XEROX

Xerox 5280/5309/5310

Service Manual

Revision 700P88022 has been merged into base 700P88020.

700P88020
February 1995

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Revision Control List

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ABOUT THIS MANUAL

This manual is part of a documentation system that also includes the Training Program.

This manual contains Repair Analysis Procedures, Repair Procedures, Adjustment Procedures, Parts List, Diagnostic Procedures, Installation Procedures, and Wiring Data information that will enable a Service Representative to repair the 5280/5309/5310 copiers.

ORGANIZATION

This manual is divided into seven sections. The title and description of each section is listed below.

A Publication Comment Sheet is provided at the end of this manual.

Section 1. SERVICE CALL PROCEDURES

This section contains the following:

- Initial Actions / System Checks
  This diagram identifies how to collect the data necessary to decide how to proceed with the service call. It classifies the problem and refers you to the appropriate Repair Analysis Procedure.

- System Checkout
  The System Checkout procedure is used to verify that the copier is operating properly after a repair has been made.

- Final Action
  The Final Action procedure identifies the steps that must be performed before closing out the service call.

Section 2. REPAIR ANALYSIS PROCEDURES (RAPs)

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

Section 3. IMAGE QUALITY REPAIR ANALYSIS PROCEDURES (RAPs)

This section contains the Repair Analysis Procedures (RAPs) necessary to repair copy quality faults. The first RAP, CQ1 Copy Defect Entry Procedure, is used to classify a copy quality problem and will reference the RAP to be used to repair the problem. When performing a RAP, exit the procedure when the fault is fixed. Do not perform the remaining steps.

Section 4. REPAIR / ADJUSTMENT PROCEDURES

This section contains the repair and adjustment procedures for the 5280/5309/5310 copiers. When the replacement of a failed part does not require a repair procedure, refer the detailed parts list to clarify any confusion to replace the part.

Section 5. PARTS LIST

This section contains the detailed Parts List for the 5280/5309/5310 copiers.

Section 6. GENERAL PROCEDURES/ GENERAL INFORMATION

This section contains Diagnostic Procedures, Installation and Removal Procedures, and General Information which includes Product Specifications for the 5280/5309/5310 copiers.

Section 7. WIRING DATA

This section contains Plug/Jack Locational Drawings and BSDs.

HOW TO USE THIS MANUAL

The Service Call Procedures will direct you to the proper section of the Service Manual.

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

If you are directed to Section 3, you will perform the CQ1 Copy Defect Entry Procedure to classify the copy quality problem. You will then be directed to the proper RAP to begin the troubleshooting process. From these RAPs you may be referenced to other sections of the manual to make checks, adjustments, or to replace parts.

When you have made a repair, go to the System Checkout / Final Action to complete the call.

REFERENCE SYMBOLOGY

Notes, adjustments, and parts lists support the checklists and the RAP information. The symbols that refer to this supportive data are shown below.

Note

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

Adjustments

This symbol refers to an adjustment procedure located in Section 4 of this Service Manual. The number adjacent to the symbol indicates the number that is assigned to that adjustment.

Parts list

PL 10.6 Refers to the parts list located in Section 5 of this Service Manual. The number after the PL designation indicates the number that is assigned to that part.

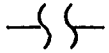
SPECIAL SYMBOLS

Descriptions of all commonly used graphic symbols are included in order to help you in troubleshooting when performing the RAPs.

Interrupt Vertical Signal

This symbol indicates the continuation of a signal line that is interrupted in a vertical direction.

Interrupt Horizontal Signal



This symbol indicates the continuation of a signal line that is interrupted in a horizontal direction.

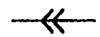
Standby Power Input

This symbol indicates the continuation of a standby power line that is interrupted in the vertical direction.

Left to Right Flow

This symbol indicates the direction of signal flow.

Feedback



This symbol indicates a feedback signal.

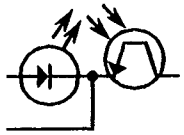
Flag

This symbol identifies an area of a Circuit Diagram that you should check.

Ground

This symbol indicates a machine ground.

LED / Phototransistor Sensor



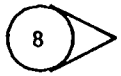
This symbol identifies a sensor that is used in the document and paper paths. Reflected light switches this type of sensor off and on.

Without Tag Change

This symbol indicates that the area to which the triangle points has not been modified by the tag number in the circle.

This symbol indicates that the entire page has not been modified by the tag number in the circle.

With Tag Change



This symbol indicates that the area to which the triangle points has been modified by the tag number in the circle.

This symbol indicates that the entire page has been modified by the tag number in the circle.

SIGNAL NOMENCLATURE

The signal is named to imply the condition of the machine when the signal is available. For example:

DOCUMENT JAM SENSED (L) + 12 VDC

- DOCUMENT JAM SENSED: Signal Name
- (L): Logic state when the signal is available in its named state. In this case, the signal is Lo when a document jam is sensed.
- + 12 VDC: Logic voltage when the signal is Hi.

DC VOLTAGE LEVELS

DC voltages should be measured between the test point and the machine frame, unless instructed otherwise. The table below shows the values of the voltages.

Nominal Voltage	Logic State	Actual Voltage Ranges
+5 VDC	H	+4.8 to +5.2 VDC
	L	0.0 to +1.0 VDC
+24 VDC	H	+22.0 to +25.7 VDC
	L	0.0 to +3.0 VDC
+35 VDC (UNREG)	H	+25.0 to +35.0 VDC
	L	0.0 to +3.0 VDC

SECTION CONTENTS

INTRODUCTION

Use the Service Call Procedures as a maintenance guide when performing any service on the 5280/5309/5310 Copier. The procedure has been designed for use with the 5280/5309/5310 Service Manual.

- Initial Actions/System Checks - This diagram identifies and classifies the copier problem and refers you to the appropriate RAP or BSD in order to repair the problem. When the problem has been repaired, perform the System Checkout / Final Action.

- System Checkout/Final Action - This procedure should be completed at the end of every service call to ensure that the copy paper and the document are being transported properly and to ensure that copy quality is within specification.

INITIAL ACTIONS

1. QUESTION THE OPERATOR.
2. VERIFY, CLASSIFY, AND REPAIR THE PROBLEM.

STATUS INDICATOR

- **STATUS CODES**
  Go to Status Code Entry Chart.
- **OTHER STATUS INDICATORS**

  PAPER MISFEED LAMP ON
  Go to Paper Misfeed Lamp On RAP (5280/5309 Only) or Paper Misfeed Lamp On RAP (5310 Only).

  DRY INK CARTRIDGE LAMP ON
  Go to Dry Ink Cartridge Lamp On RAP.

  COPY CARTRIDGE LAMP ON
  Go to Copy Cartridge Lamp On RAP.

COPY QUALITY

- **COPY QUALITY PROBLEMS**
  Go to CQ1 Copy Defect Entry RAP in Section 3.

OTHER FAULTS

- **COPY COUNT DISPLAY IS BLANK**
  Go to 1.1 Power On RAP.
- **COPIER START PROBLEM**
  Go to 1.1 Power On RAP.
- **DEAD MACHINE**
  Go to 1.1 Power On RAP.
- **MANUAL FEED PROBLEMS**
  Go to 8.1 No Manual Feed RAP.
- **SELECTION/INDICATION PROBLEM**
  Go to 2.1 Selection/Indication RAP
- **ALL OTHER PROBLEMS**
  Go to Section 2 Contents.

H2 FUSER THERMISTOR PROBLEM

The fuser thermistor was open.

Go to H2 Status Code RAP.

H3 FUSER OVERHEAT PROBLEM

There was a fuser overheat

Go to H3 Status Code RAP.

H4 FUSER PROBLEM

The fuser did not warm up in time.

Go to H4 Status Code RAP.

L1 SCAN FORWARD PROBLEM

The main PWB sensed that the lamp carriage did not scan forward properly.

Go to L1 / L3 Status Code RAP.

L3 SCAN HOME PROBLEM

The main PWB sensed that the lamp carriage did not return home properly.

Go to L1 / L3 Status Code RAP.

L4 MAIN MOTOR PROBLEM

The main PWB sensed that the main motor did not turn on at power-on.

Go to L4 Status Code RAP.

L5 LENS HOME PROBLEM

The main PWB sensed that the lens did not go home at power-on.

Go to L5 Status Code RAP.

P PAPER FEED PROBLEM

The main PWB sensed that the paper did not feed.

Go to P Status Code RAP (5280/5309) or P Status Code RAP (5310) .

SYSTEM CHECKOUT/FINAL ACTION

Make several copies of the test pattern. (USMG, include 124%, 95% and 75%; RXL, include 124%, 80% and 70%.) Use the cassette and manual feed.

Copies are delivered to the receiving tray.

Y N

Refer to Initial Action / System Checks to begin your repair.

Evaluate the copies using CQ1 Copy Defect Entry RAP.

A copy defect is present.

Y N

Clean exterior of machine and provide copy samples of the customer originals.

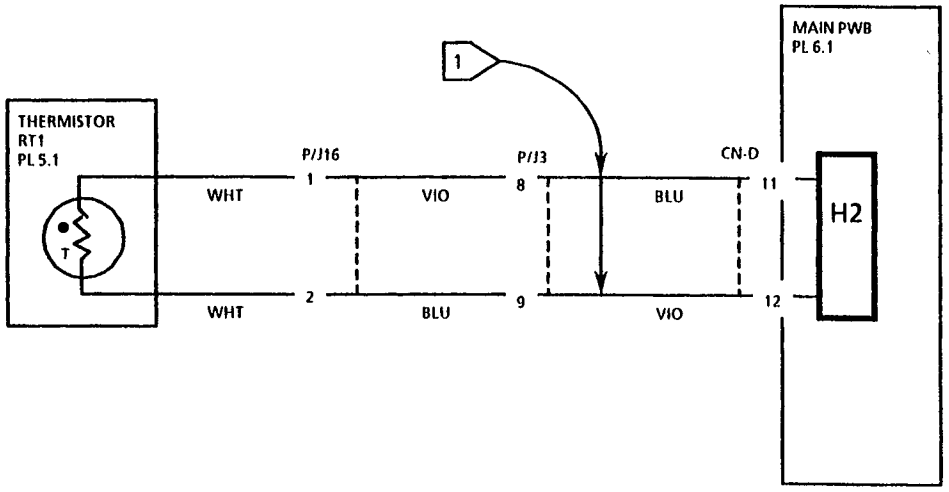
Go to the Copy Quality RAP identified by the CQ1 Copy Defect Entry RAP.

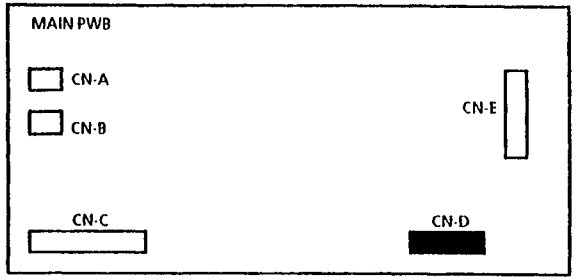
SECTION CONTENTS

H2 STATUS CODE RAP

The main PWB sensed that the thermistor was open.

Go to Flag 1 and check the thermistor, RT1, and its wiring for an open. If OK, replace the main PWB.





H3 STATUS CODE RAP

The main PWB detected that the fuser exceeded operating temperature.

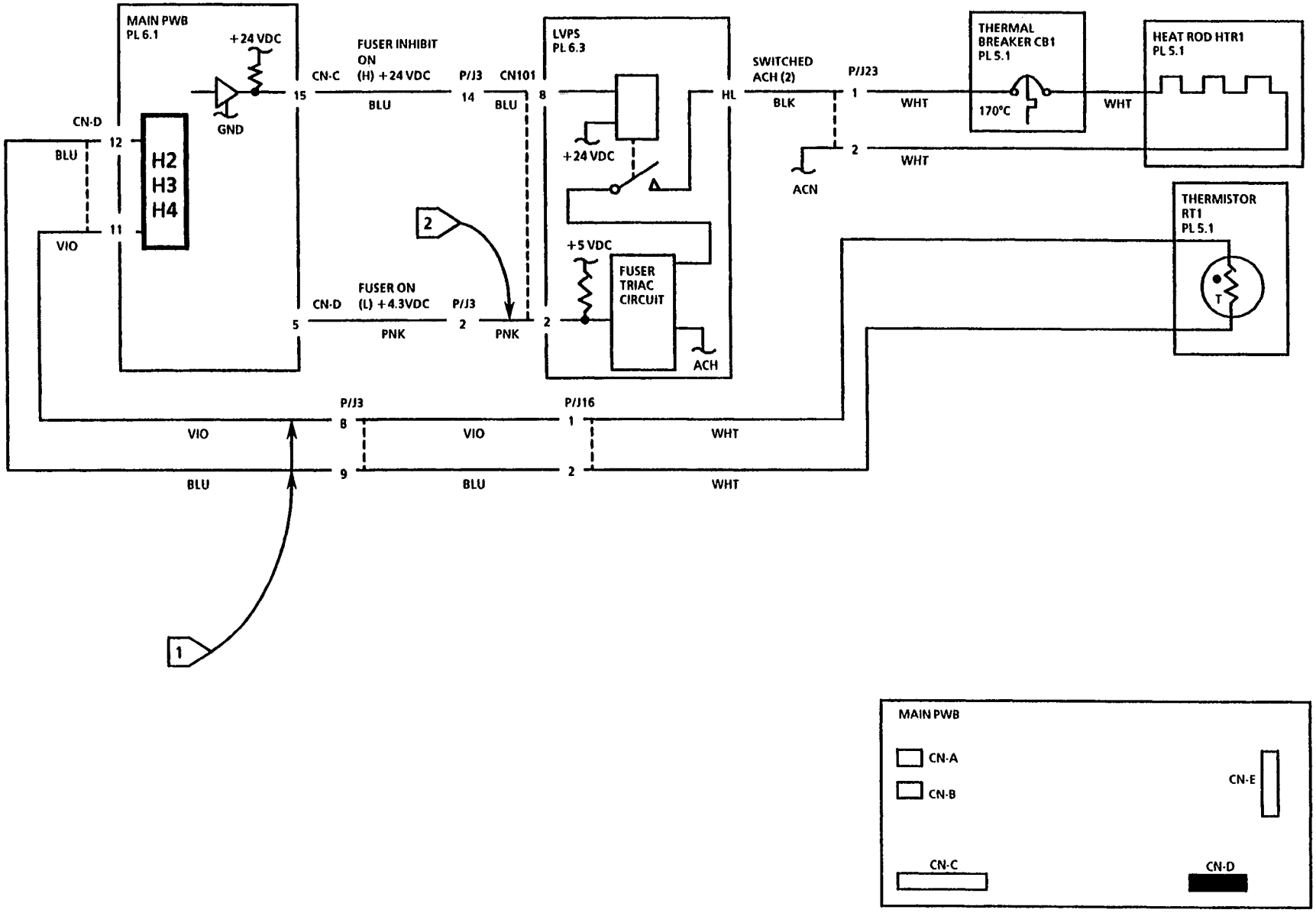
Switch off the power and allow the copier to cool, about 5 minutes. Switch on power.

H3 is displayed immediately at power on.

Y **N**

Go to Flag 2 and check for a short . If OK, replace the LVPS, PS1

Go to Flag 1 and check for a short. If OK, replace the main PWB.


MAIN PWB
PL 6.1
+24 VDC
GND
FUSER INHIBIT
ON
(H) +24 VDC
CN-C
15
BLU
P/J3
14
CN101
8
BLU
LVPS
PL 6.3
+24 VDC
HL
SWITCHED
ACH (2)
BLK
P/J23
1
WHT
THERMAL
BREAKER CB1
PL 5.1
170°C
WHT
HEAT ROD HTR1
PL 5.1
2
WHT
ACN
CN-D
12
BLU
H2
H3
H4
11
VIO
2
THERMISTOR
RT1
PL 5.1
T
+5 VDC
FUSER
TRIAC
CIRCUIT
FUSER ON
(L) +4.3VDC
CN-D
5
PNK
P/J3
2
PNK
2
ACH
P/J3
8
VIO
VIO
P/J16
1
WHT
9
BLU
BLU
2
WHT
1
MAIN PWB
CN-A
CN-B
CN-E
CN-C
CN-D

H4 STATUS CODE RAP

The Fuser did not warm up in the time required.

When status code H4 is displayed, connect the meter between CN-D-5 (+) on the main PWB and chassis (-).
There is approximately 4.3 VDC present.
Y N
Go to Flag 1 and check the main PWB and its associated wiring for an open circuit. If OK, replace the main PWB.

Switch the power off, then on.
There is approximately 0 VDC present.
Y N
Replace the main PWB.

When status code H4 is displayed (approximately 40 seconds after power up), connect the meter between CN-C-15 (+) on the main PWB and chassis (-).
There is approximately 24 VDC present.
Y N
Go to Flag 2 and check the LVPS and its associated wiring for an open circuit. If OK, replace the LVPS.

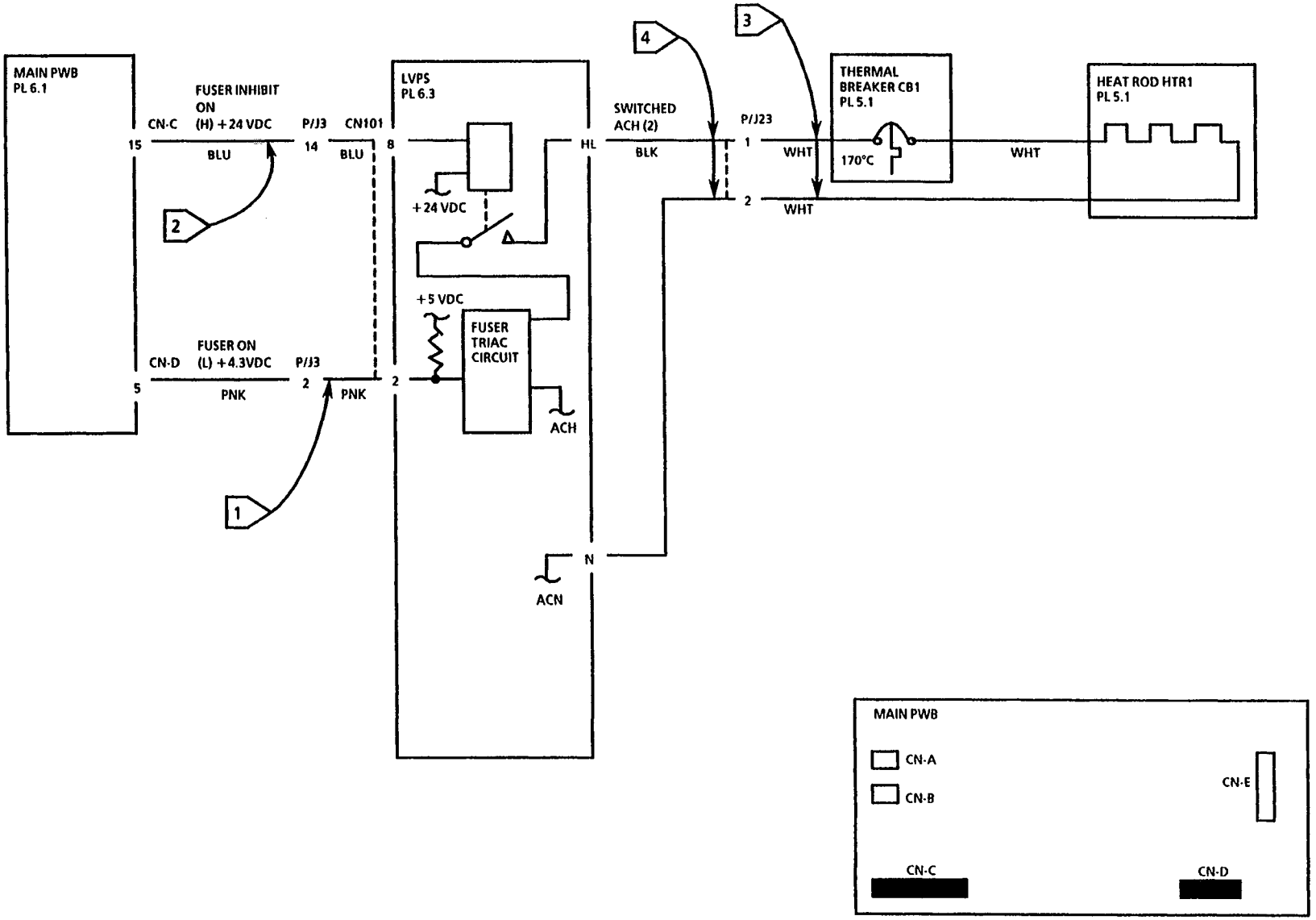
Switch the power off, then on.
There is approximately 0 VDC present.
Y N
Replace the main PWB.

A

A
Disconnect the power cord.
Open the copier and disconnect P/J23. Connect the meter between P/J23-1 and P/J23-2 to the fuser.
There are approximately 0 Ohms.
Y N
Remove the fuser cover and check the thermal breaker CB1 for an open.
CB1 is open.
Y N
Go to Flag 3 the check fuser and its associated wiring for an open circuit. If OK, replace the heat rod, HTR1.

Reset CB1. Switch the power off, then on. If an H3 status code occurs, replace the LVPS PS1.

Go to Flag 4 and check for an open wire. If OK, replace the LVPS, PS1.


MAIN PWB
PL 6.1
FUSER INHIBIT
ON
CN-C
(H) +24 VDC
P/J3
CN101
15
BLU
14
BLU
8
LVPS
PL 6.3
+24 VDC
+5 VDC
FUSER
TRIAC
CIRCUIT
ACH
FUSER ON
CN-D
(L) +4.3VDC
P/J3
5
PNK
2
PNK
2
1
2
3
4
HL
SWITCHED
ACH (2)
BLK
N
ACN
P/J23
1
WHT
2
WHT
THERMAL
BREAKER CB1
PL 5.1
170°C
WHT
HEAT ROD HTR1
PL 5.1
MAIN PWB
CN-A
CN-B
CN-C
CN-D
CN-E

L1 / L3 STATUS CODE RAP

L1 The main PWB sensed that the lamp carriage did not scan forward properly.

L3 The main PWB sensed that the lamp carriage did not return home properly.

Open the copier and clear any paper jam.
Ensure that the lamp carriage is in the home (left) position.
Switch off the power, then switch on the power.
Press **Start**.
Status code L5 is present.

Y N

The lamp carriage moved before the status code is displayed.

Y N

Open the copier and clear any paper jam.
Connect the meter between CN-C-21 (+) from the main PWB and CN-C-22 (-).
Press **Start** and observe the meter.
+ 24 VDC appears momentarily.

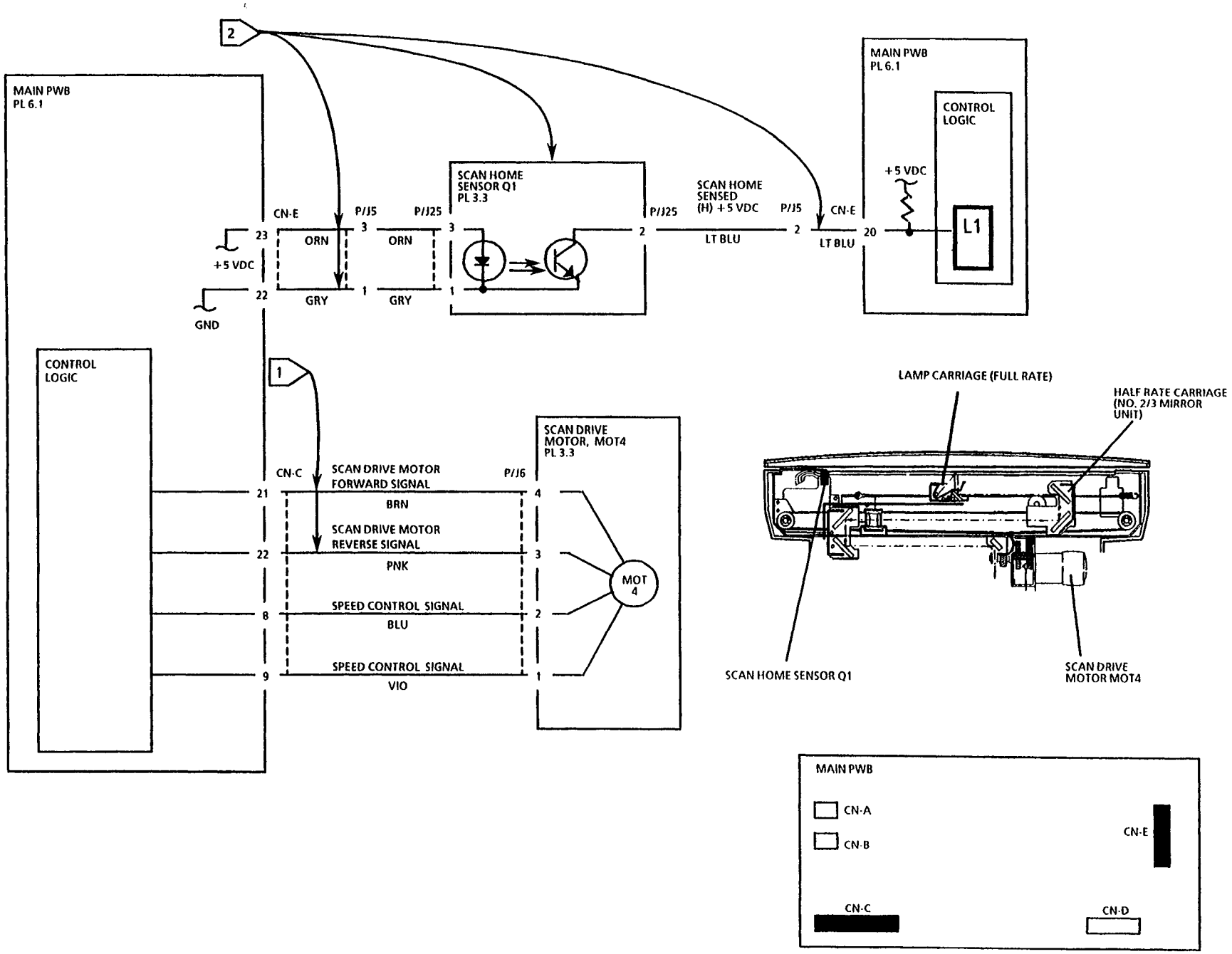
Y N

Go to Flag 1 and check for an open circuit. If OK, replace the main PWB.

Replace the scan drive motor,MOT4.

Go to Flag 2 and check for an open or short circuit. If OK replace the scan home sensor, Q1.

Go to L5 Status Code RAP.


2
MAIN PWB
PL 6.1
CONTROL
LOGIC
+5 VDC
L1
SCAN HOME
SENSOR Q1
PL 3.3
SCAN HOME
SENSED
(H) +5 VDC
CN-E
P/J5
P/J25
23
22
ORN
GRY
+5 VDC
GND
LT BLU
20
1
CONTROL
LOGIC
SCAN DRIVE
MOTOR, MOT4
PL 3.3
CN-C
P/J6
SCAN DRIVE MOTOR
FORWARD SIGNAL
BRN
SCAN DRIVE MOTOR
REVERSE SIGNAL
PNK
SPEED CONTROL SIGNAL
BLU
SPEED CONTROL SIGNAL
VIO
MOT
4
LAMP CARRIAGE (FULL RATE)
HALF RATE CARRIAGE
(NO. 2/3 MIRROR
UNIT)
SCAN HOME SENSOR Q1
SCAN DRIVE
MOTOR MOT4
MAIN PWB
CN-A
CN-B
CN-E
CN-C
CN-D

L4 STATUS CODE RAP

The main PWB sensed that the main motor did not run at power-up.

Open the copier and clear any paper jam. Remove the left side cover (REP 14.2) to gain access to the main drive motor, MOT1.
Switch the power off, then on while observing the main motor.
The main motor ran.

Y N

Open the copier and clear any paper jam. Connect the meter to P/J3-3 (+) on the LVPS PS1 and chassis (-).
Switch off the power, then switch on the power.
There is approximately +35 VDC present.

Y N

Go to 1.4 +35 VDC RAP.

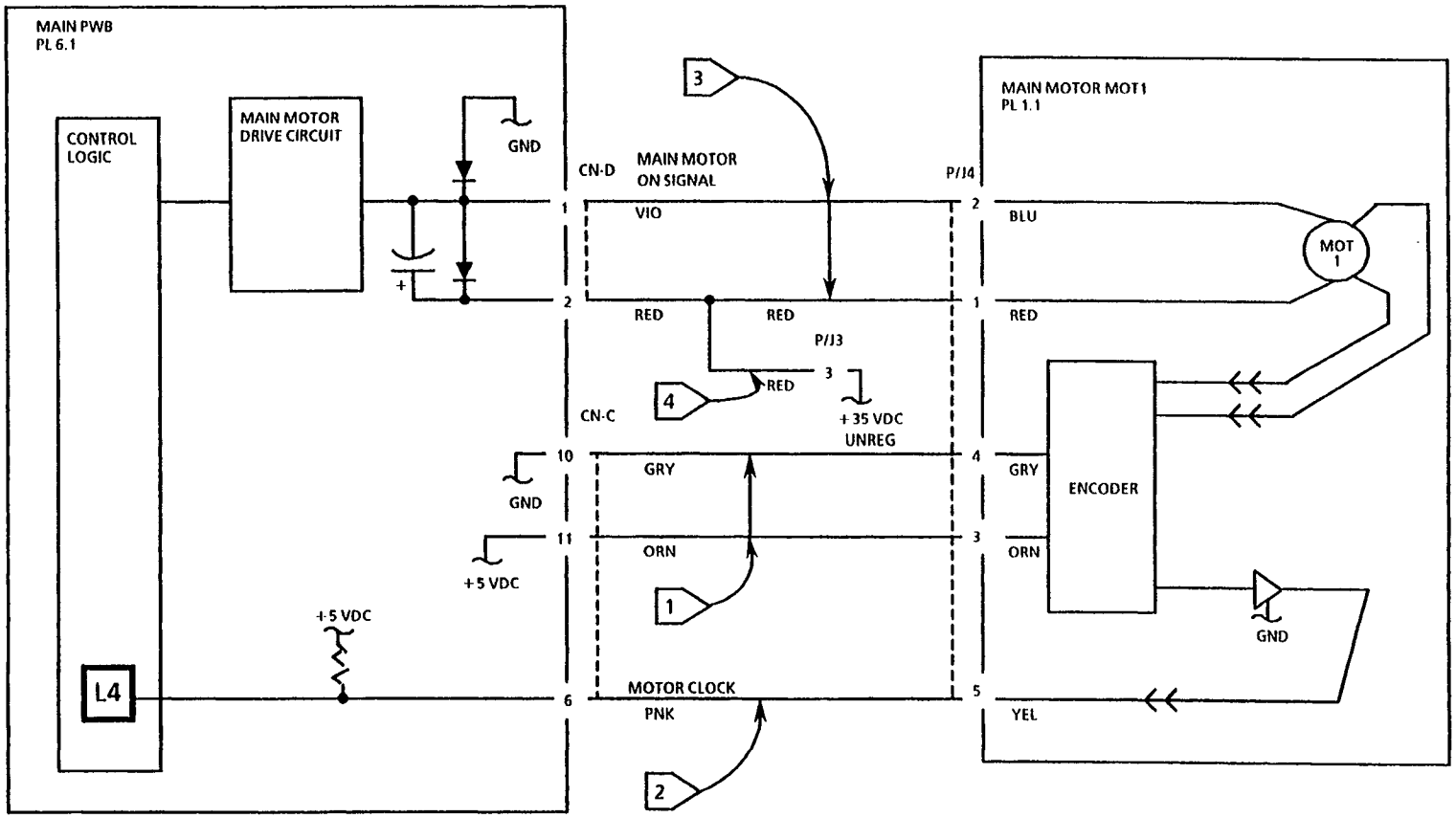
Go to Flags 3 and 4 and check the main motor circuit for an open. If OK, replace the main PWB.

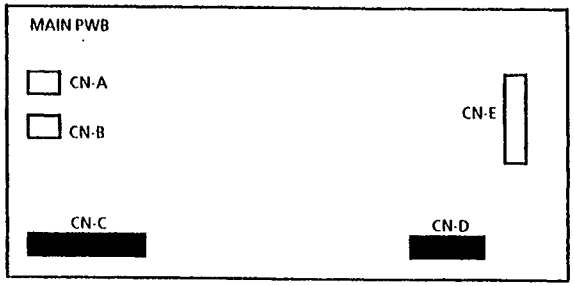
Connect the meter to the main motor P/J4-3 (+) and P/J4-4 (-).
There is approximately 5 VDC.

Y N

Go to Flag 1 and check for an open circuit. If OK, replace the main PWB.

Go to Flag 2 and check for an open or short circuit. If OK, replace the main motor, MOT1.


MAIN PWB
PL 6.1
CONTROL LOGIC
MAIN MOTOR DRIVE CIRCUIT
GND
CN-D
MAIN MOTOR ON SIGNAL
VIO
RED
RED
P/J3
RED
+35 VDC UNREG
CN-C
GND
+5 VDC
GRY
ORN
+5 VDC
L4
MOTOR CLOCK
PNK
MAIN MOTOR MOT1
PL 1.1
P/J4
BLU
RED
GRY
ORN
YEL
MOT 1
ENCODER
GND
1
2
3
4
10
11
6
2
1
4
3
5


MAIN PWB
CN-A
CN-B
CN-E
CN-C
CN-D

L5 STATUS CODE RAP

The main PWB sensed that the lens did not return to the home position at power-on.

Open the copier and clear any paper jam.
Switch the power off, then on.
Connect the meter between CN-B-6 (+) on the main PWB and chassis (-).
There is +24 VDC present.

Y **N**

Go to 1.3 +24 VDC RAP.

Ensure an L5 status code is displayed.
Remove the registration plate, platen glass (REP 14.1), and optics light shield cover (REP 6.11). **The lens carriage is blocking the lens sensor Q2.**

Y **N**

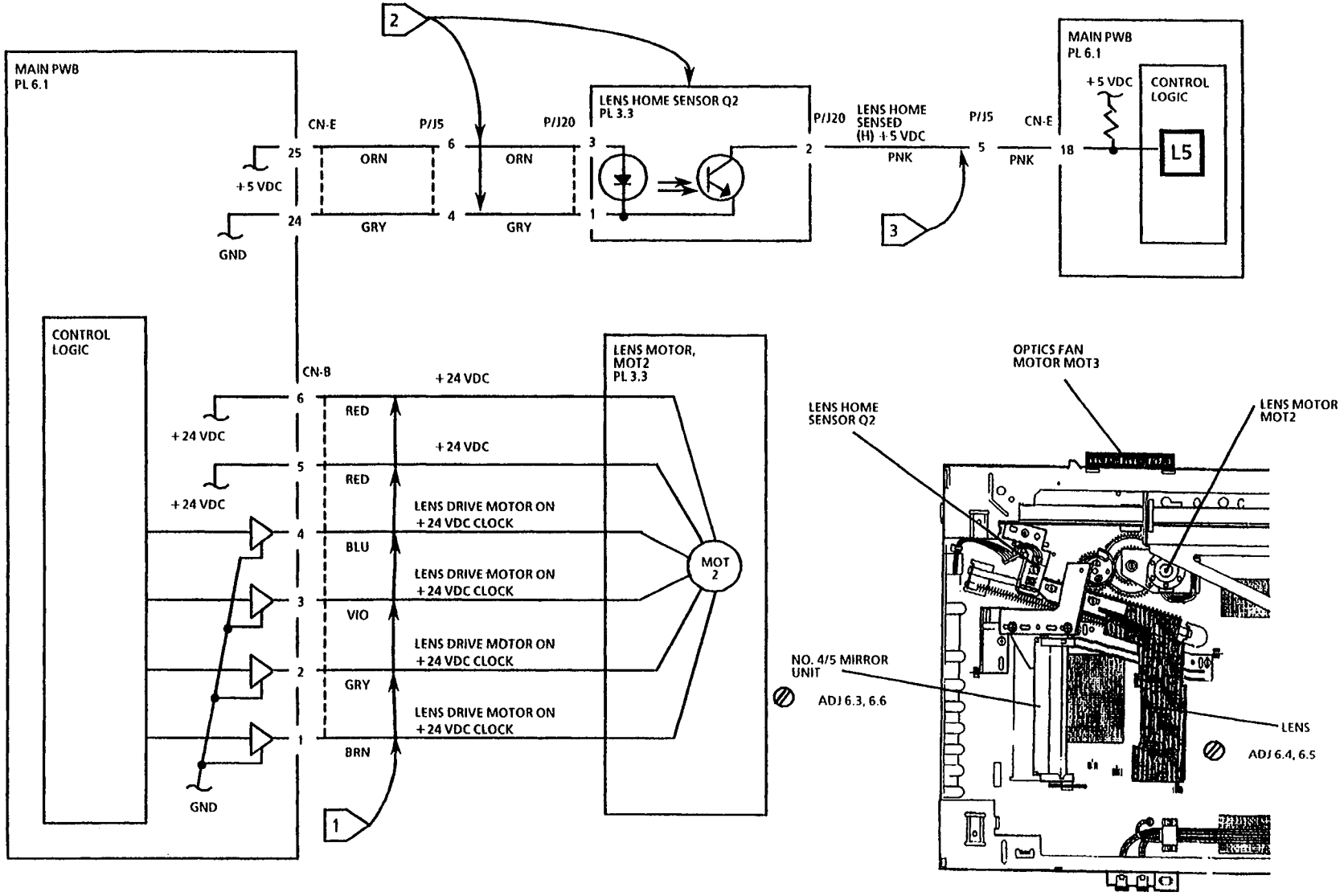
Go to Flags 2 and 3 and check for an open lens home sensor circuit.

Connect the meter between CN-E-18 (+) on the main PWB and chassis (-).
There is +5 VDC present.

Y **N**

Go to Flag 3 and check for a short circuit.

Go to Flag 1 and check for an open circuit. If OK, check for a mechanical problem such as a binding carriage or lens motor. Repair or replace as necessary.


MAIN PWB
PL 6.1
CN-E
P/J5
P/J20
LENS HOME SENSOR Q2
PL 3.3
LENS HOME
SENSED
(H) +5 VDC
+5 VDC
GND
ORN
GRY
PNK
CONTROL
LOGIC
L5
CN-B
+24 VDC
LENS MOTOR,
MOT2
PL 3.3
RED
BLU
VIO
GRY
BRN
LENS DRIVE MOTOR ON
+24 VDC CLOCK
MOT
2
OPTICS FAN
MOTOR MOT3
LENS HOME
SENSOR Q2
LENS MOTOR
MOT2
NO. 4/5 MIRROR
UNIT
ADJ 6.3, 6.6
LENS
ADJ 6.4, 6.5

TOP VIEW

P STATUS CODE RAP (5280/5309)

The main PWB sensed that the paper did not feed.

Open the copier and clear any paper jam.
Switch off the power, then switch on the power.
Make a copy using the paper tray bypass.
Status code P occurred.

Y N

Connect the meter between CND-3 (+) and chassis (-).
There is +24 VDC present.

Y N

Go to Flag 2 and check the paper feed solenoid, SOL2 and its associated wiring for an open circuit.

Press **Start.**
The voltage decreased to approximately 0 VDC.

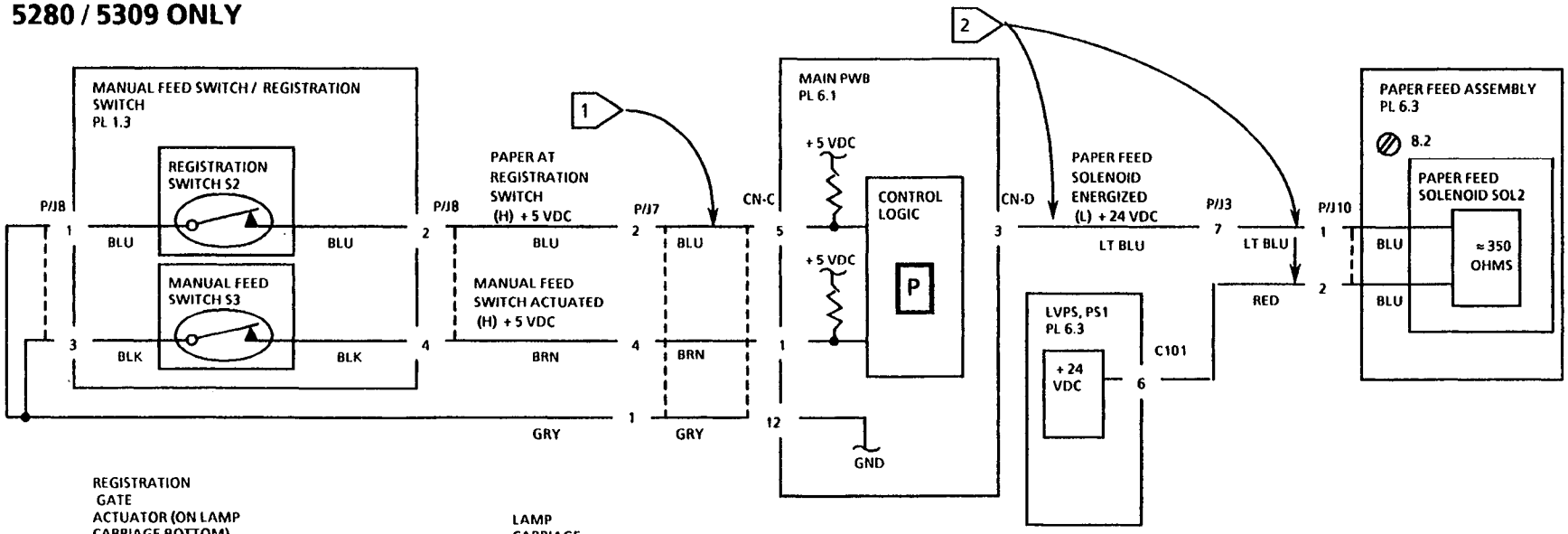
Y N

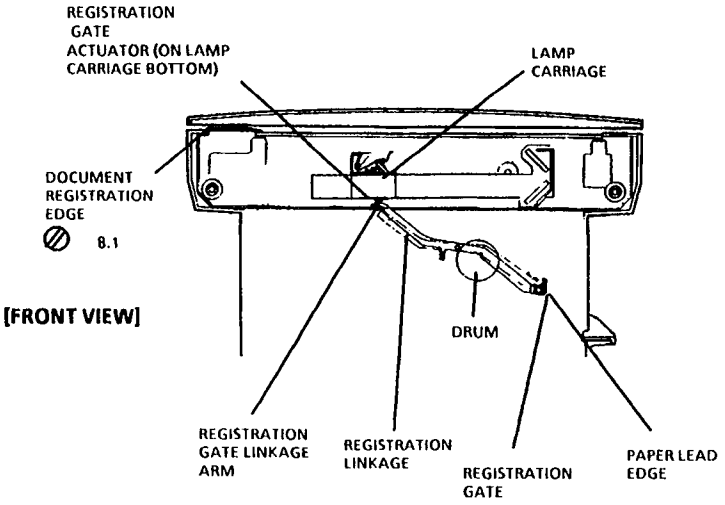
Replace the main PWB.

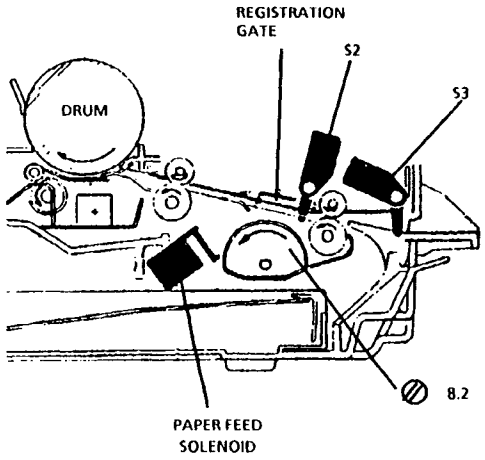
Check the paper feed-in area for a mechanical problem or obstruction.

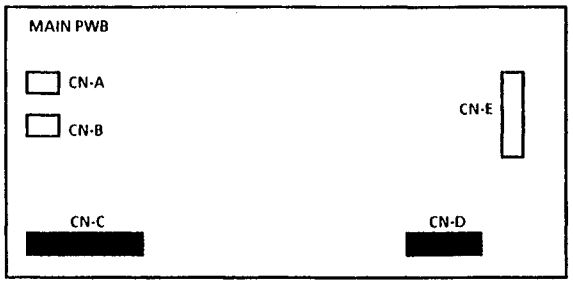
Go to Flag 1 and check the registration switch, S2 and its associated wiring for a short circuit.

5280 / 5309 ONLY









P STATUS CODE RAP (5310)

The main PWB sensed that the paper did not feed.
Open the copier and clear any paper jam.
Switch off the power, then switch on the power.
Make a copy using both the paper tray and the manual paper feed (alternate tray).
Status code P occurred from both trays.

Y N

Status code P occurred from the paper tray only.

Y N

Status code P occurred from the manual paper feed (alternate tray) only.
Go to Flag 3 and check the manual feed solenoid, SOL1 and its associated wiring for an open circuit.

Connect the meter between CND-3 (+) and chassis (-).
There is +24 VDC present.

Y N

Go to Flag 2 and check the paper feed solenoid, SOL2 and its associated wiring for an open circuit.

Press Start.
The voltage decreased to approximately 0 VDC.

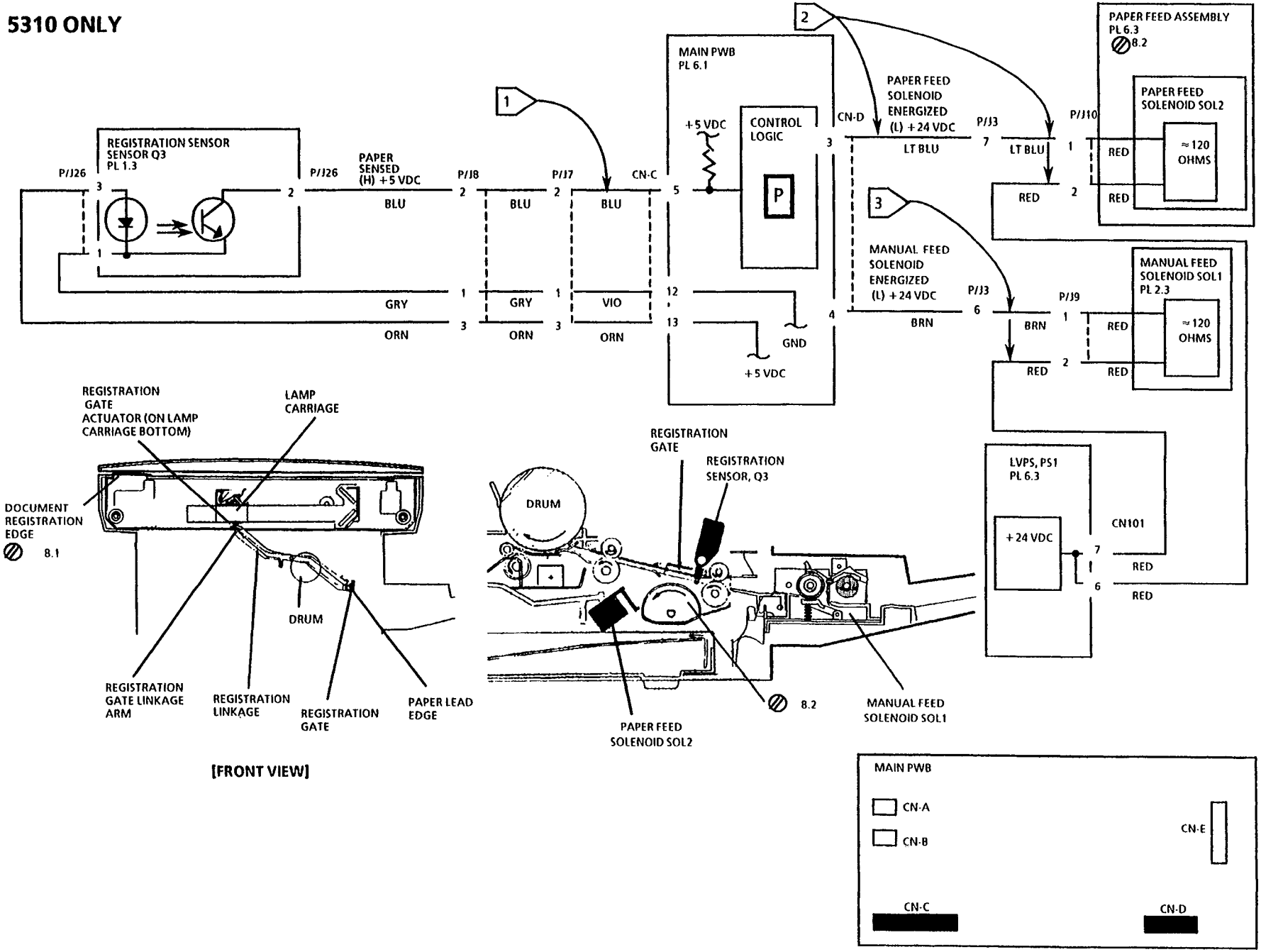
Y N

Replace the main PWB.

Check the paper feed-in area for a mechanical problem or obstruction.

- Remove the dry ink cartridge and the copy cartridge and check the drive train for broken gears and missing teeth. If OK, go to Flag 1 and check the registration sensor, Q3 and its associated wiring for a short circuit.
- Check for free movement of the Registration Sensor lever. Refer to Service Bulletin # 5310 010 dated: 6/22/94

5310 ONLY



[FRONT VIEW]

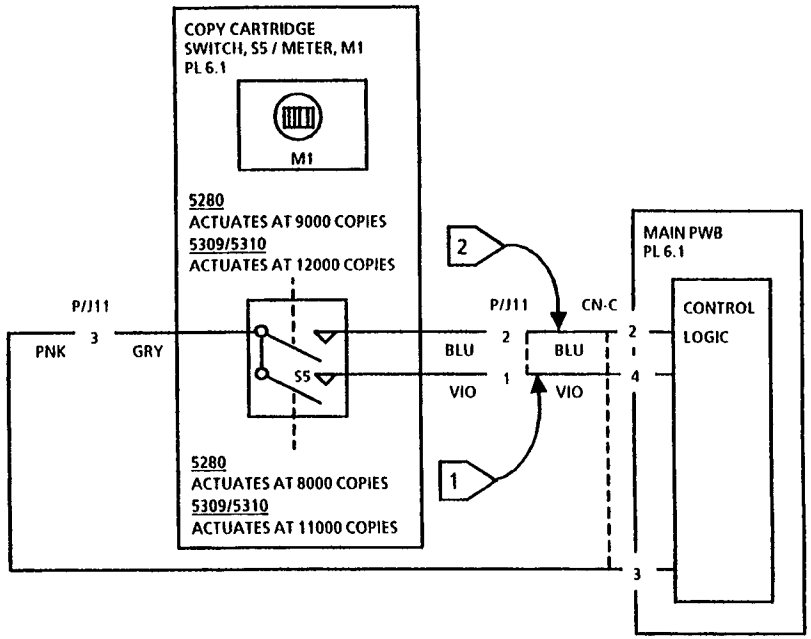
COPY CARTRIDGE LAMP ON RAP

The copy cartridge lamp is flashing on and off.

Y N

The copy cartridge lamp is on steady.
If the copy cartridge meter indicates 8000 copies or more for the 5280 (11000 copies or more for the 5309/5310) , replace the cartridge.
If the copy cartridge meter indicates less than 8000 copies for the 5280 (11000 copies for the 5309/5310), go to Flag 1 and check for a short circuit.

If the copy cartridge meter indicates 9000 copies or more for the 5280 (12000 copies or more for the 5309/5310) , replace the cartridge.
If the copy cartridge meter indicates less than 9000 copies for the 5280 (12000 copies for the 5309/5310), go to Flag 2 and check for a short circuit.



DRY INK CARTRIDGE LAMP ON RAP

This RAP should be entered under the following conditions:

- 2 minutes after power on, the dry ink cartridge lamp flashes .

NOTE: If the customer complains that the dry ink cartridge reached its end of life too soon, go to 9.9 Premature Dry Ink Cartridge Failure RAP.

Remove the dry ink cartridge and the copy cartridge and check the drive train for broken gears and missing teeth. If OK, continue with the RAP below.

Reinstall the dry ink cartridge and the copy cartridge.
Connect the meter between CN-C-20 (+) on the main PWB and chassis (-).
Switch on the power while observing the meter.
The is approximately + 12.5 VDC present
Y N
| Replace the main PWB.

Connect the meter between CN-C-19 (+) on the main PWB and chassis (-).
Switch on the power while observing the meter.
The is approximately + 12.5 VDC present
Y N
| Replace the main PWB.

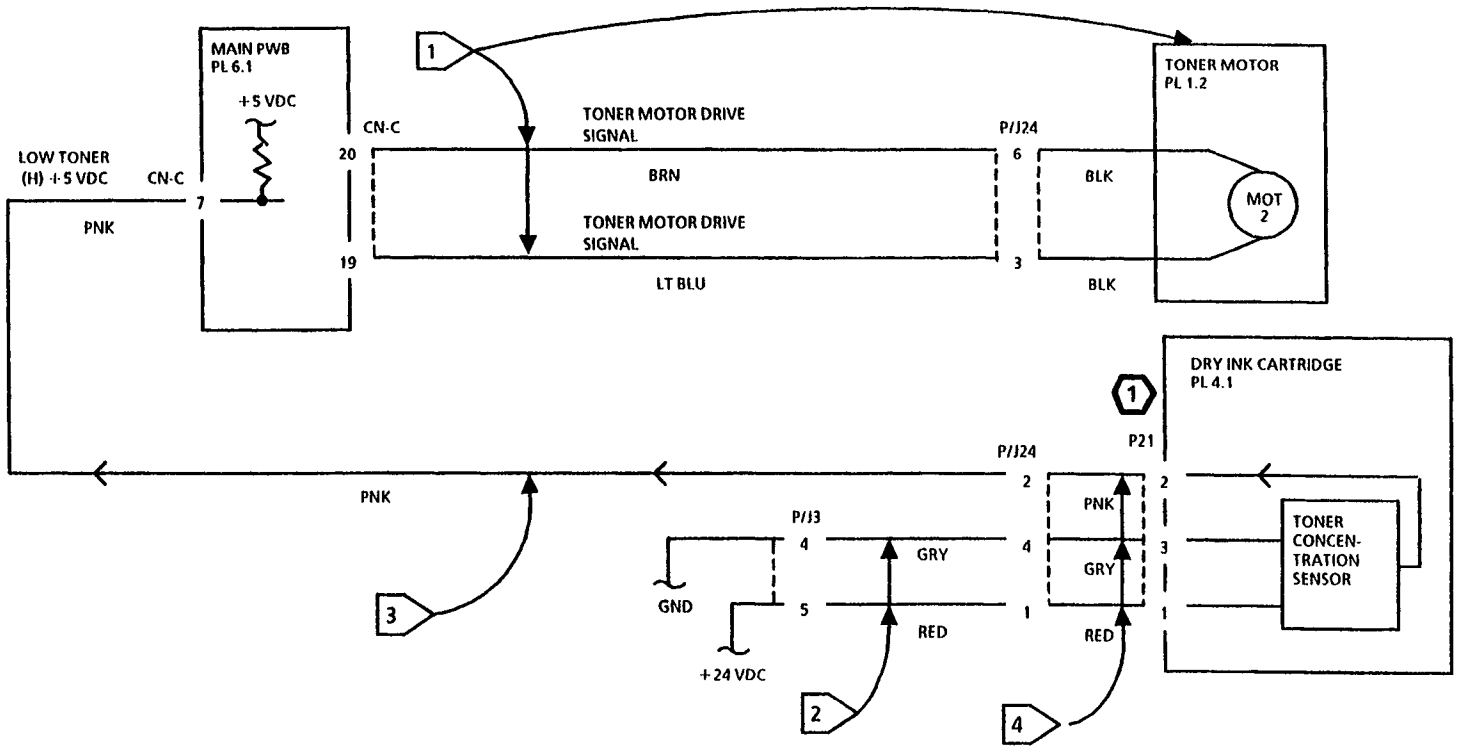
Connect the meter between CN-C-7 (+) on the main PWB and chassis (-).
There is + 5 VDC present.
Y N
A B
| Replace the main PWB.

Connect the meter between P/J24-1 (+) and P/J24-4 (-).
There is + 24 VDC present.
Y N
| Go to Flag 2 and check for an open wire between P/J3 and P/J24.

Connect the meter between P/J24-2 (+) and chassis (-).
Switch off the power, then switch on the power.
There is + 5 VDC present.
Y N
| Go to Flag 3 and check for an open wire between CN-C-7 on the main PWB and P/J24-2.

Switch off the power.
Remove the right cover to observe the toner motor drive gears.
Hold the front access cover closed and switch on the power.
The toner drive gears rotate.
Y N
| Go to Flag 1 and check for an open toner motor circuit. If OK, replace the toner motor MOT2.

Go to Flag 4 and check for an open wire between P21 and P/J24. If OK, ensure that the cartridge is seated properly. If the problem still exists, replace the dry ink cartridge.



NOTE: (1) THE FOLLOWING FIGURE SHOWS THE LOCATION OF THE PINS FOR CONNECTOR P21 AS VIEWED FROM THE FRONT OF THE COPIER WITH THE COPY CARTRIDGE REMOVED.

2	4
1	3

PAPER MISFEED LAMP ON RAP (5280/5309 ONLY)

Initial Action:
Make a copy using the paper tray only. If a P status code occurs, go to the P status code RAP ((5280/5309).

Open copier and clear any paper jam.
Switch off the power, then switch on the power.
The copier immediately started a copy cycle when power was switched on.

Y N

The paper misfeed lamp flashes immediately when power was switched on.

Y N

Clear any paper jam and close copier.
Switch off the power off, then on.
Wait ten seconds, then open the copier.
Paper fed from the paper tray.

Y N

Place some paper under the white exit switch actuator. Close the copier.
The paper misfeed lamp is flashing.

Y N

Go to Flag 1 and check the exit switch S4 and its associated wiring for a short circuit.

A B C D

Open the copier and remove the paper.

- Check the fuser pressure roller for a flat spot. Replace the roller if necessary.
- Check for obstructions in the paper path.
- Remove the dry ink cartridge and the copy cartridge and check the drive train for broken gears and missing teeth.
- Check the registration gate mechanism for proper operation.

Go to Flag 2 and check the paper feed solenoid SOL2 for a short circuit. If OK, check the paper feed solenoid SOL2 for mechanical binding.

Connect the meter between CN-C-5 (+) on the main PWB and chassis (-).
There is approximately 0 VDC present.

Y N

Ensure that the registration switch actuator operates freely. If OK, go to Flag 3 and check the registration switch S2 and its associated wiring for an open circuit.

Connect the meter between CN-E-9 (+) on the main PWB and chassis (-).
There is approximately 0 VDC present.

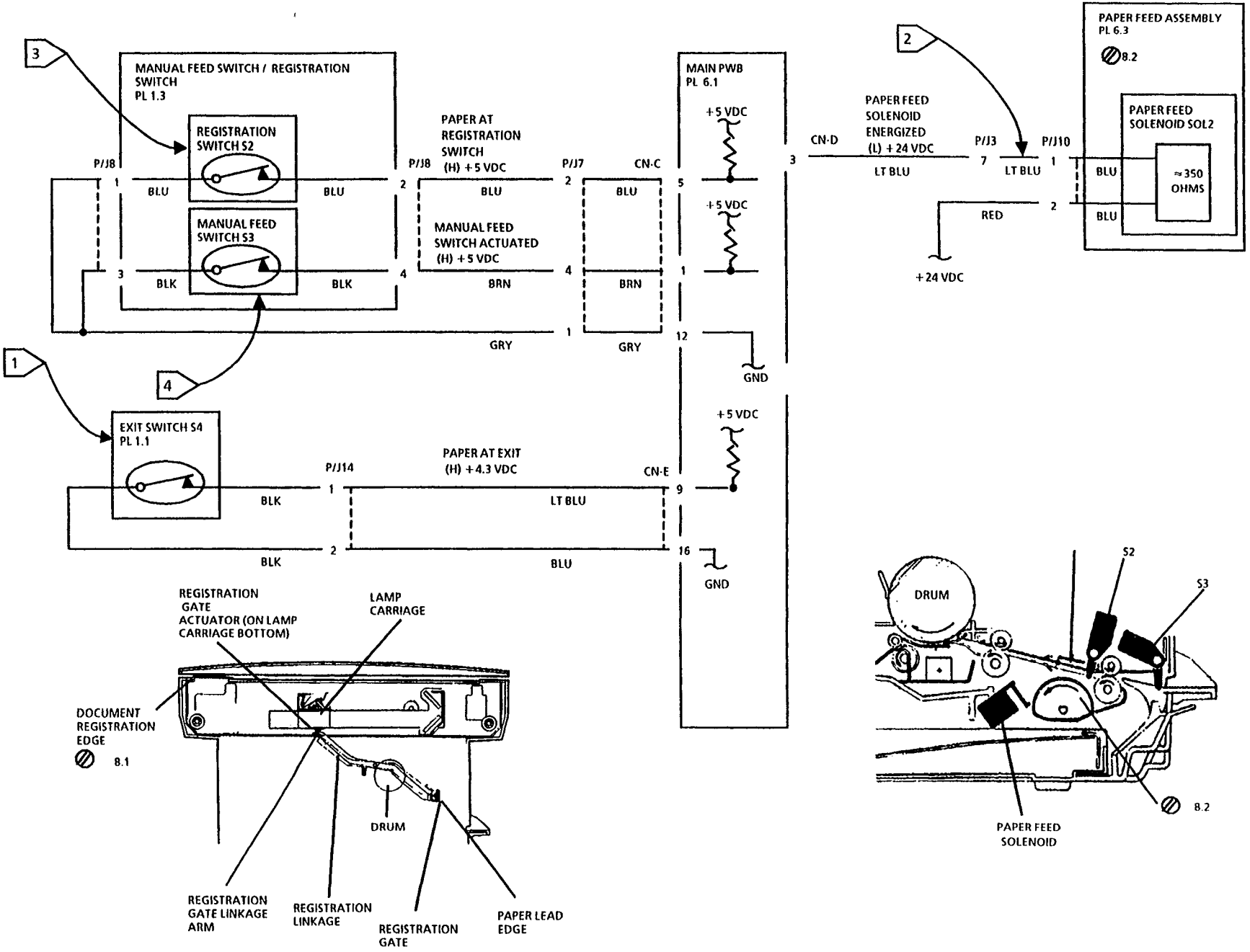
Y N

Ensure that the exit switch actuator operates freely. If OK, go to Flag 1 and check the exit switch S4 and its associated wiring for an open circuit.

Replace the Main PWB.

A

Ensure that the manual feed switch actuator operates freely. If OK, go to Flag 4 and check the manual feed switch S3 and its associated wiring for an open circuit.


MANUAL FEED SWITCH / REGISTRATION SWITCH
PL 1.3
REGISTRATION SWITCH S2
MANUAL FEED SWITCH S3
P/J8
BLU
BLK
PAPER AT REGISTRATION SWITCH (H) +5 VDC
MANUAL FEED SWITCH ACTUATED (H) +5 VDC
P/J7
CN-C
BRN
GRY
MAIN PWB
PL 6.1
+5 VDC
GND
EXIT SWITCH S4
PL 1.1
PAPER AT EXIT (H) +4.3 VDC
P/J14
CN-E
LT BLU
PAPER FEED ASSEMBLY
PL 6.3
8.2
PAPER FEED SOLENOID ENERGIZED (L) +24 VDC
CN-D
P/J3
P/J10
PAPER FEED SOLENOID SOL2
≈350 OHMS
RED
+24 VDC
REGISTRATION GATE ACTUATOR (ON LAMP CARRIAGE BOTTOM)
LAMP CARRIAGE
DOCUMENT REGISTRATION EDGE
8.1
DRUM
REGISTRATION GATE LINKAGE ARM
REGISTRATION LINKAGE
REGISTRATION GATE
PAPER LEAD EDGE
S2
S3
PAPER FEED SOLENOID

[FRONT VIEW]

PAPER MISFEED LAMP ON RAP (5310 ONLY)

The paper misfeed lamp flashes immediately when power was switched on.

Y N

Clear any paper jam and close copier.
Switch off the power, then switch on the power.
Wait ten seconds, then open the copier.
Paper fed from the paper tray.

Y N

Place some paper under the white exit switch actuator. Close the copier.
The paper misfeed lamp is flashing.

Y N

Go to Flag 1 and check the exit switch S4 and its associated wiring for a short circuit.

Open the copier and remove the paper.

- Check the fuser pressure roller for a flat spot. Replace the roller if necessary.
- Check for obstructions in the paper path.
- Remove the dry ink cartridge and the copy cartridge and check the drive train for broken gears and missing teeth.
- Check the registration gate mechanism for proper operation.

A B

A B

Go to Flag 2 and check the paper feed solenoid SOL2 for a short circuit. If OK, check the paper feed solenoid SOL2 for mechanical binding.

Connect the meter between CN-C-5 (+) on the main PWB and chassis (-).
There is approximately 0 VDC present.

Y N

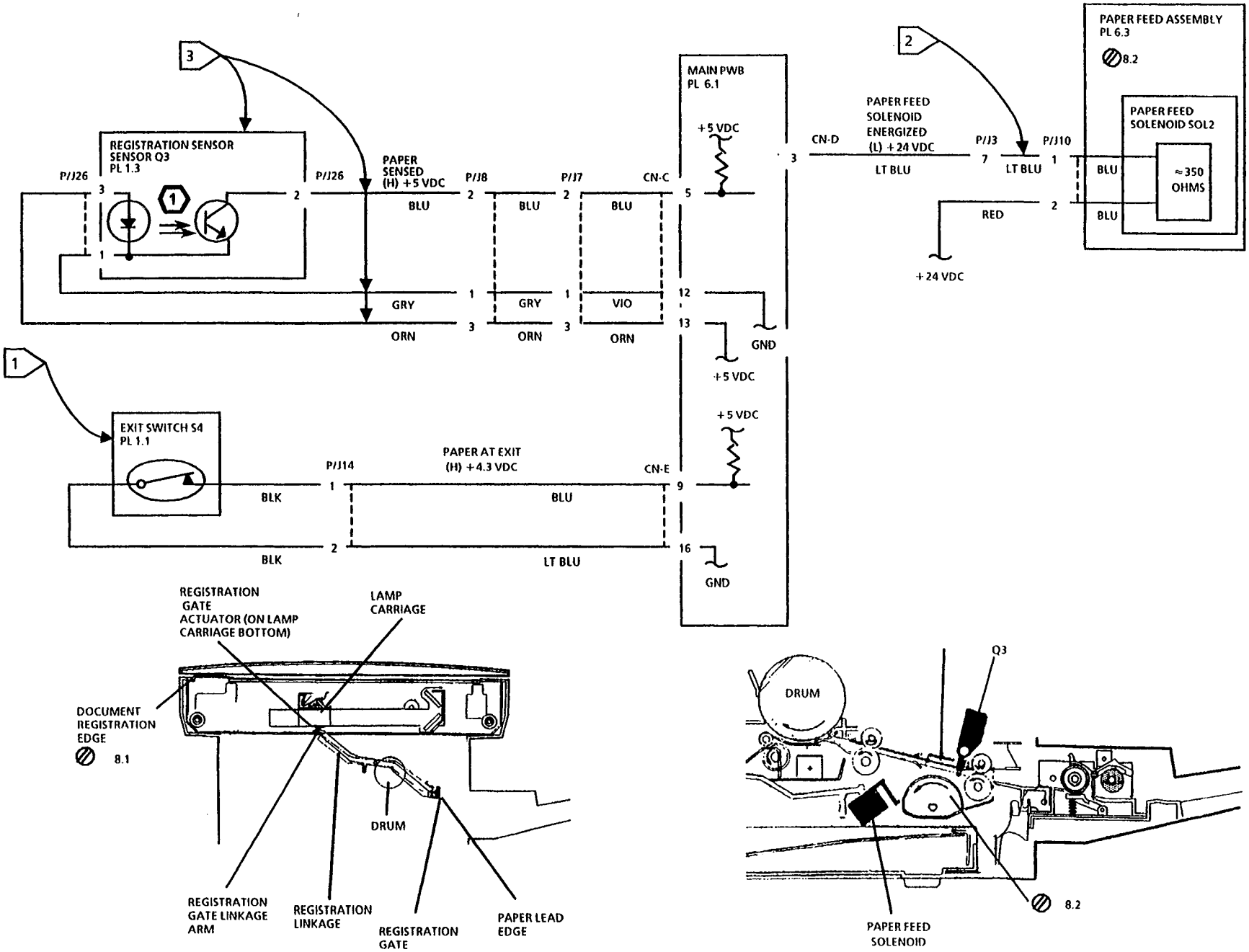
Ensure that the registration sensor actuator operates freely. If OK, go to Flag 3 and check the registration sensor Q3 and its associated wiring for an open circuit.

Connect the meter between CN-E-9 (+) on the main PWB and chassis (-).
There is approximately 0 VDC present.

Y N

Ensure that the exit switch actuator operates freely. If OK, go to Flag 1 and check the exit switch S4 and its associated wiring for an open circuit.

Replace the Main PWB.


3
REGISTRATION SENSOR
SENSOR Q3
PL 1.3
P/J26
PAPER SENSED (H) +5 VDC
P/J8
P/J7
CN-C
MAIN PWB
PL 6.1
+5 VDC
BLU
GRY
ORN
VIO
GND
2
PAPER FEED SOLENOID ENERGIZED (L) +24 VDC
CN-D
P/J3
P/J10
LT BLU
RED
+24 VDC
PAPER FEED ASSEMBLY
PL 6.3
8.2
PAPER FEED SOLENOID SOL2
≈350 OHMS
1
EXIT SWITCH S4
PL 1.1
PAPER AT EXIT (H) +4.3 VDC
P/J14
CN-E
BLK
LT BLU
REGISTRATION GATE ACTUATOR (ON LAMP CARRIAGE BOTTOM)
LAMP CARRIAGE
DOCUMENT REGISTRATION EDGE
8.1
DRUM
REGISTRATION GATE LINKAGE ARM
REGISTRATION LINKAGE
REGISTRATION GATE
PAPER LEAD EDGE
Q3
PAPER FEED SOLENOID

[FRONT VIEW]

1.1 POWER ON RAP

Initial Action
Ensure that the dry ink cartridge is installed.

Switch off the power then switch on the power.
The copy count display is blank.
Y N
Allow the copier to warm up for 2 minutes.
The dry ink lamp flashes after 2 minutes.
Y N
Go to 2.1 Selection/Indication RAP.

Go to the Dry Ink Cartridge Lamp On RAP.

The main motor comes on when power was switched on.
Y N
A

Go to 2.1 Selection/Indication RAP.

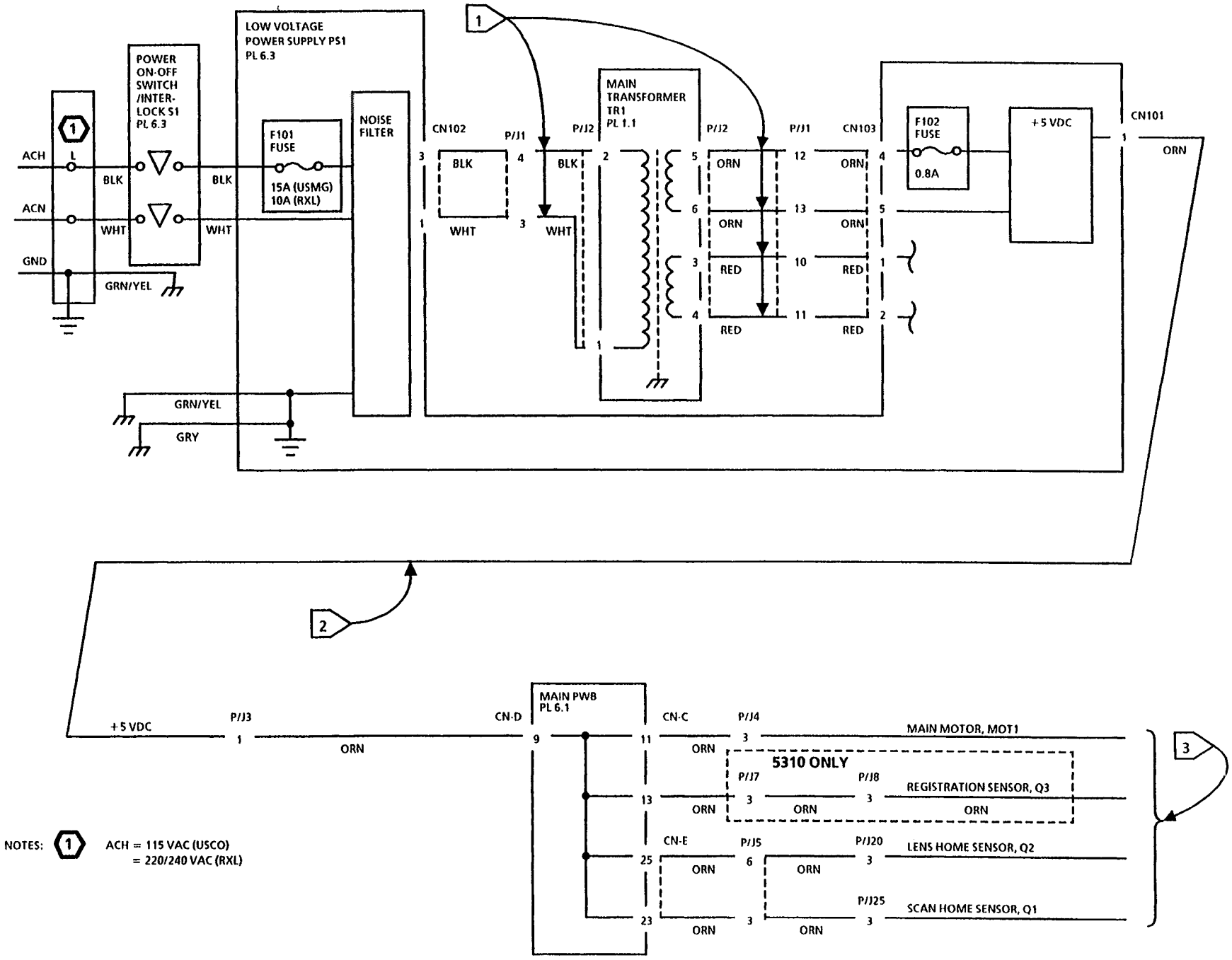
A
Switch off the power and remove the power cord.
Remove the LVPS cover.
Check fuse F101.
Fuse F101 is blown.
Y N
F102 is blown.
Y N
Go to 1.2 +5 VDC RAP.

Disconnect CN101 from the power supply.
Replace F102 and switch on the power.
F102 is blown again.
Y N
Go to Flag 2 and Flag 3 and check for a short circuit to ground.

Replace the LVPS.

Disconnect P/J2 from the main transformer.
Replace F101.
Switch on the power.
F101 blows again.
Y N
Go to Flag 1 and check the main transformer circuit for a short to ground.

Replace the LVPS PS1.


LOW VOLTAGE
POWER SUPPLY PS1
PL 6.3
POWER
ON-OFF
SWITCH
/INTER-
LOCK S1
PL 6.3
F101
FUSE
15A (USMG)
10A (RXL)
NOISE
FILTER
MAIN
TRANSFORMER
TR1
PL 1.1
F102
FUSE
0.8A
+5 VDC
CN101
ORN
CN102
CN103
P/J1
P/J2
ACH
ACN
GND
L
BLK
WHT
GRN/YEL
GRY
RED
MAIN PWB
PL 6.1
CN-D
CN-C
CN-E
P/J3
P/J4
P/J5
P/J7
P/J8
P/J20
P/J25
MAIN MOTOR, MOT1
5310 ONLY
REGISTRATION SENSOR, Q3
LENS HOME SENSOR, Q2
SCAN HOME SENSOR, Q1
NOTES:
ACH = 115 VAC (USCO)
= 220/240 VAC (RXL)

1.2 +5 VDC RAP

NOTE: Enter this RAP from the 1.1 Power On RAP only.

Connect the meter to CN-D-9 (+) on the main PWB and chassis (-).
Manually hold down the power on/off switch S1.
There is +5 VDC present.

Y **N**

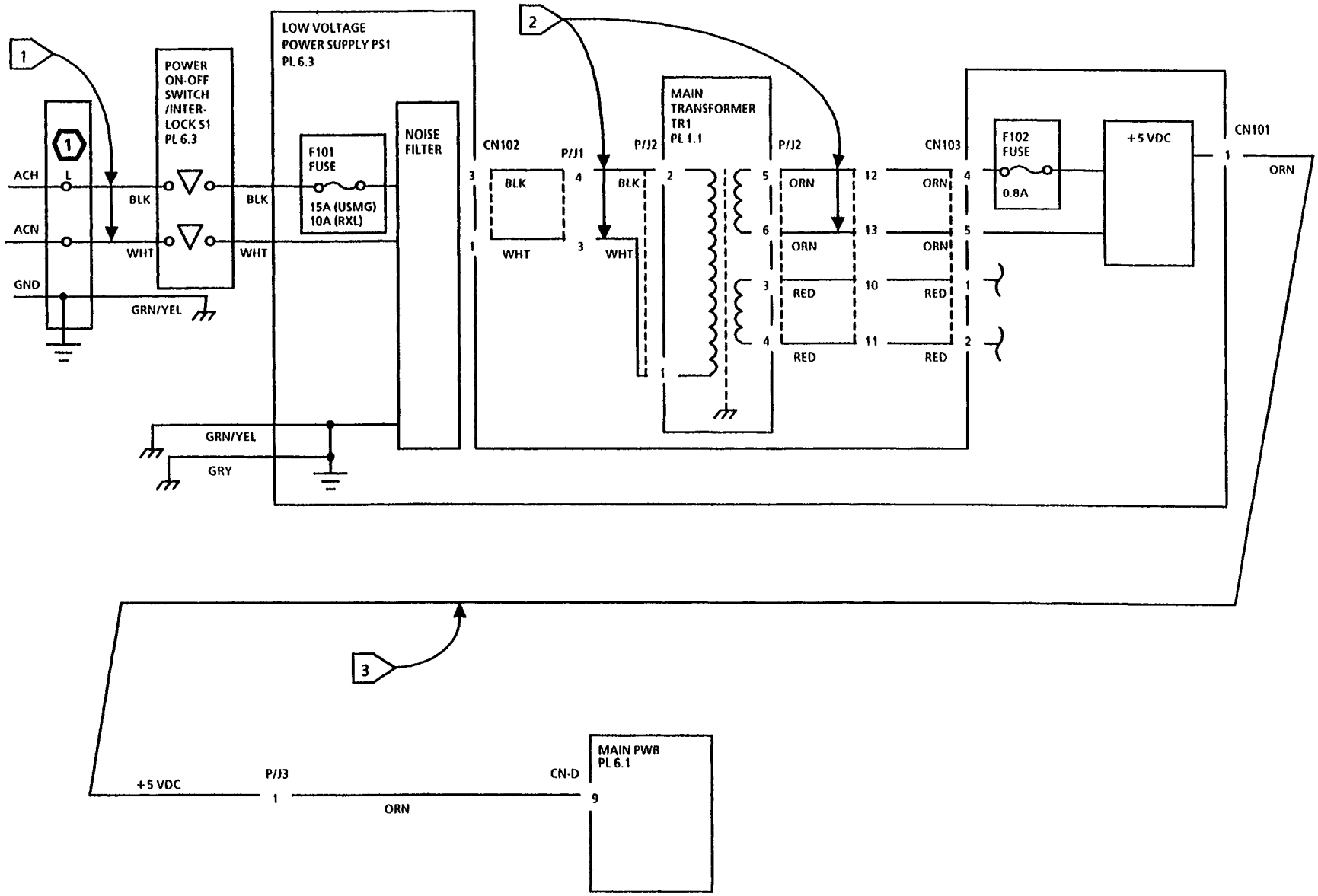
Connect the meter to CN101-1 (+) on the LVPS and ground (-).
Manually hold down the power on/off switch S1.
There is +5 VDC present.

Y **N**

Go to Flag 1 and Flag 2 and check the AC circuit for an open.

Go to Flag 3 and check for an open circuit.

Replace the main PWB.



NOTES: (1) ACH = 115 VAC (USCO)
= 220/240 VAC (RXL)

1.3 +24 VDC RAP

NOTE: Enter this RAP from the L5 RAP only.

Switch off the power and remove the power cord.
Remove the LVPS cover.
Check fuse F104.
Fuse F104 is blown.

Y N

Connect the meter to CN101-5 (+) on the LVPS and ground (-).
Reinstall the power cord and manually hold down the power on/off switch S1.
There is +24 VDC present.

Y N

Replace the LVPS.

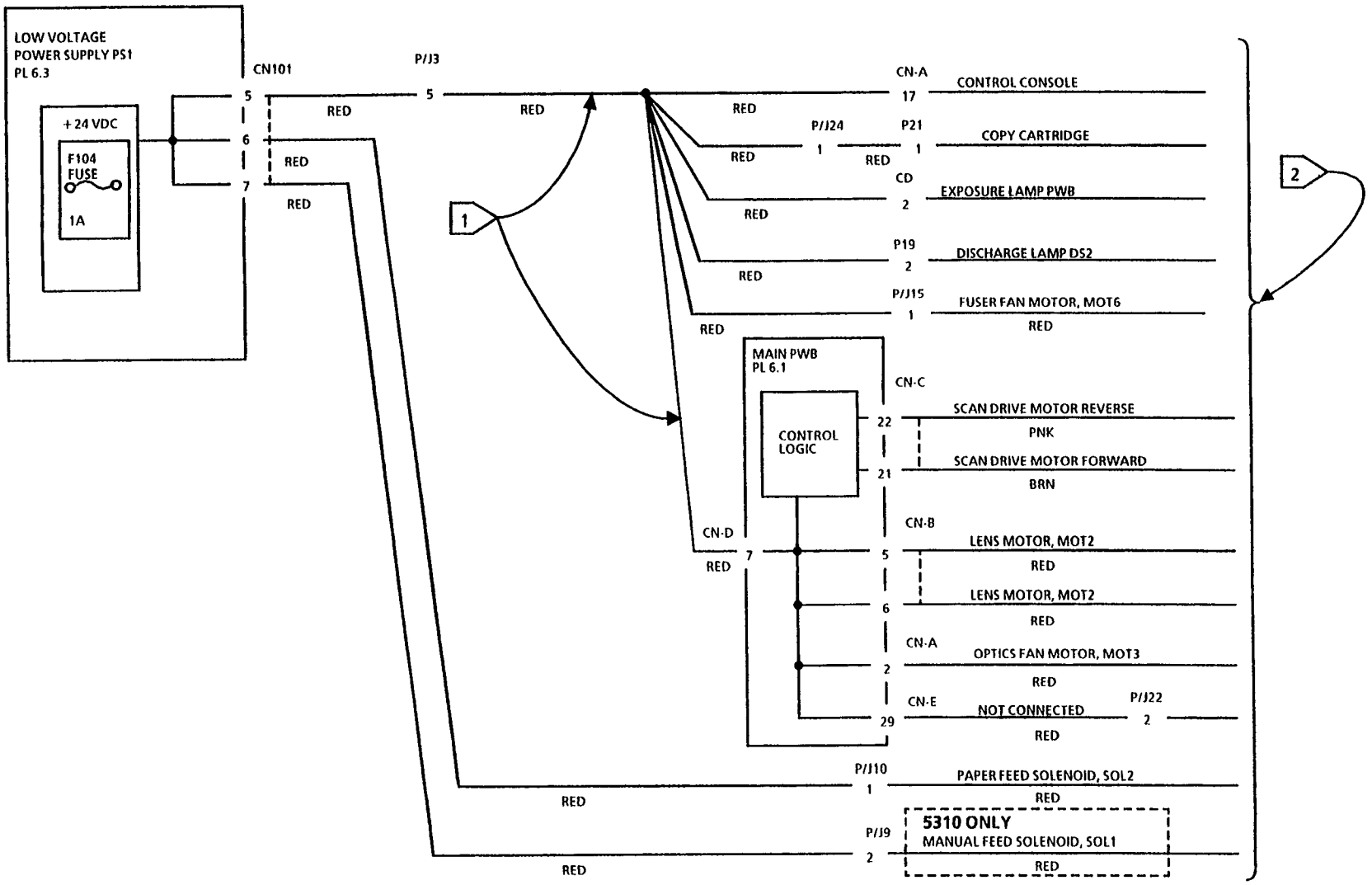
Go to Flag 1 and check for an open wire.

Disconnect CN101 on the LVPS.
Replace fuse F104.
Reinstall the power cord and manually hold down the power on/off switch S1.
Fuse F104 is blown again.

Y N

Go to Flag 2 and check for a short to ground.

Replace the LVPS.


LOW VOLTAGE
POWER SUPPLY PS1
PL 6.3
+24 VDC
F104
FUSE
1A
CN101
5
6
7
P/J3
5
RED
RED
RED
1
2
CN-A
17
CONTROL CONSOLE
P/J24
1
P21
1
COPY CARTRIDGE
CD
2
EXPOSURE LAMP PWB
P19
2
DISCHARGE LAMP DS2
P/J15
1
FUSER FAN MOTOR, MOT6
MAIN PWB
PL 6.1
CONTROL
LOGIC
CN-C
22
SCAN DRIVE MOTOR REVERSE
PNK
21
SCAN DRIVE MOTOR FORWARD
BRN
CN-D
7
CN-B
5
LENS MOTOR, MOT2
6
LENS MOTOR, MOT2
CN-A
2
OPTICS FAN MOTOR, MOT3
CN-E
29
NOT CONNECTED
P/J22
2
P/J10
1
PAPER FEED SOLENOID, SOL2
P/J9
2
5310 ONLY
MANUAL FEED SOLENOID, SOL1

1.4 +35 VDC RAP

NOTE: Enter this RAP from the L4 RAP only.

Switch off the power and remove the power cord.
Remove the LVPS cover.
Check fuse F103.
Fuse F103 is blown.

Y

N

Fuse F105 is blown.

Y

N

Connect the meter to CN101-3 (+) on the LVPS and ground (-).
Reinstall the power cord and manually hold down the power on/off switch S1.
There is approximately +35 VDC present.

Y

N

Replace the LVPS.

Go to Flag 1 and Flag 2 and check for an open wire.

Disconnect CN101 on the LVPS.
Replace fuse F105.
Reinstall the power cord and manually hold down the power on/off switch S1.
Fuse F105 is blown again.

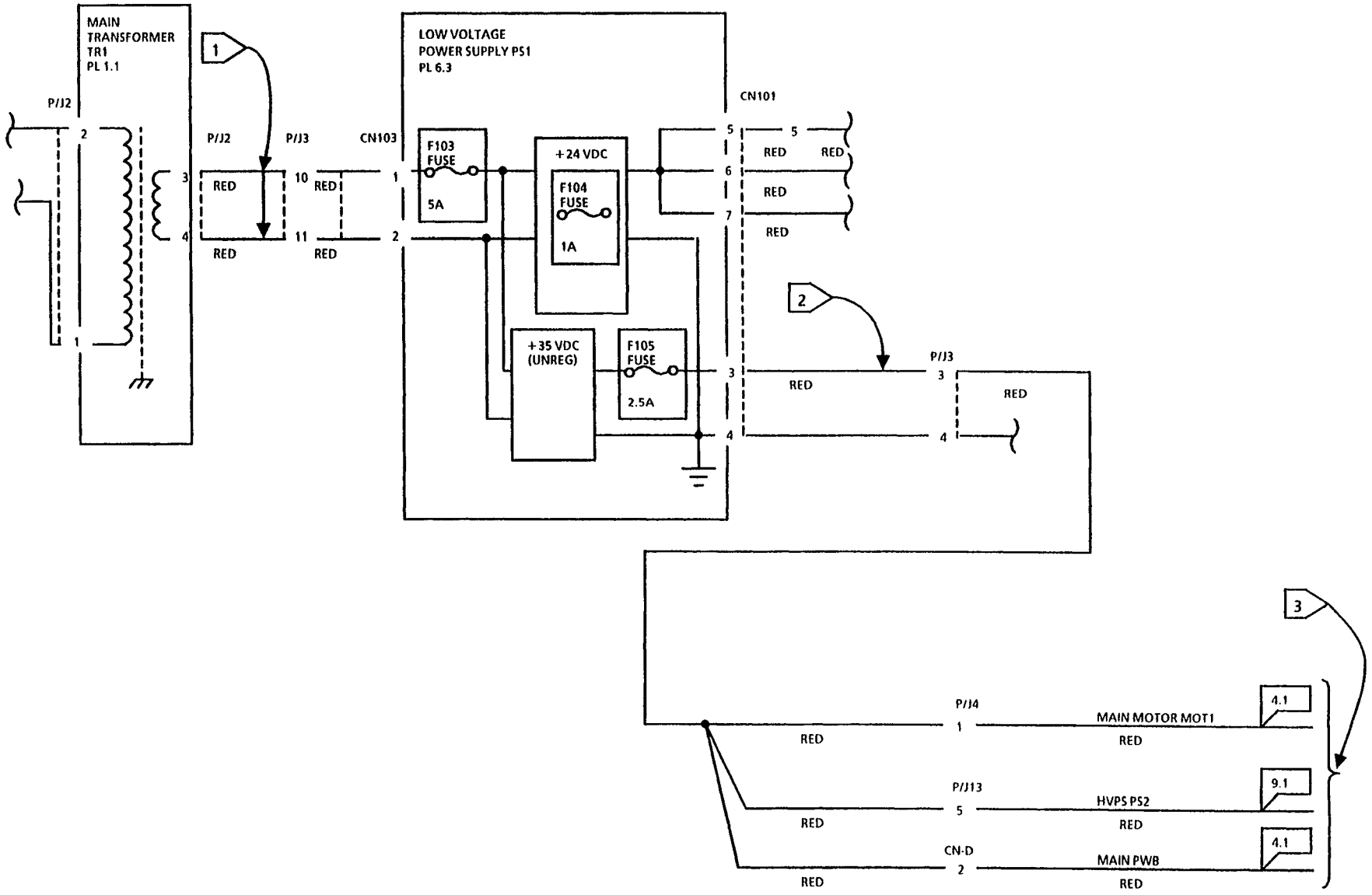
Y

N

Go to Flag 2 and Flag 3 and check for a short to ground.

Replace the LVPS.

Replace F103. If F103 bows again, replace the LVPS.


MAIN
TRANSFORMER
TR1
PL 1.1
P/J2
2
3
4
1
1
P/J2
P/J3
RED
10
11
RED
RED
RED
CN103
LOW VOLTAGE
POWER SUPPLY PS1
PL 6.3
F103
FUSE
5A
1
2
+24 VDC
F104
FUSE
1A
+35 VDC
(UNREG)
F105
FUSE
2.5A
CN101
5
6
7
3
4
5
RED
RED
RED
RED
RED
2
P/J3
3
4
RED
RED
3
P/J4
1
RED
MAIN MOTOR MOT1
RED
4.1
P/J13
5
RED
HVPS PS2
RED
9.1
CN-D
2
RED
MAIN PWB
RED
4.1

2.1 SELECTION/INDICATION RAP

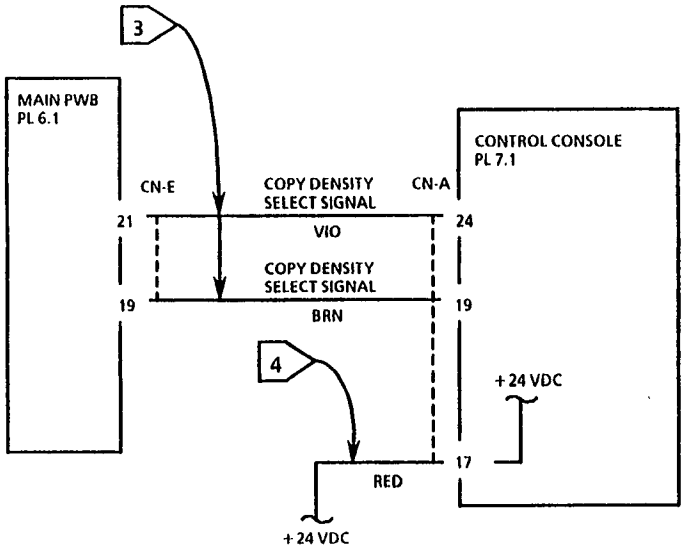
There is a selection problem.

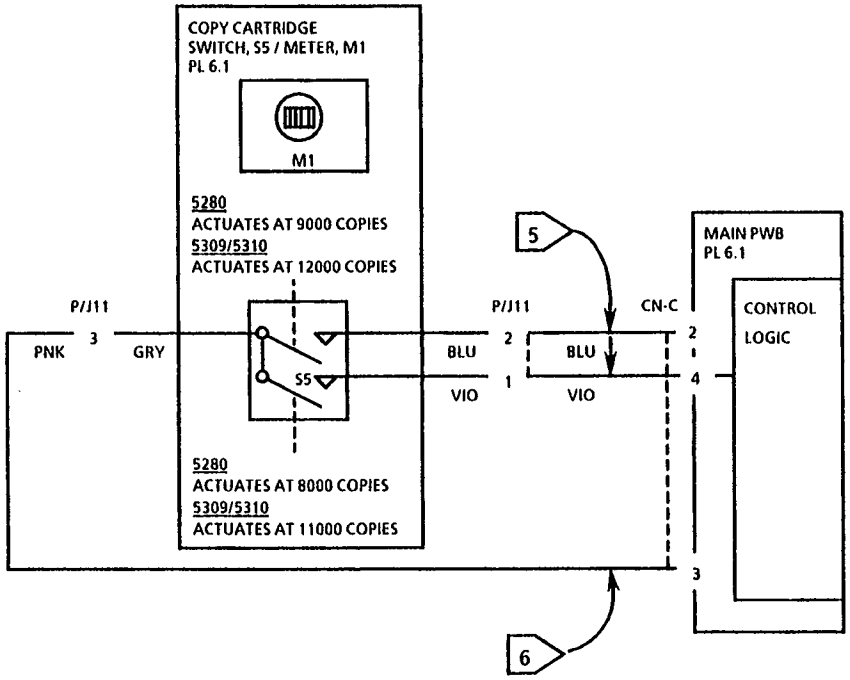
Y **N**

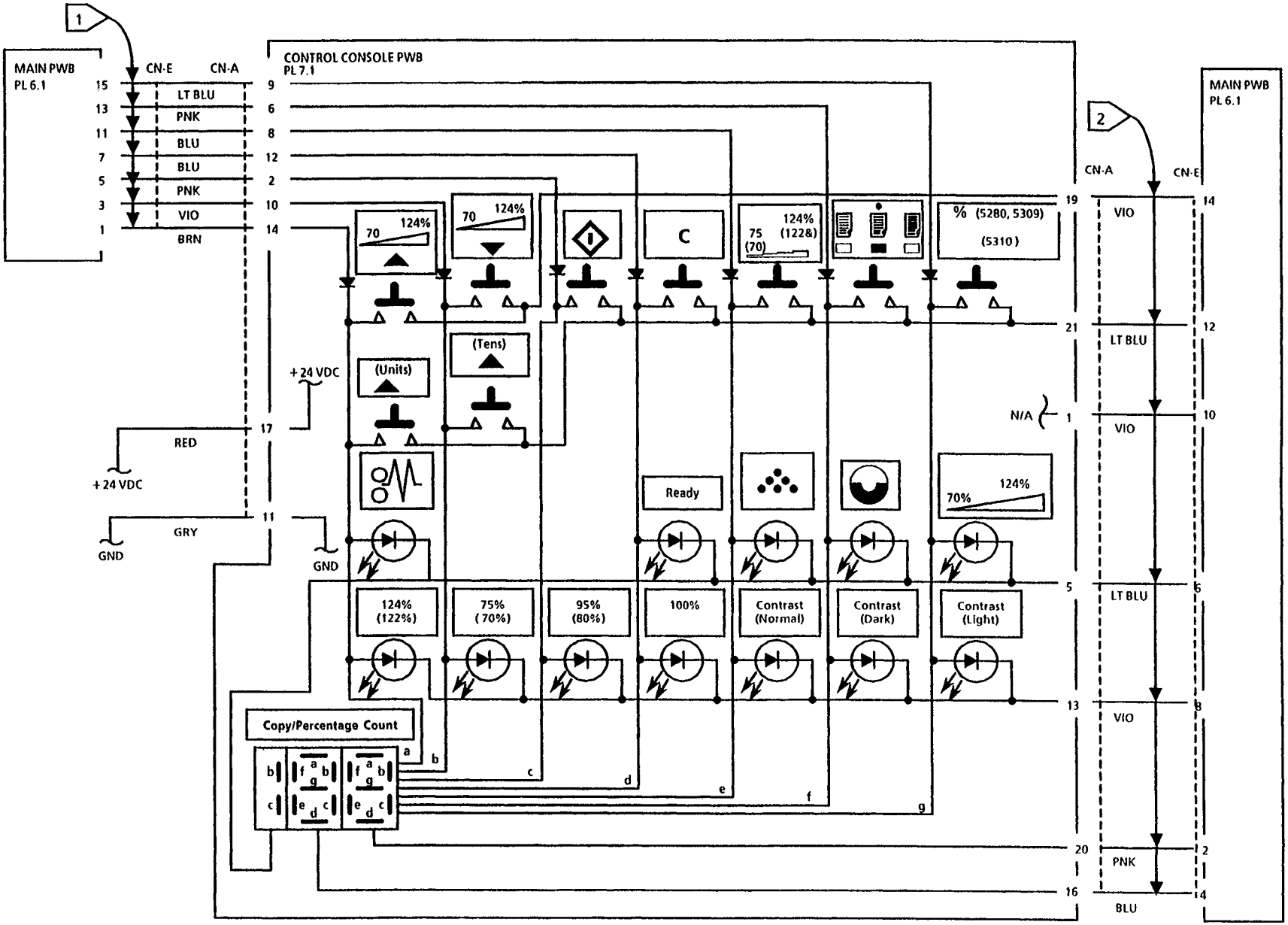
There is an indication problem.

- If only one lamp is defective, replace the control console PWB.
- If more than one lamp is defective, go to Flag 1 and Flag 2 and check for an open or short circuit.
- For copy cartridge lamp warning problems, go to Flag 5 and Flag 6 and check for an open or short circuit.

- If only one button is defective, replace the control console PWB.
- If more than one button is defective, go to Flag 1 and Flag 2 and check for an open or short circuit.
- For copy contrast selection problems, go to Flag 3 and Flag 4 and check for an open or short circuit.






1
MAIN PWB
PL 6.1
CN-E
CN-A
CONTROL CONSOLE PWB
PL 7.1
15
LT BLU
9
13
PNK
6
11
BLU
8
7
BLU
12
5
PNK
2
3
VIO
10
1
BRN
14
70
124%
70
124%
C
75
(122&)
(70)
124%
% (5280, 5309)
(5310)
19
21
(Units)
(Tens)
+24 VDC
17
RED
+24 VDC
11
GRY
GND
GND
N/A
1
Ready
70%
124%
5
124%
(122%)
75%
(70%)
95%
(80%)
100%
Contrast
(Normal)
Contrast
(Dark)
Contrast
(Light)
13
Copy/Percentage Count
a
b
c
d
e
f
g
20
16
2
MAIN PWB
PL 6.1
CN-A
CN-E
VIO
14
LT BLU
12
VIO
10
LT BLU
6
VIO
8
PNK
2
BLU
4

3.1 COPY COUNT METER RAP (RXL ONLY)

Set the meter to measure +24 VDC.
Connect the meter between CN-E-30 (+) on the main PWB and chassis (-).
Switch on the power.
There is +24 VDC present.

Y N

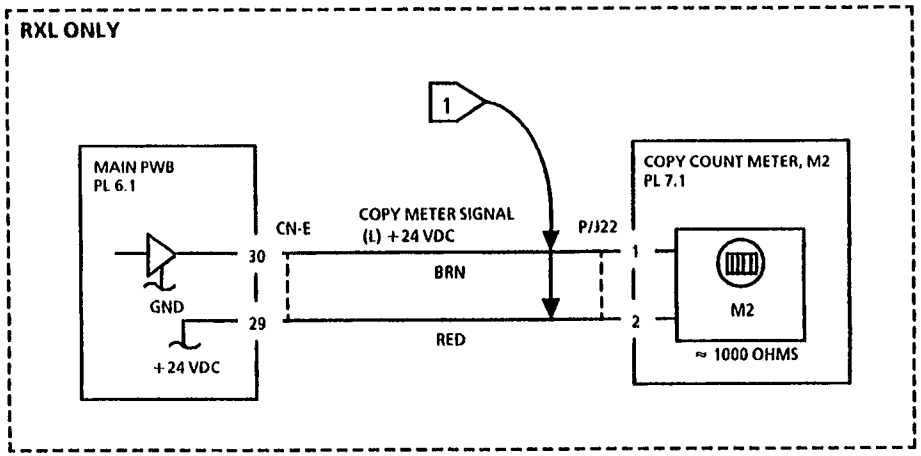
Go to Flag 1 and check for an open circuit.

Observe the meter while making a copy.
The voltage momentarily decreased from +24 VDC to approximately 0 VDC when the exposure lamp came on.

Y N

Replace the main PWB.

Replace the copy count meter.



6.1 EXPOSURE RAP

Perform the following:

CAUTION

Cover the copy cartridge while it is out of the machine to protect it from light shock.

1. Remove the following:
   a. (REP 14.3): Rear cover, left cover and right cover.
   b. Dry ink and copy cartridges.
   c. (REP 14.1): Remove the front access cover and the front interior cover, but leave the two connectors connected.
2. Reinstall the dry ink and copy cartridges.
3. (Figure 1): On the exposure control PWB, connect the meter between the "+" side of C202 (+) and ground on the "−" side of RC201 (−).
4. Set the meter to measure +6 VDC.
5. Remove any document from the platen glass and close the platen cover.
6. Set the copy contrast to the darker position.
7. Holding in the interlock rod, make five copies, reading the meter when the exposure lamp comes on. Adjust the copy density dial (VR201) (Figure 1) until the voltage is 6±0.4 VDC.
8. If adjustment cannot be made, go to Flag 1 and check for an open wire. If OK, replace the auto exposure sensor. If problem still exists, replace the exposure control PWB.
9. (Figure 2) When the exposure is correct, remove the copy density dial from VR201 and reinstall it on VR201 in the center position.

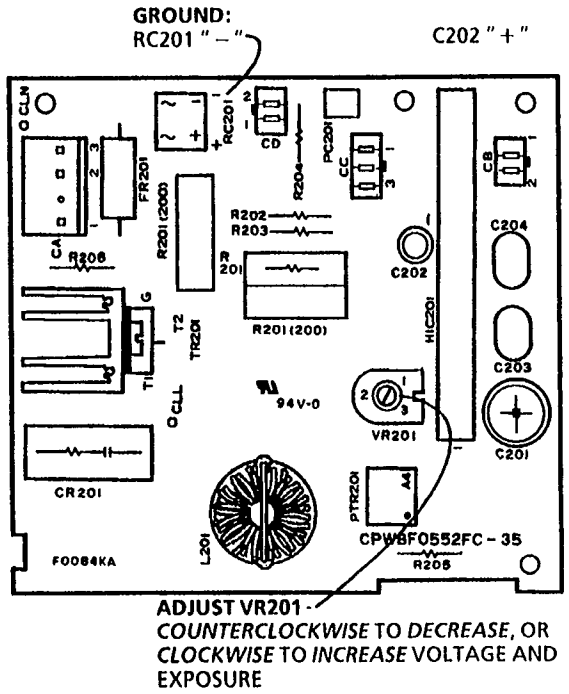


Figure 1. Exposure Voltage Check/Adjustment

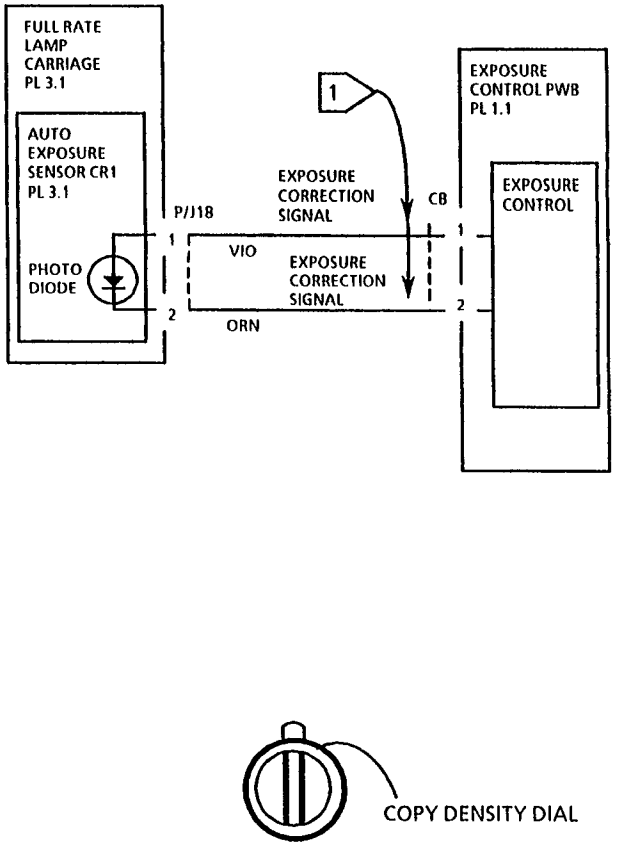
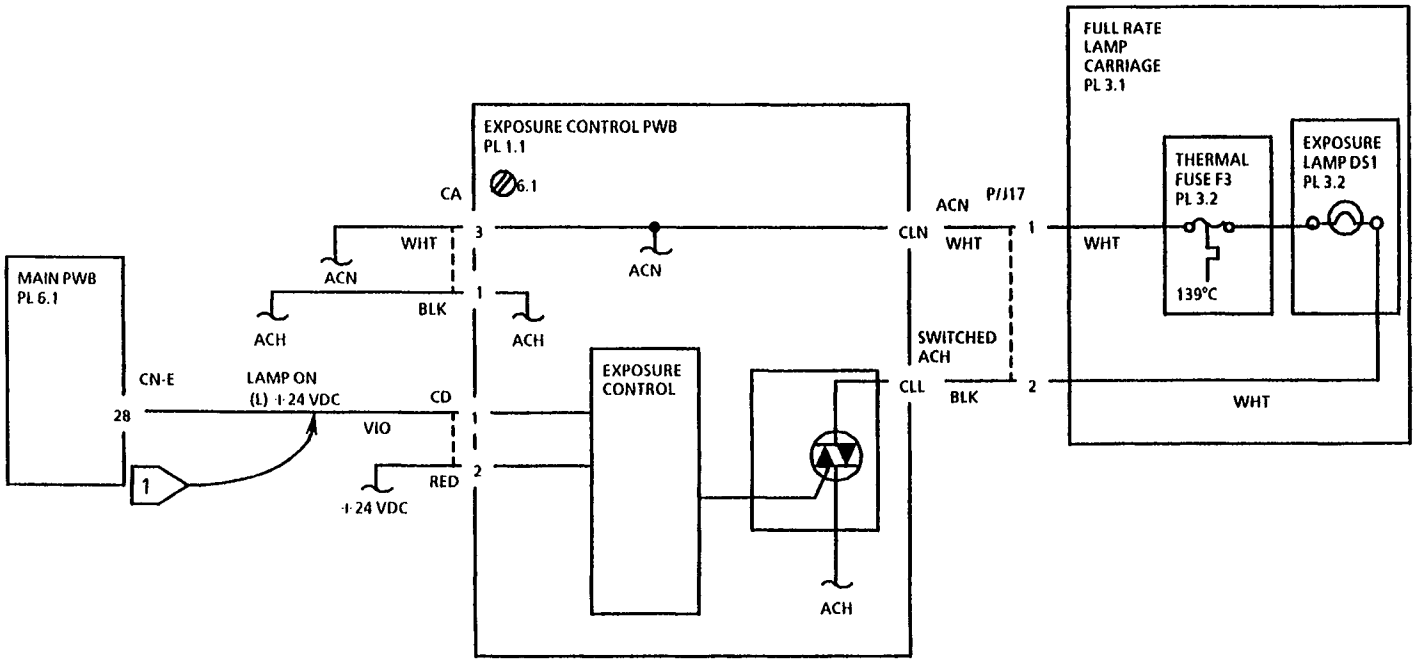


Figure 2. Centering the Copy Density dial.

6.2 EXPOSURE LAMP ON DURING STANDBY RAP

Go to Flag 1 and check for a short circuit. If OK, replace the main PWB. If problem still exists, replace the exposure control PWB.



6.3 COOLING FAN MOTOR RAP

Switch the power off then on.
Set the meter to measure +24 VDC.
Connect the meter between CN-A-1 (+) on the main PWB and chassis (-).
There is +24 VDC present.

Y N

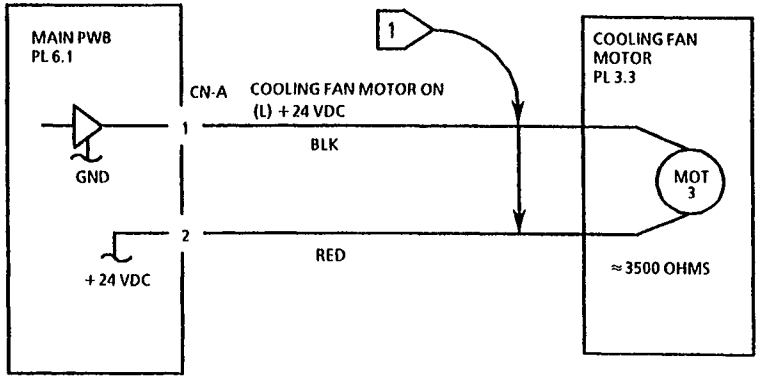
Y: Go to Flag 1 and check the cooling fan motor and its associated wiring for an open.

Make a copy while observing the meter.
The voltage decreased from +24 VDC to approximately 0 VDC.

Y N

Y: Replace the main PWB.

Replace the cooling fan motor.



6.4 SCAN DRIVE MOTOR SPEED RAP

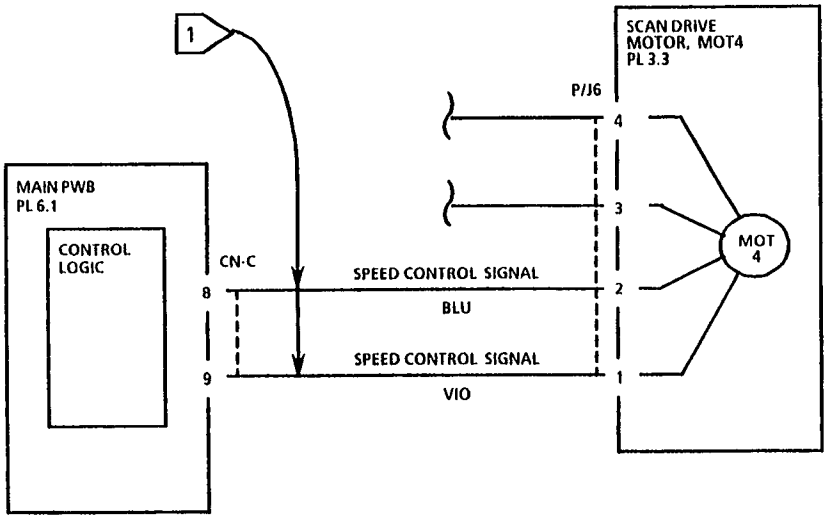
NOTE: Enter this RAP only from the Magnification Defect RAP (CQ14).

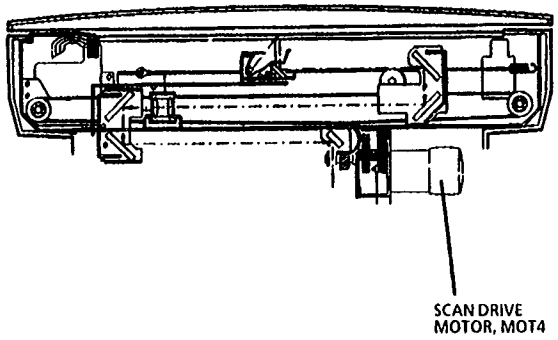
Make a 100% copy and observe the speed of the lamp carriage as it scans and rescans. **The carriage travels in both directions at nearly the same rate of speed.**

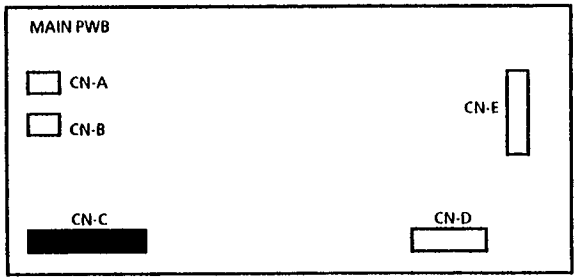
Y N

Check the scan drive for a mechanical problem or obstruction. If OK, replace the scan drive motor, MOT4 (PL 3.3).

(This indicates there is a speed control signal problem. Go to Flag 1 and check the wiring for an open or short to ground.







8.1 NO MANUAL FEED RAP

The copier is a 5310.

Y N

The copier is a 5280 or a 5309.

Clear any jam.

When the **Ready** lamp is lit, insert a sheet of paper into the manual feed tray.

The main motor comes on.

Y N

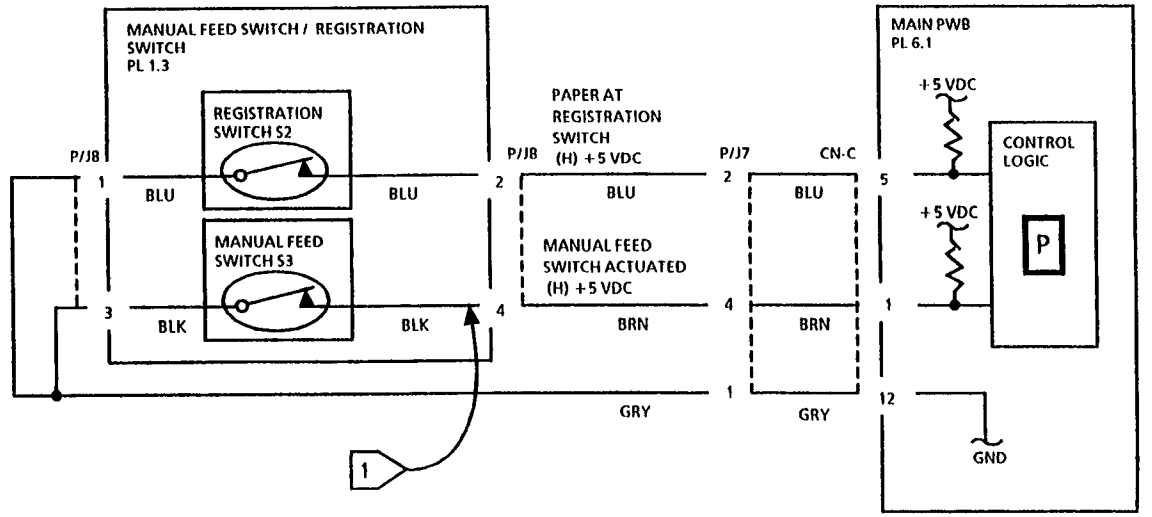
Go to Flag 1 and check for a short circuit to chassis. If OK, replace the main PWB.

Check for a mechanical feed problem such as worn rollers or paper path obstructions.

Fill the alternate tray. Select the alternate tray and press start.

If a P status code is present, go to the P Status Code RAP. Otherwise, check for a mechanical feed problem such as worn rollers or paper path obstructions.

5280 / 5309 ONLY



9.1 BLANK COPY RAP

Make a copy of Side B of the Standard Test Pattern and open the front access cover when the lamp carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. **There is an image on the drum.**

Y N

Reinstall the copy cartridge and close the copier. Connect the meter between CN-C-16 on the main PWB (+) and chassis (-). **With the front access cover closed, there is approximately + 5 VDC present.**

Y N

Connect the meter between P13-5 (+) on the HVPS and chassis (-). **There is between +33 and +38 VDC present.**

Y N

Go to Flag 3 and check for an open wire. If OK, replace the LVPS PS2.

Go to Flag 1 and check for an open wire.

Press the **Start** button. **The voltage decreased to approximately 0 VDC during scanning.**

Y N

Replace the Main PWB.

Go to Flag 5 and check the charge corotron circuit for an open. If OK, replace the Copy Cartridge. If the problem remains, replace the HVPS PS2.

Reinstall the copy cartridge and close the copier. Connect the meter between CN-C-18 (+) on the main PWB and chassis (-). **With the front access cover closed, there is approximately + 5 VDC present.**

Y N

Go to Flag 2 and check for an open wire. If OK, replace the HVPS PS2.

A

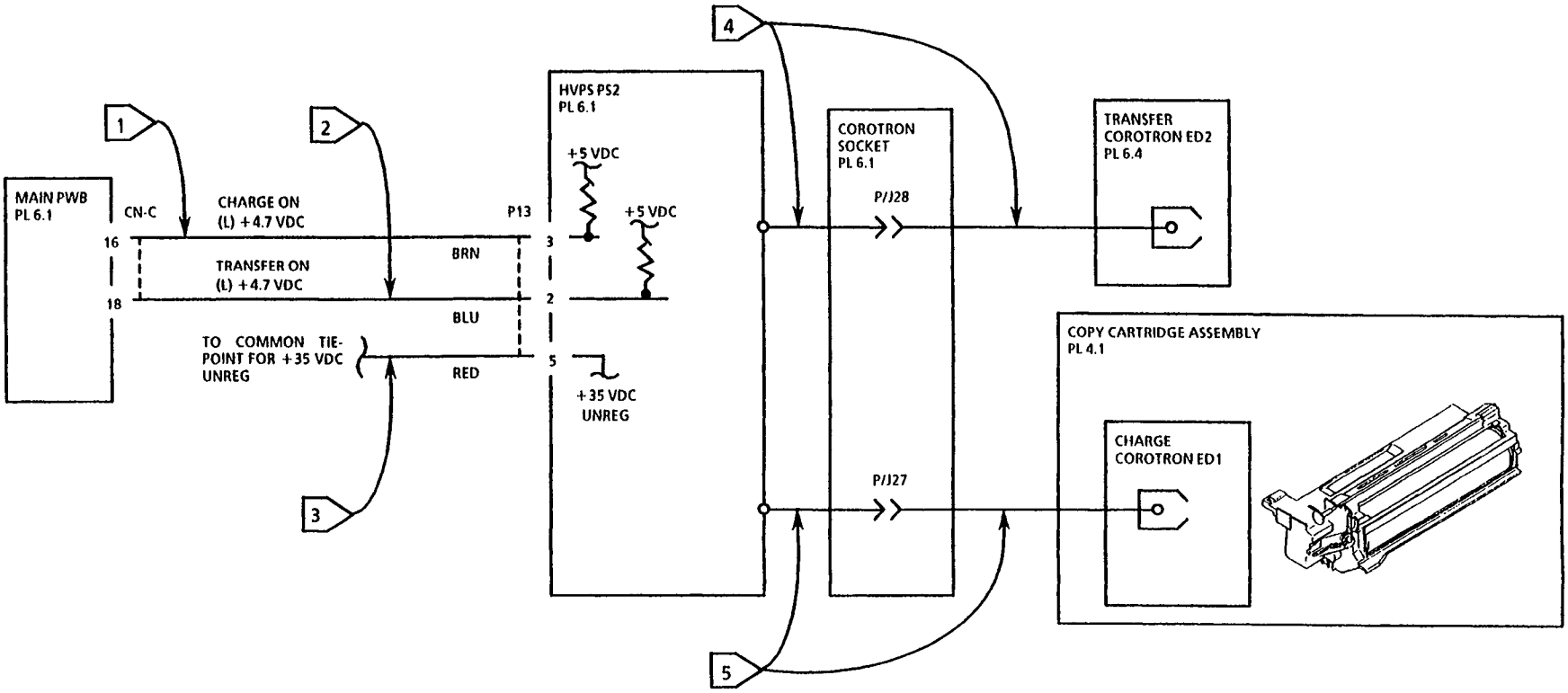
A

Press the **Start** button. **The voltage decreased to approximately 0 VDC during scanning.**

Y N

Replace the Main PWB.

Go to Flag 4 and check the transfer corotron circuit for an open. If OK, replace the HVPS PS2.


1
2
3
4
5
MAIN PWB
PL 6.1
CN-C
16
18
CHARGE ON
(L) +4.7 VDC
TRANSFER ON
(L) +4.7 VDC
TO COMMON TIE-
POINT FOR +35 VDC
UNREG
P13
BRN
BLU
RED
HVPS PS2
PL 6.1
+5 VDC
+5 VDC
+35 VDC
UNREG
3
2
5
COROTRON
SOCKET
PL 6.1
P/J28
P/J27
TRANSFER
COROTRON ED2
PL 6.4
COPY CARTRIDGE ASSEMBLY
PL 4.1
CHARGE
COROTRON ED1

9.2 BLACK COPY RAP

Set the meter to measure +24 VDC. Connect the meter between CN-E-28 (+) on the main PWB and chassis (-). **With the front cover interlock actuated, there is +24 VDC present.**

Y N

Go to Flag 2 and check for an open circuit.

Press **Start.** **The voltage decreased to approximately 0 VDC during scanning.**

Y N

Replace the Main PWB.

Go to Flag 3 and check for an open circuit. If OK, set the meter to measure 115 VAC USMG, 220 VAC RXL. Connect the meter between CA-1 (+) and CA-3 (-) on the exposure control PWB. **There is ACH present.**

Y N

Go to Flag 1 and check for an open circuit.

Switch off the copier. Disconnect P/J17. Set the meter to measure ohms. Connect the meter between P/J17-1 and P/J17-2. **There is between 1 and 2 ohms present.**

Y N

Check for a blown thermal fuse F3. **F3 is blown.**

Y N

Go to Flag 5 and check the exposure lamp DS1 and its associated wiring for an open circuit.

Replace thermal fuse F3. **With the front cover interlock actuated, the exposure lamp is on during standby.**

Y N

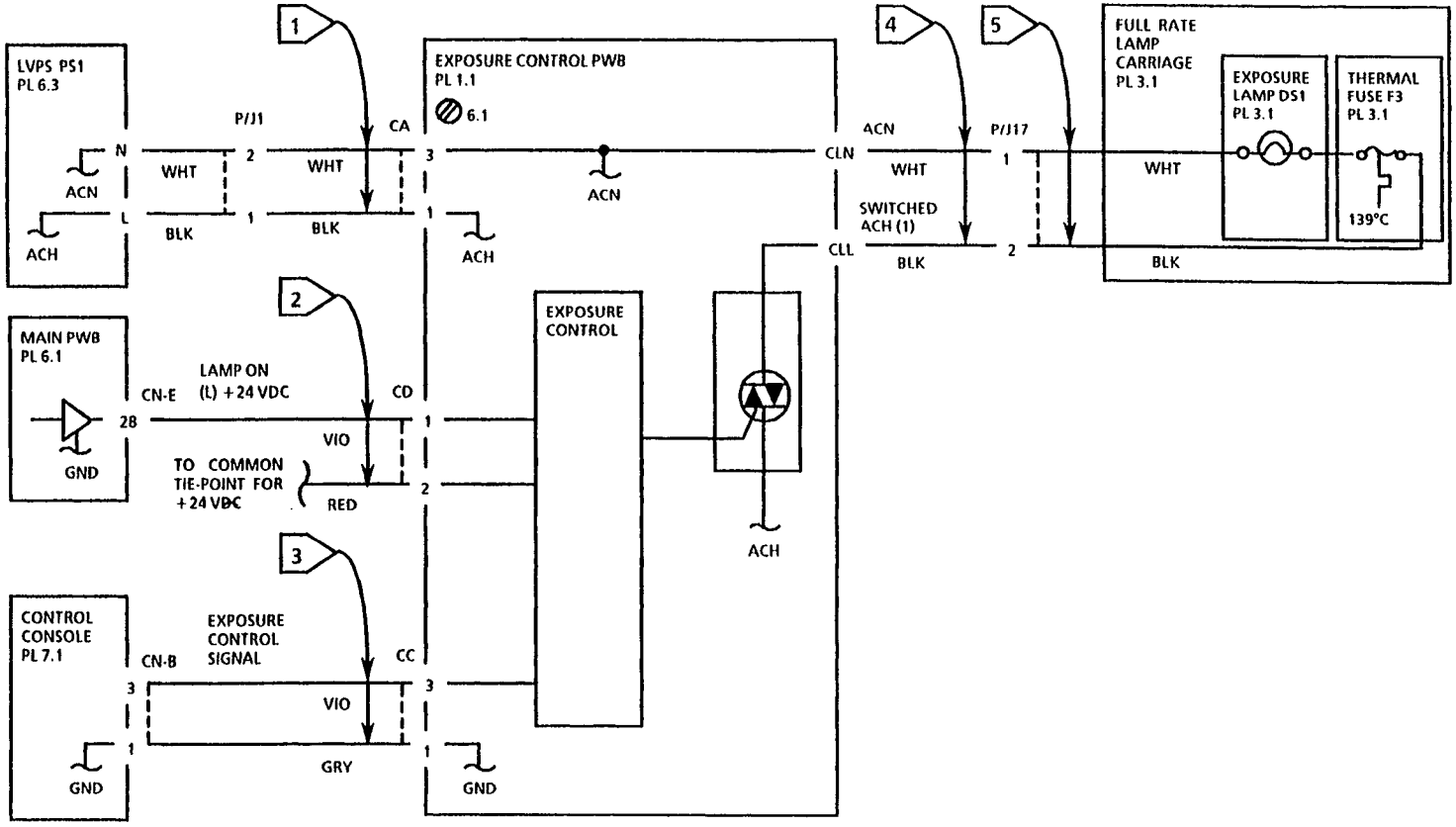
The problem is repaired.

Go to 6.2 Exposure Lamp On In Standby RAP.

A

A

Go to Flag 4 and check for an open circuit between the exposure control PWB and P/J7. Replace the Exposure Control PWB.


LVPS PS1
PL 6.3
P/J1
N
ACN
WHT
2
WHT
L
ACH
BLK
1
BLK
1
CA
3
1
EXPOSURE CONTROL PWB
PL 1.1
6.1
ACN
ACH
ACN
CLN
WHT
P/J17
1
SWITCHED
ACH (1)
CLL
BLK
2
FULL RATE
LAMP
CARRIAGE
PL 3.1
EXPOSURE
LAMP DS1
PL 3.1
THERMAL
FUSE F3
PL 3.1
WHT
139°C
BLK
MAIN PWB
PL 6.1
CN-E
28
GND
LAMP ON
(L) +24 VDC
CD
1
VIO
TO COMMON
TIE-POINT FOR
+24 VDC
RED
2
EXPOSURE
CONTROL
ACH
CONTROL
CONSOLE
PL 7.1
CN-B
3
1
GND
EXPOSURE
CONTROL
SIGNAL
CC
3
VIO
GRY
1
GND
1
2
3
4
5

9.3 DISCHARGE LAMP RAP

Switch on the power and wait until the main motor switches off.
Connect the meter between CN-E-27 (+) on the main PWB and chassis (-).
There is +24 VDC present.

Y N

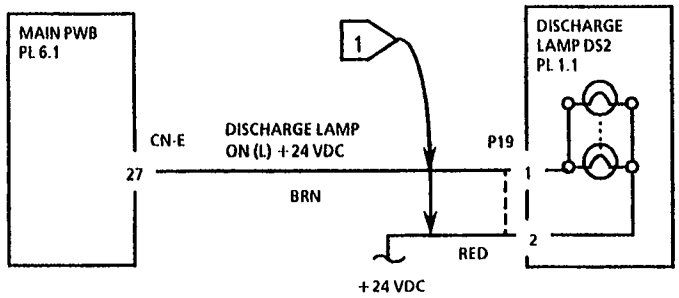
Go to Flag 1 and check the discharge lamp and its associated wiring for an open or short circuit.

Press **Start.** **The voltage decreased to approximately 0 VDC.**

Y N

Replace the Main PWB

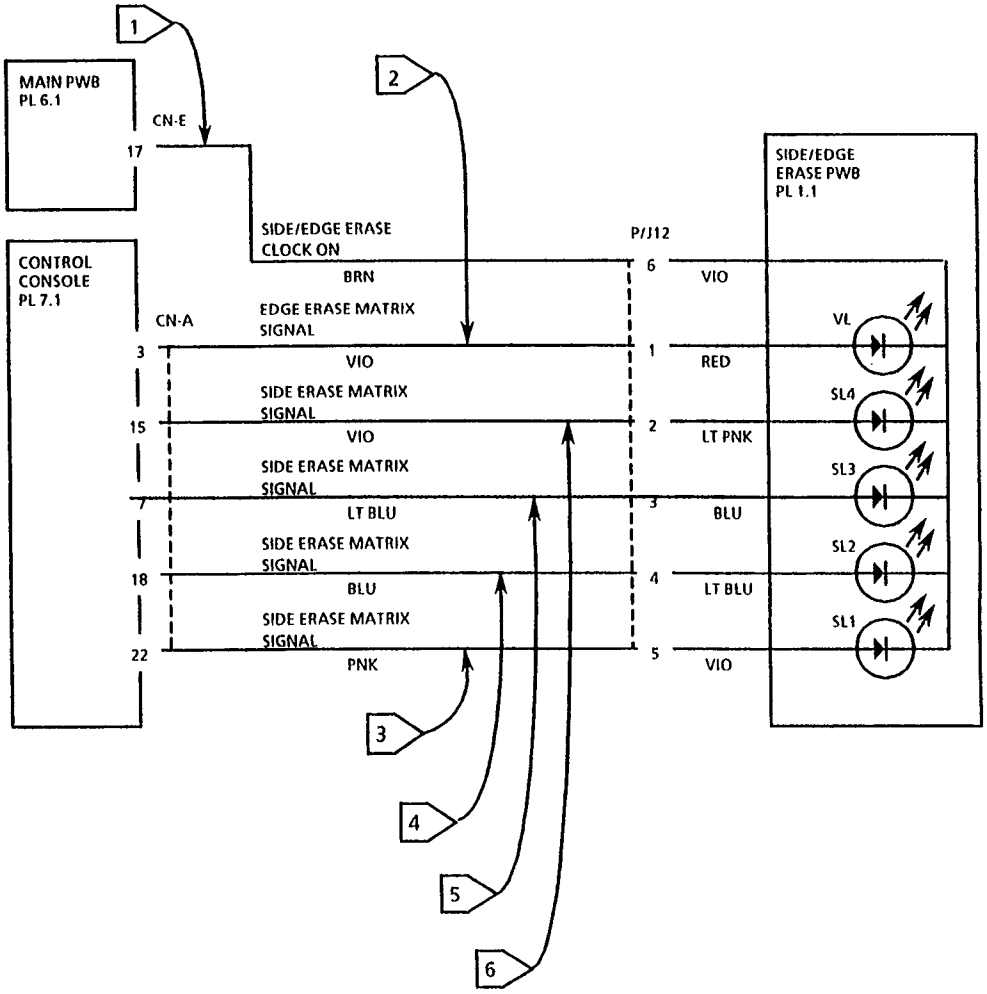
Clean the Discharge Lamp.



9.4 SIDE/EDGE ERASE PWB RAP

Classify the problem:

- **None of the lamps light,** go to Flag 1 and check for an open or short circuit.
- **Only the edge erase lamp (VL) does not light,** go to Flag 2 and check for an open or short circuit.
- **The 79 to 82% side erase lamp (SL1) does not light,** go to Flag 3 and check for an open or short circuit.
- **The 76 to 78% side erase lamp (SL2) does not light,** go to Flag 4 and check for an open or short circuit.
- **The 73 to 75% side erase lamp (SL3) does not light,** go to Flag 5 and check for an open or short circuit.
- **The 70 to 72% side erase lamp (SL4) does not light,** go to Flag 6 and check for an open or short circuit.



9.5 DEVELOPER BIAS RAP

Classify the problem.

If copies are light, go to Flag 2 and check for an open circuit. If OK, replace the HVPS.
If copies have background, connect the meter between P/J24-5 (+) and chassis (-). Press **Start.** **There is approximately - 235 VDC present.**

Y N

Connect the meter between CN-C-17(+) on the main PWB and chassis (-).
There is approximately +4 VDC present.

Y N

Go to Flag 1 and check for an open wire. If OK, replace the HVPS.

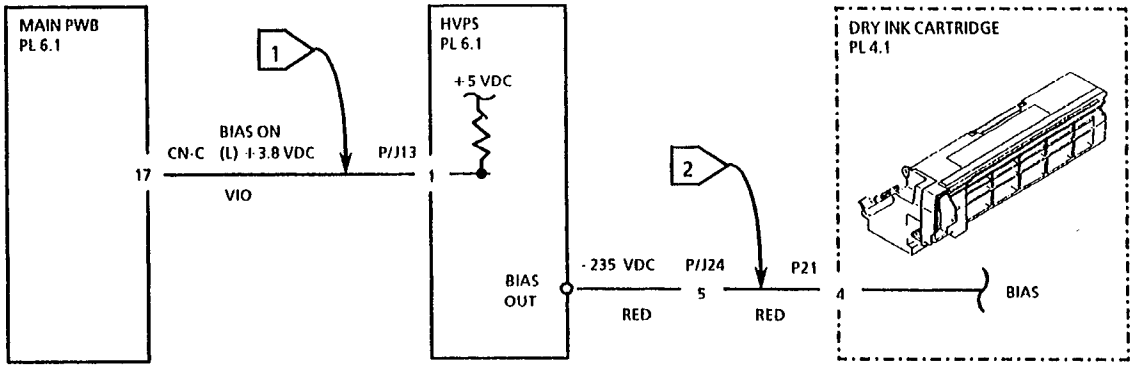
Press **Start.** **The voltage decreased to approximately 0 VDC.**

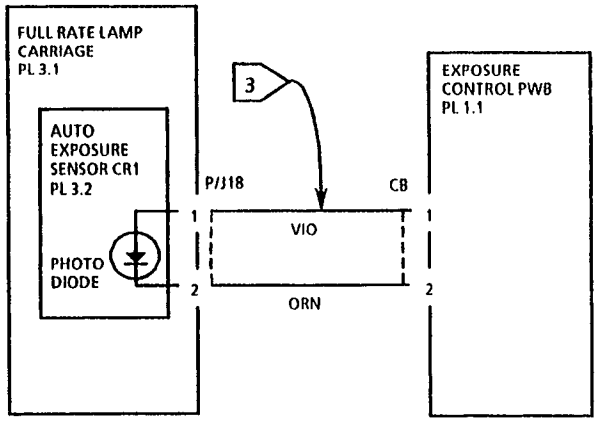
Y N

Replace the Main PWB.

Go to Flag 2 and check for a short circuit to ground between P/J24-5 and Bias Out. If OK, replace the HVPS.

Go to Flag 3 and check for a short circuit to ground between P/J18-1 and CB-1.





9.6 TONER DISPENSE RAP

Remove the Dry Ink Cartridge. Cheat the front access cover interlock. Switch on the power. Observe the toner dispenser drive gear through the space vacated by the Dry Ink Cartridge. **The gear rotates.**

Y N

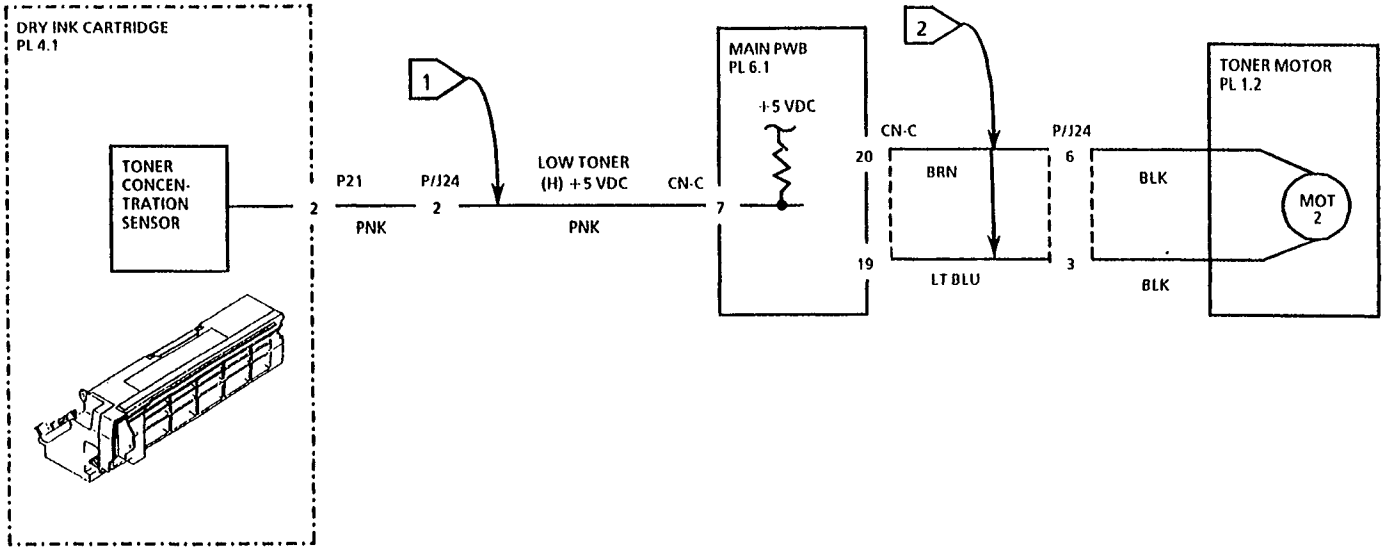
Go to Flag 2 and check for an open circuit. (Normal resistance should be about 100 ohms.) If OK, carefully remove pin 20 from CN-C on the Main PWB. Select **Peak Hold** and set the meter to measure +25 VDC. **There is +25 VDC present both at pin 20 and on the wire.**

Y N

Go to Flag 1 and check for a short circuit to ground. If OK, replace the Main PWB.

Replace the Toner Motor.

(This indicates that the Dry Ink Cartridge has either a mechanical or electrical problem.) Replace the Dry Ink Cartridge.


DRY INK CARTRIDGE
PL 4.1
TONER CONCEN-TRATION SENSOR
2
P21
PNK
P/J24
2
1
LOW TONER (H) +5 VDC
PNK
CN-C
7
MAIN PWB
PL 6.1
+5 VDC
CN-C
20
19
2
BRN
LT BLU
P/J24
6
3
BLK
BLK
TONER MOTOR
PL 1.2
MOT 2

9.7 PREMATURE DRY INK CARTRIDGE FAILURE RAP (LESS THAN 3K COPIES)

Cheat the front access cover interlock. Switch on the copier and observe the operation of the discharge lamp. **The lamp comes on.**

Y N

Go to 9.3 Discharge Lamp RAP.

Select 70% reduction and make a copy.
There are black borders on the copy.

Y N

Instruct the customer that making any copies with an open document cover or with high image area coverage, such as photographs, will reduce the life of the Dry Ink Cartridge.

Go to the 9.4 Side/Edge Erase PWB RAP.

Section Contents

CQ 1 COPY DEFECT ENTRY RAP

1. Select the defect that matches the copy quality problem from the DEFECT column in the four tables (Figures 1, 2, 3, and 4).

2. Make several copies of the Standard Test Pattern (82P524 - USMG; 82P523 - RXL) or the original associated with that table. Read the DEFINITION OR SPECIFICATION column in order to verify that a defect exists.

3. Read the REFERENCE column of the defect that best describes the copy quality problem.

NOTE: Before examining a copy, note its orientation in the receiving tray. The LEAD EDGE of the copy is the edge on the left. The TRAIL EDGE of the copy is the edge on the right. The FRONT EDGE of the copy is the edge facing the front of the copier. The REAR EDGE of the copy is the edge facing the rear of the copier.

USING THE SIDE A COPIES (Test Pattern 82P524 - USMG; 82P523 - RXL)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
LIGHT COPY	The .7 solid area density block nearest the center of the copy is equal to or greater than the .7 solid area density block on the test pattern. With the dark setting selected, the .10 line pair on the test pattern is partially or completely copied. (This is only a guideline only, not a specification.)	Go to CQ 4 Light Copy RAP.
RESOLUTION	For a 100% copy, both the horizontal and vertical 4.3 LP/mm arrays for the center resolution target should be resolved completely. Also, both the horizontal and vertical 3.5 LP/mm arrays for the side resolution targets should be resolved completely. (This is only a guideline, not a specification.)	Go to CQ 8 Resolution RAP.
MISREGISTRATION (LEAD EDGE)	The center 10 mm reference line along the lead edge of the copy must be 6 to 9 mm from the edge of a 100% copy.	Go to CQ 6 Misregistration (Lead Edge) RAP.
MISREGISTRATION (FRONT EDGE)	One of the 10 mm reference lines along the front edge of a 100% copy should be 10 mm, $\pm$ 1 mm, from the edge. (This is only a guideline, not a specification.)	Perform ADJ 6.5 Front Edge Registration
SKEW	The left 10 mm reference line along the lead edge of the copy should be the same distance from the edge of the copy as the right 10 mm reference line, $\pm$ 1.2 mm. (This is only a guideline, not a specification.)	Go to CQ 9 Skew RAP.
UNEVEN DENSITY	The density of all the 1.0 blocks are within 0.3 density of each other. (This is only a guideline, not a specification.))	Go to CQ 12 Uneven Density (Front Edge to Rear Edge) RAP.
UNFUSED COPY	Gently rub the .7 patch four times with a paper towel (twice lead edge to trail edge and twice front edge to rear edge). The image must not smudge.	Go to CQ 13 Unfused Copy RAP.

Figure 1. CQ1 Copy Defect RAP Tables

(continued on next page)

USING THE SIDE B COPIES (Test Pattern 82P524 - USMG; 82P523 - RXL)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
SKIPS / SMEARS	The 2.5 LP/mm array for a 100% copy should be completely resolved. (This is only a guideline, not a specification.)	Go to CQ 10 Skips / Smears RAP.
SMUDGE	After image transfer, the toner image that is not yet fused is rubbed by any part of the machine or foreign material.	Inspect the copy transport area between the transfer corotron and the fuser for the cause of this problem .
MAGNIFICATION	The tolerance for a 100% copy should be within $\pm$ 0.8% of the original size in the front edge to rear edge direction. (This is only a guideline, not a specification.)	Go to CQ 14 Magnification Defect RAP.

Figure 2. CQ1 Copy Defect RAP Tables

(continued on next page)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
BACKGROUND	The background area is darker than the corresponding area of a black-and-white original . (Classify the background defect as occurring over the entire copy; as bands in the lead edge to the trail edge direction; or as bands in the front edge to rear edge direction.)	Go to CQ 2.1 Background (Overall) RAP. Go to CQ 2.2 Background Bands (Lead Edge to Trail Edge) RAP. Go to CQ 2.3 Background Bands (Front Edge to Rear Edge) RAP.
BLACK COPIES	A black image covers the entire copy.	Go to 9.2 Black Copy RAP in Section 2.
BLACK BORDERS	A black border is present on reduction copies.	Go to 9.4 Side/Edge Erase PWB in Section 2.
BLANK / NEARLY BLANK COPIES	The copy is white; there is no image, or only a very faint image, on the copy.	Go to 9.1 Blank Copy RAP.
LINES AND STREAKS	A dirty line, 1.0 mm wide or less, appears on the copy.	Go to CQ 5 Lines and Streaks RAP.
RESIDUAL IMAGE	An electrostatic or toner image is transferred to subsequent copies.	Go to CQ 7 Residual Image RAP.
SPOTS	Dark toner spots adhere to non-image areas of the copy.	Go to CQ 11 Spots RAP.

Figure 3. CQ1 Copy Defect RAP Tables

(continued on next page)

USING THE GRAY DUSTING (Produced by making a copy of either side of the Standard Test Pattern after rotating the exposure control knob to its darkest setting and selecting the 'dark' copy contrast setting.)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
DELETIONS	There is an area of the copy that carries no toner image or a very faint toner image . The deleted areas may be any shape or randomly distributed over the copy. *NOTE: There is a normal 9 mm deletion (maximum) along the rear edge of all copies.* (Classify the deletion defect as random or repetitive spots, as deletions in the lead edge to the trail edge direction, or as deletions in the front edge to rear edge direction.)	Go to CQ 3.1 Deletions (Random or Repetitive Spots) RAP. Go to CQ 3.2 Deletions (Lead Edge to Trail Edge) RAP. Go to CQ 3.3 Deletions (Front Edge to Rear Edge) RAP.

Figure 4. CQ1 Copy Defect RAP Tables

CQ 2.1 BACKGROUND (OVERALL) RAP

INITIAL ACTION

Ensure that the optics are clean.

PROCEDURE

Make one copy of Side A of the Standard Test Pattern with the copy contrast control set at the DARK position. **The .05 line pair is partially copied or copied completely.**

Y N

Make one copy of Side A again with the copy contrast control set at the NORMAL position. Compare all of the 0.7 solid area density blocks on the copy with any of the 1.0 solid area density blocks on the test pattern. **One or more of the 0.7 solid area density blocks is greater than the 1.0 solid area density blocks on the test pattern.**

Y N

(This indicates that the exposure and density specs are met.) Replace the Copy Cartridge (PL 4.1).

(This indicates that the exposure spec is met, but the density spec is not met.) Replace the Dry Ink Cartridge (PL 4.1). If the problem remains, replace the Copy Cartridge (PL 4.1).

A

A

(This indicates that the exposure spec and/or the density spec are not met.) Open the front access cover and cheat the cover interlock. Switch on the copier and observe the operation of the discharge lamp. **The lamp comes on.**

Y N

Go to 9.3 Discharge Lamp RAP in Section 2.

Perform ADJ 6.1 Exposure. If the adjustment cannot be obtained, perform the following:

- Go to 6.1 Exposure RAP in Section 2.
- Go to 9.5 Developer Bias RAP in Section 2.
- Replace the Copy Cartridge (PL 4.1)
- Replace the Dry Ink Cartridge (PL 4.1)

CQ 2.2 BACKGROUND BANDS (LEAD EDGE TO TRAIL EDGE) RAP

PROCEDURE

Make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

- **If the band appears on the photoreceptor,** inspect the optics for contamination. If OK, inspect the exposure lamp for discoloration. If it has dark areas that cannot be cleaned, replace the Exposure Lamp (PL 3.1). If the exposure lamp is OK, replace the Copy Cartridge (PL 4.1).

- **If the band does not appear on the photoreceptor,** clean the transfer corotron. If the problem remains, replace the Transfer Corotron Wire (PL 6.4).

CQ 2.3 BACKGROUND BANDS (FRONT EDGE TO REAR EDGE) RAP

PROCEDURE

Classify the type of background defect.

- **Fixed bands of background.**
  Open the front access cover. Cheat the front access cover interlock. Switch on the copier and observe the operation of the discharge lamp. **The lamp comes on.**
  Y N
  | Go to 9.3 Discharge Lamp in Section 2.
  Replace the Copy Cartridge (PL 4.1).

- **Random bands of background.**
  Make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

  -- **If the band appears on the photoreceptor,** observe the exposure lamp as it is scanning.
  If the exposure lamp flashes or dims, ensure that it is secured properly in the lamp contacts. If OK, replace the Exposure Control PWB (PL 1.1).
  If the exposure lamp is OK, replace the Copy Cartridge (PL 4.1). If the problem remains, replace the HVPS (PL 6.1) for a charging problem.

  -- **If the band does not appear on the photoreceptor,** replace the HVPS (PL 6.1) for a transfer related problem.

CQ 3.1 DELETIONS (RANDOM OR REPETITIVE SPOTS) RAP

PROCEDURE

Classify the type of deletion defect.

- **If the deletion repeats every 73 mm,** inspect the pressure roll for damage and replace it as required (PL 6.2).

- **If the deletion repeats every 78 mm,** inspect the heat roll for damage and replace it as required (PL 5.1).

- **If the deletion repeats every 157 mm,** try to remove the defect by cleaning the photoreceptor with a soft cloth and Film Remover. If the defect cannot be removed, replace the Copy Cartridge (PL 4.1).

- **If the deletion does not repeat every 73, 78, or 157 mm,** rotate the exposure control knob to its darkest setting and set the copy contrast to dark. (This should produce a 'gray' dusting.) Make a copy of either side of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

  -- **If the deletion appears on the photoreceptor,** replace the Dry Ink Cartridge (PL 4.1)

  -- **If the deletion does not appear on the photoreceptor,** replace the copy paper with a new supply. If the problem still exists, clean the transfer corotron wire. If the problem still exists, replace the Transfer Corotron Wire (PL 6.4).

CQ 3.2 DELETIONS (LEAD EDGE TO TRAIL EDGE) RAP

PROCEDURE

NOTE: There is a normal 9 mm deletion (maximum) along the rear edge of all copies.

Classify the type of deletion defect.

- **If the deletion appears as lines or bands that align with the fuser stripper fingers or the thermistor,** inspect the stripper fingers and thermistor for contamination or damage. Clean or replace them as required (PL 5.1)

- **If the deletion does not appear to align with the fuser stripper fingers or the thermistor,** rotate the exposure control knob to its darkest setting and set the copy contrast to dark. (This should produce a 'gray' dusting.) Make a copy of either side of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

  -- **If the deletion appears on the photoreceptor,** check the magnetic roll (on the dry ink cartridge) and photoreceptor for foreign material such as a staple or a piece of paper (clean as required). If OK, replace the Copy Cartridge (PL 4.1). If the problem still exists, replace the Dry Ink Cartridge (PL 4.1)

  -- **If the deletion does not appear on the photoreceptor,** clean the transfer corotron wire. If the problem still exists, replace the Transfer Corotron Wire (PL 6.4).

CQ 3.3 DELETIONS (FRONT EDGE TO REAR EDGE) RAP

INITIAL ACTION

If the image deletion along the lead edge is more than 4 mm from the lead edge of a 100% copy, go to CQ 6, Misregistration (Lead Edge) RAP.

PROCEDURE

Open the front access cover. Cheat the front access cover interlock. Switch on the copier and observe the operation of the discharge lamp. **The lamp comes on.**

Y N

Go to 9.3 Discharge Lamp in Section 2.

Rotate the exposure control knob to its darkest setting and set the copy contrast to dark. (This should produce a 'gray' dusting.) Make a copy of either side of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

- **If the deletion appears on the photoreceptor,** clean the contact on the copy cartridge and the contact that it interfaces with. Also, inspect these contacts for damage. If OK, replace the Copy Cartridge (PL 4.1). If the problem still exists, replace the HVPS (PL 6.1).

- **If the deletion does <u>not</u> appear on the photoreceptor,** clean the contact on the transfer corotron and the contact that it interfaces with. Also, inspect these contacts for damage. If the problem still exists, replace the HVPS (PL 6.1).

CQ 4 LIGHT COPY RAP

PROCEDURE

Make one copy of Side A of the Standard Test Pattern with the copy contrast control set at the DARK position. **The .10 line pair is reproduced.**

Y N

Perform ADJ 6.1 Exposure. If the adjustment cannot be obtained, perform the following:

- Go to 6.1 Exposure RAP in Section 2.
- Go to 9.5 Developer Bias RAP in Section 2.
- Replace Copy Cartridge (PL 4.1)
- Replace Dry Ink Cartridge (PL 4.1)

(This indicates that the exposure level is OK.) Go to 9.6 Toner Dispense RAP in Section 2.

CQ 5 LINES AND STREAKS RAP

INITIAL ACTION

Ensure that the optics are clean and free of any obstructions.

PROCEDURE

Make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

- **If the line or streak appears on the photoreceptor,** wipe the defect from of the photoreceptor with a soft cloth.
  <u>If the defect was removed</u>, replace the Copy Cartridge (PL 4.1).
  <u>If the defect was not removed</u>, clean the photoreceptor with a soft cloth and Film Remover. If the defect is still present, replace the Copy Cartridge (PL 4.1).
- **A line or streak appears on the photoreceptor in reduction mode.** The LED in the BL circuit board has been changed (new color is red). Refer to Service Bulletin # 5310 011 dated: 5/11/94.
- **If the line or streak does <u>not</u> appear on the photoreceptor,** classify the location of the defect.
  <u>If the line or streak aligns with the fuser stripper fingers or the thermistor,</u> inspect the stripper fingers, thermistor, and heat roll for contamination or damage Clean or replace them as required (PL 5.1)
  <u>If the line or streak **does not** align with the fuser stripper fingers or the thermistor,</u> inspect the paper path from the transfer corotron to the exit tray for toner build-up in the area that aligns with the line or streak on the copy. Clean or repair the affected component(s) as required.

CQ 6 MISREGISTRATION (LEAD EDGE) RAP

PROCEDURE

Classify the type of misregistration problem.

- If misregistration occurs only from the bypass tray (5280/5309), go to Step 1.
- If misregistration occurs only from the manual feeder (5310), go to Step 2.
- If misregistration occurs only from the main tray, go to Step 3.
- If misregistration occurs from the bypass tray, or the manual feeder, and the main tray, go to Step 4.

1. Check the bypass tray for the following:
   a. Inspect the paper path from this tray for an obstruction, such as a burr.
   b. Check the manual feed switch actuator for binding. Repair as required (PL 1.3).
   c. Replace the Manual Feed Switch / Registration Switch (PL 1.3).
2. Check the manual feeder for the following:
   a. Ensure that the manual registration roll and manual registration pinch roll are clean.
   b. Inspect the manual feed solenoid, SOL1 (PL 2.3) for binding.
   c. Inspect the manual registration roll pawl for wear.

(Cont'd)

   d. Inspect the paper path for an obstruction such as a burr.
   e. Replace the registration roll clutch gear (24T) (PL 1.2) and the spring (PL 6.3).
3. Classify the main tray misregistration problem.

   Registration varies:

   a. Ensure that the paper feed roller is clean.
   b. Inspect the paper path from this tray for an obstruction, such as a burr.
   c. Replace paper feed clutch gear (27T), spring, sleeve, and boss (PL 6.3).

   Registration **does not** vary:

   a. Perform ADJ 8.3 Paper Feed Roller Home Position.
4. Classify the bypass tray, or manual feeder, and main tray misregistration problem.

   Registration varies:

   a. Ensure that preregistration roller and registration roller are clean.
   b. Inspect the paper registration area for an obstruction such as a burr.
   c. Check the registration gate and its linkage for binding (PL 6.1).

   Registration **does not** vary:

   a Perform ADJ 8.2 Lead Edge to Trail Edge Registration.

CQ 7 RESIDUAL IMAGE RAP

PROCEDURE

Make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

- **If the residual image appears on the photoreceptor,** replace the Copy Cartridge (PL 4.1).
- **If the residual image does not appear on the photoreceptor,** inspect the heat roll and the pressure roll for contamination or damage. Clean or replace them as required (PL 5.1 & 6.2). If OK, ensure that the surface of the thermistor is clean and that it is positioned correctly against the heat roll.

CQ 8 RESOLUTION RAP

INITIAL ACTION

Replace the copy paper with a new supply. Ensure that the optics are clean.

PROCEDURE

1. Perform ADJ 6.3 Number 4/5 Mirror Unit.
2. Replace the Copy Cartridge (PL 4.1).

CQ 9 SKEW RAP

PROCEDURE

Classify the type of skew problem.

- If skew occurs only from the bypass tray (5280/5309) or the manual feeder (5310), go to Step 1.
- If skew occurs only from the main tray, go to Step 2.
- If skew occurs from the bypass tray or the manual feeder and the main tray, go to Step 3.

1. Check the bypass tray for the following.
   a. Ensure that the bypass guide or manual feeder is set to the correct width of the copy paper.
   b. Inspect the paper path from this tray for an obstruction, such as a burr.
2. Check the main tray for the following.
   a. Ensure that the paper guides are set to the correct width and length of the copy paper.
   b. Inspect the paper path from this tray for an obstruction, such as a burr.
   c. Inspect the paper feed roller for contamination and wear. Clean or replace the roller as required (PL 6.2).
   d. Replace the Paper Cassette (PL 2.1 & 2.2).
3. (This indicates that the problem is a common paper handling problem or an optical alignment problem.) Open the front access cover and cheat the cover interlock. Slide the corotron cleaning tool toward the front of the copier about 2 - 3 inches. Without a document on the glass, close the platen cover and make a copy. Measure the distance between the edge of the black band and the edge of the paper, about and inch from both lead and trail edges of the paper. **Skew is present.**

Y **N**

(The skew is optics related.)

-- Check the top (lead edge) registration edge for damage. If OK, perform ADJ 8.1 Registration Plate.

(The skew is paper handling related.)

-- Inspect the paper registration area for an obstruction such as a burr.

-- Inspect the registration gate for nicks or burrs. Repair the gate as required.

-- Inspect the preregistration rollers and the registration rollers for contamination and wear. Clean or replace them as required (PL 6.2).

-- Replace the Paper Feed Assembly (PL 6.2).

CQ 10 SKIPS AND SMEARS RAP

PROCEDURE

Make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem. **The defect appears on the photoreceptor.**

Y N

(This indicates that the problem occurs during transfer.) Examine the copies you made for analysis when you entered CQ1.

- **If the smears repeat at a fixed interval,** inspect the gears that provide drive to the fuser for contamination or wear. Clean or replace them as required (PL 5.1). Also, inspect the gears that provide drive for the paper after it is registered for contamination or wear. Clean or replace them as required (PL 6.3).
- **If the smears occur randomly or at the same location,** perform the following:
  - -- Ensure that the paper weight meets specification.
  - -- Clean the transfer corotron wire. If the problem remains, replace the Transfer Corotron Wire (PL 6.4).
  - -- Replace the HVPS (PL 6.1).

A

A

(This indicates that the problem occurs before transfer.) Examine the copies you made for analysis when you entered CQ1.

- **If the skips occur at the same location on every copy,** check the lamp carriage rail for contamination or wear (PL 3.2).
- **If the skips repeat at a fixed interval,** perform the following:
  - -- Inspect the gears that provides drive to the copy cartridge for contamination or wear. Clean or replace them as required (PL 6.2).
  - -- Inspect the gears that provide drive to the lamp carriage assembly for contamination or wear. Clean or replace them as required (PL 3.3).
- **If the skips occur randomly,** check the scan drive motor for smooth operation. Replace it as required (PL 3.3).
- **If blurs occur randomly,** it may be caused by the wire harness being to close to the high voltage transformer. Refer to Service Bulletin # 5310 004 dated: 7/8/93.

CQ 11 SPOTS RAP

PROCEDURE

Classify the type of spot problem.

- If **the spots occur in the same location on every copy,** ensure that the spots are not on the document. Inspect and clean the two sides of the platen glass. Ensure that the platen cushion is free of contamination.
- **If the spots do not occur in the same location on every copy,** make a copy of Side B of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.
  - -- **If the spots appear on the photoreceptor,** try to wipe the defect off the photoreceptor with a soft cloth.
    If the defect can be wiped off the photoreceptor, inspect the dry ink cartridge area and developer material for contamination. Replace the Dry Ink Cartridge as required (PL 4.1).
    If the defect cannot be wiped off the photoreceptor, try cleaning the photoreceptor with a soft cloth and Film Remover. If the defect cannot be removed, replace the Copy Cartridge (PL 4.1).

CQ 11 SPOTS RAP (CONT'D)

-- **If the spots do <u>not</u> appear on the photoreceptor,** inspect the paper path from the transfer corotron to the exit tray for toner build-up on a component which aligns with the spots on the copy. Clean or repair it as required. If OK, inspect the stripper fingers and thermistor for contamination or damage, and for damage they may have caused to the heat roll. Clean or replace them as required (PL 5.1) Also, check the pressure roll for contamination or damage. Clean or replace the roll as required (PL 6.2).

CQ 12 UNEVEN DENSITY (FRONT EDGE TO REAR EDGE) RAP

PROCEDURE

The density is even from the front edge to the rear edge of the copy.

Y N

Make a copy of Side A of the Standard Test Pattern and open the front access cover when the scan carriage reaches the center of scan. Clear the paper jam, and remove the copy cartridge. Observe the image on the photoreceptor and classify the problem.

- **If the density appears <u>uneven</u> on the photoreceptor,** replace the Copy Cartridge (PL 4.1). If the problem remains, replace the Dry Ink Cartridge (PL 4.1).
- **If the density appears <u>even</u> on the photoreceptor,** clean the transfer corotron. If the problem remains, replace the Transfer Corotron Wire (PL 6.4).

Inspect the optics for contamination. If OK, inspect the exposure lamp for discoloration. If it has dark areas that cannot be cleaned, replace the Exposure Lamp (PL 3.1). If OK, perform ADJ 6.2 Exposure Plate Alignment.

CQ 13 UNFUSED COPY RAP

PROCEDURE

1. Replace the copy paper with a new supply.
2. Ensure that the fuser loading mechanism (PL 6.2) is operating freely.
2. Replace the Heat Rod HTR1 (PL 5.1).
3. Replace the Thermistor RT1 (PL 5.1).

CQ 14 MAGNIFICATION DEFECT RAP

PROCEDURE

1. **If the magnification defect is in the lead edge to trail edge direction,** go to 6.4 Scan Drive Motor Speed RAP.

2. **If the magnification defect is in the front edge to rear edge direction,** switch the copier off then on. If a fault code is declared, go to the appropriate RAP. Otherwise, perform ADJ 6.4 Front to Rear Magnification.

SECTION CONTENTS

REPAIRS

ELECTRICAL

MAIN DRIVES

OPTICS

PAPER FEED AND REGISTRATION

XEROGRAPHICS

COPY TRANSPORTATION AND FUSING

FRAMES AND COVERS

ADJUSTMENTS

OPTICS

PAPER FEED AND REGISTRATION

REP 1.1 Power On-Off Switch/Interlock(S1), and Power Receptacle

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

NOTE: Proceed only as far as necessary to remove the desired parts.

1. *Remove the Rear Cover (REP14.2).*
2. *(Figure 1): Remove the Low Voltage Power Supply Cover.*

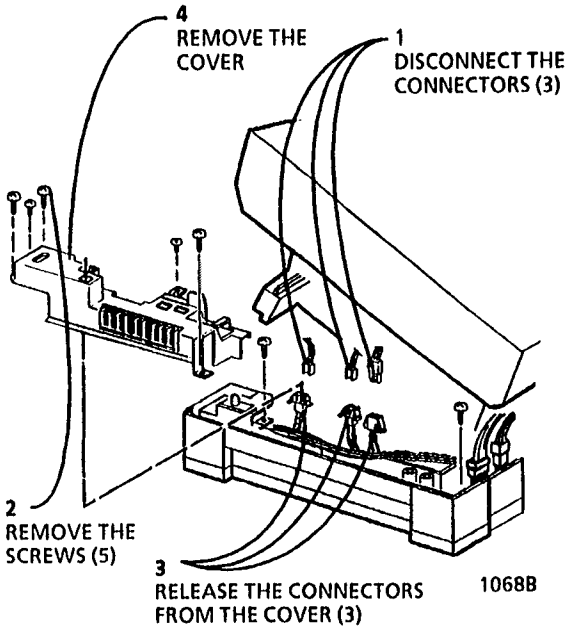


Figure 1. Removing the LVPS Cover

3. (Figure 2): Remove the Switch Bracket.
4. Remove the desired part from the bracket after disconnecting the wires.

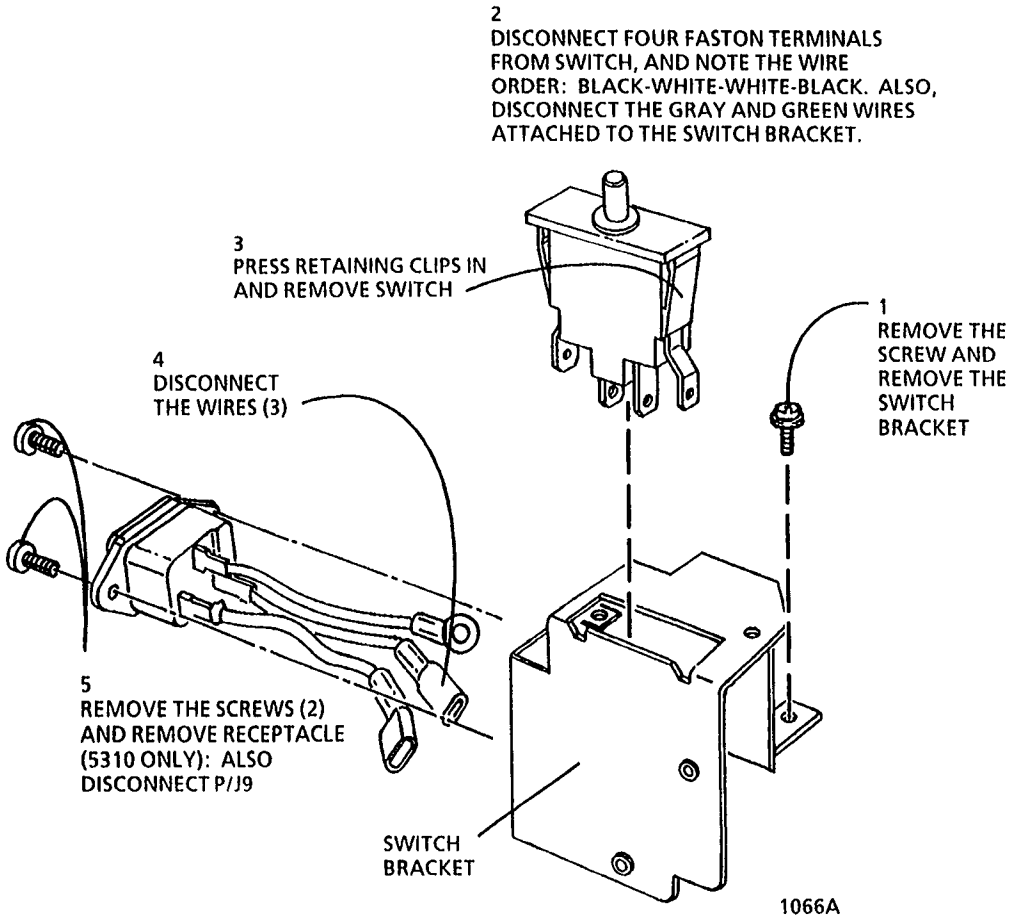


Figure 2. Removing the Power On-Off Switch/Interlock or the Power Receptacle

REP 1.2 Low Voltage Power Supply (LVPS) (PS1)

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Power On-Off Switch Bracket, using (REP 1.1).
2. (Figure 1): Remove the Low Voltage Power Supply.

NOTE: When replacing the LVPS, disconnect the following wires: the black and white wires on the Power On-Off Switch that attach to the LVPS, and the green and gray wires attached to the switch bracket. Also, disconnect the following connectors: CN101, CN102, CN103, N, L, and HL.

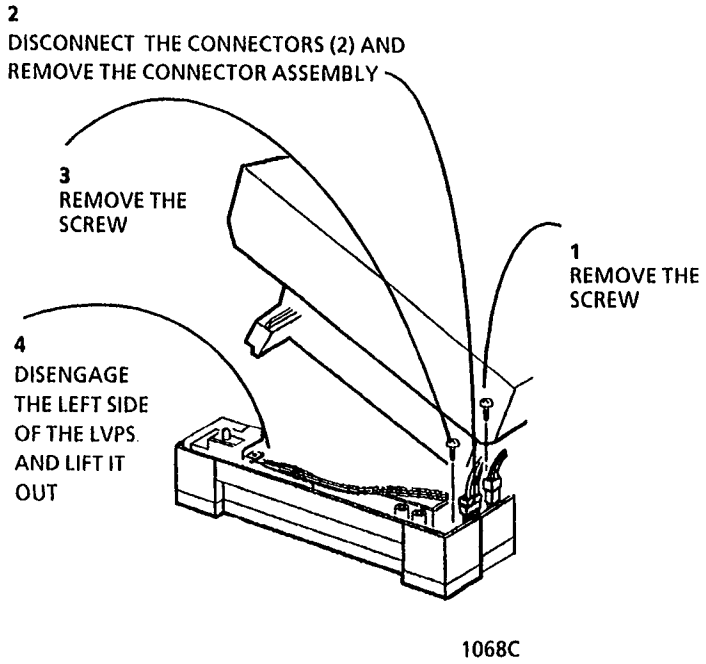


Figure 1. Removing the LVPS

REP 1.3 Transformer (TR1)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove all the Covers (REP 14.1, REP 14.2).

NOTE: Proceed only as far as necessary to remove the desired parts.

2. Remove the Optics Frame Assembly (REP 6.1).
3. (Figure 1): Remove the Transformer.

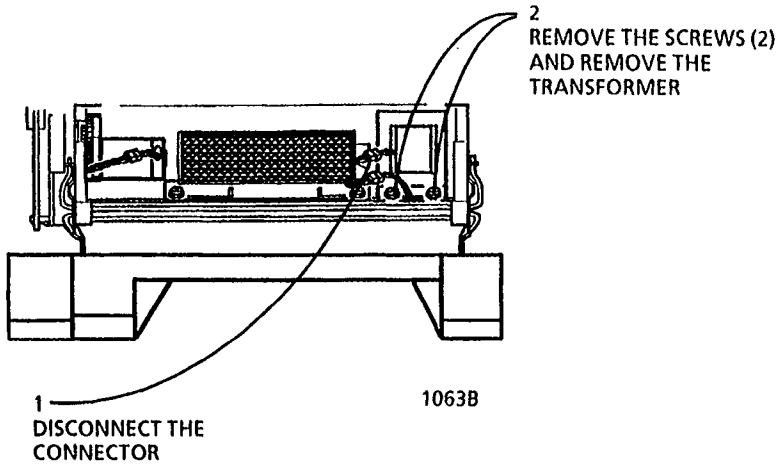


Figure 1. Removing the Transformer (TR1)

REP 1.4 Control Console PWB

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Front Interior Cover (REP 14.2).
2. (Figure 1): Remove the Control Console PWB.

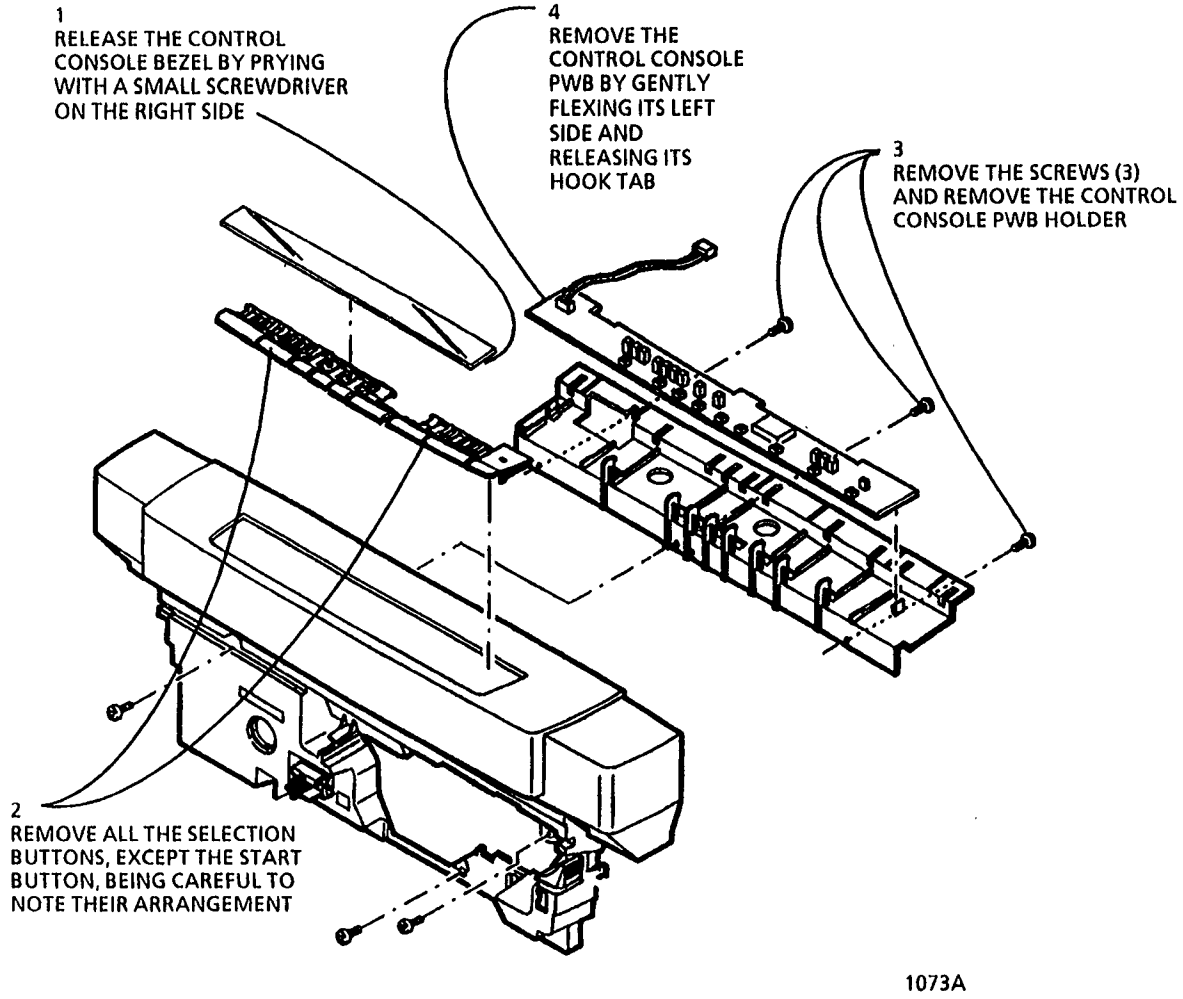


Figure 1. Removing the Control Console PWB

REP 1.5 Main PWB

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Rear Cover (REP 14.2).
2. (Figure 1): Remove the Main PWB.

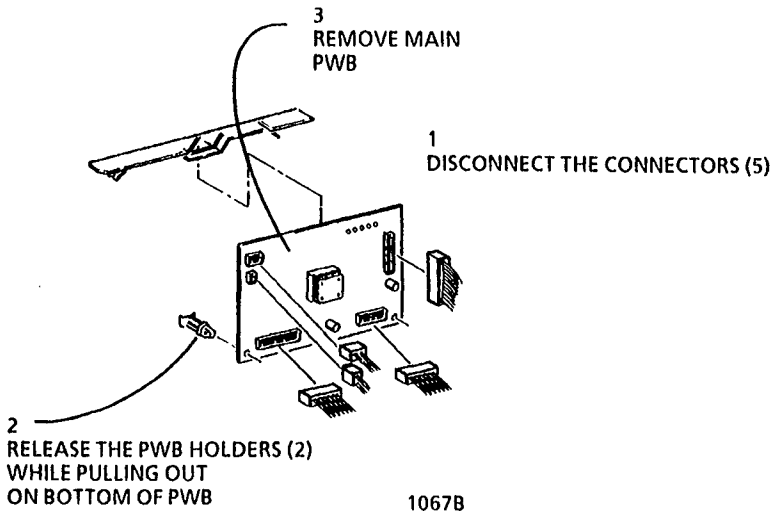


Figure 1. Removing the Main PWB

REP 4.1 Main Motor (MOT1)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove all the covers (REP 14.1, REP 14.2).
2. (Figure 1): Remove the Optics Frame Assembly (REP 6.1).
3. Remove the Main PWB and HV PWB Module (REP 9.10).

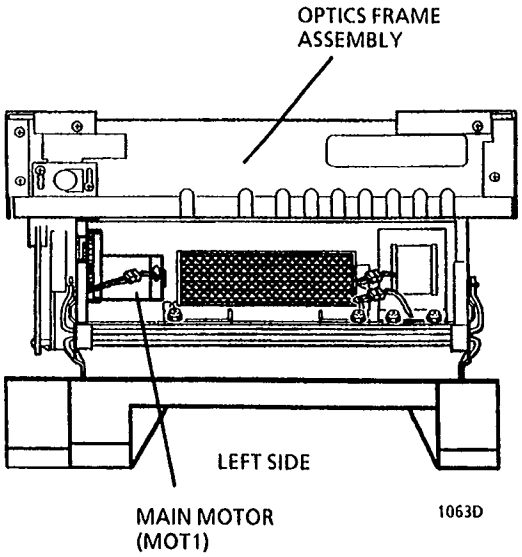


Figure 1. Preparing to Remove the Main Motor (MOT1)

4. (Figure 2): Remove the Main Motor.

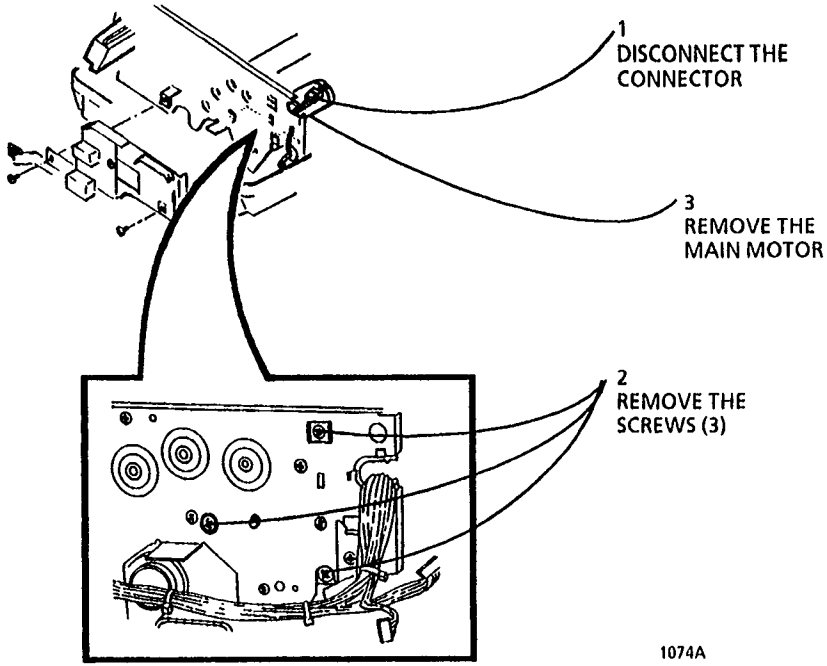


Figure 2. Removing the Main Motor (MOT1)

REP 6.1 Optics Frame Assembly

Parts List on PL 7.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

NOTE: Proceed only as far as necessary to remove the desired parts.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove all covers (REP 14.1, REP 14.2).

CAUTION

When removing the Optics Frame Assembly, check for any wire harness still connected.

3. (Figure 1): Remove the Optics Frame Assembly.

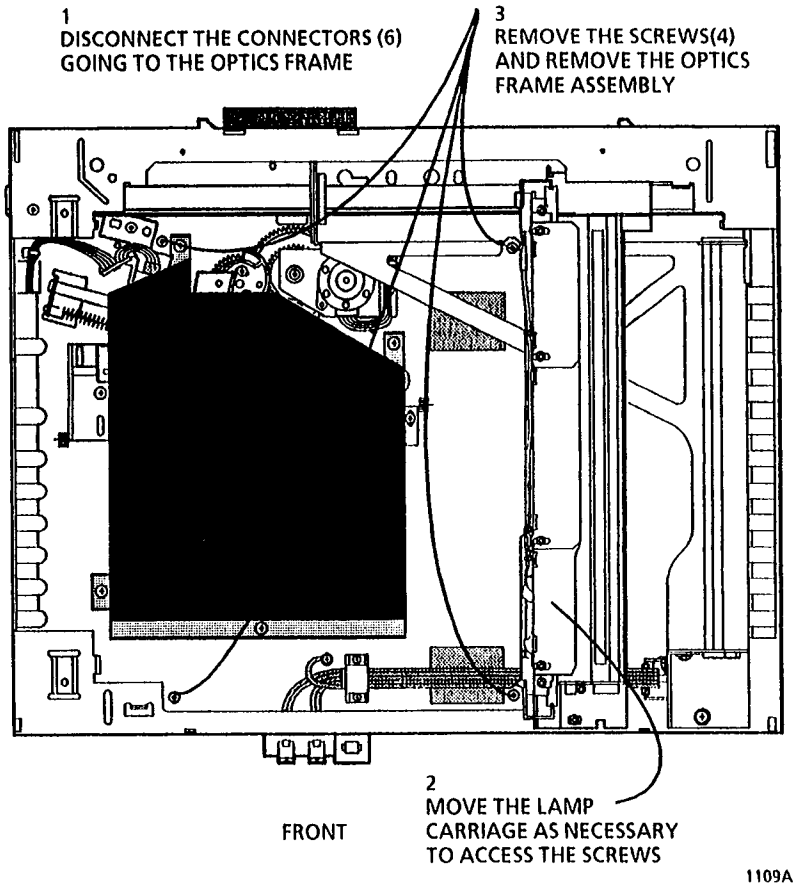


Figure 1. Removing the Optics Frame Assembly

REP 6.2 Full-Rate Lamp Carriage

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove all covers (REP 14.1, REP 14.2).
3. (Figure 1): Remove the connectors from the frame.

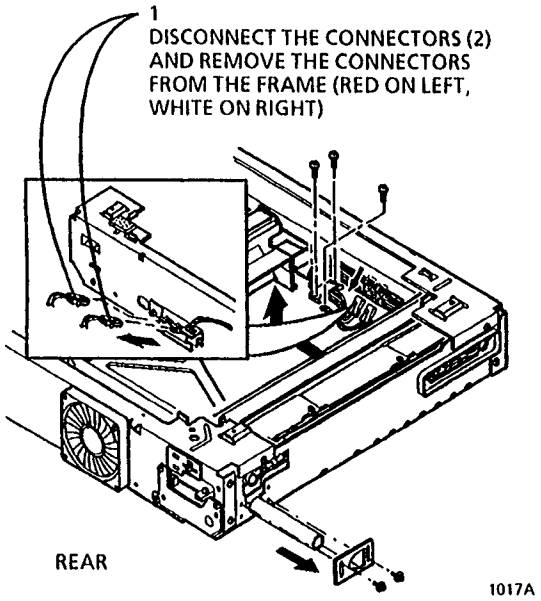


Figure 1. Preparing to remove the Full-Rate Lamp Carriage

4. (Figure 2): Relieve the wire harness.

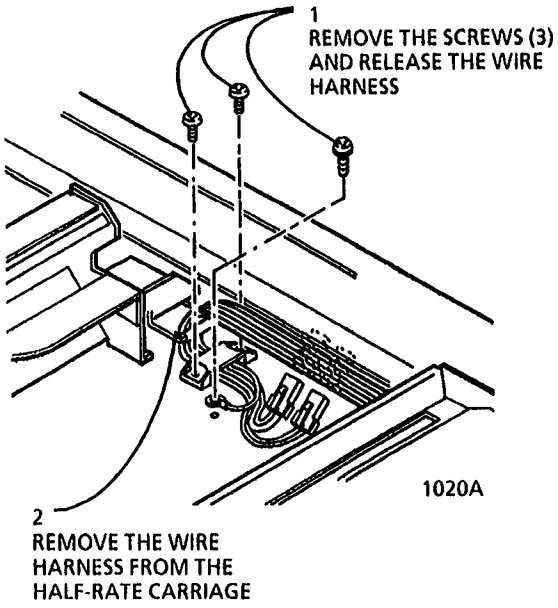


Figure 2. Relieving the wire harness

5. (Figure 3): Detach the Full-Rate Lamp Carriage from the Optics Cable.

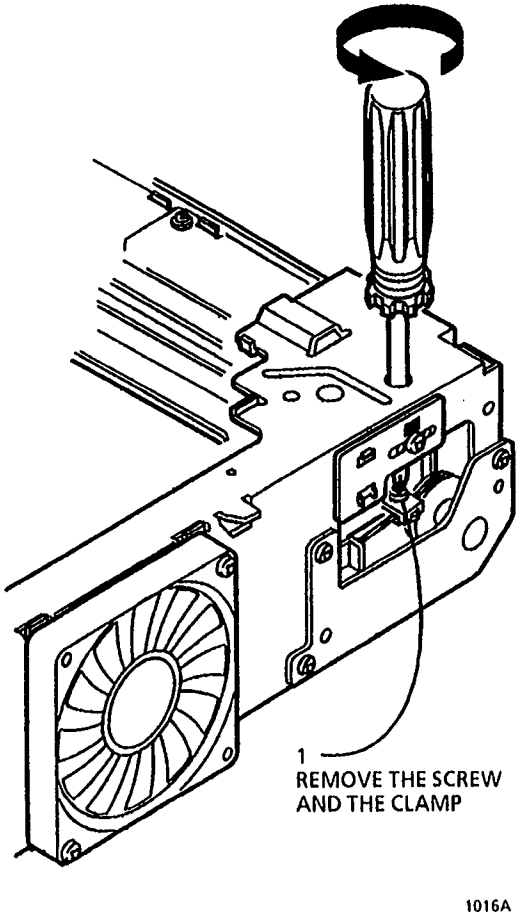


Figure 3. Detaching the Full-Rate Lamp Carriage

6. Slide the Full-Rate Lamp Carriage to the left until it is about an inch from the Half-Rate Carriage.

7. (Figure 4): Scribe the position of the retaining plate and remove it.

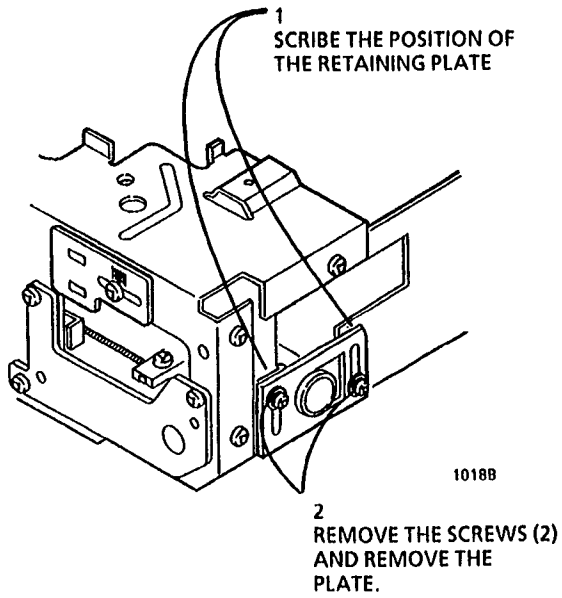


Figure 4. Scribing and Removing the Retaining Plate

8. Slide the Optics Rail to the left until it disengages from the Full-Rate Lamp Carriage.

9. (Figure 5): Remove the Full-Rate Lamp Carriage.

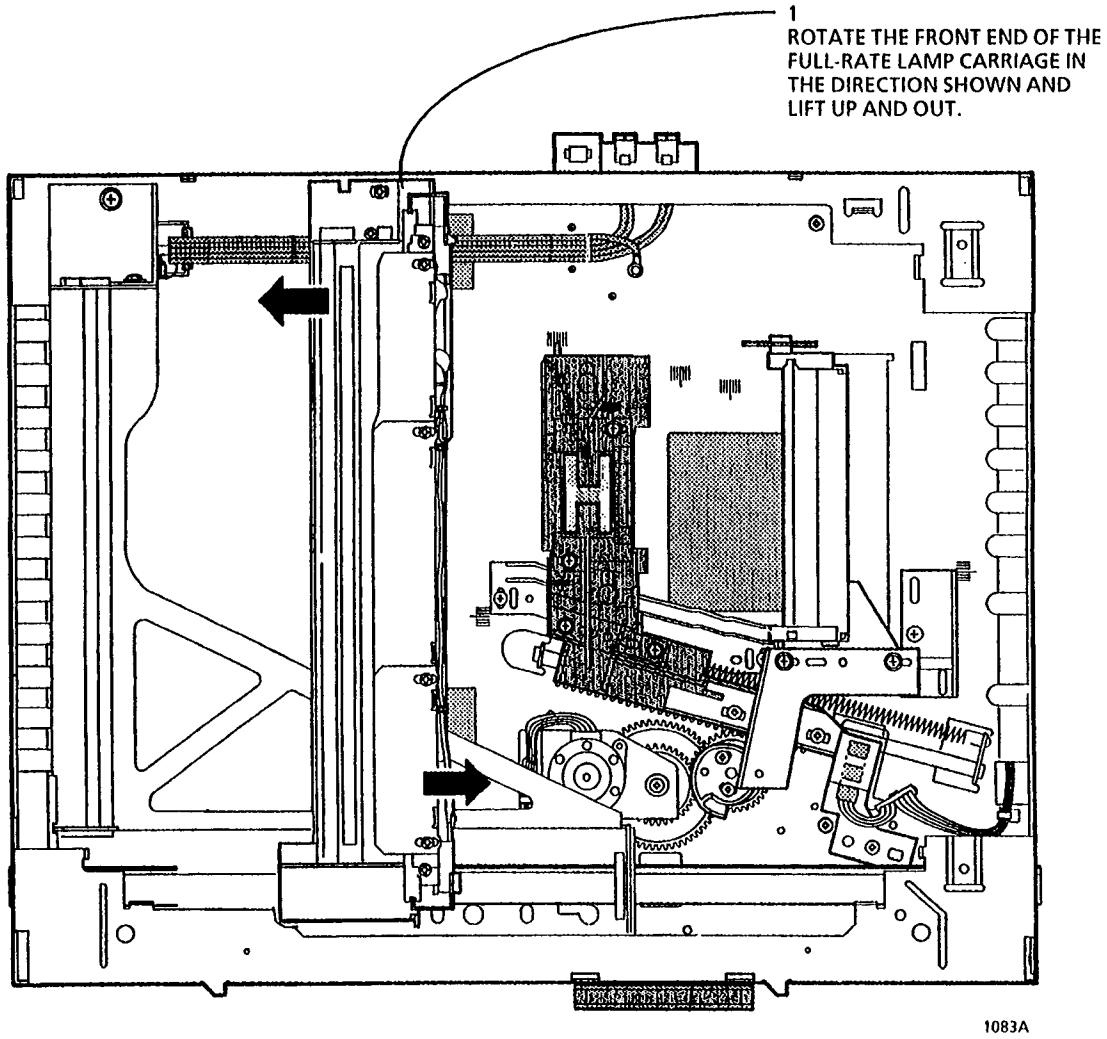


Figure 5. Removing the Full-Rate Lamp Carriage

Replacement

NOTE: Once the Optics Rail is attached to the Full-Rate Lamp Carriage and secured to the frame, align the carriage with a screwdriver as shown. Then clamp the Optics Cable to the Full-Rate Lamp Carriage.

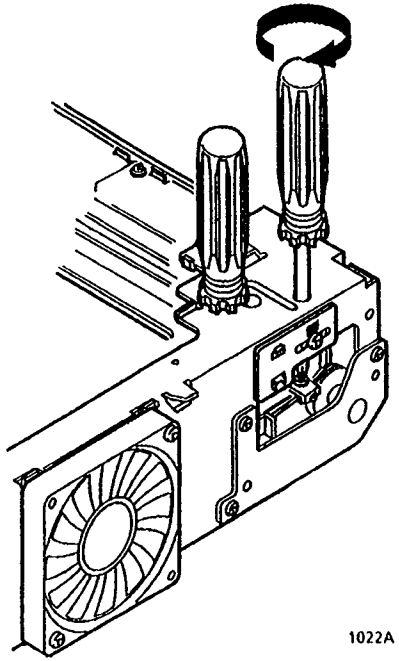


Figure 6. Reattaching the Full-Rate Lamp Carriage

REP 6.3 Exposure Control PWB

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove the Front Access Cover and Front Interior Cover (REP 14.2).
3. (Figure 1): Remove the exposure control PWB.

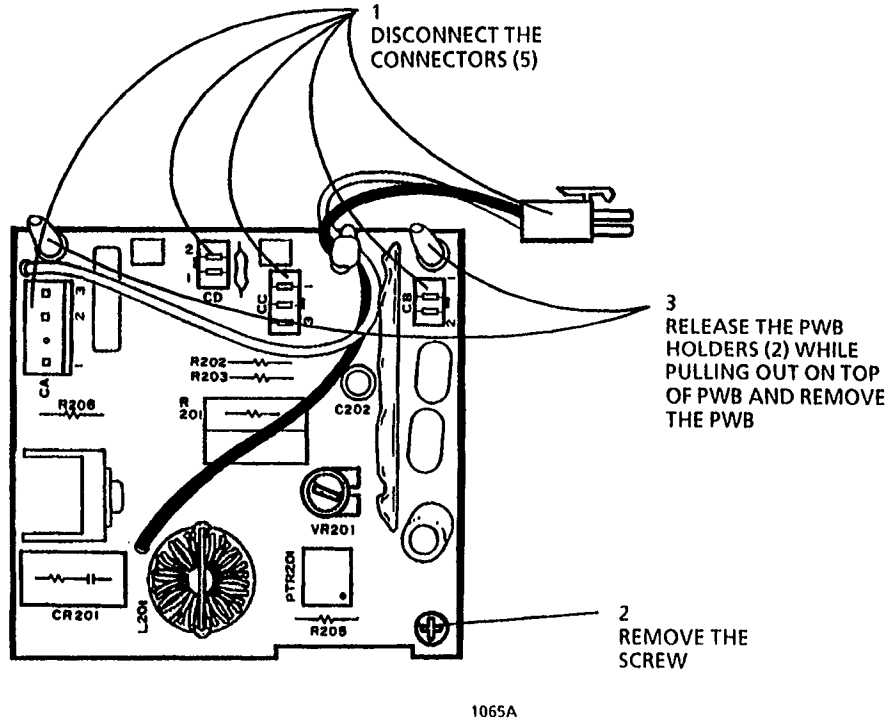


Figure 1. Removing the Exposure Control PWB

Replacement

Check/adjust the overall exposure (ADJ 6.1).

REP 6.4 Auto Exposure Sensor (CR1)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove all covers (REP 14.1, REP 14.2).
3. Remove the Full-Rate Lamp Carriage (REP 6.2).
4. (Figure 1): Remove the auto exposure sensor.

LAMP CARRIAGE (BOTTOM VIEW)

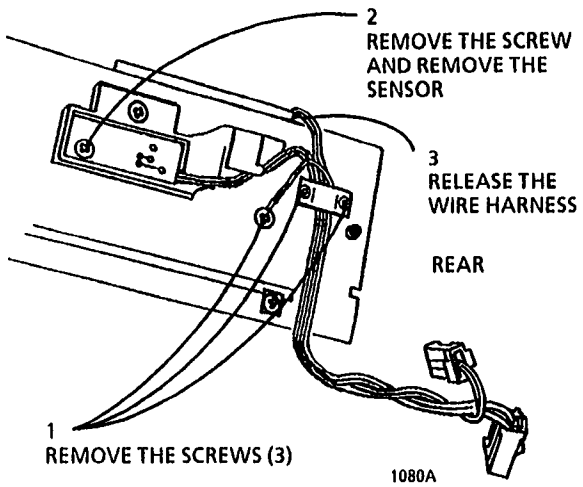


Figure 1. Removing the Auto Exposure Sensor (CR1)

Replacement

Be careful you do not twist the wire harness when replacing it. Also, check/adjust the overall exposure (ADJ 6.1).

REP 6.5 Exposure Lamp (DS1)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and the Platen Glass (REP 14.1).
2. Remove the Rear Cover (REP 14.2).
3. (Figure 1): Remove the Cooling Fan Motor (MOT3).

CAUTION

Do not touch the Exposure Lamp with your hands. Hold the lamp by the ends. If the lamp has been touched, wipe it off with Film Remover and a clean cloth.

4. (Figure 1): Remove the exposure lamp.

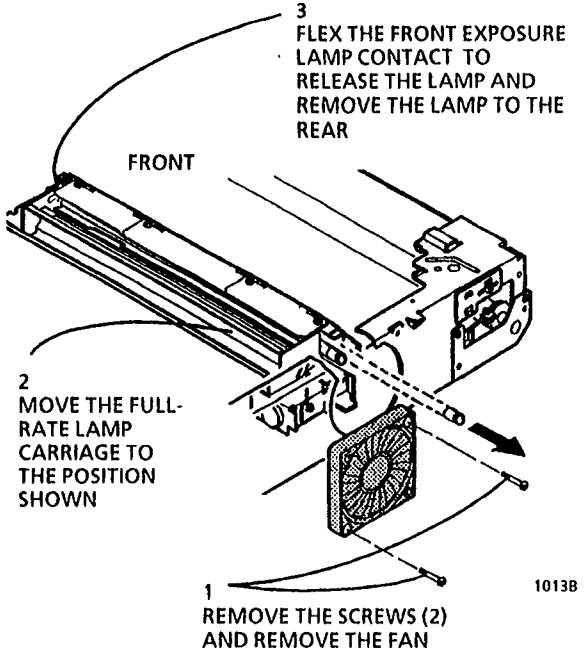


Figure 1. Removing the Exposure Lamp (DS1)

Replacement

1. (Figure 2): Install the lamp with the protrusion oriented, as shown in Figure 3.
2. Check/adjust the overall exposure (ADJ 6.1).

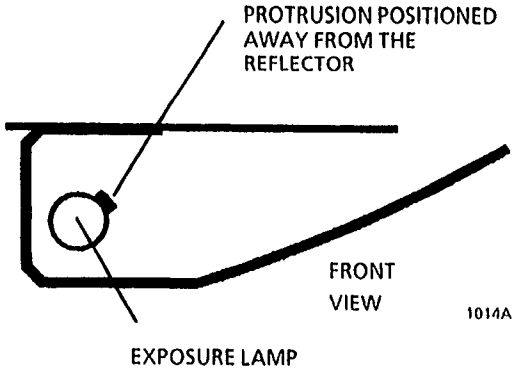


Figure 2. Exposure Lamp Orientation

REP 6.6 Thermal Fuse (F3)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and Platen Glass (REP 14.1) .
2. Remove the Left Cover (REP 14.2).
3. (Figure 1): Remove the Thermal Fuse.

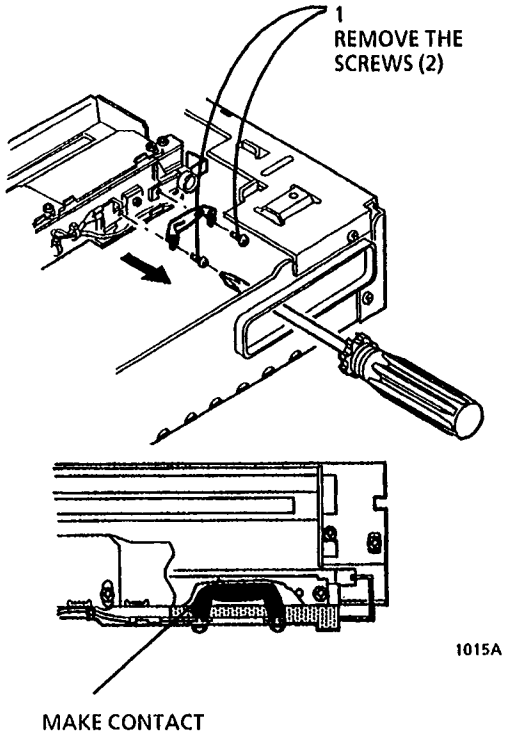


Figure 1. Removing the Thermal Fuse (F3)

Replacement

(Figure 1): Install the fuse so that it contacts the reflector behind the block as shown.

REP 6.7 Scan Drive Motor (MOT4)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and Platen Glass (REP 14.1) .
2. Remove the Rear Cover (REP 14.2).
3. (Figure 1): Tape the optics cable in place on the drive pulley and remove the drive pulley.
4. (Figure 1): Remove the Scan Drive Motor.

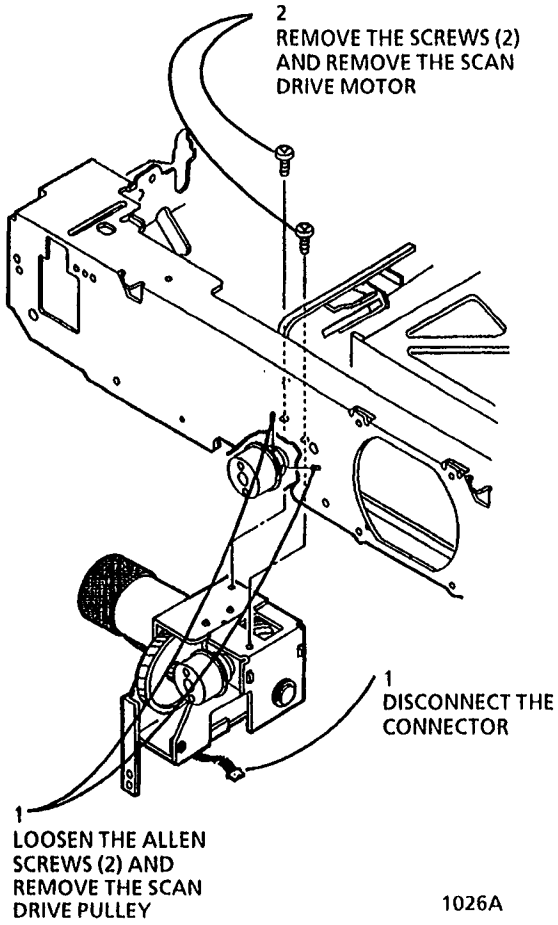


Figure 1. Removing the Scan Drive Motor (MOT4)

REP 6.8 Scan Home Sensor (Q1)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and Platen Glass (REP 14.1) .
2. Remove the Rear Cover and Left Cover (REP 14.2).
3. (Figure 1): Remove the Scan Home Sensor.

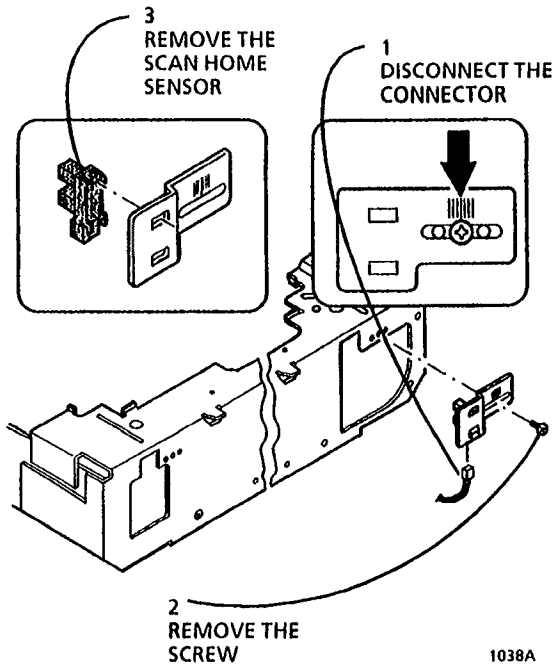


Figure 1. Removing the Scan Home Sensor

Replacement

NOTE: The sensor may require epoxy to hold it in place on the bracket. Install the bracket at the center position.

REP 6.9 Lens Motor (MOT2)

Parts List on PL 3.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove all covers (REP 14.1, REP 14.2).
3. Remove the Optics Frame Assembly (REP 6.1).

NOTE: Before removing any component in the optics, scribe the position of the component.

4. Remove the lens light shield cover.
5. (Figure 1): Remove the Lens Motor.

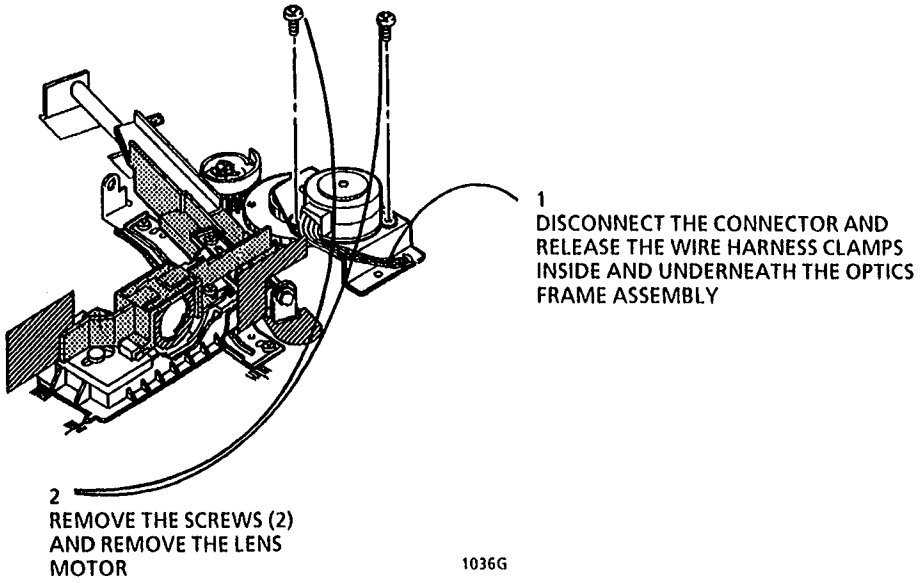


Figure 1. Removing the Lens Motor (MOT2)

REP 6.10 Lens Home Sensor (Q2)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and Platen Glass (REP 14.1) .
2. Remove the Rear Cover and Left Cover (REP 14.2).
3. Remove the lens light shield cover.
4. (Figure 1): Remove the Lens Home Sensor.

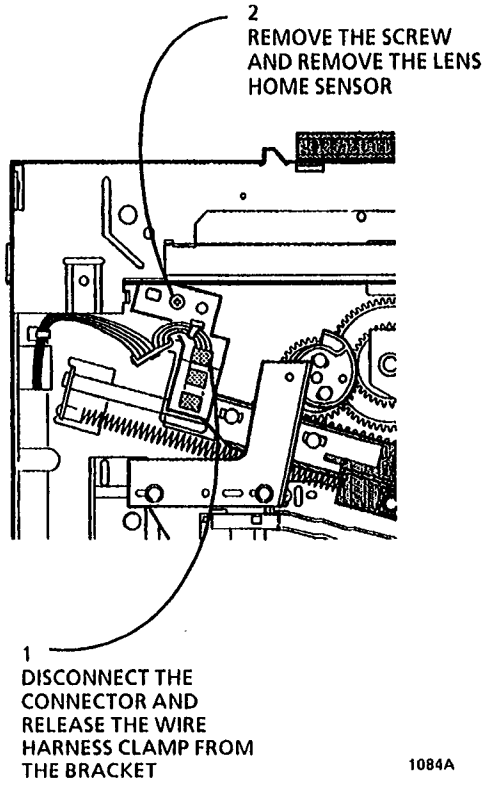


Figure 1. Removing the Lens Home Sensor

REP 6.11 Optics Light Shield Cover/Lens

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover, Platen Glass (REP 14.1), Rear Cover, and Left Cover (REP 14.2).
2. (Figure 1): Remove the Optics Light Shield Cover.

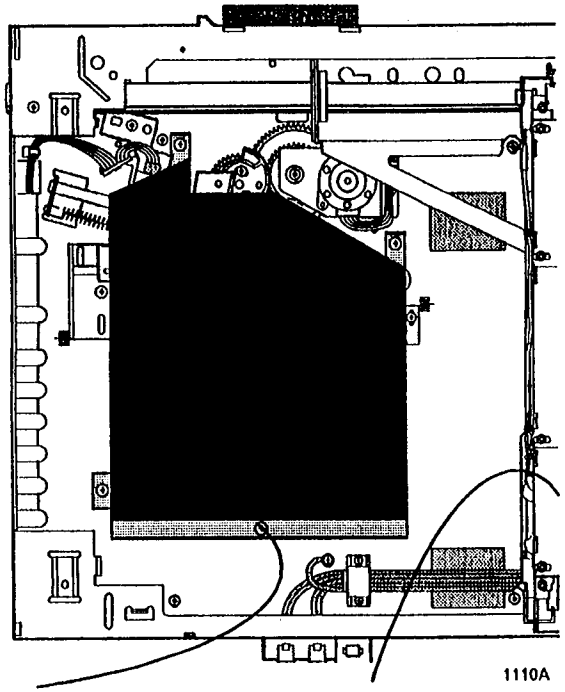


Figure 1. Removing the Light Shield Cover

NOTE: Before removing any component in the optics, scribe the position of the component.

4. (Figure 2): Remove the Optics Lens.

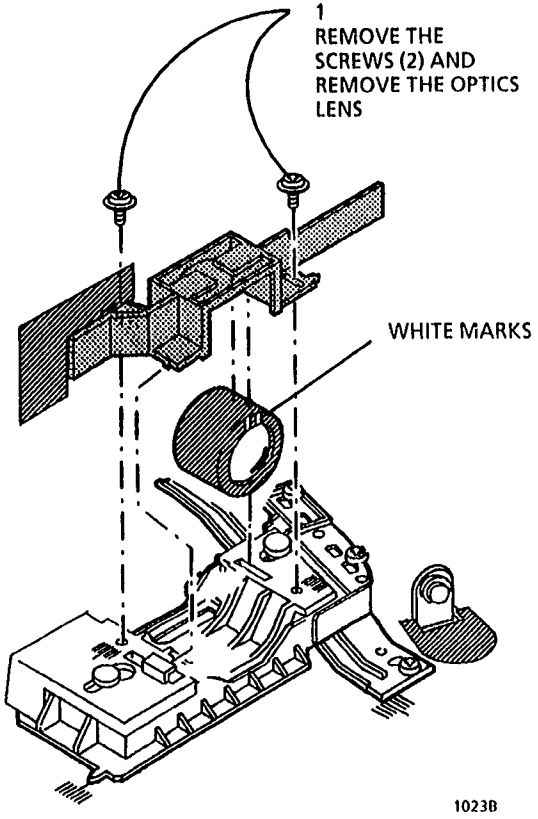


Figure 2. Removing the Optics Lens

Replacement

Put the white marks on the lens barrel facing the incoming light.

REP 6.12 Mirrors

Parts List on PL 3.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove all covers (REP 14.1, REP 14.2).

NOTE: Proceed only as far as necessary to remove the desired part.

No. 1 Mirror

NOTE: The No. 1 mirror is spared as part of the Full-Rate Lamp Carriage.

No. 2/3 Mirrors

NOTE: The No. 2 mirror is secured with epoxy.

1. Remove the Full-Rate Lamp Carriage (REP 6.2).
2. Remove the Half-Rate Carriage.
3. (Figure 1): Remove the No. 2 or 3 Mirror.

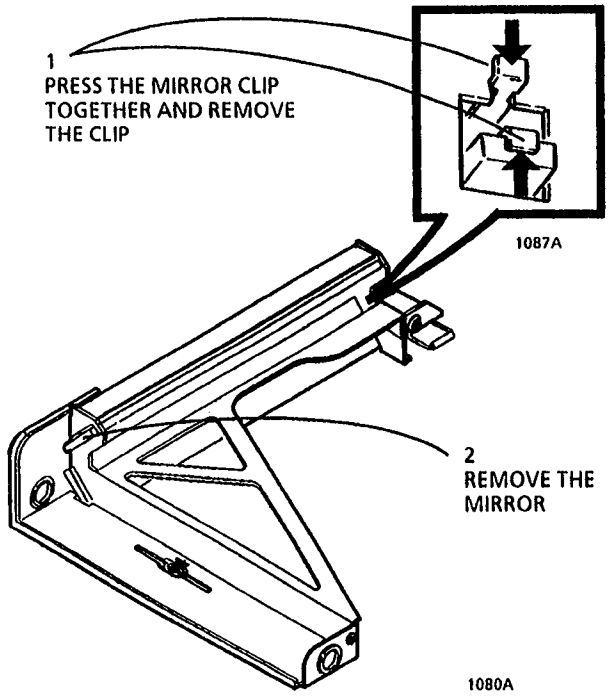


Figure 1. Removing the Mirror

Replacement

1. Install the mirror with the mirrored surface toward the lens.
2. Ensure that each mirror clip is seated properly.

No. 4/5 Mirrors

1. (Figure 2): Remove the No. 4/5 Mirror

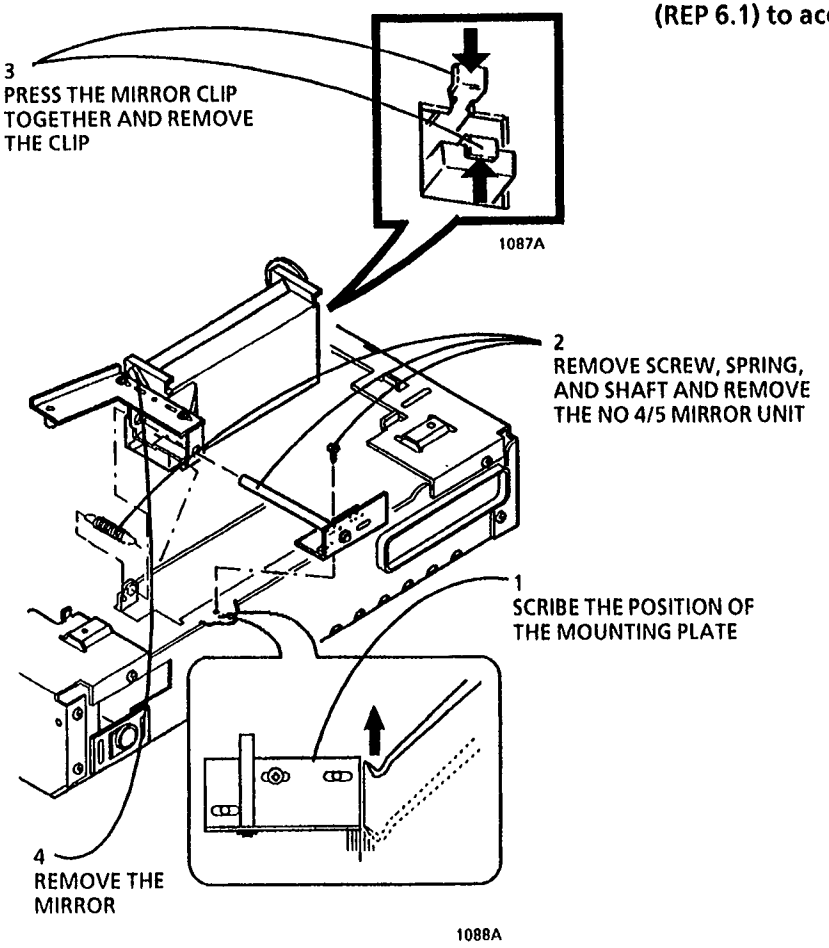


Figure 2. Removing the Mirror

No. 6 Mirror

NOTE: The No. 6 Mirror is located on the bottom side of the Optics Frame Assembly.

1. Remove the Optics Frame Assembly (REP 6.1) to access the mirror.

Replacement

1. Install the mirror with the mirrored surface toward the lens.
2. Ensure that each mirror clip is seated properly.
3. Perform ADJ 6.3 for the No. 4/5 Mirror Unit.

REP 6.13 Cooling Fan Motor (MOT3)

Parts List on PL 3.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover (REP 14.1).
2. Remove the Rear Cover (REP 14.2).
3. Disconnect the fan connector (CN-A) on the Main PWB.
4. (Figure 1): Remove the Cooling Fan Motor.

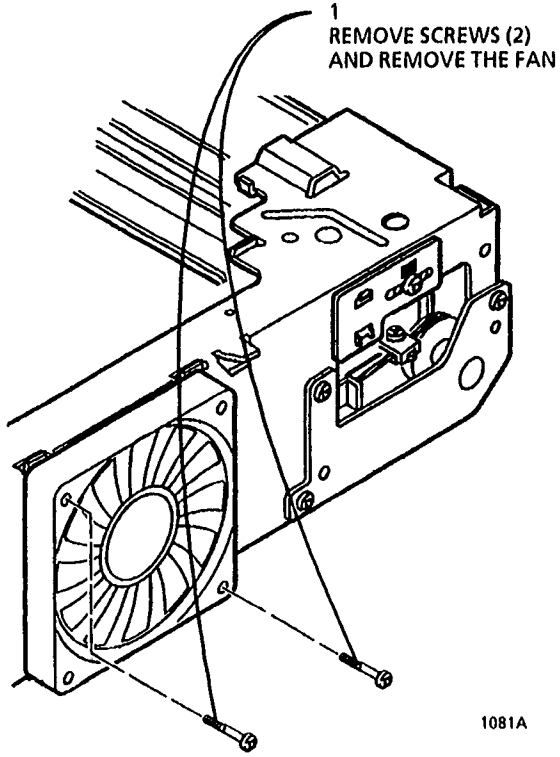


Figure 1. Removing the Cooling Fan Motor (MOT3)

REP 6.14 Optics Cable

Parts List on PL 3.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and the Platen Glass (REP 14.1).
2. Remove the Rear Cover (REP 14.2).
3. (Figure 1): Relieve the Optics Cable tension.

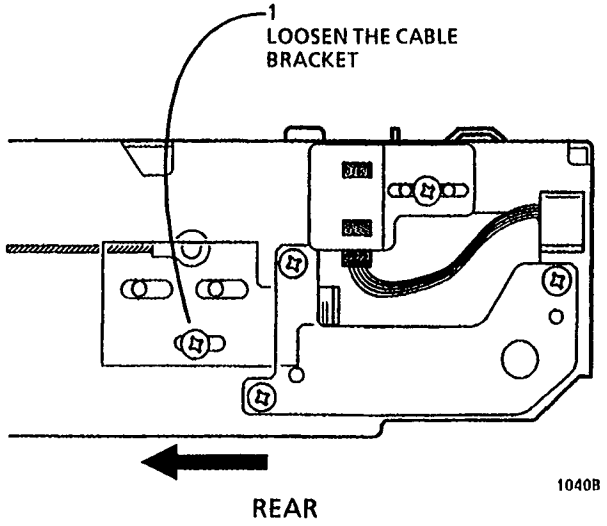


Figure 1. Relieving the Optics Cable Tension

4. (Figure 2): Remove the Optics Cable.

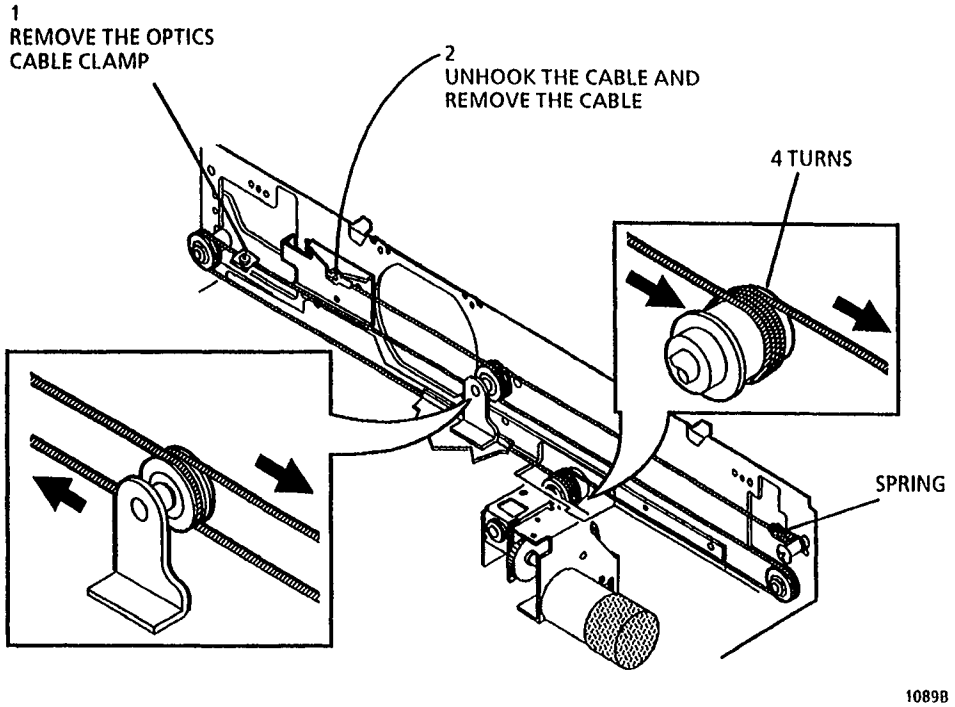


Figure 2. Removing the Optics Cable

Replacement

1. Restring the Optics Cable starting at the spring end.
2. (Figure 3): Adjust the Optics Cable tension.

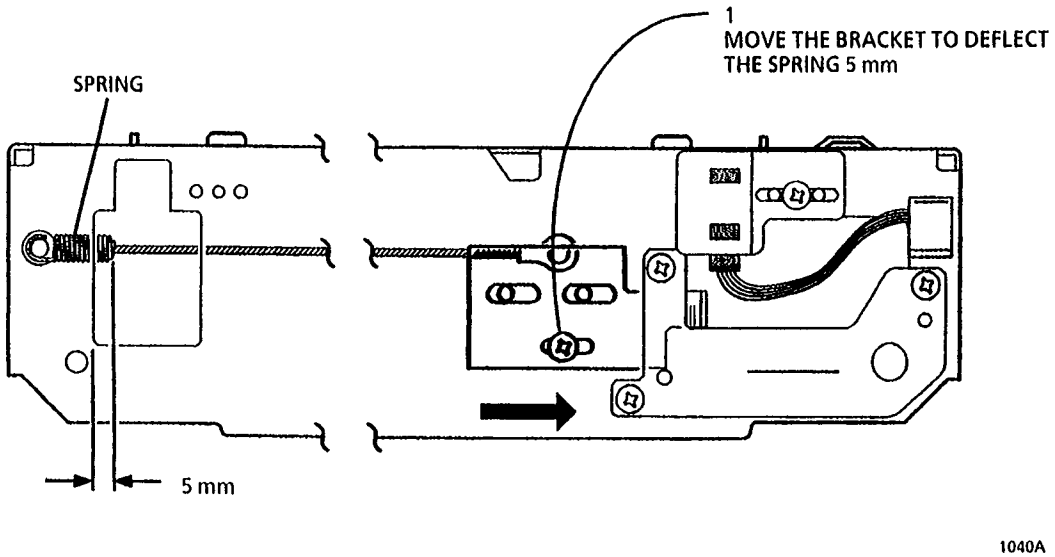


Figure 3. Adjusting the Optics Cable Tension

3. (Figure 4): Reattach the Full-Rate Lamp Carriage.

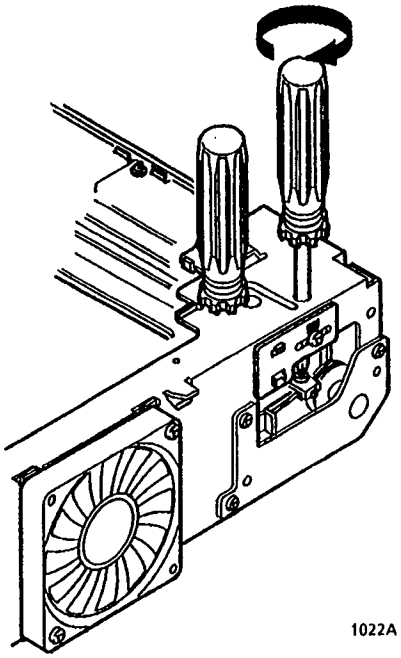


Figure 4. Reattaching the Full-Rate Lamp Carriage

REP 6.15 Shift Cam Gear

Parts List on PL 3.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Platen Cover and the Platen Glass (REP 14.1).
2. Remove the Rear Cover, Left Cover, and Right Cover (REP 14.2).
3. Remove the lens light shield cover.

NOTE: Before removing the Shift Cam Gear, mark the teeth of the two gears it meshes with.

4. (Figure 1): Remove the Shift Cam Gear.

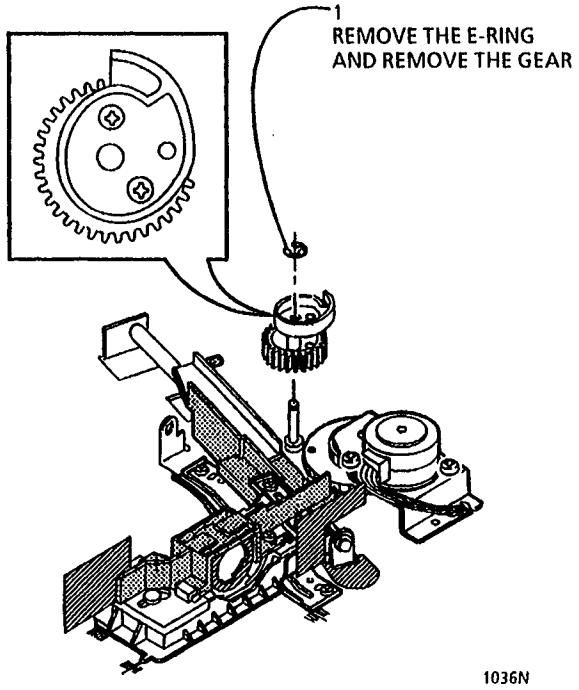


Figure 1. Removing the Shift Cam Gear

Replacement

1. Align the marks on the Shift Cam Gear with the marks on the two gears it meshes with.

REP 8.1 Paper Feed Solenoid (SOL 2)

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and <u>place it in a black plastic bag to avoid light shock</u>.
2. Loosen and move the Power On/Off Switch Bracket (REP 1.1) out of the way.
3. (Figure 1): Remove the Paper Feed Solenoid.

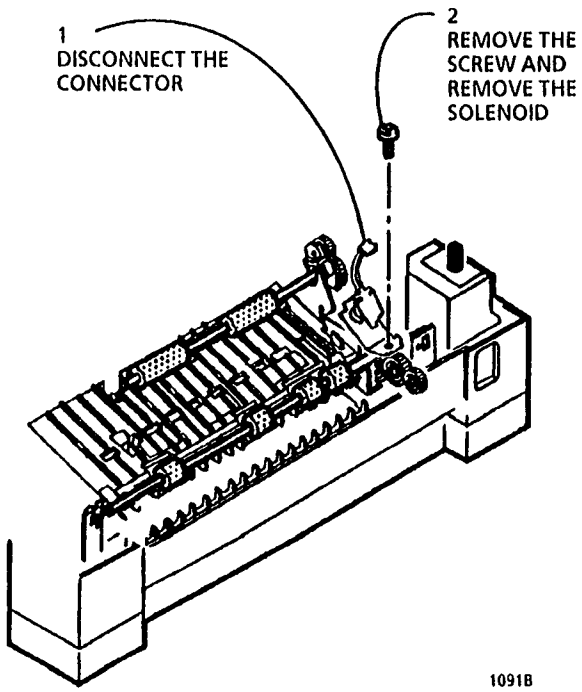


Figure 1. Removing the Paper Feed Solenoid (SOL2)

REP 8.2 Paper Feed Clutch

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Paper Feed Solenoid (SOL2) (REP 8.1).
2. (Figure 1): Remove the Paper Feed Clutch.

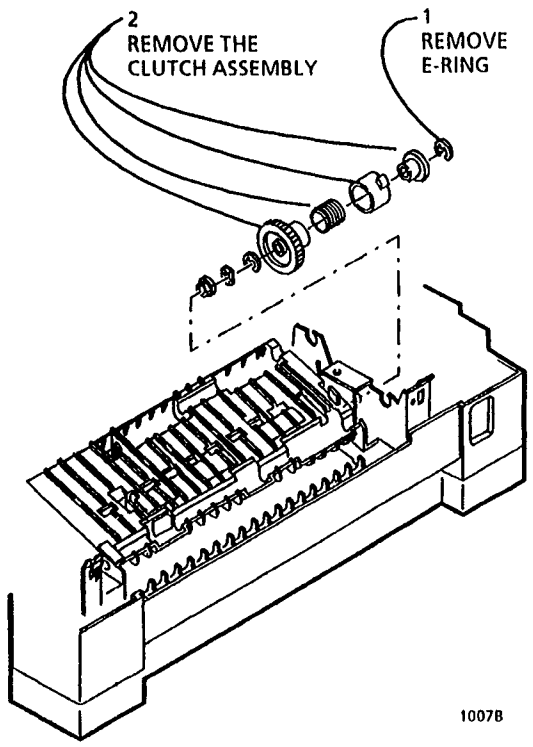


Figure 1. Removing the Paper Feed Clutch

3. (Figure 2): Remove the boss, spring, sleeve, and gear, as necessary.

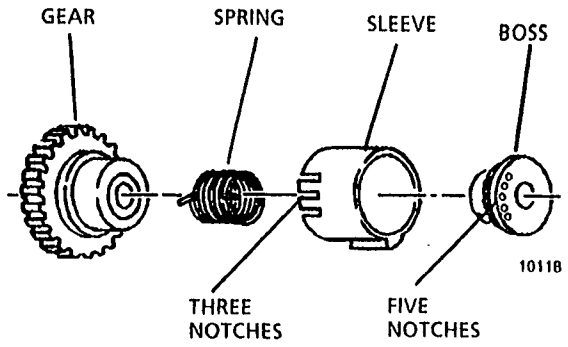


Figure 2. Removing the Boss, Spring, Sleeve, and Gear

Replacement

1. Before reassembling the clutch, lubricate the spring with grease.
2. (Figure 2): When reassembling the clutch, engage the spring in the middle notch of the five notches in the boss and the middle notch of the three notches in the sleeve.
3. Before reinstalling the paper feed assembly, perform ADJ 8.2 Paper Feed Roller Home Position.

REP 8.3 Manual Feed Sensor (Q3) (5310 Only)

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove the Right Cover (REP 14.2).
3. (Figure 1): Remove the Manual Feed Sensor.

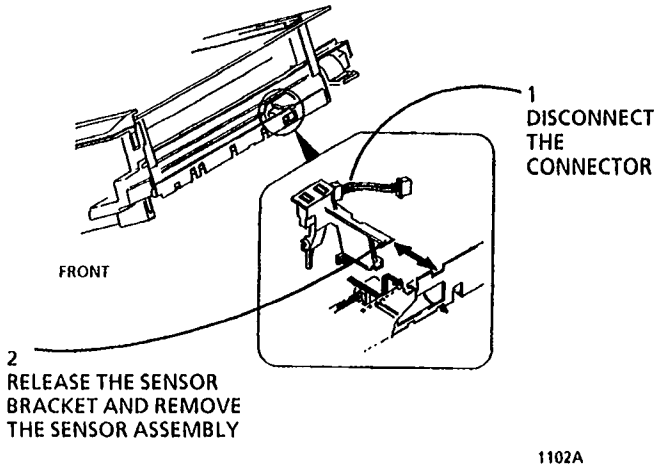


Figure 1. Removing the Manual Feed Sensor (Q3)

REP 8.4 Manual Feed Switch (S3) and Registration Switch (S2) (5280/5309 Only)

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove the Right Cover (REP 14.2).
3. Open the copier.
4. (Figure 1): Remove the Manual Feed Switch/Registration switch.

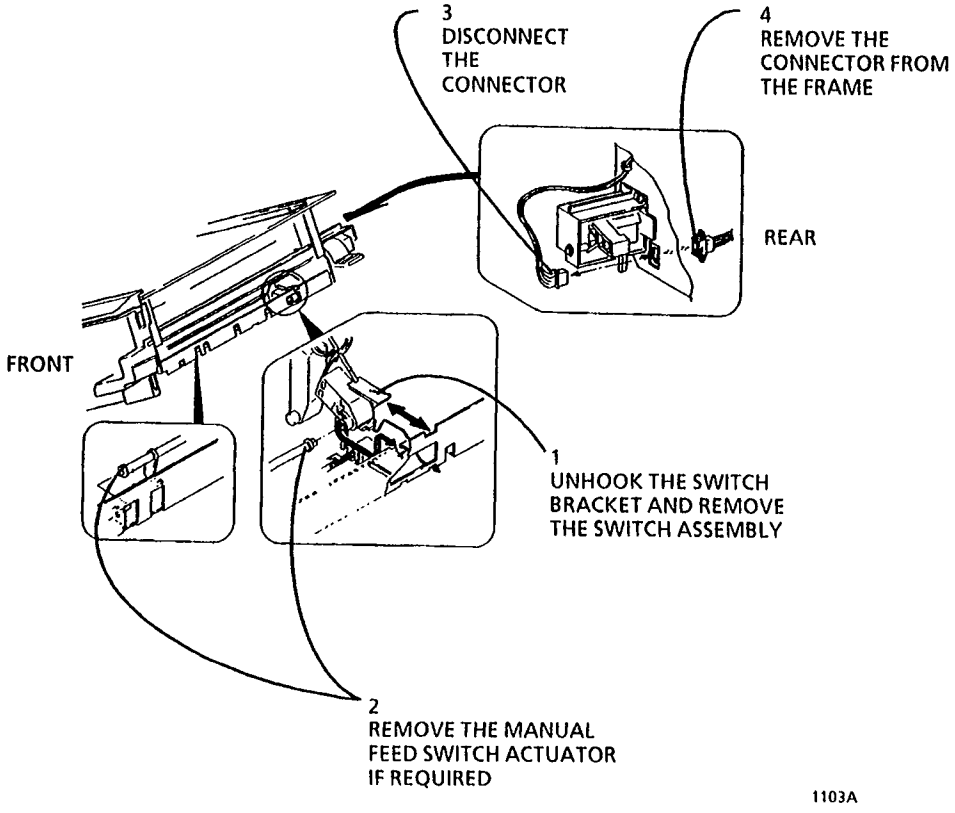


Figure 1. Removing the Manual Feed Switch/Registration switch

REP 8.5 Manual Feed Solenoid (SOL1) (5310 ONLY)

Parts List on PL 2.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Open the copier.
2. (Figure 1): Remove the Manual Feed Assembly and the Top Cover.

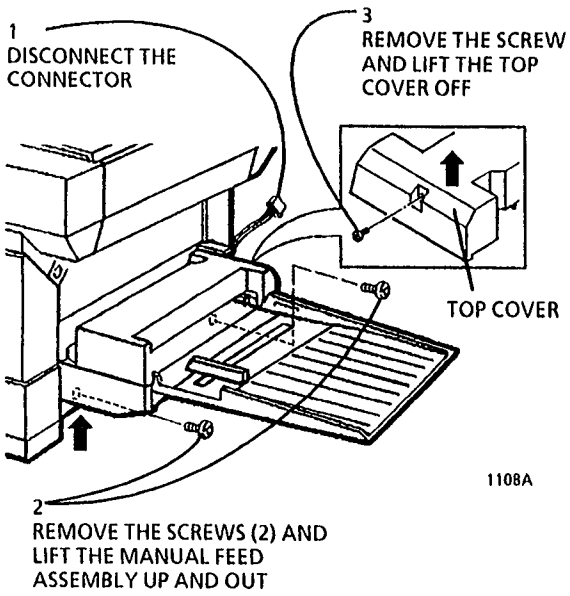


Figure 1. Removing the Manual Feed Assembly and the Top Cover

3. (Figure 2): Preparing to remove the Manual Feed Solenoid.

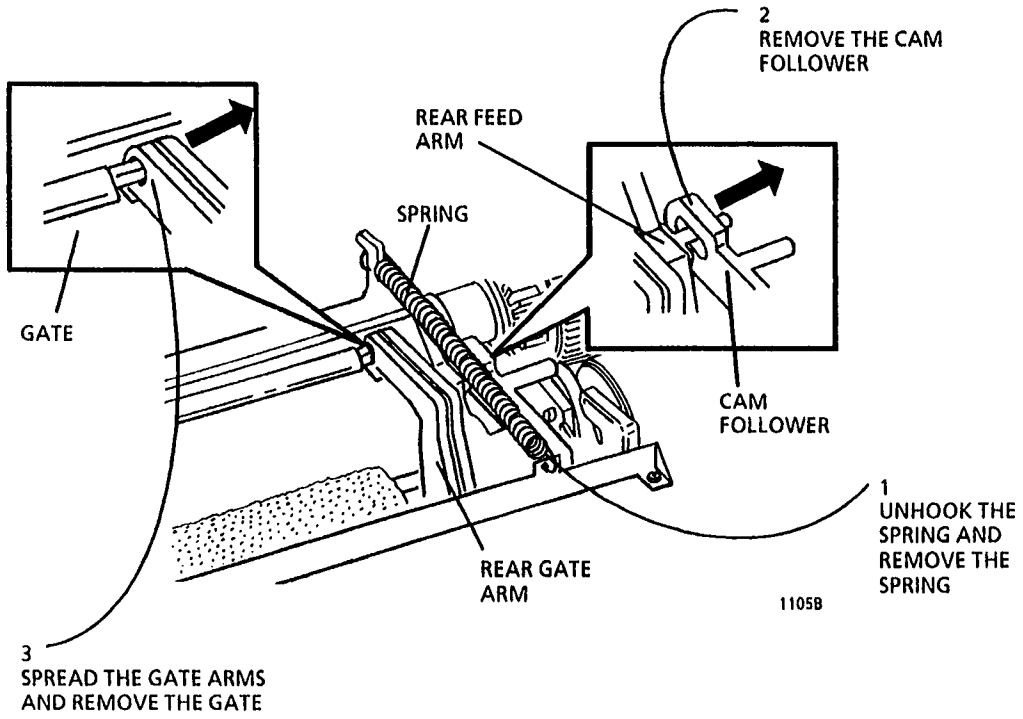


Figure 2. Preparing to Remove the Manual Feed Solenoid

4. (Figure 3): Remove the Paper Feed Roll shaft Assembly.

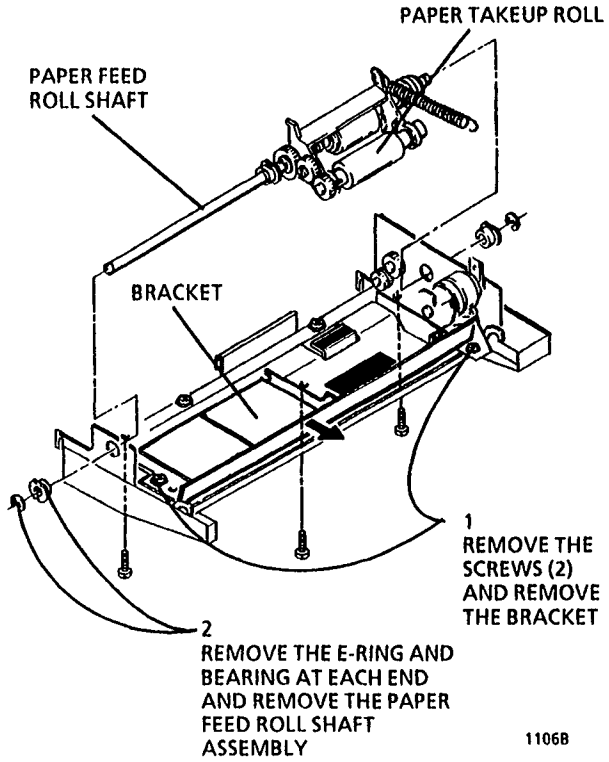


Figure 3. Preparing to Remove the Manual Feed Solenoid

5. (Figure 4): Remove the Manual Feed Solenoid.

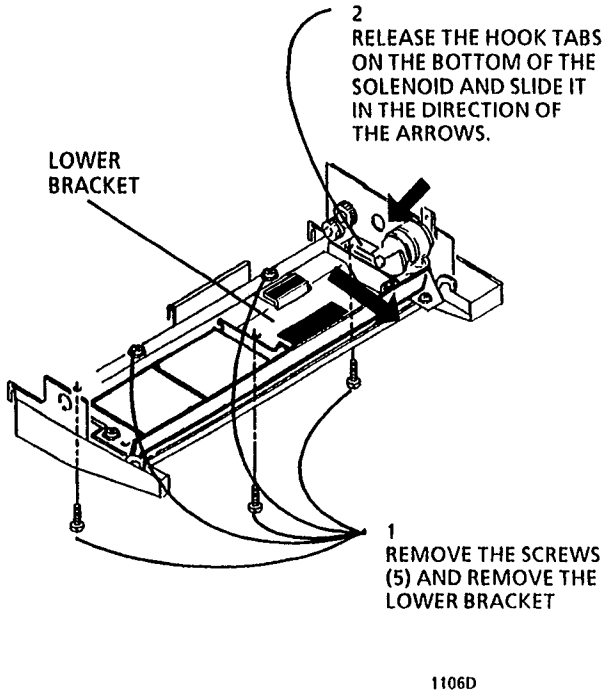


Figure 4. Removing the Manual Feed Solenoid

REP 8.6 Registration Gate Linkage Arm

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Rear Cover, Left Cover and Right Cover (REP 14.2).
2. Remove the Main PWB Module (REP 9.10).
3. Remove the Charge Corotron Terminal, and Transfer Corotron Terminal (REP 9.6).
4. (Figure 1): Remove the Registration Gate Linkage Arm.

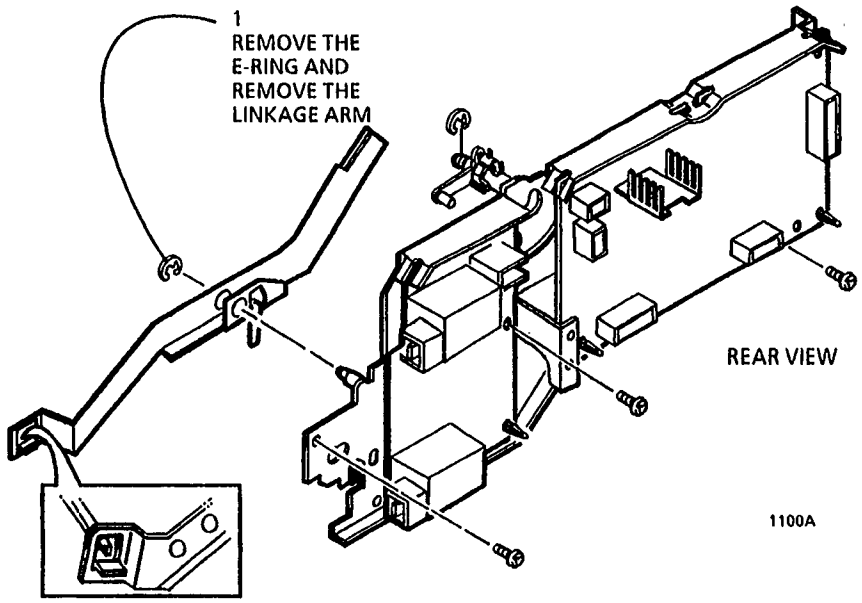


Figure 1. Removing the Registration Gate Linkage Arm

REP 8.7 Registration Gate Actuator

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Rear Cover (REP 14.2).
2. Remove the Main PWB Module (REP 9.10).
3. (Figure 1): Remove the Registration Gate Actuator.

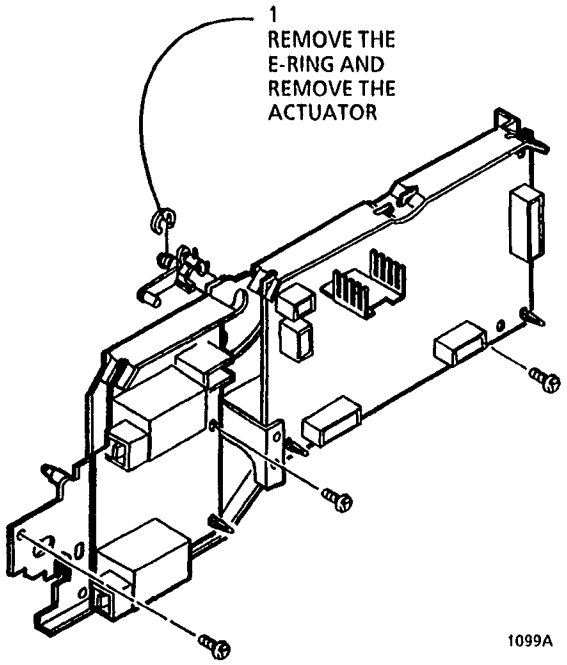


Figure 1. Removing the Registration Gate Actuator

REP 8.8 Pinch Roller and Pinch Roller Springs

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove all covers (REP 14.1, REP 14.2).
3. Open the copier.
4. (Figure 1): Remove the Upper Paper Feed Baffle.

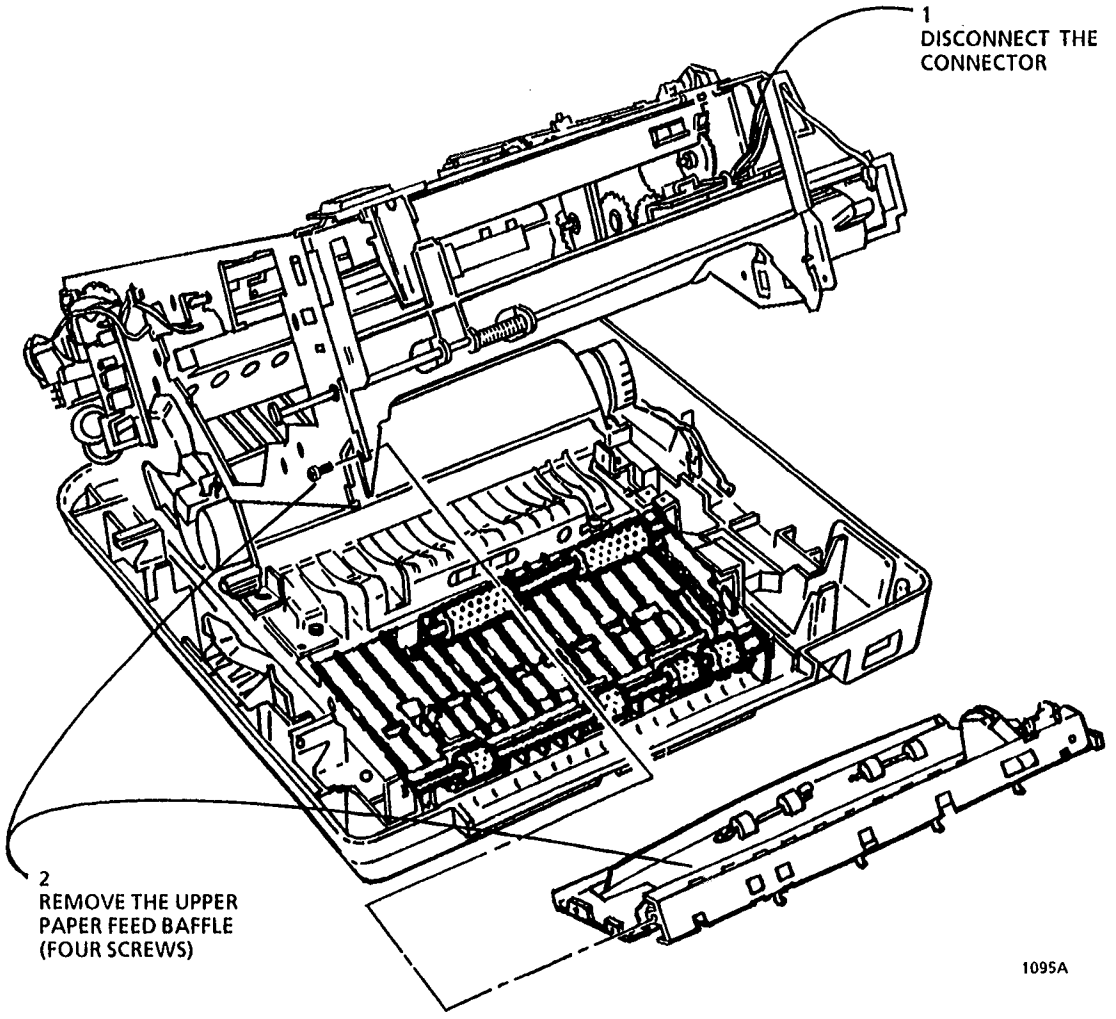


Figure 1. Removing the Upper Paper Feed Baffle

4. (Figure 2): Remove the pinch rollers and springs, as necessary.
   a. Unhook the spring.
   b. Remove the roller(s) from the spring, being careful to note the location of the spacers.

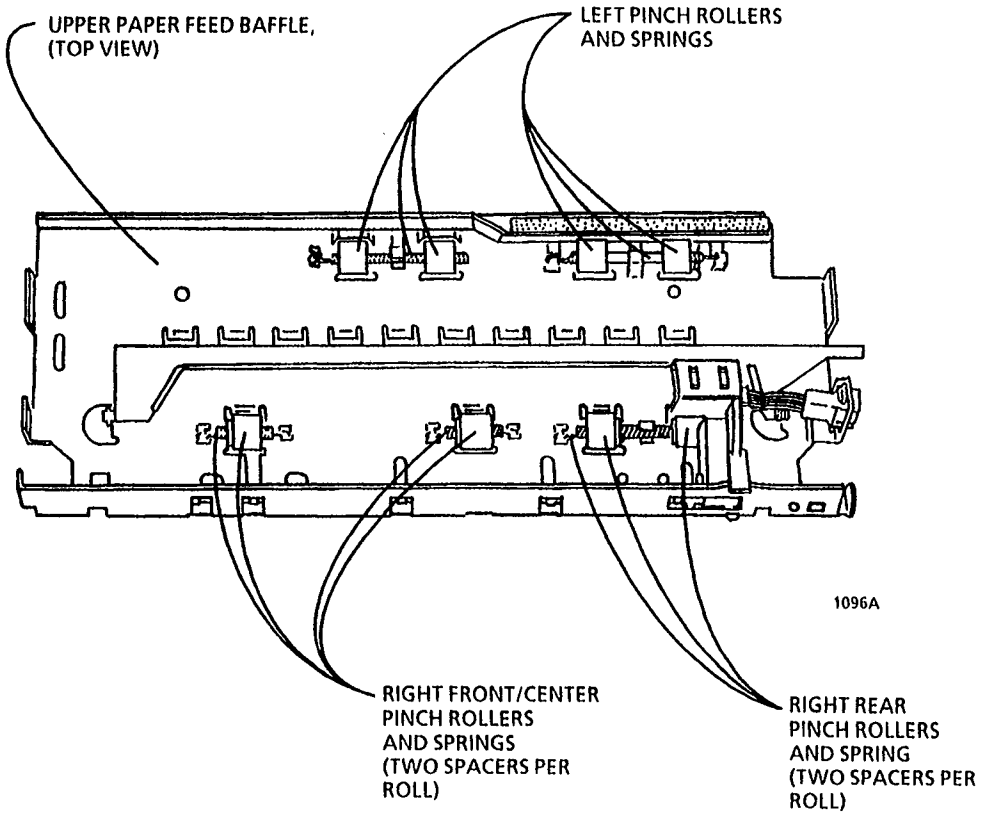


Figure 2. Removing the Pinch Rollers and Springs

REP 8.9 Paper Feed Rollers / Registration and Preregistration Rollers

Parts List on PL 6.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove the Paper Feed Solenoid (REP 8.1).
3. (Figure 1): Remove either the Paper Feed Roller, the Registration Roller or the Preregistration Roller, as necessary.

NOTE: Proceed only as far as necessary to remove the desired parts.

Replacement

After installing the Paper Feed Roller, perform the Paper Feed Roller Home Position (ADJ 8.2).

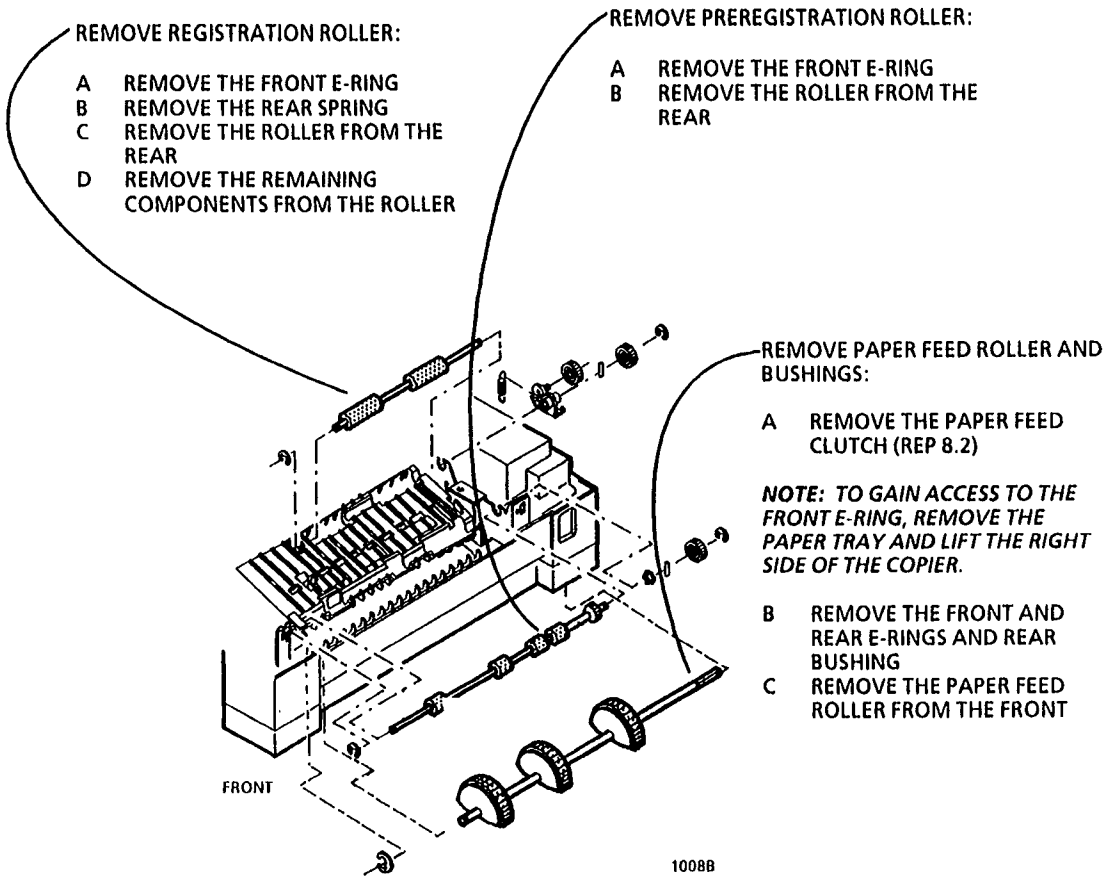


Figure 1. Removing the Paper Feed Roller, the Registration Roller, or the Preregistration Roller

REP 9.1 Toner Motor (MOT2)

Parts List on PL 1.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock.**
2. Remove all covers (REP 14.1, REP 14.2).
3. Remove the Optics Frame Assembly (REP 6.1).
4. (Figure 1): Remove the Toner Motor.

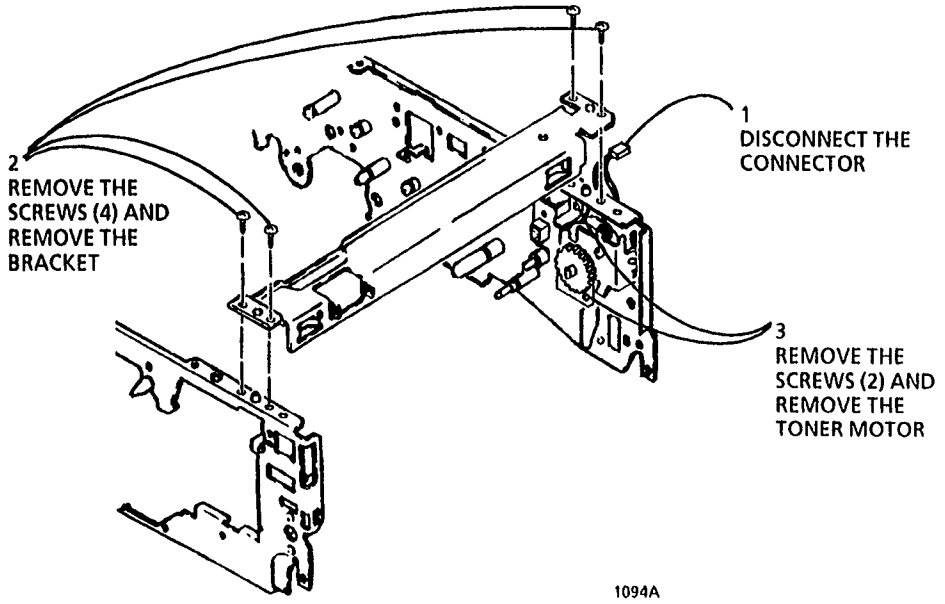


Figure 1. Removing the Toner Motor (MOT2)

REP 9.2 Transfer Corotron Wire and Transfer Corotron Blocks

Parts List on PL 6.4

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the dry ink cartridge. Remove the copy cartridge and **place it in a black plastic bag to avoid light shock**.
2. (Figure 1): Remove the transfer corotron wire and the corotron wire terminal.

NOTE: The corotron blocks can be removed by releasing the hook tabs.

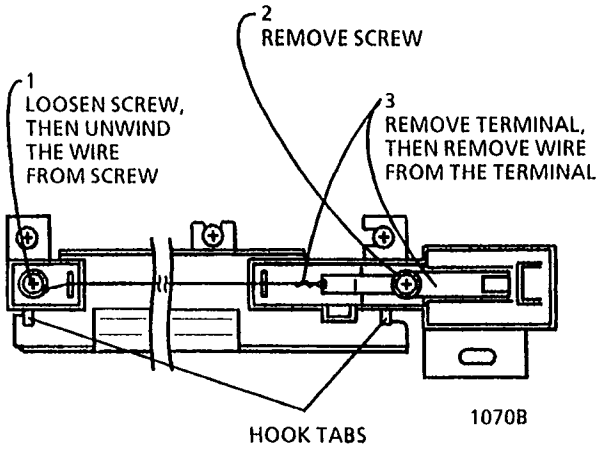


Figure 1. Removing the Transfer Corotron Wire and Terminal

Replacement

1. (Figure 2): Install the transfer corotron wire onto the terminal.

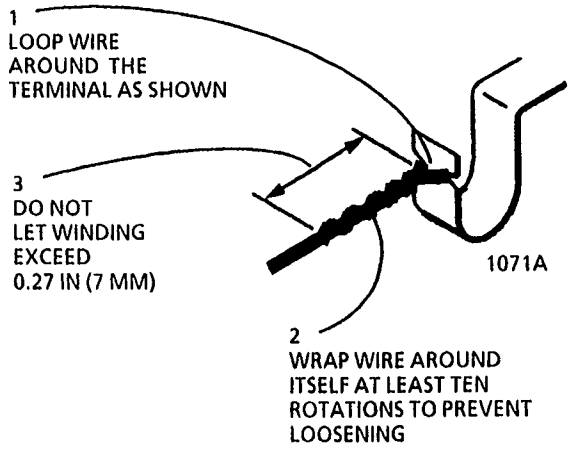


Figure 2. Installing the Transfer Corotron Wire onto the Terminal

2. (Figure 3): Install the terminal into the rear transfer corotron block and install the screw.

NOTE: When threading the Transfer Corotron Wire (Step 3), do not tighten the screw in the Front Transfer Corotron Block until after adjusting the wire tension (Step 4).

3. (Figures 3 and 4): Thread the wire through the notches on the blocks and loop the other end one-half rotation around the screw on the front block, between the washer and the screw head.

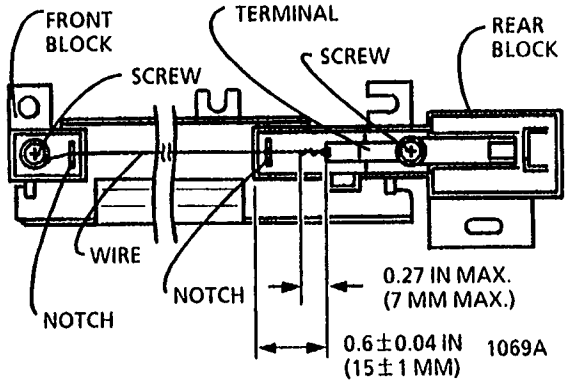


Figure 3. Threading and Tensioning the Transfer Corotron Wire

CAUTION

Be careful not to break the wire when adjusting the tension.

4. (Figure 3): Adjust the wire tension.
   a. Pull gently on the free end of the wire until the wire tension moves the terminal to 0.6±0.04 inch (15±1 mm) from the outside edge of the rear block.
   b. Readjust, as necessary.
   c. Tighten the screw.
5. Trim excess wire from the ends to prevent arcing.
6. Clean the wire with film remover and a cotton swab.

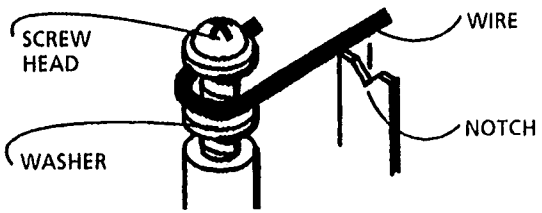


Figure 4. Threading the Wire

REP 9.3 Discharge Lamp (DS2)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the dry ink cartridge. Remove the copy cartridge and **place it in a black plastic bag to avoid light shock**.
2. Open the copier.
3. Remove Front Interior Cover (REP 14.2).
4. (Figure 1): Remove the Discharge Lamp.

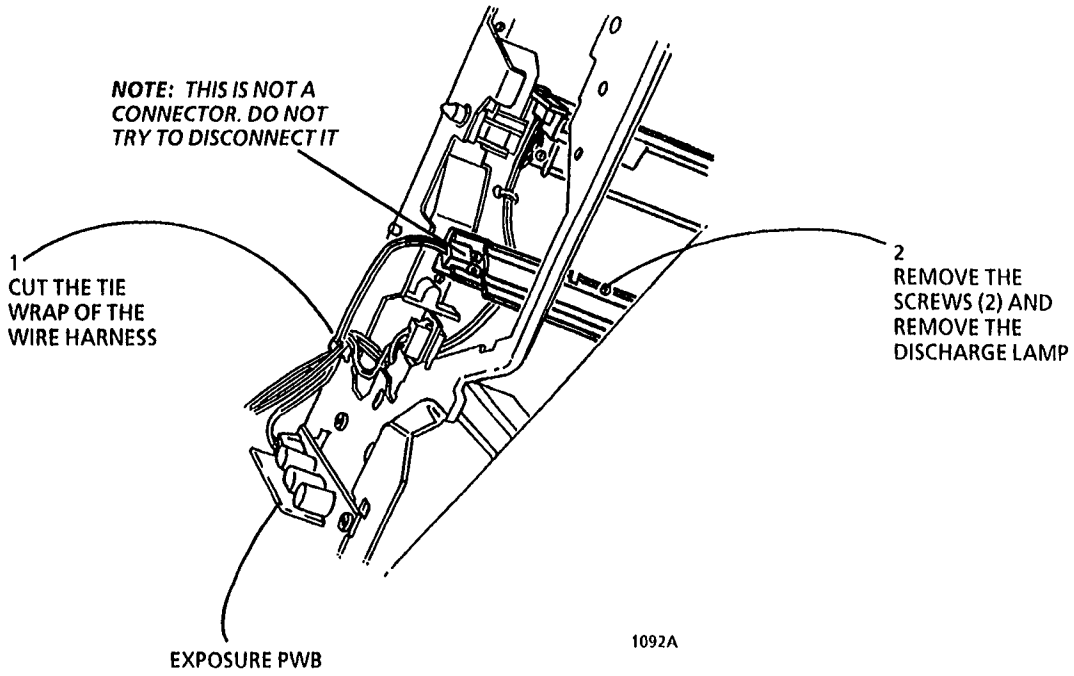


Figure 1. Removing the Discharge Lamp

REP 9.4 Side/Edge Erase Lamp PWB (W/Lamps)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the dry ink cartridge. Remove the copy cartridge and **place it in a black plastic bag to avoid light shock**.
2. Open the copier.
3. Remove Front Interior Cover (REP 14.2).
4. (Figure 1): Remove the Side/Edge Erase PWB.

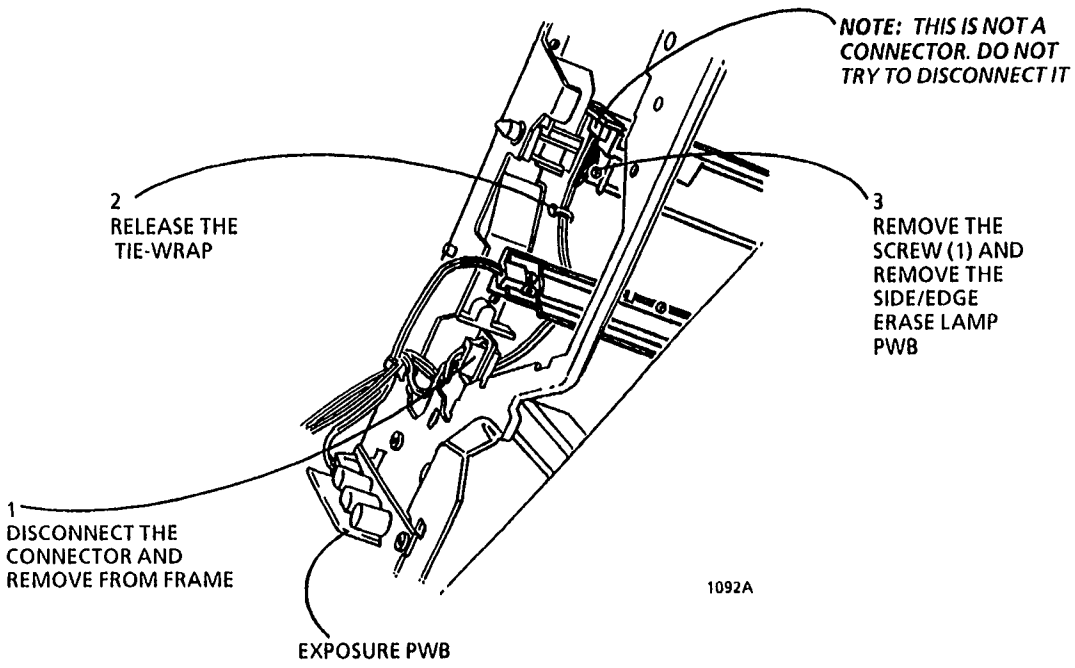


Figure 1. Removing the Side/Edge Erase Lamp PWB (W/Lamps)

REP 9.5 Stripper Assembly and Stripper Guide

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge.

CAUTION

Never touch the copy cartridge without gloves. Oil from the skin may damage the copy cartridge. The copy cartridge may become damaged (light shocked) if exposed to the light for an extended period.

2. Remove the Copy Cartridge.
3. (Figure 1): Remove the Stripper Assembly from the bottom of the Copy Cartridge.
4. (Figure 2): If necessary, remove the Stripper Guide from the Stripper Assembly.

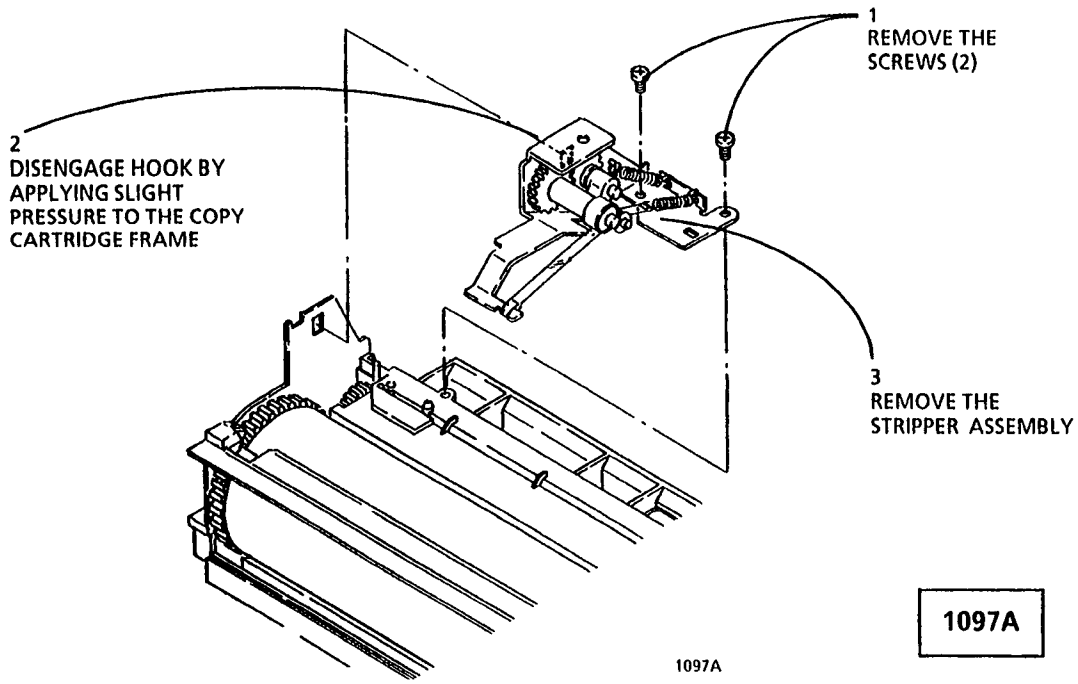


Figure 1. Removing the Stripper Assembly

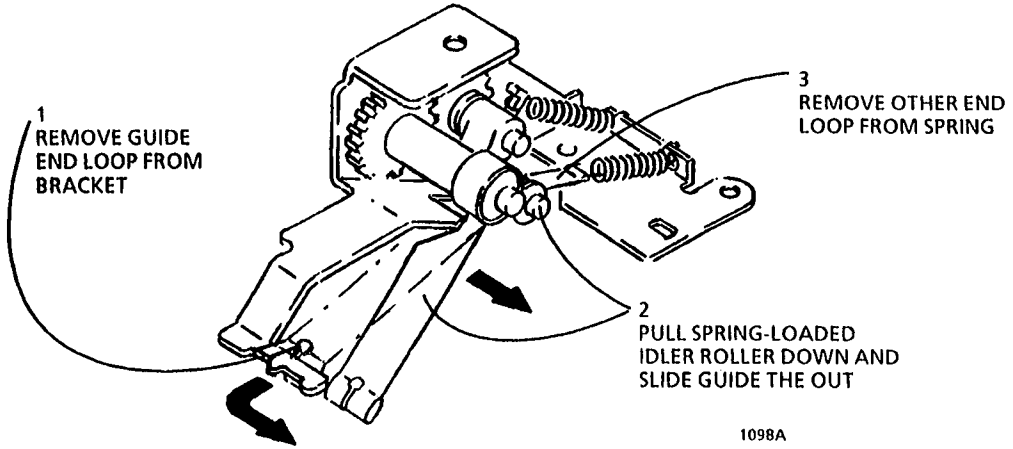


Figure 2. Removing the Stripper Guide

REP 9.6 Charge Corotron and Transfer Corotron Terminals

Parts List on PL 5.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and place it in a black plastic bag to avoid light shock.
2. Remove the Rear Cover (REP 14.2).
3. Remove the PWB module (REP 9.10).
4. (Figure 1): Remove the Charge and Transfer Corotron Terminals.

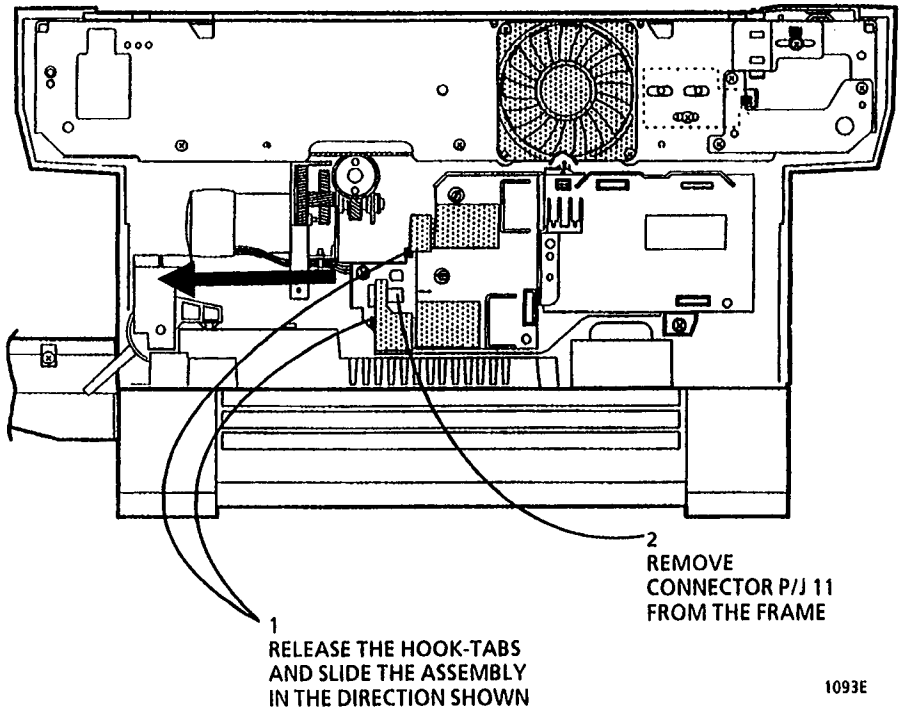


Figure 1. Removing the Charge and Transfer Corotron Terminals

REP 9.5 Stripper Assembly and Stripper Guide

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge.

CAUTION

Never touch the copy cartridge without gloves. Oil from the skin may damage the copy cartridge. The copy cartridge may become damaged (light shocked) if exposed to the light for an extended period.

2. Remove the Copy Cartridge.
3. (Figure 1): Remove the Stripper Assembly from the bottom of the Copy Cartridge.
4. (Figure 2): If necessary, remove the Stripper Guide from the Stripper Assembly.

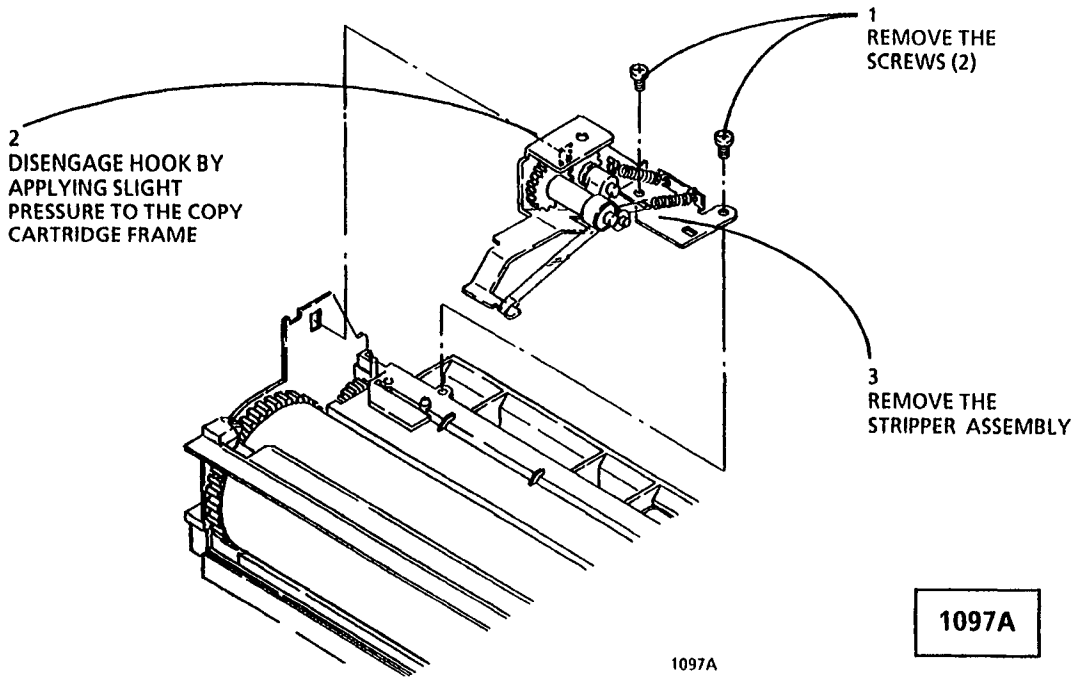


Figure 1. Removing the Stripper Assembly

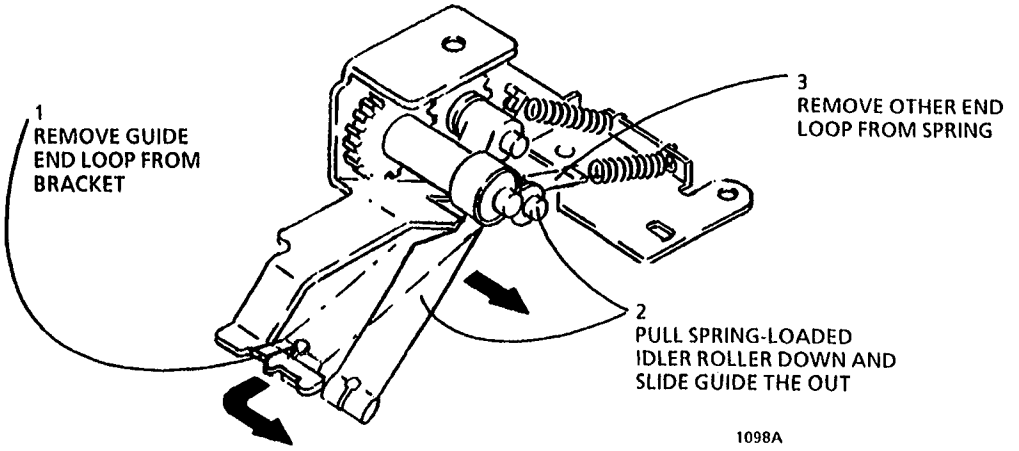


Figure 2. Removing the Stripper Guide

REP 9.6 Charge Corotron and Transfer Corotron Terminals

Parts List on PL 5.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove the Rear Cover (REP 14.2).
3. Remove the PWB module (REP 9.10).
4. (Figure 1): Remove the Charge and Transfer Corotron Terminals.

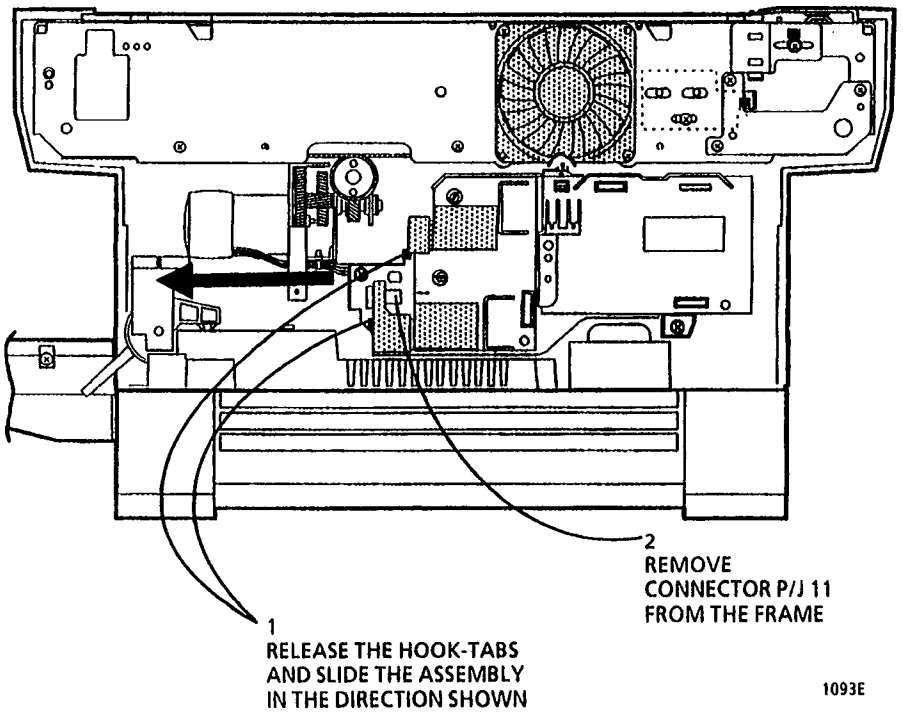


Figure 1. Removing the Charge and Transfer Corotron Terminals

REP 9.7 Copy Cartridge Switch/Meter (S5, M1)

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Rear Cover (REP 14.2).
2. Remove the Main and HV PWB Module (REP 9.10).
3. (Figure 1): Remove the switch/meter bracket, located behind the PWB Module, and the switch/meter from the bracket.

CAUTION

Applying excessive pressure onto the registration linkage arm could damage the incrementing mechanism of the main counter.

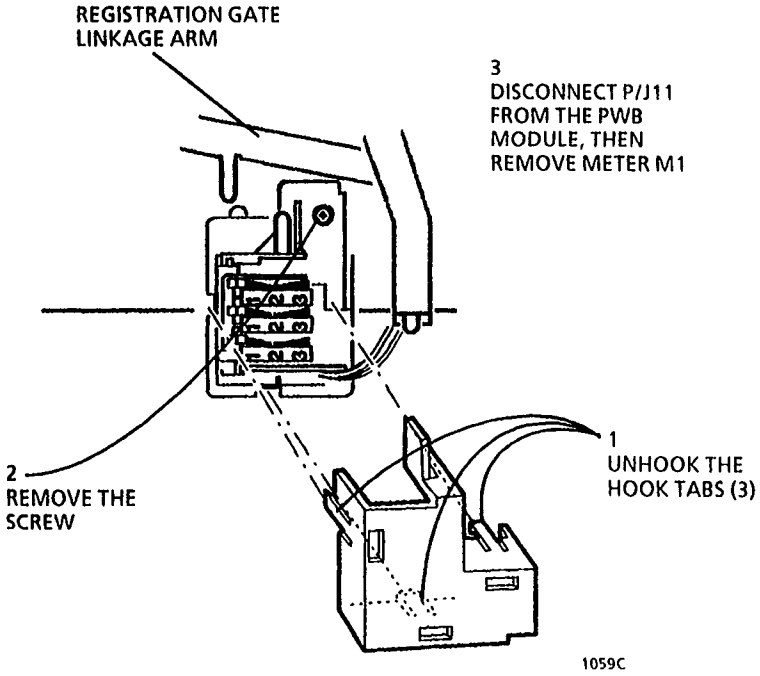


Figure 1. Removing the Copy Cartridge Switch/Meter

REP 9.8 High Voltage Power Supply (HVPS)

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Dry Ink Cartridge. Remove the Copy Cartridge and **place it in a black plastic bag to avoid light shock**.
2. Remove the Platen Cover (REP 14.1) .
3. Remove the Rear Cover (REP 14.2).
4. (Figure 1): Remove the High Voltage Power Supply.

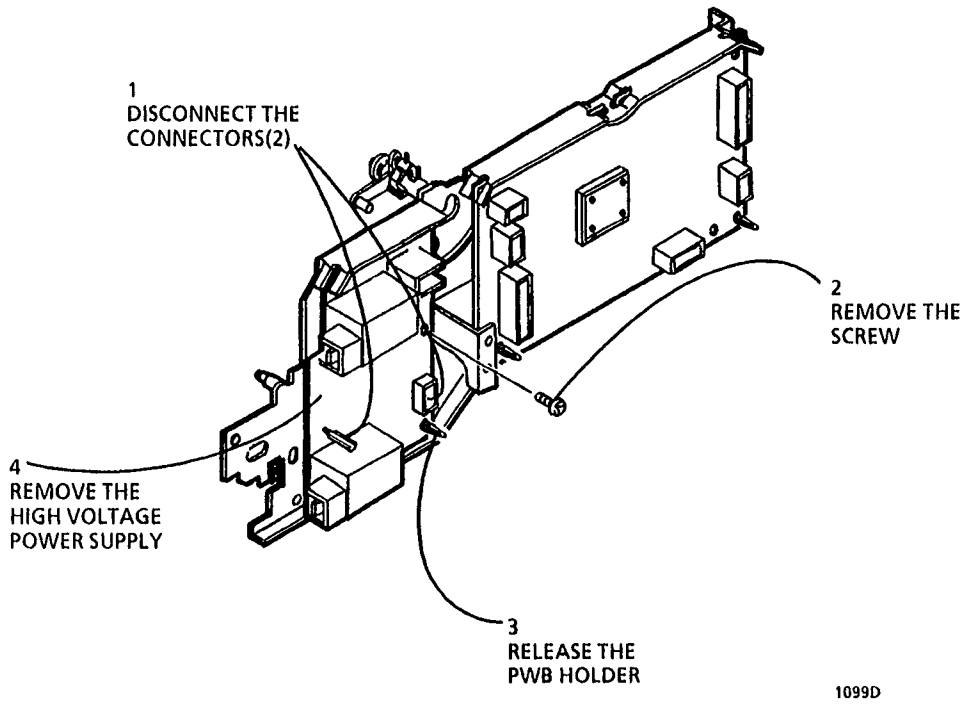


Figure 1. Removing the High Voltage Power Supply

REP 9.9 Ozone Filter

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Left Cover (REP 14.2)
2. (Figure 1): Remove the Ozone Filter.

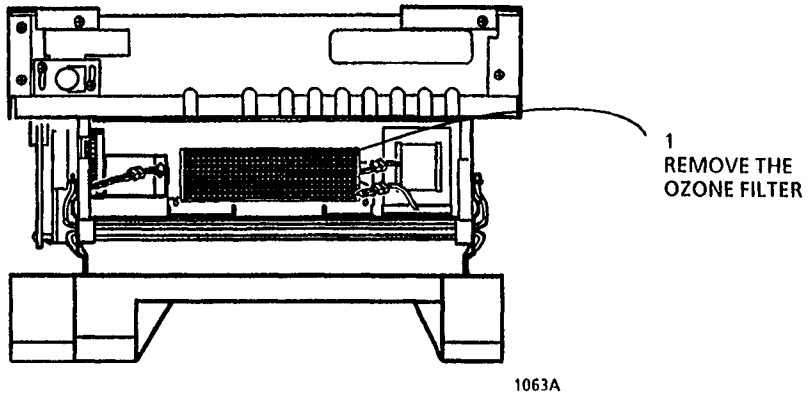


Figure 1. Removing the Ozone Filter

REP 9.10 Main PWB and HV PWB Module

Parts List on PL 6.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the Rear Cover (REP 14.2).
2. (Figure 1): Remove the main PWB and HV PWB Module.

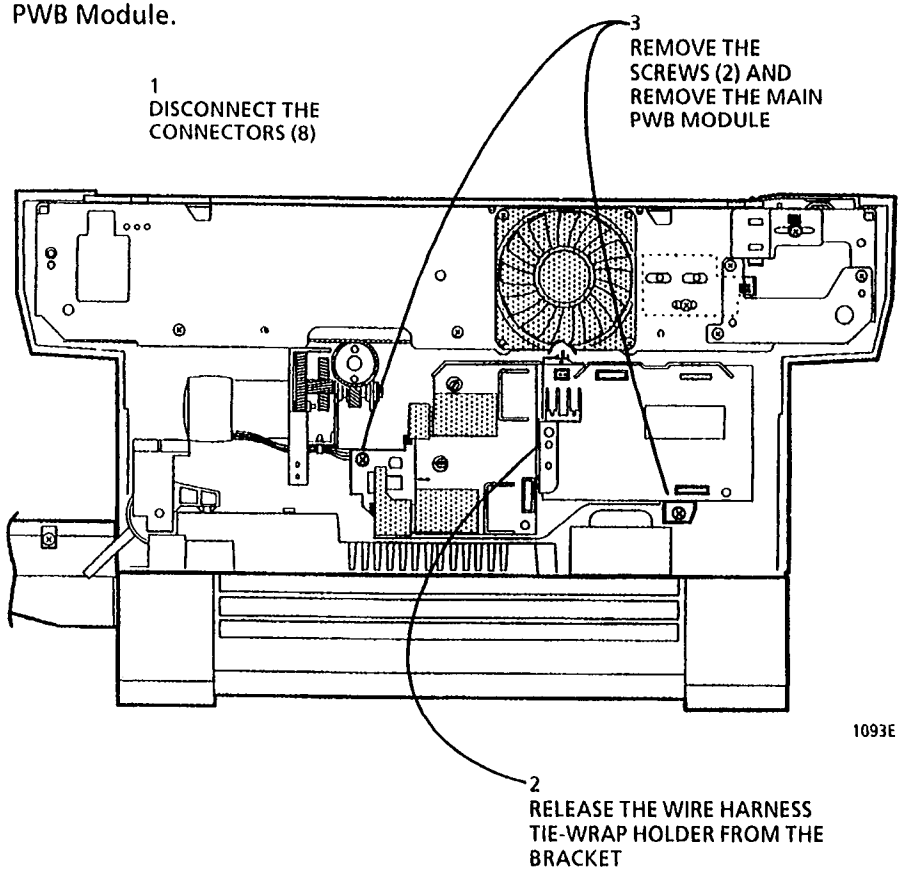


Figure 1. Removing the Main PWB and HV PWB Module

Replacement

Make sure the Registration Gate Linkage Arm is positioned over the Registration Gate.

CAUTION

Applying excessive pressure onto the registration linkage arm could damage the incrementing mechanism of the main counter.

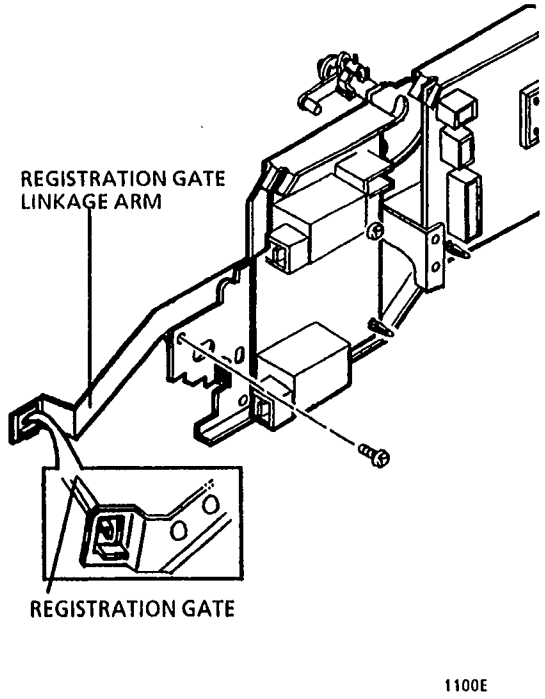


Figure 2. Reinstalling the Main PWB Module

REP 10.1 Fuser Assembly

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.
2. (Figure 1): Remove the fuser assembly.

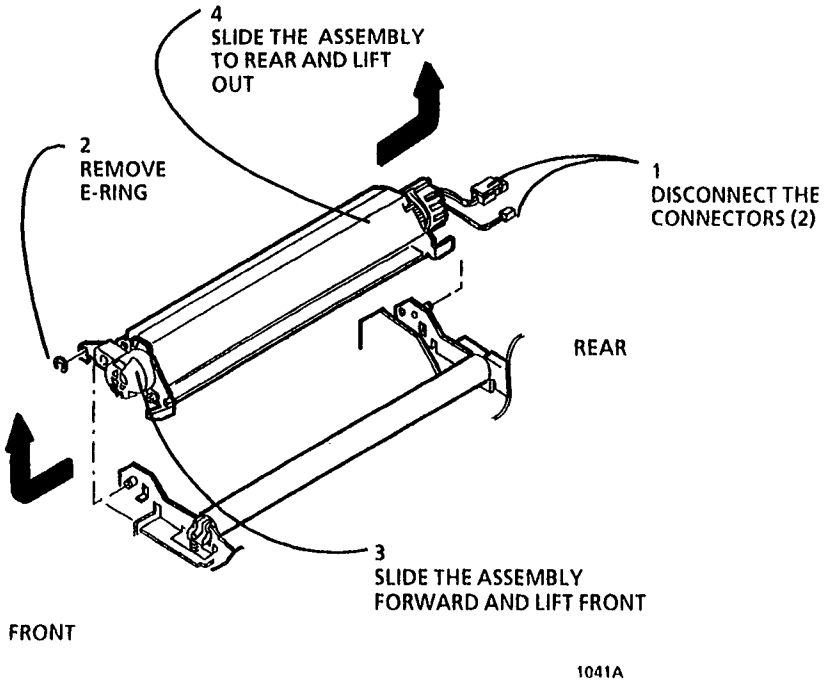


Figure 1. Removing the Fuser Assembly

REP 10.2 Stripper Finger

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.
2. Remove the fuser assembly (REP 10.1).
3. Remove the fuser cover (one screw). Release the cover from the 4 hook tabs.
4. (Figure 1): Remove either stripper finger as required.

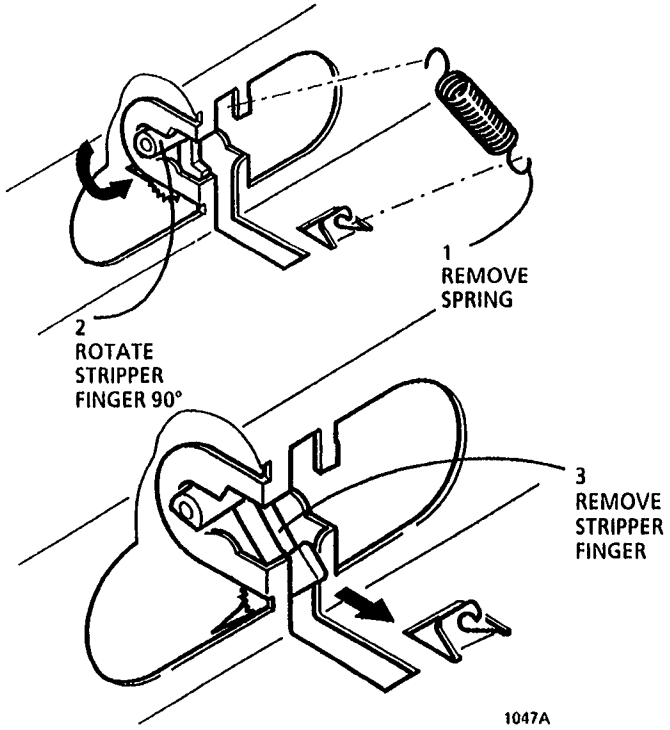


Figure 1. Removing the Stripper Finger

REP 10.3 Fuser Fan Motor (MOT6)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.
2. Remove the dry ink cartridge. Remove the copy cartridge and **place it in a black plastic bag to avoid light shock**.
3. Remove all the covers (REP 14.1, REP 14.2)
4. Remove the Optics Frame Assembly (REP 6.1).
5. (Figure 1): Remove the Fuser Fan Duct.
6. Open the copier to access the fan mounting screws behind the fuser assembly.
7. (Figure 1): Remove the Fuser Fan Motor.

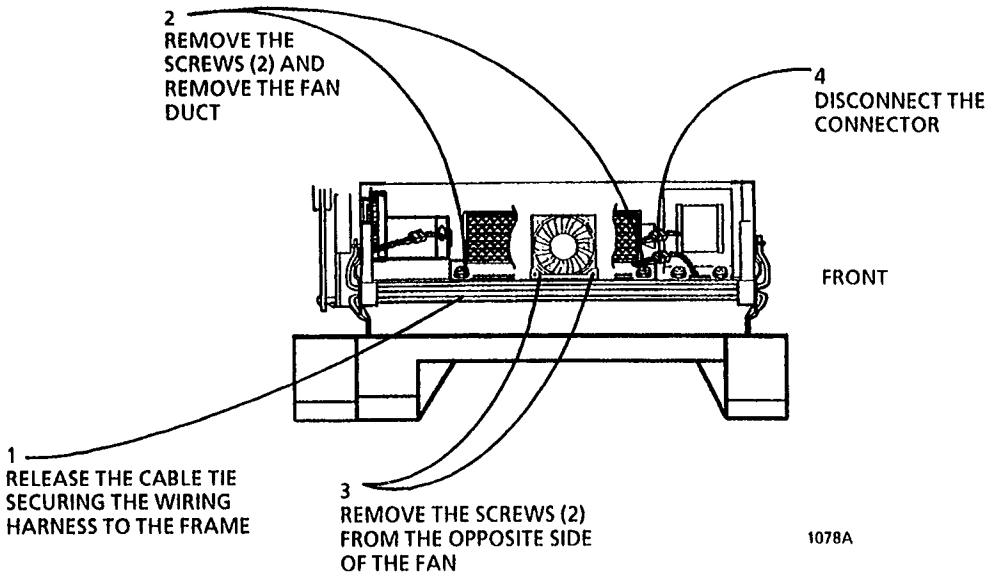


Figure 1. Removing the Fuser Fan Motor (MOT6)

REP 10.4 Thermistor (RT1)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the fuser cover (one screw). Release the cover from the 4 hook tabs.
4. (Figure 1): Secure the stripper fingers away from the heat roll.

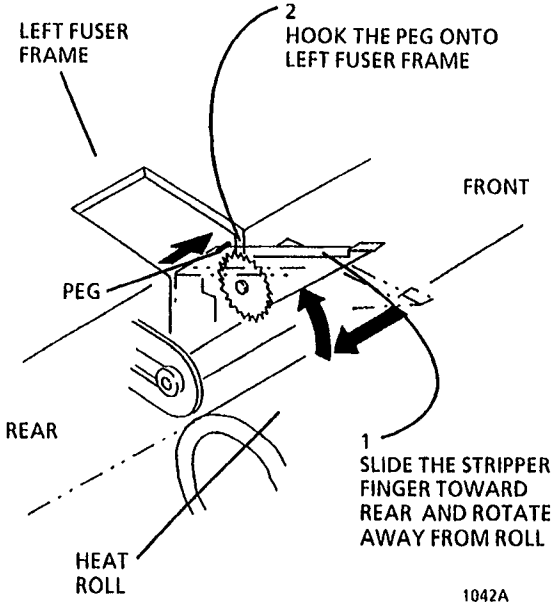


Figure 1. Securing the Stripper Fingers

5. (Figure 2): Remove the Left Fuser Frame.

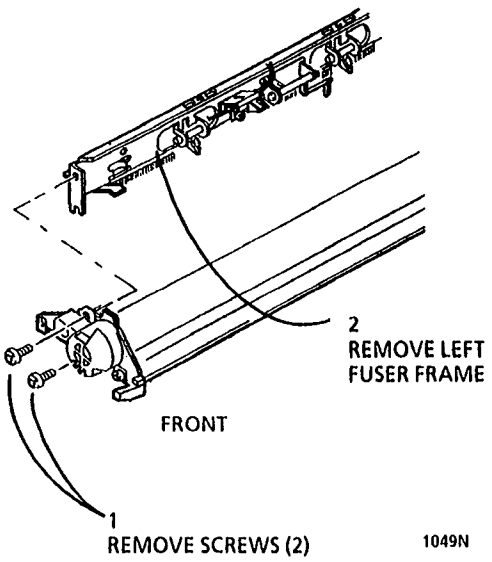


Figure 2. Removing the Left Fuser Frame

6. (Figure 3): Remove the thermistor.

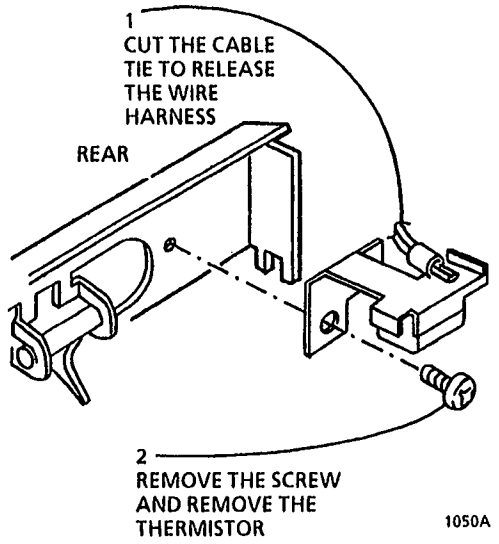


Figure 3. Removing the Thermistor

Replacement

(Figure 4): Ensure that the center of the thermistor contacts the heat roll. If not, remove the thermistor, and reform its copper mounting brackets slightly, and reinstall the thermistor.

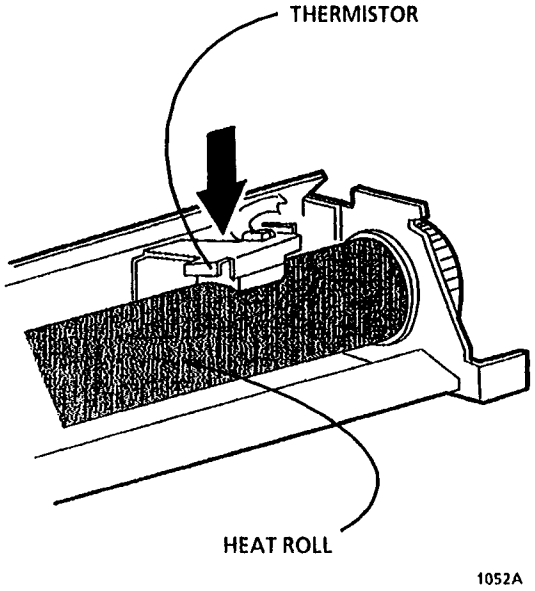


Figure 4. Installing the Thermistor

REP 10.5 Thermal Breaker (CB1)

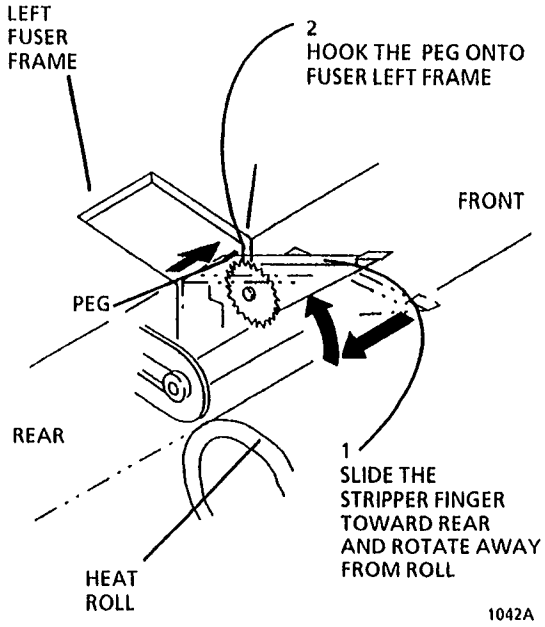
Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

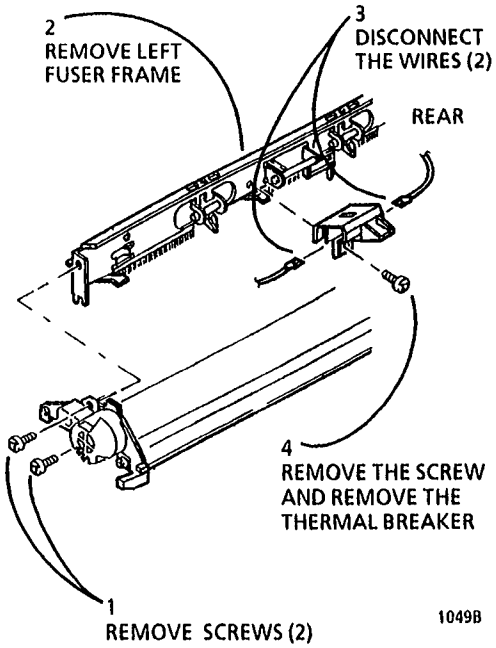
1. Open the copier.
2. Remove the fuser assembly (REP 10.1).
3. Remove the fuser cover (one screw).
4. (Figure 1): Secure the stripper fingers away from the heat roll.



Fuser assembly (Bottom view)

Figure 1. Securing the Stripper Fingers

5. (Figure 2): Remove the thermal breaker.



Fuser assembly (Top view)

Figure 2. Removing the Thermal Breaker

Replacement

1. (Figure 3): Ensure that the clearance between the thermal breaker and the heat roll is 1.25±0.25 mm). if not, then look for damaged or defective components, which might affect this clearance.

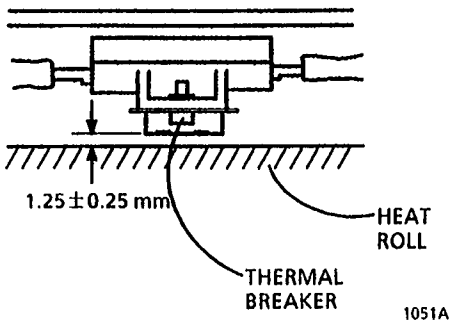


Figure 3. Showing the Thermal Breaker Clearance

REP 10.6 Heat Rod (HTR1)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

CAUTION

Do not touch the glass part of the heat rod with your hands, or damage will result.

1. Open the copier.
2. (Figure 1): Remove the heat rod.

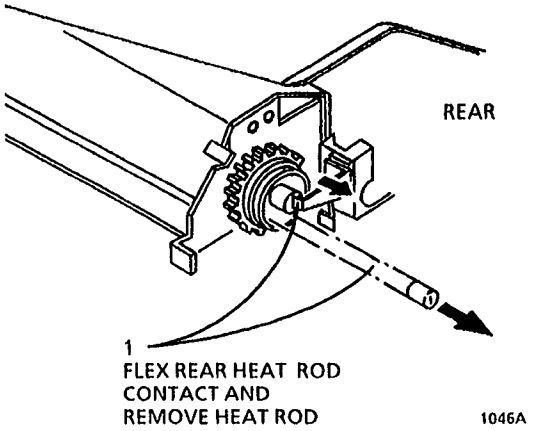


Figure 1. Removing the Heat Rod

Replacement

Look through the slots in the front heat rod cover to seat the heat rod in the front contact, then perform the reinstallation.

REP 10.7 Heat Roll

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.
2. Remove the Fuser Assembly (REP 10.1).
3. Remove the Heat Rod (REP 10.6).
4. Remove the fuser cover (one screw).
5. Remove the front heat rod cover (two screws).
6. (Figure 1): Secure the stripper fingers away from the heat roll.

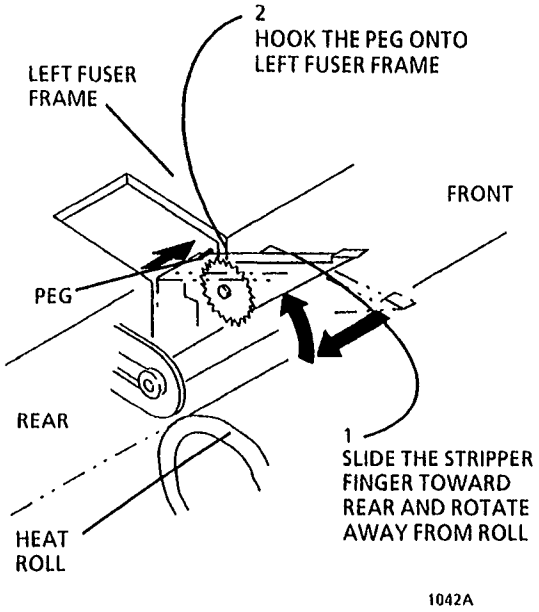


Figure 1. Securing the Stripper Fingers

7. (Figure 2): Remove the heat roll.

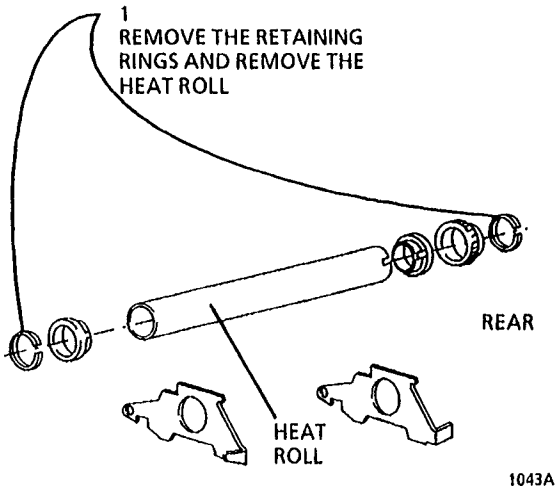


Figure 2. Removing the Heat Roll

REP 10.8 Pressure Roll

Parts List ON PL 5.1

REMOVAL

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.

NOTE: Proceed only as far as necessary to remove the desired parts.

2. (Figure 1): Remove the pressure roll.

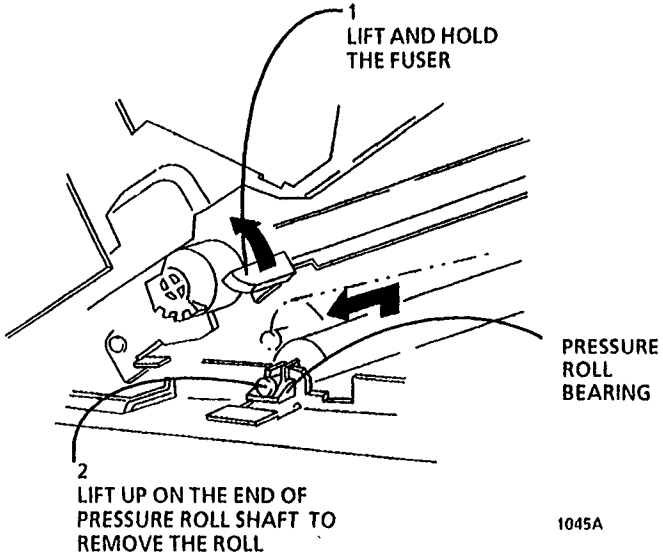


Figure 1. Removing the Pressure Roll

REP 10.9 Exit Switch (S4)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove all the covers (REP 14.1, REP 14.2).
2. Remove the Optics Frame Assembly (REP 6.1).
3. (Figure 1): Remove the fuser fan duct.

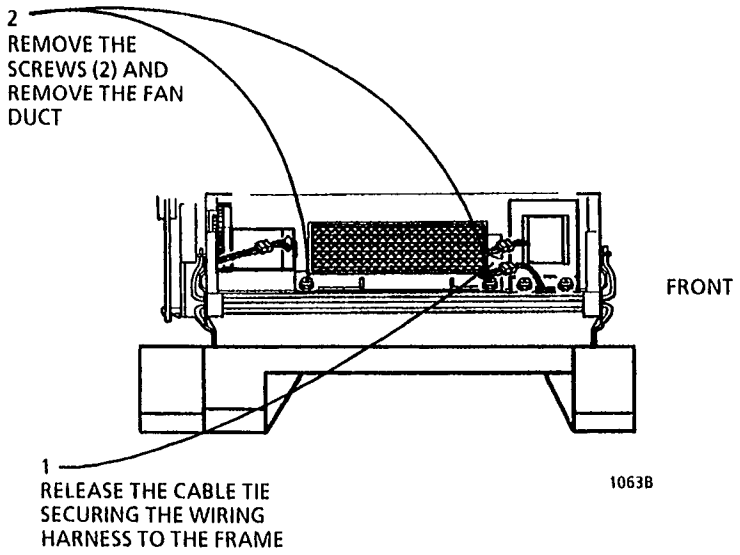


Figure 1. Removing the Fuser Fan Motor (MOT6)

4. (Figure 2): Remove the exit switch.

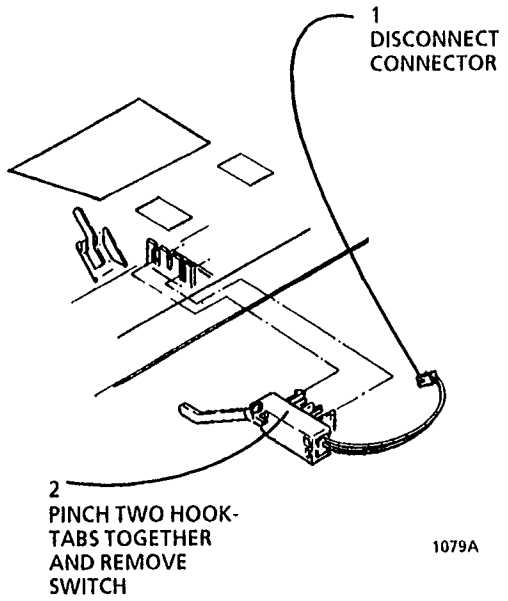


Figure 2. Removing the Exit Switch (S4)

REP 10.8 Pressure Roll

Parts List ON PL 5.1

REMOVAL

WARNING

Switch off the copier power, disconnect the power cord, and allow the fuser to cool.

1. Open the copier.

NOTE: Proceed only as far as necessary to remove the desired parts.

2. (Figure 1): Remove the pressure roll.

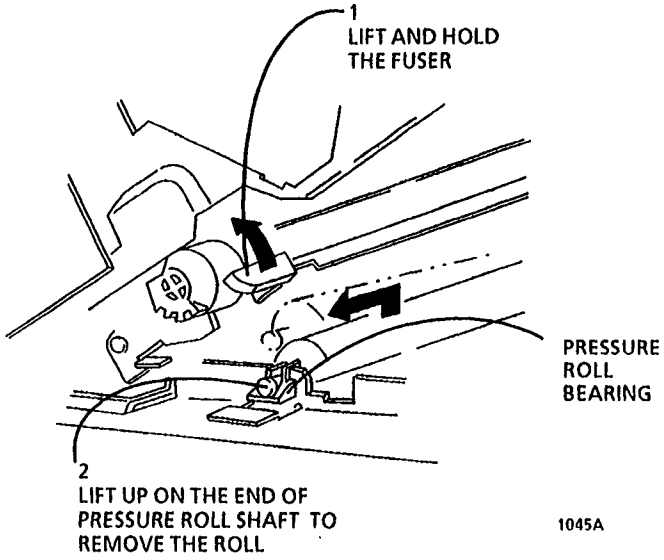


Figure 1. Removing the Pressure Roll

REP 10.9 Exit Switch (S4)

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove all the covers (REP 14.1, REP 14.2).
2. Remove the Optics Frame Assembly (REP 6.1).
3. (Figure 1): Remove the fuser fan duct.

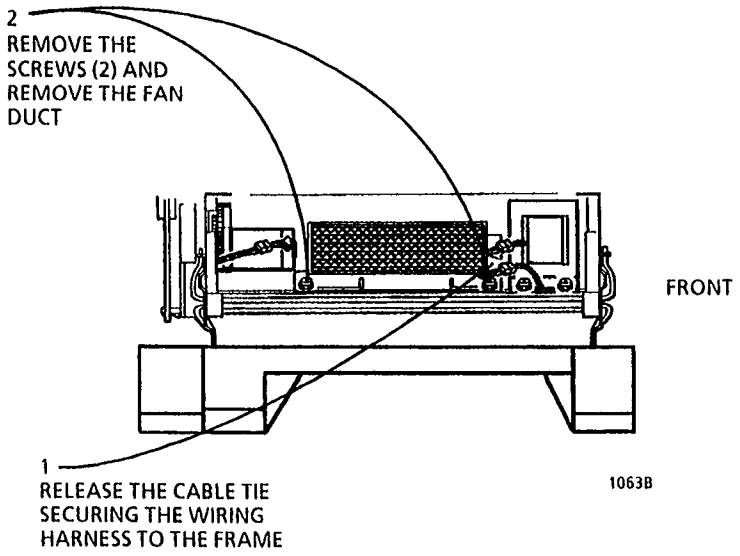


Figure 1. Removing the Fuser Fan Motor (MOT6)

4. (Figure 2): Remove the exit switch.

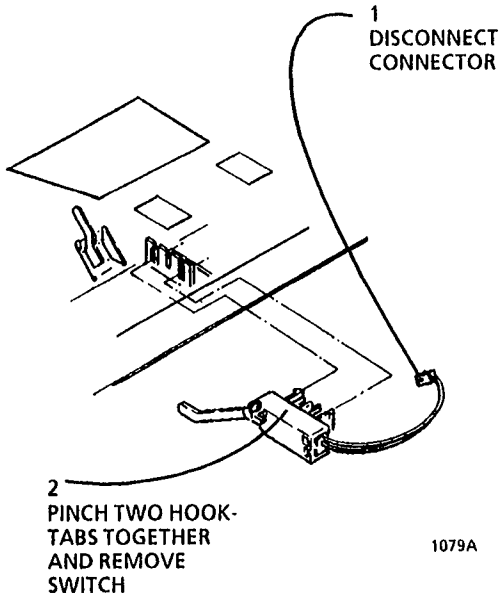


Figure 2. Removing the Exit Switch (S4)

REP 14.1 Platen Cover / Platen Glass

Parts List on PL 7.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. (Figure 1): Remove the Platen cover.
2. Remove the Registration Plate.
3. Remove the Platen Glass.

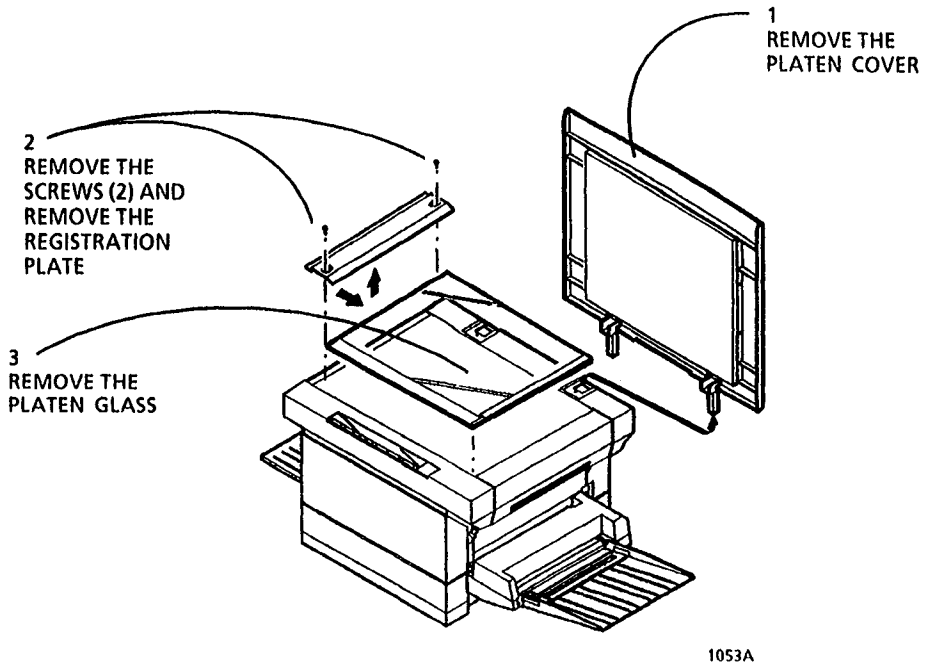


Figure 1. Removing the Platen Cover / Platen Glass

REP 14.2 Front Access Cover, Front Interior Cover, Rear Cover, Left Cover, and Right Cover

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

NOTE: The side covers must <u>not</u> be removed without removing the Front Interior and Rear Covers first. Only the Front Access Cover can be removed by itself. Also, proceed only as far as necessary to remove the desired covers.

1. Remove the dry ink cartridge. Remove the copy cartridge and <u>place it in a black plastic bag to avoid light shock</u>.

<u>Front Access Cover</u>

1. (Figure 1): Remove the Front Access Cover.
   a. Open the cover.
   b. Flex the cover gently to disengage one hinge pin from its bracket, and remove the cover.

<u>Front Interior Cover</u>

1. (Figure 1): Remove the Front Interior Cover.
   a. Close the copier and remove the three screws.
   b. Open the copier.
   c. Release the two hook tabs and gently pull the cover out far enough to perform step d.
   d. Disconnect the 3 and 24 pin connectors and remove the cover.

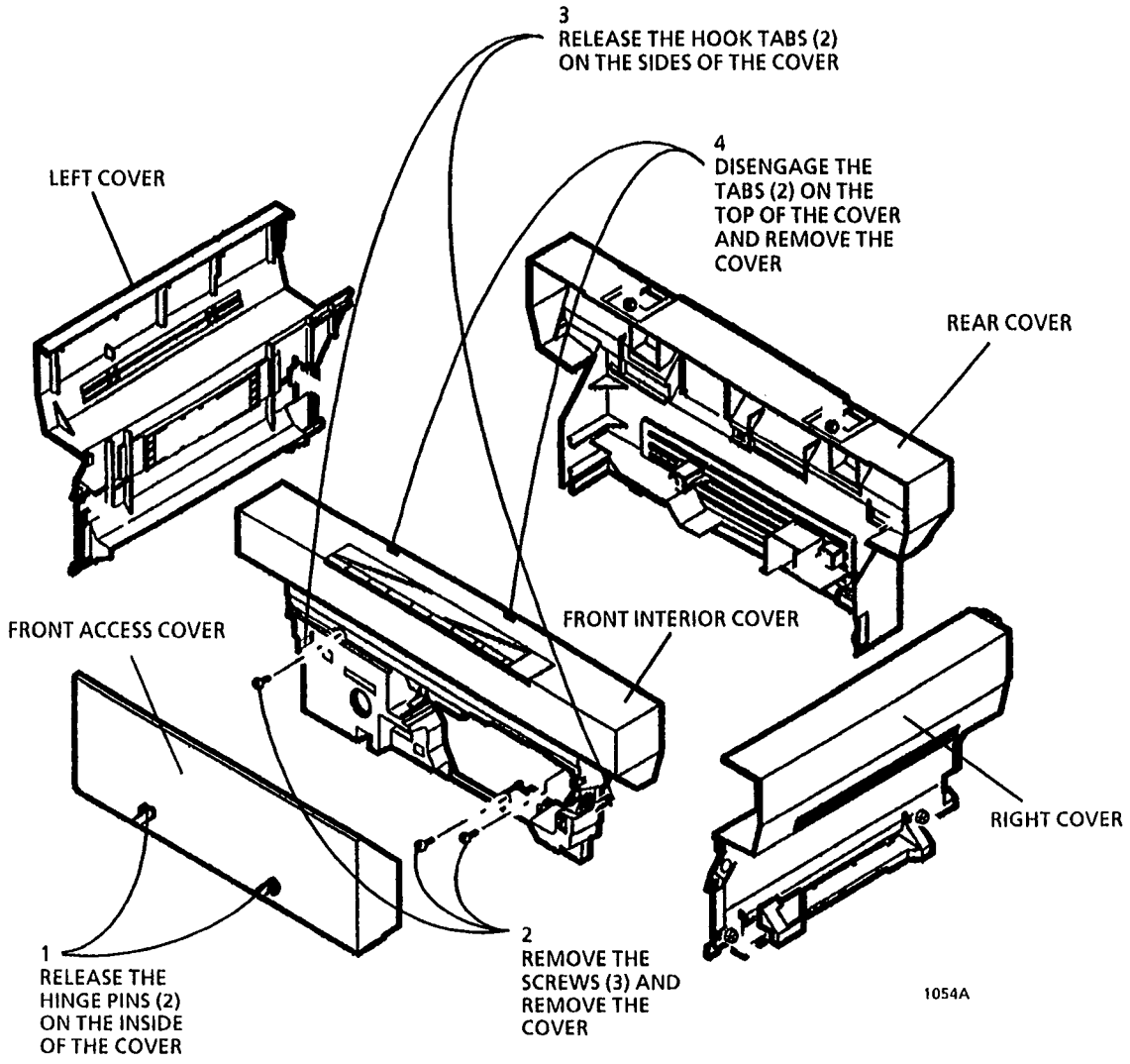


Figure 1. Removing the Front Access, Front Interior Covers

NOTE: After removing the Front Interior Cover, the copier can be opened by pushing the release button shaft to the left. And when reinstalling the front cover, ensure that the release button does not interfere with the shaft.

Rear Cover

1. (Figure 2): Remove the Rear Cover.
   a. Remove the Platen Cover (REP 14.1).
   b. With the copier open, remove the four screws.
   c. Pull gently out and up on the bottom left corner of the cover and clear the two hook tabs.

Left Cover (Step 2)

1. (Figure 2): Remove the Left Cover.
   a. Close the copier.
   b. Remove the two screws.
   c. Pull out gently on the top two corners of the cover.
   d. Keeping the cover approximately vertical (do not tilt it outward), shift the cover to the left, lower the left side, and remove the bottom right corner.
   e. Still keeping the cover approximately vertical (do not tilt it outward), lower the right side and remove the bottom left corner.

Right Cover (Step 3)

1. (Figure 2): Remove the Right Cover.
   a. (5310 Only): Open the copier.
   b. Remove the two screws and pull gently on the top two corners of the cover.

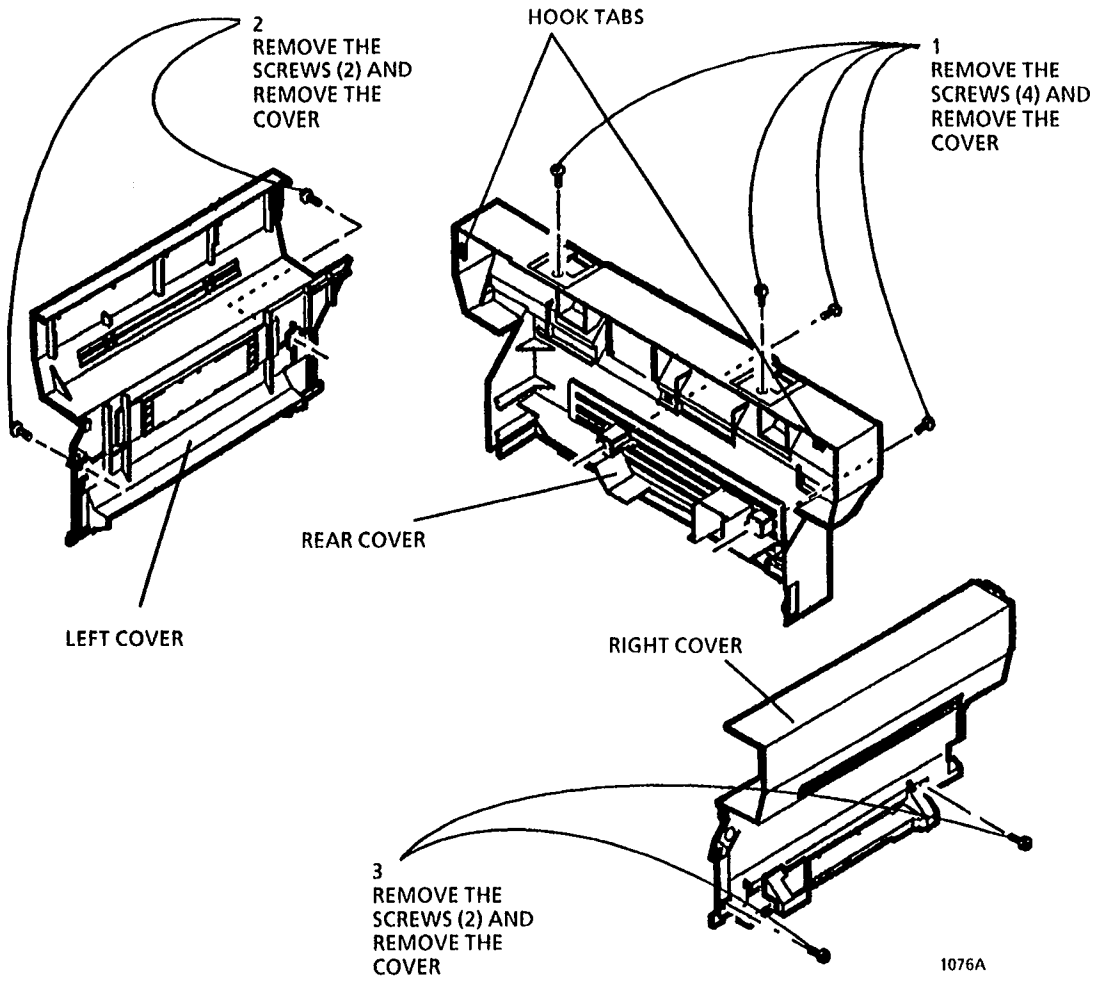


Figure 2. Removing the Rear, Left, and Right Covers

REP 14.3 Torsion Bar / Hinge

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove all the covers except the Left Cover (REP 14.1, REP 14.2).
2. Remove the PWB Module (REP 9.10).
3. (Figure 1): Remove the Torsion Bar/ Hinge.

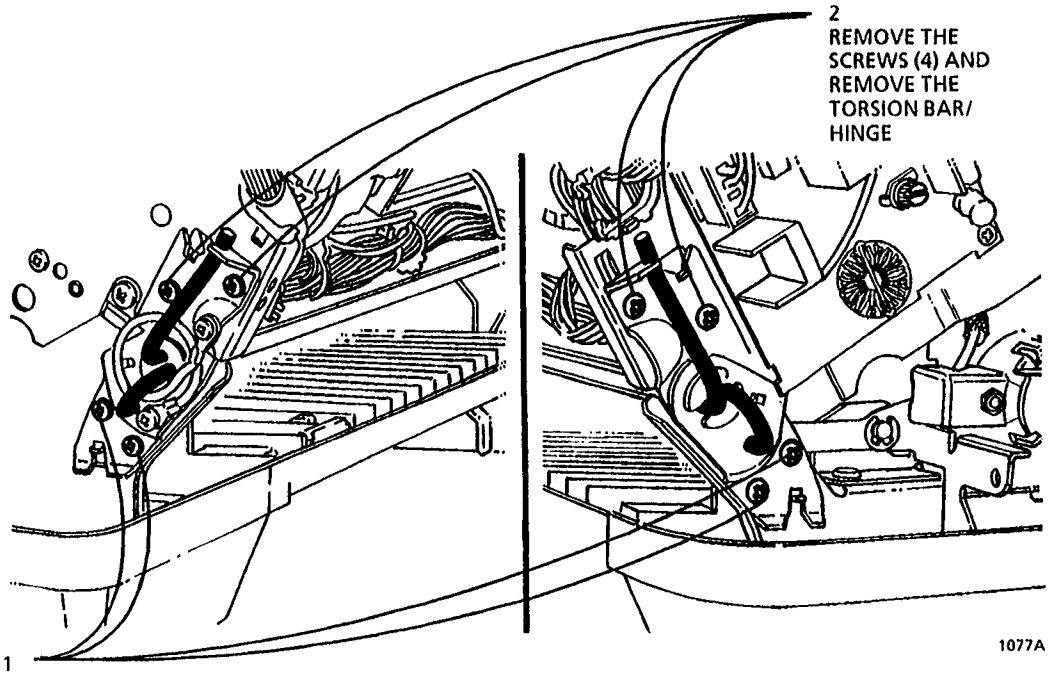


Figure 1. Removing the Torsion Bar / Hinge

ADJ 6.1 EXPOSURE

Purpose

The purpose is to adjust the overall exposure level until the correct line density is produced on the copy and then center the copy density dial.

Adjust the overall exposure whenever any of the following parts are exchanged:

- Exposure Control PWB
- Exposure Lamp (DS1)
- Auto Exposure Sensor (CR1)

Prerequisites:

Ensure the following:

- Platen Cover and Platen Glass are clean and in good condition.
- All optics are clean and in good condition.
- Auto Exposure Sensor is clean and in good condition.
- (ADJ 6.2): Exposure Plates are aligned.

Check

1. Set the magnification to 100%.
2. (Figure 1) Set the copy density dial to the center position.
3. Set the copy contrast control to the dark position.
4. Make five copies of Side A of the standard test pattern.
5. (Figure 2) Check the fifth copy.
   - If the .10 line pair is just visible and the .05 line pair is not visible, the exposure is correct.
   - If the .10 line pair is not visible, decrease the exposure.
   - If the .05 line pair is visible, increase the exposure.

Adjustment

CAUTION

Cover the copy cartridge while it is out of the machine to protect it from light shock.

1. Remove the following:
   a. (REP 14.3): Rear cover, left cover and right cover.
   b. Dry ink and copy cartridges.
   c. (REP 14.1): Remove the front access cover and the front interior cover, but leave the two connectors connected.
2. Reinstall the dry ink and copy cartridges.
3. Holding in the interlock rod, make five copies. Adjust the copy density dial:
   - Counterclockwise to decrease exposure (and increase line density)
   - Clockwise to increase exposure (and decrease line density)
4. (Figure 1) When the exposure is correct, remove the copy density dial from VR201 and reinstall it on VR201 in the center position.
5. Reinstall the covers.

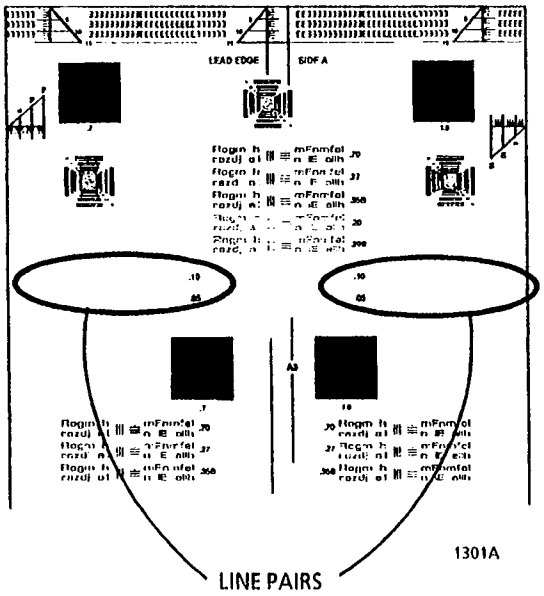


Figure 2. Checking the line pairs

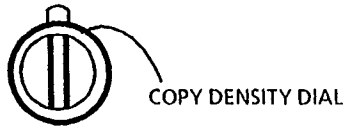


Figure 1. Centering the Copy Density dial.

ADJ 6.2 Exposure Plate Alignment

Purpose

The purpose is to balance the exposure between the front and rear sides of the copy (side-to-side). This will ensure equal line density on the front and rear areas of the copy and eliminate some lead-edge-to-trail-edge background bands.

Check

1. Set the magnification to 100%.
2. (Figure 1) Set the copy density dial to the center position.
3. Set the copy contrast control to the dark position.
4. Make five copies of Side A of the standard test pattern.
5. (Figure 2) Check the line pairs on both the front and rear of the fifth copy. If they reproduce equally, the adjustment is OK.

Adjustment

1. Remove the following:
   a. (REP 14.2): Rear cover, left cover
   b. (REP 14.1): Registration plate and platen glass.
2. Switch off the power and move the lamp carriage to the right by rotating the scan drive gear (rear of copier) until all the exposure plate screws are visible.

CAUTION

The exposure plates may be hot. Allow the plates to cool before performing the next step.

3. (Figure 3): Loosen the screws and align the exposure plates flush with the right side of the exposure assembly. Retighten the screws.
4. (Figure 3) Perform the Check again. If necessary, move the exposure plates until both the front and rear line pairs reproduce equally.
   - Moving the plate(s) in direction A increases exposure (lighter).
   - Moving the plate(s) in direction B decreases exposure (darker).
5. Reinstall the rear cover, platen glass and registration plate.

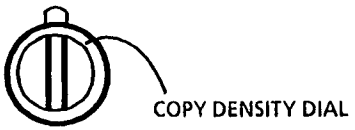


Figure 1. Centering the copy density dial

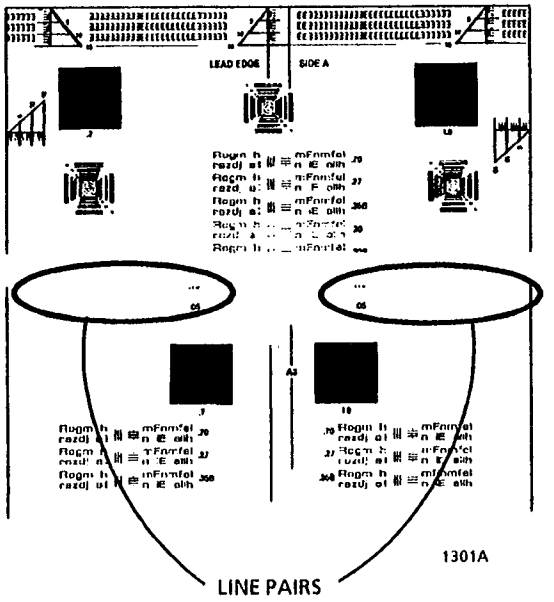


Figure 2. Checking the line pairs

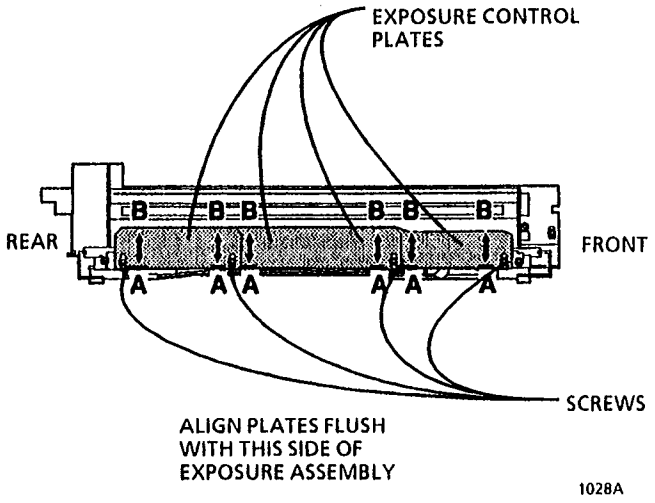


Figure 3. Aligning the Exposure Plates

ADJ 6.3 Number 4/5 Mirror Unit

Purpose

The purpose is to correctly align the No. 4/5 Mirror Unit Assembly to ensure proper resolution and front edge registration.

Check

1. Make a 100% copy of Side A of the standard test pattern and ensure that the following are resolved.
   - 4.3 LP/mm array of the center target
   - 3.5 LP/mm array of the side targets

Adjustment

1. Remove the following:
   a. (REP 14.2): Rear cover, left cover, registration plate.
2. (Figure 1): Loosen the screw on the mirror assembly shaft adjustment plate.
3. (Figure 1): Move the plate to the center position and tighten the screw.
4. Reinstall the platen glass and the registration plate and make another 100% copy of side A of the standard test pattern and recheck the resolution. If resolution is still defective, go to Step 5.
5. (REP 14.1): Remove the registration plate and platen glass.
6. Remove the optics light shield (REP 6.11).
7. (Figure 2): Loosen the two Screws on the mirror adjustment plate.
8. (Figure 2): Move the Number 4/5 Mirror Unit Assembly slightly left or right and tighten the screws.

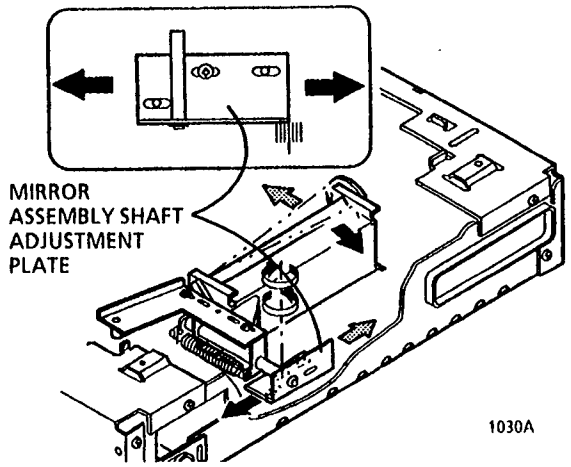


Figure 1. Centering The Mirror Assembly Shaft Adjustment Plate

9. Reinstall the lens cover, registration plate, and platen glass and make another 100% copy of side A of the standard test pattern and recheck the resolution. Repeat Steps 5 through 9 as necessary to resolve the 4.3 LP/mm array .
10. Go to ADJ 6.5 Front Edge Registration.

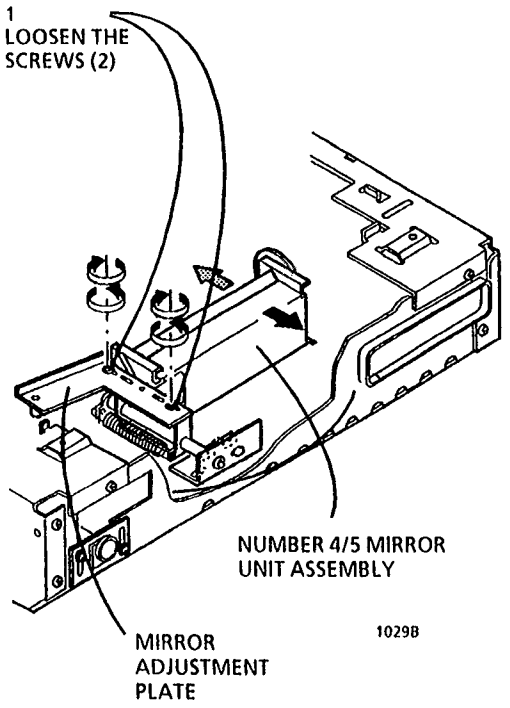


Figure 2. Loosening the Two Screws

ADJ 6.4 Front To Rear Magnification

Purpose

The purpose is to correctly align the Lens Assembly to ensure proper front to rear (side-to-side) magnification.

Check

1. Make a 100% copy of Side B of the standard test pattern.
2. The magnification tolerance for a 100% copy should be within ± 0.8% of the original size in the front to rear direction.

Adjustment

1. Remove the following:
   a. (REP 14.2): Rear cover and left cover.
2. (REP 14.1): Platen glass.
3. Optics light shield (REP 6.11).
4. (Figure 1): Loosen the two screws on the lens.
   a. If the copy is too large, move the lens toward the left side of the copier.
   b. If the copy is too small, move the lens toward the right side of the copier.

NOTE: The distance between each index mark represents a 1.5% change in image size for a 100% copy.

5. (Figure 1): Tighten the two screws on the lens.
6. Reinstall the lens cover and platen glass and make another 100% copy of Side B of the standard test pattern. Recheck the magnification. Repeat Steps 2 through 6 as necessary.

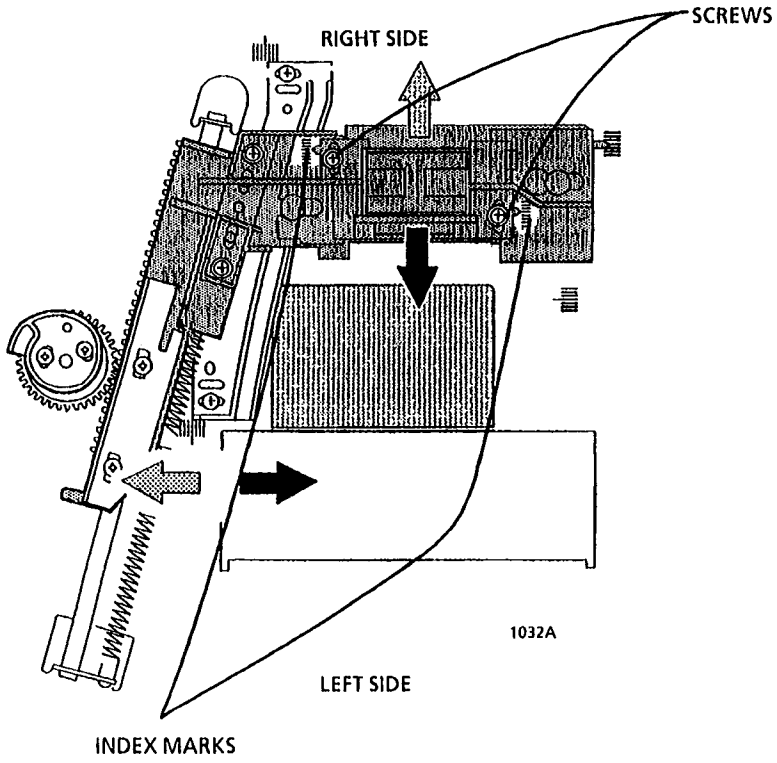


Figure 1. Adjusting the Magnification

ADJ 6.5 Front Edge Registration

Purpose

The purpose is to correctly align the Lens Guide to ensure proper front edge registration.

Check

1. Make a 100% copy of Side A of the standard test pattern.
2. (Figure 1): Using either of the two front edge registration targets on the copy as a reference, the 10 mm reference line should be 10 mm ±1 mm from the front edge of the copy.

Adjustment

1. Remove the following:
   a. (REP 14.2): Rear cover and left cover.
2. (REP 14.1): Remove the platen glass.
3. Remove the optics light shield (REP 6.11).
4. (Figure 2): Loosen the two screws on the lens guide.
   a. If the image on the copy is shifted too far to the front, move the lens guide toward the rear of the copier
   b. If the image on the copy is shifted too far to the rear, move the lens guide toward the front of the copier
   c. Align the top and bottom of the lens guide to the same index marks
   d. Tighten the screws
5. Reinstall the lens cover and platen glass and make a 100% copy of Side A of the standard test pattern and recheck the front edge registration. Repeat steps 2 through 5 as necessary.

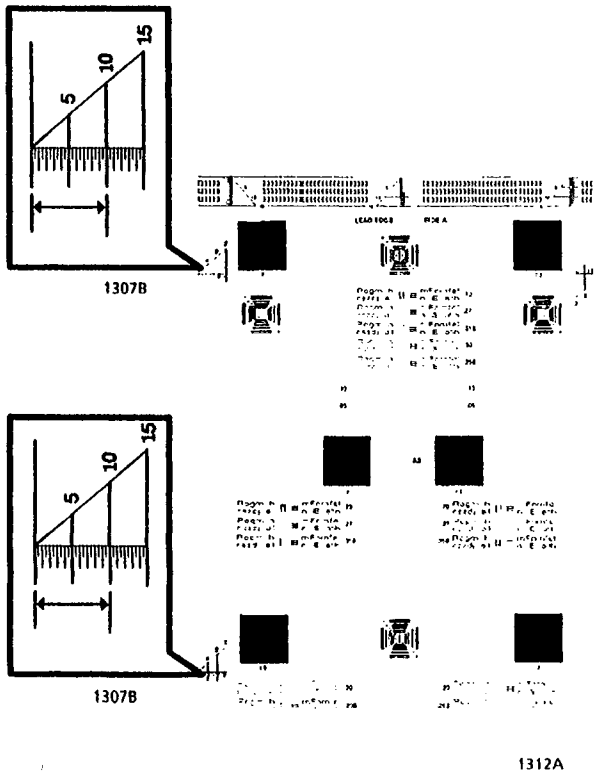


Figure 1. Checking the Front Edge registration

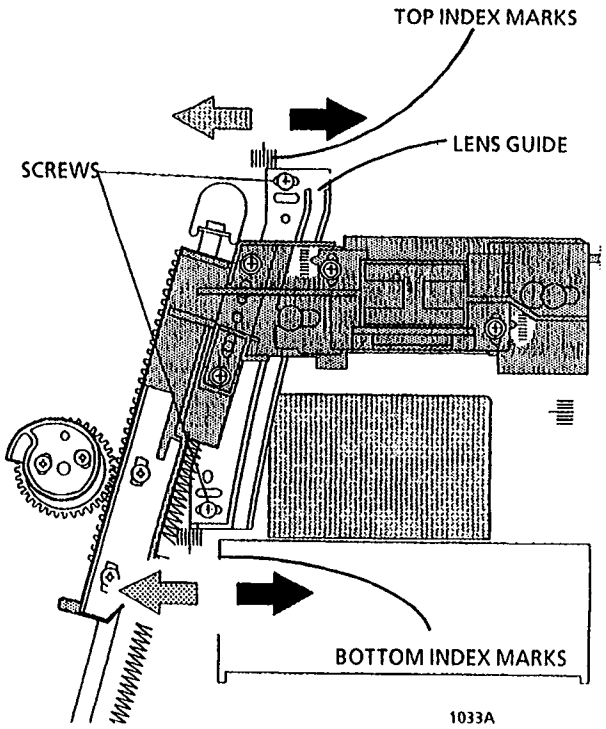


Figure 2. Adjusting the Front Edge Registration

ADJ 6.6 Optical Skew

Purpose

The purpose is to correctly align the Number 4/5 Mirror Assembly to prevent an optical skew.

Check

1. Make a 100% copy of Side A of the standard test pattern.
2. Using the left and right registration targets along the lead edge of the copy as a reference, the left 10 mm reference line should be the same distance from the edge of the copy as the right 10 mm reference line, ± 1.2 mm.

Adjustment

CAUTION

Cover the copy cartridge while it is out of the machine to protect it from light shock.

1. Perform ADJ 8.1 Registration Plate and recheck skew. If skew is still out of specification, go to step 2.
2. Remove the following:
   a. (REP 14.2): Rear cover, left cover and right cover.
   b. Dry ink and copy cartridges.
   c. (REP 14.2): Remove the front access cover and the front interior cover, but leave the two connectors connected.
3. Reinstall the dry ink and copy cartridges.
4. (Figure 1): Rotate the eccentric cam 1/8 to 1/4 turn in either direction.
5. Holding in the interlock rod, make a copy of Side A of the standard test pattern and recheck the image skew. Repeat Steps 4 and 5 as necessary.

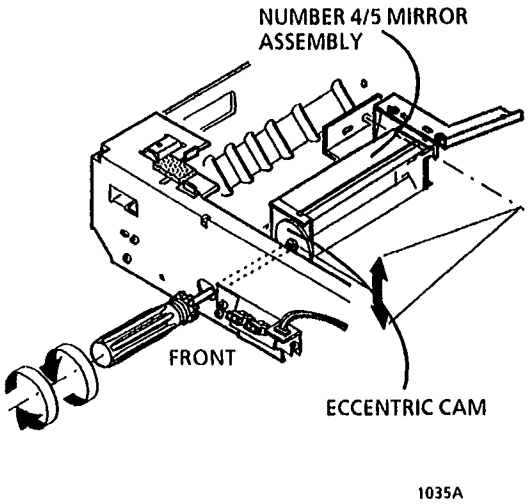


Figure 1. Adjusting the Optical Skew

ADJ 8.1 Registration Plate

Purpose

The purpose is to position the registration plate correctly on the frame for proper lead edge registration and skew.

Adjustment

1. Loosen the screws.
2. (Figure 1): Adjust the top and bottom of the registration plate so that the cross-hair pattern is centered in the hole. Tighten the screws.
3. Perform ADJ 8.2 Lead Edge Registration.

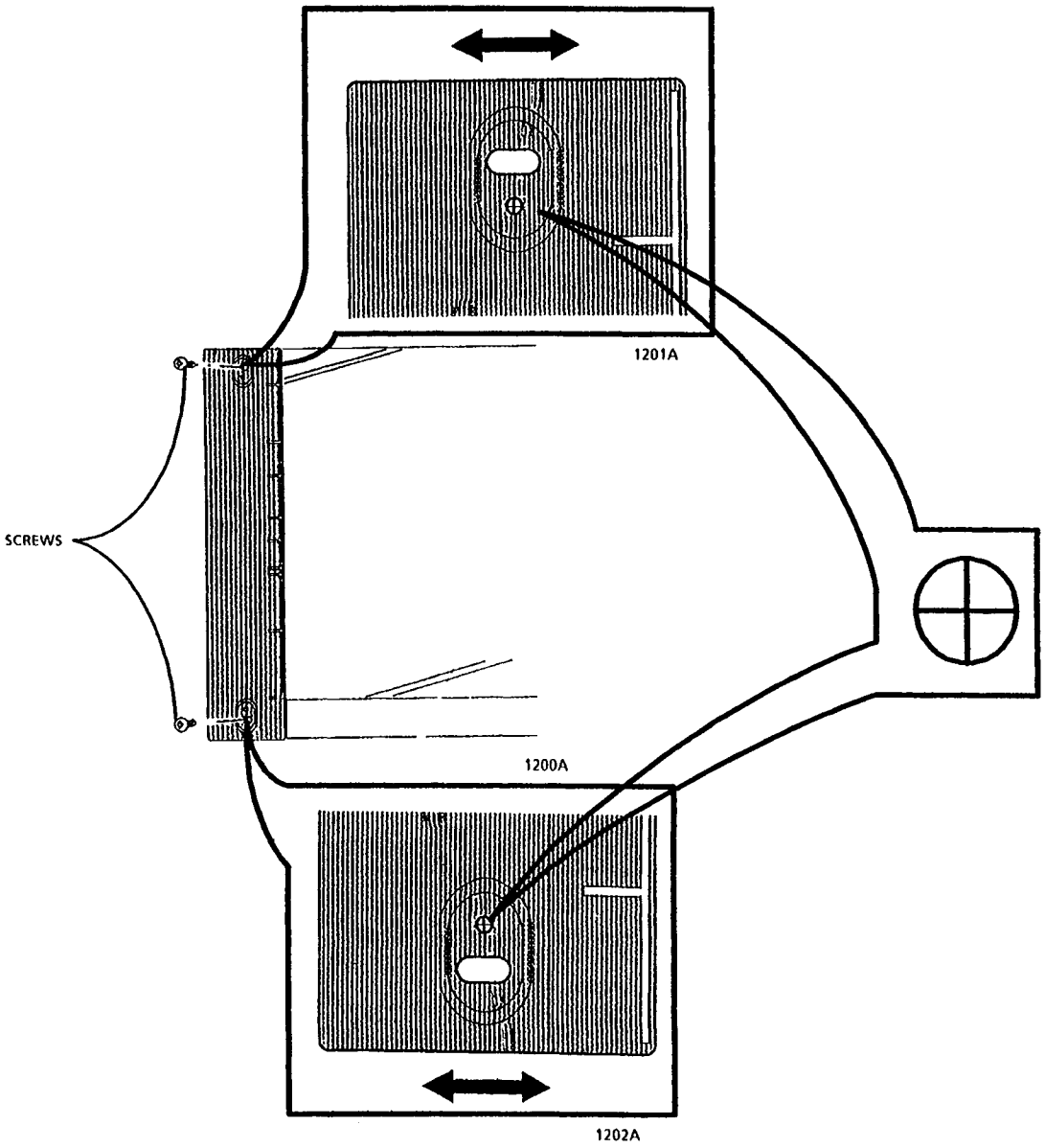


Figure 1. Adjusting the Lead Edge to Trail Edge Registration.

ADJ 8.2 Lead Edge Registration

Purpose

The purpose is to register the image on the paper in the lead-edge-to-trail-edge direction.

Check

1. Make a 100% copy of Side A of the Standard Test Pattern, with the LEAD EDGE squarely registered against the Registration plate.
2. Look at the LEAD EDGE registration scales on the copy.

   Using the center 15 mm scale, ensure that the reference 10 mm line is between 6 to 9 mm from the lead edge of the copy (Figure 1).

   If not, perform the Adjustment.

Adjustment

1. Perform ADJ 8.1 Registration Plate and recheck registration. If registration is still out of specification, go to step 2.
2. Remove the following:
   a. (REP 14.2): Rear cover and left cover.
   b. (REP 14.1): Remove the platen glass.

CAUTION

Do not overtighten the screw. The Registration Gate Actuator threads will strip if the screw is overtightened.

3. (Figure 2): If, during the check, the registration scale reading was:
   - Above the specified range (over 9 mm), loosen the screw and move the Registration Gate Actuator in the A direction the same distance that the image must be moved and tighten the screw.
   - Below the specified range (less than 6 mm), loosen the screw and move the Registration Gate Actuator in the B direction the same distance that the image must be moved and tighten the screw.
4. Recheck/readjust registration as necessary.

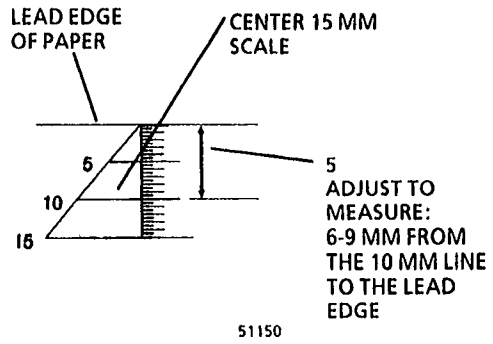


Figure 1. Checking the Lead Edge to Trail Edge Registration.

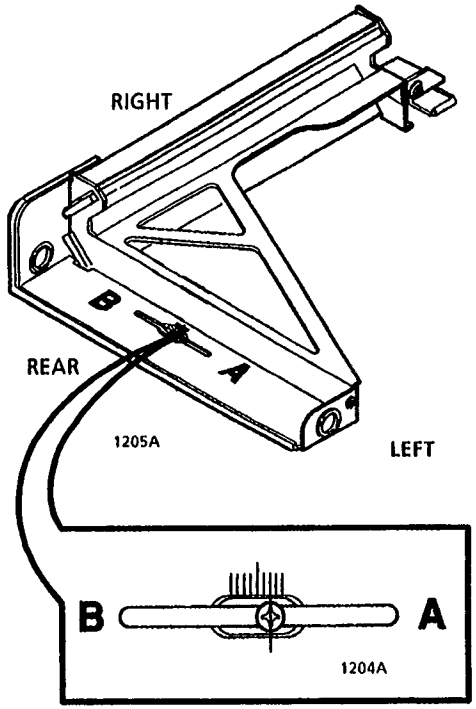


Figure 2. Adjusting the Lead Edge to Trail Edge Registration.

ADJ 8.3 Paper Feed Roller Home Position

Purpose

The purpose is to align the Paper Feed Roller home position to ensure correct paper feed timing.

Check

1. (REP 1.1): Remove the low voltage power supply assembly.
2. (Figure 1): Check the paper feed roll home position alignment. If the check is not satisfactory, perform the adjustment.

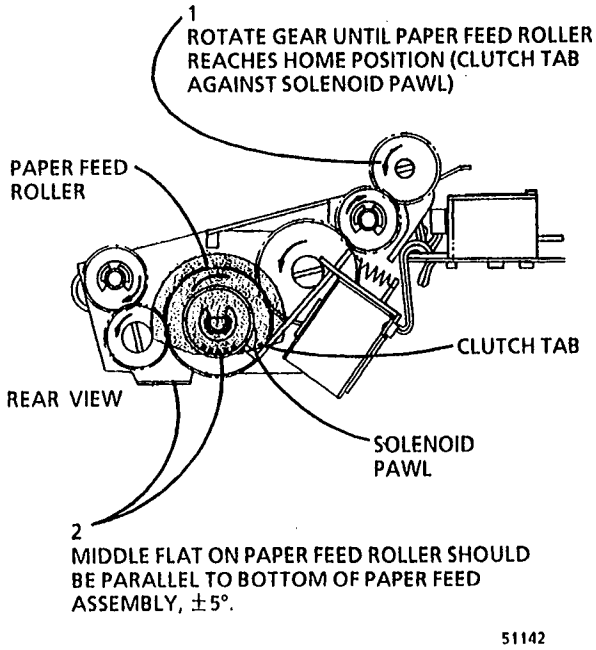


Figure 1. Checking the Paper Feed Roll Home Position Alignment

Adjustment

1. (REP 8.2): Remove the clutch assembly.
2. (Figure 2): Remove the boss slowly, noting with which groove of the five grooves the spring is engaged.

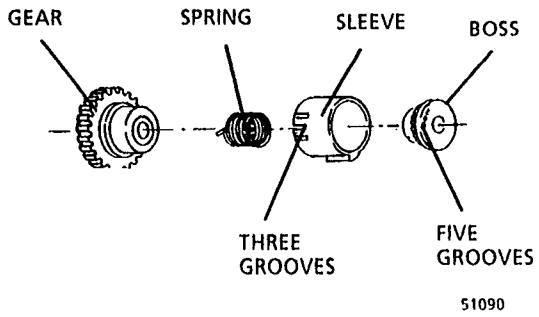


Figure 2. Removing the Boss, Spring, Sleeve, and Gear

3. (Figure 3): Rotate the boss one groove in the direction that the paper feed roller home position must move, and reinstall the boss.

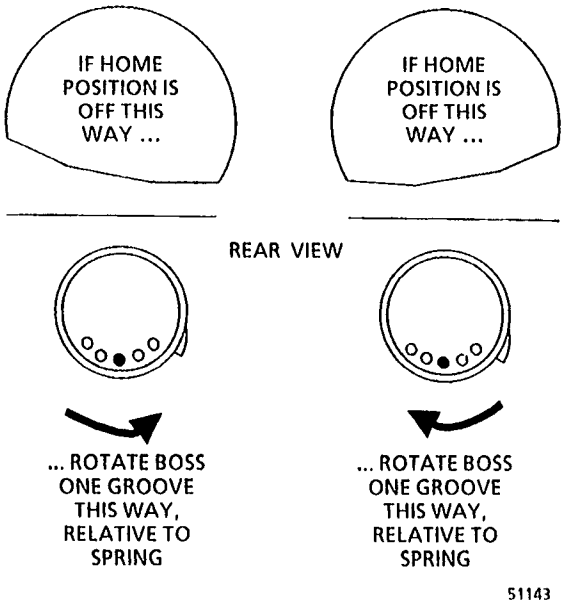


Figure 3. Adjusting the Paper Feed Roller Home Position

4. (REP 8.2): Reinstall the clutch assembly.
5. Check and readjust the alignment as necessary.

NOTE (Figures 2 and 3): If the proper alignment is beyond the range of the last Boss groove, rotate the Sleeve one groove in the opposite direction from the previous rotations. Using another of the sleeve's three grooves, repeat the Check and Adjustment.

5. PARTS LIST SECTION

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:

A	Amp
DH	Document Handler
EMI	Electro Magnetic Induction
HZ	Hertz
MNL	Multinational
NOHAD	Noise Ozone Heat Air Dirt
P/O	Part Of
PWB	Printed Wiring Board
REF	Reference
R/E	Reduction/Enlargement
RX	Rank Xerox
USO	United States Operations
V	Volt
W/	With
W/O	Without
XCL	Xerox Canada Limited
XLA	Xerox Latin America

SYMBOLOGY

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.

SYMBOLOGY

An alpha character within a circle with a line coming from it is used to denote a broken explode line. Two such circles on an exploded view depict the beginning and the finish of the broken portion of the explode lines.

The following symbols are used in the parts list sections of the documentation.

An item number within a shaded box shows that the part has an adjustment procedure (Figure 1). Check the Adjustment Section for the specification or procedure.

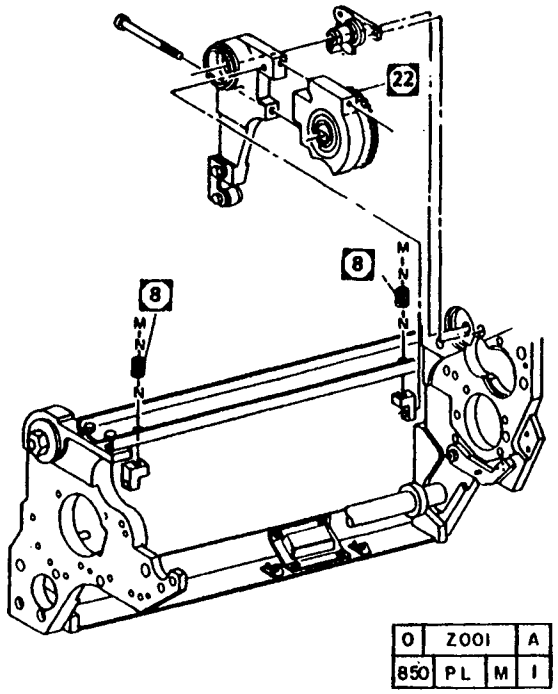


Figure 1. Adjustment Symbol

An item number within an unshaded box shows that the part has a procedure in the Repairs Section (Figure 2). Check the procedure for the correct sequence of repair, for warnings, for cautions, for notes, and for other special conditions.

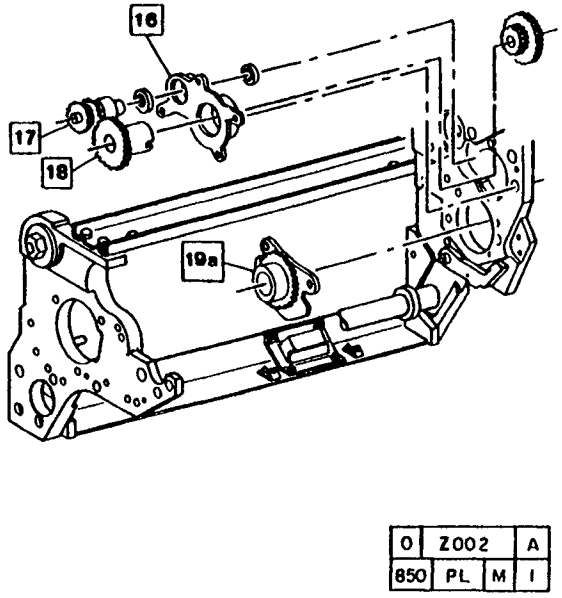


Figure 2. Repair Symbol

An item number within a shaded box and an unshaded box shows that the part has an adjustment procedure and a repair procedure (Figure 3). Check the Repairs Section and Adjustment Section for more information.

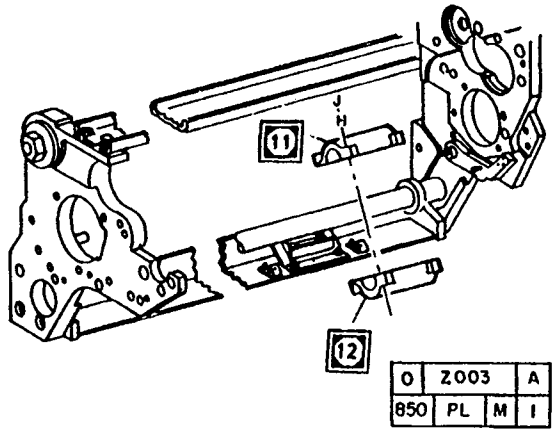
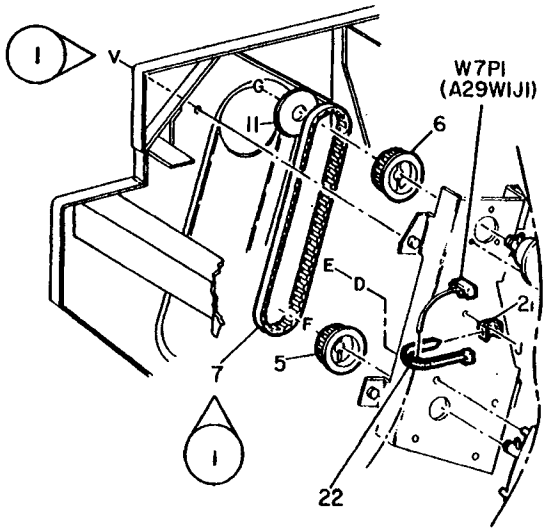


Figure 3. Adjustment and Repair Symbol

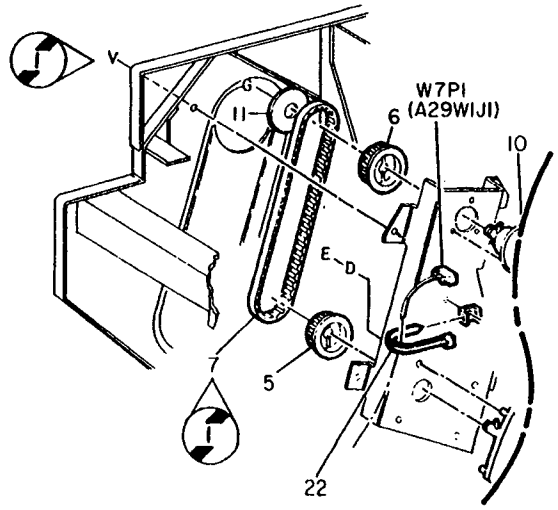
A tag number within a circle and pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 4). Information on the modification is in the Change Tag Index.



0	Z004		A
850	PL	M	I

Figure 4. With Tag Symbol

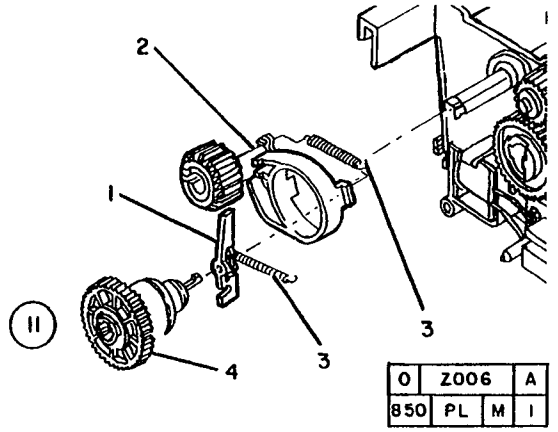
A tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the tag number within the circle (Figure 5).



0	Z005		A
850	PL	M	I

Figure 5. 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 6). Information on the modification is in the Change Tag Index.



0	Z006		A
850	PL	M	I

Figure 6. 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 7).

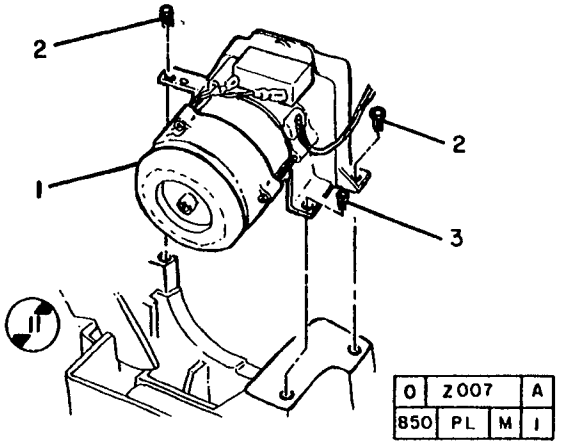


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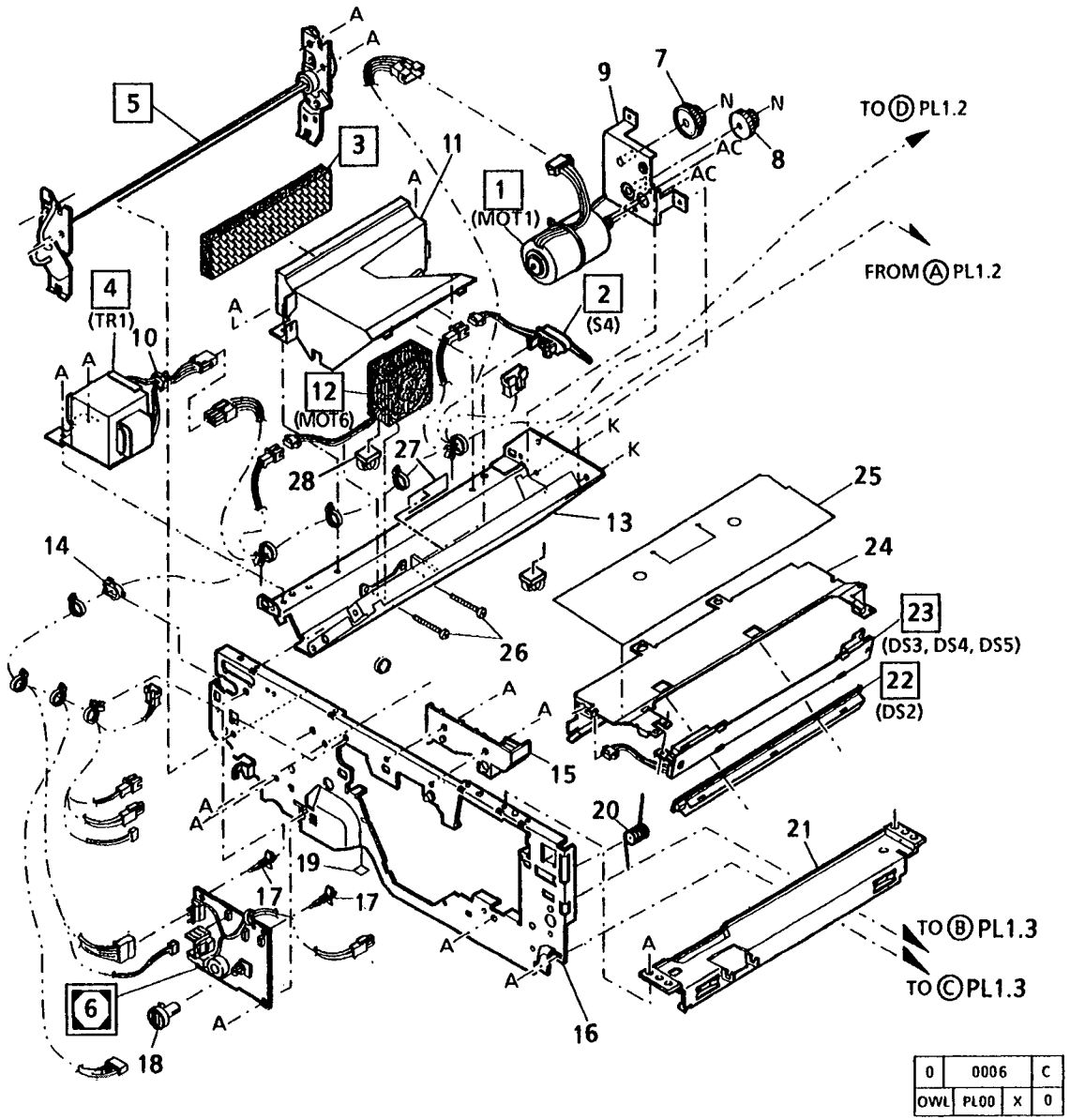
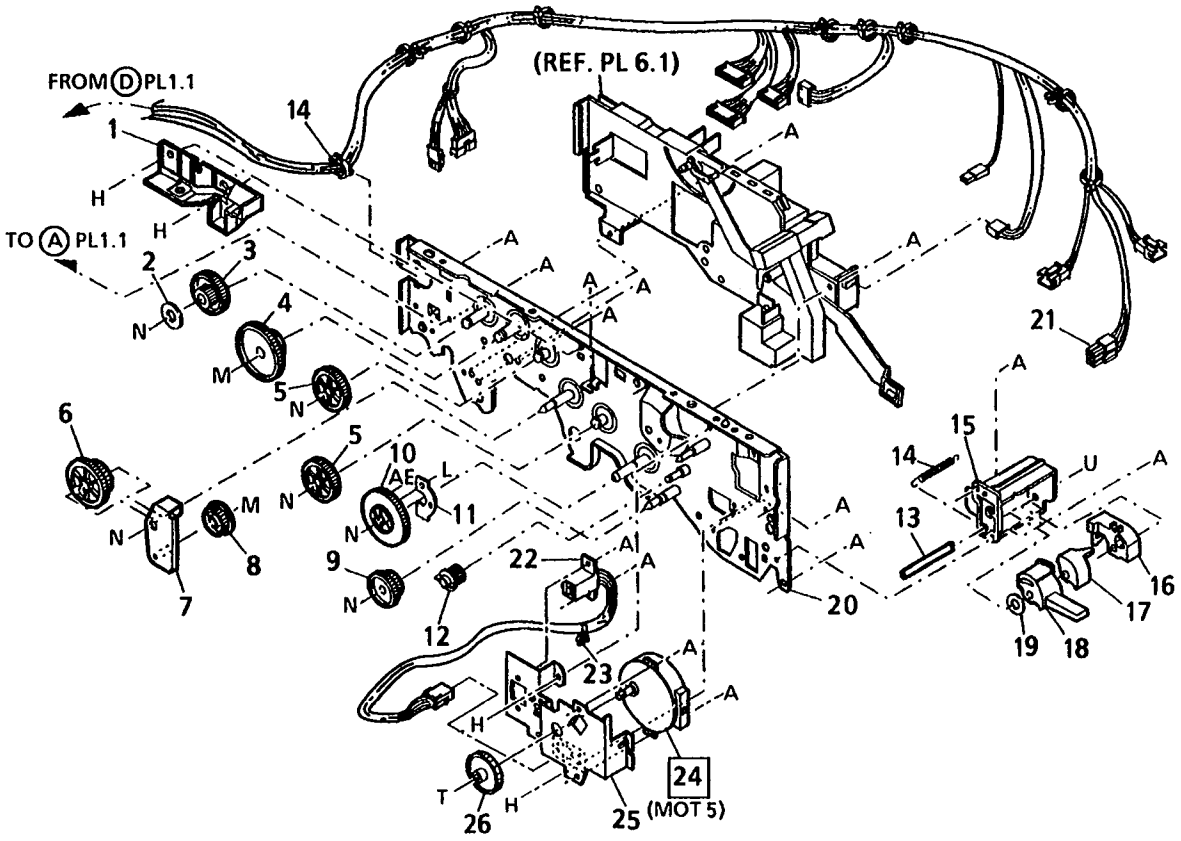
Figure 7. Entire Drawing Without Tag Symbol

PL 1.1 MAIN DRIVES (1 OF 3)



ITEM	PART	DESCRIPTION
1	127E7830	MAIN MOTOR (120V/60HZ) (MOT1)
2	110E5350	EXIT SWITCH (S4)
3	142E1010	OZONE FILTER
4	105E3680	POWER TRANSFORMER (TR1) (120V/60HZ)
-	105E3730	POWER TRANSFORMER (TR1) (220V/50HZ)
-	105E3740	POWER TRANSFORMER (TR1) (240V/50HZ)
5	--	TORSION BAR(NOT SPARED)
6	140K56471	EXPOSURE CONTROL PWB (120V/60HZ) (USO/XCL/XLA)
-	140K56480	EXPOSURE CONTROL PWB (220V/60HZ)(XLA)
-	140K56481	EXPOSURE CONTROL PWB (50HZ)(RX)
7	--	GEAR A (NOT SPARED)
8	--	GEAR B (NOT SPARED)
9	--	BRACKET (NOT SPARED)
10	--	TIE-WRAP (NOT SPARED)
11	--	FAN DUCT (NOT SPARED)
12	127E7860	FUSER FAN MOTOR (MOT6)
13	--	BRACKET(NOT SPARED)
14	--	BUSHING (NOT SPARED)
15	113E5060	FRONT MOUNTING BRACKET
16	--	FRONT UPPER FRAME (NOT SPARED)
17	--	PWB SUPPORT(NOT SPARED)
18	--	ADJUST KNOB(NOT SPARED)
19	--	FUSER MOUNTING SPACER (NOT SPARED)
20	--	LOCK SPRING(NOT SPARED)
21	--	PAPER GUIDE(NOT SPARED)
22	140K56510	DISCHARGE LAMP PWB(DS2)
23	160K9380	SIDE/EDGE ERASE PWB (DS3,DS4,DS5)
24	--	BRACKET (NOT SPARED)
25	--	PAPER GUIDE(NOT SPARED)
26	--	SCREW (M4 X 30) (NOT SPARED)
27	48E19490	MYLAR COVER
28	120E10920	HARNESS RETAINER

PL 1.2 MAIN DRIVES (2 OF 3)



ITEM	PART	DESCRIPTION
1	113E5070	REAR MOUNTING BRACKET
2	--	WASHER (NOT SPARED)
3	7E24600	GEAR (22/48T)
4	7E24620	GEAR (22/59T)
5	7E11300	GEAR (37T)
6	7E24630	GEAR (30/42T)
7	--	BRACKET (NOT SPARED)
8	7E11310	GEAR (24T)
9	7E11240	GEAR (18/39T)
10	7E11330	GEAR (50T)
11	--	SPRING (NOT SPARED)
12	7E24640	GEAR (18T)
13	--	SHAFT (NOT SPARED)
14	9E17240	POWER SWITCH ACTUATOR SPRING
15	--	BRACKET (NOT SPARED)
16	11E4890	POWER SWITCH ACTUATOR
17	8E2880	POWER SWITCH CAM
18	11E4880	POWER SWITCH LEVER (5280/5309)
-	11E4900	POWER SWITCH LEVER (5310)
19	--	WASHER (NOT SPARED)
20	--	REAR UPPER FRAME (NOT SPARED)
21	--	UPPER FRAME HARNESS (NOT SPARED)
22	--	INTERFACE HARNESS NO.1 (NOT SPARED)
23	--	TIE-WRAP (NOT SPARED)
24	127E6960	TONER MOTOR (MOT5)
25	--	BRACKET (NOT SPARED)
26	7E11340	GEAR (29T)

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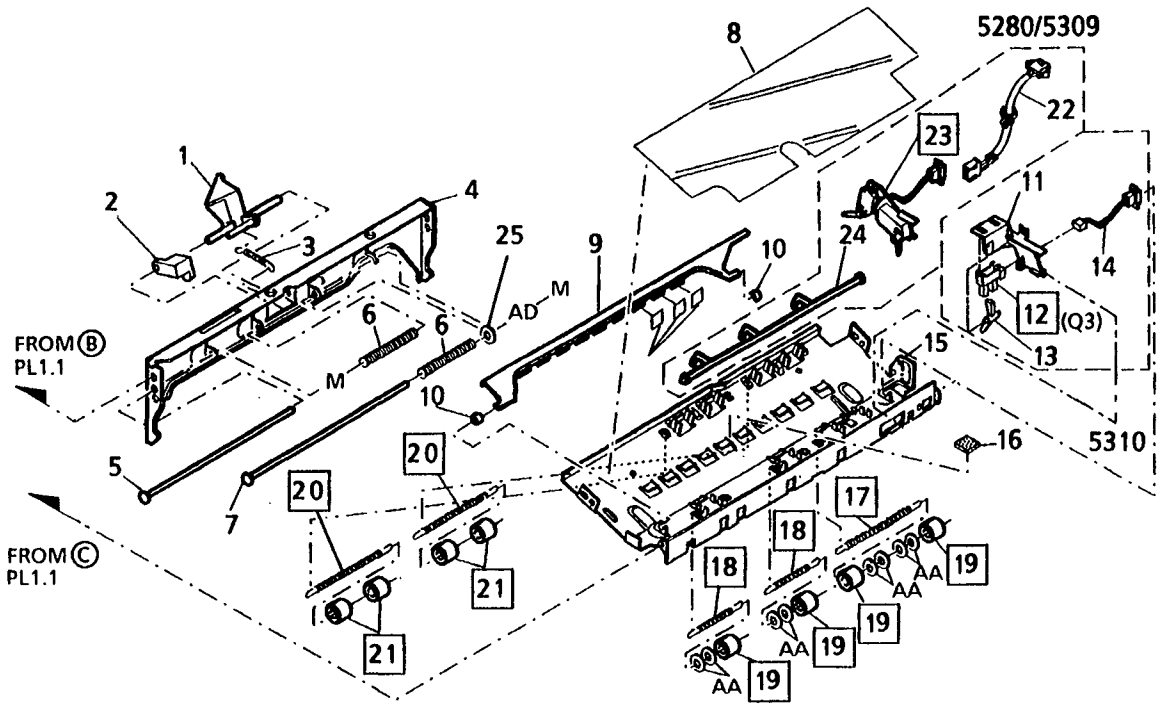

ITEM	PART	DESCRIPTION
1	11E4550	DISABLE VOLTAGE LEVER
2	11E4540	SUB LEVER
3	9E34670	SPRING
4	--	LOCK PLATE(NOT SPARED)
5	6E47970	SHAFT
6	--	SPRING(NOT SPARED)
7	6E27160	SHAFT
8	--	PAPER GUIDE(NOT SPARED)
9	--	GATE (NOT SPARED)
10	--	BEARING (NOT SPARED)
11	68E58950	BRACKET
12	110E5370	REGISTRATION SENSOR(Q3) (5310)
13	11E4950	REGISTRATION SENSOR LEVER (5310)
14	--	INTERFACE HARNESS NO.2 (NOT SPARED)
15	--	PAPER GUIDE(NOT SPARED)
16	--	NOISE DAMPER (NOT SPARED)
17	9E17220	RIGHT REAR PINCH ROLLER SPRING(5280/5309)
-	9E32700	RIGHT REAR PINCH ROLLER SPRING (5310)
18	9E17250	LEFT/CENTER, FRONT PINCH ROLLER SPRING
19	22E13370	RIGHT PINCH ROLLER
20	9E17230	LEFT PINCH ROLLER SPRING
21	22E7320	LEFT PINCH ROLLER
22	--	INTERFACE HARNESS NO.3 (NOT SPARED)
23	110E2760	MANUAL FEED SWITCH/ REGISTRATION SWITCH (S3/S2)(5280,5309)
24	31E3610	MANUAL FEED SWITCH ACTUATOR
25	28E10810	WASHER

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PL 2.1 100 SHEET CASSETTE (5280)

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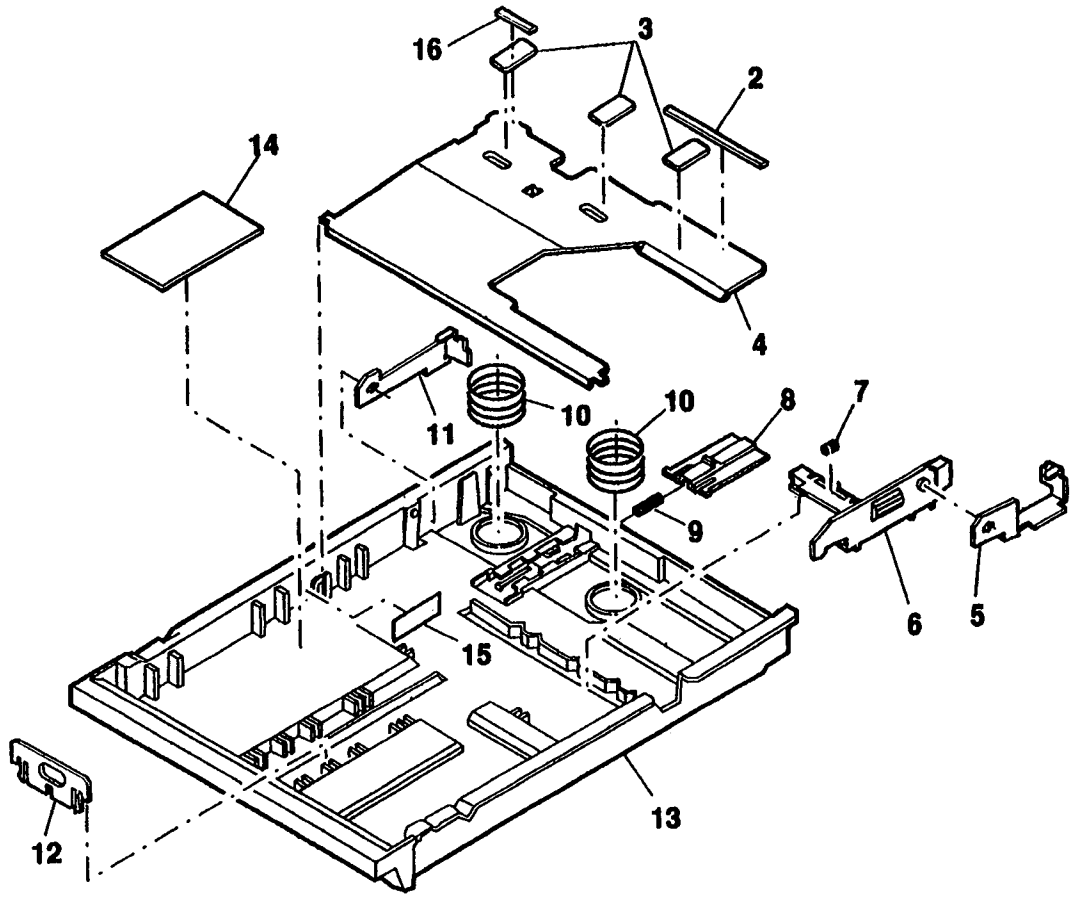

ITEM	PART	DESCRIPTION
1	109R7	100 SHEET CASSETTE (5280)
2	--	FRONT MYLAR STRIP (P/O ITEM 1)
3	--	NON-SKID PADS (P/O ITEM 1)
4	--	PAPER TURNING PLATE (P/O ITEM 1)
5	--	FRONT PAWL (P/O ITEM 1)
6	--	FRONT SIDE PLATE (P/O ITEM 1)
7	--	SIDE PLATE SPRING (P/O ITEM 1)
8	--	TURNING PLATE LATCH (P/O ITEM 1)
9	--	LATCH SPRING (P/O ITEM 1)
10	--	TURNING PLATE SPRING (P/O ITEM 1)
11	--	REAR PAWL (P/O ITEM 1)
12	3E26050	PAPER STOP
13	--	CASE (P/O ITEM 1)
14	--	INSTRUCTION LABEL (P/O ITEM 1)
15	--	MAX FILL LABEL (P/O ITEM 1)
16	--	REAR MYLAR STRIP (P/O ITEM 1)

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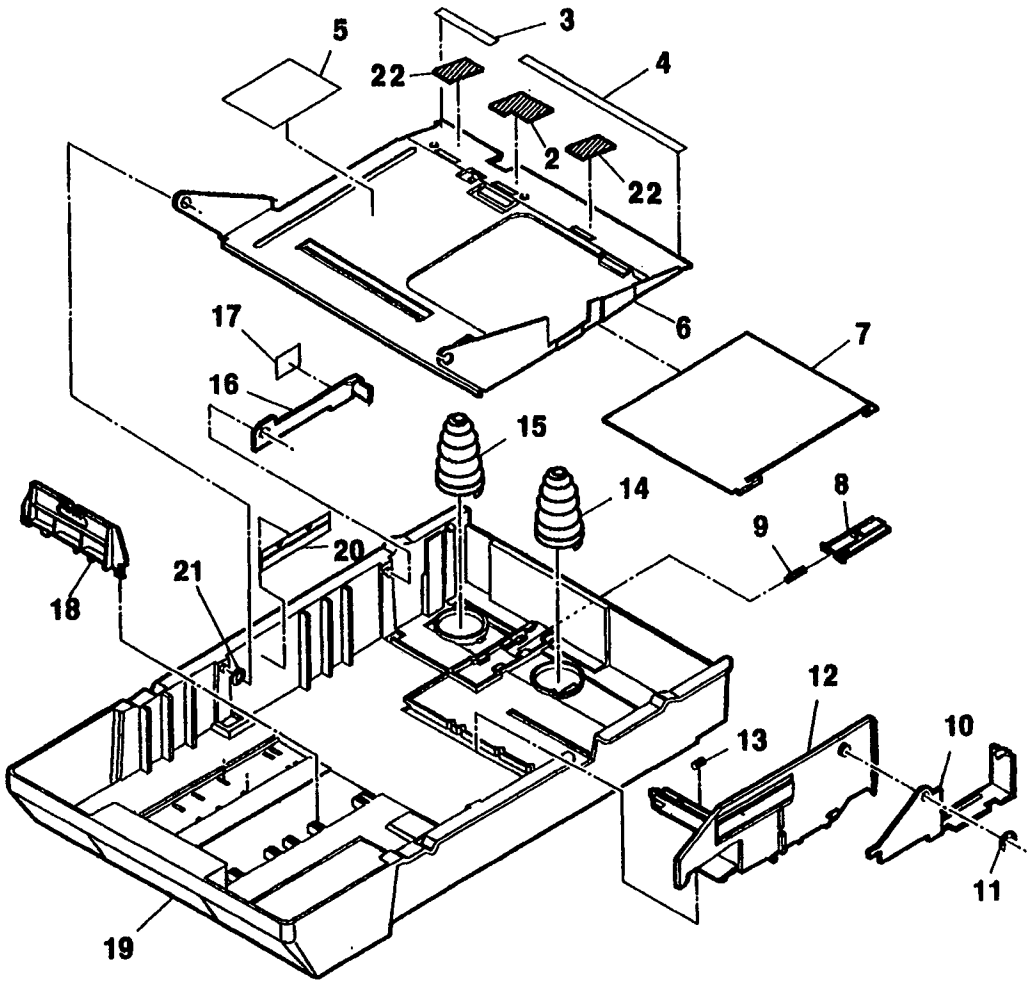

ITEM	PART	DESCRIPTION
1	109R8	250 SHEET CASSETTE (5309/5310)
2	--	CENTER NON-SKID PAD (P/O ITEM 1)
3	--	REAR MYLAR STRIP (P/O ITEM 1)
4	--	FRONT MYLAR STRIP (P/O ITEM 1)
5	--	INSTRUCTION LABEL (P/O ITEM 1)
6	--	PAPER TURNING PLATE (P/O ITEM 1)
7	--	SUB PLATE (P/O ITEM 1)
8	--	TURNING PLATE LATCH (P/O ITEM 1)
9	--	LATCH SPRING (P/O ITEM 1)
10	--	FRONT PAWL (P/O ITEM 1)
11	--	E-RING FASTENER (P/O ITEM 1)
12	--	SIDE PLATE (P/O ITEM 1)
13	--	SIDE PLATE SPRING (P/O ITEM 1)
14	--	LARGE CASSETTE SPRING (P/O ITEM 1)
15	--	SMALL CASSETTE SPRING (P/O ITEM 1)
16	--	REAR PAWL (P/O ITEM 1)
17	--	REAR PAWL WEAR STRIP (P/O ITEM 1)
18	3E26060	PAPER STOP
19	--	CASE (P/O ITEM 1)
20	--	MAX FILL LABEL (P/O ITEM 1)
21	--	WASHER (P/O ITEM 1)
22	--	SIDE NON-SKID PADS (P/O ITEM 1)

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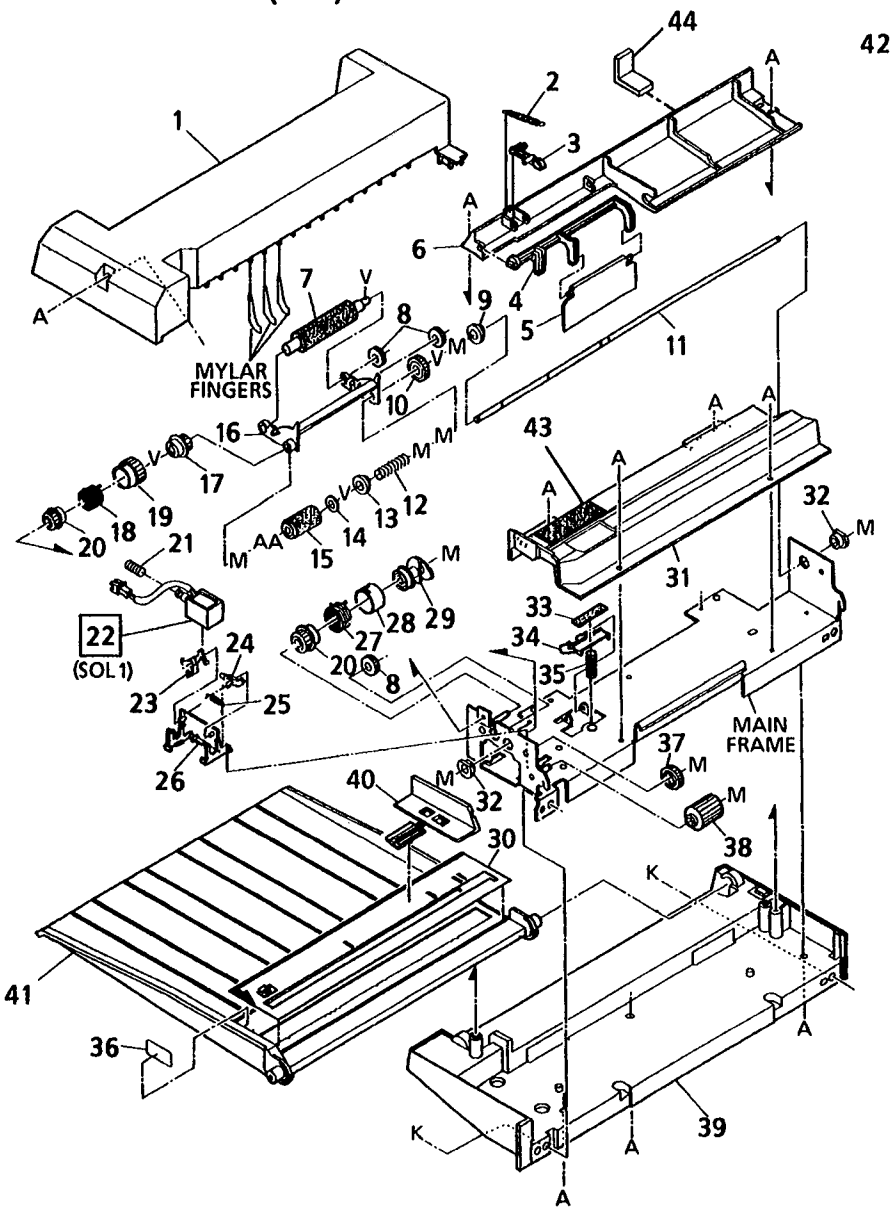
PL 2.3 MANUAL PAPER FEED (5310)



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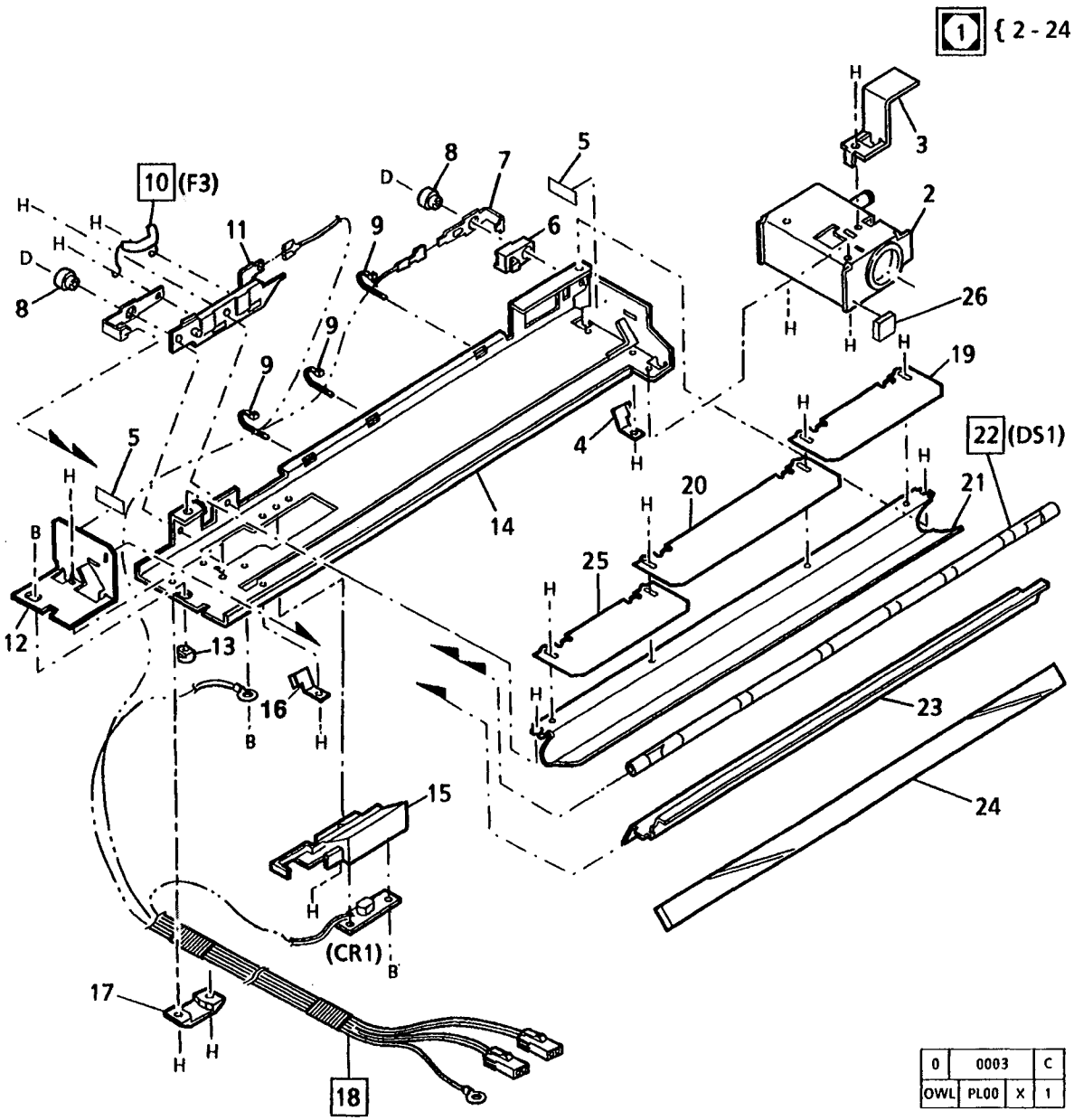
ITEM	PART	DESCRIPTION
1	2E57050	UPPER COVER
2	9E50450	ROLLER SPRING
3	31E5010	CAM FOLLOWER
4	31E5020	GATE ARM
5	3E15810	GATE
6	--	UPPER PAPER GUIDE (NOT SPARED)
7	22E10240	TAKEUP ROLL
8	--	GEAR(16T)(NOT SPARED)
9	13E8650	PAPER FEED BEARING
10	7E14840	GEAR (20T)
11	6E49380	SHAFT (SEE NOTE 1)
12	9E25210	SPRING
13	--	BEARING (NOT SPARED)
14	--	SPACER (NOT SPARED)
15	5E10560	PAPER FEED ROLL (SEE NOTE 1)
16	31E5030	FEED ARM
17	--	BOSS (NOT SPARED)
18	--	SPRING (NOT SPARED)
19	--	BARREL (NOT SPARED)
20	--	BOSS (NOT SPARED)
21	--	SPRING(NOT SPARED)
22	121E8790	MANUAL PAPER FEED SOLENOID (SOL1)
23	--	PAWL B (NOT SPARED)
24	--	PAWL A (NOT SPARED)
25	--	SPRING A (NOT SPARED)
26	--	BRACKET(NOT SPARED)
27	--	SPRING (NOT SPARED)
28	--	BARREL(NOT SPARED)
29	--	BOSS (NOT SPARED)
30	--	SIZE LABEL (REF:PL7.1B,ITEM 1)
31	--	BRACKET (NOT SPARED)
32	--	BEARING (NOT SPARED)
33	19E15900	MYLAR SHEET
34	113E8020	HOLDER
35	--	SPRING (NOT SPARED)
36	--	MAX LABEL (REF:PL7.1B,ITEM 1)
37	7E25330	GEAR (26T)
38	7E25320	GEAR (20T)
39	2E57060	LOWER COVER
40	--	SIDE PLATE(NOT SPARED)
41	50E9460	INPUT PAPER TRAY
42	22K30660	PAPER FEED ASSEMBLY (USO/XCL/XLA)
-	22K32180	PAPER FEED ASSEMBLY (RX)
43	19E29620	RETARD PAD
44	38E14840	PAPER GUIDE

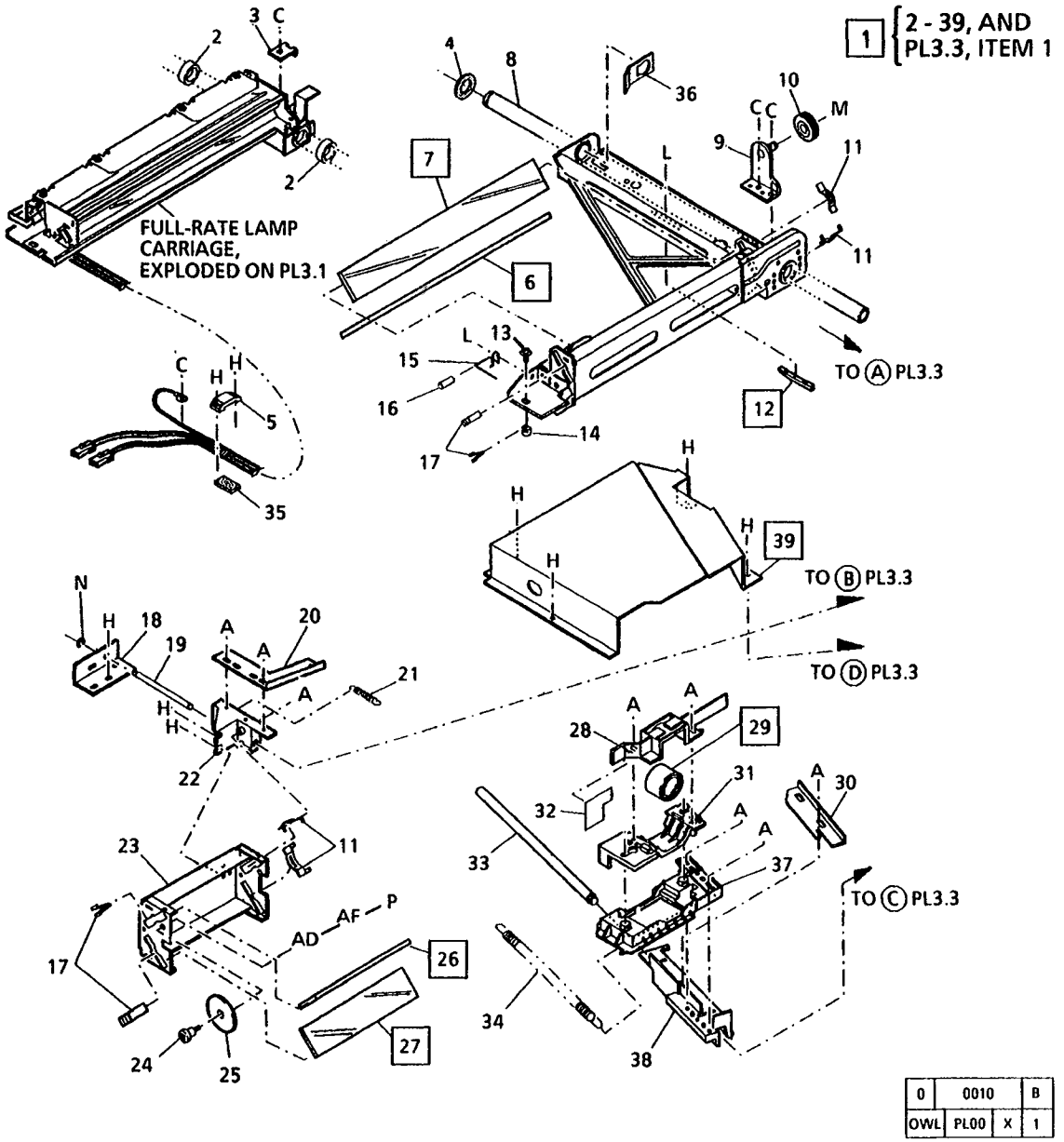
NOTE 1: ITEMS 11 AND 15 MUST BE REPLACED TOGETHER.

PL 3.1 FULL-RATE LAMP CARRIAGE



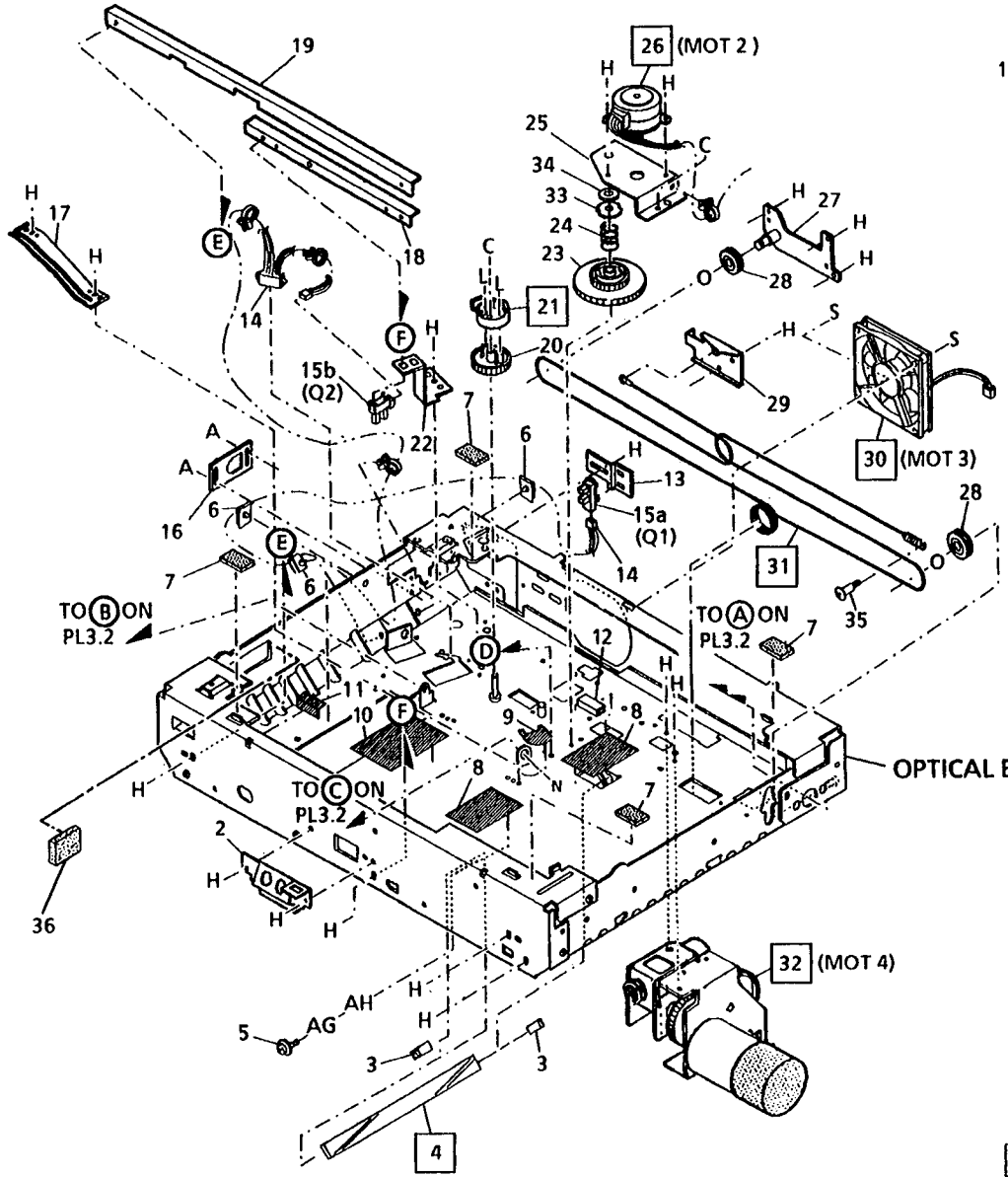
ITEM	PART	DESCRIPTION
1	62K6150	FULL-RATE LAMP CARRIAGE ASSEMBLY (100V SERIES)
-	62K6160	FULL-RATE LAMP CARRIAGE ASSEMBLY (200V SERIES)
2	--	LAMP HOLDER(P/O ITEM 1)
3	--	REAR MOUNTING BRACKET (P/O ITEM 1)
4	--	MIRROR NO.1 REAR BRACKET (P/O ITEM 1)
5	--	SIDE REFLECTOR (P/O ITEM 1)
6	--	REAR LAMP CONTACT BASE (P/O ITEM 1)
7	--	REAR LAMP CONTACT PLATE (P/O ITEM 1)
8	--	LAMP CONTACT MOUNTING BRACKET (P/O ITEM 1)
9	--	TY-WRAP (P/O ITEM 1)
10	108E2170	THERMAL FUSE BASE (F3)
11	--	FRONT LAMP CONTACT BASE (P/O ITEM 1)
12	--	FRONT MOUNTING BRACKET (P/O ITEM 1)
13	--	TEFLON SLIDER (P/O ITEM 1)
14	--	BASE PLATE(P/O ITEM 1)
15	--	SENSOR BRACKET (P/O ITEM 1)
16	--	FRONT MIRROR SUPPORT BRACKET(P/O ITEM 1)
17	--	WIRE HARNESS BRACKET (P/O ITEM 1)
18	--	COPY LAMP WIRE HARNESS (P/O ITEM 1)
19	--	CONTROL PLATE A (P/O ITEM 1)
20	--	CONTROL PLATE B (P/O ITEM 1)
21	--	MAIN REFLECTOR (P/O ITEM 1)
22	122E1540	EXPOSURE LAMP (DS1) (100V SERIES)
-	122E1550	EXPOSURE LAMP (DS1) (200V SERIES)
23	--	SLIT PLATE(P/O ITEM 1)
24	--	MIRROR NO.1 (P/O ITEM 1)
25	--	CONTROL PLATE C (P/O ITEM 1)
26	17E6360	BUMPER

PL 3.2 OPTICAL UNIT (1 OF 2)



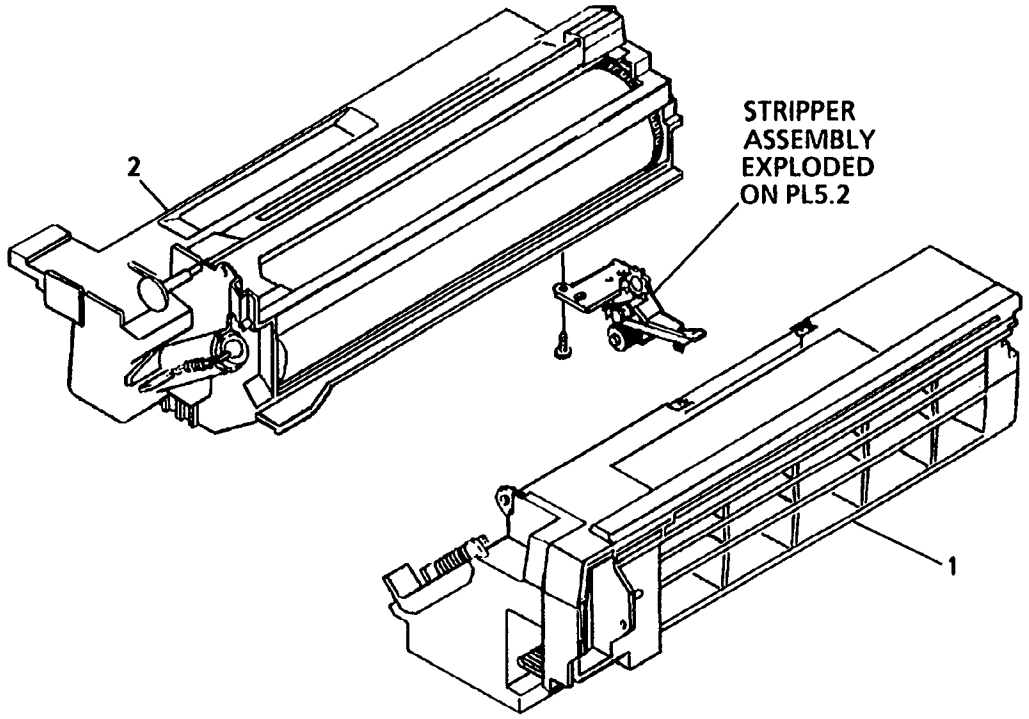
ITEM	PART	DESCRIPTION
1	--	OPTICAL UNIT (NOT SPARED)
2	19E23720	OIL FELT PAD
3	15E33850	WIRE MOUNTING BRACKET
4	4E8520	CUSHION
5	--	WIRE HARNESS CLAMP (P/O ITEM 1)
6	62E6360	MIRROR NO.3
7	62E6350	MIRROR NO.2
8	--	GUIDE SHAFT(P/O ITEM 1)
9	15E33860	PULLEY MOUNTING BRACKET
10	20E18820	PULLEY
11	19E23740	REAR MIRROR CLAMP
12	116E5820	REGISTRATION GATE ACTUATOR
13	--	SCREW (P/O ITEM 1)
14	--	TEFLON SLIDER (P/O ITEM 1)
15	116E6320	HARNESS HOOK
16	118E9030	HARNESS SLEEVE
17	--	FRONT MIRROR CLAMP (P/O ITEM 1)
18	--	BEARING BRACKET (P/O ITEM 1)
19	--	SHAFT (P/O ITEM 1)
20	15E33820	MIRROR NO.4 AND NO.5 ADJUSTING PLATE
21	--	NO.4 AND NO.5 MIRROR SPRING (P/O ITEM 1)
22	--	BEARING (P/O ITEM 1)
23	--	MIRROR NO.4 AND NO.5 MOUNTING BRACKET (P/O ITEM 1)
24	--	SHOULDER SCREW (P/O ITEM 1)
25	--	COLLAR (P/O ITEM 1)
26	62E6370	MIRROR NO.4
27	62E6380	MIRROR NO.5
28	--	LENS COVER (P/O ITEM 1)
29	62E6340	LENS
30	15E33800	ZOOM ADJUSTING PLATE
31	15E33830	LENS BASE PLATE
32	--	LIGHT SHIELD (P/O ITEM 1)
33	--	LENS SHAFT(P/O ITEM 1)
34	9E50500	LENS CARRIAGE SPRING
35	4E5440	WIRE HARNESS CUSHION
36	--	MYLAR PROTECTION SHEET (P/O ITEM 1)
37	41E1220	LENS CARRIAGE
38	--	LENS SHAFT MOUNTING BRACKET (P/O ITEM 1)
39	2E57340	LIGHT SHIELD COVER

PL 3.3 OPTICAL UNIT (2 OF 2)



ITEM	PART	DESCRIPTION
1	--	P/O OPTICAL UNIT (REF:PL3.2,ITEM 1)
2	--	CONNECTOR BRACKET (P/O ITEM 1)
3	19E23730	FRONT MIRROR CLAMP
4	62E6390	MIRROR NO.6
5	--	SCREW (P/O ITEM 1)
6	--	WIRE HARNESS CLAMP (P/O ITEM 1)
7	4E5450	PLATEN GLASS CUSHION
8	--	MIRROR NO.6 LIGHT SHIELD (P/O ITEM 1)
9	--	OPTICAL LIGHT SHIELD (P/O ITEM 1)
10	--	DARK BOX LIGHT SHIELD (P/O ITEM 1)
11	--	SMALL LIGHT SHIELD (P/O ITEM 1)
12	--	EDGING (L15) (P/O ITEM 1)
13	15E33870	PHOTO ANGLE A
14	152K58560	OPTICAL WIRE HARNESS
15	110E5370	PHOTO TRANSISTOR
15a	--	SCAN HOME SENSOR (Q1)
15b	--	LENS HOME SENSOR (Q2)
16	--	SHAFT GUIDE PLATE (P/O ITEM 1)
17	32E4400	LENS GUIDE
18	--	LOWER OPTICAL RAIL (P/O ITEM 1)
19	--	UPPER OPTICAL RAIL (P/O ITEM 1)
20	--	GEAR (P/O ITEM 1)
21	--	CAM (P/O ITEM 1)
22	113E12320	ZOOM SENSOR ADJUSTMENT BRACKET
23	7E25480	GEAR (45/120T)
24	9E50510	ZOOM BRAKE SPRING
25	15E33890	MOTOR SUPPORT BRACKET
26	127E8100	LENS MOTOR (MOT2)
27	15E33880	PULLEY MOUNTING BRACKET
28	--	PULLEY (P/O ITEM 1)
29	15E33840	WIRE TENSION BRACKET
30	127E8110	COOLING FAN MOTOR(MOT3)
31	117E11800	OPTICS CABLE
32	127K11210	SCAN DRIVE MOTOR (MOT4)
33	15E33810	ZOOM FRICTIONAL PLATE
34	55E24320	ZOOM BRAKE SHEET
35	--	SHOULDER SCREW (P/O ITEM 1)
36	4E8750	CUSHION

ITEM	PART	DESCRIPTION
1	6R343	DRY INK CARTRIDGE (BLACK,5280)
-	6R359	DRY INK CARTRIDGE (BLACK,5309/5310)
2	13R50	COPY CARTRIDGE ASSEMBLY (5280)
-	13R55	COPY CARTRIDGE ASSEMBLY (5309/5310)



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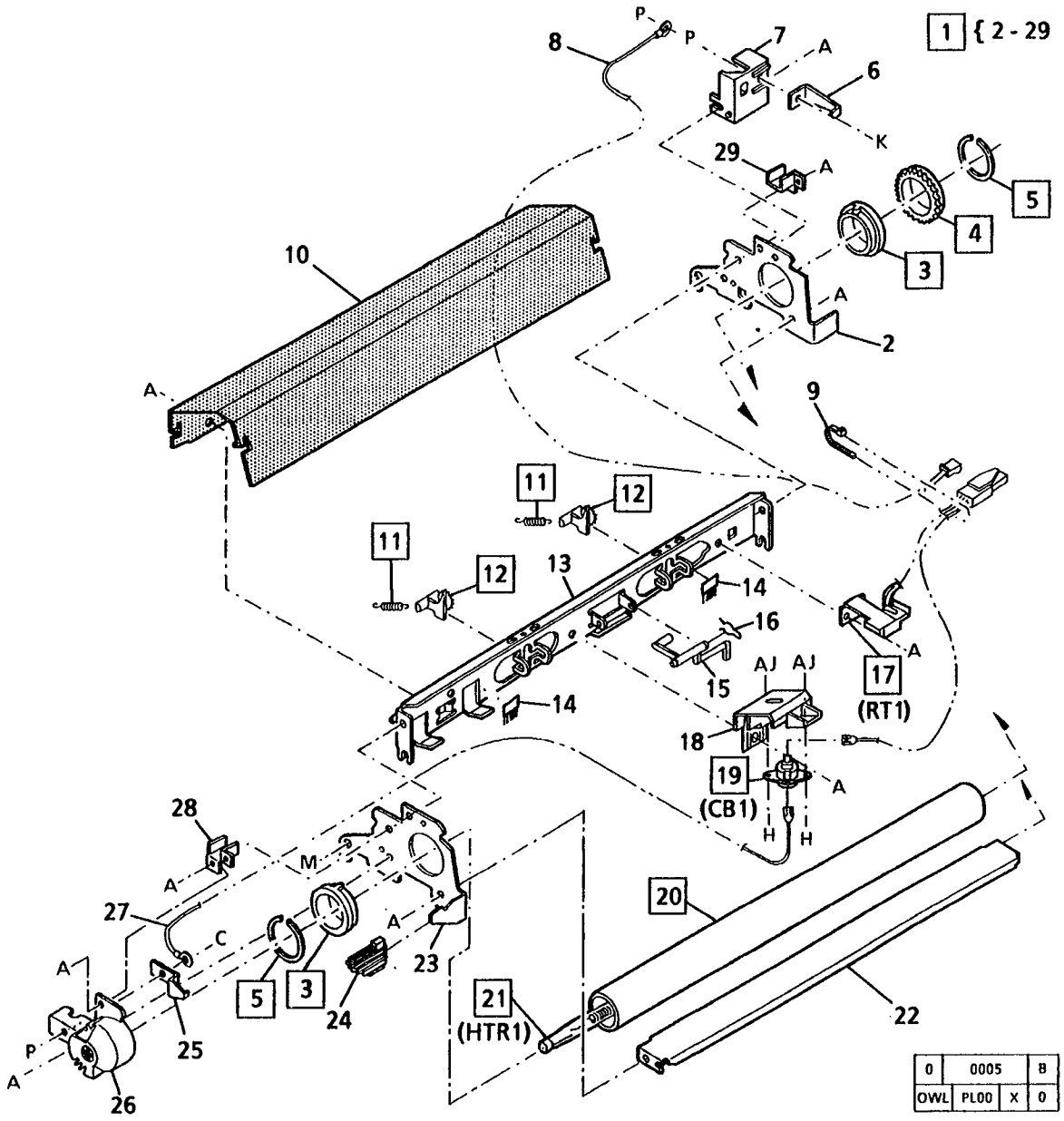
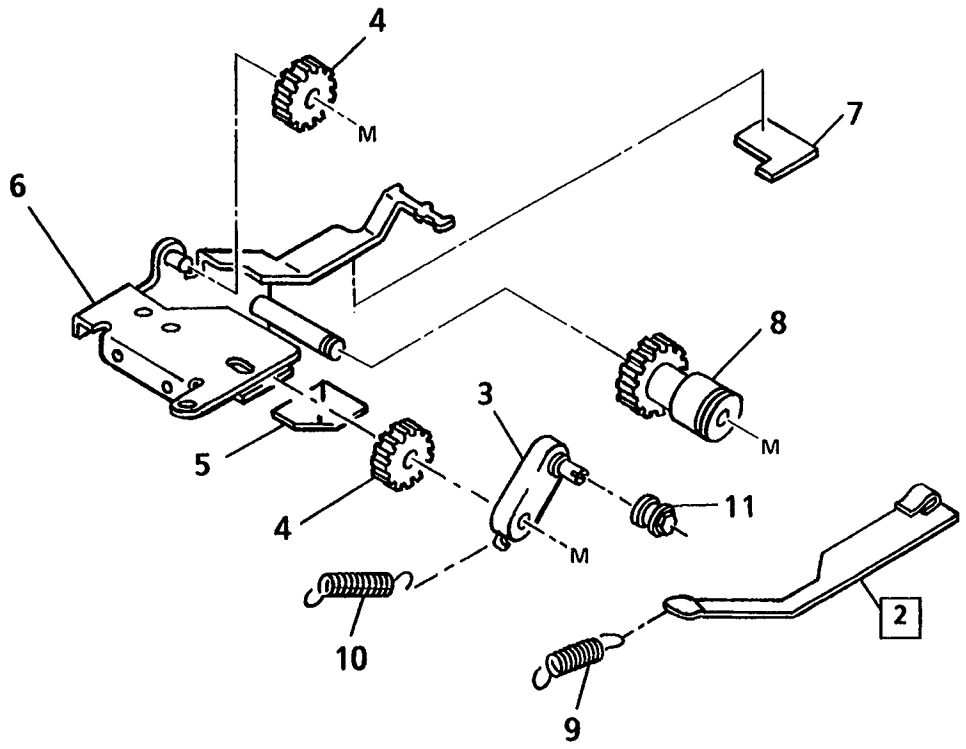
PL 5.1 FUSER ASSEMBLY



ITEM	PART	DESCRIPTION
1	126K3410	FUSER ASSEMBLY (120V/60HZ)
-	126K3430	FUSER ASSEMBLY (220V/50HZ)
-	126K3440	FUSER ASSEMBLY (240V/50HZ)
2	--	REAR FUSER FRAME (P/O ITEM 1)
3	13E5160	HEAT ROLL BEARING
4	7E11350	HEAT ROLL GEAR
5	3E10140	HEAT ROLL RETAINING RING
6	--	REAR LAMP SPRING (P/O ITEM 1)
7	--	LAMP SPRING MOUNTING BASE (P/O ITEM 1)
8	--	FUSER WIRING HARNESS (P/O ITEM 1)
9	--	TIE-WRAP (P/O ITEM 1)
10	2E55960	FUSER COVER
11	9E17710	STRIPPER FINGER SPRING
12	7E11260	STRIPPER FINGER
13	--	OUTPUT PAPER GUIDE (P/O ITEM 1)
14	115E1690	STATIC ELIMINATOR
15	11E2420	EXIT SWITCH ACTUATOR
16	--	RETAINING CLIP (M4) (P/O ITEM 1)
17	130E5030	THERMISTOR (RT1)
18	--	MOUNTING BRACKET (P/O ITEM 1)
19	130E2990	THERMAL BREAKER (CB1)
20	22E11390	HEAT ROLL
21	122E1560	HEAT ROD (HTR1) (120V/60HZ)
-	122E1570	HEAT ROD (HTR1) (220V/50HZ)
-	122E1580	HEAT ROD (HTR1) (240V/50HZ)
22	--	INPUT PAPER GUIDE (P/O ITEM 1)
23	--	FRONT FUSER FRAME (P/O ITEM 1)
24	3E10740	FUSER HANDLE
25	9E17590	FRONT HEAT ROD CONTACT
26	2E22460	FRONT HEAT ROD COVER
27	--	THERMAL BREAKER HARNESS (P/O ITEM 1)
28	--	FRONT FUSER INSULATOR (200V SERIES) (P/O ITEM 1)
29	--	REAR FUSER INSULATOR (200V SERIES) (P/O ITEM 1)

PL 5.2 STRIPPER ASSEMBLY



ITEM	PART	DESCRIPTION
1	32K850	STRIPPER ASSEMBLY
2	32E2381	STRIPPER GUIDE
3	31E4990	PRESSURE ARM
4	--	GEAR (16T) (P/O ITEM 1)
5	--	MYLAR SHEET (P/O ITEM 1)
6	--	STRIPPER FRAME (P/O ITEM 1)
7	--	MYLAR SHEET (P/O ITEM 1)
8	--	SEPARATOR ROLLER (P/O ITEM 1)
9	--	SPRING (P/O ITEM 1)
10	--	SPRING (P/O ITEM 1)
11	--	ROLLER (P/O ITEM 1)

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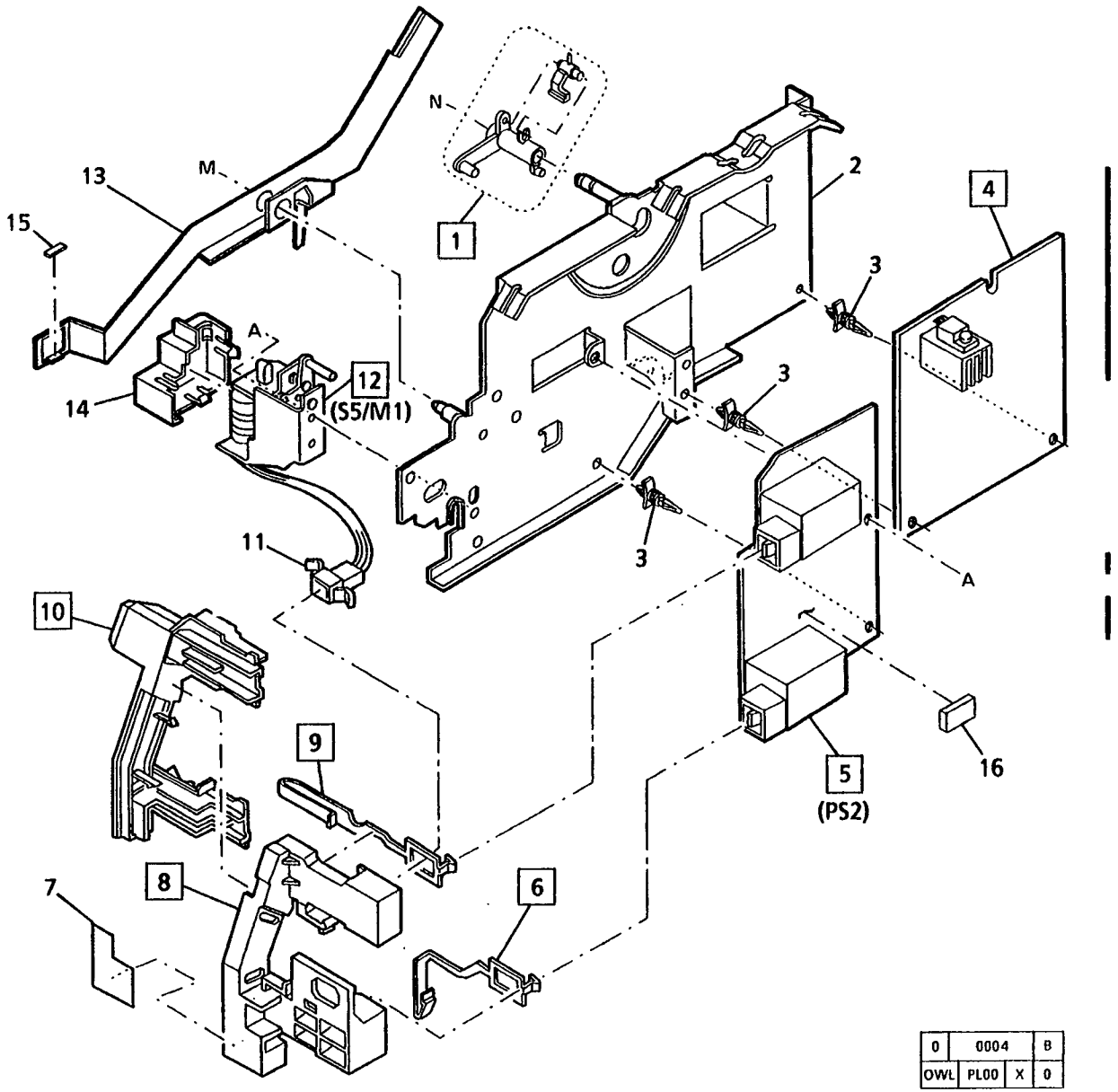
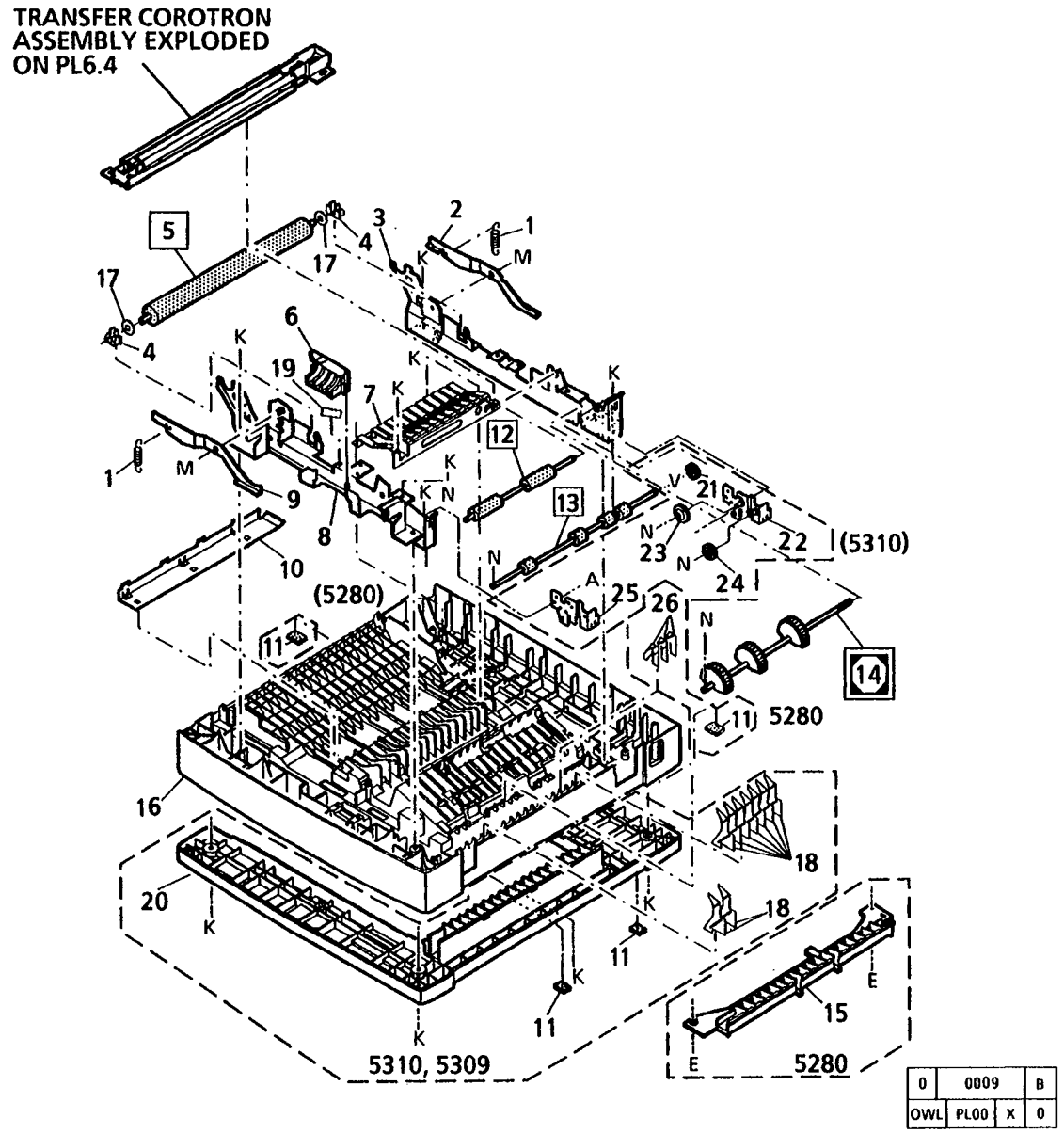
OWL	PL00	X	0

PL 6.1 MAIN PWB AND HV PWB MODULE



ITEM	PART	DESCRIPTION
1	31E6220	REGISTRATION GATE LINKAGE ARM
2	--	SUPPORT FRAME (NOT SPARED)
3	--	PWB SUPPORT(NOT SPARED)
4	140K56450	MAIN PWB
5	140K56460	HIGH VOLTAGE POWER SUPPLY(HVPS)(PS2)
6	116E3280	TRANSFER COROTRON TERMINAL
7	--	CAUTION HIGH VOLTAGE LABEL (REF:PL7.1B,ITEM 1)
8	113E5090	COROTRON SOCKET
9	116E3270	CHARGE COROTRON TERMINAL
10	2E21840	COROTRON TERMINAL COVER
11	--	COUNTER INTERFACE HARNESS(NOT SPARED)
12	111E300	12K COPY CARTRIDGE SWITCH/METER (S5/M1)
-	111E290	9K COPY CARTRIDGE SWITCH/METER (S5/M1)
13	--	CONNECTOR ARM (NOT SPARED)
14	2E22480	METER COVER
15	--	INSULATOR(NOT SPARED)
16	4E6150	HIGH VOLTAGE POWER SUPPLY CUSHION

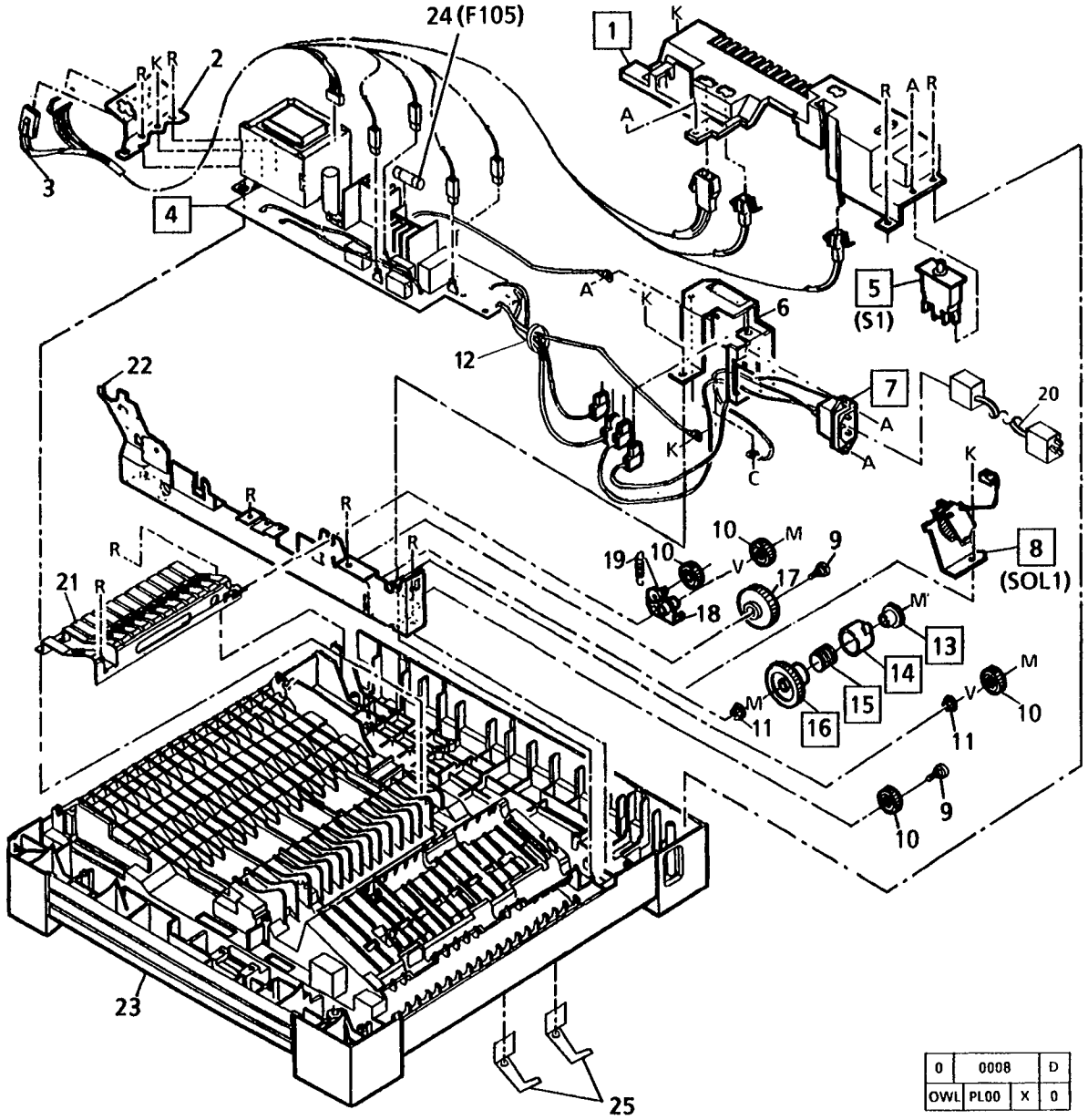
PL 6.2 PAPER FEED AND LOWER FRAME



ITEM	PART	DESCRIPTION
1	9E49850	SPRING
2	31E6780	REAR PRESSURE ARM
3	1E25430	REAR LOWER FRAME (5280/5309)
-	1E25710	REAR LOWER FRAME (5310)
4	13E5110	BEARING
5	22E15170	PRESSURE ROLL
6	120E3670	COPY CARTRIDGE MOUNTING BRACKET (5280)
-	120E5670	COPY CARTRIDGE MOUNTING BRACKET (5310/5309)
7	32E2350	PAPER GUIDE
8	1E25440	FRONT LOWER FRAME (5280/5309)
-	1E25720	FRONT LOWER FRAME (5310)
9	31E6790	FRONT PRESSURE ARM
10	33E3010	PRESSURE ROLL STRIPPER
11	4E1830	RUBBER FOOT
12	22E13380	REGISTRATION ROLL
13	22E7340	PREREGISTRATION ROLL (5280/5309)
-	22E13530	PREREGISTRATION ROLL (5310)
14	22E7330	PAPER FEED ROLL(5280)
-	22E13540	PAPER FEED ROLL (5310/5309)
15	--	CASSETTE FOOT (NOT SPARED)
16	--	LOWER FRAME(NOT SPARED)
17	28E10130	WASHER
18	38E14110	MYLAR SHEET
19	--	CAUTION LABEL (NOT SPARED)
20	--	CASSETTE BASE HOLDER (NOT SPARED)
21	--	GEAR(16T)(NOT SPARED)
22	--	BRACKET(NOT SPARED)
23	--	IDLER GEAR (30T) (NOT SPARED)
24	--	GEAR(26T)(NOT SPARED)
25	--	BRACKET (NOT SPARED)
26	--	MYLAR SHEET(NOT SPARED)

0	0009	B
OWL	PL00	X	0

PL 6.3 LOW VOLTAGE POWER SUPPLY

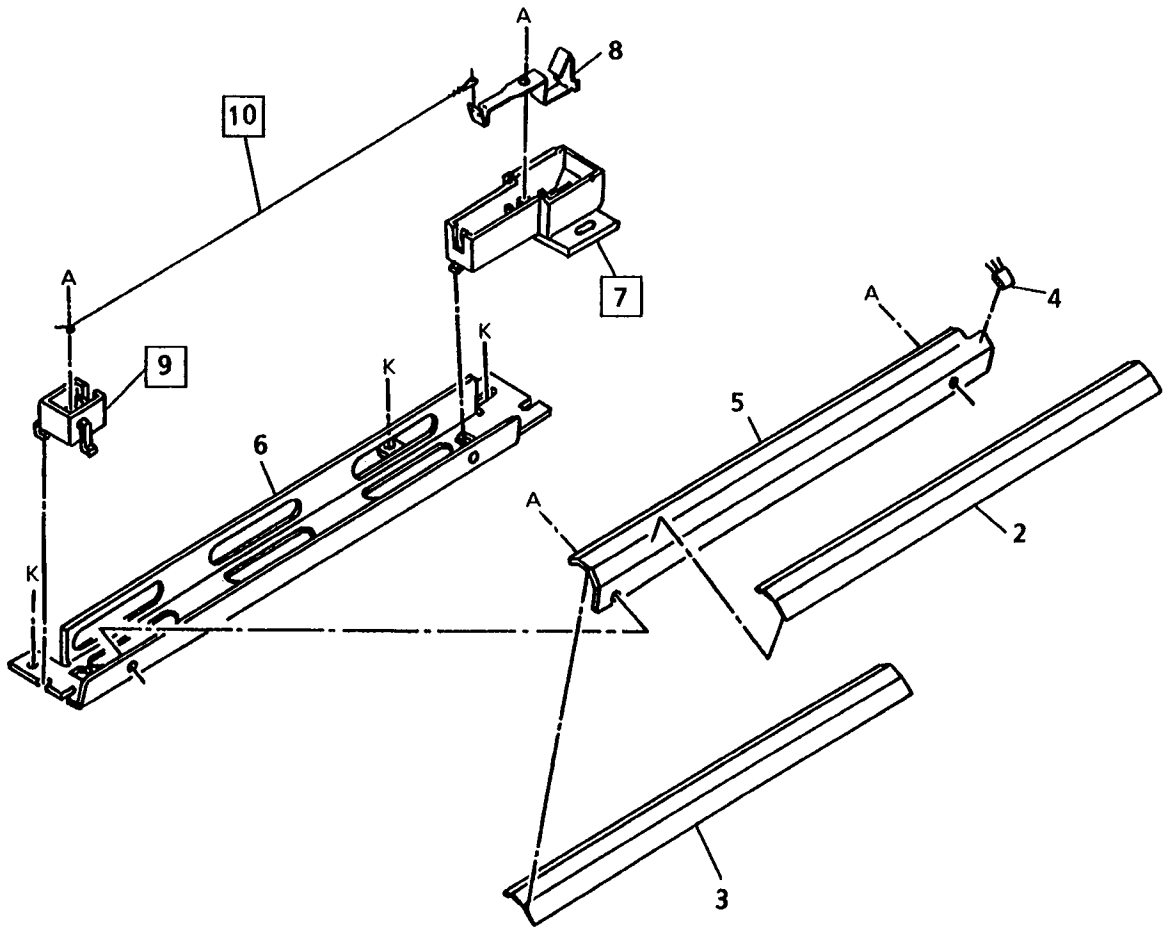


ITEM	PART	DESCRIPTION
1	2E55970	POWER SUPPLY COVER
2	--	POWER CONNECTOR MOUNTING BRACKET (NOT SPARRED)
3	--	LOWER FRAME HARNESS (NOT SPARED)
4	105K8340	LOW VOLTAGE POWER SUPPLY(LVPS)(120V/60HZ)
-	105K8350	LOW VOLTAGE POWER SUPPLY (LVPS) (220/240V/50HZ)
5	110E2780	POWER ON/OFF SWITCH (S1)
6	113E12010	POWER SWITCH/ RECEPTACLE CHASSIS
7	113E12000	INPUT POWER RECEPTACLE
8	121E8480	PF CLUTCH SOLENOID (SOL2)
9	--	SHOULDER SCREW (NOT SPARED)
10	7E11270	GEAR (16T)
11	13E8650	BEARING
12	--	TIE-WRAP(NOT SPARED)
13	5E4260	CLUTCH BOSS
14	16E4430	CLUTCH BARREL
15	9E17190	CLUTCH SPRING
16	7E11290	GEAR (27T)
17	7E11280	GEAR (26T)
18	31E3600	PIVOT ARM
19	9E17210	SPRING
20	117E9750	POWER CORD(120V/60HZ)
-	117E10760	POWER CORD(220V/60HZ)
-	117E9760	POWER CORD(220V/50HZ)
-	117E9830	POWER CORD(240V/50HZ)
21	--	PAPER GUIDE (REF:PL6.2,ITEM 7)
22	--	REAR LOWER FRAME (NOT SPARED)
23	--	LOWER FRAME (NOT SPARED)
24	108E3010	FUSE (F105)
25	38E13450	PAPER GUIDE (W/TAG 1)

0	0008		D
OWL	PL00	X	0

PL 6.4 TRANSFER COROTRON ASSEMBLY

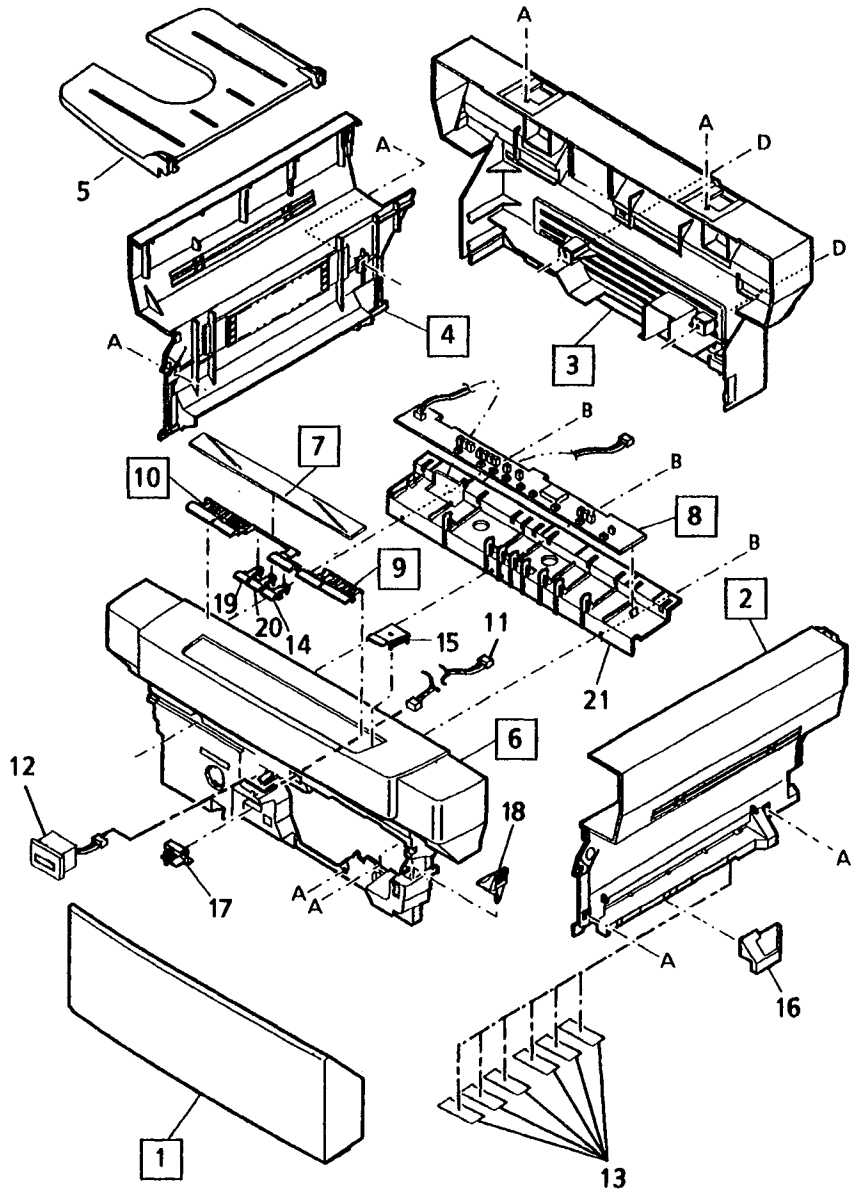
(ED2) 1 { 2 - 10



ITEM	PART	DESCRIPTION
1	125K1820	TRANSFER COROTRON ASSEMBLY (ED2)
2	--	PAPER GUIDE (P/O ITEM 1)
3	--	PAPER GUIDE (P/O ITEM 1)
4	--	STATIC DISCHARGE BRUSH (P/O ITEM 1)
5	--	PAPER GUIDE (P/O ITEM 1)
6	--	TRANSFER COROTRON FRAME (P/O ITEM 1)
7	113E5050	REAR TC BLOCK
8	116E3260	REAR TC WIRE TERMINAL
9	113E5040	FRONT TC BLOCK
10	117E5320	TRANSFER COROTRON WIRE

0	0018	A
OWL	PL00 X	1

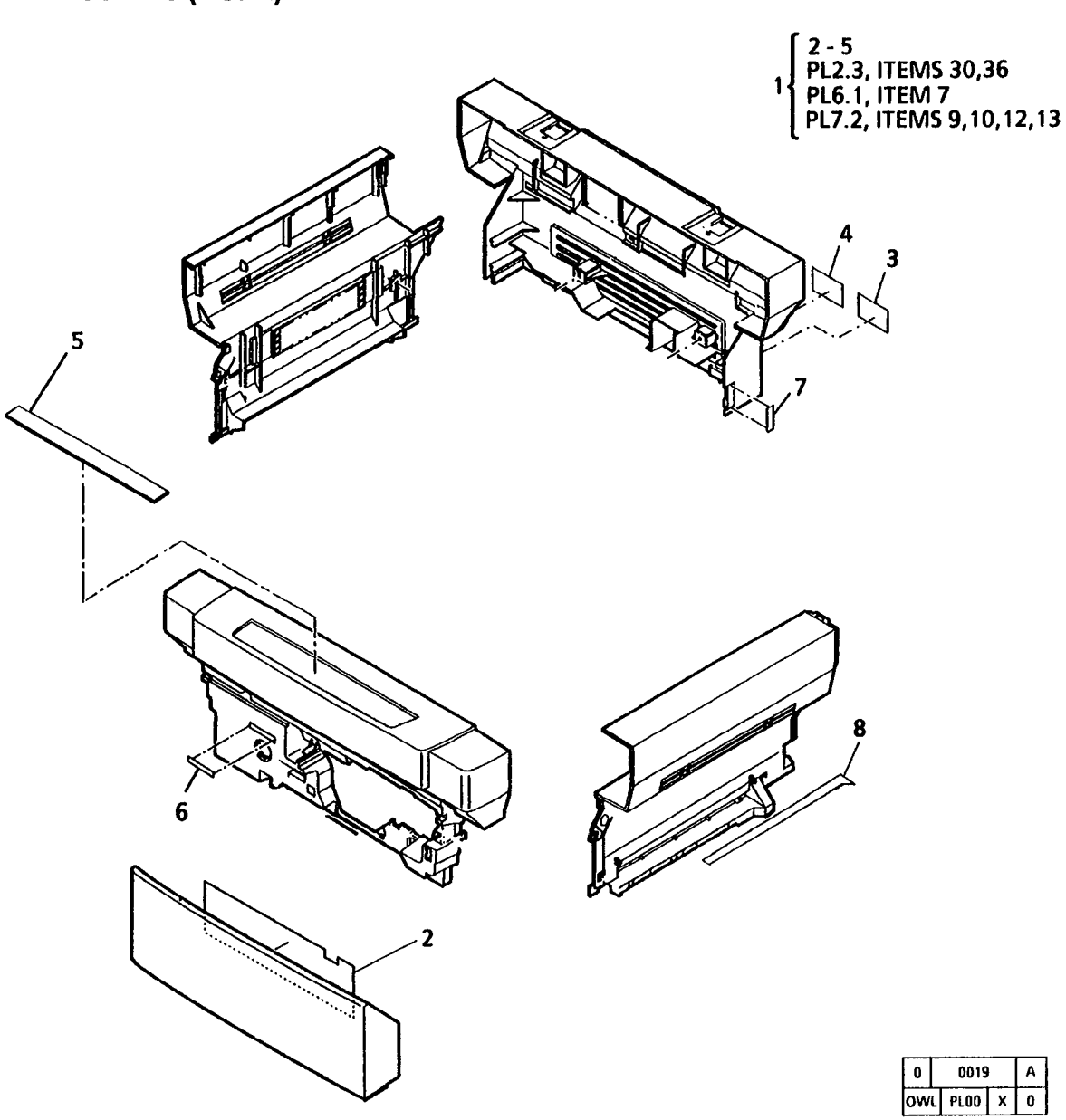
PL 7.1A COVERS (1 OF 2)



0	0001	C
OWL	PL00	X	1

ITEM	PART	DESCRIPTION
1	2E55870	FRONT ACCESS COVER (5309/5310)
-	2E55880	FRONT ACCESS COVER (5280)
2	2E55910	RIGHT COVER
3	2E55920	REAR COVER
4	2E55930	LEFT COVER
5	50E9280	COPY OUTPUT TRAY (5280/5309)
-	50E9290	COPY OUTPUT TRAY (5310)
6	2E55890	FRONT INTERIOR COVER (5280)
-	2E55900	FRONT INTERIOR COVER (5309/5310)
7	53E3670	BEZEL(5280,USO/XCL/XLA)
-	53E3690	BEZEL (USO/XCL/XLA) (5309)
-	53E3680	BEZEL (USO/XCL/XLA) (5310)
-	53E4010	BEZEL (RX,5310)
-	53E4000	BEZEL (RX,5309)
-	53E3990	BEZEL (RX)(5280)
8	140K56440	CONTROL CONSOLE PWB (INCH SERIES,5280/5309)
-	140K58680	CONTROL CONSOLE PWB (AB SERIES,5280/5309)
-	140K57170	CONTROL CONSOLE PWB (INCH SERIES,5310)
-	140K58670	CONTROL CONSOLE PWB (AB SERIES,5310)
9	3E24500	BUTTON UNIT (EXP SEL, COPY QTY TENS) R/E SEL AND
10	3E24490	BUTTON UNIT (STOP/CLEAR AND COPY QTY UNITS)
11	162K550	HARNESS ADAPTER
12	18E650	COPY COUNT METER
13	--	RIGHT EXTERIOR SHEET (5309/5310) (NOT SPARED)
14	3E24510	SEL OR SPLY SEL BUTTON
15	3E24480	START BUTTON
16	38E12220	MANUALS FEED GUIDE (5280/5309)
17	42E390	COROTRON CLEANER
18	11E4870	RELEASE BUTTON
19	3E24530	ZOOM PERCENTAGE DOWN BUTTON
20	3E24520	ZOOM PERCENTAGE UP BUTTON
21	19E32480	PWB CONSOLE HOLDER

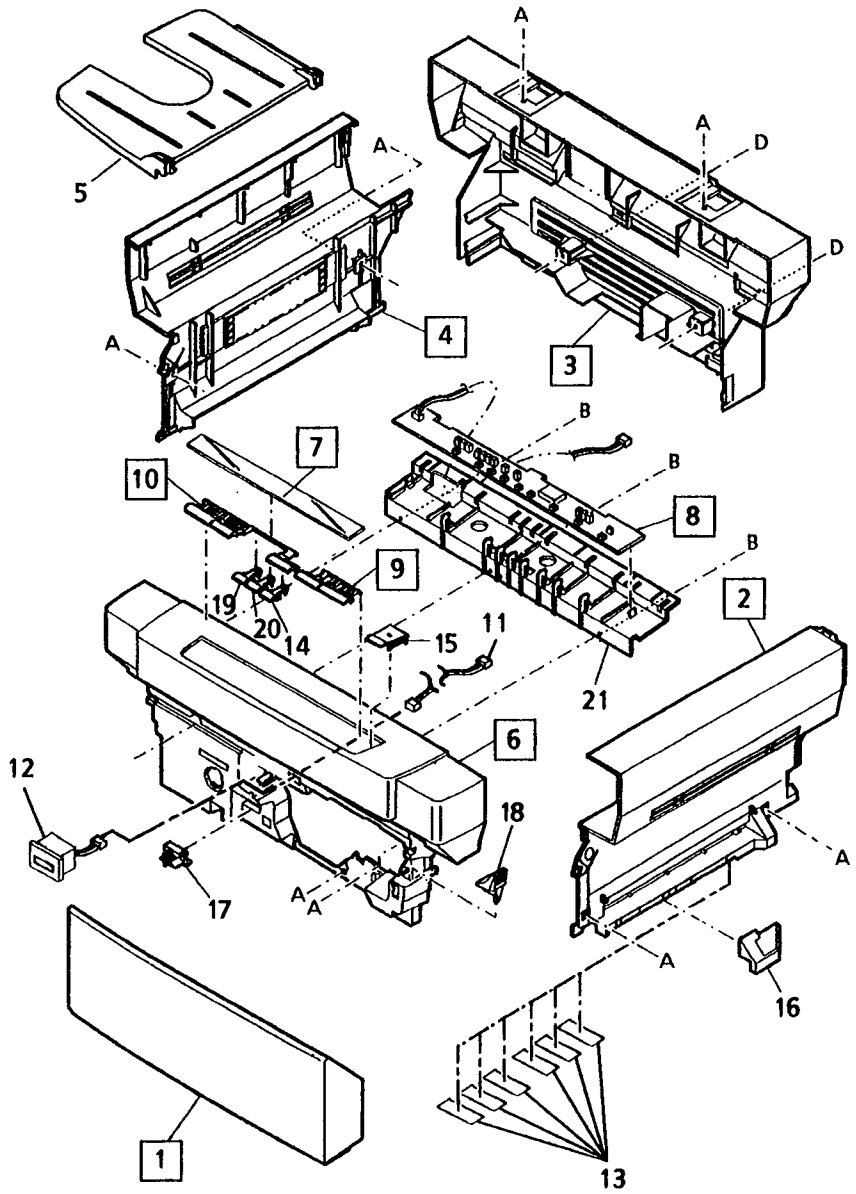
PL 7.1B COVERS (2 OF 2)



ITEM	PART	DESCRIPTION
1	600K42370	LABEL KIT (USO/XCL/XLA)(5310)
2	--	OPEN CAUTION LABEL (P/O ITEM 1)
3	--	SERVICE CAUTION LABEL ((P/O ITEM 1)
4	--	CANADIAN SERVICE LABEL (P/O ITEM 1)
5	--	CONTROL PANEL LABEL (P/O ITEM 1)
6	--	VARIABLE RESISTOR LABEL (NOT SPARED)
7	--	POWER ON/OFF LABEL (NOT SPARED)
8	--	MANUAL FEED SIZE LABEL (5280/5309) (NOT SPARED)

0	0019		A
OWL	PL00	X	0

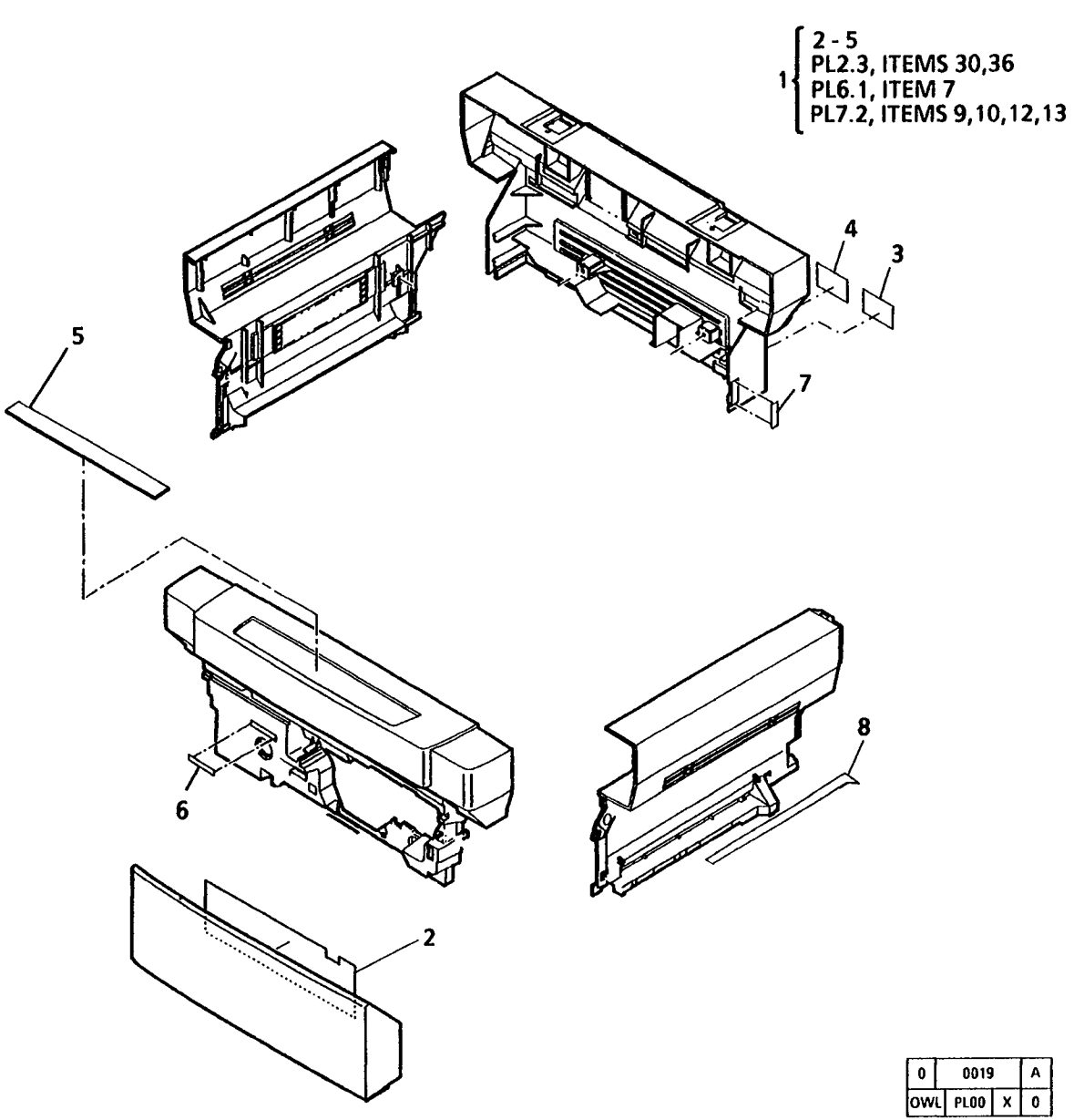
PL 7.1A COVERS (1 OF 2)



0	0001	C
OWL	PL00	X	1

ITEM	PART	DESCRIPTION
1	2E55870	FRONT ACCESS COVER (5309/5310)
-	2E55880	FRONT ACCESS COVER (5280)
2	2E55910	RIGHT COVER
3	2E55920	REAR COVER
4	2E55930	LEFT COVER
5	50E9280	COPY OUTPUT TRAY (5280/5309)
-	50E9290	COPY OUTPUT TRAY (5310)
6	2E55890	FRONT INTERIOR COVER (5280)
-	2E55900	FRONT INTERIOR COVER (5309/5310)
7	53E3670	BEZEL(5280,USO/XCL/XLA)
-	53E3690	BEZEL (USO/XCL/XLA) (5309)
-	53E3680	BEZEL (USO/XCL/XLA) (5310)
-	53E4010	BEZEL (RX,5310)
-	53E4000	BEZEL (RX,5309)
-	53E3990	BEZEL (RX)(5280)
8	140K56440	CONTROL CONSOLE PWB (INCH SERIES,5280/5309)
-	140K58680	CONTROL CONSOLE PWB (AB SERIES,5280/5309)
-	140K57170	CONTROL CONSOLE PWB (INCH SERIES,5310)
-	140K58670	CONTROL CONSOLE PWB (AB SERIES,5310)
9	3E24500	BUTTON UNIT (EXP SEL, COPY QTY TENS) R/E SEL AND
10	3E24490	BUTTON UNIT (STOP/CLEAR AND COPY QTY UNITS)
11	162K550	HARNESS ADAPTER
12	18E650	COPY COUNT METER
13	--	RIGHT EXTERIOR SHEET (5309/5310) (NOT SPARED)
14	3E24510	SEL OR SPLY SEL BUTTON
15	3E24480	START BUTTON
16	38E12220	MANUALS FEED GUIDE (5280/5309)
17	42E390	COROTRON CLEANER
18	11E4870	RELEASE BUTTON
19	3E24530	ZOOM PERCENTAGE DOWN BUTTON
20	3E24520	ZOOM PERCENTAGE UP BUTTON
21	19E32480	PWB CONSOLE HOLDER

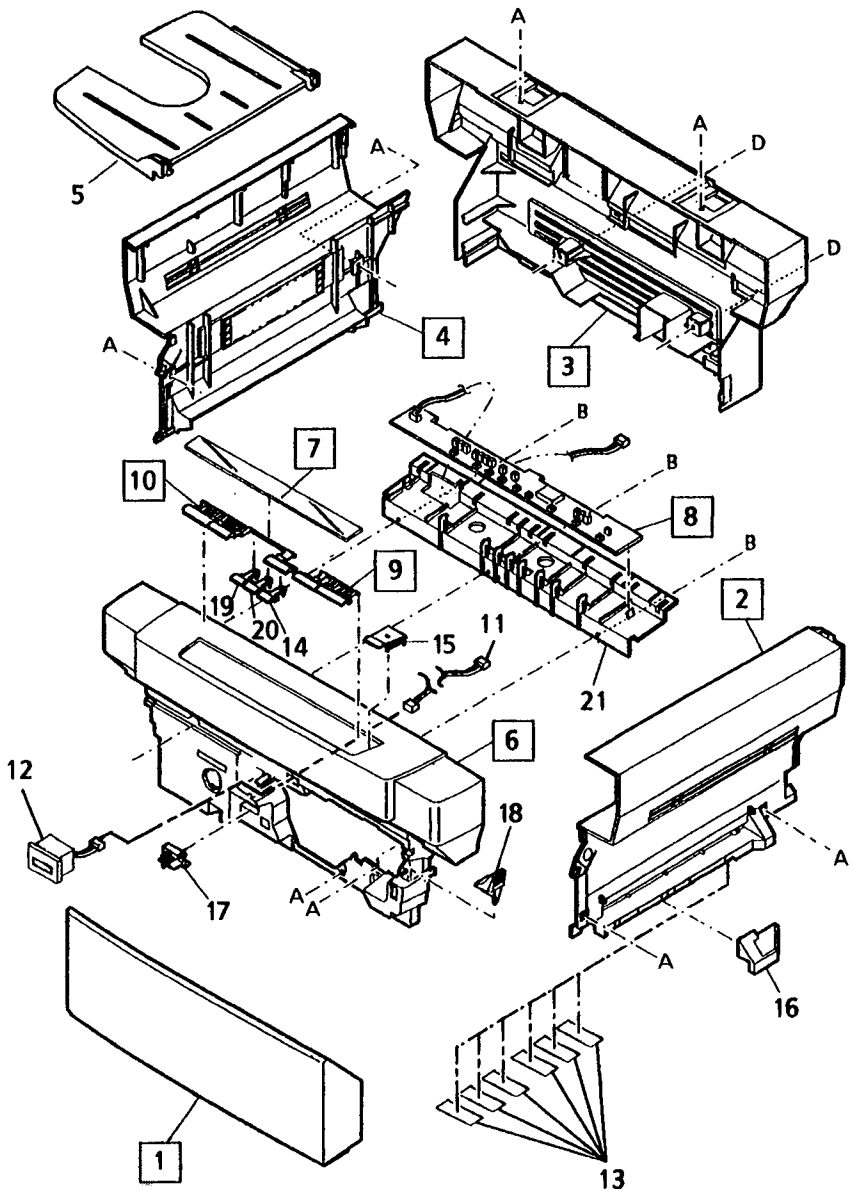
PL 7.1B COVERS (2 OF 2)



ITEM	PART	DESCRIPTION
1	600K42370	LABEL KIT (USO/XCL/XLA)(5310)
2	--	OPEN CAUTION LABEL (P/O ITEM 1)
3	--	SERVICE CAUTION LABEL ((P/O ITEM 1)
4	--	CANADIAN SERVICE LABEL (P/O ITEM 1)
5	--	CONTROL PANEL LABEL (P/O ITEM 1)
6	--	VARIABLE RESISTOR LABEL (NOT SPARED)
7	--	POWER ON/OFF LABEL (NOT SPARED)
8	--	MANUAL FEED SIZE LABEL (5280/5309) (NOT SPARED)

0	0019		A
OWL	PL00	X	0

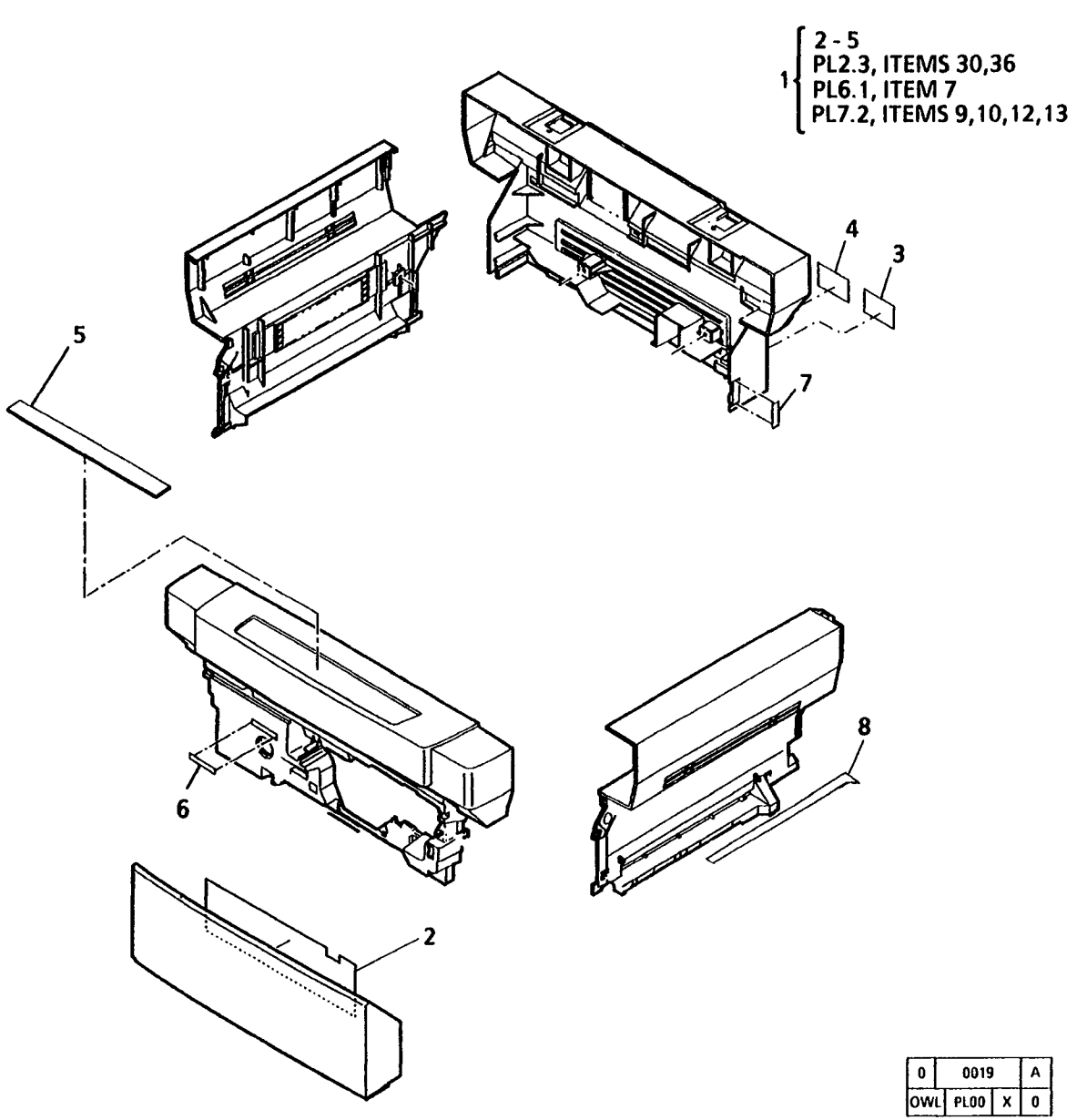
PL 7.1A COVERS (1 OF 2)



0	0001	C
OWL	PL00	X	1

ITEM	PART	DESCRIPTION
1	2E55870	FRONT ACCESS COVER (5309/5310)
-	2E55880	FRONT ACCESS COVER (5280)
2	2E55910	RIGHT COVER
3	2E55920	REAR COVER
4	2E55930	LEFT COVER
5	50E9280	COPY OUTPUT TRAY (5280/5309)
-	50E9290	COPY OUTPUT TRAY (5310)
6	2E55890	FRONT INTERIOR COVER (5280)
-	2E55900	FRONT INTERIOR COVER (5309/5310)
7	53E3670	BEZEL(5280,USO/XCL/XLA)
-	53E3690	BEZEL (USO/XCL/XLA) (5309)
-	53E3680	BEZEL (USO/XCL/XLA) (5310)
-	53E4010	BEZEL (RX,5310)
-	53E4000	BEZEL (RX,5309)
-	53E3990	BEZEL (RX)(5280)
8	140K56440	CONTROL CONSOLE PWB (INCH SERIES,5280/5309)
-	140K58680	CONTROL CONSOLE PWB (AB SERIES,5280/5309)
-	140K57170	CONTROL CONSOLE PWB (INCH SERIES,5310)
-	140K58670	CONTROL CONSOLE PWB (AB SERIES,5310)
9	3E24500	BUTTON UNIT (EXP SEL, COPY QTY TENS) R/E SEL AND
10	3E24490	BUTTON UNIT (STOP/CLEAR AND COPY QTY UNITS)
11	162K550	HARNESS ADAPTER
12	18E650	COPY COUNT METER
13	--	RIGHT EXTERIOR SHEET (5309/5310) (NOT SPARED)
14	3E24510	SEL OR SPLY SEL BUTTON
15	3E24480	START BUTTON
16	38E12220	MANUALS FEED GUIDE (5280/5309)
17	42E390	COROTRON CLEANER
18	11E4870	RELEASE BUTTON
19	3E24530	ZOOM PERCENTAGE DOWN BUTTON
20	3E24520	ZOOM PERCENTAGE UP BUTTON
21	19E32480	PWB CONSOLE HOLDER

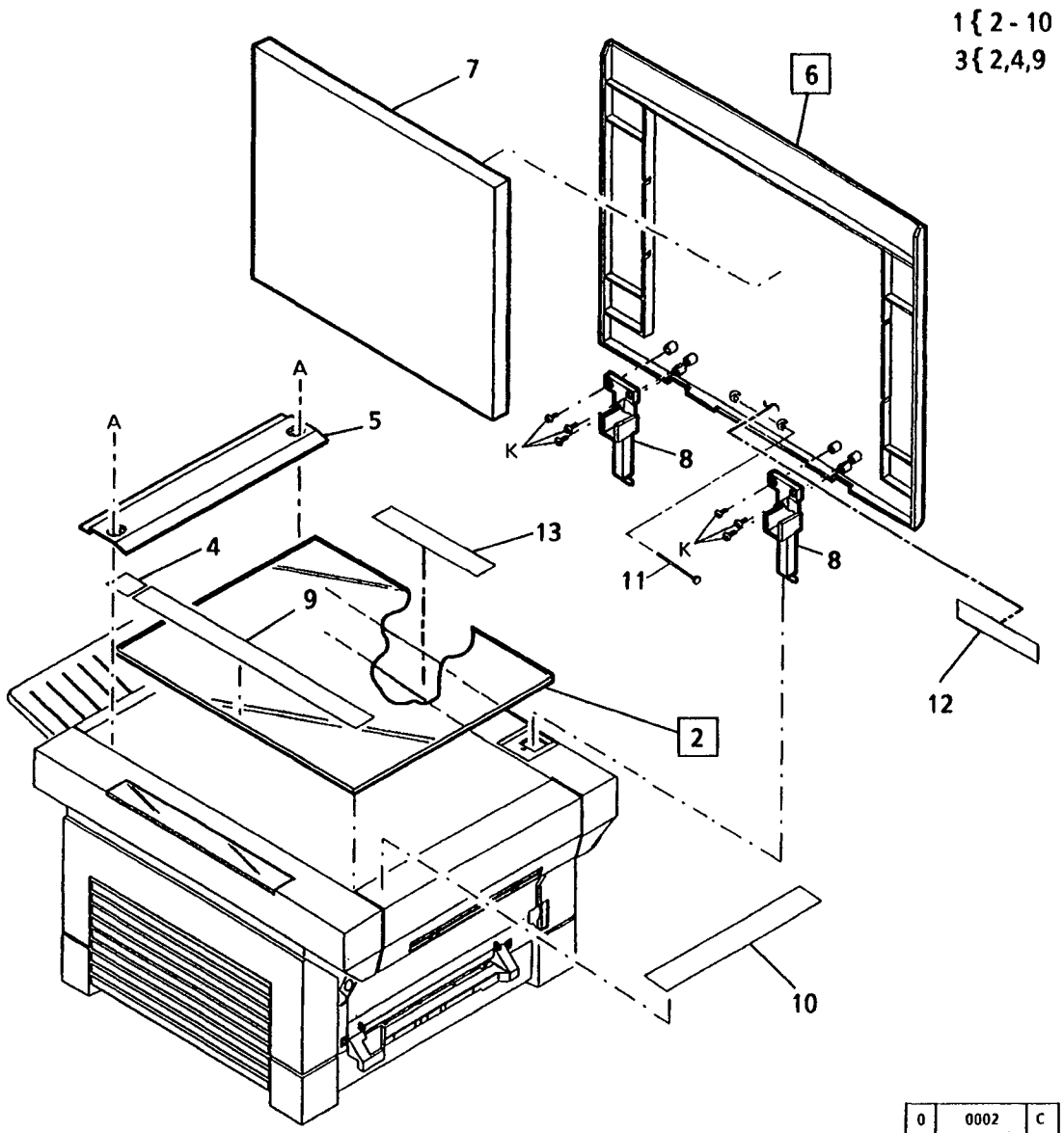
PL 7.1B COVERS (2 OF 2)



ITEM	PART	DESCRIPTION
1	600K42370	LABEL KIT (USO/XCL/XLA)(5310)
2	--	OPEN CAUTION LABEL (P/O ITEM 1)
3	--	SERVICE CAUTION LABEL ((P/O ITEM 1)
4	--	CANADIAN SERVICE LABEL (P/O ITEM 1)
5	--	CONTROL PANEL LABEL (P/O ITEM 1)
6	--	VARIABLE RESISTOR LABEL (NOT SPARED)
7	--	POWER ON/OFF LABEL (NOT SPARED)
8	--	MANUAL FEED SIZE LABEL (5280/5309) (NOT SPARED)

0	0019		A
OWL	PL00	X	0

PL 7.2 PLATEN AND TOP COVERS



ITEM	PART	DESCRIPTION
1	--	PLATEN ASSEMBLY (NOT SPARED)
2	--	PLATEN GLASS (P/O ITEM 3)
3	90K1720	PLATEN GLASS ASSEMBLY
4	--	OPERATION LABEL (P/O ITEM 3)
5	32E4220	REGISTRATION PLATE
6	2E55950	PLATEN COVER (5310)
-	2E55940	PLATEN COVER(5280/5309)
7	4E5200	PLATEN CUSHION
8	3E24540	PLATEN HINGE
9	--	DOCUMENT GLASS REGISTRATION LABEL(H) (P/O ITEM 3) (ALSO P/O ITEM 1 ON PL7.1B)
10	--	INSTRUCTIONS LABEL (REF:PL7.1B,ITEM 1)
11	29E17480	OPTIC LOCKING PIN
12	--	LOCKING PIN STORAGE LABEL (REF:PL7.1B,ITEM 1)
13	--	SERVICE LABEL (REF:PL7.1B,ITEM 1)

0	0002	C
OWL	PL00	X	2

ITEM	PART	DESCRIPTION
1	600K23760	HARDWARE KIT
A	--	SCREW(3 X 8MM,BLACK) (P/O ITEM 1)
B	--	SCREW(3 X 8MM,SILVER) (P/O ITEM 1)
C	--	SCREW(4 X 8MM,YELLOW) (P/O ITEM 1)
D	--	SCR(3 X 10MM,SILVER) (P/O ITEM 1)
E	--	SCREW(3 X 8MM,BLACK) (P/O ITEM 1)
F	--	SCREW(3 X 8MM,YELLOW) (P/O ITME 1)
G	--	SCREW(2.3 X 16MM) (YELLOW)(P/O ITEM 1)
H	--	SCREW(3 X 6MM,YELLOW) (P/O ITEM 1)
J	--	SCREW(2.3 X 8MM) (YELLOW)(P/O ITEM 1)
K	--	SCREW(4 X 10MM,SILVER) (P/O ITEM 1)
L	--	SCREW(3 X 6MM,YELLOW) (P/O ITEM 1)
M	--	E-RING(4MM)(P/O ITEM 1)
N	--	E-RING(5MM)(P/O ITEM 1)
O	--	E-RING(6MM)(P/O ITEM 1)
P	--	NUT(M4)(P/O ITEM1)
R	--	SCREW(4 X12K) (P/O ITEM 1)
S	--	SCREW(4 X 20K) (P/O ITEM 1)
T	--	GRIP RING (5MM) (P/O ITEM 1)
U	--	GRIP RING (6MM) (P/O ITEM 1)
V	--	ROLL PIN (2MM X 7MM) (P/O ITEM 1)
W	--	SCREW(3 X 16MM) (P/O ITEM 1)
X	--	SCREW (P/O ITEM 1)
Y	--	GRIP RING(P/O ITEM 1) (P/O ITEM 1)
Z	--	SCREW(3 X 5MM,LEFT HAND THREAD) (NOT SPARED)
AA	--	WASHER(6MM)(NOT SPARED)
AB	--	WASHER (NOT SPARED)
AC	--	SCREW (M3 X 4) (NOT SPARED)
AD	--	WASHER (4MM) (NOT SPARED)
AE	--	PIN (3 X 9MM) (NOT SPARED)
AF	--	LOCKWASHER (4MM) (NOT SPARED)
AG	--	LOCKWASHER (5MM) (NOT SPARED)
AH	--	WASHER (5MM) (NOT SPARED)
AJ	--	NUT (M3) (NOT SPARED)

PART NUMBER	PL LOC.
1E25430	6.2
1E25440	6.2
1E25710	6.2
1E25720	6.2
2E21840	6.1
2E22460	5.1
2E22480	6.1
2E55870	7.1A
2E55880	7.1A
2E55890	7.1A
2E55900	7.1A
2E55910	7.1A
2E55920	7.1A
2E55930	7.1A
2E55940	7.2
2E55950	7.2
2E55960	5.1
2E55970	6.3
2E57050	2.3
2E57060	2.3
2E57340	3.2
3E10140	5.1
3E10740	5.1
3E15810	2.3
3E24480	7.1A
3E24490	7.1A
3E24500	7.1A
3E24510	7.1A
3E24520	7.1A
3E24530	7.1A
3E24540	7.2
3E26050	2.1
3E26060	2.2
4E1830	6.2
4E5200	7.2
4E5440	3.2
4E5450	3.3
4E6150	6.1
4E8520	3.2
4E8750	3.3
5E4260	6.3
5E10560	2.3
6R343	4.1
6R359	4.1
6E27160	1.3
6E47970	1.3
6E49380	2.3
7E11240	1.2
7E11260	5.1
7E11270	6.3
7E11280	6.3
7E11290	6.3
7E11300	1.2
7E11310	1.2
7E11330	1.2
7E11340	1.2
7E11350	5.1
7E14840	2.3
7E24600	1.2
7E24620	1.2
7E24630	1.2
7E24640	1.2
7E25320	2.3
7E25330	2.3
7E25480	3.3
8E2880	1.2
9E17190	6.3
9E17210	6.3
9E17220	1.3
9E17230	1.3
9E17240	1.2
9E17250	1.3
9E17590	5.1
9E17710	5.1
9E25210	2.3
9E32700	1.3
9E34670	1.3
9E49850	6.2
9E50450	2.3
9E50500	3.2
9E50510	3.3
11E2420	5.1
11E4540	1.3
11E4550	1.3
11E4870	7.1A
11E4880	1.2
11E4890	1.2
11E4900	1.2
11E4950	1.3
13R50	4.1
13R55	4.1
13E5110	6.2
13E5160	5.1
13E8650	2.3
13E8650	6.3
15E33800	3.2
15E33810	3.3
15E33820	3.2
15E33830	3.2
15E33840	3.3
15E33850	3.2
15E33860	3.2
15E33870	3.3
15E33880	3.3
15E33890	3.3
16E4430	6.3
17E6360	3.1
18E650	7.1A
19E15900	2.3
19E23720	3.2
19E23730	3.3
19E23740	3.2
19E29620	2.3
20E18820	3.2
22E7320	1.3
22E7330	6.2
22E7340	6.2
22E10240	2.3
22E11390	5.1
22E13370	1.3
22E13380	6.2
22E13530	6.2
22E13540	6.2
22E15170	6.2
22K30660	2.3
22K32180	2.3
28E10130	6.2
28E10810	1.3
29E17480	7.2
31E3600	6.3
31E3610	1.3
31E4990	5.2
31E5010	2.3
31E5020	2.3
31E5030	2.3
31E6220	6.1
31E6780	6.2
31E6790	6.2
32K850	5.2
32E2350	6.2
32E2381	5.2
32E4220	7.2
32E4400	3.3
33E3010	6.2
38E12220	7.1A
38E13450	6.3
38E14110	6.2
38E14840	2.3
41E1220	3.2
42E390	7.1A
48E19490	1.1
50E9280	7.1A
50E9290	7.1A
50E9460	2.3
53E3670	7.1A
53E3680	7.1A
53E3690	7.1A
53E3990	7.1A
53E4000	7.1A
53E4010	7.1A
55E24320	3.3
62K6150	3.1
62K6160	3.1
62E6340	3.2
62E6350	3.2
62E6360	3.2
62E6370	3.2
62E6380	3.2
62E6390	3.3
68E58950	1.3
90K1720	7.2
105E3680	1.1
105E3730	1.1
105E3740	1.1
105K8340	6.3
105K8350	6.3
108E2170	3.1
108E3010	6.3
109R7	2.1
109R8	2.2
110E2760	1.3
110E2780	6.3
110E5350	1.1
110E5370	1.3
110E5370	3.3
111E290	6.1
111E300	6.1
113E5040	6.4
113E5050	6.4
113E5060	1.1
113E5070	1.2
113E5090	6.1
113E8020	2.3
113E12000	6.3
113E12010	6.3
113E12320	3.3
115E1690	5.1
116E3260	6.4
116E3270	6.1
116E3280	6.1
116E5820	3.2
116E6320	3.2
117E5320	6.4
117E9750	6.3
117E9760	6.3
117E9830	6.3
117E10760	6.3
117E11800	3.3
118E9030	3.2
120E3670	6.2
120E5670	6.2
120E10920	1.1
121E8480	6.3
121E8790	2.3
122E1540	3.1
122E1550	3.1
122E1560	5.1
122E1570	5.1
122E1580	5.1
125K1820	6.4
126K3410	5.1
126K3430	5.1
126K3440	5.1
127E6960	1.2
127E7830	1.1
127E7860	1.1
127E8100	3.3
127E8110	3.3
127K11210	3.3
130E2990	5.1
130E5030	5.1
140K56440	7.1A
140K56450	6.1
140K56460	6.1
140K56471	1.1
140K56480	1.1
140K56481	1.1
140K56510	1.1
140K57170	7.1A
140K58670	7.1A
140K58680	7.1A
142E1010	1.1
152K58560	3.3
160K9380	1.1
162K550	7.1A
600K23760	8.1
600K42370	7.1B

GP 1 IMAGE ON PHOTORECEPTOR

PROCEDURE

1. Prepare the copier to make a copy of Side B of the standard test pattern (82P524 USMG, 82P523 RXL).
2. Press the **Start** button. Open the front access cover when the scan carriage reaches the center of scan. This will cause a paper jam.
3. Clear the paper jam.
4. Remove the Copy Cartridge and observe the image on the photoreceptor.
5. Reinstall the Copy Cartridge.
6. Repeat steps 1 through 5 two more times or as required.

PHYSICAL CHARACTERISTICS

Copier Dimensions

5280 – 11.8" (300 mm) Height, 19.7" (500 mm) Width, 18.2" (463 mm) Depth

5309 – 12.3" (313 mm) Height, 19.7" (500 mm) Width, 18.2" (463 mm) Depth

5310 – 13" (330 mm) Height, 22.1" (561 mm) Width, 18.2" (463 mm) Depth

Copier Weight

5280 – 50.7 lbs (23 kg)

5309 – 52.9 lbs (24 kg)

5310 – 55.1 lbs (25 kg)

CAPABILITIES

Copy Rate (1:1) -

10 copies/minute 8.5×11" (A4), 5.5×8.5" (A5)

8 copies/minute 8.5×14" (A4)

Warm-Up Time - within 20 seconds

First Copy Out - 9 seconds (8.5 X 11 inches)

Features

- **Auto Exposure** - this feature compensates for originals with color background.
- **Auto Power Saver** - the **Ready** light starts blinking after power on and also approximately 90 seconds after the last copy is made. Pressing the **Start** button will remove the copier from the power saver mode, but the first copy may take a few seconds longer than usual.

Features (Cont'd)

- **Paper Tray Bypass:**

  5280/5309

  This tray is used to feed business cards, transparencies and labels.

  5310

  This tray is a 50 sheet multifeed bypass (alternate) tray. It also can be used to single sheet feed business cards, transparencies and labels.

- **Magnification/Reduction:**

  USMG: 75%, 95%, and 124%, and zoom function (1% steps from 70 to 124%).

  RXL: 70%, 80%, 124%, and zoom function (1% steps from 70 to 124%).

PAPER / DOCUMENT SPECIFICATIONS

Paper Cassette Capacity:

5280 - 100 sheets

5309/5310 - 250 sheets

Copy Paper Sizes:

USMG: 8.5 X 14 inches to 8.5 X 5.5 inches (Cassette); 8.5 X 14 inches to 2 X 3.5 inches (Paper Tray Bypass)

RXL: A4, B5, A5 (Cassette); A4 to A6 (Paper Tray Bypass)

Copy Paper Weight:

USMG: 14.9 to 21.3 pounds (Cassette); 16 to 34.5 pounds (Paper Tray Bypass)

RXL: 56 to 80 g/m^2 (Cassette); 52 to 130 g/m^2 (Paper Tray Bypass)

PAPER / DOCUMENT SPECIFICATIONS (Cont'd)

Original Sizes:

10 X 14 inches (B4-250×353mm) maximum

Platen Cover Capacity - 1.2 inches (30 mm) (maximum) with the platen cover in use

Platen Glass Capacity - 5.3 pounds (2.4 kg) (maximum)

ELECTRICAL POWER REQUIREMENTS

USMG: Voltage - 115 VAC ±10%, 60 Hz, single phase

Current - 15 AMP service

RXL: 220/240 VAC ±10%, 50 Hz, single phase

Power Consumption - 1.15 KW (maximum with copier running), 50 watts (minimum with copier in standby and in power saver mode)

ENVIRONMENTAL DATA

Operating Temperature - 50 to 86 degrees F (10 to 30 degrees C)

Relative Humidity - 20 to 85%.

TOOLS

Test Pattern	USMG - 82P524
	RXL - 82P523
Formula A	USMG - 43P48
All Purpose Cleaner	RXL - 8R90175
Lint-Free Cloth	USMG / RXL - 600S4372
Lens and Mirror Cleaner	USMG - 43P81
	RXL - 8R90178
Film Remover	USMG - 43P45
General Cleaning Solvent	RXL - 8R90176
Heavy-Duty Towels	USMG - 35P3191
Cleaning Cloth	RXL - 8R90019

SUPPLIES

Dry Ink Cartridge *	
5280 Black **	6R343
5309/5310	6R359
Copy Cartridge	
5280	13R50
5309/5310	13R55
Paper Cassette	
5280	109R7
5309/5310	109R8

SUPPLIES (Continued)

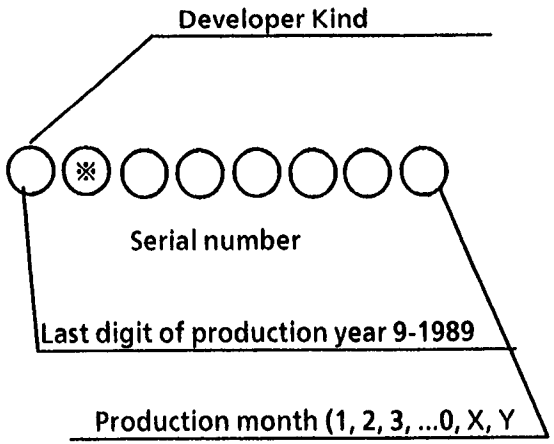
NOTES:

* *Store at 23 to 104 degrees F (-5 to 40 degrees C).*

** *Yield is approximately 3,000 copies for 8.5 X 11 inches paper.*

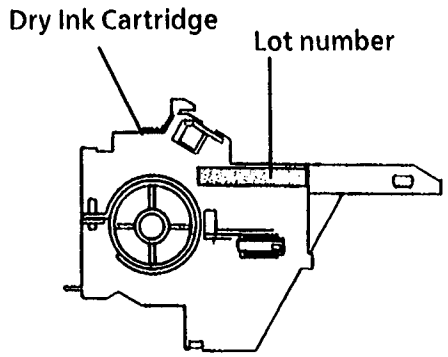
RELATED INFORMATION -

User Guide	700P96241
Training Kit	USMG - 700S96439



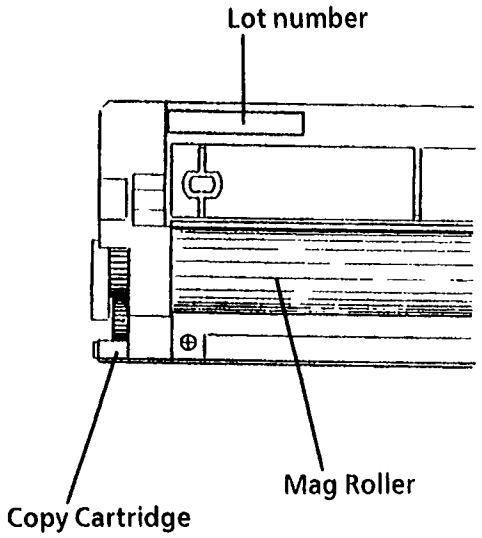
1150

Figure 1. Lot Number Interpretation



1152

Figure 2. Dry Ink Cartridge Lot Number



1151

Figure 3. Copy Cartridge Lot Number

POWER SWITCH MECHANISM AND PRECAUTIONS

The Low Voltage Power Supply can be switched on and off with the power switch lever, or by opening and closing the front access cover when the power switch is in the "ON" position.

1. (Figure 1): When the front access cover is closed, the protrusion on the cover pushes on the interlock rod, which engages the switch cam.

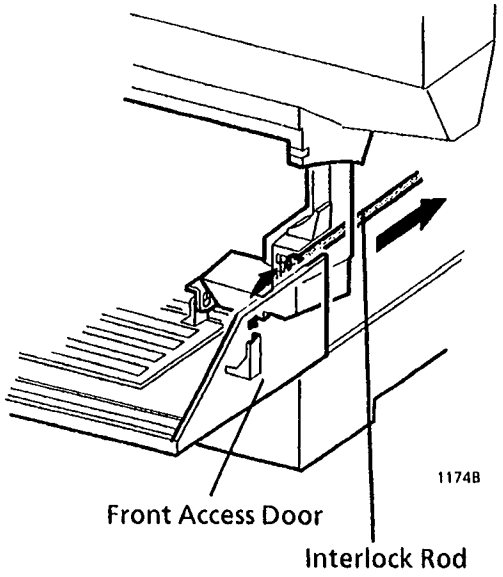


Figure 1. Closing the Front Door

2. (Figure 2): When the power switch lever is pushed up, the rising part of the cam slides over the actuator. When the front access cover is closed, the actuator slides towards the rear frame.

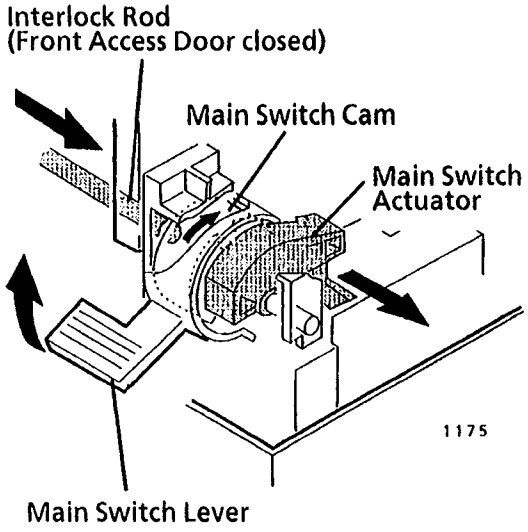


Figure 2. Sliding the Actuator

3. (Figure 3): The slide plate presses down the protrusion of the Power On-Off Switch S1 to switch on the power.

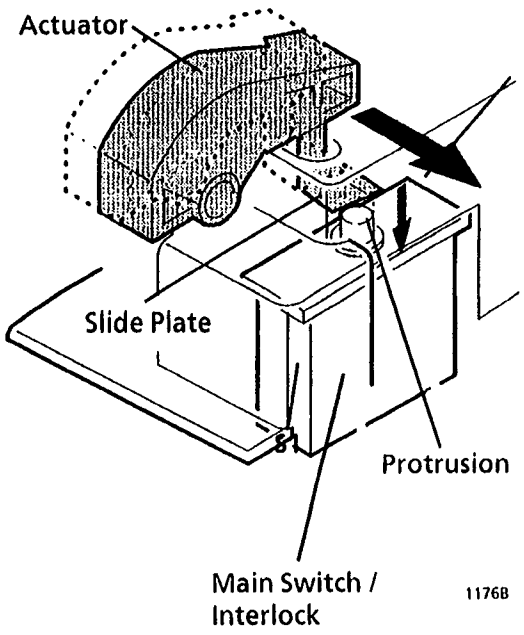


Figure 3. Actuating the Switch

COPY CARTRIDGE METER

The number of copies that are recorded on the mechanical meter can easily be checked. The meter (located just below the photoreceptor drive gear) advances one digit every 10 copies. The meter cover must be removed in order to read the amount recorded on the meter (Figure 5).

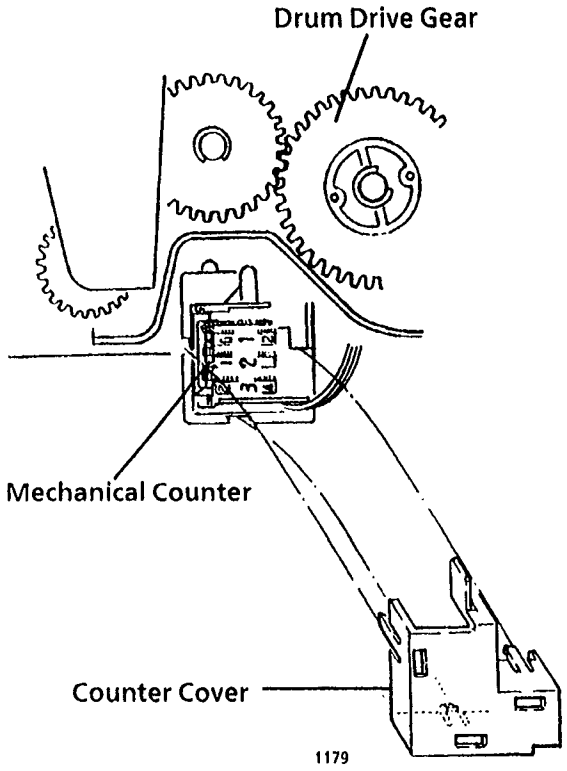


Figure 5. Checking the Copy Cartridge Meter

NOTE: The meter in the figure indicates the copy number of 3210, reading from bottom to top.

UNPACKING

As you unpack the copier, familiarize yourself with its contents (Figure 1).
After the copier is installed and the Ready Indicator is lit, the copier is ready to make copies.

IMPORTANT: *Save the carton and packing materials. They should be used to repack the copier if it has to be shipped for servicing or in case you move.*

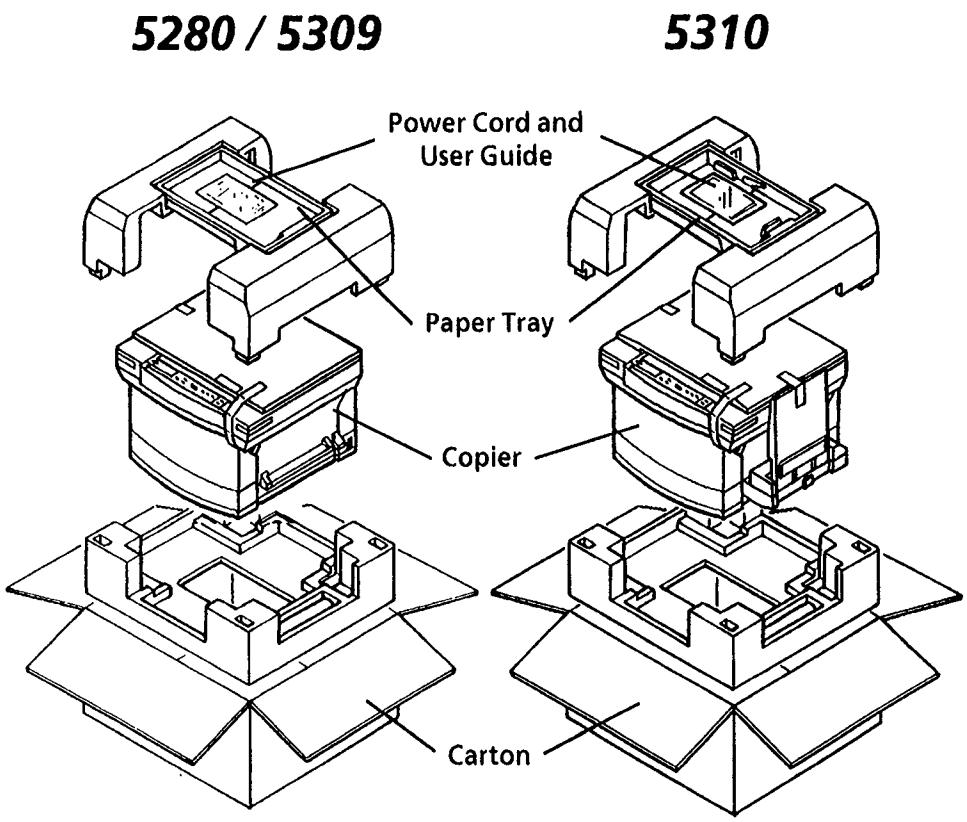
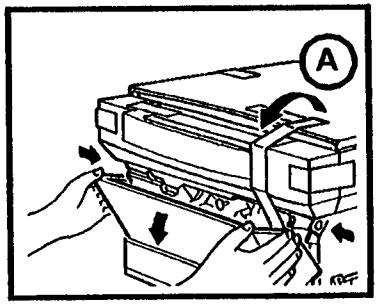
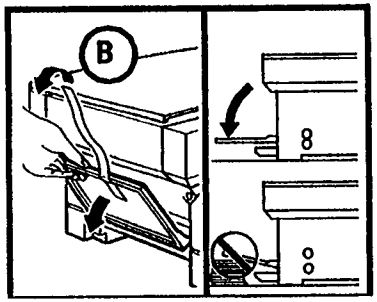


Figure 1. Unpacking the Copier

Copier Installation



1. Remove the copier from the box and the plastic wrap.
2. Position the copier so the Control Panel is facing you. Press the buttons on both sides of the copier and open the Front Cover.
3. Remove tape (A) to remove the spacer where the Dry Ink Cartridge will be inserted.

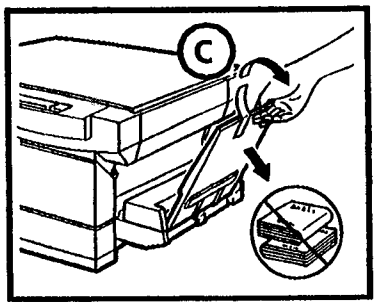


4. Remove tape (B) and swing the Exit Tray down on the left side of the copier.

CAUTION

Do not place any objects under the Exit Tray. If the Exit Tray is not fully opened during copying, a paper misfeed or improper fusing may occur.

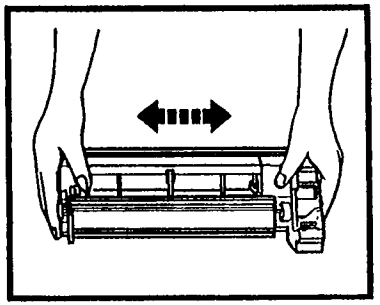
5. Remove the remaining tape on the front of the copier.



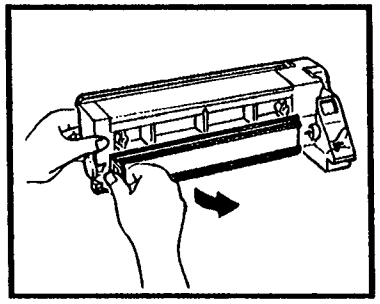
Step 6 for 5310 Only

6. Remove tape (C) to open the Alternate Paper Tray.

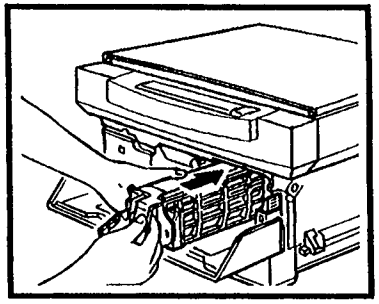
Note: Do not place any objects under the Alternate Paper Tray.



7. Remove the Dry Ink Cartridge from the box and the bag. Shake the cartridge vigorously to loosen the Dry Ink. Thoroughly shaking the cartridge will ensure maximum copies per cartridge.
   - The Dry Ink Cartridge is sold separately.

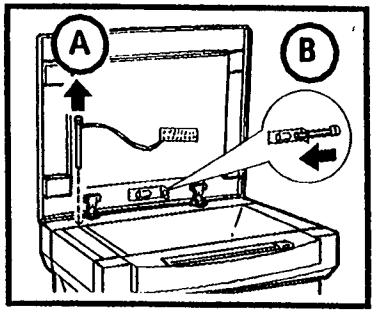


8. Remove the cover from the Dry Ink Cartridge.
   - Save the Dry Ink Cartridge Cover. It should be used to seal the cartridge if the copier must be shipped for servicing or in case you move.



*Note: When inserting a used cartridge, wipe off the **Felt Seal** on the left rear side of the cartridge to reduce the possibility of scratching the Copy Cartridge.*

9. Slide the Dry Ink Cartridge **firmly** into the copier until the Cartridge clicks into place.
10. Close the Front Cover.

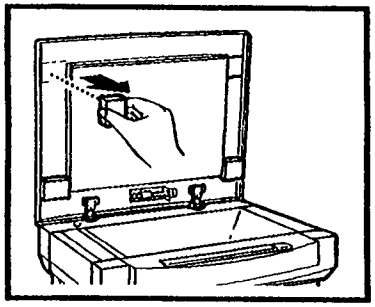


11. Remove the Shipping Pin (A).

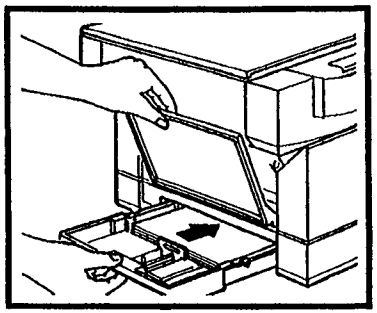
CAUTION

The Shipping Pin keeps internal parts in place during shipping. Failure to remove the Pin may cause damage to the copier.

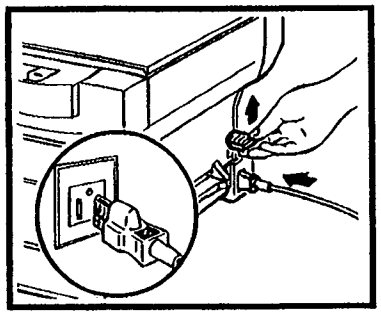
12. Remove the tag from the Pin and store the Pin in the location shown (B). The Pin will be required whenever the copier is shipped or moved over long distances.



13. Remove the four pieces of protective packing material from the inside corners of the Document Cover.



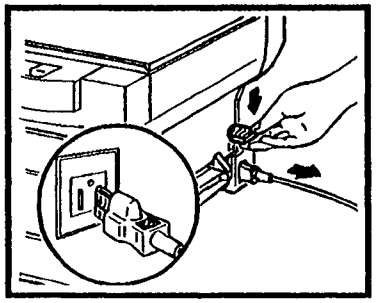
14. Remove the Paper Tray from the bag and load the copy paper into the tray.
    - Follow the instruction label on the tray.
    - Do not fill above the MAX line.
    - Refer to the **Loading Copy Paper** section for additional information.
15. Lift the Output Tray and insert the Paper Tray.



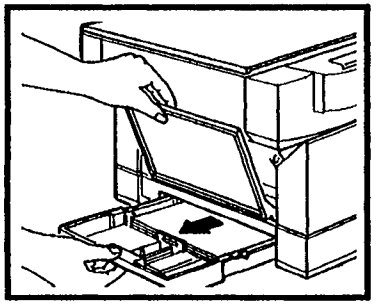
16. Plug the power cord into the copier and then into a grounded outlet.
17. Turn on the copier power switch located on the right side of the copier. In approximately 2 minutes, the Ready Indicator will light.
    - If the Status Code P appears in the display, ensure that there is paper in the tray, and that the Paper Tray is correctly inserted.

Note: Save the carton and packing materials. They should be used to repack the copier if it has to be shipped for servicing or in case you move.
If the copier is moved from a cool to a warm place, dew may form inside the copier. Operation of the copier in this condition will cause poor copy quality and malfunctions. Leave the copier at room temperature for at least 2 hours before use.

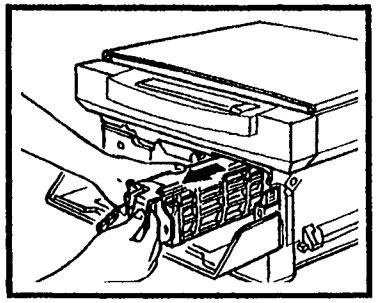
Repacking Procedure



1. Turn **off** the copier.
2. Unplug and disconnect the Power Cord.
   - Do not return the Power Cord when the copier is being returned for service.



3. Remove the Paper Tray.
   - Do not return the Paper Tray when the copier is being returned for service.

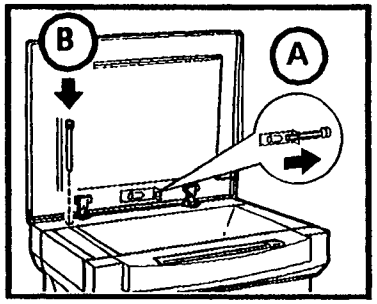


4. Remove the Dry Ink Cartridge from the copier and store it in the bag and box in which it came.

CAUTION

Prior to reinserting the cartridge, wipe off the **Felt Seal** on the left rear side of the cartridge to reduce the possibility of scratching the Copy Cartridge.

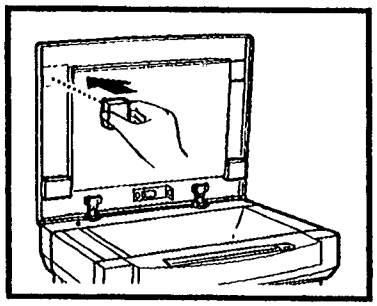
- Do not return the cartridge when the copier is being returned for service.



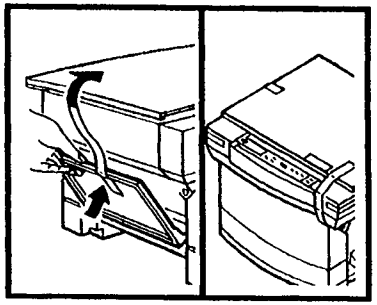
CAUTION

The Shipping Pin keeps internal parts in place during shipping. Failure to replace the Pin prior to shipping may cause damage to the copier.

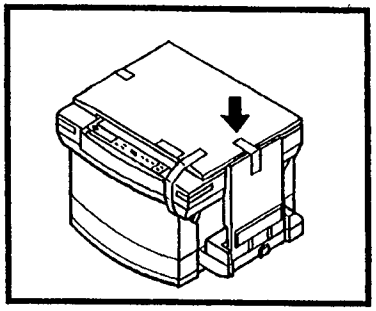
5. Remove the Shipping Pin from the storage location (A) on the Document Cover and place the Pin in the hole (B) as shown.



6. Place the protective packing material back into the inside corners of the Document Cover.
   - Skip to step 7 if you no longer have the protective material.



7. Fold up and close the Exit Tray and tape it to the Document Cover.
8. Tape the Document Cover closed as shown.



Step 9 for 5310 Only

9. Swing the Alternate Paper Tray up and tape it to the top of the closed Document Cover.
10. If you have the original packaging, pack the copier in the carton as shown in the diagram on page 5.
    - If you no longer have the original packaging go to step 11.

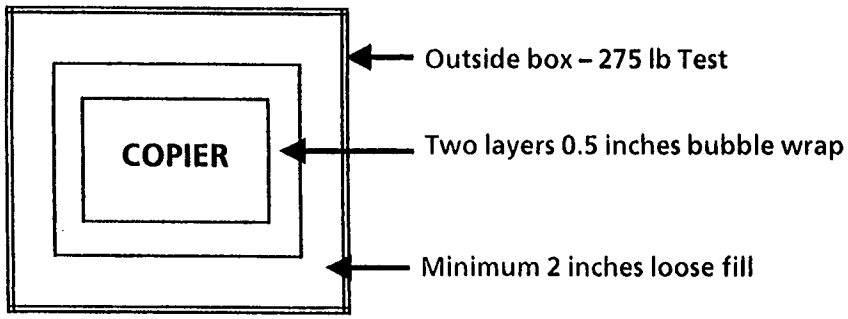
11. Place the copier in a large plastic bag.
12. Completely wrap the copier in 2 layers of bubble wrap (minimum 0.5 inches thick) and tape the bubble wrap to keep it in place.
13. Select a corrugated box large enough to allow at least 2 inches between the bubble-wrapped copier and the walls of the box.

Note: The strength of the box should be 275 lb test.

14. Fill the bottom of the box with 2 to 3 inches of foam nuggets or peanuts.
15. Place the bubble-wrapped copier in the center of the box.
16. Add enough loose foam fill to completely surround and cover the copier.

Note: The loose foam fill should be compressed to ensure minimal movement.

17. Securely tape and seal the box.



Section Contents

P/J NO.	LOCATION	FIG.
CN101	On LVPS, PS1	7- 2
CN102	On LVPS, PS1	7- 2
CN103	On LVPS, PS1	7- 2
CN-A	On Control Console PWB	7- 1
CN-B	On Control Console PWB	N/A
CN-A	On Main PWB	7- 2
CN-B	On Main PWB	7- 2
CN-C	On Main PWB	7- 2
CN-D	On Main PWB	7- 2
CN-E	On Main PWB	7- 2
CA	On Exposure Control PWB	7- 1
CB	On Exposure Control PWB	7- 1
CC	On Exposure Control PWB	7- 1
CD	On Exposure Control PWB	7- 1
1	On LVPS, PS1	7- 2
2	Power Transformer,TR1	7- 3
3	On LVPS, PS1	7- 2
4	To Main Motor, MOT1	7- 3
5	To P/J25 & P/J26	7- 3
6	To Scan Drive Motor, MOT4	7- 2
7	To P/J8	7- 2 (5280/5309 Only)
8	To Registration Switch, S2 and Manual Feed Switch, S3	7- 2 (5280/5309 Only)
8	To P/J 26	7- 2 (5310 Only)
9	To Manual Feed Solenoid, SOL1	7- 1 (5310 Only)
10	To Paper Feed Solenoid, SOL2	7- 1
11	To Copy Cartridge Switch, S5 / Meter, M1	7- 2
12	To Side / Edge Erase PWB	7- 1
13	To HVPS, PS2	7- 2
14	To Exit Switch, S4	7- 3

P/J NO.	LOCATION	FIG.
15	To Fuser Fan Motor, MOT6	7- 3
16	To Thermistor, RT1	7- 1
17	To Exposure Lamp, DS1	7- 1
18	To Auto Exposure Sensor, CR1	7- 1
19	Not used	N/A
20	To Lens Home Sensor, Q2	7- 2
21	To Dry Ink Cartridge	7- 1
22	To Copy Count Meter, M2	7- 2 (RXL Only)
23	To Heat Rod, HTR1	7- 1
24	To Toner Motor, MOT5 and to P21	7- 2
25	To Scan Home Sensor, Q1	7- 2
26	To Registration Sensor, Q3	7- 1 (5310 Only)
27	To Charge Corotron, ED1	7- 1
28	To Transfer Corotron, ED2	7- 2

Section Contents

P/J NO.	LOCATION	FIG.
CN101	On LVPS, PS1	7-2
CN102	On LVPS, PS1	7-2
CN103	On LVPS, PS1	7-2
CN-A	On Control Console PWB	7-1
CN-B	On Control Console PWB	N/A
CN-A	On Main PWB	7-2
CN-B	On Main PWB	7-2
CN-C	On Main PWB	7-2
CN-D	On Main PWB	7-2
CN-E	On Main PWB	7-2
CA	On Exposure Control PWB	7-1
CB	On Exposure Control PWB	7-1
CC	On Exposure Control PWB	7-1
CD	On Exposure Control PWB	7-1
1	On LVPS, PS1	7-2
2	Power Transformer,TR1	7-3
3	On LVPS, PS1	7-2
4	To Main Motor, MOT1	7-3
5	To P/J25 & P/J26	7-3
6	To Scan Drive Motor, MOT4	7-2
7	To P/J8	7-2 (5280/5309 Only)
8	To Registration Switch, S2 and Manual Feed Switch, S3	7-2 (5280/5309 Only)
8	To P/J 26	7-2 (5310 Only)
9	To Manual Feed Solenoid, SOL1	7-1 (5310 Only)
10	To Paper Feed Solenoid, SOL2	7-1
11	To Copy Cartridge Switch, S5 / Meter, M1	7-2
12	To Side / Edge Erase PWB	7-1
13	To HVPS, PS2	7-2
14	To Exit Switch, S4	7-3

P/J NO.	LOCATION	FIG.
15	To Fuser Fan Motor, MOT6	7-3
16	To Thermistor, RT1	7-1
17	To Exposure Lamp, DS1	7-1
18	To Auto Exposure Sensor, CR1	7-1
19	Not used	N/A
20	To Lens Home Sensor, Q2	7-2
21	To Dry Ink Cartridge	7-1
22	To Copy Count Meter, M2	7-2 (RXL Only)
23	To Heat Rod, HTR1	7-1
24	To Toner Motor, MOT5 and to P21	7-2
25	To Scan Home Sensor, Q1	7-2
26	To Registration Sensor, Q3	7-1 (5310 Only)
27	To Charge Corotron, ED1	7-1
28	To Transfer Corotron, ED2	7-2

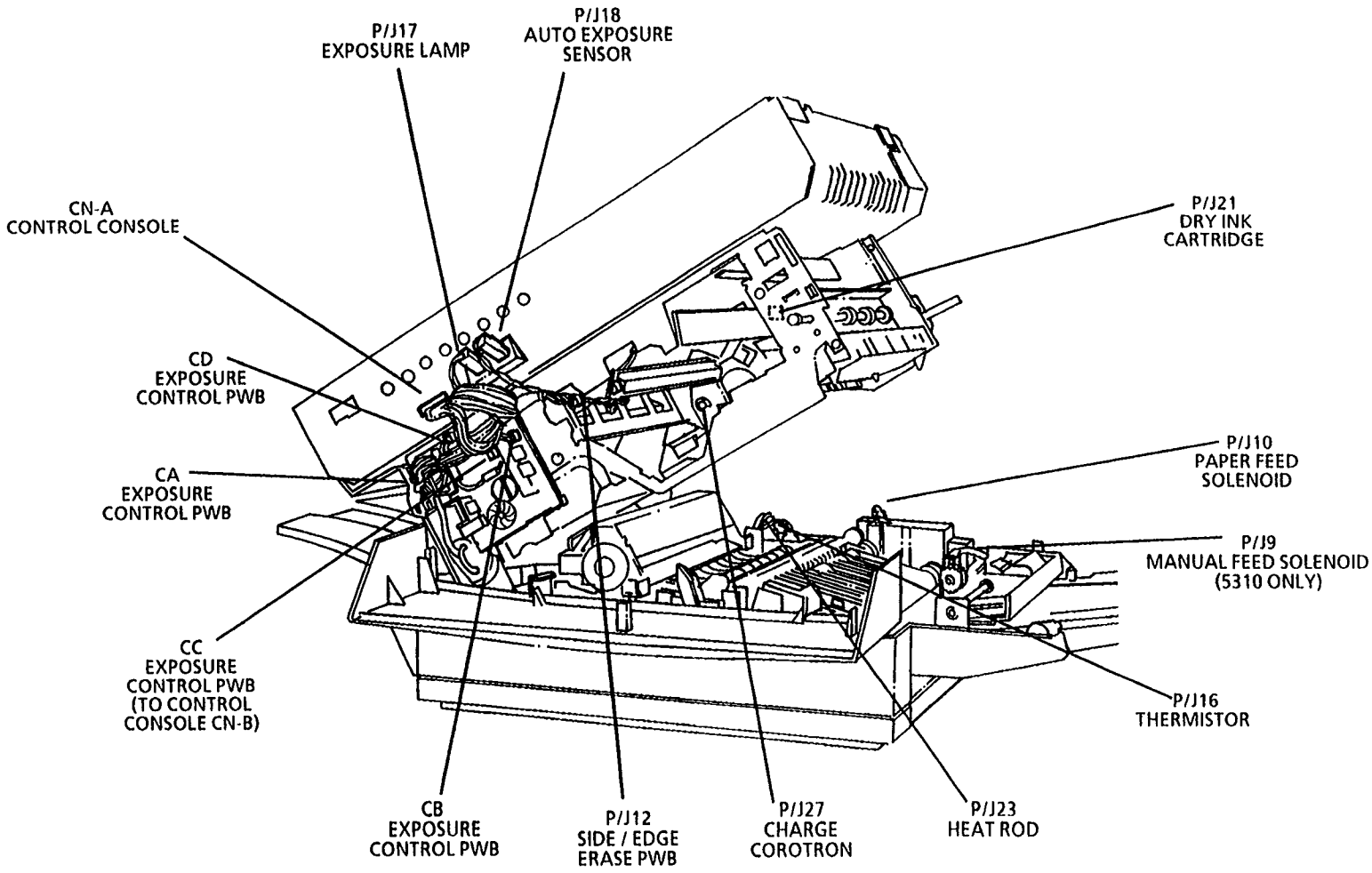


Figure 7-1. Plug/Jack Location, Front View

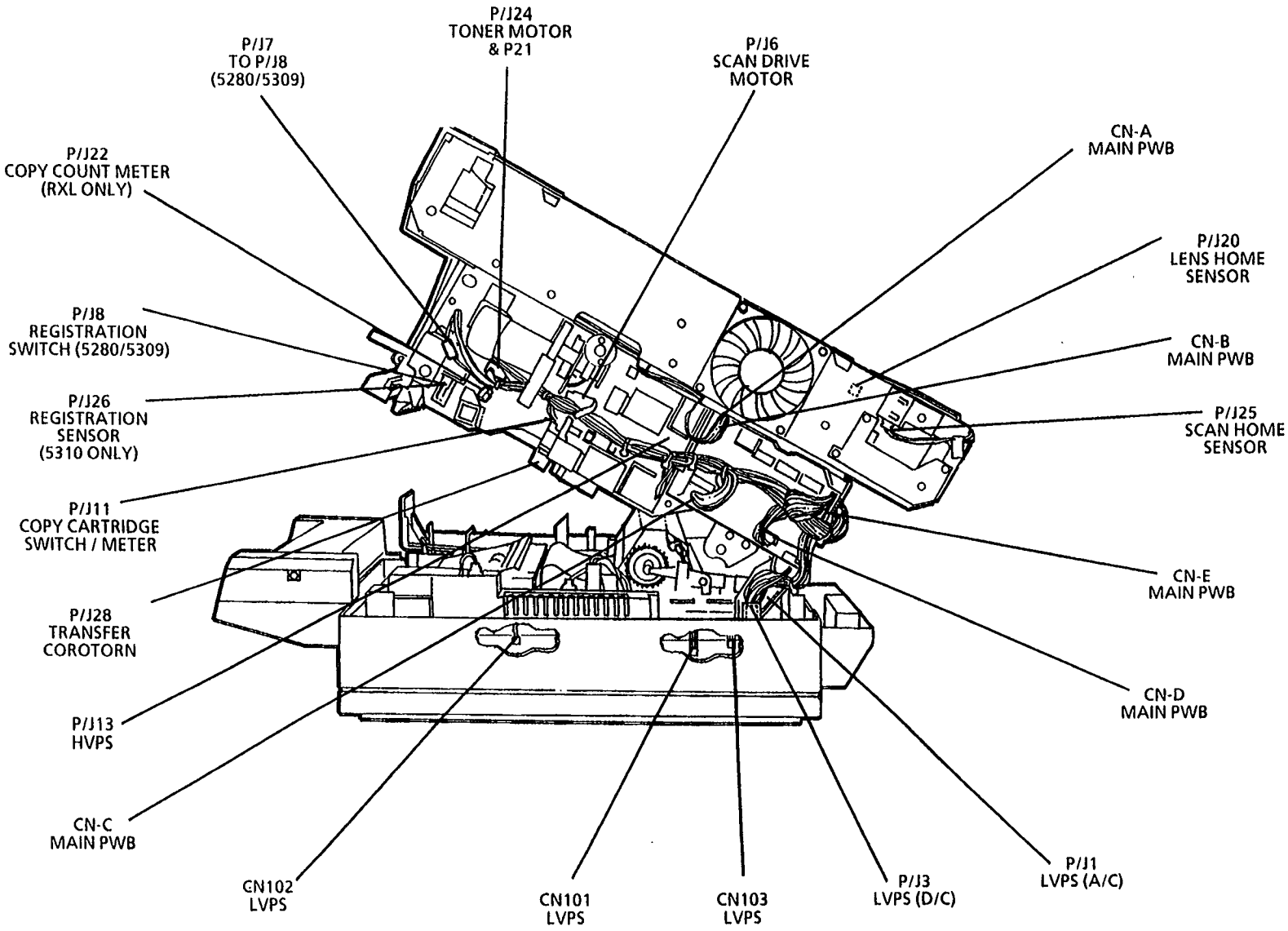


Figure 7-2. Plug/Jack Location, Rear View

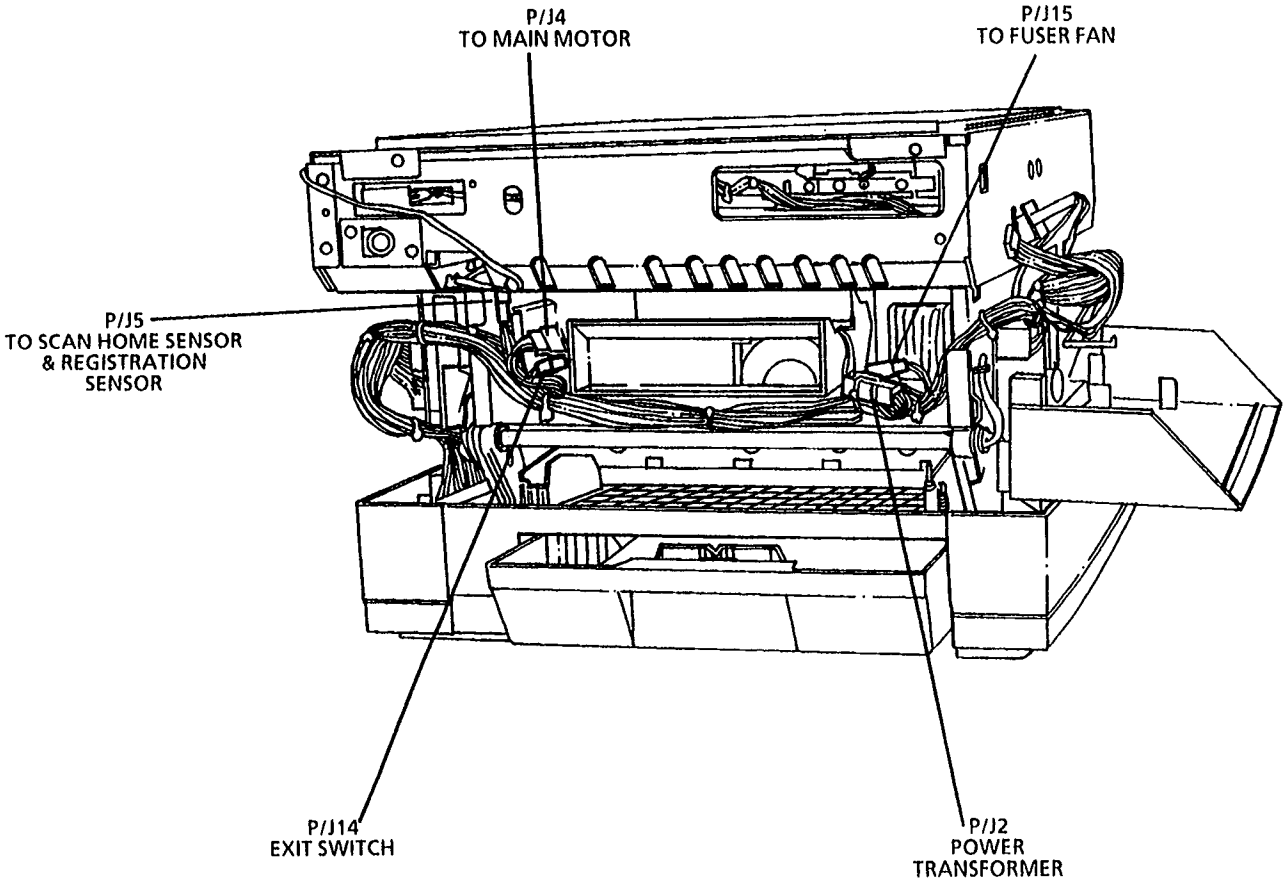
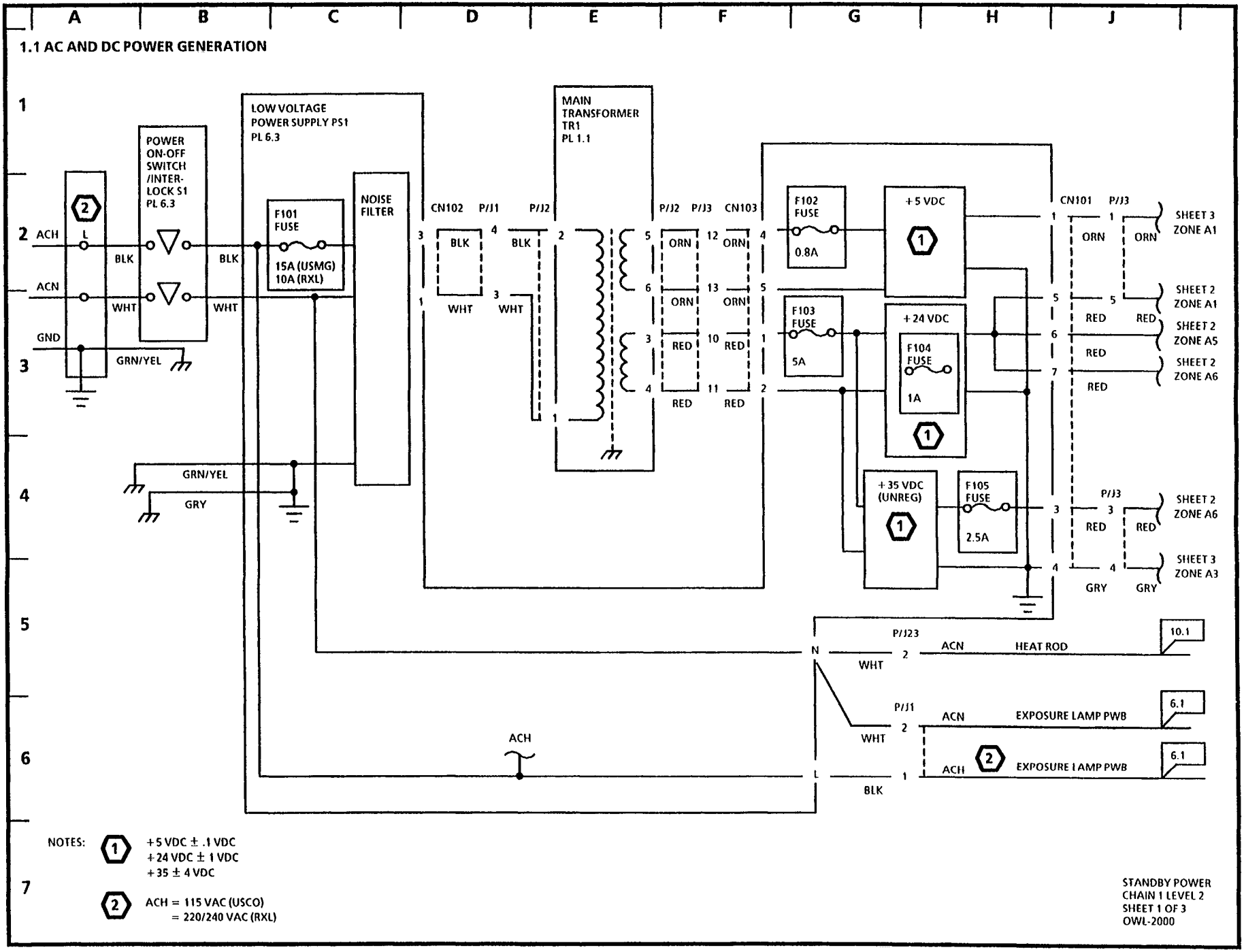
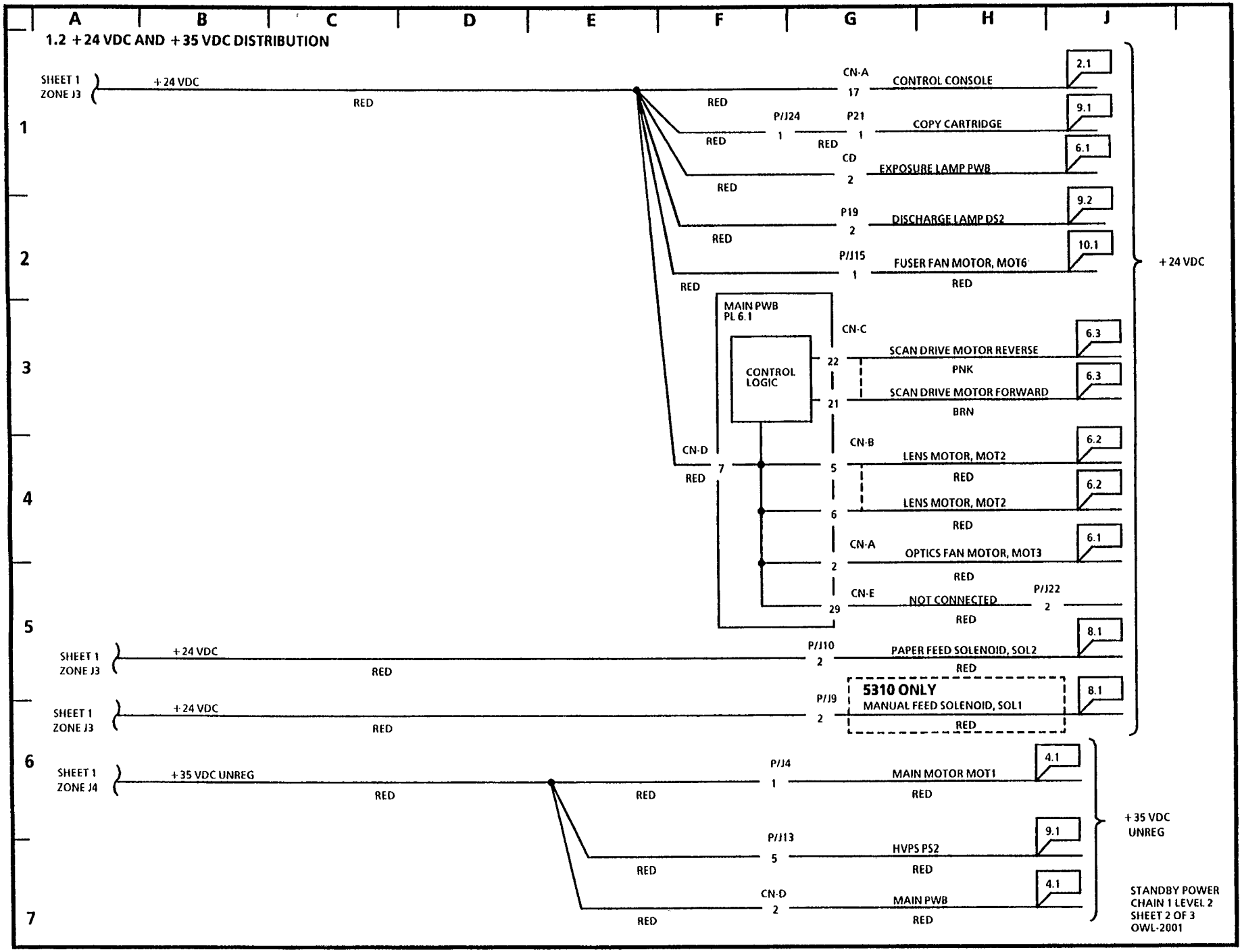
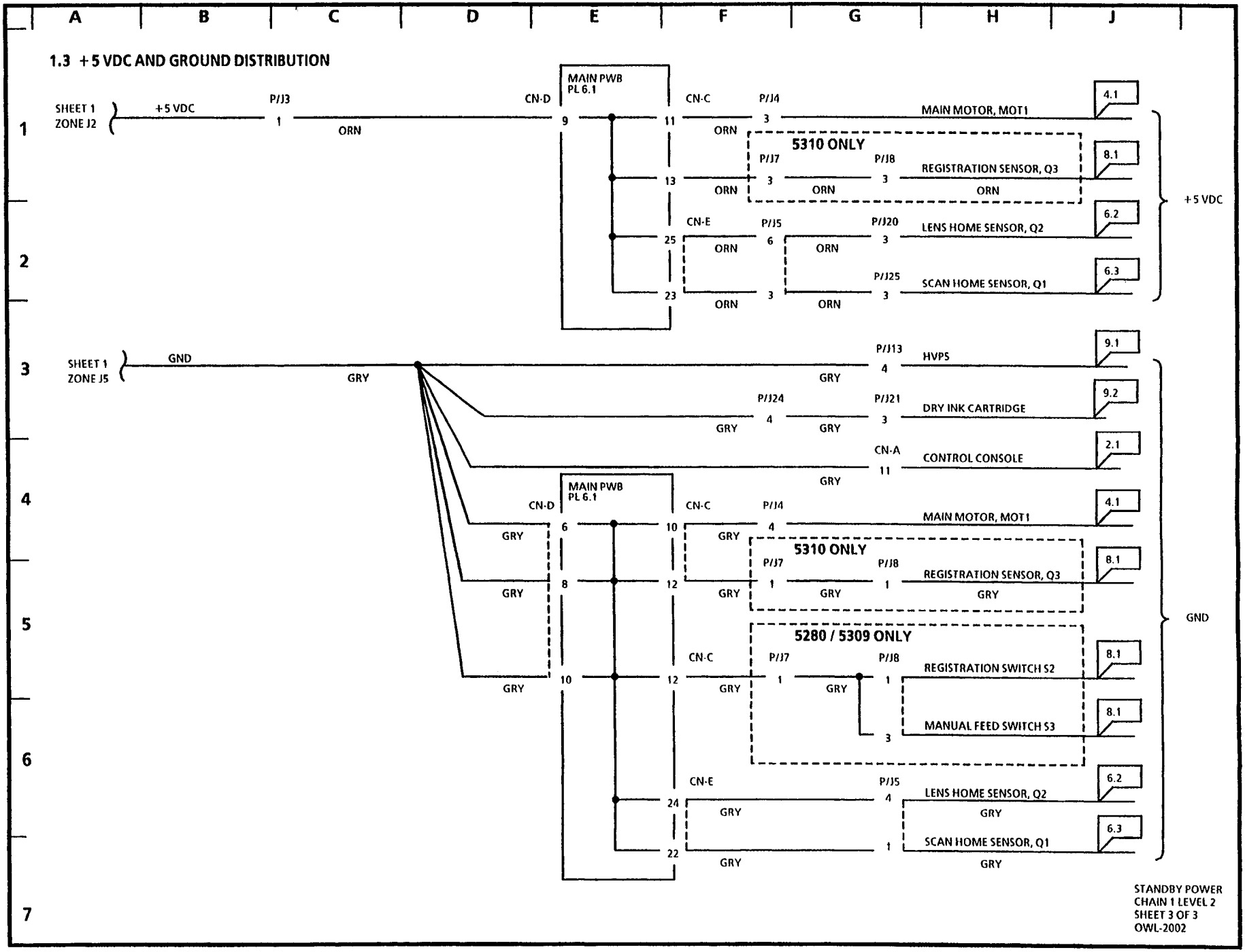
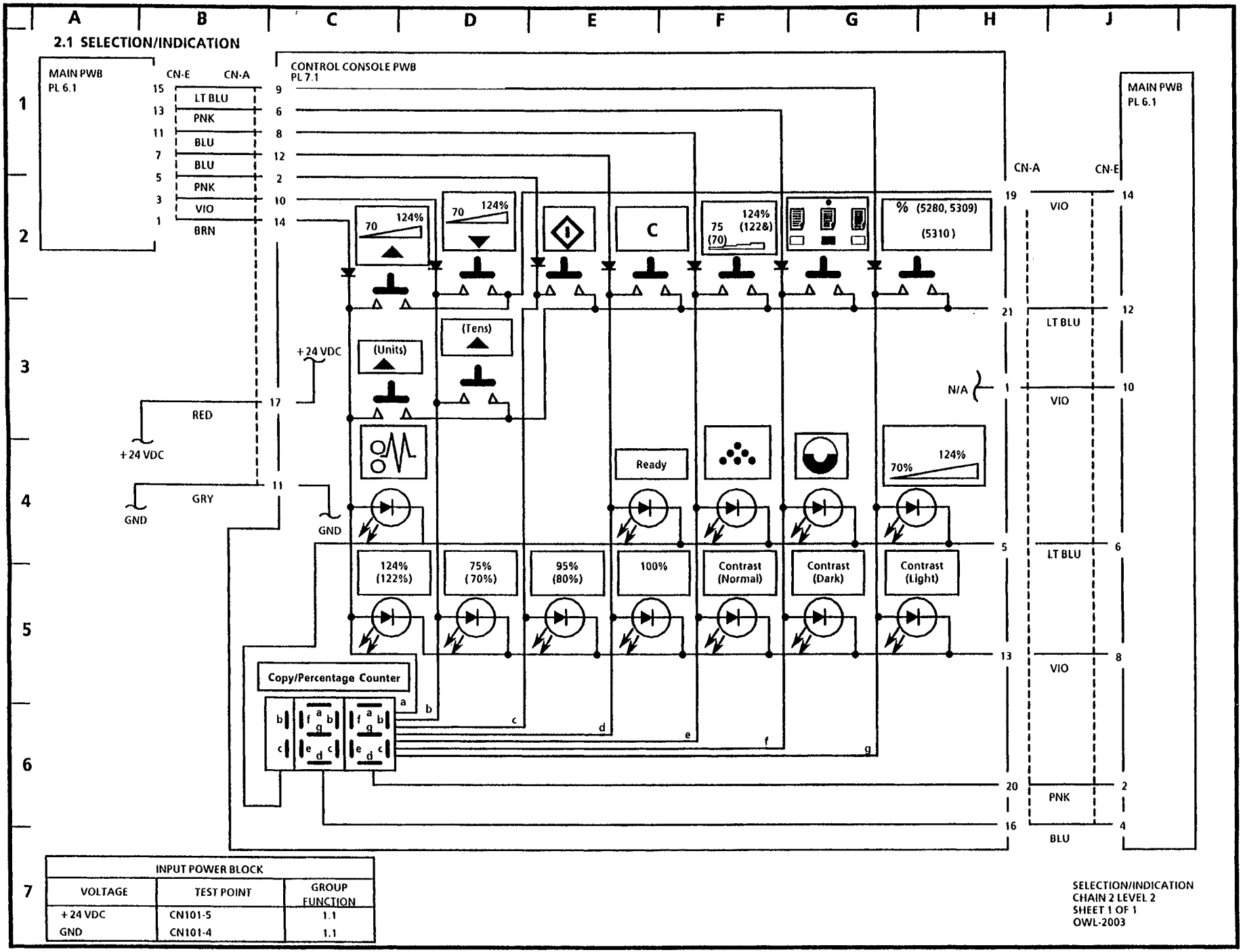


Figure 7-3. Plug/Jack Location, Left View

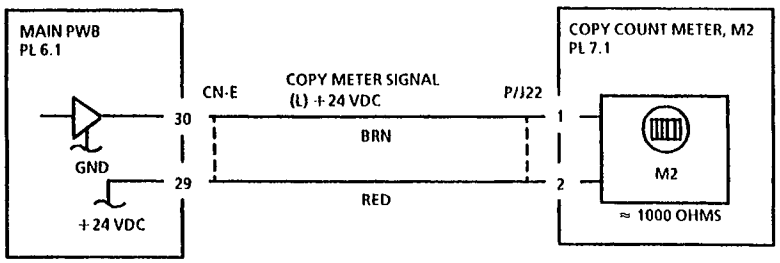

1.1 AC AND DC POWER GENERATION
A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
7
ACH
ACN
GND
L
BLK
WHT
GRN/YEL
POWER ON-OFF SWITCH /INTER-LOCK S1 PL 6.3
LOW VOLTAGE POWER SUPPLY PS1 PL 6.3
F101 FUSE
15A (USMG)
10A (RXL)
NOISE FILTER
GRY
CN102
P/J1
P/J2
MAIN TRANSFORMER TR1 PL 1.1
P/J3
CN103
ORN
RED
F102 FUSE
0.8A
+5 VDC
F103 FUSE
5A
+24 VDC
F104 FUSE
1A
+35 VDC (UNREG)
F105 FUSE
2.5A
CN101
SHEET 3 ZONE A1
SHEET 2 ZONE A1
SHEET 2 ZONE A5
SHEET 2 ZONE A6
SHEET 2 ZONE A6
SHEET 3 ZONE A3
P/J23
N
HEAT ROD
10.1
EXPOSURE LAMP PWB
6.1
NOTES:
+5 VDC ± .1 VDC
+24 VDC ± 1 VDC
+35 ± 4 VDC
ACH = 115 VAC (USCO)
= 220/240 VAC (RXL)
STANDBY POWER
CHAIN 1 LEVEL 2
SHEET 1 OF 3
OWL-2000


A
B
C
D
E
F
G
H
J
1.2 +24 VDC AND +35 VDC DISTRIBUTION
SHEET 1 ZONE J3
+24 VDC
RED
CN-A
17
CONTROL CONSOLE
2.1
P/J24
1
P21
1
COPY CARTRIDGE
9.1
CD
2
EXPOSURE LAMP PWB
6.1
P19
2
DISCHARGE LAMP DS2
9.2
P/J15
1
FUSER FAN MOTOR, MOT6
10.1
+24 VDC
MAIN PWB
PL 6.1
CONTROL LOGIC
CN-C
22
SCAN DRIVE MOTOR REVERSE
6.3
PNK
21
SCAN DRIVE MOTOR FORWARD
6.3
BRN
CN-D
7
CN-B
5
LENS MOTOR, MOT2
6.2
6
LENS MOTOR, MOT2
6.2
CN-A
2
OPTICS FAN MOTOR, MOT3
6.1
CN-E
29
NOT CONNECTED
P/J22
2
SHEET 1 ZONE J3
+24 VDC
RED
P/J10
2
PAPER FEED SOLENOID, SOL2
8.1
SHEET 1 ZONE J3
+24 VDC
RED
P/J9
2
5310 ONLY
MANUAL FEED SOLENOID, SOL1
8.1
SHEET 1 ZONE J4
+35 VDC UNREG
RED
P/J4
1
MAIN MOTOR MOT1
4.1
+35 VDC UNREG
P/J13
5
HVPS PS2
9.1
CN-D
2
MAIN PWB
4.1
STANDBY POWER
CHAIN 1 LEVEL 2
SHEET 2 OF 3
OWL-2001


A
B
C
D
E
F
G
H
J
1.3 +5 VDC AND GROUND DISTRIBUTION
SHEET 1 ZONE J2
+5 VDC
P/J3
1
ORN
CN-D
MAIN PWB PL 6.1
9
11
CN-C
P/J4
3
MAIN MOTOR, MOT1
4.1
13
5310 ONLY
P/J7
3
ORN
P/J8
3
ORN
REGISTRATION SENSOR, Q3
8.1
25
CN-E
P/J5
6
ORN
P/J20
3
ORN
LENS HOME SENSOR, Q2
6.2
23
P/J25
3
ORN
SCAN HOME SENSOR, Q1
6.3
+5 VDC
SHEET 1 ZONE J5
GND
GRY
P/J13
4
HVPS
9.1
P/J24
4
GRY
P/J21
3
DRY INK CARTRIDGE
9.2
CN-A
11
CONTROL CONSOLE
2.1
MAIN PWB PL 6.1
CN-D
6
GRY
10
CN-C
P/J4
4
MAIN MOTOR, MOT1
4.1
8
GRY
12
5310 ONLY
P/J7
1
P/J8
1
REGISTRATION SENSOR, Q3
8.1
10
GRY
5280 / 5309 ONLY
CN-C
P/J7
1
P/J8
1
REGISTRATION SWITCH S2
8.1
3
MANUAL FEED SWITCH S3
8.1
CN-E
24
P/J5
4
LENS HOME SENSOR, Q2
6.2
22
1
SCAN HOME SENSOR, Q1
6.3
GND
STANDBY POWER
CHAIN 1 LEVEL 2
SHEET 3 OF 3
OWL-2002

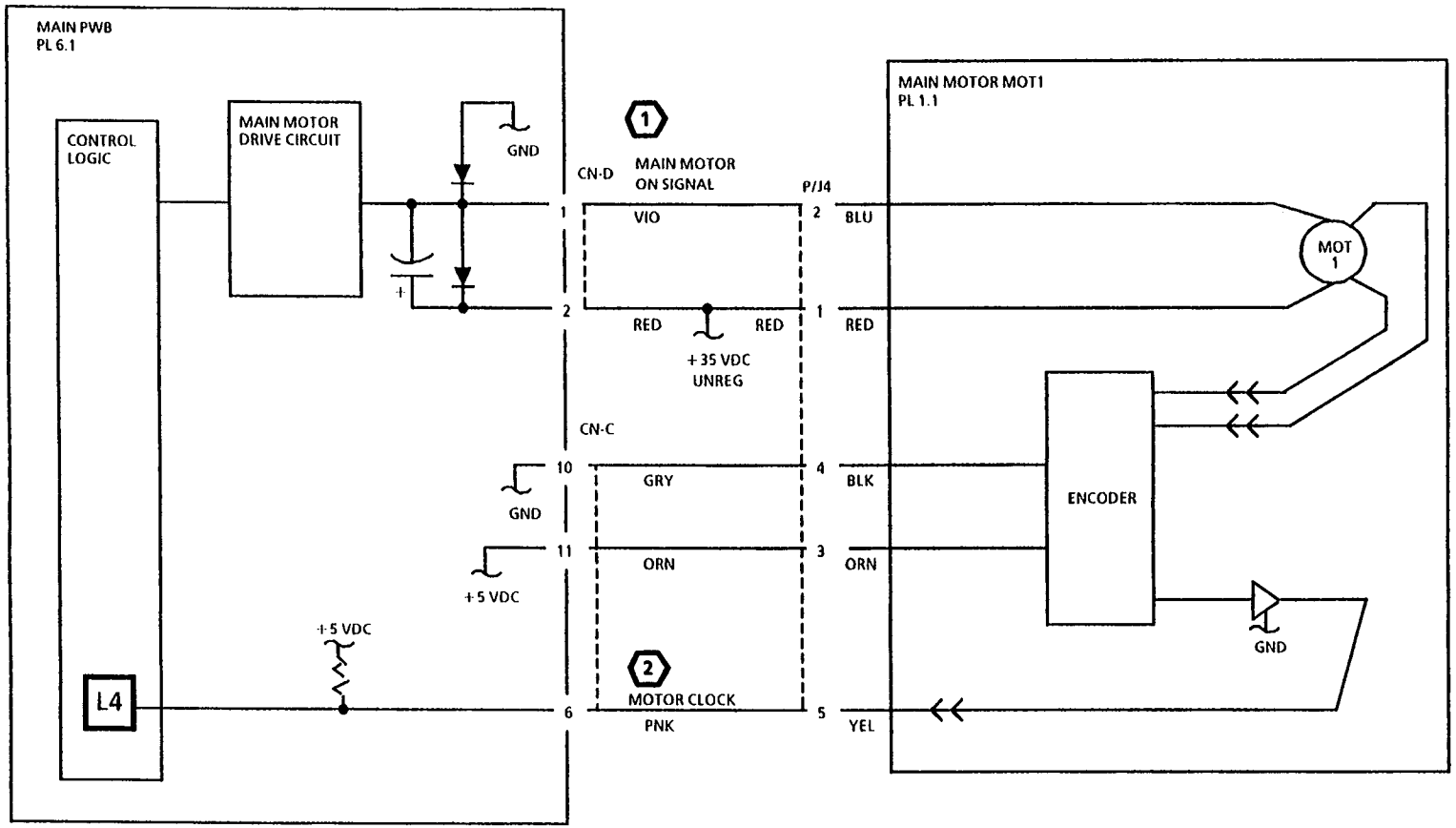

2.1 SELECTION/INDICATION
MAIN PWB PL 6.1
CN-E
CN-A
LT BLU
PNK
BLU
BLU
PNK
VIO
BRN
CONTROL CONSOLE PWB PL 7.1
MAIN PWB PL 6.1
CN-A
CN-E
VIO
LT BLU
VIO
LT BLU
VIO
PNK
BLU
+24 VDC
RED
+24 VDC
GRY
GND
GND
N/A
(Units)
(Tens)
Ready
124% (122%)
75% (70%)
95% (80%)
100%
Contrast (Normal)
Contrast (Dark)
Contrast (Light)
% (5280, 5309)
(5310)
Copy/Percentage Counter
INPUT POWER BLOCK
VOLTAGE
TEST POINT
GROUP FUNCTION
+24 VDC
CN101-5
1.1
GND
CN101-4
1.1
SELECTION/INDICATION
CHAIN 2 LEVEL 2
SHEET 1 OF 1
OWL-2003

RXL ONLY



CONTROL
CHAIN 3 LEVEL 2
SHEET 1 OF 1
OWL-2004

4.1 MAIN DRIVE

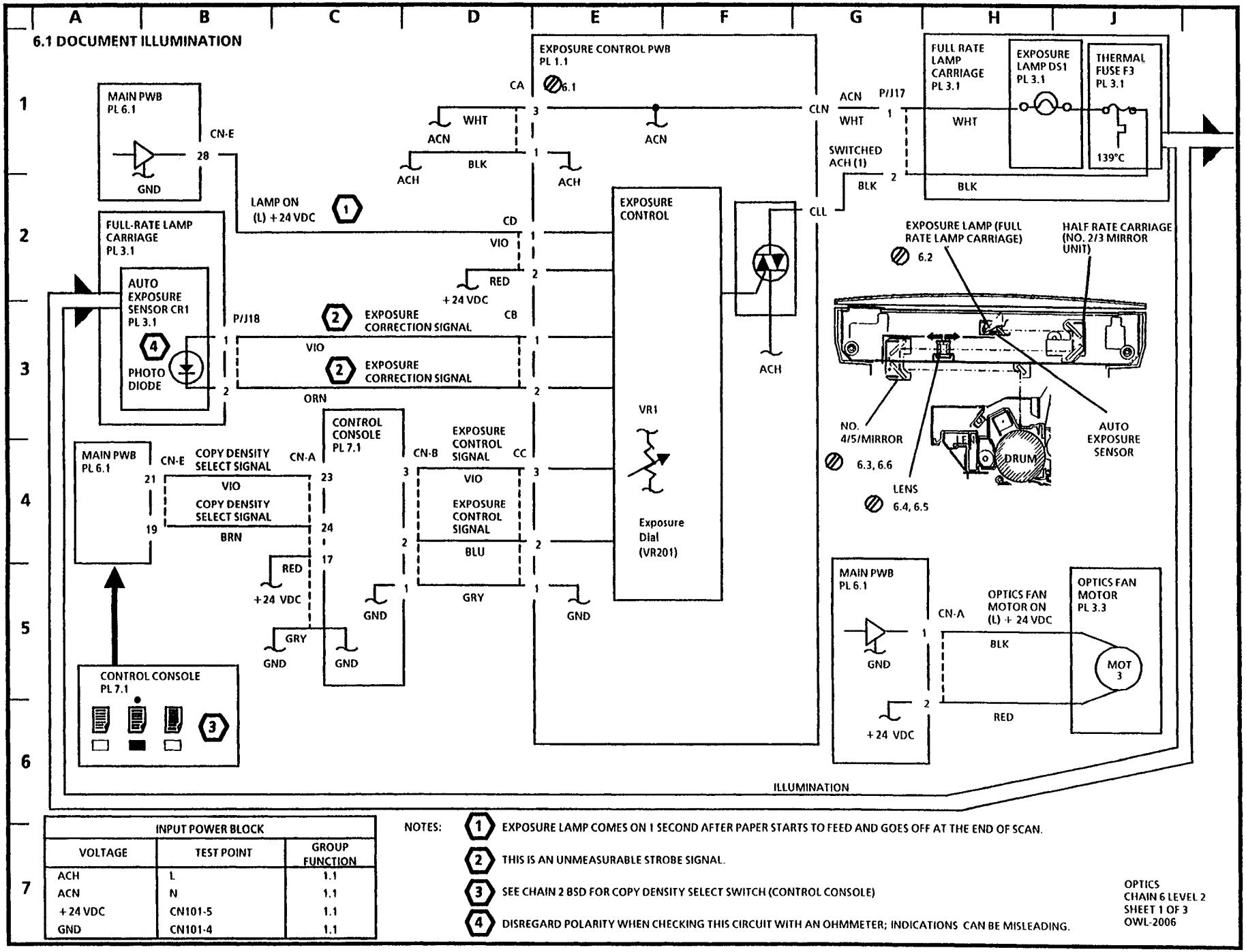


NOTES:

1. MAIN MOTOR OFF ≈ +35 VDC
   MAIN MOTOR ON ≈ +15 ±2 VDC
2. VOLTAGE MEASURES APPROXIMATELY 2.5 VDC DURING THE COPY CYCLE.

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
+35 VDC UNREG	CN101-3	1.1

MAIN DRIVES
CHAIN 4 LEVEL 2
SHEET 1 OF 1
OWL-2005



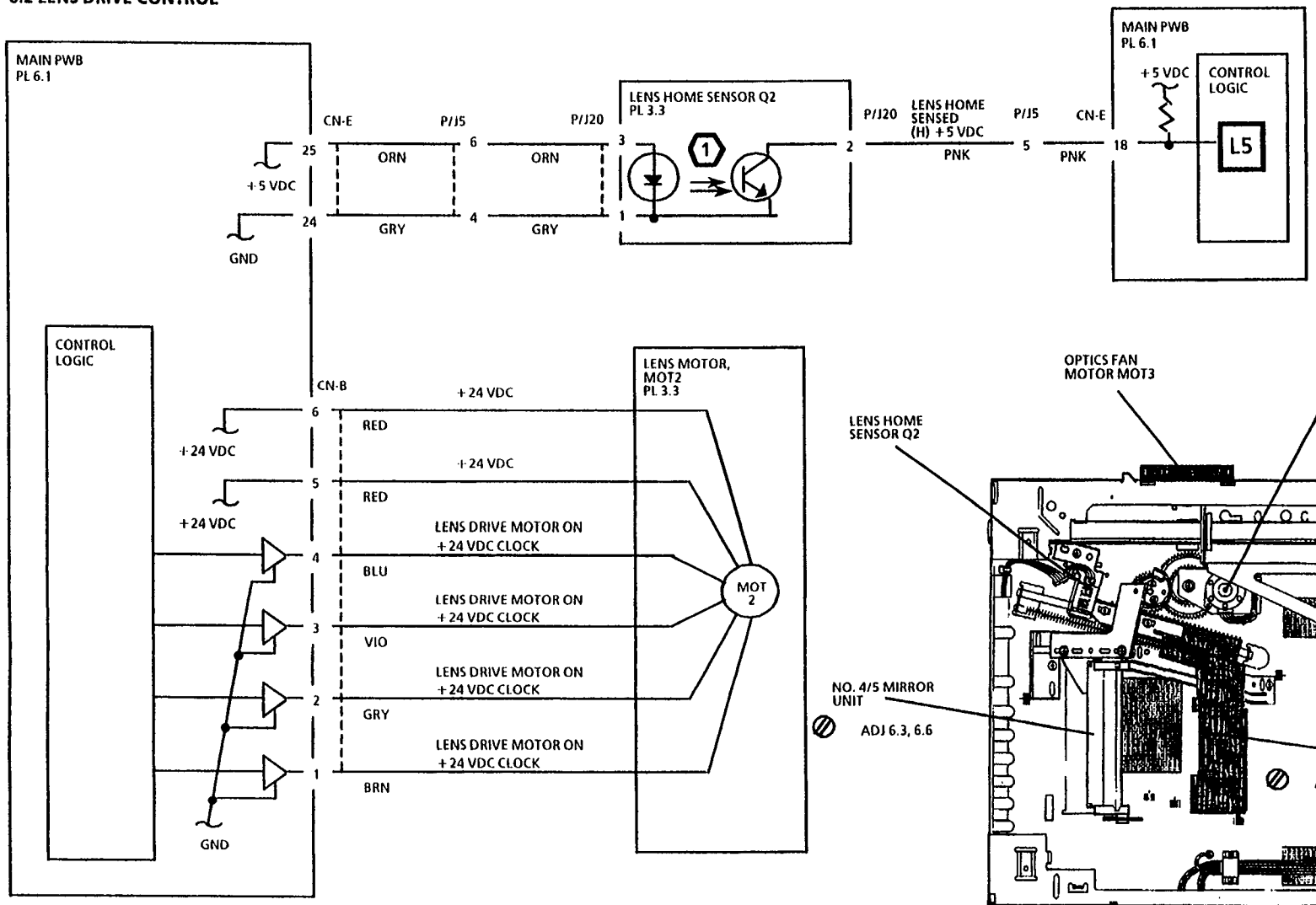
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
ACH	L	1.1
ACN	N	1.1
+24 VDC	CN101-5	1.1
GND	CN101-4	1.1

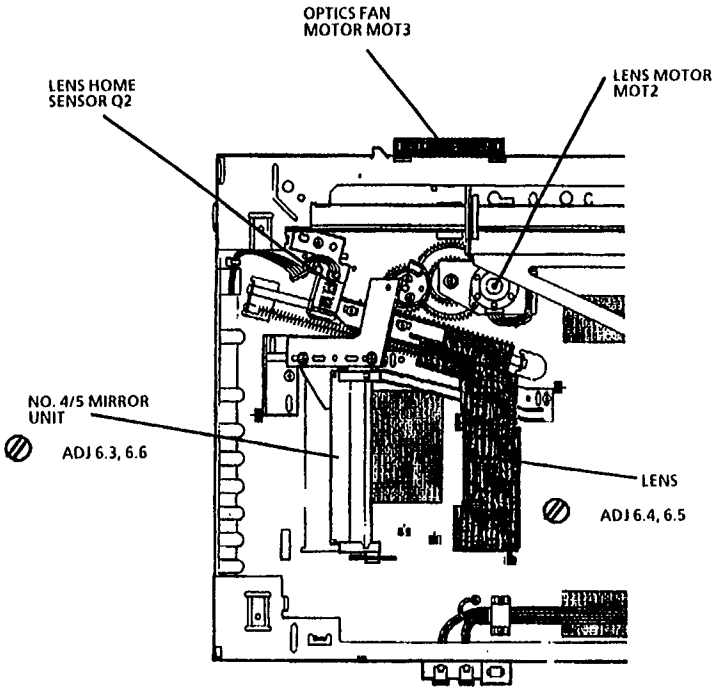
NOTES:

1. EXPOSURE LAMP COMES ON 1 SECOND AFTER PAPER STARTS TO FEED AND GOES OFF AT THE END OF SCAN.
2. THIS IS AN UNMEASURABLE STROBE SIGNAL.
3. SEE CHAIN 2 BSD FOR COPY DENSITY SELECT SWITCH (CONTROL CONSOLE)
4. DISREGARD POLARITY WHEN CHECKING THIS CIRCUIT WITH AN OHMMETER; INDICATIONS CAN BE MISLEADING.

OPTICS
CHAIN 6 LEVEL 2
SHEET 1 OF 3
OWL-2006

6.2 LENS DRIVE CONTROL



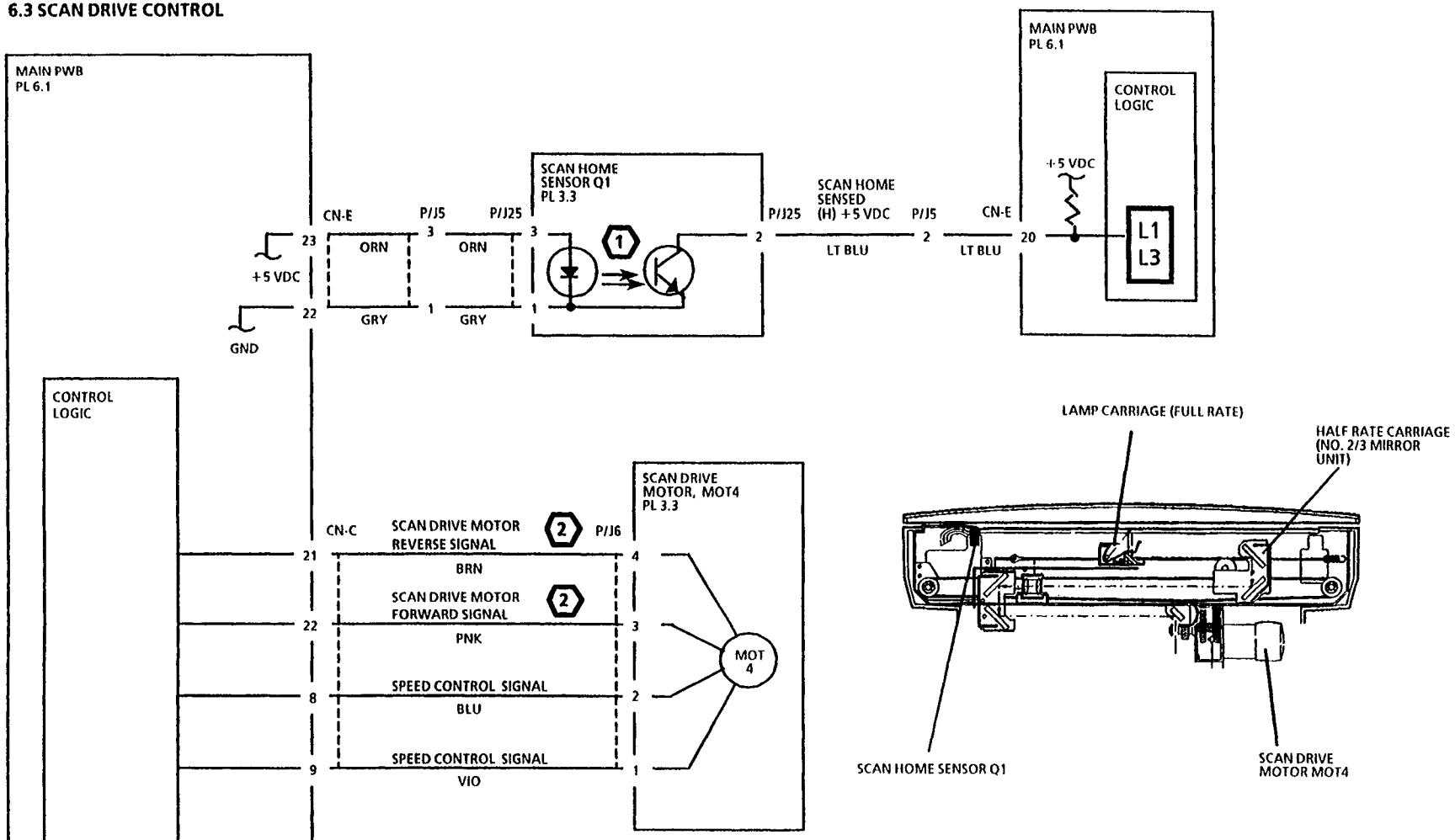


TOP VIEW

NOTE: (1) DISREGARD POLARITY WHEN CHECKING THIS CIRCUIT WITH AN OHMMETER; INDICATIONS CAN BE MISLEADING.

OPTICS
CHAIN 6 LEVEL 2
SHEET 2 OF 3
OWL-2007

6.3 SCAN DRIVE CONTROL



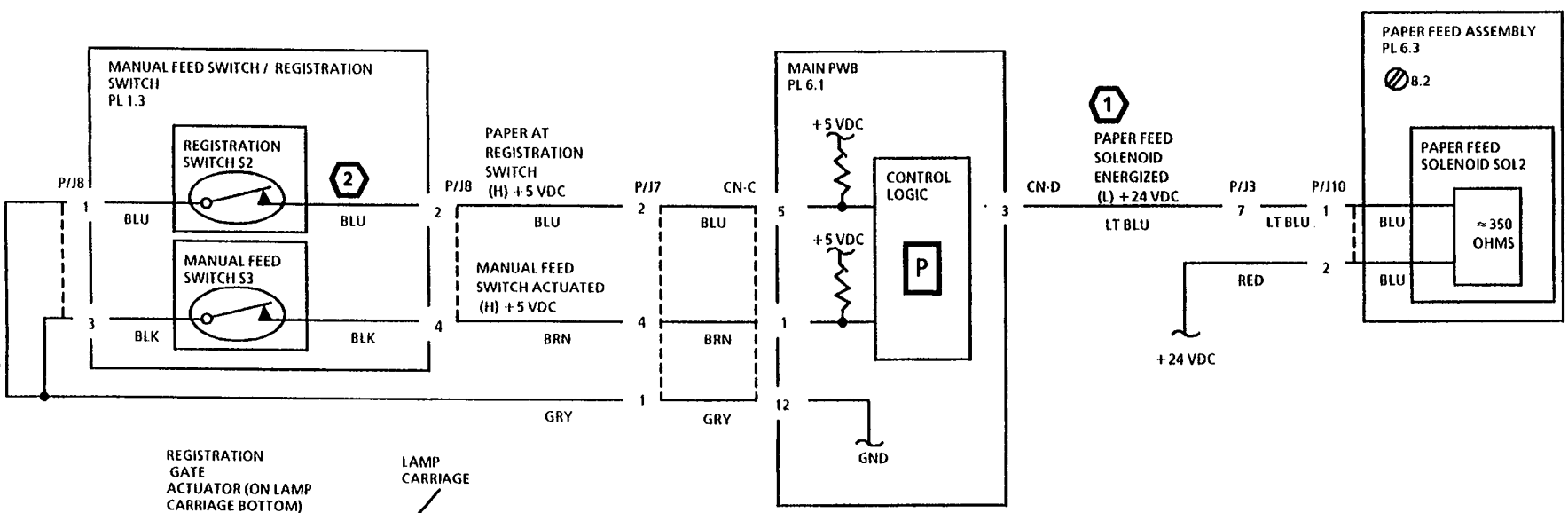
NOTES: (1) DISREGARD POLARITY WHEN CHECKING THIS CIRCUIT WITH AN OHMMETER; INDICATIONS CAN BE MISLEADING.

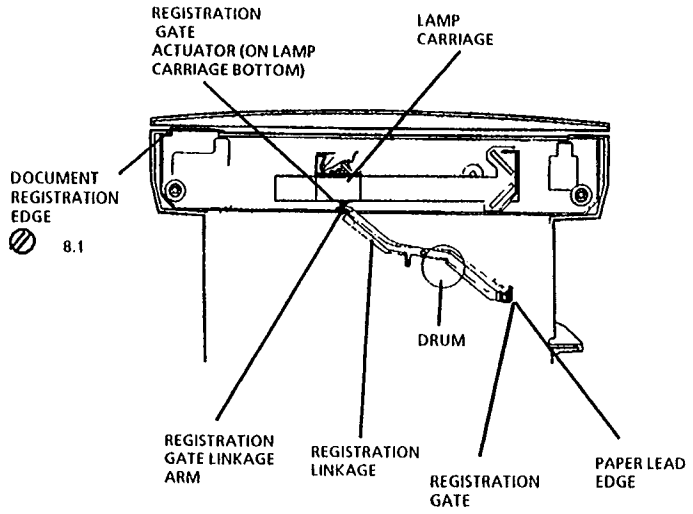
(2)

+24 VDC SWITCHING TO THE SCAN DRIVE MOTOR		
PIN	FORWARD	REVERSE
21	LOW	+24 VDC
22	+24 VDC	LOW

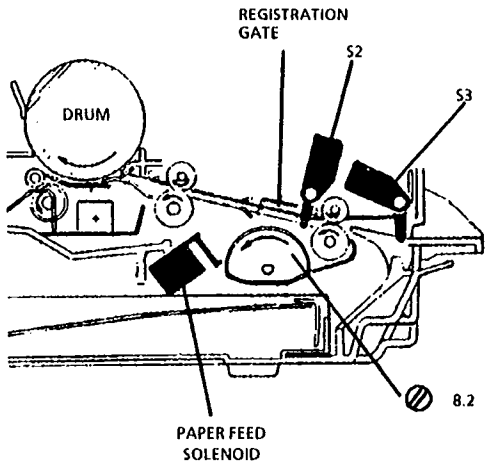
OPTICS
CHAIN 6 LEVEL 2
SHEET 3 OF 3
OWL-2008

5280 / 5309 ONLY





[FRONT VIEW]



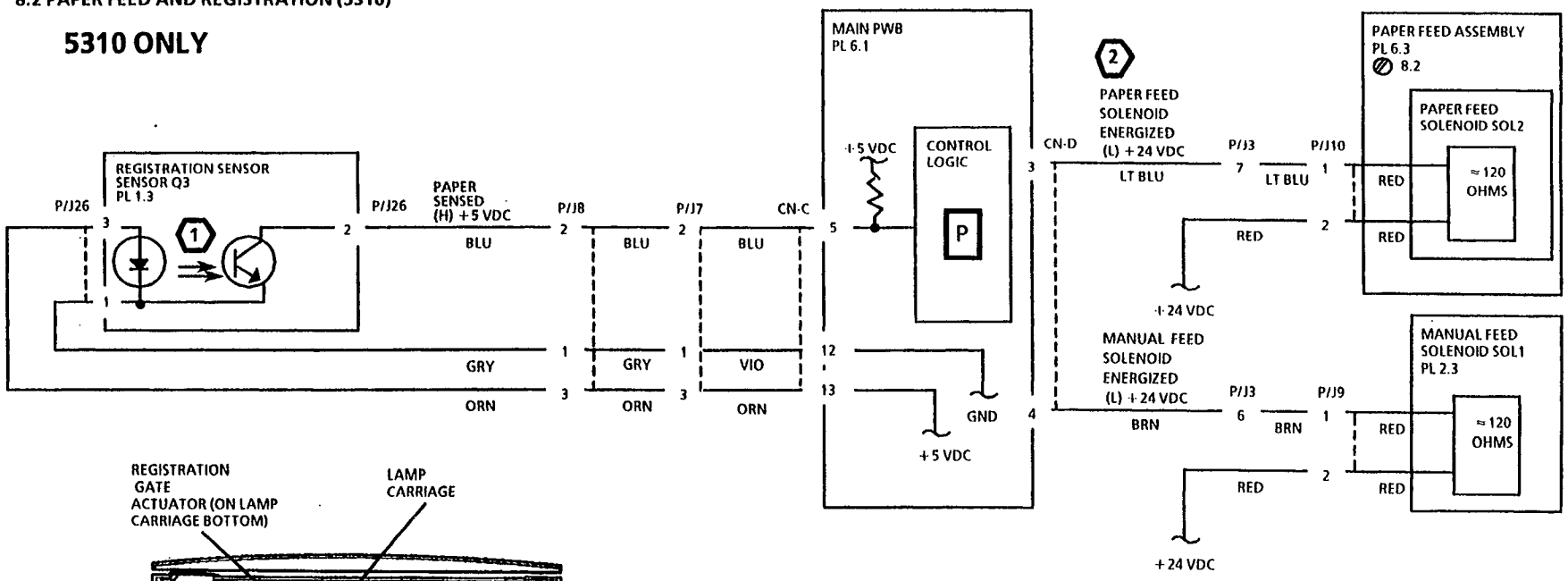
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
+24 VDC	CN101-7	1.1
GND	CN101-4	1.1

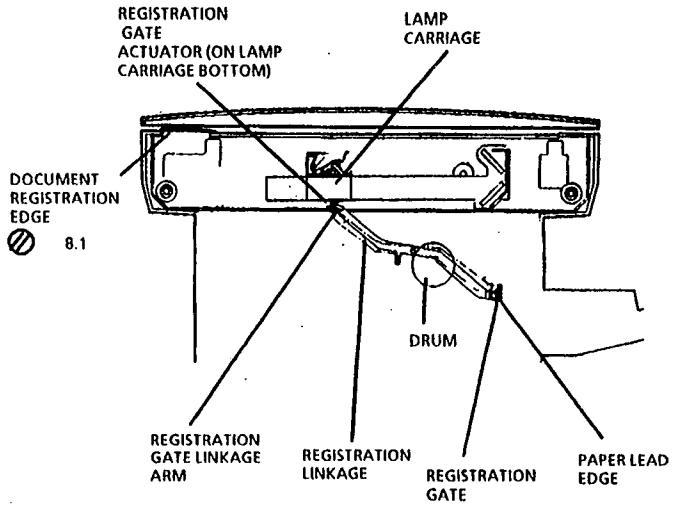
NOTES:
1. SOLENOID 2 ENERGIZES 0.9 SECOND AFTER THE MAIN MOTOR COMES ON
2. THE LENGTH OF THE COPY PAPER DETECTED BY THE REGISTRATION SWITCH DETERMINES THE SCAN LENGTH.

PAPER FEED AND TRANSPORTATION CHAIN 8 LEVEL 2 SHEET 1 OF 2 OWL-2009

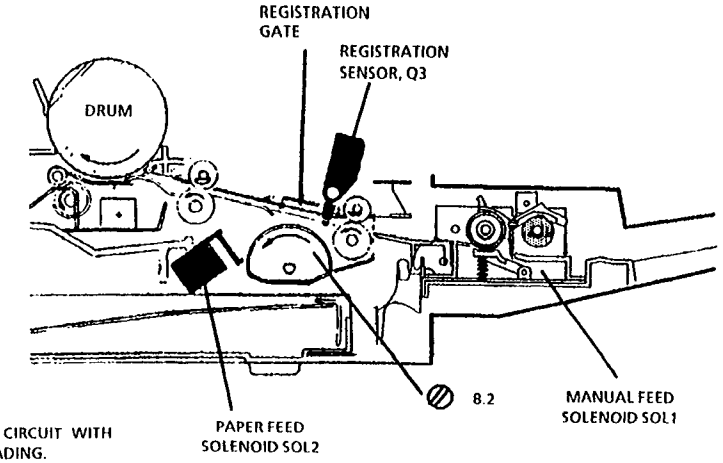
8.2 PAPER FEED AND REGISTRATION (5310)

5310 ONLY





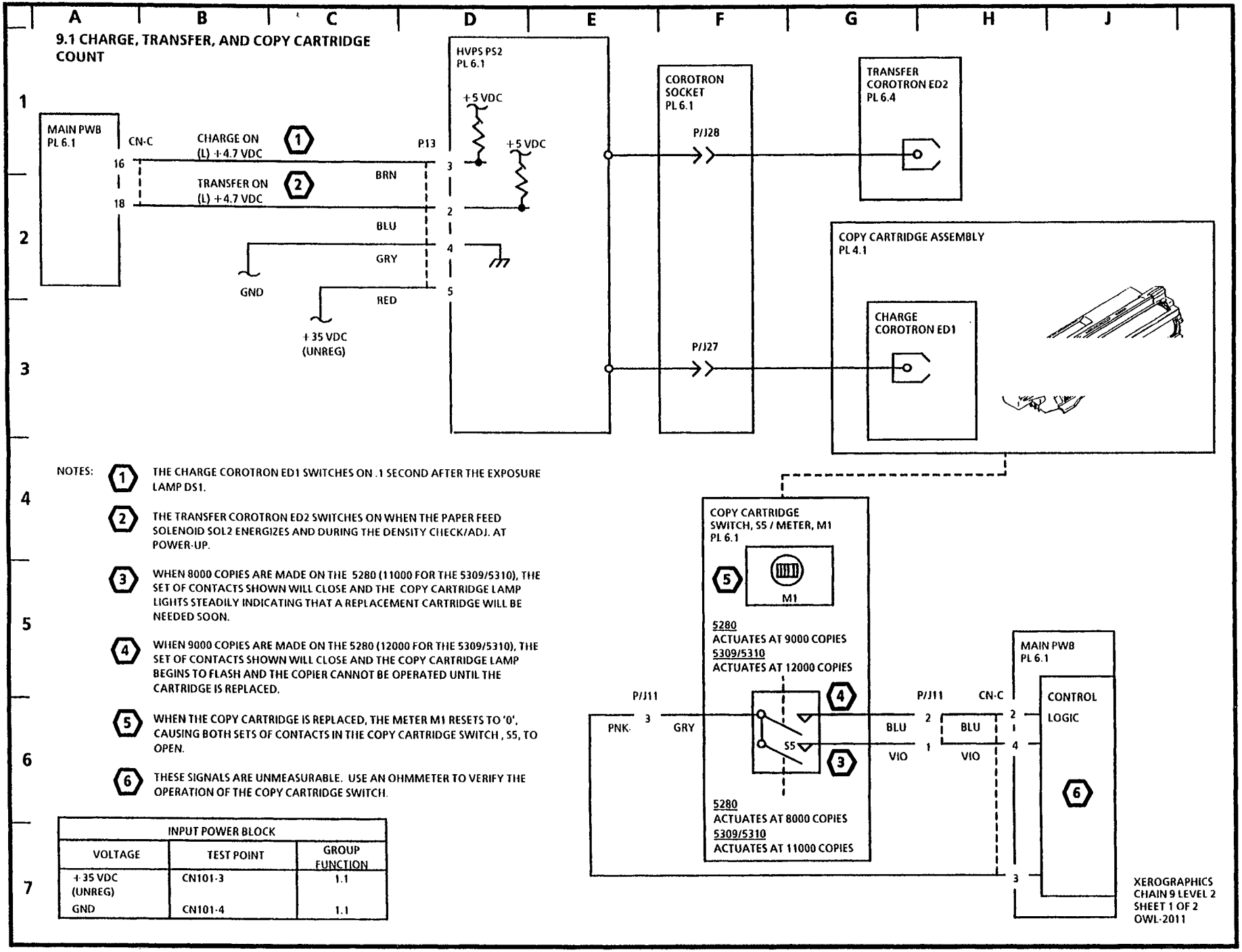
[FRONT VIEW]



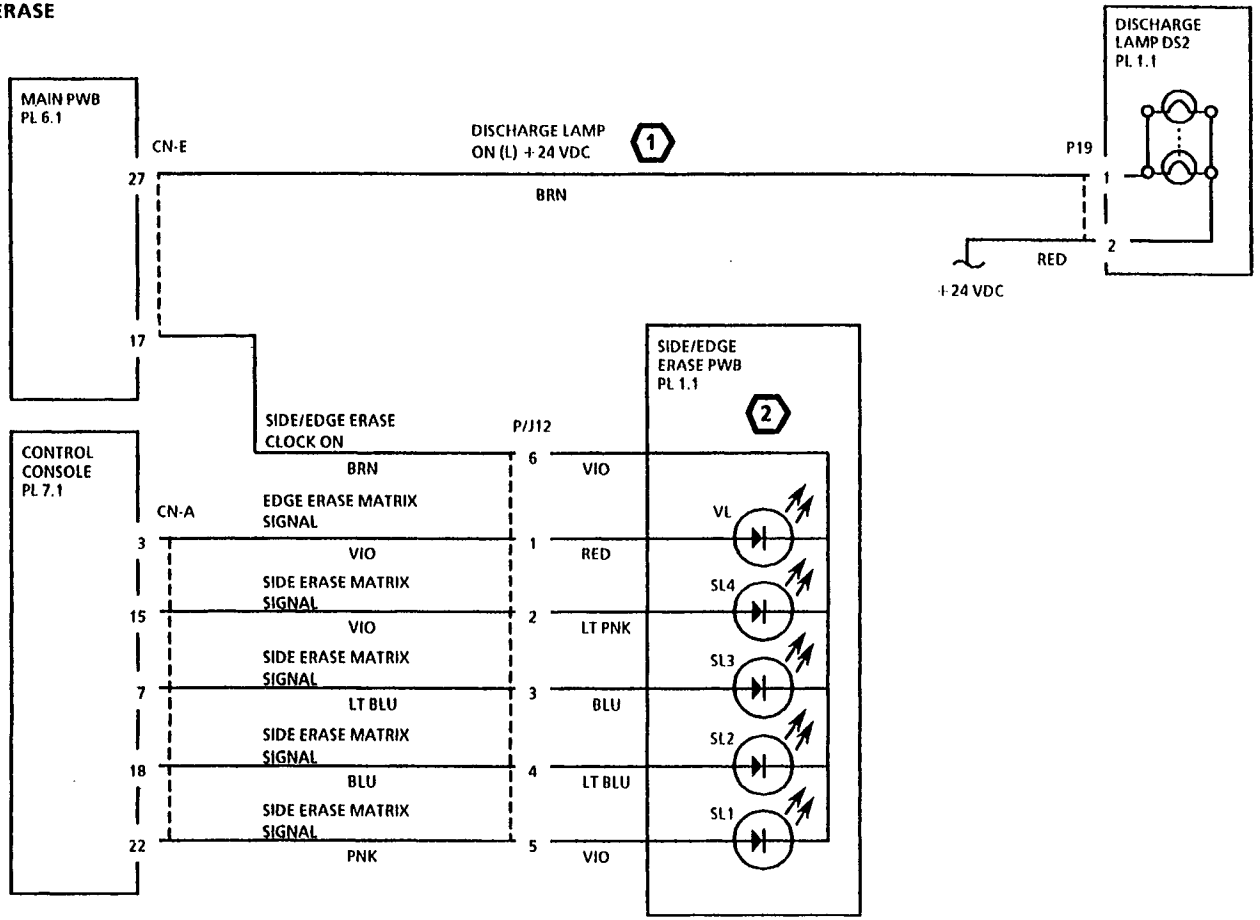
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
+24 VDC	CN101-6 FOR SOL2	1.1
	CN101-7 FOR SOL1	1.1
GND	CN101-4	1.1

NOTES:
1. DISREGARD POLARITY WHEN CHECKING THIS CIRCUIT WITH AN OHMMETER; INDICATIONS CAN BE MISLEADING.
2. SOLENOID 2 ENERGIZES 1 SECOND AFTER THE MAIN MOTOR COMES ON.

PAPER FEED AND TRANSPORTATION
CHAIN 8 LEVEL 2
SHEET 2 OF 2
OWL-2010


A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
7
9.1 CHARGE, TRANSFER, AND COPY CARTRIDGE COUNT
MAIN PWB PL 6.1
CN-C
16
18
CHARGE ON (L) +4.7 VDC
TRANSFER ON (L) +4.7 VDC
BRN
BLU
GRY
RED
GND
+35 VDC (UNREG)
P13
3
2
4
5
HVPS PS2 PL 6.1
+5 VDC
+5 VDC
COROTRON SOCKET PL 6.1
P/J28
P/J27
TRANSFER COROTRON ED2 PL 6.4
COPY CARTRIDGE ASSEMBLY PL 4.1
CHARGE COROTRON ED1
NOTES:
1 THE CHARGE COROTRON ED1 SWITCHES ON .1 SECOND AFTER THE EXPOSURE LAMP DS1.
2 THE TRANSFER COROTRON ED2 SWITCHES ON WHEN THE PAPER FEED SOLENOID SOL2 ENERGIZES AND DURING THE DENSITY CHECK/ADJ. AT POWER-UP.
3 WHEN 8000 COPIES ARE MADE ON THE 5280 (11000 FOR THE 5309/5310), THE SET OF CONTACTS SHOWN WILL CLOSE AND THE COPY CARTRIDGE LAMP LIGHTS STEADILY INDICATING THAT A REPLACEMENT CARTRIDGE WILL BE NEEDED SOON.
4 WHEN 9000 COPIES ARE MADE ON THE 5280 (12000 FOR THE 5309/5310), THE SET OF CONTACTS SHOWN WILL CLOSE AND THE COPY CARTRIDGE LAMP BEGINS TO FLASH AND THE COPIER CANNOT BE OPERATED UNTIL THE CARTRIDGE IS REPLACED.
5 WHEN THE COPY CARTRIDGE IS REPLACED, THE METER M1 RESETS TO '0', CAUSING BOTH SETS OF CONTACTS IN THE COPY CARTRIDGE SWITCH , S5, TO OPEN.
6 THESE SIGNALS ARE UNMEASURABLE. USE AN OHMMETER TO VERIFY THE OPERATION OF THE COPY CARTRIDGE SWITCH.
INPUT POWER BLOCK
VOLTAGE
TEST POINT
GROUP FUNCTION
+35 VDC (UNREG)
CN101-3
1.1
GND
CN101-4
1.1
COPY CARTRIDGE SWITCH, S5 / METER, M1 PL 6.1
M1
S5
5280
ACTUATES AT 9000 COPIES
5309/5310
ACTUATES AT 12000 COPIES
5280
ACTUATES AT 8000 COPIES
5309/5310
ACTUATES AT 11000 COPIES
P/J11
3
PNK
GRY
BLU
VIO
P/J11
2
1
CN-C
BLU
VIO
MAIN PWB PL 6.1
CONTROL LOGIC
2
4
3
XEROGRAPHICS
CHAIN 9 LEVEL 2
SHEET 1 OF 2
OWL-2011

9.2 DISCHARGE AND SIDE ERASE



NOTES:

1. DISCHARGE LAMP DS2 SWITCHES ON WHEN THE PAPER FEED SOLENOID SOL2 ENERGIZES.

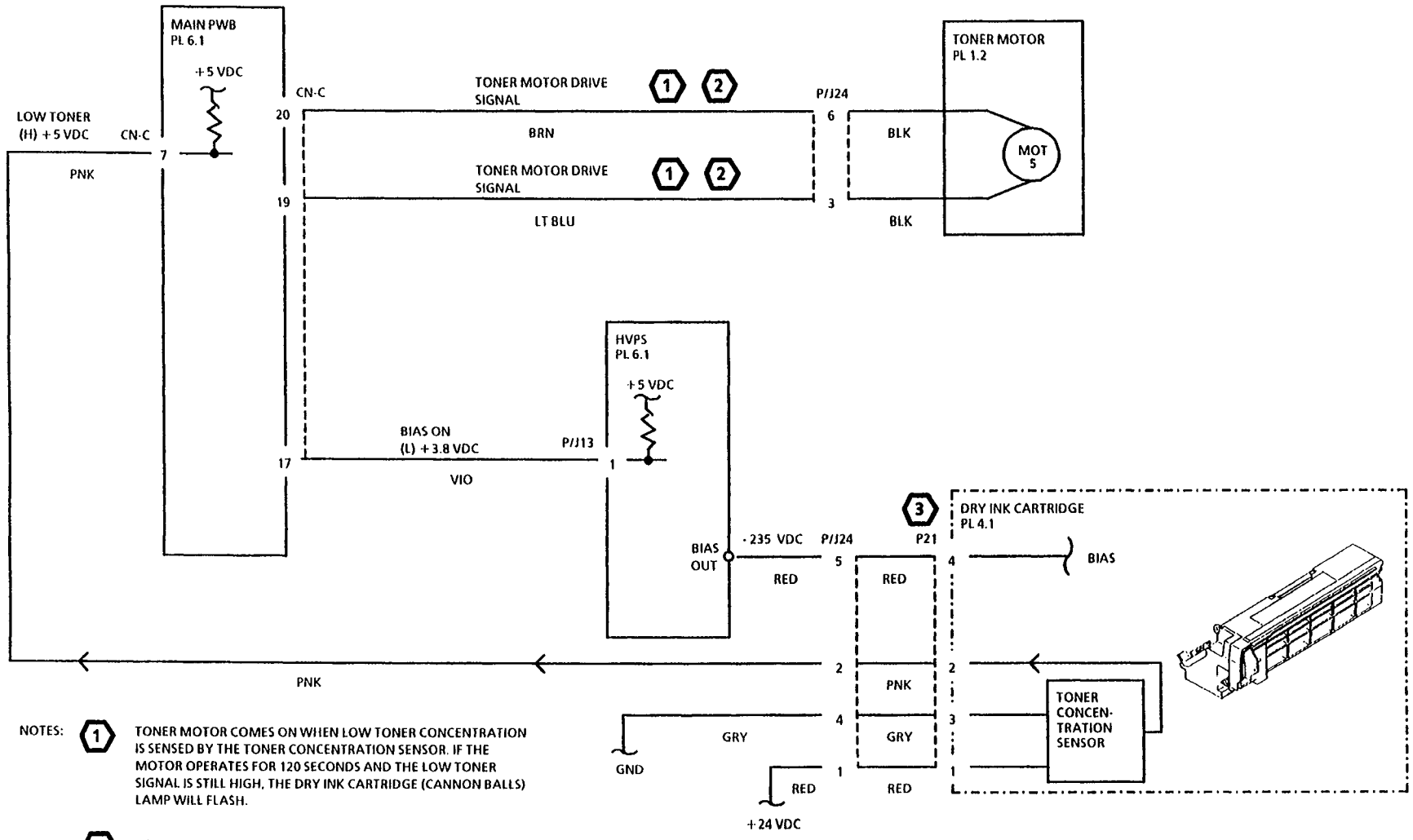
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
+24 VDC	CN101-5	1.1
GND	CN101-4	1.1

2.

SIDE/EDGE ERASE MATRIX	
R/E %	LAMPS LIT
70 TO 72%	VL, SL1, SL2, SL3, SL4
73 TO 75%	VL, SL1, SL2, SL3
76 TO 78%	VL, SL1, SL2
79 TO 82%	VL, SL1
83 TO 124%	VL

XEROGRAPHICS
CHAIN 9 LEVEL 2
SHEET 2 OF 2
OWL-2012

9.3 DEVELOPMENT



NOTES:

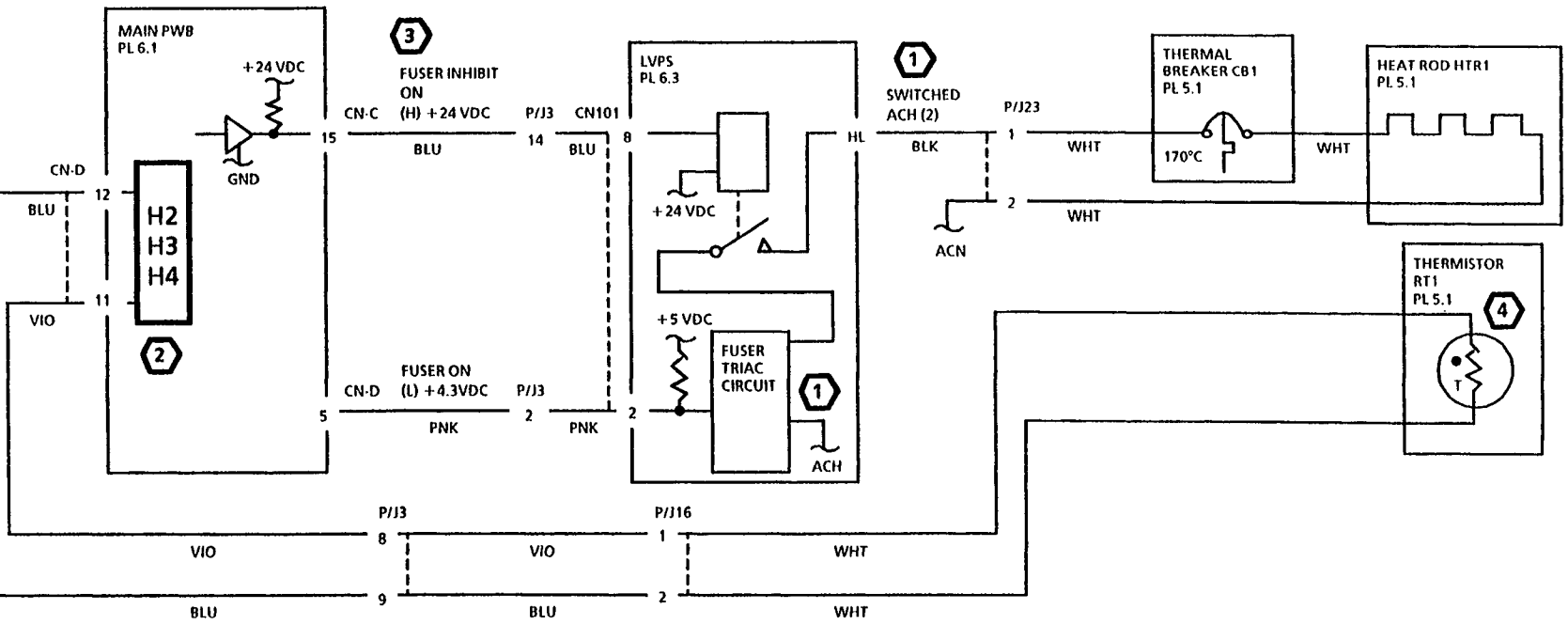
1. TONER MOTOR COMES ON WHEN LOW TONER CONCENTRATION IS SENSED BY THE TONER CONCENTRATION SENSOR. IF THE MOTOR OPERATES FOR 120 SECONDS AND THE LOW TONER SIGNAL IS STILL HIGH, THE DRY INK CARTRIDGE (CANNON BALLS) LAMP WILL FLASH.
2. TONER MOTOR DRIVE SIGNAL IS A +24 VDC PULSED SIGNAL.
3. THE FOLLOWING FIGURE SHOWS THE LOCATION OF THE PINS FOR CONNECTOR P21 AS VIEWED FROM THE FRONT OF THE COPIER WITH THE COPY CARTRIDGE REMOVED.

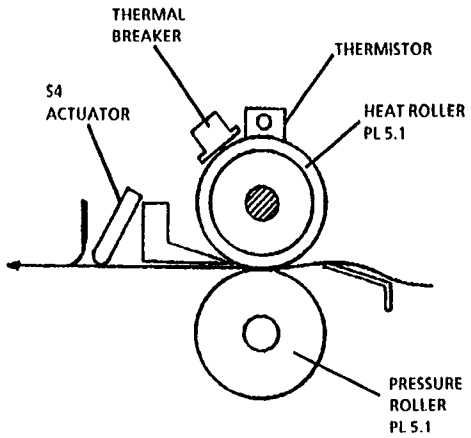
2	4
1	3

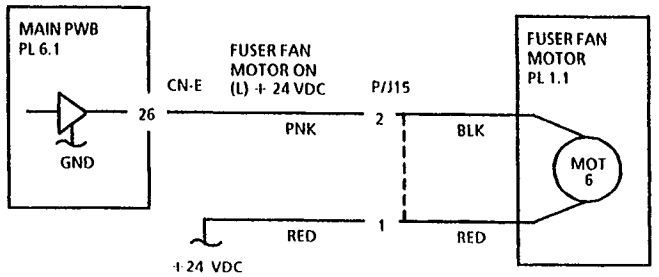
INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
+24 VDC	CN101-5	1.1
GND	CN101-4	1.1

XEROGRAPHICS
CHAIN 9 LEVEL 2
SHEET 3 OF 3
OWL-2013

10.1 FUSING AND FUSER COOLING





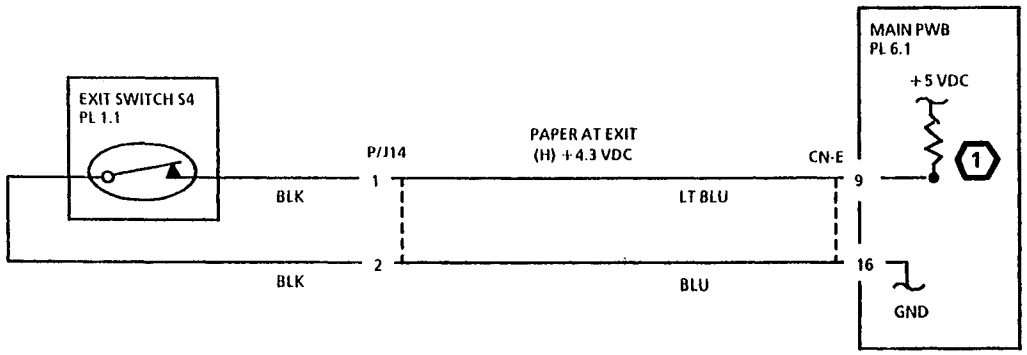


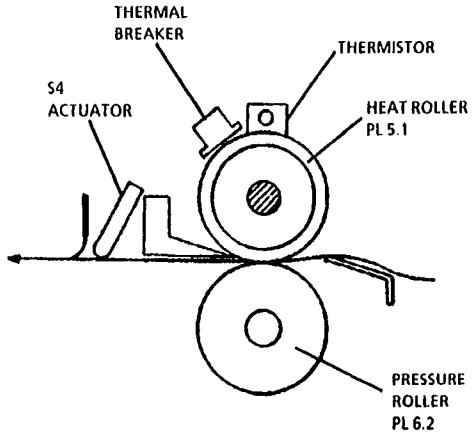
NOTES:

1. ACH = 115 VAC (USMG)
   = 220/240 VAC (RXL)
2. H2 = OPEN THERMISTOR
   H3 = FUSER OVERHEAT (THERMISTOR ≈ 0 OHMS)
   H4 = FUSER DID NOT WARM UP WITHIN 40 SECONDS AFTER POWER-UP.
3. +24 VDC IS SUPPLIED TO THE RELAY WHEN AN H STATUS CODE IS DECLARED. NORMALLY A LOW SIGNAL IS PRESENT, CAUSING THE CONTACT TO CLOSE.
4. COLD ≈ 125K OHMS
   HOT ≈ 6K OHMS

INPUT POWER BLOCK		
VOLTAGE	TEST POINT	GROUP FUNCTION
ACN	N	1.1
+24 VDC	CN101-5	1.1

FUSING
CHAIN 10 LEVEL 2
SHEET 1 OF 2
OWL-2014





NOTE: (1) A PAPER JAM WILL OCCUR (PAPER JAM LAMP FLASHING) IF THE:

A. EXIT SWITCH, S4, IS ACTUATED (OPEN) WHEN THE POWER IS SWITCHED ON.
B. PAPER LEAD EDGE DOES NOT ACTUATE THE EXIT SWITCH, S4, WITHIN 2.3 SECONDS AFTER SCAN BEGINS (SCAN HOME SENSOR, Q1, IS LOW).
C. EXIT SWITCH, S4, REMAINS ACTUATED (OPEN) 1.4 SECONDS AFTER THE DISCHARGE LAMP, DS2, GOES OFF (END OF COPY CYCLE).

FUSING AND
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CHAIN 10 LEVEL 2
SHEET 2 OF 2
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