

Transmittal Page

Product	Title	Part Number
XC520 / XC540 / XC560 / XC580	Service Manual	701P07530
Status		Date
Initial Issue (USO) Reissue (RXL) This Manual supersedes 701P06920 in RXL		March 1996

USCO: This manual is an Initial Issue.

RXL: This Manual supersedes 701P06920
 This manual has been updated to reflect the
 XC560/XC580 configurations.

The XC520/XC540/XC560/XC580 copier is a combination of the
 5220 family and the 5201/5203/5305/5306 copier
 The major similarities/ differences are as follows

- 1 The XC520/XC540/XC560/XC580 copying process is similar to the 5220 family and the 5201/5203/5305/5306 copiers, with the exception that the XC520/XC540/XC560/XC580 and the 5201/5203/5305/5306 copiers have a copy cartridge, while the 5220 family does not.
- 2 The XC520/XC540/XC560/XC580 exposure lamp is similar to the 5201/5203/5305/5306 exposure lamp. It is not similar to the 5220 family which uses a fluorescent exposure lamp.
- 3 The XC520/XC540/XC560/XC580 does not have a service indicator like the 5220 family. The three exposure lamps will flash when the drum cartridge needs replacing (same as 5201/5203/5305/5306)
- 4 The status codes are identical to the 5201/5203/5305/5306 status codes and not the 5220 family status codes.

Xerox

Xerox XC520 / XC540 /XC560 /XC580 Service Manual

701P07530
March, 1996

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ABOUT THIS MANUAL

This manual is part of a documentation system which also includes Training

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 XC520/XC540/XC560/XC580 family of 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
- System Checkout
- Final Action

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 using a RAP, always exit the procedure when the fault is fixed. Do not perform the remaining steps

Section 3 - IMAGE QUALITY REPAIR ANALYSIS PROCEDURES (RAPs)

This section contains the Repair Analysis Procedures (RAPs) necessary to repair 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 using 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 XC520/XC540/XC560/XC580.

Section 5 - PARTS LIST

This section contains the detailed Parts List for the XC520/XC540/XC560/XC580

Section 6 - GENERAL PROCEDURES/ GENERAL INFORMATION

This section contains Diagnostic Procedures, Installation and Removal Procedures, and General Information which includes Product Specifications for the XC520/XC540/XC560/XC580

Section 7 - WIRING DATA

This section contains Plug/Jack Location 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 sent 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 your troubleshooting. 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, return 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

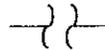
PL 10.6

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 aid in troubleshooting when using the RAPs

Interrupt Horizontal Signal



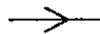
This indicates the continuation of a signal line which is interrupted in a horizontal direction

Standby Power Input



This indicates the continuation of a standby power line which is interrupted in the vertical direction

Left to Right Flow



This indicates the direction of signal flow

Feedback



This indicates a feedback signal.

Flag



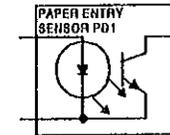
This is used to identify an area of a Circuit Diagram that you should check

Ground



This indicates a machine ground.

LED / Phototransistor Sensor



This type of sensor is used in the document and paper path. It uses reflected light to switch the sensor off and on.



Without Tag Change



This symbol indicates that the area the triangle points to 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 the triangle points to 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

Signal Name

Logic voltage when the signal is Hi

Logic state when the signal is available in its named state In this case, the signal is Lo when a document jam is sensed.

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
+32 VDC (Unreg)	H	+28.0 to +36.0 VDC
	L	0.0 to +3.0 VDC



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INTRODUCTION

Use the Service Call Procedure as a maintenance guide when performing service on the XC520/XC540/XC560/XC580 Copier. The procedure has been designed for use with the XC520/XC540/XC560/XC580 Service Manual

- Copier Maintenance - When the copier is being serviced, the maintenance/cleaning should be performed
- Initial Actions / System Checks - This diagram is designed to identify and classify the copier problem and to refer you to the appropriate RAP in order to repair the problem. When the problem has been repaired, perform the System Checkout / Final Action
- 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 transported properly and to ensure that copy quality is within specification

COPIER MAINTENANCE

Introduction

When the copier is being serviced, the following maintenance procedure should be performed

Procedure

- 1 Clean the following parts every time the copier is serviced

Description	Procedure
Charge corotron (on drum cartridge)	Clean using a Corotron brush or a cotton swab.
Transfer and Detack Corotrons (located on transport door)	Clean using a Corotron brush or a cotton swab.
Transport roller (located on transport door)	Clean using a Lint Free Tissue 35P2163 (USCO) or 600S4372 (RXL) and water.
Platen Glass	Clean using water or Xerox Lens and Mirror Cleaner 43H12 (USCO) or 8R90178 (RXL) and Lint Free Tissue 35P2163 (USCO) or 600S4372 (RXL).
Reflector	Clean using Xerox Lens and Mirror Cleaner 43H12 (USCO) or 8R90178 (RXL) and Lint Free Tissue 35P2163 (USCO) or 600S4372 (RXL).
Selfoc Lens	Clean per User Guide using the lens cleaner tool.

- 2 Note the drum cartridge count by performing the Drum Cartridge Count Read procedure in Section 6. Replace the following parts if there are more than 3,000 copies on the Copier

Description	Part #	Repair
Drum Cartridge	113R104 (USCO) or 113R105 (RXL)	REP 9 2

- 3 Note the total copy count by performing the Total Copy Count Read procedure in Section 6. Replace the following parts if there are more than 15,000 copies on the Copier.

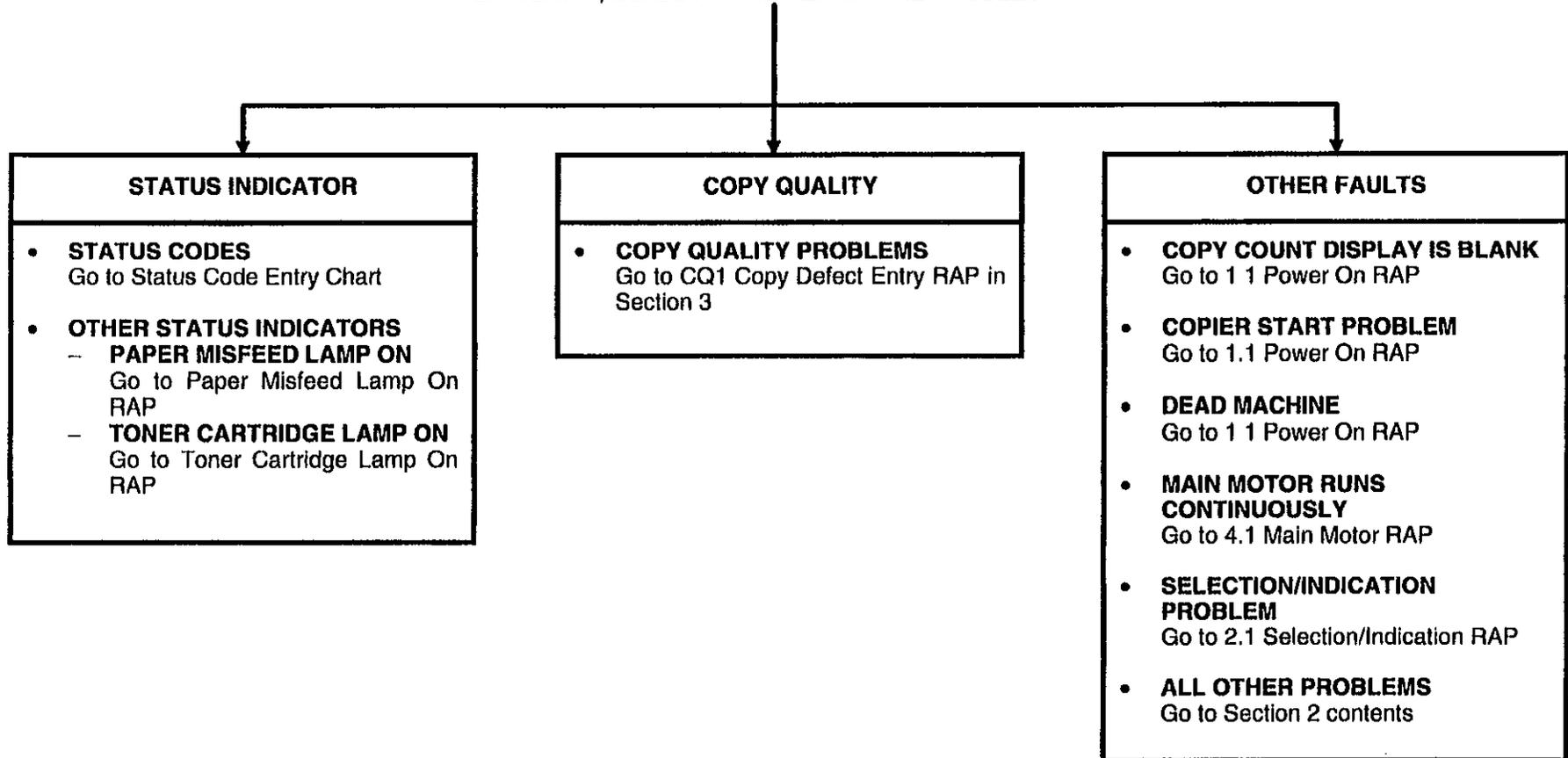
Description	Part #	Repair
Heat Roll	22E10210	10.6
Pressure Roll	22E10220	10.7
Stripper Fingers	9E25190	10.8

4. Lubricate the following parts if there are more than 15,000 copies on the Copier

Description	Location	Lubricant
Gear	PL 2.2, Item 19	70P27
Gear	PL 1.3, Item 3	70P27
Gear	PL 1.3, Item 15	70P27
Coupling	PL 1.4, Item 3	70P27

INITIAL ACTIONS

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



STATUS CODE ENTRY CHART

H2 THERMISTOR PROBLEM

The main PWB sensed that the thermistor RT1 was open
Go to H2 Status code RAP

H3 FUSER OVERHEAT PROBLEM

The main PWB sensed a fuser overheat
Go to H3 Status code RAP

H4 FUSER WARM-UP PROBLEM

The main PWB sensed that the fuser did not reach 140° C within 40 seconds after power on or that the fuser dropped below 100° C for 3 seconds during the copy cycle
Go to H4 Status code RAP

L3 PLATEN PROBLEM

The main PWB sensed that the platen did not move within 15 seconds after the main motor turns on.
Go to L3 Status Code RAP

L4 MAIN MOTOR PROBLEM

The main PWB sensed a problem with the main motor circuit
Go to L4 Status Code RAP

L6 EXPOSURE LAMP FAILURE

The auto exposure sensor did not sense any light from the exposure lamp.
Go to L6 Status code RAP.

P PAPER FEED PROBLEM

The main PWB sensed that the paper did not reach the paper feed sensor in time after Start was pressed.
Go to P Status code RAP



SYSTEM CHECKOUT / FINAL ACTION

Make several copies of the test pattern.

Copies are delivered to the exit tray.

Y N

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

Evaluate the copies using CQ1 Copy Defect Entry RAP

Image quality is acceptable.

Y N

Go to the copy quality RAP identified by the CQ1 Copy Defect Entry RAP

Clean exterior of machine and provide copy samples of the customers originals

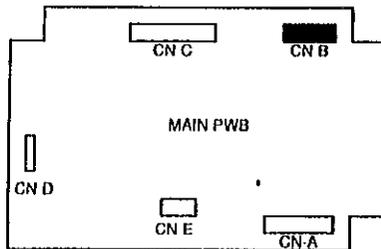


H2 STATUS CODE RAP

Description:

The main PWB sensed that the thermistor RT1 was open

Go to Flag 1 and Flag 2 and check for an open. If OK, replace the thermistor. If problem still exists, replace the main PWB.



H3 STATUS CODE RAP

Description:

The main PWB sensed a fuser overheat

NOTE: An H3/H4 status code must be cleared in diagnostics before the copier becomes operational again. See the H3/H4 Status Code Clear procedure in Section 6.

Connect the meter between CN-A-14 (+) on the LVPS and ground (-).

There is 1.2 VDC present while an H3 status code is displayed.

Y N

Enter Diagnostic code 4 to clear the H3 status code (see H3/H4 Status Code Clear in Section 6)

The H3 status code appears immediately after power on.

Y N

Remove the left cover to observe the cooling fan

The cooling fan is running.

Y N

Go to 6.1 Cooling Motor MOT2 RAP

Replace the LVPS.

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

Replace the main PWB. If problem still exists, replace the LVPS.

H4 STATUS CODE RAP

Description:

The main PWB sensed that the fuser did not reach 140° C within 40 seconds after power on or that the fuser dropped below 100° C for 3 seconds during the copy cycle

NOTE: An H3/H4 status code must be cleared in diagnostics before the copier becomes operational again. See the H3/H4 Status Code Clear procedure in Section 6.

Connect the meter between CN-B-6 (+) on the main PWB and ground (-).

There is +24 VDC present while an H4 status code is displayed.

Y N

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

Enter Diagnostic code 4 to clear the H4 status code (see H3/H4 Status Code Clear in Section 6). Switch the power off then on.

The voltage decreased to less than +1 VDC.

Y N

Replace the main PWB.

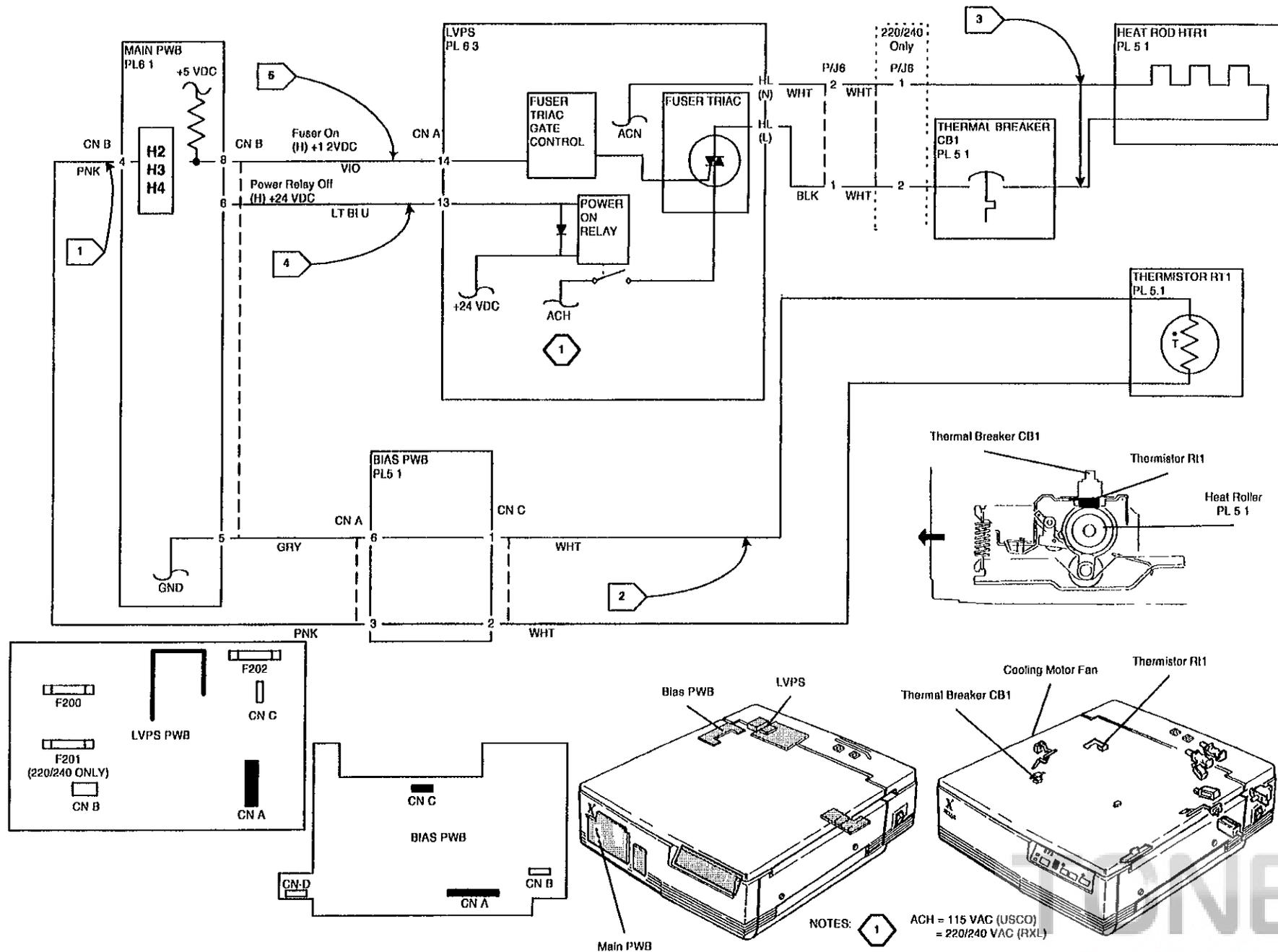
Connect the meter between CN-A-14 (+) on the LVPS and ground (-). Switch the power off then on.

There is approximately 1.2 VDC present.

Y N

Go to Flag 5 and check for an open or short circuit. If OK, replace the main PWB. If problem still exists, replace the LVPS.

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



L3 STATUS CODE RAP

Description:

The main PWB sensed that the platen did not move properly.

Switch power off, then on.

Press **Start** while observing the platen.

The platen moved.

Y N

The main motor ran.

Y N

Go to 4 1 Main Motor RAP.

Go to Flag 1 and check for an open wire. If OK, check the platen drive for a mechanical problem such as a broken gear

The platen crashed (noisy) before L3 was displayed

Y N

Connect the meter between CN-C-8 (+) on the main PWB and ground (-) Switch the power off then on

There is +24 VDC present.

Y N

Go to Flag 2 and check for an open circuit If OK, replace the drive assembly

Connect the meter between CN-C-6(+) on the main PWB and ground (-) Switch the power off then on.

There is +24 VDC present.

Y N

Go to Flag 3 and check for an open circuit. If OK, replace the drive assembly

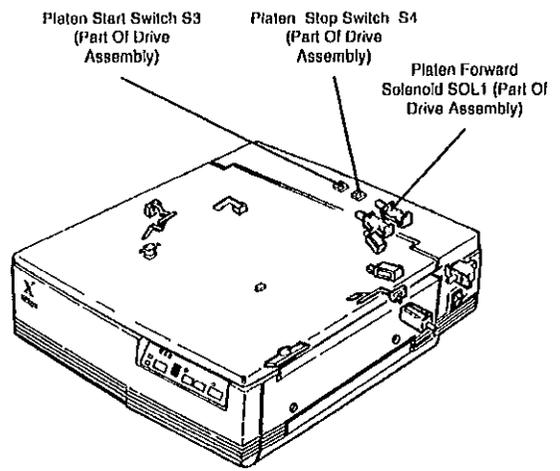
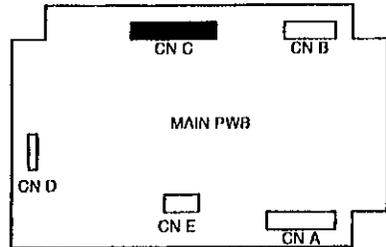
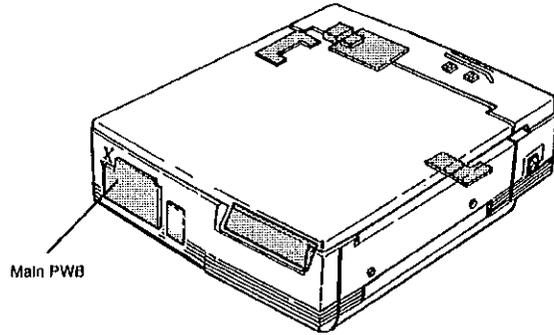
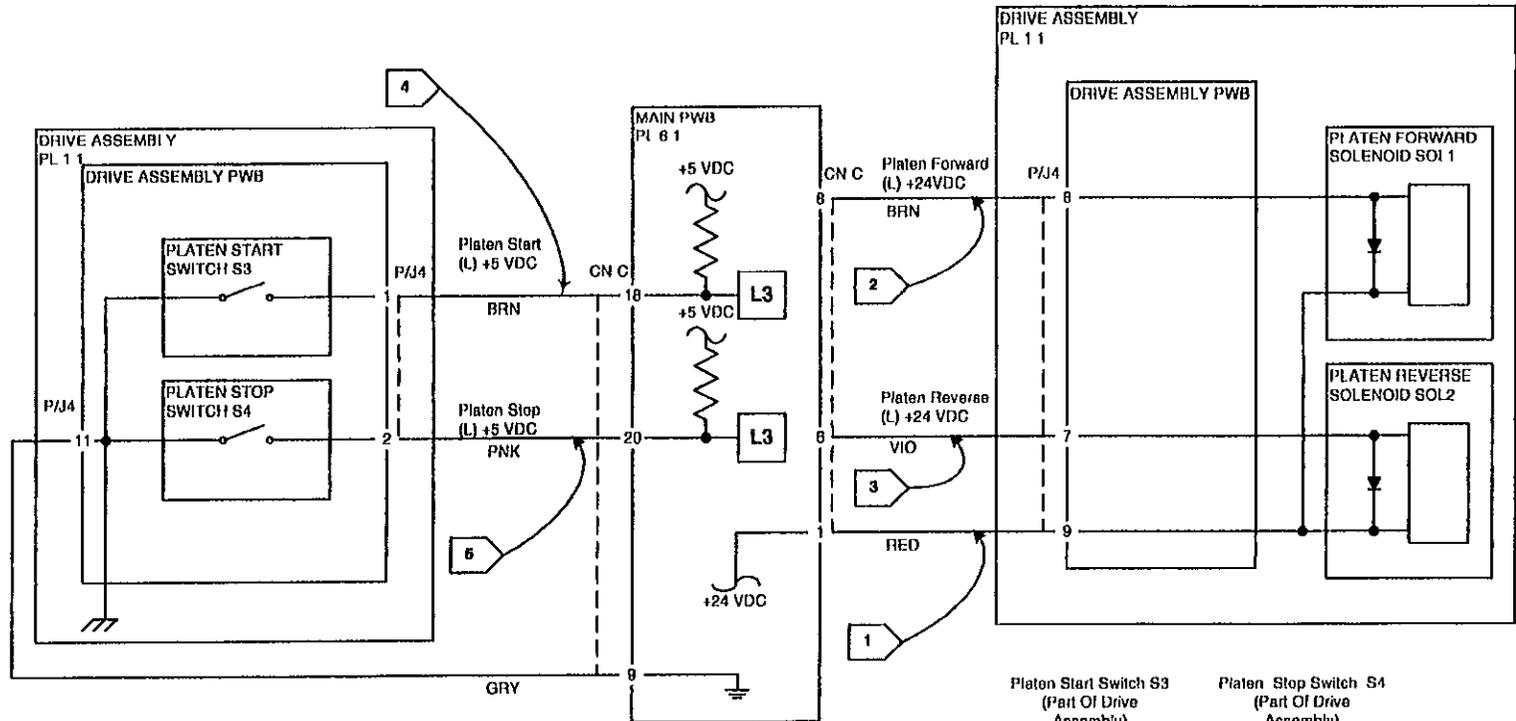
A B

A B

Go to Flag 4 and Flag 5 and check for a short circuit If OK, check the platen drive for a mechanical problem such as a broken gear

- Go to Flag 4 and check for an open circuit
- Go to Flag 2 and check for a short circuit
- If problem still exists, replace the main PWB

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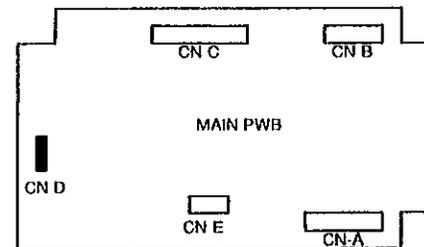
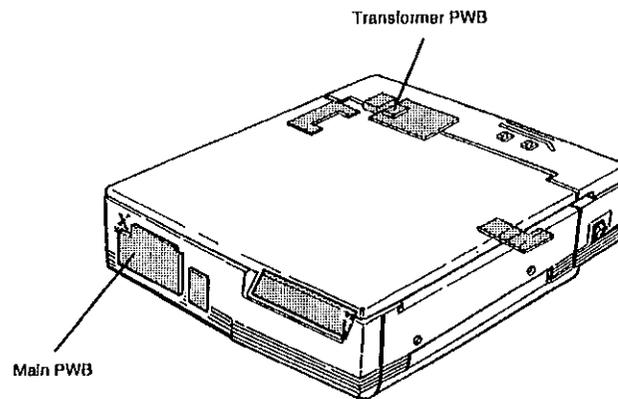
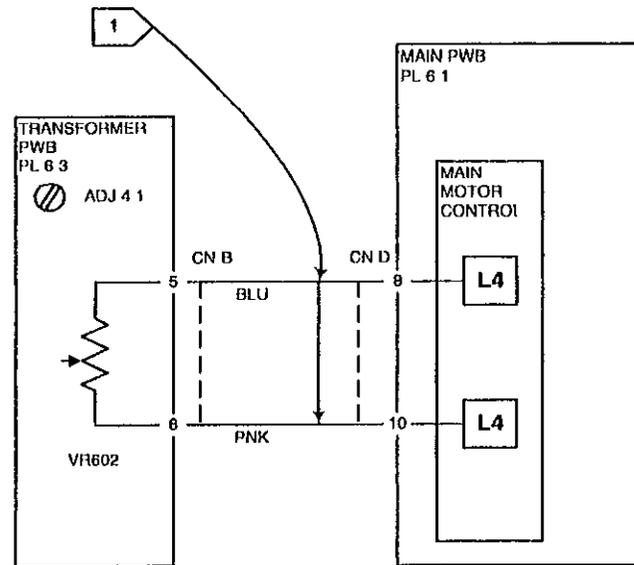


L4 STATUS CODE RAP

Description:

The main PWB sensed a main motor problem

- Perform ADJ4.1 Motor Speed Adjustment
- If problem still exists, go to Flag 1 and check for an open circuit. If OK, replace the main PWB before replacing the drive assembly



L8 STATUS CODE RAP

Description:

The auto exposure sensor did not sense the proper amount of light from the exposure lamp

NOTE: If L8 status code appears only after many copies are made, check that the cooling fan motor is running. If it is not running, go to 6.2 Cooling Motor MOT2 RAP

Switch the power off then on.

Status code L8 appears approximately 8 seconds after power is switched on.

Y N

Press **Start**.

The exposure lamp lights.

Y N

Go to Flag 2 and Flag 3 and check for an open circuit.

Go to Flag 1 and check for an open in the auto exposure sensor circuit

Connect the meter between CN-D-1 (+) on the main PWB and ground (-)

There is +24 VDC present.

Y N

Connect the meter between CN-A-5(+) on the LVPS and ground (-)

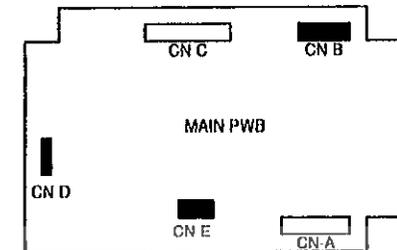
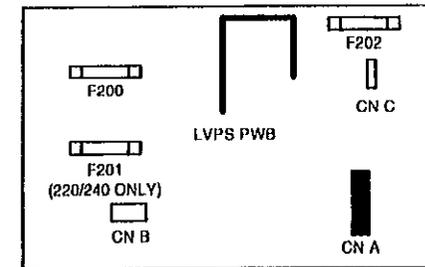
There is +24 VDC present.

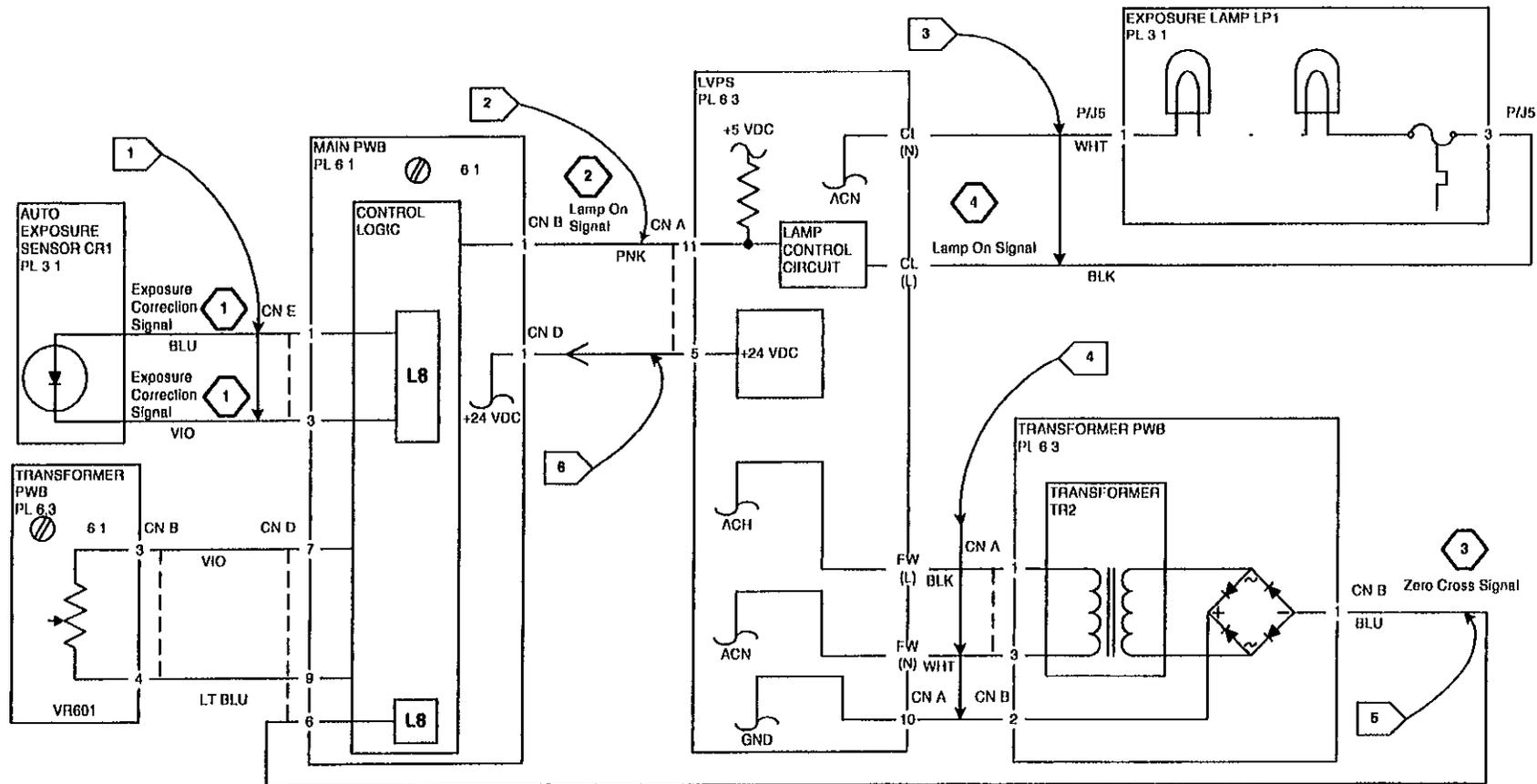
Y N

Replace the LVPS

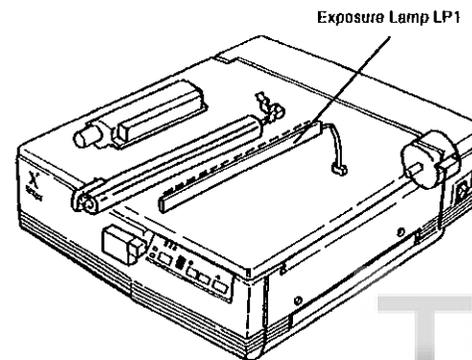
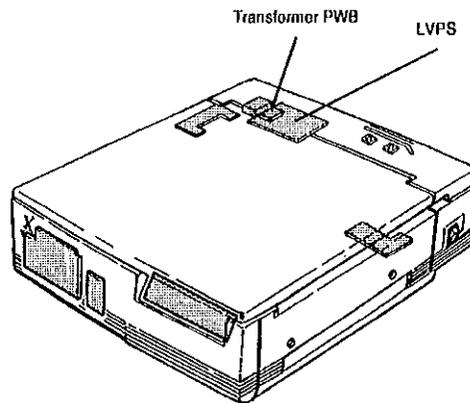
Go to Flag 6 and check for an open wire

Go to Flags 4 and Flag 5 and check for an open circuit. If OK, replace the main PWB





- NOTES:
- 1 This signal is not measurable
 - 2 Lamp on = + 2 VDC
Lamp off = 0 VDC
 - 3 Approximately 4.2 VAC
 - 4 Approximately 60 to 80 VAC



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Status Code Indicators
L8

P STATUS CODE RAP

Description:

The main PWB sensed that the paper did not reach the paper feed sensor in time after **Start** was pressed

NOTE: If an L3 status code appears (about 8 seconds after the P status code is displayed), go to the L3 Status Code RAP

Clear any paper jam

Ensure there is paper present in the paper tray

Switch the power off, then on

Press **Start**

The take-up roller lowers.

Y N

Connect the meter between CN-C-12 (+) on the main PWB and chassis (-).

There is +24 VDC present.

Y N

Go to Flag 1 and check for an open circuit.

Switch the power off, then on

Press **Start**.

The voltage decreased to approximately 1 VDC.

Y N

Replace the main PWB.

- Check for a mechanical problem with the take-up roller mechanism or with the paper feed solenoid SOL3.
- If an L3 status code appears (about 8 seconds after the P status code is displayed), go to the L3 Status Code RAP

A

A

The paper prefeeds.

Y N

- If main motor does not run, go to 4 1 Main Motor RAP
- Check for a mechanical problem with the take-up roller mechanism

Clear any paper jam

Ensure there is paper present in the paper tray.

Switch the power off, then on.

Connect the meter between CN-C-14 (+) on the main PWB and chassis (-)

There is +5 VDC present.

Y N

Replace the main PWB

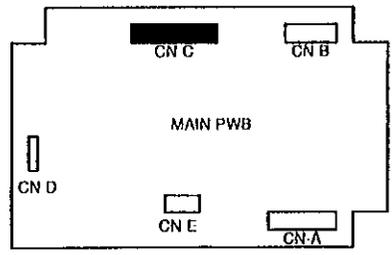
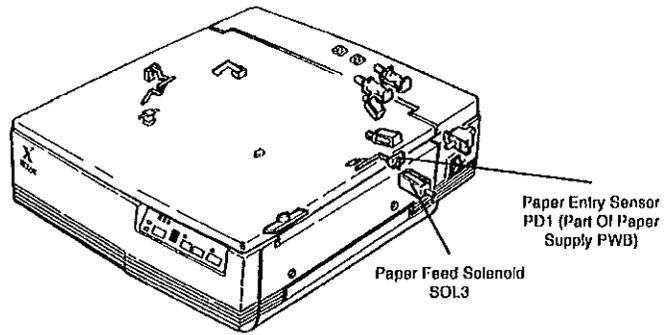
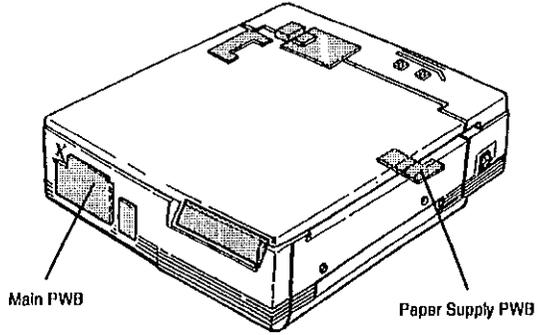
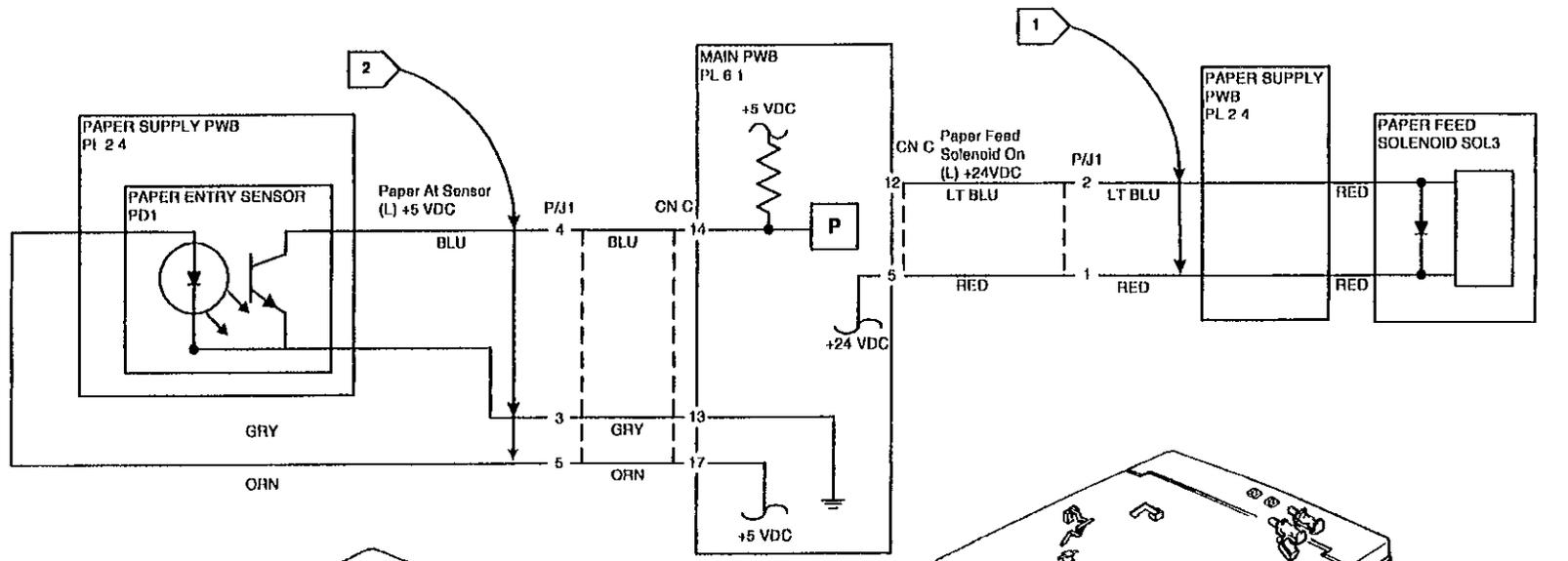
Press **Start**

The voltage decreased to approximately 1 VDC after the paper prefed.

Y N

Go to Flag 2 and check for an open paper entry sensor circuit. If OK, replace the paper supply PWB

Check for a mechanical problem or obstruction preventing the paper from reaching the sensor actuator in time



TONER
Status Code Indicators
P

TONER CARTRIDGE LAMP ON RAP

NOTE: If the customer complains that the toner cartridge reached its end of life too soon, then instruct the customer that making copies with the document cover open or making copies with high image area coverage, such as photographs, will reduce the life of the toner cartridge. (See XC520/XC540/XC560/XC580 Toner Cartridge Yield in Section 6)

NOTE: When power is switched on, the cooling motor MOT2 begins to run immediately. After a 4 second delay, the exposure lamp lights and main motor MOT1 turns on. They both stay on for approximately 4 seconds to discharge the drum.

Lift the platen cover to observe the exposure lamp. Listen for the main motor.

Switch the power off, then on.

When the exposure lamp lights, the main motor turns on.

Y N

Go to 4 1 Main Motor RAP

Switch off the power

Connect the meter between CN-C-16 on the main PWB (+) and chassis (-).

Switch the power on

There is +5 VDC present.

Y N

Replace the main PWB

Switch off the power

Connect the meter between P/J2-6 (+) and P/J2-4 (-).

Switch the power on

There is +24 VDC present.

Y N

A B

A B

Go to Flag 2 and check for an open between P/J2-6 and CN-C-3. If OK, go to Flag 3 and check for an open between P/J2-4 and CN-C-11.

Switch off the power.

Connect the meter between CN-C-2 on the main PWB (+) and chassis (-).

Switch on the power

There is +24 VDC present (momentarily).

Y N

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

The voltage decreased from +24 VDC to approximately +1 VDC.

Y N

Replace the main PWB

Connect the meter between P/J2-3 (+) and chassis (-).

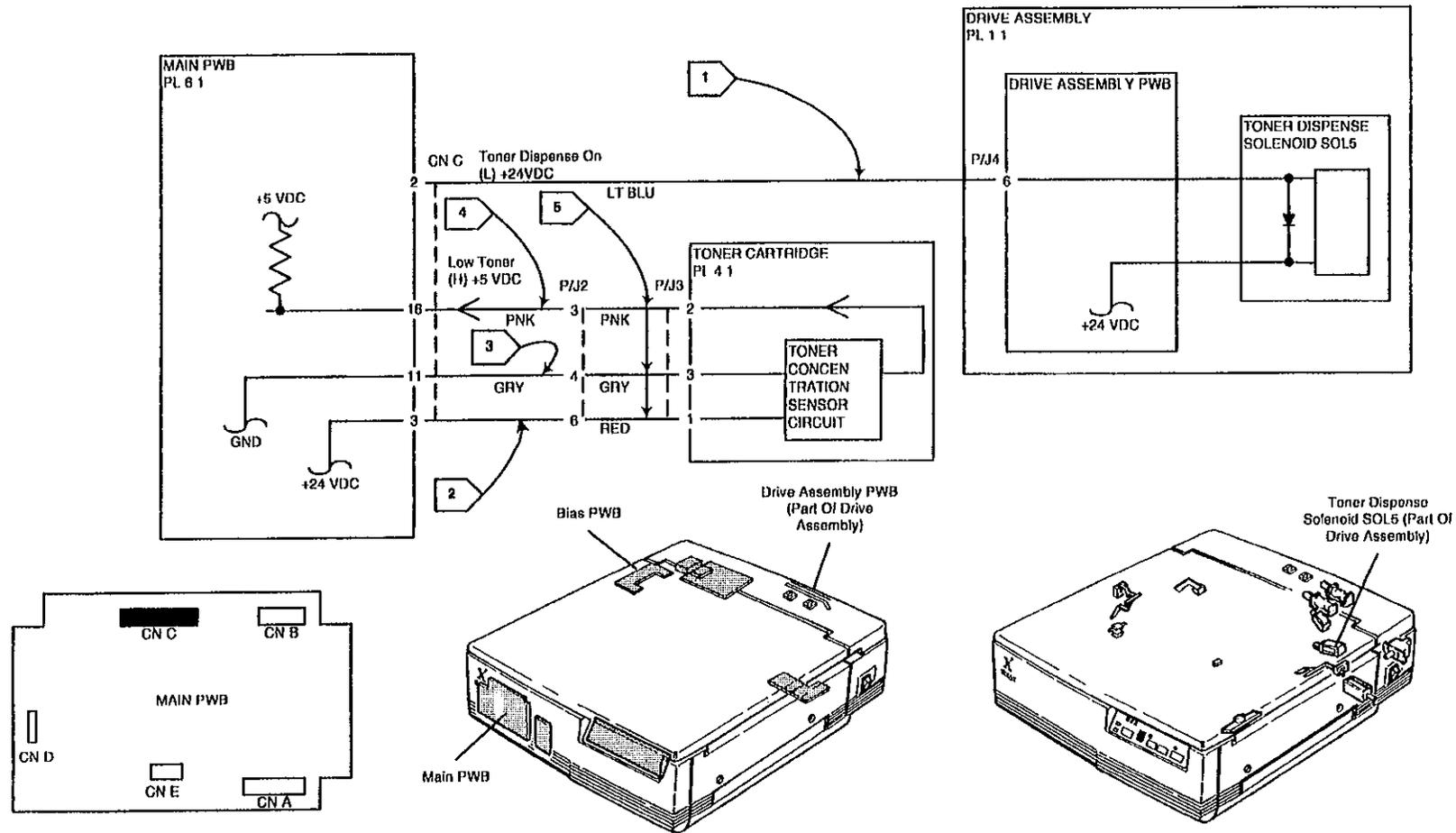
Switch the power off, then on

There is +5 VDC present.

Y N

Go to Flag 4 and check for an open between P/J2-3 and CN-C-16

Go to Flag 5 and check for an open wire between P/J2 and P/J3. If OK, replace the toner cartridge. If problem still exists, check for a mechanical drive problem to the toner cartridge.



PAPER MISFEED LAMP ON RAP

NOTE: Ensure the copier is level. The paper misfeed lamp may light if the copier is not level.

Switch off the power and clear any paper jam.
Switch on the power and wait 10 seconds

The paper misfeed lamp is flashing.

Y N

Press Start

The paper lead edge feeds past the fuser rolls.

Y N

Switch off the power and clear any paper jam

Switch on the power.

Connect the meter between CN-C-10 on the main PWB (+) and chassis (-)

There is +24 VDC present.

Y N

Go to Flag 1 and check for an open wire. If OK, go to Flag 2 and check for an open wire. Replace the registration roll solenoid SOL4 as required

Press Start

The voltage decreased to approximately 1 VDC.

Y N

Replace the main PWB.

A B C

A B C
A B C
A

Check the following

- Ensure that the paper tray guide is set to the correct width of the copy paper.
- Inspect the paper path from this tray and the paper registration area for an obstruction such as a burr
- Inspect the registration roll [PL 2.1] and its pinch roll [PL 2.4] for contamination and wear. Clean (with Film Remover only) or replace as required.
- Check the condition of the registration pinch roll springs [PL 2.4] to ensure that they are applying even tension.

DO NOT clear the paper from the fuser.

Connect the meter between CN-B-2 on the main PWB (+) and chassis (-)

There is +5 VDC present.

Y N

Check for a mechanical problem.

- A deformed pressure roller
- An obstruction in the fuser
- A binding registration solenoid

Go to Flag 5 and Flag 6 and check for an open wire. If OK, replace the Bias PWB.

A

Paper fed after power was switched on and before Start was pressed.

Y N

Connect the meter between CN-C-14 on the main PWB (+) and chassis (-)

There is +5 VDC present.

Y N

Ensure that the paper sensor actuator is not binding. If OK, go to Flag 4 and check for a short to ground. If OK, replace the paper supply PWB

Connect the meter between CN-B-2 on the main PWB (+) and chassis (-)

There is +5 VDC present.

Y N

Ensure that the paper sensor actuator is not binding. If OK, go to Flag 5 and check for a short to ground. If OK, replace the Bias PWB.

Replace the main PWB

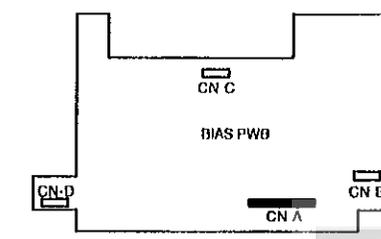
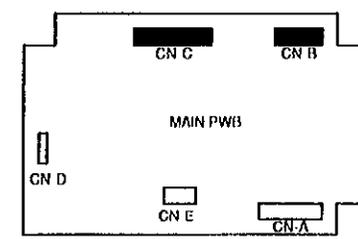
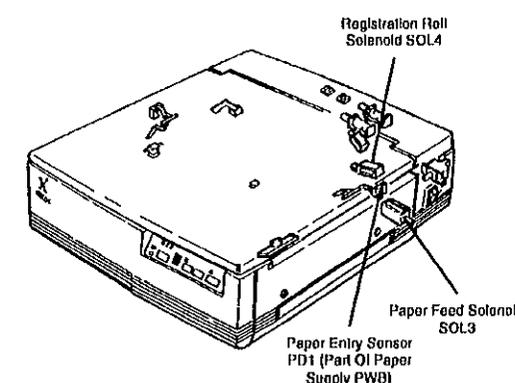
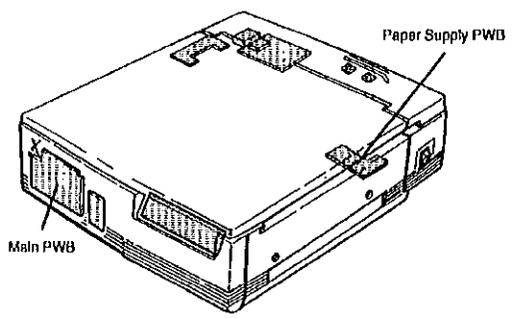
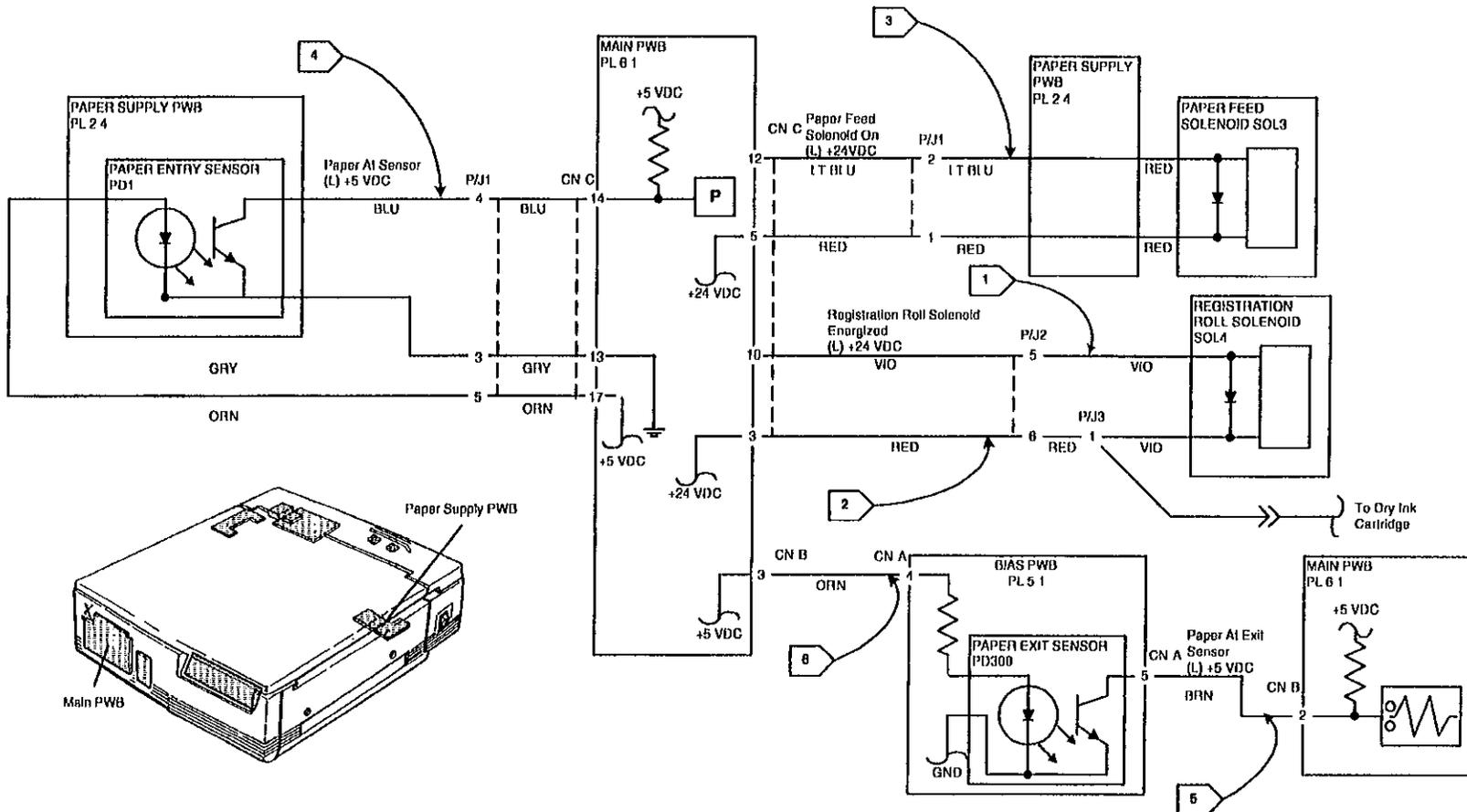
Connect the meter between CN-C-12 on the main PWB (+) and chassis (-)

There is +24 VDC present.

Y N

Go to Flag 3 and check for a short to ground

Check the paper feed solenoid SOL3 for binding. Replace if necessary



TONER

Status Code Indicators

Paper Misfeed Lamp On RAP

1.1 POWER ON RAP

Initial Action:

Ensure the copy cartridge and toner cartridge are inserted and that the paper transport door is closed

Clear any paper jam

Switch the power off, then on while observing the control console.

The control console is blank.

Y N

Go to 2 1 Selection Indication RAP for a start problem.

An L8 status code appears after about 8 seconds.

Y N

The main motor is running.

Y N

Switch off the power and disconnect the power cord. Check fuse F200 (check both F200 and F201 in 220/240 machines) on the LVPS

A fuse is blown.

Y N

Check fuse F202 on the LVPS

Fuse is blown.

Y N

A B C D E

A B C D E

Connect the meter between CN-B-3 (+) and CN-B-1(-) on the LVPS

There is 115 VAC (USCO) or 220/240 (RXL) present.

Y N

Go to Flag 1 and Flag 2 and check for an open. If OK, check the interlock mechanism for operating properly. If OK, replace the LVPS

Connect the meter between CN-C-1 (+) and CN-C-3(-) on the LVPS

There is approximately 28 VAC present.

Y N

Go to Flag 3 and check for an open circuit. If OK, replace transformer TR1.

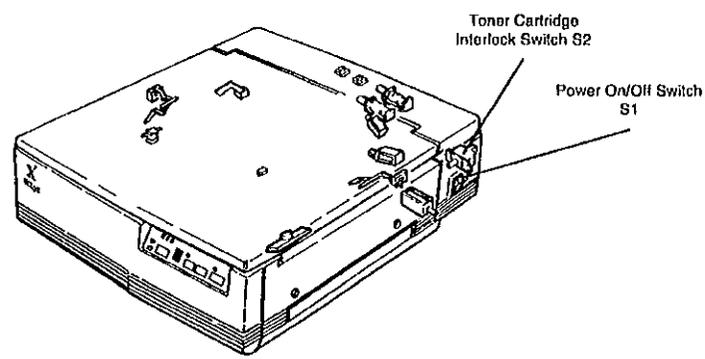
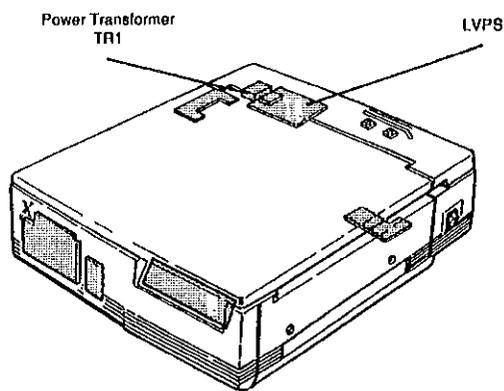
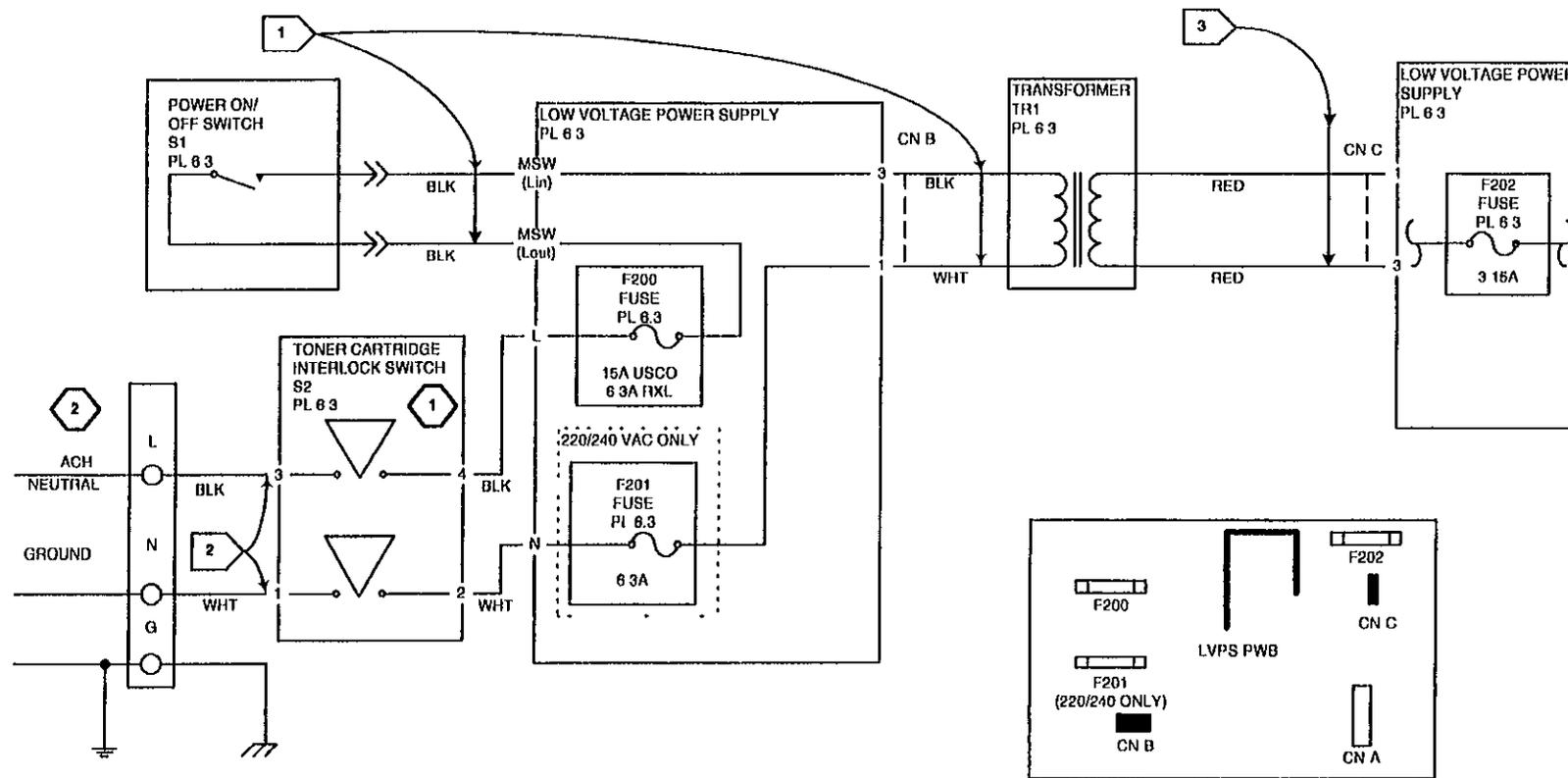
Go to 1 2 DC Power RAP

Go to 1 2 DC Power RAP

Replace the fuse. If fuse blows again, replace the Transformer TR1.

Go to 1 2 DC Power RAP

Go to L8 RAP



- Notes:
- 1 THIS INTERLOCK IS CLOSED WHEN THE TONER CARTRIDGE IS INSTALLED
 - 2 ACH = 115 VAC (USCO)
= 220/240 VAC (HXL)



1.2 DC POWER RAP

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

F202 is blown.

Y N

Connect the meter between CN-D-5 (+) on the main PWB and chassis (-)

There is +5 VDC present.

Y N

Connect the meter between CN-A-9 (+) on the LVPS and chassis (-)

There is +5 VDC present.

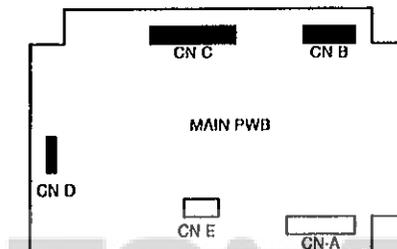
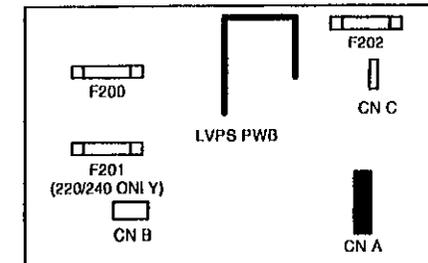
Y N

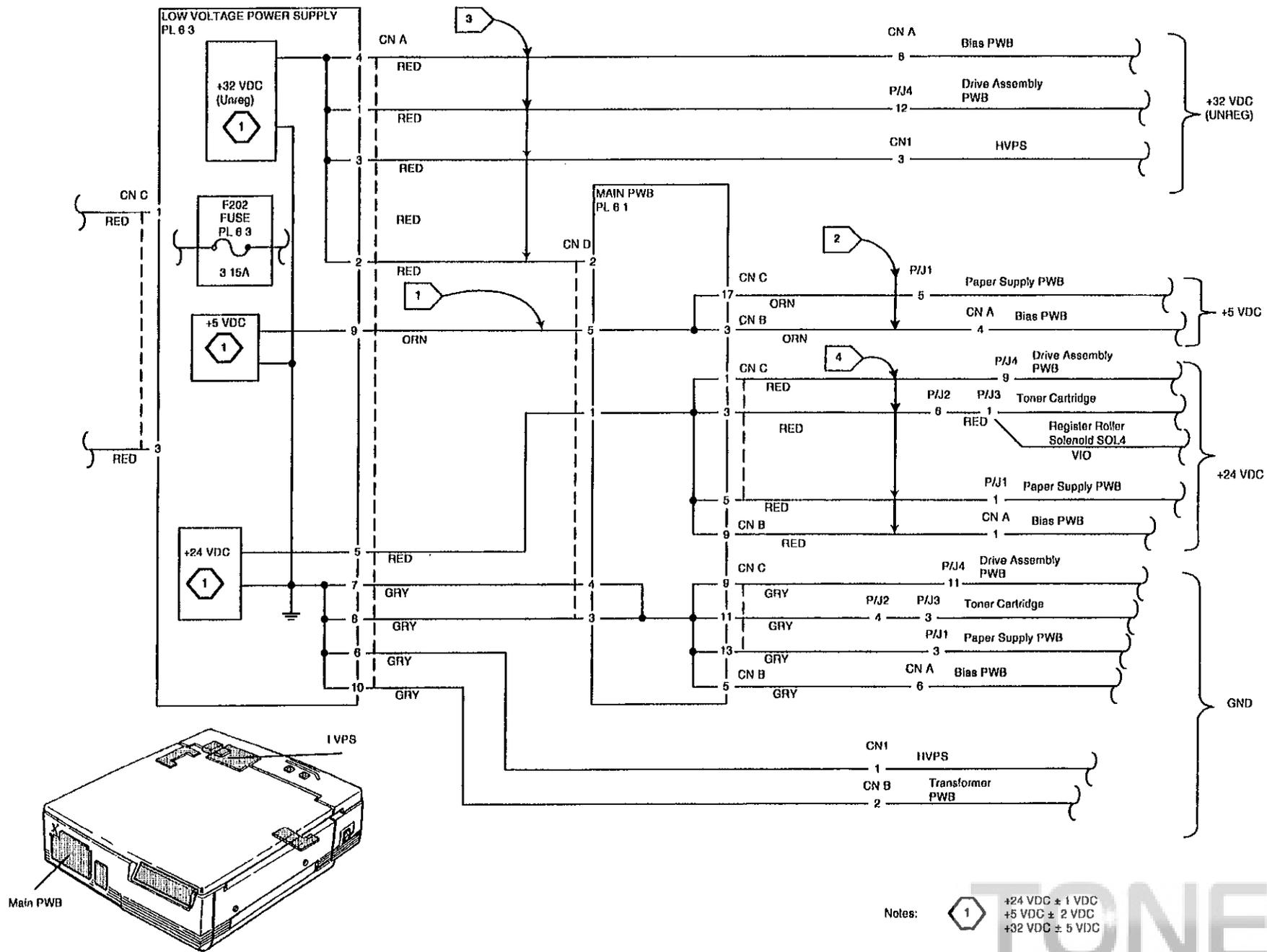
Go to Flag 1 and Flag 2 and check for a short circuit. If problem still exists, replace the LVPS.

Go to Flag 1 and check for an open circuit.

Ensure that CN-A is properly connected to the main PWB. If OK, replace the control console before replacing the main PWB.

Go to Flag 3 and Flag 4 and check for a short to ground. If OK, replace the LVPS.

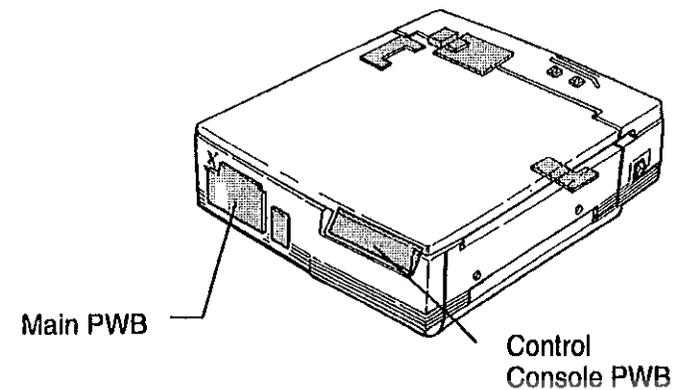
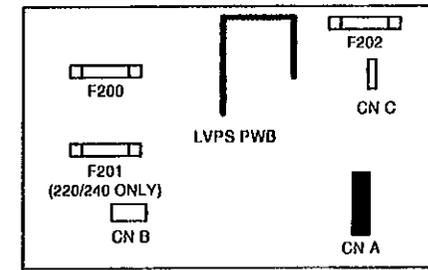
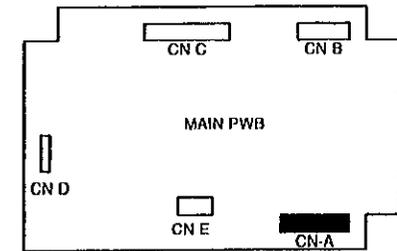


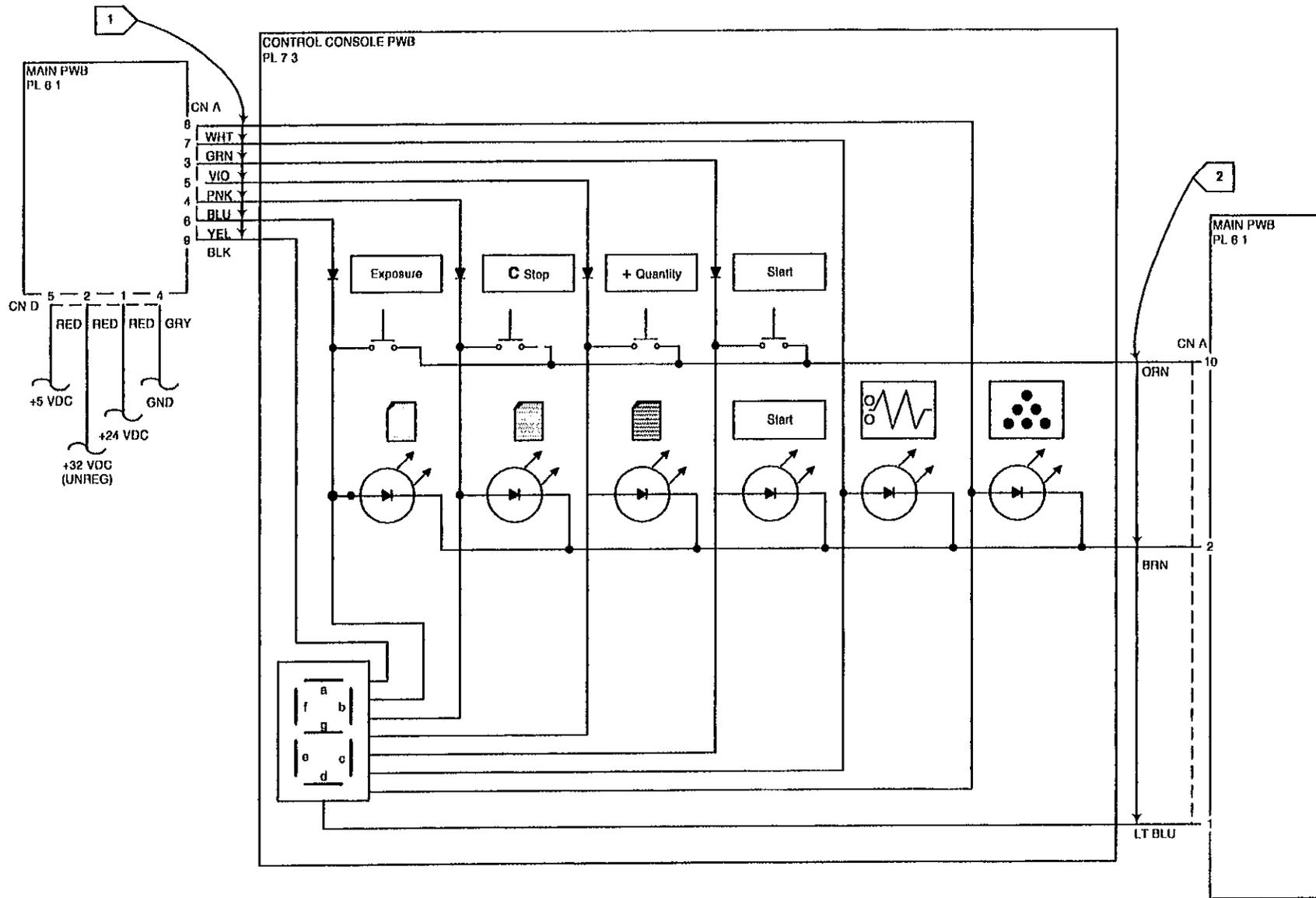


2.1 SELECTION/INDICATION RAP

*NOTE: to test the lamps, switch on the power while holding the **Stop** switch pressed (See Entering Diagnostics in Section 6) All lamps will light*

For selection/indication problems, go to Flag 1 and Flag 2 and check CN-A for being properly connected. If OK, replace the control console before replacing the Main PWB.





4.1 MAIN MOTOR RAP

The main motor runs continuously.

Y N

Connect the meter between CN-C-4 (+) on the main PWB and chassis (-). Switch the power off, then on while observing the meter.

There is +32 VDC present when power is first switched on.

Y N

Connect the meter between P/J4-12 (+) on the drive assembly and chassis (-)

There is +32 VDC present when power is first switched on.

Y N

Connect the meter between CN-A-1 (+) on the LVPS and chassis (-)

There is +32 VDC present when power is first switched on.

Y N

Replace the LVPS

Go to Flag 2 and check for an open wire

Check fuse F5 on the drive assembly PWB.

The fuse is blown.

Y N

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

Replace the fuse. If the fuse blows again, replace the drive assembly

A B

A B

Lift the platen cover. Switch the power off, then on while observing the exposure lamp and meter. **The voltage decreases when the exposure lamp lights.**

Y N

Replace the main PWB

Switch the power off, then on while observing the exposure lamp and meter.

The voltage decreases to between +8 and +12 VDC when the exposure lamp lights.

Y N

Connect the meter between CN-D-2 (+) on the main PWB and chassis (-)

There is +32 VDC present.

Y N

Go to Flag 3 and check for an open wire

Perform the main motor adjustment (ADJ 4 1). If the adjustment cannot be performed, replace the main PWB.

Check for a mechanical problem such as the drive assembly binding or a broken or worn drive gear

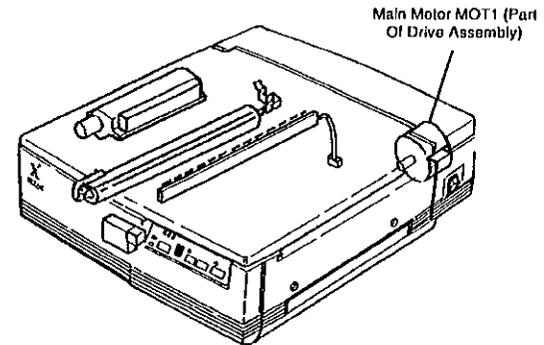
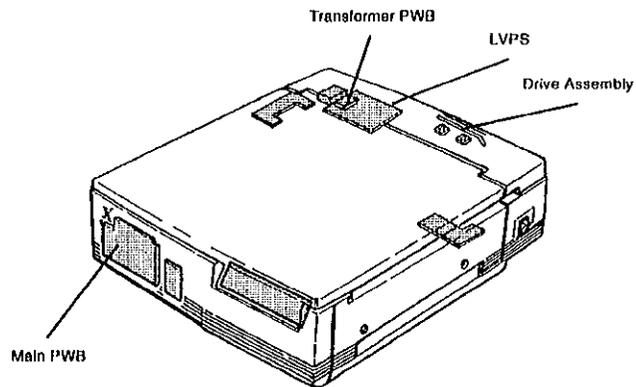
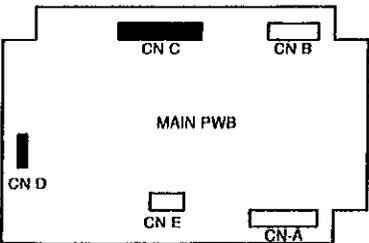
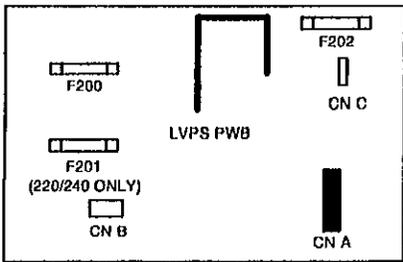
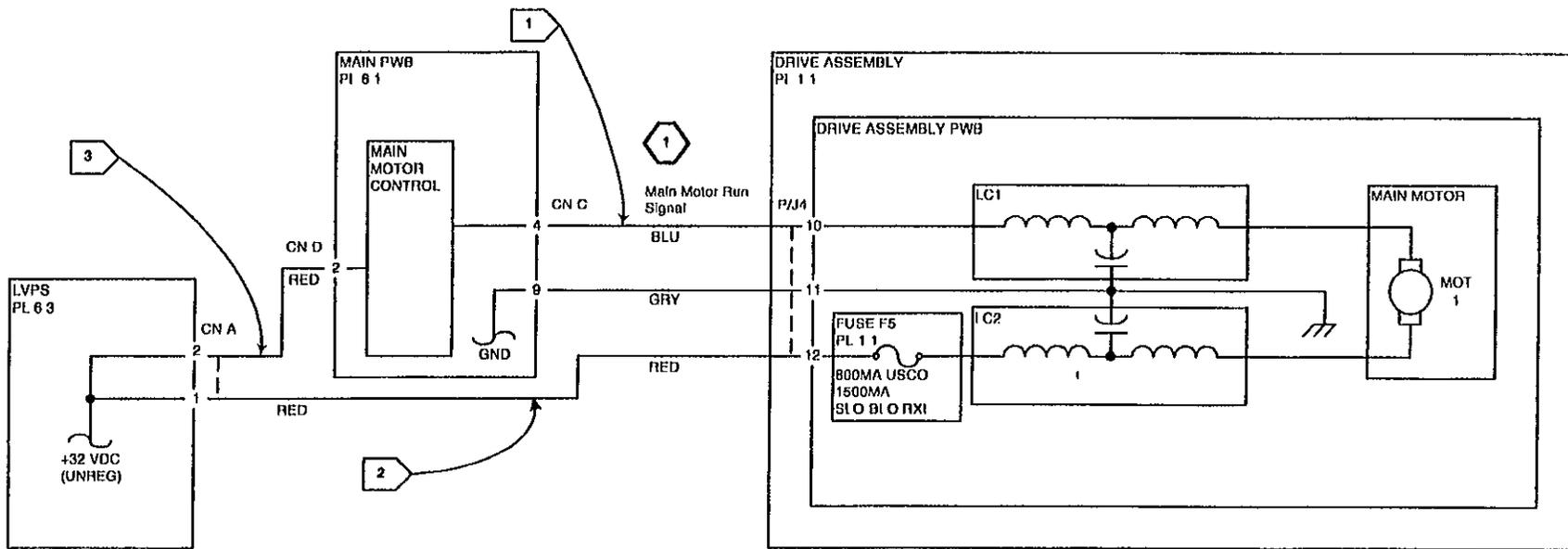
Wait a minimum of 2 minutes

The Toner cartridge lamp is flashing.

Y N

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

Go to Toner Cartridge Lamp On RAP



NOTES:



MAIN MOTOR RUNS WHEN THE READY LAMP ON AND START IS PRESSED. WHEN THE MAIN MOTOR MOT1 IS ON, THE VOLTAGE DECREASES TO APPROXIMATELY 10 TO 12 VDC

6.1 EXPOSURE RAP

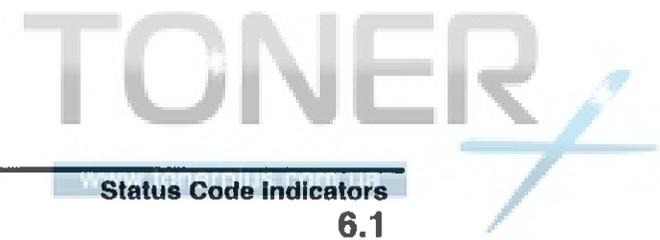
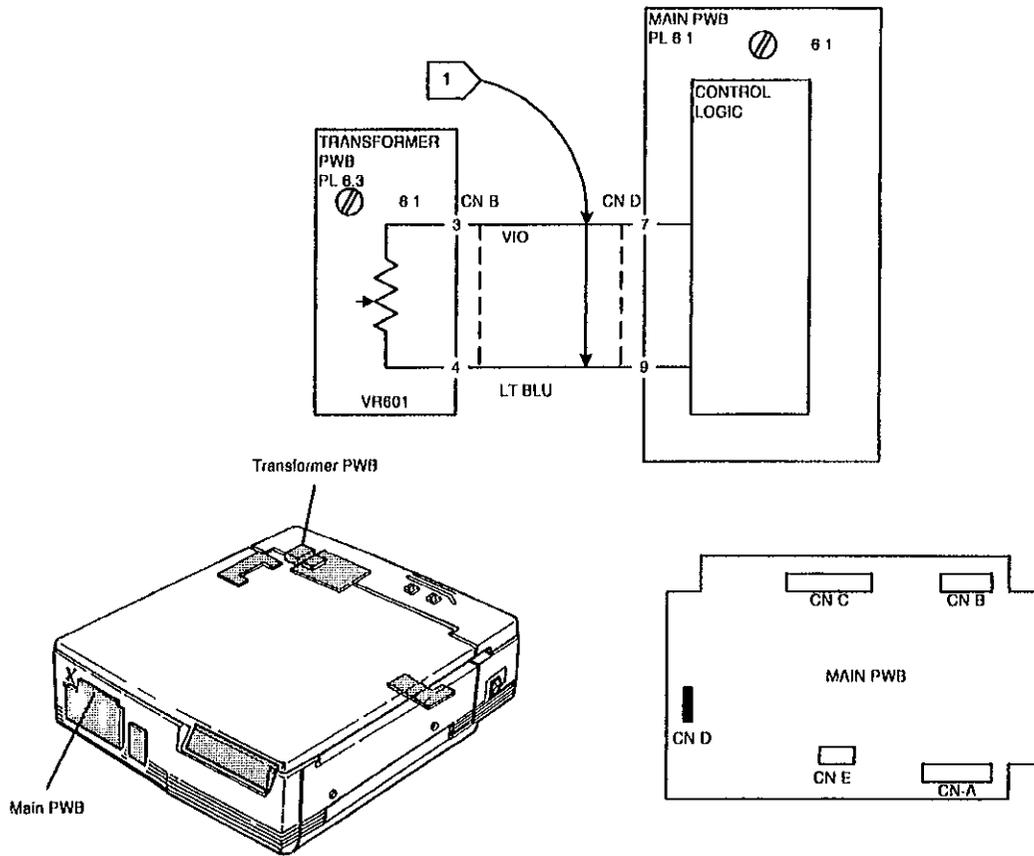
Connect the meter across CN-D pins 7 and 9
There is between 0 and 50K ohms present.

Y N

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

Replace the following items in the order listed,
one at a time, until the problem is resolved

- 1 Exposure lamp (PL 3 1) (Background problems only)
- 2 Auto exposure sensor (PL 3.1)
- 3 Drum cartridge (PL 4 2)



6.2 COOLING MOTOR MOT2 RAP

Switch the power on and allow the copier to warm up (Start lamp lit)

Wait 90 seconds to allow the copier to enter the Power Shut-off or Power Save mode (Ready lamp flashing)

Connect the meter between CN-B-10 (+) on the main PWB and chassis (-).

There is +24 VDC present.

Y N

Go to Flag 1 and check for an open circuit

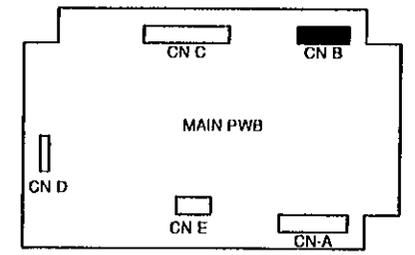
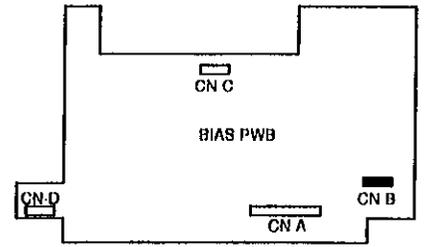
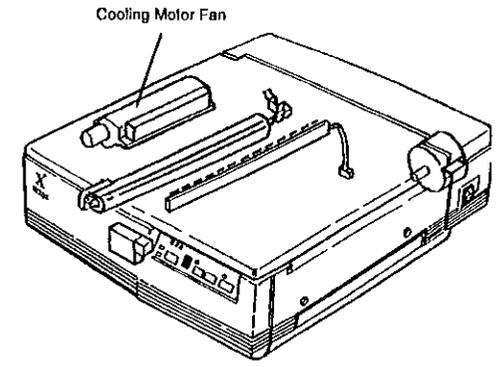
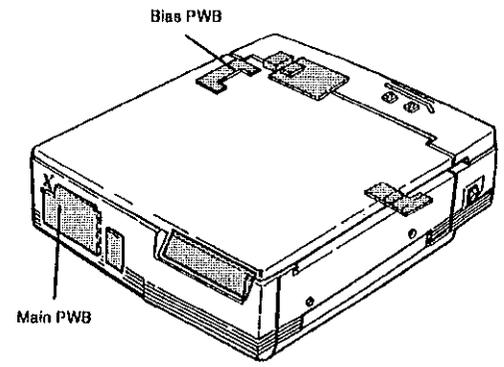
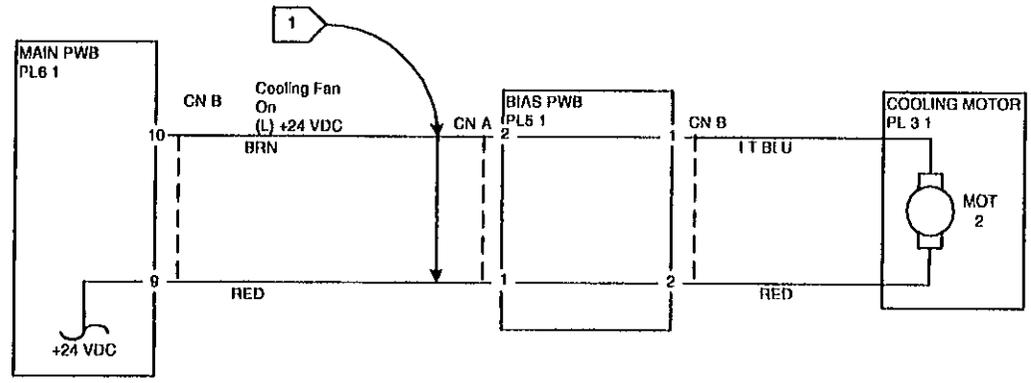
Switch the power off, then on

There is 0 VDC present.

Y N

Replace the main PWB

Replace the cooling motor MOT2



9.1 DEVELOPER BIAS RAP

NOTE: Enter this RAP only if ADJ 9 1 Bias Voltage cannot be adjusted

Connect the meter between CN-D-1 (+) on the bias PWB and chassis (-)

Press **Start**.

There is -250 VDC present.

Y N

Connect the meter between CN-A-8 (+) on the bias PWB and chassis (-)

Switch the power off, then on

There is +32 VDC present.

Y N

Go to Flag 3 and check for an open circuit

Connect the meter between CN-B-12 (+) on the main PWB and chassis (-).

Switch the power off, then on

There is +24 VDC present.

Y N

Go to Flag 2 and check for an open circuit.

Press **Start**.

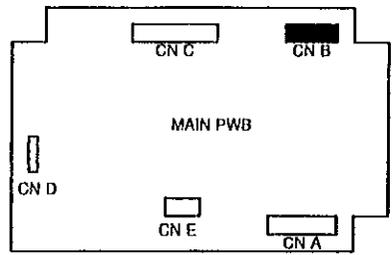
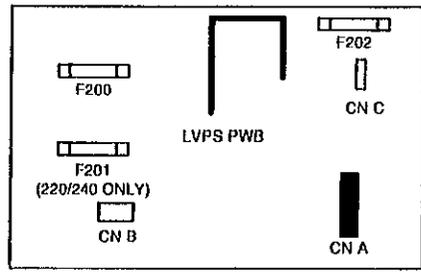
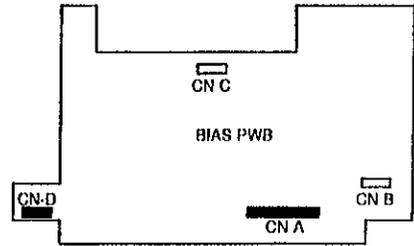
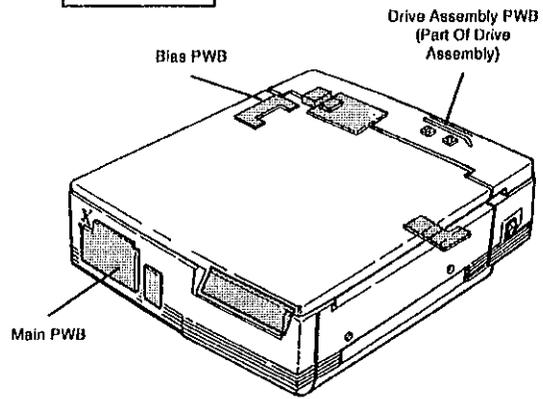
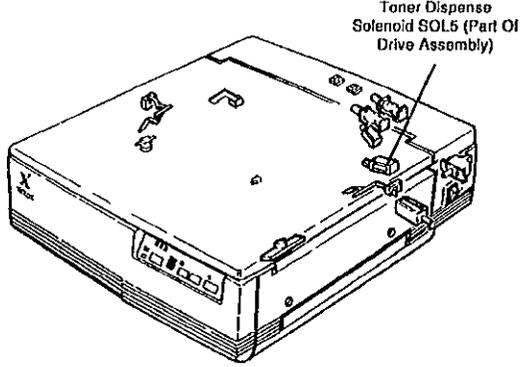
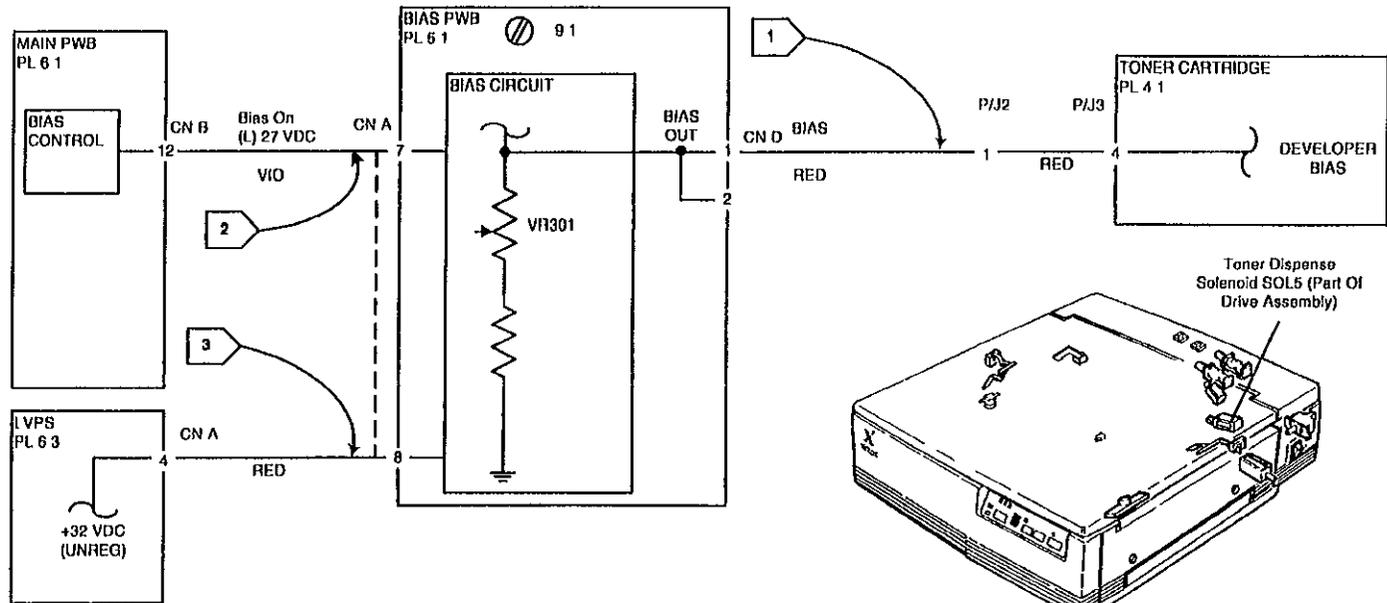
The voltage decreased to approximately 0 VDC.

Y N

Replace the main PWB

Replace the Bias PWB

Go to Flag 1 and check for an open circuit.



9.2 BLANK COPY RAP

Perform GP1 Image on the Photoreceptor Procedure (Section 6)

There is an image on the photoreceptor.

Y N

Switch off the copier.

Connect (+) lead to CN1-2 on the HVPS, (-) lead to chassis. Switch on the copier

Approximately +27 VDC is present.

Y N

Connect (+) lead to CN1-3; (-) lead to chassis.

Approximately +32 VDC is present.

Y N

Go to Flag 2 and check for an open circuit

Replace the HVPS.

Connect (+) lead to CN-B-11 on the Main PWB, (-) lead to chassis

Approximately +27 VDC is present.

Y N

Go to Flag 1 and check for an open circuit

Press the **Start** button.

The voltage decreased to approximately 0 VDC.

Y N

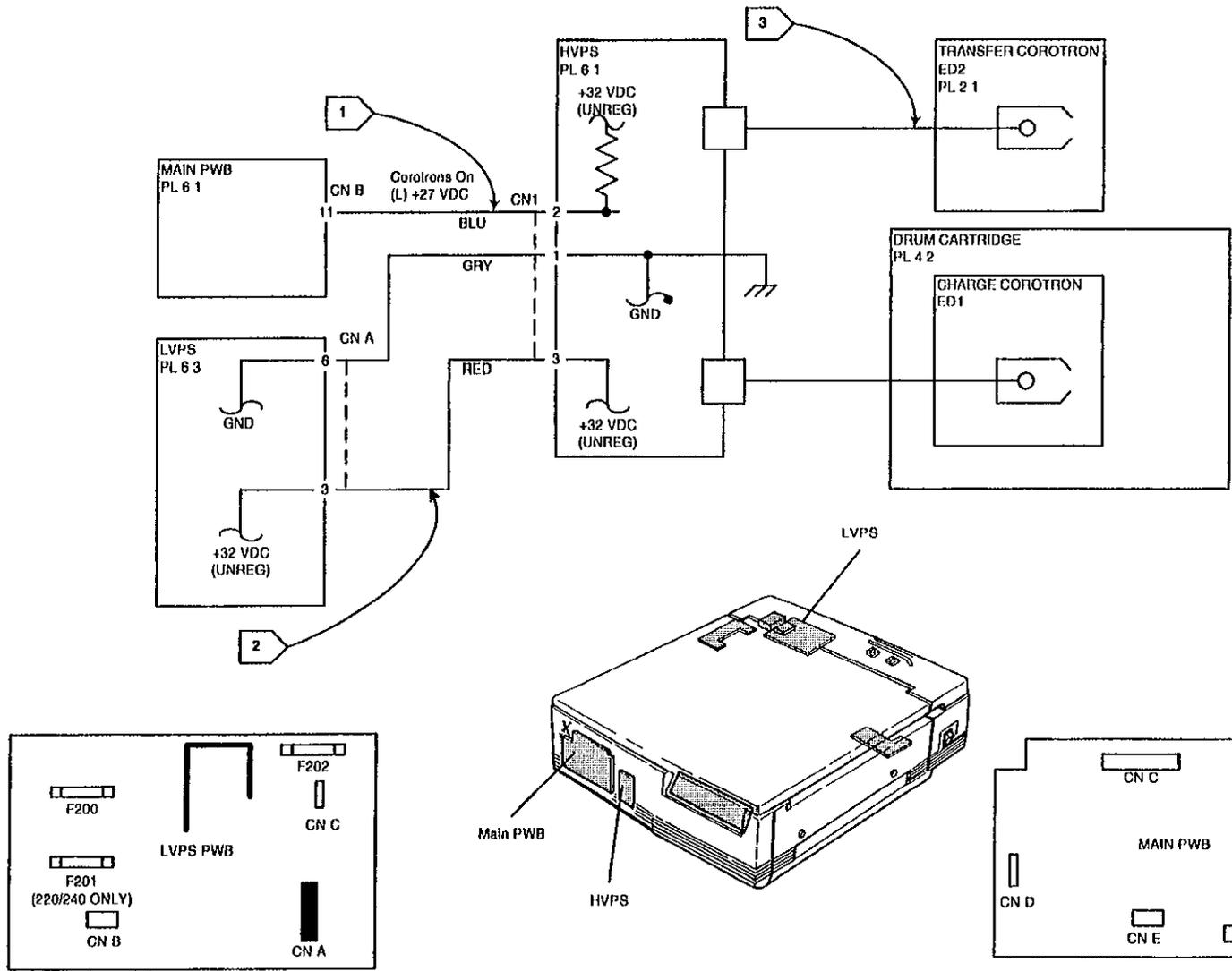
Replace the Main PWB.

A B

A B

Replace the drum cartridge

Go to Flag 3. Inspect the transfer corotron wire for an open or for signs of arcing. Repair as required. If OK, clean the spring on the transfer corotron and the contact that interfaces with it. Inspect the contact and spring for damage. If OK, replace the HVPS



9.3 TONER DISPENSE RAP

- 1 Background related problem:
Connect (+) lead to CN-C-2 on the main PWB, (-) lead to chassis. Switch on the copier.

Approximately +24 VDC is present.

Y N

Go to Flag 1 and check the wire for a short circuit to ground

Check the Toner Dispense Solenoid SOL5 for mechanical binding

- 2 Light copy related problem:
Make two copies with the document cover open and no document on the glass. Switch off the copier.

Connect (+) lead to CN-C-16 on the main PWB, (-) lead to chassis. Switch on the copier.

Approximately +5 VDC is present.

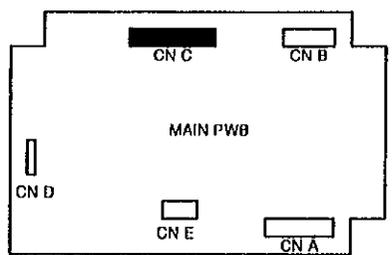
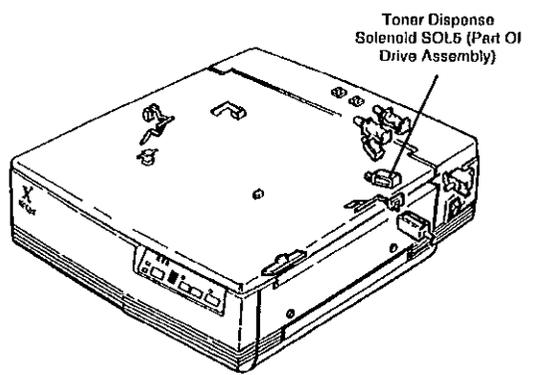
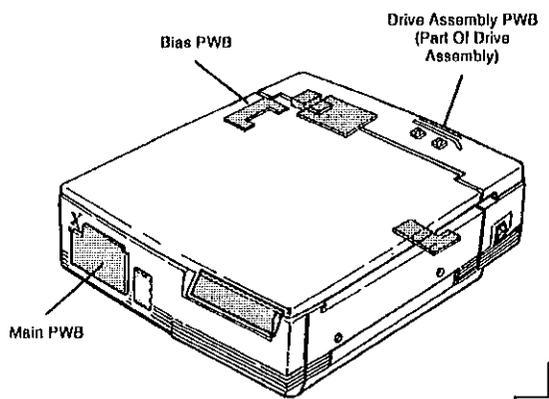
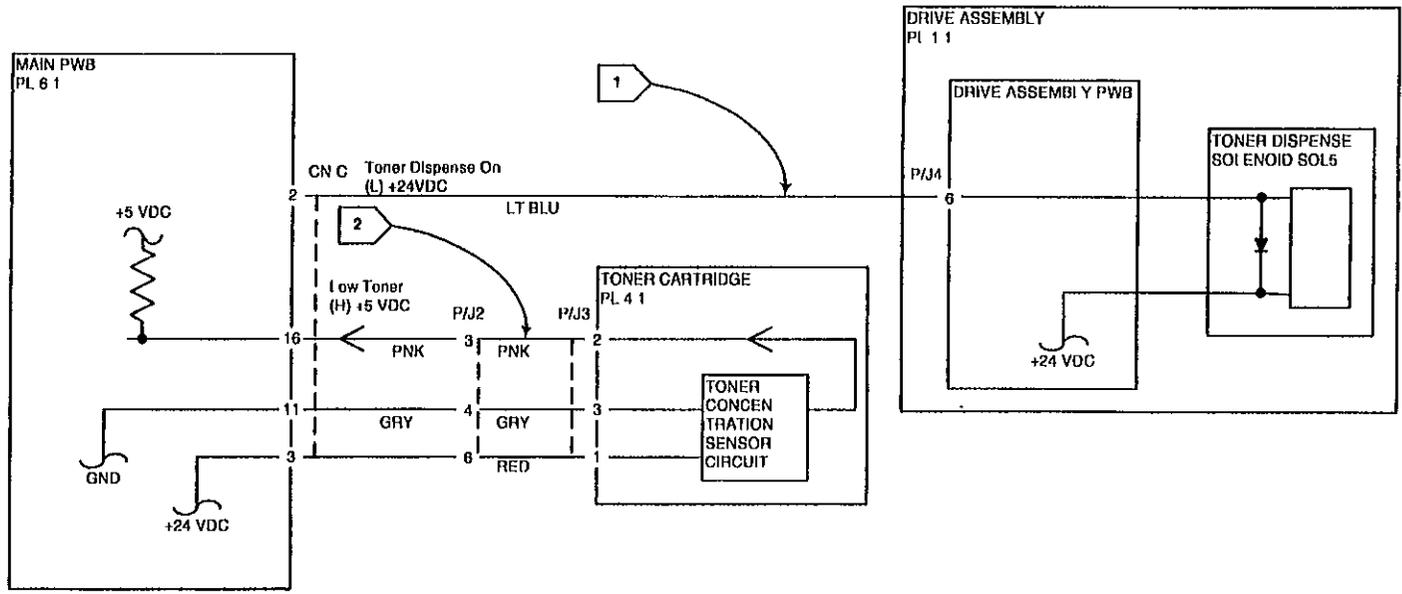
Y N

A B

A B

Go to Flag 2 and check the wire for a short circuit to ground. If OK, replace the toner cartridge.

This indicates that the toner concentration sensor circuit is OK. Replace the toner cartridge.



9.4 COROTRONS ON CONTINUOUSLY RAP

*NOTE. Enter this RAP only from CQ 3.3
Deletions (Front Edge To Rear Edge) RAP*

Switch the power on and allow the copier to warm up (Start lamp lit).

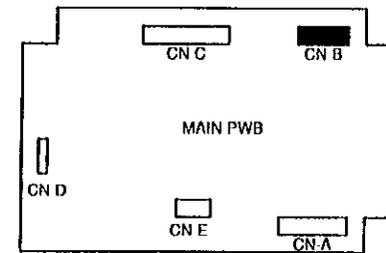
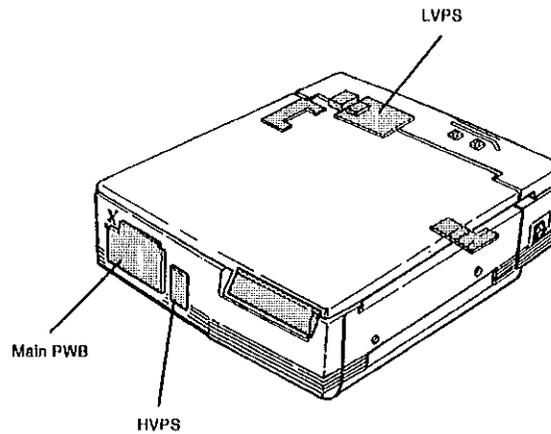
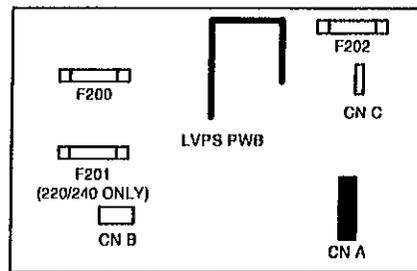
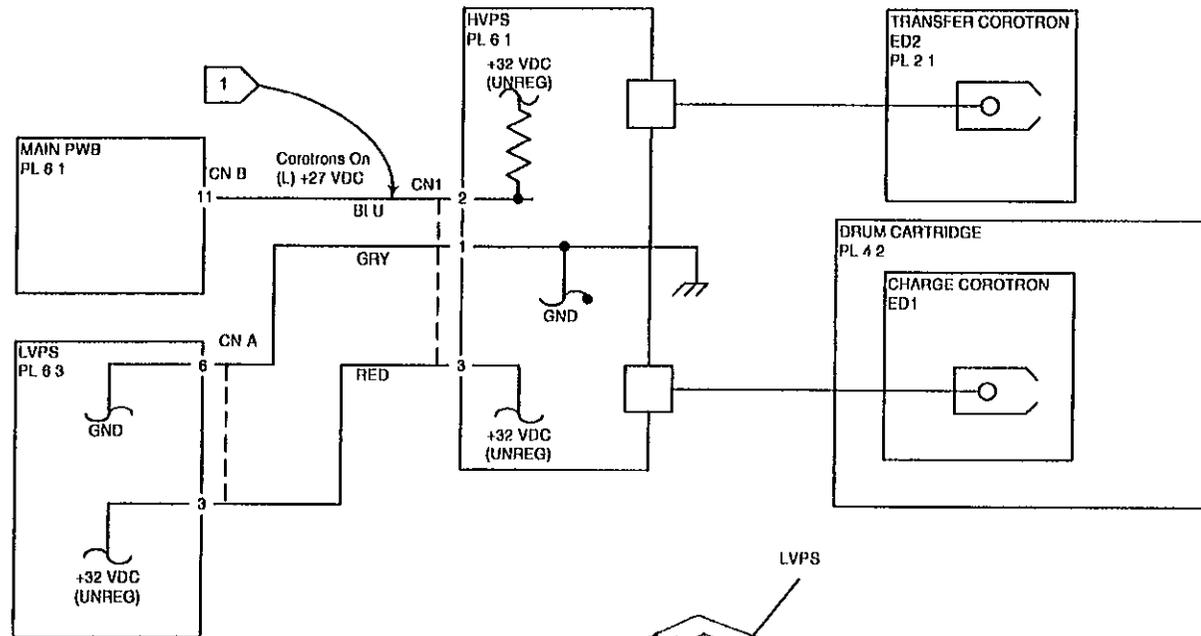
Connect the meter between CN-B-11 (+) on the main PWB and chassis (-).

There is approximately +27 VDC present.

Y N

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

Replace the HVPS and the drum cartridge.



Section Contents

TITLE	PAGE	TITLE	PAGE
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CQ 2 1 BACKGROUND (OVERALL) RAP	3-6	CQ 12 UNEVEN DENSITY (FRONT EDGE TO REAR EDGE) RAP	3-11
CQ 2 2 BACKGROUND BANDS (LEAD EDGE TO TRAIL EDGE) RAP	3-6	CQ 13 UNFUSED COPY RAP	3-11
CQ 2 3 BACKGROUND BANDS (FRONT EDGE TO REAR EDGE) RAP	3-6		
CQ 3 1 DELETIONS (RANDOM OR REPETITIVE SPOTS) RAP	3-7		
CQ 3 2 DELETIONS (LEAD EDGE TO TRAIL EDGE) RAP	3-7		
CQ 3 3 DELETIONS (FRONT EDGE TO REAR EDGE) RAP	3-7		
CQ 4 LIGHT COPY RAP	3-8		
CQ 5 LINES AND STREAKS RAP ..	3-8		
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CQ 8 RESOLUTION RAP	3-9		
CQ 9 SKEW RAP	3-9		
CQ 10 SKIPS AND SMEARS RAP .. .	3-10		



CQ 1 COPY DEFECT ENTRY RAP

1. Select the defect that matches the copy quality problem from the DEFECT column of the four tables (Figures 1, 2, and 3)
2. Make several copies of the test pattern 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

Using the Side A copies (Test Pattern 82P524)

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 a guideline only, not a specification.)	Go to CQ 4 Light Copy RAP.
Misregistration (lead edge)	The center 10 mm reference line on the copy must be 2.5 ± 1.5 mm from the lead edge of a 100% copy.	Go to CQ 6 Misregistration (Lead Edge) RAP.
Skew	Refer to the two outside 10 mm reference targets on the copy to ensure that they are within 2.0 mm with respect to each other (This is a guideline only, not a specification.)	Go to CQ 9 Skew RAP
Unfused copy	Gently rub the .7 patch four times with a paper towel (twice top-to-bottom and twice side-to-side).	Go to CQ 13 Unfused Copy RAP.

Using the Side B copies (Test Pattern 82P524)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
Skips / smears	The 2.5 LP/mm array for a 100% copy should be completely resolved (This is a guideline only, 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 size of the image on the copy is not equal to the size of the image on the original.	If image is distorted, go to CQ 10 Skips / Smears RAP. Otherwise, replace the Selfoc Lens.
Resolution	The 4.3 LP/mm lines of all the resolution targets in both the top-to-bottom direction and the side-to-side direction should be resolved completely (This is a guideline only, not a specification.)	Go to CQ 8 Resolution RAP



Using the customer's original

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.
Blank / nearly blank copies	The copy is white, there is no image or only a very faint image on the copy.	Go to 9.2 Blank Copy RAP in section 2.
Color original / halftone defect	Poor color original / halftone reproduction.	Go to 6.1 Exposure RAP in section 2.
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.
Uneven density	Image darkness varies across the width of the copy	Go to CQ 12 Uneven Density (Front Edge to Rear Edge) RAP.

Using the dark dusting (produced by making a copy with the platen cover open)

DEFECT	DEFINITION OR SPECIFICATION	REFERENCE
DELETIONS	<p>There is an area of the copy which carries no toner image or a very faint one. The deleted areas may be any shape or randomly distributed over the copy.</p> <p>NOTE: There is an intentional 9 mm deletion (maximum) along the rear edge of all the copies.</p> <p>(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.)</p>	<p>Go to CQ 3.1 Deletions (Random or Repetitive Spots) RAP</p> <p>Go to CQ 3.2 Deletions (Lead Edge to Trail Edge) RAP</p> <p>Go to CQ 3.3 Deletions (Front Edge to Rear Edge) RAP</p>



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 (82P524) 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 MIDDLE (Auto Exposure) 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

Replace the Toner Cartridge (PL 4.1)

Go to 9.3 Toner Dispense RAP

1. Perform ADJ 9.1 Developer Bias.

NOTE: If this adjustment cannot be obtained, go to 9.1 Developer Bias RAP

2. Perform ADJ 6.1 Exposure

NOTE: If this adjustment cannot be obtained, go to 6.1 Exposure RAP

3. Replace the Toner Cartridge (PL 4.1).
4. Replace the Drum Cartridge (PL 4.2)

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

PROCEDURE

NOTE: Examine the copy as it is oriented in the receiving tray. The "lead edge" of the copy means the edge that was first to exit the fuser. The "trail edge" of the copy means the edge that was last to exit the fuser.

1. Perform GP1 Image on the Photoreceptor procedure (Section 6)
 - **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 OK, go to 6.1 Exposure RAP
 - **If the band does not appear on the photoreceptor**, clean the Transfer Corotron. If the problem remains, replace the Transfer Corotron Wire (PL 2.1).

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

PROCEDURE

NOTE: Examine the copy as it is oriented in the receiving tray. The "front edge" of the copy means the edge that faces the front of the copier as the copy exited the fuser. The "rear edge" of the copy means the edge that faces the rear of the copier as the copy exited the fuser.

1. If background appears as a fixed band or bands, go to 9.6 Developer Bias RAP.
2. If background appears as a random band or bands, perform GP1 Image on the Photoreceptor procedure (Section 6)
 - **If the band appears on the photoreceptor**, observe the Exposure Lamp as it is scanning
 - If the Exposure Lamp flashes or dims, replace the Exposure Lamp (PL 3.1). If the problem remains, replace the LVPS (PL 6.3). If the problem still remains, replace the Main PWB (PL 6.1). Otherwise, replace HVPS (PL 6.1)
 - If the problem remains, replace the LVPS (PL 6.3)
 - **If the band does not appear on the photoreceptor**, replace the HVPS (PL 6.1)

CQ 3.1 DELETIONS (RANDOM OR REPETITIVE SPOTS) RAP

PROCEDURE

- 1 **If the deletion repeats every 58 mm**, inspect the pressure roll for damage and replace it as required (PL 5.1)
- 2 **If the deletion repeats every 80 mm**, inspect the heat roll for damage and replace it as required (PL 5.1).
3. **If the deletion repeats every 95 mm**, see if the defect can be removed by cleaning the photoreceptor with a soft cloth and Film Remover. If the defect cannot be removed, replace the Drum Cartridge (PL 6.1)
- 4 **If the deletion does not repeat every 58, 80, or 95 mm**, perform GP1 Image on the Photoreceptor procedure (Section 6).
 - **If the deletion appears on the photoreceptor**, ensure that the charge corotron is clean. Also, ensure that the developer material is free of contamination. If OK, replace the Toner Cartridge (PL 4.1). If the problem remains, replace the Drum Cartridge (PL 4.2).
 - **If the deletion does not appear on the Drum Cartridge**, replace the copy paper with a new supply. If the problem remains, clean the transfer corotron. If the problem still remains, replace the Transfer Corotron Wire (PL 2.1).

CQ 3.2 DELETIONS (LEAD EDGE TO TRAIL EDGE) RAP

PROCEDURE

NOTE Examine the copy as it is oriented in the receiving tray. The "lead edge" of the copy means the edge that was first to exit the fuser. The "trail edge" of the copy means the edge that was last to exit the fuser.

NOTE There is an intentional 9 mm deletion (maximum) along the rear edge of all copies.

- 1 **If the deletion appears as lines or bands that align with the fuser stripper fingers or the thermistor**, inspect the stripper fingers and the thermistor for contamination or damage. Clean or replace the thermistor as required (PL 5.1)
- 2 Perform GP1 Image on the Photoreceptor procedure (Section 6).
 - **If the deletion appears on the photoreceptor**, ensure that the charge corotron is clean. Also, check the magnetic roll on the Toner Cartridge and the photoreceptor for foreign materials such as a staple or a piece of paper. If OK, replace the Toner Cartridge (PL 4.1). If the problem still remains, replace the Drum Cartridge (PL 4.2)
 - **If the deletion does not appear on the photoreceptor**, clean the transfer corotron. If the problem remains, replace the Transfer Corotron Wire (PL 2.1)

CQ 3.3 DELETIONS (FRONT EDGE TO REAR EDGE) RAP

PROCEDURE

NOTE Examine the copy as it is oriented in the receiving tray. The "front edge" of the copy means the edge that faces the front of the copier as the copy exited the fuser. The "rear edge" of the copy means the edge that faces the rear of the copier as the copy exited the fuser.

- 1 **If the image deletion is along the lead edge and is more than 4 mm from the lead edge of the copy**, perform ADJ 8.1 Lead Edge Registration
- 2 Perform GP1 Image on the Photoreceptor procedure (Section 6)
 - **If the deletion appears randomly on the photoreceptor**, clean the contact and the spring on the charge corotron and the contacts that interface with them. Inspect these contacts (and the spring) for damage. Also inspect the corotron for signs of arcing. Make the required repairs (PL 6.2). If OK, replace the HVPS (PL 6.1).
 - **If the deletion appears at a fixed location on the photoreceptor**, go to 9.5 Corotrons On Continuously RAP
 - **If the deletion does not appear on the photoreceptor**, clean the spring on the transfer corotron and the contact that interfaces with it. Inspect the contact and the spring for damage. Also inspect the corotron for signs of arcing. Make the required repairs (PL 2.1). If OK, replace the HVPS (PL 6.1).



CQ 4 LIGHT COPY RAP

PROCEDURE

NOTE If main motor appears to be running too fast, go to 4 1 Main Motor RAP in Section 2.

Make one copy of Side A of the Standard Test Pattern (82P524) with the copy contrast control set at the DARK position

The .10 line pair is partially or completely reproduced.

Y N

1 Perform ADJ 9 1 Developer Bias

NOTE If this adjustment cannot be obtained, go to 9 2 Developer Bias RAP.

2 Perform ADJ 6 1 Exposure.

NOTE If this adjustment cannot be obtained, go to 6 1 Exposure RAP.

3 Replace the Toner Cartridge (PL 4 1)

4 Replace the Drum Cartridge (PL 4 2)

Go to 9 4 Toner Dispense RAP

CQ 5 LINES AND STREAKS RAP

INITIAL ACTION

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

PROCEDURE

1 Perform GP1 Image on the Photoreceptor procedure (Section 6)

- **If the line or streak appears on the photoreceptor**, see if the defect can be wiped off the photoreceptor with a soft cloth
 - If the defect can be wiped off the photoreceptor, replace the Cleaning Blade (PL 6 2).
 - Otherwise, try cleaning the photoreceptor with a soft cloth and Film Remover. If the defect cannot be removed, replace the Drum Cartridge (PL 4 2)
- **If the line or streak does not appear on the photoreceptor**, classify the location of the defect
 - If the line or streak aligns with the fuser stripper fingers or the thermistor, inspect the stripper fingers and thermistor for contamination or damage, and for damage they may have caused to the heat roll. Clean or replace these components as required (PL 5.1)
 - Otherwise, inspect the paper path from the transfer corotron to the exit tray for toner buildup in an area that aligns with the line or streak on the copy. Also check the star wheel on the drum cartridge for contamination. Clean or repair these components as required

CQ 6 MISREGISTRATION (LEAD EDGE) RAP

PROCEDURE

NOTE Examine the copy as it is oriented in the receiving tray. The "lead edge" of the copy means the edge that was first to exit the fuser. The "trail edge" of the copy means the edge that was last to exit the fuser.

1. **If misregistration varies from copy to copy,**

- Ensure that the registration roll and the registration pinch roll are clean
- Inspect the registration roll solenoid, SOL 4 (PL 1.3), for binding.
- Inspect the registration roll pawl for wear.
- Inspect the paper path for an obstruction such as a burr.
- Replace the registration roll clutch gear (24T) and the spring (PL 1 3)

2. **If misregistration is constant from copy to copy,**

- Perform the Main Motor Speed adjustment (ADJ 4 1)

NOTE. If this adjustment cannot be obtained, go to 4 1 Main Motor RAP

- Perform ADJ 8 1 Lead Edge Registration.

CQ 7 RESIDUAL IMAGE RAP

PROCEDURE

- 1 Perform GP1 Image on the Photoreceptor procedure (Section 6).
 - **If the residual image appears on the photoreceptor**, replace the Drum Cartridge (PL 4 2)
 - **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 the rolls as required (PL 5.1). If OK, ensure that the surface of the thermistor is clean and that it is correctly positioned against the heat roll

CQ 8 RESOLUTION RAP

INITIAL ACTION

Replace the copy paper with a new supply. Ensure that the optics are clean. Also, ensure that all the platen rail screws are installed and secured [PL 7 2]

PROCEDURE

- 1 Replace the Drum Cartridge (PL 4 2)
2. Replace the Selfoc Lens (PL 3 1)

CQ 9 SKEW RAP

PROCEDURE

- 1 **If the skew occurs from the Bypass Tray and the Main Tray**, determine if skewing varies from copy to copy

If the skewing varies, perform the following

- Ensure that the paper tray guide is set to the correct width of the copy paper
- Inspect the paper path from this tray and the paper registration area for an obstruction such as a burr.
- Inspect the registration roll [PL 2.1] and its pinch roll [PL 2 4] for contamination and wear. Clean the rolls (with Film Remover only) or replace them as required
- Check the condition of the registration pinch roll springs [PL 2 4] to ensure that they are applying an even tension

Otherwise, check the registration edge, that contacts the top of the document, for damage



CQ 10 SKIPS AND SMEARS RAP

PROCEDURE

Perform GP1 Image on the Photoreceptor procedure (Section 6)

The defect appears on the photoreceptor.

Y N

(This indicates that the problem occurs during the transfer process.) Examine the copies you made when entering CQ1.

- **If the smear repeats at a fixed interval**, inspect the gears that provide drive to the fuser for contamination or wear. Clean or replace the gears as required (PL 1 4, 5.1). Also, inspect the gears that provide drive for the paper after it is registered for contamination or wear. Clean the gears or replace them as required (PL 1 4, 2 2)
- **If the smear occurs randomly or at the same location**, perform the following:
 - Ensure that the paper weight meets the specification
 - Clean the transfer corotron wire. If the problem remains, replace the Transfer Corotron Wire (PL 2.1)
 - Replace the HVPS (PL 6.1)

A

A

(This indicates that the problem occurs before the transfer process.) Examine the copies you made when entering CQ1.

- **If the skip occurs at the same location on every copy**, check the platen drive rack for contamination or wear (PL 7 2)
- **If the skip repeats at a fixed interval**, perform the following:
 - Inspect the gears that provides drive to the Copy Cartridge for contamination or wear. Clean or replace the gears as required (PL 1.3).
 - Inspect the gears that provide drive to the platen assembly for contamination or wear. Clean the gears or replace them as required (PL 1 1)
- **If the skip occurs randomly**, check the platen forward clutch, SOL1, for smooth operation. Replace the clutch as required (PL 1 1)

CQ 11 SPOTS RAP

PROCEDURE

- 1 **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.
- 2 **If the spots do not occur in the same location on every copy**, perform GP1 Image on the Photoreceptor procedure (Section 6)
 - **If the spots appear on the photoreceptor**, see if the defect can be wiped off the photoreceptor with a soft cloth.
 - If the defect can be wiped off the photoreceptor, inspect the Toner Cartridge area and the developer material for contamination. Replace the Toner Cartridge as required (PL 4.1)
 - Otherwise, try cleaning the photoreceptor with a soft cloth and Film Remover. If the defect cannot be removed, replace the Drum Cartridge (PL 4 2).

(Continued)

CQ 11 SPOTS RAP (CONTINUED)

- If the spots do not appear on the photoreceptor, inspect the paper path from the transfer corotron to the copy output tray for toner build-up in an area that aligns with the spots on the copy. Clean or repair these components as required. If OK, inspect the stripper fingers and the thermistor for contamination or damage, and for damage they may have caused to the heat roll. Clean or replace these components as required (PL 5 1). Also check the star wheel on the drum cartridge for contamination. Also, check the pressure roll for contamination or damage. Clean or replace the Pressure Roll as required (PL 5 1).

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

NOTE. Examine the copy as it is oriented in the receiving tray. The "front edge" of the copy means the edge that faces the front of the copier as the copy exited the fuser. The "rear edge" of the copy means the edge that faces the rear of the copier as the copy exited the fuser.

PROCEDURE

- 1 Make a copy with the platen cover open. **The density is even from the front edge to the rear edge of the copy.**

Y N

Perform GP1 Image on the Photoreceptor procedure (Section 6).

- If the density appears uneven on the photoreceptor, replace the Toner Cartridge (PL 4 1). If the problem remains, replace the Drum Cartridge (PL 4.2).
- If the density appears even on the photoreceptor, clean the Transfer Corotron. If the problem remains, replace the Transfer Corotron Wire (PL 2 1).

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, go to 6 1 Exposure RAP.

CQ 13 UNFUSED COPY RAP

PROCEDURE

- 1 Replace the copy paper with a new supply.
- 2 Replace the Heat Rod HTR1 (PL 5 1).
- 3 Replace the Thermistor RT1 (PL 5 1).



Title	Page
<i>Adjustments</i>	
Main Drives	
ADJ 4 1 MAIN MOTOR SPEED	4-41
Optics	
ADJ 6 1 EXPOSURE	4-42
Paper Feed and Registration	
ADJ 8 1 LEAD EDGE REGISTRATION	4-44
Xerographics	
ADJ 9 1 BIAS VOLTAGE	4-45

REP 1.1 Low Voltage Power Supply (LVPS)

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following:
 - a) The Platen Cover/Glass Assembly (REP 14.4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
- c) The Drum Cartridge (REP 9.2)
- d) The Left Cover, the Right Cover, and the Upper Rear Cover (REP 14.2)
- e) The Lower Rear Cover (REP 14.3)
- f) The Transformer PWB (REP 3.3)

- 2 (Figure 1) Remove the low voltage power supply

NOTE: There are tie-wraps that have to be cut to relieve the wire harnesses

Replacement

- 1 Perform the following Adjustment Checks.
 - ADJ 4 1 Main Motor Speed
 - ADJ 6.1 Exposure
 - ADJ 8 1 Lead edge Registration
 - ADJ 9 1 Bias Voltage

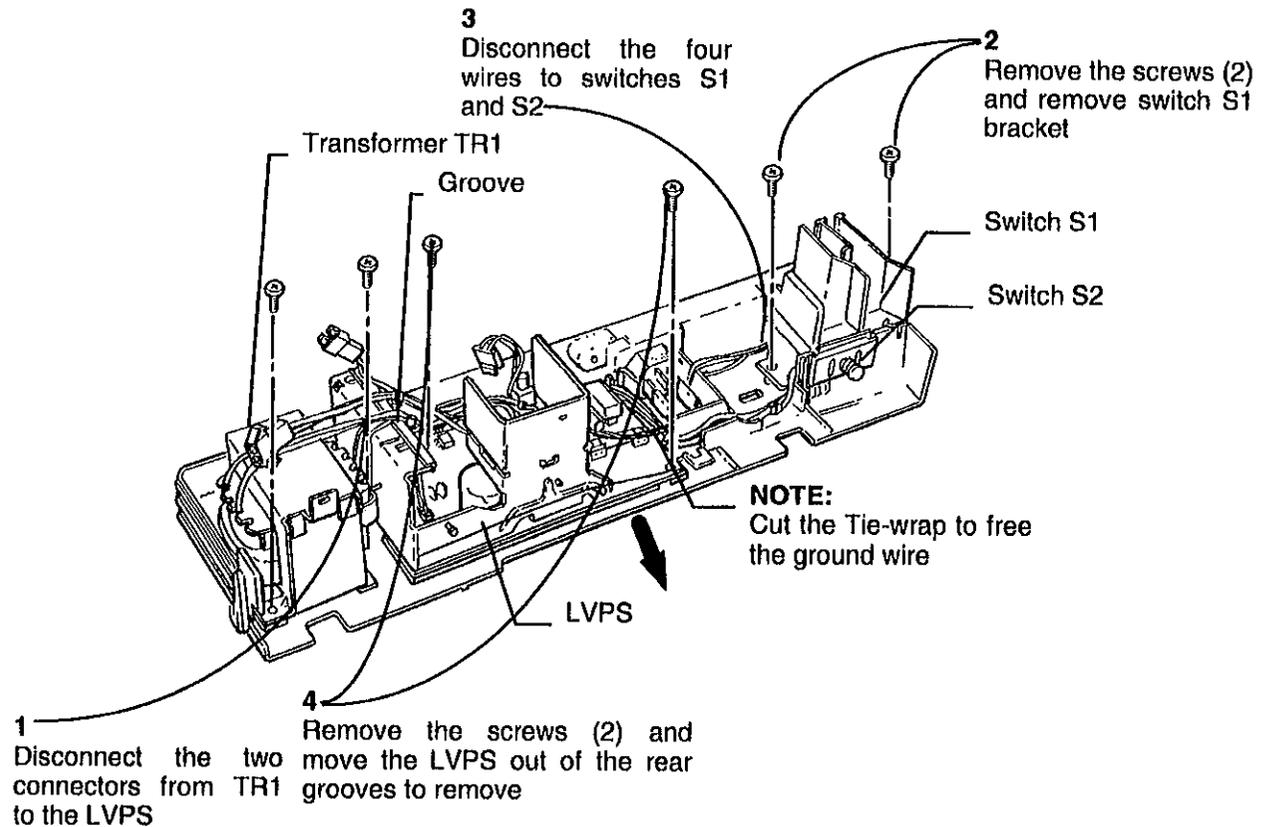


Figure 1. Removing the LVPS.

REP 1.2 Toner Cartridge Interlock Switch (S2)

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1 Remove the following:

- a) The platen cover/glass assembly (REP 14 4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9 1)
- c) The Drum Cartridge (REP 9 2)
- d) The Left Cover, the Right Cover, and the Upper Rear Cover (REP 14 2)
- e) The Lower Rear Cover (REP 14 3)

2 (Figure 1) Remove the toner cartridge interlock switch (S2)

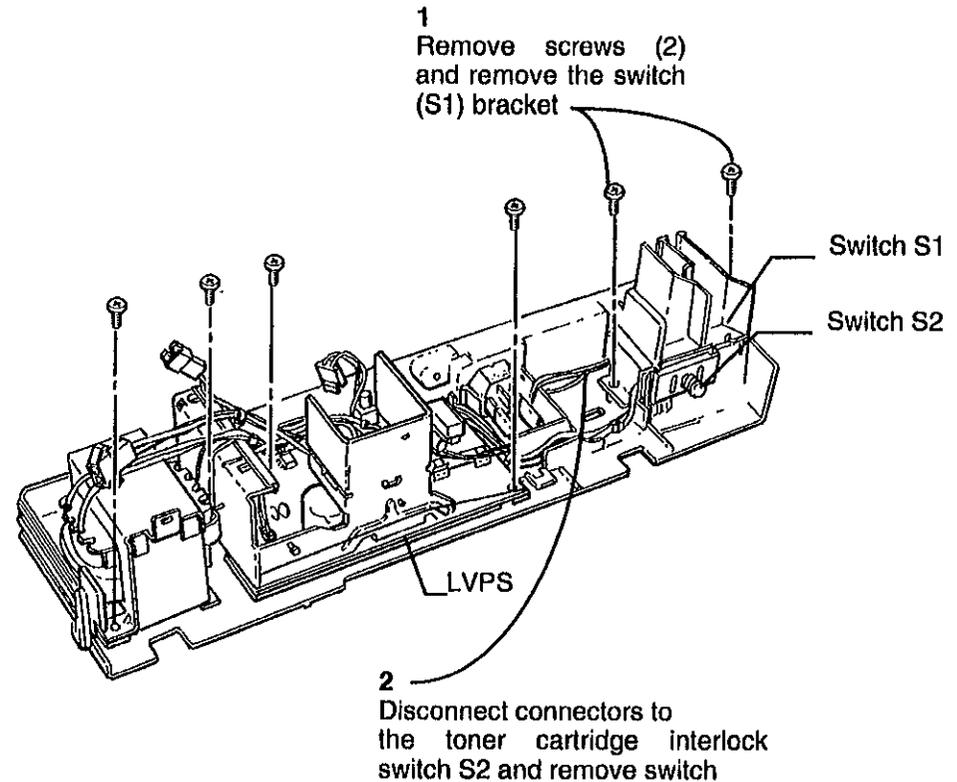


Figure 1. Removing the Interlock Switch S2.

REP 3.1 Main PWB

Parts List on PL 6.1

Removal

1. Record the copy count.
 - a) Press the Stop button

NOTE: After approximately 7 seconds, the display will flash each number Five numbers will flash indicating the copy count

- b) Record the numbers that are displayed
The most significant digit of the billing count is flashed first

WARNING

Switch off the copier power and disconnect the power cord.

2. Remove the following:

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- a) The Toner Cartridge (REP 9 1)
- b) The Drum Cartridge (REP 9 2)
- c) The Left Cover, the Right Cover, and the Front Cover (REP 14 2)

- 3 (Figure 1) Remove the main PWB.

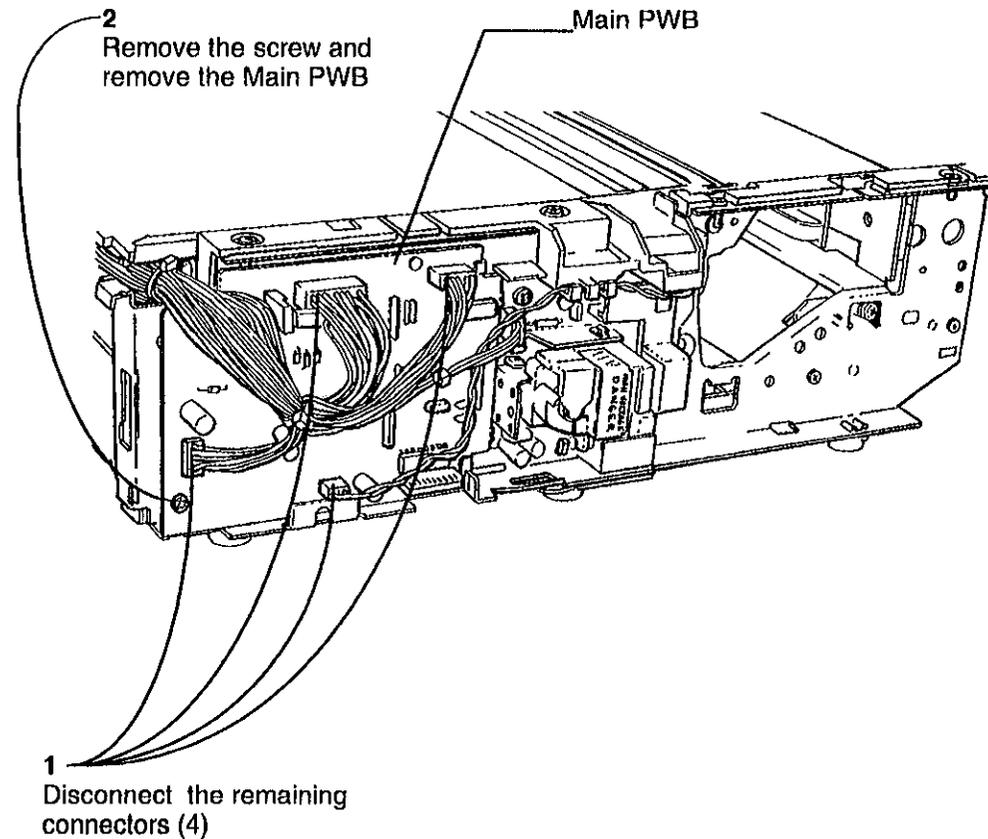


Figure 1. Removing the Main PWB.

Replacement

- 1 Perform the following Adjustment Checks:
 - ADJ 4 1 Main Motor Speed
 - ADJ 6 1 Exposure
 - ADJ 8.1 Lead Edge Registration

REP 3.2 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 following:

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- a) The Toner Cartridge (REP 9.1)
- b) The Drum Cartridge (REP 9.2)
- c) The left cover, the right cover, and the front cover (REP 14.2)
- d) The Main PWB (REP 3.1)

2 (Figure 1) Remove the high voltage power supply

Replacement

- 1 Perform the following Adjustment Check
 - ADJ 6.1, Exposure

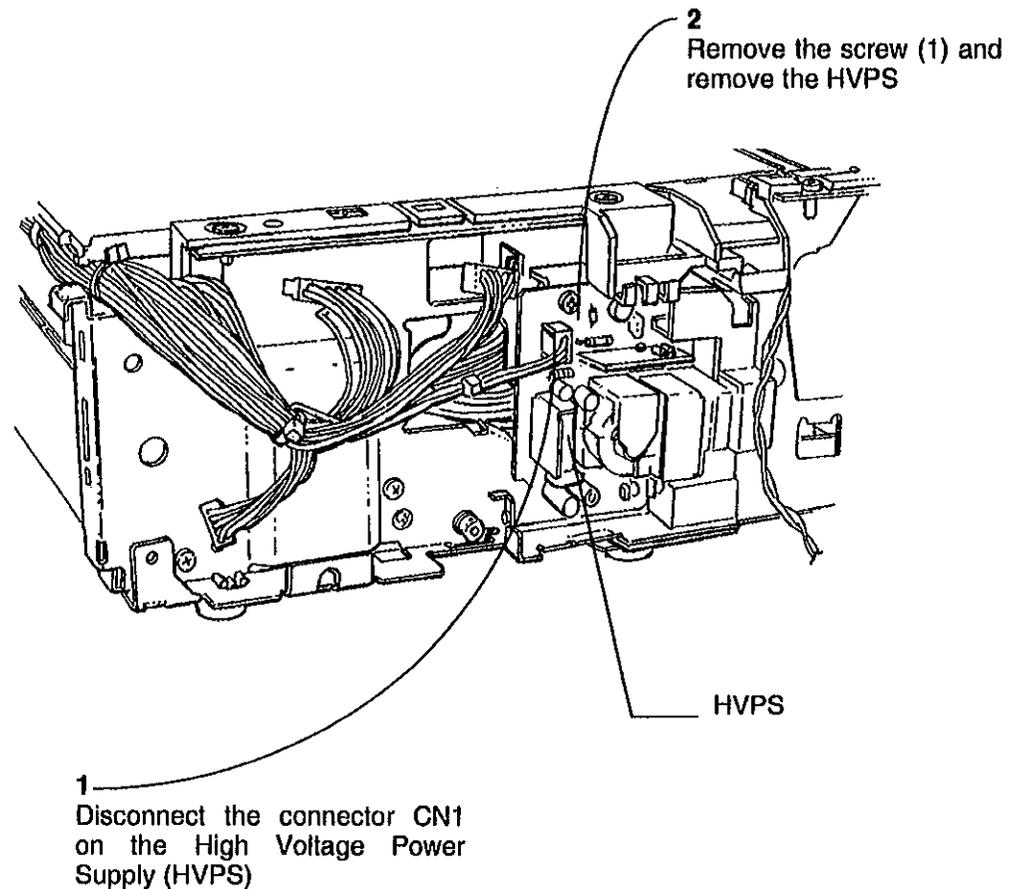


Figure 1. Removing the HVPS.

REP 3.3 Transformer PWB

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The Platen Cover/Glass Assembly. (REP 14 4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, and the Upper Rear Cover. (REP 14 2)
- 2 (Figure 1): Remove the Transformer PWB

Replacement

- 1 Perform the following Adjustment Check:
 - ADJ 6.1, Exposure

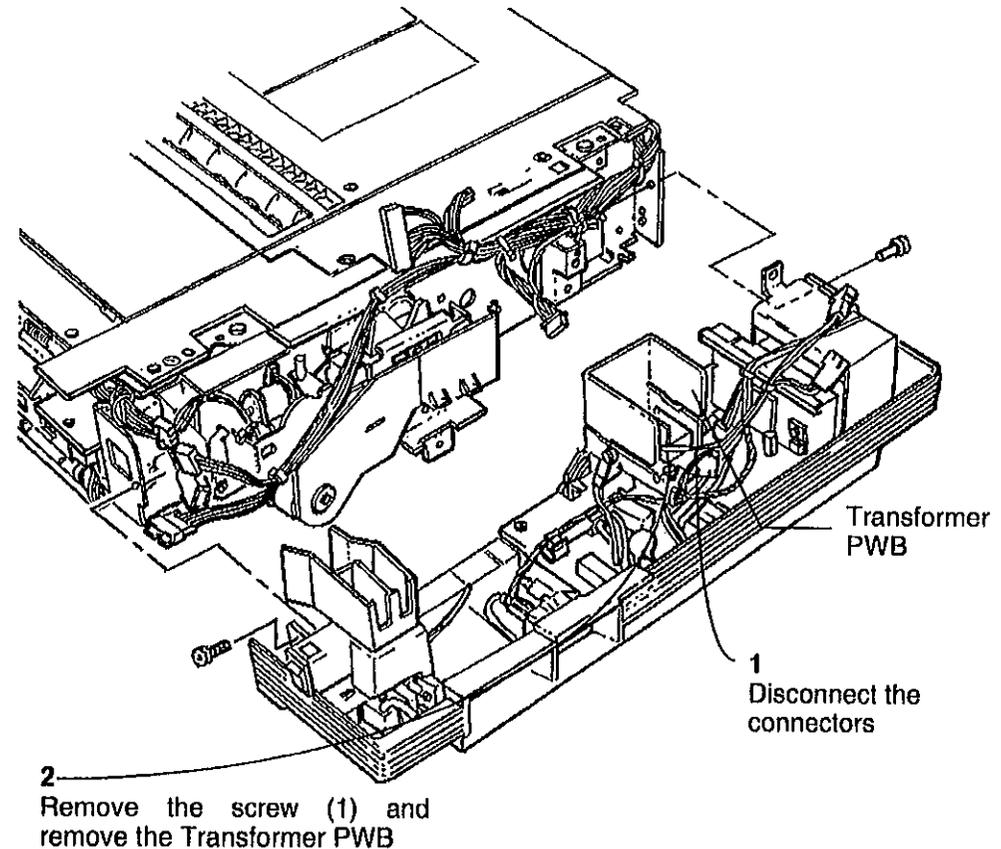


Figure 1. Removing the Transformer PWB.



REP 3.4 Transformer (TR1)

Parts List on PL 6.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following.
 - a) The Platen Cover/Glass Assembly (REP 14.4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
- c) The Drum Cartridge (REP 9.2)
- d) The Left Cover, the Right Cover, and the Upper Rear Cover (REP 14.2)
- e) The Lower Rear Cover (REP 14.3)

- 2 (Figure 1). Remove the Transformer (TR1).

Replacement

1. Perform the following Adjustment Check.
 - ADJ 6.1, Exposure

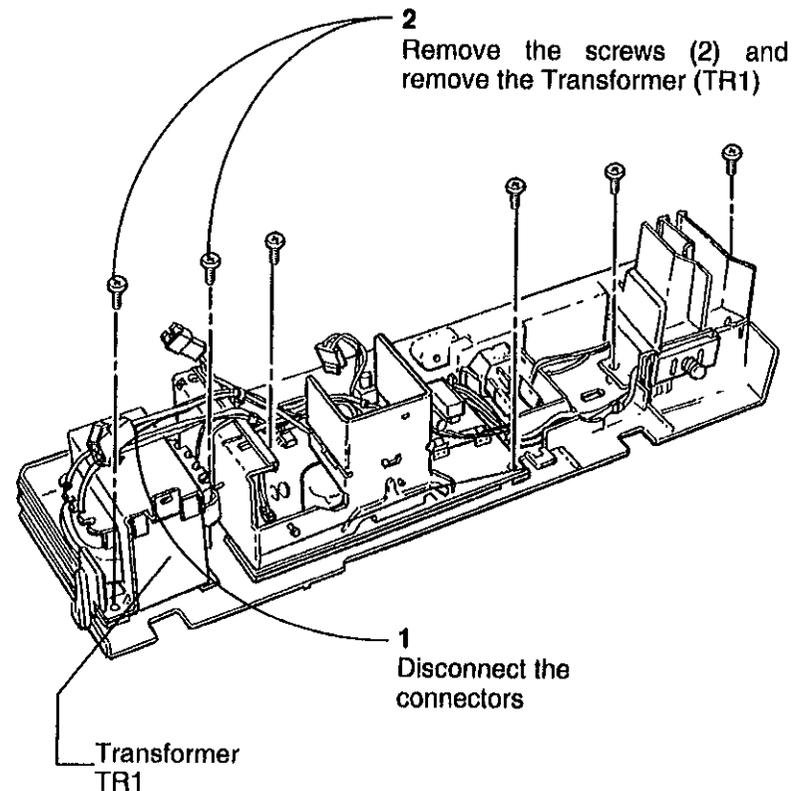


Figure 1. Removing the Transformer TR1.

REP 3.5 Bias PWB

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the following:

- a) The platen cover/glass assembly (REP 14 4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
- c) The Drum Cartridge (REP 9 2)
- d) The Left Cover, the Right Cover, and the Rear Cover (REP 14 2)
- e) The Fuser Assembly (REP 10 4)

2 (Figure 1) Remove the Bias PWB.

Replacement

1. Perform the following Adjustment Check
 - ADJ 9 1, Bias Voltage

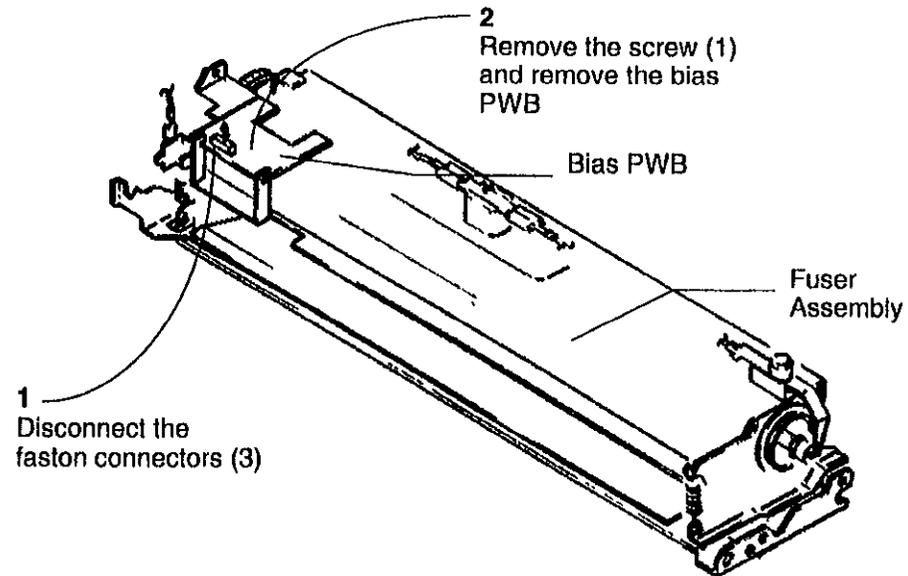


Figure 1. Removing the Bias PWB

REP 4.1 Main Drive Assembly and Drive Gears

Parts List on PL 1.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the following.
 - a) The platen cover/glass assembly (REP 14.4)
 - b) The Toner Cartridge (REP 9.1)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- c) The Drum Cartridge (REP 9.2)
 - d) The left cover, the right cover, and the upper rear cover (REP 14.2)
 - e) The Optics Frame (REP 6.3)
 - f) The lower rear cover (REP 14.3)
- 2 (Figure 1) Remove the Main Drive Assembly
- 3 (Figure 2) When removing the drive gears, observe that the reduction gear, A, is mounted with a left-hand thread screw.

Replacement

- 1 Perform the following Adjustment:
 - ADJ 4.1 Main Motor Speed

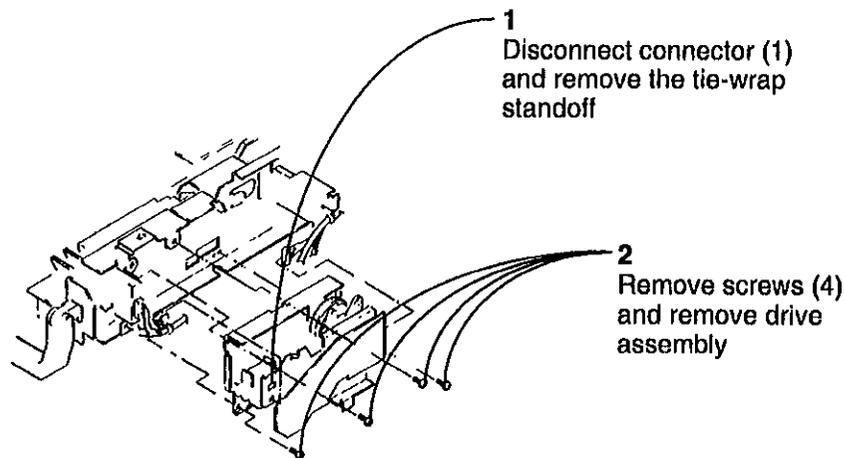


Figure 1. Removing the Main Drive Assembly

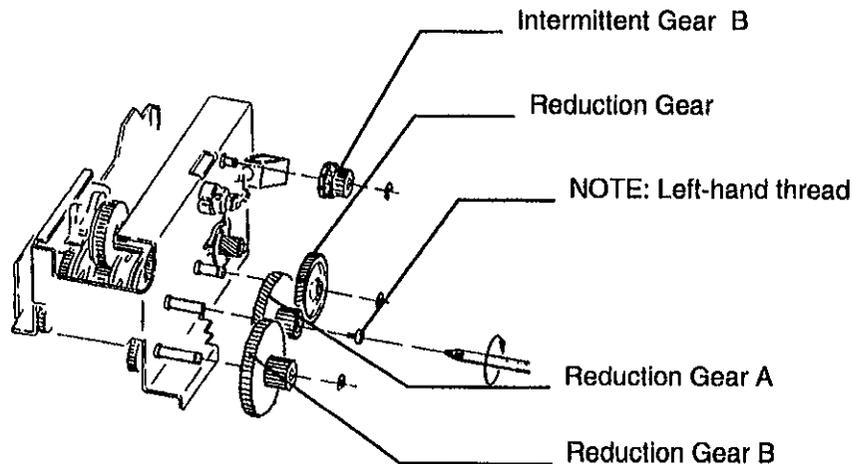


Figure 2. Removing the Drive Gears

REP 6.1 Exposure Lamp

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the following:
 - a) The platen cover/glass assembly. (REP 14 4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge.

- b) The Toner Cartridge (REP 9.1)
- c) The Drum Cartridge (REP 9 2)
- d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14 2)

2. (Figure 1) Remove the exposure lamp.

Replacement

NOTE: When reinstalling the exposure lamp cover, insert the tab side first

- 1 Perform the following Adjustment
 - ADJ 6 1 Exposure

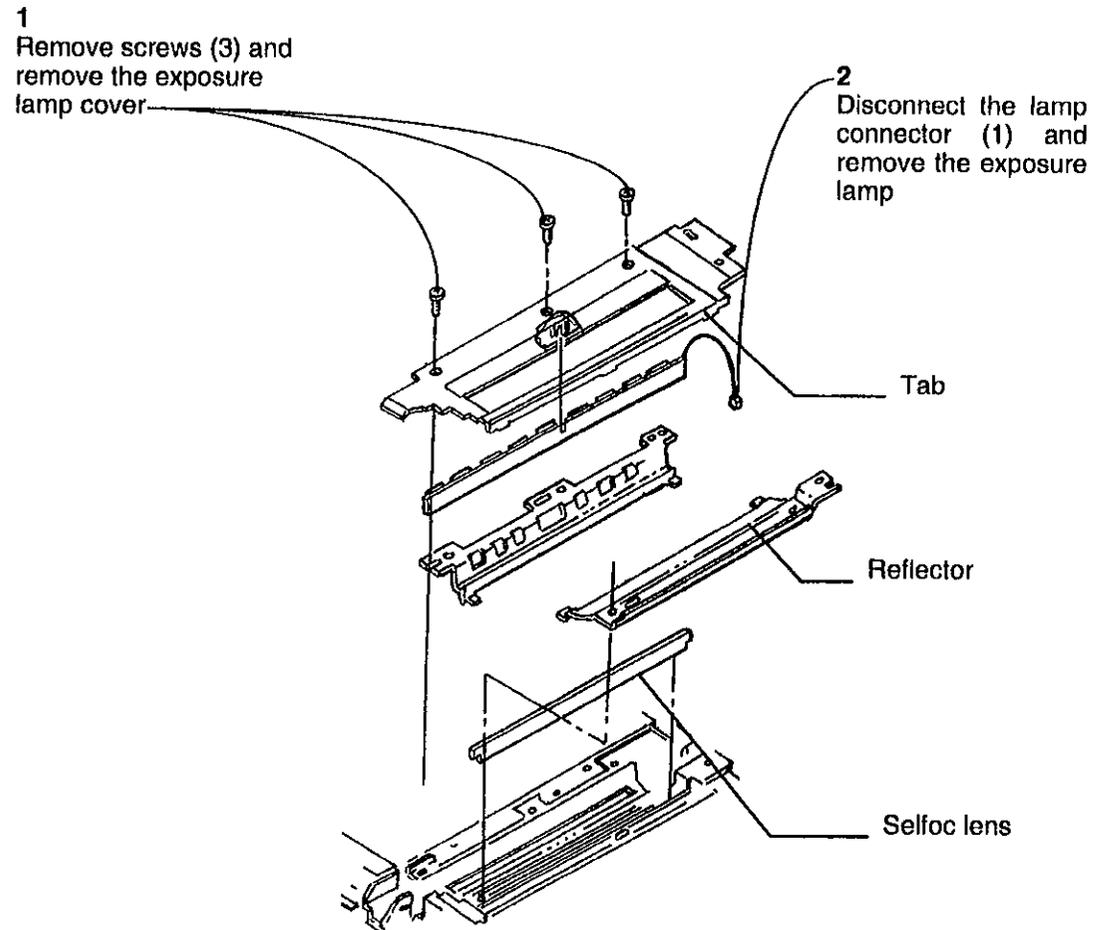


Figure 1. Removing the Exposure Lamp

REP 6.2 Selfoc Lens / 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 following.
 - a) The platen cover/glass assembly (REP 14 4)

NOTE The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9 1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14 2)
- 2 (Figure 1) Remove the selfoc lens or the auto exposure sensor (CR1)

Replacement

NOTE: The plastic shield on the Selfoc lens is positioned so that the narrow side goes to the right

NOTE: The auto exposure sensor (CR1) is glued in place. If it is replaced, use an epoxy glue or plibond (63P505) to refasten to frame

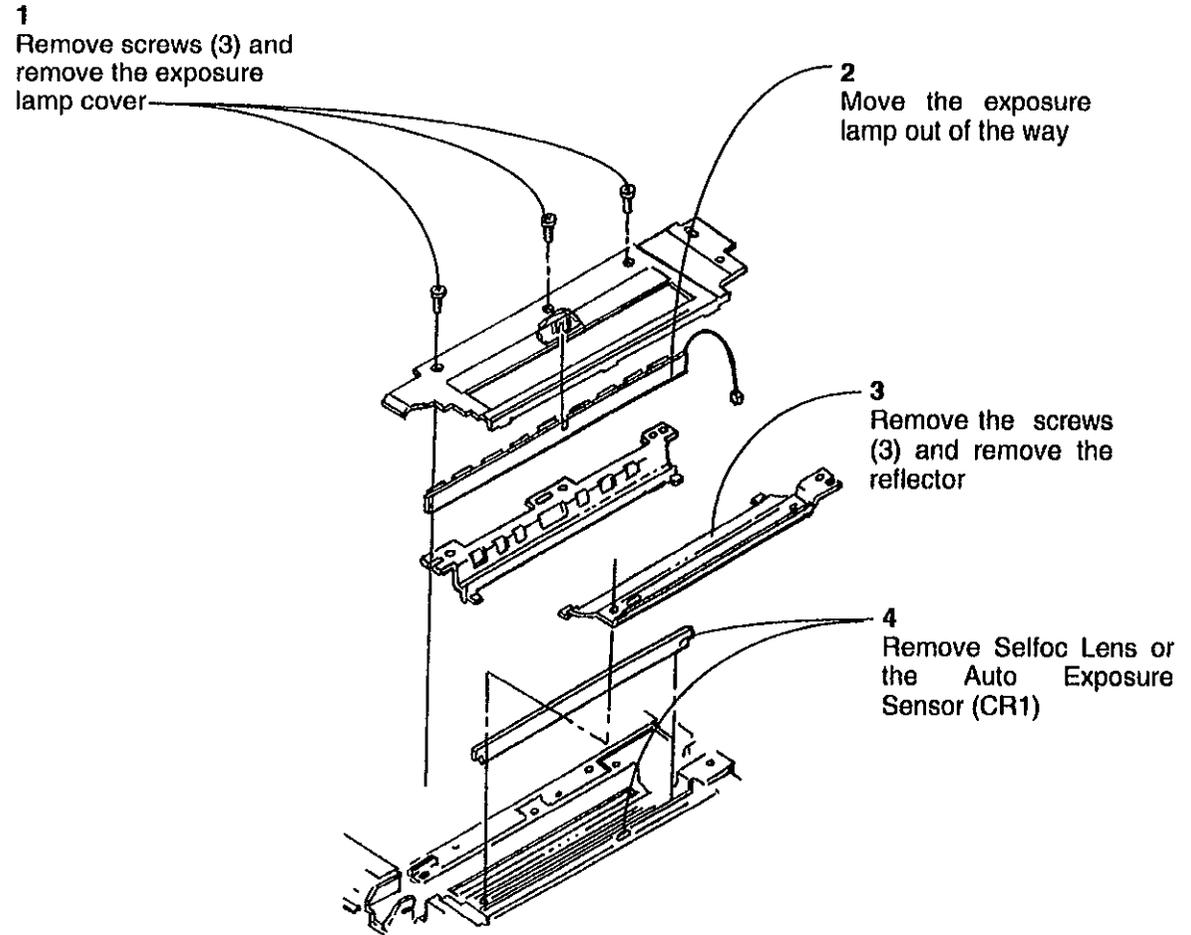


Figure 1. Removing the Selfoc Lens / Auto Exposure Sensor (CR1)

REP 6.3 Optics Frame

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The platen cover/glass assembly (REP 14.4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge.

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14.2)

- 2 (Figure 1) Remove the optics frame

Replacement

NOTE: Ensure the interlock switch (S2) slide actuator is in front of the switch actuator button, not on top of it

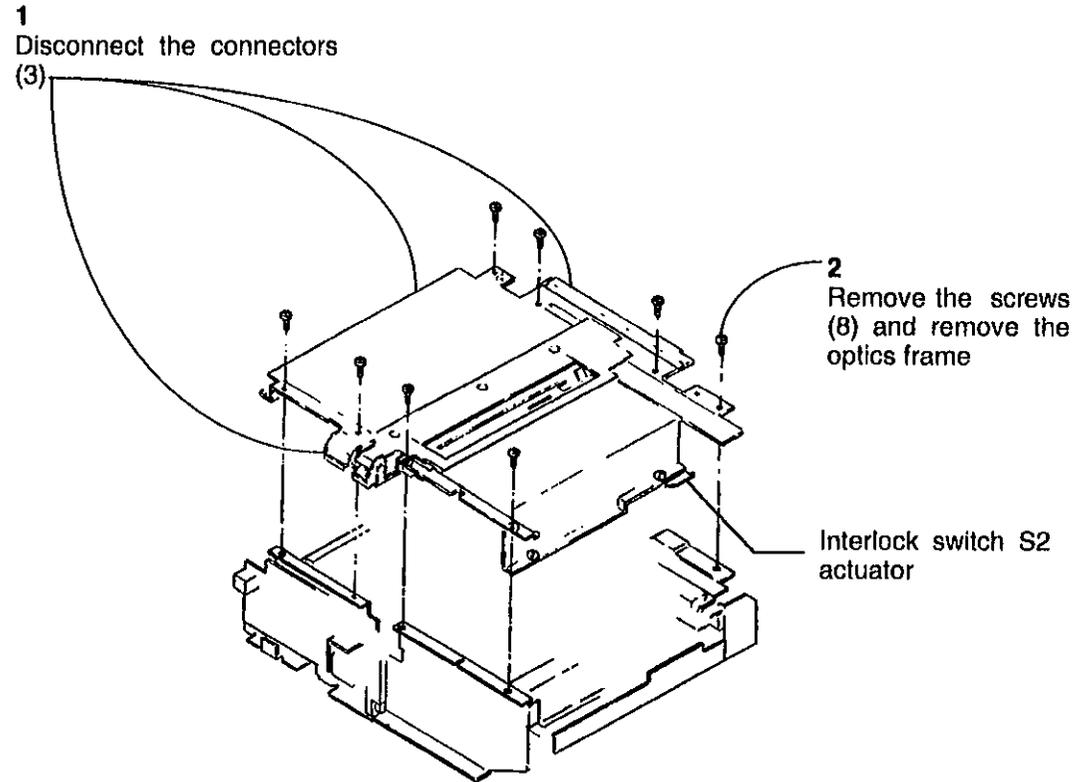


Figure 1. Removing the Optics Frame

REP 6.4 Cooling Motor (MOT2)

Parts List on PL 3.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The platen cover/glass assembly (REP 14.4)

NOTE: *The Toner Cartridge must be removed before the Drum Cartridge.*

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14.2)
- 2 Disconnect the Cooling Motor connector on the Bias PWB
- 3 Remove the Optics Frame (REP 6.3)
- 4 Remove the screws (2) holding the cooling motor located on the underside of the optics frame

REP 8.1 Paper Feed / Xerographic Drive Assembly

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The platen cover/glass assembly. (REP 14.4)

NOTE The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14.2)
 - e) The Optics Frame (REP 6.3)
 - f) The Lower Rear Cover (REP 14.3)
 - g) The Paper Feed Assembly (REP 8.3)
- 2 Move the Paper Supply PWB (PL 2.4) out of the way
- 3 (Figure 1). Remove the paper feed/xerographic drive assembly.

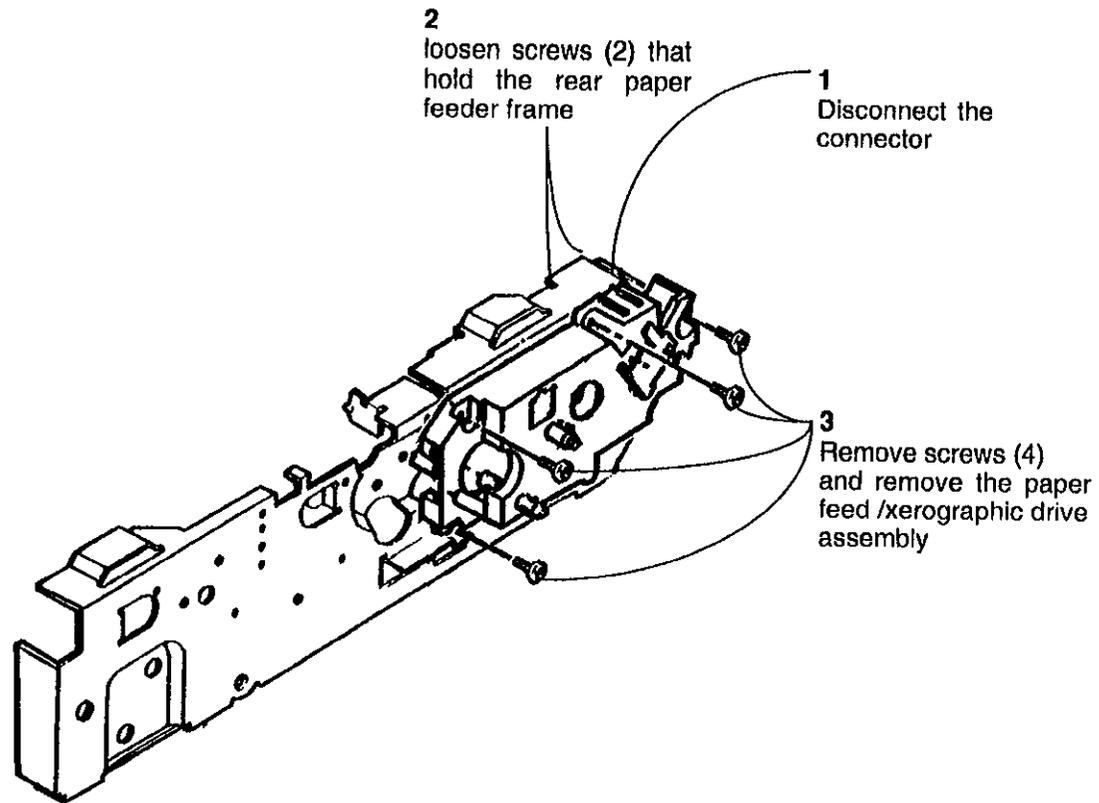


Figure 1. Removing the Drive Assembly

REP 8.2 Registration Roll Solenoid (SOL4)

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the paper feed/xerographic drive assembly (REP 8 1)
- 2 (Figure 1) The registration roll solenoid (SOL4) is easily removed by releasing the two tabs on the back side of the drive assembly

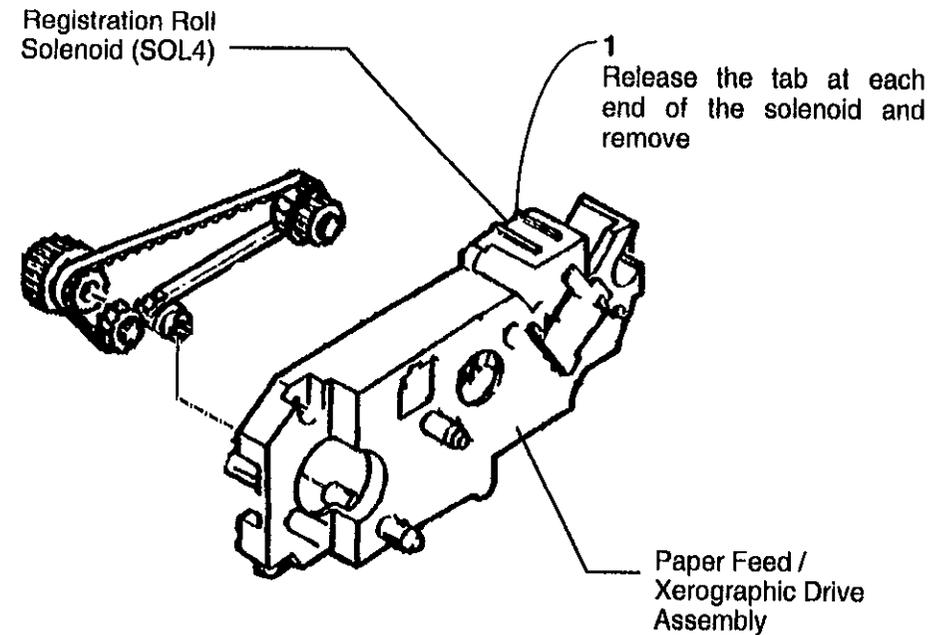


Figure 1. Removing the Registration Roll Solenoid (SOL4).

REP 8.3 Paper Feed Assembly

Parts List on PL 2.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The platen cover/glass assembly. (REP 14 4)

NOTE The Toner Cartridge must be removed before the Drum Cartridge.

- b) The Toner Cartridge (REP 9 1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14 2)
 - e) The Optics Frame (REP 6.3)
 - f) The Transformer PWB (REP 3 3)
 - g) The Lower Rear Cover (REP 14 3)
- 2 Move the Paper Supply PWB out of the way
- 3 (Figure 1). Remove the gate by gently spreading the gate arms
- 4 Disengage the cam follower from the rear feed arm by gently spreading them apart.
- 5 Open the paper transport base
- 6 (Figure 2) Remove the paper feed assembly.

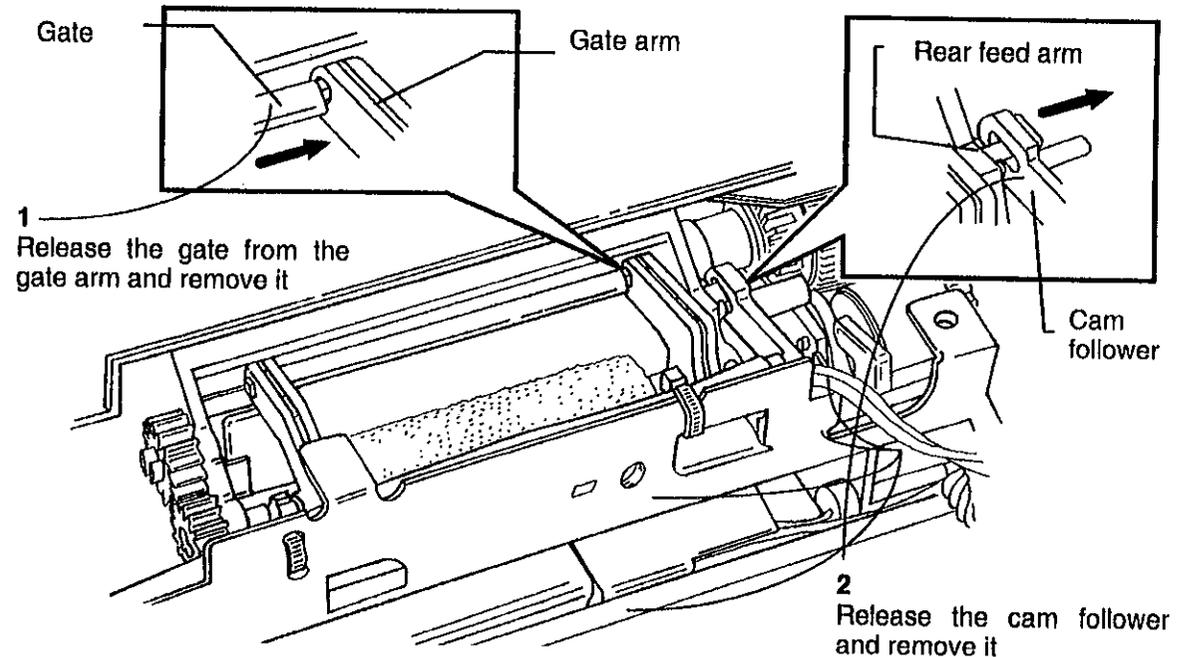


Figure 1. Preparing to Remove the Paper Feed Assembly

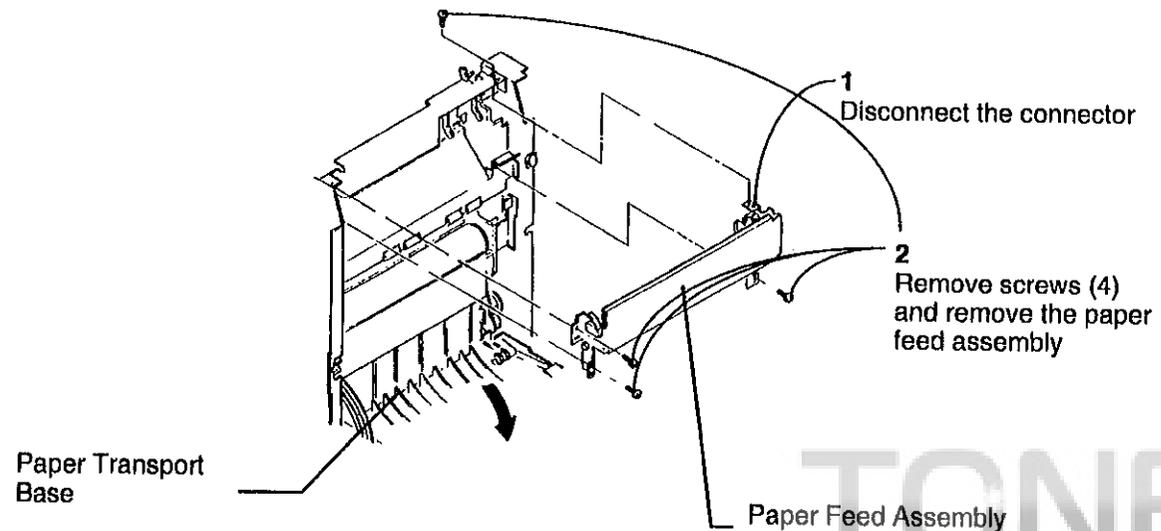


Figure 2. Removing the Paper Feed Assembly

REP 8.4 Paper Takeup Roll / Paper Feed Roll

Parts List on PL 2.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the paper feed assembly (REP 8.3)
- 2 (Figure 1) Remove the paper feed roll shaft by removing the E-ring and bearing at each end

NOTE: In order to hold the clutch in place on the shaft, temporarily replace the bearing and E-ring at that end

- 3 (Figure 1) Remove the paper takeup roll by releasing the roll from the front feed arm
- 4 (Figure 2) Disassemble the hardware from the paper feed roll shaft, and remove the paper feed roll

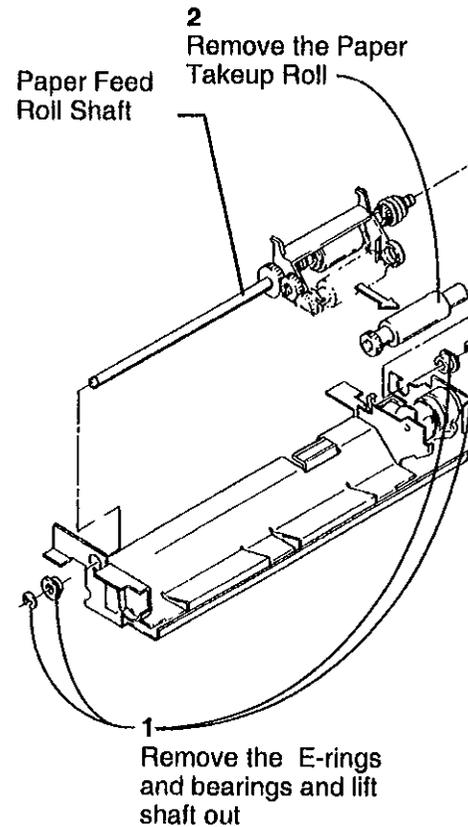
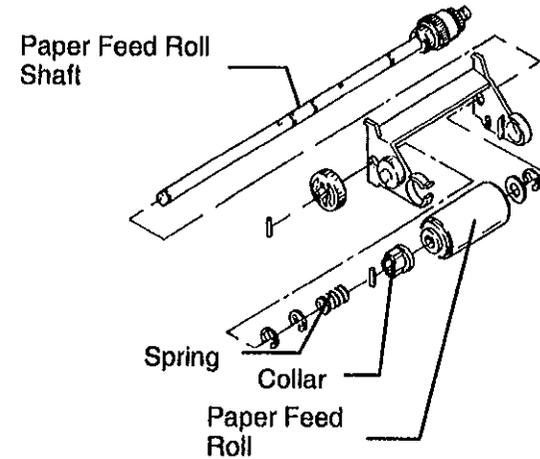


Figure 1. Removing the Take-up Roll

XC520/540



XC560/580

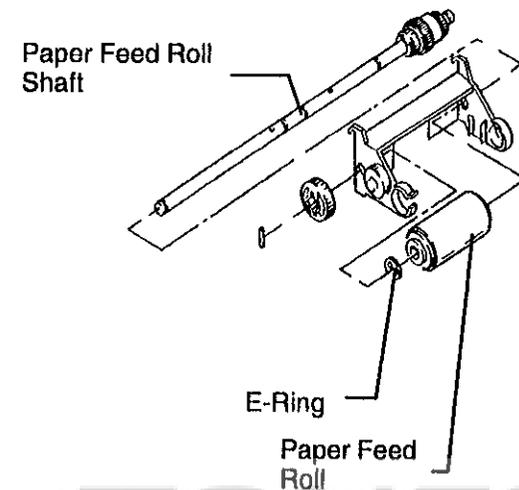


Figure 2. Removing the Paper Feed Roll

REP 8.5 Paper Feed Drive Belt

Parts List on PL 1.3

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1. Remove the paper feed/xerographic drive assembly (REP 8.1)
- 2 (Figure 1): Remove the paper feed drive belt

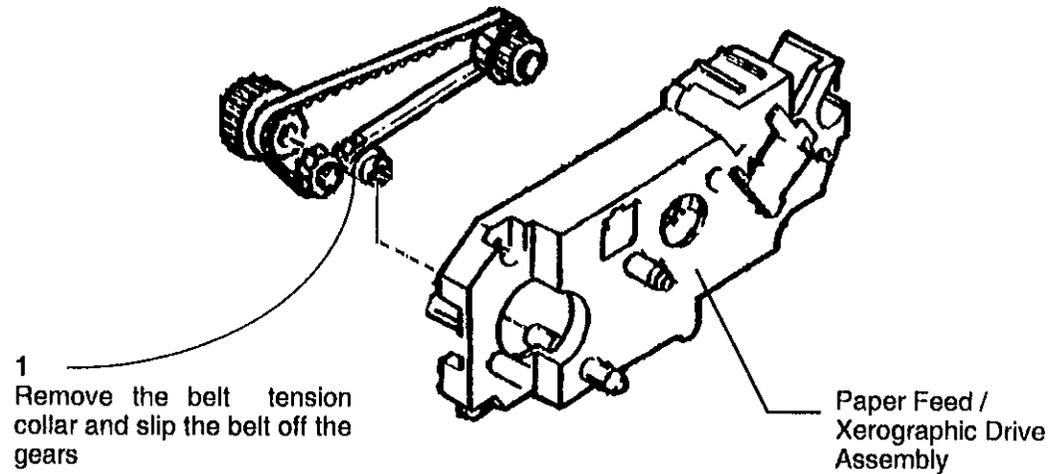


Figure 1. Removing the Paper Feed Drive Belt

REP 9.1 Toner Cartridge

Parts List on PL 4.1

Removal

- 1 (Figure 1) Slide the Document Cover/Glass Assembly to the left, and open the Front Door.

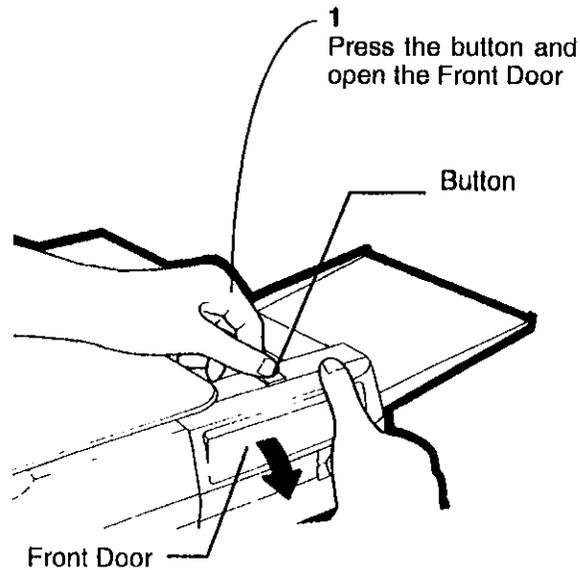


Figure 1. Opening the Front Door

- 2 (Figure 2) Squeeze the lock lever and handle to release the Toner Cartridge, and remove the cartridge from the copier.

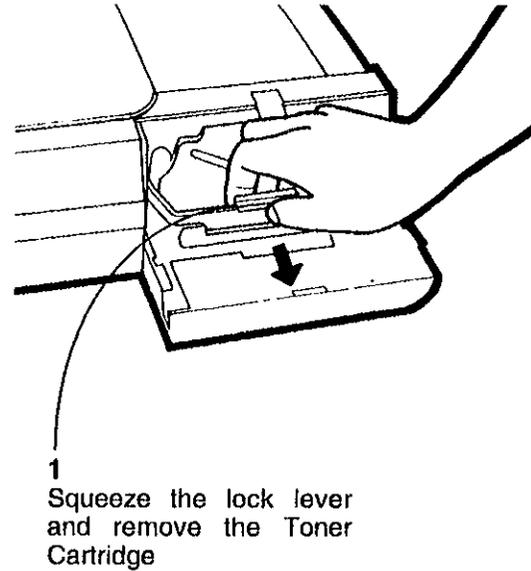


Figure 2. Removing the Toner Cartridge

Replacement

- 1 (Figure 3) Install the Toner Cartridge.

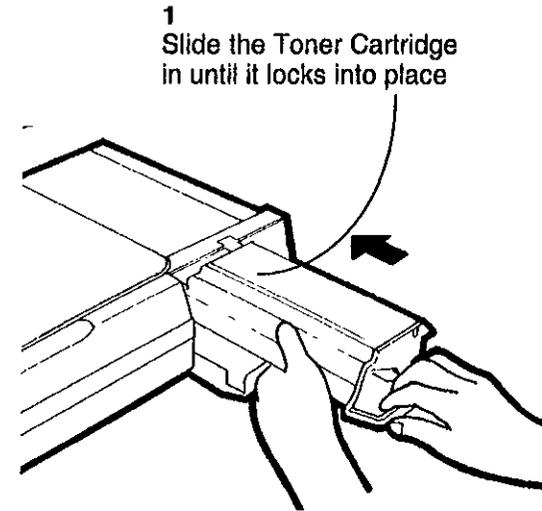


Figure 3. Reinstalling the Toner Cartridge

REP 9.2 Drum Cartridge

Parts List on PL 4.2

Removal

NOTE. The Toner Cartridge must be removed before the Drum Cartridge

- 1 Remove the Toner Cartridge (REP 9 1).
- 2 (Figure 1) While holding the Platen Cover/Glass Assembly in place, turn the copier up onto the Left Side Cover as shown, and open the Bottom Cover Door.

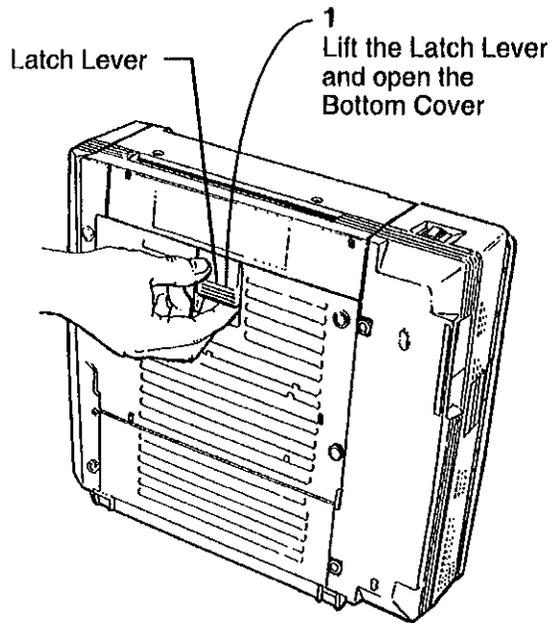


Figure 1. Opening the Bottom Cover (Door)

3. (Figure 2) Lift the latch lever to release the Drum Cartridge, and remove the Drum Cartridge from the copier

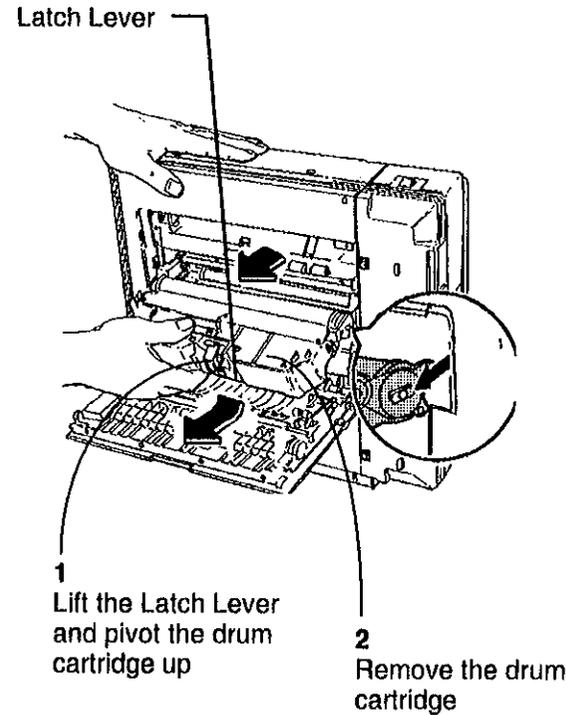


Figure 2. Removing the Drum Cartridge

Replacement

- 1 (Figure 3) Slide the Drum Cartridge into the copier and pivot the Drum Cartridge downward until it locks into place

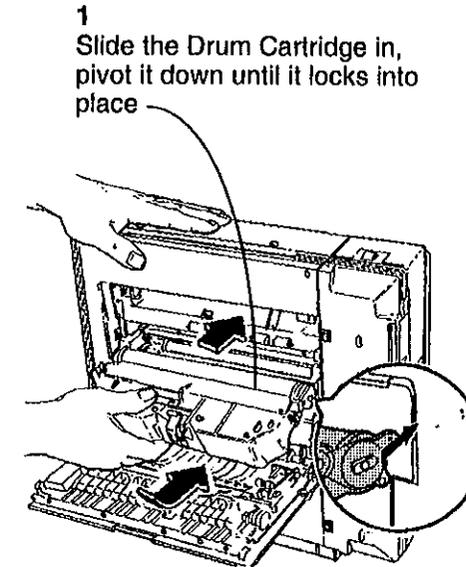


Figure 3. Reinstalling the Drum Cartridge

REP 9.3 Transfer Corotron Wire

Parts List on PL 2.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Open the Bottom Cover Door
- 2 (Figure 1) Remove the corotron wire

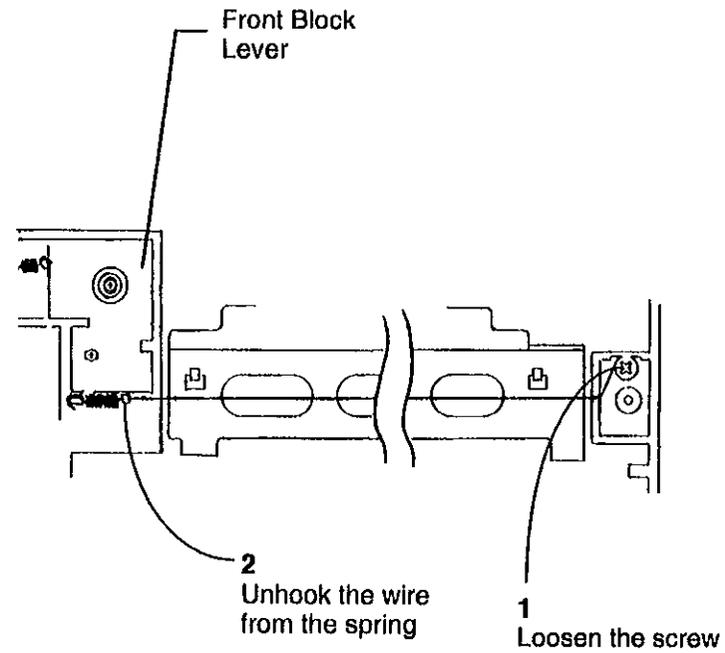


Figure 1. Removing the Transfer Corotron Wire

Replacement

NOTE: Be careful not to put a kink in the corotron wire.

- 1 (Figure 2) Using a minimum of 16 to 18 inches of corotron wire or a spool of wire, attach the wire to the spring

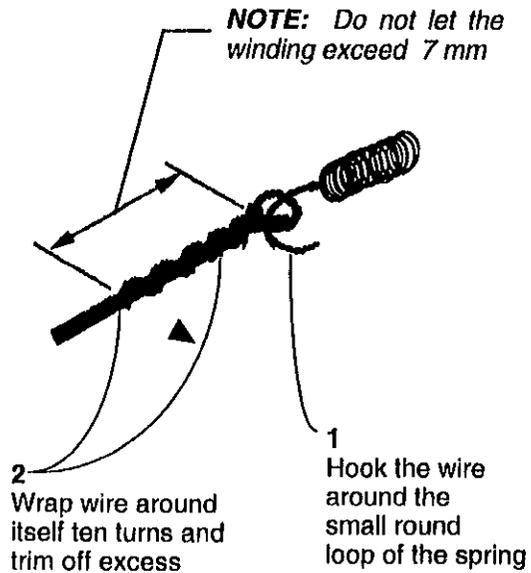


Figure 2. Installing the Transfer Corotron Wire onto the Spring

2. (Figure 3) Thread the wire over the notches on each end block, and loop the open end a 3/4 turn around the screw in the rear block as shown. Do not tighten the screw until the tension is set



- 1 Wrap wire around the screw, tighten the screw, and trim off the excess wire

Figure 3. Installing and Tensioning the Transfer Corotron Wire

- 3 Set the tension on the corotron wire as follows:
 - a) Pull gently on the free end of the wire until the wire tension stretches the spring approximately 3 mm
 - b) Tighten the screw
 - c) Reset the tension as necessary
- 4 Cut off any excess wire to prevent arcing
- 5 Clean the wire with film remover (USCO) or wash solvent (RXL) and a cotton swab

REP 10.1 Fuser / Paper Transport Drive Assembly

Parts List on PL 1.4

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following.
 - a) The Platen Cover/Glass Assembly (REP 14.4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14.1)
 - e) The Optics Frame (REP 6.3)
- 2 (Figure 1): Remove the Fuser / Paper Transport Drive Assembly

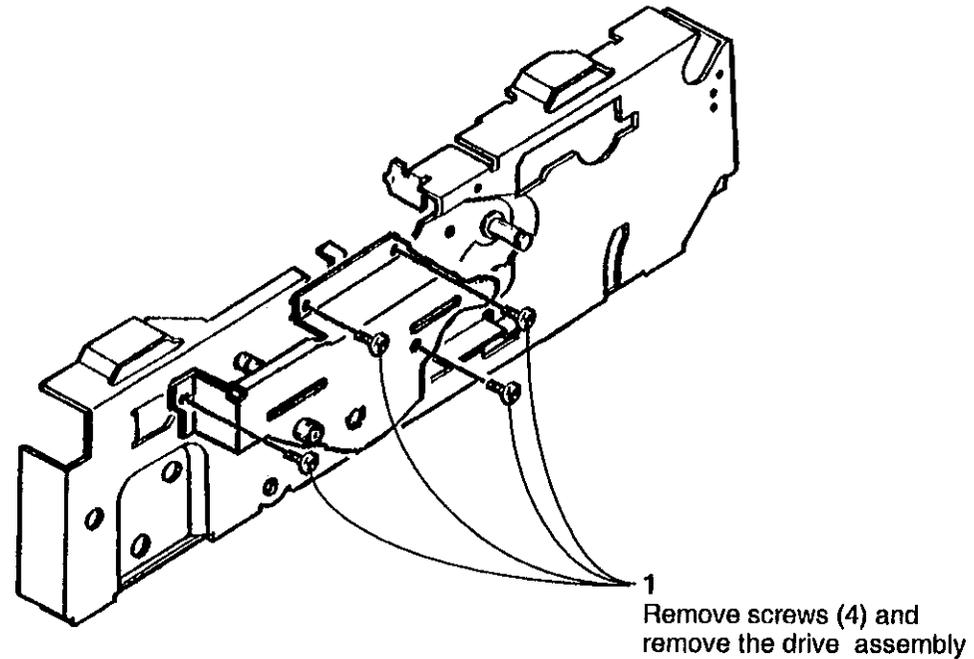


Figure 1. Removing the Fuser / Paper Transport Drive Assembly

Replacement

NOTE: Locate the shafts of the drive gears into the holes in the frame at reinstallation.

REP 10.2 Transport Drive Belt

Parts List on PL 1.4

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following.
 - a) The Platen Cover/Glass Assembly (REP 14.4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9.1)
 - c) The Drum Cartridge (REP 9.2)
 - d) The Left Cover, the Right Cover, the Front Cover, and the Upper Rear Cover (REP 14.2)
 - e) The Optics Frame (REP 6.3)
- 2 Remove the Fuser / Paper Transport Drive Assembly. (REP 10.1)
- 3 (Figure 1) Remove the Transport Drive Belt

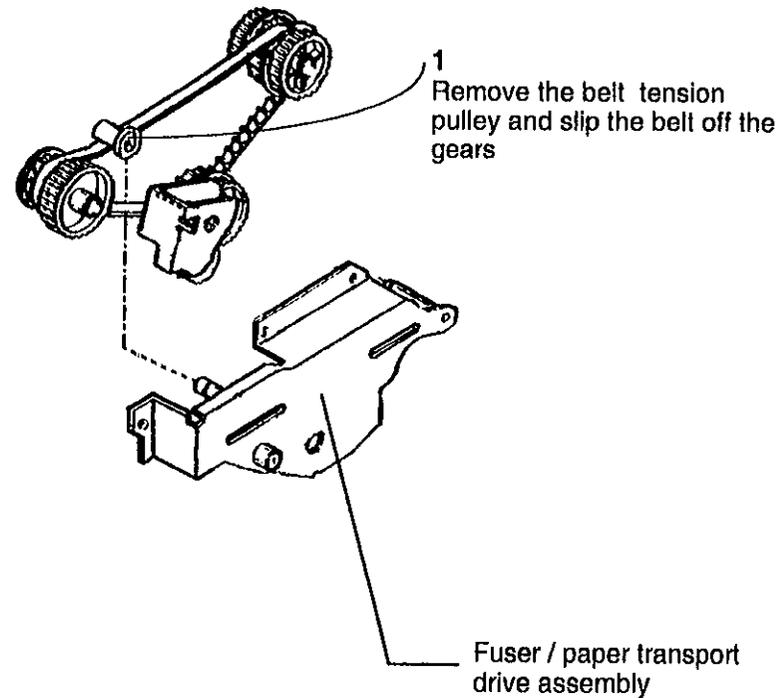


Figure 1. Removing the Transport Drive Belt

REP 10.3 Stripper Guide and Stripper Guide Holder

Parts List on PL 2.1 ,2.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1 Remove the following.

- a) The Platen Cover/Glass Assembly (REP 14 4)

NOTE: The Toner Cartridge must be removed before the Drum Cartridge

- b) The Toner Cartridge (REP 9 1)
- c) The Drum Cartridge (REP 9 2)

- 2 Place the copier on the left side cover, and open the Bottom Cover Door (paper transport base)
- 3 (Figure 1) Remove the stripper guide and the stripper guide holder.

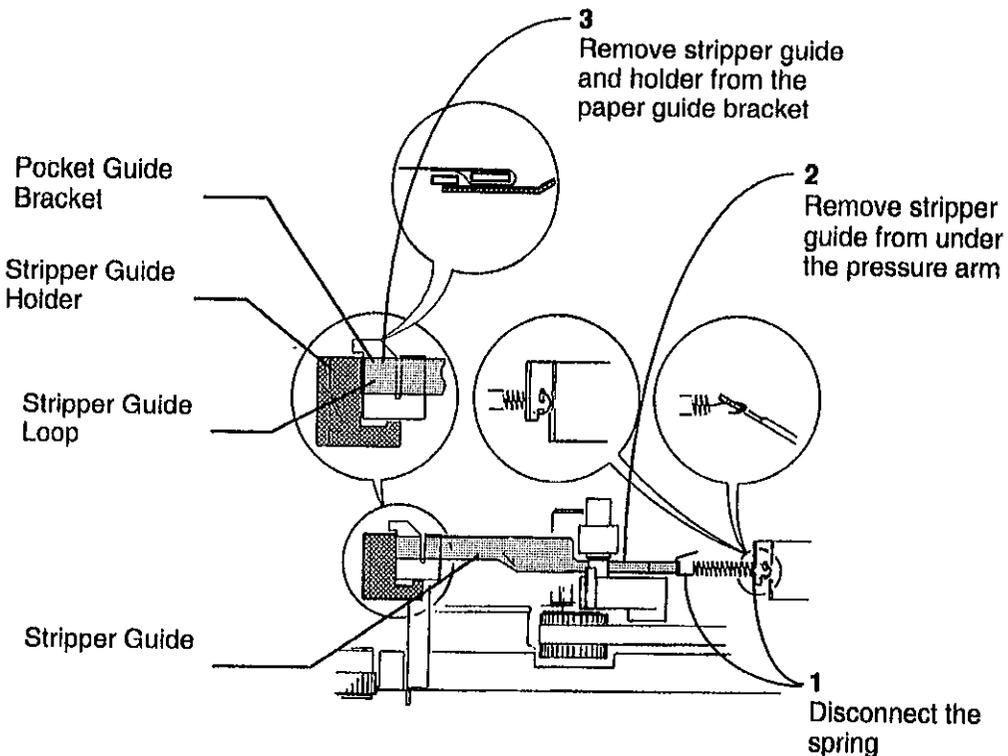


Figure 1. Removing the Stripper Guide and the Stripper Guide Holder

Replacement

- 1 (Figure 2): Install the stripper guide and the stripper guide holder.

NOTE: Be sure that the stripper guide holder is fastened to the underside of the paper guide bracket

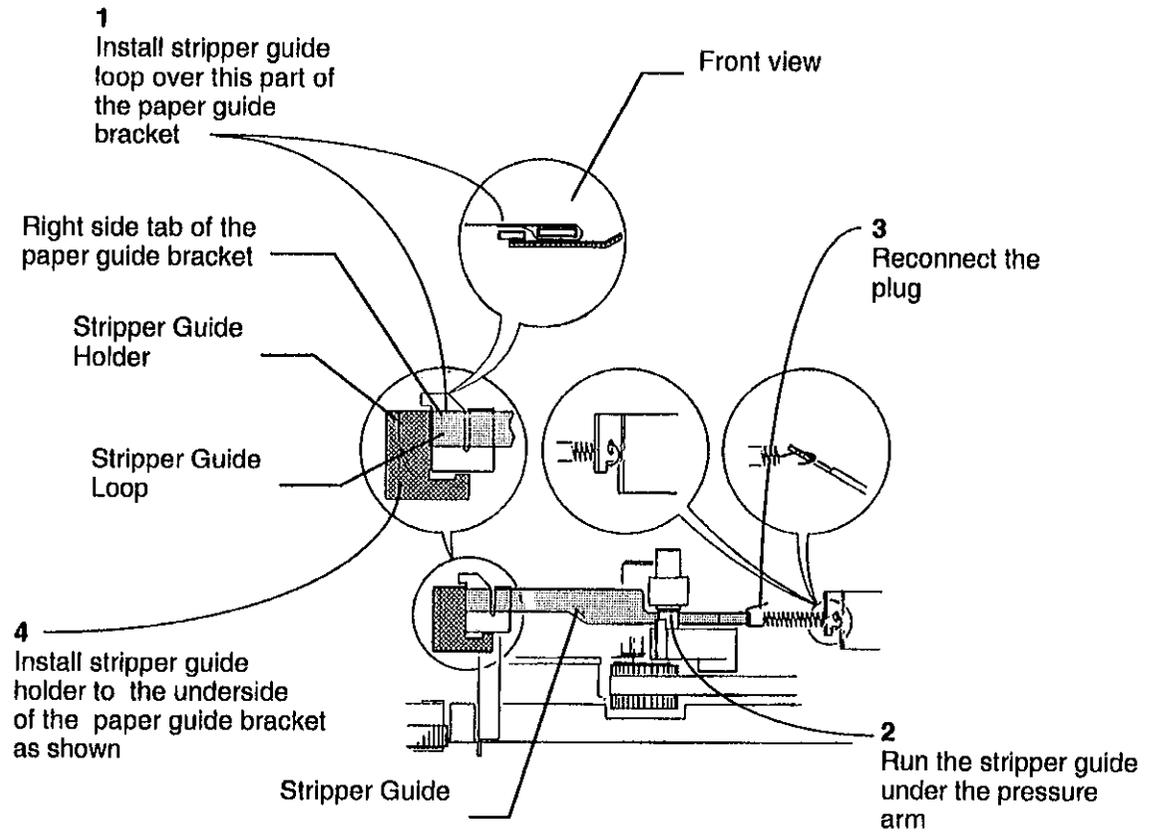


Figure 2. Installing the Stripper Guide and the Stripper Guide Holder

REP 10.4 Fuser Assembly

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following
 - a) The platen cover / glass assembly (REP 14 4)
 - b) The left cover, the right cover, the front cover, and the upper rear cover (REP 14 2)
 - c) The Lower Rear Cover (REP 14 3)
- 2 (Figure 1): Move the main PWB out of the way in order to access the two screws. (REP 3 1)

Note Move the bottom part of the frame enough to clear the tabs that position the fuser assembly

- 3 (Figure 1): Remove the fuser assembly.

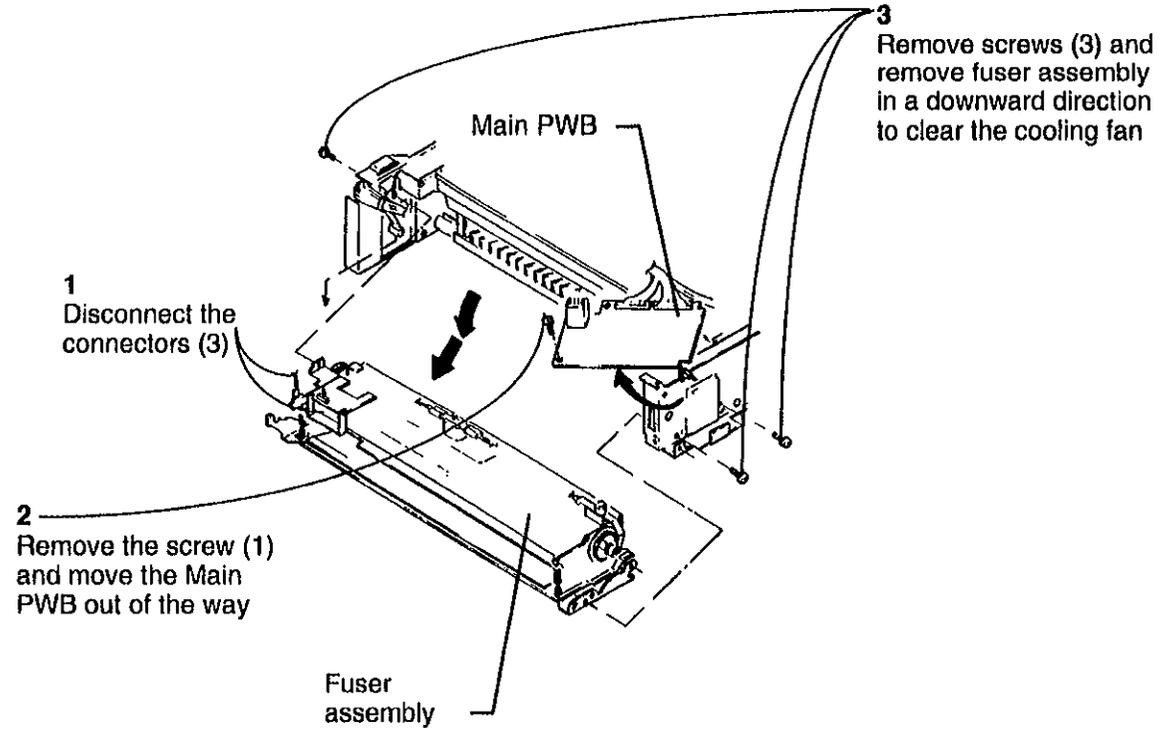


Figure 1. Removing the Fuser Assembly

REP 10.5 Heat Rod (HTR1)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord .

CAUTION

Do not touch the glass part of the heat rod Oil from the skin on your fingers can cause damage the heat rod

- 1 Remove the Fuser Assembly (REP 10 4)
- 2 (Figure 1). Remove the Heat Rod.

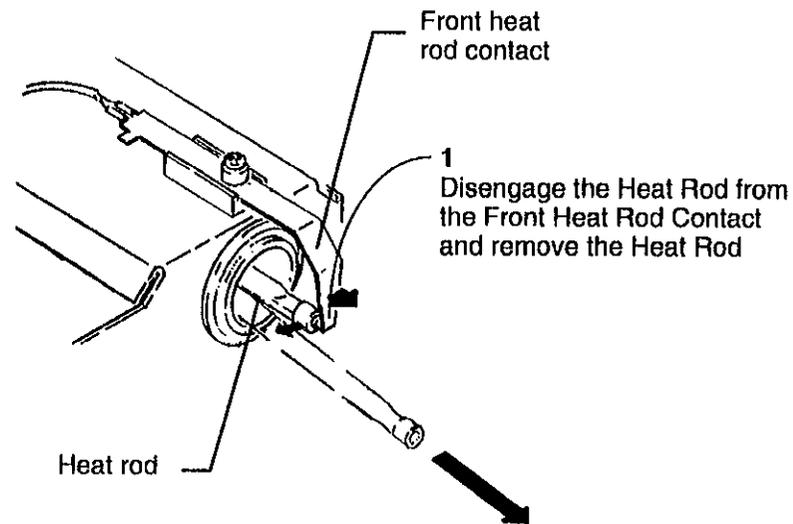


Figure 1. Removing the Heat Rod

Replacement

CAUTION

Be sure not to touch the glass part of the heat rod with your fingers Oil from the skin can cause damage to the glass. Use Film Remover (USCO) or wash solvent (RXL) to clean the glass part of the heat rod



REP 10.6 Thermistor (RT1)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

1 Remove the Fuser Assembly (REP 10.4)

NOTE Do not cut the tie-wrap holding the thermistor wire harness. Cut the thermistor wire harness and remove it from the tie-wrap

1. (Figure 1) Remove the Thermistor (RT1)

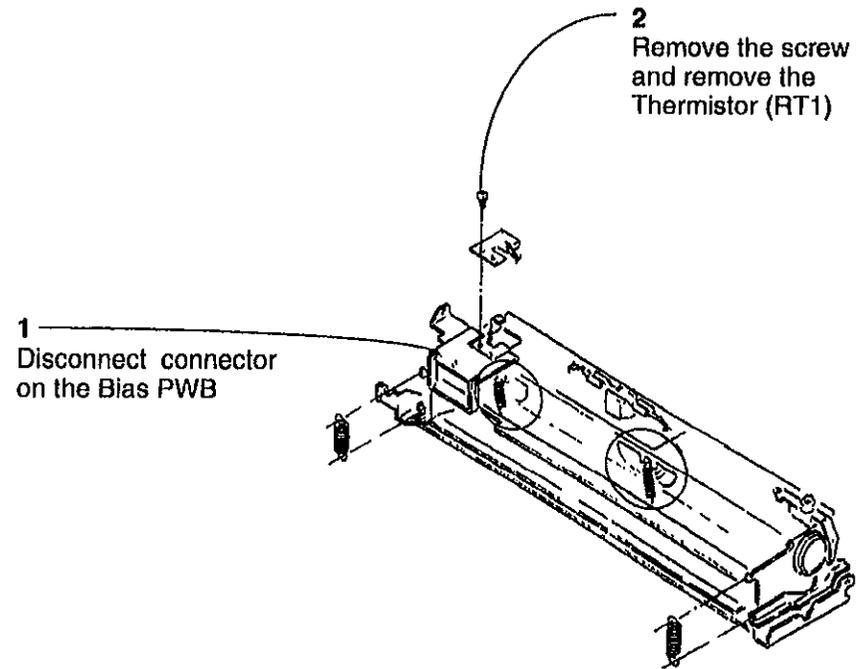


Figure 1. Removing the Thermistor (RT1)

REP 10.7 Thermal Breaker (CB1)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the Fuser Assembly (REP 10.4)
- 2 (Figure 1) Remove the Thermal Breaker (CB1)

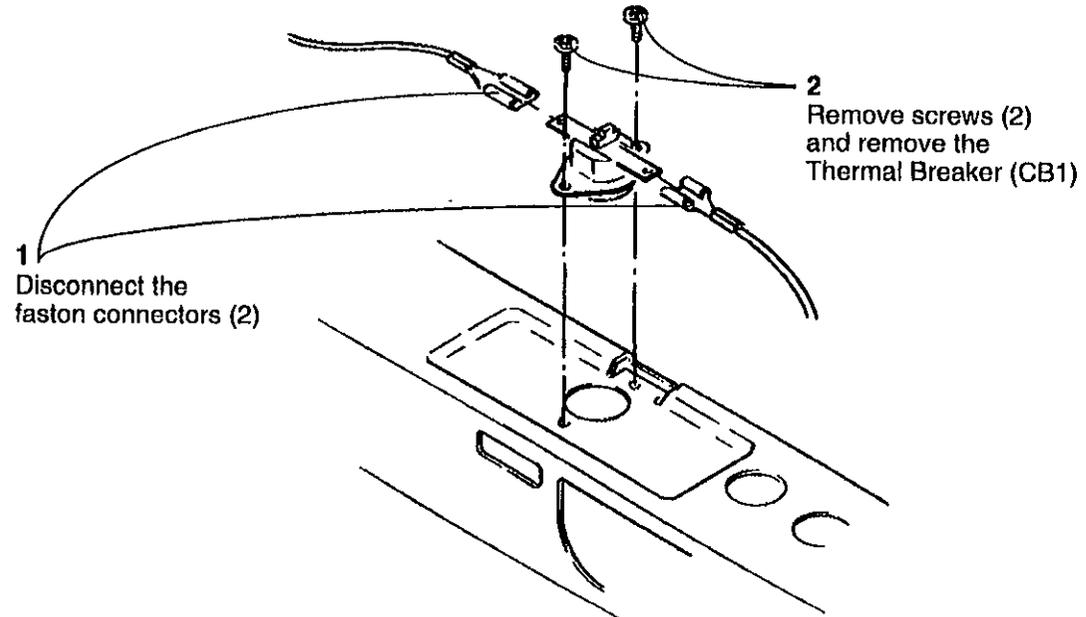


Figure 1. Removing the Thermal Breaker (CB1)

REP 10.8 Separator Pawl (2)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the Fuser Assembly (REP 10 4).
- 2 (Figure 1) Remove the Separator Pawl

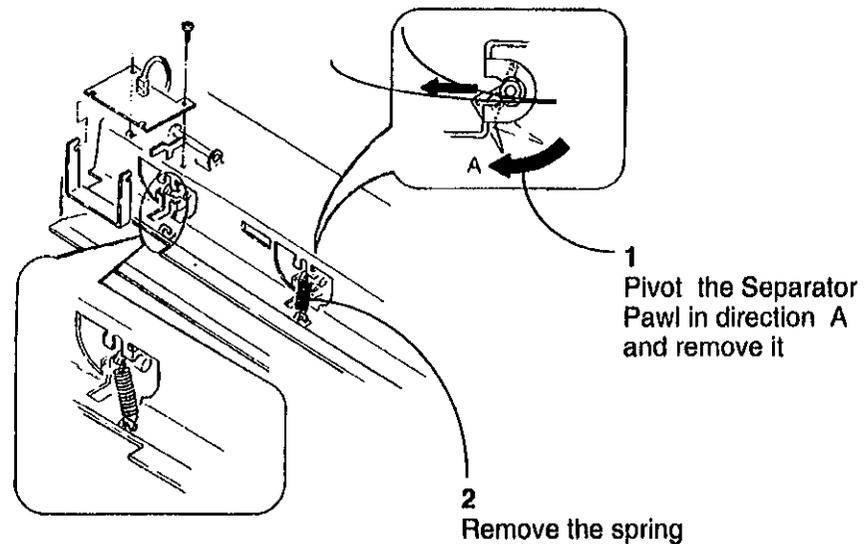


Figure 1. Removing a Separator Pawl

REP 10.9 Heat Roll / Pressure Roll

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

CAUTION

Do not touch the glass part of the heat rod. Oil from the skin on your fingers can cause damage to the heat rod.

Heat Roll

- 1 Remove the fuser assembly (REP 10 4)
- 2 Remove the heat rod. (REP 10 5)
3. Remove the rear heat rod contact.
4. Remove the stripper finger bracket. (REP 10 10)
- 5 Latch the separator pawls away from the heat roll surface, or disconnect one end of the pawl spring
- 6 Move the thermistor bracket out of the way.

CAUTION

The two pressure springs, holding the pressure roll up against the heat roll, must be removed before removing the heat roll or damage may result

- 7 (Figure 1) Remove the heat roll.

Pressure Roll

- 1 Open the copier
2. The pressure roll can be removed easily by removing the heat roll bearings and lifting the pressure roll out.

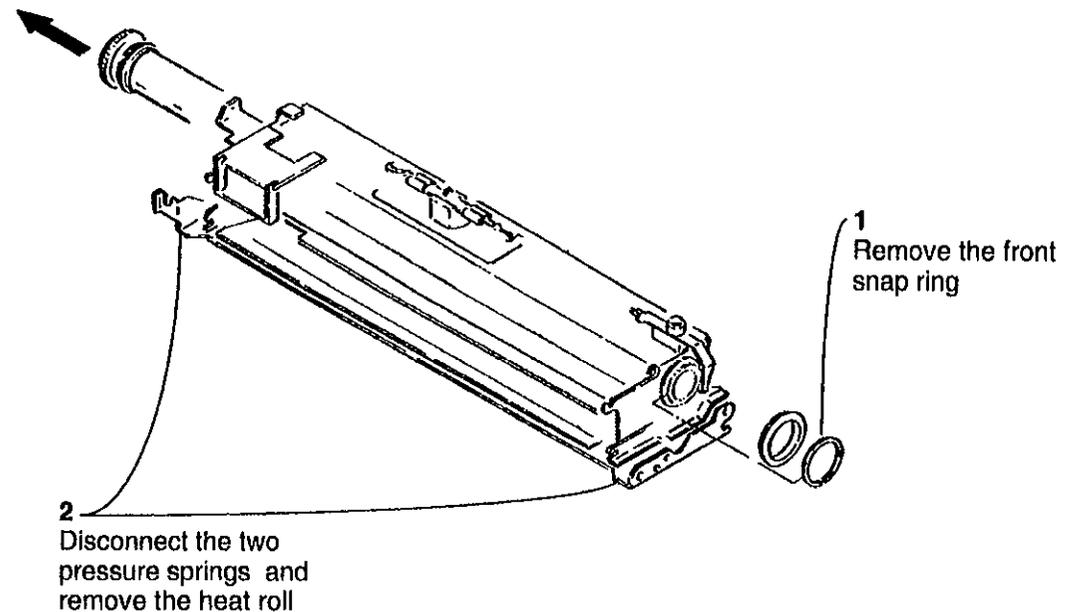


Figure 1. Removing the Heat Roll

Replacement

CAUTION

Be sure not to touch the glass part of the heat rod with your fingers. Oil from the skin can cause damage to the glass. Use Film Remover (USCO) or wash solvent (RXL) to clean the glass part of the heat rod.



REP 10.10 Stripper Fingers (4)

Parts List on PL 5.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the bottom cover (REP 14 5)
- 2 (Figure 1) Remove the stripper fingers

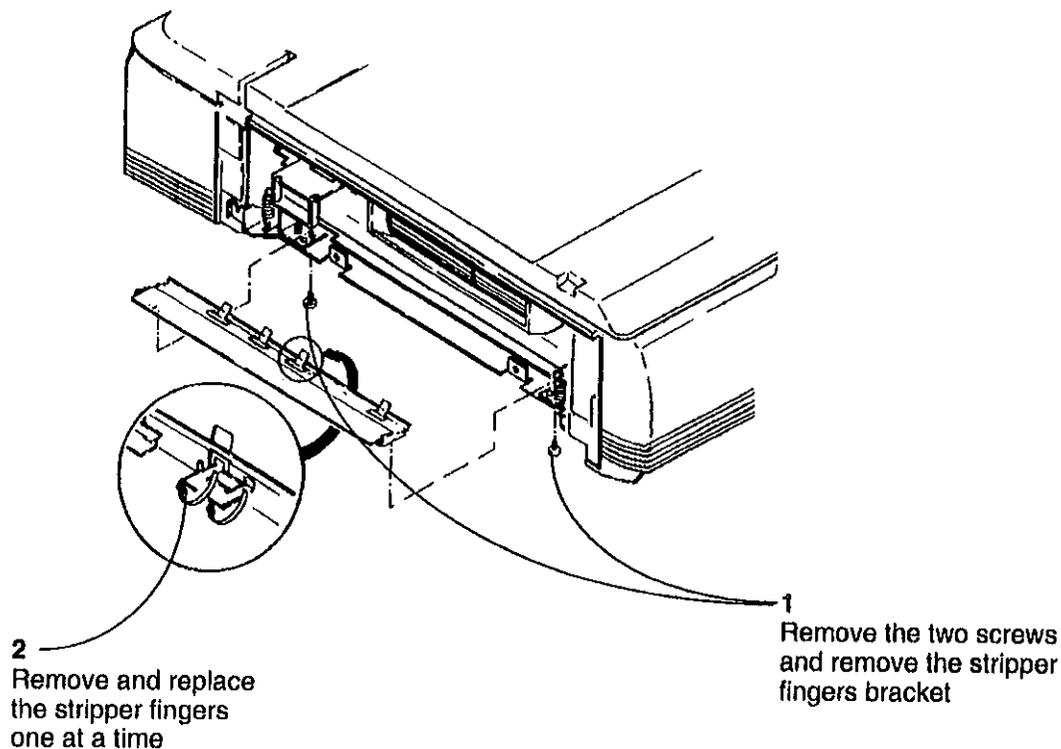


Figure 1. Removing the Stripper Fingers

Replacement

1. Be sure to place the replacement fingers in the correct position. Counting from the front end of the bracket, the correct positions are 1, 3, 4, and 5.

REP 14.1 Front door, Exit Tray, and Paper Tray

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

NOTE: To release the tabs, as shown, use a small screwdriver.

- 1 Remove the Platen Cover/Glass Assembly (REP 14 4).
- 2 Refer to Figure 1 to locate the parts:
 - Front Door
 - Exit Tray
 - Paper Tray

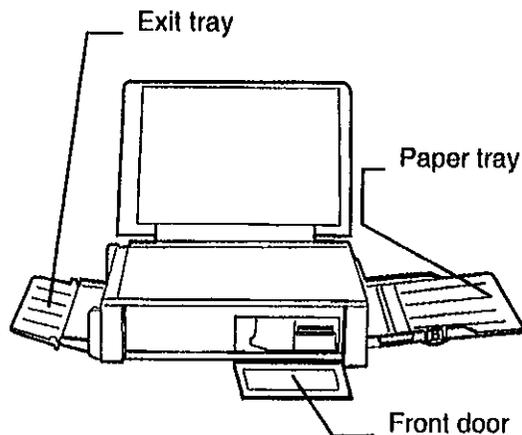
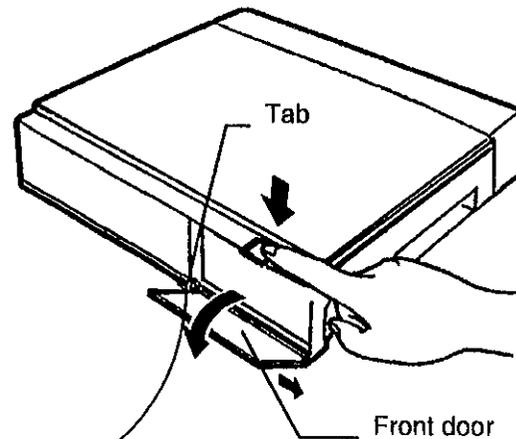


Figure 1. Locating the Front Door, the Exit Tray, or the Paper Tray

FRONT DOOR REMOVAL

- 1 Remove the following:
 - a) The Toner Cartridge (REP 9 1)
 - b) The Left Cover, the Right Cover, and the Front Cover, (REP 14 1)
- 2 (Figure 2). Remove the Front Door



- 1 Move the Front Door Tab off the left side, and remove the Front Door

Figure 1. Removing the Front Door

- **EXIT TRAY REMOVAL**

- 1 (Figure 3). Remove the Exit Tray

NOTE: While pressing downward on the center of the Exit Tray, use a small screwdriver to pry the exit tray toward the rear to pop the Tab out of the front slot

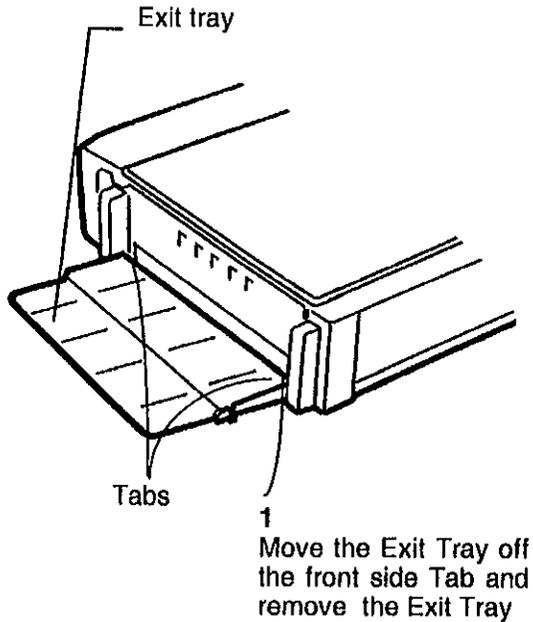


Figure 3. Removing the Exit Tray

- **PAPER TRAY REMOVAL**

- 1 (Figure 4) Remove the Paper Tray

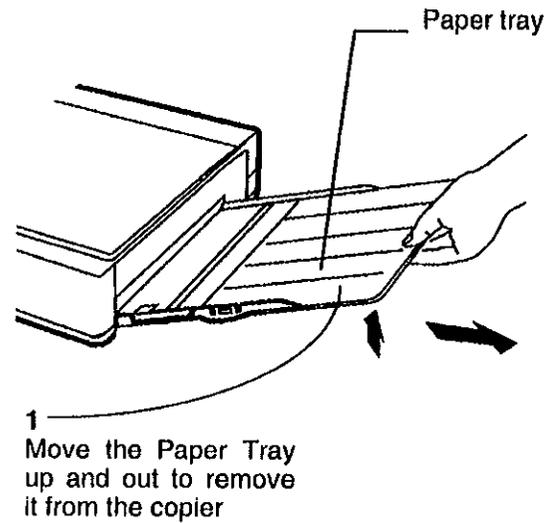


Figure 4. Removing the Paper Tray

REP 14.2 Left Cover, Right Cover, Front Cover and Upper Rear Cover.

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

NOTE: To release the tabs, as shown on the covers, use a small screwdriver.

NOTE: The left cover and the right cover must be removed before removing the front cover

Refer to Figure 1 to remove the covers

- **Left Cover:**
(Step 1): Remove the two screws, and remove the left cover
- **Right Cover:**
(Step 2) Remove the two screws, and remove the right cover
- **Front Cover:**
 - a) Remove the Toner Cartridge
 - b) (Step 3) Remove the two screws, release the two tabs, and remove the front cover
- **Upper Rear Cover:**
(Step 4): Remove the two screws, and remove the upper rear cover.

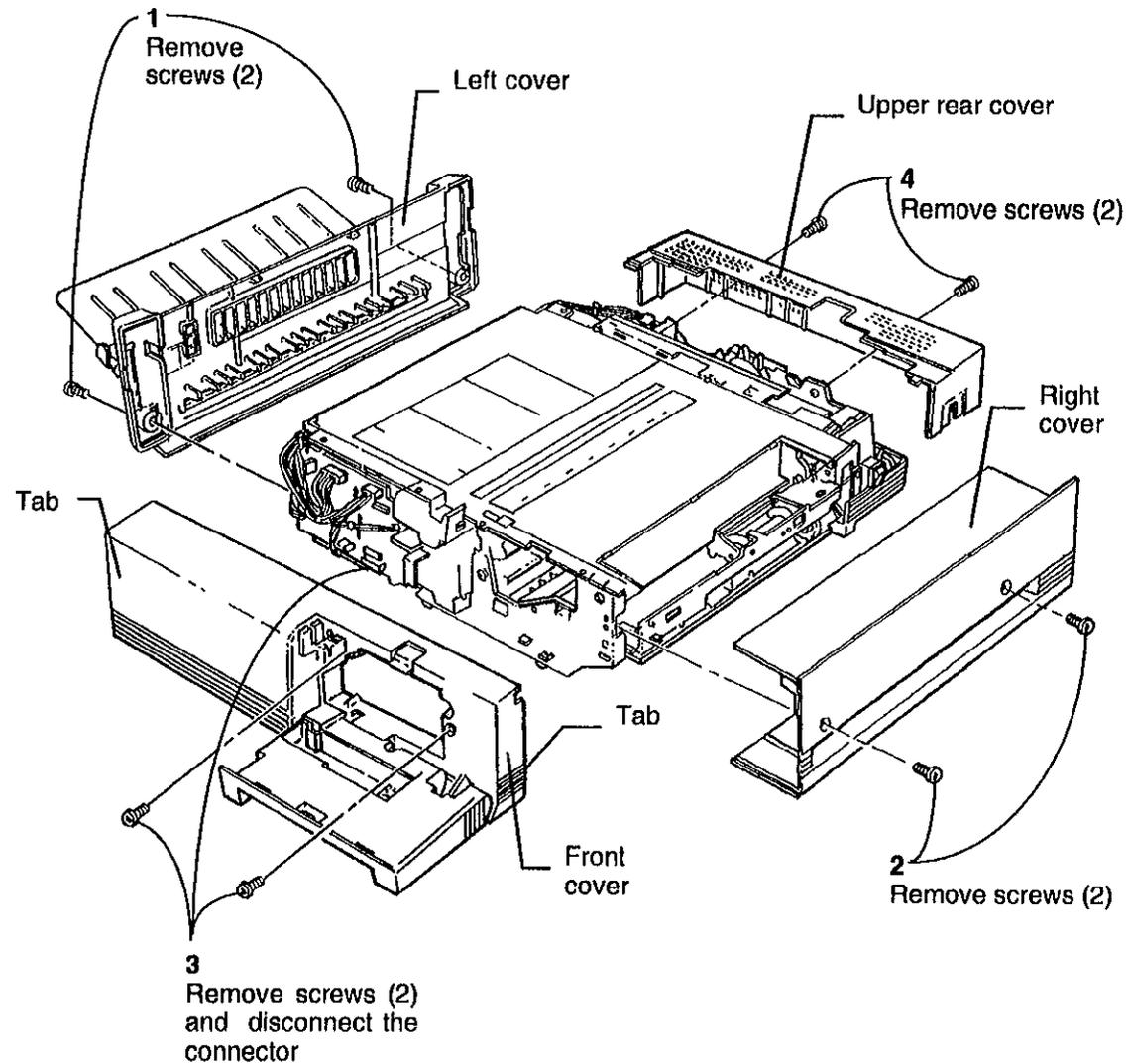


Figure 1. Removing the Covers

REP 14.3 Lower Rear Cover

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 Remove the following.
 - a) The platen cover / glass assembly (REP 14.4)
 - b) The left cover, the right cover, and the upper rear cover (REP 14.1).
 - c) The transformer PWB (REP 3.3)
- 2 (Figure 1) Disconnect the five (6) connectors, the developer bias wire (red), and the ground wire to the lower rear cover
3. Remove the four (4) screws.
4. (Figure 2). Release the tab on the cover with a small screwdriver, and remove the lower rear cover

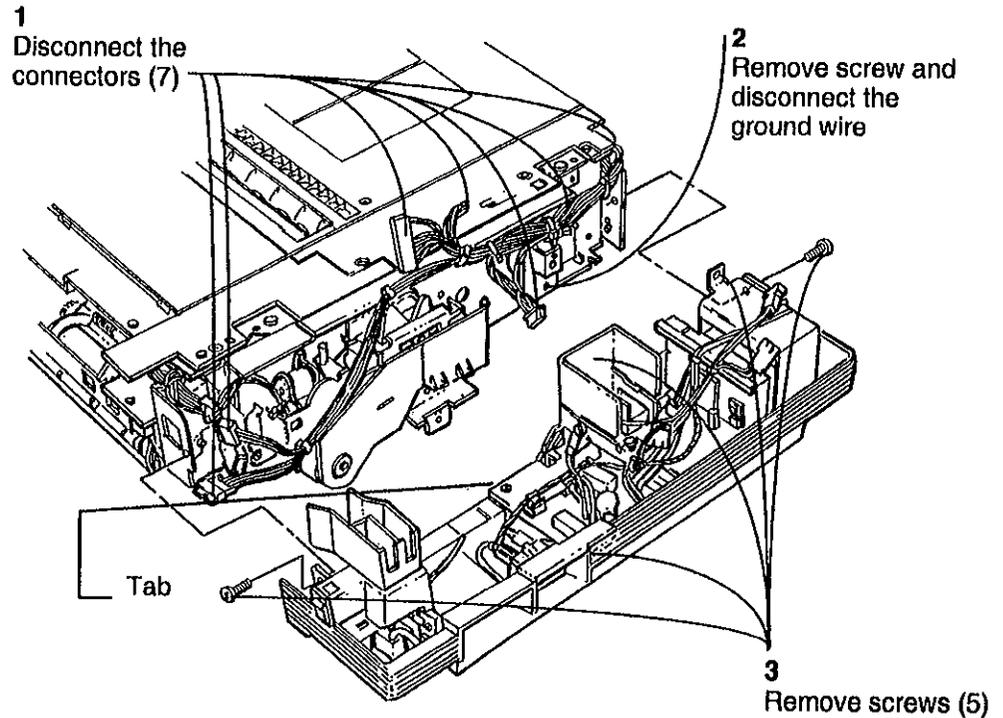


Figure 1. Preparing to Remove the Lower Rear Cover

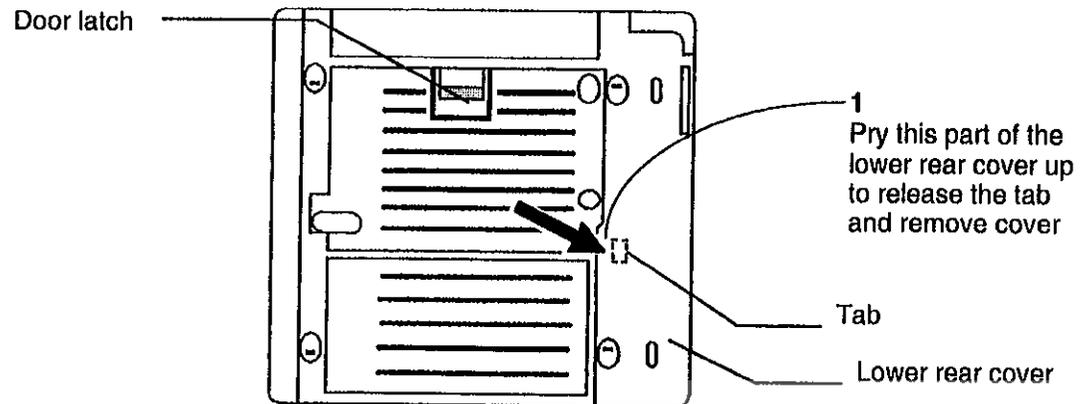


Figure 2. Releasing the Tab to Remove the Lower Rear Cover

REP 14.4 Platen Cover / Glass Assembly.

Parts List on PL 7.2

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 (Figure 1): Slide the platen cover to the right, and remove the screw.

CAUTION

Remove the platen glass from the front slide track before lifting the assembly off the top of the copier.

2. Slide the platen cover to the left, lift the cover away from the glass, disconnect it from the hinge assembly, and remove the two screws

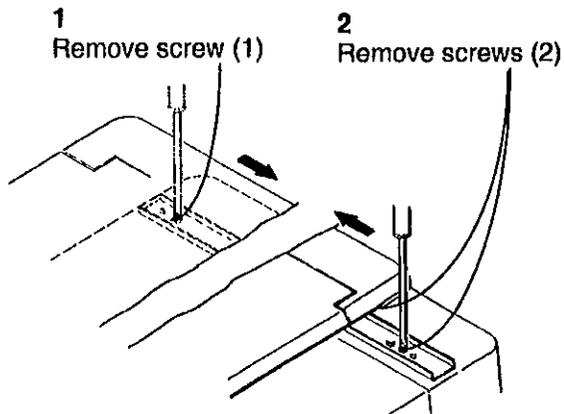


Figure 1. Removing the Platen Cover/Glass Assembly

NOTE: Perform step 3 only if you need to separate the platen cover from the platen cover / glass assembly.

- 3 (Figure 2): If required, remove the platen cover from the platen cover/glass assembly by lifting and sliding the cover to the right as shown

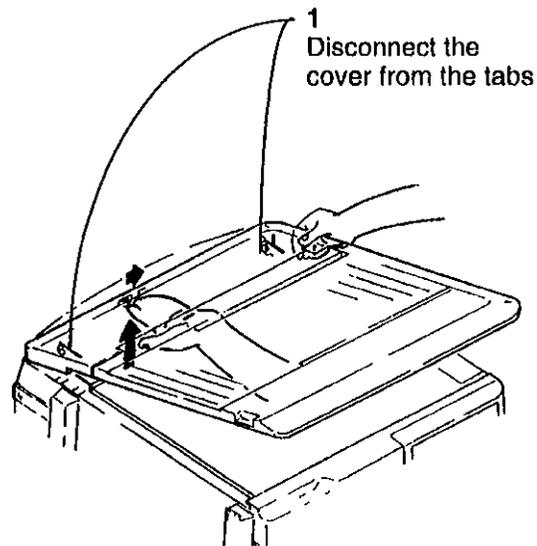


Figure 2. Removing the Platen Cover from the Assembly

Replacement

When you reinstall the platen cover/glass assembly, be sure to place the platen glass into the front slide track when the front cover is in place

REP 14.5 Bottom Cover

Parts List on PL 7.1

Removal

WARNING

Switch off the copier power and disconnect the power cord.

- 1 (Figure 1) Loosen the two screws, and remove the bottom cover.

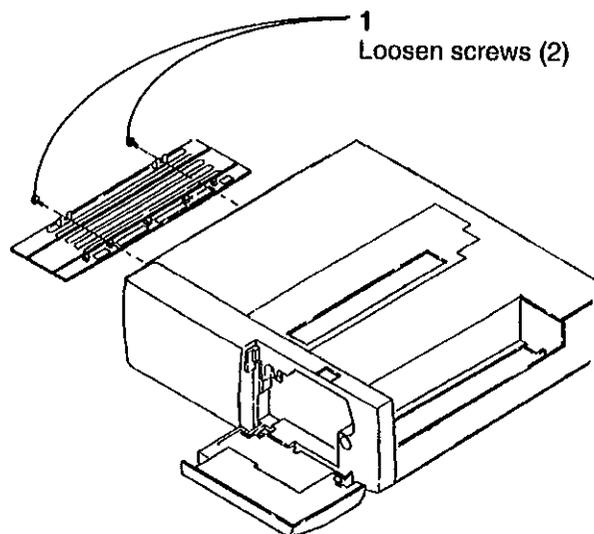


Figure 1. Removing the Bottom Cover

ADJ 4.1 Main Motor Speed

Purpose

The purpose is to adjust the main motor speed in order to ensure that the platen cover moves to the proper position

NOTE: An "L4" Status Code or a paper jam could occur if the speed is misadjusted.

Check

- 1 Turn on the main switch
- 2 Make a single copy, and observe the stop position of the platen cover. The platen cover should stop within + 10mm of the edge of the left cover (Measured at mid-cover)

Adjustment

1. (Figure 1) Remove the upper/rear cover. Set the VR602 to the 12 o'clock position
- 2 Make a single copy, and observe the stop position of the platen cover
- 3 If the platen cover did not stop within +10mm of the edge of the left cover, adjust VR602
 - a) Counterclockwise to decrease speed (and move the stop position of the platen cover to the right).
 - b) Clockwise to increase speed (and move the stop position of the platen cover to the left)
- 4 Repeat steps 2 and 3 as required.
- 5 Perform ADJ 8 1, Registration

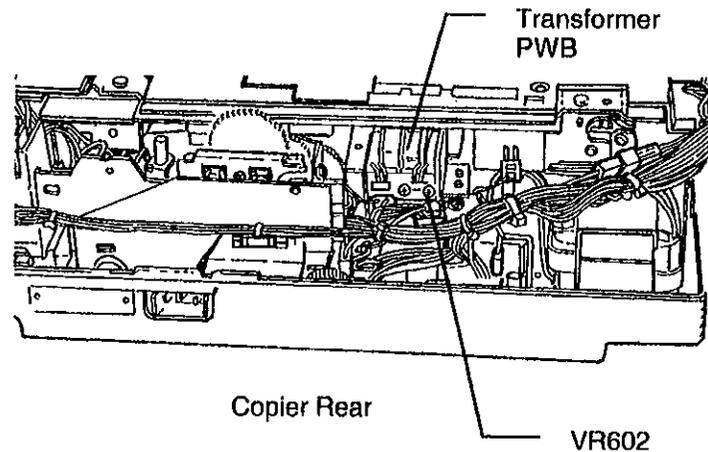


Figure 1. Adjusting the Main Motor Speed

ADJ 6.1 Exposure

Purpose

The purpose is to adjust the exposure level until the correct line density is produced on the copy. Correcting exposure will also eliminate background.

Note: This adjustment consists of three sections. They are **Lamp Voltage**, **White Reference Level**, and **Manual Exposure**. They all must be performed.

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

- Main PWB
- LVPS
- HVPS
- Exposure Lamp (DS1)
- Auto Exposure Sensor (CR1)
- Drum Cartridge

Prerequisites:

Ensure that the following are true:

- 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 4.1) Main motor speed is correct
- (ADJ 9.1) Bias voltages are correct

Check

- 1 Set the exposure range to the middle position
- 2 Make three copies of side A of the standard test pattern (82P524) with the exposure control set to the **Auto** position.

3. Check the third copy
 - If the .27 line pair is just visible ~~and the .20 line pair is not visible~~, the exposure is correct. If not, perform the adjustment.

BSM #3

Adjustment

Lamp voltage

- 1 To gain access to P/J5, remove the rear cover (REP 14. ~~2~~)
2. Press and hold the Stop/Clear button while switching on the power
 - a) All lamps will be lit
 - b) The display will indicate "8"
3. Press the **Copy Quantity** button ~~ten~~ ^{eleven} times. The display will indicate "A"
- 4 (Figure 1) Connect the meter between P/J5-1 and P/J5-3.

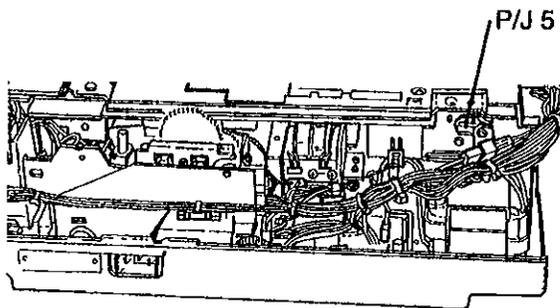


Figure 1. Measuring the lamp voltage

- 5 Adjust the Exposure Lamp voltage until the meter indicates between 64 VAC and 66 VAC.
 - a) Press the **Start** button. The Exposure Lamp will light and the display will indicate the current setting for the voltage measured.

Note: The exposure lamp will turn off after 10 seconds. Press the **Start** button again.

NOTE: The display will range from 1 to 9. The lamp voltage will increase or decrease approximately 1 VAC for a one digit increase or decrease. "0" is the center position (the same as "5")

- b) Press the **Copy Quantity** button to increase or decrease the exposure lamp voltage. Increasing the number increases the voltage. Decreasing the number, decreases the voltage. The "0" setting is the same as the "5" setting.
6. Press the **Start** button to store the new setting.
 - 7 Switch off the power

White Reference Level.

- 1 Enter diagnostics.
2. Press the **Copy Quantity** button eight times The display will indicate "8"
- 3 Cover the platen glass with 3 sheets of white paper.
- 4 Adjust the white reference level
 - a) Press the **Start** button and observe the Light, Dark, and Auto lamps

Note The exposure lamp will turn off after 10 seconds. Press the **Start** button again

- b) (Figure 1) Adjust VR601 on the transformer PWB until the Auto and Light lamps are both lit as shown below

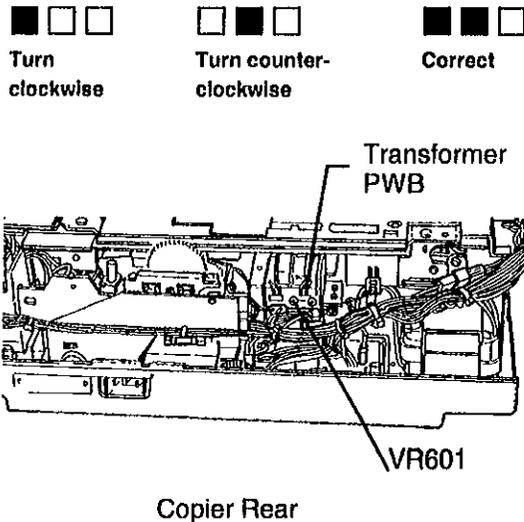


Figure 1. Adjusting the white reference level

Manual Exposure

- 1 Set the exposure range to the middle position
- 2 Make three copies of side A of the standard test pattern (82P524) with the exposure control set to the ~~Auto~~ ^{Manual} position
- 3 Check the third ~~copy~~ ^{copy}:
 - If the 27 line pair is just visible ~~and the 20 line pair is not visible~~, the exposure is correct. If not, continue
4. Enter diagnostics.
5. Press the **Copy Quantity** button five times. The display will indicate "5".
- 6 Adjust the Manual Exposure setting
 - a) Press the **Start** button The display will indicate the current setting. The adjustment range is from 0 to 49. Observe the Exposure LEDs and display to determine the setting. Use the following as a guide:

<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> 0	= 0
<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> 5	= 15
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> 5	= 25
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> 5	= 35
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> 9	= 49
 - b) Press the **Copy Quantity** button to increase the exposure or the **Exposure** button to decrease the exposure. Increasing the number, increases the exposure.

- 7 Press the **Start** button to store the new setting and make a copy
- 8 Exit diagnostics
9. Go to Section 6 and perform the following procedures in the order listed
 - 1) Auto Exposure Adjustment
 - 2) Light and Dark Exposure Adjustment
- 10 Reinstall the rear cover

ADJ 8.1 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 copy of side A of the standard test pattern (82P524), with the LEAD EDGE registered squarely against the top (lead edge) registration edge (normal orientation)
2. Look at the LEAD EDGE registration scales on the copy

If the edge of the paper registers between 1 mm and 4 mm, the lead edge to trail edge registration is adjusted correctly.

If not, perform the adjustment.

Adjustment

- 1 Perform ADJ 4 1 Main Motor Speed.
- 2 Make a copy of side A of the standard test pattern (82P524), with the LEAD EDGE registered squarely against the top (lead edge) registration edge (normal orientation)
- 3 Look at the lead edge registration scales on the copy

NOTE: To avoid damage to the platen cover, remove the cover from the platen cover/platen glass assembly (REP 14 3)

4. (Figure 1). If the registration scale reading was.
 - a) **Above the specified range**, move the platen start actuator to the right the same distance that the image must be moved.
 - b) **Below the specified range**, move the platen start actuator to the left the same distance that the image must be moved
5. Recheck and readjust Lead Edge Registration as necessary.

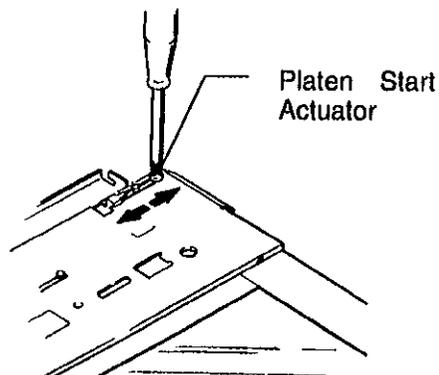


Figure 1. Adjusting the lead edge registration

ADJ 9.1 Bias Voltage

Purpose

The purpose is to adjust the developer bias voltages to within specification.

Check

1. Switch off the copier. Remove the left cover.
2. Set your meter to be able to measure a -250 VDC.
3. Connect the (+) lead to CN-D-1 on the bias PWB; the (-) lead to chassis.
4. Program 3 copies and press **Start**.
5. Check for a measurement between -247 to -253 VDC.
6. If the voltage reading is out of specification, perform the adjustment.
7. If the voltage is OK, reinstall the left cover.

Adjustment

NOTE: The adjustment pots may be glued to hold the factory setting. Loosen the pots if the voltage requires an adjustment.

1. Program 3 copies and press **Start**.
2. (Figure 1): Adjust VR301 on the bias PWB until the voltage is between -247 to -253 VDC.
3. Reinstall the left cover.

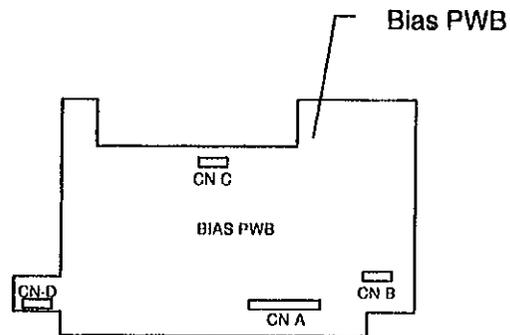


Figure 1. Adjusting the Bias Voltage

5. PARTS LIST SECTION

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PL 1 2 TONER CARTRIDGE BRACKET	5-5		
PL 1 3 PAPER FEED/XEROGRAPHIC DRIVE ASSEMBLY	5-6		
PL 1 4 FUSER/PAPER TRANSPORT DRIVE ASSEMBLY	5-7		
PAPER FEED AND REGISTRATION			
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OVERVIEW

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components

ORGANIZATION

PARTS LISTS

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

ELECTRICAL CONNECTORS AND FASTENERS

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

COMMON HARDWARE

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

PART NUMBER INDEX

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

OTHER INFORMATION

ABBREVIATIONS

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

ADJ	ADJUSTMENT PROCEDURE
A	AMP
AC	ALTERNATING CURRENT
HZ	HERTZ
M	MILLIMETER
PL	PL (EX: PL2 4 OR PL2-A4)
P/O	PART OF
PWB	PRINTED WIRING BOARD
REF	REFERENCE
REP	REPAIR PROCEDURE
RX	RANK XEROX
US	UNITED STATES CUSTOMER OPERATIONS
V	VOLT
W/	WITH
W/O	WITHOUT
XCL	XEROX CANADA LIMITED
XLA	XEROX LATIN AMERICA

SYMBOLGY

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.

SYMBOLGY

A tag number within a circle and pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1) Information on the modification is in the Change Tag Index

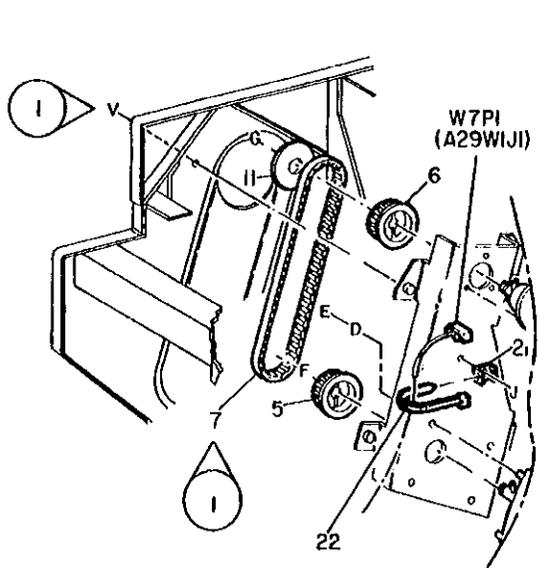


Figure 1 With Tag Symbol

A tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the tag number within the circle (Figure 2)

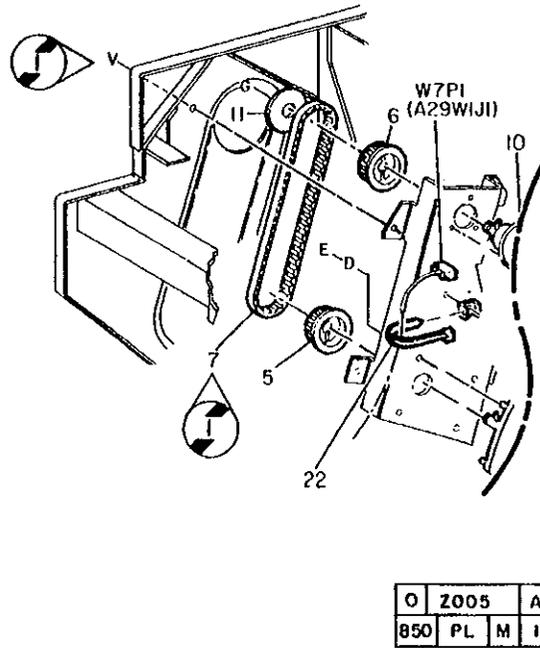


Figure 2 Without Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3) Information on the modification is in the Change Tag Index.

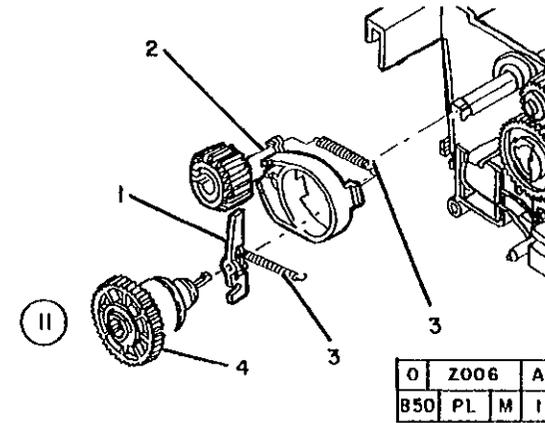


Figure 3 Entire Drawing With Tag Symbol

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4)

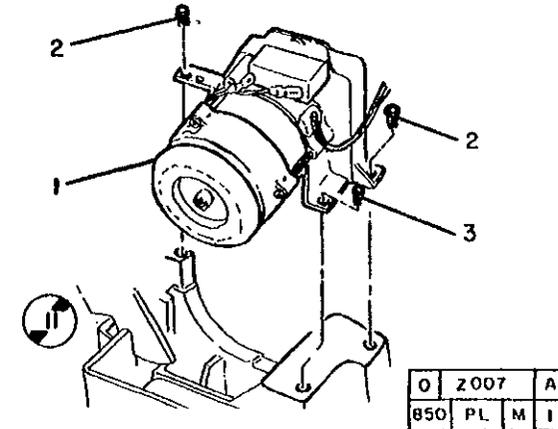
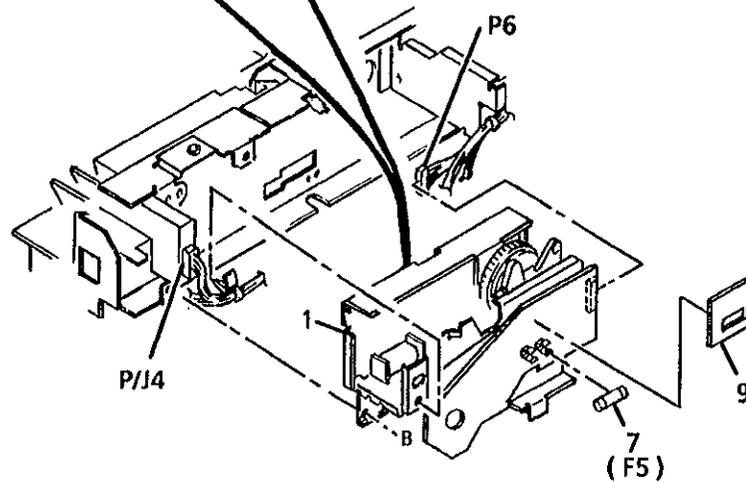
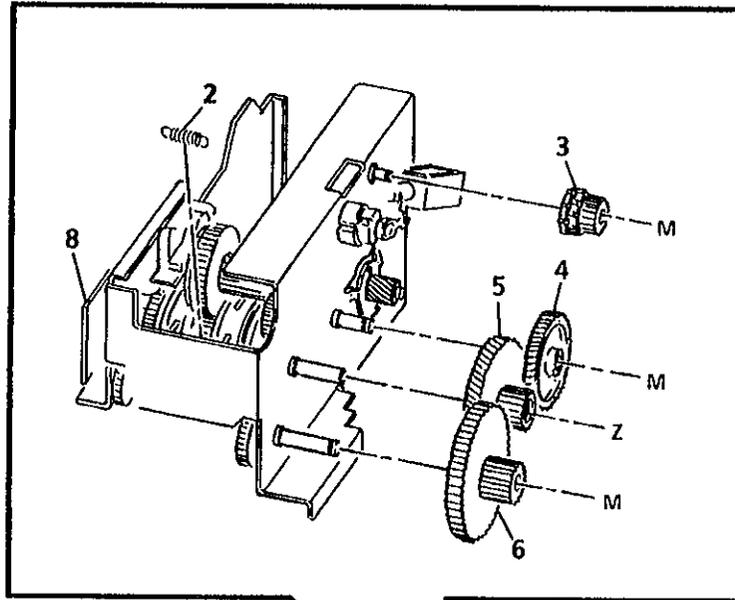


Figure 4 Entire Drawing Without Tag Symbol

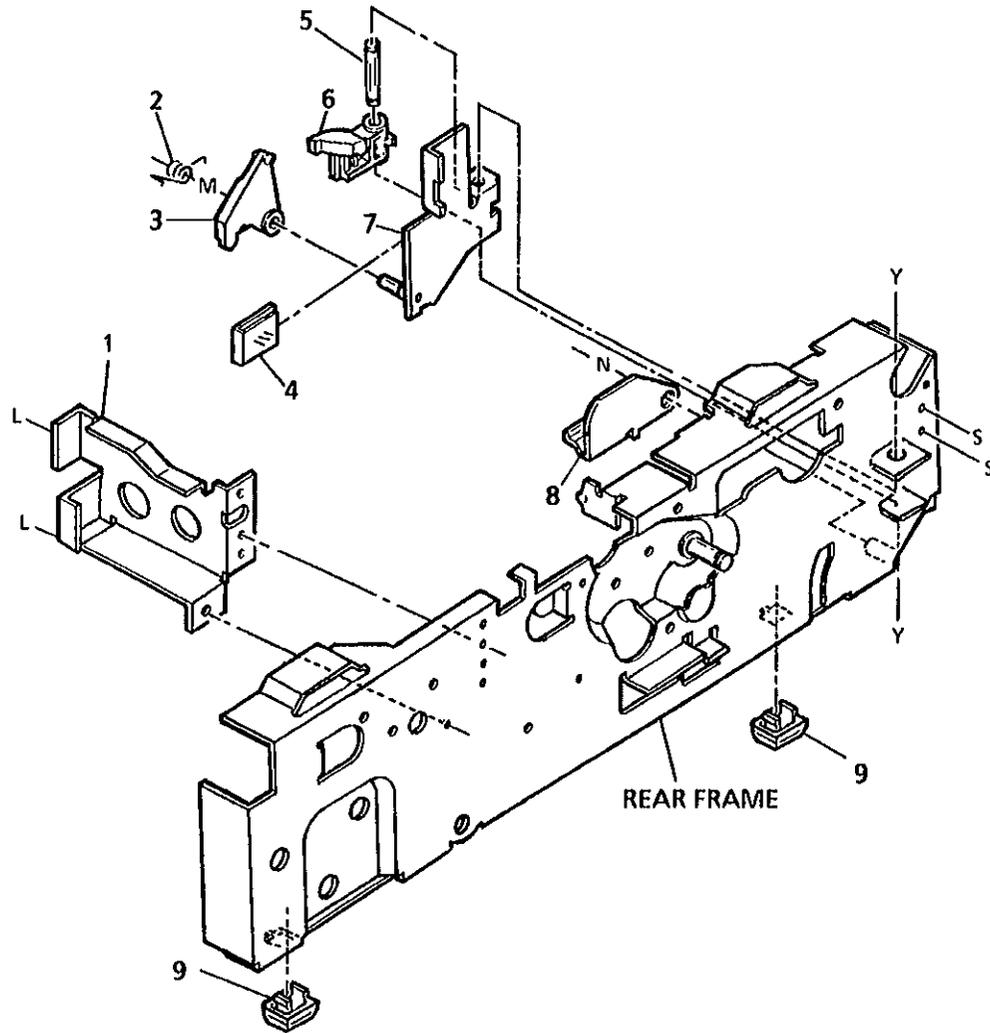
PL 1.1 MAIN DRIVE ASSEMBLY



0	0001	B
SHK	PL	X 0

ITEM	PART	DESCRIPTION
1	7K6270	DRIVE ASSEMBLY (60HZ) (REP 4.1)
-	7K8690	DRIVE ASSEMBLY (50HZ) (REP 4.1)
2	9E25140	SPRING
3	7E14920	GEAR
4	7E14930	GEAR (70T/20T)
5	7E14940	GEAR (65T/20T)
6	7E14950	GEAR (65T/20T)
7	108E1340	FUSE (F5) (8A, 100V)
-	108E2560	FUSE (F5) (5A, 200V)
8	--	DRIVE ASSEMBLY PWB (P/O ITEM 1)
9	--	PWB PROTECTOR (NOT SPARED)

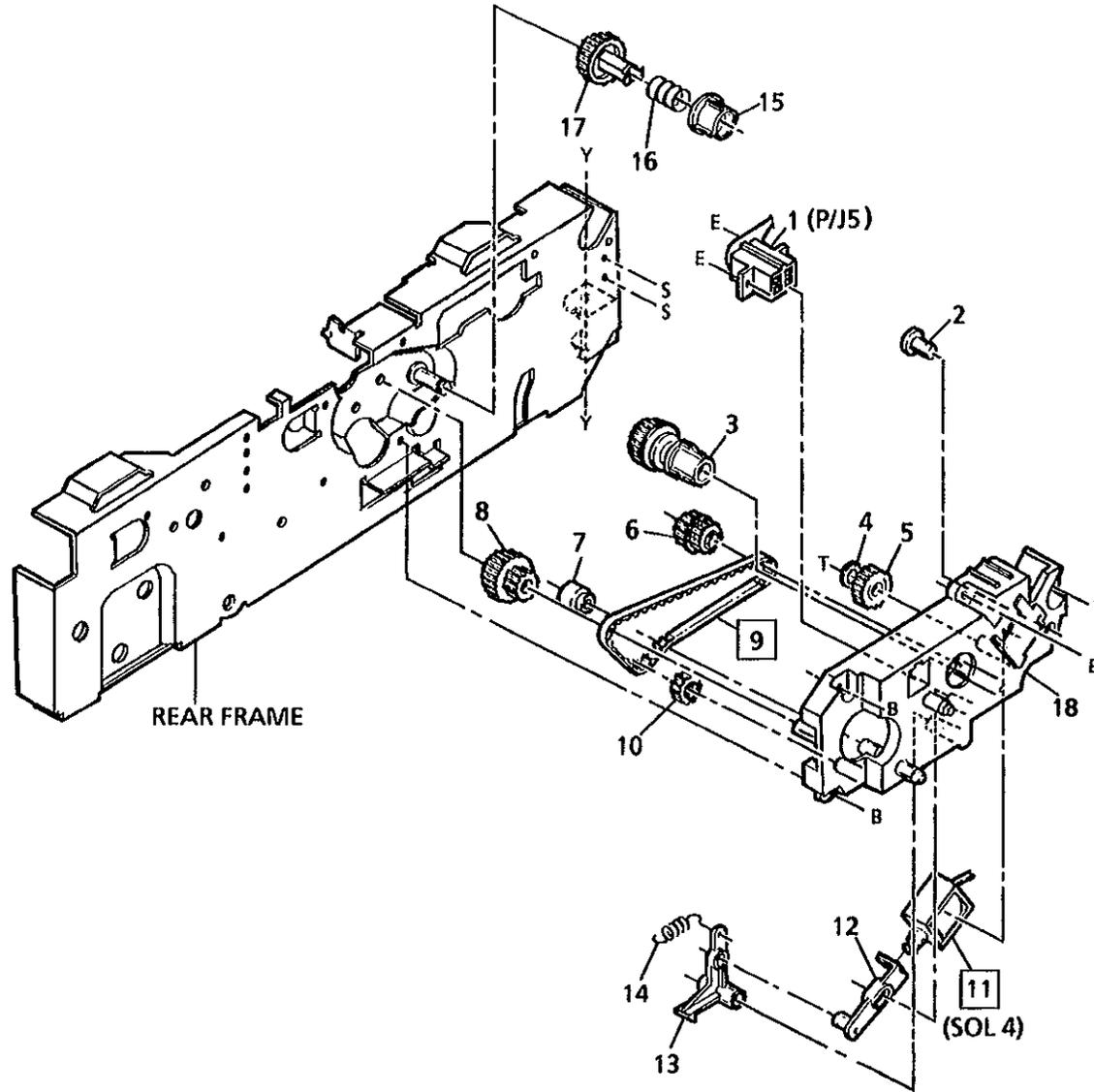
PL 1.2 TONER CARTRIDGE BRACKET



ITEM	PART	DESCRIPTION
1	--	SUPPORT BRACKET (NOT SPARED)
2	9E25040	SPRING
3	11E3460	LEVER
4	--	INSULATOR (NOT SPARED)
5	--	SHAFT (NOT SPARED)
6	11E3470	LEVER
7	--	BRACKET (NOT SPARED)
8	--	LEVER (NOT SPARED)
9	17E4000	REAR FOOT

0	0002	A
SHK	PL	X 0

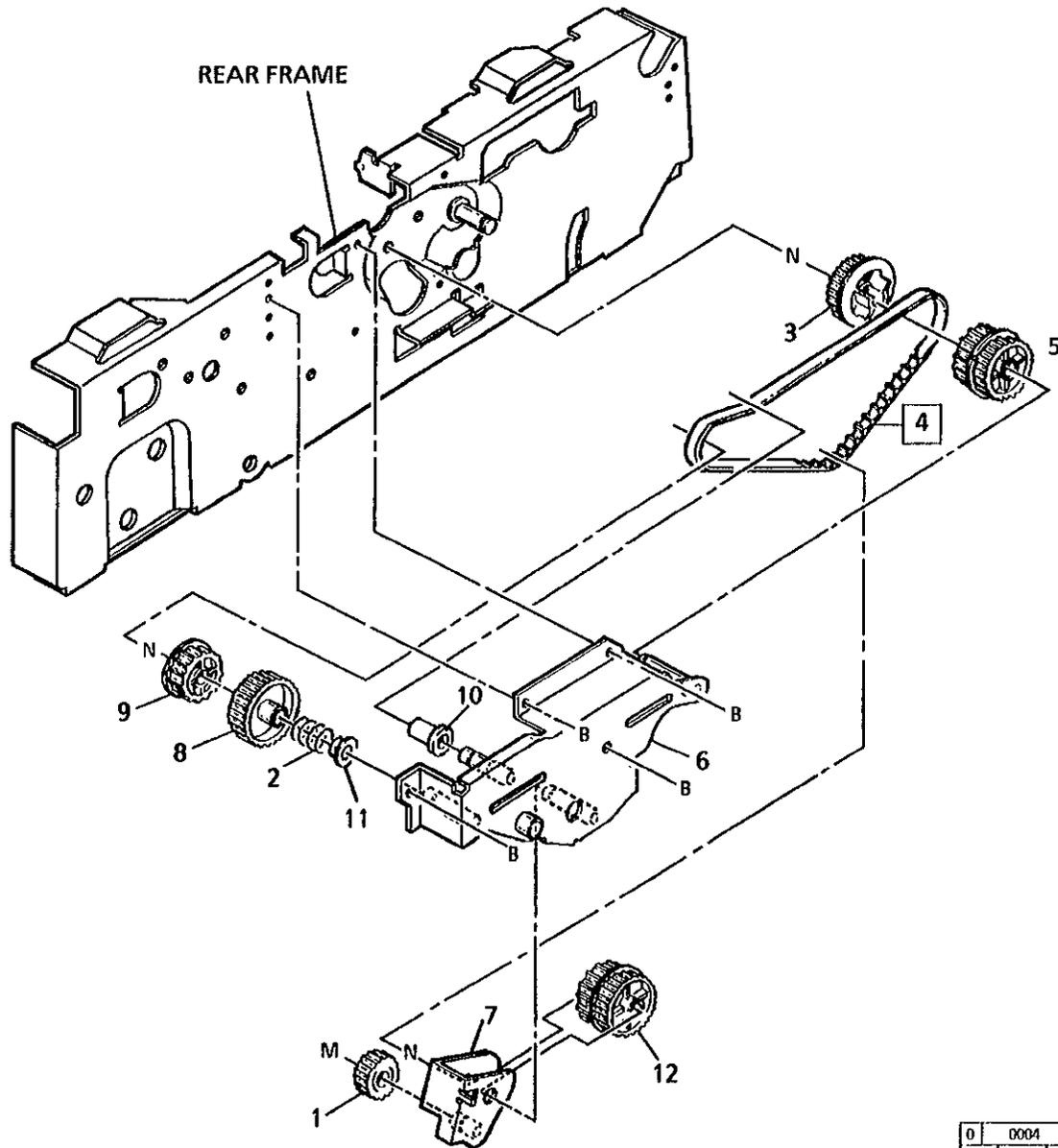
PL 1.3 PAPER FEED/XEROGRAPHIC DRIVE ASSEMBLY



ITEM	PART	DESCRIPTION
1	--	DEVELOPER INTERFACE HARNESS (NOT SPARED)
2	6E22900	PIN
3	--	COUPLER (NOT SPARED)
4	14E18000	SPACER
5	7E14840	GEAR (20T)
6	7E14850	GEAR (16/20T)
7	5E6340	COLLAR
8	7E14860	GEAR (26/20T)
9	23E6050	PAPER FEED DRIVE BELT (REP 8 5)
10	20E12600	PULLEY (16T)
11	121E6360	REGISTRATION ROLL SOLENOID (SOL4) (REP 8 2)
12	11E3480	REGISTRATION PAWL LEVER
13	11E3490	REGISTRATION PAWL
14	9E25050	REGISTRATION PAWL SPRING
15	5E6350	COUPLER
16	9E25060	SPRING
17	7E14870	GEAR (24T)
18	--	BRACKET (NOT SPARED)

0	0003	A
SHK	PL	X 0

PL 1.4 FUSER/PAPER TRANSPORT DRIVE ASSEMBLY

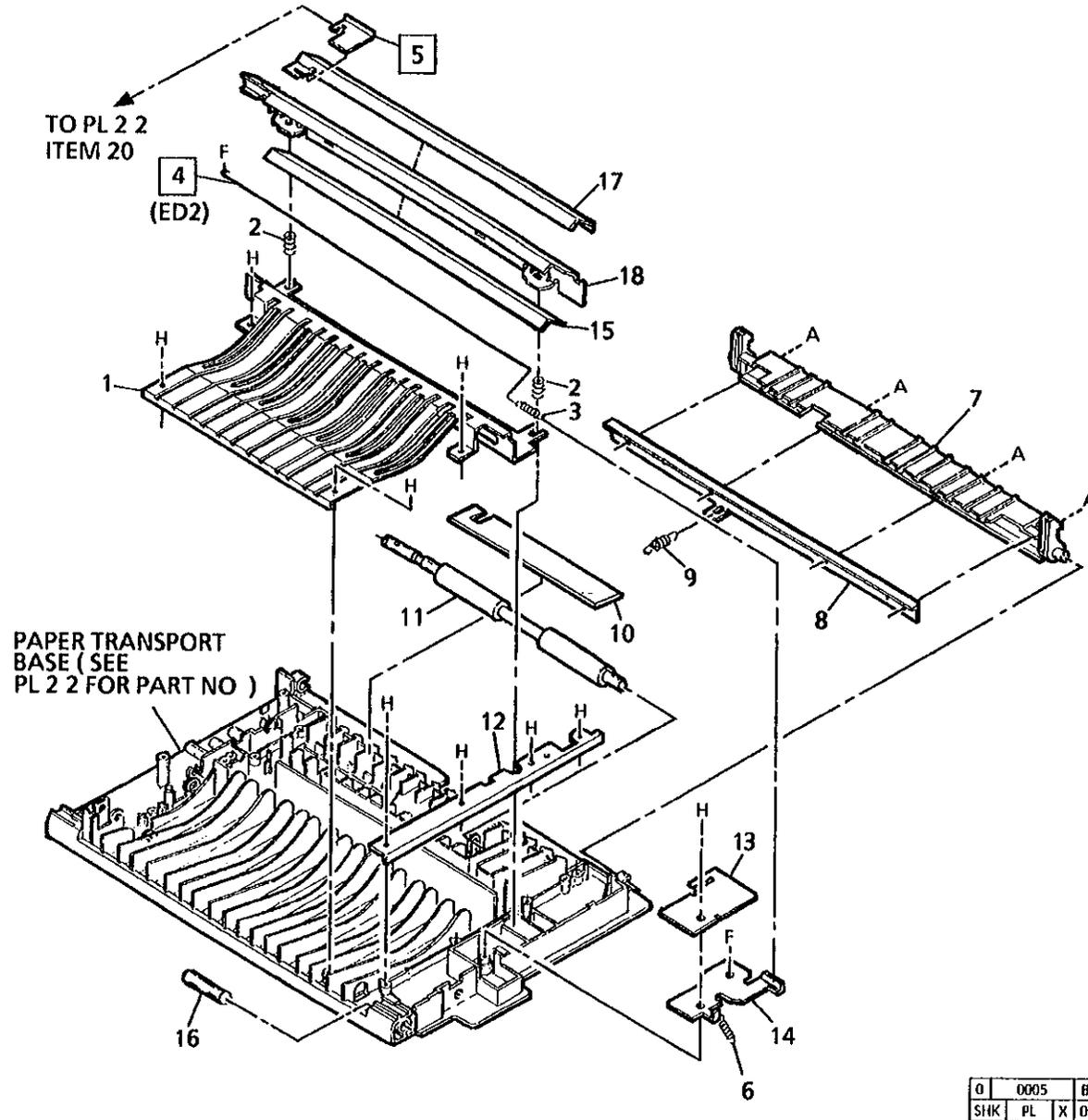


ITEM	PART	DESCRIPTION
1	7E14840	GEAR (20T)
2	9E25060	SPRING
3	7E14880	GEAR (30T)
4	23E6060	TRANSPORT DRIVE BELT (REP 10 2)
5	7E14910	DOUBLE GEAR
6	--	BRACKET
7	--	BRACKET
8	--	GEAR (36T)
9	20E12610	PULLEY (32T)
10	--	PULLEY
11	--	BEARING
12	7E42080	GEAR (30 /36T)

0	0004	A
SHK	PL	X 0

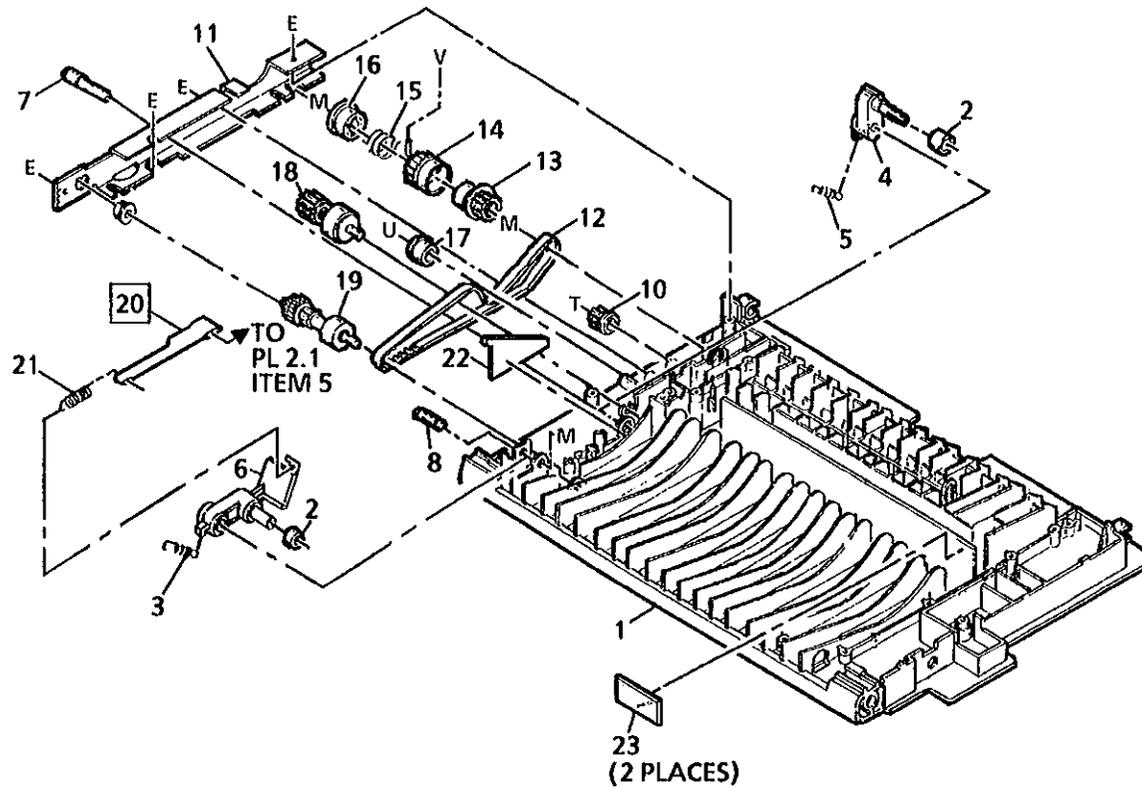


PL 2.1 REGISTRATION AND TRANSFER COROTRON



ITEM	PART	DESCRIPTION
1	38E8550	PAPER GUIDE
2	9E25070	SPRING
3	9E25080	SPRING
4	117E5320	COROTRON WIRE (ED2) (REP 9 3)
5	38E8760	STRIPPER GUIDE HOLDER (REP 10 3)
6	--	SPRING (NOT SPARED)
7	3E16090	PAPER TRANSPORT LATCH
8	--	BASE PLATE (NOT SPARED)
9	9E25090	SPRING
10	38E8570	PAPER GUIDE
11	22E10180	REGISTRATION ROLL
12	--	SUPPORT PLATE (NOT SPARED)
13	118E6740	COVER
14	--	CONTACT (NOT SPARED)
15	38E8590	BAFFLE
16	--	SHAFT (NOT SPARED)
17	38E8580	GUIDE COATING
18	--	PAPER GUIDE (NOT SPARED)

PL 2.2 STRIPPING AND COPY TRANSPORT

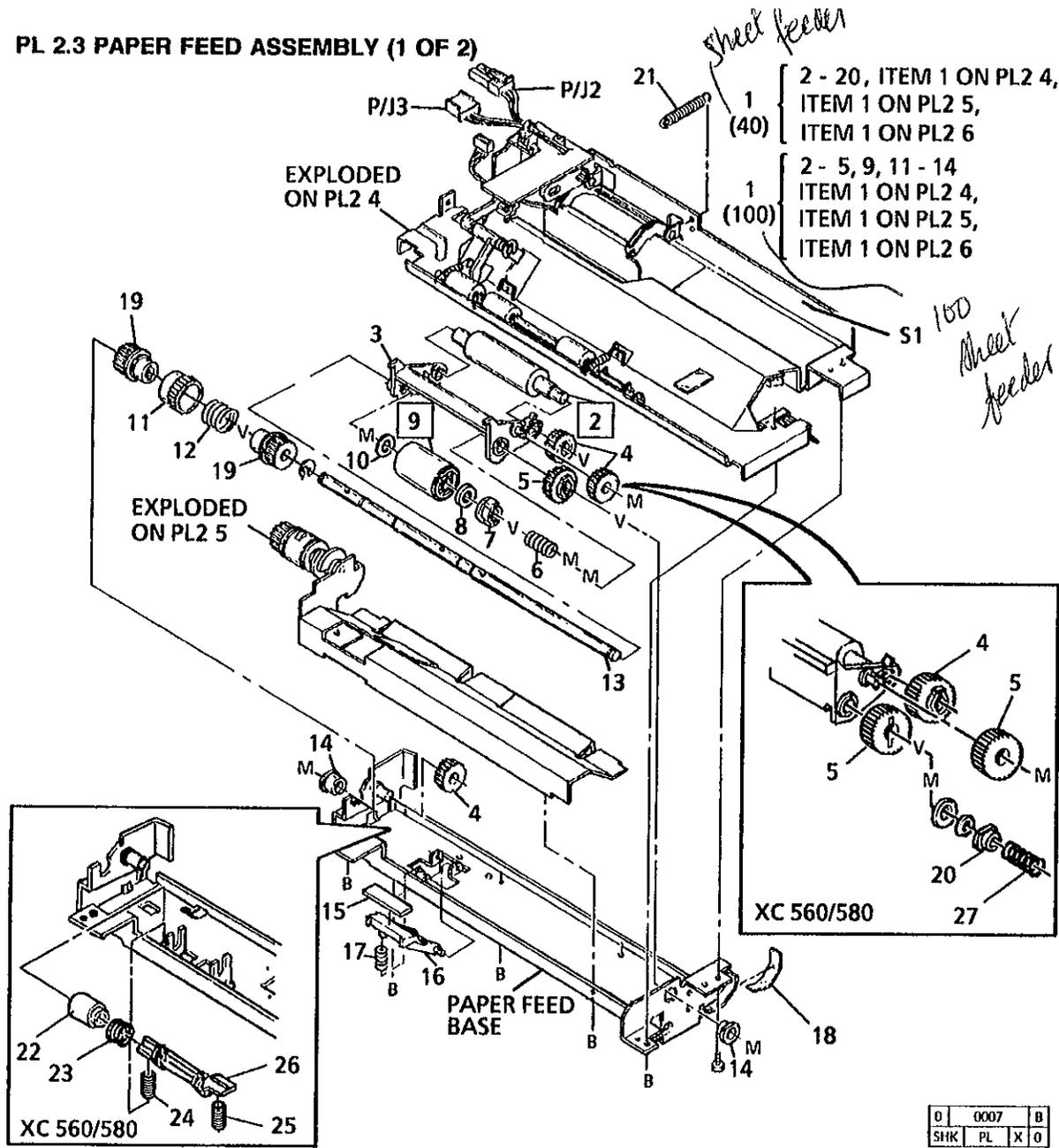


ITEM	PART	DESCRIPTION
1	2E33560	PAPER TRANSPORT BASE
2	--	COLLAR (NOT SPARED)
3	9E25100	SPRING
4	31E4990	PRESSURE ARM
5	9E25110	SPRING
6	31E5000	LOADING ARM
7	--	PIN (NOT SPARED)
8	--	PIN (NOT SPARED)
9	--	BEARING (NOT SPARED)
10	20E12620	PULLEY
11	--	SUPPORT BRACKET (NOT SPARED)
12	23E6070	TIMING BELT (144T)
13	5E6360	CLUTCH BOSS/GEAR
14	--	CLUTCH SLEEVE (NOT SPARED)
15	9E25120	CLUTCH SPRING
16	5E6370	CLUTCH BOSS
17	5E6380	COLLAR
18	22E10190	ROLLER
19	22E10200	ROLLER
20	38E8600	STRIPPER GUIDE (REP 10 3)
21	9E25130	SPRING
22	--	PAPER GUIDE (NOT SPARED)
23	118E6750	TONER SEAL

0	0006	A
SHK	PL	X 0

TONER

PL 2.3 PAPER FEED ASSEMBLY (1 OF 2)

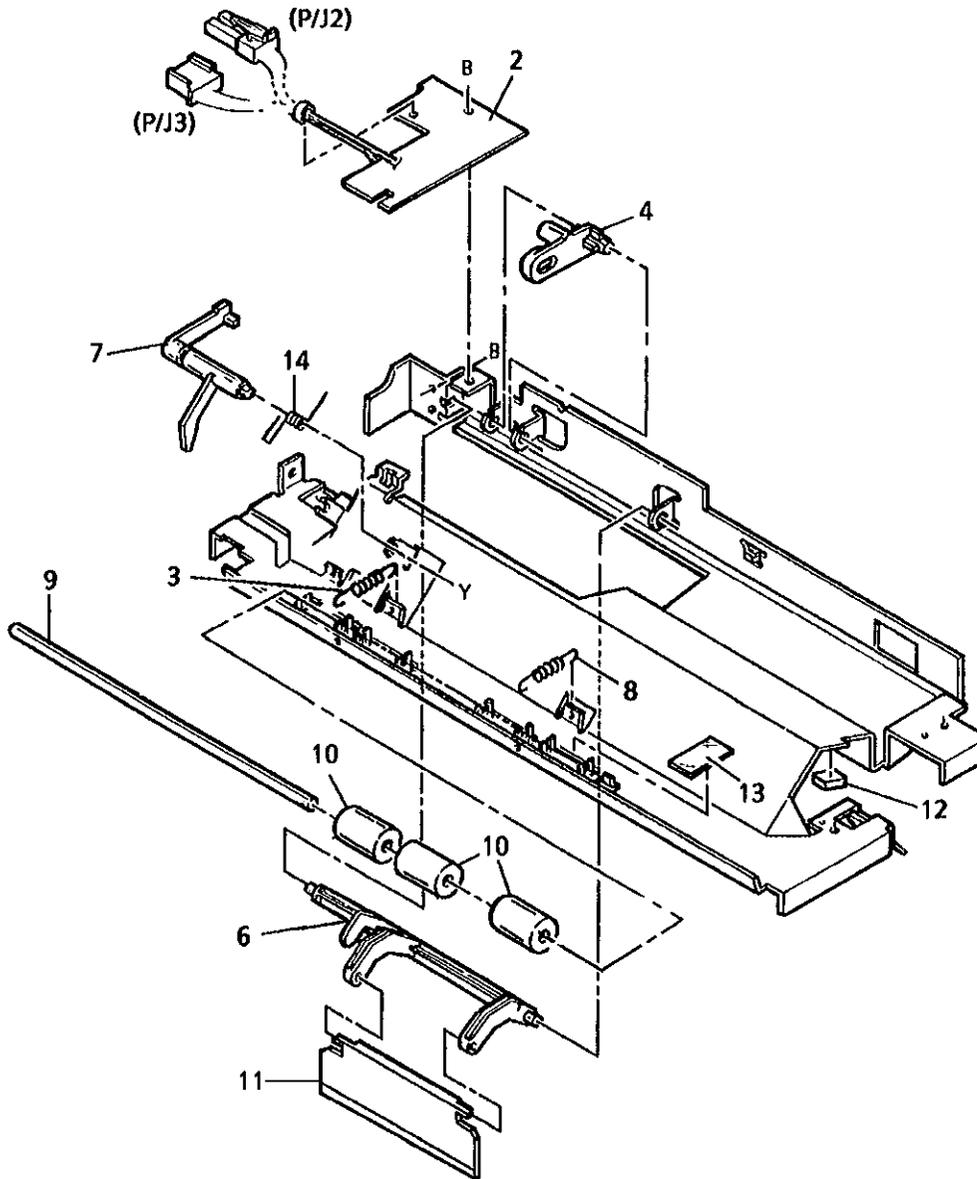


ITEM	PART	DESCRIPTION
①	--	PAPER FEED ASSEMBLY (REP 8 3)
2	22E20050	TAKEUP ROLL (REP 8 4)
3	31E5030	FEED ARM (XC520/XC540)
-	31E8200	FEED ARM (XC560/XC580)
4	--	GEAR (16T)(P/O ITEM 1)
5	7E14840	GEAR (20T)
6	9E25210	SPRING
7	--	BEARING (P/O ITEM 1)
8	--	SPACER(P/O ITEM 1)
9	22E10250	PAPER FEED ROLL (XC520/XC540)(REP 8 4)
-	5E10560	PAPER FEED ROLL (XC560/XC580)(REP 8 4)
10	14E18000	SPACER (XC520/XC540)
11	--	CLUTCH BARREL (P/O ITEM 1)
12	--	SPRING (P/O ITEM 1)
13	6E22920	SHAFT (XC520/XC540)
-	6E56150	SHAFT (XC560/XC580)
14	--	BEARING (P/O ITEM 1)
15	19E15900	RETARD PAD (XC520/XC540)
16	113E8020	RETARD FRAME (XC520/XC540)
17	9E25220	SPRING (XC520/XC540)
18	--	WEAR PROTECT STRIP (P/O ITEM 1)
19	--	CLUTCH BOSS (P/O ITEM 1)
20	--	BEARING (XC560/XC580) (P/O ITEM 1)
21	809E530	SPRING (XC560/XC580)
22	22E20520	REVERSE ROLL (XC560/XC580)
23	809E450	SPRING (XC560/XC580)
24	809E470	SPRING (XC560/XC580)
25	809E460	SPRING (XC560/XC580)
26	6E56160	REVERSE ROLL SHAFT (XC560/XC580)
27	809E480	SPRING (XC560/XC580)

0	0007	B
SHK	PL	X 0



PL 2.4 PAPER FEED ASSEMBLY (2 OF 2)



1 { 2 - 14

ITEM	PART	DESCRIPTION
1	--	PAPER FEEDER (P/O ITEM 1 ON PL2 3)
2	160K21470	PAPER SUPPLY PWB
3	9E25240	REGISTRATION PINCH ROLL SPRING
4	31E5010	CAM FOLLOWER (XC520/XC540)
-	31E8190	CAM FOLLOWER (XC560/XC580)
5	--	WIRE HARNESS (NOT SPARED)
6	31E5020	GATE ARM (XC520/XC540)
-	31E8220	GATE ARM (XC560/XC580)
7	11E3520	PAPER ENTRY SENSOR ACTUATOR
8	9E25200	SPRING
9	6E22910	SHAFT
10	22E10230	PINCH ROLL
11	3E15810	GATE (XC520/XC540)
-	3E41390	GATE (XC560/XC580)
12	6E22930	SHAFT CUSHION
13	38E8620	UPPER GUIDE SPRING
14	--	

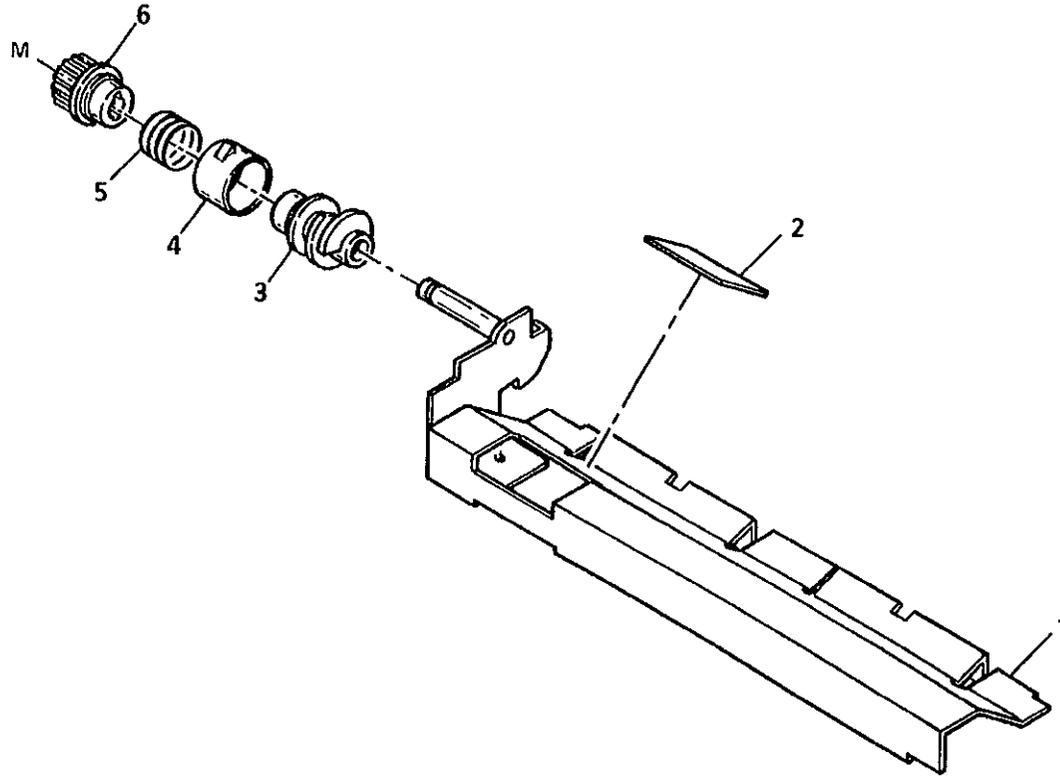
might be able to get

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SHK	PL	X 0



PL 2.5 PAPER GUIDE/CLUTCH ASSEMBLY

1 { 2-7



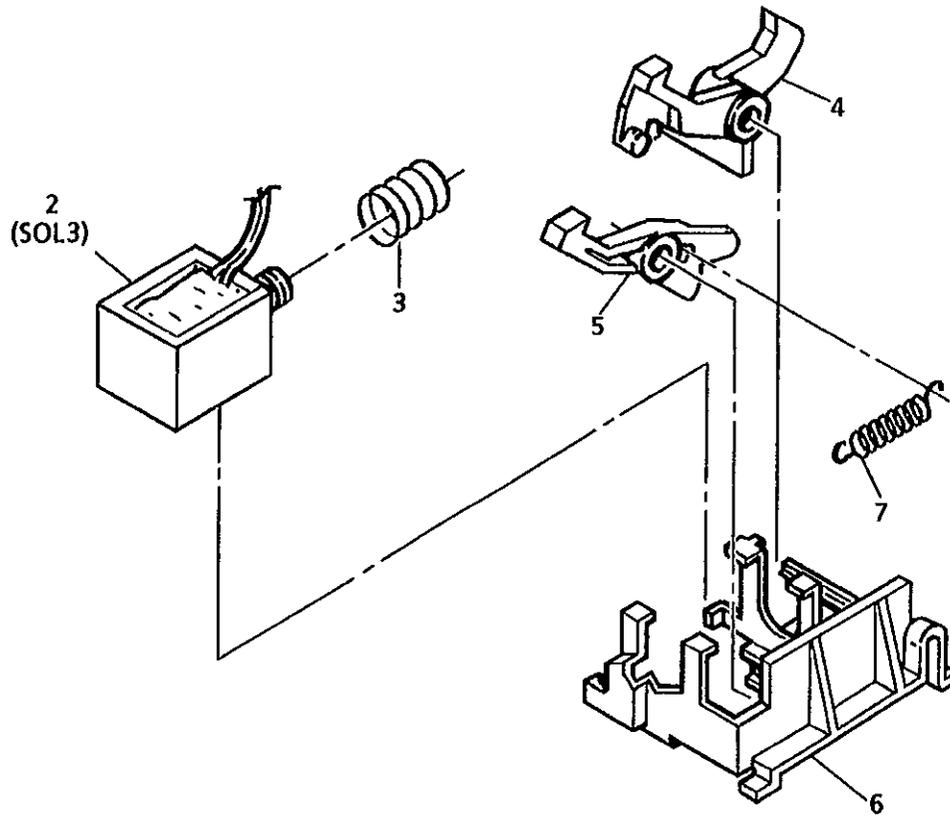
ITEM	PART	DESCRIPTION
1	--	PAPER GUIDE/CLUTCH ASSEMBLY (P/O ITEM 1 ON PL2 3)
2	38E8610	PAPER GUIDE (XC520/XC540)
-	38E16900	PAPER GUIDE (XC560/XC580)
3	--	CLUTCH BOSS (P/O ITEM 1)
4	--	CLUTCH BARREL (P/O ITEM 1)
5	--	SPRING(P/O ITEM 1)
6	--	CLUTCH BOSS (P/O ITEM 1)
7	--	PAPER GUIDE (P/O ITEM 1)

0	0010	A
SHK	PL	X 0

PL 2.6 PAPER FEED SOLENOID ASSEMBLY

1 { 2-7

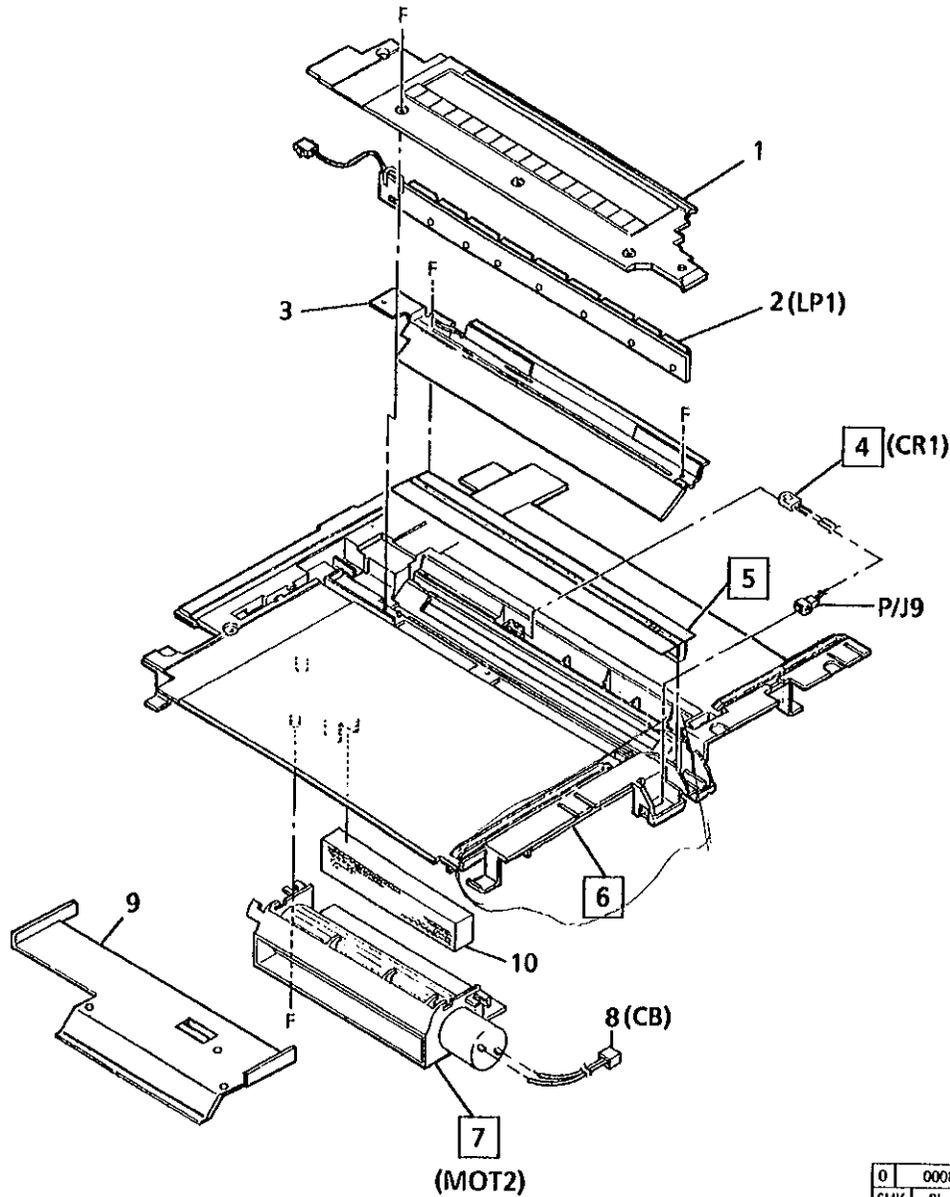
ITEM	PART	DESCRIPTION
1	--	SOLENOID ASSEMBLY (P/O ITEM 1 ON PL2 3)
2	121E6370	PAPER FEED SOLENOID (SOL3)
3	9E50870	SPRING
4	7E25590	PAWL
5	7E25600	PAWL
6	68E67890	MOUNTING BRACKET (P/O ITEM 1)
7	9E50880	SPRING



0	0012	A
SHK	PL	X 0



PL 3.1 OPTIC ASSEMBLY



ITEM	PART	DESCRIPTION
1	48E30830	EXPOSURE LAMP COVER
2	122E2020	EXPOSURE LAMP (LP1) (REP 6 1)
3	62K7800	REFLECTOR
4	--	AUTO EXPOSURE SENSOR (CR1) (REP 6 2)
5	62K7790	SELFOC LENS (REP 6 2)
6	1E38560	OPTICS FRAME (just small piece) (REP 6 3)
7	127K8340	COOLING MOTOR(MOT2) (REP 6 4)
8	152K35990	WIRE HARNESS
9	--	DUCT COVER
10	53E4810	OZONE FILTER

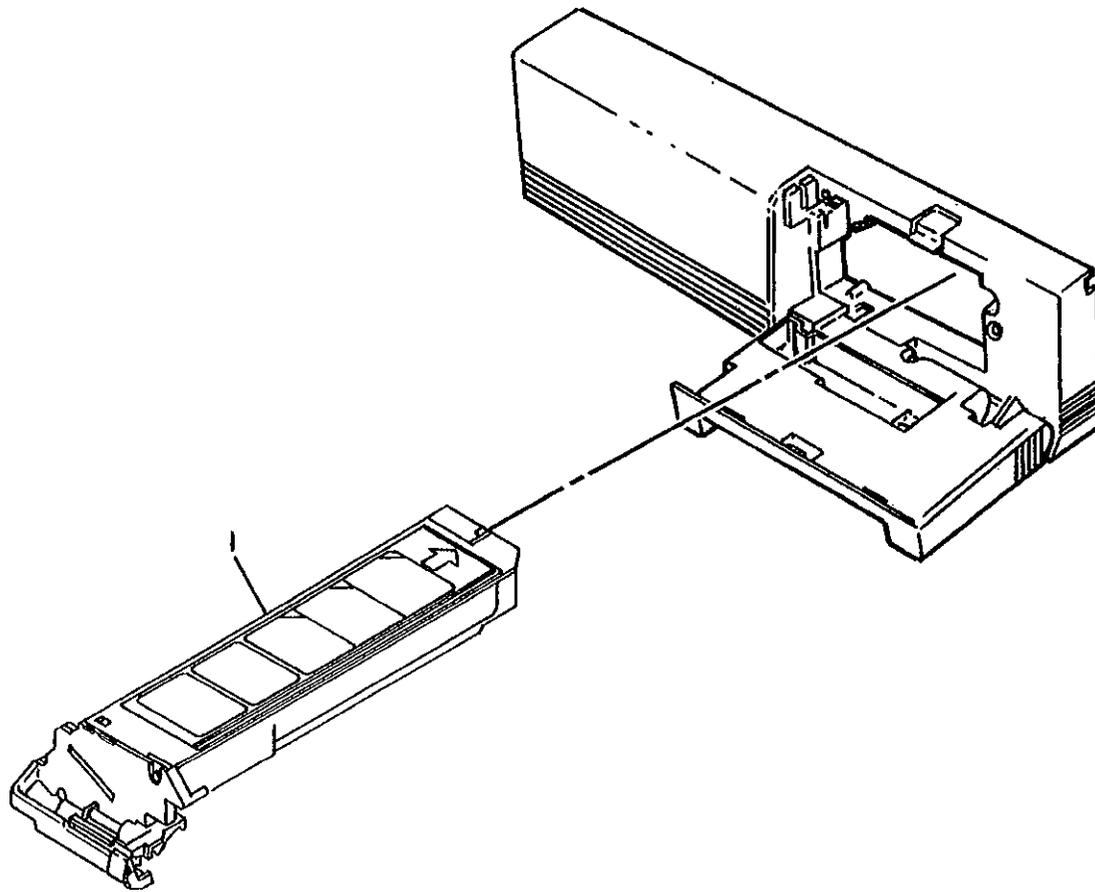
DUNT-6171FC12

130E04250
(DUNT-6171FC12)
for 5220

5222
DUNT-6171FC11
130E04250

0	0008	A
SHK	PL	X D

PL 4.1 TONER CARTRIDGE



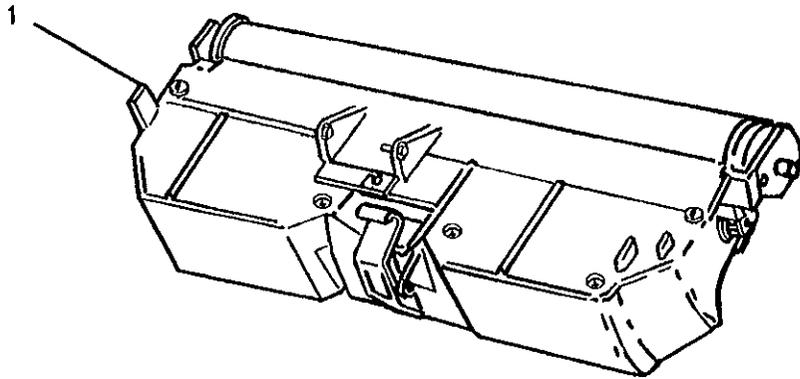
ITEM	PART	DESCRIPTION
1	6R333	TONER CARTRIDGE (BLACK) (USO/XCL/XLA) (REP 9 1)
-	6R589	TONER CARTRIDGE (BLACK) (RX) (REP 9 1)

0	0018	A
SHK	PL	X 0



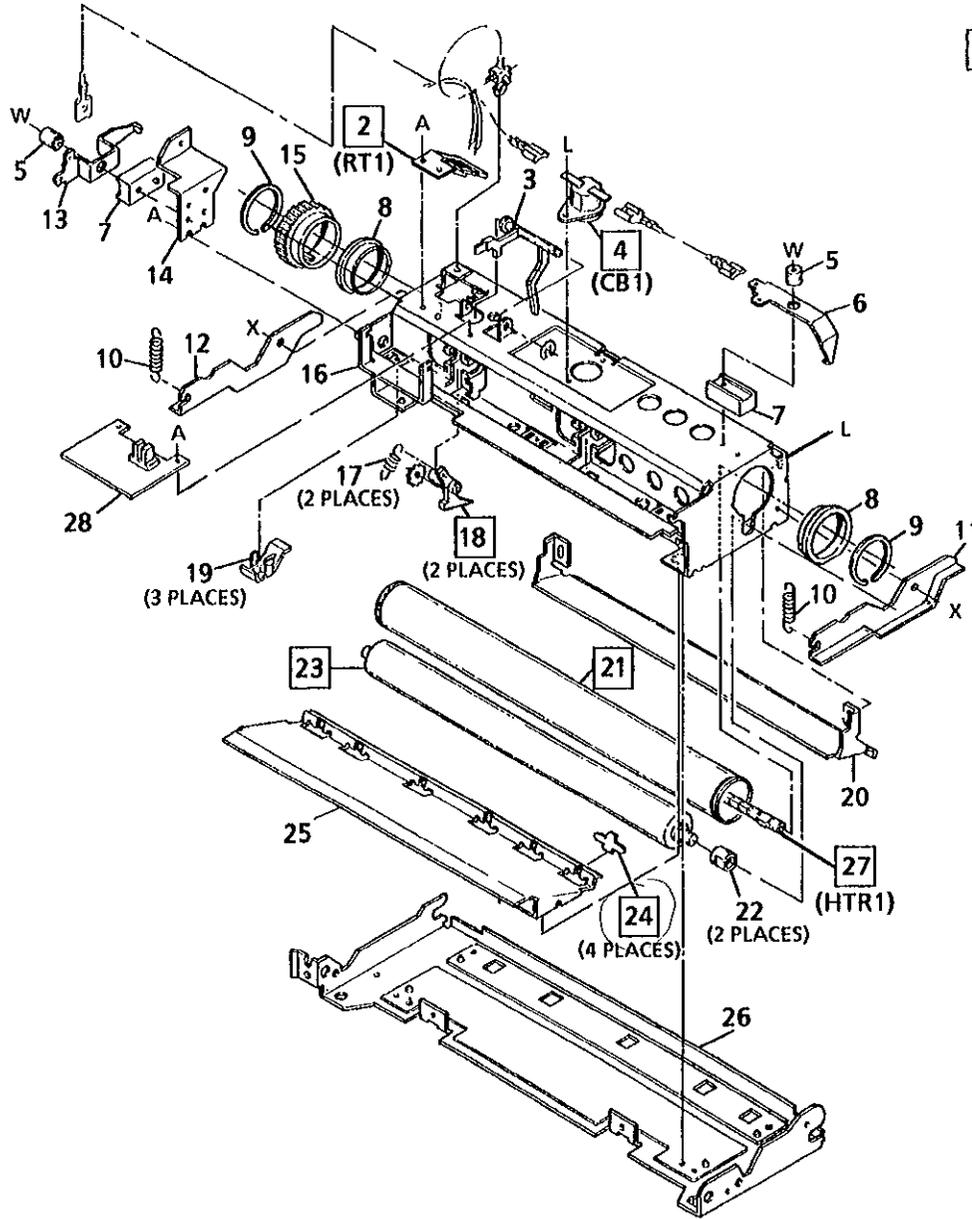
PL 4.2 DRUM CARTRIDGE

ITEM	PART	DESCRIPTION
1	113R104	DRUM CARTRIDGE (USO/XCL/XLA) (REP 9.2)
-	113R105	DRUM CARTRIDGE (RX) (REP 9.2)



0	0013	A
SHK	PL	X 0

PL 5.1 FUSER ASSEMBLY



1 { 2 - 28

ITEM	PART	DESCRIPTION
1	--	FUSER ASSEMBLY (NOT SPARED) (REP 10 4)
2	130K54440	THERMISTOR (RT1) (REP 10 6)
3	11E3510	EXIT SENSOR ACTUATOR
4	130E2990	THERMAL BREAKER (CB1) (REP 10 7)
5	--	INSULATOR (P/O ITEM 1)
6	9E25150	FRONT HEAT ROD CONTACT (P/O ITEM 1)
7	--	INSULATOR FRAME (P/O ITEM 1)
8	13E5160	BEARING
9	3E10140	HEAT ROLL SNAP RING
10	9E25160	SPRING
11	--	LEVER (P/O ITEM 1)
12	--	LEVER (P/O ITEM 1)
13	9E25170	REAR HEAT ROD CONTACT
14	--	HEAT ROD MOUNTING BRACKET (P/O ITEM 1)
15	7E14961	GEAR (45T)
16	--	FUSER FRAME (P/O ITEM 1)
17	9E25180	SPRING
18	7E11260	SEPARATOR PAWL (REP 10 8)
19	--	HEAT ROLL GUIDE (P/O ITEM 1)
20	--	INPUT BAFFLE (P/O ITEM 1)
21	22E10210	HEAT ROLL (REP 10 9)
22	13E6560	BEARING
23	22E18560	PRESSURE ROLL (REP 10 9)
24	9E25190	STRIPPER FINGER - gets small bit of plastic instead - Czech (PACKAGE OF 4) (REP 10 10)
25	--	EXIT BAFFLE (P/O ITEM 1)
26	--	FUSER BASE (P/O ITEM 1)
27	122E1190	HEAT ROD (HTR1) (120V) (REP 10 5)
-	122E2030	HEAT ROD (HTR1) (220V) (RX) (REP 10 5)
28	160K21450	BIAS PWB (REP 3 5)

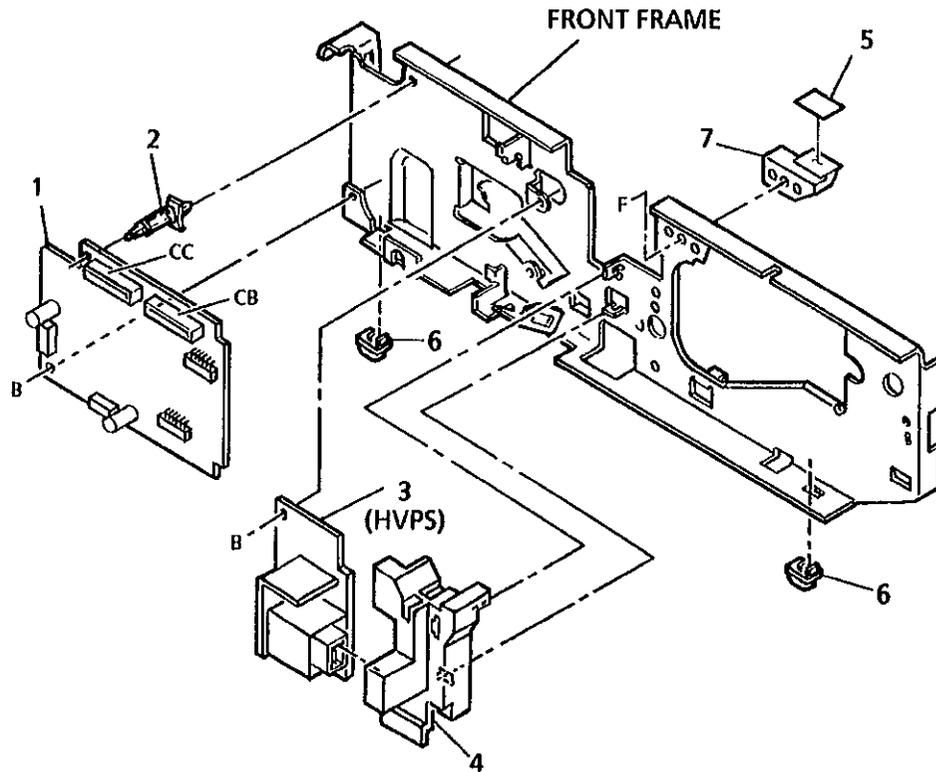
0	0011	A
SHK	PL	X 0

TONER

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PL 5.1

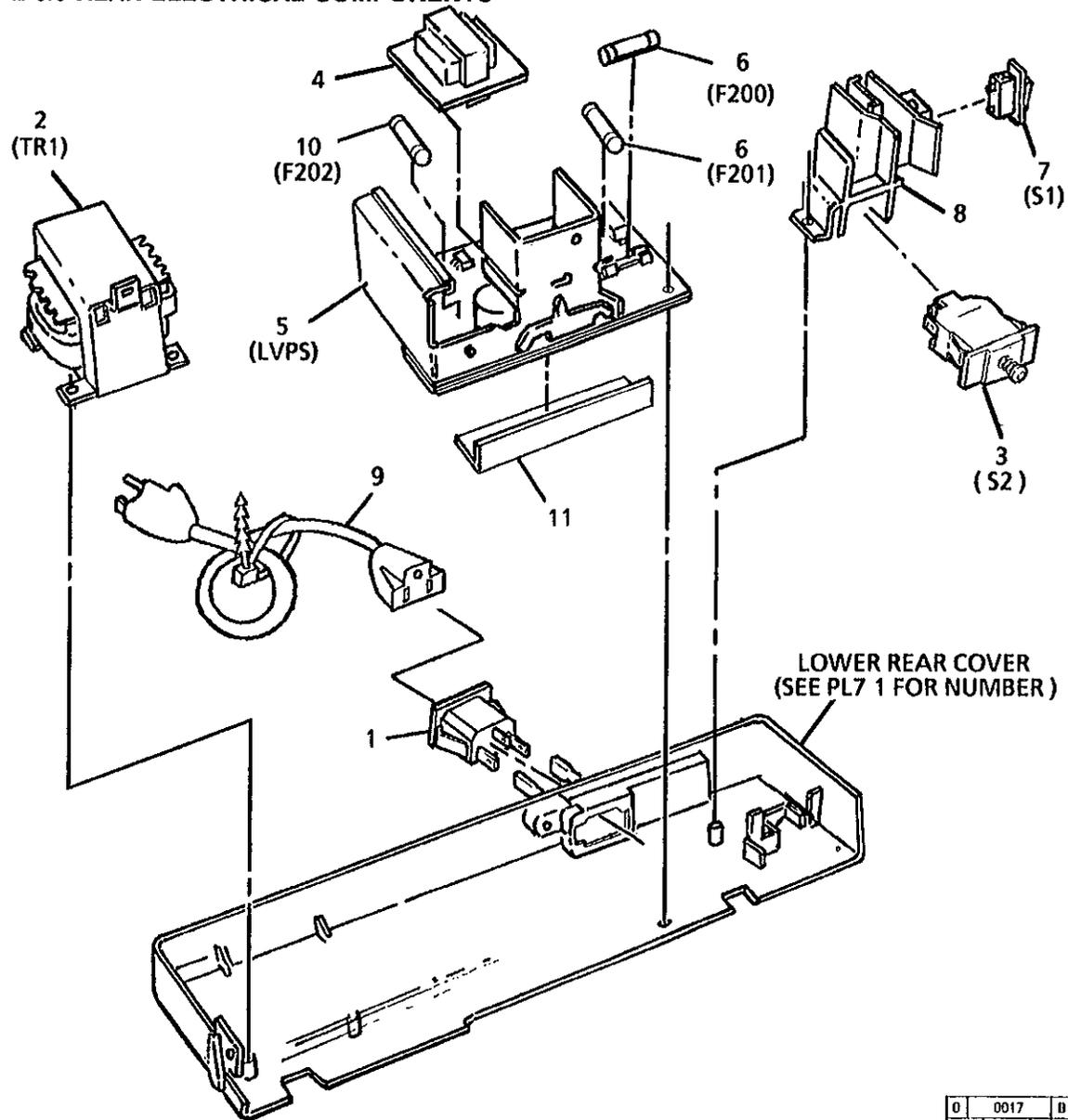
PL 6.1 MAIN PWB, HVPS



ITEM	PART	DESCRIPTION
1	160K21441	MAIN PWB (100V) (REP 3 1)
-	160K30510	MAIN PWB (200V) (REP 3 1)
2	--	SUPPORT (NOT SPARED)
3	105K13440	HIGH VOLTAGE POWER SUPPLY (HVPS) (REP 3 2)
4	113K2070 1	HVPS SOCKET
5	10E2590	SLIDE
6	17E4000	FRONT FOOT
7	14E18260	PLATEN SUPPORT BLOCK

0	0019	A
SHK	PL	X 0

PL 6.3 REAR ELECTRICAL COMPONENTS

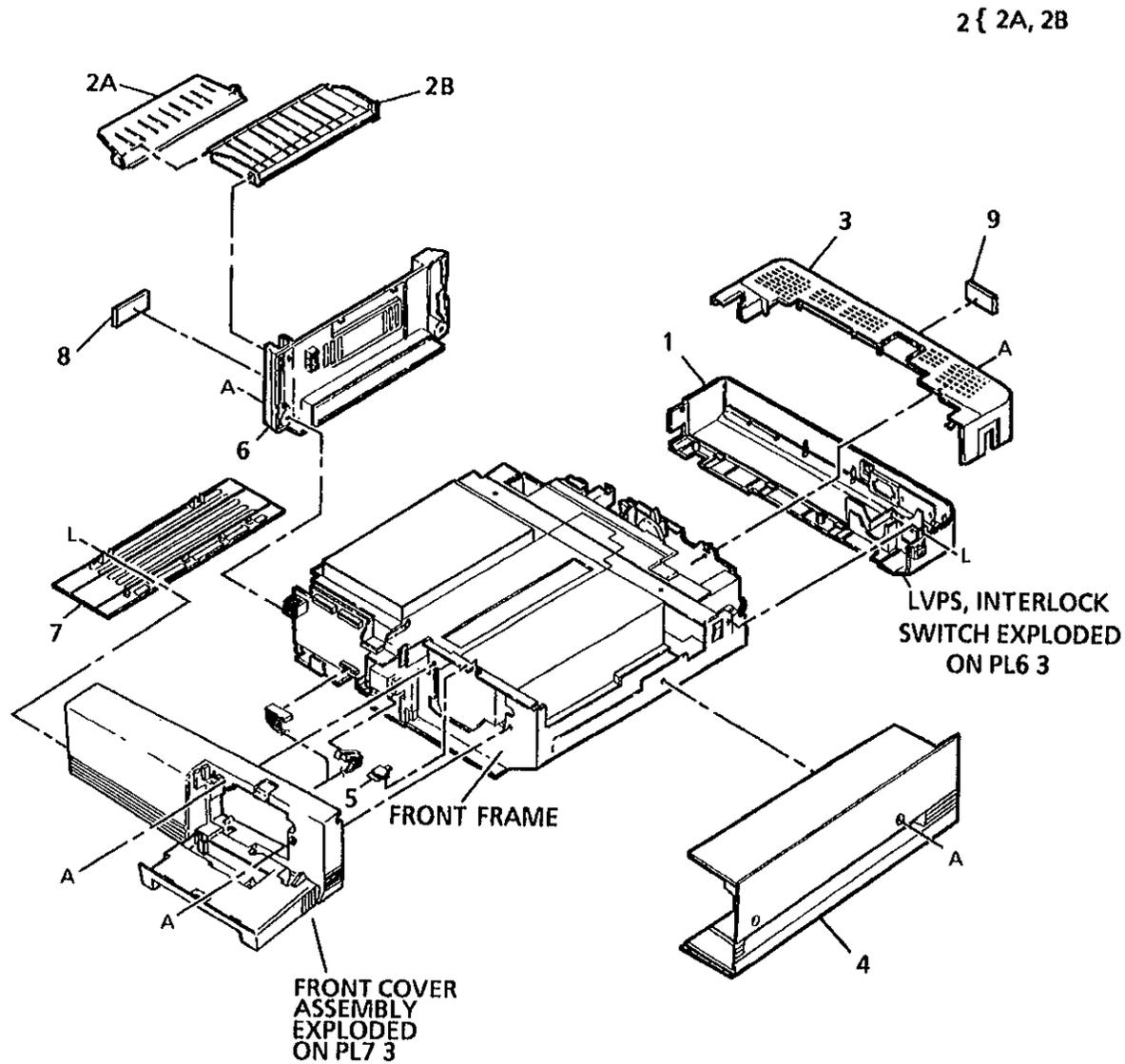


ITEM	PART	DESCRIPTION
1	113E8010	AC SOCKET
2	105K13390	TRANSFORMER (TR1)(60HZ) (REP 3 4)
-	105K13400	TRANSFORMER (TR1)(50HZ) (REP 3 4)
3	110E4030	TONER CARTRIDGE INTERLOCK SWITCH (S2) (REP 1 2)
4	160K21430	TRANSFORMER PWB (100V)(REP 3 3)
-	160K27070	TRANSFORMER PWB (200V)(RX) (REP 3 3)
5	160K21060	LOW VOLTAGE POWER SUPPLY (60HZ)(REP 1 1)
-	160K21070	LOW VOLTAGE POWER SUPPLY (50HZ)(REP 1 1)
6	108E3660	FUSE (F200)(15A, 120V)
-	108E2200	FUSE (F200/F201) (6 3A, 220V)
7	110E4040	POWER ON/OFF SWITCH (S1)
8	--	SWITCH BRACKET (NOT SPARED)
9	--	POWER CORD (NOT SPARED)
10	108E3670	FUSE (F202) (3 15A, 120V)
-	108E3680	FUSE (F202) (3 15A, 220V)
11	118E11140	PWB PROTECTOR SHEET

LOWER REAR COVER
(SEE PL7 1 FOR NUMBER)

0	0017	0
SHK	PL	X 0

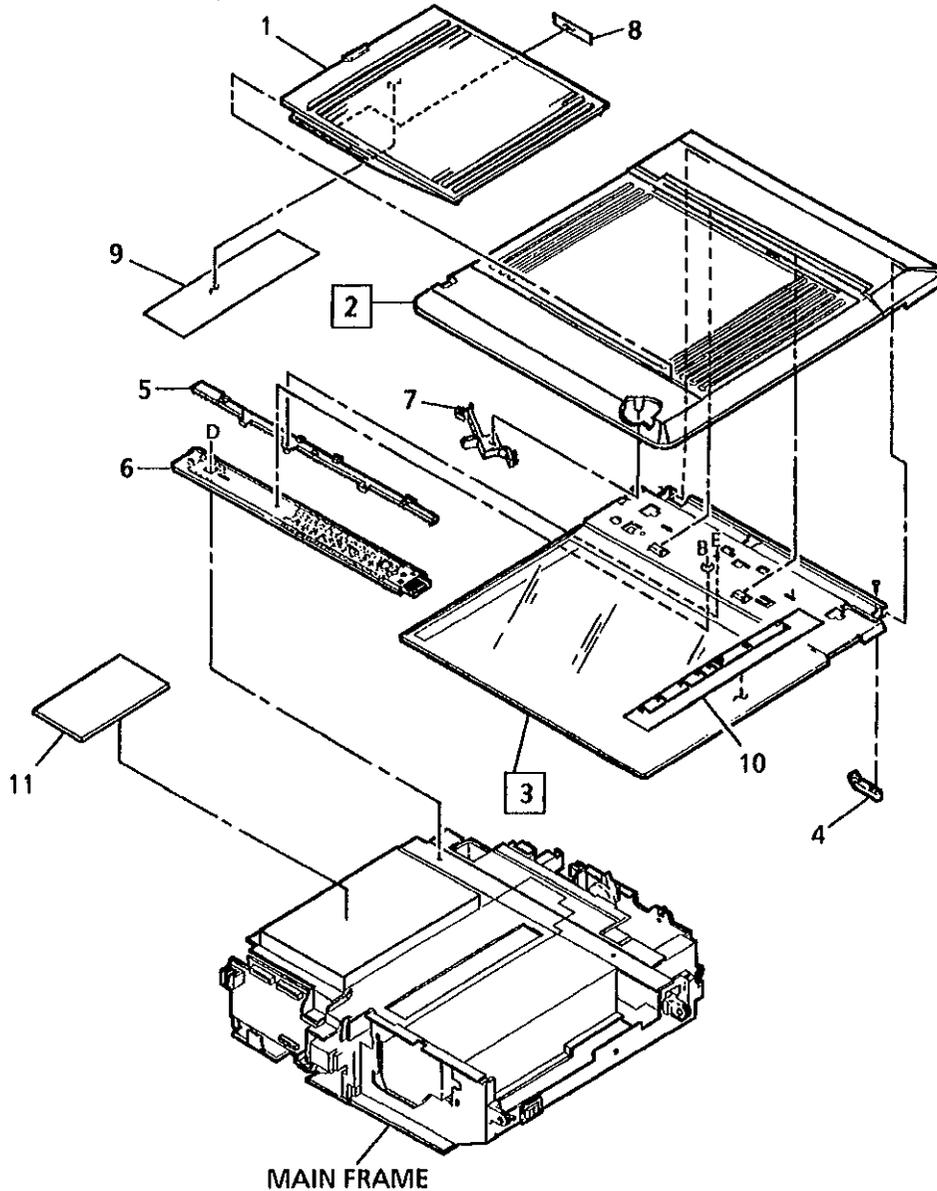
PL 7.1 COVERS AND EXIT TRAY



ITEM	PART	DESCRIPTION
1	48E30400	LOWER REAR COVER (REP 14 3)
2	50K31790	EXIT TRAY (LETTER SIZE) 8 1/2 x 11 (REP 14 1)
-	50K31800	EXIT TRAY (LEGAL SIZE) 11 x 17 (REP 14 1)
2a	--	EXIT TRAY 2 (P/O ITEM 2)
2b	--	EXIT TRAY 1 (P/O ITEM 2)
3	48E30790	UPPER REAR COVER (REP 14 2)
4	48E30800	RIGHT COVER (XC520/XC540) (REP 14 2)
-	--	RIGHT COVER (XC560/XC580) (REP 14 2)
5	--	RELEASE BUTTON
6	48E30810	LEFT EXTERIOR COVER (REP 14.2)
7	2E33540	BOTTOM COVER (REP 14.5)
8	96E70050	FCC LABEL (USO)
9	891E470	CAUTION LABEL (USO)
-	891E480	CAUTION LABEL (RX)

0	0014	B
SHK	PL	X 0

PL 7.2 PAPER TRAY, PLATEN AND TOP COVERS

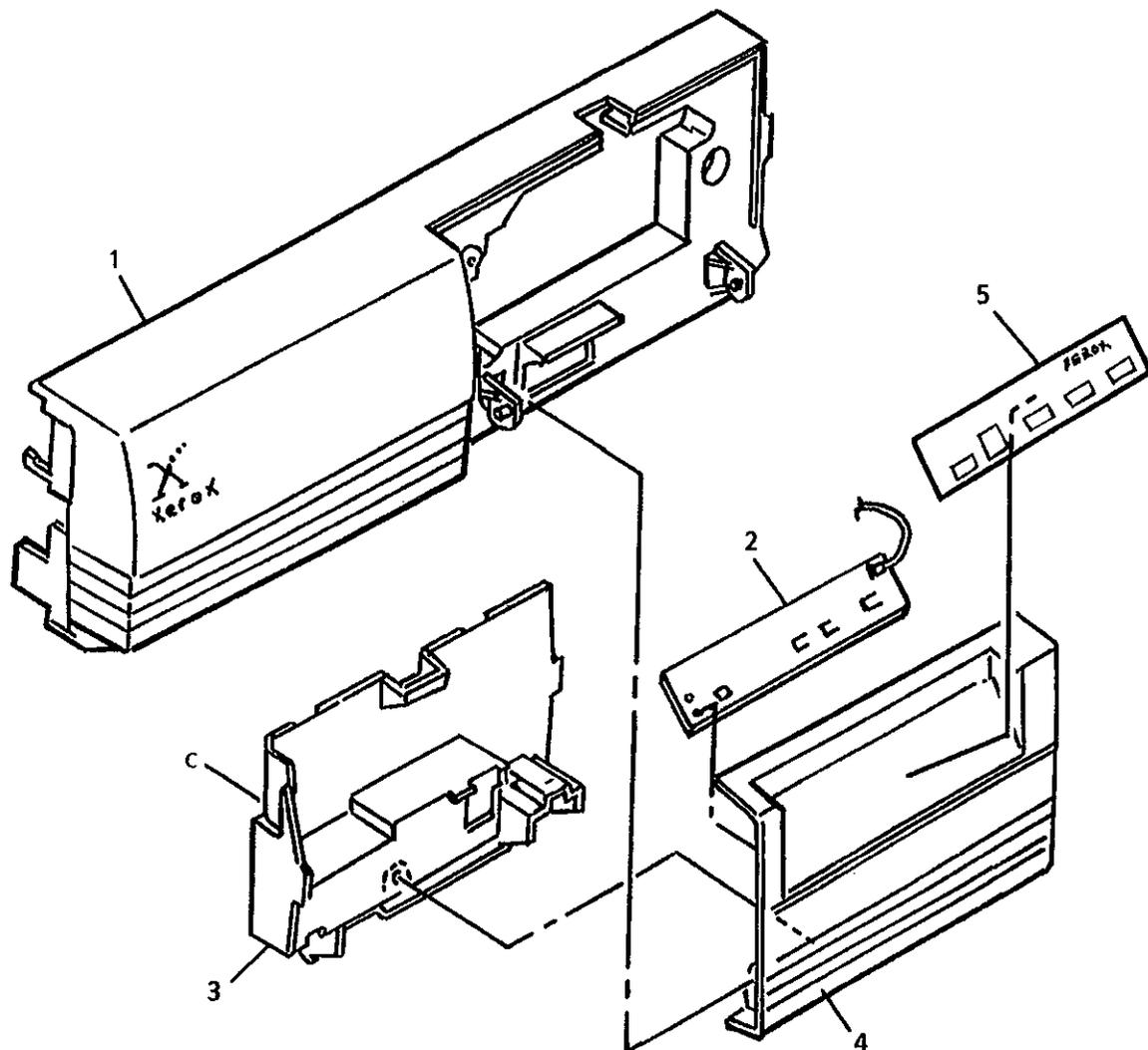


ITEM	PART	DESCRIPTION
1	50K31710	PAPER TRAY(XC520/XC540)
-	50K31720	(REP 14 1) PAPER TRAY(XC560/XC580)
2	48E30420	PLATEN COVER (LEGAL SIZE)
-	48E30410	(REP 14 4) PLATEN COVER (LETTER SIZE)
3	90K1950	PLATEN GLASS (LETTER SIZE)
-	90K1960	(REP 14 4) PLATEN GLASS (LEGAL SIZE)
4	14E17990	PLATEN START ACTUATOR
5	7E14830	PLATEN DRIVE RACK (XC520/XC540)(LTR)
-	7E26160	(REP 14 4) PLATEN DRIVE RACK (XC520/XC540)(LGL)
6	10E2540	PLATEN RAIL (XC520/XC540)(LTR)
-	10E3420	(REP 14 4) PLATEN RAIL (XC520/XC540)(LGL)
7	--	COROTRON/LENS CLEANER (NOT SPARED)
8	891E520	MAX FILL LABEL (XC520/XC540)
-	891E530	(REP 14 4) MAX FILL LABEL (XC560/XC580)
9	891E510	PAPER TRAY WIDTH LABEL
10	--	DOCUMENT GLASS REGISTRATION LABEL (NOT SPARED)
11	96E70030	INSTRUCTION LABEL (USO)
-	96E70040	(REP 14 4) INSTRUCTION LABEL (RX)

0	0015	B
SHK	PL	X 0



PL 7.3 FRONT COVER ASSEMBLY



ITEM	PART	DESCRIPTION
1	48E30370	FRONT COVER (REP 14 1)
2	160K21050	CONTROL CONSOLE PWB
3	48E30380	CONTROL CONSOLE REAR COVER
4	48E30390	CONTROL CONSOLE FRONT COVER
5	96E67200	LABEL (XC520)
-	96E69740	LABEL (XC540)
-	891E490	LABEL (XC560)
-	891E500	LABEL (XC580)

0	0016	B
SHK	PL	X Q

ITEM	PART	DESCRIPTION
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 ITEM 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 ITEM 1)
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)



<u>PART NUMBER</u>	<u>PL LOC.</u>						
1E38560	3 1						
2E33540	7 1	9E25160	5 1	38E8590	2 1	122E2020	3 1
2E33560	2 2	9E25170	5.1	38E8600	2 2	122E2030	5 1
3E10140	5 1	9E25180	5 1	38E8610	2 5	127K8340	3 1
3E15810	2 4	9E25190	5 1	38E8620	2 4	130E2990	5 1
3E16090	2 1	9E25200	2 4	38E8760	2 1	130K54440	5 1
3E41390	2 4	9E25210	2 3	38E16900	2 5	152K35990	3 1
5E6340	1 3	9E25220	2 3	48E30370	7 3	160K21050	7 3
5E6350	1 3	9E25240	2 4	48E30380	7 3	160K21060	6 3
5E6360	2 2	9E50870	2 6	48E30390	7 3	160K21070	6 3
5E6370	2 2	9E50880	2 6	48E30400	7 1	160K21430	6 3
5E6380	2 2	10E2540	7 2	48E30410	7 2	160K21441	6 1
5E10560	2 3	10E2590	6 1	48E30420	7 2	160K21450	5 1
6R333	4 1	10E3420	7 2	48E30790	7 1	160K21470	2 4
6R589	4 1	11E3460	1 2	48E30800	7 1	160K27070	6 3
6E22900	1 3	11E3470	1 2	48E30810	7 1	160K30510	6 1
6E22910	2 4	11E3480	1 3	48E30830	3.1	809E450	2 3
6E22920	2 3	11E3490	1 3	50K31710	7 2	809E460	2 3
6E22930	2 4	11E3510	5 1	50K31720	7 2	809E470	2 3
6E56150	2 3	11E3520	2 4	50K31790	7 1	809E480	2 3
6E56160	2 3	13E5160	5 1	50K31800	7 1	809E530	2 3
7K6270	1 1	13E6560	5 1	53E4810	3 1	891E470	7 1
7K8690	1 1	14E17990	7 2	62K7790	3 1	891E480	7 1
7E11260	5 1	14E18000	1 3	62K7800	3 1	891E490	7 3
7E14830	7 2	14E18000	2 3	68E67890	2 6	891E500	7 3
7E14840	1 3	14E18260	6 1	90K1950	7 2	891E510	7 2
7E14840	1 4	17E4000	1.2	90K1960	7 2	891E520	7 2
7E14840	2 3	17E4000	6 1	96E67200	7 3	891E530	7 2
7E14850	1 3	19E15900	2 3	96E69740	7 3		
7E14860	1 3	20E12600	1 3	96E70030	7 2		
7E14870	1 3	20E12610	1 4	96E70040	7 2		
7E14880	1 4	20E12620	2 2	96E70050	7.1		
7E14910	1 4	22E10180	2 1	105K13390	6 3		
7E14920	1 1	22E10190	2 2	105K13400	6 3		
7E14930	1 1	22E10200	2 2	105K13440	6 1		
7E14940	1 1	22E10210	5 1	108E1340	1 1		
7E14950	1 1	22E10230	2 4	108E2200	6 3		
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7E25590	2 6	22E18560	5 1	108E3660	6 3		
7E25600	2 6	22E20050	2 3	108E3670	6 3		
7E26160	7 2	22E20520	2 3	108E3680	6 3		
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9E25070	2 1	31E5010	2 4	113E8010	6 3		
9E25080	2 1	31E5020	2 4	113E8020	2 3		
9E25090	2 1	31E5030	2 3	117E5320	2 1		
9E25100	2 2	31E8190	2 4	118E6740	2 1		
9E25110	2 2	31E8200	2 3	118E6750	2 2		
9E25120	2 2	31E8220	2 4	118E11140	6 3		
9E25130	2 2	38E8550	2 1	121E6360	1 3		
9E25140	1 1	38E8570	2 1	121E6370	2 6		
9E25150	5 1	38E8580	2 1	122E1190	5 1		

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DIAGNOSTICS

Entering/Exiting Diagnostics

- 1 Press and hold the Stop/Clear button while switching on the power
 - a) All indicators will be lit
 - b) The display will indicate "8"
- 2 Press the Copy Quantity button
 - a) The indicators will go out
 - b) The display will indicate "0"
- 3 Using the Copy Quantity button, select the number that corresponds to the desired diagnostic test (See Table 1)

Number	Description
0	Total Counter Read
1	Drum Counter Read
2	Total Counter Write
3	Drum Counter Write
4	Clear H3, H4 Status Codes
5	Manual Exposure Adjustment
6	Auto Exposure Adjustment
7	Machine Configuration Setting
8	White Level Adjustment
9	Manual Light/Dark Exposure Adjustment
A	Exposure Lamp Voltage Adjustment
B	HVPS On

Table 1

4. To exit diagnostics, switch the power off, then on

Total Copy Count Read

- 1 Enter diagnostics The display will indicate "0"
- 2 Record the copy count
 - a) Press the Start button. The display will flash each number Five numbers will flash indicating the copy count.
 - b) Record the numbers that are displayed The most significant digit of the copy count is flashed first
3. To end the copy count read, switch the power off, then on

Total Copy Count Write

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button twice The display will indicate "2"
- 3 Write the total copy count.
 - a) Press the **Start** button. The paper misfeed indicator will light Enter the most significant digit (ten thousands) using the **Copy Quantity** button If a wrong number is entered, press **Clear** and start over.
 - b) Press the **Start** button again The paper toner cartridge indicator will light. Enter the next digit (thousands) using the **Copy Quantity** button.
 - c) Press the **Start** button again The light exposure indicator will light Enter the next digit (hundreds) using the **Copy Quantity** button.
 - d) Press the **Start** button again. The auto exposure indicator will light Enter the next digit (tens) using the **Copy Quantity** button
 - e) Press the **Start** button again. The dark exposure indicator will light Enter the next digit (ones) using the **Copy Quantity** button.
 - f) Press the **Start** button again. The new copy count is stored
4. Exit diagnostics.

Drum Cartridge Count Read

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button. The display will indicate "1"
- 3 Record the drum count.
 - a) Press the **Start** button. The display will flash each number. Five numbers will flash indicating the copy count.
 - b) Record the numbers that are displayed. The most significant digit of the drum count is flashed first.
- 4 To end the drum count read, press the **Exposure** button
- 5 Exit diagnostics

Drum Cartridge Count Write

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button three times. The display will indicate "3"
- 3 Write the drum count
 - a) Press the **Start** button. The paper misfeed indicator will light. Enter the most significant digit (ten thousands) using the **Copy Quantity** button.
 - b) Press the **Start** button again. The paper toner cartridge indicator will light. Enter the next digit (thousands) using the **Copy Quantity** button.
 - c) Press the **Start** button again. The light exposure indicator will light. Enter the next digit (hundreds) using the **Copy Quantity** button.
 - d) Press the **Start** button again. The auto exposure indicator will light. Enter the next digit (tens) using the **Copy Quantity** button.
 - e) Press the **Start** button again. The dark exposure indicator will light. Enter the next digit (ones) using the **Copy Quantity** button.
4. The new drum count was stored after the last digit (ones) was entered
- 5 Exit diagnostics

Manual Exposure Adjustment

NOTE: This adjustment effects the Auto Exposure Adjustment and the Light and Dark Exposure adjustments

1. Enter diagnostics
- 2 Press the **Copy Quantity** button five times. The display will indicate "5".
3. Adjust the Manual Exposure setting
 - a) Press the **Start** button. The display will indicate the current setting. The adjustment range is from 0 to 49. Observe the Exposure LEDs and display to determine the setting. Use the following as a guide.

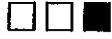
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	0	= 0
<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	5	= 15
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5	= 25
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	5	= 35
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	9	= 49
 - b) Press the **Copy Quantity** button to increase the exposure or the **Exposure** button to decrease the exposure. Increasing the number, increases the exposure.
- 4 Press the **Start** button to store the new setting and make a copy
- 5 Exit diagnostics.
- 6 Perform the Auto Exposure Adjustment and the Light and Dark Exposure Adjustment (next page)



Auto Exposure Adjustment

NOTE: This adjustment is effected by the Manual Exposure Adjustment. Perform this adjustment after performing the Manual Exposure Adjustment

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button six times. The display will indicate "6"
- 3 Adjust the Auto Exposure setting
 - a) Press the **Start** button. The display will indicate the current setting. The adjustment range is from 0 to 49. Observe the Exposure LEDs and display to determine the setting. Use the following as a guide:

		= 0
		= 15
		= 25
		= 35
		= 49
 - b) Press the **Copy Quantity** button to increase the exposure or the **Exposure** button to decrease the exposure. Increasing the number, increases the exposure
- 4 Press the **Start** button to store the new setting and make a copy.
- 5 Exit diagnostics

Light and Dark Exposure Adjustment

NOTE: This adjustment is effected by the Manual Exposure Adjustment and Auto Exposure Adjustment. Perform this adjustment after performing those Adjustments

- 1 Enter diagnostics.
- 2 Press the **Copy Quantity** button nine times. The display will indicate "9". The Light indicator should be lit.
- 3 Adjust the Light Exposure setting.
 - a) Press the **Start** button. The display will indicate the current setting. The adjustment range is from 0 to 9.
 - b) Press the **Copy Quantity** button to change the setting (the higher the number, the lighter the setting).
- 4 Adjust the Dark Exposure setting.
 - a) Press the **Exposure** button. The Dark indicator should be lit.
 - b) Press the **Copy Quantity** button to change the setting (the higher the number, the lighter the setting).
- 5 Press the **Start** button to store the new settings
- 6 Exit diagnostics

Exposure Lamp Voltage Adjustment

NOTE: See ADJ 6.1 Exposure in Section 4 for the more detailed procedure.

1. Enter diagnostics.
2. Press the **Copy Quantity** button ten times. The display will indicate "A"
- 3 Adjust the Exposure Lamp voltage.
 - a) Press the **Start** button. The Exposure Lamp will light and the display will indicate the current setting.

Note: The exposure lamp will turn off after 10 seconds. Press the **Start** button again
 - b) Press the **Copy Quantity** button to increase or decrease the exposure lamp voltage. Increasing the number increases the voltage. Decreasing the number, decreases the voltage
4. Press the **Start** button to store the new setting.
- 5 Exit diagnostics

White Reference Level

NOTE See ADJ 6 1 Exposure in Section 4 for the more detailed procedure

- 1 Enter diagnostics.
- 2 Press the **Copy Quantity** button eight times. The display will indicate "8".
- 3 Cover the platen glass with 3 sheets of white paper
4. Adjust the white reference level.
 - a) Press the **Start** button and observe the Light, Dark, and Auto indicators.
 - b) Adjust VR601 on the transformer PWB until the Auto and Dark indicators are both lit as shown below



Turn
clockwise



Turn counter-
clockwise



Correct

- 5 Exit diagnostics

High Voltage Power Supply On

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button eleven times The display will indicate "b"
3. Switch on the HVPS.
 - a) Press the **Start** button. The HVPS will switch on for 30 seconds and then switch off.
 - b) Press the **Start** button again to repeat this test.
4. Exit diagnostics

H3/H4 Status Code Clear

- 1 Enter diagnostics
- 2 Press the **Copy Quantity** button four times The display will indicate "4"
- 3 Press the **Start** button
- 4 Exit diagnostics

GP 1 Image On Photoreceptor

Procedure

1. Prepare the copier to make a copy of Side B of the Standard Test Pattern (82P524)
2. Press the Start button. (The platen will move to the start position, and scanning will begin.) Switch off the copier when the platen reaches the home (center) position. This will cause a paper jam.
3. Clear the paper jam, being careful not to disturb the image on the photoreceptor.
4. Observe the image on the photoreceptor.
5. Repeat steps 1 through 4 two more times, or as required.

GP 2 Copy Count Procedure

1. Record the copy count.
 - a) Press and hold the Stop button

NOTE: After approximately 7 seconds, the display will flash each number. Five numbers will flash indicating the copy count.

- b) Record the numbers that are displayed. The most significant digit of the billing count is flashed first.

GP3 Drum Cartridge Count Clear

1. Press and hold the **Exposure** button while switching on the power. All indicators except the ready indicator light.
2. Release the **Exposure** button. Press and hold the **Exposure** button until the paper misfeed indicator and toner cartridge indicator switch off (approximately 10 seconds).
3. The drum copy counter is now cleared. Copies can be made at this time.

Product Specifications

Physical Characteristics

XC520/XC560

WIDTH 15.7 Inches (400 mm)

DEPTH 17.2 Inches (436 mm)

HEIGHT 4.9 Inches (125 mm)

WEIGHT 24.6 Pounds (11.2 kg)

XC540/XC580

WIDTH 17.2 Inches (436 mm)

DEPTH 17.2 Inches (436 mm)

HEIGHT 4.9 Inches (125 mm)

WEIGHT 26.4 Pounds (12 kg)

Electrical Requirements

100 / 120 V Type:

107 - 132 VAC / 50 - 60 Hz +/- 2Hz

7.5 Amps Max / 900 Watts Max

220 /240 V Type:

198 - 254 VAC / 50 - 60 Hz +/- 2 Hz

4.4 Amps Max / 1000 Watts Max

All Configurations:

Power Saver Mode = 36 Watts

Copier Capabilities

Type	Desktop (Portable)	
Original Size	<u>XC520/XC560</u> Maximum 8.5" x 11" (A 4)	<u>XC540/XC580</u> Maximum 8.5" x 14" (216mm x 356mm)
Copy Paper Size	<u>XC520/XC560</u> Minimum 2" x 3.5" (51 mm x 89 mm) Maximum 8.5" x 11" (A 4)	<u>XC540/XC580</u> Minimum 2" x 3.5" (51 mm x 89 mm) Maximum 8.5" x 14" (216mm x 356mm)
Copy Paper Weights	16 to 24 lb (60 - 90 gsm) 20 lb (75 gsm) Optimum	
Paper Tray Capacity	<u>XC520/XC540</u> 40 Sheets	<u>XC560/XC580</u> 100 Sheets
First copy out time	18 Seconds	
Warm-up time	20 Seconds	
Magnification	1.1 ± 1%	

Supplemental Tools and Supplies

TOOLS -	USCO	RXL
Test Pattern	82P524	82P523/82P524
Corotron / Lens Cleaner	42E590	42E590

SUPPLIES -	USCO	RXL
Formula A	43P48	8R90175
Lint Free Tissues	35P2163	600S4372
Lens / Mirror Cleaner	43H12	8R90178
Film Remover	43P45	8R90176
Towel	35P3191	8R90019
Lubricant	70P27	70P27

Toner Cartridge *		
Black		6R333 (USCO) / 6R589 (RXL) **
Drum Cartridge***		113R104 (USCO) / 113R105 (RXL)
Paper Cassette	50E6870	

RELATED INFORMATION -

User Guide (USCO) 701P90015

NOTES

- * Store at 23 to 104 degrees F (-5 to 40 degrees C)
- ** Yield is approximately 2000 copies @ 5% area coverage for 8 5" x 11" / A4 paper
- *** Drum cartridge life is 12000 copies

Miscellaneous

Lot Number Identification

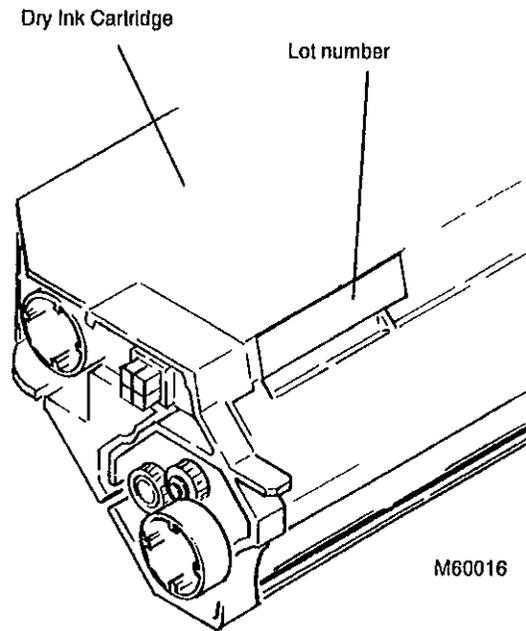
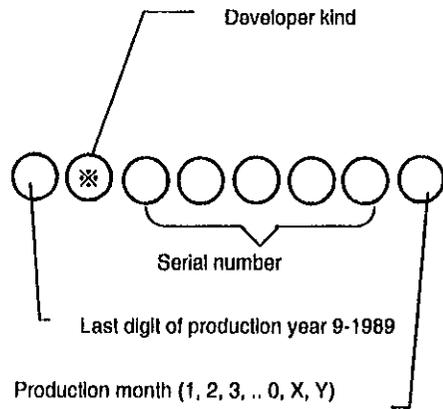


Figure 1. Lot number interpretation.

1150

General Service Notes

XC520/XC540/XC560/XC580 TONER CARTRIDGE YIELD

A small number of customers may complain that they are not getting 2000 copies from their dry ink cartridge

The expected dry ink cartridge yield of 2000 copies is based on an average area coverage of 5 percent per 8.5" X 11" copy. However, yield varies with area coverage of customer documents, document size, contrast setting, and percent of copies made with the platen cover open. Therefore, the 2000 copies yield cannot be guaranteed.

It is important to understand that many of the customer's documents are greater than 5% area coverage

The following estimates apply only when these conditions are met: copies are made with the copy contrast control set at its normal (middle) position; the platen cover is closed, and the size of the document is 8.5" x 11"

Area Coverage	Copies Per Cartridge
3%	2800
5%	2000

Any document which contains more area coverage than the samples represented in Figures 2 and 3, will result in a yield of less than 2000 copies. Figures 4 and 5 show examples of area coverage that exceed 5%.

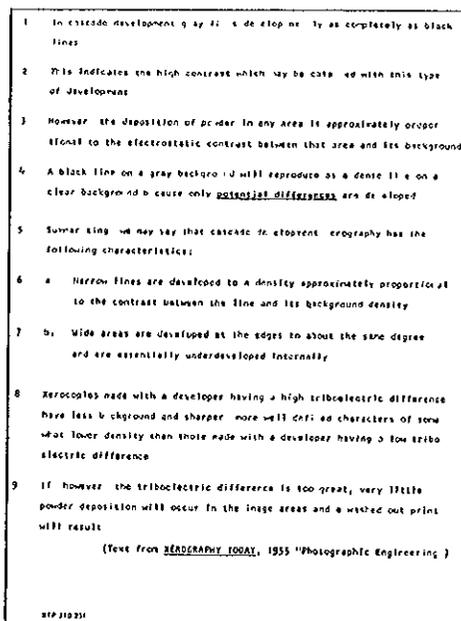


Figure 2 . Area coverage - 3%

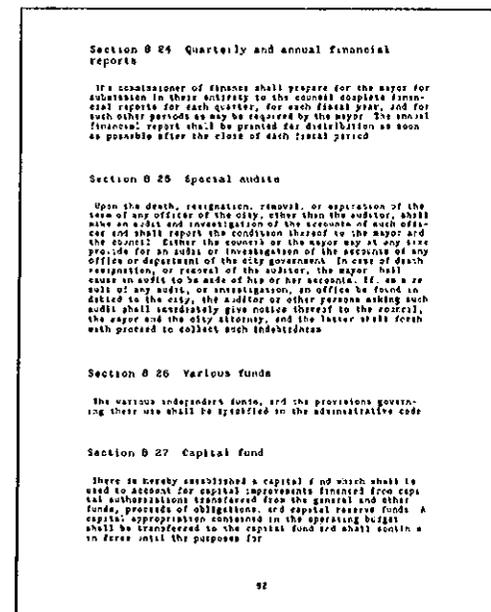


Figure 3. Area coverage - 5%

Section Contents

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BLOCK SCHEMATIC DIAGRAMS (BSDS).....	7-7

PLUG / JACK LOCATION INDEX

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CN1	To HVPS	7-2
CN-A	On LVPS	7-1
CN-A	On Main PWB	7-2
CN-A	On Transformer PWB	7-1
CN-A	On Bias PWB	7-3
CN-B	On LVPS to Transformer TR1	7-1
CN-B	On Main PWB	7-2
CN-B	On Bias PWB	7-3
CN-B	On Transformer PWB	7-1
CN-C	On Main PWB	7-2
CN-C	On Bias PWB	7-3
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CN-E	On Main PWB to Auto Exposure sensor	7-2
1	To Paper Supply PWB	7-1
2	To P/J3 and Registration Roll Solenoid SOL 4	7-1
3	To Toner Cartridge	7-4
4	To Drive Assembly PWB	7-1
5	From LVPS to LP1	7-1
6	From LVPS to Fuser Assembly	7-1

Plug/Jack Location Drawings

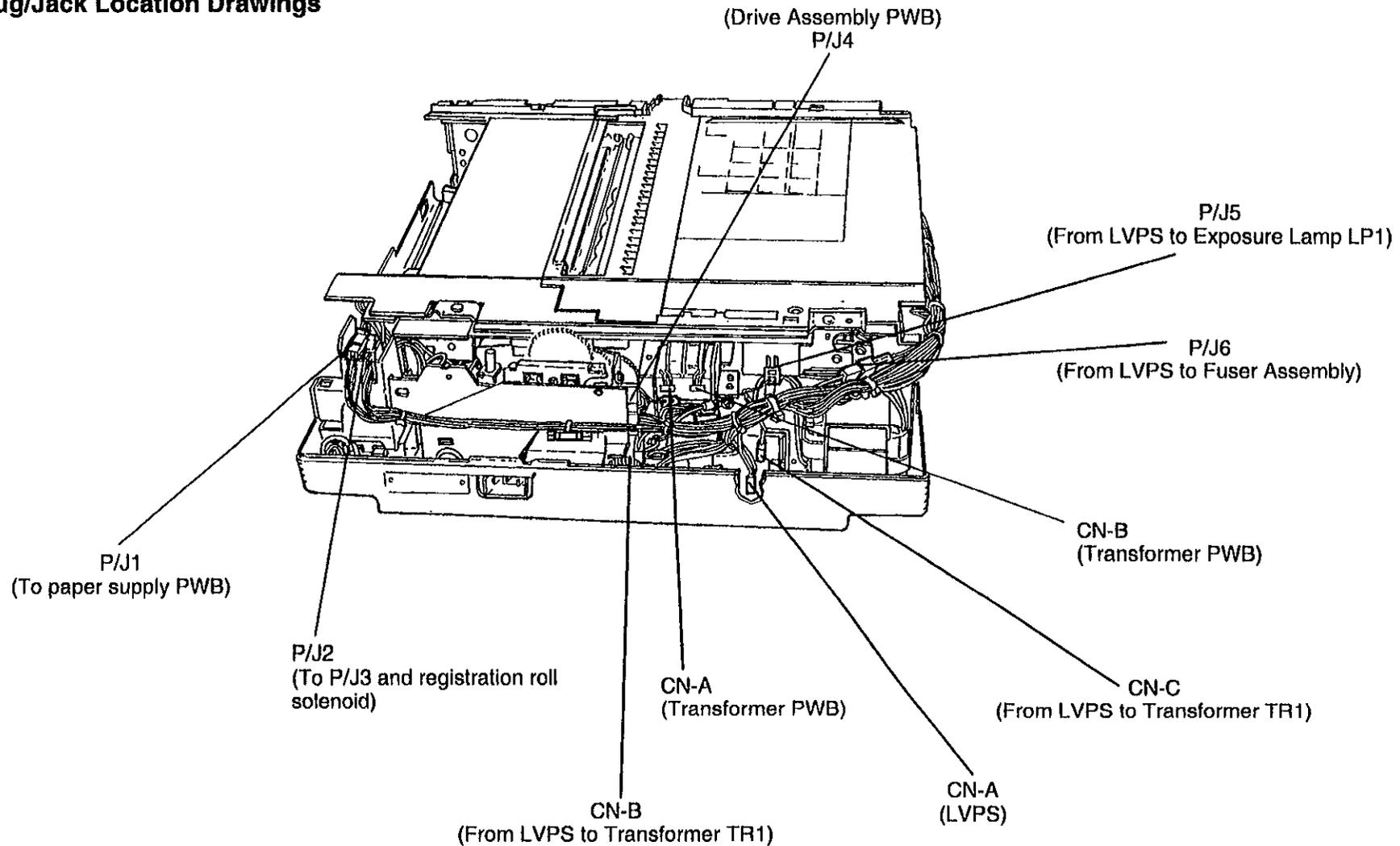


Figure 7- 1. Plug/Jack Location , Rear View

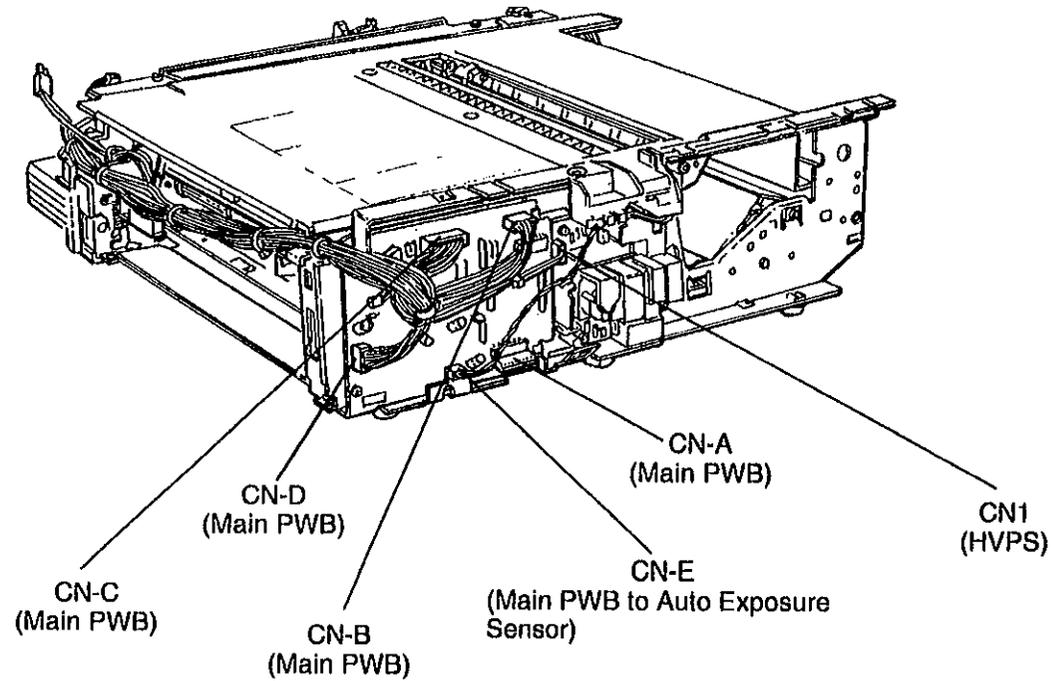


Figure 7- 2. Plug/Jack Location, Front View

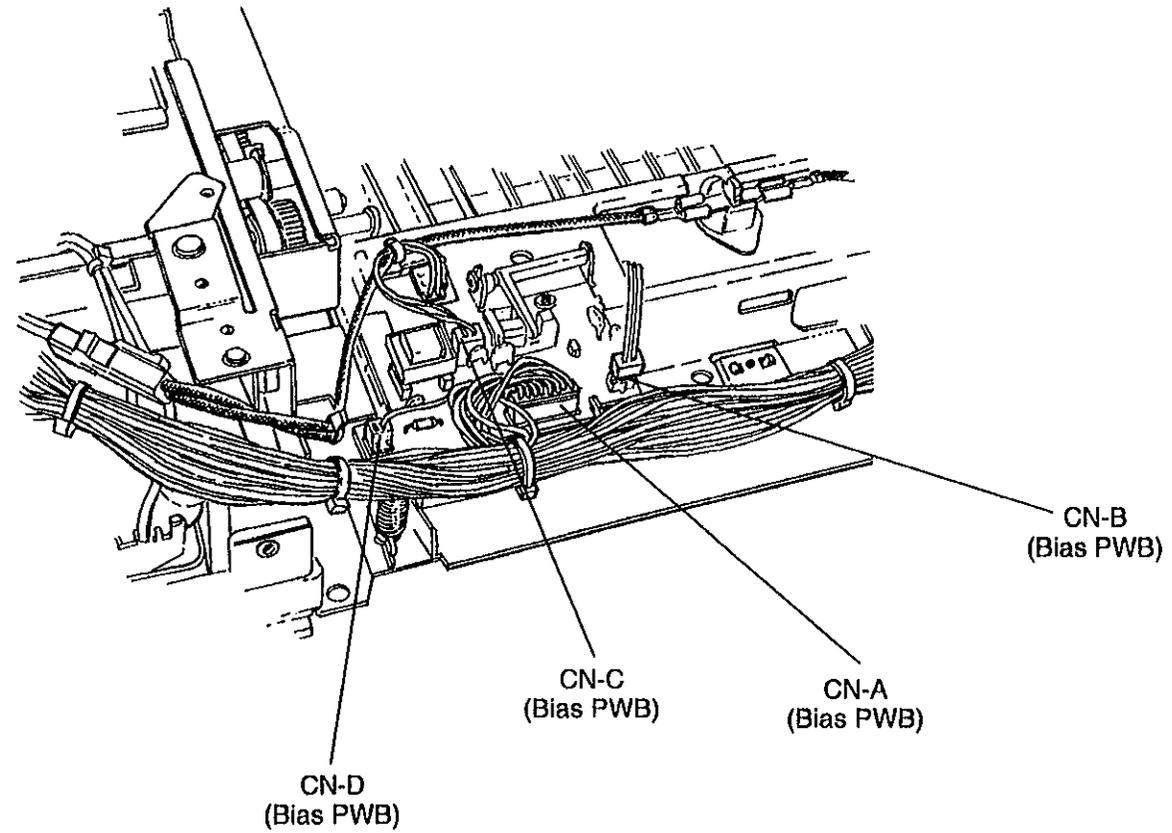


Figure 7- 3. Plug/Jack Location, Left Rear View

(To Toner Cartridge)
P/J3

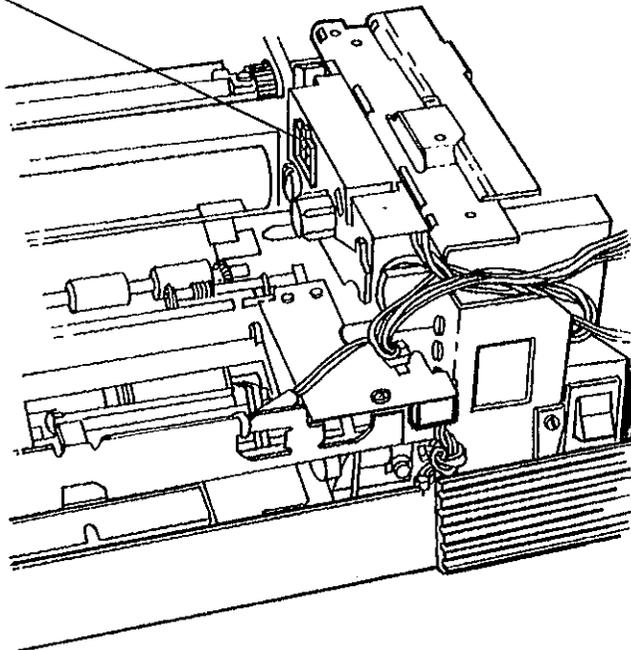
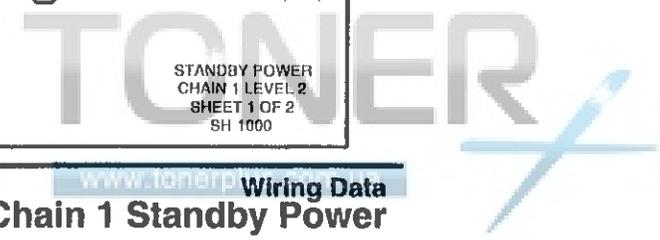
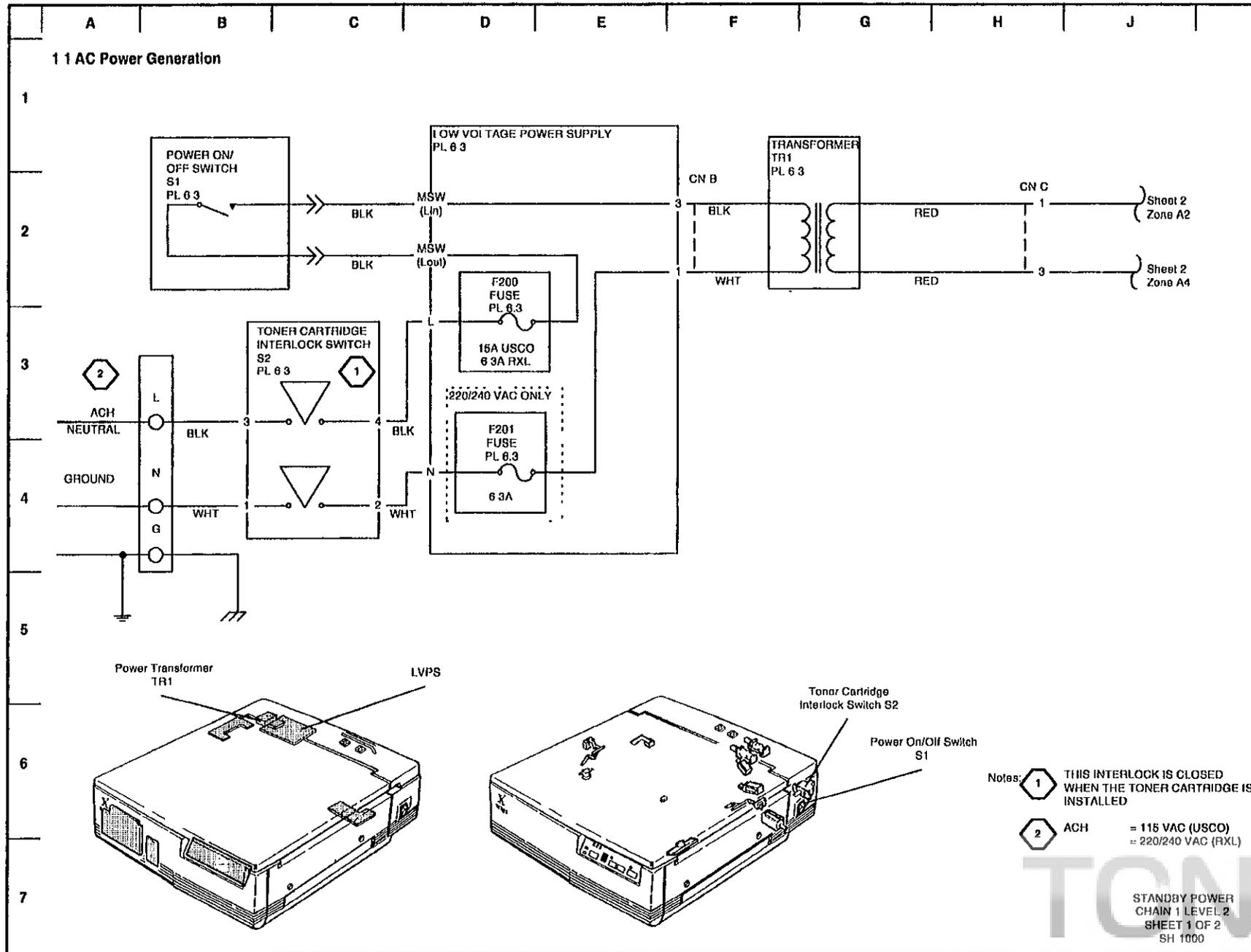
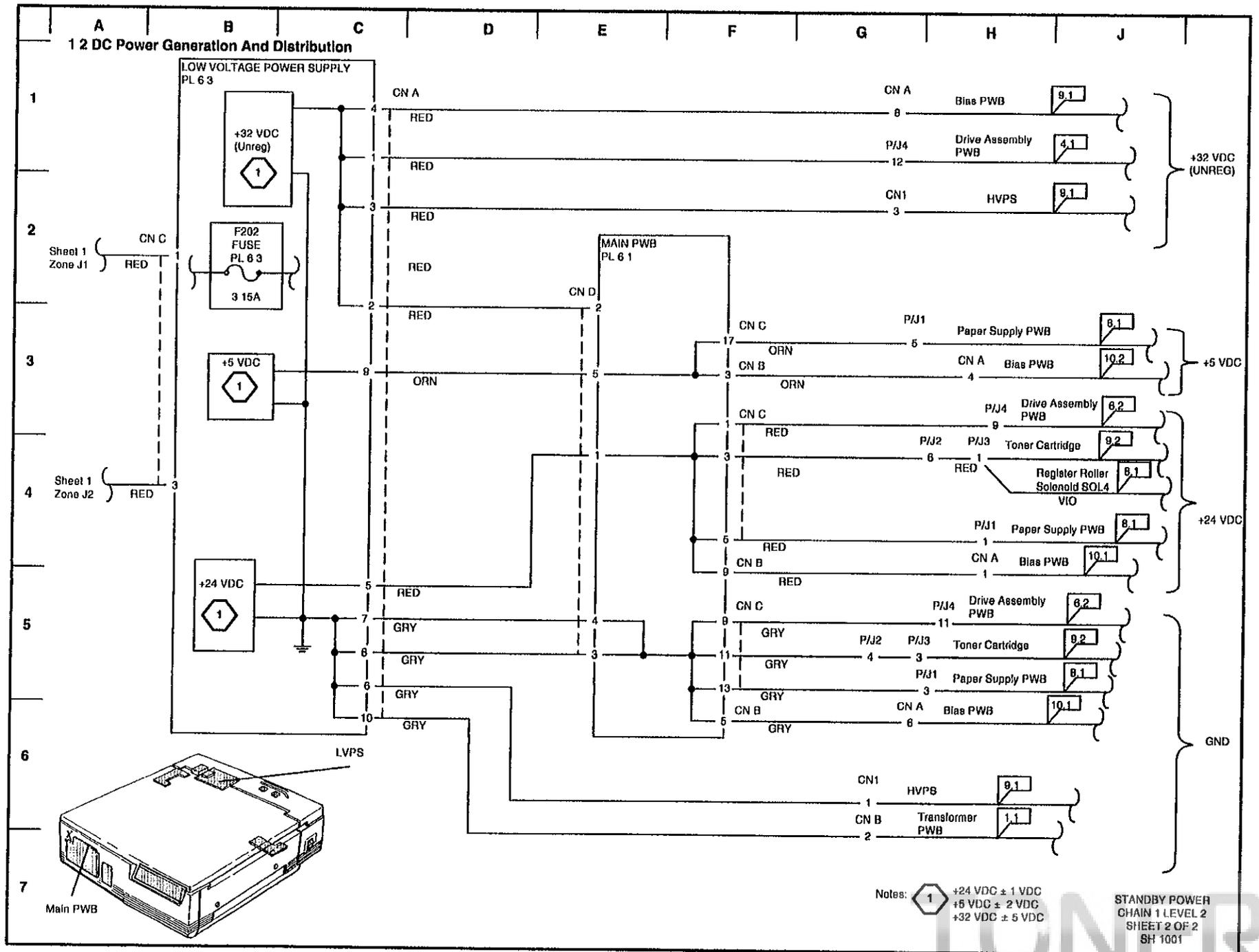
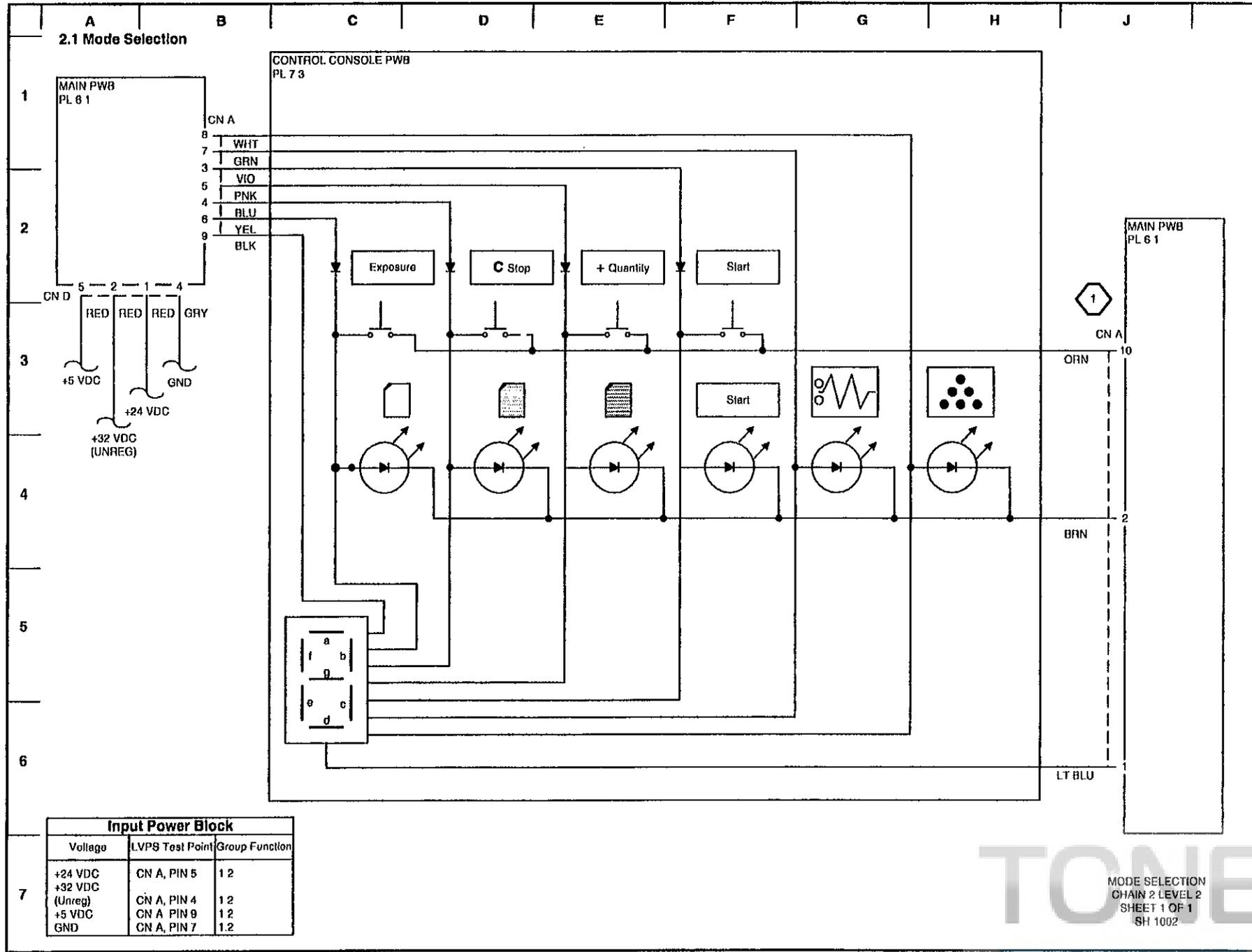


Figure 7- 4. Plug/Jack Location, Top Right View

Block Schematic Diagrams (BSDs)







TONER

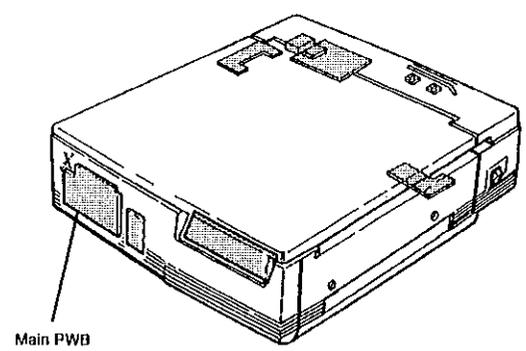
MODE SELECTION
CHAIN 2 LEVEL 2
SHEET 1 OF 1
SH 1002

www.toner.com

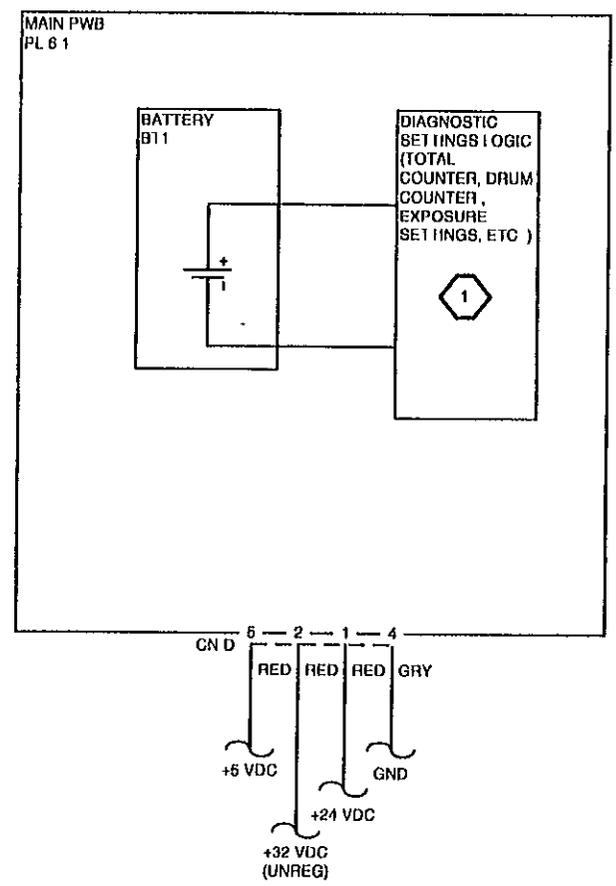
Wiring Data
Chain 2 Mode Selection

3.1 Billing And Power Save

1
2
3
4
5
6
7



Main PWB



Input Power Block		
Voltage	LVPS Test Point	Group Function
+24 VDC	CN A PIN 5	1 2
+32 VDC (Unreg)	CN A PIN 4	1 2
+5 VDC	CN A PIN 0	1 2
GND	CN A, PIN 7	1.2

Notes: See Section 6, Diagnostics

MACHINE RUN CONTROL
CHAIN 3 LEVEL 2
SHEET 1 OF 1
SII 1003

4.1 Main Drive

1

2

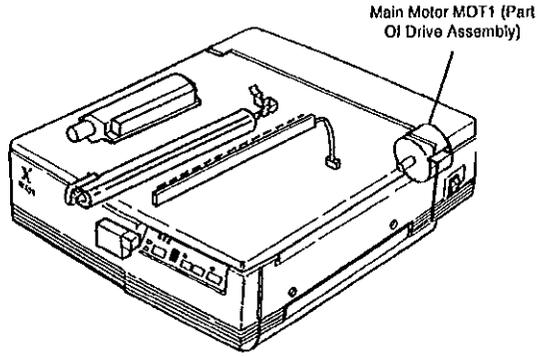
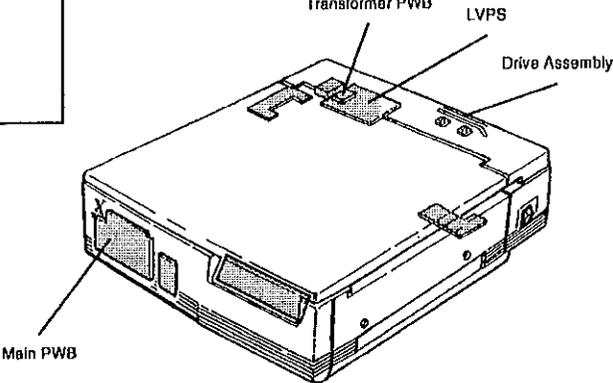
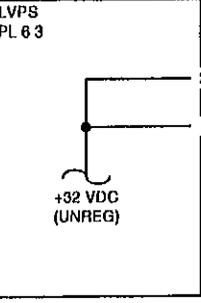
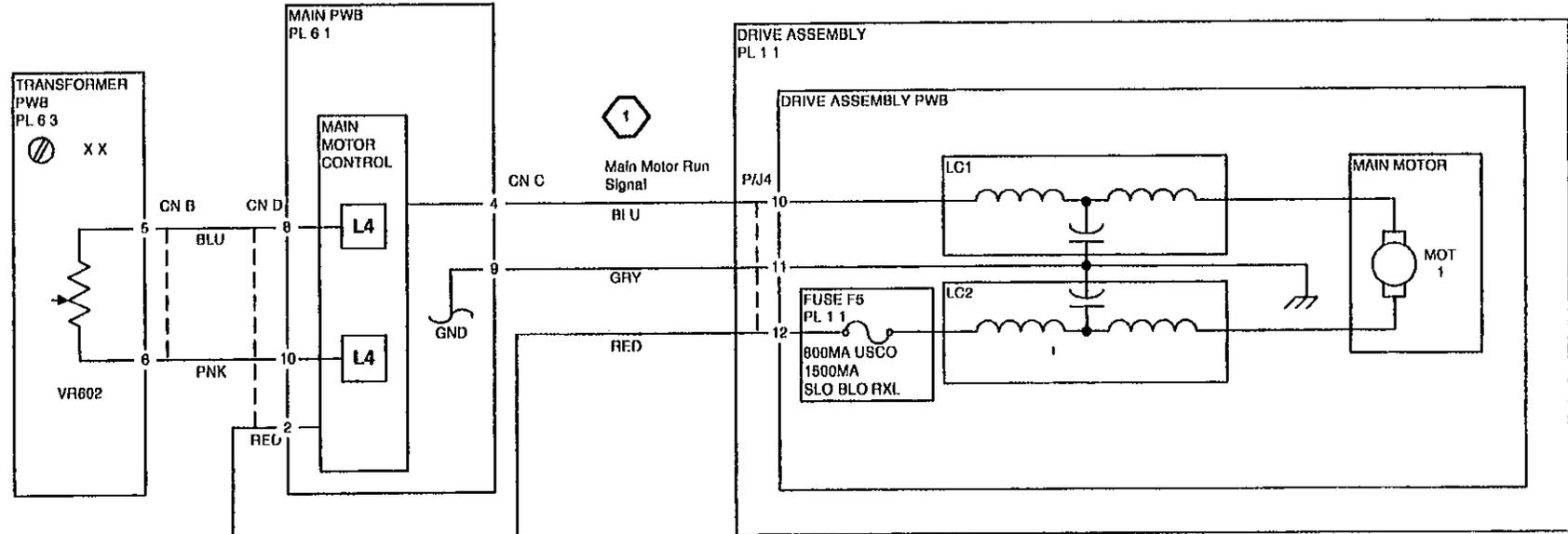
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4

5

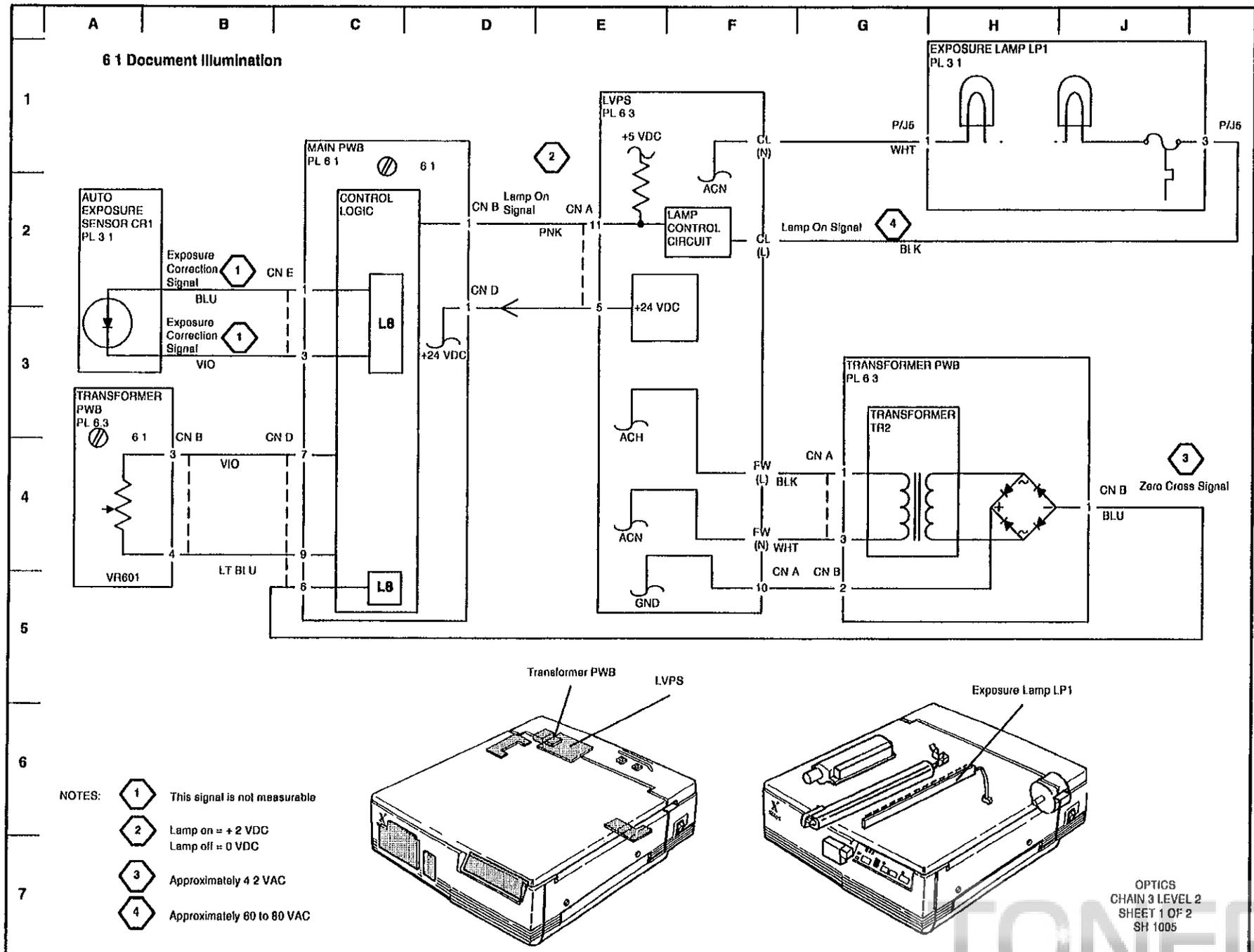
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7

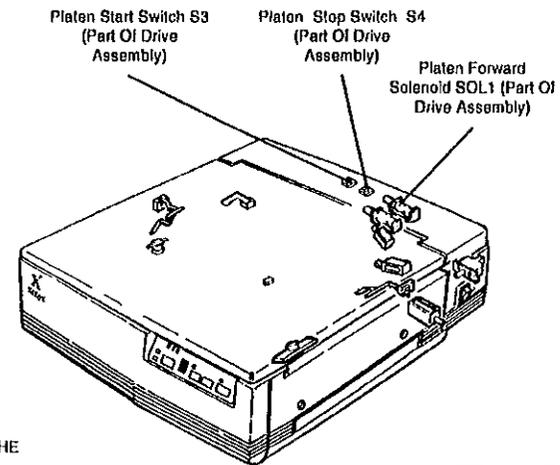
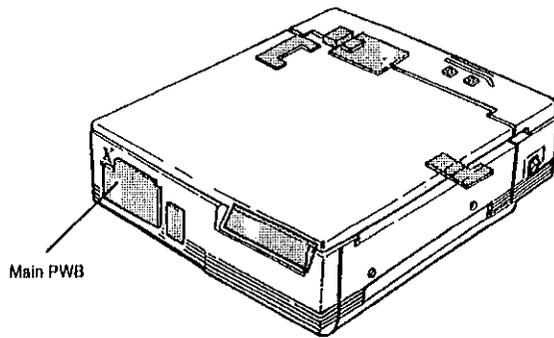
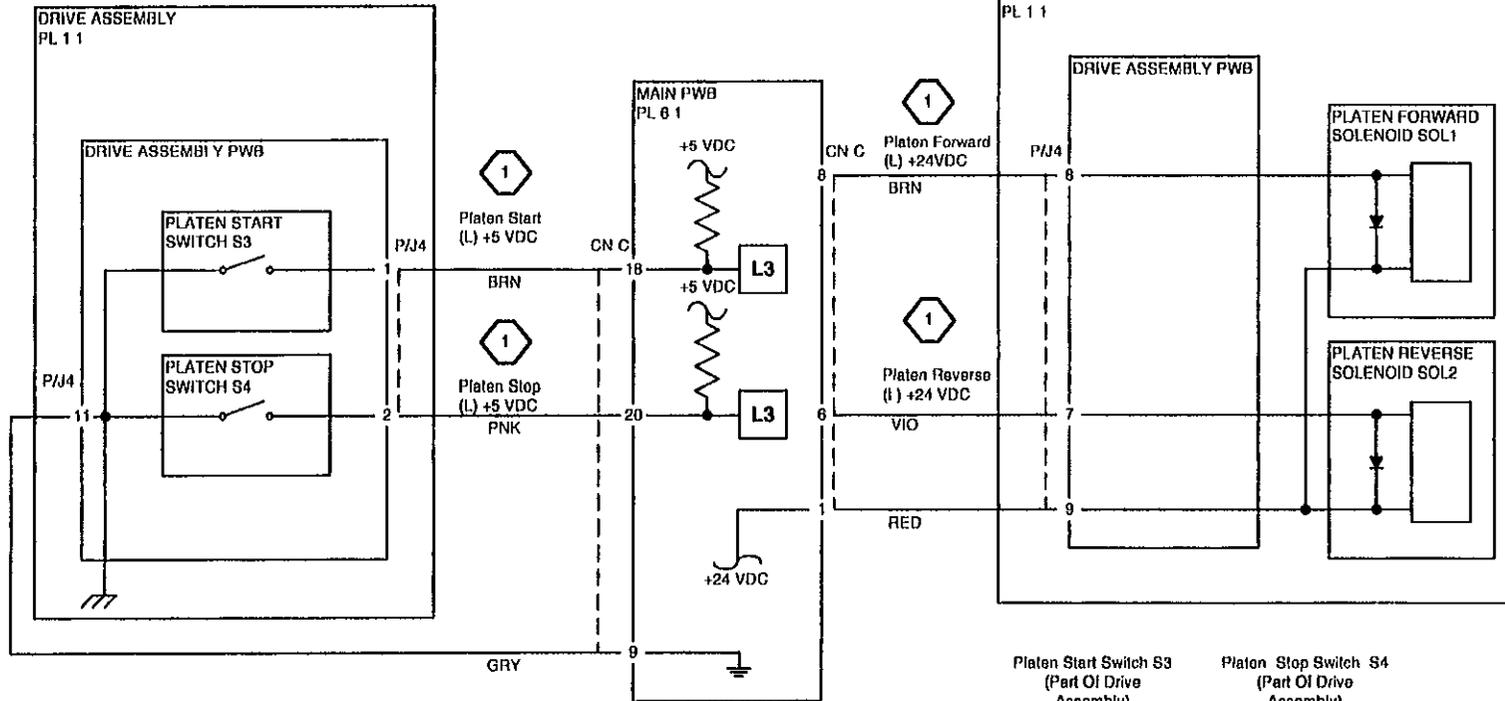


NOTES:
 1 MAIN MOTOR RUNS WHEN THE READY LAMP IS ON AND START IS PRESSED. WHEN THE MAIN MOTOR MOT1 IS ON, THE VOLTAGE DECREASES TO APPROXIMATELY 10 TO 12 VDC

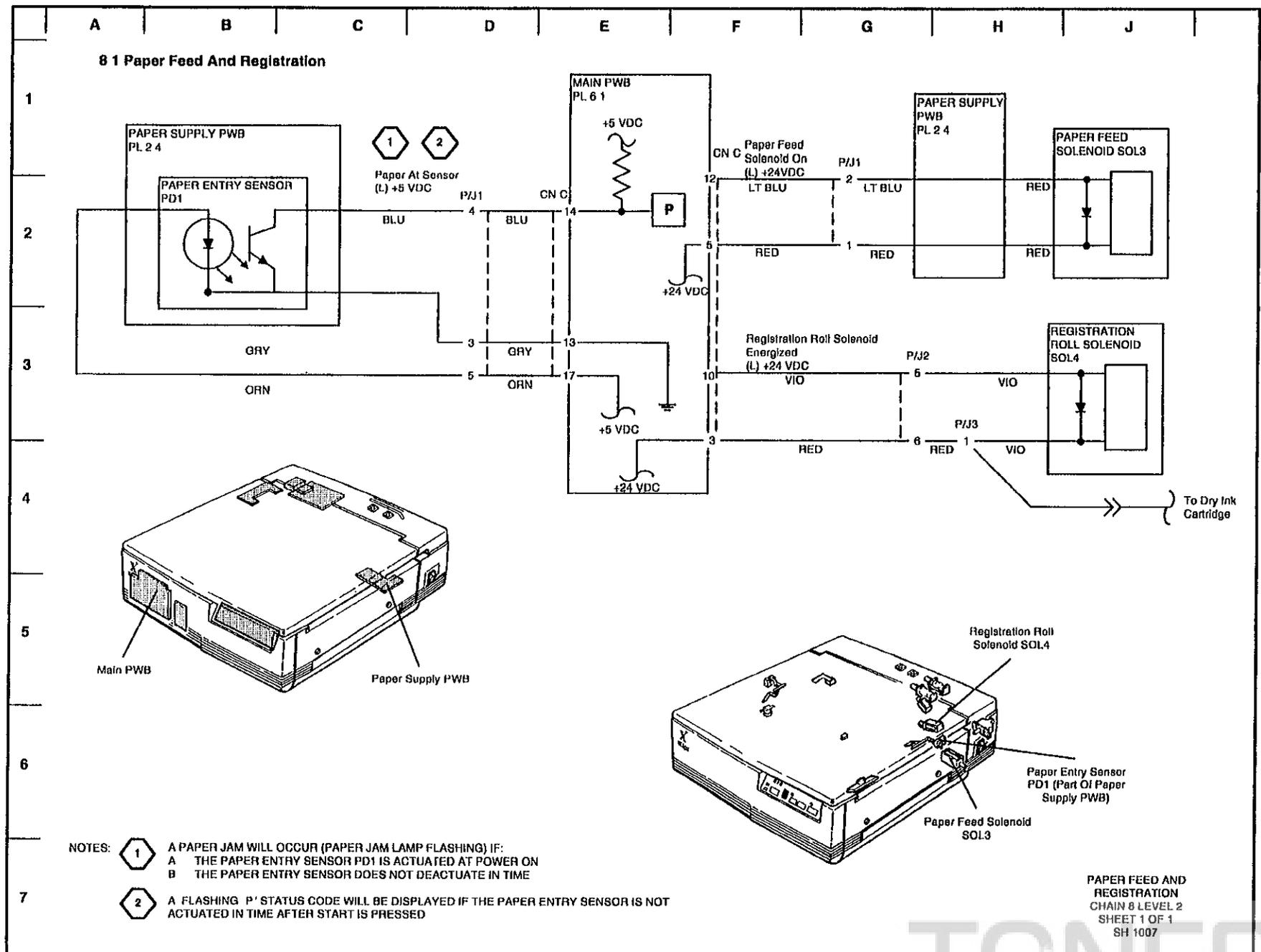
MACHINE RUN CONTROL
 CHAIN 3 LEVEL 2
 SHEET 1 OF 1
 SH 1004



6.2 Platen Drive And Lens Positioning



- NOTES:
- 1 WHEN THE MAIN MOTOR MOT1 TURNS ON, THE PLATEN FORWARD CLUTCH SOL1 ENGAGES AND DRIVES THE PLATEN TO THE RIGHT A FEW INCHES TO ENSURE THAT THE PLATEN STOPPER IS DISENGAGED
 - 2 THE PLATEN REVERSE CLUTCH SOL2 ENGAGES AND DRIVES THE PLATEN TO THE LEFT UNTIL THE PLATEN START SWITCH S3 IS ACTUATED
 - 3 THE PLATEN FORWARD CLUTCH SOL1 ENGAGES AND DRIVES THE PLATEN TO THE RIGHT UNTIL THE PLATEN STOP SWITCH S4 IS ACTUATED
 - 4 THE PLATEN REVERSE SOLENOID ENGAGES AGAIN DRIVING THE PLATEN TO THE LEFT UNTIL THE PLATEN STOPS FLUSH WITH THE LEFT SIDE OF THE COPIER



9.1 Charge And Transfer

