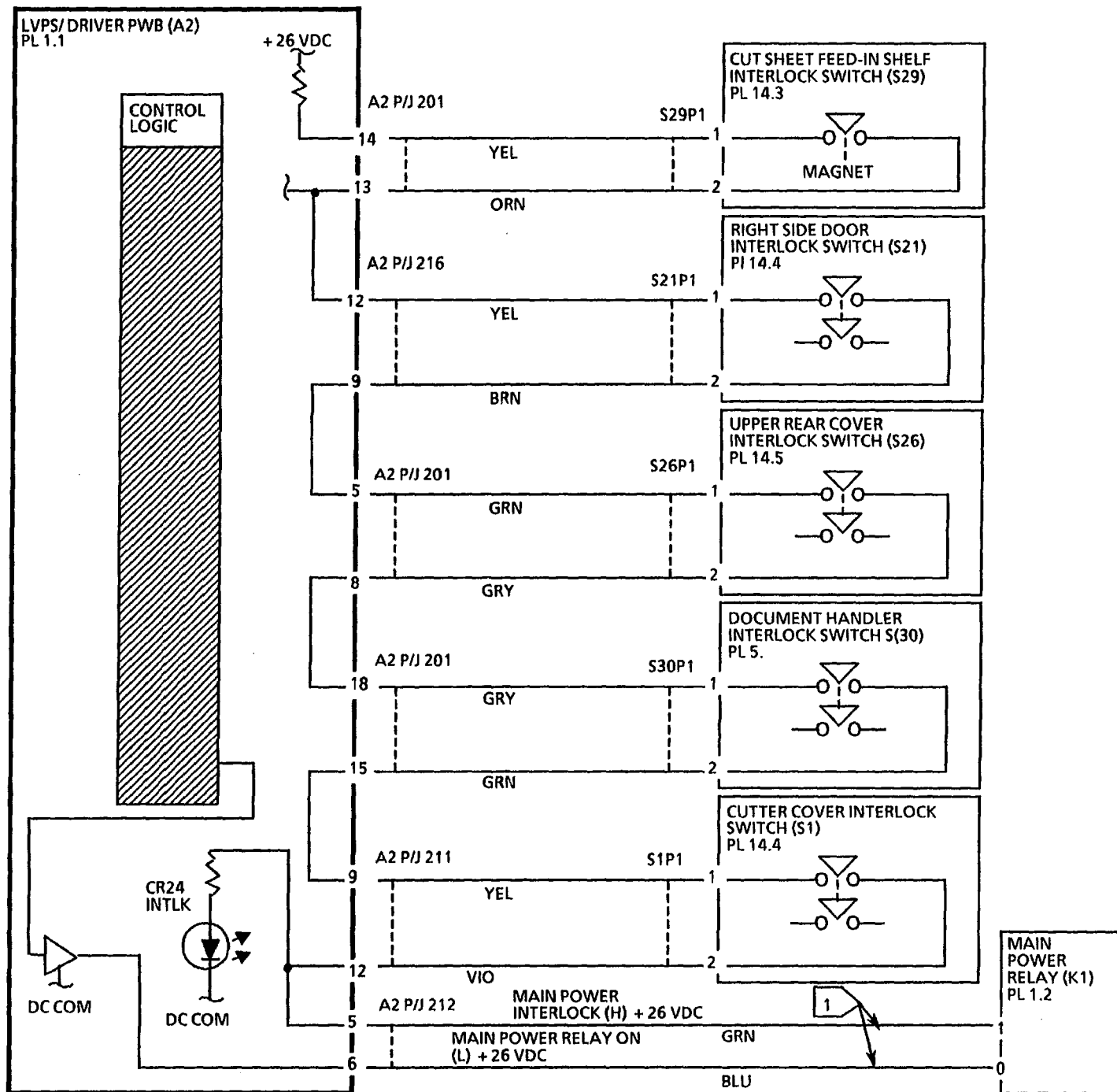
Set the DMM to read +26 VDC. Connect the (+) lead to A2 P212-5 of the LVPS/ Driver PWB (A2). Connect the (–) lead to frame ground.

There is +26 VDC.

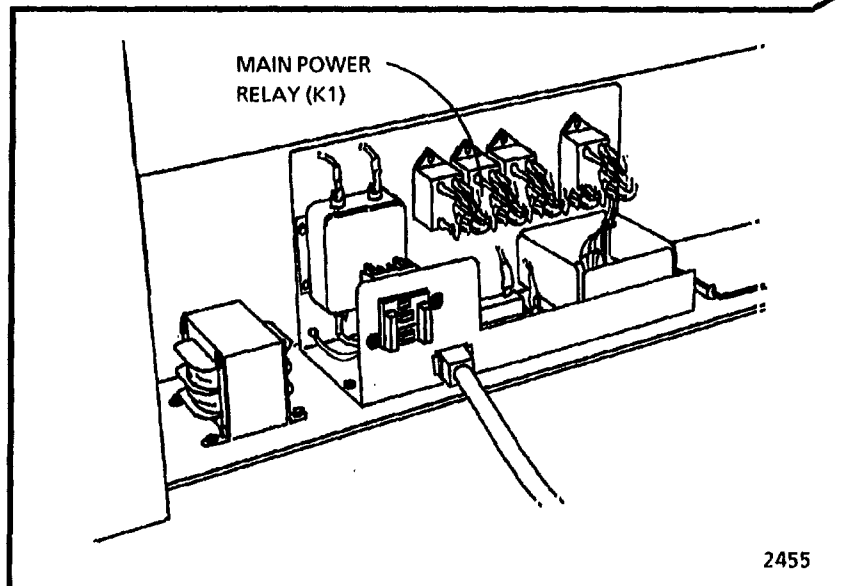
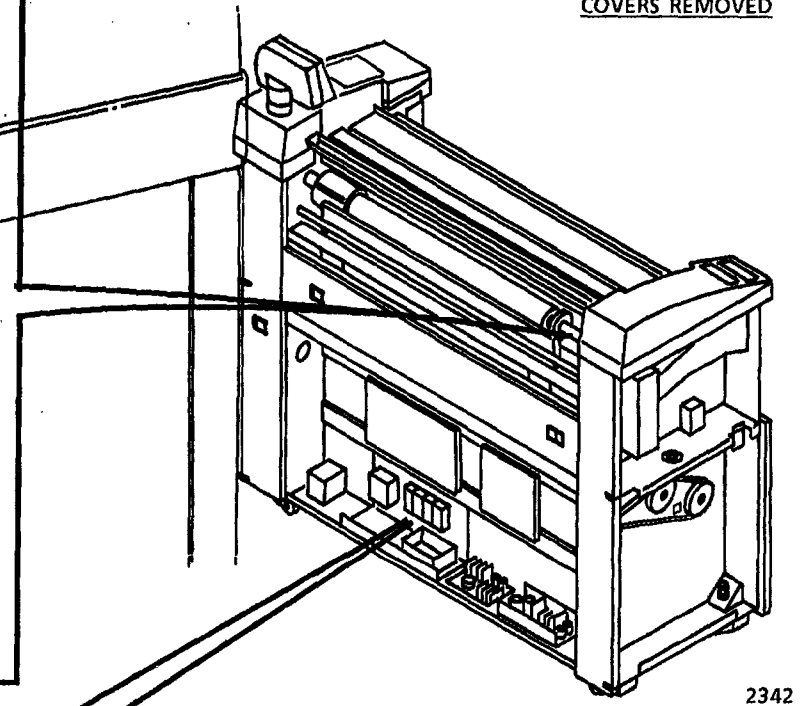
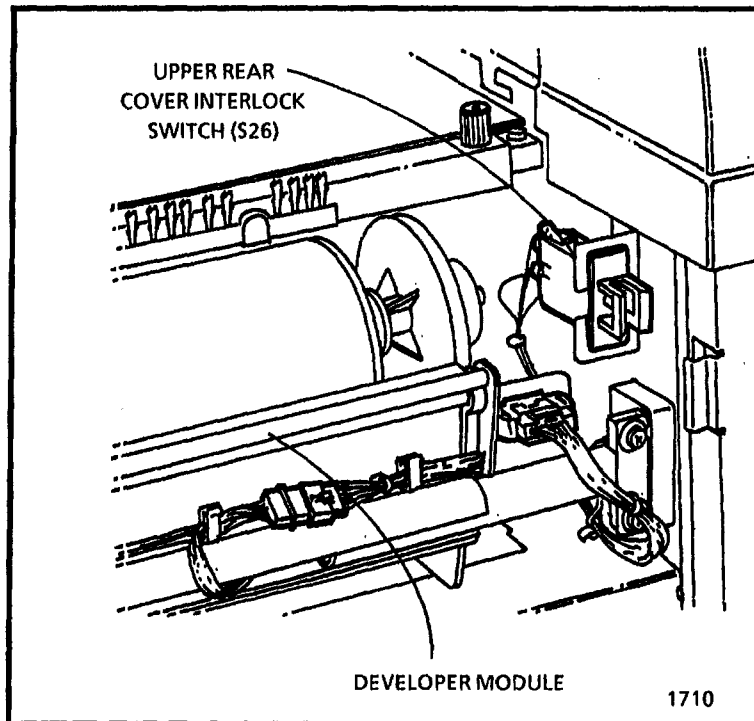
Y N

Replace the LVPS/ Driver PWB (A2).

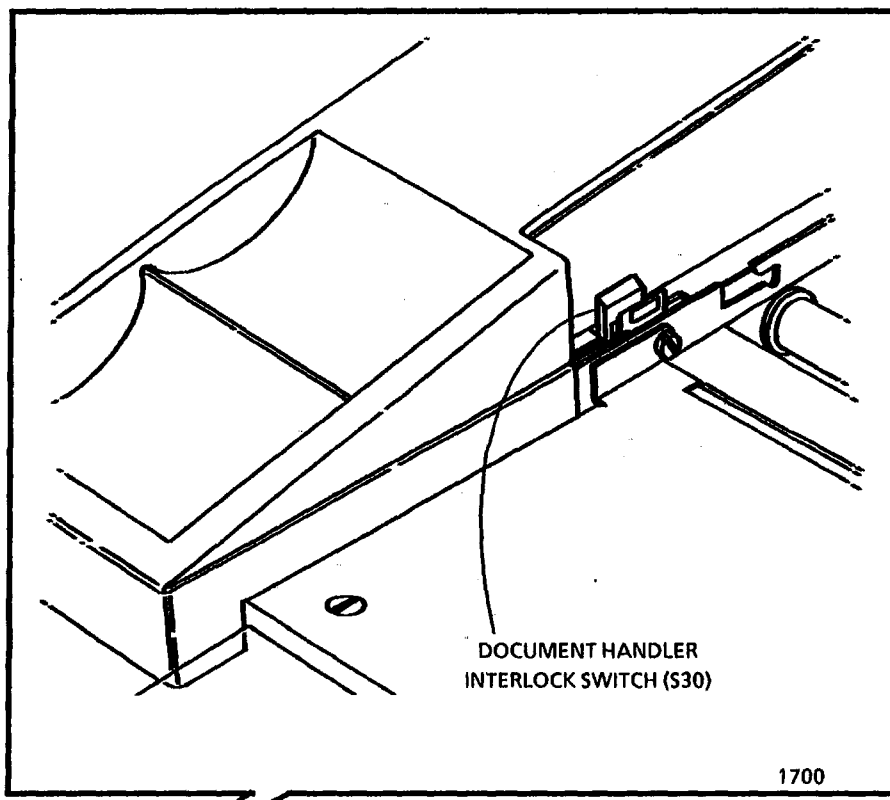
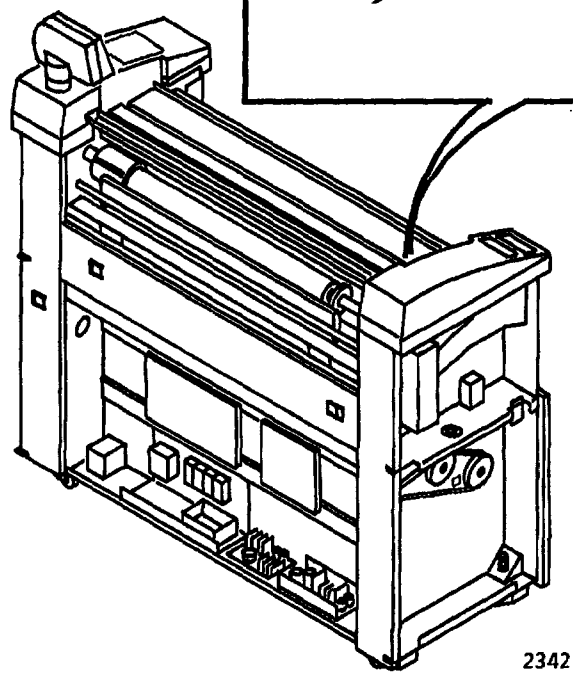
Go to FLAG 1 and check the wires for continuity. If the wires are good, replace the Main Power Relay (K1).



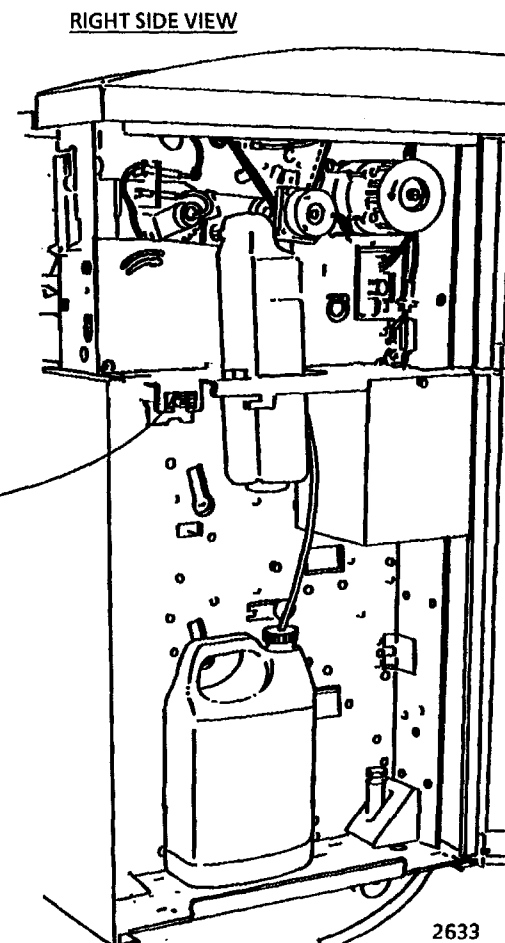
REAR VIEW WITH THE
COVERS REMOVED



Notes:



RIGHT SIDE DOOR
INTERLOCK
SWITCH (S21)



1.5 DC Power RAP

Use this RAP to locate problems in DC power generation and distribution circuitry.

NOTES: *The component locator drawings and the circuit diagram are on the following pages.*

The +5V and +15V LEDs, when lit, indicate that DC voltage is available on the LVPS/ Driver PWB (A2).

Initial Actions

- Ensure that you followed the 1.1 AC Power RAP to check that ACH and ACN are present.
- Ensure that Fuse F2 on the LVPS/Driver PWB (A2) is good.

Procedure

The +5V (CR26) and +15V (CR28) LEDs on the LVPS/ Driver PWB (A2) are lit.

Y N

Switch off the power and disconnect the Power Cord.

Disconnect connector A2 P207 from the LVPS/ Driver PWB (A2).

Connect the Power Cord and switch on the power to the copier.

The +5V (CR26) and +15V (CR28) LEDs on the LVPS/ Driver PWB (A2) are lit.

Y N

A B C

A B C

Set the DMM to read ACH. Connect the (+) lead to A2 P214 pin 1 of the LVPS/ Driver PWB (A2). Connect the (-) lead to pin 4.

There is ACH.

Y N

Replace the LVPS/ Driver PWB (A2).

Set the DMM to measure 22 VAC.

Connect the (+) lead to A2P214 pin 6. Connect the (-) lead to pin 10.

There is 22 to 25 VAC.

Y N

Replace the Main Transformer (T1).

Replace the LVPS/ Driver PWB (A2).

Refer to the connector A2 P207 listing (Section 7) and check each of the power pins for a short circuit to frame.

If there is no short circuit, replace the Control PWB (REP 3.1).

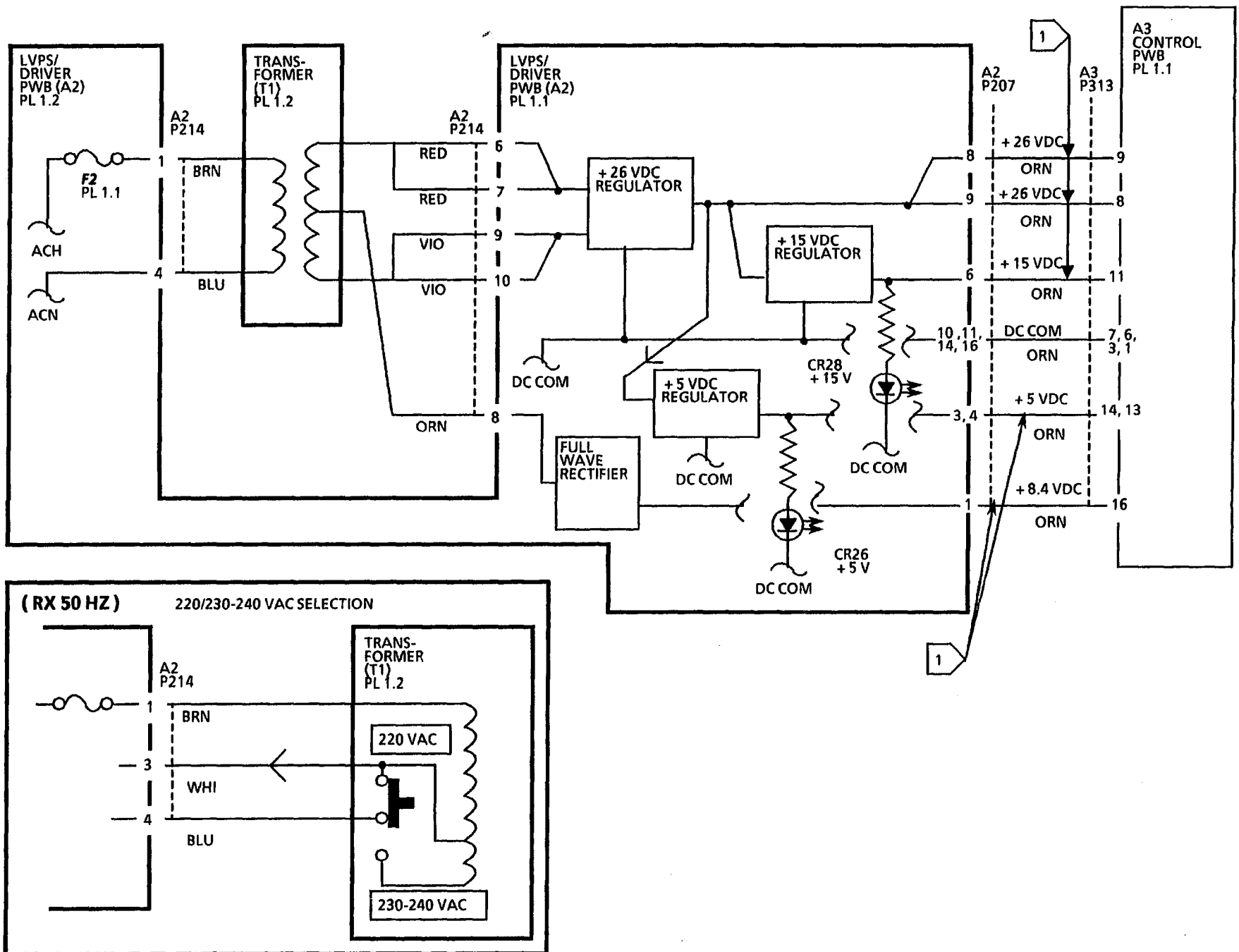
Connect the (-) lead to frame ground. Measure the following voltages:

PIN (+)	VOLTAGE
A2 P207-8	+ 26 VDC
A2 P207-6	+ 15 VDC
A2 P207-4	+ 5 VDC
A2P207-1	+ 8.4 VDC

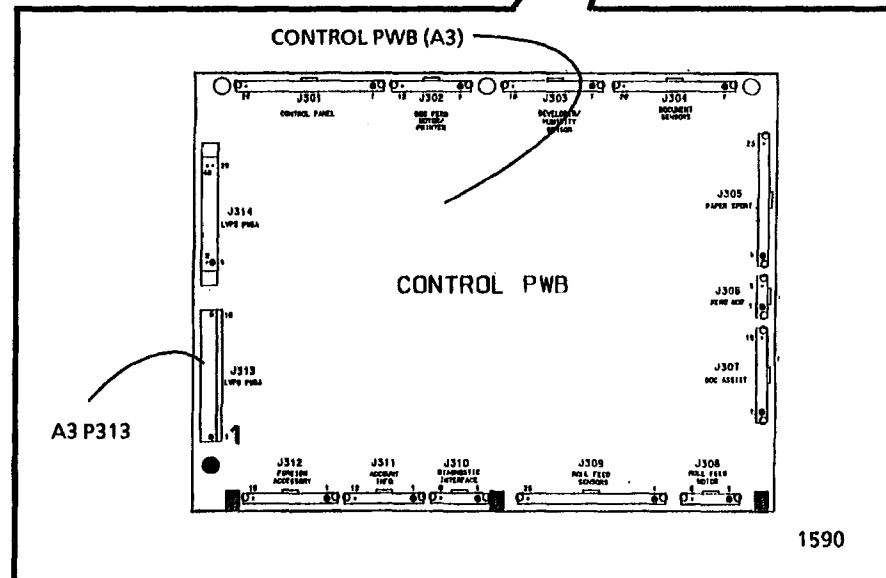
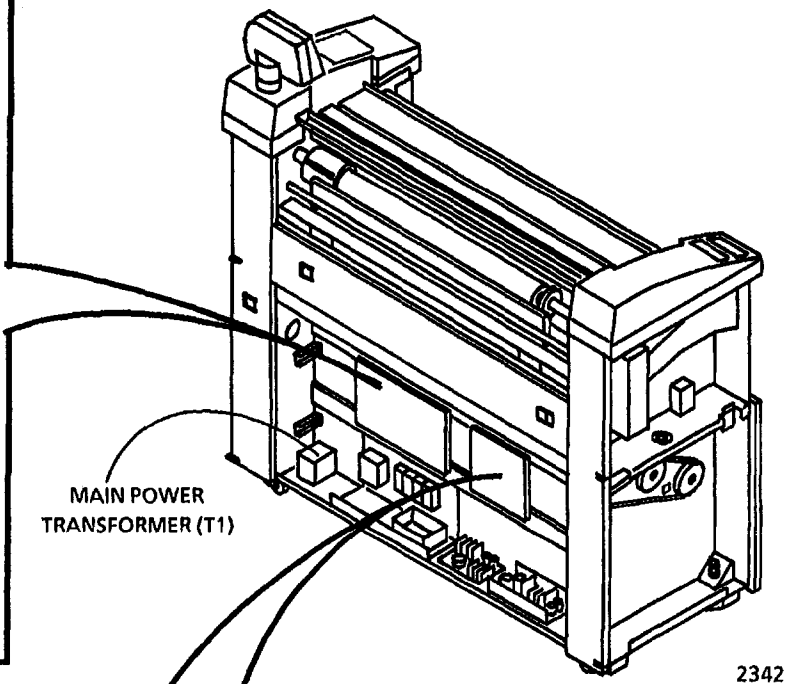
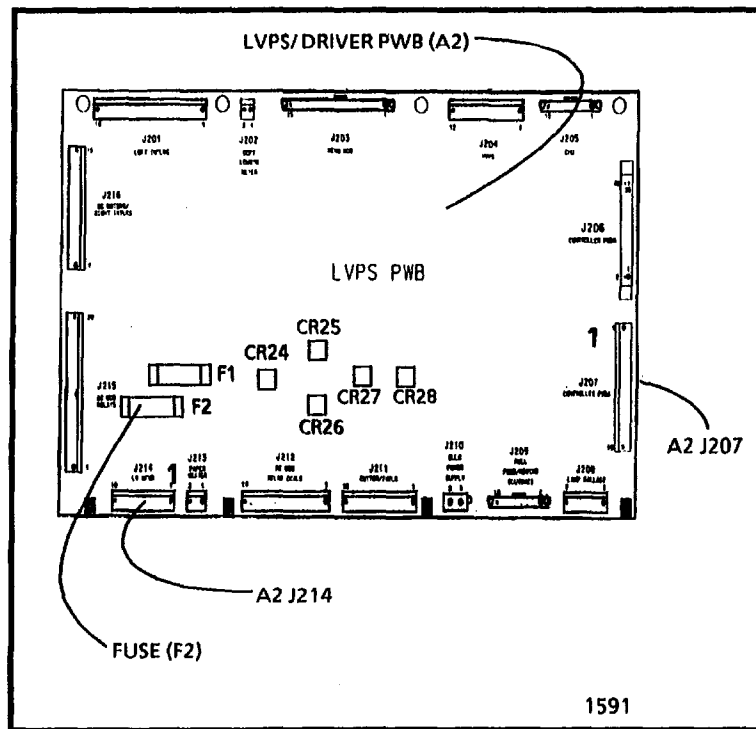
D

If any voltage is not at specification, replace the LVPS/ Driver PWB (A2).

If a voltage is at specification, go to FLAG 1 and repair the wires that do not have continuity.



Notes:



1.6 Ground Fault RAP

(1/31/94)

This RAP is used to locate and repair ground faults 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 copier is equipped with a Ground Fault Protection (GFP) device that detects excessive current leakage to ground. If excessive leakage is detected the GFP device will remove all power to the copier.

Initial Actions

- Check that the correct voltage is being applied to the copier at the AC Module connector A1P1.

Procedure



Do not disconnect any plugs or wires while the power cord is connected and the main power switch is switched on (1).

The Ground Fault Protector is in the tripped Position (red flag is not visible).

Y N

Go to FLAG 1 and check that the correct voltage is present. The voltage is correct.

Y N

Replace the Ground Fault Protector (PL 1.2).

Go to the 1.1 AC Power RAP.

A

A

Refer to FLAG 1 and disconnect the wires at the input to the Line Filter (FL1). Test the GFP according to the Warning Label. The GFP passes the test.

Y N

Replace the GFP (PL 1.2).

Connect the GFP device to the Line Filter. The GFP is in the tripped Position (red flag is not visible) after the Main Power Switch is switched on.

Y N

Go to the 1.1 AC Power RAP.

Go to FLAG 2 and disconnect the Line Filter wires at terminals 3 and 4.

The GFP is in the tripped Position (red flag is not visible) after the the Power Cord is connected to the wall outlet.

Y N

Connect the wires to the Line Filter. Go to FLAG 3 and disconnect the wires at the Main Power Relay (K1). The GFP is in the tripped Position (red flag is not visible) after the Main Power Switch is switched on.

Y N

Set the DMM to the 20K resistance scale. Switch off the Main Power and disconnect the power cord at A1P1.

Go to FLAGS 2 through 4 and check for a path to ground. Look for pinched wires or wires with frayed insulation. Reconnect the wires to the Main Power Relay. The GFP is in the tripped Position (red flag is not visible) after the Main Power Switch is switched on.

Y N

B C D E

B C D E

Go to the Call Flow Diagram in Section 1.

Go to FLAG 5 and disconnect the wires at 4B, 4A, 8B, and 8A. Go to FLAGS 5 through 8 and check for a path to ground. Look for pinched wires or wires with frayed insulation. Reconnect the wires at FLAG 5. The GFP is in the tripped Position (red flag is not visible) after the Main Power Switch is switched on.

Y N

Go to the Call Flow Diagram in Section 1.

Disconnect the following components separately:

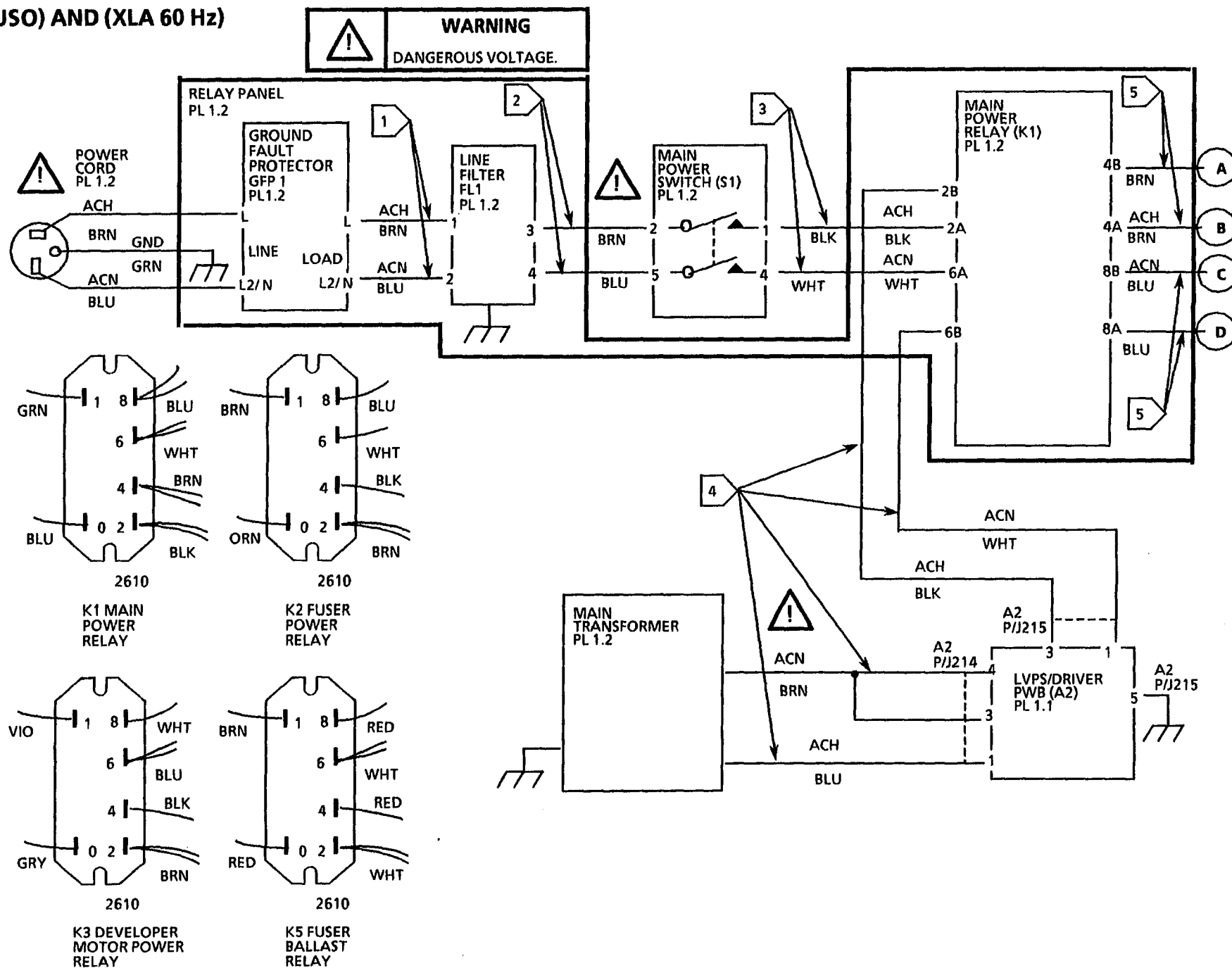
- Main Transformer
- LVPS/Driver PWB
- Media Heater

After each component is disconnected determine if the GFP trips when the Main Power Switch is turned on.

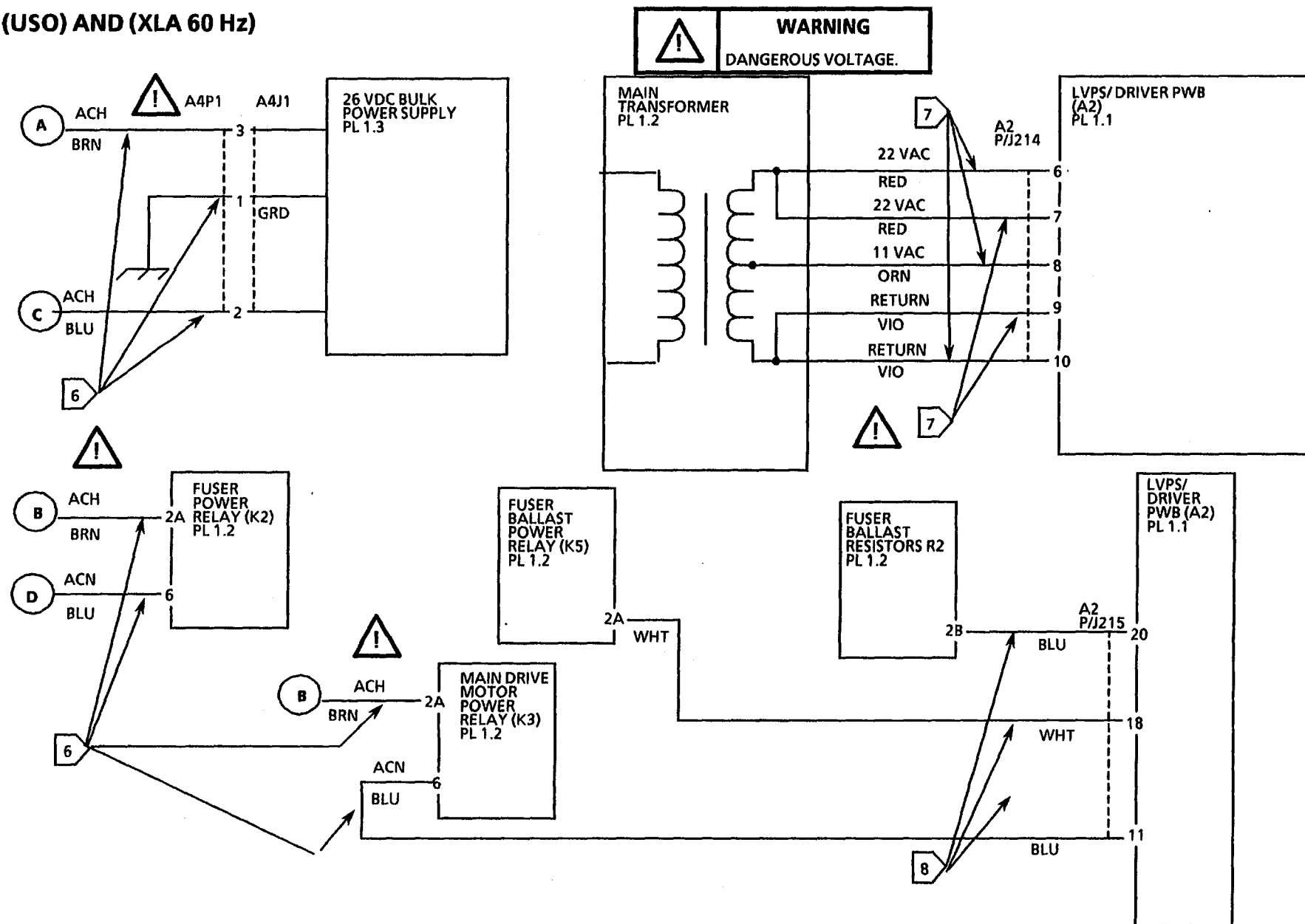
Replace the Main Power Switch (PL 1.2).

Replace the Line Filter (PL 1.2).

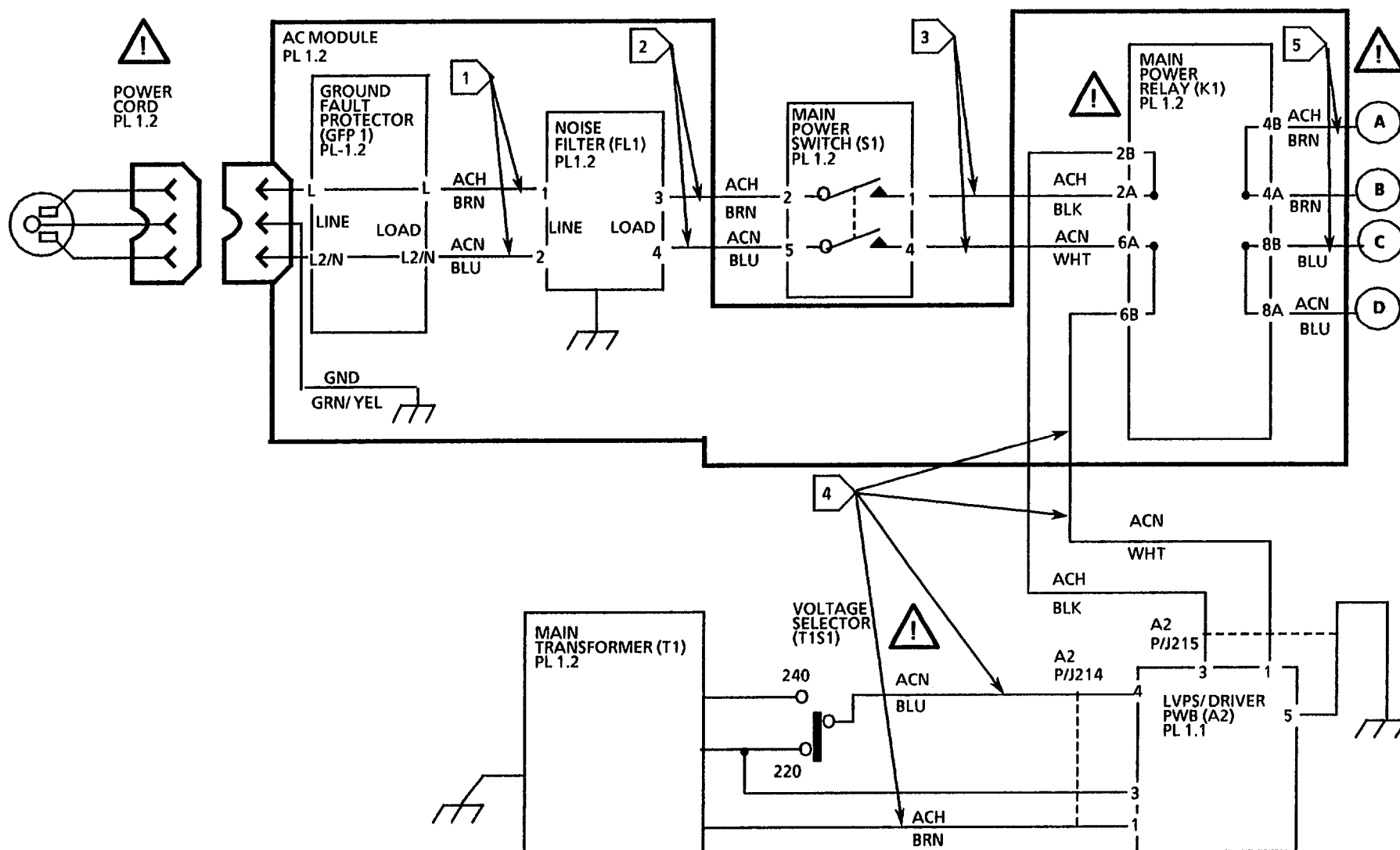
(USO) AND (XLA 60 Hz)



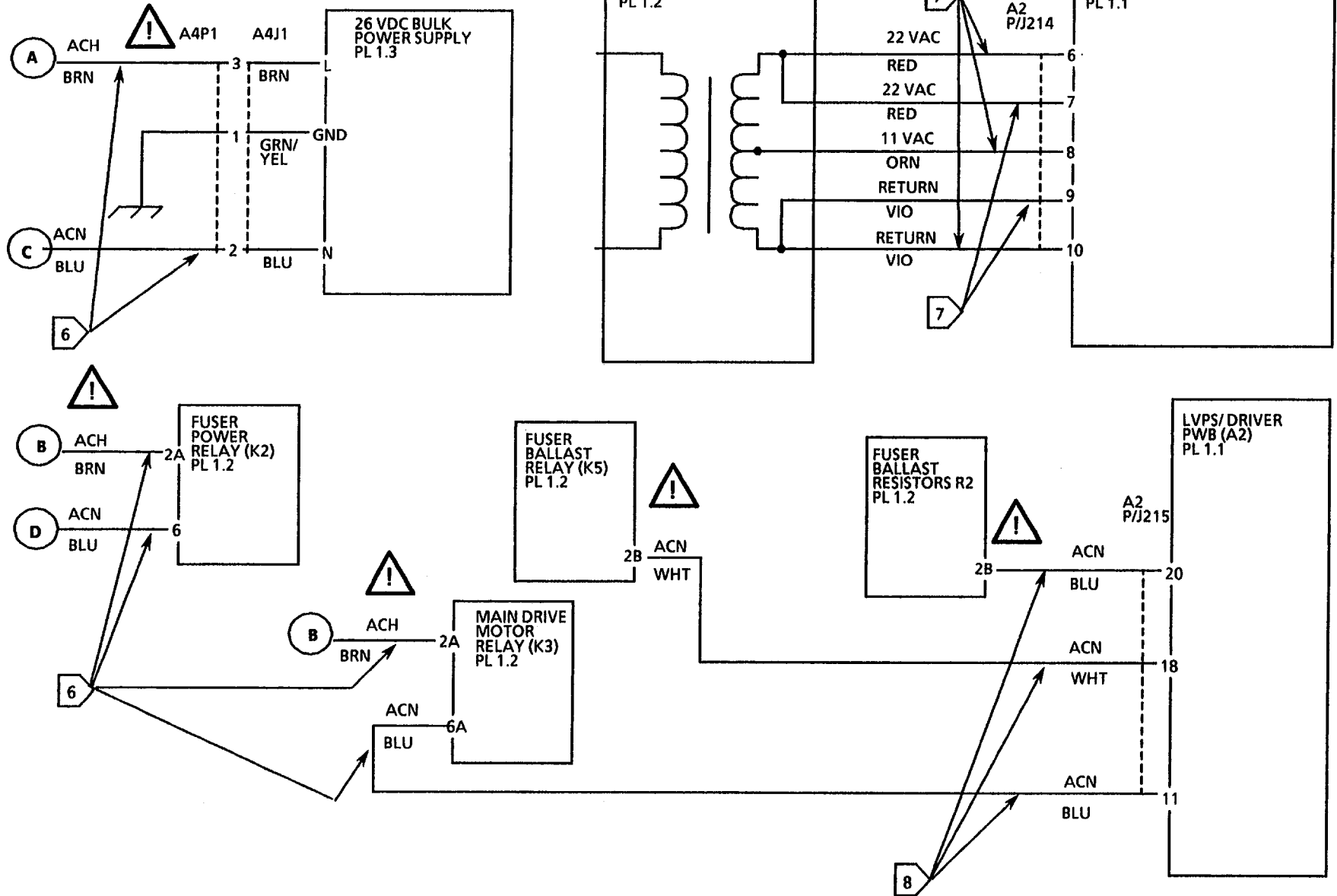
(USO) AND (XLA 60 Hz)

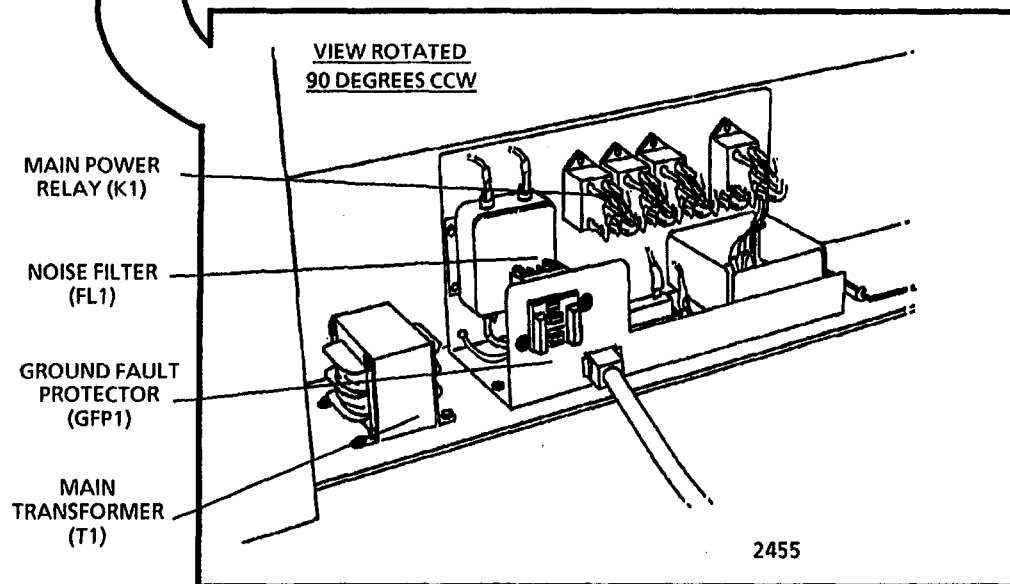
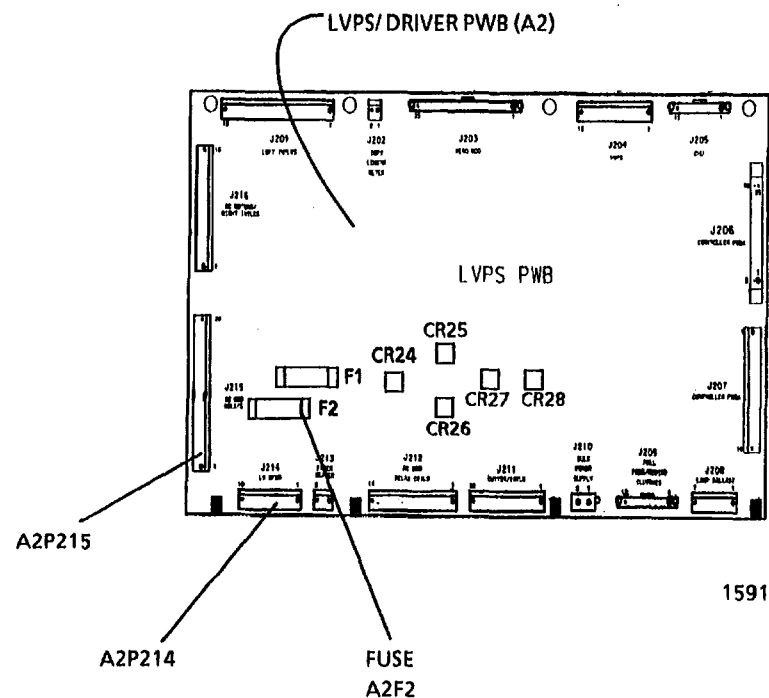
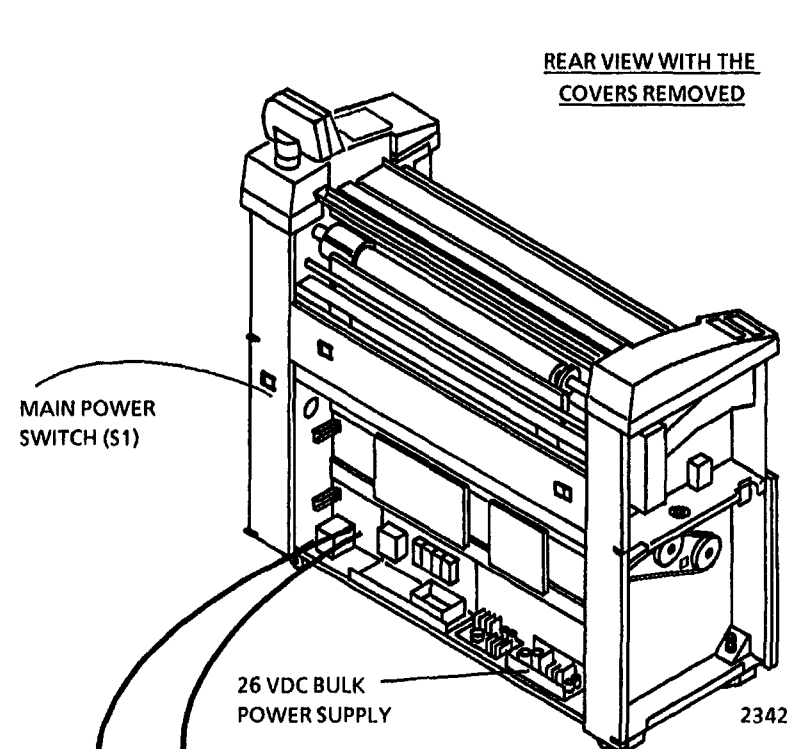


(RX 50 Hz)



(RX 50 Hz)





2.1 Control Panel RAP

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

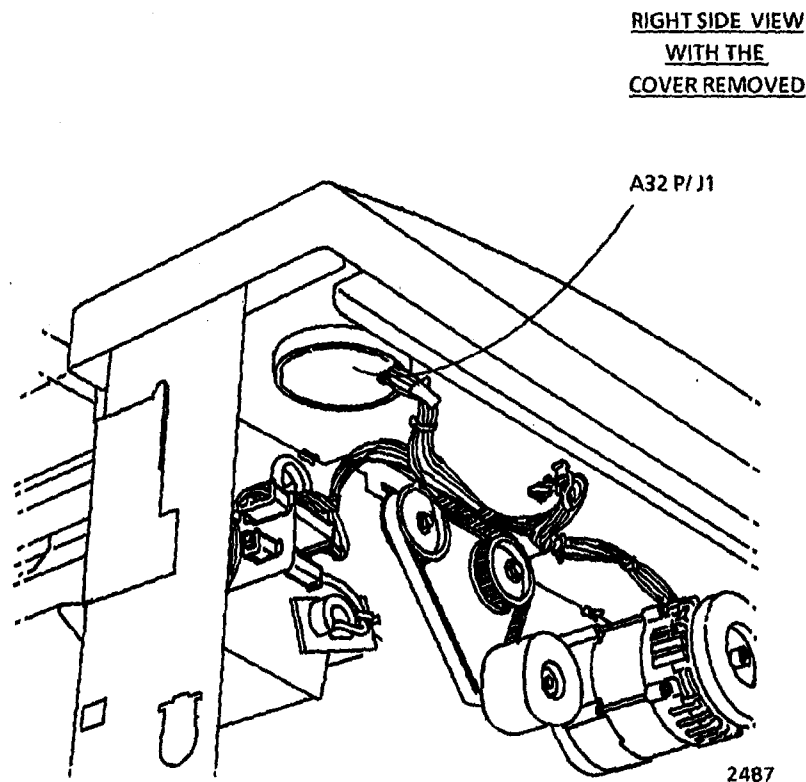
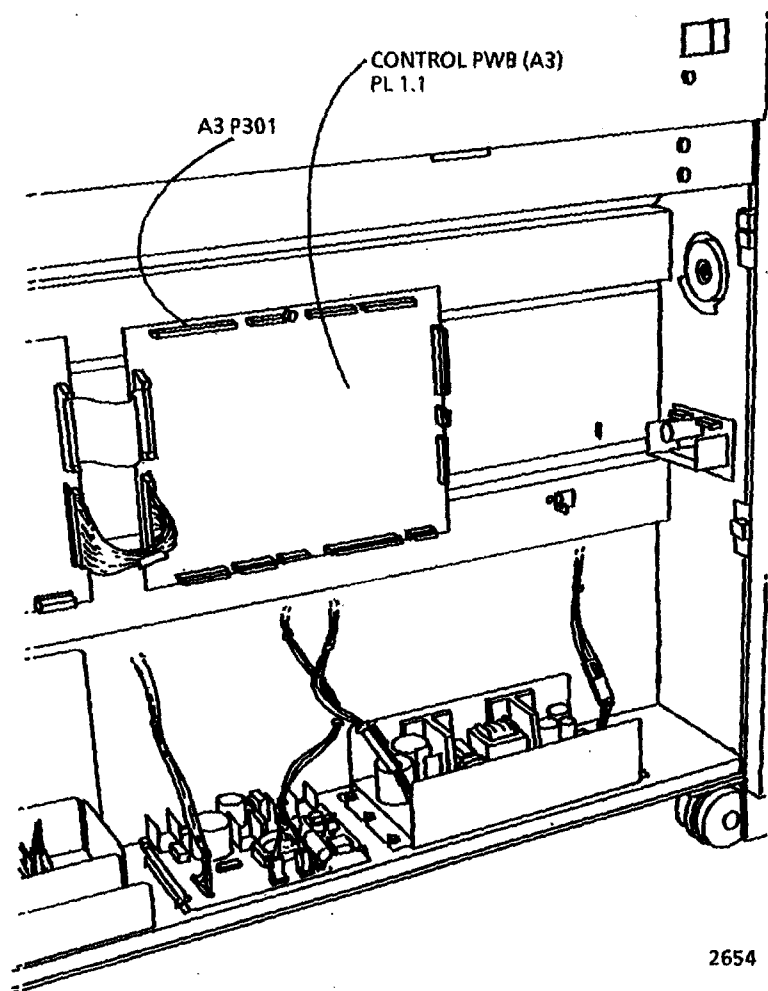
NOTE: The component location drawings are on this page. The circuit diagram is on the page following the table.

Initial Actions

- Ensure that Control Panel harness connector A32 P/J1 is seated fully.
- Ensure that the Control PWB (A3) connector A3 P301 is installed correctly and seated fully.

Procedure

Refer to the table on the next two pages.



2.1 Control Panel

	Probable Cause	Corrective Action
1. The Message Display is not illuminated, no LEDs are lit, no characters are displayed.	1A. There is no + 5 VDC.	1A. Go to the 1.1 AC Power RAP. Go to the 1.5 DC Power RAP.
	1B. There is an open circuit in the wires between the Control PWB and the Control Panel assembly.	1B. Go to FLAG 1 and FLAG 3 check for an open circuit in the wires between A3 P301 and A32 A1 P1.
	1C. There is a problem with the Control Panel assembly (A32 A1) or Control PWB (A3).	1C. Order the Control Panel assembly (A32 A1) and the Control PWB (A3). Replace the Control Panel assembly. If the problem persists, replace the Control PWB (A3).
2. The Message Display is illuminated, no characters or random characters appear.	2A. There is an open circuit in the wiring between the Control Panel assembly and the Control PWB.	2A. Go to FLAG 2 and check for an open circuit in the wires between A3 P301 and A32 A1 P1. Then go to FLAG 4 and check for an open circuit in the wires between A32 A3 P1 and A32 A1 P2. Ensure that all of the Control Panel assembly connectors are seated fully.
	2B. There is a problem with the Message Display PWB (A32 A3) or the Control PWB (A3).	2B. Order the Message Display Assembly (A32 A3) and Control PWB (A3). Replace the Message Display Assembly. If the problem persists, replace the Control PWB (A3).
	2C. There is a problem with the Control Panel assembly (A32 A1).	2C. Replace the Control Panel assembly (A32 A1).
3. The Message Display is illuminated, but the keys and LEDs do not operate.	3A. There is an open circuit in the Control Panel wires.	3A. Go to FLAG 1 and check for an open circuit in the wires between A3 P301 and A32 A1 P1.
	3B. There is a problem with the Control Panel assembly (A32 A1) or the Control PWB (A3).	3B. Order the Control Panel assembly (A32 A1) and the Control PWB (A3). Replace the Control Panel assembly. If the problem persists, replace the Control PWB (A3).

(Continued)

2.1 Control Panel

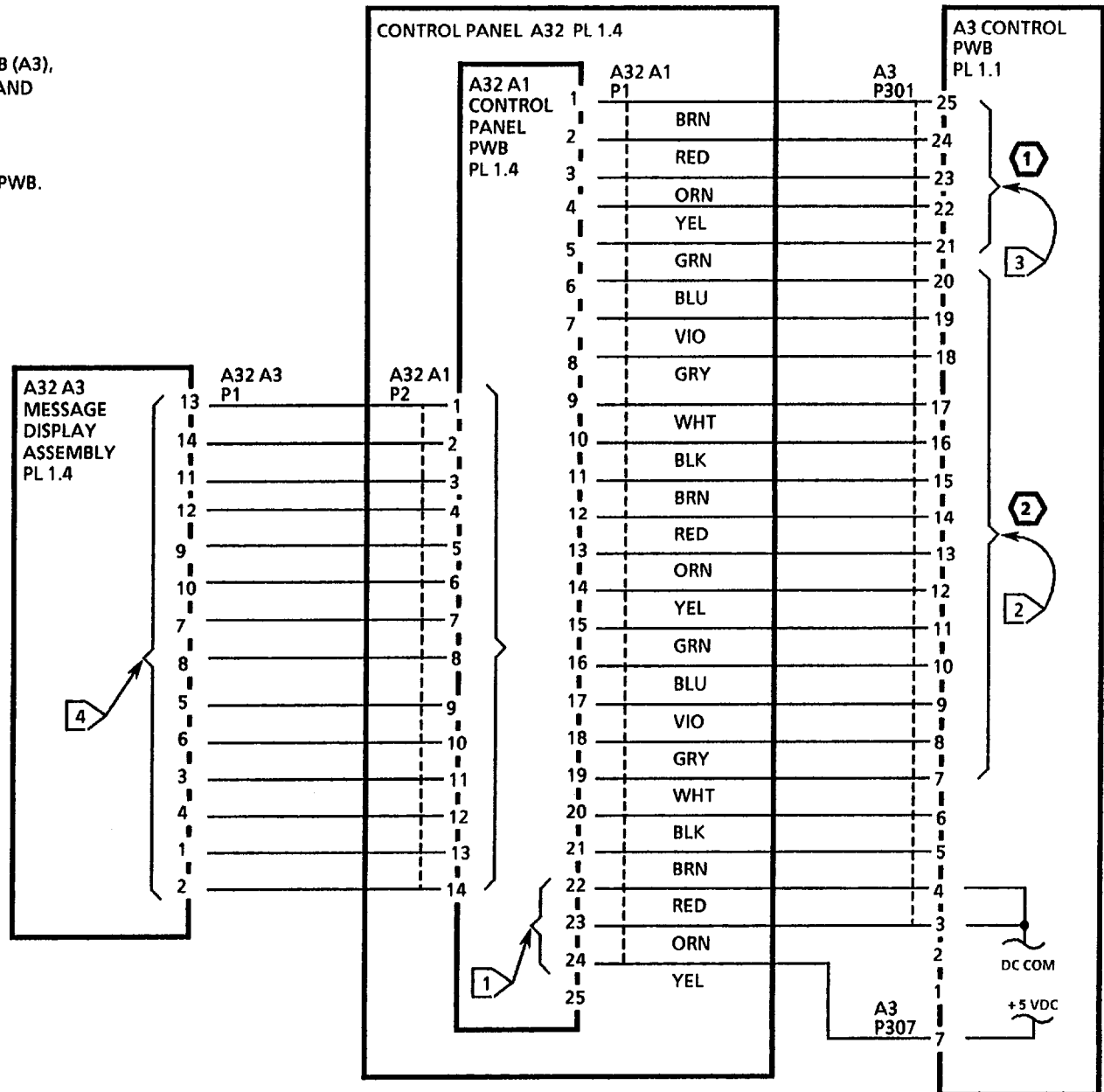
Probable Cause

Corrective Action

- | | | |
|--|--|--|
| 4. The Message Display is illuminated, but some keys or LEDs do not operate. | 4A. There is a problem with the Control Panel Assembly (A32 A1). | 4A. Replace the Control Panel Assembly (A32 A1). |
| 5. All the LEDs or all the keys do not operate. | 5A. There is an open circuit in the Control Panel wires. | 5A. Go to FLAG 1 and check for an open circuit in the wires between A3P301 and A32P1. |
| | 5B. There is a problem with the Control Panel Assembly (A32 A1) or Control PWB (A3). | 5B. Order the Control Panel Assembly (A32 A1) and Control PWB (A3). Replace the Control Panel Assembly. If the problem persists, replace the Control PWB (A3). |

NOTE:

- 1 SERIAL DATA LINE SENDS AND RECEIVES INFORMATION BETWEEN THE CONTROL PWB (A3), THE CONTROL PANEL ASSEMBLY (A32 A1), AND THE MESSAGE DISPLAY ASSEMBLY (A32 A3).
- 2 PARALLEL DATA BUS SENDS DATA TO THE CONTROL PANEL PWB FROM THE CONTROL PWB.



2.2 POST 2, 3, 4, 5, 6 and 7 RAP

This RAP is used when the logic detects a fault during the Power On Self-test (POST). The Control Panel is either blank or only a 2, 3, 4, 5, 6 or 7 is displayed. When the copier is switched on, the copier does not initialize.

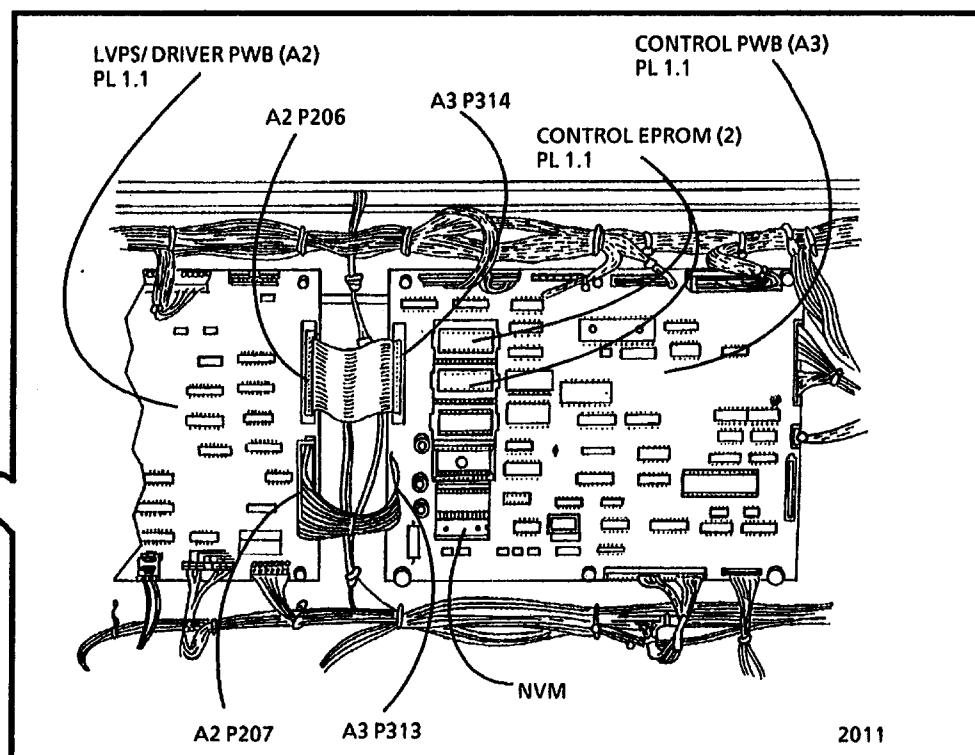
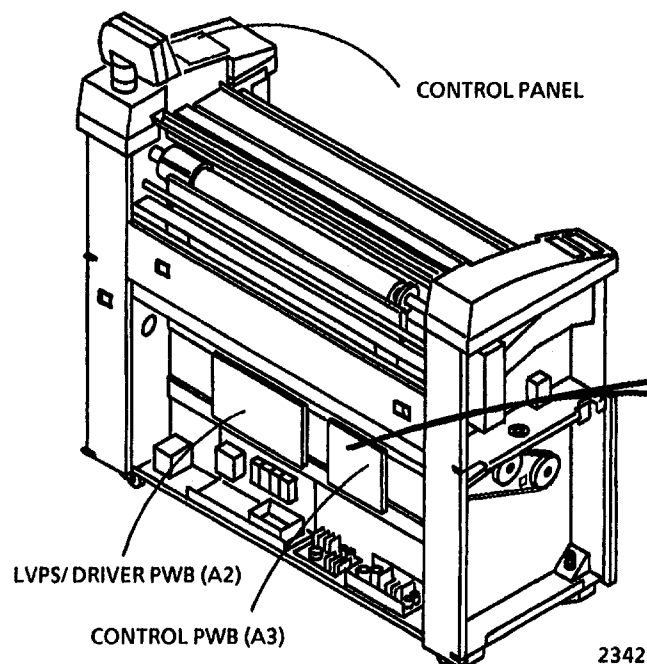
NOTES 1: If the Control Panel displays random characters, refer to the 2.1 Control Panel RAP.

Initial Actions

- Ensure that the EPROMs and the NVM are seated fully on the Control PWB.
- Ensure that the 40-conductor ribbon cable connected at the LVPS/ DRIVER PWB connector A2 P206 and the Control PWB connector A3 P314 is seated fully at each connector.
- Ensure that the power cable connected at the LVPS/ DRIVER PWB connector A2 P207 and the CONTROL PWB connector A3 P313 is seated fully at each connector.
- Ensure that the Control Console cable connector A32 P/ J1 is correctly connected and seated fully.

Procedure

Refer to the table on the following page.



2.2 POST 2, 3, 4, 5, 6 and 7 RAP

Probable Cause

Corrective Action

- | | | |
|--|--|--|
| 1. The number 1 or 2 is displayed on the Control Panel, or the display is blank. The copier does not initialize. | 1. There is a fault in the RAM memory. | 1. Replace the Control PWB(A3) (REP 3.1). |
| 2. The number 3 is displayed. The copier does not initialize. | 2A. The contents of the Control EPROMs does not agree with the checksum.

2B. The Control PWB (A3) is damaged. | 2A. Replace both Control PWB (A3) Control EPROMs.

2B. Replace the Control PWB (A3) (REP 3.1). |
| 3. The number 4 is displayed. The copier does not initialize. | 3. There is a fault in the Analog-to-Digital Converter or the Digital-to-Analog Converter. | 3. Replace the Control PWB (A3) (REP 3.1). |
| 4. The number 5 is displayed. The copier does not initialize. | 4A. There is a fault in the printer port output circuitry.

4B. There is a fault in the copier timing circuitry. | 4A. Replace the Control PWB (A3) (REP 3.1).

4B. Replace the Control PWB (A3) (REP 3.1). If the problem persists, replace the LVPS/ Driver PWB (A2). |
| 5. The number 6 is displayed. The copier does not initialize. | 5. There is a fault in the Digital-to-Analog Converter. | 5. Replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3) (REP 3.1). |
| 6. The number 7 is displayed. The copier does not initialize. | 6. There is a fault in the printer port output circuitry. | 6. Replace the Control PWB (A3) (REP 3.1). |

4.1 Main Drive Motor RAP

This RAP is used for problems with the Main Drive Motor that may or may not be indicated by a status code.

The problem may occur if there is a fault in the Main Drive Motor, the motor control circuitry or the mechanical components.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions



WARNING

Dangerous Voltage is present on the ACH wires and terminal connectors.

- Check the Main Drive Motor connector (M21 P/J1) for damage and ensure that the connector is seated correctly.
- Check that the Main Drive Gears are in good condition and are engaged correctly.
- Check that the Developer Drive Coupling is in good condition and is engaged fully.

Procedure

CAUTION

In order to prevent damage to the copier, the Fuser Heat Roll must be at the run temperature before the Main Drive Motor is switched on.

NOTE: 1. The code [1004] may be timed out and switched off after the Heat Roll reaches the run temperature. The Start button must be pressed, in order to reenter the code [1004].

2. If the message, "FUSER CAN NOT BE TURNED ON, CONDITION XX", is displayed when the code [1004] is entered, refer to the Special Tests [1004] located in Section 6.

Enter the code [1004] in order to energize the Fuser Heat Rod and increase the Fuser Heat Roll temperature to the run temperature. The message, "1004 FUSER TEMP TEST TEMP = XXX CELSIUS, XXX FAHRENHEIT", is displayed when the Heat Roll is at the run temperature. The Main Drive Motor is switched on, when the Fuser Roll is at the run temperature.

With the Fuser Roll at the run temperature, the Main Drive Motor is switched on.

Y N

There is ACH between pins P1 and P2 of the Main Drive Motor connector (M21).

Y N

A B C

A B C

Connect the (-) probe to the AC GROUND at E1 of the Power Cord terminal. Connect the (+) probe to the 2B terminal of the Fuser Power Relay (K2).

There is ACH between 2B and E1.

Y N

There may be an open circuit in the ACH wire between the Fuser Power Relay (K2) and the Main Power Relay (K1). Go to the 1.1 AC POWER RAP and check the ACH wire for an open circuit in the wire. Repair the wires as required.

Switch Off (0) the copier power. Go to FLAG 1 and check the wiring for an open circuit in the wires. If there is no open circuit, switch On (1) the copier power.

There is + 26VDC at A2 P212 pin 8 of the LVPS/ DRIVER PWB.

Y N

There is + 26VDC at A2 P212 pin 7 of the LVPS/ DRIVER PWB.

Y N

A B D E F

A B D E F
Replace the LVPS/ DRIVER PWB (A2).

Go to FLAG 2 and check the wiring for an open circuit in the wires. If there is no open circuit, replace the Main Drive Motor Relay (K3).

Enter the code [1004] in order to energize the Fuser Heat Rod and increase the Fuser Heat Roll temperature to the run temperature. The message, "1004 FUSER TEMP TEST TEMP = XXX CELSIUS, XXX FAHRENHEIT", is displayed when the Heat Roll is at the run temperature. The Main Drive Motor Relay (K3) is switched on, when the Fuser Roll reaches the run temperature.

The voltage at A2 P212 pin 8 of the LVPS/ DRIVER PWB goes LOW when the Fuser Roll reaches the run temperature.

Y N

Replace the LVPS/ DRIVER PWB.

Replace the Main Drive Motor Relay (K3).

Press Power Off (0). Disconnect the Main Drive Motor connector (M21 P/J1). Set the Multimeter to ohms, DC, +, 200 ohms.

The motor resistance is approximately 60 ohms as measured between (M21 J1) pins 1 and 2.

Y N

A G H

A G H

Replace the Main Drive Motor.

Check the drive system for binding by manually rotating the motor shaft. Rotate the shaft by turning the motor cooling fan which is attached to the motor shaft. If the system is binding, check the Main Drive Gears and the Cleaner Blade Drive Gear for damage.

Check the following items for damage:

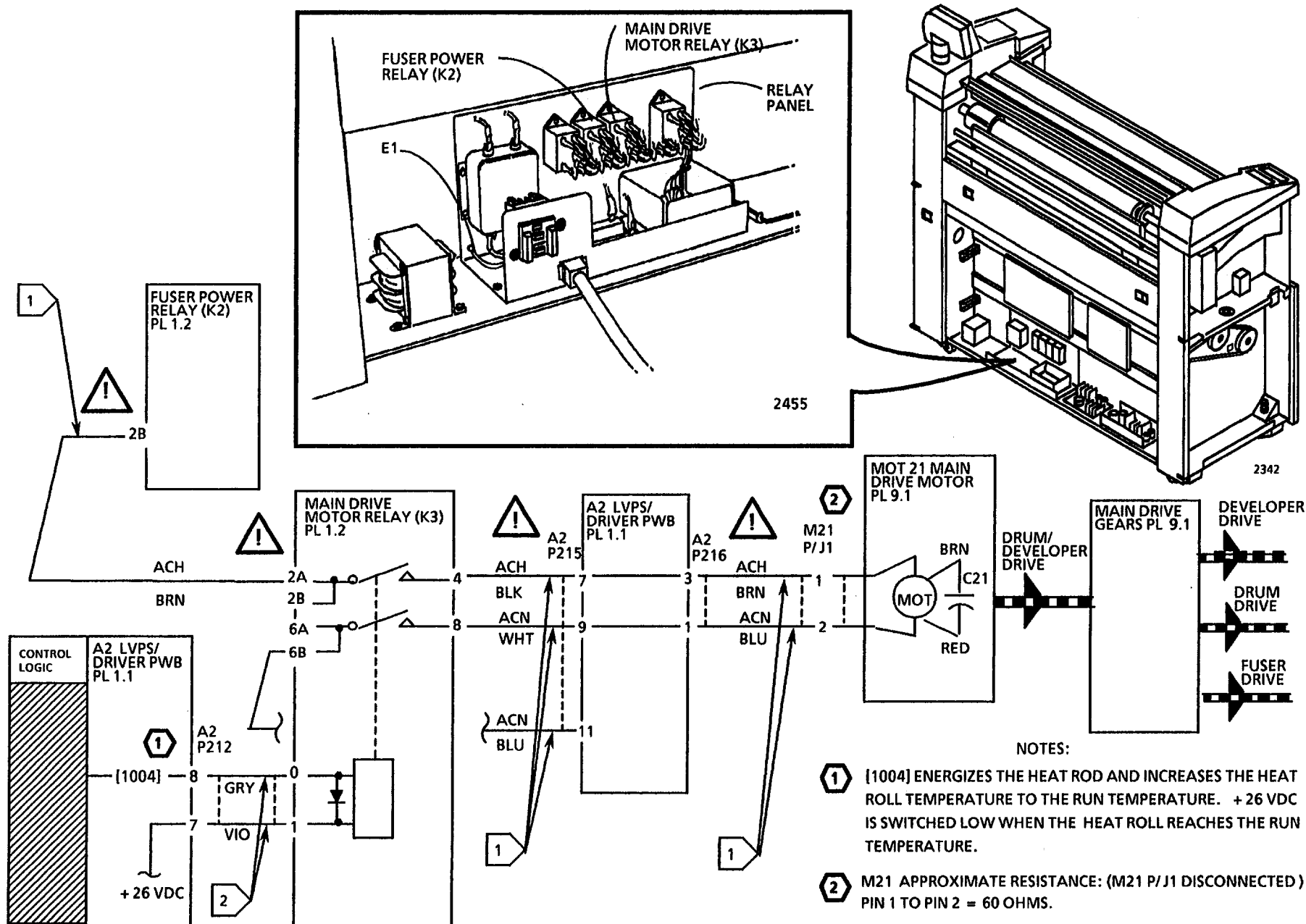
- Main Drive Gears
- Cleaner Blade Drive Gear
- Mixing Auger Drive Gears
- Mag Roll Drive Gear

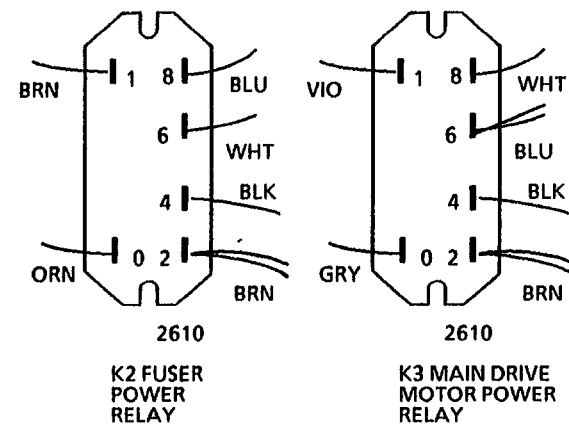
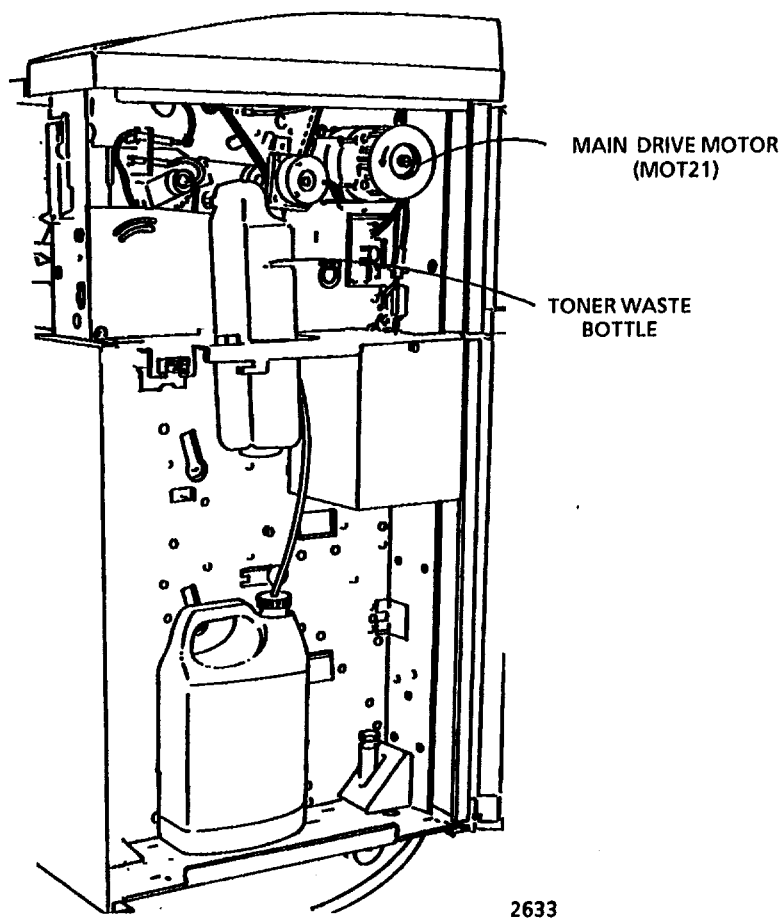


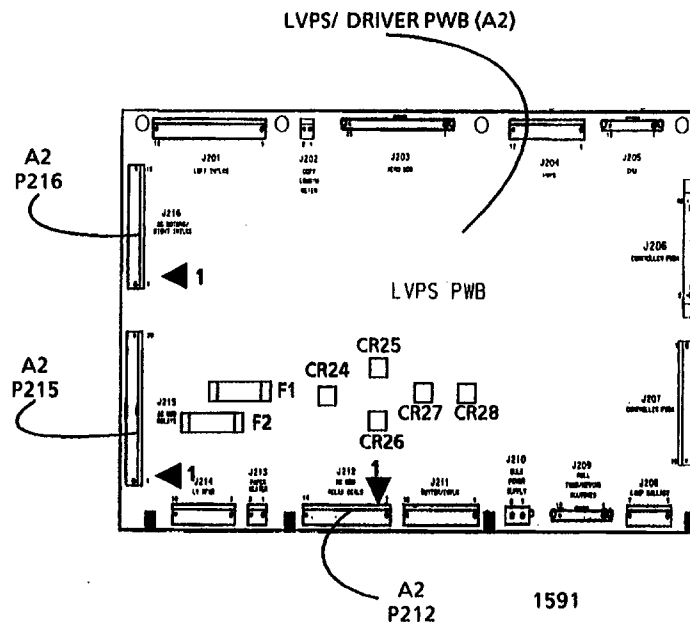
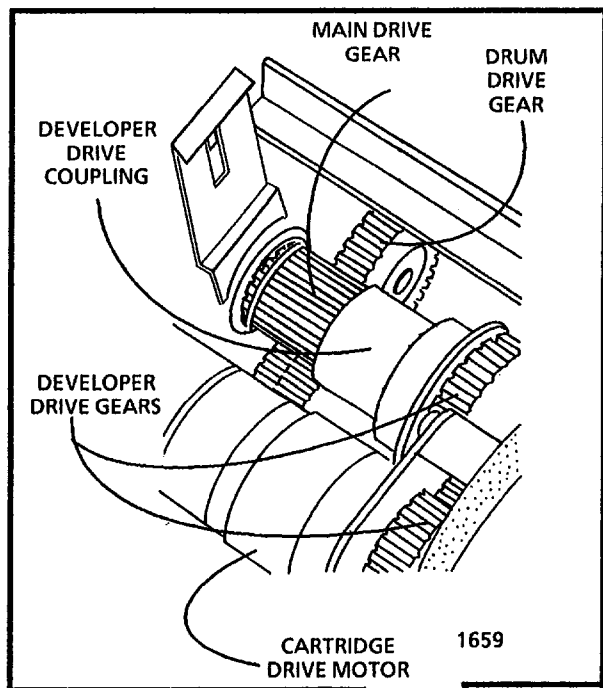
WARNING

DANGEROUS VOLTAGE.

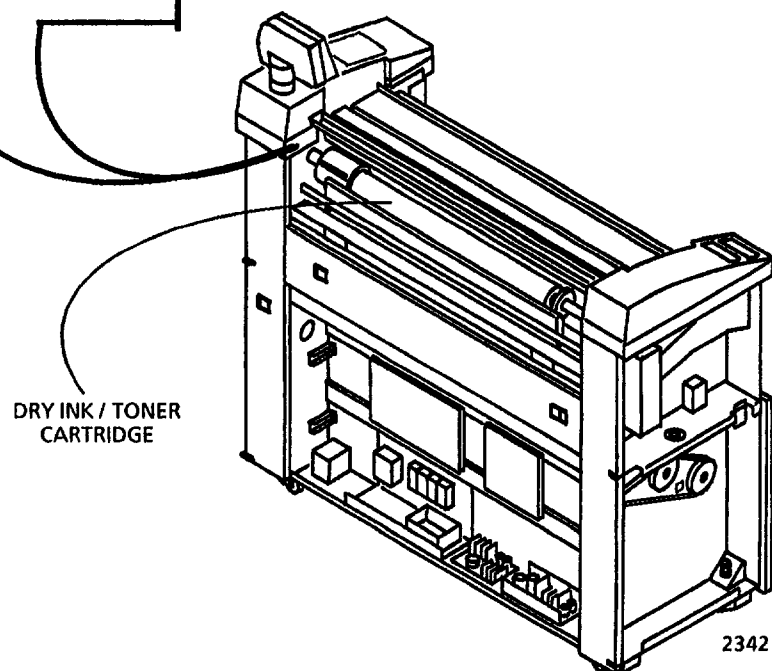
REAR VIEW WITH THE
COVERS REMOVED







REAR VIEW WITH THE
COVERS REMOVED



5.1 Document Handler RAP

This RAP is used for Document Handler problems that may or may not be indicated by a status code.

The problem may occur if there is a problem with the document sensors, mechanical components, the drive motor, the motor control circuitry or poor quality documents.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions

- Ensure that the document is in good condition.
- Ensure that the Document Carrier is being used for torn, worn, folded or fragile Documents.
- Check that the Upper Document Handler is positioned correctly.
- Check the document path for obstructions and the top and bottom platens for damage and for correct installation.
- Check that the Document Sensor connectors are seated fully and are not damaged.
- Check the Document Drive Belt and Pulleys for damage and for the correct installation.
- Check the Document Drive Motor for binding by rotating the Document Drive Pulleys manually.

- Check the connectors for the Document Drive Motor (A31 P2), Drive Motor PWB (A31 P1) and Control PWB (A3 P302) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the document meets the size specification.
- Remove the Upper Document Handler Assembly. Check the document drive rolls, pinch rolls, endcaps, roll load springs, and the feed shelf for contamination or damage. Clean or replace the components as required.

Procedure

Cheat the Document Handler Interlock Switch (S30).

Enter the code [0601-1] in order to check that the Document Drive Motor drives in the scan direction.

Enter the code [0601-4] in order to check that the Document Drive Motor drives in the rescan direction.

The Feed Drive Roll rotates in both directions.

Y N

Press the Power Off (0) switch. Go to FLAG 1 and check for an open circuit in the wires to the Drive Motor PWB.

The check is good.

Y N

Repair or replace the wires as required.

Disconnect the Document Drive Motor connector (A31 P2) from the Drive Motor PWB. Set the Multimeter (600T1616) to ohms, DC, +, 200 ohms. Check the resistance of the motor, refer to Note 2.

The check is good.

Y N

Replace the MOT 23 Document Drive Motor.

A B

A B

Disconnect the Drive Motor PWB connector (A31 P1) from the Drive Motor PWB. Set the Multimeter to V, DC, +, 200V. Measure the voltages at the connector (A31 P1). Refer to Note 1 for voltages at pins A31 P1-8, 7, 6 and 4.

The check is good.

Y N

Replace the A3 Control PWB.

Replace the A31 Drive Motor PWB.

Check the following items:

- Document Drive Belt has the correct tension.
- Document Stop Position (ADJ 5.2).

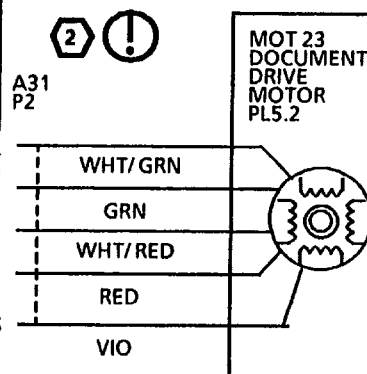
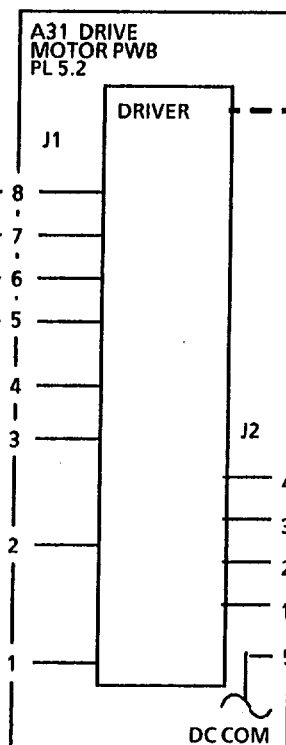
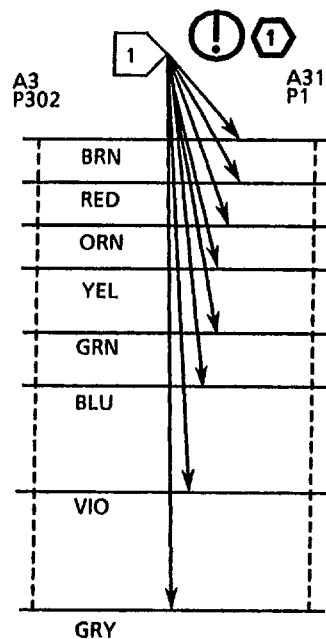
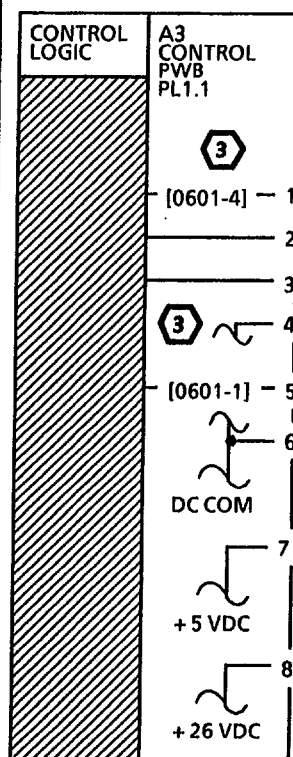
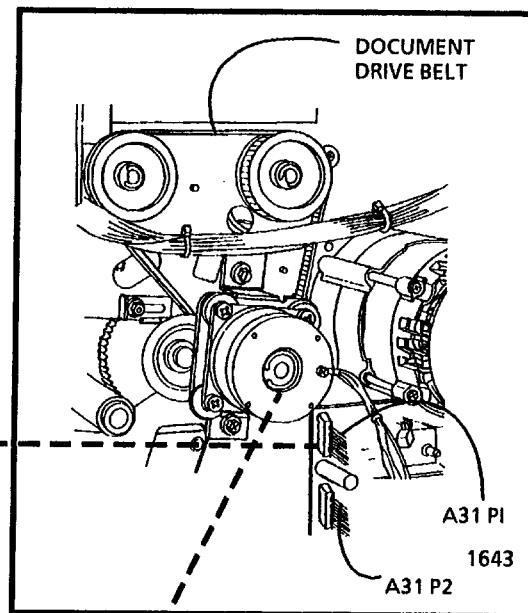
- ① A31 P1 APPROXIMATE VOLTAGES:
(A31 P1 DISCONNECTED FROM A31
DRIVE MOTOR PWB).

PIN	STANDBY VOLTAGE	[0601 -1] VOLTAGE	[0601 -4] VOLTAGE
P1-8	+ 5.0 VDC	+ 0.1 VDC	+ 4.5 VDC
P1-7	+ 5.0 VDC	+ 4.5 VDC	+ 4.5 VDC
P1-6	+ 5.0 VDC	+ 0.1 VDC	+ 0.1 VDC
P1-4	+ 5.0 VDC	+ 2.0 VDC	+ 2.0 VDC

⚠ CAUTION
TO PREVENT DAMAGE TO THE COMPONENTS, PRESS
THE POWER OFF (O) SWITCH BEFORE DISCONNECTING
THE PLUGS.

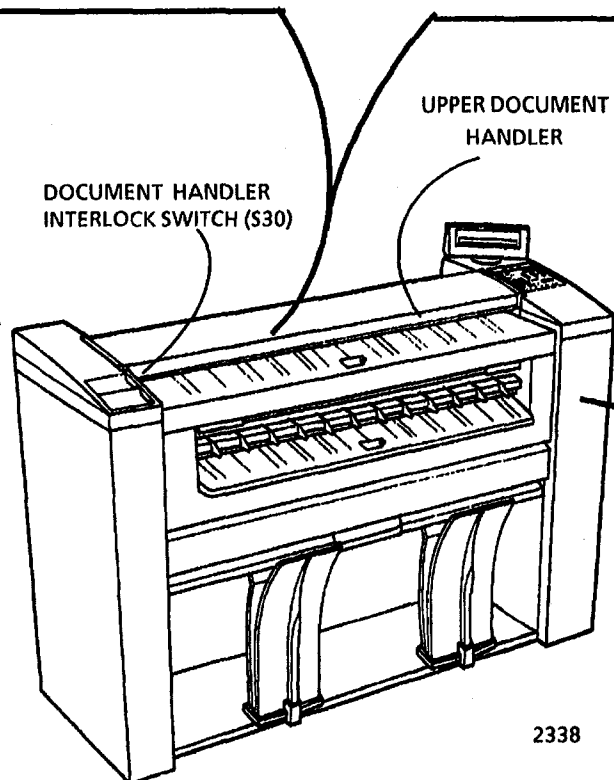
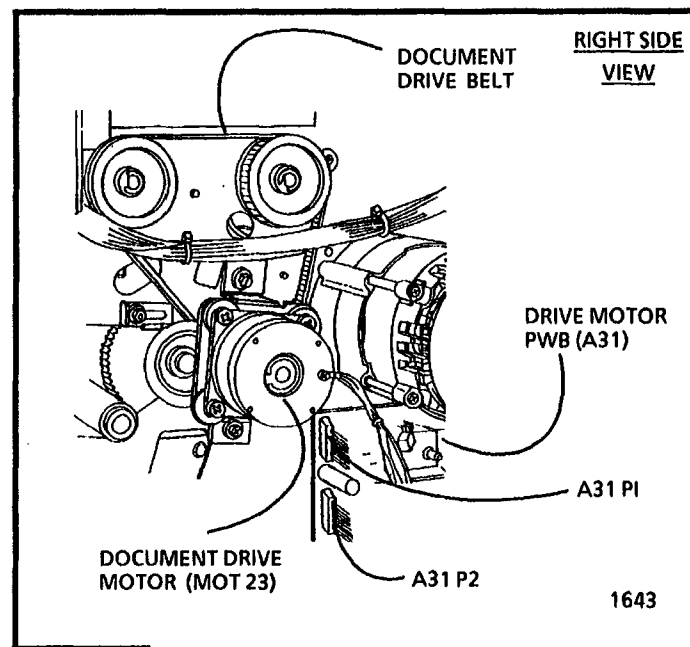
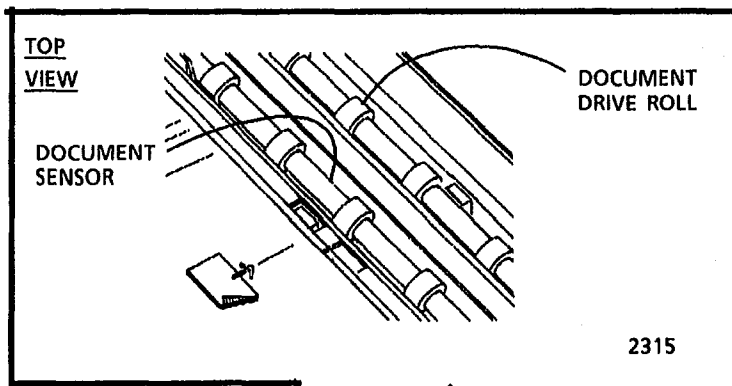
- ③ THE CODE [0601 - 1] ENERGIZES THE DOCUMENT
DRIVE MOTOR AND THE MOTOR ROTATES IN THE
SCAN DIRECTION.

THE CODE [0601 - 4] ENERGIZES THE DOCUMENT
DRIVE MOTOR AND THE MOTOR ROTATES IN THE
RESCAN DIRECTION.



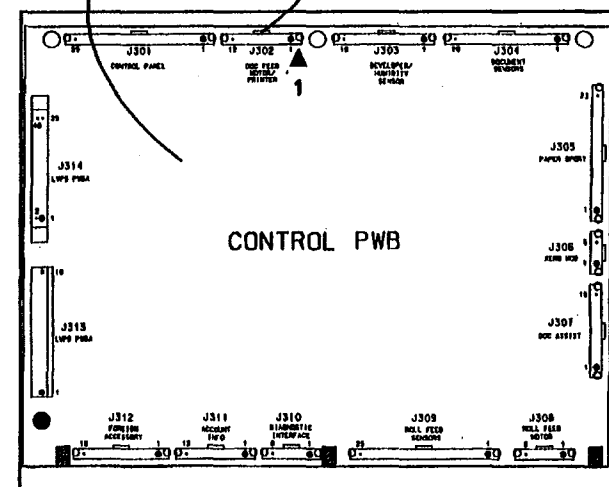
- ② A31 P2 APPROXIMATE RESISTANCE:
(A31 P2 DISCONNECTED FROM A31
DRIVE MOTOR PWB)
PIN 1 TO PIN 2 = 3.5 OHMS,
PIN 3 TO PIN 4 = 3.5 OHMS

DOCUMENT
DRIVE



CONTROL PWB (A3)

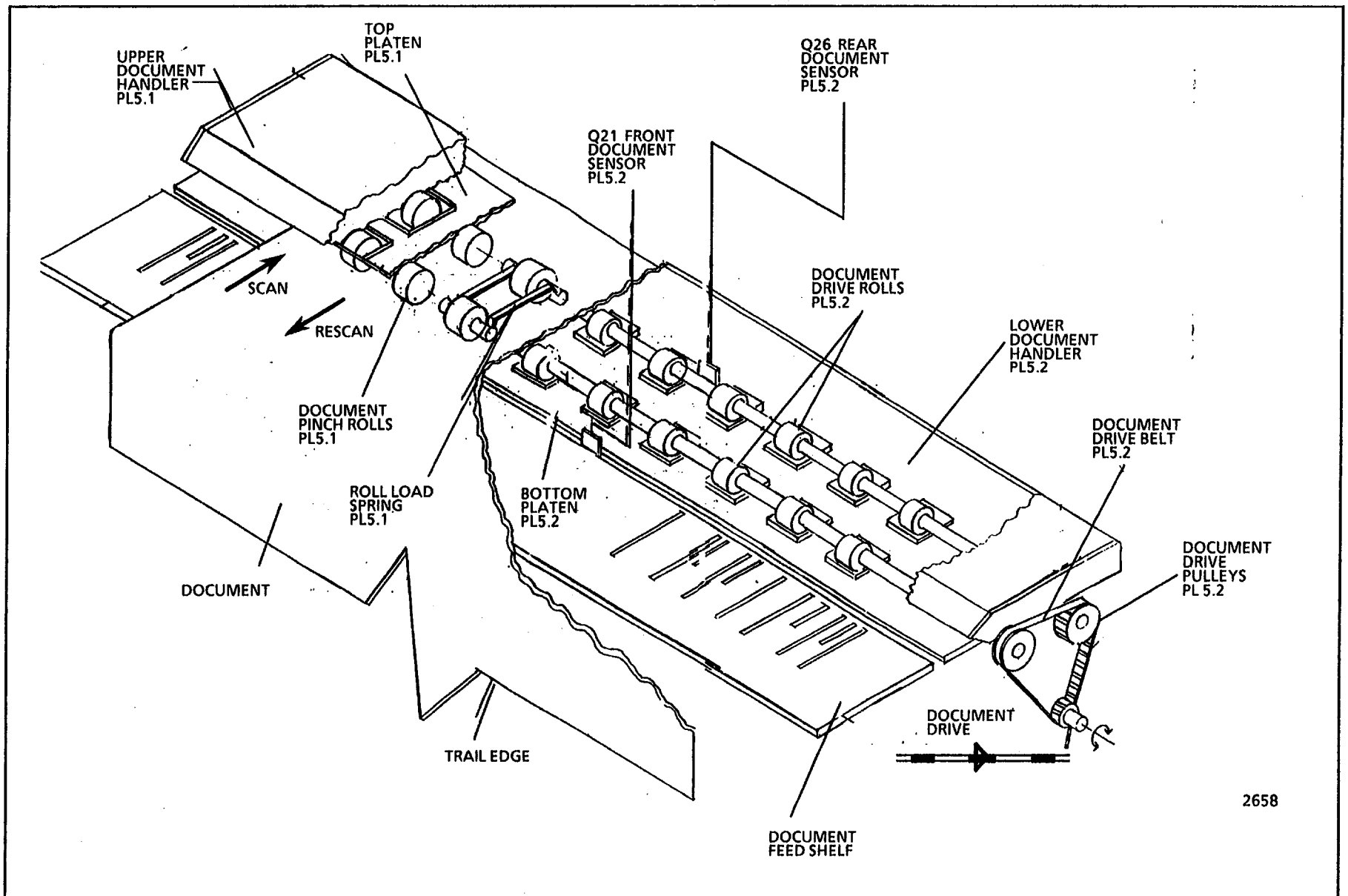
A3 P302



1590

DOCUMENT HANDLER

FRONT VIEW



7.1 Roll Feed RAP

(02/15/94)

This RAP is used for Roll feed problems that may or may not indicate a status code.

The problem may occur if there is a problem with the Roll drive mechanical components, the Roll Drive Motor or the motor control circuitry.

NOTE: *The component locator drawings and the circuit diagram are on the next five pages.*

Initial Actions

- Check that the media is in good condition and is loaded correctly.
- Check the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the media path for obstructions.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Pull out the Drawer. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.

- Check the Rewind Gears, Roll Arbors, and Arbor Support Rolls for binding or damage.
- Check the connectors for the Roll Drive Motor (A7 P2), Drive Motor PWB (A7 P1) and Control PWB (A3 P308) for damage. Ensure that the connectors are seated correctly.
- Ensure that the customer is running media that meet the type specification.
- Ensure that the customer is running media that meet the size specification.
- With the copier in the Power Saver Mode, check that the media heater is warm. Refer to the **OF1 Media Heater RAP** as required.

Procedure

NOTE: *In order to prevent a media jam, ensure to remove the media from the Feed Drive and Pinch Rolls.*

Remove the Roll Media from the Feed Drive and Pinch Rolls. Cheat the Front Covers Interlocks. Enter the code [0716-1] in order to check the Roll Drive Motor and the Roll Feed Clutch.

The Roll Feed Drive Roll rotates.

Y N

The Roll Drive Motor is energized.

Y N

Go to FLAG 1 and check for an open circuit in the wires to the Drive Motor PWB.

If the check is good, press the Power Off (0) switch. Disconnect the drive motor connector (A7 P2). Set the Multimeter (600T1616) to ohms, DC, +, 200 ohms. Check the resistance of the motor, refer to Note 2.

If the check is good, disconnect the Drive Motor PWB connector (A7 P1) from the Drive Motor PWB. Set the Multimeter to V, DC, +, 200V. Measure the voltages at the Motor PWB connector (A7 P1). Refer to Note 1 for voltages at pins A7 P1-8, 7, 6 and 4.

If the check is good, replace the A7 Drive Motor PWB. If the check is no good, replace the A3 Control PWB.

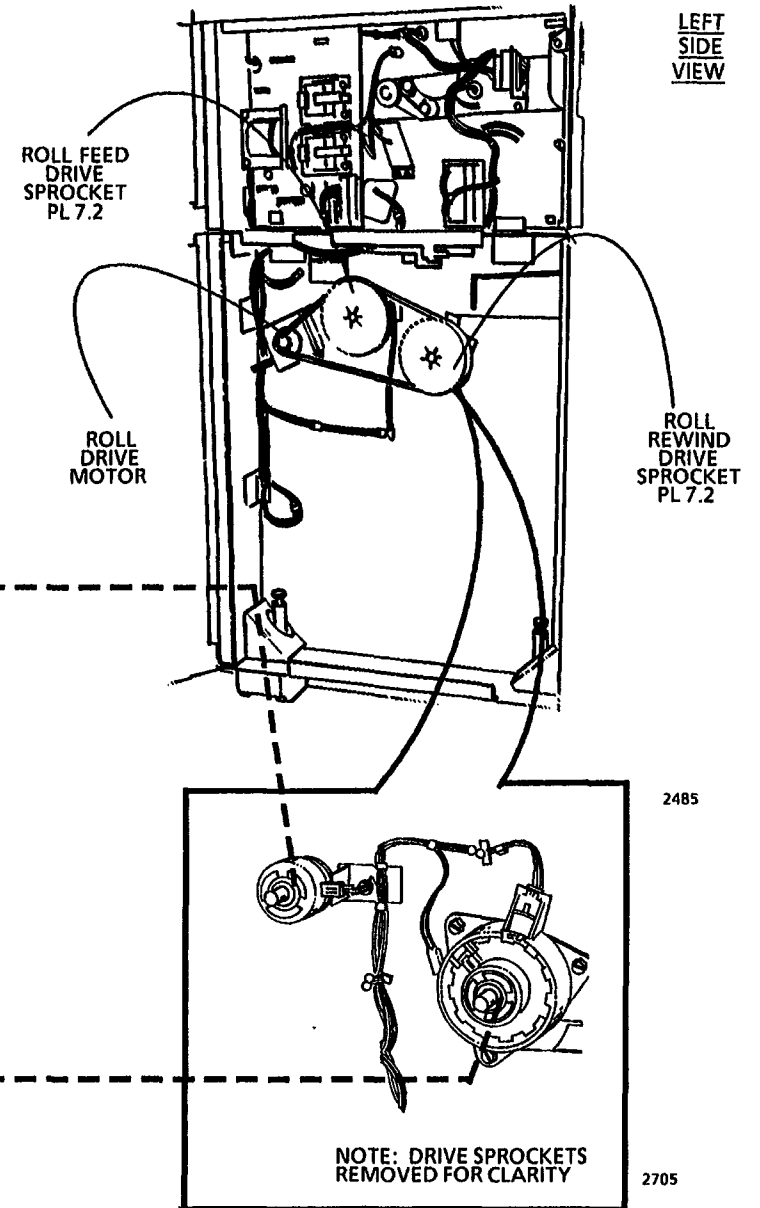
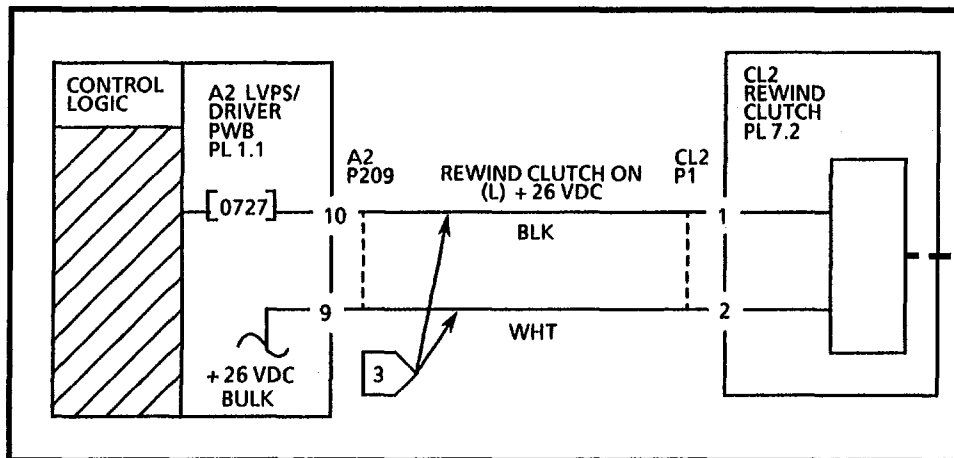
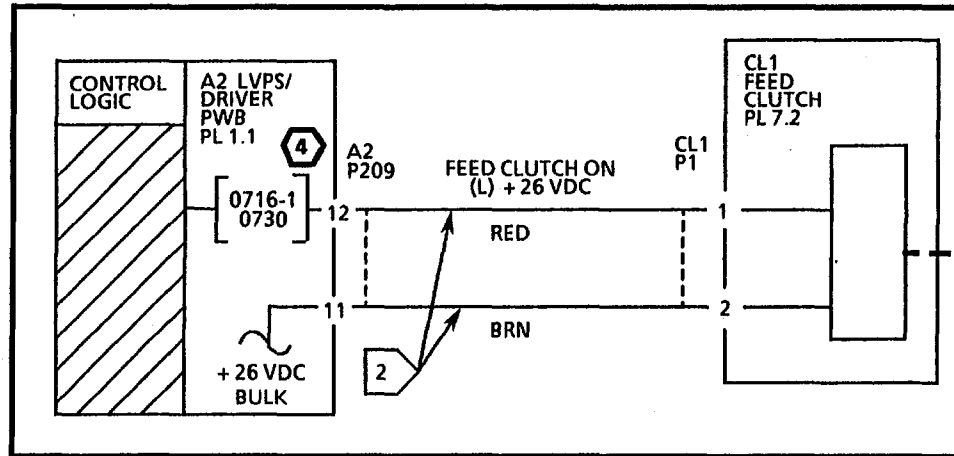
There is + 26 VDC at pin 12 of A2 P209 of the LVPS/ Driver PWB.

Y N

A B C

NOTES:

- ④ [0716-1] ENERGIZES THE ROLL DRIVE MOTOR AND THE ROLL FEED CLUTCH (CL1).
[0730] ENERGIZES THE ROLL FEED CLUTCH (CL1).



1

A7 P1 APPROXIMATE VOLTAGES:
(A7 P1 DISCONNECTED FROM A7 DRIVE
MOTOR PWB).

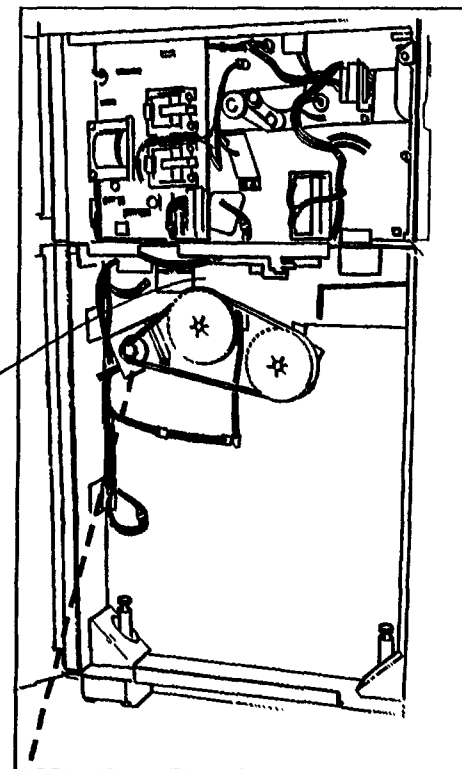
PIN	STANDBY VOLTAGE	[0703] VOLTAGE	[0704] VOLTAGE
P1-8	+5 VDC (OR) +0.1 VDC	+0.1 VDC	+4.5 VDC
P1-7	+5 VDC (OR) +0.1 VDC	+4.5 VDC	+4.5 VDC
P1-6	+5.0 VDC	+0.1 VDC	+0.1 VDC
P1-4	+2.4 VDC	+2.0 VDC	+2.0 VDC

CAUTION

TO PREVENT DAMAGE TO THE
COMPONENTS, PRESS THE POWER OFF
(O) SWITCH BEFORE DISCONNECTING THE
PLUGS.

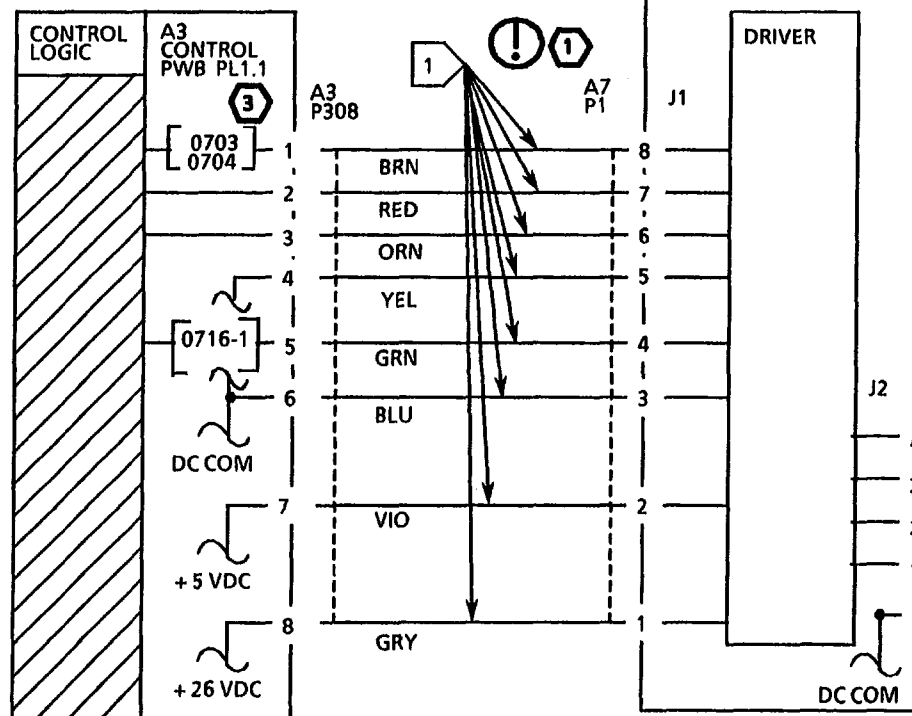
[0703] ENERGIZES THE ROLL DRIVE
MOTOR AND THE MOTOR ROTATES IN
THE COUNTERCLOCKWISE DIRECTION.
[0704] ENERGIZES THE ROLL DRIVE
MOTOR AND THE MOTOR ROTATES IN
THE CLOCKWISE DIRECTION.

LEFT
SIDE
VIEW



ROLL FEED
DRIVE
SPROCKET

0	24859	A
TAR	SM 2	M 0



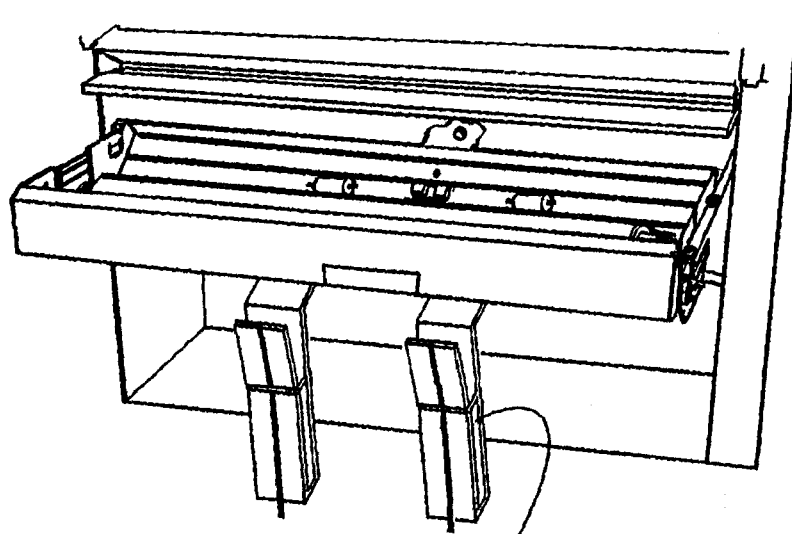
2

A7
P2

MOT1
ROLL DRIVE
MOTOR
PL7.2

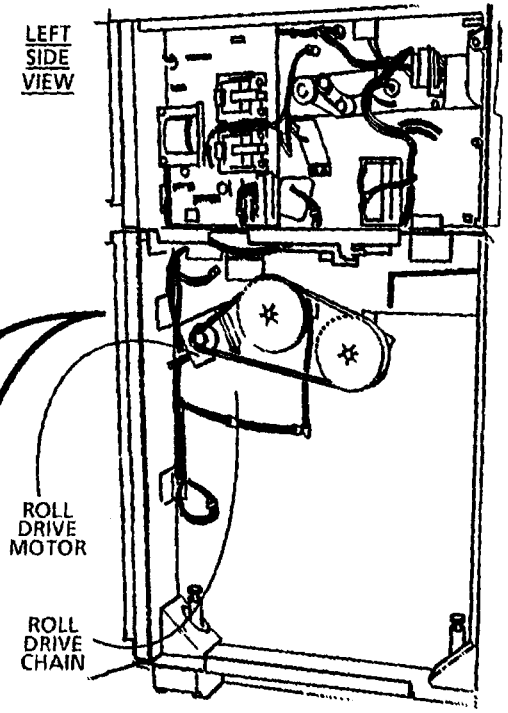
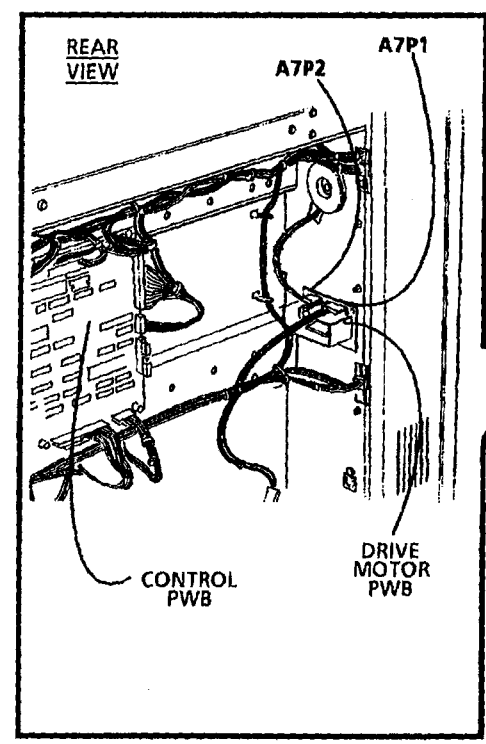
ROLL DRIVE

A7 P2 APPROXIMATE RESISTANCE:
(A7 P2 DISCONNECTED FROM A7
DRIVE MOTOR PWB)
PIN 1 TO PIN 2 = 3.5 OHMS
PIN 3 TO PIN 4 = 3.5 OHMS



FEED
PINCH
ROLLS

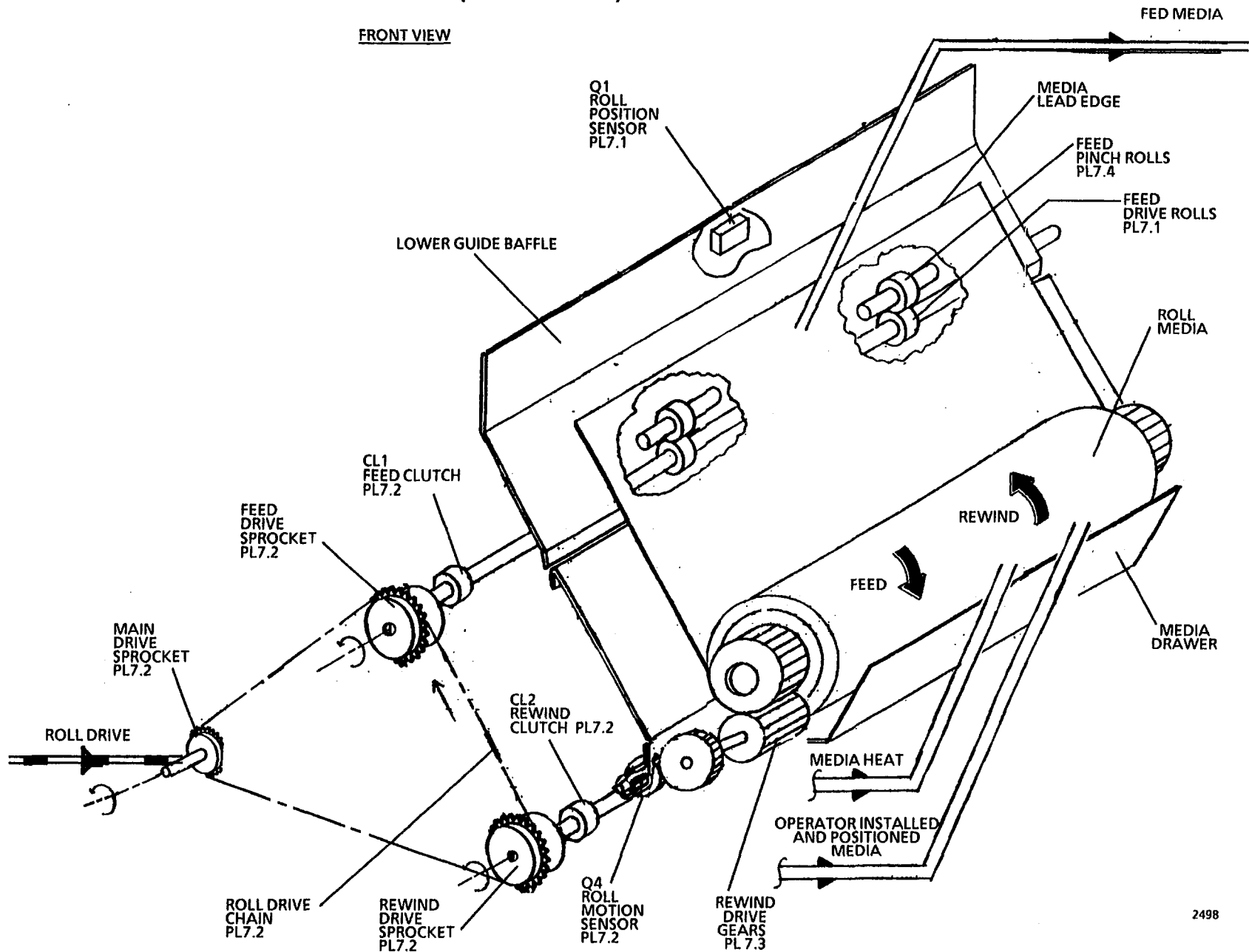
0	2339	A
TAR	SM 2	X 0



2489

ROLL FEED (MEDIA DRAWER)

FRONT VIEW



8.1 Media Transport RAP

03/17/93

This RAP is used for Media Transport problems that may or may not indicate a status code.

The problem may occur if there is a problem with the Media Transport mechanical components, the Transport Drive Motor or the motor control circuitry.

NOTE: The component locator drawings and the circuit diagram are on the following pages.

Initial Actions



WARNING

The Fuser Heat Roll may be hot. Be careful and do not touch the roll while performing this procedure.

- Lower the Cut Sheet Feed-in Shelf
- Check for obstructions in the media path. Remove any obstructions in the media path.
- Check that the media is in good condition and is loaded correctly.
- Ensure that the customer is running media that meets the type specification.
- Ensure that the customer is running media that meets the size specification.

- Raise the Fuser Fabric Guide in order to observe the Sheet Drive Roll. Check the Transport Drive Motor, drive belts and drive rolls for binding by rotating the Cut Sheet Drive Roll manually. The roll will rotate the drive belts, which in turn will rotate the drive rolls and motor.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Media Transport (A3 P305) for damage. Ensure that the connector and pins are seated correctly.
- With the copier in the Standby mode, check that media heater is warm. If the heater is not warm, refer to the **OF1 Media Heater RAP** located in Section 2.

Procedure

Lower the Cut Sheet Feed-in Shelf and cheat the Shelf Interlock switch in order to observe the Sheet Drive Belt. Enter the code[0917-1] in order to check the Transport Drive Motor.

The Cut Sheet Drive Belt rotates.

Y N

Observe the Registration Drive Belt in order to determine if the Transport Drive Motor is energized.

The Transport Drive Motor is energized.

Y N

Press Power Off (0). Go to FLAG 1 and check for an open circuit in the wires to the Drive Motor PWB.

If there is no open circuit, disconnect the drive motor connector (A24 P2). Set the Multimeter (600T1616) to ohms, DC, +, 200 ohms. Check the resistance of the motor, refer to Note 3.

The check is good.

Y N

Go to FLAG 2 and check for an open circuit or a short circuit to ground in the wires to the Transport Drive Motor.

If there is no open or short circuit, replace the Transport Drive Motor (MOT1).

A B C

A B C

Disconnect the Drive Motor PWB connector (A24 P1). Set the Multimeter to V, DC, +, 200V. Connect the (-) lead to DC GND. Measure the voltages at the Motor PWB connector (A24 P1). Refer to Note 1 for voltages at pins A24 P1-8, 7, 6 and 4.

If the check is good, replace the A24 Drive Motor PWB. If the check is no good, replace the A3 Control PWB.

Check the Sheet Drive Roll, Drive Belt and pulleys for contamination or damage. Check the Registration Drive Roll for contamination or damage. Ensure that the Registration Drive Belt is tensioned correctly.

CAUTION

In order to prevent damage to the copier, the Fuser Heat Roll must be at the run temperature before the Main Drive Motor is switched on.

NOTE: 1. The code [1004] may be timed out and switched off after the Heat Roll reaches the run temperature. The Start button must be pressed, in order to reenter the code [1004].

2. If the message, "FUSER CAN NOT BE TURNED ON, CONDITION XX", is displayed when the code [1004] is entered, refer to the Special Tests [1004] located in Section 6.

D

D

Enter the code [1004] in order to energize the Fuser Heat Rod and increase the Fuser Heat Roll temperature to the run temperature. The message, "1004 FUSER TEMP TEST TEMP = XXX CELSIUS, XXX FAHRENHEIT", is displayed when the Heat Roll is at the run temperature. The Main Drive Motor is switched on, when the Fuser Roll is at the run temperature.

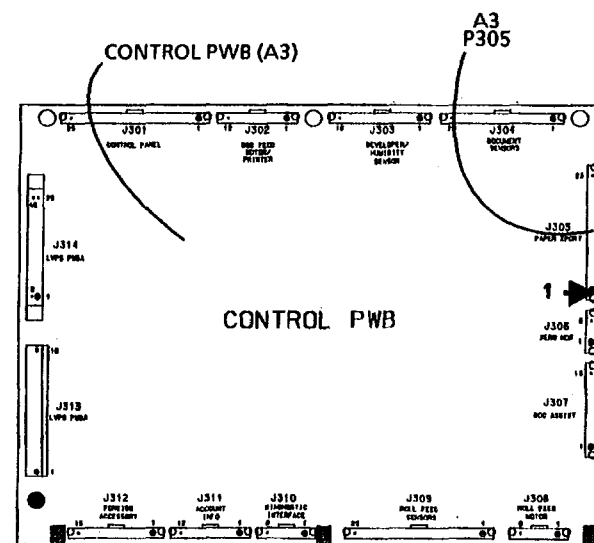
With the Fuser Roll at the run temperature, the Heat Roll rotates.

Y N

Check the Fuser Drive Belt and Drive Pulleys for damage. Ensure that the Belt is positioned on the Pulleys correctly.

Check the following items:

- Fuser Heat Roll and Fabric Guide for damage.
- Turnaround Baffle for obstruction, damage or misalignment.
- Transfer/ Detack Corotron for correct position and operation.
- Latching Cover for correct operation.



1590

NOTES:

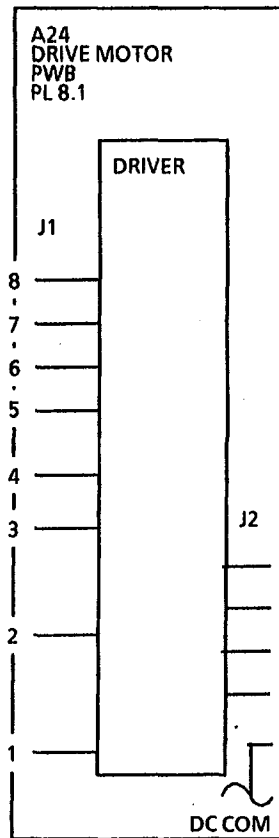
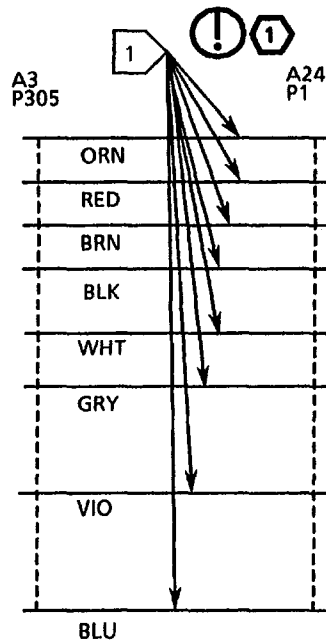
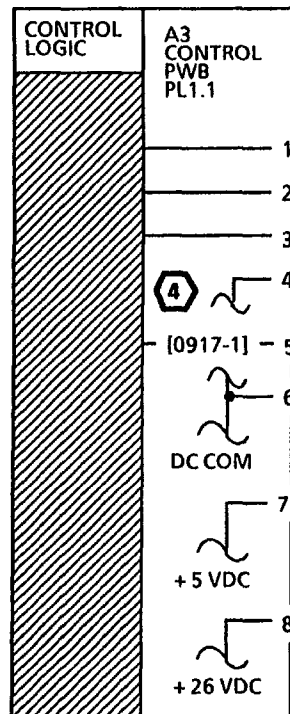
- 1 A24 P1 APPROXIMATE VOLTAGES:
(A24 P1 DISCONNECTED FROM A24 DRIVE MOTOR PWB)

PIN	STANDBY VOLTAGE	[0917-1] VOLTAGE
P1-8	+ 4.0 VDC	+ 0.1 VDC
P1-7	+ 0 VDC	+ 4.3 VDC
P1-6	+ 4.0 VDC	+ 0.1 VDC
P1-4	+ 4.0 VDC	+ 2.1 VDC



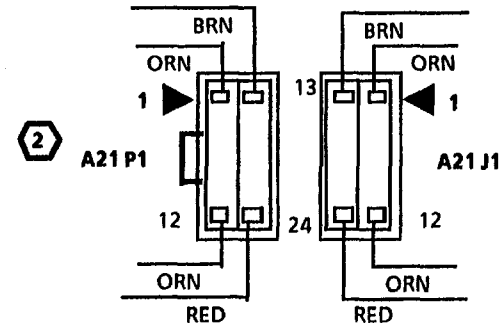
CAUTION
TO PREVENT DAMAGE TO THE COMPONENTS, PRESS THE POWER OFF (O) SWITCH BEFORE DISCONNECTING THE PLUGS.

4



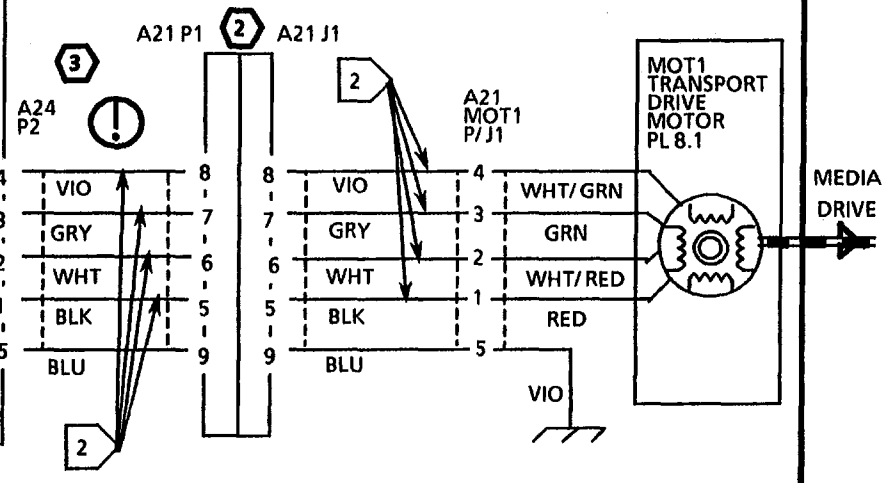
NOTES:

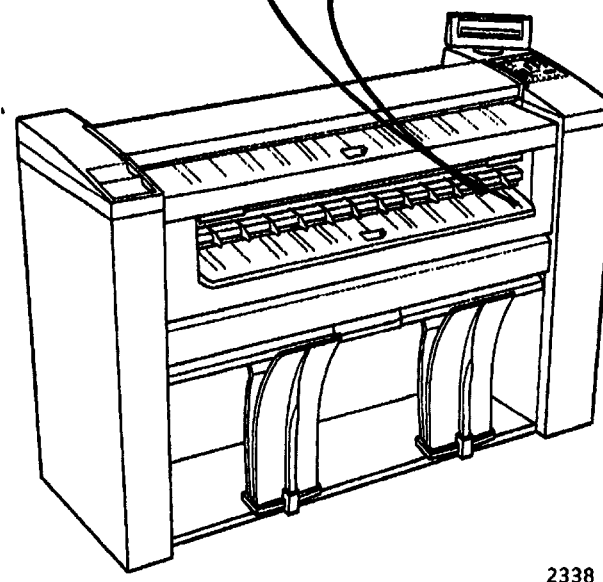
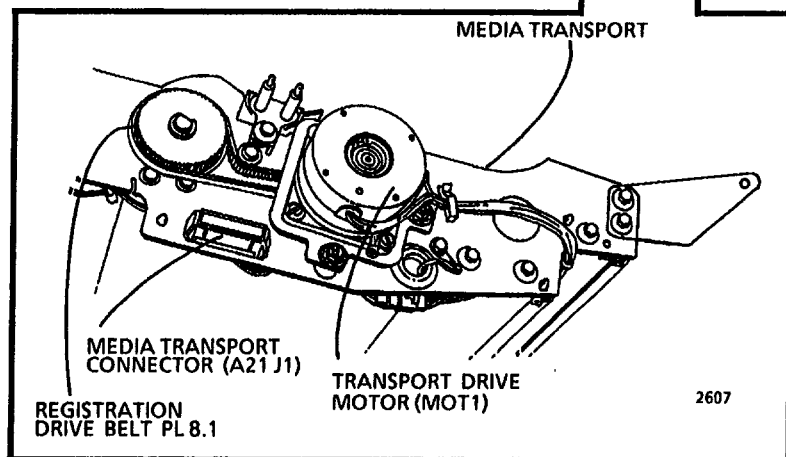
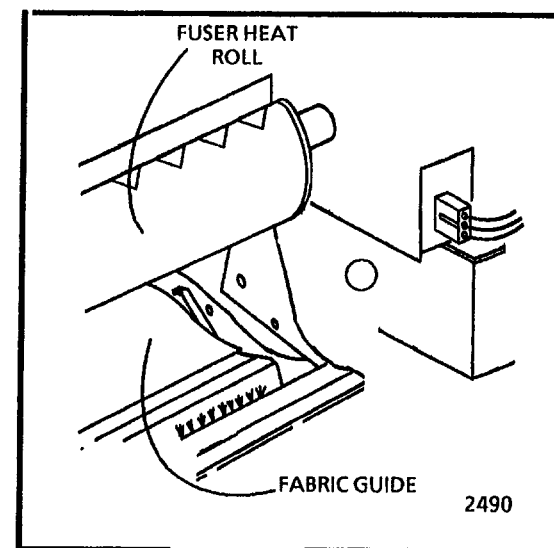
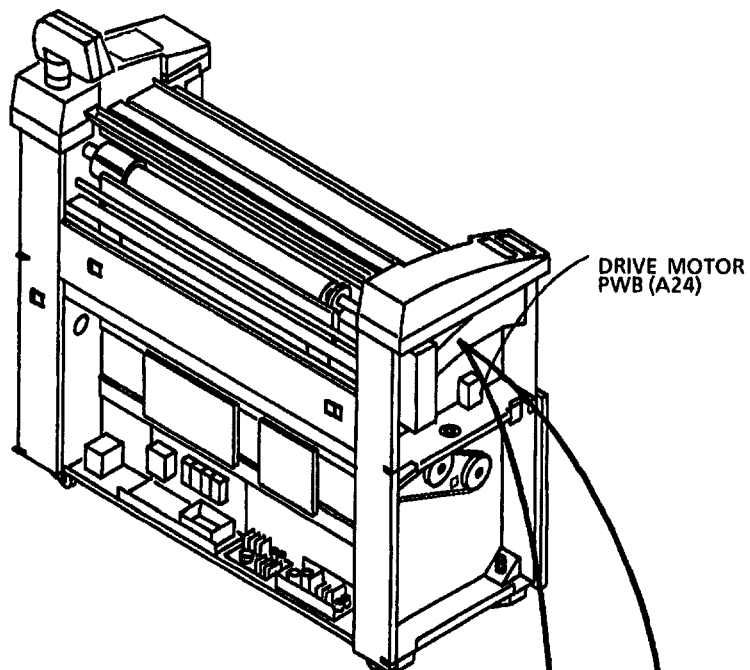
- 2 CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



- 3 A24 P2 APPROXIMATE RESISTANCE:
(A24 P2 DISCONNECTED FROM A24 DRIVE MOTOR PWB)
PIN 1 TO PIN 2 = 3.5 OHMS
PIN 3 TO PIN 4 = 3.5 OHMS

- 4 ENTER THE CODE [0917-1] TO ENERGIZE THE TRANSPORT DRIVE MOTOR. THE MOTOR ROTATES IN THE MEDIA FEED DIRECTION.

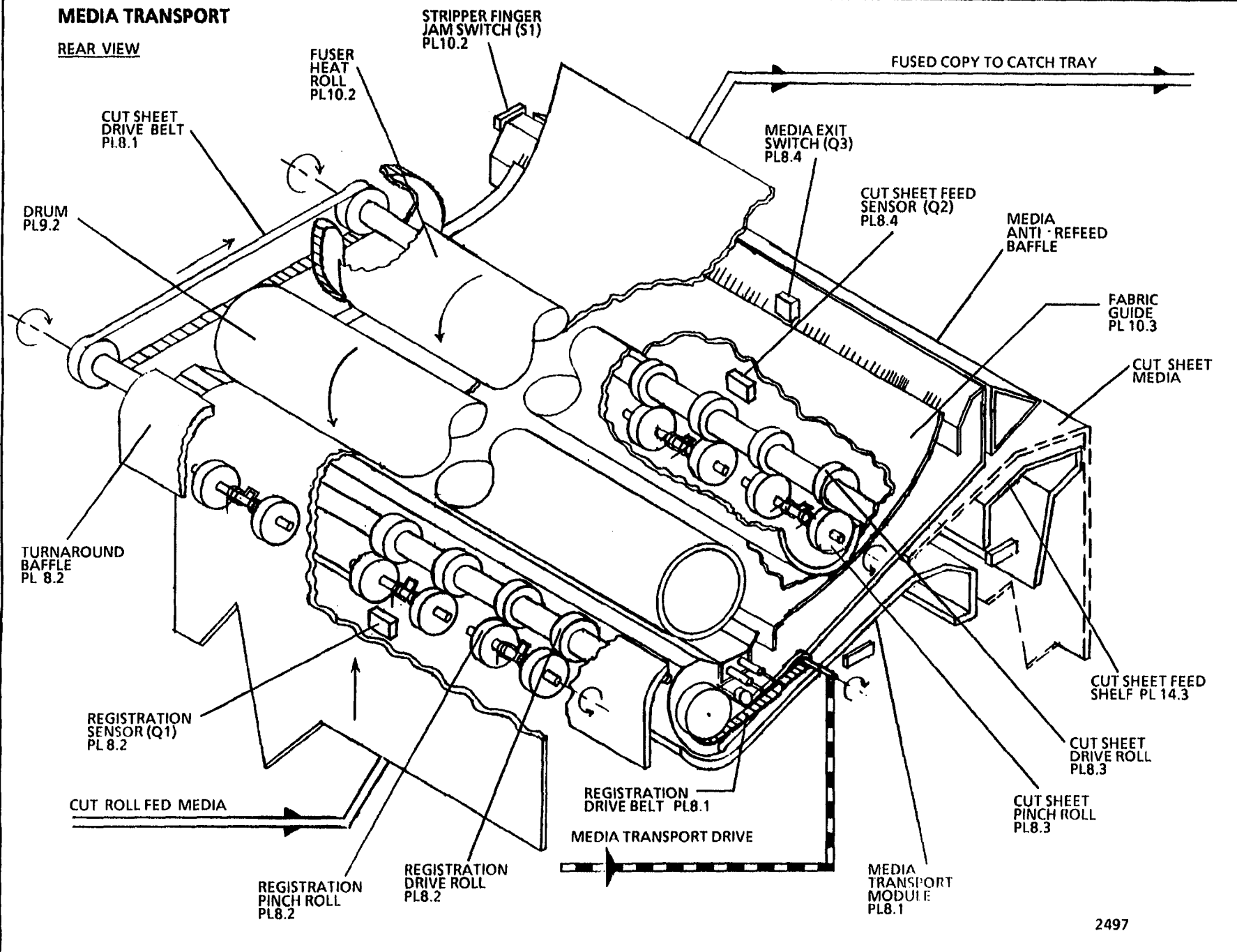




Notes:

MEDIA TRANSPORT

REAR VIEW



2497

OF1 Media Heater RAP

This RAP is used when there is a fault in the Media Heater or the AC circuits that supply ACH to the heater.

NOTE: The circuit diagram and the component locator drawings are on the following pages.

Initial Actions



WARNING
Dangerous Voltage.

- Ensure that Connector A2P213 located on the LVPS/ Driver PWB (A2) and the Media Heater Connector HR1P/ J1 are correctly installed and fully seated.
- Ensure that Fuse F1 located on the LVPS/ Driver PWB (A2) has continuity. If not, replace the Fuse F1.

Procedure

Switch on the copier. Wait until the copier has initialized. Press the **Stop** key twice. The copier enters the **Rest Mode**.

Open the Left Side door. Set the DMM to read ACH. Connect the (+) lead to HR1P1 - pin 1. Connect the (-) lead to HR1P1- pin 2.

ACH is present.

Y N

A B

A B

Connect the (+) probe to A2J213 - pin 1 located on the LVPS/ Driver PWB (A2).
Connect the (-) probe to A2J213 - pin 3.

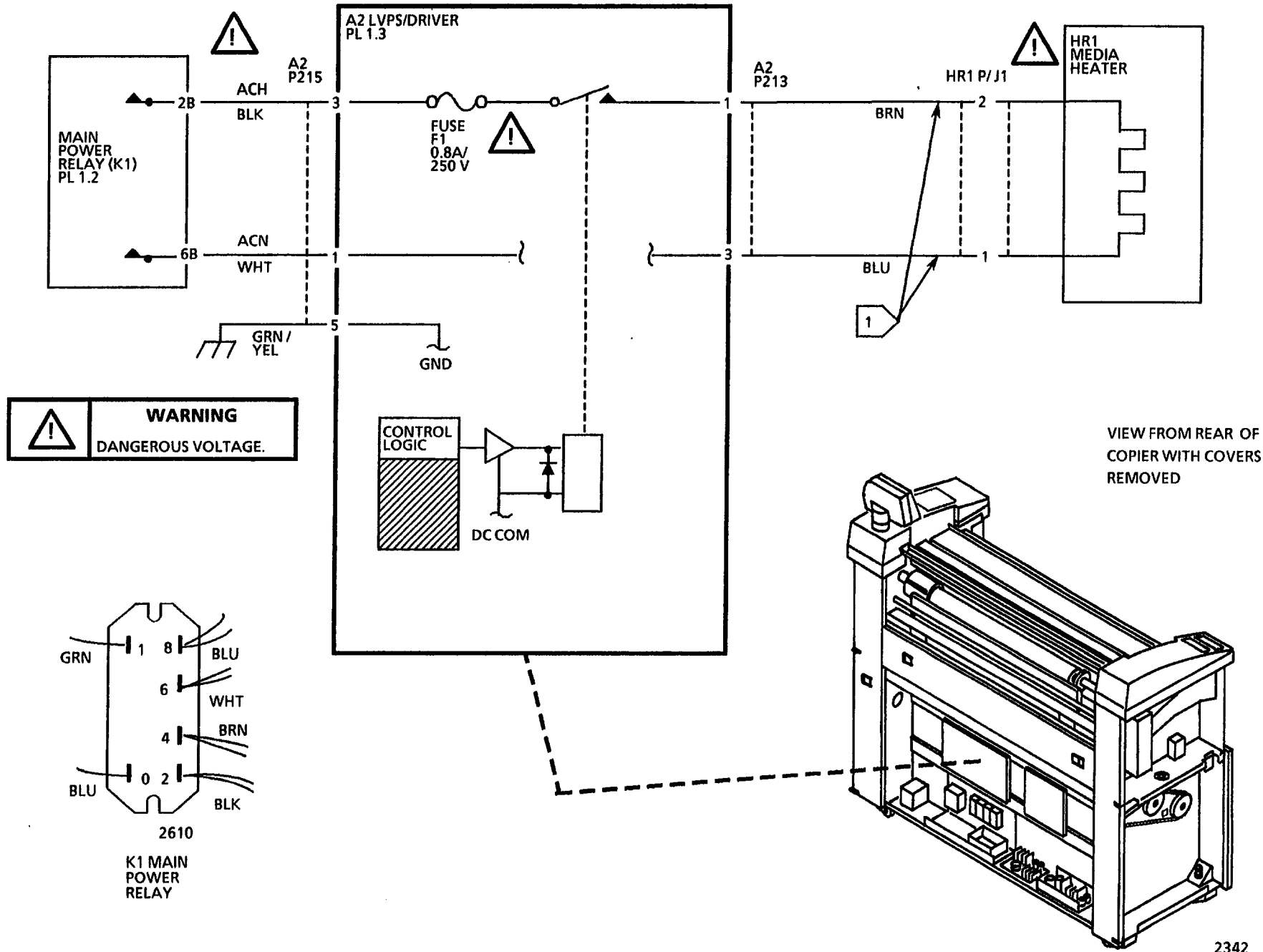
ACH is present

Y N

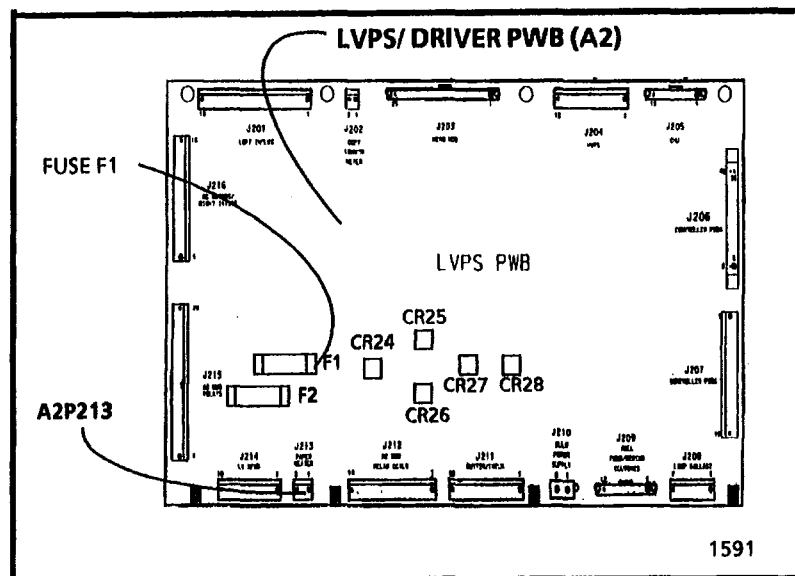
Replace the LVPS/ Driver PWB (A2).

Go to FLAG 1 and repair the open circuit in the wires.

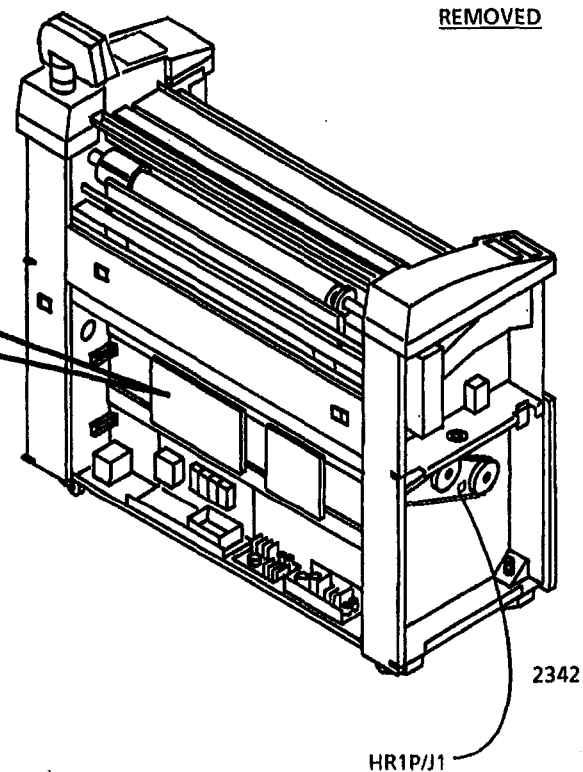
Replace the Media Heater HR1.



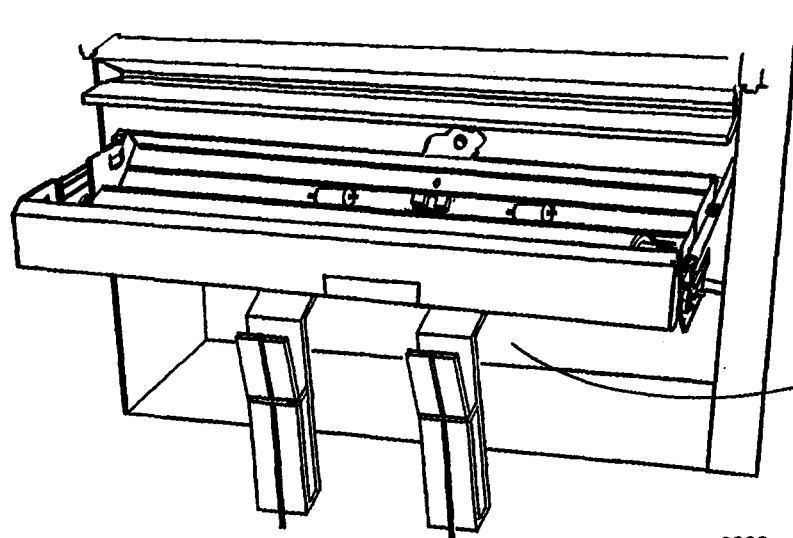
Notes:



VIEW FROM REAR OF
COPIER WITH COVERS
REMOVED



2342



THE MEDIA HEATER IS LOCATED
UNDER THE THE MEDIA SUPPLY
DRAWER

2339

OF 2 Document Does Not Scan RAP

This RAP is used for Document Scan problems that are not indicated by a status code.

The problem may occur if there is a problem with the document sensors, mechanical components, the drive motor, the motor control circuitry or poor quality documents.

NOTE: The component locator drawings and the circuit diagram are on the next four pages.

Initial Actions

- Ensure that the document is in good condition.
- Check that the Upper Document Handler is positioned correctly.
- Check the document path for obstructions and the top and bottom platens for damage and for correct installation.
- Ensure that the connector for each of the following Document Sensors are not damaged and are correctly seated:
 - Front Document Sensor (Q22 P1)
 - Rear Document Sensor (Q26 P1)
- Ensure that the Control PWB connector (A3 P304) is not damaged and is seated correctly.

Procedure

Remove the Upper Document Handler.

Enter the code [0502] in order to check the Front Document Sensor.

Block the Front Document Sensor.

When the sensor is blocked, the Control Panel display changes from (01) to (00)

Y N

Go to FLAG 2 and check the wiring between the Front Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open or short circuit, replace the Front Document Sensor (Q22).

If the problem persists, replace the Control PWB (A3).

Enter the code [0503] in order to check the Rear Document Sensor.

Block the Rear Document Sensor.

When the sensor is blocked, the Control Panel display changes from (01) to (00)

Y N

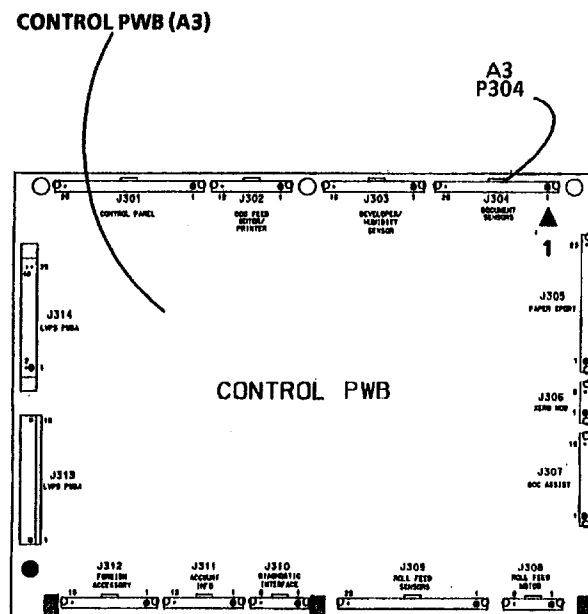
Go to FLAG 3 and check the wiring between the Rear Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open or short circuit, replace the Rear Document Sensor (Q26).

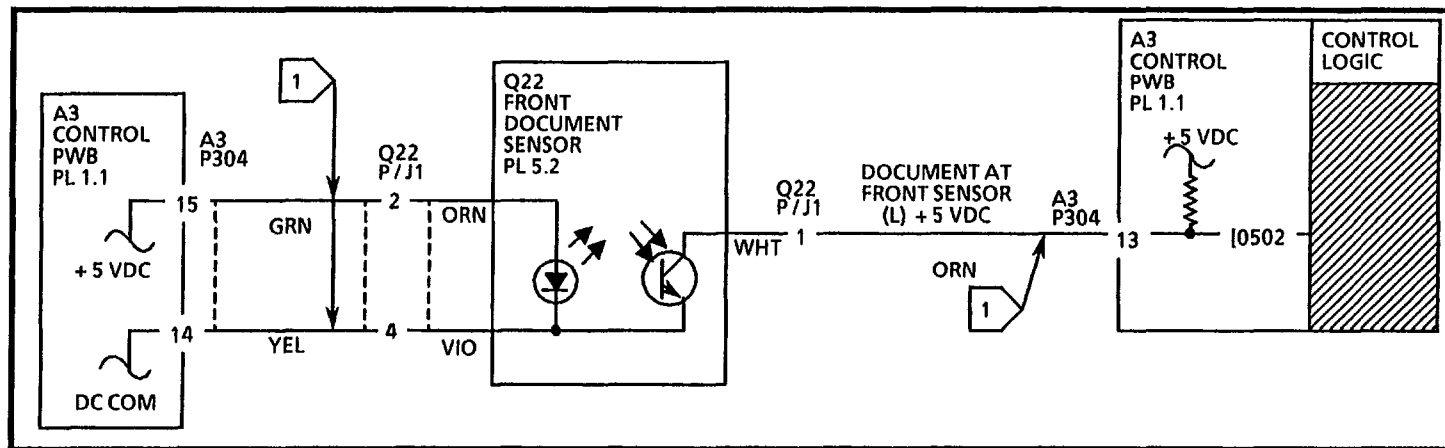
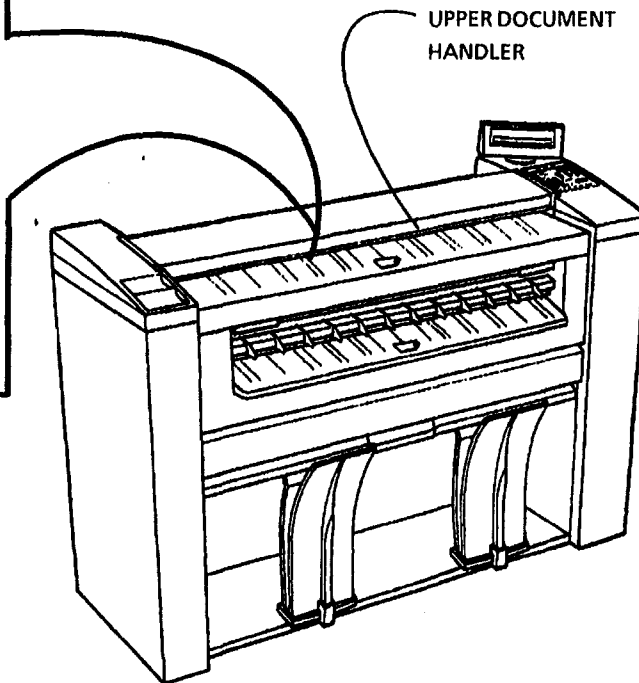
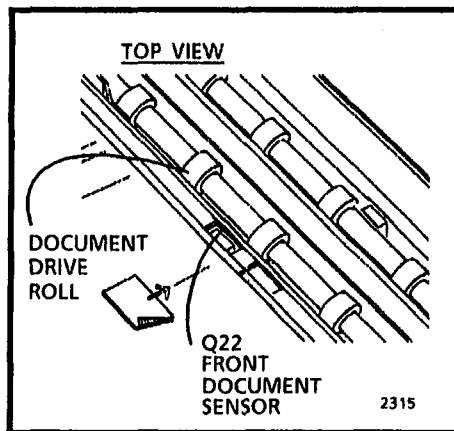
If the problem persists, replace the Control PWB (A3).

A

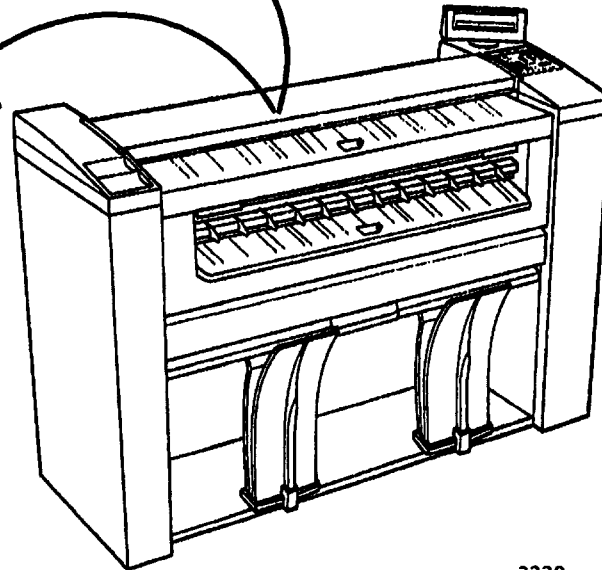
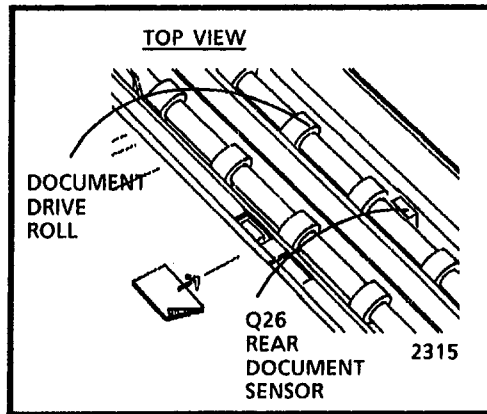
Go to the 5.1 Document Handler RAP.



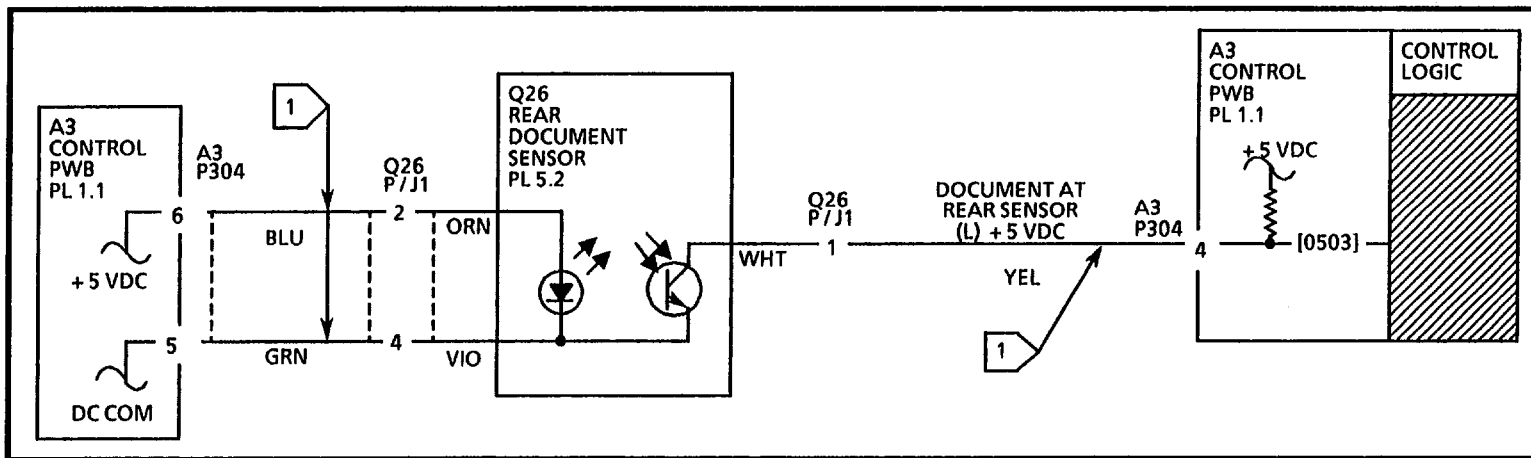
1590



Notes:



2338



OF 3 Media Does Not Feed RAP

This RAP is used for Media Feed problems that are not indicated by a status code. The Control Panel may display the message, "PLEASE OPEN THE CUT SHEET FEED-IN SHELF". With the copier in the Cut Sheet operating mode, the sheet media will not feed into the copier and the copier will not run.

The problem may occur if there is a problem with the media sensors, mechanical components, the drive motors, the motor control circuitry or poor quality documents.

NOTE: The component locator drawings and the circuit diagram are on the next three pages.

Initial Actions

Follow these actions for Roll Media feed problems:

- Ensure that the roll media is in good condition and is loaded correctly.
- Pull out the Media Supply Drawer. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check the roll media feed path for obstructions.

- Check that the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Check the Rewind Gears, Roll Arbors, and Arbor Support Rolls for binding or damage.
- Check the connectors for the Roll Drive Motor (A7 P2), Drive Motor PWB (A7 P1) and Control PWB (A3 P308) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the customer is running media that meets the type and size specification.

Follow these actions for Cut Sheet feed problems:

- Check that the media is in good condition and is loaded correctly.
- Lower the Cut Sheet Feed-in Shelf. Check for obstructions in the media path. Remove any obstructions in the media path.

- Raise the Fuser Fabric Guide in order to observe the Sheet Drive Roll. Check the Transport Drive Motor, drive belts and drive rolls for binding by rotating the Cut Sheet Drive Roll manually. The roll will rotate the drive belts, which in turn will rotate the drive rolls and motor.
- Check the Media Transport connector (A21 P/ J1), Drive Motor PWB (A23 P1, P2) and Control PWB (A3 P305) for damage. Ensure that the connectors and pins are seated correctly.
- Check the actuator of the Cut Sheet Feed-in Sensor for binding or damage.
- Ensure that the customer is running media that meets the type and size specification.

Procedure

Enter the code [0801] in order to check the Cut Sheet Feed-in Sensor. The Control Panel display indicates an (01) when the sensor is actuated.

Insert a sheet of media into the Media Transport in order to actuate the Cut Sheet Feed-in Sensor.

The display changes from (00) to (01) when the sensor is actuated.

Y N

A B

A B

Go to FLAG 1 and check for an open circuit or a short circuit to ground in the wires to the Cut Sheet Feed-in Sensor.

If there is no open or short circuit, replace the Cut Sheet Feed-in Sensor (Q2).

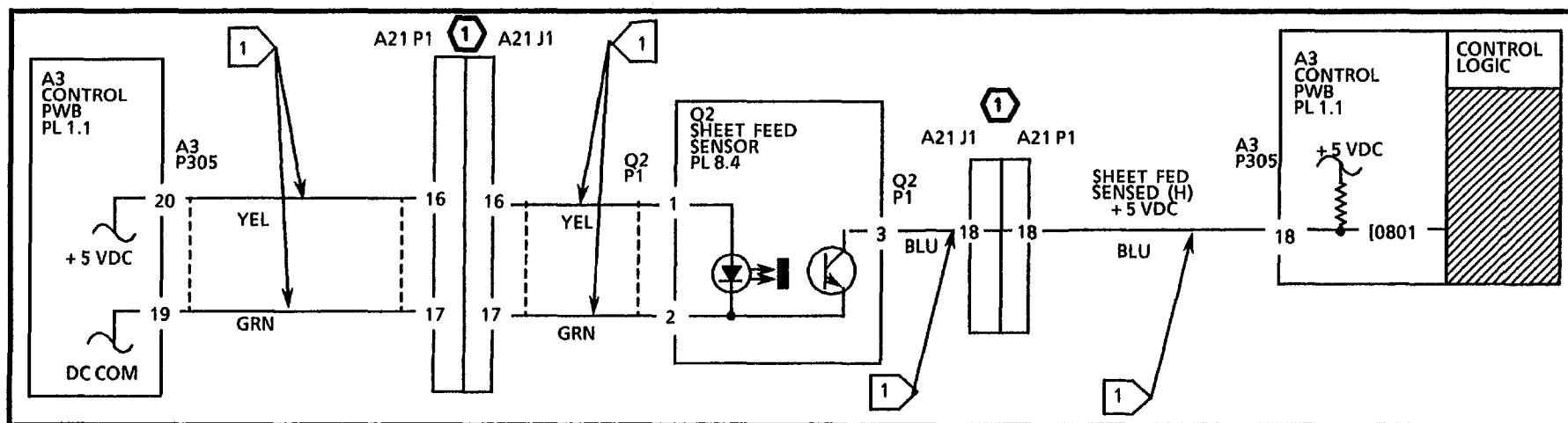
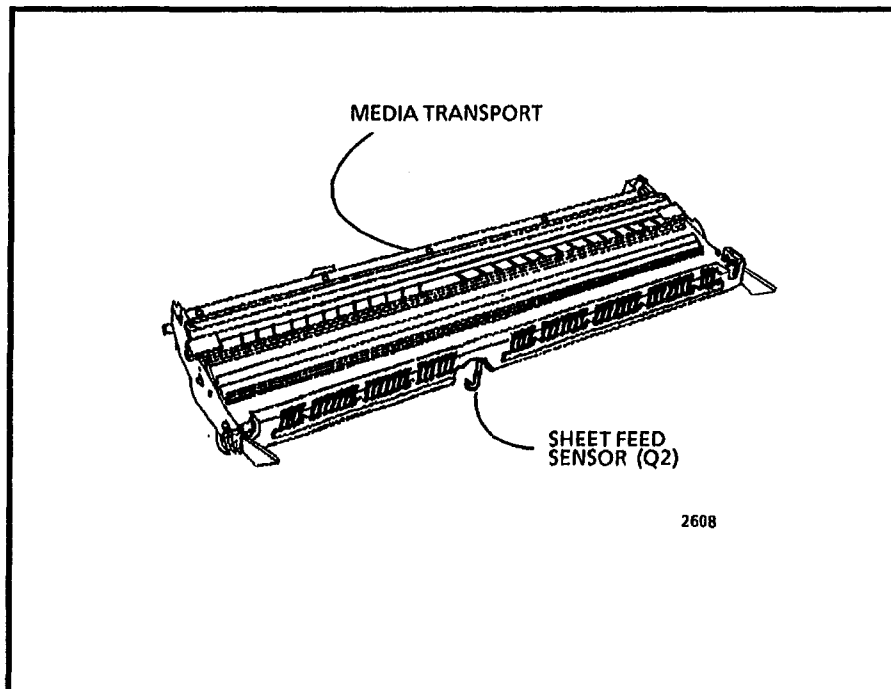
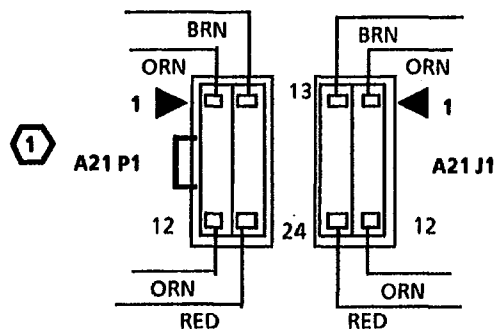
If the problem persists, replace the Control PWB (A3).

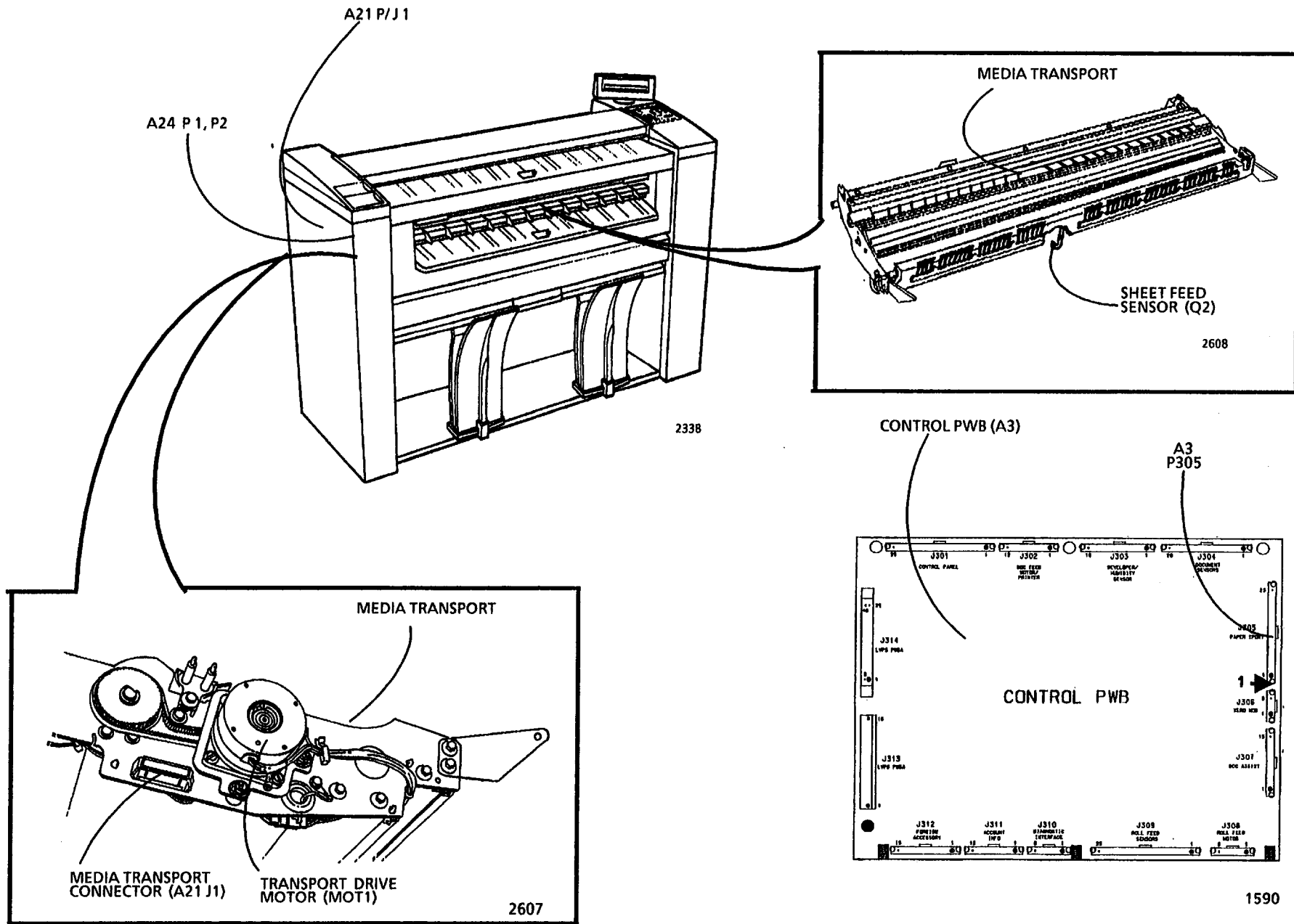
If the copier exhibits Roll Media feed problems go to the Roll Feed RAP

If the copier exhibits Cut Sheet Media feed problems go to the 8.1 Media Transport RAP.

NOTES:

- ① CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.





Notes:

OF 4 Component Failure with No Status Code RAP

This RAP is used for problems that are not indicated by a status code.

The problem may occur if there is a problem with the copier sensors, control logic, mechanical components, the drive motors, the motor control circuitry or poor quality documents.

Initial Actions

- If the Document will not scan, go to the **OF2 Document Does Not Scan RAP**.
- If the Media will not feed, go to the **OF3 Media Does Not Feed RAP**.
- If the Control Panel displays the message, "REFEED ROLL, go to the **Refeed Roll RAP**,
- If the Control Panel displays the message, "NVM Fault Call for Assistance ", go to the **LL.60 NVM Fault RAP**.
- If the Control Panel displays only the number 2, 3, 4, 5, 6 or 7, go to the **2.2 POST 2, 3, 4, 5, 6 and 7 RAP**.

Procedure

Refer to Table 1 and locate the component that is not functioning in the **COMPONENT** column. Perform the required action listed in the corresponding **GO TO** column.

TABLE 1

COMPONENT	GO TO
Main Drive Motor (MOT21)	4.1 Main Drive Motor RAP
Cleaner Blade Positioning Motor (MOT3)	OF 5 Cleaner Blade Positioning Motor RAP
Media Transport Drive Motor (MOT1)	8.1 Media Transport RAP
Roll Drive Motor (MOT1)	7.1 Roll Feed RAP
Document Drive Motor (MOT23)	5.1 Document Handler RAP
Cooling Fans	1.3 Cooling Fans RAP
Toner Cartridge Drive Motor (M4)	J2.02 Toner Cartridge Home Position RAP
Cutter Drive Motor (MOT1)	LL.30 Cutter Fault RAP

OF 5 Cleaner Blade Positioning Motor RAP

This RAP is used to locate problems associated with the Cleaner Blade Positioning Motor. You were probably directed here because of a copy quality problem associated with poor cleaning.

There may be a problem with the motor or associated wiring. The problem may also occur if the LVPS(A2) or Control PWB (A3) is bad.

Initial Actions

- Ensure that connectors A23 P/J2, A2 P203, A2 P1, A1 P2, are not damaged and are connected correctly.

Procedure

Ensure that the Interlock switches are closed. Enter the code [0913] in order to switch on the Cleaner Blade Positioning Motor (MOT3). Press the Start button and listen for the motor to run.

The motor energizes.

Y N

A B

A

B

There is + 26 VDC at pin 20 of A2 P203 of the LVPS/Driver PWB (A2).

Y N

There is + 26 VDC at pin 19 of A2 P203 of the LVPS/Driver PWB (A2).

Y N

Replace the LVPS/Driver PWB (A2).

Go to FLAG 1 and check for an open circuit in the wires to the Cleaner Blade Positioning Motor. If there is no open, replace the Cleaner Blade Positioning Assembly. If the problem persists replace the Thermistor PWB.

Enter the code [0913].

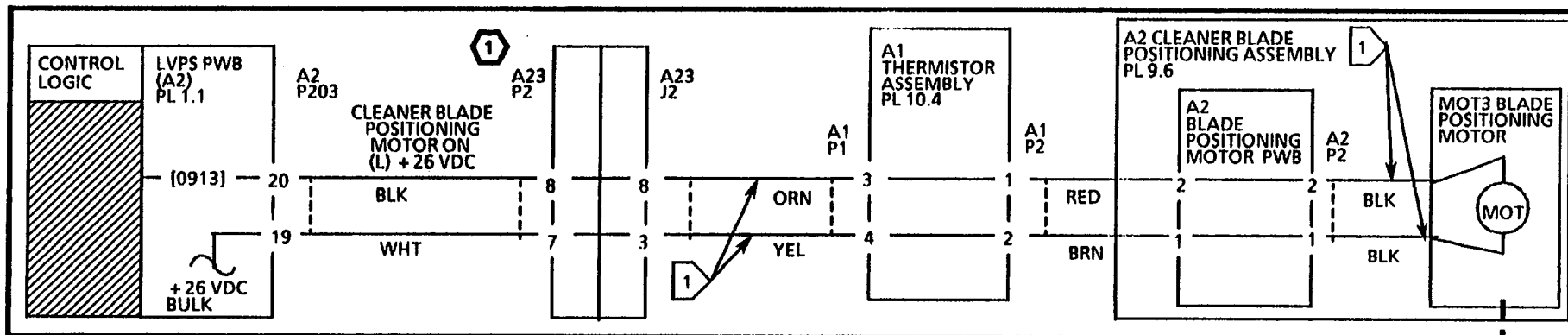
The voltage at A2 P203 pin 20 goes from + 26 VDC to approximately + 2 VDC.

Y N

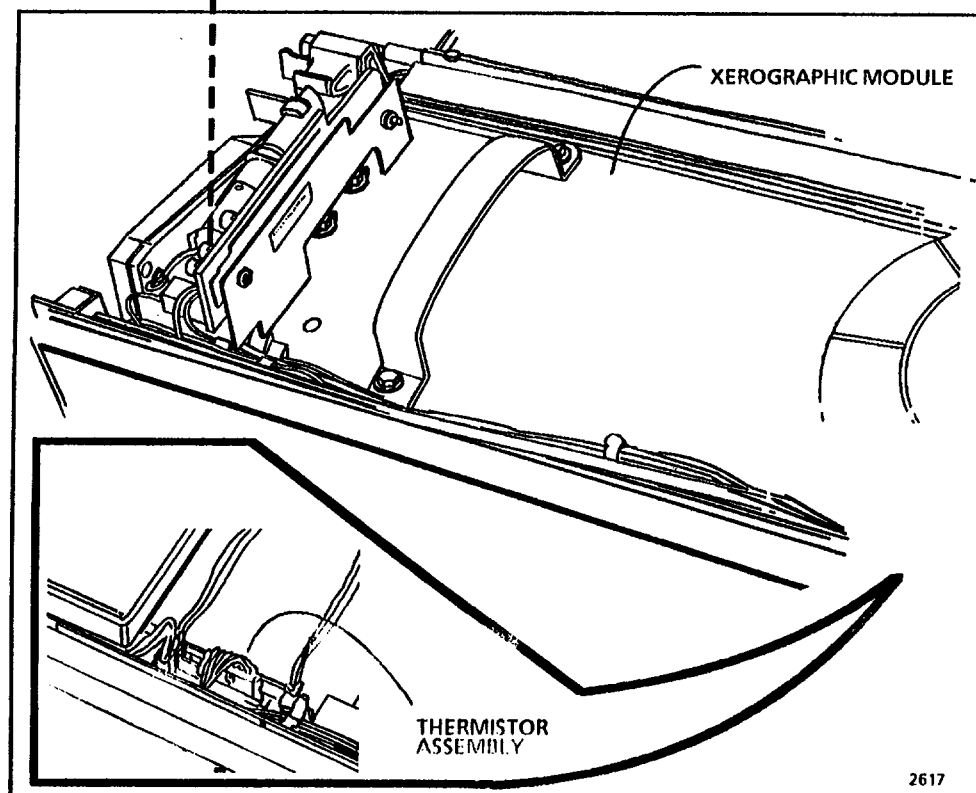
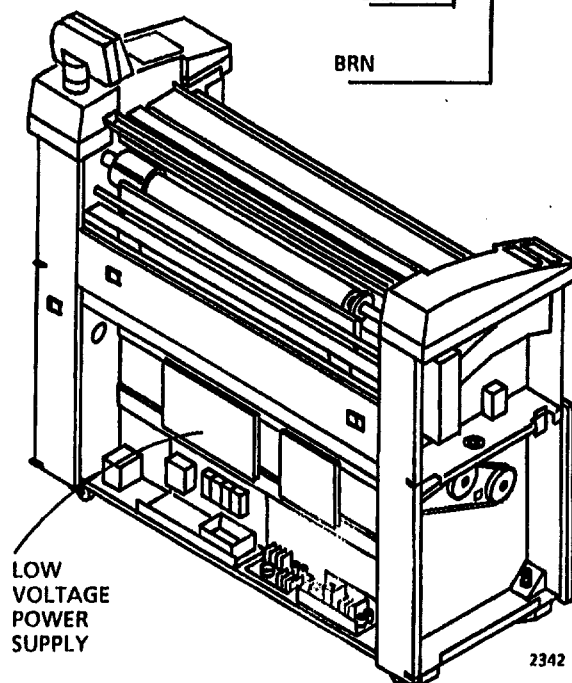
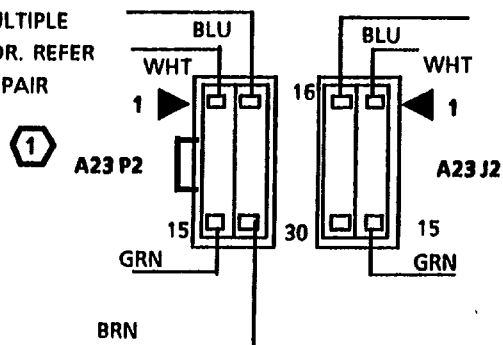
Replace the LVPS/Driver PWB (A2), if the problem persists, replace the Control PWB (A3).

If the problem persists replace the Cleaner Blade Positioning Assembly.

Return to the CQ RAP that directed you here.



1 CONNECTOR IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



3. Image Quality Repair Analysis Procedures

Section Contents

Copy Quality RAPS

How to Use the Image Defect Samples	3-2	CQ 13	Offsetting	3-42
Image Quality Definitions	3-2	CQ 14	Registration	3-45
Image Quality Analysis RAP	3-5	CQ 15	Residual Image	3-46
Image Quality Specifications	3-6	CQ 16	Resolution	3-49
Damaged Media RAP	3-12	CQ 17	Skewed Image	3-50
Media Handling Problems	3-14	CQ 18	Skips	3-52
CQ 1 Uniform Background	3-17	CQ 19	Smears	3-54
CQ 2 Background Banding/ Streaks	3-20	CQ 20	Spots	3-56
CQ 3 Black Copy	3-24	CQ 21	Streaks	3-57
CQ 4 Blank Copy	3-25	CQ 22	Marginal Fused Copy	3-62
CQ 5 Border Line	3-27	CQ 23	Wrinkle Deletions	3-64
CQ 6 Cold Flow	3-28	CQ 24	Trail Edge Deletion	3-65
CQ 7 Developer Bead Carryover ..	3-30	CQ 25	Developer Bias RAP	3-66
CQ 8 Edge Banding	3-31	CQ 26	High Voltage Power Supply RAP	3-70
CQ 9 Length Distortion	3-32	CQ 27	Exposure Control RAP	3-72
CQ 10 Dry ink Disturbance	3-34	CQ 28	Offsetting and Residual Image Isolation RAP	3-75
CQ 11 The Light Copy (Overall)	3-36	CQ 30	Erase Lamp	3-76
CQ 11 The Light Copy (Partial)	3-38			
CQ 12 Localized Deletions	3-39			

How to Use the Image Defect Samples

Copy quality refers to the entire copy. The total copy could have certain defects, such as damaged media or image quality defects on the copy.

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

The causes for some image quality problems can be isolated by using the Image on Drum (Panic Stop) Procedure (General Procedures in Section 6).

The image quality defect samples on the following pages may be used as references to identify the defective image quality characteristics. The majority of the samples are cropped areas of the defective test pattern. A reduced area (25 percent of the original size) gives an idea of how the defect may appear on the copy while the actual size sample shows the detail that the defect may have.

The PROBABLE CAUSE column is most often arranged in the sequence of the most probable cause to least probable cause or the greatest ease to the greatest difficulty of the check. Opposite each PROBABLE CAUSE is the CORRECTIVE ACTION for that cause. Read the entire probable cause list before taking any corrective action.

Compare the copy defect to the examples that are listed on the following pages. After you have determined the defect sample that best describes the image defect, perform the following:

- a. Start with the first PROBABLE CAUSE and continue through the list until you come to the cause that best applies to the copy defect.
- b. Perform the CORRECTIVE ACTION.
- c. 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.

Image Quality Definitions

The following terms are some of those most commonly used that describe copy quality problems.

Background

A degree of darkness or dirtiness that is overall or localized in the areas of the copy where no image is present.

Black Copy

A copy that is entirely black except for the lead edge and trail edge and possibly the left and right borders.

Blank Copy

A copy entirely without an image.

Cold Flow

A distortion in the selenium alloy coating on the photoreceptor drum. This defect can appear anywhere on the copy and will be perpendicular to the media feed.

(Continued)

Image Quality Definitions

(Continued)

Crystallization

This is a change in the surface characteristics of the drum, usually caused by exposure to heat or chemicals. When this occurs, the drum cannot accept a full charge, and the result is deletions.

Deletions

An area of the copy where information has been lost.

Darkness

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

Developer Bead Carryover

A condition where the developer beads stick to the drum during the development process and are carried out of the developer housing. This is generally caused by a very low dry ink concentration or an incorrect Xerographic Set-up (Electrostatic Series). This may appear to be one or more small deletions in the copy image that are randomly distributed over the entire copy. In some cases, a single developer bead can be seen or felt in the middle of the deletion.

Fuser Fix

A measure of how the dry ink particles adhere to the media as a result of the fusing process.

Image Distortion or Skew

The image is skewed with respect to the media. The image from side-to-side or lead edge to trail edge is not parallel to the edges of the copy. There is also distortion of the image from one side of the copy to the other. These defects are a result of a misadjustment of the media or document transportation system components.

Lichtenberg Spots

Large circular spots that appear randomly throughout the image on the copy in the process direction (from lead edge to trail edge). This is caused by a disturbance of the transferred image before the fusing process.

The Light Copy

A copy in which the Image Darkness is lighter than the specified line density for the copier.

Media Damage

Any physical distortion to the media that is used in making a copy. This distortion can take the following forms: tears, folds, wrinkles, frayed edges, or others.

Misregistration

A condition in which the distance from the lead edge of the image to the lead edge of the media is not within specification.

Offsetting

The transfer of dry ink from the copy to the fuser heat roll. Sometimes the dry ink is transferred back to the copy or to consecutive copies.

Resolution

The uniformity or clarity of fine line detail.

Residual Image

An image that is repeated on to the same copy or to consecutive copies. The image can be either a ghosting of the original image or a dry ink image. The repeated image is usually spaced 10.4 inches (264 mm) from the original image. This problem can be caused by poor cleaning of the drum, a drum that is fatigued, or offsetting by the fuser.

Skips

Skips are a light image defect or deletion that is caused by a momentary difference in speed between the document and the drum surface.

Smear

Smear is a compressed image defect caused by a momentary difference in speed between the photoreceptor drum surface and the copy media.

(Continued)

Image Quality Definitions

(Continued)

Line Darkness

The darkness and uniformity for a line.

Spots

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

Streak

Any copy defect that occurs in the process direction (from lead edge to trail edge).

Unfused Copy

A copy in which the image can be wiped easily off the media. The image has not fused to the media.

Vertical Line Distortion

The image in the copy direction is longer or shorter than the image on the document.

Image Quality Analysis RAP

1. Make one D (A1) size copy on 20 lb bond paper of Test Pattern 82E5980 in the Copy Contrast Normal mode (the middle Copy Contrast lamp is lit).
 - a. Evaluate the copy and ensure that the copy meets the Image Quality Specifications as specified in the Image Quality Specifications area of Section 3.
 - b. If the copy is not to specification, refer to the appropriate Copy Quality (CQ) defect and follow the procedure to eliminate any defects.
 - c. Evaluate the copy for any visual defects.
 - d. If the copy exhibits any visual defects, refer to the appropriate Copy Quality (CQ) defect and follow the procedure to eliminate the defects.
2. Go to the Maintenance Activities, located in Section 1.

Note:

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

Image Quality Specifications

Image Reference Scale 82E7030 (SIR 201.01)

Image Reference Scale 82E7030 (SIR 201.01) (Figure 1) is used to evaluate the image darkness.

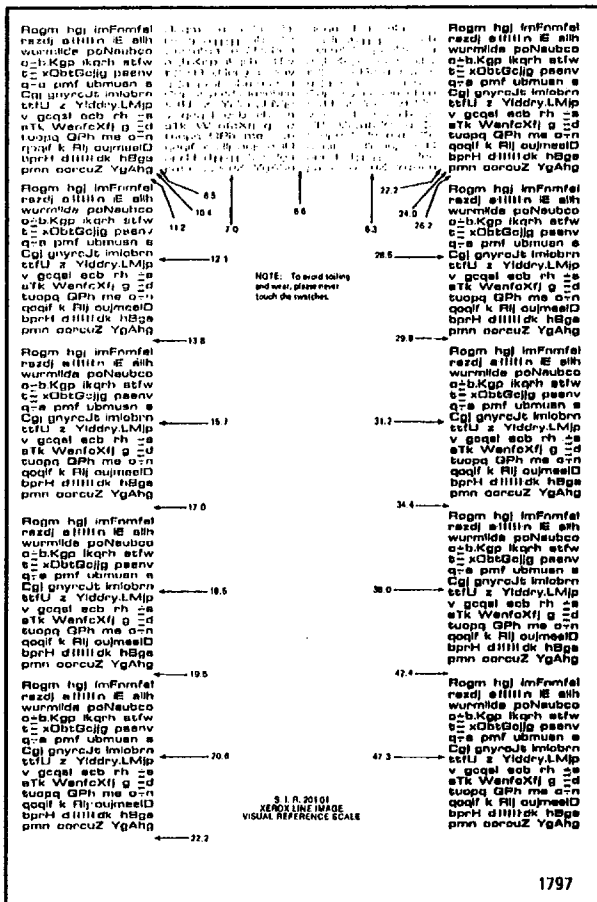


Figure 1. Image Reference Scale 82E7030 (SIR 201.01)

Image Reference Scale 82P520 (SIR 495.01)

Image Reference Scale 82P520 (SIR 495.01) (Figure 2) is used to evaluate the solid area density of the black one inch square on Test Pattern 82E5980.

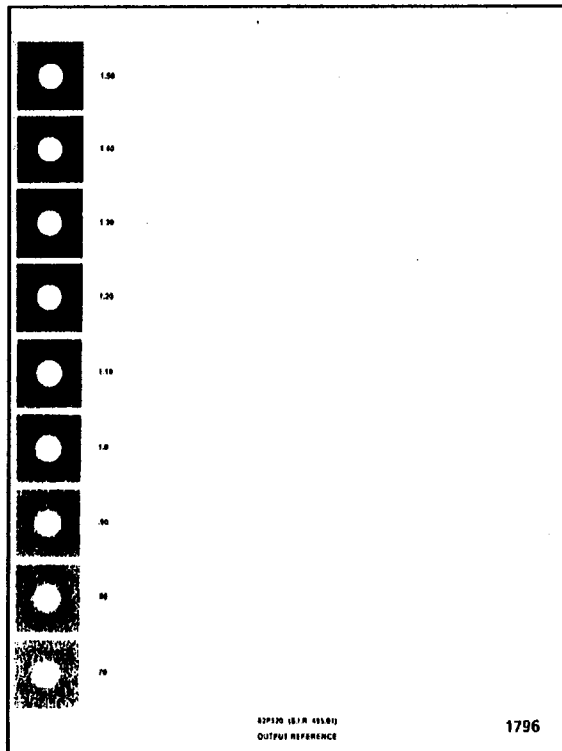


Figure 2. Image Reference Scale 82P520 (SIR 495.01)

Image Reference Scale 82P502 (SIR 305.00)

Image Reference Scale 82P502 (SIR 305.00) (Figure 3) is used to evaluate the amount of background in the non-image area.

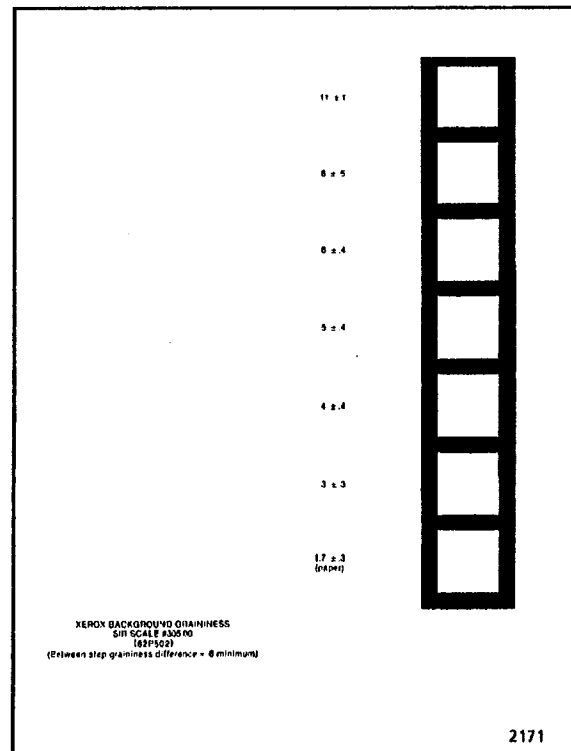


Figure 3. Image Reference Scale 82P502 (SIR 305.00)

Test Pattern 82E5980

This test pattern is the standard test pattern that is used for the evaluation of the copy quality of the 3030 copier. Copies of this test pattern are evaluated against the specifications that are listed in this section.

The Test Pattern (Figure 4) is used to evaluate line darkness, skips and smears, registration, fusing, skew, solid area density, background, resolution, exposure level, lead edge registration, and magnification.

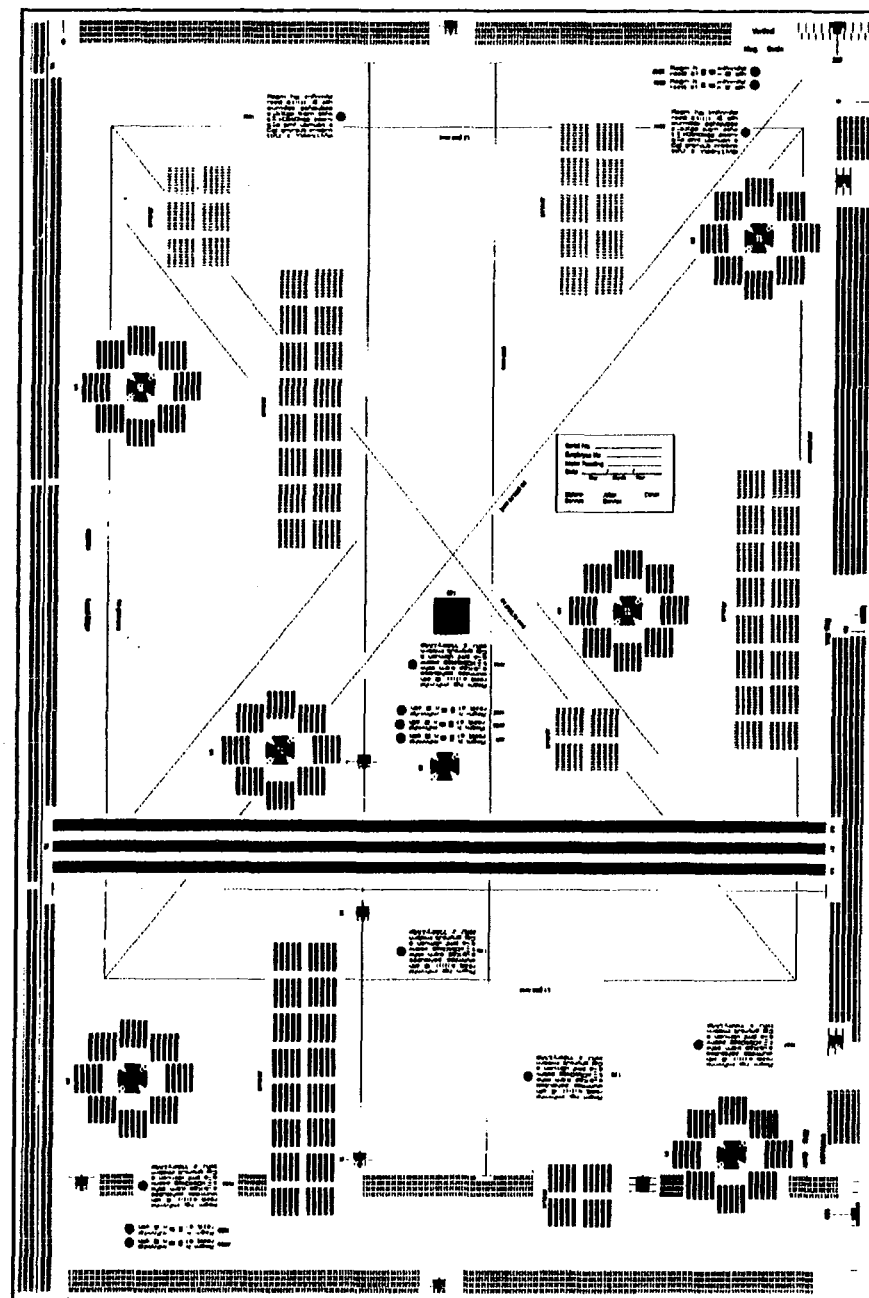


Figure 4. Test Pattern 82E5980

1820

Line Darkness

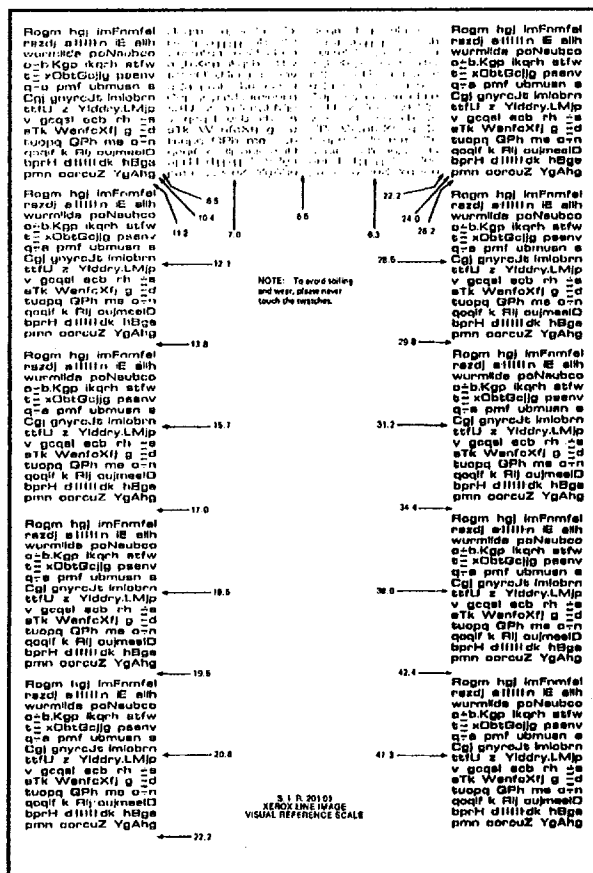
The copy of the 0.70G5 pattern in the center of Test Pattern 82E5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030. For corrective action check with procedure CQ 11.

Uniformity

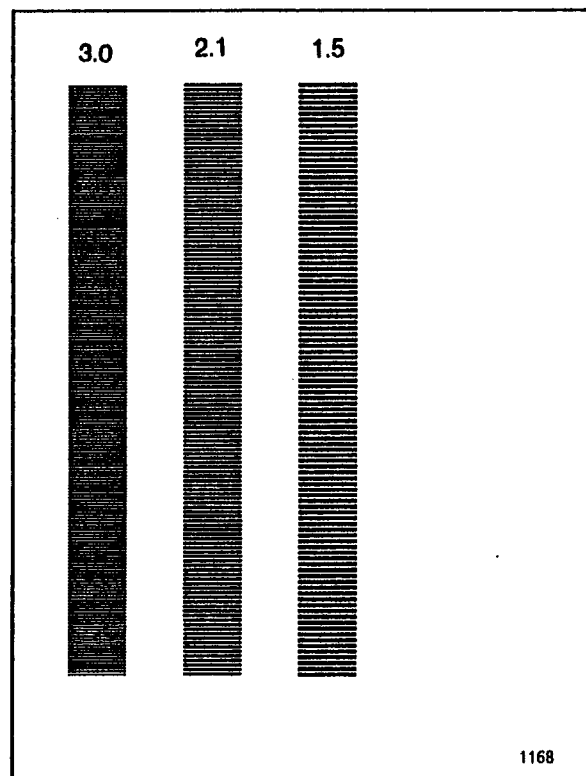
The copy of the 0.70G2 and 0.70G6 patterns of Test Pattern 82E5980 should be between 17.0 and 29.8 on Test Pattern 82P502 when location 0.70G5 is at 24.

Skips and Smears

The 1.5 line pair per millimeter array on the Test Pattern 82E5980 must be completely resolved. The 2.1 line pair per millimeter lines can be seen as complete lines with one exception down the length of the copy. For corrective action, check the CQ procedure 18 and 19.



1797

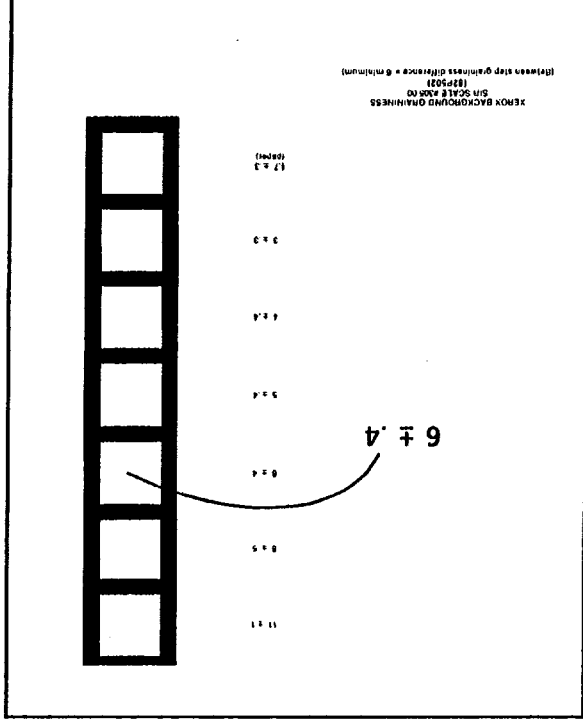


Background

Background must be less than the background of the $6 \pm .4$ patch on the image Reference Scale 82P502.

NOTE: Evaluate the worst areas on the copy.

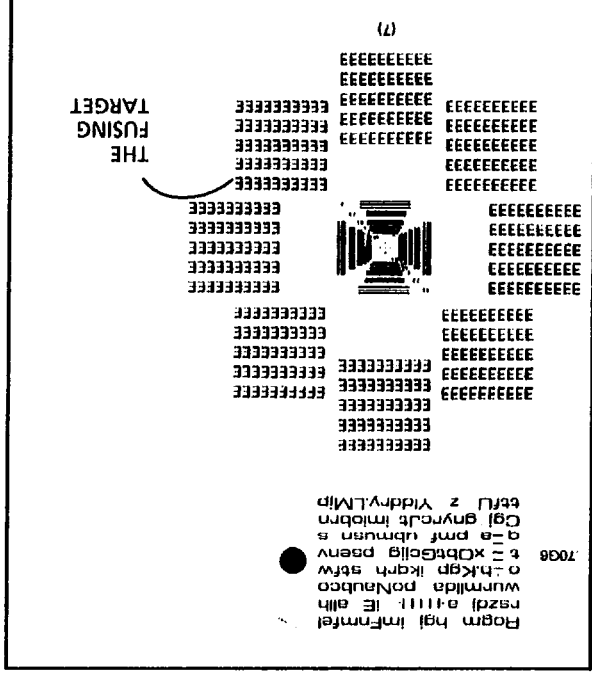
For corrective action, check the procedures CQ 1 and 2.



2171

Fusing

Run one copy of the Test Pattern 82E5980 with the 0.7G paragraph on the copy equal to the 1.2G paragraph on the Test Pattern. Check the fusing targets (1), (2), (3), (4), (6), and (7). Gently rub the targets four times with a paper towel (twice top-to-bottom and twice side-to-side). The image must not wipe off of the copy. For corrective action, check the procedure CQ 22.

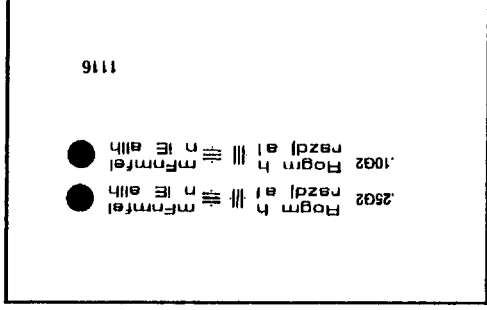


1114

Exposure Level/Low Contrast Lines

The 0.25G2 and 0.25B line pair targets on the copies of the Test Pattern 82E5980 should be greater than or equal to the 7.0 line Darkness Reference Scale 82E7030.

For corrective action, check the procedure CQ 11, 16, or 27.

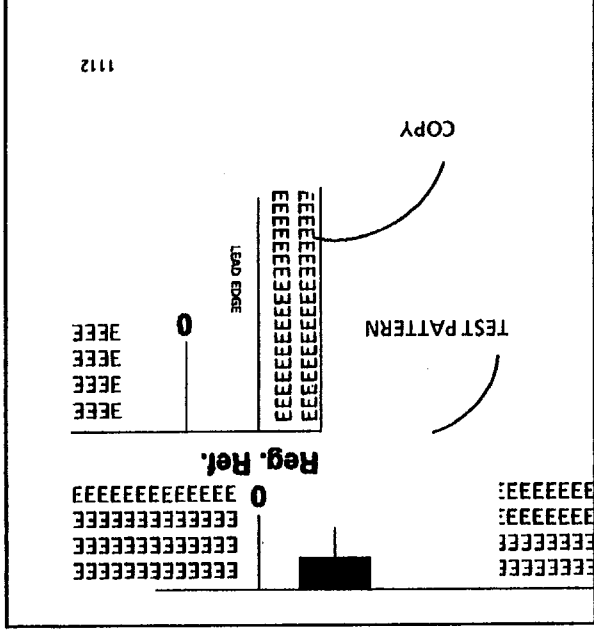


1116

Lead Edge Registration

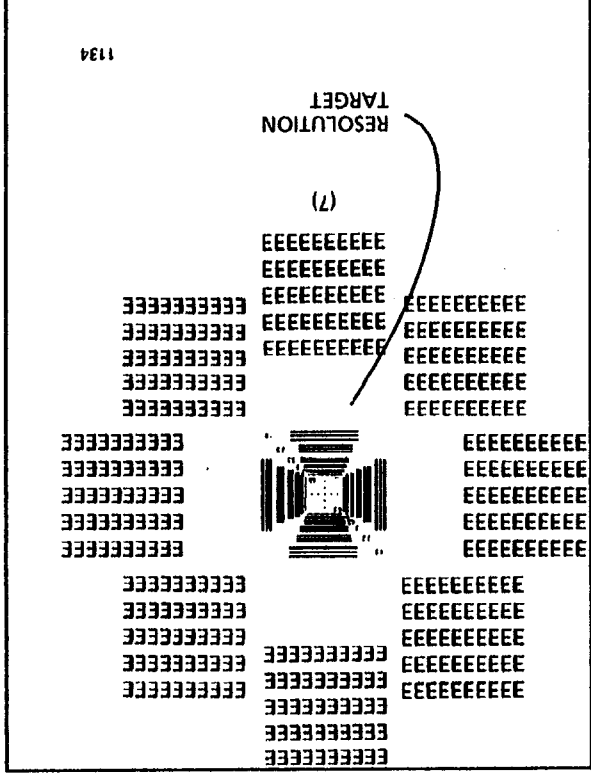
When the Lead Edge reference line on the copy is aligned with the 0 reference line on the test pattern, the lead edge of the copies of Test Pattern 82E5980 must be within the black box on Test Pattern 82E5980.

For corrective action, check the procedure CQ 14.



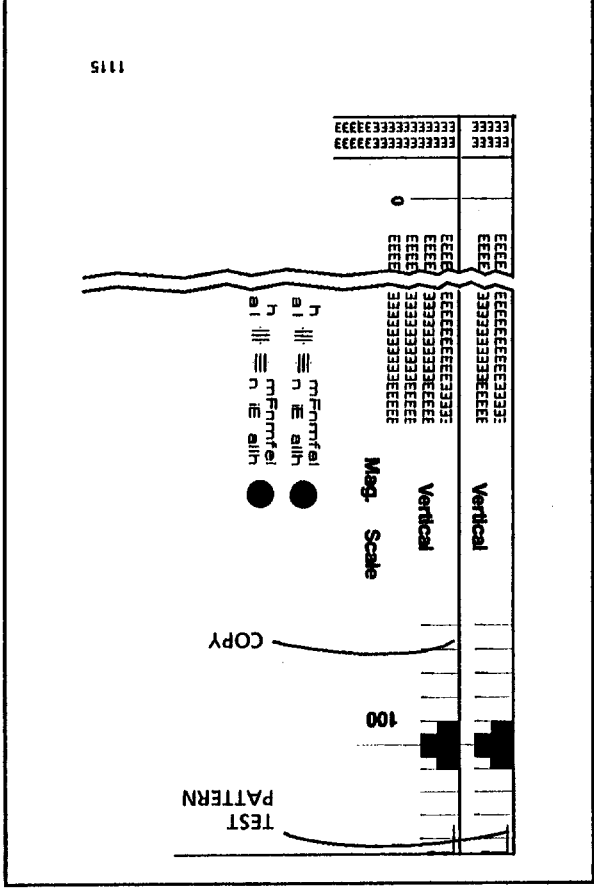
Resolution

The copies of the Test Pattern 82E5980 must exhibit 100% of the 2.5 line pairs in each direction and 50% of the 3.5 line pairs in each direction. Check the resolution targets at the (1), (2), (5), (6), and (7) patterns. For corrective action, check the procedure CQ 16.



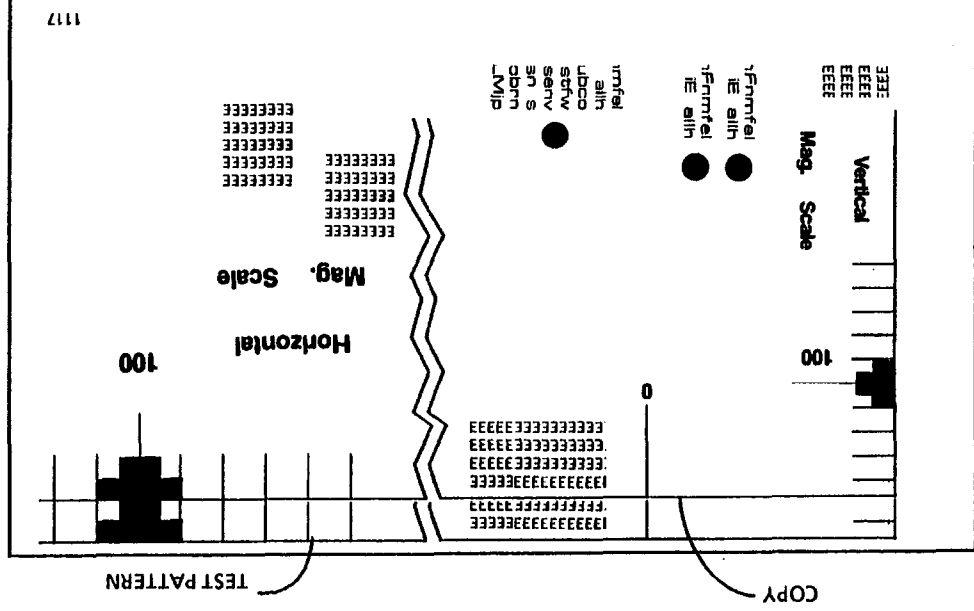
Vertical Magnification

Align the 0 reference line of the copy with the 0 reference line of the Test Pattern 82E5980. The 100 reference line of the Vertical Mag. Scale on the copy must be within the narrow black area at the 100 reference line on the 82E5980 test pattern. For corrective action, check the ADJ 5.1.



Horizontal Magnification

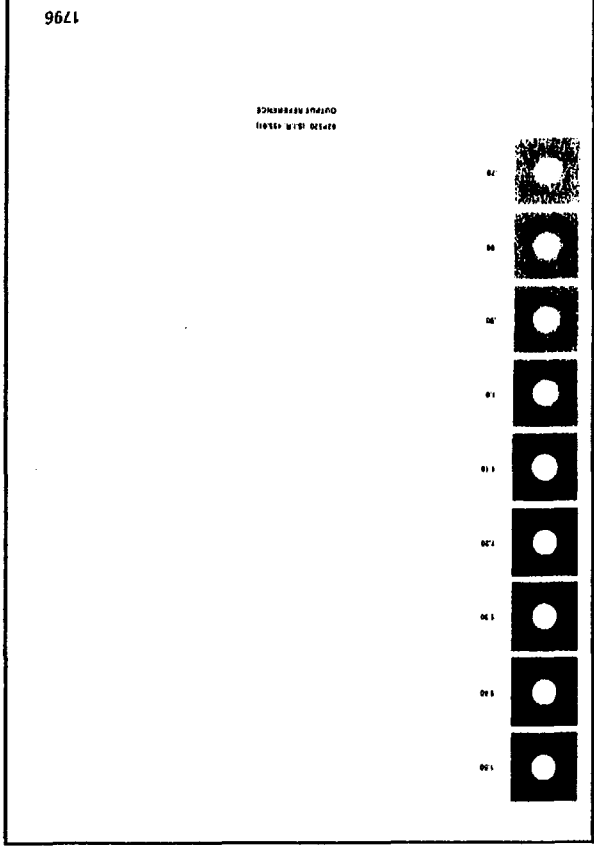
Align the 0 reference line of the copy with the 0 reference line of the Test Pattern 82E5980. The 100 reference line of the Horizontal Mag. Scale on the copy must be within the narrow black area at the 100 reference line on the Test Pattern.



Solid Area Density

The 1.0 density black square on Test Pattern 82E5980 is greater than or equal to the 0.7 Solid Area density square on Test Pattern 82P520.

For corrective action, check ADJ 9.3.



Damaged Media RAP

Probable Cause

Corrective Action

1. Crease Marks

A thin irregular line on the media because of stressing the media.

1. This defect can be caused by handling the media incorrectly.
Fuser Pressure Plates or Fabric Guide (PL 10.3) is damaged or incorrectly installed.

1. Ensure that the media is stored correctly and is not folded or creased when it is inserted in the copier.

2. Damaged Supply Roll

There could be a flattened area at one end of the roll.

2. Rolled media was not handled correctly and could have fallen on a hard surface during the handling of the roll.

2. Replace the media roll.

3. Dog Ears

A corner of the lead edge of the copy has been bent back.

3. Curled or roll cut media.
Detack corotron.
Media guides in the media supply area.
Obstruction in the fuser area.
Cutter drawer not closed completely on the right side

3. Use the cut sheet media.
Check for an obstruction in the area of the transfer/detack corotron.
Check for an obstruction or damaged guides in the media area.
Ensure that the cutter drawer is completely closed.

4. Frayed Side Edge

This is damage to the sides of the copy.

4. Damaged media supply roll.
Incorrect media side-to-side registration.
Obstruction in the media path.

4. Replace the media roll.
Ensure that the media is inserted between the guide marks on the media feed-in shelf.
Reposition the media roll on the Roll Support Tube.
Check the media path for an obstruction.

5. Oil Streaks

Streaks on the copy.

5. Contamination or excessive amount of oil on the fuser oil pad and wick.
Contaminated Doner Roll.

5. Clean or replace the Oil Pad (REP 10.9) and Wick (REP 10.11). Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs.

Damaged Media RAP (Continued)

Probable Cause

Corrective Action

6. Tears in the Media Lead Edge

6. Damaged Stripper Finger.
Media side-to-side registration.

6. Replace the Stripper Finger (PL 10.4).
Reposition the media roll on the Roll Support Tube.
Check for an obstruction in the area of the transfer/detack corotron.
Check for an obstruction or damaged guides in the media area.

7. Wrinkle

A severe case of creases that runs in the direction of the media travel.

This is damage that is probably caused by the fuser subsystem.

7. Damage or obstruction in the handling system for the media.
Fuser is too hot.
Damp media.
Fuser Pressure Plates or Fabric Guide (PL 10.3) is damaged or incorrectly installed.
Tightly rolled media.
Fuser Heat Roll is damaged or contaminated.

7. Check the media path for an obstruction or damage.
Check/Adjust the Fuser Temperature (ADJ 10.1)
Try a new media roll or a cut sheet.
Replace the Fuser Roll (PL 10.2).
Replace Pressure Plates.

8. Cockle

The media has a rough surface like an orange peel.

This damage could be caused by the fuser subsystem.

8. Damage or obstruction in the handling system for the media.
Fuser is too hot.
Damp media.
Fuser Pressure Plates or Fabric Guide (PL 10.3) is damaged or incorrectly installed.
Tightly rolled media.

8. Check the media path for an obstruction or damage.
Check/Adjust the Fuser Temperature (ADJ 10.1)
Try a new media roll or a cut sheet.

9. Other Damage

9. If there are other defects that are on the copy, go to the Media Handling Problems on the following pages.

Media Handling Problems

Introduction

For media transportation problems, use the following problem solving approach. Experience has shown that many media transportation problems have more than one cause and must be handled using a systematic approach.

Media transportation problems show up as one of the following symptoms:

Pre-fuser jams
Copy quality defects
Physical distortion of media

When these symptoms occur, perform the following checks of media and copier and perform the corrective actions:

Media Check

1. Check the type of media:

- a. Some vellum (a tracing paper) or bond paper less than 20 lb (80 gsm) performs with less reliability than Xerox 20 lb (80 gsm) media. Some film less than 0.004 inches thick will perform with less reliability.
- b. Other brands of media may have different design specifications than Xerox media and may not give acceptable performance in the 3030 copier.

2. Check the storage of media:

- a. Media that is exposed to the environment may have damp areas.
- b. Media may have curled ends or become distorted from storing the media on end.

Corrective Actions

- a. Use the Xerox approved media.
- b. After performing all the checks of media, test with fresh Xerox media. Use the *Media Messages* booklet to explain differences to the customer.
- a. Suggest that the customer use the original package in which the Xerox media is shipped to store the media when it is out of the copier.
- b. Suggest that the customer store the media flat. Do not stand media on end.

Continued

Media Handling Problems (Continued)

Media Check

Corrective Actions

3. Check the grain direction of Cut Sheet media:

- a. Media with the grain direction perpendicular to the feed direction will have fewer wrinkles and jams than media fed with the grain parallel to the feed direction.
- b. To test for grain direction, tear a corner from a sheet of media, moisten one side, and the media will curl. Place your finger in the curl, place the piece in the sheet, and your finger will point in the direction of the grain.

- a. Try feeding the Cut Sheet media in the correct grain direction.
- b. Roll cut media can only be made with the grain in the process direction

Copier Check

4. Ensure that the fuser temperature is set to specification. (Fuser temperature that is too high will cause the media to shrink or wrinkle.)

4 Clean the thermistor, and ensure that the thermistor is in contact with the fuser roll; perform Fuser Temperature Adjustment (ADJ 10.1).

5. An incorrect electrostatic value can cause jams or deletions.

5 Perform Electrostatic Series (ADJ 9.2).

6. Check, clean or replace the following components:

6a. Check for contamination or dirt; clean or replace components if necessary.

a. Transfer/detack Corotron (REP 9.9).

b. Bottom of Xerographic Module (plate located above Transfer/detack Corotron).

b. Clean the module with (US and XLA film remover) (RX General Purpose cleaner). Dirt in this area causes dirty copies, smudges, and jams.

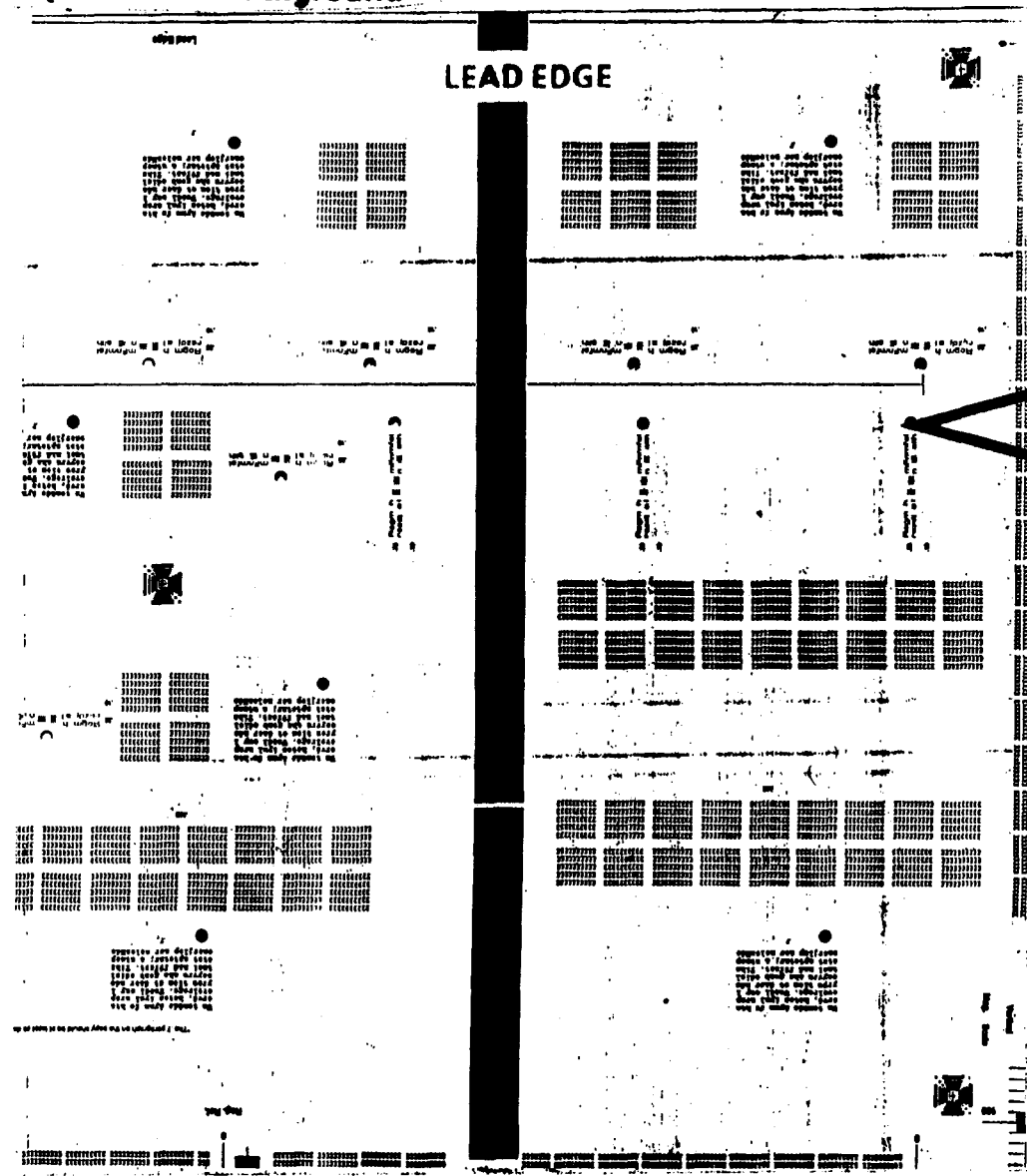
c. Oil dispense wick is clogged.

c. Check the Oil Pads (REP 10.9); replace the Wick (REP 10.11).

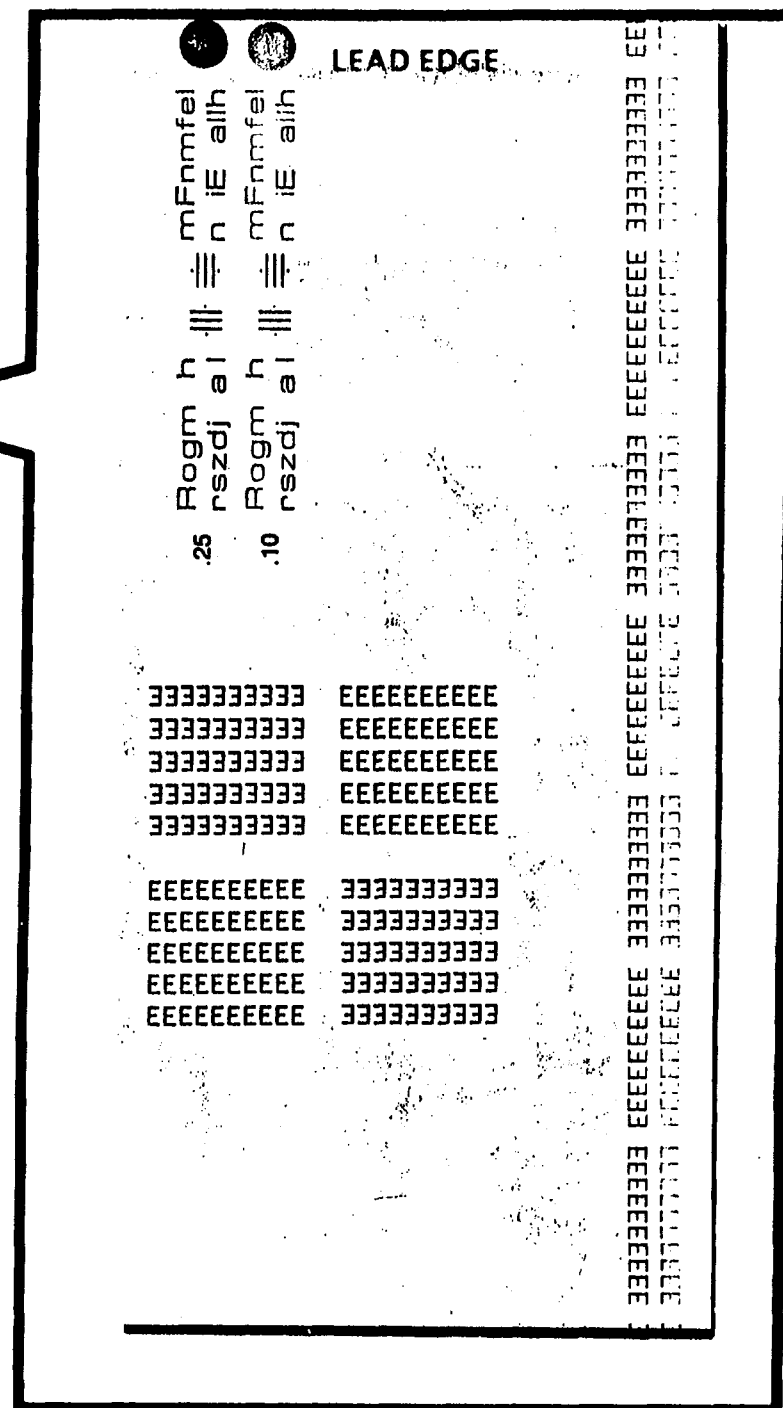
(Continued)

6. Check, clean or replace the following component (continued):
 - d. Fabric Guide.
 - e. Fuser roll.
 - f. Fuser Pressure Plates.
 - g. Media Transport Module is not latched against the pins on the Xerographic Module.
 - h. Fuser Stripper Fingers
 - i. Excessive oil. Contaminated Doner Roll.
7. After completing the previous checks, run several copies with dry Xerox media to verify that the problem is fixed or still exists. If the problem is fixed, perform the Final Actions

- d. Replace the Fabric Guide (REP 8.9).
- e. Replace the Fuser Roll (REP 10.2) if it is glazed or contaminated.
- f. Check that the plate is positioned correctly and is not bent or damaged. (PL 10.3).
- g. Ensure that the media transport module is against the pins. Check the latching bars and transport latching cover for damage.
- h. Ensure that the fuser stripper fingers (REP 10.8) are not damaged.
- i. Check the oil pads (REP 10.9); replace the wick (REP 10.11).
Clean Doner Roll with film remover.
Ensure Doner Roll has wrap springs.

**Definition**

Background is a degree of dry ink contamination in the non-image areas of the copy. The background defect can be uniform over the entire copy or localized.



CQ 1 Uniform Background

Probable Cause

Corrective Action

- | | |
|---|--|
| 1. Dirty transport platen, platen, exposure lamp, or lens. | 1. Clean the transport platen and the platen with Antistatic Cleaner.
If required, apply a small amount of Film Remover (USO), General Purpose Cleaner (RX), to a towel to remove excess contaminants from the lens and exposure lamp. Then, apply Antistatic Cleaner to the towel and wipe the lens and exposure lamp. |
| 2. Ensure that the Erase LEDs illuminate. | 2. Refer to CQ 30 if the Erase LED PWB is not working.
Ensure that the exposure lamp is installed correctly (REP 6.1). |
| 3. Electrostatic voltages are out of specification. | 3. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4) procedures. |
| 4. Developer bias has a short circuit to ground. | 4. Go to the CQ 25 Developer Bias RAP. |
| 5. Photoreceptor drum has been exposed to the light (Light Shock). | 5. Make five copies in a lighter contrast mode then check the copy quality. |
| 6. Photoreceptor drum is not being cleaned correctly. | 6. Enter the diagnostic mode and then enter the code [0913]. Press the Start button and the Cleaner Blade Positioning Motor (MOT 3) should energize. If the motor does not energize, go to CQ 15. |
| 7. Developer material has made more than 40K feet (12K metres) of copies. | 7. Replace the developer material (REP 9.8) and perform the Electrostatic Series (ADJ 9.2). |

Note: If the developer material is replaced, *perform [921-6] to calibrate the toner control system.*

CQ 1 Uniform Background (Continued)

Probable Cause

Corrective Action

8. Dry ink concentration is too high.

8. Remove the dry ink cartridge and inspect it for damage and dry ink leakage. If the cartridge is damaged, replace the cartridge (Section 6, Consumables) and, the waste bottle (PL 9.1).

Make a copy of Test Pattern 82E5980. Check that the line darkness is in specification. If not, perform the Electrostatic Series (ADJ 9.2) and adjust Image Density (ADJ 9.3 or 9.4) if required.

If this is not successful, replace the developer material.

Note: If the developer material is replaced, perform [921-6] to calibrate the toner control system.

9. There is an open circuit in the photoreceptor drum ground circuit.

9. Check that the Ground Clip is in contact with photoreceptor drum shaft (PL 9.2).

10. Defective or incorrect photoreceptor drum.

10. Replace photoreceptor drum (REP 9.3) and then perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4).

11. Incorrect dry ink or developer is installed in the copier.

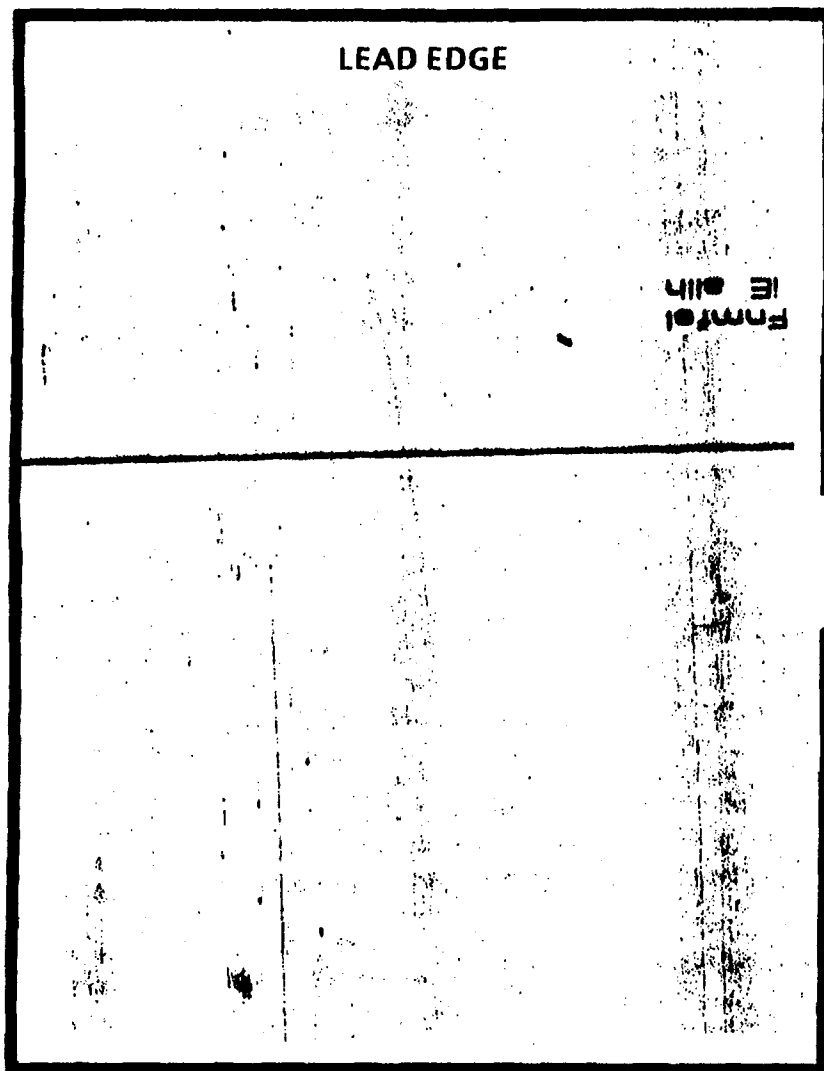
11. Ensure the Customer is using the correct dry ink.

12. Photoreceptor Drum Seal (Upper Seal on Cleaner housing) is damaged or missing.

12. Check the Photoreceptor Drum Seal for damage (PL 9.5).

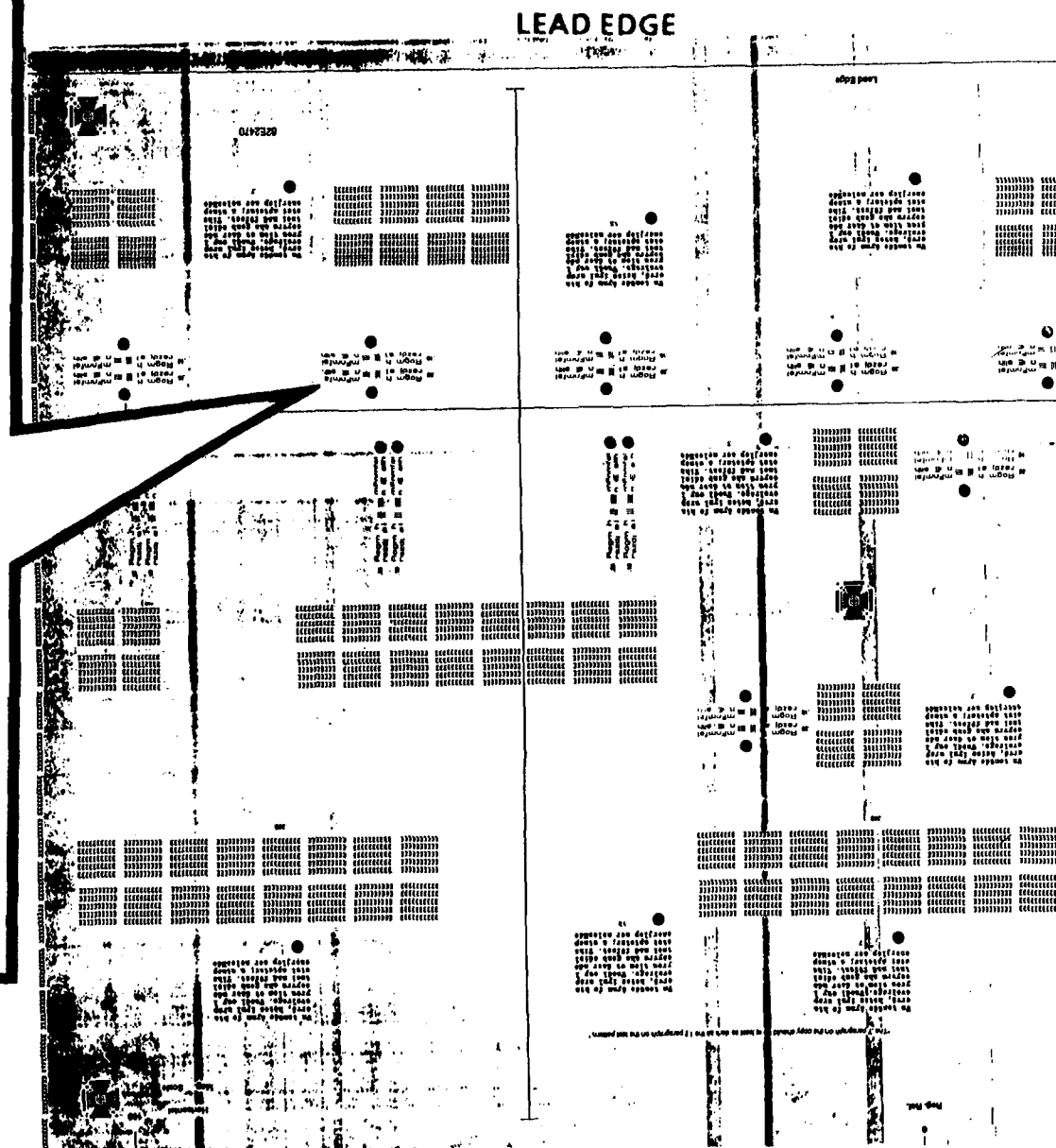
13. Toner Waste Bottle is full.

13. Replace Bottle and ensure the Cleaner Auger is not bound.



Definition

Background banding is a narrow band of background that appears in the direction of media feed.



CQ 2 Background Banding/ Streaks

Probable Cause

Corrective Action

1. Dirty transport platen, platen, exposure lamp, or lens.
2. Ensure that the Erase LEDs PWB switches on and all the LED's are turned on.
3. Contamination on corotron(s).
4. The cleaner blade is not cleaning the photoreceptor drum correctly.

1. Clean the transport platen and the platen with Antistatic Cleaner.

If required, apply a small amount of Film Remover onto a towel to remove excess contaminants from the lens and exposure lamp. Then, apply Antistatic Cleaner to the towel and wipe the lens and exposure lamp.

2. Refer to CQ 30 if LED PWB is not working. Ensure that the exposure lamp is installed correctly (REP 6.1).

3. Clean, repair, or replace the corotrons and then perform the Electrostatic Series (ADJ 9.2).

4. Enter the diagnostic mode and then enter code [0913]. Press **Start** and listen for the motor sound. The Cleaner Blade Positioning Motor (MOT3) should energize. If the motor does not energize, press the **Stop** button to cancel the code. Go to the CQ 15 and begin with Corrective Action number (2).

If the motor does energize, check the following:

The cleaner blade weight moves freely (REP 9.4).

The cleaner blade assembly translates across the photoreceptor drum.

No wires are interfering with the cleaner blade weight.

Cleaner auger and drive belt operate correctly. Ensure the auger is not bound.

(Continued)

CQ 2 Background Banding/ Streaks

(Continued)

Probable Cause

Corrective Action

4. (Continued)

Photoreceptor drum is not being cleaned correctly.

4. (Continued)

Remove the photoreceptor drum and check the following for damage or contamination:

- Cleaner blade seal assembly (REP 9.4)
- Cleaner blade (REP 9.4)
- Cleaner blade retainers (REP 9.4)
- Drum seal (PL 9.5)
- Cleaner Housing

If the cleaning problem is not corrected, change the Cleaner Blade (REP 9.4).

5. Photoreceptor drum is Contaminated or damaged .

5. Polish the photoreceptor drum (Section. 6, General Procedures). If this does not remove the contamination, replace the photoreceptor drum (REP 9.3).

If the photoreceptor drum is damaged, determine the cause of the damage and correct before replacing the photoreceptor drum. Perform the Electrostatic Series (ADJ 9.2).

6. The lower document feed rolls are contaminated.

6. Clean the feed rolls with the following: USO or XLA Formula A Cleaner or RX General Purpose Cleaner.

(Continued)

CQ 2 Background Banding/ Streaks (Continued)

Probable Cause

Corrective Action

- | | |
|--|--|
| 7. Uneven distribution of developer material within the developer housing. | 7. Ensure that the copier is level front-to-back and side-to-side (ADJ 14.1). |
| 8. The media path components are contaminated. | 8. Clean the areas on the transport module and xerographic module that could come in contact with the media. |
| 9. Dry ink concentration is too high. | 9. Remove the dry ink cartridge and inspect it for damage and dry ink leakage. If the cartridge is damaged, replace that cartridge and waste bottle (PL 9.1).

Make a copy of Test Pattern 82E5980. Check that the line darkness ins in specification. If not, perform the Electrostatic Series (ADJ 9.2) and adjust the Image Density (ADJ 9.3 or 9.4) if required.

If this is not successful, replace the developer material. Enter the code[9 21 6] to calibrate the toner sensor, then perform the Image Density (ADJ 9.3 or 9.4). |
| 10. The cooling fans are not operating or they are defective or damaged. | 10. Go to the 1.3 Cooling Fan RAP in Section 2.

If the problem still exists, go to the CQ 1 Uniform Background RAP. |
| 11. Document stops over the lens during scan and/or rescan. | 11. Check document Stop Position (ADJ 5.2). |
| 12. Photoreceptor Drum Seal is damaged or missing. | 12. Check the Photoreceptor Drum Seal for damage (PL 9.5). |
| 13. Toner Waste Bottle is full. | 13. Replace Bottle and ensure the Cleaner Auger is not bound. |

CQ 3 Black Copy

No copy defect sample is needed.

Probable Cause

1. Exposure lamp does not light.
2. Exposure lamp is installed backwards.
3. Photoreceptor is not properly grounded.

Corrective Action

1. Go to the LL.26 Loss of Illumination RAP.
2. Refer to REP 6.1
3. Go to REP 9.1 and 9.2 to remove the drum assembly and check the contact of the Ground Clip to the left side of the drum assembly.

Definition

The entire copy is excessively dark.

CQ 4 Blank Copy

Probable Cause

Corrective Action

Initial Action

Perform the Image On Drum (Panic Stop) Procedure (General Procedures). If there is an image on the drum, the problem is in the image transfer area. If there is no image, the problem is in the charge or development areas.

No copy defect sample is needed.

1. The Corotrons are dirty or defective .

2. Magnetic roll is not rotating.

3. There is no charge or transfer output from the HVPS.

4. An electrostatic voltage is out of specification.

1. Check that the high voltage leads are fully plugged into the corotrons. Clean, repair, or replace the corotron and perform the Electrostatic Series (ADJ 9.2)

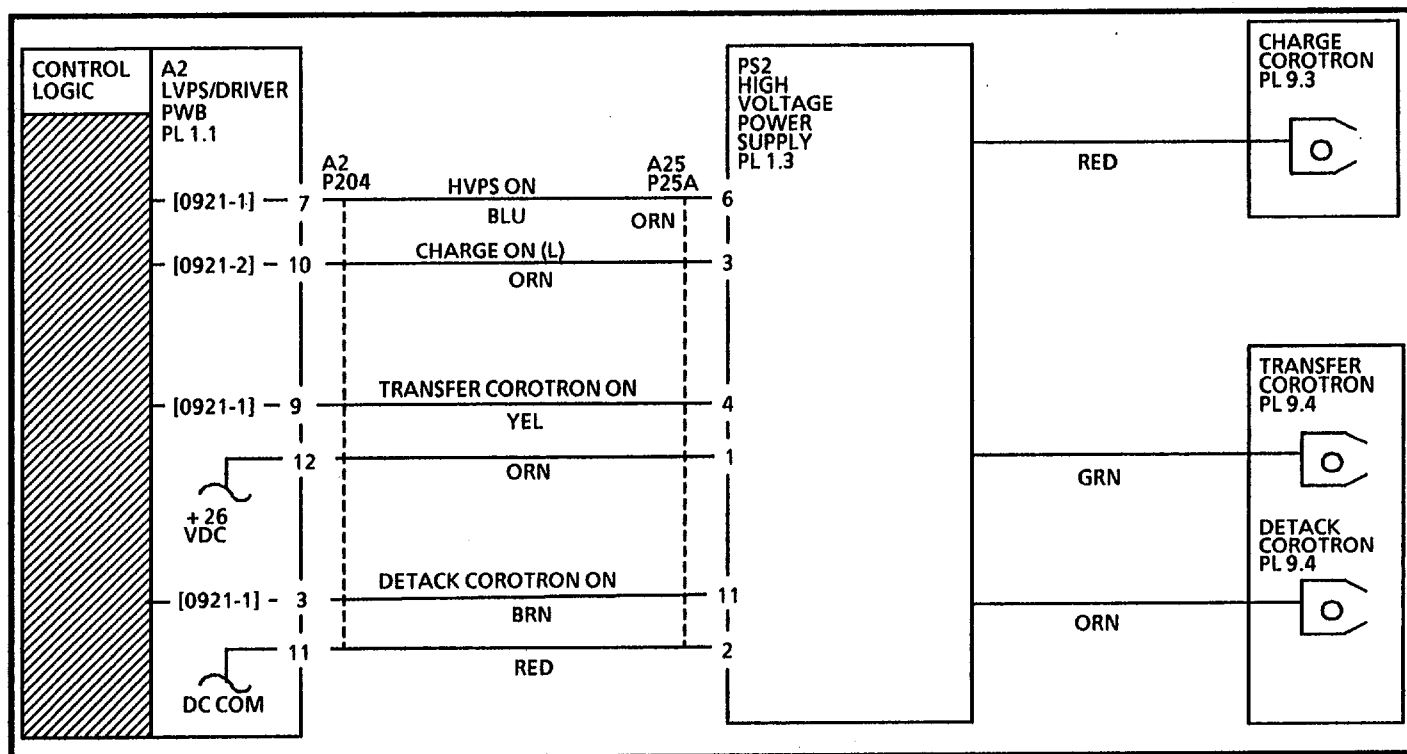
2. Check the Drum/Developer drive for damage. Ensure that the Drive coupling gear is engaged. Go to Developer Drive Motor RAP (4.1)

3. Go to the CQ 26 HVPS RAP.

4. Perform the Electrostatic Series (ADJ 9.2)

Definition

There is no image on the copy.



- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Document is smaller than the copy media. 2. Paste-up documents. 3. The transport, platen, and/or lens is dirty. 4. Registration is not adjusted correctly. 5. Media registration side-to-side is incorrect. | <ol style="list-style-type: none"> 1. This is normal operation. If the document is smaller than the copy media, the edges of the document will be copied. If this is not acceptable, try either of the following: <ol style="list-style-type: none"> a. Cut the media to the same size as the document. b. Select the lightest setting on the Copy Contrast. 2. Instruct the customer. 3. Clean the components with Formula A. 4. Adjust the Image Registration (ADJ 8.1). 5. Reposition the media roll on the Media Roll Support Tube. |
|--|---|



```

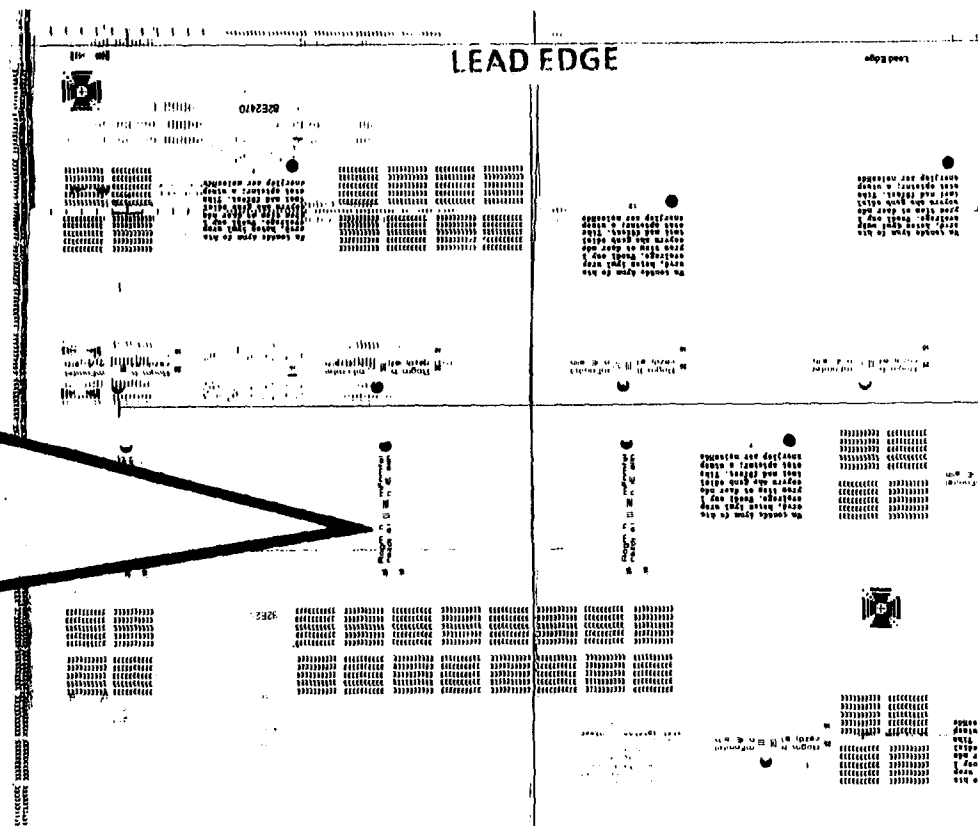
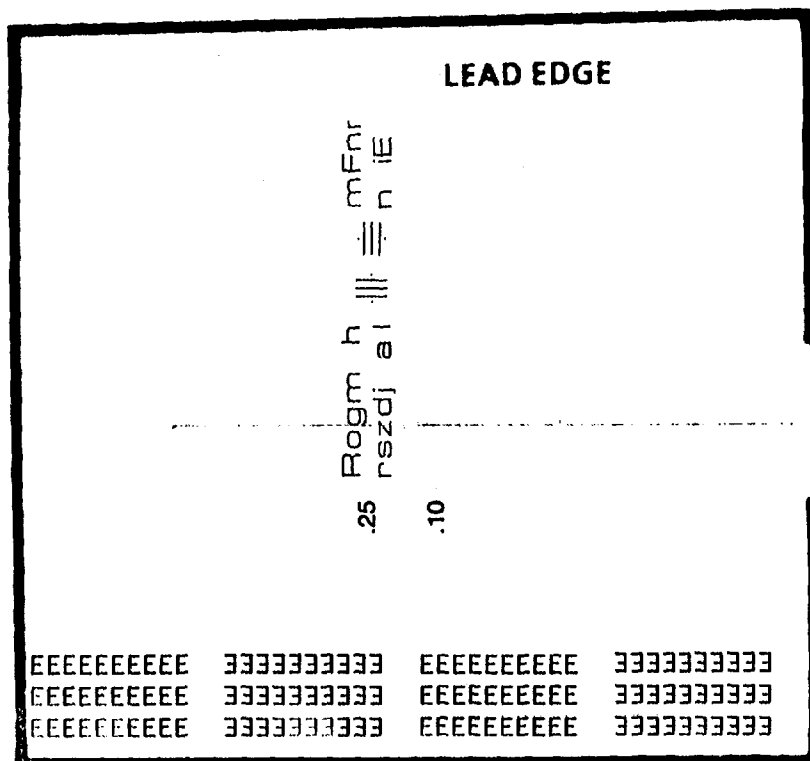
EEEEEEEEEE 3333333333 EE
EEEEEEEEEE 3333333333 EE
EEEEEEEEEE 3333333333 EE
EEEEEEEEEE 3333333333 EE
EEEEEEEEEE 3333333333 EE

3333333333 EEEEEEEEEEE 33
3333333333 EEEEEEEEEEE 33
3333333333 EEEEEEEEEEE 33
3333333333 EEEEEEEEEEE 33
3333333333 EEEEEEEEEEE 33
    
```

Definition

A border line is a line that appears on or near any edge of the copy.

CQ 6 Cold Flow



Probable Cause

1. The cleaning blade is not being raised off the photoreceptor drum during the Standby mode.

Corrective Action

1. Check the Cleaner blade assembly (PL 9.5) for free movement.
2. Enter the diagnostic code [0913] to check the Cleaner Blade Positioning Motor (MOT3). If the motor does not energize go to the OF 5 Cleaner Blade Positioning Motor RAP.
3. Replace the Photoreceptor Drum (REP 9.3) and perform the Electrostatic Series (ADJ 9.2).

Definition

Cold Flow is a distortion in the selenium alloy coating on the photoreceptor drum. This defect can appear anywhere on the copy and is perpendicular to the paper feed direction. Defect will also appear every 10.4 inches (264 mm).

CQ 7 Developer Bead Carryover

Probable Cause

1. Charge voltage on photoreceptor drum is too high.
2. Developer material has been used for more than 40K feet (9K metres) of copies.

Corrective Action

1. Perform the Electrostatic Series (ADJ 9.2).
2. Replace the developer material (REP 9.7).

Note: *If the developer material is replaced, perform [921-6] to calibrate the toner control system.*

No copy defect sample is needed.

Definition

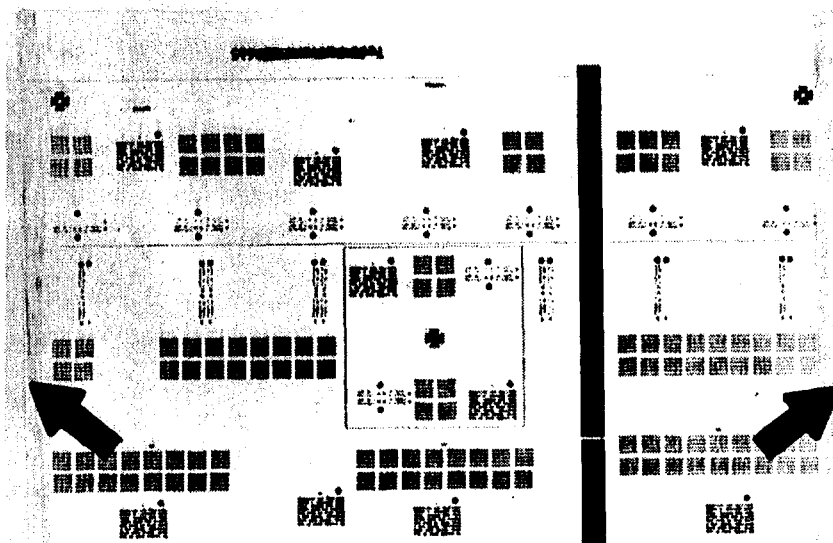
Bead carryover is one or more small deletions in the copy image that appear randomly over the entire copy. In some cases a single developer bead can be seen in the middle of the deletion.

CQ 8 Edge Banding

Probable Cause

Corrective Action

LEAD EDGE



1. High background or Banding/Streaks.
2. Photoreceptor drum is not being cleaned correctly.

1. Go to the CQ 1 Uniform Background RAP or go to CQ 2 Background Banding/ Streaks RAP.
2. Enter the code [0913]. Listen for the sound of the Cleaner Blade Positioning Motor. The motor should turn.

If the motor does not turn, go to the OF 5 Cleaner Blade Positioning Motor RAP.

If the motor does turn, check the following:

The cleaner blade weight moves freely (REP 9.4).

The cleaner blade assembly translates across the photoreceptor drum.

No wires are interfering with the cleaner blade weight.

Cleaner auger and belt operate correctly.

Remove the photoreceptor drum and check the following for damage or contamination:

Cleaner blade seal assembly (REP 9.4)

Cleaner blade (REP 9.4)

Cleaner blade retainers (REP 9.4)

Drum seal (PL 9.5)

If the cleaning problem persists, replace the cleaner blade (REP 9.4).

3. Distribution of developer material within the developer housing is uneven.
4. Contamination on the ends of corotrons, Exposure Lamp, or Lens.
5. Developer Housing is not being cleaned correctly.
6. The Erase LED's (DS1) are contaminated or defective.

3. Ensure that the copier is level (ADJ 14.1).
4. Clean ends of corotrons with a brush, repair or replace. Clean Lamp or Lens (PL 6.1).
5. Vacuum Developer Housing Pressure Equalizer tubes.
6. Clean or replace the Erase LED PWB (DS1), (PL 9.3).

Definition

Edge banding is a black band on any edge of the copy.

CQ 9 Length Distortion

Probable Cause

Corrective Action

1. There is contamination or static on the platen.
2. Document speed is too fast or too slow.
3. Media is damp .
4. Media speed at the fuser is incorrect. Media is moving too slowly.
4. There is too much or too little oil on the fuser roll. Check the oil dispense wick for contamination and sufficient oil.

1. Clean the platen with Antistatic Cleaner.
2. Perform the Copy Size Adjustment (ADJ 5.1).
- 3a. Cut sheet media:
Make a copy, using a sheet of media from a new pack of media.

If the problem is corrected, ensure that the cut sheet media is being stored correctly.
- 3b. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the roll media is being stored correctly.

Refer to Section 2 and ensure that the media heater is working.

Definition

Length distortion, often referred to as copy enlargement or reduction, can be any of the following:

- a. The image on the media is longer than the image on the document.
- b. The image on the media is shorter than the image on the document. .
- c. One side of the media image is larger than the other side
5. The lower document feed rolls are contaminated.
6. Contaminated Doner Roll
7. Worn fabric guide
5. Go to the CQ 17 Skewed Image RAP.
6. Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs.
7. Replace Fabric Guide (REP 8.9)Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs.

(Continued)

Image Tolerance Specification. The copier has a tolerance specification; nominal $100 \pm 0.5\%$ horizontal and vertical. As a general guide the following table illustrates the expected variance over the length of the print when the copier is set to specification.

PAPER SIZE (INCHES)	DECIMAL (INCHES)	NEAREST FRACTION (INCHES)	METRIC (mm)
8.5 (A4)	± 0.040	$\pm 3/64$	± 1.02
11 (A3)	± 0.055	$\pm 1/16$	± 1.40
17 (A2)	± 0.085	$\pm 3/32$	± 2.16
24 (A1)	± 0.120	$\pm 1/8$	± 3.05
36 (A0)	± 0.180	$\pm 3/16$	± 4.57
48	± 0.240	$\pm 15/64$	± 6.10
52	± 0.260	$\pm 17/64$	± 6.6
56	± 0.280	$\pm 9/32$	± 7.11

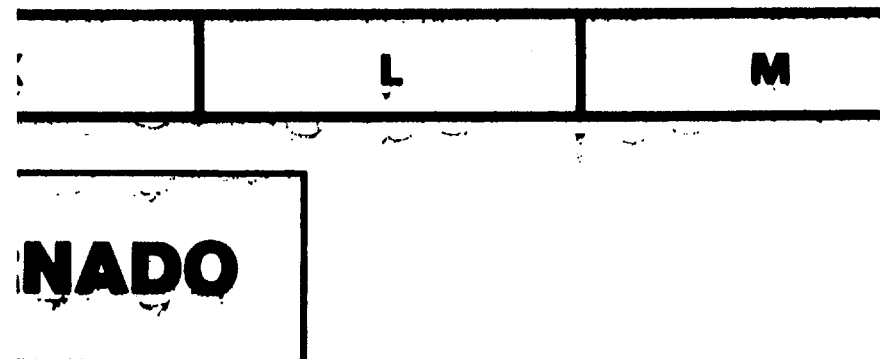
11	REFERENCE DWG. NO.	
	—UNLESS OTHERWISE SPECIFIED	
	MARK TOOL WITH PART NO. & TOOL NO. REMOVE ALL BURRS & SHARP EDGES FROM MACHINED	
	MANUFACTURING TOLERANCES	
	INCH DIMENSIONS	METRIC DIMENSIONS
	±.020 FOR 2 OR LESS DECIMALS	±0.5 FOR 1 DEC
	±.005 FOR 3 DECIMALS	±0.13 FOR 2 DEC
	±.0002 FOR 4 DECIMALS	±0.005 FOR 3 DEC
	± FOR ANGLES	± FOR ANGLES

TYPE 1

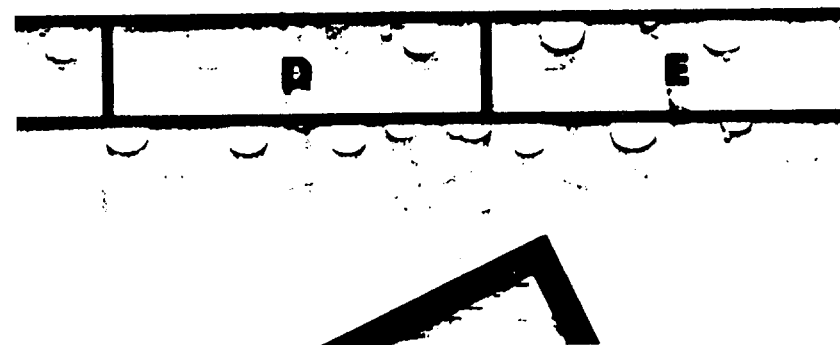
Definition

This is a disturbance of the transferred toner image before the fuser. The defect can appear randomly throughout the image area in the process direction (from lead edge to trail edge) of the copy.

The samples show various amounts of the defect.



TYPE 2



TYPE 3 Lichtenberg Spots

CQ 10 Dry Ink Disturbance

Probable Cause

1. Transfer/detack corotron hardware is not seated correctly.
2. An electrostatic voltage is out of specification.
3. Obstruction in the media path prior to fusing.

Corrective Action

1. Ensure that the Transfer/Detack corotron is seated correctly (REP 9.9). Ensure that the media guides are installed correctly on the Transfer/Detack corotron.
2. Perform the Electrostatic Series (ADJ 9.2).
3. Check the Path.

CQ 11 The Light Copy (Overall)

No copy defect sample needed.

Probable Cause

1. Excessive use of high density documents will deplete the dry ink supply.
2. The image on the document is light.
3. An electrostatic voltage is out of specification.
4. Corotron Dampers are missing or defective.

Corrective Action

1. Discuss the use of high density documents with the Customer.
2. Select a darker Copy Contrast setting for light copy.
3. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4).
4. Ensure Charge and Transfer corotron dampers are in place. Repair or replace corotrons as necessary.

(Continued)

Definition

Light copies are copies where the line darkness and/or solid area is lighter than the line darkness and/or solid area specifications for the copier.

CQ 11 The Light Copy (Overall)
(Continued)

Probable Cause

Corrective Action

6. Media is damp.

6a. Cut sheet media:

Make a copy, using a sheet of media from a new pack of media.

If the problem is corrected, ensure that the media is being stored correctly.

6b. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the roll media is being stored correctly.

Refer to Section 2 and ensure that the Media Heater is working.

7. Developer material has run for more than 40K feet (12.2K) meters.

7. Replace the Developer Material (REP 9.7). Perform [921-6] to calibrate the tonersensor, then check that the image density is in specification. Perform the Image Density adjustment (ADJ 9.3 or 9.4) if required.

8. The developer bias is out of specification.

8. Go to the CQ 25 Developer Bias RAP.

9. Developer mixing Augers are not turning.

9. Check that the Developer Drive coupling is in position and the Augers are turning.

10. There are airborne chemicals.

10. Some chemicals can cause damage or contamination of the drum. Wash (General Procedures) or replace the drum (REP 9.3), and perform the Electrostatic Series (ADJ 9.2). If the problem still exists, notify technical support.

11. Transfer /Detack Corotron Media Guides are not installed correctly.

11. Ensure that the guides are installed correctly. (Continued)

CQ 11 The Light Copy (Partial)

Probable Cause

Corrective Action

- | | |
|--|--|
| 1. Copier is not level (difference in side-to-side density). | 1. Level the copier (ADJ. 14.1) |
| 2. Developer Module or Xerographic Module is not seated fully against the stops. | 2. Ensure that the Developer Module and Xerographic Module are installed and secured correctly. |
| 3. The light can enter the copier through an opening in the covers. | 3. Ensure that the Covers are not damaged and that they are seated correctly. Allow the Photoreceptor Drum to rest before trying to make copies. |
| 4. Fans not functioning. | 4. Go to the 1.3 Copier Cooling Fan RAP in Section 2. |
| 5. The Magnet and lens are not installed correctly against the reflector. | 5. Check the installation of components and if any are incorrect, reinstall correctly. |
| 6. The lens shield is separated from the lens assembly. | 6. Replace the lens (REP 6.2) . |
| 7. Charge and /or Transfer/Detack Corotron are contaminated | 7. Clean/ Replace the corotron (REP 9.8 and/or 9.9). Perform the Electrostatic Series (ADJ 9.2) procedure. |
| 8. Corotron Dampers are missing or defective. | 8. Ensure Charge and Transfer corotron dampers are in place. Repair or replace corotrons as necessary. |
| 9. Air Manifold/Heat shield is damaged. | 9. Replace the Air Manifold/Heat shield (PL 10.2). |
| 10. Photoreceptor is contaminated or defective. | 10. Replace the Photoreceptor (REP 9.3). |
| 11. Transfer /Detack Corotron Media Guides are not installed correctly. | 11. Ensure that the guides are installed correctly. |

CQ 12 Localized Deletions

Probable Cause

1. Media is damp.

Corrective Action

- 1a. Cut sheet media:

Make a copy, using a sheet of media from a new pack of media.

If the problem is corrected, ensure that the media is being stored correctly.

- 1b. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the roll media is being stored correctly.

Refer to Section 2 and ensure that the Media heater is working.

2. Fabric Guide is contaminated or wrinkled.

2. Replace the Fabric Guide (REP 8.9).

3. Fabric Guide not tensioned correctly.

3. Ensure that the Fabric Guide is installed correctly.

4. Corotrons are dirty, have loose wires or the corotron connectors are not connected correctly.

4. Check for connector damage or loose wires. Clean the corotron if it is dirty. Repair or replace corotron if it is damaged and perform the Electrostatic Series (ADJ 9.2).

5. Transfer /Detack Corotron Media Guides are not installed correctly.

5. Ensure that the guides are installed correctly.

(Continued)

Definition

Deletions are areas on the copy where the image is missing. (The causes for the defects are on the following two pages.)

CQ 12 Localized Deletions (Continued)

Probable Cause

Corrective Action

- | | |
|---|---|
| 5. The fuser temperature is too high. | 5. Check the Fuser Temperature (ADJ 10.1) |
| 6. Oil dispense assembly is contaminated. | 6. Replace the Oil Pads (PL 10.5) and Wick (PL 10.5). Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs. |
| 7. Lens is not mounted correctly or the light shield is damaged or missing. | 7. Check the following: <ul style="list-style-type: none">a. The Light Seal is separated from lens (PL 6.1). Repair the seal with black electrical tape.b. Ensure that the magnet and lens are positioned correctly against frame.c. Check for direct room light or sunlight on the copier. |
| 8. Document is damaged. | 8. Use document carrier and copy contrast controls. |
| 9. Not enough developer material is in developer housing. | 9. Replace developer material (REP 9.7) and perform the Electrostatic Series (ADJ 9.2).
<i>Note: If the developer material is replaced, perform [921-6] to calibrate the toner control system.</i> |
| 10. There are light leaks. | 10. Ensure that the covers are not damaged and that they are seated correctly. Allow the photoreceptor drum to rest before trying to make copies. |
| 11. Copier is not level. | 11. Level the copier. |
| 12. There is Developer bead carryover. | 12. Refer to the CQ 7 Developer Bead Carryover RAP. |

(Continued)

CQ 12 Localized Deletions (Continued)**Probable Cause****Corrective Action**

13. There is Crystallization of the Photoreceptor Drum.

13. Replace the drum (REP 9.3) and then perform the Electrostatic Series (ADJ 9.2). If this is a continuing problem, ask the customer if chemicals are used or stored in the area. If chemicals are suspected, discuss with the customer the possibility of moving the machine or chemicals to another location.

14. Air flow manifold is damaged.

14. Replace the Air Manifold (PL 10.2).

15. The Fuser pressure plates are not positioned correctly or they are damaged.

15. Check that the Fuser Pressure Plate (PL 8.1) is positioned in the extrusion. Replace the fuser pressure plates if they are damaged. The plates must be flat with the foam pads in good condition.

16. An electrostatic voltage is out of specification.

16. Perform the Electrostatic Series (ADJ 9.2) and the Image Density (ADJ 9.3 or 9.4).

17. There are Powder Deficiency Spots - Small size spot on the photoreceptor drum surface that will not accept a charge.

17. Replace the Photoreceptor Drum (REP 9.3).

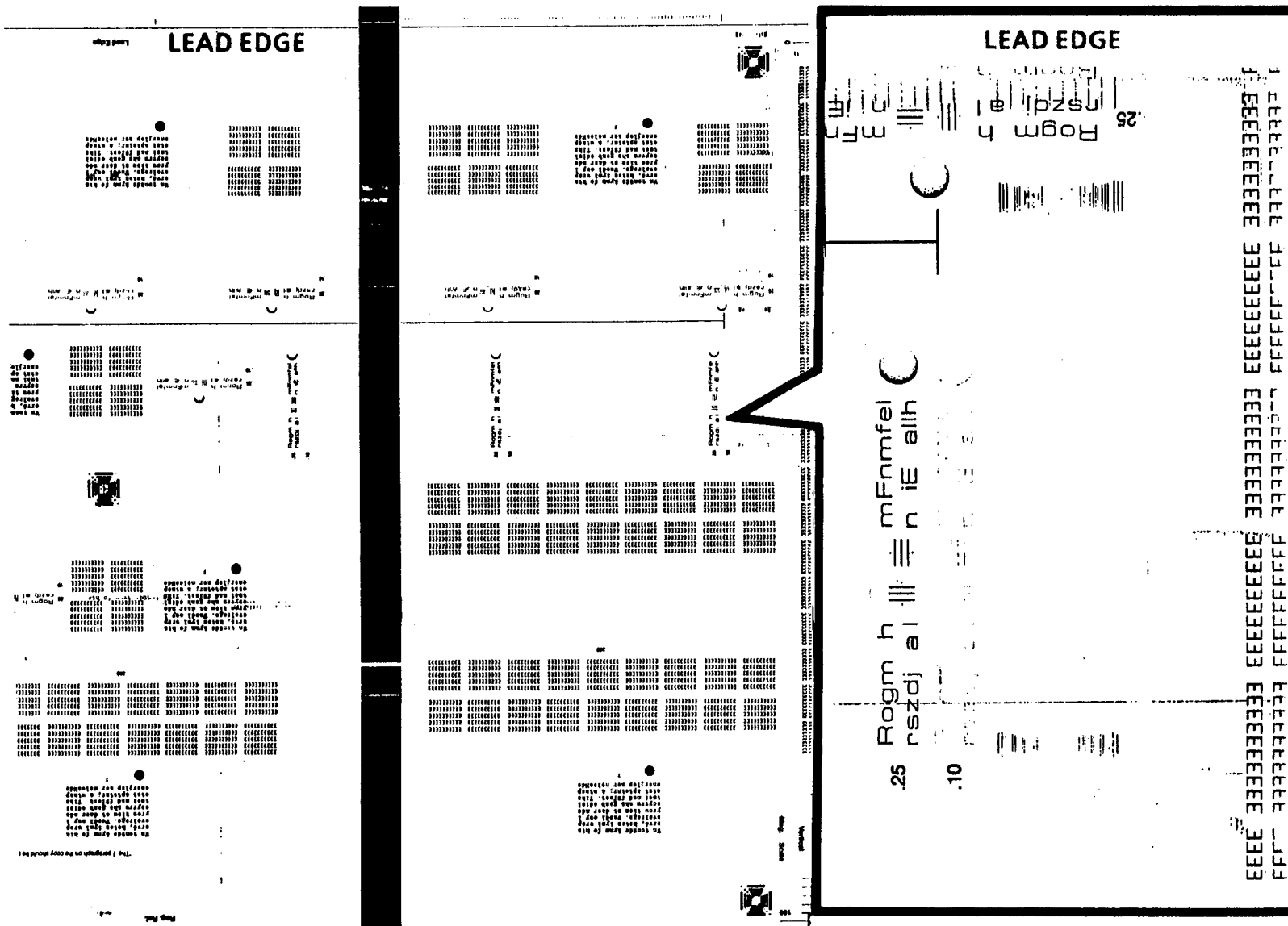
18. There are airborne contaminants.

18. Wash (General Procedures) or replace the Photoreceptor Drum (REP 9.3) as required and perform the Electrostatic Series (ADJ 9.2) and the Image Density (ADJ 9.3 or 9.4).

If this is a continuing problem, ask the customer if chemicals are used or stored in the area. If chemicals are suspected, discuss with the customer the possibility of moving the copier or chemicals to another location.

19. The fans are not functioning.

19. Go to the 1.3 Cooling Fans RAP in Section 2.



Definition

Offsetting is the transfer of an image from the copy to the fuser. The image is then transferred back onto the same copy or another copy. The offset image may be repeated approximately every 10.4 inches (264 mm).

CQ 13 Offsetting

Probable Cause

Corrective Action

1. There is Offsetting or Residual Image.
2. There is insufficient oil on the fuser.
3. The Fuser temperature is out of specification.
4. The Image Density is too high.
5. Media is damp.
6. Pressure Plates are deformed.
7. Fabric Guide is not smooth.

1. Go to the CQ 28 Isolation procedure to determine if the problem is offsetting or residual image. Return to this RAP if the problem is offsetting.
2. Replace Oil Pads (REP 10.9), and replace the Wick (REP 10.11). Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs.

Perform the procedure, Initialization of the Fuser Roll (General Procedures).
3. Check/adjust the Fuser Temperature (ADJ 10.1).

Note: If the Fuser temperature is reduced too much, poor toner fix could occur.
4. Reduce Image Density (ADJ 9.4).
- 5a. Cut sheet media:

Make a copy, using a sheet of media from a new pack of media.

If the problem is corrected, ensure that the roll media is being stored correctly.
- 5b. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, check that the media heater is working and ensure that the roll media is being stored correctly.
6. Replace Pressure Plates (PL 10.3).
7. Replace the Fabric Guide (PL 10.3).

BLANK

CQ 14 Registration

Probable Cause

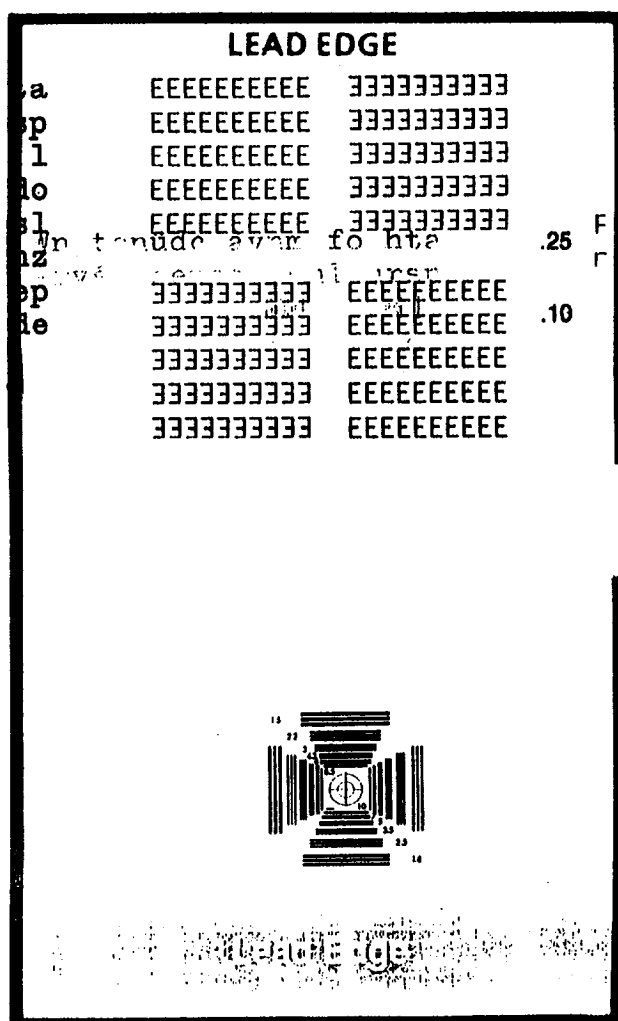
1. Registration is not adjusted correctly.
2. Document sensor is dirty or defective.
3. Operator did not insert the document correctly or interfered with the movement of the document.
4. There is a build-up of static electricity on the platen, the document feed-in shelf and/ or the upper rear door.

Corrective Action

1. Perform the Image Registration (ADJ 8.1) .
2. Ensure that the front document sensor is not damaged. Clean sensor with Antistatic cleaner or water and cotton.
3. Instruct the operator on how to insert the document into the document handler.
4. Clean the platen, the document feed-in shelf and the upper rear door with Antistatic Cleaner.

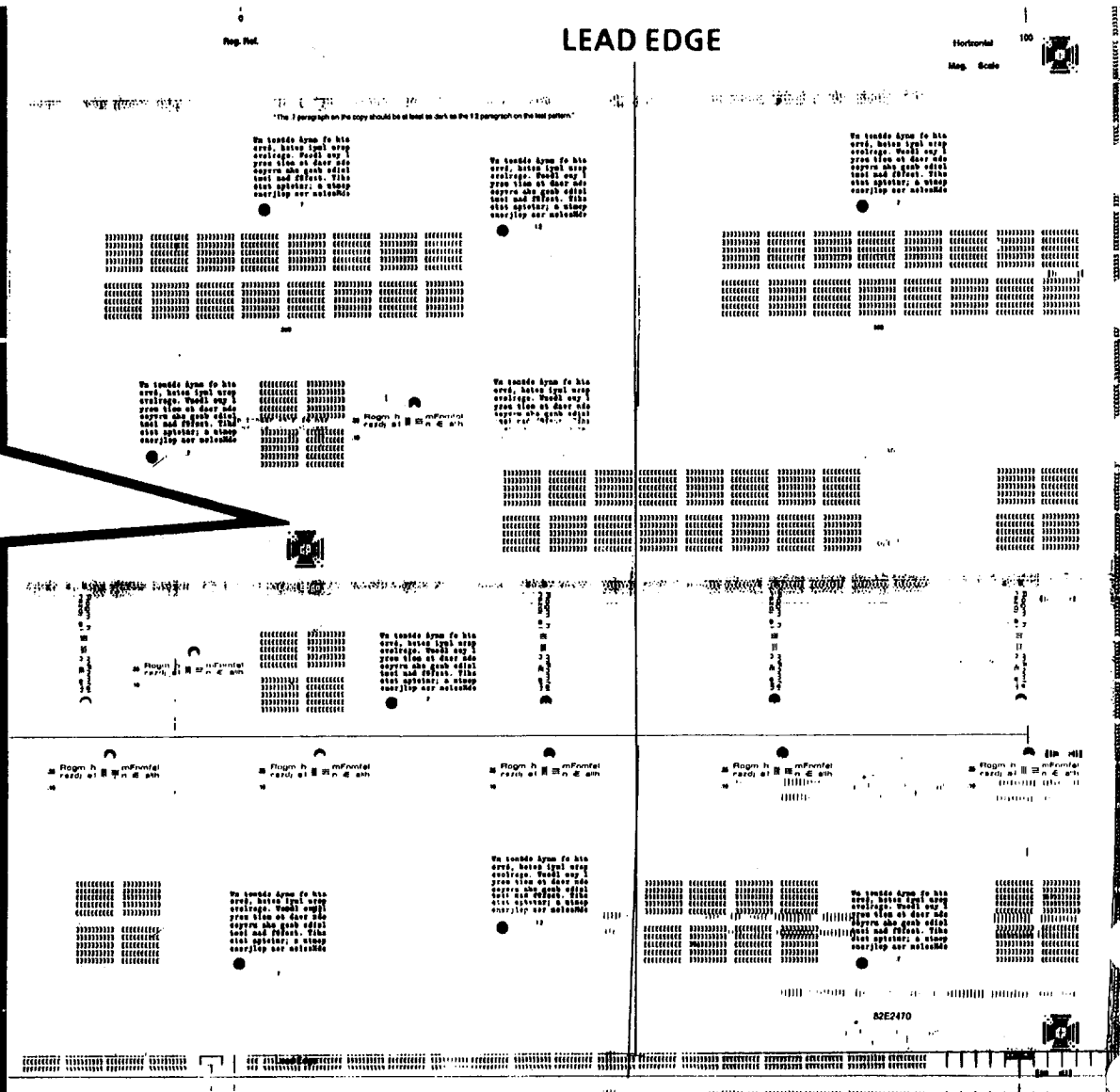
Definition

Misregistration: the distance from the lead edge of the image to the lead edge of the media is not within specification.



Definition

An image that is repeated back on to the same copy or the next copy made. The image can be either a negative image (see sample) or a positive image (almost the same as offsetting). The repeated image can be caused by poor cleaning or a photoreceptor drum that has been exposed to the light.



CQ 15 Residual Image

Probable Cause

1. There is Offsetting or Residual Image.
2. Photoreceptor drum is not being cleaned correctly.

Corrective Action

1. Go to the CQ 28 Isolation procedure to determine if the problem is offsetting or residual image. Return to this RAP if the problem is residual image.
2. Ensure that the Interlock switches are closed. Enter the code [0913] in order to check the Blade Positioning Motor (MOT3). Listen for the sound of the motor. If the motor does not turn, go to the OF 5 Cleaner Blade Positioning Motor RAP.

If the motor does energize (motor sound can be heard):

Check that the Cleaner Blade Weight moves freely (wires do not interfere with the cleaning blade weight) (REP 9.4).

Check that the Cleaner Auger and Drive Belt operate correctly.

Remove the Xerographic Module. Check that the cleaner blade assembly translates across the Photoreceptor drum.

Remove the Photoreceptor drum and check the following items for damage or contamination:

- Cleaner Blade Seal Assembly (REP 9.4).
- Cleaner Blade (REP 9.4).
- Cleaner Blade Retainers (REP 9.4).
- Photoreceptor Drum Seal (PL 9.5).
- Cleaner Housing

Per form the Photoreceptor Cleaning Enhancement procedure

If after performing the above checks the problem persists, replace the Cleaner Blade (REP 9.4).

3. Light shocked Photoreceptor drum.
4. The Erase LED PWB is not functioning.
5. An Electrostatic voltage is out of specification.
6. Toner Waste Bottle is full.
3. Make five copies in a Normal (center LED) contrast mode, then check the copy quality against the specification, Section 3, and CQ 14 Registration.
4. Refer to CQ 30.
5. Check/adjust the Electrostatic Series (ADJ 9.2).
If the residual image problem occurs again within a short period of time, replace the Drum (REP 9.3) and the Cleaner Blade (REP 9.4).
6. Replace waste bottle and ensure the auger rotates freely.

CQ 16 Resolution

Probable Cause

Corrective Action

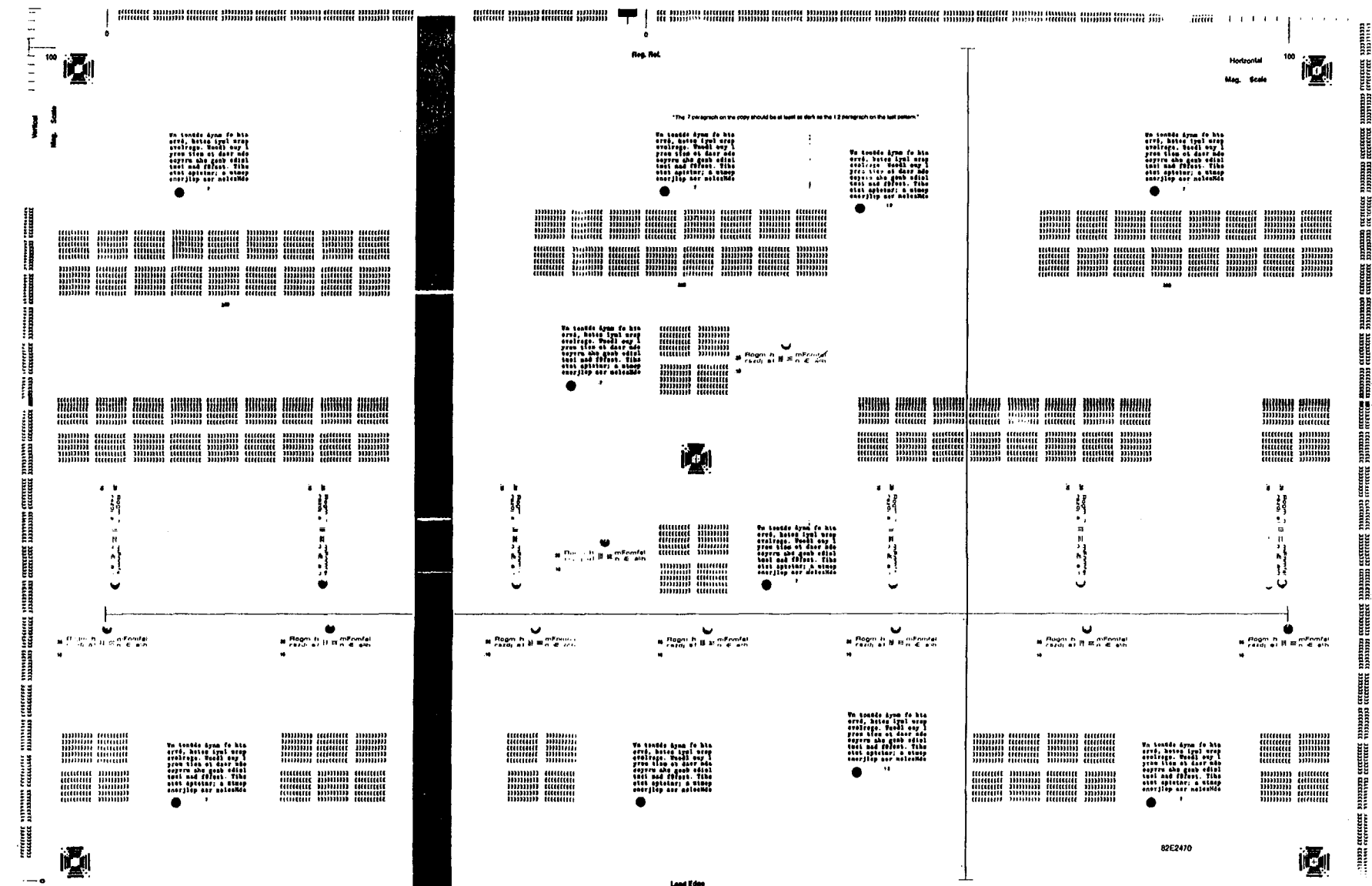
- | | |
|---|--|
| 1. Lens is damaged or is not installed correctly. | 1. Ensure that the Lens is installed correctly (REP 6.2) and that it is not damaged. |
| 2. Document handler is not installed correctly. | 2. Ensure that the Document Handler is installed correctly. |
| 3. The lower document feed rolls are contaminated or damaged. | 3. Clean the Feed Rolls with Formula A Cleaner (USO, RX, and XLA) and water. Replace the rolls if they are damaged (PL 5.1). |
| 4. The platen is not installed correctly or is damaged. | 4. Ensure that the Platen is installed correctly. Replace the platen (PL 6.1) if it is damaged. |
| 5. There is a buckle in the document. | 5. Straighten the creases in the document. Use document carrier as required. |
| 6. Exposure level is incorrect. | 6. Perform the Electrostatic Series (ADJ 9.2). |

No copy defect sample is needed.

Definition

The image is out of focus and is blurred.
Refer to the Image Quality Specification.

CQ 17 Skewed Image



Definition

Skewed image defect: The copy image is not parallel with the edges of the copy media.

Skew Isolation Procedure

1. Figure 1: Place a piece of tape across the width of the platen. Place the tape so that when a copy is made the image of the tape will be a few inches in from the edge of the copy media.
2. Make a copy.
3. If the copy looks like one of the strips in Figure 2, the problem is in the media feed.
4. If the copy looks like Figure 3, the problem is in the document feed.
5. Refer to the appropriate Probable Cause to correct the problem.

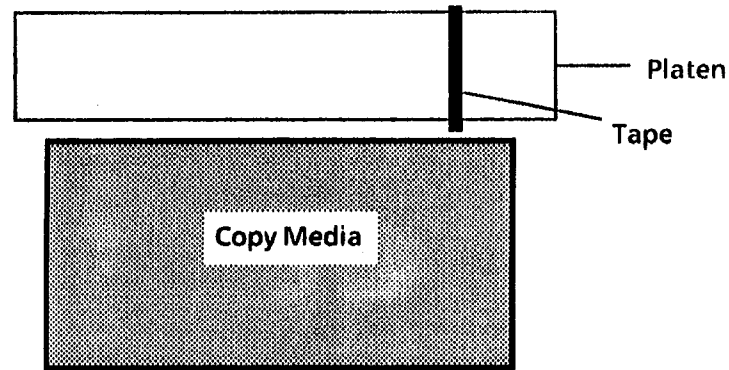


Figure 1. Installing the Tape

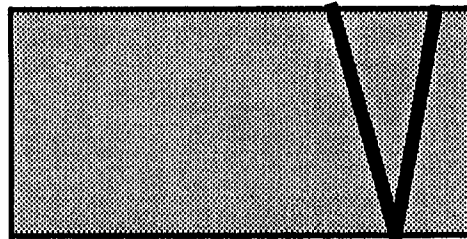


Figure 2

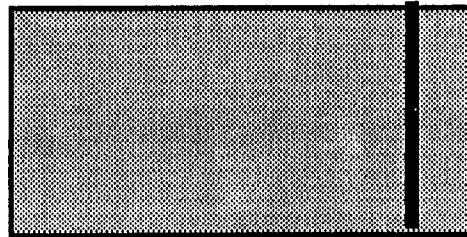


Figure 3

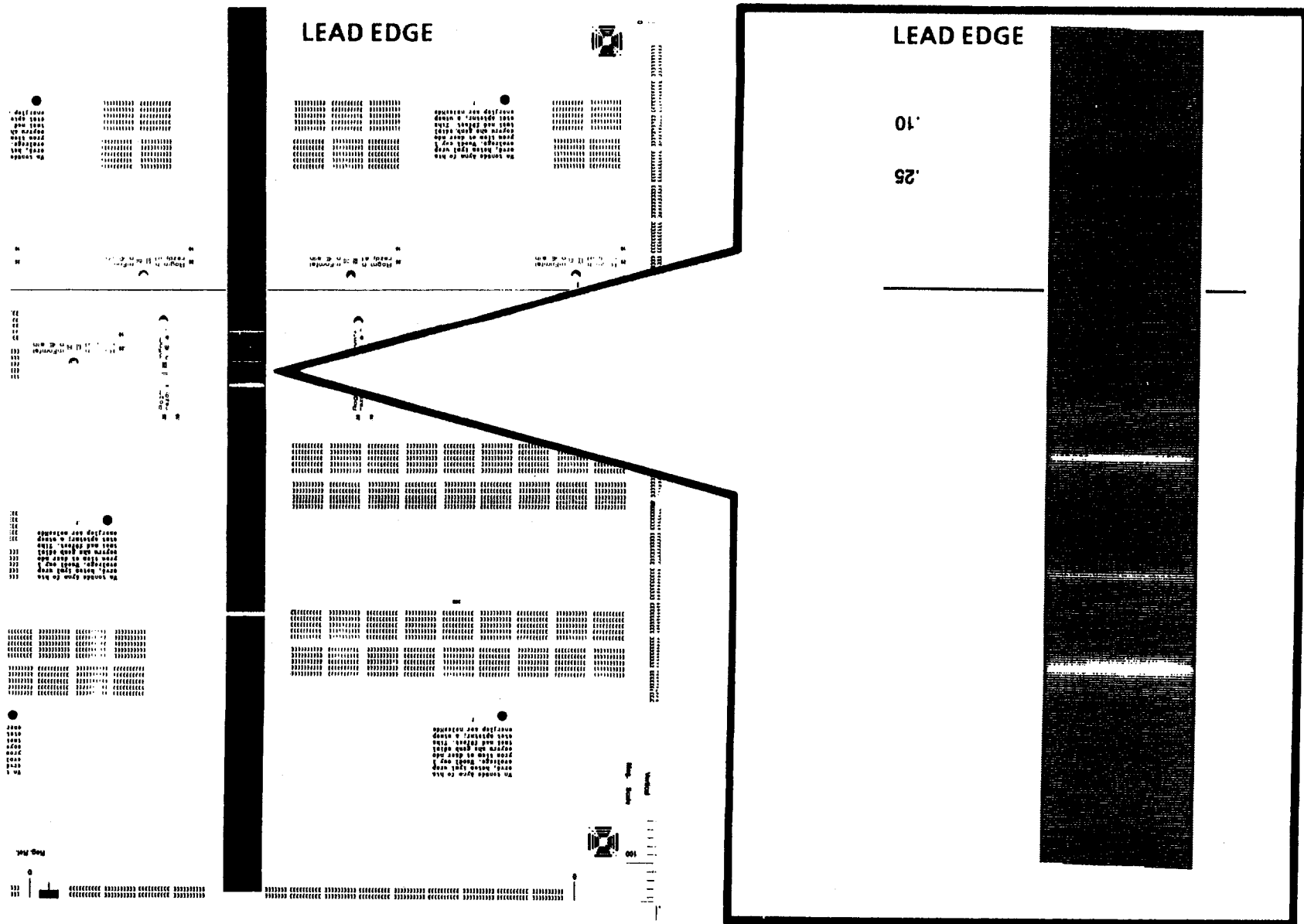
CQ 17 Skewed Image

Probable Cause

1. Document entered the document handler incorrectly aligned, or the cut sheet media entered the feed rolls incorrectly aligned.
2. There is static on the platen or the platen is damaged.
3. Document Idler Rollers are contaminated or damaged.
4. There is an obstruction in the document return path. More probable in the multiple copy mode.
5. Registration Drive and or pinch rolls are contaminated or damaged.
6. Media Feed Drive and/or pinch rolls are contaminated or damaged.
7. The lead edge of the document or of the copy media is damaged.

Corrective Action

1. Ensure that the document and the copy media are fed in straight.
2. Clean the Platen with Antistatic Cleaner .
Replace the Platen (PL 6.1) if it is damaged.
3. Check that the Lower Document Drive rolls and Document Pinch Rolls (PL 5.2) are not binding. Replace the rolls and bearings if necessary.
4. Check the document return path.
5. Clean the Registration rolls (PL 8.2):
USO and XLA: Formula A Cleaner and water.
RX: General Purpose Cleaner
Replace the rolls if they are damaged.
6. Clean the rolls (PL 8.2):
USO and XLA: Formula A Cleaner and water.
RX: General Purpose Cleaner
Replace the rolls if they are damaged.
7. Ensure that the lead edges of the document and the copy media are straight and are not damaged.

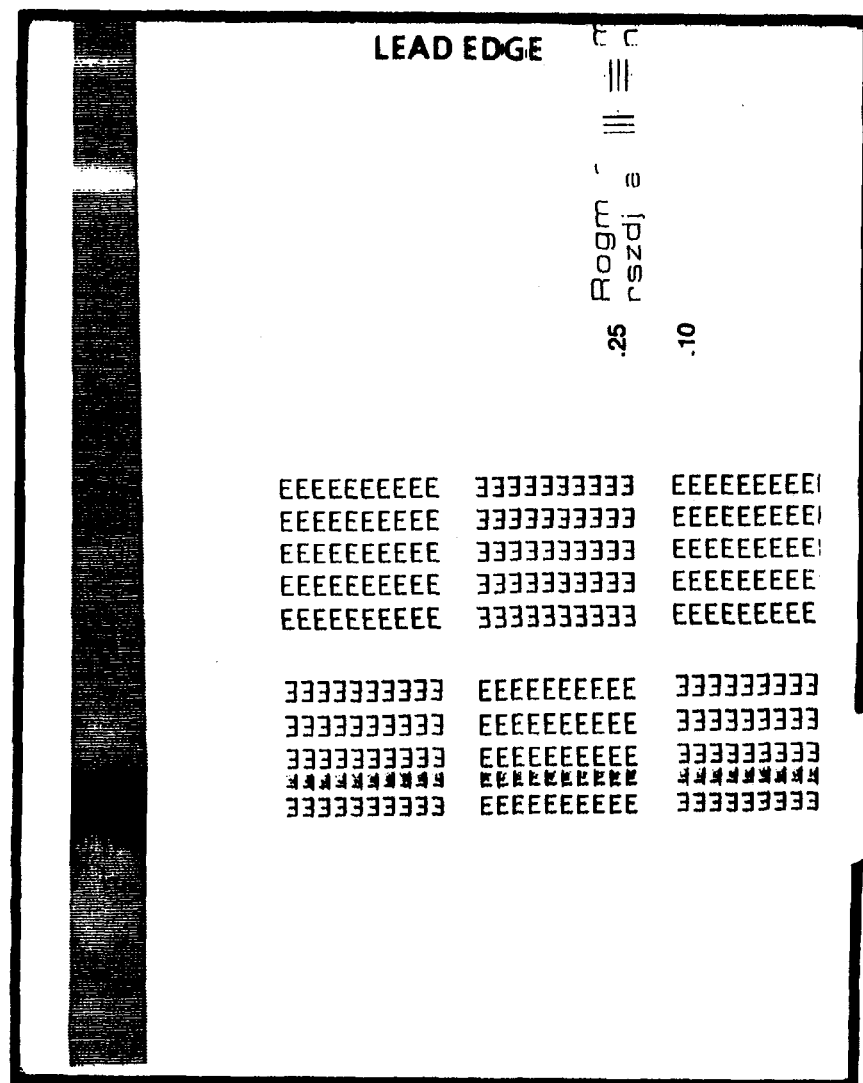


Definition

Skips are a light image defect that is caused by a difference in speed between the document and the drum surface.

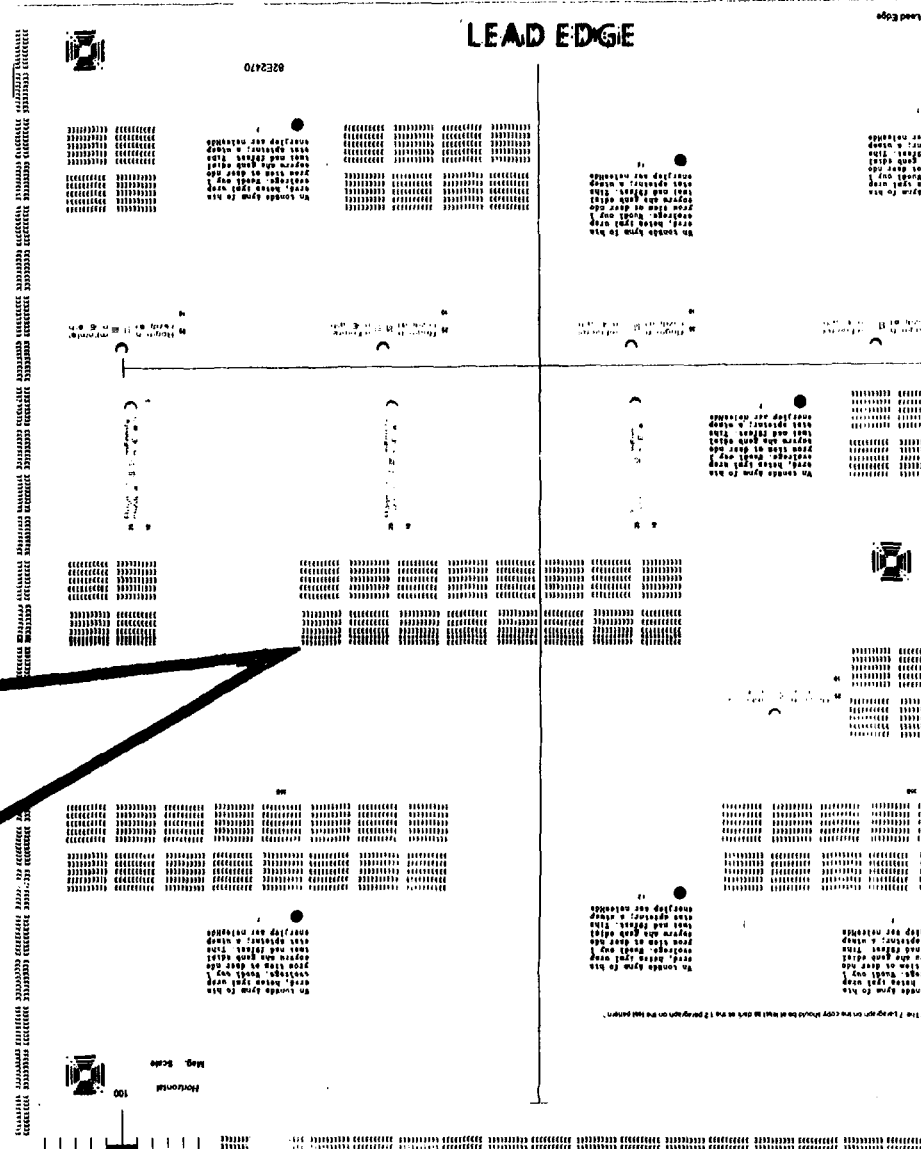
Probable Cause**Corrective Action**

- | | |
|--|--|
| 1. Document was disturbed as it moved across the platen. | 1. Check the platen for damage. Clean the platen with Antistatic Cleaner. Ensure that the document is not moved or disturbed as it feeds through the document transport. |
| 2. Document transport drive belt is slipping on the drive pulleys. | 2. Check that the document Drive rolls and document Pinch rolls are not binding.
A. Ensure belt is tensioned properly and is not damaged.
B. Check photoreceptor drives. |
| 3. Document Drive Belt and Pulleys are contaminated or damaged. | 3. Replace the damaged or contaminated parts (PL 5.2). |
| 4. Ensure that the Document Drive Pulleys are not loose. | 4. Replace pulleys. |
| 5. Document handler is not seated correctly. | 5. Ensure that the Document handler is seated correctly and that it is latched correctly. |
| 6. Photoreceptor drive gear is damaged. | 6. Replace the photoreceptor shaft assembly (PL 9.2). |
| 7. Worn or defective D holes in the Document Drive pulley. | 7. Replace pulley (PL 5.2). |



Definition

Smear is an image defect caused by a difference in speed between the photoreceptor drum surface and the copy media.



CQ 19 Smears

Probable Cause

Corrective Action

- | | |
|--|---|
| 1. Operator interfered with the copy media as the media fed into or out of the copier. | 1. Question the operator as to how the media is inserted into the copier. |
| 2. Photoreceptor drum is not secured correctly on drum shaft, causing the drum to slip. | 2. Tighten the Photoreceptor Drum hardware (REP 9.3).
Ensure Photoreceptor Drive Gear is not damaged. |
| 3. Transfer/detack corotron current is out of specification. | 3. Perform the Electrostatic Series (ADJ 9.2). |
| 4. Media is contacting the cleaner extrusion between the photoreceptor drum and the fuser roll. | 4. Try to make a copy using a Xerox approved media to see if the defect is corrected. Replace the media, if required. |
| 5. Drum/Developer drive motor gear mesh is too tight. | 5. Check the condition of the gears. |
| 6. The copy media hesitates as it goes through the fuser, causing the media to buckle. This allows the media to contact the bottom of the xerographic module and smudge the image. | 6. Go to the Media Transportation Problems located in this section.
Check the Media Pressure Plates for damage (PL 10.3). |
| 7. The copy stalls in the fuser. | 7. Check the following: <ul style="list-style-type: none">a. Fuser Temperature (ADJ 10.1)b. Damage or contamination of the Fabric Guide (PL 8.1).c. The position of the fuser pressure plates and Fabric Guide (PL 10.3).d. Inspect the Fuser Drive Belt tension, and the Fuser drives for damage.e. Excessive oil on fuser roll. |
| 8. Worn or defective D holes in the Document Drive pulley. | 8. Replace pulley (PL 5.2). |
| 9. Fuser drive belt is loose. | 9. Tighten the Fuser drive belt (PL 10.2). |

CQ 20 Spots

Probable Cause

Corrective Action

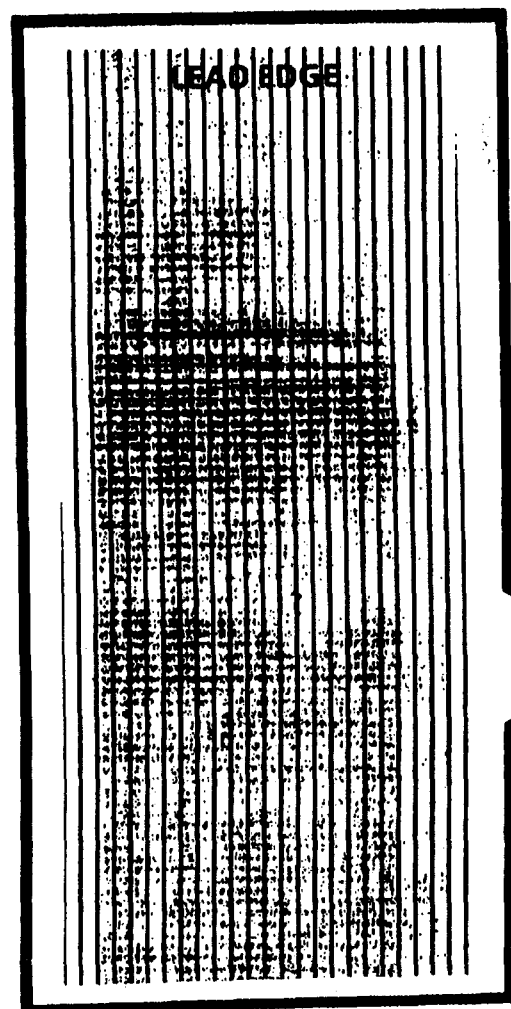
No copy sample defect is needed.

- | | |
|---|---|
| 1. Photoreceptor drum is contaminated or damaged. Defect appears every 10.4 inches (264 mm). | 1. Wash (General Procedures) or replace (REP 9.3) the Photoreceptor Drum as required. |
| 2. Developer material is contaminated. | 2. Inspect and clean any contamination on the Developer Housing. Check the developer for correct operation. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 & 9.4). |
| 3. Fuser Roll or Oil Dispense wick is contaminated or damaged. Defect appears every 10.4 inches (264 mm). | 3. Clean or replace the Fuser Roll (REP 10.2) and Wick (REP 10.11). Clean Doner Roll with film remover. Ensure Doner Roll has wrap springs. |
| 4. Media Feed Drive and/or Pinch Rolls is contaminated or damaged. | 4. Clean or replace Media Feed drive and/or Pinch Rolls (REP 8.2). |
| 5. Media is defective or damaged. | 5. Use Xerox approved media and make a copy to see if the defect is corrected. Replace the media, if required. |
| 6. Developer Material has made more than 40K feet (12K metres) of copies. | 6. Replace the developer material (REP 9.8) and perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 & 9.4).

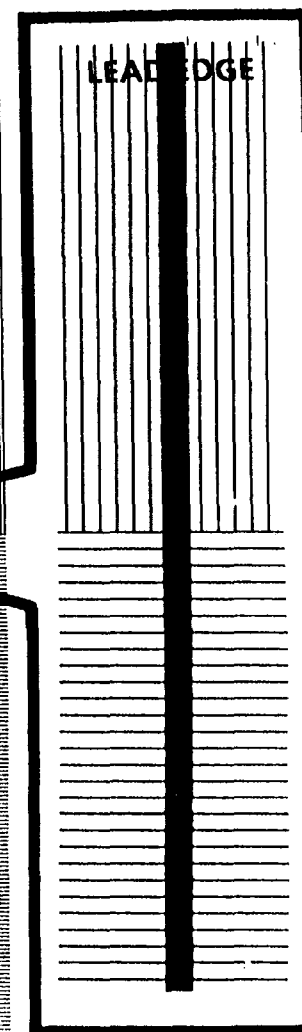
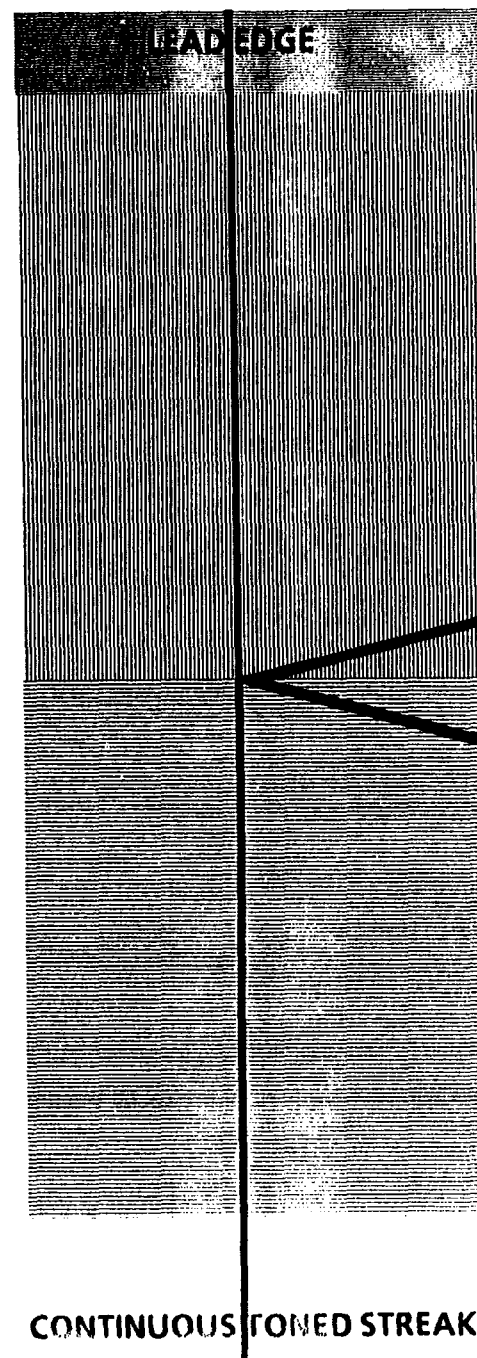
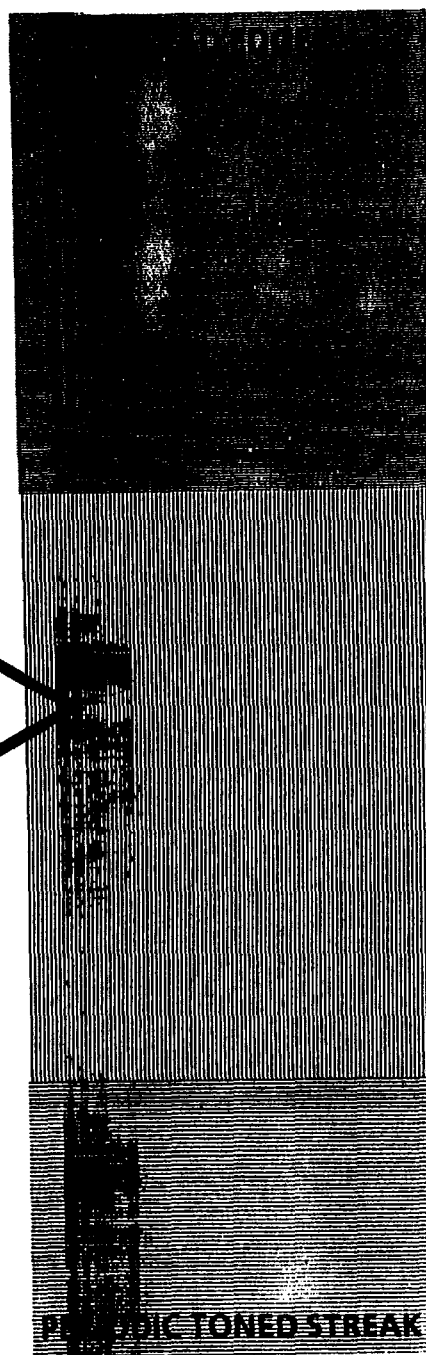
<i>Note: If the developer material is replaced, perform [921-6] to calibrate the toner control system.</i> |
| 7. Photoreceptor Seal is Damaged. | 7. Replace/ Reform the Photoreceptor Seal (PL 9.5). |
| 8. Excessive dry ink contamination is on the turnaround baffle near the transfer/detack corotron. | 8. Clean the contamination, then check that the developer housing is seated correctly. Check for an obstruction between the magnetic roll and the developer housing. Check the developer housing for damage. |

Definition

These defects are 0.2 inches (5 mm) or smaller in diameter. These could appear at intervals that are in the process direction. Defect may appear every 10.4 inches (264 mm) if the defect is on the photoreceptor or fuser roll.

**Definition**

Copy defects that appear in the process direction (from lead edge to trail edge). Streaks may be uniform, nonuniform (a smudge with no clearly defined line pattern), or periodic.



CQ 21 Streaks

Probable Cause

Corrective Action

- | | |
|--|--|
| 1. There is moisture on the photoreceptor. | 1. Empty the moisture collection bottle. Drain moisture from the media transport. Check for obstruction in the drain system. |
| 2. Something is blocking the optical path to the photoreceptor drum. | 2. Remove the photoreceptor drum assembly (REP 9.2) and cover it with a shield. Look for an obstruction in the optical path. |
| 3. Photoreceptor drum is not being cleaned correctly. | <p>3. Enter the diagnostic mode and then enter the code [0913]. Listen for the sound of the motor. If the Cleaner Blade Positioning Motor (MOT3) does not turn, go to the OF 5 Cleaner Blade Positioning Motor RAP.</p> <p>If the motor does turn, check the following:</p> <ul style="list-style-type: none">The cleaner blade weight moves freely (REP 9.4).The cleaner blade assembly translates across the photoreceptor drum.No wires are interfering with the cleaner blade weight.Cleaner auger and drive belt operate correctly. <p>Remove the photoreceptor drum and check the following for damage or contamination:</p> <ul style="list-style-type: none">● Cleaner blade seal assembly (REP 9.4)● Cleaner blade (REP 9.4)● Cleaner blade retainers (REP 9.4)● Drum seal (PL 9.5)● Cleaner Housing (PL 9.5) <p>Perform the Photoreceptor Cleaning Enhancement Procedure.</p> <p>If the cleaning problem persists, replace the Cleaner Blade (REP 9.4).</p> |
| 4. Developer Waste Bottle is full. | 4. Replace bottle and ensure that the auger rotates freely. |

(Continued
)

Probable Cause**Corrective Action**

- | | |
|---|---|
| 5. Developer housing is not functioning correctly or is not seated correctly. | 5. Replace the developer material (REP 9.7). If more than 40K feet (12K metres) of media have been run, check the developer roll and material for contamination. Replace the developer material as required. Ensure that the Developer Housing is seated and operating correctly. Ensure that the developer housing is level. |
| 6. Fuser components are contaminated or damaged. | 6. Check the fuser roll for contamination, damage, or offsetting. If the Fuser Roll is damaged, check the Stripper Fingers (PL 10.4) for damage. If there is material from the fuser roll on the Air Manifold, check the Air Manifold (PL 10.2) for interference with the fuser roll. Check the oil dispense assembly for the correct operation. Check for contamination of the fuser wick. Check the fabric guide for damage that may have caused the contamination of the drum because of excessive moisture. |
| 7. Media path components and baffles are contaminated. | 7. Clean the contaminated media path baffles and components. |

(Continued)

CQ 21 Streaks (Continued)

Probable Cause

8. Media supply is contaminated.
9. Copier is not level (side-to-side).
10. Dry ink concentration is too high.

11. The photoreceptor drum has been subjected to light shock, crystallization, contamination, or it is defective.

Corrective Action

8. Clean the media supply area.
9. Ensure that the copier is level (ADJ 14.1) (side-to-side).
10. Remove the Dry Ink Cartridge and inspect for damage and dry ink leakage. If the cartridge is damaged, replace the cartridge and the waste bottle.
Check the Image Density. If the Density is greater than 1.2, perform the Decrease the Image Density (ADJ 9.4) adjustment procedure.
11. Wash (General Procedures) or replace the photoreceptor drum (REP 9.3) as required. Check for damage to other components that touched the photoreceptor drum in the area where the defect occurred. Check for contamination or damage of the following parts: Cleaner Blade, Seals in the Cleaner area, Magnetic Seal, Developer material, or Developer roll.
Perform the Electrostatic Series (ADJ 9.2). Check that the line darkness is in specification; adjust the Image Darkness (ADJ 9.3 or 9.4), if required.

(Continued)

- | | | |
|--|--|---|
| 12. Corotrons are contaminated or defective. | | 12. Make a copy and perform the Image on Drum (Panic Stop) procedure in Section 6 to isolate the cause of the defect.

If the defect is on the developed image on the Photoreceptor Drum, replace the Charge Corotron (PL 9.3).

If the defect is not on the Photoreceptor Drum, but it is on the media, replace the Transfer Corotron (PL 9.4).

Perform the Electrostatic Series (ADJ 9.2). Check that the Line Darkness is in specification, adjust the Image Density (ADJ 9.3 or 9.4), if required. |
| 13. The light leaks because the covers are misadjusted or are loose. | 13. Ensure that the Covers are not damaged and are seated correctly. | |
| 14. The Light Lens Shield is loose from the magnet. | 14. Replace the Light Lens Shield (PL 6.1). | |
| 15. Media is damaged or damp media. | 15. Cut sheet media:

Make a copy using a sheet of media from a new pack of media.

If the problem is corrected, check that the media is being stored correctly. | |
| 16. Media is damp or Damaged. | 16. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the media heater is working and that the roll media is being stored correctly. | |

CQ 22 Marginal Fused Copy

Probable Cause

1. Inadequate input power.
2. The fusing temperature is too low.
3. Media is damp .

Corrective Action

1. Refer to Section 6 Installation Procedure and check the AC line voltage and the machine ground.
2. Check/adjust the Fuser Temperature (ADJ 10.1).
- 3a. Cut sheet media:
Make a copy using a sheet of media from the middle of the stack.

If the problem is corrected, check that the media is being stored correctly.
- 3b. Roll media:

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the media heater is working and that the roll media is being stored correctly.
4. Check that the fabric guide is installed correctly .
5. Ensure that the fuser pressure plates are seated correctly. The plates should be flat and foam pads should be in good condition.

There is no copy defect sample needed.

4. Fabric guide tension is incorrect .
5. Fuser pressure plates are not seated correctly.

Definition

Marginal Fused copy is a copy where the image can be easily wiped off the media.

(Continued)

CQ 22 Marginal Fused Copy
(Continued)

Probable Cause

Corrective Action

- | | |
|--|---|
| 6. Fuser Heat Roll surface is worn or damaged. | 6. Replace Fuser Roll. Check and replace Stripper Fingers as necessary. |
| 7. The Image Density is greater than 1.2. | 7. Perform the Electrostatic Series (ADJ 9.2). |

CQ 23 Wrinkle Deletions

Probable Cause

1. Media is wrinkled.

Corrective Action

1. Go to Media Handling Problems procedure located in this Section.
Refer to the Media Check section of the procedure.

Definition

Wrinkle deletions are large areas of image that are missing from the copy around a wrinkle in the media.

CQ 24 Trail Edge Deletion

Probable Cause

1. Excessive curl in the media.

NOTE: The Trail Edge Deletion is caused by the preset curl in the media. The curl is formed by the media being wrapped around the core of the roll. The deletion may get worse as the roll of media is depleted and the diameter of the roll becomes smaller.

Corrective Action

1. Use the media that is longer than what is actually required for the image area.

No copy defect sample

Definition

A Trail Edge Deletion exists when an image deletion greater than 0.24 inches (5 mm) on the trail edge of the copy is observed.

CQ 25 Developer Bias RAP

This RAP is used for background and copy contrast related problems.

Initial Actions

- Ensure that the developer bias connector A25 P25, is seated correctly on the high voltage power supply HVPS (A25) and that the developer bias lead is connected to the developer bias clip.
- Go to FLAG 1 and check the developer bias lead for a short circuit to frame or an open circuit.

Procedure

Set the meter to measure + 300 VDC.

Connect the (–) to the **GND** test point on the HVPS.

Plug in and switch on the copier. Cheat the upper rear cover interlock switch. Make a copy in the light input, normal copy mode.

The voltage at the developer bias clip changes from approximately 0.00 VDC to approximately +200 VDC while a copy is being made.

Y N

The voltage at A25 P25 Pin 8 of the High Voltage Power Supply goes from +14.1 VDC to +4.9 VDC while a copy is being made.

Y N

A B C

A B C
Y N

Switch off the copier. Go to FLAG 2 and check the wiring for an open circuit.

If there is no open circuit, replace the Control PWB (PL 1.4).

The voltage at A25 P25A Pin 12 goes low while a copy is being made.

Y N

Switch off the copier. Go to FLAG 3 and check the wiring for an open circuit.

If there is no open circuit, replace the Control PWB (A3) (PL 1.1).

Replace the High Voltage Power Supply PWB (A25) and perform the Electrostatic Series (ADJ 9.2).

A

A

Make a copy in the Dark Input, normal copy mode.

The voltage at the developer bias clip goes from approximately 0.00 VDC to approximately +300 VDC while a copy is being made.

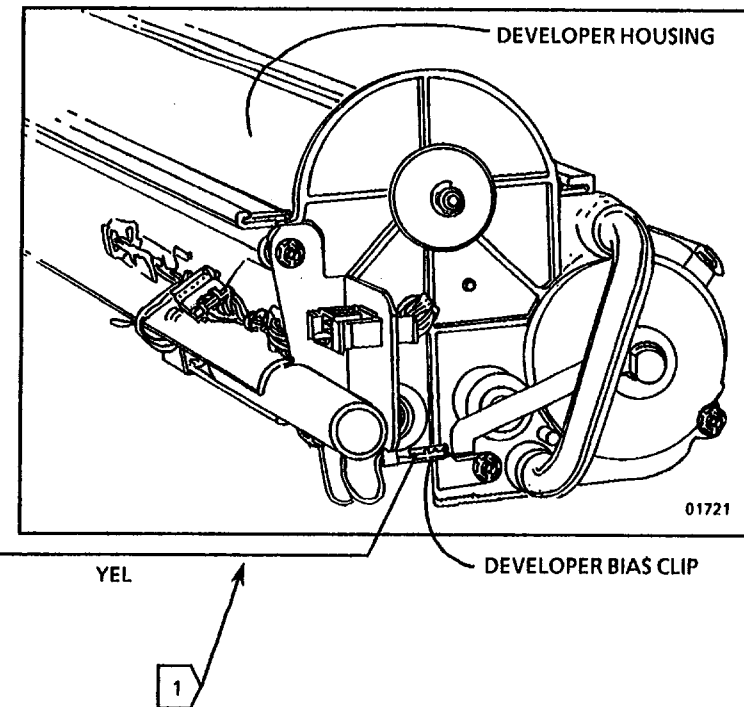
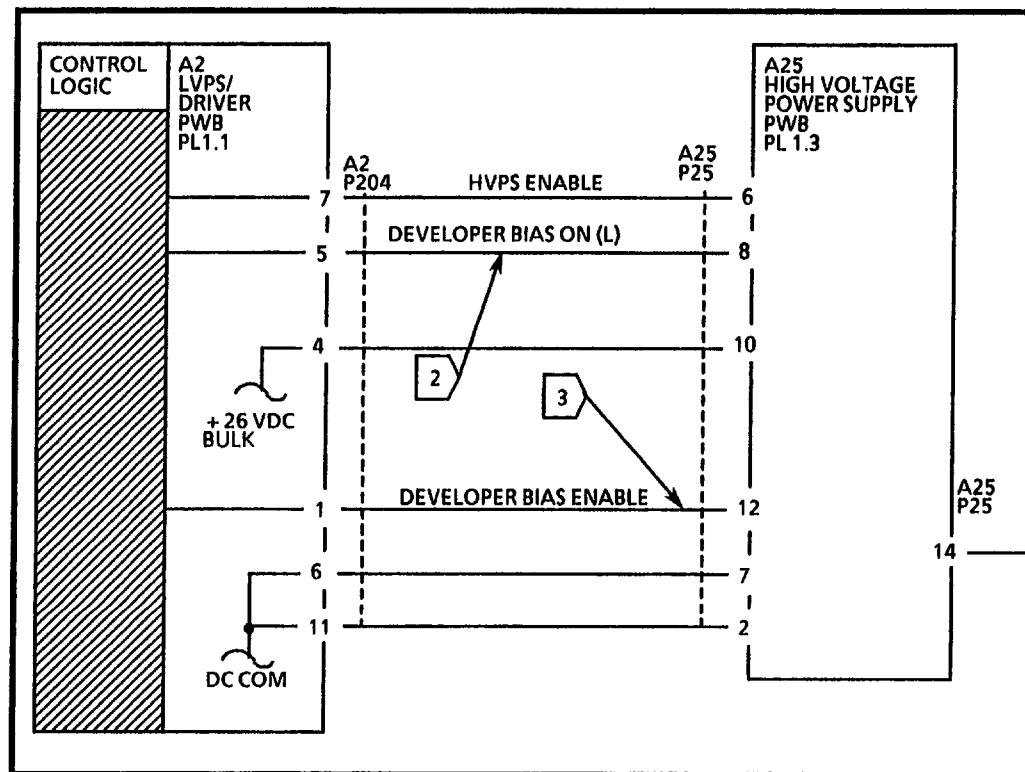
Y N

Replace the High Voltage Power Supply PWB (A25) and perform the Electrostatic Series (ADJ 9.2).

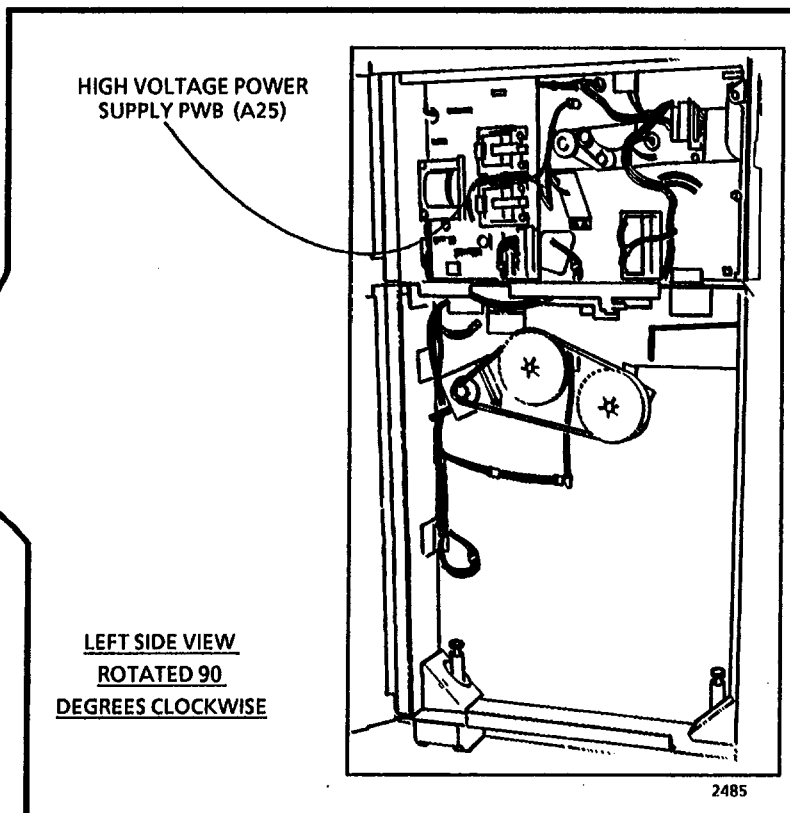
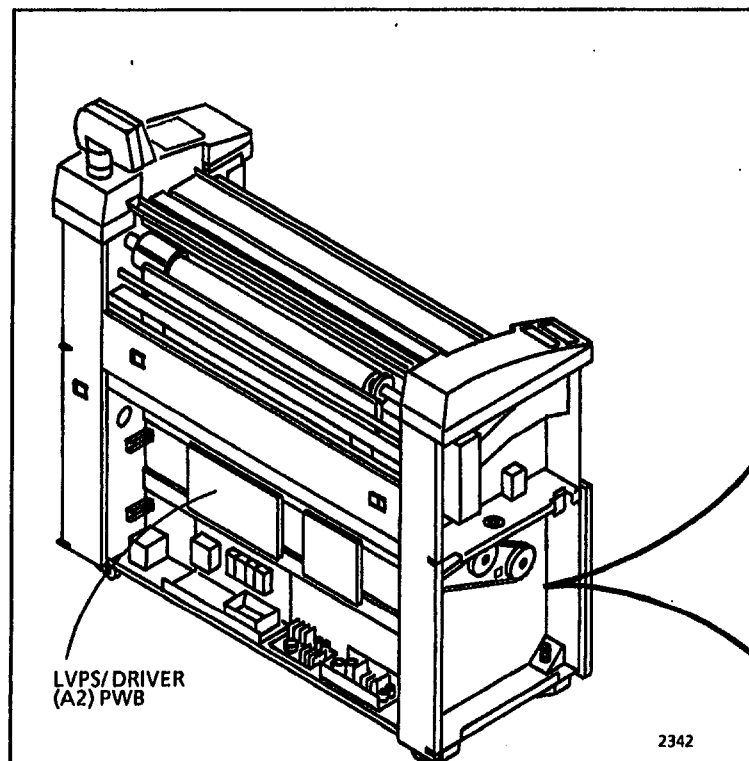
Go to the Copy Quality RAP that directed you here and continue troubleshooting the copy quality problem.

Developer Bias Voltages While Copies Are Being Made

Document Input	Copy Contrast						
	3 DARK	2 DARK	1 DARK	NORMAL	1 LIGHT	2 LIGHT	3 LIGHT
DARK	200 VDC	200 VDC	250 VDC	300 VDC	350 VDC	400 VDC	400 VDC
LIGHT	100 VDC	150 VDC	150 VDC	200 VDC	200 VDC	300 VDC	350 VDC



Notes:



CQ 26 High Voltage Power Supply RAP

This RAP is used for copy quality problems related to the loss of Charge or Transfer Corotron voltage. This RAP may also be used to check Detack Corotron problems.

Initial Actions

- Switch off and unplug the copier.
- Ensure that the connectors are correctly seated on the high voltage power supply.
- Ensure that all corotrons are connected and free of contamination.

Procedure

Set the meter to measure +26 VDC.

Connect the (–) to the GND test point (TP4) on the HVPS.

Plug in and switch on the copier.

There is +26 VDC at pins 1 and 10 of A25 P25 of the HVPS.

Y N

If there is +26 VDC at Pins 4 and 12 of A2 P204 go to FLAG 1 and check the wiring for an open circuit. If there is not +26 VDC at pins 4 and 12 of A2 P204 replace the LVPS/ Driver (A2).

A

A

Enter the diagnostic code [0921-1] and connect the (–) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 6 and A2 P204 Pin 7. If there is not a low at both pins, go to FLAG 2 and check the wiring. If the wiring is OK replace the LVPS/ Driver (A2). If the problem persists, replace the Controller PWB (A3).

Enter the diagnostic code [0921-1] and connect the (–) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 3 and A2 P204 Pin 10. If there is not a low at both pins, go to FLAG 3 and check the wiring. If the wiring is OK, replace the LVPS/ Driver (A2). If the problem persists, replace the Controller PWB (A3).

NOTE: *The wire between A25 P25 Pin 3 and A2 P204 Pin 10 is used for charge bias. During rescan of a normal copy run the charge bias will momentarily go from 0 VDC to about 14.5 VDC. This bias change effectively shuts down the Charge Current during rescan, enabling the copier to run cleaner with decreased toner consumption.*

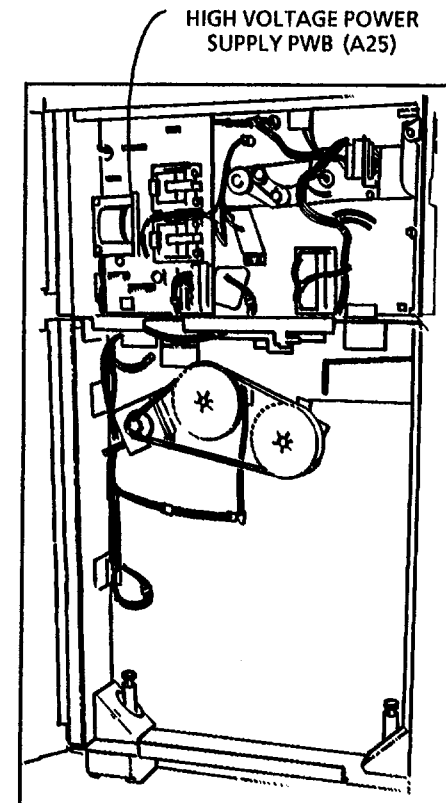
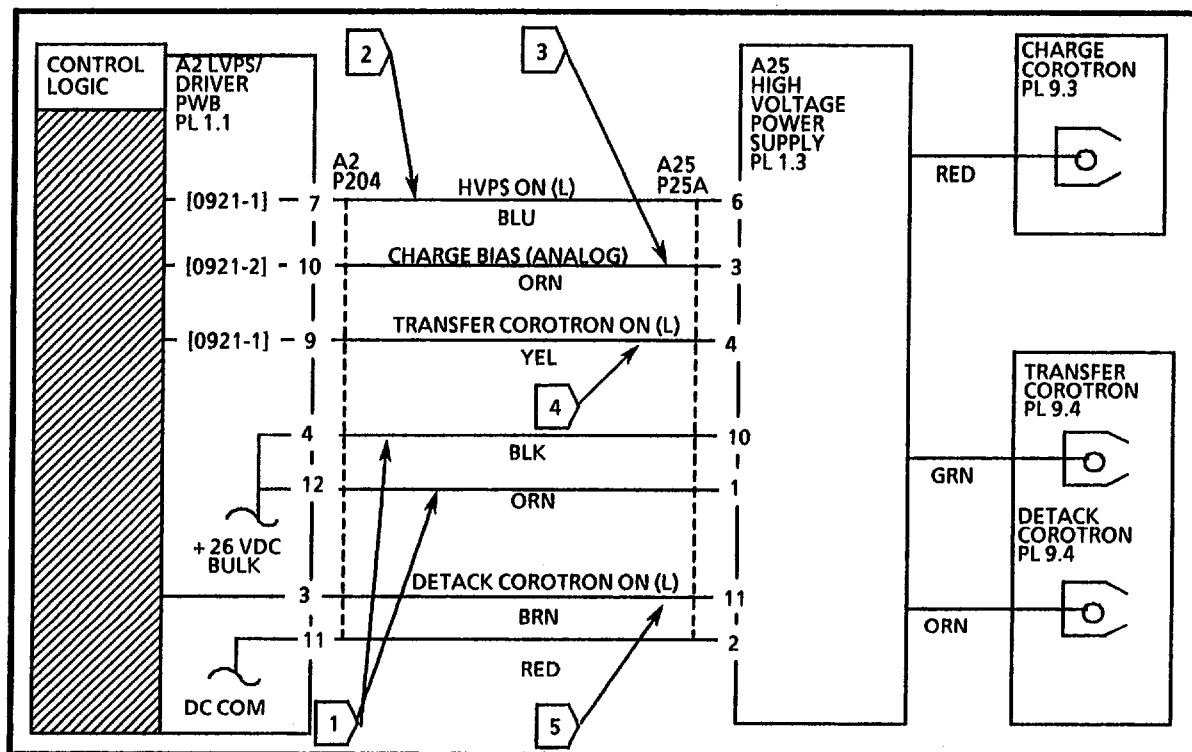
Enter the diagnostic code [0921-1] and connect the (–) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 4 and A2 P204 Pin 9. If there is no low at both pins, go to FLAG 4 and check the wiring. If the wiring is OK replace the LVPS/ Driver (A2). If the problem persists, replace the Controller PWB (A3).

Enter the diagnostic code [0921-1] and connect the (–) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 11 and A2 P204 Pin 3. If there is not a low at both pins, go to FLAG 5 and check the wiring. If the wiring is OK replace the LVPS/ Driver (A2). If the problem persists, replace the Controller PWB (A3).

Go to ADJ. 9.2, if any of the outputs cannot be set, check for an open circuit in the wiring from the HVPS to the corotrons.

If the problem persists, repair or replace the problem corotrons.

If the problem persists, replace the HVPS PWB (A25) and perform the Electrostatic Series (ADJ 9.2).



2485

CQ 27 Exposure Control RAP

This RAP is used if the photoreceptor background voltage cannot be set to specification in ADJ 9.2, and for problems with Uniform Background, Banding/ Streaks, Light Copy, and Poor Resolution.

Initial Actions

- Ensure that connectors A2 P208, A3 P304, A4 P21, A4 P22 are connected/ seated properly.
- Ensure that the exposure lamp and the Jacket is positioned properly.

Procedure

WARNING

The exposure lamp, charge, developer bias, erase lamp, main drive, fuser, and the drum cleaning blade are energized when code [0921-5] is entered.

Enter the code [0921-5]. Make a note of the Illumination sensor voltage displayed on the Message Display. Press copy contrast Darker (down) button 3 times.

The illumination sensor voltage decreases by greater than 2.0 VDC.

Y N

The illumination sensor voltage changed by less than 2.0 VDC, but more than zero changed.

Y N

Press Stop and enter [0921-5]. While observing the lamp intensity, press the copy contrast Darker (down) button 3 times.

The lamp intensity decreased.

Y N

A B C D

A B C D

Press Stop and connect the DMM between A2 P208 pin 7 and ground. Enter [0921-5] and make a note of the illumination voltage displayed on the top line of the Message Display. Press the copy contrast Darker (down) button 3 times.

The voltage and DMM voltage both decreased by at least 7.0 VDC.

Y N

Go to Flag 2 and check the wiring for a short circuit. If there is no short circuit, replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3).

Replace the Lamp Ballast Power Supply PWB (A5). If the problem persists, go to Flag 3 and check the wiring for a short circuit. If the problem persists, replace the Exposure Lamp.

Go to Flag 1 and check the wiring for an open or short circuit. If the problem persists, replace the Illumination Sensor. If the problem persists, replace the Controller PWB (A3).

Press Stop and connect the DMM between A2 P208 pin 7 and ground. Enter [0921-5] and make a note of the illumination Bias voltage displayed on the top line of the message display. Press the copy contrast Darker (down) button 3 times.

A E

A E

The Bias voltage and DMM voltage both decreased by at least 7.0 VDC.

Y N

Go to Flag 2 and check the wiring for a short circuit. If the problem persists, replace the LVPS/ Driver (A2). If the problem persists, replace the Controller PWB (A3).

Press Stop and connect the DMM (-) lead to A3 P304 pin 16 and the (+) lead to pin 17. Enter [0921-5] and press the copy contrast Darker (down) button 3 times.

The DMM voltage increased by more than 2.0 VDC.

Y N

Go to Flag 1 and check the wiring for an open or short circuit. If the check is good, replace the Illumination Sensor. If the problem persists, replace the Lamp Ballast PS PWB (A5). If the problem persists, go to Flag 3 and check the wiring for a short circuit. If the problem persists, replace the Exposure Lamp. If the problem persists, replace the Controller PWB (A3).

Replace the Controller PWB (A3).

Press Stop then press Start and enter [0921-5]. The illumination sensor voltage on the message display is at least 3.3 VDC.

Y N

Check for a physical light blockage of the Illumination sensor. The illumination sensor voltage on the message display is at least 3.3 VDC.

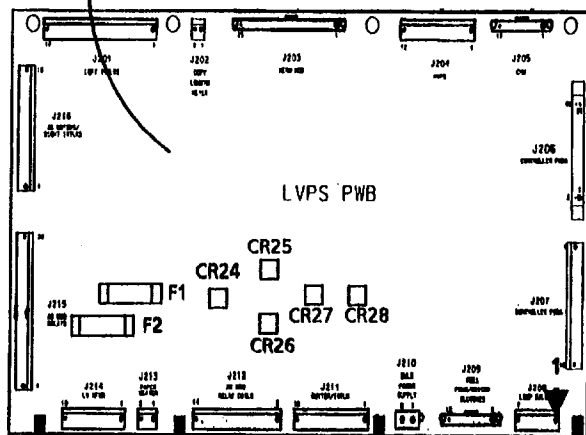
Y N

Return to path C.

Return to the RAP that directed you here.

Return to the RAP that directed you here.

LVPS/ DRIVER PWB (A2)

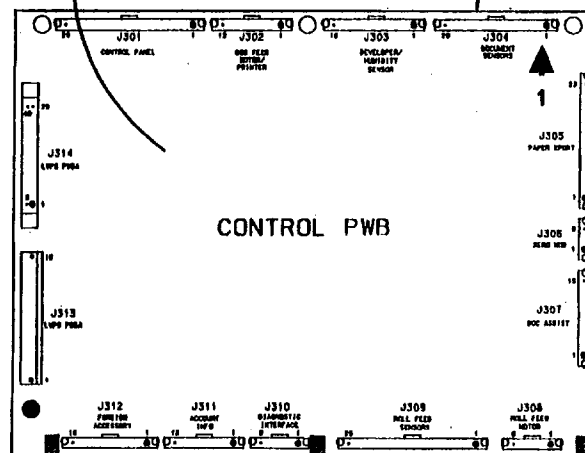


A2
P208

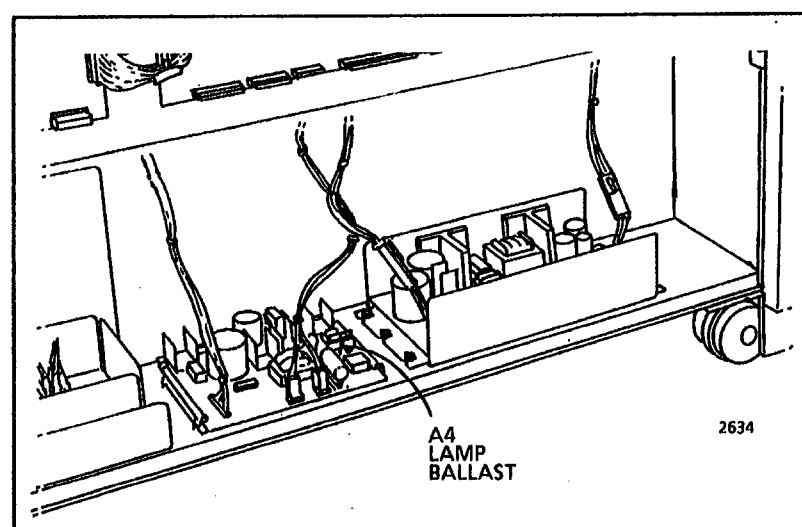
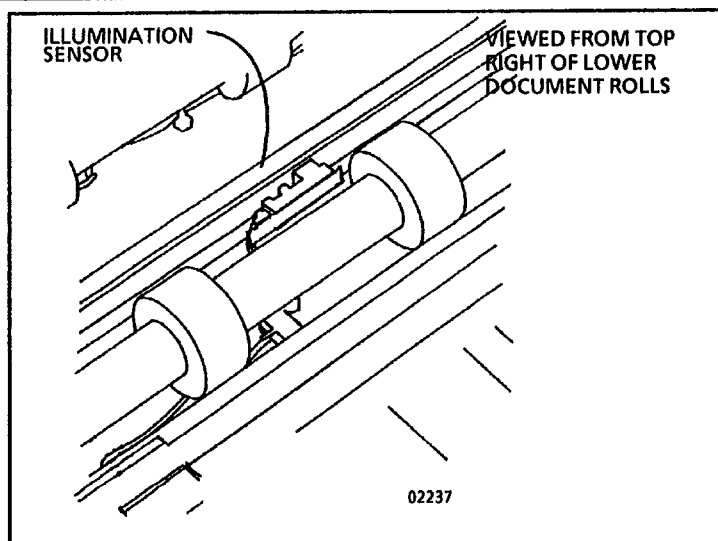
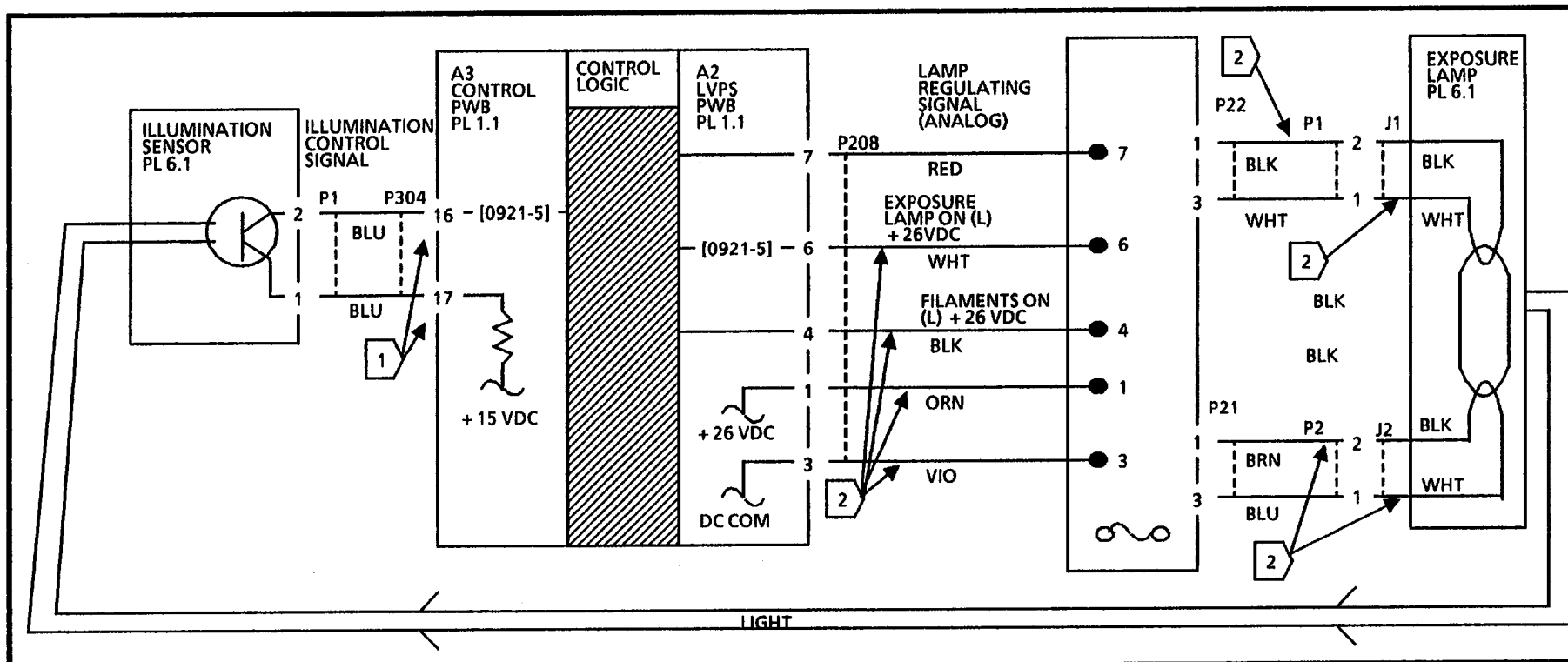
1591

CONTROLLER PWB (A3)

A3
P304



1590



CQ 28 Offsetting and Residual Image Isolation RAP

This RAP is used to differentiate between the Fuser and the Photoreceptor as the source of an offsetting or residual image copy quality problem. It may be necessary to make several copies to see if the problem can be repeated.

1. Ask the customer for the document that is causing the problem.
2. Select a sheet of media and draw a short line 10 3/8 inches (108 mm) from the lead edge and parallel to that edge.
3. Put the number 0 (zero helps you to locate line as media exits the fuser) by one end of the line that was drawn in step 2. Use this prepared sheet as the media for the next copy.
4. Select the Normal Contrast mode (middle LED is lit).
5. Insert the lead edge of the prepared media with the marked side facing down.
6. Start to make a copy, then press the **STOP** button when the line marked on the copy media is even with the outside edge of the transport latching cover.

NOTE: The mark will move about 1/2 inch (1.27 cm) beyond the front cover before the main drive stops.

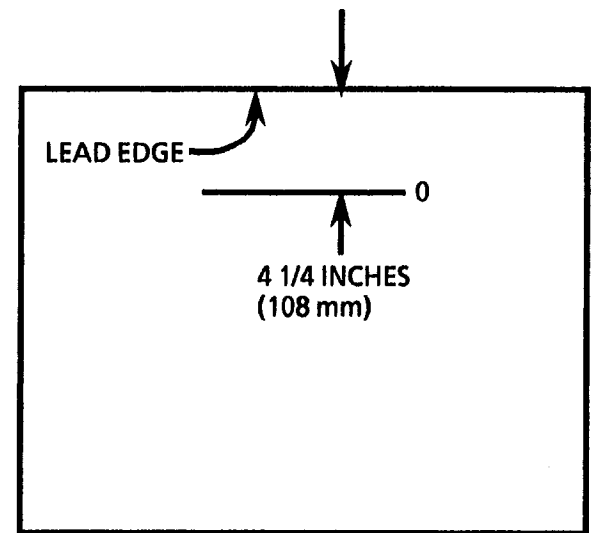
7. Open the transport latching cover and remove the partially made copy. Ensure that the copy is not dragged against the photoreceptor or fuser roll.
8. Examine the new copy 10 3/8 inches (264 mm) away from the lead edge.

NOTE: Locate the exact end of the fused area of the image by wiping the image with a finger.

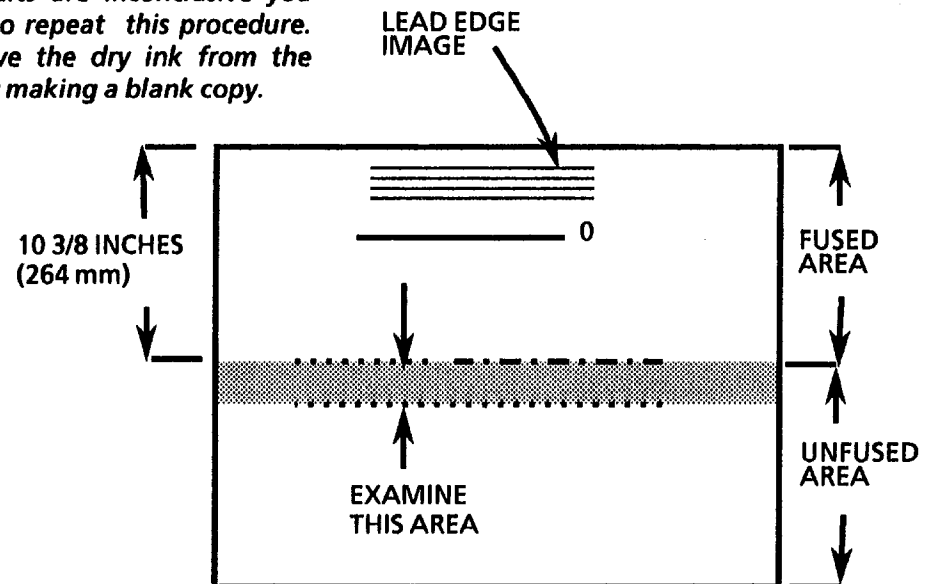
If defect is in the unfused area, it indicates that the photoreceptor is the source of the problem.

9. If there is a reprint of the lead edge information in the unfused area of the image, the problem is residual image. This is caused by a cleaning problem, a dirty cleaning blade, or an incorrect electrostatic value. Go to the CQ-15 Residual Image RAP.
10. Examine the images within the unfused area. If the reprint is not in the unfused area, remove the oil dispense assembly and check the fuser roll for a dry ink image. If there is a dry ink image on the roll, go to the CQ-13 Offsetting RAP.

NOTE: If your results are inconclusive you may need to repeat this procedure. First, remove the dry ink from the fuser roll by making a blank copy.



THE PREPARED MEDIA



A CHECK FOR RESIDUAL IMAGES

CQ 30 Erase LED RAP

This RAP is used for copy quality problems related to the loss of Erase LED's intensity.

Initial Actions

- Switch off and unplug the copier.
- Ensure that all connectors are correctly seated.
- Ensure that the Erase LED's are clean and properly installed.

Procedure

Set the meter to measure + 26 VDC.

Connect the (-) lead to GND.

Plug in and switch on the copier

There is + 26 VDC at Pin 12 of A2 P203 of the LVPS/ Driver (A2).

Y N

Go to FLAG 1 and check for open or short circuits. If the wiring is OK, check for + 26 VDC at pin 11 of A2 P203.

There is + 26 VDC at Pin 11 of A2 P203.

Y N

Replace the LVPS/ Driver (A2).

Replace the Erase LED PWB, DS1.

Enter the diagnostic code [0966].

The Erase LED's are working.

Y N

A B

A B

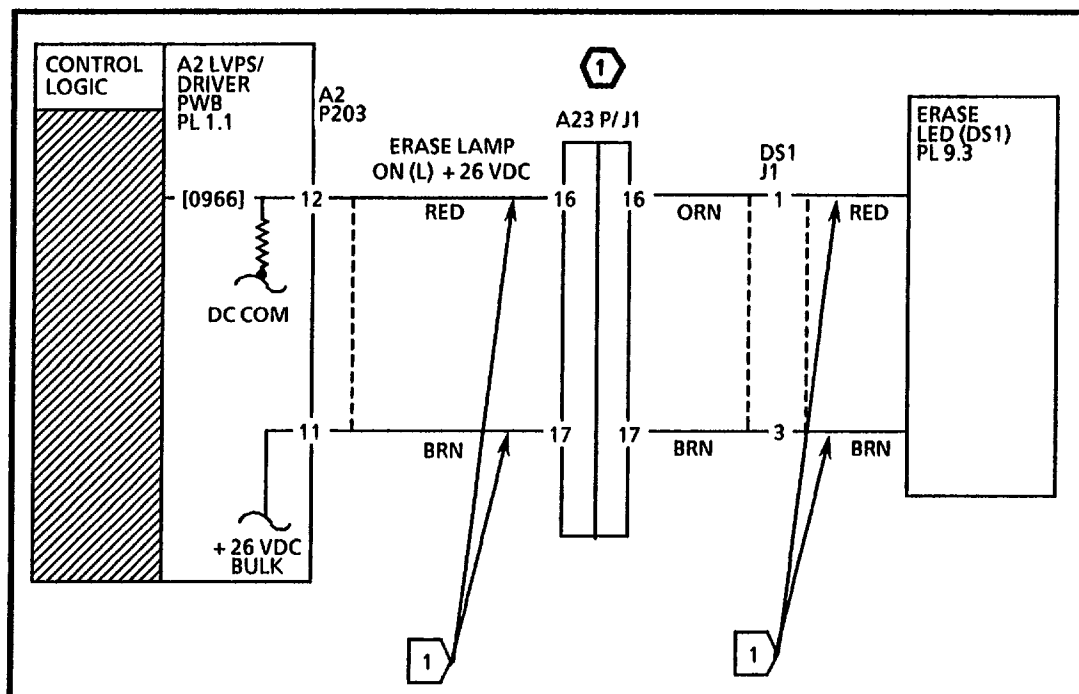
Replace the Erase LED, DS1.

If the problem persists, replace the Controller PWB (A3).

If the problem persists, replace the LVPS/ Driver (A2) PWB.

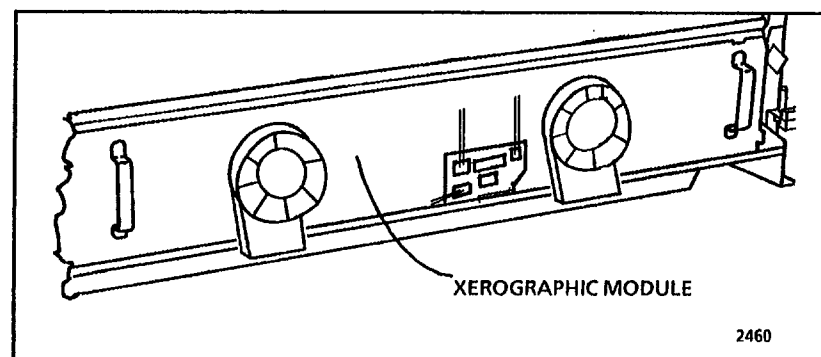
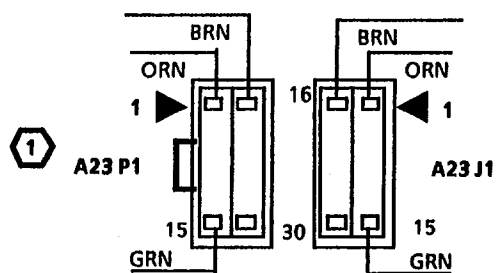
Go to ADJ. 9.2 and verify that the Electrostatic settings are in specification.

Run 5 copies of Test Pattern 82E5980 and check that the copy quality is in specification.



NOTES:

- ① CONNECTOR A23 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



Notes:

4. Repair/Adjustment

Section Contents

Run Control

REP 3.1	Control PWB	4-3
REP 3.2	High Voltage Power Supply (HVPS)	4-5

Document Transportation

REP 5.1	Document Pinch Rolls	4-6
REP 5.2	Document Drive Rolls	4-7
REP 5.3	Document Drive Motor ..	4-9
REP 5.4	Platen	4-10

Optics

REP 6.1	Exposure Lamp	4-11
REP 6.2	Lens	4-12
REP 6.3	Illumination Sensor	4-13
REP 6.4	Reflector	4-14

Media Roll Feed

REP 7.1	Media Supply Drawer	4-16
REP 7.2	Rewind Gear and Rewind Internal Gear	4-17
REP 7.3	Roll Feed Pinch Rolls	4-18
REP 7.4	Roll Feed Drive Rolls	4-19

REP 7.5	Feed Clutch	4-20
REP 7.6	Rewind Clutch	4-21
REP 7.7	Motion Sensor	4-22
REP 7.9	Roll Drive Motor	4-23
REP 7.10	Media Roll Heater	4-24
REP 7.11	Encoder Disk	4-25

Media Transportation

REP 8.1	Media Transport Assembly	4-27
REP 8.2	Media Exit Switch	4-30
REP 8.6	Sheet Drive Roll	4-31
REP 8.7	Sheet Pinch Rolls	4-36
REP 8.8	Media Registration Sensor	4-37
REP 8.9	Fabric Guide	4-38
REP 8.10	Media Transport Drive Motor	4-41
REP 8.11	Sheet Feed Switch	4-43
REP 8.12	Registration Pinch Rolls ..	4-44
REP 8.13	Registration Drive Belt ...	4-48
REP 8.14	Stripper Finger Jam Switch	4-49
REP 8.15	Cutter Home Sensor	4-50

Xerographics

REP 9.1	Xerographic Module	4-51
REP 9.2	Photoreceptor Drum Assembly	4-57
REP 9.3	Photoreceptor Drum	4-60
REP 9.4	Cleaner Blade	4-63
REP 9.5	Developer Module	4-66
REP 9.6	Cartridge Drive Motor ...	4-71
REP 9.7	Developer Material	4-72
REP 9.8	Charge Corotron / Erase Lamp	4-78
REP 9.9	Transfer / Detack Corotron	4-79
REP 9.11	Toner Sensor	4-80
REP 9.12	Toner Home Sensor	4-81
REP 9.13	Sump Shield	4-83
REP 9.14	Cartridge Drive Plate	4-85
REP 9.15	Contamination Seal	4-87
REP 9.16	Cleaner Blade Positioning Assembly	4-89
REP 9.17	Photoreceptor Seal	4-90

Fusing

REP 10.1	Fuser Heat Rod	4-91
REP 10.2	Fuser Heat Roll	4-95
REP 10.3	Fuser Triac	4-98
REP 10.4	Fuser Drive Pulley	4-99
REP 10.5	Thermistor PWB Assembly (RT 1)	4-100
REP 10.6	Stripper Finger Assembly	4-101
REP 10.7	Oil Dispense Assembly	4-103
REP 10.8	Stripper Fingers	4-105
REP 10.9	Oil Pads	4-106
REP 10.10	Oil Dispense Roll Assembly	4-109
REP 10.11	Wick	4-110

Frames

REP 14.1	Right and Left Side Doors	4-114
----------	------------------------------------	-------

Run Control

ADJ 3.2	Country Configuration .	4-115
---------	-------------------------	-------

Document Transportation

ADJ 5.1	Copy Size Adjustment ..	4-116
ADJ 5.2	Document Stop Positions	4-118

Media Transportation

ADJ 8.1	Image Registration	4-121
ADJ 8.2	Auto Length	4-123
ADJ 8.3	Key In MM Copy Length	4-125

Xerographics

ADJ 9.2	Electrostatic Series	4-127
ADJ 9.3	Increase the Image Density	4-133
ADJ 9.4	Decrease Image Density	4-135
ADJ 9.5	Toner Home Sensor	4-138

Fusing

ADJ 10.1	Fuser Temperature (NVM)	4-141
ADJ 10.2	Fuser Temperature (Probe)	4-144

Frames

ADJ 14.1	Copier Level	4-147
----------	--------------------	-------

REP 3.1 Control PWB

Parts List on PL 1.1

Removal



WARNING

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

1. Remove the rear covers.

1

STEP 2B: If the copier is not equipped with a second language, there will only be 4 EPROMs. Save the EPROMs that are removed here for reinstallation on the new Control PWB.

2. (Figure 1): Remove the Control PWB.

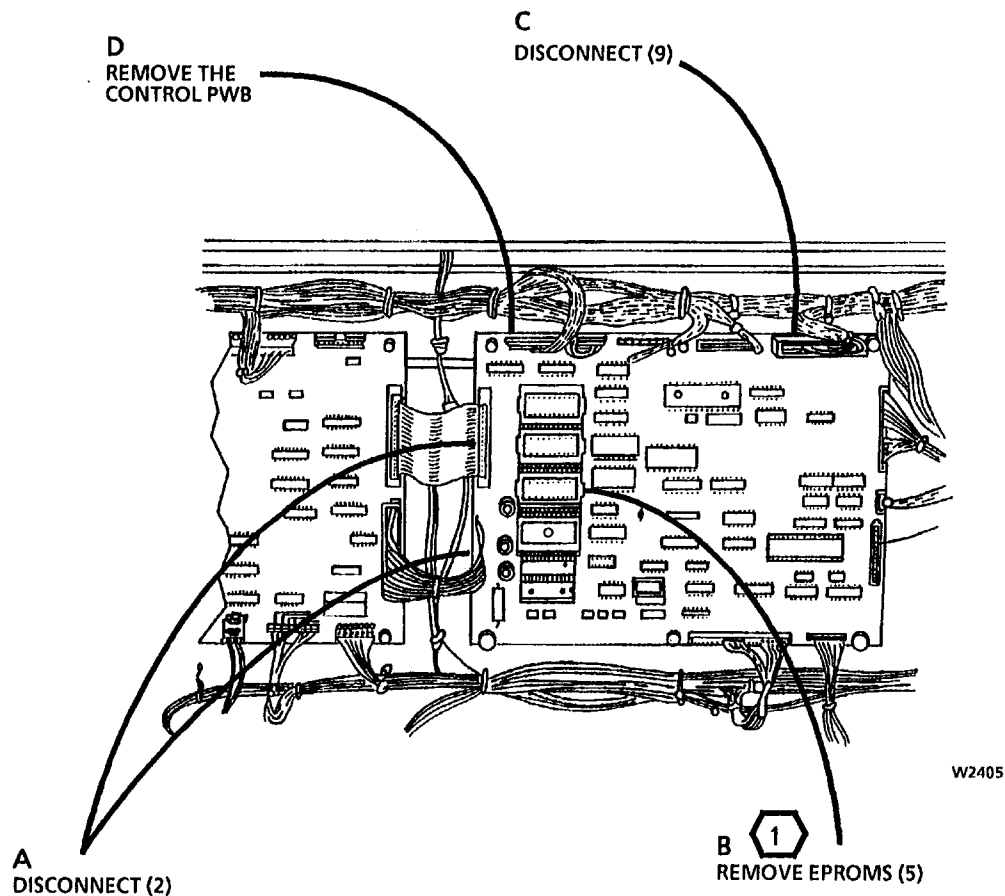


Figure 1. Removing the Control PWB

Replacement

2 STEP 1B: Reinstall the EPROMs that were removed from the old Control PWB except the NVM. The NVM will be installed in step 1 C.

3 STEP 1C: Ensure that the dot on the NVM is located as shown in Figure 2.

1. (Figure 2): Reinstall the Control PWB.

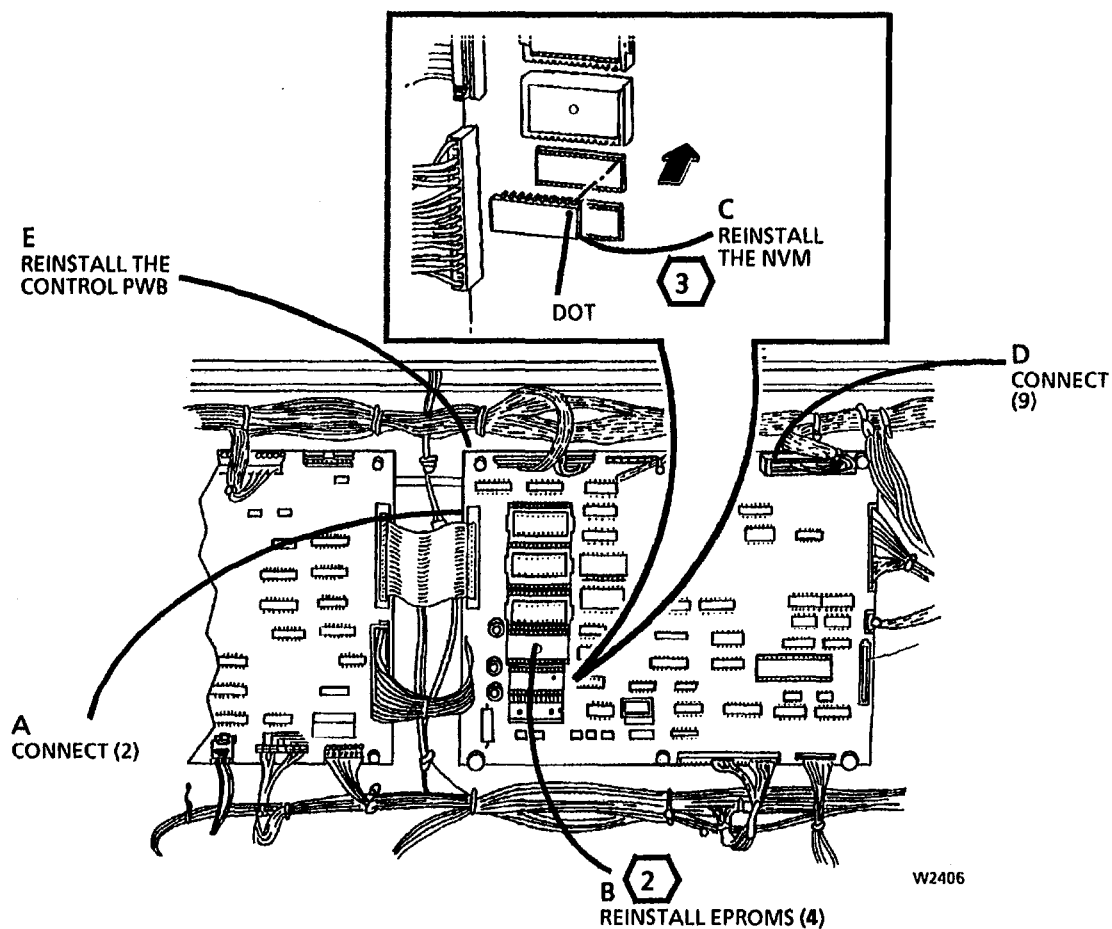


Figure 2. Reinstalling the Control PWB

REP 3.2 High Voltage Power Supply (HVPS)

Parts List on PL 1.3

Removal



WARNING

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

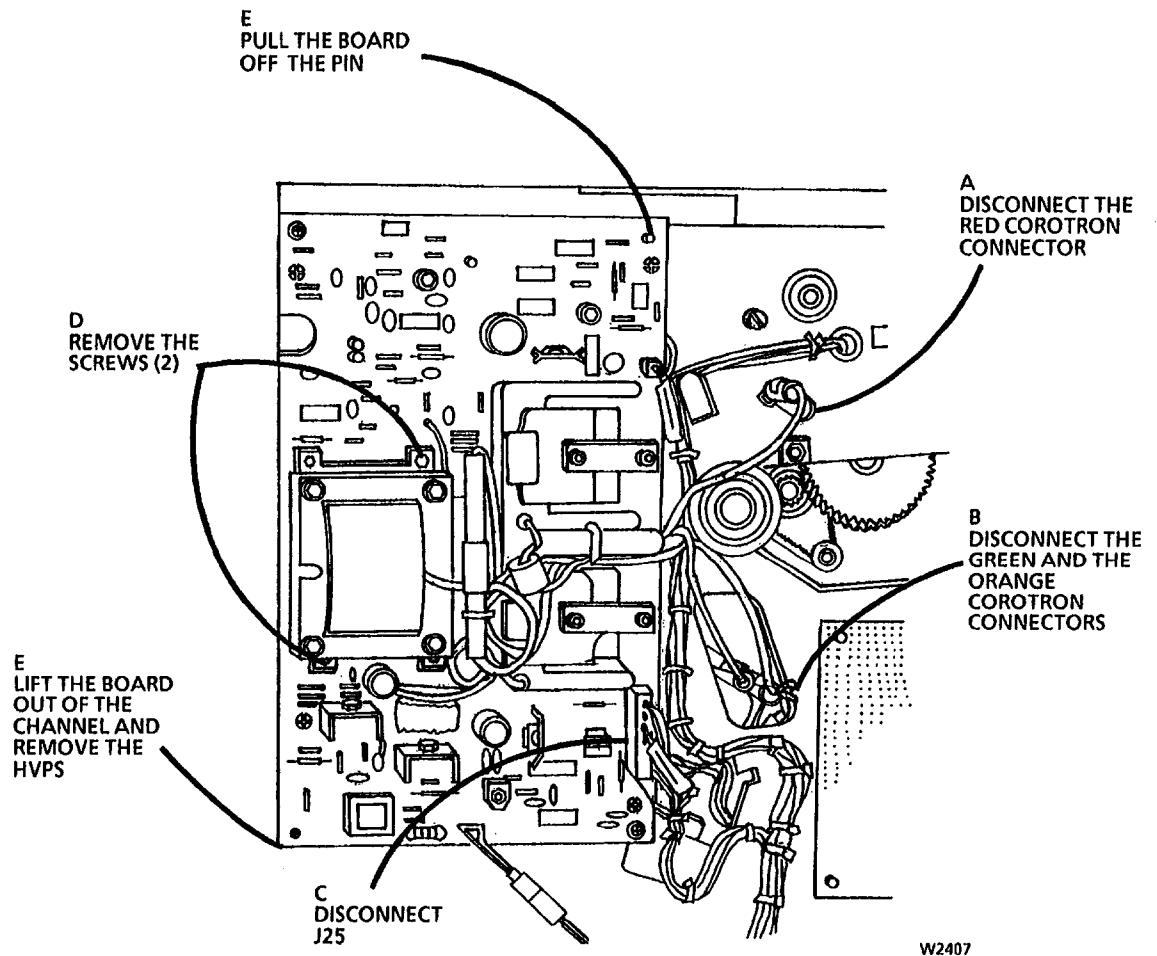
1. Open the Left Side Door.
2. Remove the shield that covers the HVPS.
3. (Figure 1): Remove the High Voltage Power Supply.

Replacement



Route all high voltage wires through the appropriate cable ties, making sure that the high voltage wires are not in tight contact with sharp metal.

1. If a new HVPS is being installed, perform the Electrostatic Series (ADJ 9.2).



W2407

Figure 1. Removing the High Voltage Power Supply

REP 5.1 Document Pinch Rolls

Parts List on PL 5.1

Removal



WARNING

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

1. Remove the Document Handler and place it upside down on a flat surface.
2. (Figure 1): Remove the Document Platen.

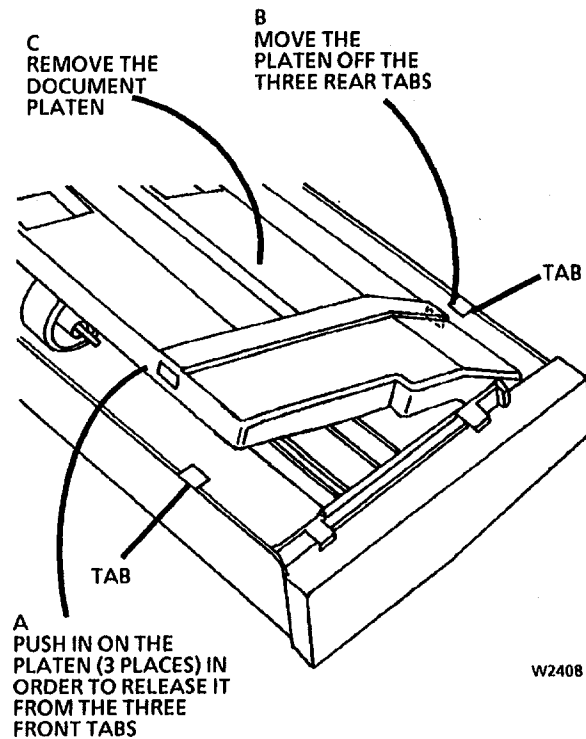


Figure 1. Removing the Document Platen

3. (Figure 2): Remove the Document Pinch Rolls.
4. Check/Adjust the Document Stop Position (ADJ 5.2).

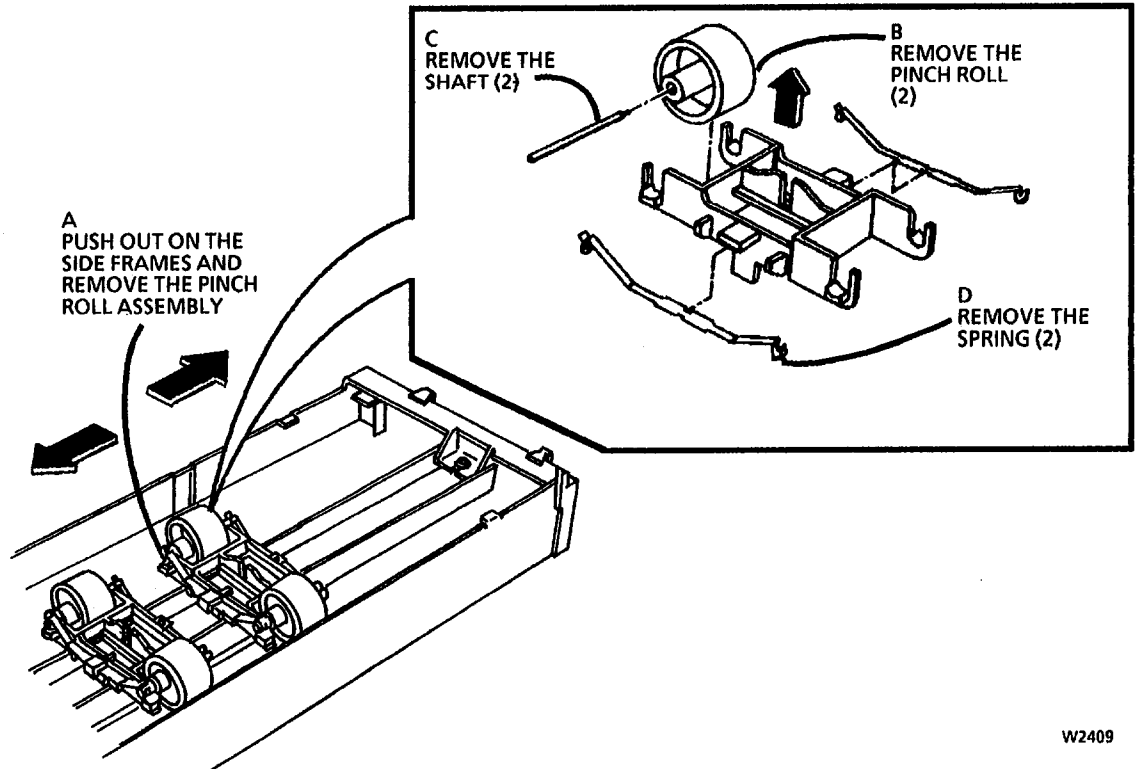


Figure 2. Removing the Document Pinch Rolls

REP 5.2 Document Drive Rolls

Parts List on PL 5.2

Removal



WARNING

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

1. Remove the High Voltage Power Supply (REP 3.2).
2. Remove the Document Handler and place it upside down on a flat surface.
3. Remove the Platen (REP 5.4).
4. Open the Right Side Door and remove the waste bottle.

5. (Figure 1): Remove the Drive Pulleys.

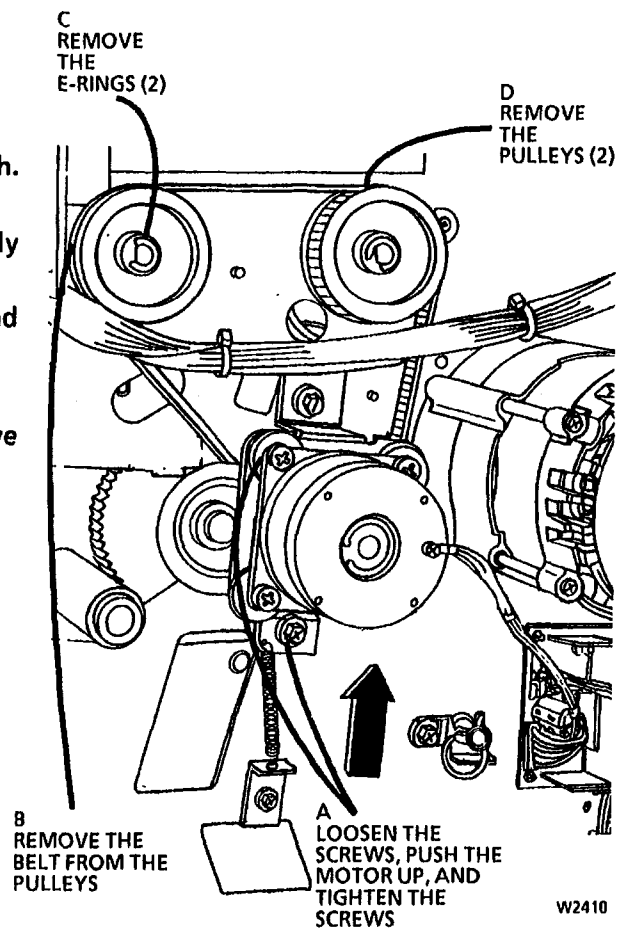


Figure 1. Removing the Drive Pulleys

6. (Figure 2): Open the Left Side Door and remove the bearings.

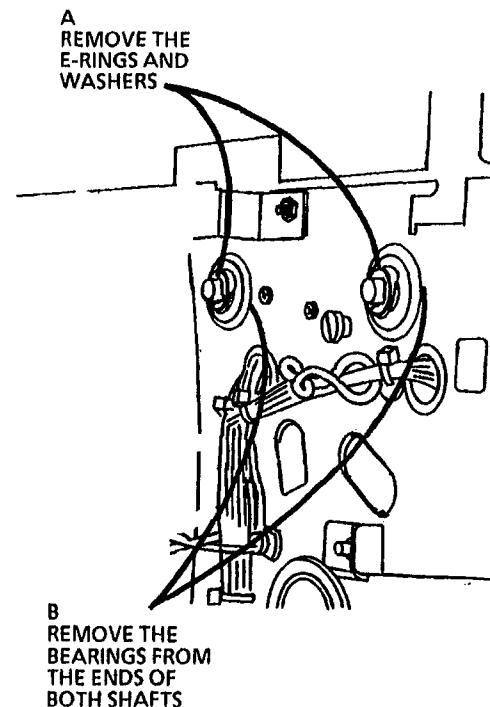


Figure 2. Removing the Bearings

7. (Figure 3): Remove the Document Drive Rolls.

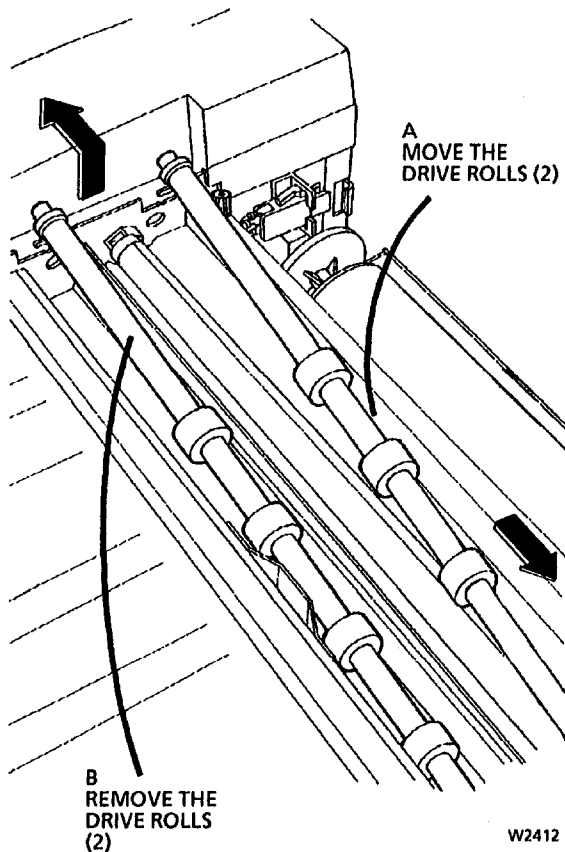


Figure 3. Removing the Document Drive Rolls

Replacement

1. Reinstall the Document Drive Rolls and the bearings.
2. (Figure 4): Reinstall the belt.
3. Check/Adjust the Document Stop Position (ADJ 5.2).

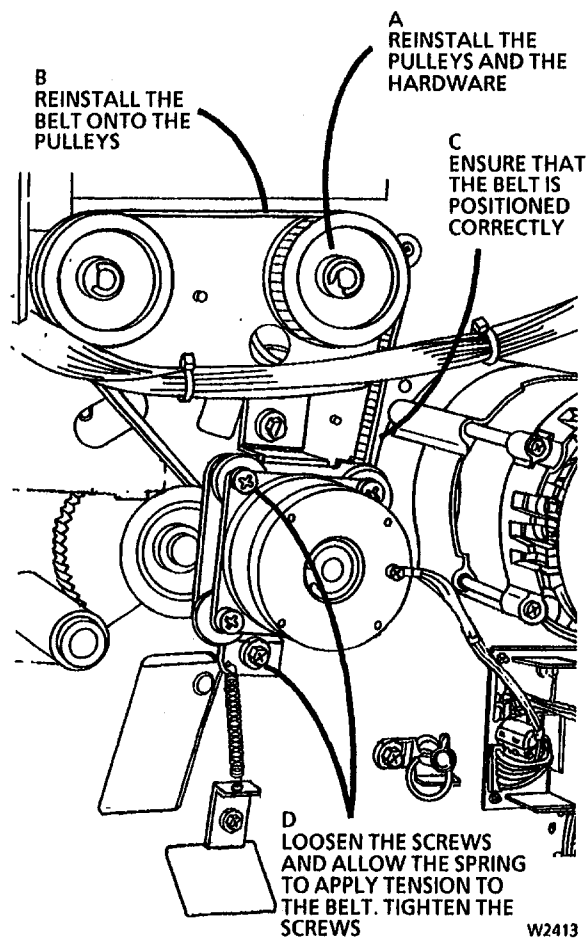


Figure 4. Reinstalling the Belt

REP 5.4 Platen

Parts List on PL 5.2

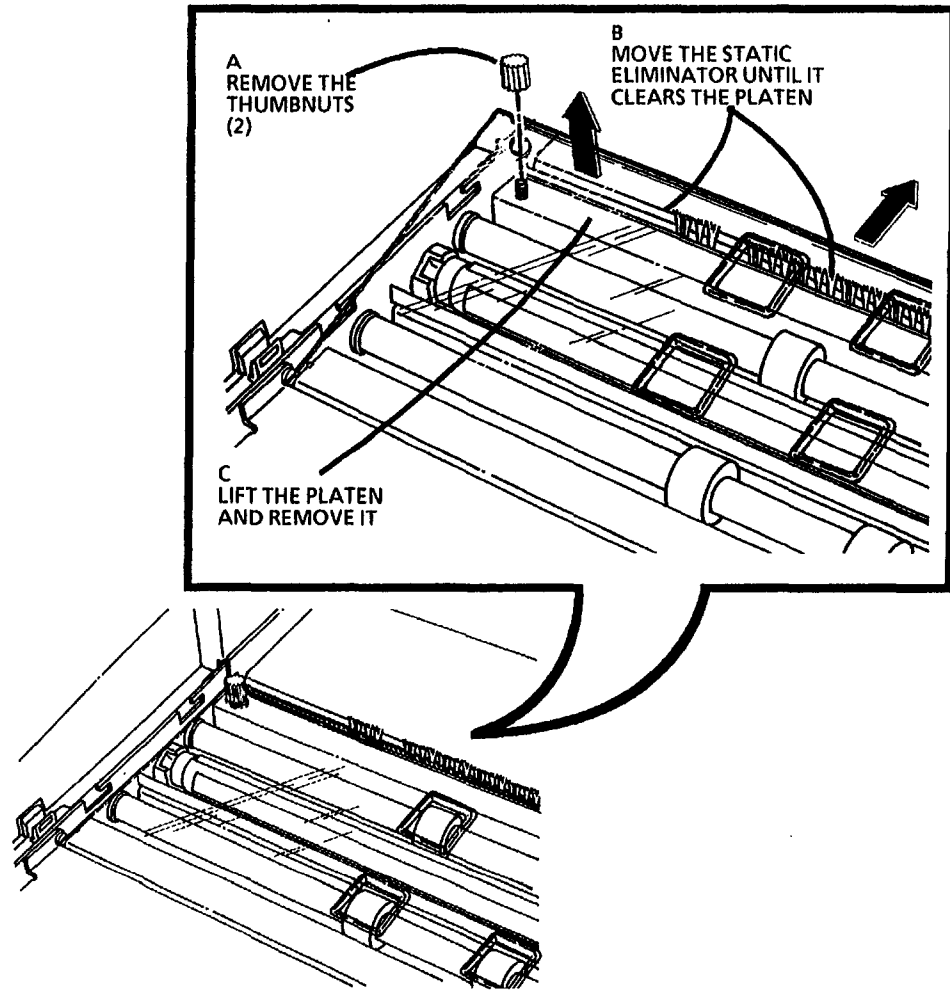
Removal



WARNING

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

1. Remove the Document Handler and place it upside down on a flat surface.
2. Remove the platen.



W2414

Figure 1. Removing the Platen

REP 5.3 Document Drive Motor

Parts List on PL 5.2

Removal



WARNING

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

1. Open the Right Side Door.

2. (Figure 1): Remove the Document Drive Motor.

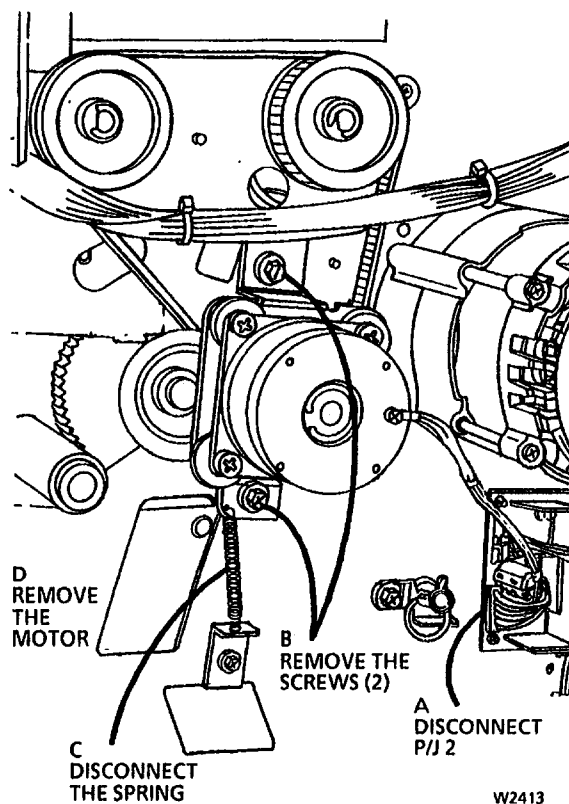


Figure 1. Removing the Document Drive Motor

Replacement

1. Reinstall the Document Drive Motor. Only fingertighten the screws.
2. (Figure 2): Apply tension to the belt.
3. Check/Adjust the Document Stop Position (ADJ 5.2).

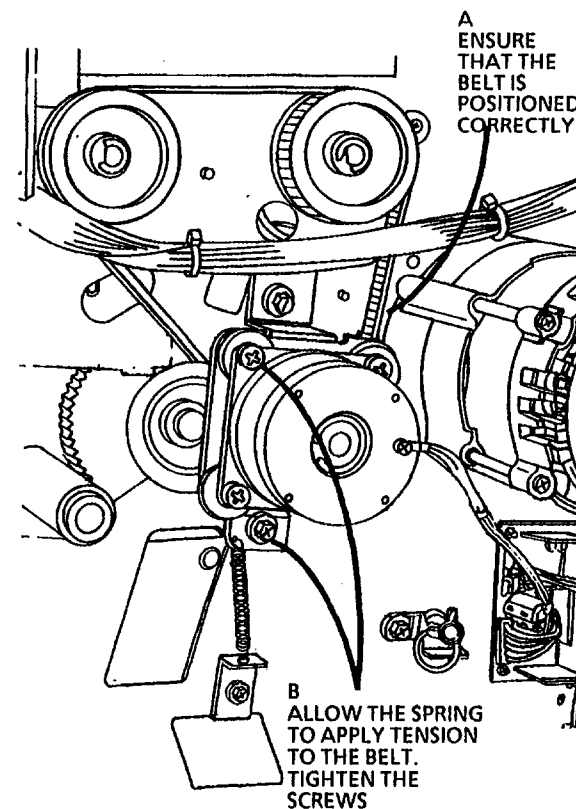


Figure 2. Reinstalling the Belt

REP 6.1 Exposure Lamp

Parts List on PL 6.1

Removal



WARNING

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

1. Remove the Document Handler and place it upside down on a flat surface.
2. Remove the Platen (REP 5.4).
3. Remove the Exposure Lamp.
4. If the lamp is being replaced, remove the Lamp Shield from the Exposure Lamp.

Replacement



STEPS 1A and 1B: Ensure that the lamp part number is at the right side of the machine. Ensure that the Lamp Shield is positioned so that the clear portion of the Exposure Lamp is exposed and faces toward the front of the copier.

1. (Figure 1): Reinstall the Exposure Lamp.
2. Enter the diagnostic mode.



WARNING

There will be a time delay between the time the code [0921-3] is entered and the time the Fuser Motor starts to turn. The Fuser Motor will not start until the fuser is at the correct temperature.

3. Enter code [0921-3].



When the fuser is at the correct temperature, the Main Drive Motor will turn on. The Exposure Lamp will also come on at the same time.



If the Background (Exposure) Check of the Electrostatic Series is not within specification, perform the entire Electrostatic Series.

4. When the Main Drive Motor and the Exposure Lamp turn off (approximately 2 minutes 40 seconds), exit the diagnostic mode.
5. Perform the Background (Exposure) Check of the Electrostatic Series (ADJ 9.2).

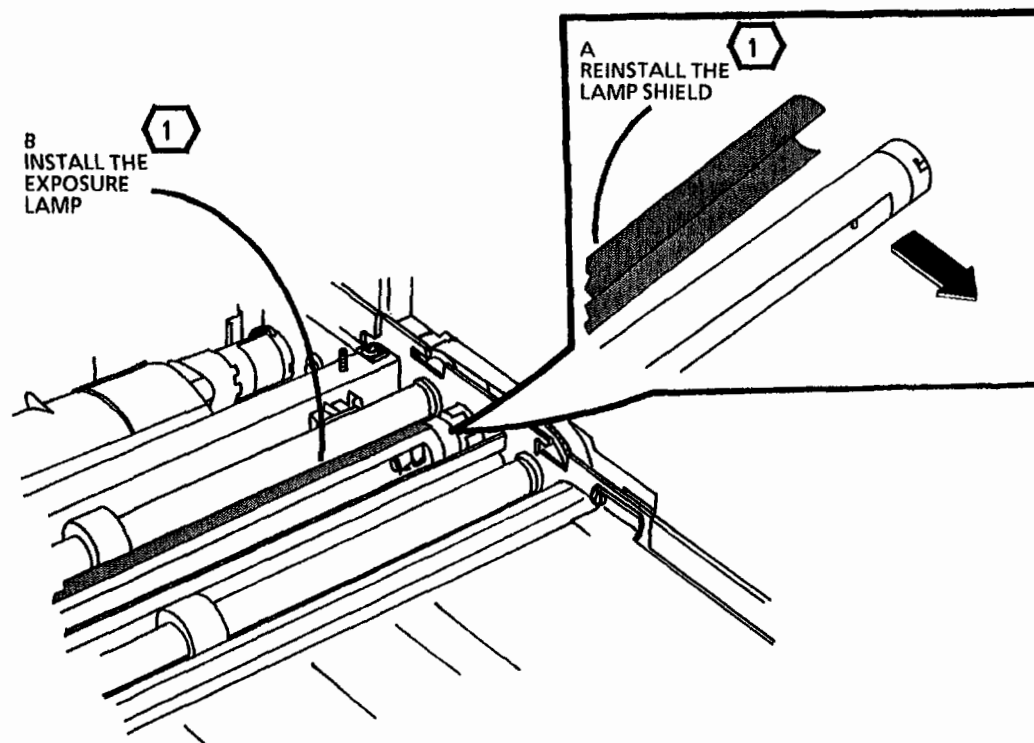


Figure 1. Reinstalling the Exposure Lamp

W2415

REP 6.2 Lens

Parts List on PL 6.1

Removal



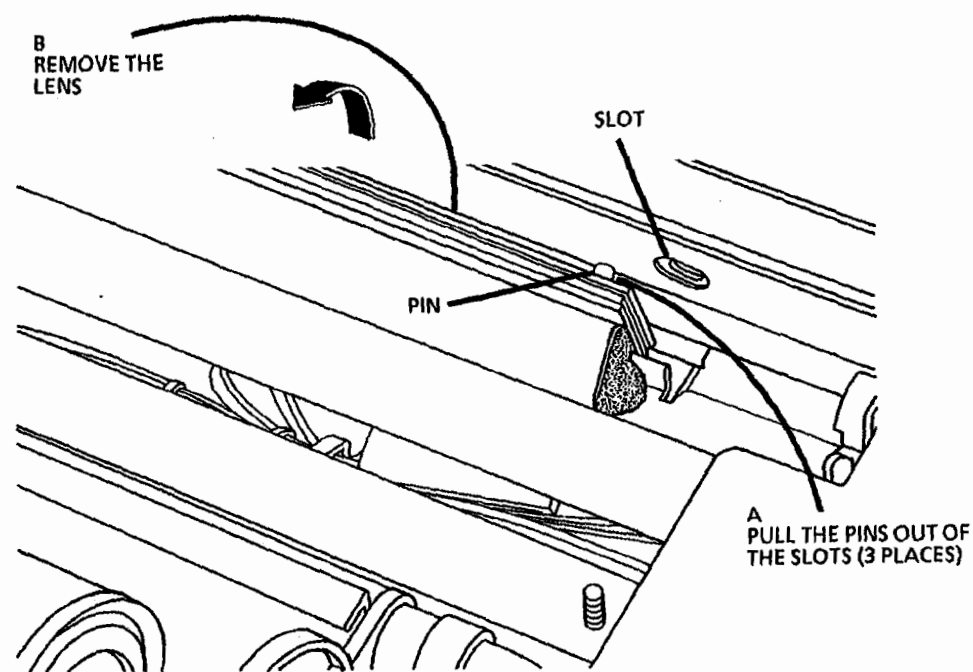
WARNING

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

1. Remove the Document Handler and place it upside down on a flat surface.
2. Remove the Platen (REP 5.4).
3. Remove the Exposure Lamp (REP 6.1).
4. (Figure 1): Remove the lens.

Replacement

1. When reinstalling the lens, ensure that the pins are completely reinstalled in the slots.



W2416

View from rear of copier

Figure 1. Removing the Lens

REP 6.3 Illumination Sensor

Parts List on PL 6.1

Removal



WARNING

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

1. Remove the Document Handler and place it upside down on a flat surface.
2. Remove the Platen (REP 5.4).

3. (Figure 1): Remove the Illumination Sensor.

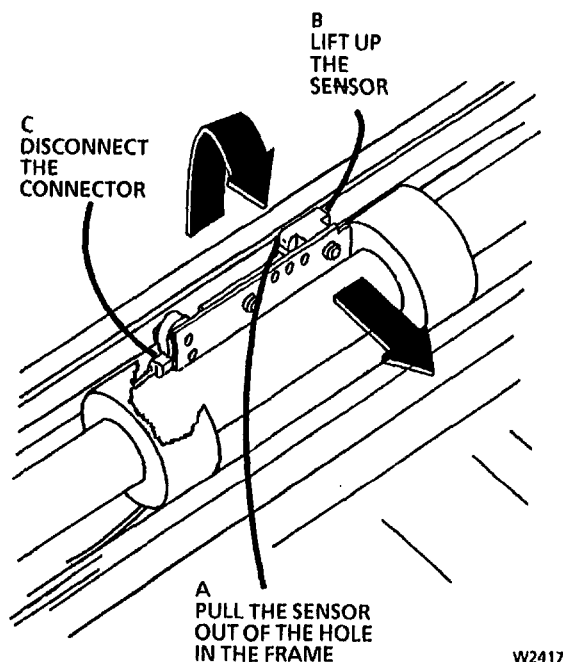


Figure 1. Removing the Illumination Sensor

Replacement

1. When reinstalling the Illumination Sensor, ensure that the sensor is secured in the hole in the frame.
2. Perform the Background (Exposure) Check of the Electrostatic Series (ADJ 9.2).

REP 6.4 Reflector

Parts List on PL 6.1

Removal



WARNING

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

1. Remove the following:

- a. High Voltage Power Supply (REP 3.2)
- b. Platen (REP 5.4)
- c. Document Drive Rolls (REP 5.2)
- d. Exposure Lamp (REP 6.1)
- e. Lens (REP 6.2)
- f. Illumination Sensor (REP 6.3)



When removing the screws, ensure that the retainer does not fall into the copier.

2. (Figure 1): Remove the retainer and the pins.

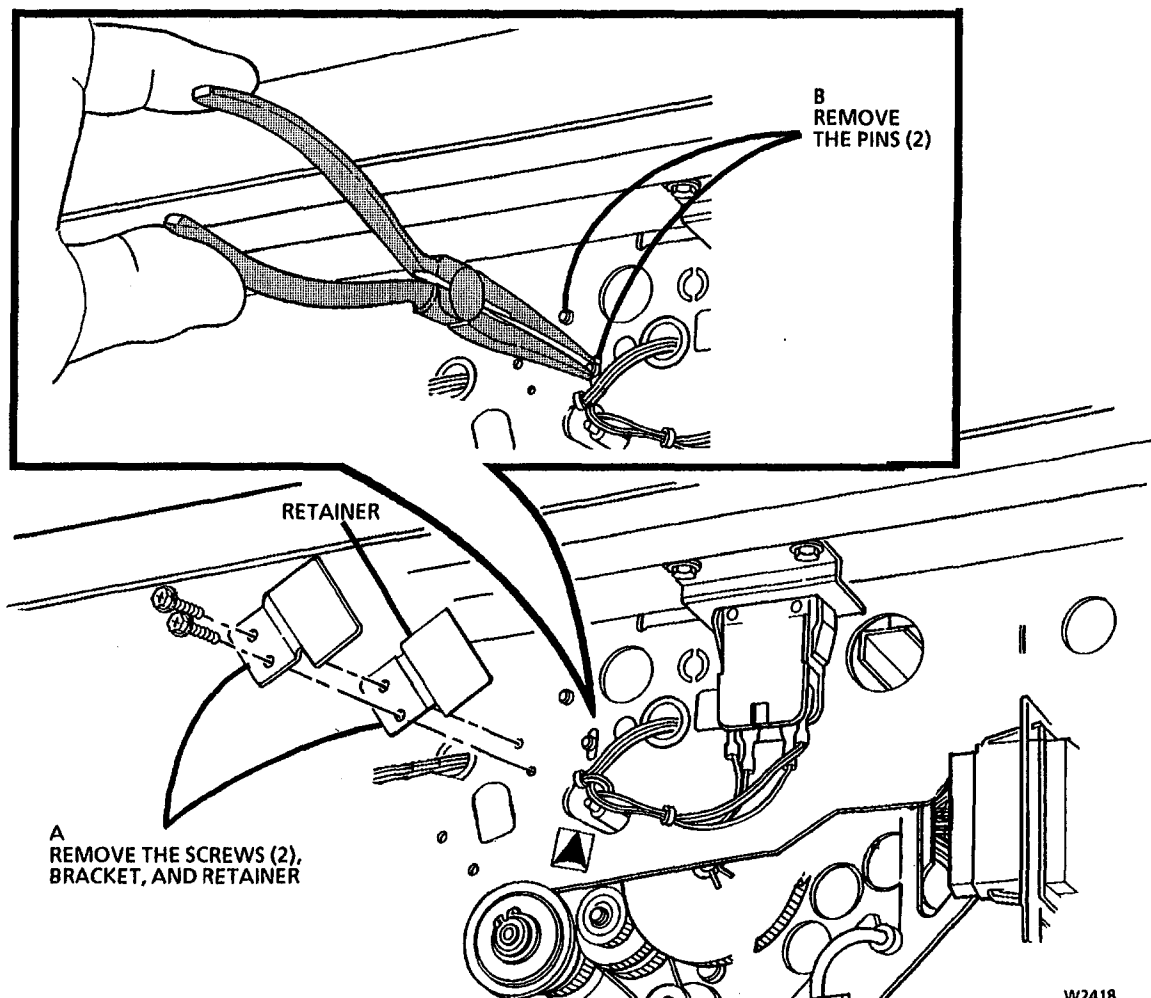


Figure 1. Removing the Retainer and the Pins

3. (Figure 2): Remove the reflector.

Replacement

1. Reinstall the pins through the frame and into the holes in the end of the reflector during reinstallation.
2. Perform the Background (Exposure) Check of the Electrostatic Series (ADJ 9.2).

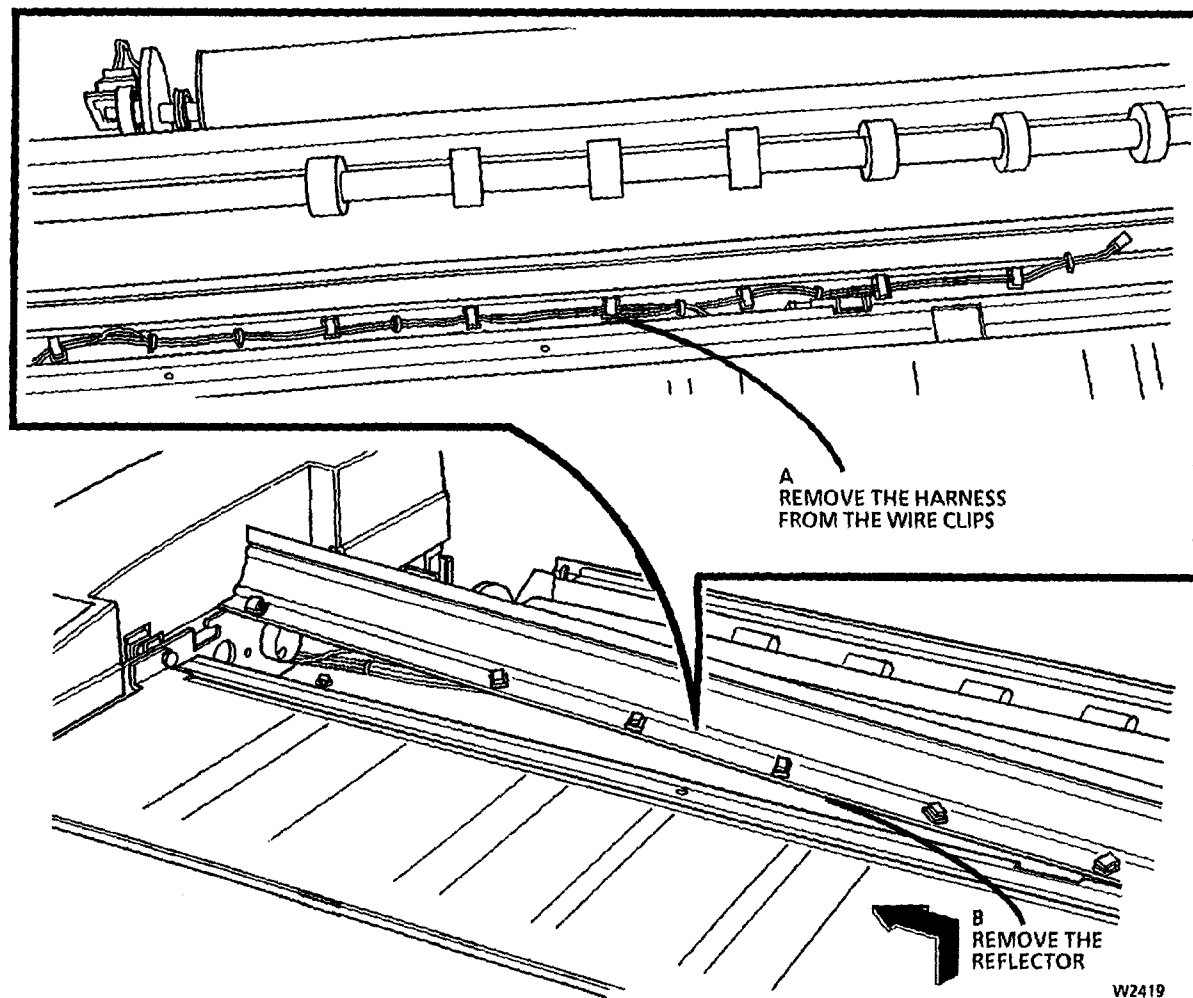


Figure 2. Removing the Reflector

REP 7.1 Media Supply Drawer

Parts List on PL 7.1

Removal



WARNING

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

1. (Figure 1): Remove the Front Cover.

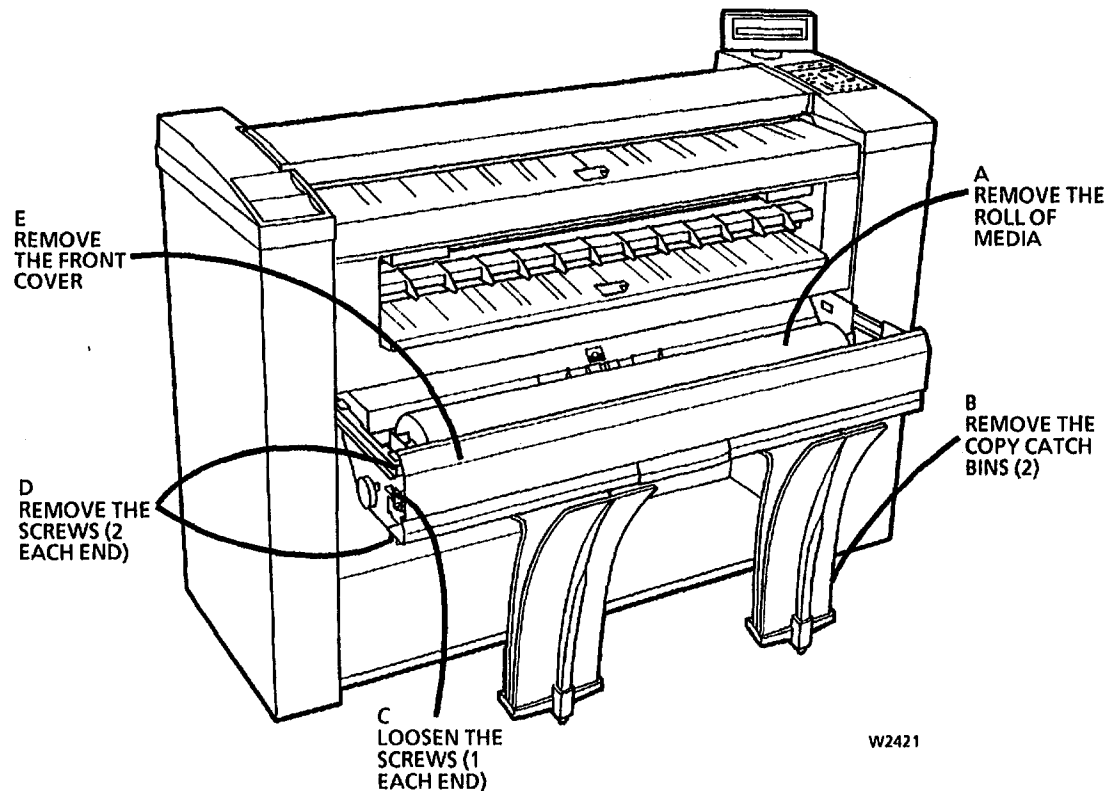


Figure 1. Removing the Front Cover

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

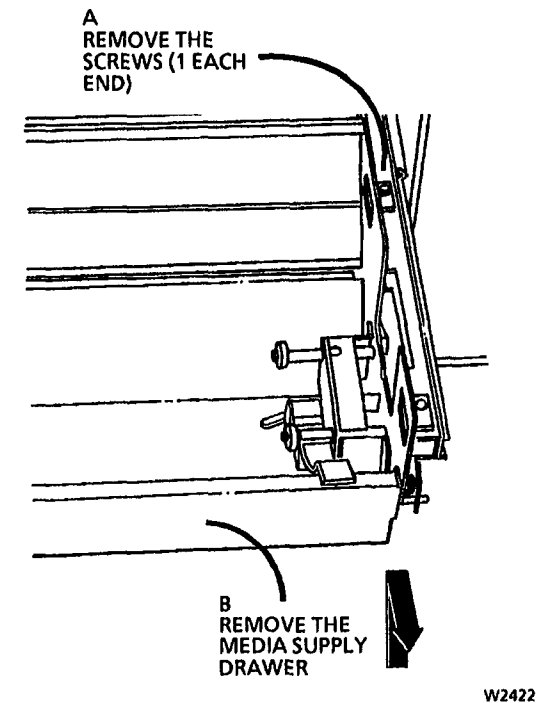


Figure 2. Removing the Media Supply Drawer

REP 7.2 Rewind Gear and Rewind Internal Gear

Parts List on PL 7.3

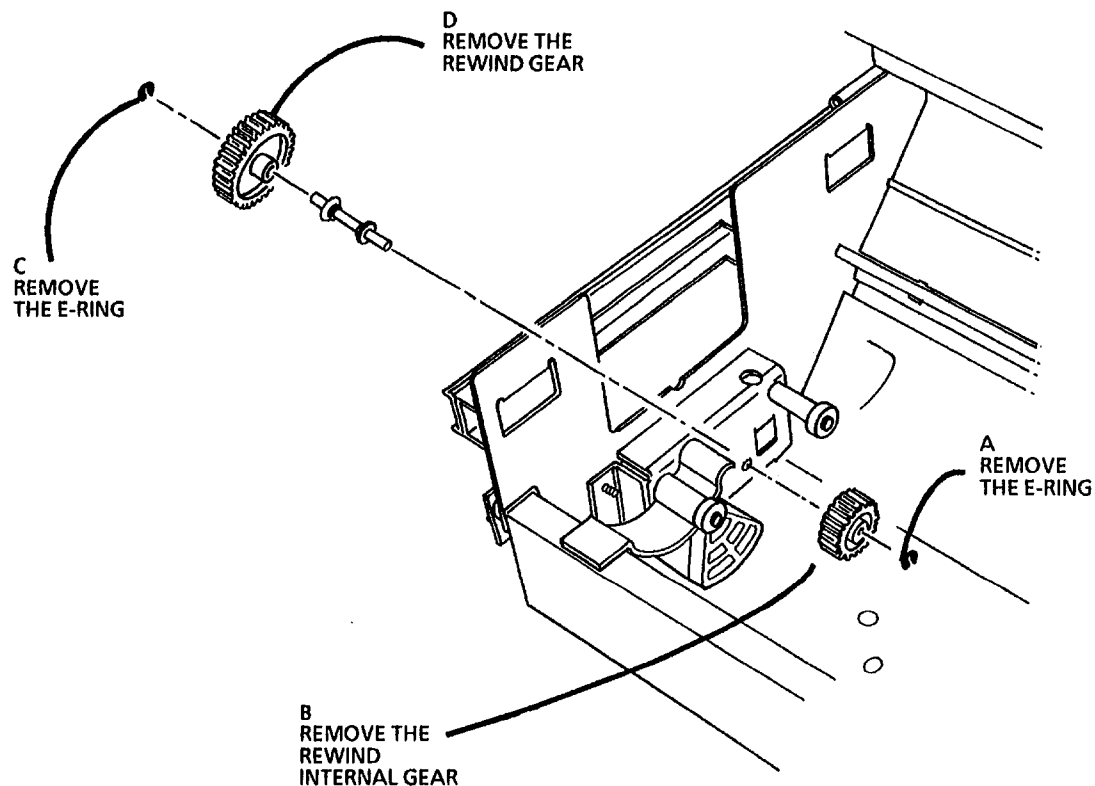
Removal



WARNING

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

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



W2420

Figure 1. Removing the Rewind Gears

REP 7.3 Roll Feed Pinch Rolls

Parts List on PL 7.5

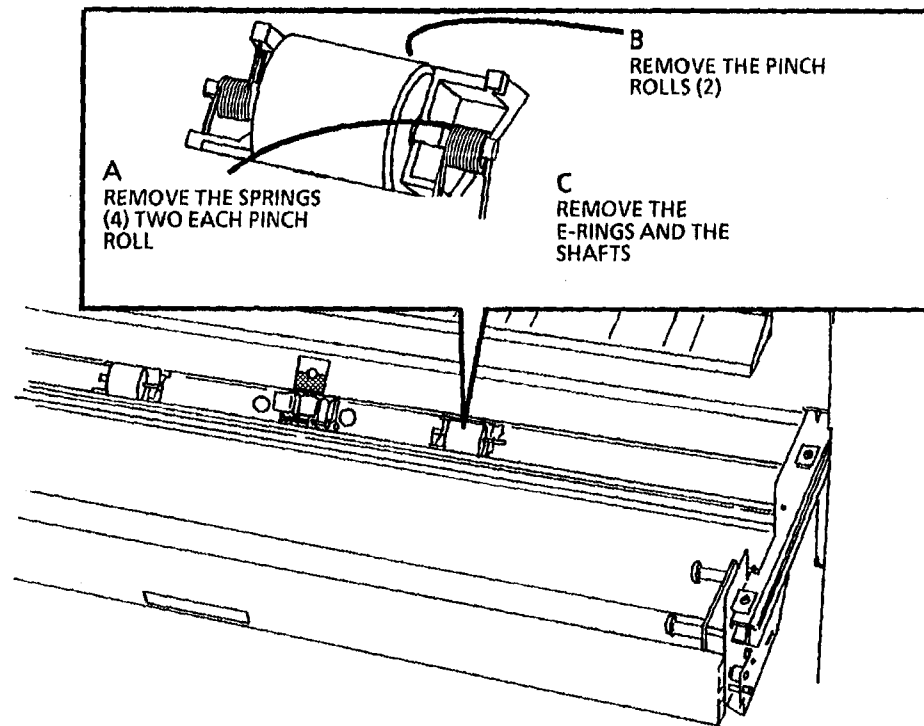
Removal



WARNING

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

1. Remove the roll of media.
2. (Figure 1): Remove the Roll Feed Pinch Rolls.



W2423

Figure 1. Removing the Roll Feed Pinch Rolls

REP 7.4 Roll Feed Drive Rolls

Parts List on PL 7.1

Removal



WARNING

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

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

2. Remove the Feed Clutch (REP 7.5).
3. Remove the Toner Waste Bottle.
4. (Figure 1): Remove the Roll Feed Drive Rolls.

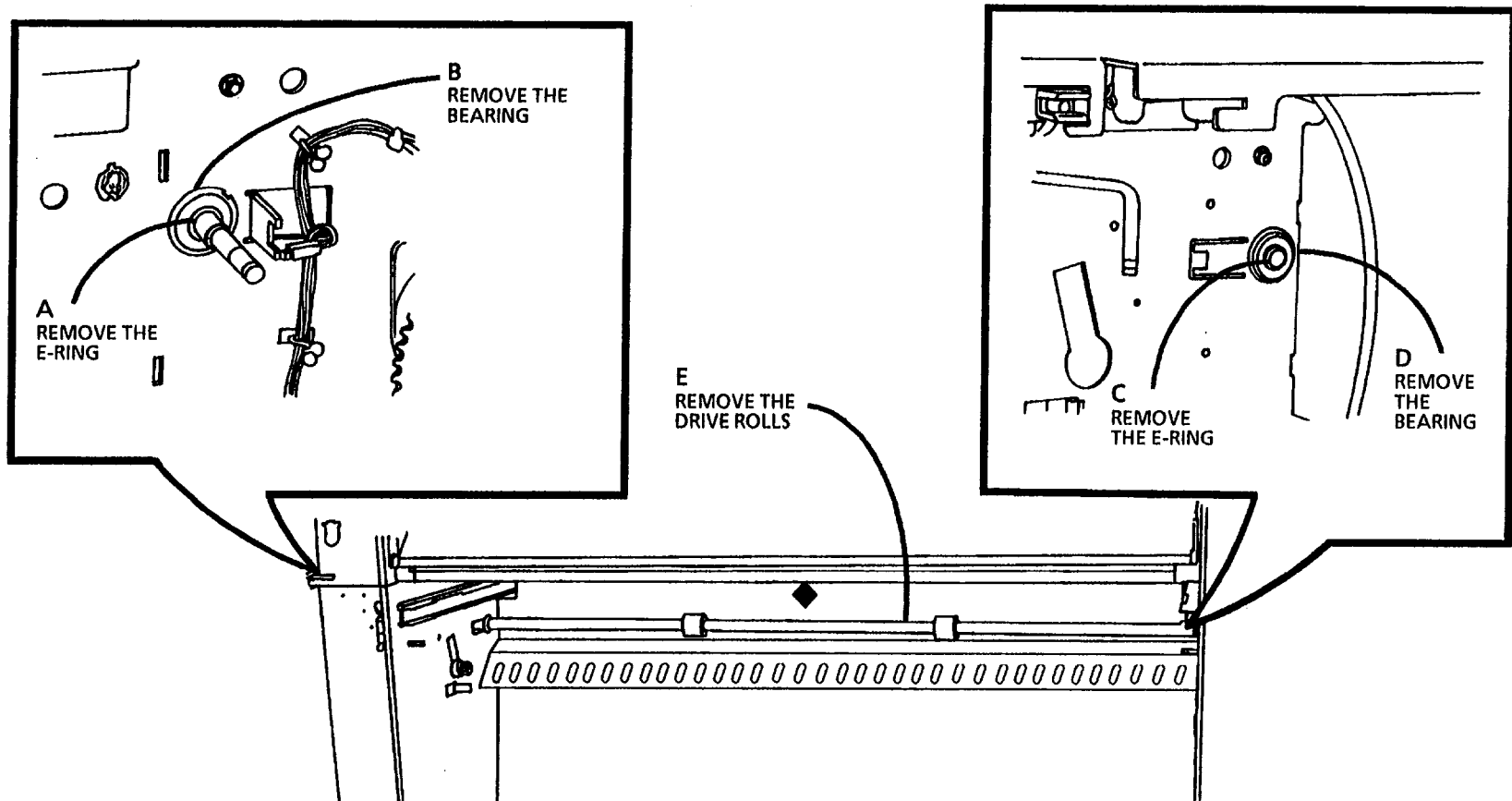


Figure 1. Removing the Roll Feed Drive Rolls

W2424

REP 7.5 Feed Clutch

Parts List on PL 7.2

Removal



WARNING

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

1. Open the Left Side Door.
2. (Figure 1): Remove the Feed Clutch.

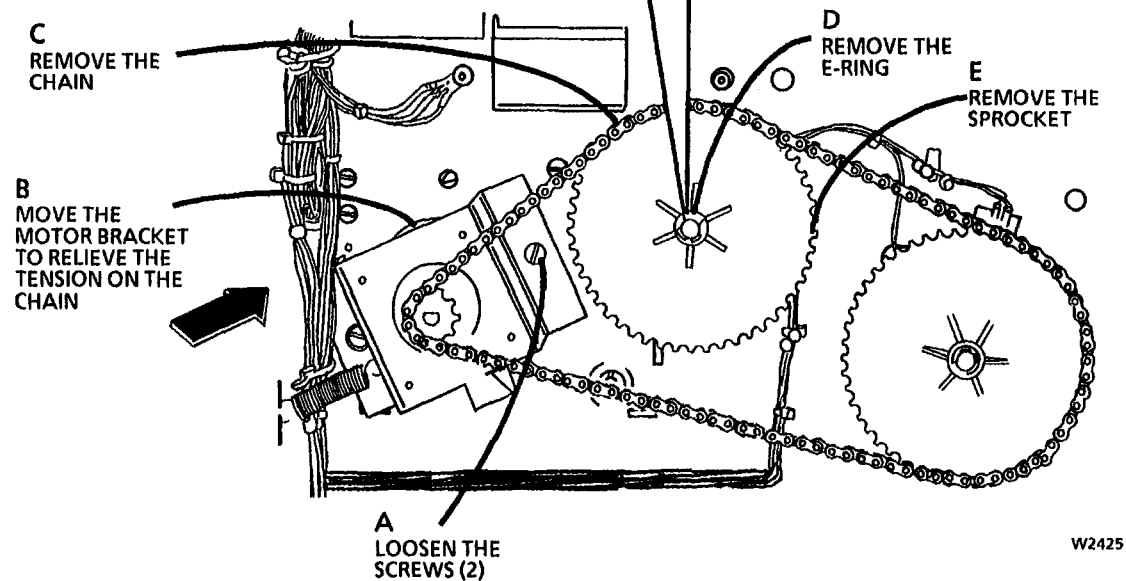


Figure 1. Removing the Feed Clutch

REP 7.6 Rewind Clutch

Parts List on PL 7.2

Removal



WARNING

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

1. Open the Left Side Door.
2. (Figure 1): Remove the Clutch.

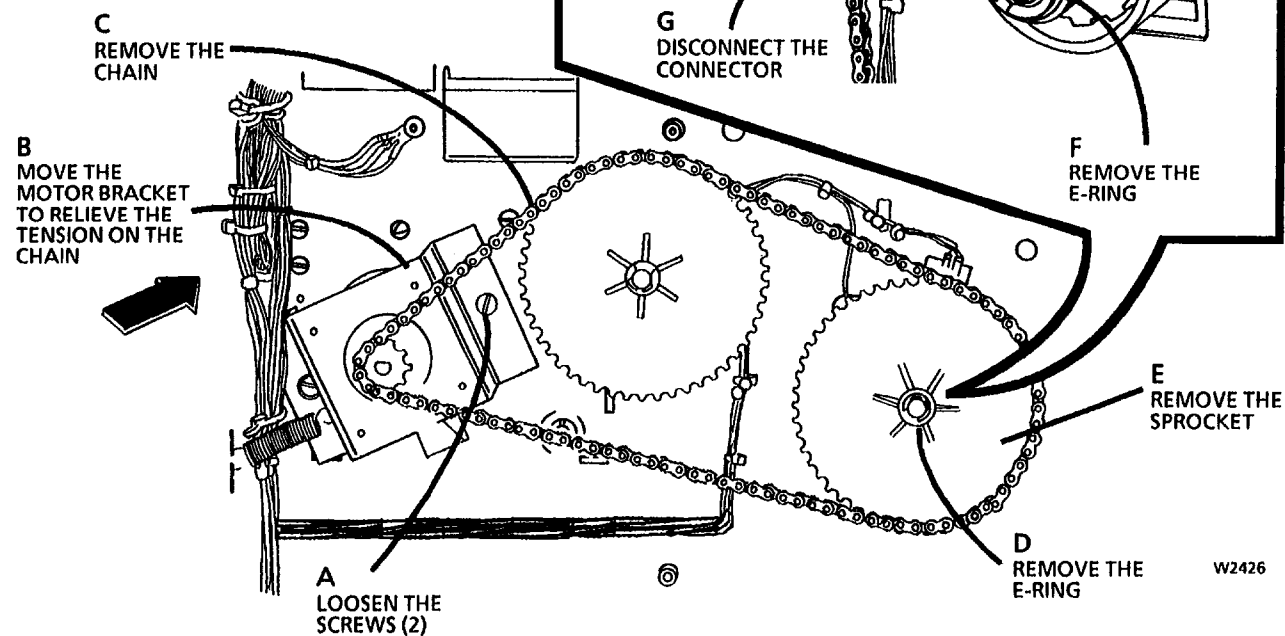


Figure 1. Removing the Rewind Clutch

REP 7.7 Motion Sensor

Parts List on PL 7.2

Removal



WARNING

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

1. Open the Left Side Door.

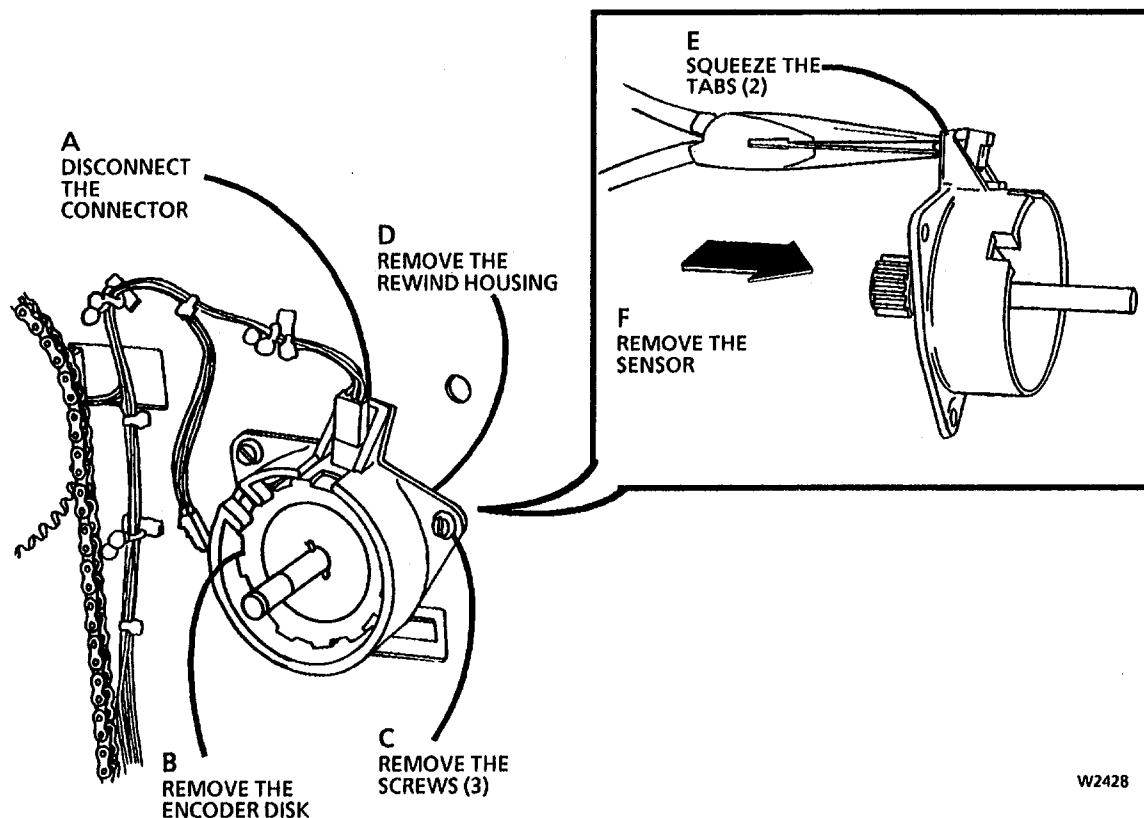


Figure 1. Removing the Encoder Sensor

2. Remove the Rewind Clutch (REP 7.6).
3. (Figure 1): Remove the Motion Sensor.

Replacement

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

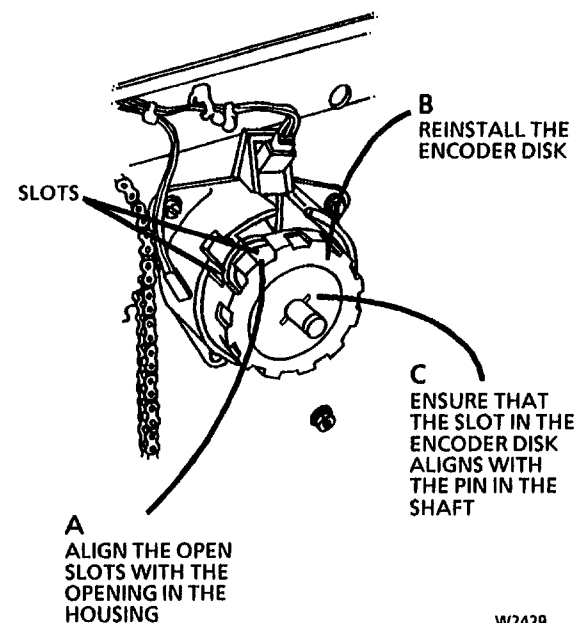


Figure 2. Reinstalling the Encoder Disk

3. Reinstall the remaining components

REP 7.9 Roll Drive Motor

Parts List on PL 7.2

Removal



WARNING

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

1. Open the Left Side Door.

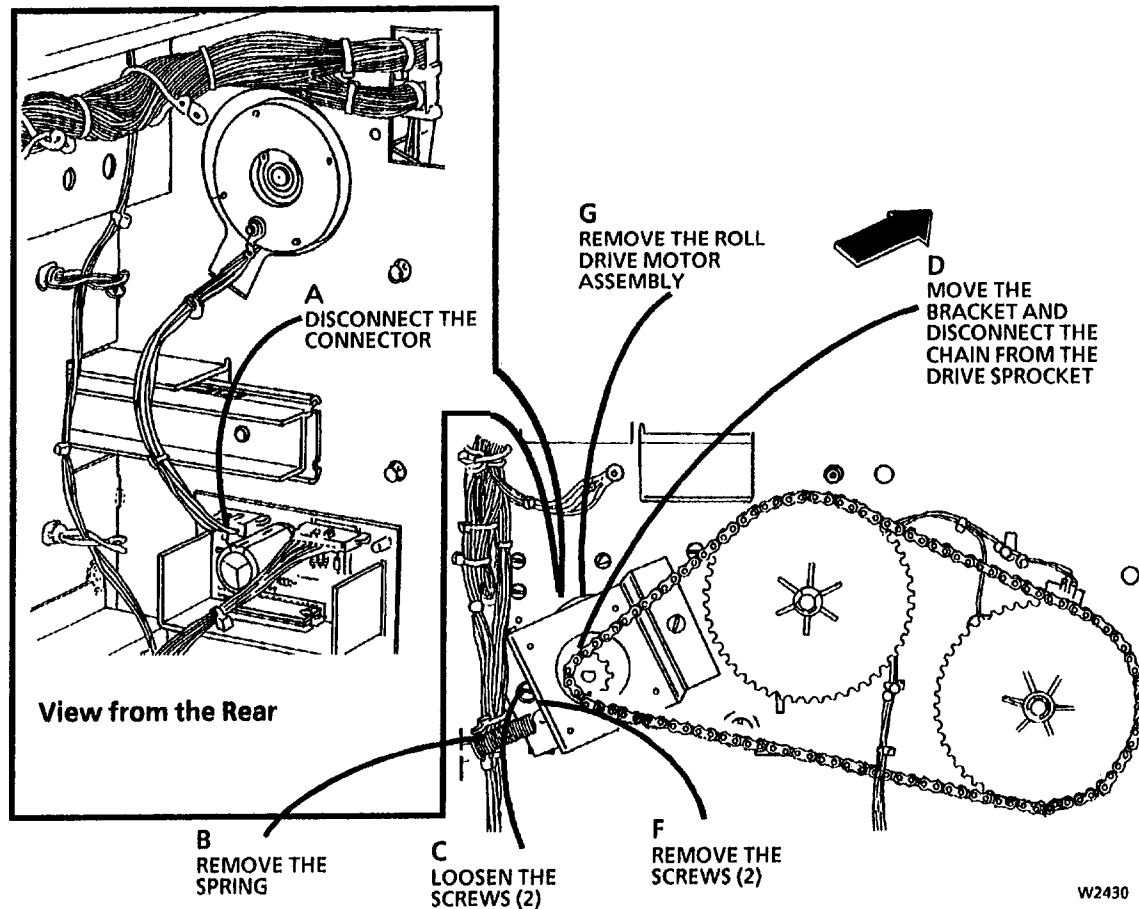


Figure 1. Removing the Roll Drive Motor Assembly

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

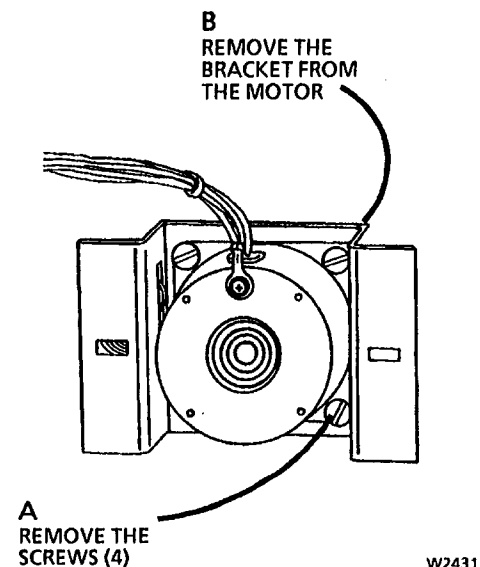


Figure 2. Removing the Bracket

REP 7.10 Media Roll Heater

Parts List on PL 7.2

Removal



WARNING

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

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

2. Open the Left Side Door and the Right Side Door.
3. (Figure 1): Remove the Media Roll Heater.

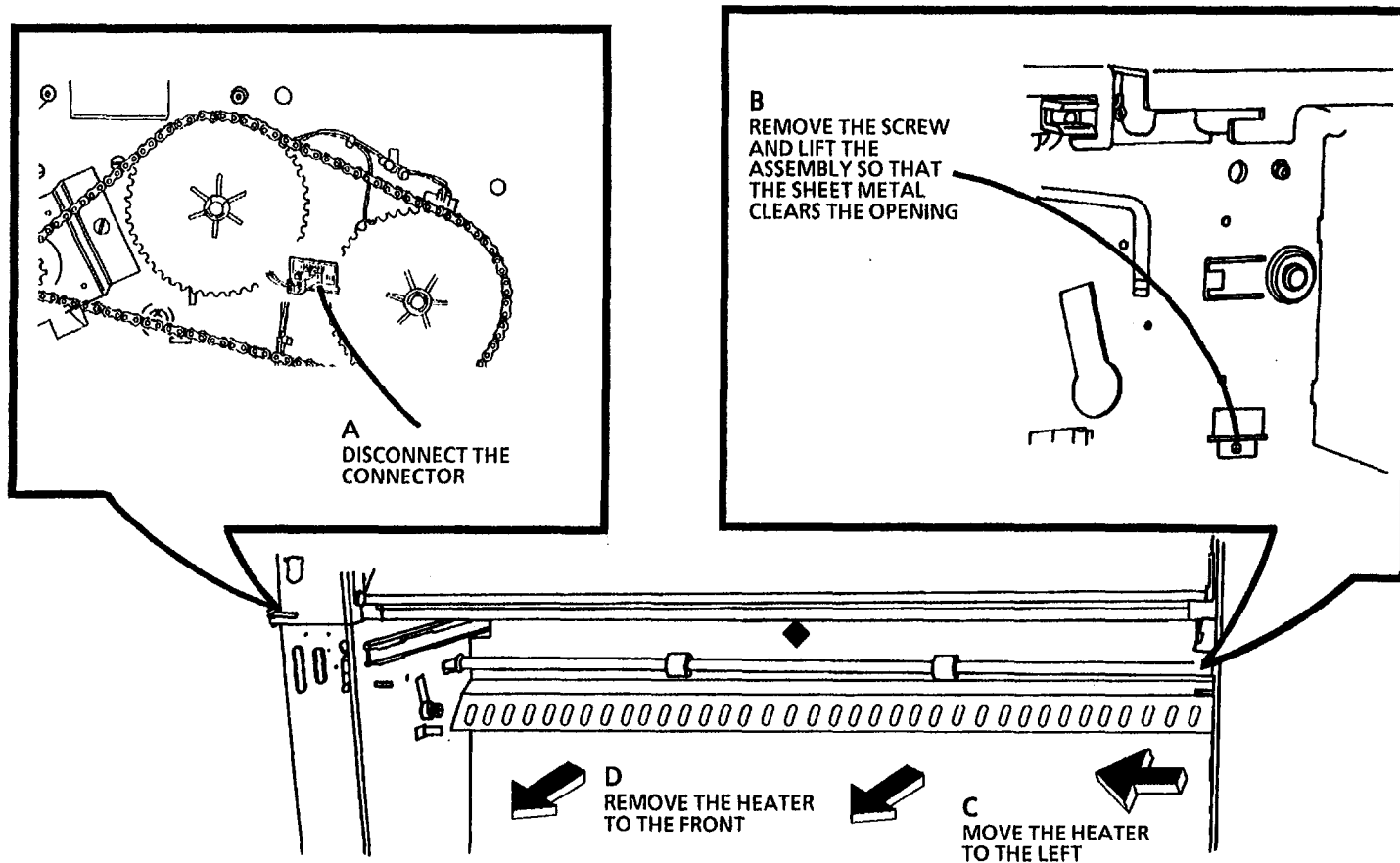


Figure 1. Removing the Media Roll Heater

W2432

REP 7.11 Encoder Disk

Parts List on PL 7.2

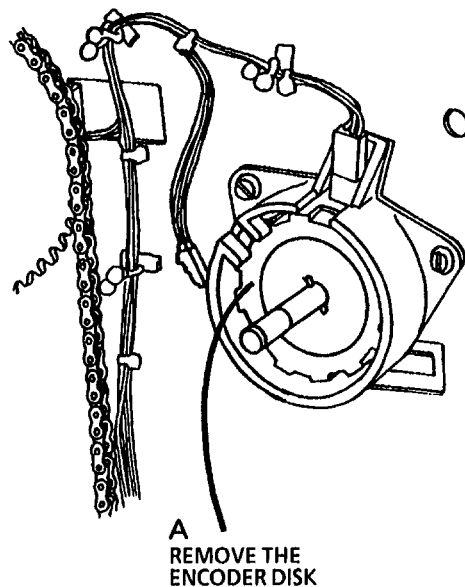
Removal



WARNING

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

1. Open the Left Side Door.
2. Remove the Rewind Clutch(Rep 7.6).
3. (Figure 1): Remove the Encoder Disk.

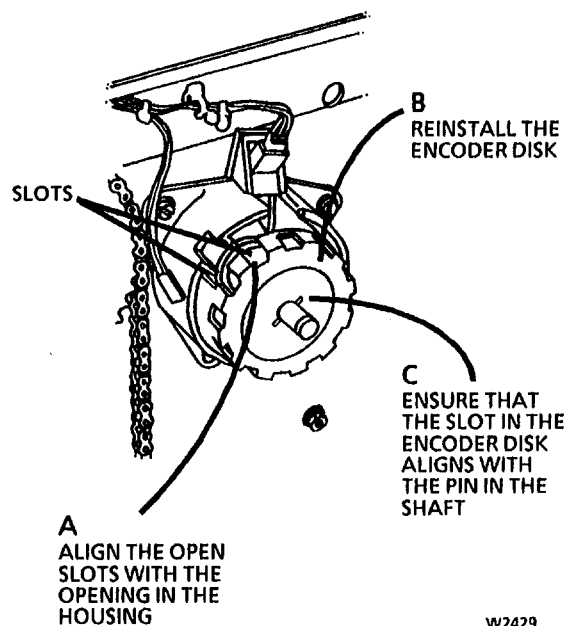


W2433

Figure 1. Removing the Encoder

Replacement

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



W2429

Figure 2. Reinstalling the Encoder Disk

3. Reinstall the remaining components

Notes:

REP 8.1 Media Transport Assembly

Parts List on PL 8.1

Removal



WARNING

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

1. Remove the Xerographic Module (REP 9.1) and store in a safe place.

2. (Figure 1): Disconnect the connectors on the left side of the copier.

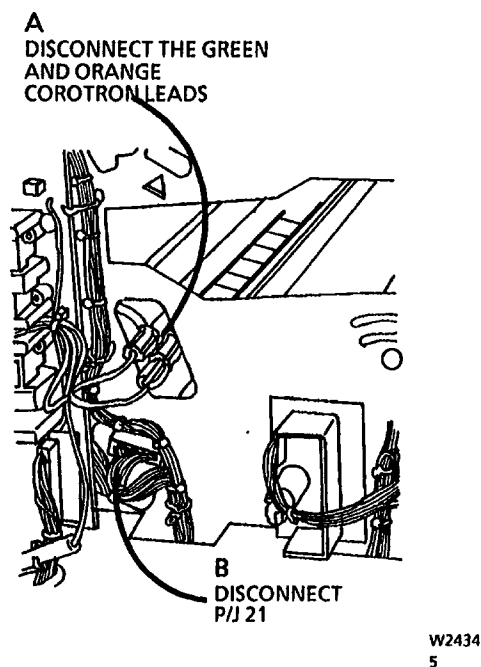


Figure 1. Disconnecting the Connectors

3. (Figure 2): Disconnect the Moisture Collection Tube.

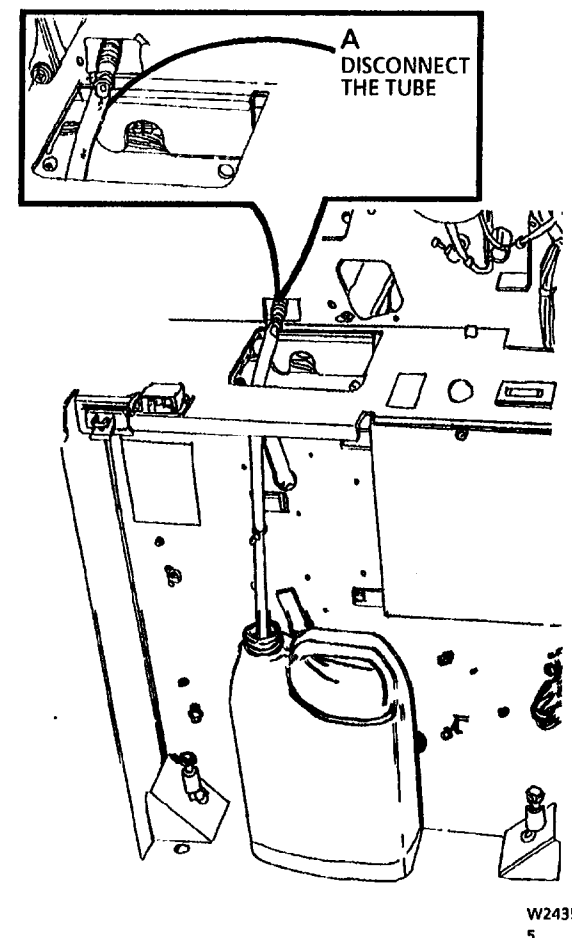


Figure 2. Disconnecting the Tube

4. (Figure 2): Remove the Media Transport Assembly.

1 Before removing the Media Transport Assembly, ensure that there is a clean area on which to place the assembly.

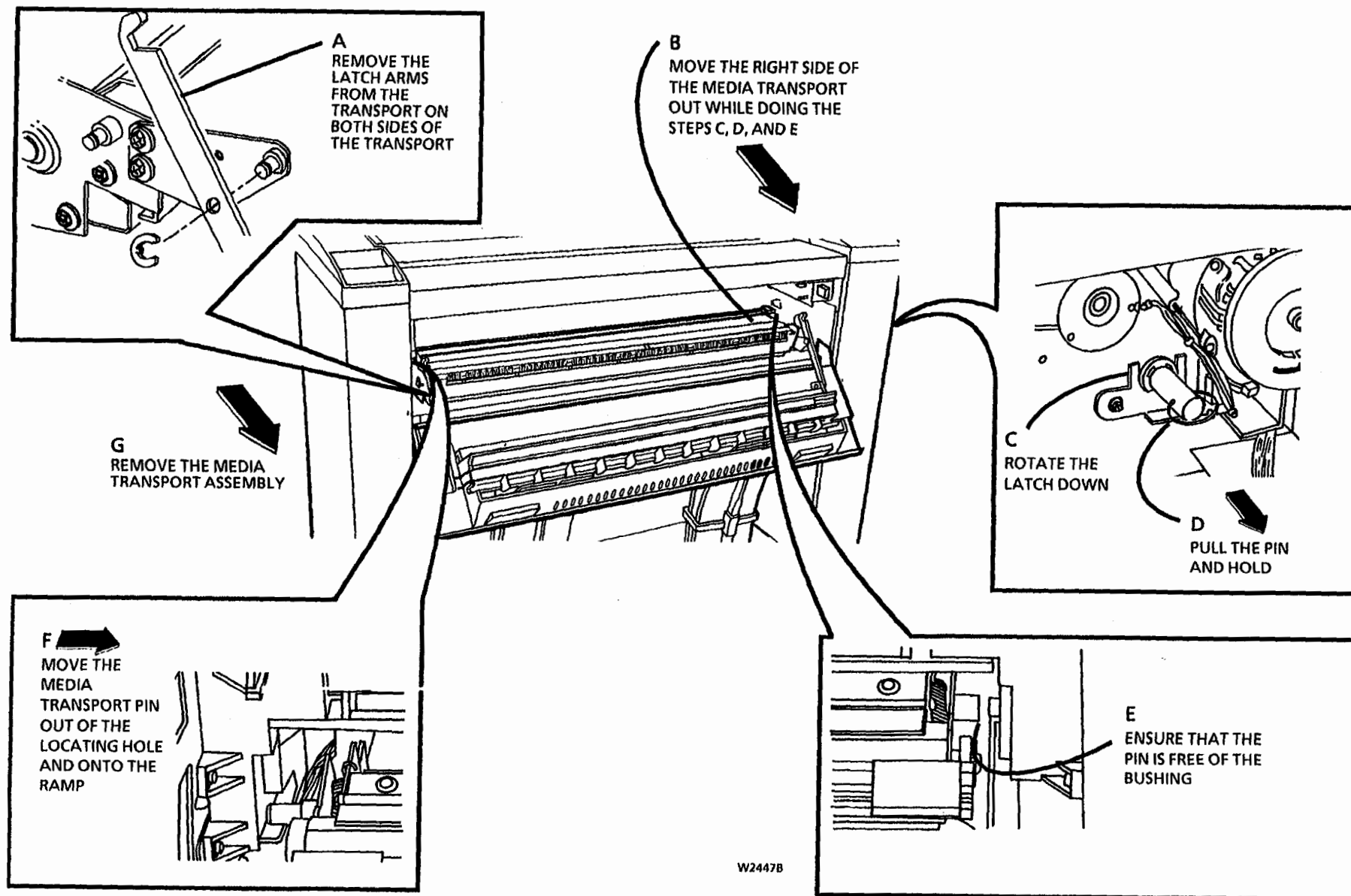
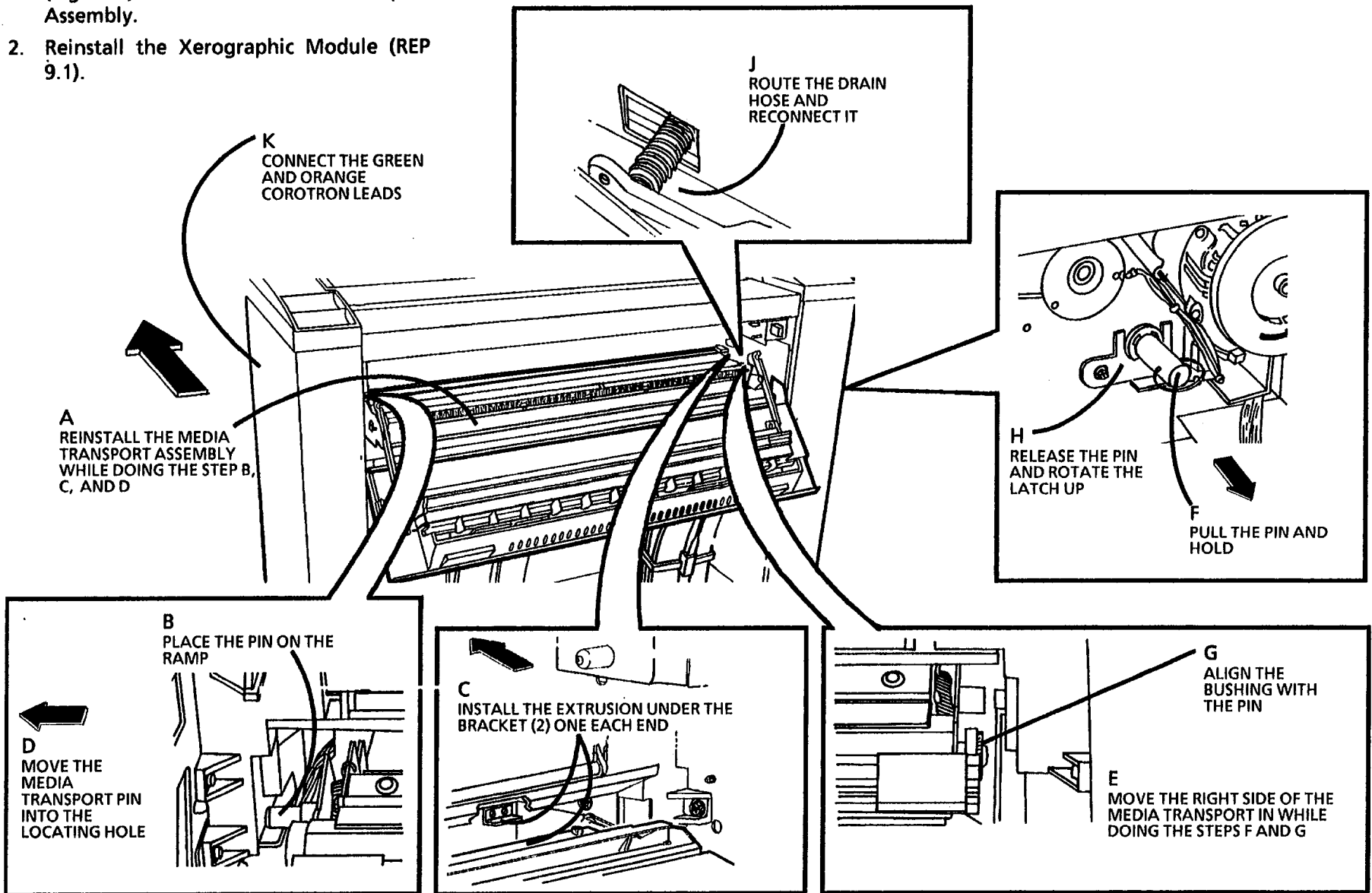


Figure 2. Removing the Media Transport Assembly

Replacement

1. (Figure 3): Reinstall the Media Transport Assembly.
2. Reinstall the Xerographic Module (REP 9.1).



W2446B

Figure 3. Install the Media Transport Assembly

REP 8.2 Media Exit Switch

Parts List on PL 8.4

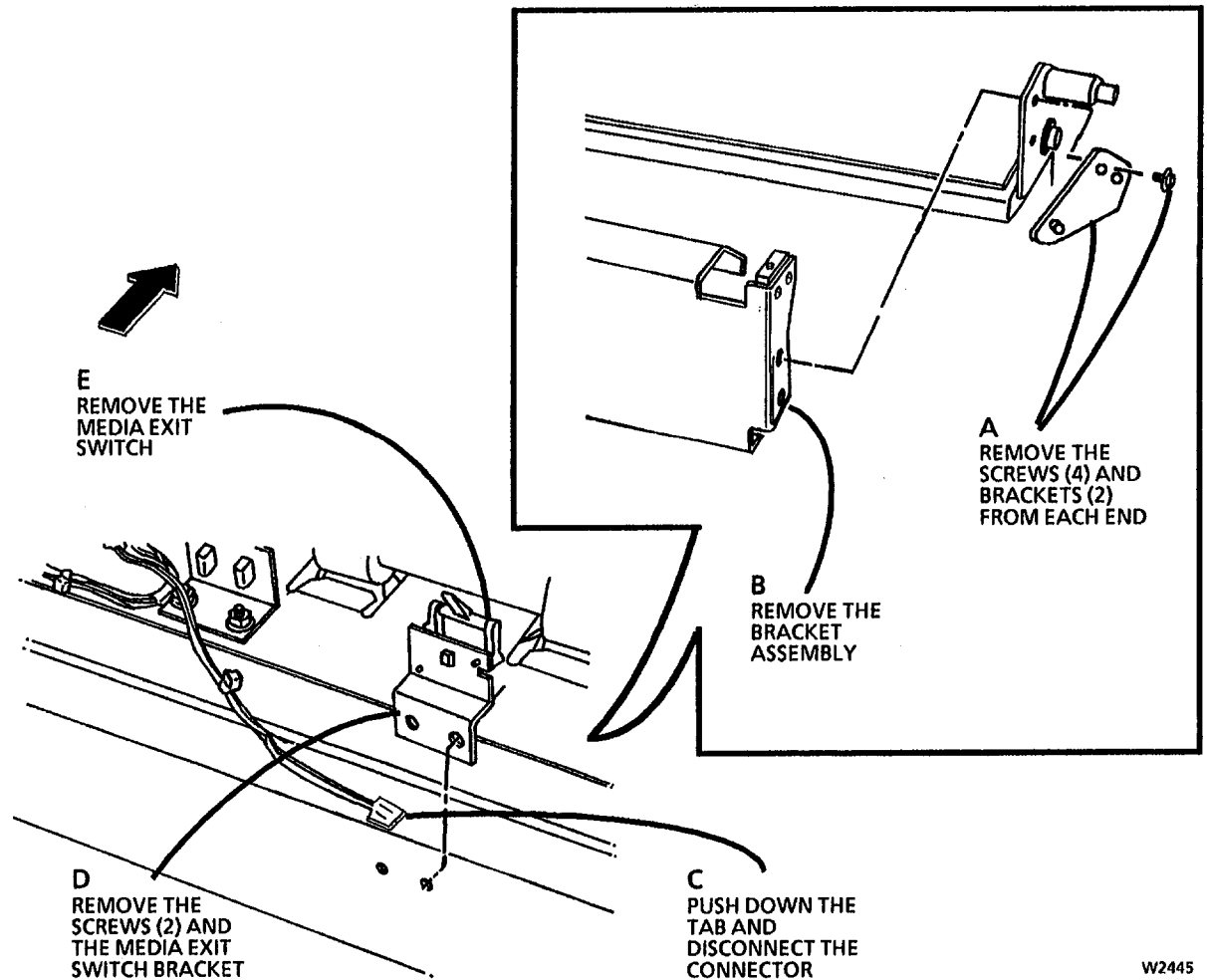
Removal



WARNING

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

1. Remove the Document Handler and raise the Document Feed-in Shelf.
2. Remove the Xerographic Module (REP 9.1).
3. Remove the Media Transport Assembly (REP 8.1).
4. (Figure 1): Remove the Media Exit Switch.



W2445

Figure 1. Removing the Media Exit Switch

REP 8.6 Sheet Drive Roll

Parts List on PL 8.3

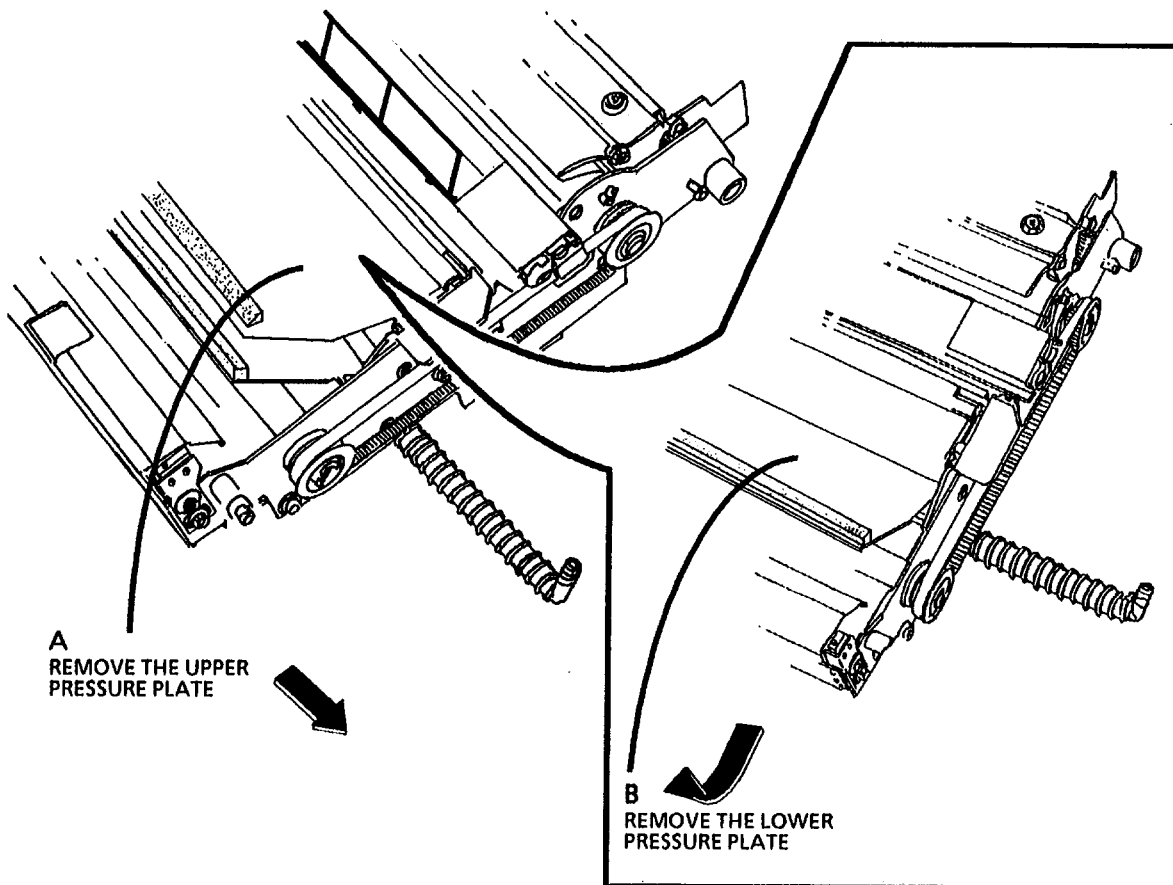
Removal



WARNING

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

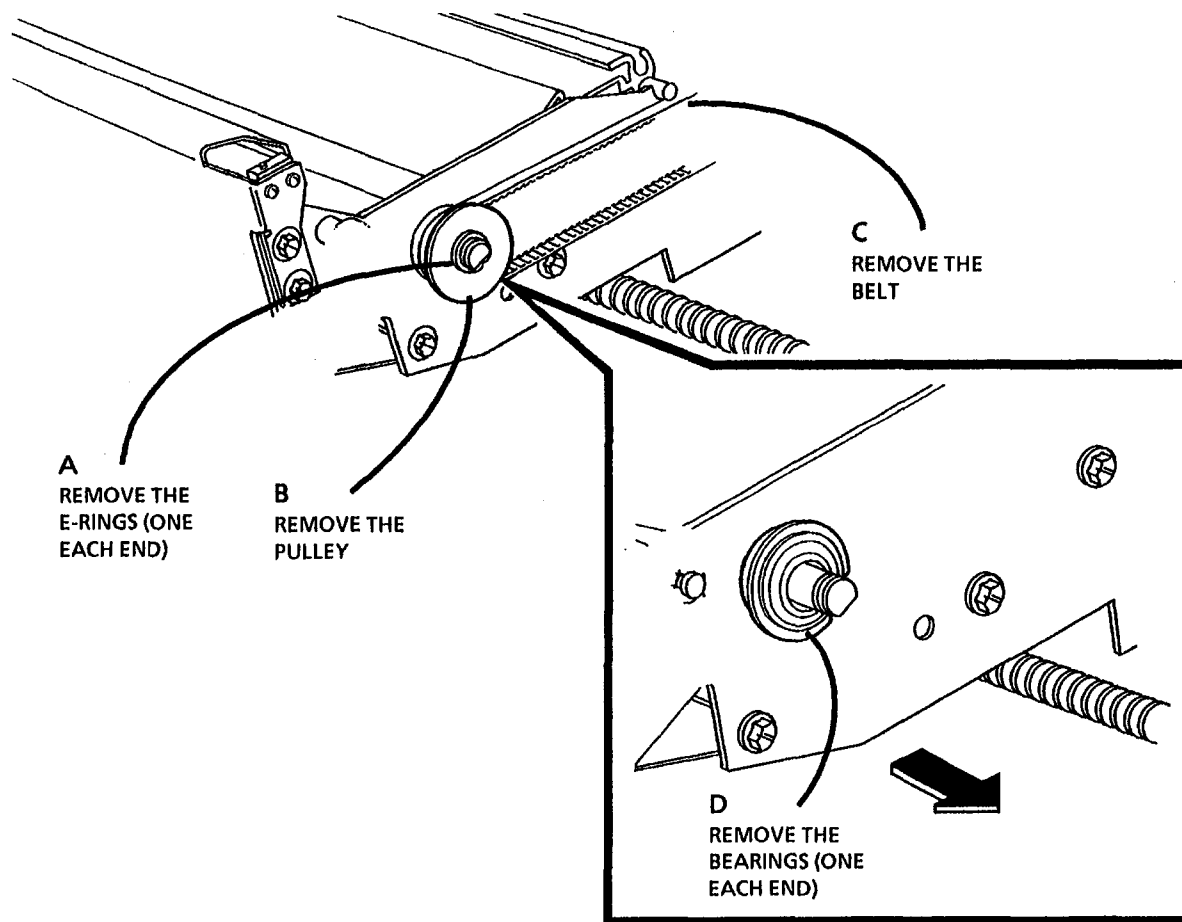
1. Remove the Xerographic Module (REP 9.1).
2. Remove the Media Transport Assembly (REP 8.1).
3. Remove the Fabric Guide (REP 8.9).
4. (Figure 1): Remove the Upper and Lower Pressure Plates.



W2440

Figure 1. Removing the Upper and Lower Pressure Plates

5. (Figure 2): Remove the belt and the pulley.



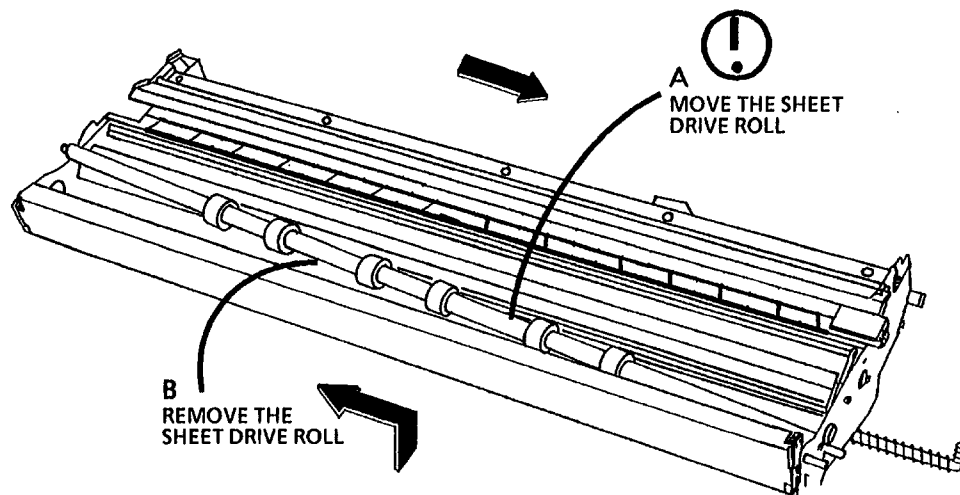
W2441

Figure 2. Removing the Belt and the Pulley



STEP 6A: *Be careful not to damage the actuator arm on the Sheet Media Feed Switch.*

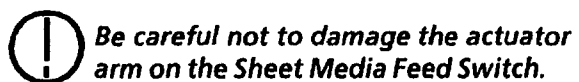
6. (Figure 3): Remove the Sheet Drive Roll.



W2442

Figure 3. Removing the Sheet Drive Roll

Replacement



1. Reinstall the Sheet Drive Roll.

2. (Figure 4): Reinstall the Lower Pressure Plate.

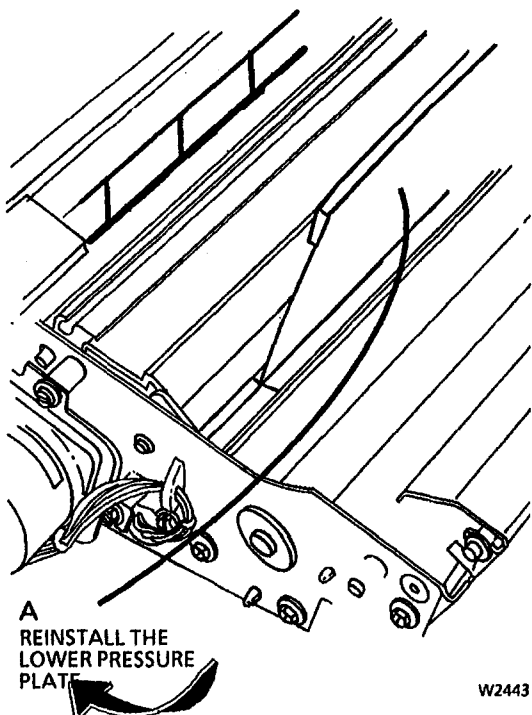


Figure 4. Reinstalling the Lower Pressure Plate

3. (Figure 5): Reinstall the Upper Pressure Plate.

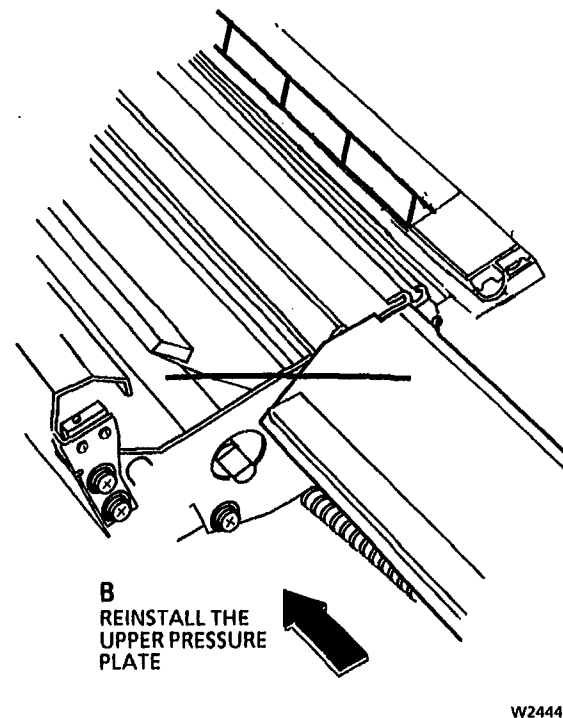


Figure 5. Reinstalling the Upper Pressure Plate

4. (Figure 6): Reinstall the Fabric Guide.

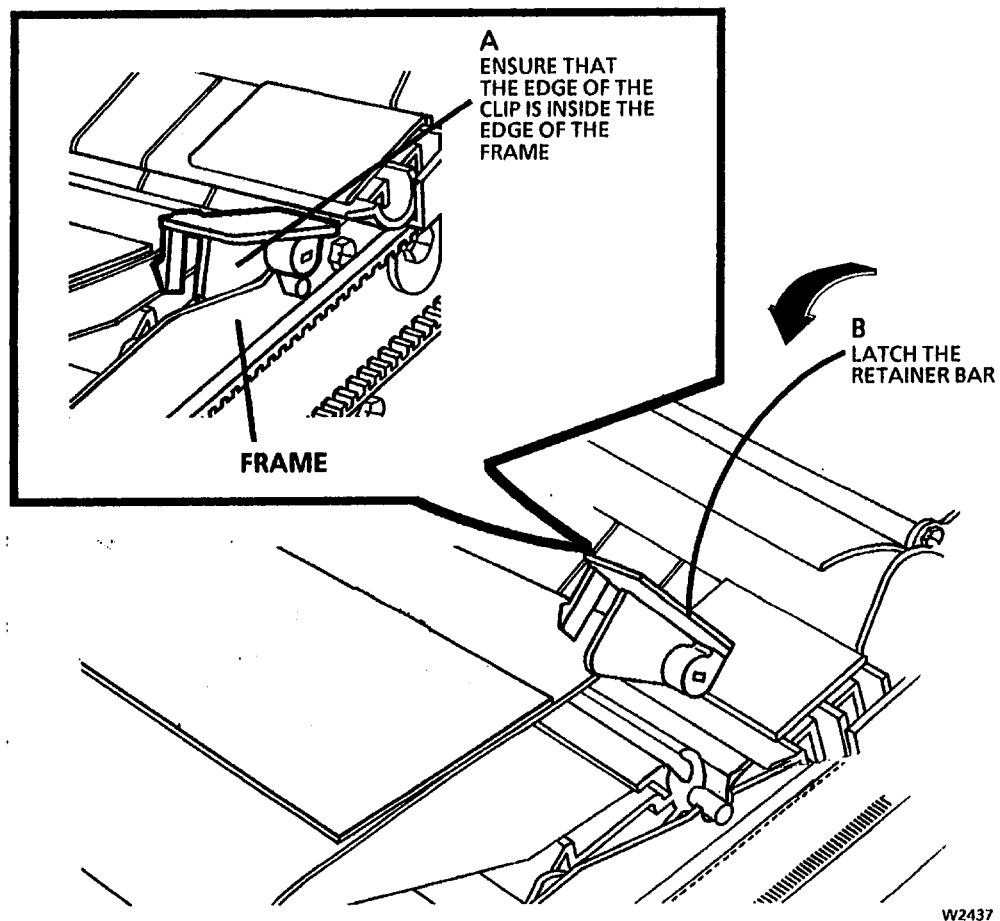


Figure 6. Reinstalling the Fabric Guide

REP 8.7 Sheet Pinch Rolls

Parts List on PL 8.3

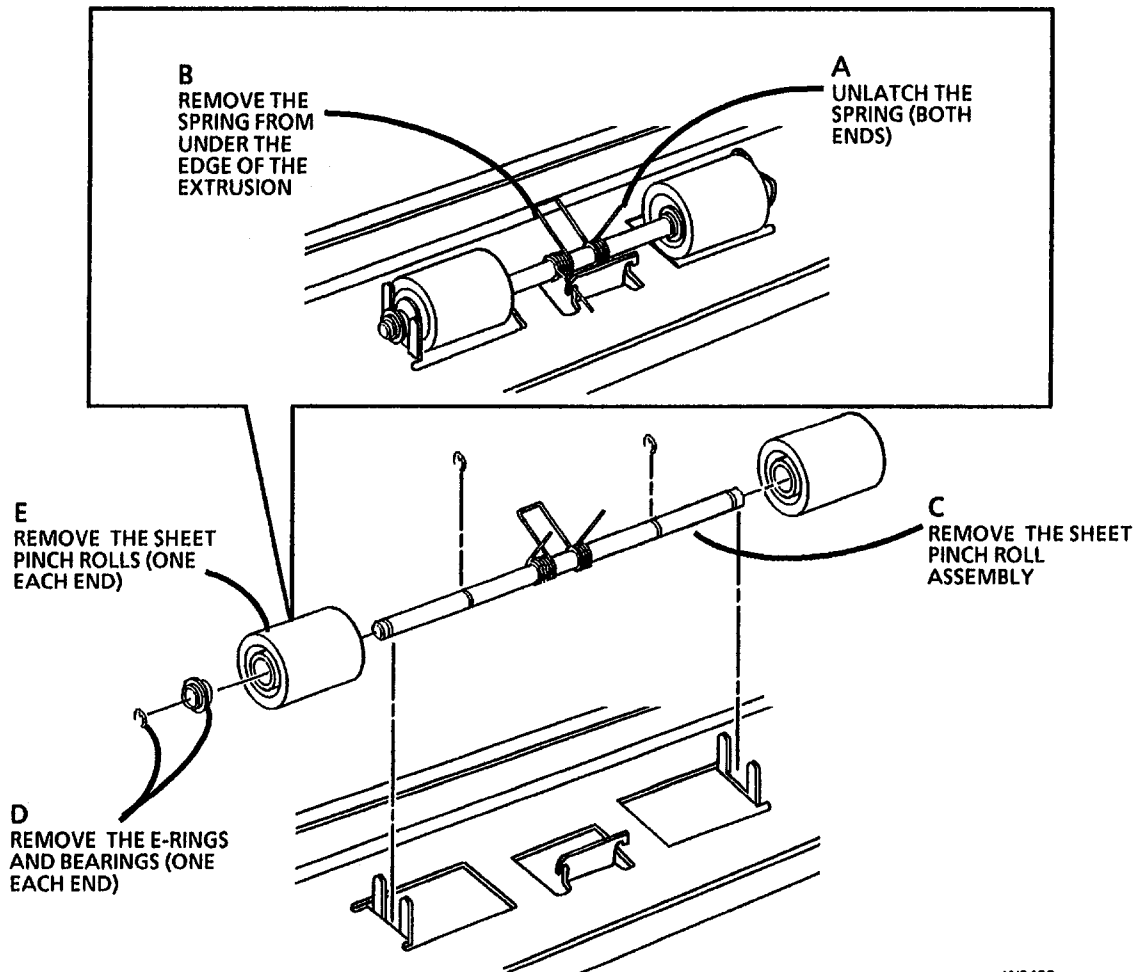
Removal



WARNING

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

1. Remove the Xerographic Module (REP 9.1).
2. Remove the Media Transport Assembly (REP 8.1).
3. Turn the Media Transport Assembly over.
4. (Figure 1): Remove the Sheet Pinch Rolls.



W2439

Figure 1. Removing the Sheet Pinch Rolls

REP 8.8 Media Registration Sensor

Parts List on PL 8.2

Removal



WARNING

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

1. Remove the Xerographic Module (REP 9.1).
2. Remove the Media Transport Assembly (REP 8.1).
3. (Figure 1): Remove the Media Registration Sensor.

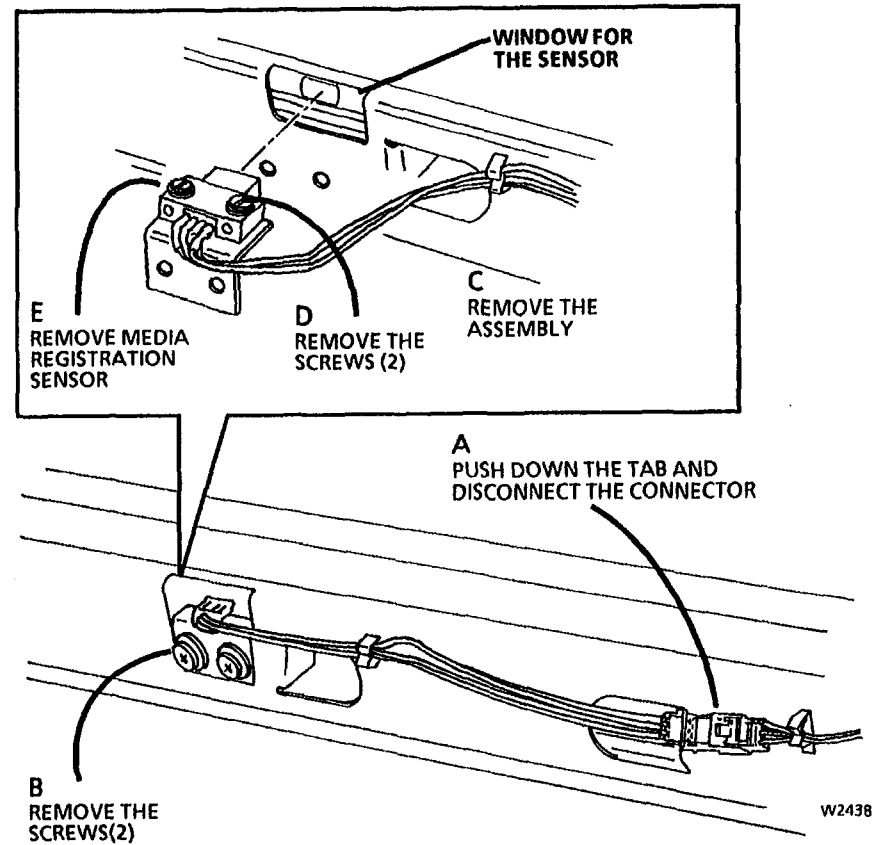


Figure 1. Removing the Media Registration Sensor

REP 8.9 Fabric Guide

Parts List on PL 10.3

Removal



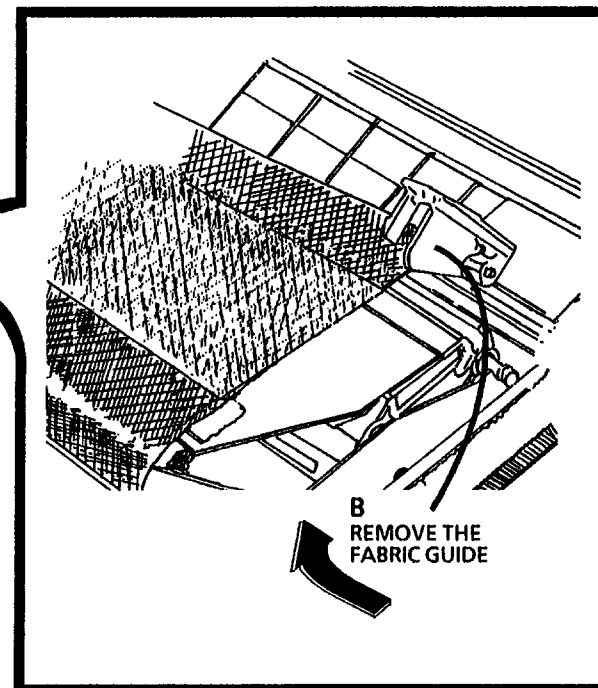
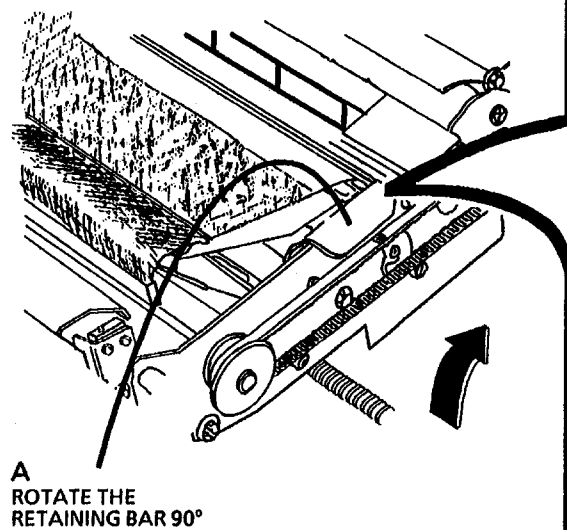
WARNING

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

1

The Xerographic Module does not have to be removed to remove the Fabric Guide. The Xerographic Module is shown removed for clarity.

2. (Figure 1): Remove the Fabric Guide.



W2436

Figure 1. Removing the Fabric Guide

Replacement

1. (Figure 2): Reinstall the Fabric Guide.

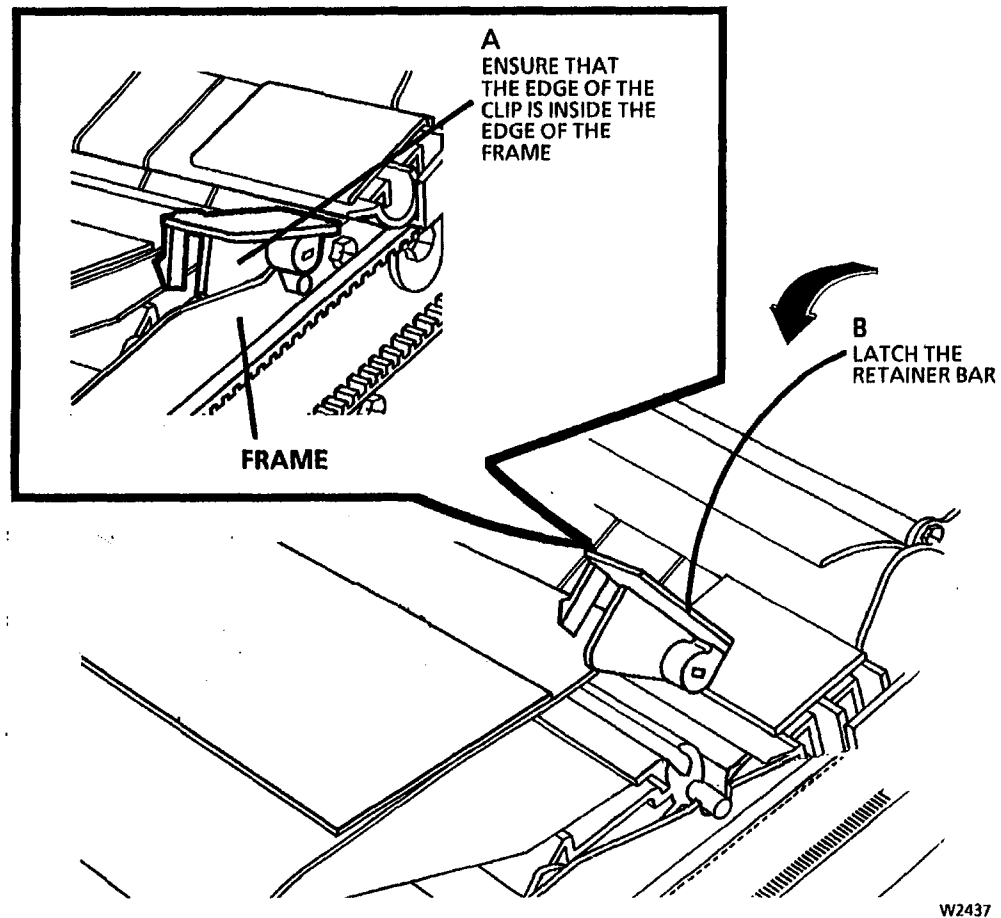


Figure 2. Reinstalling the Fabric Guide

Notes:

REP 8.10 Media Transport Drive Motor

Parts List on PL 8.1

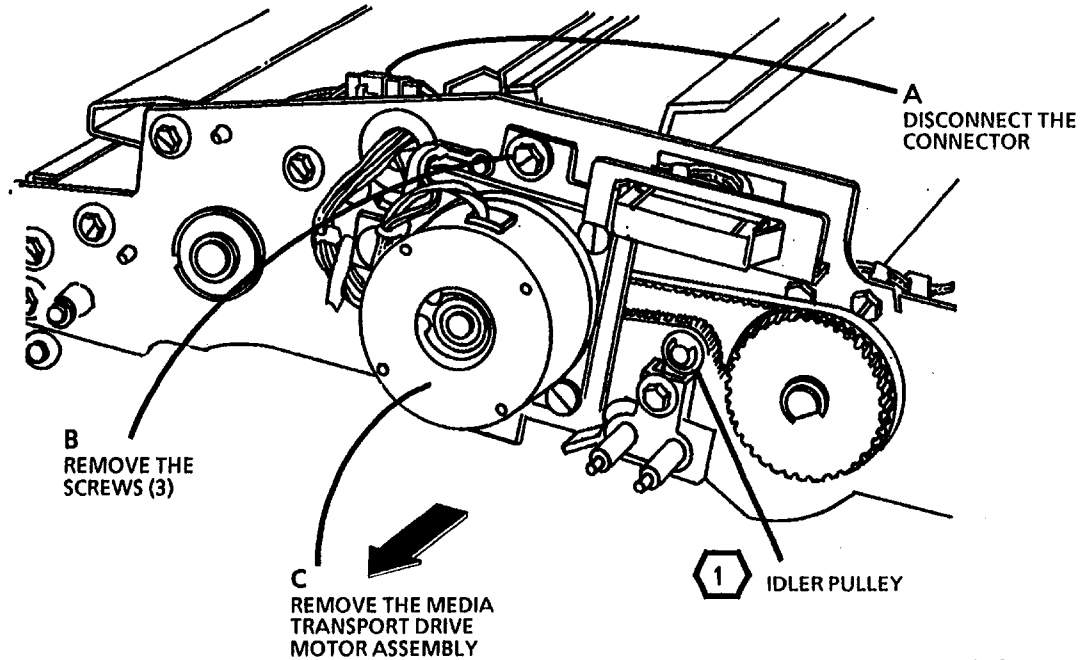
Removal



WARNING

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

1. Remove the Xerographic Module (REP 9.1).
2. Remove the Media Transport Assembly (REP 8.1).
3. Turn the Media Transport Assembly over.
4. (Figure 1): Remove the Media Transport Drive Motor Assembly.



W2448

Figure 1. Removing the Media Transport Drive Motor

5. (Figure 2): Remove the Media Transport Drive Motor from the mounting plate.

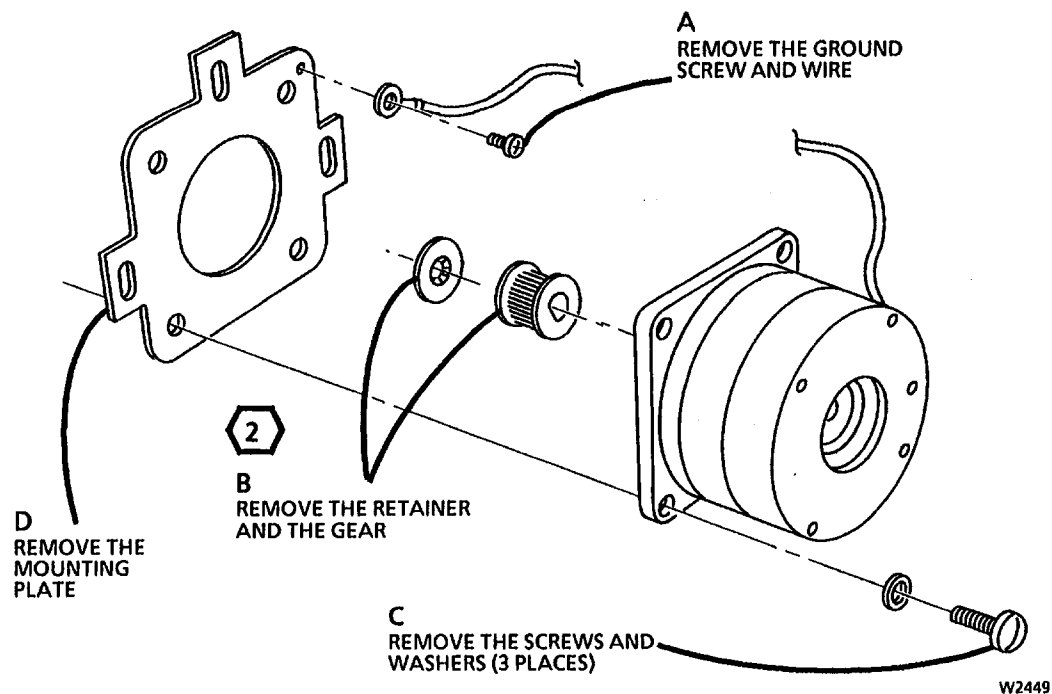


Figure 2. Removing the Media Transport Drive Motor from the Mounting Plate

Replacement

1. The replacement is the reverse of the removal

1 For reinstallation of the Media Transport Drive Motor, refer to Figure 1 of the Removal procedure: Ensure that the belt is over the idler pulley, as shown in Figure 1.

2 If the motor is being replaced, install the old gear on the new motor.

REP 8.11 Sheet Feed Switch

Parts List on PL 8.4

Removal



WARNING

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

1. Remove the Right and Left Side Doors (REP 14.1).

2. Remove Xerographic Module (REP 9.1).

3. Remove Media Transport (REP 8.1).



STEP 3: Use caution when removing the xerographic module. The fuser may be hot.

4. (Figure 1): Remove the Sheet Feed Switch.

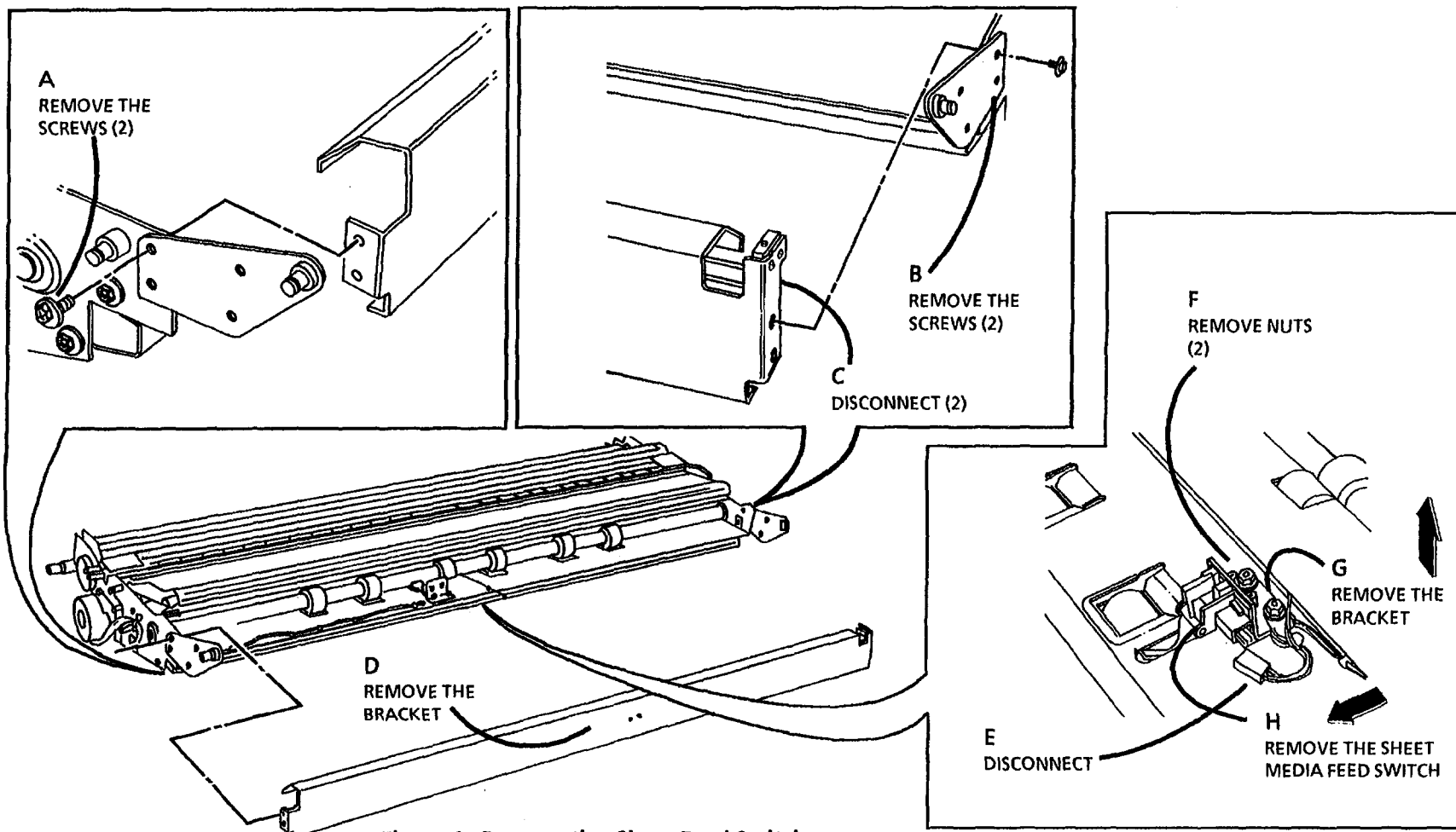


Figure 1. Remove the Sheet Feed Switch

W2450

REP 8.12 Registration Pinch Rolls

Parts List on PL 8.2

Removal



WARNING

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

2. Remove the Right and Left Side Doors (REP 14.1).



STEP 3: Use caution when removing the xerographic module the fuser may be hot.

3. Remove Xerographic Module (REP 9.1).

4. Remove Media Transport (REP 8.1).



STEP 5 D: Ensure that the screw is free of the frame.

5. (Figure 1): Prepare to remove the Registration Pinch Rolls.

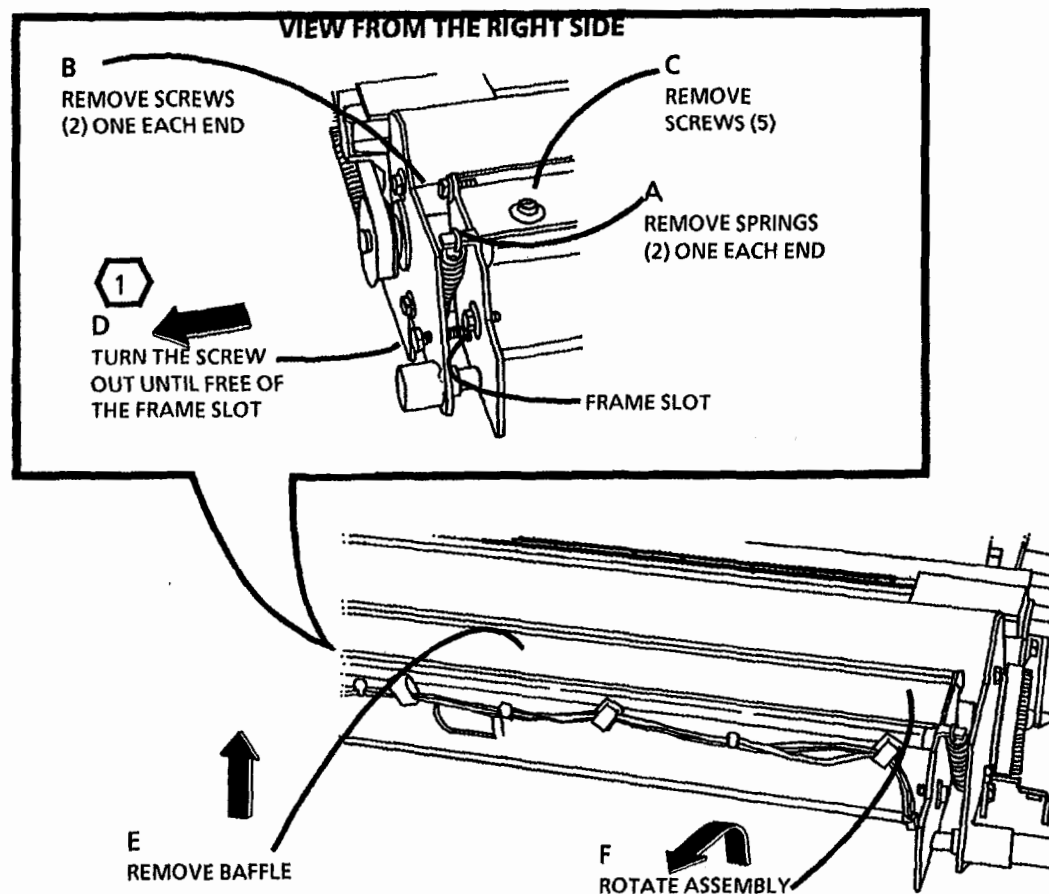


Figure 1. Prepare to Remove the Registration Pinch Rolls

6. (Figure 2): Remove the Registration Pinch Rolls.

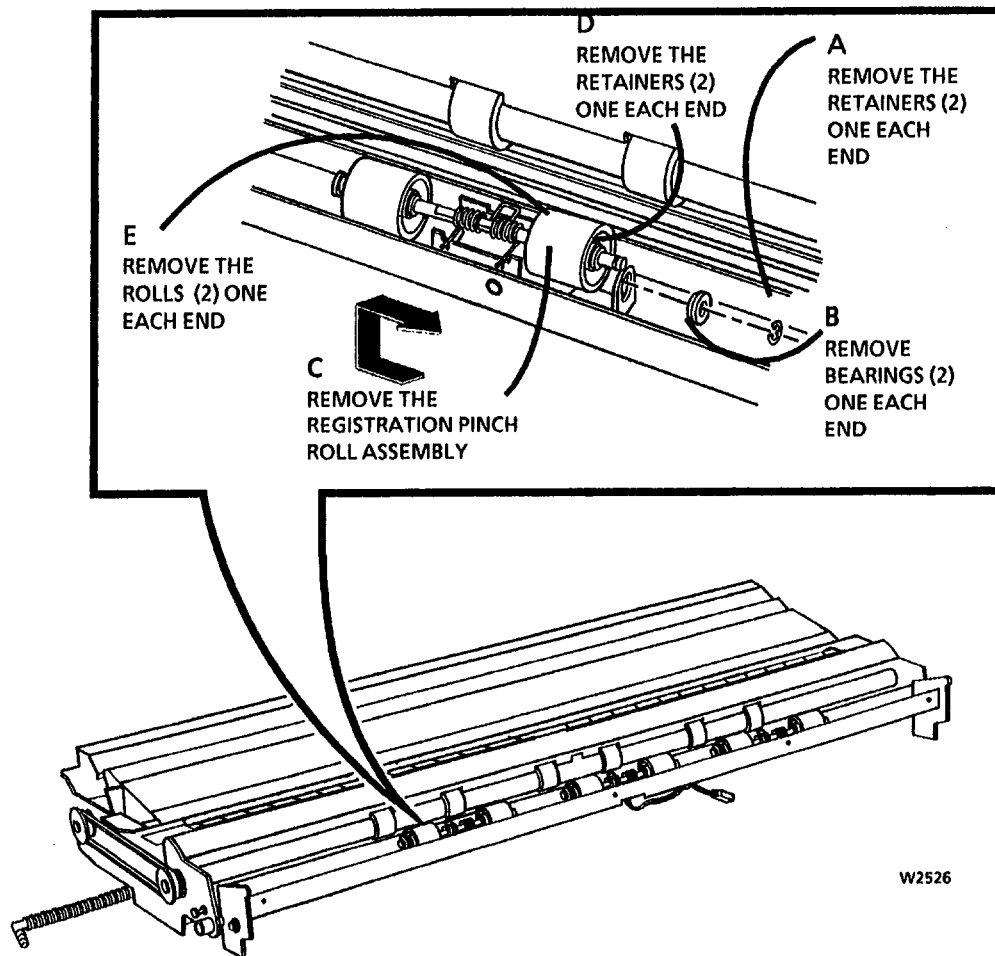


Figure 2. Remove the Registration Pinch Rolls

Replacement

1. Reinstall the rolls and retainers on the shaft.
2. (Figure 3): Install the Registration Pinch Roll Assembly.

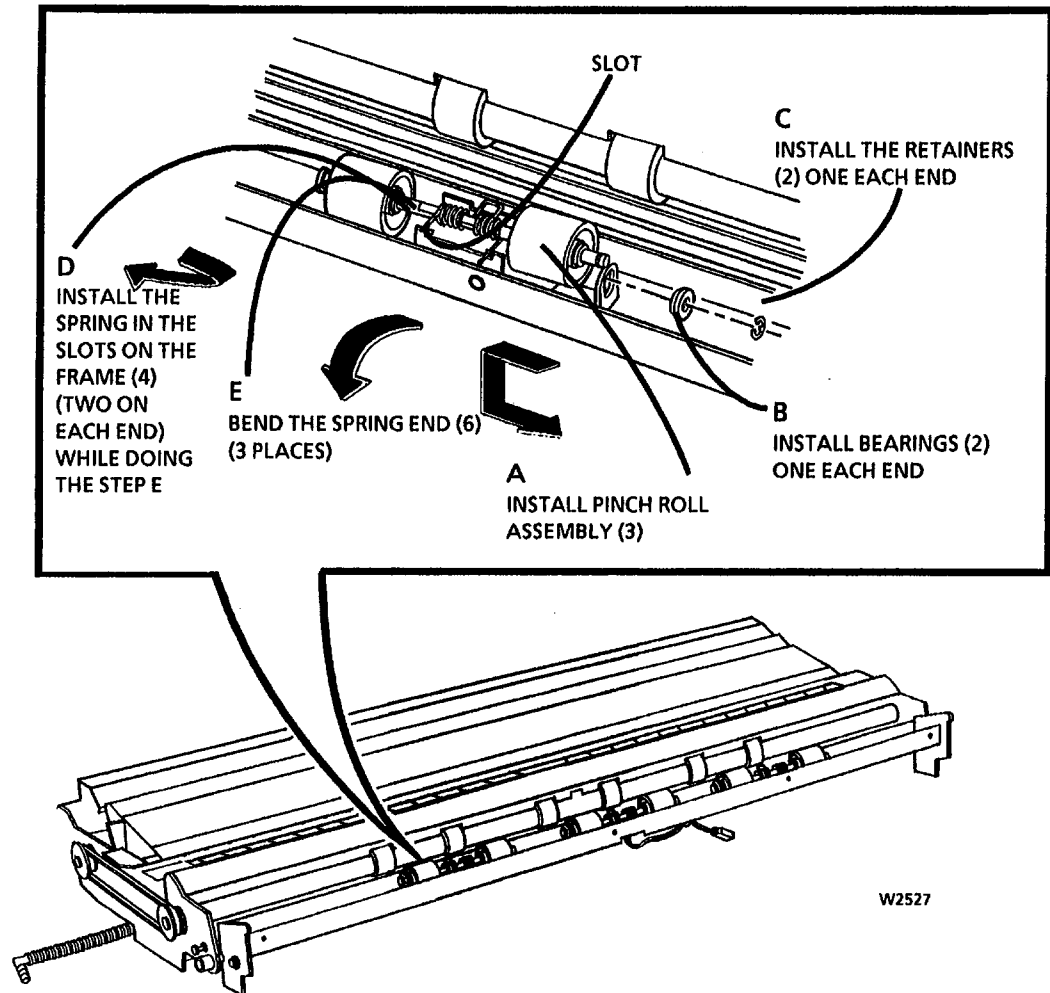
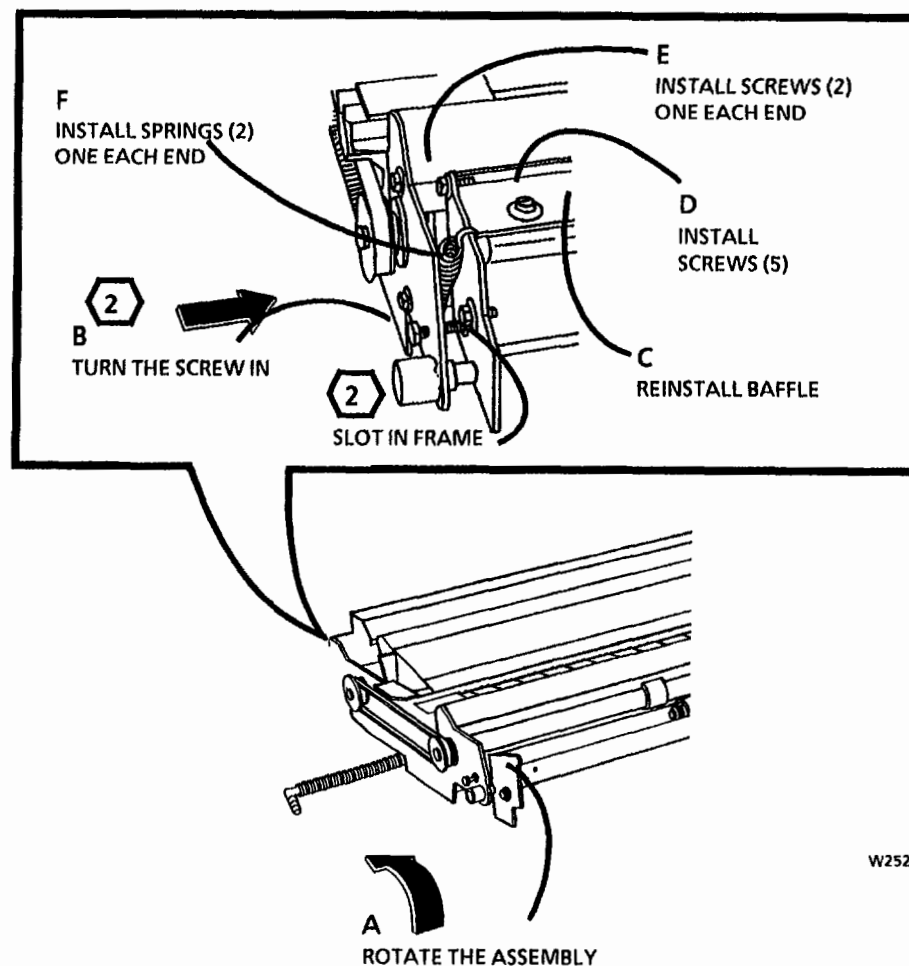


Figure 3. Install the Registration Pinch Roll Assembly

2 **STEP 2D:** To restrict the movement of the pinch roll housing, the screw must be through the slot in the frame.

2. (Figure 4): Install the Springs.
3. The remainder the replacement is a reversal of the removal.
4. Check/Adjust the following:
 - a. Copy Size Adjustment (ADJ 5.1)
 - b. Image Registration (ADJ 8.1)
 - c. Auto Length (ADJ 8.2)



W2528

Figure 4. Install the Springs

REP 8.13 Registration Drive Belt

Parts List on PL 8.1

Removal



WARNING

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

1. Remove the Right and Left Side Doors (REP 14.1).



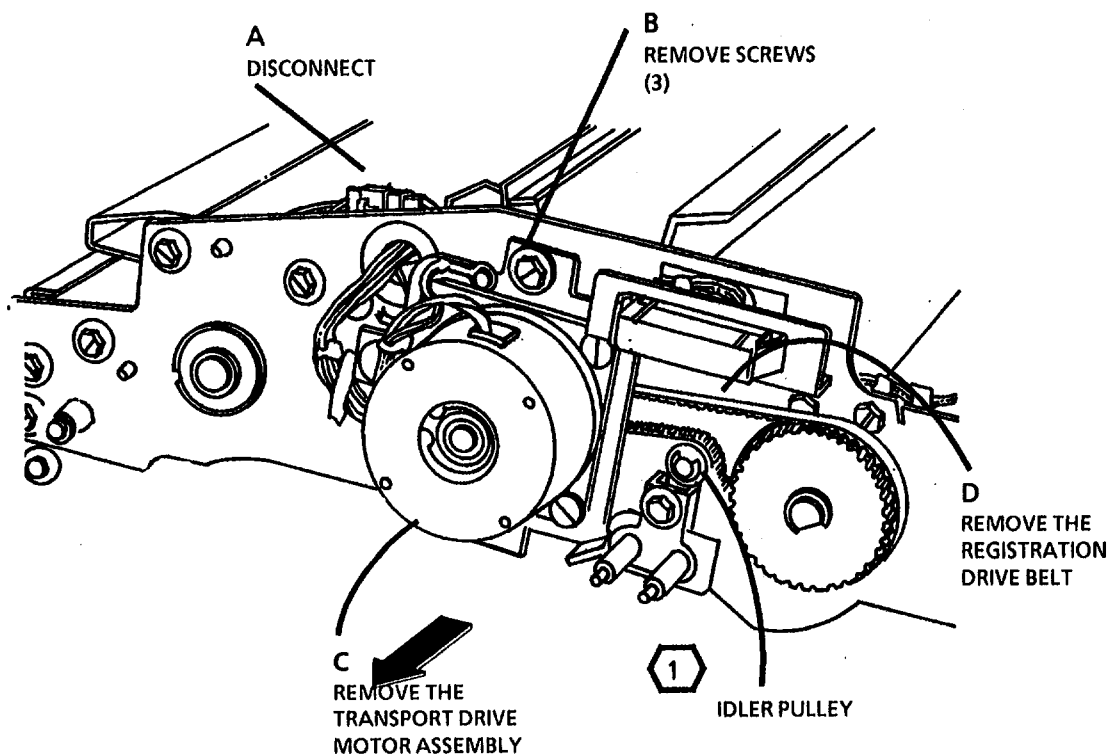
STEP 3: Use caution when removing the xerographic module. The fuser may be hot.

2. Remove Xerographic Module (REP 9.1).
3. Remove Media Transport (REP 8.1).
4. Turn the Media Transport over.
5. (Figure 1): Remove the Media Feed Drive Belt.

Replacement



Refer to Figure 1 in the Removal and ensure that the belt is installed over the idler pulley.



W2448

Figure 1. Remove the Media Feed Drive Belt

REP 8.14 Stripper Finger Jam Switch

Parts List on PL 8.4

Removal



WARNING

1. Switch off the Main Power Switch.
Disconnect the Power Cord.
2. Lower the Front Latching Cover.

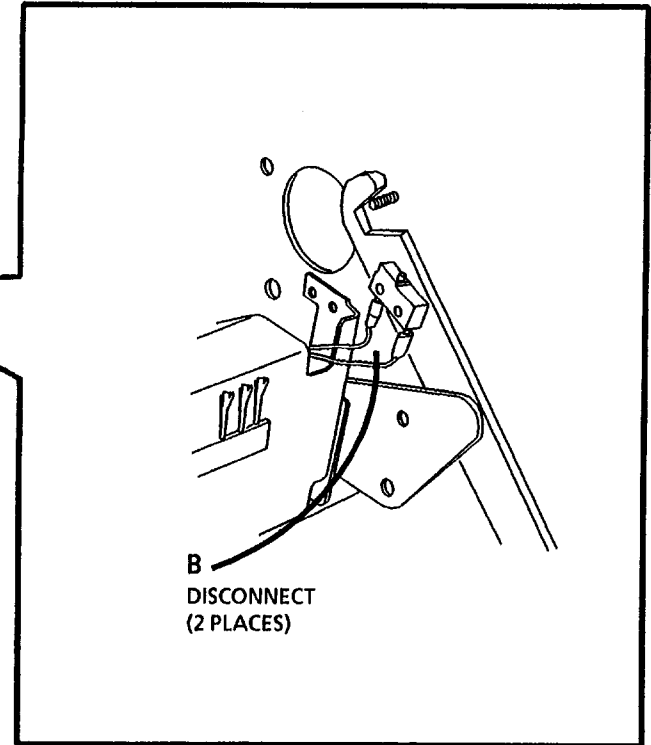
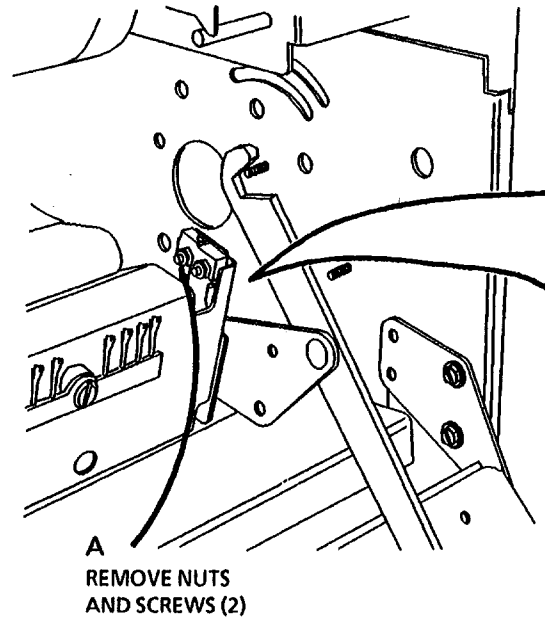
3. (Figure 1): Disconnect the Media Transport from the Latching Cover.
4. (Figure 2): Remove the Stripper Finger Jam Switch.

Replacement



Ensure that the switch plunger is located in the front.

1. The replacement is a reversal of the removal.



W2563

Figure 2. Remove the Stripper Finger Jam Switch

REP 8.15 Cutter Home Sensor

Parts List on PL 7.8

Removal



WARNING

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

1. (Figure 1): Remove the Cutter Home Sensor.

Replacement

1. The replacement is a reversal of the removal.

- 1 Ensure that the Cutter Drive Pulley disc is centered in the sensor.

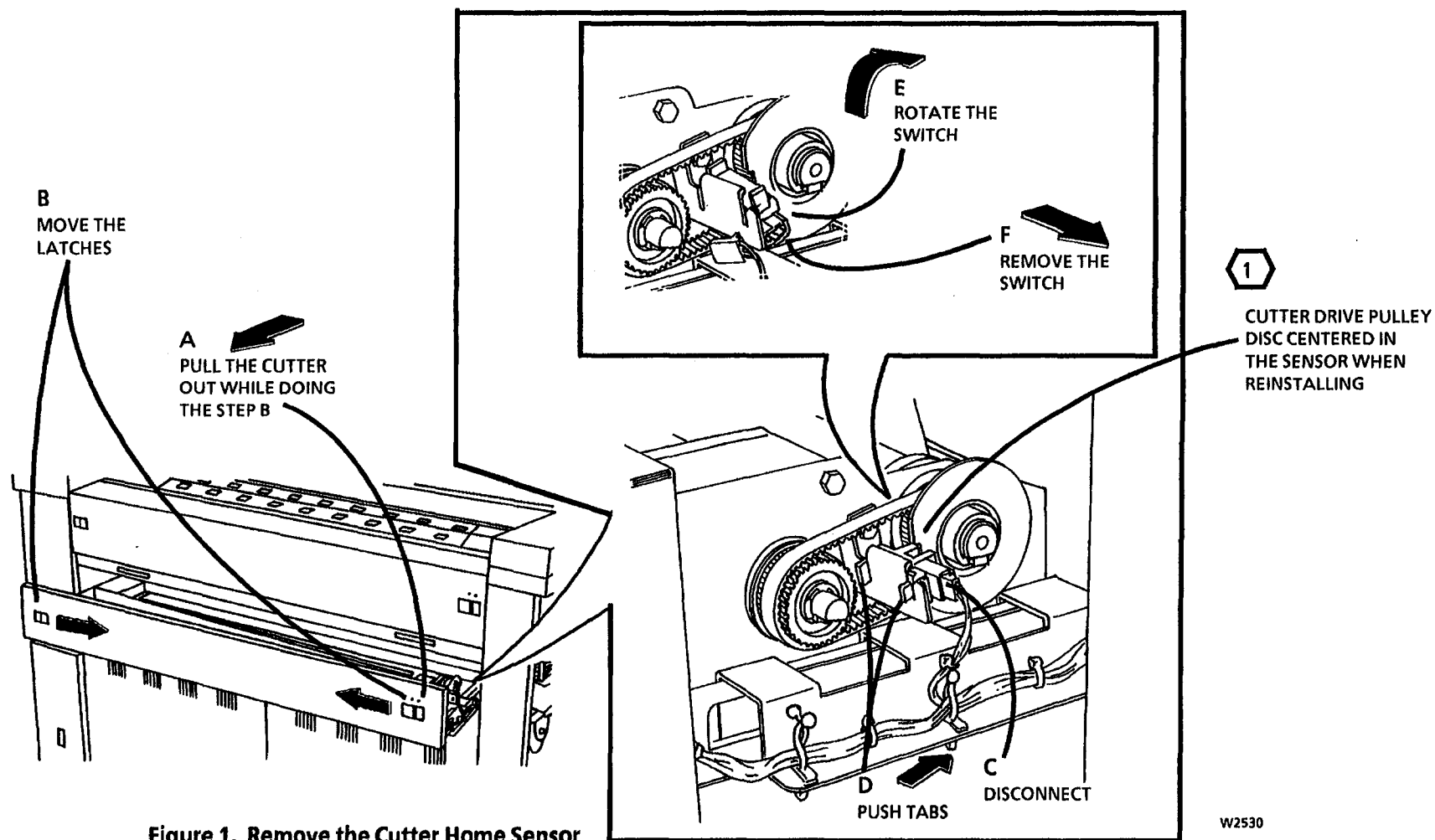


Figure 1. Remove the Cutter Home Sensor

W2530

REP 9.1 Xerographic Module

3. (Figure 1): Lift the Document Feed-in Shelf.

Parts List on PL 9.1

Removal

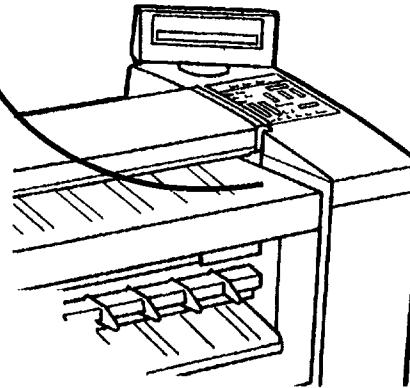


WARNING

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

1. Remove the Document Handler.
2. Remove the Right and Left Side Doors (REP 14.1).

A
ROTATE 1/4 TURN
SCREWS (2) ONE
EACH END

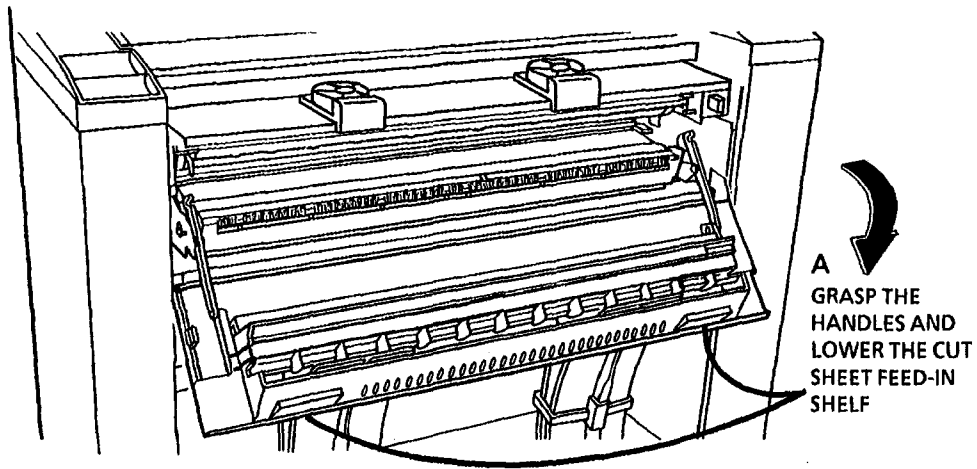


B
ROTATE THE
DOCUMENT FEED-IN
SHELF FULLY

W2562

Figure 1. Lift the Document Feed-in Shelf

4. (Figure 2): Lower the Cut Sheet Feed-in Shelf.



W2507

Figure 2. Lower the Cut Sheet Feed-in Shelf

1 The service rails are stored in the Left Side Door of the Copier.

5. (Figure 3): Install the Xerographic Module Service Rails.

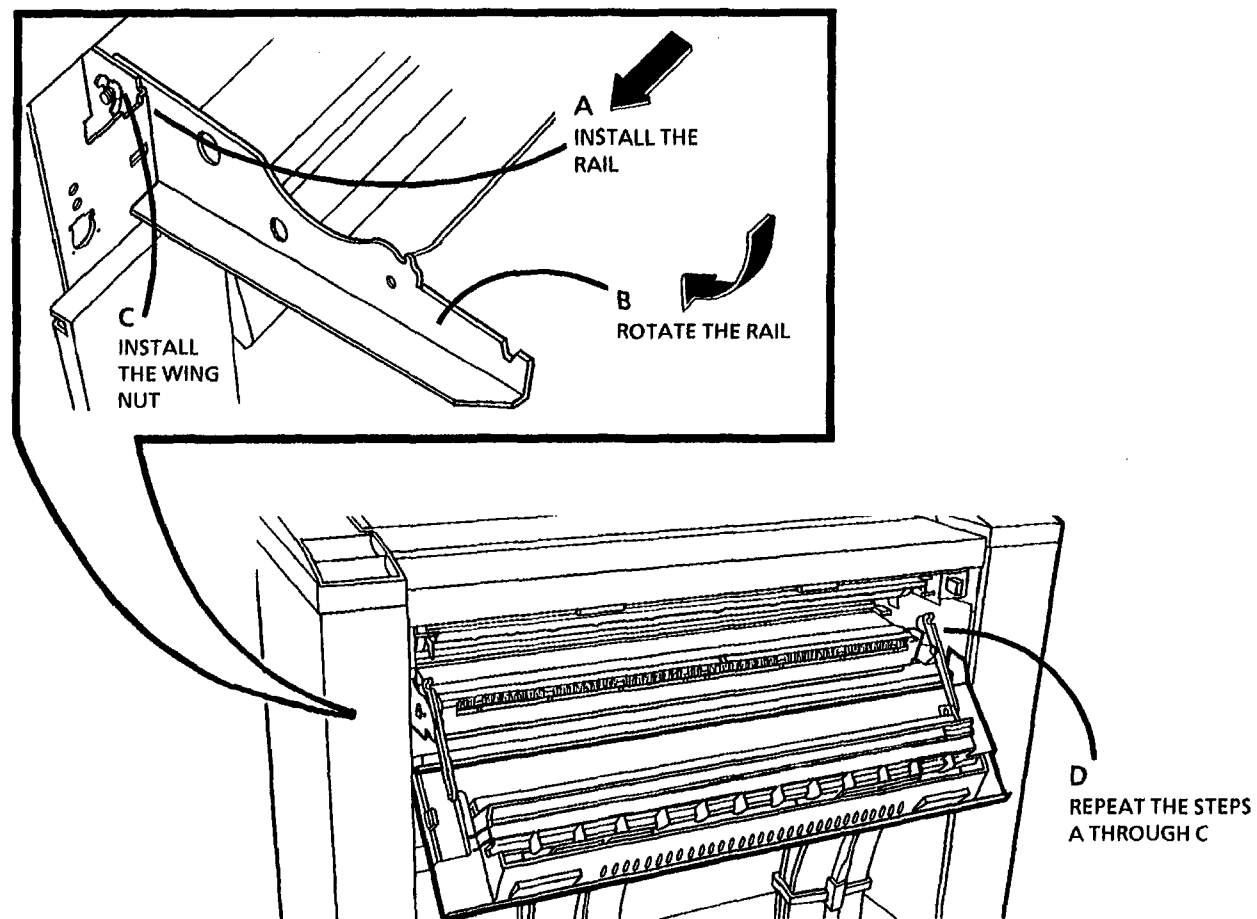
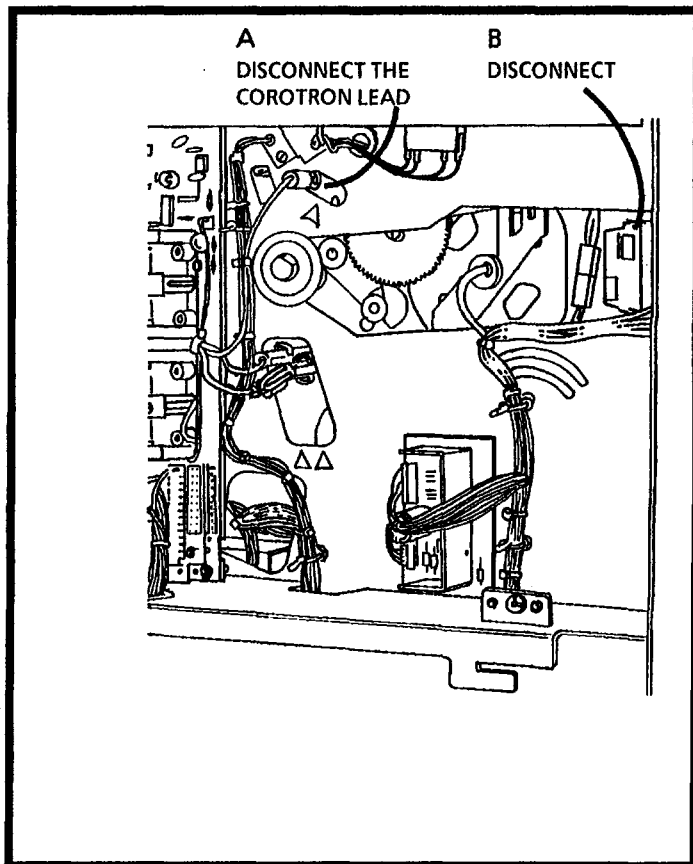


Figure 3. Install the Service Rails

W2509

6. (Figure 4): Prepare to remove the Xerographic Module.

VIEW FROM THE LEFT SIDE



VIEW FROM THE RIGHT SIDE

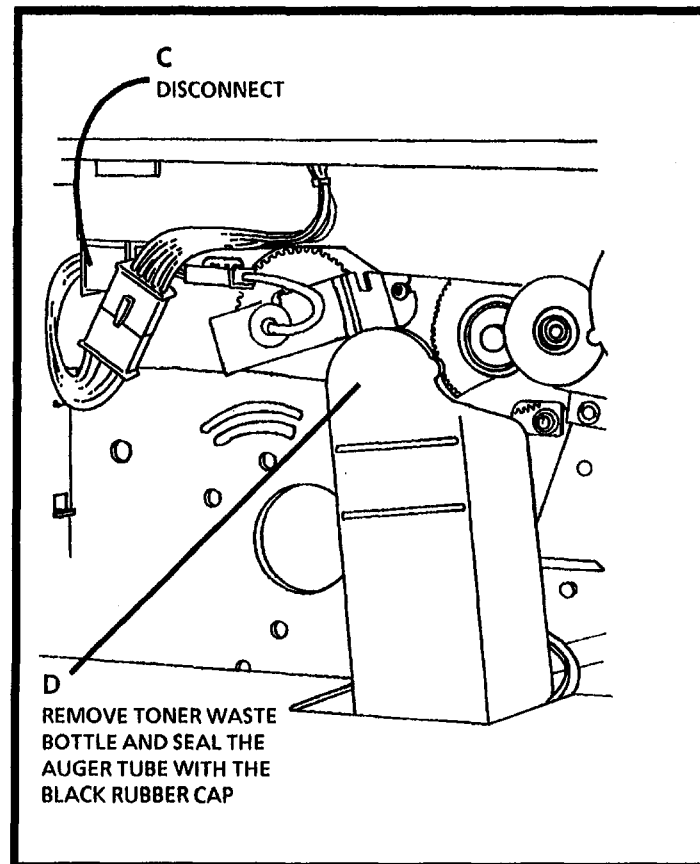


Figure 4. Preparing to Remove the Xerographic Module

W2561



WARNING

The Fuser may be hot.



Cover the photoreceptor drum with a light shield to prevent damage.



STEP 7B: Be careful when removing the module. The module is heavy, difficult to handle, and cannot be placed on any surface without supports at each end of the module frame so that the fuser roll and photoreceptor drum do not contact any surface.

2

The xerographic module may remain on the service rails for some of the repair procedures. It may also be removed to a flat, clean surface for service or storage.

7. (Figure 5): Remove the Xerographic Module to clean, flat surface if not being serviced on the service rails. Place a ream of paper or other supports at each end of the module frame to prevent damage to the photoreceptor drum or fuser roll.
8. Continue with Step 9 if the service is being performed on the service rails.

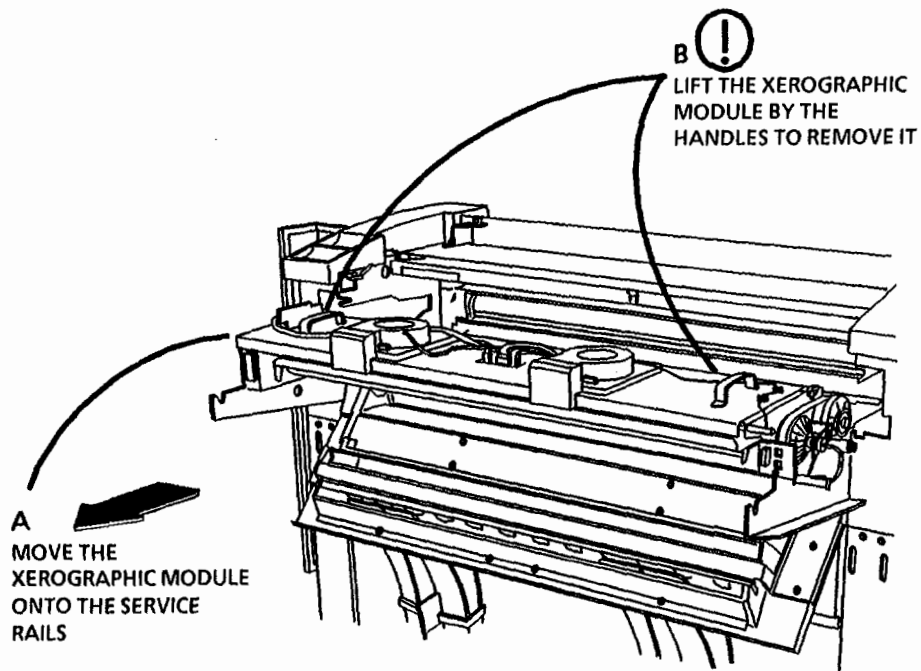


Figure 5. Remove the Xerographic Module to a Clean Flat Surface

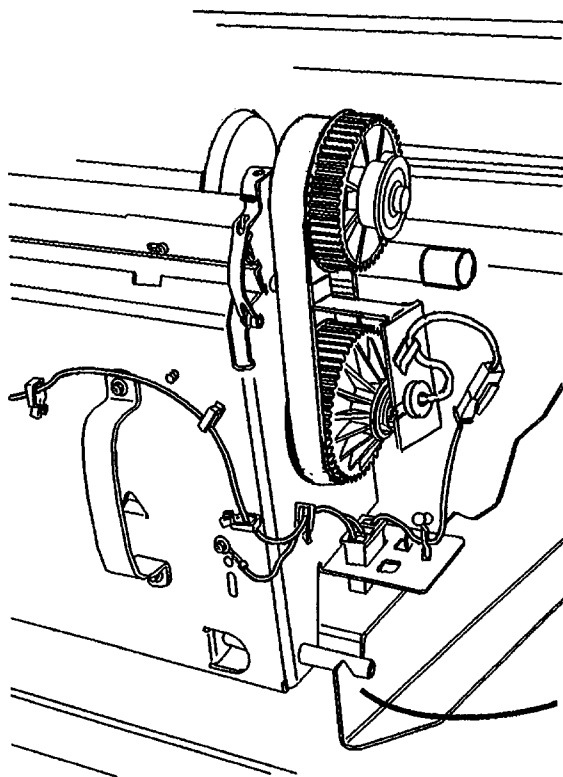
W2510



The pin in position A and the bracket in position B on the Xerographic Module must be in the slots provided on the Service Rails to ensure a safe position of the Xerographic Module on the Service Rails.

9. (Figure 6): Xerographic Module service position on the Service Rails.
10. If the Xerographic module must be removed from the service rails, position a ream of paper or some support at each end of the module to prevent the fuser roll and photoreceptor drum from being damaged

POSITION A

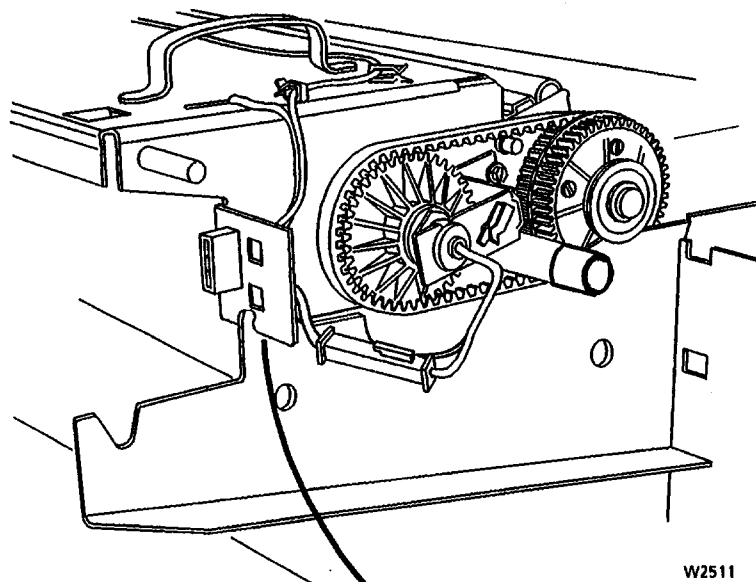


W2573



ENSURE THAT THE PIN ON THE XEROGRAPHIC MODULE IS IN THE SLOT ON THE RAIL

POSITION B



W2511



ENSURE THAT THE BRACKET ON THE XEROGRAPHIC MODULE IS IN THE SLOT ON THE RAIL

Figure 6. Position the Xerographic Module on the Service Rails

REP 9.2 Photoreceptor Drum Assembly

Parts List on PL 9.2

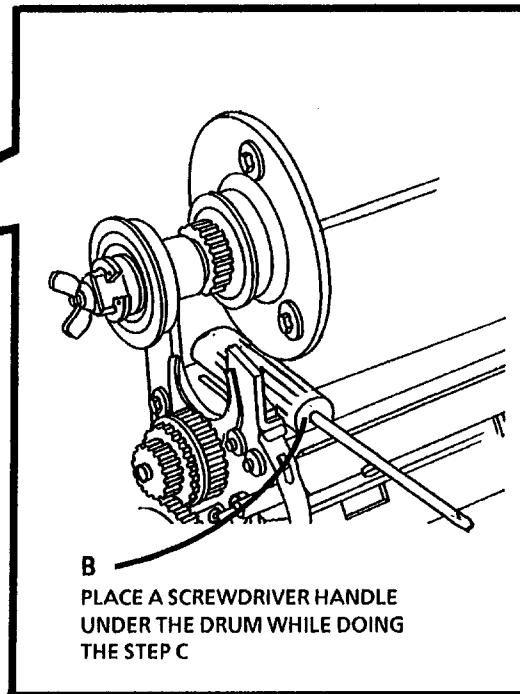
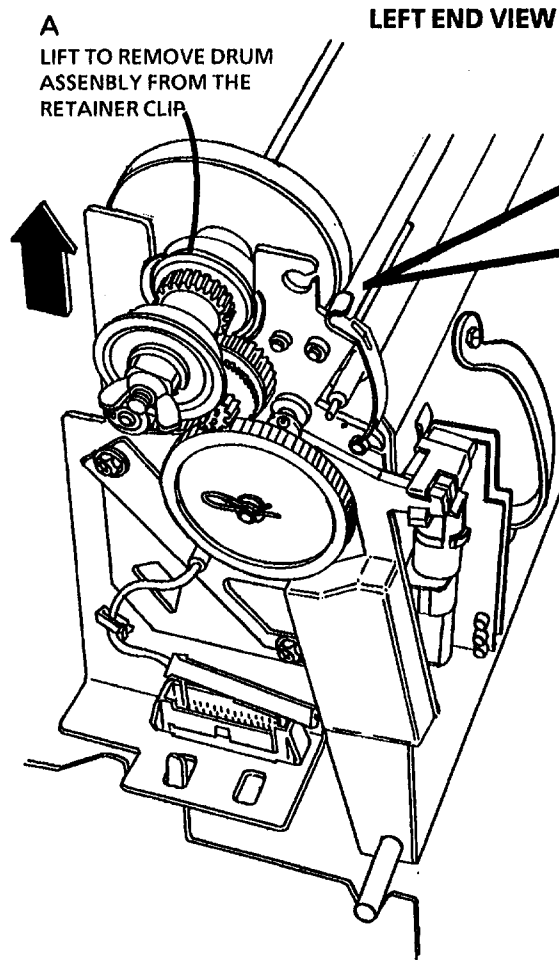
Removal



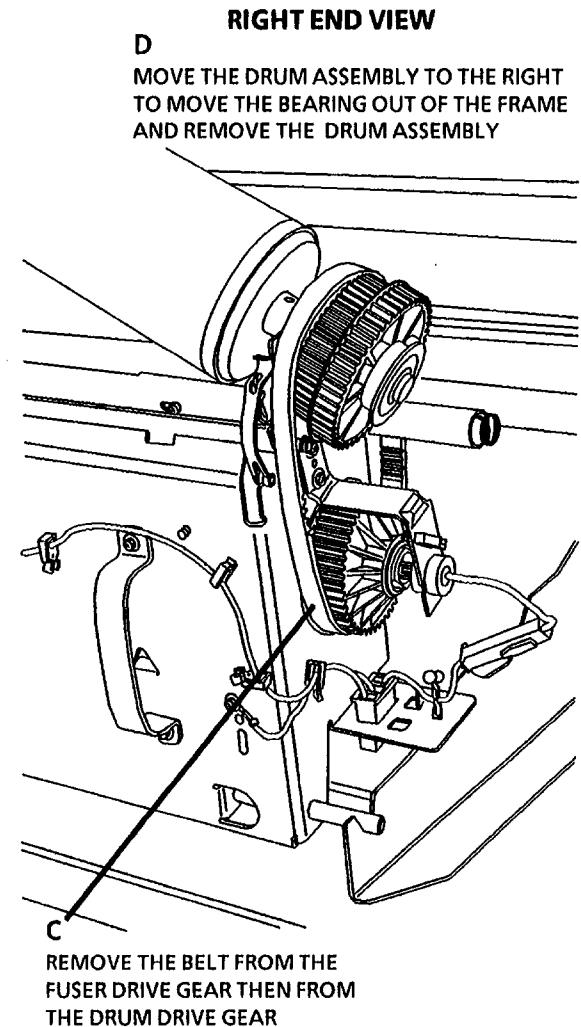
WARNING

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

1. Remove the Right and the Left Side Doors (REP 14.1).
2. Remove the Xerographic Module (REP 9.1).
3. (Figure 1): Remove the Photoreceptor Drum Assembly.



W2513



W2516

Figure 1. Remove the Photoreceptor Drum Assembly

BLANK

Replacement



Cover the photoreceptor drum with a light shield in order to prevent damage.



STEP 1: Before installing the photoreceptor drum, reform the photoreceptor seal so that it is pointing to the charge corotron.

1. (Figure 2): Reinstall the Photoreceptor Assembly.

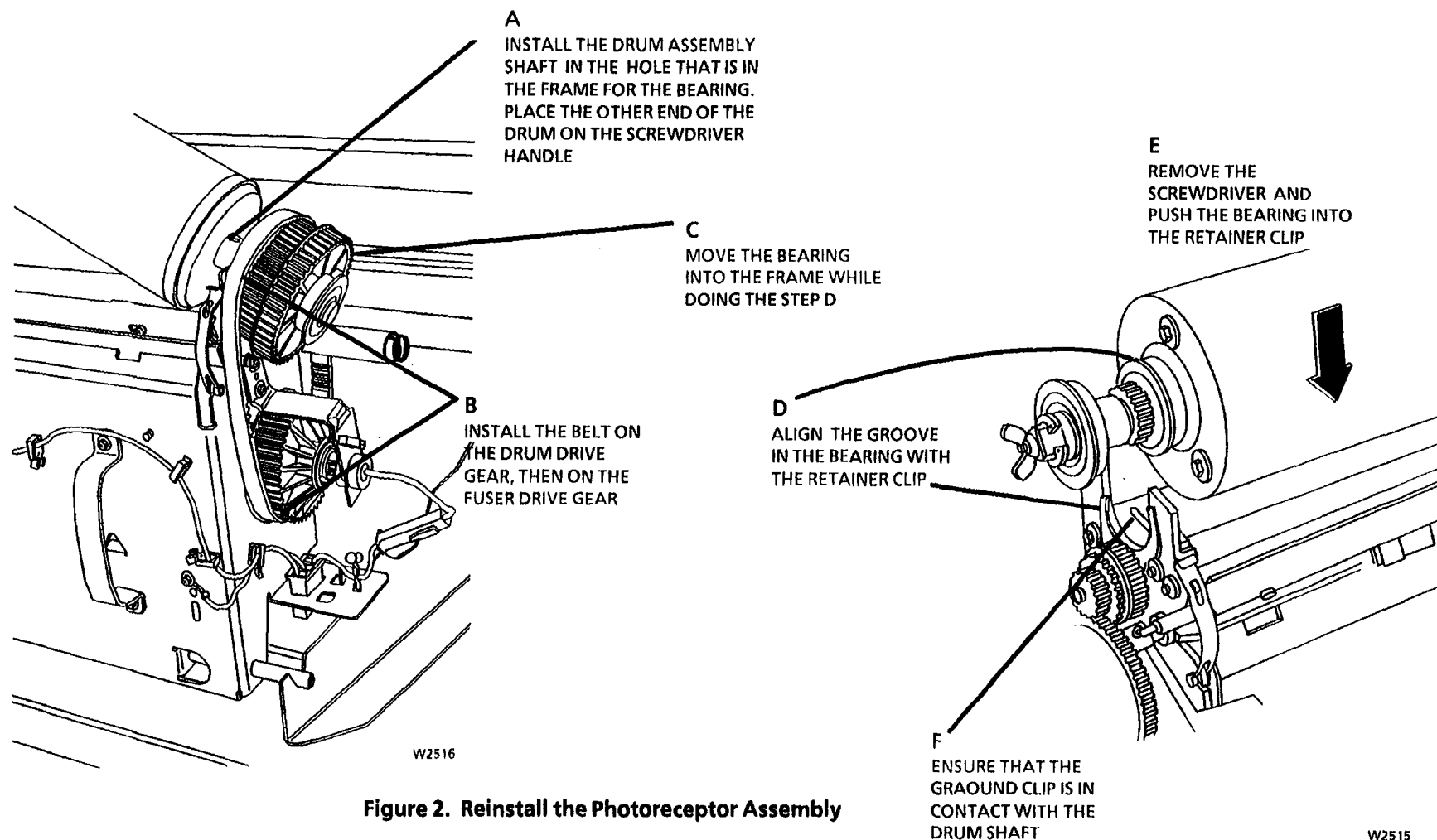


Figure 2. Reinstall the Photoreceptor Assembly

REP 9.3 Photoreceptor Drum

Parts List on PL 9.2

Removal

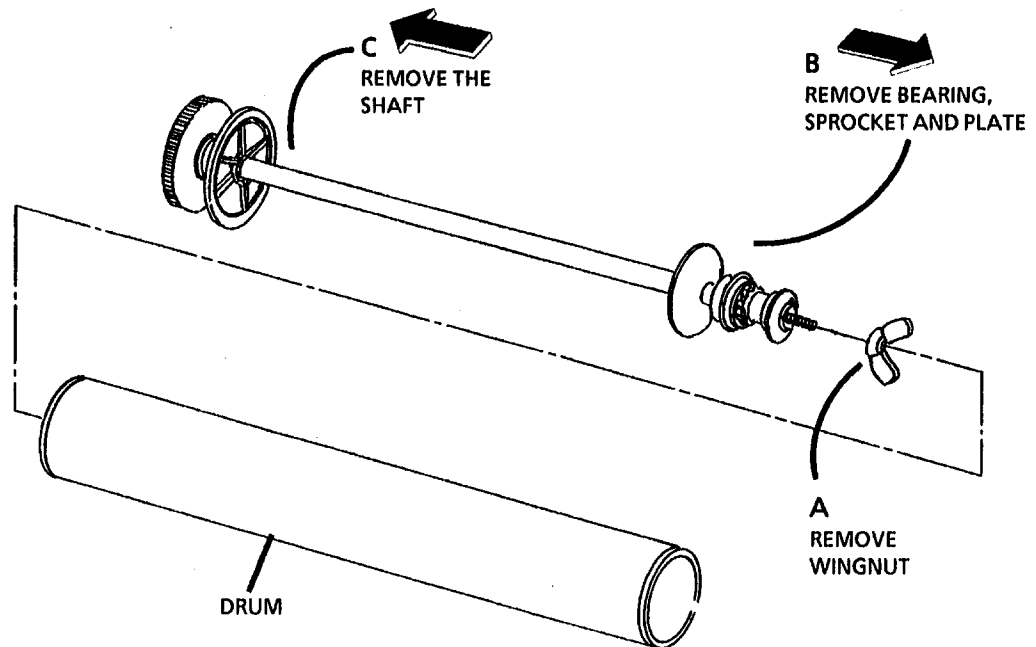


WARNING

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

1. Remove the Document Handler and raise the Document Feed-in Shelf.

2. Remove the Right and the Left Side Doors (REP 14.1).
3. Remove the Xerographic Module (REP 9.1).
4. Remove the Photoreceptor Drum Assembly (REP 9.2).
5. (Figure 1): Remove the Photoreceptor Shaft Assembly.



W2565

Figure 1. Remove the Photoreceptor Shaft Assembly

Replacement



Do not remove the light shield until Step 2 when the photoreceptor is ready to be installed in the xerographic module.



STEP 1 A: Ensure that the top of the drum box is up before opening the box.

1. (Figure 2): Install the Photoreceptor Assembly Shaft

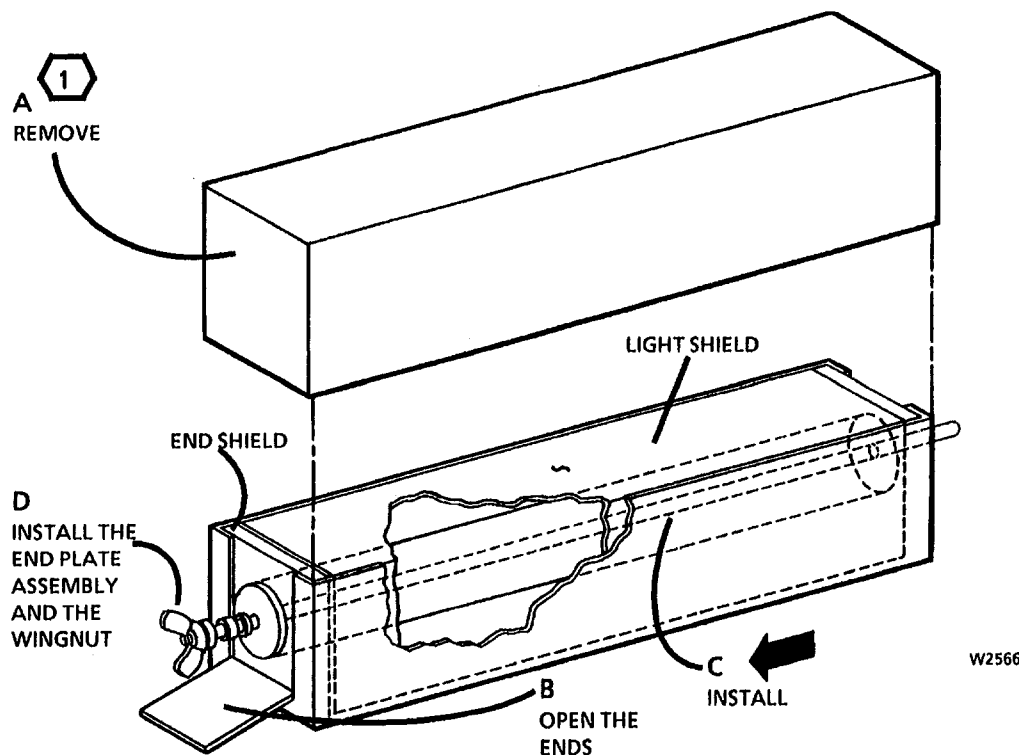


Figure 2. Install the Assembly Shaft

2. (Figure 3): Prepare the Drum for installation.

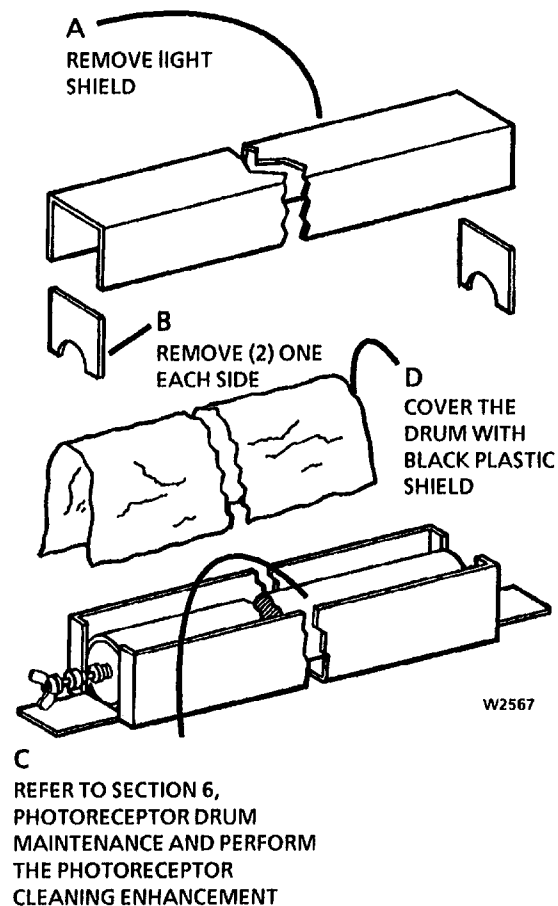


Figure 3. Prepare the Drum for Installation

4 *Replace the seal if it is damaged.*

3. Clean the Photoreceptor Seal (PL 9.5, Item 12) and move it towards the photoreceptor drum to provide a seal between the photoreceptor drum and the auger extrusion.

5 *Removal of the Charge Corotron/Erase LED PWB is necessary to avoid contamination while applying stearate dust to the cleaner blade.*

4. Remove the Charge Corotron/Erase LED PWB.

6 *If an excessive amount of stearate is applied to the cleaning blade, the excess stearate may get into the transfer/detack corotron which will cause a copy quality problem. Do not apply an excessive amount of stearate on the cleaner blade. Vacuum clean if required.*

5. Apply a light coating of stearate dust to the Cleaner Blade.
6. Reinstall the Charge Corotron/Erase LED PWB.

7. Reinstall the Photoreceptor Drum Assembly in the Xerographic Module (REP 9.1).

8. Reinstall the Xerographic Module (REP 9.1).

9. Perform the Electrostatics Series (ADJ 9.2).

REP 9.4 Cleaner Blade

Parts List on PL 9.5

Removal

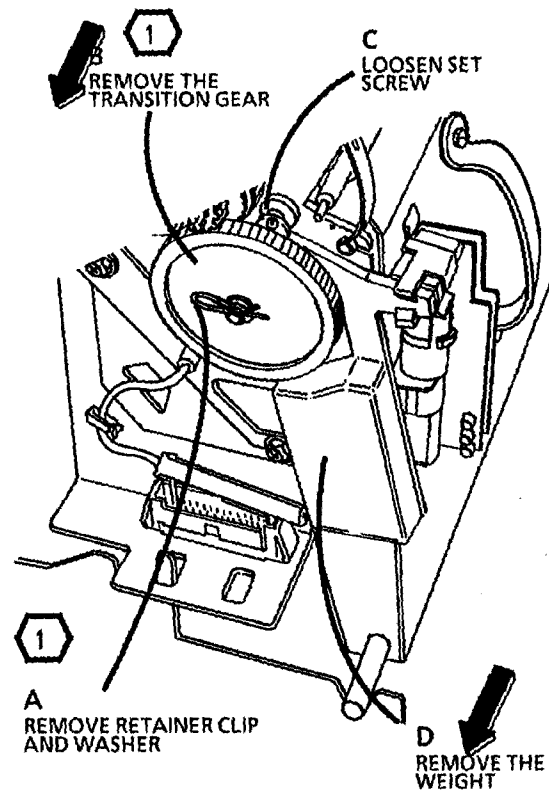


WARNING

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

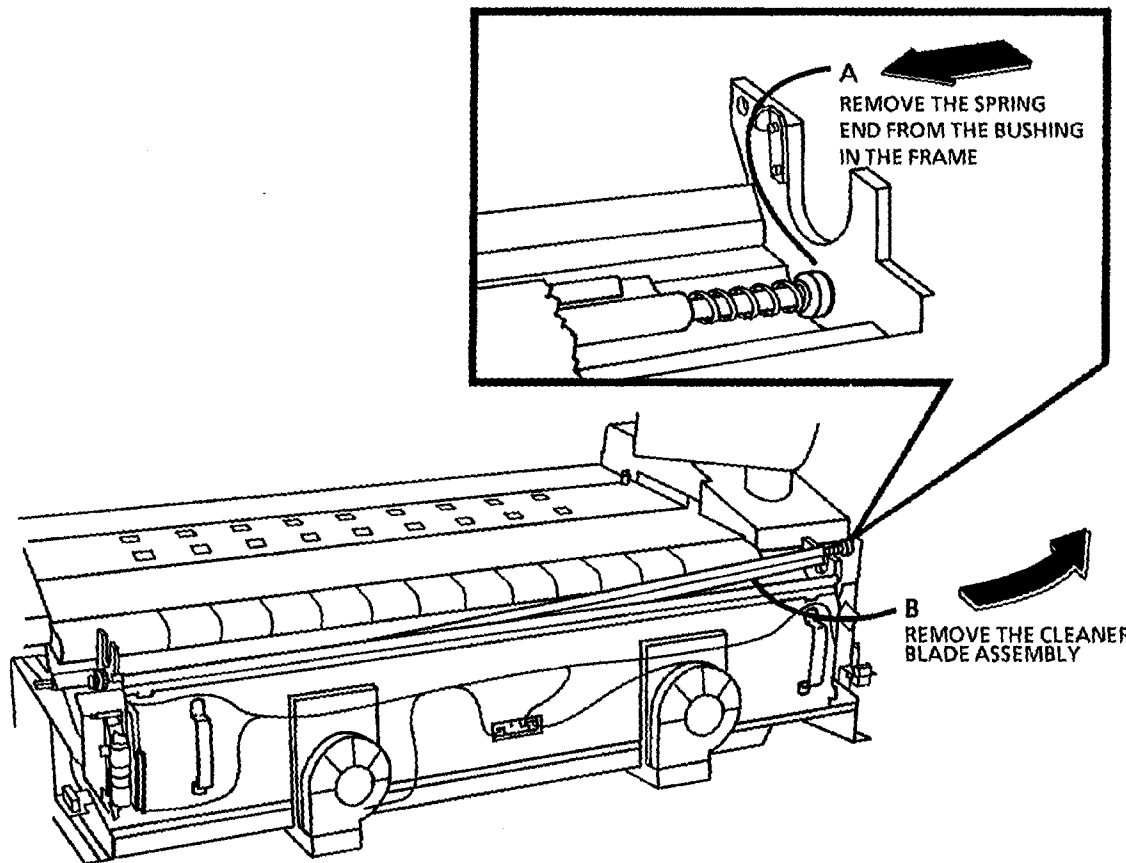
1. Remove the Xerographic Module (Rep 9.1).
2. Remove Photoreceptor Drum Assembly (REP 9.2).
3. (Figure 1): Remove Transition Gear and Weight.
4. (Figure 2): Remove the Cleaner Blade Assembly.

1 STEPS 3 A AND B: Use care when removing the retainer and the transition gear. The cleaner blade assembly is spring-loaded.



W2568

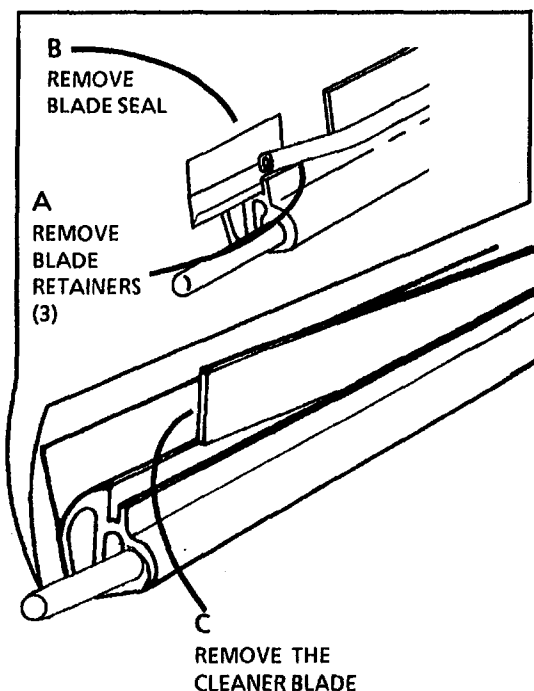
Figure 1. Remove the Transition Gear and Weight



W2517

Figure 2. Remove the Cleaner Blade Assembly

4. (Figure 3): Remove the Cleaner blade.



W2569

Figure 3. Remove the Cleaner Blade

Replacement

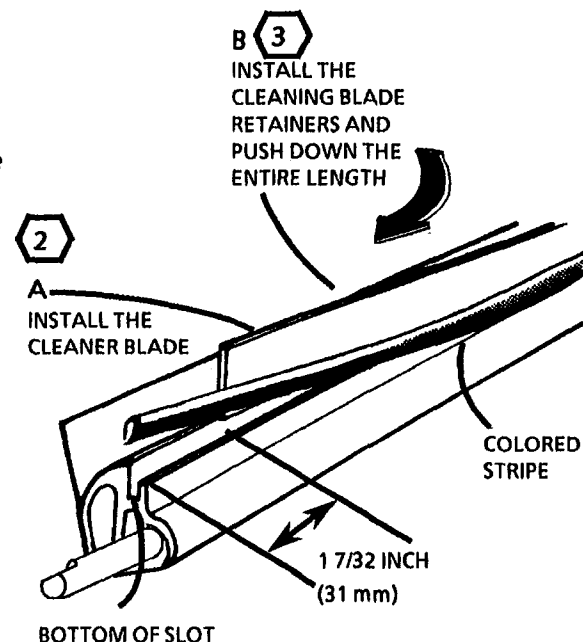
- 1 Applying a coat of zinc stearate to the cleaning blade before installing the cleaning blade and retainers will lubricate them for easier installation of the retainers.

1. Apply a light coating of zinc stearate to the cleaning blade.

- 2 STEP 2 A: With the cleaner housing positioned as shown, install the cleaner blade with the arrow pointed up and the words, **THIS SIDE TOWARD PHOTORECEPTOR**, facing towards you. Do not touch the edge of the cleaner blade with your fingers. If the edge is touched, clean the blade with film remover and dust again with zinc stearate.

- 3 STEP 2 B: When installing the cleaner blade retainers, ensure that the colored stripe is installed to the outside and that the holders are completely seated.

2. (Figure 4): Install the Cleaning Blade.

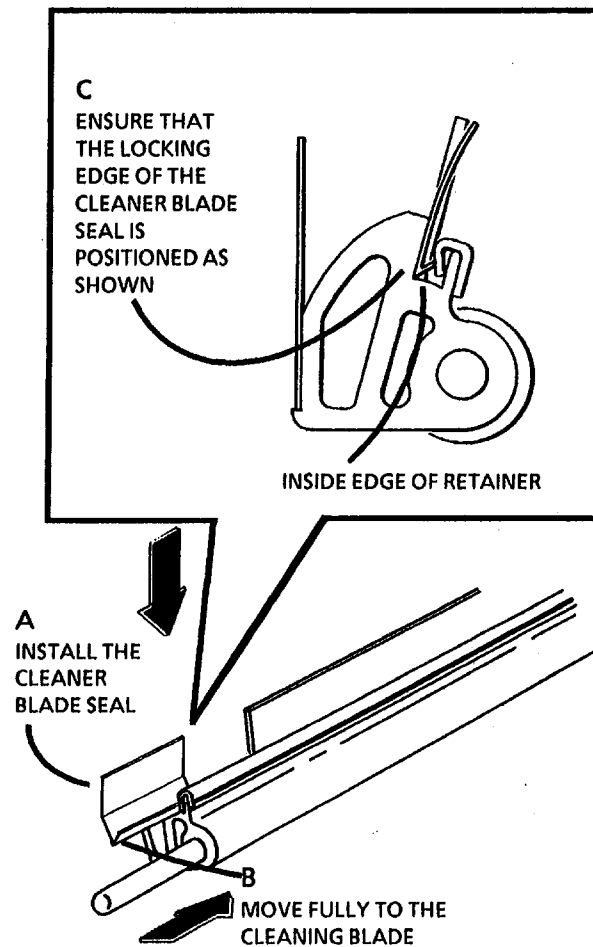


W2570

Figure 4. Install the Cleaner Blade

❗ **STEP 3 B:** Do not touch the wiping edge of the cleaner blade with your fingers.

3. (Figure 6): Install the Cleaner Blade Seal.



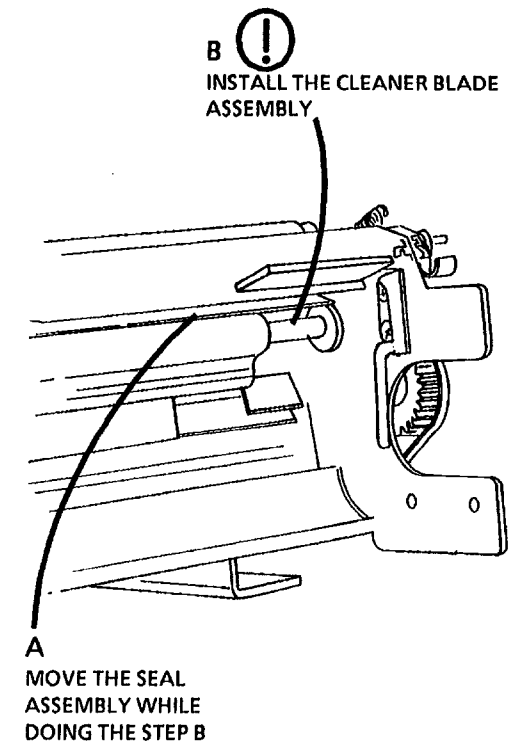
W2571

Figure 6. Install the Cleaner Blade Seal

❗ **STEP 4:** Apply the zinc stearate before installing the cleaner blade assembly into the xerographic module to prevent contamination to the charge corotron/erase LED PWB.

4. Apply a light coating of Zinc Stearate to the Cleaner Blade.

5. (Figure 6): Install the Cleaner Blade Assembly.
6. The remainder of the replacement is the reverse of the removal procedure.



W2572

Figure 6. Install the Cleaner Blade Assembly

REP 9.5 Developer Module

Parts List on PL 9.8

Removal



WARNING

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

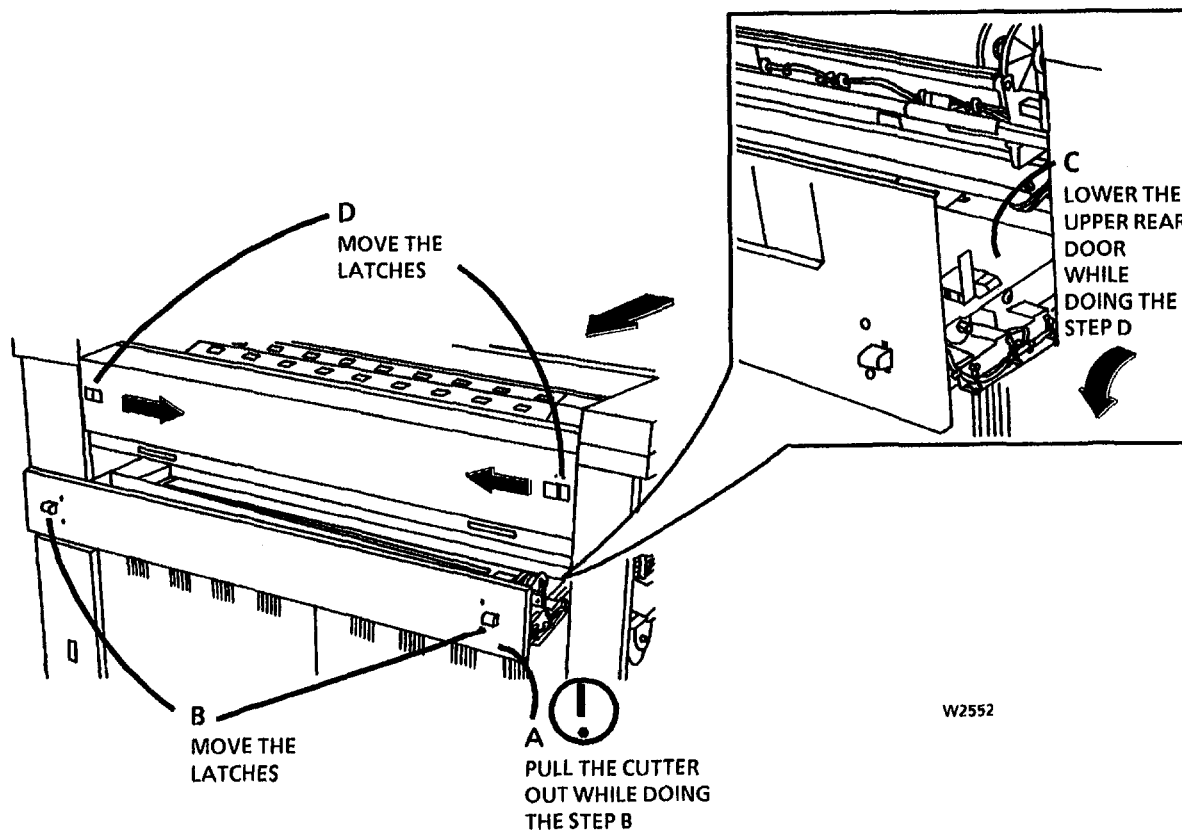
1

Before removing the developer module, ensure that there is a clean area to place the assembly.



STEP 2A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

1. (Figure 1): Lower the Upper Rear Door.



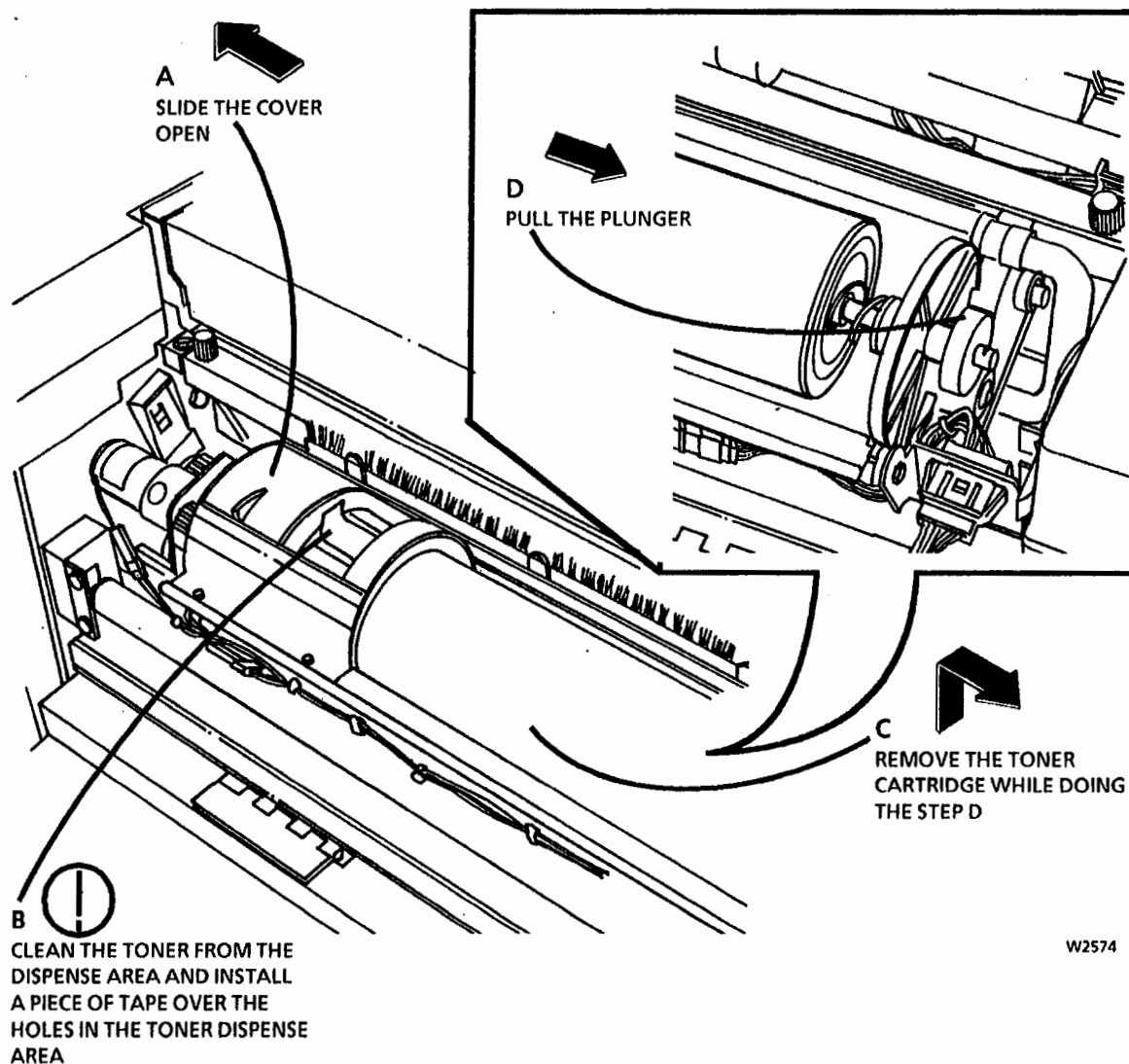
W2552

Figure 1. Lower the Upper Rear Door

(Continued)

! *STEP 3 B: Tape the toner cartridge dispense holes in order to prevent toner from pouring out when the toner cartridge is tipped up for removal.*

2. (Figure 2): Remove the Toner Cartridge.



W2574

Figure 2. Remove the Toner Cartridge

4. (Figure 3): Remove the Developer Module.

2 STEP 4 E and F: Ensure that the clamp will not cause interference when removing the developer module.

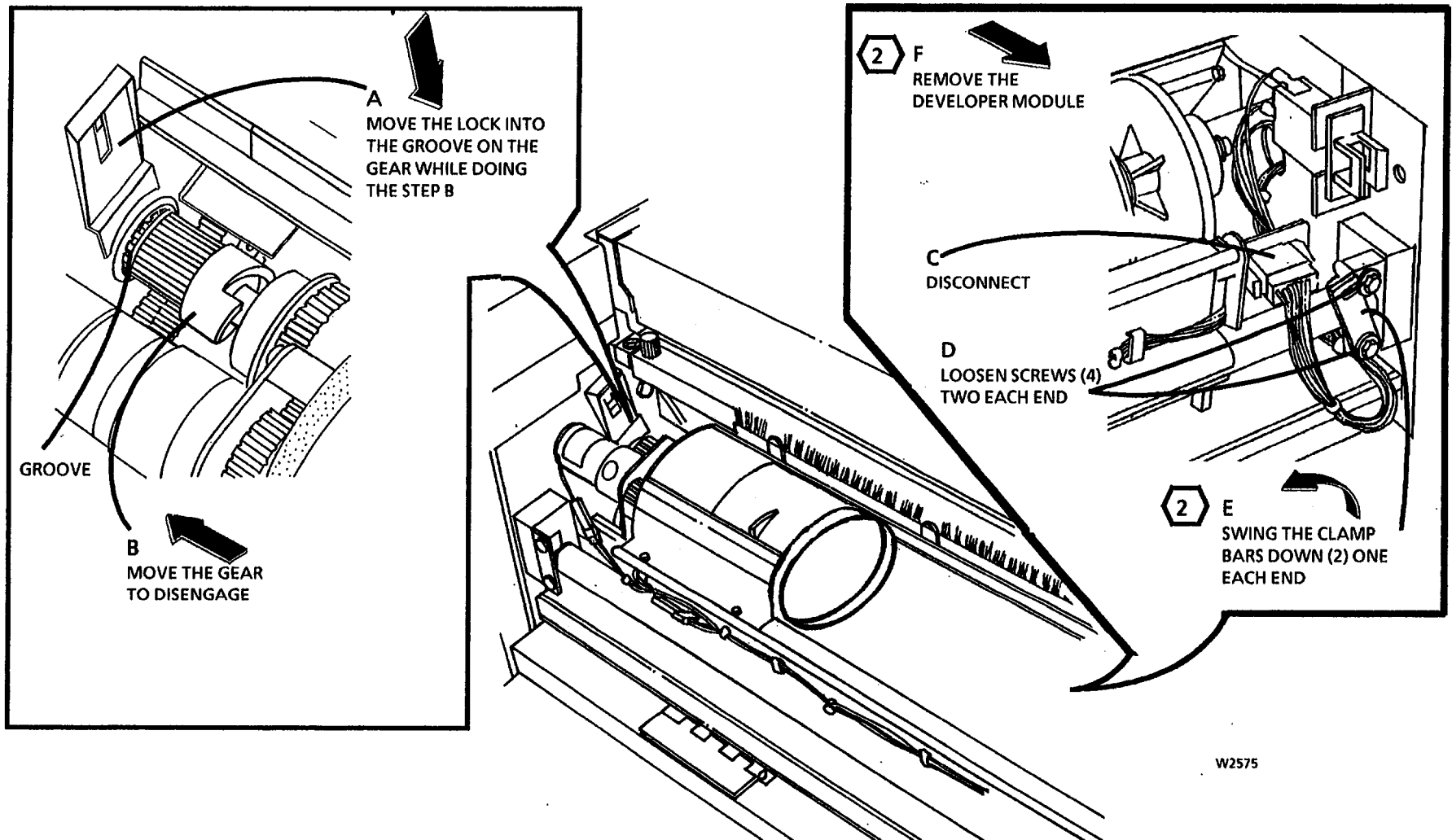


Figure 3. Remove the Developer Module

Replacement

1. (Figure 4): Install the Developer Module.

- 3** STEP 1 A: Ensure that the developer module is fully installed in the brackets.
- 4** STEP 1 E: Ensure that the gear is free to engage with the developer module drive gears.

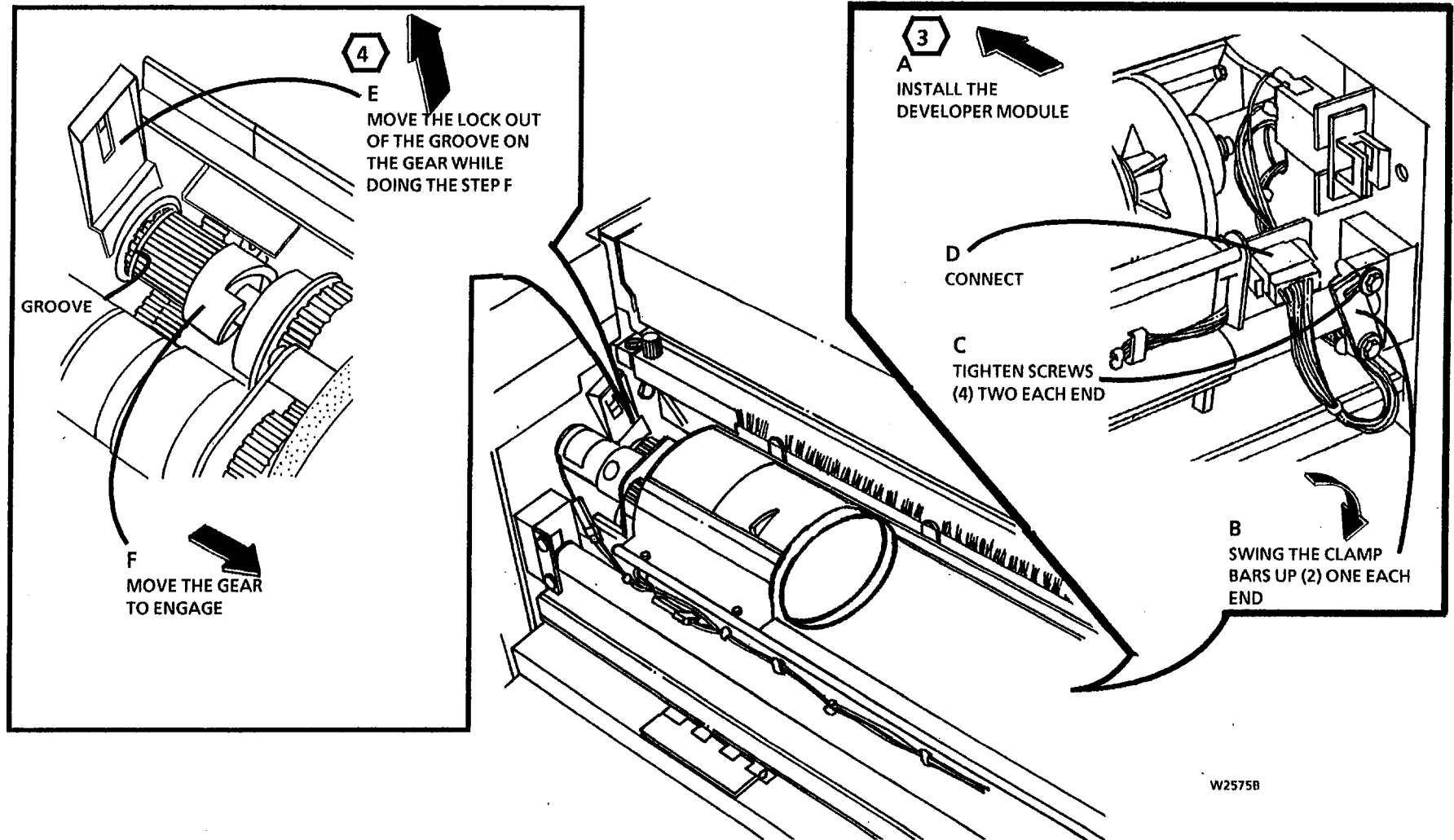


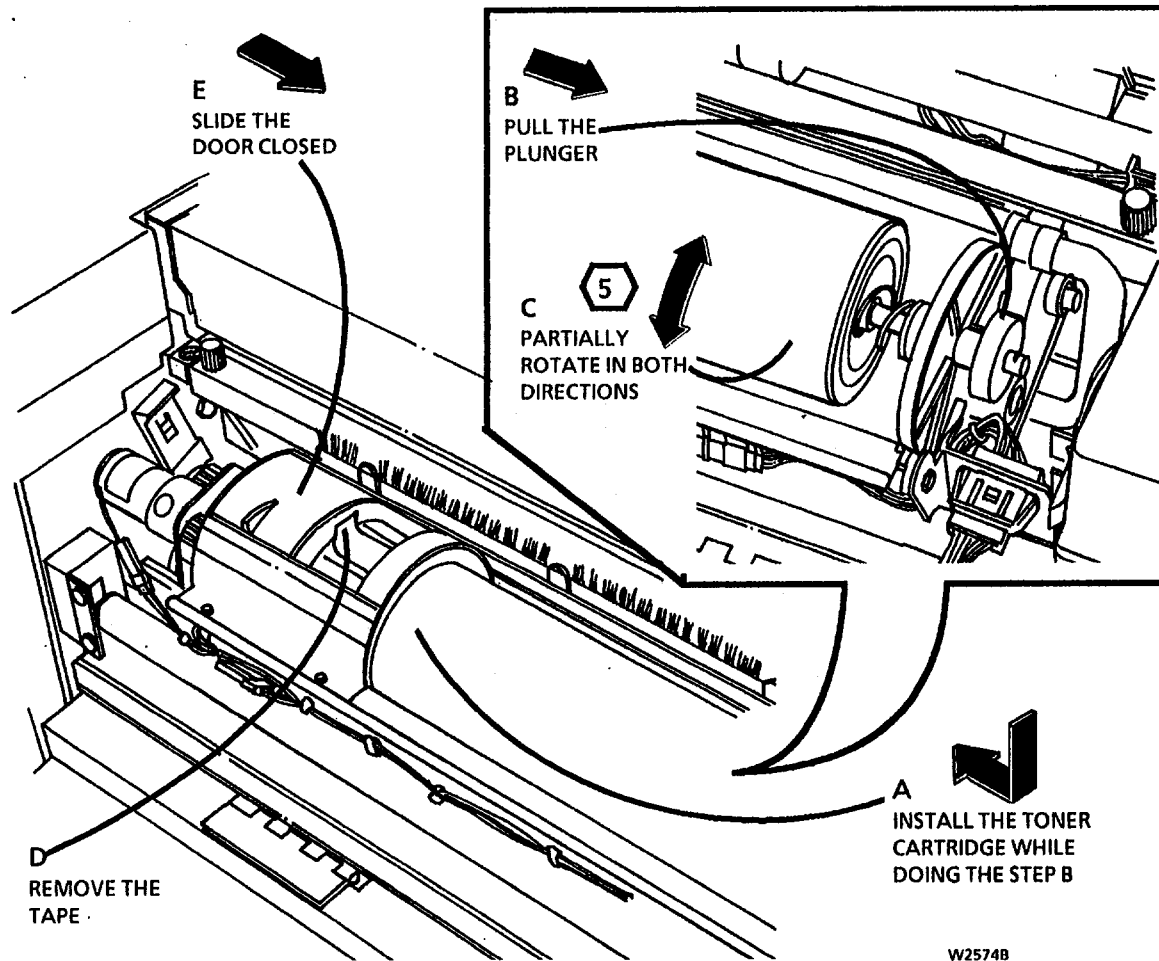
Figure 4. Install the Developer Module

5

STEP 2 C: To ensure that the toner cartridge is engaged in the drive plate, rotate the cartridge.

3. If new developer material has been installed, ensure that the toner sensor calibration code [09 21 6] is performed.

2. (Figure 5): Reinstall the Toner Cartridge.



W2574B

Figure 5. Reinstall the Toner Cartridge

REP 9.6 Cartridge Drive Motor

Parts List on PL 9.10

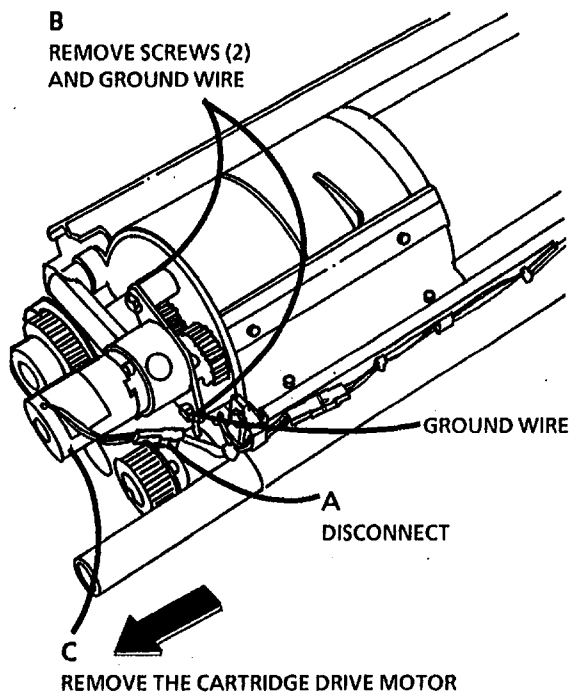
Removal



WARNING

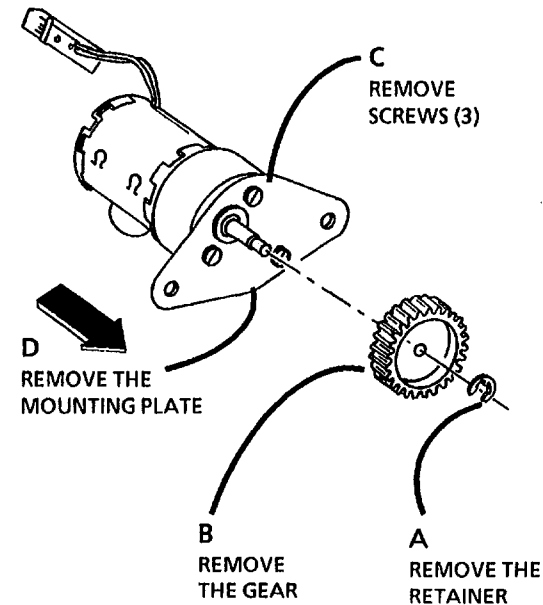
Switch off the Main Power Switch. Disconnect the Power Cord.

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



W2576

Figure 1. Remove the Cartridge Drive Motor



W2577

Figure 2. Remove the Cartridge Drive Motor from the Mounting Plate

REP 9.7 Developer Material

Parts List (Refer to Other Tools and Supplies, Machine Consumables in Section 6.)

Removal



WARNING

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

1. Remove the Developer Module (REP 9.5).
 2. Place the Developer Module on a drop cloth on the floor.
 3. (Figure 1): Remove the Sump Shield from the Developer Module.
- Do not rotate the Developer Module in the vertical position. This may cause developer to get into the toner cartridge clutch in the end of the Developer Module.**

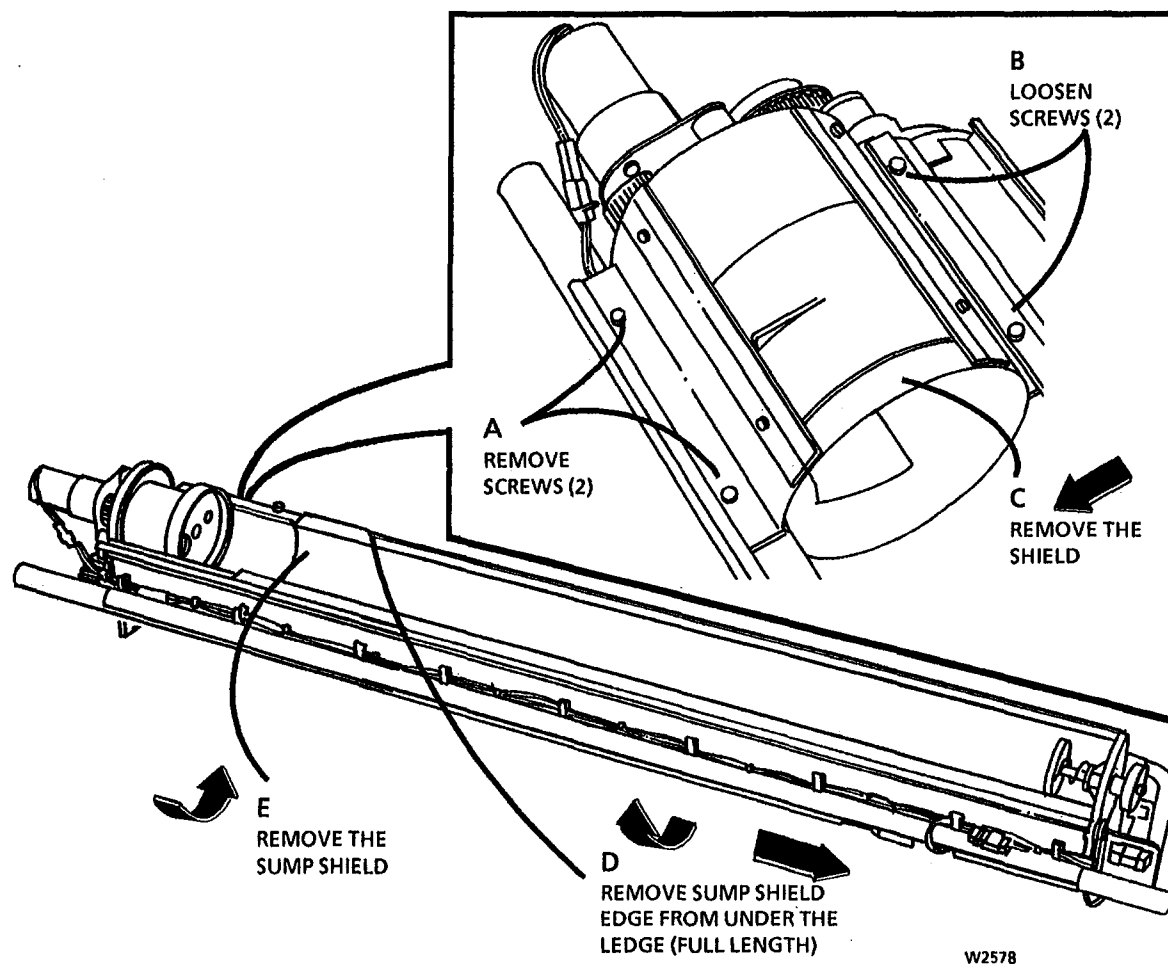


Figure 1. Remove the Sump Shield from the Developer Module

(Continued)

1 STEP 4 A: Rotate the developer module away from the Magnetic Roll.

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

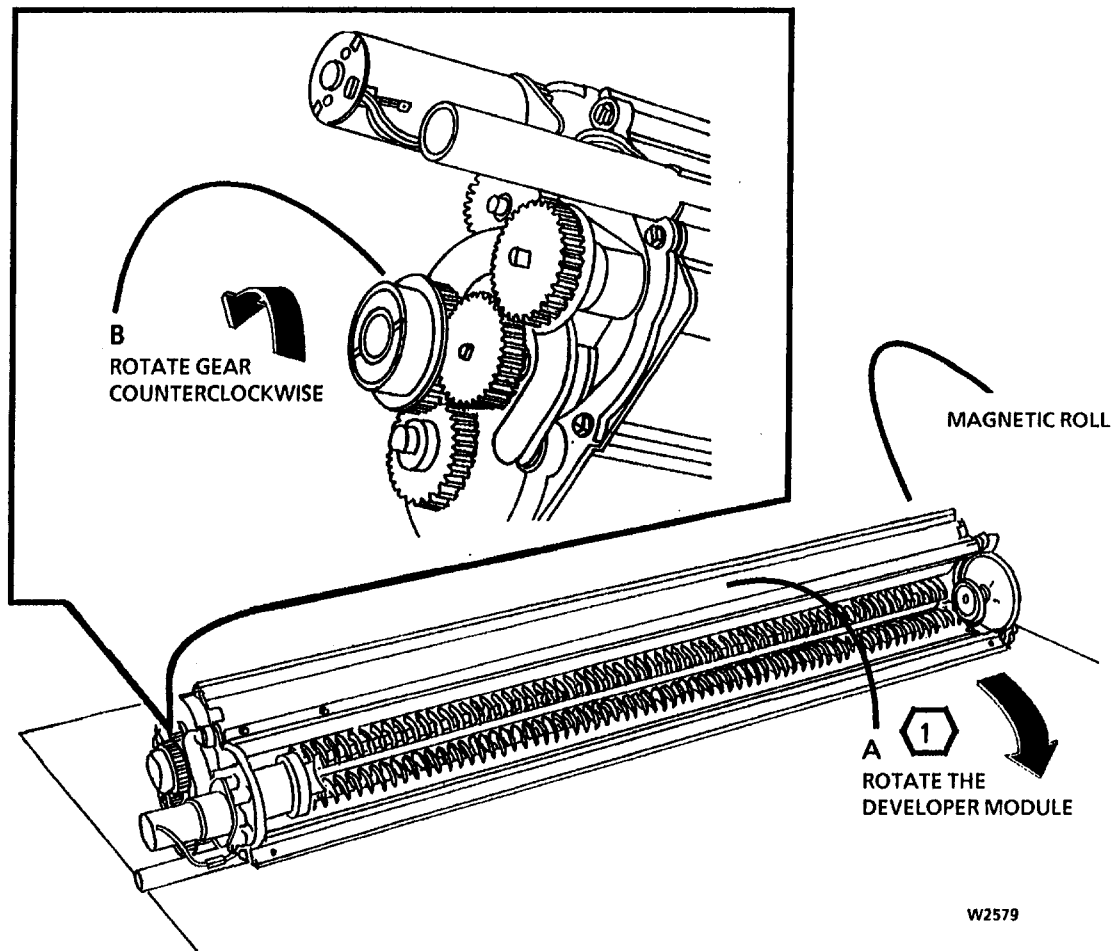


Figure 2. Dump the Developer Material

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

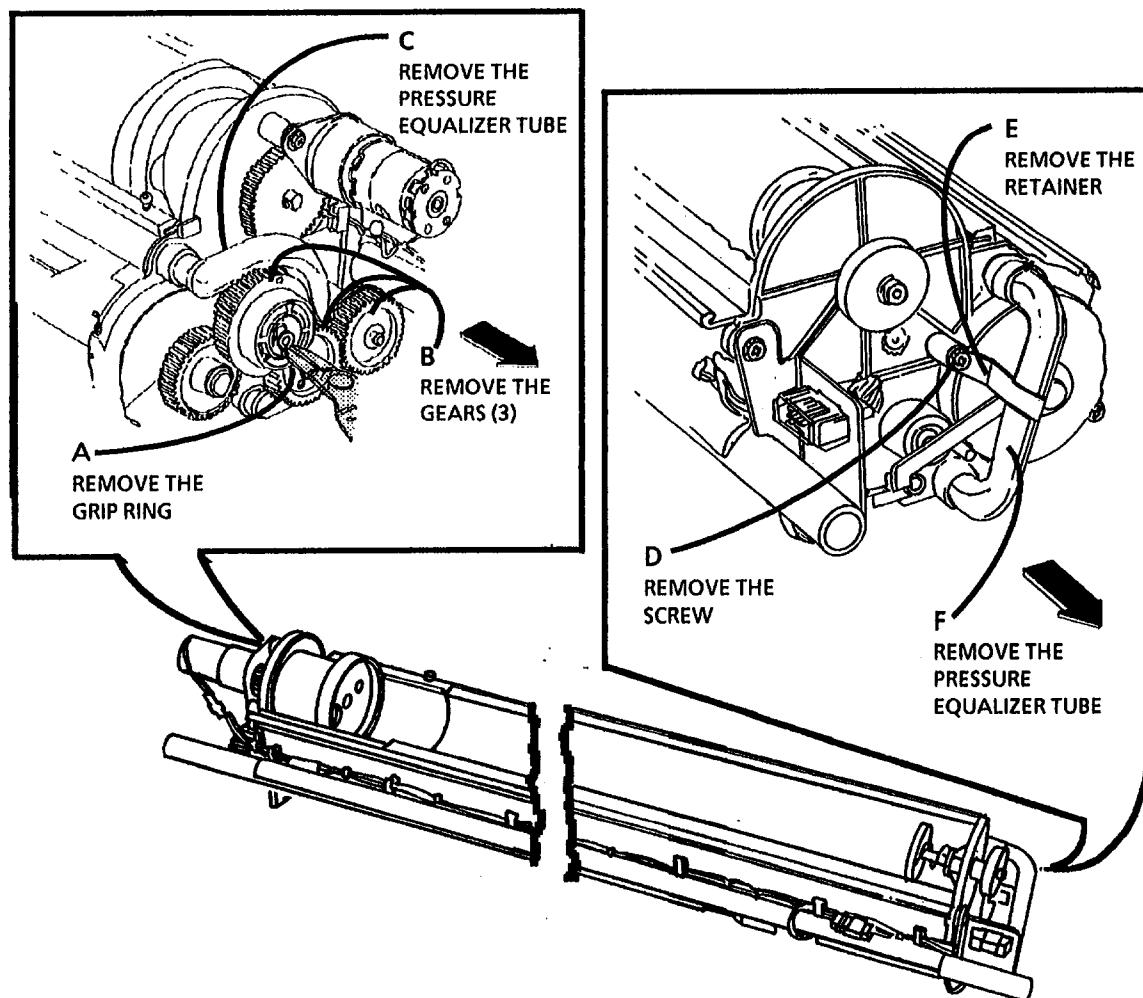


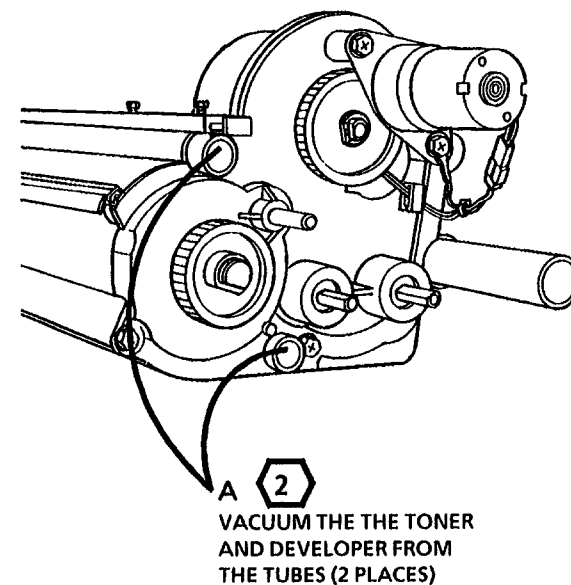
Figure 3. Remove the Air Equalization Tubes

W2580

6. Using a vacuum cleaner, clean the entire developer module, magnetic roll, and pressure equalizer tubes thoroughly.

- 2 STEP 7 A: Ensure that the entire length of the tube on the developer module is clear of any developer.

7. (Figure 4): Using a vacuum cleaner, clean the housing where the pressure equalizer tubes attach.

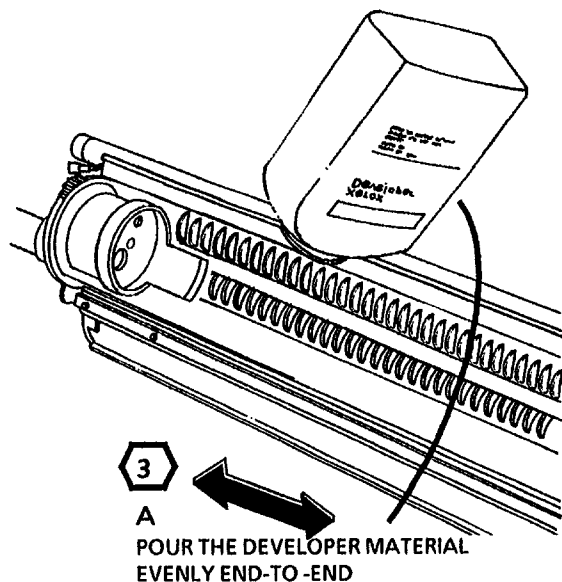


W2581

Figure 4. Vacuum the tubes on the developer module

8. (Figure 5): Install the Developer material and record the batch number on the machine log.

3 STEP 8A: Pour the developer material evenly over the full length of the two augers.

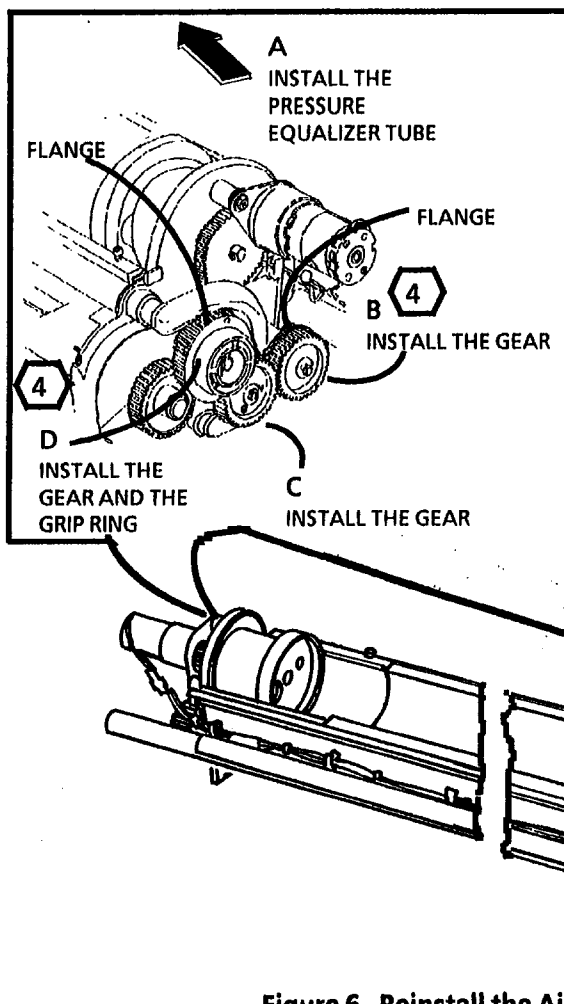


W2582

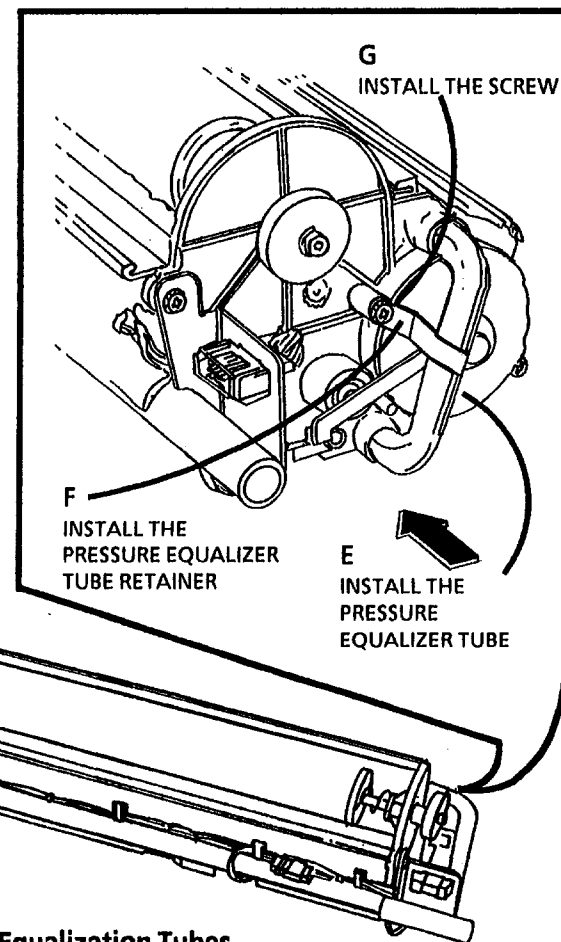
Figure 5. Install the Developer

Replacement

4 STEP 1 B and D: *The gears must be reinstalled with the flanges as shown to ensure that all the gears are secured.*



1. (Figure 6): Reinstall the Pressure Equalizer Tubes.



W2583

Figure 6. Reinstall the Air Equalization Tubes

- 5** STEP 4 B AND C: *Ensure that the full length of the edge of the shield is under the edge of the housing.*

2. (Figure 7): Install the Sump Shield in the Developer Module.

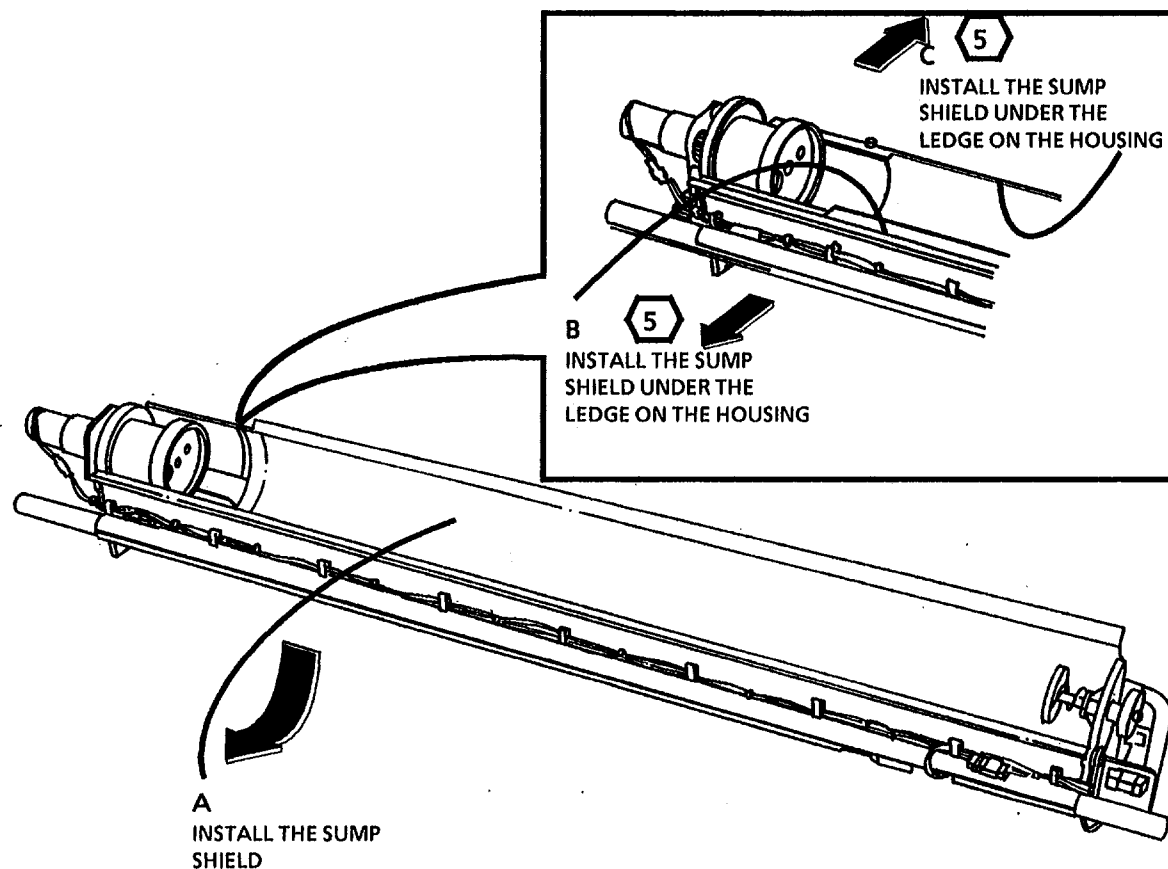


Figure 7. Install the Sump Shield in the Developer Module

- 6** STEP 3 C: *Do not overtighten the screws.*

3. (Figure 8): Reinstall the Top Shield.

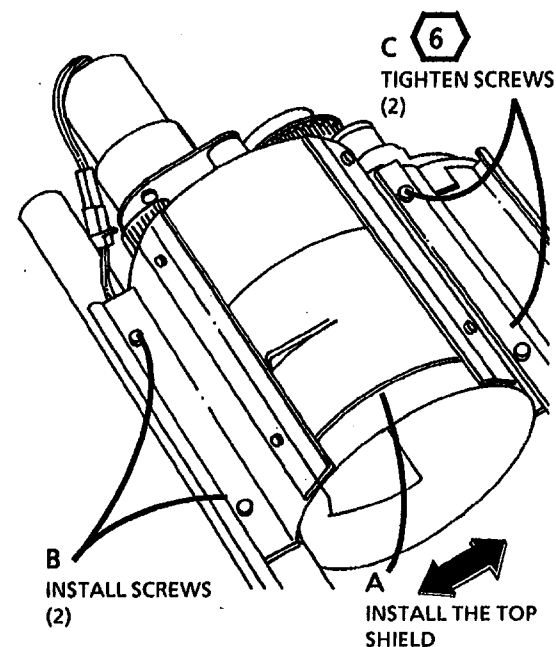


Figure 8. Reinstall the Top Shield

4. Reinstall the developer module.

5. (Figure 9): Reinstall the Toner Cartridge.

- 7 STEP 5 C: To ensure that the toner cartridge is engaged in the drive plate, rotate the cartridge.

- 8 **DO NOT** run copies prior to performing the code [09 21 6], Toner Sensor calibration. Running copies prior to this adjustment may cause toner faults and/or premature copy defects.

6. Enter the diagnostic mode.

- 9 Step 7: In the following step, the copier will automatically calibrate the sensor. The code [09 21 6] is entered to start the calibration and is to be done **ONLY** with a new batch of developer.

7. Enter the code [09 21 6] and follow the displayed instructions in order to calibrate the Toner Sensor.

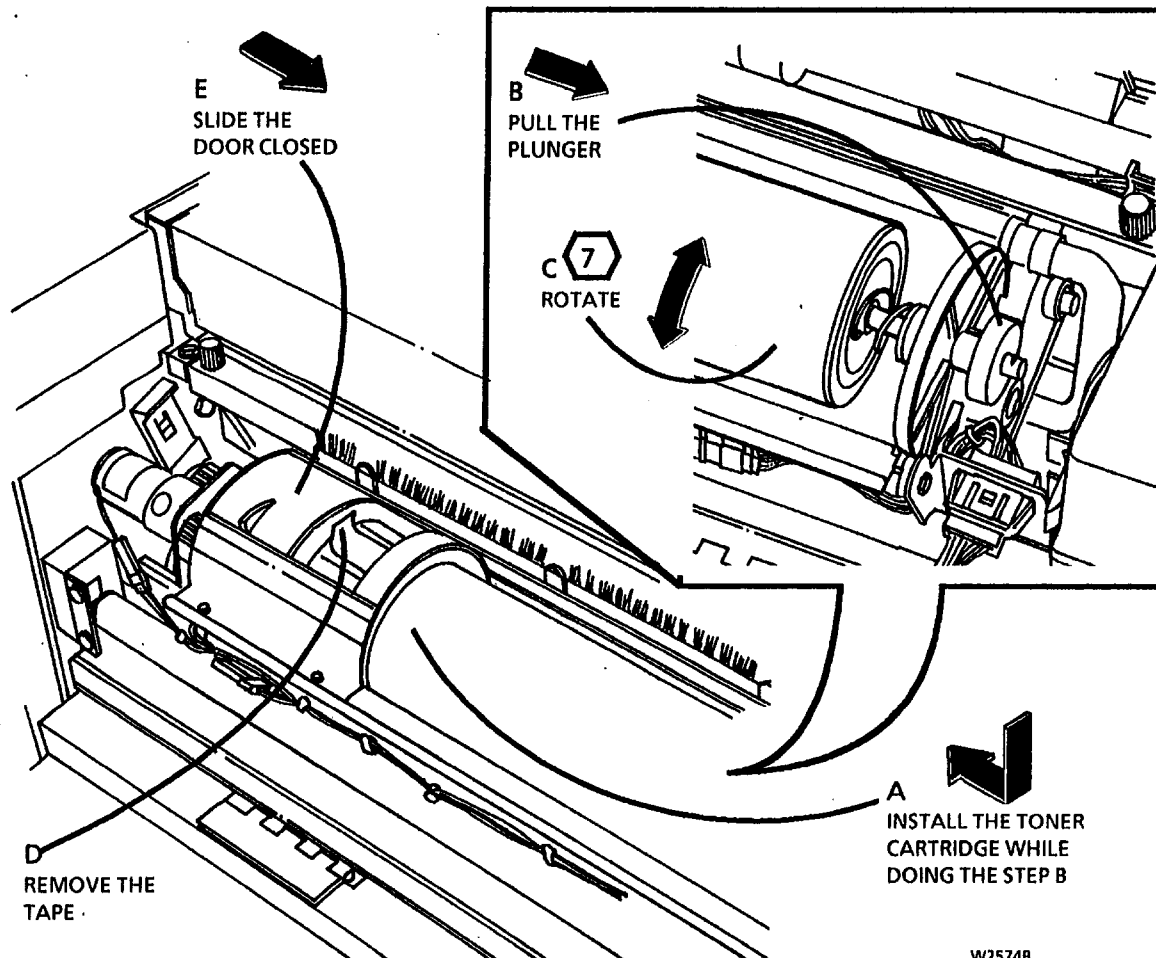


Figure 9. Reinstall the Toner Cartridge

REP 9.8 Charge Corotron/Erase LED PWB

Parts List on PL 9.3

Removal



WARNING

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

1. Remove the Right and Left Side Doors (REP 14.1).
2. Remove the Xerographic Module (REP 9.1).
3. (Figure 1): Remove the Charge Corotron/Erase LED PWB.

Replacement

1. The replacement is a reversal of the removal.
2. Perform the Electrostatic Series (ADJ 9.2).

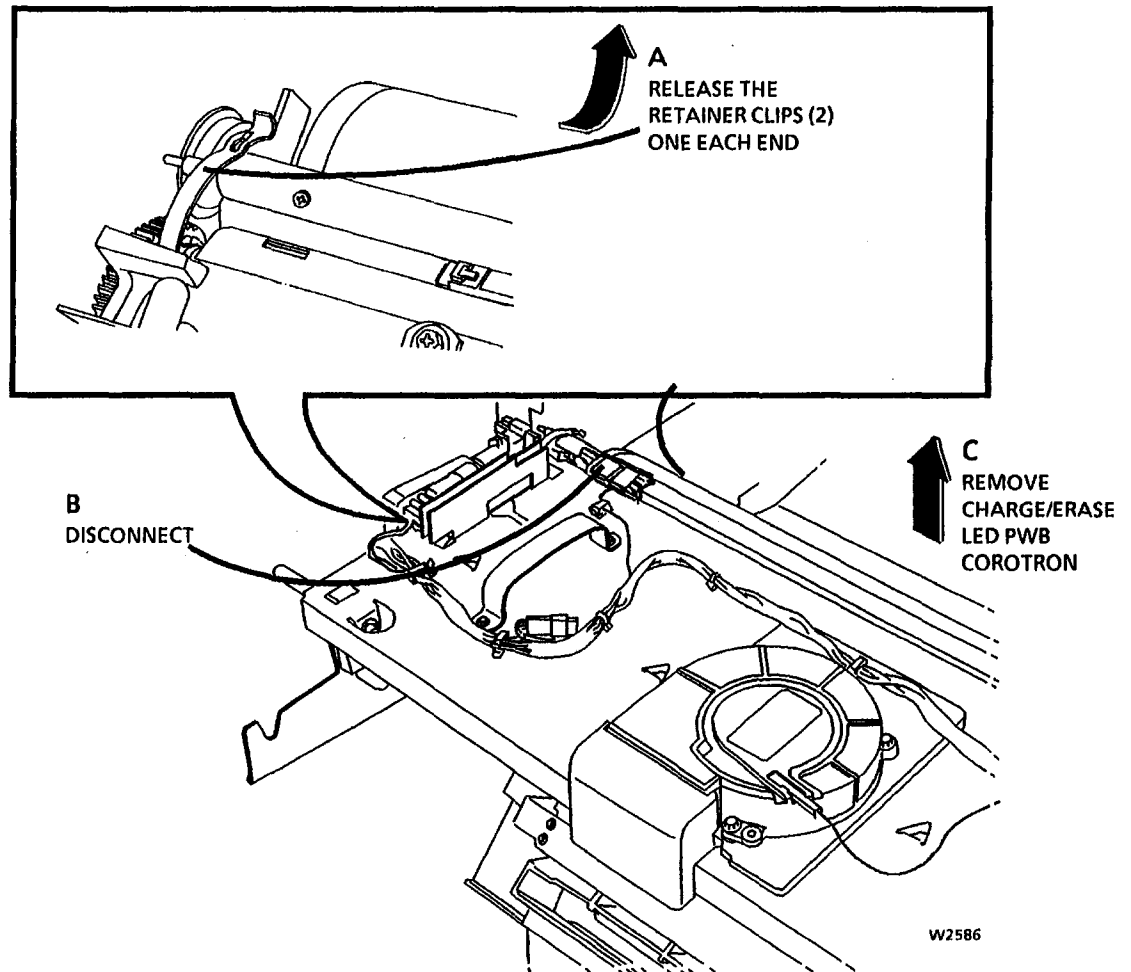


Figure 1. Remove the Charge Corotron/Erase Lamp

REP 9.9 Transfer/Detack Corotron

Parts List on PL 9.4

Removal



WARNING

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



WARNING

Be careful not to burn your hands when removing the Transfer/ Detack Corotron. The fuser may be hot.



STEP 1 D, E, AND F: Use caution and do not damage the drum when removing the transfer/ detack corotron.

1. (Figure 1): Remove the Transfer/ Detack Corotron.

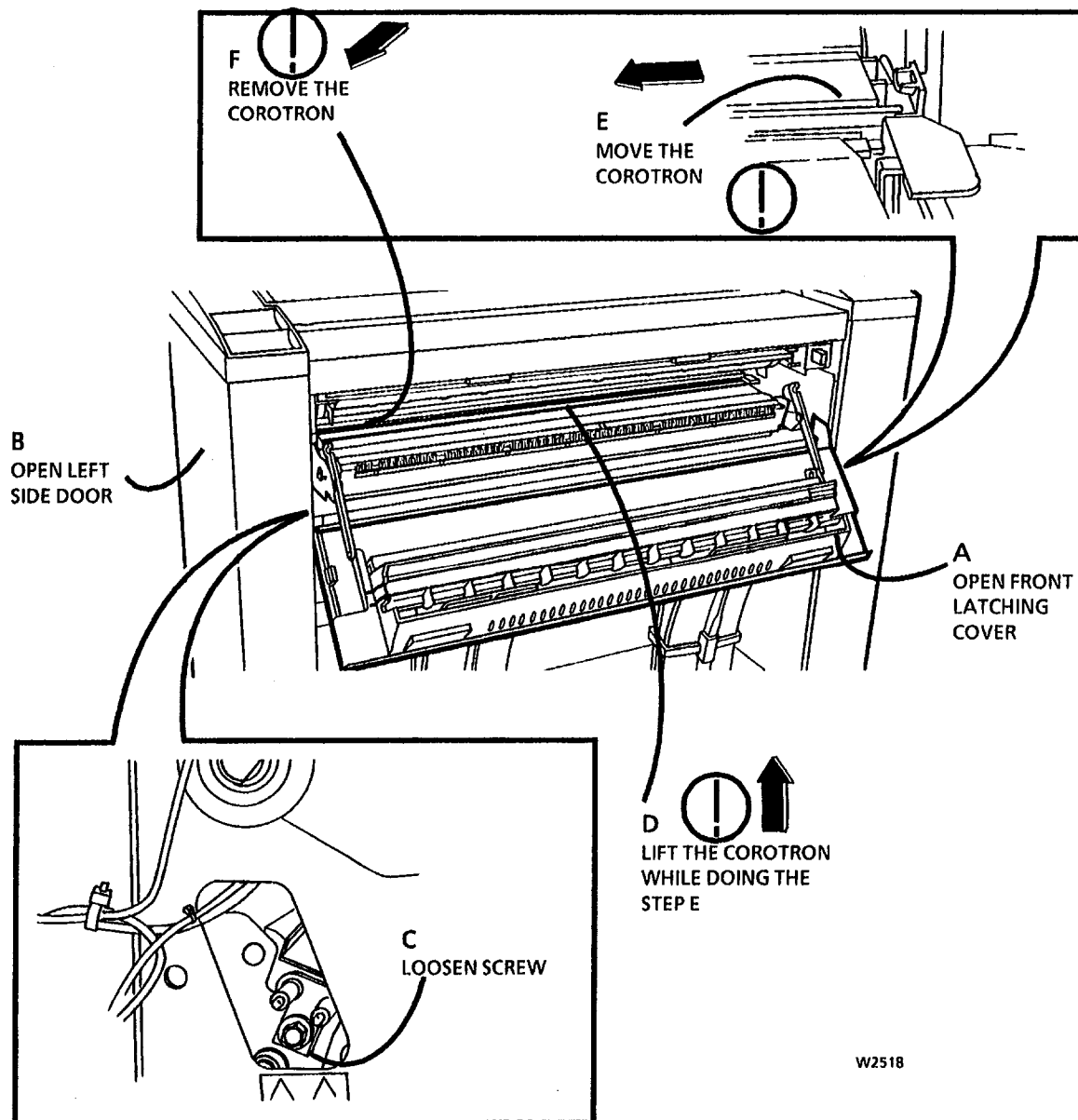


Figure 1. Remove the Transfer/ Detack Corotron

REP 9.11 Toner Sensor

PARTS LIST ON PL 9.9

Removal



WARNING

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



The developer material must be removed before removing the toner sensor assembly.

1. Remove the Developer Module (REP 9.5).
2. Remove the Developer Material (REP 9.7).
3. (Figure 1): Remove the Toner Sensor.
4. Remove the spacer from behind the Toner Sensor.

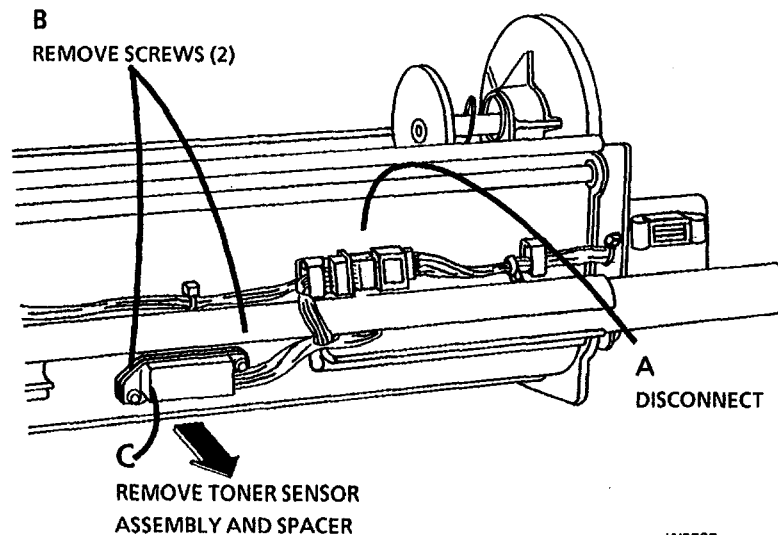


Figure 1. Remove the Toner Sensor

Replacement

1. Install the Toner Sensor Assembly (including the spacer).
 2. Install the Developer Module (REP 9.5).
 3. Install new developer material (REP 9.7). If new developer material is not installed, do not do the code [9 21 6] calibration.
 4. Do not run copies before calibrating the toner sensor. Running copies before doing the calibration may cause toner faults and/or copy defects.
- 1 In the following step, the copier will automatically calibrate the toner sensor. The code [9 21 6] is entered in order to start the calibration.
5. Enter the code [9 21 6] and follow the instruction on the display in order to calibrate the toner sensor.

REP 9.12 Toner Home Sensor

Parts List on PL 9.9

Removal



WARNING

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

1. Remove the following:
 - a. Developer Module (REP 9.5)
 - b. Cartridge Drive Plate (REP 9.14)

1 *STEPS 2 C and D: The toner home sensor is threaded. The wires need to be straightened to rotate the sensor for removal.*

2. (Figure 1): Remove the Toner Home Sensor.

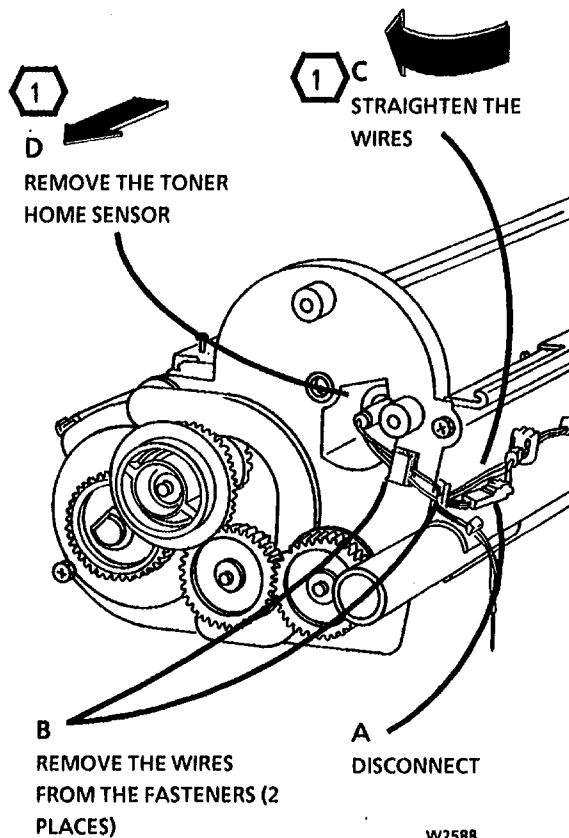


Figure 1. Remove the Toner Home Sensor

Replacement

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

ⓘ STEP 3 C: To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 3.

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

⦿ 2 STEP 3 C: Do not overtighten the screws.

4. (Figure 3): Reinstall the Top Shield.
5. Reinstall the Developer Module.

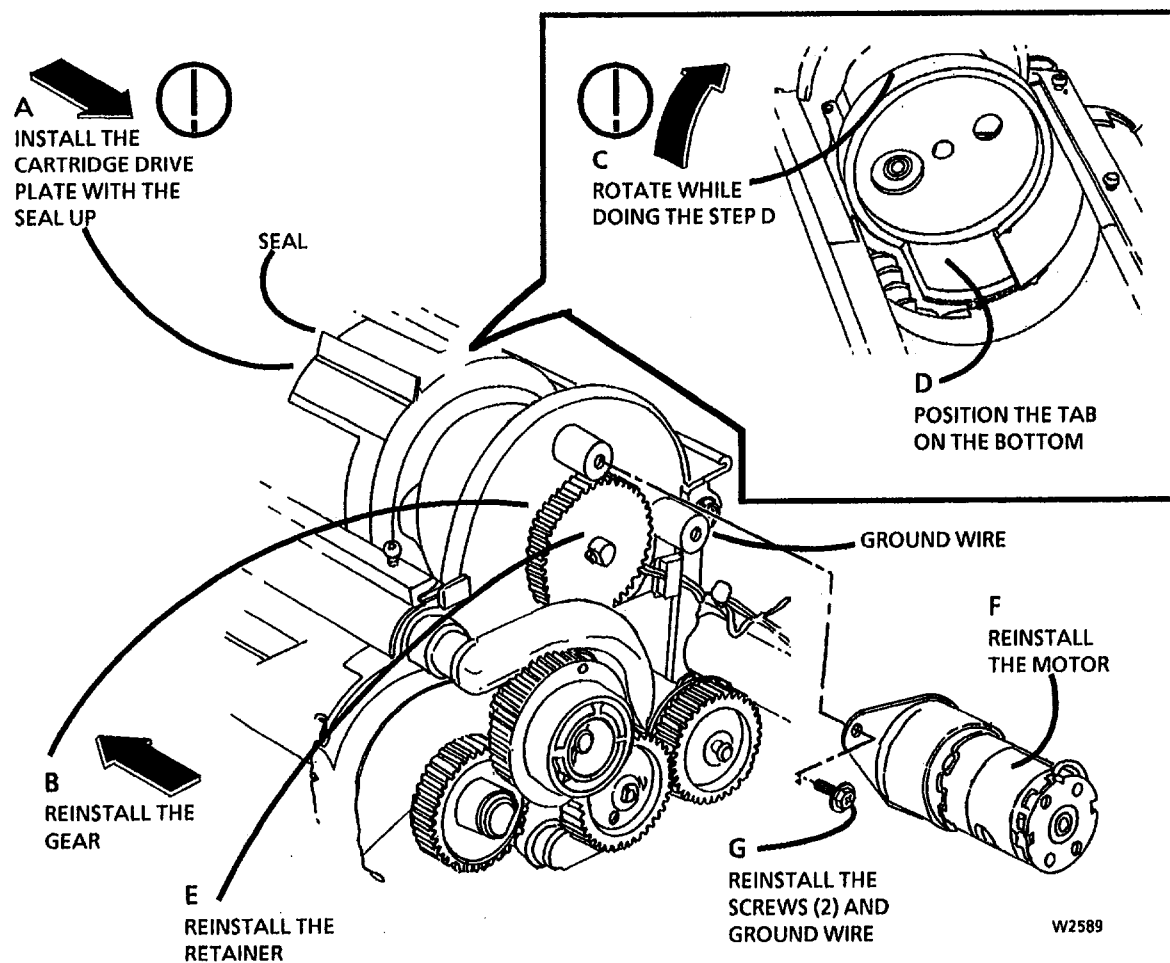


Figure 2. Install the Cartridge Drive Plate

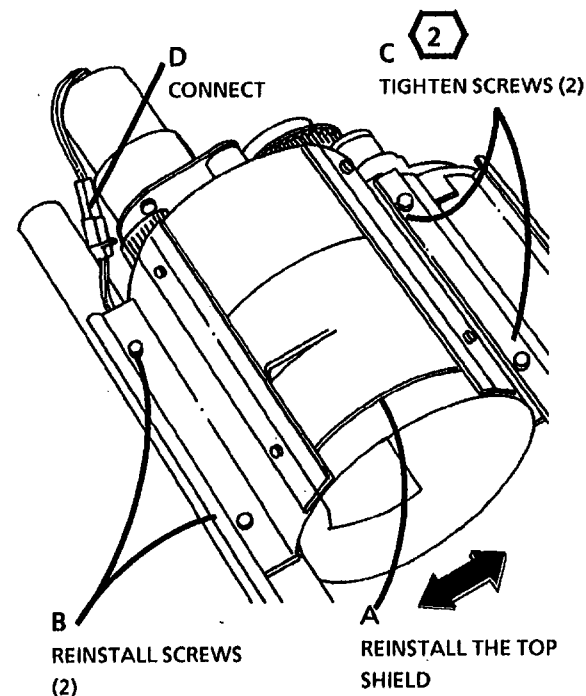


Figure 3. Reinstall the Top Shield

REP 9.13 Sump Shield

Parts List on PL 9.9

Removal

WARNING

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

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

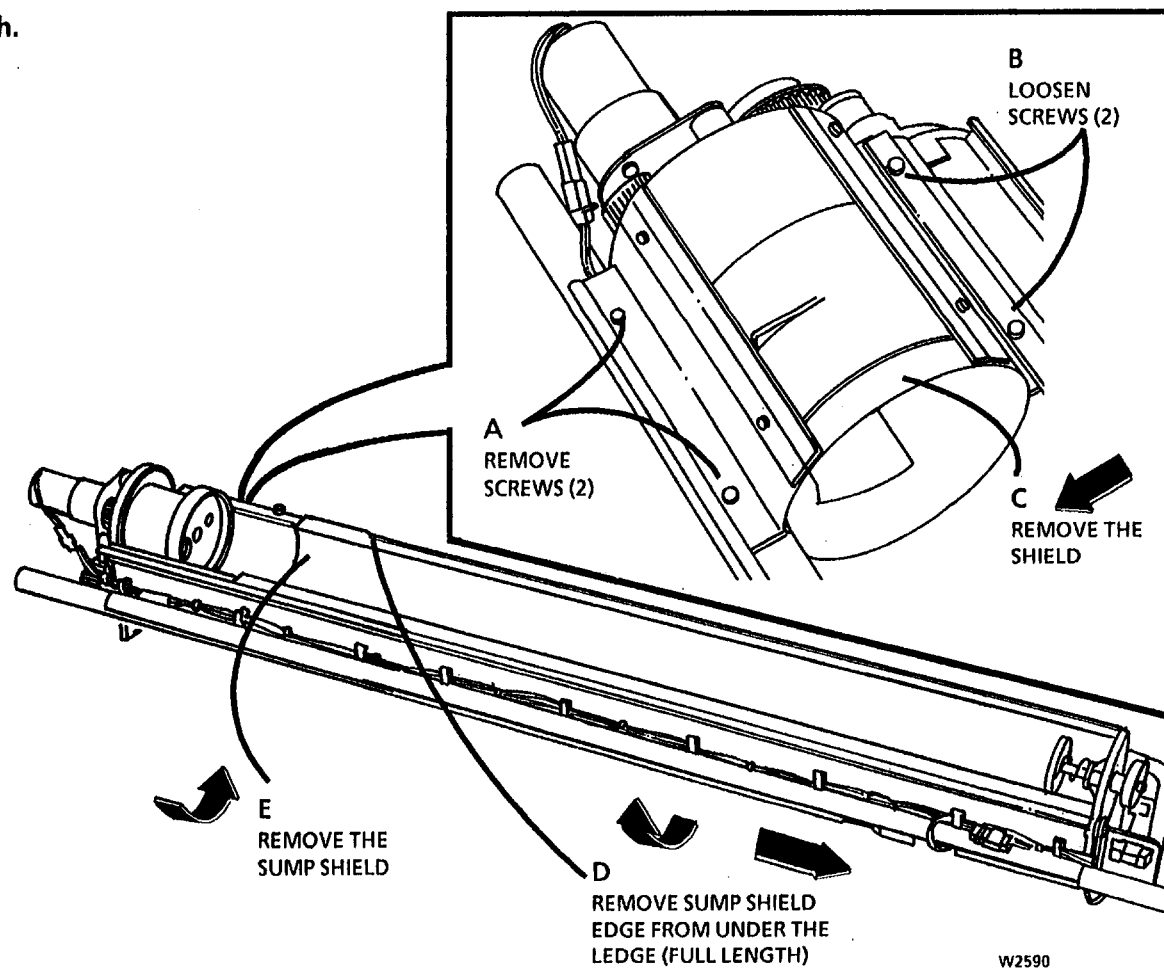
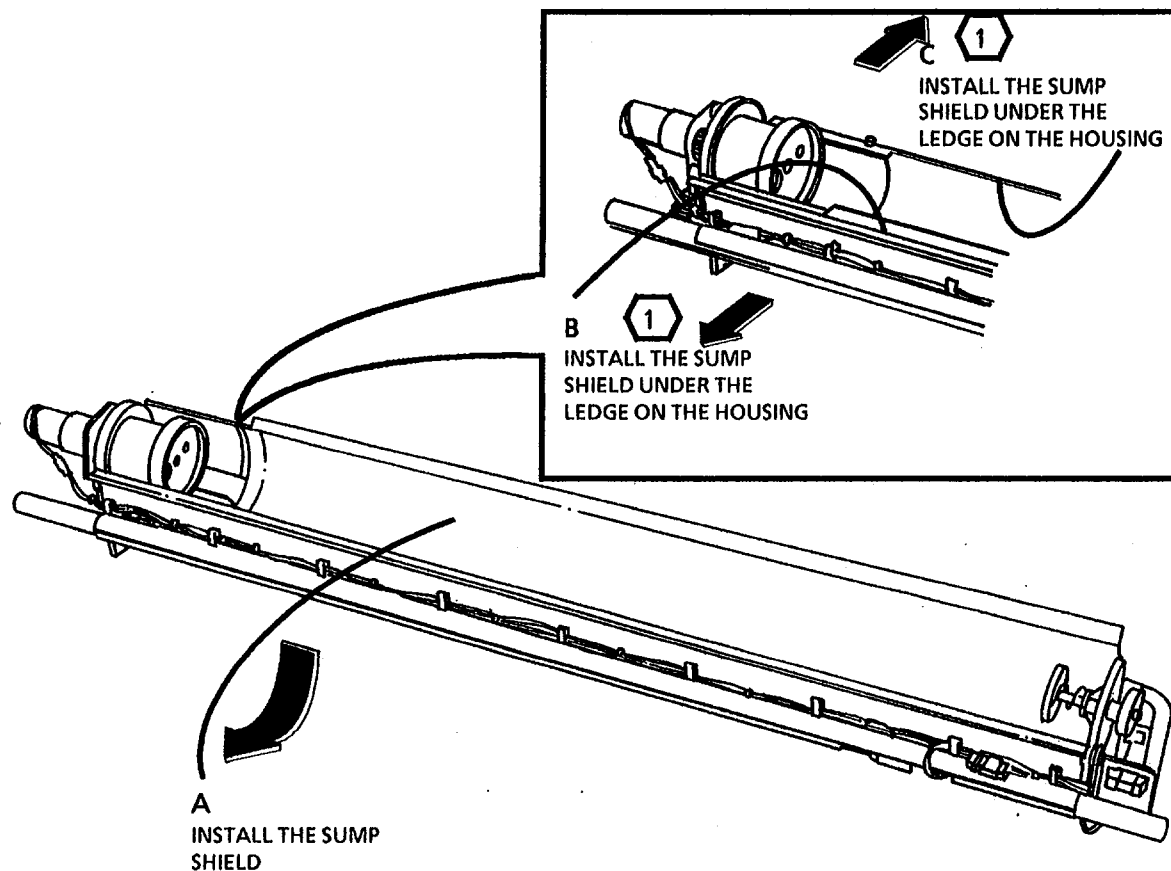


Figure 1. Remove the Sump Shield

Replacement

- 1** STEP 1 B AND C: *Ensure that the full length of the edge of the shield is under the edge of the housing.*

1. (Figure 2): Install the Sump Shield in the Developer Module.
2. The remainder of the replacement is a reversal of the removal.



W2584

Figure 2. Install the Sump Shield in the Developer Module

REP 9.14 Cartridge Drive Plate

Parts List on PL 9.9

Removal

WARNING

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

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

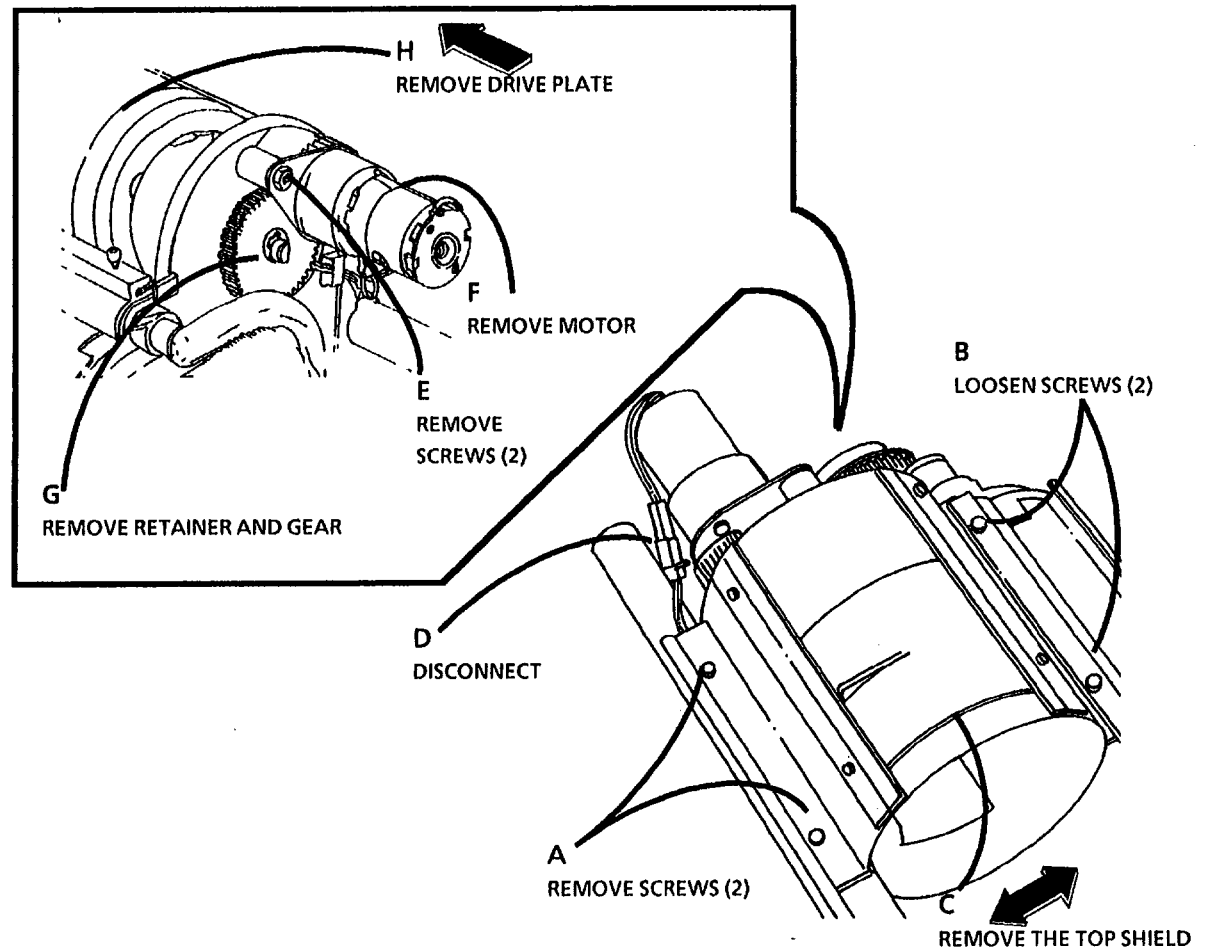


Figure 1. Remove the Cartridge Drive Plate

W2591

Replacement

⚠ STEP 1 C: To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 2.

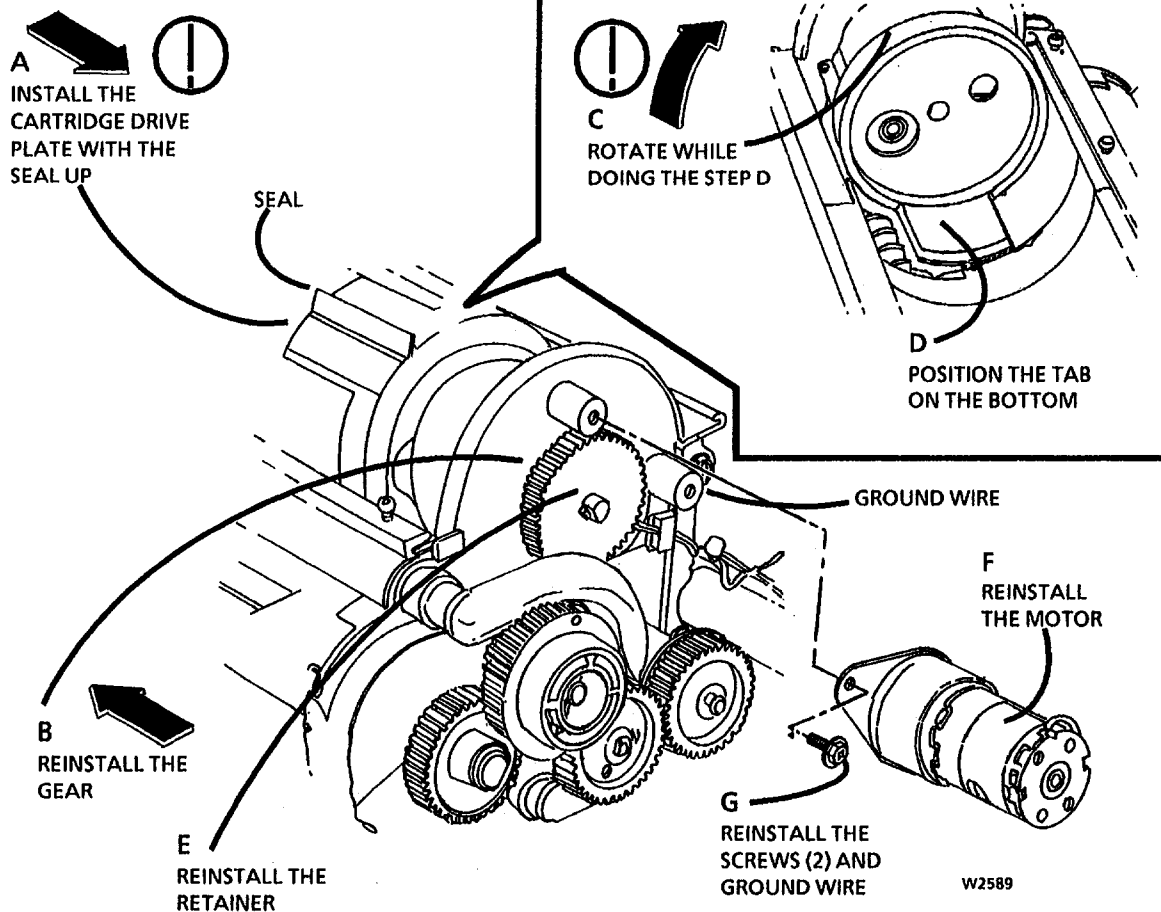


Figure 2. Install the Cartridge Drive Plate

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

⚠ STEP 2 C: Do not overtighten the screws.

2. (Figure 3): Reinstall the Top Shield.

3. Reinstall the Developer Module.

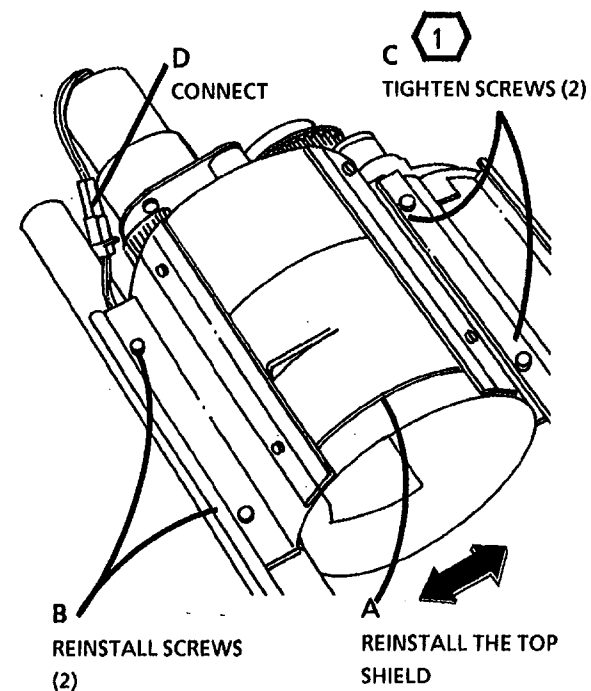


Figure 3. Reinstall the Top Shield

REP 9.15 Contamination Seal

Parts List on PL 9.5

Removal



WARNING

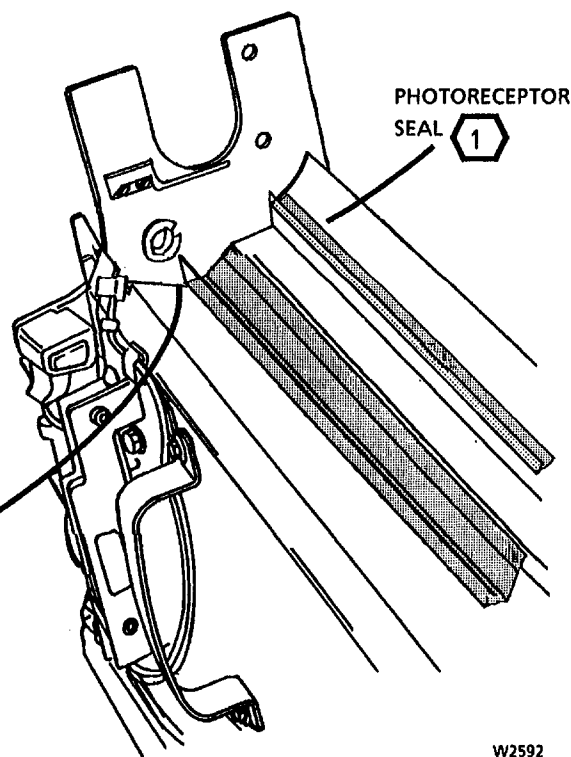
Switch off the Main Power Switch.
Disconnect the Power Cord.

1. Remove the following:
 - a. Right and Left Side Doors (REP 14.1)
 - b. Xerographic Module (REP 9.1)
 - c. Photoreceptor Drum (REP 9.2)
 - d. Cleaner Blade (REP 9.4)
 - e. Charge Corotron/Erase LED PWB (REP 9.8)

1 STEP 2 A: Do not remove the Photoreceptor Seal.

A **1**
REMOVE THE
CONTAMINATION SEAL

2. (Figure 1): Remove the Contamination Seal.
3. Vacuum the Waste Toner Auger and the area where the Contamination Seal will be installed.



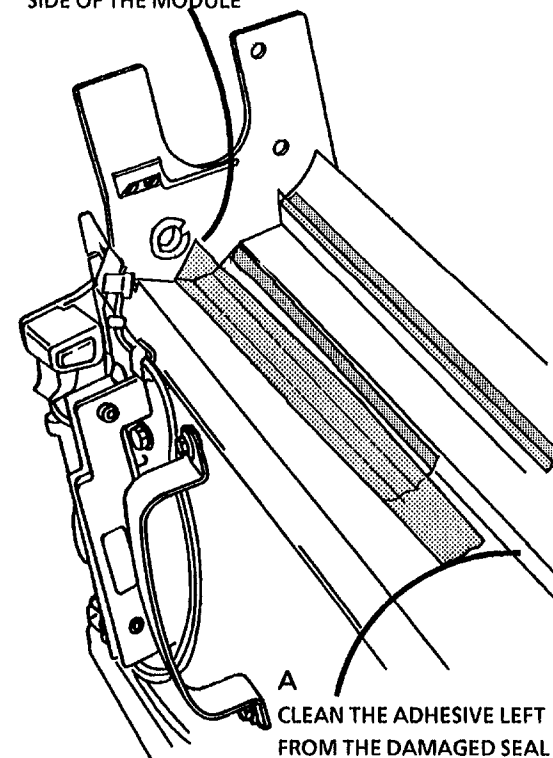
W2592

Figure 1. Remove the Contamination Seal

Replacement

1. (Figure 2): Place the new Contamination Seal in the Xerographic Module.

B
PLACE THE SEAL IN THE
MODULE AND AGAINST THE
SIDE OF THE MODULE



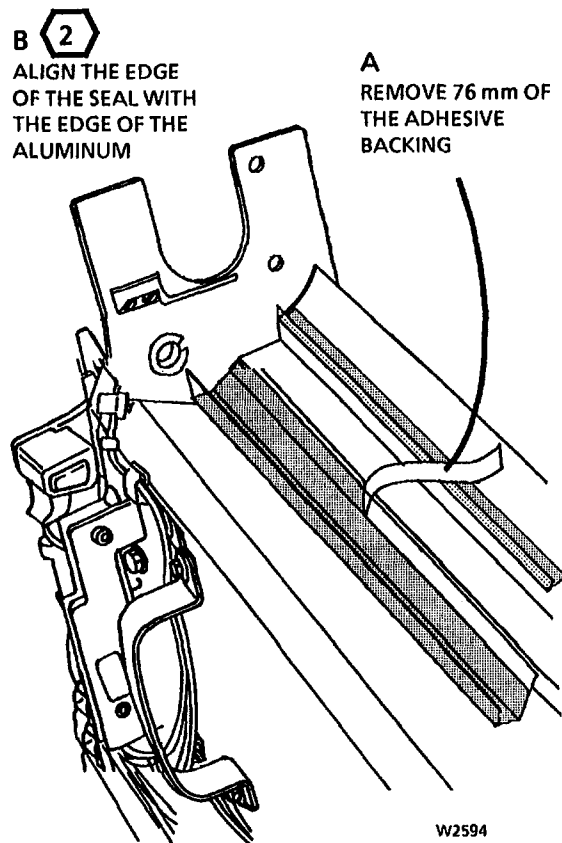
A
CLEAN THE ADHESIVE LEFT
FROM THE DAMAGED SEAL

W2593

Figure 2. Place the Contamination Seal in the Module

- 2** **STEP 2 B:** Ensure that the seal stays against the side of the xerographic module.

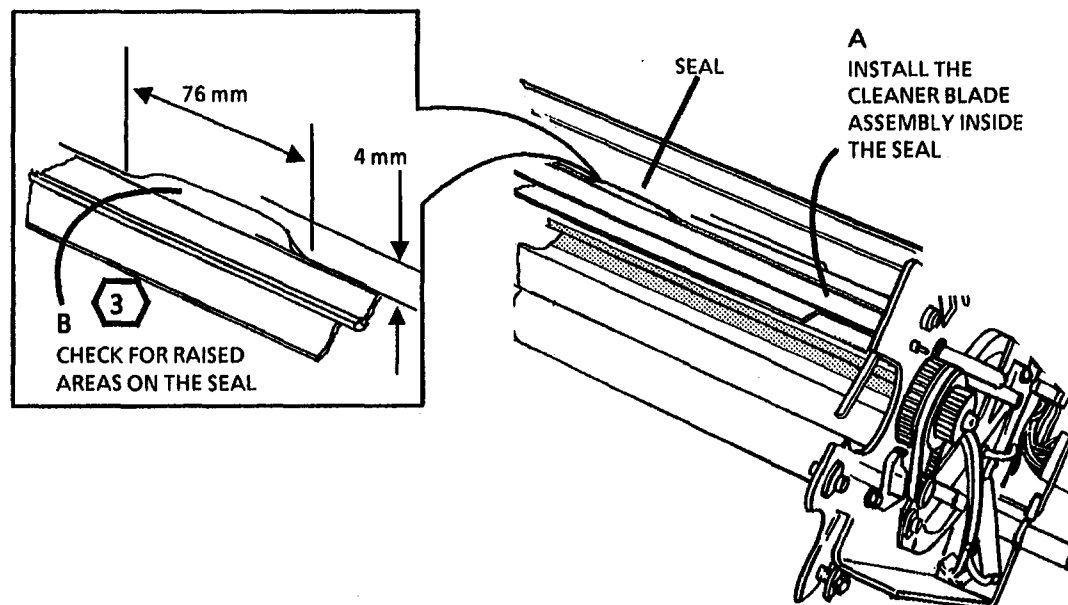
2. (Figure 3): Install the Contamination Seal.



- 3** **STEP 3 B:** Areas of the seal raised off the cleaner blade should be less than 76 mm long and 4 mm high. There should be no raised areas within 300 mm from either end of the cleaner blade.

3. (Figure 4): Check the seal for correct installation.

4. Remove any raised areas by moving your finger across the top of the seal and push the raised area to either end of the Cleaner Blade Assembly.



- 4** **STEP 5 B:** Before installing the photoreceptor drum assembly, refer to section 6, Photoreceptor Maintenance and perform the Photoreceptor Cleaning Enhancement.

5. Reinstall the following:

- Charge Corotron/Erase LED PWB (REP 9.8)
- Photoreceptor Drum (REP 9.3)
- Xerographic Module (REP 9.1)
- Right and Left Side Doors (REP 14.1)

Figure 3. Install the Contamination Seal

Figure 4. Check for correct installation

REP 9.16 Cleaner Blade Positioning Assembly

Parts List on PL 9.6

Removal



WARNING

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

1. *Open* the Right and Left Side Doors.
2. Remove Xerographic Module (REP 9.1)

3. (Figure 1): Remove the Cleaning Blade Positioning Assembly.

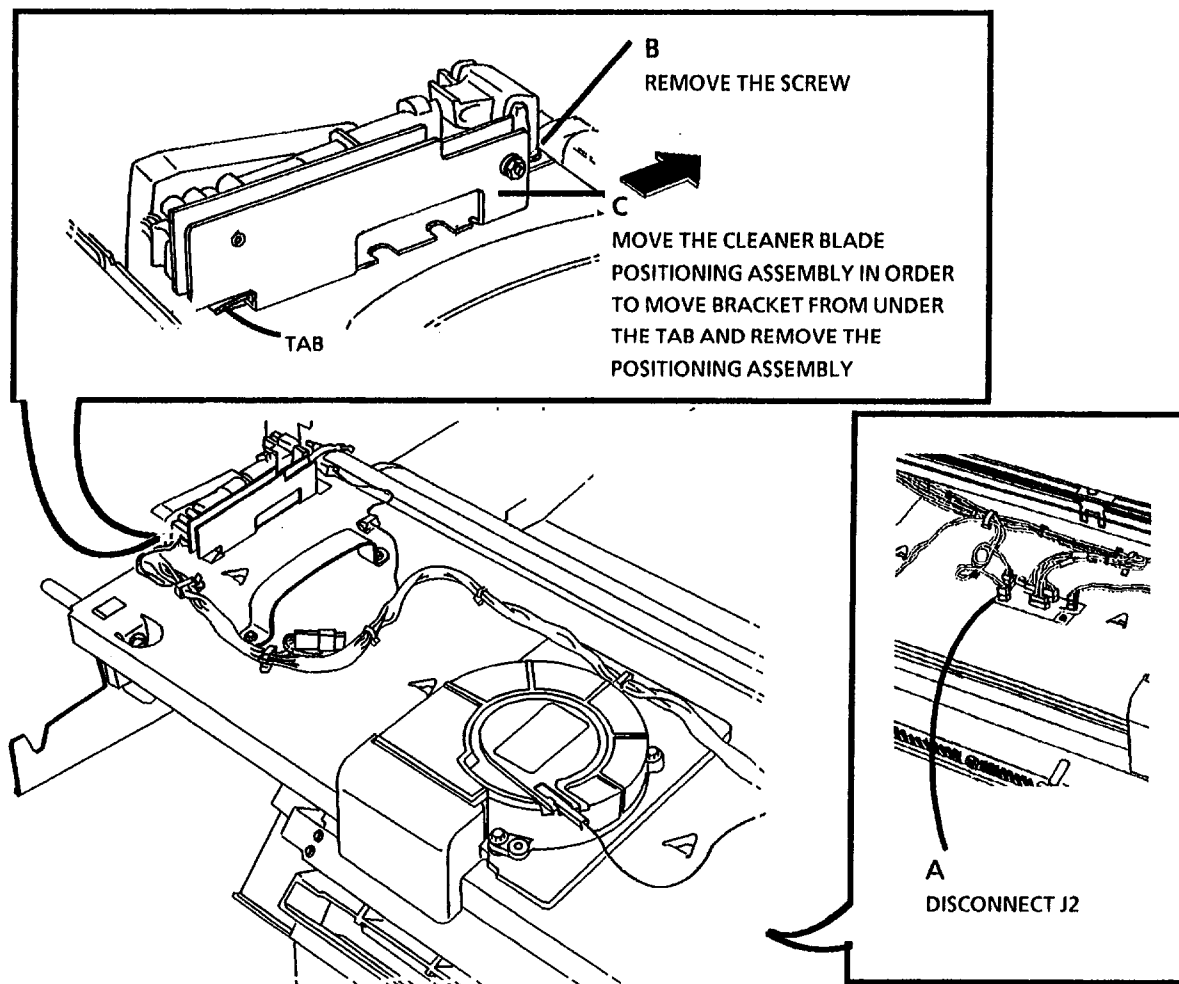


Figure 2. Remove the Cleaner Blade Positioning Assembly

W2519B

REP 9.17 Photoreceptor Seal

Parts List on PL 9.5

Removal



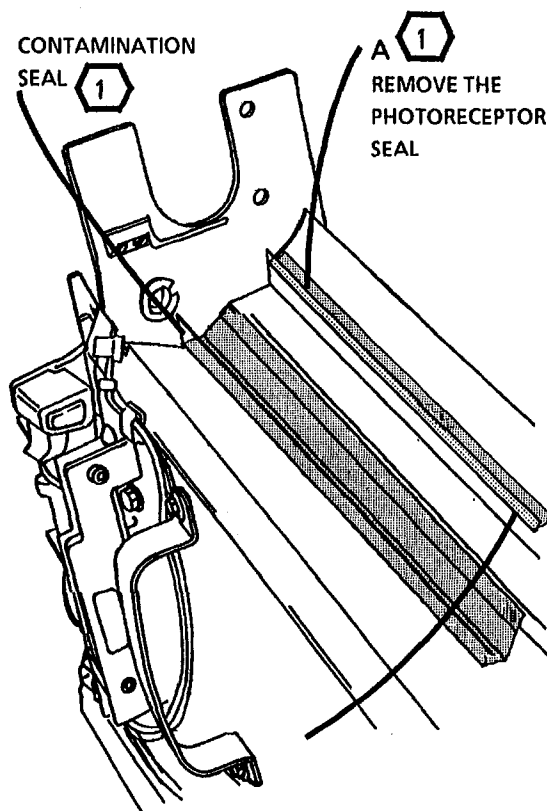
WARNING

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

1. Remove the following:
 - a. Right and Left Side Doors (REP 14.1)
 - b. Xerographic Module (REP 9.1)
 - c. Photoreceptor Drum (REP 9.2)
 - d. Cleaner Blade (REP 9.4)
 - e. Charge Corotron/Erase LED PWB (REP 9.8)

1 STEP 2A : Do not remove the Contamination Seal.

2. (Figure 1): Remove the Contamination Seal.
3. Vacuum the Waste Toner Auger and the area where the Contamination Seal will be installed.

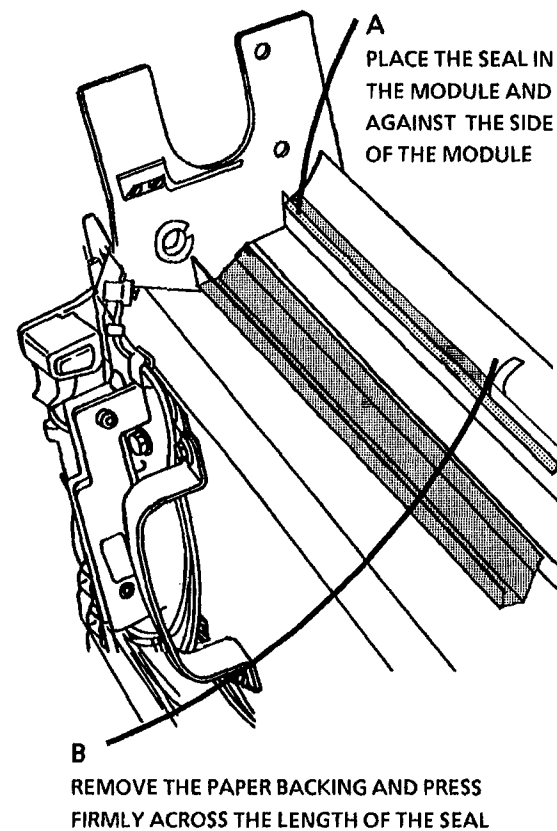


W2592

Figure 1. Remove the Photoreceptor Seal

Replacement

1. (Figure 2): Place the new Photoreceptor Seal in the Xerographic Module.
2. Apply stearate to the seal and ensure the seal is not damaged and is against the photoreceptor when the photoreceptor is installed.



W2594B

Figure 2. Place the Photoreceptor Seal in the Module

REP 10.1 Fuser Heat Rod

Parts List on PL 10.2

Removal



WARNING

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



Allow the fuser to cool before
removing the Xerographic Module.
Fuser may be hot.

1. Remove the following:

- a. Right and Left Side Door (REP 14.1).
- b. Xerographic Module (REP 9.1).
- c. Stripper Finger Assembly (REP 10.6).
- d. Oil Dispense Assembly (REP 10.7).

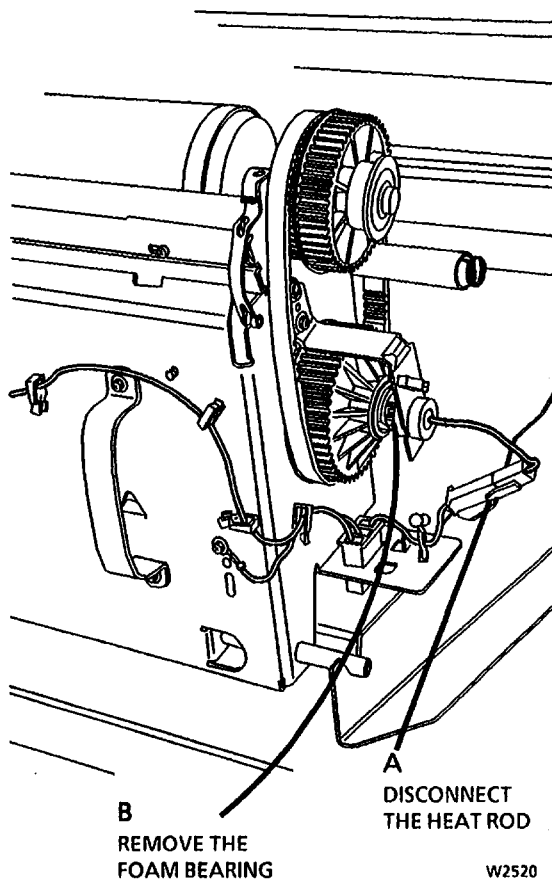


Figure 1. Prepare to Remove the Heat Rod



STEP 3 A and B: Use care when
removing the retainer clip and the
transition gear. The cleaner blade
assembly is spring-loaded.

3. (Figure 2): Remove the Transition Gear and Weight.

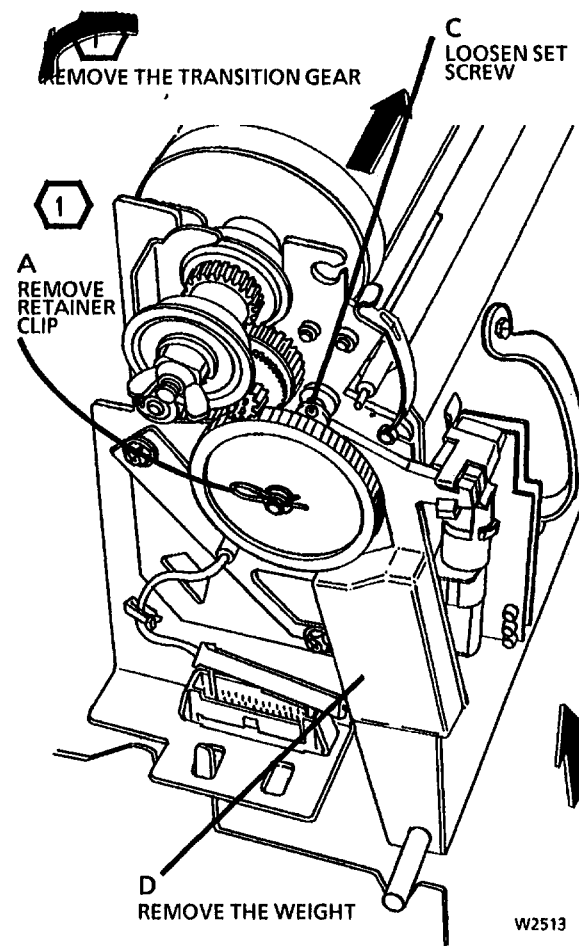


Figure 2. Remove the Transition Gear and
Weight

4. (Figure 3): Prepare to remove the Heat Rod.

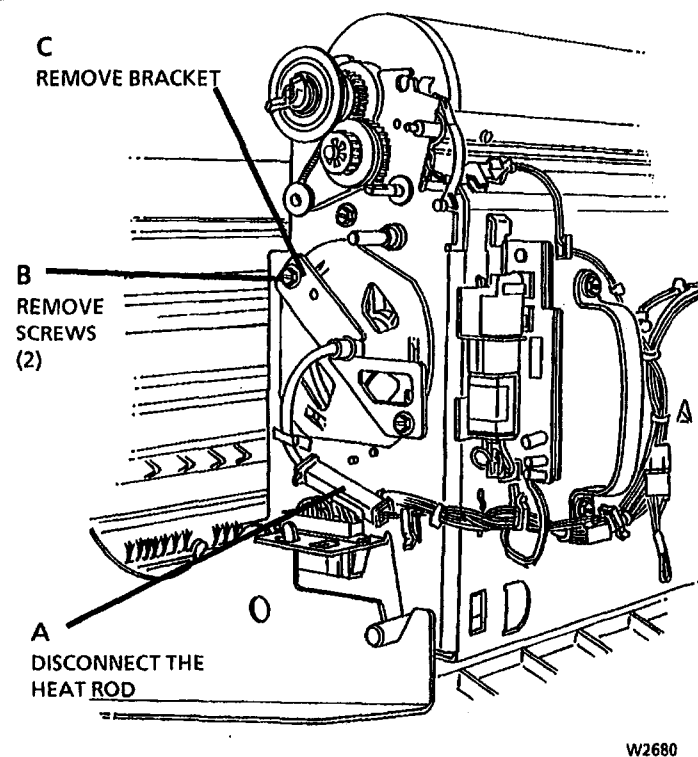


Figure 3. Preparing to Remove the Heat Rod

5. (Figure 4): Remove the Fuser Heat Rod.

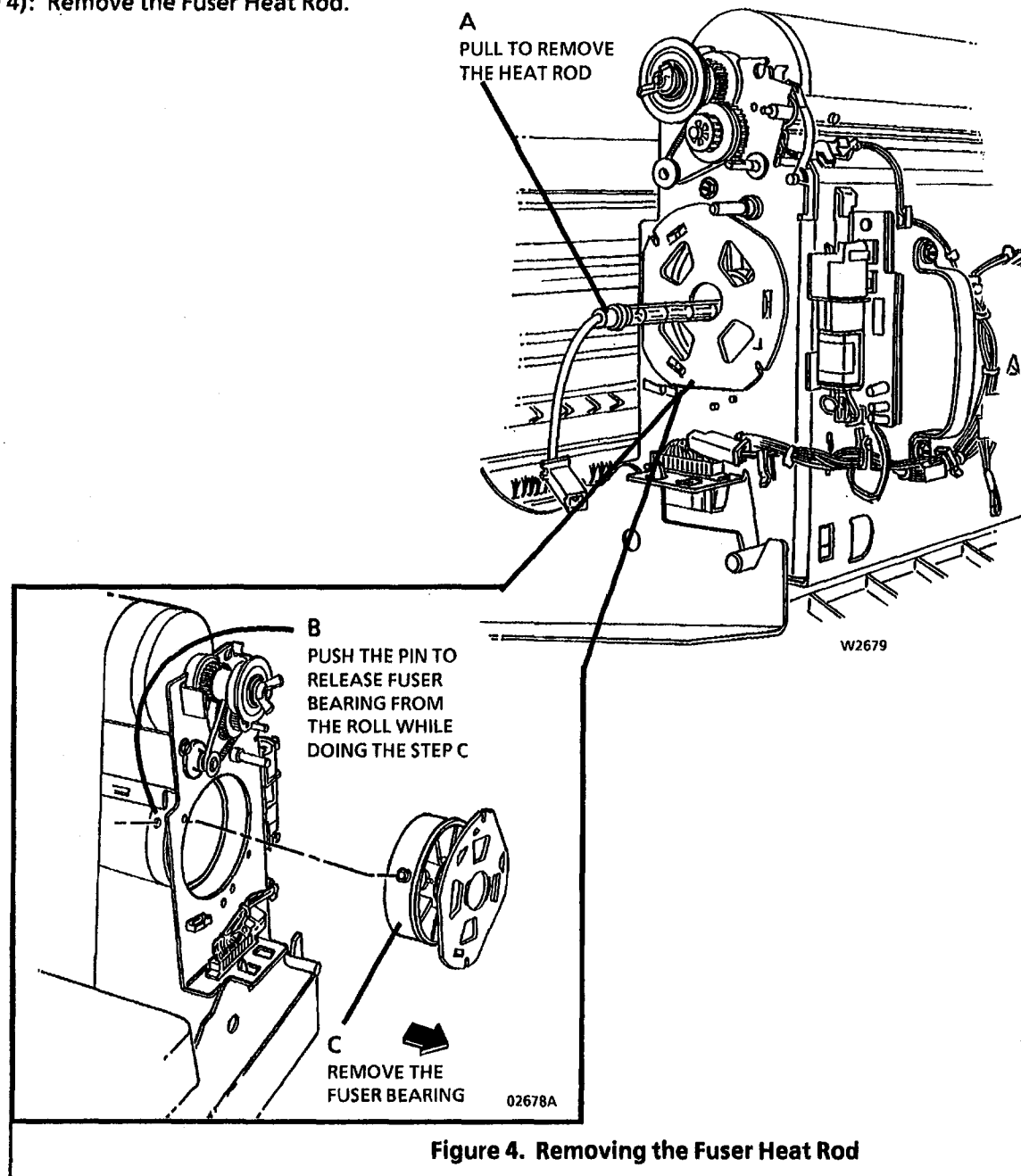


Figure 4. Removing the Fuser Heat Rod

Replacement



STEP 1 A: Wear gloves or wrap a sheet of paper around the Heat Rod when handling the heat rod. Oil from your fingers can damage the Heat Rod.

1. (Figure 5): Install the Heat Rod.



STEP 1 A: Install the Heat Rod, RED connector first. **DO NOT** remove the connectors from the wires on the ends of the heat rod. The heating element inside the rod is closer to the end with the white connector.



STEP 1 A: Insert the red connector into the fuser roll. while looking into the roll, align the red connector with the hole in the fuser drive gear and insert the connector through the gear. If the connector will not go through, use the rod that secures the fabric guide. Insert the rod through the right side of the xerographic module. Secure the red connector to the rod and pull the heat rod into the fuser roll.

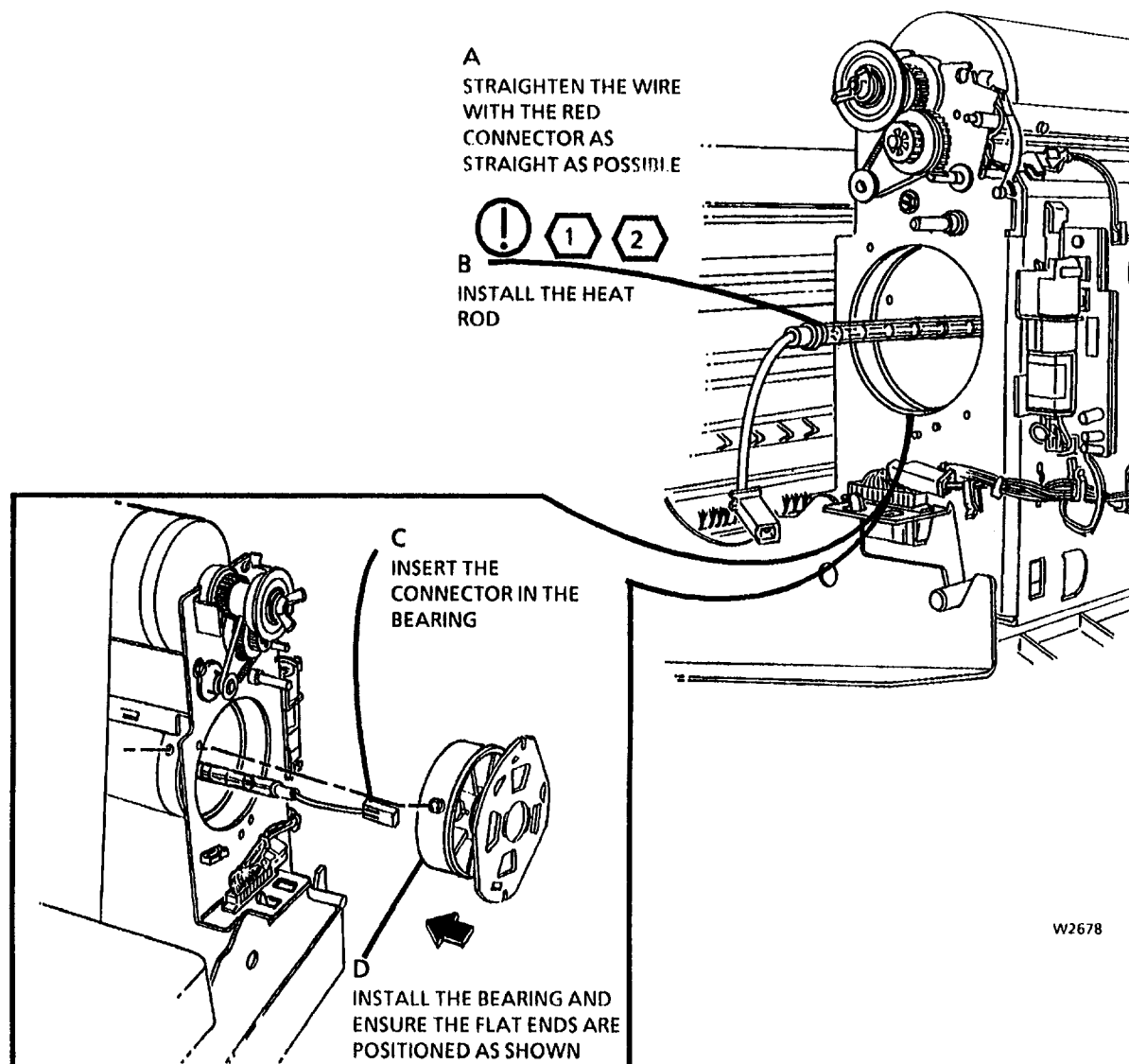


Figure 5. Install the Heat Rod

2. (Figures 6 and 7): Complete the installation of the heat rod.

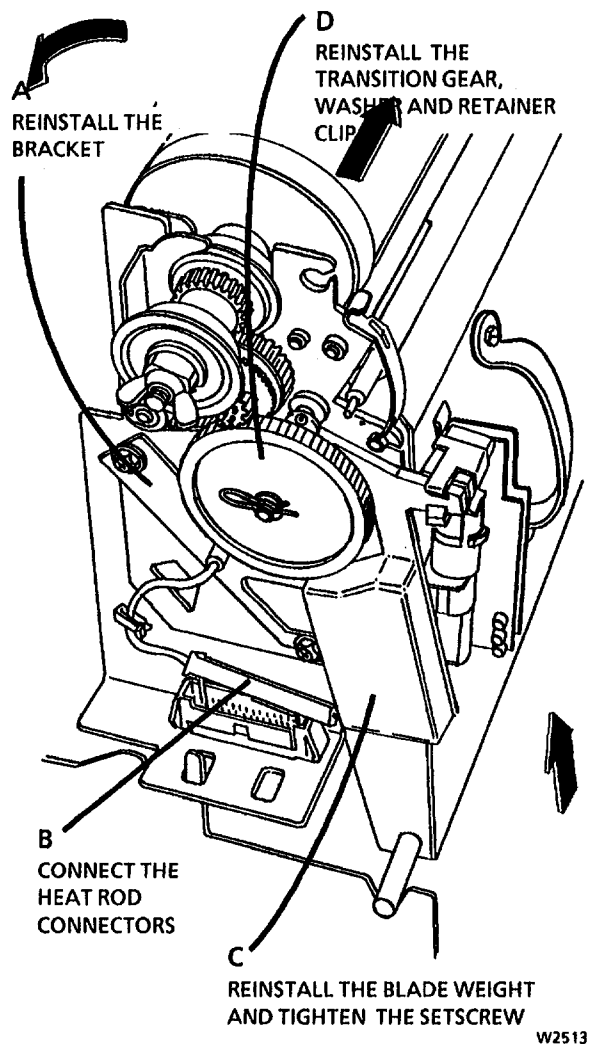


Figure 6. Completing the Installation

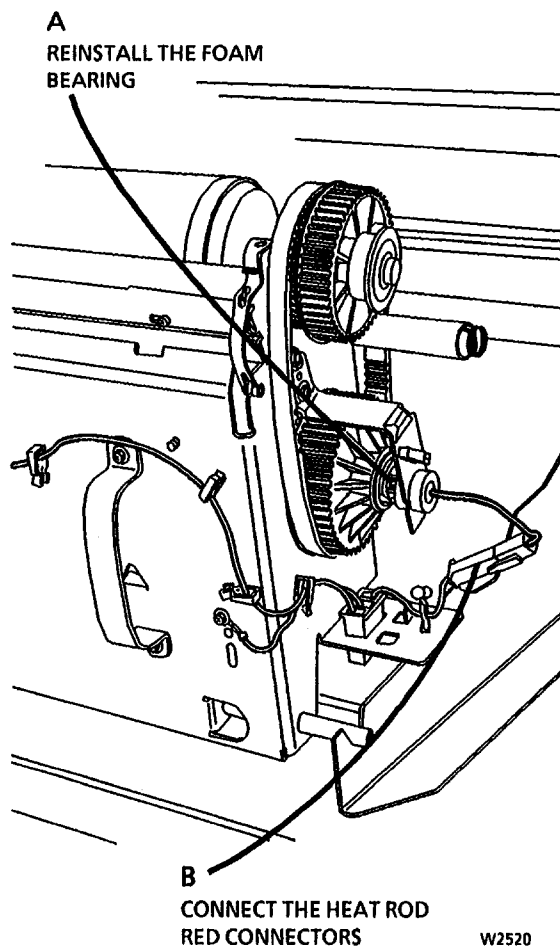


Figure 7. Completing the Installation

3. Reinstall the following:
- Oil Dispense Assembly (REP 10.7).
 - Stripper Finger Assembly (REP 10.6).
 - Xerographic Module (REP 9.1).
 - Right and Left Side Door (REP 14.1).

2 By heating the fuser roll to the operating temperature and allowing it to run, fuser oil will be evenly applied to the surface of the fuser roll.

4. Enter diagnostic mode.

WARNING

There will be a time delay between the time the code [1003-1] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

- Enter the code [1003-1]. Allow the Fuser Drive Motor to cycle. When the Fuser Drive Motor stops, exit the diagnostic mode.
- Ensure that the Thermistor is clean and touches the Fuser Roll after assembly.

REP 10.2 Fuser Heat Roll

2. (Figure 1): Prepare to Remove the Fuser Roll.

Parts List on PL 10.2

Removal



WARNING

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



Allow fuser to cool before removing the xerographic module. The fuser may be hot.

1. Remove the following:

- a. Right and Left Side Doors (REP 14.1).
- b. Xerographic Module (REP 9.1).
- c. Stripper Finger Assembly (REP 10.6).
- d. Oil Dispense Assembly (REP 10.7).
- e. Heat Rod (REP 10.1).

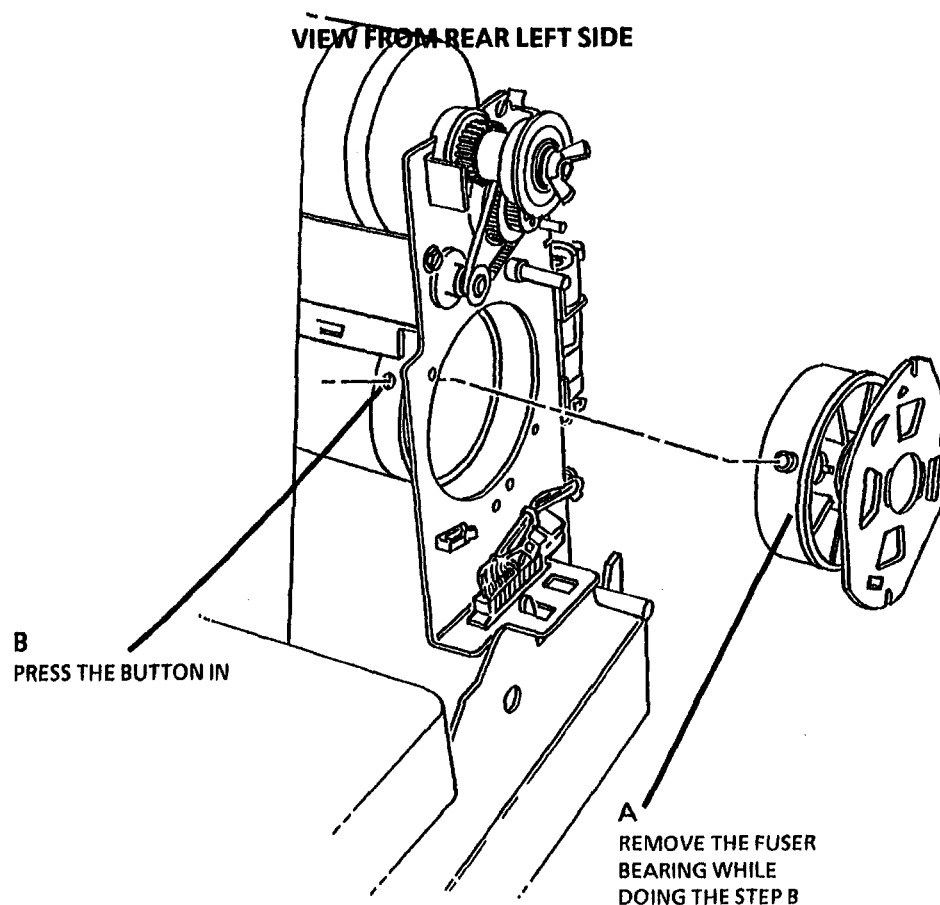


Figure 1. Prepare to Remove the Fuser Roll

0	2677	A
WIN	SM04 X	0

3. (Figure 2): Remove the Fuser Roll.

4. Remove the Thermistor Assembly PWB (RT1) (REP 10.5).

5. Clean the thermistor contact where it contacts the fuser roll with a clean dry cloth to remove any loose dirt.

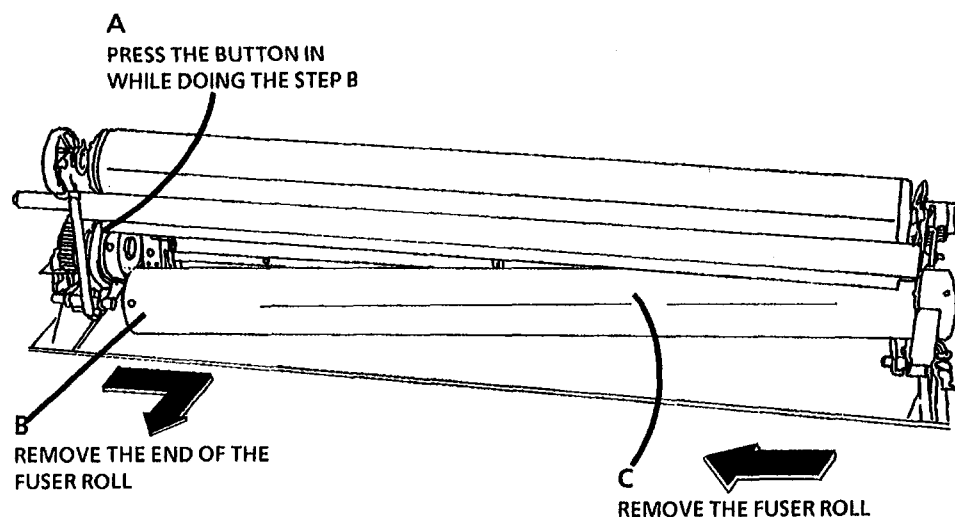


Figure 2. Remove the Fuser Roll

W2596

Replacement

1 *STEP 1: Do not install the fuser bearing after installing the fuser roll. It will be installed during Heat Rod (REP 10.1) in step 3.*

1. Install the Thermistor Assembly PWB (RT1) (REP 10.5).

2. Install the Fuser Roll.

3. Install the Heat Rod (REP 10.1).

4. Install the Xerographic Module (REP 9.1). Leave the Copy Feed Shelf down. Close the Document Feed Shelf in order to secure the Xerographic Module.

5. Connect the Power Cord and enter diagnostics.

6. Enter the code [09 10]. place a magnet on the Copy Feed Shelf interlock switch and verify that the quantity display displays 1.

7. Press the Stop button two times.

8. Enter the code [04 03]. The Fuser Roll will rotate.



WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



WARNING

Ensure that the area where components with fuser oil is present is protected by a drop cloth. Clean any fuser oil spills with warm water and soap to avoid the possibility of bodily injury due to falls.

9. Apply part of an 8cc tube of Fuser Oil (93E00811) to a soft cloth.
10. Wipe the fuser oil soaked cloth evenly across the entire surface of the Fuser Roll.
11. Repeat Steps 9 and 10 until the entire contents of two tubes of fuser oil is used.
12. Inspect for dry areas.



Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

13. If dry areas are present, repeat Step 10.
14. Wipe the Fabric Guide with the same cloth to remove any debris that may be present.
15. Press the Stop button two times.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll **WILL** be hot.

16. Enter the code [09 21 4] and wait for the Fuser Roll to warm to run temperature.



The third 8cc tube of Fuser Oil will be used in the next step. The first two tubes of oil were applied with the Fuser Roll cold. The next tube of oil will be applied with the Fuser Roll at run temperature.

17. Repeat Steps 9 and 10 until the contents of another 8cc tube of Fuser Oil is used. This completes a total of three 8cc tubes of Fuser Oil.



If [09 21 4] times out while performing the oiling process, re-enter the code [09 21 4] and continue.

18. Press the Stop button two times.
19. Clean the Oil Dispense Roll with film remover.
20. Remove the magnet from the Copy Feed Shelf Interlock Switch.
21. Reinstall the following:
 - a. Oil Dispense Assembly (REP 10.7).
 - b. Stripper Fingers (10.6).
22. Perform the Fuser Temperature Adjustment (ADJ 10.1).
23. Exit diagnostics and select a quantity of 6 to make 6 copies of the blank side of the test pattern (82E5980) (all white) to remove any excess oil from the Fuser Roll.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The Stripper Finger Assembly **WILL** be hot.

24. Remove the Stripper Finger Assembly (REP 10.6).
25. Use a thick soft clean cloth to wipe any excess fuser oil from the ends of the Fuser Roll and the Fabric Guide.
26. Reinstall the Stripper Finger Assembly (REP 10.6).
27. Make a copy of the test pattern (82E5980) and evaluate the quality and the fuse fix of the copy.

REP 10.3 Fuser Triac

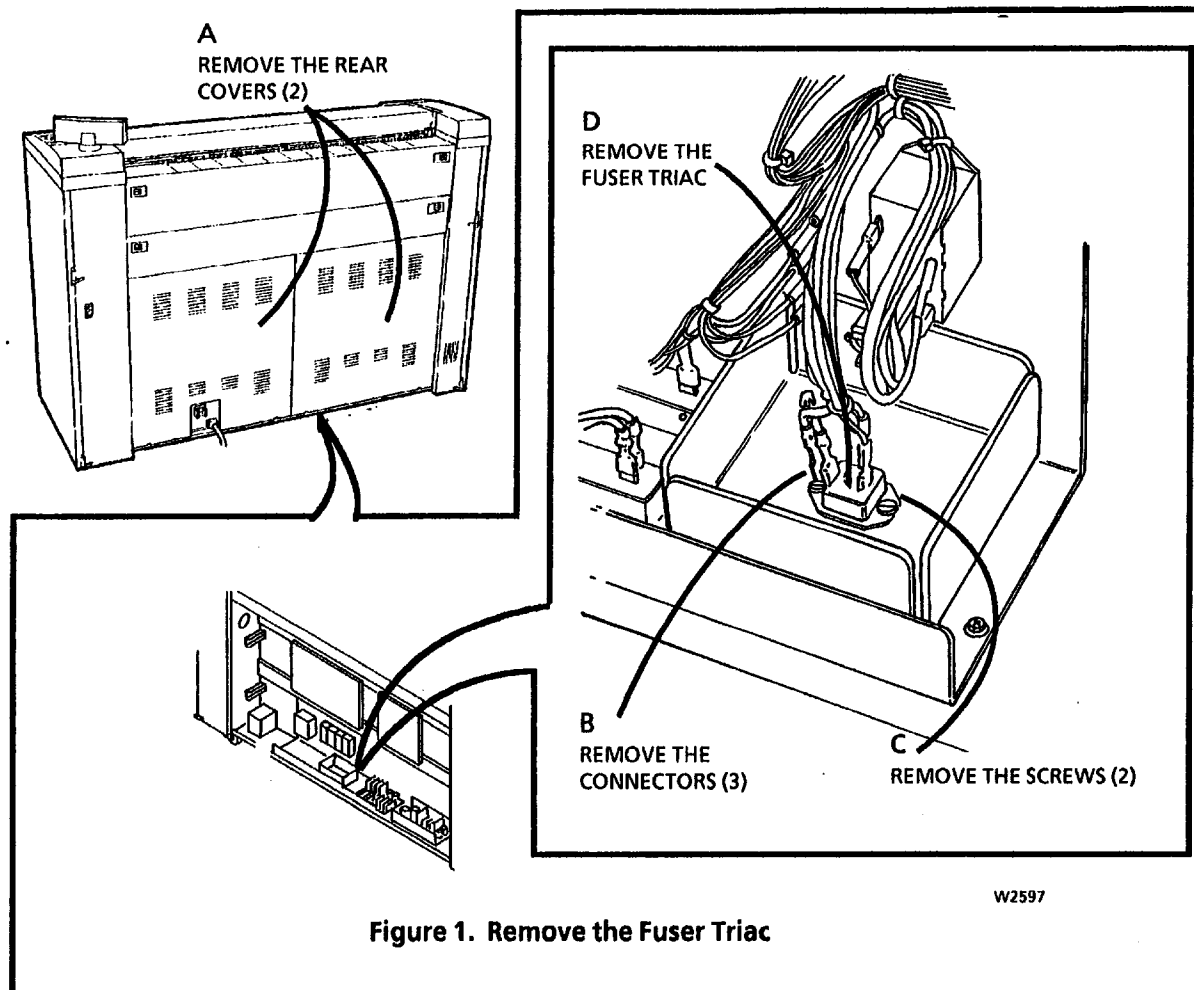
Parts List on PL 1.2

Removal



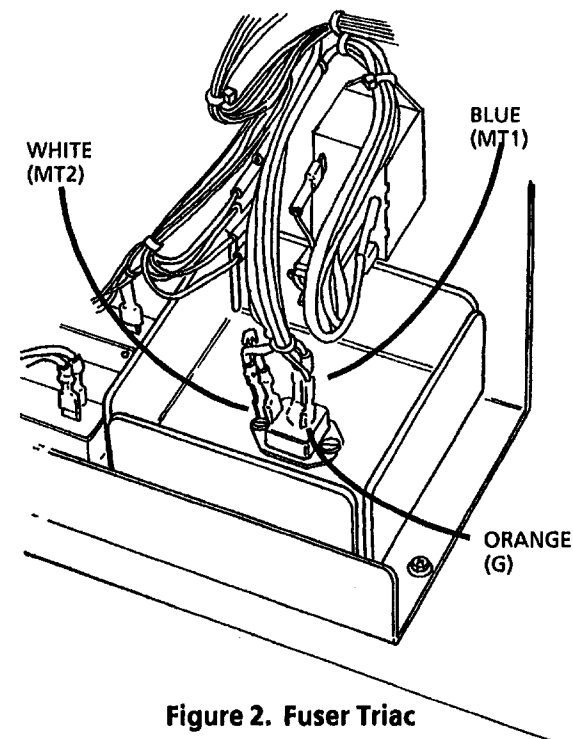
WARNING

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



Replacement

1. Cover the entire surface where the triac mounts to the frame with a film of thermal compound.
2. (Figure 2): Fuser Triac.



REP 10.4 Fuser Drive Pulley

Parts List on PL 10.2

Removal



WARNING

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

1. Remove the following:
 - a. Right and Left Side Doors (REP 14.1).
 - b. Xerographic Module (REP 9.1).

2. (Figure 1): Remove the Lamp Bracket.

3. (Figure 2): Remove the Fuser Drive Pulley.

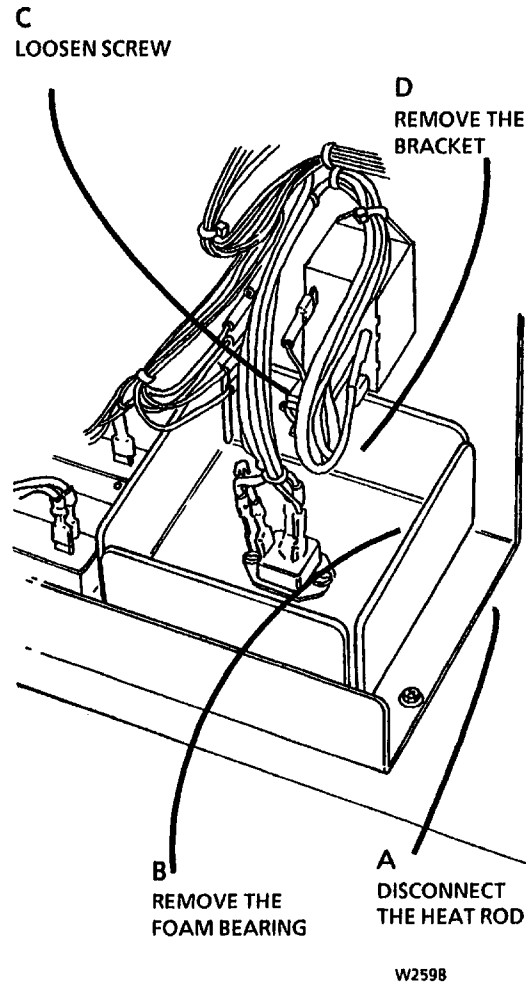


Figure 1. Remove the Bracket

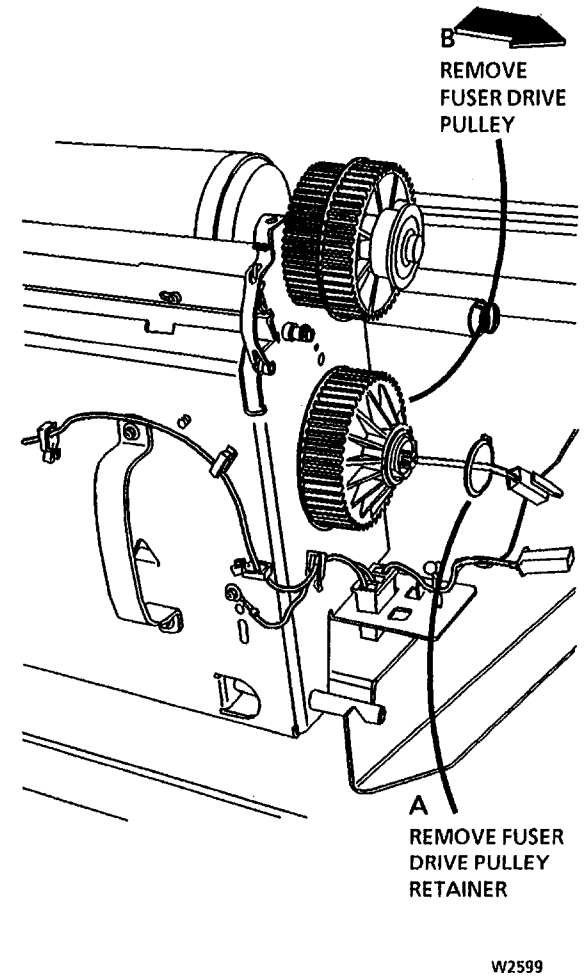


Figure 2. Remove the Fuser Drive Pulley

REP 10.5 Thermistor Assembly PWB (RT1)

Parts List on PL 10.4

Removal



WARNING

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

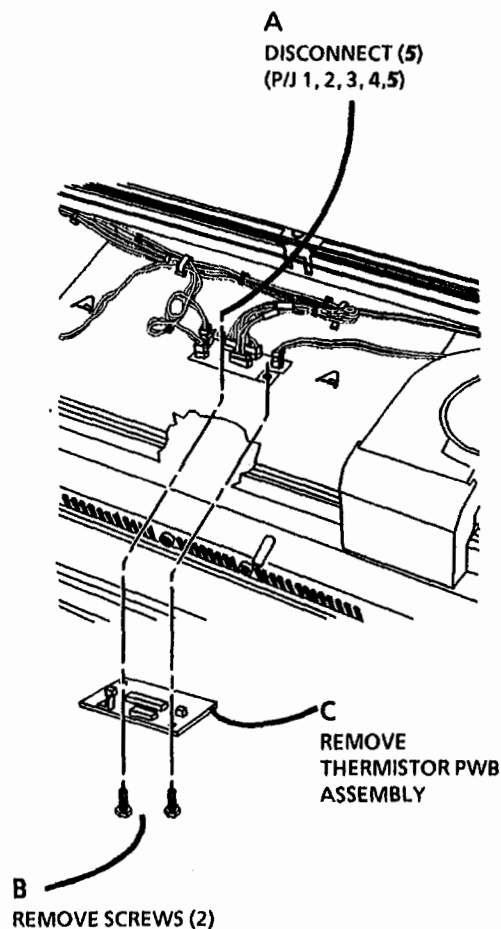
1. Remove the following:
 - a. Stripper Finger Assembly (REP 10.6)
 - b. Oil Dispense Assembly (REP 10.7)

2. Raise the Document Feed-in Shelf.



Allow the fuser to cool before removing the thermistor assembly. The fuser roll may be hot.

3. (Figure 1): Remove the Thermistor Assembly PWB (RT1).



W2560

Replacement



Lightly lubricate the fuser roll with silicon oil in the area where the thermistor comes in contact with the roll.

1. Adjust the Fuser Temperature (ADJ 10.1).

Figure 1. Remove the Thermistor Assembly

REP 10.6 Stripper Finger Assembly

Parts List on PL 10.4

Removal



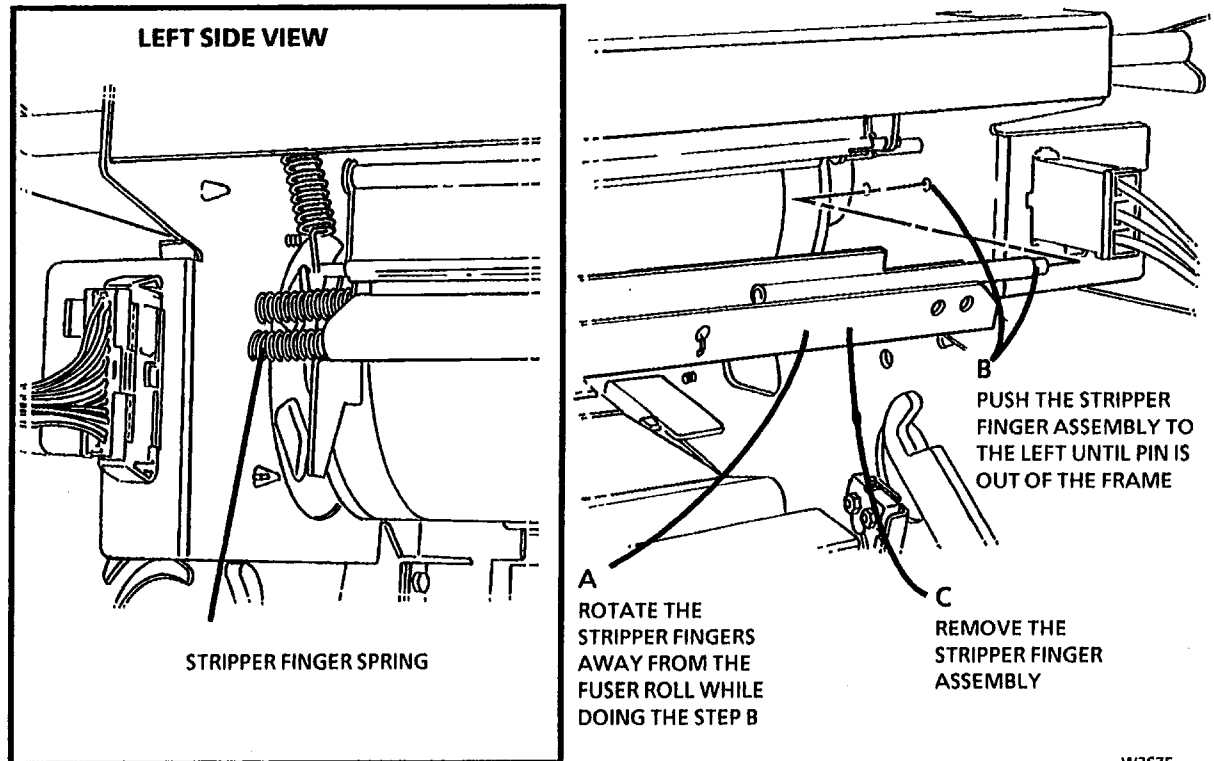
WARNING

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



Handle the Stripper Finger Assembly with care in order to avoid bending the stripper fingers.

1. Open the Front Cover.
2. (Figure 1): Remove the Stripper Finger Assembly.



W2675

Figure 1. Remove the Stripper Finger Assembly

Replacement

ⓘ **Step 1 A:** To avoid damage to the stripper fingers and the fuser roll, ensure that the stripper fingers are away from the fuser roll when reinstalling the Stripper Finger Assembly.

1. (Figure 2): Reinstall the Stripper Finger Assembly.

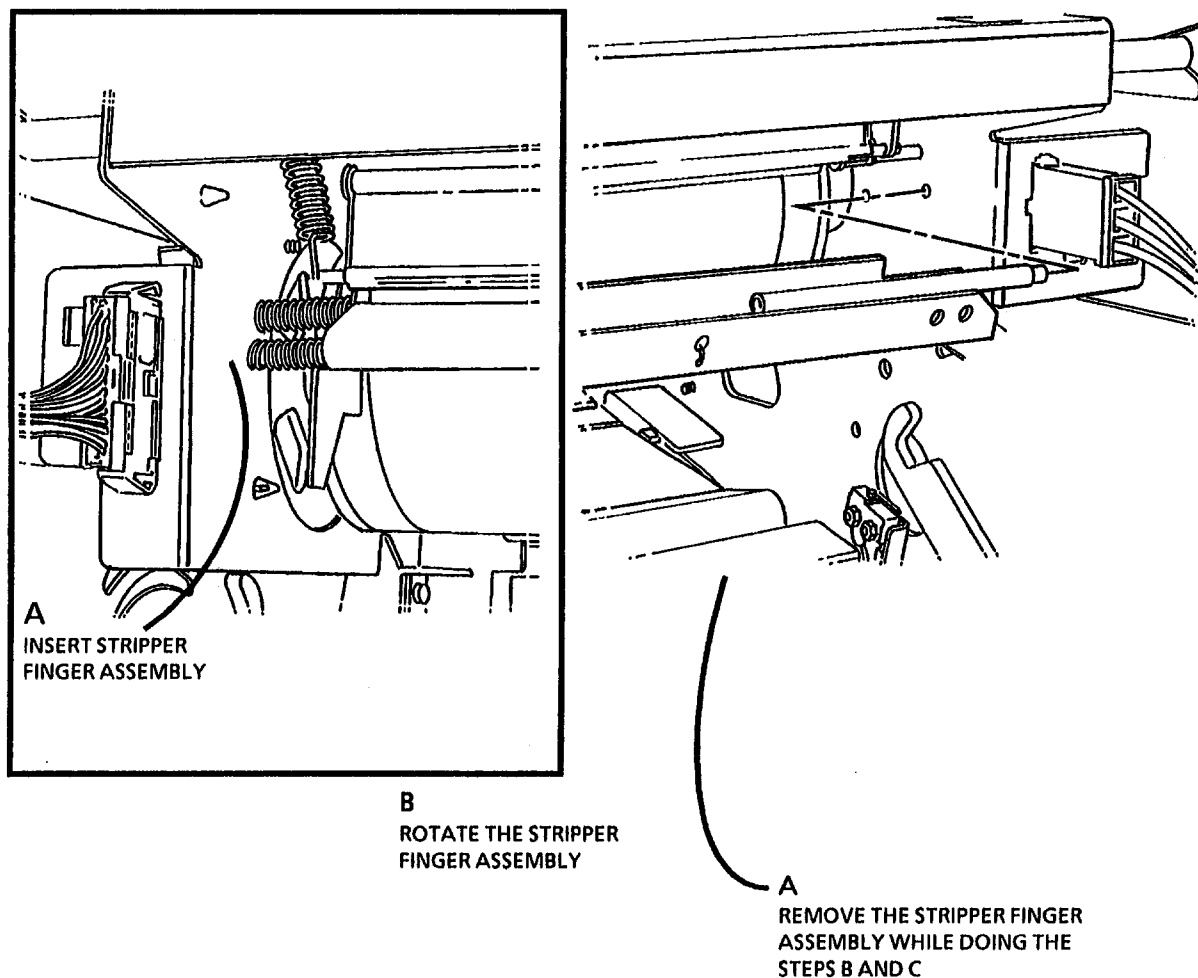


Figure 2. Remove the Stripper Finger Assembly

W2675

REP 10.7 Oil Dispense Assembly

Parts List on PL 10.5

Removal



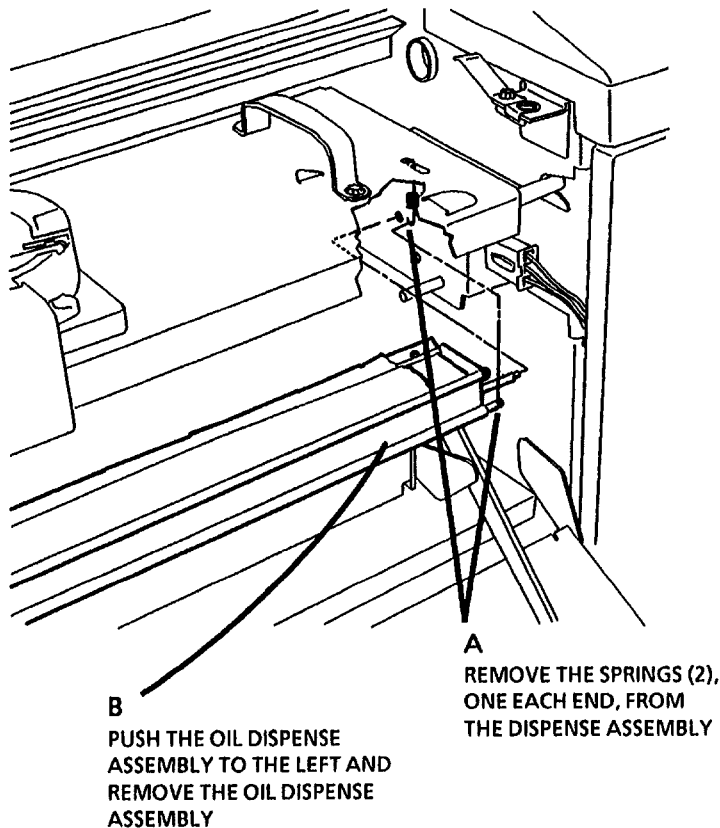
WARNING

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



*Handle the Stripper Finger Assembly
with care in order to avoid bending
the stripper fingers.*

2. Lower the Front Latching Cover.
3. Remove the Stripper Finger Assembly (REP 10.6)
4. (Figure 1): Remove the Oil Dispense Assembly.



W2676

Figure 1. Removing the Oil Dispense Assembly

Replacement

ⓘ *Step 1 A: To avoid damage to the stripper fingers and the fuser roll, ensure that the stripper fingers are away from the fuser roll when reinstalling the Stripper Finger Assembly.*

1. (Figure 2): Install the Oil Dispense Assembly and Stripper Finger Assembly.

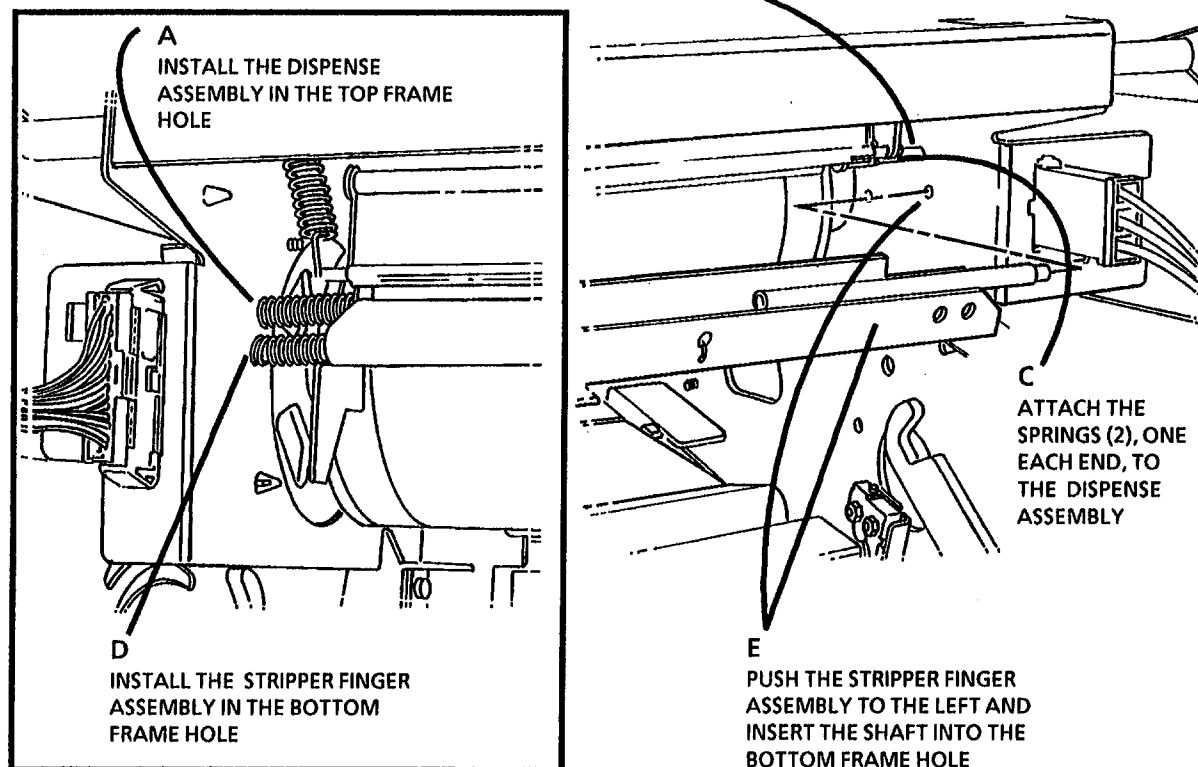


Figure 2. Installing the Oil Dispense Assembly

W2675

REP 10.8 Stripper Fingers

Parts List on PL 10.4

Removal

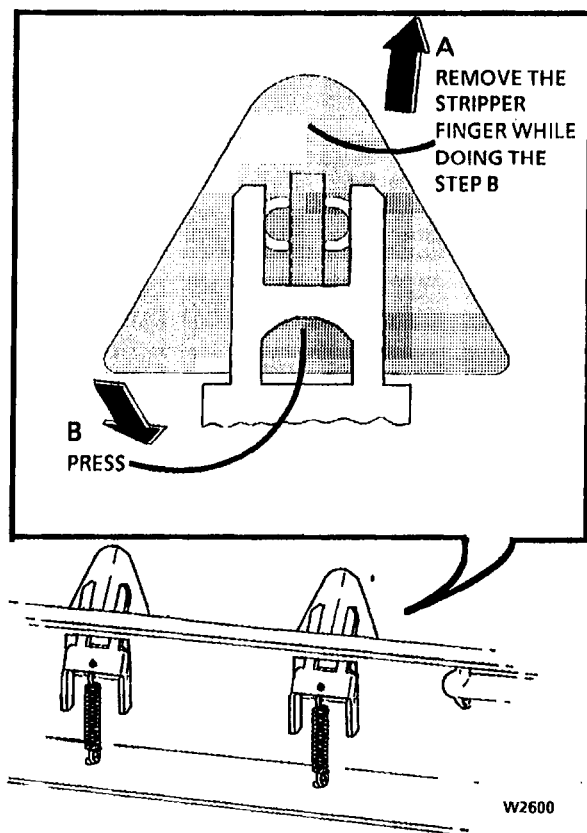


WARNING

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



Handle the Stripper Finger Assembly with care in order to avoid bending the stripper fingers.



W2600

Figure 1. Remove the Stripper Fingers



WARNING

The fuser roll may be hot.

1. Remove the Stripper Finger Assembly (REP 10.6)
2. (Figure 1): Remove the Stripper Fingers.

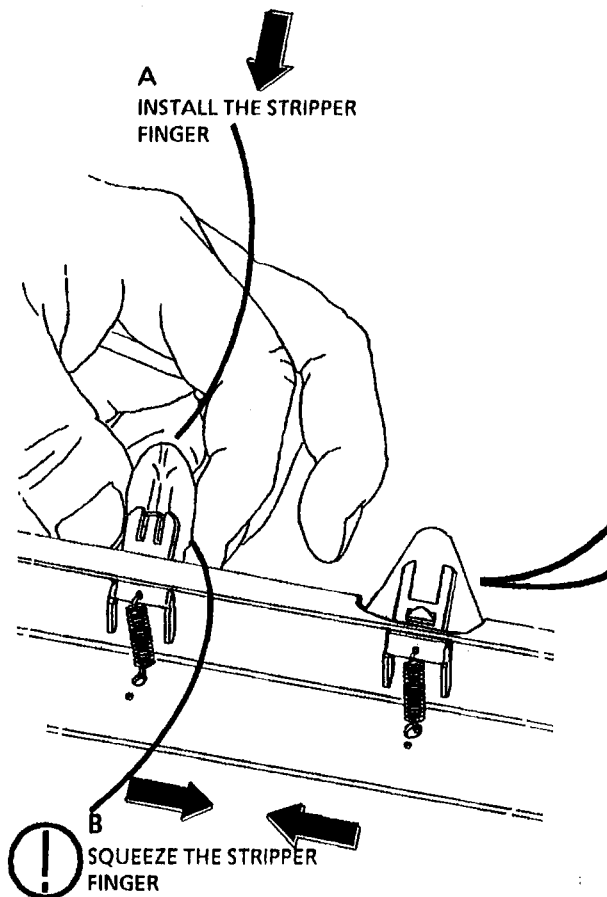


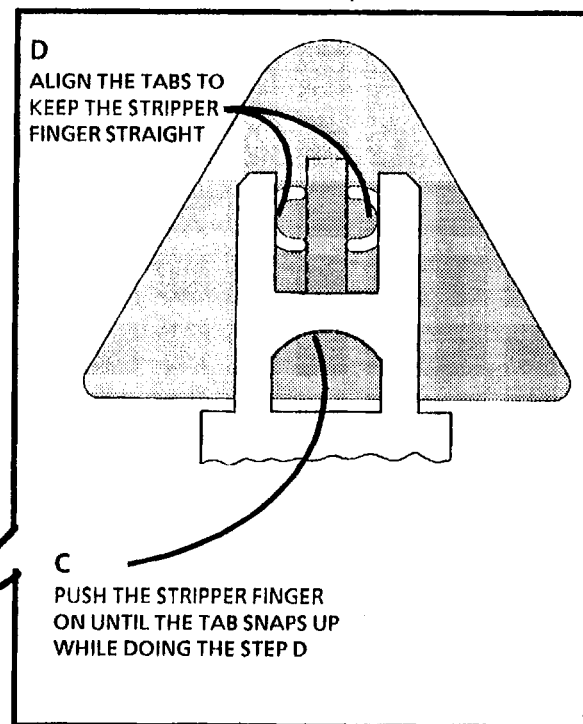
Figure 2. Install the Stripper Fingers

Replacement



STEP 1 B: To avoid damage to the stripper fingers, do not bend them too far causing them to fold.

1. (Figure 2): Install the Stripper Fingers.
2. The remainder the the replacement is a reversal of the removal procedure.



W2663

REP 10.9 Oil Pads

Parts List on PL 10.5

Removal



WARNING

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

1. Lower the Front Latching Cover.

2. Remove the following:
 - a. Stripper Finger Assembly (REP 10.6)
 - b. Oil Dispense Assembly (REP 10.7)
3. (Figure 1): Remove the Oil Pads.

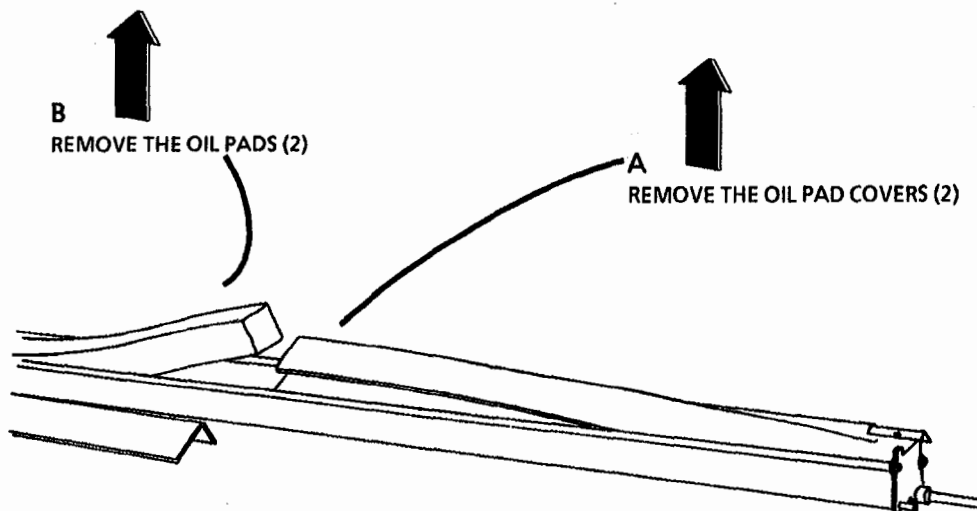


Figure 1. Remove the Oil Pads

W2664

Replacement

⚠ To avoid damaging the oil dispense roll, do not pull the wick too tightly over the extrusion.

⚠ STEP 1 A: To avoid folding the wick or pulling the wick too tight, use the oil pad covers as guides when installing the oil pads.

1. (Figure 2): Install the Oil Pads.
2. Reinstall the Oil Pad Covers.

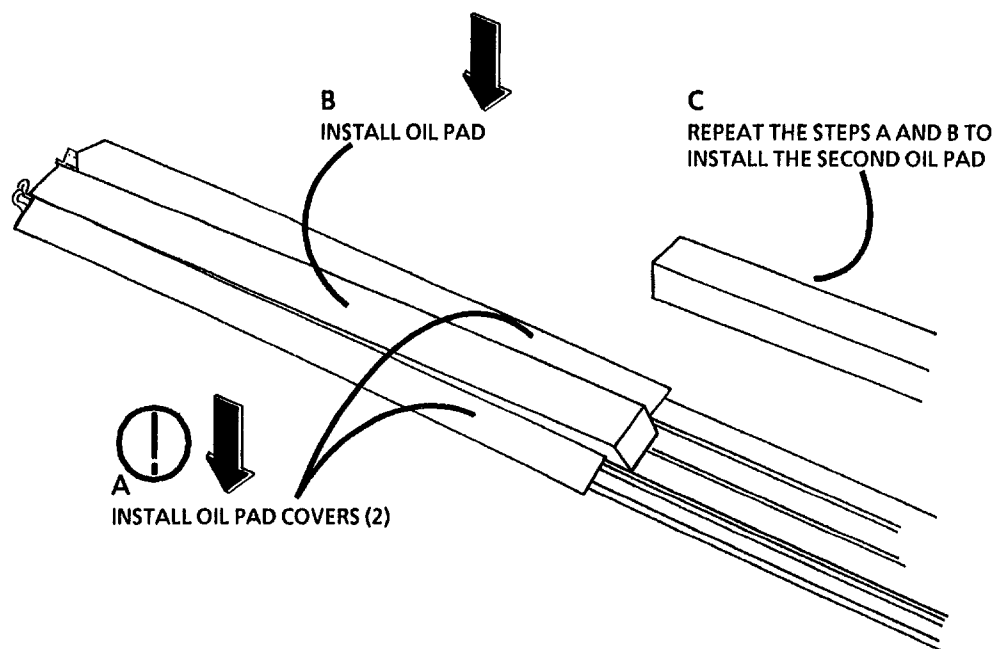


Figure 2. Install the Oil Pads

W2665



WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.




WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll **WILL** be hot.



WARNING

Ensure that the area where components with fuser oil is present is protected by a drop cloth. Clean any fuser oil spills with warm water and soap to avoid the possibility of bodily injury due to falls.

3. Connect the Power Cord and enter diagnostics.
 4. Place a magnet on the Copy Feed Shelf Interlock Switch.
 5. Enter the code [09 21 4] and wait for the Fuser roll to warm to run temperature.
-  *If [09 21 4] times out while performing the oiling process, re-enter the code [09 21 4] and continue.*

6. Apply part of an 8cc tube of fuser oil (93E00811) to a folded soft cloth.
7. Wipe the fuser oil soaked cloth evenly across the entire surface of the Fuser Roll.
8. Repeat steps 6 and 7 until the entire contents of the tube of oil is used.



Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

9. Inspect for dry and/or contaminated areas on the Fuser Roll. If dry or contaminated areas are found, wipe the pad with oil back and forth across the area while applying pressure.
10. Press the Stop button two times.
11. Wipe the Fabric Guide with the same cloth to remove any excess oil and debris that may be present.
12. Clean the Fabric Guide with a clean dry pad.
13. Reinstall the following:
 - a. Oil Dispense Assembly (REP 10.7)
 - b. Stripper Finger Assembly (REP 10.6)
14. Remove the magnet from the Copy Feed Shelf Interlock Switch and raise the Copy Feed Shelf.
15. Perform the Fuser Temperature Adjustment (ADJ 10.1).

16. Exit diagnostics and select a quantity of 6 to make 6 copies of the blank side of the test pattern (82E5980) (all white) to remove any excess oil from the Fuser Roll surface.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The Stripper Finger Assembly **WILL** be hot.

17. Use a thick soft clean cloth to wipe any excess Fuser Oil from the ends of the Fuser Roll and the Fabric Guide.
18. Reinstall the Stripper Finger Assembly (REP 10.6).

REP 10.10 Oil Dispense Roll Assembly

Parts List on PL 10.5

Removal



WARNING

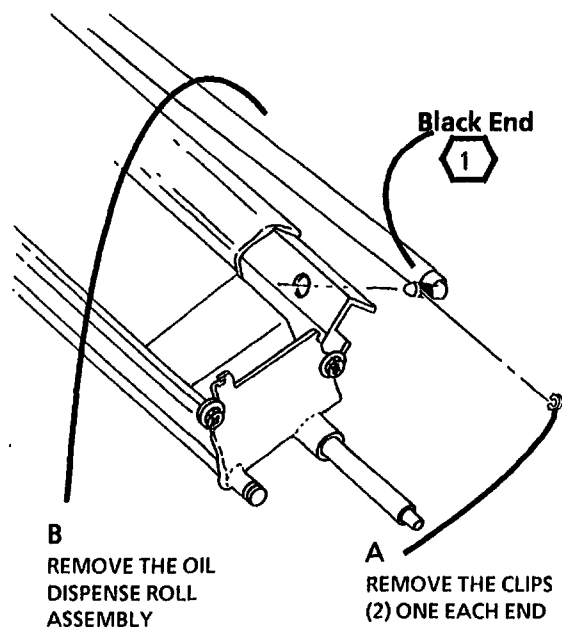
Switch off the Main Power Switch. Disconnect the Power Cord.

1. Lower the Front Latching Cover.
2. Remove the following:
 - a. Stripper Finger Assembly (REP 10.6)
 - b. Oil Dispense Assembly (REP 10.7)
3. (Figure 1): Remove the Oil Dispense Roll Assembly.

Replacement



Install the Oil Dispense Roll with the black end on the right end of the Oil Dispense Assembly as shown in Figure 1 of the removal procedure.



W2666

Figure 1. Remove the Oil Dispense Roll Assembly

REP 10.11 Wick

Parts List on PL 10.5

Removal



WARNING

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

1. Lower the Front Latching Cover.
2. Remove the following:
 - a. Stripper Finger Assembly (REP 10.6)
 - b. Oil Dispense Assembly (REP 10.7)
 - c. Oil Dispense Roll Assembly (REP 10.10)
 - d. Oil Pads (REP 10.9)
3. (Figure 1): Remove the Wick.

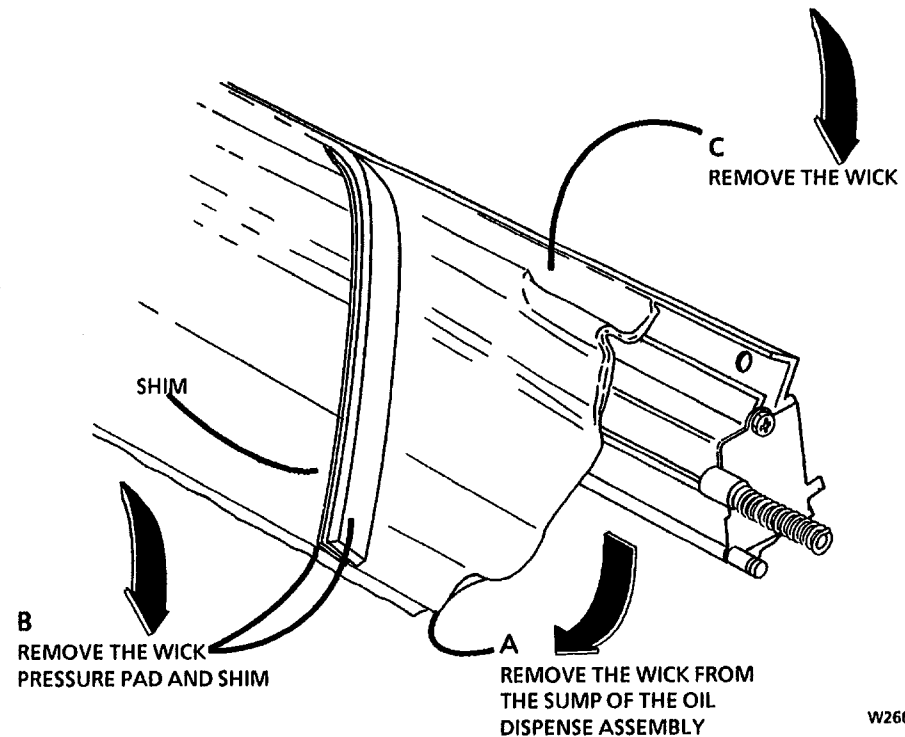


Figure 1. Removing the Wick

Replacement

- 1** *STEPS 1 A and B: Ensure that the pressure pad does not stretch while installing it. The length of the pressure pad should not exceed the length of the wick. Trim any extra length off.*
- 2** *STEPS 1 B and C: Center the Wick. Ensure that the holes at each end are not covered.*

1. (Figure 2): Prepare to install the Wick.

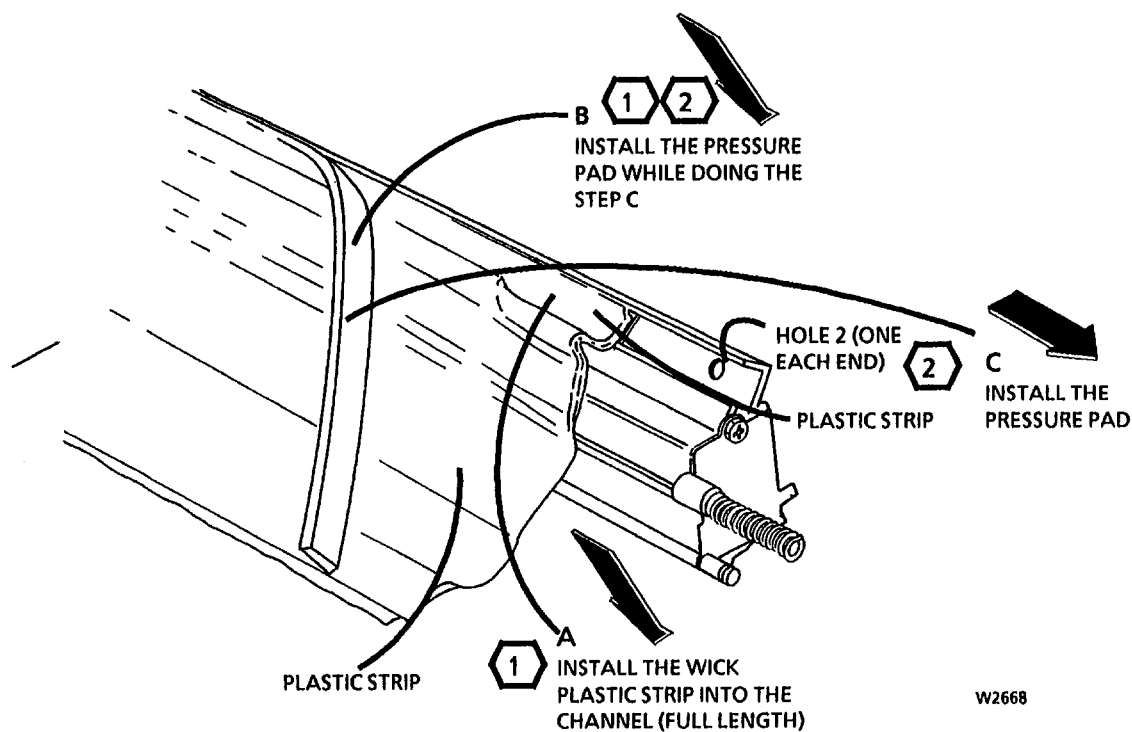


Figure 2. Prepare to Install the Wick

2. (Figure 3): Install the Wick.

3. Install the Oil Pads (REP 10.9).

3 STEP 4 C: Ensure that the holes at each end are not blocked by the wick after installing the shim.

4. (Figure 4): Install the Shim.

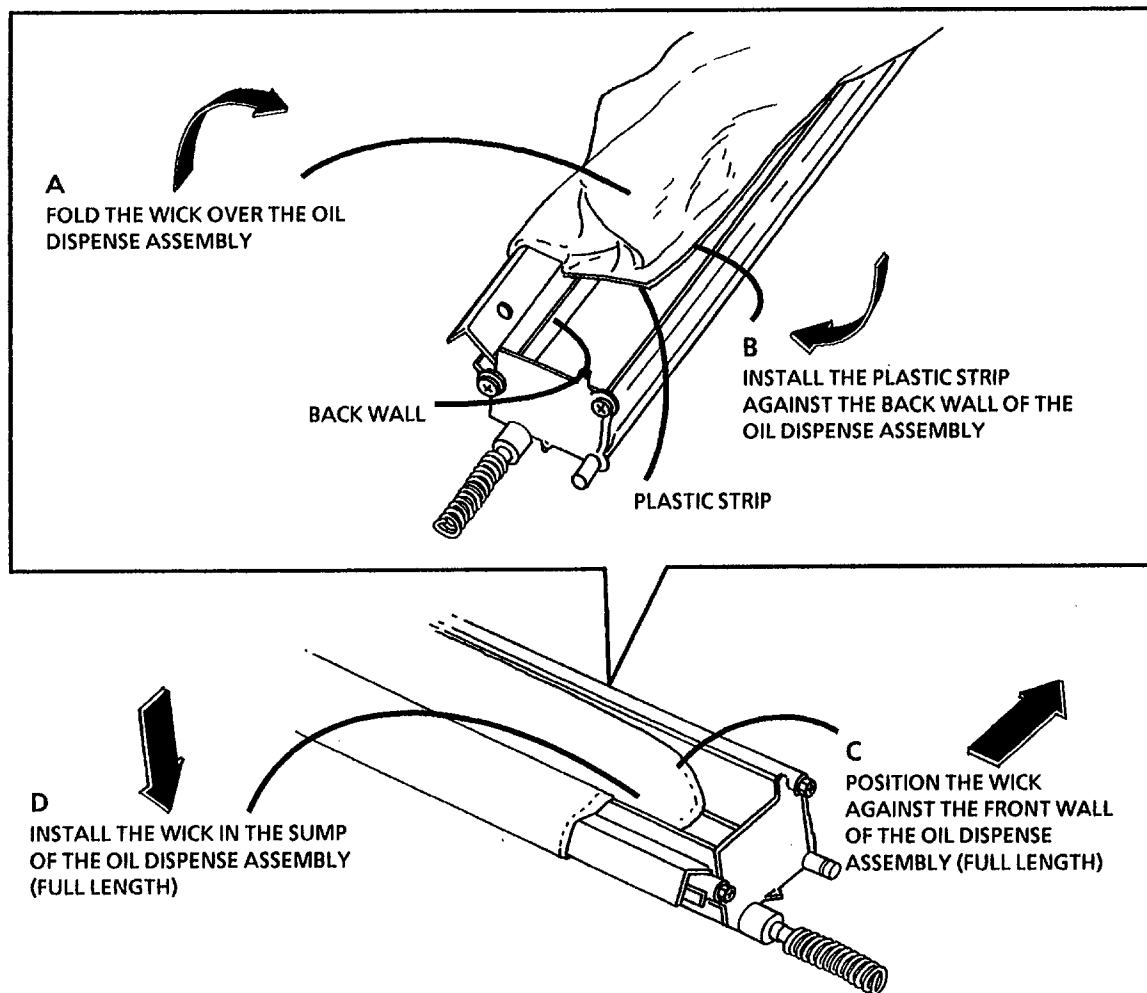
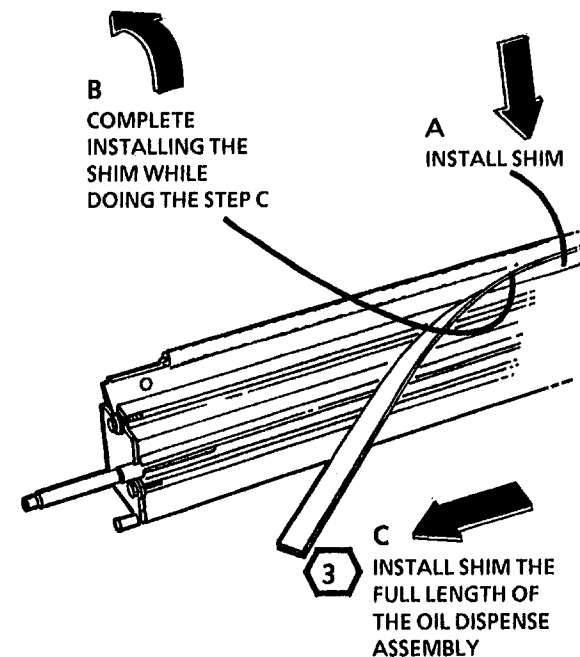


Figure 3. Install the Wick

W2669



W2670

Figure 4. Install the Shim

5. Clean the Oil Dispense Roll with film remover.
6. Reinstall the Oil Dispense Roll (REP 10.10).

(Continued)



WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll **WILL** be hot.



WARNING

Ensure that the area where components with fuser oil is present is protected by a drop cloth. Clean any fuser oil spills with warm water and soap to avoid the possibility of bodily injury due to falls.

7. Connect the Power Cord and enter diagnostics.
8. Place a magnet on the Copy Feed Shelf Interlock Switch.
9. Enter the code [09 21 4] and wait for the Fuser roll to warm to run temperature.



If [09 21 4] times out while performing the oiling process, re-enter the code [09 21 4] and continue.

10. Apply part of an 8cc tube of fuser oil (93E00811) to a folded soft cloth.
11. Wipe the fuser oil soaked cloth evenly across the entire surface of the Fuser Roll.
12. Repeat Steps 10 and 11 until the entire contents of the tube of oil is used.



Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

13. Inspect for dry and/or contaminated areas on the Fuser Roll. If dry or contaminated areas are found, wipe the pad with oil back and forth across the area while applying pressure.
14. Press the Stop button two times.
15. Wipe the Fabric Guide with the same cloth to remove any excess oil and debris that may be present.
16. Clean the Fabric Guide with a clean dry pad.
17. Reinstall the following:
 - a. Oil Dispense Assembly (REP 10.7)
 - b. Stripper Finger Assembly (REP 10.6)
18. Remove the magnet from the Copy Feed Shelf Interlock Switch and raise the Copy Feed Shelf.
20. Perform the Fuser Temperature Adjustment (ADJ 10.1).

21. Exit diagnostics and select a quantity of 6 to make 6 copies of the blank side of the test pattern (82E5980) (all white) to remove any excess oil from the Fuser Roll surface.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The Stripper Finger Assembly **WILL** be hot.

22. Use a thick soft clean cloth to wipe any excess Fuser Oil from the ends of the Fuser Roll and the Fabric Guide.
23. Reinstall the Stripper Finger Assembly (REP 10.6).

REP 14.1 Right and Left Side Doors

Parts List on PL 14.1, PL 14.2

Removal



WARNING

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

1

This procedure shows the removal of the Left Side Door. Use the same technique to remove the Right Side Door.

1. (Figure 1): Remove the Left Side Door.

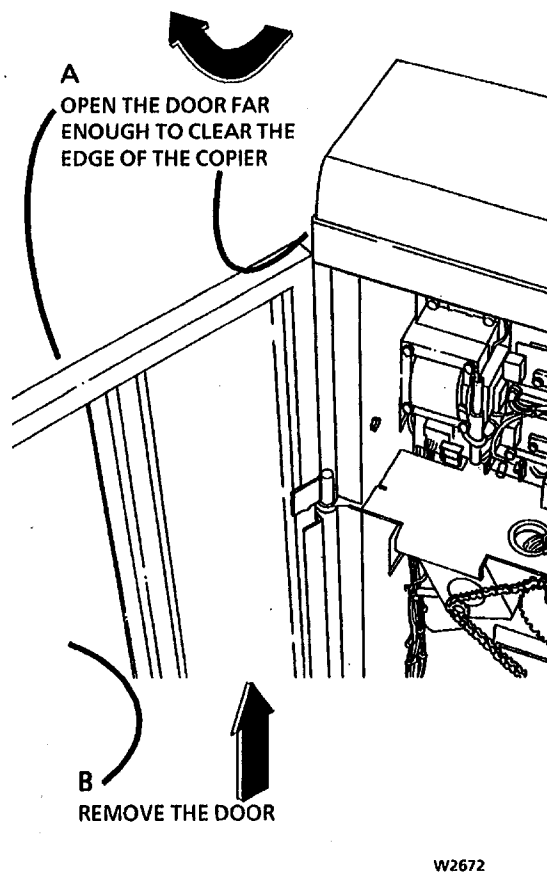


Figure 1. Remove the Left Side Door

Replacement

1. (Figure 2): Install the Left Side Door.

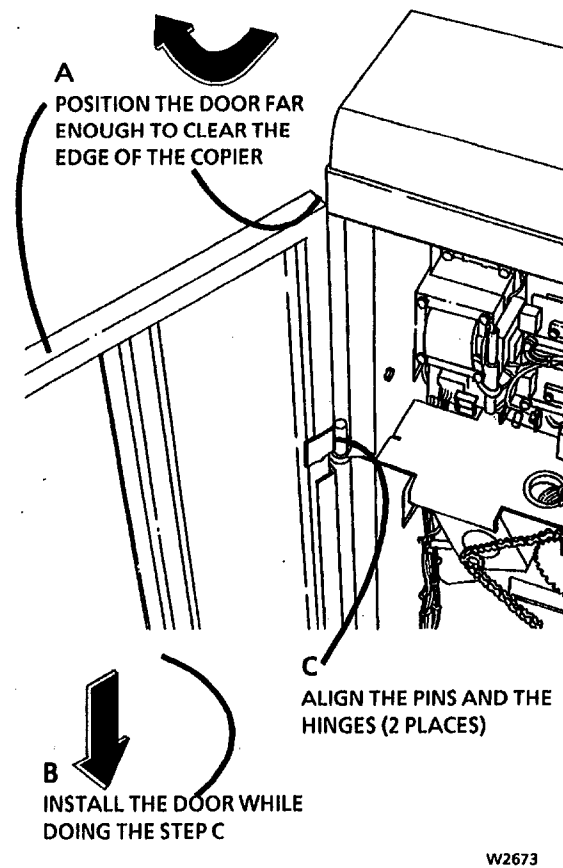


Figure 2. Install the Left Side Door

ADJ 3.2 Country Configuration

Purpose

The purpose of this procedure is to set up the correct input power, media width, and billing meter configuration.

Adjust

- 1. Enter the diagnostic mode.
- 2. Enter the code [0261].
- 3. To adjust the Input power configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value that is displayed on the Control Console.

- | Adj | Configuration |
|-----|---------------|
| 0 | 50 Hz |
| 1 | 60 Hz |
- 4. Press the **Start** button to enter the new value.
 - 5. Press the **Stop** button two times.

- 6. Enter the code [0262].
- 7. To adjust the media width configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value displayed on the Control Console.

- | Adj | Configuration |
|-----|---------------|
| 1 | inch |
| 2 | A |
| 3 | inch and A |
| 4 | A and B |
| 5 | All |
- 8. Press the **Start** button to enter the new value.
 - 9. Press the **Stop** button two times.
 - 10. Enter the code [0263].
 - 11. To adjust the billing meter configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value displayed on the Control Console.

- | ADJ | CONFIGURATION |
|-----|---------------|
| 0 | feet |
| 1 | metric |
- 12. Press the **Start** button to enter the new value.
 - 13. Exit the diagnostic mode.

ADJ 5.1 Copy Size Adjustment

Purpose

The purpose of this adjustment is to obtain a size-for-size copy of the Document on the customer supplied media. The size of the image is adjusted by changing the speed at which the document is scanned. This adjustment compensates for the media stretching or shrinking as the media passes through the copier.

Prerequisite

Perform the Check/ Adjustment of the Fuser Temperature (Through NVM) (ADJ 10.1).

Check

1 The test pattern 82E5980 must be fed long edge first in the 36 inch (914mm) direction. Keep the copy media within the 36 inch (914mm) marks on the feed-in shelf.

1. Ensure that the copier is programmed for the correct media type. Review the **Customized Programs (P code) P41**. Refer to the User Guide.

2. Make 3 copies of test pattern 82E5980 on the customer supplied **20 pound (80GSM)** bond paper (roll and cut sheet).

2 To give the copy media time to stabilize, wait 5 minutes before checking the third copy with the test pattern. Discard the first 2 copies from the two media sources (roll and cut sheet media).

3. Place the third copy from the two media sources on top of the test pattern.
4. (Figure 1): Compare the **Vertical Mag. Scale** reference marks on the test pattern with the marks on the copy.

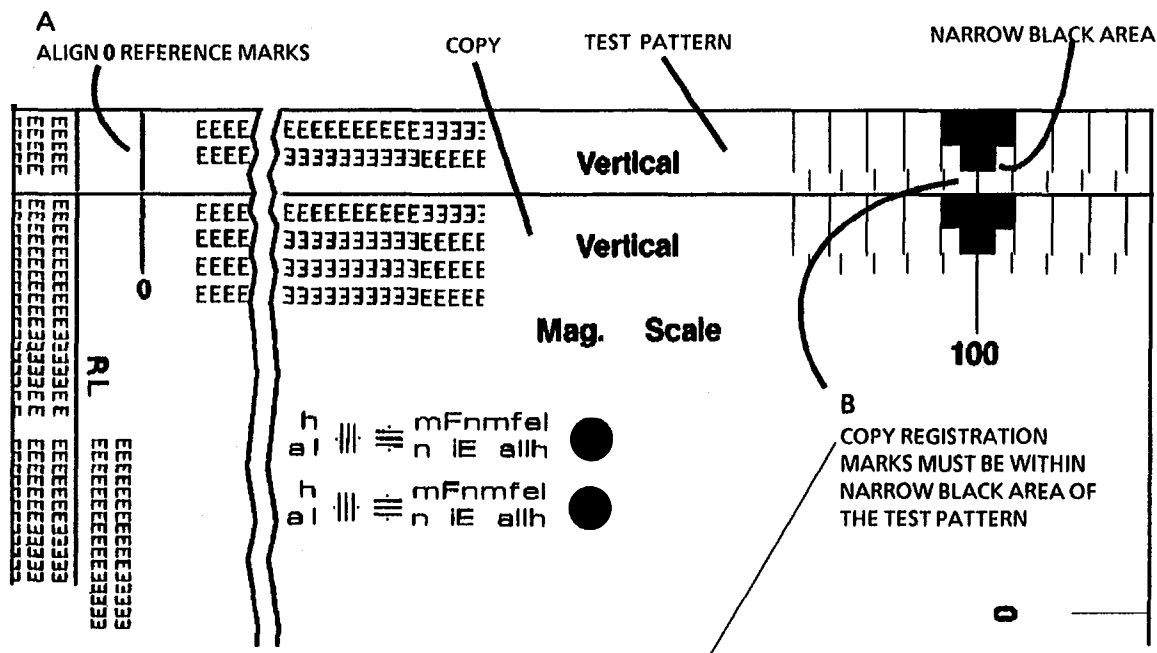



Figure 1. Compare the Reference marks on the Test Pattern with the Marks on the Copy

W2531

(Continued)

Adjustment

1. Enter the diagnostic mode.
 2. Enter the code [0601] in order to adjust the speed at which the Document Drive Motor drives the Document.
 3. Select Bond.
 4. Record the NVM value.
 5. Use the **Copy** contrast up arrow button in order to increase the Output value, or the **Copy** contrast down arrow button in order to decrease the Output value that is displayed on the Control Console. A change of 5 will equal approximately 1 mm.
 6. Press the **Start** button to store the new setting in NVM.
-  *When making a copy on cut sheet to check the adjustment, ensure that the correct Copy Media button is pressed. This will ensure the correct document speed is selected.*
7. Exit the diagnostic mode and repeat the **Check** and **Adjust** until the copy size is in specification.
 8. If the customer uses vellum and/ or film media, perform the **Check** and the **Adjustment** again while using film and/or vellum media.
 9. This adjustment affects other copier adjustments. Perform the following **Check/ Adjustments** in the sequence as listed:
 - a. Image Registration (ADJ 8.1)
 - b. Auto Length (ADJ 8.2)

ADJ 5.2 Document Stop Positions Check

Purpose

The purpose of this adjustment is to ensure that the leading or trailing edge of the document does not stop over the lens. When the document is over the lens at the start or end of scan, streaks will occur on the leading or trailing edge of the copy.

1. Remove the Document Handler.

1 The document must be approximately 5/16 inch (8 mm) from the center of the lens.

2. (Figure 1): Mark the position of the start of scan and the end of scan on the back of the document.

3. Reinstall the Document Handler.

4. Select Lead Margin, Trail Margin and a quantity of 5 in the normal run mode.

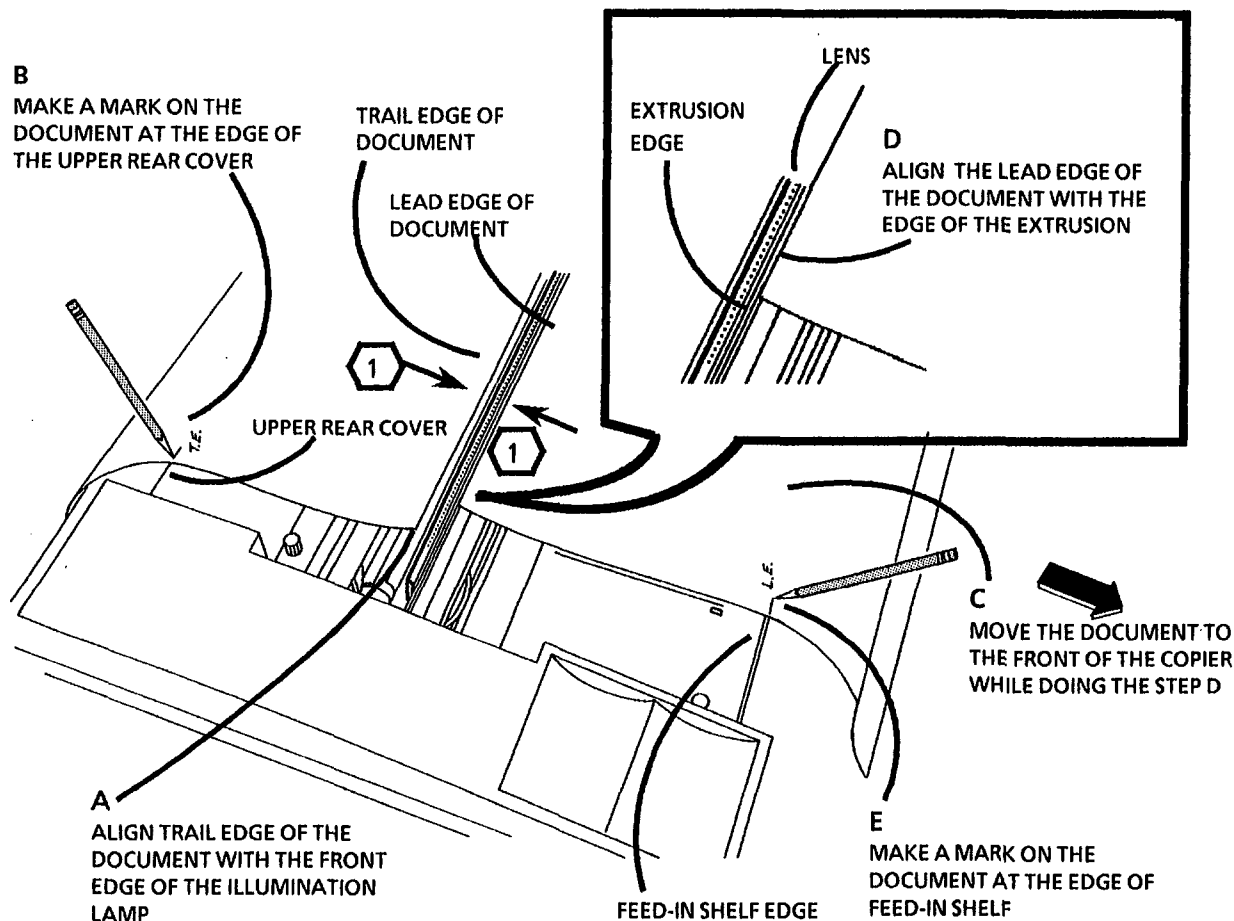


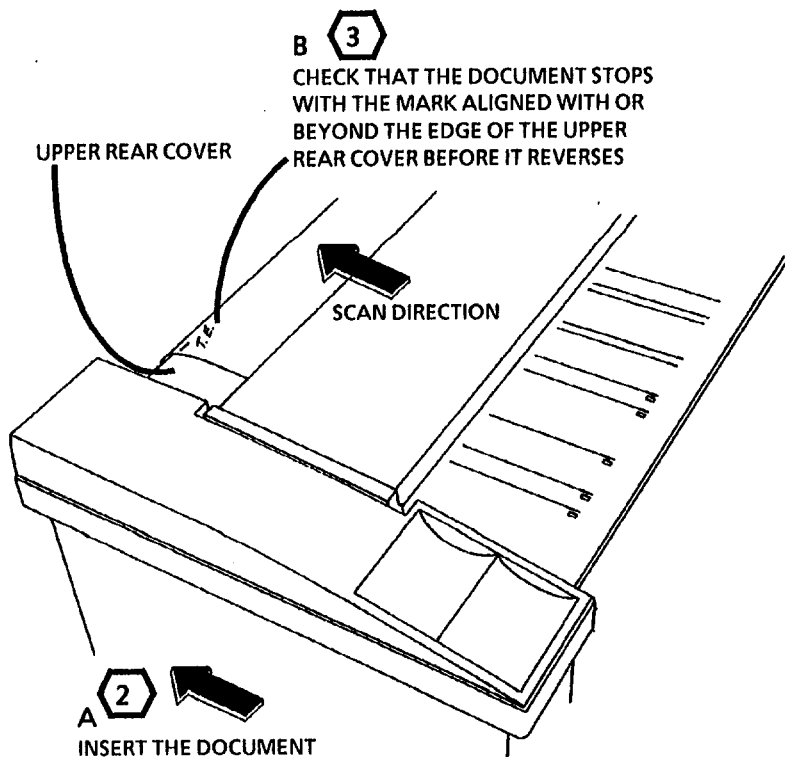
Figure 1. Mark the scan positions

2 **STEP 5 A:** Before inserting the document, read steps B and C in figure 2. The check will be made while the document is moving.

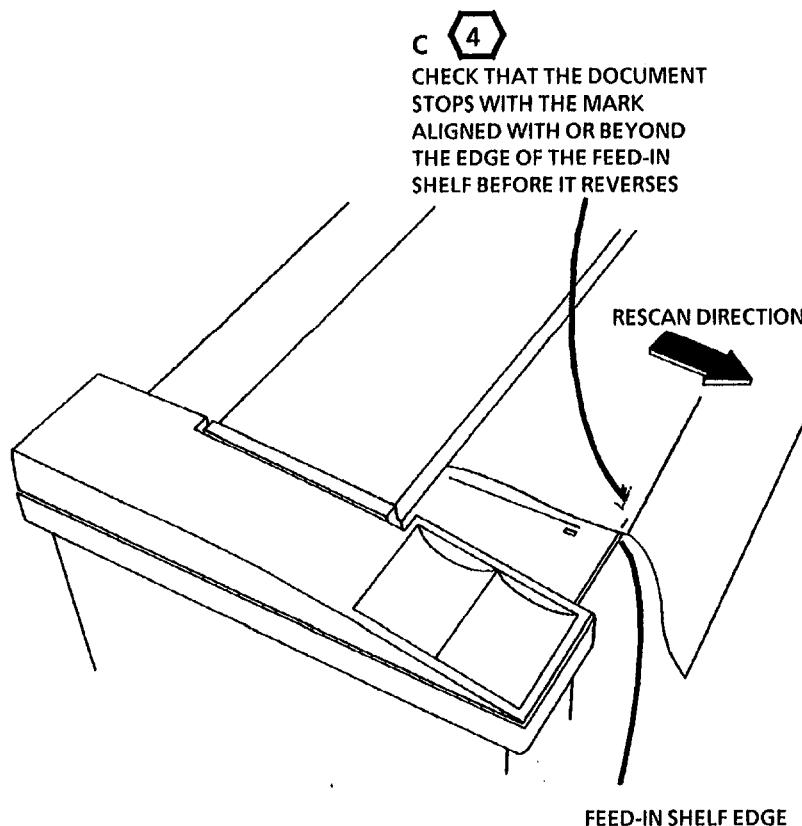
3 **STEP 5 B:** The trailing edge mark made in the step 2 must be at the edge of the upper rear door or beyond.

4 **STEP 5 C:** The leading edge mark made in the step 2 must be at the edge of the feed-in shelf or beyond.

5. (Figure 2): Check the trail edge position and the lead edge position..



W2533



W2534

Figure 2. Check the trail edge position and the lead edge position

(Continued)

Adjustment

1. If the trailing edge mark checked in step 5 is not at or beyond the edge of the upper rear cover, enter the diagnostic mode.
2. Enter the code [0561].



Each increment represents approximately 1/32 inch (1 mm) movement of the document.

3. Increase the value to have the document trailing edge move farther from the front of the copier, decrease the value to have the document trailing edge move towards the front of the copier.
4. Repeat the check.
5. If the leading edge mark checked in step 6 is not at or beyond the edge of the feed-in shelf, enter the diagnostic mode.
6. Enter the code [0562].



Each increment represents approximately 1/8 inch (3.5 mm) movement of the document.

7. Increase the value to have the document leading edge move farther from the rear of the copier, decrease the value to have the document leading edge move towards the rear of the copier.
8. Repeat the check.

ADJ 8.1 Image Registration

Purpose

The purpose is to obtain the correct registration of the image on the copy. The correct registration is obtained by adjusting the time at which the Media Transport Drive Motor is energized. The motor drives the Registration Drive Rolls which drive the media to the drum.

Prerequisite

Perform the following Check/ Adjustments in the sequence as listed:

- a. Fuser Temperature (NVM) (ADJ 10.1)
- b. Copy Size Adjustment (ADJ 5.1).

Check

1. The test pattern **82E5980** must be fed long edge first. Keep the copy media within the **USO MAX (RX A0/A1)** marks on the feed-in shelf.
1. Make 3 copies of the test pattern **82E5980**, using bond media.
2. STEP 3 A: Folding the copy in half will allow measuring the length of the copy media in the middle.
2. (Figure 1): Fold the copy.

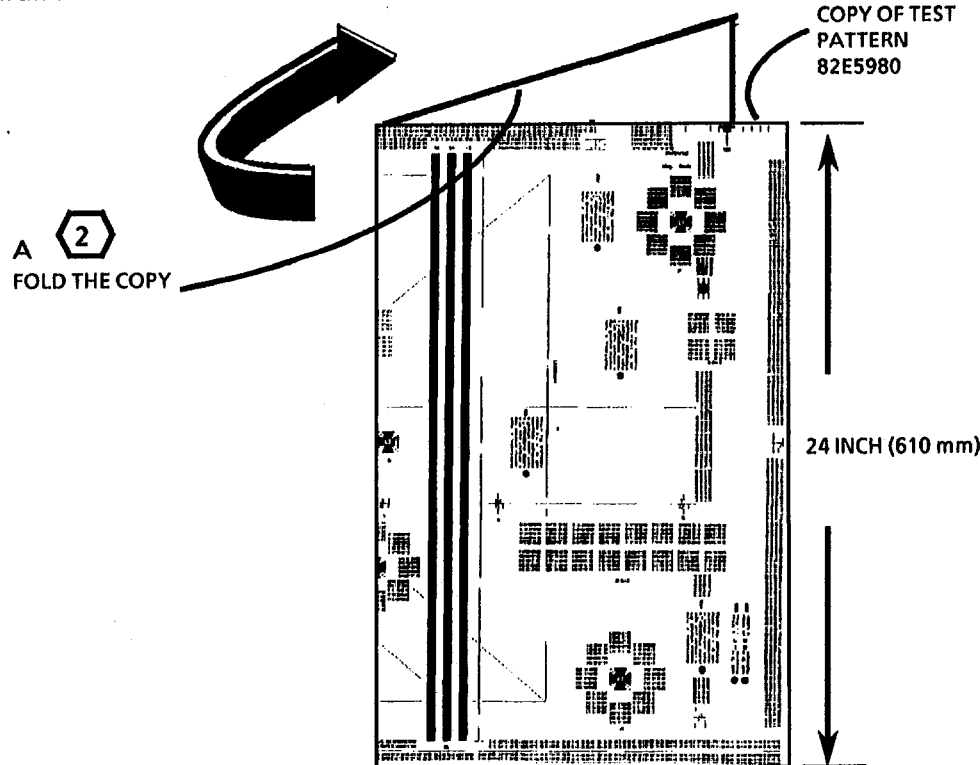


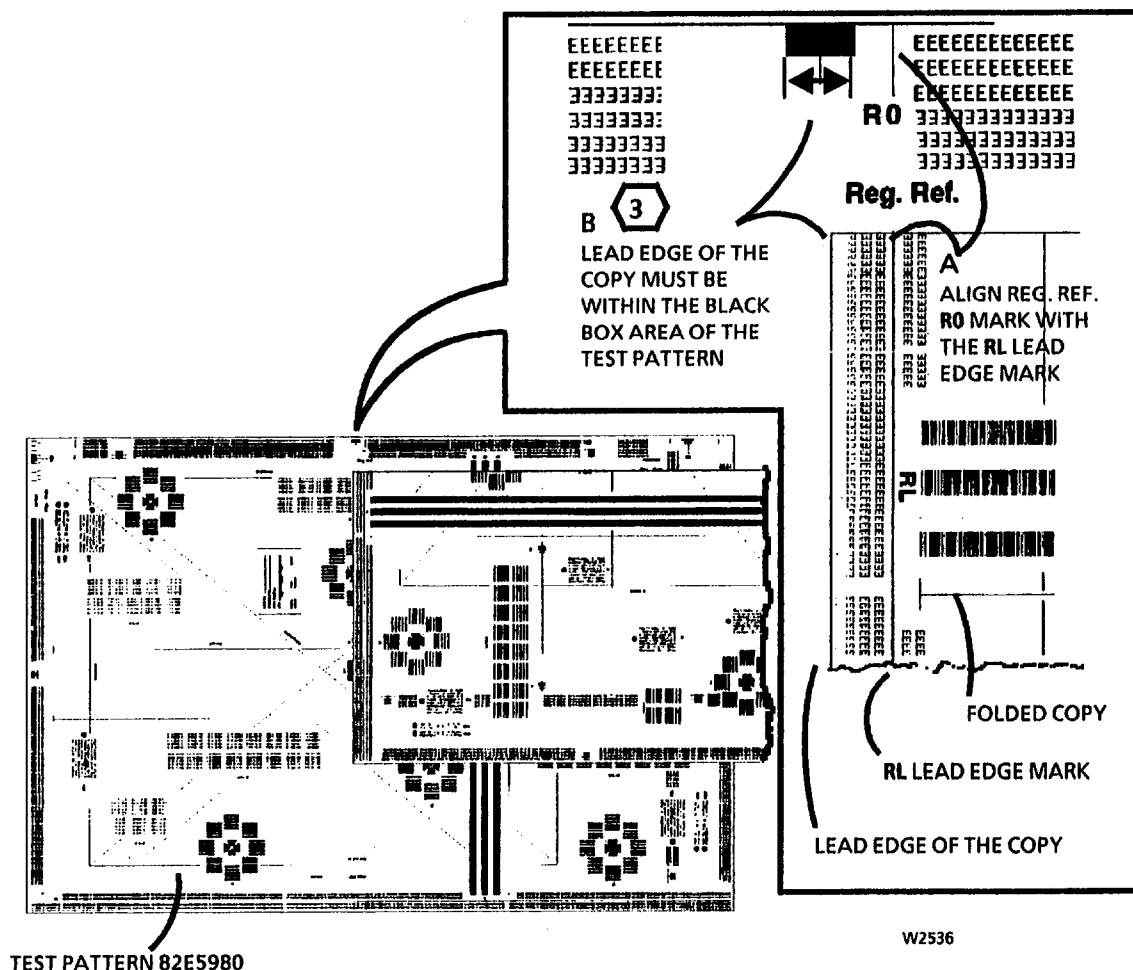
Figure 1. Fold the Copy

W2535

(Continued)

3 **STEP 3 B:** *The Lead Edge at the center of the copy must be within the black box area of the test pattern.*

3. (Figure 2): Check the image registration of the copy.



Adjustment

1. Enter the diagnostic mode.
2. Enter the code [0860] in order to adjust the time at which the Media Transport Drive Motor is energized.
3. Select [Bond].

4 *Each increment will change the lead edge by approximately 1/32 inch (0.8 mm).*

4. Use the Copy contrast UP button to make the lead edge shorter and the Copy contrast DOWN button to make the lead edge longer.
5. Press the Start button to enter the new value into NVM.
6. Exit the diagnostic mode.
7. Perform the Check.
8. Repeat this adjustment until registration is within specification.
9. If the customer uses vellum and/or film media, select the appropriate media and perform the Check and Adjustment while using the film or vellum.
10. This adjustment affects another copier adjustment. Perform the Check/Adjustment of the Auto Length (ADJ 8.2).

ADJ 8.2 Auto Length

Purpose

The purpose is to obtain the correct copy length. The correct copy length is obtained by adjusting the time at which the Cutter Drive Motor is energized. The motor when energized, drives the Cutter Bar which rotates to cut the media.

Prerequisite

Perform the following Check/ Adjustments in the sequence as listed:

- a. Fuser Temperature Adjustment (ADJ 10.1)
- b. Copy Size Adjustment (ADJ 5.1)
- c. Image Registration (ADJ 8.1)

Check

1. Make 3 copies of test pattern 82E5980 using bond media.

1 To give the copy media time to stabilize, wait 5 minutes before checking the third copy with the test pattern. Discard the first 2 copies.

2 STEP 2 A: Folding the copy in half will allow measuring the length of the copy media in the middle.

2. (Figure 1): Fold the copy in half.

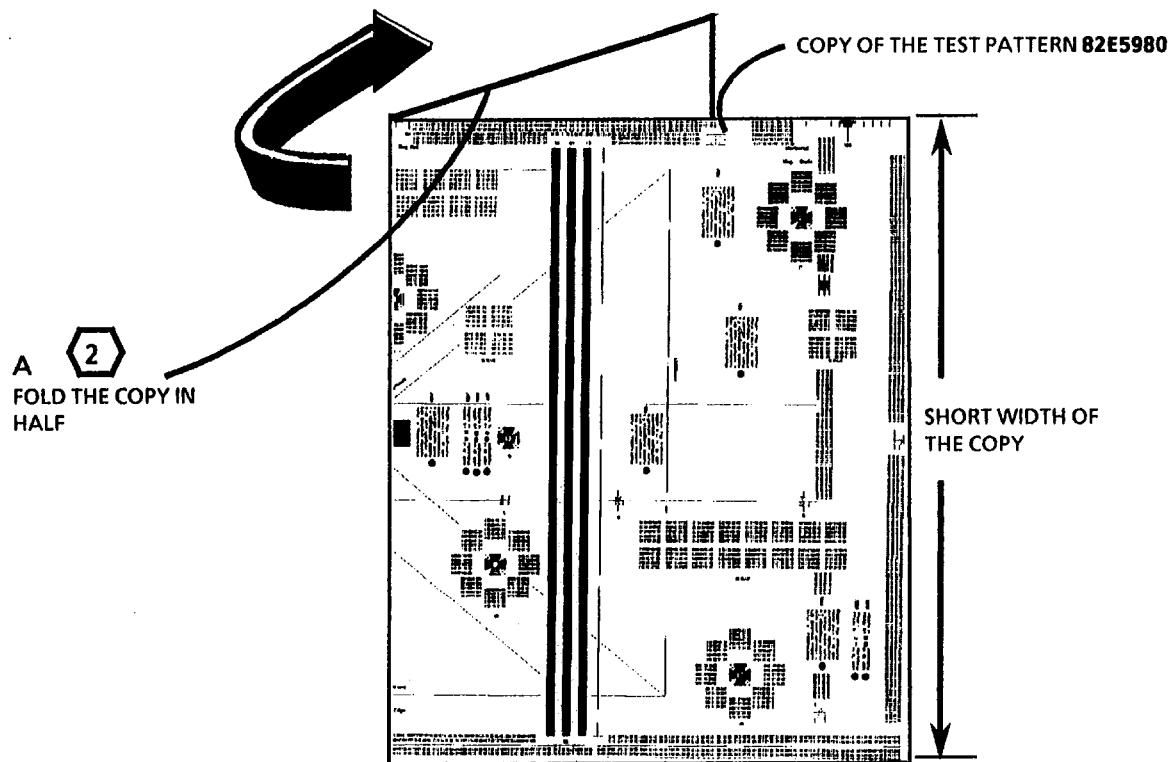


Figure 1. Folding the Copy in Half

W2537

3. (Figure 2): Check the length difference between the test pattern and the copy.

Adjustment

1. Enter the diagnostic mode.
2. Enter the code [0862] in order to adjust the time at which the Cutter Drive Motor is energized.

3. Each increment on the display equals 1/8 inch (0.8 mm) of change on the copy.

3. Use the Copy contrast UP arrow button in order to increase the length of the copy media, or the Copy contrast DOWN arrow button in order to decrease the length of the copy media.
4. Press the Start button in order to enter the new value into NVM.
5. Exit the diagnostic mode.
6. Repeat the Check/Adjust until the copy is within $\pm 1/8$ inch (± 3.0 mm) of the test pattern.

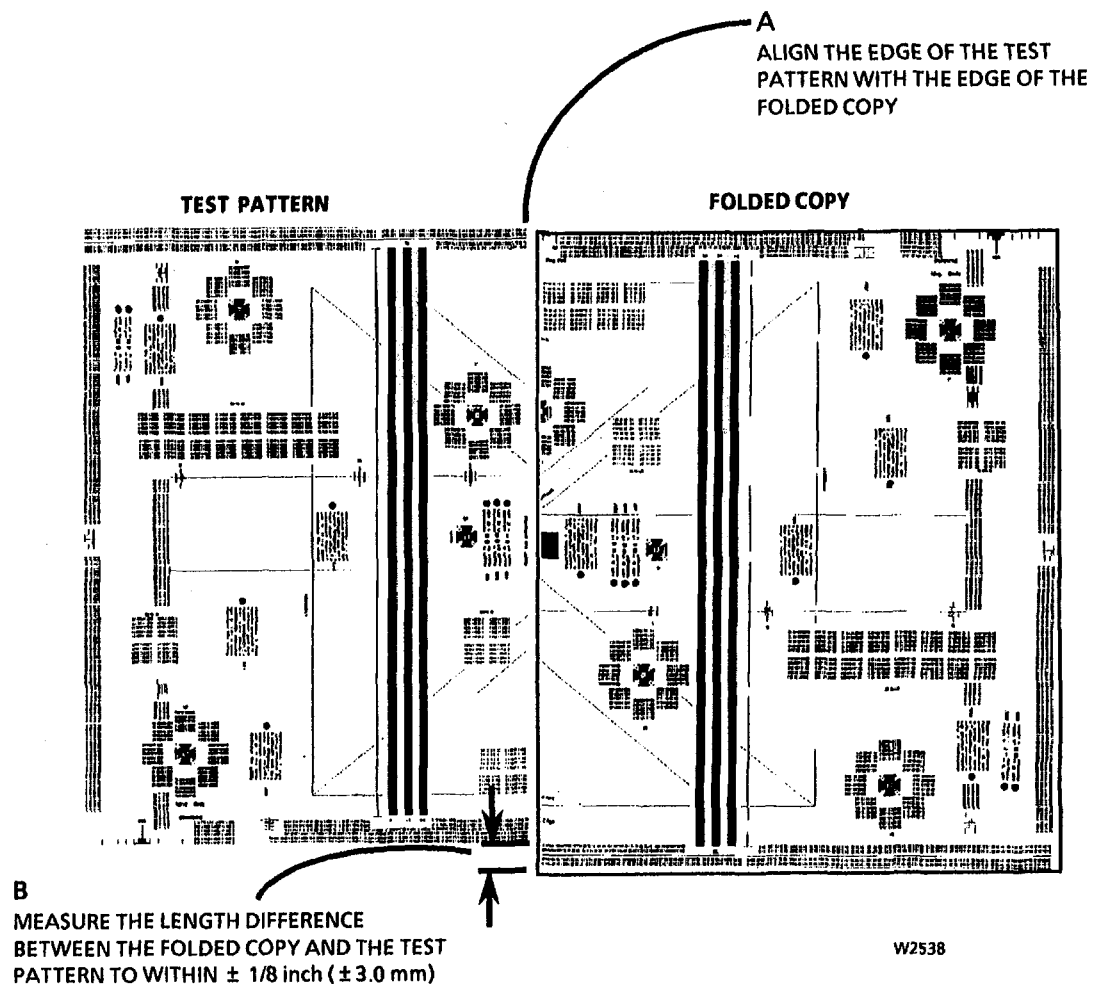


Figure 2. Measure the Length Difference Between the Test Pattern and the Copy

ADJ 8.3 Key In inch/mm Copy Length

Purpose

The purpose of this adjustment, is to adjust the length of the copy media to be within $\pm 3/32$ inch ($\pm 2\text{mm}$) of the length selected when using the Key In inch/mm feature.

Prerequisite

Perform the following Check/ Adjustments in the sequence as listed:

- a. Fuser Temperature (NVM) (ADJ 10.1)
- b. Copy Size Adjustment (ADJ 5.1).

Check

1. Make one 24 inch (600 mm) copy using the type of media that is being checked.
 - a. Press the **Key In inch** button, then enter 24 using the numeric key pad.
 - b. Press the **Qty** button, then enter 3 using the numeric key pad.
 - c. Press **Start**.
 - d. Measure the length of the copy in the process direction.
2. Press the **Clear** button.
3. Make one 48 inch (1200 mm) copy using the type of media that is being checked.
 - a. Press the **Key In inch** button, then enter 48 using the numeric key pad.
 - b. Press the **Qty** button, then enter 3 using the numeric key pad.
 - c. Press **Start**.
 - d. Measure the length of the copy in the process direction.
4. The copy lengths should be $\pm 3/32$ inch ($\pm 2\text{mm}$) of the length selected, if not, perform the Adjustment.

Adjustment

1. Enter the diagnostic mode.
2. Enter the code [0700], the following will be displayed:

**07 00 BOND KEY IN INCH/MM ADJUSTMENT
SELECT [1] KEY IN INCH OR [2] KEY IN MM**

3. Select [1], **KEY IN INCH**, the following will be displayed:

**07 00 KEY IN INCH
[1] - RESET TO DEFAULT, [2] - ADJUST**

4. Select [1] **RESET TO DEFAULT**.

1 *The Media Type leds will begin flashing. Before pressing the Start button, the selection can be changed by pressing the selected button again. The leds will begin flashing again.*

5. Press the **Media Type** button for the type of media being used, then press **Start**.
6. Exit the diagnostic mode and repeat the Check again.
7. If the copy length is not within specification, continue with step 8.
8. Enter the diagnostic mode.
9. Enter the code [0700], the following will be displayed:

**07 00 BOND KEY IN INCH/MM ADJUSTMENT
SELECT [1] KEY IN INCH OR [2] KEY IN MM**

10. Select [1], **KEY IN INCH**, the following will be displayed:

07 00 KEY IN INCH

[1] - RESET TO DEFAULT, [2] - ADJUST

11. Select [2] **ADJUST**.

2 *The Media Type leds will begin flashing. Before pressing the Start button, the selection can be changed by pressing the selected button again. The leds will begin flashing again.*

The following message is displayed:

**07 00 BOND KEY IN INCH ADJUSTMENT
LENGTH OF 24 INCH COPY IS 0.00 [START]**

12. Enter the copy length measured in Step 1d and press **Start**., the following will be displayed:

**07 00 BOND KEY IN INCH ADJUSTMENT
LENGTH OF 48 INCH COPY IS 0.00 [START]**

(Continued)

(Continued)

13. Enter the copy length measured in Step 2d and press **Start**.

The following message is displayed:

07 00 BOND MEASURED VALUES CORRECT?
24 = XX.XX, 48 = XX.XX [YES][NO]

14. If the values displayed are the same as those entered in Steps 12 and 13, press **[YES]** ;

If the values are not the same, press **[NO]** and repeat Steps 12 and 13.

When **[YES]** is pressed, the following message is displayed:

07 00 BOND KEY IN INCH
ADJUSTMENT COMPLETE

15. Exit the diagnostic mode and repeat the Check.

ADJ 9.2 Electrostatic Series

- 1** *The Electrostatic Series must be performed in the exact sequence as written when setting up a new or used photoreceptor drum to nominal parameters.*

Purpose

The purpose is to adjust the corotron outputs and the photoreceptor background voltage in order to obtain good copy quality as specified in Section 3 of this manual.

- 2** *When setting the Electrostatic parameters with a new photoreceptor drum, the image density will be slightly lighter than with a used photoreceptor drum. To ensure that the photoreceptor drum is correctly conditioned before doing the electrostatic series or part within the series, perform the next step.*

1. **Used Photoreceptor Drum:** Run one copy and wait 3 minutes.

New Photoreceptor Drum: Run 25 feet (7.6 meters) of copy and wait 3 minutes.

2. Switch off the power.
3. Open the Left Side Door.

- 3** *STEP 4 B: Install the probe into the end of the probe holder that has part number of the probe holder on the side. When installing the probe, align the indent on the probe with the edge of the probe holder. Ensure that the indent is adjacent to the corner with the dot.*

4. (Figure 1): Install Electrometer Probe in the Probe Holder.

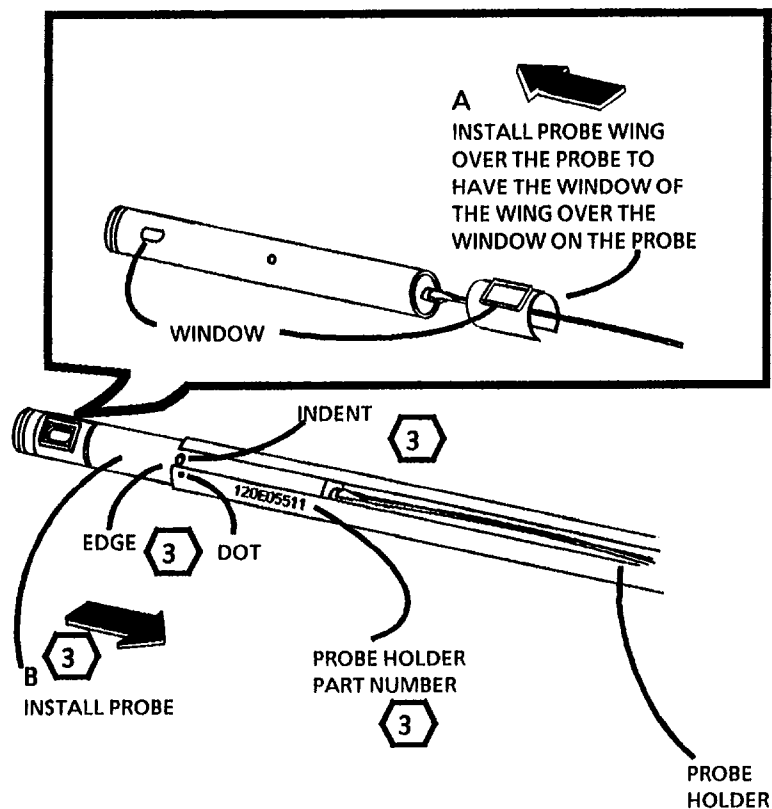


Figure 1. Install the Electrometer Probe in the Probe Holder

W2539

4 STEP 5 A: To position the probe in the center of the photoreceptor, ensure that the mark on the probe holder is aligned with the edge of the frame.

5 Window in the probe must face the photoreceptor.

6 Place two sheets of clean white paper on the entire surface of the Platen under the Document Handler. This prevents light leaks when setting the charge voltage and ensures the correct conditions for checking the background voltages.

6 For correct operation of diagnostics, ensure that the document handler is fully seated.

5. (Figure 2): Install the Electrometer Probe.

7. Install the Document Handler.

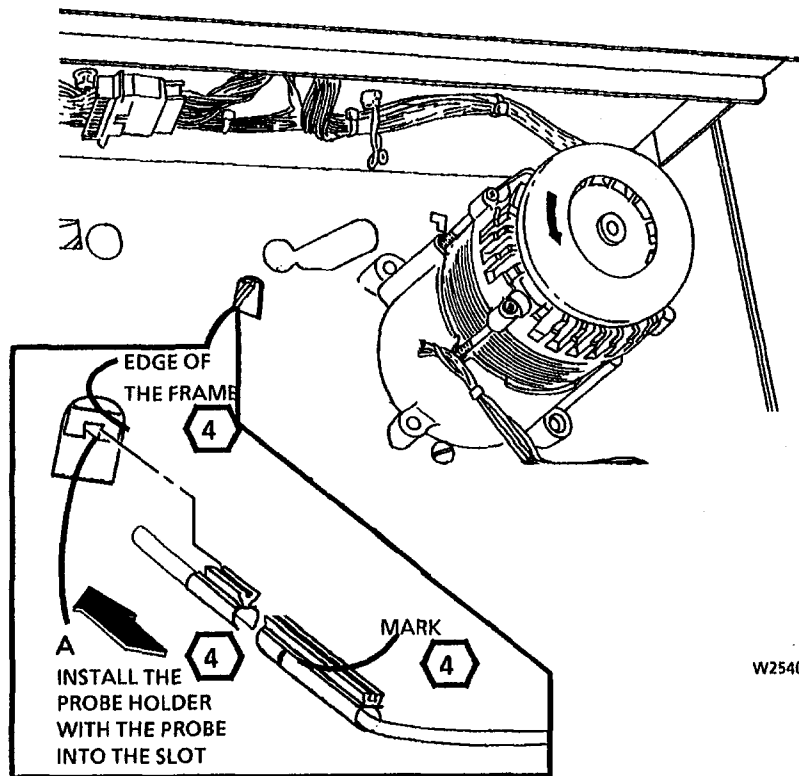


Figure 2. Install the Electrometer Probe

8. (Figure 3): The correct position of the electrometer, meter and the leads.

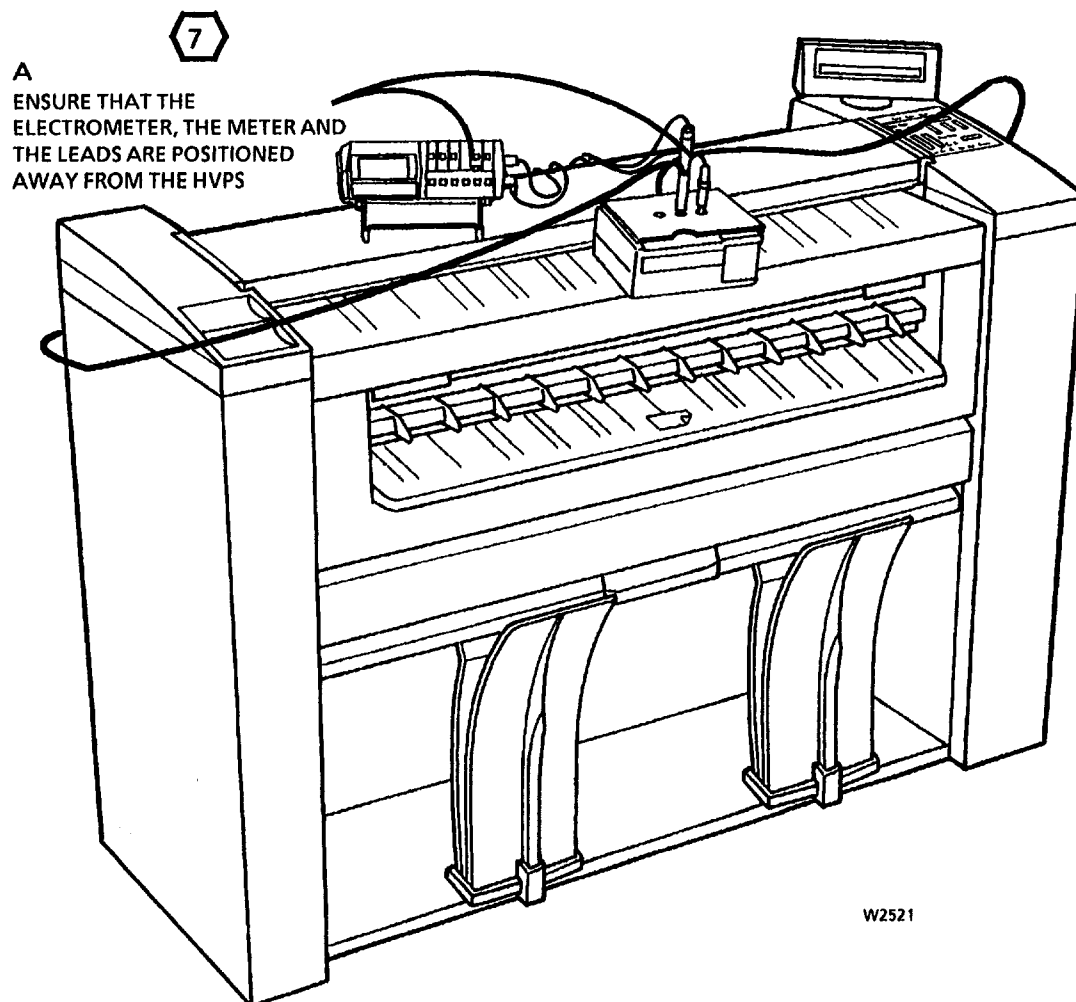


Figure 3. The Correct Position of the Electrometer, Meter and the Leads

7 **STEP 8 A:** The electrometer, meter and the leads must be positioned away from the HVPS in order to obtain the correct voltage measurement. The meter and electrometer must also be separated as shown in Figure 3. Position the electrometer, meter, and the leads in this way for the remainder of the procedure. Do not connect the meter and the electrometer at this time. The purpose of this illustration is to show the correct position. Attach the components as needed in subsequent steps.

Transfer/Detack Check and Adjust

9. Enter the diagnostic mode.

- 8 The code [1] must be added to the code [0921] to turn the transfer / detack corotron on.



WARNING

There will be a time delay between the time the code [0921-1] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

10. Enter the code [0921-1].

- 9 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

- 10 STEPS 11 B and C and 12 B: Ensure that the probe tips do not touch the machine frame. Touching the machine will result in no readings.

11. (Figure 4): Adjust the detack corotron voltage.

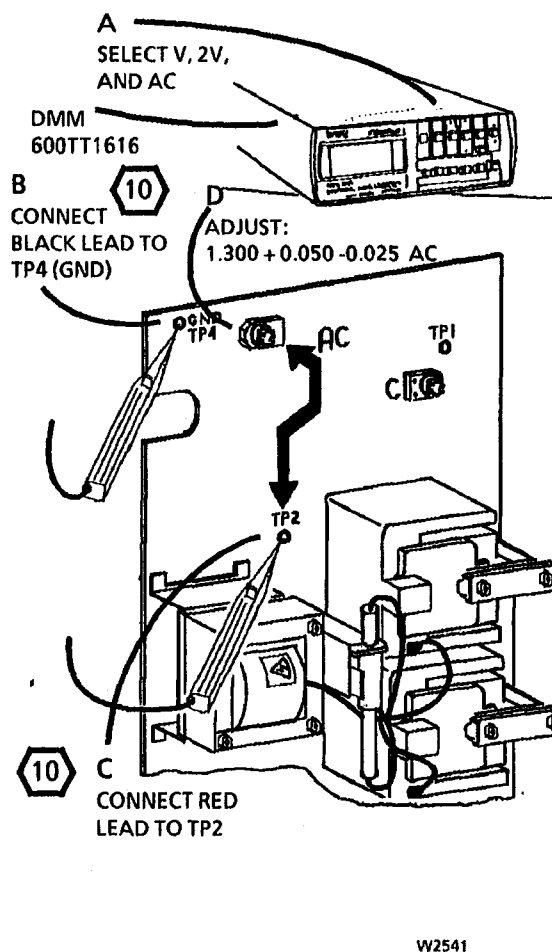


Figure 4. Adjustment of the Detack Corotron

- 11 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

12. (Figure 5): Adjust the transfer corotron voltage.

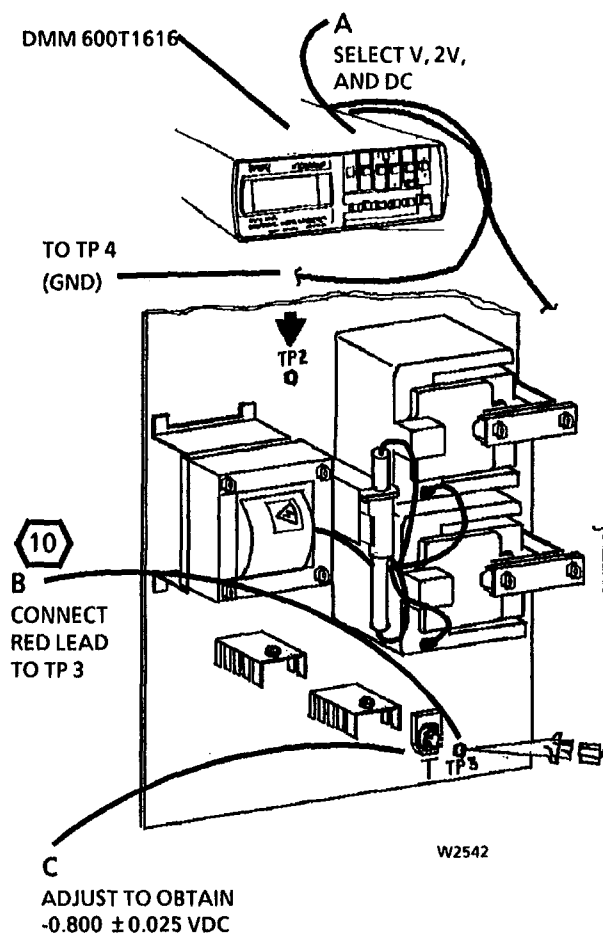


Figure 5. Adjust the Transfer Corotron

Charge Check and Adjust

13. (Figure 6): Connect the DMM to the Electrometer.

12 If the LOW BATTERY light stays on, replace the batteries. DO NOT continue the electrostatic series if the LOW BATTERY light is on.



WARNING

There will be a time delay between the time the code [0921-2] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

14. Enter the code [0921-2]

13 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

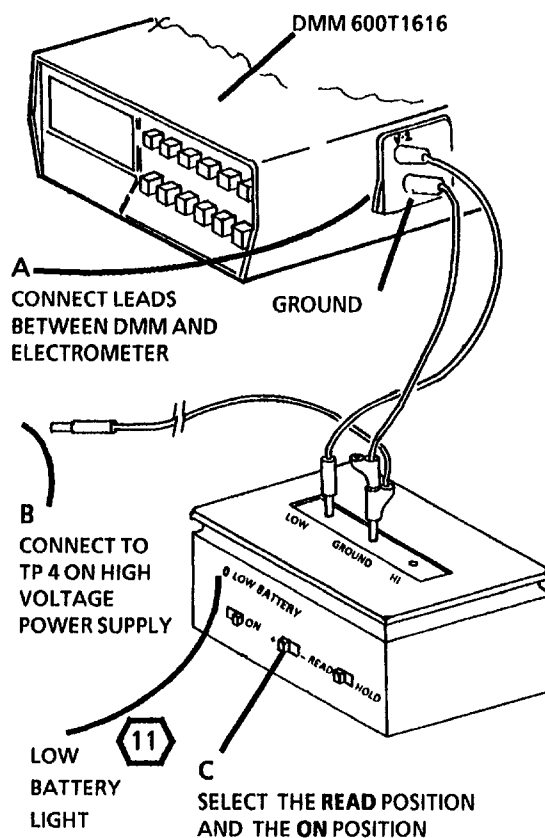


Figure 6. Connecting the Electrometer

15. (Figure 7): Adjust the charge voltage.

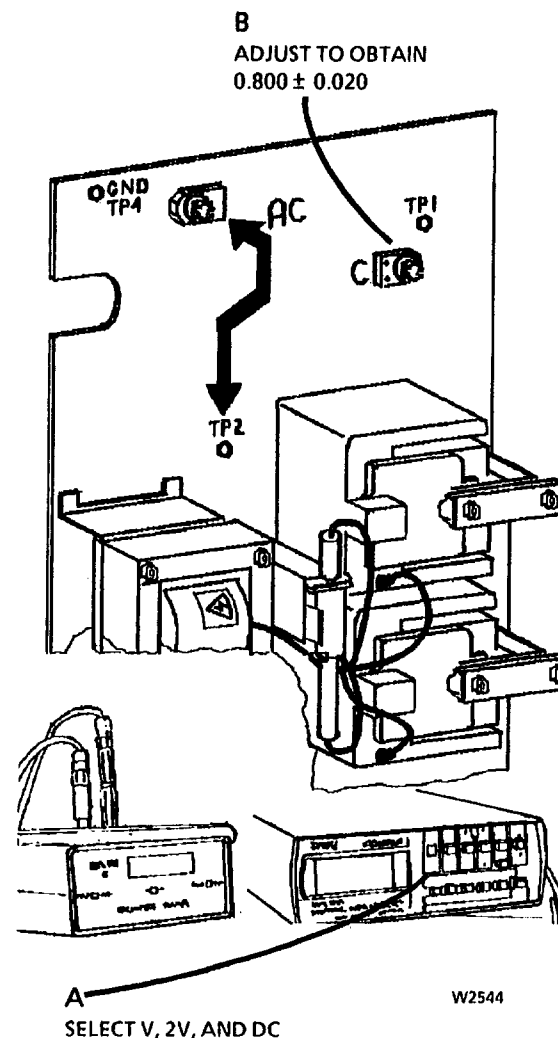


Figure 7. Adjust the Charge Voltage

- 14** Position the DMM and the Electrometer as shown in Step 7, Figure 3. Ensure that the doors are closed.

16. Press the Stop button.

Background (Exposure) Check and Adjust

- 15** The background voltage on the drum is adjusted by adjusting the voltage to the exposure lamp.



WARNING

There will be a time delay between the time the code [0921-3] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

17. Enter the code [0921-3].

- 16** When code [0921-3] is entered, the setpoint will automatically start at [9].

18. Adjust the exposure voltage.

- A. Wait 15 seconds and note the average readings at set point [9].
- B. If the voltage measured in Step A is more than 0.200 VDC, check the following:
- Electrometer to meter leads are in the correct position (refer to Figure 3)
 - Check the Exposure Control RAP (CQ 27)
 - Document Handler is in place
 - Ensure that the lens is clean
 - Ensure that the (2) sheets of white paper are on the entire surface of the platen.
 - Ensure that the photoreceptor was not exposed to sun light. If it was, rest the photoreceptor overnight.
 - Ensure that the correct Photoreceptor Drum is installed (1R81).
 - If the voltage at set point [9] is still above 0.200 VDC and all the above conditions are checked and correct, replace the Photoreceptor Drum.
- C. Scroll down from [9] stopping at each setpoint (8,7,6,...). At each setpoint wait 15 seconds and note the meter reading. At the first setpoint that displays an average reading of 0.020 to 0.050 VDC over the average reading noted at set point [9], press the Start button to enter this setpoint value into NVM.

- 17** If the exposure voltage can not be adjusted to specification, go to CQ 27 Exposure Control RAP.

19. Press the Stop button and switch off Electrometer.

20. Switch the power off.

21. Remove the Electrometer.

22. Remove the Document Handler and the two (2) sheets of clean white paper.

23. Reinstall the Document Handler.

24. Switch the power on.

25. Make a copy of the Test Pattern 82E5980.
- A. Check the line darkness:
- the 0.70G5 pattern in the center of Test Pattern 82E5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030.
1. If the density is less than 0.7, perform the Increase the Image Density Adjustment (ADJ 9.3).
 2. If the density is greater than 1.2, perform the Decrease the Image Density Adjustment (ADJ 9.4).

ADJ 9.3 Increase the Image Density

Purpose

The purpose is to adjust the toner concentration level to increase the image density level.

Prerequisite

The Electrostatic Series **MUST** be performed prior to performing the image density adjustment to ensure that all the parameters are at nominal. Failure to do this may result in premature failures or other damage due to excessive contamination.

Check

Refer to the Image Quality Specifications in Section 3 of this Service Manual. Check the line darkness. The copy of the 0.70G5 pattern in the center of Test Pattern 82E5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030.

1 For higher toner concentration (increase the image density), the toner sensor voltage must be decreased.

Adjust

1. Enter the diagnostic mode.



WARNING

There may be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

2. Enter the code [0921-4]. The following will be displayed:

09 21 4	Control Point 5.2 volts Sensor Reading 5.2 volts
---------	---

2 *STEP 3 B: Each time the Copy contrast down button is pressed, the next lower LED will be lit, indicating a lower Control Point setting. A control point of 4.8 is the lowest sensor voltage that can be attained. Do not move more than (2) increments at one time. This may result in a fault.*

3. (Figure 1): Increase the image density.

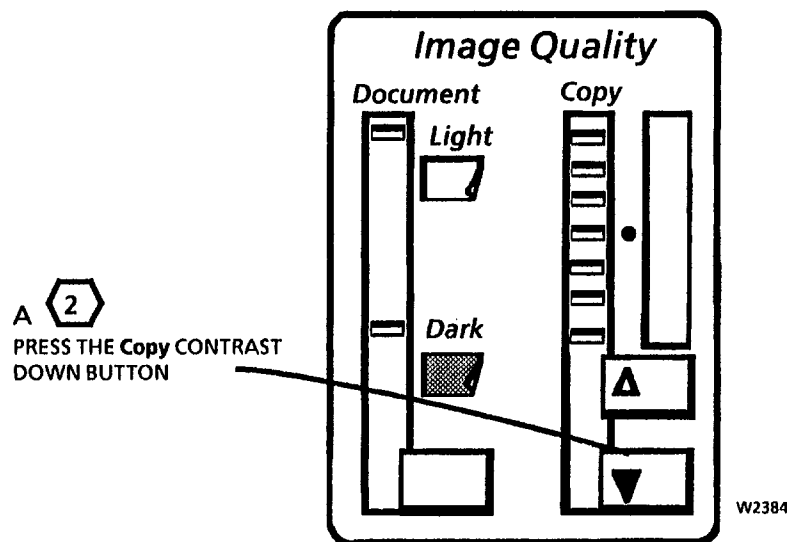


Figure 1. Increase the image density

4. Exit the diagnostic mode.

5. Run 5 blank copies to add the toner required by the lower toner sensor voltage.

6. Enter the diagnostic mode.



WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

7. Enter the code [0921-4]. The following will be displayed:

09 21 4

Control Point 5.0 volts
Sensor Reading 5.0 volts



The Control Point and the Sensor Reading should be the same. The Sensor Reading may vary $\pm .2$ volts.

8. Verify that the toner sensor voltage has been decreased.

9. Exit the diagnostic mode.

10. Repeat the Check. Adjust only 2 times if necessary. If the image density remains out of specification after the second adjustment, go to CQ 11 Light Copy RAP.

11. Check that the density of the 1.0 Solid square is between 0.7 and 1.2 on the copy, using the output reference 82P520.

ADJ 9.4 Decrease the Image Density

Purpose

The purpose is to adjust the toner concentration level to decrease the image density level.

Prerequisite

The Electrostatic Series **MUST** be performed prior to performing the image density adjustment to ensure that all the parameters are at nominal. Failure to do this may result in premature failures or other damage due to excessive contamination.

Check

Refer to the Image Quality Specifications in Section 3 of this Service Manual. Check the line darkness. The copy of the 0.70G5 pattern in the center of Test Pattern 82P5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030.

1

For a lower toner concentration (decrease the image density), the toner sensor voltage must be increased.

ADJUST

1. Enter the diagnostics mode.



WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

2. Enter the code [0921-4]. The following will be displayed:

09 21 4	Control Point 5.2 volts Sensor Reading 5.2 volts
---------	---

2

STEP 3 B: Each time the Copy up arrow button is pressed, the next higher LED will be lit, indicating a higher Control Point setting. Do not move more than (2) increments at one time. This may result in a fault.

3. (Figure 1): Decrease the image density.

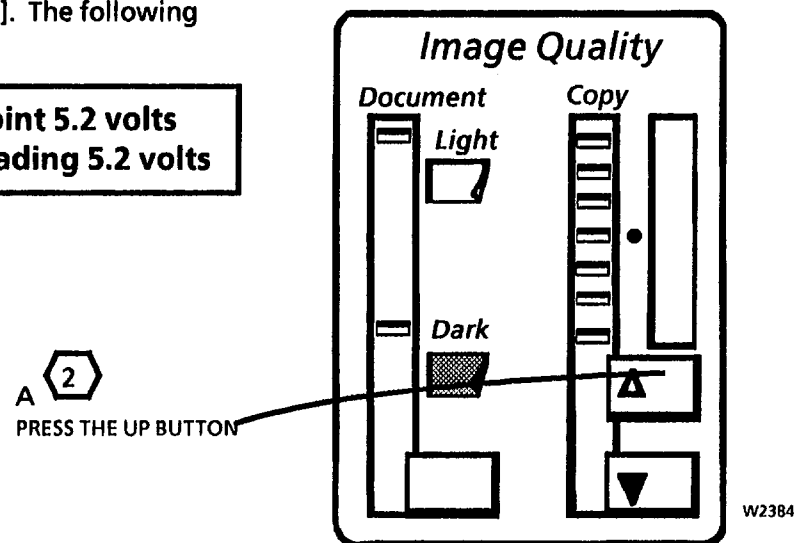


Figure 1. Decrease the Image Density

	01767	B
TAR	SM 4	M

3 *The cardboard from a media package may be used as a dark document.*

4. Exit the diagnostic mode.

5. Lower the Developer Module Cover and bypass the interlock.

4 *With the developer cover lowered, the cartridge drive motor is visible.*

6. Run copies of a dark document until the Toner Cartridge Motor turns on indicating that the toner concentration is low enough.

7. Enter the diagnostics mode.



WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

8. Enter the code [0921-4]. The following will be displayed:

09 21 4	Control Point 5.4 volts
	Sensor Reading 5.4 volts

5 *The Control Point and the Sensor Reading should be the same. The Sensor Reading may vary ± 0.2 volts.*

9. Verify that the Toner Sensor Voltage has been increased.

10. Exit the diagnostic mode.

11. Repeat the Check. Adjust only 2 times if necessary. If the image density remains out of specification after the second adjustment, go to CQ 1Uniform Background RAP.

12. Check that the density of the 1.0 Solid square is between 0.7 and 1.2 on the copy, using the output reference 82P520.

ADJ 9.5 Toner Home Sensor

Purpose

The purpose is to adjust the Toner Home Sensor to the correct distance from the magnet on the Toner Cartridge.

Check

1. Remove the Toner Cartridge.
2. Remove the Developer Module (REP 9.5).

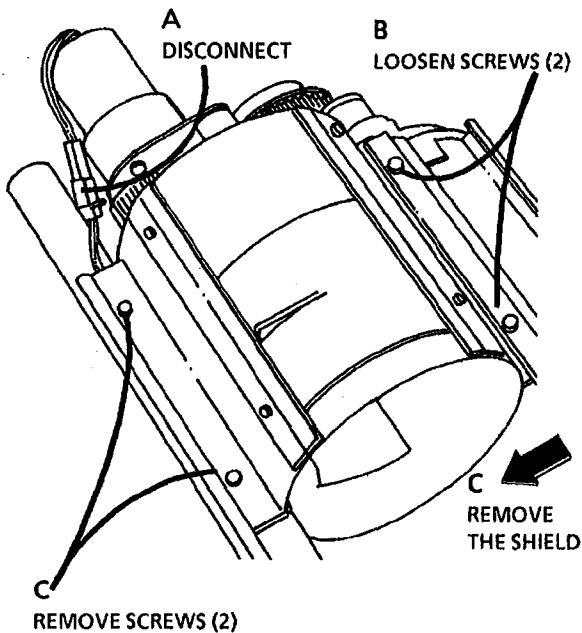


Figure 1. Remove the Top Shield

3. (Figure 1): Remove the Top Shield.
4. (Figure 2): Remove the Cartridge Drive Plate.

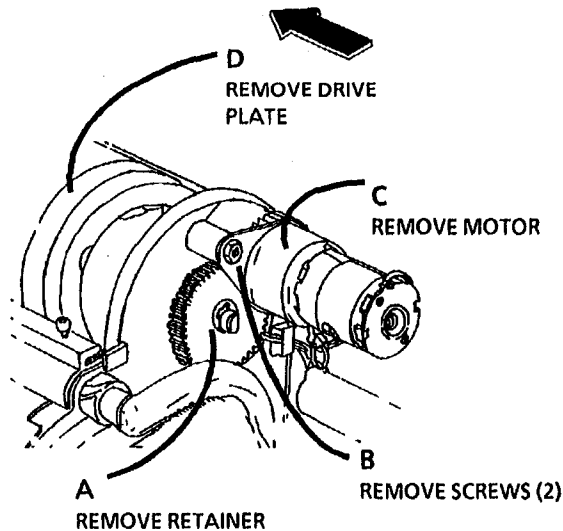


Figure 2. Remove the Cartridge Drive Plate

5. (Figure 3): Check the Toner Home Sensor adjustment.

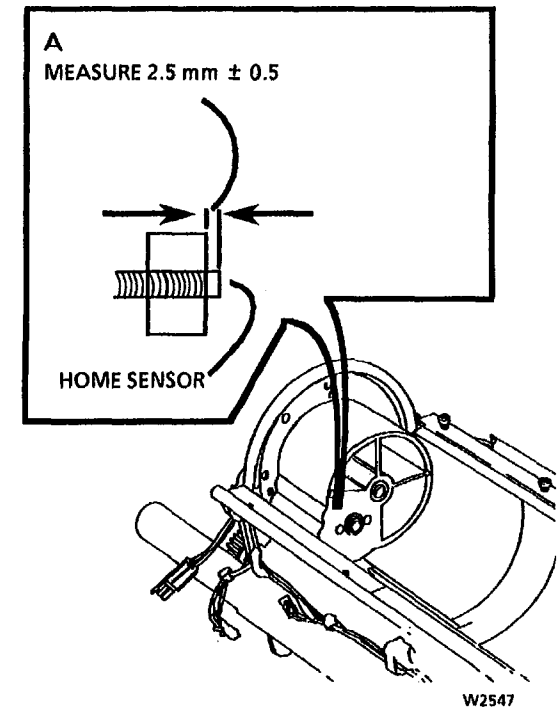


Figure 3. Check the Toner Home Sensor Adjustment

Adjustment

1 *STEPS 1 C and D: The toner home sensor is threaded. The wires need to be straightened to rotate the sensor for adjustment.*

1. (Figure 3): Adjust the Toner Home Sensor.

2. Reconnect the sensor and secure the wires.

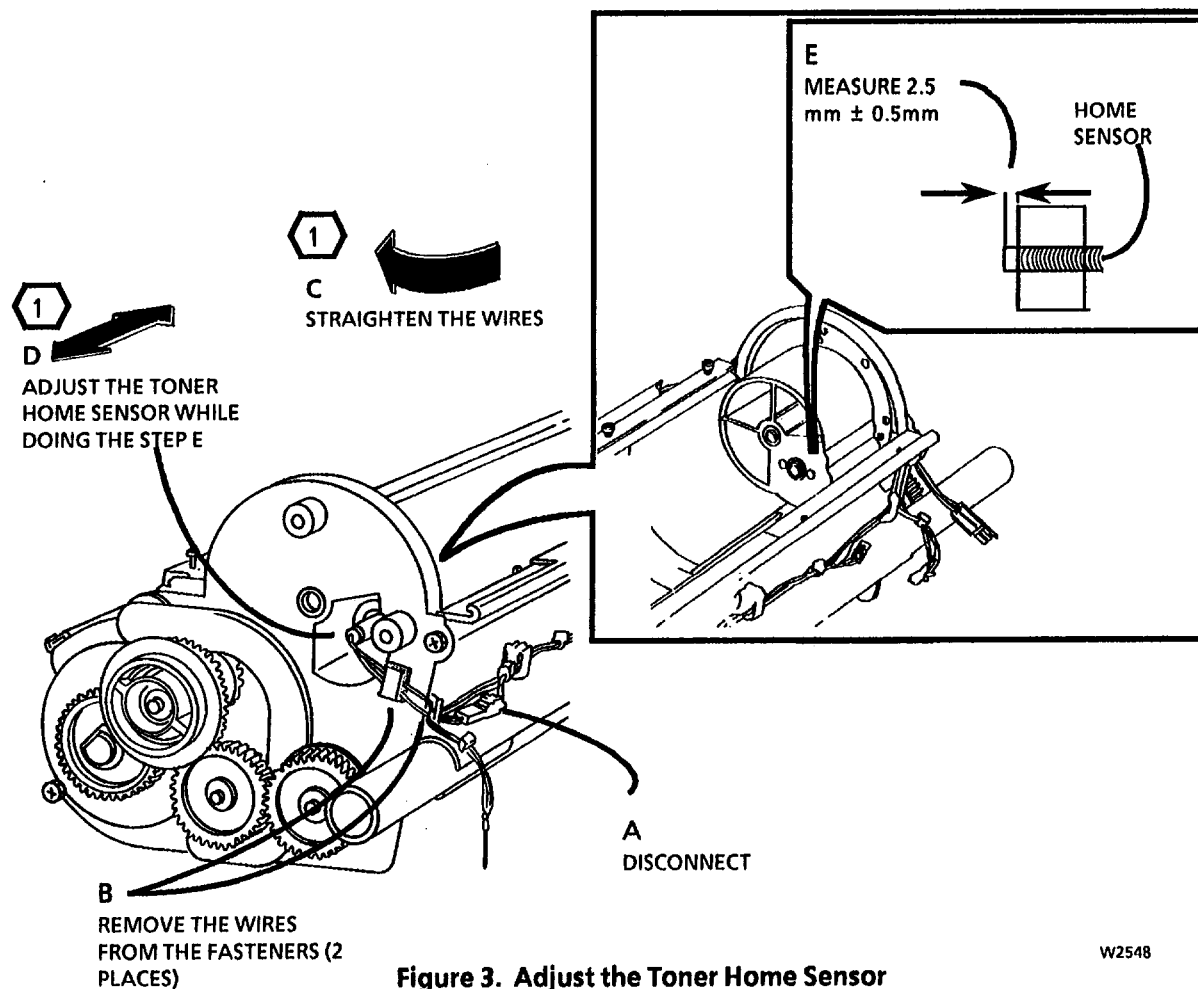


Figure 3. Adjust the Toner Home Sensor

W2548

STEP 3 D: To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 4.

3. (Figure 4): Reinstall the Cartridge Drive Plate.

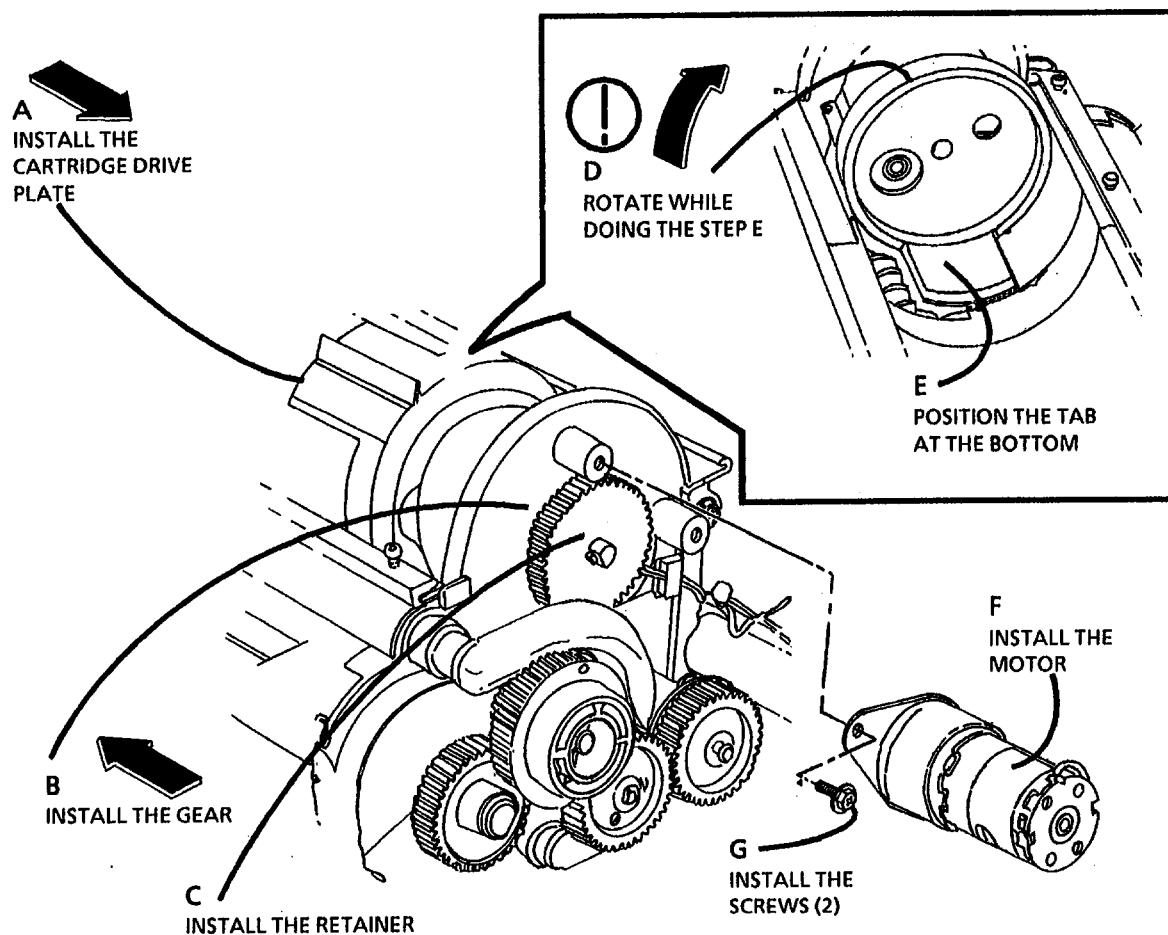
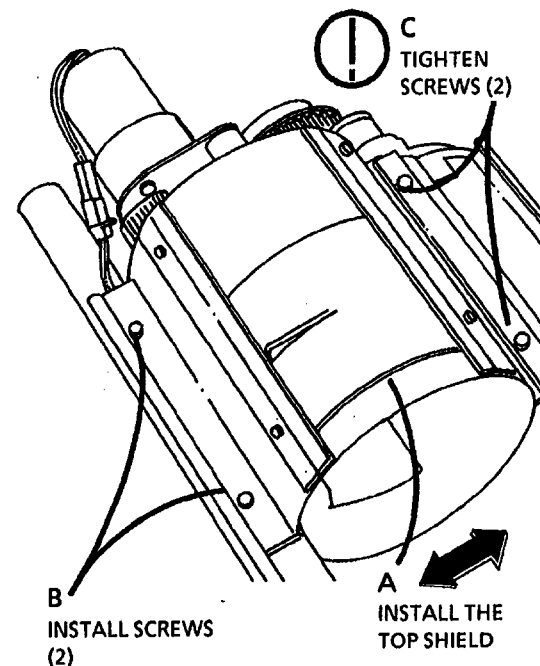


Figure 4. Install the Cartridge Drive Plate

W2549

STEP 4 C: Do not overtighten the screws.

4. (Figure 5): Reinstall the Top Shield.



W2550

Figure 5. Reinstall the Top Shield

5. Reinstall the following:

- Toner Cartridge
- Developer Module

ADJ 10.1 Fuser Temperature (Through NVM)

Purpose

The purpose is to adjust the fuser roll temperature to maintain the correct copy fusing.

1 *This procedure can be started only when the fuser is not in a ready to copy condition. If the fuser is in the ready to copy condition, power the copier off and allow the fuser to cool.*

2 *Ensure that all the interlocks are closed.*

Check

1. Enter the diagnostic mode.
2. Enter the code [1004] in order to switch the Fuser Heat Rod on and increase the Fuser temperature to the run temperature.

10 04 FUSER TEMP TEST
FUSER WARMING TO RUN TEMPERATURE

The Main Drive Motor is switched on when the Heat Roll Temperature reaches the run temperature. The temperature is then displayed on the Control Panel.

3. Check the Bond fusing temperature.

3 *STEP 3 B: Wait until the temperature reading stabilizes in order to obtain the correct temperature. The temperature will increase and decrease 1 or 2 degrees when the temperature is stabilized.*

10 04 FUSER TEMP TEST
TEMP = 143.8 CELSIUS, 290 FAHRENHEIT

4. Press the Stop button 2 times.

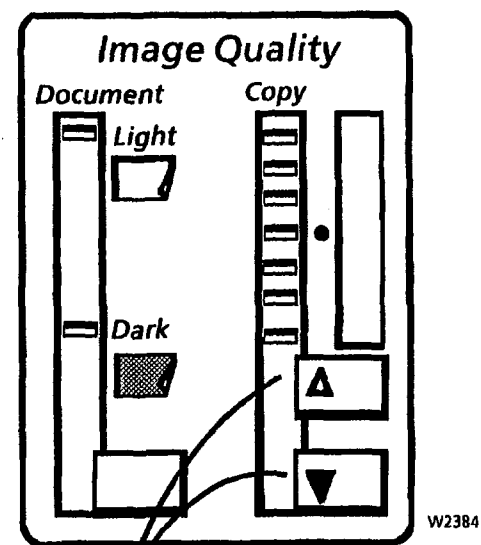
ADJUSTMENT

1. Enter the code [1060] in order to adjust the Fuser Temperature for bond.

10 60 FUSER TEMPERATURE SETPOINT: 20
RANGE IS 0-65, 20 IS ADJ, START TO STORE

- 5 **STEP 2 A:** Pressing the Copy contrast up or down buttons will scroll the setpoint on the display. Each number represents approximately a 1 °F (0.5° C) change in the fuser temperature.

2. (Figure 2): Adjust the Bond fusing temperature.



- A** PRESS THE UP BUTTON TO RAISE THE FUSER TEMPERATURE PRESS THE DOWN BUTTON TO LOWER THE FUSER TEMPERATURE
- B** PRESS THE Start BUTTON
- C** PRESS THE Stop BUTTON TWO TIMES

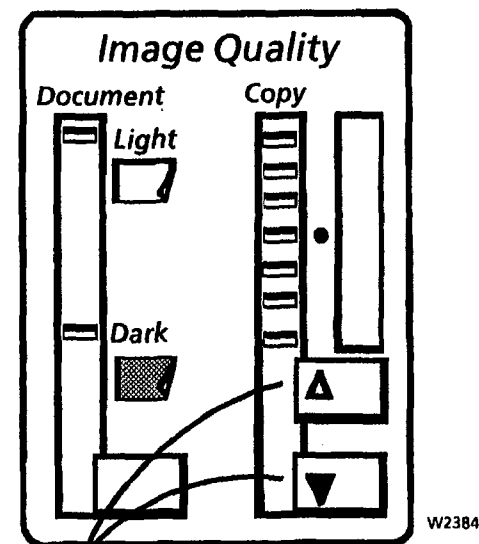
Figure 2. Adjust the Fuser Temperature Setpoint

- 6 **STEP 3:** To set the temperature for vellum, a SETPOINT must be adjusted.

3. In order to check the vellum setpoint, enter the code[1062]. The following will be displayed:

10 62 FUSER VELLUM TEMP SETPOINT: 25
RANGE IS 0-50, 25 IS ADJ, START TO STORE

4. (Figure 3): If the setpoint is not 25, adjust setpoint to 25.



- A** PRESS THE UP BUTTON TO RAISE THE ADJUST VALUE PRESS THE DOWN BUTTON TO LOWER THE ADJUST VALUE
- B** PRESS THE Start BUTTON
- C** PRESS THE Stop BUTTON TWO TIMES

Figure 3. Adjust the Vellum Fusing Setpoint

(Continued)

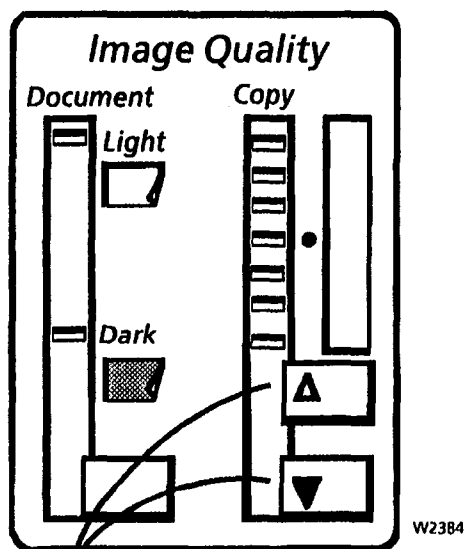
7

STEP 5: To set the temperaure for film, a **SETPOINT** must be adjusted.

5. In order to check the setpoint, enter the code[1063]. The following will be displayed:

10 63 FUSER FILM TEMP SETPOINT: 35
RANGE IS 0-50, 35 IS ADJ, START TO STORE

6. (Figure 3): If the set point is not 35, adjust the setpoint to 35.



A

PRESS THE UP BUTTON TO
RAISE THE ADJUST VALUE
PRESS THE DOWN
BUTTON TO LOWER THE
ADJUST VALUE

B

PRESS THE **Start** BUTTON

C

PRESS THE **Stop**
BUTTON TWO TIMES

7. This adjustment affects other copier adjustments. Perform the following Check/ Adjustments in the sequence as listed:
- Copy Size Adjustment (ADJ 5.1)
 - Image Registration (ADJ 8.1)
 - Auto Length (ADJ 8.2)

Figure 3. Adjust the Film Fusing Setpoint

ADJ 10.2 Fuser Temperature (With Probe)

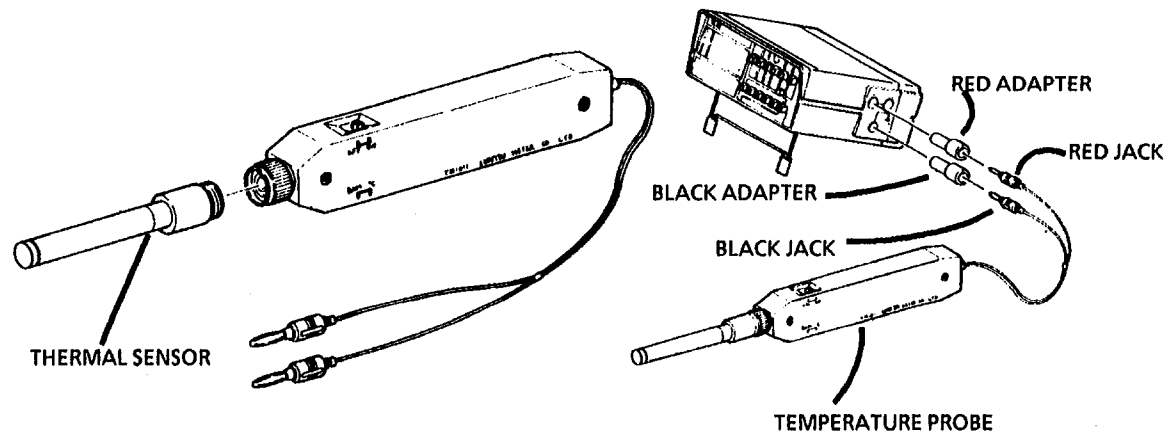
Purpose

The purpose is to adjust the fuser roll temperature to maintain the correct copy fusing.

- 1 Ensure that the fuser thermistor, RT1, is in positive contact with the fuser roll.
- 2 This procedure must be performed after the machine becomes ready.

HOW TO SET UP TEMPERATURE PROBE

1. (Figure 1): Connect the Thermal Sensor to the Temperature Probe.



W2557

Figure 2. Connect Temperature Probe to DMM

W2556

Figure 1. Connect the Thermal Sensor to the Temperature Probe

3. Switch the DMM on and then switch the Temperature Probe on.
4. Switch the functional switch of the DMM to the DC voltage measurement mode.
5. Press the 20V range switch of DMM.
6. Rotate the select switch of the temperature Probe to **BATT TEST**. If the voltage is lower than 1.7V, replace the battery of the Temperature Probe with a new battery.

7. Rotate the select switch of the temperature probe to °C position, and press the 200mV range switch of the DMM.

3 You are now ready to check the temperature after you expose the fuser roll for easy access.

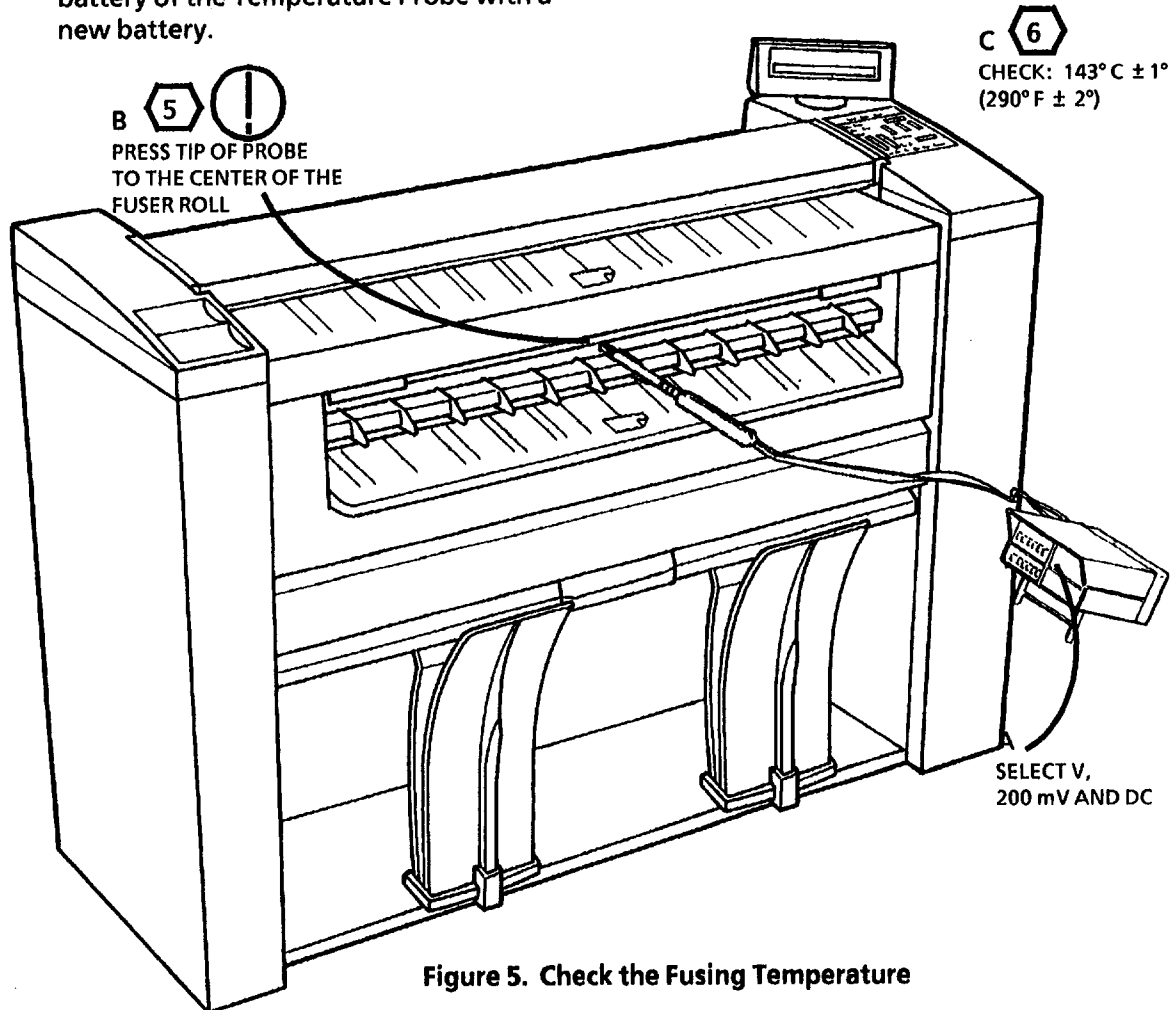


Figure 5. Check the Fusing Temperature

Check the Temperature

1. Enter the diagnostic mode.
2. Enter the code [1004] in order to switch the the Fuser Heat Rod on and increase the Fuser temperature to the run temperature. The Main Drive Motor is switched on when the Heat Roll Temperature reaches the run temperature. The temperature is then displayed on the Control Panel.

! **STEP 3B:** Orient the metal strips of the temperature probe vertically in order to avoid scratching the surface of the fuser roll.

5 **STEP 3 B:** With the fuser roll rotating, press the temperature sensor firmly to the surface of the fuser roll in order to obtain an accurate reading.

6 **STEP 3 C:** The 143 ± 2 reading on the 200mV scale is 143 °C ± 2° (290°F ± 2°).

3. (Figure 5): Check the fusing temperature with the Temperature Probe.
4. Press the Stop button 2 times.

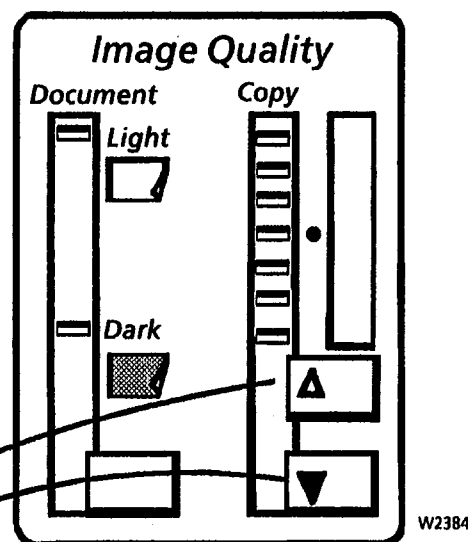
Adjustment

1. While in the diagnostic mode, enter the code [1060] in order to adjust the Bond Fuser Temperature. The following will be displayed

10 60 FUSER TEMPERATURE SETPOINT: 20
RANGE IS 0-65, 20 IS ADJ, START TO STORE

7 STEP 2 A: Pressing the Copy UP or DOWN buttons will scroll the temperature set point on the display. Each number represents approximately 0.5 degree C (1 degree F) change in the fuser temperature.

2. (Figure 6): Adjust the Bond fusing temperature to $143^{\circ}\text{C} \pm 1^{\circ}$ ($290^{\circ}\text{F} \pm 2^{\circ}$).



A **7**

PRESS THE UP BUTTON TO RAISE THE FUSER TEMPERATURE
PRESS THE DOWN BUTTON TO LOWER THE FUSER TEMPERATURE

B

PRESS THE Start
BUTTON

C

PRESS THE Stop
BUTTON TWO TIMES

3. Repeat the Check the Temperature procedure with the probe again to ensure that the correct adjustment has been made.
4. Enter the code [1062] and check that the vellum Setpoint is 25. Enter the code [1063] and check that the film Setpoint is 35. If not, adjust using the Copy UP or DOWN arrow button.
4. This adjustment affects other copier adjustments. Perform the following Check/ Adjustments in the sequence as listed:
 - a. Copy Size Adjustment (ADJ 5.1)
 - b. Image Registration (ADJ 8.1)
 - c. Auto Length (ADJ 8.2)

Figure 6. Adjust the Fusing Temperature

ADJ 14.1 Copier Level

Purpose

The purpose of this adjustment is to level the copier in a non-twisted condition.

Check

1. Check and ensure that the castors are adjusted fully up (copier at the lowest position).

⚠ STEP 1A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

2. Remove the Document Handler.
3. (Figure 1): Lower the Upper Rear Door.

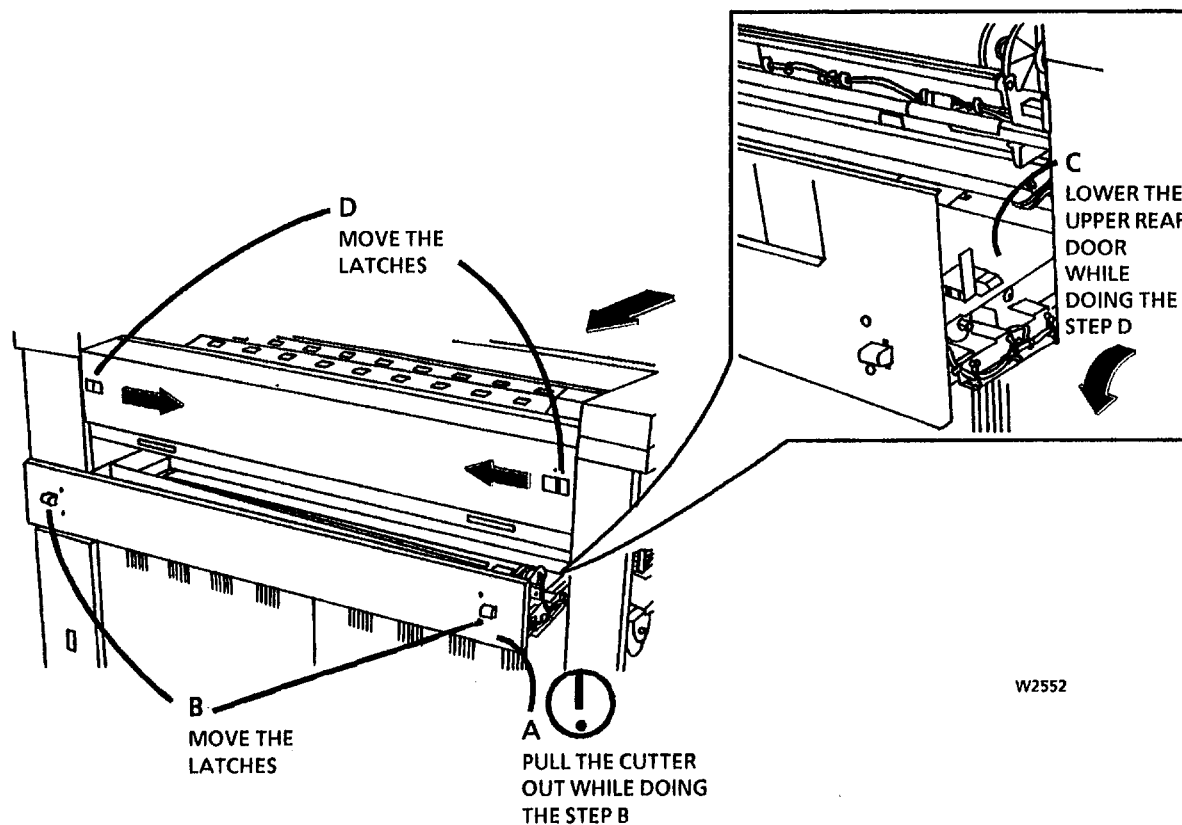


Figure 1. Lower the Upper Rear Door

1 *STEPS 4 A and B: To ensure that the copier is not twisted, perform the front-to-back check on both ends of the copier.*

2 *STEPS 4 A and B: The bubble must be centered between the lines on the level.*

4. (Figure 2): Check the level of the copier.

5. Determine on which side of the copier the front-to-back level is the farthest out of level.

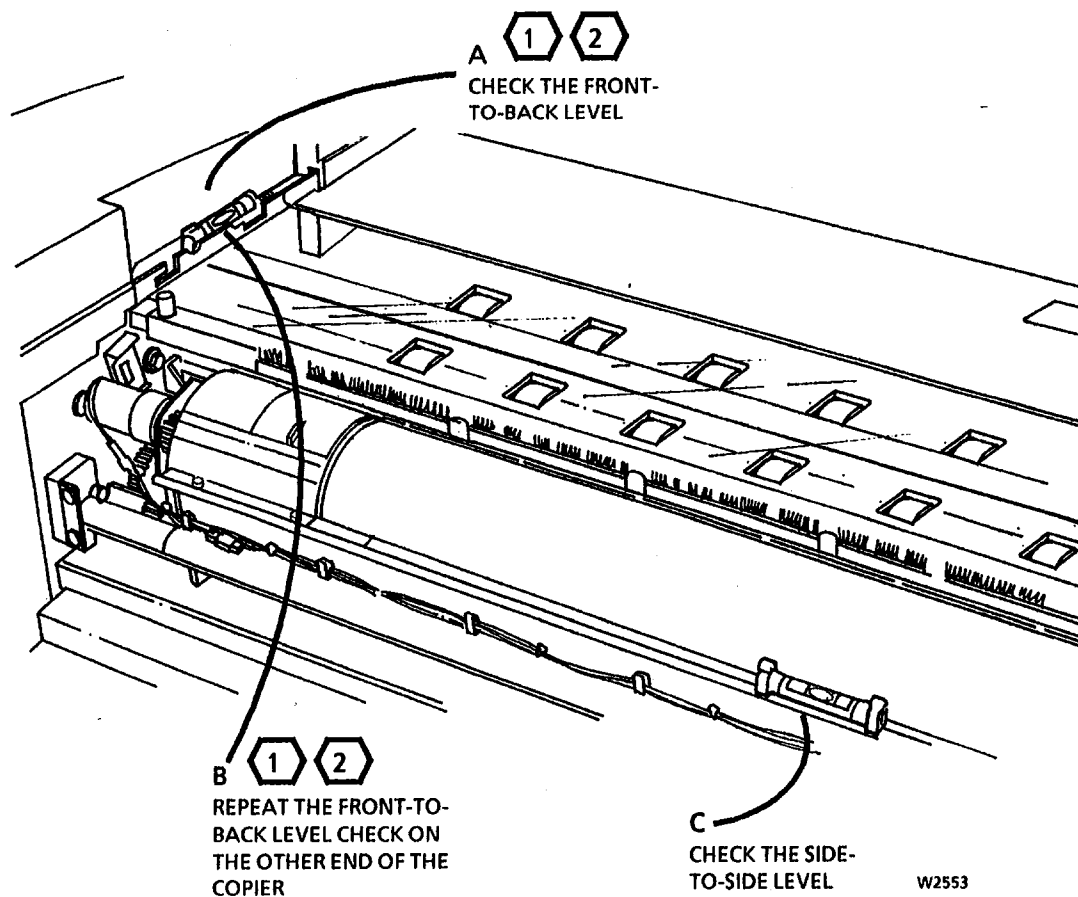


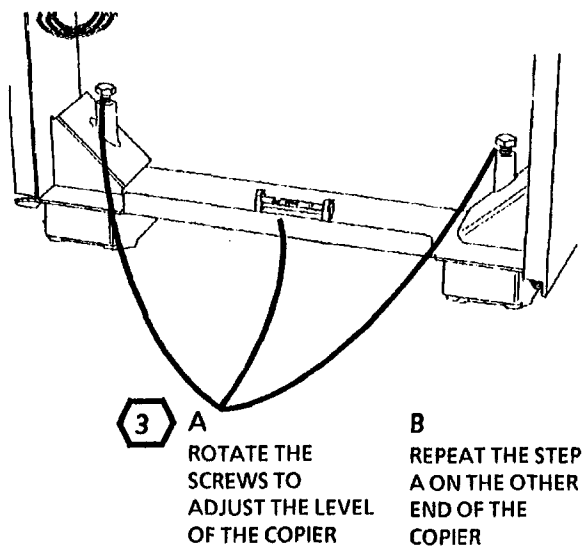
Figure 2. Check the level of the copier

Adjustment

1. Adjust the side which is the farthest out of specification first.

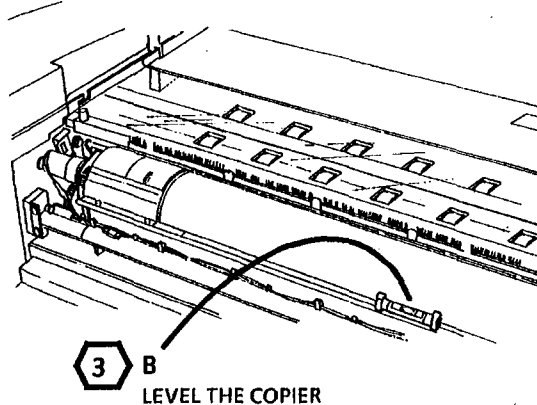
3 *STEPS 1 A and 2 B: The bubble must be centered between the lines on the level.*

2. (Figure 3): Adjust the Front-to-back Level.



W2554

Figure 3. Adjust the Front-to-back Level



W2555

Figure 4. Adjust the Side-to-side Level

3. (Figure 4): Adjust the Side-to-side level.
4. Perform Steps 4 and 5 of the Check.
5. Perform Steps 1 and 2 of the Adjustment until the level is within specification.

Notes:

5. PARTS LIST SECTION

TITLE	PAGE	TITLE	PAGE	ELECTRICAL CONNECTORS AND FASTENERS	
INTRODUCTION	5-2	XEROGRAPHIC MODULE		PL 15.1 MISCELLANEOUS ELECTRICAL CONNEC- TORS AND FASTENERS	5-43
PARTS LIST		PL 9.1 XEROGRAPHIC MODULE ASSEMBLY	5-24	COMMON HARDWARE	5-44
ELECTRICAL COMPONENTS		PL 9.2 PHOTORECEPTOR DRUM	5-25	PART NUMBER INDEX	5-45
PL 1.1 ELECTRICAL CONTROL COMPONENTS/DC POWER GENERATION	5-4	PL 9.3 CHARGE COROTRON AND ERASE LED PWB	5-26		
PL 1.2 AC ELECTRICAL COMPONENTS	5-5	PL 9.4 TRANSFER/DETACK COROTRON	5-27		
PL 1.3 DC ELECTRICAL COMPONENTS	5-6	PL 9.5 PHOTORECEPTOR DRUM CLEANING (PART 1 OF 2)	5-28		
PL 1.4 CONTROL CONSOLE	5-7	PL 9.6 PHOTORECEPTOR DRUM CLEANING (PART 2 OF 2)	5-29		
PL 1.5 MACHINE COOLING	5-8	PL 9.7 XEROGRAPHIC MODULE SERVICE RAILS	5-30		
DOCUMENT FEED		DEVELOPER MODULE			
PL 5.1 DOCUMENT HANDLER COMPONENTS ...	5-9	PL 9.8 DEVELOPER MODULE ASSEMBLY	5-31		
PL 5.2 DOCUMENT DRIVE COMPONENTS	5-10	PL 9.9 DEVELOPER MODULE COMPONENTS (PART 1 OF 2)	5-32		
OPTICS		PL 9.10 DEVELOPER MODULE COMPONENTS (PART 2 OF 2)	5-33		
PL 6.1 OPTICS COMPONENTS	5-11	FUSER			
MEDIA ROLL FEED		PL 10.1 XEROGRAPHIC MODULE ASSEMBLY ...	5-34		
PL 7.1 ROLL SUPPLY FEED ASSEMBLY	5-12	PL 10.2 FUSER HEAT COMPONENTS	5-35		
PL 7.2 ROLL SUPPLY DRIVES	5-13	PL 10.3 FUSER PRESSURE COMPONENTS AND MOISTURE COLLECTION	5-36		
PL 7.3 ROLL SUPPLY DRAWER COMPONENTS (PART 1 OF 4)	5-14	PL 10.4 FUSER HEAT CONTROL AND STRIPPER FINGERS	5-37		
PL 7.4 ROLL SUPPLY DRAWER COMPONENTS (PART 2 OF 4)	5-15	PL 10.5 FUSER OILER	5-38		
PL 7.5 ROLL SUPPLY DRAWER COMPONENTS (PART 3 OF 4)	5-16	COVERS AND INTERLOCK SWITCHES			
PL 7.6 ROLL SUPPLY DRAWER COMPONENTS (PART 4 OF 4)	5-17	PL 14.1 CUT SHEET FEED-IN SHELF AND LEFT SIDE DOOR	5-39		
PL 7.7 MEDIA CUTTER ASSEMBLY	5-18	PL 14.2 REAR AND RIGHT SIDE COVERS	5-40		
PL 7.8 MEDIA CUTTER COMPONENTS	5-19	PL 14.3 LEFT AND RIGHT CAPS AND UPPER REAR DOOR	5-41		
MEDIA TRANSPORT		PL 14.4 DOCUMENT FEED-IN SHELF AND COPY CATCH SHIELDS	5-42		
PL 8.1 MEDIA TRANSPORT ASSEMBLY	5-20				
PL 8.2 MEDIA REGISTRATION COMPONENTS ...	5-21				
PL 8.3 CUT SHEET FEED COMPONENTS	5-22				
PL 8.4 MEDIA TRANSPORT COMPONENTS	5-23				

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:

ADJ	ADJUSTMENT PROCEDURE
A	AMP
AC	ALTERNATING CURRENT
HZ	HERTZ
M	MILLIMETER
PL	PL (EX: PL2.4 OR PL2-A4)
P/O	PART OF
PWB	PRINTED WIRING BOARD
REF	REFERENCE
REP	REPAIR PROCEDURE
RX	RANK XEROX
US	UNITED STATES CUSTOMER OPERATIONS
V	VOLT
W/	WITH
W/O	WITHOUT
XCL	XEROX CANADA LIMITED
XLA	XEROX LATIN AMERICA

SYMBOLLOGY

Symbology used in the Parts List section is identified in the Symbology section.

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.

SYMBOLOLOGY

A tag number within a circle and 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.

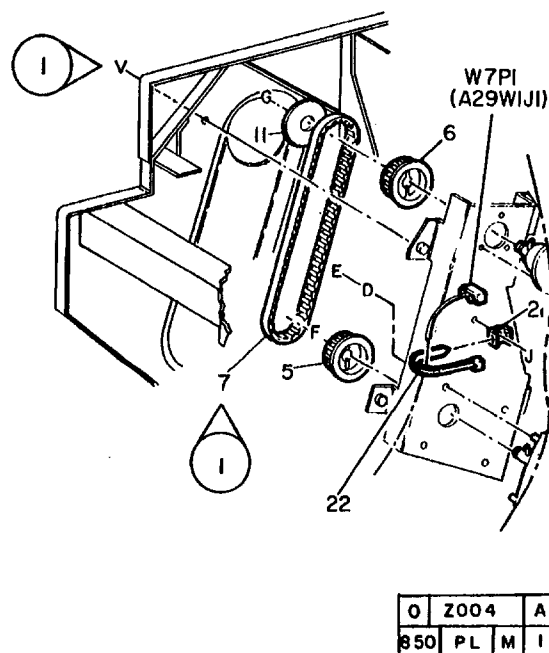


Figure 1. With Tag Symbol

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).

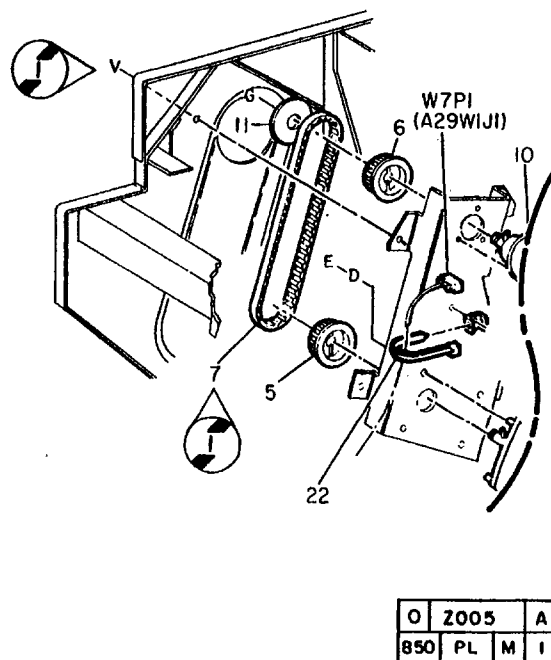


Figure 2. Without Tag Symbol

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.

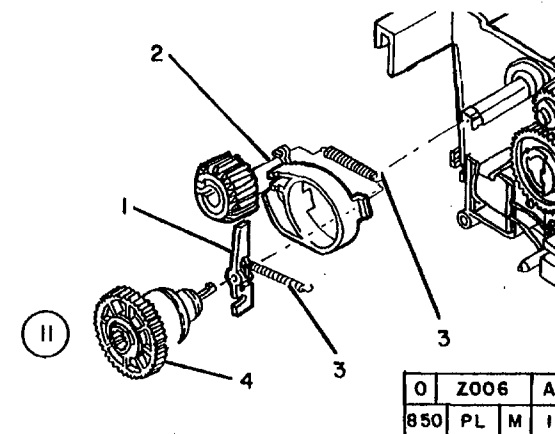


Figure 3. Entire Drawing With Tag Symbol

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).

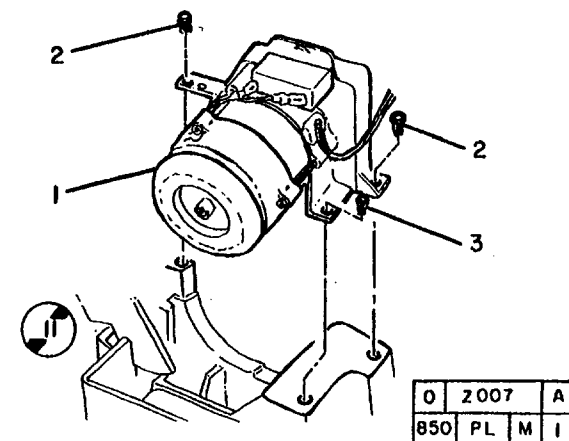
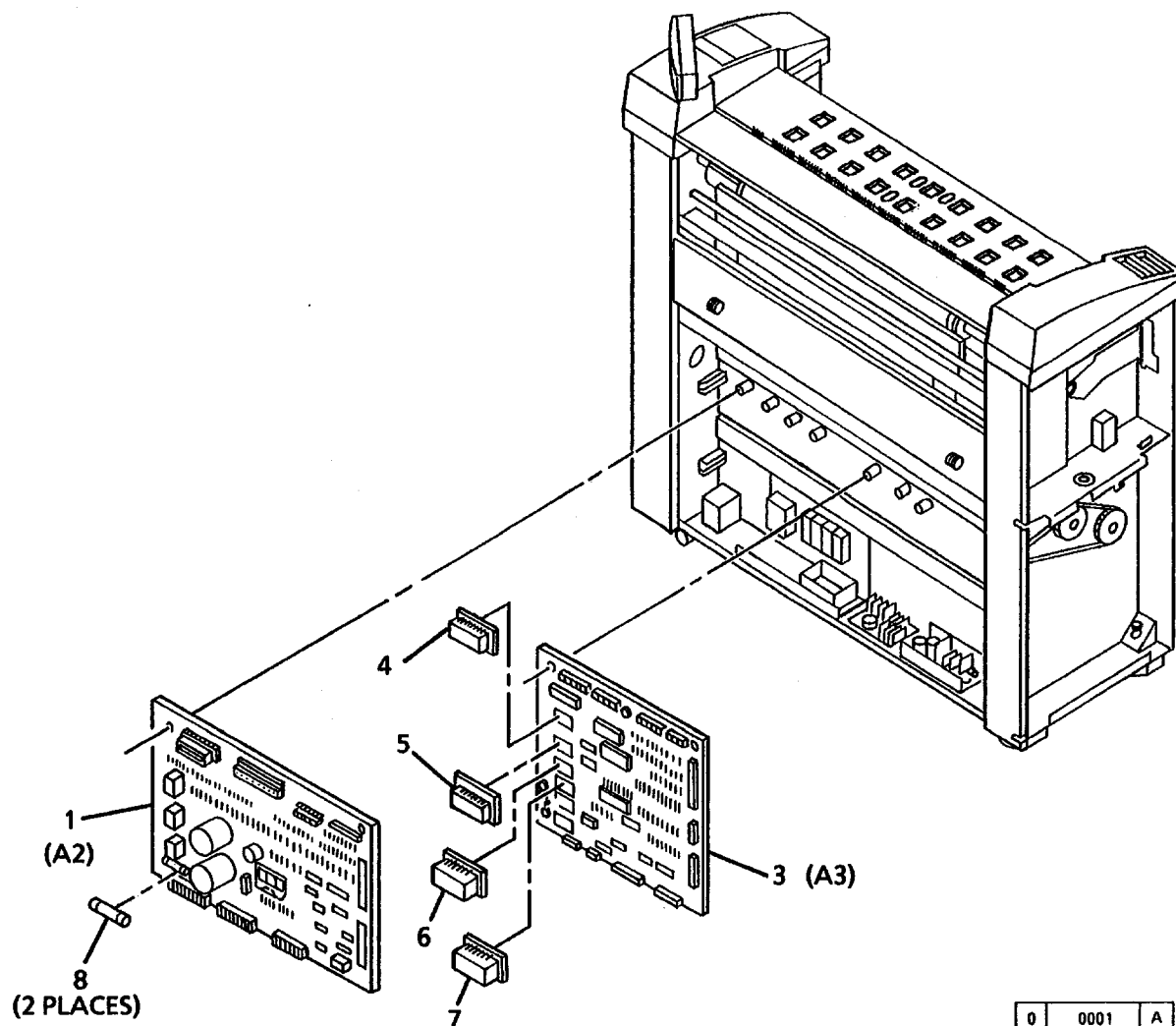


Figure 4. Entire Drawing Without Tag Symbol

PL 1.1 ELECTRICAL CONTROL COMPONENTS/DC POWER GENERATION

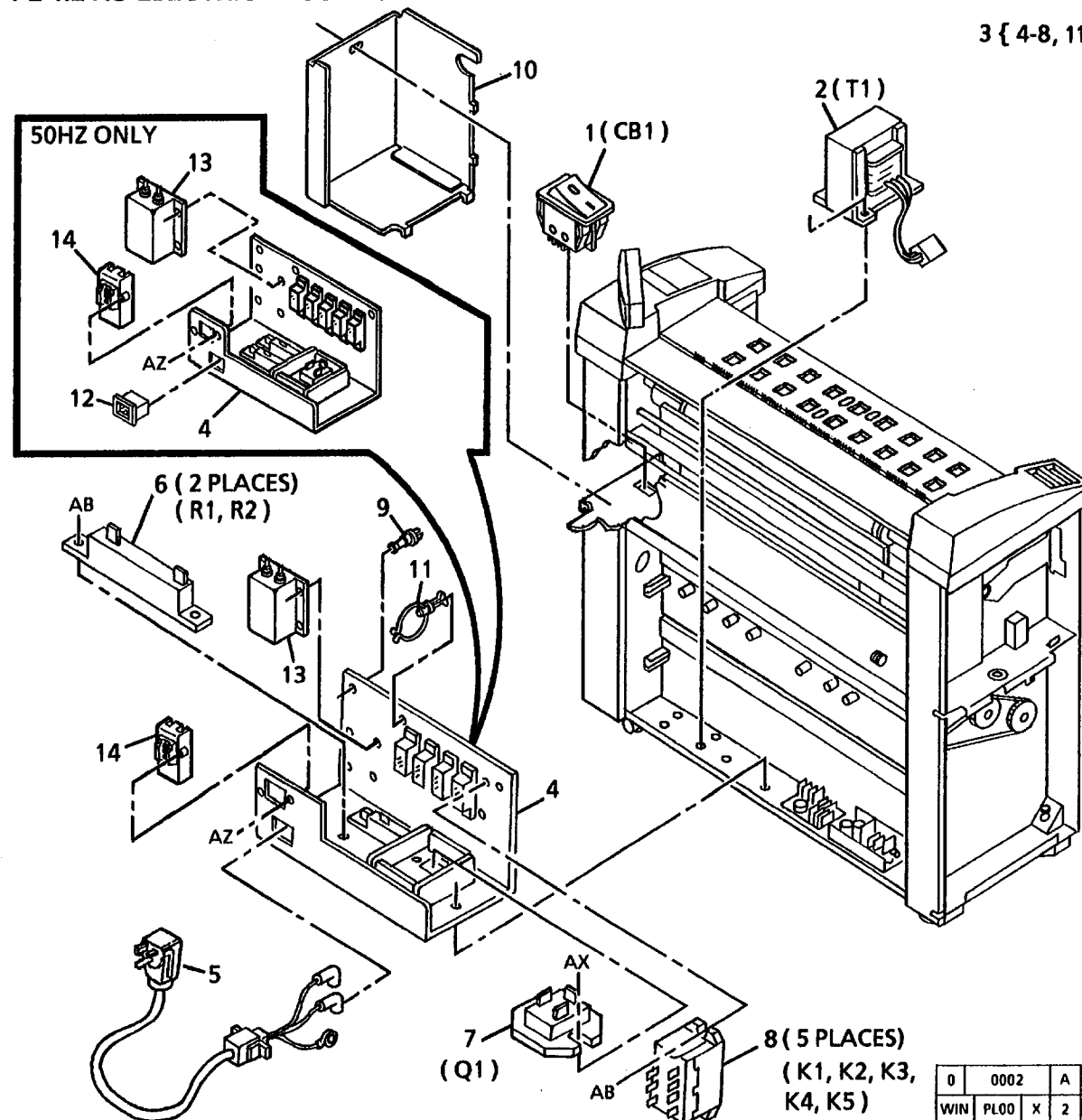
2 { 3, 7
9 { 4, 5, 6



ITEM	PART	DESCRIPTION
1	140K27489	LOW VOLTAGE POWER SUPPLY DRIVER PWB (A2)
2	--	CONTROLLER ASSEMBLY (TO BE AVAILABLE AT LATER DATE)
3	140K69980	CONTROL PWB (A3) (REP 3.1)
4	--	CONTROL EPROM NO.2 (P/O ITEM 9)
5	--	CONTROL EPROM NO.1 (P/O ITEM 9)
6	--	PRIMARY LANGUAGE EPROM (P/O ITEM 9)
7	537K6920	NVM EPROM
8	708W4001	FUSE (1 AMP) (60HZ)
-	708W3901	FUSE (0.5AMP) (50HZ)
9	133K9501	CIRCUIT ASSEMBLY KIT (60HZ)
-	133K9510	CIRCUIT ASSEMBLY KIT (50HZ)

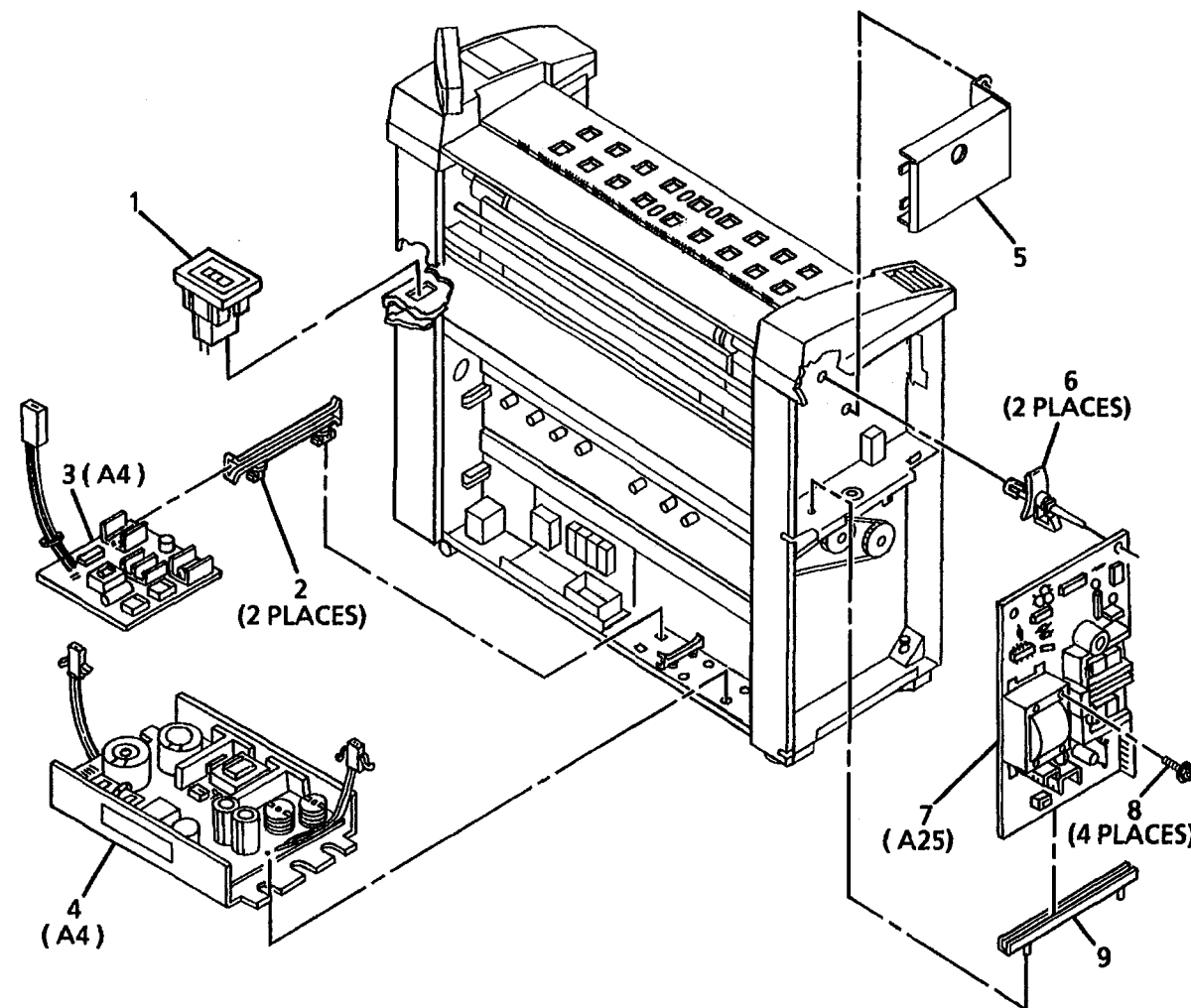
0	0001	A
WIN	PL00	X 0

3 { 4-8, 11



ITEM	PART	DESCRIPTION
1	110E6330	MAIN POWER SWITCH (CB1)
2	105K833	MAIN TRANSFORMER
-	105K1084	(60HZ) (T1)
3	--	MAIN TRANSFORMER
4	--	(50HZ) (T1)
5	117K10591	AC MODULE (60HZ) (50HZ)
6	103E2721	(TO BE AVAILABLE
-	103E2731	AT LATER DATE)
7	707W1652	AC COMPONENT
8	109E1040	(60HZ) (50HZ)
9	3P25202	(P/O ITEM 3)
10	2E40132	POWER CORD (60HZ ONLY)
11	120E2150	BALLAST RESISTOR (60HZ)
12	114K491	(R1, R2)
13	142E440	BALLAST RESISTOR (50HZ)
-	142E1131	(R1, R2)
14	108E1761	FUSER TRIAC (Q1)
		(REP 10.3)
		AC RELAY
		(K1, K2, K3, K4, K5)
		STANDOFF
		COVER
		TWIST CLAMP
		INLET CONNECTOR
		(50HZ ONLY)
		FILTER (60HZ)
		FILTER (50HZ)
		GROUND FAULT PANEL

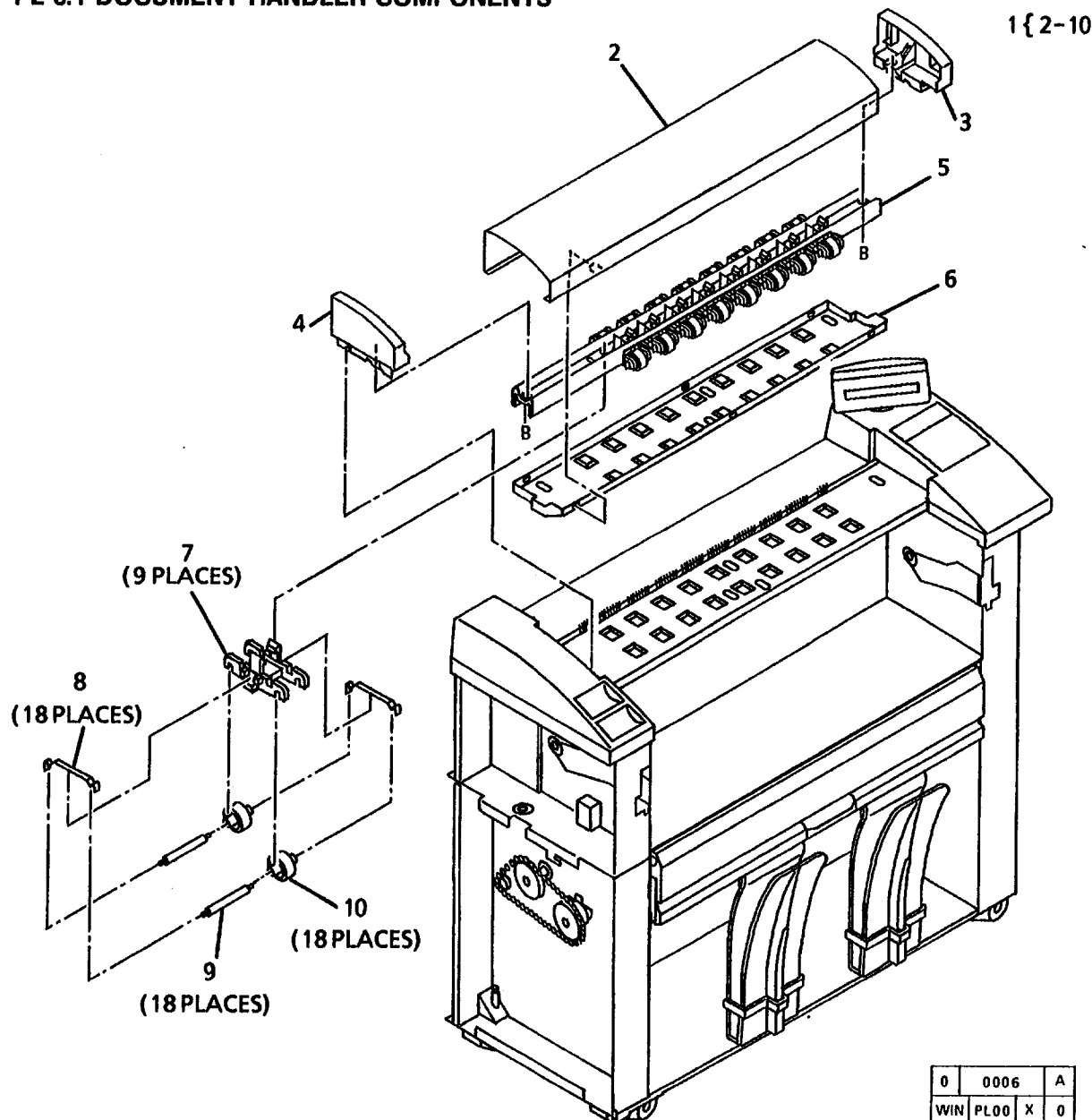
PL 1.3 DC ELECTRICAL COMPONENTS



ITEM	PART	DESCRIPTION
1	111K21	MEDIA COUNTER
2	101E1020	CIRCUIT BOARD GUIDE
3	104K430	EXPOSURE LAMP BALLAST (A4)
4	105K5273	BULK POWER SUPPLY (+ 26VDC) (60HZ) (A4)
-	105K5552	BULK POWER SUPPLY (+ 26VDC) (50HZ) (A4)
5	55K14940	SHIELD (50HZ ONLY)
6	--	STANDOFF (NOT SPARED)
7	105K5480	HIGH VOLTAGE POWER SUPPLY (A25)
8	26E3460	LOCKING SCREW
9	101E7930	PWB GUIDE

0	0003	A
WIN	PL00	X 1

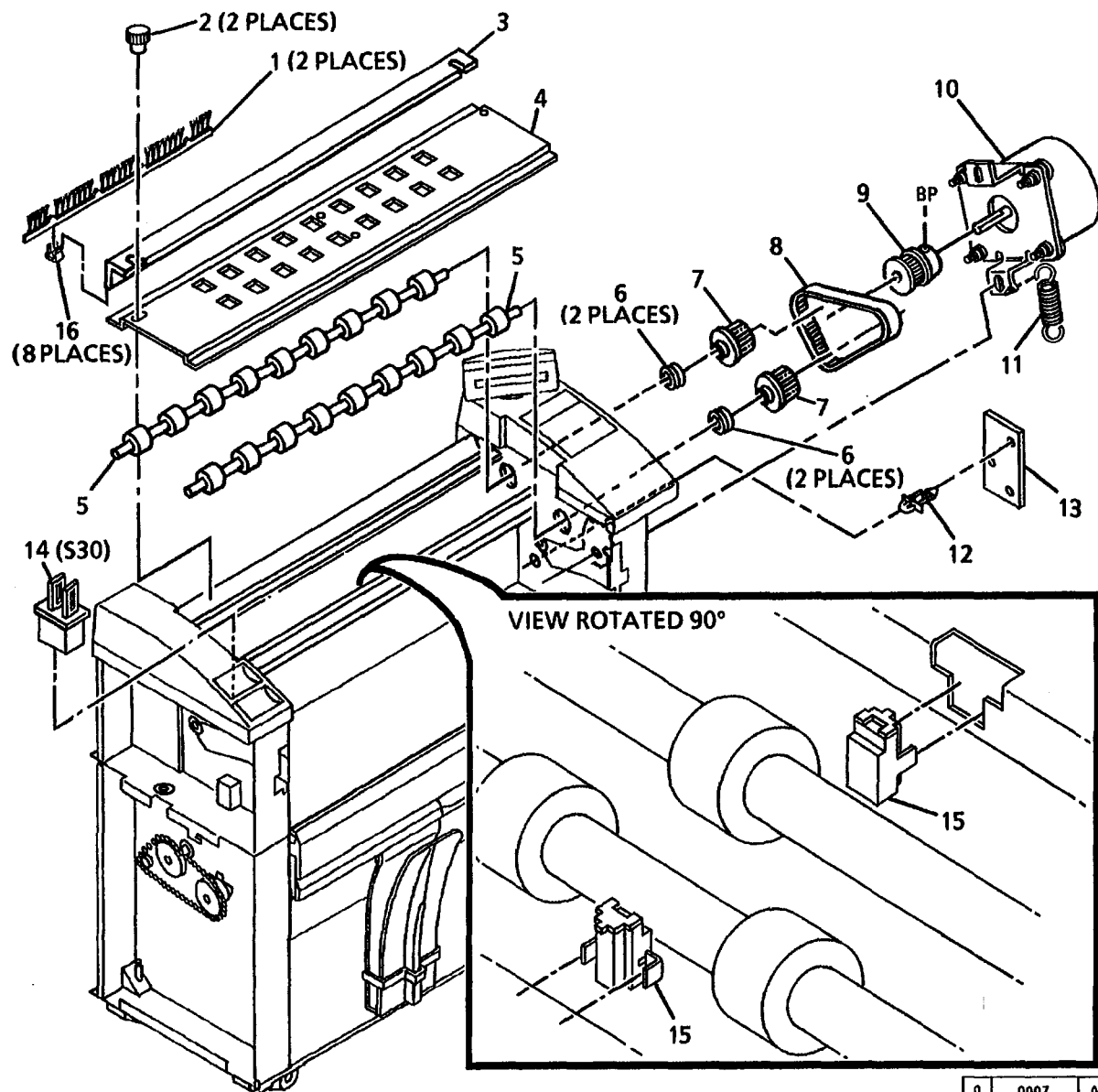
PL 5.1 DOCUMENT HANDLER COMPONENTS



ITEM	PART	DESCRIPTION
1	22K37721	DOCUMENT HANDLER ASSEMBLY
2	--	DOCUMENT HANDLER COVER (P/O ITEM 1)
3	21E6210	RH END CAP
4	21E6220	LH END CAP
5	--	PINCH ROLL SUPPORT (P/O ITEM 1)
6	38E13162	DOCUMENT PLATEN
7	31E3561	PINCH ROLL YOKE
8	9E21410	ROLL LOAD SPRING (REP 5.1)
9	6E19570	PINCH ROLL SHAFT (REP 5.1)
10	22E7280	DOCUMENT PINCH ROLL (REP 5.1)

0	0006	A
WIN	PL00	X 0

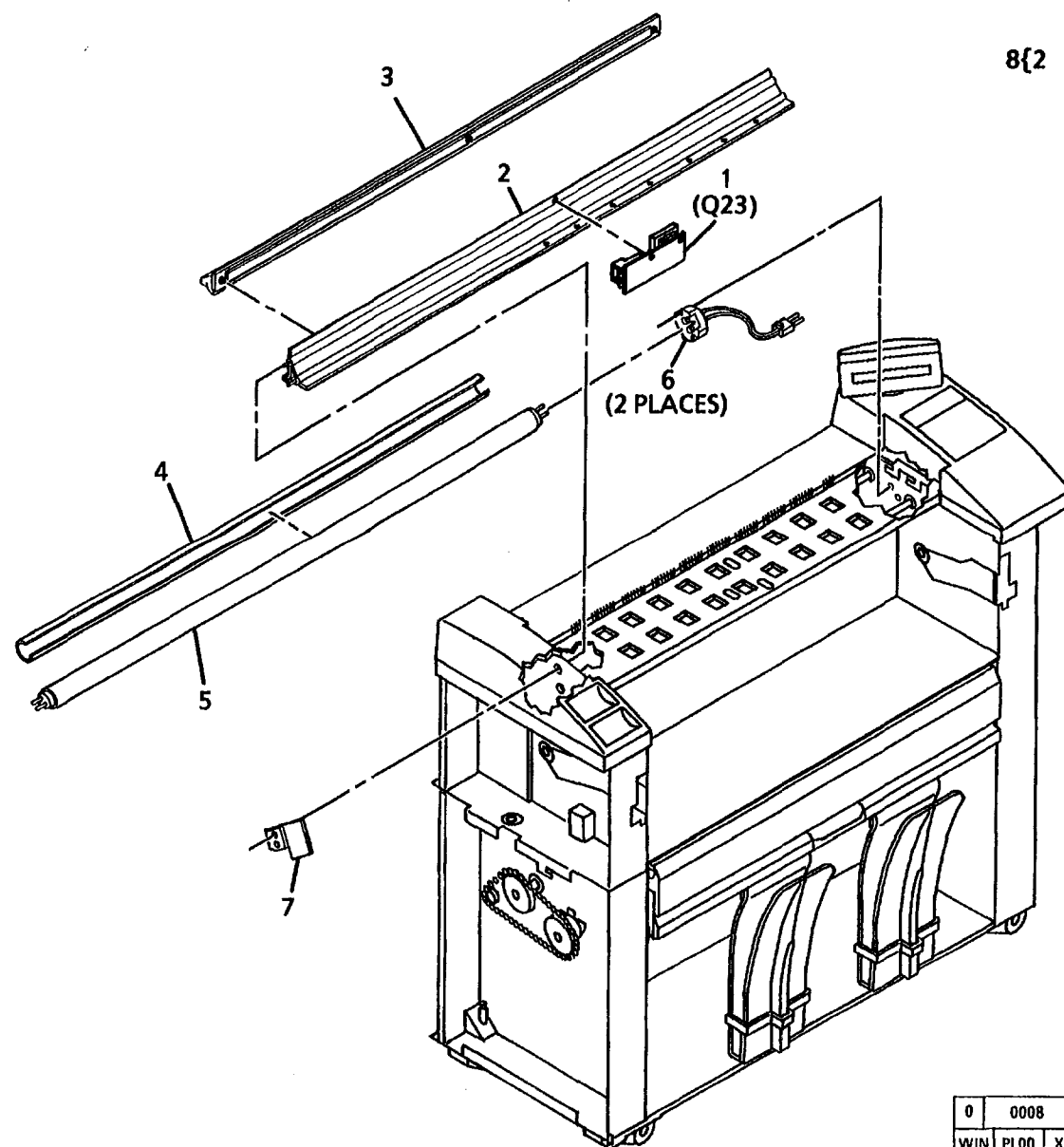
PL 5.2 DOCUMENT DRIVE COMPONENTS



ITEM	PART	DESCRIPTION
1	115E3100	STATIC ELIMINATOR
2	27E2251	PLATEN NUT
3	--	PLATEN RETAINER BRACKET (NOT SPARED)
4	90E1690	DOCUMENT BOTTOM PLATEN (REP 5.4)
5	22K16301	DOCUMENT DRIVE ROLL (REP 5.2)
6	413W30853	DOCUMENT DRIVE BEARING
7	20E10561	DOCUMENT DRIVE PULLEY
8	23E6570	DOCUMENT DRIVE BELT
9	20E14550	PULLEY (28T)
10	127K8861	DOCUMENT DRIVE MOTOR (REP 5.3)
11	9E50070	SPRING
12	--	STANDOFF (NOT SPARED)
13	140K15952	DRIVE MOTOR PWB
14	110E2640	DOCUMENT HANDLER INTERLOCK SWITCH (S30)
15	130E6720	DOCUMENT SENSOR
16	19E15041	CLIP

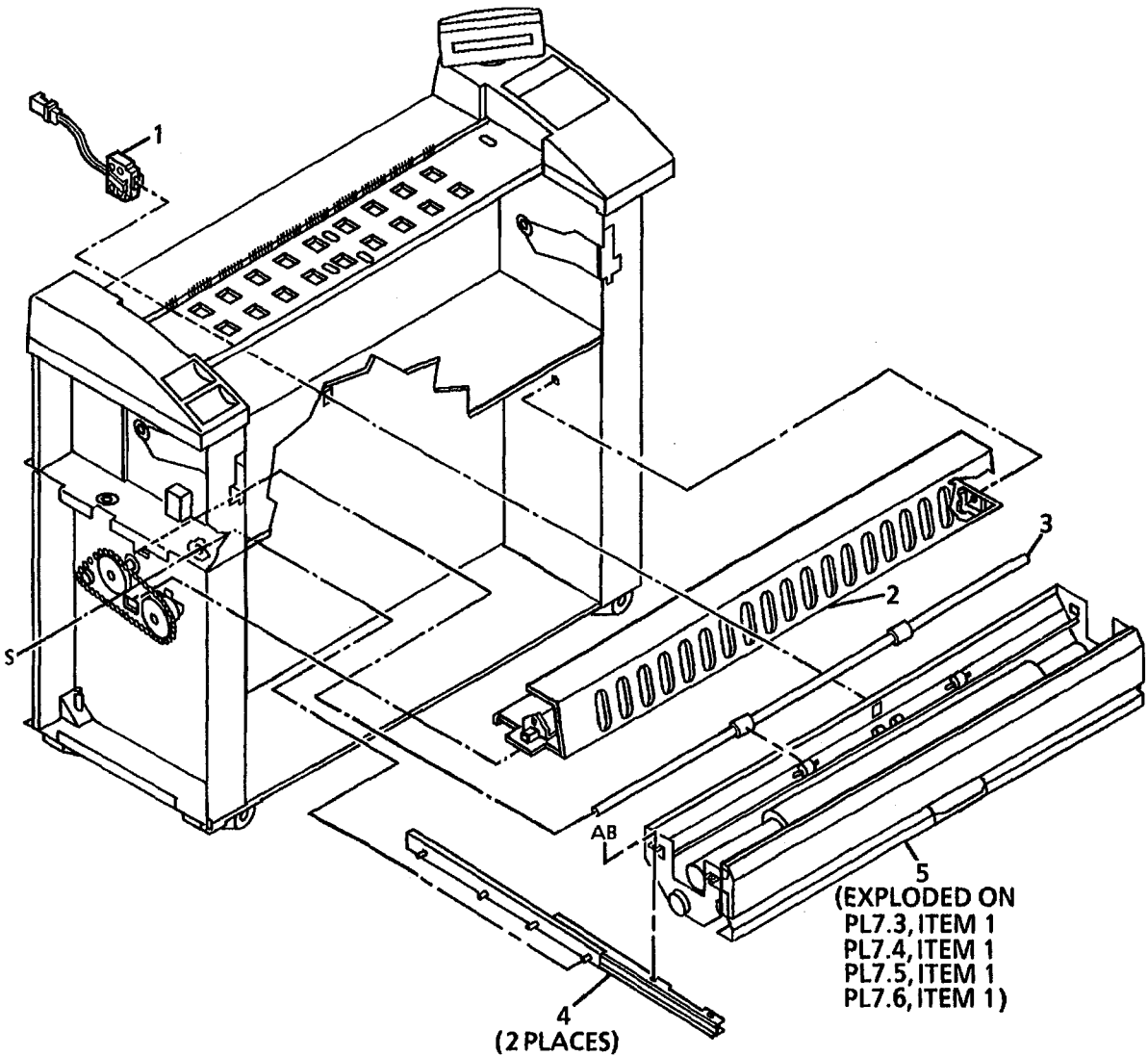
PL 6.1 OPTICS COMPONENTS

ITEM	PART	DESCRIPTION
1	130K53940	ILLUMINATION SENSOR (Q23) (REP 6.3, ADJ 9.2)
2	--	REFLECTOR (P/O ITEM 8)
3	62K4841	LENS (REP 6.2)
4	113E7881	LAMP SHIELD
5	122E302	EXPOSURE LAMP (REP 6.1)
6	113K1221	LAMP SOCKET
7	9E42461	OPTICS SPRING
8	62K5450	REFLECTOR ASSEMBLY (REP 6.1)



0	0008	A
WIN	PL00	X 1

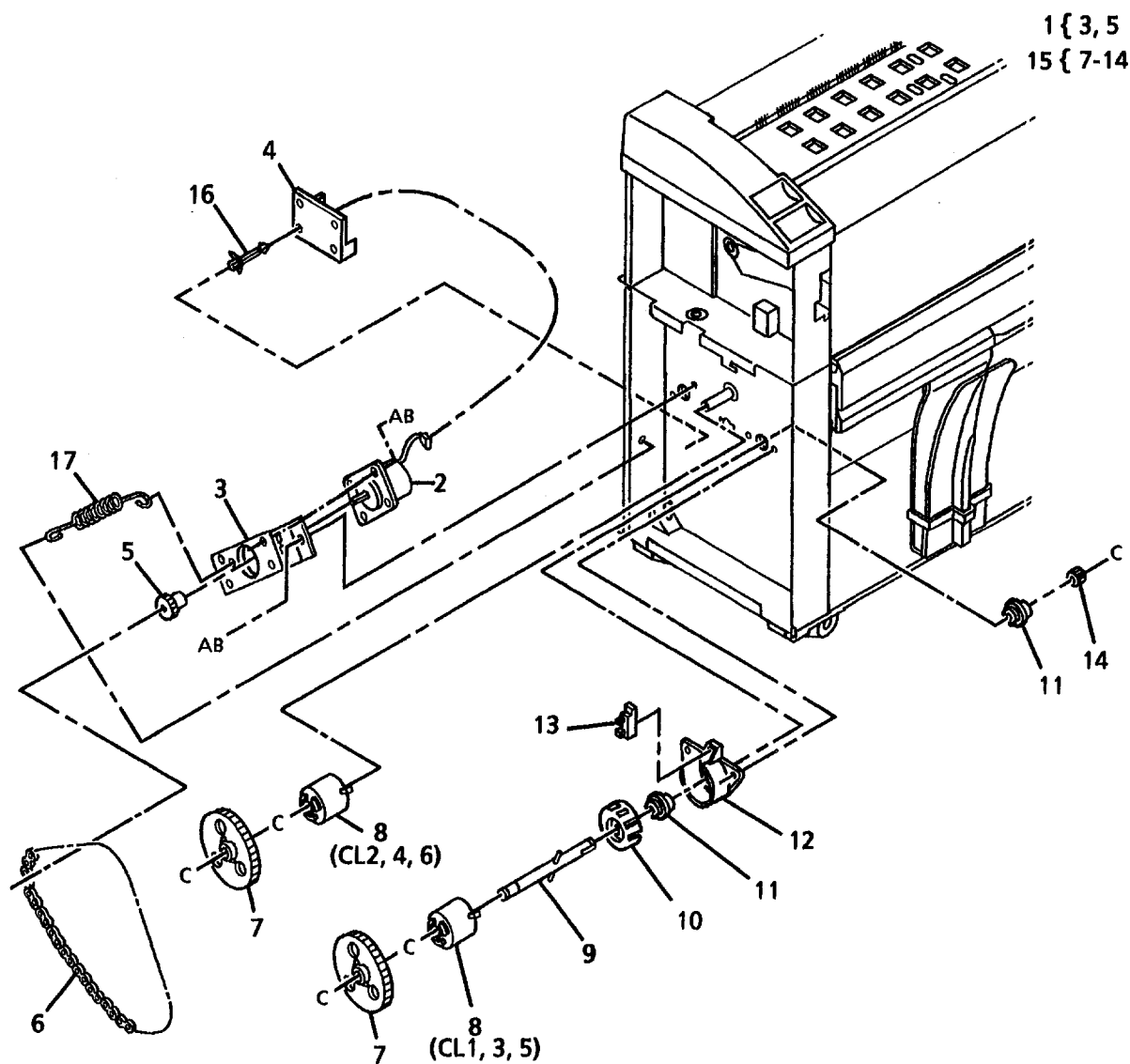
PL 7.1 ROLL SUPPLY FEED ASSEMBLY



ITEM	PART	DESCRIPTION
1	130K51801	POSITION SENSOR
2	126K4140	MEDIA ROLL HEATER
-	126K4130	MEDIA ROLL HEATER
3	22K28930	ROLL FEED DRIVE ROLL
4	10K1351	SLIDE
5	50K19610	ROLL SUPPLY DRAWER
		ASSEMBLY (REP 7.1)

0	0009	A
WIN	PL00	X 2

PL 7.2 ROLL SUPPLY DRIVES

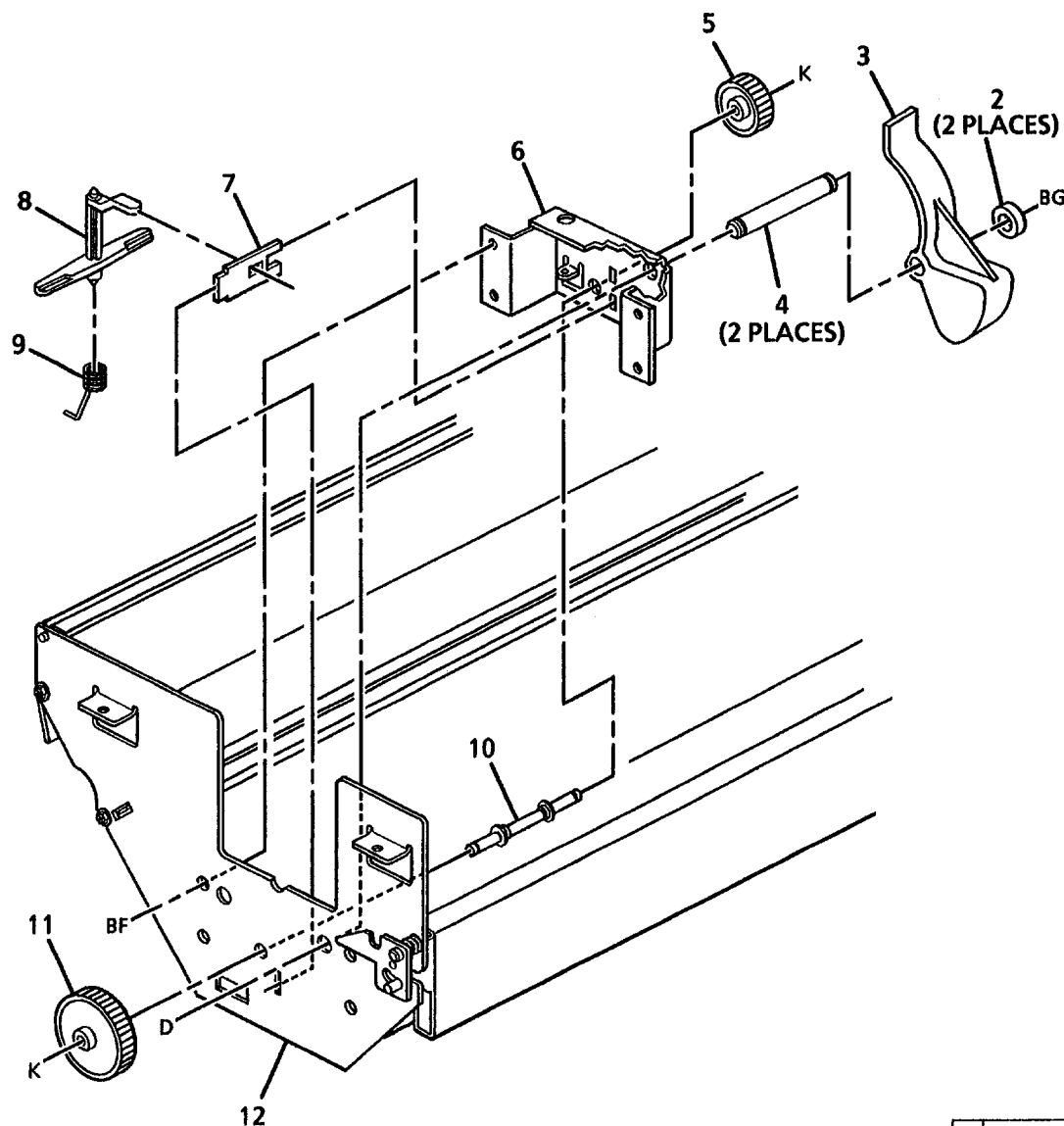


ITEM	PART	DESCRIPTION
1	7K7561	ROLL DRIVE MOTOR ASSEMBLY
2	127K4293	ROLL DRIVE MOTOR (REP 7.9)
3	--	BRACKET (P/O ITEM 1)
4	140K15952	DRIVE MOTOR PWB
5	7E16410	MAIN DRIVE SPROCKET (10T)
6	423W70603	CHAIN
7	7E19071	SPROCKET (50T)
8	121E7510	FEED CLUTCH (REP 7.5)
9	--	REWIND CLUTCH (REP 7.6)
10	5E6810	REWIND SHAFT (P/O ITEM 15)
11	413W30854	ENCODER DISK (REP 7.11)
12	--	BEARING (P/O ITEM 15)
13	130E3250	REWIND HOUSING (REP 7.8)
14	--	MOTION SENSOR (REP 7.7)
15	7K5760	REWIND DRIVE GEAR (12T) (P/O ITEM 15)
16	--	REWIND DRIVE ASSEMBLY
17	9E43260	STANDOFF (NOT SPARED) MOTOR SPRING

0	0010	A
WIN	PL00	X 2

PL 7.3 ROLL SUPPLY DRAWER COMPONENTS (PART 1 OF 4)

1 { 2-12

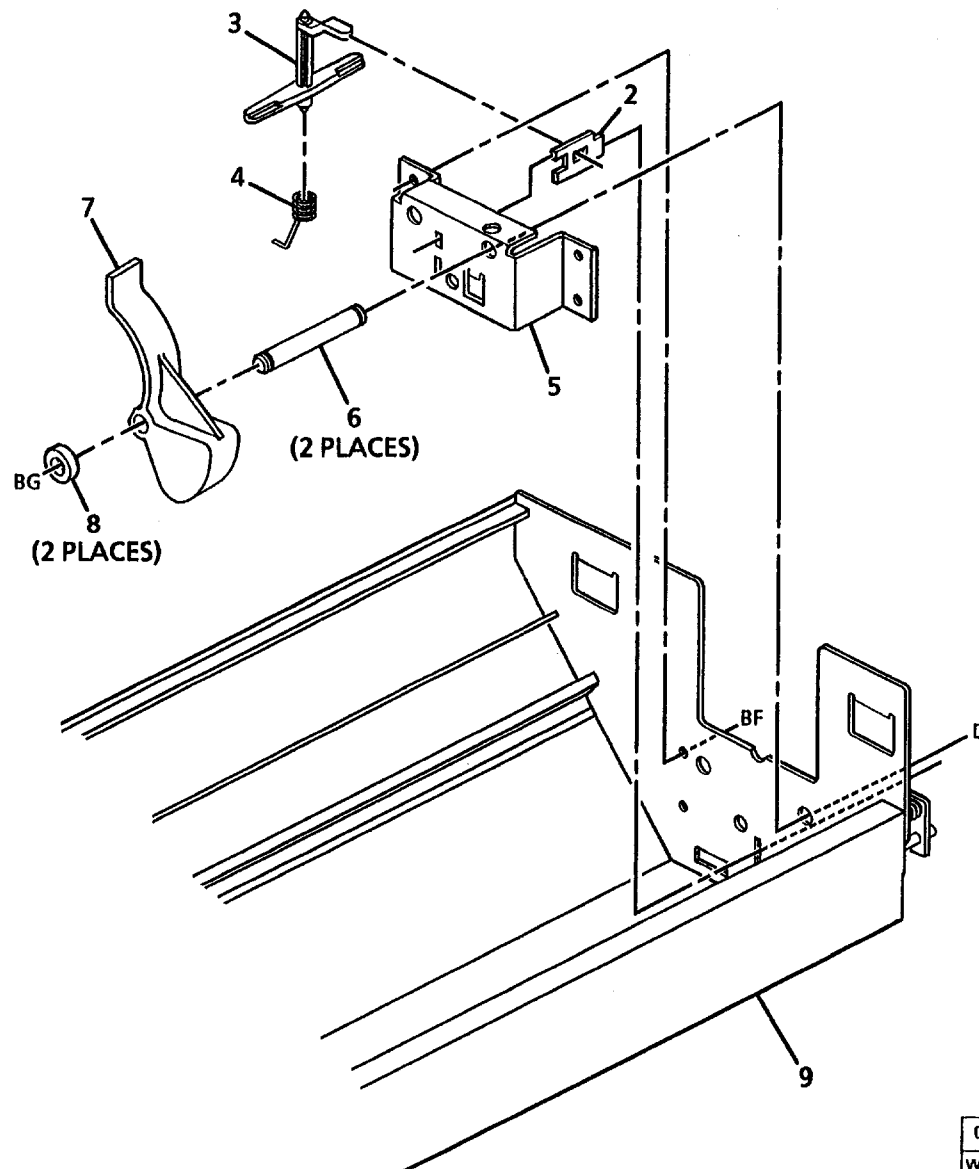


ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY (REF PL7.1, ITEM 5)
2	22E11540	SUPPORT ROLLER
3	55E23520	GEAR GUARD
4	29E14760	LH SUPPORT PIN
5	7E14650	REWIND INTERNAL GEAR (20T) (REP 7.2)
6	--	LH CRADLE BRACKET (P/O ITEM 1)
7	--	LH ROLL LOCK (P/O ITEM 1)
8	3E17610	ROLL LOCK
9	9E27340	ROLL LOCK SPRING
10	--	REWIND SHAFT (P/O ITEM 1)
11	7E14600	REWIND GEAR (32T) (REP 7.2)
12	--	DRAWER FRAME (P/O ITEM 1)

0	0011	A
WIN	PL00	X 1

PL 7.4 ROLL SUPPLY DRAWER COMPONENTS (PART 2 OF 4)

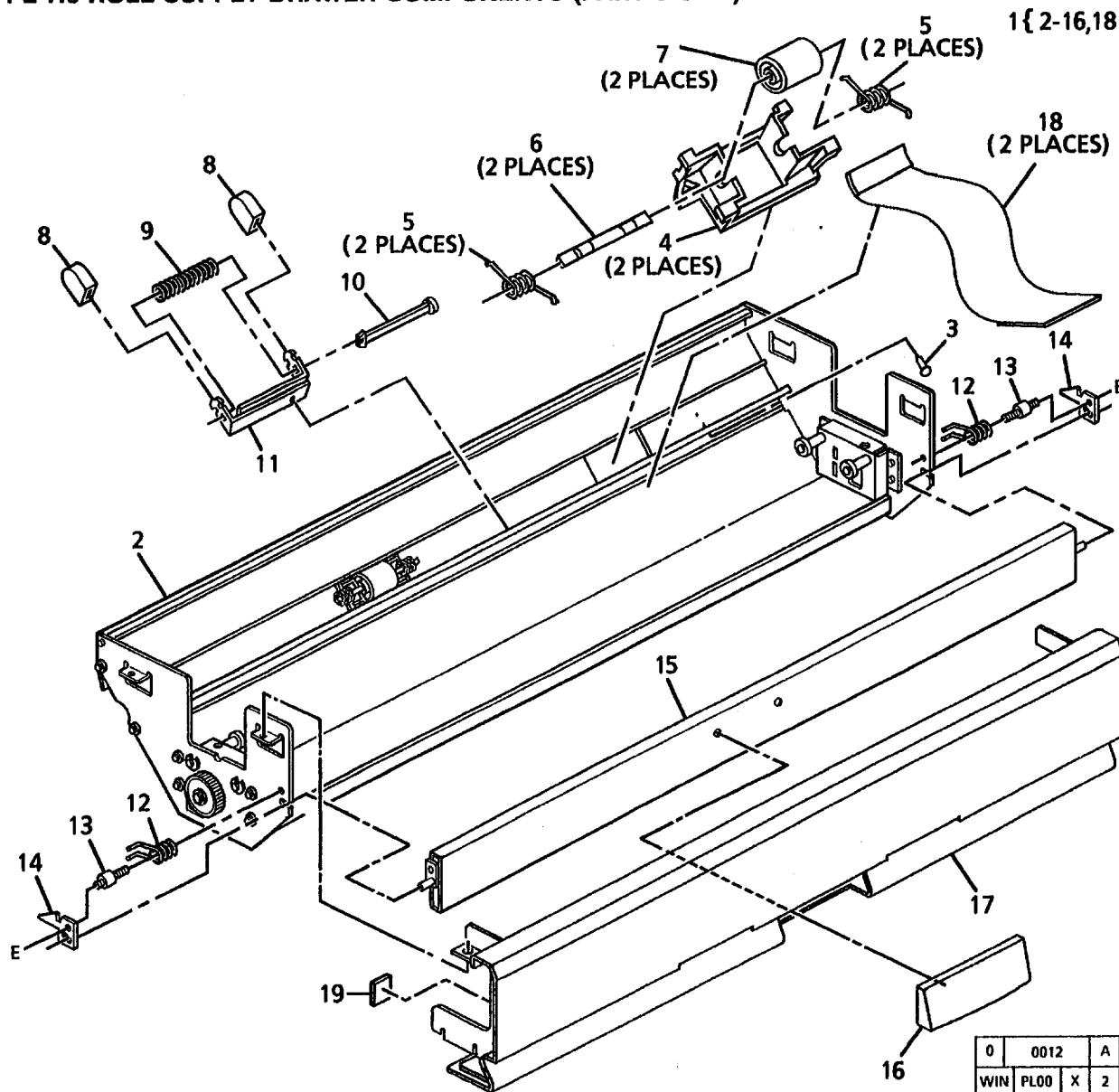
1{2-9



ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY (REF PL7.1, ITEM 5)
2	--	RH ROLL LOCK (P/O ITEM 1)
3	3E17610	ROLL LOCK
4	9E27340	ROLL LOCK SPRING
5	--	RH CRADLE BRACKET (P/O ITEM 1)
6	29E14750	RH SUPPORT PIN
7	55E23520	GEAR GUARD
8	22E11540	SUPPORT ROLLER
9	--	DRAWER FRAME (P/O ITEM 1)

0	0038	A
WIN	PL00	X 0

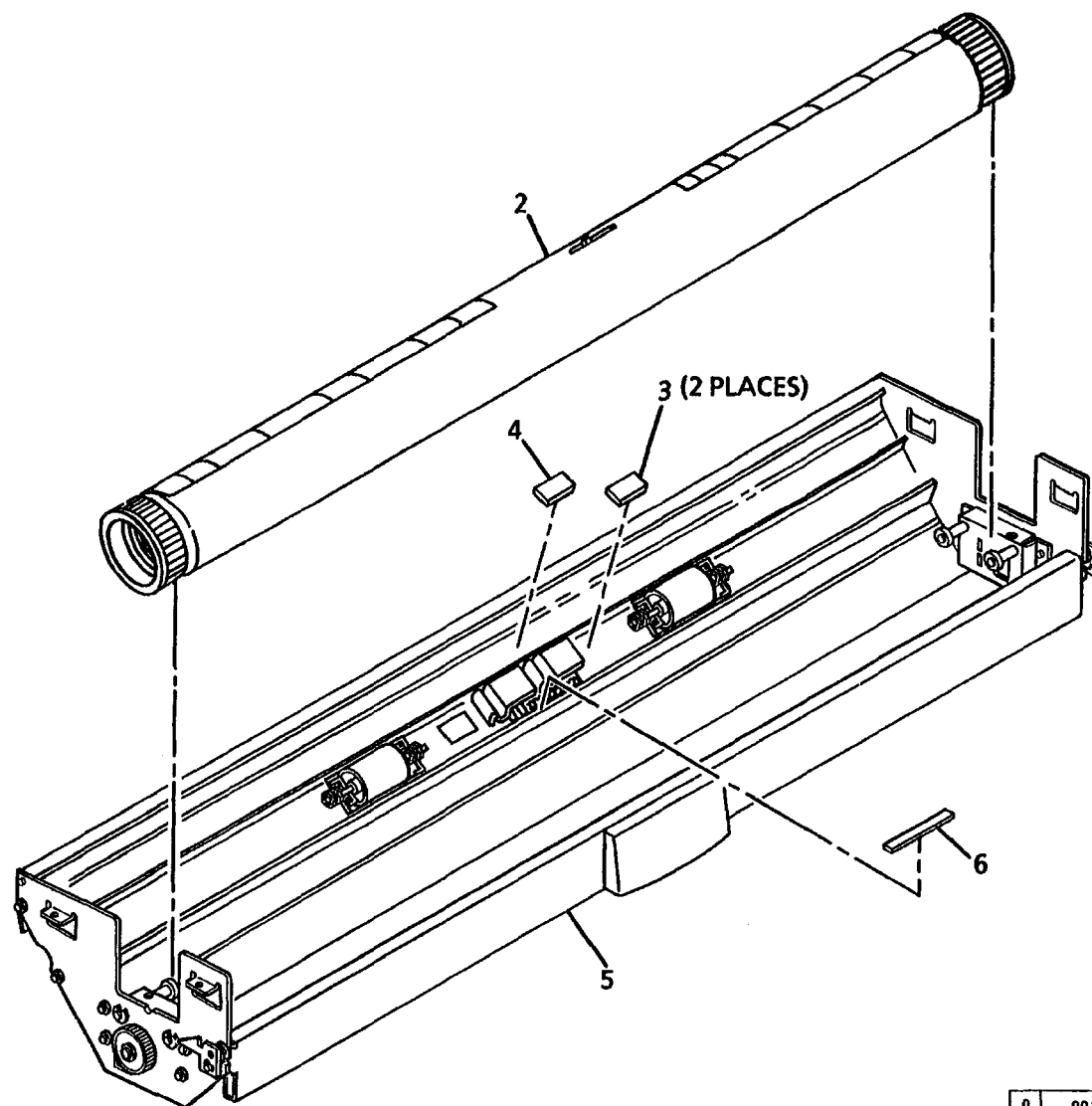
PL 7.5 ROLL SUPPLY DRAWER COMPONENTS (PART 3 OF 4)



ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY (REF PL7.1, ITEM 5)
2	--	DRAWER FRAME (P/O ITEM 1)
3	17E4250	BAFFLE STOP
4	68E17221	BRACKET
5	9E27351	PINCH ROLL SPRING
6	--	PINCH ROLL SHAFT (P/O ITEM 1)
7	22E10060	ROLL FEED PINCH ROLL (REP 7.3)
8	--	LOCK RELEASE HANDLE (P/O ITEM 1)
9	9E32790	LOCK SPRING
10	29E14460	RETAINER
11	--	LATCH (P/O ITEM 1)
12	9E27330	DRAWER LATCH SPRING
13	--	LATCH PIN (P/O ITEM 1)
14	--	SUPPLY DRAWER LATCH (P/O ITEM 1)
15	3K7580	HANDLE
16	3E26570	DRAWER HANDLE
17	48K14560	DRAWER COVER
18	38K9190	PAPER GUIDE
19	121E7680	MAGNET

PL 7.6 ROLL SUPPLY DRAWER COMPONENTS (PART 4 OF 4)

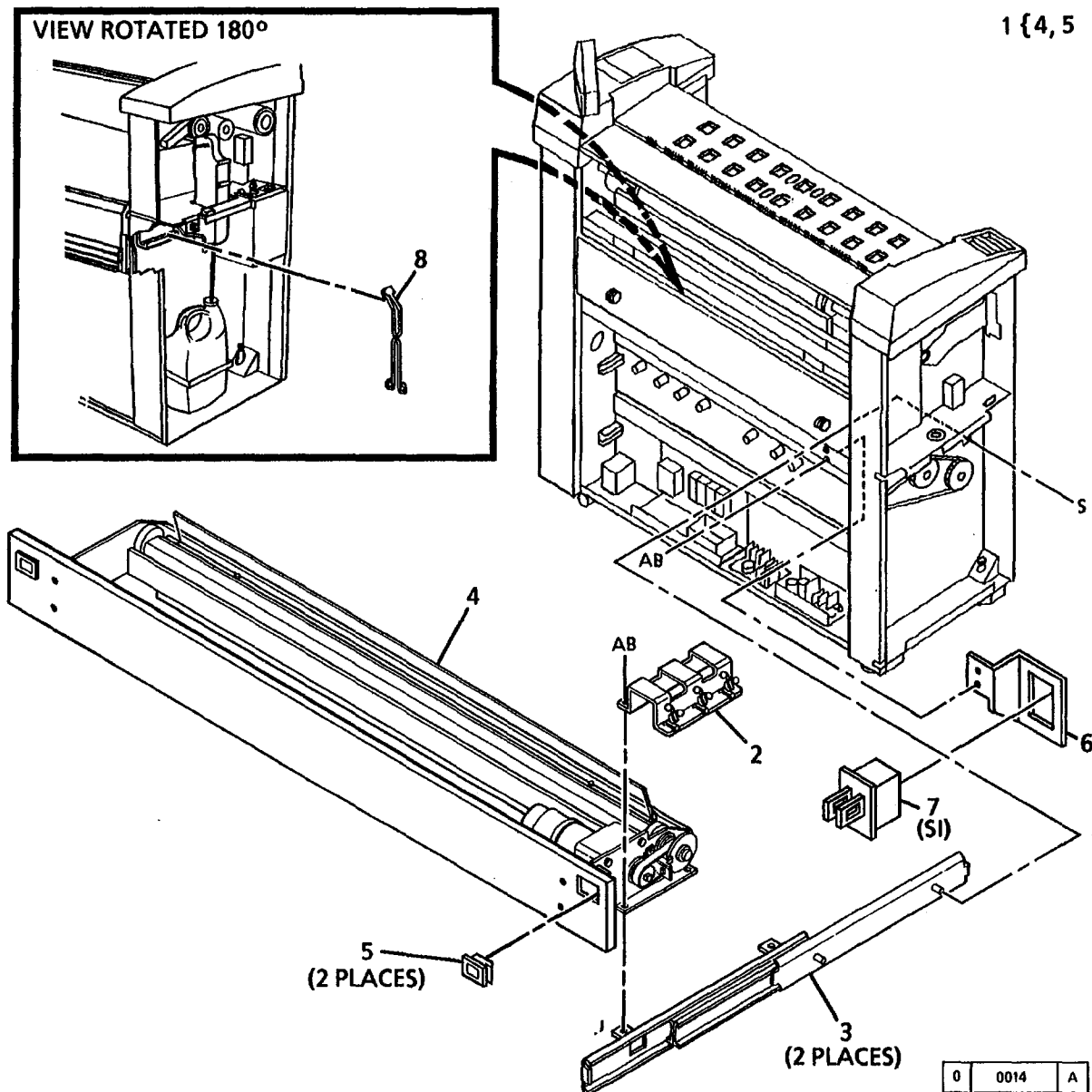
1{3-6



ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY (REF PL7.1, ITEM 5)
2	52K1861	ROLL SUPPORT TUBE ASSEMBLY (60HZ)
-	52K2081	ROLL SUPPORT TUBE ASSEMBLY (50HZ)
3	92E22541	LABEL (PUSH HERE)
4	92E36430	LABEL (MEDIA LEAD)
5	--	DRAWER FRAME (P/O ITEM 1)
6	92E22560	LABEL (PINCH ARROWS)

0	0013	A
WIN	PL00	X 3

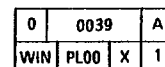
PL 7.7 MEDIA CUTTER ASSEMBLY



ITEM	PART	DESCRIPTION
1	--	MEDIA CUTTER ASSEMBLY (TO BE AVAILABLE AT LATER DATE)
2	--	BRACKET (NOT SPARED)
3	10K1360	MEDIA CUTTER SLIDE
4	--	MEDIA CUTTER (P/O ITEM 1)
5	3E18781	LATCH
6	--	BRACKET (NOT SPARED)
7	110E2640	MEDIA CUTTER COVER INTERLOCK SWITCH (S1)
8	--	TONGS (NOT SPARED)

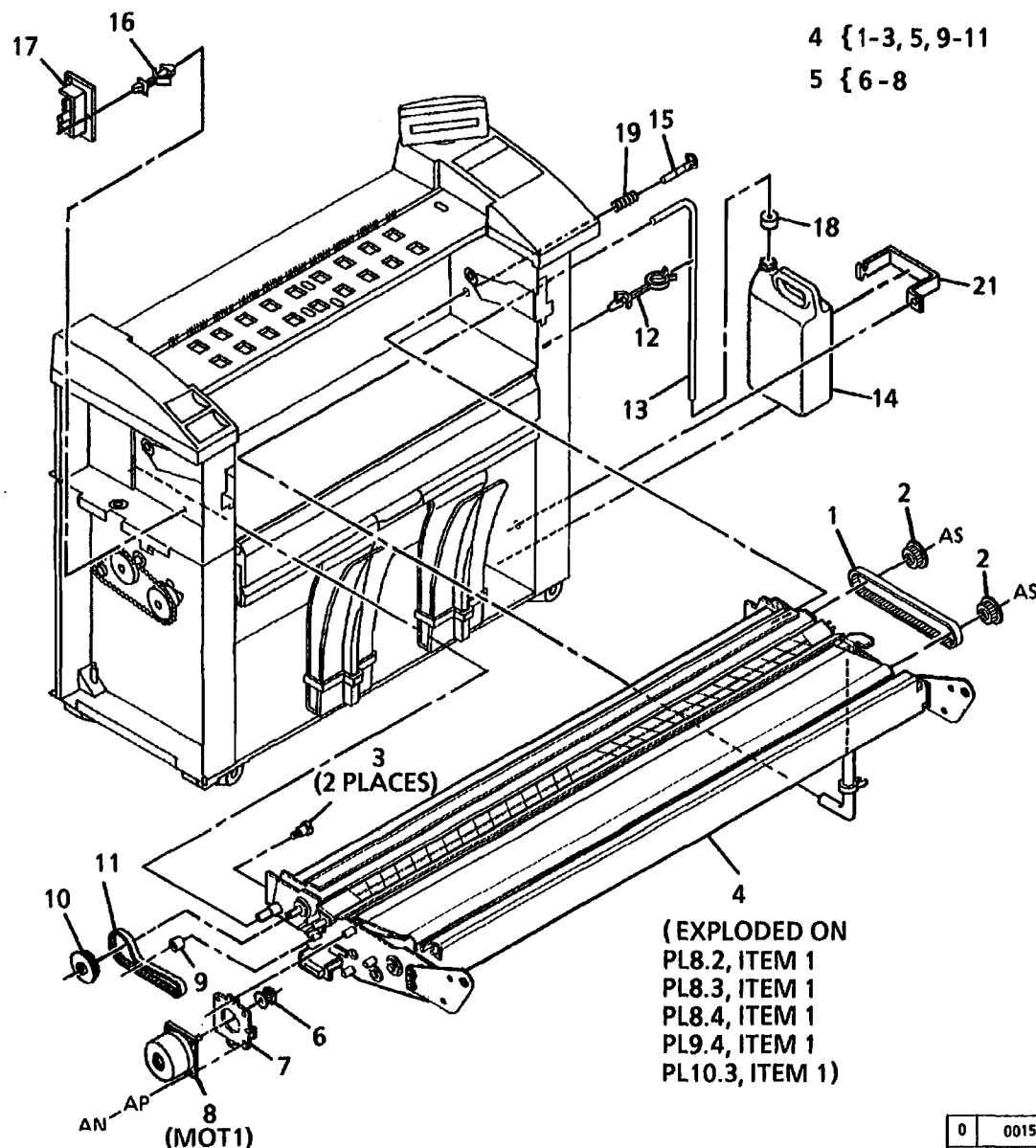
3030

5/94
5-19



PARTS LIST SECTION
PL 7.8

PL 8.1 MEDIA TRANSPORT ASSEMBLY



ITEM	PART	DESCRIPTION
1	423W72201	SHEET DRIVE BELT
2	20E13853	SHEET DRIVE PULLEY
3	26E11970	SHOULDER SCREW
4	22K30592	MEDIA TRANSPORT ASSEMBLY (REP 8.1)
5	--	TRANSPORT DRIVE MOTOR ASSEMBLY (NOT SPARED)
6	20E13603	DRIVE MOTOR PULLEY
7	--	MOTOR MOUNTING PLATE (P/O ITEM 5)
8	127K4293	TRANSPORT DRIVE MOTOR (MOT1) (REP 8.10)
9	22E11441	IDLER ROLLER
10	20E12353	REGISTRATION DRIVE PULLEY
11	423W64001	REGISTRATION DRIVE BELT (REP 8.13)
12	--	TWIST CLAMP (NOT SPARED)
13	52E7910	MOISTURE COLLECTION TUBE
14	93E1501	MOISTURE COLLECTION BOTTLE
15	29K1111	PIN
16	--	STANDOFF (NOT SPARED)
17	140K15952	DRIVE MOTOR PWB
18	--	BOTTLE CAP (NOT SPARED)
19	9E32510	COMPRESSION SPRING

Exploded view diagram of a mechanical assembly. The diagram shows the following components and their assembly locations:

- Part 1:** A long, thin metal rail or track.
- Part 2:** A small component, labeled "AL" and "AM", located at the top right.
- Part 3:** A long, thin metal rail or track, located below Part 1.
- Part 4 (Q1):** A small component, labeled "X", located at the top right.
- Part 5:** A small component, labeled "X", located at the top right.
- Part 6:** A small component, labeled "K", located at the bottom left.
- Part 7:** A small component, labeled "K", located at the bottom left.
- Part 8:** A small component, labeled "K", located at the bottom left.
- Part 9:** A small component, labeled "K", located at the bottom left.
- Part 10:** A long, thin metal rail or track, located below Part 3.
- Part 11:** A small component, labeled "K", located at the bottom left.
- Part 12:** A long, thin metal rail or track, located below Part 10.
- Part 13:** A small component, labeled "AS" and "BN", located at the bottom right.
- Part 14:** A long, thin metal rail or track, located below Part 12.
- Part 15:** A small component, labeled "BN", located at the bottom right.

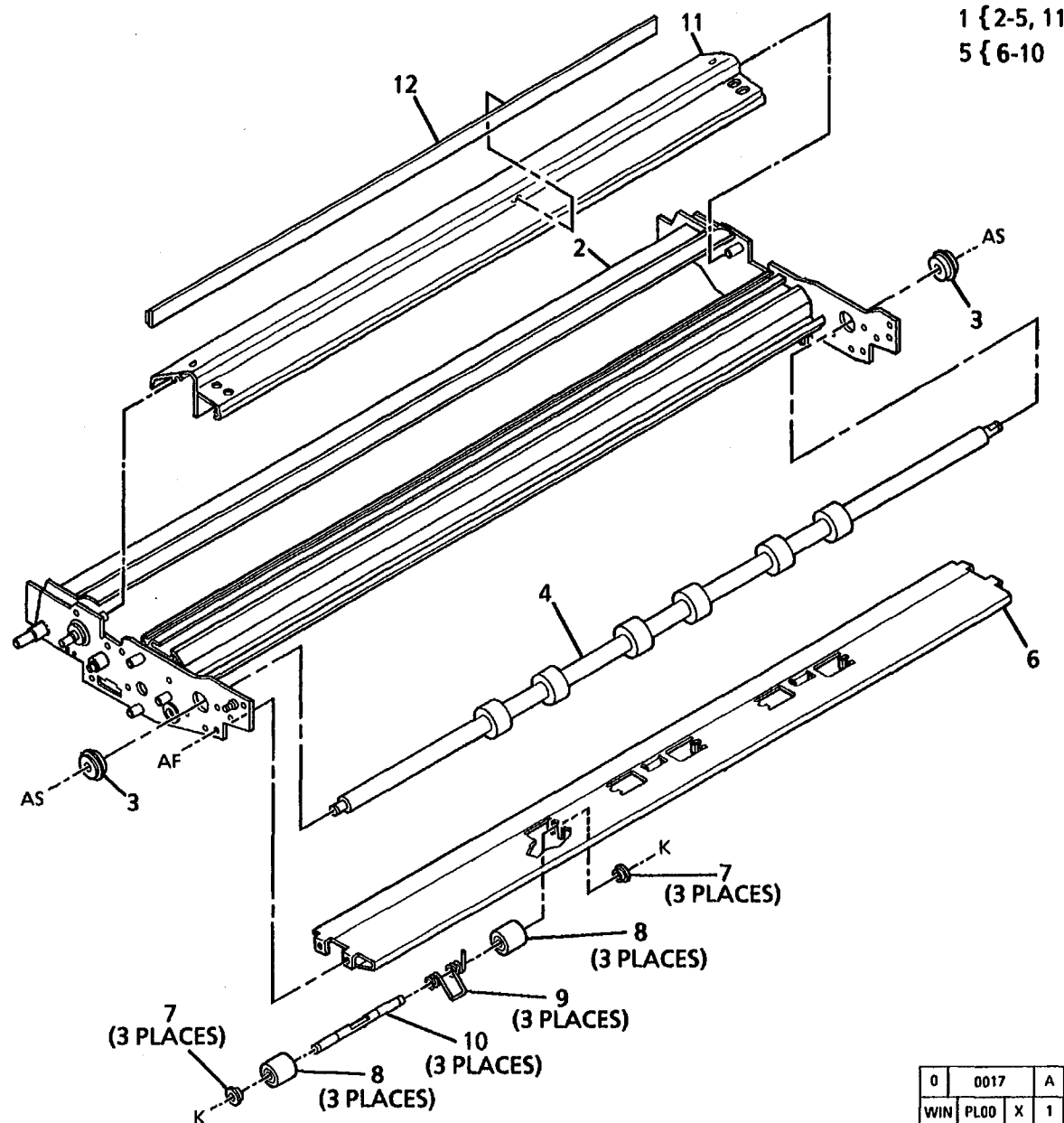
Assembly locations are indicated by dashed lines and labels:

- (3 PLACES):** Indicated for parts 6, 7, and 8.
- (2 PLACES):** Indicated for parts 11 and 15.
- AL, AM:** Located at the top right.
- X:** Located at the top right.
- K:** Located at the bottom left.
- AS, BN:** Located at the bottom right.

ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF PL8.1, ITEM 4)
2	--	REGISTRATION SUPPORT ASSEMBLY (P/O ITEM 1)
3	--	REGISTRATION SUPPORT (P/O ITEM 2)
4	130E5990	MEDIA REGISTRATION SENSOR (Q1) (REP 8.8)
5	30K37830	REGISTRATION SENSOR BRACKET
6	16E6020	BUSHING
7	22E10531	REGISTRATION PINCH ROLL (REP 8.12)
8	6E42300	PINCH ROLL SHAFT
9	9E32500	PINCH ROLL SPRING
10	--	TURNAROUND BAFFLE (P/O ITEM 2)
11	--	REGISTRATION SUPPORT SPRING (P/O ITEM 1)
12	6K12940	REGISTRATION DRIVE ROLL
13	413W31054	BEARING
14	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)
15	16E8931	BUSHING

0	0016		A
WIN	PL00	X	1

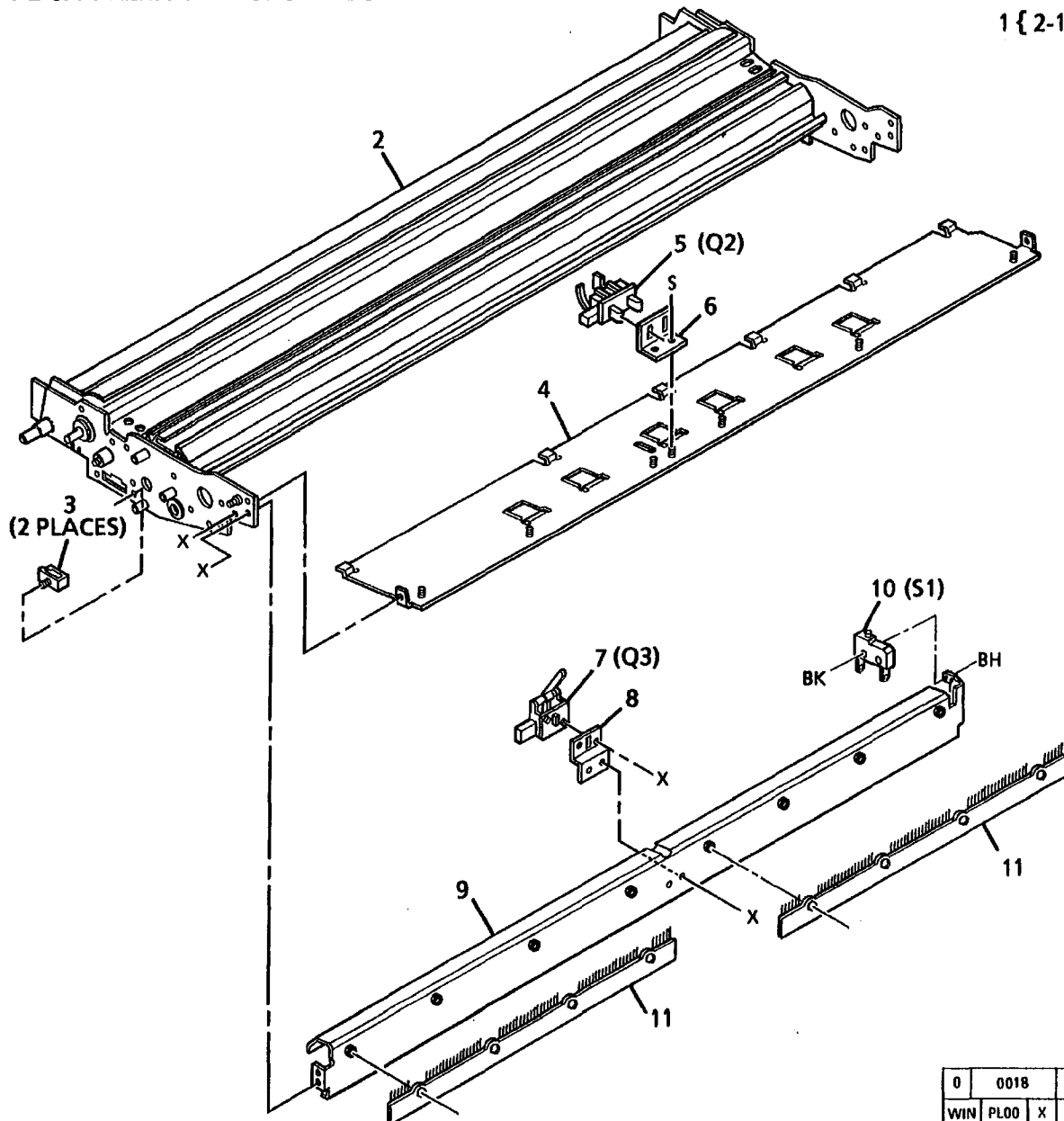
PL 8.3 CUT SHEET FEED COMPONENTS



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF PL8.1, ITEM 4)
2	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)
3	413W31054	BEARING
4	6K9731	SHEET DRIVE ROLL (REP 8.6)
5	--	SHEET SUPPORT ASSEMBLY (P/O ITEM 1)
6	--	SHEET LOWER Baffle (P/O ITEM 1)
7	16E6020	BUSHING
8	22E9390	SHEET PINCH ROLL (REP 8.7)
9	9E32490	SHEET PINCH SPRING (REP 8.7)
10	6E23540	SHEET PINCH SHAFT (REP 8.7)
11	--	TOP GUIDE (P/O ITEM 1)
12	55K16960	SHIELD

0	0017	A
WIN	PL00	X 1

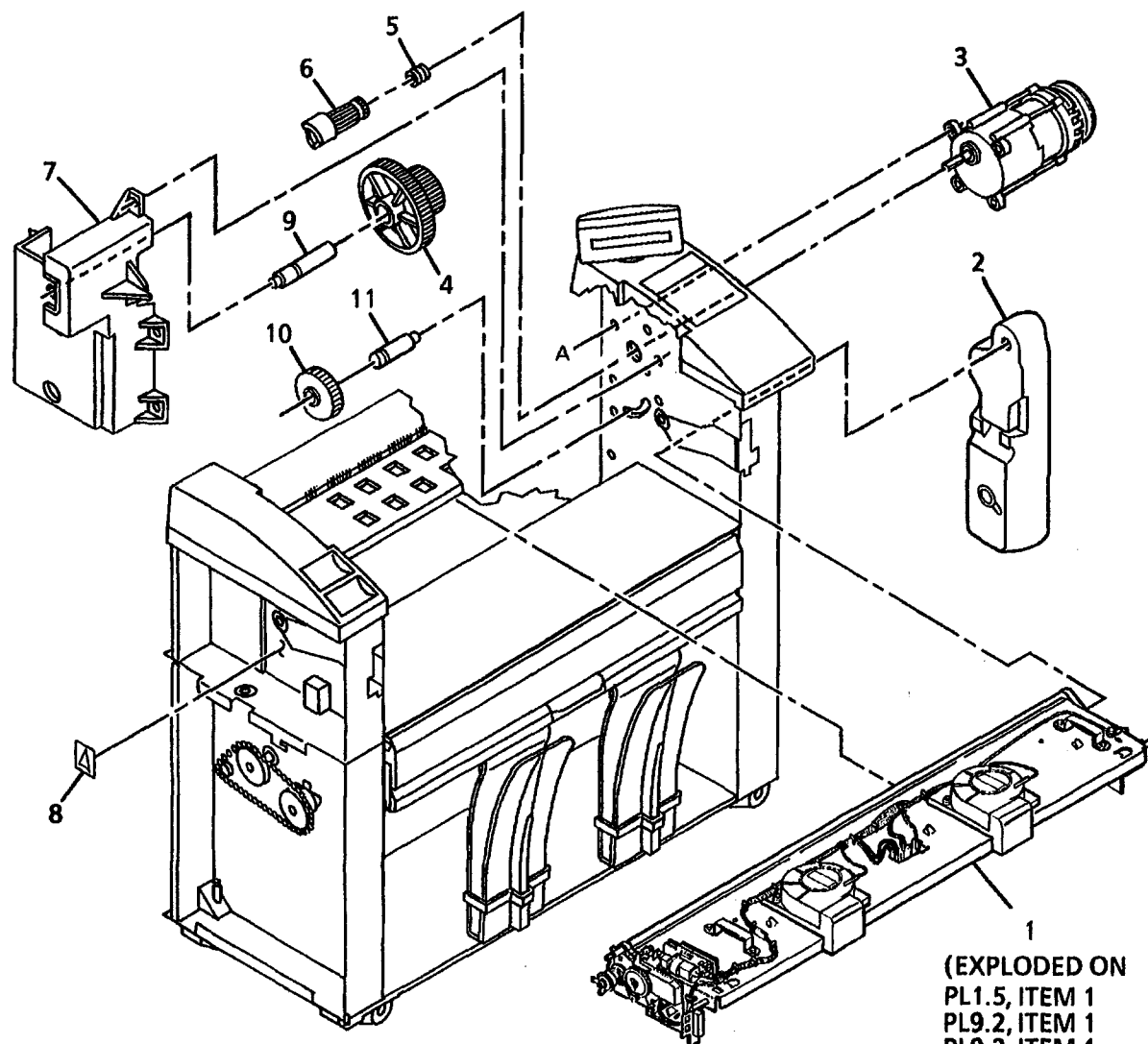
1 { 2-11



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF PL8.1, ITEM 4)
2	--	TRANSPORT FRAME (P/O ITEM 1)
3	19E7100	CABLE CLIP
4	38K7214	SHEET UPPER BAFFLE
5	110K3731	SHEET FEED SENSOR (REP 8.11)
6	--	BRACKET (P/O ITEM 1)
7	110K3340	MEDIA EXIT SWITCH (REP 8.2)
8	--	BRACKET (P/O ITEM 1)
9	--	EXIT SUPPORT (P/O ITEM 1)
10	110E5500	STRIPPER FINGER JAM SWITCH (REP 8.14)
11	115E3100	STATIC BRUSH

0	0018		A
WIN	PL00	X	2

PL 9.1 XEROGRAPHIC MODULE ASSEMBLY



ITEM	PART	DESCRIPTION
1	126K4150	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (REP 9.11)
-	126K4160	XEROGRAPHIC MODULE ASSEMBLY (50HZ) (REP 9.11)
2	--	TONER WASTE BOTTLE (NOT SPARED)
3	127E5073	DRUM/DEVELOPER DRIVE MOTOR (60HZ)
-	127E6891	DRUM/DEVELOPER DRIVE MOTOR (50HZ)
4	7E29510	DRUM DRIVE GEAR (36T/68T)
5	9E41251	COUPLING SPRING
6	7E29520	DRIVE GEAR/COUPLING GEAR HOUSING (NOT SPARED)
7	--	GEAR HOUSING (NOT SPARED)
8	92E36450	LABEL (RED ARROW)
9	6E23761	IDLER SHAFT
10	7K7570	GEAR (48T)
11	29E13641	DRUM/DEVELOPER DRIVE PIN

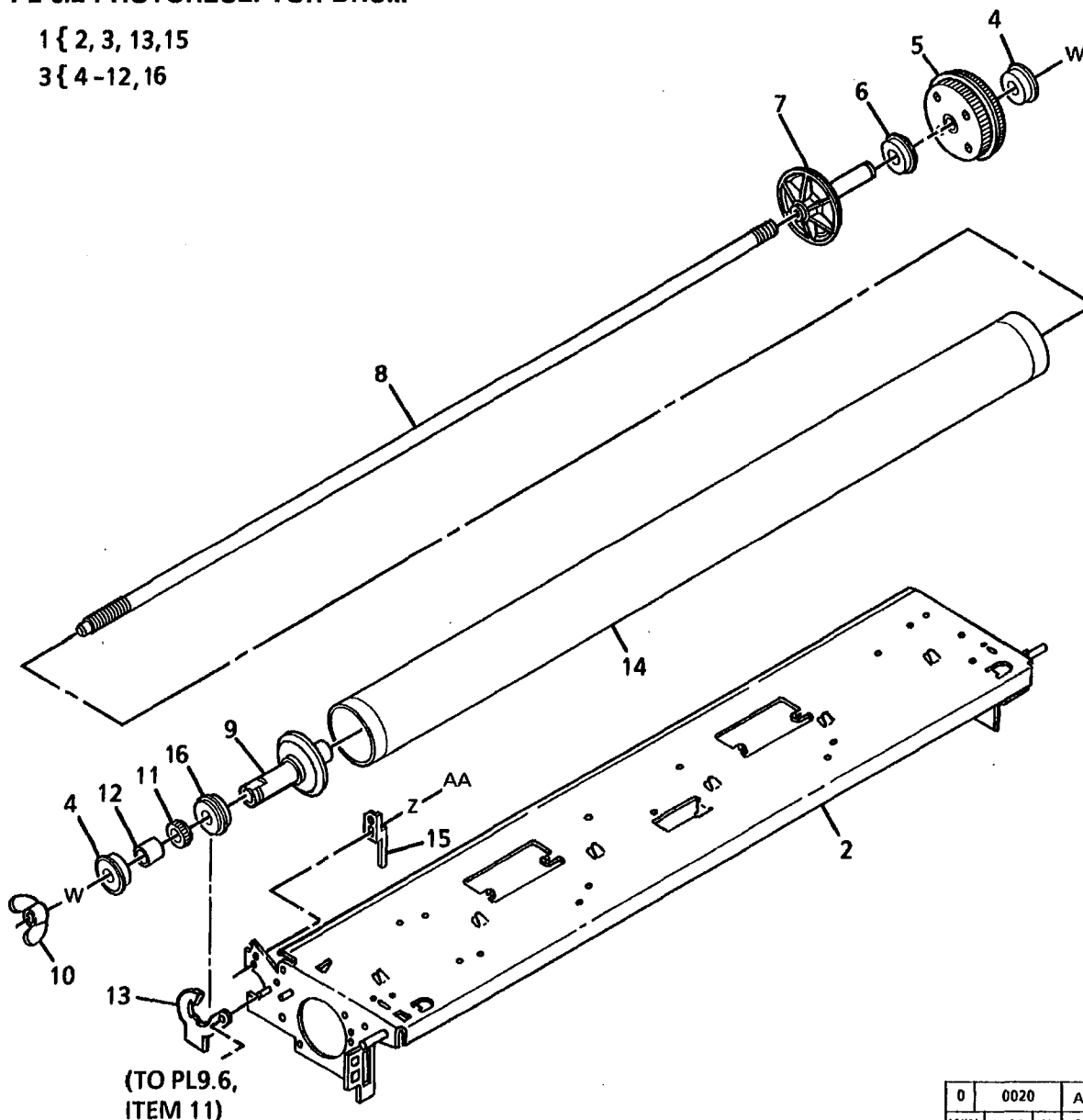
(EXPLODED ON
PL1.5, ITEM 1
PL9.2, ITEM 1
PL9.3, ITEM 1
PL9.5, ITEM 1
PL9.6, ITEM 1)

0	0019	A
WIN	PL00	X 2

PL 9.2 PHOTORECEPTOR DRUM

1 { 2, 3, 13, 15

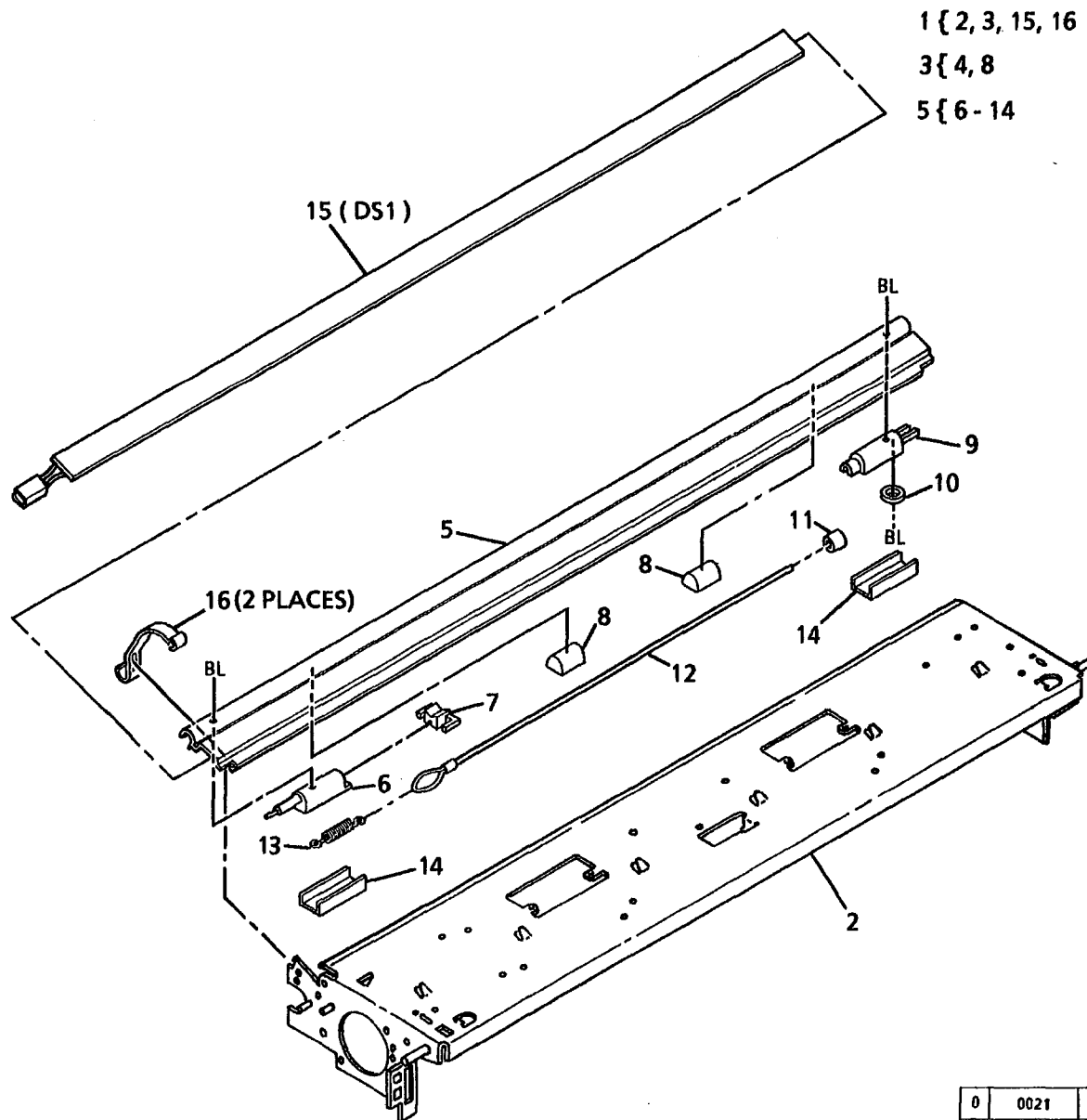
3 { 4 - 12, 16



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL9.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	6K13310	PHOTORECEPTOR SHAFT ASSEMBLY
4	13K380	BEARING
5	7E27031	DRUM DRIVE GEAR
6	413W31553	BEARING
7	5K3450	RH END CAP
8	--	SHAFT (P/O ITEM 3)
9	5K3440	LH HUB
10	230W652	WING NUT
11	7E1340	CLEANER BLADE AND TONER AUGER DRIVE GEAR
12	14E2671	SPACER
13	--	LH SUPPORT (TO BE AVAILABLE AT LATER DATE)
14	1R81	PHOTORECEPTOR DRUM (REP 9.2, ADJ 9.2)
15	30E16161	GROUND CLIP
16	--	BEARING (NOT SPARED)

0	0020	A
WIN	PL00	X 3

PL 9.3 CHARGE COROTRON AND ERASE LED PWB



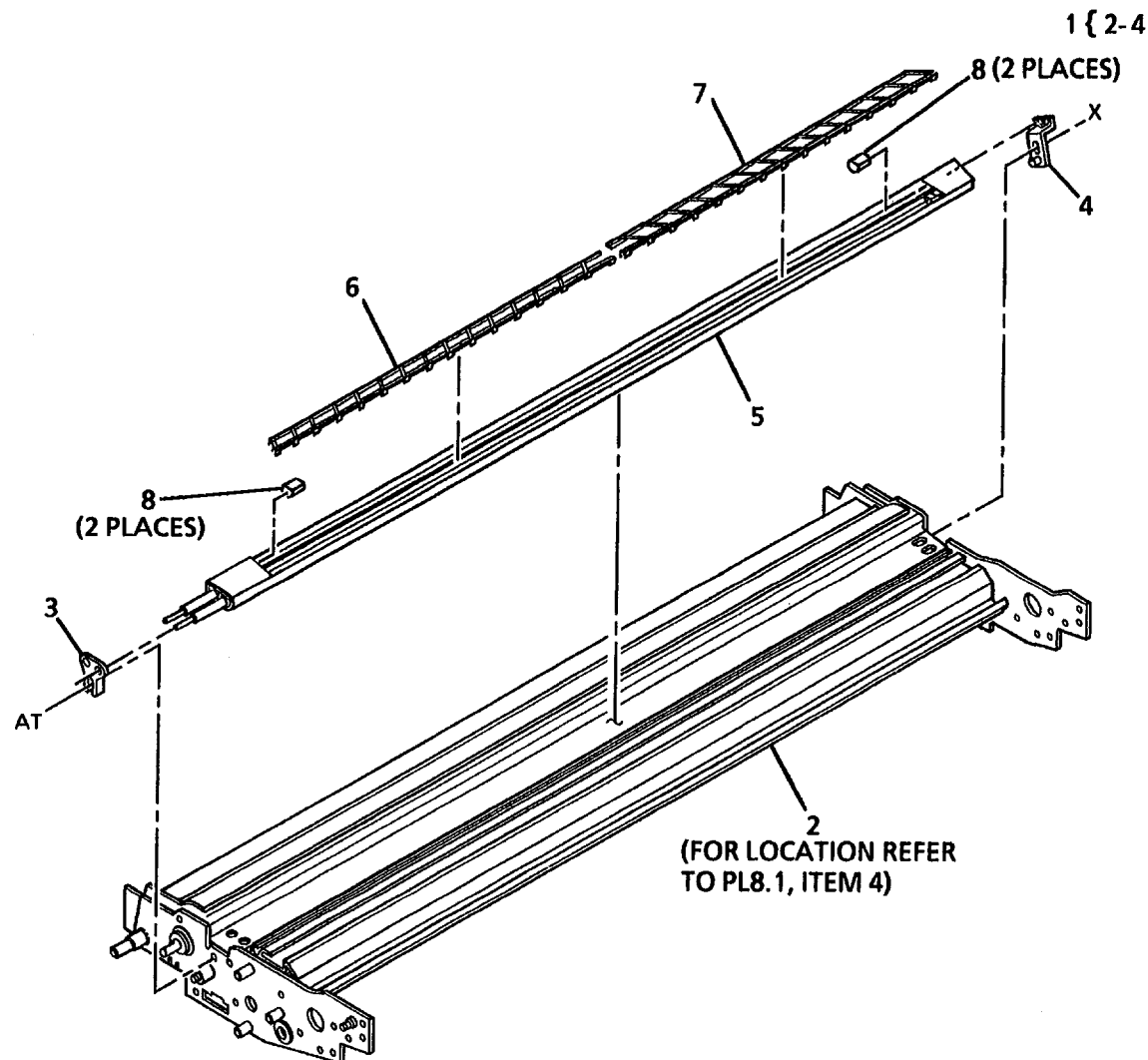
1 { 2, 3, 15, 16
3 { 4, 8
5 { 6 - 14

ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL9.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	125K1412	CHARGE COROTRON/ERASE LAMP ASSEMBLY (REP 9.8, ADJ 9.2)
4	--	SHIELD (P/O ITEM 3)
5	600K37740	COROTRON REPAIR KIT
6	--	REAR BLOCK (P/O ITEM 5)
7	--	WIRE GUIDE (P/O ITEM 5)
8	4E502	FOAM DAMPER
9	--	FRONT BLOCK (P/O ITEM 5)
10	--	CLAMP (P/O ITEM 5)
11	--	FERRITE BEAD (P/O ITEM 5)
12	--	WIRE (GOLD)(P/O ITEM 5)
13	--	SPRING (P/O ITEM 5)
14	--	ARC SHIELD (P/O ITEM 5)
15	101K18880	ERASE LED PWB (DS1)
16	9E34222	COROTRON RETAINER

0	0021	A
WIN	PL00	X 1

PL 9.4 TRANSFER/DETACK COROTRON

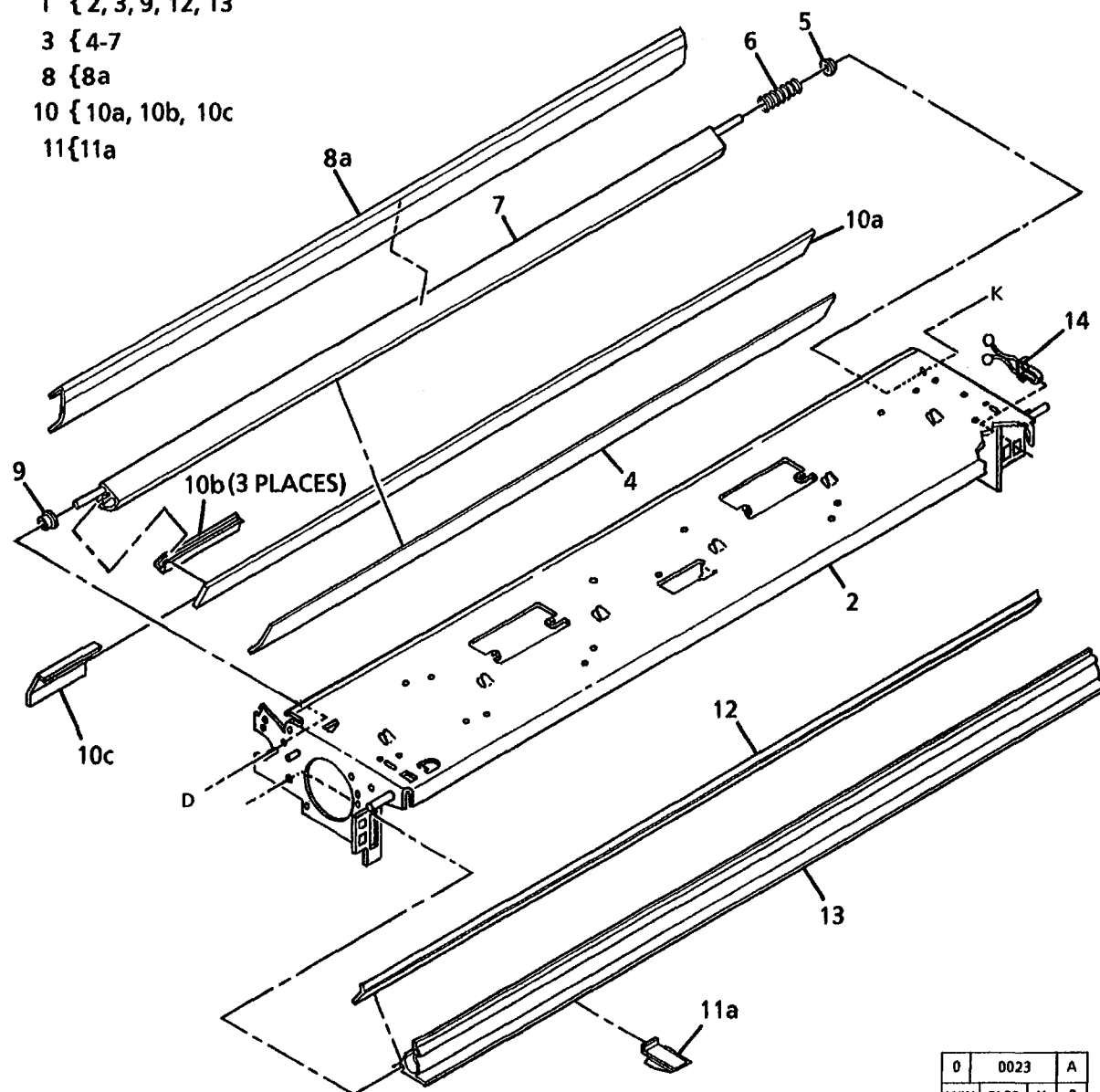
ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF PL8.1, ITEM 4)
2	--	TRANSPORT FRAME (P/O ITEM 1)
3	19E16080	LEFT COROTRON CLAMP
4	19E19971	RIGHT COROTRON CLAMP
5	125K1220	TRANSFER/DETACK COROTRON
6	38E6610	(REP 9.9, ADJ 9.2) LEFT PAPER GUIDE
7	38E6620	RIGHT PAPER GUIDE
8	4E502	FOAM DAMPER



0	0022	A
WIN	PL00	X 2

PL 9.5 PHOTORECEPTOR DRUM CLEANING (PART 1 OF 2)

- 1 { 2, 3, 9, 12, 13
- 3 { 4-7
- 8 { 8a
- 10 { 10a, 10b, 10c
- 11 { 11a

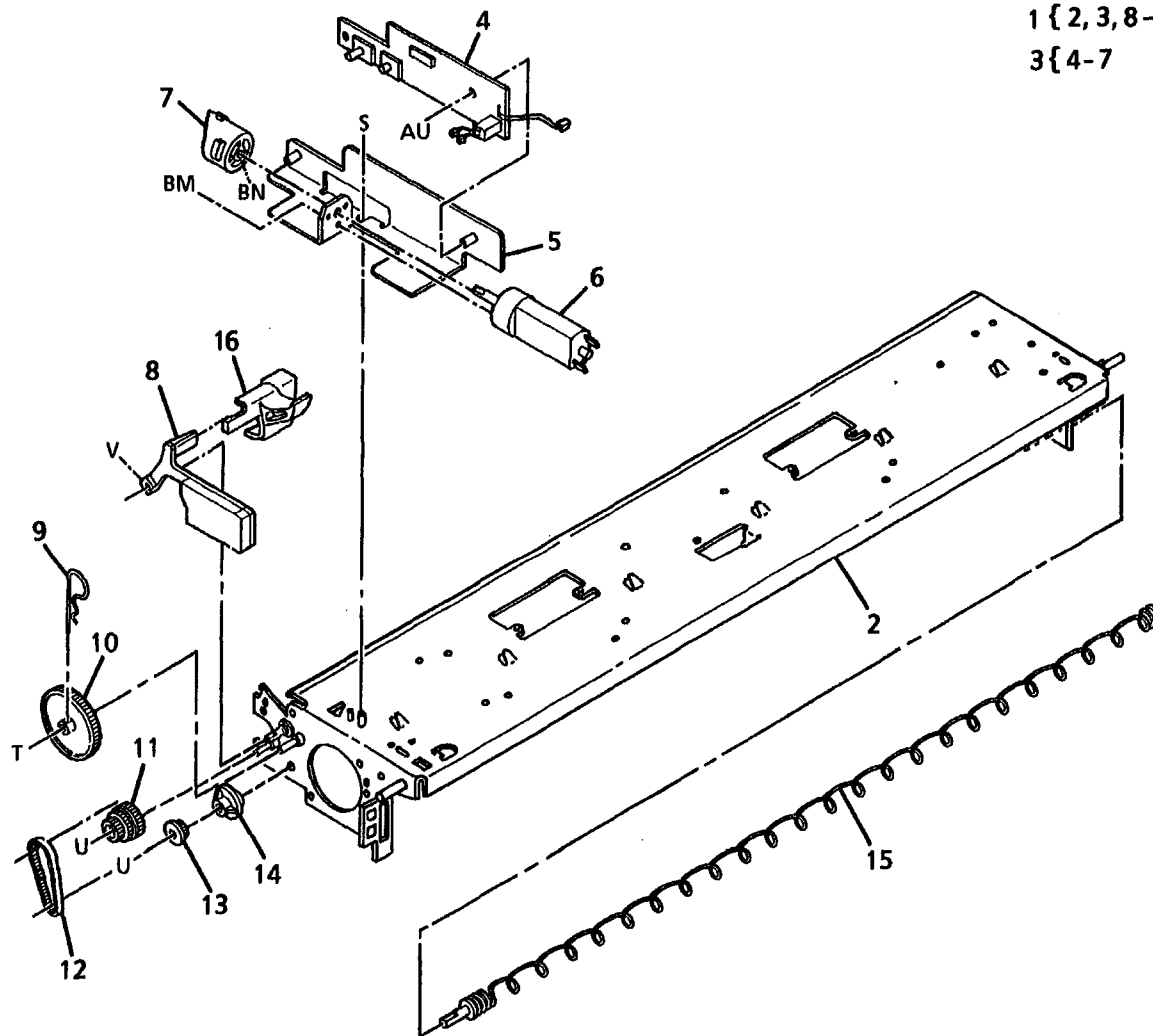


ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL9.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	42K1390	CLEANER BLADE ASSEMBLY (REP 9.4)
4	35E3580	BLADE SEAL
5	13E1571	BEARING
6	9E6960	SPRING
7	--	CLEANER HOUSING (P/O ITEM 3)
8	600K29981	CONTAMINATION SEAL KIT
8a	--	CONTAMINATION SEAL (REP 9.15)
9	13E7161	BEARING
10	600K25780	CLEANER BLADE REPAIR KIT
10a	--	CLEANER BLADE
10b	--	CLEANER BLADE RETAINER
10c	--	CLEANER BLADE SEAL
11	600K8481	MEDIA DEFLECTOR KIT (7/KIT)
11a	--	MEDIA GUIDE
12	35K1222	PHOTORECEPTOR SEAL
13	--	HOUSING (P/O ITEM 1)
14	120E6510	TWIST CLAMP

0	0023	A
WIN	PL00	X 3

PL 9.6 PHOTORECEPTOR DRUM CLEANING (PART 2 OF 2)

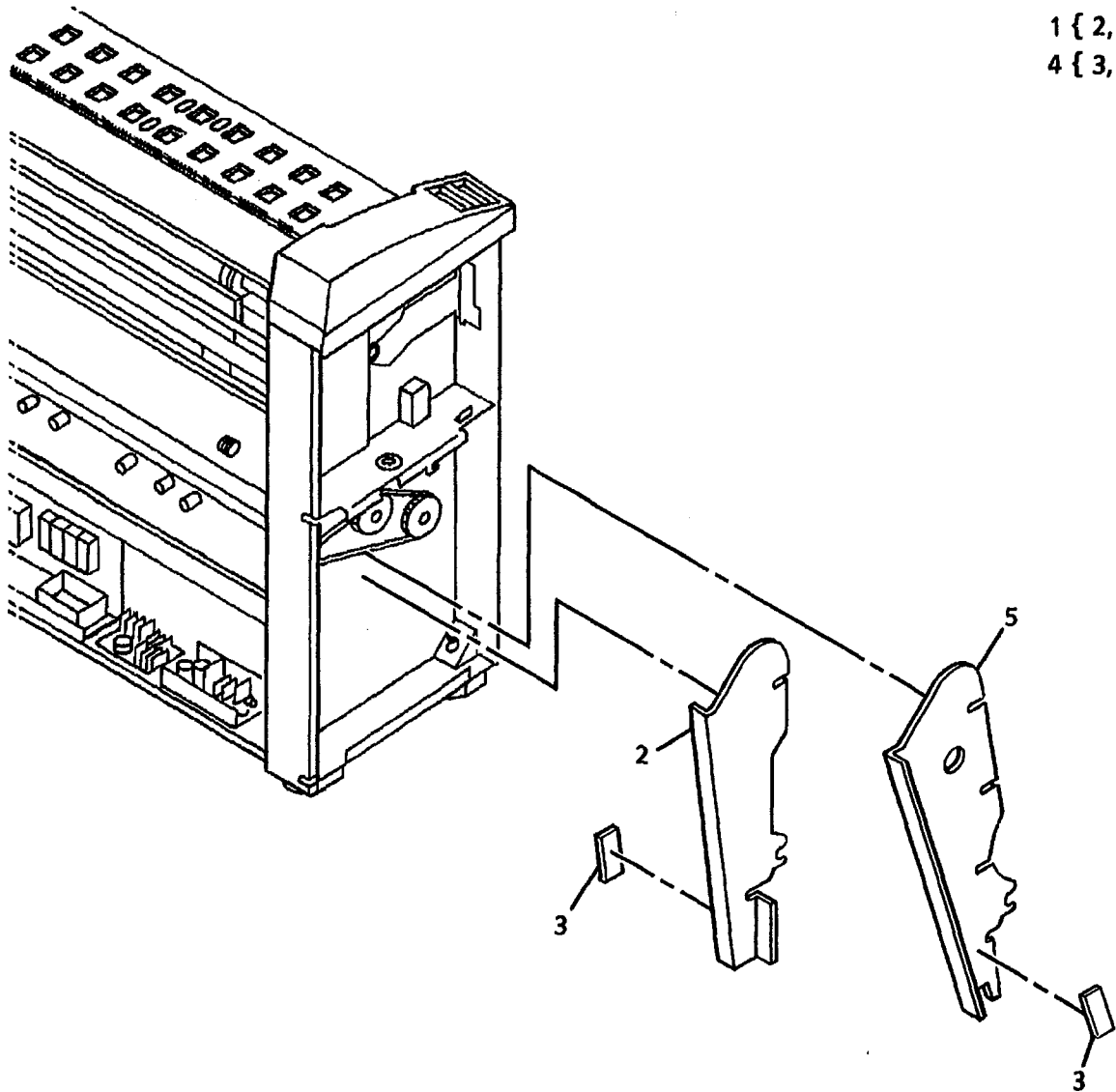
1 { 2, 3, 8-15
3 { 4-7



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL9.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	127K11322	CLEANER BLADE MOTOR ASSEMBLY (REP 9.16)
4	--	BLADE MOTOR PWBA (P/O ITEM 3)
5	--	BRACKET (P/O ITEM 3)
6	--	MOTOR (P/O ITEM 3)
7	--	CAM (P/O ITEM 3)
8	36E93	BLADE WEIGHT
9	29E3560	COTTER PIN
10	7E1331	TRANSITION GEAR
11	7E5221	GEAR PULLEY
12	23E1620	AUGER DRIVE BELT
13	20E4350	AUGER PULLEY
14	13E803	AUGER BEARING
15	94K85	WASTE TONER AUGER
16	16E8641	BLADE WEIGHT ADAPTER

0	0024	A
WIN	PL00	X 0

PL 9.7 XEROGRAPHIC MODULE SERVICE RAILS

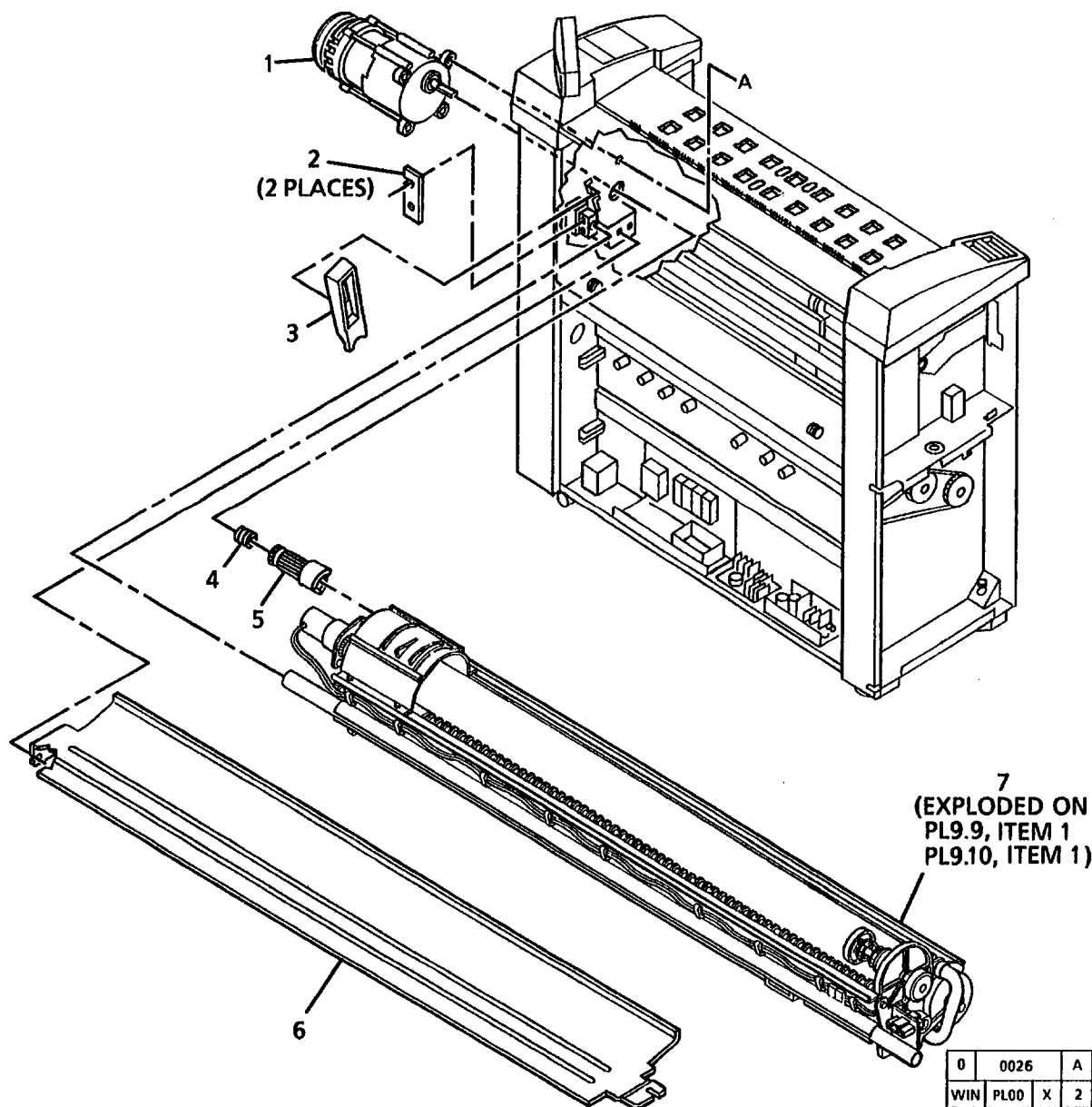


1 { 2, 3
4 { 3, 5

ITEM	PART	DESCRIPTION
1	68K6750	RH SERVICE RAIL ASSEMBLY
2	--	RH SERVICE RAIL (P/O ITEM 1)
3	--	LABEL (CAUTION) (P/O ITEMS 1 AND 4)
4	68K6760	LH SERVICE RAIL ASSEMBLY
5	--	LH SERVICE RAIL (P/O ITEM 4)

0	0025	A
WIN	PL00	X 2

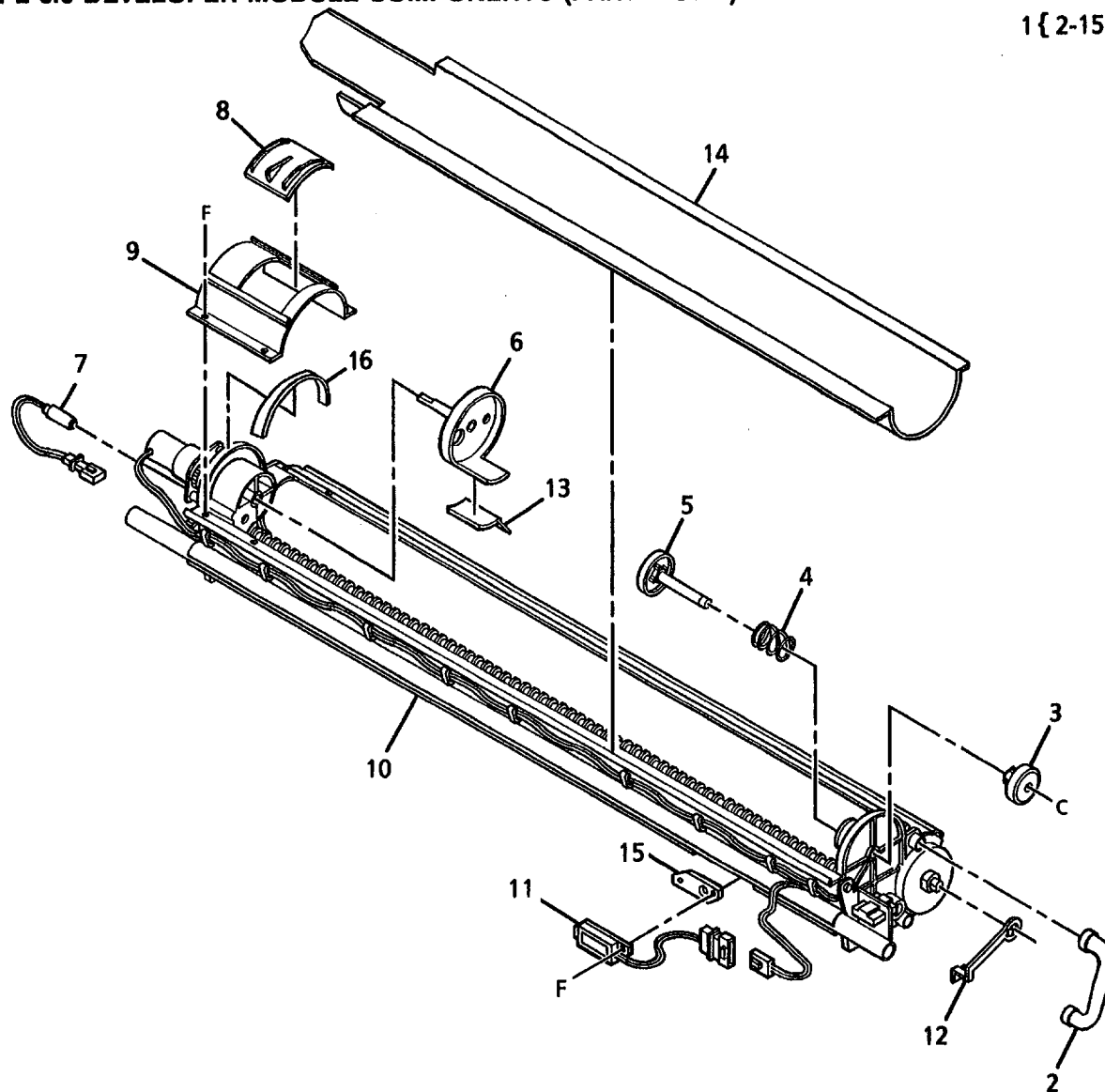
PL 9.8 DEVELOPER MODULE ASSEMBLY



ITEM	PART	DESCRIPTION
1	127E5073	DRUM/DEVELOPER DRIVE MOTOR (60HZ)
-	127E6891	DRUM/DEVELOPER DRIVE MOTOR (50HZ)
2	19E16240	CLAMP
3	28E7771	RETAINER
4	9E41251	COUPLING SPRING
5	7E29520	DRIVE GEAR/COUPLING
6	55E16352	DEVELOPER BAFFLE
7	121K8730	DEVELOPER MODULE ASSEMBLY (REP 9.5, ADJ 9.3, 9.4, 9.6)

PL 9.9 DEVELOPER MODULE COMPONENTS (PART 1 OF 2)

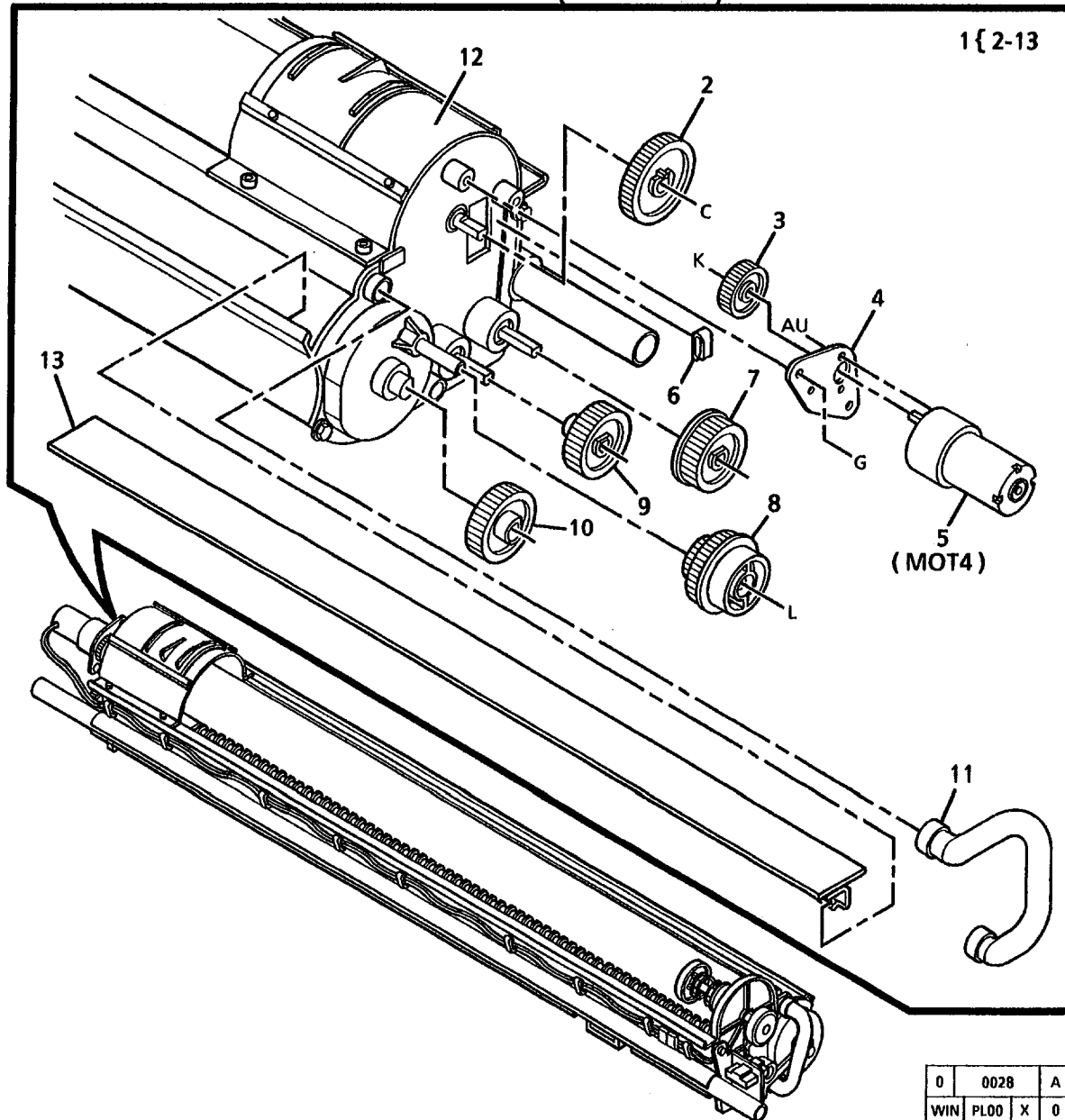
1{2-15



ITEM	PART	DESCRIPTION
1	--	PART OF DEVELOPER MODULE ASSEMBLY (REF PL9.7, ITEM 7)
2	54E3181	PRESSURE EQUALIZER TUBE
3	3E19330	CARTRIDGE KNOB
4	--	SPRING (P/O ITEM 1)
5	5K1350	CARTRIDGE HUB
6	6K9871	CARTRIDGE DRIVE PLATE (REP 9.14)
7	130K30381	TONER HOME SENSOR (REP 9.12, ADJ 9.5)
8	2E40470	TOP SHIELD DOOR
9	55K13840	TOP SHIELD
10	--	DEVELOPER FRAME (P/O ITEM 1)
11	130K53300	TONER SENSOR (REP 9.11, ADJ 9.5)
12	19E15551	BIAS CLIP
13	1E23080	TONER STRIP
14	55K13830	SUMP SHIELD (REP 9.13)
15	--	SENSOR SPACER (P/O ITEM 1)
16	35E12210	SEAL

0	0027	A
WIN	PL00	X 0

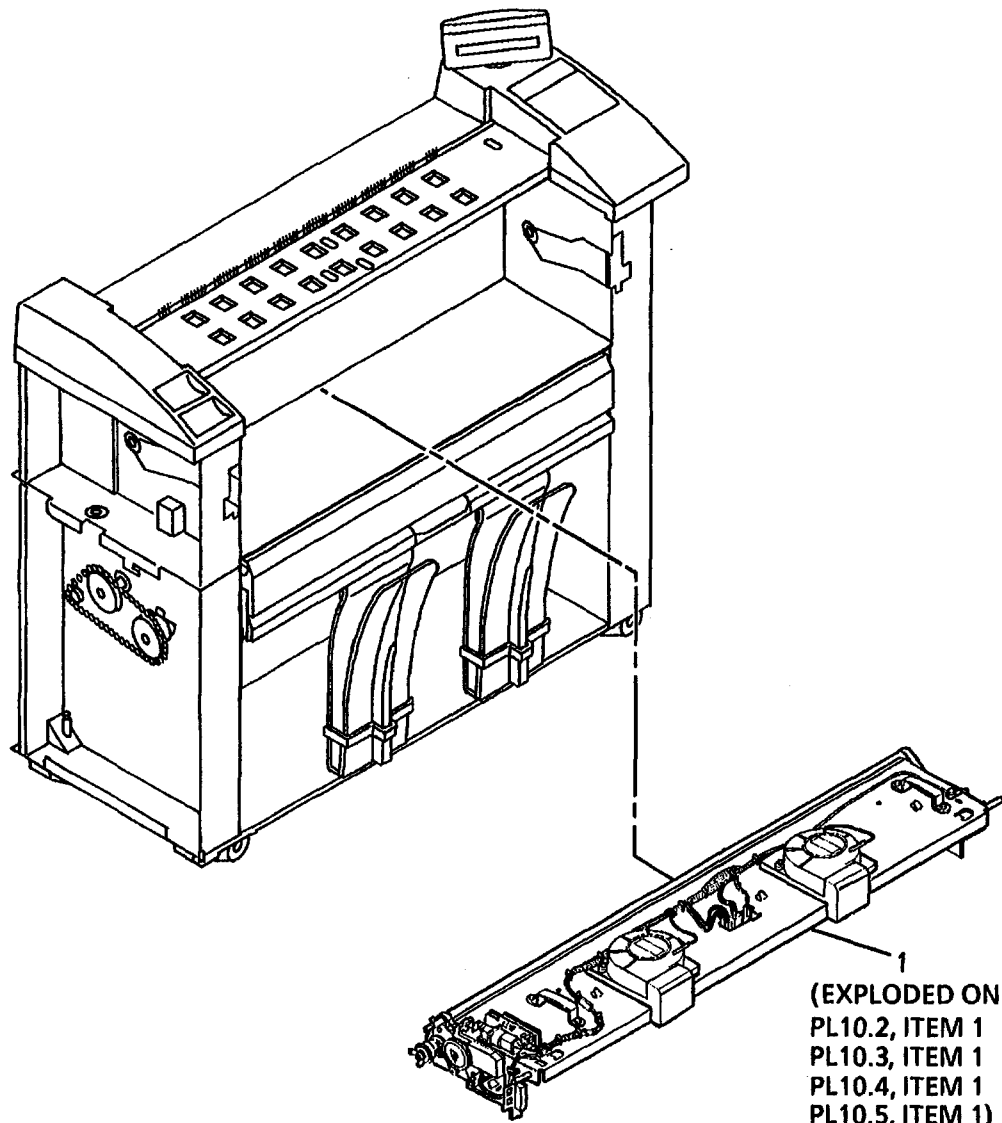
PL 9.10 DEVELOPER MODULE COMPONENTS (PART 2 OF 2)



ITEM	PART	DESCRIPTION
1	--	PART OF DEVELOPER MODULE ASSEMBLY (REF PL9.7, ITEM 7)
2	7E16330	CARTRIDGE GEAR (44T)
3	7E16340	CARTRIDGE DRIVE GEAR (26T)
4	15E17790	MOTOR MOUNTING PLATE
5	127K8920	CARTRIDGE DRIVE MOTOR (MOT4) (REP 9.6)
6	120E4750	CABLE CLIP
7	7E14690	AUGER DRIVE GEAR (37T)
8	7K5260	DEVELOPER DRIVE GEAR (43T/25T)
9	7E14700	AUGER DRIVE GEAR (37T)
10	7E14710	MAGNETIC ROLL DRIVE GEAR (40T)
11	54E3491	PRESSURE EQUILIZER TUBE
12	--	DEVELOPER FRAME (P/O ITEM 1)
13	35K4581	SEAL

PL 10.1 XEROGRAPHIC MODULE ASSEMBLY

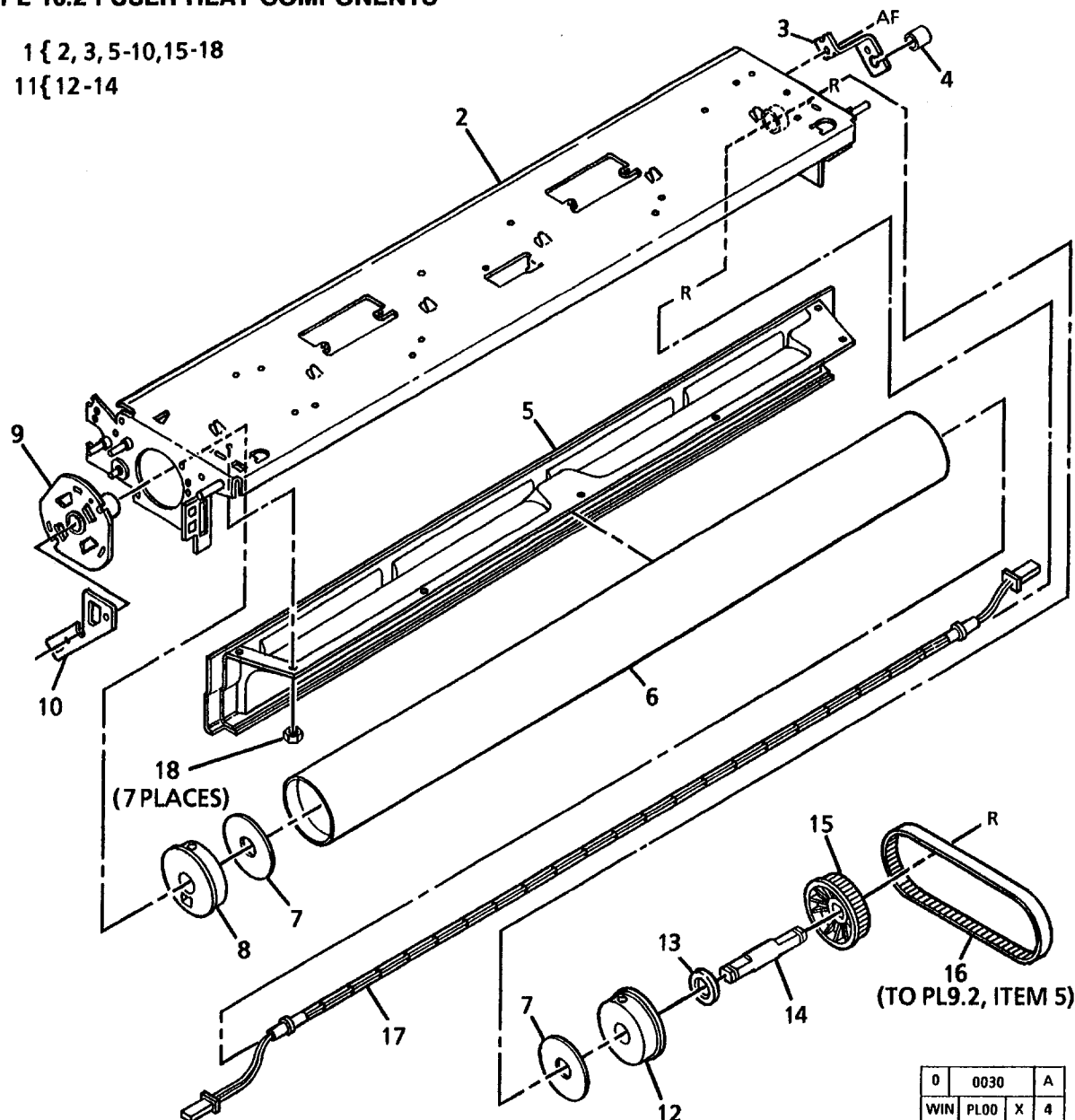
ITEM	PART	DESCRIPTION
1	126K4150	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (REP 9.1)
-	126K4160	XEROGRAPHIC MODULE ASSEMBLY (50HZ) (REP 9.1)



0	0029	A
WIN	PL00	X 0

PL 10.2 FUSER HEAT COMPONENTS

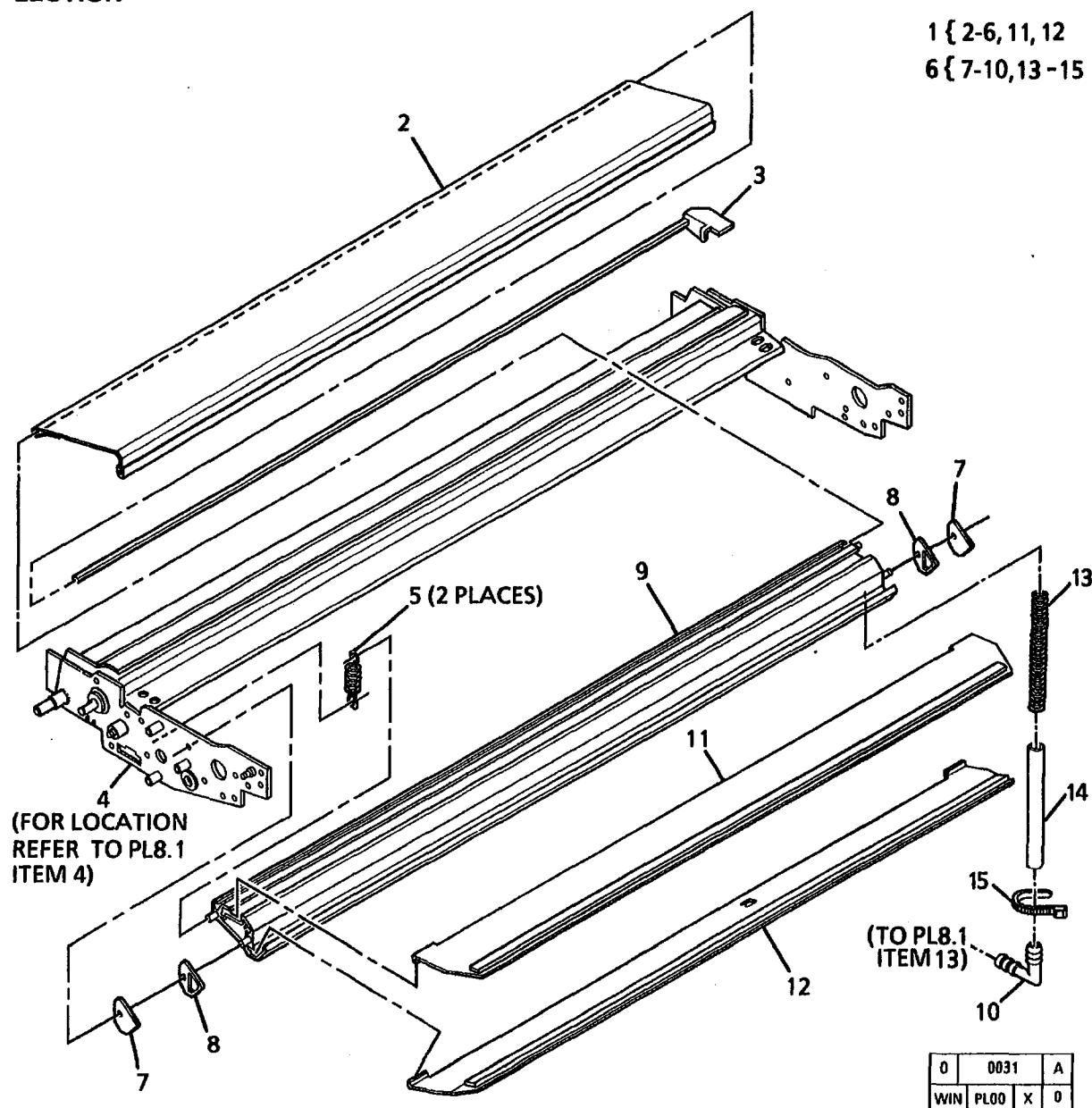
1 { 2, 3, 5-10, 15-18
11 { 12-14



0	0030	A
WIN	PL00	X 4

ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL10.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	49E6460	RH LAMP BRACKET
4	16E8080	GROMMET
5	54K1841	AIR MANIFOLD/ HEATSHIELD
6	22K40050	FUSER HEAT ROLL (REP 10.2, ADJ 10.2)
7	62E5461	REFLECTOR
8	5K2613	LH FUSER BEARING
9	5K3430	FUSER HUB
10	--	LH LAMP BRACKET (P/O ITEM 1)
11	600K45270	FUSER DRIVE SHAFT KIT
12	--	RH FUSER BEARING (P/O ITEM 11)
13	115E2231	GROUND RING
14	--	FUSER DRIVE SHAFT (P/O ITEM 11)
15	20E12832	FUSER DRIVE PULLEY (REP 10.4)
16	23E11181	FUSER DRIVE BELT
17	126E492	FUSER HEAT ROD (60HZ) (REP 10.1, ADJ 10.2)
-	126E821	FUSER HEAT ROD (50HZ) (REP 10.1, ADJ 10.2)
18	--	NUT (NOT SPARED)

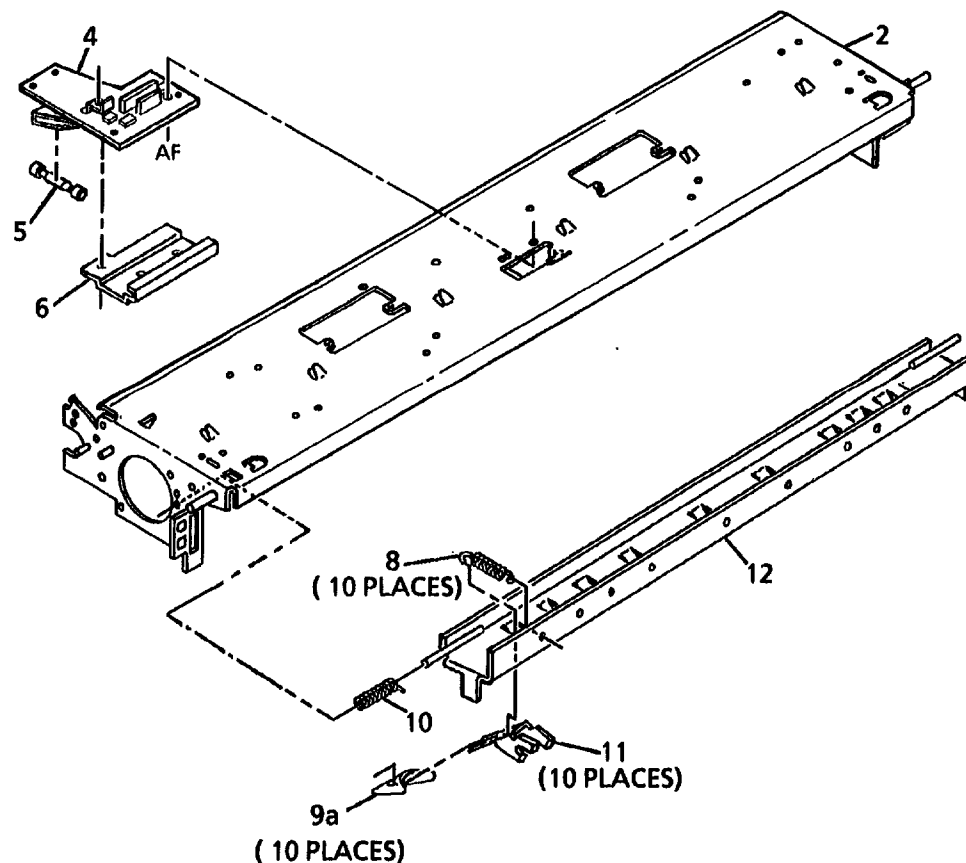
PL 10.3 FUSER PRESSURE COMPONENTS AND MOISTURE COLLECTION



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF PL8.1, ITEM 4)
2	23K471	FABRIC GUIDE ASSEMBLY (REP 8.9)
3	3K6360	FABRIC GUIDE
4	--	RETAINER HANDLE TRANSPORT FRAME (P/O ITEM 1)
5	9E32480	SPRING
6	2K55230	HOUSING ASSEMBLY
7	21E4990	END CAP
8	35E15280	GASKET
9	--	HOUSING (P/O ITEM 6)
10	--	ADAPTER (P/O ITEM 6)
11	33K1271	PRESSURE PLATE A
12	33K1281	PRESSURE PLATE B
13	9E46870	DRAIN TUBE SPRING
14	52E7900	MOISTURE DRAIN TUBE
15	--	CABLE TIE (P/O ITEM 6)

PL 10.4 FUSER HEAT CONTROL AND STRIPPER FINGERS

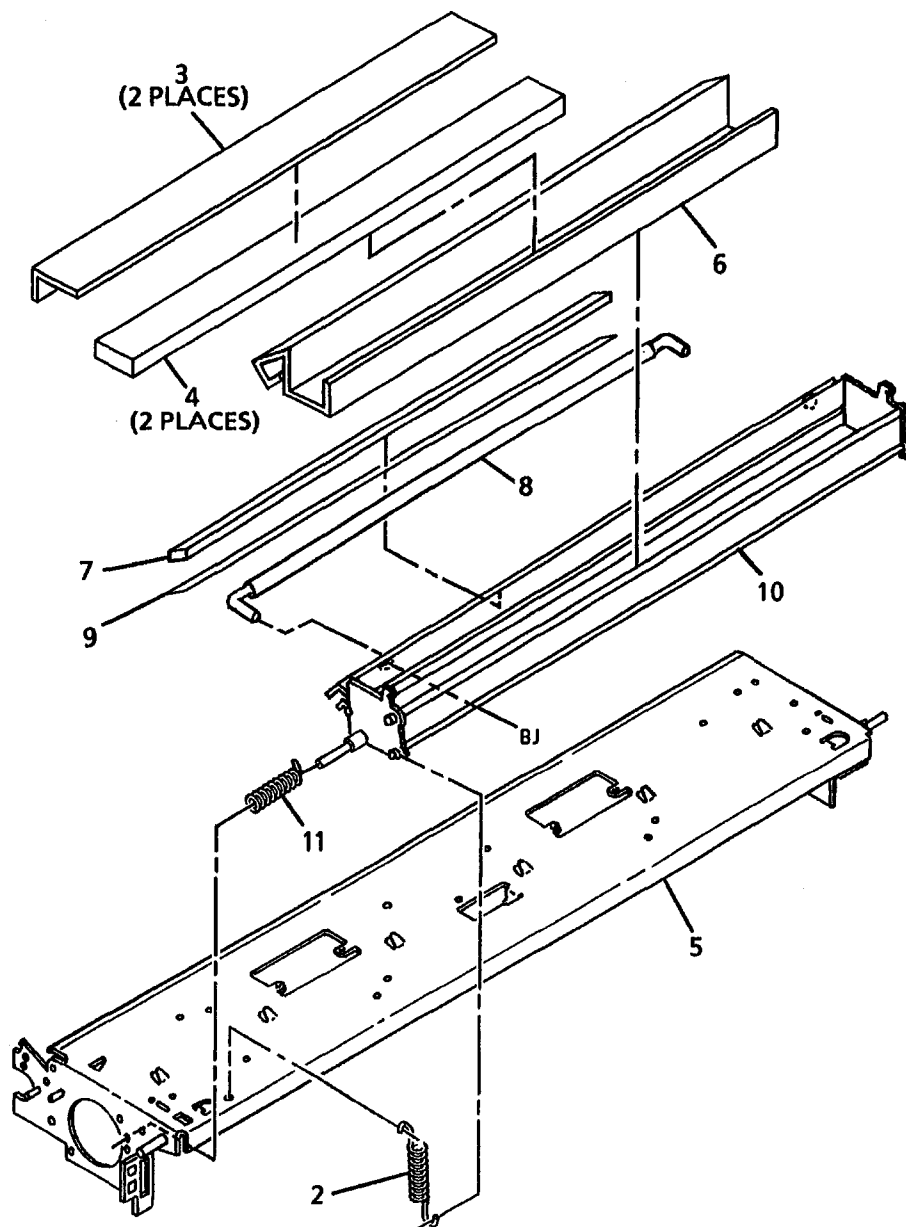
1 {2,3,7
3 {4,5,6
7 {8,10-12
9 {9a



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL10.1, ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	130K52351	THERMISTOR ASSEMBLY (REP 10.5)
4	--	THERMISTOR (P/O ITEM 3)
5	108E1830	THERMAL FUSE
6	118E7492	INSULATOR
7	30K51120	STRIPPER BRACKET ASSEMBLY
8	9E57010	SPRING
9	600K35880	STRIPPER FINGER SPARE KIT
9a	--	STRIPPER FINGER (REP 10.8)
10	9E38060	SPRING
11	68E38113	STRIPPER FINGER BRACKET
12	--	STRIPPER FINGER SUPPORT (P/O ITEM 7) (REP 10.6)

0	0032	A
WIN	PL00	X 1

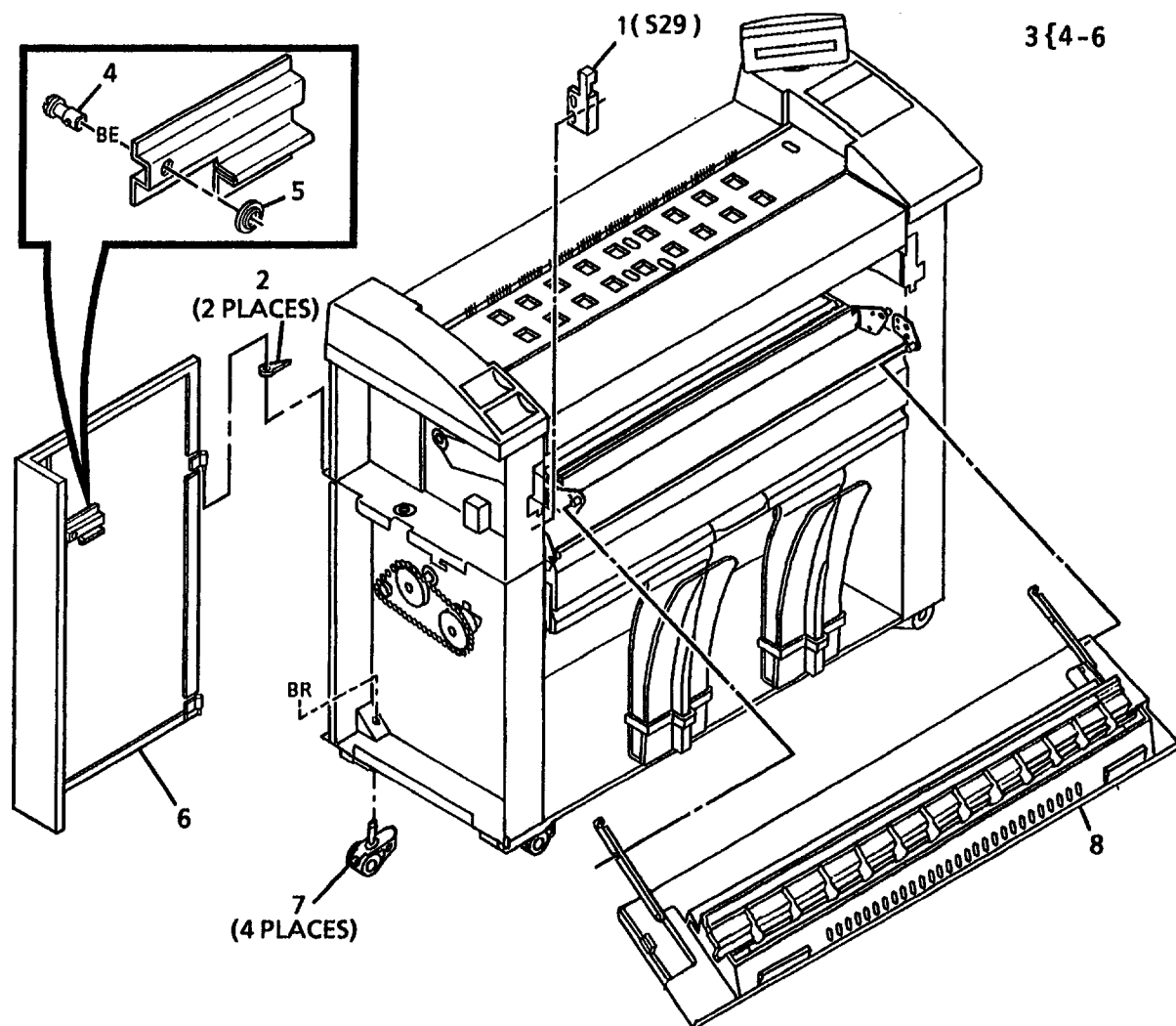
PL 10.5 FUSER OILER



0	0033	A
WIN	PL00	X 3

ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF PL10.1, ITEM 1)
2	9E54440	SPRING
3	--	OIL PAD COVER (TO BE AVAILABLE AT LATER DATE)
4	19K3310	OIL PAD (REP 10.9)
5	--	XEROGRAPHIC FRAME (P/O ITEM 1)
6	94K2660	WICK (REP 10.11)
7	19E24110	PRESSURE PAD
8	22K34060	OIL DISPENSE ROLL (REP 10.10)
9	1E27610	SHIM
10	48K22810	OIL DISPENSE HOUSING (REP 10.7)
11	9E38060	SPRING

PL 14.1 CUT SHEET FEED-IN SHELF AND LEFT SIDE DOOR

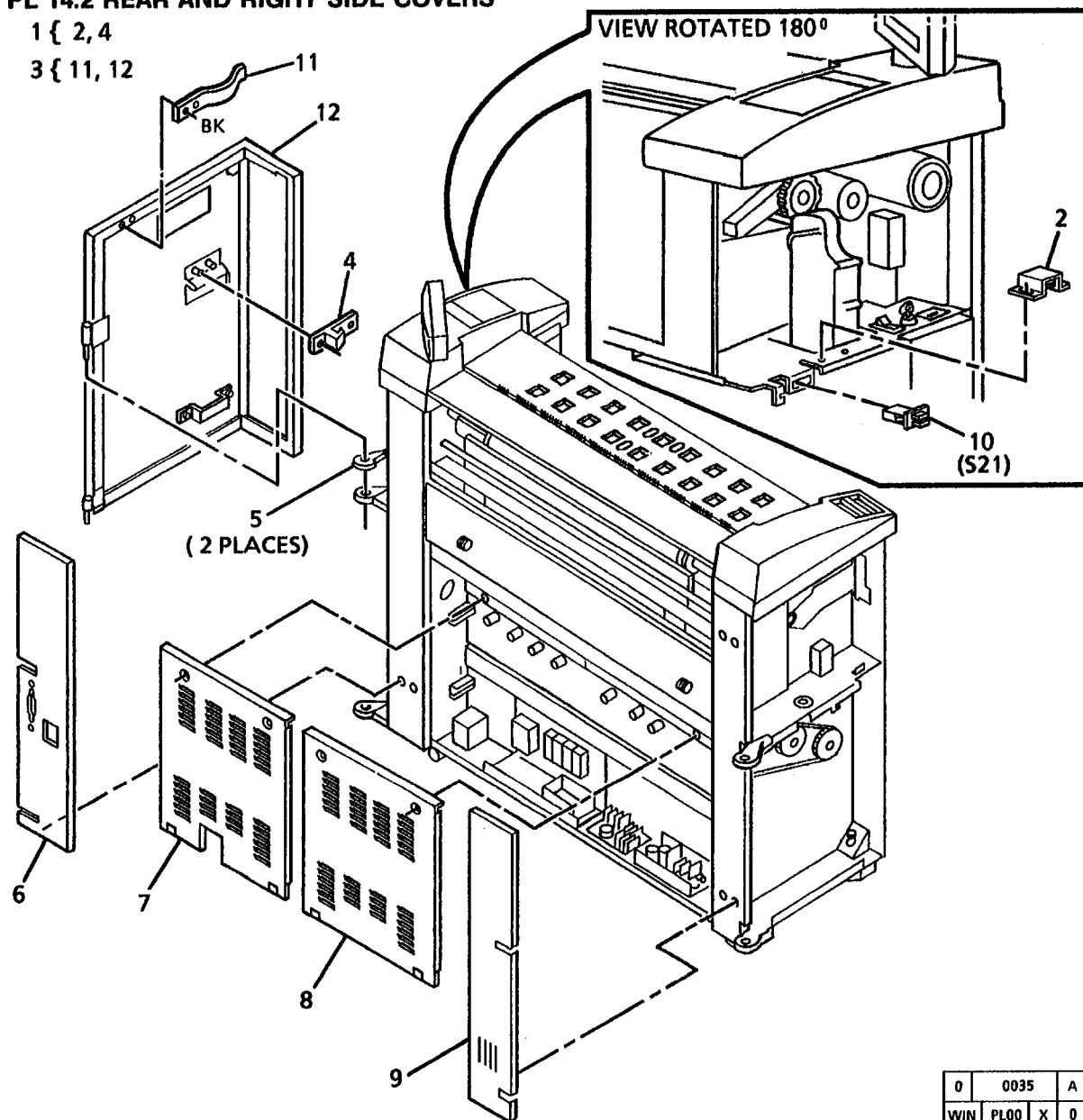


ITEM	PART	DESCRIPTION
1	130E2271	CUT SHEET FEED-IN SHELF INTERLOCK SWITCH (S29)
2	14E20541	LEFT HINGE SPACER
3	48K18980	LEFT DOOR ASSEMBLY (REP 14.1)
4	29E15040	LEFT DOOR FASTENER
5	429W20350	GROMMET
6	--	LEFT DOOR (P/O ITEM 3)
7	17K1120	LOCKING CASTOR
8	30K52510	CUT SHEET FEED-IN SHELF ASSEMBLY (60HZ)
-	30K52500	CUT SHEET FEED-IN SHELF ASSEMBLY (50HZ)

0	0034	A
WIN	PL00	X 3

PL 14.2 REAR AND RIGHT SIDE COVERS

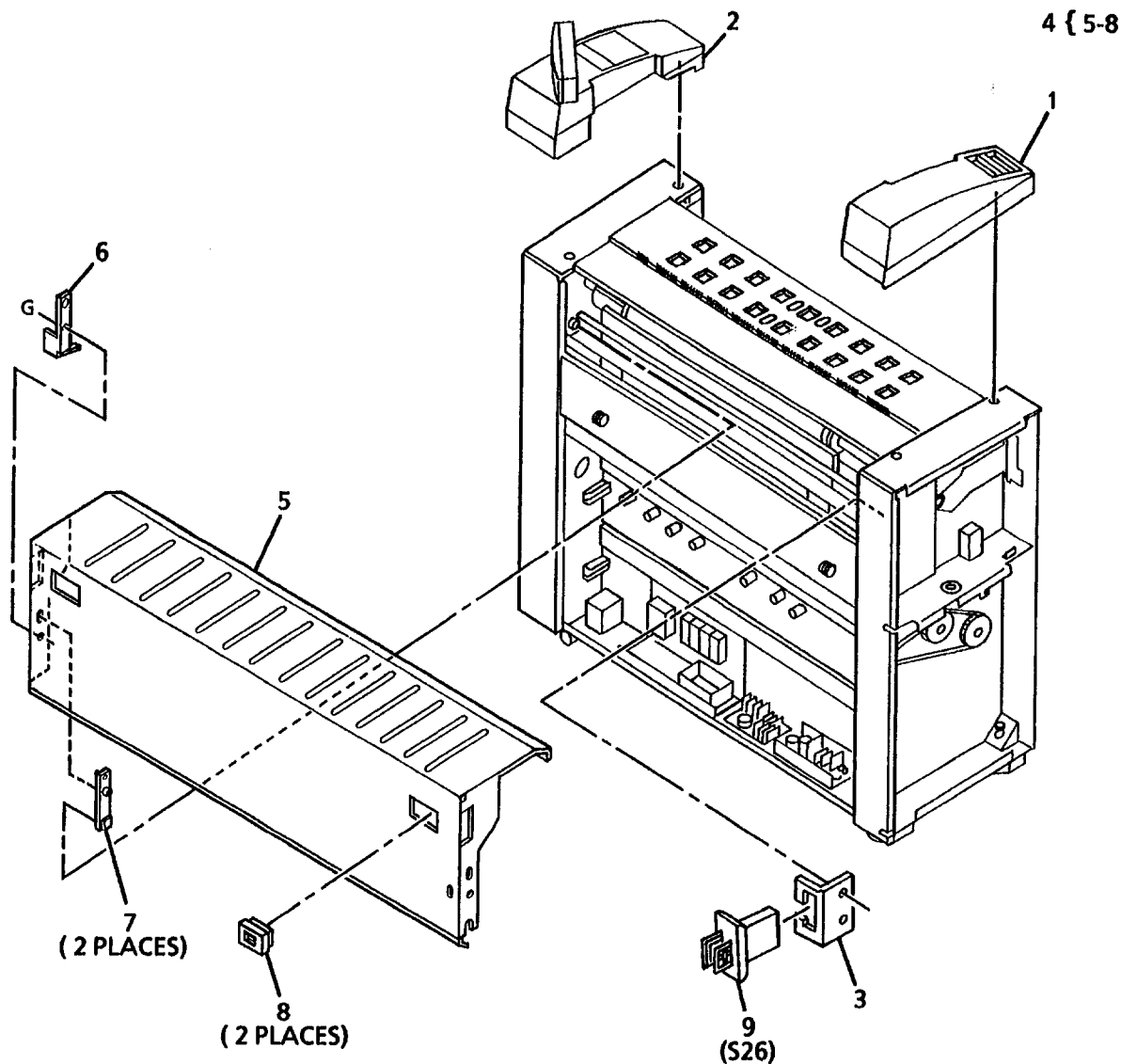
1 { 2, 4
3 { 11, 12



ITEM	PART	DESCRIPTION
1	3E18740	RIGHT DOOR
2	--	LATCH ASSEMBLY
3	48K18990	LATCH (P/O ITEM 1)
4	--	RIGHT SIDE DOOR
5	14E20551	ASSEMBLY (REP 14.1)
6	48K19000	KEEPER (P/O ITEM 1)
7	2K64491	RIGHT HINGE SPACER
8	48K10040	RIGHT REAR COVER
9	2K48982	LOWER RIGHT REAR COVER
10	110E2640	LOWER LEFT REAR COVER
11	--	LEFT REAR COVER
12	--	RIGHT SIDE DOOR
		INTERLOCK SWITCH (S21)
		GROUNDING SPRING
		(P/O ITEM 3)
		RIGHT SIDE DOOR
		(P/O ITEM 3)

0	0035	A
WIN	PL00	X 0

PL 14.3 LEFT AND RIGHT CAPS AND UPPER REAR DOOR

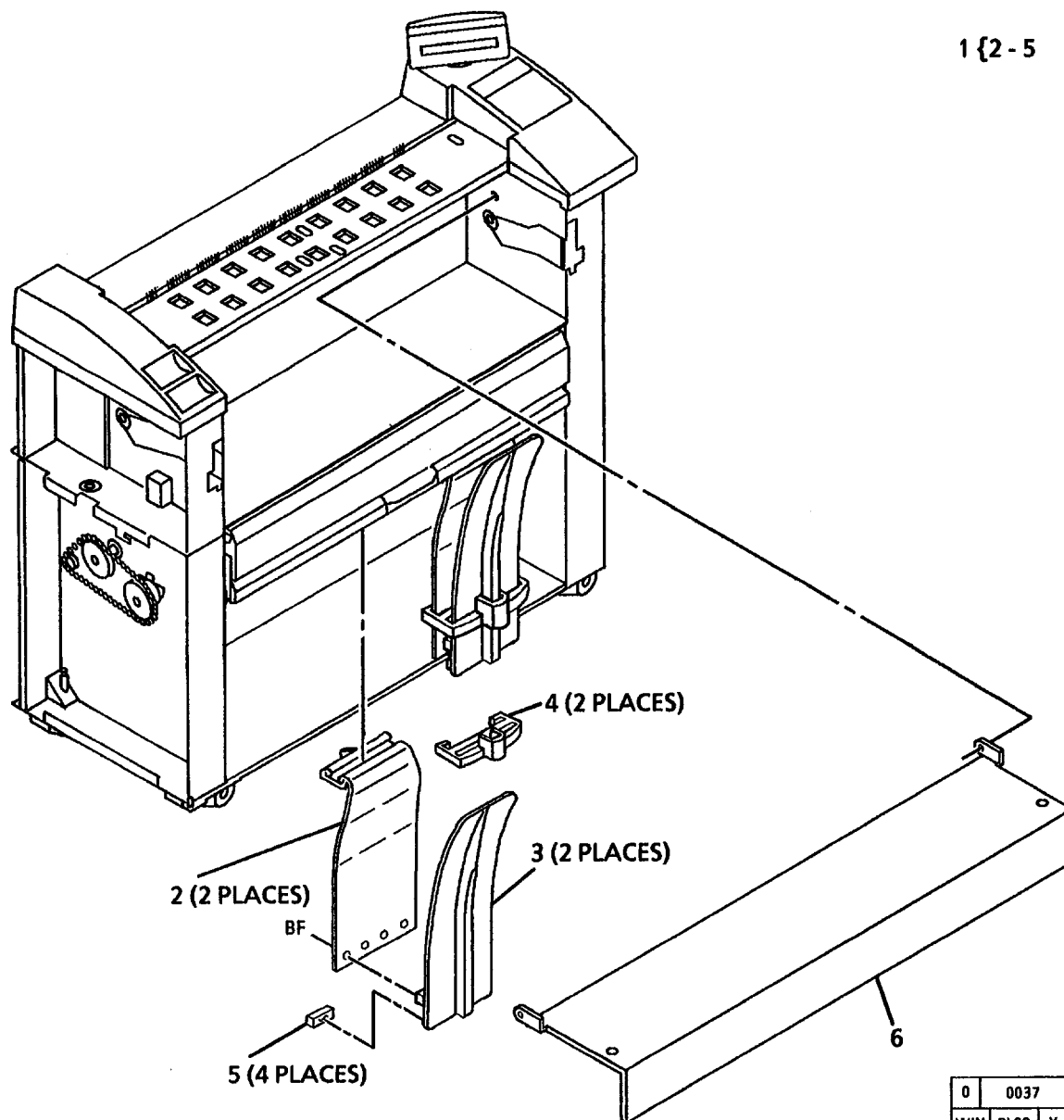


ITEM	PART	DESCRIPTION
1	21E4873	LEFT CAP
2	--	CONTROL CONSOLE HOUSING (RIGHT CAP) (REF PL1.4, ITEM 1) (NOT SPARED)
3	--	INTERLOCK BRACKET (NOT SPARED)
4	2K55982	UPPER REAR DOOR ASSEMBLY
5	--	UPPER REAR DOOR (P/O ITEM 4)
6	--	UPPER REAR DOOR SPRING
7	--	GROUND (P/O ITEM 4)
8	--	PIVOT GUIDE (P/O ITEM 4)
9	3E18781	LATCH
10	110E2640	DEVELOPER COVER (UPPER REAR DOOR)
		INTERLOCK SWITCH (S26)

0	0036	A
WIN	PL00	X 0

PL 14.4 DOCUMENT FEED-IN SHELF AND COPY CATCH SHIELDS

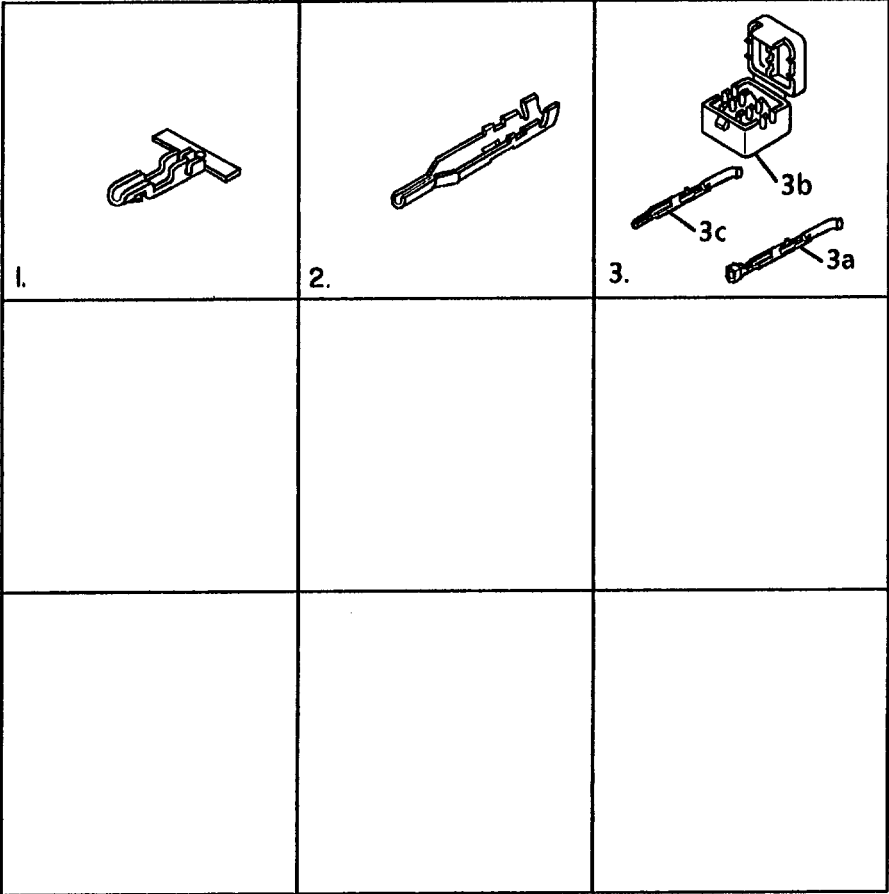
1 {2 - 5



ITEM	PART	DESCRIPTION
1	50K21140	COPY CATCH SHIELD ASSEMBLY
2	--	REAR STACKER (P/O ITEM 1)
3	--	FRONT STACKER (P/O ITEM 1)
4	17E6010	COPY STOP
5	121E9040	MAGNET
6	30K52060	DOCUMENT FEED-IN SHELF ASSEMBLY (60HZ)
-	30K52040	DOCUMENT FEED-IN SHELF ASSEMBLY (50HZ)

0	0037	A
WIN	PL00	X 2

PL 15.1 MISCELLANEOUS ELECTRICAL CONNECTORS AND FASTENERS



ITEM	PART	DESCRIPTION
1	--	CONTACT SOCKET (20-26 AWG) (TO BE AVAILABLE AT LATER DATE)
2	--	CONTACT PIN (20-26 AWG) (TO BE AVAILABLE AT LATER DATE)
3	600K30680	WIRE AND CONNECTOR REPAIR KIT
3a	--	SOCKET WIRE (10/KIT)
3b	--	CONNECTOR (20/KIT)
3c	--	PIN WIRE (10/KIT)

0	0040	A
WIN	PL00	X 0

ITEM	PART	DESCRIPTION	ITEM	PART	DESCRIPTION
A	112W11655	HEX SCREW (6 X 16)	BJ	354W20752	RETAINING RING (4-5MM)
B	112W7455	SCREW (M4 X 12)	BK	215W10102	NUT (8-48)
C	354W21052	RETAINING RING (7-9MM)	BL	113W54055	SCREW (M3 X 4LG)
D	354W21252	RETAINING RING (9-12MM)	BM	153W27952	SCREW (M4.2 X 25LG)
E	153W23352	SCREW (M2.9 X 6.5)	BN	153W17752	SCREW (M4.2 X 19)
F	132W253	SCREW (M3 X 6LG)	BP	141W30553	SETSCREW (M4 X 6)
G	156W27555	SCREW (M4.2 X 14)	BR	131W20853	SCREW (M10 X 1.5)
H	156W27655	SCREW (4.2 X 16)			
J	251W10856	PLAIN WASHER			
K	354W24251	ALTERNATE			
-	354W20852	RETAINING RING (5-7MM)			
L	356W2502	RETAINING RING			
M	251W10455	WASHER (M4)			
N	256W20454	LOCKWASHER (M4)			
P	112W27255	SCREW (M4 X 8)			
R	351W12551	RETAINING RING (M25)			
S	220W450	NUT (M4)			
T	251W10655	WASHER (M6)			
U	351W10651	RETAINING RING (M6)			
V	121W30455	SET SCREW (M4 X 6)			
W	351W11551	RETAINING RING (M15)			
X	112W27355	SCREW (M4 X 10)			
Y	286W3954	SPRIAL PIN (3 X 22)			
Z	259W30351	LOCKWASHER (M4)			
AA	131W37153	SCREW (M4 X 8)			
AB	153W27452	SCREW (4.2 X 9.5)			
AC	131W37553	SCREW (M4 X 16)			
AD	131W37853	SCREW (M4 X 30)			
AE	131W40253	SCREW (M5 X 10)			
AF	153W17452	SCREW (M4.2 X 9.5)			
AG	112W7255	SCREW (M4 X 8)			
AH	156W27455	SCREW (4.2 X 9.5)			
AJ	156W23355	SCREW (M2.9 X 6.5)			
AK	286W2354	SPRING PIN (2-19MM)			
AL	113W6455	SCREW (M3 X 10)			
AM	251W10355	WASHER (M3)			
AN	113W50555	SCREW (M5 X 12)			
AP	256W20554	LOCKWASHER (M5)			
AR	236W651	SPEED NUT			
AS	354W21152	RETAINING RING (8-11MM)			
AT	112W27655	SCREW (M4 X 16)			
AU	113W6355	SCREW (M3 X 8LG)			
AV	220W650	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	201W455	NUT (HEX M4)			
BC	265W650	LOCKWASHER (M6)			
BD	236W851	SPEEDNUT			
BE	265W850	LOCKWASHER (M8)			
BF	153W27552	SCREW (4.2 X 13)			
BG	354W555	RETAINING RING (6MM)			
BH	113W13802	SCREW (2-56 X 1/2)			

<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>
1R81	9.2	9E6960	9.5	20E13853	8.1	38K6601	7.8	105K833	1.2	130E2271	14.1
1E23080	9.9	9E21410	5.1	20E14550	5.2	38E6610	9.4	105K1084	1.2	130E3250	7.2
1E27610	10.5	9E27330	7.5	20E18830	7.8	38E6620	9.4	105K5273	1.3	130E3250	7.8
2E40132	1.2	9E27340	7.3	21E4873	14.3	38K7214	8.4	105K5480	1.3	130E5990	8.2
2E40470	9.9	9E27340	7.4	21E4990	10.3	38K9190	7.5	105K5552	1.3	130E6720	5.2
2K48982	14.2	9E27340	7.8	21E6210	5.1	38E13162	5.1	108E1761	1.2	130K30381	9.9
2K55230	10.3	9E27351	7.5	21E6220	5.1	48K10040	14.2	108E1830	10.4	130K51801	7.1
2K55982	14.3	9E32480	10.3	22E7280	5.1	48K14560	7.5	109E1040	1.2	130K52351	10.4
2K64491	14.2	9E32490	8.3	22E9390	8.3	48K18980	14.1	110E2640	5.2	130K53300	9.9
3K6360	10.3	9E32500	8.2	22E10060	7.5	48K18990	14.2	110E2640	7.7	130K53940	6.1
3K7580	7.5	9E32510	8.1	22E10531	8.2	48K19000	14.2	110E2640	14.2	133K9501	1.1
3E16521	7.8	9E32790	7.5	22E11441	8.1	49E6460	10.2	110E2640	14.3	133K9510	1.1
3E17610	7.3	9E34222	9.3	22E11540	7.3	50K19610	7.1	110K3340	8.4	140K15952	5.2
3E17610	7.4	9E38060	10.4	22E11540	7.4	50K21140	14.4	110K3731	8.4	140K15952	7.2
3E18740	14.2	9E38060	10.5	22K16301	5.2	52K1861	7.6	110E5500	8.4	140K15952	8.1
3E18781	7.7	9E41251	9.1	22K28930	7.1	52K2081	7.6	110E6330	1.2	140K27489	1.1
3E18781	14.3	9E41251	9.8	22K30592	8.1	52E7900	10.3	111K21	1.3	140K69980	1.1
3E19330	9.9	9E42461	6.1	22K34060	10.5	52E7910	8.1	113K1221	6.1	142E440	1.2
3P25202	1.2	9E43260	7.2	22K37721	5.1	54K1841	1.5	113E7881	6.1	142E1131	1.2
3E26570	7.5	9E46870	10.3	22K40050	10.2	54K1841	10.2	114K491	1.2	413W30854	7.2
4E502	9.3	9E50070	5.2	23K471	10.3	54E3181	9.9	115E2231	10.2	413W31054	8.2
4E502	9.4	9E54440	10.5	23E1620	9.6	54E3491	9.10	115E3100	5.2	413W31054	8.3
5K1350	9.9	9E57010	10.4	23E6570	5.2	54E4660	1.5	115E3100	8.4	413W31553	9.2
5K2613	10.2	10K1360	7.7	23E11181	10.2	55K13830	9.9	117K10591	1.2	423W57550	7.8
5K3430	10.2	13K380	9.2	26E3460	1.3	55K13840	9.9	118E7492	10.4	423W64001	8.1
5K3440	9.2	13E803	9.6	26E11970	8.1	55K14940	1.3	120E2150	1.2	423W72201	8.1
5K3450	9.2	13E1571	9.5	27E2251	5.2	55E16352	9.8	120E4750	9.10	429W20350	14.1
5E6810	7.2	13E7161	9.5	28E7430	7.8	55K16960	8.3	120E5440	1.5	537K6920	1.1
6K9731	8.3	14E2671	9.2	28E7771	9.8	55E23520	7.3	120E6510	9.5	600K8481	9.5
6K9871	9.9	14E20541	14.1	29K1111	8.1	55E23520	7.4	121E7510	7.2	600K25780	9.5
6K12940	8.2	14E20551	14.2	29E3560	9.6	62K4841	6.1	121E7680	7.5	600K29981	9.5
6K13310	9.2	15E17790	9.10	29E13641	9.1	62K5450	6.1	121K8730	9.8	600K30680	15.1
6E19570	5.1	16E6020	8.2	29E14460	7.5	62E5461	10.2	121E9040	14.4	600K35880	10.4
6E23540	8.3	16E6020	8.3	29E14750	7.4	68K6750	9.7	122E302	6.1	600K37740	9.3
6E23761	9.1	16E8080	10.2	29E14760	7.3	68K6760	9.7	125K1220	9.4	600K45270	10.2
6E42300	8.2	16E8641	9.6	29E15040	14.1	68E17221	7.5	125K1412	9.3	707W1652	1.2
7E1331	9.6	16E8931	8.2	30E16161	9.2	68E38113	10.4	126E492	10.2	708W3901	1.1
7E1340	9.2	17K1120	14.1	30K37830	8.2	68E62740	7.8	126E821	10.2	708W4001	1.1
7E5221	9.6	17E4250	7.5	30K51120	10.4	90E1690	5.2	126K4130	7.1		
7K5260	9.10	17E6010	14.4	30K52040	14.4	92E22541	7.6	126K4140	7.1		
7K5760	7.2	19K3310	10.5	30K52060	14.4	92E22560	7.6	126K4150	9.1		
7K7561	7.2	19E7100	8.4	30K52500	14.1	92E36430	7.6	126K4150	10.1		
7K7570	9.1	19E15041	5.2	30K52510	14.1	92E36450	9.1	126K4160	9.1		
7E14600	7.3	19E15551	9.9	31E3561	5.1	93E1501	8.1	126K4160	10.1		
7E14650	7.3	19E16080	9.4	33K1271	10.3	94K85	9.6	127K1740	1.5		
7E14690	9.10	19E16240	9.8	33K1281	10.3	94K2660	10.5	127K4293	7.2		
7E14700	9.10	19E19971	9.4	35K1222	9.5	101E1020	1.3	127K4293	8.1		
7E14710	9.10	19E24110	10.5	35E3580	9.5	101E7930	1.3	127E5073	9.1		
7E16330	9.10	19E26770	1.5	35K4581	9.10	101K18880	9.3	127E5073	9.8		
7E16340	9.10	20E4350	9.6	35K5460	1.5	101K20520	1.4	127E6891	9.1		
7E19071	7.2	20E10561	5.2	35K5480	1.5	101K20530	1.4	127E6891	9.8		
7E27031	9.2	20E12353	8.1	35E12210	9.9	103E2721	1.2	127K8861	5.2		
7E29510	9.1	20E12832	10.2	35E15280	10.3	103E2731	1.2	127K8920	9.10		
7E29520	9.1	20E13603	8.1	36E93	9.6	104K430	1.3	127K11322	9.6		

Section Contents

System Procedures

Diagnostic Tests	6-2
To Enter the Diagnostic Mode	6-2
To Exit the Diagnostic Mode	6-2
Input Diagnostic Test Procedure ..	6-2
Output Diagnostic Test Procedure	6-3
To Enter Multiple Codes	6-4
Special Tests	6-4
Image on Drum (Panic Stop) Procedure ..	6-7
Photoreceptor Drum Maintenance	6-8
Photoreceptor Cleaning Enhancement ..	6-9
Initialization of the Fuser Roll	6-10
Molex SL Connector Repair Procedure ..	6-13
Specifications	
Product Codes	6-18
Physical Characteristics	6-18
Installation Space Required	6-18
Copy Rate	6-18
Maximum Number of Copies Selected ..	6-18
Magnification	6-18
Cut Length Accuracy	6-18
Cut Squareness	6-18
Electrical Power Requirements	6-18
Audible Noise	6-18

6. General Procedures / Information

Document (Original) Size	6-18
Side Edge Registration	6-18
Copy Image Size	6-18
Media Type and Size	6-19
Media Roll Supply	6-19
Environmental Data	6-19
Heat Emission	6-19

Installation

Ground and AC Voltage Check	6-20
Electrical Power Requirements ...	6-20
Floor Space Requirements	6-21
Installation Procedure	6-22
Functional Check	6-40
Product Demonstration	6-43
Installation Checklist	6-43
Functional Check	6-43
Product Demonstration Checklist	6-43

Removal

Removal Procedure	6-44
-------------------------	------

General Tools and Supplies

Supplies	6-57
Tools	6-57
Test Pattern	6-57
Image Reference Pattern	6-57
Machine Consumables	6-58
Cleaning Materials	6-58
Supply Kit	6-58
Other Tools and Supplies	6-58

General Tools and Supplies (RX)

Tools	6-59
Test Pattern	6-59
Image Reference Pattern	6-59
Machine Consumables	6-59
Cleaning Materials	6-59
Supply Kits	6-58
Other Tools and Supplies	6-60

Change Tag/ MOD Index

Introduction	6-61
Classification Codes	6-61
Change Tag/ MOD Index	6-62

Diagnostic Tests

Note: Ensure that all interlocks are closed.

This section contains the Input and Output and Special Test diagnostic procedures.

To Enter the Diagnostic Mode:

The diagnostic mode is entered by pressing and holding the zero (0) button while switching on the copier. While powering up in the diagnostic mode the Message Display will indicate the Copyright message, the message ROM configuration, and the software revision level.

The following message will be displayed when the diagnostic mode is entered.

CHAIN 00 PRESS START TO ENTER
PLEASE ENTER THE CHAIN NUMBER

The top and bottom Copy Contrast LEDs will flash off and on alternately.

Enter the first two digits of the code, and press the **Start** button, then enter the second two digits of the code, and press the **Start** button to begin the test.

The code entered will be displayed in the **Media Length** display. The code will also be displayed in the top line of the Message Display. 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 **Stop** button is used to stop the tests.

The **Clear** 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 copier. The test numbers are sequential numbers to identify the tests within a chain.

The chain numbers used are listed below.

Chain Number	Functional Area
01	Standby Power
02	User Interface (Control Panel)
03	Machine Run Control
04	Drives
05	Document Transportation
06	Optics
07	Media Supply
08	Media Transportation
09	Xerographics
10	Fusing/Copy Transportation

To Exit the Diagnostic Mode:

Enter the test [0361] or switch the copier 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 **Start** button to begin the test.
4. Manually operate the component that is being tested.
5. The condition of the component will be indicated in the message display window and the **Quantity** window. The state of the component is indicated by a 0 for low state and a 1 for high state.
6. Press the **Stop** button to stop the diagnostic Test.
7. Press the **Stop** button again to clear the chain.

Input Diagnostic Test Codes

Codes

0101
0102
0103
0110
0500
0502
0503
0701
0702
0707
0710
0721
0801
0803
0807
0901
0910
0911
1005
1008

Component

Right Door Interlock
ACH Sensed
Line Frequency Sense
Media Supply Drawer Interlock
Document Handler Interlock
Document Front Sensor
Document Rear Sensor
Media Transport Interlock
Cutter Drawer Interlock
Roll Position Sensor
Roll Motion Sensor
Cutter Home Sensor
Cut Sheet Feed-in Switch
Media Registration Sensor
Copy Exit Sensor
Cartridge Home Sensor
Cut Sheet Feed Shelf Interlock
Upper Rear Door Interlock
Stripper Finger Jam Switch
Fuser Overtemperature Sensor

Note: If the beeper cannot be heard when actuating a component, enter customize program P16 and follow the display to switch on the beeper.

Output Diagnostic Test Procedure

The output diagnostic test is used to ensure that the electrical output components of the copier are operating correctly. The output diagnostic test allows the operation of the individual or multiple (chaining) output component(s) in order to verify its operation.

Refer to section on entering and exiting from multiple codes before continuing.

1. Enter the diagnostic mode.
2. Enter the chain number (first two numbers on the code)
3. Press the **Start** button.
4. Enter the test number (last two numbers of the code).
5. Press the **Start** 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 locate the problem.
7. Press the **Stop** button to stop the Diagnostic Test.
8. To exit the diagnostic mode, enter the test [0361] or switch the copier 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

Code	Component Tested
0203	Billing Meter Index
0206	Auditron/CVA
0210	Control Panel LEDs
0306	Ready Foreign Interface
0307	Count Pulse Foreign Interface
0308	Reduction/Enlargement
	Premium Foreign Interface
0309	Large Paper Premium Foreign Interface
0403	Main Drive Motor ³
0601-1	Document Drive Motor drives in the Feed direction (bond) (Refer to Special Test)
0601-2	Document Drive Motor drives in the Feed direction (vellum) (Refer to Special Test)
0601-3	Document Drive Motor drives in the Feed direction (film) (Refer to Special Test)
0201-4	Document Drive Motor rotate in the reverse direction.
0703	Roll Drive Motor (Motor rotates in the counterclockwise direction) ¹
0704	Roll Drive Motor (Motor rotates in the clockwise direction) ¹
0716-1	Roll Drive Motor and Roll 1 Feed Clutch (CL1) (bond)
0716-2	Roll Drive Motor and Roll 1 Feed Clutch (CL1) (vellum)
0716-3	Roll Drive Motor and Roll 1 Feed Clutch (CL1) (bond)
0720	Cutter Brake
0723	Cutter Drive Motor
0727	Roll Rewind Clutch (CL2) ¹
0730	Roll 1 Feed Clutch (CL1) ¹

Code	Component Tested
0905	Toner Dispense Motor
0913	Cleaner Blade Positioning Motor (MOT3) ²
0914	Cooling Fans On at slow speed if fuser is cold.
0917-1	Registration Roll (bond)
0925	Toner Cartridge (1 Revolution)
0966	Erase LED PWB
1004	Fuser Run Temperature Display. Drum/ Developer Motor is switched on. ³ (Refer to Special Test)
1006	Fuser Temperature Display
1009	Fuser Power Relay On

NOTES:

- ¹ Codes [0727] and [0730] must be chained with [0703] in order to check the operation of the Feed and Rewind Clutches for Roll 1.
- ² Cooling fans will also come on when this code is entered if the Fuser is cold.
- ³ Fuser must be at the run temperature before the Drive Motor is switched on to prevent copier damage.

To Enter Multiple Codes (Chaining)

The **Roll** button is used when entering more than one code. Enter the desired code. If the code can be chained, **ROLL TO CHAIN** will appear on the message display. Press the **Roll** button, then enter the next code.

To Exit the Multiple Codes

Multiple codes can be switched off by two methods.

1. Enter the codes in the reverse sequence from how they were entered, pressing the **Stop** button after each code.
2. Press and hold the **P** button while pressing the **Stop** button. This will clear all 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 copier. To enter a special test, the copier must first be in the diagnostics 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, pressing the **Start** button, and then using the **Copy contrast** UP and DOWN arrow keys to select the desired NVM value. To enter the selected value, press the **Start** button again. To exit the test, press the **Stop** button.

If there is a reference to a procedure, the procedure must be followed in order to correctly perform the test.

Code	Description	Value
0211	Language ROM Test 0 = Both Language ROMs are defective. 1 = Primary Language ROM is good. 2 = Secondary Language ROM is good. 3 = Both Language ROMs are good.	
0261	Line Service 0 = 115V 1 = 230/240 V 3 = 220V	
0262	Input Shelf (Media Width) This code is used to control what media width can be used in the copier. 1 = inch 2 = A 3 = inch and A 4 = A and B 5 = All	1
0263	Billing Type This code is used to select the billing in metres or feet. 0 = feet 1 = metric	0
0360	NVM reset to default Entering the number 1 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 = US NVM Default 2 = Billing Meter 3 = EO NVM Default	

Code	Description	Value
0361	Watchdog Timer Test This code can be use to exit the diagnostics mode.	
0362	Diagnostic Timeout This code allows the adjustment of the time interval that the copier will stay in the diagnostic mode. Adjustment scale is from 0 to 10, range is 5 to 50 minutes.	5 min.
0363	Reset NVM Mismatch Locations This code allows the NVM values to be reset back 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 Checksum	
0370	Reset Auditron NVM	
0371	Reset Auditron Admin Password This code allows the Technical Representative to change the administrator number without resetting the NVM.	

Code	Description	Value
0373	Reset Mismatch Auditron NVM This code allows the NVM values to be reset to the nominal recorded Auditron values. The software compares the NVM values to a backup file and resets the values that are not the same as the values in the backup file.	
0374	Reset Auditron NVM Checksum	
0379	Auditron/ EFA (External Foreign Accessory) Control 0 = Auditron/ EFA Off 1 = Auditron On 2 = External Foreign Accessory On, billing in square decimeters 3 = External Foreign Accessory On, billing once per copy	1
0561	Document Handler Scan Distance This code adjusts how far the document travels on the scan cycle before it starts the rescan. Refer to ADJ 5.2	
0562	Document Handler Rescan Distance This code adjusts how far the document travels on the rescan cycle before it gets scanned again or stops at the end of the copy cycle. Refer to ADJ 5.2	

CODE	DESCRIPTION	VALUE
0601	CVT (Document Drive Motor) This code allows the adjustment of the document drive motor speed. Refer to ADJ 5.1 Copy Size Adjustment	
0860	Document Reg Time This code allows the adjustment of the image on Bond, Tracing Paper, and Film media. Adjustment scale is from 0 to 20. Adjustment range is zero to (16 mm) in increments of (0.8 mm). Refer to ADJ 8.1 Image Registration	10 (8 mm)
0862	Time for Auto Cut This code allows for the adjustment of the copy media length by determining when the cutter is to cut the media. Adjustment scale is from 0 to 20. Adjustment range is zero to (16 mm) in increments of (0.8 mm). Refer to ADJ 8.2 Auto Length	10 (8 mm)
0908	Run with Active P/ R Indexing This code enables and disables the photoreceptor indexing feature.	

CODE	DESCRIPTION	VALUE
0920	Run Time This code displays the total amount of time that the Drum/ Developer and Fuser Drive Motors have been energized.	
0921	Electrostatic Series This code is used to adjust the corotrons, exposure, and the developer bias. 1 Adjusts the Transfer/Detack Corotron voltage 2 Adjusts the Charge Corotron Voltage (V_0) 3 Adjusts the Exposure (V_{BK}) 4 Adjusts the image density 5 Displays Illumination Bias Voltage and Illumination Sensor output voltage 6 Toner Sensor Calibration Refer to ADJ 9.2 Electrostatic Series	

CODE	DESCRIPTION	VALUE
0922	Run with Active Toner Fault This code disables toner faults to enable the running of copies while in a LL toner fault. While in diagnostics enter the code [0922] and select [YES] for running with toner faults. Enter the code [0361] to exit the diagnostic mode. Run copies.	
0926	Initialization of Toner NVM Complete This code resets the toner control values to nominal.	
0960	P/ R Index Time This code adjusts the time between indexes of the photoreceptor while the cleaning blade is against the photoreceptor.	
0961	Blade Dropout Time This code adjusts the length of time the cleaning blade is against the photoreceptor after the end of the copy cycle. The code [0960] is disabled when the cleaning blade is away from the photoreceptor.	

CODE	DESCRIPTION	VALUE
1004	Fuser Temp Test (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 the run temperature, the Drum/ Developer Motors is switched on. 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	
1010	Fuser Scorch Sensor (Thermistor RT2). Signal is 1 with Fuser temperature = < 420° F (215° C). Signal is 0 with Fuser temperature = > 420° F (215° C). Note: Power must be switched off then on, in order to reset signal.	

CODE	DESCRIPTION	VALUE
1026	Initialization of Fuser This code resets the fuser control NVM to the default values.	
1060	Fuser Temperature Setpoint This code allows for the adjustment of the fuser run temperature. Run temperature is 290° F (143° C) with A0 wide Bond media. Refer to ADJ 10.1 Fuser Temperature	20
1061	Fuser Main Drive On Point This code adjusts the temperature at which the Drum/ Developer Motors is switched on.	
1062	Fuser Vellum (Tracing Paper) Temp Setpoint This code adjusts the temperature offset between bond and Vellum (Tracing Paper) media. Refer to ADJ 10.1 Fuser Temperature	25
1063	Fuser Film Temp Setpoint This code adjusts the temperature offset between bond and film media. Refer to ADJ 10.1 Fuser Temperature	35
9903	Stepper Rate NVM This code initializes all the stepper motor values to the default values.	

Image on Drum (Panic Stop) Procedure

This procedure allows the isolation of copy 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 copy after the transfer, the defect is related to the transfer or fuser.

1. Make a copy of Test Pattern, 82E5980 ; open the right door interlock when the test pattern is almost half way into the document handler.
2. Remove the Developer Module.
3. 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.

Photoreceptor Drum Maintenance



WARNING

When performing the photoreceptor 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.



These procedures must be completed in the shortest possible time in order to reduce the effects of light shock.

Washing Procedure

The Washing Materials:

Photoreceptor Maintenance Kit, Film Remover

1. Remove the photoreceptor 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 movement.



Ensure that the ends of the drum are washed.

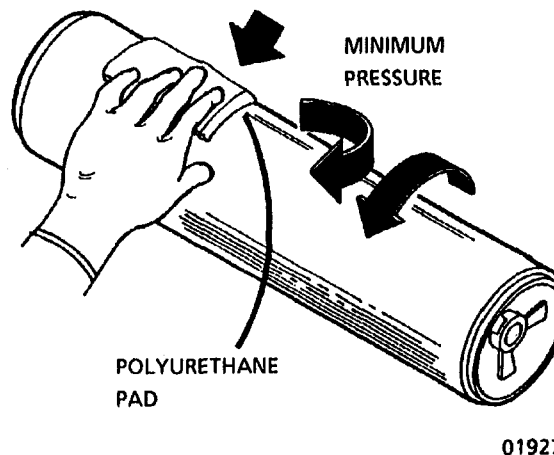


Figure 1. Washing the Drum

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 over the entire surface of the drum.
9. Buff the surface of the drum using the clean side of the dry polyurethane pad.



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 diagnostic mode. Enter tests [1004] and allow the copier to run for 5 more minutes.
14. Place the used washing materials in the disposal bag.
15. Wash your hands.

The Polishing Procedure

The Polishing Materials:

Photoreceptor Maintenance Kit,
Photoreceptor Polish



This procedure can be used to remove large areas of filming or fine scratches.



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

(Continued)

(Continued)

1. Remove the photoreceptor 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. Completely soak two sponges with water.
5. Using a paper towel, remove some water from one of the sponges until the sponge is only slightly damp.
6. Using another paper towel, remove some water from the second sponge until it is drier than the first sponge.
7. Shake the container of polish thoroughly.
8. Put a large amount of polish on a clean polyurethane pad.
9. (Figure 2): Polish the drum.

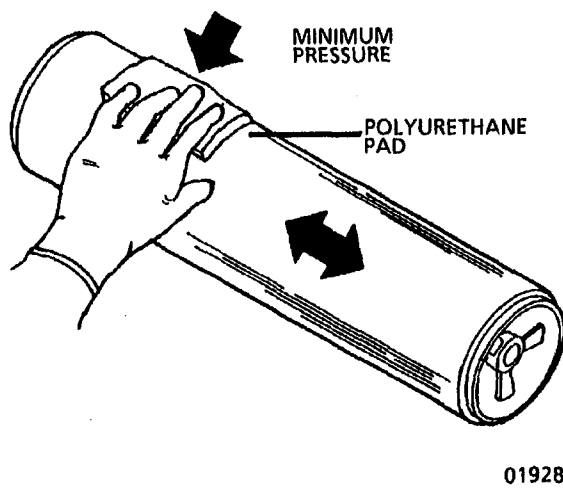


Figure 2. Polishing the Drum

2 Ensure that the entire surface of the drum is polished.

10. Remove the polish from the drum, using the first sponge. Then remove any residual polish, using the second sponge.
11. Buff the surface of the drum, using the clean side of the dry polyurethane pad.
12. Use the dusting pouch in order to apply a thin layer of zinc stearate over the entire surface of the drum.
13. Buff the surface of the drum again.

3 Ensure that the ends of the drum are buffed as well as the center of the drum.

14. Continue to buff the surface of the drum for three complete revolutions of the drum.
15. Apply a final thin layer of zinc stearate over the entire surface of the drum.

! After completing the polishing procedure, the drum must be used immediately. If the drum is stored, crystallization problems may occur.

16. Reinstall the drum.
17. Enter the diagnostic mode. Enter the test [1004] and allow the copier to run for 5 more minutes.
18. Place the used polishing materials in the disposal bag.
19. Wash your hands.

Photoreceptor Cleaning Enhancement

1. Remove the photoreceptor drum assembly (REP 9.2).
2. Use the dusting pouch (8R171) to apply a thin layer of zinc stearate over the entire surface of the photoreceptor.
3. With a new lint free cloth (600S4372), wipe the entire surface of the photoreceptor using moderately heavy pressure. Use a back and forth motion of 6 - 10 strokes while revolving the photoreceptor 3 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 photoreceptor.
6. Reinstall the photoreceptor drum assembly (REP 9.2).

Initialization of the Fuser Roll

Purpose

Correct operation of the Fuser Roll requires that the Fuser Roll be initialized by coating the roll evenly with fuser oil. The following steps specify the correct technique for initializing the fuser roll. Perform the procedure exactly as written and do not omit any steps. The Fuser Roll must be initialized cold then hot.

Introduction

This procedure must only be used to initialize a new Fuser Roll or when installing a new 3030 Copier. Do not use this procedure when replacing the wick or oil pads. These components have their own procedures.



WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll may be hot.

Items Required

2 Tube (8 cc) fuser oil
1 pair disposable gloves
Heavy-duty towels

1. Press power off and disconnect the power cord.



STEP 2 E: To avoid damaging the stripper fingers, handle the Stripper Finger Assembly with care.

2. Remove the Stripper Finger Assembly (REP 10.6).
3. Remove the Oil Dispense Assembly (REP 10.7).
4. Leave the Media Feed-in Shelf open and bypass the Feed-in Shelf Interlock.
5. Enter the diagnostic mode and enter the code [0403] to turn on the Main Drive Motor in order rotate the Fuser Roll.
6. Fold a cloth or paper towel into a pad and apply half the tube of oil to the pad.
7. Being very careful, apply the oil to the surface of the fuser roll over the full length.
8. Apply the remainder of the oil on the pad and repeat step 7.
9. Inspect the entire surface of the roll for dry areas.



1 Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

10. If there are any dry areas on the Fuser Heat Roll, wipe the oil from the surrounding areas to the dry areas, using a towel.
11. Using the same pad clean the Fabric Guide on the Media Transport, then discard the pad.
12. Exit the code [0403] and enter the code [09 21 4] in order to bring the Fuser Roll to operating temperature.
13. While the fuser is warming up, fold another cloth or paper towel into a pad and apply approximately one quarter of the oil on the pad.
14. When the Fuser Roll begins rotating, very carefully apply oil on the surface of the roll over the full length.
15. Apply another one quarter of oil to the pad and apply oil on the surface of the roll over the full length.
16. Clean the Oil Dispense Roll with Film Remover.
17. Reinstall the following:
 - a. Oil Dispense Assembly
 - b. Stripper Finger Assembly
18. Remove the interlock bypass and close the Media Feed-in Shelf.
19. Switch the copier off then on..



The copies made in the next step are not for copy quality. They are run to remove any excess fuser oil from the fuser heat roll.

20. Make 5 copies on 36 inch (914 mm) bond media. Use the white side of test pattern 82E5980.

21. Switch the copier off.



Use extreme caution in the next steps. Use a thick cloth to wipe the excess oil from the ends of the fuser heat roll and the fabric guide. The Fuser Heat Roll and the Fabric Guide will be very hot. .

22. Lower the Media Feed-in Shelf.

23. Remove the Stripper Finger Assembly.

24. Wipe excess oil from the ends of the Fuser Heat Roll and the Fabric Guide.

25. Reinstall the Stripper Finger Assembly.

26. Wash your hands to remove any fuser oil that may remain on them.

27. Switch on the copier

28. Make 5 copies of test pattern 82E5980 and check the copy quality.

BLANK

Molex SL Connector Repair Procedure

1. (Figure 1): Molex Extraction Tool.

Purpose

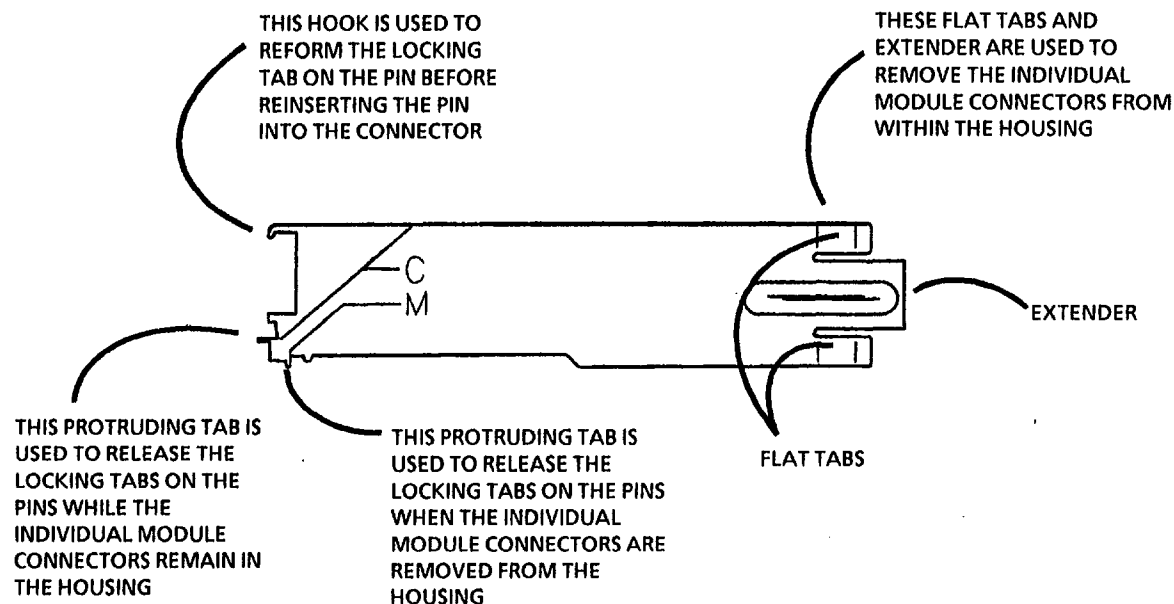
The purpose of this procedure is to show the approved method of repair or replacement of the wire terminals in either the Pin Housing Connectors or the Socket Housing Connectors without damaging them.



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



	01994	A
TAR	SM 6	M

Figure 1. Molex Extraction Tool

(Continued)

BLANK

(Continued)

⚠ *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 locate the individual connectors correctly will cause the copier to malfunction causing damage.*

⚠ *STEP 2 B: 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.

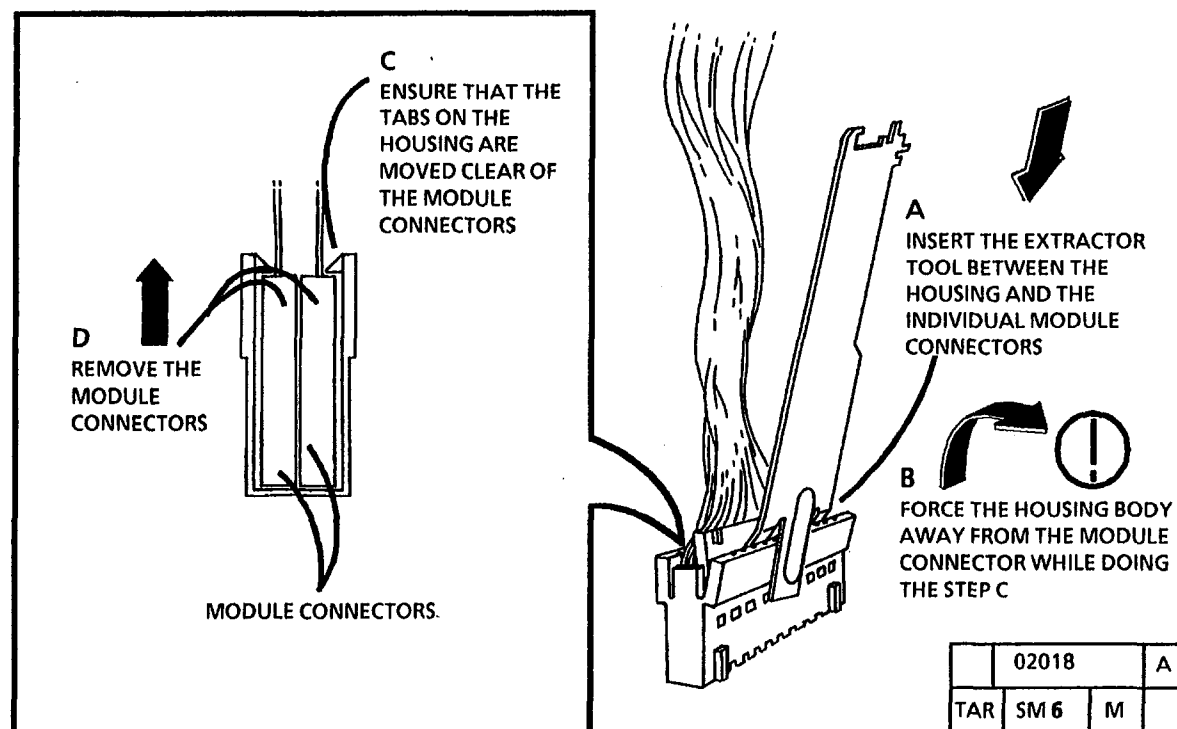


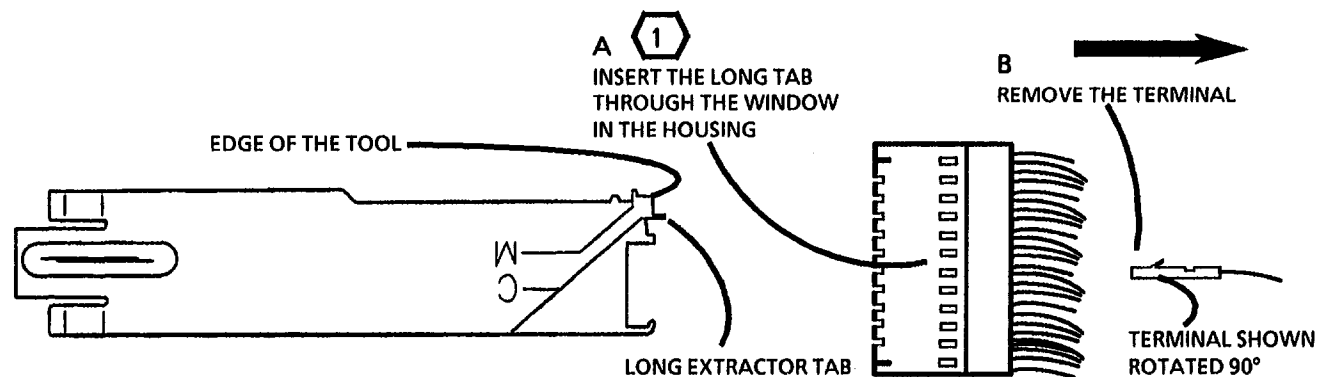
Figure 2. Remove the individual module connectors from the housing

(Continued)

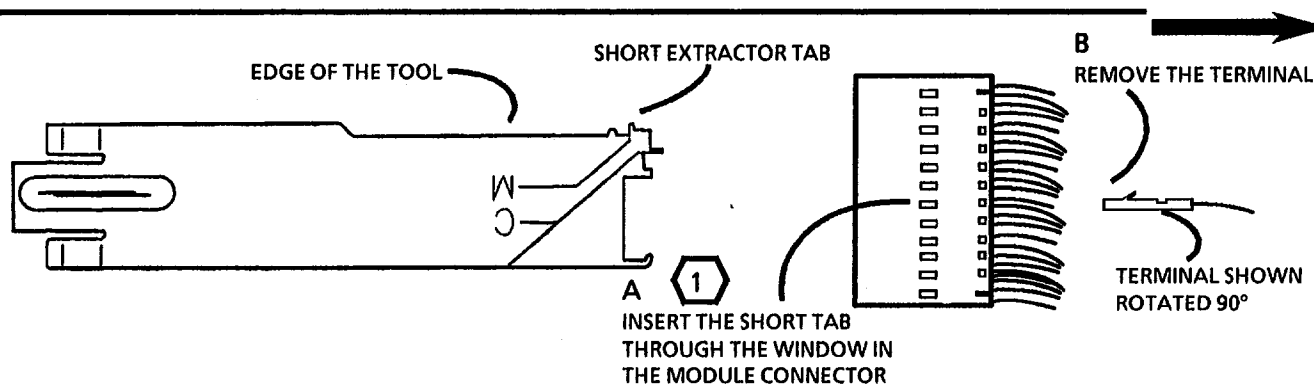
(Continued)

1 STEP 3 A: Insert the extractor tabs until the face of the tool is flush with the connector housing.

3. (Figure 3): Remove the Terminals from the Connectors.



TERMINAL REMOVAL THROUGH THE HOUSING



TERMINAL REMOVAL FROM MODULE CONNECTOR REMOVED FROM THE HOUSING

Figure 3. Remove the Terminals from the Connectors

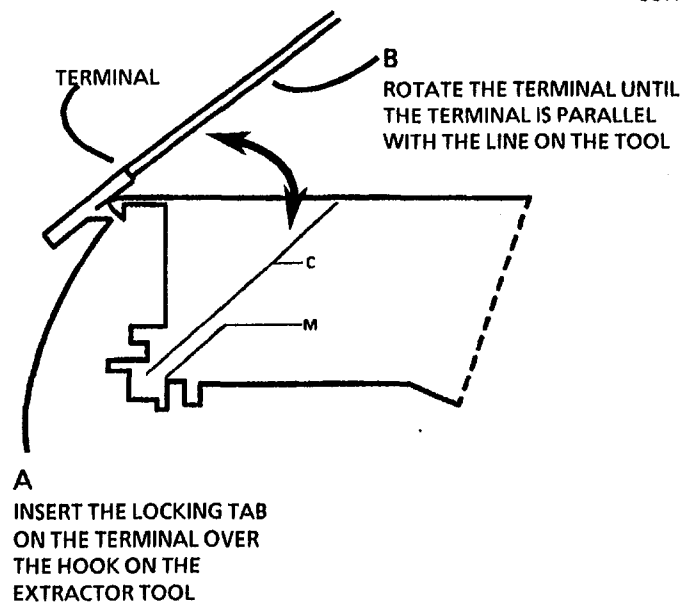
	01995	B
TAR	SM 6	M

(Continued)

(Continued)

4. (Figure 4): Reform the Terminal Locking Tab.

5. Reinstall the terminal to the pin position it was removed from.
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



	01996	A
TAR	SM 6	M

Figure 4. Reform the Terminal Locking Tab

Specifications

Product Codes

The product code is located on the serial number plate and identifies the product configuration.

60 Hz 1HE
50 Hz 0HE

Physical Characteristics

Weight	500 lbs	225 kg
Depth	22 3/4 in	550 mm
Width	57 in	1450 mm
Height	43 in	1100 mm

Installation Space Required

105 in (267 cm) X 87 in (221 cm)

Copy Rate

Process Speed: 15 feet/minute
3 meters / minute

First copy out: , 20 seconds

Maximum Number of Copies Selected

Multiple Mode: 15 Copies
Sets Mode: One Copy

Cut Length Accuracy

Copies up to 610 mm will be cut within ± 4.5 mm. For lengths greater than 610 mm, any copy will be within ± 0.5 % of the specified copy length. From the first copy to the last copy of a multiple copy run, the difference in length will be no more than 6 mm.

Magnification

1:1 nominal ($\pm 1/2\%$) with 20 pound (75 gsm) bond and test pattern 82E5980

Cut Squareness

The cut length of the copy will be square:

- For lengths greater than 420 mm may vary ± 0.25 %
- For lengths less than 420 mm may vary less than 1.3 mm

Electrical Power Requirements

60 Hz: The power outlet must be on a 20 ampere service line that is dedicated (wired directly to the circuit breaker panel with no shared neutral and on a different phase from the lighting circuit, in order to prevent dimming the lights).

60 Hz: 104 - 127 VAC, single phase
50 Hz: 220/240 VAC, single phase

Current at 115 VAC:
Standby: 6 Amperes
Running: 16 Amperes

Current at 220 VAC:
Standby (Low Power): 2 Amperes
Running: 8.5 Amperes

Current at 240 VAC:
Standby (Low Power): 2 Amperes
Running: 9 Amperes

Power Consumption

Copying Mode: 1840 watts (115 V)
1400 watts (220/240 V)

Standby
(Ready to Copy) Mode: 690 Watts (115 V)
950 watts (220/240 V)

Power Saver Mode: 160 Watts (115 V)
219 Watts (220 V)
264 Watts (240 V)

Power cord length: 10 feet (3 metres)

Audible Noise

Operating Mode: 67 dBA maximum
Standby Mode: 52dBA maximum

Document (Original) Size

Minimum Size: 8 1/2 X 11 (A 4)

Maximum Size: 914 mm x 5 m (4 x A0)

Note: Any Document greater than 60 inches (1500 mm) in length must be run in the Sets Mode of Operation.

Maximum Document Thickness: 1/8 in (3 mm)

Side Edge Registration

For all modes, copy misalignment is ± 6 mm to the machine center (media location).

Copy Image Size

5mm (0.2 in.) lead and trail edge with remaining roll diameter greater than 95mm (3.7 in.).

10 mm lead and trail edge with remaining roll diameter less than 95 mm.

Specifications (Continued)

Media Type and Size

Type specification:

USO, XLA, XC: Bond vellum, film

RX: bond, tracing paper, film

Size specification:

Auto Continuous Roll

WIDTH: 17 in (432 mm) to 36 in (914 mm)

LENGTH: 10 in (250 mm) to 60 in (1524 mm) with the copier in the multiple copy mode. Up to 82 feet (25 metres) with the copier in the SETS mode.

Manual Feed (Cut Sheets)

WIDTH: 8 1/2 in (216 mm) to 36 in (914 mm)

LENGTH: 11 in (280 mm) to 60 in (1524 mm) with the copier in the multiple copy mode. Up to 82 feet (25 metres) with the copier in the SETS mode.

Media Roll Supply

One rolls, with 36 in (914 mm) X 500 ft (150 metres) for bond and vellum(tracing paper) and 36 in (914 mm) X 150 ft (46 metres) for film.

Environmental Data

Maximum Temperature: 90° F, 32° C

Maximum Humidity: 85%

Minimum Temperature: 60° F, 16° C

Minimum Humidity: 15%

Maximum Altitude: 7000 ft (2133 metres) above sea level

Heat Emission (Average) 50/ 60 Hz

Copying Mode: 6826 BTU/ HR (115V)
6450 BTU/ HR (220V)
7338 BTU/ HR (240V)

Standby Mode: 2350 BTU/HR (115V)
(Ready to Copy) 3242 BTU/HR (220/240V)

Power Saver Mode: 550 BTU/HR (115V)
901 BTU/HR (220/240V)

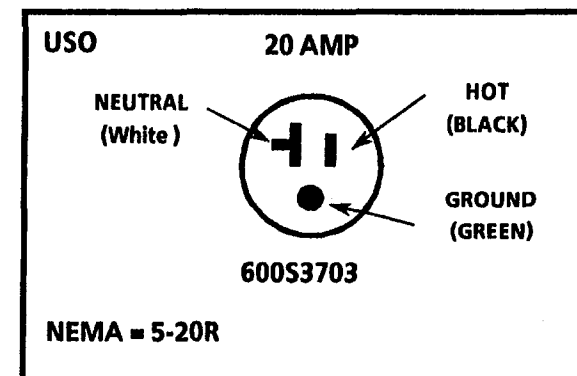
Installation and Removal

Ground and AC Voltage Check

ⓘ Before installing the 3030 Copier, check for correct voltage, polarity and the grounding of the AC outlet that is provided by the customer. Use the Polarity Checker (600T467) or a multi-meter. Incorrect voltage applied to the 3030 could result in poor performance or damage to the copier.

① The power line outlet must be a 20 amp single dedicated line (wired directly to the circuit breaker panel) with no shared neutral and on a different phase from the lighting circuits.

ⓘ If specifications are not met, the AC outlet is wired or grounded incorrectly. Inform the Customer and request that a licensed electrician correct the problem. DO NOT make the correction yourself.



1. Check the ground and the AC voltage.

60 Hz

- A. Check for 104 -127 VAC between AC Hot and AC Neutral.
- B. Check for 104-127 VAC between AC Hot and Ground.
- C. Check for less than 2 VAC between AC Neutral and Ground.

50 Hz

- A. Check for 220 -240 VAC between AC Hot and AC Neutral.
- B. Check for 220 -240 VAC between AC Hot and Ground.
- C. Check for less than 2 VAC between AC Neutral and Ground.

2. (Figures 1 and 2): This shows the minimum allowable space requirements.



This product will produce ozone during operation. The ozone that is produced is dependent on the copy 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.

FLOOR SPACE REQUIREMENTS

105 inches X 86 inches (2667 mm X 2185 mm)

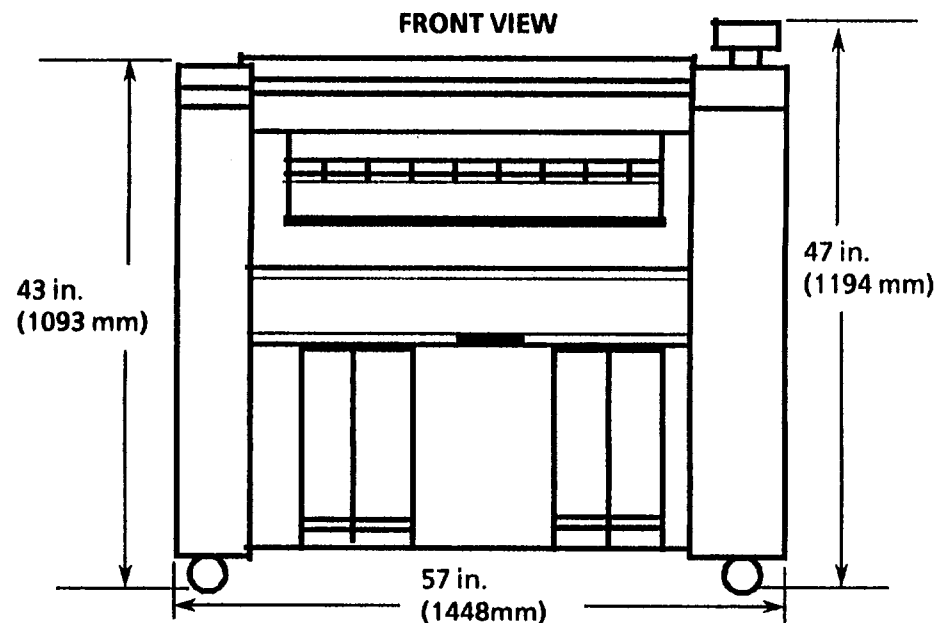


Figure 1. Minimum Space Requirements

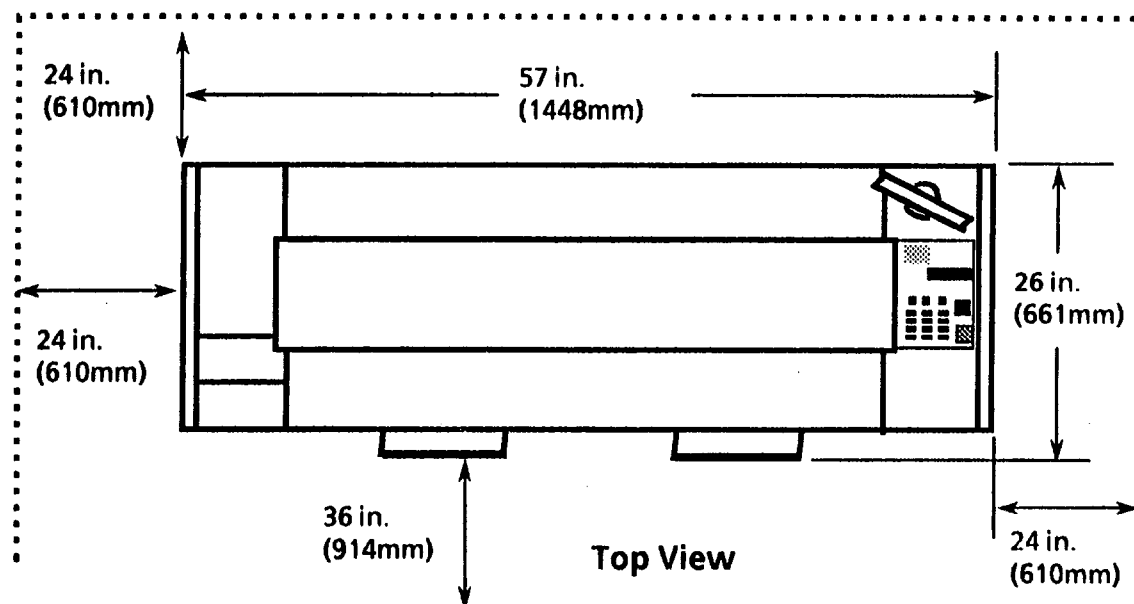


Figure 2. Minimum Space Requirements

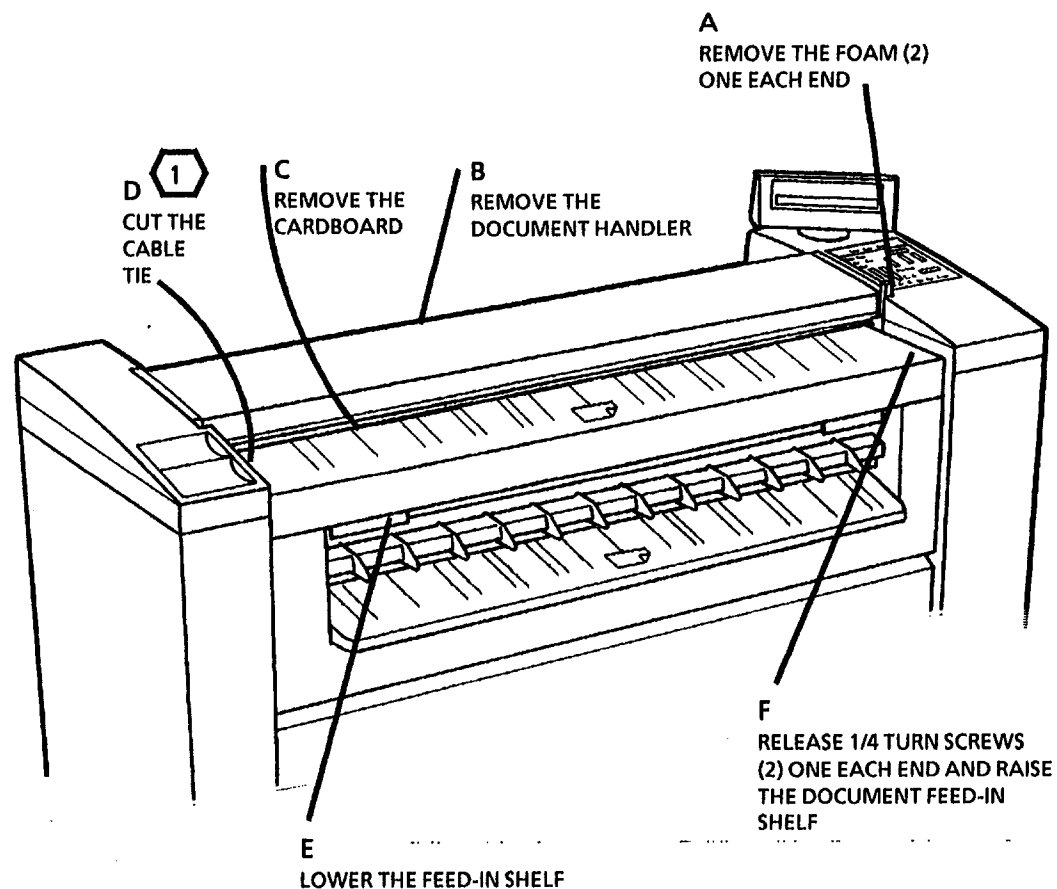
(Continued)

Installation Procedure

1. (Figure 3): Remove the packing material.

1

STEP D: The cable tie is securing the Cleaning Blade Weight.



2635

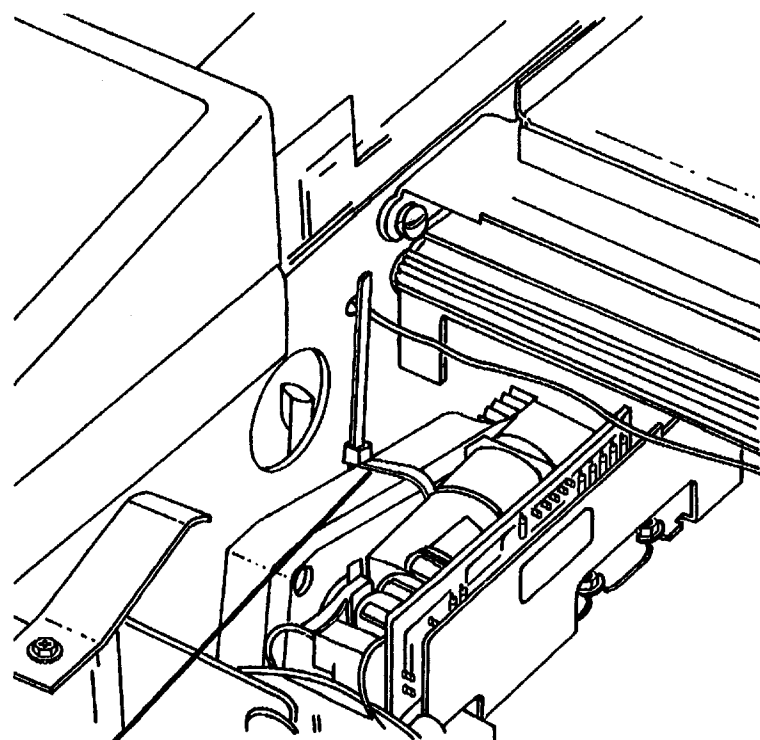
Figure 3. Remove Document Handler

(Continued)

2. (Figures 4): Remove the remaining cable Ties.

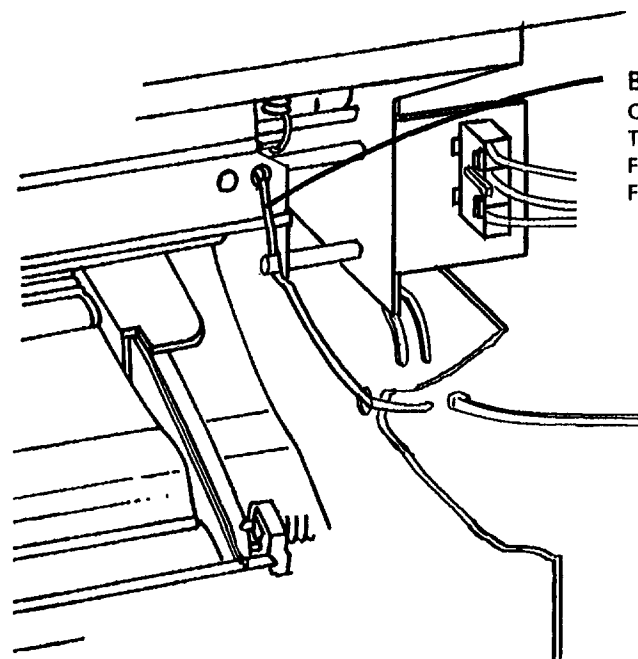
2

STEP B: Place your index finger on the head of the cable tie behind the bracket to ensure that the end of the cable tie does not fall into the copier.



A
CUT AND REMOVE THE CABLE
TIE FROM THE BLADE WEIGHT

02183A



B 2

CUT AND REMOVE
THE CABLE TIES
FROM THE STRIPPER
FINGER BRACKET

2653

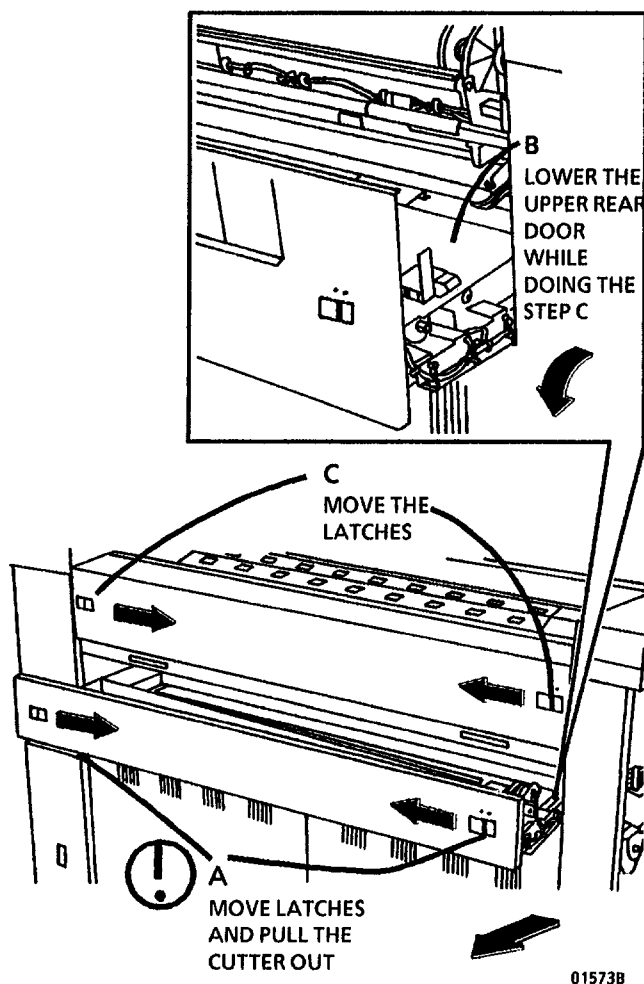
Figure 4. Removing the Cable Ties

(Continued)



STEP 3 A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

3. (Figure 5): Prepare to Remove the Developer Module.



01573B

Figure 5. Prepare to Remove the Developer Module

4. (Figure 6): Remove the Toner Cartridge.

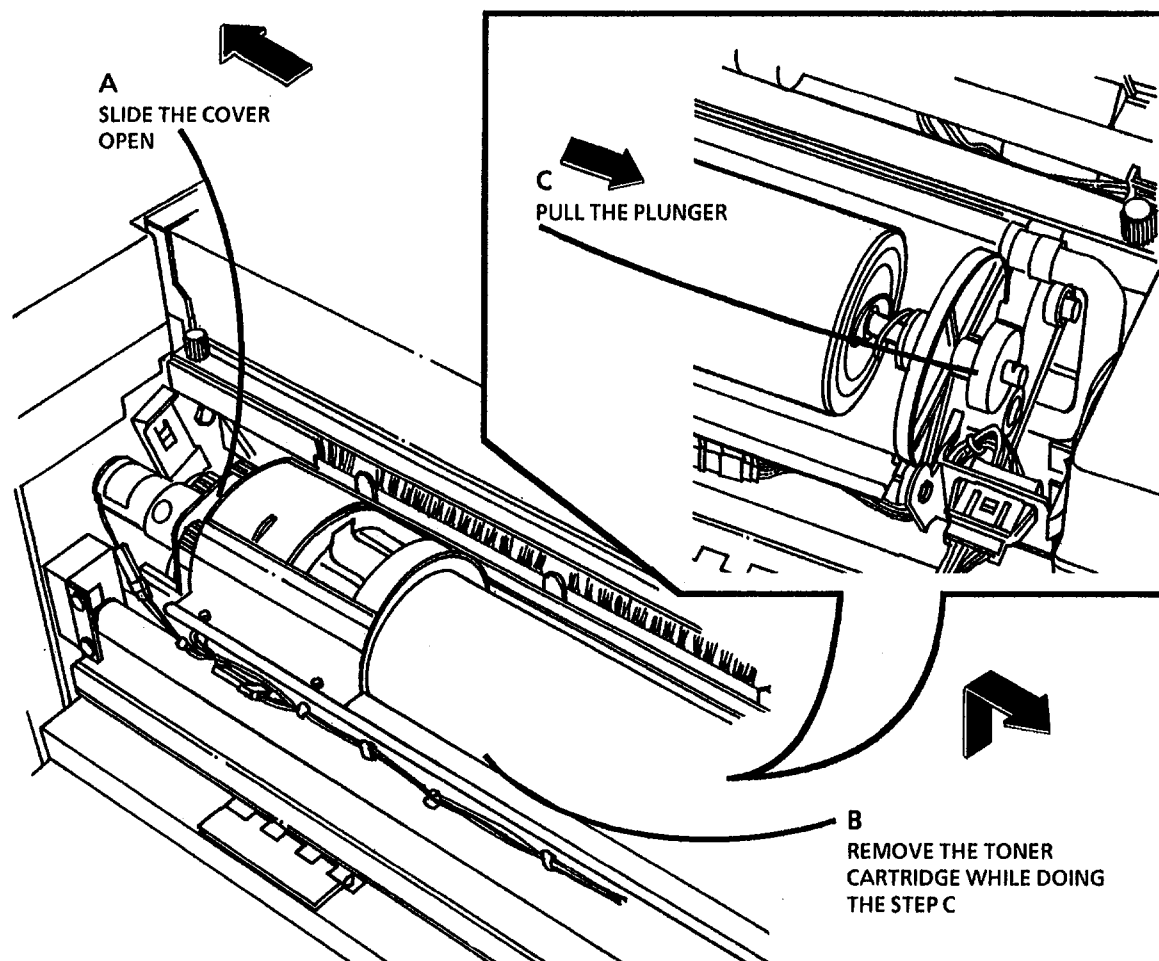


Figure 6. Remove the Toner Cartridge

01599B

(Continued)

5. (Figure 7): Remove the Developer Module.

3 STEP 5 F: Before removing the developer module, ensure that there is a clean area to place the assembly.

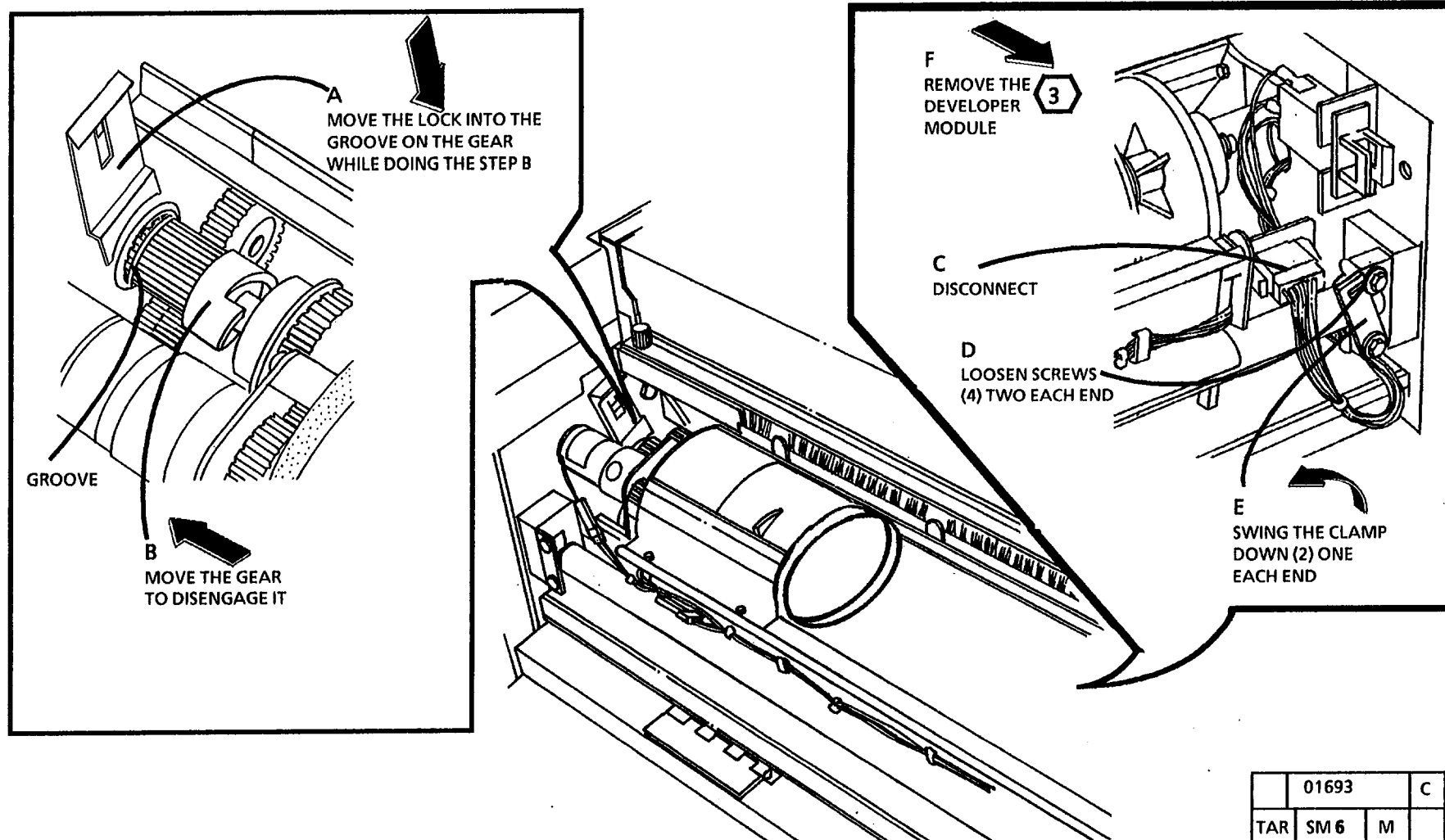


Figure 7. Remove the Developer Module

(Continued)

(Continued)

6. (Figure 8): Remove the Sump Shield from under the toner cartridge.

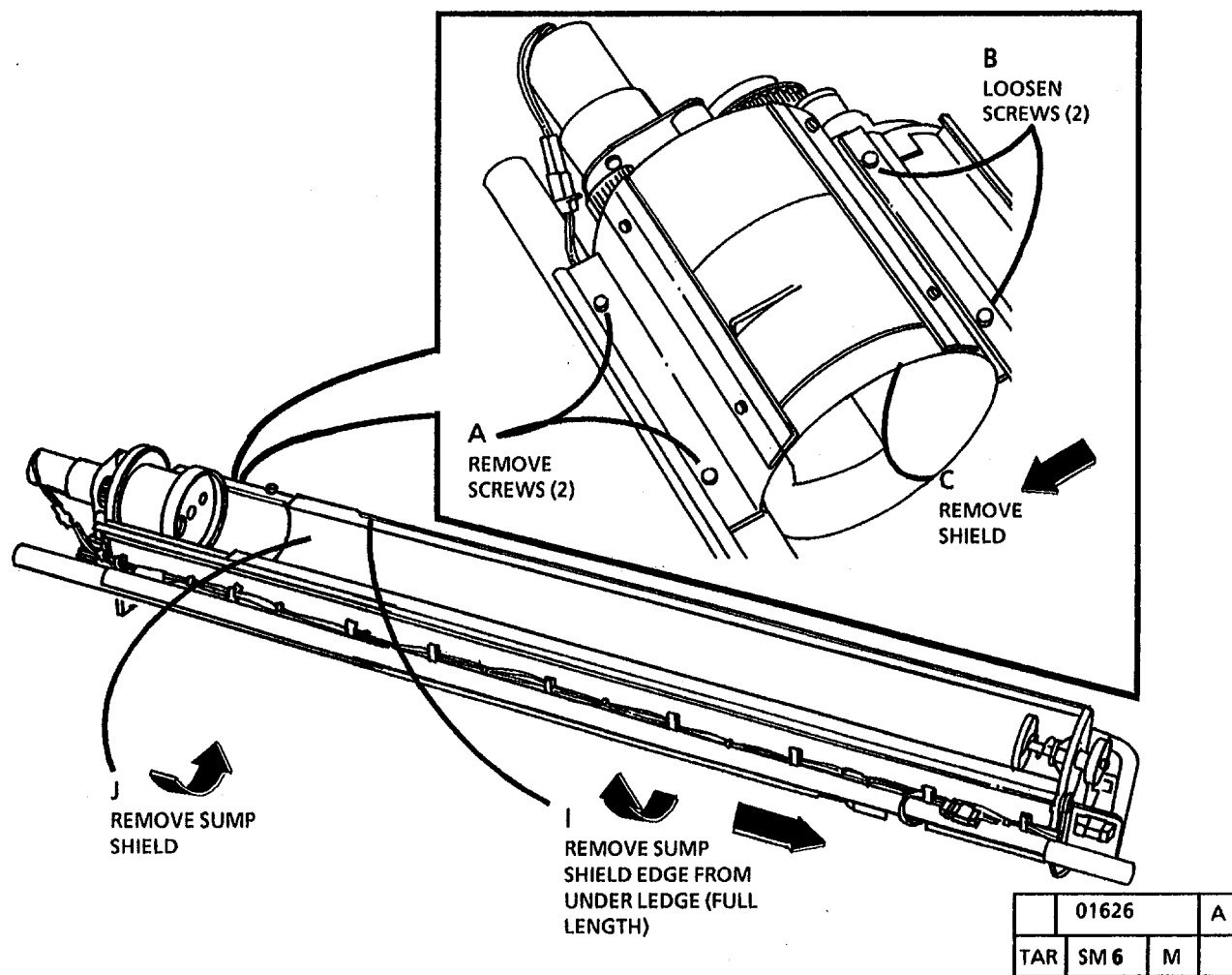


Figure 8. Remove the Sump Shield from Under the Toner Cartridge

(Continued)

4 STEP 7A: Pour the developer material evenly over the full length of the augers.

7. (Figure 9): Install the Developer Material and record the batch number on the machine log.

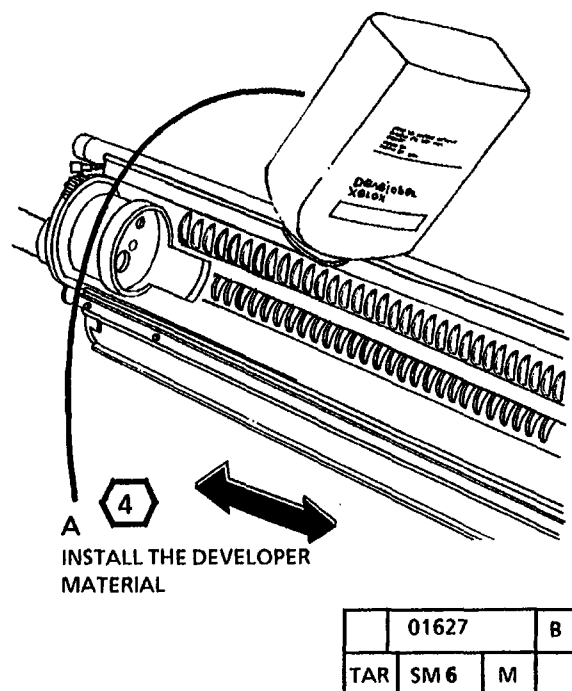
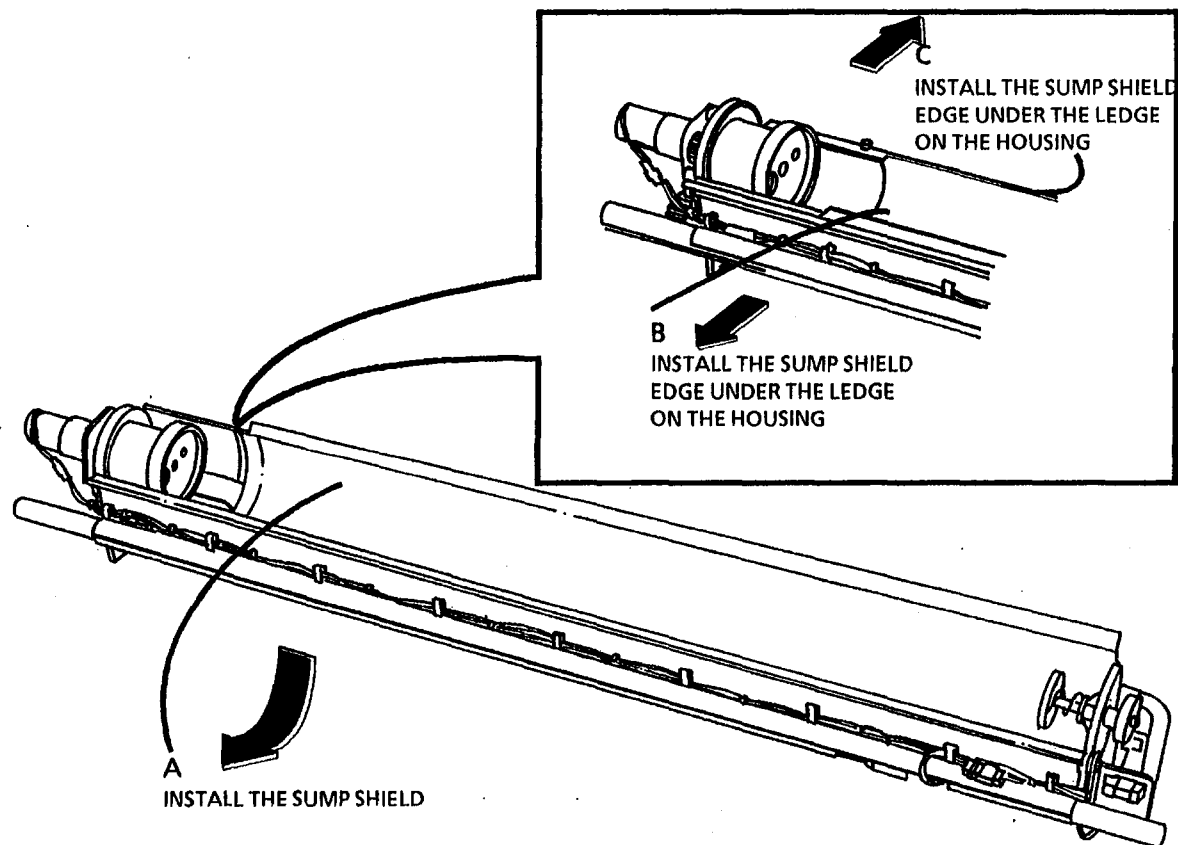


Figure 9. Install the Developer Material

8. (Figure 10): Reinstall the Sump Shield on the bottom of the Developer Module.



01628			A
TAR	SM 6	M	

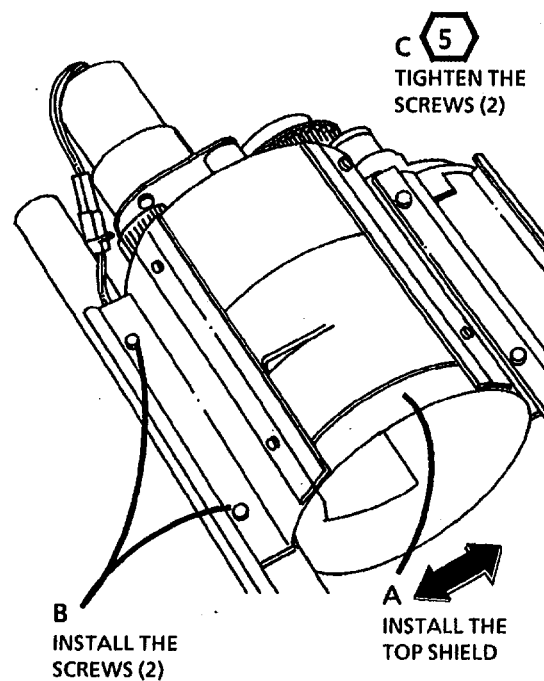
Figure 10. Reinstall the Sump Shield on the bottom of the Developer Module

(Continued)

(Continued)

5 *STEP 9 C: Do not overtighten the screws.*

9. (Figure 11): Reinstall the Top Shield.



	01731		A
TAR	SM 6	M	

Figure 11. Reinstall the Top Shield

(Continued)

(Continued)

6 STEP 10 A : Ensure that the developer module is fully installed in the brackets.

7 STEP 10 E: Ensure that the gear is free to engage with the developer module drive gears.

10. (Figure 12): Reinstall the Developer Module.

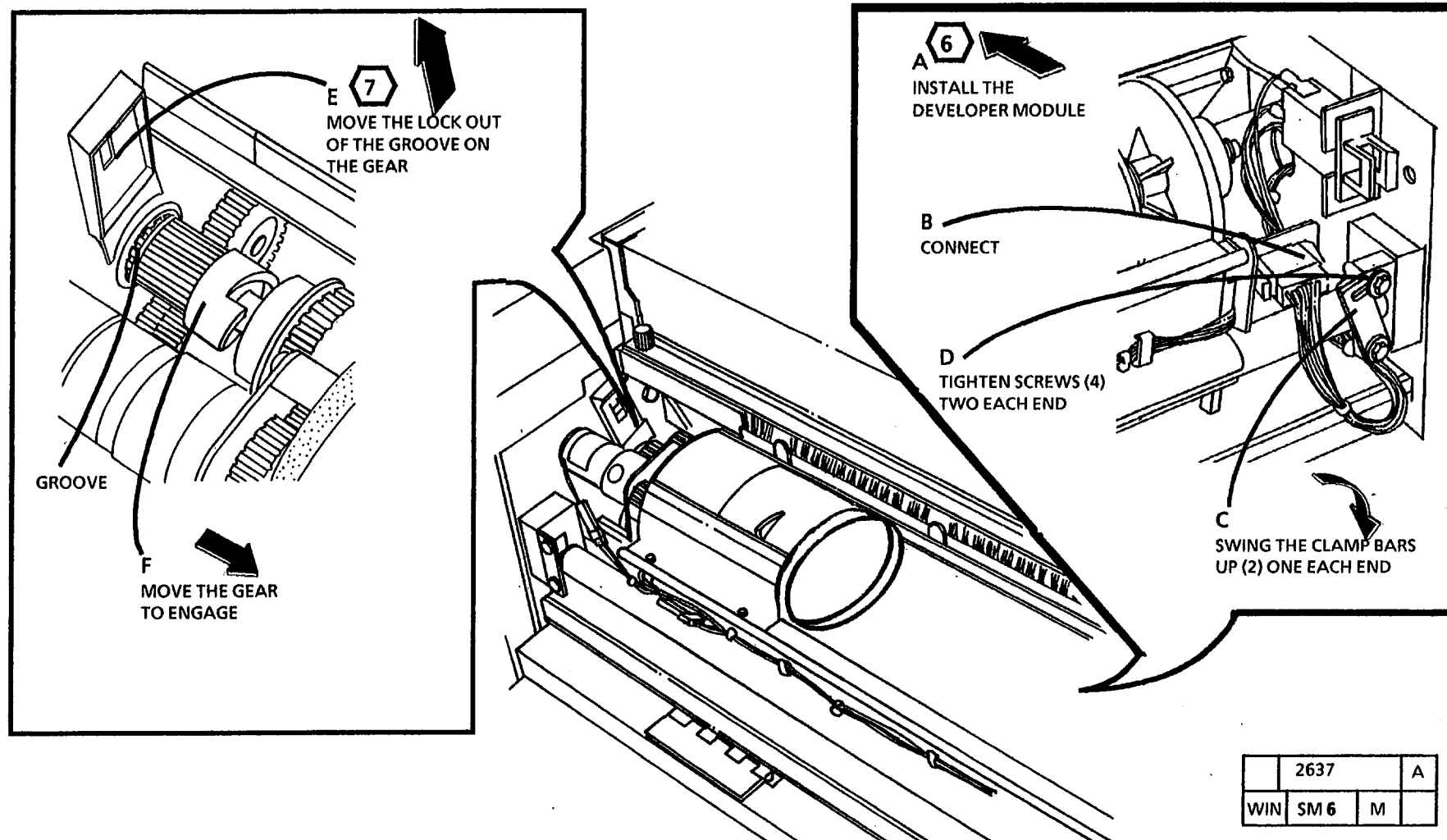


Figure 12. Reinstall the Developer Module

(Continued)

(Continued)

11. (Figure 13): Lower the copier to the lowest position.

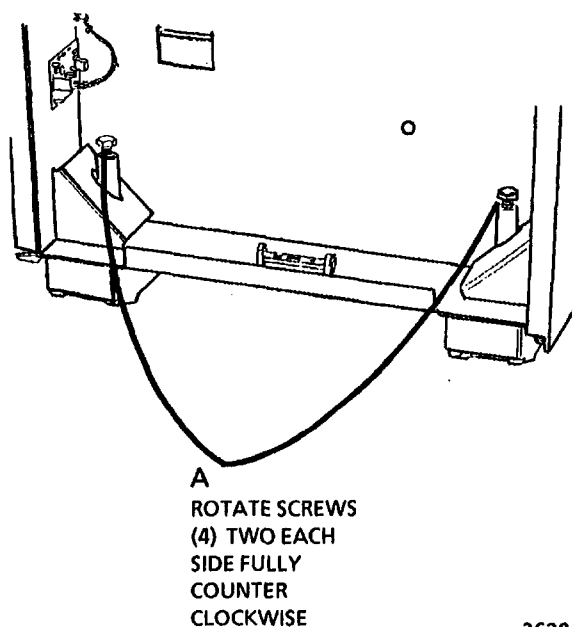


Figure 13. Lower the Copier to the Lowest Position

(Continued)

- 8 STEPS 12 A and B: To ensure that the copier is not twisted, perform the front-to-back check on the frame at the ends of the copier.
- 9 STEPS 12 A and B: The bubble must be centered between the lines on the level.

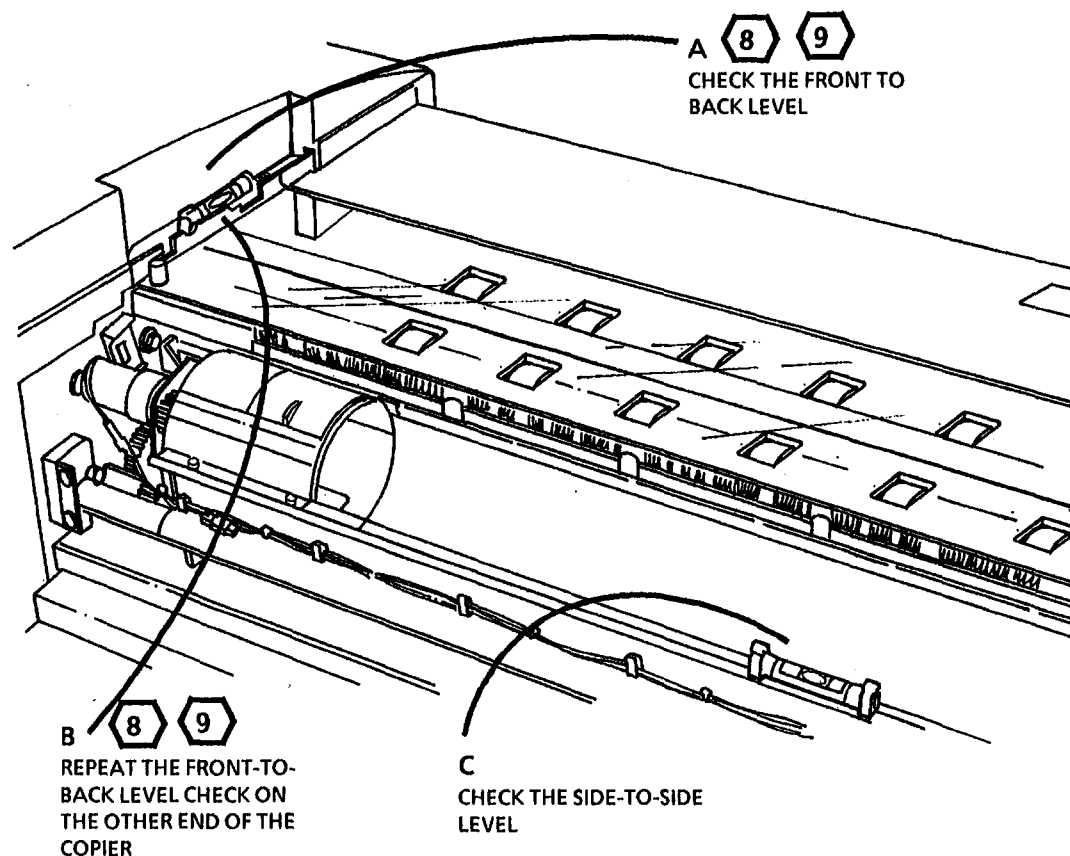


Figure 14. Check the Level of the Copier

(Continued)

(Continued)

10 Adjust the side which is the farthest out of level first.

11 *STEP 14 A : The bubble must be centered between the lines on the level.*

14. (Figure 15): Adjust the front-to-back level.

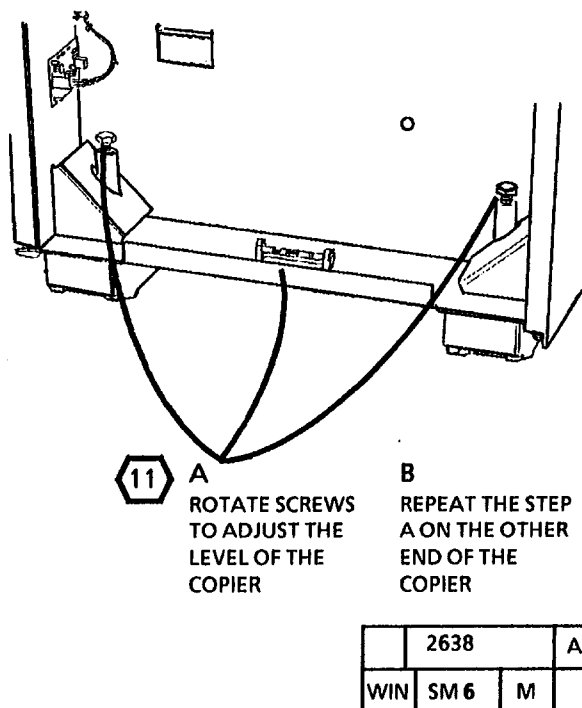


Figure 15. Adjust the front-to-back level

12 *STEP 15 B: The bubble must be centered between the lines on the level.*

15. (Figure 16): Adjust the side-to-side level.

16. Perform steps 11 through 14 until the level is within specification.

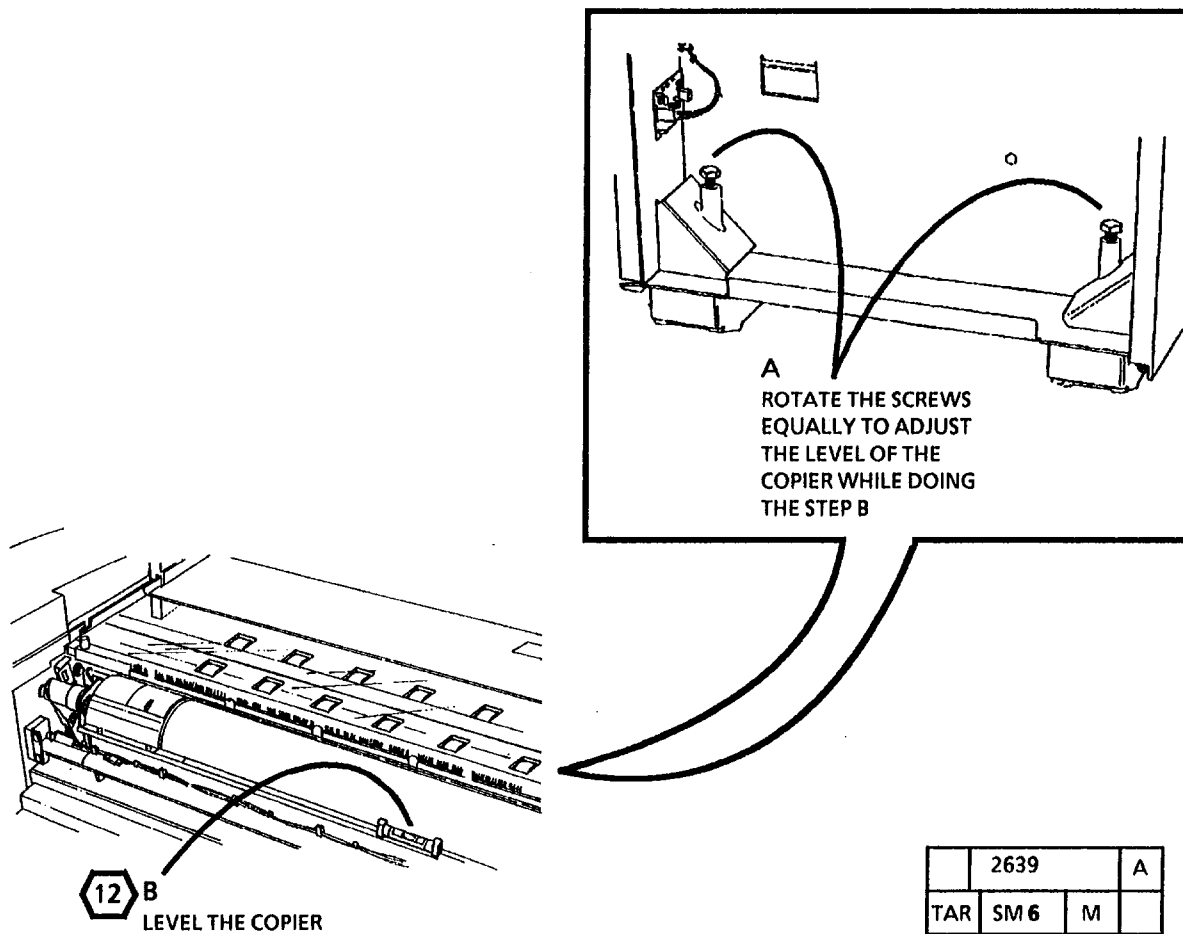


Figure 16. Adjust the side-to-side level

(Continued)

(Continued)

- 12 STEP 17 C: To ensure that the toner cartridge is engaged in the drive plate, rotate the cartridge.

17. (Figure 17): Install the Toner Cartridge.

18. Close the Upper Rear Cover and push the Cutter Module in.

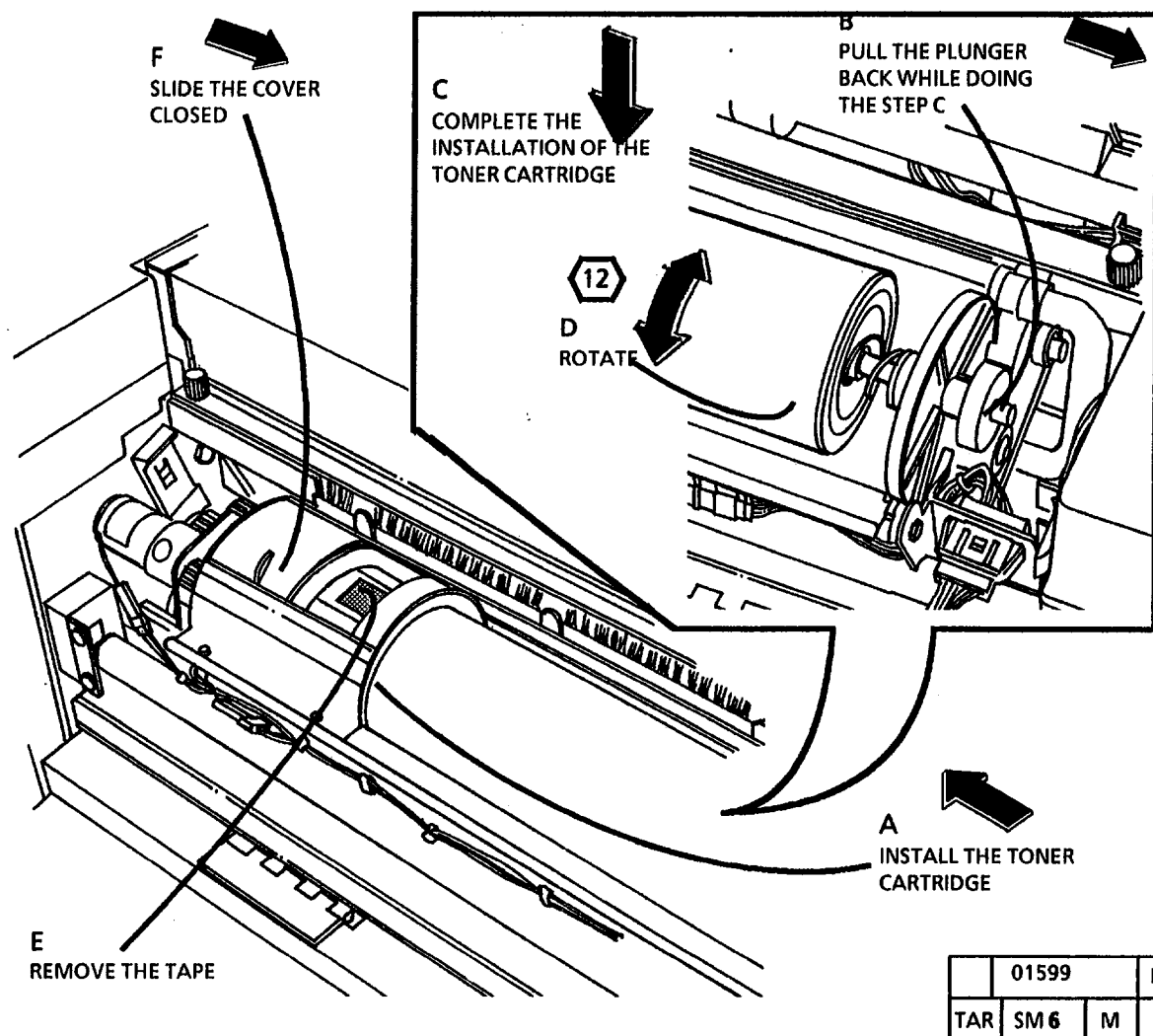


Figure 17. Install the Toner Cartridge.

(Continued)

(Continued)

19. Remove the service rails from the installation kit.

! **STEP 20:** The media supply drawer must remain closed when the service rails are in use. The tab on the bottom of the rail is there to ensure that the media supply doors remain closed.

20. (Figure 18): Install the Service Rails.

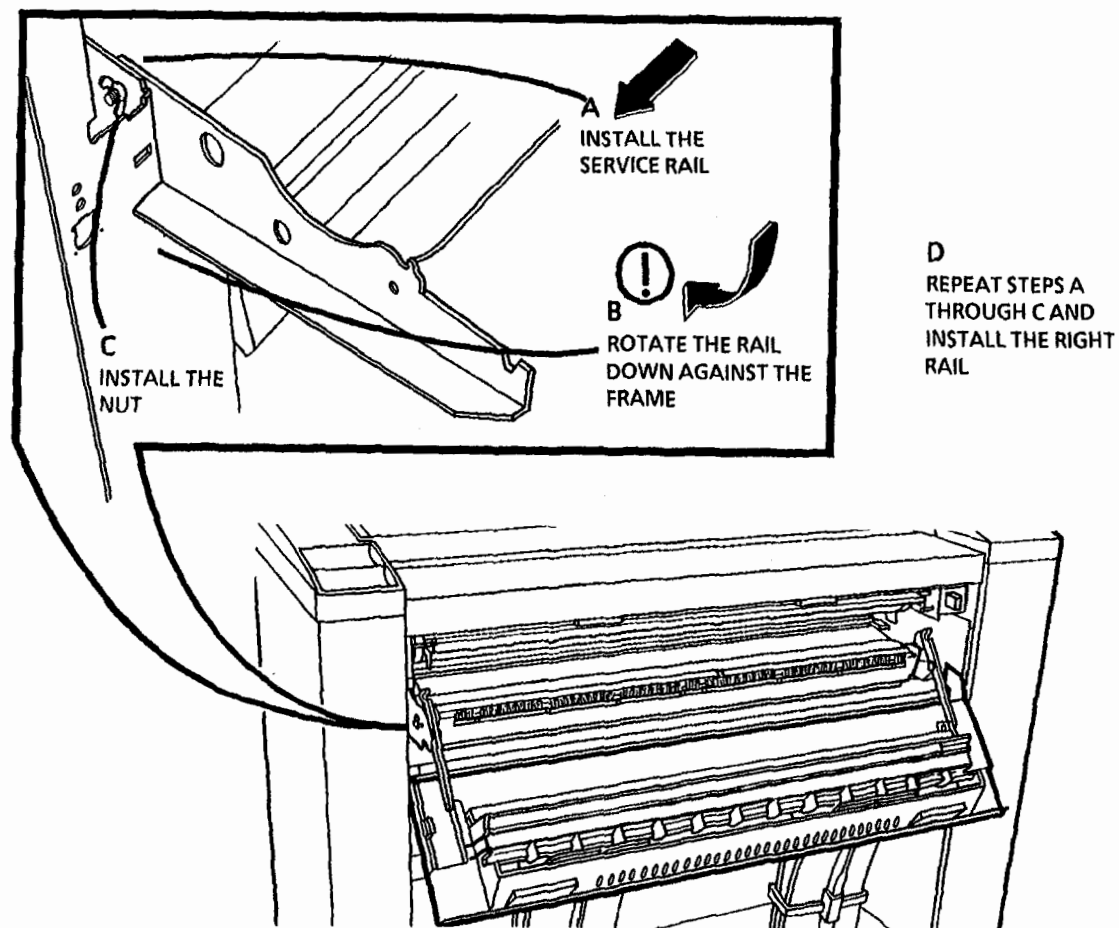


Figure 18. Installing the Service Rails

02509

(Continued)

(Continued)

21. (Figure 19): Prepare to Remove the Xerographic Module.

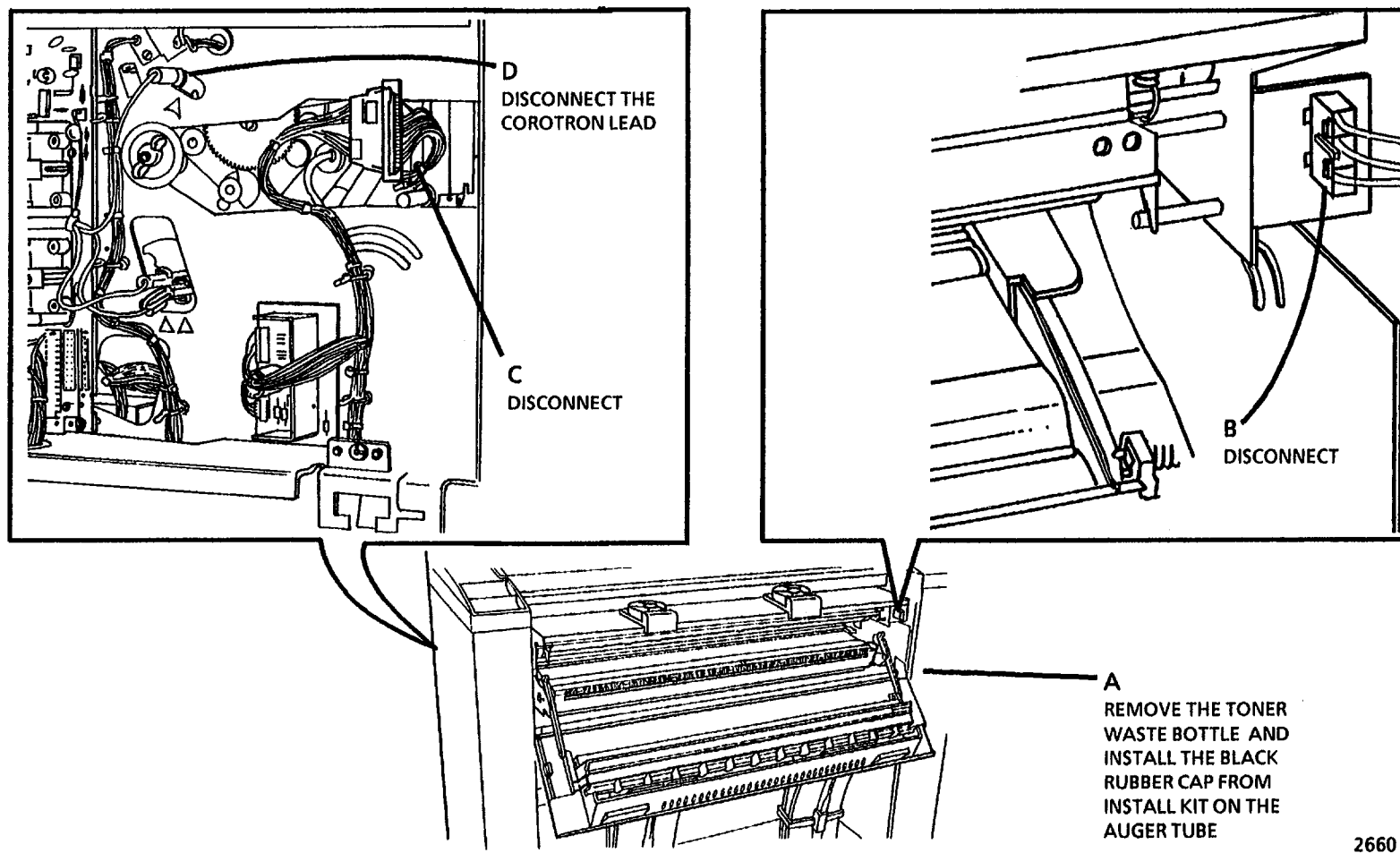


Figure 19. Prepare to Remove the Xerographic Module

(Continued)

! **STEP 22 B:** To ensure a safe position of the xerographic module on the service rails, the on the module must be in the slots on the rails. The module is heavy and it is difficult to handle.

13 The xerographic module may remain on the service rails to install the photoreceptor.

22. (Figure 20): Remove the Xerographic Module

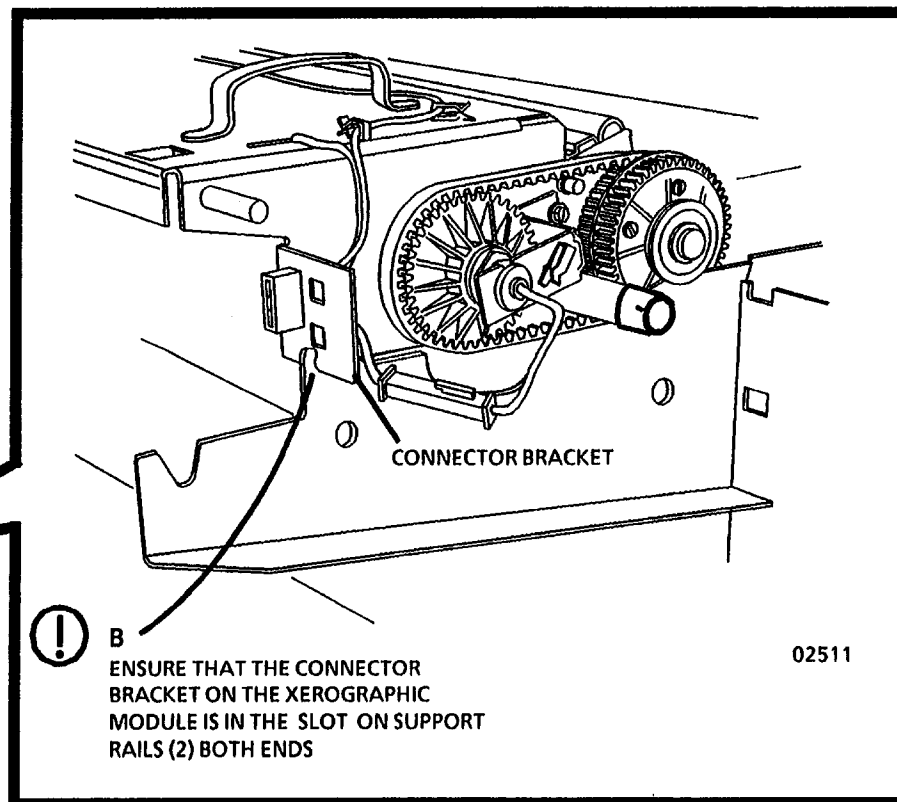
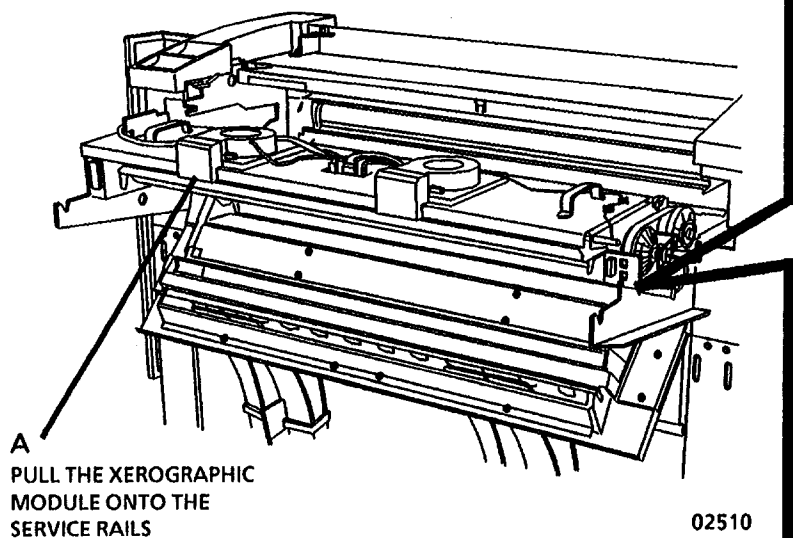
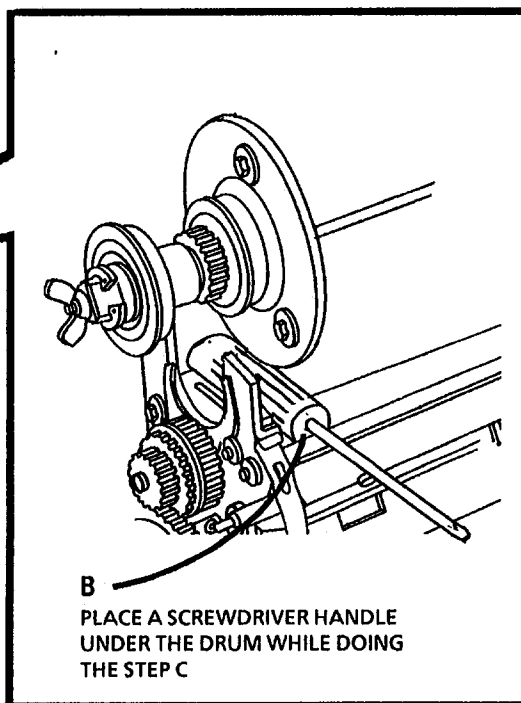
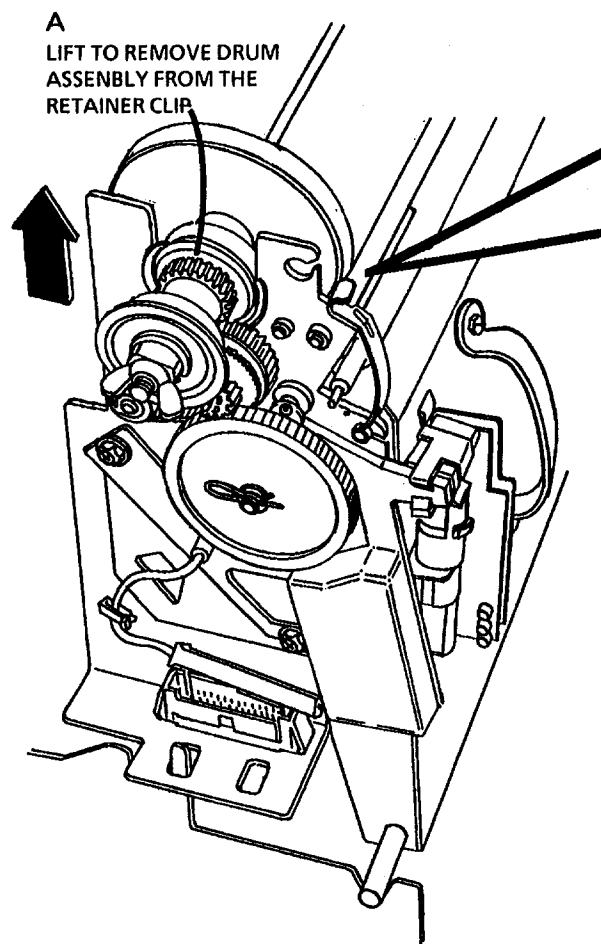


Figure 20. Remove the Xerographic Module

(Continued)

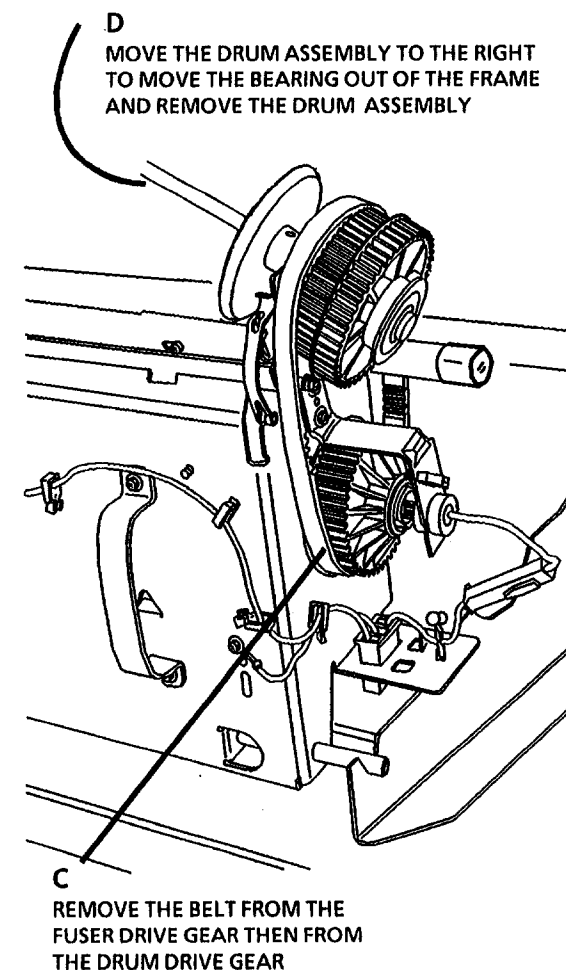
- 14 The photoreceptor for the copier is packed separately and will be installed in the next step.

23. (Figure 21): Remove the Photoreceptor Drum Assembly.



- 15 STEP 24: DO NOT perform the electrostatic series after installing the photoreceptor drum. It will be done later in the installation

24. Install the Photoreceptor Drum (REP 9.3).



02641

02640

Figure 21. Removing Photoreceptor Drum Assembly

(Continued)

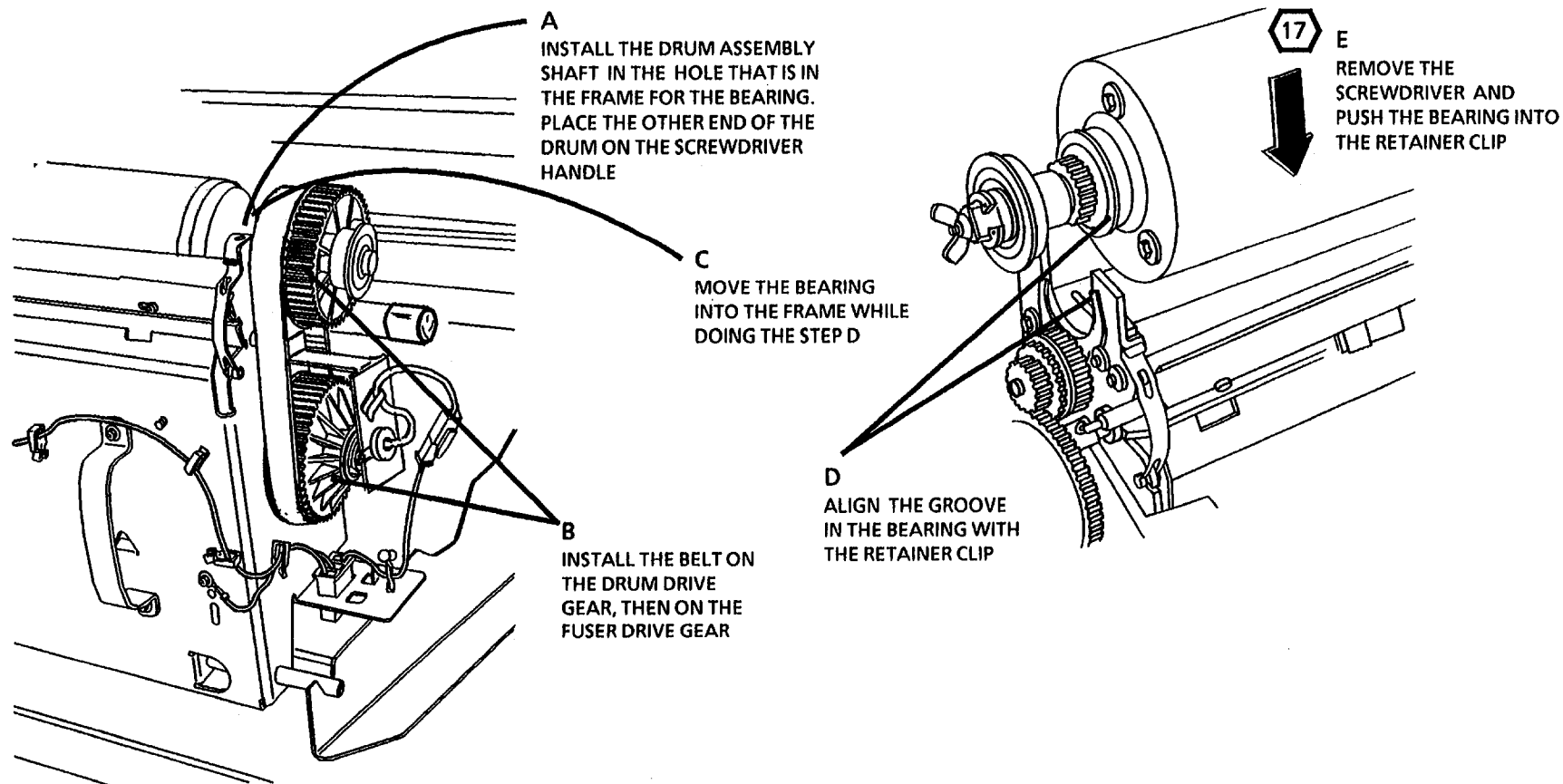
- 16** To prevent contaminating the Charge Corotron/Erase LED PWB with zinc stearate, remove the Charge Corotron/Erase LED PWB before applying the zinc stearate to the cleaner blade. Reinstall the Charge Corotron/Erase LED PWB after applying the zinc stearate to the cleaner blade.

25. Apply zinc stearate to the cleaner blade if not already done.

26. (Figure 22): Reinstall the Photoreceptor Drum Assembly.

17

STEP E: If the ground clip does not touch the support shaft, reform the clip to make it touch the shaft.



02643

02162

Figure 22. Reinstall the Photoreceptor Assembly

(Continued)

27. Reinstall the Xerographic Module and the perform the following:
 - a. reconnect all connectors at both ends of the xerographic module
 - b. remove the rubber cap and reinstall the toner waste bottle.
28. Remove the service rails and store them inside the Left Door.
29. Rotate the document feed in shelf closed.
30. (Figure 23): **RX ONLY:** Install the power cord and language EPROMS.

18 *The language EPROM are provide in a separate kit and may not be required on all installations.*

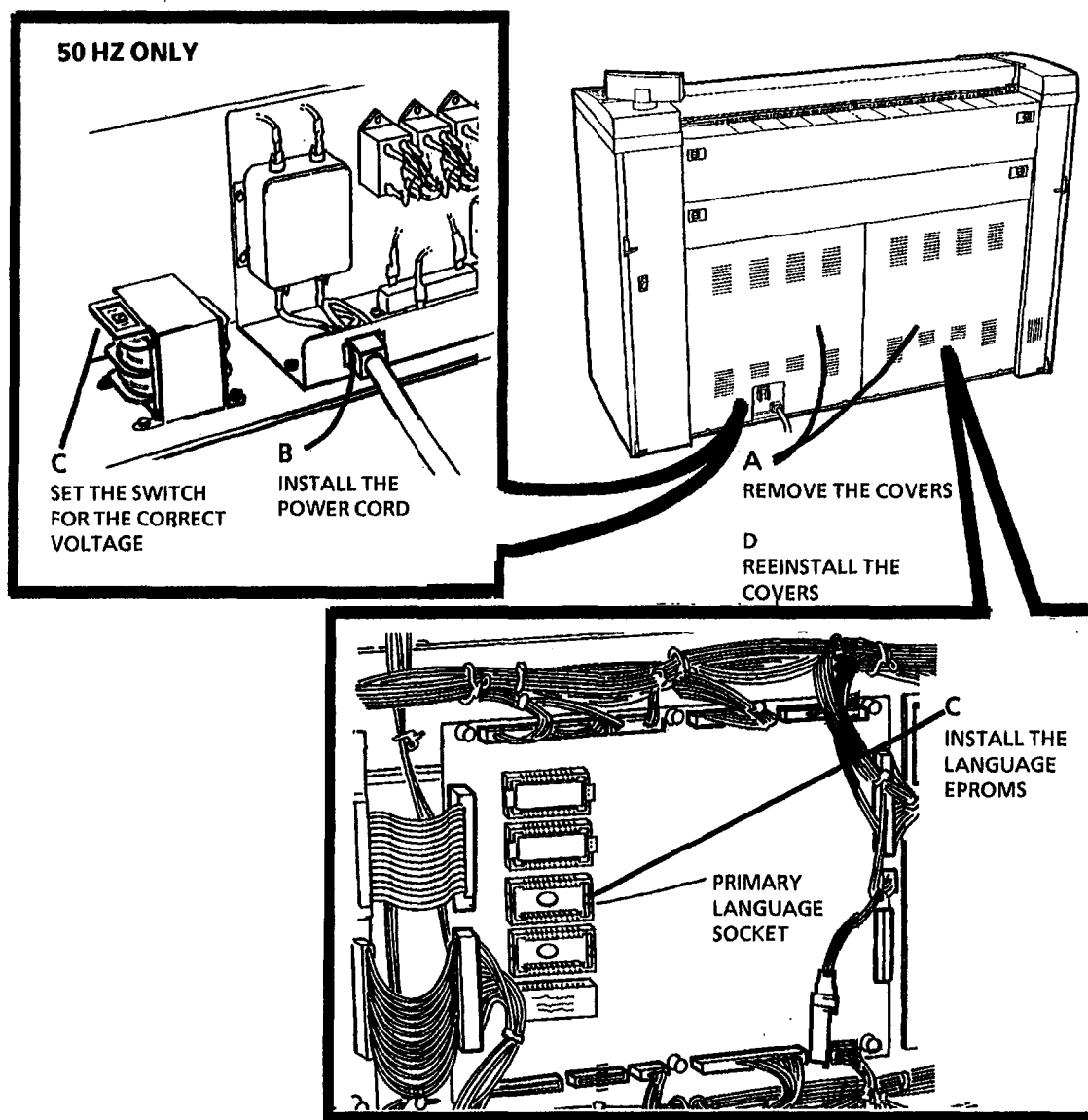


Figure 23. Installing the Language EPROMS

02689

31. (Figure 24): Remove the platen.
32. Clean both sides of the platen with anti-static cleaner.
33. Reinstall the platen and document handler.

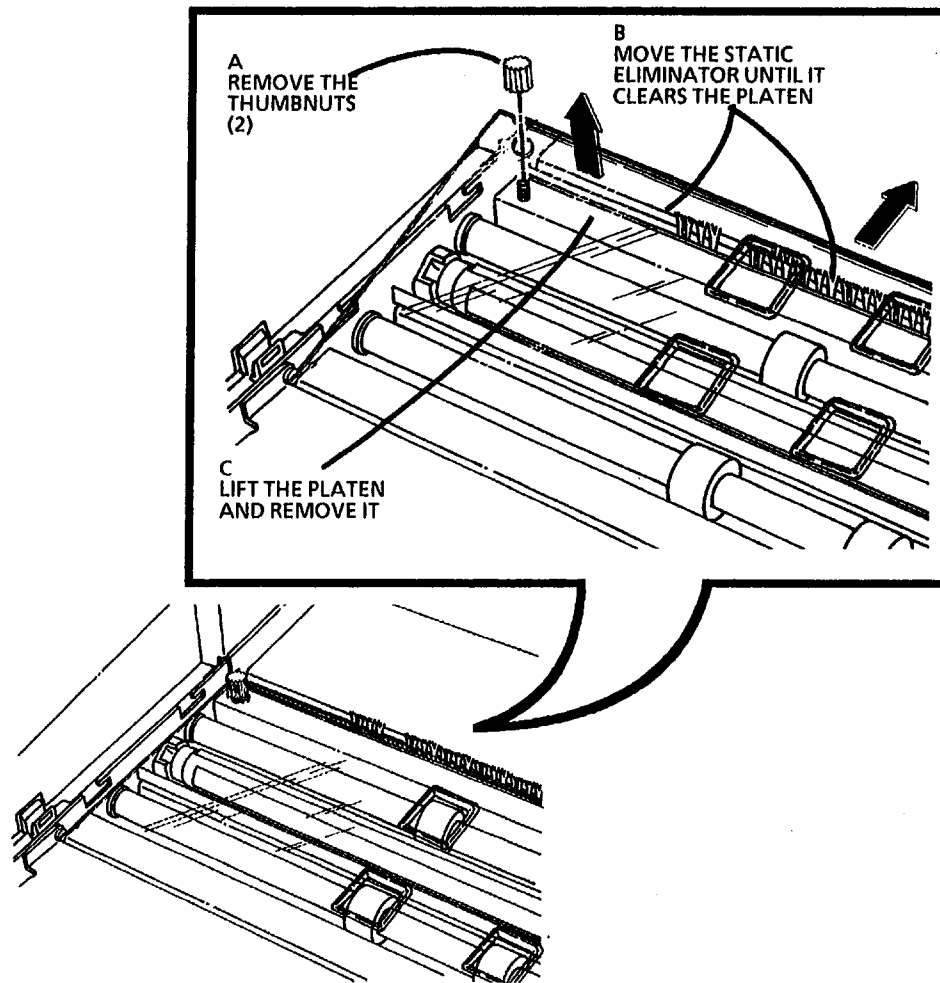


Figure 24. Remove the Platen

2414

(Continued)

(Continued)

34. (Figure 25): Install the Copy Catch Shields.

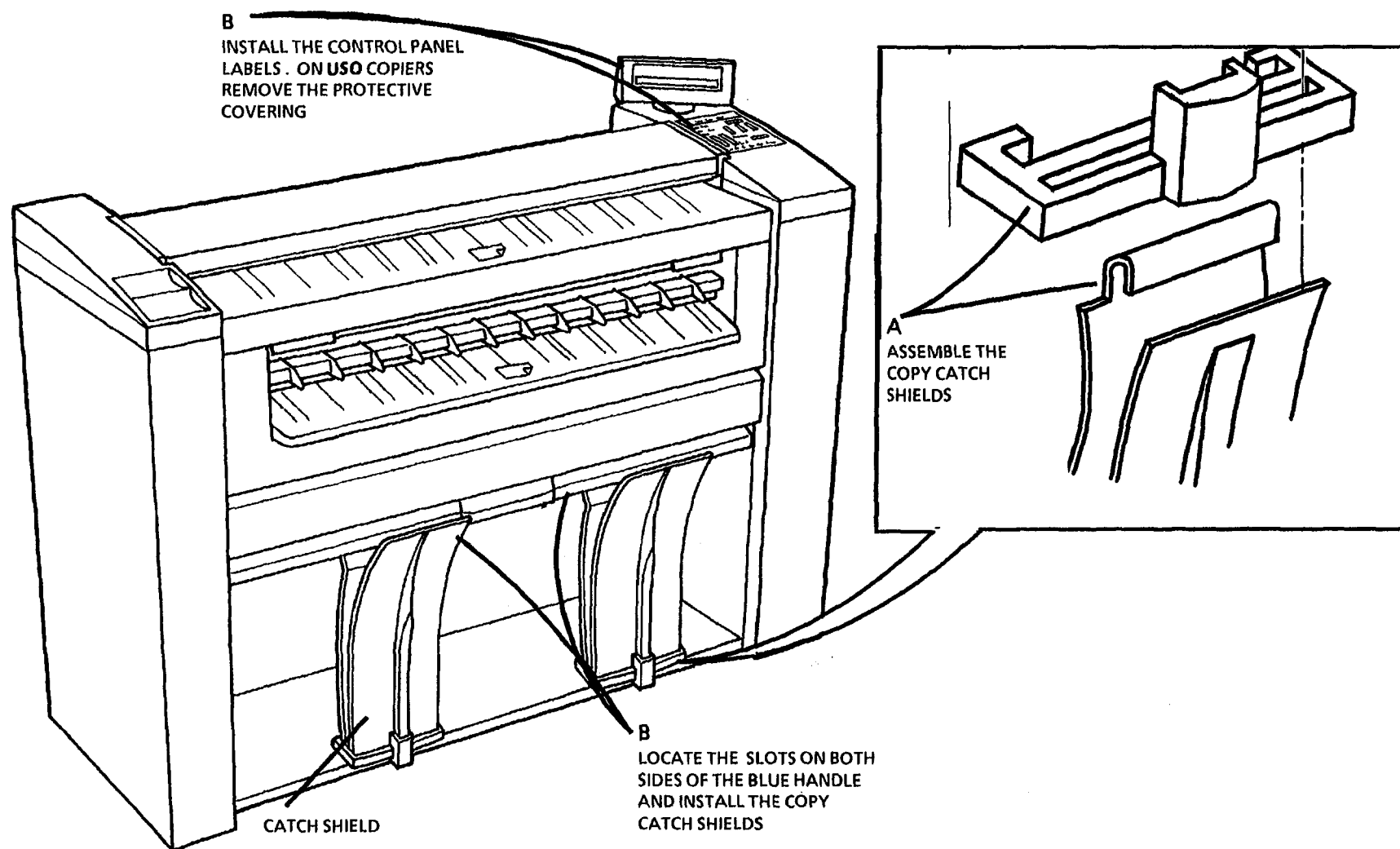


Figure 25. Install the Copy Catch Shields

2347

(Continued)

Functional Check

1. Plug the power cord into the wall outlet.

19 *DO NOT run copies prior to performing the code [9 21 6] Toner Sensor Calibration. Running copies prior to this adjustment may cause toner faults and/or premature copy quality defects.*

2. (Figure 26): Switch the copier on and enter the diagnostic mode.
3. Refer to the Initialization of the Fuser Roll procedure at the beginning of Section 6 and do Steps 1 through 11.
4. Check/Adjust the following :
 - a. Country Configuration (ADJ 3.2)
 - b. Fuser Temperature (ADJ 10.1)

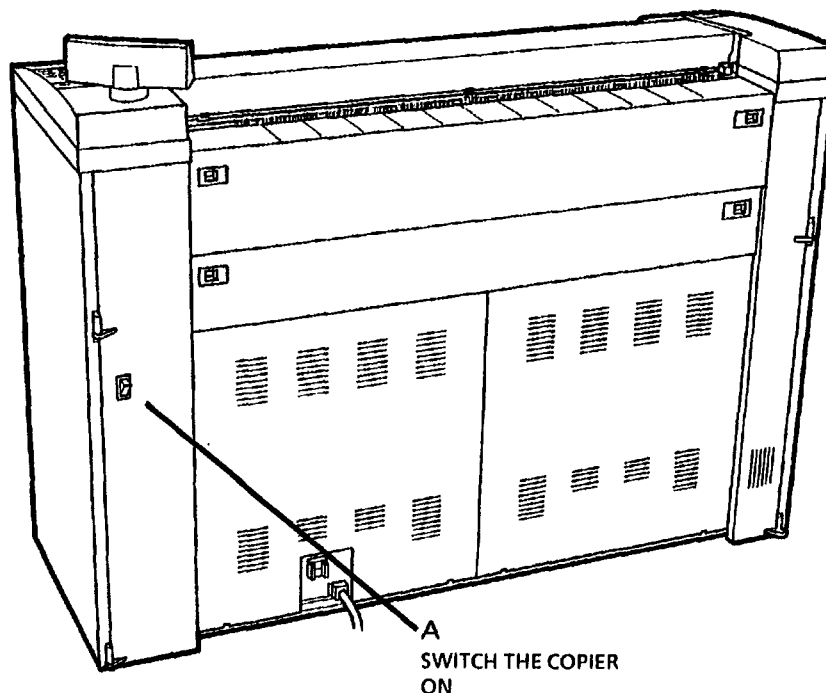
20 *STEP 5: Do not run copies or adjust the density at this time when doing the Electrostatic Series (ADJ 9.2).*

5. Perform the Electrostatic Series (ADJ 9.2) Steps 2 through 24 only.

21 *Step 6: The code [9 21 6] is entered to start the calibration, the copier will automatically calibrate the sensor. The code [9 21 6] is to be done only with a new batch of developer.*

6. Enter the code [9 21 6] and follow the displayed instructions in order to calibrate the toner sensor.
7. Refer to the Initialization of the Fuser procedure at the beginning of Section 6 and do Steps 12 (enter [9 21 4]) through 28.

8. Refer to the Service Manual and perform the following adjustments:
 - a. Copy Size Adjustment (ADJ 5.1)
 - b. Image Registration (ADJ 8.1)
 - c. Auto Cut Length (ADJ 8.2)
 - d. Key In in/mm Copy Length (ADJ 8.3)
9. Exit the diagnostic mode.
10. Inform the operator that the following adjustments are operator adjustments and can be changed to fit their needs. Refer to the User Guide and perform the following adjustments:
 - a. Feature Timeout
 - b. Power Saver Mode (RX: Low Power Mode)
 - c. Standby Mode
 - d. Lead Edge Margin
 - e. Trail Edge Margin



2648

Figure 26. Switch the Copier On

(Continued)

11. (Figure 26 and 27): Record the copy count meter readings.

Xerox Service Call Report										This Is Not An Invoice										CALL ID																																							
CUSTOMER NAME																				DATE																																							
ADDRESS																				CITY										STATE										ZIP																			
CUSTOMER CONTACT																				TELEPHONE										SERVICE REP NAME/ID																													
PROBLEM DESCRIPTION																				DISTRICT NO.																																							
PROBLEM RESOLUTION																				ESTIMATE																																							
SERIAL NUMBER										PRODUCT DESCRIPTION										CANC										CUSTOMER REQ. TIME										ASST										ALT									
TRAVEL HR					Min					Day					ARRIVE Time					Day					DEPART Time					CREDIT					CREDIT					CREDIT					CREDIT														
METER TOTAL										METER A										METER B																																							

B
ENTER THE READING FROM
THE METER LOCATED NEXT
TO THE ON/OFF SWITCH
(REFERENCE FIGURE 36)

A
ENTER CUSTOMIZED
PROGRAM P15 AND RECORD
THE METER A READING

02059

2649

Figure 27. Service Meter Location

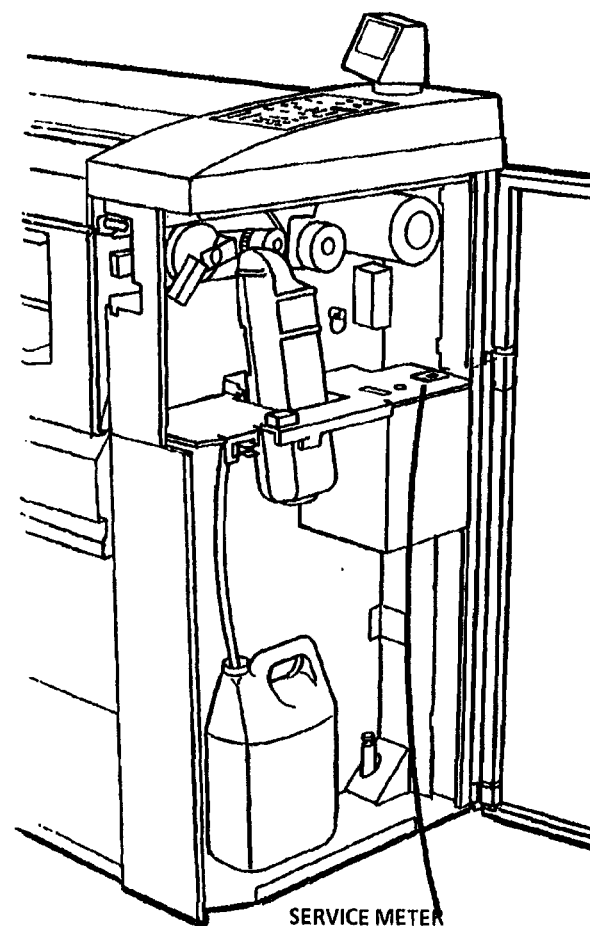


Figure 26. Record the Copy Count Readings

(Continued)

13. Separate the **First Call Report 3030** card from the **Installation Quality Report 3030** card and insert the **First Call Report 3030** card into the Machine Log Pouch.

14. Record the following on the copier **Installation Quality Report 3030** card:

- Copy count reading
- Copier serial number
- Installation date
- Comments (as required)

15. Mail the copier **Installation Quality Report 3030** card.

Product Demonstration

To demonstrate the capabilities of the 3030, refer to the User Guide. Perform the following procedures to train an operator:

1. Getting To Know Your Copier
2. Control Console
3. Loading the media
4. Making the copies in the multiple copy and sets modes. When to use them.
5. Making the copies using the roll media supply.
6. Making the copies using the cut sheet media
7. Scale Adjust
8. Partial Copy
9. Document Input/ Copy Contrast
10. The Copy Output Selections
11. Adding toner and how to clear the J1 status code

12. Cleaning the Platen and the Optical System

13. Problem Solving Status Codes

14. Clearing the Copier

Installation Checklist

Site Preparation

_____ Supply Voltage Check

_____ Space Requirements

Installation

_____ Remove the packing material.

_____ Remove the Xerographic Module

_____ Remove the tie-wrap on the Cleaning Blade Solenoid Weight.

_____ Install the Photoreceptor Drum

_____ Reinstall the Xerographic Module

_____ Remove the Toner Cartridge.

_____ Level the copier.

_____ Add developer

_____ Install the Toner Cartridge.

_____ Clean the Platen

_____ Install the Document Handler

_____ Enable the correct language

_____ Install the Copy Catch Shields

Functional Check

_____ Switch on the copier and allow the copier to warm up.

_____ Initialization of the Fuser Roll

_____ Perform the Country Configuration (ADJ 3.2)

_____ Perform the Fuser Temperature (ADJ 10.1)

_____ Perform the Toner Sensor Calibration [9 21 6]

_____ Perform Copy Size Adjustment (ADJ 5.1)

_____ Perform the Electrostatic Series (ADJ 9.2).

_____ Image Registration (ADJ 8.1) (Part of ADJ 5.1)

_____ Auto Cut Length (ADJ 8.2) (Part of ADJ 5.1)

_____ Key In In /mm Copy Length (ADJ 8.3)

_____ Make five copies.

_____ Check the copy quality.

_____ Check the operator adjustments

Product Demonstration Checklist

_____ ON/OFF switch, copy count meter, and serial number plate

_____ Control Console

_____ Making the Copies

_____ Scale Adjust

_____ Partial Copy

_____ Adding the toner

_____ Cleaning the Optical System

_____ Problem Solving Status Codes

_____ Clearing the Copier

Removal Procedure

If the installation becomes an abort, or if the 3030 must be moved to a different location and repacked, the following procedures will be necessary.

1. **Warning: Disconnect the power cord.**
2. Remove the Xerographic Module (REP 9.1).
3. Remove the Photoreceptor Drum Assembly (REP 9.2).
4. (Figure 1): Install a cable tie on the Blade Weight.

1 *Step 4A: The Blade Weight will be secured using a second cable tie later in the procedure.*

5. Clean the entire cleaner blade area with a vacuum cleaner.
6. Clean the Cleaner Blade with film remover and put a light coating of zinc stearate on the Cleaner Blade.

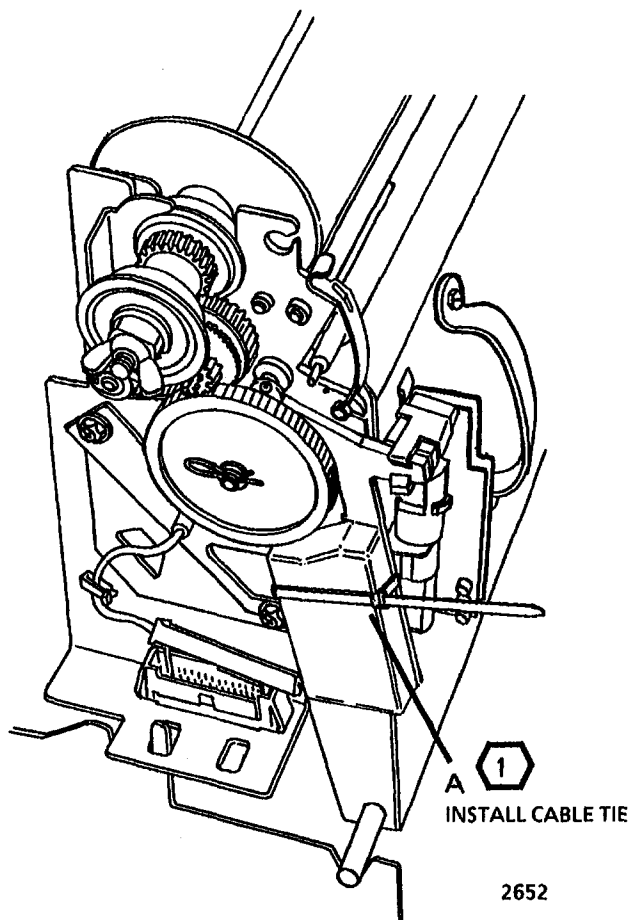


Figure 1. Installing the Cable Tie

(Continued)

(Continued)

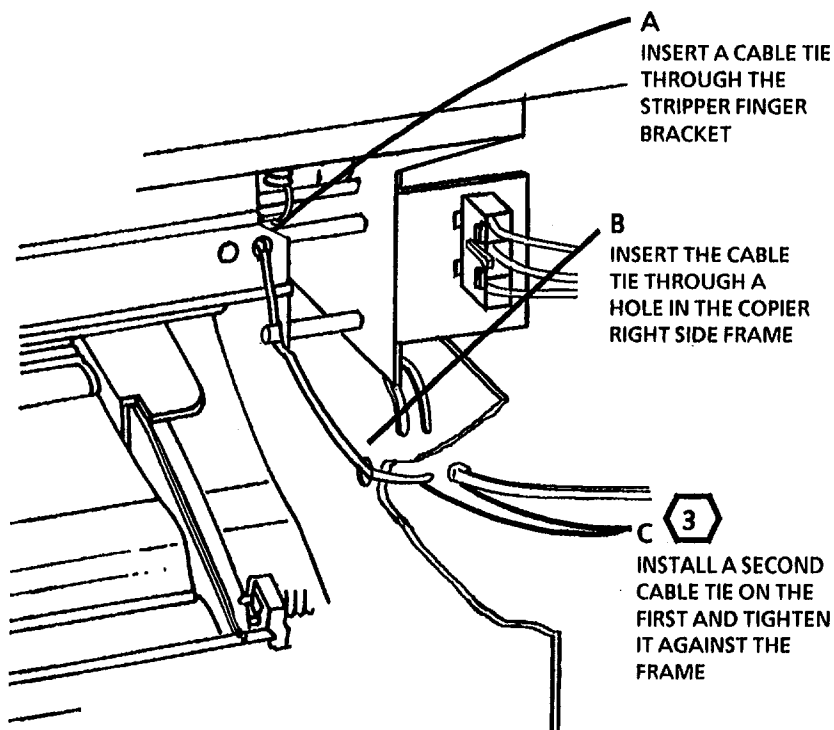
- 2 Do not reinstall the toner waste bottle on the xerographic module.

7. Reinstall the following:

- a. Photoreceptor Drum Shaft Assembly
- b. Xerographic Module

8. (Figures 2): Secure the Stripper Finger Assembly.

- 3 STEP 8 C: Slide the cable tie so that it is tight against the the frame of the copier to hold the stripper finger bracket from moving.



2653

Figure 2. Securing the Stripper Finger Assembly

(Continued)

(Continued)



To prevent damaging the photoreceptor, the 3030 must be shipped with the cleaning blade not touching the photoreceptor.

9. (Figure 3): Secure the Cleaning Blade Weight and install the Platen packaging.



STEP 9C: Pull up on the cable tie that is around the blade weight while pushing down on the second cable tie. Push cable tie down until it is against the Document Feed-in Shelf.

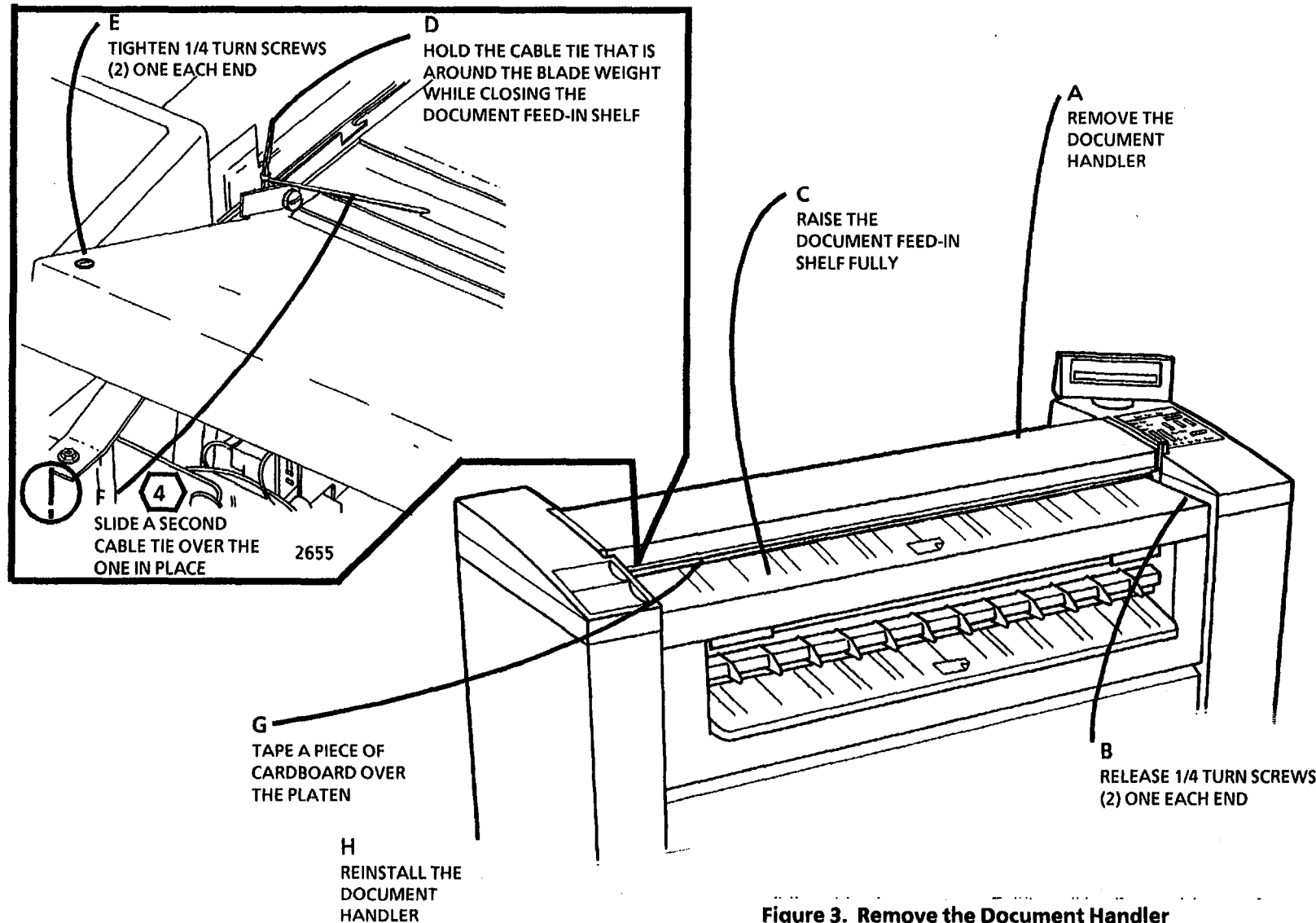


Figure 3. Remove the Document Handler

2635

(Continued)

(Continued)

10. (Figure 4): Remove the Copy Catch Shields.

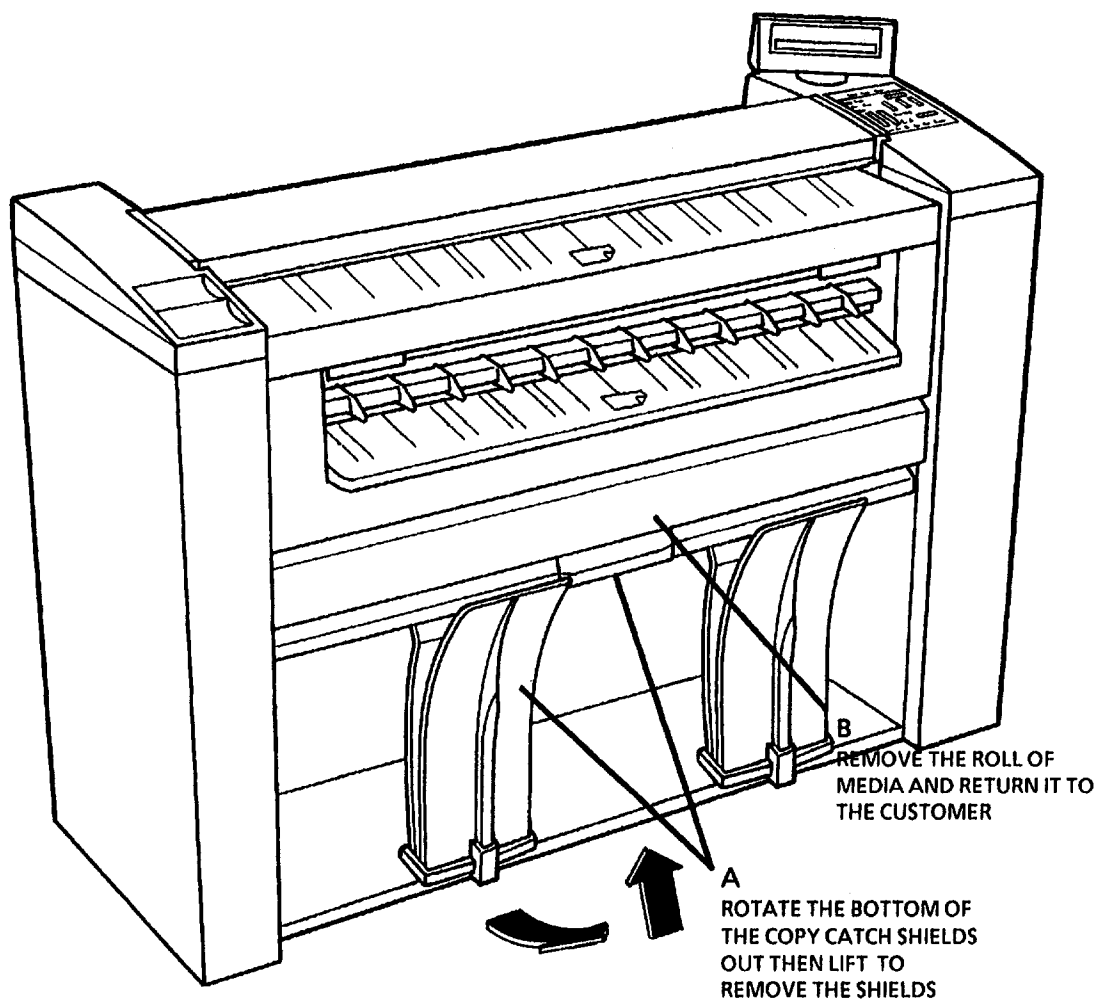


Figure 4. Remove the Copy Catch Shields

2656

- ! STEP 11 A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

11. (Figure 5): Prepare to remove the Developer Module.

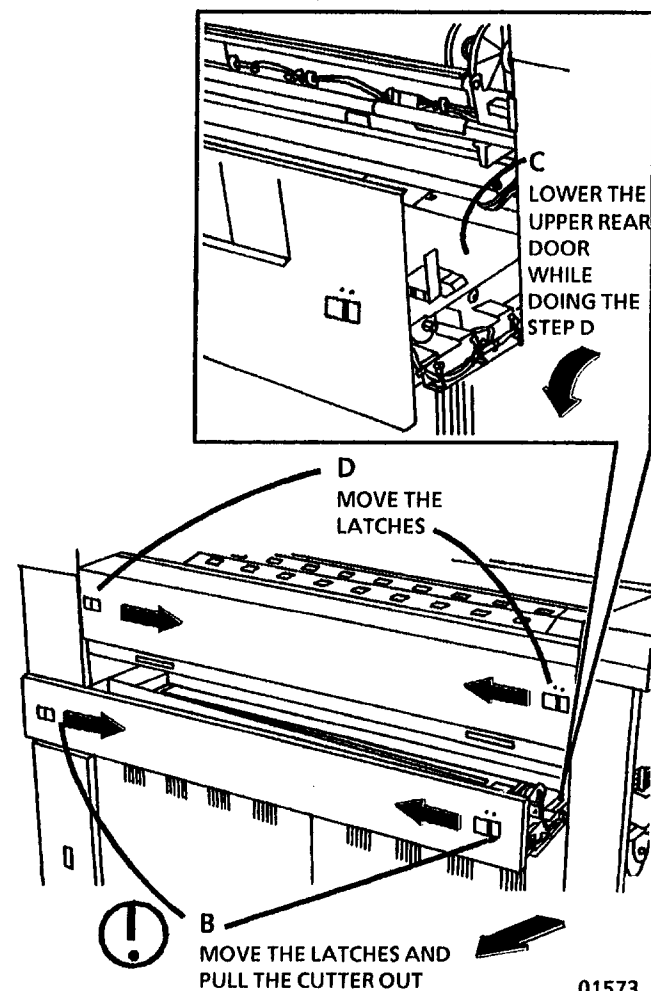


Figure 5. Prepare to remove the Developer Module
(Continued)

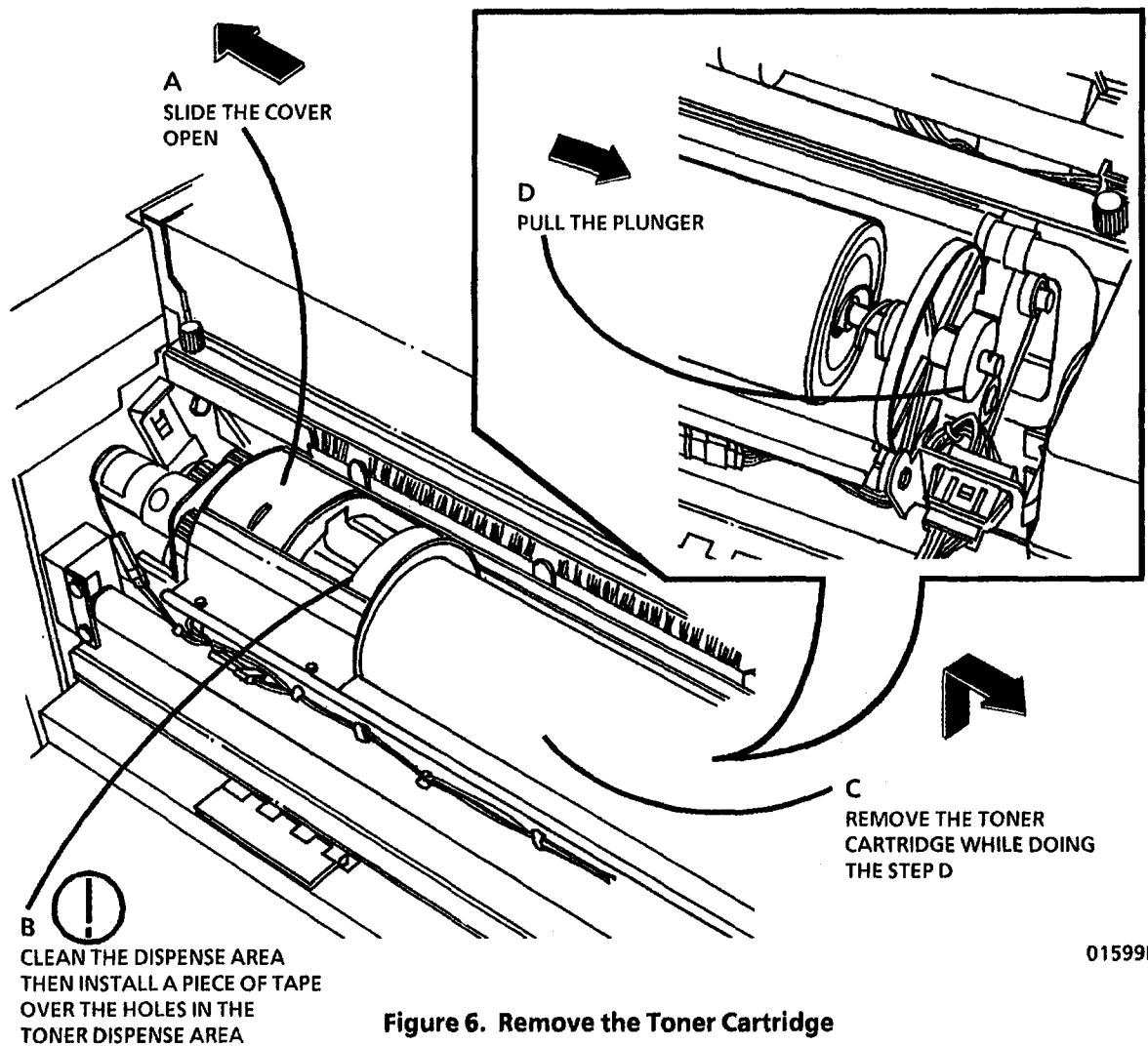
01573

(Continued)

12. (Figure 6): Remove the Toner Cartridge.



STEP 12 B: Tape the toner cartridge dispense holes to prevent toner from spilling out when the toner cartridge is tipped up for removal.



01599B

Figure 6. Remove the Toner Cartridge

(Continued)

(Continued)

5 STEP 13F: Before removing the developer module, ensure that there is a clean area to place the module.

13. (Figure 7): Remove the Developer Module.

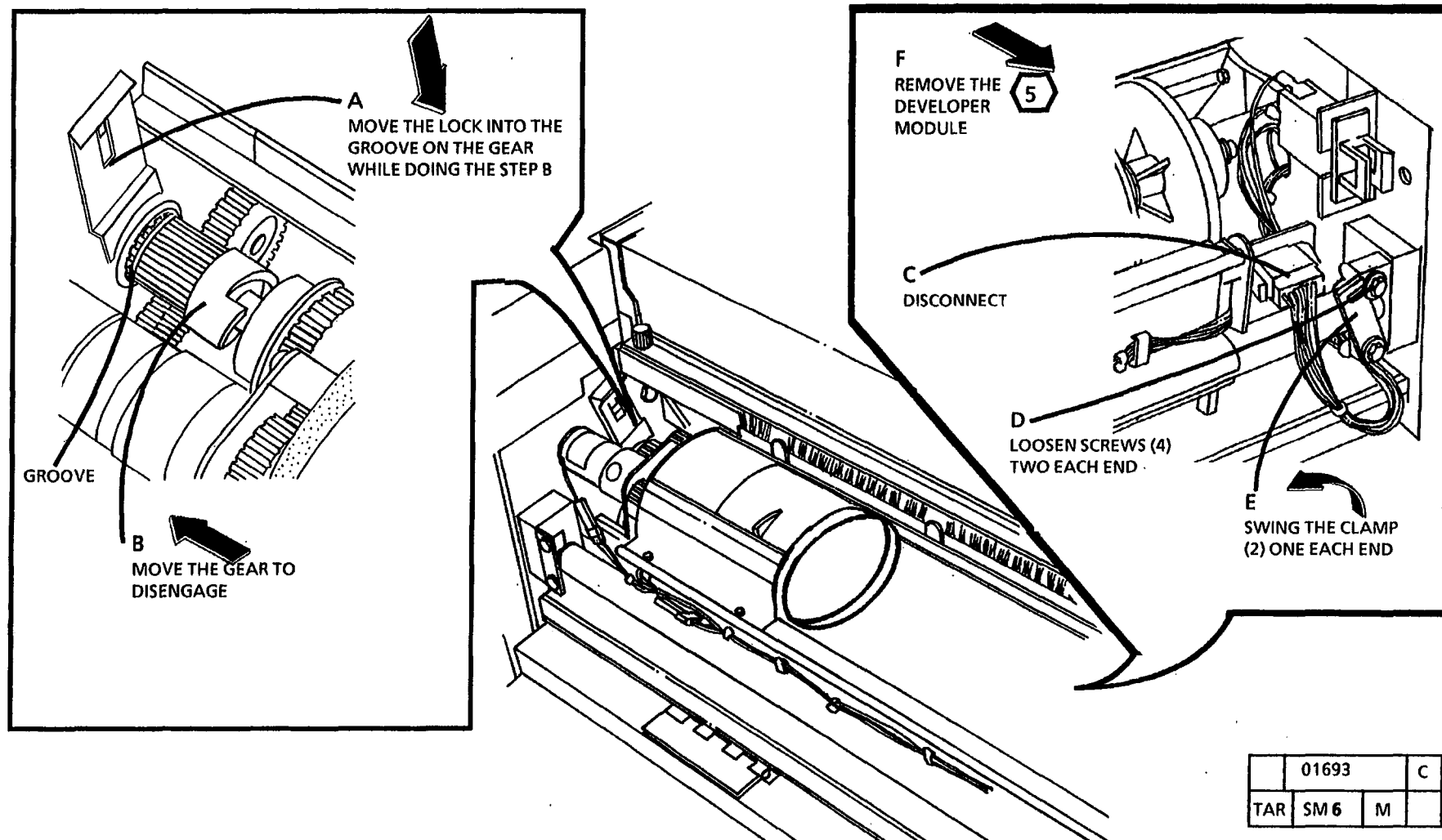


Figure 7. Remove the Developer Module

(Continued)

(Continued)

14. (Figure 8): Remove the Sump Shield.

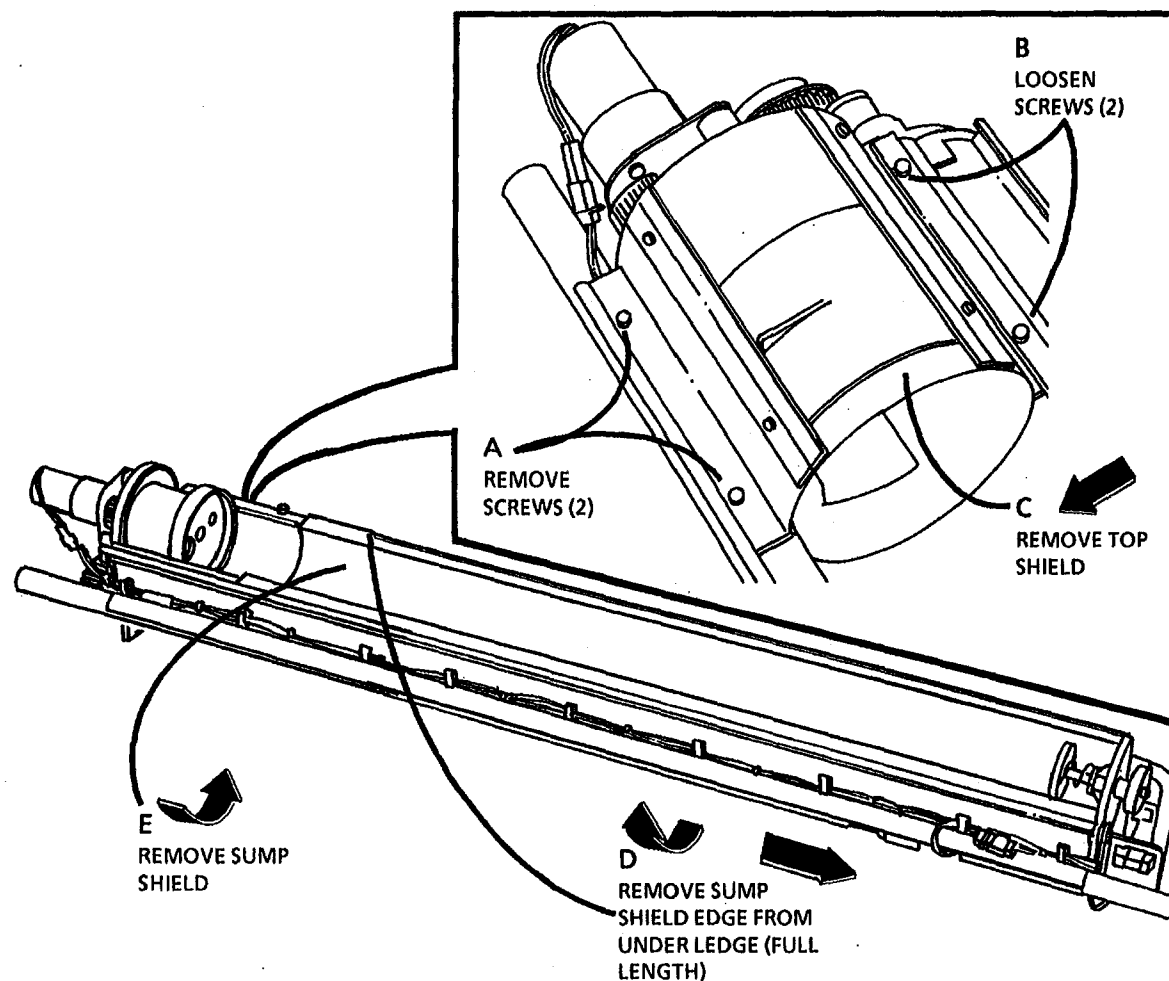


Figure 8. Removing the Sump Shield

	01626	A
TAR	SM 6	M

(Continued)

(Continued)

15. (Figure 9): Dump the Developer Material.

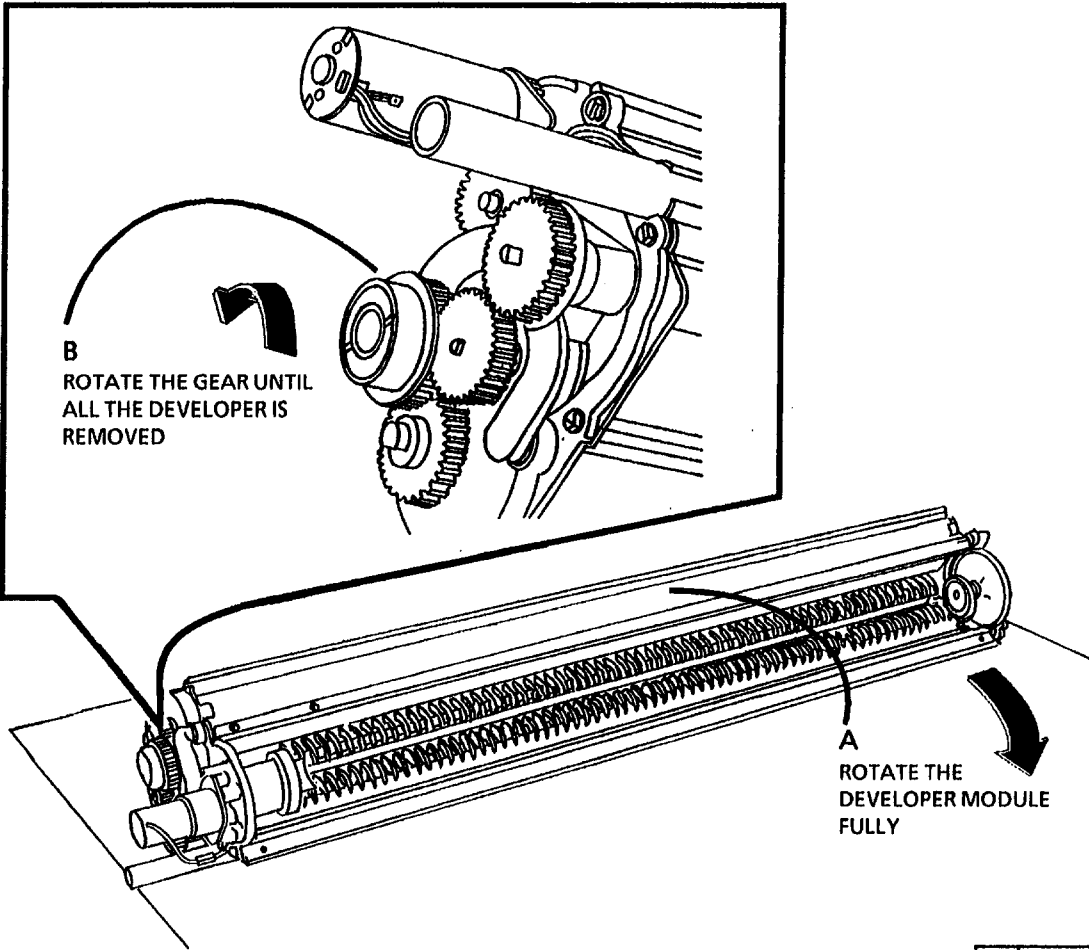


Figure 11. Dump the Developer Material

	01780	C
TAR	SM 6	M

(Continued)

(Continued)

16. (Figure 10): Remove the Pressure Equalizer Tubes.

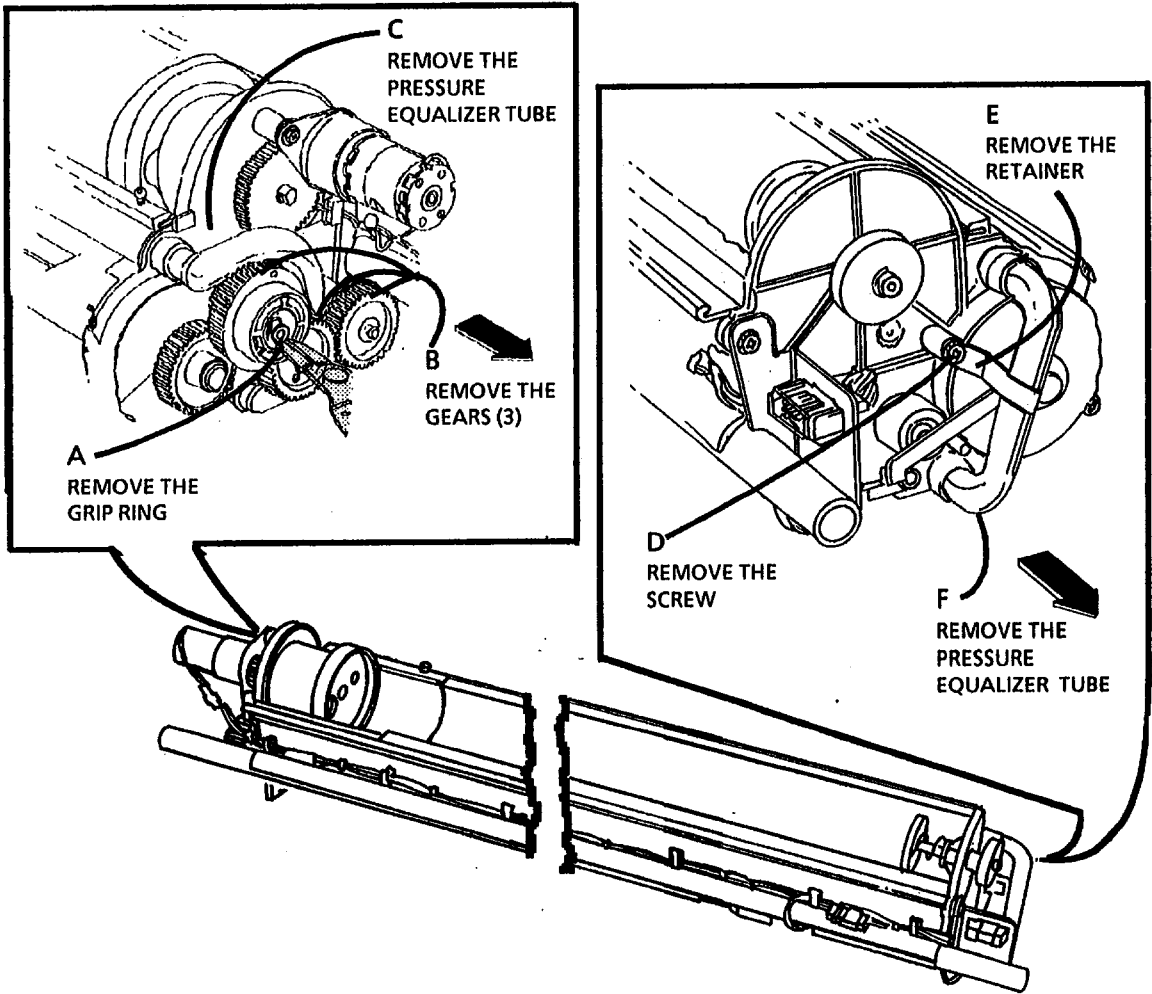


Figure 10. Remove the Pressure Equalizer Tubes

	01781	B
TAR	SM 6	M

(Continued)

(Continued)

17. Clean the entire Developer Module, Magnetic Roll, and the Pressure Equalizer Tubes thoroughly with a vacuum cleaner.

6

STEP 18 B and D: The gears must be reinstalled with the flanges as shown to ensure that all the gears are secured.

18. (Figure 11): Reinstall the Pressure Equalizer Tubes.

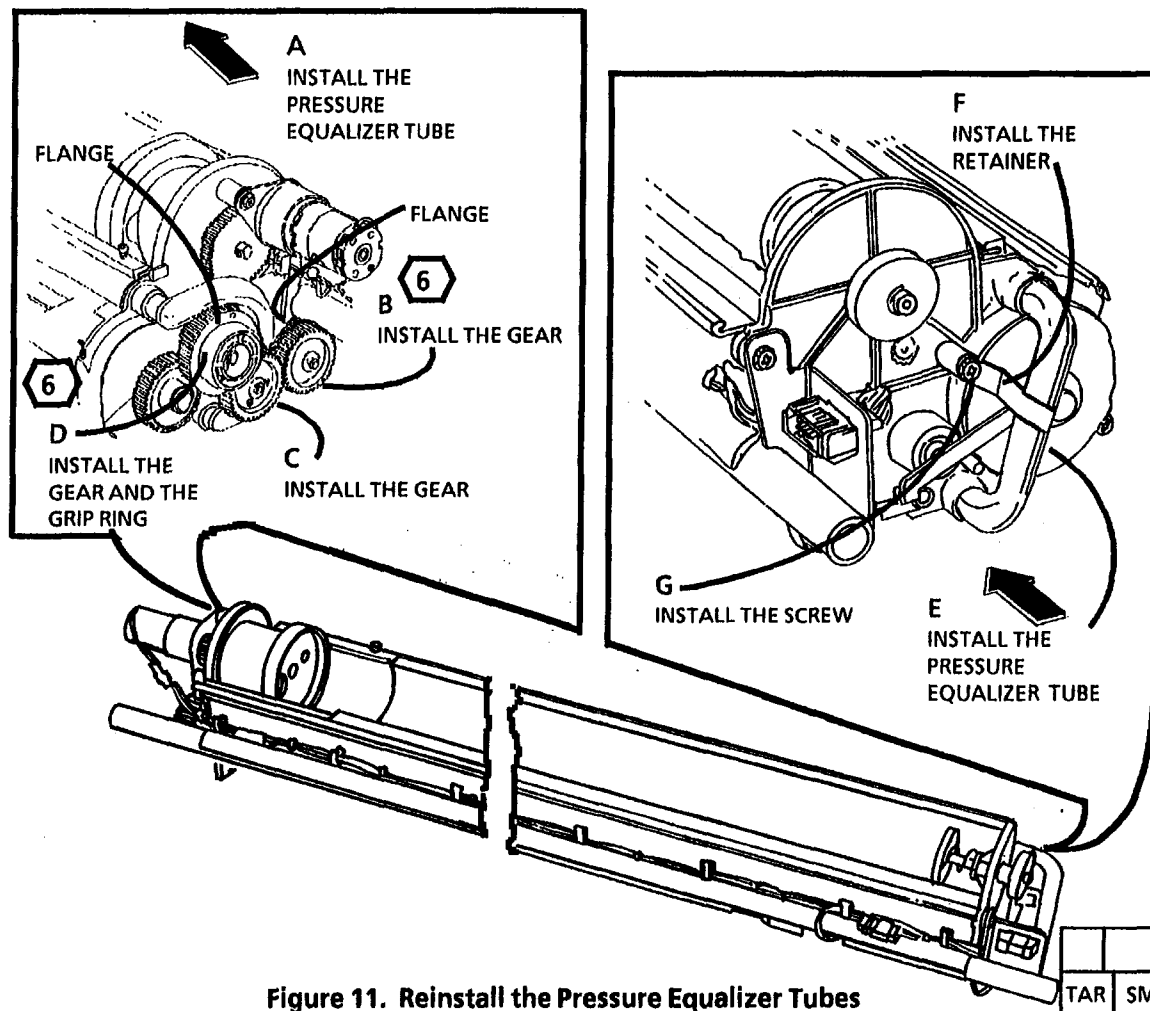


Figure 11. Reinstall the Pressure Equalizer Tubes

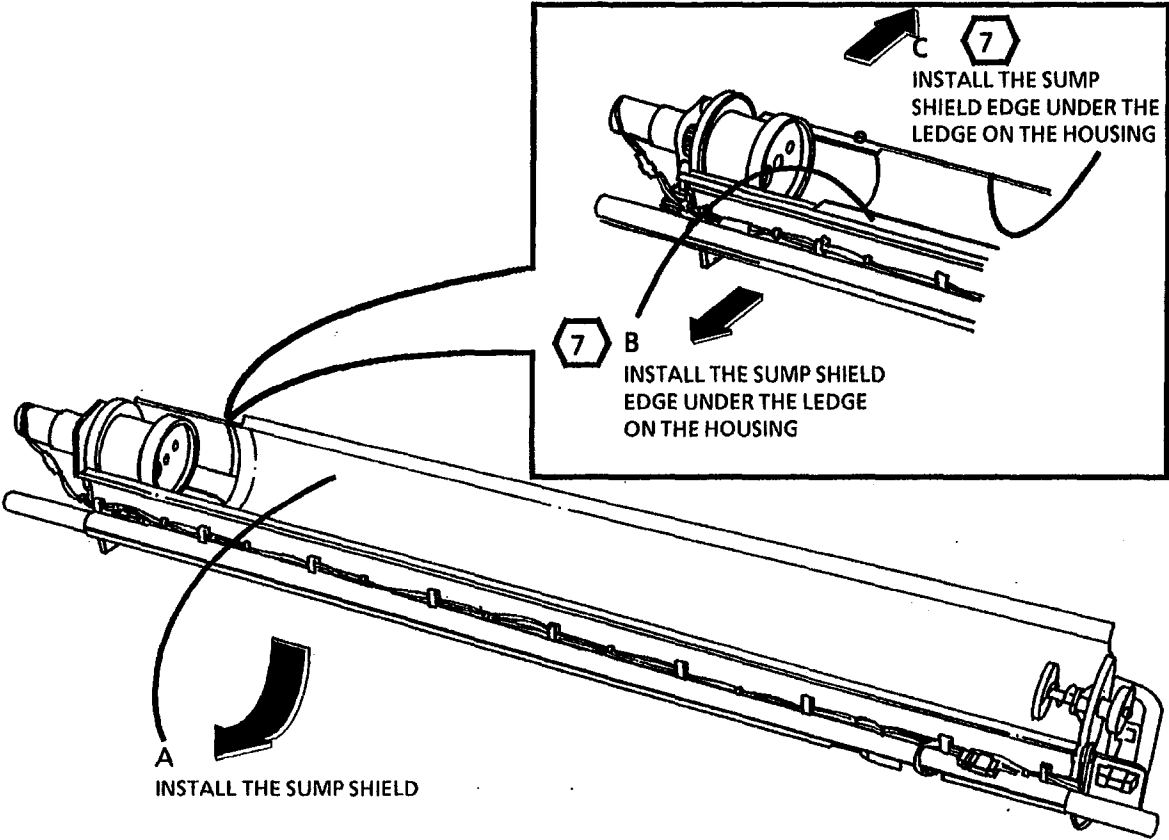
	01782	B
TAR	SM 4	M

(Continued)

(Continued)

19. (Figure 12): Reinstall the Sump Shield.

7 STEP 19 B and C: Ensure that the full length of the edge of the shield is under the edge of the housing.



	01628	A
TAR	SM 6	M

Figure 12. Reinstalling the Sump Shield

(Continued)

(Continued)

8 STEP 20 C: Do not overtighten the screws.

20. (Figure 13): Reinstall the Top Shield.

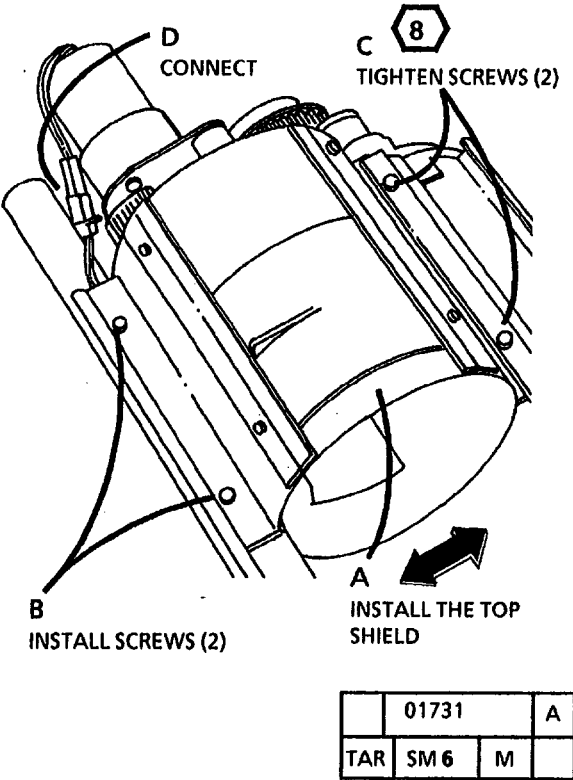


Figure 13. Reinstalling the Top Shield

(Continued)

(Continued)

9 STEP 21A: Ensure that the developer module is fully installed in the brackets.

10 STEP 21 E: Ensure that the gear is free to engage with the developer module drive gears.

21. (Figure 14): Reinstall the Developer Module.

22. Close the Upper Rear Cover and push the Cutter in.

23. Cap the toner waste bottle and tape it to the toner cartridge for shipment with the copier.

24. Remove and empty the moisture collection bottle, then reinstall the bottle.

25. Close and secure all the covers.

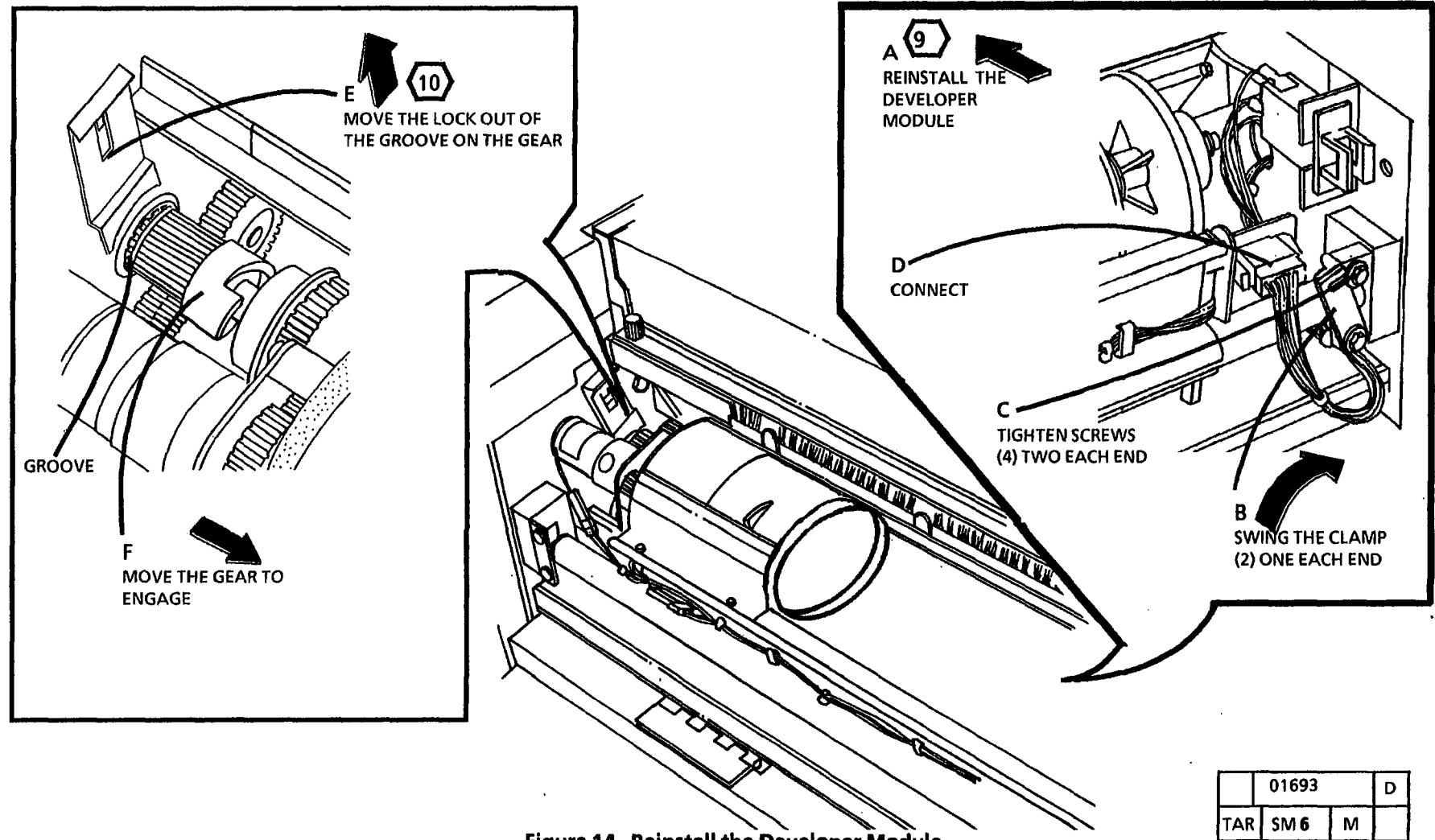


Figure 14. Reinstall the Developer Module

	01693	D
TAR	SM 6	M

General Tools And Supplies

Supplies

Description	Part
Service Manual Binder	600P88124

Tools

Description	Part
Basic Multinational Tool Kit	600T1835
Supplemental Tool Kit	600T1837
Metric Supplemental Tool Kit	600T1836
Digital Multimeter	600T1616
Leads Kit	600T1617
Red Adapter Plug	499T9567
Black Adapter Plug	499T9568
Mod IV Electrometer	600T1620
Temperature Probe Set (Probe and Sensor)	499T9570
Thermal Sensor (Straight Tip)	499T9572
Light Shield	600T1198
Stackable Test Lead	600T1652
Probe Holder	120E5511
Leveling Tool	600T1844
Interlock Tool	600T91616
Outlet Tester	600T647
Vacuum Cleaner	600T1820
Vacuum Cleaner Bags (10)	93E3270
Vacuum Cleaner Filter Module	600T1832
Electrometer Probe Wing	600T1728

Description	Part
Screwdriver Blade 6 inch 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 m Tape Measure	600T41505
Line Level	600T41510

Description	Part
Round File 6 inch	600T41801
Flat File 6 inch	600T41802
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

Test Pattern

Test Pattern	82P5980
--------------	---------

Image Reference Pattern

Solid Area	82P520
Image Darkness	82E7030
Background	82P502

Machine Consumables

Description	Part
Photoreceptor	1R81
Toner Cartridge (with reclaim bottle)	US 6R395 RX 6R90202
Developer (7 pound bottle)	US 5R310 RX 5R90179
Dusting Pouch	8R181

Cleaning Materials

Description	Part
Treated Cleaning Cloth (not for use on corotrons or fuser roll)	35P1638
Cleaning Solvent	43P10
Disposable Gloves	99P3024
Drop Cloth	35P1737
Drum Polish	43P76
Film Remover	43P45
Formula A	43P48
Heavy Duty Towels	35P3191
Lint-Free Cloth	600S4372
Polyurethane Pads (40)	600S4653
Antistatic Fluid	43E110
Photoreceptor Maintenance Kit	600S5838

Other Tools and Supplies

Supply Kit 673K00101

Description	Part
Oil Tube (8ml) (2)	93E811
Developer (7 pound bottle)	5R310
Dusting Pouch (Zinc Stearate)	8R181
Antistatic Fluid	43E110
Electrometer Probe Holder	120E5511
Jam Clearance Tongs	19E19250
Service Rails (Left)	68K6760
Service Rails (Right)	68K6750
Machine Log Holder	600P293
Bond Media Roll	3R3683
Wing Nut (Service Rail)	230W00952
Xerographic Module Service Plug (black rubber cap)	21E6320

RX Supply Kit 673K00111

Description	Part
Oil Tube (8ml) (2)	93E811
Developer (7 pound bottle)	5R90179
Dusting Pouch (Zinc Stearate)	8R181
Antistatic Fluid	43E110
Electrometer Probe Holder	120E5511
Jam Clearance Tongs	19E19250
Service Rails (Left)	68K6760
Service Rails (Right)	68K6750
Wing Nut (Service Rail)	230W00952
Xerographic Module Service Plug (black rubber cap)	21E6320

General Tools and Supplies (RX)

Tools

Description	Part
Screwdriver Blade	
6 inch x 3/16 inch	600T40203
Pocket Screwdriver	600T40205
5.5mm Combination Spanner	600T40501
7mm combination Spanner	600T40502
5.5mm Socket	600T40701
7mm Socket	600T40702
Longnose Pliers	600T40901
Diagonal Cutting Pliers	600T40903
Gland Nut Pliers	600T40904
Hex Key Set	600T91702
Retaining Ring Pliers	600T41401
150mm Rule	600T41503
2m 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 Drive	600T1751
Metric Feeler Gauge Set	600T41509
Interlock Cheater	600T91616
Screwdriver Handle	600T40212
Vacuum Cleaner	600T91720
10 Spare Bags	603T80130
13mm Combination Spanner	600T40505
Light Shield	600T1198
Digital Multimeter	600T1616
Digital Multimeter Lead Set	600T1617
Mod 4 Electrometer	600T1620
Electrometer probe Holder	120E5510
Electrometer Probe Wing	600T1728

Machine Consumables (RX)

Description	Part
Photoreceptor	1R81
Toners	6R90202
Developer	5R90179

Cleaning Materials (RX)

Description	Part
Dusting Pouch	8R90139
Photoreceptor Maintenance Kit	600S92126
Photoreceptor Polish	43P69
Photoreceptor Wash Solvent/ General Cleaning Solvent	8R90176
Anti Static Fluid	43E110
Anti Static Fluid (Alternate)	8R90273
Cleaning Cloth	8R90019
Cleaning Cloth Treated (not for use on corotrons)	35P1638
Lint Free Cloth (Rayon)	600S4372
Cleaner General Purpose	8R90175
Formula A	43P48
Lens and Mirror Cleaner	43P81

Test Pattern

Test Pattern	82E5980
--------------	---------

Image Reference Pattern

Solid Area	82P520
Image Darkness	82E7030
Background	82P502

Branch Tools (RX)

Description	Part
Temperature Probe Assembly	499T9570
Straight Temperature Probe (Use with 499T9570)	499T9572
Adapter Plugs	600T91711

OTHER TOOLS AND SUPPLIES (RX)

Lubricants

Description	Part
Oil Tellus 68	8R90180
Grease Alvania No.2	600T90340
Silicone Grease	600T90429

Nationalization Kits

Generic Contents	Part
User Guide	Ref. Only
Control Panel Label	Ref. Only
Safety Label (non English)	Ref. Only
Safety Label, Rails (Non English)	Ref. Only
Power Cord	Ref. Only
Log Book	Ref. Only
Proms (Message Sets)	Ref. Only
Media, AO Roll 80 GSM Bond	Ref. Only
Media Starter Pack (A1)	Ref. Only