The Xerox 2510 (60/50 Hz)/2515 (60 Hz)Copier Service Manual

NOTE: Revision Documents 700P87481 and 700P87482 have been collated into this document.

Search

700P87480
August 1996

WARNING

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to correct the interference.

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Published by:
Multinational Customer and Service Education
Xerox Corporation, Rochester, New York 14644

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Notes:

About This Manual

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

This manual contains Service Call Procedures, Diagnostic Procedures, General Procedures or Information, Status Indicator Repair Analysis Procedures, Repair and Adjustment Procedures and Parts Lists.

This information will help a Service Representative repair and maintain this copier.

Organization

This manual is divided into eight sections:

Section 1. Service Call Procedures

This section contains the following information:

- Call Flow Diagram

  The Call Flow Diagram is a map of the procedures to follow on each service call.
- Initial Actions

  The Initial Actions identify how to collect the information necessary to proceed with the service call.
- Status Code Entry Chart

  The Status Code Entry Chart shows a list of status codes, causes, clearance procedures and instructions on where to go if the problem continues.
- Maintenance Activities Checklist

  This is a list of the items that have to be checked based on the type of call to be performed.

Section 2. Status Indicator Repair Analysis Procedures

This section contains the Repair Analysis Procedures (RAPs) that are necessary to repair the faults other than image quality defects. When using a RAP, stop the repairs when the fault is fixed. Do not perform the remaining steps.

Section 3. Image Quality Repair Analysis Procedures

This section contains a listing of image quality defects and samples to assist in classifying the defects. When the defect has been classified, a checklist is then used to repair the cause of the defect. The checklists are arranged in the sequence of most probable to least probable cause.

Section 4. Repair/ Adjustment Procedures

This section contains the repairs and adjustments for the copier.

Section 5. Parts List

This section contains the detailed Parts Lists for the copier.

Section 6. General Procedures/ Information

This section contains the Diagnostic Procedures, Copier Installation procedures, Copier Specifications, and Supplemental Tools and Supplies.

Section 7. Wiring Data

This section has a list of the connectors in the copier and shows the location of the connectors and some of the component wiring.

Section 8. Accessories/ Options

This section contains information about the accessories and options for the 2510 copier.

How To Use This Manual

Always begin with the service call procedures, Section 1. Perform initial actions to identify and classify the problem.

Then proceed to one of the following sections of the manual to correct the problem.

Section 2 contains the status indicator RAPs. Use these RAPs if the copier is not operational, such as when a status code is displayed or there is an improper indication, or "1/92" display, etc.

Section 3 is used to troubleshoot image quality problems. If you are not sure of the type of image quality problem that is occurring, use the contents page in Section 3 to find a defect that best represents the type of defect that is on the copy.

When using Section 2 or Section 3, you may be directed to Section 4 to perform repair or adjustment procedures or to Section 5, Parts List.

Next, go to Section 1 and perform the normal call procedures. Next determine if extended maintenance procedures must be performed. The Extended Maintenance procedures depend on the number of feet of the copies that have been made since the last service activity was performed.

After performing normal call or extended maintenance, perform final actions to ensure that the copier meets the copy specifications.

Multinational Configurations Differences.

This manual contains information that applies to USO (USA), and XCL (Canada) 2510/2515 60Hz and XLA 2510 50/60 HZ, 2515 60Hz. USO references usually apply to XCL. If USO and XCL are different, the specific USO or XCL information will be shown by itself.

"Dry Ink" means the same as "Toner" and "Tag" means the same as "Mod".

Repair Analysis Procedures (RAPs)

A RAP is a series of steps designed to lead you to the cause of a problem. In each step, you will perform an action or observe an occurrence. At each step, a statement is made that has a Yes (Y) or No (N) answer.

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

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

Proceed through the steps only until the problem is solved. There is no need to continue with the RAP after the problem is corrected.

Repair / Adjustment Procedures

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

When a modification affects how a particular procedure is performed, the procedure or steps are identified with either a W/ Tag/MOD or a W/O Tag/MOD statement.

Each procedure or step that is affected by a modification is identified with the statement, W/ Tag/MOD followed by the modification number. The W/ in the statement indicates that this step must be performed on copiers that are assembled with that specific modification.

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

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

FOR EXAMPLE:

THERMISTOR (RT 1) REPAIR PROCEDURE

WARNING

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

   W/ Tag/MOD 5: Remove the xerographic module.

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

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

2. Lower the transport latching cover.

3. Lower the front cover.

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

Reference Symbology

The following symbols are used in this document:

NOTE

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

Adjustment

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

Voltage Source

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

Status Code

The status code is represented by a box in the control logic section of the circuit diagram. This example is the code for the fuser undertemperature signal.

Flags

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

Component Control

[10] The code [10] is the test for the copier main drive motor.

Parts List

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

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

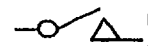
Indicates that the part has an adjustment procedure listed in the Repair/Adjustment section of this manual.

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

Switches and Relay Contacts

Safety interlock switch that is open.

Safety interlock switch that is closed.



Switch/ relay contacts with momentary contacts shown normally open.

Switch/ relay contacts with momentary contacts shown normally closed.

WARNING

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

CAUTION

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

Tag/MOD Information

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

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

Tag/MOD Information

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

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

The Signal Flow

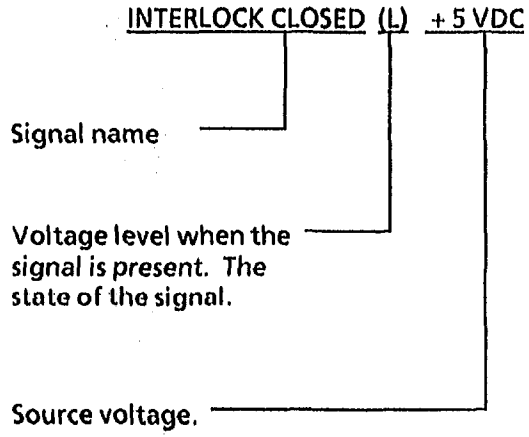
This symbol is used on circuit diagrams to indicate an interrupted signal in the horizontal direction.

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

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

Signal Name

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



DC Voltage Specifications

Voltage	Specification
5 VDC	4.75 TO 5.25 VDC
10 VFWR	2.5 TO 14 VDC
15 VDC	14.25 TO 15.75 VDC
24 VDC	19 TO 35 VDC

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Notes:

About This Manual

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

This manual contains Service Call Procedures, Diagnostic Procedures, General Procedures or Information, Status Indicator Repair Analysis Procedures, Repair and Adjustment Procedures and Parts Lists.

This information will help a Service Representative repair and maintain this copier.

Organization

This manual is divided into eight sections:

Section 1. Service Call Procedures

This section contains the following information:

- Call Flow Diagram

  The Call Flow Diagram is a map of the procedures to follow on each service call.
- Initial Actions

  The Initial Actions identify how to collect the information necessary to proceed with the service call.
- Status Code Entry Chart

  The Status Code Entry Chart shows a list of status codes, causes, clearance procedures and instructions on where to go if the problem continues.
- Maintenance Activities Checklist

  This is a list of the items that have to be checked based on the type of call to be performed.

Section 2. Status Indicator Repair Analysis Procedures

This section contains the Repair Analysis Procedures (RAPs) that are necessary to repair the faults other than image quality defects. When using a RAP, stop the repairs when the fault is fixed. Do not perform the remaining steps.

Section 3. Image Quality Repair Analysis Procedures

This section contains a listing of image quality defects and samples to assist in classifying the defects. When the defect has been classified, a checklist is then used to repair the cause of the defect. The checklists are arranged in the sequence of most probable to least probable cause.

Section 4. Repair/ Adjustment Procedures

This section contains the repairs and adjustments for the copier.

Section 5. Parts List

This section contains the detailed Parts Lists for the copier.

Section 6. General Procedures/ Information

This section contains the Diagnostic Procedures, Copier Installation procedures, Copier Specifications, and Supplemental Tools and Supplies.

Section 7. Wiring Data

This section has a list of the connectors in the copier and shows the location of the connectors and some of the component wiring.

Section 8. Accessories/ Options

This section contains information about the accessories and options for the 2510 copier.

How To Use This Manual

Always begin with the service call procedures, Section 1. Perform initial actions to identify and classify the problem.

Then proceed to one of the following sections of the manual to correct the problem.

Section 2 contains the status indicator RAPs. Use these RAPs if the copier is not operational, such as when a status code is displayed or there is an improper indication, or "1/92" display, etc.

Section 3 is used to troubleshoot image quality problems. If you are not sure of the type of image quality problem that is occurring, use the contents page in Section 3 to find a defect that best represents the type of defect that is on the copy.

When using Section 2 or Section 3, you may be directed to Section 4 to perform repair or adjustment procedures or to Section 5, Parts List.

Next, go to Section 1 and perform the normal call procedures. Next determine if extended maintenance procedures must be performed. The Extended Maintenance procedures depend on the number of feet of the copies that have been made since the last service activity was performed.

After performing normal call or extended maintenance, perform final actions to ensure that the copier meets the copy specifications.

Multinational Configurations Differences.

This manual contains information that applies to USO (USA), and XCL (Canada) 2510/2515 60Hz and XLA 2510 50/60 HZ, 2515 60Hz. USO references usually apply to XCL. If USO and XCL are different, the specific USO or XCL information will be shown by itself.

"Dry Ink" means the same as "Toner" and "Tag" means the same as "Mod".

Repair Analysis Procedures (RAPs)

A RAP is a series of steps designed to lead you to the cause of a problem. In each step, you will perform an action or observe an occurrence. At each step, a statement is made that has a Yes (Y) or No (N) answer.

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

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

Proceed through the steps only until the problem is solved. There is no need to continue with the RAP after the problem is corrected.

Repair / Adjustment Procedures

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

When a modification affects how a particular procedure is performed, the procedure or steps are identified with either a W/ Tag/MOD or a W/O Tag/MOD statement.

Each procedure or step that is affected by a modification is identified with the statement, W/ Tag/MOD followed by the modification number. The W/ in the statement indicates that this step must be performed on copiers that are assembled with that specific modification.

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

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

FOR EXAMPLE:

THERMISTOR (RT 1) REPAIR PROCEDURE

WARNING

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

   W/ Tag/MOD 5: Remove the xerographic module.

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

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

2. Lower the transport latching cover.

3. Lower the front cover.

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

Reference Symbology

The following symbols are used in this document:

NOTE

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

Adjustment

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

Voltage Source

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

Status Code

The status code is represented by a box in the control logic section of the circuit diagram. This example is the code for the fuser undertemperature signal.

Flags

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

Component Control

[10] The code [10] is the test for the copier main drive motor.

Parts List

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

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

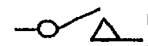
Indicates that the part has an adjustment procedure listed in the Repair/Adjustment section of this manual.

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

Switches and Relay Contacts

Safety interlock switch that is open.

Safety interlock switch that is closed.



Switch/ relay contacts with momentary contacts shown normally open.

Switch/ relay contacts with momentary contacts shown normally closed.

WARNING

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

CAUTION

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

Tag/MOD Information

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

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

Tag/MOD Information

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

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

The Signal Flow

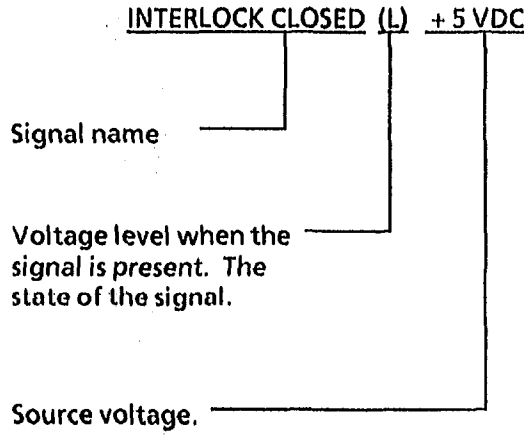
This symbol is used on circuit diagrams to indicate an interrupted signal in the horizontal direction.

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

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

Signal Name

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



DC Voltage Specifications

Voltage	Specification
5 VDC	4.75 TO 5.25 VDC
10 VFWR	2.5 TO 14 VDC
15 VDC	14.25 TO 15.75 VDC
24 VDC	19 TO 35 VDC

1. Service Call Procedures

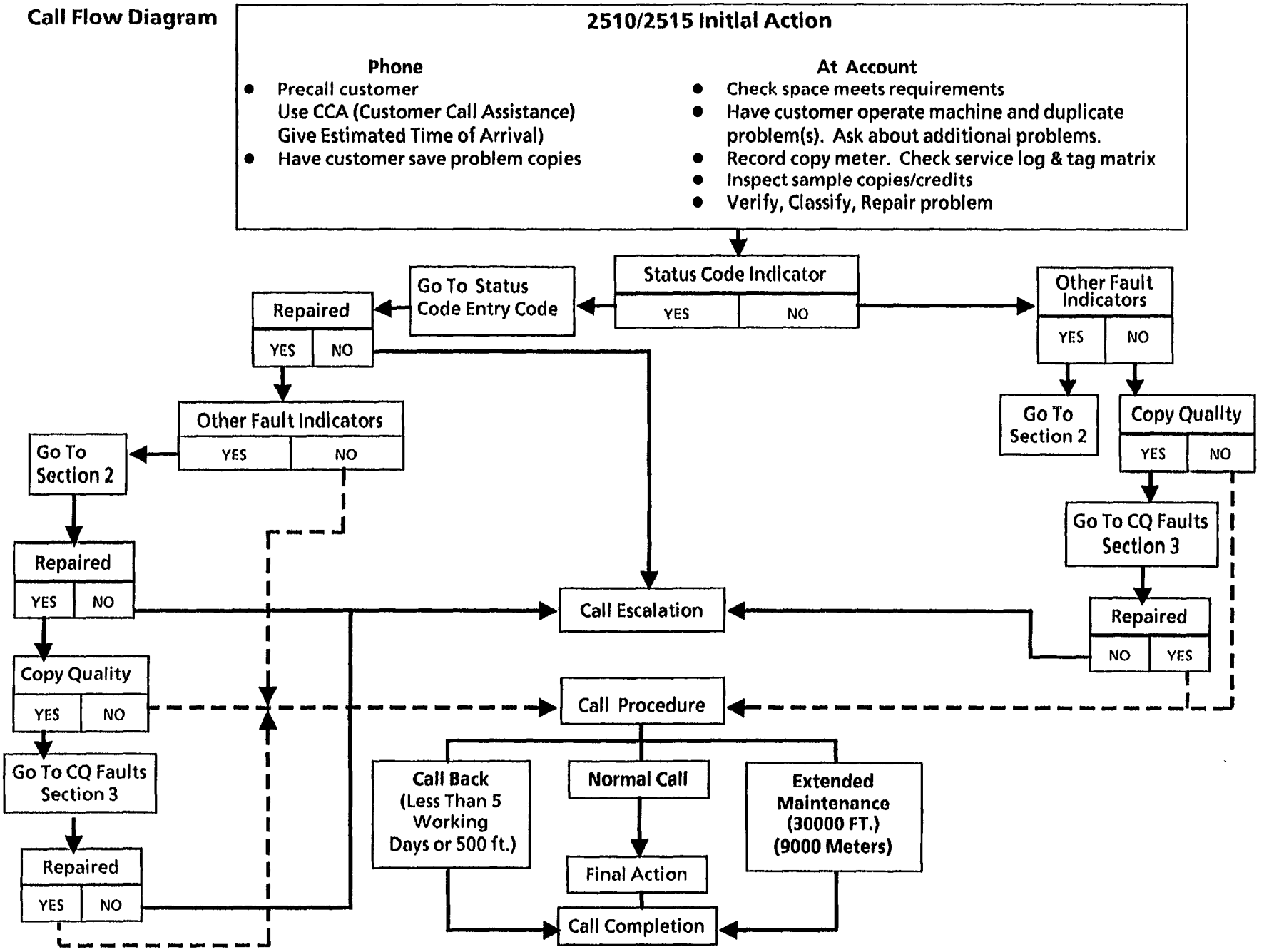
Section Contents

Introduction

Use the Service Call Procedures as a maintenance guide when performing the service on the copier. The Service Call procedure has been designed to be used with the 2510/2515 Service Manual.

- Call Flow Diagram - This diagram outlines the major activities that are performed when a service call is made. The diagram also outlines how the decision is made as to whether an Extended Maintenance activity will be performed.
- Initial Actions - This procedure is designed to guide the Service Representative through the customer interface. It also assists the Service Representative in preparing the copier for an evaluation of its performance. The Initial Actions diagram is designed to identify and classify the problem and to refer you to the appropriate RAP in order to repair the problem. When the problem has been repaired, refer to the Call Flow Diagram and continue the Service Call with the Maintenance Activities.
- Maintenance Activities - This procedure contains the activities that are followed after the main cause for the service call has been corrected. These activities are referred to as Normal Call and Extended Maintenance.
- Normal Call - This is the service activity that is performed when less than 30K feet (9K metres) of media has been run since the last service call. Normal Call activity is designed to be performed on all calls. This activity includes cleaning and replacing the parts in areas that require more frequent cleaning and inspection time. Normal Call activity is designed to restore the copier to an initially clean and functional condition.
- Extended Maintenance - This is the service activity that is performed when greater than 30K feet (9K metres) of media has been run since the last service call. Extended Maintenance is designed to restore the copy quality to an initial copy quality condition.
- Final Action - The purpose of this procedure is to record the media feet count and make a record of the service activities that were performed in the machine log book. Final Action is designed to stress test the image quality and repair any image quality problems.

Call Flow Diagram



STATUS CODE	CAUSE	CLEARANCE PROCEDURE	GO TO RAP IN SECTION 2
A	A document was inserted before the copy paper was registered.	Remove document, press ***Start*** and wait for ***Ready*** to come on and reinsert copy paper and document.	A - Document Sensor RAP
b	Control PWB Failure	Switch off the copier, then switch on the copier. Record the NVM values. Replace the control pwb. **(2515 only)** Enter the NVM values recorded previously.	
Flashing b		Reset NVM. Select the lower right hand segment.	
C	The transport latching cover is open or the upper rear cover is off.	Close the transport latching cover. Check that the upper rear cover is in place.	C - Cover Interlock Open RAP
E	Paper Path Jam.	Clear the paper jam. Open, then close the transport latching cover	E - Paper Path Jam RAP
F	Fuser Failure	Switch off the copier, then switch on the copier.	F - Fuser RAP
H	Foreign accessory prevents printing or has a malfunction	Insert required coin or card.	H - foreign accessory Rap 3.2 or 3.3
J Low Toner Light not Lit	Excessive toner concentration		J - High Toner Concentration RAP 1
J Low Toner Light Lit	Insufficient toner concentration	Replace dry ink cartridge. Run copier for three time-out cycles.	J - Low Toner Concentration RAP 2
U	Copy Count Meter is disconnected.	Reconnect counter.	U - Copy Count Meter RAP
L9 to L0 (Note 1)	Copier is in its warm up cycle.	Wait for fuser to warm up. Display should be counting down from L9 to L0.	
Constant P	Copier is in the power saver mode.	Press the Start button.	
Constant L9 or L8	Copier does not warm up.	Switch off the copier, then switch on the copier.	F - Fuser RAP

INTERVAL	TASK	REASON	TASK ENABLER
NC *[Normal Call]*	Clean the platen	Spots on platen result in lines on copy. Dust and other contaminants lower light transmission.	Clean both sides of platen with anti static cleaner on a white cloth.
NC	Clean lower document feed rolls and optics cavity	Dirty feed rolls can cause original to slip. contaminants in optics can cause C.Q. defects.	Clean using the Formula "A" on a towel or cloth.
NC	Clean the exposure lamp lens	Contamination on lamp and lens result in C.Q. defects.	Apply a small amount of anti-static cleaner to a towel. Check the tape on the lens, repair or replace as necessary. Install Lens Light Leak Kit 600K24052
NC	Inspect the idler rolls	Binding can cause the document drive to stall,resulting in a larger than acceptable copy.	Idler rolls should turn freely. Replace as required.
NC	Clean the Transport Platen	Copy quality defect with thin trnasparent documents. Possible increase in toner consumtion	Clean the transport platen with Formula A and Film Remover.

(Continued)

INTERVAL	TASK	REASON	TASK ENABLER
NC (Normal Call)	Check charge / precharge corotron. replace if 20k or more	Contamination, loose or broken wires, damaged end blocks cause C.Q. defects.	Remove contamination. 800 volts at onset should be able to be obtained with power supply output at "TP 1" below 475 volts. Clean the corotron extrusion and wire with a cotton swab and Film Remover.
NC	Clean the xerographic module	Contamination (dry ink or other) can cause cleaning problems. Contaminants can travel to optics and corotrons resulting in C.Q. problems. Fused dry ink on the bottom of module can cause jams.	Vacuum toner from the housing and cleaner blade. *Note: Ensure that the vacuum does not contact the edge of cleaner blade that touches the surface of the photorecptor drum.* Use cleaning solvent to remove fused toner from the bottom of module.
NC	Check / replace stripper fingers	Bent stripper fingers cause feedout jams and fuser roll damage.	Replace damaged or contaminated stripper fingers.
NC	Check /clean/replace oil dispenser assy	A contaminated wick can damage the fuser roll and apply fuser oil unreliably.	Replace wick if contaminated or if customer is running erasable vellum. **(2510 W/Tag 252, 2515):** Perform the Initialization Procedure for the fuser roll. **(2510 W/Tag 252, 2515)** Clean donor roll on copiers with an ODOS oiler.
NC	Clean / replace fuser roll, fabric guide	Smooth/worn fuser roll loses ability to drive media. Contaminated fabric guide causes too much resistance to media resulting in jams / deletions/wrinkles.	Clean with film remover . Clean fabric guide with formula "A" and film remover. **(2510 W/Tag 252, 2515):** Performthe initialization procedure for the fuser roll.
NC	Check the fuser roll for lack of oil	Too much or too little oil can cause media handling problems.	Replace the oil pads. **(2510 W/Tag 252, 2515):** If the fuser roll is dry, perform the initialization procedure for the fuser roll.
NC	Check / replace ozone filter	Lack of air flow due to clogged filters can cause "light side" copy quality defects.	If the charge voltage (V_0) can not be achieved equally on both sides of drum suspect a clogged ozone filter - remove filter, and recheck- if your able to obtain equal charge voltage (V_0) replace filters

(Continued)

INTERVAL	TASK	REASON	TASK ENABLER
7K (W/O Tag 22	Replace the Oil Pad	Dry pads result in fuser roll wear, Offsetting, Media Handling problems	Ensure that the pads touch in the center to prevent oil from seeping ovrt the ends **(2510 Only)** Install Tag 22
14 K (W Tag 22)	Replace the Oil Pads	Dry pads result in fuser roll wear, Offsetting, Media Handling problems	Ensure that the pads touch in the center to prevent oil from seeping ovrt the ends.
10K	Lubrication	Noise from various areas of the copier.	See OF1 Isolation Procedure for Mechanical Noise RAP, Section 2, for the parts to be lubricated and the specific lubrication to use.
10K (2510 W/Tag 252, 2515)	Replace oil pads and wick	Copy quality defects. Oil pads are dry. Wick is contaminated	Replace oil pads. Replace wick. **(2510 W/Tag 252, 2515):** Perform the Initialization Procedure for the fuser roll.

(Continued)

INTERVAL	TASK	REASON	TASK ENABLER
20K	Replace or repair corotrons	Contamination on the wires, damaged or worn out end blocks, are causes for corotron failure resulting in copy quality defects/jams etc	Perform 2510 ADJ 9.2, 2515 ADJ 9.3 Electrostatic Series.
30K	Check / clean cleaning blade	Residual image, streaks, drum scuffing can occur if blade is worn or contaminated.	Vacuum clean the cleaning blade. ***Note 1*** Apply zinc stearate to the cleaning blade and photoreceptor drum. **Note 2** Replace if damaged.
30K	Replace ozone filter	Clogged filters can cause side-to-side light copy quality defects and cause augers to bind with partially fused dry ink.	Vacuum auger area and seal. ***Note 1*** Ensure that seal is oriented toward the drum. Replace seal if damaged.
30K	Perform ADJ 9.2/9.3/9.4 Electrostatic Series	New corotrons can affect the charge voltage (V_o).	Ensure machine is at operating temperature and all light leaks are eliminated before performing the 2510 ADJ 9.2, 2515 ADJ 9.3 Electrostatic Series.

Note 1: *Ensure that the vacuum does not contact the edge of cleaner blade that touches the surface of the photorecptor drum.*

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

Media Transport

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean lower paper transports, turnaround baffle,paper feed rolls	Contaminants can cause media to slip, motion sensor to stall, C.Q. defects.	Clean transport with anti- static fluid and cloth. Clean feed roller with Formula A.
NC	Clean under transport	Reduce airborne contaminants,esthetics.	Vacuum clean, then wipe down with a lint free cloth.

Developer Module

INTERVAL	TASK	REASON	TASK ENABLER
NC	Check that the developer housing is level.	Uneven level results in uneven density. Worn developer causes excess dry ink consumption and CQ defects.	Developer should be even from end to end.
NC	Check the canister for proper rotation	If toner canister is not rotating correctly it will cause light copies.	Check the developer housing for a worn cam, damaged retainer clip. (2515 only)Check the dry ink dispense solenoid for binding or not adjusted correctly.
NC	Check the developer drives	Worn gears will cause housing to move up and down causing copy quality defects.	Check the developer for worn or broken teeth , replace if necessary.
30K	Replace developer	Worn developer causes excess toner usage, higher dirt levels, and copy quality defects.	Replace the developer (2515 only) Ensure that the extrusion, for the auger on the inside of the module, is positioned on the pin located in the center of the developer module. Ensure that the pick off baffle is installed correctly.
30K	Replace developer filter	Filters allow correct air flow in the developer housing to reduce dirt level.	Check/replace black plastic filter housing if damaged or warped.

(Continued)

COVERS

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean covers	Positive customer perception	Formula A plus antistatic fluid on feed in shelves
NC	Reduce static build up	Document handling and stacking problem.	Clean the following with anti static cleaner: • Document and Media Feed- In Shelves • Document Return Guide • All the plastic document and media guides • Separator Guides

Final Action

1. Make a record of the copy count meter in the service log.
2. Make one light dusting (input document without an image) copy.
3. Make one 36 X 24 (A1) copy of test pattern 82E5980 in copy normal mode.
4. Perform the Image Quality Analysis located in Section 3.
5. Make a copy at each of the following **Copy Contrast** settings:
   A. Lightest
   B. Darkest
   C. Normal (center position)
6. Compare the copies for differences in image darkness. If two or more copies are the same, go to the CQ 25 Developer Bias RAP located in Section 3.
7. Check that the copy count meter has advanced.
8. Record all activities in the service log.

Notes:

Section Contents

Status codes

Other Faults

A - Document Sensor RAP

Status code A will be displayed if a document is inserted before the copy paper is registered. This could occur if the actuator that blocks the document sensor is binding.

1 *The circuit diagram is on the next page.*

Initial Actions

- Check the actuator of the document sensor for damage or binding.
- Check the document path for obstructions and the Transport Platen and the platen for damage and for correct installation.
- Clean the sensor.

Procedure

Enter the code [Top Right Segment] to check the document sensor.

NOTE: *The Film Led is lit on the Control Panel when the sensor is blocked.*

Actuate the Document Sensor (Q1). **The appropriate lamp goes on then off when the sensor is actuated.**

Y N

A B

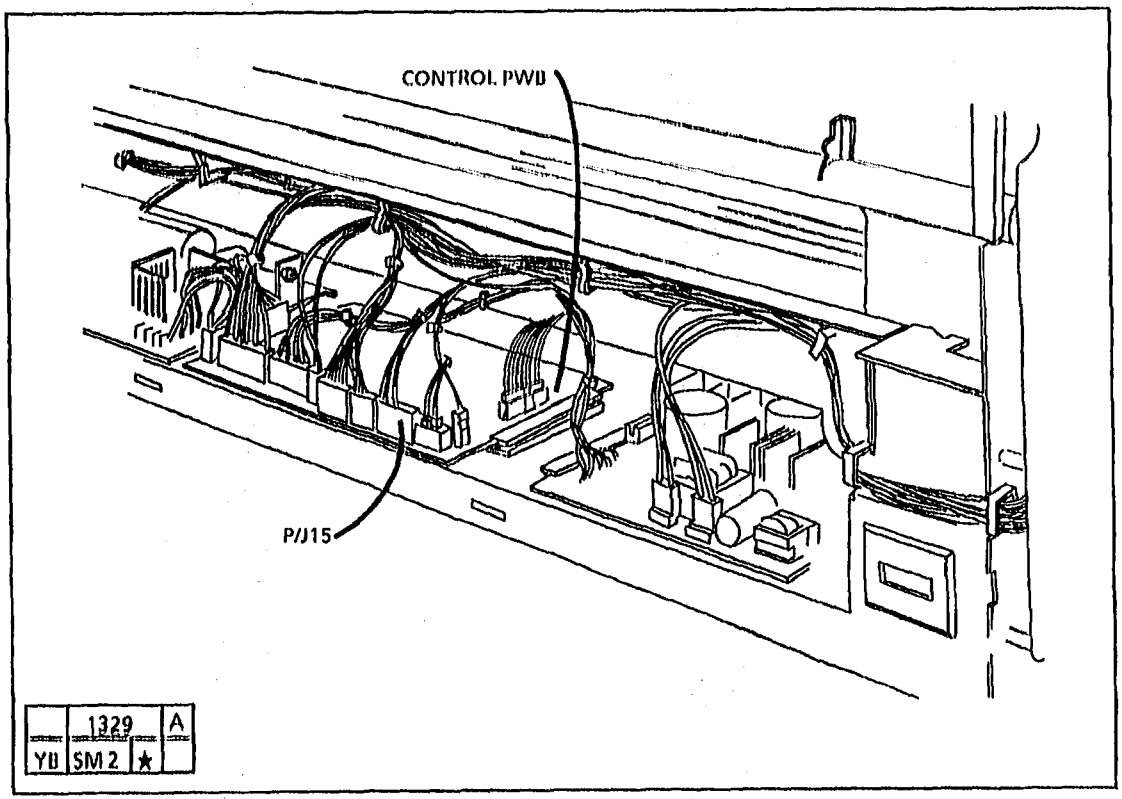
A B

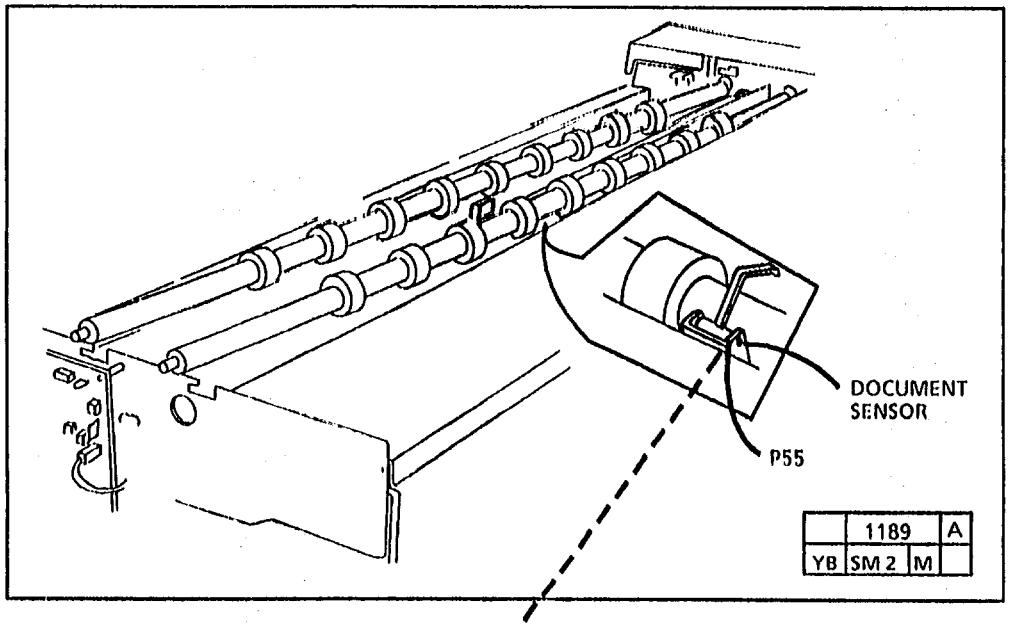
Go to FLAG 1 and check the wiring for an open circuit or a short circuit.

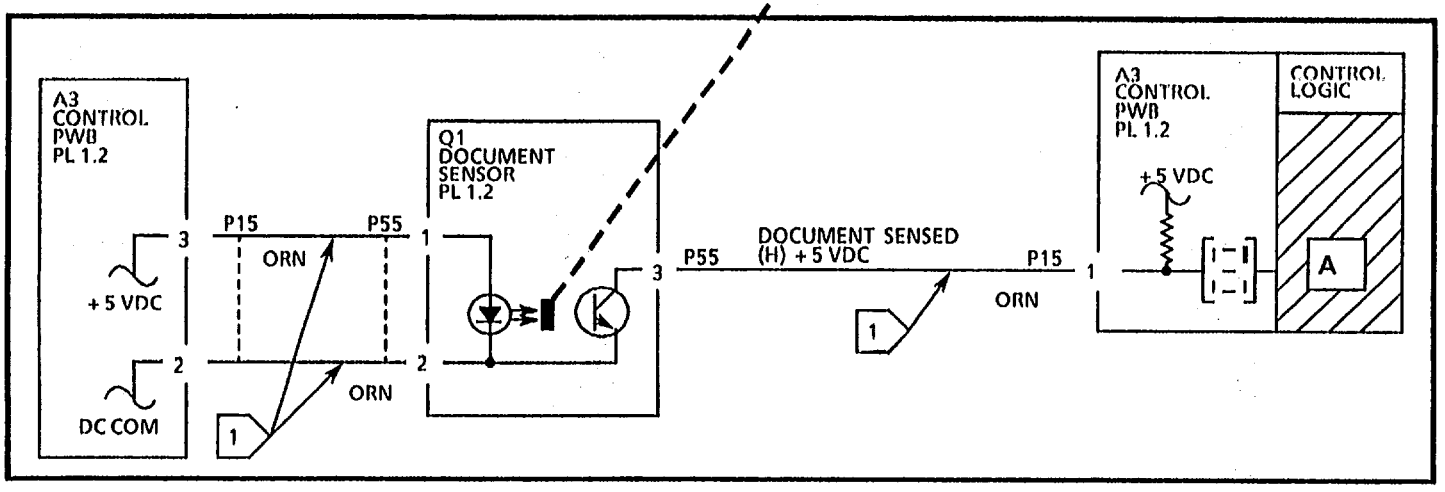
If there is no open or short circuit, replace the Document Sensor (Q1).

If the problem persists, replace the Control PWB.

The problem could be an intermittent Document Actuator or Sensor. Refer back to the Initial Actions section of this RAP. If the problem persists, replace the Document Sensor.




DOCUMENT SENSOR
P55
1189
A
YB
SM 2
M


A3 CONTROL PWB PL 1.2
3
+5 VDC
2
DC COM
P15
P55
ORN
ORN
1
Q1 DOCUMENT SENSOR PL 1.2
1
2
3
P55
DOCUMENT SENSED (H) +5 VDC
P15
1
ORN
1
A3 CONTROL PWB PL 1.2
+5 VDC
CONTROL LOGIC
A

C - Cover Interlock Open RAP (2510 W/O TAG 5)

This code is displayed if the control logic senses that one of the interlock switches is open or disconnected.

1 *The transport latching cover and upper rear cover interlock switches are actuated by magnets located on the transport latching cover and the upper rear cover.*

Initial Actions

- Ensure that the transport latching cover is closed, and the upper rear cover is installed.
- Ensure that the connectors P/J 5, 9, 43, 44, and 58, are connected/seated properly.
- Ensure magnets located on the transport latching cover and the upper rear cover are aligned with their associated interlock switch.

Procedure

The INT LED on the LVPS PWB is lit.

Y N

Set the DMM to the (+) 200 VDC scale.

Connect (+) to P/J5-3; connect (-) to the Ground test point on the HVPS (TP4).

There is +19 to +35 VDC.

Y N

Go to FLAG 1 and check the wiring for and open circuit. If there is no open circuit, disconnect the P/J 58 connector.

A B C

A B C

Measure the resistance between pins 1 and 3 of the connector. Use a magnet to check that the switch opens and closes.

The Upper Rear Cover Interlock Switch (S4) is good.

Y N

Replace the switch.

There is +19 to +35 VDC.

Y N

Replace the High Voltage Power Supply (PL 1.1).

Refer back to initial actions.

Connect (+) to P/J5-4; connect (-) to the Ground test point on the HVPS (TP4).

There is +19 to +35 VDC.

Y N

Replace the LVPS PWB (A2).

Connect (+) of the DMM to P/J5-6.

There is +19 to +35 VDC.

Y N

Go to FLAG 2 and check the wiring for and open circuit. If there is no open circuit, disconnect the P/J 44 connector. Measure the resistance between pins 1 and 3 of the connector. Use a magnet to check that the switch opens and closes

The Transport Cover Interlock Switch (S5) is good.

Y N

Replace the switch.

A D Refer back to initial actions.

A D

Connect (+) to P/J9-13; connect (-) to the Ground test point on the HVPS (TP4).

There is +19 to +35 VDC.

Y N

Go to FLAG 3 and check the wiring for and open circuit. If there is no open circuit, replace the LVPS PWB (A2).

Replace the Controller PWB (A3).

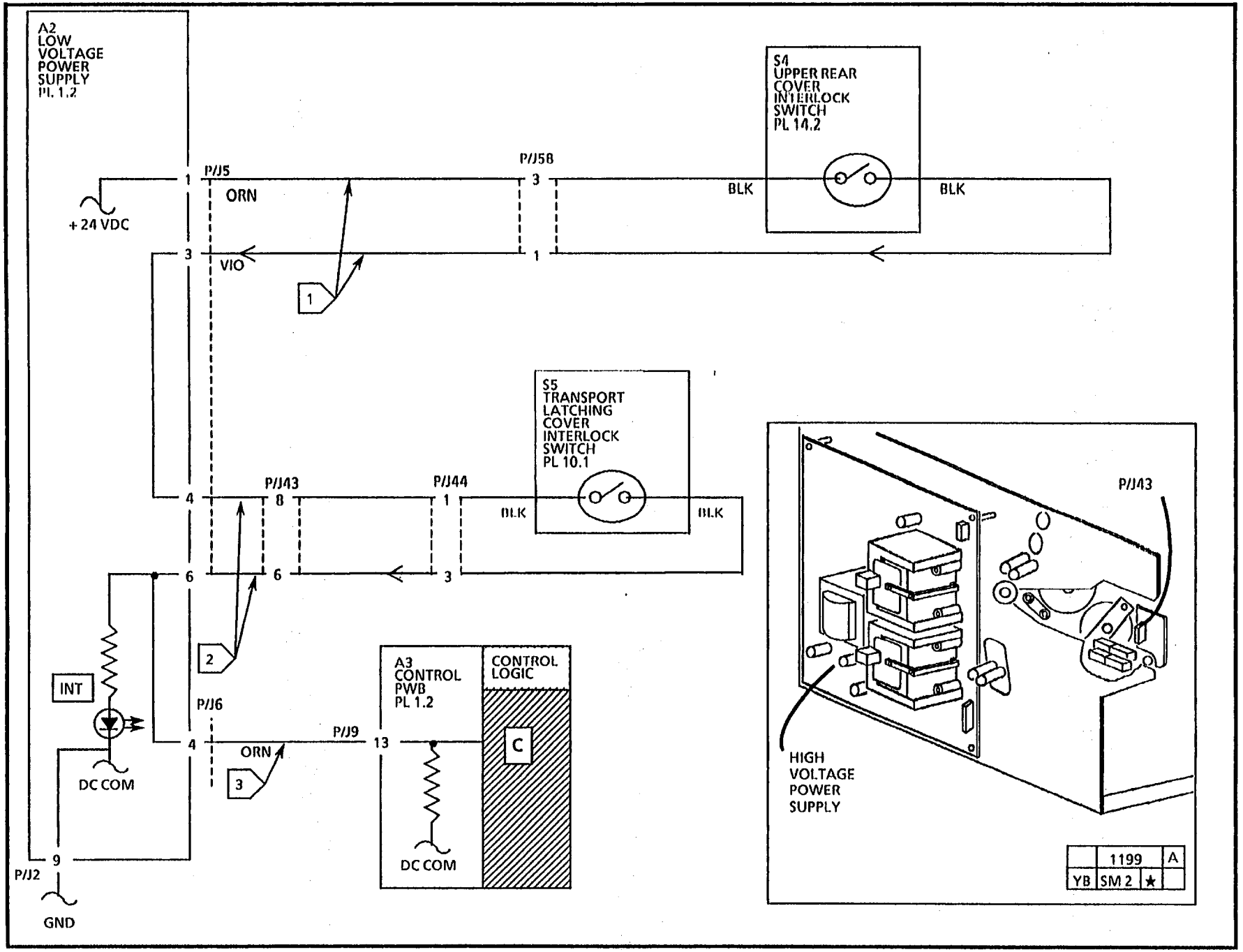
Connect (+) to P/J9-13; connect (-) to the Ground test point on the HVPS (TP4).

There is +19 to +35 VDC.

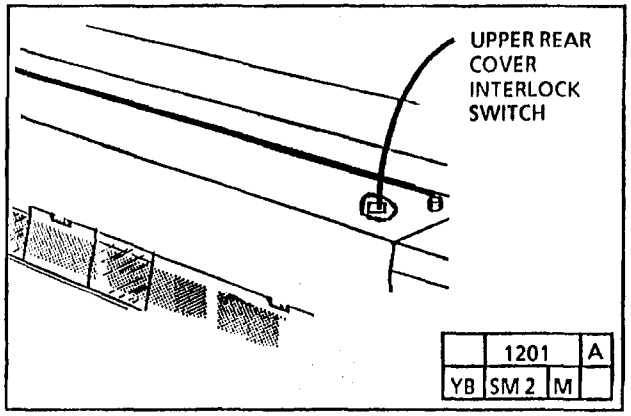
Y N

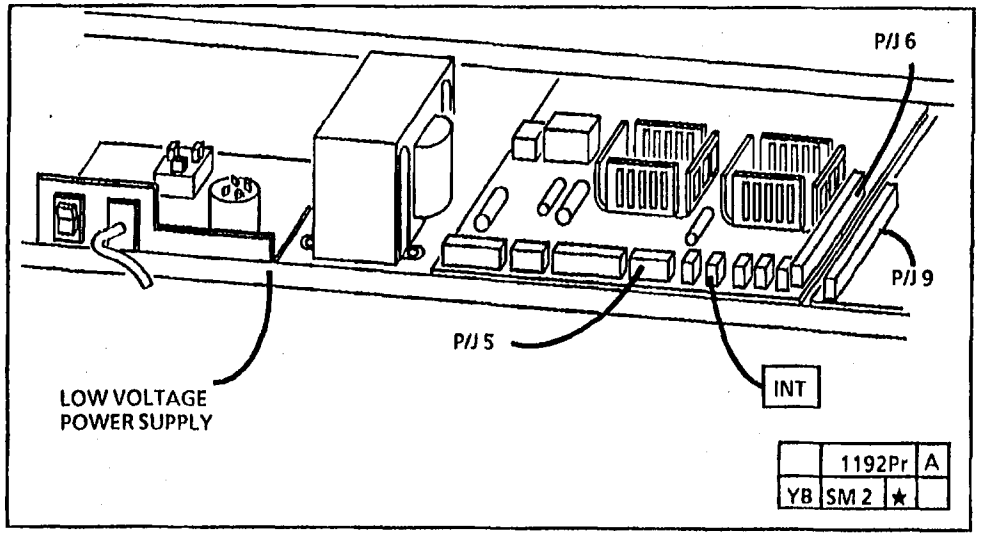
Go to FLAG 3 and check the wiring for and open circuit. If there is no open circuit, replace the LVPS PWB (A2).

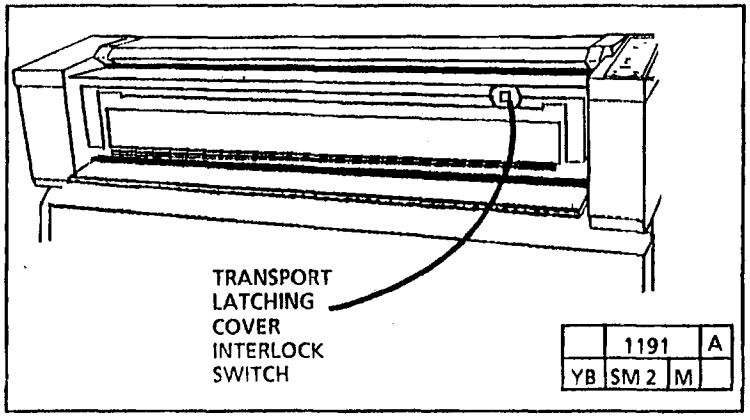
Replace the Controller PWB (A3).

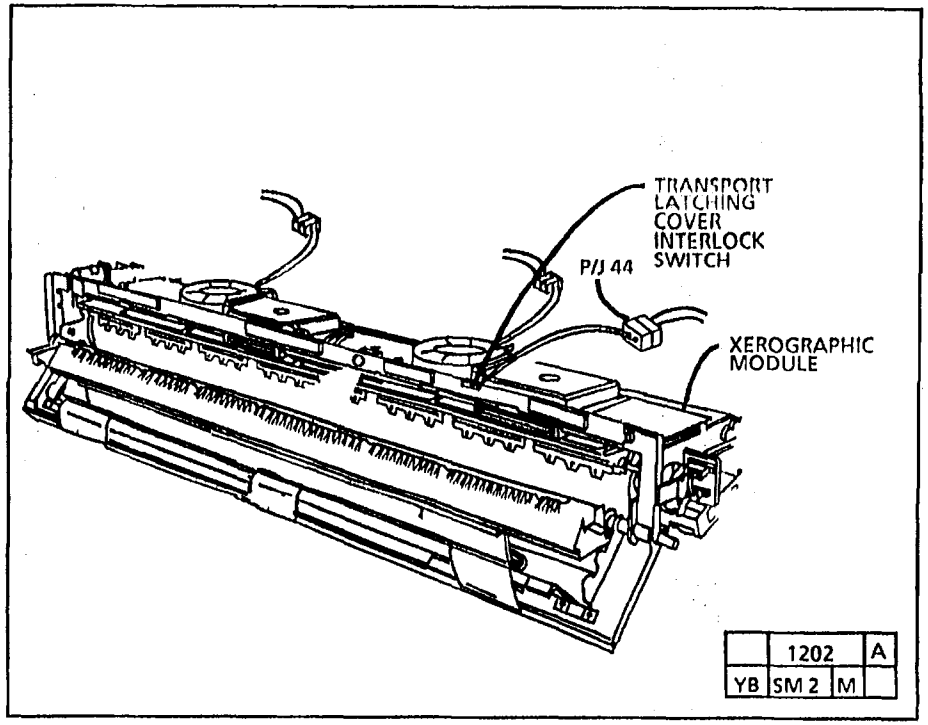

A2
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
+24 VDC
P/J5
P/J58
ORN
VIO
S4
UPPER REAR
COVER
INTERLOCK
SWITCH
PL 14.2
BLK
BLK
S5
TRANSPORT
LATCHING
COVER
INTERLOCK
SWITCH
PL 10.1
P/J43
P/J44
INT
P/J6
P/J9
DC COM
A3
CONTROL
PWB
PL 1.2
CONTROL
LOGIC
C
DC COM
P/J2
GND
HIGH
VOLTAGE
POWER
SUPPLY
1199
A
YB
SM 2

Notes:


UPPER REAR COVER INTERLOCK SWITCH
1201 A
YB SM 2 M


P/J 6
P/J 9
P/J 5
INT
LOW VOLTAGE POWER SUPPLY
1192Pr A
YB SM 2 ★


TRANSPORT LATCHING COVER INTERLOCK SWITCH
1191 A
YB SM 2 M


TRANSPORT LATCHING COVER INTERLOCK SWITCH
P/J 44
XEROGRAPHIC MODULE
1202 A
YB SM 2 M

C - Cover Interlock Open RAP (2510 W/ TAG 5; 2515)

This code is displayed if the control logic senses that one of the interlock switches or the Thermistor PWB is open or disconnected.

1 *The transport latching cover and upper rear cover interlock switches are actuated by magnets located on the transport latching cover and the upper rear cover.*

Initial Actions

- Ensure that the transport latching cover is closed, and the upper rear cover is installed.
- Ensure that the connectors P/J 5, 9, 43, 44, 46, 47, and 58, are connected/seated properly.
- Ensure magnets located on the transport latching cover and the upper rear cover are aligned with their associated interlock switch.

Procedure

The INT LED on the LVPS PWB is lit.

Y N

Set the DMM to the (+) 200 VDC scale.

Connect (+) to P/J5-4; connect (-) to the Ground test point on the HVPS (TP4).

There is + 19 to + 35 VDC.

Y N

Go to FLAG 1 and check the wiring for and open circuit. If there is no open circuit, disconnect the P/J 47 connector.

A B C

A B C

Measure the resistance between pins 1 and 3 of the connector. Use a magnet to check that the switch opens and closes.

The Transport Cover Interlock Switch (S5) is good.

Y N

Replace the switch.

Replace the Thermistor PWB (A10).

Connect (+) to P/J5-3; connect (-) to the Ground test point on the HVPS (TP4).

There is + 19 to + 35 VDC.

Y N

Replace the LVPS PWB (A2).

Connect (+) of the DMM to P/J5-1.

There is + 19 to + 35 VDC.

Y N

Go to FLAG 2 and check the wiring for and open circuit. If there is no open circuit, disconnect the P/J 58 connector. Measure the resistance between pins 1 and 3 of the connector. Use a magnet to check that the switch opens and closes.

The Upper rear Cover Interlock Switch (S4) is good.

Y N

Replace the switch.

Refer back to initial actions.

A D

A D

Connect (+) to P/J9-13; connect (-) to the Ground test point on the HVPS (TP4).

There is + 19 to + 35 VDC.

Y N

Go to FLAG 3 and check the wiring for and open circuit. If there is no open circuit, replace the LVPS PWB (A2).

Replace the Controller PWB (A3).

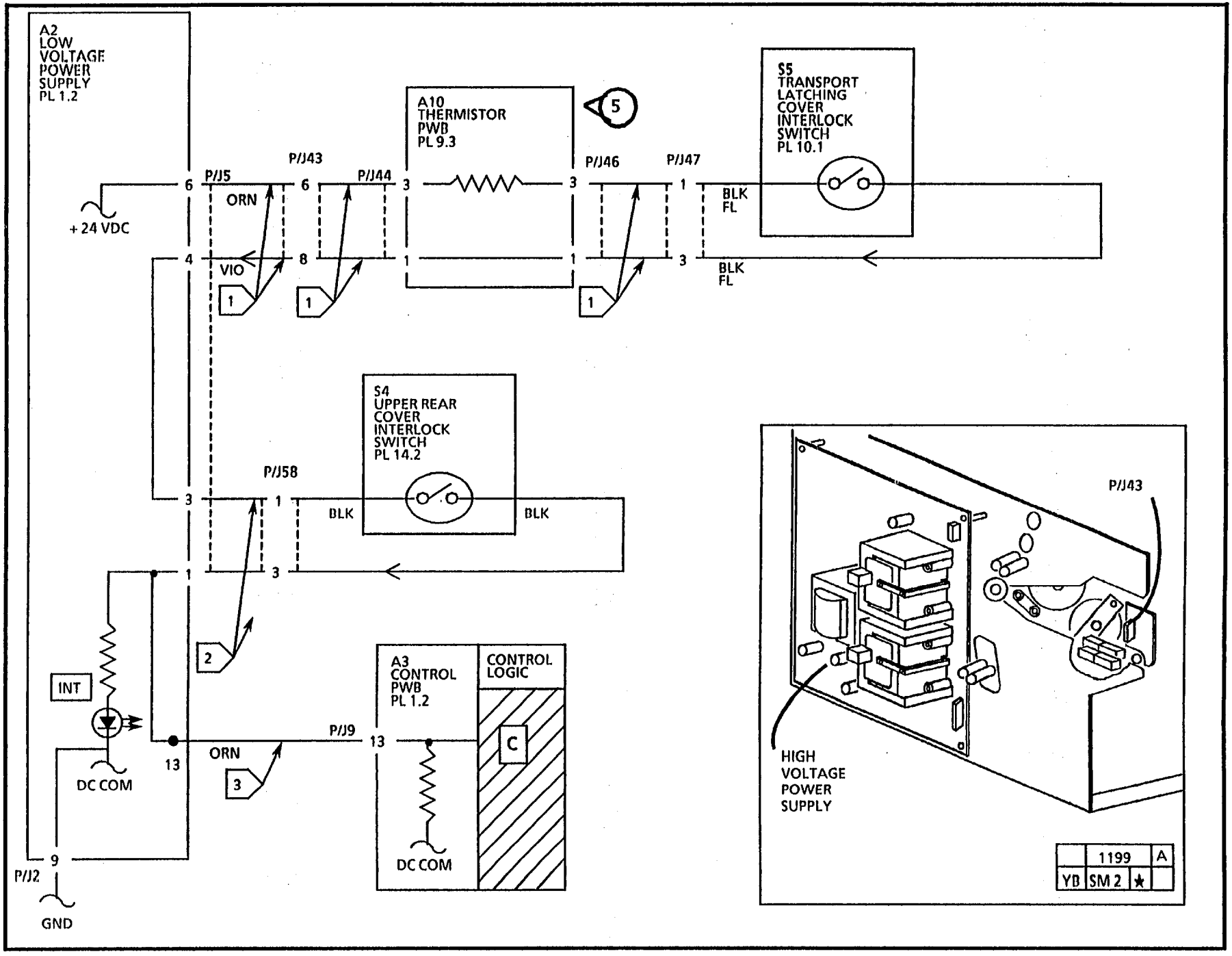
Connect (+) to P/J9-13; connect (-) to the Ground test point on the HVPS (TP4).

There is + 19 to + 35 VDC.

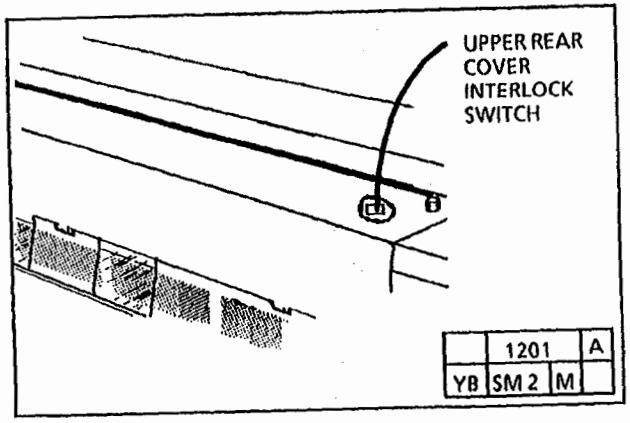
Y N

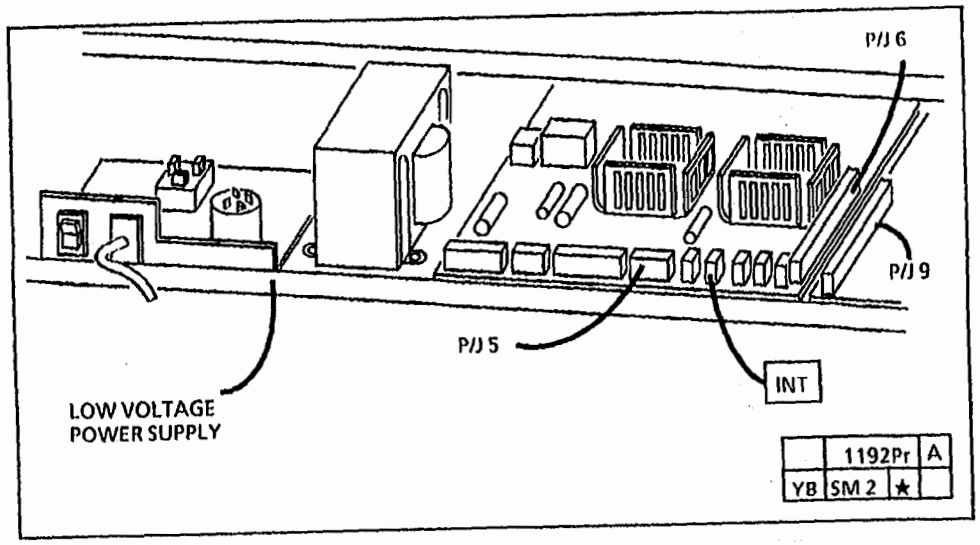
Go to FLAG 3 and check the wiring for and open circuit. If there is no open circuit, replace the LVPS PWB (A2).

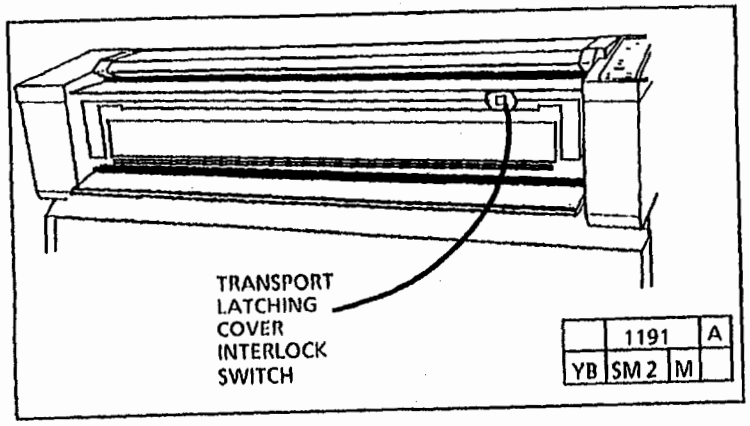
Replace the Controller PWB (A3).

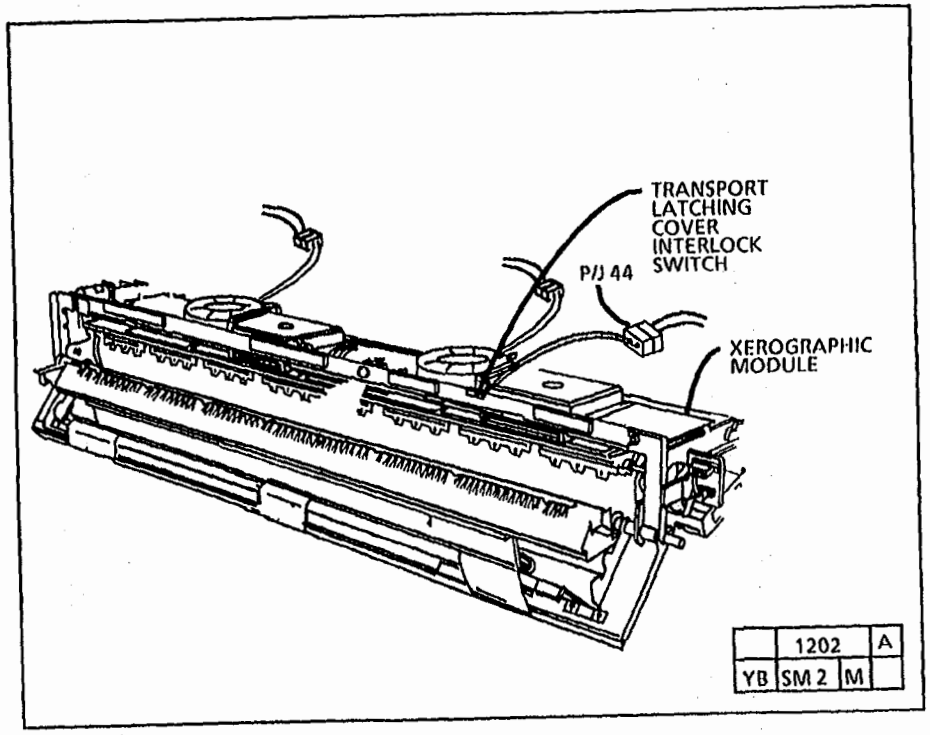

A2
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
+ 24 VDC
P/J5
P/J43
P/J44
A10
THERMISTOR
PWB
PL 9.3
P/J46
P/J47
S5
TRANSPORT
LATCHING
COVER
INTERLOCK
SWITCH
PL 10.1
ORN
VIO
BLK
FL
BLK
FL
S4
UPPER REAR
COVER
INTERLOCK
SWITCH
PL 14.2
P/J58
BLK
BLK
INT
DC COM
P/J9
ORN
A3
CONTROL
PWB
PL 1.2
CONTROL
LOGIC
C
DC COM
P/J2
GND
P/J43
HIGH
VOLTAGE
POWER
SUPPLY
1199
A
YB
SM 2

Notes:


UPPER REAR
COVER
INTERLOCK
SWITCH
1201
A
YB
SM 2
M


P/J 6
P/J 9
P/J 5
INT
LOW VOLTAGE
POWER SUPPLY
1192Pr
A
YB
SM 2
★


TRANSPORT
LATCHING
COVER
INTERLOCK
SWITCH
1191
A
YB
SM 2
M


TRANSPORT
LATCHING
COVER
INTERLOCK
SWITCH
P/J 44
XEROGRAPHIC
MODULE
1202
A
YB
SM 2
M

E - Paper Path Jam RAP

This code is displayed for any of the following reasons:

- The copy paper was registered, but a copy was never delivered.

The circuit diagrams are on the next two page.

Initial Actions

Check for an obstruction in the paper path.

(2515 W/ TAGS 2, 7, or 89): Enter the code [A] to switch on the main drive motor and the code [b] to energize the Media Feed Clutch. Feed in a sheet of media

(2510, 2515W/O TAGS 2, 7, or 89): Enter the codes [L], [g], [j], wait 2 minutes and enter the code [A] to switch on the main drive motor. Enter the code [b] to energize the Media Feed Clutch. Feed in a sheet of media

The media feeds out of the copier.

Y N

Continue with the **Initial Actions** and the **Procedure.**

Electrostatics may be causing the jam.

Disconnect the Blue corotron cable and made several copies. If there is a jam, the Transfer/Detack corotron is probably shorting. If there is no jam the Charge/Precharge corotron is probably shorting.

Check that the Charge voltage is in specification using the electrometer. If the voltage is very high (1200 volts) or varying by 200 volts there is probably a shorting problem.

- Check for a piece of media in the turnaround baffle.
- Check the gap after the transfer/detack corotron. If the gap is open, either tape over the gap or install kit 600K24350.
- Ensure that the drive gears and the Paper feed clutch are not damaged.
- Check to see if the Feed Clutch is binding. Unplug the Media Feed Clutch at P/J 30. Turn power on and push start. The feed rolls should not turn when the main drive motor starts.
- Check for incorrectly stored paper.
- Ensure that the stub shaft between the Media Feed Clutch and the feed rolls is not loose. If loose, replace the upper media feed roll assembly.
- Check connectors P/J 14, 28, 29, and 30 for damage and proper seating.
- Check that the transport is fully against the hinge pins on the Front Cover of the Xerographic Module when the Transport Latching Cover is closed. If not, replace the Latch Springs (PL 9.2)

Procedure

WARNING

(2515 W/ TAGS 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

Set the DMM to read + 24 VDC. Connect (+) to P/J14-5 on the control PWB. Connect (-) to the **Gnd** test point on the HVPS (TP4). Enter the diagnostic code [b].

The voltage changes between 24 VDC to 0 VDC.

Y N

Go to FLAG 1 and check for an open or short circuit. If there is no open or short circuit, replace the Control PWB (A3). If the problem persists replace the Media Feed Clutch (PL 8.3).

(2515 W/ TAGS 2, 7, or 89): Enter the code [A] to switch on the main drive motor and the code [b] to energize the Media Feed Clutch.

(2510, 2515W/O TAGS 2, 7, or 89): Enter the codes [L], [g], [j], wait 2 minutes and enter the code [A] to switch on the main drive motor. Enter the code [b] to energize the Media Feed Clutch. **The Feed rolls are turning.**

Y N

Replace the Media Feed Clutch (PL 8.3).

Enter the code to check the Motion Sensor (the Top Segment will be lit).

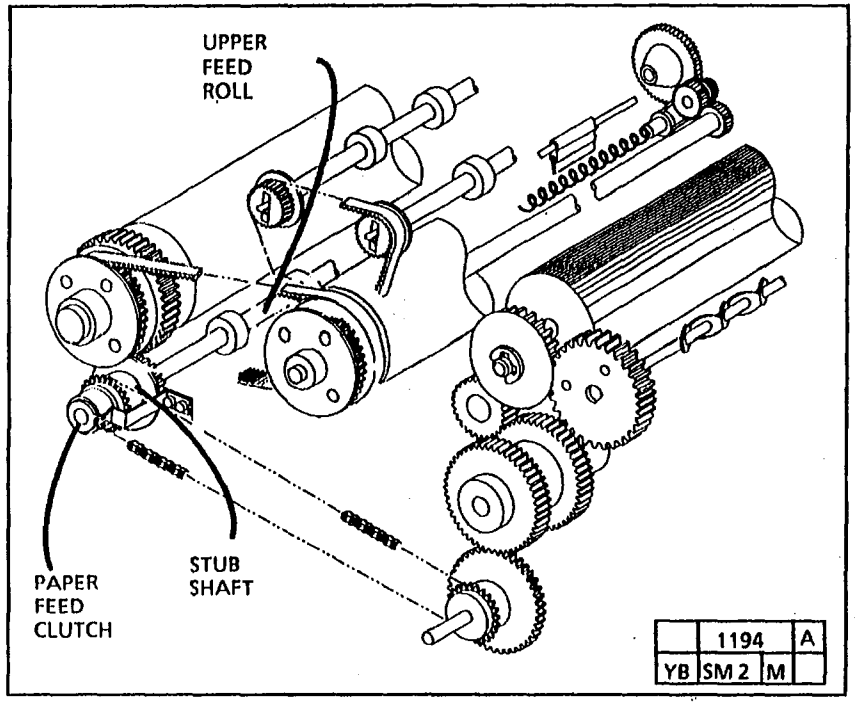
Insert a sheet of media in order to be able to test the Motion Sensor.

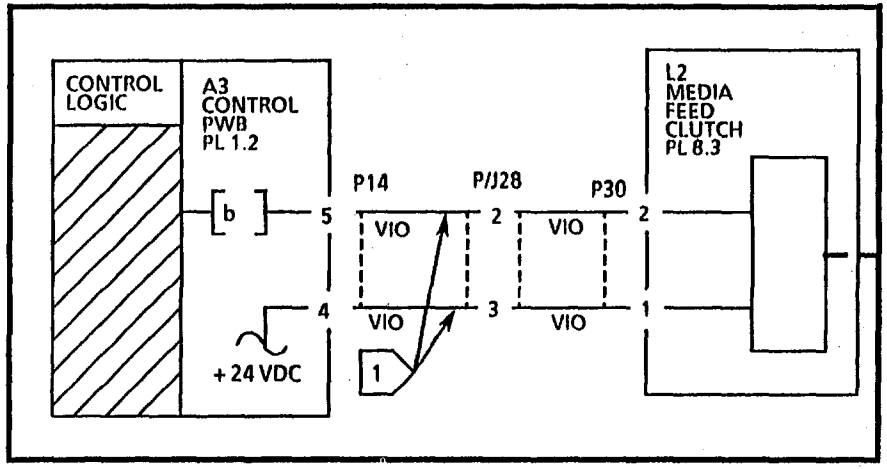
The copy output LED goes off and on when the Motion Sensor wheel is rotated.

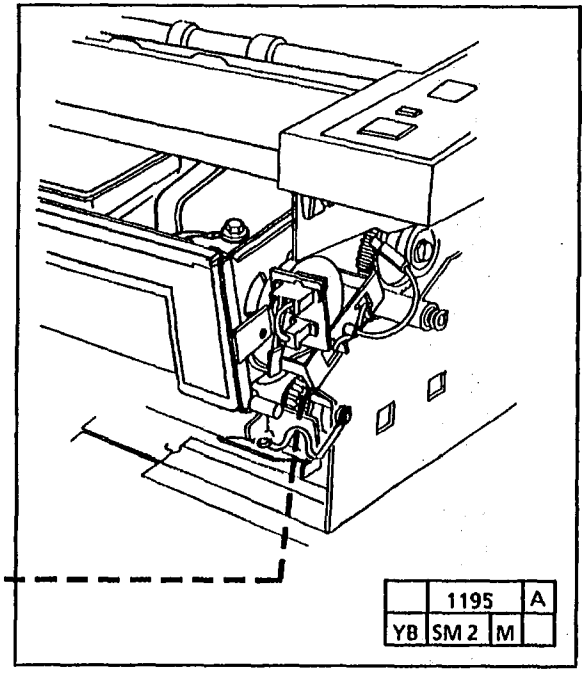
Y N

Go to FLAG 2 and check for an open or short circuit. If there is no open or short circuit, replace the Motion Sensor (Q3). If the problem persists replace the Control PWB (A3).

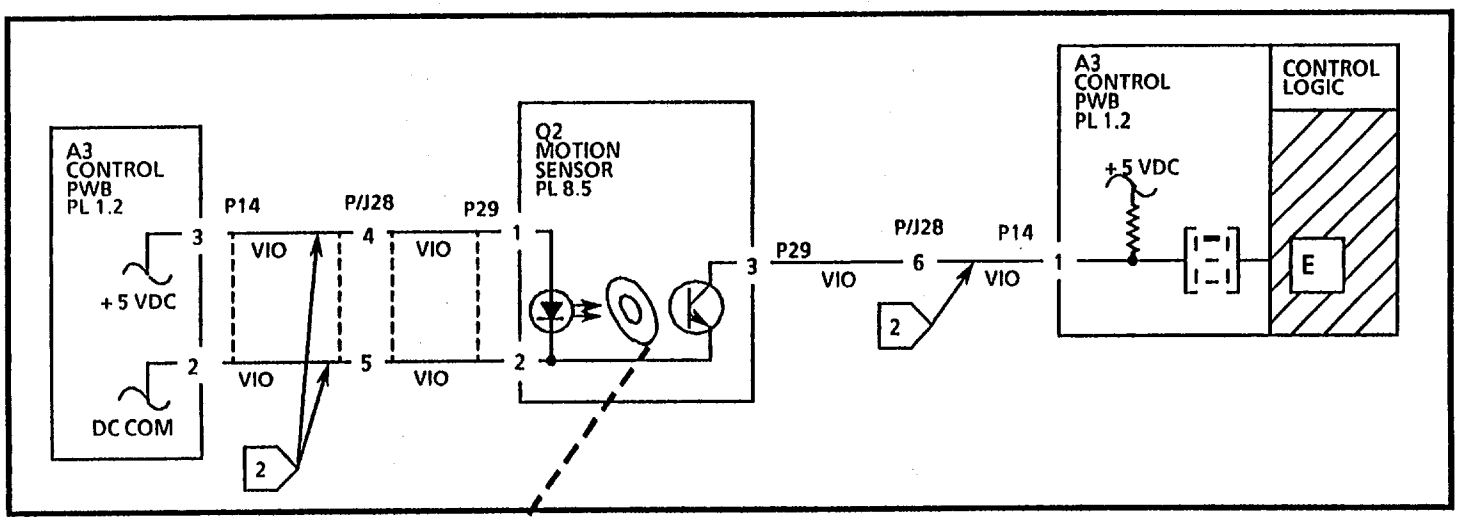
Proceed to wrap up the call.

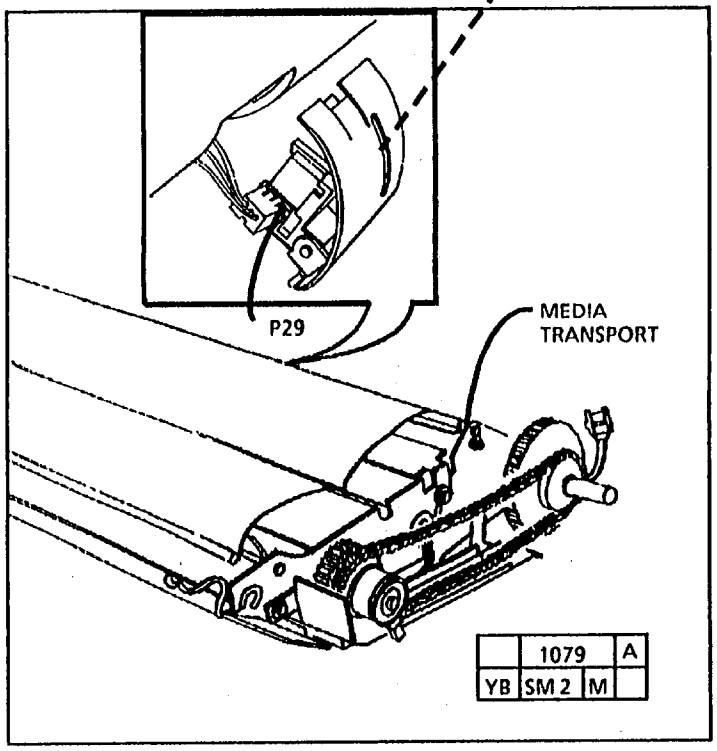

UPPER
FEED
ROLL
PAPER
FEED
CLUTCH
STUB
SHAFT
1194
A
YB
SM 2
M

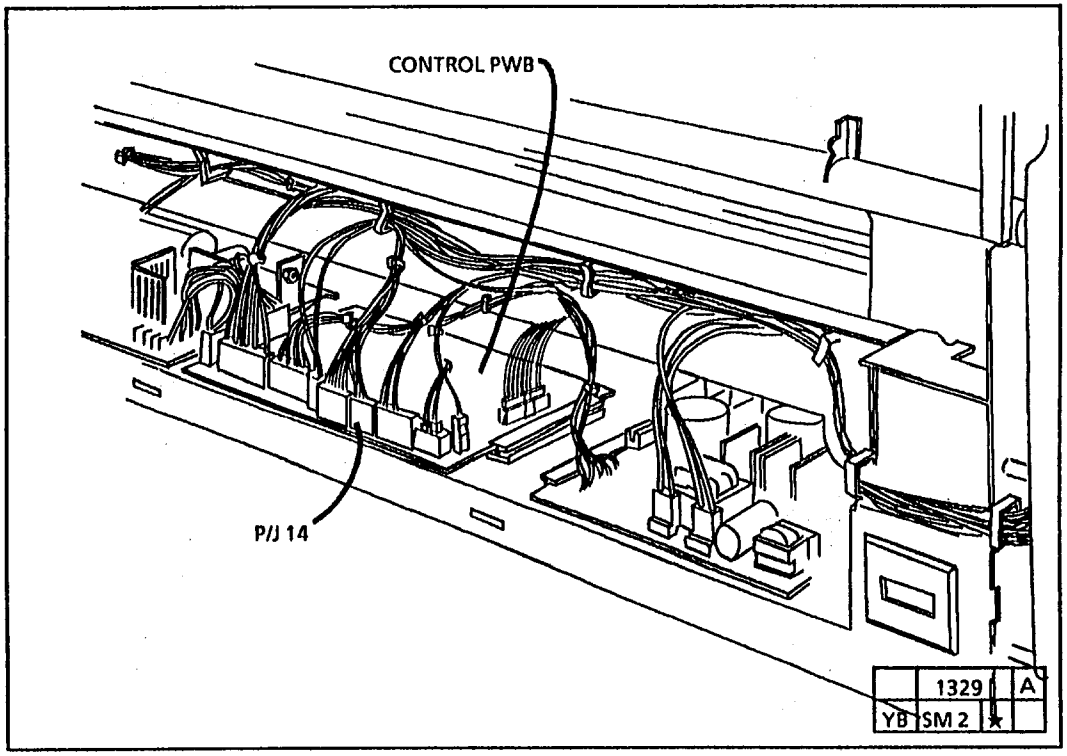

CONTROL
LOGIC
A3
CONTROL
PWB
PL 1.2
b
5
4
+24 VDC
P14
P/J28
P30
VIO
VIO
VIO
VIO
2
3
2
1
1
L2
MEDIA
FEED
CLUTCH
PL 8.3


1195
A
YB
SM 2
M

Notes:


A3
CONTROL
PWB
PL 1.2
P14
P/J28
P29
3
+5 VDC
2
DC COM
VIO
4
VIO
5
VIO
VIO
Q2
MOTION
SENSOR
PL 8.5
1
2
3
2
P29
VIO
P/J28
6
P14
VIO
1
2
A3
CONTROL
PWB
PL 1.2
+5 VDC
CONTROL
LOGIC
E


P29
MEDIA
TRANSPORT
1079
A
YB
SM 2
M


CONTROL PWB
P/J 14
1329
A
YB
SM 2

F - Fuser (2510) RAP

This Rap is used if there is a problem with Fuser overtemperature or fuser warmup. Also a constant L8 or L9.

WARNING

The heat rod and the fuser roll may be hot. Be careful when working in this area.

Initial Actions

- Ensure that the Thermistor Pad is free of contamination.
- W/O TAG 5, Check connectors P/J 2, 6, 9, 18, 37, 38, 39, 40, 43, and 47 for damage and proper seating.
- W/ TAG 5, Check connectors P/J 2, 6, 9, 17, 37, 38, 39, 40, 43, and 44 for damage and proper seating.
- Ensure that the Thermistor Pad is contacting the fuser roll.

⚠	**WARNING** DANGEROUS VOLTAGE.

Procedure

CAUTION

To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor (A); always enter the codes (g) fuser and (J) cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code (A) to start the main drive motor.

Enter the diagnostic codes [g and J]. **Wait 3 minutes.**

The Fuser Heat Rod is on.

Y N

There is less than 5 ohms between P/J38-1 and P/J40-1.

Y N

A B C

A B C

Check the Fuser Heat Rod for an open circuit. If there is no open circuit go to FLAG 4 and check the wiring for an open circuit. If the Fuser Heat Rod still does not turn on, check the Over Temperature Thermostat (A9) for an open circuit.

The Over Temperature Thermostat (A9) is open.

Y N

Go to FLAGS 1 and 3 and check the wiring for an open circuit. If no open circuit is found replace the Fuser Triac. If the problem persists, replace the LVPS PWB (PS1). If the problem persists, replace the Controller PWB (A3).

Replace the Over Temperature Thermostat (A9) . Disconnect P/J 44 and check RT1 for a cold resistance of between 100K and 150K ohms. If not in Specification replace the Thermistor assembly PWB (PL 9.3). If resistance is OK go to FLAG 2 and check the wiring for an open circuit. If no open circuit is found, check the following:

- If the fans are not turning, go to the 1.3 or 1.4 Cooling Fan RAP.
- Remove the xerographic module and check the air flow manifold in order to ensure that it is not distorted or cracked.

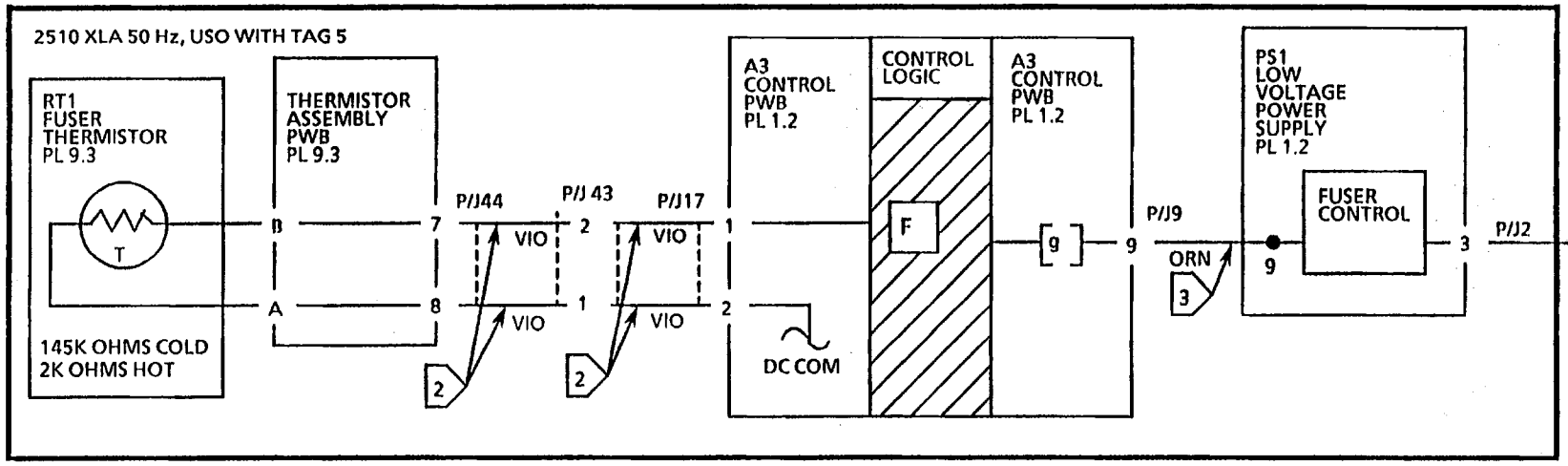
Remove the right side cover. Switch on the copier and press start. Within 60 seconds after ready, the fuser heat rod should begin to cycle. If not, turn off immediately and replace the Fuser Triac. If the problem persists, replace the LVPS PWB (A2). If the problem persists, replace the Controller PWB (A3).

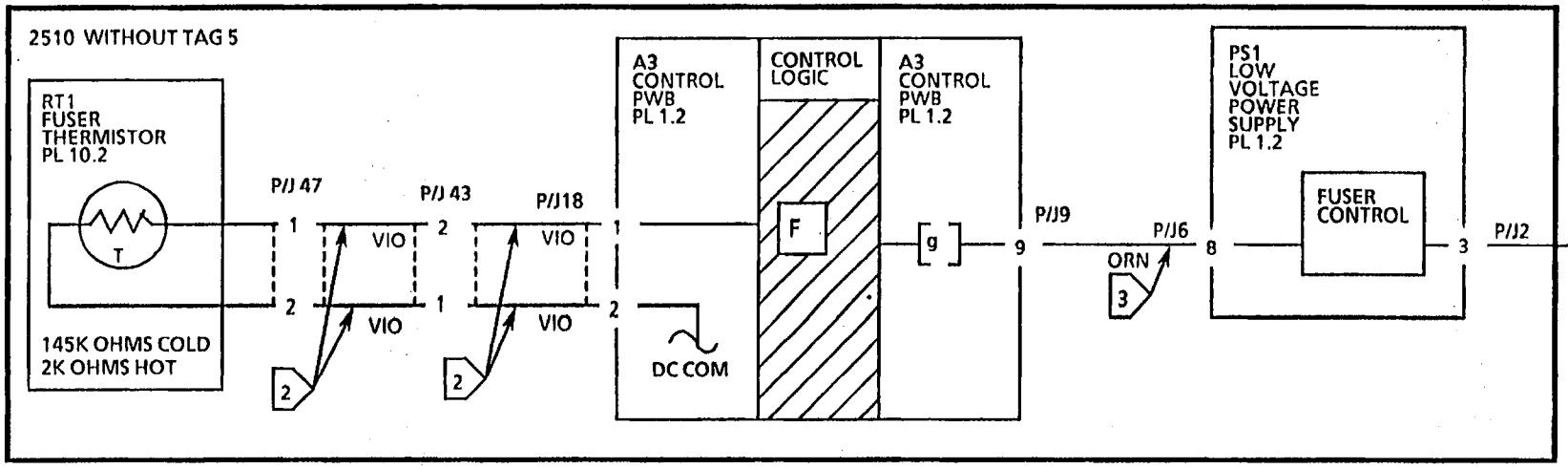
A B

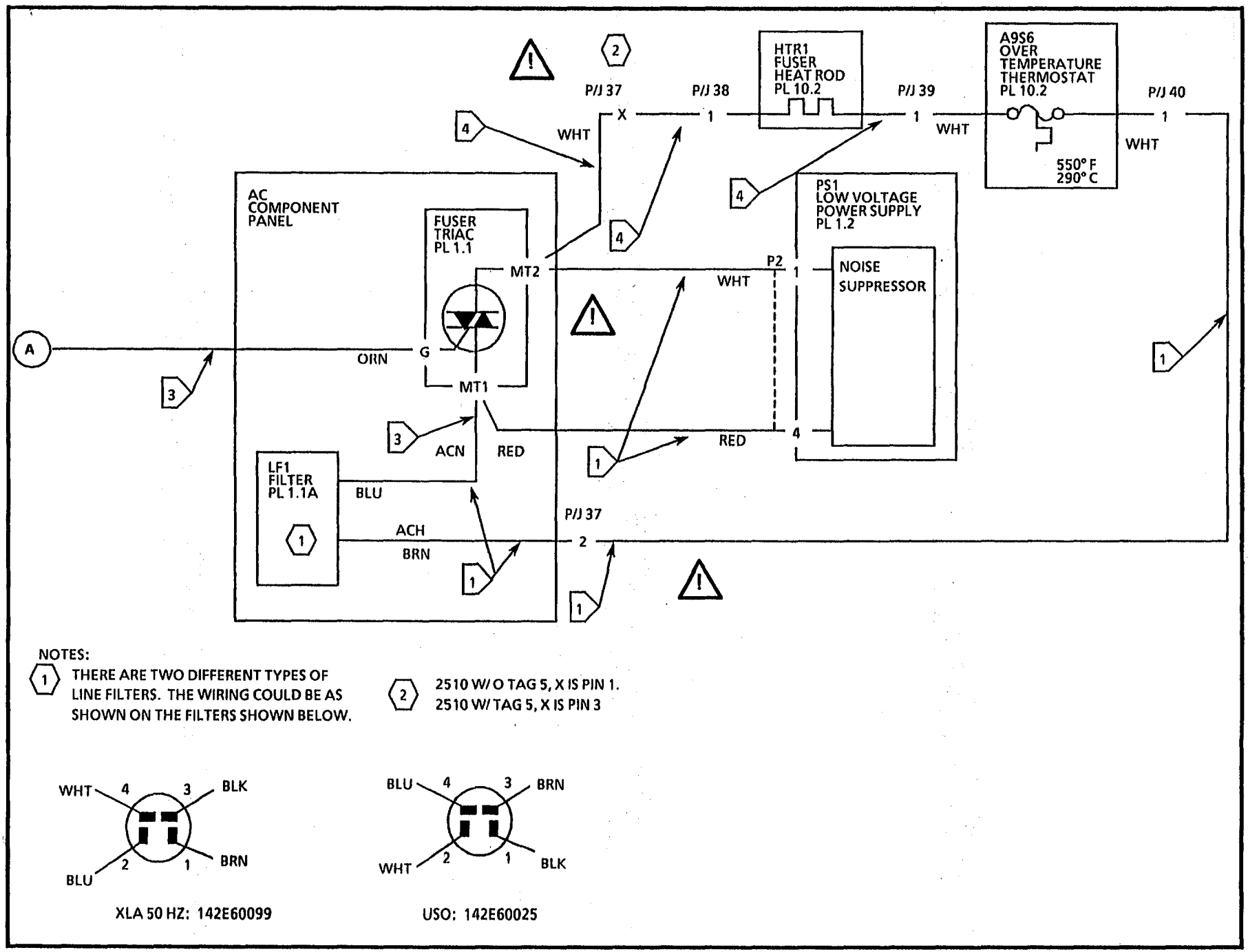
A B

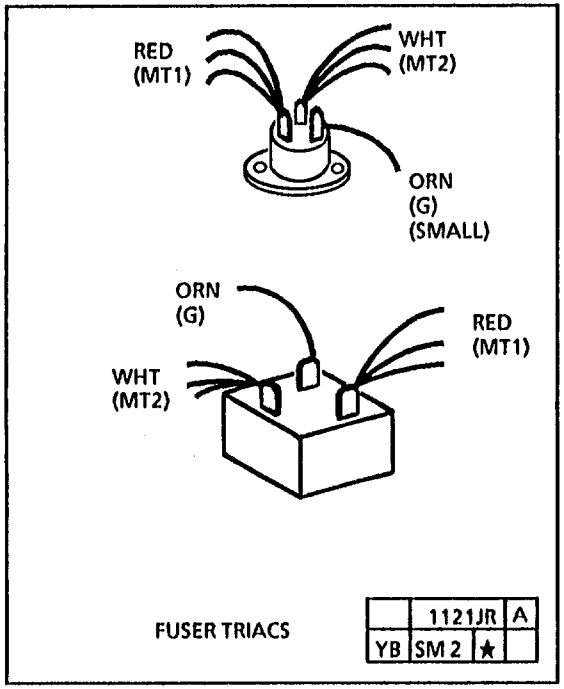
Go to FLAGS 1 thru 4 and check the wiring for a short circuit. If no short circuit is found, replace the Fuser Triac. If the problem persists, replace the LVPS PWB (PS1). If the problem persists, replace the Controller PWB (A3).

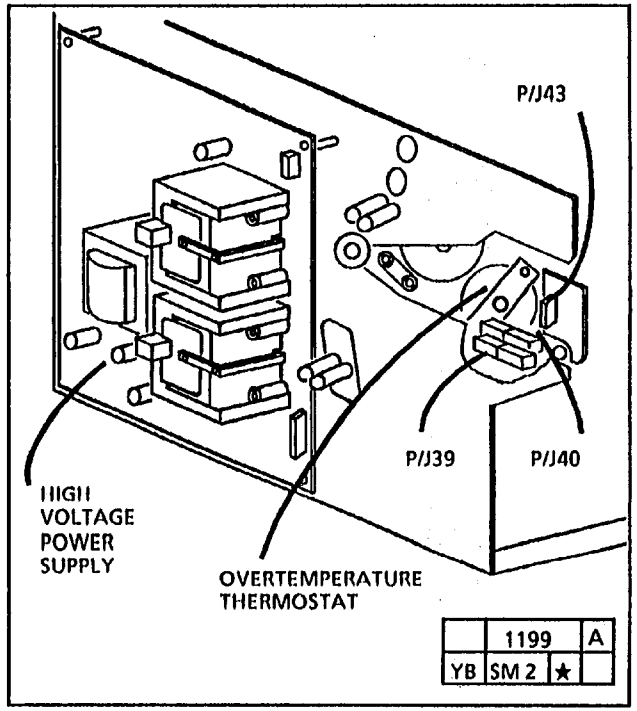
Disconnect P/J 44 and check RT1 for a cold resistance of between 100K and 150K ohms. If not in Specification replace the Thermistor assembly PWB (PL 9.3). If resistance is OK go to FLAG 2 and check the wiring for an open circuit. If no open circuit is found, replace the Contoller PWB.

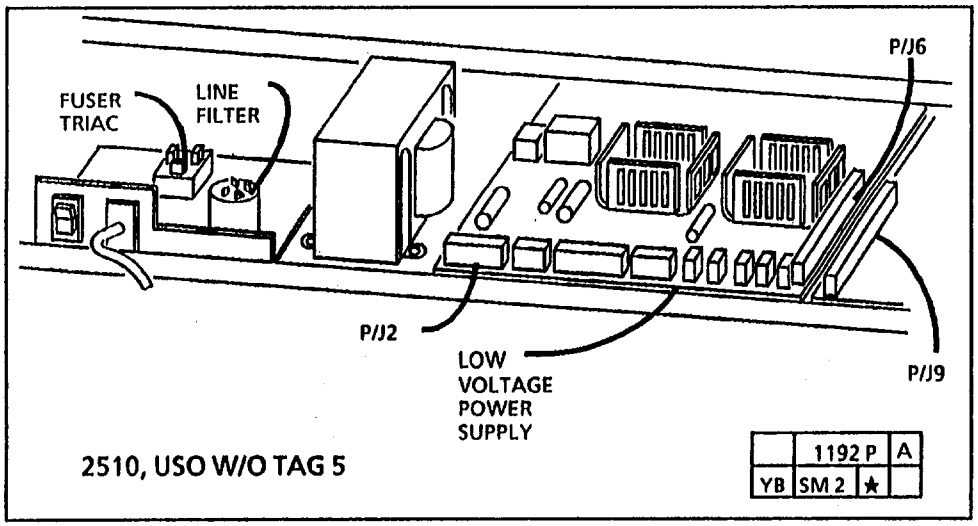

2510 XLA 50 Hz, USO WITH TAG 5
RT1
FUSER
THERMISTOR
PL 9.3
T
145K OHMS COLD
2K OHMS HOT
THERMISTOR
ASSEMBLY
PWB
PL 9.3
B
A
7
8
P/J44
P/J 43
P/J17
VIO
VIO
VIO
VIO
2
1
2
1
2
2
A3
CONTROL
PWB
PL 1.2
DC COM
CONTROL
LOGIC
F
A3
CONTROL
PWB
PL 1.2
g
9
P/J9
ORN
3
PS1
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
9
FUSER
CONTROL
3
P/J2
A
3

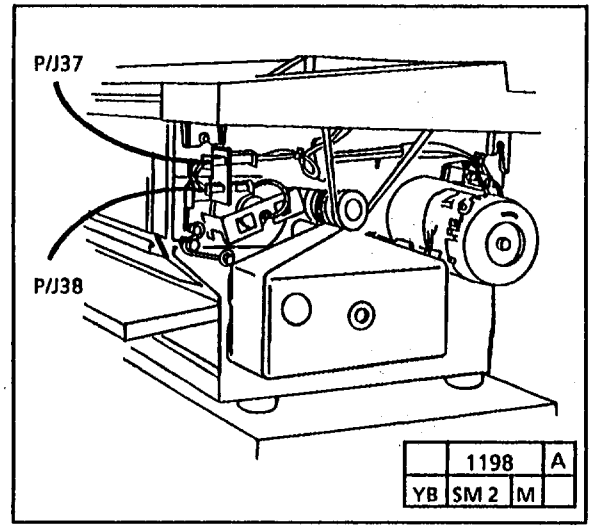

2510 WITHOUT TAG 5
RT1
FUSER
THERMISTOR
PL 10.2
T
145K OHMS COLD
2K OHMS HOT
P/J 47
P/J 43
P/J18
1
2
VIO
VIO
VIO
VIO
2
1
2
A3
CONTROL
PWB
PL 1.2
DC COM
CONTROL
LOGIC
F
A3
CONTROL
PWB
PL 1.2
g
9
P/J9
P/J6
ORN
3
8
PS1
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
FUSER
CONTROL
3
P/J2
A
3

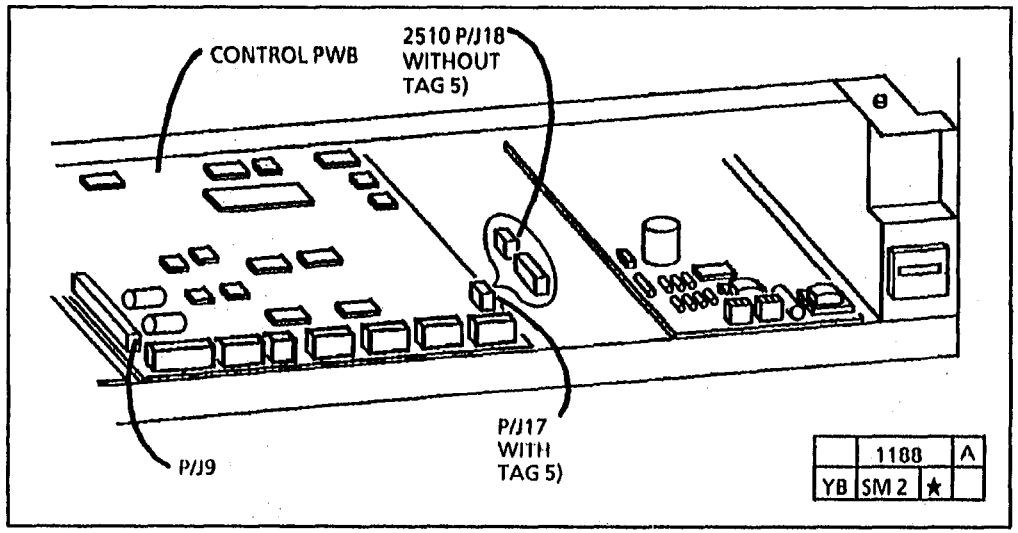

AC COMPONENT PANEL
FUSER TRIAC PL 1.1
MT2
MT1
G
ORN
A
3
ACN
RED
LF1 FILTER PL 1.1A
1
BLU
ACH
BRN
P/J 37
X
2
4
WHT
P/J 38
1
HTR1 FUSER HEAT ROD PL 10.2
P/J 39
1
WHT
A9S6 OVER TEMPERATURE THERMOSTAT PL 10.2
550° F
290° C
P/J 40
1
WHT
PS1 LOW VOLTAGE POWER SUPPLY PL 1.2
P2
1
WHT
NOISE SUPPRESSOR
4
RED
1
P/J 37
2
NOTES:
1 THERE ARE TWO DIFFERENT TYPES OF LINE FILTERS. THE WIRING COULD BE AS SHOWN ON THE FILTERS SHOWN BELOW.
2 2510 W/O TAG 5, X IS PIN 1.
2510 W/ TAG 5, X IS PIN 3
WHT 4 3 BLK
BLU 2 1 BRN
XLA 50 HZ: 142E60099
BLU 4 3 BRN
WHT 2 1 BLK
USO: 142E60025

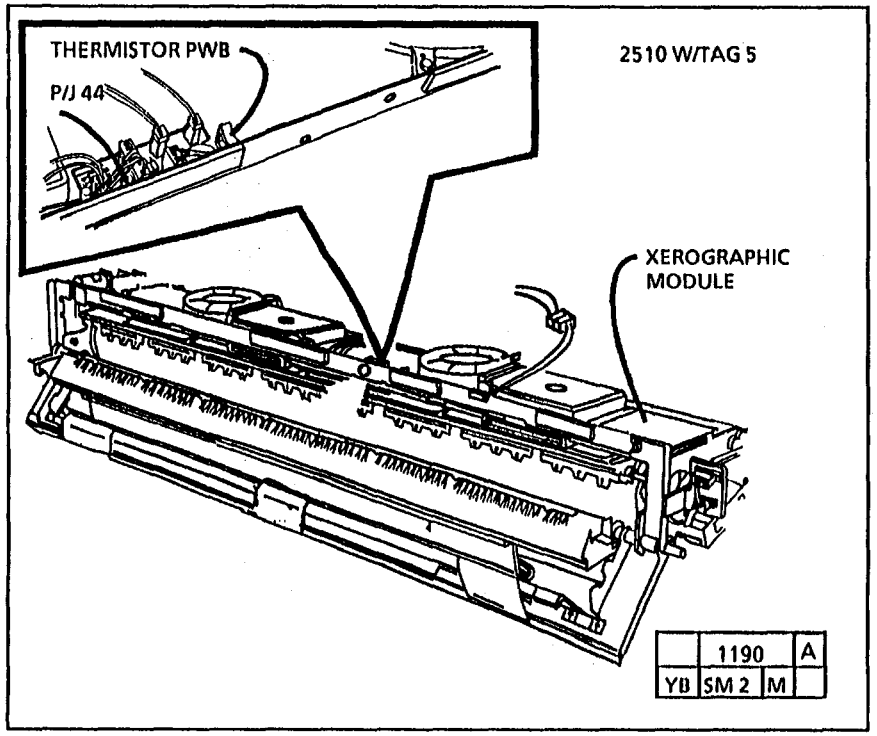

RED
(MT1)
WHT
(MT2)
ORN
(G)
(SMALL)
ORN
(G)
WHT
(MT2)
RED
(MT1)
FUSER TRIACS
1121JR A
YB SM 2 ★

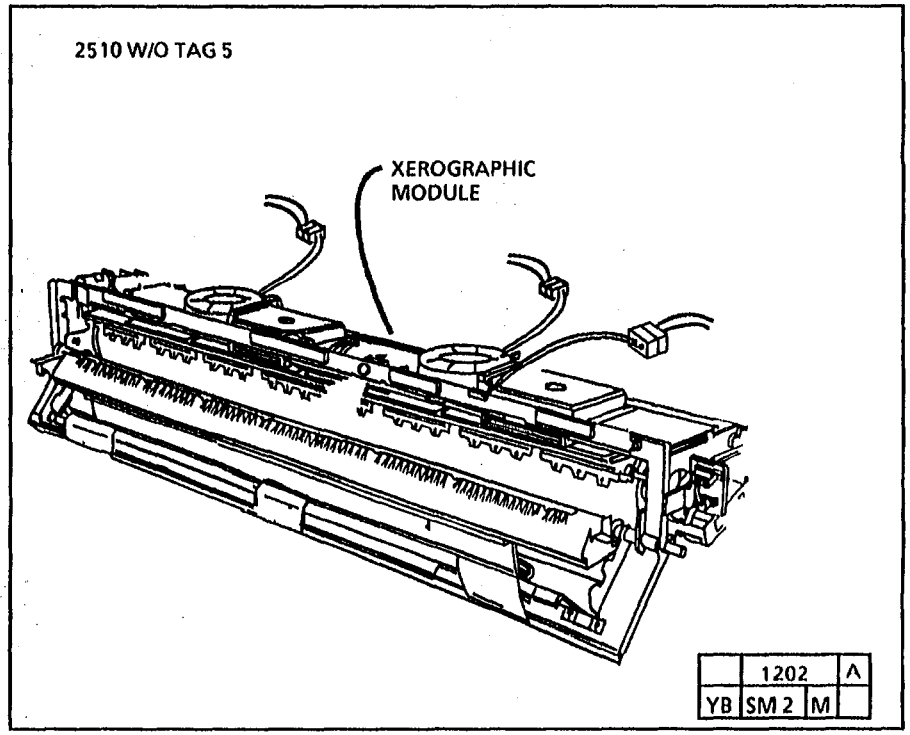

P/J43
P/J39
P/J40
HIGH
VOLTAGE
POWER
SUPPLY
OVERTEMPERATURE
THERMOSTAT
1199 A
YB SM 2 ★


FUSER
TRIAC
LINE
FILTER
P/J6
P/J2
LOW
VOLTAGE
POWER
SUPPLY
P/J9
2510, USO W/O TAG 5
1192 P A
YB SM 2 ★


P/J37
P/J38
1198 A
YB SM 2 M


CONTROL PWB
2510 P/J18 WITHOUT TAG 5)
P/J9
P/J17 WITH TAG 5)
1188 A
YB SM 2 ★


THERMISTOR PWB
P/J 44
2510 W/TAG 5
XEROGRAPHIC MODULE
1190 A
YB SM 2 M


2510 W/O TAG 5
XEROGRAPHIC MODULE
1202 A
YB SM 2 M

Notes:

F - Fuser (2515) RAP

This RAP is used if there is a problem with Fuser overtemperature or fuser warmup. Also, a constant L8 or L9 is displayed.

WARNING

The heat rod and the fuser roll may be hot. Be careful when working in this area.

Initial Actions

- Ensure that the Thermistor Pad is free of contamination.
- W/ TAG 5, Check connectors P/J 2, 6, 9, 17, 37, 38, 39, 40, 43, and 44 for damage and proper seating.
- Ensure that the Thermistor Pad is contacting the fuser roll.

Procedure

CAUTION

W/O TAGS 2, 7,or 89: To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor (A); always enter the codes (g) fuser and (J) cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code (A) to start the main drive motor.

(1) *The overheat LED will be lit if the fuser temperature is more than 390°F (200°C). The overtemperature thermostat will open when the temperature is more than 550° F (290°C).*

Enter the diagnostic codes [g and J], W/ TAGS 2 , 7, or 89 enter the code[A] . Wait 3 minutes.

The Fuser Heat Rod is on.

Y N

Open the transport latching cover and observe the overheat LED through the hole in the frame.

The overheat LED is off.

Y N

(An overheat condition exists if the overheat LED is lit.)

Switch off and unplug the copier.

Check the fuser triac for a short circuit between MT1 and MT2. (This could have caused the overheat relay to open.) Replace the triac if there is a short circuit.

If there is no short circuit, go to FLAG 4 and check the wiring for a short circuit to frame. If the problem persists replace the Thermistor Assembly PWB (A10).

Switch off and unplug the copier. Measure the resistance between P2-1 of the LVPS and terminal 3 of the Line Filter.

There is less than 5 ohms between the pins.

Y N

Check the Fuser Heat Rod for an open circuit. If there is no open circuit go to FLAG 4 and check the wiring for an open circuit. If the Fuser Heat Rod still does not turn on, check the Over Temperature Thermostat (A9) for an open circuit.

The Over Temperature Thermostat (A9) is open.

Y N

A B C D

Go to FLAGS 1 and 3 and check the wiring for an open circuit. If no open circuit is found, replace the Fuser Triac. If the problem persists, replace the LVPS PWB (PS1). If the problem persists, replace the Controller PWB (A3).

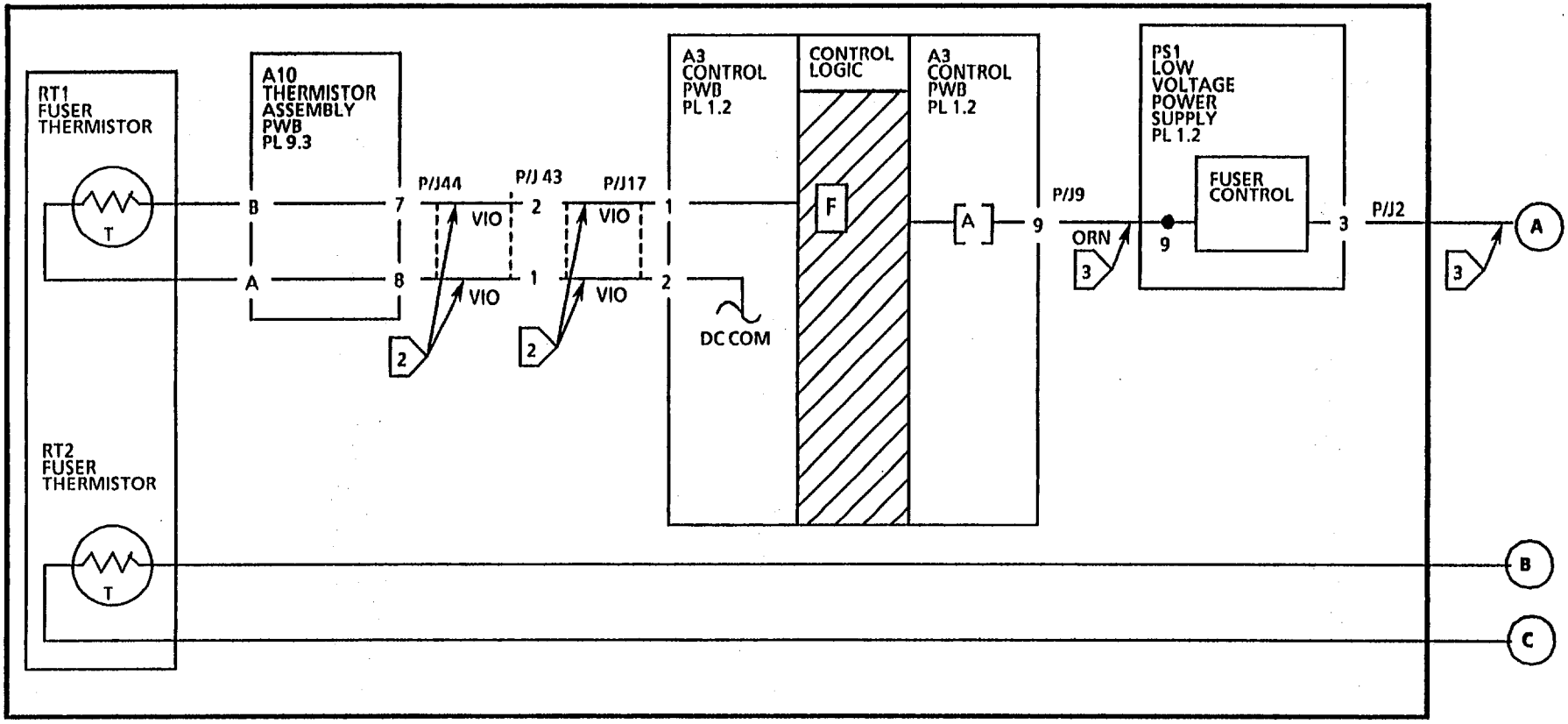
Replace the Over Temperature Thermostat (A9) . Disconnect P/J 44 and check RT1 for a cold resistance of between 100K and 150K ohms. If not in Specification replace the Thermistor assembly PWB (PL 9.3). If resistance is OK go to FLAG 2 and check the wiring for an open circuit. If no open circuit is found, check the following:

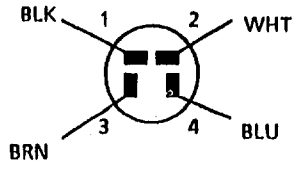
- If the fans are not turning, go to the 1.3 Cooling Fan RAP.
- Remove the xerographic module and check the air flow manifold in order to ensure that it is not distorted or cracked.

Remove the right side cover. Switch on the copier and press start. Within 60 seconds after ready, the fuser heat rod should begin to cycle. If not, turn off immediately and replace the Fuser Triac. If the problem persists, replace the LVPS PWB (A2). If the problem persists, replace the Controller PWB (A3).

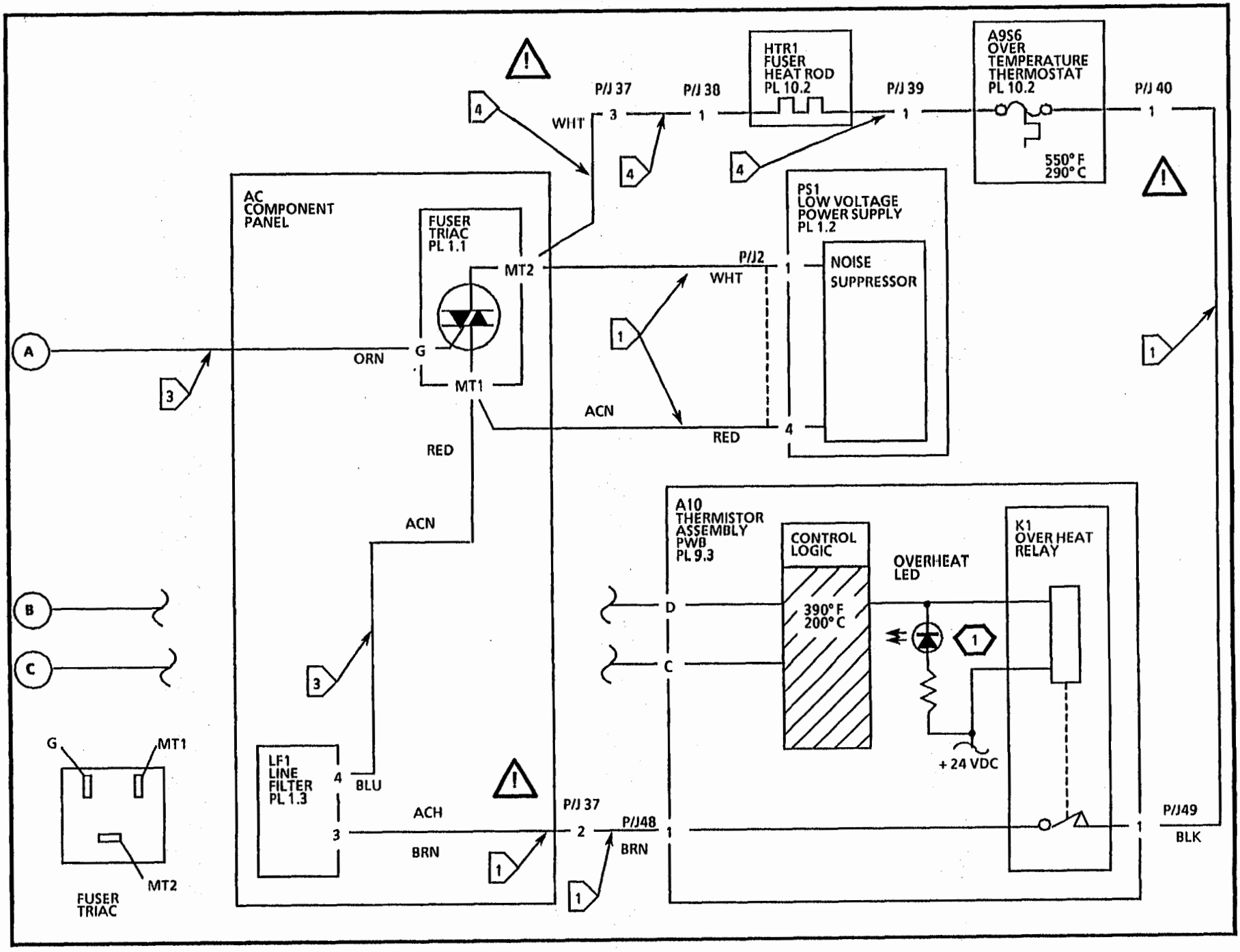
Go to FLAGS 1 and 3 and check the wiring for a short circuit. If no short circuit is found, replace the Fuser Triac. If the problem persists, replace the LVPS PWB (PS1). If the problem persists, replace the Controller PWB (A3).

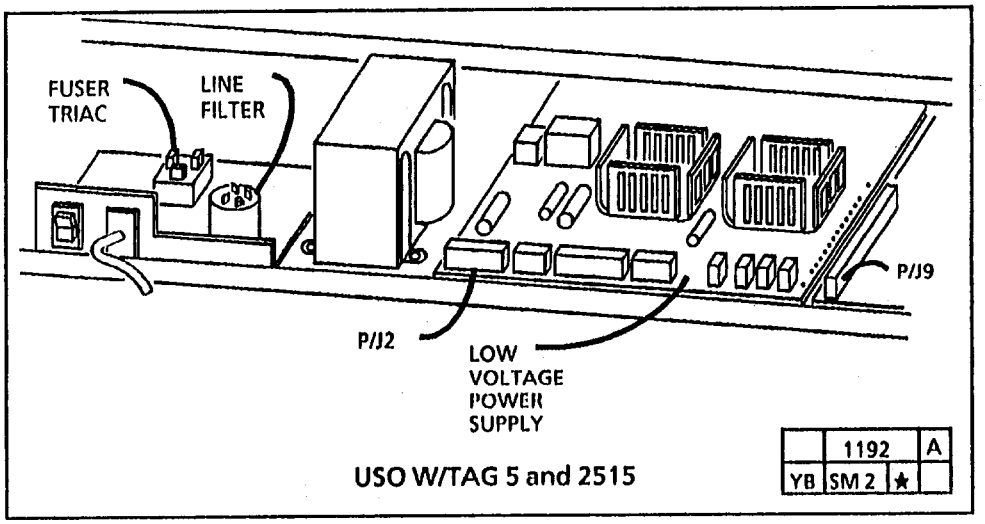
Disconnect P/J 44 and check RT1 for a cold resistance of between 100K and 150K ohms. If not in Specification replace the Thermistor assembly PWB (PL 9.3). If resistance is OK go to FLAG 2 and check the wiring for an open circuit. If no open circuit is found, replace the Contoller PWB.



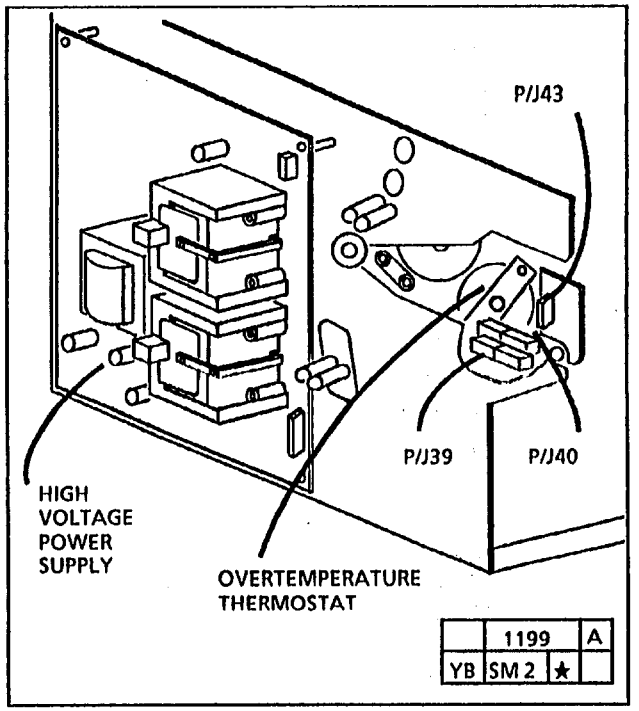


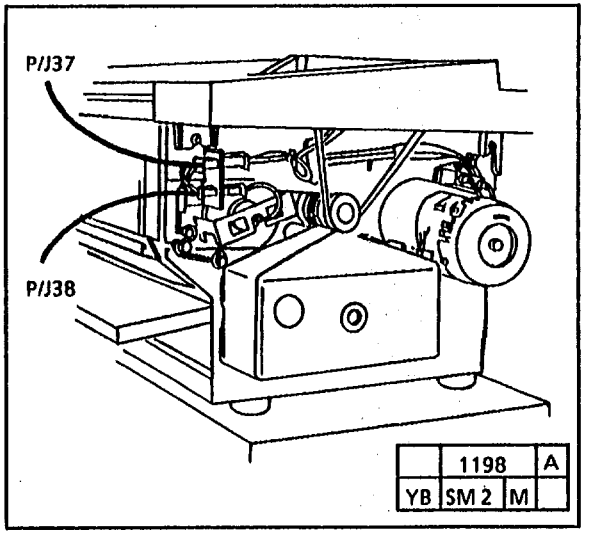
LINE FILTER (USO), (XLA 60 Hz)

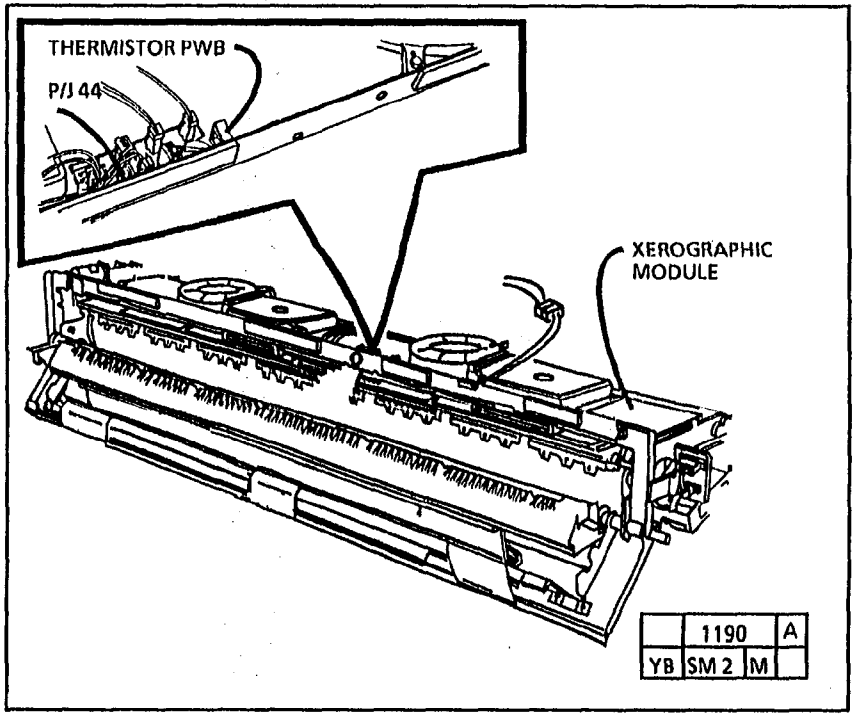

HTR1
FUSER
HEAT ROD
PL 10.2
A9S6
OVER
TEMPERATURE
THERMOSTAT
PL 10.2
550° F
290° C
P/J 37
P/J 38
P/J 39
P/J 40
WHT
AC
COMPONENT
PANEL
FUSER
TRIAC
PL 1.1
MT2
MT1
G
ORN
PS1
LOW VOLTAGE
POWER SUPPLY
PL 1.2
NOISE
SUPPRESSOR
P/J2
ACN
RED
A10
THERMISTOR
ASSEMBLY
PWB
PL 9.3
CONTROL
LOGIC
390° F
200° C
OVERHEAT
LED
K1
OVER HEAT
RELAY
+ 24 VDC
LF1
LINE
FILTER
PL 1.3
BLU
ACH
BRN
P/J48
P/J49
BLK
FUSER
TRIAC

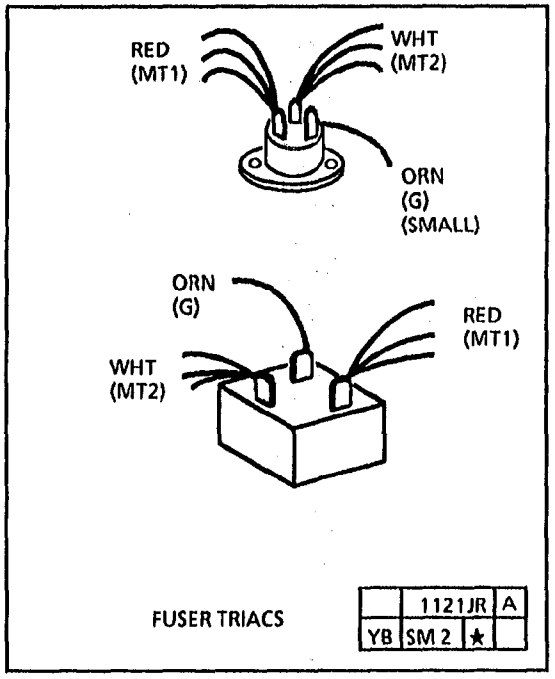


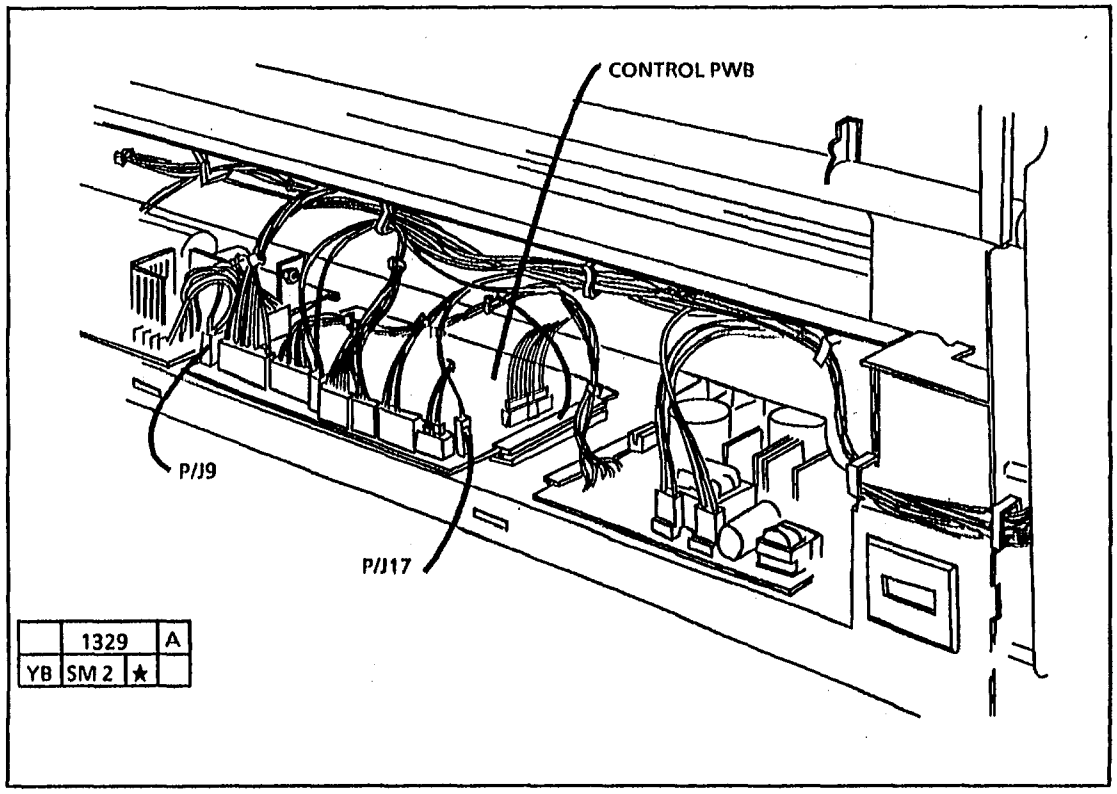
USO W/TAG 5 and 2515






THERMISTOR PWB
P/J 44
XEROGRAPHIC MODULE
1190 A
YB SM 2 M


RED (MT1)
WHT (MT2)
ORN (G) (SMALL)
ORN (G)
RED (MT1)
WHT (MT2)
FUSER TRIACS
1121JR A
YB SM 2 ★


CONTROL PWB
P/J9
P/J17
1329
A
YB
SM 2
★

NOTES

H - Foreign Accessory PWB RAP 2510 W/Tag 26, 2515

The status code **H** will be displayed if the foreign accessory feature is enabled but the foreign accessory does not allow copier operation. If the copier has timed out and **Start** is pressed, the **Ready** LED will light, but no media can be fed and no **H** code may be displayed. to verify that an **H** code condition exists, switch off the copier, then switch on the copier and attempt to make a copy. The status code **H** will be displayed.

Ensure that the foreign accessory is correctly connected. Ensure that the requirements of the foreign accessory for enabling the operation of the copier have been met.

Switch off the copier. Remove the lower rear cover. Disconnect the foreign accessory cable from connector J2 on the foreign accessory PWB. Connect the test connector to J2 on the foreign accessory PWB. Cheat the magnetic interlock switch for the upper rear cover. Switch on the copier.

The status code H is displayed.

Y **N**

Switch off the copier, and check the foreign accessory cable for open circuits.

The cable is without open circuits.

Y **N**

Replace the cable. Disconnect the test connector and reconnect the cable and the foreign accessory device. Switch on the copier.

A **B** **C**

A **B** **C**

The status code H is displayed

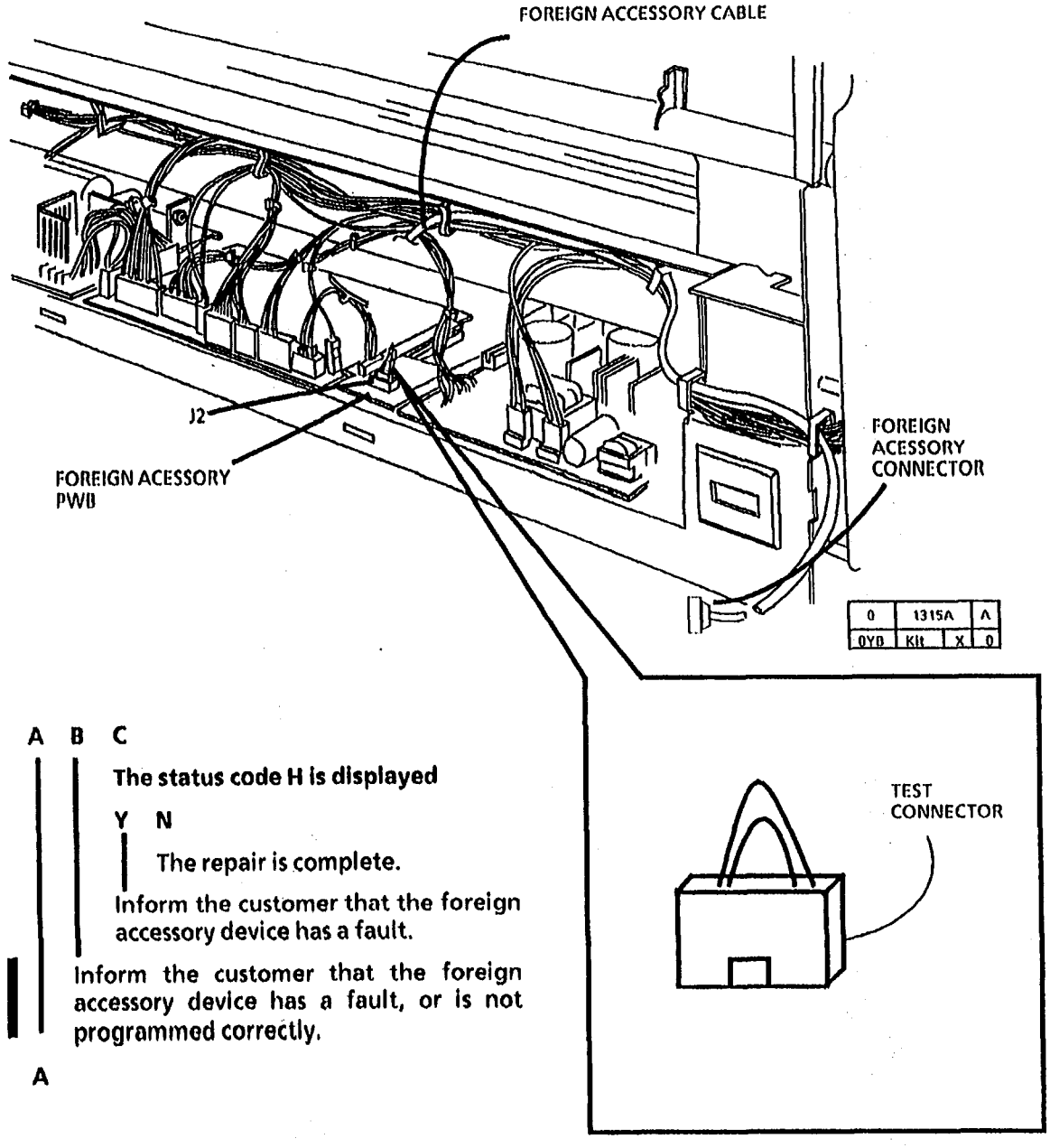
Y **N**

The repair is complete.

Inform the customer that the foreign accessory device has a fault.

Inform the customer that the foreign accessory device has a fault, or is not programmed correctly.

A



A

Switch off the copier and check the jumper cable for correct wiring. See table 2.

The jumper cable has continuity.

Y N

Replace the jumper cable. Switch on the copier.

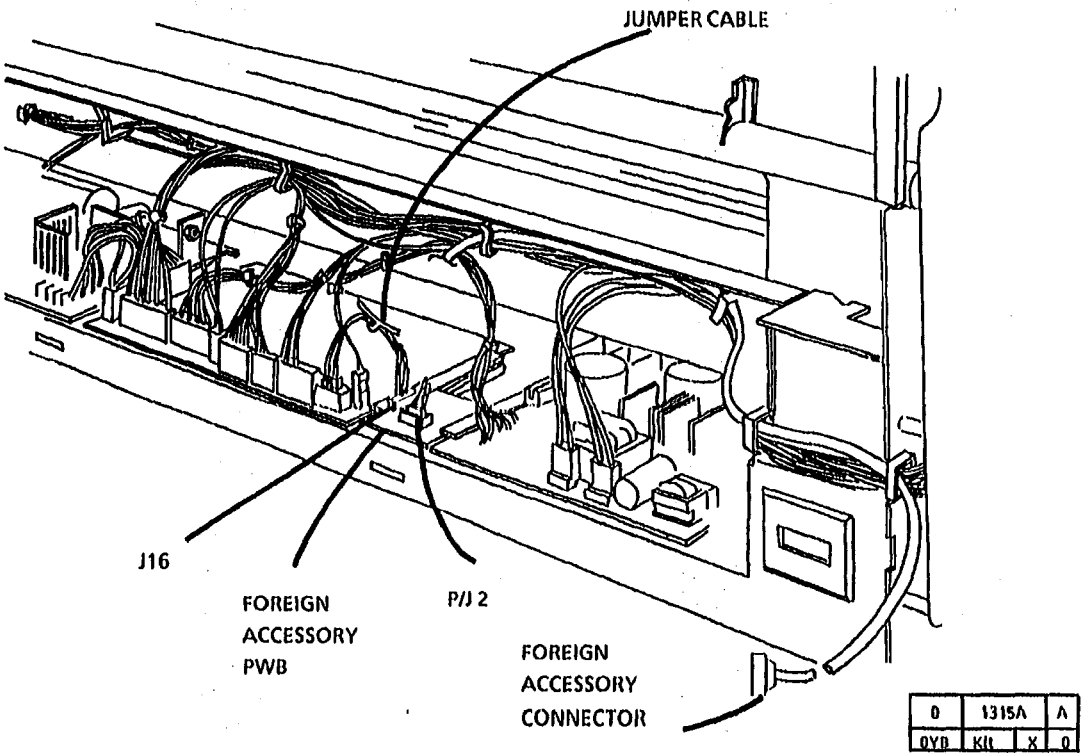
The status code H is displayed.

Y N

The repair is complete.

Replace the foreign accessory PWB.

Replace the foreign accessory PWB.



Jumper Cable Wiring

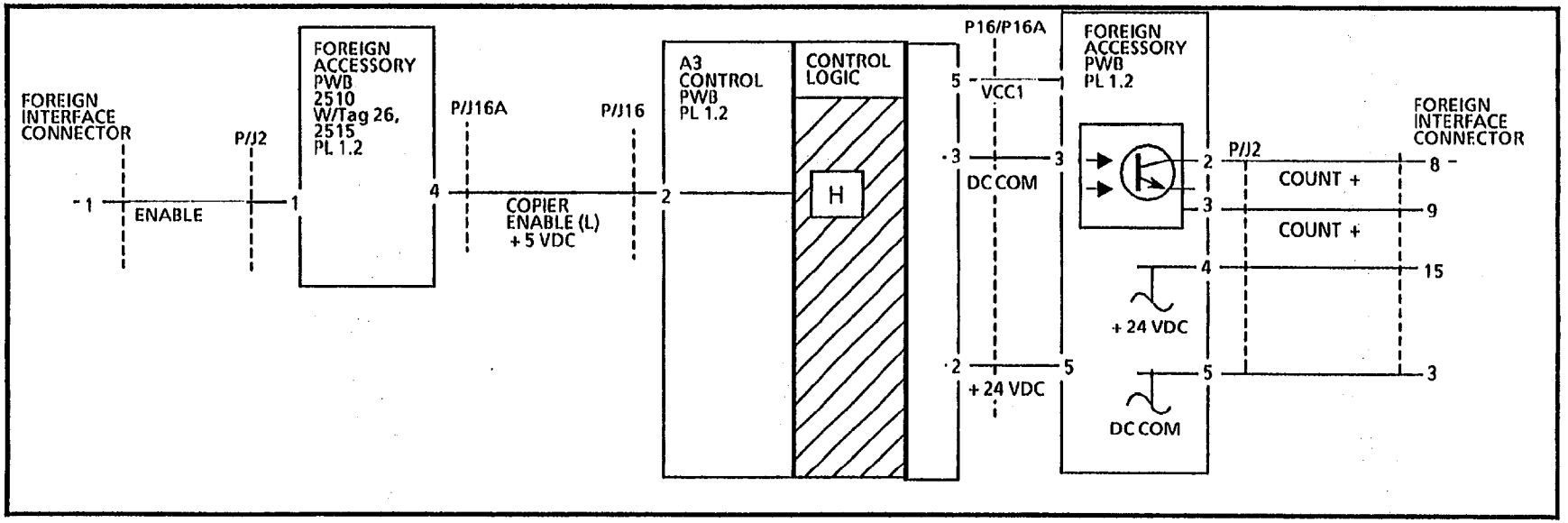
J16 (5PIN SL)	FUNCTION	J16A (5PIN SL)
PIN 1	VCC(1	PIN 5
PIN 2	Copier Enable	PIN 4
PIN 3	DC COM	PIN 3
PIN 4	Copy count pulse	PIN 2
PIN 5	+ 24 VDC	PIN 1

TABLE 1

Foreign Accessory Cable

J2 (6 PIN SL)	FUNCTION	"D" SHELL 15 PIN
PIN 1	Copier Enable	PIN 1
PIN 2	Copy Count +	PIN 8
PIN 3	Copy Count -	PIN 9
PIN 4	+ 24 VDC	PIN 15
PIN 5	Ground	PIN 3
PIN 6	Not Used	NC

TABLE 2


FOREIGN INTERFACE CONNECTOR
P/J2
FOREIGN ACCESSORY PWB 2510 W/Tag 26, 2515 PL 1.2
P/J16A
P/J16
A3 CONTROL PWB PL 1.2
CONTROL LOGIC
H
P16/P16A
FOREIGN ACCESSORY PWB PL 1.2
FOREIGN INTERFACE CONNECTOR
1
ENABLE
1
4
COPIER ENABLE (L) + 5 VDC
2
5
VCC1
3
DC COM
2
+ 24 VDC
2
3
4
5
P/J2
COUNT +
COUNT +
+ 24 VDC
DC COM
8
9
15
3

J - High Toner

(*Low Toner* Lamp is NOT lit)

The status code J will be displayed if there is an excessive or an excessive concentration of toner in the developer material.

Initial Actions

Switch off the copier. Remove the upper rear cover and by-pass the interlock.

Check that the cartridge is not damaged and that it is correctly installed. Ensure that it is the correct cartridge.

Ensure that the Toner Solenoid connectors P/J 18, P/J 31, and P/J 35 are connected and fully seated.

Ensure that the Toner Sensor connectors P/J 31 and P/J 34 are connected and fully seated.

CAUTION

(2515 W/O Tag 2, 7, or 89): *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor (A); always enter the codes (g) fuser and (J) cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code (A) to start the main drive motor.*

WARNING

(W/ Tags 2 or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

Enter the diagnostic mode. Enter the code [4] and press Start. Make a record of the control point, then press Stop.

(W/O Tag 2, 7, or 89):

- enter the code [L] and press ***Start.***
- enter code (g) and press ***Start.***
- enter code (J) and press ***Start.***
- wait at least 2 minutes.
- enter code (A) and press ***Start.***

(W/ Tag 2, 7, or 89): Enter diagnostic mode

- enter the code [L] and press ***Start.***
- enter code (A) and press ***Start.***

Make a record of the toner sensor value in code [Y].

The value displayed is 3 greater than the value of code [4].

Y N

Replace the Controller PWB (REP 3.1). If the problem persists, replace the Control Panel (PL 1.1).

Make 3 copies of 82E5980 in the Normal copy mode. Check the image density of the last copy.

The density of the 0.70G5 paragraph in the center of 82E5980 is greater than or equal to paragraph 28.5 on S.I.R 82E7030.

Y N

Perform the Electrostatic Series (ADJ 9.3) then return to this RAP.

Make 3 copies of 82E5980 in the Normal copy mode. Check the image density of the last copy.

The density of the 0.70G5 paragraph in the center of 82E5980 is greater than or equal to paragraph 28.5 on S.I.R 82E7030.

Y N

Go to Flag 1 and check for an open circuit.

There is an open circuit.

Y N

A B C D

A B C D

Go to Flag 2 and check for a short circuit.

There is a short circuit.

Y N

Replace the toner sensor (REP 9.11). If the problem persists, replace the Controller PWB (REP 3.1).

Repair the wires, and perform the Detoning Procedure (General Procedures, Section 6).

Observe the rotation speed of the toner cartridge.

The rotation speed is fast (about 10 seconds per revolution).

Y N

Perform the Detoning Procedure (General Procedures, Section 6).

Disconnect P/J35. Enter the diagnostic mode. **(W/O Tag 2, 7, or 89):** Enter the codes [L], [g], [J], wait at least 2 minutes, and enter the code [A] and press Start.

(W/ Tag 2,7, or 89): Enter the codes [L], and enter the code [A] and press Start.

The rotation speed of the toner cartridge is slow (about 2 to 4 minutes per revolution).

Y N

Visually check the position of the toner solenoid shaft.

The solenoid shaft is retracted.

Y N

Perform the Toner Dispense Solenoid Adjustment (ADJ 9.5). Perform the Detoning Procedure (General Procedures, Section 6).

E F

E F

Replace the Toner Solenoid (REP 9.8).

Perform the Detoning Procedure (General Procedures, Section 6).

Go to Flag 3, and check the wires for an open or short circuit.

There is a short circuit.

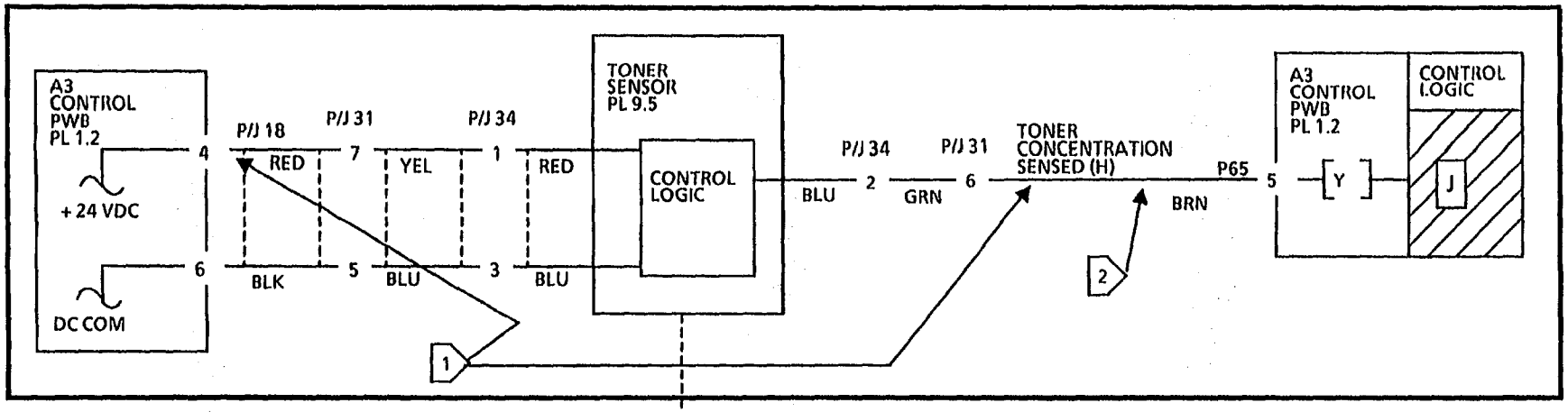
Y N

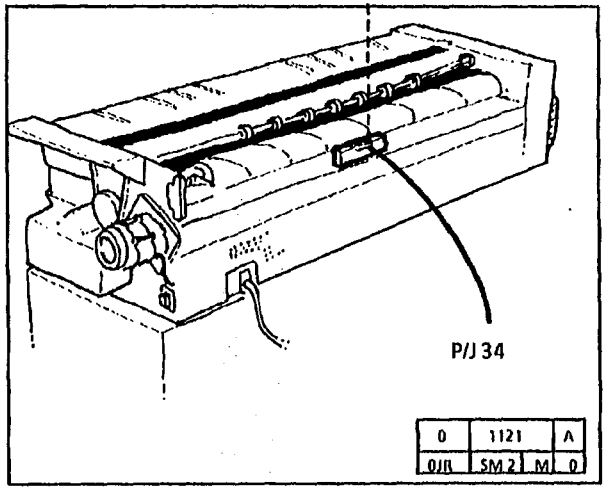
Replace the Toner Solenoid (REP 9.8).

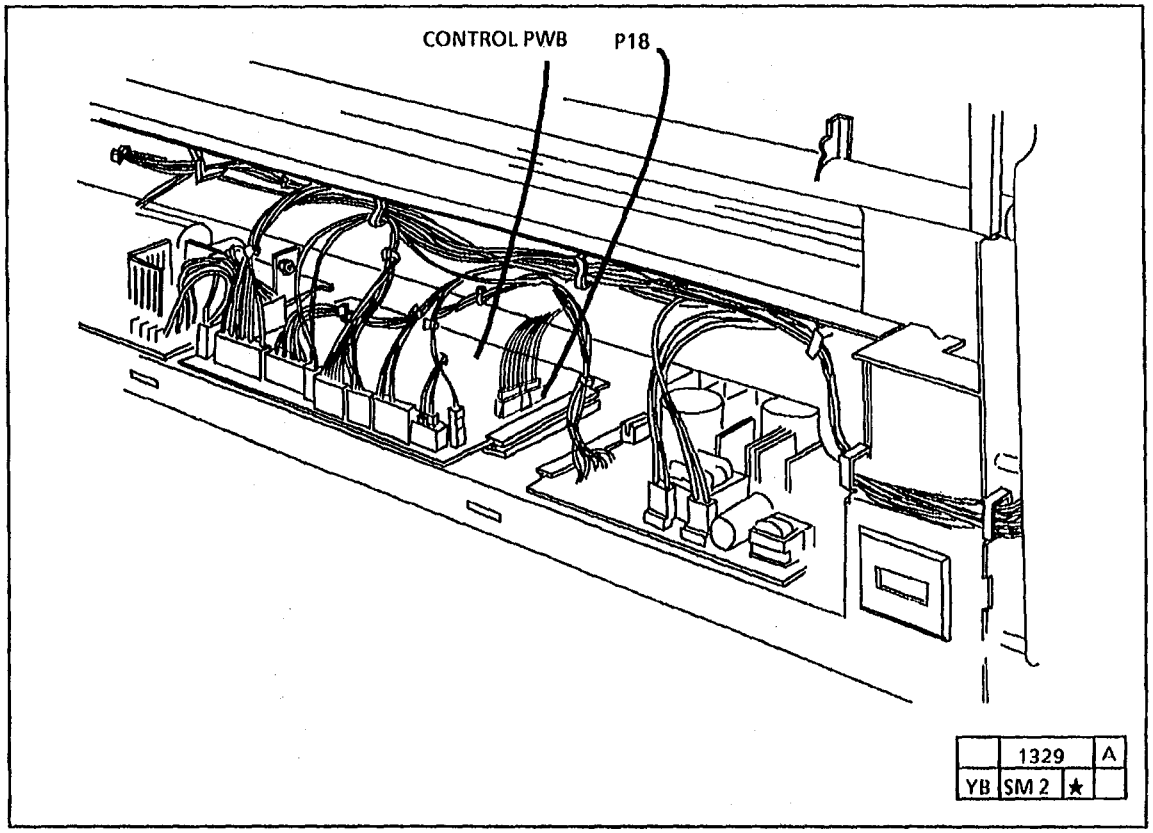
Perform the Detoning Procedure (General Procedures). If the problem persists replace the Control PWB.

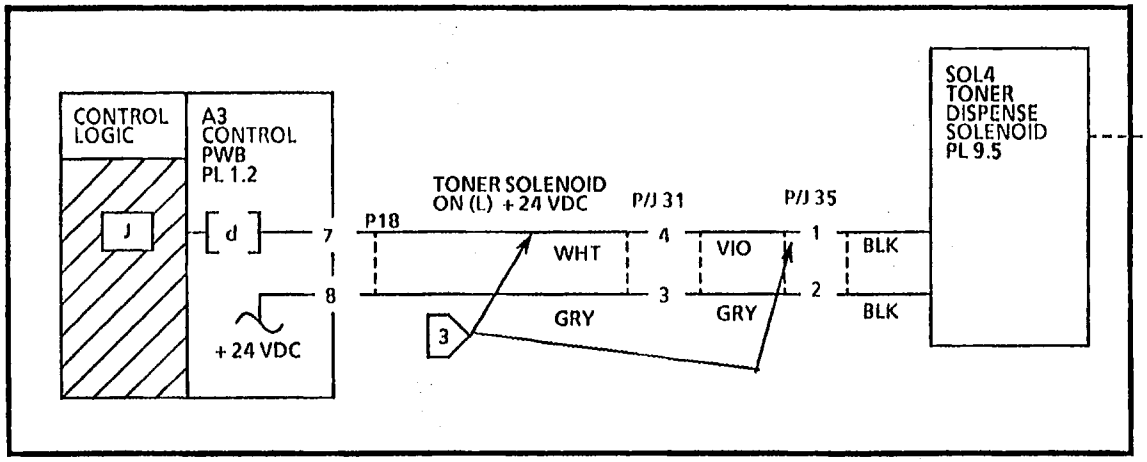
Repair the wires.

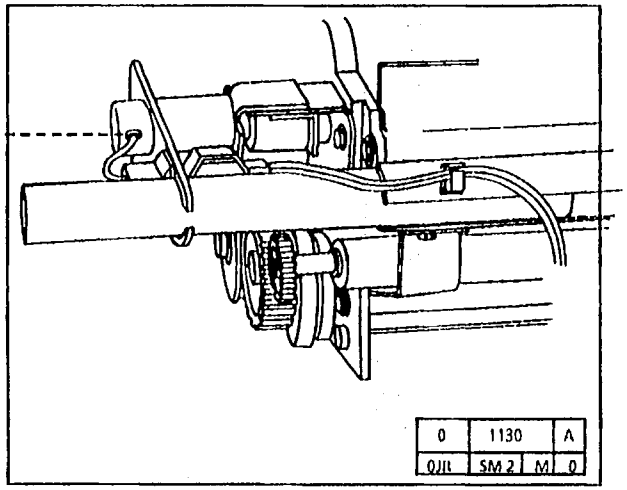
Perform the Detoning Procedure (General Procedures, Section 6).


A3
CONTROL
PWB
PL 1.2
+24 VDC
DC COM
4
6
P/J 18
P/J 31
P/J 34
RED
7
YEL
1
RED
BLK
5
BLU
3
BLU
TONER
SENSOR
PL 9.5
CONTROL
LOGIC
P/J 34
P/J 31
TONER
CONCENTRATION
SENSED (H)
P65
BLU
2
GRN
6
BRN
5
2
1
A3
CONTROL
PWB
PL 1.2
CONTROL
LOGIC
Y
J

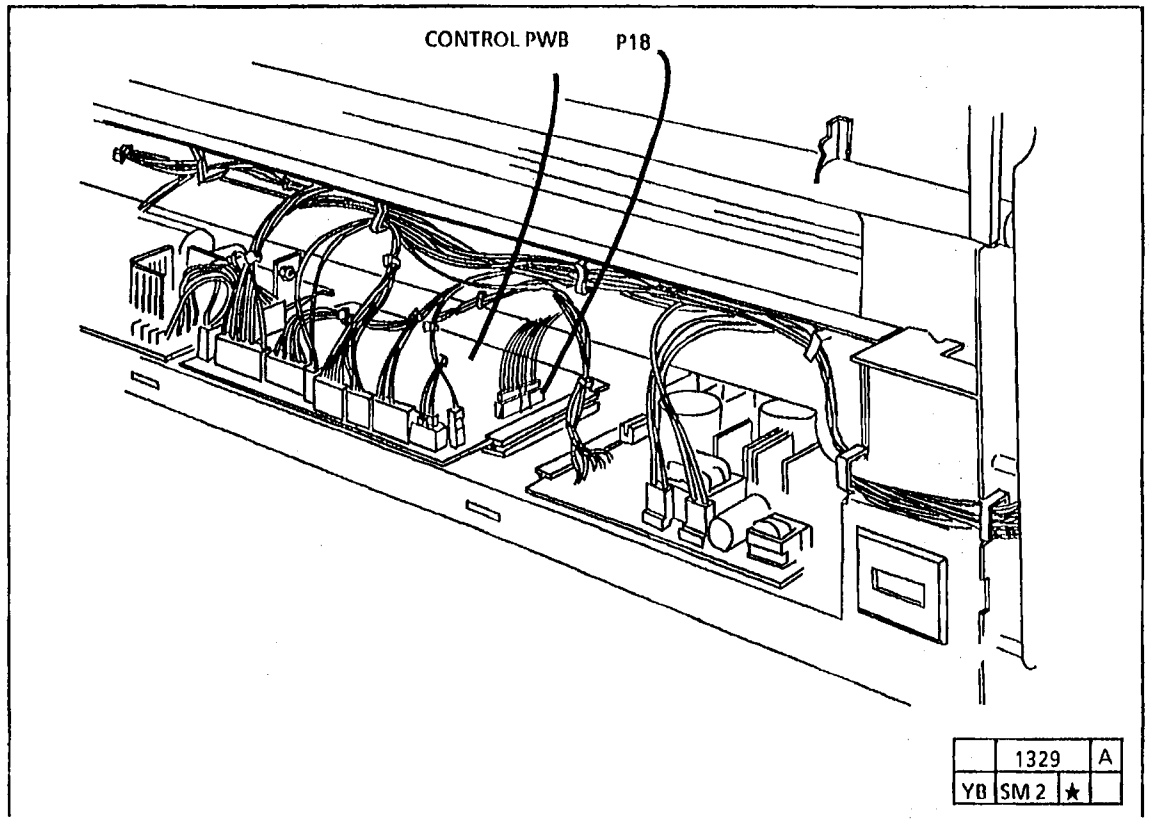

P/J 34
0
1121
A
0/R
SM 2
M
0


CONTROL PWB
P18
1329
A
YB
SM 2
★





0	1130	A
0JIL	SM 2	M 0



	1329	A
YB	SM 2	★

J - Low Toner RAP (Low Toner Lamp is Lit)

The status code J, with the Low Toner lamp on, indicates the toner concentration is significantly lower than the nominal set point.

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

Initial Actions

- Ensure that the toner cartridge is the correct cartridge, and is installed correctly.
- Ensure that the green clip on the right end of the cartridge is not deformed or stretched.
- Remove the cartridge. Ensure the plastic flap is 4 mm off the cartridge. Shake the toner cartridge from left to right to ensure the mixture is free and the cartridge is not empty.
- Check that the pick-off baffle (REP 9.9) is installed correctly with the straight edge of the baffle touching the magnetic roll with the label down.
- Ensure that the Toner Dispense Solenoid is adjusted correctly (ADJ 9.5).
- Ensure that when the toner cartridge is rotated one revolution, the toner is deposited evenly on the surface of the developer material
- Ensure that the Toner Solenoid connectors P/J 31, P/J 35, P/J 18 are connected and fully seated.
- Ensure that the Toner Sensor connector P/J 34 is connected and fully seated.
- Ensure that the level of the developer material is above auger.
- Ensure that the developer housing is level side-to-side and front to rear.
- Ensure that the auger gutter is on the gutter pin if not, install the Developer Gutter Clip (PL 9.5).
- Ensure that the reclaim bottle is not full. A full bottle may indicate a developer system problem. Refer to the OF2 High Toner Consumption RAP.

CAUTION

W/O TAGS 2, 7,or 89: *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor (A); always enter the codes (g) fuser and (J) cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code (A) to start the main drive motor.*

Procedure

Enter diagnostic code[4] and note the setting. Press **Stop**.

W/O TAGS 2, 7, or 89; enter the diagnostic codes [g, J, and A], **W/ TAGS 2, 7, or 89;** enter the code[A].

WARNING

There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

Enter the code [d], Toner Dispense Solenoid.

Enter the code [Y], toner concentration control point value.

NOTE: *Once diagnostic code [Y] is entered further chaining is not allowed.*

The value displayed in code [Y] is 3 levels below the control point value displayed in Diagnostic Code [4].

Y N

| Replace the Control PWB. (REP 3.1).

Switch off the copier. Switch on the copier an allow it to cycle out (approximately 8 minutes). If te J-Low Toner does not clear, proceed with this RAP.

Make 3 copies of 82E5980 in the Normal copy mode. Check the image density of the last copy.

The density of the 0.70G5 paragraph in the center of 82E5980 is greater than or equal to paragraph 28.5 on S.I.R 82E7030.

Y N

| Set the DMM to the 200 VDC scale and connect the (+) lead to P/J 34 Pin 2.

| **The reading is greater than 14 volts.**

| Y N

| | Replace the Control PWB. (REP 3.1).

| Go to FLAG 2 and check for a open circuit.

| **There is an open circuit.**

A B C

A B C

Replace the Toner Sensor (REP9.11). Check/Adjust the Image Density (ADJ 9.4).

Repair the wires. Check/Adjust the Image Density (ADJ 9.4).

Observe the rotation speed of the toner cartridge.

The rotation speed is fast (about 10 seconds per revolution).

Y N

W/O TAGS 2 , 7, or 89; enter the diagnostic codes [g, J, and A], **W/ TAGS 2 , 7, or 89;** enter the code[A] .

After the main drive motor in on, enter the code [d] to actuate the toner dispense solenoid.

The toner dispense solenoid actuates.

Y N

Set the DMM to the 200VDC scale and connect the (+) lead to P/J 35, pin 2 and the (-) lead to P/J 35. pin 1.

There is 24 VDC

Y N

Connect the (+) lead to P/J 65, pin8 and the (-) lead to P/J 65, pin 7.

There is 24 VDC.

Y N

Replace the Control PWB (REP3.1), then continue with Path A.

Repair the wires, then continue Path A.

Replace the Toner Dispense Solenoid (REP 9.8). Perform the Toner Dispense Solenoid Adjustment (ADJ 9.5), the continue with Path A.

A D

A D

Exit the diagnostics and perform the Toner Dispense Solenoid Adjustment (ADJ 9.5), the continue with Path A.

Perform Electrostatic Series, ADJ 9.3. Do not perform the Image Density Adjustment (ADJ 9.4) yet.

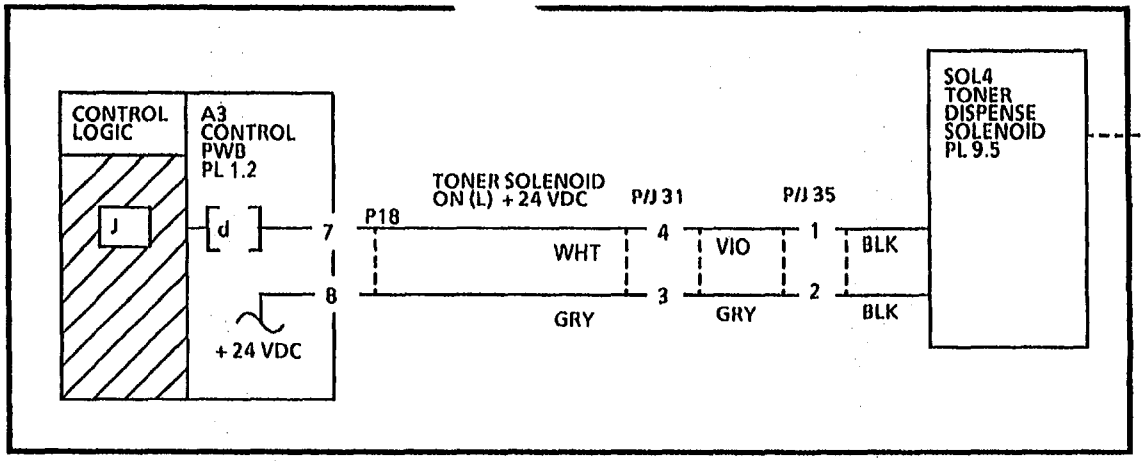
Switch on the copier and allow it to cycle out. Do this two times to ensure the material is mixed completely (approximately 16 minutes).

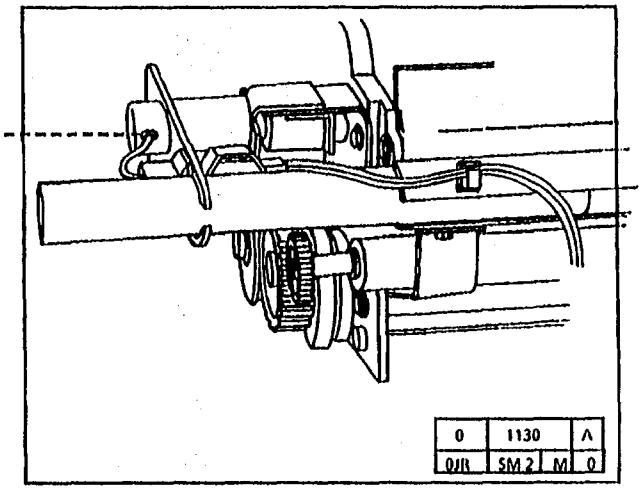
J - Low Toner is displayed

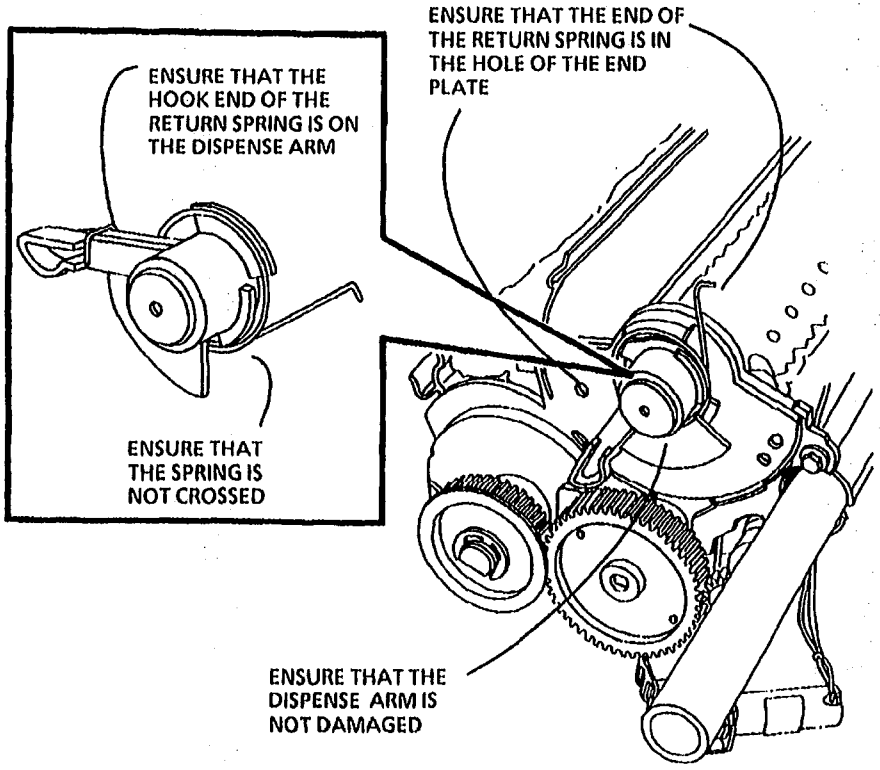
Y N

Perform the Image Density Adjustment (ADJ 9.5).

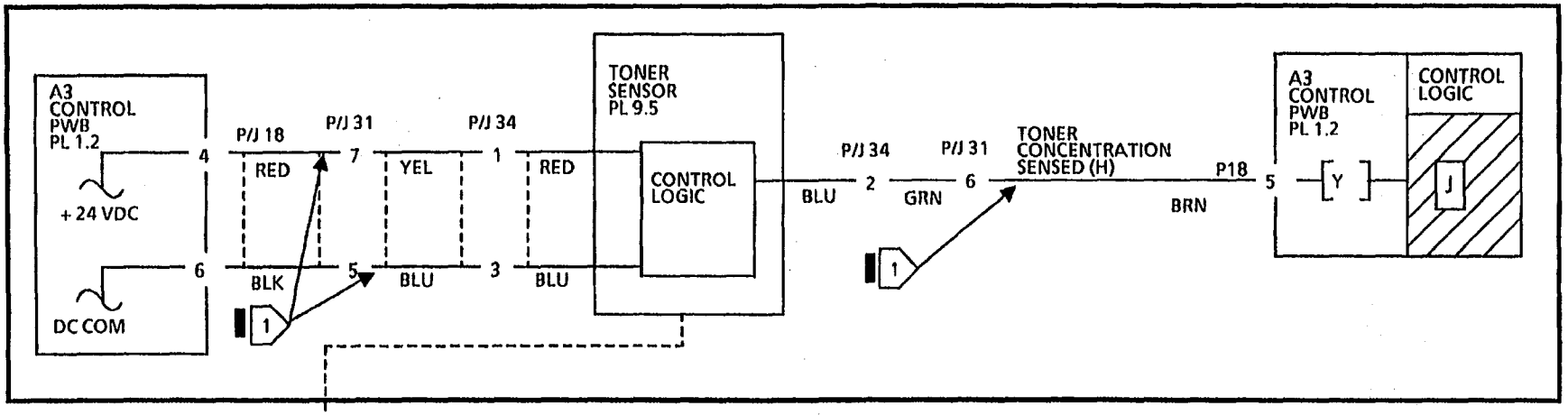
Press Start and allow to cycle out. If J-Low Toner does not clear before cycle out, refer back to the Initial Actions section of this RAP.

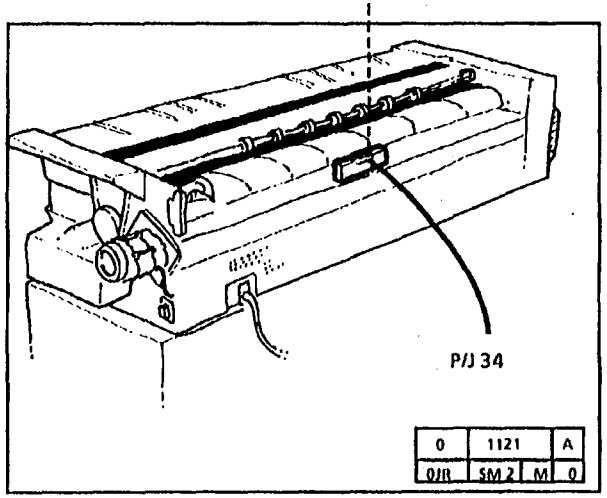

CONTROL LOGIC
A3 CONTROL PWB PL 1.2
J
d
7
8
+24 VDC
TONER SOLENOID ON (L) +24 VDC
P18
P/J 31
P/J 35
WHT
GRY
4
3
VIO
GRY
1
2
BLK
BLK
SOL4 TONER DISPENSE SOLENOID PL 9.5

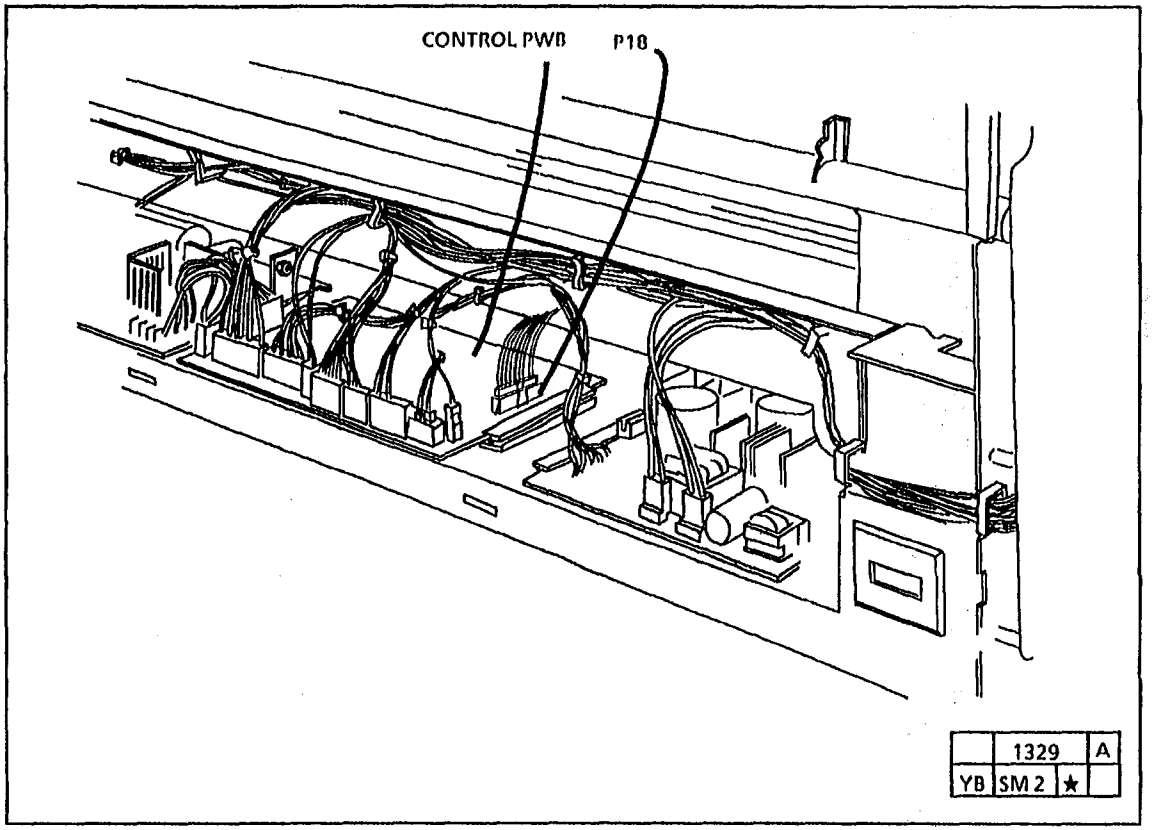

0
1130
A
0/R
SM 2
M
0


ENSURE THAT THE HOOK END OF THE RETURN SPRING IS ON THE DISPENSE ARM
ENSURE THAT THE END OF THE RETURN SPRING IS IN THE HOLE OF THE END PLATE
ENSURE THAT THE SPRING IS NOT CROSSED
ENSURE THAT THE DISPENSE ARM IS NOT DAMAGED

1251Z


A3
CONTROL
PWB
PL 1.2
4
+ 24 VDC
6
DC COM
P/J 18
P/J 31
P/J 34
RED
7
YEL
1
RED
BLK
5
BLU
3
BLU
1
TONER
SENSOR
PL 9.5
CONTROL
LOGIC
P/J 34
P/J 31
TONER
CONCENTRATION
SENSED (H)
P18
5
BLU
2
6
GRN
BRN
1
A3
CONTROL
PWB
PL 1.2
Y
CONTROL
LOGIC
J


P/J 34
0
1121
A
0/R
SM 2
M
0


CONTROL PWB
P18
1329
A
YB
SM 2
★

Notes

U - Copy Count Meter RAP

Initial Actions

The status code U will be displayed if there is an open circuit in the wiring to the copy count meter.

Ensure that the Country Configuration (ADJ 3.3) is adjusted correctly before performing this RAP.

Procedure

Set the meter to measure + 24 VDC.

Connect (+) to P12-2 of the Control PWB; (-) to the **GND** test point on the HVPS (TP4).

There is + 19 to + 35 VDC present.

Y N

Switch off and unplug the copier. Go to FLAG 1 and check for an open circuit between the copy count meter and the Control PWB.

Enter the diagnostic mode.

Enter the code [P] for the copy count meter.

Note: the copy count meter advances each timer the diagnostic code (P) is entered.

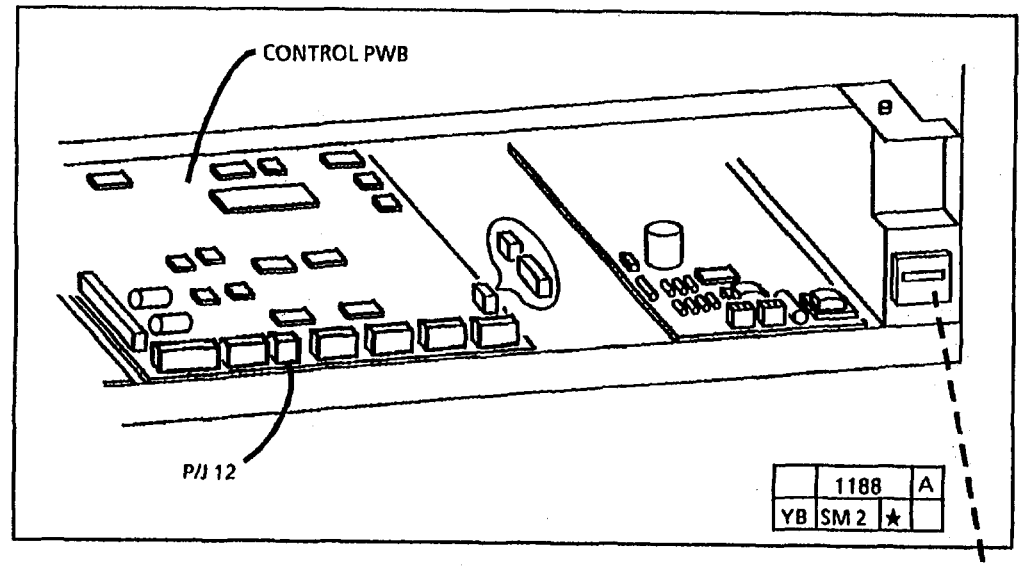
There is less than + 2 VDC at P12-2.

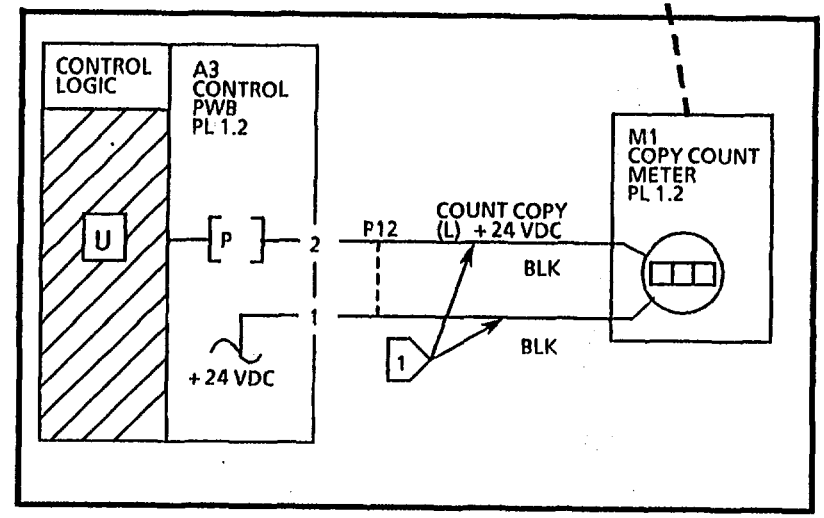
Y N

Replace the Control PWB.

Replace the copy count meter.

If the problem still exists, replace the Control PWB.





1.1 AC Power RAP

This RAP is used for problems in the AC Circuitry.

Loss of AC power may occur if there is a malfunction in the Power On/Off Switch, AC Interlock Switch, Line Filter, AC wiring, or a Ground Fault exists.

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

Initial Actions

- Check that the correct voltage is being applied to the copier at the wall outlet.
- **2515 W/ TAG/ MOD 5:** The Inline Ground Fault Device (on the Power Cord) is activated (red flag not up), go to 1.5 Ground Fault (2515 W/ TAG/ MOD 5) RAP.

Procedure

Go to FLAG 4 and check that ACH is present.

ACH voltage is present.

Y N

A B

A B

Go to Pin 1 of The Power On/Off Switch or pin 3A of the AC Interlock Switch (2510 W/ O TAGS 4 and 5) and check for ACH.

ACH voltage is present.

Y N

Go to FLAGS 1 through 4 and check the wiring from the low voltage power supply to the power cord for an open circuit. If there is no open circuit go to the 1.5 Ground Fault RAP (2515 W/ TAG/ MOD 5).

Go to FLAG 2 and check that ACH is present.

ACH voltage is present.

Y N

Replace the Power On/Off Switch or the AC Interlock Switch (2510 W/ O TAGS 4 and 5).

Go to FLAG 3 and check that ACH is present.

ACH voltage is present.

Y N

Replace the AC Interlock Switch or replace the Power On/Off Switch (2510 W/ O TAGS 4 and 5).

Go to FLAG 4 and check that ACH is present.

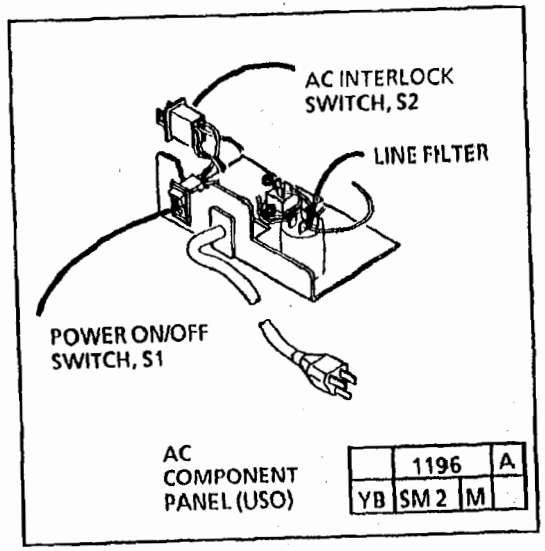
ACH voltage is present.

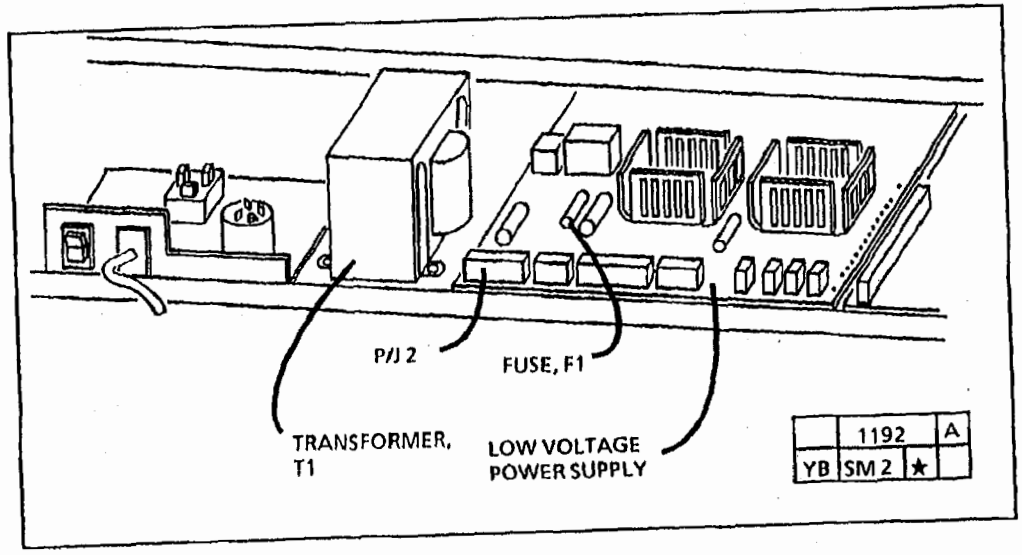
Y N

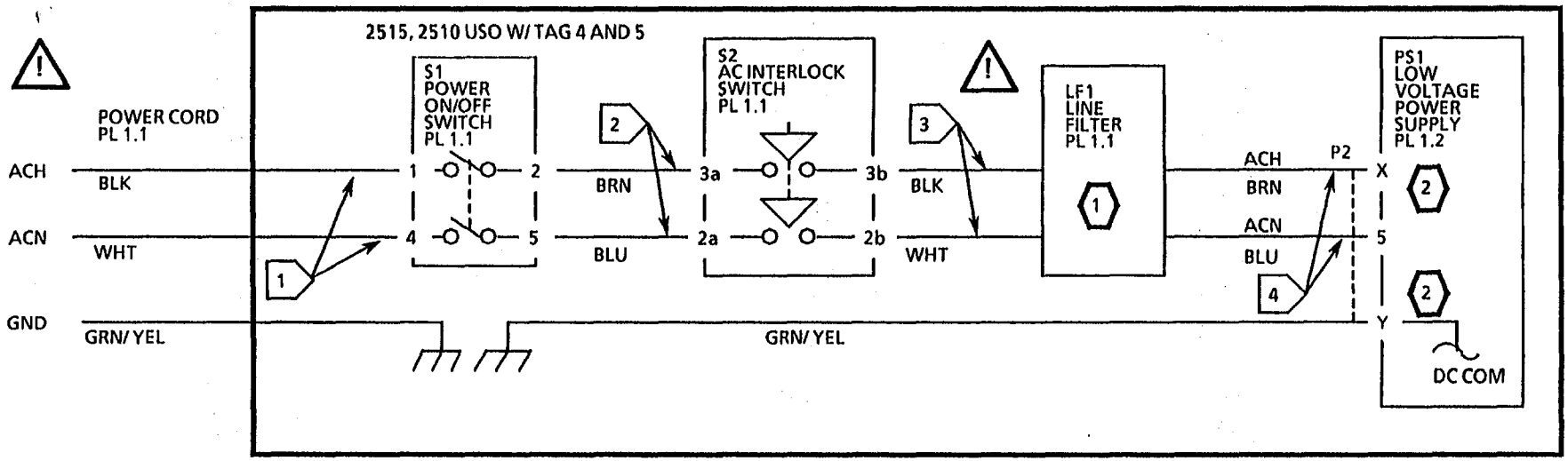
Replace the Line Filter.

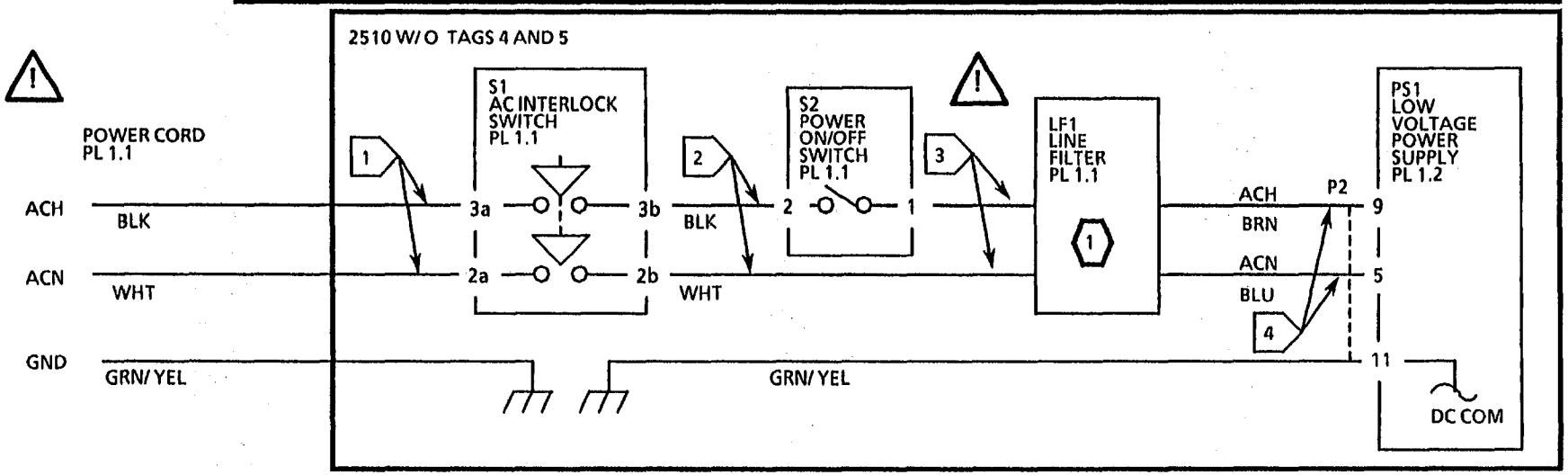
Go to the 1.2 DC Power RAP.

Go to the 1.2 DC Power RAP.


AC INTERLOCK SWITCH, S2
LINE FILTER
POWER ON/OFF SWITCH, S1
AC COMPONENT PANEL (USO)
1196 A
YB SM 2 M

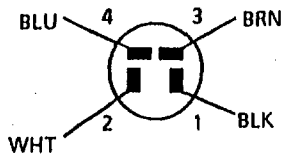

P/J 2
FUSE, F1
TRANSFORMER, T1
LOW VOLTAGE POWER SUPPLY
1192 A
YB SM 2 ★





NOTES:

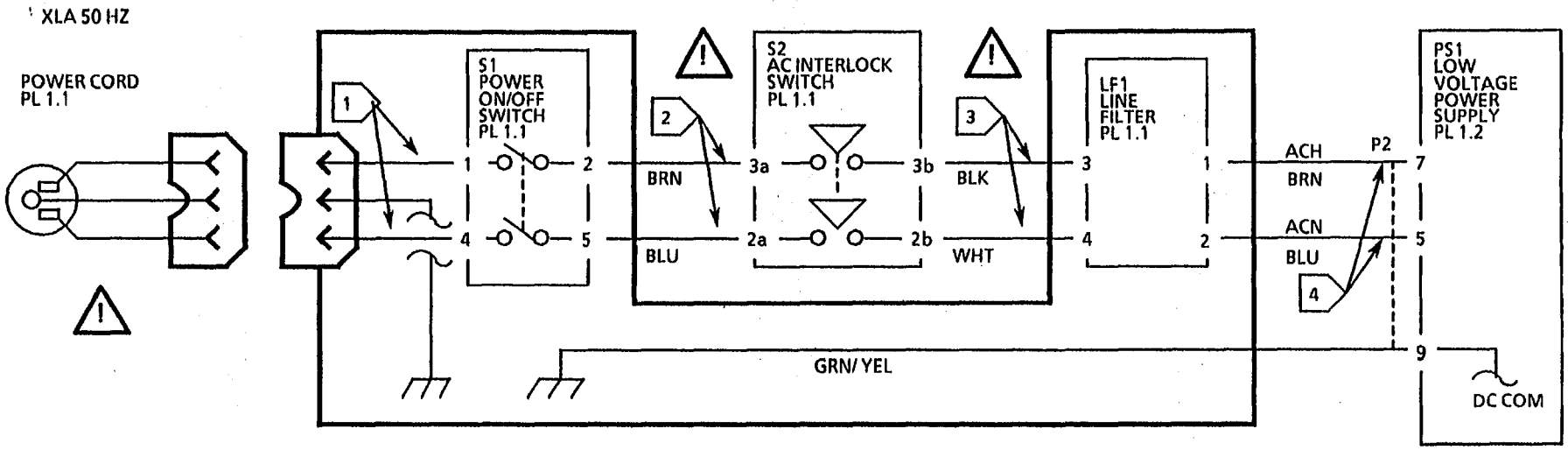
(1) THERE ARE TWO DIFFERENT TYPES OF LINE FILTERS. THE WIRING COULD BE AS SHOWN ON THE FILTERS SHOWN BELOW.

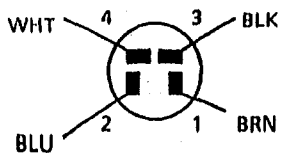


(2)

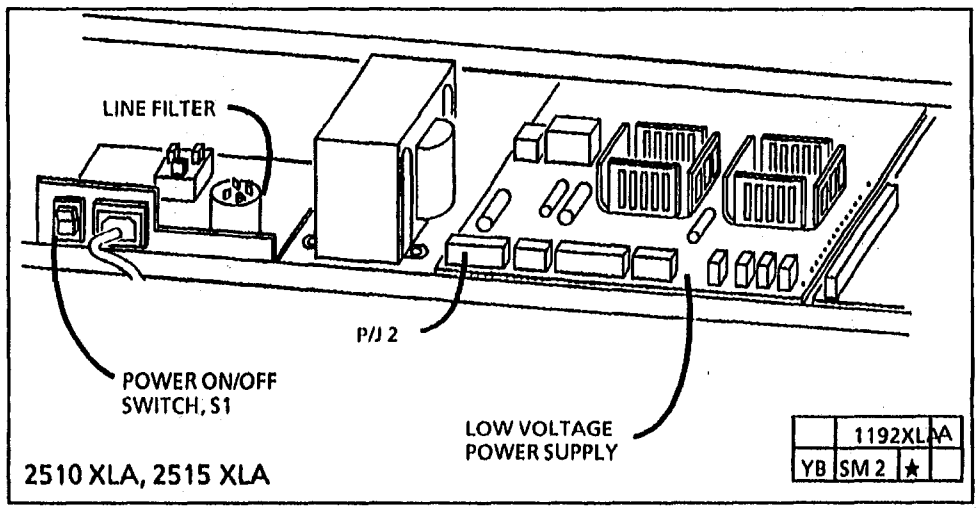
PIN	LVPS PIN	
	2510W/O TAG 5	2510 W/TAG 5, 2515
X	9	7
Y	11	9

Notes:

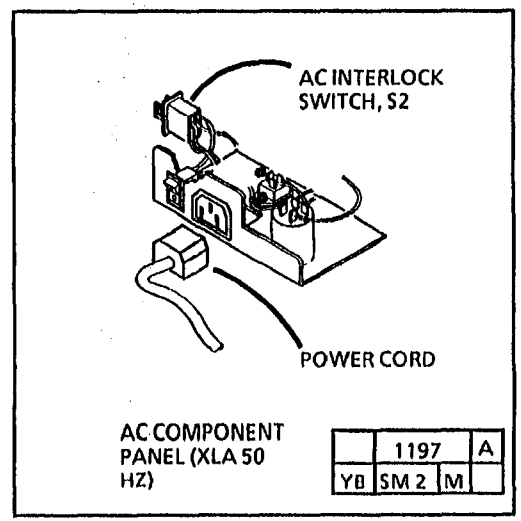




LINE FILTER



2510 XLA, 2515 XLA



AC COMPONENT
PANEL (XLA 50
HZ)

1.2 DC Power RAP

This RAP is used for problems related to the loss of all or part of the DC Power.

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

Initial Actions

- Ensure that the connectors P/J 4, and P/J 9, are connected/seated properly.
- **(2510 Only):** If the Fuse (F1) is failing intermitently, check that the thermistor PWB cover is in place on the bottom of the thermistor PWB. This prevents the oiler assembly from touching the termistor PWB.
- If another copier is on the same electrical circuit, the cycling of its fuser may cause the fuse to fail. An indication of another copier is a 2510/2515 transformer noise (hum) when the copiers is in the Rest mode.

Procedure

The +5V and +15V LEDs on the low voltage power supply are lit.

Y N

Set the DMM to read AC. Connect the DMM to P/J 4 Pins 1 and 4.

ACH is present.

Y N

Ensure the Fuse F1 on the LVPS is not open. **The Fuse is open.**

Y N

Replace the LVPS PWB.

Go to FLAG 1 and check for a short circuit. Replace the Fuse (F1) and disconnect P/J9. Set the DMM to read AC, and connect the meter leads from P/J4 pin 6 to P/J4 pin 10. **There is 22 to 25 VAC.**

Y N

Replace the Transformer (PL 1.2).

A B C

Reconnect P/J 9.
If the problem persists replace the Controller PWB (A3).

Connect the meter leads from P/J4 pin 6 to P/J4 pin 10. **There is 22 to 25 VAC.**

Y N

Replace the Transformer (PL 1.2).

Disconnect P/J 9.

The +5V and +15V LEDs on the low voltage power supply are lit.

Y N

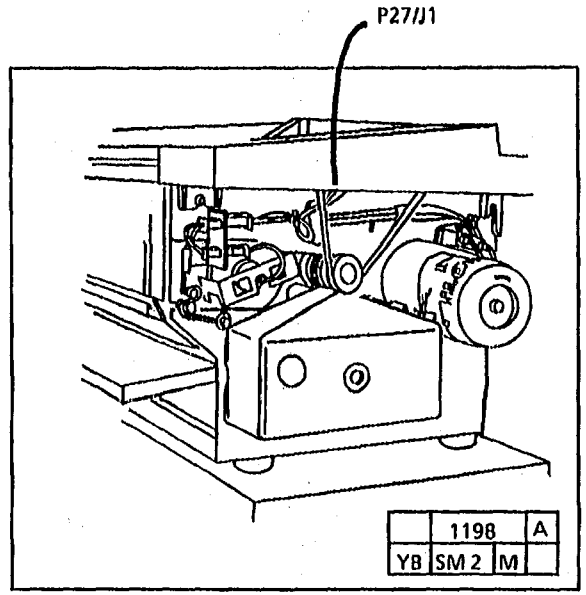
Replace the LVPS PWB (A2).

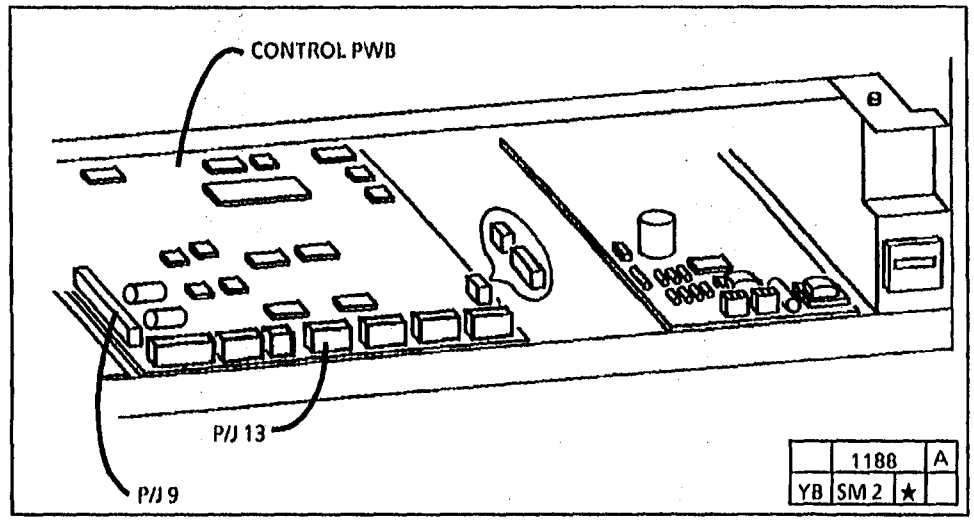
Replace the Controller PWB (A3).

Set the DMM to the 200 VDC range. Connect (-) to the **GND** test point on the HVPS and measure the following LVPS voltages:

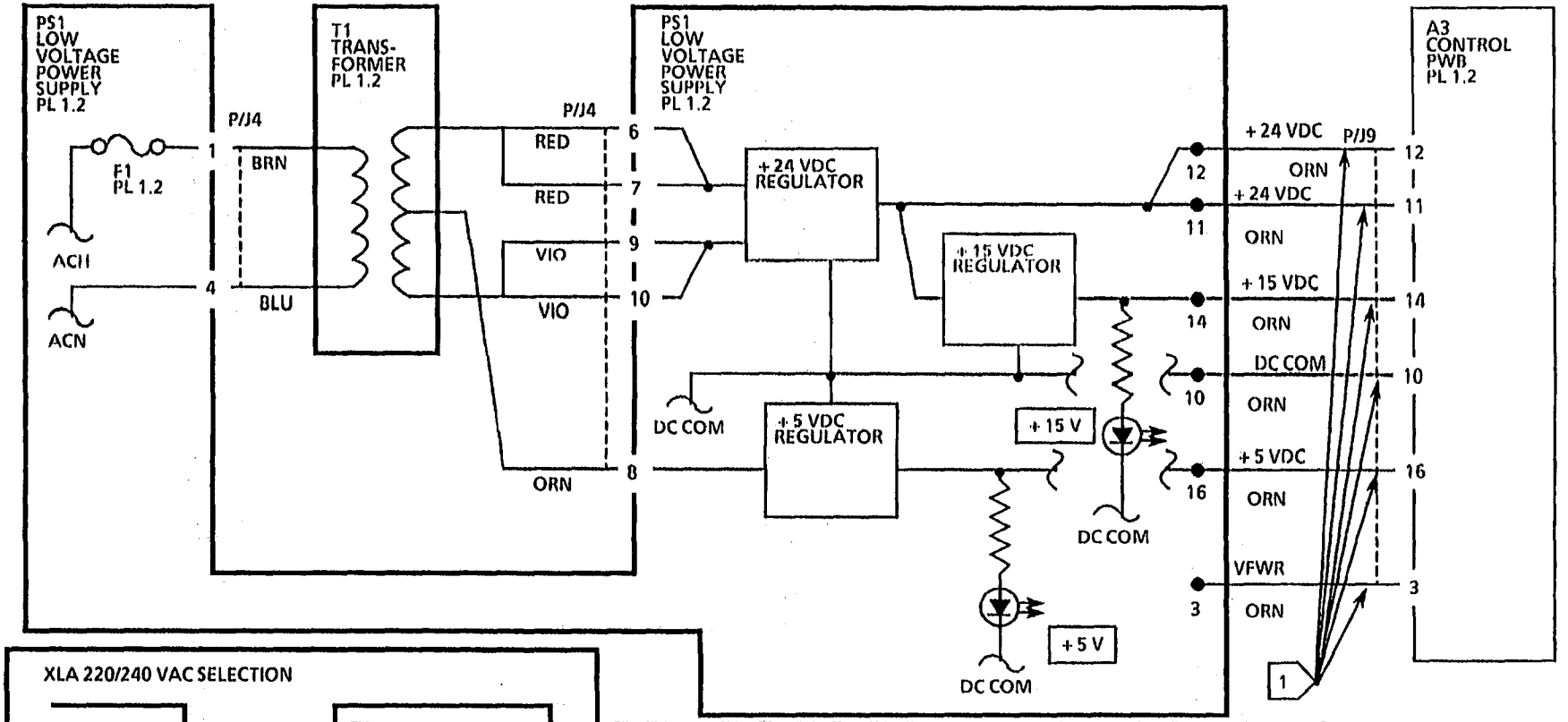
- P/J 9 Pin 16 = +5 VDC
- P/J 9 Pin 14 = +15 VDC
- P/J 9 Pin 12 = +24 VDC
- P/J 9 Pin 3 = +10VDC (+2.5 to +14 VDC)

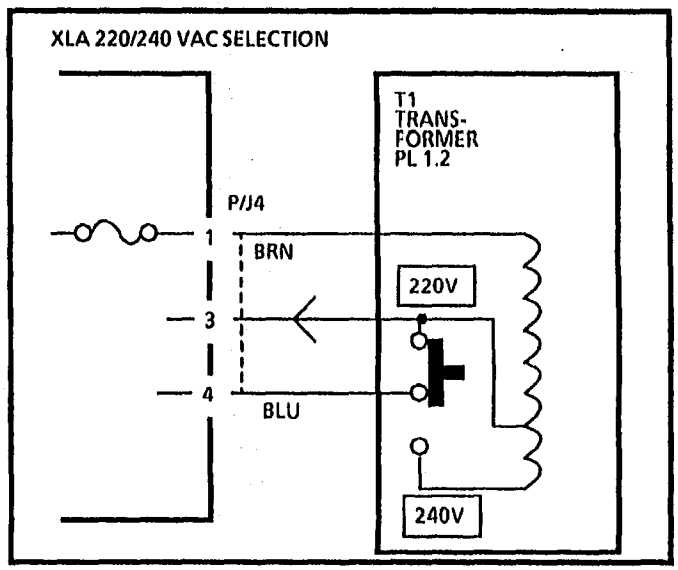
If any voltage is missing, go to FLAG 1 and check for and open circuit. If there is no open circuit replace the Low Voltage Power Supply PWB (A2).

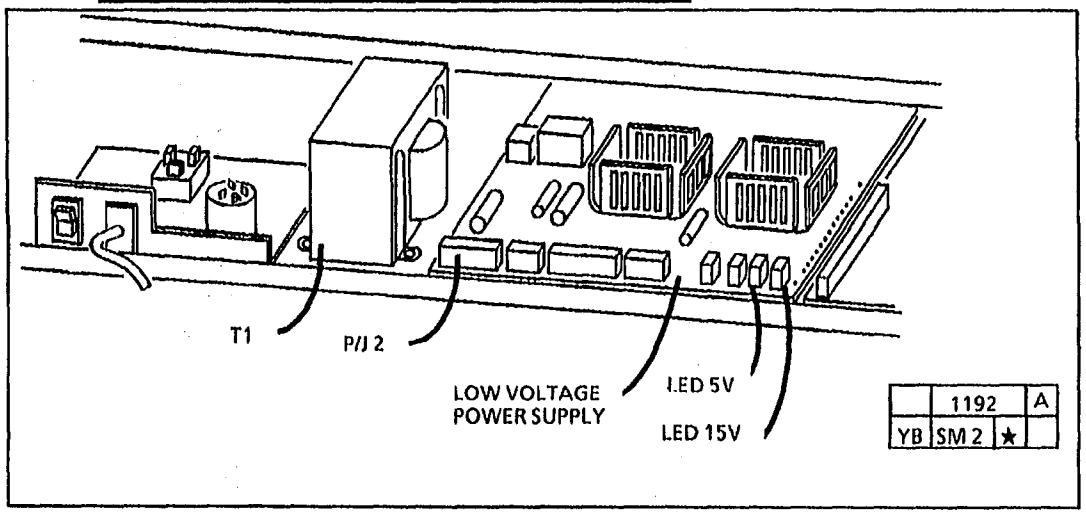

P27/J1
1198
A
YB
SM 2
M


CONTROL PWB
P/J 13
P/J 9
1188
A
YB
SM 2
★

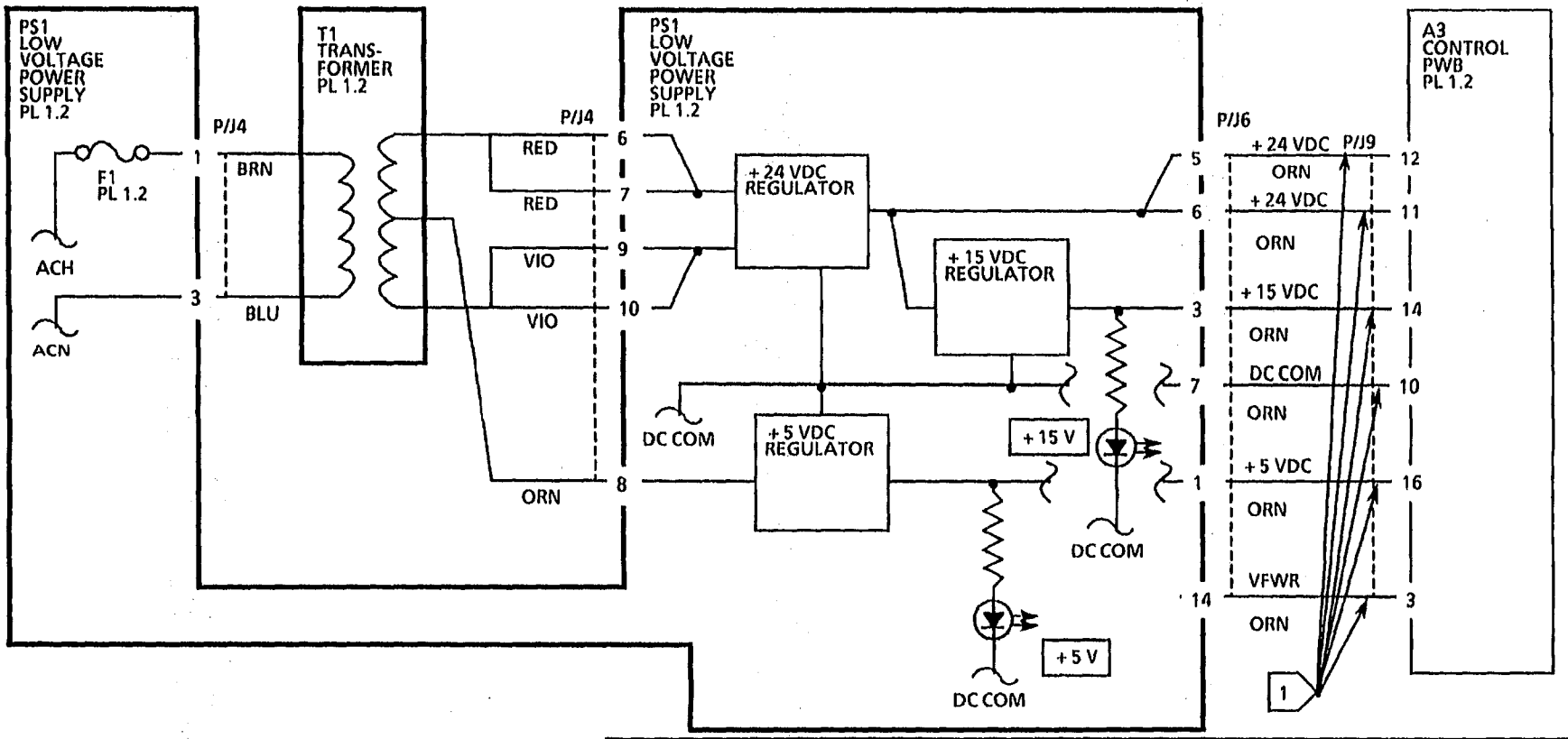
Notes:

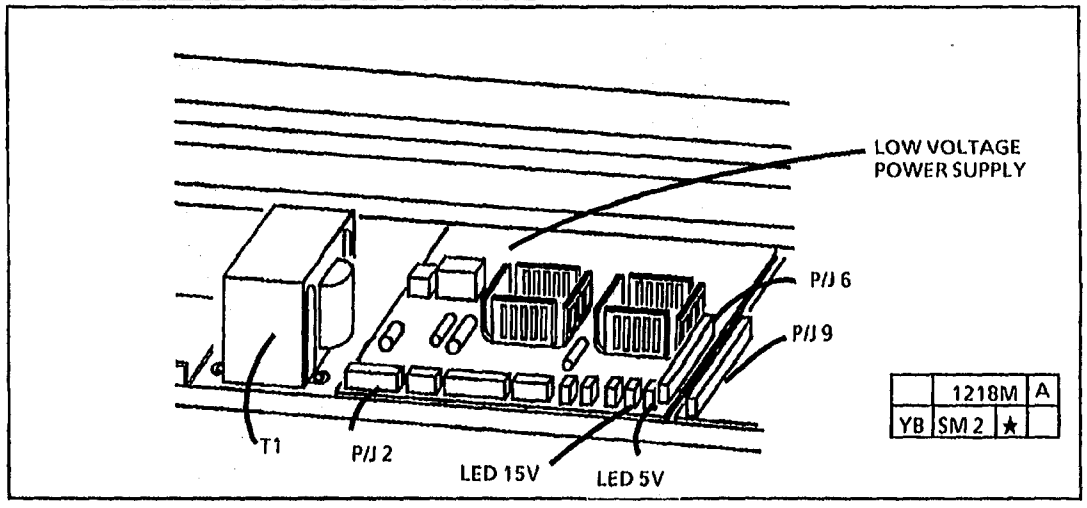

PS1
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
T1
TRANS-
FORMER
PL 1.2
P/J4
F1
PL 1.2
ACH
ACN
BRN
BLU
RED
RED
VIO
VIO
ORN
+24 VDC
REGULATOR
+15 VDC
REGULATOR
+5 VDC
REGULATOR
DC COM
+15 V
+5 V
A3
CONTROL
PWB
PL 1.2
P/J9
+24 VDC
ORN
+24 VDC
ORN
+15 VDC
ORN
DC COM
ORN
+5 VDC
ORN
VFWR
ORN


XLA 220/240 VAC SELECTION
T1
TRANS-
FORMER
PL 1.2
P/J4
BRN
BLU
220V
240V


T1
P/J 2
LOW VOLTAGE
POWER SUPPLY
LED 5V
LED 15V
1192
A
YB
SM 2

Notes:


PS1
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
T1
TRANS-
FORMER
PL 1.2
P/J4
F1
PL 1.2
ACH
ACN
BRN
BLU
RED
RED
VIO
VIO
ORN
+24 VDC
REGULATOR
+15 VDC
REGULATOR
+5 VDC
REGULATOR
DC COM
+15 V
+5 V
P/J6
A3
CONTROL
PWB
PL 1.2
+24 VDC
P/J9
ORN
+24 VDC
ORN
+15 VDC
ORN
DC COM
ORN
+5 VDC
ORN
VFWR
ORN


LOW VOLTAGE
POWER SUPPLY
P/J 6
P/J 9
T1
P/J 2
LED 15V
LED 5V
1218M
A
YB
SM 2

1.3 DC Cooling Fan RAP (2510 W/Tag 5; 2515)

This RAP is used when a copier cooling malfunction is suspected. You may have been directed here from a CQ RAP or the F1 Fuser RAP.

(1) *The fans are turning at a slower speed when the copier is in the power saver mode than when the copier is making copies.*

Initial Actions

- Ensure that the connectors P/J 5, 9, 41, 42, 43, and 44 are connected/seated properly.
- Check both fans for mechanical binding or possible obstruction.
- Ensure the ozone filters are not blocked.

Procedure

Both fans are turning while the copier is in the standby mode.

Y N

Set the DMM to the (+) 200 VDC scale. Connect the DMM (+) lead to P/J5-8 and the (-) lead to the ground test point on the HVPS (TP4). Enter the code [J] to turn the Cooling fans on.

The voltage goes between +19 to +35 + VDC to less than 0.1 VDC.

Y N

A B C

A B C

Set the DMM to the (+) 20 VDC scale. Connect the DMM (+) lead to P/J9-7 and the (-) lead to the ground test point on the HVPS (TP4). Enter the code [J] to turn the Cooling fans on.

The voltage goes from less than 0.1 VDC to between +3.5 to 5.0 VDC.

Y N

Replace the Controller PWB (A3).

Go to FLAG 1 and check for an open circuit. If there is no open circuit, replace the LVPS PWB (A2).

Replace one or both Fans.

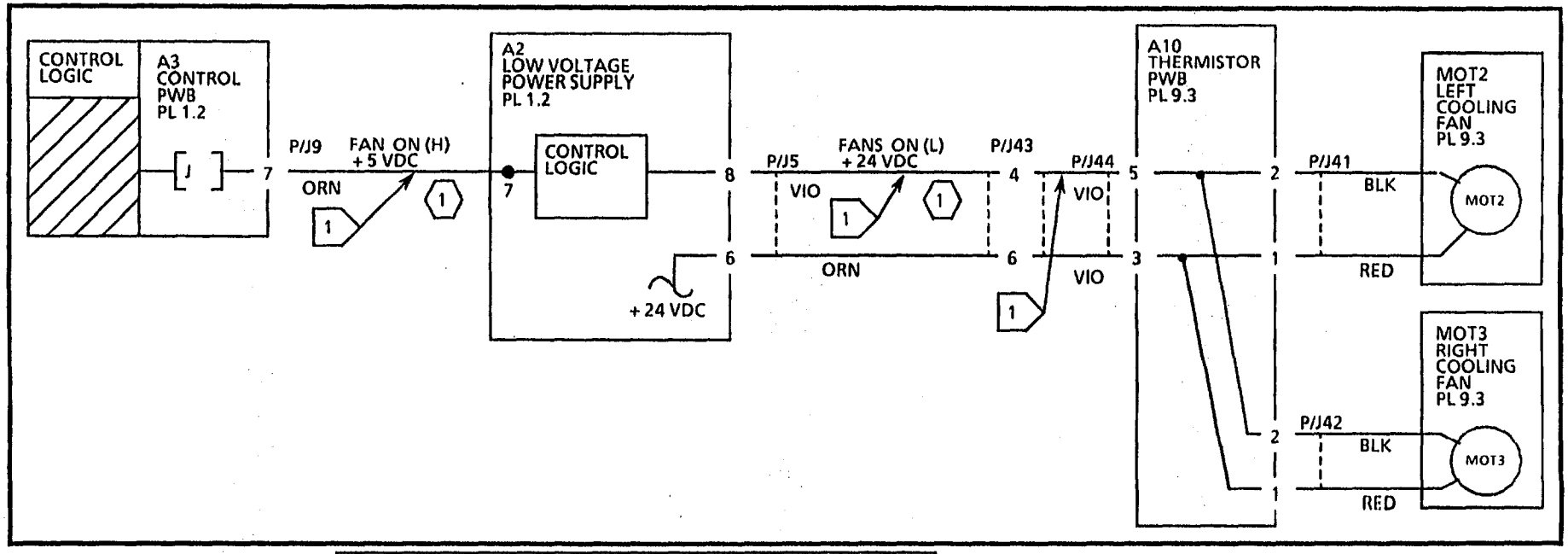
Refer to note 1 and determine if the fans switch to a slower speed.

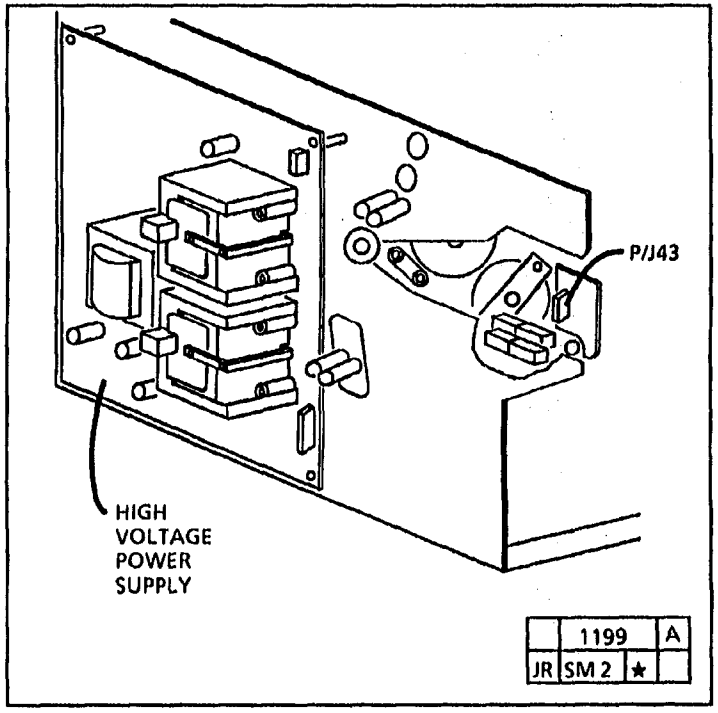
The fans switch to a slower speed after the copier enters the Power Saver mode.

Y N

Replace the Thermister PWB (A10). If the problem persists replace the Controller PWB (A3).

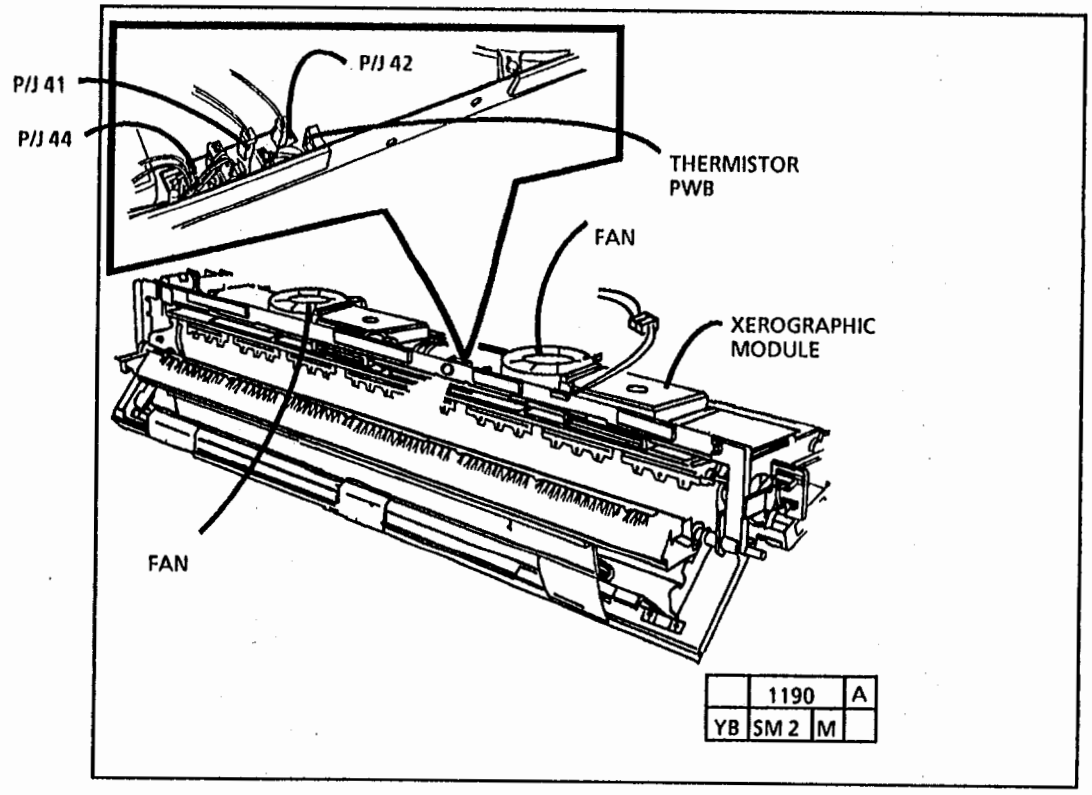
Return to the RAP that directed you here.

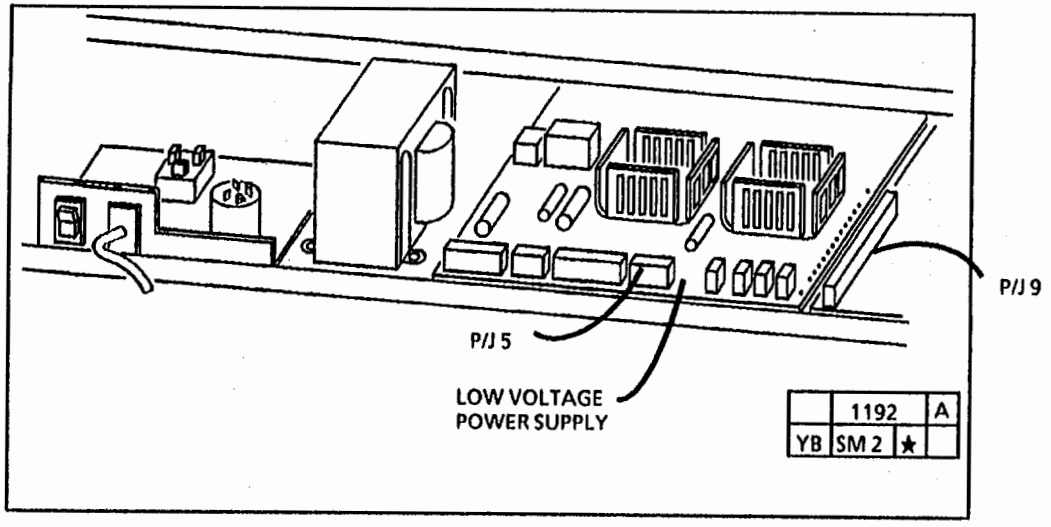




(1)

	FANS OFF	FANS ON	
		RUN MODE	POWER SAVER MODE
P/J5-8	+26 VDC	+0.1 VDC	+9.5 VDC
P/J9-7	0 VDC	+3.5 to 5 VDC	+2.0 VDC


P/J 41
P/J 42
P/J 44
THERMISTOR PWB
FAN
XEROGRAPHIC MODULE
FAN
1190 A
YB SM 2 M


P/J 9
P/J 5
LOW VOLTAGE POWER SUPPLY
1192 A
YB SM 2 ★

Notes:

1.4 AC Cooling Fan RAP (2510 W/O Tag 5)

Note: The fans are turning at a slower speed when the copier is in the power saver mode than when the copier is making copies.

Enter the code [J] to switch on the fans.

The FANS LED on the low voltage power supply is lit.

Y N

Go to FLAG 1 and check the wire between P6-10 and P9-7 for an open circuit.
If there is no open circuit, replace the Control PWB.

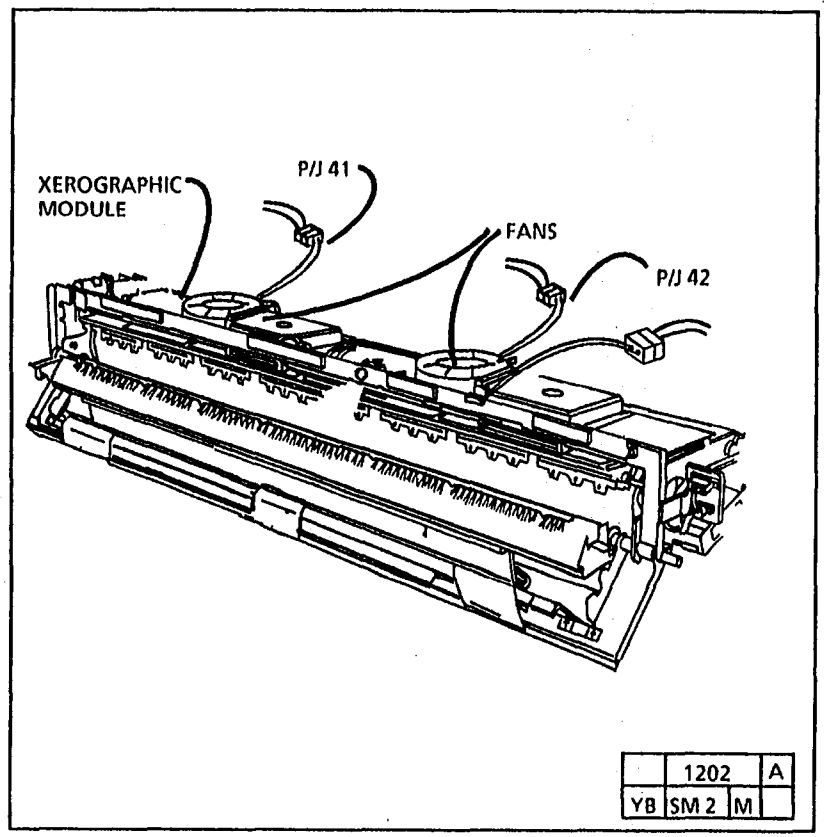
If the problem still exists, replace the LVPS.

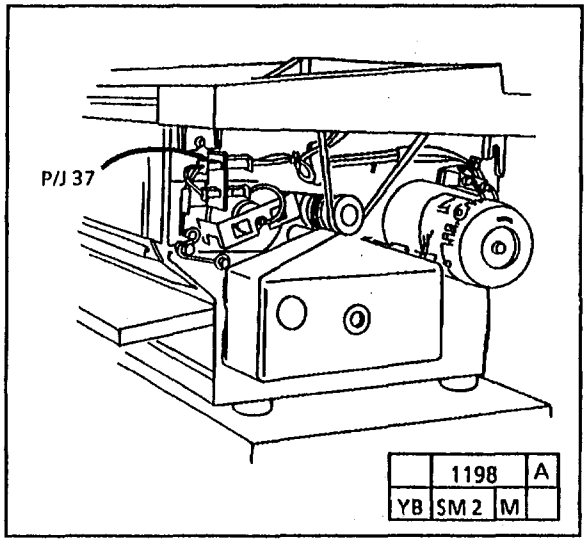
Switch off and unplug the copier.

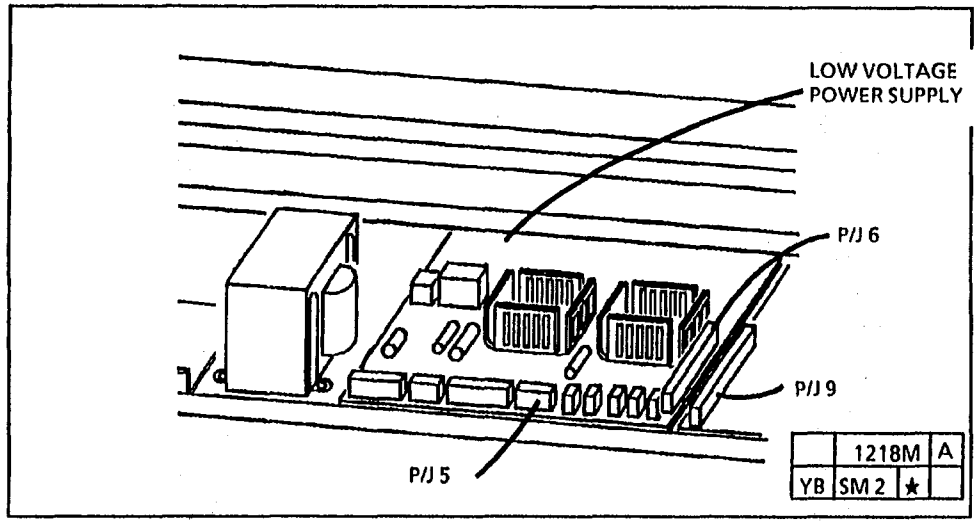
Go to FLAG 2 and check the wiring between the low voltage power supply and the fans for an open circuit.

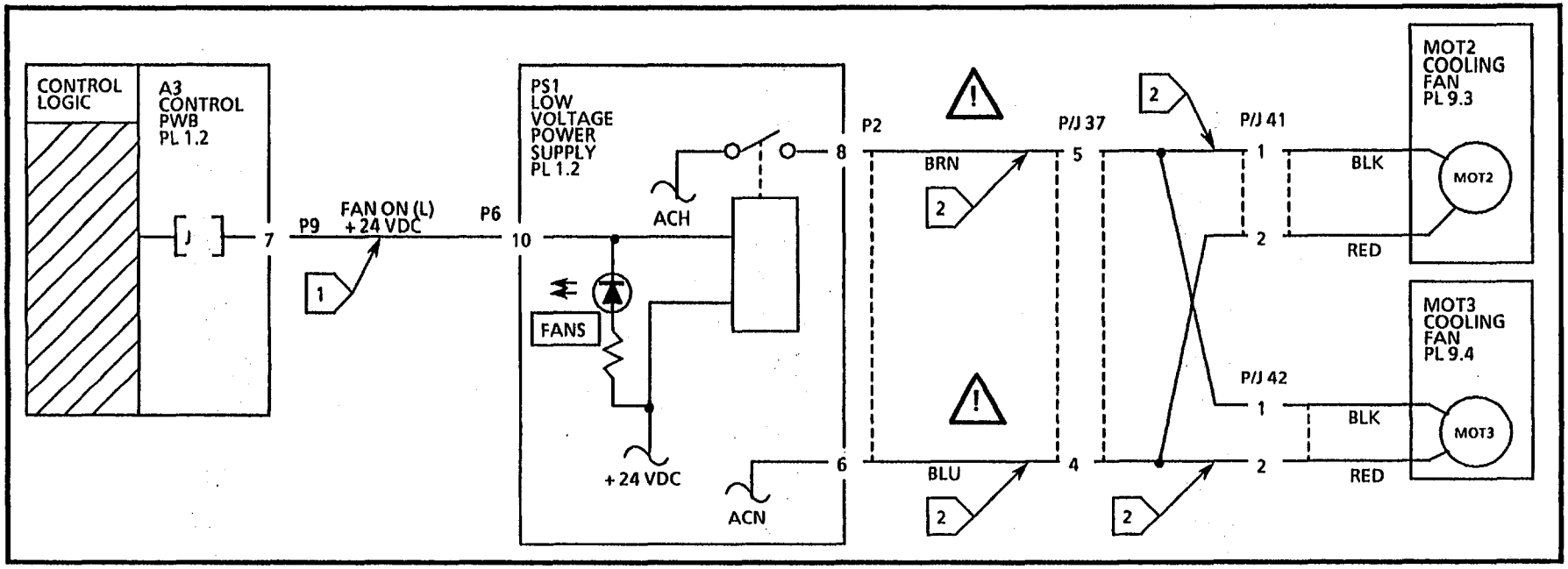
Check the fans for mechanical binding or possible obstruction; replace as necessary.

Replace the ozone filters if they are blocked.








CONTROL LOGIC
A3 CONTROL PWB PL 1.2
J
7
P9
FAN ON (L) +24 VDC
1
P6
10
PS1 LOW VOLTAGE POWER SUPPLY PL 1.2
ACH
FANS
+24 VDC
ACN
8
6
P2
BRN
BLU
2
P/J 37
5
4
P/J 41
P/J 42
1
2
BLK
RED
MOT2 COOLING FAN PL 9.3
MOT2
MOT3 COOLING FAN PL 9.4
MOT3

1.5 Ground Fault (2515 W/ TAG/ MOD 5) RAP

This RAP is used to locate and repair ground faults in the primary AC power distribution circuitry. You were directed to this RAP from another AC power RAP that traced the loss of AC power to the GFP device.

The 2515 copier is equipped with an inline Ground Fault Protection (GFP) device (Located on the power cord) that detects excessive current leakage to ground. If excessive leakage is detected the GFP device will remove all power to the copier.

Initial Actions

- Check that the correct voltage is being applied to the copier at the wall outlet.

Procedure

Do not disconnect any plugs or wires while the power cord is plugged into the wall and the main power switch is on.

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

Y N

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

Y N

Replace the Power On/Off Switch (PL 1.1).

Go to the 1.1 AC Power RAP.

A

A

Refer to FLAG 1and disconnect ACH and ACN at Pins 2 and 5 of the Power On/Off Switch. Plug in the power cord and test the GFP according to the Warning label. **The GFP passes the test.**

Y N

Replace the GFP (PL 1.2).

Reconnect ACH and ACN wires to the Power On/Off Switch. Go to FLAG 2 and check that the correct voltage is present. **The voltage is correct.**

Y N

Go to the 1.1 AC Power RAP.

Go to FLAG 3 and disconnect the wires to the Line Filter at the Line Filter. **The GFP trips (red flag is not up) after the Power On/Off Switch is turned on.**

Y N

Reconnect the wires to the Line Filter. Set the DMM to the 20K resistance scale. Switch off the Power On/Off Switch and unplug the power cord.

Go to the F1 Fuser RAP and check for a high resistance path from ACH or ACN to Ground. Look for pinched wires or wires with frayed insulation. **The GFP trips (red flag is not up) after the Power On/Off Switch is turned on.**

Y N

B C D

B C D

Proceed to wrap up the call.

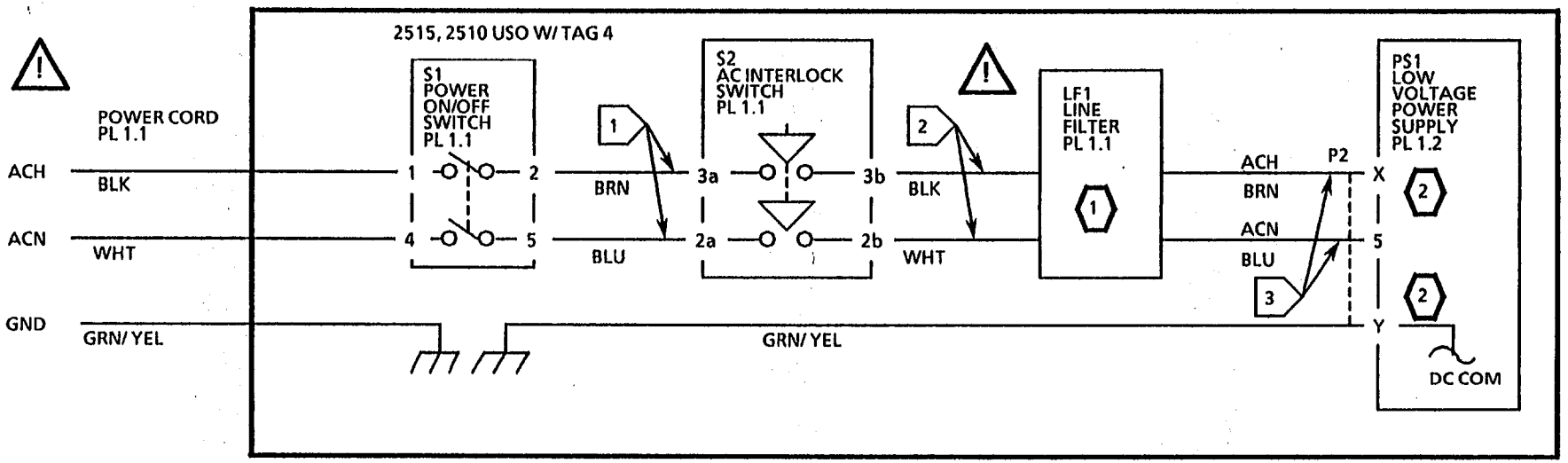
Disconnect Pins 7 and 5 of connector P2 at the LVPS PWB. **The GFP trips (red flag is not up) after the Power On/Off Switch is turned on.**

Y N

Proceed to wrap up the call.

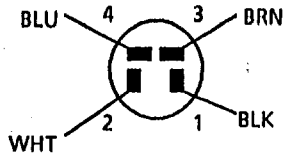
Replace the LVPS PWB (PS1).

Replace the Line Filter (PL 1.1).



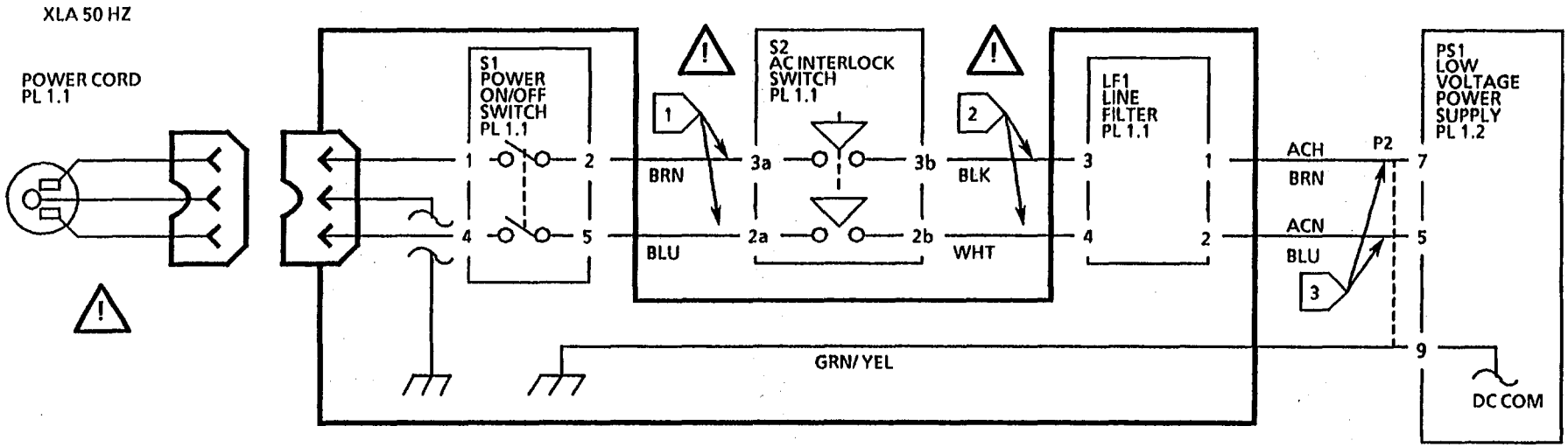
NOTES:

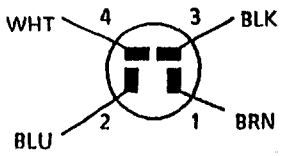
(1) THERE ARE TWO DIFFERENT TYPES OF LINE FILTERS. THE WIRING COULD BE AS SHOWN ON THE FILTERS SHOWN BELOW.



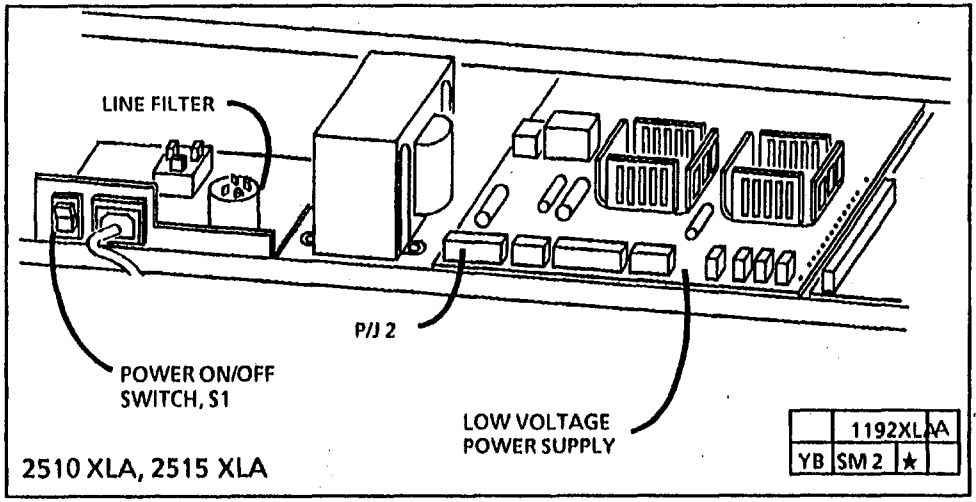
(2)

PIN	LVPS PIN	
	2510W/O TAG 5	2510 W/TAG 5, 2515
X	9	7
Y	11	9

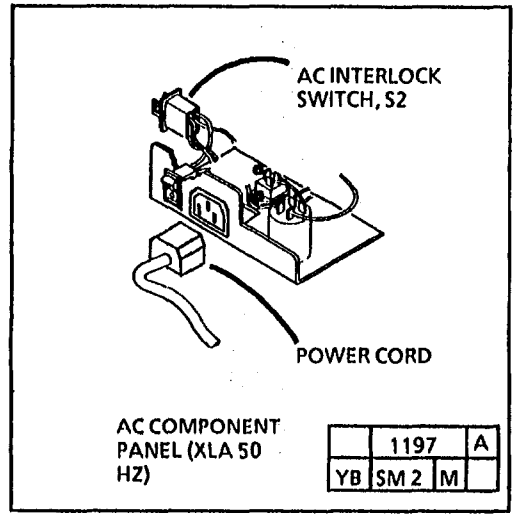




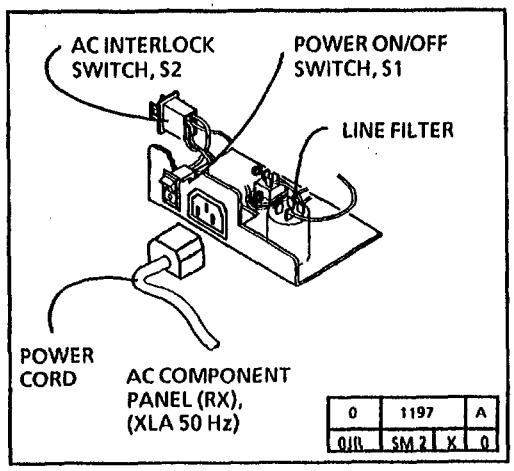
LINE FILTER

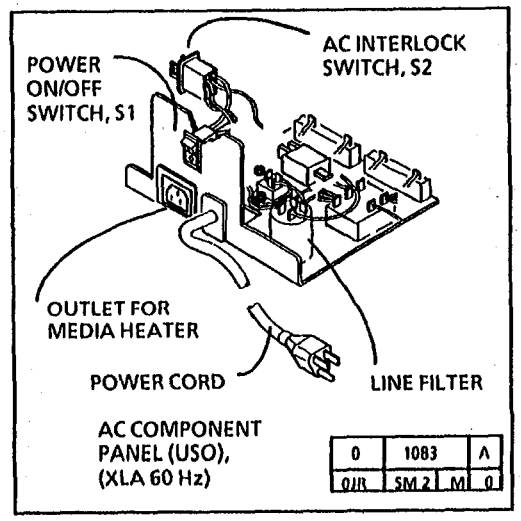


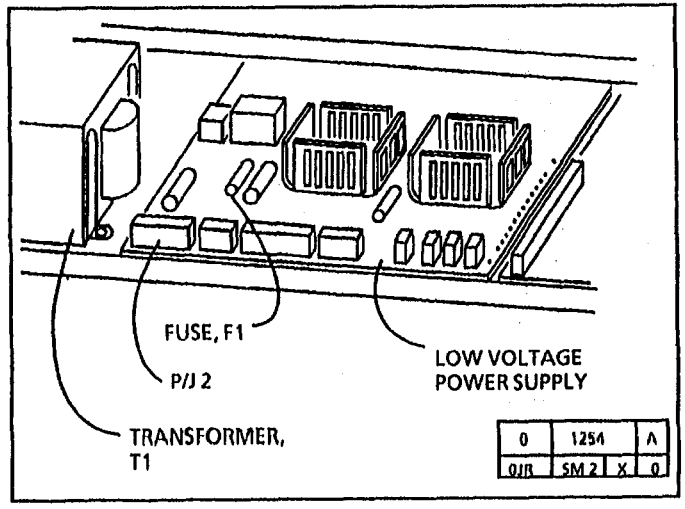
2510 XLA, 2515 XLA



AC COMPONENT
PANEL (XLA 50
HZ)


AC INTERLOCK SWITCH, S2
POWER ON/OFF SWITCH, S1
LINE FILTER
POWER CORD
AC COMPONENT PANEL (RX), (XLA 50 Hz)
0 1197 A
0/R SM 2 X 0


AC INTERLOCK SWITCH, S2
POWER ON/OFF SWITCH, S1
OUTLET FOR MEDIA HEATER
POWER CORD
LINE FILTER
AC COMPONENT PANEL (USO), (XLA 60 Hz)
0 1083 A
0/R SM 2 M 0


FUSE, F1
P/J 2
LOW VOLTAGE POWER SUPPLY
TRANSFORMER, T1
0 1254 A
0/R SM 2 X 0

2.1 Control Panel RAP

This RAP is used for control panel faults that do not indicate a status code.

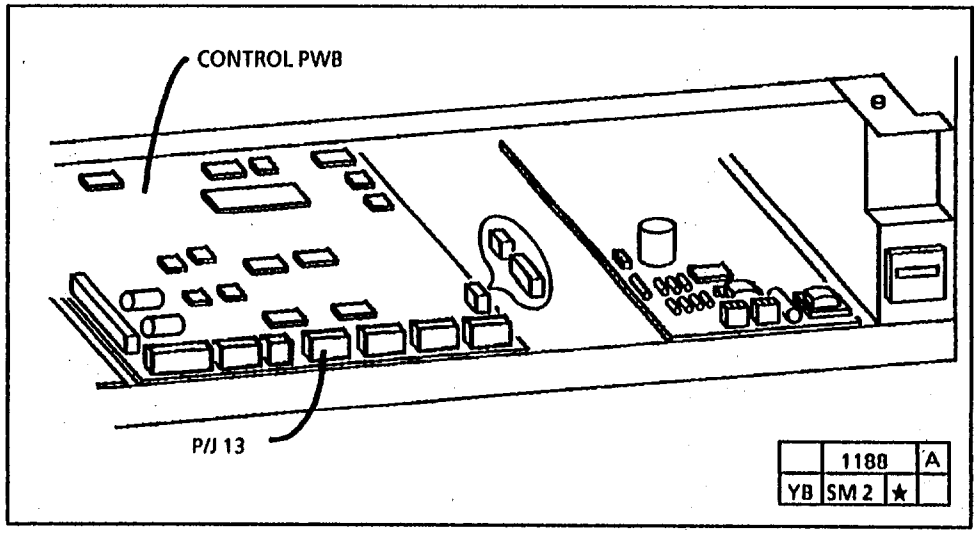
One problem is that you are unable to select a control panel feature. Another problem is that one or more of the control panel lamps are not lit.

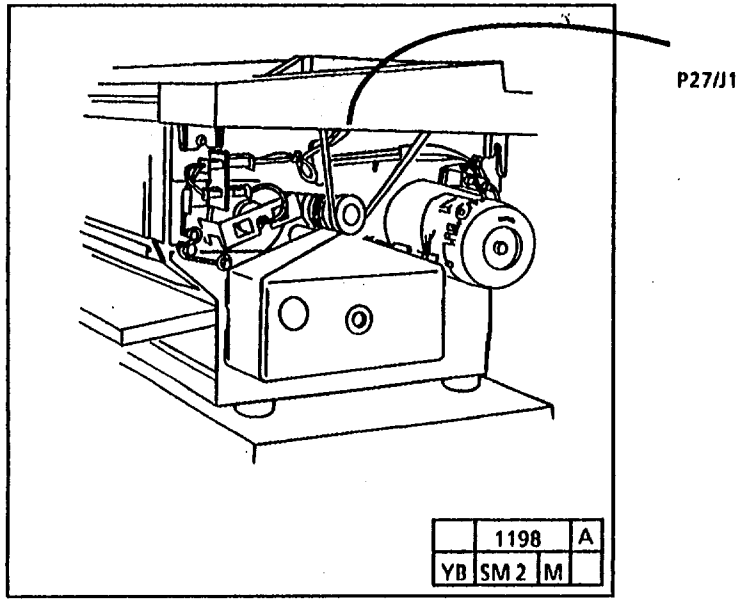
Ensure that the connector to the control panel is seated correctly.

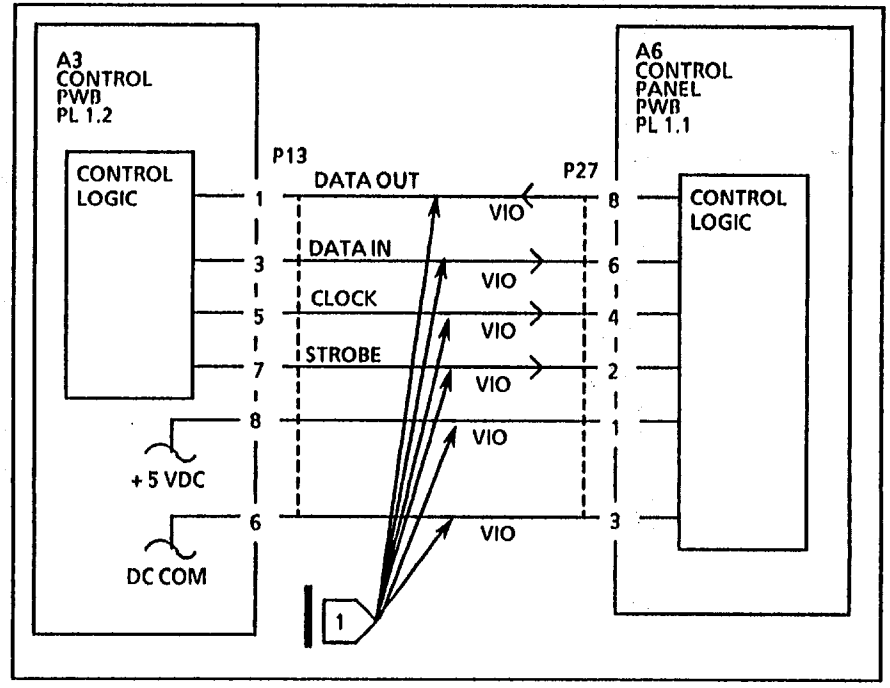
Switch off, then switch on the copier. All of the control panel lamps will light for 3 seconds during self-test.

If one lamp does not light or if one button does not work, replace the control panel.

If none of the lights or buttons work, go to FLAG 1 and check for an open or short circuit. If there is no open or short circuit replace the Controller PWB (A3). If the problem persists, replace the Control Panel (A6).







3.1 Copy Count Meter RAP

This RAP is used for a copy count meter fault that does not indicate a status code.

Initial Actions

Ensure that the Country Configuration (ADJ 3.2) is adjusted correctly before performing this RAP.

Ensure that connector P/J 12 is connected/seated properly.

Procedure

Set the meter to measure + 24 VDC.

Connect (+) to P12-2 of the Control PWB; (-) to the **GND** test point on the HVPS.

Enter the diagnostic mode.

Enter the code [P] for the copy count meter.

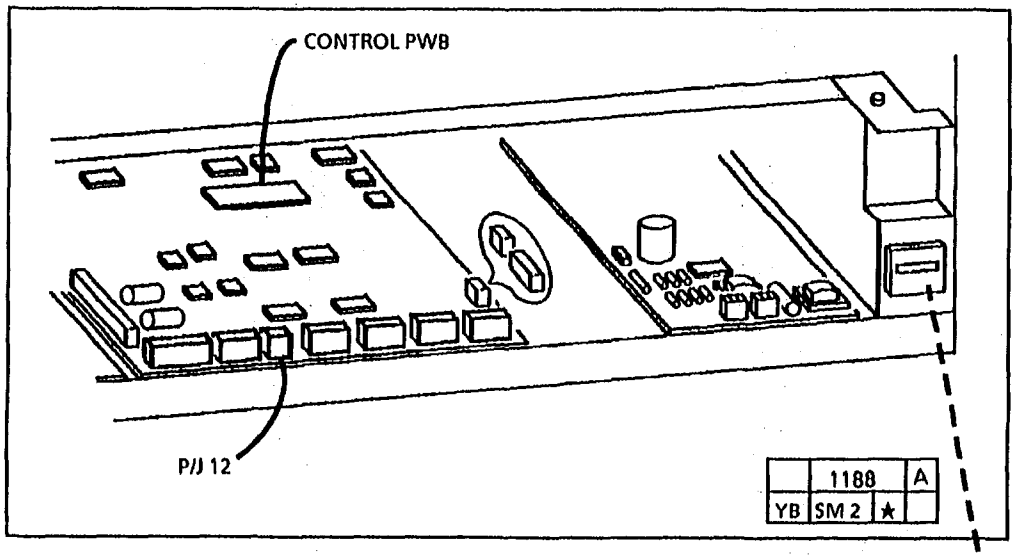
The voltage goes from + 25 VDC to less than + 1 VDC.

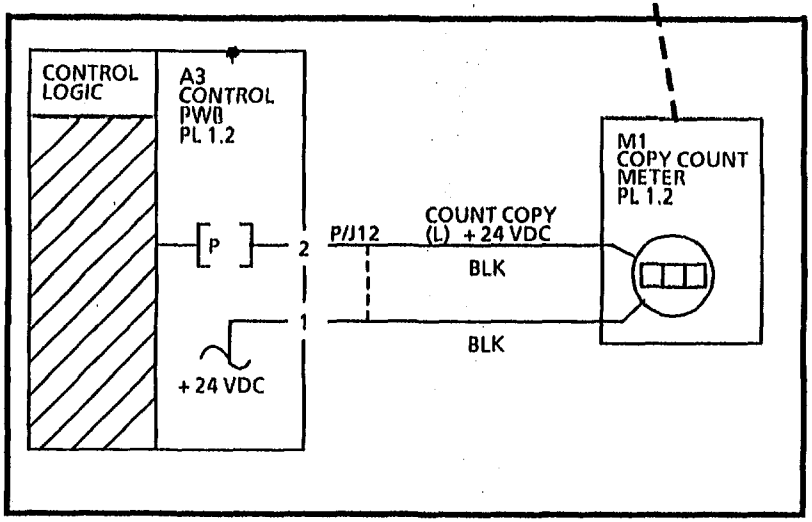
Y N

Replace the Control PWB.

Replace the copy count meter.

If the problem still exists, replace the Control PWB.





3.2 Foreign Accessory - No Billing RAP (2510 W/Tag 26; 2515)

This RAP is used when the external billing system does not record copy transactions.

Enter the diagnostic mode, and select special test 1 (2510), or test 2 (2515). Table 1 shows the values that can be stored in non-volatile memory.

The Foreign Accessory feature is enabled (the value = 1 or 3).

Y N

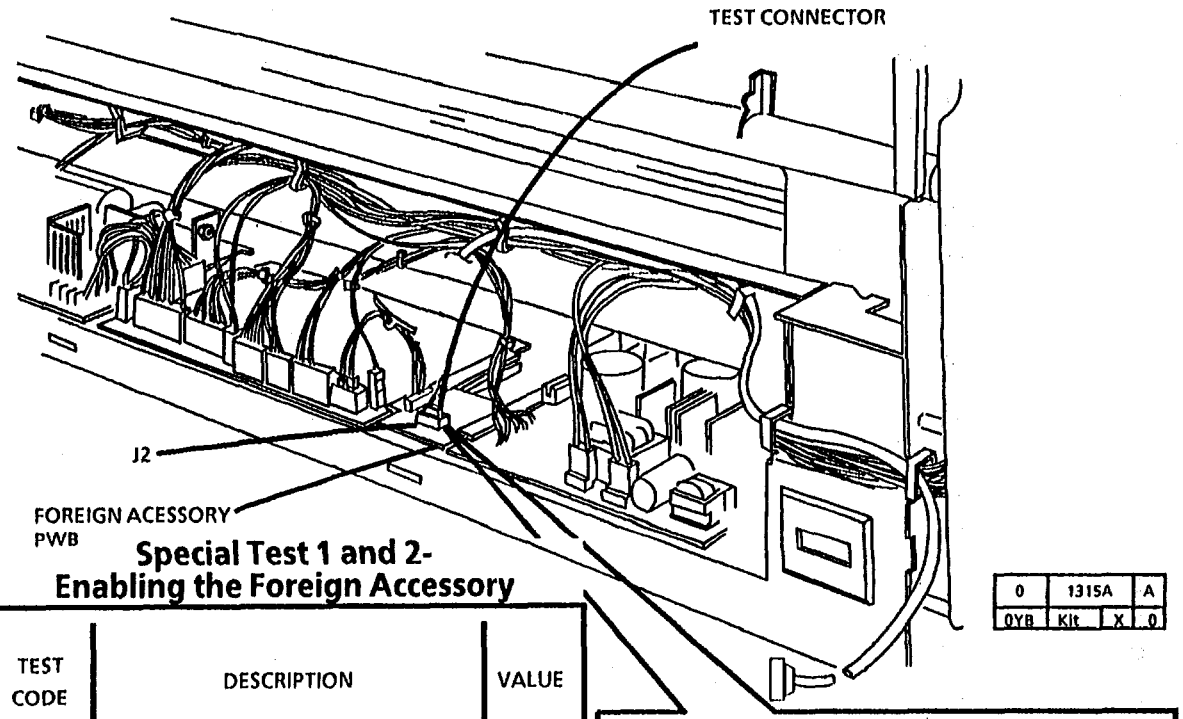
Select the value **1** or the value **3**.

Switch off the copier. Remove the Document Handler, the Right Side Cover, the Upper Rear Cover, and the Lower Rear Cover. Cheat the magnetic Interlock Switch for the Upper Rear Cover. Disconnect the Foreign Accessory Cable from Connector J2, and connect the Test Connector. Switch on the copier.

Set the DVM to the 200 VDC scale. Connect the black (-) lead to the frame of the copier.

Place white copier paper over the Exposure Lamp, but do not press the Document Sensor. Press ***START***. Wait for the copier to be Ready. Insert a sheet of media 24 inches (61 cm) long.

(Continued)



Special Test 1 and 2- Enabling the Foreign Accessory

TEST CODE	DESCRIPTION	VALUE
1 (2510)	Enables an installed foreign accessory. The allowable values are:	
2 (2515)	The Foreign Accessory feature is enabled. A negative output pulse of 450 ms is provided near the end of each copy.	1
	The Foreign Accessory feature is disabled.	2
	The Foreign Accessory feature is enabled. A negative output pulse of 450 ms is provided near the end of each incrementing of the Copy Count Meter.	3

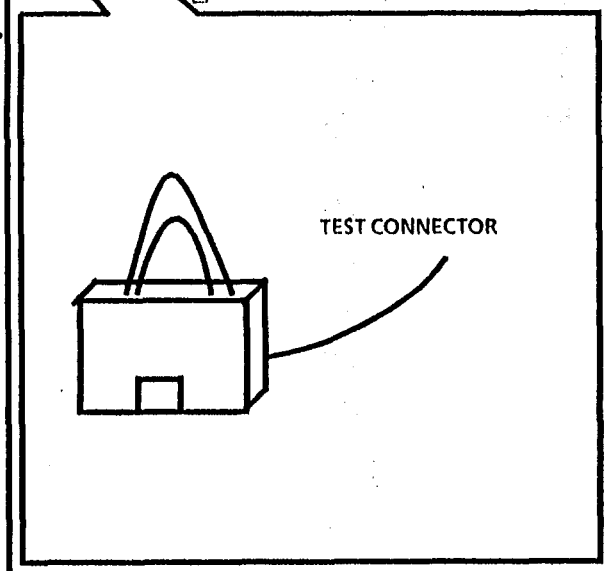


TABLE 1

Connect the red (+) lead of the DVM to Pin 3 of the Test Connector. The meter reads less than 2 VDC.
Press and hold the Document Sensor, and observe the DVM.

When the Copy Count Meter increments, the voltage increases to more than 20 VDC for approximately 0.5 seconds.

Y N

Switch off the copier. Disconnect the harness. Refer to Table 2 and check the jumper cable for an open circuit.

The jumper cable has an open circuit.

Y N

Replace the foreign accessory kit.

Replace the jumper cable.

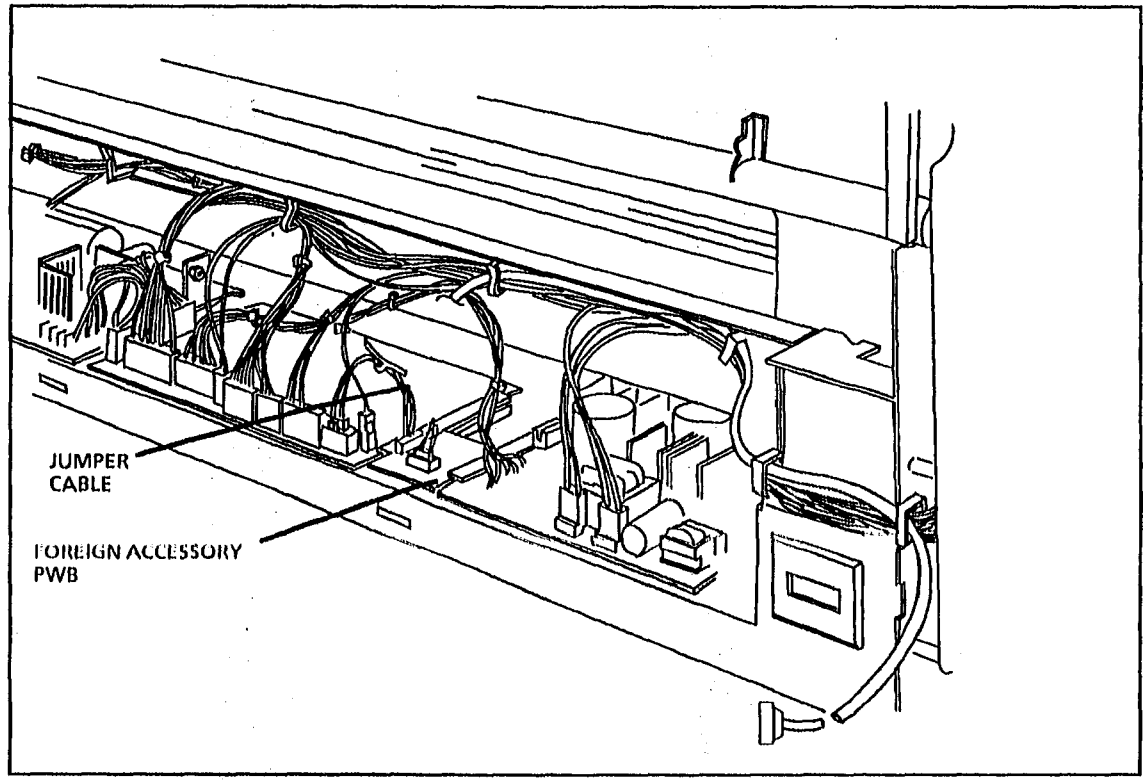
Check the foreign accessory cable for continuity.

The foreign accessory cable has continuity.

Y N

Replace the foreign accessory cable.

Replace the foreign accessory PWB.



Jumper Cable Wiring

J16 (5PIN SL)	FUNCTION	J16A (5PIN SL)
PIN 1	VCCI1	PIN 5
PIN 2	COPIER ENABLE	PIN 4
PIN 3	DC COM	PIN 3
PIN 4	COPY COUNT PULSE	PIN 2
PIN 5	+ 24 VDC	PIN 1

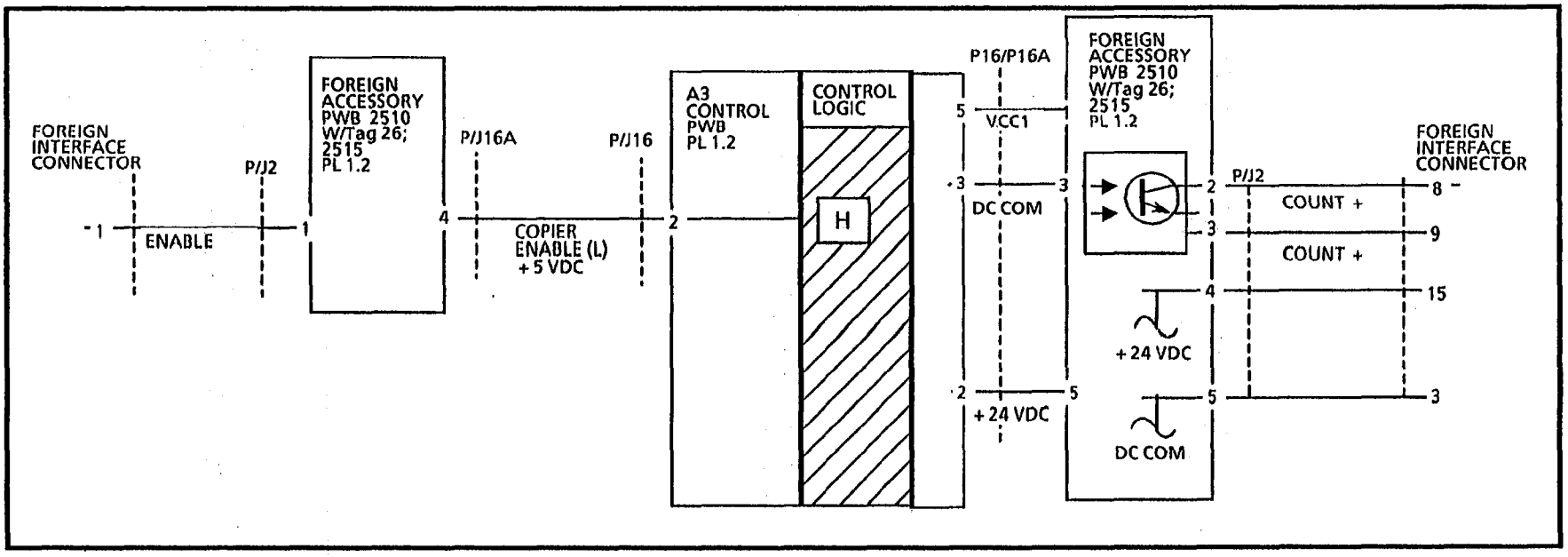
TABLE 2

Foreign Accessory Cable

J2 (6 PIN SL)	FUNCTION	"D" SHELL 15 PIN
PIN 1	Copier Enable	PIN 1
PIN 2	Copy Count +	PIN 8
PIN 3	Copy Count -	PIN 9
PIN 4	+ 24 VDC	PIN 15
PIN 5	Ground	PIN 3
PIN 6	Not Used	NC

TABLE 2

Notes:


FOREIGN INTERFACE CONNECTOR
P/J2
FOREIGN ACCESSORY PWB 2510 W/Tag 26; 2515 PL 1.2
P/J16A
P/J16
A3 CONTROL PWB PL 1.2
CONTROL LOGIC
P16/P16A
FOREIGN ACCESSORY PWB 2510 W/Tag 26; 2515 PL 1.2
FOREIGN INTERFACE CONNECTOR
P/J2
1
ENABLE
1
4
COPIER ENABLE (L) + 5 VDC
2
H
5
VCC1
3
DC COM
2
+ 24 VDC
3
3
2
COUNT +
8
3
COUNT +
9
4
+ 24 VDC
15
5
DC COM
5
3

4.1 Main Drive Motor RAP

Initial Actions

This RAP is used if the main drive motor does not turn or turns when the power is switched on.

If the main drive motor turns when power is switched on, go to FLAG 1 and check the wiring for a short circuit to frame.

Switch off the copier. Remove the rear cover and observe the **MTR** LED on the low voltage power supply. Switch on the power.

The MTR LED is lit after the display alternates between L and 3.

Y N

Switch off and unplug the copier. Go to FLAG 1 and check for an open circuit between the Control PWB and the LVPS PWB.

If there is no open circuit, replace the Control PWB.

Set the meter to measure ACH.

There is ACH between P3-1 and P3-3 of the LVPS PWB.

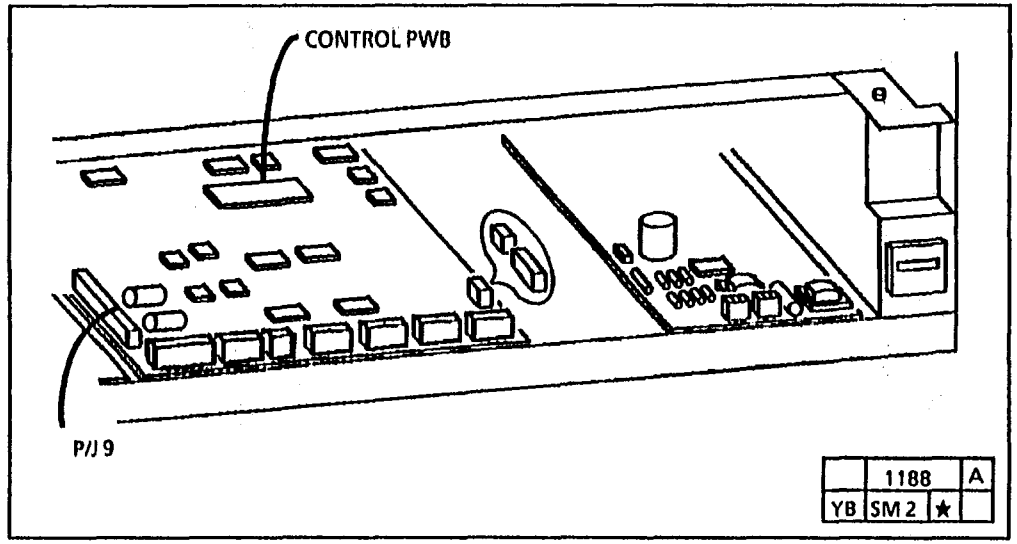
Y N

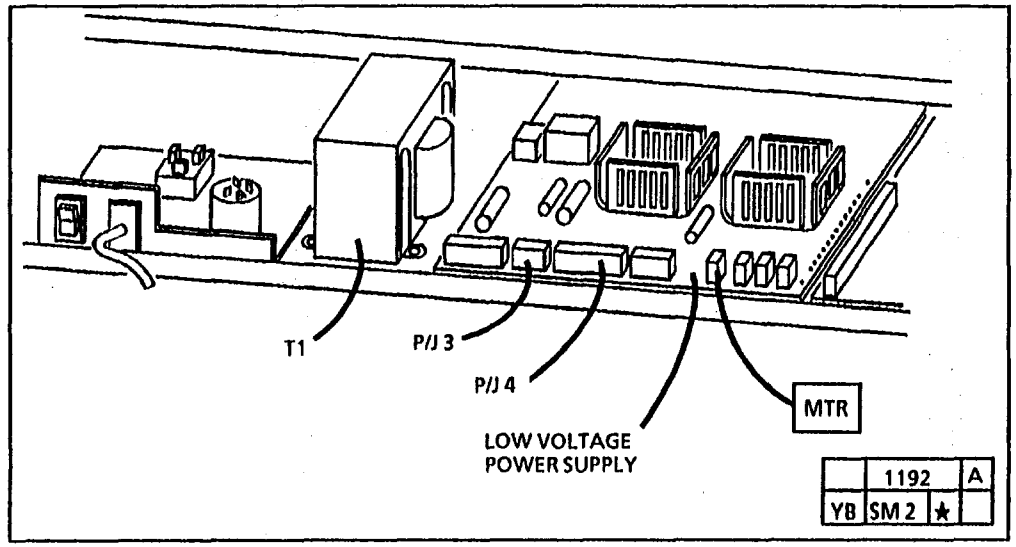
Switch off and unplug the copier. Go to FLAG 2 and check for an open circuit between P4-3 and P4-4 of the LVPS PWB. If there is an open circuit, replace the transformer.

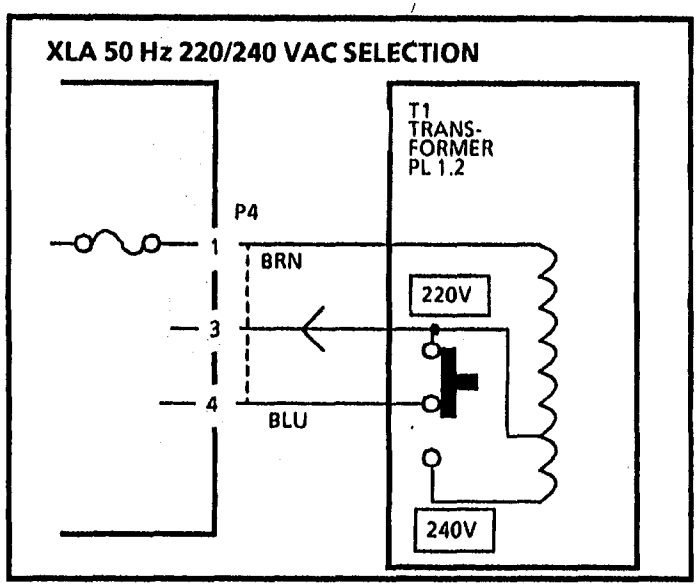
If there is no open circuit, replace the LVPS.

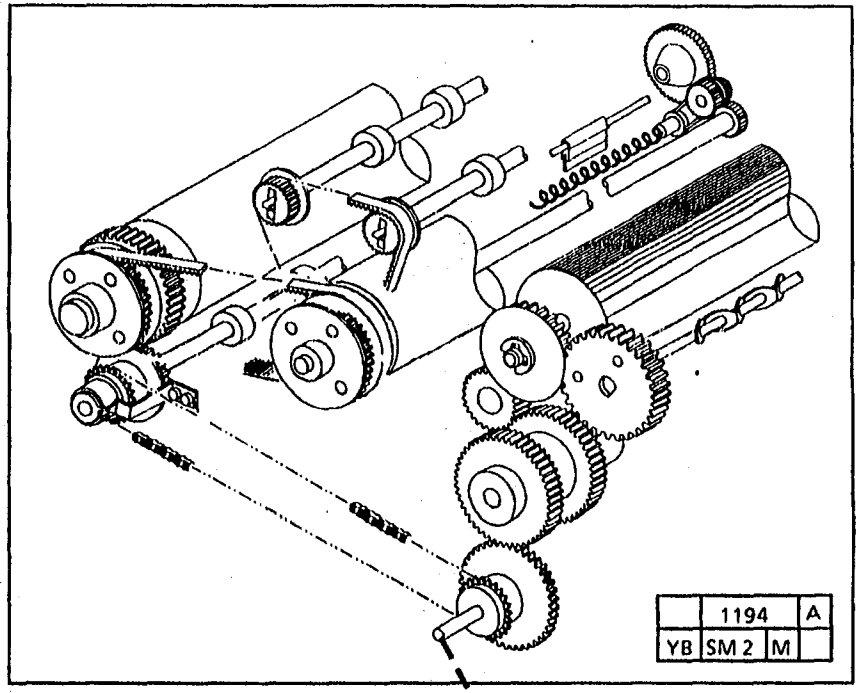
Switch off and unplug the copier. Go to FLAG 3 and check for an open circuit between the main drive motor and the LVPS PWB.

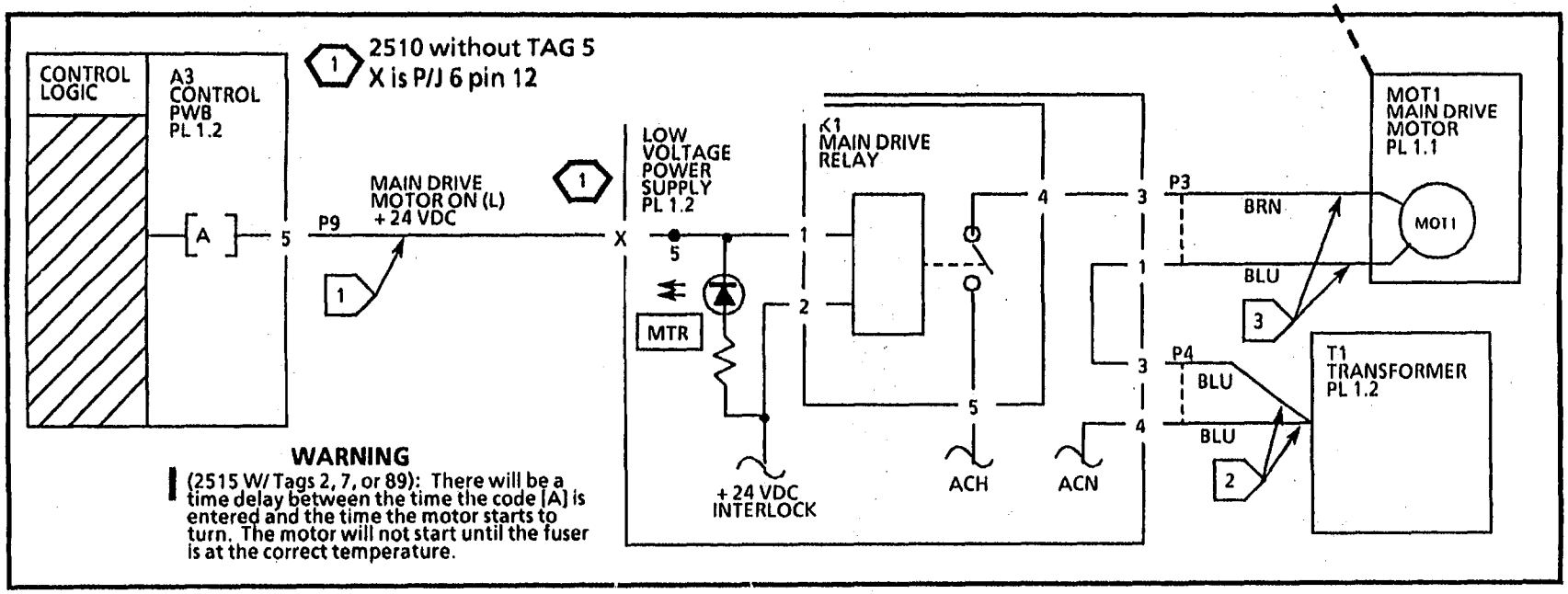
If there is no open circuit, replace the main drive motor.






XLA 50 Hz 220/240 VAC SELECTION
T1
TRANS-
FORMER
PL 1.2
P4
1
BRN
220V
3
4
BLU
240V


1194
A
YB
SM 2
M


CONTROL
LOGIC
A3
CONTROL
PWB
PL 1.2
A
5
1
2510 without TAG 5
X is P/J 6 pin 12
P9
MAIN DRIVE
MOTOR ON (L)
+ 24 VDC
1
X
LOW
VOLTAGE
POWER
SUPPLY
PL 1.2
5
MTR
K1
MAIN DRIVE
RELAY
1
2
4
3
1
3
5
4
+ 24 VDC
INTERLOCK
ACH
ACN
MOT1
MAIN DRIVE
MOTOR
PL 1.1
P3
BRN
BLU
MOT1
3
P4
BLU
BLU
2
T1
TRANSFORMER
PL 1.2
WARNING
(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

5.1 Document Handler RAP

This RAP is used for document handler faults that do not indicate a status code.

One problem is that the document is not sensed by the Document Handler.

1 *The circuit diagram is on the next page.*

Initial Actions

- Ensure that the document is in good condition.
- Ensure that the Document Handler is properly grounded (PL 5.1).
- Refer to Normal Call for Anti Static cleaning procedures.

Procedure

Enter the code [Top Right Segment] to check the Front document sensor.

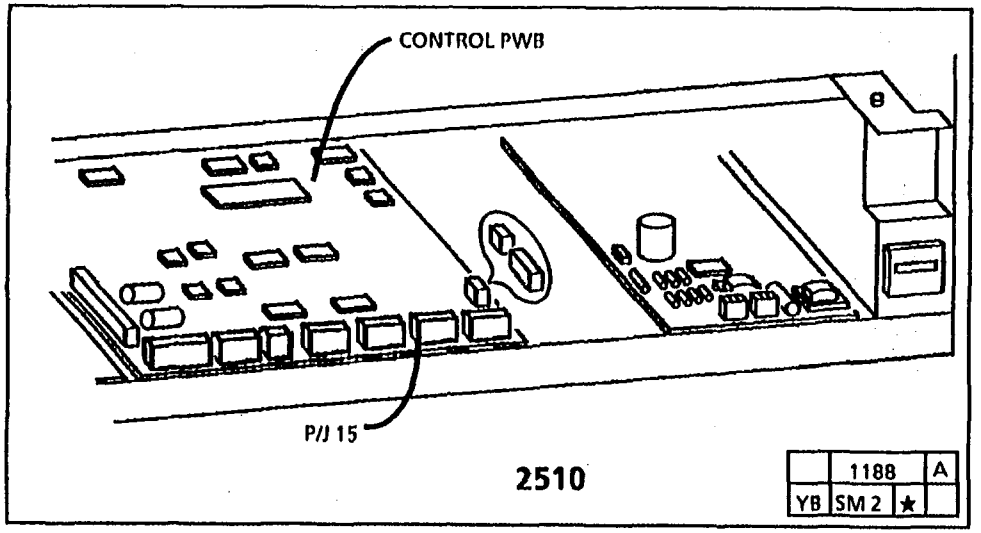
NOTE: *The bottom Copy Output lamp (2510) or the right Copy Media lamp (2515) is lit on the Control Panel when the sensor is blocked.*

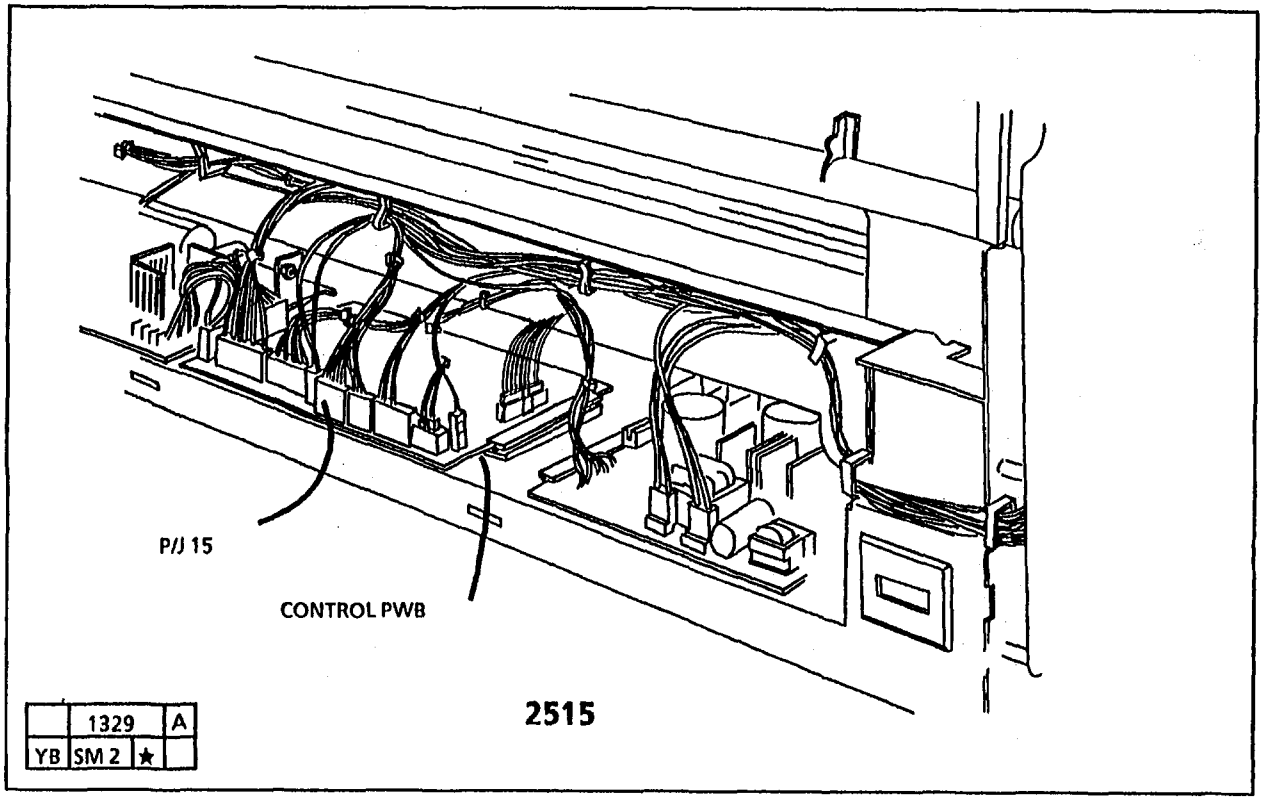
Actuate the Front Document Sensor (Q1). **The Copy Output lamp (2510) or the right Copy Media lamp (2515) goes on then off when the sensor is actuated.**

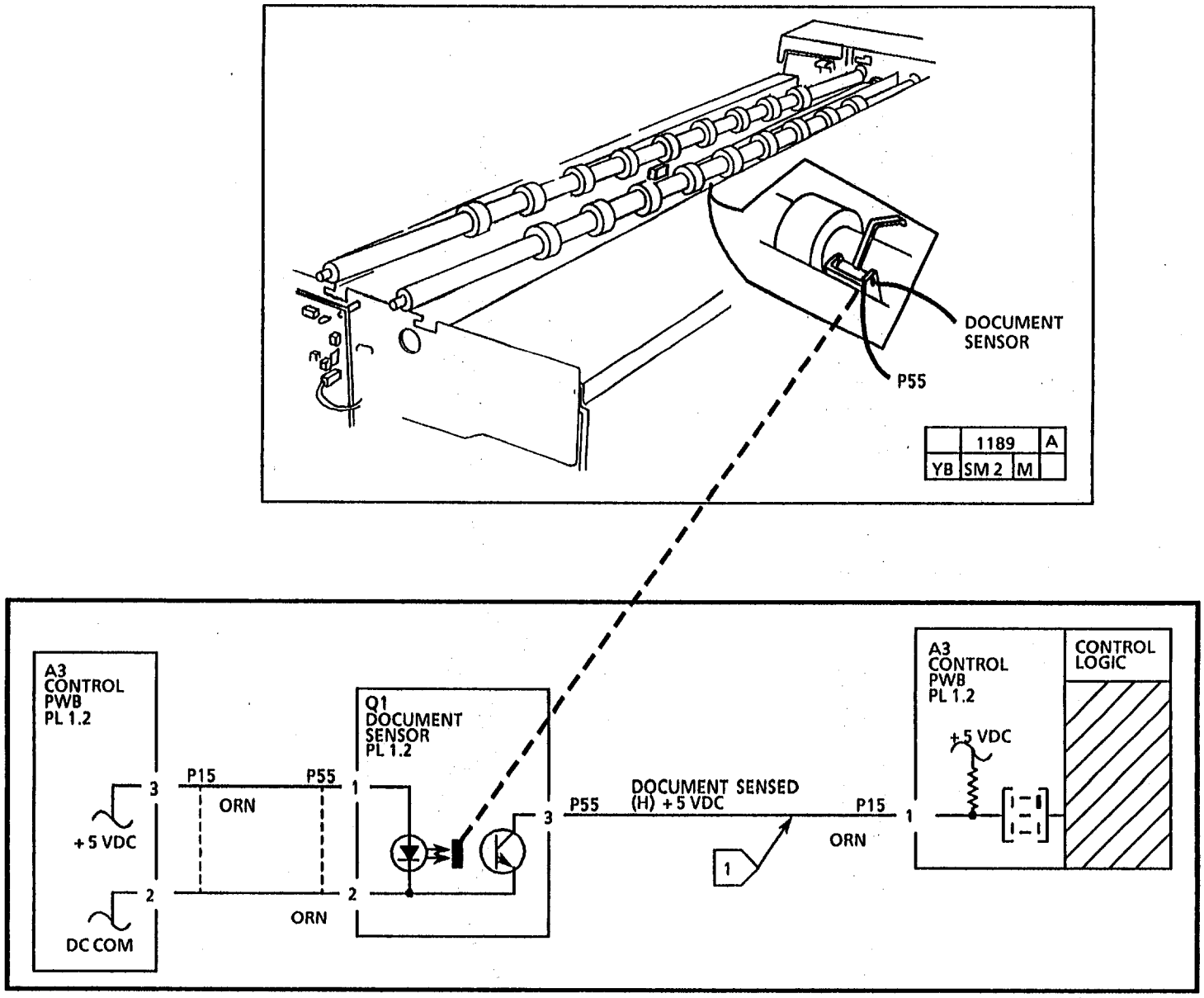
Y N

Go to FLAG 1 and check the wiring for a short circuit. If there is no short circuit to frame, replace the Front Document Sensor (Q1). If the problem persists replace the Controller PWB (A3).

Proceed to wrap up the call.






DOCUMENT SENSOR
P55
1189
A
YB
SM 2
M
A3 CONTROL PWB PL 1.2
+5 VDC
DC COM
P15
P55
ORN
ORN
Q1 DOCUMENT SENSOR PL 1.2
DOCUMENT SENSED (H) +5 VDC
P55
P15
ORN
1
A3 CONTROL PWB PL 1.2
+5 VDC
CONTROL LOGIC

OF1 Noise Isolation Procedure

This procedure is used to isolate noises to a specific subsystem or component. There probably will not be a dropout to a specific component. The procedure will be eliminating one subsystem at a time in order to isolate to the most probable cause for the noise.

CAUTION

(2510. 2515 WIO Tag 2, 7, or 89): To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor (A); always enter the codes (g) fuser and (J) cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code (A) to start the main drive motor.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

In the Power Saver or Rest mode, there is an electrical noise at the rear of the copier.

Y N

A B

A B

Remove the document drive belt.

The noise is heard when the main drive motor is turning after the control panel indicates L3.

Y N

Enter the diagnostic mode:

(2510 , 2515 W/O Tag 2, 7, or 89)

- enter code [L] and press ***Start***
- enter code (g) and press ***Start***.
- enter code (J) and press ***Start***.
- wait at least 2 minutes.
- enter code (A) and press ***Start***.
- enter code (b) and press ***Start***. this will energize the media feed clutch.

(2515 W/ Tag 2, 7, or 89)

- enter code (A) and press ***Start***.
- enter code (b) and press ***Start***. this will energize the media feed clutch.

The noise is heard when the feed clutch is energized.

Y N

Reinstall the document drive belt.

Insert a document into the document handler. Check the following :

- the lower document feed rolls
- the bearings for binding (PL 5.1)
- document handler idler rolls
- the tension of the drive belt
- if the exposure lamp heat sink is rubbing the document drive roll

A B C

A B C

Switch off and unplug the copier. Remove the media transport module (REP 8.1).

Check the following for damage:

- the upper media feed rolls
- the bearings
- media idler rolls
- idler roll shaft

Lubricate the Main Drive Gear, Pivot Shaft with Molycote 557 (USO 70H37) or Tri-Flow (USO 70P100).

Switch off and unplug the copier. Remove the developer module (REP 9.5). Bypass the upper rear cover interlock switch.

Connect the copier and switch on the power.

A B

(Continued)

(Continued)

A B

The noise is heard when the main drive motor is turning after the control panel indicates L3.

Y N

Check the developer module and gears for binding.

Remove the Xerographic Module (REP 9.1).

Remove the Idler Gear (PL 1.1) and clean the gear. Clean the shaft, and remove any damage to the shaft (scoring, burrs, etc.) with emory cloth. Lubricate the gear and shaft with Molycote 557 (USO 70H37) or Tri-Flow (USO 70P100).

Check the gear blacklash between the Idler Gear and the Main Drive Gear. Replace if required.

Reinstall the Xerographic Module and Developer Module. If the problem persists, rebuild or replace the Developer Module.

(2515 only) If there is an intermitent noise from the Developer Housing Rear Auger, install the Rear Auger Fix Kit (Pl 9.5)).

Switch off and unplug the copier. Remove the xerographic module (REP 9.1).

Remove the drum drive belt. Install the xerographic module.

Connect the power cord and switch on the copier.

A B

A B

Enter the diagnostic mode:

(2510, 2515 W/O Tag 2, 7, or 89)

- enter code [L] and press ***Start***.
- enter code (g) and press ***Start***.
- enter code (J) and press ***Start***.
- wait at least 2 minutes.
- enter code (A) and press ***Start***.

(2515 W/ Tag 2, 7, or 89)

- enter code (A) and press ***Start***.

The noise is heard when the main drive motor is turning.

Y N

Switch off and unplug the copier. Check the photoreceptor drum, auger and gears for damage or wear. Lube the pulley/gear shaft.

Remove and clean the Auger Gear. Check the the shaft for damage (scoring, burrs, etc. and clean with emory cloth. Lubricate the gear and shaft with Molycote 557 (USO 70H37) or Tri-Flow (USO 70P100). Replace gear if required.

(2515 only) Contamination seal noise (popping): ensure that the Contamination Seal is positioned correctly, if not, replace.

Ensure that the Photoreceptor Ground Clip is positioned flat against the Drum Shaft. If lubrication is used on the clip, ensure that it is conductive.

A B

A B

Switch off and unplug the copier. Check the fuser roll and the bearings for damage.

Lubricate the fuser bearing with molybdenum disulfide 70P87.

Lubricate the pivot shaft of the main drive gear with Molykote 557 (USO 70H37) or Tri-Flow (USO 70P100).

Replace the grounding bearing or lubricate with a conductive lubricant.

Check that the fuser roll screws are centered in the holes in the fuser roll.

Check for damaged Latch Springs.

Check to see if the shipping spring has been removed. If not, remove the spring.

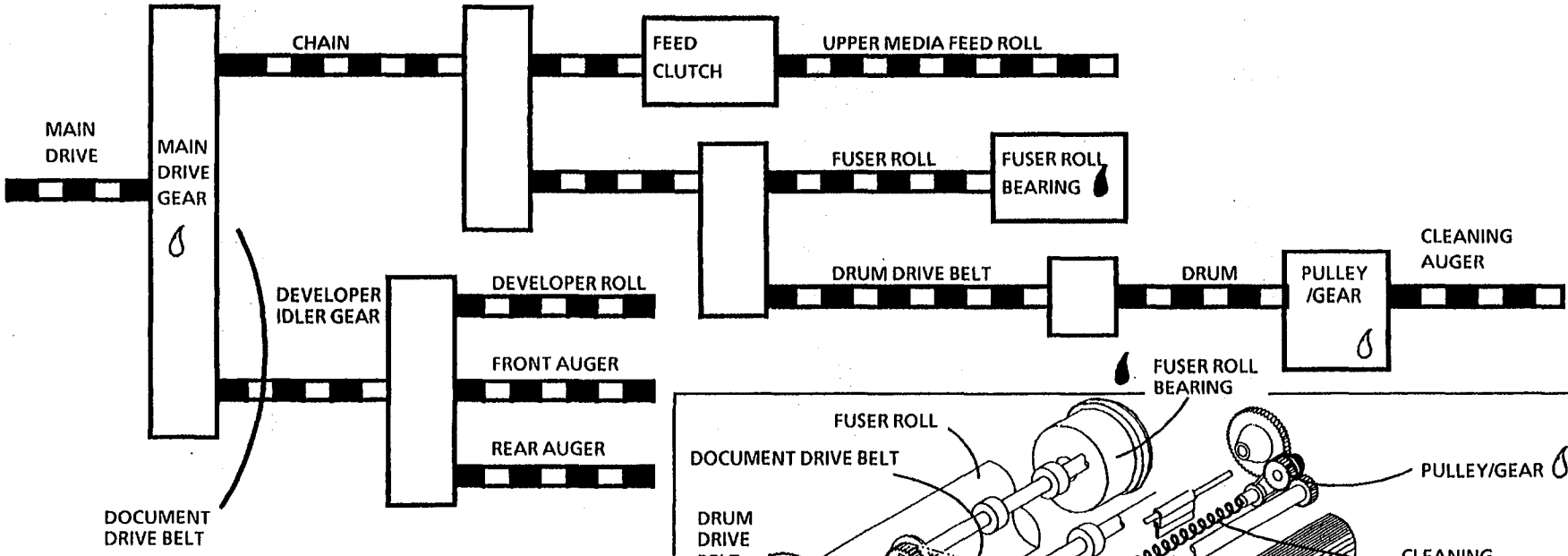
Check the gears for damage and wear.

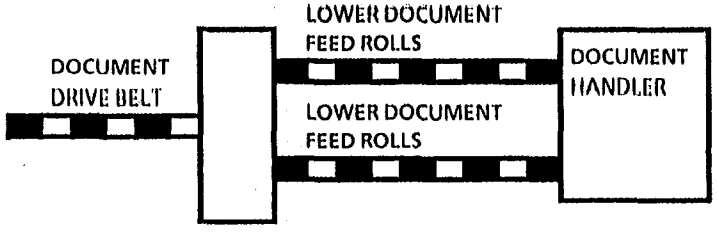
Check the surface of th eFuser Roll for adequate oil.

Reflecter is secured correctly.

Check for another copier on the same electrical circuit as the 2510/2515. In rush current caused by the other copier fuser cycling can cause the transformer to make a noise.

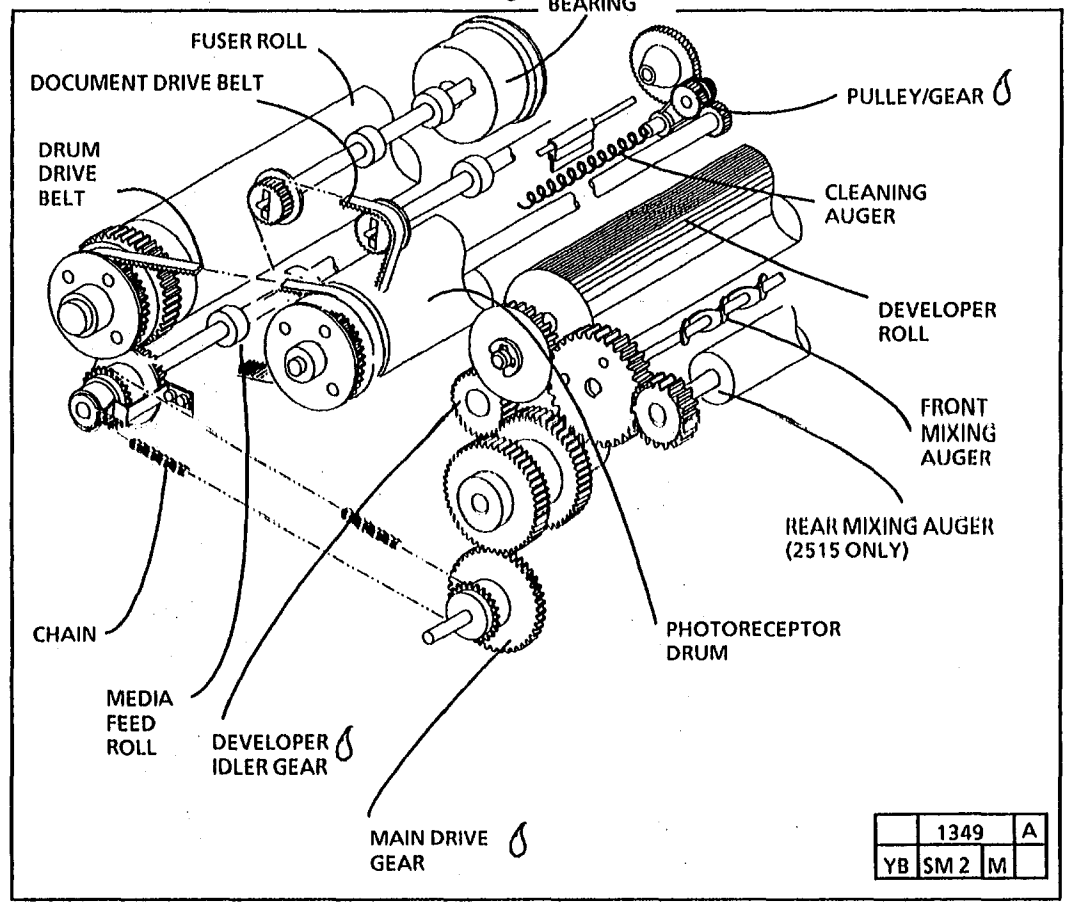
Notes:





Lubrication Chart

	Molykote 557 (USO, XLA 70H37
	Molybdenum disulfide 70P87



OF 2 High Toner Consumption

Initial Actions

Check the following to ensure that a high toner consumption problem exists.

- The toner yield from one cartridge is less than 2000 linear feet.
- The toner cartridge is empty. Check that the cartridge is not damaged.
- Toner in the Waste Toner Bottle is above the Red Cap in the side of the bottle.
- There is less than 10,000 linear feet made since the last developer material replacement.
- Check the image area coverage and non-image areas of the documents used by the customer. Documents with a lot of image or that have a dark non-image area will use more toner.

There is a high toner consumption problem.

Y N

Inform the customer that the minimum toner yield from one cartridge is less than 2000 linear feet.

Perform the following:

- Clean the Platen, Lens, and Transport Platen.
- Refer to the Tape Transfer procedure (Section 6)
- Perform the Image Density Adjustment (ADJ 9.4).
- Reduce the time interval of the Timeout to Power Saver mode, Special Test 1. Toner is dispensed during the cycle out time.

If the problem persists, check the following:

- Dispense Solenoid for binding and not actuating correctly.
- Dispense Solenoid is adjusted correctly (ADJ 9.5).
- Developer housing is shorted to the copier frame.
- Developer Bias is switching correctly (CQ 25)
- High Voltage Power Supply is working correctly (CQ 26)
- **2510 ONLY:** Ensure that the Dispenser Adjustment Handle and Dispenser Drive Arm are not damaged and are operating correctly.

If the problem is not corrected after trying all of the above, call the Field Engineering hotline.

OF 3 Shutdowns

Copier stops in the middle of a copy job and returns to the Rest mode. The copier is protected by a circuit called the Watchdog Timer. The Watchdog Timer circuit monitors the 5 VDC logic voltage. If this voltage goes out of range, the Watchdog Timer returns the copier to the Rest Mode.

Perform the following checks:

- Check that the power is within specification at the AC wall outlet. If not, notify the customer.
- Check that the copier is the only device on the circuit. If not, notify the customer.
- Ensure that the AC hot, Neutral and Ground of the wall outlet is wired correctly. If not, notify the customer.
- Check that the Right Side Cover is secure correctly and actuating the AC interlock.
- Ensure that the AC interlock is functioning correctly and not damaged. Replace if required (PL 1.1).
- Ensure that the Ground Strap on the front document feed roll is making good contact by checking the continuity to ground. Meter should indicate 0 ohms. This prevents static electricity discharge through the illumination sensor. If the ground strap is missing, install repair kit 600K11390
- Check the fuser connector P/J37 for burn marks or heat discoloration (brown or black in color).

- If the shut down is intermittent, or to the Power Saver mode, this could indicate the Latching Cover may be moving or vibrating open.
  Check the following:
  - Fuser Oil is sufficient
  - (2510 Only) Tag 24 is installed and latched. (2515 Only) the latch is engaged.
  - Worn fuser drive gears
  - damaged latch springs

OF 4 Toner/Developer Dumping

Toner/developer dumping is generally caused by either the Developer material, Developer Housing, or the interface between the Developer Housing and the Xerographic Module.

Initial Actions

- Ensure that the copier is level front-to-rear.
- Check that the Developer Material is at the correct level. The mixing auger should not be visible.
- Check for failed Developer Material. Remove a small amount of material, and place it in the palm of your hand. Rub the material with your finger to separate the toner. The Developer material should be red to pink in color. If not, perform the Tape Transfer Procedure, Section 6. If the material is failed, replace it.
- Using test pattern 82E5980, check the image density. Adjust the Toner Control as necessary to obtain the correct image density.
- **(2515):** Ensure that the Toner Dispense Solenoid is adjust to specification.
- Check that the Charge voltage is in specification.
- **(2510 W/Tag 24, 2515):** Ensure that the Xerographic Module latch on right side of copiers is latched. 2510, install Tag 24.

Procedure

1. If necessary, remove the Xerographic Module (REP 9.1).
2. Place a jumper wire between pin 6 and 8 of P43. Ensure the the wire will not contact the copier frame. This will cause a short to ground and possible damage the Control PWB.
3. Cover the Media Transport with a sheet of paper so that the paper is under the Developer Housing covering the corotron.
4. Enter the diagnostic mode and enter the Main Drive Motor on code in order to run the motor.
   2510 Code A
   2515 Bottom Segment.
5. Check for toner or developer dumping.
   a. If material is dumping on the paper, either the Developer Material is failed or the Developer Housing must be replaced or rebuilt.
      - Check the Magnetic Roll surface for wear. **2510:** Replace the Magnetic Roll and rebuild the Developer Housing or replace the housing. **2515:** Replace the housing.
      - Check the Developer Housing drive gears for wear and damage. Gear teeth should not be rounded or pointed.
      - Check the backlash between the Drive gear on the Main Drive Motor and the Idler Gear to the Developer Drive Gear.Remove the Upper Rear Cover. Hold the Idler gear from moving, and rotate the Drive Gear on the Main Drive Motor back and forth. There should be a small amount of movement. If there is excessive movement or no movement, adjust the Main Drive Motor. Loosen the 4 motor mounting screws just enough to be able to move the motor. Move the motor to set the backlash.
      - Replace the Developer Material. If the problem persists:

      (2510): Rebuild or replace the Developer Housing.
      (2515): Replace the Developer Housing.

b. If material is not dumping on the paper, the problem is the interface between the Developer and the Xerographic Module (DRS).
   - Remove the Xerographic Module and check the Drum to Auger Seal. The seal should be against the Photoreceptor Drum. If not reform, or replace. The seal should point towards the Charge Corotron.
   - Check the Photoreceptor Drum for an out of round condition. Slowly rotate the Drum and watch the surface in relationship with the straight edge of the Xerographic Module. If the distance changes, remove the Photoreceptor Assembly and check the hubs for damage and reseat the Photoreceptor.
   - Ensure that the fuser roll is adequately oiled

   - Obtain the DRS Tool and instructions from the District Technical Specialist and check the DRS.

OF 5 Charge Voltage Out of Specification

Problem	Cause	Corrective Action
Voltage not equal side-to-side	Bent or bowed corotron	Replace the Charge Corotron (PL 9.2)
Voltage fluctuates	Photoreceptor drum is not seated correctly on the drum shaft.	Remove the xerographic module, and check that the drum is fully seated on the drum shaft end plates.
Voltage starts high and quickly drops below 600 volts	Contaminates ozone filter, cooling fans not operating, air manifold is blocked by the U-shaped seal near the cleaning blade	Replace the Ozone filter (PL 9.3) Replace the Cooling Fan (PL 9.3) Clear the obstruction blocking the manifold.
Voltage is low and cannot be adjusted to 800 VDC	Defective corotron, defective photoreceptor drum, light leak, defective high voltage power supply	Repair or replace the Charge Corotron (PL 9.2) Replace the Photoreceptor Drum (PL 9.1) Ensure that the covers are in place while doing the electrostatic adjustments. Refer to the CQ 26 HVPS Rap (Sect 3)
Voltage fluctuates from 800 to 1300 VDC	Shorting or arcing Precharge or Detack Corotron	Clean, repair, or replace the defective corotron (PL 8.6, Pl 9.2)
Voltage is constant, but is 1300 VDC or higher	Ground connection on the electrometer is not connected or is not functioning	Ensure that the electrometer is grounded correctly.
	Failed Precharge or Detack corotron.	Clean, repair, or replace the defective corotron (PL 8.6, Pl 9.2).

OF 6 Media Will Not Feed

Problem	Cause	Corrective Action
Media will not move into the Media Transport.	Media Feed Clutch is not functioning correctly.	Refer to the E - Paper Path Jam RAP.
	Upper Feed Roll stub shaft is slipping in the Drive Shaft. Make a mark across both shafts, and make a copy. If the the mark no longer lines up, the shaft is slipping	Replace the Upper Media Feed Roll (PL 8.1)
	Obstruction in the Turnaround Baffle.	Check the area for pieces of media or other material that may cause the media to jam.

OF 7 Fuser Heat Rod On at Power Up

Introduction

The Fuser Heat Rod remains on in Power Up Mode. This could also happen after replacing the Overheat Thermostat.

Procedure

The Fuser Heat Rod is on during the Power Up Mode

Y N

Go to the F- Fuser RAP.

Switch off the copier and disconnect the power cord. Disconnect the orange wire from the Fuser Triac (gate wire). Connect the power cord and switch on the copier.

The Heat Rod is off

Y N

Ensure that the Traic is wired correctly. If correct, replace the Traic (PL 1.1).

Switch off the copier and disconnect the power cord. Connect the orange wire on the Triac. Disconnect P/J 9 from the Control PWB. Connect the power cord and switch on the copier.

The Heat Rod is off

Y N

A B

A B

Ensure that the Triac is wired correctly. If correct, replace the LVPS (PL 1.2).

Ensure that the Triac is wired correctly. If correct, replace the Control PWB (PL 1.2).

3. Image Quality Repair Analysis Procedures

Section Contents

Copy Quality RAPS

How to Use the Image Defect Samples

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

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

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

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

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

NOTE: Some of the copy quality defect samples still show the old test pattern. Please disregard which test pattern is shown. The purpose of the samples is to show the defect, and not the test pattern.

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

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

Image Quality Definitions

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

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

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

Blank Copy
A copy entirely without an image.

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

(Continued)

Image Quality Definitions

(Continued)

Crystallization

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

Deletions

An area of the copy where information has been lost.

Density

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

Developer Bead Carryover

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

Fuser Fix

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

Image Distortion or Skew

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

Lichtenberg Spots

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

The Light Copy

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

Media Damage

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

Misregistration

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

Offsetting

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

Resolution

The uniformity or clarity of fine line detail.

Residual Image

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

Smear

Any copy defect that occurs from left to right sides.

Line Darkness

The darkness and uniformity for a line.

(Continued)

Image Quality Definitions
(Continued)

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

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

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

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

Image Quality Analysis RAP

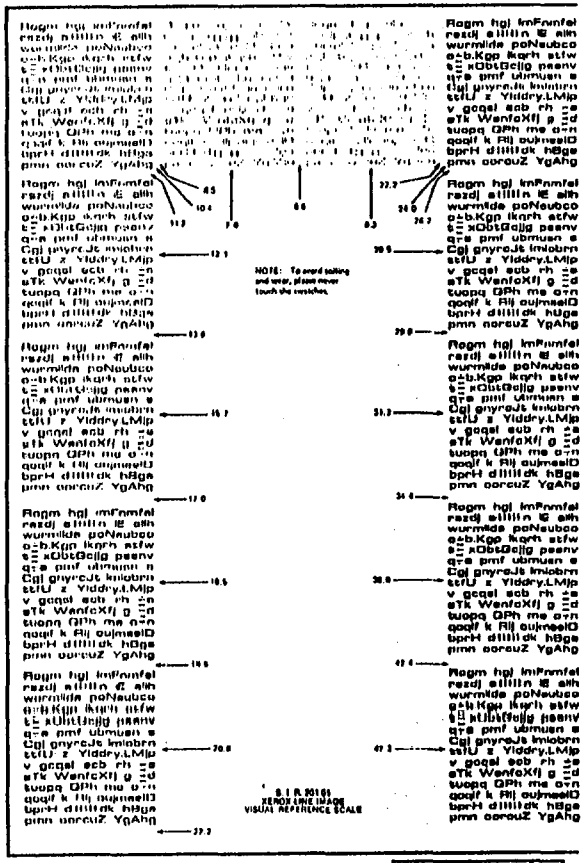
1. Make one D (A1) size copy on 20 lb bond paper of Test Pattern **82E5980** in the Copy Contrast Normal mode (the middle Copy Contrast lamp is lit).
   a. Evaluate the copy and ensure that the copy meets the Image Quality Specifications as specified in the Image Quality Specifications area of Section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

NOTE: Some of the copy quality defect samples still show the old test pattern. Please disregard which test pattern is shown. The purpose of the samples is to show the defect, and not the test pattern.

2. Make one D (A1) size copy on 20 lb bond paper of Test Pattern **82E5980** in each of the following Copy Contrast modes:
   a. Lightest (top Copy Contrast lamp lit)
   b. Normal (middle Copy Contrast lamp lit)
   c. Darkest (bottom Copy Contrast lamp lit)
3. Compare the copies for differences in image darkness. If two or more copies are the same, go to the CQ 25 Developer Bias RAP.
4. Go to the Maintenance Activities located in Section 1.

Image Reference Scale 82E7030

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

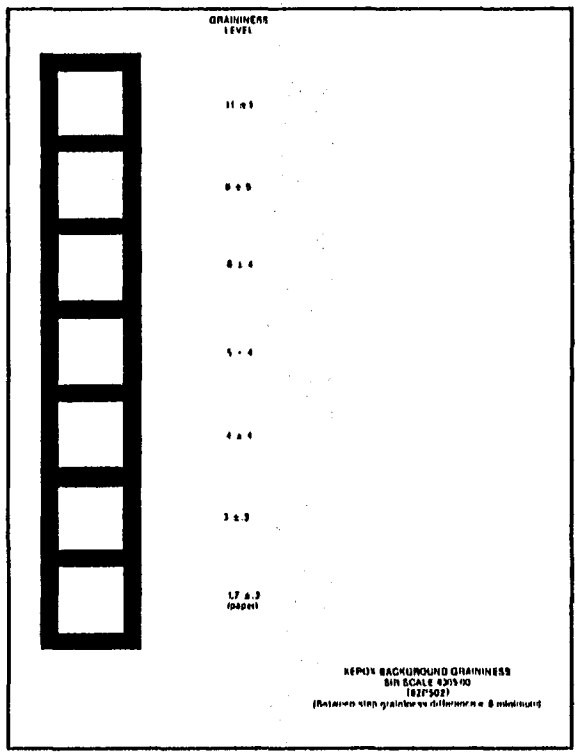


0	1797	A
OJR	SM 3	M	0

Figure 1. Image Reference Scale 82E7030

Xerox Background Grainness SIR Scale 82P502

82P502, (Figure 2) is used to evaluate the amount of background.



0	1798	A
OJR	SM 3	M	0

Figure 2. Xerox Background Scale 82P502 (Continued)

Test Pattern 82E5980

This test pattern is the standard test pattern used for the evaluation of the copy quality of the 2510 or 2515 copier. Copies of this test pattern are evaluated against the specifications listed in this section.

The Test Pattern (Figure 2) is used to evaluate line darkness, skips and smears, registration, skew, resolution, exposure level, lead edge registration, and magnification.

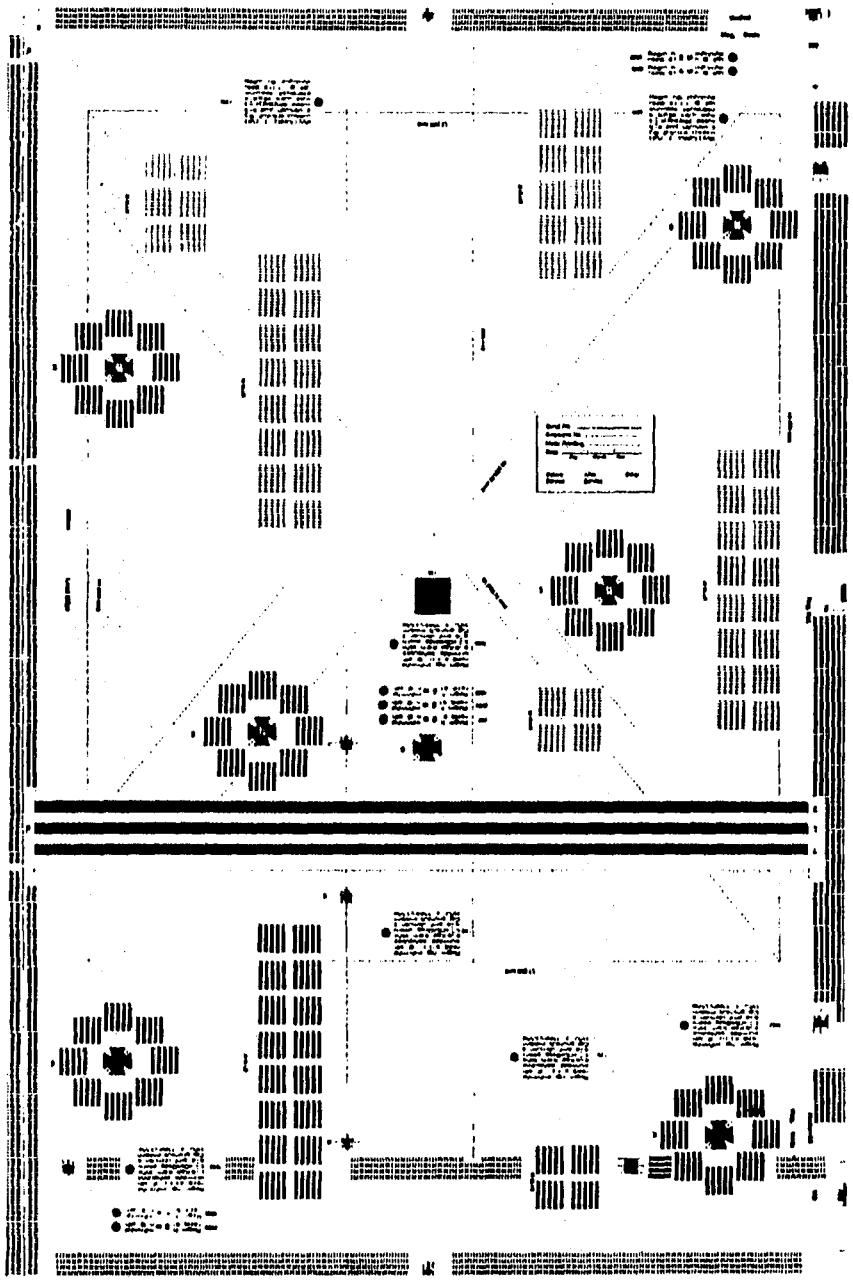


Figure 2. Test Pattern 82E5980

Line Darkness

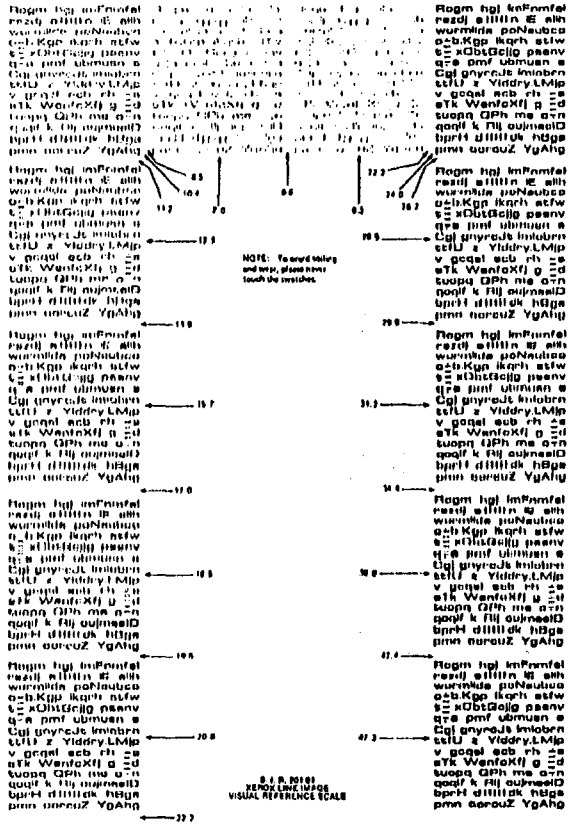
The copy of the 0.70G5 pattern in the center of test pattern 82E5980 should be between paragraphs 28. 5 and 34.4 on S.I.R test pattern 82E7030.

Uniformity

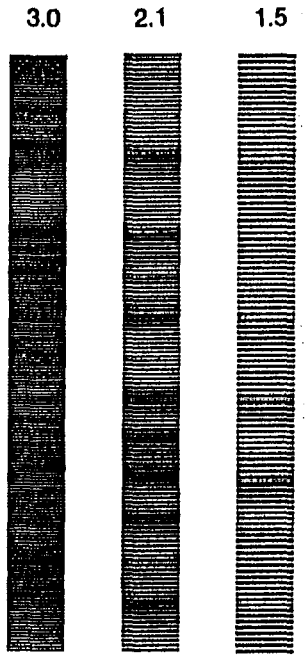
The copy of the 0.70G2 and 0.70G6 patterns of test pattern 82E5980 should be between 28.5 and 34.4 on test pattern 82E7030 when location 0.70G5 is at 28.5.

Skips and Smears

The 1.5 line pair per millimetre array on the Test Pattern 82E5980 must be completely resolved. The 2.1 line pair per millimetre can be completely resolved except for one part.



0	1797		A
0/R	SM 3	M	0

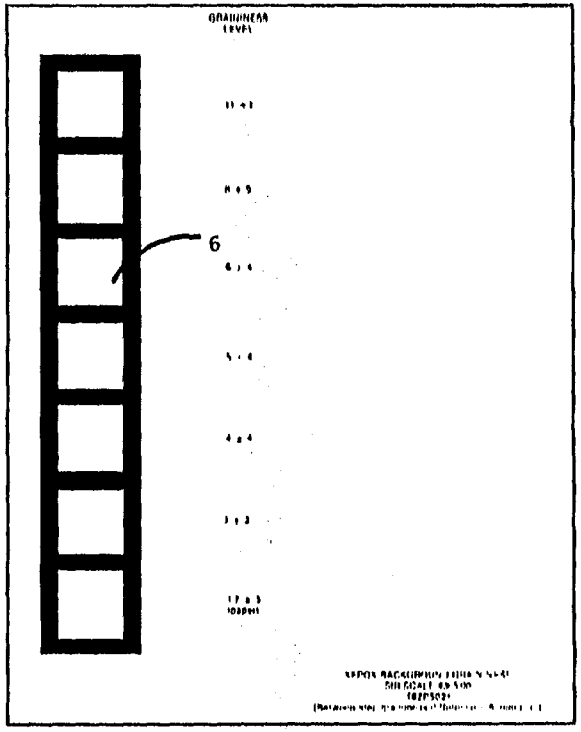


0	1168		A
0/R	SM 3	X	0

Background

Background must be less than the background of the 6.0 patch on the Background Grainness SIR Scale 82P502.

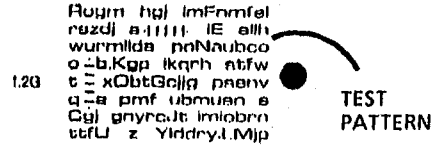
NOTE: Evaluate the worst areas on the copy.

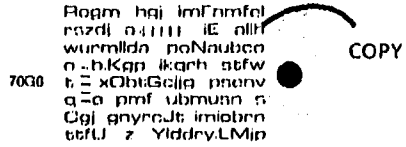


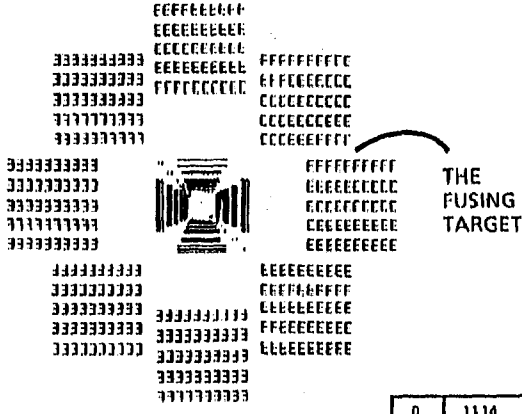
0	TR1798	A
OJR	SM 3 M	0

Fusing

Ensure that the 0.70G5 pattern in the center of test pattern 82E5980 is between paragraphs 28.5 and 34.4 on S.I.R test pattern 82E7030. Check the fusing targets (1), (2), (3), (4), (6), and (7). Gently rub the targets four times with a paper towel (twice top-to-bottom and twice side-to-side). The image must not wipe off of the copy.



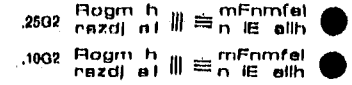




0	1114	A
OJR	SM 3 M	0

Exposure Level

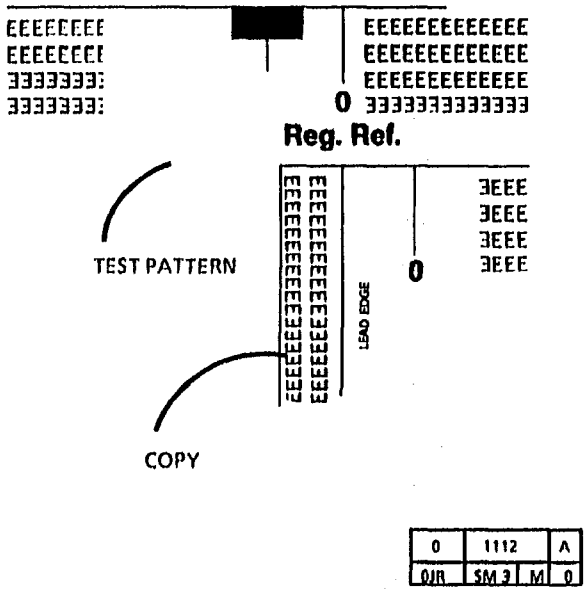
The 0.10G line pair targets on the copies of the 82E5980 Test Pattern should be lightly visible at only one of the 0.10G2, 0.10G5, and 0.10G6 patterns.



0	1116	A
OJR	SM 3 M	0

Lead Edge Registration

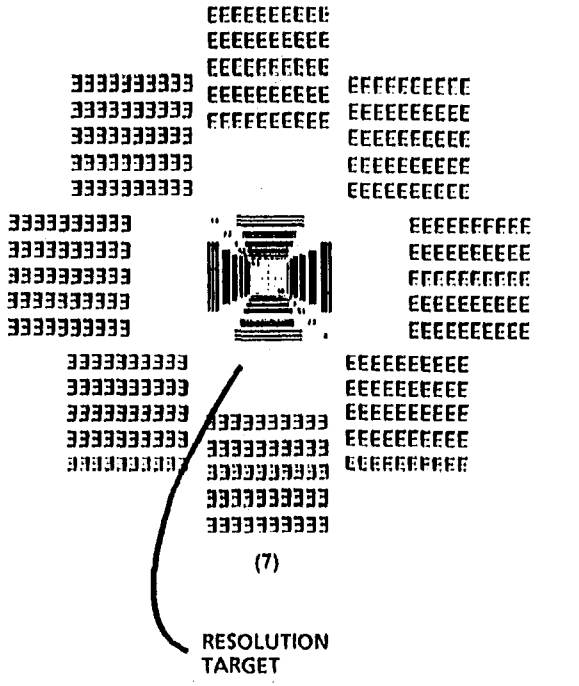
When the Lead Edge reference line on the copy is aligned with the 0 reference line on the test pattern, the lead edge of the copies of the 82E5980 test pattern must be within the black box on test pattern 82E5980.



0	1112	A
OJR	SM 3 M	0

Resolution

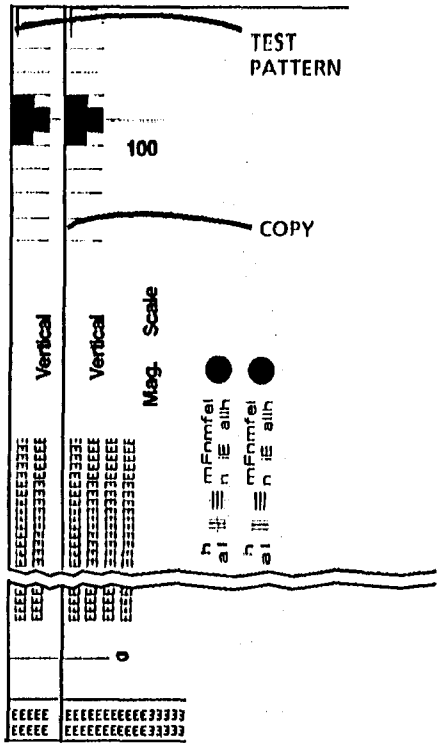
The copies of the 82E5980 test pattern must exhibit 100% of the 2.5 line pairs in each direction and 50% of the 3.5 line pairs in each direction. Check the resolution targets at the (1), (2), (5), (6), and (7) patterns.



0	1134	A
OJR	SM 3 M	0

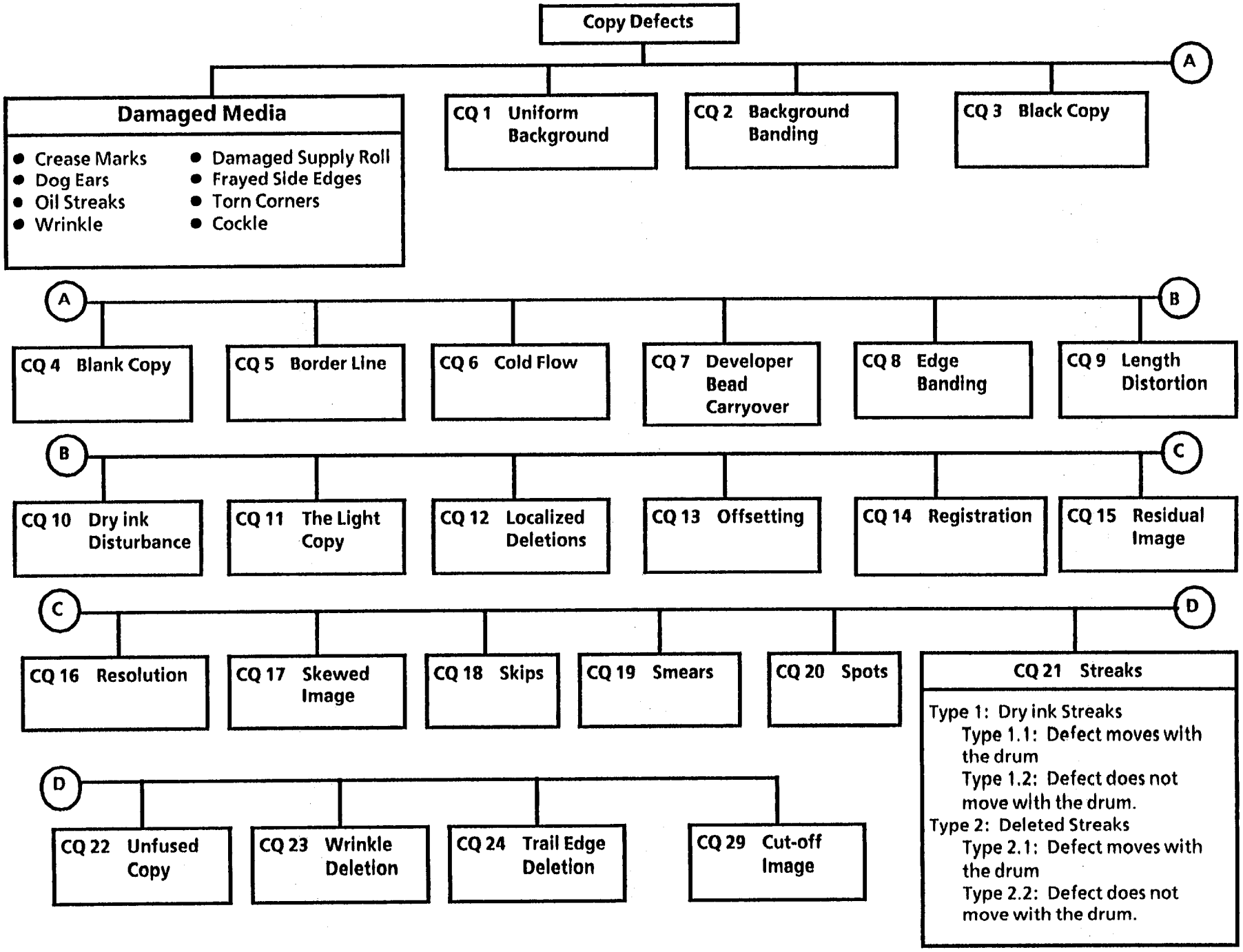
Vertical Magnification

Align the 0 reference line of the copy with the 0 reference line of the 82E5980 test pattern.
The 100 reference line of the Vertical Mag. Scale on the copy must be within the wide black area at the 100 reference line on the 82E5980 test pattern.



0	1115	A
OJR	SM 3 M	0

NOTES



Copy Defect Flowchart

Notes:

Damaged Media RAP	Probable Cause	Corrective Action
1. **Crease Marks** A thin irregular line on the media because of stressing the media.	1. This defect can be caused by handling the media incorrectly.	1. Ensure that the media is stored correctly and is not folded or creased when inserted in the copier.
2. **Damaged Supply Roll** There could be a flattened area at one end of the roll.	2. Rolled media was not handled correctly and could have fallen on a hard surface during handling of the roll.	2. Replace the media roll.
3. **Dog Ears** A corner of the lead edge of the copy has been bent back.	3. Curled or roll cut media. Detack corotron	3. Use the cut sheet media. Check for an obstruction caused by the detack corotron.
4. **Frayed Side Edge** This is damage to the sides of the copy.	4. Damaged media supply roll. Incorrect media side-to-side registration. Obstruction in the media path.	4. Replace the media roll. Ensure that the media is inserted between the guide marks on the media feed-in shelf. Check the media path for an obstruction.
5. **Oil Streaks** Streaks on the copy.	5. Contamination or excessive amount of oil on the fuser oil pad and wick.	5. Clean or replace the oil pad (2510 REP 10.4, 2515 REP 10.5) and wick (2515 REP 10.5). 2510 adjust the oil dispense assembly (ADJ 10.2).

(Continued)

Damaged Media RAP (Continued)

	Probable Cause	Corrective Action
6. **Wrinkle** A severe case of creases that runs in the direction of media travel. This is damage, if it begins within the first 6 inches of the copy is probably caused by the Fuser subsystem. If the damage is located from the middle of the copy to the trail edge, it is most likely a Feed/Idler Roll area problem.	6. Damage or obstruction in the handling system for the media. Fuser oil is dispensed uneven. Fuser is too hot. Damp media. Fuser Pressure Plate or Media Guide Plate 2515 only PL 8.4) is damaged or incorrectly installed. Tightly rolled media. Fuser heat roll is damaged or contaminated. Damaged Latch Springs	6. Check the media path for an obstruction or damage. 2510 Check or adjust Oil Dispense Assembly (ADJ 10.2). Check/Adjust the Fuser Temperature (ADJ 10.1) Try a new media roll or a cut sheet. Replace the fuser roll (PL 10.2). Replace the Latch Springs (PL 9.2)
7. **Cockle** The media has a rough surface like an orange peel. This damage could be caused by the fuser subsystem.	7. Damage or obstruction in the handling system for the media. Fuser oil is dispensed uneven. Fuser is too hot. Damp media. Fuser Pressure Plate or Media Guide Plate (2515 only PL 8.4) is damaged or incorrectly installed. Tightly rolled media.	7. Check the media path for an obstruction or damage. 2510 Check or adjust Oil Dispense Assembly (ADJ 10.2). Check/Adjust the Fuser Temperature (ADJ 10.1) Try a new media roll or a cut sheet
8. **Other Damage**		8. If there are other defects that are on the copy, go to the Media Handling Problems on the following pages.

Media Handling Problems

Introduction

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

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

Pre-fuser jams
Copy quality defects
Physical distortion of media

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

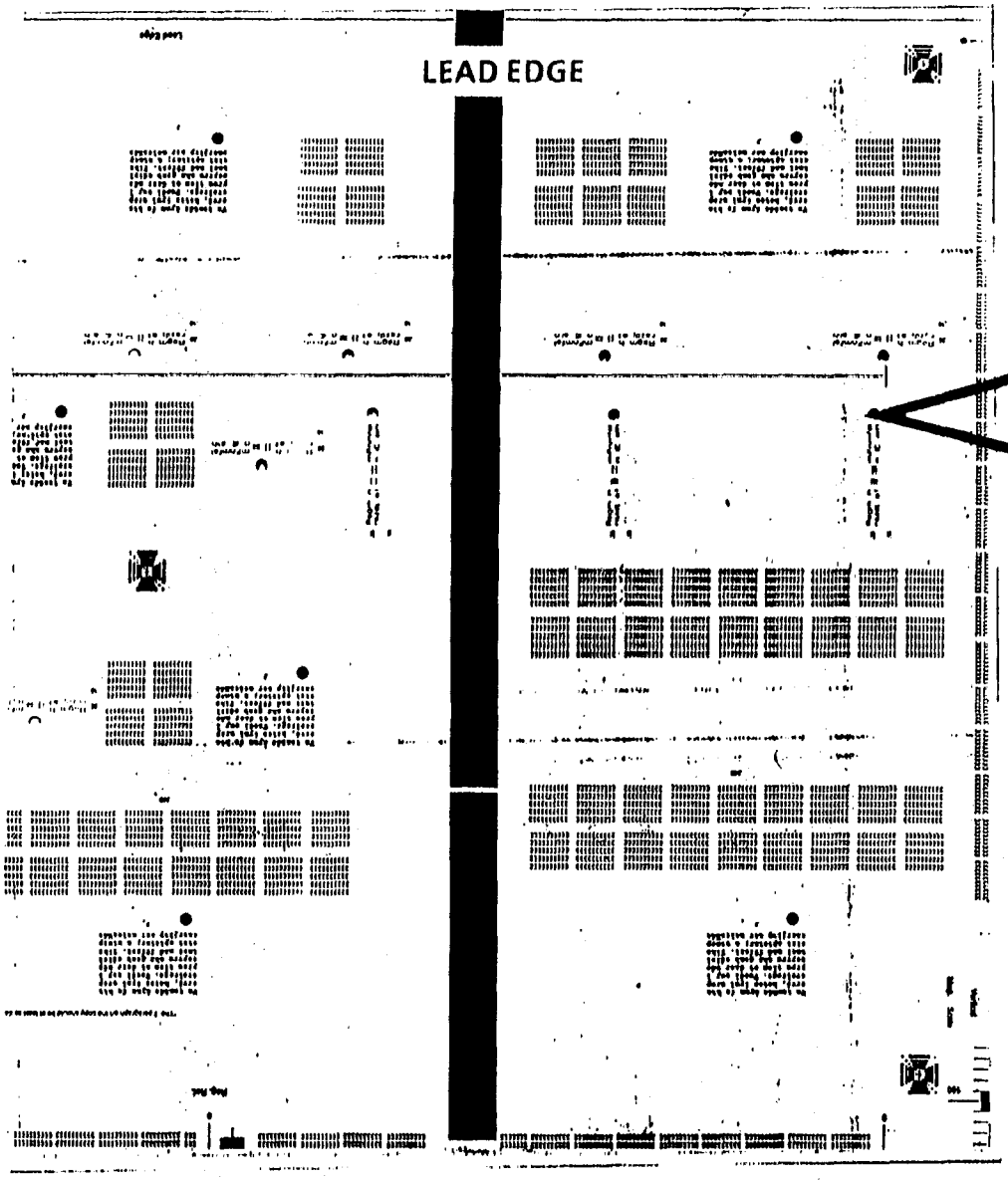
Media Check	Corrective Actions
1. Check the type of media:	
a. Some vellum (a tracing paper) or bond paper less than 20 lb perform with less reliability than Xerox 20 lb. media. Some film less than 0.004 inches thick will perform with less reliability.	a. Use the Xerox qualified media.
b. Other brands of media may have different design specifications than Xerox media and may not give acceptable performance in the 2510/2515 copiers.	b. After all media checks, test with fresh Xerox media. Use the "Media Messages" booklet to explain differences to the customer.
c. Erasable media has chemicals which, when heated, gives off a gas that contaminates copier components.	c. Xerox new and improved Zero Solvent Eraseable Vellum is acceptable with limited use. Use should be limited to 15% or less of the monthly copy volume.
2. Check the storage of media:	
a. Media that is exposed to the environment may have damp areas.	a. Suggest that the customer use the package in which the Xerox media is shipped.
b. Media may have curled ends or taken a set from storing the media on end.	b. Suggest that the customer store the media flat.

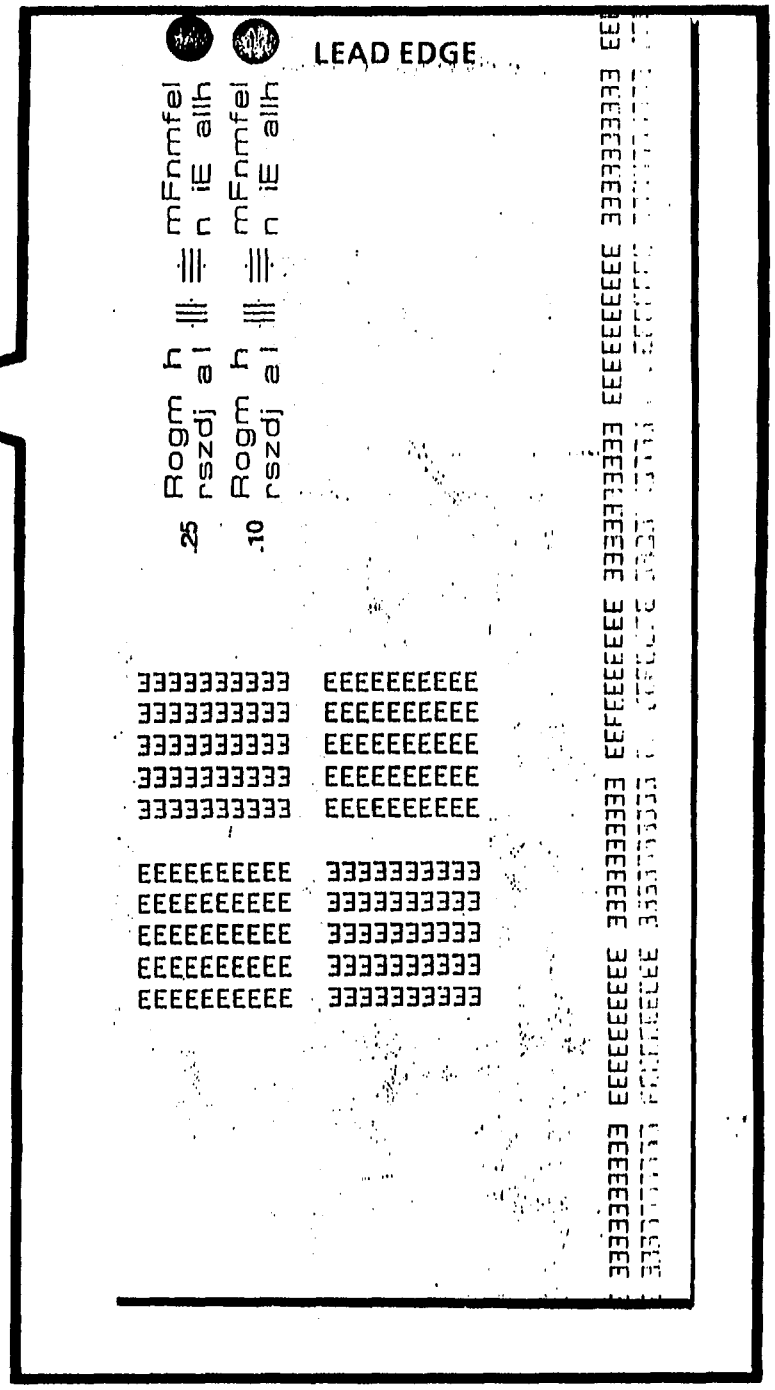
(Continued)

Media Check	Corrective Actions
3. Check the grain direction of media: a. Media with the grain direction perpendicular to the feed direction will have fewer wrinkles and jams than media fed with grain parallel to the feed direction.	a. Try feeding the media in the correct grain direction. As of mid April 1987, Xerox "cut corner" media of size C or larger will have the grain in the correct direction.
b. To test for grain direction, tear a corner from a sheet of media, moisten one side, and the media will curl. Place your finger in the curl, place the piece in the sheet, and your finger will point in the direction of the grain.	b. Roll cut media can only be made with the grain in the process direction
Copier Check	
4. Ensure that fuser temperature is set to specification. (Fuser temperature that is too high will cause the media to shrink or wrinkle.)	4 Clean the thermistor, and ensure that the thermistor is in contact with the fuser roll; perform Fuser Temperature Adjustment (ADJ 10.1).
5. An incorrect electrostatic value can cause jams or deletions.	5 Perform Electrostatic Series (2510 ADJ 9.2 ; 2515 ADJ 9.3).
6. Check, clean or replace the following components: a. Transfer/detack corotron (PL 8.6).	a. Check for contamination or dirt; clean or replace if necessary.
b. Bottom of xerographic module (plate located above transfer/detack corotron).	b. Clean the module with film remover. Dirt in this area causes dirty copies, smudges, and jams.
c. Oil dispense wick is clogged.	c. Check the oil pads (2510 REP 10.4; 2515 10.5); replace the wick (2515 REP 10.6) (2515 and 2510 W/Tag252 PL 10.5) (2510 W/O Tag 252 PL 10.4).

(Continued)

Copier Check	Corrective Action
6. Check, clean or replace the following components (continued):	
d. Fabric guide.	d. Replace the fabric guide (REP 8.4).
e. Fuser roll.	e. Replace the fuser roll (PL 10.2) if it is glazed or contaminated. Before replacing, try to removing glaze using a 220 to 300 grit abrasive paper; refer to Section 6, General Procedures, Sanding the Heat Roll).
f. 2510/2515 Fuser pressure plate. 2515 Media guide plate	f. Check for correct position on pins, bent or damaged plate (2510 PL 8.2, 2515 PL 8.4).
g. Fabric guide tensioning assembly.	g. Ensure that the fabric guide tensioning assembly (2510 PL 8.2 2515 PL 8.4) is in the fully up position.
h. Weight rod is not centered in the fabric guide.	h. Center the weight rod.
I. Media transport module is not latched against the pins on the xerographic module.	i. Ensure that the media transport module is against the pins. Replace the latch springs if necessary.
j Media deflectors.	j Check the media deflectors for damage (2515 and 2510 W/Tag252 PL 10.5).
k. Fuser stripper fingers	k. Ensure that the fuser stripper fingers (2515 and 2510 W/Tag252 PL 10.5) (2510 W/O Tag 252 PL 10.4) are not damaged.
l. Excessive oil	l. Check the oil pads (2510 REP 10.4; 2515 10.5); replace the wick (2515 REP 10.6) (2515 and 2510 W/Tag252 PL 10.5) (2510 W/O Tag 252 PL 10.4) .
7. After completing the previous checks, run several copies with dry Xerox media to verify that the problem is fixed or still exists. If the problem is fixed, perform the Final Actions.	





Definition

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

CQ 1 Uniform Background

Probable Cause	Corrective Action
1. Dirty transport platen, platen, exposure lamp, or lens.	1.Clean the transport platen and the platen with Anti-Static Fluid. If required, apply a small amount of film remover (USO) to a towel to remove excess contaminants from the lens and exposure lamp. Then apply Anti-Static Fluid to the towel and wipe the lens and exposure lamp.
2. Incorrect dry ink or developer is installed in the copier.	2. Ensure the Customer is using the correct dry ink.
3. Electrostatic voltages are out of specification.	3. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
4. Developer material has made more than 30K feet (9K metres) of copies.	4. Replace the developer material (REP 9.8) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
5. The cooling fans are not turning or they are defective or damaged.	5. Go to the 1.3 DC Cooling Fan Rap (2510 W/O Tag 5; 2515).
6. Photoreceptor drum is not being cleaned correctly.	6. Enter the diagnostic mode and then enter the code (L). Press ***Start*** and then ***Stop***. The cleaner blade solenoid should actuate. If not: Check the cleaner blade solenoid circuit on the following page.

(Continued)

Probable Cause

6. (Continued)

Corrective Action

6. Make a copy, after half of the copy has entered the copier press **Stop**. Remove the xerographic module. Observe the area on the photoreceptor drum between the charge corotron and approximately a quarter of the way down the drum to the start of the developed image. The drum should be totally clean. If the area is clean , continue with 6a, if not, go to 6b.

6a. Observe the developed image on the drum. There is high background in the non-image area, go to Step 7

6b. Check the following:

- Cleaner blade solenoid adjustment (ADJ 9.1).
- The cleaner blade weight moves freely and when fully transistioned, does not touch the frame. Ensure there is clearance.
- The cleaner blade assembly transitions across the photoreceptor drum.

Cleaner auger and drive belt turn freely.

Remove the photoreceptor drum and check the following for damage or contamination:

- Cleaner blade seal assembly (REP 9.4).
- Cleaner blade (REP 9.4).
- Cleaner blade retainers (REP 9.4).
- Drum seal.

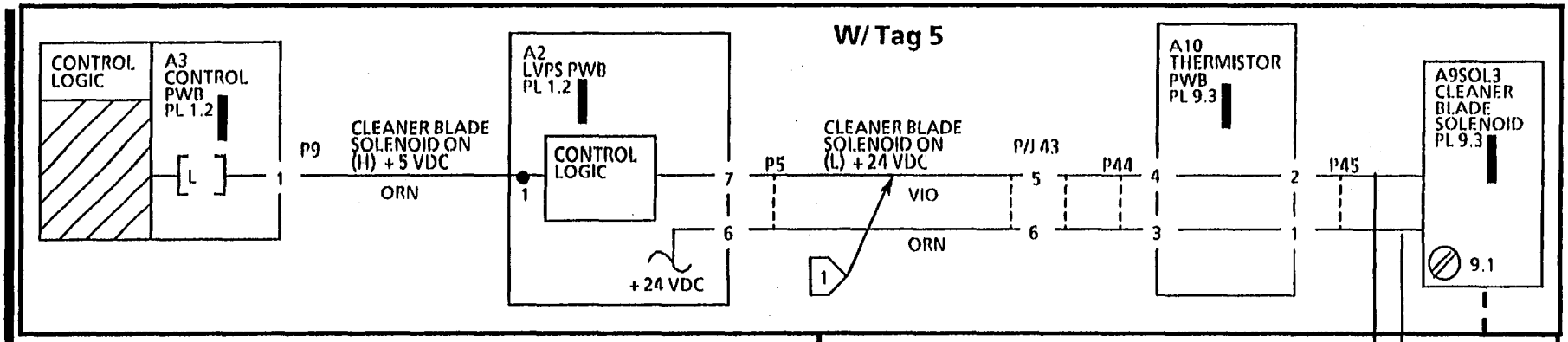
Reinstall the xerographic module. If the cleaning problem is not corrected replace cleaner blade (REP 9.4).

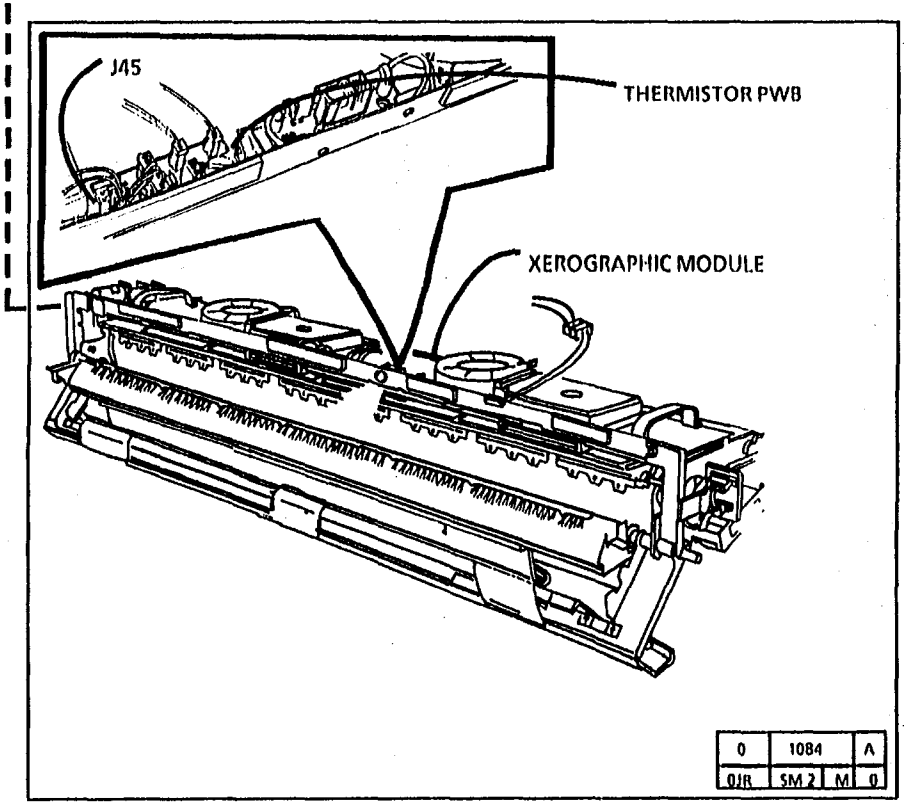
(Continued)

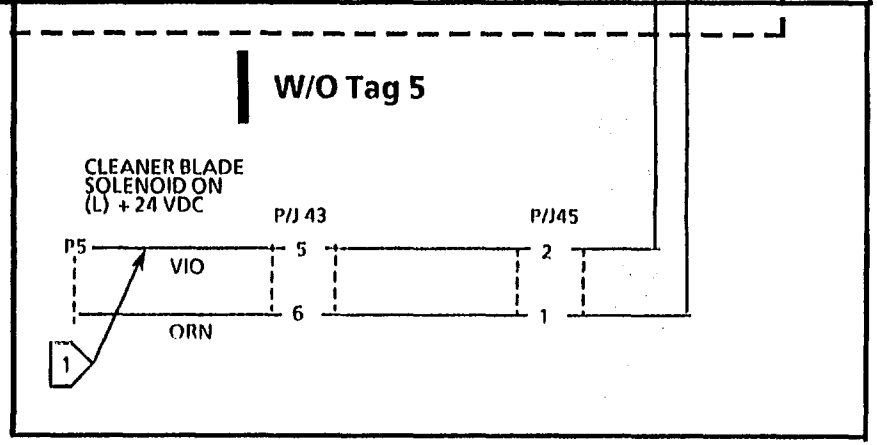
Probable Cause	Corrective Action
7. Toner is being deposited in the non-image area of the photoreceptor drum. a. Developer bias voltage is not correct.	a. **(2510, 2515 W/O Tag 2, 7, or 89):** Enter the diagnostic mode. Enter the code **[L]**, press **Start**, enter the code **[g]**, press **Start**, enter the code **[J]**, press **Start**. Wait two minutes then enter the code **[A]**, press **Start**, enter the code **[C]**, press **Start**. Measure the developer bias voltage where the wire connects to the magnetic roll. The voltage is 200 ±20 VDC, if not go to CQ 25 Developer Bias RAP. **(2515 W/ Tag 2, 7, or 89):** Enter the diagnostic mode. Enter the code **[L]**, press **Start**. Enter the code **[A]**, press **Start**, enter the code **[C]**, press **Start**. Measure the developer bias voltage where the wire connects to the magnetic roll. The voltage is 200 ±20 VDC, if not go to CQ 25 Developer Bias RAP.
b. Toner concentration is too high	b. **(2515 W/ Tag 2, 7 or 89) :** Enter the diagnostic mode. Enter the code **[L]**, press **Start**. Enter the code **[A]**, press **Start**. Wait until the motor starts (approximately 30 seconds), then enter the code **[y]**, press **Start**. **(2515 W/ Tag 2 or 89)** If **[y]** is greater than 6, go to J High Toner RAP, Section 2. **(2515 W/ Tag 7)** If **[y]** is greater than 8, go to J High Toner RAP, Section 2

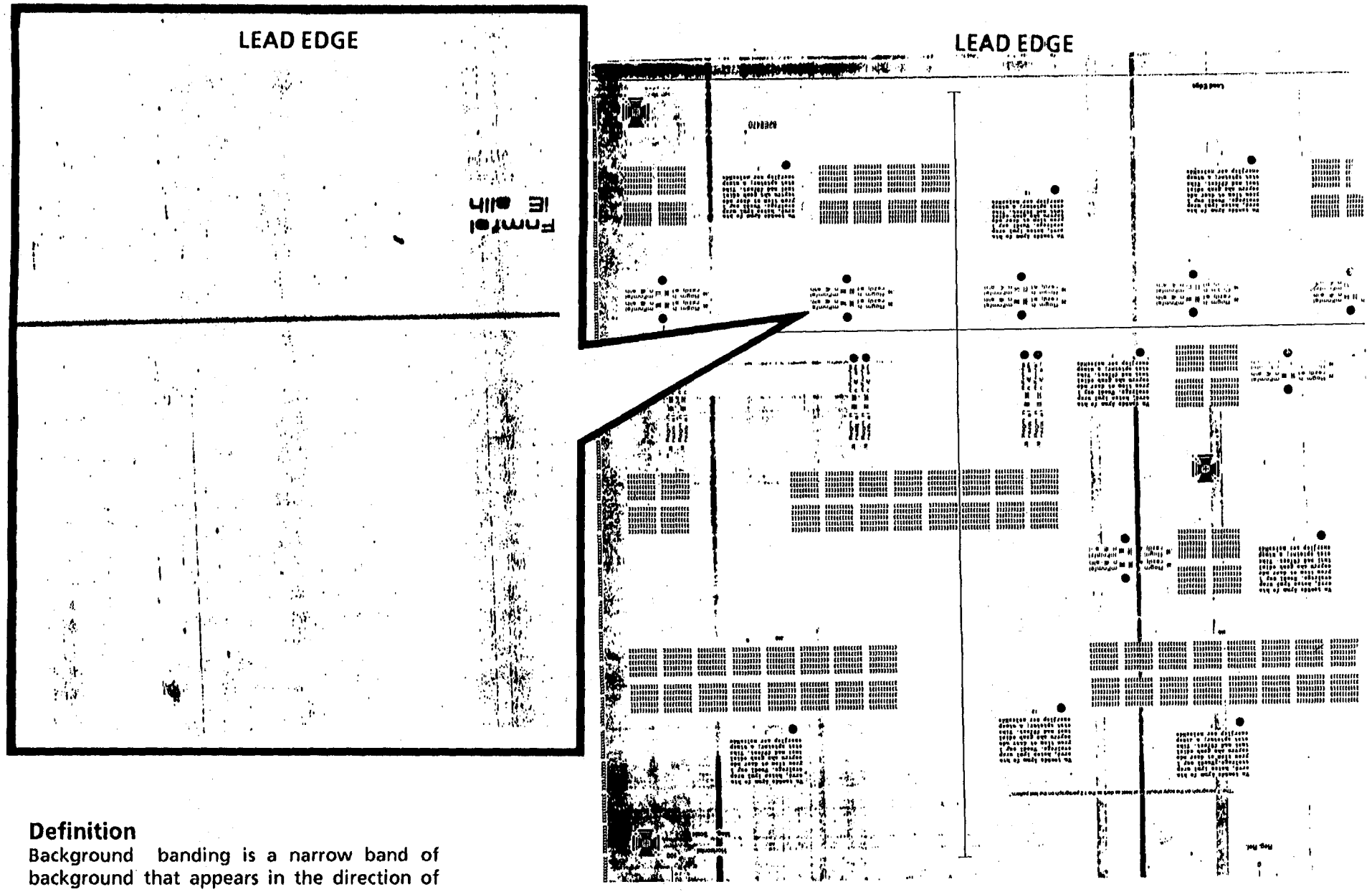
(Continued)

	Probable Cause	Corrective Action
(Continued)	b. Toner concentration is too high (Continued)	**(2515 W/O Tag 2, 7, or 89):** Enter the diagnostic mode. Enter the code [L], press Start, enter the code [g], press Start, enter the code [J], press Start. Enter the code [A], press Start. Wait until the motor starts (approximately 30 seconds), then enter the code [y], press Start. If [y] is greater than 6, go to the J - High Toner RAP. **(2510)** Move the Dispenser Adjustment Handle down one position and perform the detoning procedure in Section 6.
	c. **(2515)** Toner cartridge is not grounded correctly.	c. **(2515)** Using the multimeter, check that there is continuity between the cartridge and the copier frame or TP4. Check the ground clip is in contact with the cartridge. Check the wiring to the clip for a open. d. If this does not correct the problem, replace the developer material REP 9.9.
	8. Developer material is defective due to contamination.	8. Replace the developer material REP 9.9.


W/ Tag 5
CONTROL LOGIC
A3 CONTROL PWB PL 1.2
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
A2 LVPS PWB PL 1.2
CONTROL LOGIC
+ 24 VDC
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
P/J 43
P44
VIO
ORN
A10 THERMISTOR PWB PL 9.3
P45
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1


J45
THERMISTOR PWB
XEROGRAPHIC MODULE
0
1084
A
0/R
SM 2
M
0


W/O Tag 5
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
P/J 43
P/J45
VIO
ORN



Definition

Background banding is a narrow band of background that appears in the direction of media feed.

CQ 2 Background Banding/ Streaks

Probable Cause

1. Dirty transport platen, platen, exposure lamp, or lens.

2. Dry ink on corotron.

3. The cleaner blade is not correctly cleaning the photoreceptor drum.

Corrective Action

1. Clean the transport platen and the platen with Anti-Static Fluid.
   If required, apply a small amount of Film Remover (USO) onto a towel to remove excess contaminants from the lens and exposure lamp. Then apply Anti-Static Fluid to the towel and wipe the lens and exposure lamp.

2. Clean, repair, or replace the corotrons and then perform the Electrostatic Series (2510 ADJ 9.2; 2515 9.3).

3. Enter the diagnostic mode and then enter code [L]. Press ***Start*** and then ***Stop***. The cleaner blade solenoid should actuate. If not:

   Check the cleaner blade solenoid circuit on the following page.

   Remove the xerographic module. Check the following:

   Cleaner blade solenoid adjustment (ADJ 9.1).

   The cleaner blade weight moves freely and when fully transistioned, does not touch the frame. Ensure there is clearance.

   The cleaner blade assembly transitions across the photoreceptor drum.

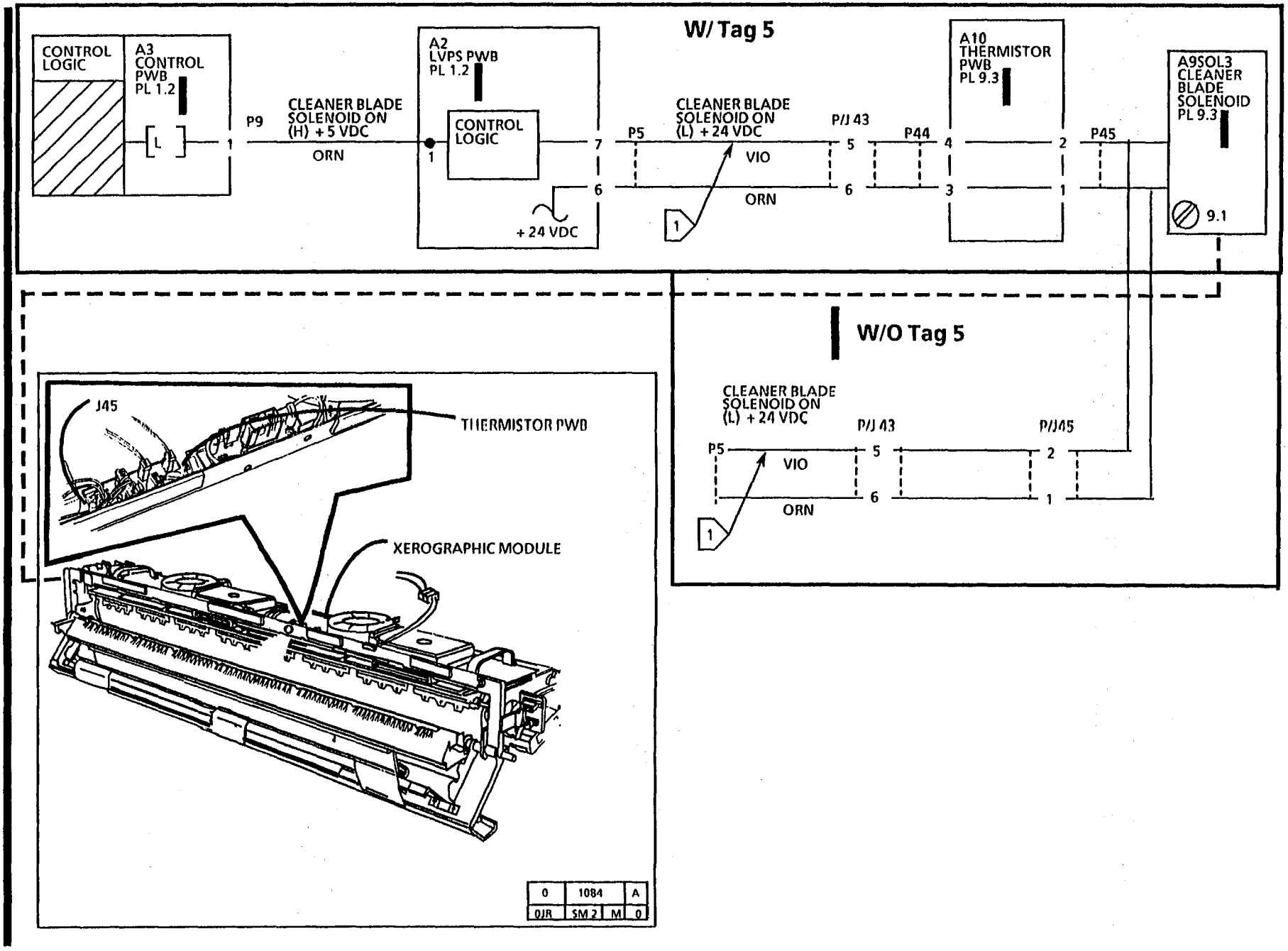
   No wires are interfering with the cleaner blade weight.

   Cleaner auger and belt.

(Continued)

Notes:

CQ 2 Background Banding/ Streaks


W/ Tag 5
CONTROL LOGIC
A3 CONTROL PWB PL 1.2
L
1
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
A2 LVPS PWB PL 1.2
CONTROL LOGIC
1
7
6
+ 24 VDC
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
VIO
ORN
1
P/J 43
5
6
P44
4
3
A10 THERMISTOR PWB PL 9.3
2
1
P45
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1
W/O Tag 5
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
VIO
ORN
1
P/J 43
5
6
P/J45
2
1
J45
THERMISTOR PWB
XEROGRAPHIC MODULE
0
1084
A
0JR
SM 2
M
0

Probable Cause	Corrective Action
3. Photoreceptor drum is not being cleaned correctly. (Continued)	3. (Continued) Remove the photoreceptor drum and check the following for damage or contamination: Cleaner blade seal assembly (REP 9.4). Cleaner blade (REP 9.4). Cleaner blade retainers (REP 9.4). Drum seal. If the cleaning problem persists change the cleaner blade (REP 9.4).
4. Contaminated or damaged photoreceptor drum.	4. Wash the photoreceptor drum (General Procedures). If this does not remove the contamination, replace the photoreceptor drum (REP 9.3). If the photoreceptor drum is damaged, determine the cause of the damage before replacing the photoreceptor drum. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
5. The lower document feed rolls are contaminated.	5. Clean the feed rolls with: USO or XLA Formula A Cleaner.
6. (2510 only) Uneven distribution of dry ink within the developer housing.	6. Remove the dry ink cartridge and inspect the cartridge for damage. Replace the cartridge if it is damaged. If there is no damage, shake the cartridge side-to-side to evenly distribute the dry ink. Reinstall the cartridge. While holding the drive side of the cartridge, rotate the cartridge one revolution and ensure that dry ink is being dispensed from each hole in the cartridge.

Probable Cause	Corrective Action
7. Uneven distribution of developer material within the developer housing.	7. Ensure that the copier is level front-to-back and side-to-side. (2510 ONLY) Ensure that the mixing auger is aligned with the holes in the developer manifold. If not, rebuild the Developer Housing. (PL 9.4)
8. The media path components are contaminated.	8. Clean the areas on the transport module and xerographic module that could come in contact with the media.
9. Dry ink concentration is too high.	9. Remove the dry ink cartridge and inspect for damage and dry ink leakage. If the cartridge is damaged, replace cartridge and waste bottle (PL 9.1). (2510 ONLY): Check the position of the darkness lever (fourth position from the bottom). Lowering the lever reduces the dispense rate of the dry ink. (2515 ONLY): If the problem still exists, perform the Detoning Procedure in the General Procedures Section . (2515 ONLY): Go to the J High Toner Concentration RAP, Section 2. If this is not successful, replace the developer material and waste bottle. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
10. The cooling fans are not turning or they are defective or damaged.	10. Go to the 1.3 Cooling Fan RAP in Section 2.
11. The ozone filters are contaminated or pluged.	11. Replace the ozone filters.
	12. If the problem still exists, go to the CQ 1 Uniform Background RAP.

CQ 3 Black Copy

No copy defect sample is needed.

Definition

The entire copy is black and there is no image.

Probable Cause

1. Exposure lamp does not light.
2. Reversed connections to the illumination sensor.

Corrective Action

1. Go to the CQ 27 Exposure RAP.
2. Go to the circuit diagram in the CQ 27 Exposure RAP and check the wiring to the illumination sensor.

Notes:

Initial Action

Perform the Image On Drum (Panic Stop) Procedure (General Procedures). If there is an image on the drum, the problem is in the image transfer area. If there is no image, the problem is in the development area.

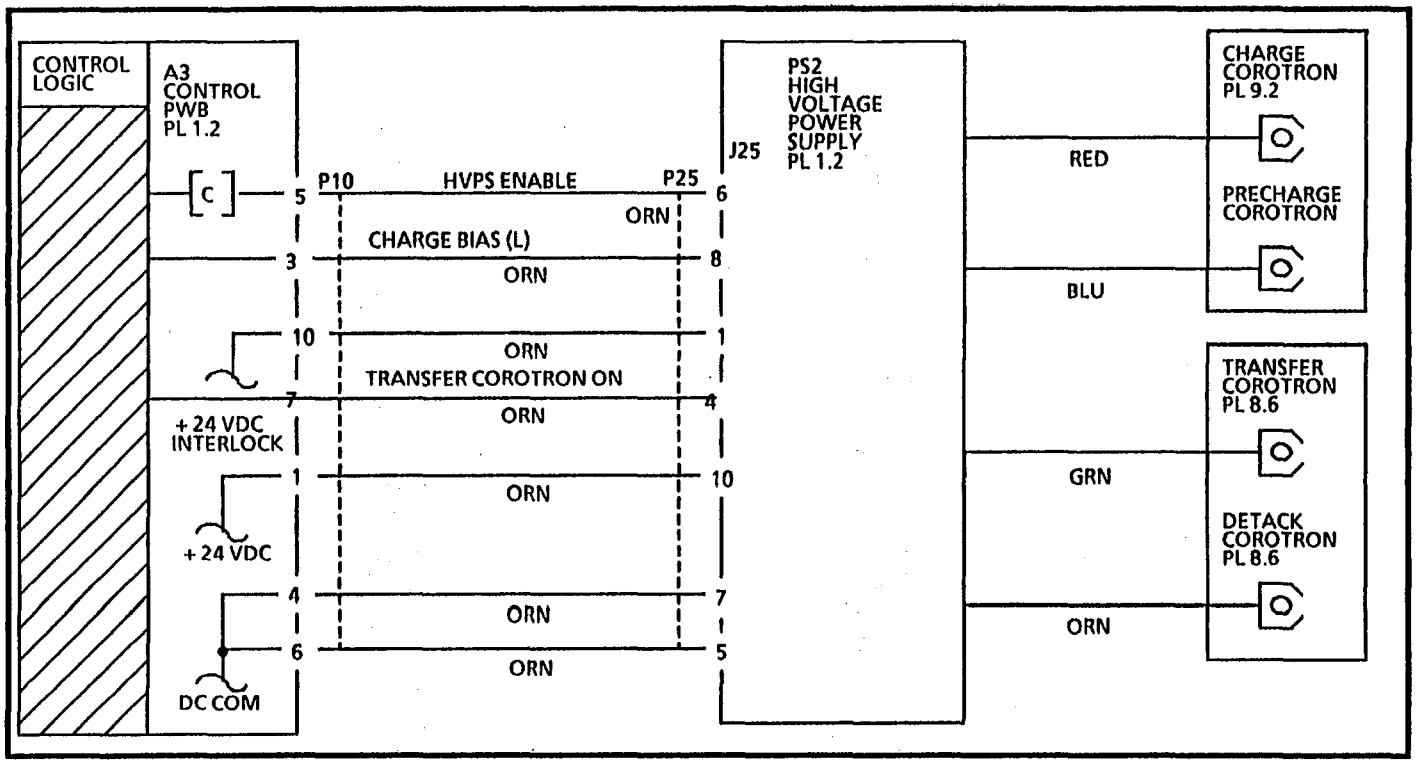
No copy defect sample is needed.

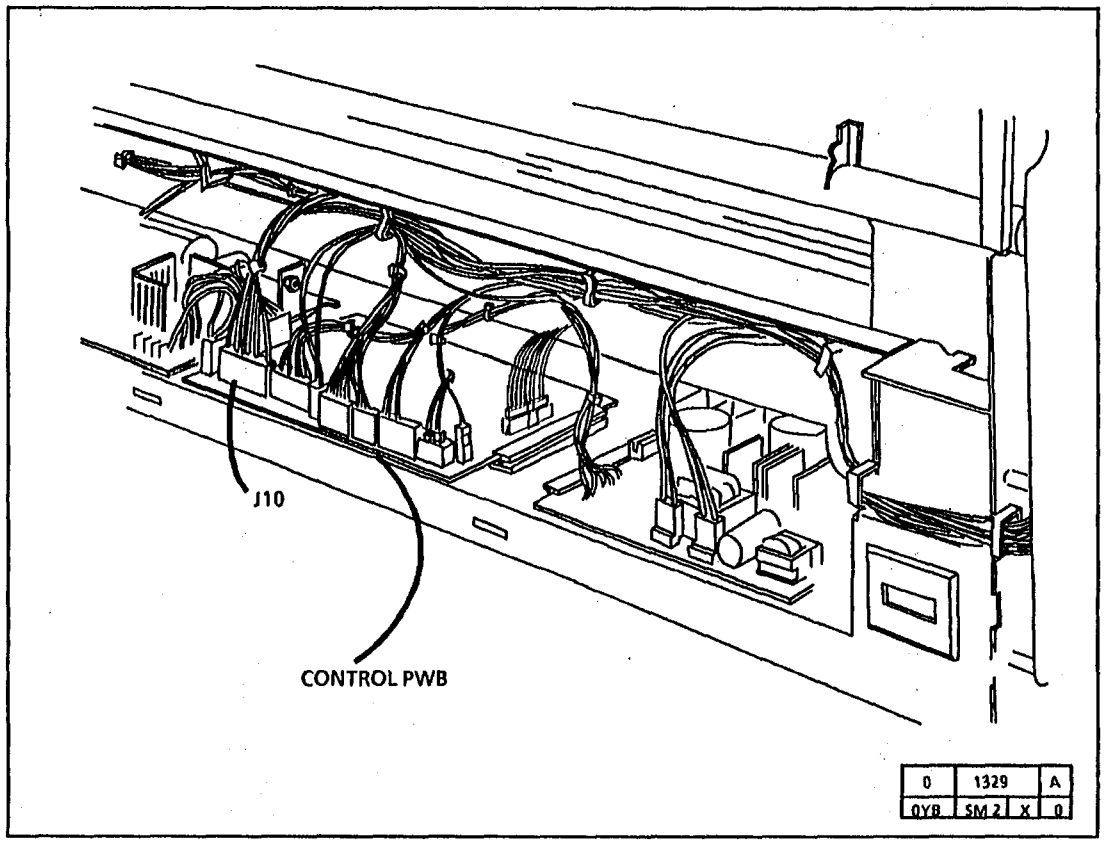
Definition

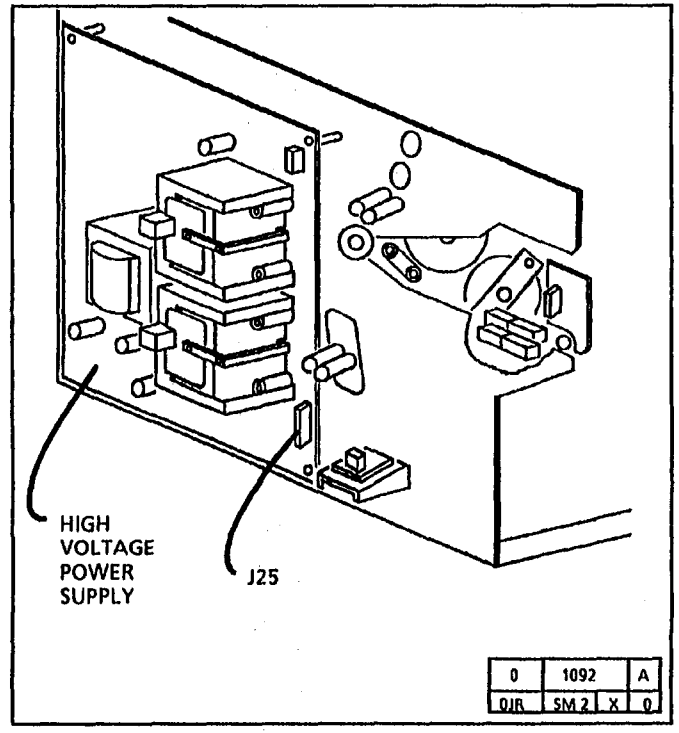
The entire copy has no image on it.

Probable Cause	Corrective Action
1. Dirty or defective corotrons.	1. Check that the high voltage leads are fully plugged into the corotrons. Clean, repair, or replace the corotron and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3)
2. Magnetic roll is not turning.	2. Check the developer drive for damage. Ensure that the idler gear (PL 1.1) is in the correct position.
3. No output from the HVPS.	3. Go to the CQ 26 HVPS RAP.
4. An electrostatic voltage is out of specification.	4. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3.)
5. TRANSFER COROTRON ON signal does not go low during transfer.	5. If the signal goes low, check the transfer corotron and the high voltage power supply. If the signal does not go low, replace the control PWB.

(Continued)


CONTROL LOGIC
A3 CONTROL PWB PL 1.2
C
5
P10
HVPS ENABLE
P25
6
ORN
CHARGE BIAS (L)
3
ORN
8
10
ORN
TRANSFER COROTRON ON
7
ORN
4
+24 VDC INTERLOCK
1
ORN
10
+24 VDC
4
ORN
7
6
ORN
5
DC COM
PS2 HIGH VOLTAGE POWER SUPPLY PL 1.2
J25
RED
BLU
GRN
ORN
CHARGE COROTRON PL 9.2
PRECHARGE COROTRON
TRANSFER COROTRON PL 8.6
DETACK COROTRON PL 8.6


J10
CONTROL PWB
0 1329 A
0YB SM 2 X 0


HIGH VOLTAGE POWER SUPPLY
J25
0 1092 A
0JR SM 2 X 0

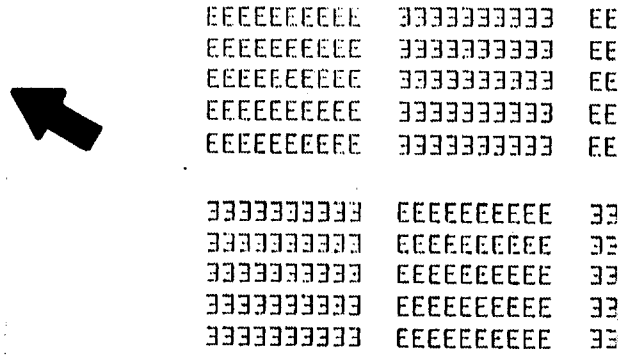
CQ 5 Border Line

Probable Cause

1. Registration is not adjusted correctly.
2. Document is smaller than the copy media.

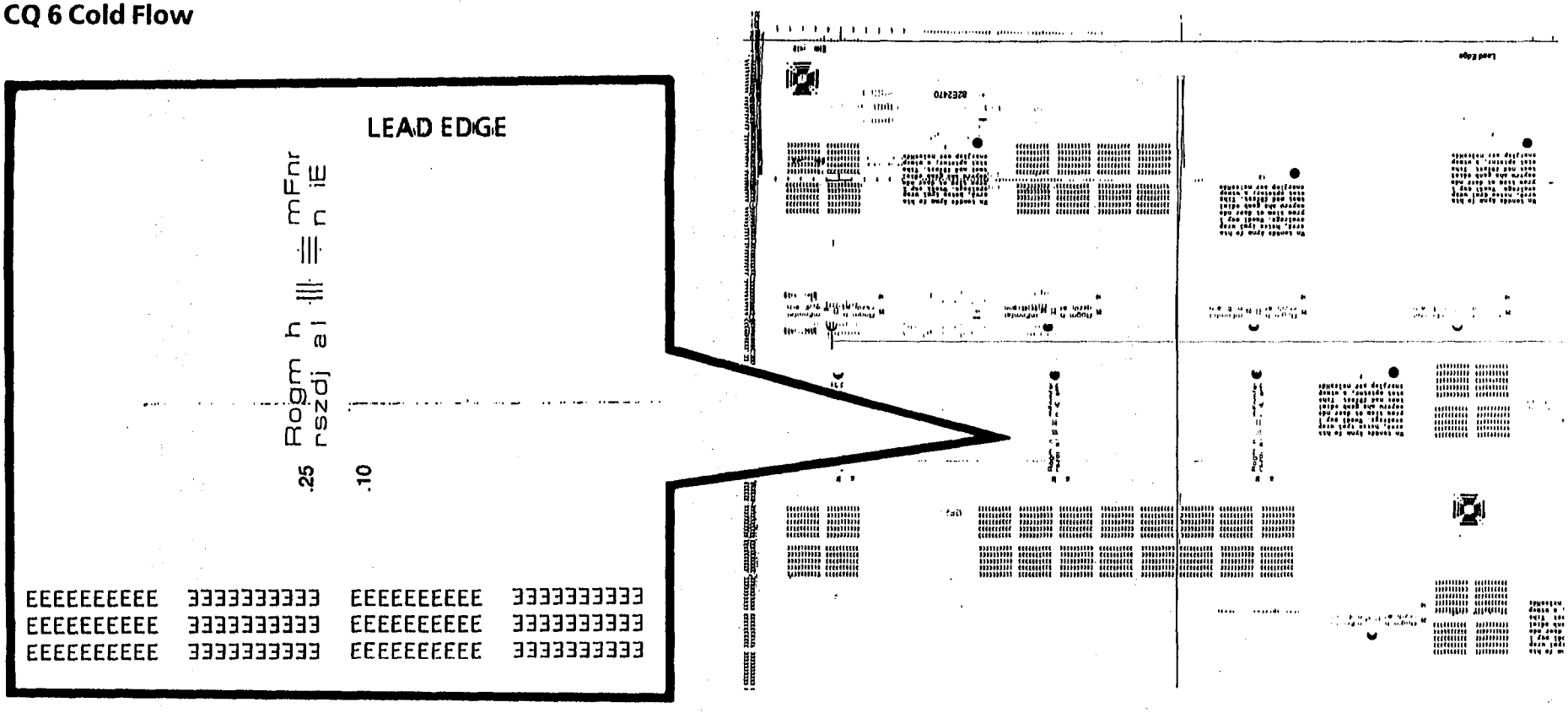
Corrective Action

1. Adjust Registration (ADJ 8.1).
2. This is normal operation. If the document is smaller than the copy media, then the edges of the document will be copied. If this is not acceptable, try either of the following:
   a. Cut the media to the same size as the document.
   b. Select the lightest setting on the Copy Contrast.



Definition

A border line is a line that appears on or near any edge of the copy.



Definition

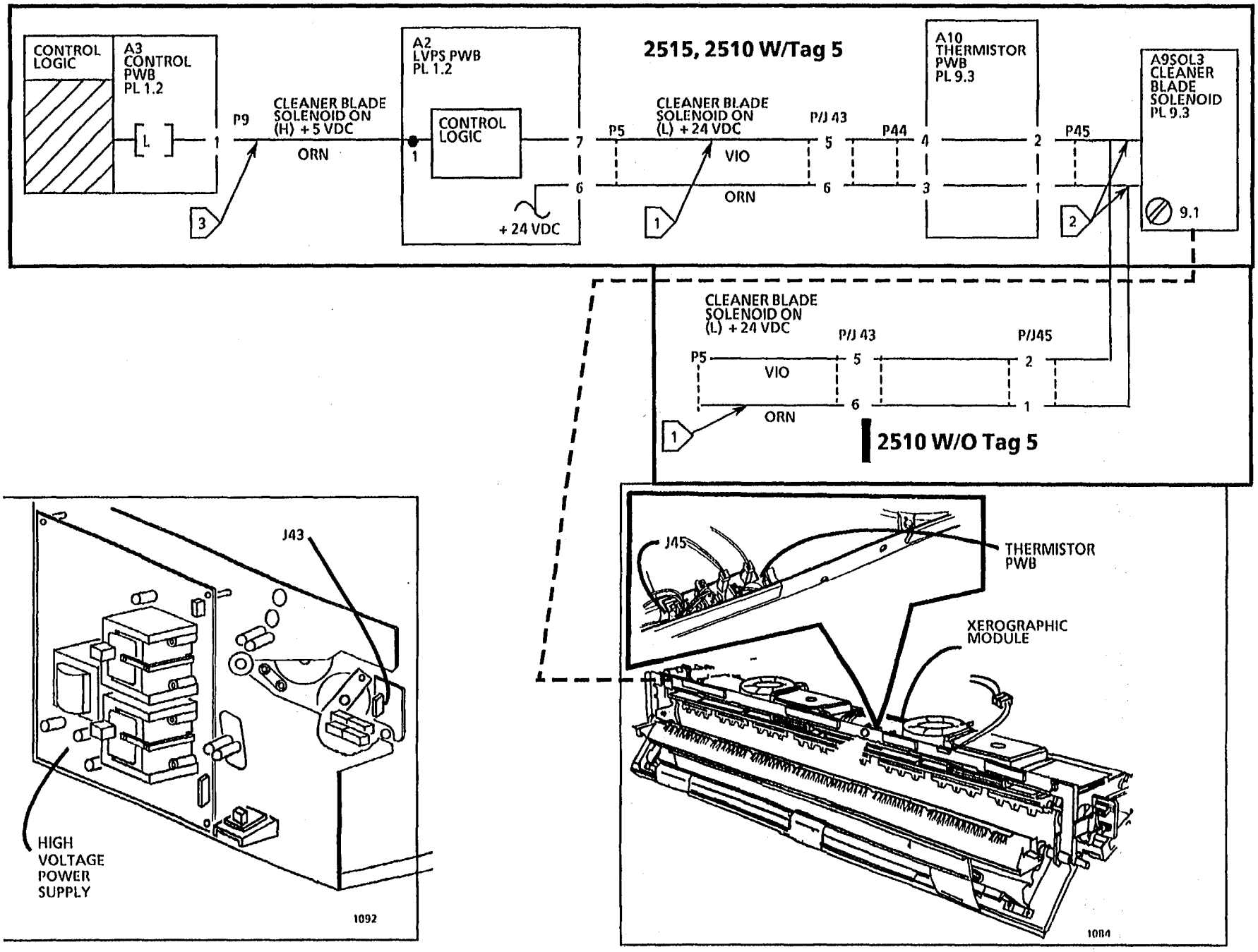
Cold Flow is a distortion in the selenium alloy coating on the photoreceptor drum. This defect can appear anywhere on the copy and will be perpendicular to the paper feed.

Probable Cause

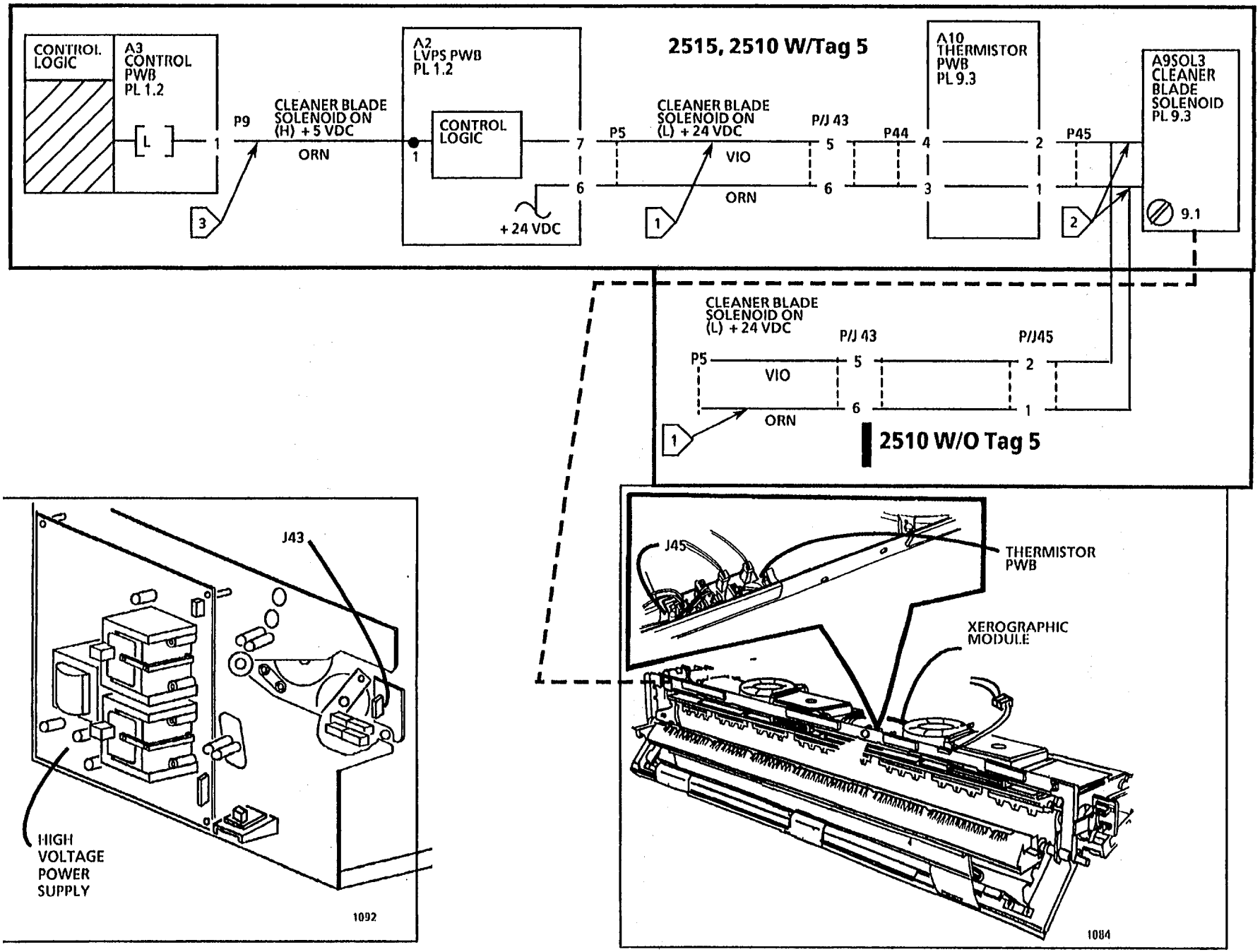
1. The cleaning blade is not being raised off the photoreceptor drum during the standby mode.

Corrective Action

1. Check the following:
   a. Adjustment of Cleaning Blade Solenoid (ADJ 9.1).
   b. Cleaning blade assembly (PL 9.2) for free movement.
2. Go to FLAG 1 and check the wiring for a short circuit to ground. If there is no short circuit, replace the cleaner blade solenoid.
3. Replace the photoreceptor drum (REP 9.3) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).


CONTROL LOGIC
A3 CONTROL PWB PL 1.2
L
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
A2 LVPS PWB PL 1.2
CONTROL LOGIC
+ 24 VDC
2515, 2510 W/Tag 5
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
P/J 43
P44
VIO
ORN
A10 THERMISTOR PWB PL 9.3
P45
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P/J 43
P/J45
P5
VIO
ORN
2510 W/O Tag 5
J43
HIGH VOLTAGE POWER SUPPLY
1092
J45
THERMISTOR PWB
XEROGRAPHIC MODULE
1084

Notes:


CONTROL LOGIC
A3 CONTROL PWB PL 1.2
L
1
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
3
A2 LVPS PWB PL 1.2
CONTROL LOGIC
1
7
6
+ 24 VDC
2515, 2510 W/Tag 5
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
VIO
ORN
1
P/J 43
5
6
P44
4
3
A10 THERMISTOR PWB PL 9.3
2
1
P45
2
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P5
VIO
ORN
1
P/J 43
5
6
P/J45
2
1
2510 W/O Tag 5
J43
HIGH VOLTAGE POWER SUPPLY
1092
J45
THERMISTOR PWB
XEROGRAPHIC MODULE
1084

CQ 7 Developer Bead Carryover

No copy defect sample is needed.

Probable Cause

1. Charge voltage on photoreceptor drum is too high.
2. Developer material has made more than 30K feet (9K metres) of copies.
3. The dry ink concentration in the developer is not high enough. This will cause the developer material to fail.
4. Developer material dumping onto Media Transport.

Corrective Action

1. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3.)
2. Replace the developer material (REP 9.8) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3.)
3. Replace the developer material (REP 9.8) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3.)
4. Ensure that photoreceptor drum is fully seated on the drum shaft and is not rotating out-of-round.

   Xerographic Module is moving away from the photoreceptor drum. Check that there is sufficient oil on the fuser. 2510 install Tag 24. 2515 ensure that the bracket that holds the right side of xerographic module is pushed against the drum shaft.

   Worn drive gears on the right side of the Developer Housing

   (2510 ONLY) The Magnetic Roll hub on the right side is damaged. Rebuild the Developer Housing

   The magnetic Roll surface is worn smooth. 2510 rebuild the Developer Housing, 2515 replace the Developer Housing.

   The Developer to Roll Spacing (DRS) is out of specification. Contact DTS to check using the DRS Tool.

   Trimmer bar gap is out of specification. Replace the Developer Housing.

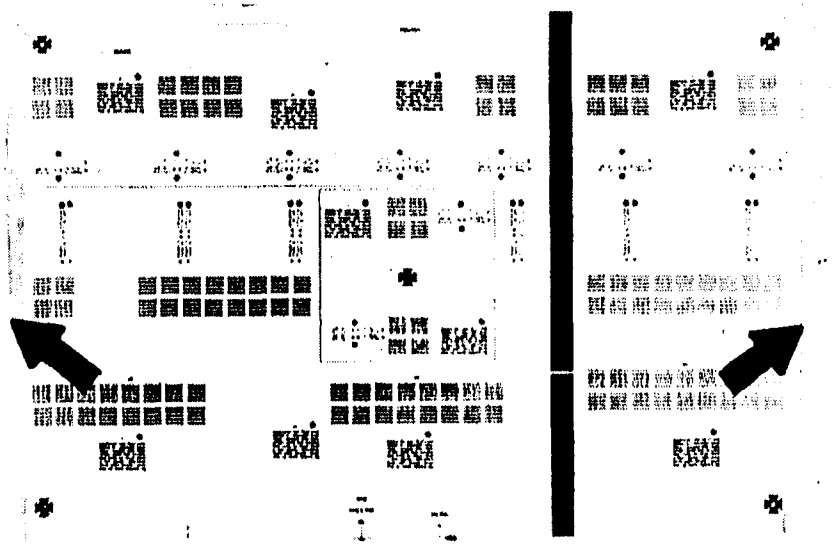
CQ 8 Edge Banding

Probable Cause

1. High background.
2. Photoreceptor drum is not being cleaned correctly.
3. Uneven distribution of developer material within the developer housing.
4. Uneven Charge Corotron voltage. Using the electrometer compare the voltage on the drum in the defect area with and area ouside the defect area. If significantly different, perform the corrective action.
5. Dirty optics.

Corrective Action

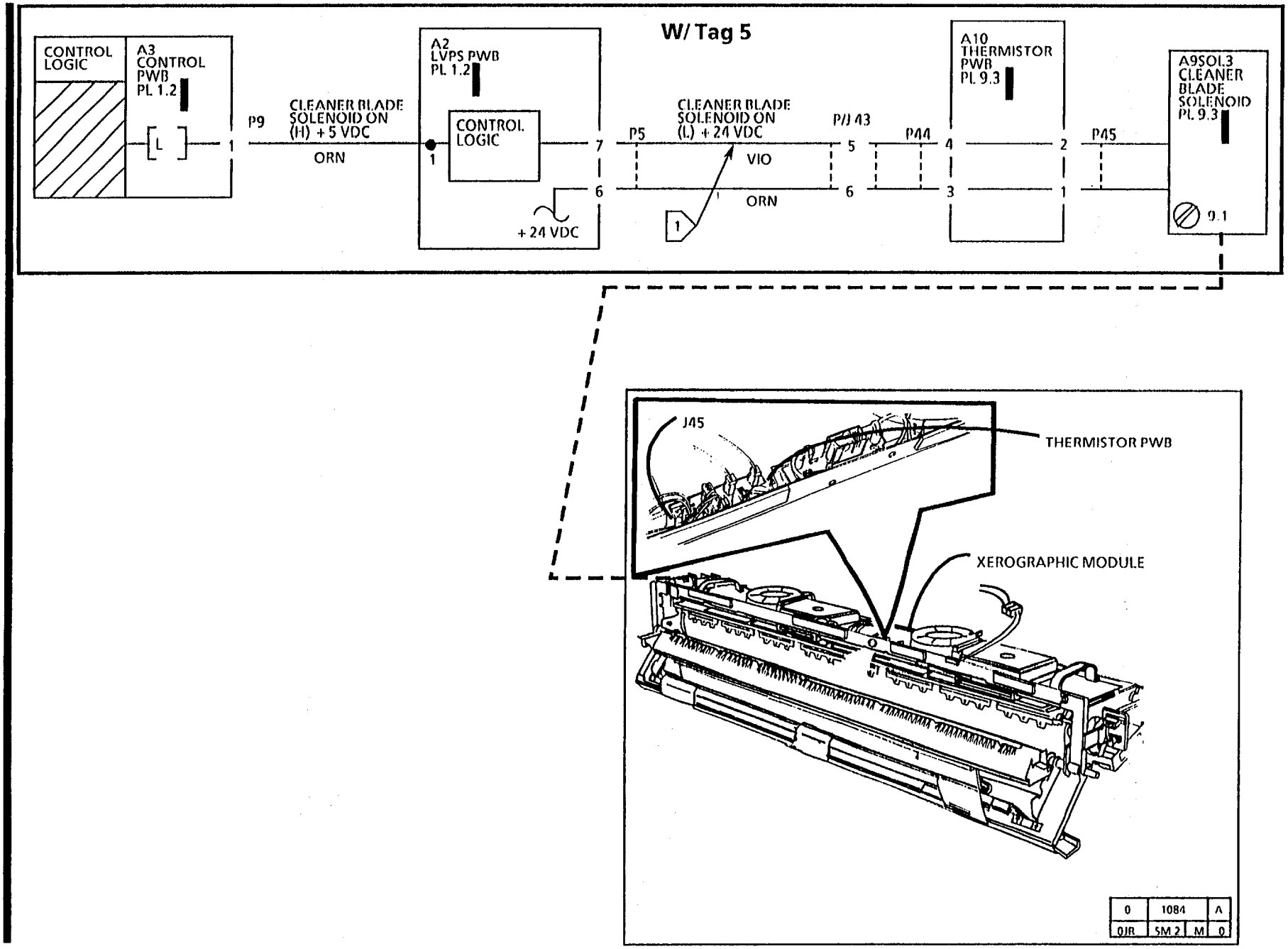
1. Go to the CQ 1 Uniform Background RAP.
2. Check the cleaning blade for damage (PL 9.3).
3. Ensure that the copier is level.
4. Clean, repair, or replace the corotron.
   Perform the Electrostatic Series ADJ 9.2.
5. Clean lens and platen.



Definition

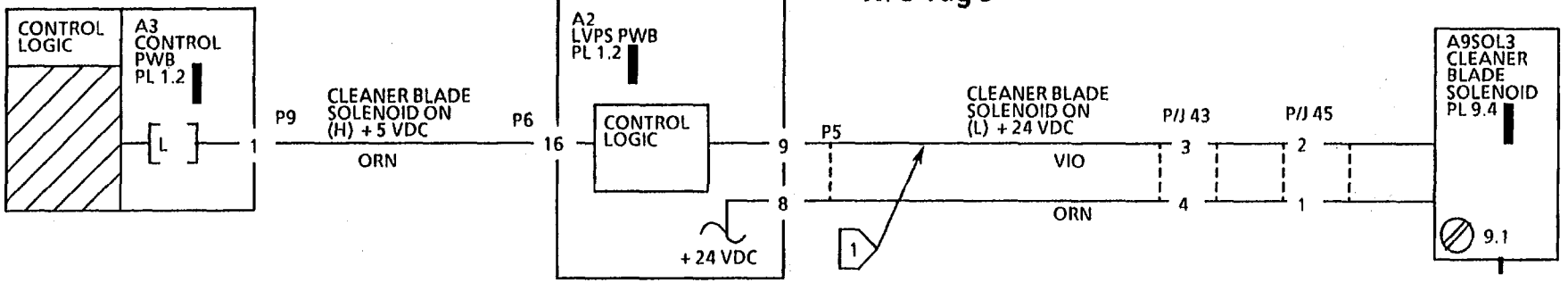
Edge banding is a black band on any edge of the copy.

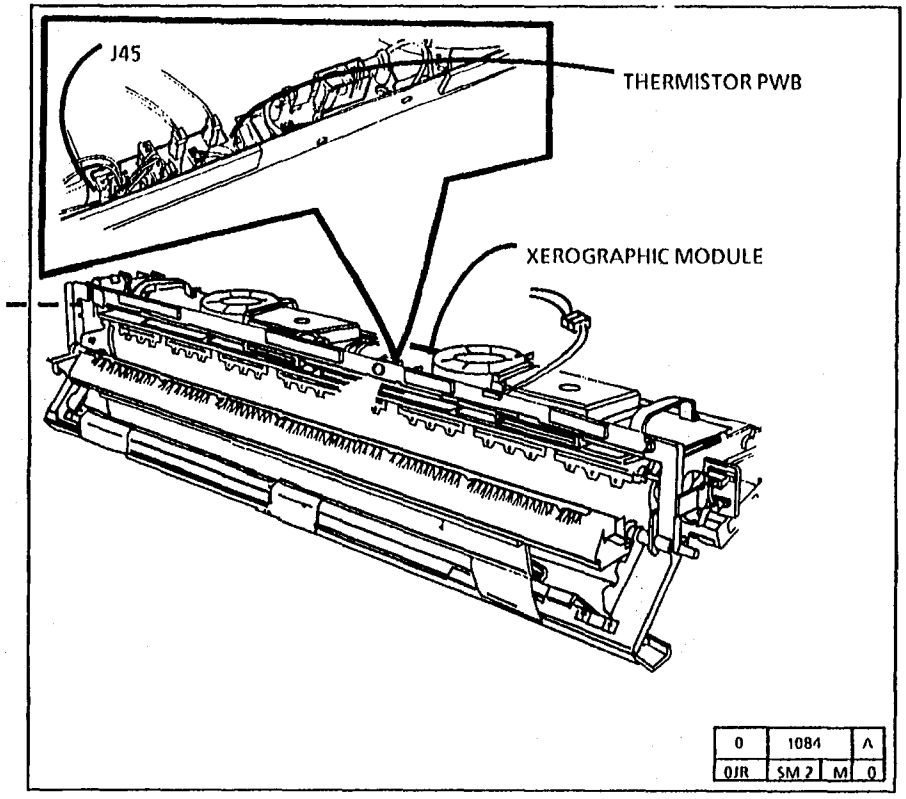
Notes:


W/ Tag 5
CONTROL LOGIC
A3 CONTROL PWB PL 1.2
L
1
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
A2 LVPS PWB PL 1.2
CONTROL LOGIC
1
7
6
+ 24 VDC
P5
CLEANER BLADE SOLENOID ON (L) + 24 VDC
VIO
ORN
1
P/J 43
5
6
P44
A10 THERMISTOR PWB PL 9.3
4
3
2
1
P45
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1
J45
THERMISTOR PWB
XEROGRAPHIC MODULE
0
1084
A
0JR
SM 2
M
0

Notes:

W/O Tag 5


CONTROL LOGIC
A3 CONTROL PWB PL 1.2
L
1
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
P6
16
A2 LVPS PWB PL 1.2
CONTROL LOGIC
9
8
+ 24 VDC
P5
1
CLEANER BLADE SOLENOID ON (L) + 24 VDC
VIO
ORN
P/J 43
3
4
P/J 45
2
1
A9SOL3 CLEANER BLADE SOLENOID PL 9.4
9.1


J45
THERMISTOR PWB
XEROGRAPHIC MODULE
0
1084
A
0JR
SM 2
M
0

No copy sample defect is available.

Definition

Length distortion, often referred to as copy enlargement or reduction, can be any of the following:

a. The image on the copy is longer than the image on the document.

b. The image on the copy is shorter than the image on the document.

c. One side of the copy image is larger than the other side.

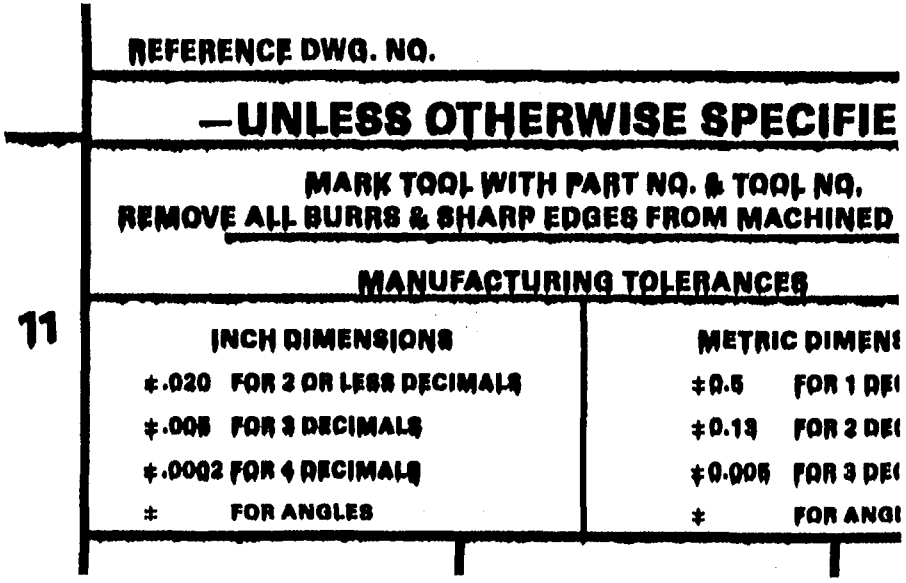
CQ 9 Length Distortion

Probable Cause	Corrective Action
1. Contamination or static on the platen.	1. Clean the platen with Antistatic Fluid.
2. Damp media.	2a. Cut sheet media Make a copy using a sheet of media from a new pack of media. If the problem is corrected, ensure that the roll media is being stored correctly. 2b. Roll media Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media. If the problem is corrected, ensure that the roll media is being stored correctly.
3. Incorrect media speed at the fuser. Media is moving too slowly.	3. There is too much or too little oil on the fuser roll. Check the oil dispense wick for contamination and sufficient oil. 2510 Adjust the oil dispense assembly (ADJ 10.2).
4. The lower document feed rolls are contaminated.	4. Go to the CQ 17 Skewed Image RAP.

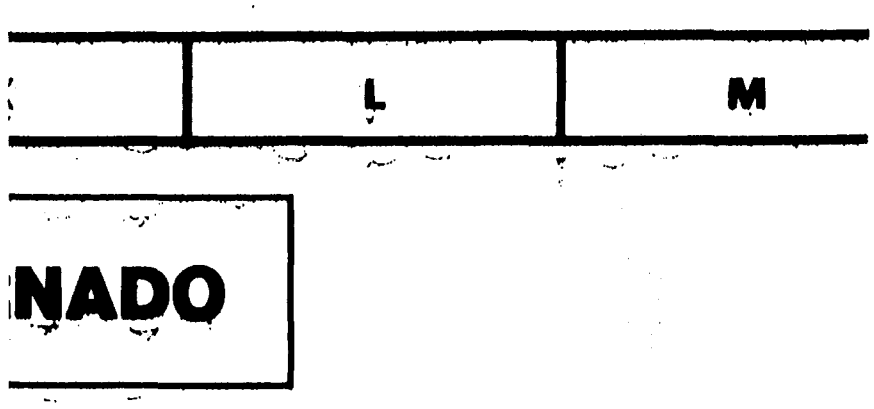
(Continued)

Image Tolerance Specification (Bond media only): The copier has a tolerance specification which is; nominal 1:1 ± 1% horizontal and vertical. As a general guide the following table illustrates the expected variance over the length of the print when the copier is set to specification.

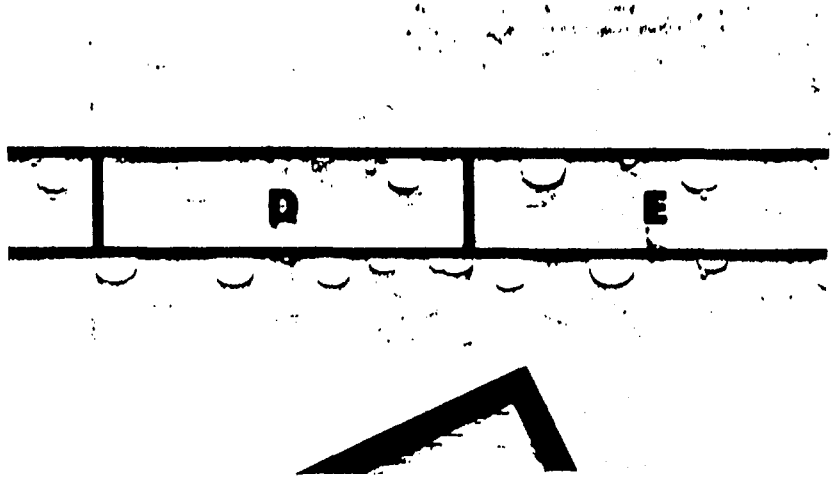
PAPER SIZE (INCHES)	DECIMAL (INCHES)	NEAREST FRACTION (INCHES)	METRIC (mm)
8	± 0.080	± 3/32	± 2.02
11	± 0.110	± 1/8	± 2.78
17	± 0.170	± 3/16	± 4.30
24	± 0.240	± 1/4	± 6.08
36	± 0.360	± 3/8	± 9.14
48	± 0.480	± 15/32	± 12.18
52	± 0.520	± 17/32	± 13.20
56	± 0.560	± 9/16	± 14.22



TYPE 1



TYPE 2



TYPE 3 LICHTENBERG SPOTS

Definition

This is a disturbance of the transferred dry ink image before the fuser. The defect can appear randomly throughout the image area in the process direction (from lead edge to trail edge) of the copy.

The samples show various amounts of the defect.

CQ 10 Dry ink Disturbance

Probable Cause

1. Transfer/detack corotron hardware is not seated correctly.
2. An electrostatic voltage is out of specification.
3. Toner concentration is too high.

Corrective Action

1. Ensure that the transfer/detack corotron is seated correctly (PL 8.6).
2. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
3. **(2515):** Perform the Electrostatic Series (ADJ 9.4).
   (2510): Adjust the Dispenser Adjustment Handle (Item 5 on PL 9.4).

CQ 11 The Light Copy (Overall)

No copy defect sample needed.

Definition

Light copies are copies where the image darkness is lighter than the image darkness specification for the copier

Probable Cause

1. Not enough dry ink in the developer material.

CAUTION

(2515 W/O Tag 2 or 89): To prevent damage to the fuser drive gears, enter the codes [g] fuser and [J] cooling fans first. Allow the copier to operate for 2 minutes minimum, then enter code [A] to start the main drive motor.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

2. Defective developer material.

Corrective Action

1. Ensure that there is dry ink in the cartridge.
   Manually rotate the cartridge. Remove the cartridge and check for a light band of toner, the width of the dispense hole area, on the surface of the developer. If there are only partial bands of toner, ensure the the plastic flap is open (5 mm), shake the cartridge to ensure toner dispenses easily.
   Check the cartridge drive for worn gears, return spring, and/or the drive arm. Check for bent dry ink cartridge. (If the cartridge is excessively bent, replacement is necessary.) Check the green retaining clip for damage.
   (2510 ONLY) Check that the cartridge slider bar moves freely.
   Check the cams on the end plates of the Developer Housing for wear.
   (2515 W/O Tag 2, 7, or 89)
   Enter the code [L], press Start; enter the code [g], press Start; enter the code [J], press Start; wait 2 minutes, enter [A], press Start, enter [d] press Start, enter [y] press Start to check the dry ink concentration. Allow copier to run until (y) equals 6 however, do not run longer than nine minutes. Value of (y) is at 6 or increasing. If the value is not at 6, replace the cartridge.
   (2515 W/ Tag 2, 7, or 89)
   Enter [L], press Start, enter [A], press Start, enter [d] press Start, enter [y] press Start to check the dry ink concentration. Allow copier to run until (y) begins to increase however, do not run longer than nine minutes. If the value of (y) is not increasing, replace the cartridge.
2. Perform the Tape Transfer (Developer Material Failure) procedure, Section 6.

Probable Cause	Corrective Action
2. Defective developer material. (Continued)	If not, remove the xerographic module and check the photoreceptor. There is toner on the photoreceptor after development, replace the developer material and perform the ADJ 9.4 Image Density. **(2515 W/ Tag 2, 7, or 89):** Enter the code [L] press Start, enter the code [A] press Start; enter the code (d) press Start; and enter the code [y] to check the dry ink concentration. **(2515 W/O Tag 2, or 89):** Allow the copier to run one minute or until (y) equals 6. **(2515 W/O Tag 7):** Allow the copier to run one minute or until (y) equals 8. Exit the diagnostic mode, press Start allow copier to cycle to standby three times. Enter the codes [L], (g), (J) wait two minutes then enter (A) and (y) again. **(2515 W/O Tag 2, or 89):** Code (y) should equal 6. **(2515 W/O Tag 7):** Code (y) should equal 8. If not, remove the xerographic module and check the photoreceptor. There is toner on the photoreceptor after development, replace the developer material and perform the Electrostatic Series (ADJ 9.3).
3. An electrostatic voltage is out of specification.	3. Perform the Electrostatic Series (ADJ 9.3).
4. Lens is not mounted correctly or light shield is damaged or missing.	4. Check the following: a. The light seal is separated from lens (PL 6.1). Fix the seal with black electrical tape. b. Ensure that the magnet and lens are positioned correctly against frame. c. Check for direct room light or sunlight on the copier.
5. Exposure lamp is not installed correctly	5. Check that the clear slot in the lamp is facing the Illumination Sensor.
6. Image on the document is light.	6. Select a darker Copy Contrast setting for light copy. (Continued)

Probable Cause	Corrective Action
7. Image density is not adjusted correctly.	7. **(2515)** Perform the ADJ9.4 2515 Image Density. **(2510)** Adjust the position of the copy darkness lever.
8. Developer bias is not correct.	8. Make a copy while checking the voltage where the wire connects to the magnetic roll. Developer bias voltage is 200 ± 20 VDC. If not, go to the CQ25 Developer Bias RAP.
9. **(2510)** Controller PWB	9. **(2515 W/O Tag 2, 7, or 89):** Enter the code [L], press **Start**; enter the code [g], press **Start**; enter the code [J] press **Start**, wait 2 minutes, enter [A] to switch on the main drive motor and the code [y] to check the dry ink concentration. Set meter to measure 20 VDC. Connect the black (-) lead to ground and red (+) lead on pin 6 of connector P-31. **(2515 W/ Tag 2,7, or 89):** Enter [A] to switch on the main drive motor and the code [y] to check the dry ink concentration. Set meter to measure 20 VDC. Connect the black (-) lead to ground and red (+) lead on pin 6 of connector P-31.

2515 W/ Tag 2 or 89

When (y)	Pin 6 =
= 6	9.4 VDC
= 5	10.3
= 4	10.6
= 3	11.6
= 2	14.75

2515 W/Tag 7

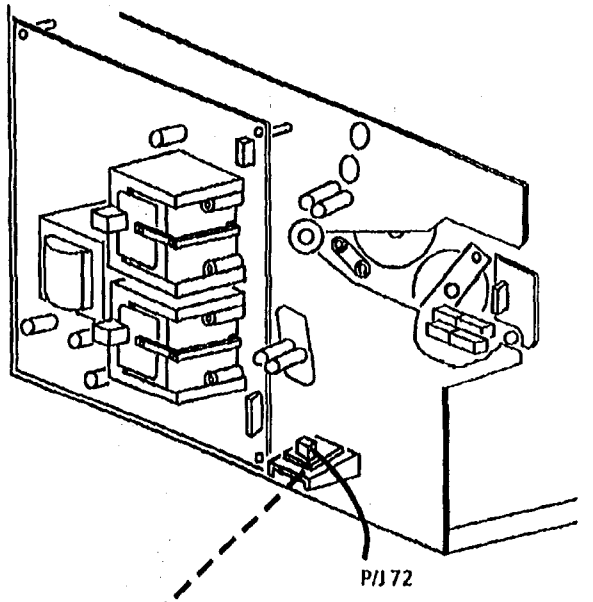
When (y)	Pin 6 =
= 0	more than 11.8 VDC
= 1	11.8
= 2	11.4
= 3	11.0
= 4	10.6
= 5	10.2
= 6	9.8
= 7	9.4
= 8	9.0
= 9	8.6

Check the voltage at Pin 6 when (y) is at one of the values shown above. Then press **Stop** and disconnect P-31. If the voltage does not agree with what is shown above, and (y) does not equal 8 with P-31 disconnected, replace the Controller PWB.

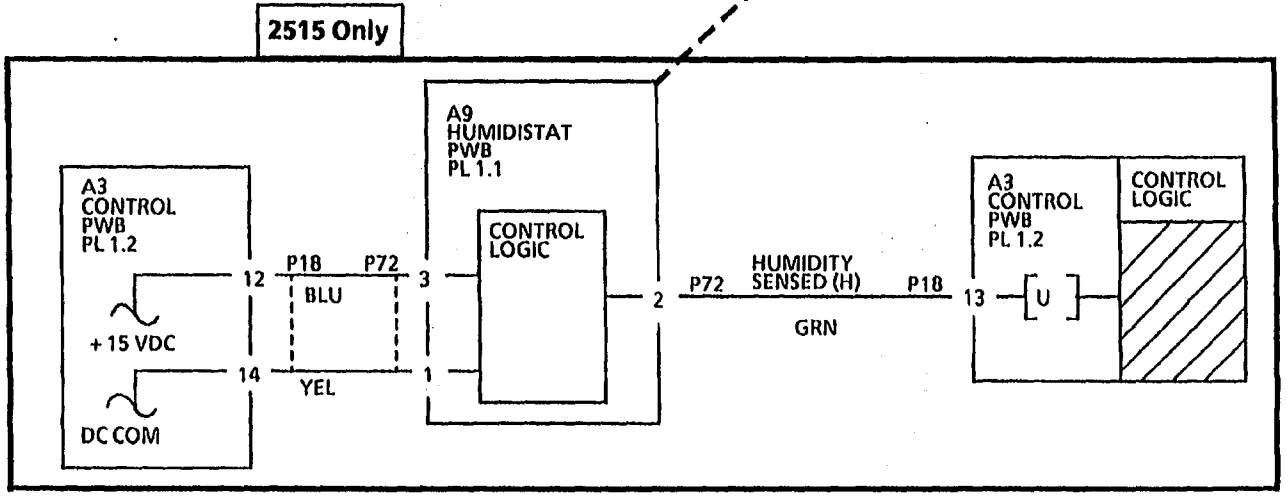
(Continued)

Probable Cause	Corrective Action
10. Not enough developer material in the developer module.	10. Check the level of the developer material. The material should be above the baffle in the rear of the module and forming v-shaped piles against the rear of the module. If not enough. replace the developer material REP 9.9.
11. Damp media. (Continued)	11a. Cut sheet media Make a copy using a sheet of media from the middle of the stack of media in the Cut Sheet Feeder or the media storage on the stand. If the problem is corrected, check that the media heater is working. Go to one of the following: 1. Damp Media RAP in Section 8B. 2. OF1 Media Heater RAP in Section 2. 11b. Roll media Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media. If the problem is corrected, ensure that the roll media is being stored correctly.
12. Developer material has more than 30K feet (9K metres) of copies on it.	12. Replace the developer material (REP 9.8) and perform the Electrostatic Series (ADJ 9.3).
13. The copy is not fused.	13. Go to the CQ 22 Unfused Copy RAP.
14. Airborne chemicals	14. Some chemicals can cause damage or contamination of the drum. Wash (General Procedures) or replace the drum (REP 9.3) and perform the Electrostatic Series (ADJ 9.3). If the problem still exists, notify technical support.

Probable Cause	Corrective Action
15. **(2515 W/O Tag 2, 7, or 89):** Defective toner sensor.	15. **(2515 W/O Tag 2, 7, or 89):** Enter the code [L], press *Start;* enter the code [g], press Start; enter the code [J] press Start; wait 2 minutes, enter [A] to switch on the main drive motor and the code [y] to check the dry ink concentration. Allow the copier to run until (y) begins to increase. Make a copy of 82P5980 and check the density. The 0.7G5 paragraph is less then 28.5 on 82P7030, replace the toner sensor.
(2515 W/ Tag 2, 7, or 89): Humidity and toner sensor.	**(2515 W/ Tag 2, 7, or 89):** Enter the codes [L] and [A] to switch on the main drive motor and the code [y] to check the dry ink concentration. Allow the copier to run until (y) begins to increase. Make a copy of 82P5980 and check the density. The 0.7G5 paragraph is less then 28.5 on 82P7030, replace the humidity sensor. If the problem still exists, replace the toner sensor.
16. Air flow manifold damaged.	17. Replace the air flow manifold (PL 9.2).
17. **(2515 Only)** The Contamination Seal in the Cleaner Blade area is damaged or has moved out of position.	18. Replace the Contamination Seal REP 9.11.
18. Defective developer module.	19. **(2515 Only)** Replace the developer module. **(2510)** Rebuild the developer module (PL 9.4).
19. **(2515 Only)** Auger channel has fallen off of the locating pin in the developer housing.	20. Install the gutter clip (PL9.5).



0	1092	A
0/R	SM 2 X	0



CQ 11 The Light Copy (Partial)	Probable Cause	Corrective Action
	1. Copier is not level.	1. Level the copier. Refer to the Installation Procedure located in Section 6.
	2. Developer module or xerographic module is not fully seated against the stops.	2. Ensure that the developer module and xerographic module are installed and secured correctly. Ensure that the Latch Springs are not damaged.
	3. The light can enter the copier through an opening in the covers.	3. Ensure that the covers are not damaged and that they are seated correctly. Allow the photoreceptor drum to rest before trying to make copies.
	4. Fans not functioning or ozone filter contaminated or blocked.	4. Go to the 1.3 Copier cooling fan RAP in Section 2. Also replace the ozone filters (PL 9.3).
	5. The magnet and lens are not installed correctly against the frame of the copier.	5. Check installation of components and if incorrect reinstall correctly.
	6. The lens shield is separated from the lens assembly	6. Replace the lens or install the Light Leak Repair Kit (PL 6.1).
	7. Bowed, damaged, or contaminated corotrons.	7. Replace the corotron (PL 8.6, PL 9.2)
	8. Photoreceptor not seated correctly on the Drum Shaft arbors.	8. Reposition the Photoreceptor Drum on the arbors.
	9. **(2510 Only):** Cracked or warped Air Manifold	9. Replace the Air Manifold (PL 9.3).
	10. **(2515 Only):** Air Manifold blocked by the U-shaped seal in the Cleaner Assembly.	10. Replace the Seal (PL 9.2).
	11. Photoreceptor damage (crystallization).	11. Replace the Photoreceptor (PL 9.1).
	12. **(2510 Only):** Developer Mixing Auger not functioning correctly.	12. Replace or rebuild the Developer Housing (PL 9.4).
	13. Developer Magnetic Roll surface is worn.	13. **(2510 Only):** Rebuild the Developer Housing (PL 9.4). **(2515 Only):** Replace the Developer Housing (PL 9.5).

(Continued)

Probable Cause	Corrective Action
14. **(2515 Only):** Pickoff Baffle is inserted upside down or backwards	14. Ensure that the Pickoff Baffle is positioned correctly.
15. Drum-To-Roll Spacing (DRS) is out of specification.	15. Call escalate to have the DRS checked using the DRS Tool.

CQ 12 Localized Deletions

Definition

Deletions are areas on the copy where the image is missing. (The causes for the defects are on the following two pages.)

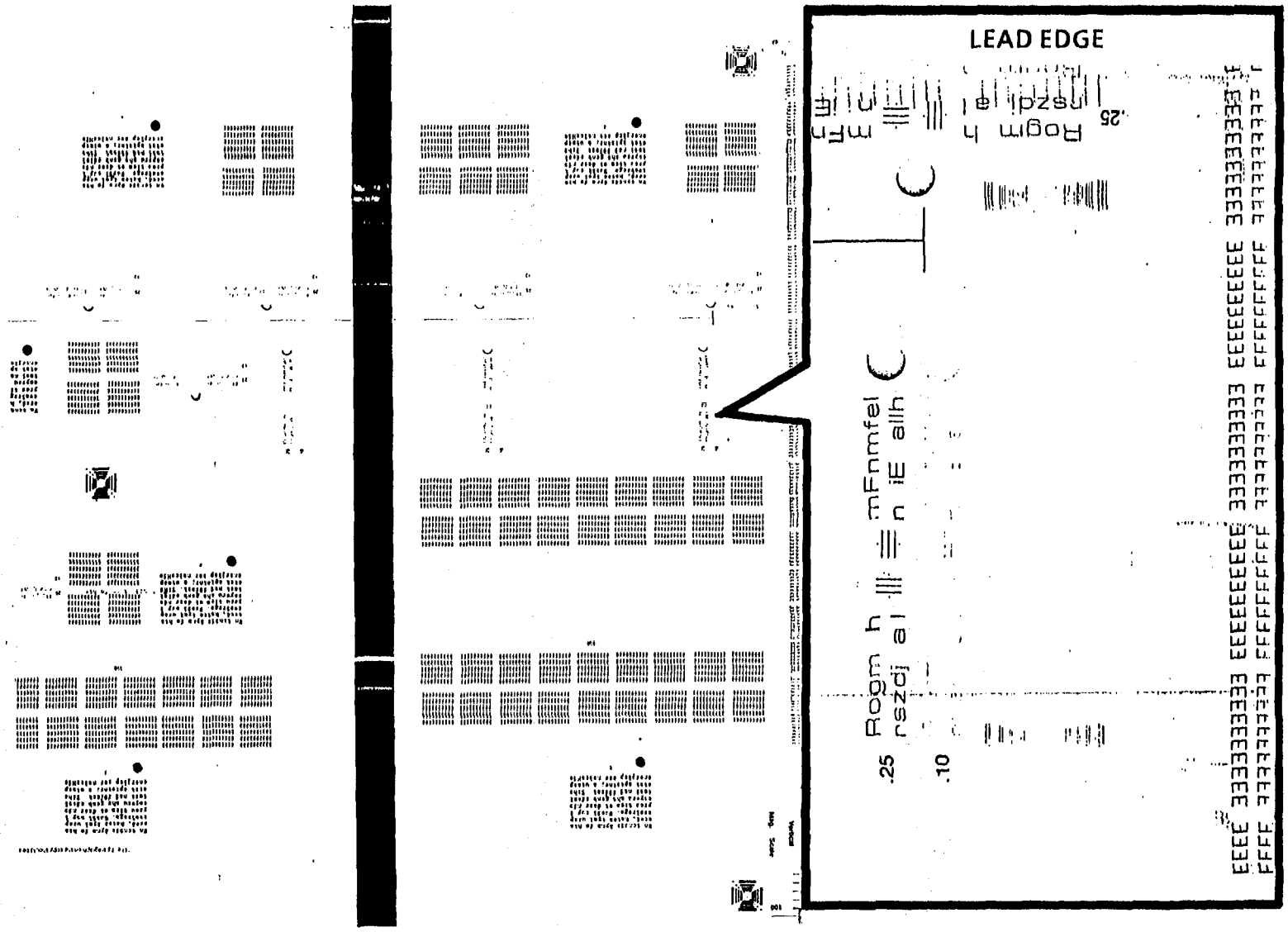
Probable Cause	Corrective Action
1. Damp media.	1a. Cut sheet media Make a copy using a sheet of media from a new pack of media. If the problem is corrected, ensure that the media is being stored correctly. 1b. Roll media Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media. If the problem is corrected, ensure that the roll media is being stored correctly.
2. Contaminated, damaged, or wrinkled fabric guide.	2. Replace fabric guide (REP 8.5).
3. Fabric guide not tensioned correctly.	3. Check that the tension assembly moves freely (2510 PL 8.4, 2515 PL 8.2).
4. Dirty corotrons, loose wire, or corotron connectors are not connected correctly.	4. Check for connector damage or loose wires. Clean the corotron if it is dirty. Repair or replace corotron if it is damaged and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
5. Damaged Latch Springs	5. Replace the Latch Springs (PL 10.1)

(Continued)

Probable Cause	Corrective Action
6. The fuser temperature is too high.	6. Check the Fuser Temperature (ADJ 10.1)
7. Oil dispense assembly is contaminated.	7. Replace the oil pads and wick (2510 PL 10.4, 2510 W/ Tag 252 and 2515 PL 10.5).
8. Lens is not mounted correctly or light shield is damaged or missing.	8. Check the following: a. The light seal is separated from lens (PL 6.1). Fix the seal with black electrical tape or install the Light Leak Repair Kit PL 6.1). b. Ensure that the magnet and lens are positioned correctly against frame. c. Check for direct room light or sunlight on the copier.
9. Not enough developer material in developer housing.	9. Replace developer material (REP 9.9) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
10. The light leak discharges the photoreceptor drum.	10. Ensure that the covers are not damaged and that they are seated correctly. Allow the photoreceptor drum to rest before trying to make copies.
11. Copier is not level.	11. Level the copier.
12. Developer bead carryover.	12. Refer to the CQ 7 Developer Bead Carryover RAP.
13. The fans are not functioning, or the ozone filter is contaminated or blocked.	13. Go to the 1.3 Cooling Fan RAP in Section 2. Also replace the ozone filters (PL 9.3).

(Continued)

Probable Cause	Corrective Action
14. Crystallization of the Photoreceptor drum.	14. Replace the drum (REP 9.3) and then perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3). If this is a continuing problem, ask the customer if chemicals are used or stored in the area. If chemicals are suspected, discuss with the customer the possibility of moving the machine or chemicals to another location.
15. Airflow manifold damaged	15. Replace the air flow manifold (PL 9.3).
16. Fuser pressure plate is not positioned correctly or is damaged.	16. Check that the fuser pressure plate (2510 PL 8.2, 2515 PL 8.4) is positioned on the locating pins. Replace the fuser pressure plate if it is damaged. The plate must be flat.
17. An electrostatic voltage is out of specification.	17. Perform the Electrostatic Series (2510 ADJ 9.2, 2515 ADJ 9.3).
18. Powder Deficiency Spots - Small size spot on the photoreceptor drum surface that will not accept a charge.	18. Replace the photoreceptor drum (REP 9.3).
19. Airborne contaminants.	19. Wash (General Procedures) or replace (REP 9.3) the photoreceptor drum as required and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3). If this is a continuing problem, ask the customer if chemicals are used or stored in the area. If chemicals are suspected, discuss with the customer the possibility of moving the copier or chemicals to another location.
20. The condition of the surface of the Fuser Roll.	20. Rough the surface of the Fuser Heat Roll (Reference Section 6, Sanding the Heat Roll). Replace the roll if required.



Definition

Offsetting is the transfer of an image from the copy to the fuser. The image is then transferred back onto the same copy or another copy. The offset image may be repeated approximately every 10.4 inches (264mm).

CQ 13 Offsetting	Probable Cause	Corrective Action
	1. Offsetting or residual image.	1. Go to the CQ 28 Isolation procedure to determine if the problem is offsetting or residual image. Return to this RAP if the problem is offsetting.
	2. Insufficient lubrication on the fuser.	2. Replace oil pads [(**2515 W/ Tag 88, 2510 W/OTag 252)** REP 10.4]; [(**2515 W/O Tag 88, 2510 W/Tag 252)** REP10.5], and replace the wick (REP 10.5). **(2515 W/ Tag 88, 2510 W/OTag 252)**Check/adjust the Oil Dispense Assembly (ADJ 10.2).: **(2515 W/O Tag 88, 2510 W/Tag 252)** Perform the procedure, Initialization of the Fuser Roll (General Procedures). **(2515 W/O Tag 88, 2510 W/ Tag 252)** Perform the Oiler Wick Priming (General Procedures). Use the ODOS oiler to give uniform, consistent oiling. Recommended for monthly copy volumes of 3,500 to 4,000 linear feet. If volumes are higher than tis use the HVA oiler (600K39660).
	3. Donor Roll is not turning freely.	3. Inspect the Donor Roll for damage. Ensure that the Roll rotates in a counterclockwise direction when viewed from the side with the Support Arm with the black paint. Check that the internal springs of the Donor Roll are installed correctly (REP 10.10). If not replace the Donor Roll.
	4. Fuser temperature is out of specification.	4. Check/adjust the Fuser Temperature (ADJ 10.1).
	5. Damp media.	5a. Cut sheet media: Make a copy using a sheet of media from a new pack of media. If the problem is corrected, ensure that the roll media is being stored correctly. 5b. Roll media: Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media. If the problem is corrected, ensure that the roll media is being stored correctly.
	6. Customer is not selecting the correct Media Type.	6. Explain to the customer that each media must have the correct temperature to ensure correct fusing of the image, and this is done by selecting the Media Type.
	7. The condition of the surface of the Fuser Roll.	7. Replace the Fuser Roll (PL 10.2) .
	8. Oil Dispense Assembly not install correctly or is damaged.	8. Ensure that the Dispense Assembly is against the brackets on the left and right sides, and is fully in the mounting holes. Replace if damaged.

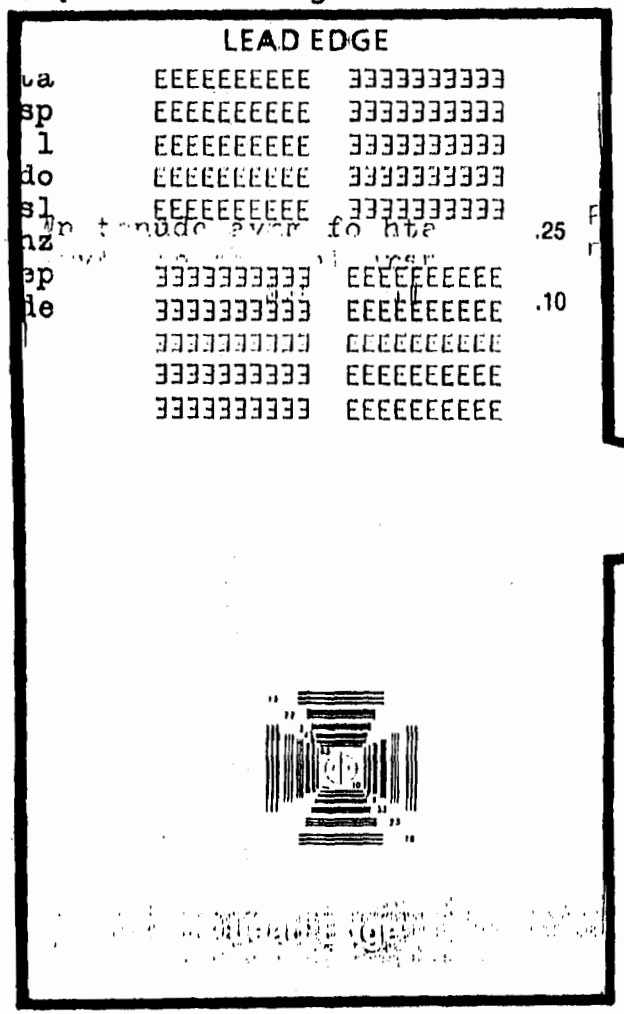
No copy defect sample is available.

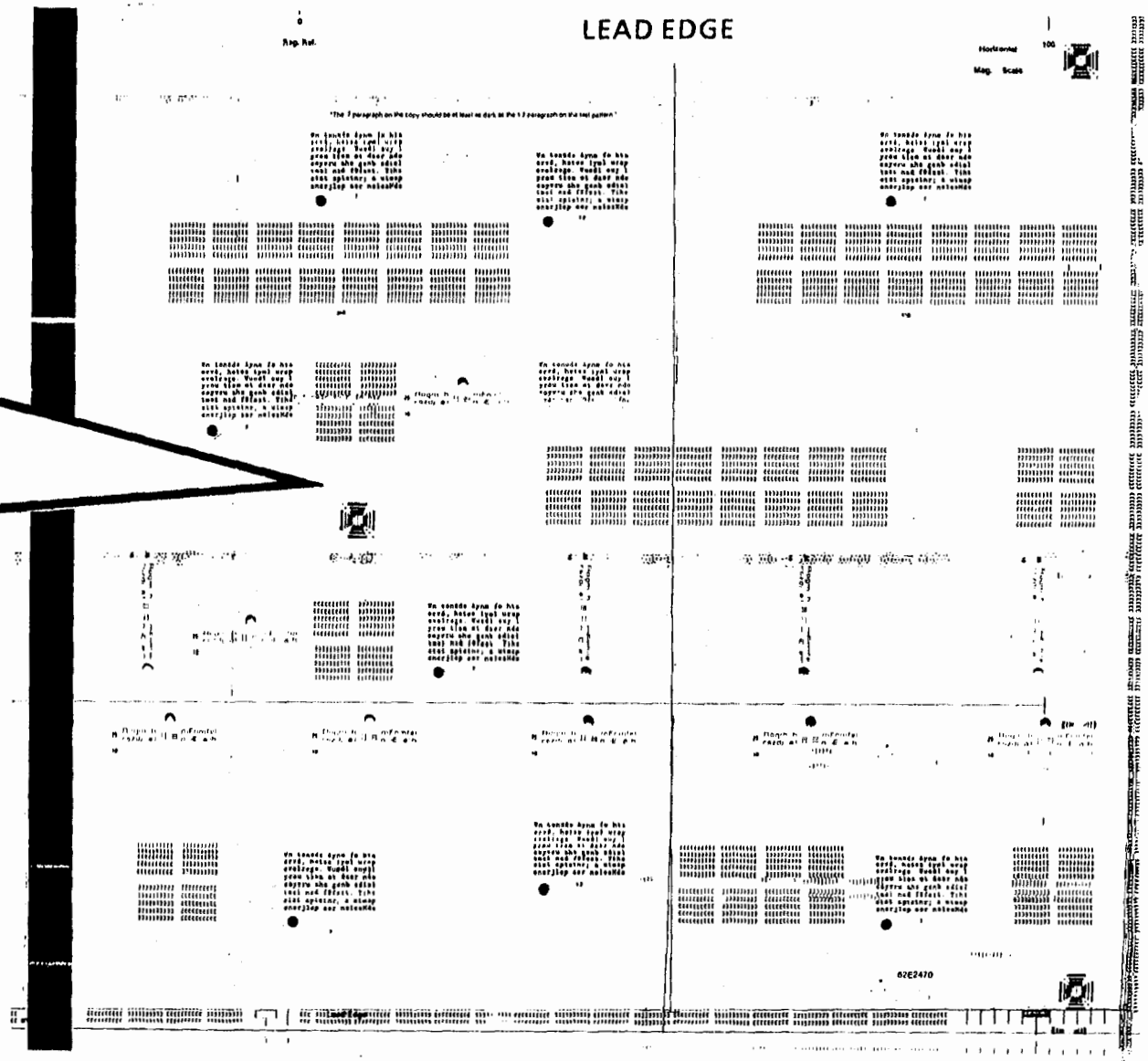
Definition

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

CQ 14 Registration

Probable Cause	Corrective Action
1. Registration is not adjusted correctly.	1. Perform the Registration adjustment (ADJ 8.1).
2. Defective motion sensor (registration will vary copy to copy).	2. Replace the motion sensor (PL 8.5).
3. Defective media feed clutch.	3. Replace the media feed clutch (PL 8.3).
4. Defective or loose upper media feed roll.	4. Replace the upper feed roll (REP 8.3).
5. Incorrect or defective document sensor.	5. Ensure that the front document sensor is installed correctly so that, the actuator actuates 0.040 inch (1mm) above the maximum height of the document drive rolls.
6. Operator pushed document too far into the document handler.	6. Instruct the operator on how to insert the document into the document handler.





Definition

An image that is repeated back on to the same copy or the next copy made. The image can either be a negative image, see sample; or a positive image (almost the same as offsetting). The repeated image can be caused by poor cleaning or a photoreceptor drum that has been exposed to the light.

CQ 15 Residual Image

Probable Cause

Corrective Action

NOTE: The CQ 28 Isolation procedure is a guide to determine if the problem is offsetting or residual image. Return to this RAP if the problem is residual image.

1. Photoreceptor drum is not being cleaned correctly.

1. Enter the diagnostic mode and then enter code (L). Press ***Start*** and then ***Stop***. The cleaner blade solenoid should actuate. If not:
   Check the cleaner blade solenoid circuit on the following page.

   The Cleaner Blade Solenoid energized.

   Y N

   There is + 24VDC at P5, Pin 7.

   Y N

   There is + 24 VDC at P5, Pin 6

   Y N

   Replace the LVPS PL 1.4.

   Go to Flag 1 and 2 and check for an open circuit in the wires. If there is no open circuit, replace the Cleaning Blade Solenoid PL 9.3.

   Enter code [A] and [L].

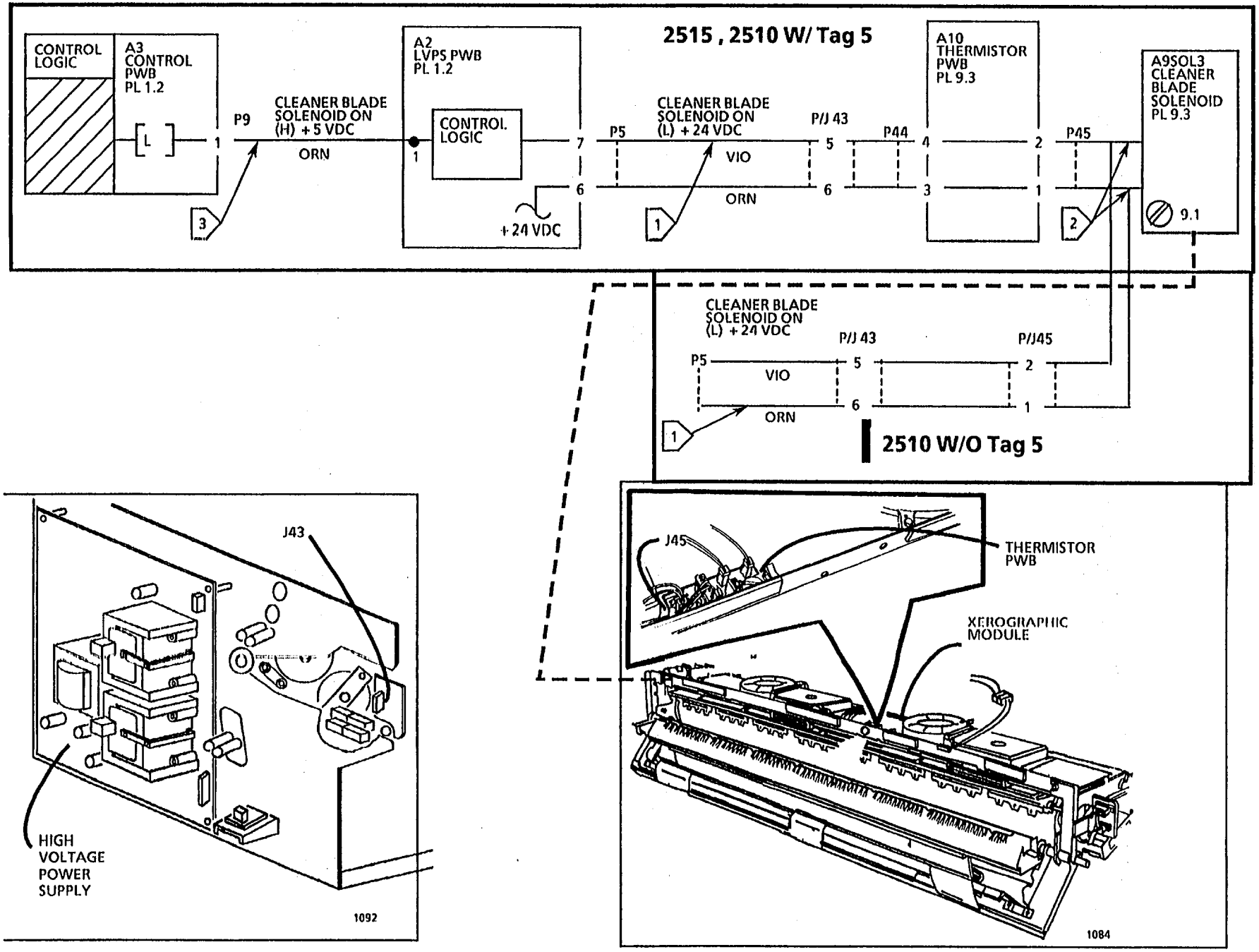
   The voltage at Pin 7 changes to 0.70 VDC.

   Y N

   Go to Flag 3 and check for an open circuit. If there is no open circuit, replace the Control PWB PL 1.4.

   Check the following on the next page:

CQ 15 Residual Image	Probable Cause	Corrective Action
	1. Photoreceptor drum is not being cleaned correctly.	Remove the xerographic module. Check the following: Cleaner blade solenoid adjustment (ADJ 9.1). The cleaner blade weight moves freely and when fully transistioned, does not touch the frame. Ensure that there is clearance. The cleaner blade assembly transitions across the photoreceptor drum. No wires are interfering with the cleaner blade weight. Cleaner auger and belt. Remove the photoreceptor drum and check the following for damage or contamination: Cleaner blade seal assembly (REP 9.4). Cleaner blade (REP 9.4). Cleaner blade retainers (REP 9.4). Drum seal. Reinstall the xerographic module. Make a copy. If the cleaning problem is not corrected replace the cleaner blade (REP 9.4).
	2. Check/Adjust the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).	
	3. If the residual image problem happens again within a short period of time, replace the photoreceptor (REP 9.3) and the cleaning blade (REP 9.4).	

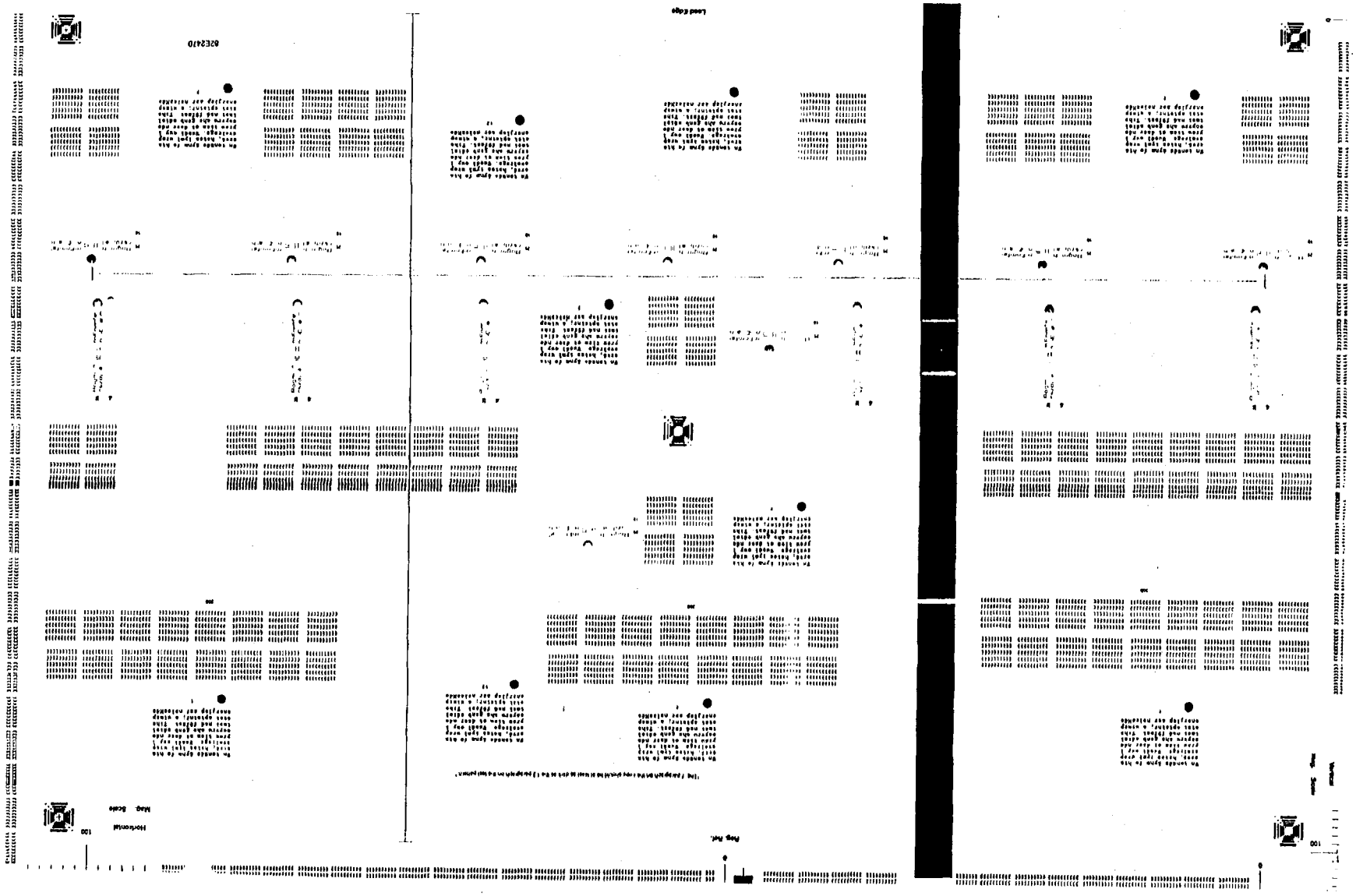

2515 , 2510 W/ Tag 5
CONTROL LOGIC
A3 CONTROL PWB PL 1.2
P9
CLEANER BLADE SOLENOID ON (H) + 5 VDC
ORN
A2 LVPS PWB PL 1.2
CONTROL LOGIC
+ 24 VDC
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P/J 43
P5
VIO
ORN
P44
A10 THERMISTOR PWB PL 9.3
P45
A9SOL3 CLEANER BLADE SOLENOID PL 9.3
9.1
CLEANER BLADE SOLENOID ON (L) + 24 VDC
P/J 43
P/J45
2510 W/O Tag 5
J43
HIGH VOLTAGE POWER SUPPLY
1092
J45
THERMISTOR PWB
XEROGRAPHIC MODULE
1084

CQ 16 Resolution

Probable Cause	Corrective Action
1. Lens is not installed correctly.	1. Ensure that the lens (REP 6.2) is installed correctly and is not damaged.
2. Document handler is not installed correctly.	2. Ensure that the document handler is installed correctly.
3. The lower document feed rolls are contaminated or damaged.	3. Clean the feed rolls with Formula A Cleaner (USO and XLA) and water. Replace the rolls if damaged (PL 5.1).
4. The platen is not installed correctly or damaged.	4. Ensure that the platen is installed correctly. Replace the platen (PL 5.1) if it is damaged.
5. There is a fold or curl in the document.	5. Straighten the creases in the document.
6. Incorrect exposure level.	6. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

No copy defect sample is needed.

Definition
The image is out of focus and blurred.



Definition

A skewed image defect is when the copy image is not parallel with the edges of the copy media.

CQ 17 Skewed Image

Skew Isolation Procedure

1. Figure 1: Place a piece of opaque tape across the width of the Platen. Place the tape so that when a copy is made the image of the tape will be a few inches in from the edge of the copy media.
2. Make a copy.
3. If the copy looks like one of the strips in Figure 2, the problem is in the media feed.
4. If the copy looks like Figure 3, the problem is in the document feed.
5. Refer to the appropriate Probable Cause to correct the problem.

Probable Cause

1. Document entered the document handler incorrectly aligned, or the media entered the feed rolls incorrectly aligned.
2. Static on the platen or the platen is damaged.
3. Contaminated or damaged document idler rollers.
4. Contaminated or damaged upper media feed rolls or media idler rolls.
5. Obstruction in the document return path.
6. Lead edge of the document or the copy media is damaged.

Corrective Action

1. Ensure that the document and copy media are fed in straight. A side guide kit is available.
2. Clean the platen with Anti-Static Fluid. Replace the platen (PL 5.1) if it is damaged.
3. Check that the lower document feed rolls and document idler rollers (PL 5.1) are not binding. If the rolls are binding, clean the bearings with a dry cloth and polish the roll shafts with abrasive cloth. Replace the rolls and bearings if necessary. Lubricate the bearings with Stearate.
4. Clean the rolls (PL 5.1) with:
   USO and XLA: Formula A Cleaner and water.
   Replace the rolls if damaged.
5. Check the document return path.
6. Ensure that the lead edges of the document and the copy media are straight and not damaged.

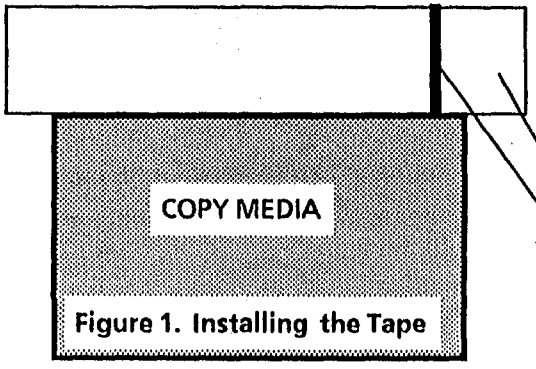


Figure 1. Installing the Tape

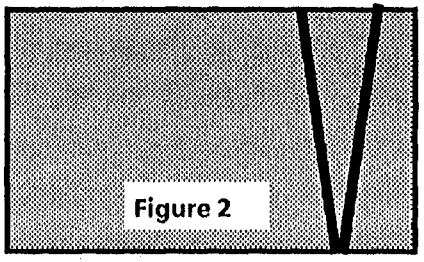


Figure 2

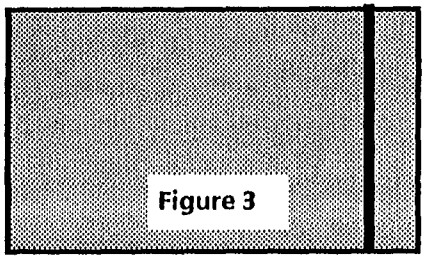
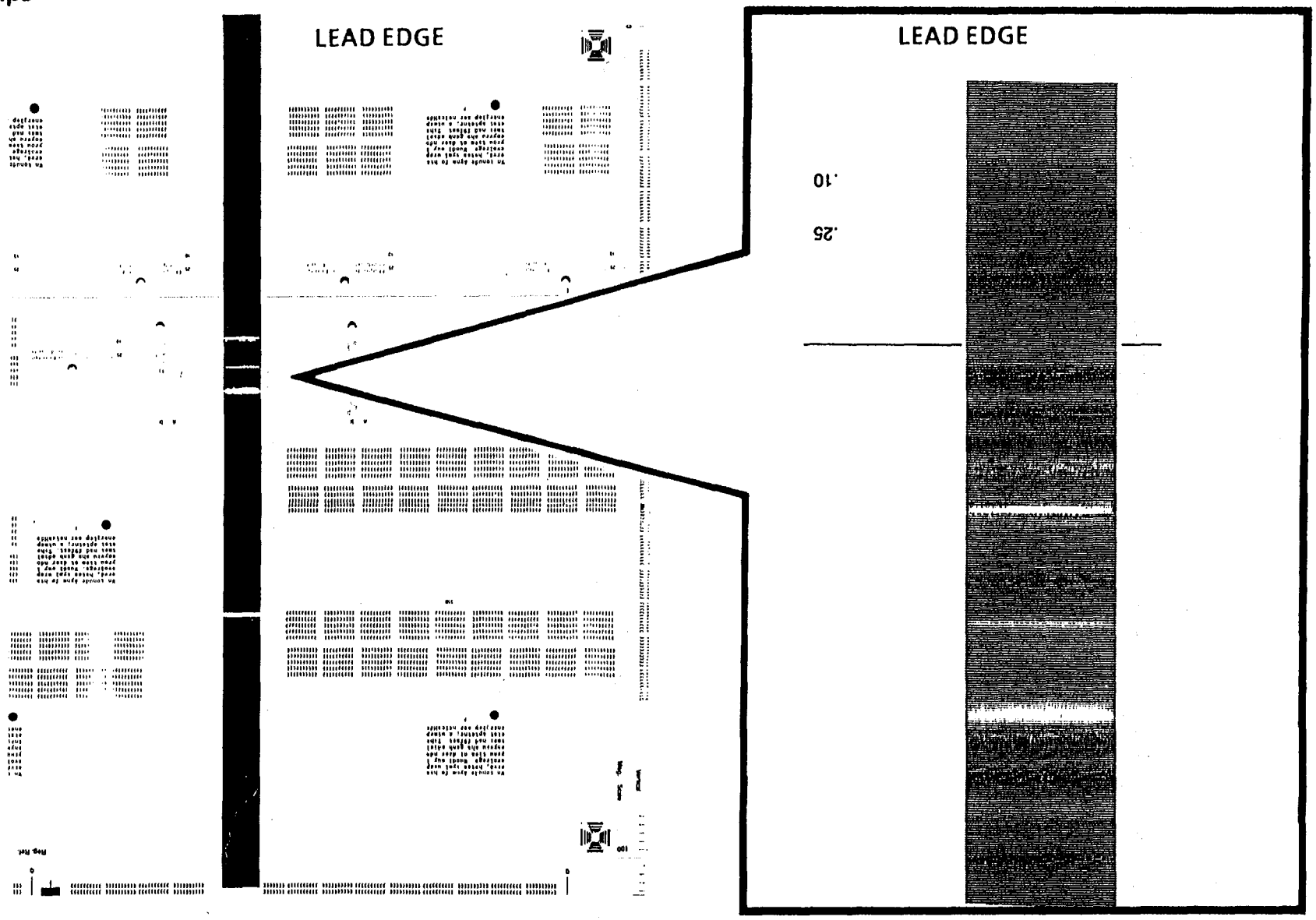


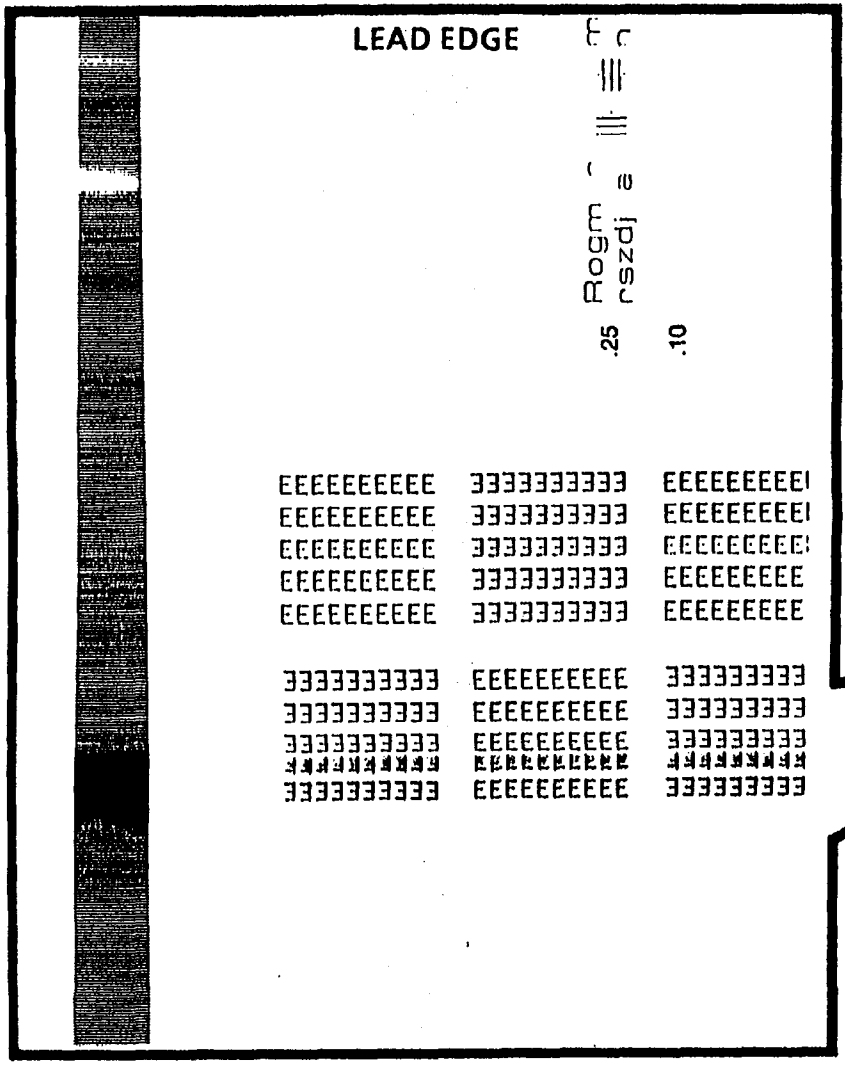
Figure 3

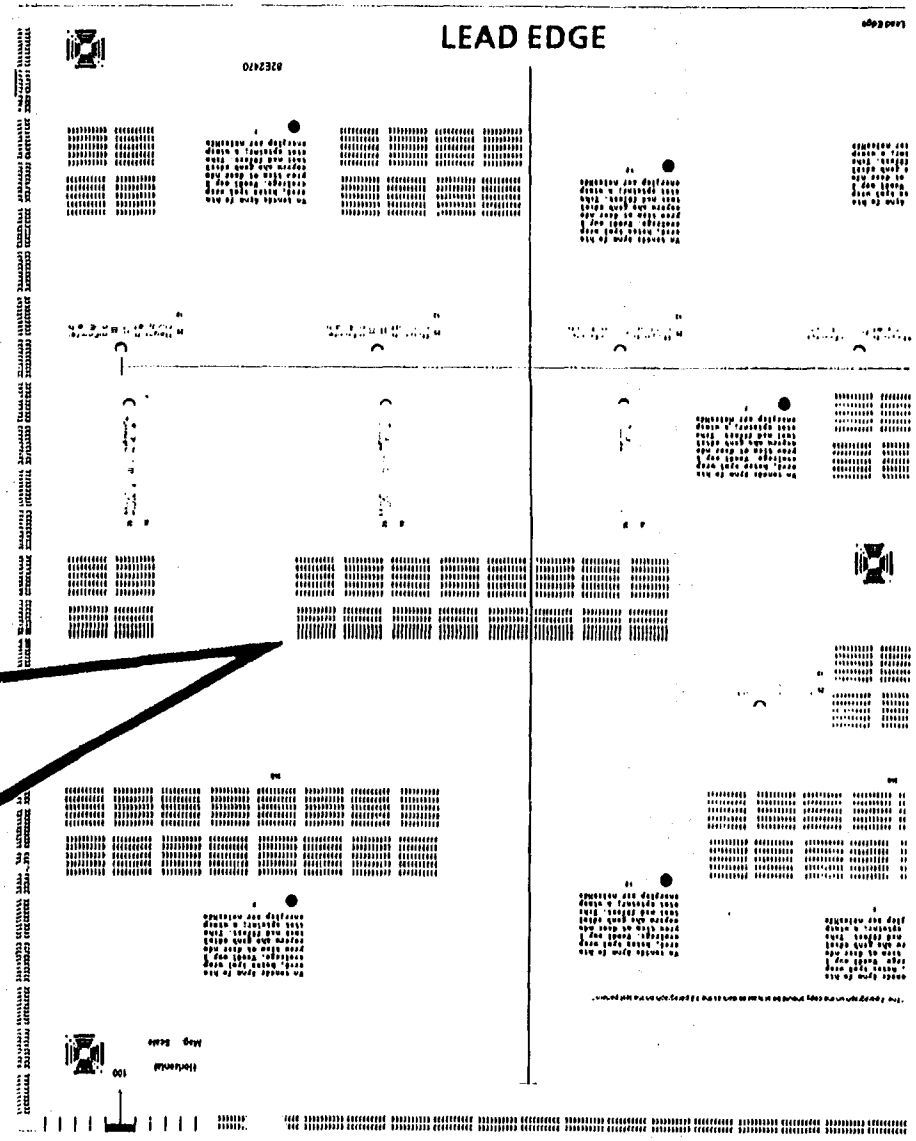


Definition

Skips are a light image defect caused by a difference in speed between the document and the drum surface.

Probable Cause	Corrective Action
1. Document was disturbed as it moved across the platen.	1. Check the platen for damage. Clean the platen with Anti-Static Fluid. Ensure that the document is not moved or disturbed as it feeds through the document transport.
2. Document transport drive belt is slipping on the drive pulleys.	2. Check that the lower document feed rolls and document idler rollers are not binding. If the rolls are binding, first clean the plastic bearings with a dry cloth and polish the roll shafts with emery paper. If the problem still occurs, replace the rolls (PL 5.1) and bearings.
3. Contaminated or damaged document transport drive belt and pulleys.	3. Replace the damaged or contaminatec parts (PL 5.1).
4. Media transport not seated correctly.	4. Ensure that the media transport is seated correctly and that it is latched correctly.





Definition

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

Probable Cause	Corrective Action
1. Operator interfered with the copy media as the media fed into the copier.	1. Question the operator as to how the media is inserted into the copier.
2. Media feed clutch feeds intermittently.	2. Go to the E Media Jam RAP in Section 2.
3. Media feed clutch stub shaft is loose or misaligned.	3. Check that the stub shaft is aligned correctly and is tight.
4. Defective media feed clutch.	4. Replace the media feed clutch (PL 8.1).
5. Photoreceptor drum is not secured correctly on drum shaft causing the drum to slip.	5. Tighten the photoreceptor drum hardware (REP 9.1A).
6. Transfer/detack corotron current is out of specification.	6. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
7. Media is contacting the extrusion between the photoreceptor drum and the fuser roll.	7. Try to make a copy using a Xerox approved media to see if the defect is corrected. Replace the media if required.
8. Main drive motor gear mesh is too tight.	8. Loosen the four bolts that hold the main drive motor to the frame and raise it slightly. Tighten the bolts and try to make a copy.
9. The copy media hesitates as it goes through the fuser causing the media to buckle. This allows the media to contact the bottom of the xerographic module and smudge the image.	9. Go to the Media Transportation Problems located in this section. Check the media deflectors for damage (PL 10.3).
10. The copy stalls in the fuser	10. Check the following: a. Fuser temperature adjustment (ADJ 10.1) b. (2510) oil dispense assembly adjustment (ADJ 10.2) c. Damage or contamination of the fabric guide (2510 PL 8.2, 2515 PL 8.4). d. The position of the 2510/2515 fuser pressure plate and 2515 media guide plate (2510 PL 8.2, 2515 PL 8.4).

CQ 20 Spots

No copy sample defect is needed.

Definition

These defects are 0.2 inches (5mm) or smaller in diameter. These could appear at intervals that are in the process direction.

Probable Cause

1. Contaminated or damaged photoreceptor drum.
2. Contaminated or damaged fuser roll or oil dispense wick.
3. Contaminated or damaged upper media feed rolls or media idler rolls.
4. Developer material has made more than 30K feet (9K metres) of copies.

CAUTION

(2510, 2515 W/O Tag 2, 7. or 89): *To prevent damage to the fuser drive gears, enter the codes (g) fuser and (J) cooling fans first. Allow the copier to operate for 2 minutes minimum, then enter code (A) to start the main drive motor.*

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

Corrective Action

1. Wash (General Procedures) or replace (REP 9.3) the photoreceptor drum as required. Perform the Electrostatic Series (2510 ADJ 9.2 ; 2515 ADJ 9.3).
2. Clean or replace the fuser roll (REP 10.2) (PL10.2) and wick (REP 10.2).
3. Clean or replace upper media feed rolls (REP 8.2) or media idler rolls (REP 8.3) (2510 PL 8.1, 2515 PL 8.3) as required.
4. Replace the developer material (REP 9.8) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

   Inspect and clean any contamination on the developer housing. Check the developer for correct operation.
   Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

   (2515 W/O Tag 2, 7. or 89): Enter the codes [L], [g], [J], wait 2 minutes, enter [A] to switch on the main drive motor and [Y] to check the dry ink concentration. If the value is less than 3 then go to the J Dry ink Concentration Fault RAP in section 2.

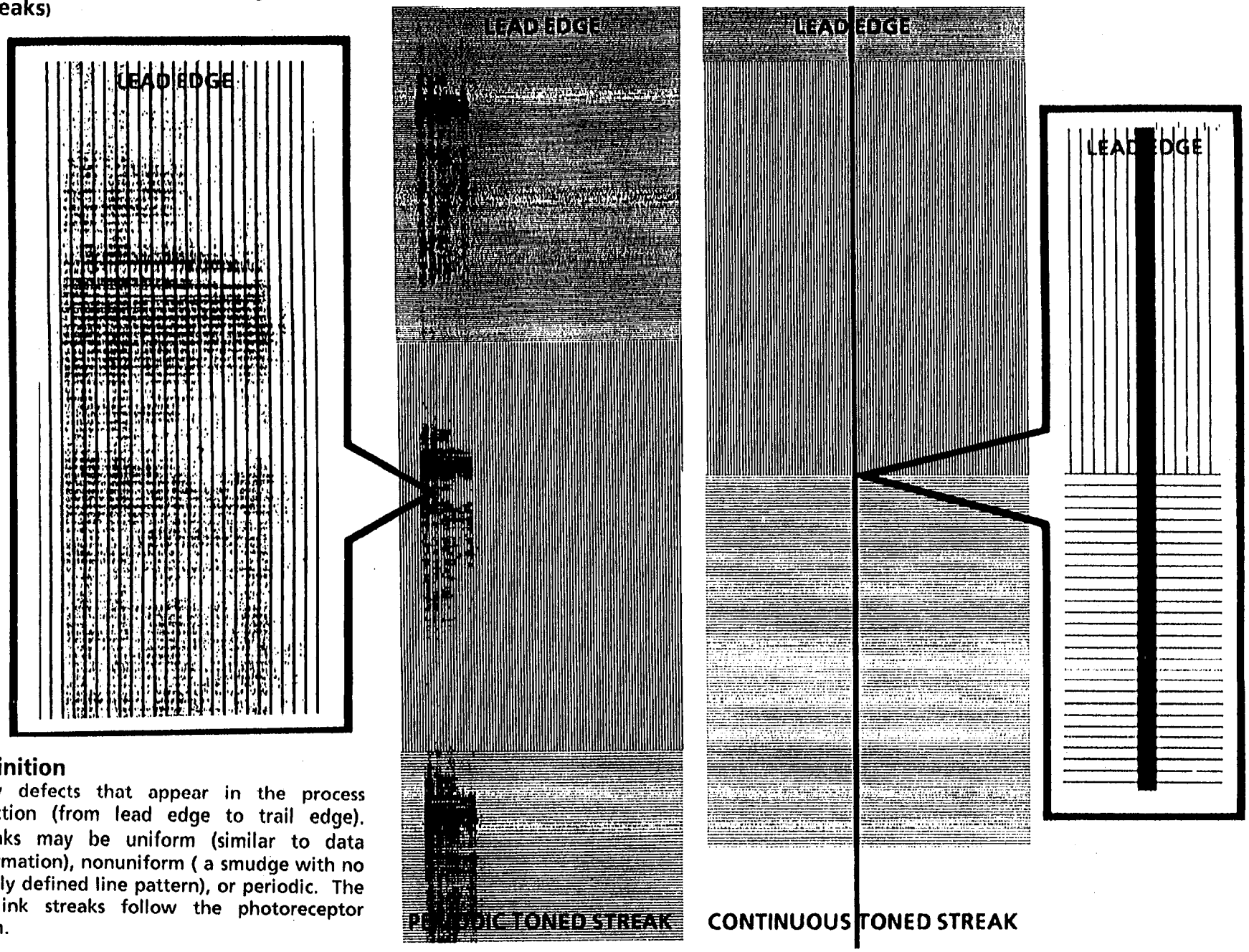
(Continued)

CQ 20 Spots	Probable Cause	Corrective Action
(Continued)	6. Low dry ink concentration or the developer material is contaminated. (Continued)	**(2515 W/ Tag 2, 7, or 89):** Enter the codes [L] and [A] to switch on the main drive motor and [Y] to check the dry ink concentration. **(2515 W/ Tag 2, or 89):** If the value is less than 3 then go to the J Dry ink Concentration Fault RAP in section 2. **(2515 W/ Tag 7):** If the value is less than 1 then go to the J Dry ink Concentration Fault RAP in section 2.
	7. Damaged auger to drum seal.	7. Replace the auger to drum seal (PL 9.1).
No copy sample defect is needed.	8. Excessive dry ink contamination is on the return baffle near the transfer/detack corotron.	8. Clean the contamination and then check that the developer housing is seated correctly. Check for an obstruction between the magnetic roll and the developer housing. Check the developer housing for damage. Reference Troubleshooting Toner/Developer Dumping, Section 6
	9. **(2510 ONLY):** Developer module seal leaking. **CAUTION** *Only the 2510 developer module can be repaired using the developer module repair kit. The 2515 developer module is the same as the 2520 and cannot be repaired. The manufacturing tolerances are much tighter and cannot be set with out the correct tools.*	9. **(2510 ONLY):** Replace the developer module seal, Developer Module Repair Kit (PL 9.4).
	10. Contaminated dry ink	10. Replace the dry ink cartridge and also the developer material (REP 9.9) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

Definition

These defects are 0.2 inches (5mm) or smaller in diameter. These could appear at intervals that are in the process direction.

CQ 21 Streaks (TYPE 1.1, Dry ink Streaks)



Definition

Copy defects that appear in the process direction (from lead edge to trail edge). Streaks may be uniform (similar to data information), nonuniform (a smudge with no clearly defined line pattern), or periodic. The dry ink streaks follow the photoreceptor drum.

CQ 21 Streaks (TYPE 1.1, Dry ink Streaks)

Probable Cause	Corrective Action
1. Defective photoreceptor drum.	1. Isolate the cause of the problem by removing the photoreceptor drum (REP 9.3) assembly from the photoreceptor drum support shaft. Rotate the photoreceptor drum end for end, and install the photoreceptor drum on the support shaft. Reinstall the photoreceptor drum assembly and run another copy. Compare the copy defect with the original copy defect. If the defect is at the same place on the copy, then go to the CQ 21 Type 1.2 RAP. If the defect moved to a different place on the copy, then continue with this RAP.
2. Defective photoreceptor drum.	2. Wash (General Procedures) or replace (REP 9.3) the photoreceptor drum as required. Check the cleaner blade for damage. Check the photoreceptor drum for damage caused by the cleaner assembly seal, cleaner blade retainers, magnetic seal, developer roll or the developer housing filter manifold. Ensure that the phoptoreceptor drum is installed correctly in the xerographic module. Ensure that the black plastic arbor is slightly recessed into the drum. Perform the Electrostatic Series (2510 ADJ 9.2, 2515 ADJ 9.3).

CQ 21 Streaks (TYPE 1.2, Dry ink Streaks)

Definition

Copy defects that appear in the process direction (from lead edge to trail edge). Streaks may be uniform (with clearly defined lines), nonuniform (a smudge with no clearly defined line pattern), or periodic. The dry ink streaks did not follow the photoreceptor drum. The photoreceptor drum may still be good.

Probable Cause

1. Something is blocking the optical path to the photoreceptor drum.
2. Photoreceptor drum not being cleaned correctly.

Corrective Action

1. Remove the photoreceptor drum assembly (REP 9.2) and cover it with a shield. Look for an obstruction in the optical path.
   Clean the top and bottom of the lens assembly.
2. Enter the diagnostic mode and then enter code (L). Press ***Start*** and then ***Stop***. The cleaner blade solenoid should actuate. If not:
   Check the cleaner blade solenoid circuit on the following page.

   Remove the xerographic module. Check the following:
   - Cleaner blade solenoid adjustment (ADJ 9.1).
   - The cleaner blade weight moves freely and when fully transitioned, does not touch the frame. Ensure that there is clearance.
   - The cleaner blade assembly transitions across the photoreceptor drum.
   - No wires are interfering with the cleaner blade weight.
   - Cleaner auger and belt.

   Remove the photoreceptor drum and check the following for damage or contamination:
   - Cleaner blade seal assembly (REP 9.4).
   - Cleaner blade (REP 9.4).
   - Cleaner blade retainers (REP 9.4).
   - Drum seal.

   If the cleaning problem persists change the cleaner blade (REP 9.4).

(Continued)

CQ 21 Streaks (TYPE 1.2, Dry ink Streaks) (Continued)

Probable Cause	Corrective Action
3. Developer housing is not functioning correctly or is not seated correctly.	3. Replace the developer material (REP 9.8) and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3) if it has made more than 30K feet (9K metres) of copies. Check the developer roll and material for contamination. Replace as required. Ensure that the developer housing is seated correctly. Also ensure that the material in the developer housing is level.
4. Contaminated or damaged fuser components.	4. Check the fuser roll for contamination, damage, or offsetting. If the fuser roll is damaged, check the stripper fingers (2510 PL 10.4, 2515 PL 10.5) for damage. If there is material from the fuser roll on the air flow manifold, check the air flow manifold (PL 9.3) for interference to the fuser roll. Check the oil dispense assembly for correct operation. Check for contamination of the fuser wick. Check the fabric guide for damage that may have caused the contamination of the drum because of excessive moisture.
5. Contaminated media path components and baffles.	5. Clean the contaminated media path baffles and components.
6. Contaminated media supply.	6. Clean the media supply area.
7. Copier is not level (side-to-side)	7. Ensure that the copier is level (side-to-side).

(Continued)

CQ 21 Streaks (TYPE 2.1, Deleted Streaks)

Probable Cause	Corrective Action
1. Defective photoreceptor drum.	1. Isolate the cause of the problem by removing the photoreceptor drum assembly (REP 9.3) from the photoreceptor drum support shaft. Rotate the photoreceptor drum end for end, and reinstall the photoreceptor drum on the support shaft. Reinstall the photoreceptor drum in the copier and run another copy. Compare the copy defect with the original copy defect. If the defect is at the same place on the copy, then go to CQ 21 Type 2.2 RAP. If the defect moved to a different place on the copy, then continue with this RAP.
2. Light shock, crystallization, or contamination of the photoreceptor drum.	2. Wash (General Procedures) or replace (REP 9.3) the photoreceptor drum as required. Check the cleaner blade for damage. Check the photoreceptor drum for damage caused by the cleaner assembly seal, cleaner blade retainers, magnetic seal, developer roll or the developer housing filter manifold. Ensure that the phoptoreceptor drum is installed correctly in the xerographic module. Ensure that the black plastic arbor is slightly recessed into the drum. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

CQ 21 Streaks (TYPE 2.2, Deleted Streaks)

Definition

Copy defects that appear in the process direction (from lead edge to trail edge). Streaks may be uniform (deletions with a clearly defined pattern), nonuniform (deletions with no clearly defined pattern), or periodic. The deleted streak did not follow the photoreceptor drum.

Probable Cause	Corrective Action
1. Contaminated or defective corotrons.	1. Make a copy and perform the Image on Drum (Panic Stop) procedure in Section 6 to isolate the cause of the defect. If the defect is on the developed image on the photoreceptor drum, replace the charge corotron (PL 9.2). If the defect is not on the photoreceptor drum, but it is on the media, replace the transfer corotron (PL 8.6). Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
2. The light leaks because the covers are misadjusted or are loose.	2. Ensure that the covers are not damaged and are seated correctly.
3. The light lens seal is loose from the magnet.	3. Replace the light lens seal (PL 6.1).
4. Damaged media or damp media.	4. Cut sheet media Make a copy using a sheet of media from ta new pack of media. If the problem is corrected, check that the media is being stored correctly.

(Continued)

Probable Cause	Corrective Action
4. Damaged media or damp media.	4b. Roll media Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media. If the problem is corrected, ensure that the roll media is being stored correctly.
5. Contaminants in the developer material.	5. Inspect the developer material for foreign material and replace the developer material (REP 9.8) if necessary. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
6. Developer housing is not seated correctly.	6. Ensure that the developer housing is seated correctly. Ensure that the developer housing is operating correctly.
7. Contaminated or damaged photoreceptor drum.	7. Wash (General Procedures) or replace the photoreceptor drum (REP 9.3) as required. Perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).
8. (2510 ONLY): The developer seal is damaged. **CAUTION** *Only the 2510 developer module can be repaired using the developer module repair kit. The 2515 developer module is the same as the 2520 and cannot be repaired. The manufacturing tolerances are much tighter and cannot be set with out the correct tools*	8. (2510 ONLY): Replace the developer seal Developer Module Repair Kit (PL 9.4).
9. The auger to drum seal is damaged.	9. Replace the auger to drum seal (PL 9.1).
10. Damaged latch springs.	10. Replace the Latch Springs (PL 9.2).

CQ 22 Unfused Copy

There is no copy defect sample needed.

Definition

Unfused copy is a copy where the image can be easily wiped off the media.

Probable Cause

1. The fusing temperature is too low.
2. Damp media.
3. Incorrect fabric guide tension.
4. Fuser pressure plate not seated correctly.

Corrective Action

1a. Check/adjust the Fuser Temperature (ADJ 10.1).
1b. Air manifold is damaged causing air to flow on the fuser roll reducing the temperature. Replace the Air Manifold (PL 9.3)
1c. Damaged filter housing can cause air to blow on the fuser roll, replace the Filter Housing (PL 9.3).
1d. (2510) Install Tag 14 to improve edge fusing.

2a. Cut sheet media
Make a copy using a sheet of media from the middle of the stack of media in the Cut Sheet Feeder or the media storage on the stand.

If the problem is corrected, check that the media is being stored correctly.

2b. Roll media

Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.

If the problem is corrected, ensure that the roll media is being stored correctly.

3. Check that the fabric guide tensioning assembly (2510 PL 8.2, 2515 PL 8.4) is not binding and the weight is centered in the fabric guide.

4. Ensure that the fuser pressure plate is seated correctly.

(Continued)

(Continued)

Probable Cause	Corrective Action
5. The image density is too high. **CAUTION** **(2510 and 2515 W/O Tag 2, 7, or 89):** *To prevent damage to the fuser drive gears, enter the codes [L] cleaning blade solenoid, [g] fuser, and [J] cooling fans first. Allow the copier to operate for 2 minutes minimum, then enter code (A) to start the main drive motor.* **WARNING** **(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.**	5a. **(2515 W/O Tag 2, 7, or 89)):** Make several copies and then enter the codes [L], [g], [J], wait 2 minutes, enter [A] to switch on the main drive motor and [Y] to check the dry ink concentration. If the value displayed is greater than 7, go to the J Dry ink Concentration RAP in Section 2. **(2515 W/ Tag 2, 7, or 89):** Make several copies and then enter the code [A] to switch on the main drive motor and [Y] to check the dry ink concentration. If the value displayed is greater than 7, go to the J Dry ink Concentration RAP in Section 2. 5b. (2515) Go to the J Dry ink Concentration RAP in Section 2.
6. Contaminated or damaged fuser roll.	6. Clean or replace the fuser roll.
7. Incorrect wall voltage.	7. Volatage at the wall must be 105 to 125 VAC.
8. Incorrect toner	8. Ensure that the customer is using toner that is designed for use in the product.
9. An incorrect fuser heat rod is installed.	9. Ensure that the correct heat rod is installed in the copier.

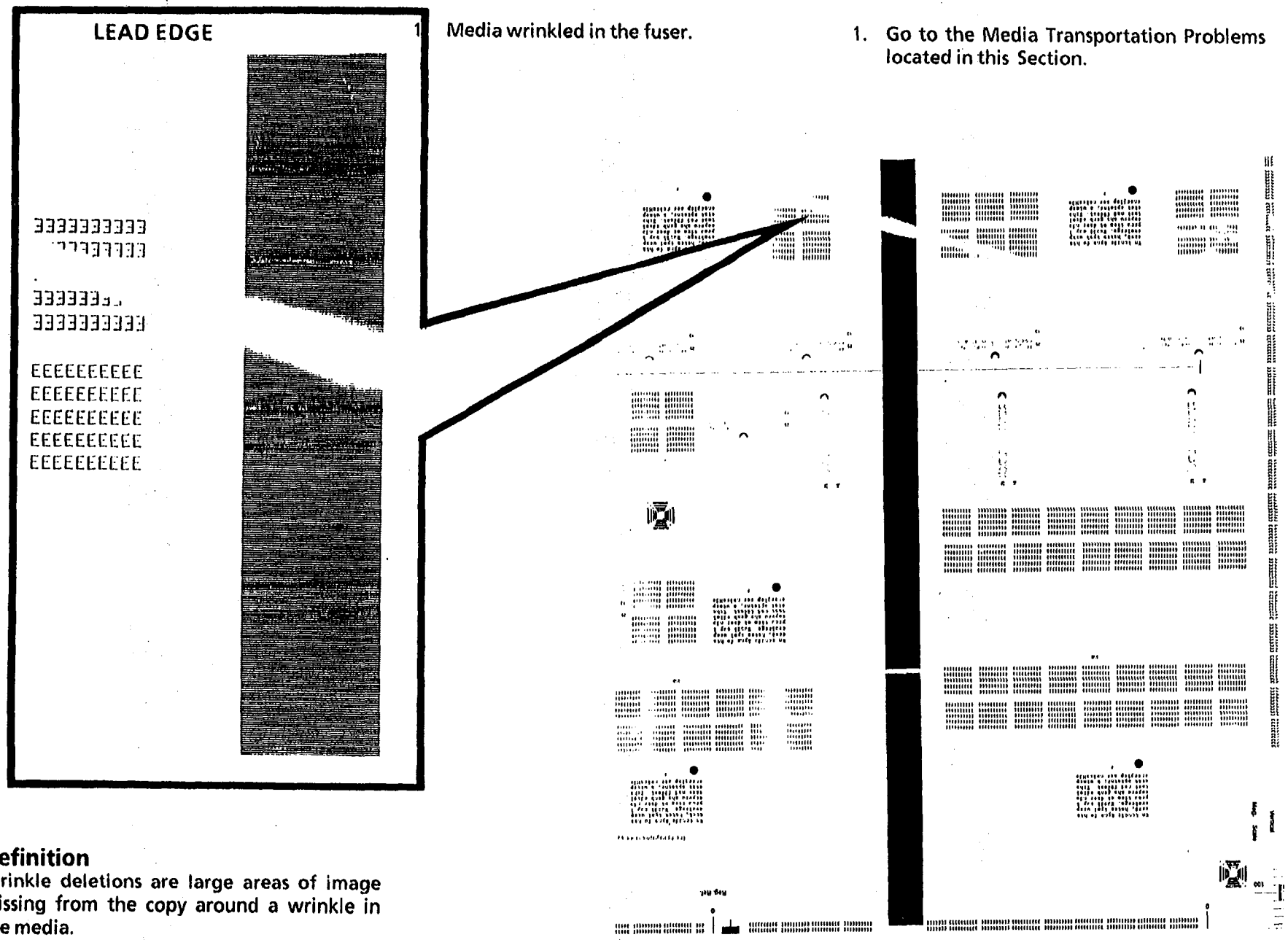
CQ 23 Wrinkle Deletions

Probable Cause

1 Media wrinkled in the fuser.

Corrective Action

1. Go to the Media Transportation Problems located in this Section.



Definition

Wrinkle deletions are large areas of image missing from the copy around a wrinkle in the media.

CQ 24 Trail Edge Deletion

Probable Cause

1. Excessive curl in the media.

NOTE: The Trail Edge Deletion is caused by the preset curl in the media. The curl is formed by the media being wrapped around the core of the roll. The deletion may get worse as the roll of media is depleted and the diameter of the roll becomes smaller.

Corrective Action

1. Use the media that has been cut 0.4 inches (10mm) longer than what is actually required for the image area.

No copy defect sample

Definition

A Trail Edge Deletion exists when an image deletion greater than 0.4 inches (10mm) on the trail edge of the copy is observed.

CQ 25 Developer Bias RAP - 2515

Switch off and unplug the copier.

Ensure that the developer bias connector, J24, is seated correctly on the high voltage power supply (HVPS) and the developer bias lead is connected to the developer bias clip.

Set the meter to measure + 400 VDC.

Connect the (-) to the **GND** test point on the HVPS and the (+) to the developer bias clip.

Plug in and switch on the copier. Cheat the AC interlock switch and the upper rear cover interlock switch. Press ***Start***; immediately select the ***Light Input*** mode.

The voltage at the developer bias clip changes from approximately 0 VDC to approximately 225 VDC when the copier reaches *L3*.

Y N

The voltage at J25-8 of the High Voltage Power Supply is approximately 6 VDC when the copier goes from *L9* to *L0*.

Y N

Switch off the copier and go to FLAG 2 and check the wiring for an open circuit.

If there is no open circuit, replace the Control PWB (PL 1.1).

A B

A B

Switch off the copier and disconnect the bias lead from the bias clip.

Ensure that the bias lead does not come in contact with the copier frame.

Switch on the copier. Press ***Start***; immediately select the ***Light Input*** mode.

The voltage at the developer bias clip changes from approximately 0 VDC to approximately 225 VDC when the copier reaches *L3*.

Y N

Go to FLAG 1 and check the developer bias lead for a short circuit to frame or an open circuit.

If there is no short circuit or open circuit, replace the high voltage power supply and perform the Electrostatic Series (2510 ADJ 9.2; 2515 9.3).

Check the developer housing for a short circuit to frame.

A

A

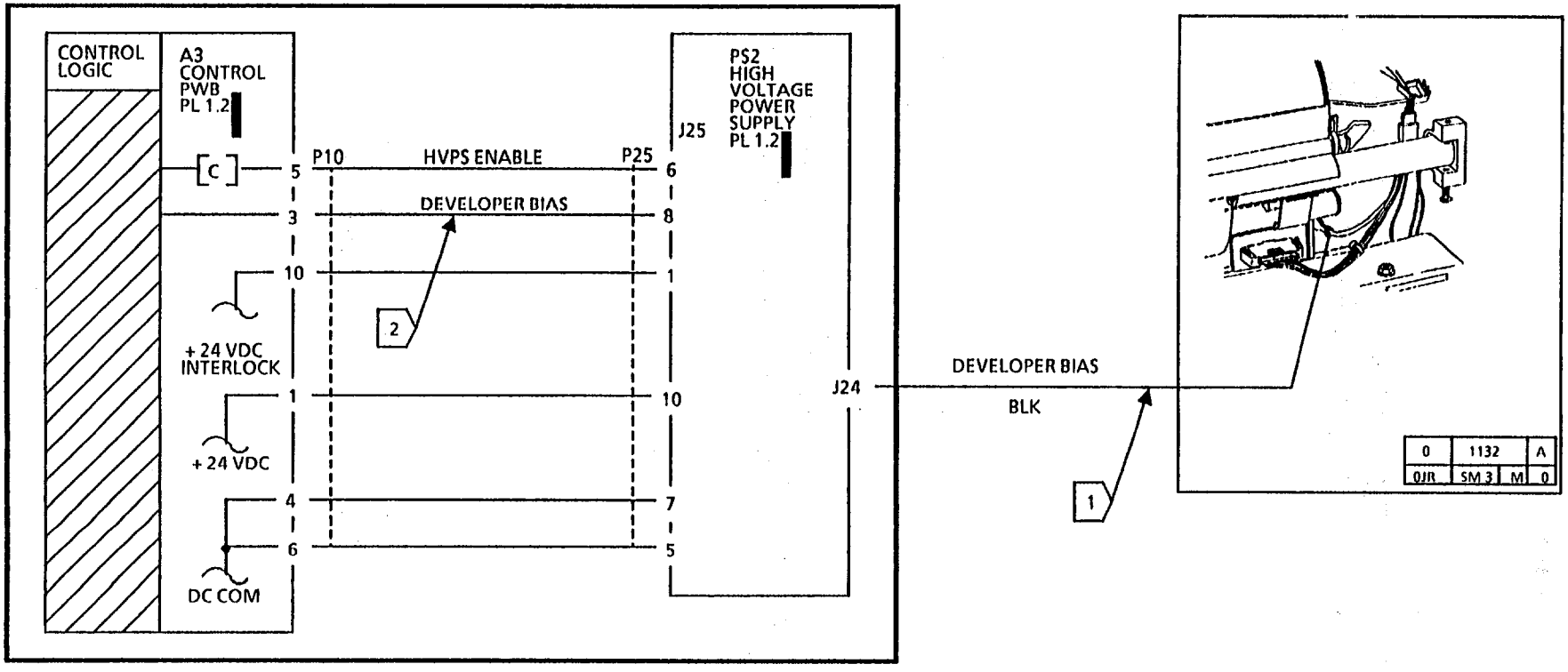
Press ***Stop***. Wait 15 seconds. Press ***Start***; then immediately select ***Dark Input***.

The voltage at the deveioper bias clip will change from 0 VDC to 225 VDC when the copier reaches *L3*. The voltage will remain at 200 VDC for a maximum of 45 seconds after the two beeps, and then drops to 0 VDC. Check contrast control in run mode only. Refer to the chart on page 3-79

Y N

Replace the high voltage power supply and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).

Go to the copy quality RAP that directed you here and continue troubleshooting the copy quality problem.



CONTROL VOLTAGES AT J25-8 TO GROUND WHEN THE COPIER IS IN THE RUN MODE.

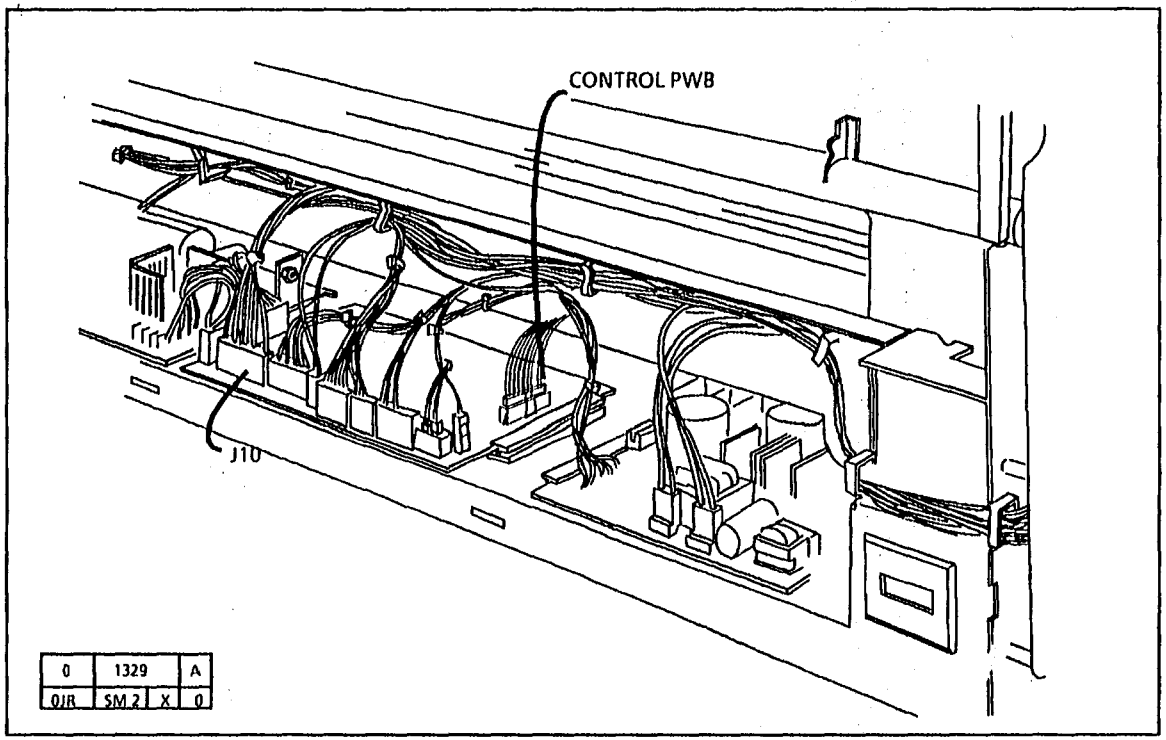
DOCUMENT INPUT MODE	COPY CONTRAST MODE				
	DARKER		NORMAL		LIGHTER
LIGHT	2.4 VDC	2.4VDC	4.9 VDC	9.8 VDC	9.8 VDC
DARK	4.9 VDC	4.9 VDC	9.8 VDC	14.7 VDC	14.7 VDC

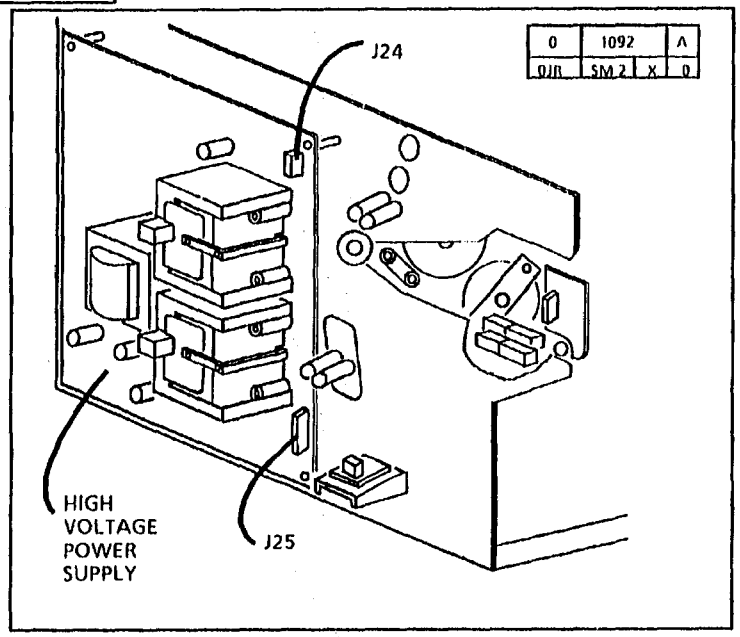
DURING THE WARMUP (L9 TO L0) THE VOLTAGE IS 6.0 VDC.

DEVELOPER BIAS VOLTAGES AT J24 TO GROUND WHEN THE COPIER IS IN RUN MODE.

DOCUMENT INPUT MODE	COPY CONTRAST MODE				
	DARKER		NORMAL		LIGHTER
LIGHT	150 VDC	150 VDC	200 VDC	300 VDC	300 VDC
DARK	200 VDC	200 VDC	300 VDC	400 VDC	400 VDC

DURING THE WARMUP, THE DEVELOPER BIAS VOLTAGE IS 0 VDC FROM L9 TO L4, AND 225 VDC FROM L3 TO L0.


CONTROL PWB
J10
0 1329 A
0/R SM 2 X 0


J24
0 1092 A
0/R SM 2 X 0
HIGH VOLTAGE POWER SUPPLY
J25

CQ 25 Developer Bias RAP - 2510

Switch off and unplug the copier.

Ensure that the developer bias connector, J24, is seated correctly on the high voltage power supply (HVPS) and the developer bias lead is connected to the developer bias clip.

Set the meter to measure +400 VDC.

Connect the (-) to the **GND** test point on the HVPS and the (+) to the developer bias clip.

Plug in and switch on the copier. Cheat the AC interlock switch and the upper rear cover interlock switch. Press **Start**; immediately select the **Light Input** mode.

The voltage at the developer bias clip goes from approximately +400 VDC to approximately +200 VDC when the copier goes from warmup to Ready.

Y N

The voltage at J25-8 of the High Voltage Power Supply goes from approximately +14.7 VDC to +4.9 VDC when the copier goes from warmup to Ready.

Y N

Switch off the copier and go to FLAG 2 and check the wiring for an open circuit. If there is no open circuit, replace the Control PWB (PL 1.1B).

Switch off the copier and disconnect the bias lead from the bias clip.
Ensure that the bias lead does not come in contact with the copier frame.

Switch on the copier. Press ***Start***; immediately select the ***Light Input*** mode.

The voltage at the developer bias lead goes from +400 VDC to +200 VDC when the copier goes from Standby to Ready.

Y N

A B C

A B C

Go to Flag 1 and check the developer bias lead for a short circuit to frame or an open circuit.

If there is no short circuit or open circuit, replace the high voltage power supply and perform the electrostatic series (ADJ 9.2).

Check the developer housing for a short circuit to frame.

A

A

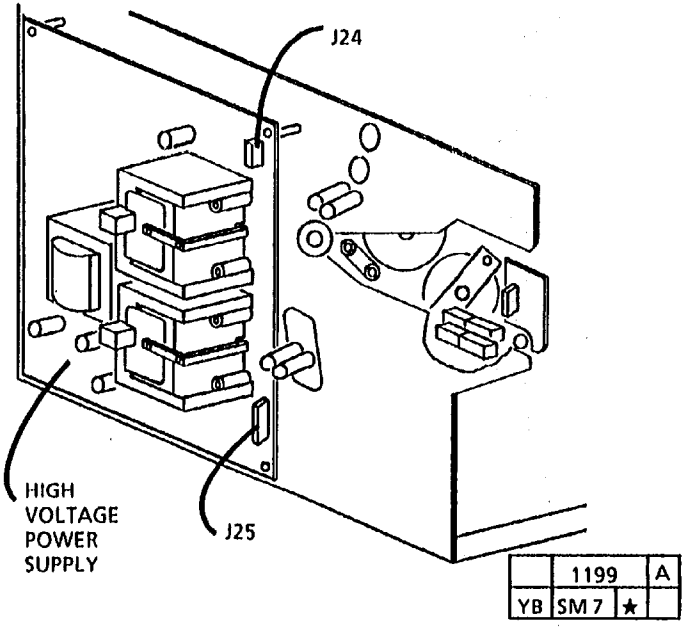
Press ***Stop***. Wait 15 seconds. Press ***Start***; then immediately select ***Dark Input***.

The voltage goes from +400 VDC to +300 VDC when the copier goes from Standby to Ready.

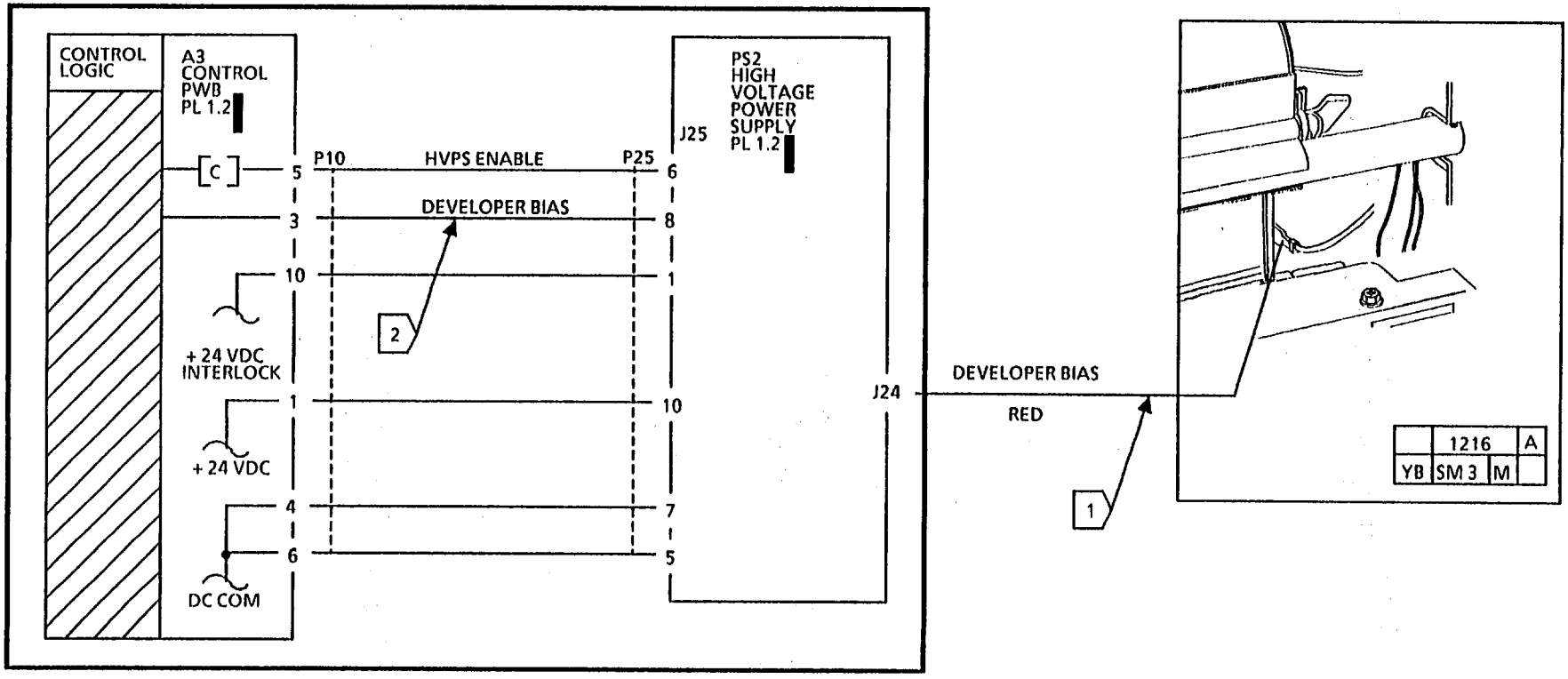
Y N

Replace the high voltage power supply and perform the electrostatic series (ADJ 9.2).

Go to the copy quality RAP that directed you here and continue troubleshooting the copy quality problem.



Notes:



CONTROL VOLTAGES AT J25-8 TO GROUND WHEN THE COPIER IS ***READY***

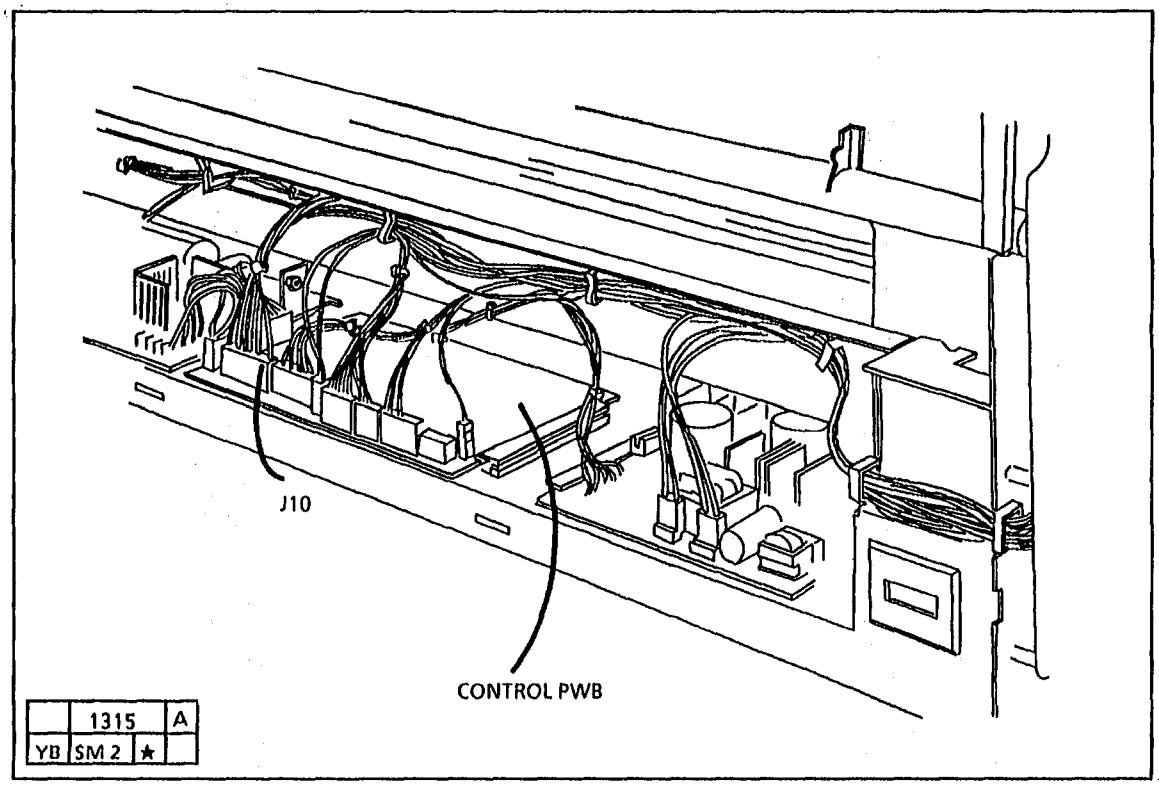
DOCUMENT INPUT MODE	COPY CONTRAST MODE				
	DARKER		NORMAL		LIGHTER
LIGHT	4.9 VDC	4.9 VDC	9.8 VDC	14.7 VDC	14.7 VDC
DARK	2.4 VDC	2.4 VDC	4.9 VDC	9.8 VDC	9.8 VDC

DURING THE WARMUP (L9 TO L0) THE VOLTAGE IS 14.7 VDC.

DEVELOPER BIAS VOLTAGES AT J24 TO GROUND WHEN THE COPIER IS ***READY***

DOCUMENT INPUT MODE	COPY CONTRAST MODE				
	DARKER		NORMAL		LIGHTER
LIGHT	150 VDC	150 VDC	200 VDC	300 VDC	300 VDC
DARK	200 VDC	200 VDC	300 VDC	400 VDC	400 VDC

DURING THE WARMUP, THE DEVELOPER BIAS VOLTAGE IS 0 VDC FROM L9 TO L4, AND 400 VDC FROM L3 TO L0.


J10
CONTROL PWB
1315
A
YB
SM 2
★

Notes:

CQ 26 High Voltage Power Supply RAP

Switch off and unplug the copier.

Ensure that the connectors are correctly seated on the high voltage power supply.

Ensure that all of the interlock switches are cheated.

Set the meter to measure +24 VDC.

Connect the (-) to the **GND** test point on the HVPS.

Plug in and switch on the copier

There is +24 VDC at pins 1 and 10 of J25 of the high voltage power supply.

Y N

Switch off the copier and go to FLAG 1 and check the wiring for an open circuit.

If there is no open circuit, replace the Control PWB.

If the problem still exists, replace the high voltage power supply and perform the Electrostatic Series (ADJ 9.2).

Set the meter to measure + 20 VDC.

In the power saver mode, there is +20 VDC at pin 6 of J25 of the HVPS.

Y N

A B

A B

Go to FLAG 2 and check the wiring from the Control PWB to the HVPS for an open circuit.

If there is no open circuit, replace the Control PWB.

Press the **Start** button to switch on the HVPS.

The voltage goes from +20 VDC to +0.7 VDC when the main drive motor is energized.

Y N

Replace the Control PWB.

Connect the (+) lead to P25-4. Enter the diagnostic mode and enter the code [E].

The voltage goes from +20 VDC to +0.7 VDC.

Y N

A B

A B

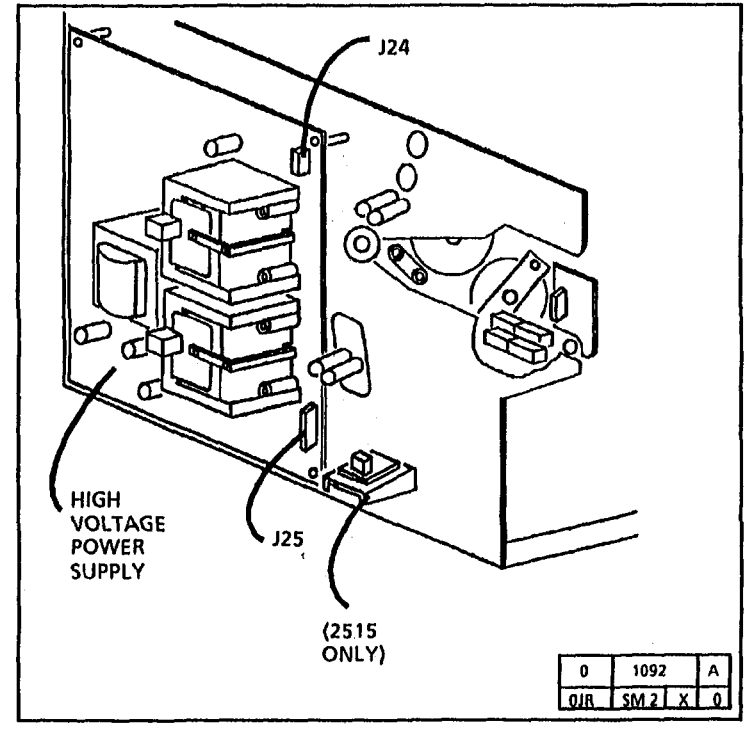
Go to FLAG 3 and check for an open circuit in the wiring.

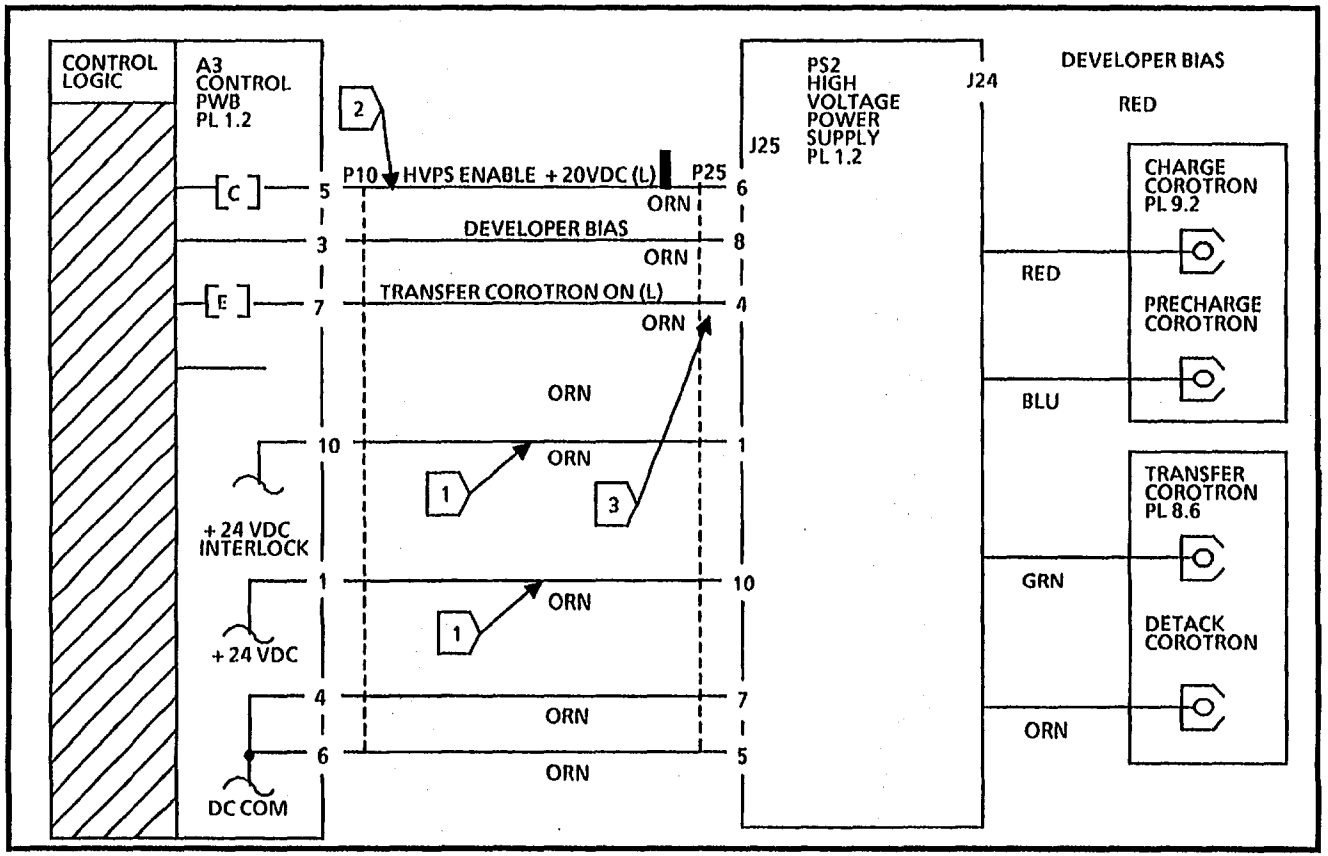
If the problem still exists, replace the control PWB.

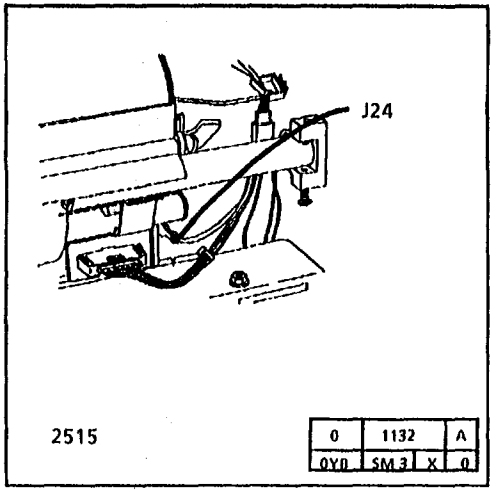
Check for an open circuit in the wiring from the HVPS to the corotrons.

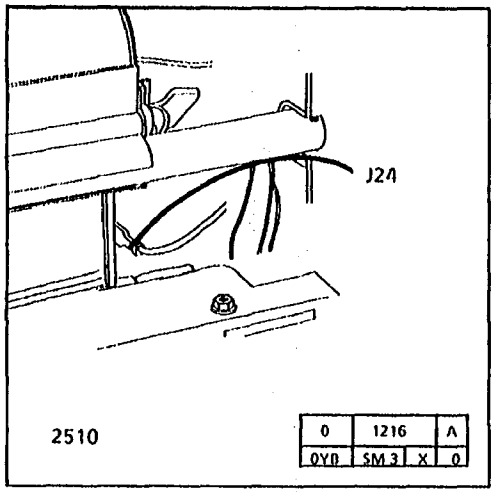
If the problem still exists, replace the corotrons.

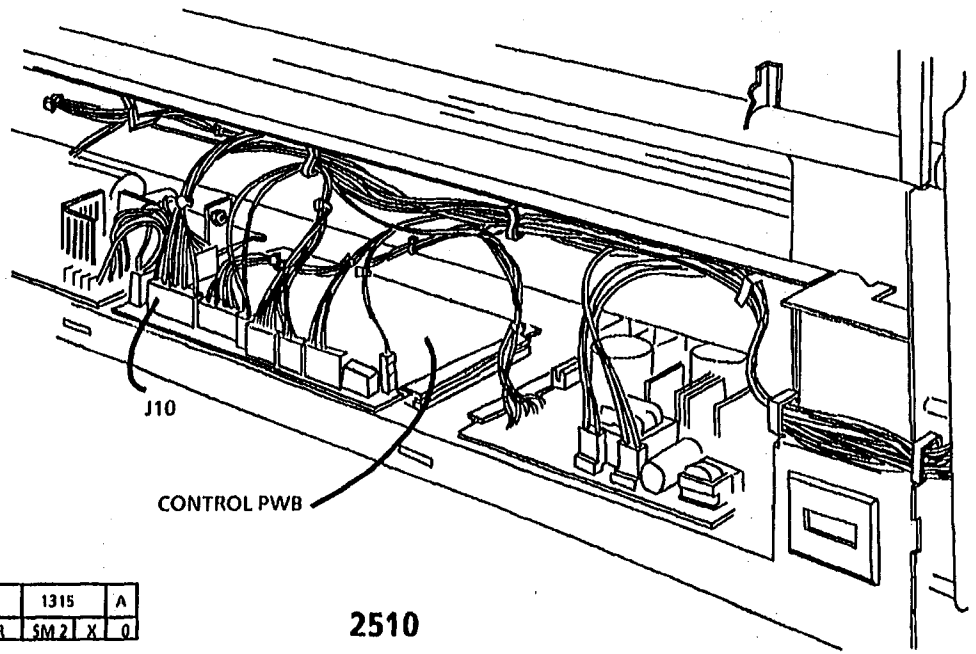
If the problem still exists replace the HVPS and perform the Electrostatic Series (2510 ADJ 9.2; 2515 ADJ 9.3).




CONTROL LOGIC
A3 CONTROL PWB PL 1.2
2
P10
HVPS ENABLE +20VDC (L)
P25
ORN
DEVELOPER BIAS
ORN
TRANSFER COROTRON ON (L)
ORN
ORN
ORN
ORN
ORN
ORN
+24 VDC INTERLOCK
+24 VDC
DC COM
1
3
PS2 HIGH VOLTAGE POWER SUPPLY PL 1.2
J25
J24
DEVELOPER BIAS
RED
CHARGE COROTRON PL 9.2
RED
PRECHARGE COROTRON
BLU
TRANSFER COROTRON PL 8.6
GRN
DETACK COROTRON
ORN

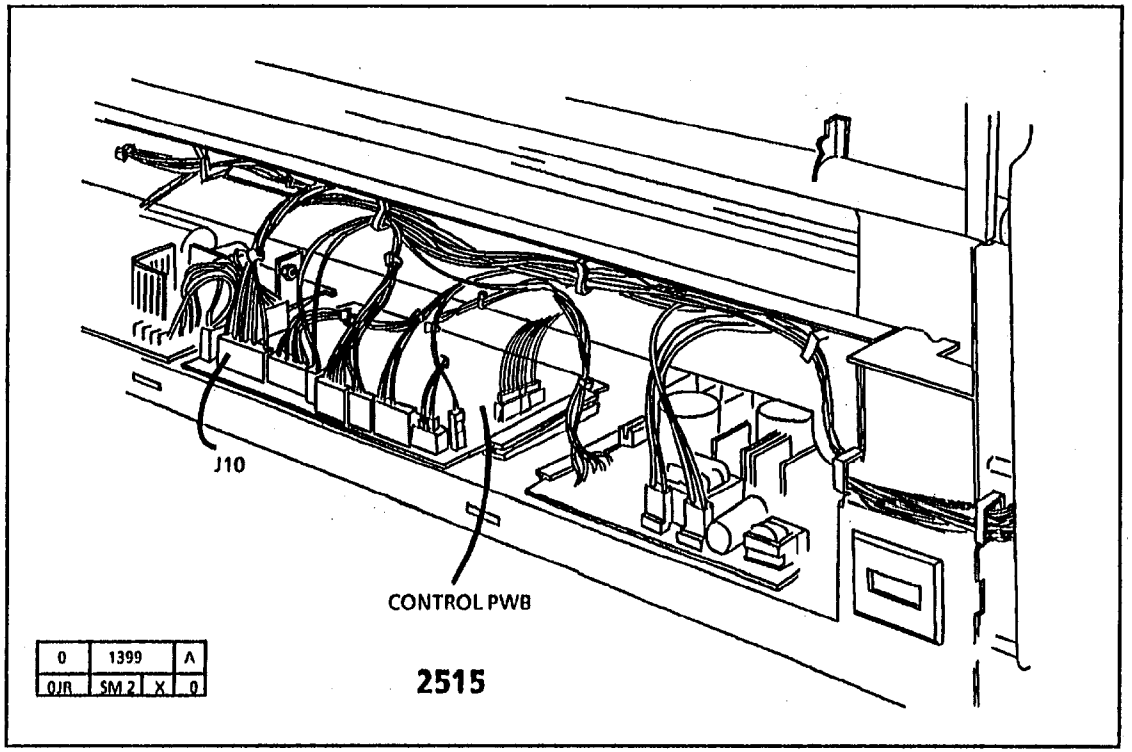

J24
2515
0 1132 A
0Y0 SM 3 X 0


J24
2510
0 1216 A
0Y0 SM 3 X 0



0	1315		A
0JR	SM 2	X	0

2510


J10
CONTROL PWB
0 1399 A
0JR SM2 X 0
2515

CQ 27 Exposure RAP

This RAP is used if there is no exposure or an excessive amount of exposure. No exposure will give a black copy and an excessive amount of exposure will give a washed out copy.

Ensure that connectors P11 of the Control PWB and P21 and P22 of the lamp ballast are connected correctly. Ensure that the exposure lamp sockets are not damaged and the lamp is fully in the lamp sockets. Ensure that the clear slot is facing the Illumination Sensor

NOTE: Do not leave the exposure lamp on for an extended amount of time. The photorecptor drum could be damaged by the light shock.

Enter the code F. **The exposure lamp lights.**

Y N

The lamp filaments are on.

Y N

There is +0.7 VDC between pins 4 (+) and 3 (-) of P11 on the Control PWB.

Y N

Go to FLAG 1 and check the wiring between the Control PWB and the lamp ballast for an open circuit.

If there is no open circuit, replace the Control PWB.

Replace the lamp ballast.

A B

A B

There is +24 VDC between pins 6 (+) and 3 (-) of P11 on the Control PWB.

Y N

Go to FLAG 2 and check the wiring between the Control PWB and the lamp ballast for an open circuit.

If there is no open circuit, replace the lamp ballast.

Press **Stop** then **Start**. **The voltage between pins 6 (+) and 3 (-) of P11 on the Control PWB goes from +24 VDC to +0.6 VDC.**

Y N

Replace the Control PWB.

Replace the lamp ballast

If the problem still exists, replace the exposure lamp.

Connect the multimeter to P11-7 (+) on the lamp ballast PWB. Connect the (-) to ground.

CAUTION

(2510, 2515 W/O Tag 2, 7, or 89): *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor [A]; always enter the codes [L] cleaning blade solenoid, [g] fuser and [J] cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code [A] to start the main drive motor.*

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

(2510, 2515 W/O Tag 2 or 89):

Enter the diagnostic mode.

- enter code [L] and press ***Start***.
- enter code [g) and press ***Start***.
- enter code [J] and press ***Start***.
- wait at least 2 minutes.
- enter code [A] and press ***Start***.
- enter code [5] and press ***Start***.

Record the existing NVM value. Observe the meter indication. Observe the multimeter. Scroll to a value of **9**, press **Start**, continue scrolling past **9** to a value of **1** press **Start**.

(2515 W/ Tag 2, 7, or 89):

Enter the diagnostic mode.

- enter code [5] and press ***Start***.

Record the existing NVM value. Observe the meter indication. Observe the multimeter. Scroll to a value of **9**, press **Start**, continue scrolling past **9** to a value of **1** press **Start**.

(Continued)

The voltage decrease when code [5] is scrolled from 9 to 1.

Y N

Connect the multimeter (+) to P15-5. Block and unblock the Illumination Sensor.

The voltage changes aproximately 2 to 3 VDC.

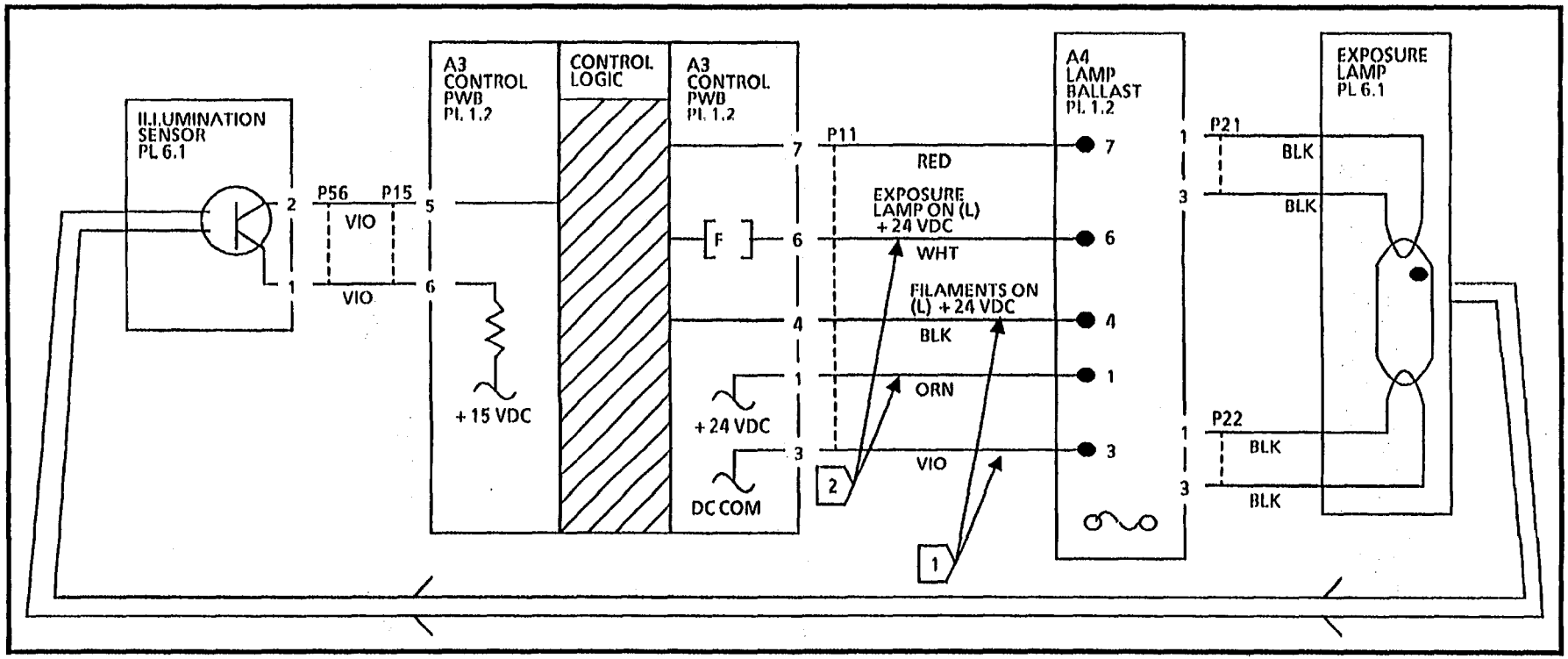
Y N

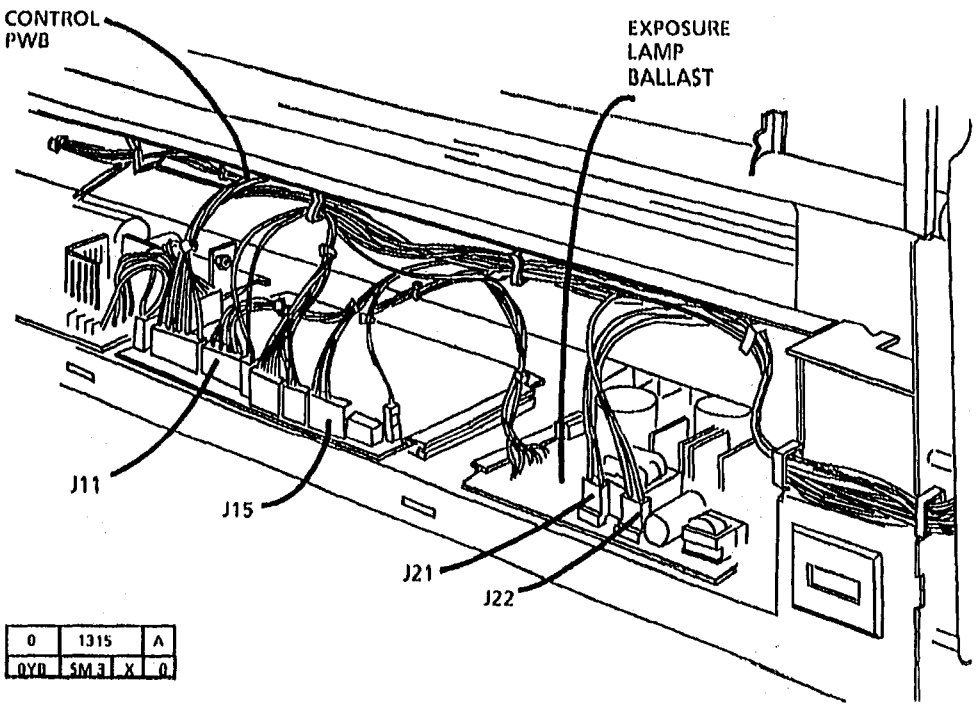
Replace the Illumination Sensor.

Replace the Control PWB.

Return the value displayed in code [5] to the value recorded earlier. Perform the Electrostatic Series (ADJ 9.3).

Notes:


ILLUMINATION SENSOR PL 6.1
P56
P15
VIO
VIO
A3 CONTROL PWB PL 1.2
+ 15 VDC
CONTROL LOGIC
A3 CONTROL PWB PL 1.2
+ 24 VDC
DC COM
P11
RED
EXPOSURE LAMP ON (L) + 24 VDC
WHT
FILAMENTS ON (L) + 24 VDC
BLK
ORN
VIO
A4 LAMP BALLAST PL 1.2
P21
BLK
BLK
P22
BLK
BLK
EXPOSURE LAMP PL 6.1


CONTROL
PWB
EXPOSURE
LAMP
BALLAST
J11
J15
J21
J22
0
1315
A
0YD
SM 3
X
0

CQ 28 Offsetting and Residual Image Isolation RAP

This RAP is used to isolate between an offsetting and residual image copy quality problem. It may be necessary to make several copies to see if the problem can be repeated.

1. Ask the customer for the document that is causing the problem.
2. Select a sheet of media, and draw a short line 4 1/4 inches (108 mm) from the lead edge and parallel to that edge.
3. Put the number 0 by one end of the line drawn in step 2. Use this prepared sheet as the media for the next copy.
4. Select the normal contrast mode (middle LED lit).
5. Insert the lead edge of the prepared media with the marked side facing down.
6. Start to make a copy, then press ***STOP*** when the line marked on the copy media is even with the outside edge of the transport latching cover.

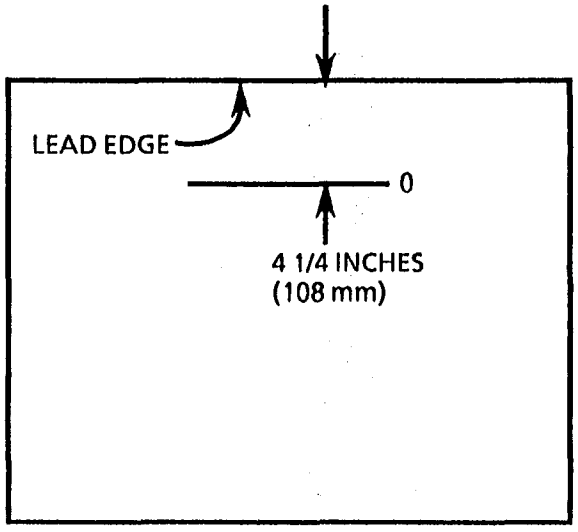
NOTE: *The mark will move about 1/2 inch (1.27cm) beyond the front cover before the main drive stops.*

7. Open the transport latching cover and remove the partially made copy. Ensure that the copy is not dragged against the photoreceptor or fuser roll.
8. Examine the new copy 10 3/8 inches (264mm) (circumference of the drum) away from the lead edge.

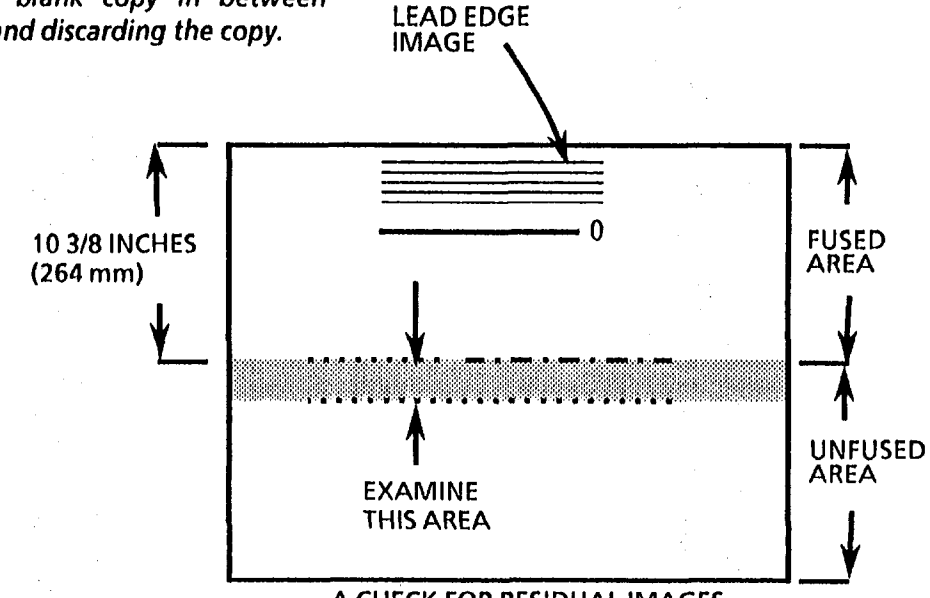
NOTE: *Locate the exact end of the fused area of the image by wiping the image with a finger.*

9. If there is a reprint of the lead edge information in the unfused area of the image, then the problem is residual image. This is caused by either a cleaning problem, a dirty cleaning blade, or an incorrect electrostatic value. Go to the CQ-15 Residual Image RAP.
10. Examine the images within the unfused area. If the reprint is not in the unfused area, then remove the oil dispense assembly and check the fuser roll for a dry ink image. If there is a dry ink image on the roll, then go to the CQ-13 Offsetting RAP.

NOTE: *If you need to repeat this procedure, remove dry ink from the fuser roll by making a blank copy in between attempts and discarding the copy.*



THE PREPARED MEDIA



A CHECK FOR RESIDUAL IMAGES

CQ29 Partial Image RAP (2510 W/Tag 26 and 2515)

This RAP is used when a copy is made under the control of a foreign accessory but the resulting copy contains no image or a partial image.

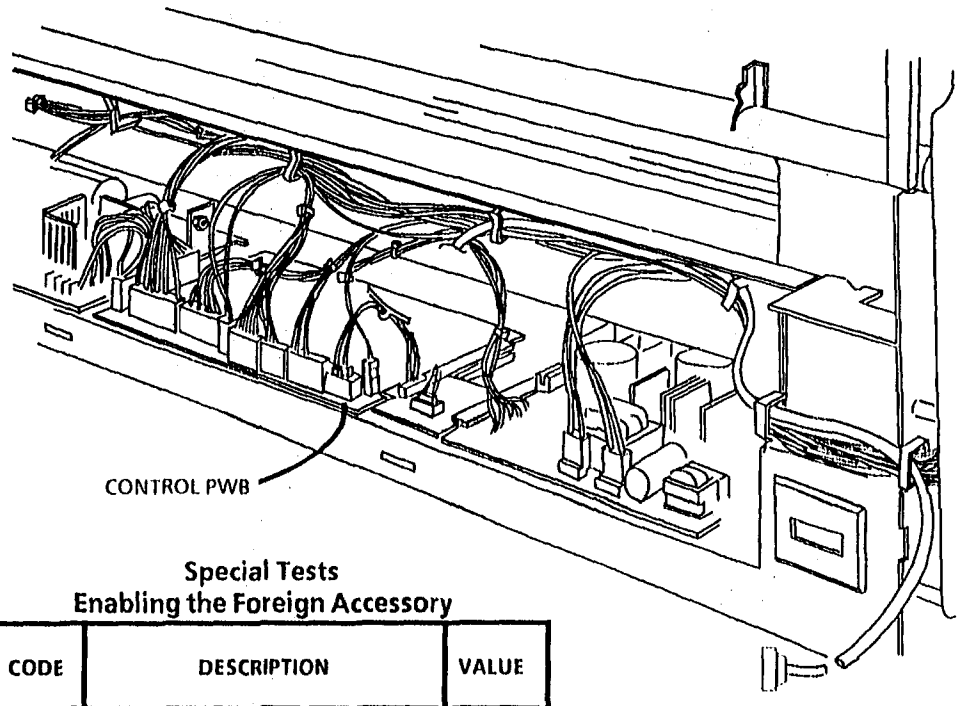
The foreign accessory feature of the software has three conditions, as shown in Table 1. Each condition is selected by using special test 1 (2510) and special test 2 (2515).

If the NVM value 3 is selected, copy length can be limited. The limit is selected by entering special test 2 and entering an NVM value of 1 to 9 as shown in table 2. Values of 1 through 8 limit the image length to the corresponding number of feet. A value of 9 allows an unlimited image length.

Ensure that the software is configured as the customer requests.

If part of the image is missing on the copy, the operator is making an image longer than the software is programmed to allow. Question the customer about the desired copy length and enter the correct NVM value.

If the problem still exists, replace the control PWB.



Special Tests
Enabling the Foreign Accessory

CODE	DESCRIPTION	VALUE
1 2510 W/Tag 26	The foreign accessory feature is enabled. A negative output pulse of 450 ms is provided near the end of each copy.	1
2 2515	The foreign accessory feature is disabled	2
	The foreign accessory feature is enabled. A negative output pulse of 450 ms is provided near the end of each incrementing of the Copy Count Meter	3

TABLE 1

Special Test 3
Setting the Allowed Image Length

CODE	DESCRIPTION	VALUE
3 2510 W/Tag 26 2515	Terminate imaging after [value] feet (XLA metres) of media. Allowable values are 1 through 9. A value of 9 allows an unlimited length of image.	9

TABLE 2

Section Contents

Repairs

Optics

Media Transportation

Xerographics

Fusing

Adjustments

Run Control

Media Transportation

Xerographics

Fusing

Notes:

REP 3.1 Control PWB

Parts List on PL 1.2

Replacement

After replacing the control pwb, perform the following adjustments:

1. Country configuration (ADJ 3.2).
2. Electrostatic series (2510: ADJ 9.2) (2515: ADJ 9.3).
3. Registration (ADJ 8.1).
4. Fuser temperature (ADJ 10.1).
5. Timeout interval to rest mode (ADJ 3.1).
6. Toner concentration (2515: ADJ 9.4).
7. Timeout Interval to Power Saver Mode (ADJ 3.3).
8. Foreign interface (ADJ 3.4).

REP 3.2 High Voltage Power Supply (HVPS)

Parts List on PL 1.2

Removal

1. **WARNING: Disconnect power cord.**
2. Remove the left side cover.
3. (Figure 1): Remove the high voltage power supply (HVPS).

Replacement

NOTE: Step 3E in REMOVAL: Ensure that the screws are reinstalled for a proper electrical ground.

CAUTION

Route all High Voltage wires through the appropriate cable ties, making sure that the HV wires are not stressed against sharp metal.

1. Perform the electrostatic series (2510 ADJ 9.2; 2515 ADJ 9.3).

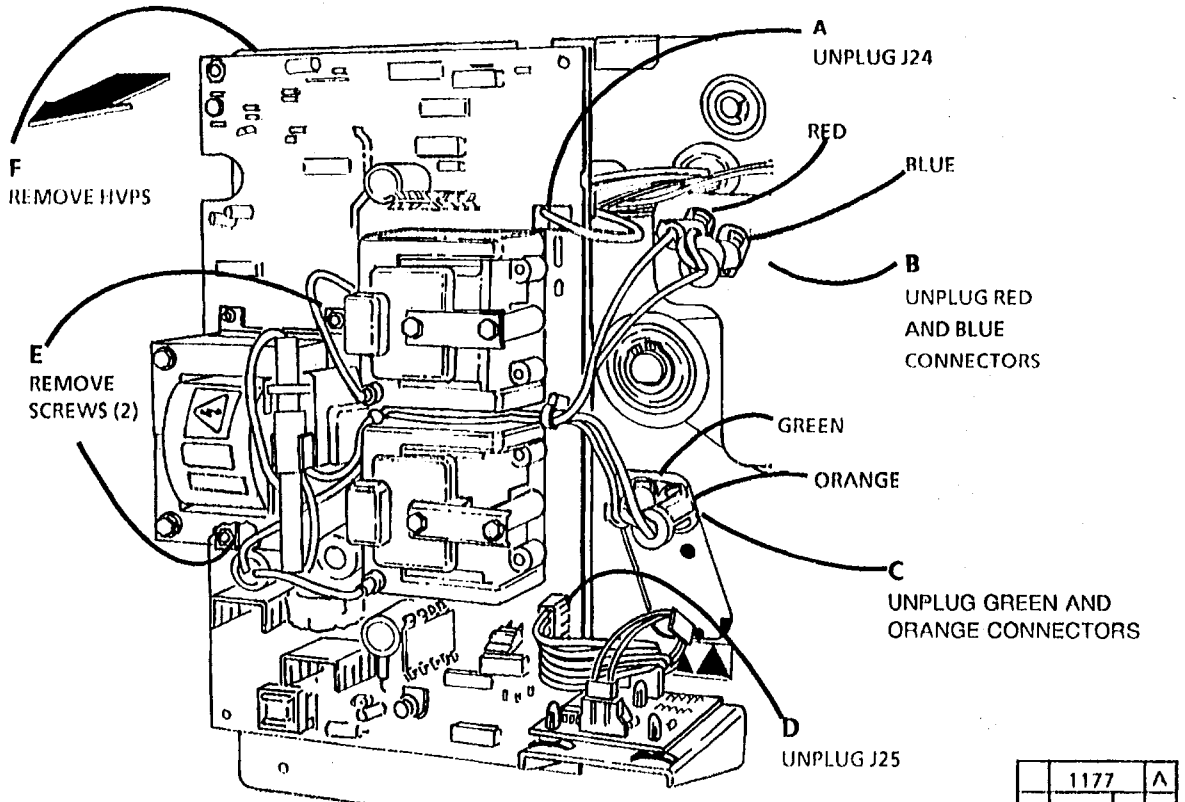


Figure 1. Removing the High Voltage Power Supply (HVPS)

	1177	
JR	SM 4	★

REP 5.1 Upper Document Feed Rolls

Parts List on 5.1

Removal

1. **WARNING: Disconnect power cord.**
2. Remove the document handler.
3. (Figure 1): Remove the rolls.

Replacement

NOTE: When replacing the rolls, ensure the part number labels are on the left.

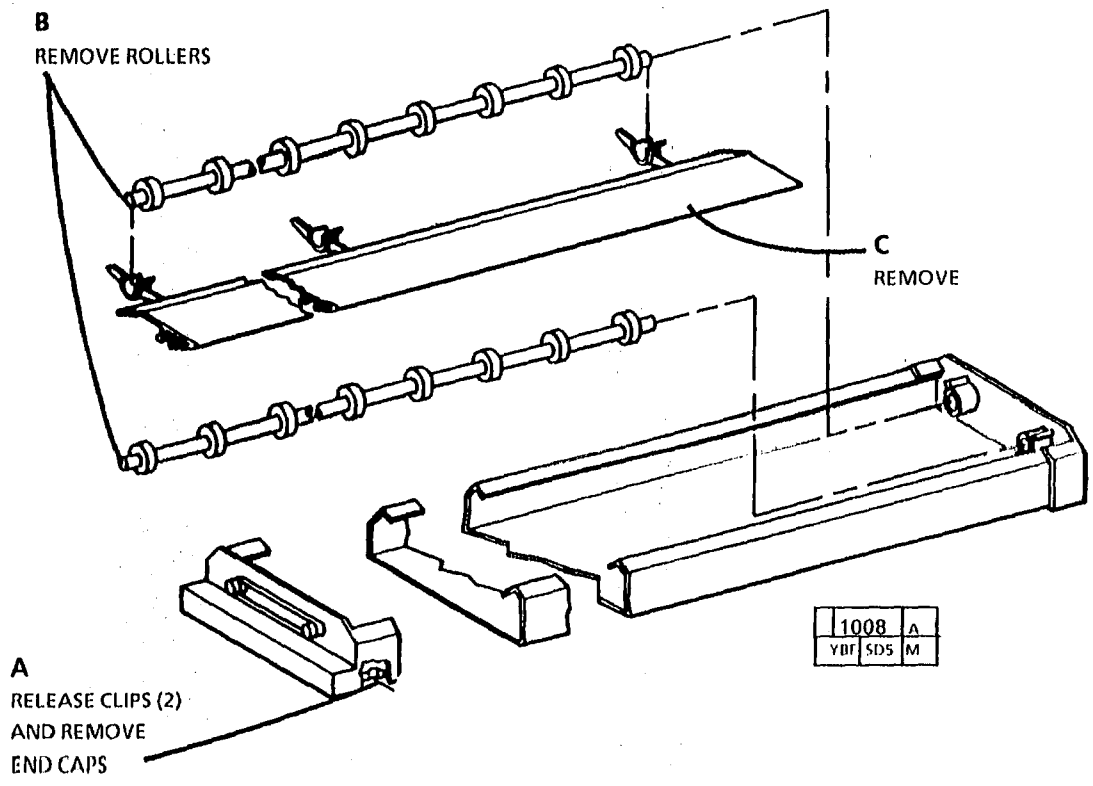


Figure 1. Removing the Upper Document Feed Rolls

REP 5.2 Lower Document Feed Rolls

Parts list on 5.1

Removal

1. **WARNING: Disconnect power cord.**
2. Remove the document handler.
3. Remove the right and left sidecovers and the upper rear cover .
4. Remove the platen .
5. (Figure 1): Remove the drive gears.

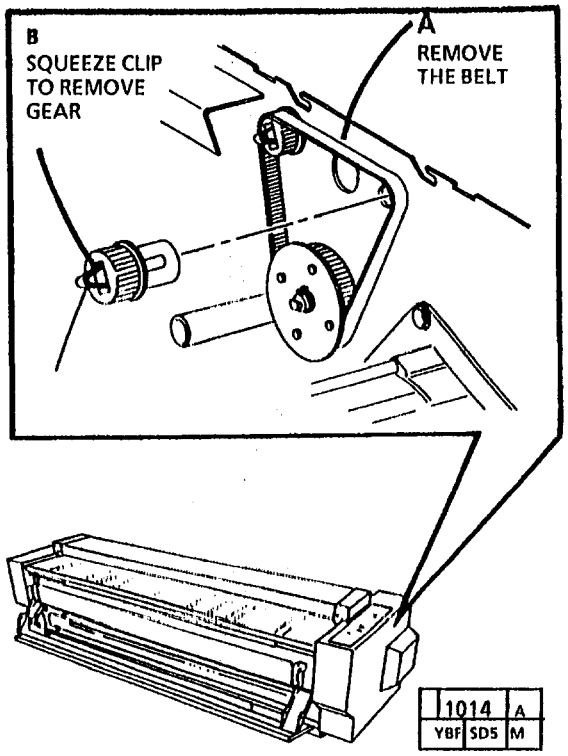


Figure 1. Removing the Drive Gears

CAUTION

Use care not to break the Document Sensor when removing the Front Feed Roll.

6. (Figure 2): Remove the feed roll(s).

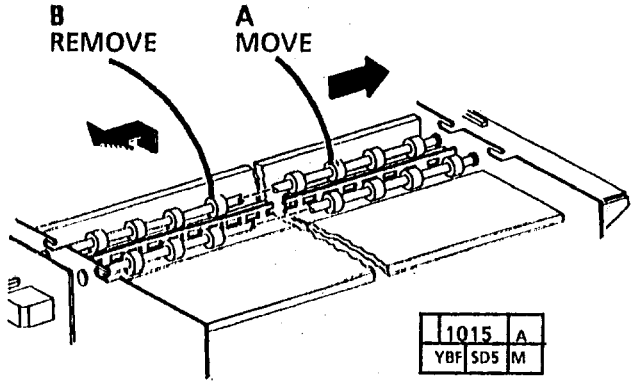


Figure 2. Removing the Feed Roll(s)

REP 6.1 Exposure Lamp

Parts List on PL 6.1

Replacement

NOTE: Ensure that the heatsink is in place in the center of the exposure lamp and it is not touching the rear document drive rolls shaft.

NOTE: Ensure that the lamp part number is at the right side of the machine and the clear slot is facing the Illumination Sensor.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

1. Enter the diagnostic mode.
2. **(2510, 2515 W/O Tag 2, 7, or 89):**
   - Enter the code [L] and press ***Start***.
   - Enter the code [g] and press ***Start***.
   - Enter the code [J] and press ***Start***.
   - Wait 2 minutes..
   - Enter the code (A) and press ***Start***.

   (2510, 2515 W Tag 2, 7, or 89):
   - Enter the code (A) and press ***Start***.
3. Enter the code [F] and press ***Start***.
4. Allow the copier to run for 4 minutes to prepare the new lamp for use.
5. Press ***Stop***.
6. Perform the electrostatic series (2510 ADJ 9.2; 2515 ADJ 9.3).

REP 6.2 Lens

Parts List on PL 5.1

Removal

1. **WARNING: Disconnect power cord.**
2. Remove the document handler.
3. Remove the platen.
4. Remove the exposure lamp.
5. (Figure 1): Remove the lens.

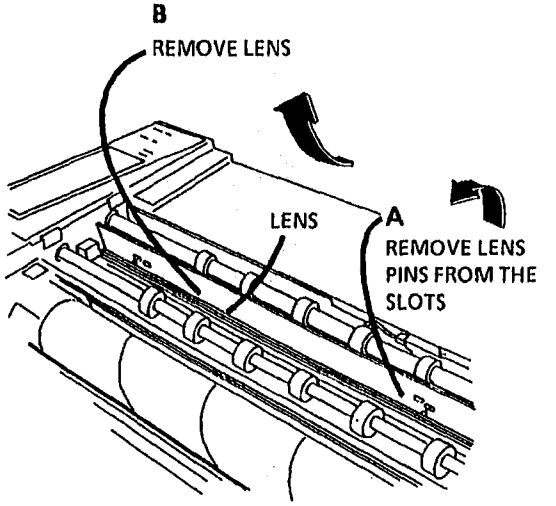


Figure 1. Removing the Lens

Replacement

1. (Figure 2): Observe correct lens position.

NOTE: Step 1A: There are six slots in the frame into which the lens pins can be installed. The slots in the lower position are for the 2510/2515. The slots in the upper position are for the 2520. Locating the lens pins in the upper slots will cause an out of focus condition in the 2510 and 2515.

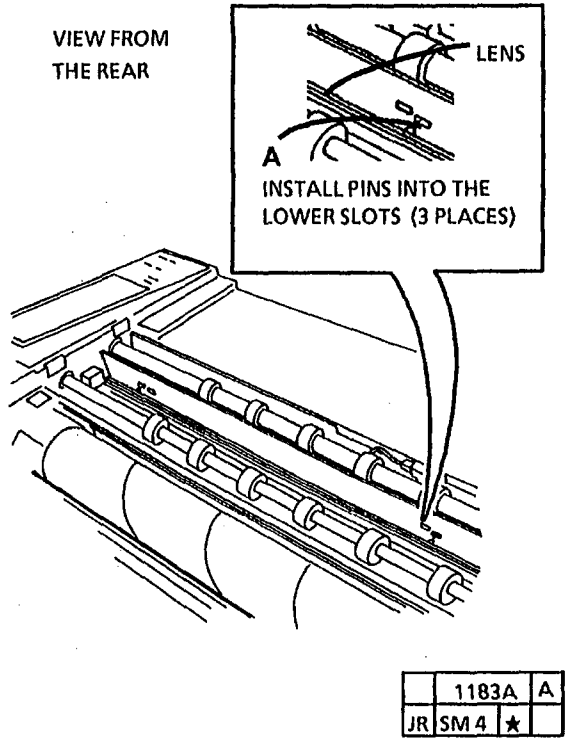


Figure 2. The Correct Lens Position

REP 8.1 Media Transport Module

Parts List on PL 8.1

Removal

1. Remove xerographic module (REP 9.1).

NOTE: Before removing the media transport assembly, ensure that there is a clean area to place the assembly.

2. Remove the left and right side covers, and the upper and lower rear covers.

3. (Figure 1): Remove the media transport.

Replacement

NOTE: Step G: When replacing the media transport, ensure that the pin is engaged in the slot.

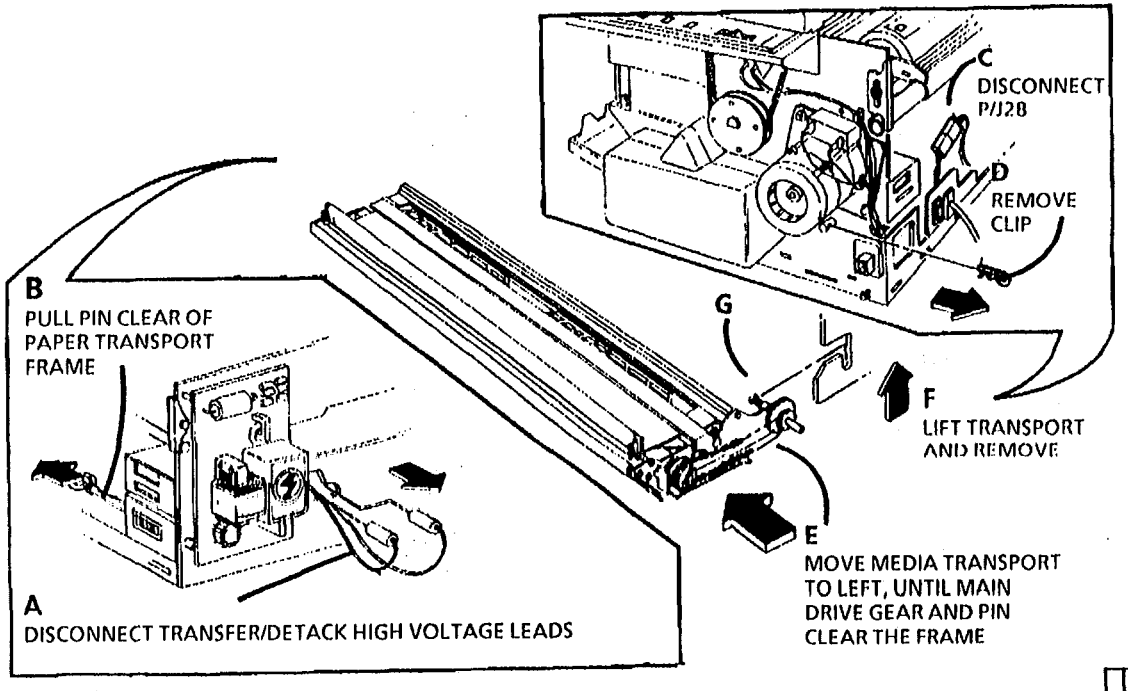


Figure 1. Removing the Mrdia Transport

	1061	A
YBf	SD5	M

REP 8.2 Upper Media Feed Roll

Parts List on (2510) PL 8.1 (2515) PL 8.3

Removal

1. **WARNING: Disconnect Power Cord**

1. Remove the media transport module (REP 8.1).

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

3. Install in reverse order.

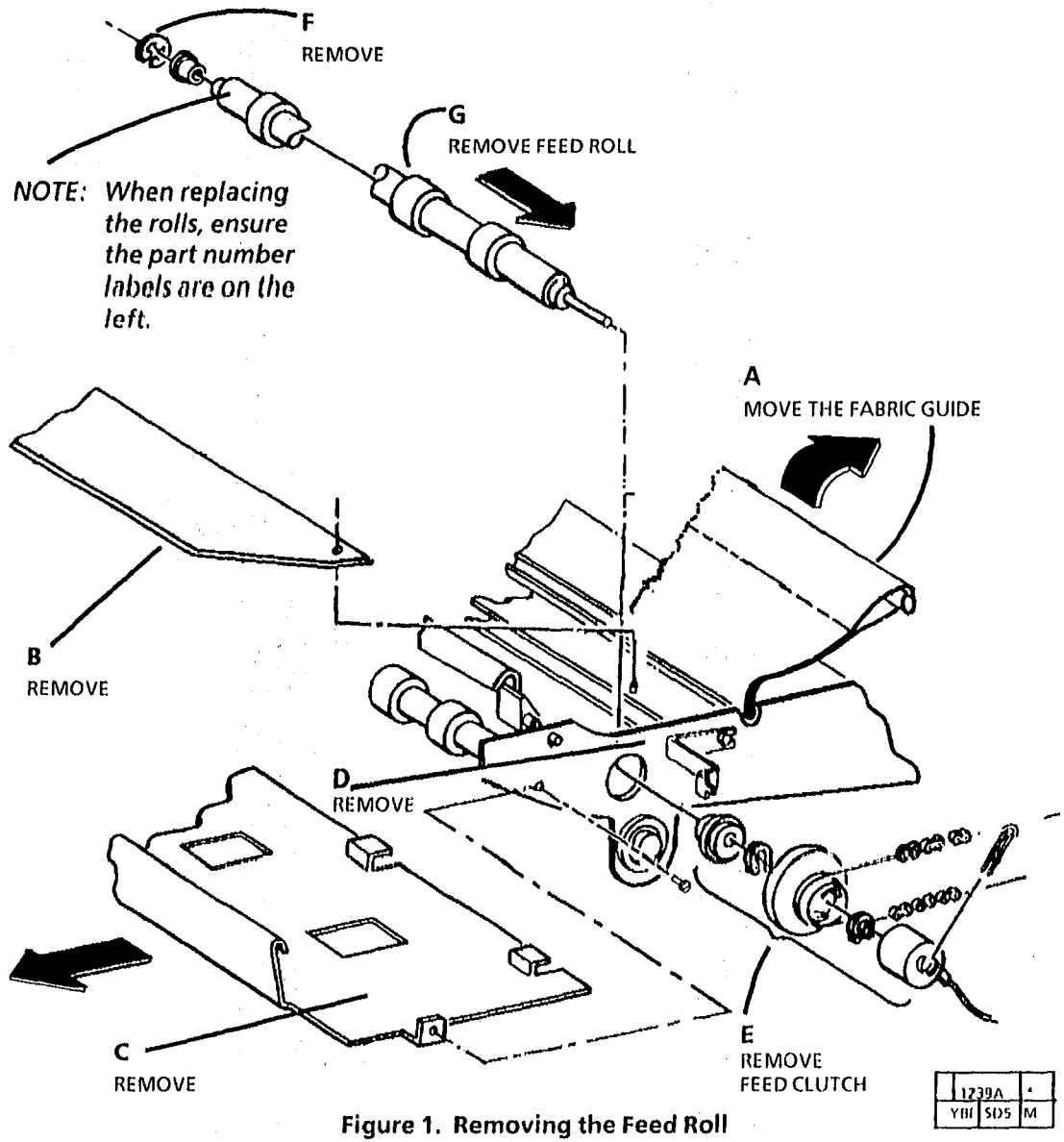


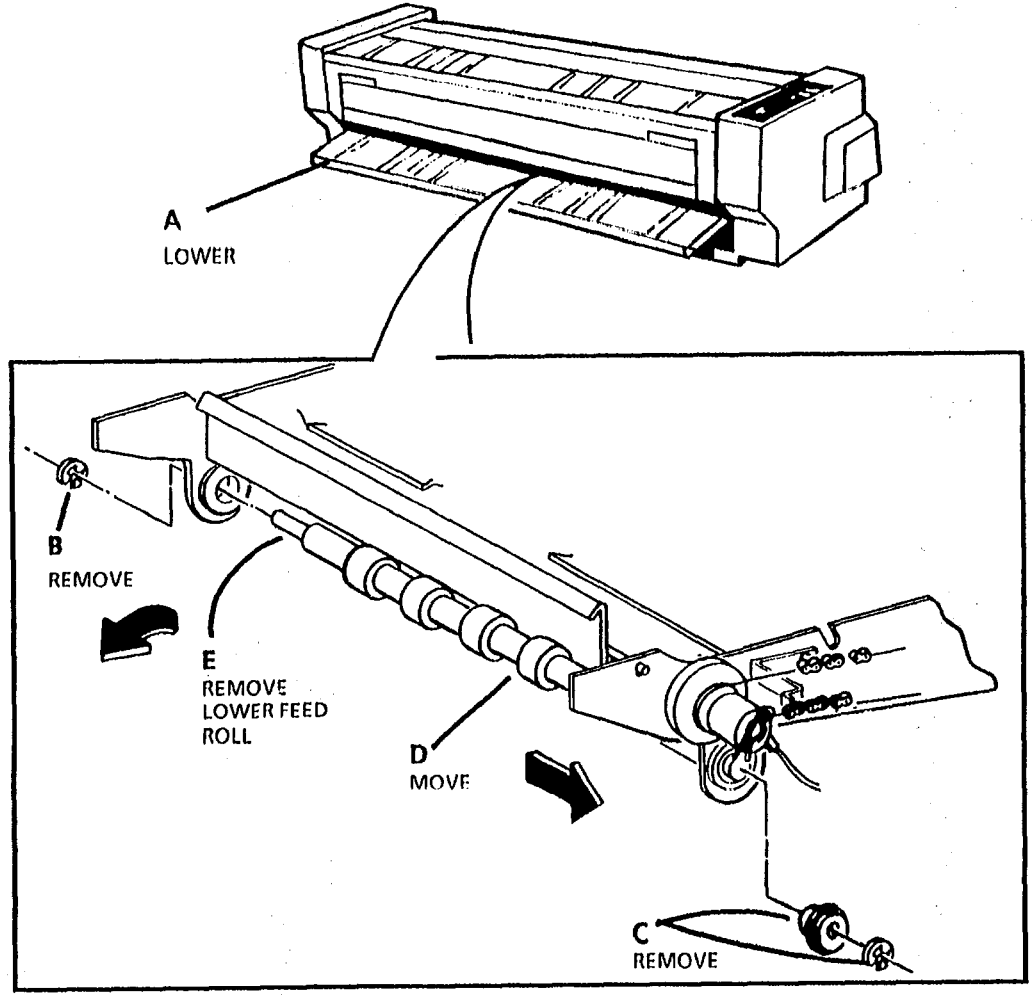
Figure 1. Removing the Feed Roll

REP 8.3 Lower Media Feed Roll

Parts List on (2510) PL 8.1 (2515) PL 8.3

Removal

1. **WARNING: Disconnect power cord.**
2. (Figure 1): Remove the feed roll.
3. Install in reverse order.



	1271	A
YBF	SDS	M

Figure 1. Removing the Feed Roll

REP 8.4 Fabric Guide

Parts List on (2510) PL 8.2 (2515) PL 8.4

Removal

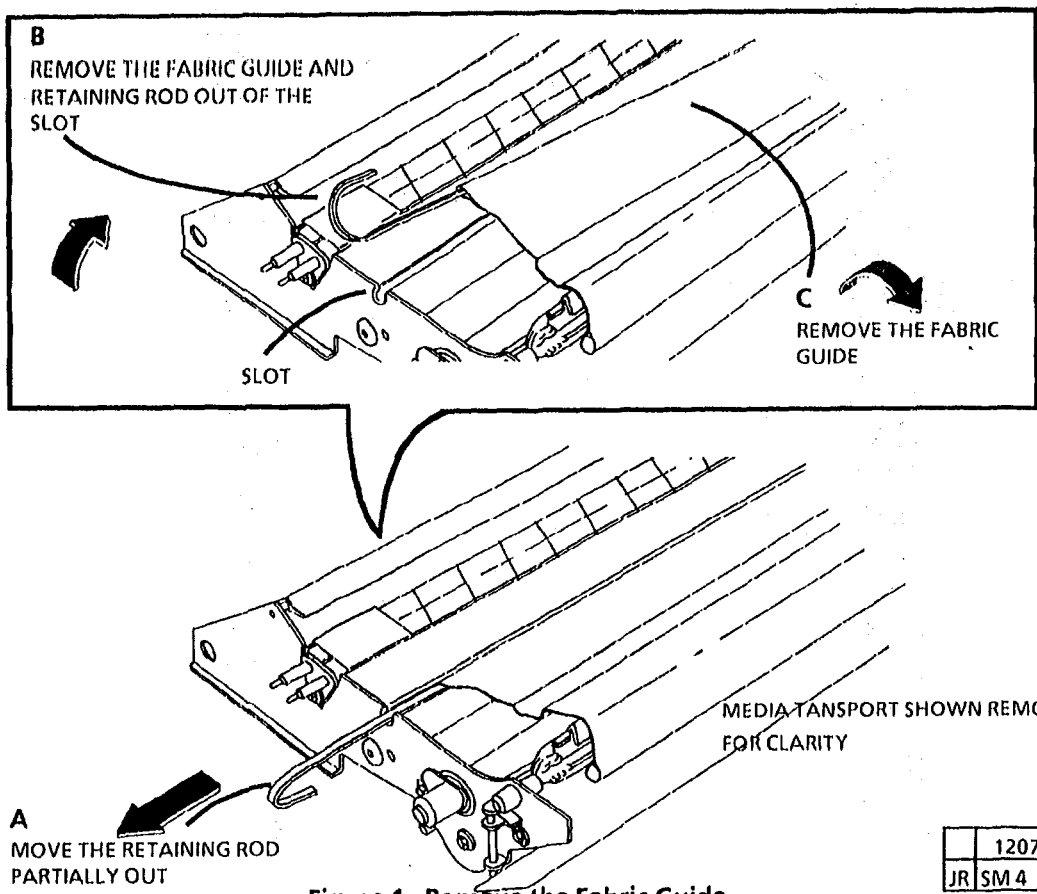
1. **WARNING: Disconnect power cord.**
2. (Figure 1): Remove the fabric guide.

Replacement

CAUTION

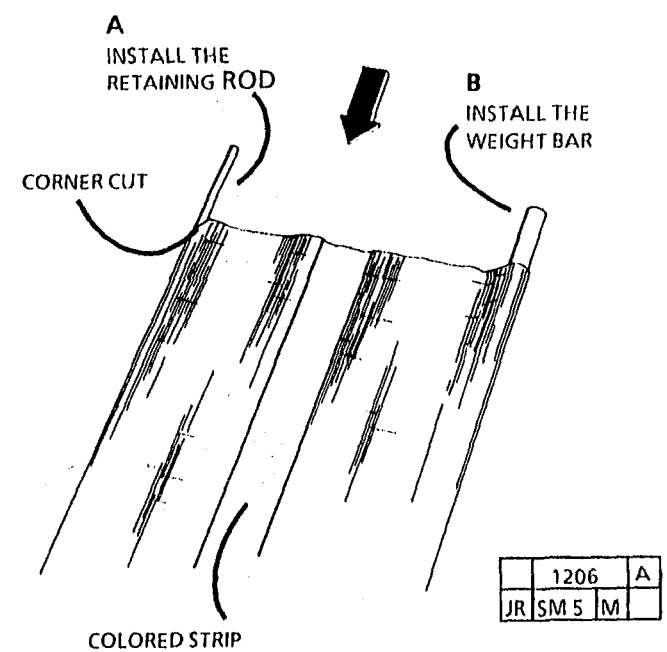
STEP 1 A : The colored strip on the fabric guide is closer to the edge with the corner cut. The corner cut must be positioned toward the back of the copier to avoid damage to the fabric guide and possible media jams. Install the retaining rod on the side opposit the corner cut.

1. (Figure 2): Install the retaining rod and the weight bar into the fabric guide.
2. The remainder of the replacement is the reverse of the removal procedure.



	1207	A
JR	SM 4	M

Figure 1. Remove the Fabric Guide



	1206	A
JR	SM 5	M

Figure 2. Install the Retaining Rod and the Weight Bar into the Fabric Guide

Removal

1. **WARNING: Disconnect power cord.**
2. Remove the right and left side covers.

Note: Placing the screwdriver handle under the Media Transport makes it easier to remove the latch springs and prevents damaging them.

3. (Figure 1): Prepare to remove the latch springs.

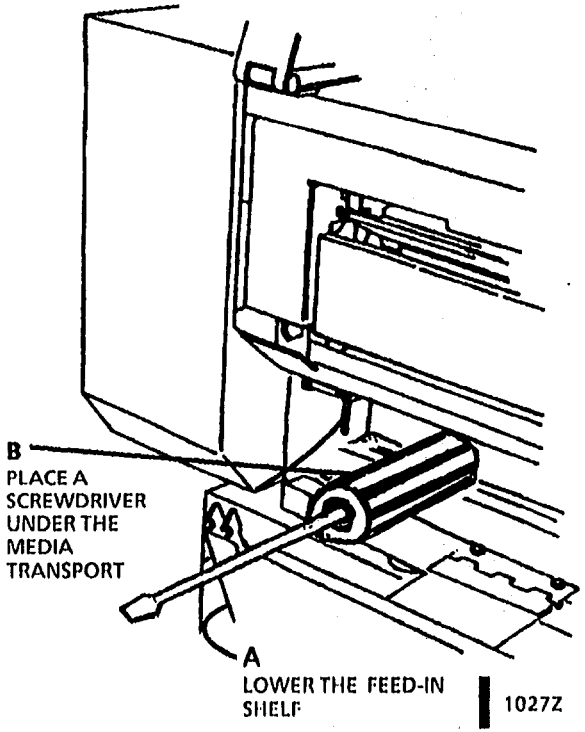


Figure 1. Preparing to Remove the Latch Springs

4. (Figure 2): Remove the latch springs from each side of the latching cover.
5. Remove the right and left side covers.

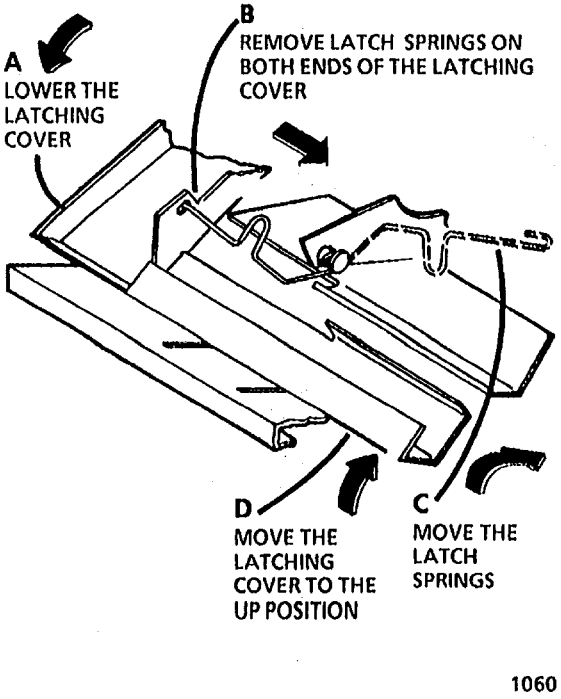


Figure 2. Removing the Latch Springs

6. (Figure 3): Preparing the right side components for xerographic module removal.

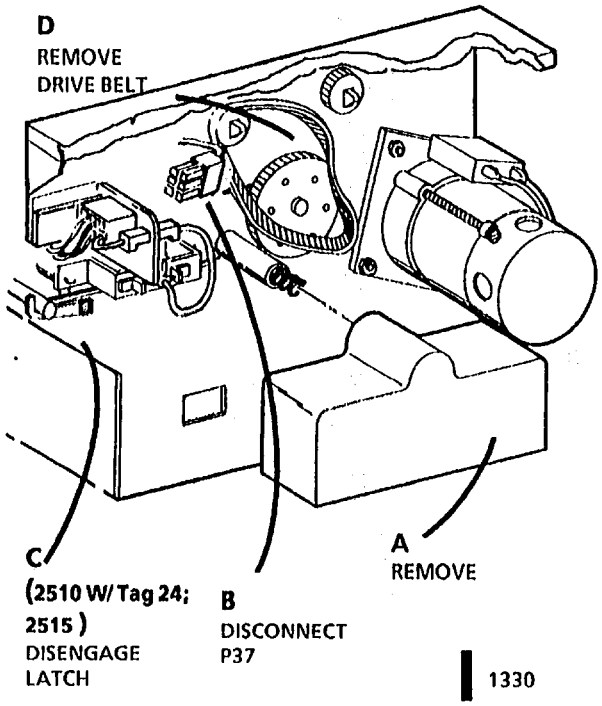


Figure 3. Preparing the Right Side for Removal

Continued

7. (Figure 4): Disconnect the electrical connectors on the left side.

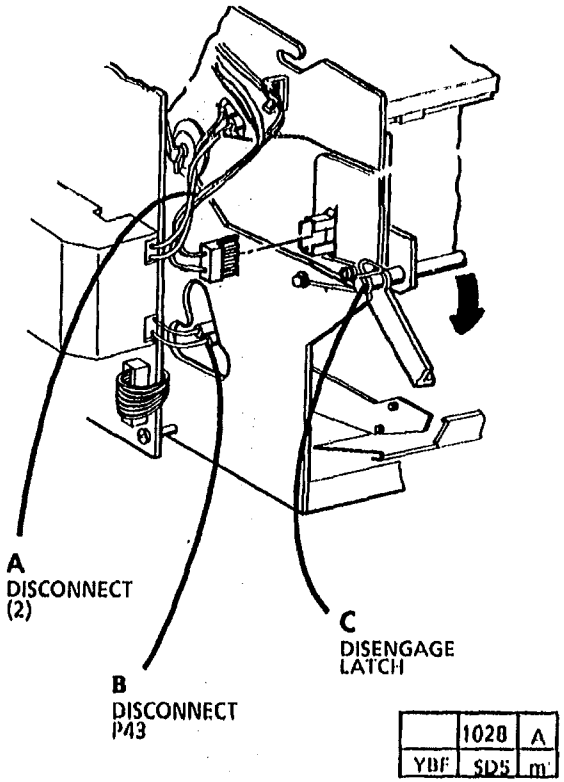


Figure 4. Disconnecting the electrical connectors and the latch

WARNING

The Fuser may be hot. Use a cloth when supporting the center of the module.

WARNING

Module is heavy and it is difficult to handle. Be careful when removing the module.

NOTE: Before removing the xerographic module, ensure that there is a clean area to place the assembly.

Note: When removing the module, support the module in the center and grasp the pulley on the right side to remove the module.

7. (Figure 5) Remove the xerographic module.

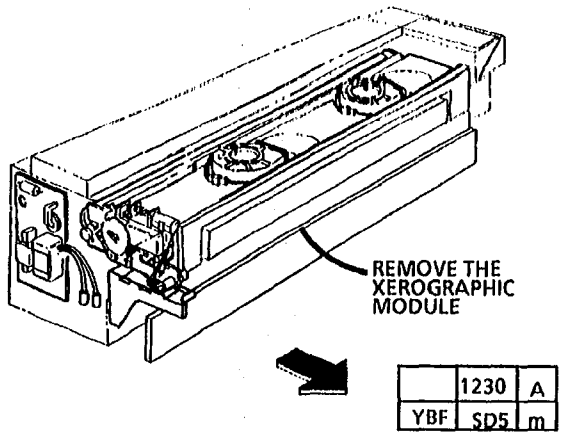


Figure 5. Removing the Xerographic module

8. Cover the photoreceptor drum with a black plastic light shield.

Replacement

NOTE: Ensure that the latch is positioned against the pin on the xerographic module.

1. **(2510 W/ Tag 24, 2515):**
   (Figure 6): Engage the latch.

2. The remainder of the replacement is a reverse of the removal.

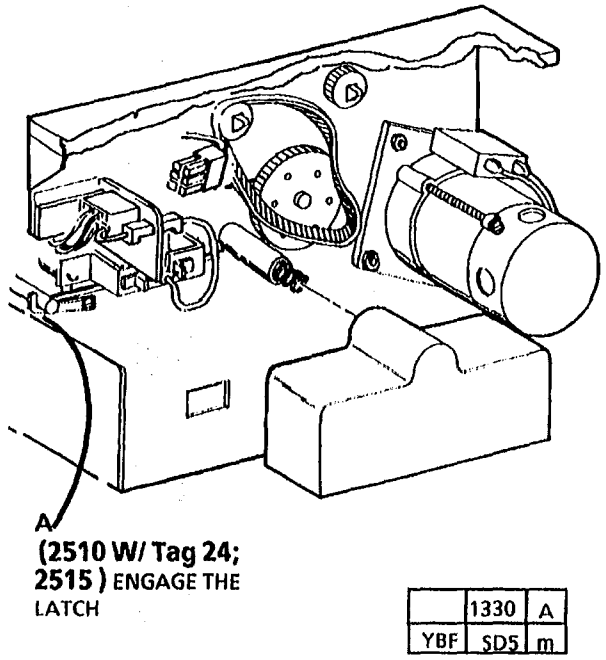


Figure 6. Engage the latch.

REP 9.2 Photoreceptor Drum Assembly

Parts List on PL 9.1

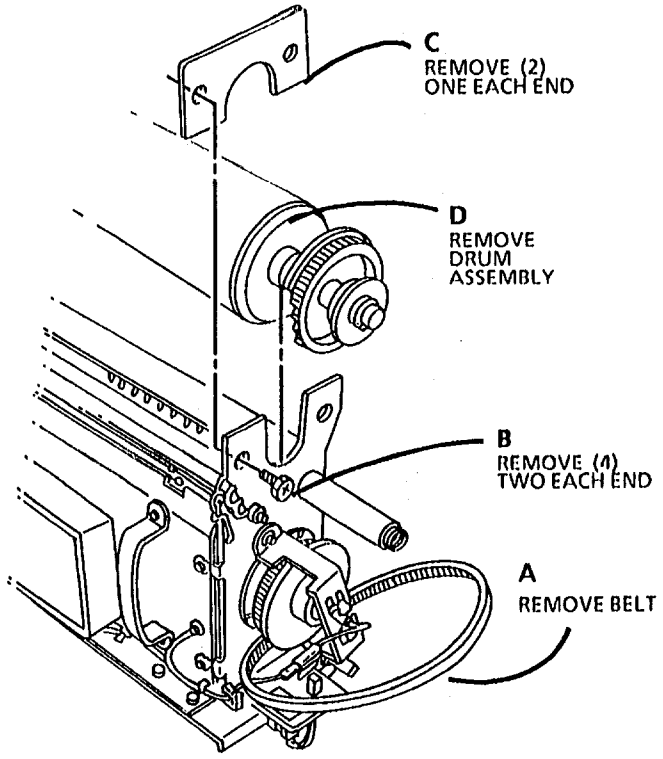
Removal

WARNING
Disconnect the power cord

1. Removethe right side cover , and the left side cover.
2. Remove the xerographic module (REP 9.1)

CAUTION
Cover the photoreceptor drum with a light shield to prevent damage.

3. (Figure 1): Remove the photoreceptor drum assembly.



	1035	A
JR	SM 4	M

Figure 1. Remove the Photoreceptor Drum Assembly

Replacement

CAUTION
STEP 1 B: Reinstall the left side of the drum assembly first to avoid damaging the drum ground bracket.

1. (Figure 2): Reinstall the photoreceptor assembly.
2. The remainder of the replacement is the reverse of the removal.

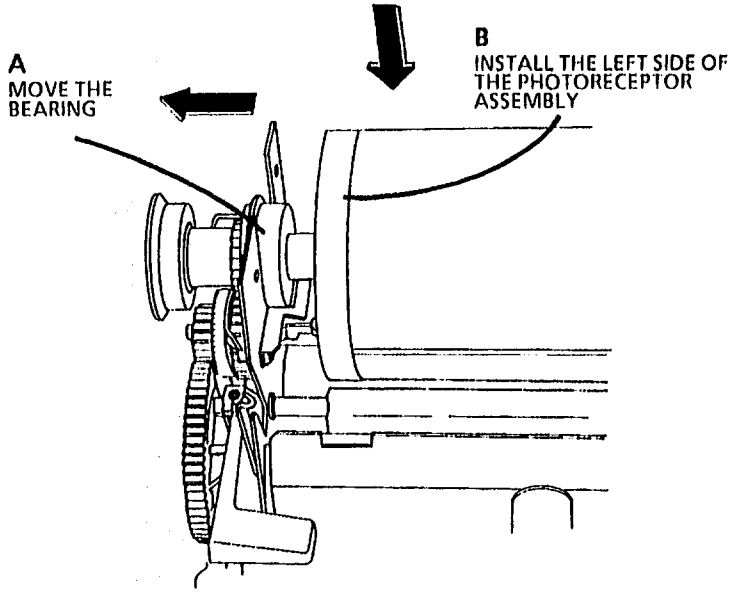


Figure 2. Reinstalling the Photoreceptor Drum Assembly

	1208	A
JR	SM 4	M

REP 9.3 Photoreceptor Drum

Parts List on PL 9.1

Removal

WARNING

Disconnect the power cord

1. Remove the separator guides, the right side cover, and the left side cover.
2. Remove the xerographic module (REP 9.1).
3. Remove photoreceptor drum assembly (REP 9.3).
4. (Figure 1): Remove photoreceptor drum shaft.

Replacement

CAUTION

Do not remove the light shield until Step 2 when the photoreceptor is ready to be installed in the xerographic module.

1. (Figure 2): Install photoreceptor drum shaft.

NOTE: STEP 1A: Ensure that the top of the drum box is up before opening the box.

NOTE: STEP 1D: The end shields (2) must be raised in order to position the drum shaft end plates against the drum fully.

NOTE: STEP 1D: When installing the drum shaft, be sure to tighten the three retaining screws evenly and with equal pressure.

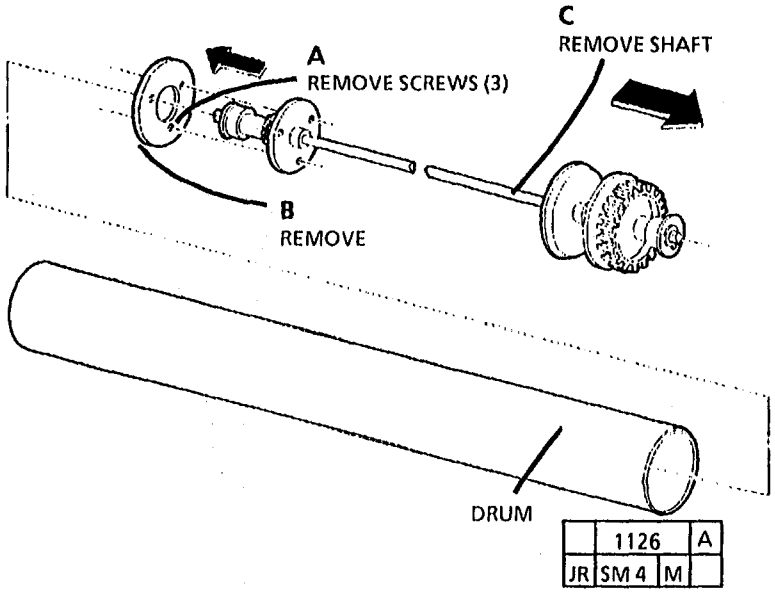


Figure 1. Remove Photoreceptor Drum Shaft

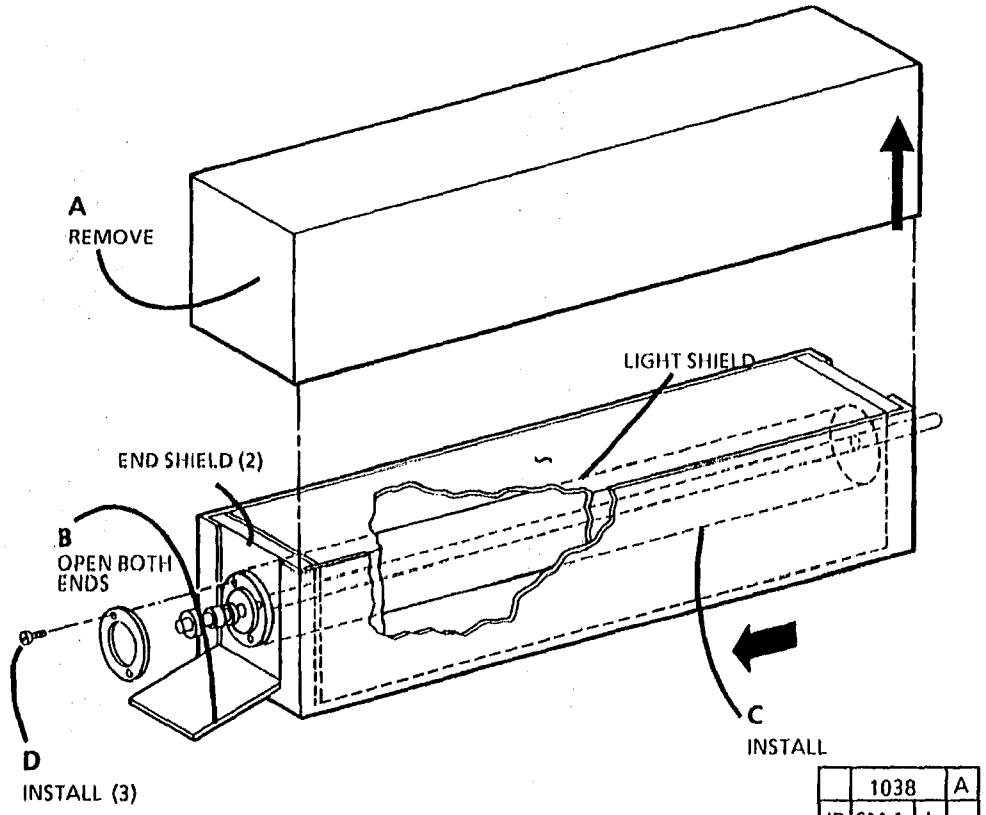


Figure 2. Install the Drum Shaft

(Continued)

2. (Figure 3): Prepare drum for installation.

CAUTION

Clean the auger to drum seal (PL 9.1A, Item 19) and move it towards the drum to provide a seal between the photoreceptor and the auger extrusion. Replace the seal if it is damaged. If the photoreceptor drum is being replaced, replace the cleaner blade also. Apply a light coating of zinc stearate to the photoreceptor drum and the cleaning blade.

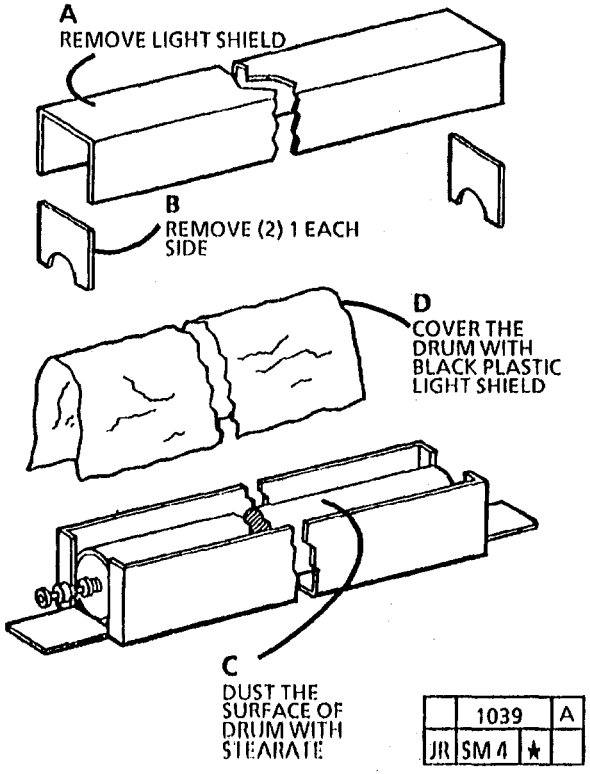


Figure 3. Prepare Drum for Installation

3. Install photoreceptor drum assembly in xerographic module (REP 9.3).

4. (Figure 4): Remove the stearate from the photoreceptor drum.

NOTE: STEP 4 A: Compress the solenoid plunger so that the cleaner blade contacts with the photoreceptor drum.

5. Install xerographic module (REP 9.1).

6. Perform the electrostatic series. 2510 ADJ 9.2 or 2515 ADJ 9.3

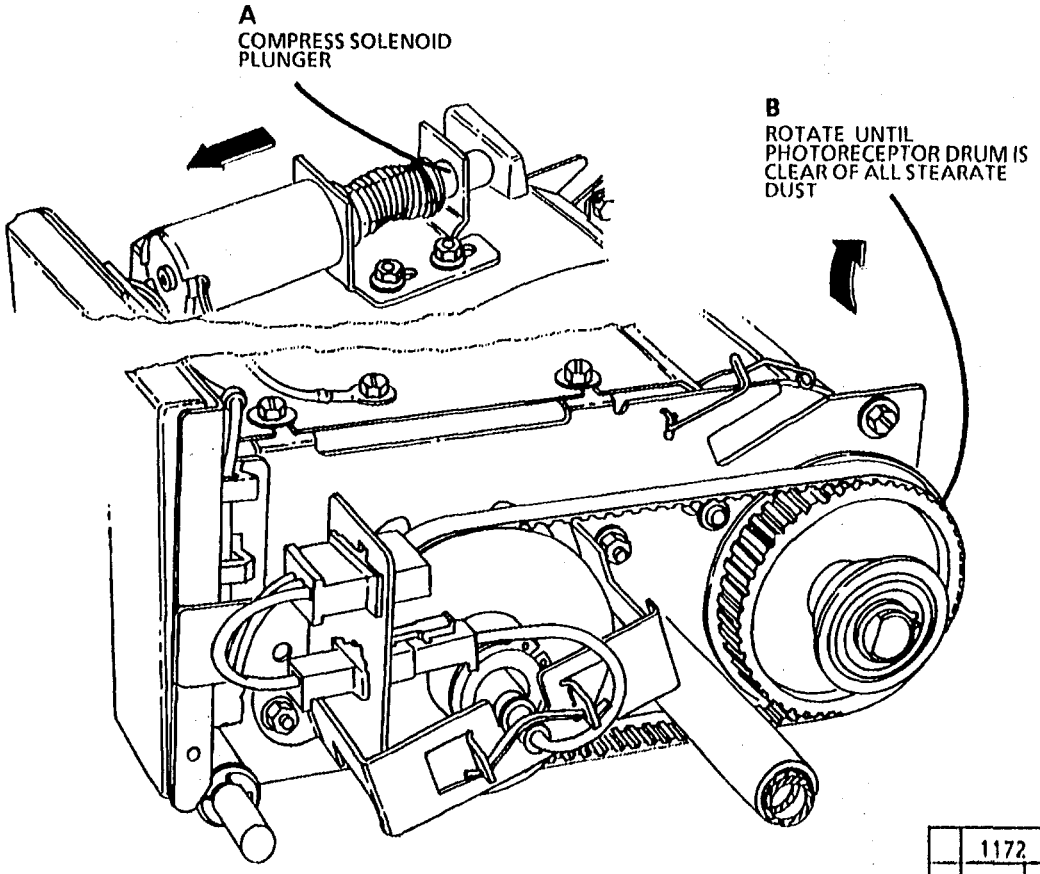


Figure 4. Remove the Stearate from the Photoreceptor Drum

REP 9.4 Cleaner Blade

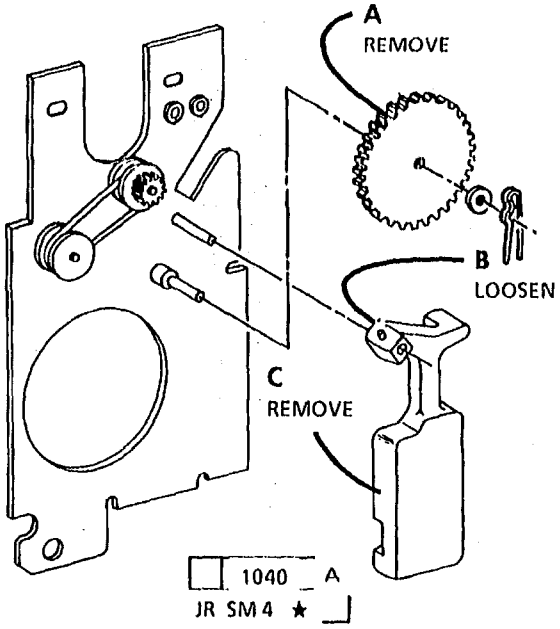
Parts List on PL 9.2

Removal

WARNING
Disconnect the power cord

1. Remove photoreceptor drum assembly (REP 9.2).
2. (Figure 1): Remove transition gear and weight.

NOTE: STEP 3 A: The cleaner blade assembly is spring loaded. Use care when removing the transition gear.



3. (Figure 2): Remove the cleaner blade assembly.

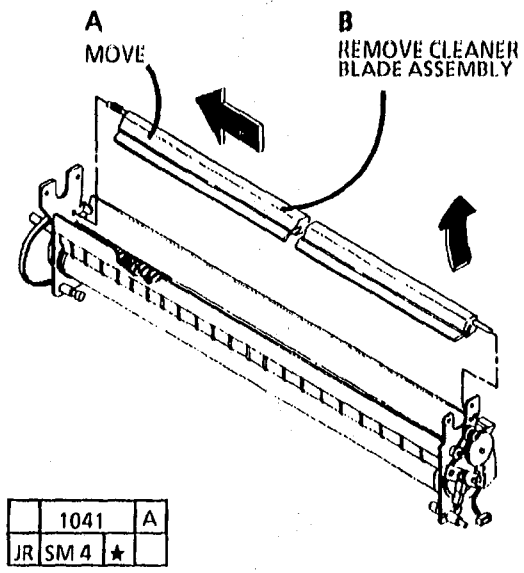


Figure 2. Remove the Cleaner Blade Assembly

NOTE: 2510 W/O Tag 10, see the change tag index and order necessary parts to upgrade the cleaner blade assembly.

4. 2510 W/Tag 10 and 2515, continue this procedure.

5. (Figure 3, Figure4): Remove the cleaner blade.

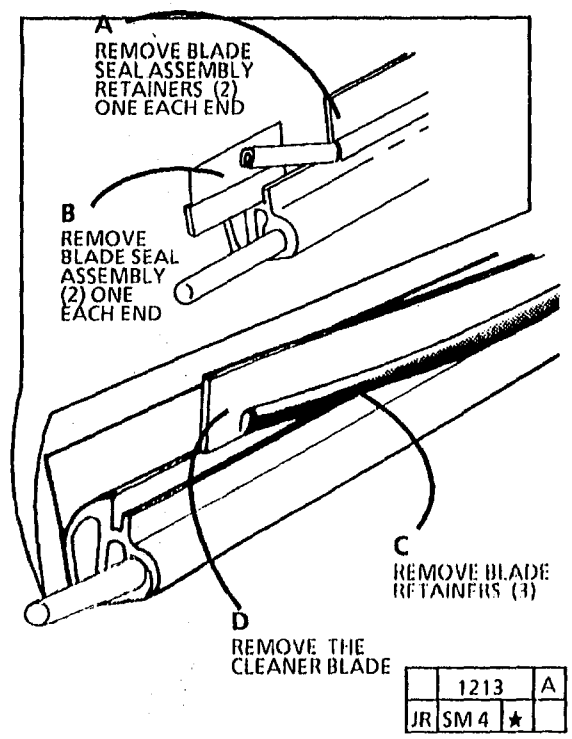


Figure 3. (2510 W/O Tag 25) Remove the Cleaner Blade

Replacement

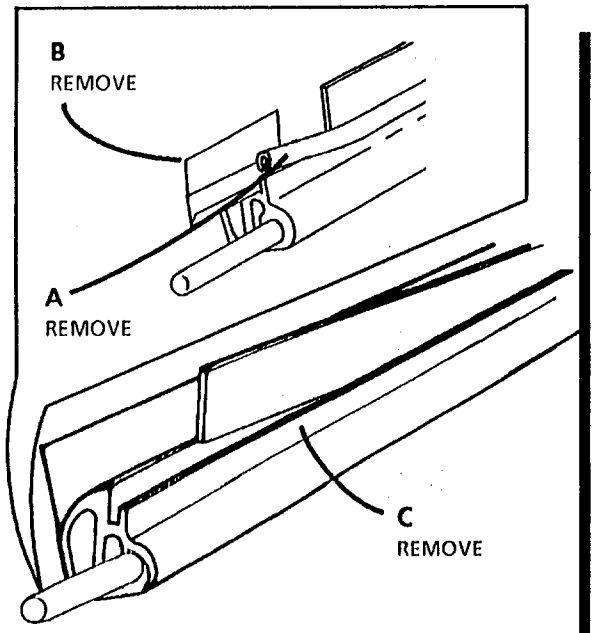


Figure 4. (2510 W/Tag 25 and 2515) Remove the Cleaner Blade

NOTE: Applying a coat of zinc stearate to te cleaning blade before installing the cleaning blade and retainers will lubricate them for easier installation of the retainers.

1. Apply a light coating of zinc stearate to the cleaning blade.
2. (Figure 5): Install the cleaner blade.

NOTE: STEP 2 A: With the cleaner blade positions as shown, install the cleaner blade with the arrow pointed up and the words "THIS SIDE TOWARD PHOTORECEPTOR" facing towards you. Do not touch the edge of the cleaner blade, that comes in contact wirh the photoreceptor drum,with your fingers. If the edge is touched, clean the blade with film remover, and dust with zinc stearate.

NOTE: STEP 2 B: Ensure that the cleaner blade assembly is on a flat surface when installing the cleaner blade holders, and that the colored stripe is installed to the outside. Ensure that the holders are completely seated using a 7 mm nut driver to roll down the top edge.

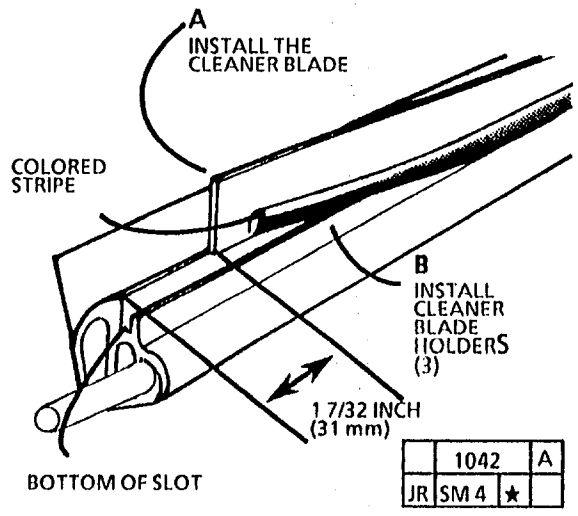


Figure 5. Install the Cleaner Blade

NOTE: STEPS 3 A AND 2 B: Maintain the location of the cleaner blade from Figure 5. It is acceptable for the blade seal assembly and retainer to extend over the end of the extrusion.

3. (Figure 6): Install the plastic seals.

CAUTION

To avoid damaging the photoreceptor, the locking edge of the cleaning blade seal must be positioned above the inside edge of the retainer to ensure positive locking of the seal in position.

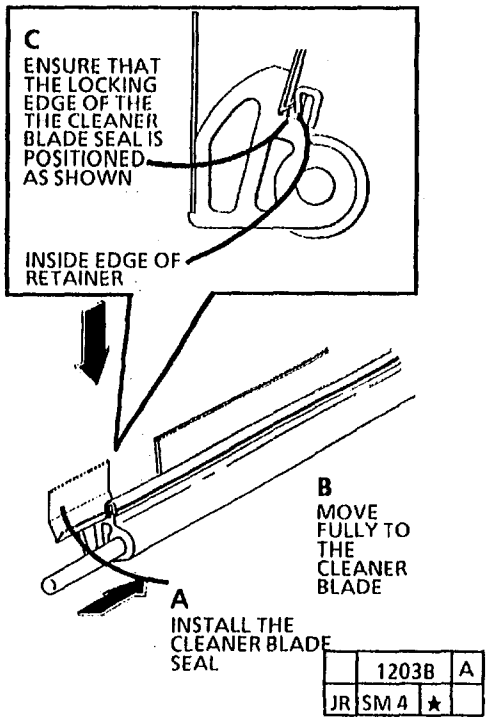


Figure 6. Install the Cleaner Blade

CAUTION

STEP 4 B: Do not touch the wiping edge of the cleaner blade with your fingers.

4. (Figure 7): Install the cleaner blade assembly into the seal assembly.

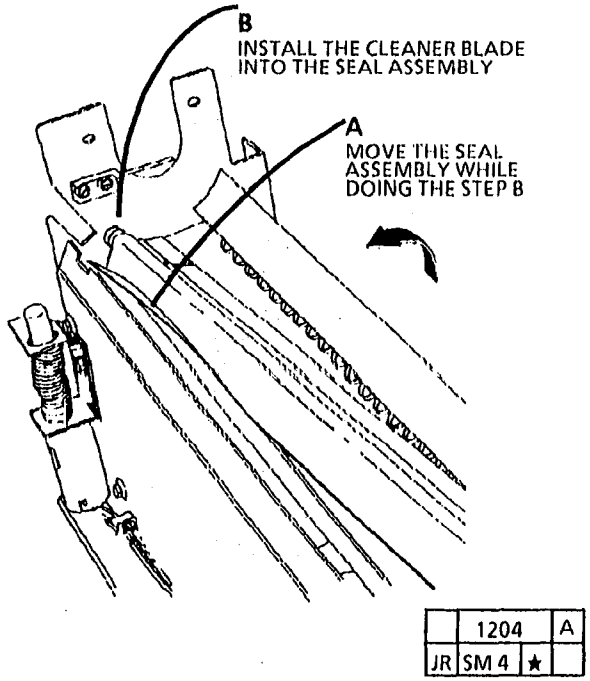


Figure 7. (2515 only) Install the Cleaner Blade Assembly into the Seal Assembly

5. Reinstall the cleaner blade weight and the transistion gear.
6. Rotate the transisition gear and ensure that the cleaning blade assembly moves side to side (translates).
7. Dust the photoreceptor drum with a light coating of zinc stearate.
8. Reinstall the photoreptor drum (REP 9.3).

(Continued)

(Continued)

9. (Figure 8): Ensure that the cleaner blade removes the stearate dust from the photoreceptor drum.

10. Ensure that the cleaner blade weight moves freely and when fully tranistioned, does not touch the frame. Ensure that there is clearance between the bracket and solenoid plunger.

11. Check the solenoid adjustment ADJ 9.1.

12. Reinstall the xerographic module.

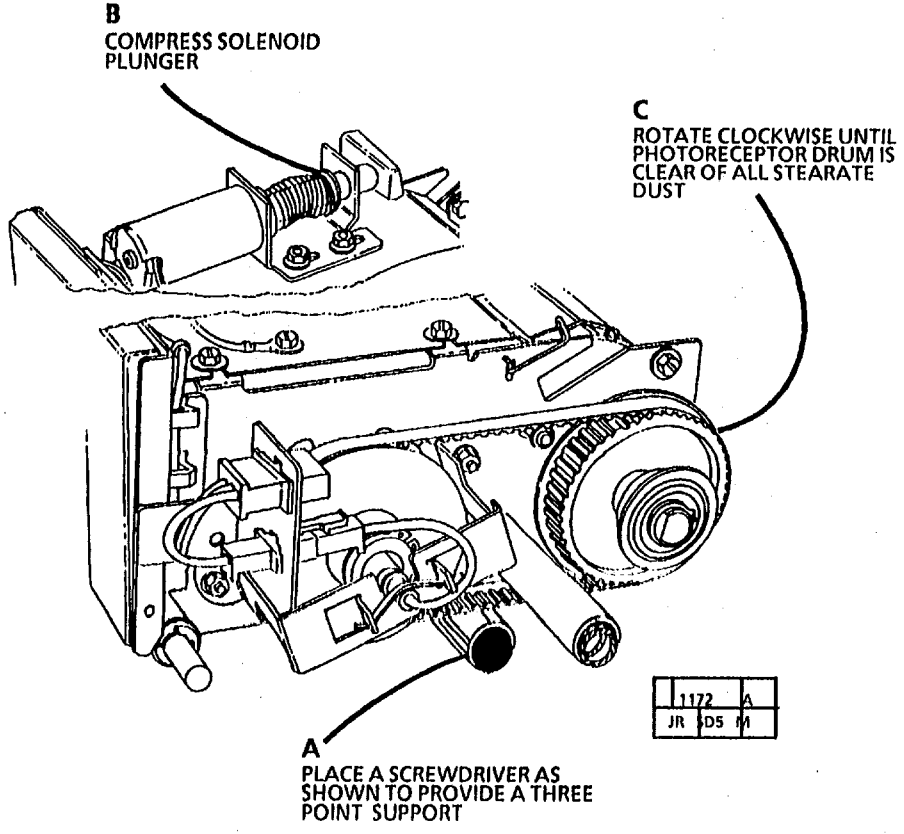


Figure 8. Remove the Stearate from the Photoreceptor Drum

REP 9.5 2510 Developer Module

Parts List on PL 9.4

Removal

NOTE: Before removing the developer module, ensure that there is a clear area to place the assembly.

WARNING
Disconnect the power cord.

2. Remove the left and right side covers and the upper rear cover.

3. (Figure 1): Remove the developer module.

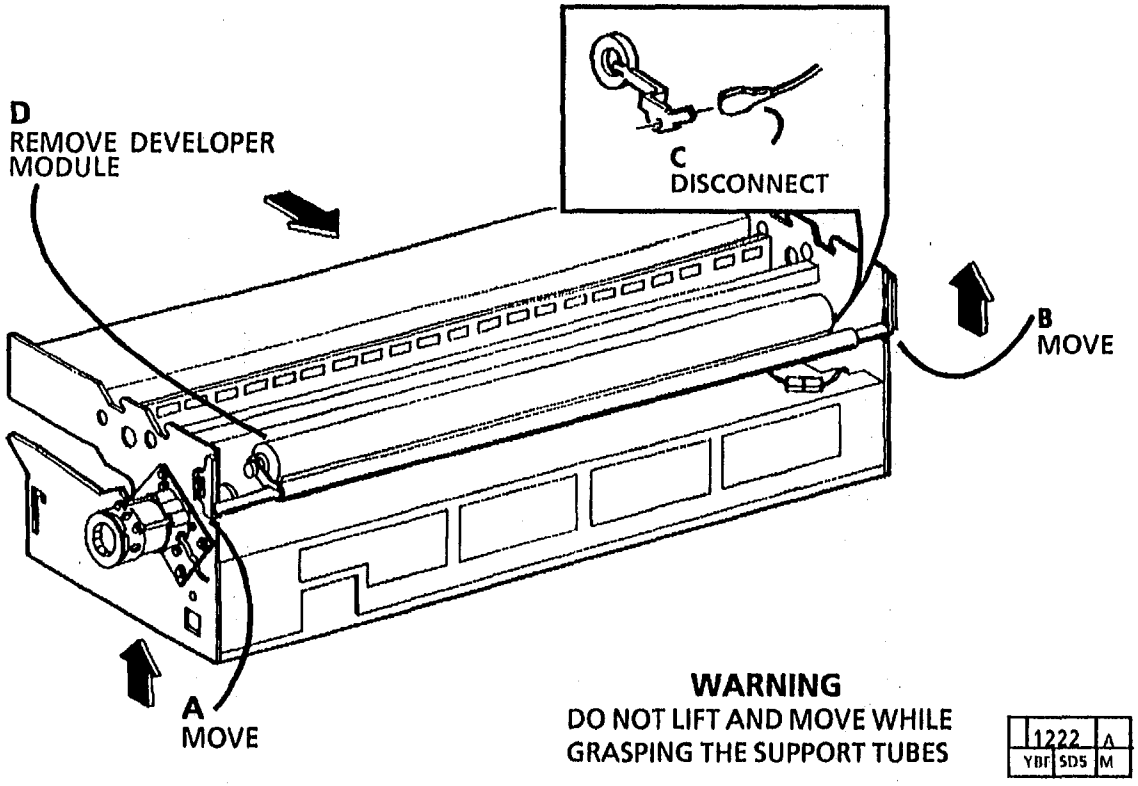


Figure 1. Remove the Developer Module

REP 9.6 2515 Developer Module

Parts List on PL 9.5

Removal

NOTE: Before removing the developer module, ensure that there is a clear area to place the assembly.

WARNING

Disconnect the power cord.

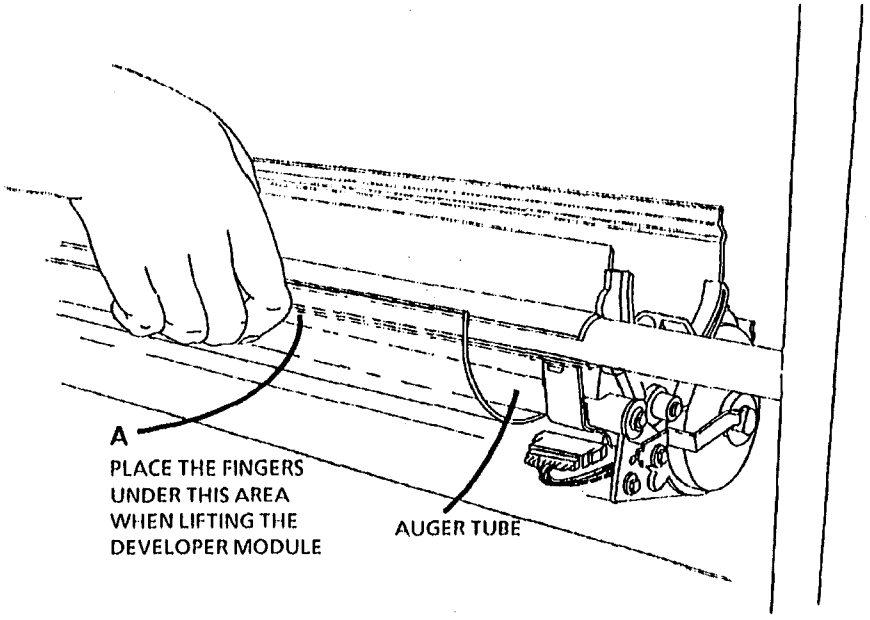
1. Remove the left and right side covers and the upper rear cover.
2. Remove the toner cartridge.

CAUTION

Do not lift the Developer Module by the auger tube.

3. (Figure 1): Hand position for removing the developer module.
4. (Figure 2): Remove the developer module.

NOTE: STEP 4 B: When loosening, ensure that the screw is loosened enough that the end of the screw is inside the bracket to avoid interference when removing the developer module.



	1129	B
JR	SM 4	M

Figure 1. Hand Position for Removing the Developer Module

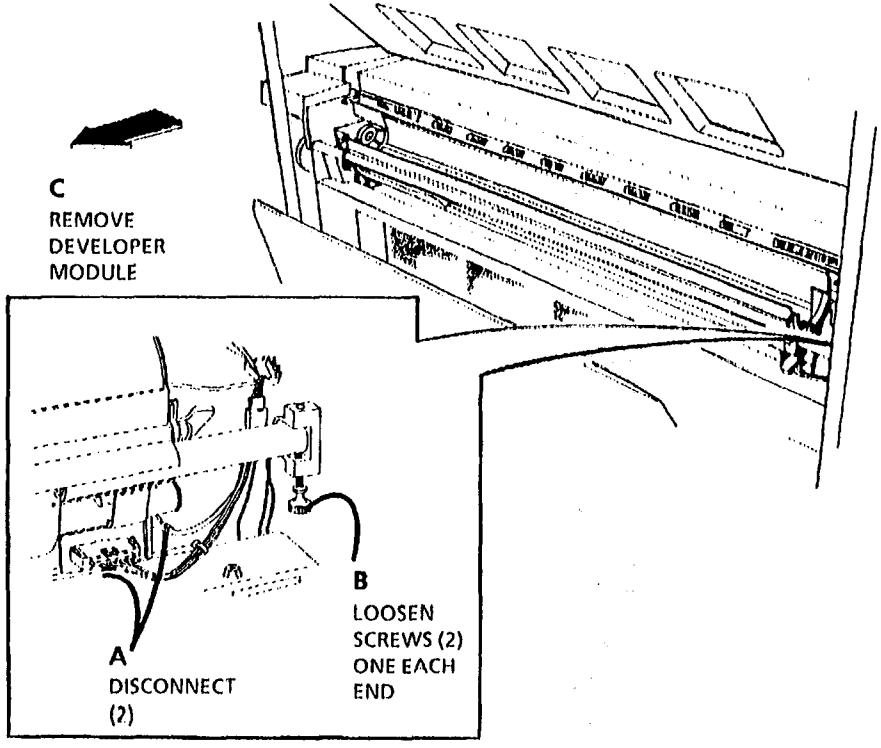


Figure 4. Removing the Developer Module

	1026	C
JR	SM 4 122P	M A

(Continued)

Replacement

CAUTION

Do not install the toner cartridge until the developer module is installed.

1. (Figure 3): Clean the developer from the magnetic roll.

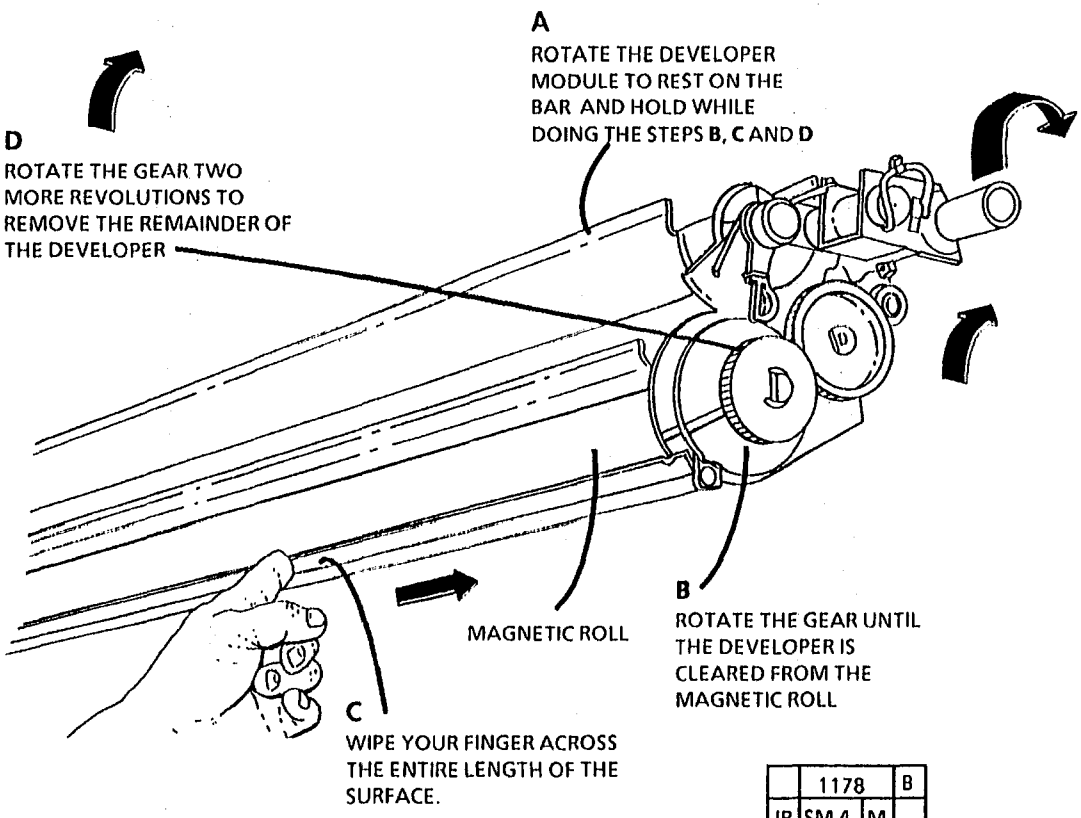


Figure 3. Cleaning the Developer from the Magnetic Roll

(Continued)

CAUTION

Do not lift the developer module by the auger tube, refer to Figure 1.

2. (Figure 4): Install the developer module.

NOTE: STEP 2 B: Ensure that the developer module is fully installed in the brackets.

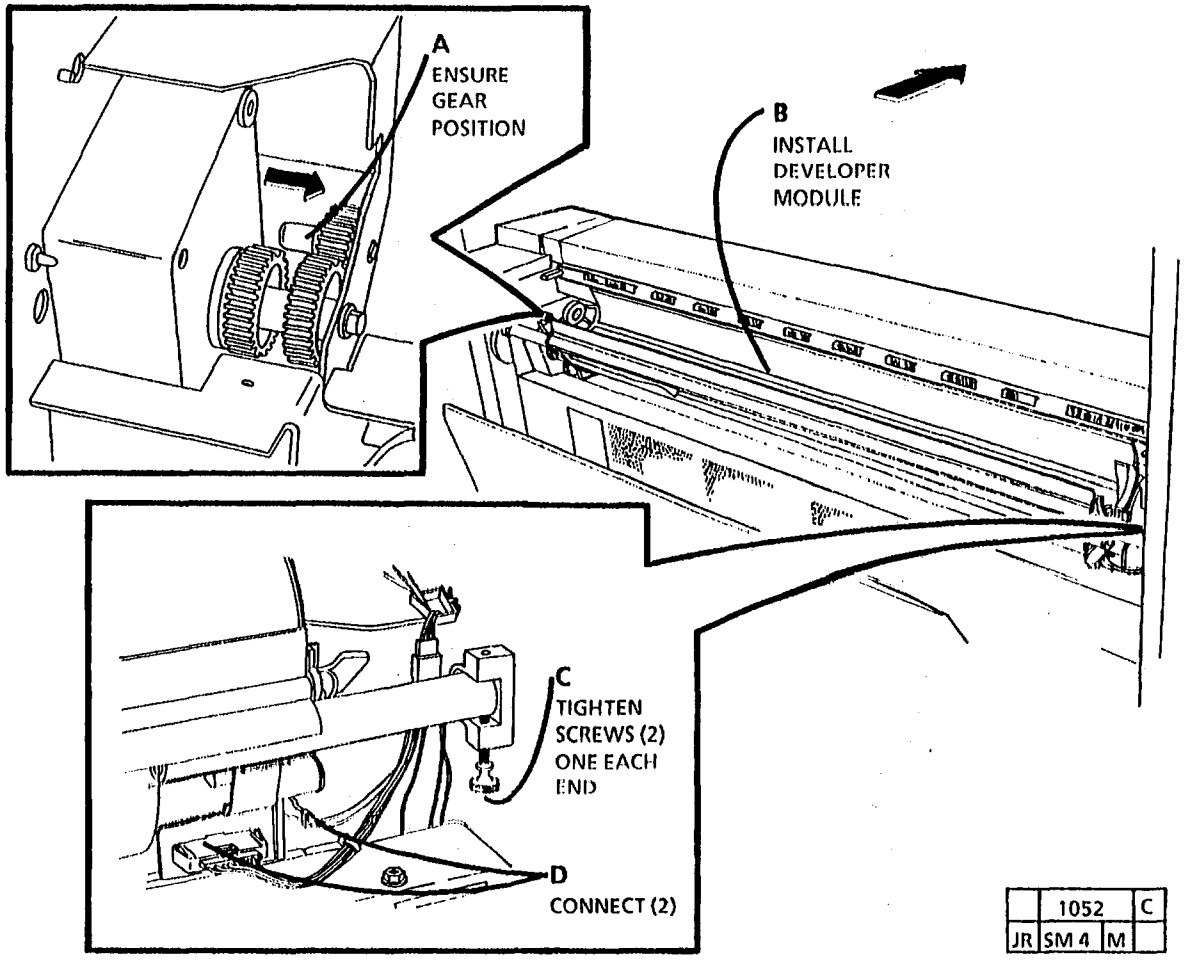
3. If the developer module installed in step 2 is the one removed in step 1 of this removal, proceed to step 5. If a new developer module is being installed, proceed to step 4.

NOTE: STEP 4 A: New developer modules are shipped with the toner dispense solenlod not installed. The toner dispense solenoid must be installed before installing the toner cartridge.

4. If a new developer module has been installed, perform the following:
   A. Install the toner dispense solenoid and ground clip (REP 9.8)
   B. Perform the electrostatic series (ADJ 9.3).

5. Install the toner cartridge.

6. Adjust the toner dispense solenoid (ADJ 9.5).



	1052	C
JR	SM 4	M

Figure 4. Install the Developer Module

REP 9.7 Dispense Arm Return Spring

Part List on (2510) PL 9.4 (2515) PL 9.5

Removal

WARNING
Disconnect the power cord.

1. Remove developer module (REP 9.5).
2. (Figure 1): Remove the return spring.

Replacement

1. (Figure 2): Replace the return spring.

NOTE: STEP E: During replacement, ensure that the return spring is not crossed.

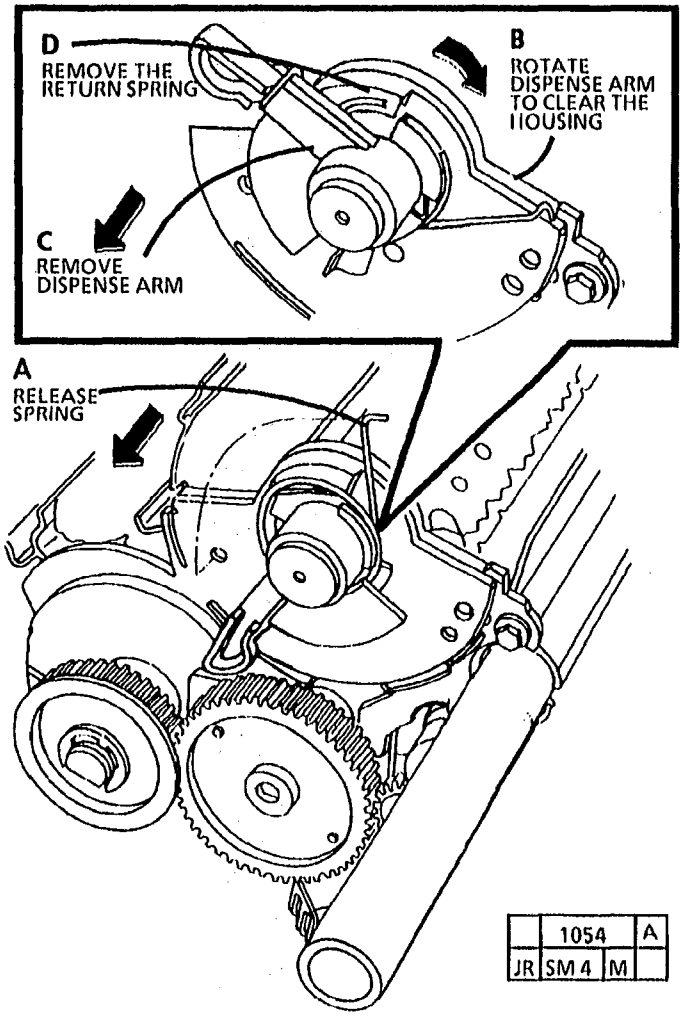


Figure 1. Remove the Return Spring

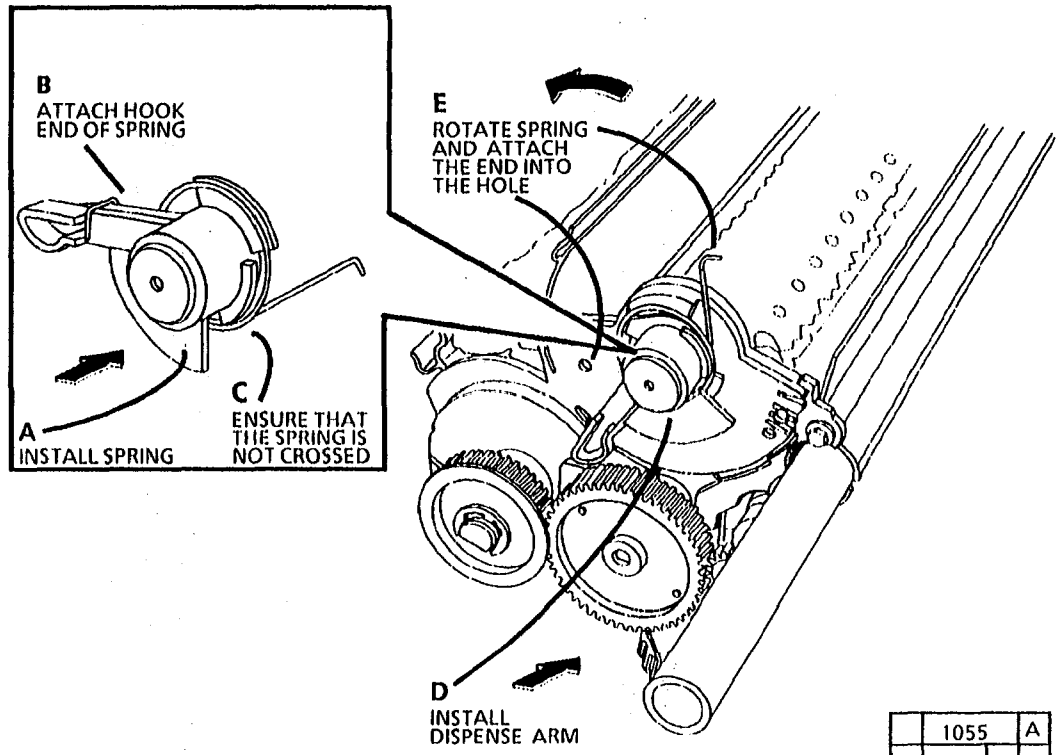


Figure 2. Replace the Return Spring

REP 9.8 2515 Toner Dispense Solenoid

Parts List on PL 9.5

Removal

WARNING
Disconnect the power cord

1. Remove the developer module (REP 9.6).
2. (Figure 1): Remove toner dispense solenoid.

DO NOT loosen the screw. Loosening the screw may cause binding of the solenoid.

Replacement

1. Install the toner dispense solenoid.
2. Adjust the toner dispense solenoid (ADJ 9.5).

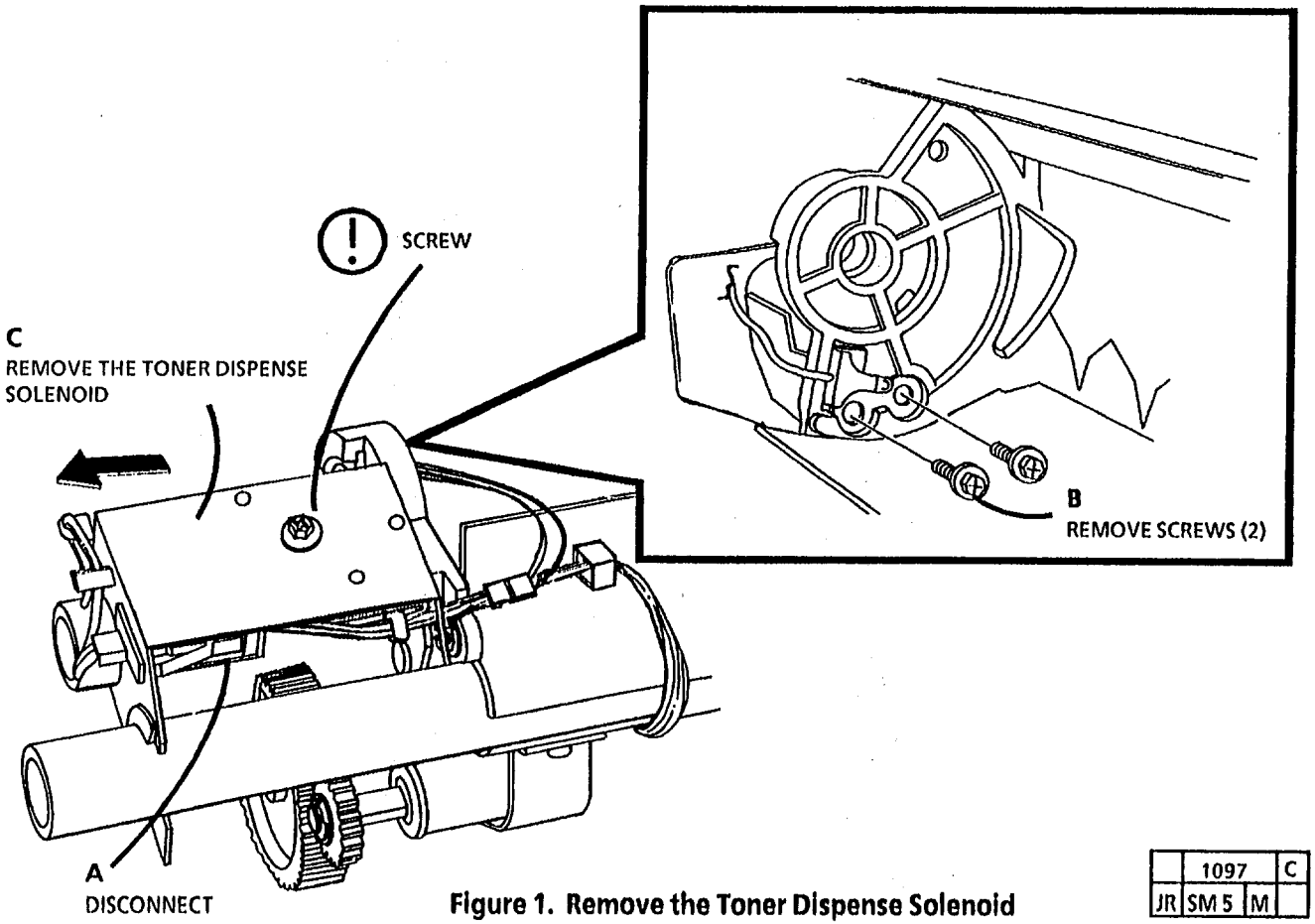


Figure 1. Remove the Toner Dispense Solenoid

	1097	C
JR	SM 5	M

REP 9.9 Developer Material

Parts List (Refer to the General Tools and Supplies, Consumables in Section 6.)

Removal

WARNING :Disconnect power cord.

1. Place a large sheet of paper on the floor.
2. Remove the dry ink cartridge.
3. Remove the developer module (2510 REP 9.5; 2515 REP 9.6).
4. (2515: Figure 1): Remove the pickoff baffle.
5. (Figure 2): Dump the developer material.
6. Using a vacuum, ensure that the developer housing is clean.

Replacement

NOTE: Ensure that the developer drive idler gear (PL 1.1A, Item 13 is located against the frame or the drive will not occur.

1. Figure 2, INSET A): **(2515)** Check that the gutter is secured to the pin with a screw or clip. If not, install the gutter clip.
2. Reinstall the Pick Off Baffle. Ensure that the label **Bottom** is facing down and the **Roll** arrows are pointing to the Magnetic roll.
3. Install the developer module (2510 REP 9.5; 2515 REP 9.6).
4. Install the developer by pouring evenly end-to-end.
5. Reinstall the dry ink/ toner cartridge.
6. Perform the Detoning procedure (Section 6).
7. Make a record of the developer material batch number in the copier log. Batch number located on the box lid.

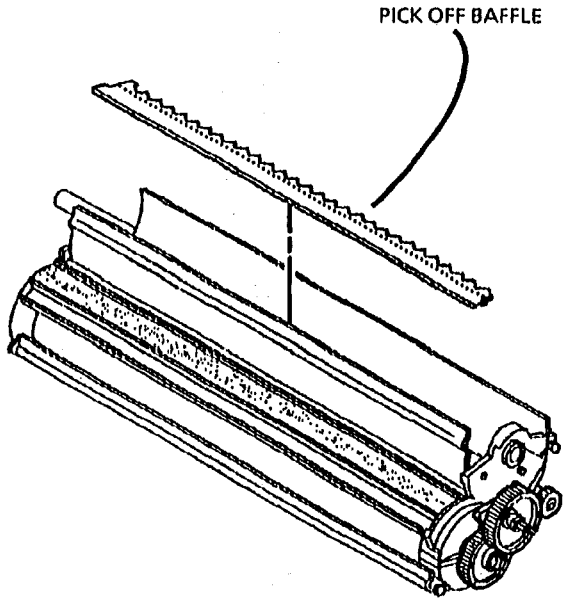


Figure 1. **(2515) Remove the Pick Off Baffle**

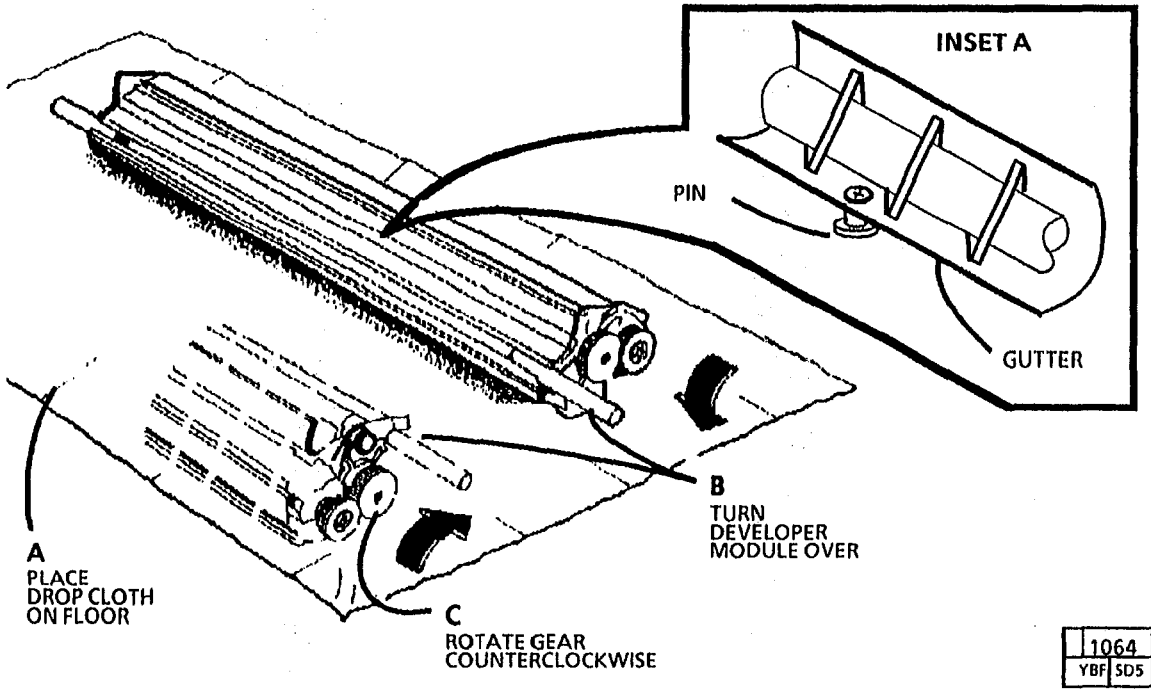


Figure 2. **Dump the Developer Material**

REP 9.10 Corotron Wires (2510 W/Tag 23; 2515)

Parts List on PL 8.6

Removal

NOTE: This procedure applies to both the charge/precharge and the transfer/detack corotrons. the transfer/detack corotron is shown.

WARNING
Switch off the main power switch and disconnect power cord.

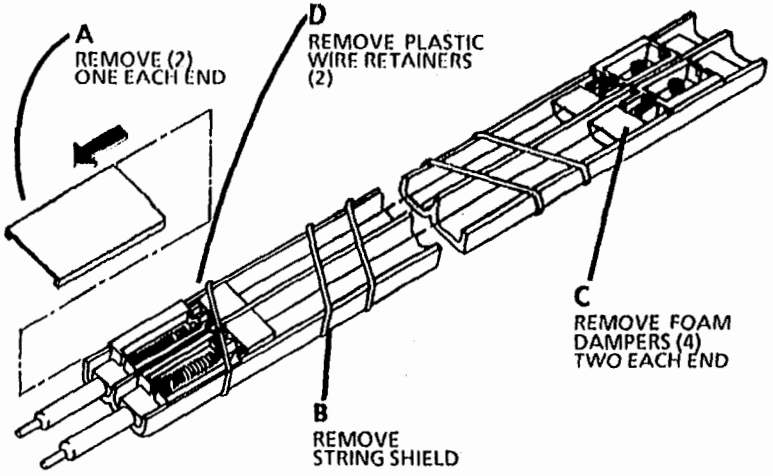
1. Remove corotron assembly.

NOTE: STEP B: The wrapping has to removed from the transfer/detack corotron only.

NOTE: STEP D: The plastic wire retainers are only on the power supply end.

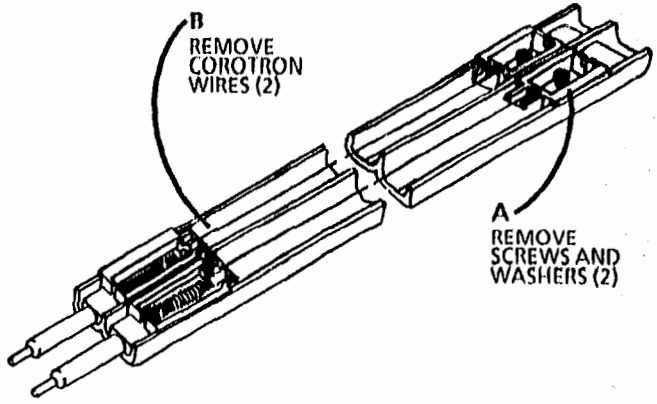
2. (Figure 1): Prepare to remove the corotron wires.

3. (Figure 2): Remove the corotron wires.



	1301a	A
YBF	SD5	M

Figure 1. Prepare to Remove Corotron Wire



	1301b	A
YBF	SD5	M

Figure 2. Remove the Corotron Wires

(Continued)

Replacement

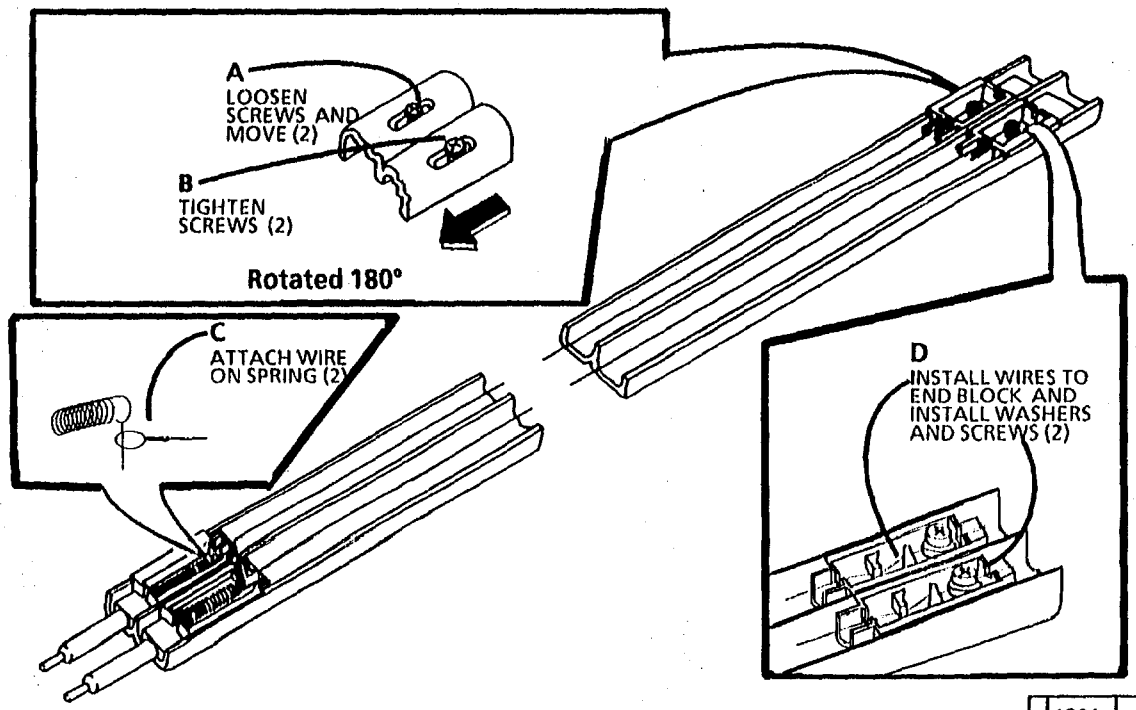
CAUTION

Be careful not to kink the corotron wire when removing them from the package.

1. Remove wires from package

NOTE: Step A: Move the two screws fully in the direction shown in Figure 3.

2. (Figure 3): Install corotron wire on the spring.



	1301c	A
YDP	SD5	M

Figure 3. Install the Corotron Wire to the Spring

(Continued)

3. (Figure 4): Pre-tension springs.

NOTE: Step A: The length of each spring body should be approximately 0.300 in. (7.6mm) when not stretched.

NOTE: Step B: The spring then will be stretched to 0.400 in. (10.1mm) by pulling the corotron wire. Before stretching the spring, mark where the spring will be stretched to achieve the 0.400 in. (10.1mm) length.

4. (Figure 5): Tension springs.

NOTE: After moving the end blocks, check that the springs are streched to 0.500 in +0.020 - 0.000 (12.7 mm + 0.5 mm - 0.000 mm). If the 0.500 in (12.7 mm) dimension is not correct, repeat Step 3 and increase the tension on the springs if the dimension is less than 0.500 in (12.7 mm) and decrease the tension on the spring if the dimension is greater than 0.500 inch.

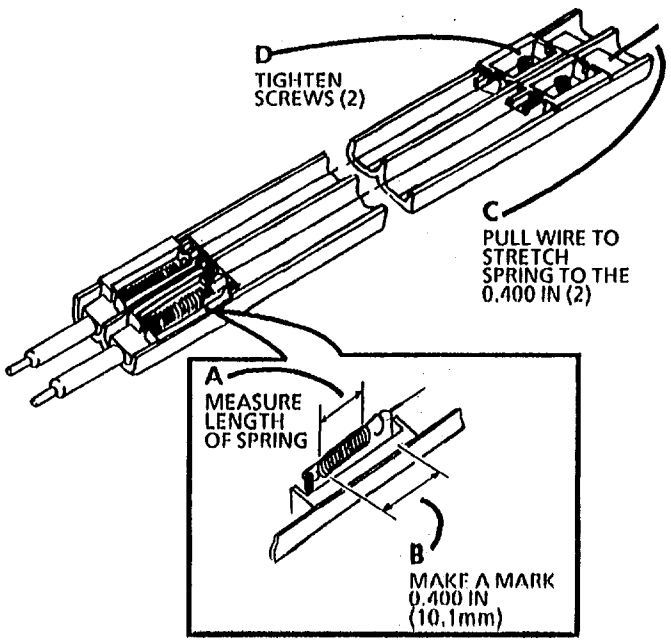


Figure 4. Pretension the Springs

1301f | A | YBF | SD5 | M

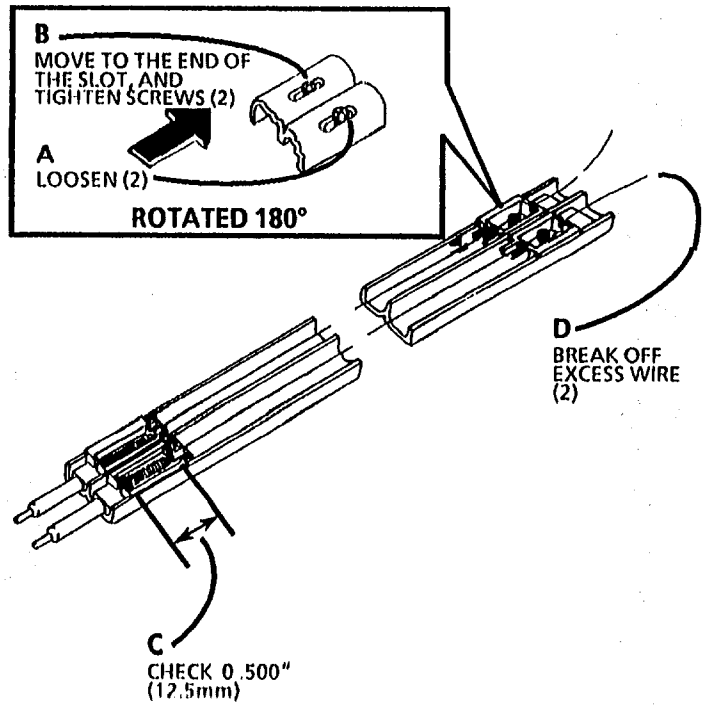


Figure 5. Tension Springs

(Continued)

1301d | A | YDF | SD5 | M

5. (Figure 6): Install plastic wire retainers and dampers.

NOTE: When installing the dampers, ensure that the edges of the dampers are below the corotron edges.

6. (Figure 7): Install the corotron string shield.

NOTE: Reinstall the string shield removed at the beginning of this procedure, or install the plastic corotron shields.

NOTE: Fold the string in half to determine the center of the string. Install the center of the string over the cut-out in the center of the corotron. Wind one side and secure before repeating the same procedure on the other side.

NOTE: Ensure that the corotron string shield is tight enough that it does not sag and touch the corotron wire.

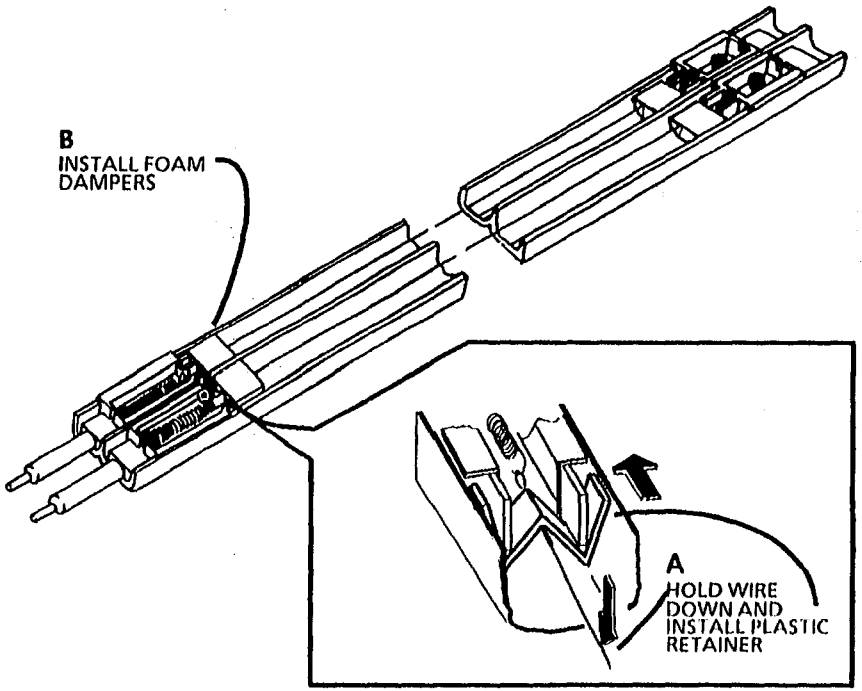


Figure 6. Install Plastic Wire Retainers and Dampers

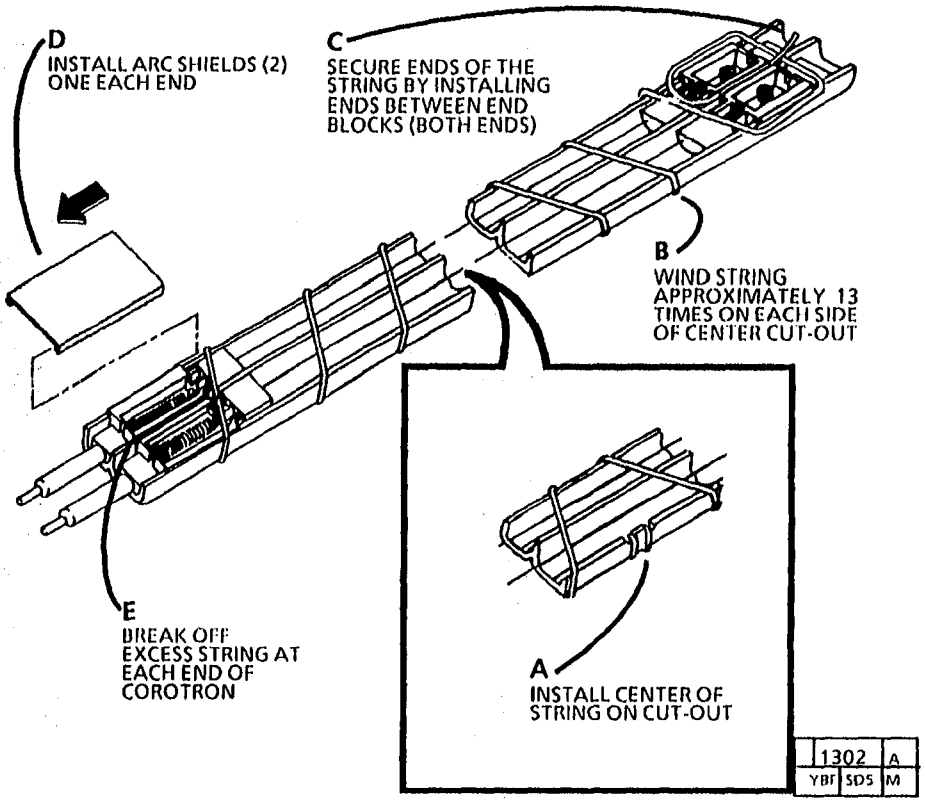


Figure 7. Install Corotron String Shield

REP 9.11 TONER SENSOR ASSEMBLY

PARTS LIST ON PL 9.5

REMOVAL

1. **WARNING: DISCONNECT THE POWER CORD.**

The developer material must be removed before removing the toner sensor assembly.

2. REMOVE THE DEVELOPER MODULE (REP9.6).
3. REMOVE THE DEVELOPER MATERIAL (REP 9.9).
4. IF PRESENT, REMOVE THE CLEAR PLASTIC COVER.
5. (FIGURE 1): REMOVE THE TONER SENSOR ASSEMBLY.

REPLACEMENT

NOTE: Do not force the Toner Sensor into the hole. If the sensor does not go in easily, order a new sensor.

1. INSTALL THE TONER SENSOR ASSEMBLY.
2. INSTALL THE CLEAR PLASTIC COVER.
3. INSTALL THE PICK OFF BAFFLE WITH THE CORRECT SIDE UP.
4. INSTALL THE DEVELOPER MODULE(REP 9.6).
5. INSTALL THE DEVELOPER BY POURING EVENLY END-TO-END WHILE TURNING THE MAIN MOTOR, BY HAND, IN THE DIRECTION INDICATED BY THE ARROW ON THE FAN.
6. INSTALL THE TONER CARTRIDGE.
7. PERFORM THE ELECTROSTATIC SERIES (ADJ 9.3) .

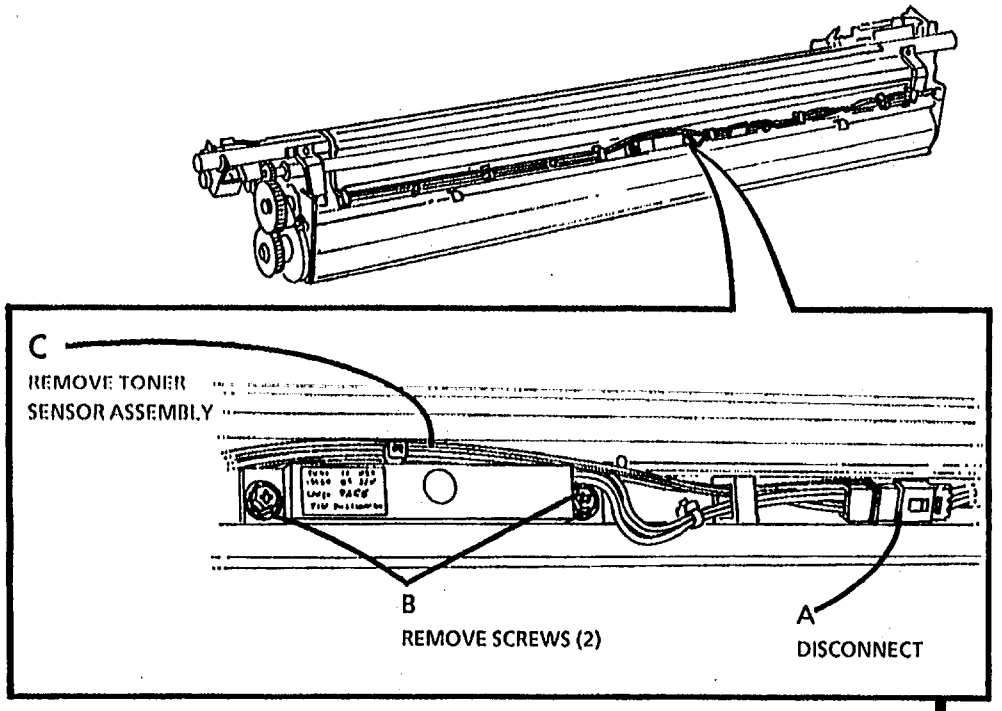


Figure 1. Remove the Toner Sensor Assembly

	01300	A
JR	SM	M	Q

NOTES

REP 10.1 Heat Rod

Parts List on PL 10.2

Removal

WARNING:
Disconnect the power cord.

CAUTION
Fuser may be hot. allow fuser to cool before removing the xerographic module.

1. Remove the xerographic module (REP 9.1)
2. (Figure 1): Remove the heat rod (REP10.1).

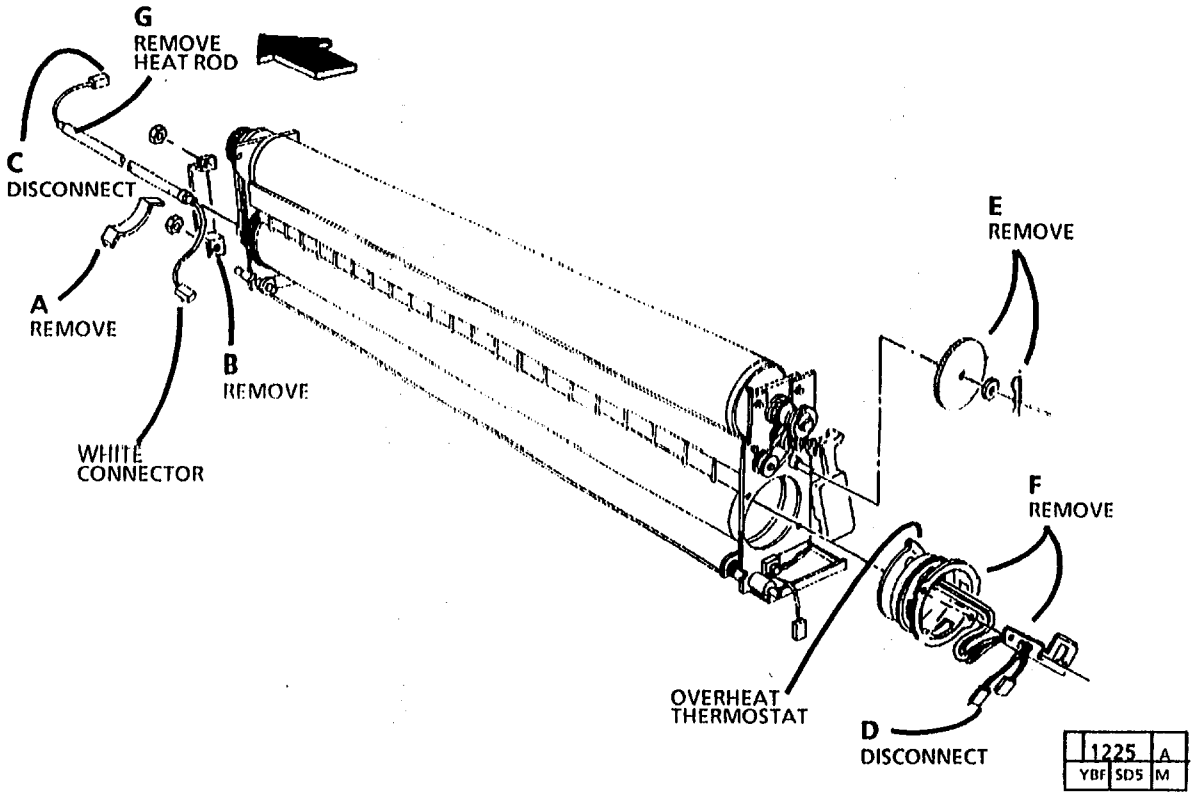


Figure 1. Remove the Heat Rod

(Continued)

Replacement

CAUTION

Oil from your fingers can damage the heat rod. Wear gloves or wrap a sheet of paper around the heat rod when handling the heat rod.

*NOTE: Install the heat rod, white connector first. **DO NOT** remove the connectors from the wires on the ends of the heat rod. The heating element inside the rod is closer to the end with the white connector.*

NOTE: Step F: When reinstalling the (2) screws, ensure that the head of the screws fit into the hole in the fuser roll.

WARNING

(2515 W/ Tags 2 or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

1. Enter diagnostic mode.

(2510, 2515 W/O Tag 2 or 89)

- *Enter code [L] and press Start.*
- *Enter code [g] and press Start.*
- *Enter code [J] and press Start.*
- *Wait 2 at least 2 minutes.*
- *Enter code [A] and press Start.*

Allow the copier to run for 15 minutes so that the fuser oil will condition the fuser roll.

(2515 W/O Tag 2 or 89)

Enter code [A] and press Start.

Allow the copier to run for 15 minutes so that the fuser oil will condition the fuser roll.

NOTE: Ensure that the thermistor is clean and touches the fuser roll after assembly.

2. (Figure 2): Install the heat rod.

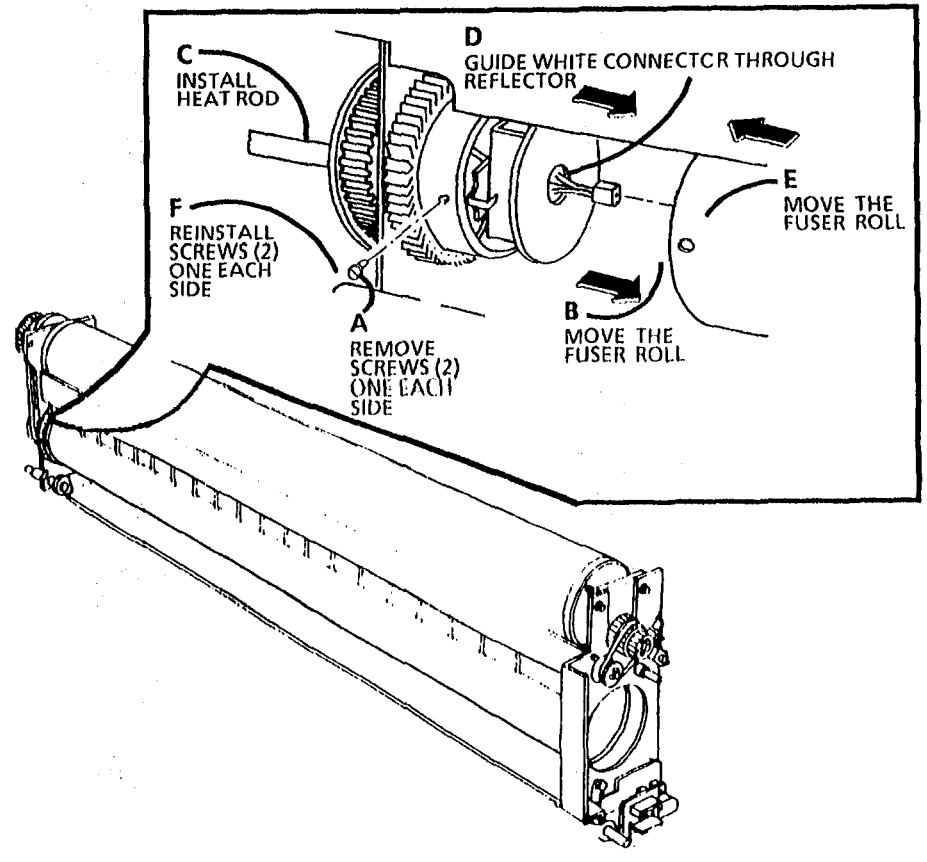


Figure 2. Install the Heat Rod

	1136		A
JR	SM 4	M	

(Continued)

Replacement

CAUTION

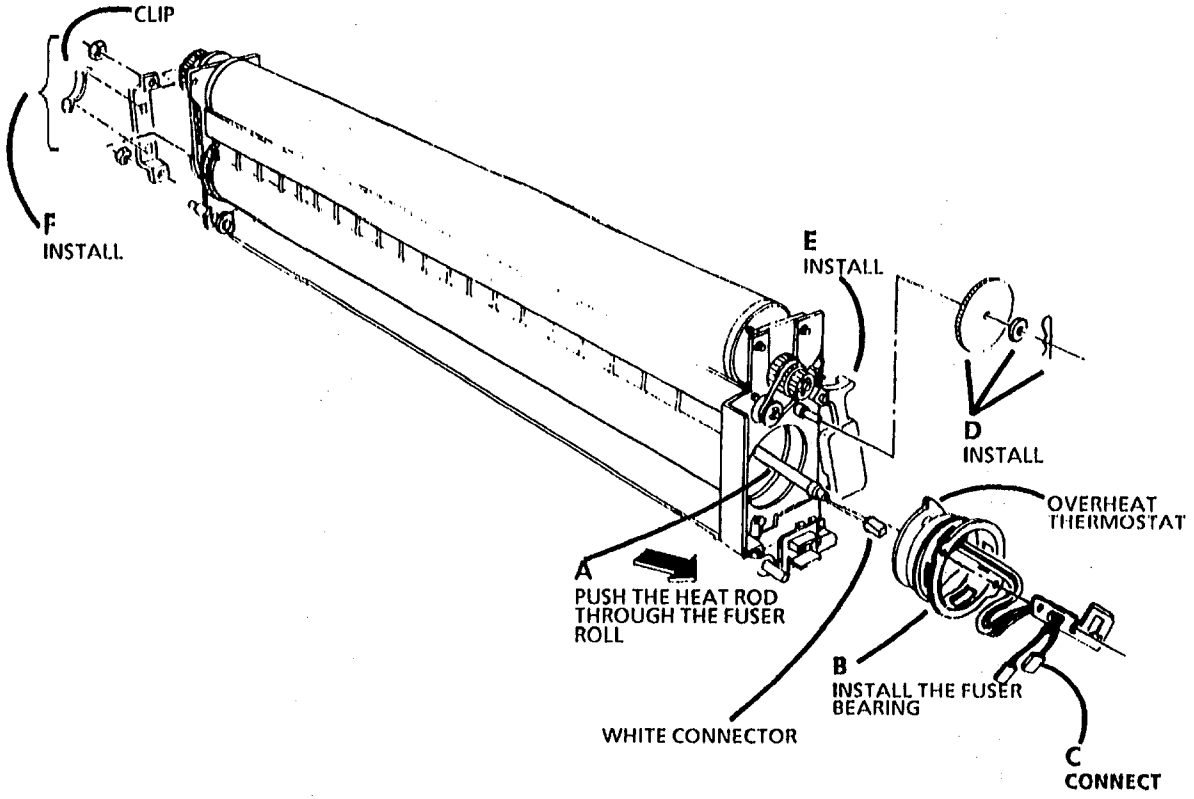
Oil from your fingers can damage the heat rod. Wear gloves or wrap a sheet of paper around the heat rod when handling the heat rod.

CAUTION

Step F: Be sure to replace the clip last when doing the replacement procedure. if the clip is installed before the other steps, it could damage the end of the heat rod.

NOTE: Step B Position the overheat thermostat as shown. The overheat thermostat must be in the up position towards the cleaner blade solenoid weight. The overheat thermostat connectors can be interchanged with no effect on their function.

3. (Figure 3): Install the fuser bearing.
4. Adjust the cleaner blade solenoid (ADJ 9.1).
5. Install the xerographic module (REP 9.1).
6. Install the oil dispenser assembly . (REP 10.5 or 10.6)
7. Adjust fuser temperature (ADJ 10.1).



	1149	A
JR	SM 4	★

Figure 3. Install the Fuser Bearing

REP 10.2 Fuser Roll

Parts List on PL 10.2

Removal

WARNING
Disconnect the power cord.

CAUTION
Fuser may be hot

2. (2510, Figure 1; 2515, Figure 2): Remove the oil dispenser assembly (REP 10.5 or 10.6).

CAUTION
Handle the oil dispenser assembly with care to avoid bending the stripper fingers.

3. Remove xerographic module (REP 9.1).

4. Remove heat rod (REP 10.1).

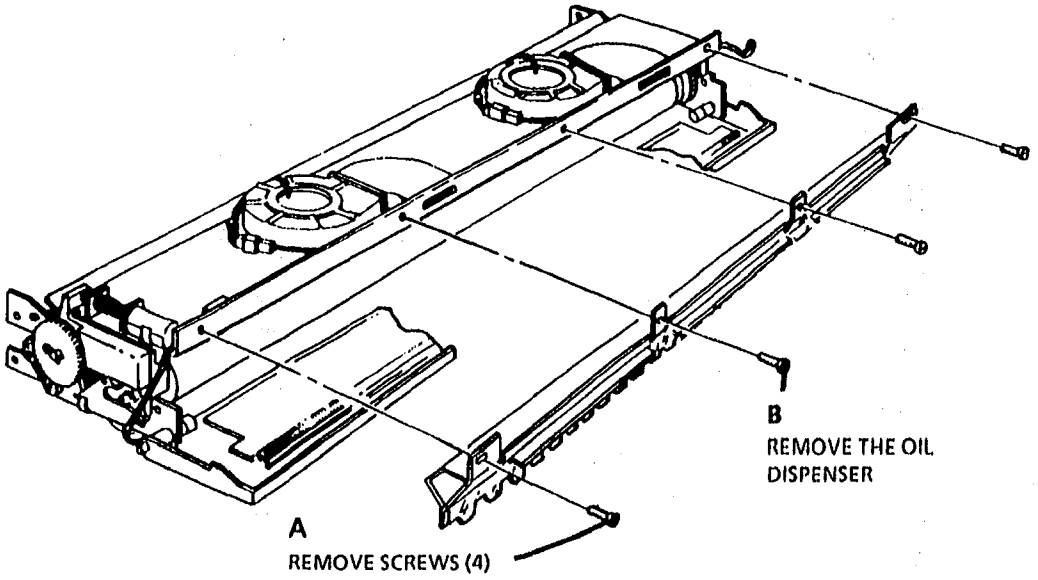


Figure 1. (2510) Remove the Dispenser Assembly

1060	A
YBF SD5	M

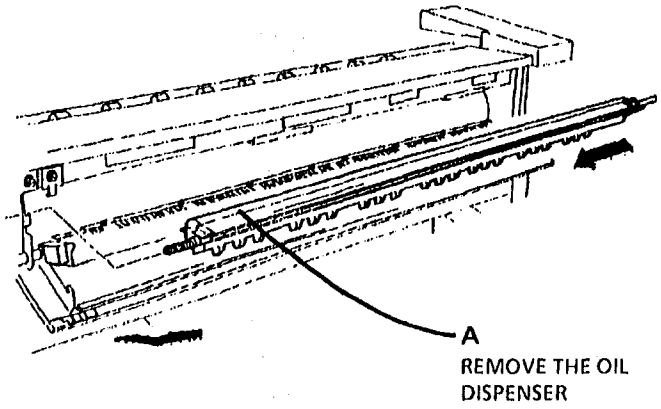


Figure 2. (2515) Remove the Dispenser Assembly

1099	A
JR SD5	M

(Continued)

5. (Figure 2): Remove fuser roll.

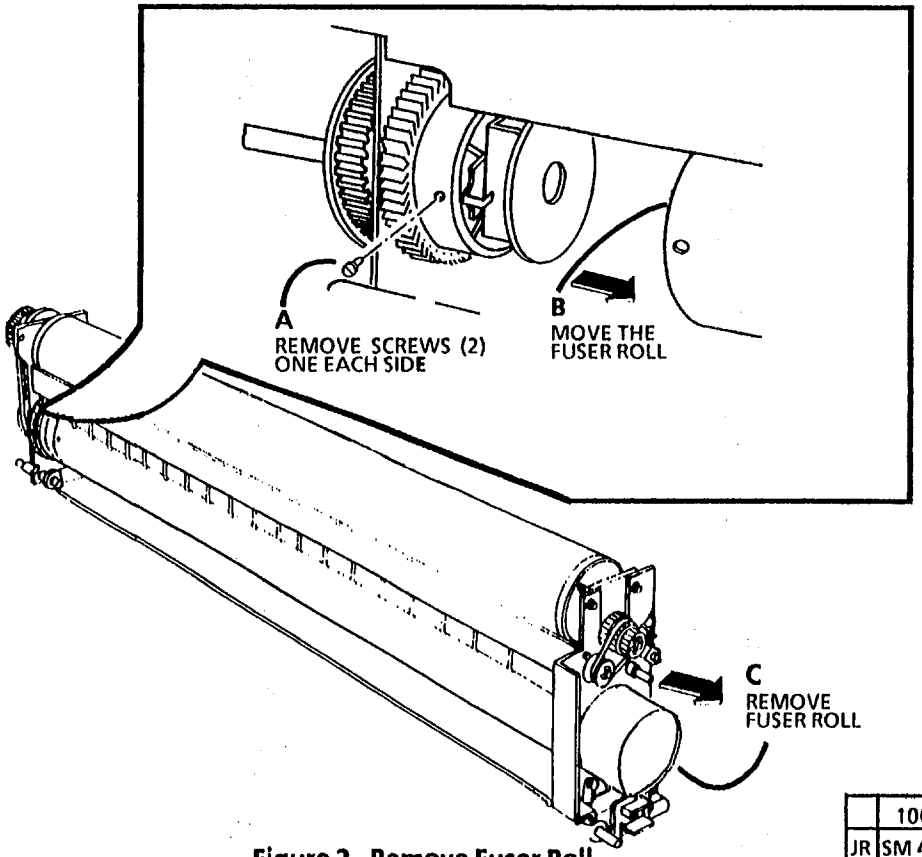


Figure 2. Remove Fuser Roll

	1061	A
JR	SM 4	★	

(Continued)

(Continued)

Replacement

NOTE: Before installing a new fuser roll, clean the surface with film remover.

NOTE: Ensure that the thermistor is clean.

NOTE: When installing a new fuser roll, be careful while installing the roll through the side frame of the xerographic module.

NOTE: Step 1 C and D: When reinstalling the (2) screws, ensure that the head of the screw fits into the hole in the Fuser Roll.

NOTE: Ensure that the thermistor touches the heat roll.

1. (Figure 3): Reinstall the fuser roll.
2. Reinstall the heat rod (REP 10.1).
3. Perform the fuser roll initiation procedure (Section 6, General Procedures).

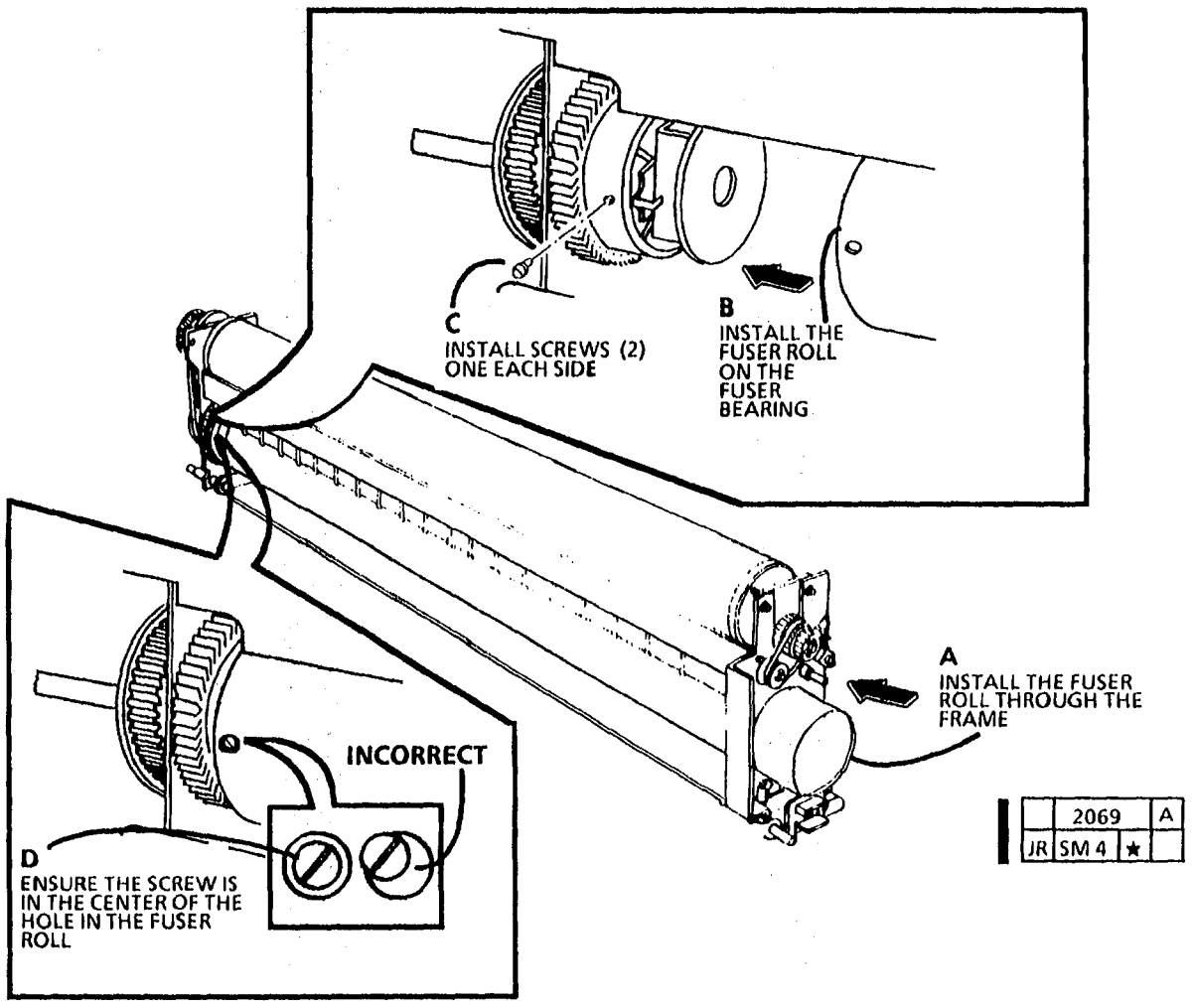


Figure 3. Reinstall the Fuser Roll

REP 10.3 Fuser Triac

Parts List on PL 1.1

Replacement

1. Cover the entire surface where the triac mounts to the frame with a film of thermal compound.

2. (Figure 1): Replace the triac.

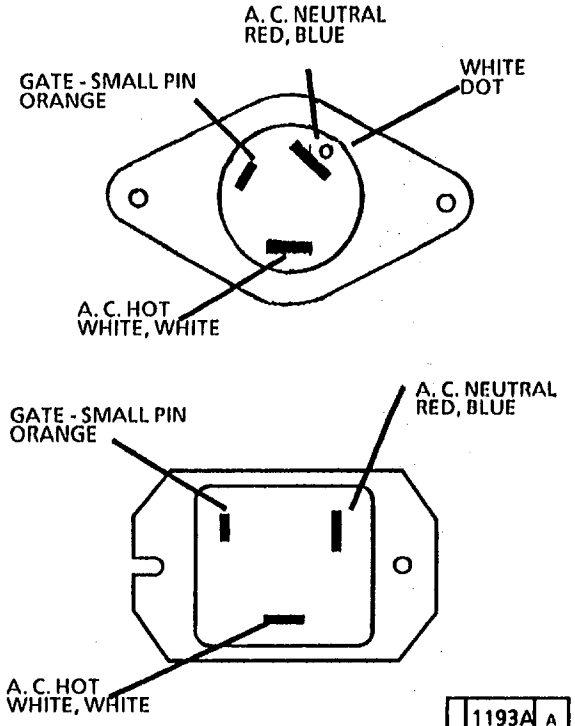


Figure 1. TRIAC Replacement

REP 10.4 2510 Oil Pads

Parts List on 10.4

Removal

WARNING:
Disconnect the power cord.

CAUTION
Fuser roll may be hot.

CAUTION
Handle the Oil Dispenser Assembly with care to avoid bending the stripper fingers.

1. Lower the copy feed shelf.
2. Lower the transport latching cover.
3. (Figure 1): Remove oil dispenser assembly.

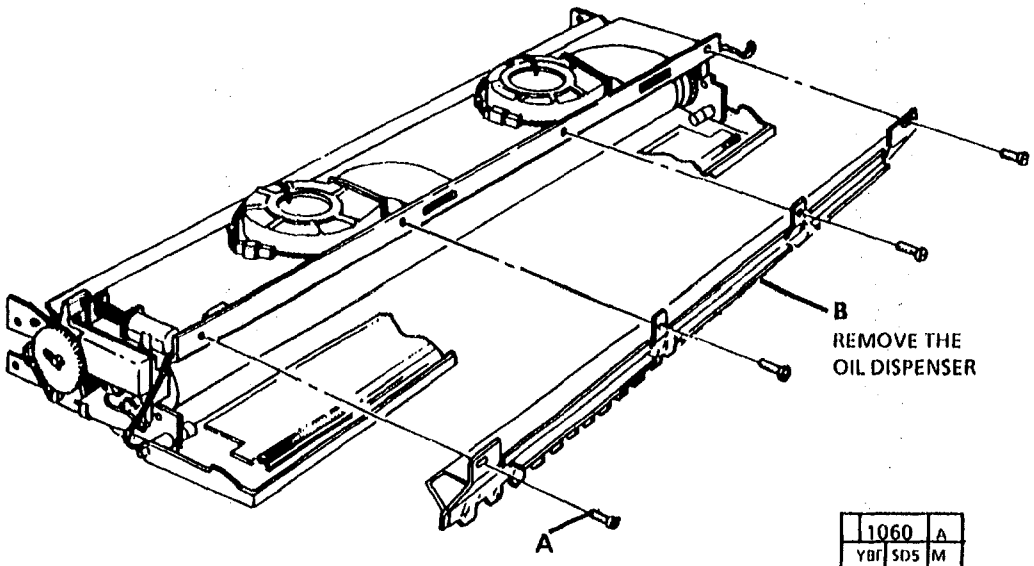


Figure 1. Remove Oil Dispenser Assembly

4. (Figure 2): Remove oil pads.

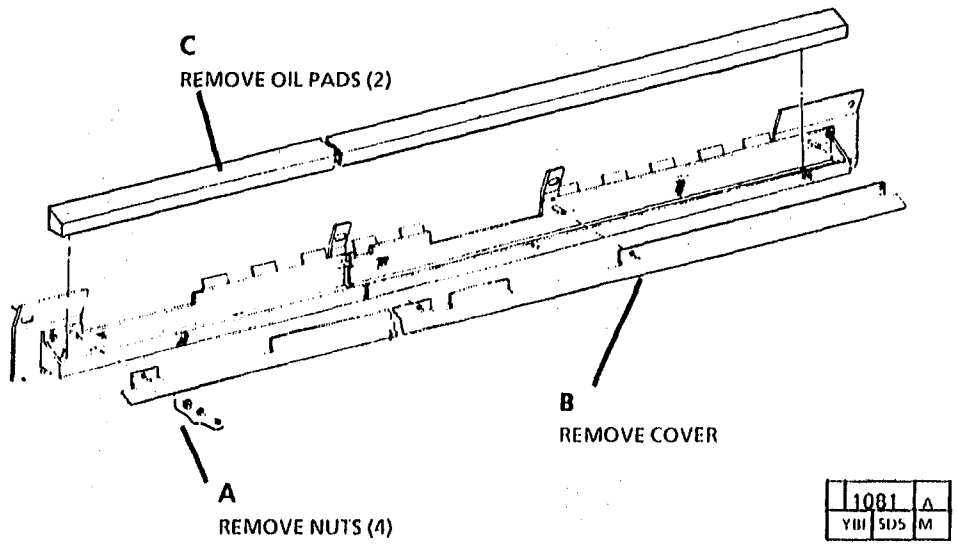


Figure 2. Remove Oil Pads

NOTE: Ensure that the Fuser Roll screw heads clear the oil dispense assembly bracket.

NOTE: If an old oil wick is used spread some fuser oil on the dirty ares and gently scrape it with a piece of .030 inch shim stock or feeler gauge material and wipe the wick with a towel.

NOTE: When a new wick is installed, or if the old wick is dry, prime it with fuser oil prior to use. To prime the wick, rub the wick surface with a new oil pad prior to installing the pad in to the oil dispenser assembly. This is necessary due to fact that it takes approximately 24 hours for the oil to travel from the pads to the wick.

Replacement

1. (Figure 1): 2510 W/TAG 22 Check/adjust the position of the metering trays.

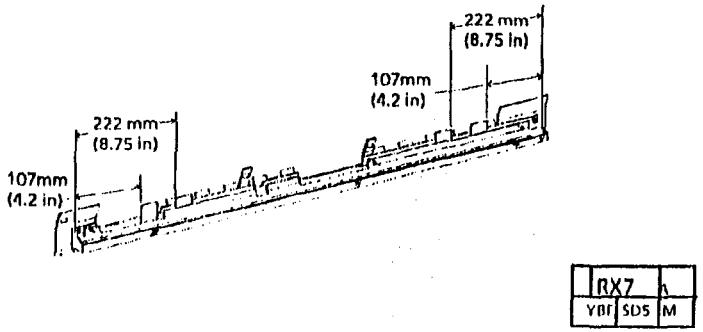


Figure 1. Checking the Metering Tray Adjustment

2. Install the oil dispenser.

3. If the fuser roll is dry as a result of a dry wick, perform perform the Initiation procedure for thefuser roll (Section 6, General Pocedures).

REP 10.5 Oil Dispense Assembly (2510 W/Tag 252 and 2515)

Parts List on PL 10.5 (2515, 2510 W/ Tag 252)
Parts List on PL 10.4 (2510 W/O Tag 252, W/ Tag 22, XLA W/ Tag 21)
Parts List on PL 10.6 (XBRA)

Removal

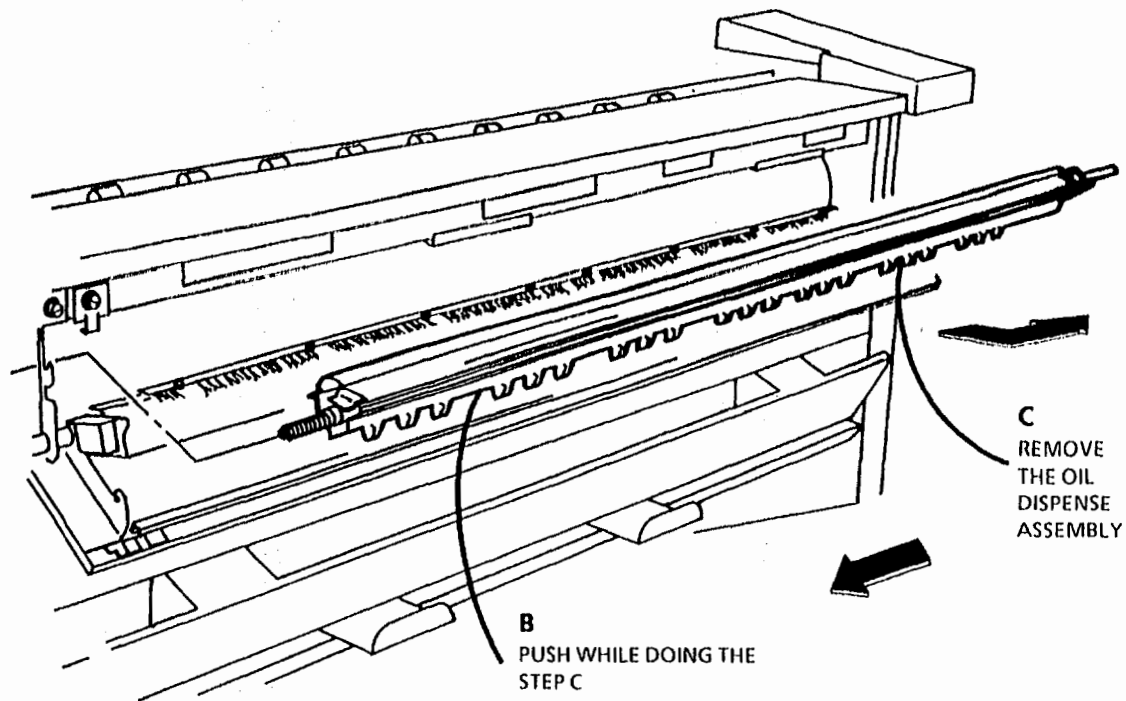
WARNING:
Disconnect the power cord.

WARNING
The Fuser Roll may be hot. Use extreme caution when working in the fuser area and do not touch any heated components.

WARNING
Fuser oil can cause severe eye irritation. Wear protective gloves when handling parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Wash hands after handling components covered with fuser oil.

1. (Figure 1): Remove the oil dispense assembly.

CAUTION
STEP 3 C: Handle the Oil Dispense Assembly with care to avoid bending the stripper fingers and the media deflectors.



	1099	A
JR	SM 5	M	

Figure 1. Remove the Oil Dispense Assembly

(Continued)

Replacement

1. Check the stripper fingers for toner build-up or damage and clean or replace as required.

2. (Figure 2): Reinstall the left side of the oil dispense assembly.

CAUTION

STEP 2 B: To avoid damage to the stripper fingers or the fuser heat roll, ensure that the oil dispense assembly is positioned up against the bracket as shown in Figure 2. Keep the oil dispense assembly as close to the fuser roll without touching the roll while installing the assembly.

3. (Figure 3): Reinstall the right side of the oil dispense assembly.

CAUTION

STEP 3 A: To avoid damage to the stripper fingers or the fuser heat roll, keep the oil dispense assembly positioned up against the bracket as shown in Figure 2. Keep the oil dispense assembly as close to the fuser roll without touching the roll while installing the assembly.

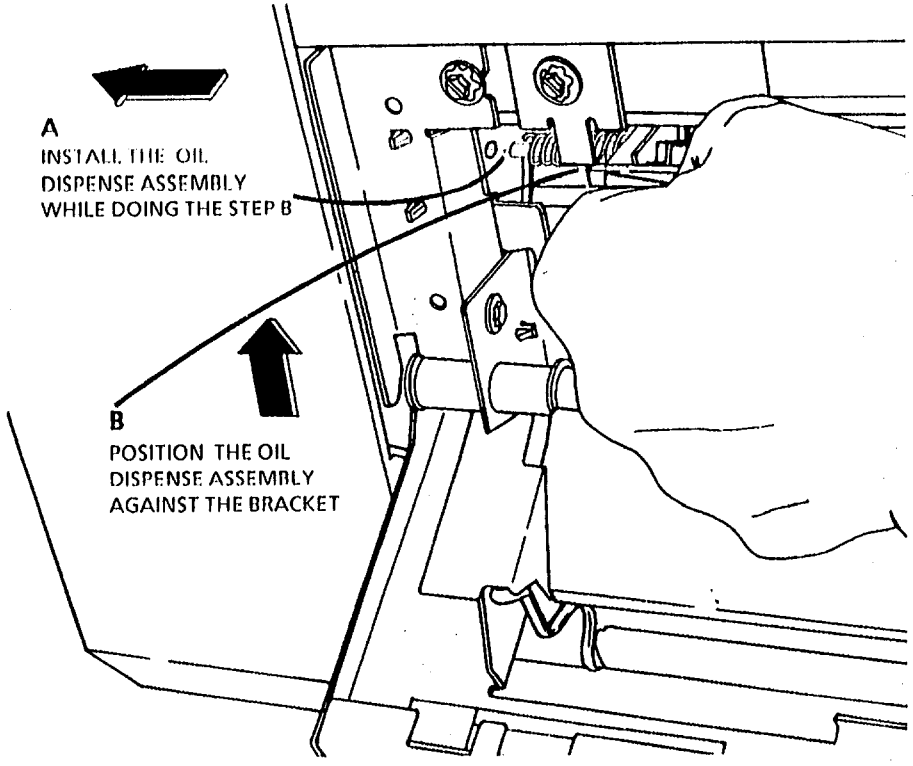


Figure 2. Reinstalling the Oil Dispense Assembly

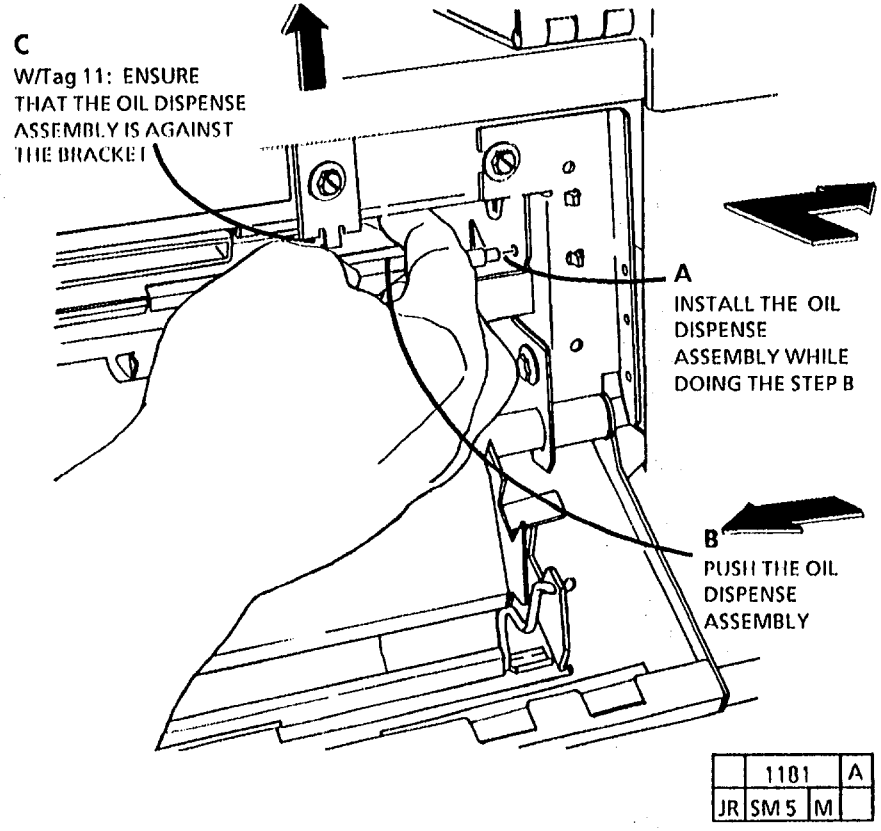


Figure 3. Reinstalling the Oil Dispense Assembly

(Continued)

REP 10.6 Media Deflectors (2510 W/Tag 252 and 2515)

Parts List on PL 10.5

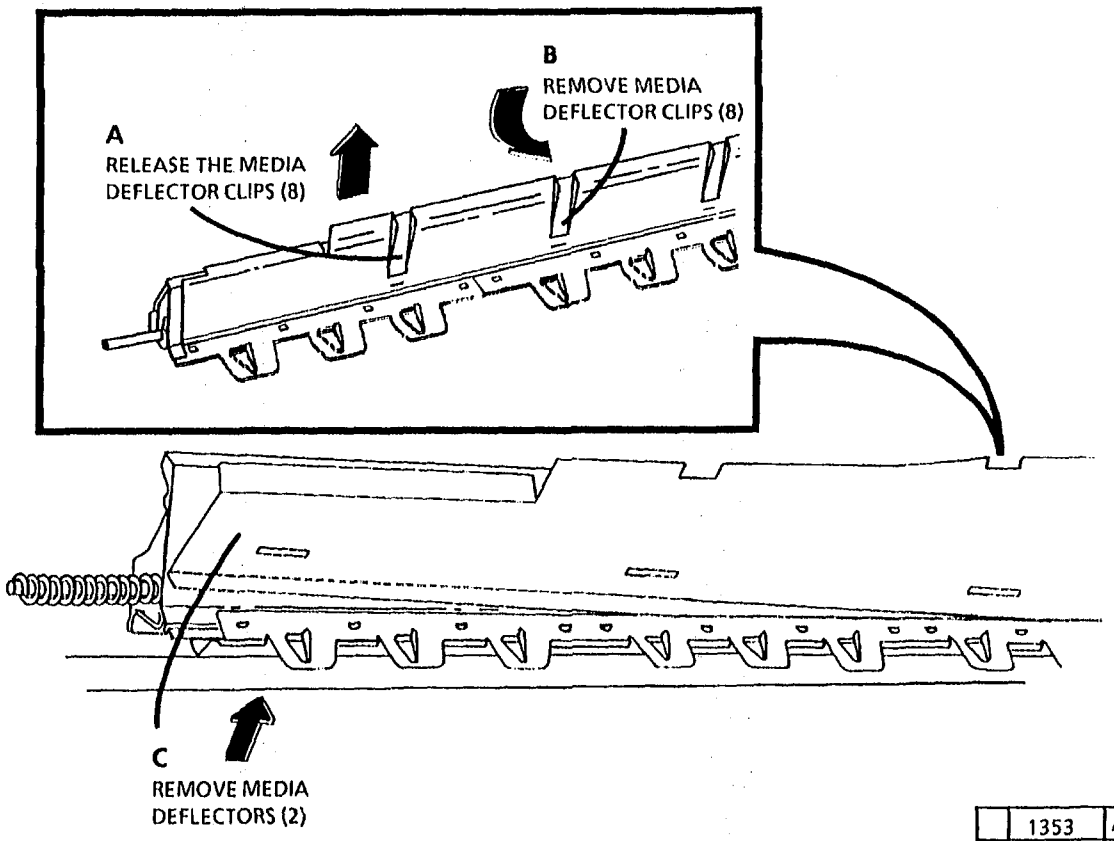
Removal

WARNING:
DISCONNECT THE POWER CORD.

1. Remove the oil dispense assembly (REP 10.5).

CAUTION
STEP 3 B: *Handle the Media Deflector Clips with care in order to avoid bending them.*

2. (Figure 1): Remove the media deflectors.

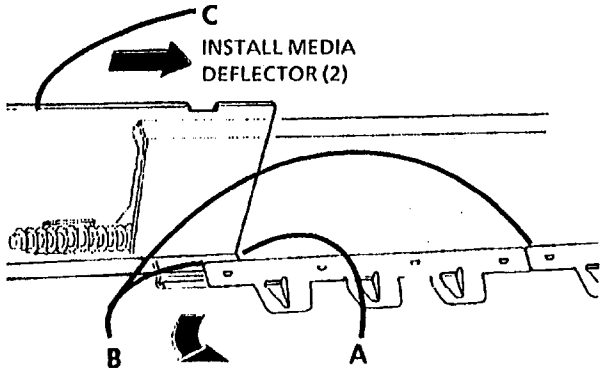


	1353	A
YB	SM 4	★

Figure 1. Remove the Media Deflectors (Continued)

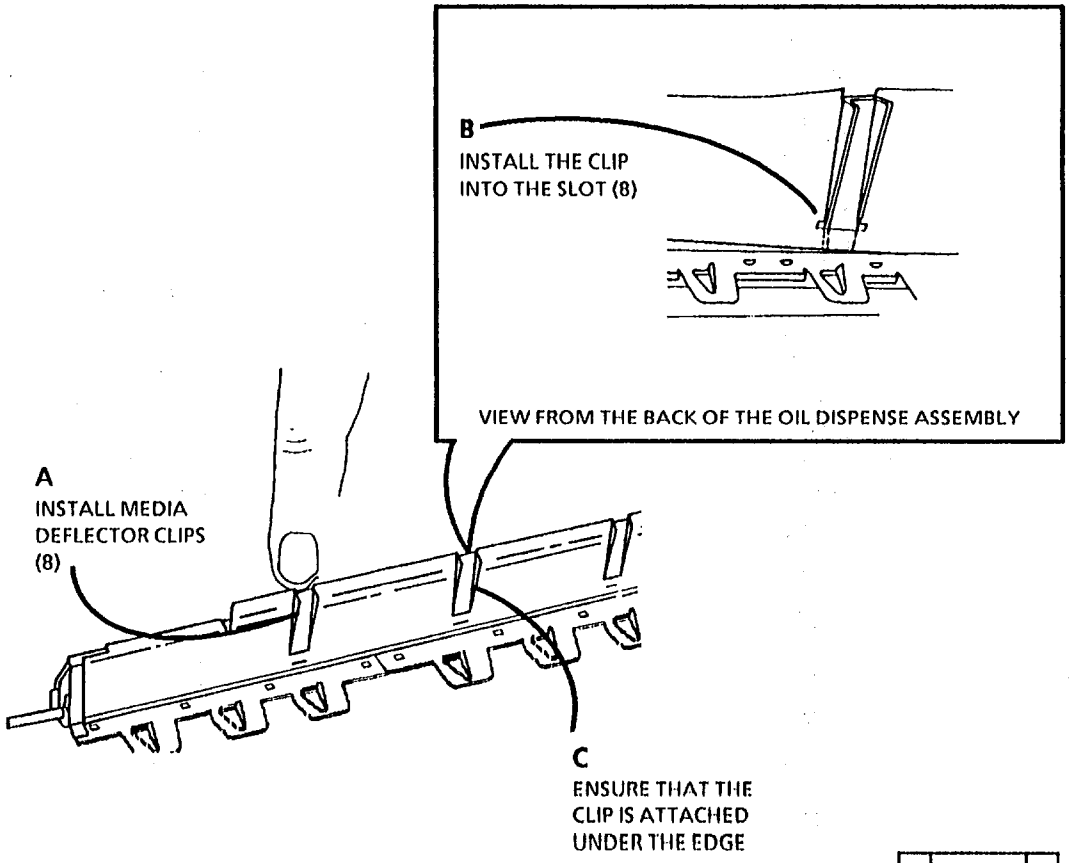
Replacement

1. (Figure 2): Install the media deflectors.
2. (Figure 3): Install the media deflector clips.



	1264	A
JR	SM 4	M

Figure 2. Install the Media Deflectors



	1354	A
JR	SM 4	★

Figure 3. Install the Media Deflector Clips

REP 10.7 Stripper Fingers

Parts List on PL 10.4 (2510 W/ Tag 16), 10.5 (2515), 10.6 (XLB)

Removal

WARNING:

Replacement

1. (Figure 2): Install the stripper fingers.

CAUTION

The stripper fingers are easily damaged and must be installed carefully. Do not bend or distort them. Slide the stripper fingers straight down onto the dispense assembly housing. Do not slide the stripper fingers on from the side of the housing. This will create aluminum shavings that could clog the oiler.

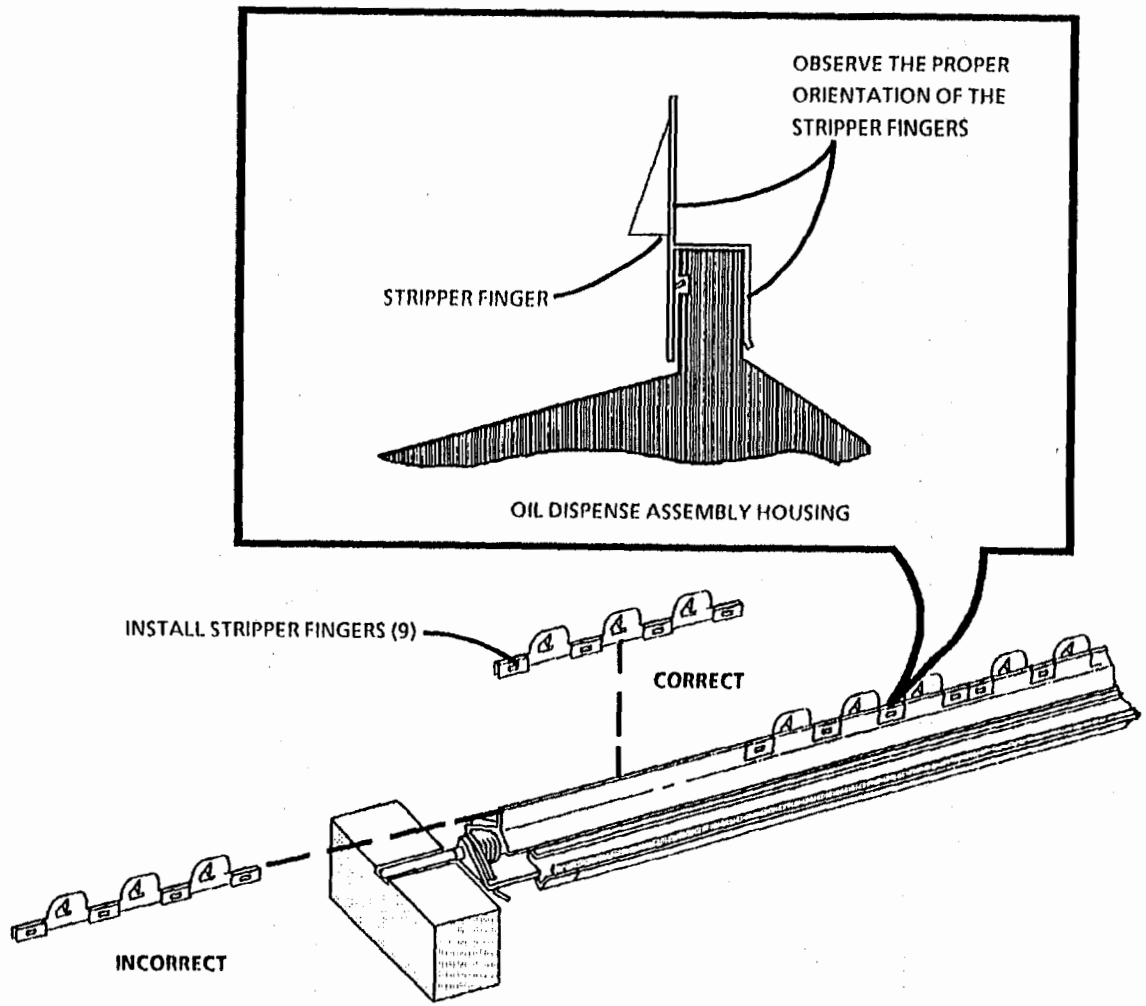


Figure 2. Installing the Stripper Fingers

	1420	A
JR	SM 4	★

(Continued)

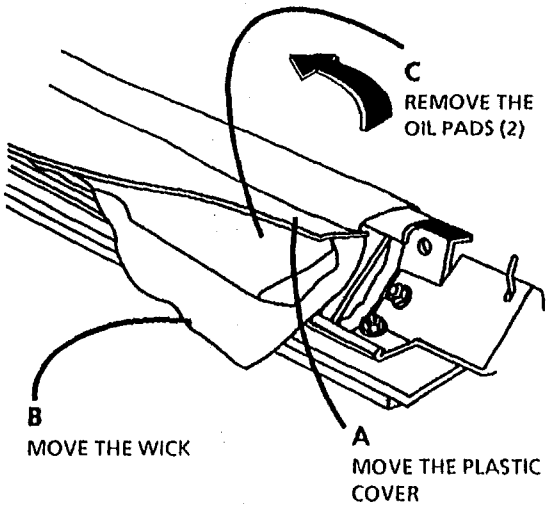
REP 10.8 Oil Pads (2510 W/Tag 252 and 2515)

Parts List on PL 10.5

Removal

WARNING
Disconnect the power cord.

1. Remove the oil dispense assembly (REP 10.5).
2. (Figure 1): Remove the oil pads.



	1444	A
JR	SM 5	M

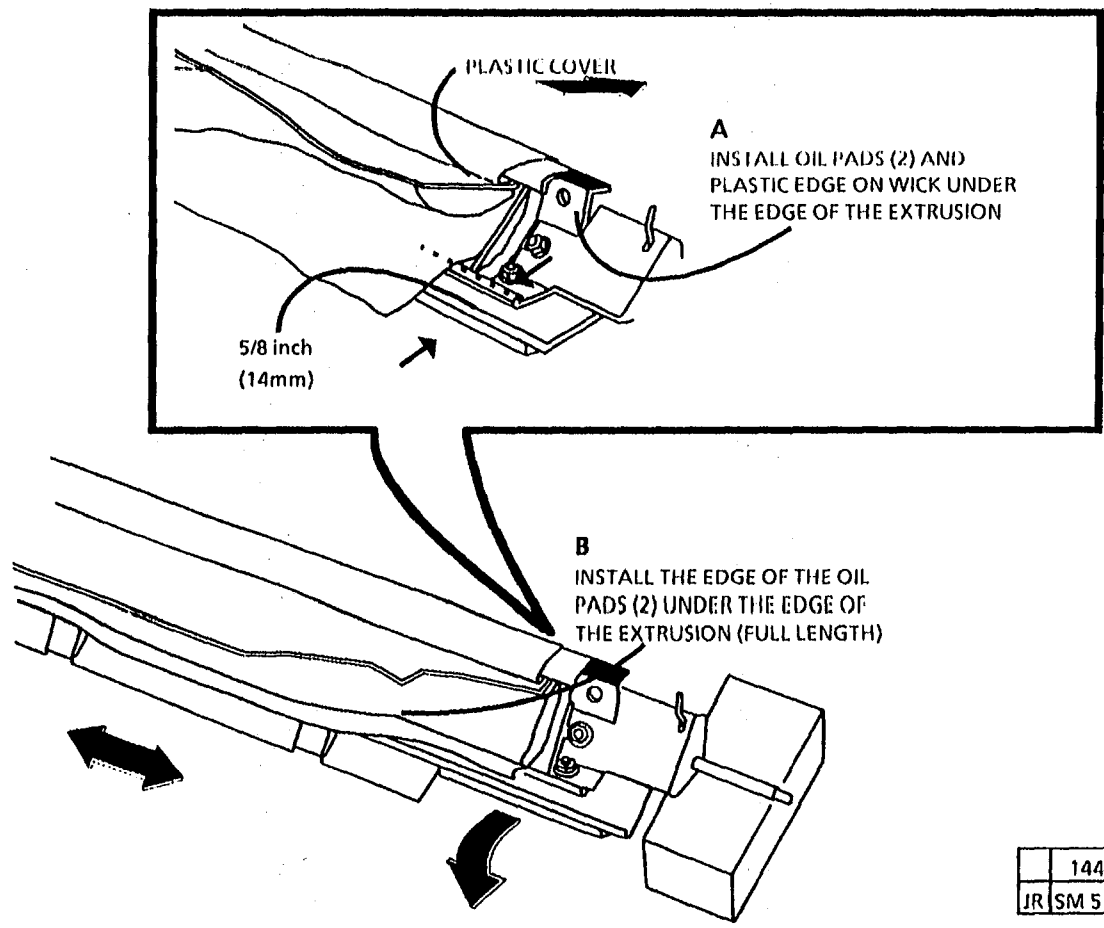
Figure 1. Remove the Oil Pads

Relacement

1. (Figure 2): Install the new oil pads.

NOTE: STEP A: Ensure that the edge of the plastic cover is under the edge of the extrusion.

NOTE: Ensure that the wick is not wrinkled and that the wick edge is a minimum of 5/8 inch (14mm).



	1445	A
JR	SM 5	M

Figure 2. Install the new Oil Pads

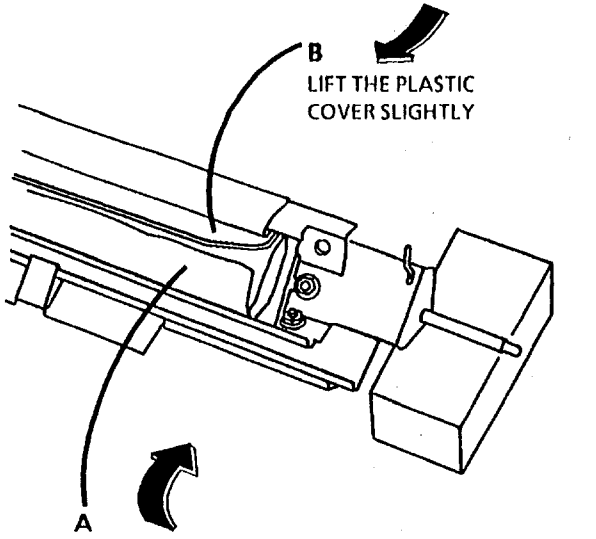
(Continued)

2. (Figure 3): Insert the wick edge under the plastic cover.

NOTE: STEP 2 B: *If the plastic cover is lifted too far, the narrow edge will come out from under the extrusion edge.*

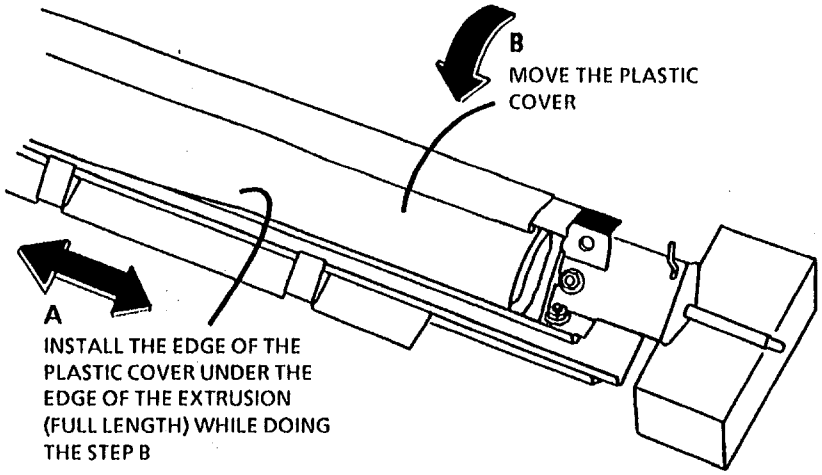
3. (Figure 4): Install the plastic cover over the oil pads.

4. Install the oil dispense assembly.



	1443		A
JR	SM 5	M	

Figure 3. Insert the wick Edge under the Plastic Cover



	1447		A
JR	SM 5	M	

Figure 4. Install the Plastic Cover over the Oil Pads

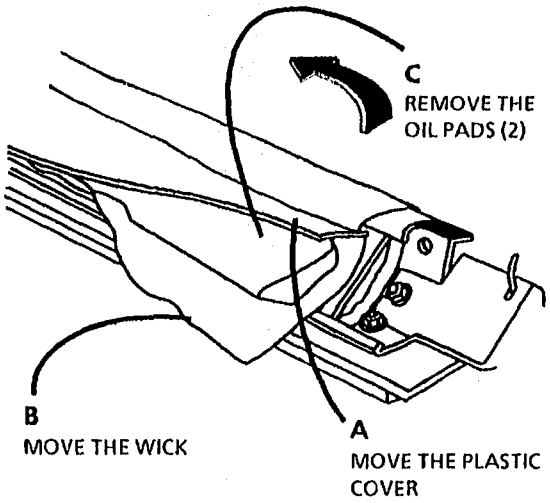
REP 10.9 Wick (2510 W/ Tag 252; 2515)

Parts List on PL 10.5

Removal

WARNING
Disconnect the power cord.

1. Remove the oil dispense assembly.
2. Remove the oil dispense roll assembly (REP 10.10).
3. (Figure 1): Remove the oil pads.



	1444		A
JR	SM 5	M	

Figure 1. Remove the Oil Pads

(Continued)

4. (Figure 2): Remove the wick.

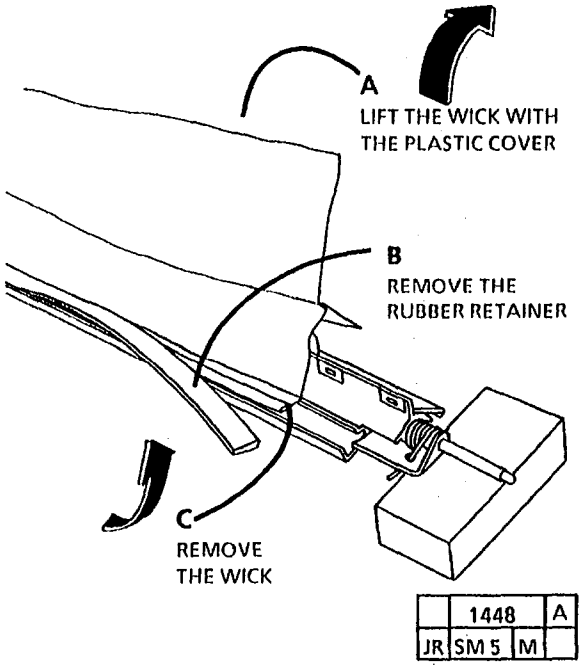


Figure 2. Remove the Wick

Replacement

1. (Figure 3): Install the wick edge with the narrow plastic strip.

CAUTION

Use care not to stretch the rubber retainer while installing it. After installing the rubber retainer, ensure that the rubber retainer is approximately the same length as the wick. Cut any excess off.

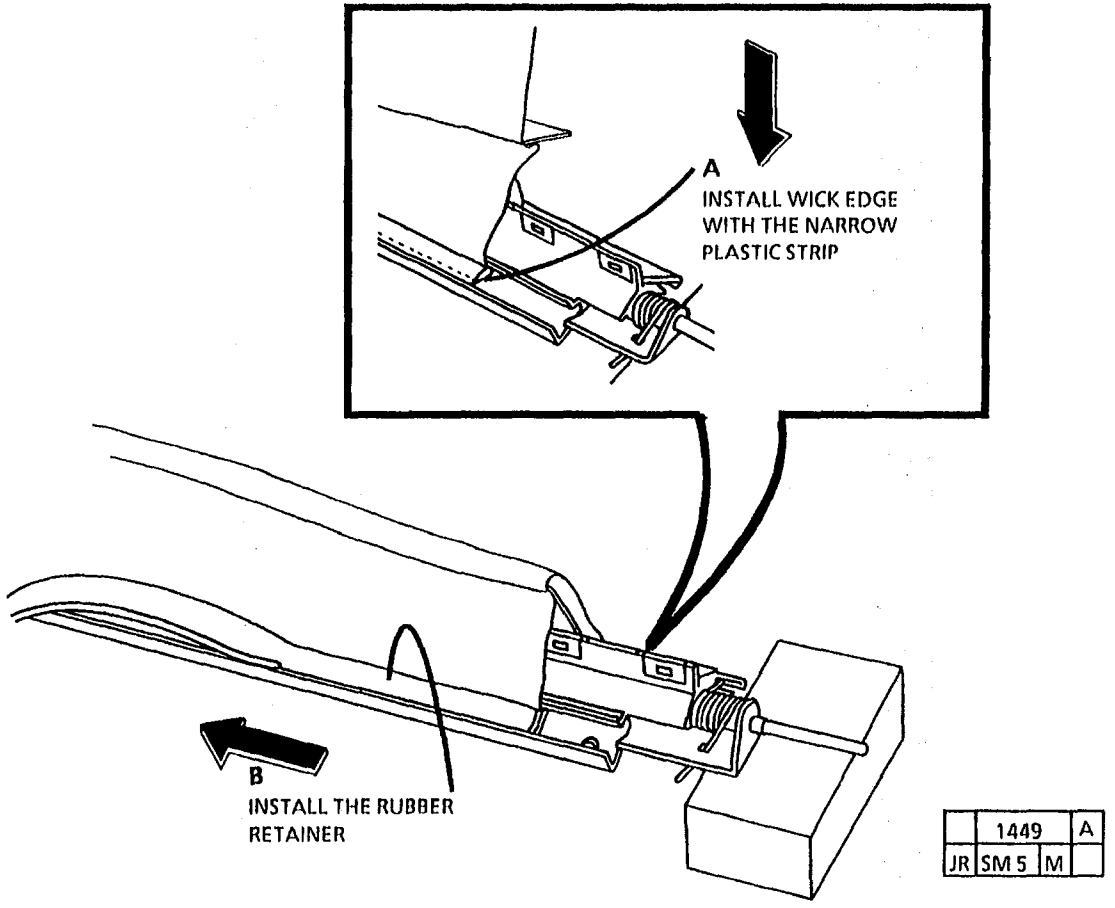


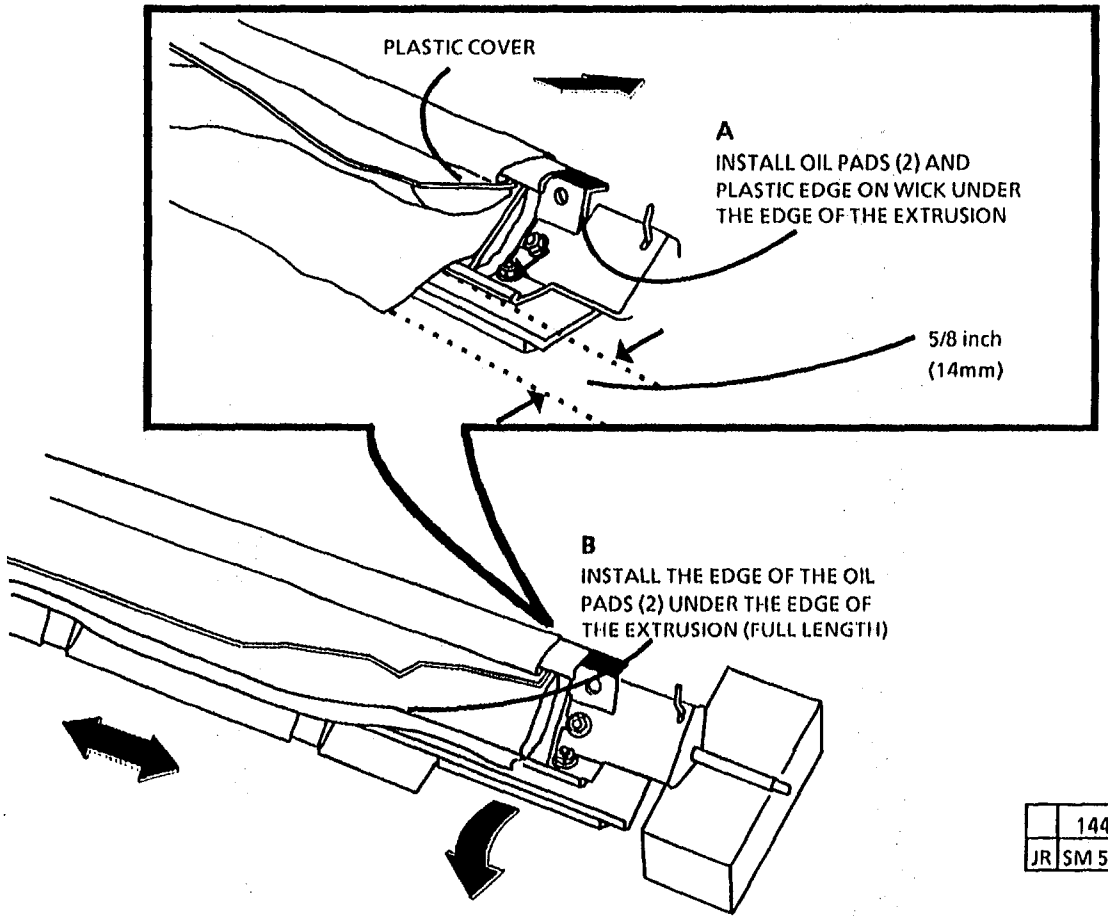
Figure 3. Install the Wick edge with the narrow plastic strip

(Continued)

NOTE: STEP 2A: Ensure that the edge of the plastic cover is under the edge of the extrusion.

NOTE: Ensure that the wick is not wrinkled and that the wick edge is a minimum of 5/8 inch (14mm).

2. (figure 4): Install the oil pads.

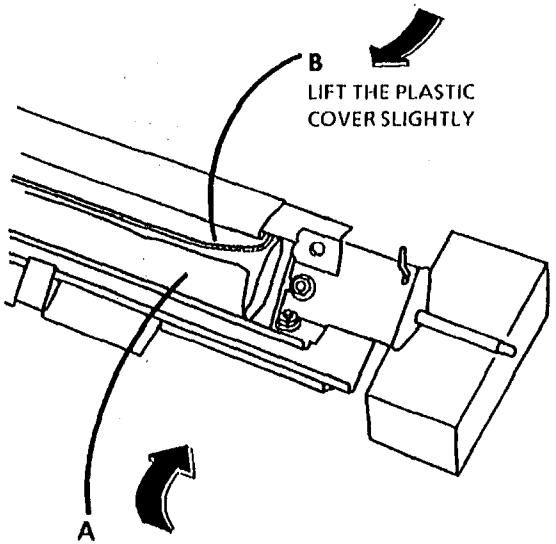


	1445	A
JR	SM 5 M	

Figure 4. Install the new Oil Pads

3. (Figure 5): Insert the wick edge under the plastic cover.

NOTE: STEP 3 B: If the plastic cover is lifted too far, the narrow edge will come out from under the extrusion edge.



	1443	A
JR	SM 5 M	

Figure 5. Insert the wick Edge under the Plastic Cover

(Continued)

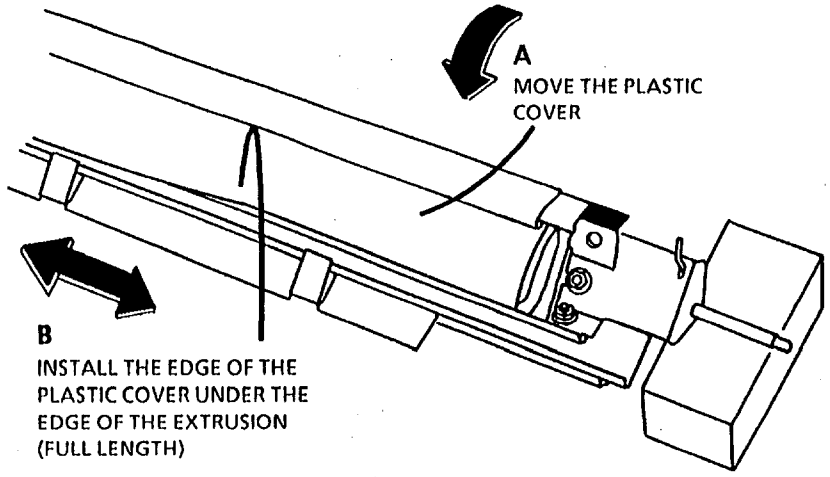
4. (Figure 6): Install the plastic cover over the oil pads.

5. Reinstall the oil dispense roll assembly .

6. Reinstall the oil dispense assembly.

*NOTE: If the costomer indicates that there is high usage of film, **DO NOT** perform the next step.*

7. Prime the wick.



	1447		A
JR	SM 5	M	

Figure 6. Install the Plastic Cover over the Oil Pads

REP 10.10 Oil Dispense Roll Assembly (2510 W/ Tag 252 and 2515)

Parts List on PL 10.5

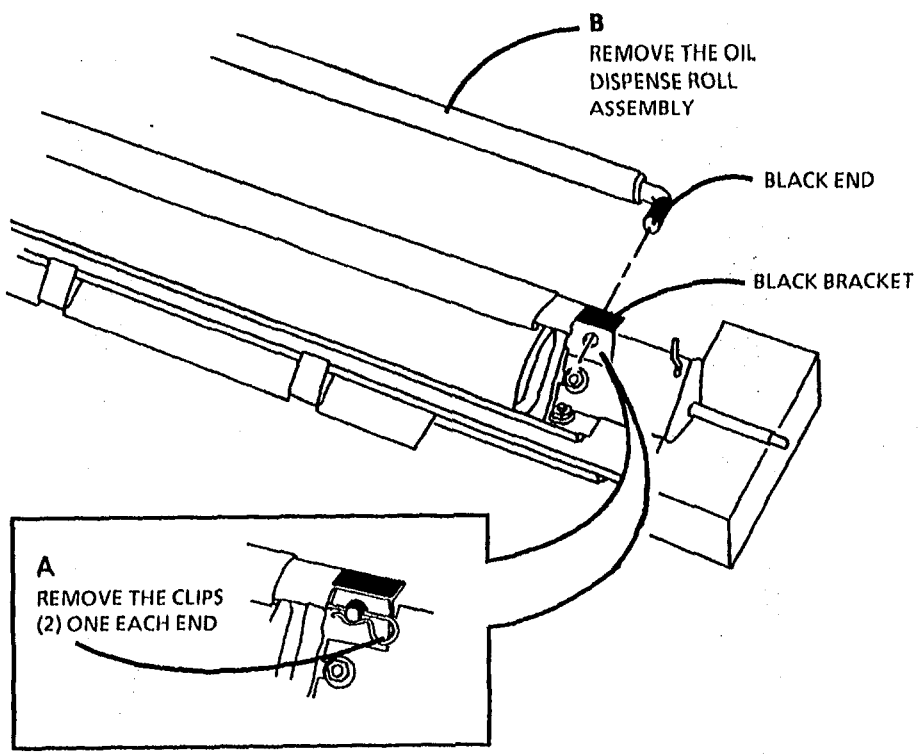
Removal

WARNING
Disconnect the power cord.

1. Remove the oil dispense assembly.
2. (Figure 1): Remove the oil dispense roll assembly.

Replacement

NOTE: *Install the black end of the oil dispense roll assembly in the end of the oil dispense assembly that has the black bracket.*



	1453		A
JR	SM 5	M	

Figure 1. Remove the Oil Dispense Roll Assembly

REP 10.11 Fuser Drive Gear

Parts List on PL 8.1,8.3

Removal

WARNING
Disconnect power cord.

CAUTION
Fuser roll may be hot.

1. Remove the fuser roll (REP 10.2).
2. (Figure 1): Remove the fuser drive gear.

Replacement

NOTE: STEP A The polished side of the reflector must be facing the fuser roll when reinstalled.

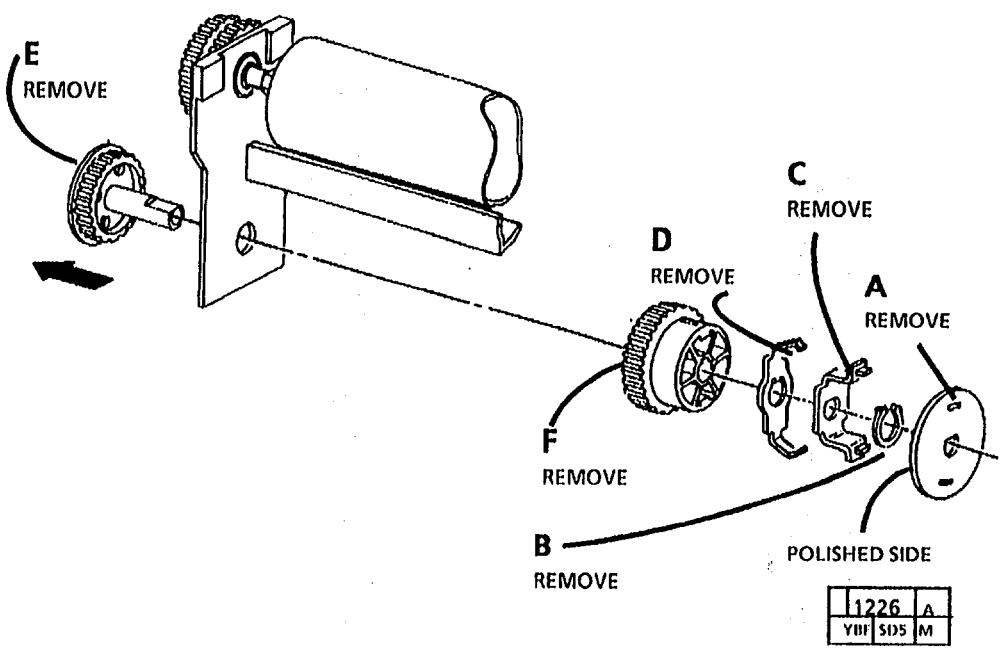


Figure 1. Remove the Fuser Drive Gear

REP 10.12 Thermistor Assembly (RT1)

Parts List on PL 9.3

Removal

WARNING:
Disconnect power cord.

1. Remove xerographic module. (REP 9.1)
2. Lower the transport latching cover.
3. Lower the front cover.

CAUTION
The fuser roll may be hot.

CAUTION
Handle the Oil Dispenser Assembly with care to avoid damaging the Stripper Fingers.

4. (Figure 1): Remove thermistor (RT1).

Replacement

Note: Lightly lubricate the Fuser Roll over the entire surface with Silicon Oil, in the area where the Thermistor comes in contact with the roll.

1. Adjust the fuser temperature (ADJ 10.1).

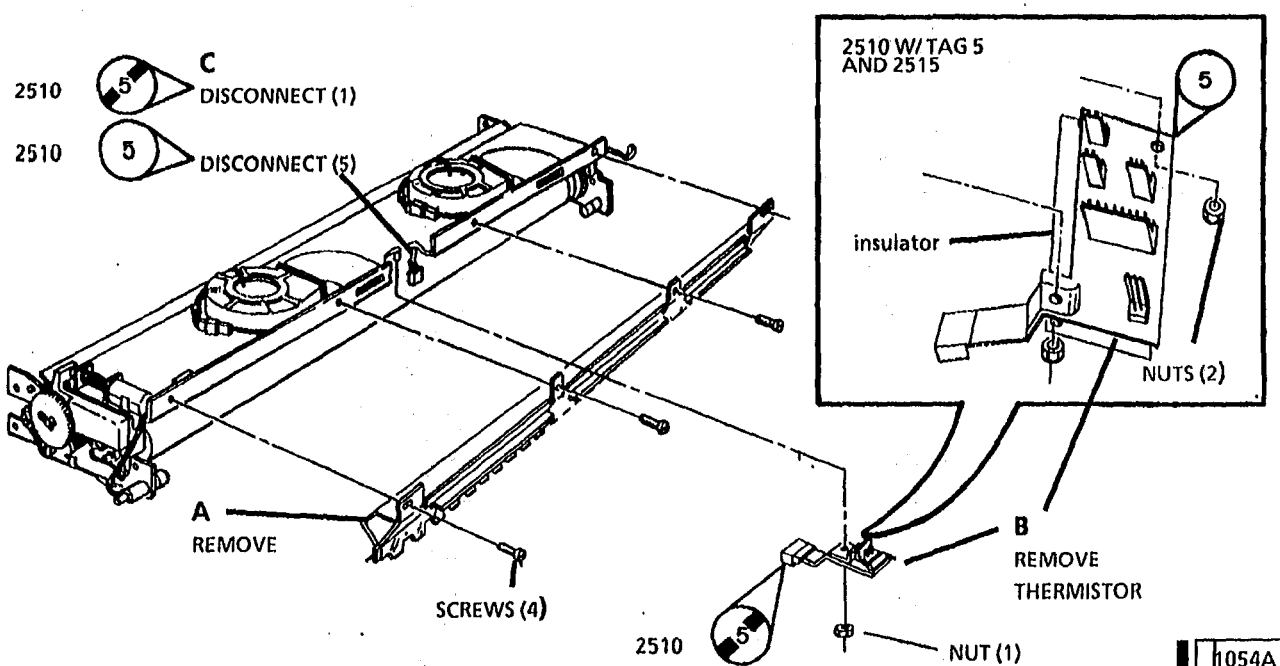


Figure 1. Remove the Thermistor (RT 1)

REP 10.13 Motion Sensor

Parts List on PL 8.5

Removal

WARNING

Disconnect the power cord.

NOTE: Note the orientation of the motion sensor when removing for proper replacement.

1. Remove xerographic module (REP 9.1).
2. Remove media transport (REP 8.1).
3. Turn media transport over.
4. (Figure 1): Remove motion sensor.

Replacement

CAUTION

After turning the Paper Transport back to the original position, ensure that the Cover, Fabric Guide, and Pressure Plate are in place.

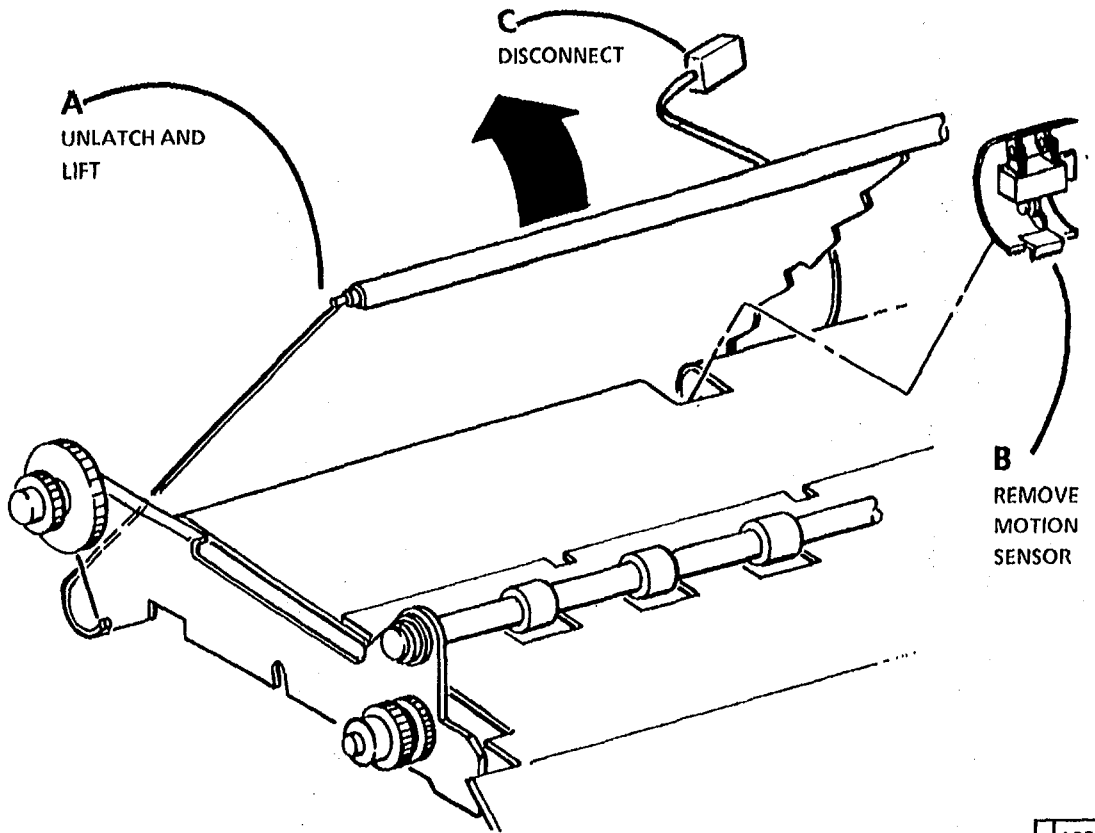


Figure 1. Remove Motion Sensor

ADJ 3.1 Timeout Interval To RestMode

Purpose

The purpose is to set the amount of time in which the copier returns to the rest mode from the power saver mode.

Introduction

The timeout interval should be set to the customer's requirements. The time is preset by manufacturing for one hour and fifteen minutes. The time interval can be set from 15 minutes to 2 hours and 15 minutes.

Procedure

1. Enter the diagnostics mode.
2. Use the ***Copy Contrast*** UP/DOWN(2510) or the ***Copy Contrast Lighter/Darker*** (2515) buttons to select test 8. Press the ***Start*** button.

NOTE: *Increasing the value displayed will increase the timeout interval. One number will increase or decrease the interval by 15 minutes.*

3. Use the ***Copy Contrast*** UP/DOWN(2510) or the ***Copy Contrast Lighter/Darker*** (2515) buttons to increase/decrease the value displayed on the control panel.
4. Press the ***Start*** button to enter and store the new setting.
5. Exit the diagnostic mode.

ADJ 3.2 Country Configuration

Purpose

The purpose of this procedure is to set up the correct country configuration for the copier.

Procedure

1. Enter diagnostic mode.
2. Use the ***Copy Contrast*** UP/DOWN(2510) or the ***Copy Contrast Lighter/Darker*** (2515) buttons to select test 9. Press the ***Start*** button.
3. Using the copy contrast buttons, select the appropriate configuration code and press ***Start*** to store the new configuration value.

Code	Configuration
1	120V, 60 Hz
2	220V, 50 Hz
3	240V, 50 Hz
4	100V, 50/60 Hz

4. Exit the diagnostic mode.

ADJ 3.3 Timeout Interval to Power Saver Mode (2515)

Purpose

The purpose is to set the amount of time it takes the copier to return to the standby mode from the run mode.

Introduction

The timeout interval should be set to the requirements of the customer. The time is preset by manufacturing for 1 minute. The time interval can be set from 45 seconds to 3 minutes.

Adjust

1. Enter the diagnostic mode.
2. Select test 1. Press ***Start***.
3. Use the ***Copy Contrast Lighter/Darker*** buttons to increase/decrease the value displayed on the control panel.

NOTE: *Increasing the value displayed will increase the run time interval after the last copy was made. One number will increase or decrease the interval by 15 seconds.*

4. Press the ***Start*** button to enter and store the new setting.
5. Exit the diagnostic mode.

ADJ 3.4 Foreign Accessory Enablement

Purpose

The purpose is to select or deselect the foreign interface feature and determine the interaction of the foreign interface output pulse.

Adjust

1. Enter the diagnostic mode.
2. Enter code 1 (2510 W/Tag 26) or enter code 2 (2515). Press ***Start***.
3. Enter the deisred value.

Function	Value
The foreign interface is enabled and an output pulse is generated at the completion of each copy.	1
The foreign interfce is not enabled.	2
The foreign interface is enabled and an output pulse is generated each time the copy count meter registers an increment.	3

5. Exit the diagnostic mode.

ADJ 8.1 Registration

Purpose

The purpose is to adjust the timing of the copier for the correct registration of the copy material and the document image.

Check

Align the lead edge reference line on the copy with the Reg. Ref. 0 reference line on the test pattern. The lead edge of the copy must be within the black box on the test pattern 82E5020 (Figure 1).

Adjustment

1. Make ten copies and check the registration. If it is out of specification proceed on to next steps.
2. Enter Diagnostics Test **7**. Press ***Start***.
3. Scroll up or down depending which direction the registration needs to be moved.
4. Press ***Start*** to enter the new setting and make copies.
5. Adjust as necessary until the registration is within specification.

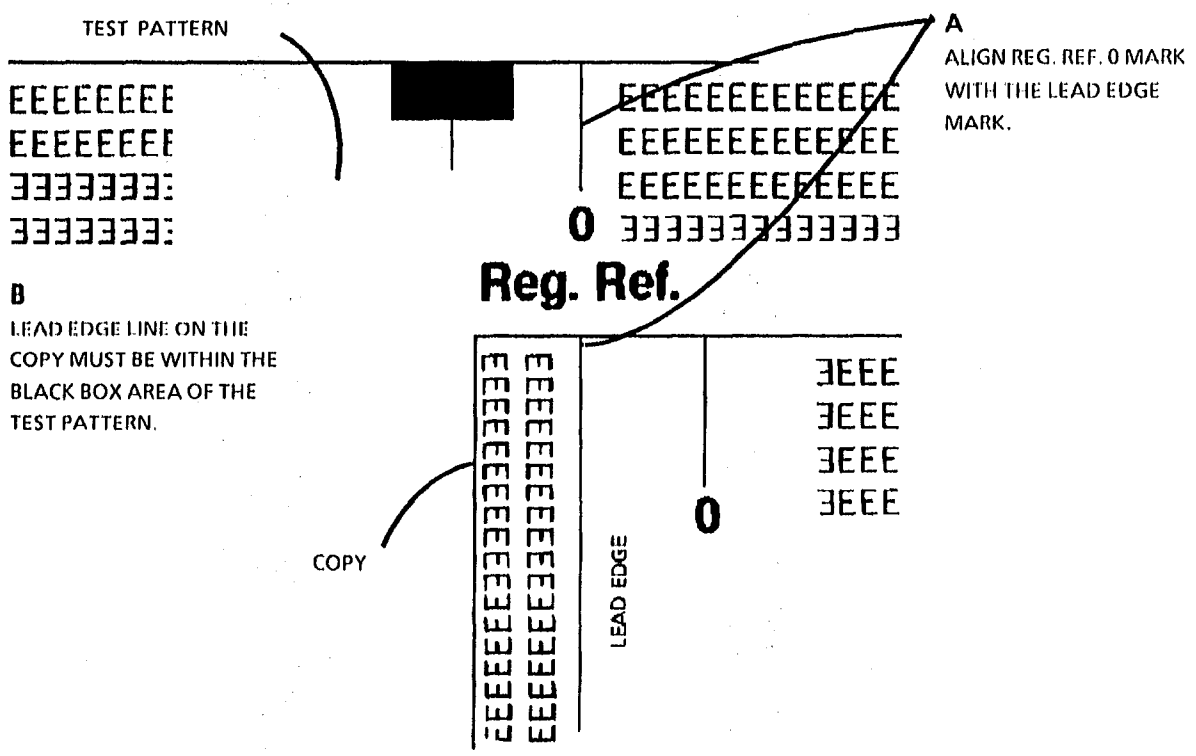


FIGURE 1. Check the Regisration

ADJ 9.1Cleaner Blade Solenoid

Purpose

The purpose is to adjust the cleaning blade solenoid so that the cleaner blade applies the correct force to the drum.

NOTE: (Figure 1) The drum must be in the xerographic module before performing this check or adjustment. The nut driver provides a 3 point stand to avoids a twist in the assembly which could result in an improper gap.

1. Remove the xerographic module (REP 9.1).
2. (Figure 1): Install the Nut Driver Handle
3. Manually compress the plunger of the solenoid.

Check

4. (Figure 2): Check for 0.050 ±0.005 (1.2 mm ±0.1 mm) between the plunger and the weight.

Adjustment

5. (Figure 2): Adjust the cleaning blade solenoid.
6. Check the cleaning blade for correct cleaning action.
   a. Remove the Charge Corotron
   b. Dust the drum with the dusting pouch.
   c. Manually compress the solenoid plunger while rotating the drum and observe the cleaner action.
   d. Reinstall the Charge Corotron
7. Rotate the Transition Gear to move the weight to its closest position to the xerograhic module frame. Check that there is no interference between the weight and frame.

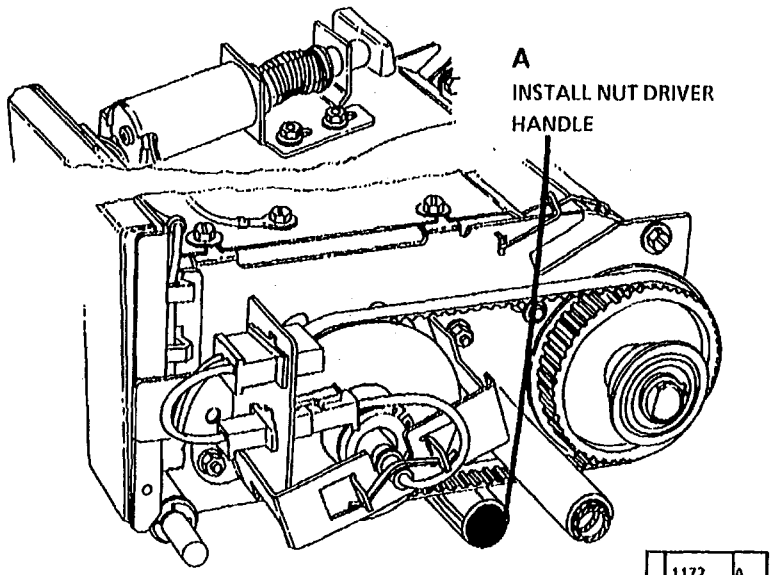


Figure 1. Installing the Nut Driver Handle

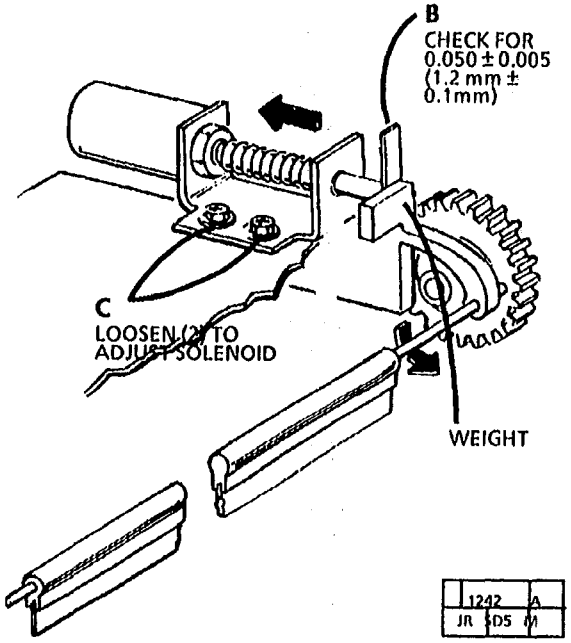


Figure 2. Adjusting the Cleaner Blade Solenoid

ADJ 9.2 Electrostatic Series (Old Type HVPS)

(1) *This adjustment must be performed in the exact order presented here.*

PURPOSE

The purpose of this adjustment is to obtain good copy quality by bringing the corotron and exposure voltages to their required specification.

1. Before performing this procedure check the following:
   - a tight fit exists between the electrometer probe and the probe holder. If the fit is too loose the probe will rotate in the holder during the procedure, and cause an inaccurate adjustment. Do not continue the adjustment until this condition is corrected.
   - the battery of the DMM is not at the end of its useful life. Two indications of this problem are a "B" on the DMM display or a faded display when the DMM is energized.
   - the 2 VDC scale is selected on the DMM.
   - the low battery LED is not illuminated on the electrometer.
   - the charge corotron is seated correctly.
   - clean the lens, platen, lamp and corotrons
2. **USED PHOTORECEPTOR DRUM:** Run one copy, then allow the copier to go into the power saver mode.

NEW PHOTORECEPTOR DRUM: Run 25 ft (7.6 metres) of copies, then allow copier to go into the power saver mode.

WARNING
Disconnect the power cord.

3. Remove:
   - the document handler
   - the left side cover
   - the right side cover
   - the upper rear cover
   - the document transport drive belt
4. Remove developer module (REP 9.5).
5. (Figure 1): Install electrometer probe in the probe holder.

(2) *The window on the probe must face the photoreceptor.*

6. (Figure 2): Install the probe holder containing the probe on the copier frame.

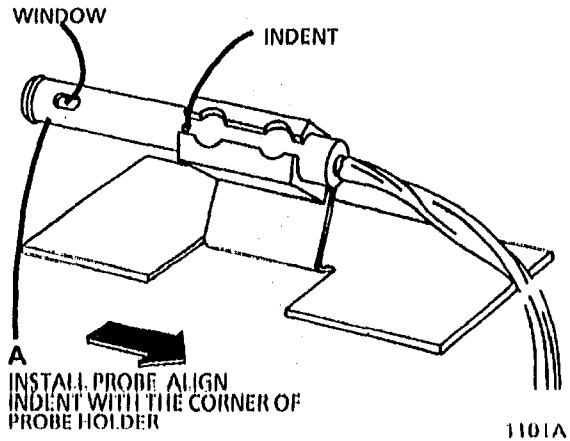


Figure 1. Install the Electrometer Probe in the Probe Holder

7. Insert four (4) sheets of 20 pound (80 gsm) paper between the electrometer probe holder and the photoreceptor drum.

(3) *This establishes the correct distance between the electrometer probe and the photoreceptor drum.*

8. Remove the paper; be careful not to disturb the position of the probe.

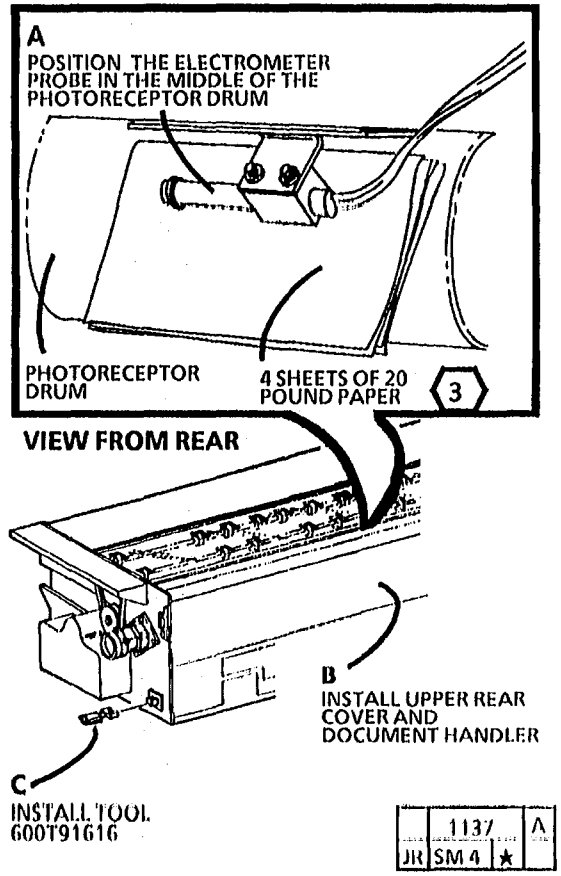


Figure 2. Install the Electrometer Probe (continued)

8a. Cover the complete surface of the platen with white paper (20 lb 80gsm), then install the document handler and rear cover.

9. Enter the diagnostic mode. Select test **g, j,** then **6** using the copy contrast buttons. Press and hold the **Start** button for one revolution of the photoreceptor drum.

10. (Figure 3): Adjust the precharge and detack corotron voltages.

4

Keep the DMM leads away from the HVPS to prevent electrical noise.

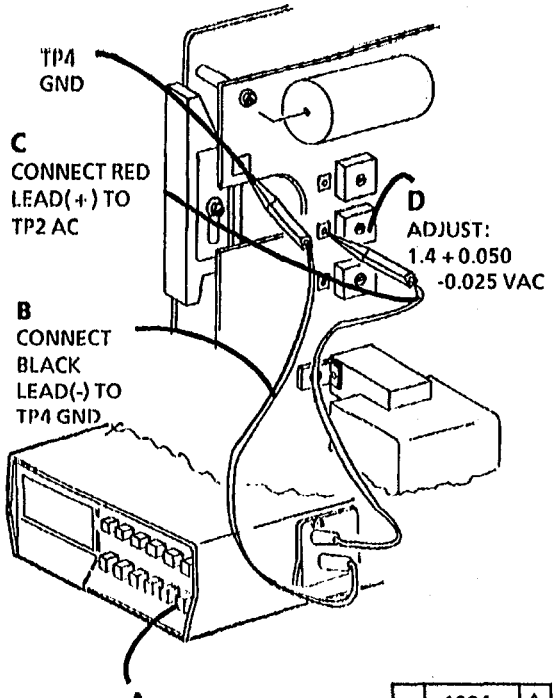


Figure 3. Adjustment of Precharge and Detack Corotrons

11. (Figure 4): Adjust the transfer corotron voltage.

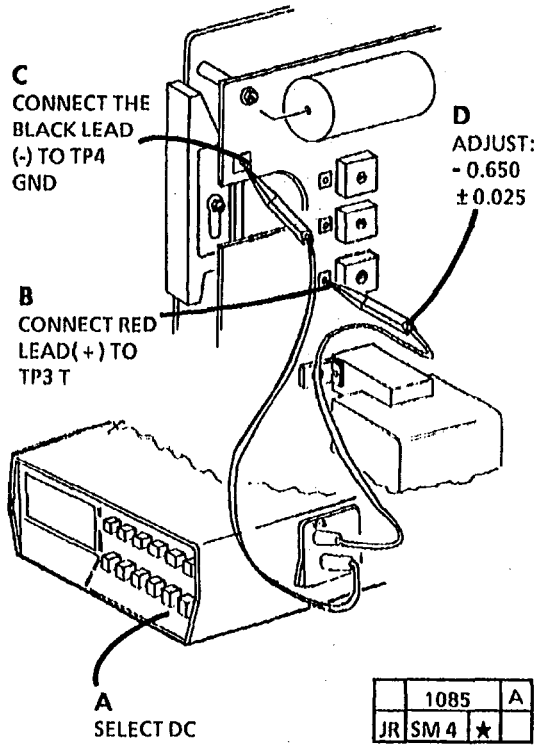


Figure 4. Adjustment of Transfer Corotron

12. (Figure 5): Connect electrometer to DMM.

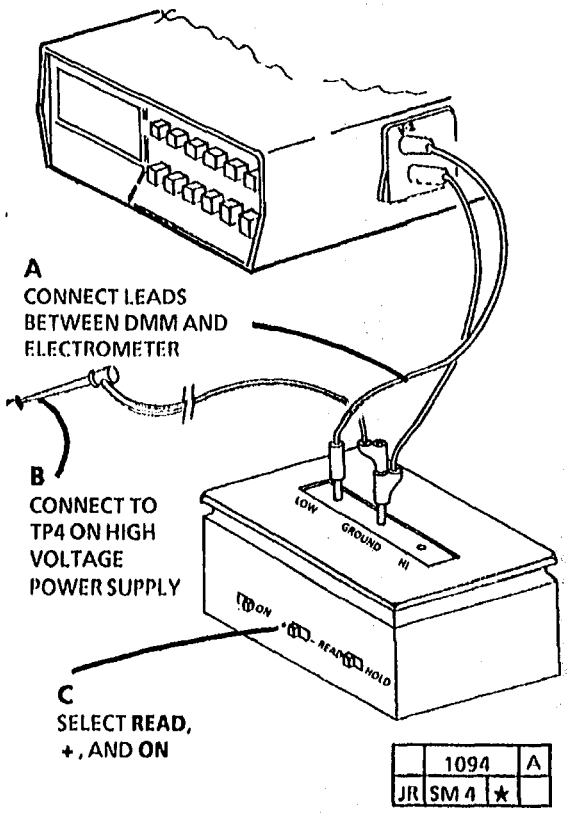


Figure 5. Connecting the Electrometer

(Continued)

13. (Figure 6): Adjust the charge voltage.

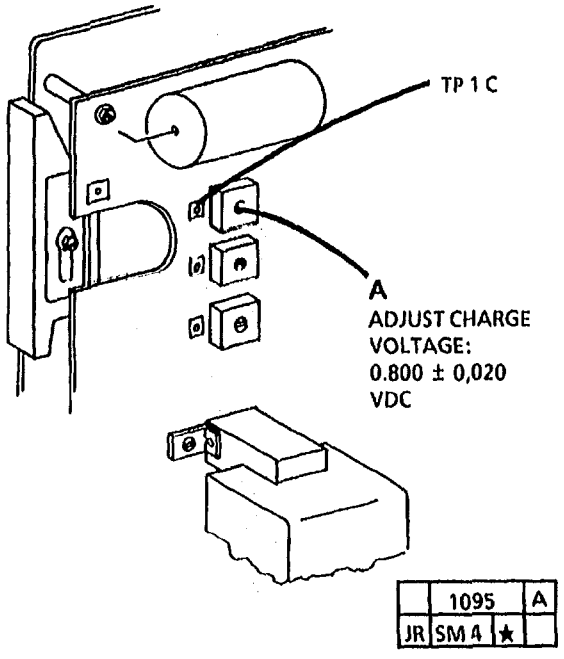


Figure 6. Charge Voltage Adjustment

14. Press the **Stop** button.

5 *Do not disturb DMM or leads when using **PEAK HOLD** to adjust the exposure voltage; any movement will affect the reading.*

15. Adjust the exposure voltage as follows.
    a. Select test 5.
    b. Press and hold the **Start** button for one revolution of the photoreceptor drum.
    c. Select 9 and press **Start**.
    d. Wait 15 seconds, and then select **PEAK HOLD** (+) on the DMM.
    e. Wait 10 seconds and record the meter readings.

6 *If the voltage measured in Step 15e is more than 0.300 VDC, go to the CQ27 Exposure RAP.*

    f. Select each set-point from 9 to 1, pressing the **Start** button, and recording the DMM reading after each set-point.
    g. Stop at the set-point that displays a voltage reading of 0.025 to 0.050 VDC more than set-point 9.

7 *If you cannot set the exposure voltage, go to the CQ27 Exposure RAP.*

16. Press **Stop** button and switch off the electrometer.

17. Switch off **PEAK HOLD** on the DMM.

18. Check the charge voltage.
    a. Connect the red lead (+) to TP1 (Figure 6).
    b. Press the **Start** button.
    c. Ensure that the DMM does not exceed 0.475 VDC. If the reading exceeds 0.475VDC, replace the charge corotron.
    d. If voltage cannot be set to specification, refer to the OF 5 Charge Corotron Out of Specification RAP.

19. Press **Stop** and switch off the power.

20. Remove the electrometer.

21. Install:
    - the developer module.
    - the document transport belt.
    - all the covers

22. Switch the copier ON.

23. Make one copy of the test pattern (82E5020) and check the copy quality.

ADJ 9.3 Electrostatic Series 2510/2515 (New HVPS)

NOTE: This adjustment must be performed in the exact order presented here.

PURPOSE

The purpose of this adjustment is to obtain good copy quality by bringing the corotron and exposure voltages to their required specification.

1. Before performing this procedure check the following:
   - a tight fit exists between the electrometer probe and the probe holder. If the fit is too loose the probe will rotate in the holder during the procedure, and cause an inaccurate adjustment. Do not continue the adjustment until this condition is corrected.
   - the battery of the DMM is not at the end of its useful life. Two indications of this problem are a "B" on the DMM display or a faded display when the DMM is energized.
   - the 2 VDC scale is selected on the DMM.
   - the low battery LED is not illuminated on the electrometer.
   - the charge corotron is seated correctly.

NOTE: When the electrostatic series is completed with a new photoreceptor drum, the image density will be slightly lighter than when the electrostatic series is completed with a photoreceptor drum previously used. If this condition should occur do not make any further adjustments at this time.

2. - **Used photoreceptor drum:** run one copy and allow the copier to go into low power mode.
   - **New photoreceptor drum:** run a minimum 25 feet (7.6 meters) of copy and allow the copier to go into low power mode.

WARNING
Disconnect the power cord.

3. Remove:
   - the document handler
   - the left side cover
   - the right side cover
   - the upper rear cover
   - the document transport drive belt
4. Remove developer module (REP 9.5).
5. (Figure 1): Install electrometer probe in the probe holder.

NOTE: The window on the probe must face the photoreceptor.

6. (Figure 2): Install the probe holder on the copier frame.

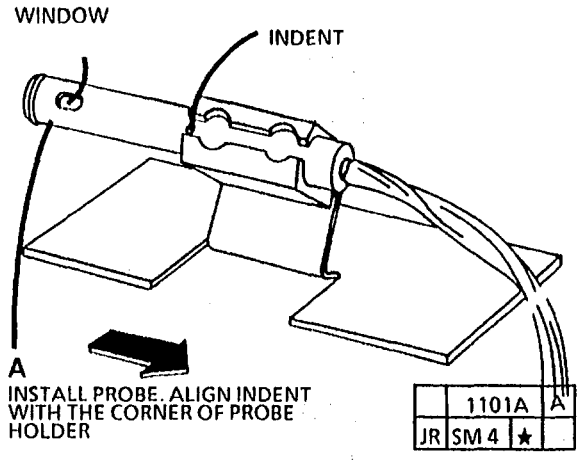


Figure 1. Install the Electrometer Probe in the Probe Holder

(Continued)

7. Insert four (4) sheets of 20 pound (80 gsm) paper between the electrometer probe holder and the photoreceptor drum.

NOTE: This establishes the correct distance between the electrometer probe and the photoreceptor drum.

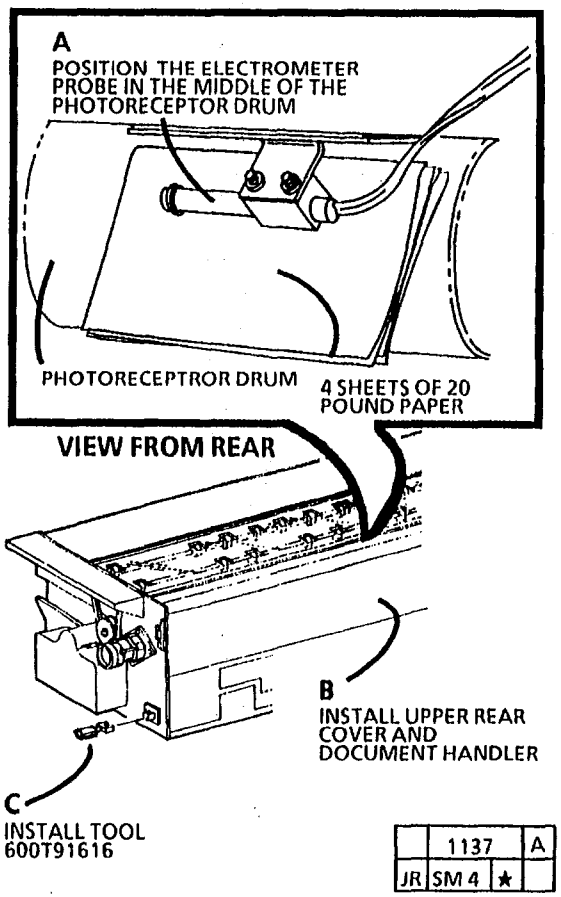


Figure 2. Install the ElectrometerProbe

8. Place two (2) sheets of clean 20 pound (80 gsm) paper on the entire surface of the platen before installing the document handler.

9. Install the document handler.

10. (Figure 3): Install the electrometer, meter and the test leads.

NOTE: STEP 11 B: The electrometer, meter and the leads must be positioned away from the HVPS in order to obtain correct voltage measurement. The meter and electrometer must also be separated as shown in Figure 3. Position the electrometer, meter and the leads this way for the remainder of the procedure. Do not connect the meter and electrometer at this time. The purpose of this illustration is to show the prope position. Attach the components as needed in subsequent steps.

11. Install the power cord into the receptacle.

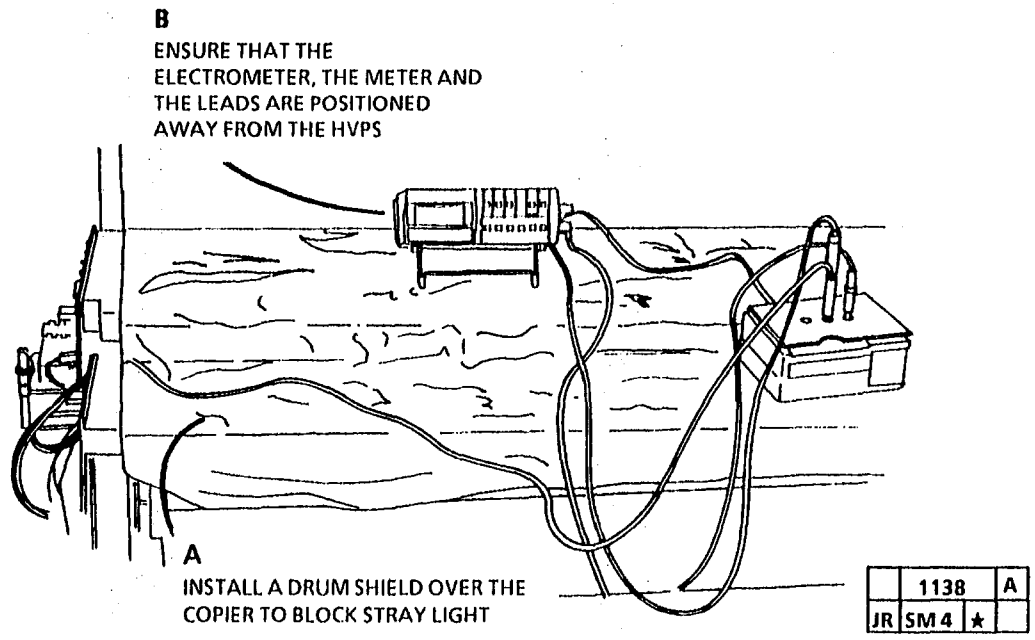


Figure 3. The Correct Position of the Electrometer, Meter and the Leads

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

12. Enter diagnostic mode.

(2510, 2515 W/O Tag 2, 7, or 89)

- Enter the code[g] and press ***Start***.
- Enter the code[J] and press ***Start***.
- Wait 2 Minutes.
- Enter the test [6].
- Press and hold the ***Start*** button for more than 30 seconds to clean the photoreceptor by engaging the cleaner blade.

(2515 W/ Tag 2, 7, or 89)

- Enter the test [6].
- After the drum begins rotating, press and hold the ***Start*** button for 30 seconds or more to clean the photoreceptor by engaging the cleaner blade.

13. (Figure 4): Adjust precharge and detack corotron voltage

NOTE: The electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows proper position when performing the electrostatic series.

NOTE: Keep the DMM leads away from the HVPS to prevent electrical noise.

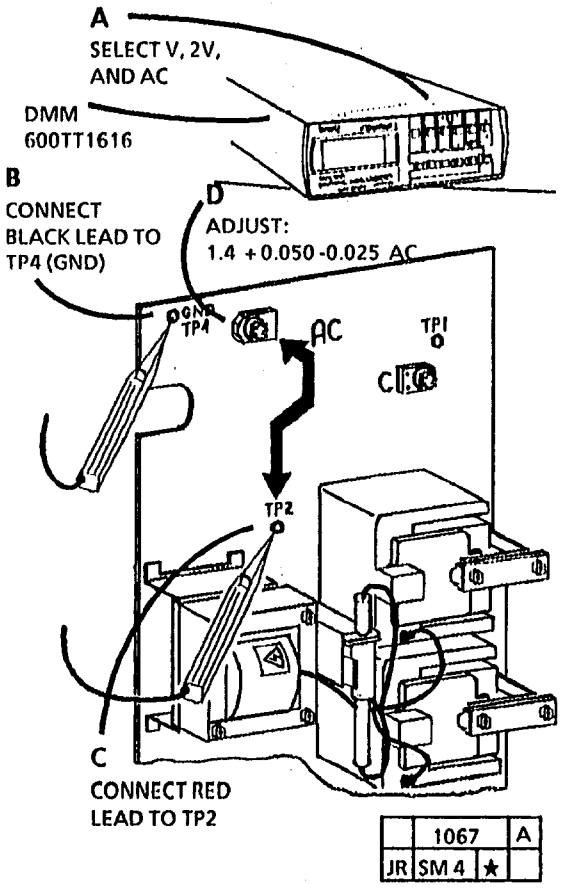


Figure 4. Adjustment of Precharge and Detack Corotrons

14. (Figure 5): Adjust transfer corotron voltage.

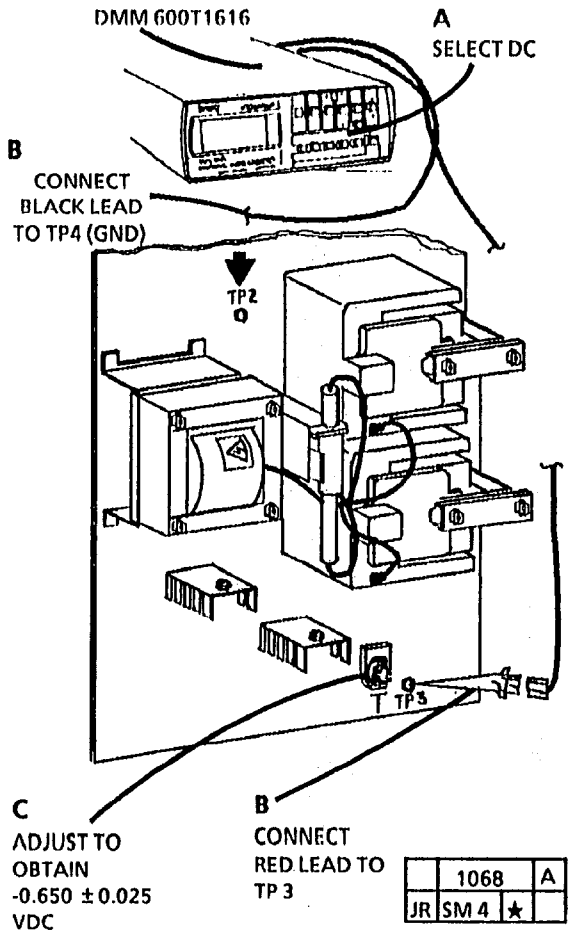


Figure 5. Adjustment of Transfer Corotron (Continued)

15. (Figure 6): Connect DMM to electrometer.

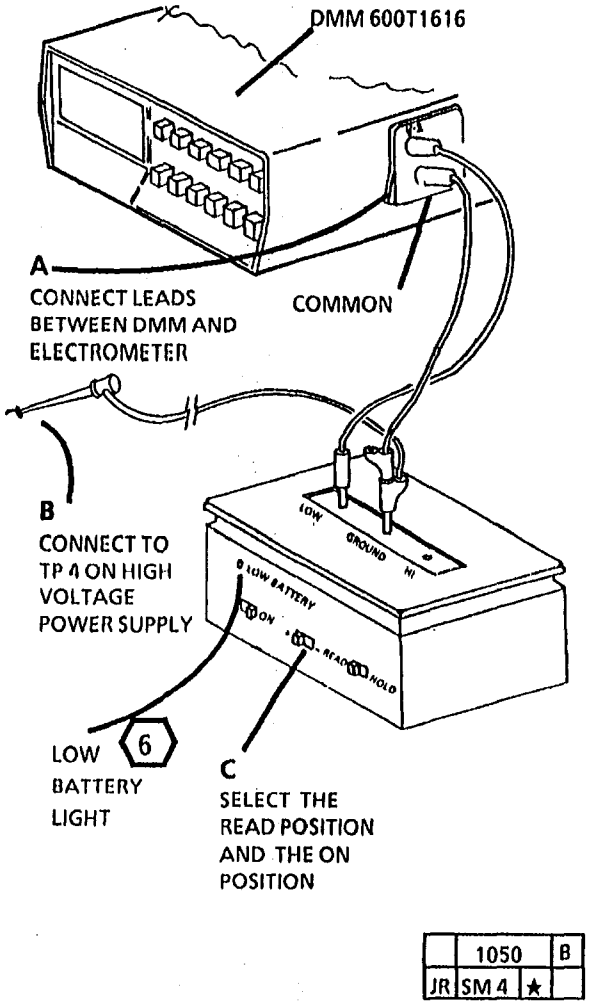


Figure 6. Connecting the Electrometer

16. (Figure 7): Adjust charge voltage.

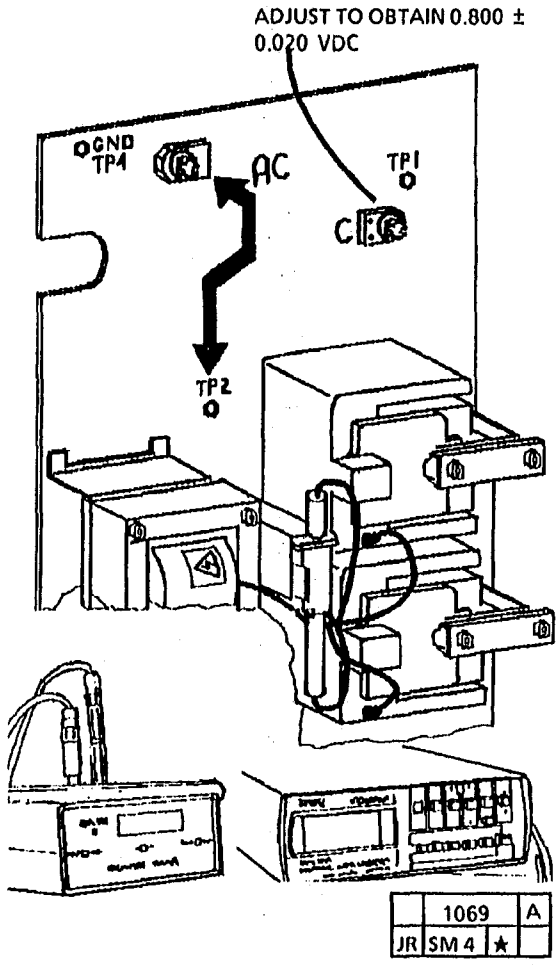


Figure 7. Adjust the Charge Voltage

17. Press the ***Stop*** button.

*NOTE: Do not disturb the DMM or the test leads when using the **PEAK HOLD** setting to adjust the exposure voltage. Any movement to these instruments will affect the accuracy of the DMM readings. **DO NOT** switch off **PEAK HOLD** until directed to in step 20.*

18. Adjust the exposure voltage as follows.
    a. Enter the test **[5]**.
    b. Press and hold the ***Start*** button for more than 30 seconds.
    c. Scroll to **9** and press ***Start.***
    d. Wait 3 minutes.
    e. Select **PEAK HOLD (+)** on the DMM.
    f. Wait 15 seconds and record the DMM readings.

NOTE: If the voltage measured in Step 18 F is more than 0.250 VDC, go to the CQ27 Exposure RAP.

    g. Select each set-point from 9 to 1, pressing the ***Start*** button, and recording the DMM reading after each set-point.
    h. Stop at the set-point that displays a voltage reading of greater than 0.025 VDC to 0.050VDC more than the set-point 9.

NOTE: If you cannot set the exposure voltage go to the CQ27 Exposure RAP.

19. Press ***Stop*** button and switch off the electrometer.

20. Switch off **PEAK HOLD** on the DMM.

21. Check the charge voltage.
    a. Connect the red lead (+) to TP1 (Figure 7).
    b. Press the ***Start*** button.
    c. Observe that the DMM reads -0.250 to -0.475 VDC.
    d. If voltage cannot be set to specification, refer to the OF 5 Charge Corotron Out of Specification RAP.

22. Press Stop and switch off the power.

21. Remove the electrometer.

23. Remove the document handler and the two (2) sheets of20 pound (80 gsm) paper.

24. Install:
    - the developer module.
    - the document transport belt.
    - the document transport drive belt
    - the left side cover
    - the right side cover
    - the upper rear cover
    - the document handler

25. Continue with ADJ 9.4 Image Density on next page.

ADJ 9.4 Image Density (2515)

NOTE: This adjustment is the continuation of ADJ 9.3 the electrostatic series. ADJ 9.3 must be performed before continuing with this adjustment.

1. Remove the upper rear and right side covers.
2. Enter the diagnostic mode.
3. Check or adjust the toner concentration to a nominal value by setting the code [4] to a value of [5].

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

(2515 W/O Tag 2, 7, or 89):

- Enter the code [L] and press ***Start***.
- Enter the code[g] and press ***Start***.
- Enter the code [J] and press ***Start***.
- Wait 2 Minutes.
- Enter the code [A] and press ***Start***.

(2515 W/ Tag 2, 7, or 89):

- Enter the code [L] and press ***Start***.
- Enter the code [A] and press ***Start***.

4. Observe the time required for the dry ink cartridge to rotate 1/4 revolution. The elapsed time for 1/4 revolution is between 30 and 60 seconds, if not perform the Toner Dispense Solenoid Adjustment (ADJ 9.5).
5. Enter code [y] and press ***Start***. If ADJ 9.5 was done, enter codes in step 3, then enter the code (y).
   - If y equals a value of 5, go to step 6.
   - If y equals 4 or less, select code (d), press **Start** then select (y), press **Start** and cycle copier until y equals 5, then go to step 6. If after 8 minutes y is not at 5, go to CQ11.
   - If y equals 6 or greater, select code (C) and press **Start**, then select (y) press **Start** and cycle copier until y equals 4
6. Exit the diagnostic mode. Press **Start**, observe the toner cartridge until it begins moving slow for one minute.
7. Reinstall the upper rear and right side covers.
8. Make a copy of the test pattern 82E5980. Check that the darkness of the **.70G5** paragraph is between paragraphs **28.5** and **34.4** on the S.I.R. 201.01 (82E7030) test pattern.
   - If the image darkness is good, go to step 11.
   - If the darkness is less than **28.5**, go to step 9.
   - If the darkness is greater than **34.4** go to step 10
9. To increase the image darkness.
   a. Enter the diagnostic mode.
   b. Enter the code **[4]** and adjust to increase the value displayed by one.
   c. Exit the diagnostic mode.
   d. Loosen and lift the right side of the upper rear cover to view the toner cartridge. Cycle the copier until the cartridge begins moving slow for one minute.
   e. Make a copy of the test pattern 82E5020. Check that the darkness of the **.70G5** paragraph is between paragraphs **28.5** and **34.4** on the S.I.R. 201.01 (82E7030) test pattern.
      - If the image darkness is good, go to step 11
      - If the image darkness is less than **28.5**, repeat step 9. If the adjustment limit is reached, go to CQ 11.

11. To decrease the density.
    a. Enter the diagnostic mode.
    b. Enter the code [4] and decrease the value displayed by one. Press Start.
    c. Enter the following codes:

(2515 W/O Tag 2,7, or 89)

- Enter the code [L] and press ***Start***.
- Enter the code [g] and press ***Start***.
- Enter the code [J] and press ***Start***.
- Wait 2 MInutes.
- Enter the code [A] and press ***Start***.
- Enter the code [C] and press ***Start***.
- Enter the code [y] and press ***Start***.

(2515 W/ Tag 2, 7, or 89)

- Enter the code [L] and press ***Start***.
- Enter the code [A] and press ***Start***.
- Enter the code [C] and press ***Start***.
- Enter the code [y] and press ***Start***.

    d. Cycle the copier until [y] equals 3, then press the **Stop** button.
    e. Exit the diagnostic mode.
    f. Loosen and lift the right side of the upper rear cover to view the toner cartridge. Cycle the copier until the cartridge begins moving slow for one minute.
    g. Make a copy of the test pattern 82E5980. Check that the darkness of the **.70G5** paragraph is between paragraphs **28.5** and **34.4** on the S.I.R. 201.01 (82E7030) test pattern.
        - If the image darkness is good, go to step 12
        - If the image darkness is greater than **34.4**, repeat step 11. If the adjustment limit is reached, go to CQ 1.
12. Reinstall the covers and return the copier to normal operating conditions.
13. Make one copy of the 82E5980 test pattern and check the copy quality.

ADJ 9.5 Toner Dispense Solenoid (2515)

Purpose

The purpose is to adjust the Toner Dispense Solenoid so that toner is dispensed to the developer module at the correct rate and to compensate for wear at each developer change.

Check

1. Remove the upper rear cover and place a magnet on the interlock switch.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

(2515 W/O Tag 2, 7, or 89):

2. Enter diagnostic mode:
   - Enter the code [L] and press ***Start.***
   - Enter the code [g] and press ***Start.***
   - Enter the code [J] and press ***Start.***
   - Wait 2 MInutes.
   - Enter the code [A] and press ***Start.***

(2515 W/ Tag 2, 7, or 89):

2.
   - Enter the code [L] and press ***Start.***
   - Enter the code [A] and press ***Start.***

3. Check the time required for the toner cartridge to rotate 1/4 revolution.

4. Press ***Stop.***

5. If the elapsed time in step 3 is between 30 and 60 seconds, there is no need for an adjustment.

Adjust

6. Remove the toner cartridge.

(1) ***STEP 7A: Loosen the screws enough that the solenoid will move freely.***

7. (Figure 1): Adjust the toner dispense solenoid.

8. Reinstall the toner cartridge.

9. Repeat step 2 through step 8 until the toner cartridge rotates 1/4 turn between 30 and 60 seconds.

10. Using the multimeter, check for continuity between the toner cartridge and **TP 4** on the HVPS. If there is no continuity , ensure that the ground clip is in contact with the cartridge.

11. Check that the toner solenoid is not shorted to the developer housing.

12. Exit diagnostics, remove the magnet, and reinstall the upper rear cover.

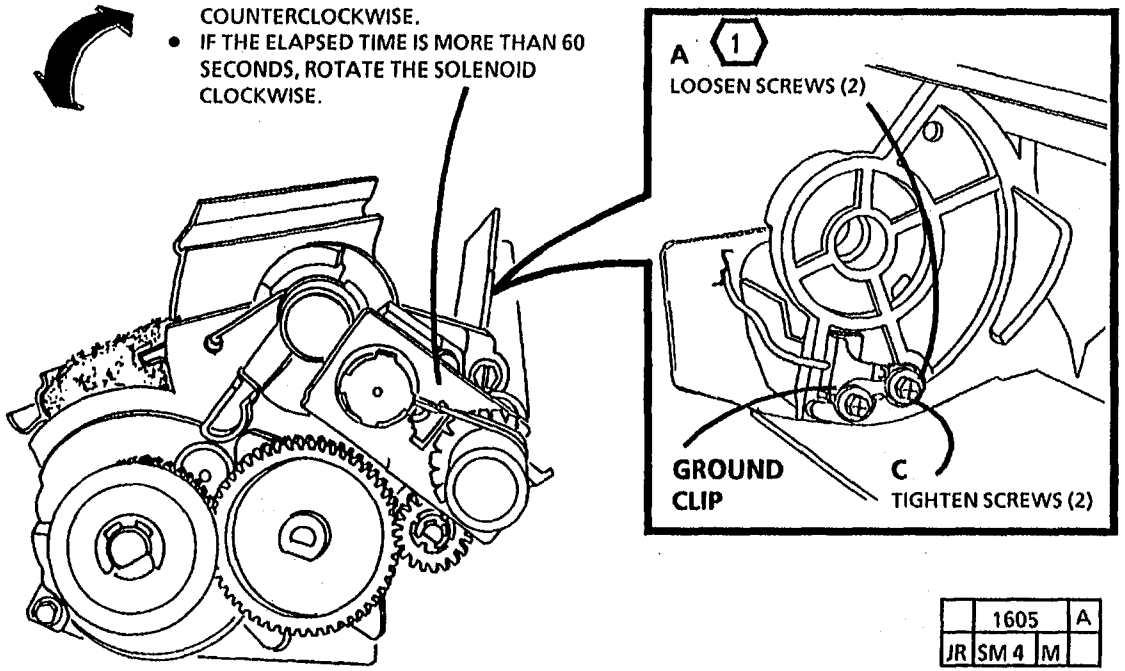


Figure 1. Adjust the Toner Dispense Solenoid

ADJ 10.1 Fuser Temperature Adjustment

Purpose

To adjust the fuser heat for correct fusing of copies.

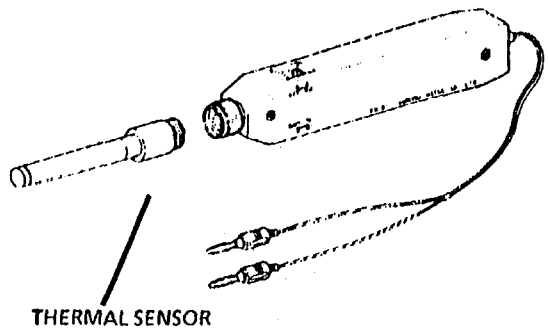
TOOLS REQUIRED: DMM, Temperature Probe Set, Adapter Plugs.

NOTE: This procedure must be performed after the machine becomes ready.

NOTE: Ensure that the fuser thermistor RT1 is in positive contact with the heat roll.

How to set up temperature probe

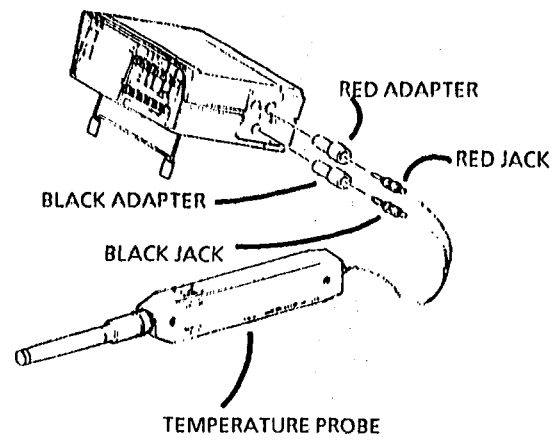
1. (Figure 1): Connect the thermal sensor to the temperature probe.



	1071	A
OJR	SD5	M

Figure 1. Connect the Thermal Sensor to the Temperature Probe

2. (Figure 2): Connect temperature probe to the dmm.



	1072A	A
OJR	SD5	M

Figure 2. Connect Temperature Probe to DMM

(Continued)

3. Switch on the power switch of the dmm and then switch on the on/off switch of the temperature probe.

4. Switch the functional switch of the dmm to the dc voltage measurement mode.

5. Press **20v** range switch of DMM.

6. Turn the select switch of the temperature probe to **BATT TEST**. check to see that a voltage higher than 1.7v is indicated. if lower than 1.7v is indicated, replace the battery of the temperature probe with a new one.

7. Turn the select switch of the temperature probe to"**°C**" position and press the 200mv range switch of the dmm.

NOTE: You are now ready to check the temperature after you expose the fuser roll for easy access. The DMM will indicate a value that represents a temperature reading in degrees C.

CHECK

1. Lower the copy feed shelf and the transport latching cover.

2. (Figure 3 and 4): Remove the oil dispenser assembly.

3. Raise the transport latching cover and the copy feed shelf.

4. Switch on the copier and wait approximately 30 seconds after ready signal to insert a sheet of copy paper. wait approximately 30 seconds again before starting to take temperature readings.

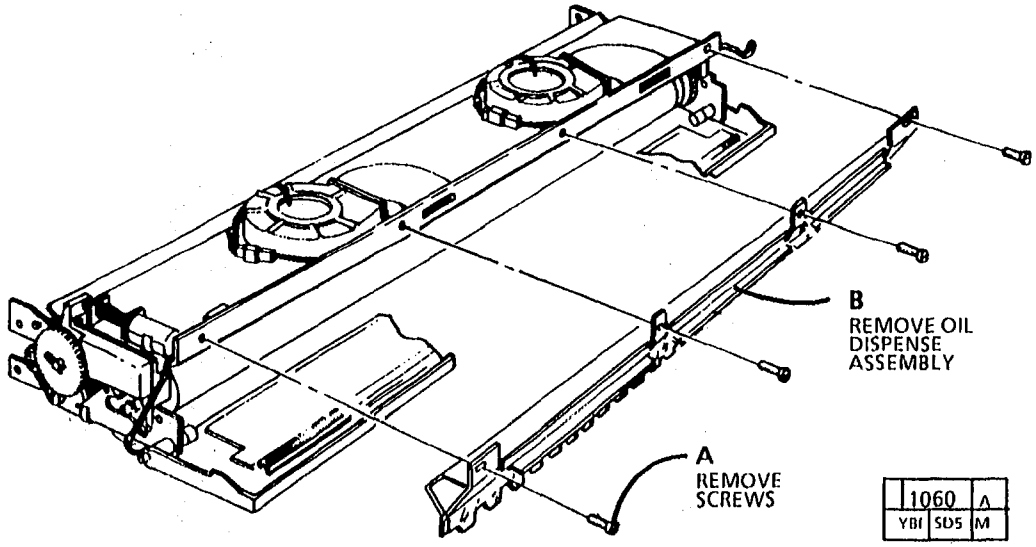


Figure 3. (2510 only) Remove the Oil Dispense Assembly

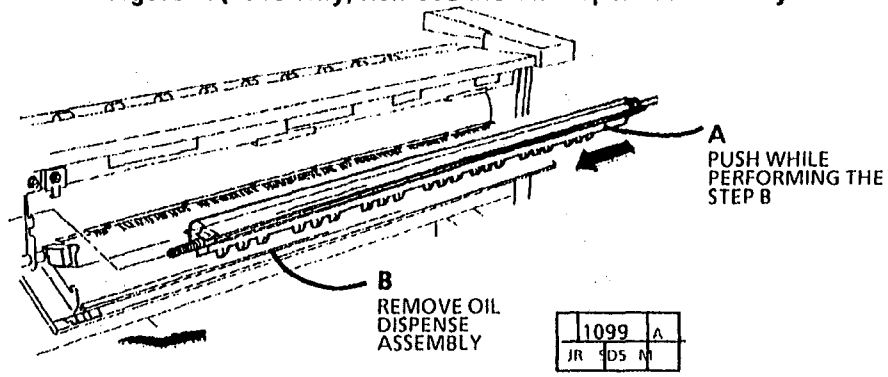


Figure 4.(2510 W/Tag 252) Remove the Oil Dispense Assembly

CAUTION

Metal strips of temperature probe must be oriented vertically in order to avoid scratching the surface of fuser roll.

NOTE: Press the temperature sensor firmly to the surface of the fuser roll for an accurate reading.

6. (Figure 4): Place the probe on the fuser roll. DMM should read 149°C ± 2°, **(2515 60 Hz ONLY 143 °C ± 2°)**.

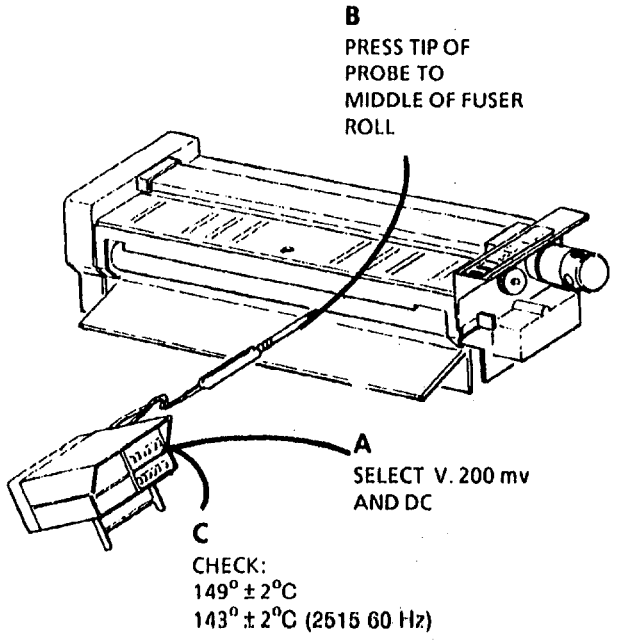


Figure 5. Place the Probe on the Fuser Roll

Adjustment

1. Enter the diagnostic mode.
2. Using thecopy contrast buttons, select test **0** and press ***Start*** to enter temperature mode.
3. Note the value displayed on the control panel (1-9).
4. Use the ***Copy Contrast*** up button to increase or the ***Copy Contrast*** down button to decrease the value displayed on the control panel. an increase of one number will increase the fuser temperature by approximately 3°c.
5. Press ***Start*** to store the new setting.
6. Exit diagnostics.
7. Check the temperature with the temperature probe to ensure correct adjustment has been made.

ADJ 10.2 (2510) Oil Dispense Assembly

Purpose

To adjust the amount of fuser oil that is applied to the Fuser Roll.

1. (Figure 1): Remove the oil dispenser.

CAUTION

Handle the oil dispenser assembly with care to avoid damaging the stripper fingers.

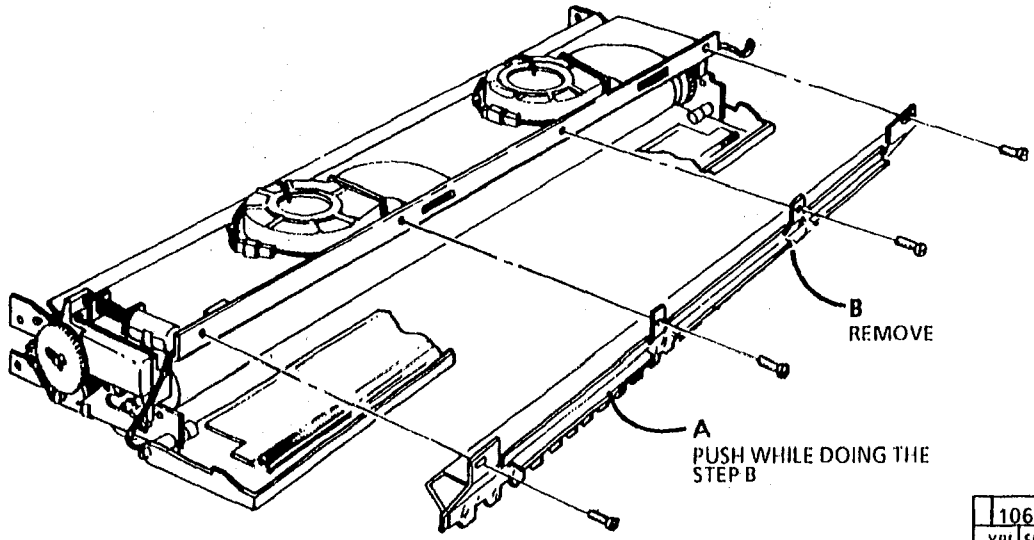


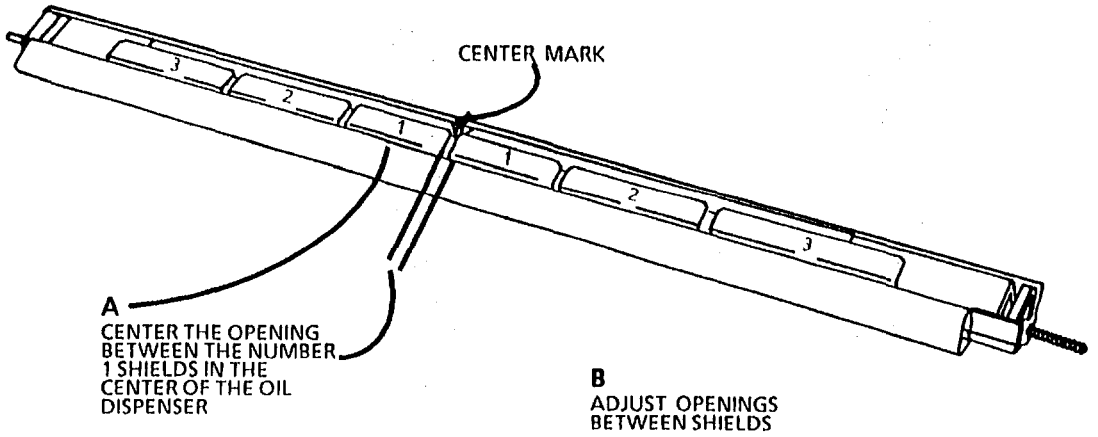
Figure 1. Remove the Oil Dispense Assembly

2. Question the customer to determine the average monthly copy volume that is run on the copier.

NOTE: The openings between the metering shields are set to 1/4 in (6mm) in manufacturing.

3. (Figure 2): Adjust the oil dispenser meter shields:

   a. If the average monthly copy volume is 400 meters per month, adjust the openings between the shields to 1/4 in (6mm).



	1306a	A
YBF	SD5	M

Figure 2. Adjust the Oil Dispense Meter Shields

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:

ALT	Alternate
HZ	Hertz
P/O	Part Of
PWB	Printed Wiring Board
SPO	South Pacific Oporations
USO	United States Operations
V	Volt
W/	With
W/O	Without
XLA	Xerox Latin America
XBRA	Xerox Brazil

SYMBOLOGY

Symbology used in the Parts List section is identified in the Symbology section.

SUBSYSTEM INFORMATION

USE OF THE TERM "ASSEMBLY"

The term "assembly" will be used for items in the part number listing that include other itemized parts in the part number listing. When the word "assembly" is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

BRACKETS

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

Tag

The notation "W/Tag" in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as "W/Tag," install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

SYMBOLOGY

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

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

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

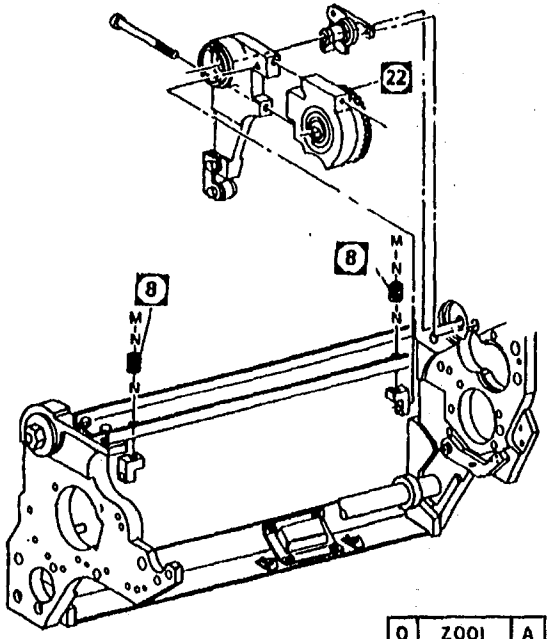


Figure 1. Adjustment Symbol

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

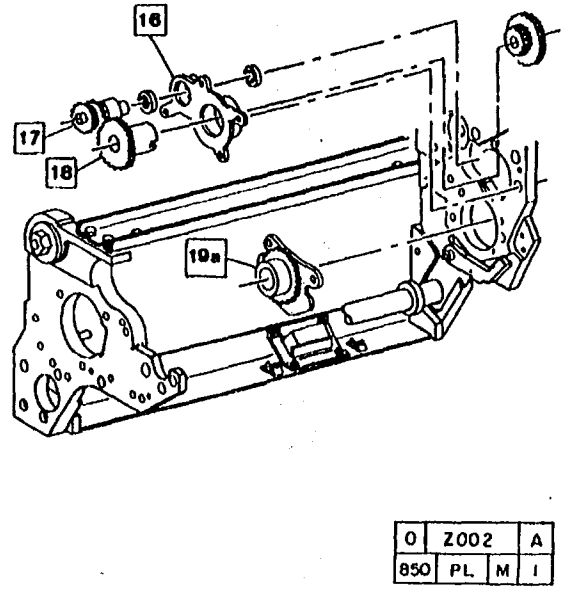


Figure 2. Repair Symbol

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

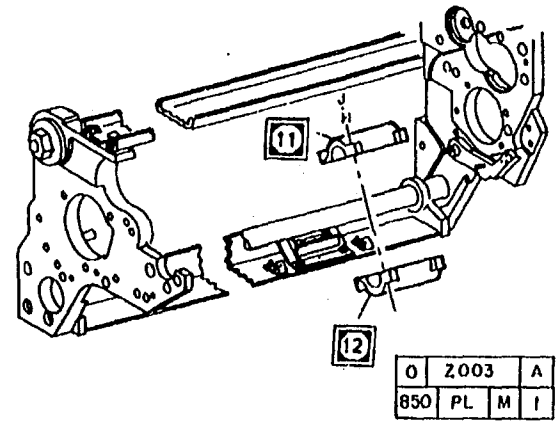
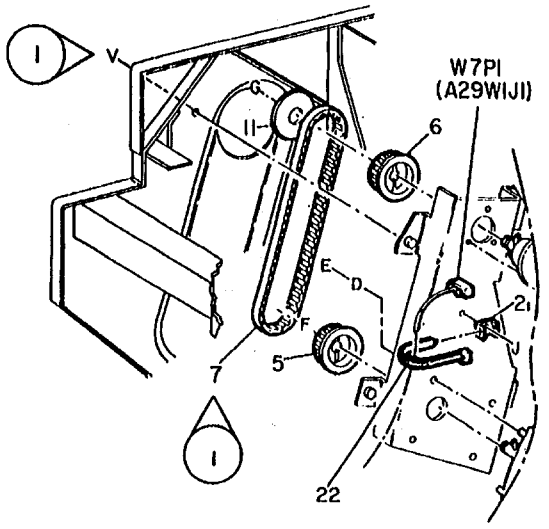


Figure 3. Adjustment and Repair Symbol

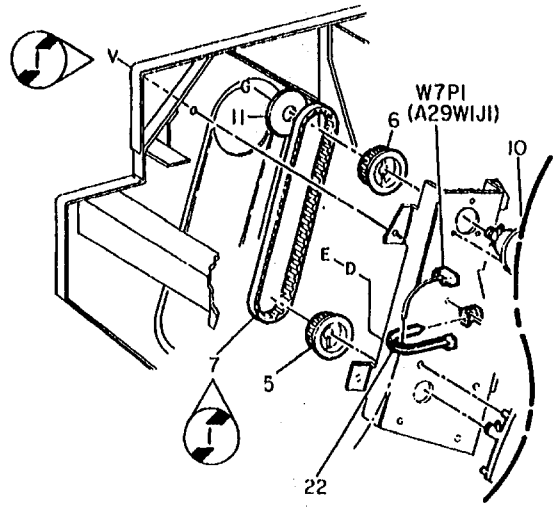
A tag number within a circle and pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 4). Information on the modification is in the Change Tag Index.



O	Z004		A
850	PL	M	I

Figure 4. With Tag Symbol

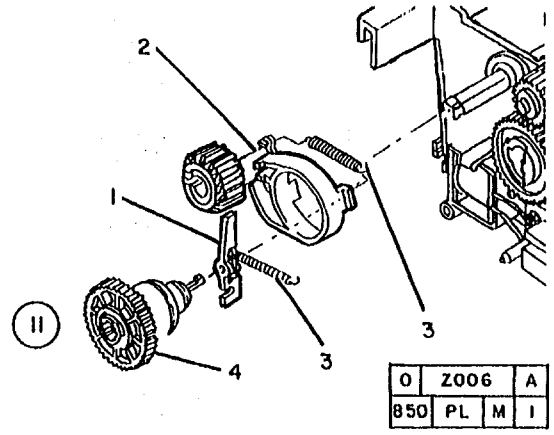
A tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the tag number within the circle (Figure 5).



O	Z005		A
850	PL	M	I

Figure 5. Without Tag Symbol

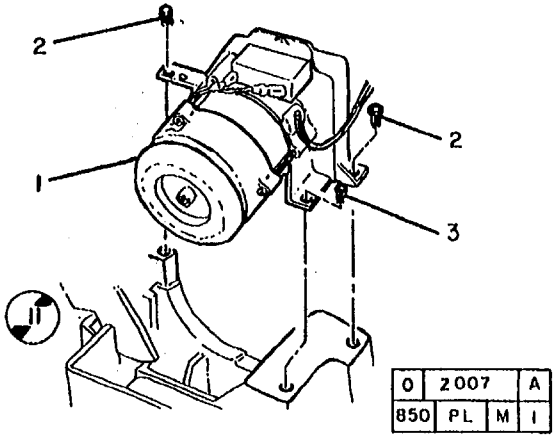
A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 6). Information on the modification is in the Change Tag Index.



O	Z006		A
850	PL	M	I

Figure 6. Entire Drawing With Tag Symbol

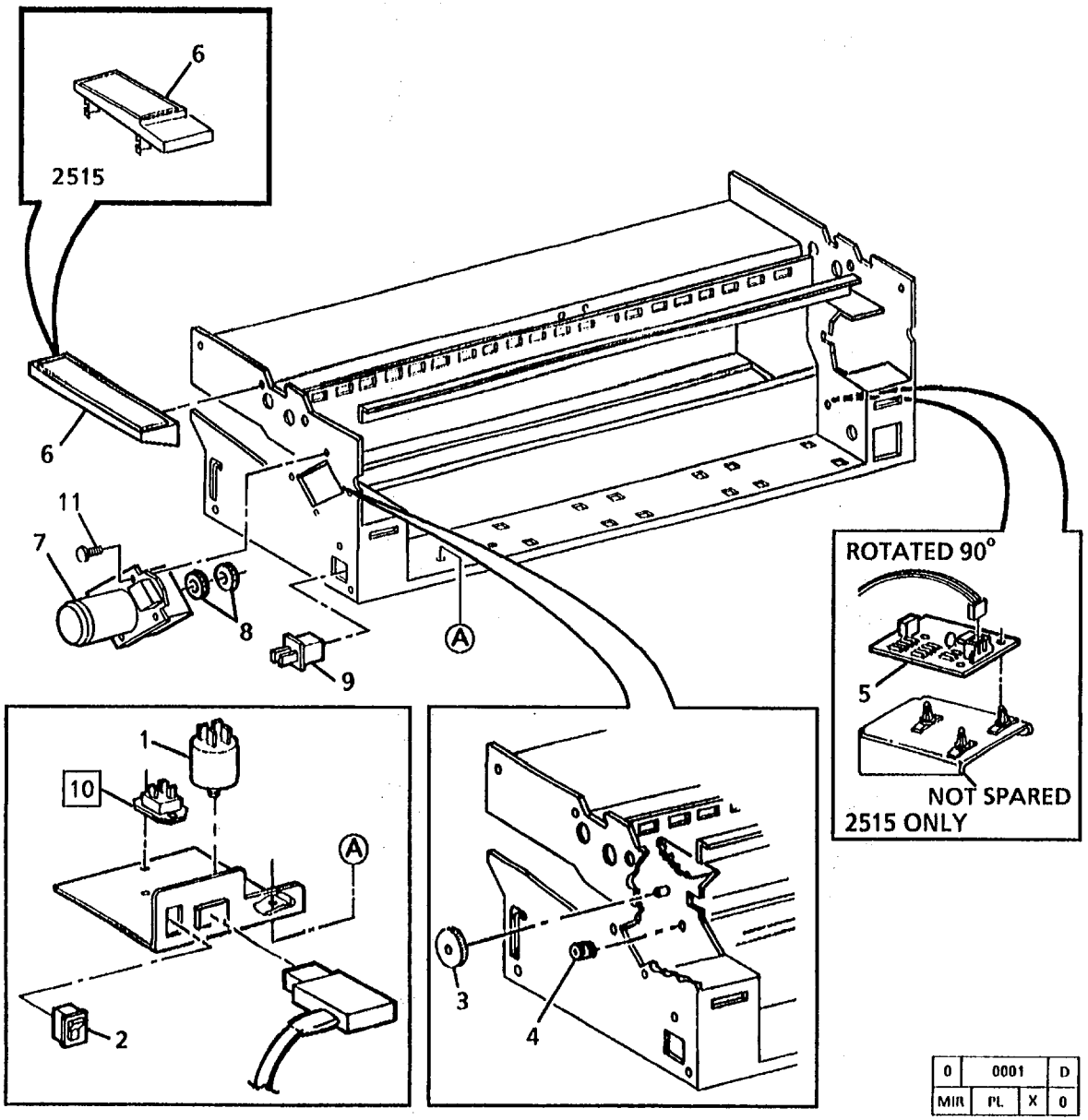
A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 7).



O	Z007		A
850	PL	M	I

Figure 7. Entire Drawing Without Tag Symbol

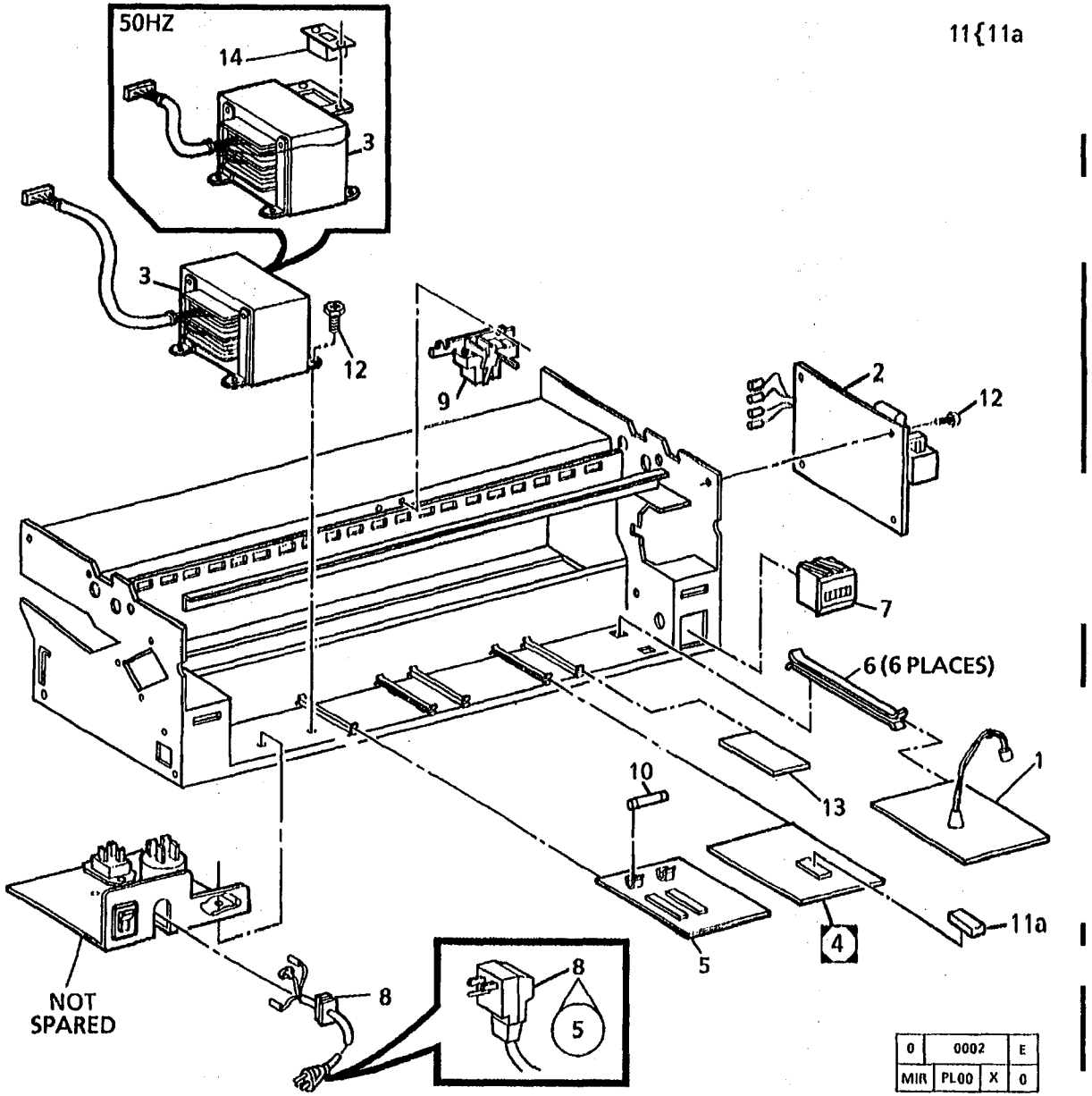
PL 1.1 ELECTRICAL COMPONENTS (PART 1 OF 2)



ITEM	PART	DESCRIPTION
1	142P60099	FILTER (50HZ)
-	142E480	FILTER (50HZ)
-	142P60025	FILTER (60HZ)
2	110E1240	ON/OFF POWER SWITCH (2510 W/TAG 4) (2515)
-	110E1020	ON/OFF POWER SWITCH (2510 W/O TAG 4)
3	7E3980	IDLER GEAR
4	413W15555	SPLIT BUSHING
5	140K23113	HUMIDISTAT PWBA (2515)
6	101K4531	CONTROL PANEL (2510 W/TAG 5)
-	101K4280	CONTROL PANEL (2510 W/O TAG 5)
-	101K4541	CONTROL PANEL (2510) (XLA)
-	101K12090	CONTROL PANEL (2515)
7	127E833	MAIN DRIVE MOTOR (60HZ) (USO, XLA)
-	127E2360	MAIN DRIVE MOTOR (50HZ) (XLA)
8	7E4010	DRIVE MOTOR GEAR
9	110P61609	AC INTERLOCK
10	600S5951	TRIAC KIT (USO)
-	707W1652	TRIAC (60HZ) (USO)
-	707W1634	TRIAC (50HZ) (RX) ALTERNATE
-	107E140	TRIAC (50HZ) (RX)
11	26E3460	SCREW

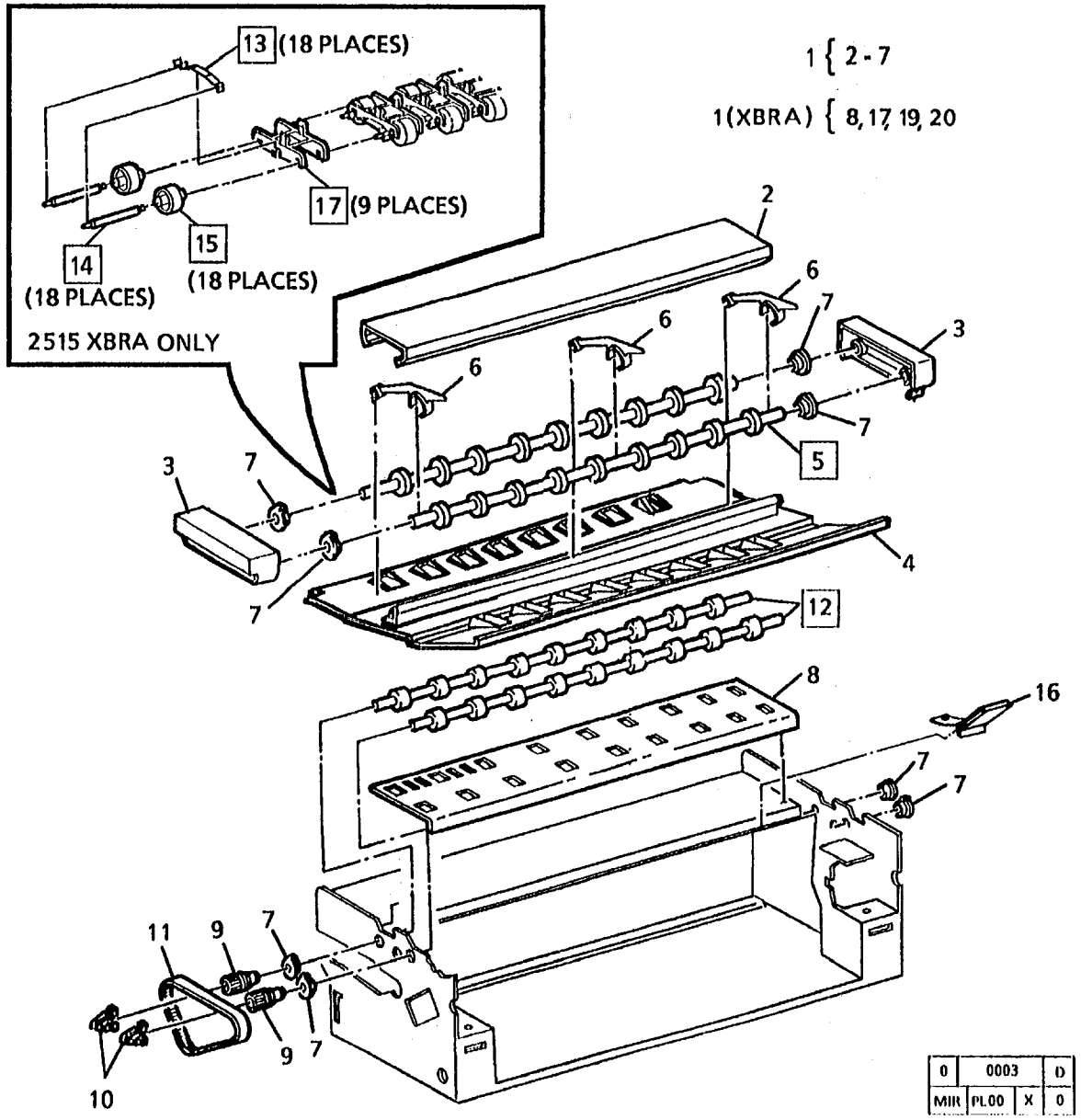
NOTE 1: THE FOLLOWING HARNESSES ARE NOW AVAILABLE FOR 2510 AND 2515. 152K8863 HVPS HARNESS 152K8874 DC RIGHT HARNESS 152K11291 DC LEFT HARNESS NOTE 2: THEFOLLOWING HARNESSES ARE NOW AVAILABLE FOR 2510 ONLY. 152K9272 PAPER TRANSPORT HARNESS 152K11281 XEROGRAPHIC MODULE HARNESS

PL 1.2 ELECTRICAL COMPONENTS (PART 2 OF 2)



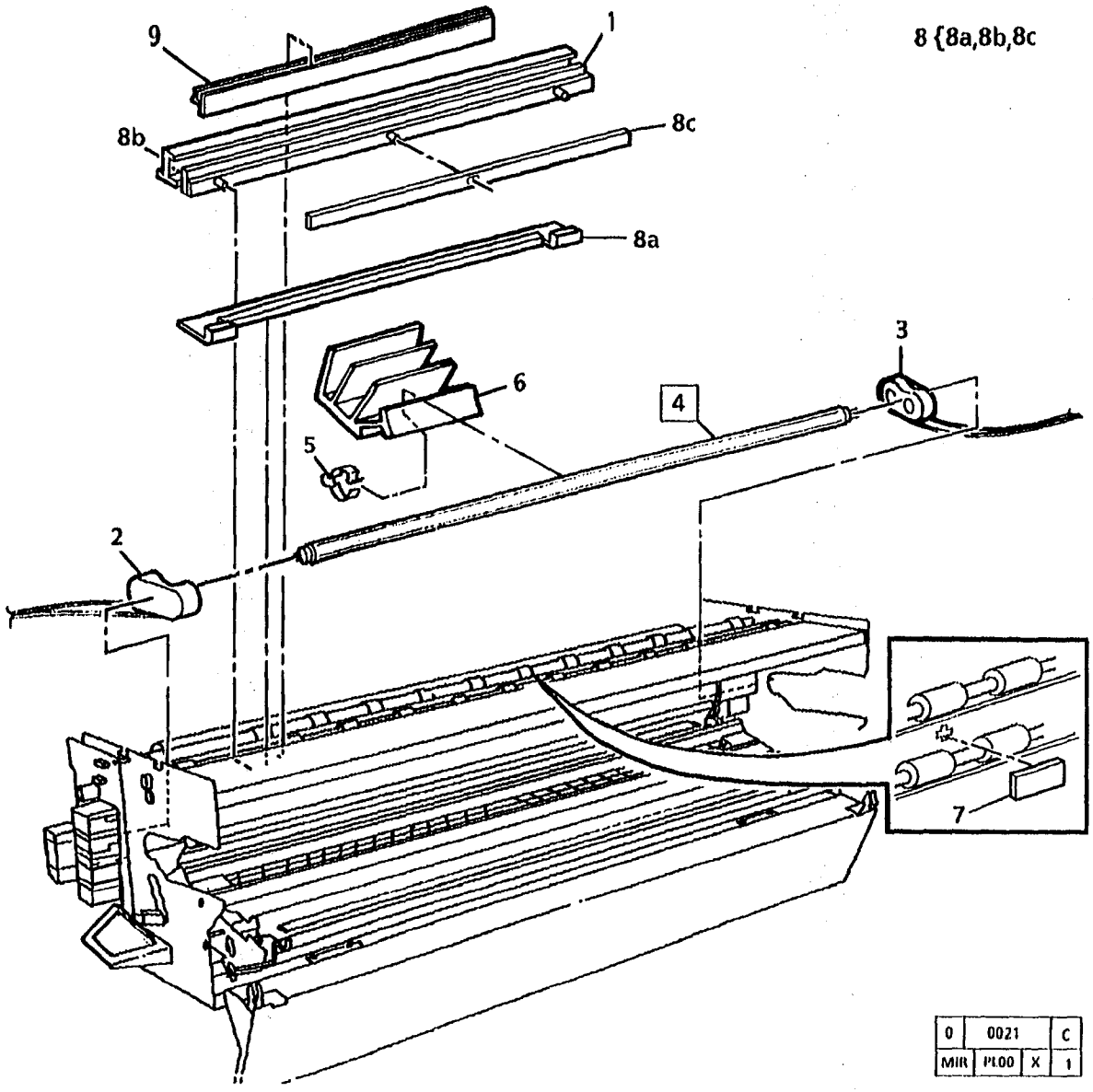
ITEM	PART	DESCRIPTION
1	104K53	EXPOSURE LAMP BALLAST PWBA
2	105K2251	HIGH VOLTAGE POWER SUPPLY PWBA
3	105K832	TRANSFORMER (60HZ)
-	105K1084	TRANSFORMER (50HZ)
4	140K45475	CONTROL PWBA (2515 W/TAG 2, 7)
-	140K8142	CONTROL PWBA (2510 W/TAG 5)
-	140K4723	CONTROL PWBA (2510 W/O TAG 5)
5	140K7902	LOW VOLTAGE POWER SUPPLY PWBA (2510 W/TAG 5) (2515)
-	140K4733	LOW VOLTAGE POWER SUPPLY PWBA (2510 W/O TAG 5)
-	140K21430	LOW VOLTAGE POWER SUPPLY PWBA (2515) (2510 W/TAG 5) (ALTERNATE)
6	101E1020	PWBA GUIDE
7	111K21	COPY COUNT METER
8	117K13891	POWER CORD (GFI) (60HZ) (USO) (2515 W/TAG 5)
-	117K14141	POWER CORD (GFI) (50HZ) (RX) (W/TAG 5)
-	117K2181	POWER CORD (2510) (USO)
-	117K3091	POWER CORD (115V) (USO) (2510 W/TAG 3) (2515 W/O TAG 5)
-	117P24088	POWER CORD (220V) (XLA)
-	117P24303	POWER CORD (240V) (XLA)
-	117S65421	POWER CORD (220V) (ALTERNATE)
-	117S65422	POWER CORD (240V) (ALTERNATE)
9	110K272	DOCUMENT SENSOR
10	708W4001	FUSE (50HZ) (1 AMP SLO-BLO)
-	708W4501	FUSE (60HZ) (2 AMP SLO-BLO)
11	600K35891	EPROM KIT (2515 TAG 7)
11a	--	EPROM
12	26E3460	SCREW
13	140K27911	FOREIGN INTERFACE PWBA (2510 W/TAG 26) (2515 W/TAG 90)
14	110E7290	VOLTAGE SWITCH

PL 5.1 DOCUMENT HANDLER



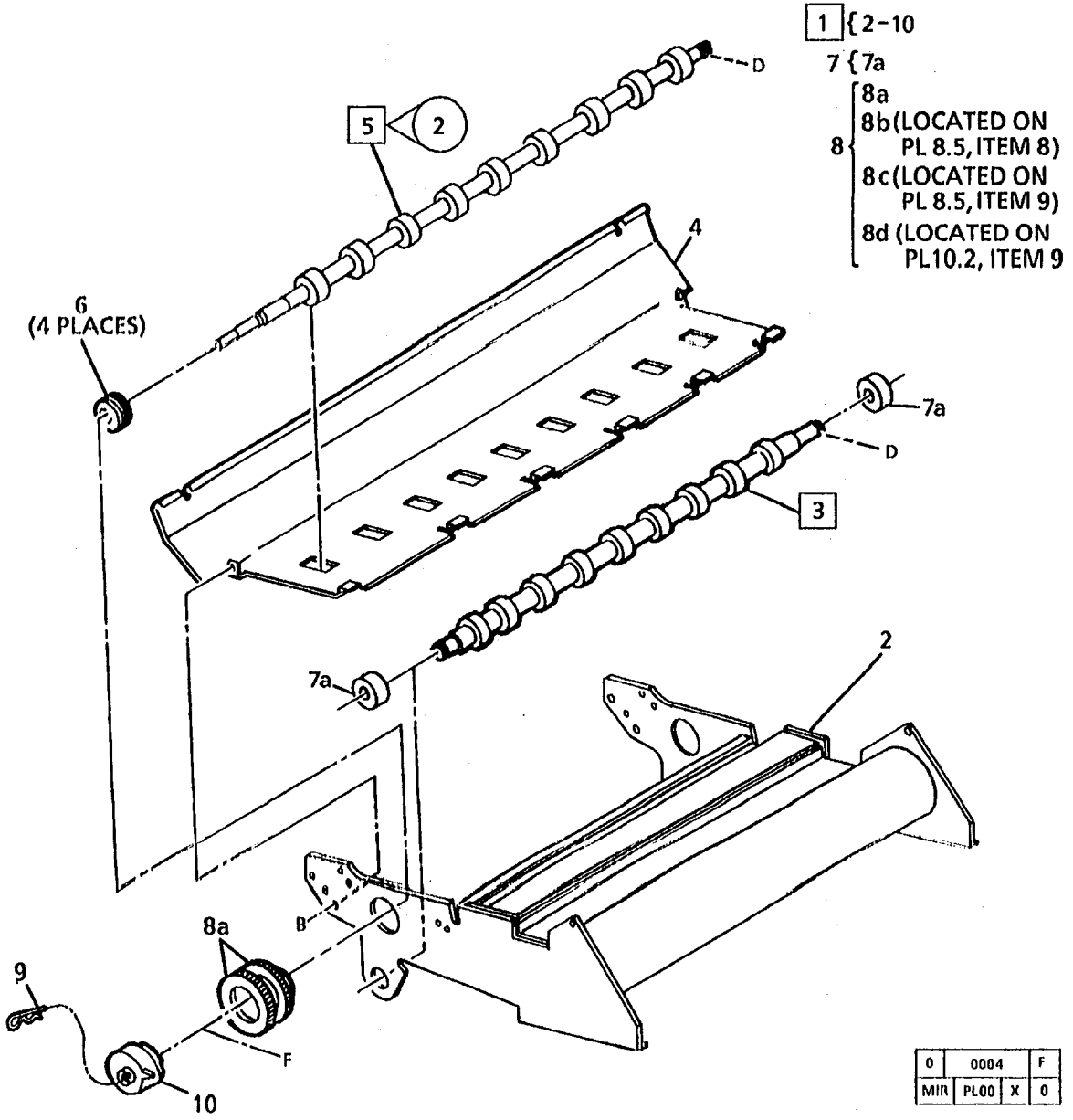
ITEM	PART	DESCRIPTION
1	22K891	DOCUMENT TRANSPORT ASSEMBLY (2510) (USO, XCL, XLA)
-	22K4900	DOCUMENT TRANSPORT ASSEMBLY (50HZ)(2510) (XLA, SPO)
-	22K19170	DOCUMENT TRANSPORT ASSEMBLY (2515)
-	22K12610	DOCUMENT TRANSPORT ASSEMBLY (XBRA)
2	--	DOCUMENT TRANSPORT HOUSING (P/O ITEM 1)
3	21E291	END CAP
4	17E420	TRANSPORT PLATEN
-	17E2771	TRANSPORT PLATEN (50HZ) (2515) (XLA)
5	7K300	UPPER DOCUMENT FEED ROLLS (ORDER 2- REPLACE AS A PAIR)
6	31E631	TRANSPORT PLATEN SUPPORT ARM
7	13E780	BEARING
8	90E76	PLATEN
9	20K351	DRIVE PULLEY
10	19E23600	DRIVE GEAR RETAINING CLIPS
11	423W58402	DOCUMENT TRANSPORT DRIVE BELT
12	7K313	LOWER DOCUMENT FEED ROLLS (ORDER 2- REPLACE AS A PAIR)
-	7K3580	DRIVE ROLLS (XBRA)
13	9E17150	FLAT SPRING (XBRA)
14	6E19570	IDLER SHAFT (XBRA)
15	22E7280	IDLER ROLLER (XBRA)
16	600K11390	GROUND CLIP KIT
16a	--	GROUND CLIP
17	31E3561	IDLER ROLL SUPPORT (XBRA)

PL 6.1 OPTICS



ITEM	PART	DESCRIPTION
1	62K1027	LENS (2510)
-	02K4021	LENS (2515)
2	113K183	LEFT EXPOSURE LAMP SOCKET
3	113K193	RIGHT EXPOSURE LAMP SOCKET
4	122E302	EXPOSURE LAMP
5	19P2152	HEAT SINK MOUNTING SPRING (2510)
-	19E6980	HEAT SINK MOUNTING SPRING (2515)
6	120E2470	HEAT SINK
7	130K52840	ILLUMINATION SENSOR
8	600K24052	LIGHT LEAK REPAIR KIT
8a	--	SEAL
8b	--	SHIELD
8c	--	MAGNET
9	35K4101	DRUM SEAL (W/TAG 12)

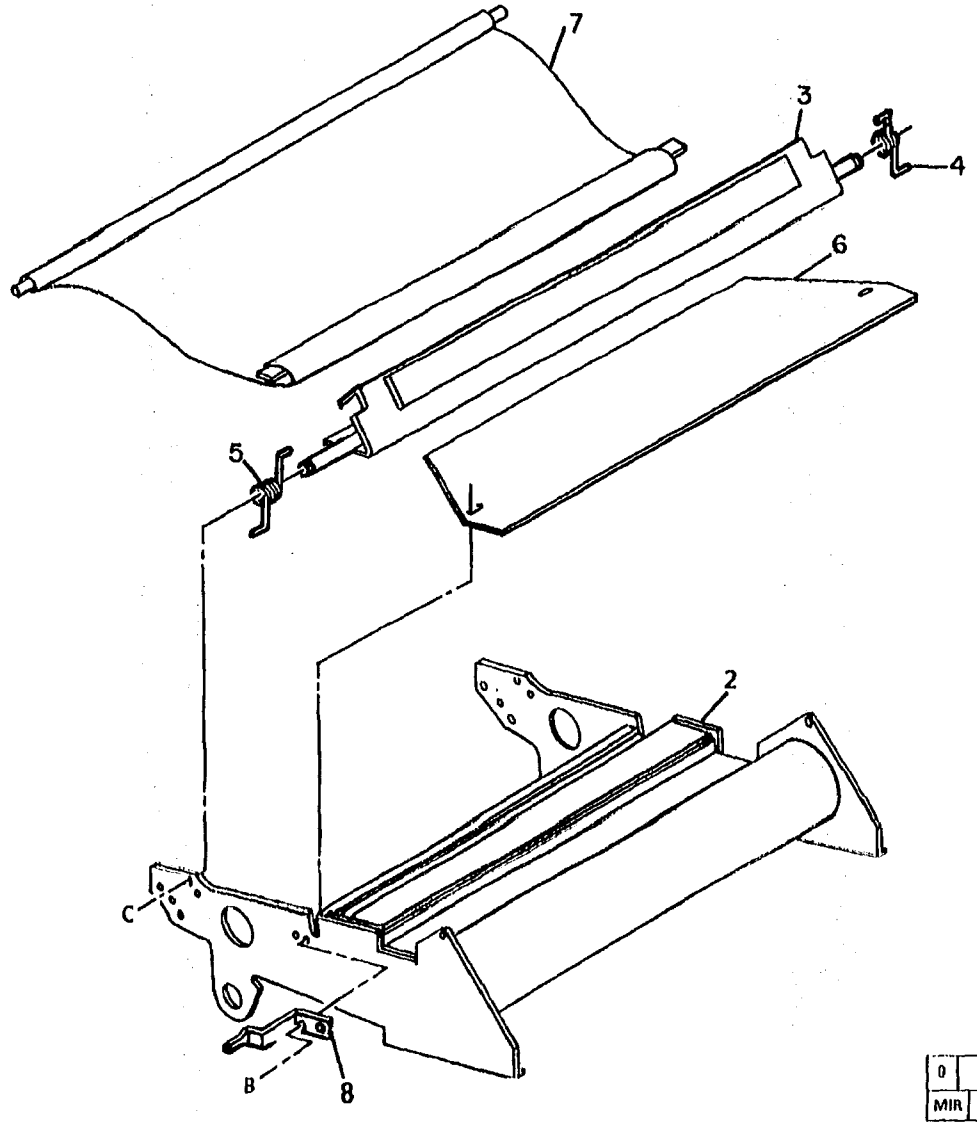
PL 8.1 FABRIC GUIDE AND MEDIA FEED (2510) (PART 1 OF 2)



ITEM	PART	DESCRIPTION
1	22K888	MEDIA TRANSPORT MODULE ASSEMBLY (USO, XCL, XLA, CHINA) (2510 W/TAG 29)
-	22K9604	MEDIA TRANSPORT MODULE ASSEMBLY (50HZ) (XLA, SPO) (2510 W/TAG 29)
-	22K19516	MEDIA TRANSPORT MODULE ASSEMBLY (XBRA) (W/TAG 29, 8)
2	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)
3	6K1033	LOWER MEDIA FEED ROLL (2510 W/TAG 2)
4	--	MEDIA GUIDE PLATE (P/O ITEM 1)
5	6K1022	UPPER MEDIA FEED ROLL (2510 W/TAG 2)
6	413W31054	BEARING
7	600K9020	11-INCH MEDIA FEED ROLL KIT
7a	--	11-INCH MEDIA FEED ROLL
8	600K3773	DRIVE GEAR KIT (USO)
8a	7K412	GEAR/SPROCKET (FX, RX, XLA)
8b	--	LEFT LATCH SPRING (REF: PL8.5, ITEM 8)
8c	--	RIGHT LATCH SPRING (REF: PL8.5, ITEM 9)
8d	--	FUSER GEAR (FX, RX, XLA) (REF: PL10.2, ITEM 9)
9	275W14201	PIN
10	121E942	MEDIA FEED CLUTCH

PL 8.2 FABRIC GUIDE AND MEDIA FEED (2510) (PART 2 OF 2)

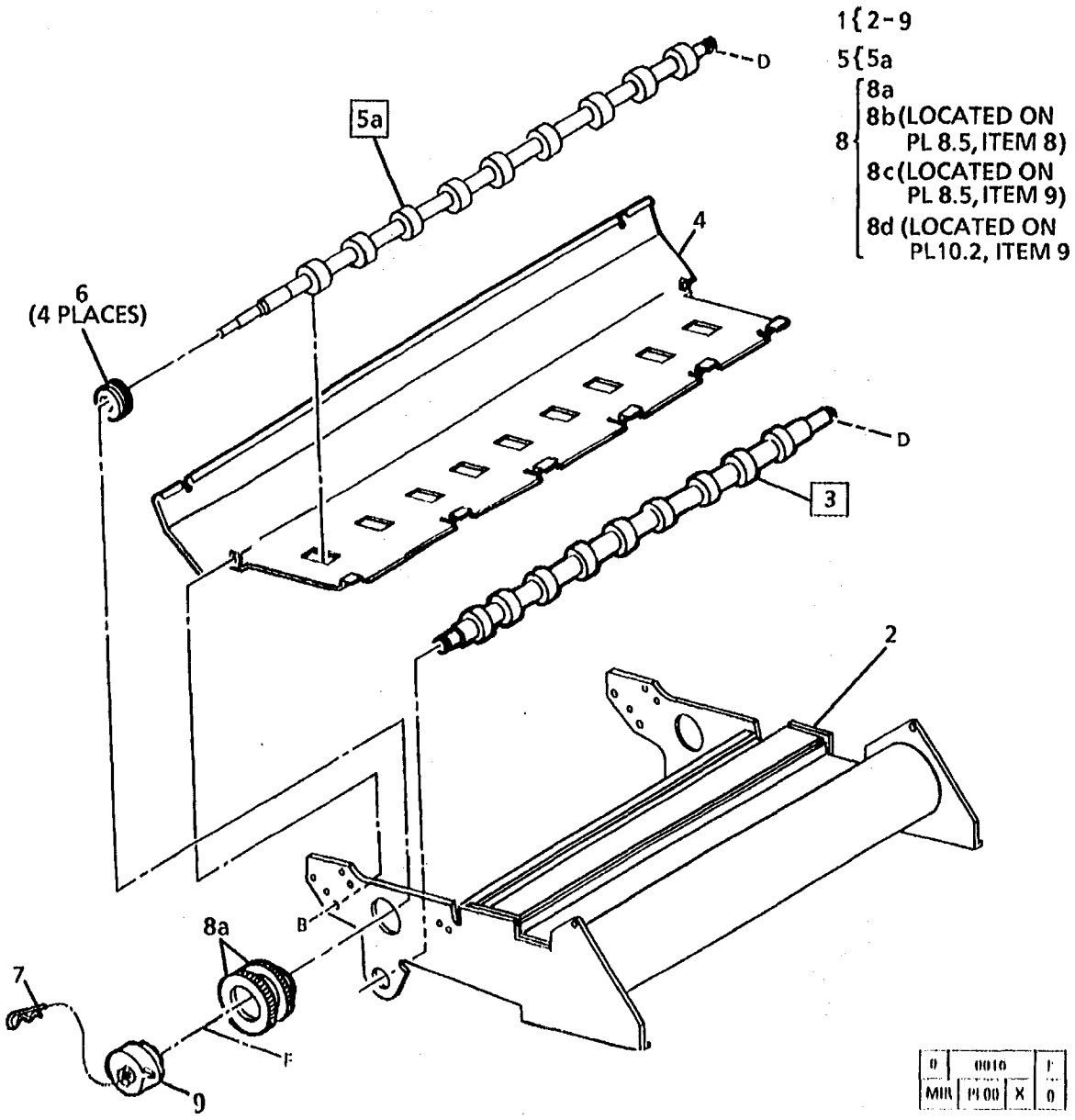
1{2-8



0	0022	A
MIR	PL00	X	0

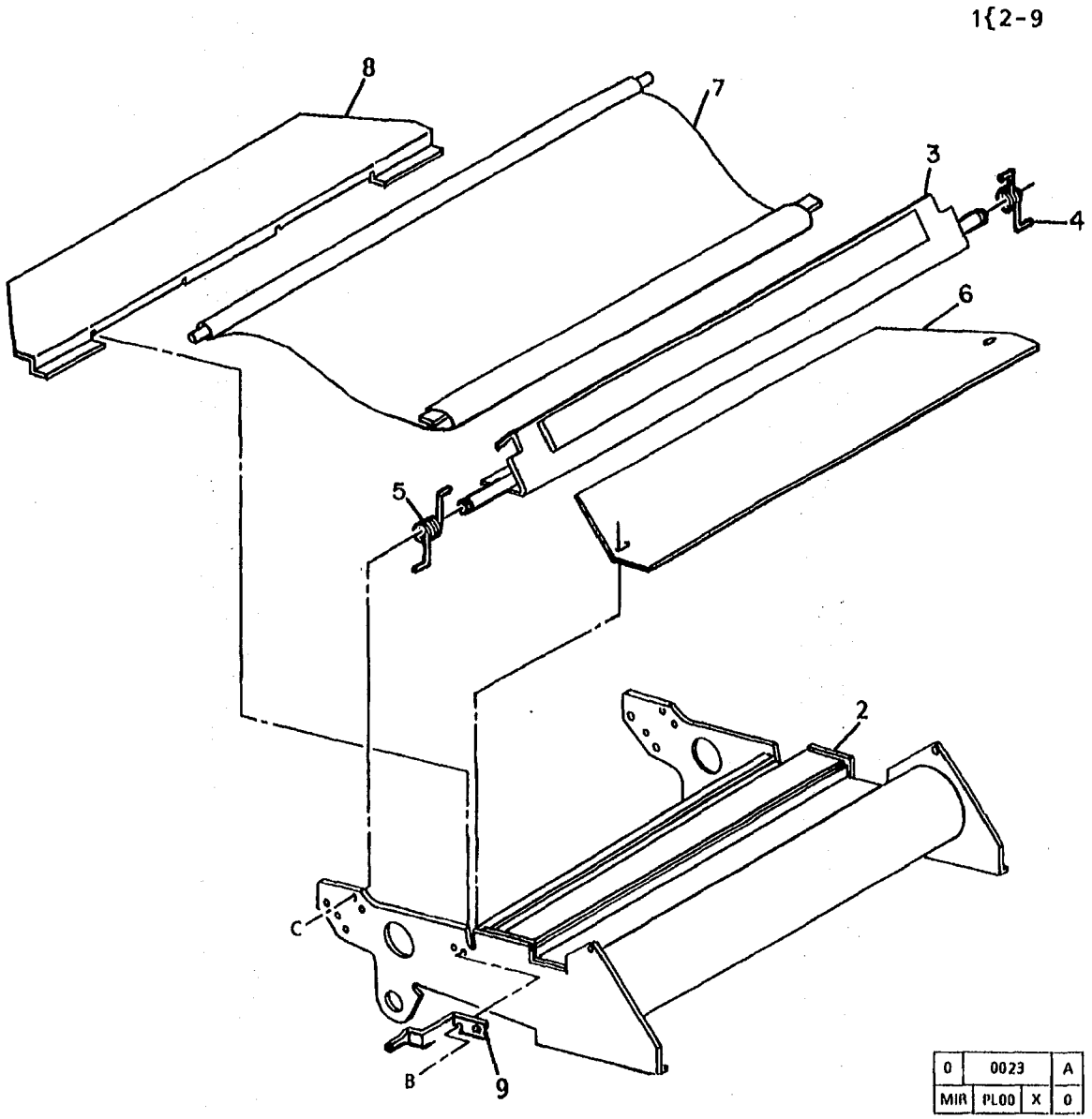
ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT MODULE ASSEMBLY (REF: PL8.1, ITEM 1)
2	--	MEDIA TRANSPORT MODULE FRAME (P/O ITEM 1)
3	30K23302	SLING TENSIONER
4	9E4011	LEFT SPRING
5	9E4021	RIGHT SPRING
6	9E3782	FUSER PRESSURE PLATE
7	8R2959	FABRIC GUIDE(USO)
-	23E3510	FABRIC GUIDE(60HZ)(XLA)
-	23E3941	FABRIC GUIDE(50HZ)(XLA)
8	--	CLUTCH RETAINING BRACKET (P/O ITEM 1)

PL 8.3 FABRIC GUIDE AND MEDIA FEED (2515) (PART 1 OF 2)



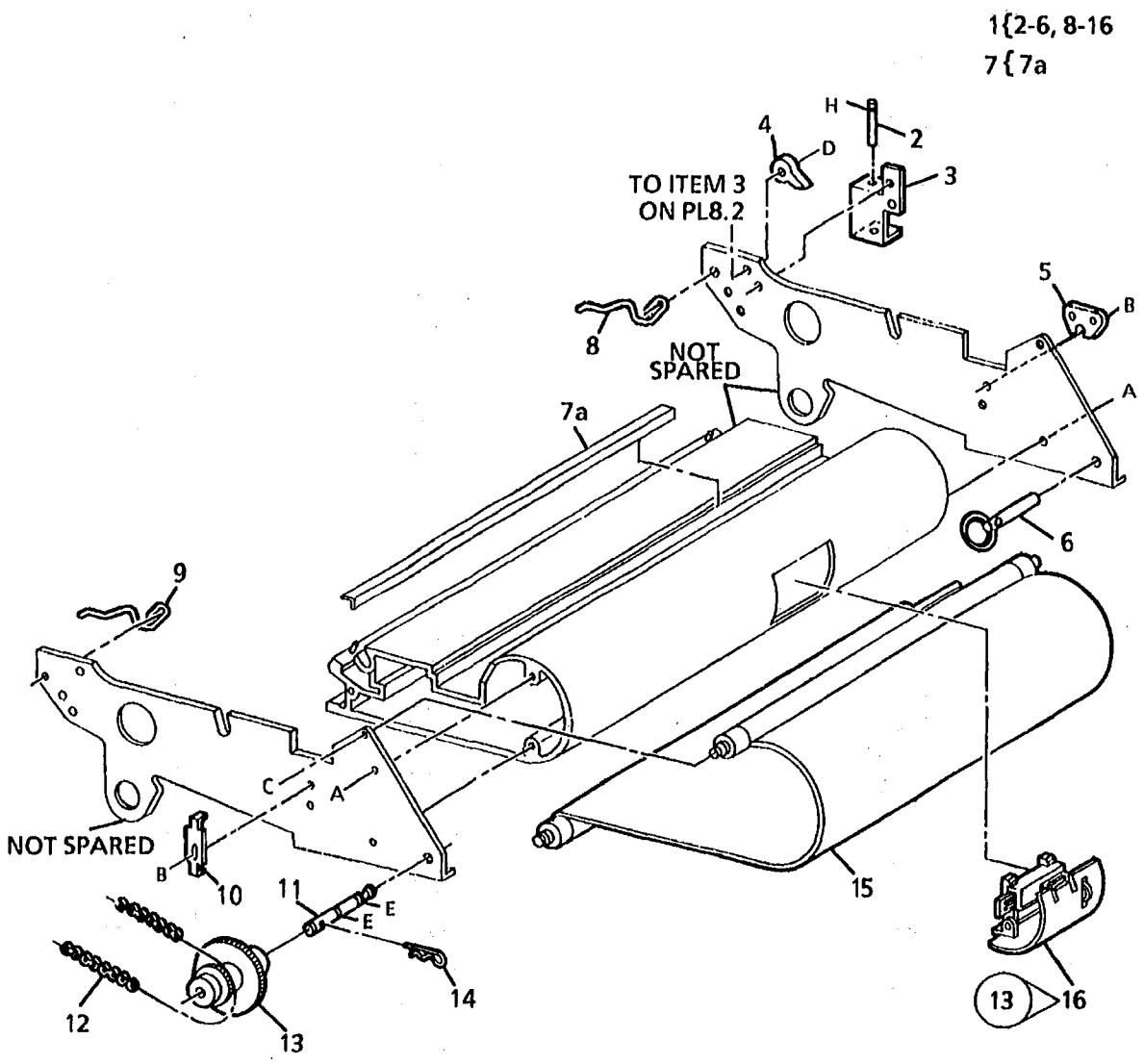
ITEM	PART	DESCRIPTION
1	22K19115	MEDIA TRANSPORT MODULE ASSEMBLY (2515 W/TAG 3)
2	--	MEDIA TRANSPORT MODULE FRAME (P/O ITEM 1)
3	6K1033	LOWER MEDIA FEED ROLL
4	--	MEDIA GUIDE PLATE (P/O ITEM 1)
5	600K33500	UPPER MEDIA FEED ROLL KIT
5a	6K10251	UPPER MEDIA FEED ROLL
6	413W31054	BEARING
7	275W14201	PIN
8	600K3773	DRIVE GEAR KIT (USO)
8a	7K412	GEAR/SPROCKET (FX, RX, XLA)
8b	--	LEFT LATCH SPRING (REF: PL8.5, ITEM 8)
8c	--	RIGHT LATCH SPRING (REF: PL8.5, ITEM 9)
8d	--	FUSER GEAR (XLA) (REF: PL10.2, ITEM 9)
9	121E042	MEDIA FEED CLUTCH

PL 8.4 FABRIC GUIDE AND MEDIA FEED (2515) (PART 2 OF 2)



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT MODULE ASSEMBLY (REF: PL8.3, ITEM 1)
2	--	MEDIA TRANSPORT MODULE FRAME (P/O ITEM 1)
3	30K23302	SLING TENSIONER
4	9E4011	LEFT SPRING
5	9E4021	RIGHT SPRING
6	9E23560	FUSER PRESSURE PLATE
7	8R3822	FABRIC GUIDE(60HZ)(USO)
-	23E3941	FABRIC GUIDE(50HZ)(XLA)
8	55E9991	MEDIA GUIDE PLATE
9	--	CLUTCH RETAINING BRACKET (P/O ITEM 1)

PL 8.5 TRANSFER/DETACK COROTRON AND TRANSPORT DRIVES (PART 1 OF 2)



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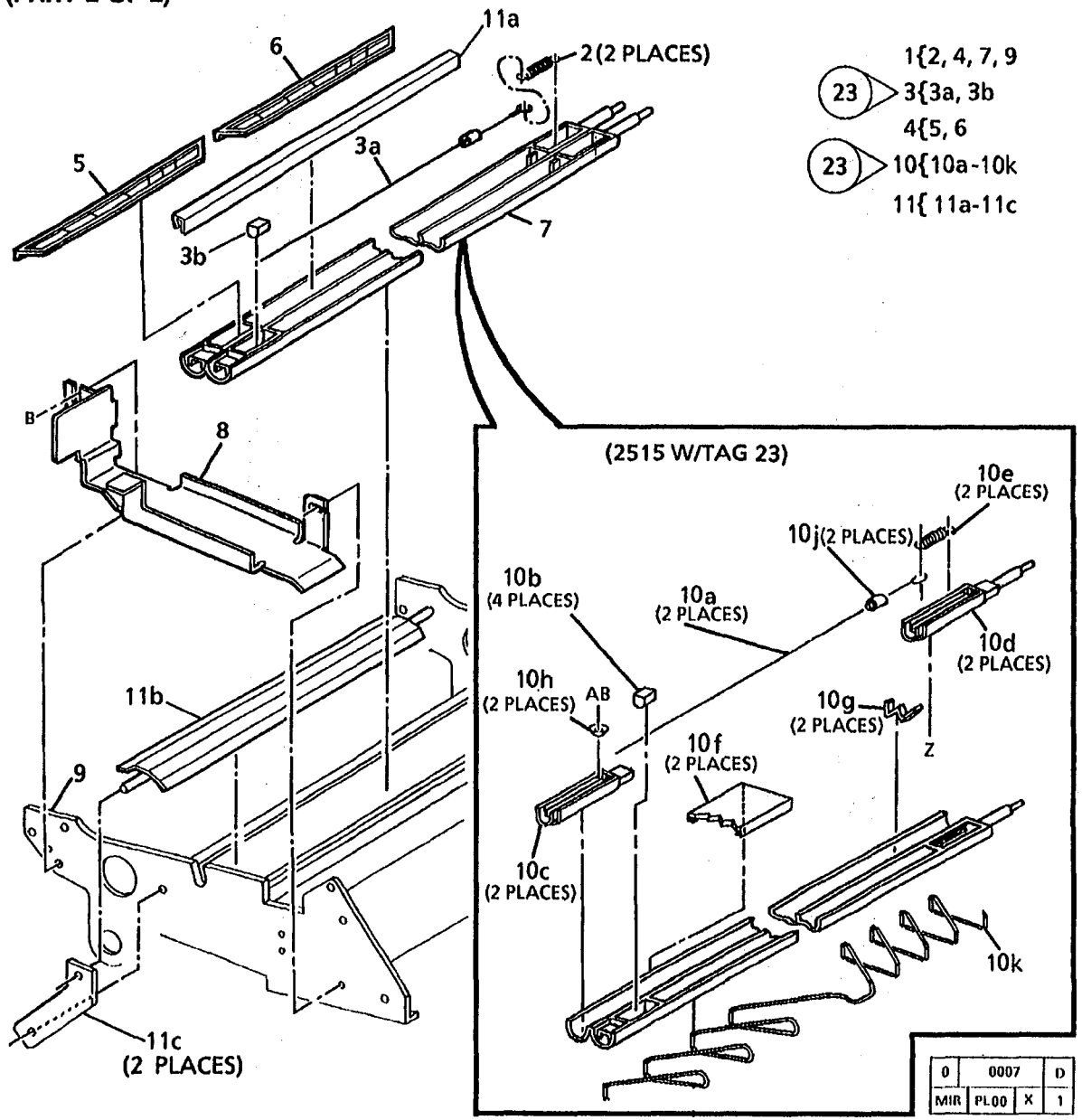
MIR	PL00	X	1

ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT MODULE ASSEMBLY (REF: PL8.1, ITEM 1) (REF: PL8.3, ITEM 1)
2	10E550	RETRACT PIN
3	30E71660	BRACKET
4	31E1310	RETRACT ARM
5	19E3090	COROTRON CLAMP
6	29K530	LEFT PIVOT SHAFT
7	600K24350	MEDIA GUIDE KIT
7a	--	MEDIA GUIDE
8	9E49190	LEFT LATCH SPRING (REF: PL8.1, ITEM 8B)
9	9E49180	RIGHT LATCH SPRING (REF: PL8.1, ITEM 8C)
10	19E3080	COROTRON CLIP
11	6E3031	RIGHT PIVOT SHAFT
12	23E1360	CHAIN
13	7E2151	MAIN DRIVE GEAR
14	29E3360	COTTER PIN
15	--	TURNAROUND BAFFLE (P/O ITEM 1)
16	130K16232	MOTION SENSOR (2510 W/TAG 13)

PL 8.6 TRANSFER/DETACK COROTRON AND TRANSPORT DRIVES (PART 2 OF 2)



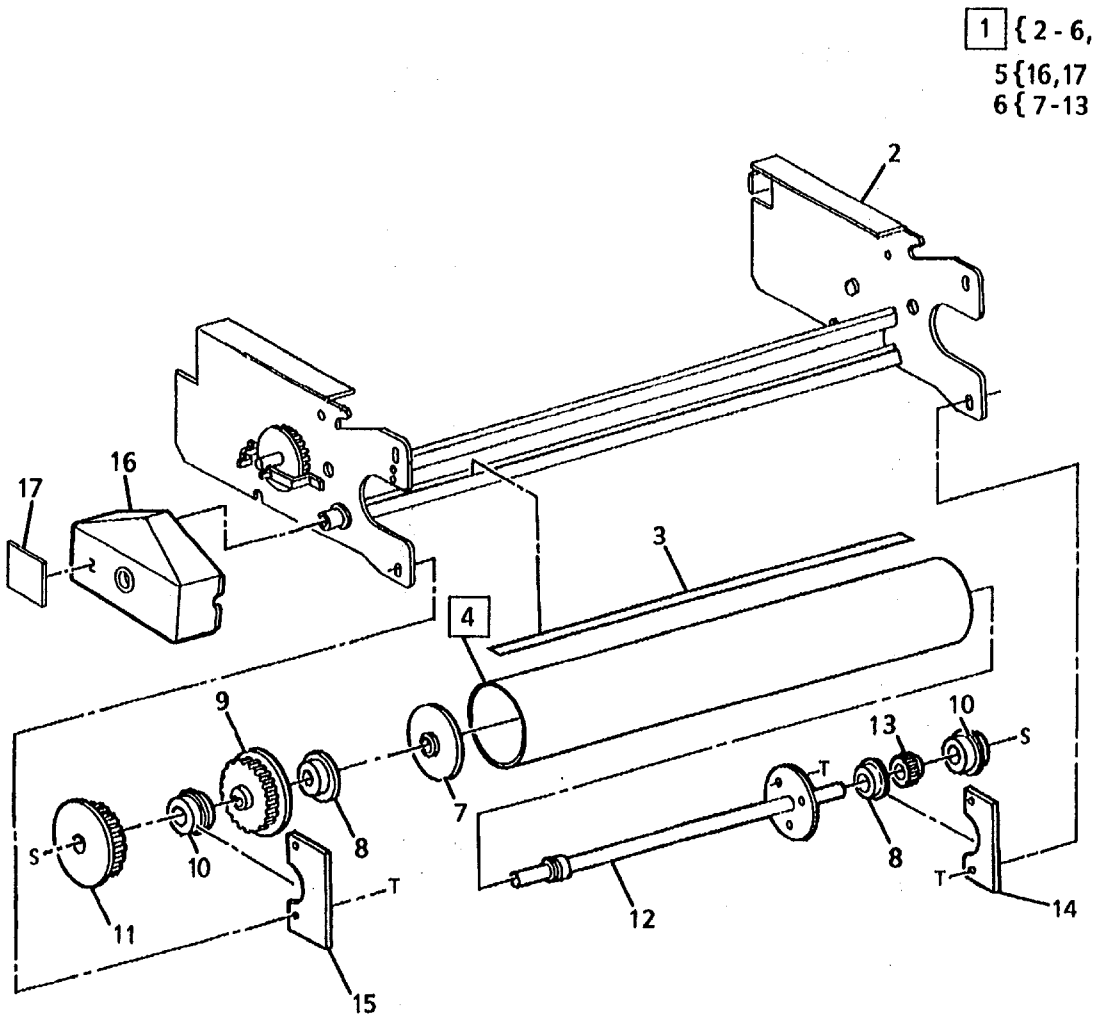
1{2, 4, 7, 9
23 3{3a, 3b
4{5, 6
23 10{10a-10k
11{ 11a-11c

ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT MODULE ASSEMBLY (REF: PL8.1, ITEM 1) (REF: PL8.3, ITEM 1)
2	--	COROTRON SPRING (REF:COROTRON REPAIR KIT, ITEM 10E)
3	600K15861	COROTRON WIRE KIT (2510 TAG 23)
3a	--	COROTRON WIRE
3b	4E502	FOAM DAMPER
4	38P90739	MEDIA GUIDE (USO)
5	38E6620	RIGHT MEDIA GUIDE
6	38E6610	LEFT MEDIA GUIDE
7	125K184	TRANSFER/DETRACK COROTRON (USO)
-	125K1051	TRANSFER/DETACK COROTRON (XBRA)
8	55E8380	CHAIN GUARD
9	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)
10	600K19352	COROTRON REPAIR KIT (2515 TAG 23)
10a	--	COROTRON WIRE
10b	--	FOAM DAMPER (REF: ITEM 3B)
10c	--	FRONT BLOCK
10d	--	REAR BLOCK
10e	--	COROTRON SPRING
10f	--	ARC SHIELD
10g	--	WIRE RETAINER
10h	--	COROTRON CLIP
10j	--	FERRITE BEAD
10k	117E6911	COROTRON SHIELD YARN
11	600K45680	SNAKE DELETION REPAIR KIT
11a	55E30940	COROTRON SHIELD
11b	--	CORROGATOR
11c	--	BRACKET

NOTE 1: ITEM 10 MUST BE IN PLACE BEFORE USING ITEM 3.

NOTE 2: MEDIA DEFLECTOR KIT LOCATED ON PL10.3, ITEM 2, MUST BE IN PLACE BEFORE USING ITEM 11.

PL 9.1 PHOTORECEPTOR DRUM AND CLEANING (PART 1 OF 2)

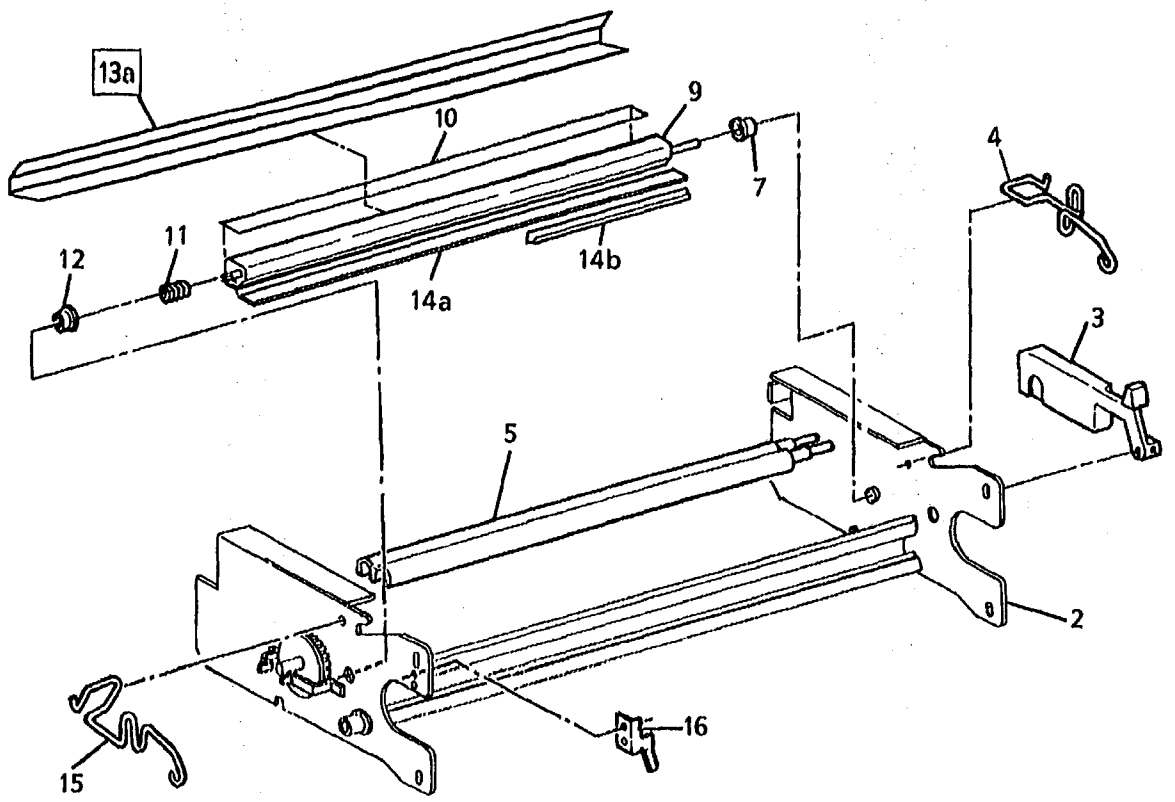


ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
3	35K1222	AUGER TO DRUM SEAL
4	1R81	PHOTORECEPTOR DRUM
5	93K940	WASTE SUMP ASSEMBLY (60HZ)
-	93K950	WASTE SUMP ASSEMBLY (50HZ)
6	6K3012	DRUM SHAFT ASSEMBLY
7	--	DRUM END PLATE (P/O ITEM 6)
8	13K380	BEARINGS
9	20E2311	INNER DRUM PULLEY
10	413W31553	BEARINGS
11	20E2300	OUTER DRUM PULLEY
12	--	DRUM SHAFT (P/O ITEM 6)
13	7E1340	AUGER DRIVE GEAR
14	--	LEFT DRUM BRACKET (P/O ITEM 1)
15	--	RIGHT DRUM BRACKET (P/O ITEM 1)
16	--	WASTE DISPOSAL BOTTLE (P/O ITEM 5)
17	--	LABEL (P/O ITEM 5)

0	0006	D
MIR	PL00	X	1

PL 9.2 PHOTORECEPTOR DRUM AND CLEANING (PART 2 OF 2)

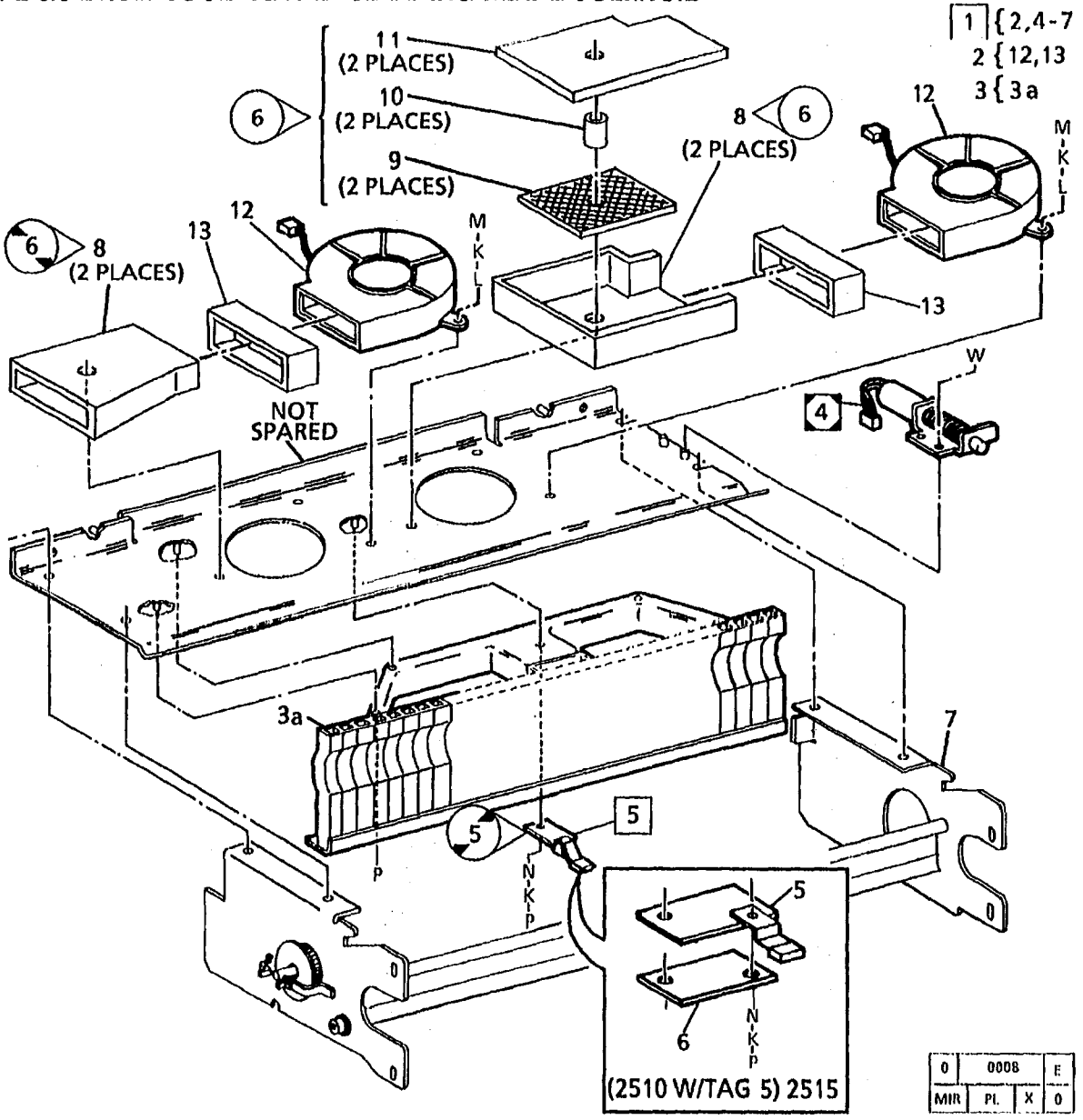
1 {2-4,7,8,15,16
6 {5
8 {9-12
13 {13a
14 {14a,14b



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
3	36E93	CLEANING BLADE WEIGHT
4	9E8600	COROTRON RETAINING SPRING
5	--	COROTRON SHIELD (P/O ITEM 6)
6	125K253	CHARGE/PRECHARGE COROTRON ASSEMBLY (50/60HZ) (2510) (60HZ) (2515)
-	125K992	CHARGE/PRECHARGE COROTRON ASSEMBLY (60HZ) (2510) (XBRA)
7	413W15355	BEARING
8	42K1390	CLEANING BLADE ASSEMBLY
9	--	CLEANING BLADE EXTRUSION (P/O ITEM 8)
10	35E3580	SEAL
11	9E6960	CLEANING BLADE SPRING
12	13E1571	CLEANING BLADE BEARING
13	600K29980	CONTAMINATION KIT
13a	--	SEAL (2515)
14	600K25780	CLEANING BLADE REPAIR KIT
14a	--	CLEANING BLADE
14b	--	RETAINER
15	9E8590	COROTRON RETAINING SPRING
16	30E16161	GROUND BRACKET

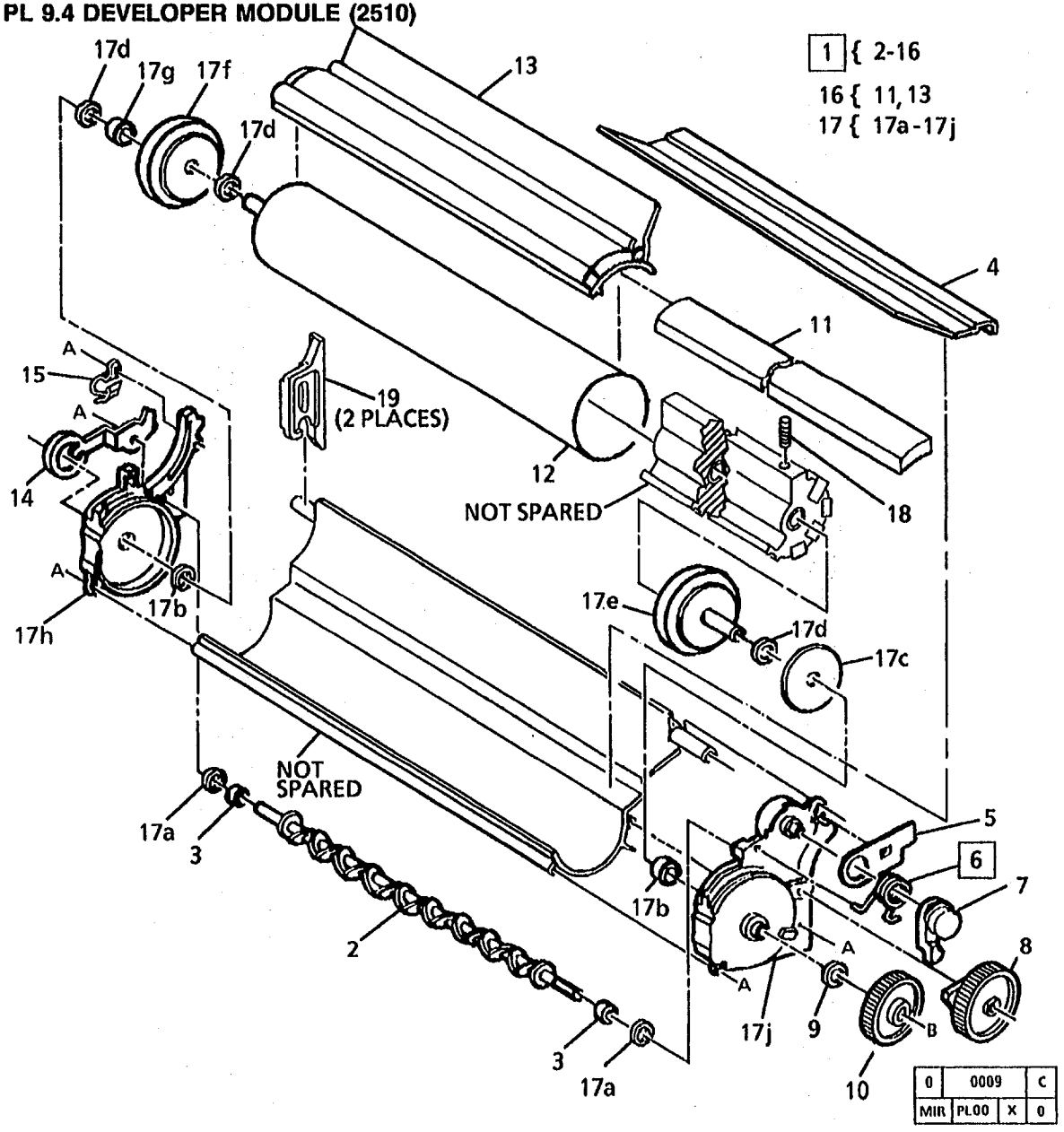
0	0025	A
MIR	PL00	X	0

PL 9.3 DRUM COOLING AND CLEANING BLADE SOLENOID



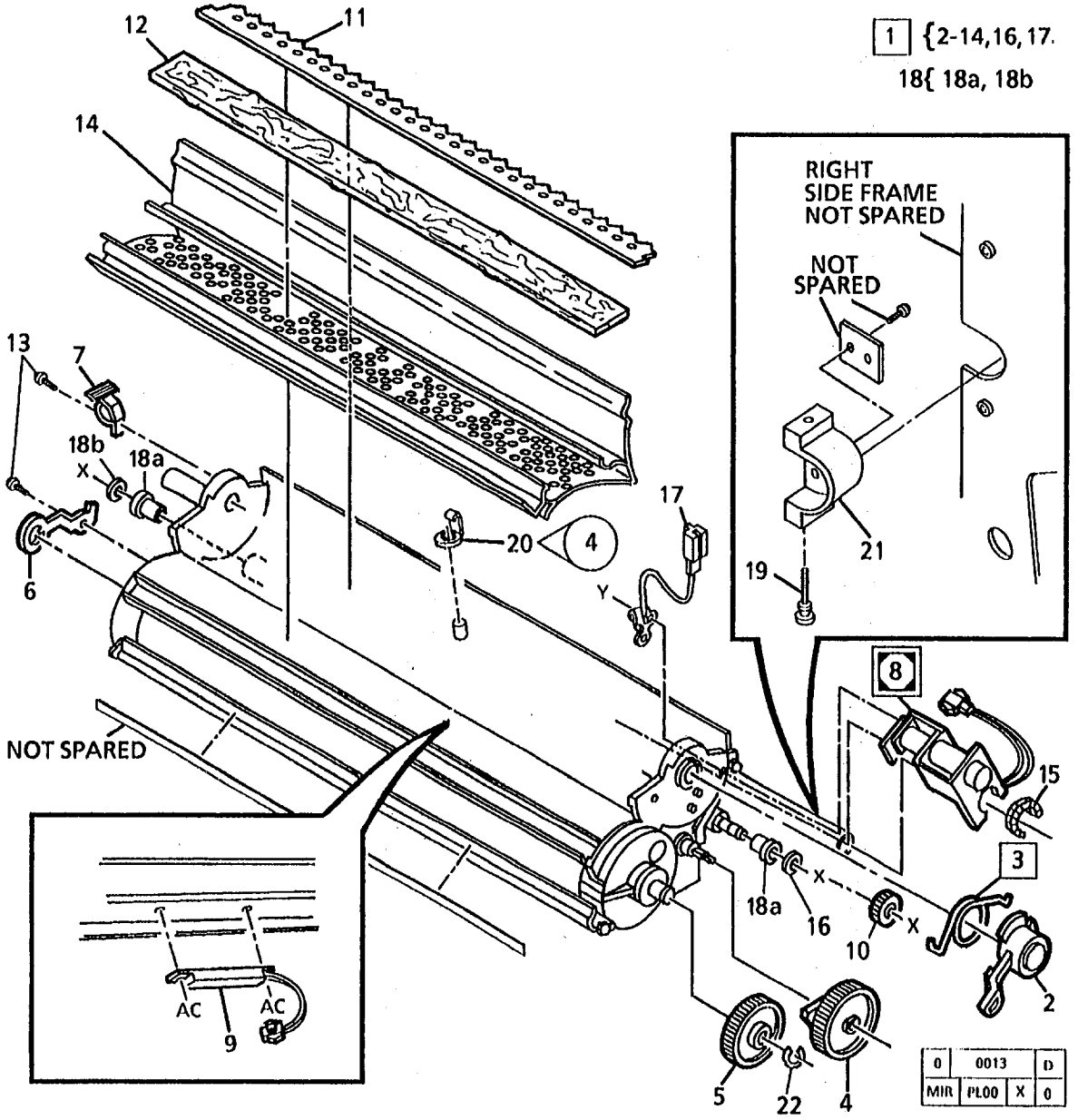
ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	127K2671	COOLING FAN ASSEMBLY (2510 W/TAG 5) (2515)
-	127K1670	COOLING FAN ASSEMBLY (2510 W/O TAG 5)
3	600K11831	AIR FLOW MANIFOLD KIT
3a	--	AIR FLOW MANIFOLD
4	121K1751	CLEANING BLADE SOLENOID (2510 W/TAG 5)
5	130K33352	THERMISTOR (RT1)(2515)
-	130K17360	THERMISTOR (RT1) (2510 W/TAG 5)
-	130K12480	THERMISTOR (RT1) (2510 W/O TAG 5)
6	118E2340	INSULATOR (2510 W/TAG 5)
7	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
8	2E13110	FILTER HOUSING (USO) (XLA)(W/TAGS 14, 6)
-	53K291	FILTER HOUSING (USO) (XLA)(W/O TAGS 14, 6)
9	53E690	OZONE FILTER (USO) (XLA)(W/TAG 6)
10	4E1000	FILTER DAMPER (USO) (XLA)(W/TAG 6)
11	2E13120	FILTER COVER (USO) (XLA)(W/TAG 6)
12	127K17160	COOLING FAN
13	--	SEAL (P/O ITEM 2)

PL 9.4 DEVELOPER MODULE (2510)



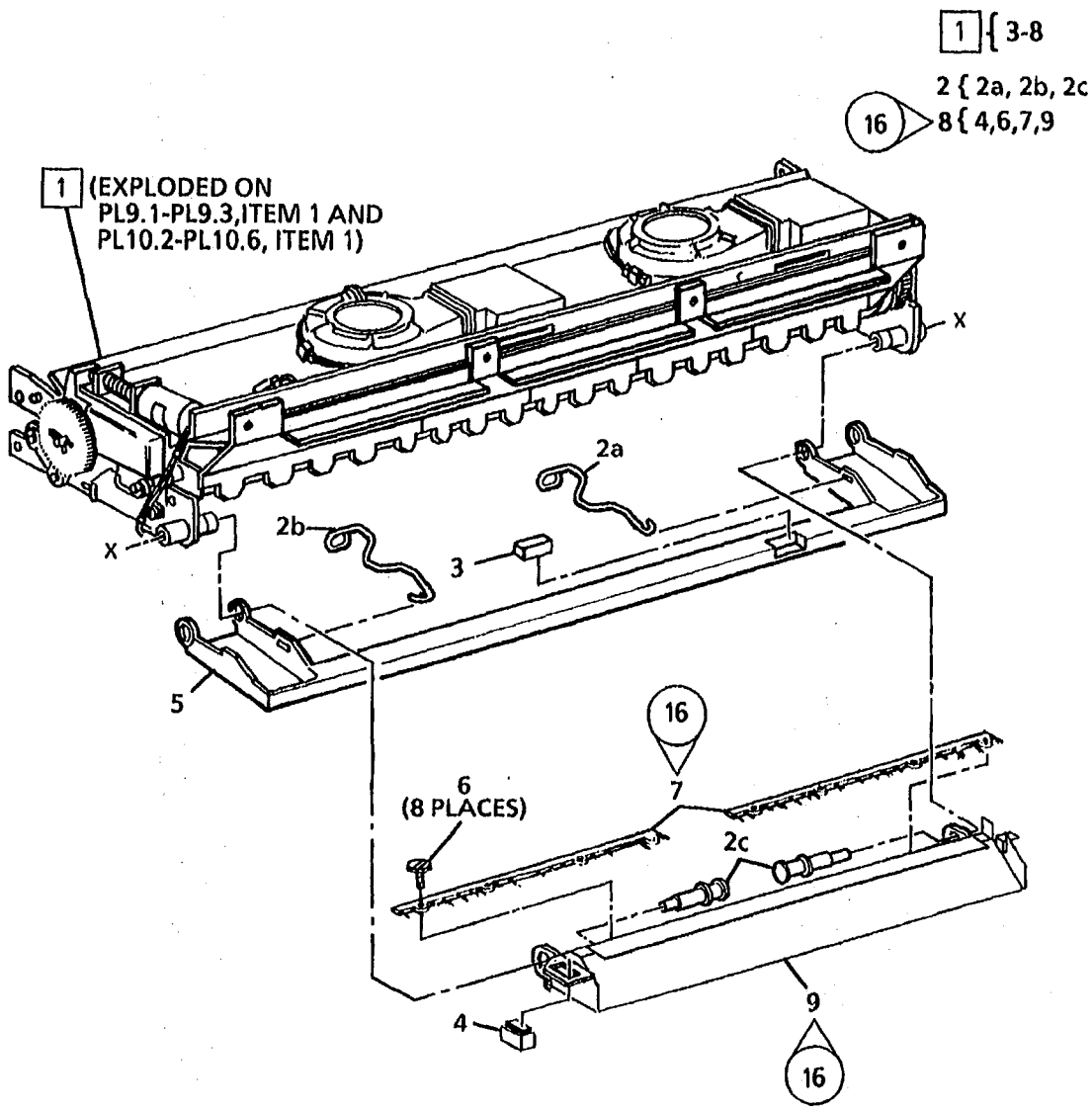
ITEM	PART	DESCRIPTION
1	121K407	DEVELOPER MODULE ASSEMBLY (2510)
2	--	MIXING AUGER (P/O ITEM 1)
3	--	SPACER (P/O ITEM 1)
4	--	MANIFOLD (P/O ITEM 1)
5	9E5771	DISPENSER ADJUSTMENT HANDLE
6	9E3840	DISPENSER ARM RETURN SPRING
7	7E1280	DISPENSER DRIVE ARM
8	7E1271	AUGER DRIVE GEAR
9	--	SPACER (P/O ITEM 1)
10	7E14510	DEVELOPER ROLL DRIVE GEAR
11	53E310	FILTER
12	52K1661	MAGNETIC ROLL
13	--	FILTER SUPPORT MANIFOLD (P/O ITEM 16)
14	19E1162	BIAS CLIP
15	9E5794	CARTRIDGE RETAINING CLIP
16	53E2351	FILTER SUPPORT MANIFOLD ASSEMBLY
17	600K14082	DEVELOPER MODULE REPAIR KIT
17a	--	AUGER MAGNETIC SEALS
17b	--	DEVELOPER MODULE SEAL
17c	--	WASHER
17d	--	PLASTIC WASHER
17e	--	DRIVE HUB
17f	--	HUB
17g	--	SEAL
17h	--	LEFT END PLATE
17j	--	RIGHT END PLATE
18	115K470	CONTACT
19	17E431	STOP

PL 9.5 DEVELOPER MODULE (2515)



ITEM	PART	DESCRIPTION
1	121K5925	DEVELOPER MODULE ASSEMBLY (2515 W/TAG 22, 6)
2	7E12730	DISPENSE ARM
3	9E3840	DISPENSE ARM RETURN SPRING
4	7E12721	AUGER DRIVE GEAR
5	7E14510	DEVELOPER ROLL DRIVE GEAR
6	19E1162	BIAS CLIP
7	9E23480	CARTRIDGE RETAINING CLIP
8	121K5891	TONER DISPENSE SOLENOID
9	130K45680	TONER SENSOR
10	7E12710	AUGER GEAR
11	55E10096	PICK OFF BAFFLE
12	53E310	FILTER PAD
13	26E3931	SCREW
14	53E2351	FILTER EXTRUSION
15	16E5590	GROMMET
16	--	WASHER (P/O ITEM 1)
17	115K521	GROUND CLIP
18	600K32840	DEVELOPER AUGER SQUEAK KIT
18a	13K1050	BEARING BLOCK
18b	28E7640	WASHER
19	26E31690	SCREW
20	600K40990	SPRING CLIP RETROFIT KIT (10/KIT) (TAG 4)
21	14K2650	DEVELOPER HOUSING MOUNTING BLOCK
22	28E2450	RETAINING RING

PL 10.1 XEROGRAPHIC MODULE



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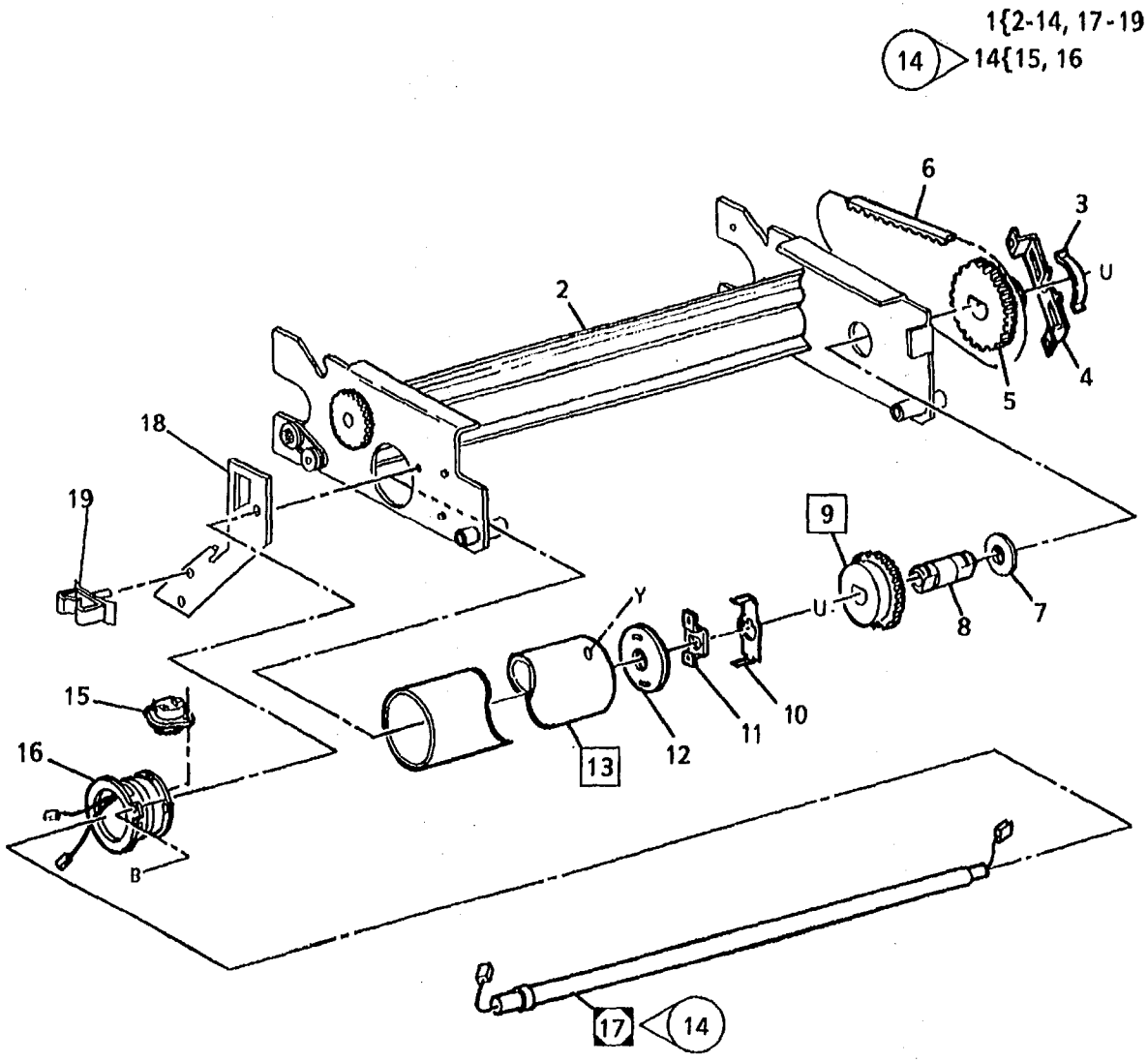
MIR	PL.00	X	0

ITEM	PART	DESCRIPTION
1	2K7686	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (W/TAG 5, 18, 29)
-	2K7211	XEROGRAPHIC MODULE ASSEMBLY (USO) (W/O TAG 5)
-	2K5746	XEROGRAPHIC MODULE ASSEMBLY (XLA) (W/TAG 21, 28, 29)
-	2K24256	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (XBRA) (W/TAG 28, 29)
-	126K4681	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (2515 W/TAG 3)
2	600K37360	LATCH REPAIR KIT
2a	9E49180	RIGHT LATCH SPRING
2b	9E49190	LEFT LATCH SPRING
2c	--	PIVOT PIN
3	121E2400	STRIP MAGNET
-	121E1910	MAGNET (INTERLOCK)
4	3P2243	MAGNETIC CATCH
5	3K6890	TRANSPORT LATCHING COVER (USO)
-	3K2150	TRANSPORT LATCHING COVER (RX)
6	26E17000	SCREW
7	115E1410	STATIC ELIMINATOR (W/TAG 16)
8	2K23402	FRONT COVER ASSEMBLY (2515) (2510 W/TAG 16)
9	2E14141	FRONT COVER (2515) (2510 W/TAG 16)

PL 10.2 FUSING (PART 1 OF 2)



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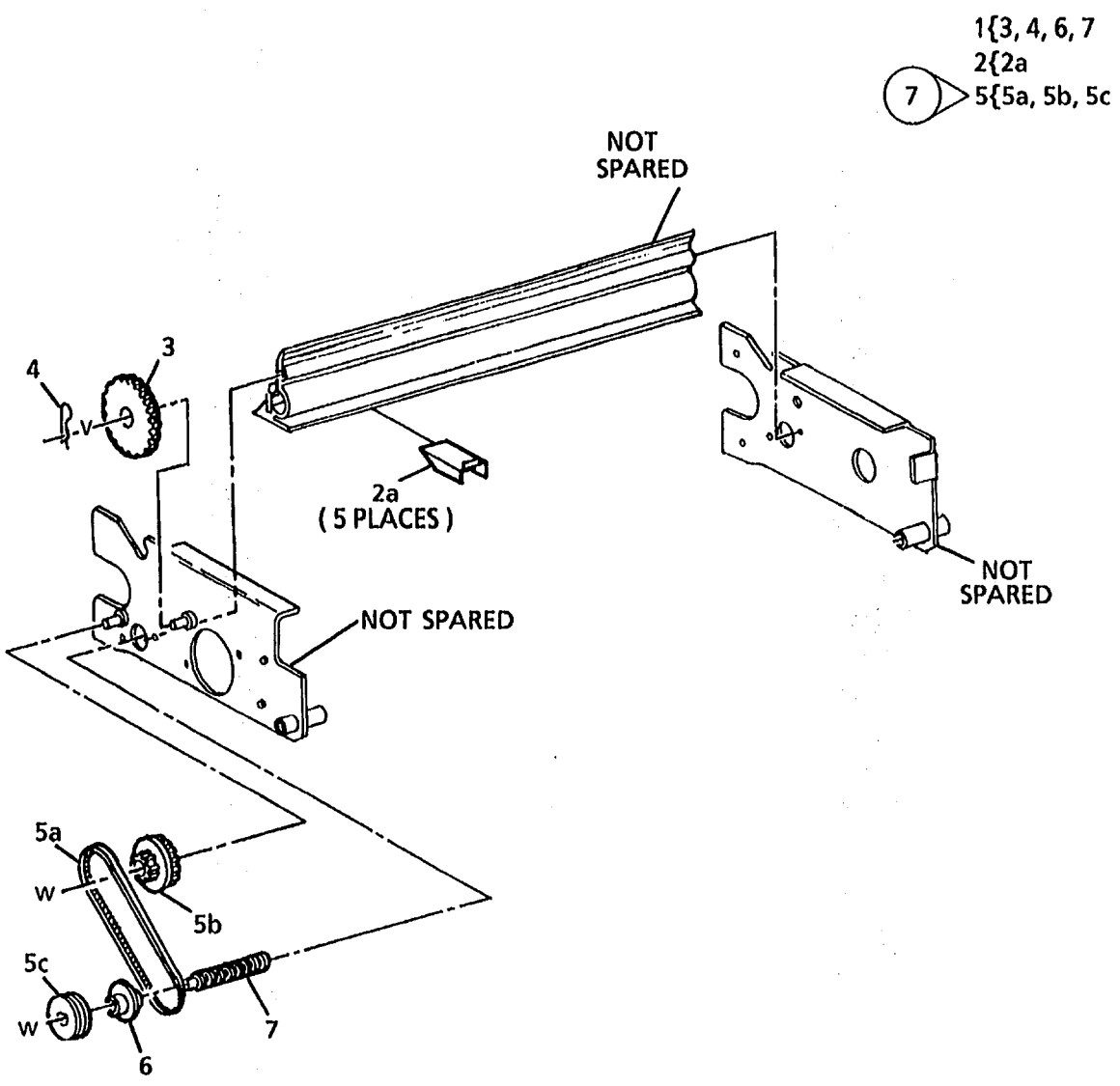
MIR	PL00	X	0

ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
3	9E2701	HEAT ROD RETAINER
4	--	BRACKET (P/O ITEM 1)
5	20E2290	FUSER PULLEY
6	423W59202	DRUM DRIVE BELT
7	115E2231	GROUND RING (RX, XBRA)
8	--	SHAFT (P/O ITEM 1)
9	7K762	FUSER GEAR (XLA) (REF: PL8.1, ITEM 8D) (REF: PL8.3, ITEM 8D)
10	30E19880	FUSER GROUND
11	--	BRACKET (P/O ITEM 1)
12	--	REFLECTOR(P/O ITEM 1)
13	22K3483	FUSER ROLL
14	13K442	FUSER OVERHEAT BEARING ASSEMBLY (W/TAG 14)
15	--	THERMOSTAT(P/O ITEM 14)
16	--	FUSER OVERHEAT BEARING (P/O ITEM 14)
17	126E112	FUSER HEAT ROD (60HZ) (USO) (W/TAG 14)
-	126E121	FUSER HEAT ROD (50HZ) (XLA) (W/TAG 14)
18	--	FUSER ROD BRACKET (P/O ITEM 1)
19	120E5540	WIRE SADDLE (CLIP)

PL 10.3 FUSING (PART 2 OF 2)



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	600K8481	MEDIA DEFLECTOR KIT
2a	--	MEDIA DEFLECTOR
3	7E1331	TRANSITION GEAR
4	29E3560	COTTER PIN
5	600K5230	AUGER DRIVE KIT (2515) (2510 TAG 7)
5a	23E1620	AUGER DRIVE BELT
5b	7E5221	PULLEY/GEAR
5c	20E4350	AUGER PULLEY
6	13E803	AUGER BEARING
7	94K85	AUGER

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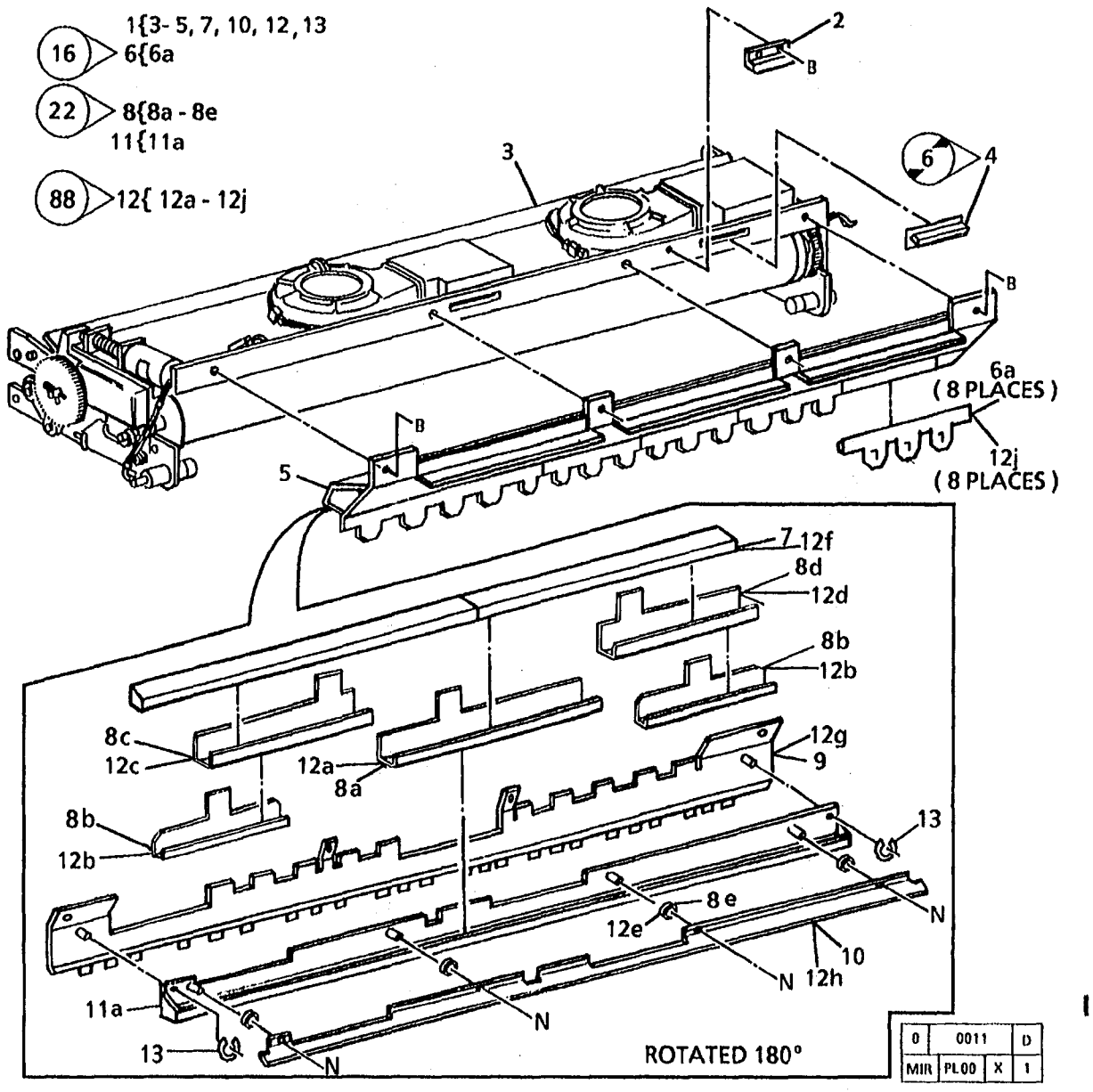
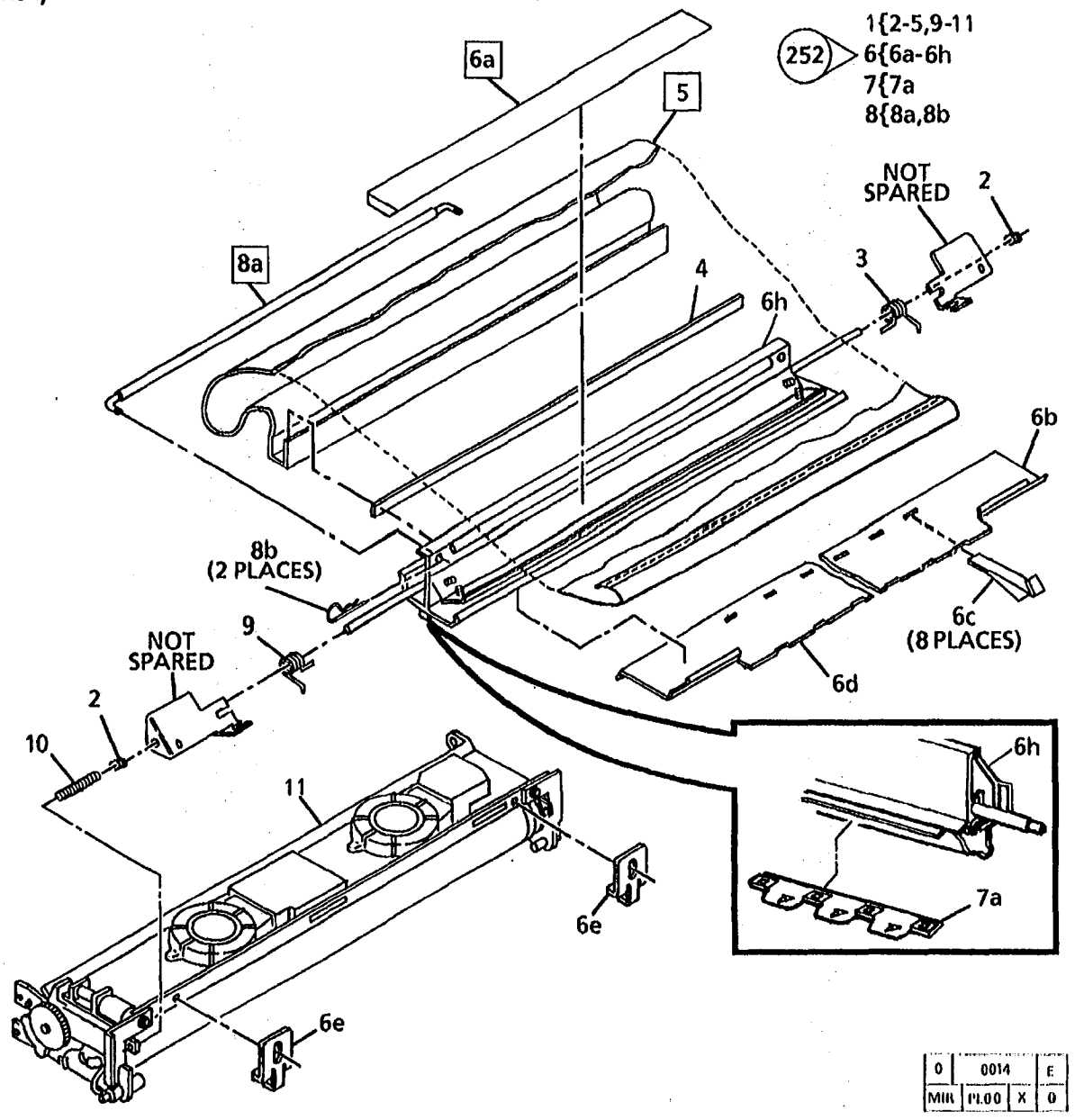
MIR	PL00	X	0

PL 10.4 OIL DISPENSER ASSEMBLY (2510 W/O TAG 252) (2515 W/TAG 88)



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	110K771	TRANSPORT LATCHING COVER INTERLOCK
3	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
4	54E861	FUSER DUCT (USO, XLA) (W/O TAGS 6, 14)
5	--	OIL DISPENSER (P/O ITEM 1)
6	600K8931	STRIPPER FINGER KIT (TAG 16)
6a	--	STRIPPER FINGER
7	19K1420	OIL PAD (XBRA)
-	19E3032	OIL PAD
8	600K12030	OIL DISPENSER METERING KIT (USO) (TAG 22)
8a	--	CENTER METERING TRAY
8b	--	METERING TRAY
8c	--	RIGHT ADJUSTABLE METERING TRAY
8d	--	LEFT ADJUSTABLE METERING TRAY
8e	--	WASHER
9	38E1945	OIL DISPENSER MOUNTING BRACKET
10	2E14512	OIL PAD COVER (XBRA)
-	15E5022	OIL PAD COVER
11	600K12020	OIL DISPENSER KIT
11a	--	OIL DISPENSER
12	600K39660	OILER KIT
12a	--	CENTER METERING TRAY
12b	--	METERING TRAY
12c	--	RIGHT ADJUSTABLE METERING TRAY
12d	--	LEFT ADJUSTABLE METERING TRAY
12e	--	WASHER
12f	--	OIL PAD (REF: ITEM 7)
12g	--	OIL DISPENSER MOUNTING BRACKET (REF: ITEM 9)
12h	--	OIL PAD COVER (REF: ITEM 10)
12j	--	STRIPPER FINGER KIT (REF: ITEM 6)
13	28E2450	RETAINING RING

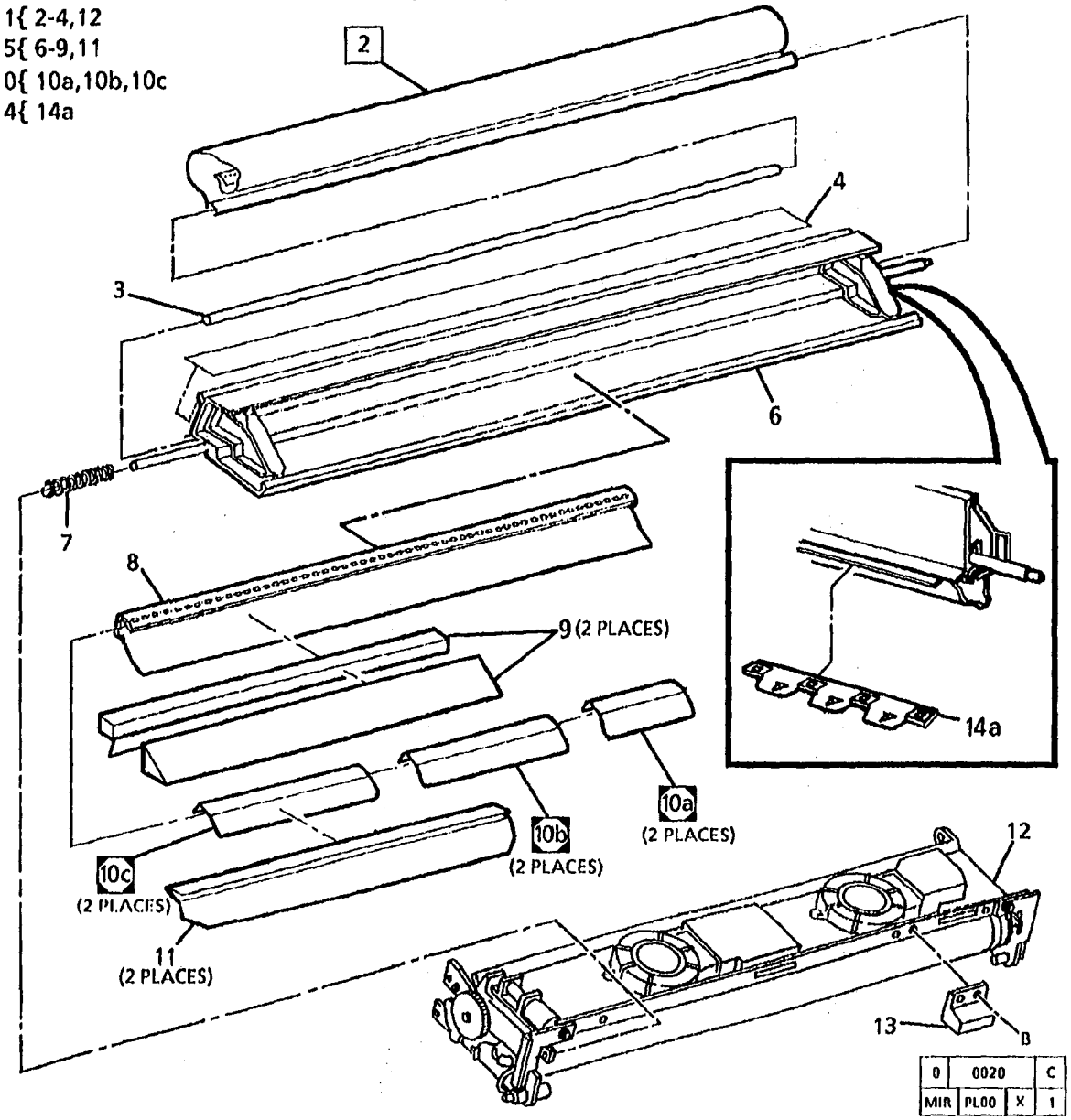
PL 10.5 OIL DISPENSER ASSEMBLY (2515 W/O TAG 88) (2510 W/TAG 252)



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	13P519	BEARING
3	9E33030	RIGHT TORSION SPRING
4	19E17080	PRESSURE PAD
5	94K1940	WICK
6	600K29600	OIL DISPENSER REPAIR KIT
6a	19K2660	OIL PAD
6b	38E10020	RIGHT MEDIA GUIDE
6c	19E13922	SPRING CLIP
6d	38E10030	LEFT MEDIA GUIDE
6e	68E23610	ADJUSTING BRACKET
6f	--	STRIPPER FINGER KIT (REF: ITEM 7)
6g	--	OIL DISPENSE ROLL KIT (REF: ITEM 8)
6h	--	OILER EXTRUSION
7	600K8931	STRIPPER FINGERS KIT (P/O OIL DISPENSER REPAIR KIT, ITEM 6F)
7a	--	STRIPPER FINGER
8	600K31170	OIL DISPENSE ROLL KIT (P/O OIL DISPENSER REPAIR KIT, ITEM 6G)
8a	--	OIL DISPENSE ROLL
8b	29E14780	COTTER PIN
9	9E33040	LEFT TORSION SPRING
10	9E38060	COMPRESSION SPRING
11	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)

PL 10.6 OIL DISPENSER ASSEMBLY(BRAZIL)

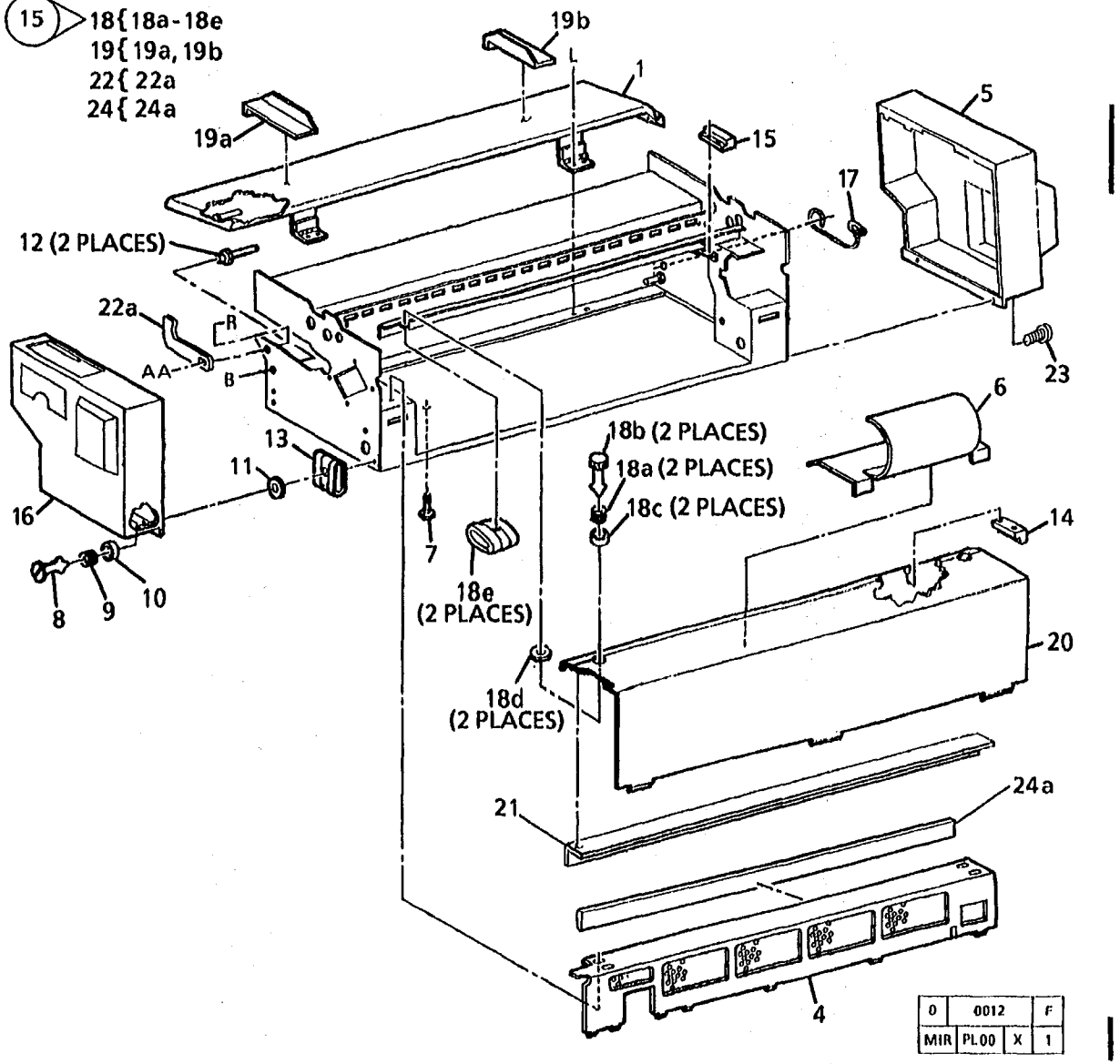
1{ 2-4,12
5{ 6-9,11
10{ 10a,10b,10c
14{ 14a



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1, ITEM 1)
2	94K862	WICK
3	--	ROD (P/O ITEM 1)
4	33K400	PLASTIC BLADE
5	30K30570	OIL DISPENSE ASSEMBLY
6	--	OIL DISPENSER (P/O ITEM 5)
7	9E12282	COMPRESSION SPRING
8	94E850	TRANSFER WICK
9	19K1420	OIL PADS
10	600K16291	METERING SHIELD KIT
10a	--	NUMBER 1 METERING SHIELD
10b	--	NUMBER 2 METERING SHIELD
10c	--	NUMBER 3 METERING SHIELD
11	2E14512	OIL PAD COVER
12	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)
13	110K771	TRANSPORT LATCHING COVER INTERLOCK
14	600K8931	STRIPPER FINGERS KIT
14a	--	STRIPPER FINGER

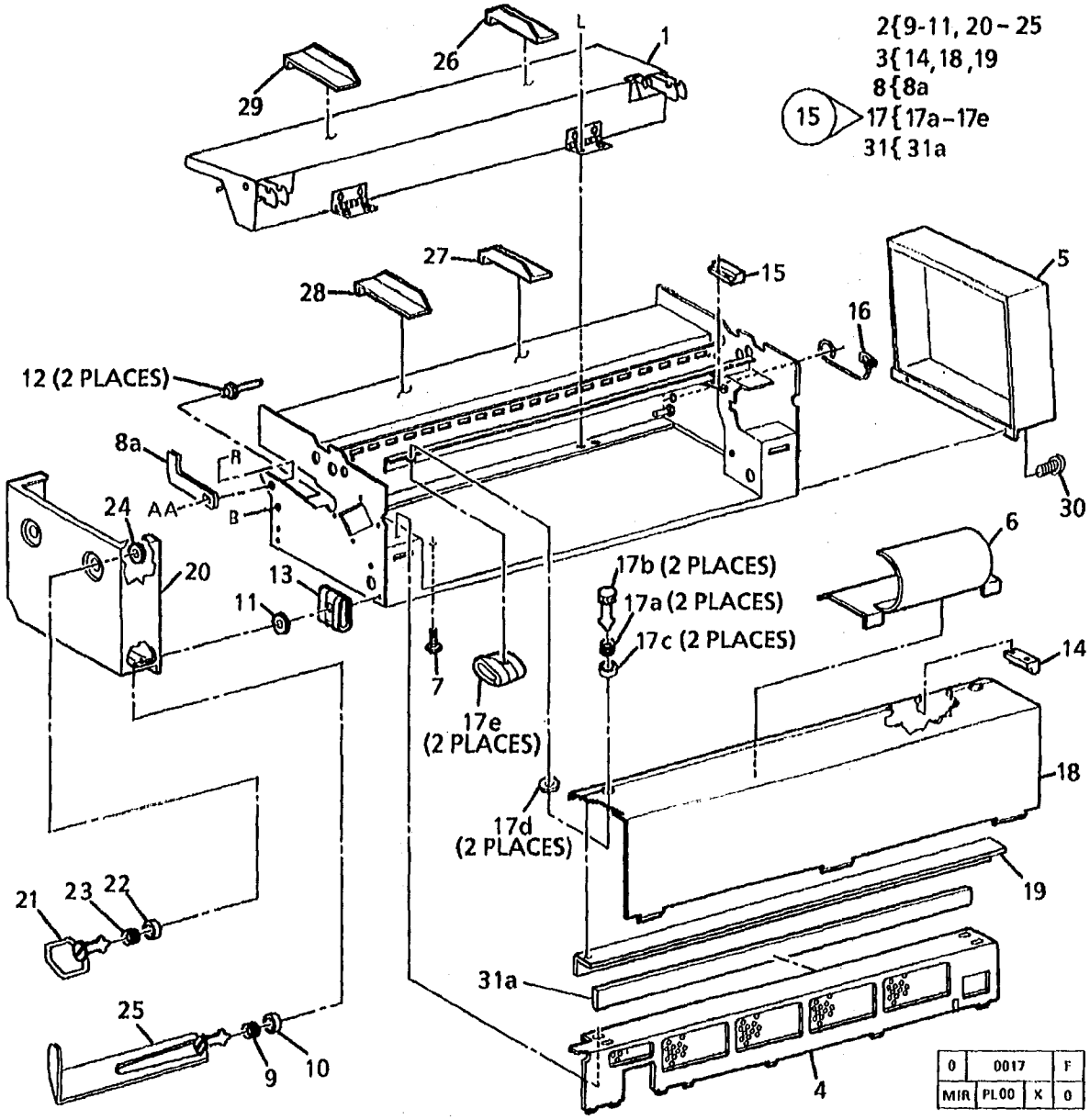
PL 14.1 COVERS (2510)

2{8-11,16
3{14,18,20,21
15 > 18{18a-18e
19{19a,19b
22{22a
24{24a

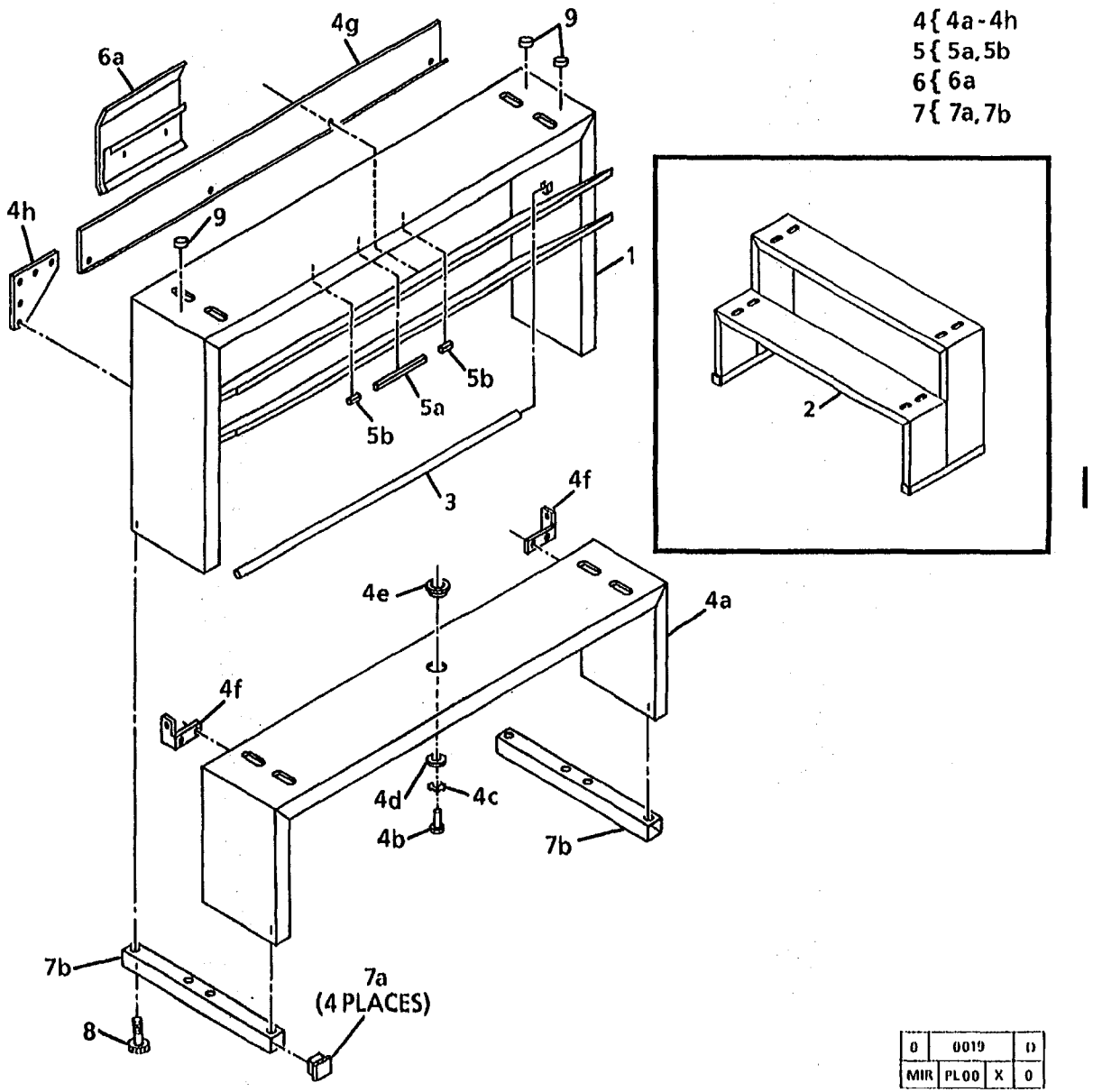


ITEM	PART	DESCRIPTION
1	30K7382	MEDIA FEED-IN SHELF(2510) (USO, XCL)
-	30K13671	(2510) (XLA)
-	30K29160	(2510) (XBRA)
2	2K6020	RIGHT SIDE COVER ASSEMBLY (USO)
-	2K7342	(XLA)
3	2K4391	UPPER REAR COVER ASSEMBLY (2510 W/O TAG 15)
-	2K23501	(2510 W/TAG 15)
4	2K6434	LOWER REAR COVER (USO)
-	2K7431	LOWER REAR COVER (XLA)
-	2K19862	LOWER REAR COVER (SPO)
-	2K19882	LOWER REAR COVER(CHINA)
5	2E7231	LEFT SIDE COVER (USO)
-	2K7350	LEFT SIDE COVER (XLA)
6	38K1861	DOCUMENT GUIDE
7	11K30	LEVELING FOOT
8	26E5180	FASTENER (USO)
-	26K382	FASTENER (XLA)
9	9P1609	SPRING
10	28P859	WASHER
11	28P1127	RETAINER
12	29E3800	LATCH PIN
13	50P680	SPRING NUT
14	121E2921	MAGNET
-	121E1910	MAGNET (BLUE PLASTIC)
15	110K771	DC INTERLOCK SWITCH
16	--	RIGHT SIDE COVER (P/O ITEM 2)
17	9E7570	LATCH SPRING
18	600K6830	REAR COVER UPGRADE KIT (TAG 15)
18a	--	SPRING
18b	--	1/4 TURN FASTENER
18c	--	WASHER
18d	--	RETAINER
18e	--	SPRING NUT
19	606K291	SIDE GUIDE KIT
19a	--	RIGHT SIDE GUIDE
19b	--	LEFT SIDE GUIDE
20	--	UPPER REAR COVER (P/O ITEM 3)
21	35K3770	SEAL
22	600K21200	LATCH BRACKET KIT (TAG 24)
22a	30E62400	BRACKET
23	26E3460	SCREW
24	600K35190	SEAL KIT
24a	--	SEAL

PL 14.2 COVERS (2515)



ITEM	PART	DESCRIPTION
1	30K43081	MEDIA FEED-IN SHELF
2	2K23235	RIGHT SIDE COVER ASSEMBLY
3	2K23501	UPPER REAR COVER ASSEMBLY
4	2K6434	LOWER REAR COVER
5	2E31113	LEFT SIDE COVER
6	38K1661	DOCUMENT GUIDE
7	11K30	LEVELING FOOT
8	600K21200	LATCH BRACKET KIT
8a	--	LATCH BRACKET
9	9P1609	SPRING
10	28P859	WASHER
11	28P1127	RETAINER
12	29E3800	LATCH PIN
13	50P680	SPRING NUT
14	121E2921	MAGNET
-	121E1910	MAGNET (BLUE PLASTIC)
15	110K771	UPPER REAR COVER INTERLOCK SWITCH
16	9E7570	LATCH SPRING
17	600K6830	REAR COVER UPGRADE KIT (TAG 15)
17a	--	SPRING
17b	--	1/4 TURN FASTENER
17c	--	WASHER
17d	--	RETAINER
17e	--	SPRING NUT
18	--	UPPER REAR COVER (P/O ITEM 3)
19	35K3770	SEAL
20	--	RIGHT SIDE COVER (P/O ITEM 2)
21	26E10300	1/4 TURN FASTENER
22	28P6140	WASHER
23	9P1366	SPRING
24	28P2030	RETAINER
25	26K661	1/4 TURN FASTENER
26	38E10240	LEFT MEDIA GUIDE
27	38E10230	LEFT DOCUMENT GUIDE
28	38E10210	RIGHT DOCUMENT GUIDE
29	38E10220	RIGHT MEDIA GUIDE
30	26E3460	SCREW
31	600K35190	SEAL KIT
31a	--	SEAL



4{ 4a-4h
5{ 5a,5b
6{ 6a
7{ 7a,7b

ITEM	PART	DESCRIPTION
1	9R1006	COPIER STAND
-	9R1003	UNIVERSAL STAND (XLA)
-	9R302	MACHINE STAND (XLA)
2	9R395	COPIER AND CUTTER STAND
3	--	MEDIA SUPPORT BAR (P/O ITEM 1)
4	97K5750	STAND CONVERSION KIT
4a	--	CUTTER STAND
4b	--	PIVOT SCREW
4c	--	WASHER
4d	--	WASHER
4e	--	BUSHING
4f	--	BRACKET
4g	--	SHELF BACK
4h	--	BRACKET
5	605K1010	STAND SAFETY KIT
5a	--	MAGNET
5b	--	FOAM BLOCK
6	600K11930	REAR PANEL KIT
6a	--	REAR PANEL
7	600K16080	FOOT KIT
7a	15E13020	CAP
7b	--	FOOT
8	11K1630	LEVELING FOOT
9	19E12310	PADS

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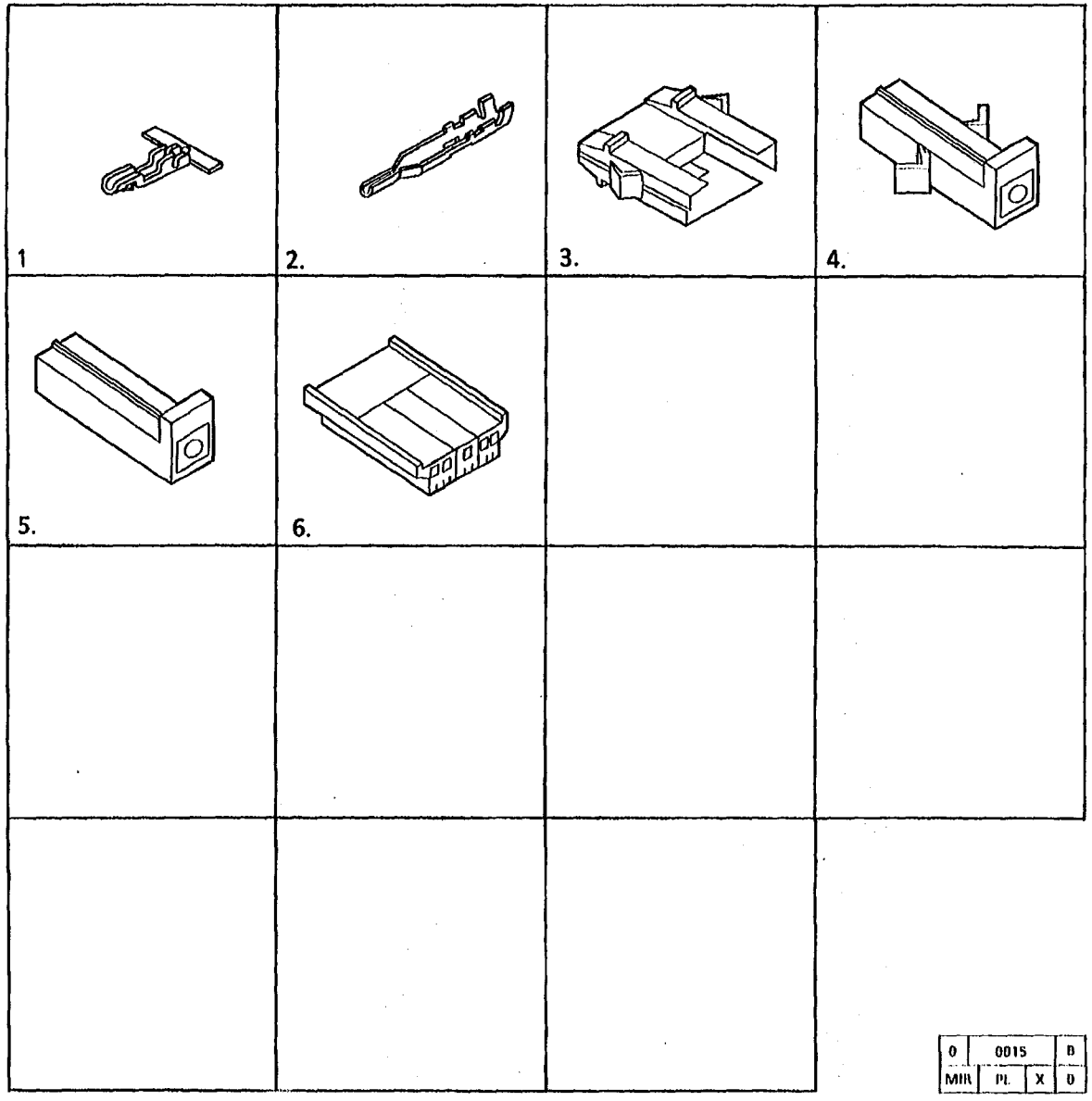
MIR	PL00	X	0

PL 16.1 ELECTRICAL CONNECTORS



ITEM	PART	DESCRIPTION
1	115P60155	CONTACT J + 2
2	115P60182	TERMINAL J52
3	114P67208	DC CONNECTOR (J43)
4	113P60984	AC CONNECTOR (J38)
5	113P60312	AC CONNECTOR (J40)
6	114P60303	DC CONNECTOR (P43)
7	114P60111	AC CONNECTOR (P37)
8	115P60080	AC CONNECTOR (P37 PINS)
-	115P537	(ALTERNATE)
9	113P60251	AC CONNECTOR (J37)
10	115P60081	AC CONNECTOR (J37 PINS)

0	0015		B
MIR	PL	X	0

ITEM	PART	DESCRIPTION
A	153W17452	SCREW (M4.2X9/5)
B	112W7255	SCREW (M4X8)
C	354W24251	RETAINING RING (4MM)
D	354W21152	RETAINING RING (8-11MM)
E	354W21352	RETAINING RING(10-14MM)
F	354W20752	RETAINING RING(4-5MM)
G	351W10851	RETAINING RING (M8)
H	351W11051	RETAINING RING (M10)
J	354W21452	RETAINING RING (10MM)
K	251W10455	WASHER (M4)
M	256W20454	LOCKWASHER (M4)
N	201W455	NUT (M4)
P	251W20464	WASHER
R	220W450	NUT (M4)
S	351W11551	RETAINING RING (M15)
T	112W27455	SCREW (M4X12)
U	351W12551	RETAINING RING (M25)
V	251W10655	WASHER (M6)
W	351W10651	RETAINING RING (M6)
X	354W21252	RETAINING RING (9-12MM)
Y	113W6455	SCREW (M3X10)
Z	113W6055	SCREW (M3X4)
AA	131W7353	SCREW (M4X12)
AB	113W54055	SCREW (M3X4)
AC	113W6255	SCREW (M3X6)
AD	121W30455	SETSCREW (M4 X 16)
-	121W30655	ALTERNATE

PART NUMBER	PL LOC.
1R81	9.1
2K4391	14.1
2K5746	10.1
2K6020	14.1
2K6434	14.1
2K6434	14.2
2K7211	10.1
2E7231	14.1
2K7342	14.1
2K7350	14.1
2K7431	14.1
2K7606	10.1
2E13110	9.3
2E13120	9.3
2E14141	10.1
2E14512	10.4
2E14512	10.6
2K19862	14.1
2K19882	14.1
2K23235	14.2
2K23402	10.1
2K23501	14.1
2K23501	14.2
2K24256	10.1
2E31113	14.2
3K2150	10.1
3P2243	10.1
3K6890	10.1
4E502	8.6
4E1000	9.3
6K1022	8.1
6K1033	8.1
6K1033	8.3
6K3012	9.1
6E3031	8.5
6K10251	8.3
6E19570	5.1
7K300	5.1
7K313	5.1
7K412	8.1
7K412	8.3
7K762	10.2
7E1271	9.4
7E1280	9.4
7E1331	10.3
7E1340	9.1
7E2151	8.5
7K3580	5.1
7E3980	1.1
7E4010	1.1
7E5221	10.3
7E12710	9.5
7E12721	9.5
7E12730	9.5
7E14510	9.4
7E14510	9.5
8R2959	8.2
8R3822	8.4
9R302	15.1
9R395	15.1
9R1003	15.1
9R1006	15.1
9P1366	14.2
9P1609	14.1
9P1609	14.2
9E2701	10.2
9E3782	8.2
9E3840	9.4
9E3840	9.5
9E4011	8.2
9E4011	8.4
9E4021	8.2
9E4021	8.4
9E5771	9.4
9E5794	9.4
9E6960	9.2
9E7570	14.1
9E7570	14.2
9E8590	9.2
9E8600	9.2
9E12282	10.6
9E17150	5.1
9E23480	9.5
9E23560	8.4
9E33030	10.5
9E33040	10.5
9E38060	10.5
9E49180	8.5
9E49180	10.1
9E49190	8.5
9E49190	10.1
10E550	8.5
11K30	14.1
11K30	14.2
11K1630	15.1
13K380	9.1
13K442	10.2
13P519	10.5
13E780	5.1
13E803	10.3
13K1050	9.5
13E1571	9.2
14K2650	9.5
15E5022	10.4
15E13020	15.1
16E5590	9.5
17E420	5.1
17E431	9.4
17E2771	5.1
19E1162	9.4
19E1162	9.5
19K1420	10.4
19K1420	10.6
19P2152	6.1
19K2660	10.5
19E3032	10.4
19E3080	8.5
19E3090	8.5
19E6980	6.1
19E12310	15.1
19E13922	10.5
19E17080	10.5
19E23600	5.1
20K351	5.1
20E2290	10.2
20E2300	9.1
20E2311	9.1
20E4350	10.3
21E291	5.1
22K888	8.1
22K891	5.1
22K3483	10.2
22K4900	5.1
22E7280	5.1
22K9604	8.1
22K12610	5.1
22K19115	8.3
22K19170	5.1
22K19516	8.1
23E1360	8.5
23E1620	10.3
23E3510	8.2
23E3941	8.2
23E3941	8.4
26K382	14.1
26K661	14.2
26E3460	1.1
26E3460	1.2
26E3460	14.1
26E3460	14.2
26E3931	9.5
26E5180	14.1
26E10300	14.2
26E17000	10.1
26E31690	9.5
28P859	14.1
28P859	14.2
28P1127	14.1
28P1127	14.2
28P2030	14.2
28E2450	9.5
28E2450	10.4
28E6140	14.2
28E7640	9.5
29K530	8.5
29E3360	8.5
29E3560	10.3
29E3800	14.1
29E3800	14.2
29E14780	10.5
30K7382	14.1
30K13671	14.1
30E16161	9.2
30E19880	10.2
30K23302	8.2
30K23302	8.4
30K29160	14.1
30K30570	10.6
30K43081	14.2
30E62400	14.1
30E71660	8.5
31E631	5.1
31E1310	8.5
31E3561	5.1
33K400	10.6
35K1222	9.1
35E3580	9.2
35K3770	14.1
35K3770	14.2
35K4101	6.1
36E93	9.2
38K1861	14.1
38K1861	14.2
38E1945	10.4
38E6610	8.6
38E6620	8.6
38E10020	10.5
38E10030	10.5
38E10210	14.2
38E10220	14.2
38E10230	14.2
38E10240	14.2
38P90739	8.6
42K1390	9.2
50P680	14.1
50P680	14.2
52K1661	9.4
53K291	9.3
53E310	9.4
53E310	9.5
53E690	9.3
53E2351	9.4
53E2351	9.5
54E861	10.4
55E8380	8.6
55E9991	8.4
55E10096	9.5
55E30940	8.6
62K1027	6.1
62K4821	6.1
68E23610	10.5
90E76	5.1
93K940	9.1
93K950	9.1
94K85	10.3
94E850	10.6
94K862	10.6
94K1940	10.5
97K5750	15.1
101E1020	1.2
101K4280	1.1
101K4531	1.1
101K4541	1.1
101K12890	1.1
104K53	1.2
105K832	1.2
105K1084	1.2
105K2251	1.2
107E140	1.1
110K272	1.2
110K771	10.4
110K771	10.6
110K771	14.1
110K771	14.2
110E1020	1.1
110E1240	1.1
110E7290	1.2
110P61609	1.1
111K21	1.2
113K183	6.1
113K193	6.1
113P60251	16.1
113P60312	16.1
113P60984	16.1
114P60111	16.1
114P60303	16.1
114P67208	16.1
115K470	9.4
115K521	9.5
115P537	16.1
115E1410	10.1
115E2231	10.2
115P60080	16.1
115P60081	16.1
115P60155	16.1
115P60182	16.1
117K2181	1.2
117K3091	1.2
117E6911	8.6
117K13891	1.2
117K14141	1.2
117P24088	1.2
117P24303	1.2
117S65421	1.2
117S65422	1.2
118E2340	9.3
120E2470	6.1
120E5540	10.2
121K407	9.4
121E942	8.1
121E942	8.3
121K1751	9.3
121E1910	10.1
121E1910	14.1
121E1910	14.2
121E2400	10.1
121E2921	14.1
121E2921	14.2
121K5891	9.5
121K5925	9.5
122E302	6.1
125K184	8.6
125K253	9.2
125K992	9.2
125K1051	8.6
126E112	10.2
126E121	10.2
126K4681	10.1
127E833	1.1
127K1670	9.3
127E2360	1.1
127K2671	9.3
127K17160	9.3
130K12480	9.3
130K16232	8.5
130K17360	9.3
130K33352	9.3
130K45680	9.5
130K52840	6.1
140K4723	1.2
140K4733	1.2
140K7902	1.2
140K8142	1.2
140K21430	1.2
140K23113	1.1
140K27911	1.2
140K45475	1.2
142E480	1.1
142P60025	1.1
142P60099	1.1
413W15355	9.2
413W15555	1.1
413W31054	8.1
413W31054	8.3
413W31553	9.1

PART NUMBER	PL LOC.
423W58402	5.1
423W59202	10.2
600K3773	8.1
600K3773	8.3
600K5230	10.3
600S5951	1.1
600K6830	14.1
600K6830	14.2
600K8481	10.3
600K8931	10.4
600K8931	10.5
600K8931	10.6
600K9020	8.1
600K11390	5.1
600K11831	9.3
600K11930	15.1
600K12020	10.4
600K12030	10.4
600K14082	9.4
600K15861	8.6
600K16080	15.1
600K16291	10.6
600K19352	8.6
600K21200	14.1
600K21200	14.2
600K24052	6.1
600K24350	8.5
600K25780	9.2
600K29600	10.5
600K29980	9.2
600K31170	10.5
600K32840	9.5
600K33500	8.3
600K35190	14.1
600K35190	14.2
600K35891	1.2
600K37360	10.1
600K39660	10.4
600K40990	9.5
600K45680	8.6
605K1010	15.1
606K291	14.1
707W1634	1.1
707W1652	1.1
708W4001	1.2
708W4501	1.2

6. General Procedures / Information

Section Contents

Diagnostic Tests

This section contains the Input and Output diagnostic test procedures.

To Enter the Diagnostic Mode:

2510 Press and hold the ***Copy Output*** button while switching on the copier.

2515 Press and hold the ***Bond*** and ***Film*** buttons while switching on the copier.

Once the copier is in the diagnostic mode, all the lamps on the control panel will light for approximately three seconds, then they will no longer be lit. The current revision level of the software will be displayed, indicated by the letter **L** and a number. A zero, **0**, will then be displayed indicating that the software is in the diagnostic mode. If **b** is displayed, the copier has a controller board malfunction at the diagnostic level.

The ***Copy Contrast*** UP and DOWN buttons are used in order to select the component to be tested.

Pressing the ***Start*** button will start the test.

To Exit the Diagnostic Mode:

Press the ***Stop*** button in order to exit the Diagnostic test. Switch off the power in order to exit the diagnostic mode.

Input Diagnostic Test Procedure

The input diagnostic test is used to ensure that the electrical "input" components of the copier are operating correctly.

1. Enter the diagnostic mode.
2. Press the ***Copy Contrast*** UP or DOWN button until the TEST indicator appears on the display.

CAUTION

(2510, 2515 W/O Tag 2, 7, or 89): *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor [A]; always enter the codes [g] fuser and [J] cooling fans first, and then allow the copier to operate for at least 2 minutes. Then enter the code [A] to start the main drive motor.*

3. Press ***Start*** button in order to begin the test.
4. Manually operate the component being tested.
5. The condition of the component will be indicated by the state of the bottom ***Copy Output*** LED (**Program** - 2510 without Tag 5; ***Film*** - 2515 and 2510 with Tag 5).
   a. If the LED is alternately lit and unlit as the component is manually operated, the component and its circuitry are functioning correctly.
   b. If the LED is always lit, the component and its circuitry are in a high condition.
   c. If the LED is always not lit, the component and its circuitry are in a low condition.
6. Press the Stop button in order to exit the Diagnostic Test.

Input Diagnostic TEST Procedure

INPUT COMPONENT	TEST SELECTOR	TEST INDICATOR
2510		
MOTION SENSOR	TOP SEGMENT OF 7 SEGMENT DISPLAY	FILM LED
DOCUMENT SENSOR	TOP RIGHT SEGMENT OF 7 SEGMENT DISPLAY	FILM LED
2515		
MOTION SENSOR	TOP SEGMENT OF 7 SEGMENT DISPLAY	FILM LED
DOCUMENT SENSOR	TOP RIGHT SEGMENT OF 7 SEGMENT DISPLAY	FILM LED

Output Diagnostic Test Procedure

The output diagnostic test is used to ensure that the electrical "output" components of the copier are operating correctly. The output diagnostic test allows operation of the individual output component to verify its operation.

Output Diagnostic Test Procedure

1. Enter the diagnostic mode.
2. Press the ***Copy Contrast*** UP or DOWN button until the TEST indicator appears on the display.
3. Press the ***Start*** button in order to begin the test.
4. Observe the component for the correct operation. If the component and its circuitry are functioning correctly, the component will operate. If not, refer to the documentation to locate the problem.
5. Press the ***Stop*** button in order to exit the Diagnostic Test.
6. Switch off the copier in order to exit the diagnostic mode.

OUTPUT COMPONENT	TEST INDICATOR
Main drive motor	A
(2515 W/ Tag 2 or 89)	
Main Drive only	Bottom Segment
Paper feed clutch	b
High voltage power supply	C**
(2515) Toner dispense solenoid	d
Transfer corotron	E*
Illumination lamp	F**
(2510, 2515 W/O Tag 2 or 89)	
Fuser	g****
(2515 W/ Tag 2 or 89)	
Beeper	g
Watchdog timer (Resets controller)	H***
Cooling fan	J
Cleaning blade solenoid	L
Copy count meter	P
(2515 only) Analog voltage output from the humidity sensor	U
(2515 only) Analog voltage output from the toner concentration sensor.	Y

* In order to perform this test, enter high voltage power supply [C] and main drive motor [A] diagnostic tests first.

** In order to prevent damage to the photoreceptor drum, enter main drive motor [A] test first.

*** The watchdog timer, when operating correctly, will cause the segments to light in rotation. Starting this test will also exit the diagnostic mode.

**** **(2510, 2515 W/O Tag 2 or 89):** In order to prevent heat damage to the manifold, enter main drive motor [A] and cooling fans [J] test first

Special Tests

The following table gives special diagnostic tests that are used to enable or disable features or to change the operating parameters. To enter a special test, the copier must first be in the diagnostics mode.

CAUTION

(2510, 2515 W/O Tag 2, 7, or 89): *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor [A]; always enter the codes [g] fuser and [J] cooling fans first, and then allow the copier to operate for at least 2 minutes. Then enter the code [A] to start the main drive motor.*

Each special test has a value that is stored in non-volatile memory (NVM). If there is a default value, it is found in the VALUE column.

NVM values may be changed by entering the special test, pressing the ***Start*** button, and then using the ***Copy Contrast*** UP and DOWN keys to select the desired NVM value. To enter the selected value, press ***Start*** again. To exit the test, press ***Stop***.

CODE	DESCRIPTION	VALUE
0	Fuser Temperature Adjustment. In order to increase the fuser temperature, press the ***COPY CONTRAST*** UP button. In order to reduce the temperature, press the ***COPY CONTRAST*** DOWN button. The value is between 1 and 9.	5
1 **2515 only**	Timeout to Power Saver (USO), (XLA 60 Hz) or Low Power (RX), (XLA 50 Hz) Mode. This is the amount of time from the ready mode to the power saver (USO), (XLA 60 Hz) or low power (RX), (XLA 50 Hz) mode and **P** (USO), (XLA 60 Hz) or **L** (RX), (XLA 50 Hz) is displayed. The time is 45 seconds plus 15 multiplied by this value. In order to increase the time, press the ***COPY CONTRAST*** UP button. In order to reduce the time, press the ***COPY CONTRAST*** DOWN button. Each increment represents 15 seconds. The value is between 1 and 9. The range of values is from 60 to 180 seconds.	1

CODE	DESCRIPTION	VALUE
1 **2510 only** 2 **2515 only**	Enables an installed foreign accessory. The allowable values are: The foreign accessory feature is enabled. a 450 ms pulse is provided near the end of each **copy**. The foreign accessory feature is disabled. The foreign accessory feature is enabled. a 450 ms pulse is provided near the end of each incrementing of the **copy count meter.**	 1 2 3
3 **2515 only**	Terminates imaging after 1 to 8 feet (0.3 to 2.8 m) of media. The value entered may be **1** through **9**. A value of **9** allows an unlimited image length.	9
4 **2515 only**	Setpoint for the toner concentration. See ADJ 9.4	5

CODE	DESCRIPTION	VALUE
5 Notes 1and 2	Exposure Adjustment The drum is charged and the illumination lamp is switched on. See ADJ 9.2	5
6 Notes1 and 2	High Voltage Set-up, used to check and adjust the corotron voltages. Electrostatic Series (ADJ 9.2)	
7	Registration, used to adjust the registration. Use the ***Copy Contrast*** Up or **Copy Contrast Down** buttons to change the registration. ADJ 8.1 Registration	5
8	Timeout to Rest (sleep) Mode. Adjusts the amount of time that elapes from when the copier enters the Power Saver mode (P displayed) until the copier enters the Rest (Sleep) mode (rotating segment). To increase the time, press ***Copy Contrast*** Up. To reduce the time, press ***Copy Contrast*** Down. The timeout = NVM x 15 minutes. See ADJ 3.1	5
9	Country Configuration. 1 120 VAC, 60 Hz 2 220 to 230 VAC, 50 Hz 3 240 VAC, 50 Hz 4 100 VAC, 50 or 60 Hz	1
Lower Right Segment	NVM Reset to Nominal	N/A

Note 1: During the tests under codes 5 and 6 the fuser lamp is on.

Note 2: This test will switch on the main drive motor. In order for the main drive motor to run, the fuser must be at the correct temperature.

Combined Output Diagnostic Test

This procedure allows the testing of two or more components at the same time.

1. Enter the diagnostic mode.
2. Press the ***Copy Contrast*** UP or DOWN button until the TEST indicator for the component to be tested is displayed.
3. Press the Start button, and the component will operate.
4. Repeat steps 2 and 3 for the remaining components to be tested.
5. Press the Stop button in order to exit the Diagnostic Test.

Image on Drum (Panic Stop) Procedure

This procedure allows the isolation of copy quality problems by observing the image on the drum before transfer of the toner to the media. If the defect is visible on the drum before transfer, the defect is related to the charge, the image, or the developer. If the defect is visible on the copy after transfer, the defect is related to the transfer or fuser.

1. Enter the code [5] and insert test pattern, 82E5020; press the ***Stop*** button when the test pattern is almost half way into the document handler.
2. Remove the developer module.
3. If the defect is visible on the developed image, the defect cause is related to the charge, the image, or the developer. If the defect is not visible, the defect cause is related to the transfer or the fuser.

The De-Toning Procedure (2515 only)

This procedure reduces excessive concentration of toner in the developer material.

1. Enter the diagnostic mode.
2. Enter the code [4] and adjust the value to[5].

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

(2515 W/O Tag 2, 7, or 89):

3. Enter the following codes .
   a. Enter the code [L] and press Start to energize the cleaning blade solenoid.
   b. Enter the code [j] and press Start to switch on the coolong fans.
   c. Enter the code [g] and press Start to switch on the fuser.
   d. Allow two minutes for the fuser to heat up and then enter the code [A] and press Start to switch on the main drive motor.
   e. Enter the code [C] and press Start to switch on the high voltage power supply.
   f. Enter the code [Y] and press Start to monitor the toner sensor.

(2515 W/ Tag 2, 7, or 89):

3. Enter the following codes.
   a. Enter the code [L] and press Start to energize the cleaning blade solenoid.
   b. Enter the code [A] and press Start to switch on the main drive motor.
   c. Enter the code [C] and press Start to switch on the high voltage power supply.
   d. Enter the code [Y] and press Start to monitor the toner sensor.
4. Allow th ecopier to run until the value of code [Y] is at 4, then press **Stop.** The developer material is now detoned below the value of 5 adjusted in Step 2.
5. Exit the diagnostic mode. Loosen the latch on the right side of the Upper Rear Cover. Pull back the cover to observe the toner cartridge. Press **Start** and allow the copier to cycle until the cartridge begins moving slowly for approximatly one minute.
6. Return to the procedure that refered you to this procedure.

Oiler Wick Priming (2510 W/ Tag 252, 2515)

This procedure adds additional oil to the wick in order to prevent a fuser roll offsetting copy quality problem.

1. Remove the Oil Dispense Assembly REP (10.5).
2. Remove the Oil Dispense Roll Assembly REP (10.10).
3. (Figure 1): Prime the wick.
4. Reinstall the Oil Dispense Roll Assembly.
5. Perform the Initialization of the Fuser Roll procedure if it was not done previous to doing this procedure.

Note: If the Initialization of the Fuser Roll procedure is going to be done after completing this procedure, do not install the Oil Dispense Assembly.

6. Install the Oil Dispense Assembly.

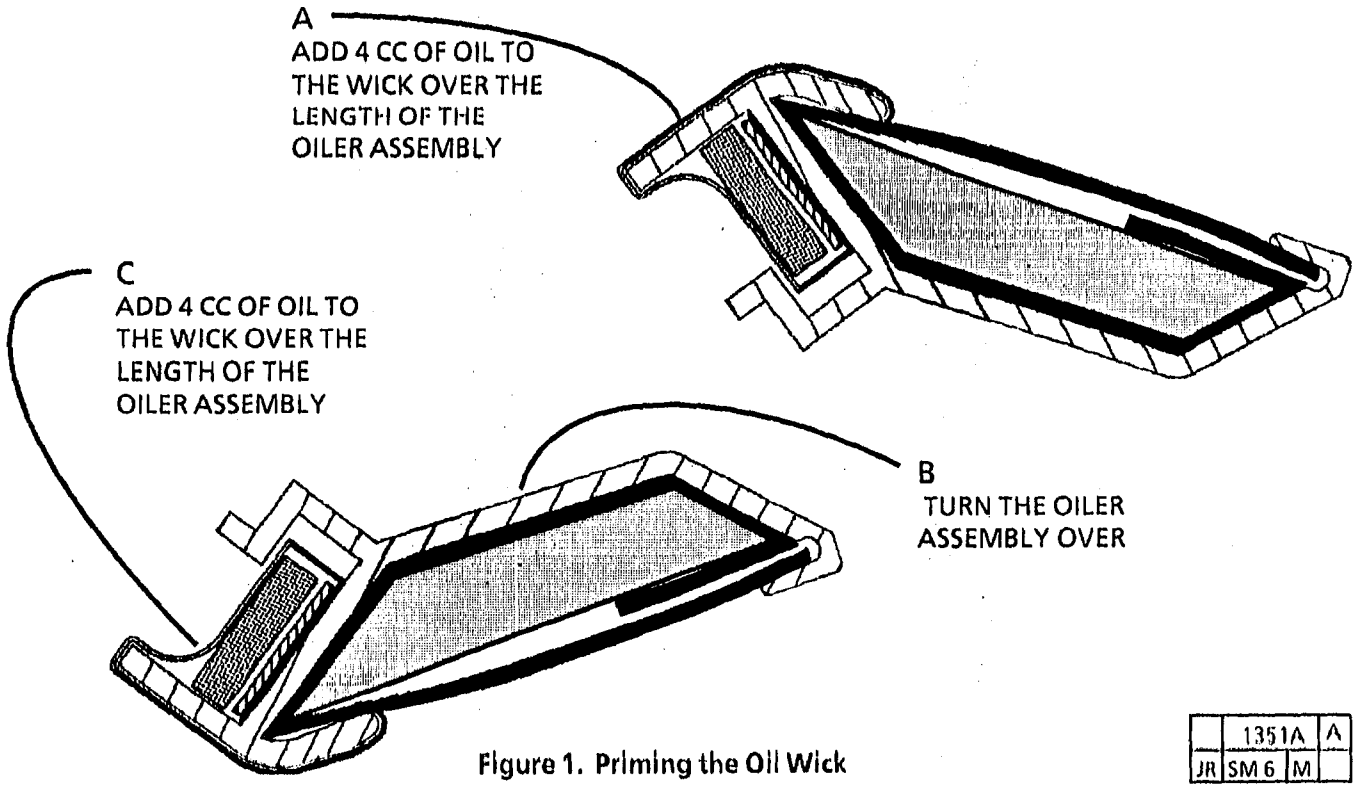


Figure 1. Priming the Oil Wick

	1351A	A
JR	SM 6	M

Photoreceptor Drum Maintenance

WARNING

When performing the photoreceptor drum maintenance:

- **Ensure that there is adequate ventilation in the area.**
- **Use protective gloves at all times.**
- **Do not smoke.**
- **Wash your hands when the procedures are completed.**

CAUTION

- *These procedures must be completed in the shortest possible time in order to reduce effects of light shock.*
- *Wiping the photoreceptor with too much pressure can cause abrasion to the selenium coating; the selenium will crystallize and will cause copy quality problems.*

Washing Procedure

The Washing Materials:

Photoreceptor Maintenance Kit, Film Remover

1. Remove the photoreceptor drum assembly from the xerographic module (REP 9.2).
2. Put on gloves.
3. Gently remove any dry ink/ toner and developer from the surface of the drum, using a dry polyurethane pad.
4. Apply Film Remover to a clean polyurethane pad.
5. (Figure 1): Wash the drum from end-to-end using a circular movement.

Note: Ensure that the ends of the drum are washed.

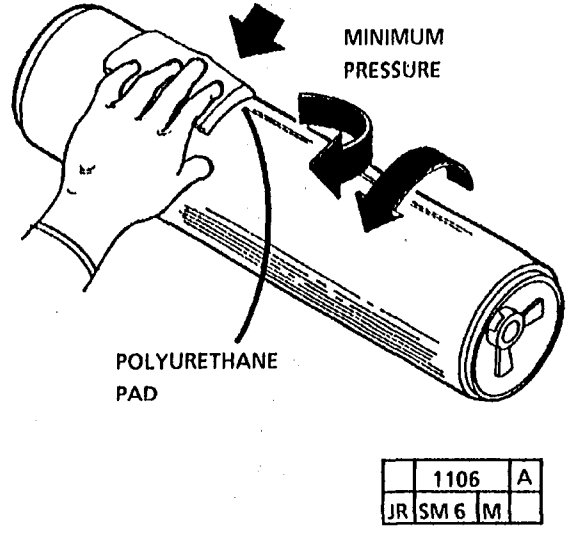


Figure 1. Washing the Drum

6. Using the clean side of the polyurethane pad, continue washing the drum until the entire surface of the drum is covered with film remover.
7. Allow enough time for the air to dry the surface of the drum.
8. Use the dusting pouch to apply a thin layer of zinc stearate over the entire surface of the drum.
9. Buff the surface of the drum using the clean side of the dry polyurethane pad.

NOTE: Ensure that the ends of the drum are buffed as well as the center of the drum.

10. Continue to buff the surface of the drum for three complete revolutions of the drum.
11. Apply a final thin layer of zinc stearate over the entire surface of the drum.
12. Reinstall the drum.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

13. **(2510, 2515 W/O Tag 2, 7, or 89):** Enter diagnostic mode. Enter the codes [L], [g], and [J]. Enter the codes (A), [C], [E], and [F]; and allow the copier to run for 5 more minutes.

    (2515 W/ Tag 2, 7, or 89): Enter diagnostic mode. Enter the code [L]. Wait at least 2 minutes enter the codes (A), [C], [E], and [F]; and allow the copier to run for 5 more minutes.
14. Place the used washing materials in the disposal bag.
15. Wash your hands.

(Continued)

Photoreceptor Drum Maintenance

The Polishing Procedure

The polishing materials:

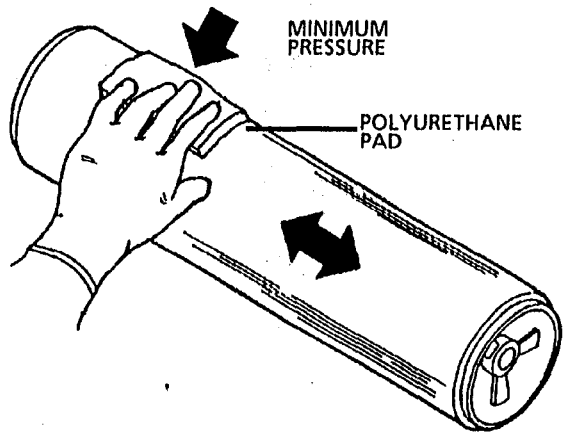
Photoreceptor Maintenance Kit,
Photoreceptor Polish

NOTE: This procedure can be used to remove large areas of filming or fine scratches.

CAUTION

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

1. Remove the photoreceptor drum assembly from the xerographic module (REP 9.2).
2. Put on gloves.
3. Gently remove any dry ink / toner and developer from the surface of the drum using a dry polyurethane pad.
4. Completely soak two sponges with water.
5. Using a paper towel, remove some water from one of the sponges until the sponge is only slightly damp.
6. Using another paper towel, remove some water from the second sponge until it is drier than the first sponge.
7. Shake the container of polish thoroughly.
8. Put a large amount of polish on a clean polurethane pad.
9. (Figure 2): Polish the drum.



	1107		A
JR	SM 6	M	

Figure 2. Polishing the Drum

NOTE: Ensure that the entire surface of the drum is polished.

10. Remove the polish from the drum using the first sponge. Then remove any residual polish using the second sponge.
11. Buff the surface of the drum using the clean side of the dry polyurethane pad.
12. Use the dusting pouch in order to apply a thin layer of zinc stearate over the entire surface of the drum.
13. Buff the surface of the drum again.

NOTE: Ensure that the ends of the drum are buffed as well as the center of the drum.

14. Continue to buff the surface of the drum for three complete revolutions of the drum.
15. Apply a final thin layer of zinc stearate over the entire surface of the drum.

CAUTION

After completing the polishing procedure, the drum must be used immediately. If the drum is stored, crystallization problems may occur.

16. Reinstall the drum.

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

17. **(2510, 2515 W/O Tag 2, 7, or 89):** Enter diagnostic mode. Select the codes [L], [g], and [J]. Wait at least 2 minutes enter the codes [A], [C], [E], [F], and; and allow the copier to run for 5 more minutes.

    (2515 W/ Tag 2, 7, or 89): Enter diagnostic mode. Select the codes [L]. Enter the codes (A), [C], [E], [F], and; and allow the copier to run for 5 more minutes.
18. Place the used polishing materials in the disposal bag.
19. Wash your hands.

Photoreceptor Cleaning Enhancement Procedure

1. Remove the Photoreceptor Drum Assembly (REP 9.2).
2. Use the dusting pouch (8R171) to apply a thin layer of zinc stearate over the entire surface of the photoreceptor.
3. With a new lint free cloth (600S4372), wipe the entire surface of the photoreceptor using moderately heavy pressure. Use a back and forth motion of 6 - 10 strokes while revolving the photoreceptor 3 revolutions.
4. Repeat steps 2 and 3 one time and then continue with step 5.
5. Apply a thin layer of zinc stearate over the entire surface of the photoreceptor.
6. Reinstall the Photoreceptor Drum Assembly (REP 9.2).

TapeTransfer (Developer Material Failure) Procedure

Purpose

The purpose of this procedure is to determine the failure of the developer material.

Materials Required

Test Pattern 82E5980
Scotch ™ Brand 810 Magic ™ Tape
4024 white bond media

1. Check/Adjust the Electrostatic Series (ADJ 9.2). and Image Density (ADJ 9.4).
2. Select the **Document Light Copy** and **Copy Contrast** middle LED.
3. Make a copy of test pattern 82E5980. When approximately 12 inches of the test pattern has been fed into the Document Handler, press the **Stop** button.
4. Remove the following:
   - Right Side Cover
   - Upper Rear Cover
   - Developer Module
5. Cut off approximately eight inches of tape. Fold one end over to make a half inch tab.
6. Rotate the Main Drive Motor backwards in order to access the developed image on the photoreceptor.

Sanding the Heat Roll

Purpose

The purpose is to recondition the heat roll surface to improve media feed through the fuser.

Use Scotch Brite or 220 to 300 grit abrasive paper to roughen the roll. Use light uniform pressure while roughening the roll. Do not use a circular motion but, use long straight strokes over the length of the roll. Roughen the complete surface, then clean with film remover and apply oil over the surface.

NOTES

Initialization of the Fuser Roll (2510 W/Tag 252; 2515)

Purpose

Correct operation of the Fuser Roll requires that the Fuser Roll be initialized by coating the roll evenly with fuser oil. The fuser roll must be at operating temperature as the oil is applied. The following steps specify the correct technique for initializing the fuser roll.

This procedure should be performed when one of the following conditions exists:

- Copier Installation
- After replacing the oil pads
- Offsetting copy quality condition exists
- After installing a new fuser roll
- Normal Call

Perform the procedure exactly as written and do not omit any steps.

Items Required

1 tube (8cc) fuser oil
1 pair disposable gloves
Heavy duty towels (blue absorbant)

WARNING

The Fuser Roll may be hot. Use extreme caution when working in the fuser area and do not touch any heated components.

WARNING

Fuser oil can cause severe eye irritation. Wear protective gloves when handling parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Wash hands after handling components covered with fuser oil.

Initialization Procedure

1. Lower the feed in shelf, the latching cover, and the front cover.
2. Remove the oil dispense assembly (see REP 10.7 for the assembly on the 2515)

NOTE: To protect the media guide plate, the fuser pressure plate, and the media feed rolls from excess fuser oil, you will insert folded sheets of media under the fabric guide.

NOTE (Step 3B): Use 2 sheets of either C or D size bond media. Fold the C size bond lengthwise in half; fold the D size lengthwise in thirds.

3. (Figure 1) : Install the 2 sheets of media under the full length of fabric guide, with the sheets overlapping in the center.
4. Lower the front cover.
5. Connect the main power cord (if disconnected).
6. Apply approximately 1/3 of an 8 cc tube of fuser oil directly on the surface of the fuser roll.
7. Raise the front cover and latching cover.

(Continued)

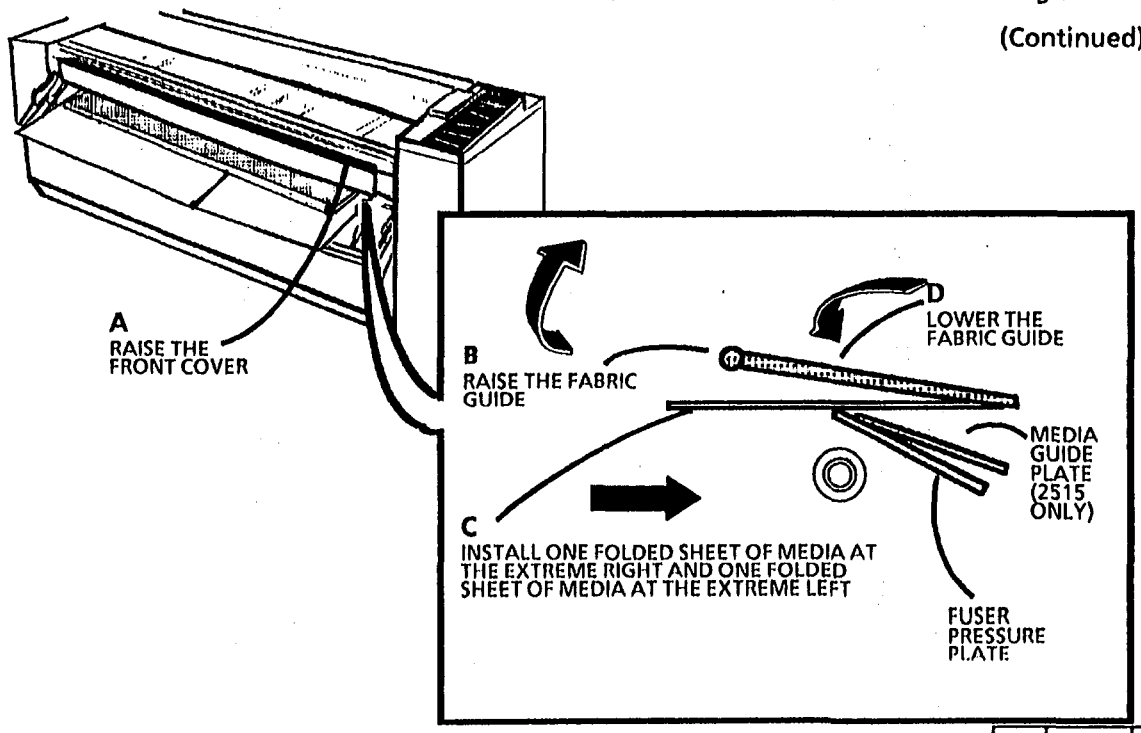


Figure 1. Installing the Media Under the Fabric Guide

0	1327		B
0/R	SM 6	M	0

(Continued)

8. Enter the diagnostic mode.

CAUTION

(2510, 2515 W/O Tag 2, 7, or 89): *To prevent damage to the drive gears; before entering any diagnostic test which requires the use of the main drive motor [A]; always enter the codes [L], cleaning blade solenoid, [g] fuser and [J] cooling fans first, and then allow the copier to operate for at least 2 minutes. Then press code [A] to start the main drive motor.*

WARNING

(2515 W/ Tags 2, 7, or 89): There will be a time delay between the time the code [A] is entered and the time the motor starts to turn. The motor will not start until the fuser is at the correct temperature.

9. **(2510, 2515 W/O Tag 2, 7, or 89):** Enter the following diagnostic codes:

   - code [L] and press **Start.**
   - code [g] and press **Start.**
   - code [J] and press **Start.**
   - wait at least 2 minutes.
   - code [A] and press **Start.**

   (2515 W/ Tag 2, 7, or 89): Enter the following diagnostic codes:

   - code [L] and press ***Start.***
   - code [A] and press **Start.**

10. Allow the copier to run for approximately 15 seconds.

11. Press **Stop.**

12. Lower the transport latching cover and the front cover and perform steps 6 through 11 two more times, or until the tube of oil is empty.

13. Lower the transport latching cover and the front cover.

WARNING

The fuser roll may be hot. Use extreme caution when working in the fuser area and do not touch any heated components.

14. Manually rotate the fuser roll and inspect the entire surface of the roll for dry areas.

Note: Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

15. If there are dry areas on the fuser roll, wipe the oil from the surrounding areas to the dry areas with a towel.

16. Raise the transport latching cover and the front cover.

17. **(2515 W/O Tag 2, 7, or 89):** Enter the following diagnostic codes:

    - code [L] and press ***Start.***
    - code [g] and press **Start.**
    - code [J] and press **Start.**
    - wait at least 2 minutes.
    - code [A] and press **Start.**

    (2510, 2515 W/ Tag 2 or 89): Enter the following diagnostic codes:

    - code [L] and press ***Start.***
    - code [A] and press **Start.**

(Continued)

(Continued)

18. Allow the copier to operate for a minimum of 10 minutes.
19. Lower the transport latching cover and the front cover.
20. Wipe the excess oil off the fabric guide with towels.
21. Remove and discard the media from under the fabric guide.
22. (Figure 2): Ensure that the fuser pressure plate and the media guide plate are located correctly.

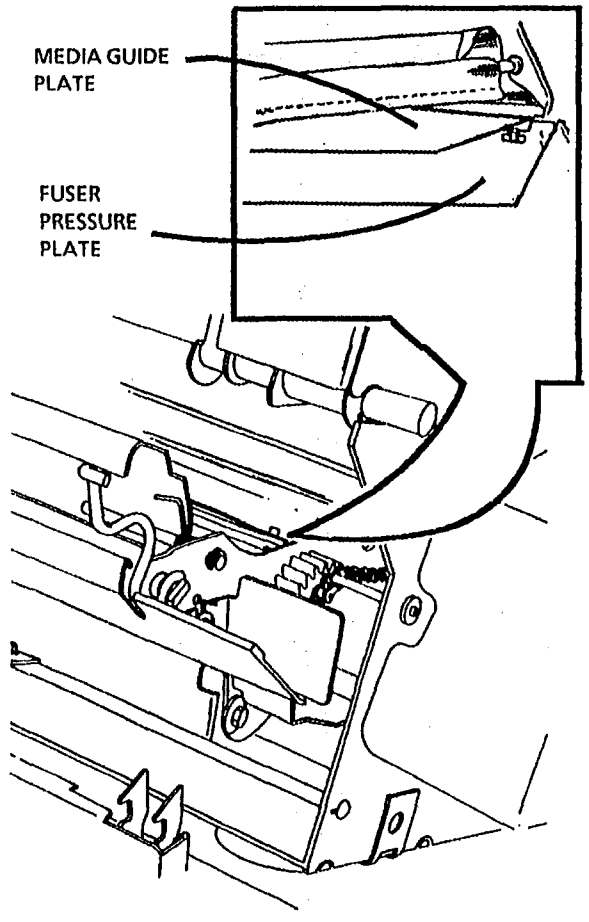


Figure 2. Location of the Media Guide Plate and the Fuser Pressure Plate

23. Reinstall the oil dispense assembly.
24. Raise the transport latching cover, the front cover and the feed in shelf.
25. Wash your hands to remove any fuser oil that may remain on them.
26. In order to remove the excess oil from the fuser roll, perform the following:

    a. **(2510, 2515 W/O Tag 2, 7, or 89):** Enter the following diagnostic codes:
       - code [L] and press ***Start.***
       - code [g] and press Start.
       - code [J] and press Start.
       - wait at least 2 minutes.
       - code [A] and press Start.
       - code [b] and press Start.

    (2515 W/ Tag 2, 7, or 89): Enter the following diagnostic codes:
       - code [L] and press ***Start.***
       - code [A] and press Start.
       - code [b] and press Start.

    c. Feed a minimum of 2 sheets of bond copy media on the extreme left side of the copier.
    d. Feed a minimum of 2 sheets of bond copy media on the extreme right side of the copier.

27. Return the copier to normal operation.

SPECIFICATIONS

PRODUCT CODES

The product code is located on the serial number plate and identifies the product configuration.

	60 Hz	50 Hz
2510	64G	60J
2515	4L3	4L2

PHYSICAL CHARACTERISTICS

	60 Hz	50 Hz
2510		
Weight	175 lb.	79.6 kg
Length	55 in.	1397 mm
Width	19 in.	483 mm
Height	13.5 in.	343 mm
2515		
Weight	180 lb.	81.8 kg
Length	55 in.	1397 mm
Width	19 in.	483 mm
Height	13.5 in.	343 mm

COPY RATE

Two inches per second (3 metres per minute)

MAGNIFICATION

2510/2515

1:1 nominal (± 1%) with 20 lb. (75 gsm) bond and test pattern 82E5980.

ELECTRICAL POWER REQUIREMENTS

60 Hz: The power outlet must be on a 15-20 ampere line that is dedicated (wired directly to the circuit breaker panel with no shared neutral and on a different phase from the lighting circuit, in order to prevent dimming the lights).

60 Hz: 105-125 VAC, 60 Hz, single phase

50 Hz: 220/240 VAC, 50 Hz, single phase

Current at 115 VAC:

Standby (Power Saver): 4 amperes
Running: 12 amperes

Current at 230 VAC:

Standby (Low Power): 2 amperes
Running: 6 amperes

Power Consumption:

Standby (Power Saver/ Low Power): 460 watts

Running: 1380 watts (60 Hz); 1400 watts (50 Hz)

Power cord length: 10 Feet (3 Metres)

ENVIRONMENTAL DATA

Maximum Temperature:	90° F 32° C
Humidity:	85%
Minimum Temperature:	60° F 16° C
Humidity:	15%
Maximum Altitude:	7000 feet (2132 metres) above sea level

Heat Output (Average)

2510
Standby:
(Power Saver - 60 Hz): 1570 BTU / HR
Standby:
(Low Power - 50 Hz): 109441 K- JOULES / HR
Running:
4700 BTU/ HR (297326.7 K-JOULES / HR)

2515
Standby:
(Power Saver - 60 Hz): 1730 BTU / HR
Standby:
(Low Power - 50 Hz): 109441 K- JOULES / HR
Running:
5170 BTU/ HR (327059 K-JOULES / HR)
Warmup Time:
80 seconds from room temperature.

GROUND AND POLARITY CHECK

CAUTION

Before installing the copier, check for correct voltage, polarity, and the grounding of the AC outlet provided by the customer. Use the Polarity Checker (600T467) or a multimeter. Incorrect voltage applied to the copier could result in poor performance or damage to the copier.

1. (Figure 1): Check the ground, voltage, and polarity.

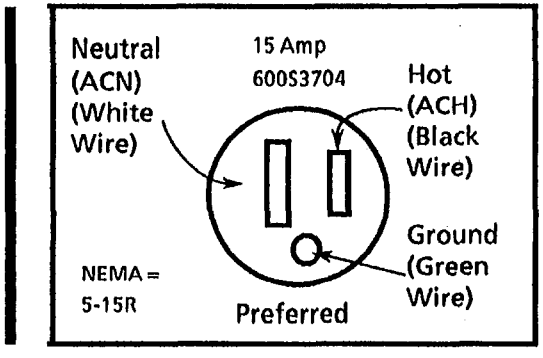


Figure 1. Checking the ground, voltage, and polarity

a. Check for 107 to 125 VAC between AC Hot and AC Neutral.

b. Check for 107 to 125 VAC between AC Hot and ground.

c. Check for less than 2 VAC between AC neutral and ground.

CAUTION

If specifications are not met, the AC outlet is wired or grounded incorrectly. Inform the Customer and request that a licensed electrician correct the problem. DO NOT make the correction yourself.

2. (Figure 2): Check that the minimum allowable space requirements are met.

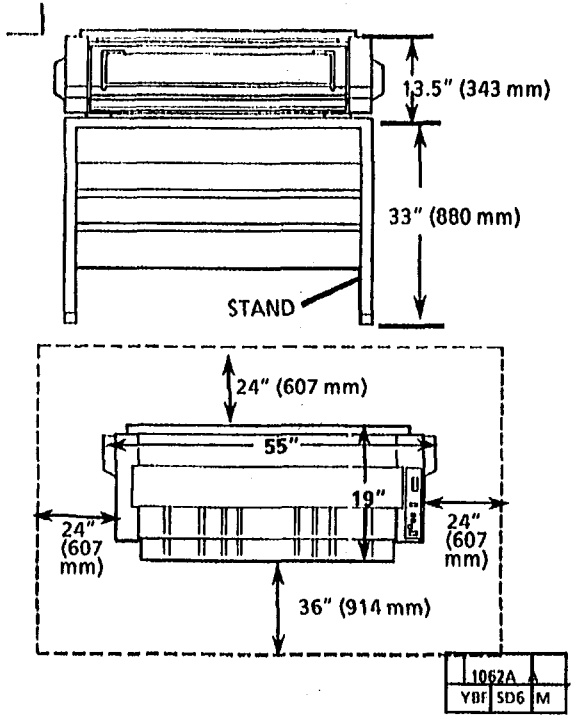


Figure 2. Minimum Space Requirements

NOTE: Machines on Table Tops:

1. *The table should be a minimum of 30 inches (762mm) high and a maximum of 36 inches (914mm) high.*
2. *The table must support a minimum weight of 175 pounds (80 KG).*
3. *The top measurements should be a maximum of 60 inches (1524mm) wide, and a maximum of 30 inches (762mm) deep.*
4. *The space requirements are the same as around the stand.*
5. *The table should be level within 1/4 inch (6.3mm) over 36 inches (914mm).*
6. *If the copier is installed on a table, the front edge of the copier should be flush with the front edge of the table. The copy feed shelf will extend beyond the edge of the table.*

NOTE: Fill out the quality report card accurately and completely. Record all problems as they are encountered doing the installation.

This product will produce ozone during normal operation. The ozone produced is dependent on copy volume and is heavier than air. Providing the proper environmental parameters as specified in Xerox installation procedures will ensure that concentration levels meet safe limits. If additional information concerning ozone is needed, request the Xerox publication 600P83222, "OZONE", by calling 1-800-828-6571.

3. (Figure 3): Remove the foam block.

4. (2510, Figure 4; 2515, Figure 5): Remove the right side cover.

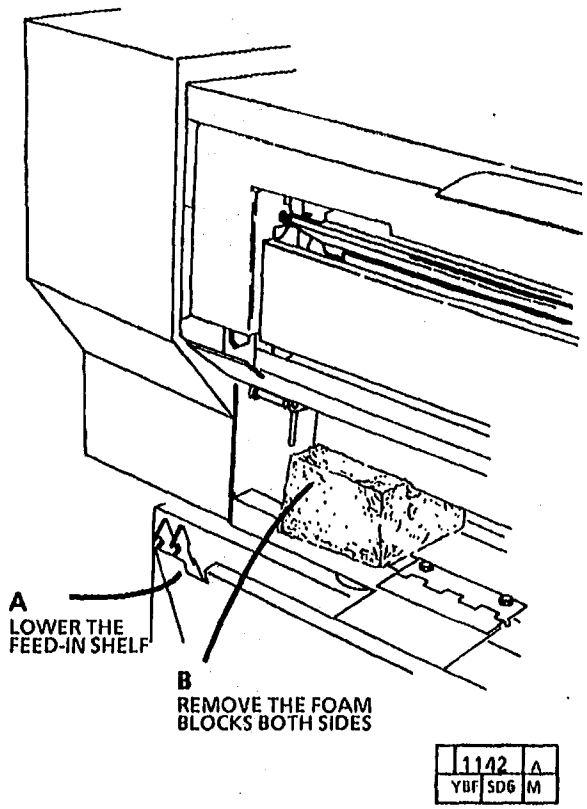


Figure 3. Removing the Foam Blocks

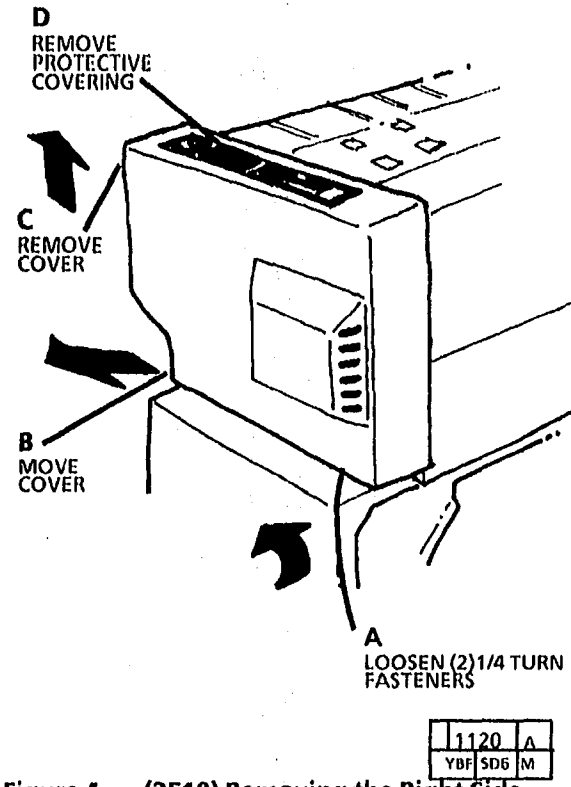


Figure 4. (2510) Removing the Right Side Cover

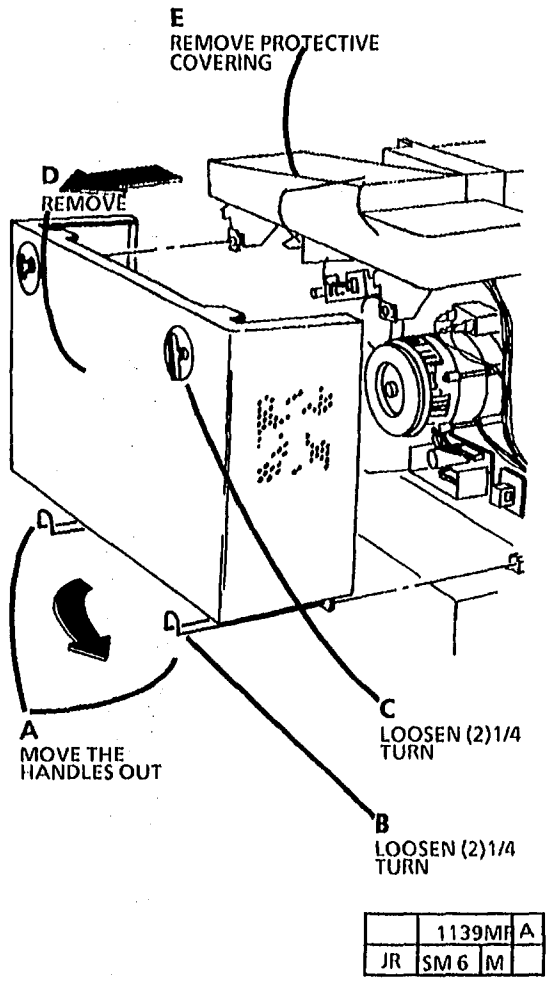


Figure 5. (2515) Removing the Right Side Cover

5. (2510, Figure 6; 2515, Figure 7): Remove the left side cover.

6. (2510 Figure 8; 2515 Figure 9): Ensure that the tag matrix is installed.

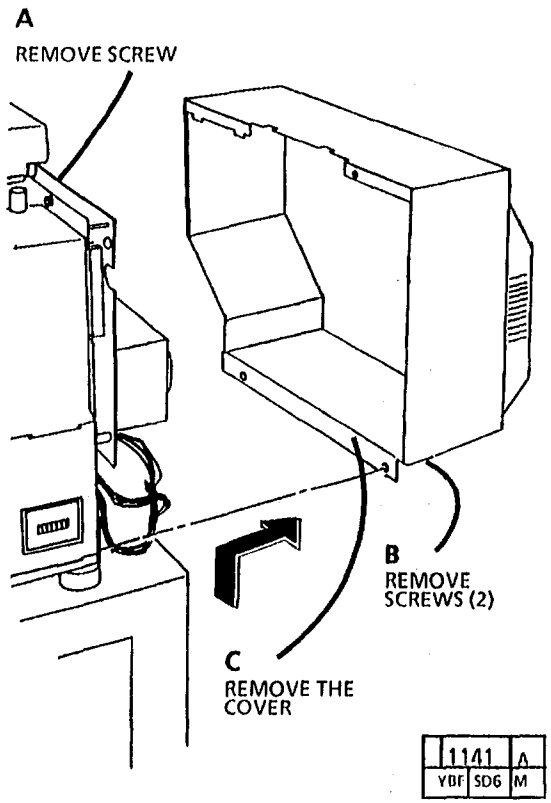


Figure 6 (2510). Removing the Left Side Cover

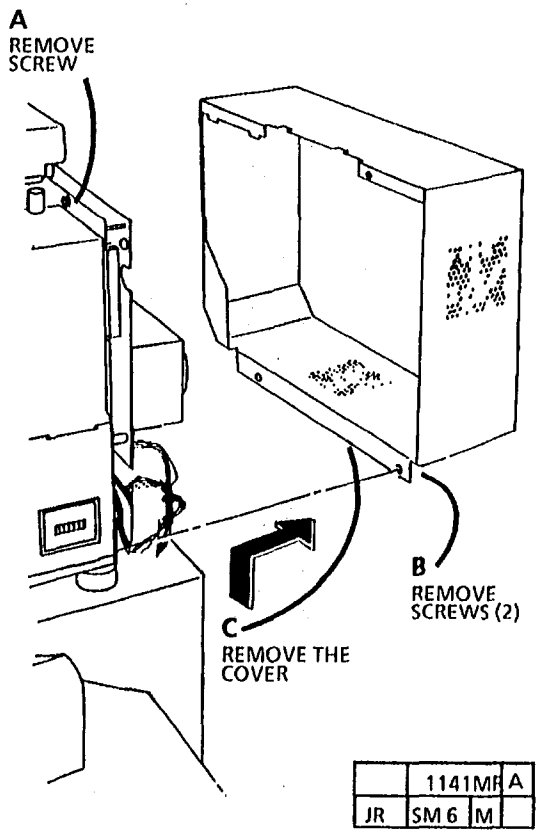


Figure 7 (2515). Removing the Left Side Cover

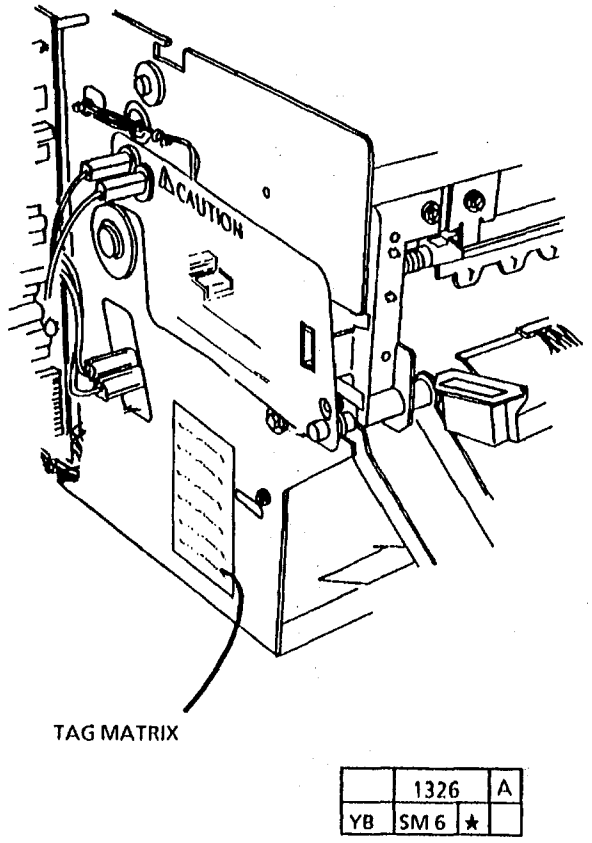
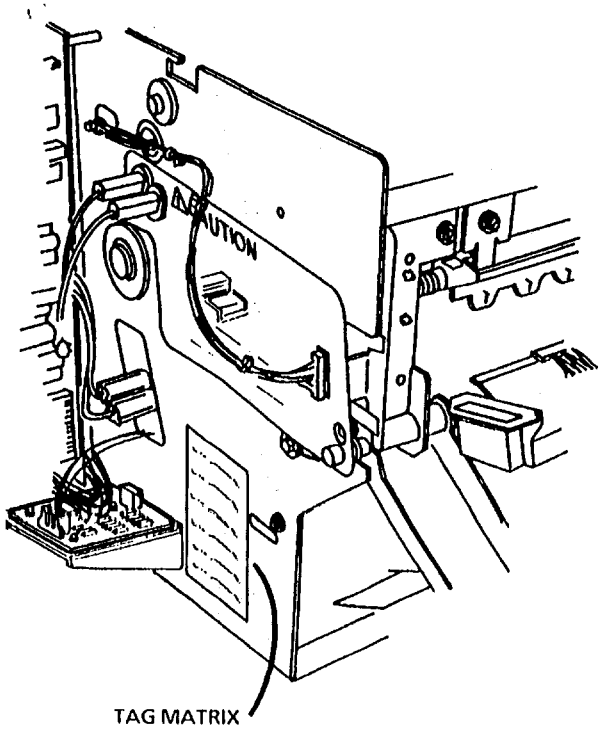


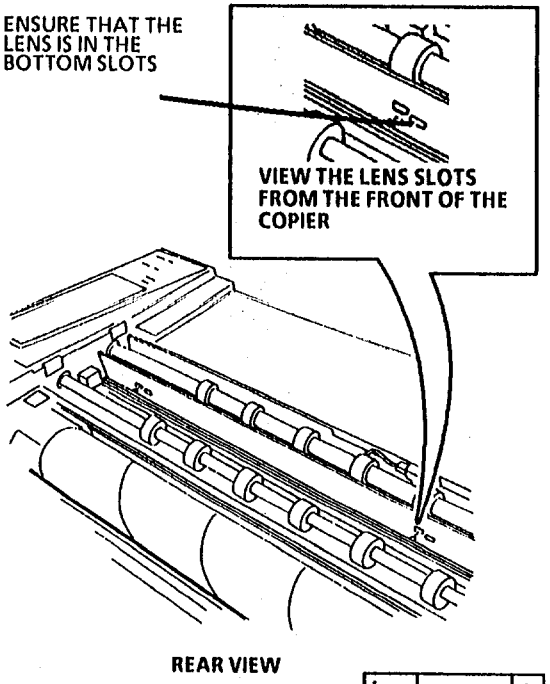
Figure 8. (2510) Tag Matrix



	1153	A
JR	SM 6 ★	

Figure 9. (2515) Tag Matrix

7. (Figure 10): Remove the platen and check that the document lens is seated correctly in the bottom slots.
8. Remove the plastic protective coating from both sides of the platen.



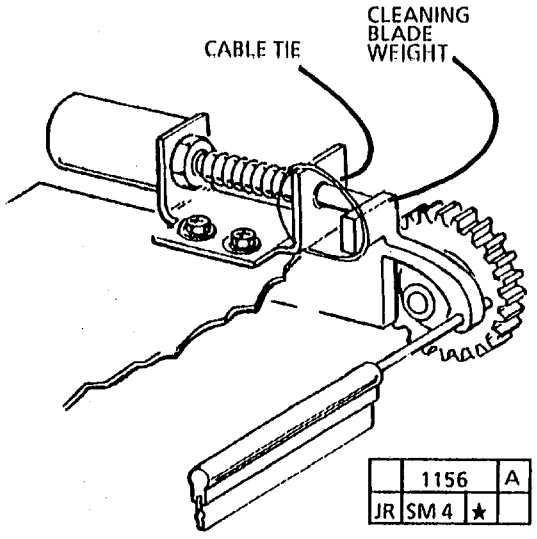
*	1183	A
JR	SM 6 M	

Figure 10. Removing the Platen and Checking the Document Lens

9. Clean both sides of the platen with anti-static cleaner and reinstall the platen. Leave the cleaner with the customer.
10. Remove the xerographic module (REP 9.1).

NOTE: The copier is shipped with the photoreceptor drum packed separately. The photoreceptor drum will be installed later in the procedure.

11. (Figure 11): Cut and remove the cable tie.



	1156	A
JR	SM 4 ★	

Figure 11. Cutting the Cable Tie

NOTE: Inside the fuser roll, there is a packing spring to support the fuser heat rod during shipment .

12. (Figure 12): Prepare to remove the fuser rod packing spring.

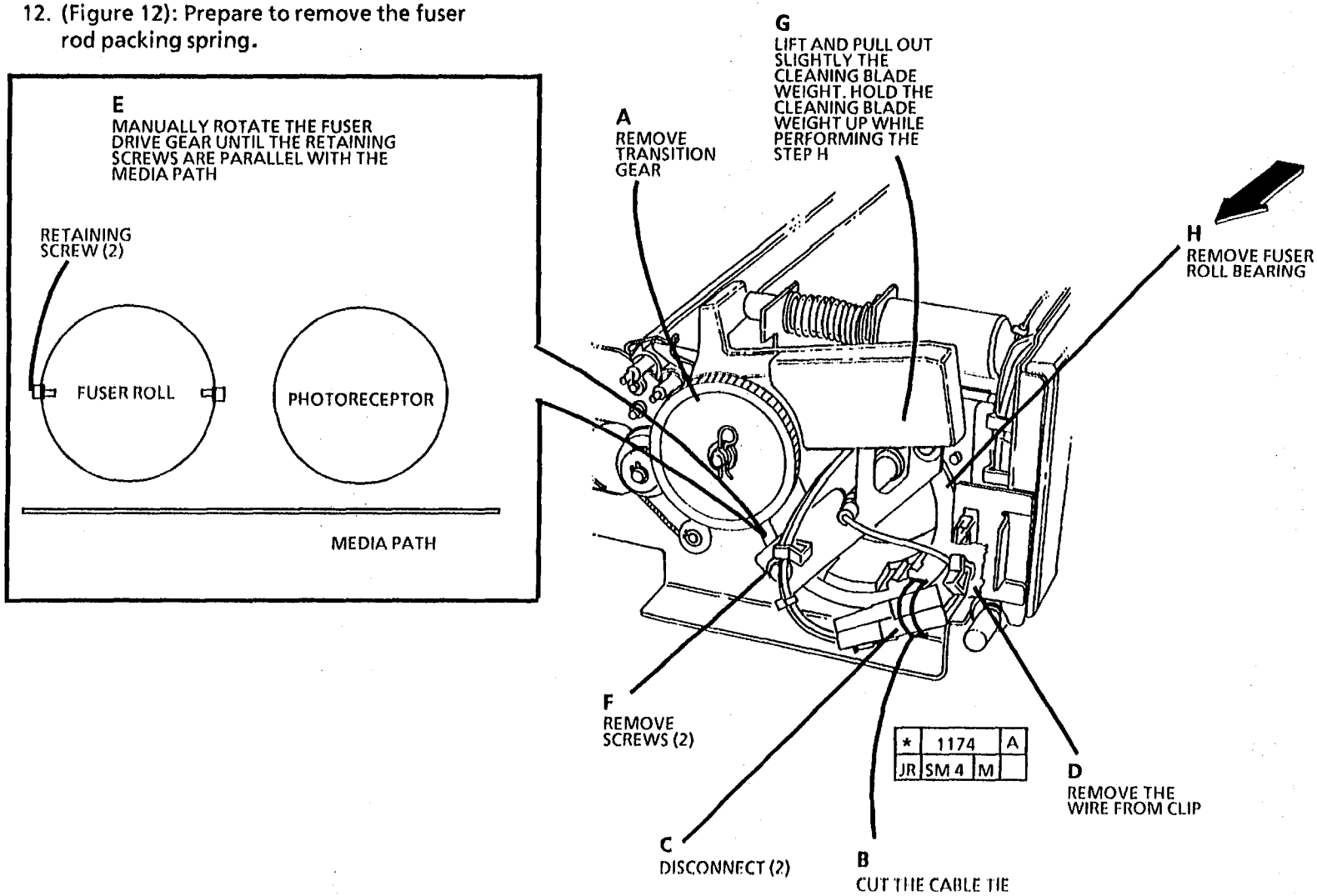
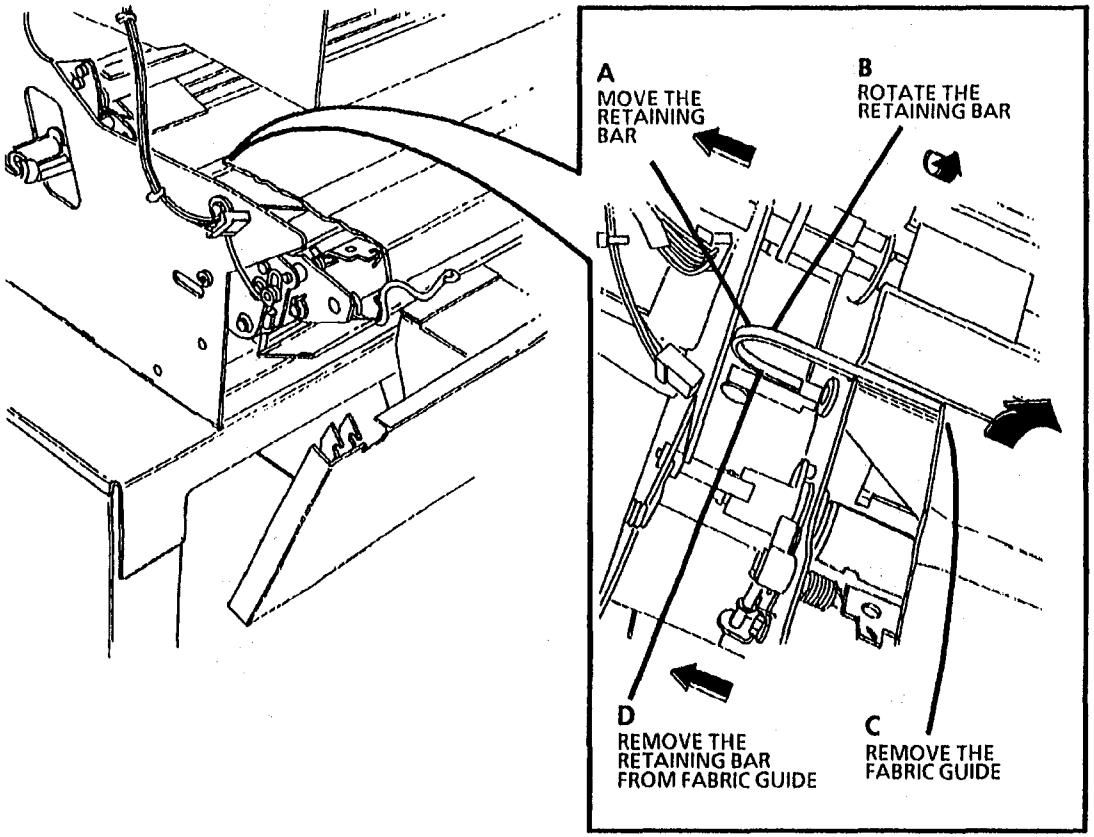


Figure 12. Preparing to Remove the fuser rod packing spring

13. (Figure 13): Remove the retaining bar from the fabric guide.



*	1175		A
JR	SM 4	M	

Figure 13. Removing the Retaining Bar

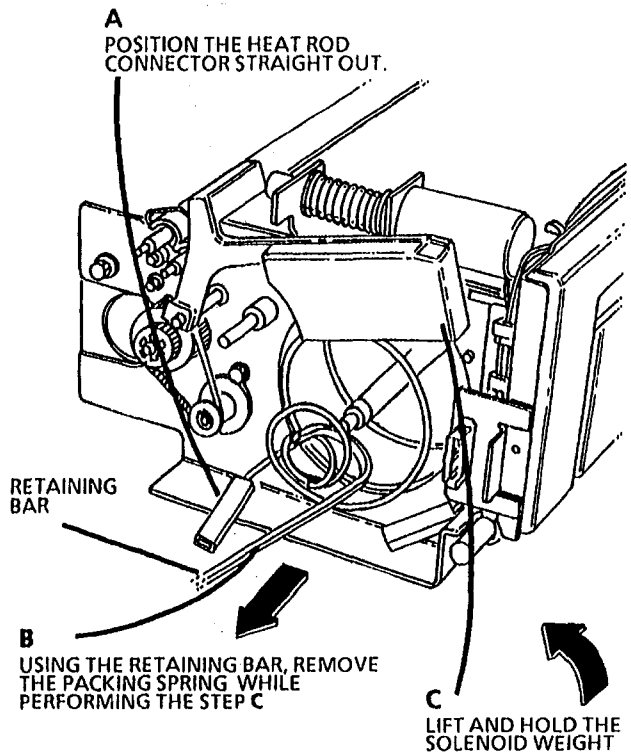
CAUTION

The heat rod is fragile.

14. (Figure 14): Remove the fuser rod packing spring.

NOTE: The packing spring is approximately at the center of the fuser roll.

NOTE: Use extreme care to avoid damage to the fuser heat rod while removing the packing spring.



*	1173		A
JR	SM 4	M	

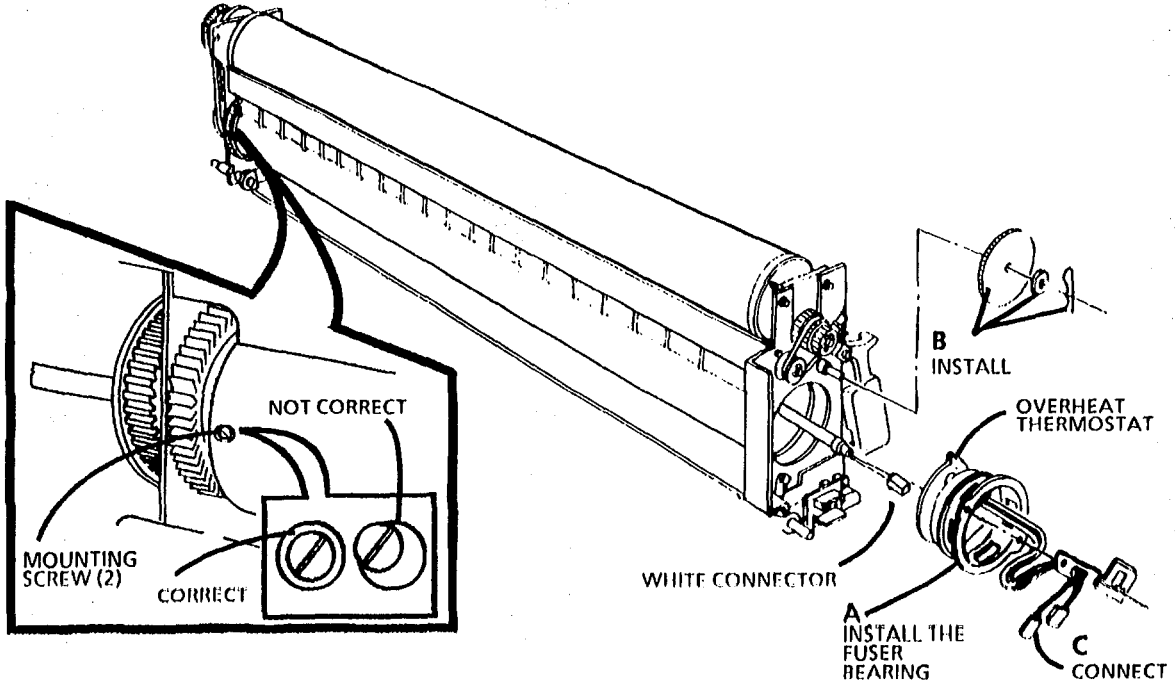
Figure 14. Removing the Packing Spring

15. (Figure 15): Install the fuser bearing and the clip.

NOTE: The overheat thermostat must be in the up position towards the cleaning blade solenoid weight. The overheat thermostat connectors can be interchanged with no effect on their function.

16. (Figure 15): Ensure that the fuser roll is not pinched under the mounting screws.

17. Lower and push in the cleaning blade weight, while ensuring that the opposite end of the cleaning blade is seated.



	1149JR	A
JR	SM 4	★	

Figure 15. Installing the Fuser Bearing

18. (Figure 16): Check the position of the pressure plate.
19. Reinstall the retaining bar.
20. Reinstall the fabric guide.

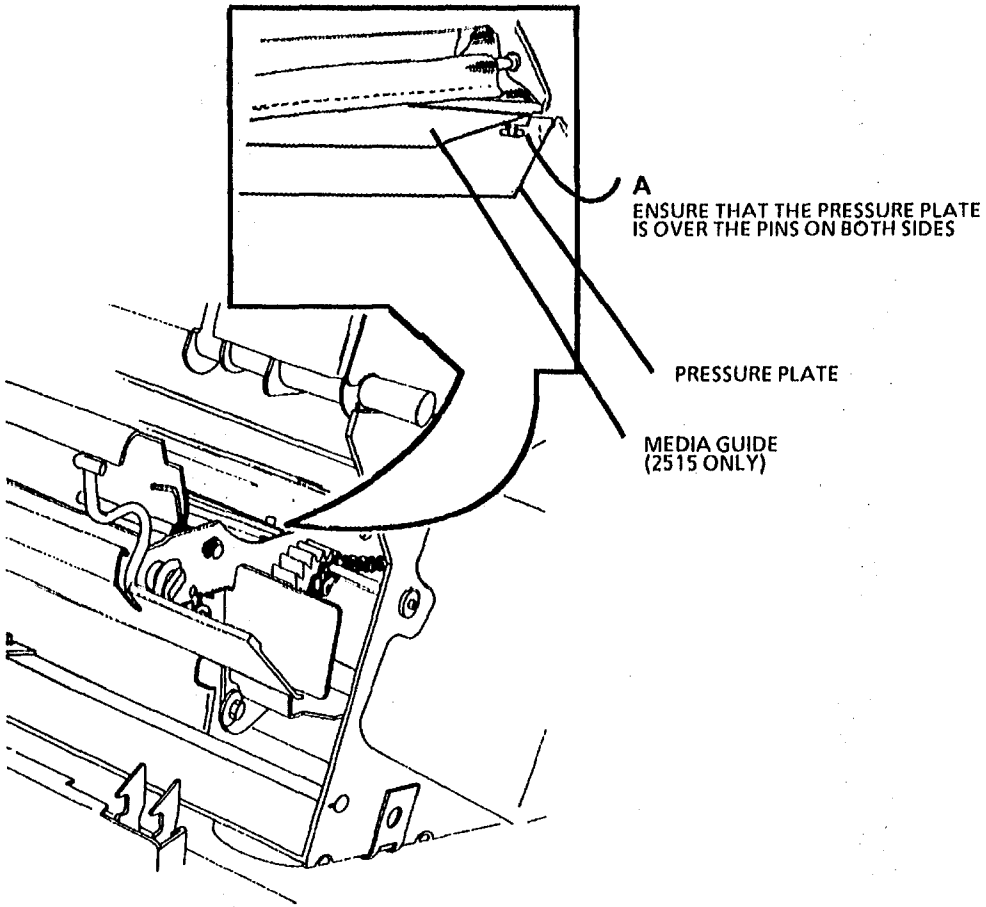


Figure 16. Checking the Position of the Pressure Plate

	1154	A
JR	SM 4	★

21. (Figure 17): Remove the photoreceptor drum shaft assembly.

NOTE: Only the photoreceptor drum shaft assembly will be in the xerographic module. The drum is shipped separately and will be installed later.

22. Clean the auger -to -drum seal (PL9.1 item 19) and reform it towards the drum to provide a seal between the drum and the augur extrusion.

NOTE: Ensure that the cleaning blade is fully into the blade support assembly.

23. Install the photoreceptor drum beginning with the replacement in (REP 9.3).

24. Check the cleaning blade solenoid (ADJ 9.1).

25. Reinstall the xerographic module (REP 9.1).

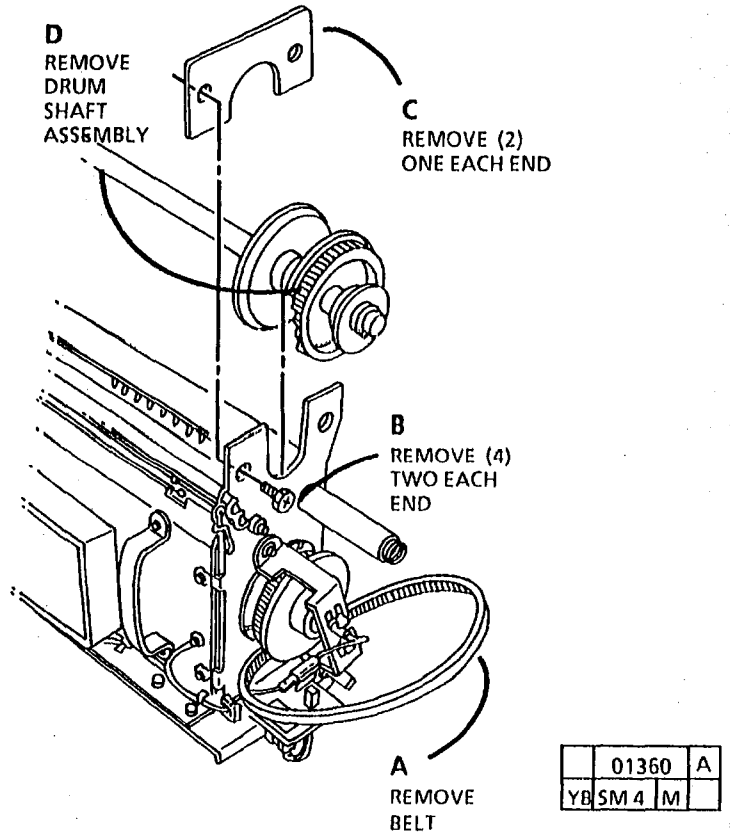
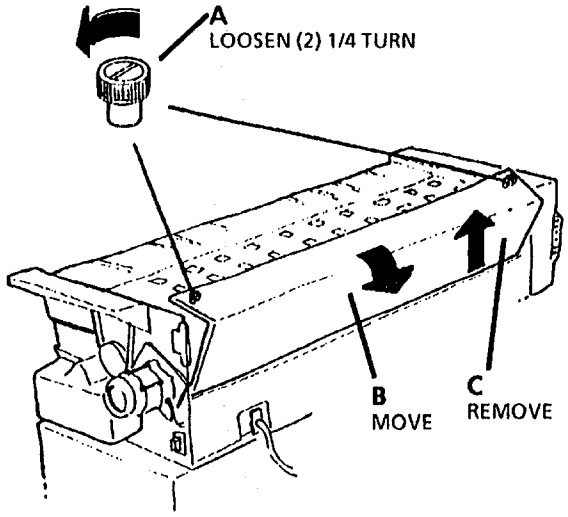


Figure 17. Removing the Photoreceptor Drum Shaft

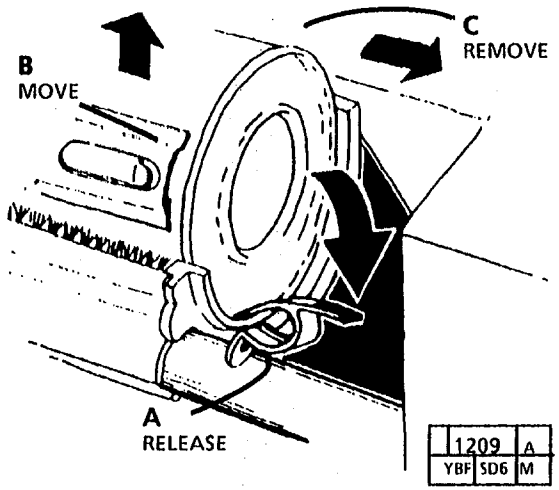
26. (Figure 18): Remove the upper rear cover.



	1337	A
YBF	SD6	M

Figure 18. Remove the Upper Rear Cover

27. (Figure 19): Remove the Dry Ink Plus cartridge.

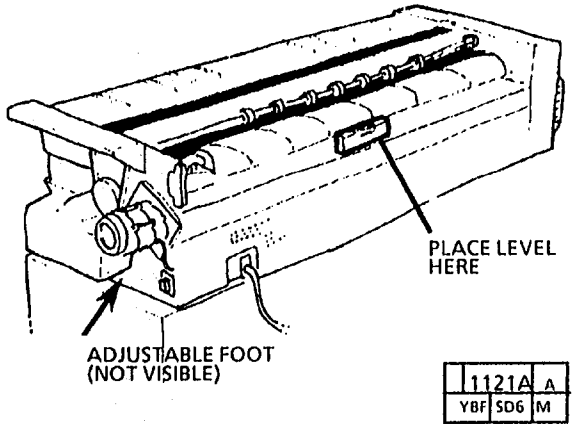


	1209	A
YBF	SD6	M

Figure 19. Remove the Dry Ink Plus Cartridge

28. (Figures 20; and 21): Level the copier.

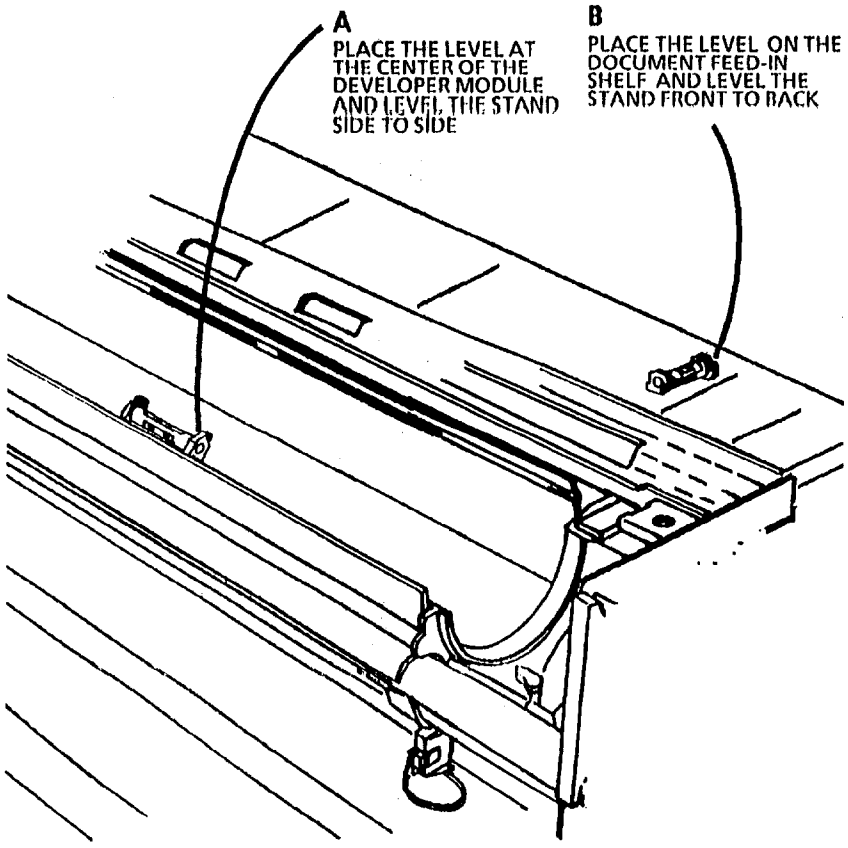
NOTE: If there is no stand adjust the single adjustable foot on the copier (leveling wrench 600T1844).



	1121A	A
YBF	SD6	M

Figure 20 Leveling the Copier - No Stand

NOTE: STEP 28 B: If there is a stand, level the copier by adjusting the feet on the stand.



0	1334	A
0YB	SM 6	★

Figure 21. Leveling the Copier Equipped with a Stand

29. (2515, Figure 22): Check the Auger Gutter.

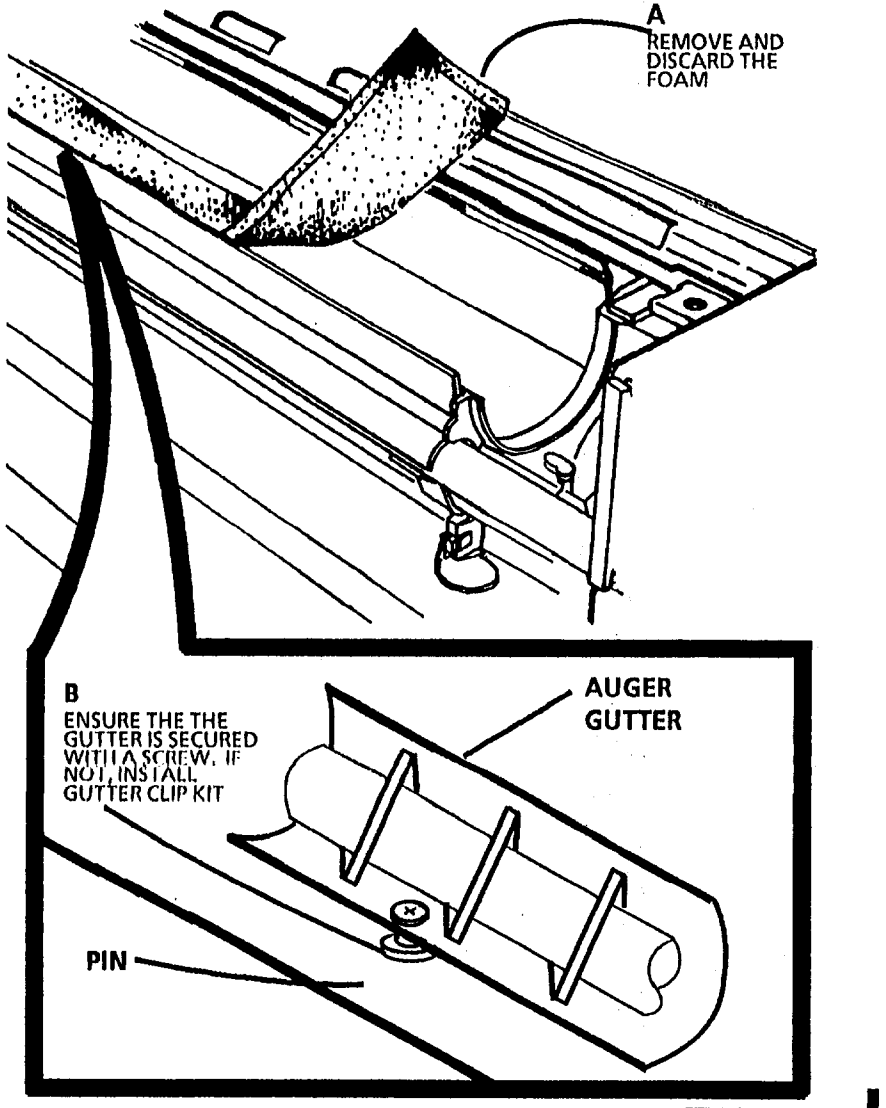
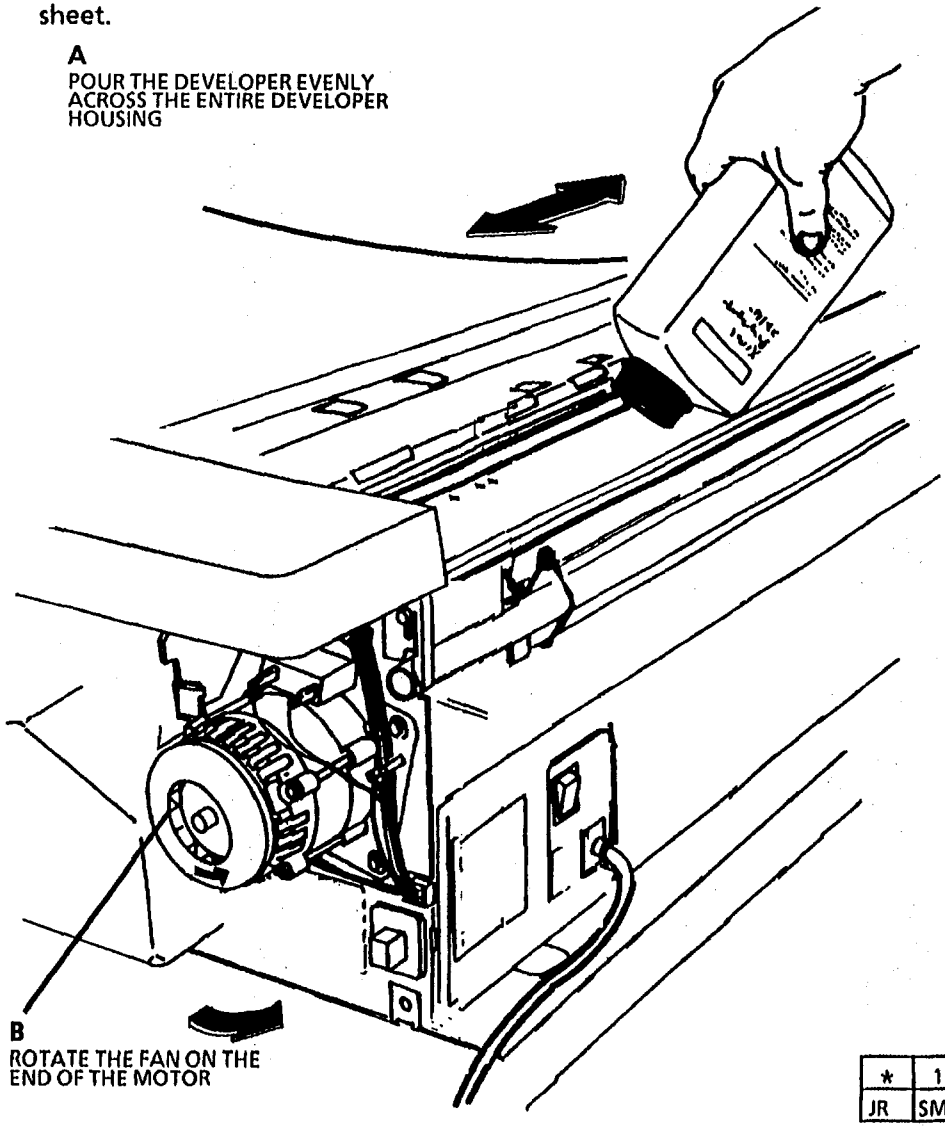


Figure 22 (2515 only). Checking the Gutter

0	1333	A
0YB	SM 6	

30. (Figure 23): Add the developer, then make a record of the batch number in the copier log sheet.



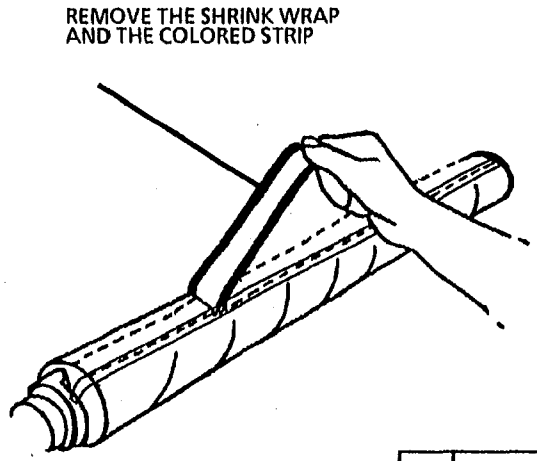
*	1147	A
JR	SM 6 M	

Figure 23. Adding the Developer

31. (Figure 24): Install the Dry Ink Plus Cartridge.

NOTE: Shake the cartridge side to side. Remove the shrink-wrap before reinstalling the cartridge. Ensure that the entire shrink-wrap is removed, including the colored strip.

Install the cartridge with the holes upwards.



	1208	A
JR	SM 6 M	

Figure 24. Installing the Cartridge

32. (2510, Figure 25): Set the darkness lever to the fourth notch from the bottom.

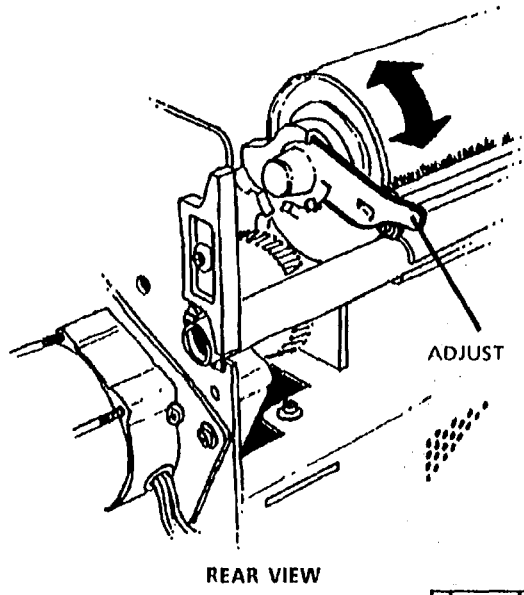


Figure 25 (2510 only). Setting the Darkness Lever

33. Clean both sides of the platen with anti-static cleaner and reinstall the platen. Leave the cleaner with the customer.

34. (Figure 26): Install the upper rear cover .

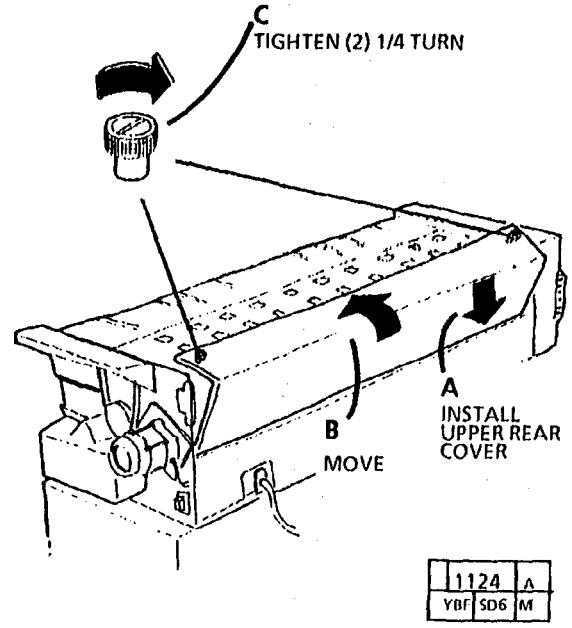


Figure 26. Installing the Upper Rear Cover

NOTE: Install the document handler so that the labels on top can be read from the front.

NOTE: Prior to installation rotate the transport platen and observe that the platen is installed correctly or has not been moved during shipping. If out of position install the correct position.

35. (Figure 27): Install the document handler.

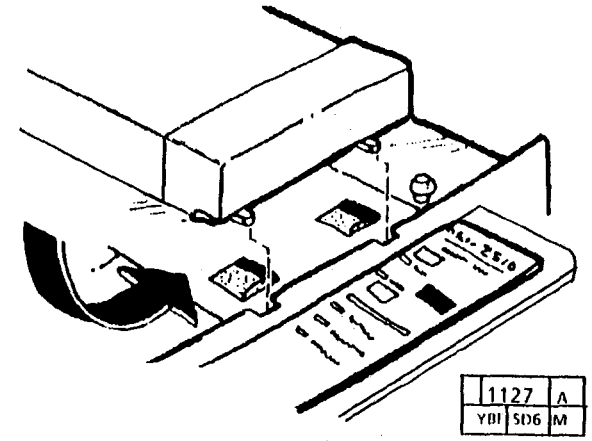


Figure 27. Installing the Document Handler

36. Connect the main power, and enter the diagnostic mode.

37. Configure the copier for the input power to be used.

    a. Select diagnostic test 9

    b. Press the ***Copy Contrast*** UP or DOWN button to select the number that corresponds to the power to be used:

       1 = 120 VAC, 60 Hz
       2 = 220 VAC, 50 Hz
       3 = 230 VAC, 50 Hz
       4 = 240 VAC, 50 Hz

    c. Press ***Start***.

38. (2515 only) Adjust Time Out to Power Saver mode to 1 minute.
    a. Select diagnostic test 1.

    b. Press the ***Copy Contrast*** UP or DOWN button to select the number 1.

    c. Press ***Start***.

39. (2510 W/Tag 252;2515) Perform the initiallization of the fuser roll procedure. (Pages 6-8 to 6-11).

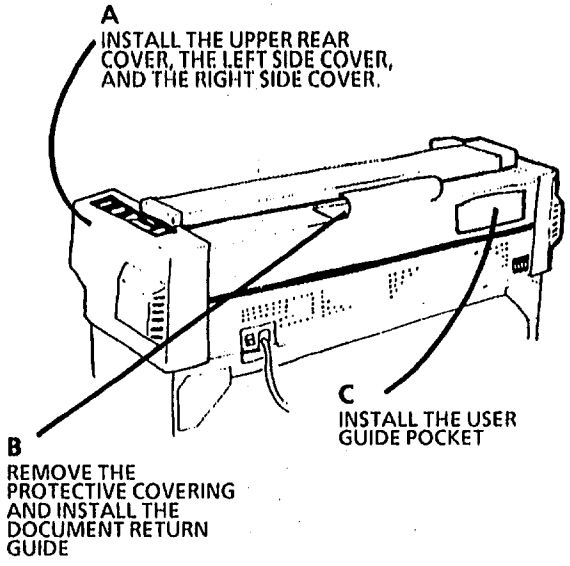
    NOTE: If a "J" code is displayed at this point in the installation, refer to the De-Toning procedure on page 6-5 of this section.

40. Perform the electrostatic series (2510: ADJ 9.2; 2515;ADJ 9.3).

41. Switch off the power and remove the electrometer probe.

NOTE: Place the dusting pouch from the Installation Kit inside the right end cover before installing the cover.

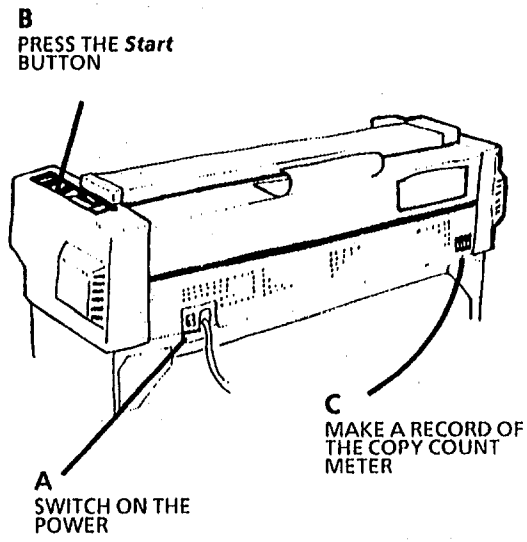
42. (Figure 28): Install covers and the user guide pocket.



*	1128		A
JR	SM 6	M	

Figure 28. Installing the Document Return Guide and the User Guide Pocket

43. (Figure 29): Switch on the copier.



*	1128		A
JR	SM 6	M	

Figure 29. Switching on the Copier

44. Make five copies of test pattern 82E5020

45. Refer to the test pattern specifications section and check the copy quality.

NOTE: If the copies have an Offsetting copy quality defect, perform the Oiler Wick Priming procedure located in Section 6.

46. Check that the copy count meter advanced

47. Separate the First Call Report card from the Installation Report card.

48. Insert the First Call Report card into the machine log pouch.

49. Record the following on the Installation Quality Report card:

    - Copy count reading
    - Copier serial number
    - Installation date
    - Comments (as required)

50. Mail the copier Installation Quality Report card.

Product Demonstration

To demonstrate the capabilities of the copier, refer to the User Guide. Perform the following procedures:

1. Getting To Know Your Copier
2. Control Panel
3. Making The Copies
4. Document Input/ Copy Contrast
5. The Copy Output Selections
6. Adding The Dry Ink Plus
7. Cleaning the Optical System
8. Problem Solving Status Codes
9. Clearing the Copier
10. Review the Media Messages Book

Installation Checklist

Site Preparation

_____ Polarity Checks
_____ Space Requirements

Installation

_____ Remove the tape, the packing material, and the covering that protects the Control Panel.
_____ Remove the covers.
_____ Remove the cable ties on the left end.
_____ Level the copier.
_____ Remove the Dry Ink Plus Cartridge.
_____ Add developer.
_____ Remove the shrink wrap and install the Dry Ink Plus Cartridge.
_____ Set the darkness lever to the fourth notch from the bottom (2510 only).
_____ Check the Document Lens.
_____ Install the rear cover.
_____ Install the Document Handler.

Functional Check

_____ Switch on the copier and allow the copier to warm-up.
_____ Set the country configuration.
_____ (2515) Adjust time out to power saver mode to 1 minute.
_____ (2510 W/Tag 252; 2515) Perform the initialization of the fuser roll procedure.
_____ Perform the electrostatic series (ADJ 9.2).
_____ Make five copies.
_____ Check the copy quality. If offsetting is observed, do the Fuser Roll Initialization procedure.
_____ Reinstall the right end cover.

Product Demonstration Checklist

_____ ON/OFF switch, copy count meter, and serial number plate
_____ Control Panel
_____ Making the Copies
_____ Adding the Dry Ink Plus
_____ Cleaning the Optical System
_____ Problem Solving Status Codes
_____ Clearing the Copier

REMOVAL PROCEDURE - INTERNAL MOVE PROCEDURE

If the copier must be moved to a different location or repacked, perform the following procedure:

1. Switch off the main power switch.

WARNING
Disconnect the main power cord.

2. (Figure 1): Remove the document return guide.

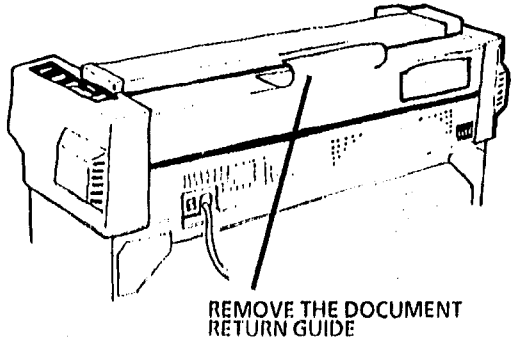


Figure 1. Removing the Document Return Guide

3. (Figure 2): Remove the document handler.

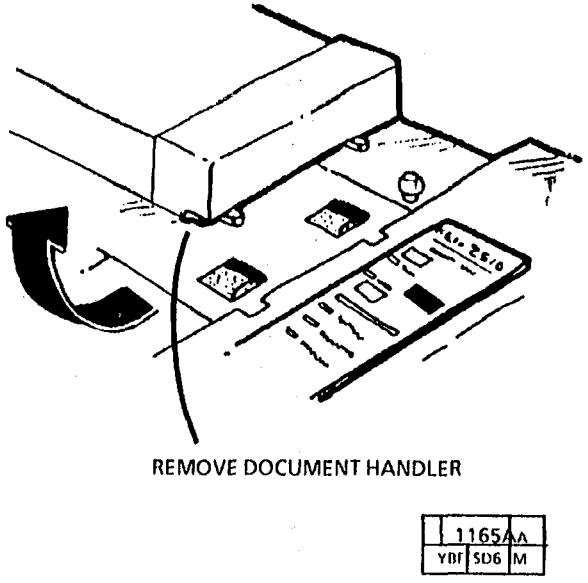


Figure 2. Removal of the Document Handler

4. (2510, Figure 3; 2515, Figure 4): Remove the right side cover.

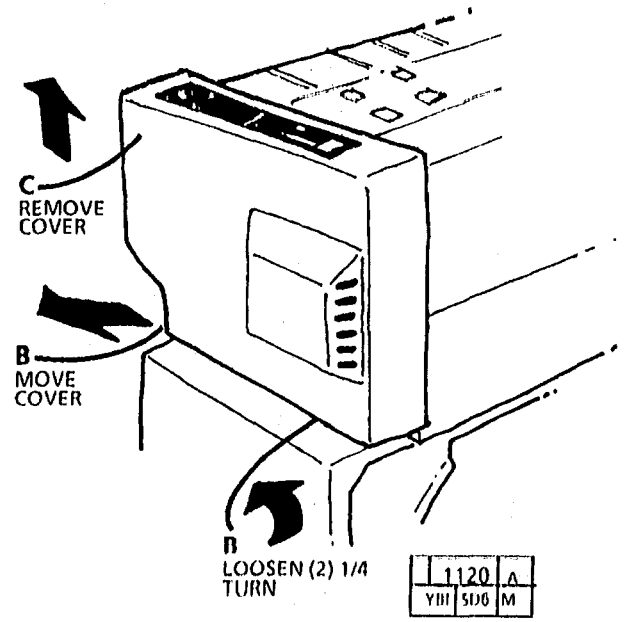


Figure 3. (2510) Removal of the Right Side Cover

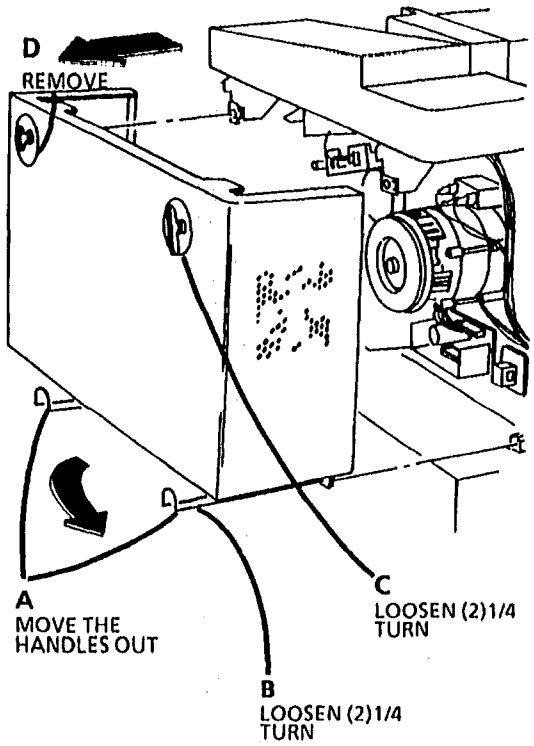


Figure 4. (2515) Removing the Right Side Cover

5. (Figure 5): Remove the upper rear cover.

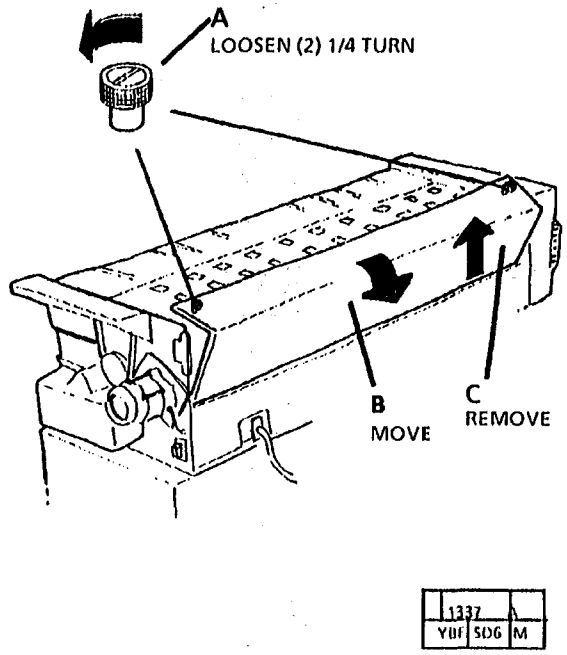


Figure 5. Removing the Upper Rear Cover

6. (2510, Figure 6; 2515, Figure 7): Remove the left side cover.

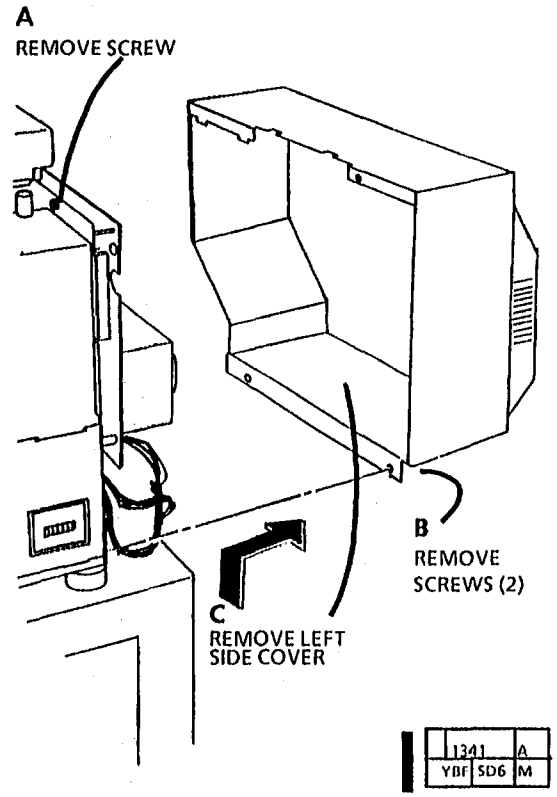


Figure 6 (2510). Removing the Left Side Cover

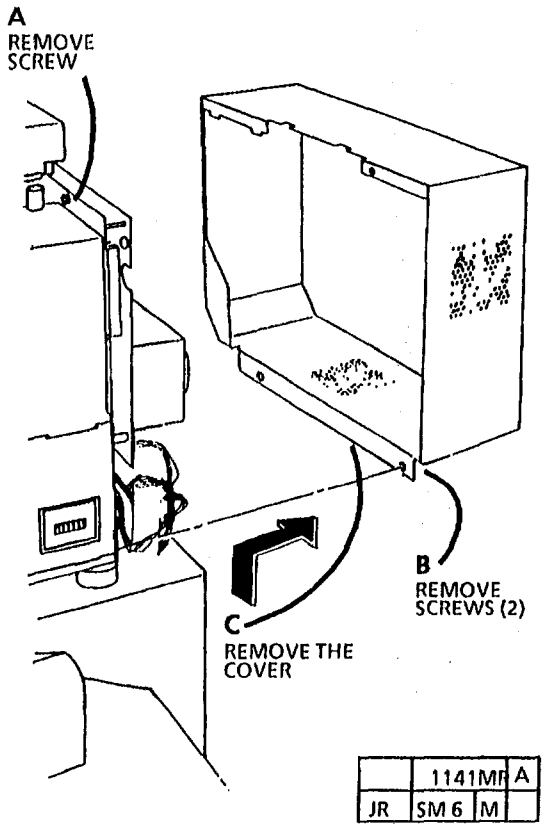


Figure 7 (2515). Removing the Left Side Cover

7. (Figure 8): Cover the openings of the dry ink plus cartridge with adhesive tape, and remove the dry ink plus cartridge.

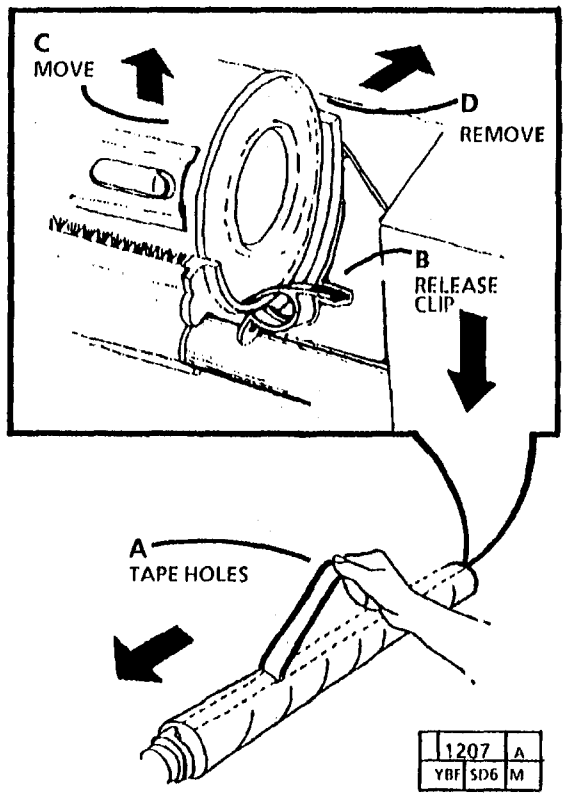


Figure 8. Removing the Dry Ink Plus Cartridge

8. Place a drop cloth or a large sheet of paper on the floor.
9. (Figure 9. 2510): Remove the developer module (REP 9.5).
10. (2510) Dump the developer material.
11. (2510) Clean the developer housing with a vacuum cleaner.

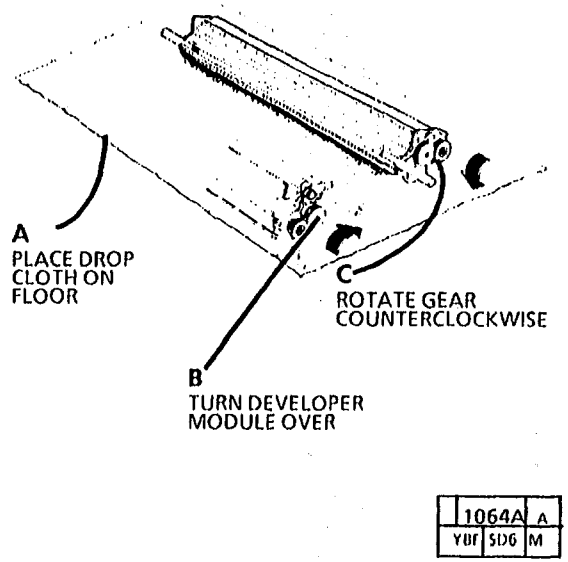


Figure 9. (2510) Dumping the Developer Material

12. (2515) Remove the pickoff baffle and store it in a safe place to avoid damaging it.

CAUTION

Do not turn the developer module to the vertical position. This may cause developer to get into the dry ink cartridge clutch at the end of the Developer Module.

NOTE: STEP 13 C: Ensure that all the developer is dumped.

13. (2515, Figure 10): Dump the developer material.

14. Completely vacuum the developer housing.

15. Reinstall the pick off baffle.

CAUTION

STEP 16 A: The pick off baffle must be taped before replacing the dry ink cartridge to ensure that the pick off baffle does not move causing damage.

16. (Figure 11): Tape the pick off baffle.

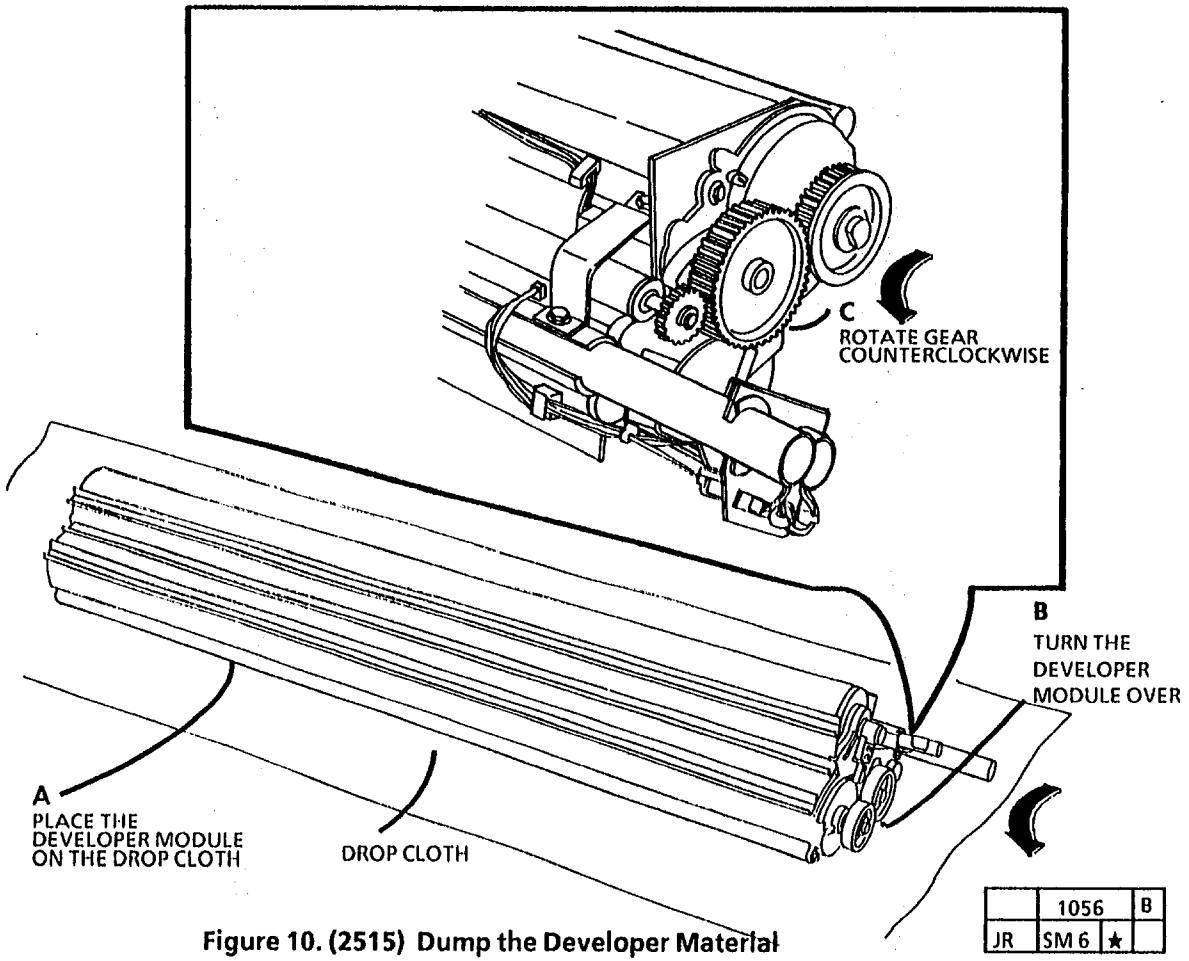


Figure 10. (2515) Dump the Developer Material

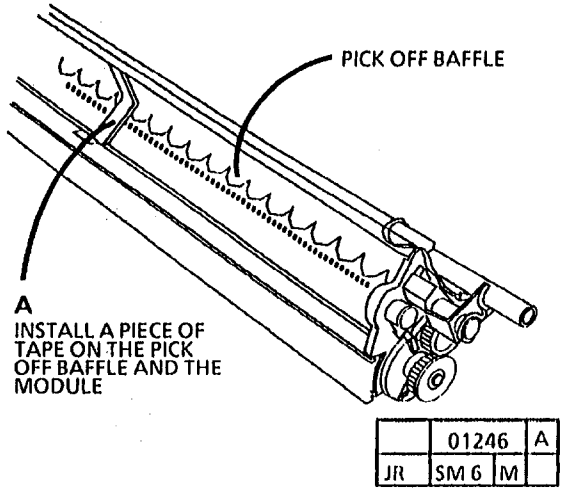
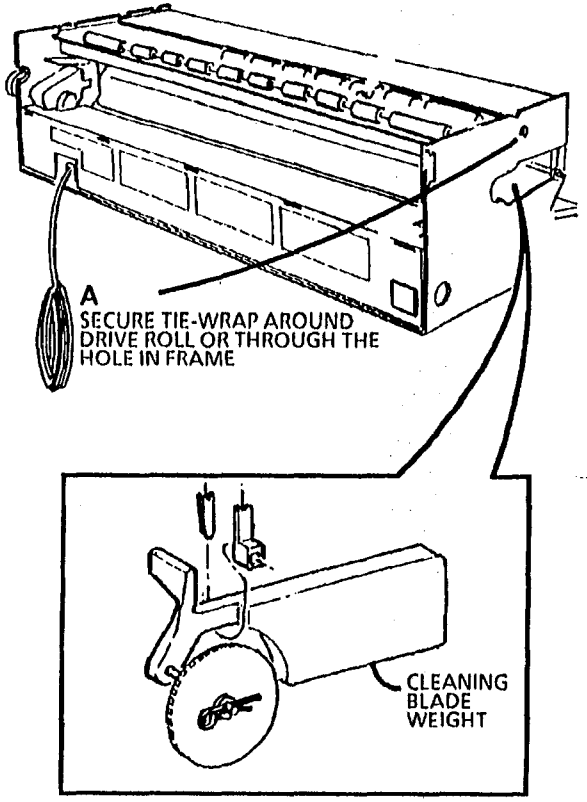


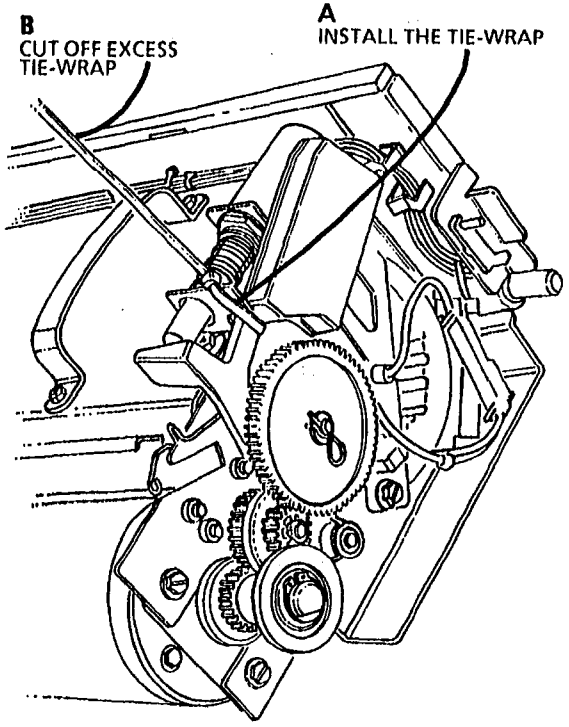
Figure 11. (2515) Tape the Pick Off Baffle

17. (2510: Figure 12; 2515: Figure 13): Secure the cleaning blade weight.



	1173A	A
YIIF	SD6	M

Figure 12 (2510). Securing the Cleaning Blade Weight



	01245	
JR	SD6	M

Figure 13 (2515). Securing the Cleaning Blade Weight

18. Reinstall the developer module and dry ink cartridge (2510 REP 9.5; 2515 REP 9.6).

19. (2510, Figure 14; 2515, Figure 15): Reinstall the left side cover.

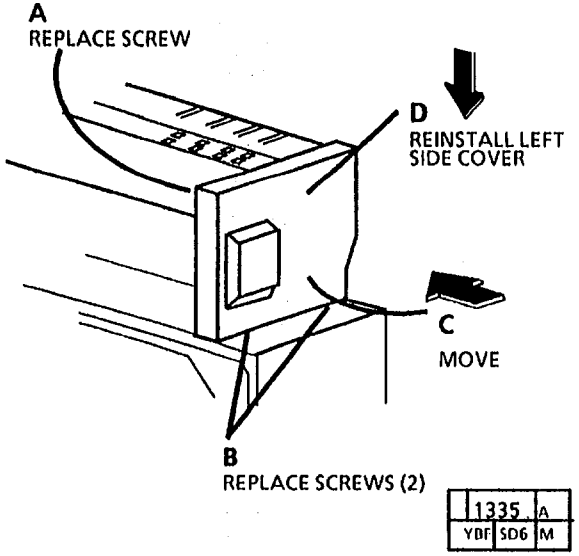


Figure 14. (2510) Reinstalling the Left Side Cover

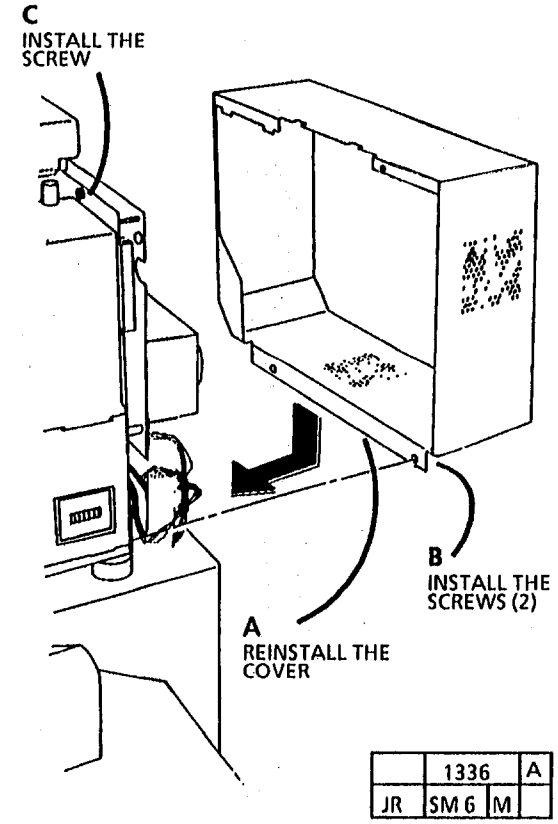


Figure 15. (2515) Reinstalling the Left Side Cover

20. (Figure 16): Reinstall the upper rear cover.

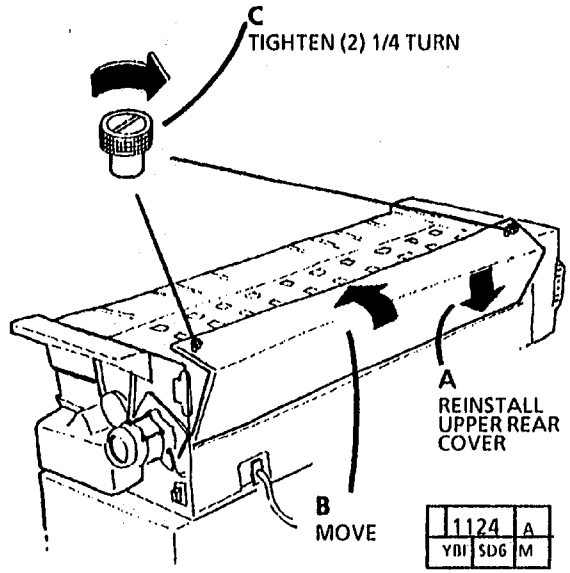


Figure 16. Reinstalling the Upper Rear Cover

21. (2510, Figure 17; 2515, Figure 18): Reinstall the right side cover.

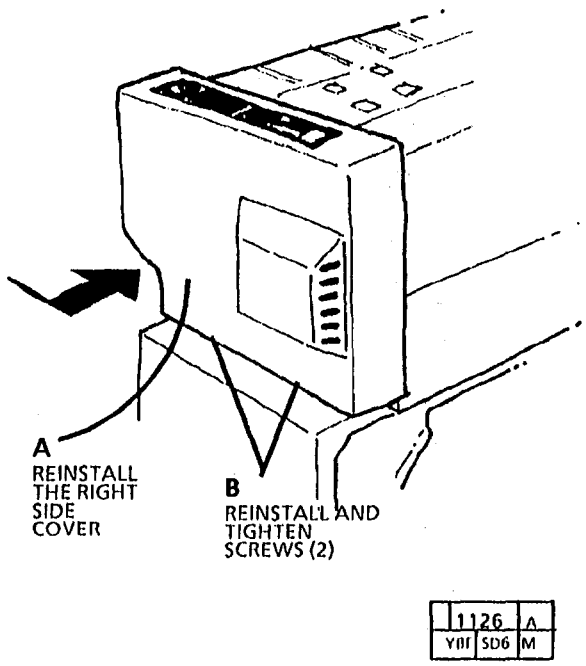


Figure 17. (2510) Reinstalling the Right End Cover

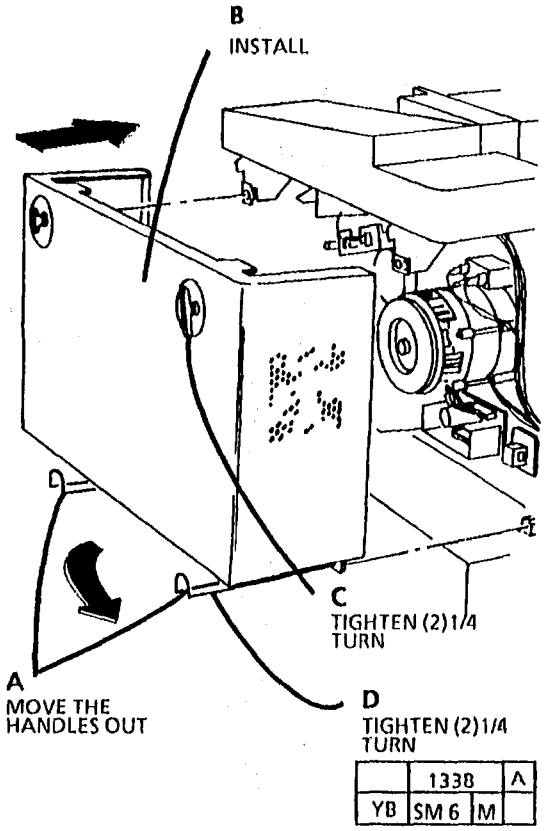


Figure 18. (2515) Reinstalling the Right Side Cover

22. (Figure 19): Reinstall the packing material.

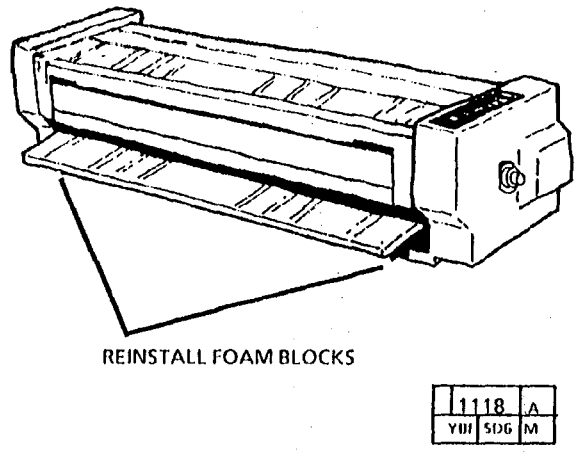


Figure 19. Reinstalling the Foam Blocks

23. After the copier has been prepared to this point, contact a rigger.
    - The rigger will repack the copier, using a repack kit supplied by the rigger.
    - If the copier is only to be moved a short distance, the rigger will decide whether or not to move the copier without the use of a repack kit.
24. If the copier is to be moved internally or only a short distance and if the copier must be up ended ensure that the dry ink cartridge and oiler assemble are removed .

Removal and Internal Move Checklist

Site Preparation

_____ Polarity Checks
_____ Space Requirements

Installation

_____ Remove the covers
_____ Remove the Xerographic module.
_____ Remove the cable tie on cleaner blade solenoid weight.
_____ Install the photoreceptor drum.
_____ Adjust the c leaner blade solenoid.
_____ Reinstall the Xerographic module.
_____ Reinstall oiler assembly if it had been removed to upend the copier.
_____ Remove the dry ink plus cartridge unless it was removed for upending
_____ Add developer.
_____ Remove the tape and reinstall the dry ink plus cartridge.
_____ Set the darkness lever to the fourth notch from the bottom (2510 only).
_____ Check the document lens.
_____ Clean the platen.
_____ Install all remaining covers.
_____ Install the Document Handler.
_____ Level the copier.

Functional Check

_____ Switch on the copier and allow the copier to warm-up.
_____ Set the country configuration.
_____ (2510 W/Tag 252, 2515) Perform the initialization of the fuser roll procedure.
_____ Perform the electrostatic series (2510 ADJ 9.2; 2515 ADJ 9.3).
_____ Make five copies.
_____ Check the copy quality. If offsetting is observed, do the Fuser Roll Initialization procedure.
_____ Reinstall the right end cover.

Product Demonstration Checklist

_____ ON/OFF switch, copy count meter, and serial number plate
_____ Control Panel
_____ Making the Copies
_____ Adding the Dry Ink Plus
_____ Cleaning the Optical System
_____ Problem Solving Status Codes
_____ Clearing the Copier

GENERAL TOOLS AND SUPPLIES

SUPPLIES

Description	Part
Service Manual Binder	700P00020

TOOLS

Description	Part
Basic Multinational Tool Kit	600T1835
SAE Supplemental Tool Kit	600T1837
Metric Supplemental Tool Kit	600T1836
Fluke Multimeter	600T2030
Fluke Multimeter Leads Kit	600T1660
Leads Kit	600T1923
Red Adapter Plug	499T9567
Black Adapter Plug	499T9568
Mod IV Electrometer	600T1620
Temperature Probe Set (Probe and Sensor)	499T9570
Thermal Sensor (Straight Tip)	499T9572
Light Shield	600T1198
Stackable Lead	600T1652
Probe Holder	600T1969
Test Pattern	82E5980
Test Pattern, Background	82E502
Test Pattern, Image Darkness	82P7030
Outlet Tester	600T467
Interlock Tool	600T91616
Vacuum Cleaner	600T1820
Vacuum Cleaner Bags (10)	93E3270
Vacuum Cleaner Filter Module	600T1832
Xero Mod Service Plug	21E6320

MACHINE CONSUMABLES (USO)

Description	Part
Photoreceptor	1R81
Dry Ink Plus (2515)	6R732
Dry Ink (2510)	6R234
Developer - 3.75 pounds	5R178
Touch-Up Paint:	
Light Grey	93S20206
Medium Grey	93S20209
2510 Customer Repack Kit	600K8510
2510 Warehouse Repack Kit	600K8520
2515 Customer Repack Kit	600K21350
2515 Warehouse Repack Kit	600K29930

CLEANING MATERIALS

Description	Part
Cleaning Cloth, Treated	35P1638
Cleaning Solvent	43P10
Cleaning Absorbent	19P580
Disposable Gloves (Box of 100)	99P3024
Disposal Kit	600S6397
Drop Cloth	35P1737
Drum Maintenance Kit	600S5838
Drum Polish	43P76
Film Remover	43P45
Formula A Cleaner	43P48
Heavy-Duty Towels	35P3191
Lint Free Cloth	600S4372
Polyurethane Pads (40)	600S4653
Antistatic Fluid	43E110

LUBRICANTS

Description	Part
Molybdenium Disulfide Grease	70P87
8cc Tube of Fuser Oil	93E811
Fuser Oil (Jug)	8R79
Molycote 557	70P61
Molycote 33	70P53

MEDIA STARTER PACK 73K23930

Description	Part
70 Sheets 20 lb. 4024 DP Paper	----
20 Sheets 20 lb. Vellum	----
10 Sheets .004" Drafting Film	----

2510 SUPPLY KIT 73K23882

Description	Part
Developer W/O Filter and Carton	502S62486
Fabric Guide	8R2959
Document Guide	38K1861
Installation Kit	73K13060
Anti-Static Fluid	43E110
Dry Ink Plus	6R234
Side Guide Kit	606K291

2510 INSTALLATION KIT 73K13060

Description	Part
Dusting Pouch (Zinc Stearate)	8R181
IQR Card	611P21058
Operator Manual	700P90233
Machine Dispatch Label	600P2404
Machine Service Log	611P20998
Forbidden Copy Card	610P0002
Sheet (MSDS) Cover Sheet	600P9115
Machine Warranty Card	611P21038
Machine Pouch	600P86493
Limited Warranty Information	600E6830
Machine Service Log	611P20998
Space Requirement Sheet	611P50096
Towels	35P3191
Dry ink MSDS	600P9075
Photoreceptor MSDS	600P9042
Developer MSDS	600P9798
Fuser MSDS	600P9028
Stearate MSDS	600P9019
Media Message Book	610P60017

2515 INSTALLATION KIT 73K63473

Description	Part
Dusting Pouch (Zinc Stearate)	8R181
IQR Card	
Operator Manual	700P92651
Machine Dispatch Label	600P2404
Machine Service Log	611P20998
Forbidden Copy Card	610P0002
Sheet (MSDS) Cover Sheet	600P9115
Machine Warranty Card	611P22158
Machine Pouch	600P86493
Limited Warranty Information	600E22178
Machine Service Log	611P22118
Space Requirement Sheet	611P50096
Towels	35P3191
Dry ink MSDS	600P9075
Photoreceptor MSDS	600P9042
Developer MSDS	600P9798
Fuser MSDS	600P9028
Stearate MSDS	600P9019
Media Message Book	610P60017

GENERAL TOOLS AND SUPPLIES
(Continued)

2515 SUPPLY KIT 73K63463

Description	Part
Developer	5R178
Document Guide	38K1861
Installation Kit	73K63473
Anti-Static Fluid	43E110
Side Guide Green (RH)	38E10210
Side Guide Blue (RH)	38E10220
Side Guide Green (LH)	38E10230
Side Guide Blue (LH)	38E10240

2515 INSTALLATION KIT 73K63473

Description	Part
Dusting Pouch (Zinc Stearate)	8R181
Operator Manual	700P92651
Machine Dispatch Label	600P2404
Machine Service Log	611P20998
Forbidden Copy Card	610P0002
Sheet (MSDS) Cover Sheet	600P9115
Machine Warranty Card	611P22158
Machine Pouch	600P86493
Limited Warranty Information	600E22178
Machine Service Log	611P22118
Space Requirement Sheet	611P22378
Towels	35P3191
Dry ink MSDS	600P
Photoreceptor MSDS	600P
Developer MSDS	600P
Fuser MSDS	600P
Stearate MSDS	600P
Media Message Book	610P60017

Introduction

All important modifications are identified by a Tag number on a matrix label attached to each 2510 inside the side cover.

This section describes all of the tags as well as multinational applicability, classification codes, and permanent or temporary modification information.

Classification Codes

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures. A tag number may also be required to identify the presence of optional hardware, firmware, or if mandatory modifications have been installed. Each tag number is given a classification code to identify the type of a change the tag has made.

CODE	CLASSIFICATION
M	Mandatory
S	Situational
R	Repair
O	Optional
N	Not installed in the field

TAG: 1

NOT USED

TAG: 2

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
USO: 64G000181 AND UP

NAME AND PURPOSE:
PAPER HANDLING UPGRADE KIT: IMPROVE PAPER HANDLING.:
(MACHINES WITH TAG 2 REQUIRE 600K3772 WHEN REPLACING THE FUSER DRIVE GEAR OR CLUTCH/ FUSER DRIVE GEAR AS A MATCHED SET.)

REFERENCE: PL 8.1, 10.2

TAG: 3

CLASS: M

USE: USO

MANUFACTURING SERIAL NUMBERS:
USO: 64G000421 AND UP

NAME AND PURPOSE:
VELLUM FEEDING UPGRADE KIT: NEW FABRIC GUIDE, EPROM, AND AIR MANIFOLDS IMPROVE THE HANDLING OF VELLUM.

KIT NUMBER: NONE
(THIS KIT CONTROLLED BY FIELD ENGINEERING.)

TAG: 4

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
USO: 64G000475 AND UP

NAME AND PURPOSE:
DPDT ON/OFF SWITCH: NEW DOUBLE POLE DOUBLE THROW ON/OFF SWITCH IMPROVES SAFETY AND RELIABILITY.

KIT NUMBER/REFERENCE: PIECE PART PL 1.1

TAG: 5

CLASS: R

USE: USO (ALL RX COPIERS HAVE THIS TAG.)

MANUFACTURING SERIAL NUMBERS:
USO: 64G001272 AND UP

NAME AND PURPOSE:
DC FANS: NEW COOLING FANS, THERMISTOR, AND EPROM IMPROVE COPIER RELIABILITY AND THE FUSING PERFORMANCE.

KIT NUMBER: NONE

REFERENCE: PL 1.1 , 1.2, PL 9.3

TAG: 6

CLASS: N

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G002845 AND UP
RX: 60J321520 AND UP

NAME AND PURPOSE:
FILTER HOUSING AND ELEMENTS:
COST SAVINGS.

KIT NUMBER: NONE

REFERENCE: PL 9.3

TAG: 7

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
64G000882 AND UP

NAME AND PURPOSE:
BELT DRIVEN AUGER: TO PREVENT TONER FROM SEIZING THE AUGER.

KIT NUMBER: 600K5230

REFERENCE: PL 10.3

TAG: 8

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
64G000925 AND UP

NAME AND PURPOSE:
DRUM SHAFT: A NEW PHOTORECEPTOR DRUM SHAFT (6K3010) THAT ELIMINATES THE NEED FOR A LOCKING NUT.

KIT NUMBER: NONE

REFERENCE: PL 9.1

TAG: 9 NOT USED

TAG : 10

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBER:
64G033503 AND UP

NAME AND PURPOSE
EXTRUSION CHANGE AND REPLACEABLE CLEANING BLADE. COPIER WITHOUT TAG10 MUST HAVE THE CLEANING BLADE ASSEMBLY 42K360 INSTALLED BEFORE THE CLEANING BLADE KIT 600K25780 CAN BE USED.

KIT NUMBER: WITHOUT TAG 10 PIECE PART 42K820
WITH TAG 10 600K25780

REFERENCE: PL 9.2

TAG: 11

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
64G000971 AND UP

NAME AND PURPOSE:
THE EDGE FUSING FIX: REMOVES THE CENTER DUCT AND REPLACES THE FUSER BEARING ASSEMBLY (13K311). TAG 7 MUST BE PREVIOUSLY INSTALLED TO INSTALL THIS TAG.

KIT NUMBER: NONE

REFERENCE: PL 10.2

TAG: 12

CLASS: N

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G004613 AND UP
RX: 60J322206 AND UP

NAME AND PURPOSE:
FRAME MODIFICATION: TO REDUCE PHOTORECEPTOR DAMAGE DURING SHIPPING AND HANDLING. THE FRAME HAS BEEN MODIFIED AND A SEAL (35K1320) WAS ADDED BETWEEN THE FRAME AND THE PHOTORECEPTOR.

KIT NUMBER: NONE
REFERENCE: PL 6.1

TAG: 13

CLASS: R

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G005754 AND UP
RX: 60J322755 AND UP
NAME AND PURPOSE:
WEIGHTED MOTION SENSOR (130K16232):
MINIMIZES VARIATION IN THE REGISTRATION OF COPIES.

KIT NUMBER: NONE

REFERENCE: PL 8.5

TAG: 14

CLASS: R

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G007315 AND UP
RX: 60J322984 AND UP

NAME AND PURPOSE:
FUSER REPAIR KIT TO UPGRADE MACHINES TO IMPROVE THE FUSING ON THE EDGES OF COPIES.
WARNING: DO NOT USE ANY TAG 14 PARTS SEPARATELY UNLESS THE MACHINE HAS BEEN UPGRADED TO TAG 14. THESE PARTS ARE NOT INTERCHANGEABLE ON PRE-TAG 14 MACHINES.

KIT NUMBER: USO:600K6780
RX:600K6790

REFERENCE: NONE

TAG: 15

CLASS: R

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G008820
RX: 60J324880

NAME AND PURPOSE:
UPPER REAR COVER UPGRADE TO INSTALL MORE RELIABLE FASTENERS ON THE UPPER REAR COVER.

KIT NUMBER: USO:600K6830

REFERENCE: PL 14.1

TAG: 16

CLASS: O (USO); 2 (RX)

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
USO: 64G011535
RX: 60J329100

NAME AND PURPOSE:
COPY FEED-OUT KIT TO ENHANCE POLYESTER FILM FEED OUT AND REDUCES OIL DEPOSITS ON COPIES BY ADDING AN ANTI-STATIC BRUSH ON THE FRONT COVER AND CHANGING THE STRIPPER FINGERS.

KIT NUMBER: 606K280 (USO AND RX)1
REFERENCE: NONE

TAG: 17 NOT USED

TAG: 18 NOT USED

TAG: 19 NOT USED

TAG: 20 NOT USED

TAG: 22

CLASS: USO R, RX 3

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
64G023918 and up

NAME AND PURPOSE:
OIL DISPENSER METERING TRAY KIT IMPROVES THE RELIABIITY OF MEDIA FEEDING BY REDUCE THE AMOUNT OF OIL ON THE FUSER ROLL.
NOTE: IF TAG 252 IS INSTALLED, THIS TAG IS CANCELED.

KIT NUMBER: 600K12030

REFERENCE: PL 10.4

TAG: 23

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
64G033660 and up

NAME AND PURPOSE:
GOLD PLATED COROTRON WIRES IMPROVES THE RELIABIITY AND EXTENDS THE LIFE OF THE COROTRONS

KIT NUMBER:
WITHOUT TAG 23: PIECE PARTS 125K252 AND 125K184
WITH TAG 23: 600K19350 COROTRON REPAIR KIT (UPGRADES NON-RESTRINGABLE COROTRONS)
600K15860 COROTRON WIRE KIT (600K19350 MAY HAVE TO BE INSTALLED FIRST)

REFERENCE: PL 8.6,

TAG: 24

CLASS: R

USE: USO

MANUFACTURING SERIAL NUMBERS:
64G034645 and up

NAME AND PURPOSE:
XEROGRAPHIC MODULE LATCH BRACKET PROVIDES A LATCH ON THE RIGHT SIDE OF THE COPIER TO MORE FIRMLY SECURE THE MODULE.

KIT NUMBER: 600K21200

REFERENCE: PL 14.1

TAG: 25

CLASS: R

USE: ALL

MANUFACTURING SERIAL NUMBERS:
N/A

NAME AND PURPOSE:
CLEANING BLADE REPAIR KIT PROVIDES PARTS TO REPAIR THE CLEANING BLADE.

KIT NUMBER:
600K25780

REFERENCE: PL 9.2

TAG: 26
CLASS: O

USE: USO /RX

MANUFACTURING SERIAL NUMBERS:
64G00xxxx and up (USO)
60J00xxxx and up (RX)

NAME AND PURPOSE:
FOREIGN ACCESSORY ENABLEMENT KIT INSTALLS AN ELECTRONIC INTERFACE FOR DEVICES THAT MONITOR OR REGULATE THE USE OF THE COPIER.

KIT NUMBER: 97K10110

REFERENCE: NONE

TAG: 252

CLASS: R

USE: USO, RX

MANUFACTURING SERIAL NUMBER
64G00xxxx to 64G00xxxx (USO)
60J00xxxx to 60J00xxxx (RX)

NAME AND PURPOSE:
OILER RETROFIT KIT: TO PROVIDE A WAY TO INSTALL THE ON-DEMAND OIL DISPENSE ASSEMBLY.
NOTE: IF THIS TAG IS INSTALLED, TAG 22 IS CANCELED.

KIT NUMBER: 600K29600

REFERENCE: NONE

TAG: 254

CLASS: 3

USE: RX ONLY

MANUFACTURING SERIAL NUMBER

NAME AND PURPOSE:
PAPER FEED-IN SHELF CORRECTS AN ALIGNMENT PROBLEM BETWEEN THE DOCUMENT AND THE PAPER FEED-IN SHELF.

KIT NUMBER: 600K11370

REFERENCE: NONE

TAG: 255

CLASS: M (USO); 1 (RX)

USE: USO AND RX

MANUFACTURING SERIAL NUMBERS:
64G004132 TO 64G005822 (USO)
60J322566 TO 60J322966 (RX)

NAME AND PURPOSE:
FUSER BEARING SAFETY KIT: RETURN THE MACHINES TO TAG 11 CONFIGURATION AFTER PROBLEMS OCCURRED BETWEEN FUSER BEARING AND FUSER HEAT ROD. REQUIRED FIELD RETROFIT.

KIT NUMBER: 605K260

REFERENCE: NONE

2515 Change Tag / Index

Introduction

All important modifications are identified by a Tag number on a matrix label attached to each 2515 inside the side cover.

This section describes all of the tags as well as multinational applicability, classification codes, and permanent or temporary modification information.

Classification Codes

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures. A tag number may also be required to identify the presence of optional hardware, firmware, or if mandatory modifications have been installed. Each tag number is given a classification code to identify the type of a change the tag has made.

CODE	CLASSIFICATION
M	Mandatory
S	Situational
R	Repair
O	Optional
N	Not installed in the field

TAG: 2

CLASS: N

USE: ALL

MANUFACTURING SERIAL NUMBER
4L3002757 US
110510068

NAME AND PURPOSE:
3 L SOFTWARE UPGRADE KIT: UPGRADE TO CURRENT SOFTWARE CONFIGURATION TO INCLUDE ADDITIONAL DIAGNOSTIC TESTS.

PIECE PART NUMBER: 140K45473

REFERENCE: PL 1.1B

TAG: 3

CLASS: N

USE: ALL

MANUFACTURING SERIAL NUMBER
4L3002568 US
110509634 RX

NAME AND PURPOSE:
XEROGRAPHIC MODULE COVER UPGRADE: FRONT COVER LATCH PINS CHANGED TO HARDEN STEEL.

PIECE PART NUMBER: N/A

REFERENCE: PL

TAG: 4

CLASS: N

USE: ALL

MANUFACTURING SERIAL NUMBER
4L302806 US
110509671 RX

NAME AND PURPOSE:
DEVELOPER MODULE UPGRADE: MIXING AUGER GUTTER SECURED TO SUPPORT PIN WITH A SCREW.

PIECE PART NUMBER: 600K40990

REFERENCE: PL 9.3

TAG: 5

CLASS: R

USE: ALL

MANUFACTURING SERIAL NUMBER
4L303532 US
110510885 RX

NAME AND PURPOSE:
GROUND FAULT PROTECTOR (GFP): GFP AUTOMATICALLY SWITCHES OFF ALL POWER TO THE COPIER WHEN LEAKEAGE CURRENT TO GROUND EXCEEDS A PREDETERMINED LIMIT.

PIECE PART NUMBER: PIECE PART

REFERENCE: PL 1.1B

TAG: 6

CLASS: N

USE: ALL

MANUFACTURING SERIAL NUMBER
4L303624 US
110510729 RX

NAME AND PURPOSE:
DEVELOPER HOUSING UPGRADE: BEARING WAS ADDED TO DRIVE END PLATE TO DECREASE WEAR AND IMPROVE RELIABILITY.

PIECE PART NUMBER: N/A

REFERENCE: N/A

TAG: 7

CLASS: N

USE: ALL

MANUFACTURING SERIAL NUMBER
4L3003624 US
110510729 RX

NAME AND PURPOSE:
4L FIRMWARE RELEASE: ENABLES GREATER LATITUDE IN IMAGE DENSITY SET-UP. CODE [Y] ADDED TO ALLOW MONITORING OF THE TONER CONCENTRATION.

PIECE PART NUMBER: 600K35891

REFERENCE: PL 1.1B

TAG: 88

CLASS: R

USE: ALL

MANUFACTURING SERIAL NUMBER: FIELD RETROFIT

NAME AND PURPOSE
HIGH VOLUME ACCOUNTS OIL DISPENSER: PROVIDES IMPROVED OIL DISPENSING FOR ACCOUNT THAT RUN HIGH COPY VOLUMENS.

KIT NUMBER: 600K39660

REFERENCE: PL

TAG: 89

CLASS: R

USE: USO, RX

MANUFACTURING SERIAL NUMBER: FIELD RETROFIT

NAME AND PURPOSE
3 L SOFTWARE UPGRADE KIT: UPGRADE TO CURRENT SOFTWARE CONFIGURATION TO INCLUDE ADDITIONAL DIAGNOSTIC TESTS.

KIT NUMBER: 600K35890

REFERENCE: PL 1.2

TAG: 90

CLASS: O

USE: ALL

MANUFACTURING SERIAL NUMBER: FIELD RETROFIT

NAME AND PURPOSE
FOREIGN ACCESSORY KIT: PROVIDES THE ABILITY TO INSTALL A FOREIGN ACCESSORY DEVICE. ALSO REQUIRES INSTALL KIT 97K11682 TO INSTALL THE CVA.

KIT NUMBER: 97K11350

REFERENCE: N/A

Section Contents

Plug / Jack Locational Drawing

Electrical Component Wiring

Connector Wiring

Plug/ Jack Listing and Location

CONNECTOR	FIGURE	CONNECTOR	FIGURE
P/J 2	1	P/J 40	4,6
P/J 3	1	P/J 41	5,9
P/J 4	1	P/J 42	5,9
P/J 5	1	P/J 43	4,6
P/J 6	1	P/J 44	5,9
P/J 9	3,5	P/J 45	7
P/J 10	3,5	P/J 46	7
P/J 11	3,5	P/J 47	5,9
P/J 12	3,5	P/J47 (2515)	5,9
P/J 13	3,5	P/J48 (2515)	5,8
P/J 14	3,5	P/J49 (2515)	5,8
P/J 15	3,5	P/J 51	4,6
P/J 16	3,5	P/J 52	4,6
P/J 17	3,5	P/J 53	4,6
P/J 18	3,5	P/J 54	4,6
P/J 21	3,5	P/J 55	10
P/J 22	3,5	P/J 56	10
P/J 24	4,6	P/J 58	5
P/J 25	4,6	P/J72 (2515)	6
P/J 27	2		
P/J 28	1		
P/J 29			
P/J 30	2		
P/J 31 (2515)	5		
P/J 32			
P/J 33			
P/J 34 (2515) (DEVELOPER BIAS)	5		
P/J 37	2		
P/J 38	2		
P/J 39	4,6		

Plug / Jack Locational Drawing

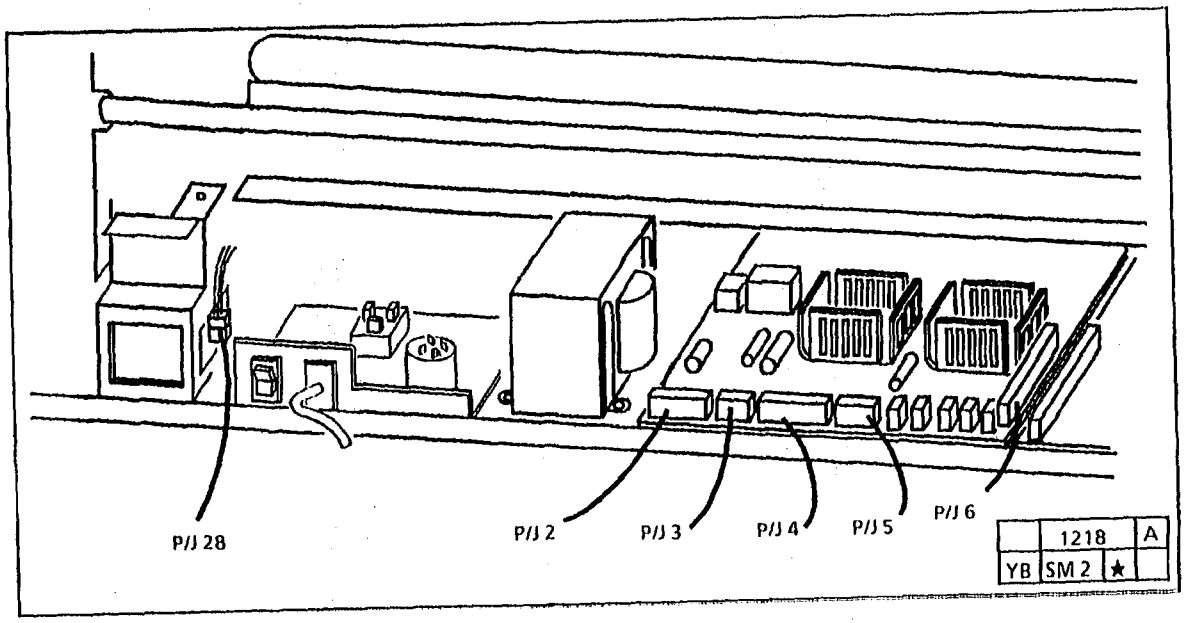


Figure 1. Rear View

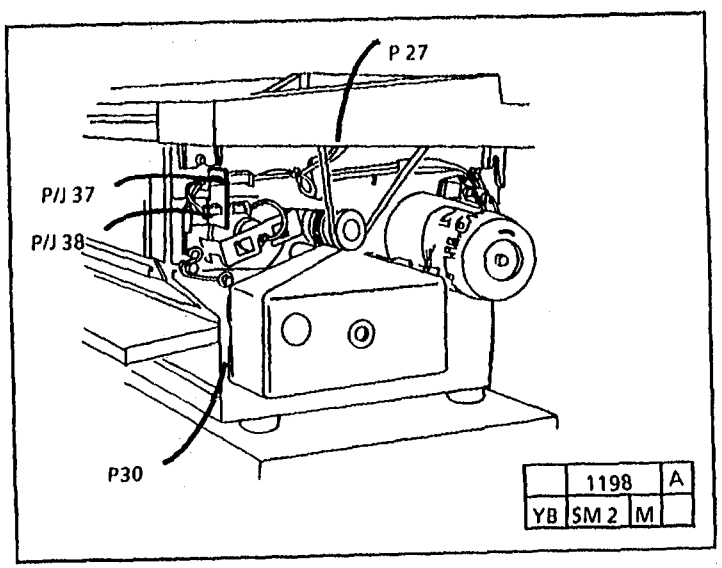


Figure 2. Right Side View

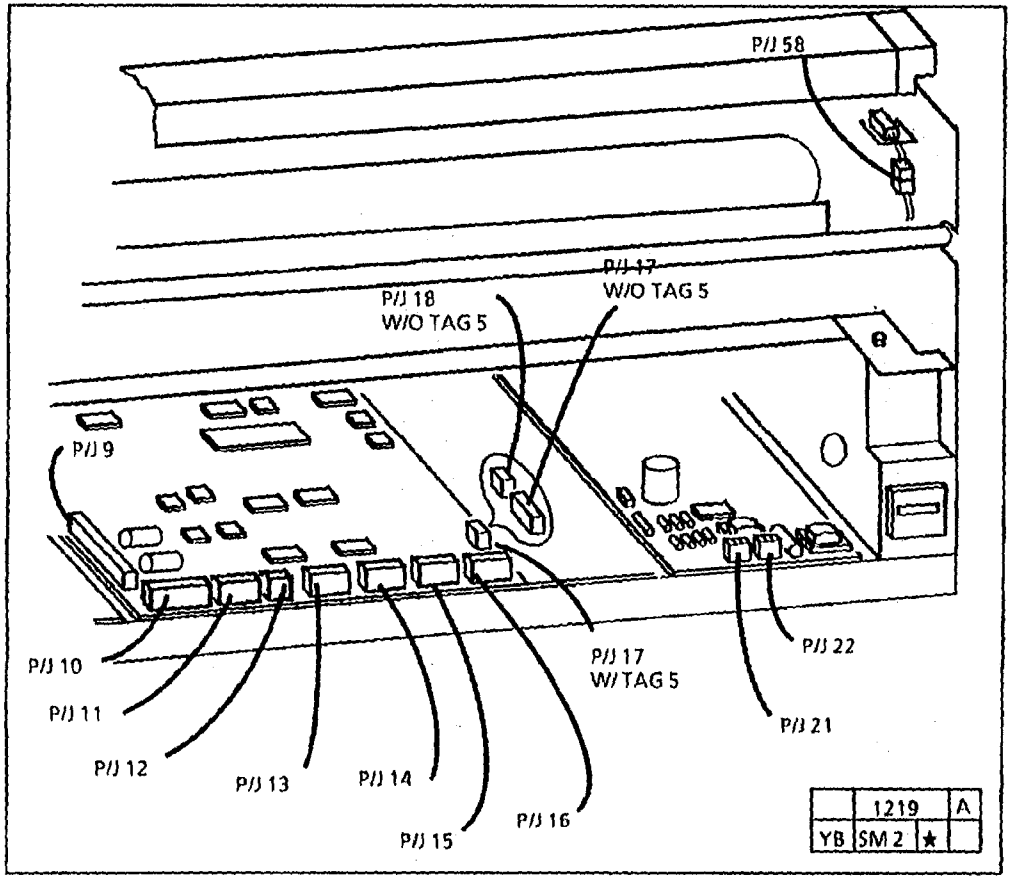


Figure 3 (2510). Rear View

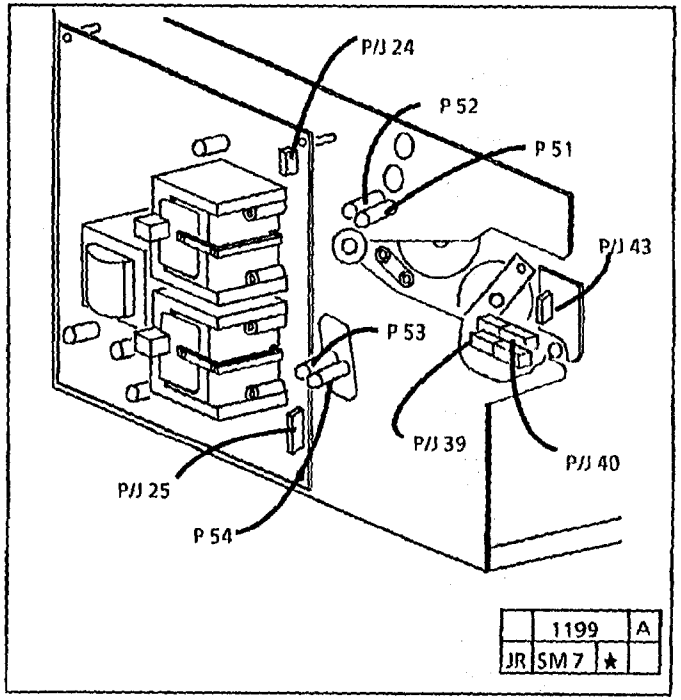


Figure 4 (2510). Left Side View

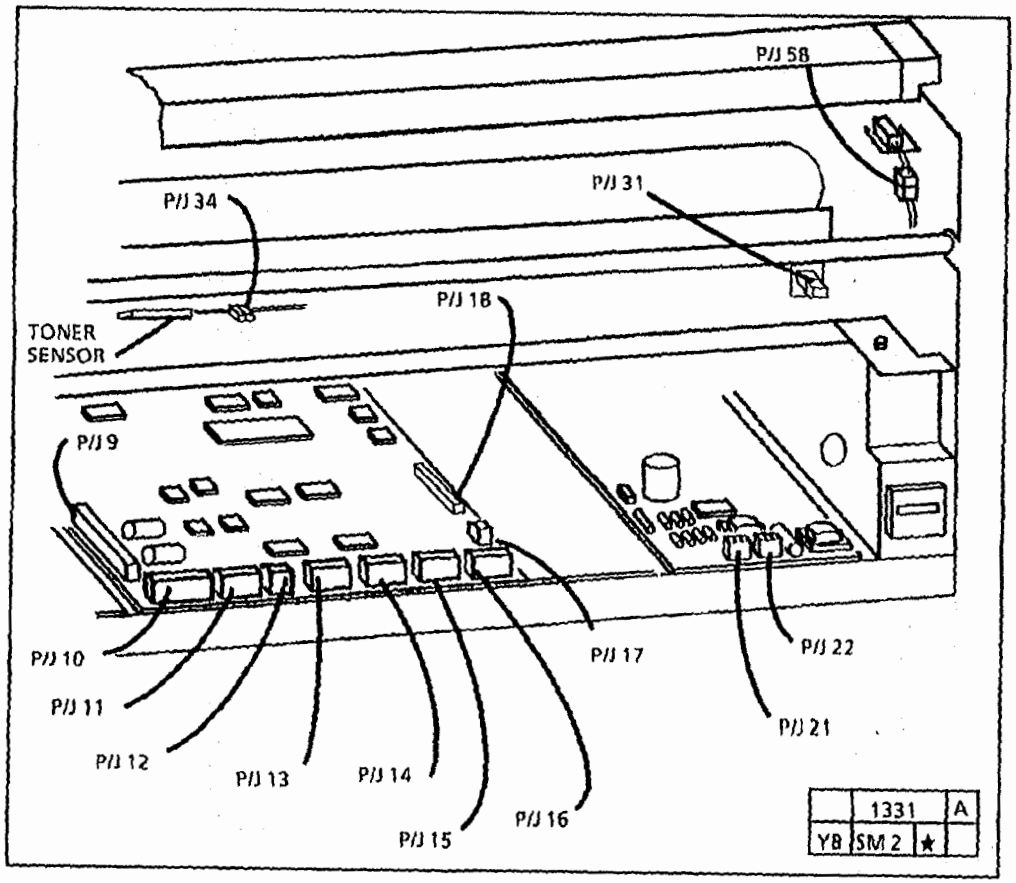


Figure 5 (2515). Rear View

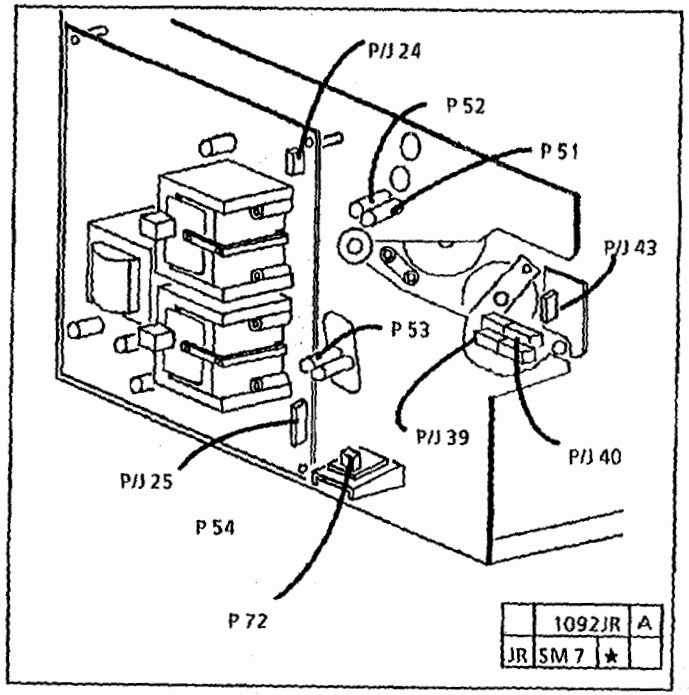


Figure 6 (2515). Left Side View

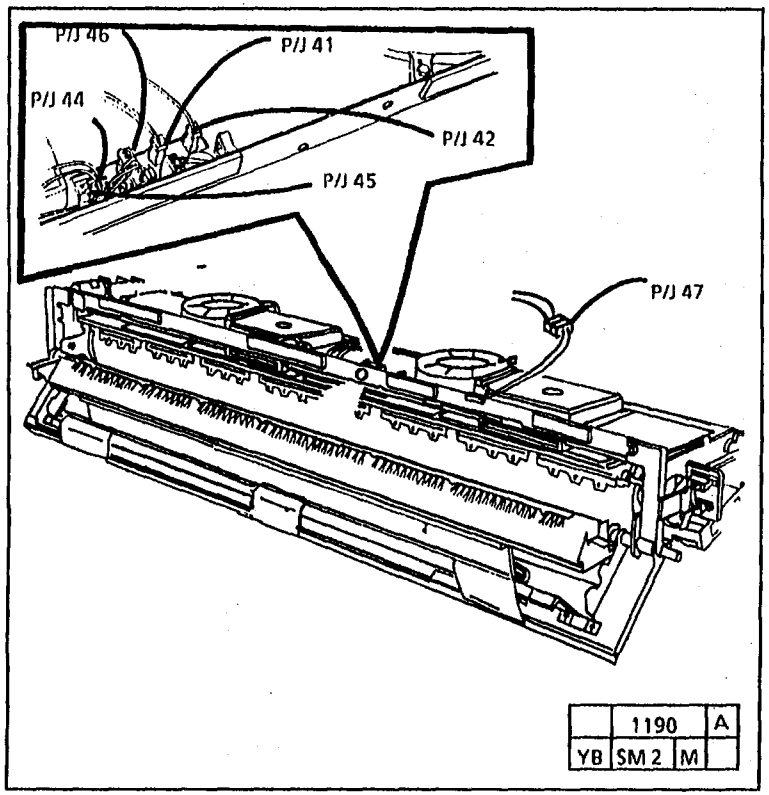


Figure 7 (2510). Xerographic Module With Tag 5

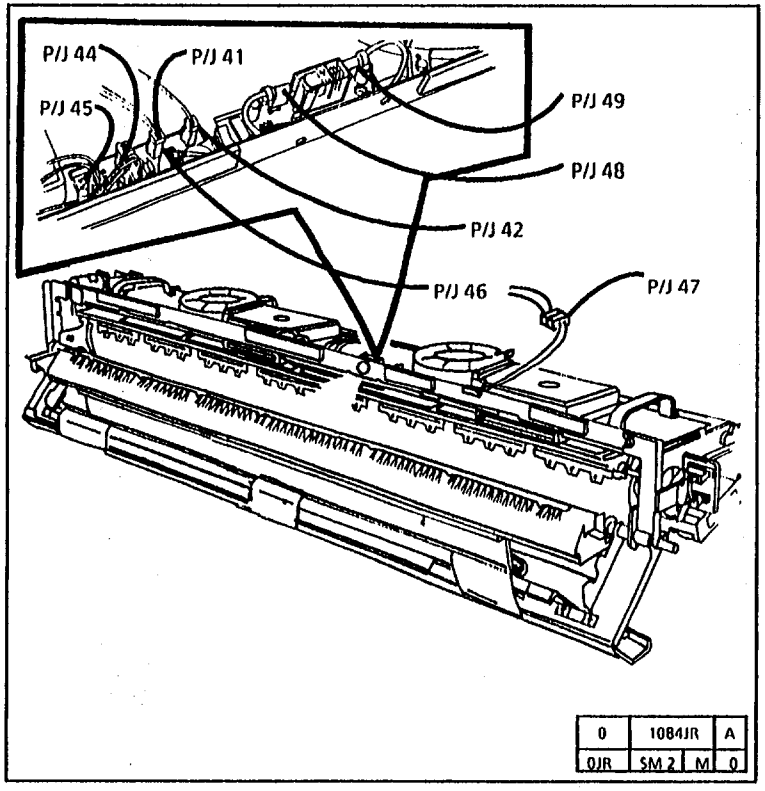


Figure 8 (2515). Xerographic Module

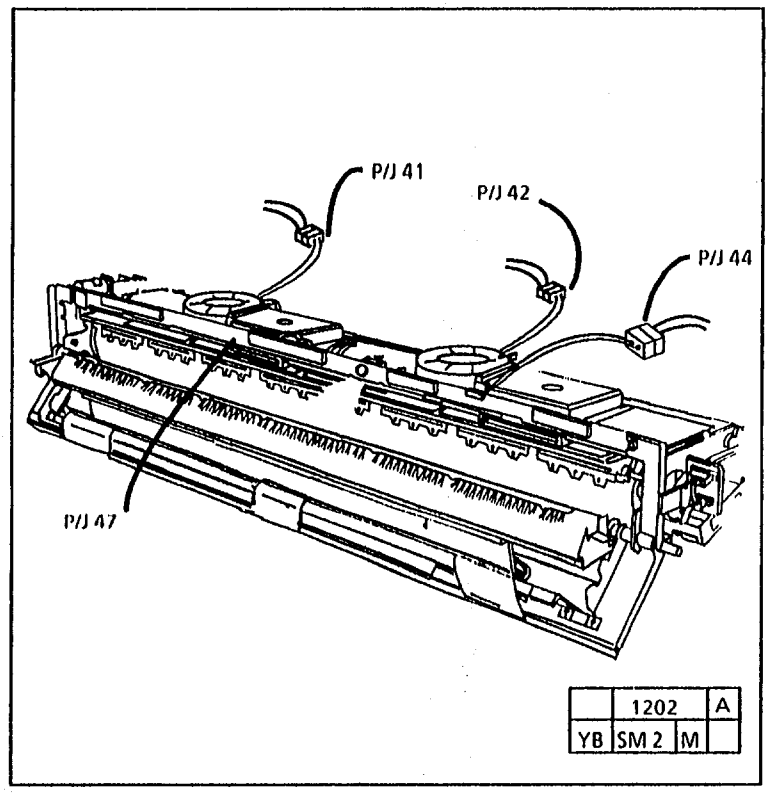


Figure 9 (2510). Xerographic Module Without Tag 5

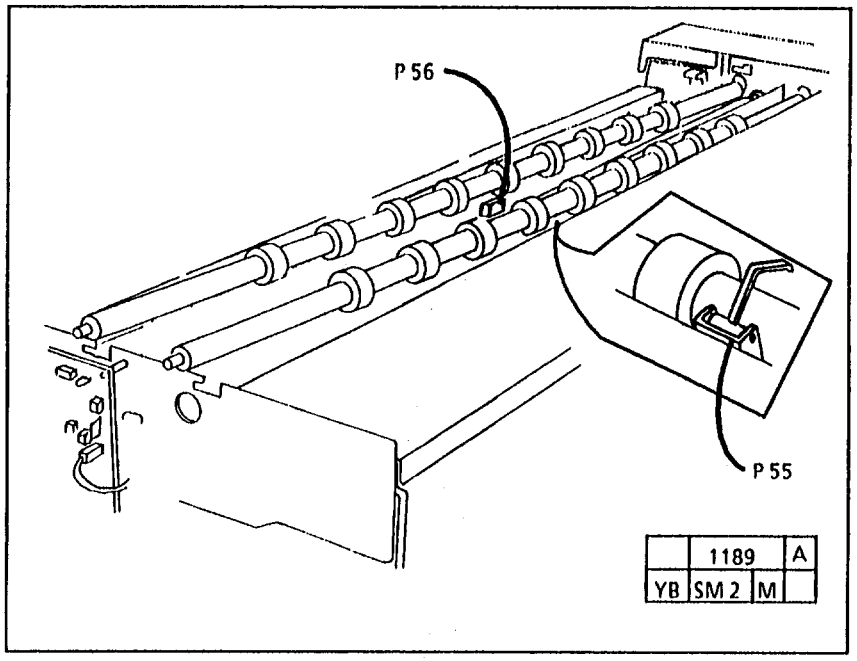


Figure 10. Platen Sensors

CONNECTOR PIN NUMBERING

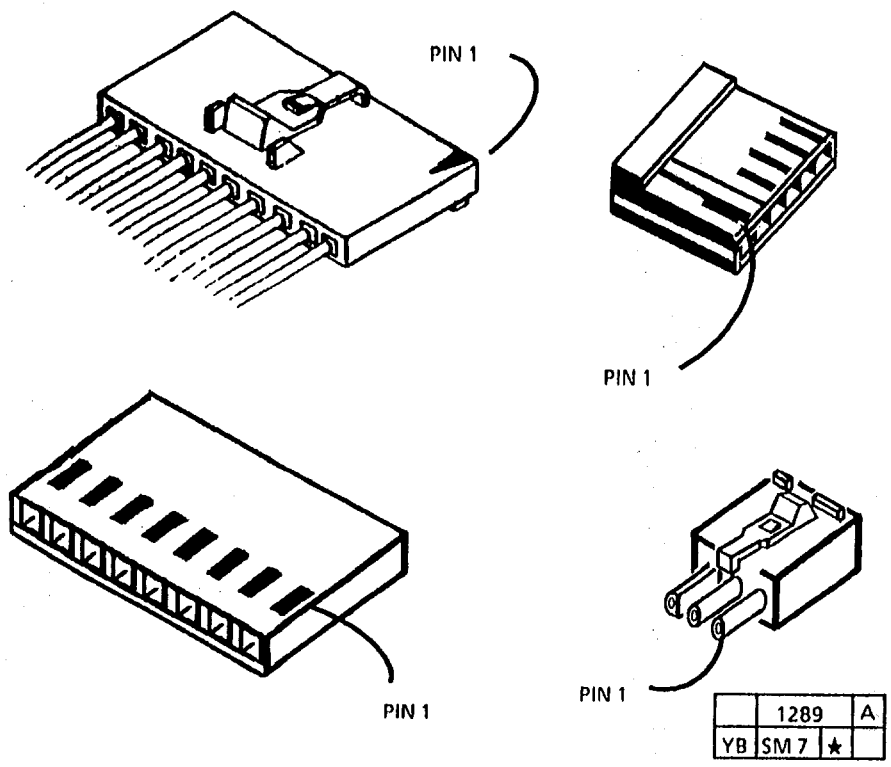


Figure 1. Connector Pin Numbering

Electrical Component Wiring Connections Drawing

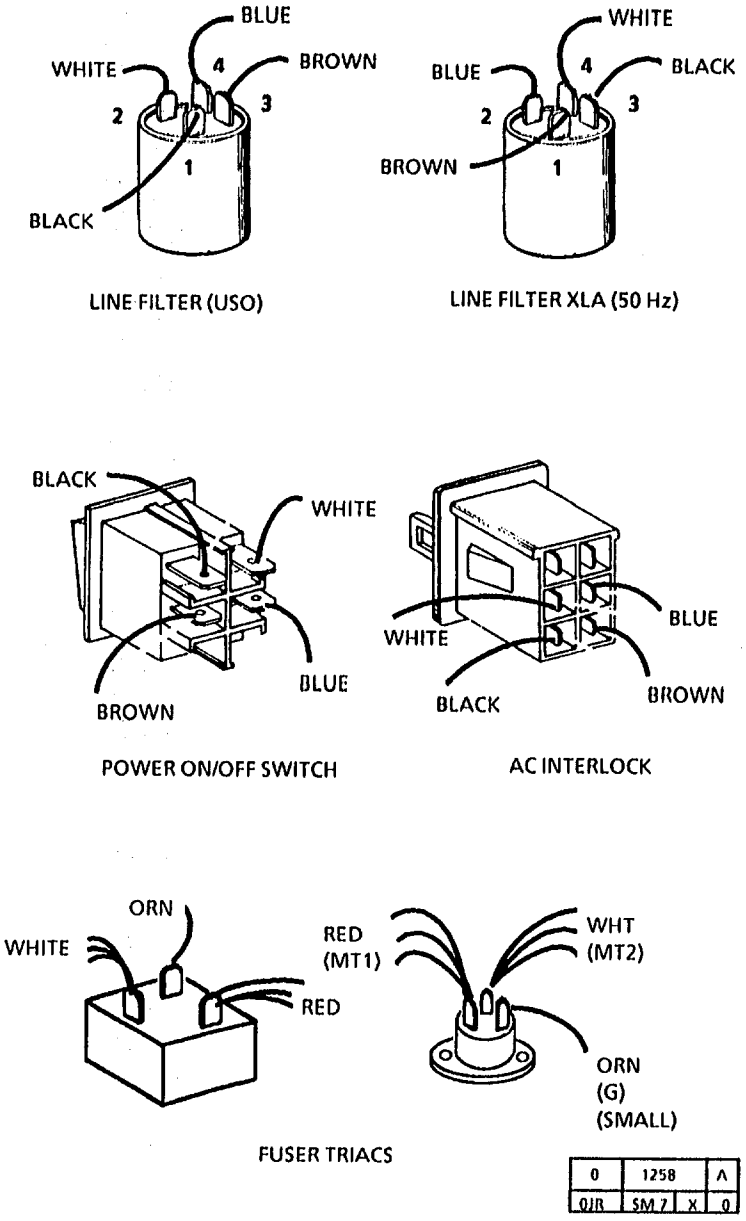


Figure 1. Electrical Component Wiring

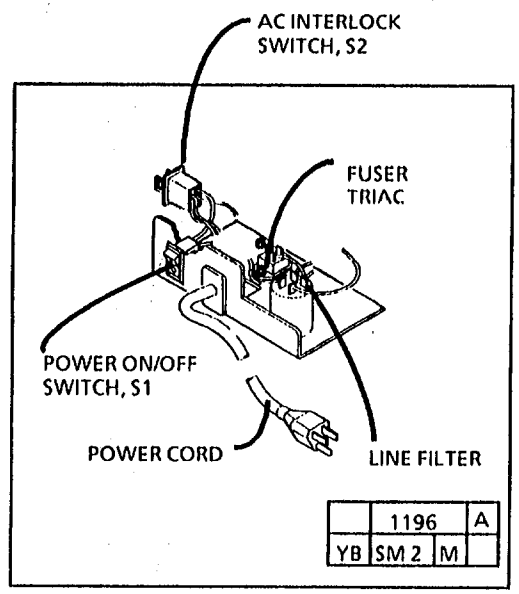


Figure 2. USO AC Component Panel

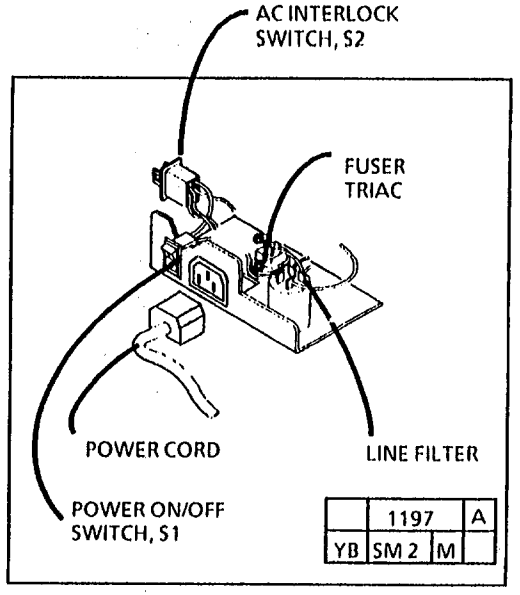


Figure 3. XLA (50 Hz) AC Component Panel

P2/J2 (2510) (LVPS, WITHOUT TAG 5 OR WITH TAG 4)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	Q1-MT2	FUSER TRIAC	WHT
2		NOT USED	
3	Q1-GATE	FUSER ON (H)	ORN
4	Q1-MT1	FUSER TRIAC	RED
5	LF1-4 OR LF1-2	ACN	BLU
6	P/J 37-4	ACN	BLU
7			
8	P/J 37-5	ACH	BRN
9	LF1-3 OR LF1-1	ACH	BRN
10			
11	E2	GND	GRN/YEL

P2/J2 (LVPS, 2515, 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	Q1-MT2	FUSER TRIAC	WHT
2		NOT USED	
3	Q1-GATE	FUSER ON (H)	ORN
4	Q1-MT1	FUSER TRIAC	RED
5	LF1-4 OR LF1-2	ACN	BLU
6		NOT USED	
7	LF1-3 OR LF1-1	ACH	BRN
8		NOT USED	
9	E2	GND	GRN/YEL

P3/J3 (LVPS, MAIN DRIVE MOTOR)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	MOT1-1	ACN	BLU
2		NOT USED	
3	MOT1-3	ACH	BRN

P4/J4 (LVPS, TRANSFORMER)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	T1-1	ACH	BRN
2		NOT USED	
3	T1-3	ACN	BLU
4	T1-4	ACN	BLU
5		NOT USED	
6	T1-6	22 VAC	RED
7	T1-7	22 VAC	RED
8	T1-8	10 VDC	ORN
9	T1-9	22 VAC	VIO
10	T1-10	22 VAC	VIO

P5/J5 (LVPS; 2515 AND 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P58-3	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P58-1	+ 24 VDC INTLK	VIO
4	P43-8	+ 24 VDC INTLK	VIO
5		NOT USED	
6	P43-6	+ 24 VDC	ORN
7	P43-5	CLEANER BLADE SOLENOID ON	VIO
8	P43-4	FANS ON	VIO
9		NOT USED	

P5/J5 (LVPS; 2510 USO WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P58-3	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P58-1	+ 24 VDC INTLK	VIO
4	P43-8	+ 24 VDC INTLK	VIO
5		NOT USED	
6	P43-6	+ 24 VDC	ORN
7		NOT USED	
8	P43-4	+ 24 VDC	ORN
9	P43-3	CLEANER BLADE SOLENOID ON	VIO

P6/J6 (LVPS; 2510, WITHOUT TAG 5)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P9-16	+ 5 VDC	ORN
2	P9-15	NOT USED	
3	P9-14	+ 15 VDC	ORN
4	P9-13	+ 24 VDC INTLK	ORN
5	P9-12	+ 24 VDC	ORN
6	P9-11	+ 24 VDC	ORN
7	P9-10	DC COM	ORN
8	P9-9	FUSER ON	ORN
9	P9-8	DC COM	ORN
10	P9-7	FANS ON	ORN
11	P9-6	DC COM	ORN
12	P9-5	MAIN DRIVE MOTOR ON	ORN
13	P9-4	DC COM	ORN
14	P9-3	10 VOLTS (FULL-WAVE)	ORN
15	P9-2	NOT USED	
16	P9-1	CLEANER BLADE SOLENOID	ORN

P9/J9 (CONTROL PWB; 2510 WITHOUT TAG 5)

PIN	PIN (LVPS)	SIGNAL NAME	WIRE COLOR
1	P6-16	CLEANER BLADE SOLENOID	ORN
2		NOT USED	
3	P6-14	10 VOLTS (FULL-WAVE)	ORN
4	P6-13	DC COM	ORN
5	P6-12	MAIN DRIVE MOTOR ON	ORN
6	P6-11	DC COM	ORN
7	P6-10	FANS ON	ORN
8	P6-9	DC COM	ORN
9	P6-8	FUSER ON	ORN
10	P6-7	DC COM	ORN
11	P6-6	+ 24 VDC	ORN
12	P6-5	+ 24 VDC	ORN
13	P6-4	+ 24 VDC INTLK	ORN
14	P6-3	+ 15 VDC	ORN
15		NOT USED	
16	P6-1	+ 5 VDC	ORN

P9/J9 (CONTROL PWB; 2515, 2510 WITH TAG 5)

PIN	SOLDER TERMINAL (LVPS)	SIGNAL NAME	WIRE COLOR
1	1	CLEANER BLADE SOLENOID	ORN
2		NOT USED	
3	3	10 VOLTS (FULL-WAVE)	ORN
4	4	DC COM	ORN
5	5	MAIN DRIVE MOTOR ON	ORN
6	6	DC COM	ORN
7	7	FANS ON	ORN
8	8	DC COM	ORN
9	9	FUSER ON	ORN
10	10	DC COM	ORN
11	11	+ 24 VDC	ORN
12	12	+ 24 VDC	ORN
13	13	+ 24 VDC INTLK	ORN
14	14	+ 15 VDC	ORN
15		NOT USED	
16	16	+ 5 VDC	ORN

P10/J10 (CONTROL PWB)

PIN	PIN (HVPS)	SIGNAL NAME	WIRE COLOR
1	P25-10	+ 24 VDC	ORN
2		NOT USED	
3	P25-8	DEVELOPER BIAS	ORN
4	P25-7	DC COM	ORN
5	P25-6	HVPS ENABLE	ORN
6	P25-5	DC COM	ORN
7	P25-4	TRANSFER COROTRON ON	ORN
8	P25-3	CHARGE CONTROL	ORN
9		NOT USED	ORN
10	P25-1	+ 24 VDC INTLK	ORN

P11/J11 (CONTROL PWB)

PIN	SOLDER TERMINAL (LAMP BALLAST)	SIGNAL NAME	WIRE COLOR
1	1	+ 24 VDC	ORN
2		NOT USED	
3	3	DC COM	VIO
4	4	FILAMENTS ON	BLK
5	5	DC COM	VIO
6	6	EXPOSURE LAMP ON	WHT
7	7	EXPOSURE LEVEL	RED

P12/J12 (CONTROL PWB)

PIN	COPY COUNT METER	SIGNAL NAME	WIRE COLOR
1		+ 24 VDC	BLK
2		COUNT THE COPY	BLK

P13/J13 (CONTROL PWB)

PIN	PIN (CONTROL PANEL)	SIGNAL NAME	WIRE COLOR
1	P27-8	DATA OUT	VIO
2	P27-7	DC COM	VIO
3	P27-6	DATA IN	VIO
4	P27-5	DC COM	VIO
5	P27-4	DATA CLOCK	VIO
6	P27-3	DC COM	VIO
7	P27-2	DATA STROBE	VIO
8	P27-1	+ 5 VDC	VIO

P14/J14 (CONTROL PWB)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P28-6	MEDIA MOVING	VIO
2	P28-5	DC COM	VIO
3	P28-4	+ 5 VDC	VIO
4	P28-3	+ 24 VDC	VIO
5	P28-2	FEED CLUTCH ON	VIO
6		NOT USED	

P15/J15 (CONTROL PWB)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P55-3	DOCUMENT SENSED	ORN
2	P55-2	DC COM	ORN
3	P55-1	+ 5 VDC	ORN
4		NOT USED	
5	P56-2	ILLUMINATION LEVEL	ORN
6	P56-1	+ 15 VDC	ORN
7		NOT USED	
8		NOT USED	
9		NOT USED	
10		NOT USED	

P17/J17 (CONTROL PWB; 2515, 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P43-2	FUSER TEMPERATURE	ORN
2	P43-1	DC COM	ORN

P18/J18 (CONTROL PWB; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P43-2	FUSER TEMPERATURE	ORN
2	P43-1	DC COM	ORN

P18/J18 (CONTROL PWB; 2515)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P31-10	NOT USED	GRN
2	P31-9	DC COM	YEL
3	P31-8	NOT USED	ORG
4	P31-7	+ 24 VDC	RED
5	P31-6	TONER SENSOR OUT	BRN
6	P31-5	DC COMMON	BLK
7	P31-4	TONER DISPENSE SOLENOID	WHI
8	P31-3	+ 24 VDC	GRY
9	P31-2	NOT USED	VIO
10	P31-1	NOT USED	BLU
11	P372-4	NOT USED	VIO
12	P372-3	+ 15 VDC	SKY
13	P372-2	HUMIDITY SENSOR OUT	GRN
14	P372-1	SIGNAL GROUND	YEL

P21/J21 (LAMP BALLAST)

PIN	SOCKET	SIGNAL NAME	WIRE COLOR
1		FILAMENT	BLK
2		NOT USED	
3		FILAMENT	BLK

P22/J22 (LAMP BALLAST)

PIN	SOCKET	SIGNAL NAME	WIRE COLOR
1		FILAMENT	BLK
2		NOT USED	
3		FILAMENT	BLK

P24/J24 (HVPS)

PIN	DEVELOPER HOUSING	SIGNAL NAME	WIRE COLOR
1	DEVELOPER BIAS CLIP	DEVELOPER BIAS	BLK
2		SHIELD	

P25/J25 (HVPS)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P10-10	+ 24 VDC INTLK	ORN
2		NOT USED	
3	P10-8	CHARGE CONTROL	ORN
4	P10-7	TRANSFER COROTRON ON	ORN
5	P10-6	DC COM	ORN
6	P10-5	HVPS ENABLE	ORN
7	P10-4	DC COM	ORN
8	P10-3	DEVELOPER BIAS	ORN
9		NOT USED	ORN
10	P10-1	+ 24 VDC	ORN

P27/J1 (CONTROL PANEL; 2510)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P13-8	+5 VDC	VIO
2	P13-7	DATA STROBE	VIO
3	P13-6	DC COM	VIO
4	P13-5	DATA CLOCK	VIO
5	P13-4	DC COM	VIO
6	P13-3	DATA IN	VIO
7	P13-2	DC COM	VIO
8	P13-1	DATA OUT	VIO

P27/J1 (CONTROL PANEL; 2515)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P18-8	+5 VDC	VIO
2	P18-7	DATA STROBE	VIO
3	P18-6	DC COM	VIO
4	P18-5	DATA CLOCK	VIO
5	P18-4	DC COM	VIO
6	P18-3	DATA IN	VIO
7	P18-2	DC COM	VIO
8	P18-1	DATA OUT	VIO

P28 (PAPER TRANSPORT MODULE)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	E6	FRAME	VIO
2	P14-5	FEED CLUTCH ON	VIO
3	P14-4	+24 VDC	VIO
4	P14-3	+5 VDC	VIO
5	P14-2	DC COM	VIO
6	P14-1	MEDIA MOVING	VIO

J28 (PAPER TRANSPORT MODULE)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	E7	FRAME	ORN
2	P30-2	FEED CLUTCH ON	ORN
3	P30-1	+24 VDC	ORN
4	P29-1	+5 VDC	ORN
5	P29-2	DC COM	ORN
6	P29-3	MEDIA MOVING	ORN

P29 (MOTION SENSOR)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J28-4	+ 5 VDC	ORN
2	J28-5	DC COM	ORN
3	J28-6	MEDIA MOVING	ORN

P30 (PAPER FEED CLUTCH)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J28-3	+ 24 VDC	VIO
2	J28-2	FEED CLUTCH ON	VIO

P31 (2515; DEVELOPER HOUSING)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P18-10	NOT USED	BLU
2	P18-9	NOT USED	VIO
3	P18-8	+ 24 VDC	GRY
4	P18-7	TONER DISPENSE SOLENOID ENERGIZE [L]	WHI
5	P18-6	DC COM	BLK
6	P18-5	TONER SENSOR OUT	BRN
7	P18-4	+ 24 VDC	RED
8	P18-3	NOT USED	ORG
9	P18-2	DC COM	YEL
10	P18-1	NOT USED	GRN

P32 (DEVELOPER BIAS CLIP)

PIN	DEVELOPER HOUSING	SIGNAL NAME	WIRE COLOR
CLIP	P24-1	DEVELOPER BIAS	BLK

P33 (LOW TONER SENSOR)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J31 - 10	+ 5 VDC	BRN
2	J31 - 9	DC COM	RED
3	J31 - 8	LOW TONER	ORN

P/J34 (TONER SENSOR; 2515)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J31-7	+ 24 VDC	YEL
2	J31-6	TONER CONCENTRATION	GRN
3	J31-5	DC COM	BLU

P35 (2515, TONER SOLENOID)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J31-4	+ 24 VDC	VIO
2	J31-3	TONER SOLENOID ON	GRY

P37 (XERO MODULE; 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	E3	FRAME GROUND	GRN/YEL
2	LF1-3	ACH	BRN
3	Q1-MT2	ACN	WHT

P37 (XERO MODULE, WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	Q1-MT2	ACN	WHT
2	LF1-3 OR LF1-1	ACH	BRN
3			
4	P2-6	ACN	BLU
5	P2-8	ACH	BRN
6			

P/J37 (XERO MODULE; 2515, 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	E8	FRAME GROUND	GRN/YEL
2	P40-1	ACH	BRN
3	P38-1	ACN	WHT

P/J37 (XERO MODULE, WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P38-1	ACN	WHT
2	P40-1	ACH	BRN
3			
4	P41-2 P42-2	ACN	BLU
5	P41-1 P42-1	ACH	BRN
6			

P/J 38 (HEAT ROD WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J37-3	ACN	WHT

P/J 38 (HEAT ROD, WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J37-1	ACN	WHT

P/J 39 (HEAT ROD)

PIN	PIN	COMPONENT	WIRE COLOR
1		OVERTEMPERATURE THERMOSTAT	WHT

P/J 40 (OVERTEMPERATURE THERMOSTAT)

PIN	PIN	COMPONENT	WIRE COLOR
1	P37-2	THERMISTOR PWB	BLK

P/J 41 (AC COOLING FAN; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J37-5	ACH	BRN
2	J37-4	ACN	BLU

P/J 41 (DC COOLING FAN; 2515, 2510 WITH TAG 5)

PIN	THERMISTOR PWB	SIGNAL NAME	WIRE COLOR
1		+ 24 VDC	RED
2		FAN ON	BLK

P/J 42 (AC COOLING FAN; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	J37-5	ACH	BRN
2	J37-4	ACN	BLU

P/J 42 (DC COOLING FAN; 2515, 2510 WITH TAG 5)

PIN	THERMISTOR PWB	SIGNAL NAME	WIRE COLOR
1		+ 24 VDC	RED
2		FAN ON	BLK

P 43 (XERO MOD; 2515, 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P17-2	DC COM	VIO
2	P17-1	FUSER TEMPERATURE	VIO
3		NOT USED	
4	P5-8	FANS ON	VIO
5	P5-7	CLEANER BLADE SOLENOID ON	VIO
6	P5-6	+ 24 VDC	ORN
7		NOT USED	
8	P5-4	+ 24 VDC INTLK	VIO

J 43 (XERO MOD; 2515, 2510 WITH TAG 5)

PIN	PIN (THERMISTOR PWB)	SIGNAL NAME	WIRE COLOR
1	P44-8	DC COM	VIO
2	P44-7	FUSER TEMPERATURE	VIO
3		NOT USED	
4	P44-5	FANS ON	VIO
5	P44-4	CLEANER BLADE SOLENOID ON	VIO
6	P44-3	+ 24 VDC	ORN
7		NOT USED	
8	P44-1	+ 24 VDC INTLK	VIO

P 43 (XERO MOD; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P18-2	DC COM	VIO
2	P18-1	FUSER TEMPERATURE	VIO
3	P5-9	CLEANER BLADE SOLENOID ON	VIO
4	P5-8	+ 24 VDC	VIO
5		NOT USED	
6	P5-6	+ 24 VDC	ORN
7		NOT USED	
8	P5-4	+ 24 VDC INTLK	VIO

J 43 (XERO MOD; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P47-2	DC COM	VIO
2	P47-1	FUSER TEMPERATURE	VIO
3	P45-2	CLEANER BLADE SOLENOID ON	
4	P45-1	+ 24 VDC	VIO
5			
6	P44-3	+ 24 VDC	ORN
7		NOT USED	
8	P44-1	+ 24 VDC INTLK	VIO

P44 (THERMISTOR PWB, WITH TAG 5)

PIN	PIN (XERO MOD)	SIGNAL NAME	WIRE COLOR
1	J43-8	+ 24 VDC INTLK	VIO
2		NOT USED	
3	J43-6	+ 24 VDC	ORN
4	J43-5	CLEANER BLADE SOLENOID ON	VIO
5	J43-4	FANS ON	VIO
6		NOT USED	
7	J43-2	FUSER TEMPERATURE	VIO
8	J43-1	DC COM	VIO

P/J44 (TRANSPORT LATCHING COVER INTERLOCK SWITCH, WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P43-8	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P43-6	+ 24 VDC INTLK	VIO

P/J45 (CLEANING BLADE SOLENOID, WITHOUT TAG5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P43-4	+ 24 VDC	BLK
2	P43-3	CLEANING BLADE SOLENOID ON	BLK

P45 (THERMISTOR PWB, WITH TAG 5)

PIN	CLEANING BLADE SOLENOID	SIGNAL NAME	WIRE COLOR
1		+ 24 VDC	BLK
2		CLEANING BLADE SOLENOID ON	BLK

P46 (THERMISTOR PWB; 2515, 2510 WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P47-3	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P47-1	+ 24 VDC INTLK	VIO

P47 (THERMISTOR; 2510 WITHOUT TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P43-2	FUSER TEMPERATURE	VIO
2	P43-1	DC COM	VIO

P47 (TRANSPORT LATCHING COVER INTERLOCK SWITCH, WITH TAG 5)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P46-3	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P46-1	+ 24 VDC INTLK	VIO

P51 (PRECHARGE COROTRON)

PIN	HVPS	SIGNAL NAME	WIRE COLOR
1		PRECHARGE COROTRON ON	BLU

P52 (CHARGE COROTRON)

PIN	HVPS	SIGNAL NAME	WIRE COLOR
1		CHARGE COROTRON ON	RED

P53 (TRANSFER COROTRON)

PIN	HVPS	SIGNAL NAME	WIRE COLOR
1		TRANSFER COROTRON ON	GRN

P54 (DETACK COROTRON)

PIN	HVPS	SIGNAL NAME	WIRE COLOR
1		DETACK COROTRON ON	ORN

P 55 (DOCUMENT SENSOR)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P15-3	+ 5 VDC	VIO
2	P15-2	DC COM	VIO
3	P15-1	DOCUMENT SENSED	VIO

P 56 (ILLUMINATION SENSOR)

PIN	PIN (CONTROL PWB)	SIGNAL NAME	WIRE COLOR
1	P15-6	+ 15 VDC	VIO
2	P15-5	ILLUMINATION LEVEL	VIO

P 58 (UPPER REAR COVER INTERLOCK SWITCH)

PIN	PIN (LVPS)	SIGNAL NAME	WIRE COLOR
1	P5-3	+ 24 VDC INTLK	VIO
2		NOT USED	
3	P5-1	+ 24 VDC INTLK	VIO

P72 (2515; HUMIDITY SENSOR)

PIN	PIN	SIGNAL NAME	WIRE COLOR
1	P18-14	SIGNAL GND	YEL
2	P18-13	SENSOR OUTPUT	GRN
3	P18-12	+ 15 VDC	SKY
4	P18-11	NOT USED	VIO

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