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# Xerox 3050 (50/60 Hz) Copier Service Manual

(3040)

- Revisions 700P86582, 700P86583, 700P86584, 700P86585, 700P86586, and 700P86587 have been merged into this document. Changes bring this document to the 12/97 level.

## Search

700P86580

December 1997

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## NOTICE

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Prepared by:  
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**Revision Control List**

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This section contains the following information:		This section contains information about diagnostic procedures, Drum Maintenance procedures, tools and supplies, installation procedures, copier specifications, and the Change Tag/ MOD Index.	
● Call Flow Diagram			
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This section contains a listing of the status codes and the Repair Analysis Procedures, (RAPs).		This section contains the list of connectors and the connector location drawings and information about some component wiring.	
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Section Contents .....	3-1	This section not used at this time.	
This section contains image quality defect samples and the Repair Analysis Procedure for correcting the problem.			





## About This Manual

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

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

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 Action

The Initial Actions identify how to collect the information necessary and how to verify, classify and proceed with the service call.

- Maintenance Activities

The Maintenance Activities lists the items that have to be serviced based on the type of call to be performed, either Normal Call or Call Back.

### 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 with the corresponding corrective action for each 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, Product Specifications, Supplemental Tools and Supplies, Generic RAPs, Installation and Removal procedures, and other information..

### Section 7. Wiring Data

This section contains the Plug/Jack Locational Drawings, Electrical Component Wiring Connections Drawings, and a set of Component Drawings.

### Section 8. Accessories/ Options

This section is not used at this time.

## 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 "blank" display, etc.

Section 3 is used to troubleshoot Image Quality problems. If you are not sure of the type of image quality defect 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, perform the Normal Call procedures.

After performing Normal Call or Call Back, perform Final Actions to ensure that the copier meets the copy specifications.

## Multinational Configuration Differences

This manual contains information that applies to **USO** (USA), **RX** (Rank Xerox and Xerox Engineering Systems Europe), **XCL** (Canada), and **XLA** (Latin America). USO references usually apply to XCL and XLA. If a USO, RX, XCL or XLA copier configuration is different, the specific USO, XCL, RX or XLA 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.

(continued)



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

FOR EXAMPLE:

**THERMISTOR (RT1) REPAIR PROCEDURE  
WARNING**

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

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

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

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

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

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

## Reference Symbology

The following symbols are used in this document:



### NOTE

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

10.1



### Adjustment

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



### Voltage Source

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

C1.01

### Status Code

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



### Flags

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

[0403]

### Component Control

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

### 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



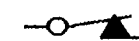
Safety interlock switch that is open.



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.

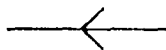


This symbol identifies an entire circuit diagram that has not been changed by this Tag/MOD number.

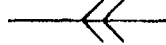


### The Signal Flow

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



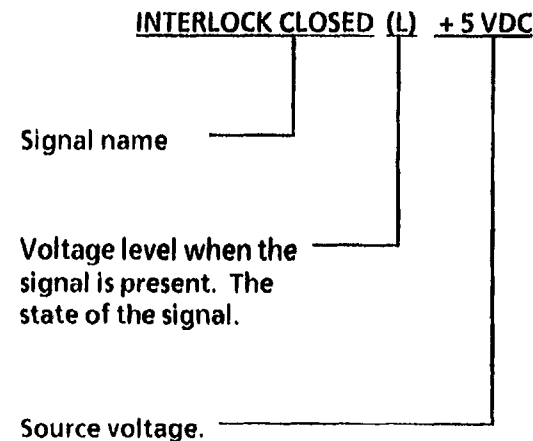
This symbol is used on circuit diagrams to indicate a recirculating signal.



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
+ 26 VDC	+ 24.7 TO + 27.3 VDC
DC COM	0.0 TO +0.8 VDC
(L)	0.0 TO +0.8 VDC

**Notes:**

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# 1. Service Call Procedures

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## Introduction

The Service Call Procedures are designed to assist the Service Representative to identify copier faults, perform the necessary corrective action and perform the correct Maintenance Procedures. The Service Call Procedures are designed to be used with the 3050 Service Manual and is the entry level for all service calls.

- **Call Flow Diagram** - This diagram outlines the major activities that are performed when a service call is made. The Initial Actions assist the Service Representative through the customer interface and help to identify the problem. The diagram also directs the Representative to verify, classify, repair the problem and perform the correct Maintenance Procedure.
- **Status Code Entry Chart** - The chart contains a list of Status Codes, their Cause, the corresponding Clearance Procedure and the Go to RAPs (Repair Analysis Procedures). The chart is designed to direct the Representative to the appropriate Clearance Procedure. If the Procedure does not clear the Status Code, the Representative refers to the Go to RAP in Section 2 column. This column contains the name of the RAP that must be followed, in order to repair the problem. When the Status Code problem has been repaired, refer to the Call Flow Diagram and continue the Service Call.

**NOTE:** *The Status Code Entry Chart includes status codes that may be generated by any one of several different firmware revisions. The total number of status codes has been reduced in later versions of firmware. The chart has been designed as a cross reference for all the firmware revisions.*

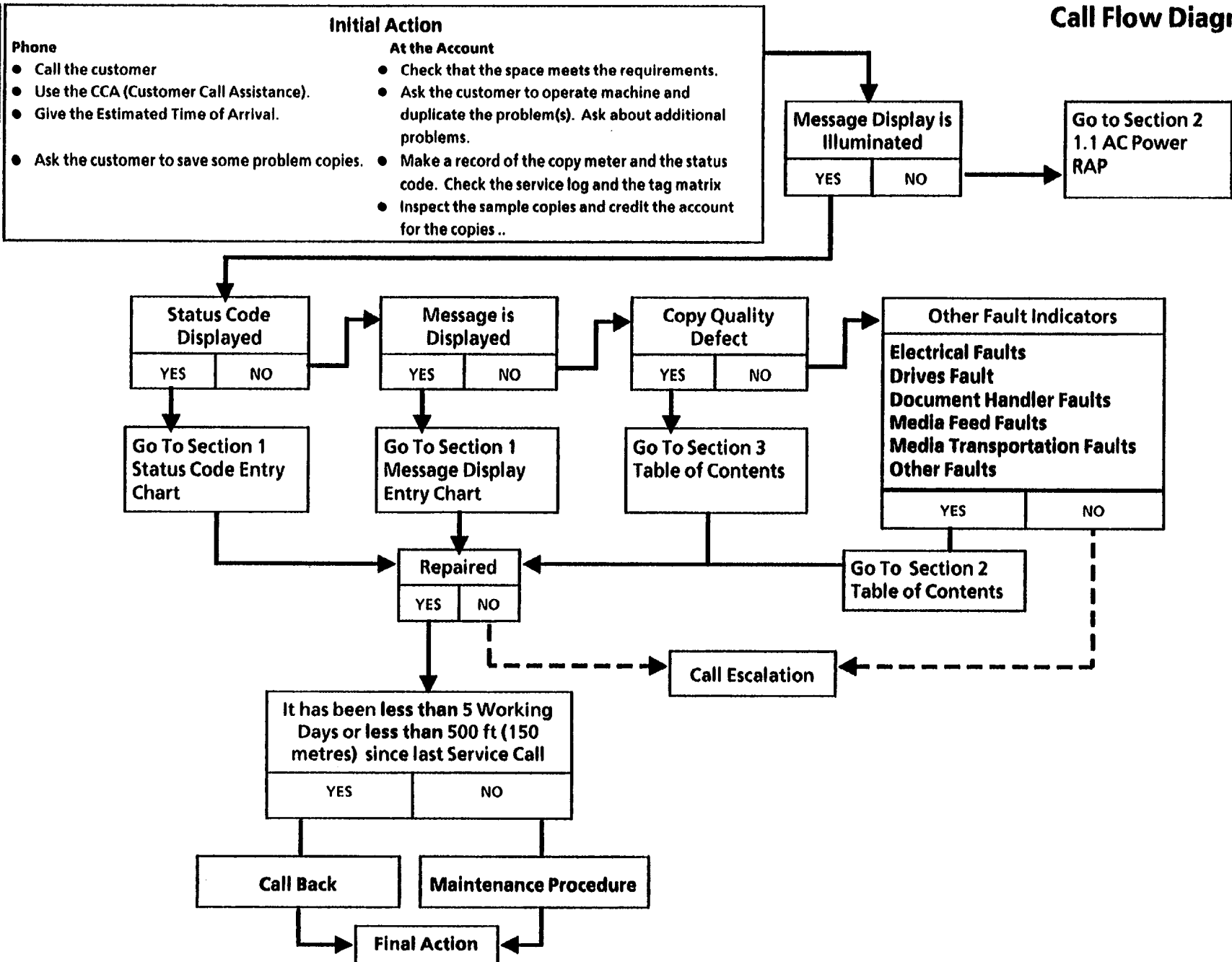
*Consequently, the chart contains status codes listed in the Status Code column that may be different than the status codes listed in the Go To RAP In Section 2 column. For example, status code C2.51 is listed in the Status Code column and C2.01 is listed in the corresponding Go To RAP In Section 2 column. The C2.01 RAP contains the information required to isolate and repair the problem that created the C2.51 status code.*

- **Call Back** - After correcting the problem that resulted in the call back, go to the Final Action and perform the activities indicated.
- **Maintenance Procedure** - This procedure contains the tasks that are performed after the main cause for the service call has been corrected. The tasks identified in the procedure are performed at the Interval indicated. The Interval may be after a specific number of feet, for example 10K. The Interval may also be specified as a Normal Call (NC). Normal Call activities are designed to be performed on all service calls. The specific interval and Normal Call activities include cleaning and replacing parts that require more frequent service and inspections. The Maintenance Procedure activities are designed to restore the copier to an initially clean and functional condition.

- **Final Action** - The purpose of this procedure is to record the media feet count and to make a record in the machine log book of the service activities that were performed. Final Action is designed to stress test the image quality and repair any image quality problems. A copy of test pattern 82E5980 is made and compared with the image copy quality specifications located in Section 3 of the manual.



# Call Flow Diagram



<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE PROCEDURE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>A1.01</b>	Insert Document Sensor was actuated at Power On.	Refer to the display on the control panel and follow the clearance procedure.	A1.01 Document Handler RAP
<b>A1.02</b>	Front Document Sensor was actuated at Power On.	Refer to the display on the control panel and follow the clearance procedure.	A1.02 Document Handler RAP
<b>A1.03</b>	Rear Document Sensor was actuated at Power On.	Refer to the display on the control panel and follow the clearance procedure.	A1.03 Document Handler RAP
<b>A1.25</b>	Document did not reach the Rear Document sensor.	Refer to the display on the control panel and follow the clearance procedure.	A1.25 Document Handler RAP
<b>A1.26</b>	Document reached the Rear Document sensor too early.	Refer to the display on the control panel and follow the clearance procedure.	A1.26 Document Handler RAP
<b>A1.33</b>	Front Document Sensor did not actuate during rescan of the document. Document was removed after copy scan, but before rescan.	Refer to the display on the control panel and follow the clearance procedure.	A1.43 Document Handler RAP
<b>A1.36</b>	Rear Document Sensor did not deactivate when the document was in the scan or rescan mode.	Refer to the display on the control panel and follow the clearance procedure.	A1.46 Document Handler RAP
<b>A1.38</b>	Operator did not press the <b>Partial Copy</b> button a second time in order to start or stop the copying of a partial copy.	Refer to the display on the control panel and follow the clearance procedure.	Instruct the operator how to use the <b>Partial Copy</b> feature.
<b>A1.43</b>	Front Document Sensor did not actuate when the document exited out the front of the copier.	Refer to the display on the control panel and follow the clearance procedure.	A1.43 Document Handler RAP
<b>A1.46</b>	Rear Document Sensor did not deactivate when the document exited the front or rear of the copier.	Refer to the display on the control panel and follow the clearance procedure.	A1.46 Document Handler RAP

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

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
A1.63	The time interval was too long between the deactuation of the Insert Sensor and the deactuation of the Front Document Sensor .	Refer to the display on the control panel and follow the clearance procedure.	A1.63 Document Handler RAP
A1.64	The Front Document Sensor deactuated before the insert document sensor.	Refer to the display on the control panel and follow the clearance procedure.	A1.64 Document Handler RAP
A1.65	Insert Document sensor deactuated too early. Document was too short.	Refer to the display on the control panel and follow the clearance procedure.	A1.65 Document Handler RAP
C0.01	Cutter could not return to the home position, or did not move off the home position.	Refer to the display on the control panel and follow the clearance procedure.	LL.30 Cutter Fault RAP
C1.01 C2.01 C3.01	The Roll X Position Sensor did not actuate or deactuate.  Refer to <i>Note 1</i>	Refer to the display on the control panel and follow the clearance procedure.	C1.01 and C1.05 Media Feed RAP C2.01 and C2.05 Media Feed RAP C3.01 and C3.05 Media Feed RAP
C1.04 C2.04 C3.04	Media Registration Sensor did not actuate or deactuate.	Refer to the display on the control panel and follow the clearance procedure.	C1.04 Media Feed RAP C2.04 Media Feed RAP C3.04 Media Feed RAP
C1.05 C2.05 C3.05	Motion was not detected or the media stopped moving before it was scheduled to stop. Possibly caused by an out of Media condition.	Refer to the display on the control panel and follow the clearance procedure.	C1.05 Media Feed RAP C2.05 Media Feed RAP C3.05 Media Feed RAP
C3.06	Roll 3 media is not detected at the Roll 2 Position Sensor.	Refer to the display on the control panel and follow the clearance procedure.	C3.06 Media Feed RAP

**NOTE 1:** Substitute either 1,2, or 3 for X depending on which Status Code is displayed.

**NOTE 2:** For roll feed problems that are not indicated by a status code and the message display reads, *Refeed Roll 1,2,or 3*, proceed to the RAP that matches the message display.

**NOTE 3:** For media feed problems that are not indicated by a status code and the message display reads, *Please Open The Cut Sheet Feed-In Shelf*, proceed to the *OF 3 Media Does Not Feed RAP*

<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>C2.07</b>	Roll 2 media is not detected at the Roll 1 Position Sensor.	Refer to the display on the control panel and follow the clearance procedure.	C2.07 Media Feed RAP
<b>C3.07</b>	Roll 3 media is not detected at the Roll 1 Position Sensor.	Refer to the display on the control panel and follow the clearance procedure.	C3.07 Media Feed RAP
<b>C1.09 C2.09 C3.09</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline If problem persists.	None
<b>C1.11 C2.11 C3.11</b>	Motion of the Roll X was not sensed while Roll X was trying to feed the media from the park position to the cut position. Also, the roll did not completely rewind.  Note 1	Refer to the display on the control panel and follow the clearance procedure.	C1.05 and C1.01 Media Feed RAP C2.05 and C2.01 Media Feed RAP C3.05 and C2.01 Media Feed RAP
<b>C1.12 C2.12 C3.12</b>	Roll X was trying to feed media forward from the park position to the cut position. The Roll X Position sensor never actuated. The roll was rewound beyond the park position.  Note 1	Refer to the display on the control panel and follow the clearance procedure.	C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP
<b>C1.15 C2.15 C3.15</b>	The media has passed the Roll X Position Sensor, but stops before reaching the cut position. Possibly caused by an out of Media condition. Note 1	Refer to the display on the control panel and follow the clearance procedure.	C1.05 Media Feed RAP C2.05 Media Feed RAP C3.05 Media Feed RAP
<b>C3.16</b>	Roll 3 media is not detected at the roll 2 Position Sensor, while trying to feed media to the cut position.	Refer to the display on the control panel and follow the clearance procedure.	C3.06 Media Feed RAP

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

**NOTE 2:** For roll feed problems that are not indicated by a status code and the message display reads, Refeed Roll 1,2, or 3, proceed to the RAP that matches the message display.

**NOTE 3:** For media feed problems that are not indicated by a status code and the message display reads, Please Open The Cut Sheet Feed-In Shelf, proceed to the OF 3 Media Does Not Feed Rap

<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>C2.17</b>	Roll 2 media is not detected at the Roll 1 position sensor, while trying to feed the media to the cut position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C2.07 Media Feed RAP</b>
<b>C3.17</b>	Roll 3 media is not detected at the Roll 1 position sensor, while trying to feed to the cut position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C3.07 Media Feed RAP</b>
<b>C1.19 C2.19 C3.19</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call the Hotline If problem persists.	None
<b>C1.21 C2.21 C3.21</b>	The media roll did not completely rewind to the park position, from the registration position. Roll X Position Sensor remains covered after the roll stops rewinding.  Note 1	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP</b>
<b>C1.22 C2.22 C3.22</b>	The Roll X that was selected during the automatic roll switching tried to feed from the park position to the registration sensor and never actuated the Roll X position sensor.  Note 1	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP</b>
<b>C1.24 C2.24 C3.24</b>	Media registration sensor never actuated. Possibly caused by an out of Media condition.	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.04 and C1.05 Media Feed RAP C2.04 and C2.05 Media Feed RAP C3.04 and C3.05 Media Feed RAP</b>
<b>C3.26</b>	This status is received when media from Roll 3 is not detected at the Roll 2 position sensor, while trying to feed the media forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C3.06 Media Feed RAP</b>

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

<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>C2.27</b>	During Automatic Roll switching, media from Roll 2 is not detected at the Roll 1 position sensor, while trying to feed the media forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C2.07 Media Feed RAP</b>
<b>C3.27</b>	During Automatic Roll switching, media from Roll 3 is not detected at the Roll 1 position sensor, while trying to feed the media forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C3.07 Media Feed RAP</b>
<b>C1.29 C2.29 C3.29</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None
<b>C1.31 C2.31 C3.31</b>	During automatic roll switching the empty roll failed to rewind completely. The Roll X Position sensor remains covered after the roll stops rewinding.	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP</b>
<b>C1.32 C2.32 C3.32</b>	The new roll selected during automatic roll switching failed to feed to the cut position. The Roll X Position Sensor did not actuate.	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP</b>
<b>C1.35 C2.35 C3.35</b>	The media stops moving after entering the image transfer area. This is the primary out of media condition.	Refer to the display on the control panel and follow the clearance procedure.	<b>C1.05 Media Feed RAP C2.05 Media Feed RAP C3.05 Media Feed RAP</b>
<b>C3.36</b>	During Automatic Roll Switching media from Roll 3 is not detected at the Roll 2 Position Sensor, while trying to feed forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	<b>C3.06 Media Feed RAP</b>

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

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
C2.37	During Automatic Roll switching, media from Roll 2 is not detected at the Roll 2 position sensor, while trying to feed the media forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	C2.07 Media Feed RAP
C3.37	During Automatic Roll switching, media from Roll 3 is not detected at the Roll 2 position sensor, while trying to feed the media forward to the registration position.	Refer to the display on the control panel and follow the clearance procedure.	C3.06 Media Feed RAP
C1.39 C2.39 C3.39	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None
C1.41 C2.41 C3.41	The cutter is unable to move from the home position when media is feeding from the registration position. Cutter is unable to rotate to cut the copy media.	Refer to the display on the control panel and follow the clearance procedure.	LL.30 Cutter Fault Rap
C1.42 C2.42 C3.42	The cutter is not able to return to the home position when feeding the media from the registration position.	Refer to the display on the control panel and follow the clearance procedure.	LL.30 Cutter Fault Rap
C1.51 C2.51 C3.51	The roll fails to rewind completely to the park position from the cutting position. The Roll X Position Sensor remains covered after roll stops rewinding.	Refer to the display on the control panel and follow the clearance procedure.	C1.01 and C1.05 Media Feed RAPS C2.01 and C2.05 Media Feed RAPS C3.01 and C3.05 Media Feed RAPS
C1.52 C2.52 C3.52	The Roll X Position Sensor is deactuated When roll rewind is attempted cut position to the park position.  Note 1	Refer to the display on the control panel and follow the clearance procedure.	C1.01 Media Feed RAP C2.01 Media Feed RAP C3.01 Media Feed RAP
C1.59 C2.59 C3.59	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None

**NOTE 1:** Substitute either 1,2, or 3 for X depending on which Status Code is displayed.

<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>C4.01</b>	The Sheet Feed Sensor was actuated during a copy when Cut Sheet was not selected.	Refer to the display on the control panel and follow the clearance procedure.	C4.01 Sheet Feed RAP
<b>C4.24</b>	The cut sheet does not reach the Sheet Feed Sensor in time.	Refer to the display on the control panel and follow the clearance procedure.	C4.24 Sheet Feed RAP
<b>C4.34</b>	The Sheet Feed sensor deactuated too early while making a copy. The operator may have to remove the cut sheet media.	Refer to the display on the control panel and follow the clearance procedure.	C4.01 Sheet Feed RAP
<b>C4.49</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None

**NOTE 1:** Substitute either 1,2, or 3 for X depending on which Status Code is displayed.



<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>E2.01</b>	The media trail edge jammed in the Media Registration Sensor area.	Refer to the display on the control panel and follow the clearance procedure.	E2.01 Media Transportation RAP
<b>E2.09</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None
<b>E4.01</b>	The media trail edge jammed in the Media Exit Switch area.	Refer to the display on the control panel and follow the clearance procedure.	E4.01 Media Transportation RAP
<b>E4.02</b>	Lead edge of media did not reach the Media Exit Switch in time.	Refer to the display on the control panel and follow the clearance procedure.	E4.02 Media Transportation RAP
<b>E4.03</b>	Lead edge of media is jamed against a Heat Roll stripper finger.	Refer to the display on the control panel and follow the clearance procedure.	E4.03 Media Transportation RAP
<b>E4.09</b>	This is a Firmware problem.	Press power off (0) then power on (1). Call Hotline if problem persists.	None
<b>E5.03</b>	Upper Rear Door is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.03 Upper Rear Door Open RAP
<b>E5.04</b>	Cutter is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.04 Cutter Cover Open RAP
<b>E5.05</b>	Sheet Feed Shelf is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.05 Sheet Feed Shelf Open RAP
<b>E5.06</b>	Right Side Door is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.06 Right Side Door Open RAP
<b>E5.07</b>	The Document Handler is out of position.	Reinstall the Document Handler	E5.07 Document Handler Open RAP
<b>E6.00</b>	The Stop button was pressed, or the front doors opened while a copy was being made in the Roll Feed mode.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Doors Open RAP
<b>E6.01</b>	The Stop button was pressed, or the front doors opened while a copy was being made in the Cut Sheet mode.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Doors Open RAP

<b>STATUS CODE</b>	<b>CAUSE</b>	<b>CLEARANCE</b>	<b>GO TO RAP IN SECTION 2</b>
<b>J1.01</b>	Recurring out of toner.	Replace the toner cartridge.	J1.01 Out of Toner RAP
<b>J2.02</b>	Toner Cartridge could not find home position, probably is not installed correctly.	Check the toner cartridge for correct installation.	J2.02 Toner Cartridge Home Position RAP
<b>LL.10</b>	Failure in the interlock circuit.	Press power off (0) then power on (1).	LL.10 Cutter Interlock Open RAP
<b>LL.24</b>	Exposure Lamp intensity is detected as too high when running a copy. This code is present on early versions of firmware.	Press power off (0) then power on (1).	CQ 27 Exposure Control RAP
<b>LL.26</b>	Exposure Lamp intensity is detected as too low when running a copy.	Press power off (0) then power on (1).	LL.26 Loss of Illumination RAP
<b>LL.30</b>	Cutter could not return to the home position, or did not move off the home position.	Refer to the display on the control panel and follow the clearance procedure. Then, press power off (0) then power on (1).	LL.30 Cutter Fault RAP
<b>LL.41</b>	Fuser fault. The fuser is unable to warm to 110° F (44° C) in one minute or less.	Press power off (0) then power on (1).	LL.41 Fuser Warm up Fault RAP
<b>LL.42</b>	Fuser fault. The Fuser Roll temperature is greater than the maximum allowable temperature for more than thirty seconds. Maximum temperature is currently 348° F (176° C). A possible cause is that a large amount of narrow copies were made.	Press power off (0) then power on (1). Then allow the copier time to cool to the operating temperature before turning power back on.	LL.42 Thermal Control RAP
<b>LL.43</b>	Fuser temperature has exceeded the temperature limit. This can also occur because the 26 VDC Bulk Power Supply has failed.	Press power off (0) then power on (1).	LL.43 Fuser Overttemperature RAP

STATUS CODE	CAUSE	CLEARANCE	GO TO RAP IN SECTION 2
LL.44	1. Fuser fault. Fuser Temperature exceeded 420° F (215° C).  2. Switching power off and on too quickly.	1. Press power off (0) then power on (1). Then allow time for the Fuser to cool to the operating temperature before switching the power back on. 2. Wait at least 5 seconds before switching the power on.	LL.44 Fuser Too Hot RAP
LL.45	Fuser was in the warm up mode for too long a period of time.	Press power off (0) then power on (1).	LL.45 Fuser Warmup Fault RAP
LL.50	26 VDC Bulk Power Supply failure.	Press power off (0) then power on (1).	LL.50 26 VDC Bulk Power supply RAP
LL.60	NVM failure, corrupted data is present in the NVM.	Press power off (0) then power on (1).	LL.60/ LL61/ LL.62 NVM Fault RAP
LL.61	NVM failure, an outdated version of firmware has been installed in the copier.	Press power off (0) then power on (1).	LL.60/ LL61/ LL.62 NVM Fault RAP
LL.62	NVM failure, an Auditron NVM problem is detected by the logic.	Press power off (0) then power on (1).	LL.60/ LL61/ LL.62 NVM Fault RAP
LL.89	There is a problem with the copier firmware.	Press power off (0) then power on (1).	No RAP. Call the HOTLINE and request assistance
LL.90	Toner concentration of the developer material is too high.	Press power off (0) then power on (1).	LL.90 High Toner Fault RAP
LL.91	Toner concentration of the developer material is too low.	Press power off (0) then power on (1).	LL.91 Low Toner Fault RAP
U1.01	Copy counter is disconnected.	Connect the copy counter.	No RAP

MESSAGE DISPLAYED	CAUSE	CLEARANCE PROCEDURE	GO TO RAP IN SECTION 2
PLEASE CLOSE THE MEDIA SUPPLY DOORS	Left Front Door Interlock Switch (S28) and/ or Right Front Door Interlock switch (S22) are open.	Refer to the display on the control panel and follow the clearance procedure.	E6.00 Media Supply Doors Open RAP
PLEASE CLOSE THE CUT SHEET FEED-IN SHELF	Cut Sheet Feed-in Shelf Interlock Switch (S29) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.05 Sheet Feed Shelf Open RAP
PLEASE CLOSE THE RIGHT SIDE DOOR	Right Side Door Interlock Switch (S21) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.06 Right Side Door Open RAP
PLEASE CLOSE THE DOCUMENT HANDLER	Document Handler Interlock Switch (S30) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.07 Document Handler Open RAP
PLEASE CLOSE THE UPPER REAR COVER	Upper Rear Cover Interlock Switch (S26) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.03 Upper Rear Door Open RAP
PLEASE CLOSE THE CUTTER DRAWER	Cutter Drawer Interlock Switch (S1) is open.	Refer to the display on the control panel and follow the clearance procedure.	E5.04 Cutter Cover Open RAP
NVM FAULT CALL FOR ASSISTANCE	Corrupted data in NVM.	Press power off (0) then power on (1).	LL.60/ LL.61/ LL.62 NVM Fault RAP
Refeed Roll 1	Refeed Roll 1 problem.	Press power off (0) then power on (1).	Refeed Roll 1 RAP
Refeed Roll 2	Refeed Roll 2 problem.	Press power off (0) then power on (1).	Refeed Roll 2 RAP
Refeed Roll 3	Refeed Roll 3 problem.	Press power off (0) then power on (1).	Refeed Roll 3 RAP
Flashing 1, 2, 3, 4, 5, 6 or 7	Copier failed power on self-test.	Press power off (0) then power on (1).	2.2 POST 2, 3, 4, 5, 6 and 7 RAP
COPIER IS DISABLED BY THE KEYLOCK	Key lock in the off position or switch has failed.	Turn switch to the on position.	Copier is Disabled by the Key lock RAP

## Maintenance Procedures

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

### DOCUMENT HANDLER

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

(Continued)

# XEROGRAPHIC MODULE

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

(Continued)

**XEROGRAPHIC MODULE (Continued)**

INTERVAL	TASK	REASON	TASK ENABLER
10K ft	W/O Tag 18: Replace the oil pads and wick. W/Tag 18: Replace the oil pads.	Copy quality defects. Oil pads are dry. Wick is contaminated.	Replace the oil pads. Replace the wick. Perform the Initialization Procedure for the Fuser Roll.
30K ft 9Km	W/Tag 18: Replace the Wick	Copy quality defects. Wick is contaminated.	Replace the wick. Clean the oil dispense roll with film remover
25K ft 7Km	Repair or replace the corotrons.	Contamination on the wires or damaged or worn out end blocks, are causes for corotron failure, which results in copy quality defects/jams, etc.	Repair or replace the corotron. Perform ADJ 9.2 Electrostatic Series.
30K ft 9Km	Check / clean the cleaning blade.	Residual image, streaks, drum scuffing can occur if blade is worn or contaminated.	Vacuum clean the cleaning blade ( <i>NOTE 1</i> ). Apply zinc stearate to the cleaning blade and photoreceptor drum ( <i>NOTE 2</i> ). Replace the blade if damaged.
30K ft 9Km	Replace the Fabric Guide.	Jams, deletions, wrinkles	Refer to REP 8.9

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

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

## MEDIA TRANSPORT

INTERVAL	TASK	REASON	TASK ENABLER
NC	Clean the lower paper transports, turnaround baffle, paper feed rolls.	Contaminants can cause the media to slip resulting in copy quality defects.	Clean the transport with antistatic fluid and a cloth. Clean the feed roller with Formula A.
NC	Clean the under side of the transport.	Reduce airborne contaminants.	Vacuum clean, then wipe down with a lint-free cloth.
NC	Empty the condensation reclaim bottle.	Prevent the bottle from overflowing.	Empty the bottle into a sink.
NC	Check the Transfer/Detack Corotron. Replace corotron if 25k or more.	Contamination, loose or broken wires, damaged end blocks cause copy quality defects.	Clean, repair, or replace the corotron. Clean the corotron using a brush.
25K ft 7K m	Repair or replace the corotron.	Contamination, loose or broken wires, damaged end blocks cause copy quality defects.	Replace or repair the corotron.

(Continued)



## MEDIA FEED

INTERVAL	TASK	REASON	TASK ENABLER
1st 10K ft or 3K m	Remove the Drive Chain slack.	Feeding problems.	Loosen the Roll Feed motor hardware to allow the spring to tension the chain. Tighten the hardware.
40K ft 13K m	Remove the Drive Chain slack.	Feeding problems.	Loosen the Roll Feed motor hardware to allow the spring to tension the chain. Tighten the hardware.

(Continued)

## DEVELOPER MODULE

INTERVAL	TASK	REASON	TASK ENABLER
NC	Check that the developer housing is level.	If the developer is not level, density may not be uniform side- to- side.	Developer material should be uniform from end- to- end. Check the level of the copier.
NC	Check the canister for proper rotation.	If toner canister is not rotating correctly, the copies will be light.	Check the dry ink dispense motor for binding. Check that the cartridge is locked in the drive hub.
NC	Check the developer drives.	Worn gears will cause the housing to move up and down, which will cause copy quality defects.	Check the gears for worn or broken teeth; replace the gears, if necessary. Ensure that the drive coupling is engaged.
40K ft 13K m NOTE 1	Replace the developer.	Worn developer will cause excess toner usage, higher dirt levels, and copy quality defects.	Replace the developer. Clean the Pressure Equalizing Tubes with a vacuum cleaner in order to remove toner inside the tubes. Vacuum clean the area around the augers and the magnetic roll.

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

(Continued)

## COVERS

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

## CUTTER

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

## MEDIA DRAWERS

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

## Call Back

1. Follow the Call Flow Diagram and resolve the problem that caused the Call Back.
2. Perform the Final Action, do not perform the Maintenance Procedures.

## Final Action

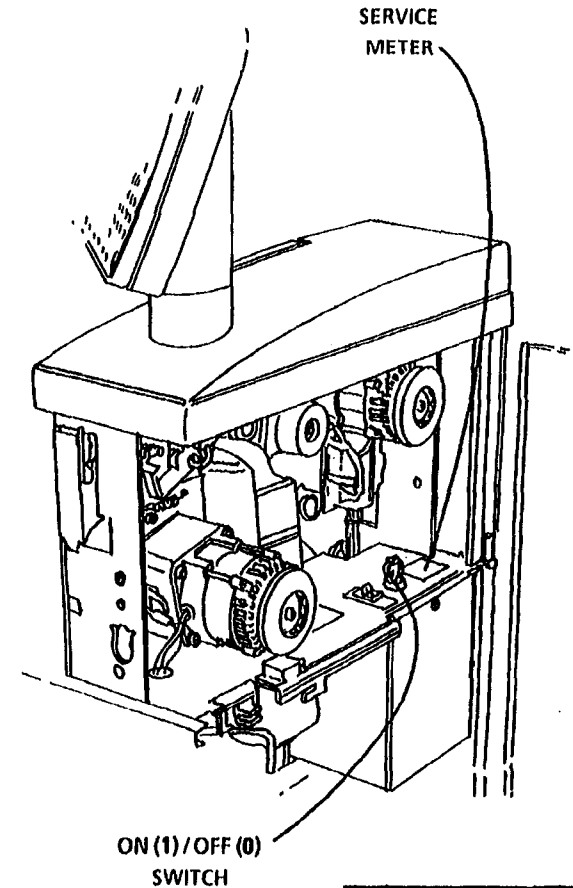
1. Make a record of the copy count meter in the service log.
2. Make one D (A1) size copy on 20 lb (80 gsm) bond paper of Test Pattern **82E5980** in the Copy Contrast Normal mode (the middle Copy Contrast lamp is lit).
  - a. Evaluate the copy and ensure that the copy meets the Image Quality Specifications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

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

**B**  
 ENTER THE READING FROM THE SERVICE METER LOCATED NEXT TO THE ON/OFF SWITCH (REFERENCE FIGURE 2)

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

	02059		A
TAR	SM 6	M	



	01636		A
TAR	SM 6	M	

**Figure 2. Service Meter Location**

**Figure 1: Service Call Report**



## 2. Status Indicator Repair Analysis Procedures

### Section Contents

*0926 - Reset fuser drum*

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# NOTES



## 2. Status Indicator Repair Analysis Procedures

Continued from 2-1

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

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

**A1.03** Indicates that the logic detected that the Rear Document Sensor was actuated at Power On. The sensor signal was HIGH when the Power On (1) button was pressed.

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

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

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

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

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

### Initial Actions

- Remove the Upper Document Handler. Ensure that the actuator for the Rear Document Sensor is not binding or damaged.
- Ensure that the connectors for the Rear Document Sensor (Q26 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Check that the copier has Tag/ MOD 02 installed (Document Sensor - O Rings).

### Procedure

Enter the code [0503] to check the Rear Document Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

Activate the Rear Document Sensor.

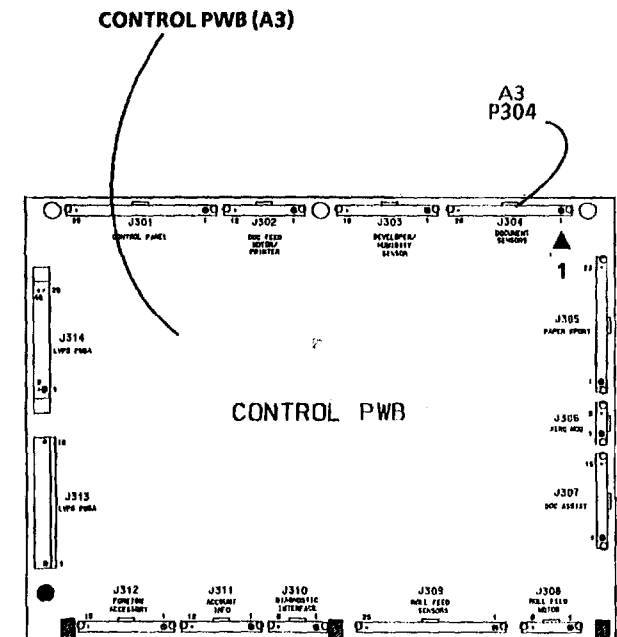
If the display does change from (00) to (01), go to the 5.1 Document Handler RAP.

If the display does not change from (00) to (01) when the sensor is actuated, continue with this procedure.

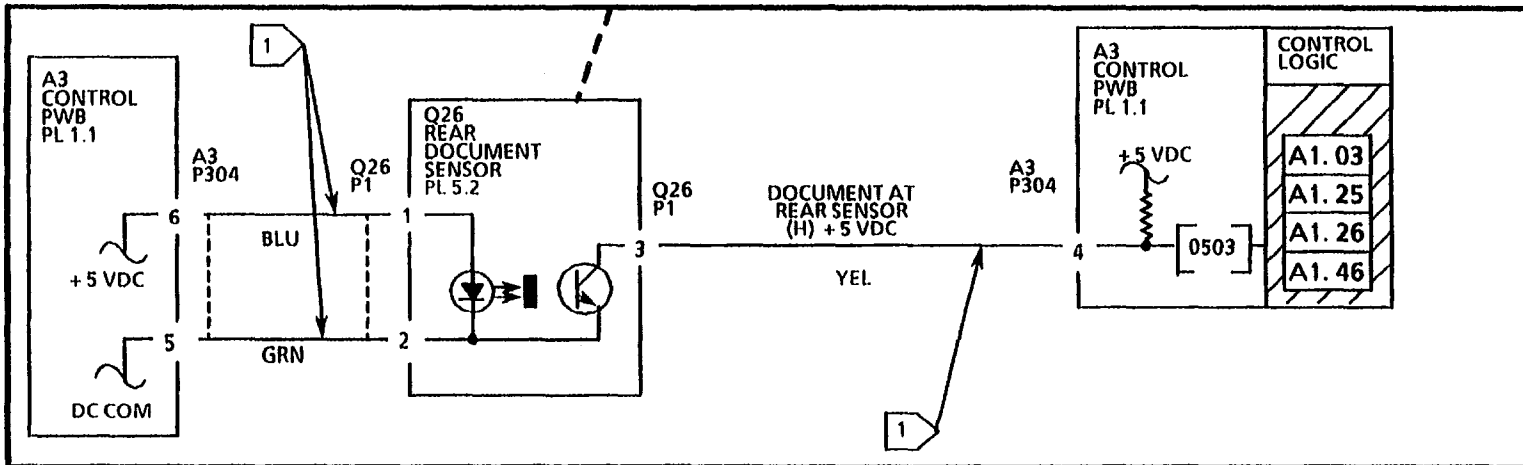
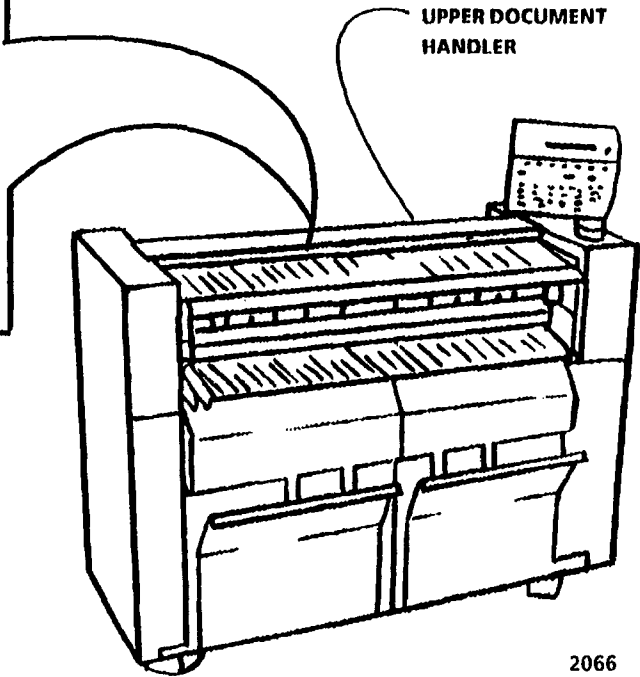
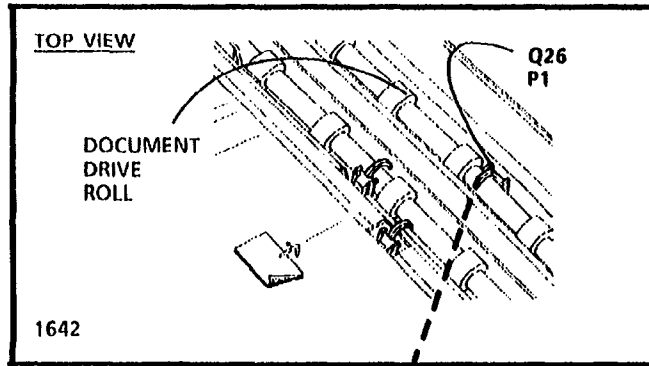
Go to FLAG 1 and check the wiring between the sensor and the Control PWB for an open circuit or a short circuit to ground.

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

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



1590



## A1.02/ A1.43 Document Handler RAP

(2/2/93)

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

**A1.02** Indicates that the logic detected that the Front Document Sensor was actuated at Power On. The sensor signal was HIGH when the Power On (1) button was pressed.

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

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

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

### Initial Actions

- Remove the Upper Document Handler. Ensure that the actuator for the Front Document Sensor is not binding or damaged.
- Ensure that the connectors for the Front Document Sensor (Q22 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Check that the copier has Tag/ MOD 02 installed (Document Sensor - O Rings).

### Procedure

Enter the code [0502] to check the Front Document Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

Activate the Front Document Sensor.

If the display does change from (00) to (01), go to the 5.1 Document Handler RAP.

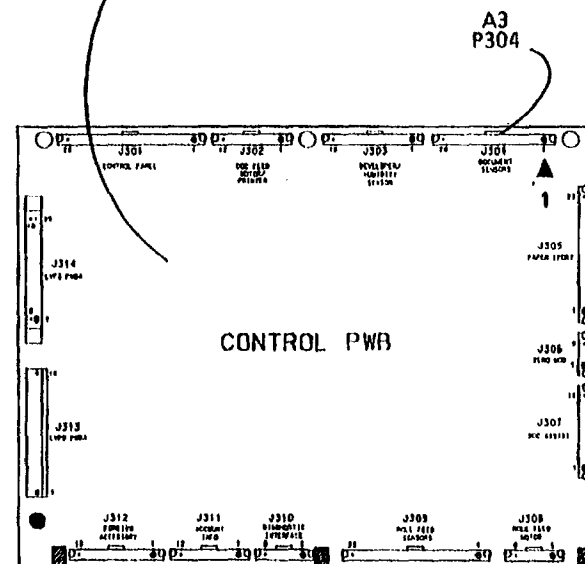
If the display does not change from (00) to (01) when the sensor is actuated, continue with this procedure.

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

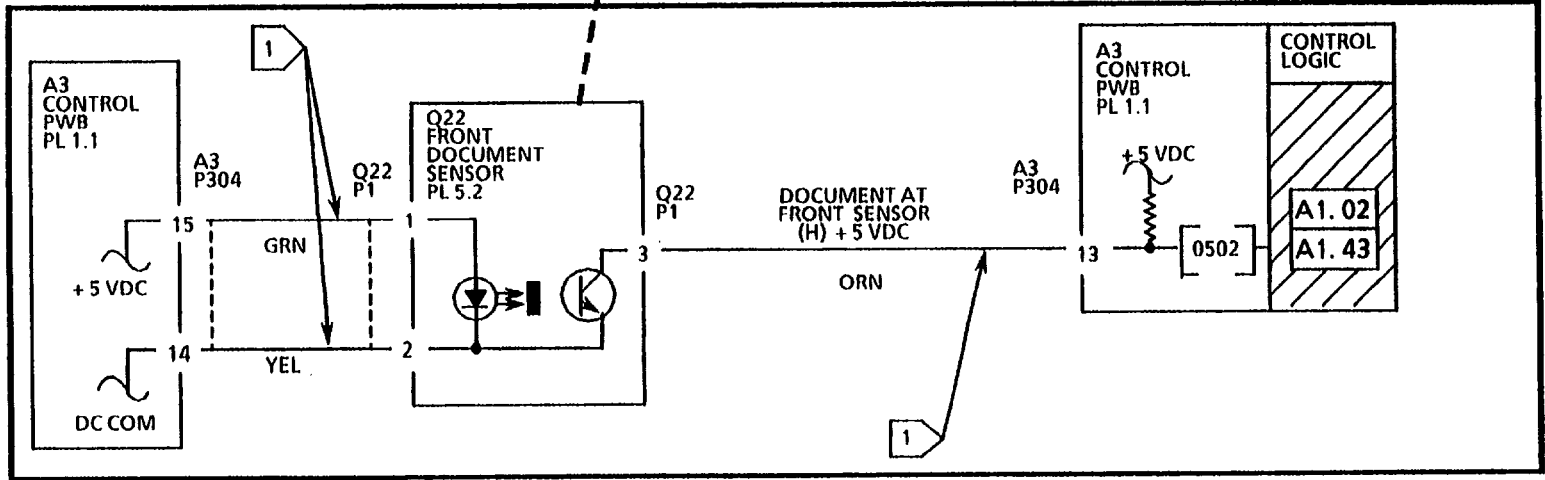
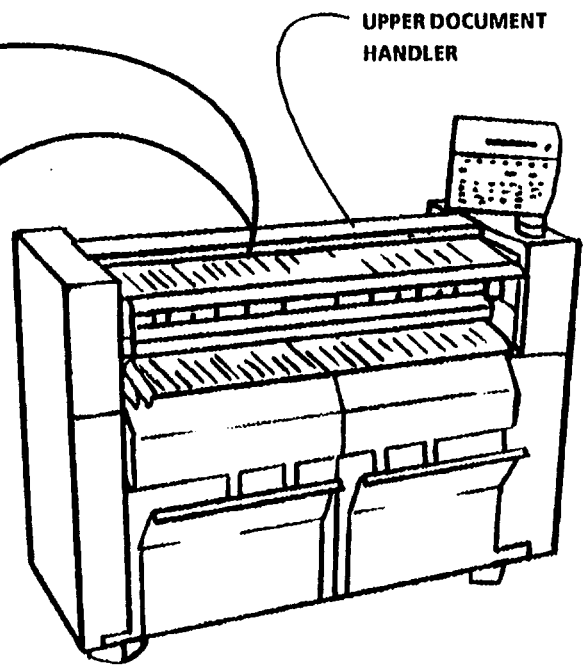
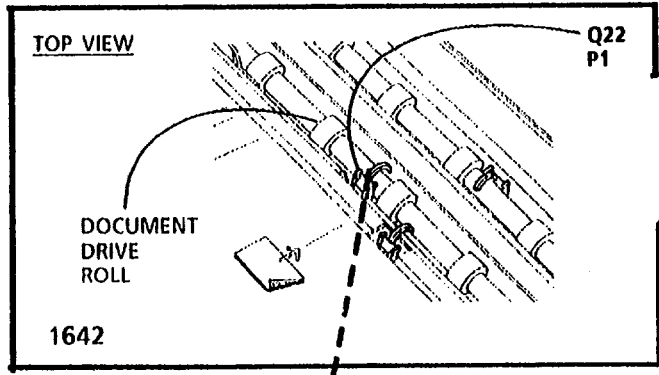
If there is no open circuit or short circuit, replace the Front Document Sensor (Q22).

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

CONTROL PWB (A3)



0	1590	A
01R	SM 2	X 0



## A1.63/ A1.64 Document Handler RAP

(2/2/93)

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

**A1.63** Indicates that the logic detected that the Insert Document Sensor deactuated too late after the Front Document Sensor deactuated. The Insert Document Sensor signal remained HIGH after the Front Document Sensor changed state from a HIGH to LOW as the document was being scanned.

**A1.64** Indicates that the logic detected that the Front Document Sensor deactuated before the Insert Document Sensor deactuated. The Front Document Sensor signal changed state from a HIGH to LOW as the document was being scanned and the Insert Document Sensor signal remained HIGH.

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

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

### Initial Actions

- Remove the Upper Document Handler. Ensure that the actuators for the Insert Document Sensor and the Front Document Sensor are not binding or damaged.
- Ensure that the connectors for the Insert Document Sensor (Q21 P1), the Front Document Sensor (Q22 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Check that the copier has Tag/ MOD 02 installed (Document Sensor - O Rings).

### Procedure

Enter the code [0501] in order to check the Insert Document Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

Activate the Insert Document Sensor.

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

Y N

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

If there is no open or short circuit, replace the Insert Document Sensor (Q21).

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

Enter the code [0502] in order to check the Front Document Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

Activate the Front Document Sensor.

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

Y N

A B

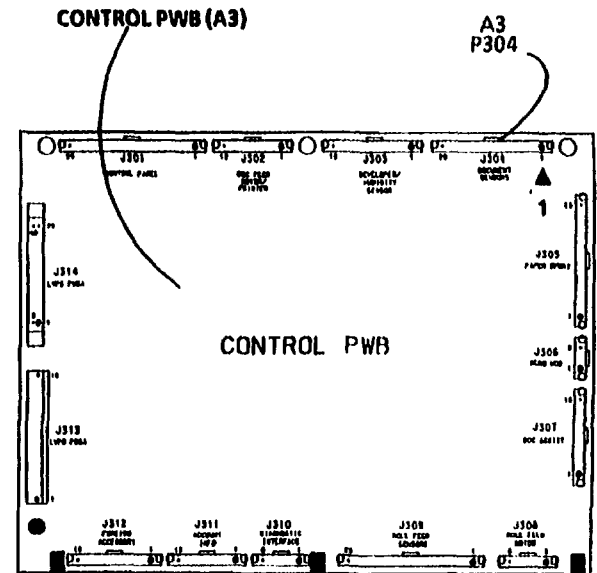
A B

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

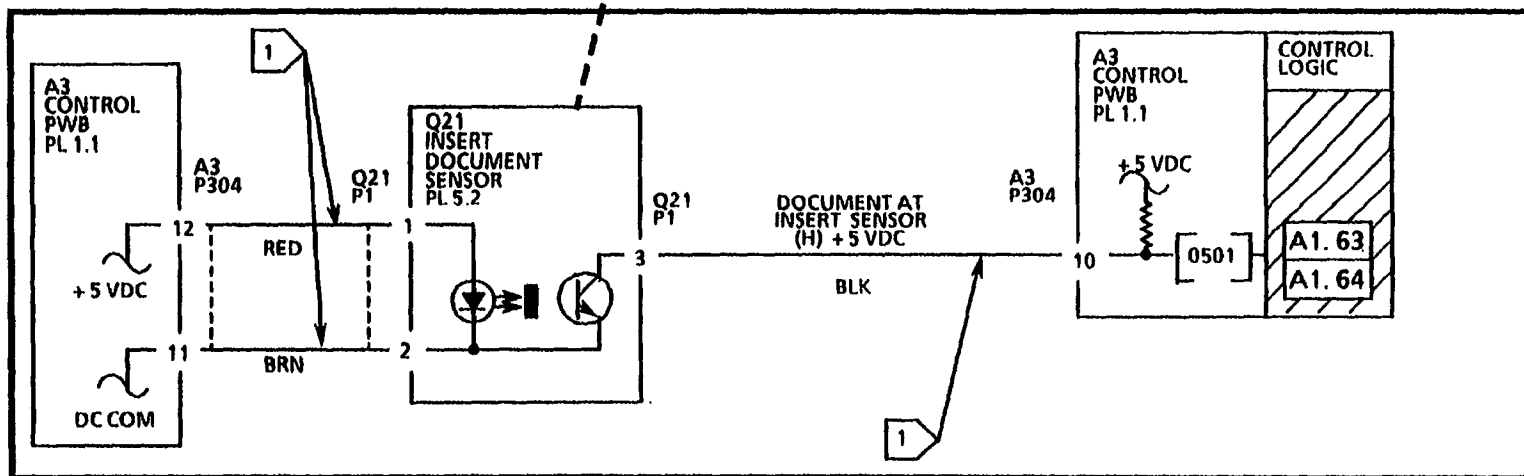
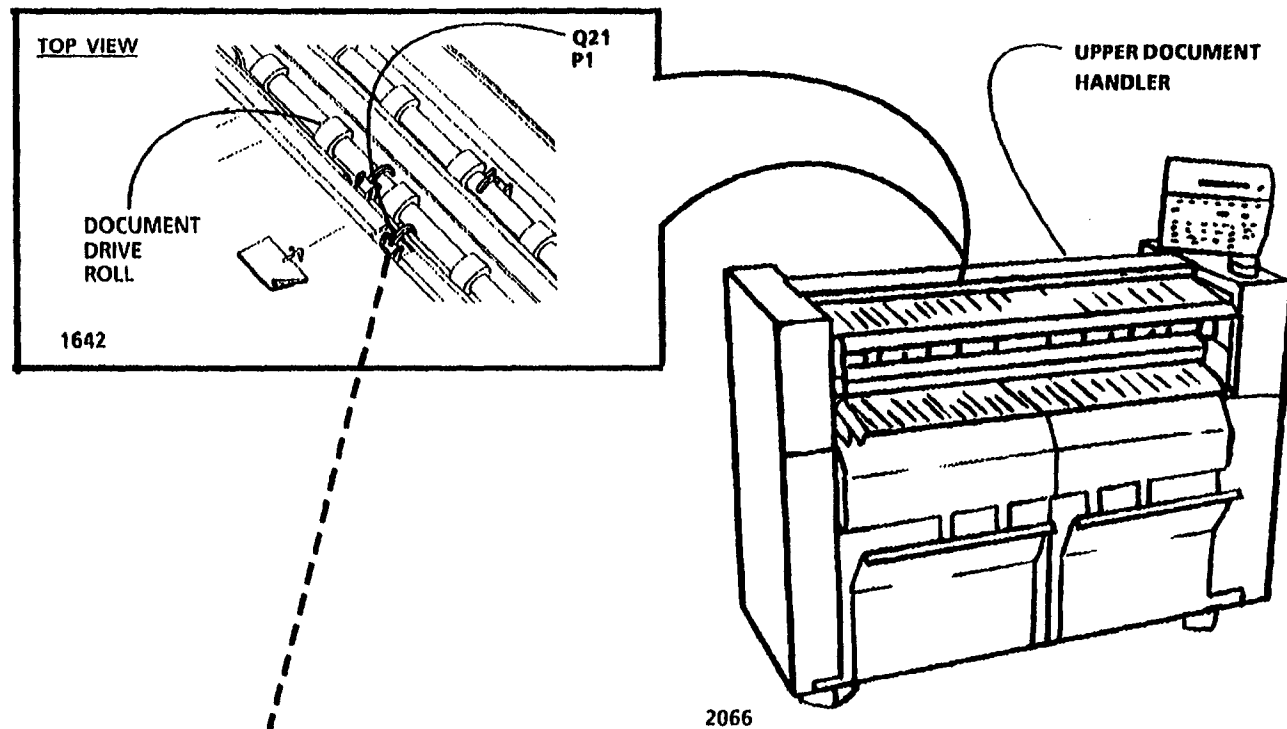
If there is no open or short circuit, replace the Front Document Sensor (Q22).

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

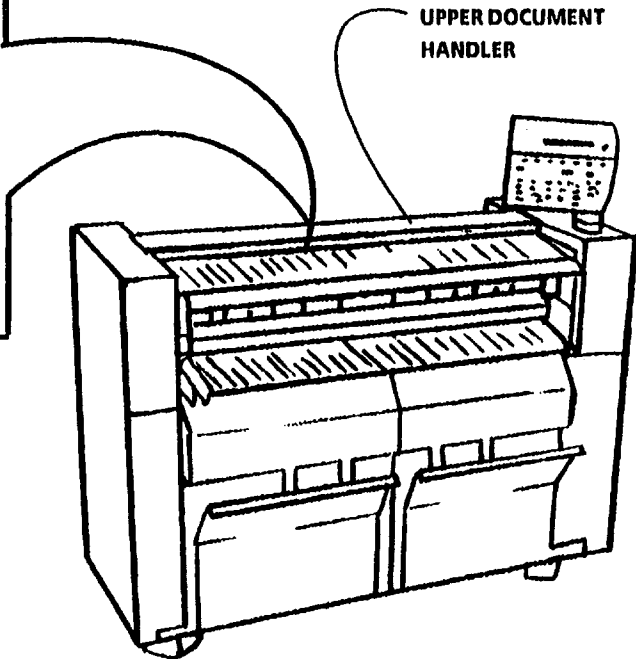
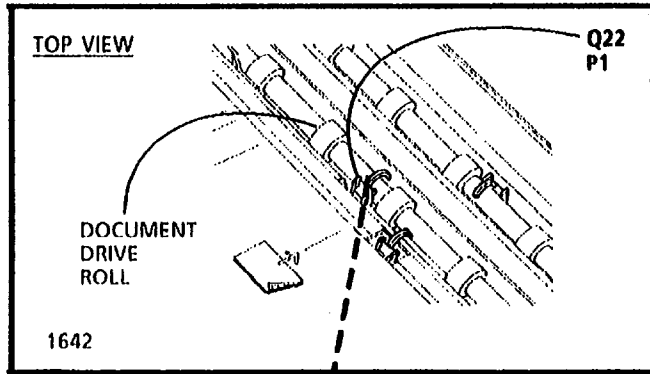
Go to the 5.1 Document Handler RAP.



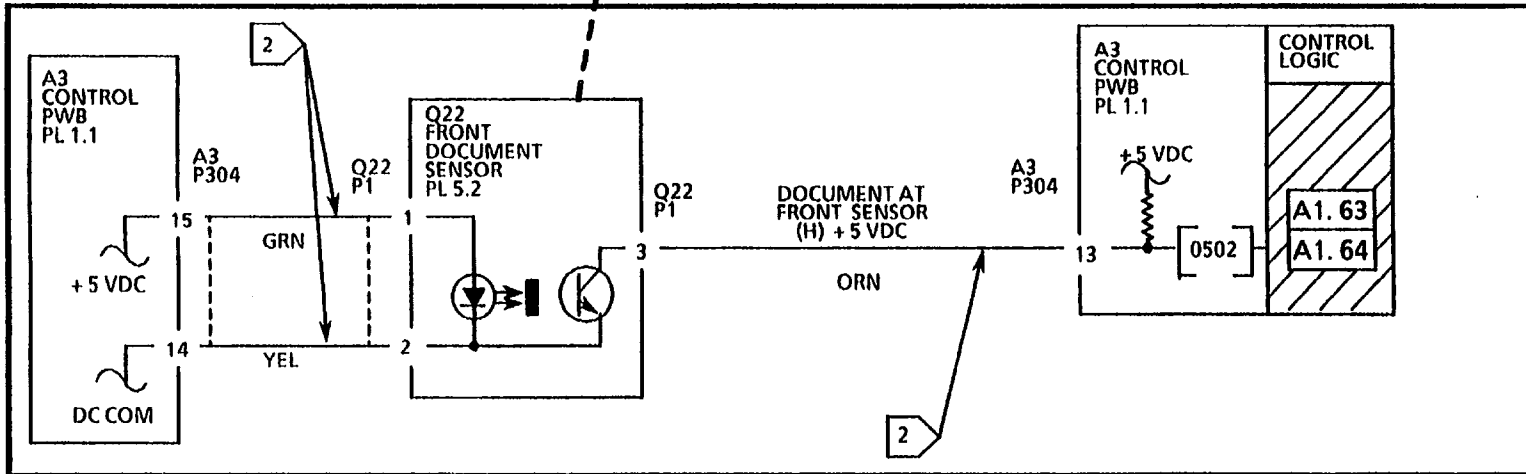
1590







2066



## A1.01/A1.65 Document Handler RAP

(2/2/93)

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

**A1.01** Indicates that the logic detected that the Insert Document Sensor was actuated at Power On. The sensor signal was HIGH when the Power On (1) button was pressed.

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

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

- the Document Handler has an excessive static condition.
- the document is less than 11.0 inches (279 mm) in length.
- the document is not in good condition.

- there is a problem with the Document Drive Motor or the motor control circuitry.

### Initial Actions

- Remove the Upper Document Handler. Ensure that the actuator for the Insert Document Sensor is not binding or damaged.
- Ensure that the connector for the Insert Document Sensor (Q21 P1) and the Control PWB (A3 P304) are not damaged and are seated correctly.
- Check that the copier has Tag/ MOD 02 installed (Document Sensor - O Rings).

### Procedure

Enter the code [0501] to check the Insert Document Sensor. The Control Panel display indicates a (01) when the sensor is actuated.

Activate the Insert Document Sensor.

If the display does change from (00) to (01), go to the 5.1 Document Handler RAP.

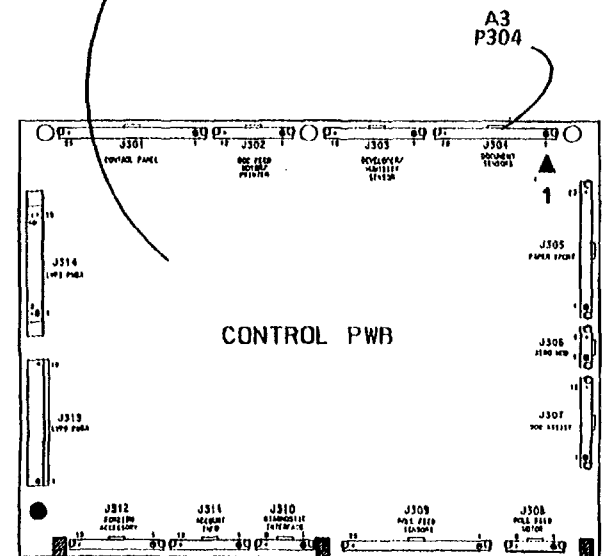
If the display does not change from (00) to (01) when the sensor is actuated, continue with this procedure.

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

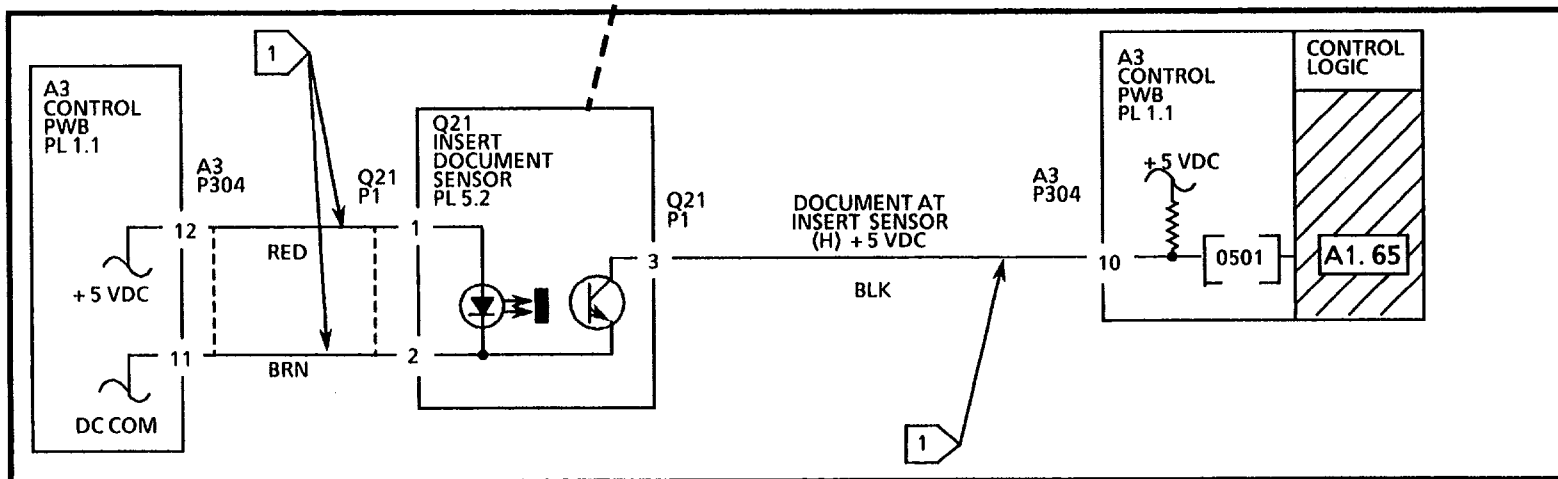
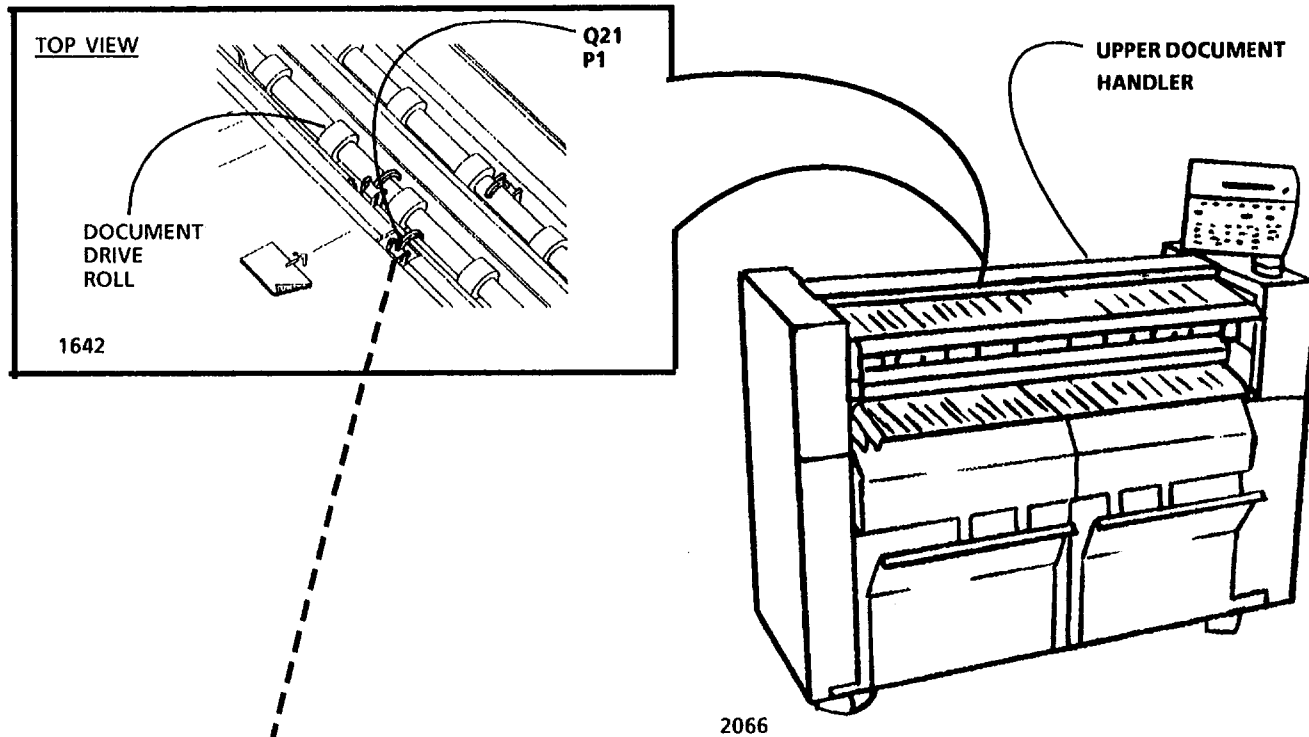
If there is no open circuit or short circuit, replace the Insert Document Sensor (Q21).

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

CONTROL PWB (A3)



1590



## LL.30 Cutter Fault (W/ O Tag / MOD 31) RAP

(12/01/97)

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

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

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

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

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

### Initial Actions

#### WARNING

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

#### CAUTION

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

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

### Procedure

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

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

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

Y N

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

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

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

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

The rotation of the cutter bar can be heard.

Y N

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

Y N

A B C

A B C

Go to the E5.04 RAP.

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

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

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

Y N

Replace the LVPS/ Driver PWB (A2).

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

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

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

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

D

D

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

The voltage is approximately 0.6 VDC at pin 4 of A2 P211 when the motor is energized.

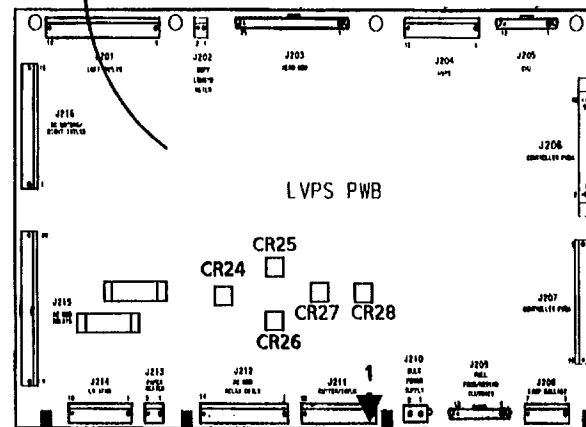
Y N

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

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

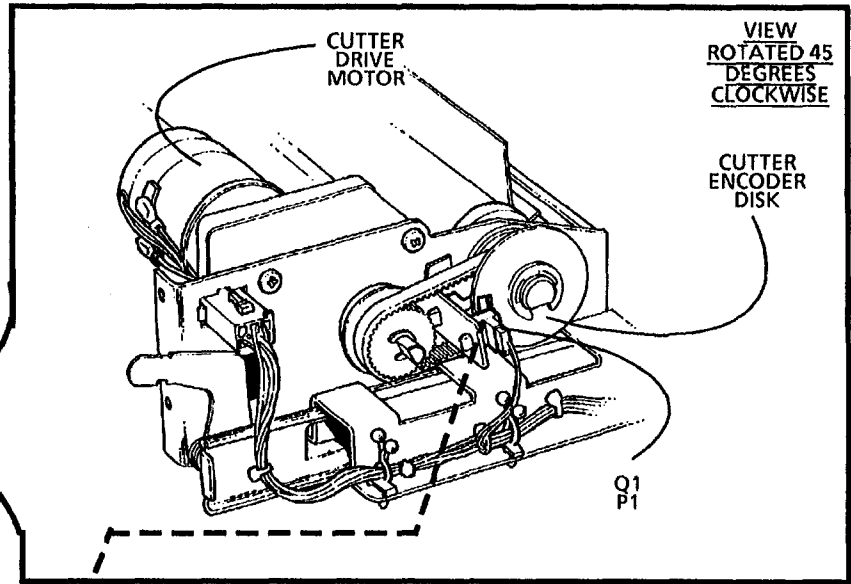
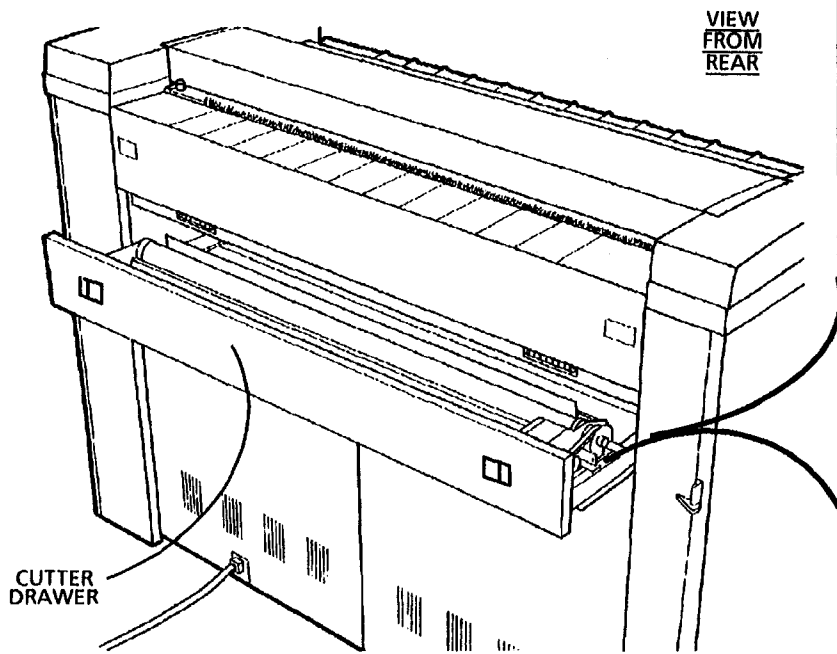
Replace the LVPS/ Driver PWB (A2). Ensure to reconnect the Cutter Home Sensor connector (Q1 P1).

LVPS/ DRIVER PWB (A2)

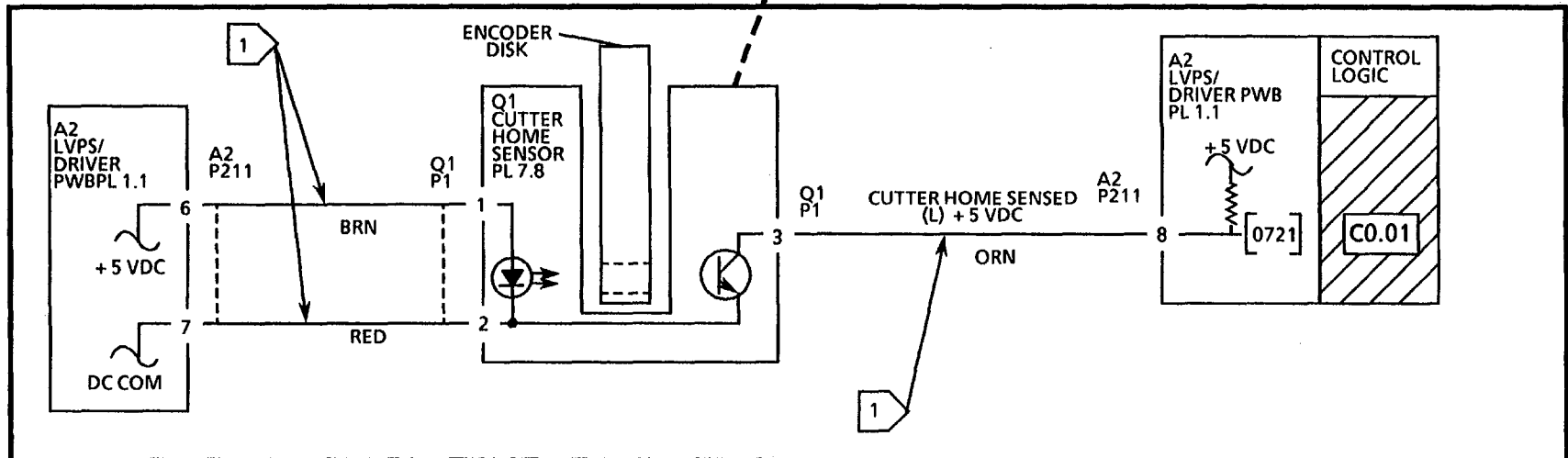


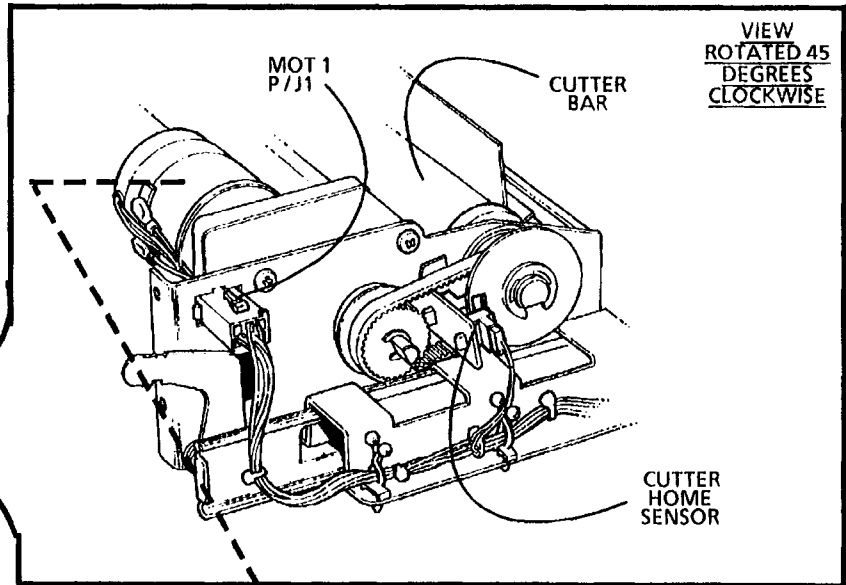
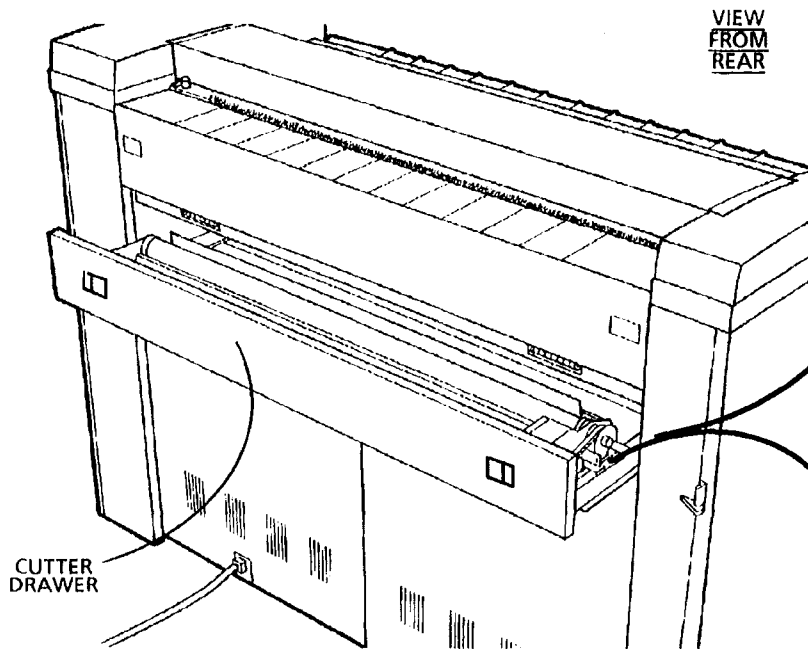
A2  
P211

1591

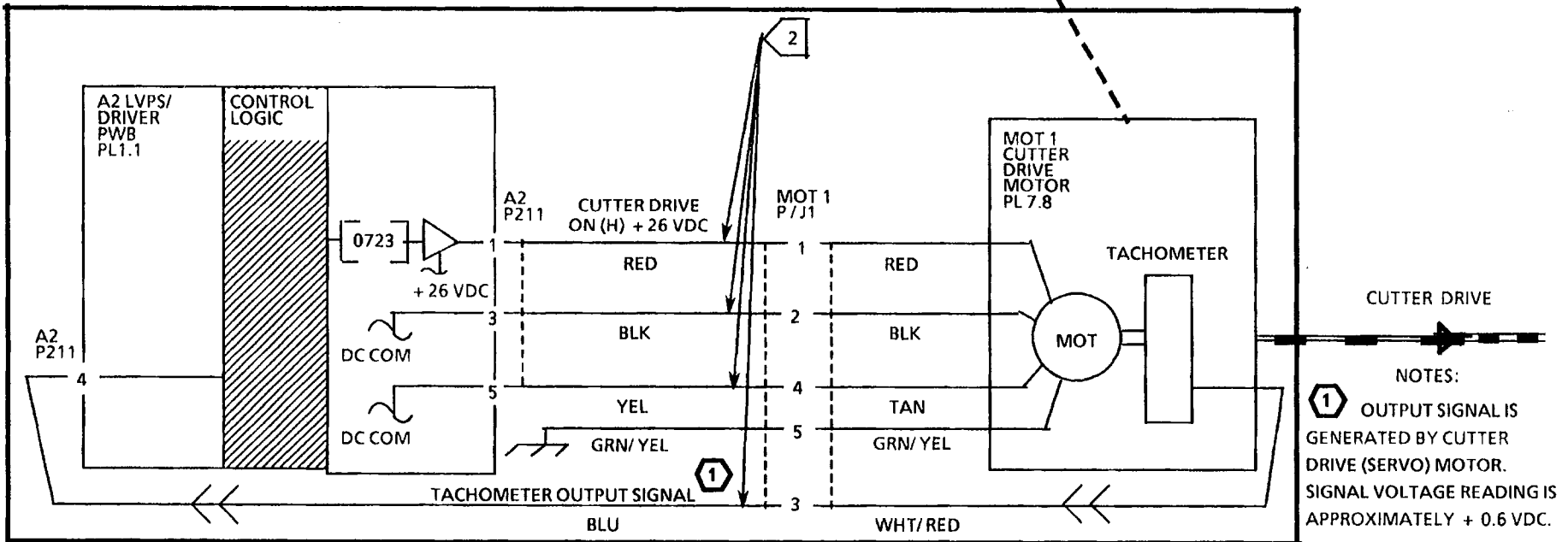


0	1803	A
TAR	SM 2	M 0





0	1803	A
TAR	SM 2	M 0

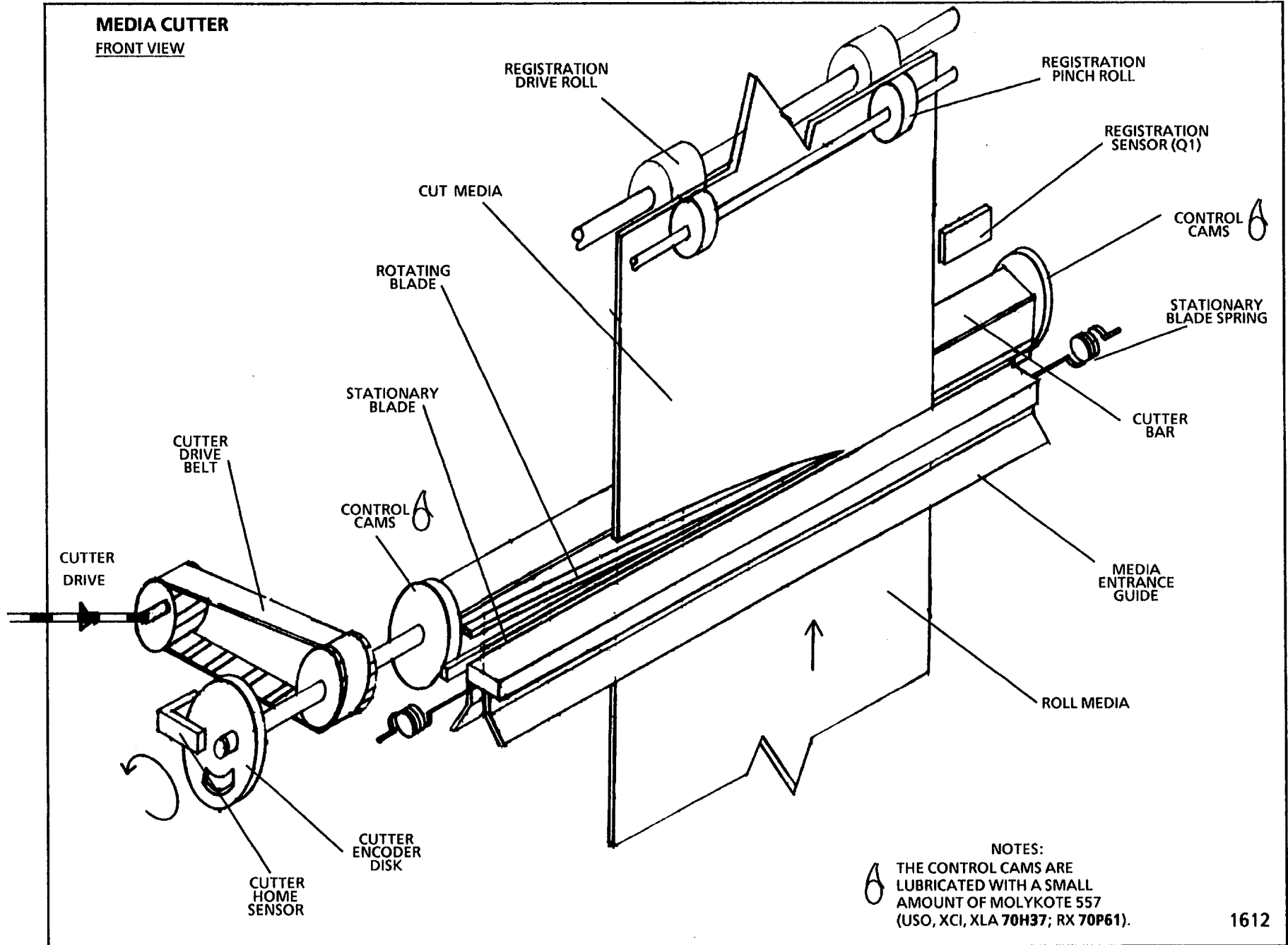


# NOTES



# MEDIA CUTTER

## FRONT VIEW



1612

## LL.30 Cutter Fault (W/ Tag / MOD 31) RAP

(11/03/97)

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

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

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

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

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

### Initial Actions

#### WARNING

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

#### CAUTION

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

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

### Procedure

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

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

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

Y N

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

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

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

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

The rotation of the cutter bar can be heard.

Y N

Press the Stop button.

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

Y N

A B C

A B C

Go to the E5.04 RAP.

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

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

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

Y N

Replace the LVPS/ Driver PWB (A2).

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

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

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

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

D

D

Press the Stop button. Prepare to check the feedback signal that is generated by the Cutter Drive Motor tachometer. The tachometer generates a voltage. Set the Multimeter to V, DC, PEAK HOLD, +, 20 V. Connect the (+) lead to A2 P211 pin 2 of the LVPS/ Driver PWB. Enter the code [0723] in order to check the tachometer feedback signal.

The voltage is approximately (+5.0 VDC at pin 2 of A2 P211 when the motor is energized.

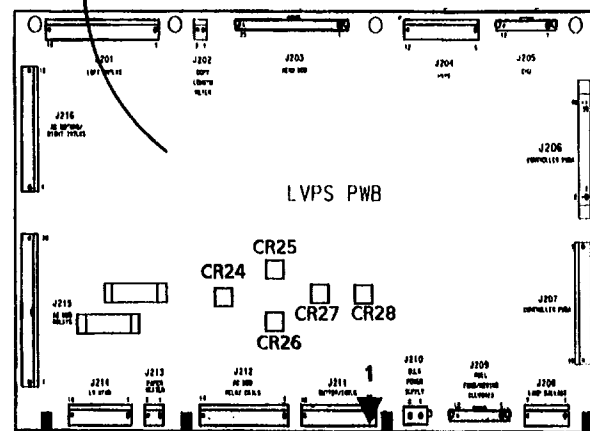
Y N

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

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

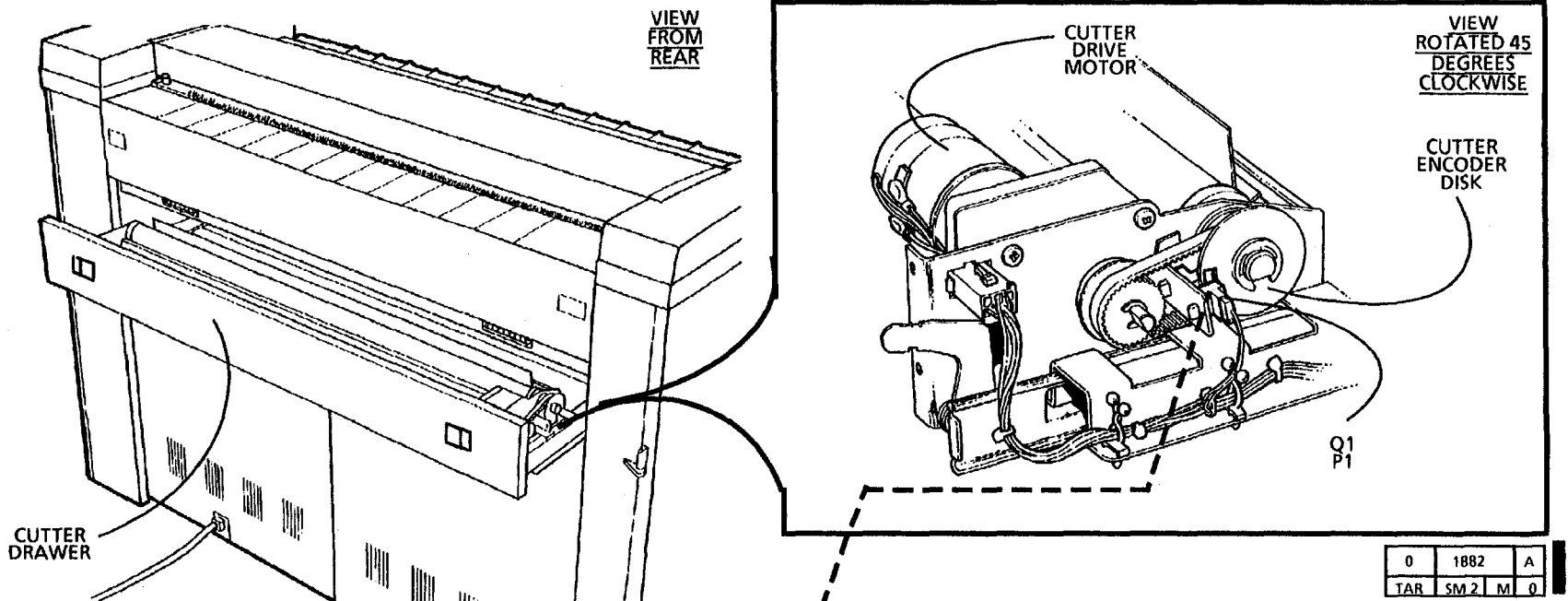
Replace the LVPS/ Driver PWB (A2). Ensure to reconnect the Cutter Home Sensor connector (Q1 P1).

LVPS/ DRIVER PWB (A2)

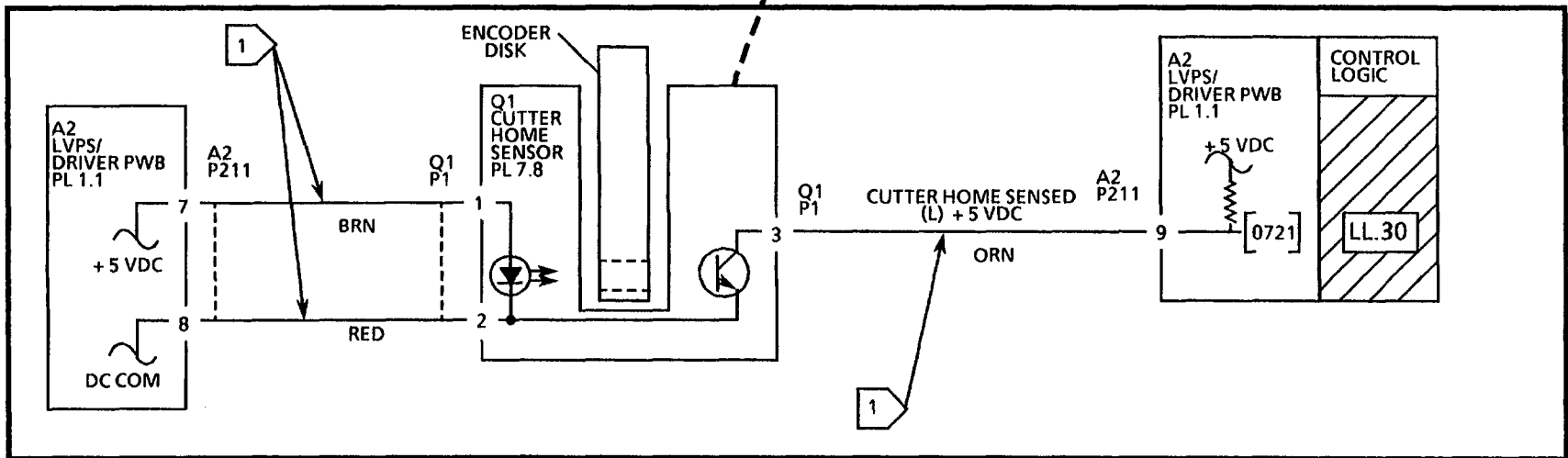


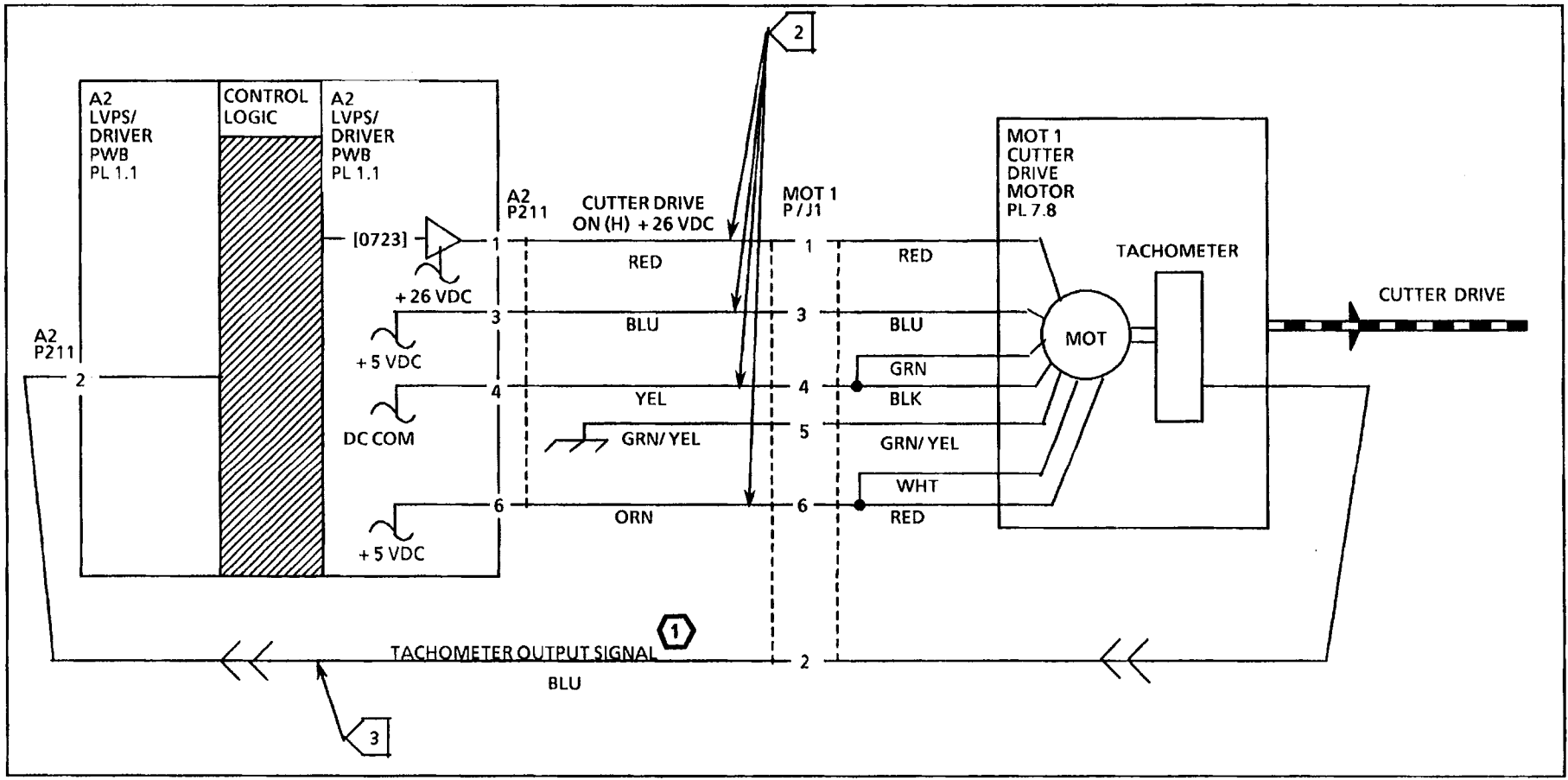
A2 P211

1591



0	1882	A
TAR	SM 2	M 0



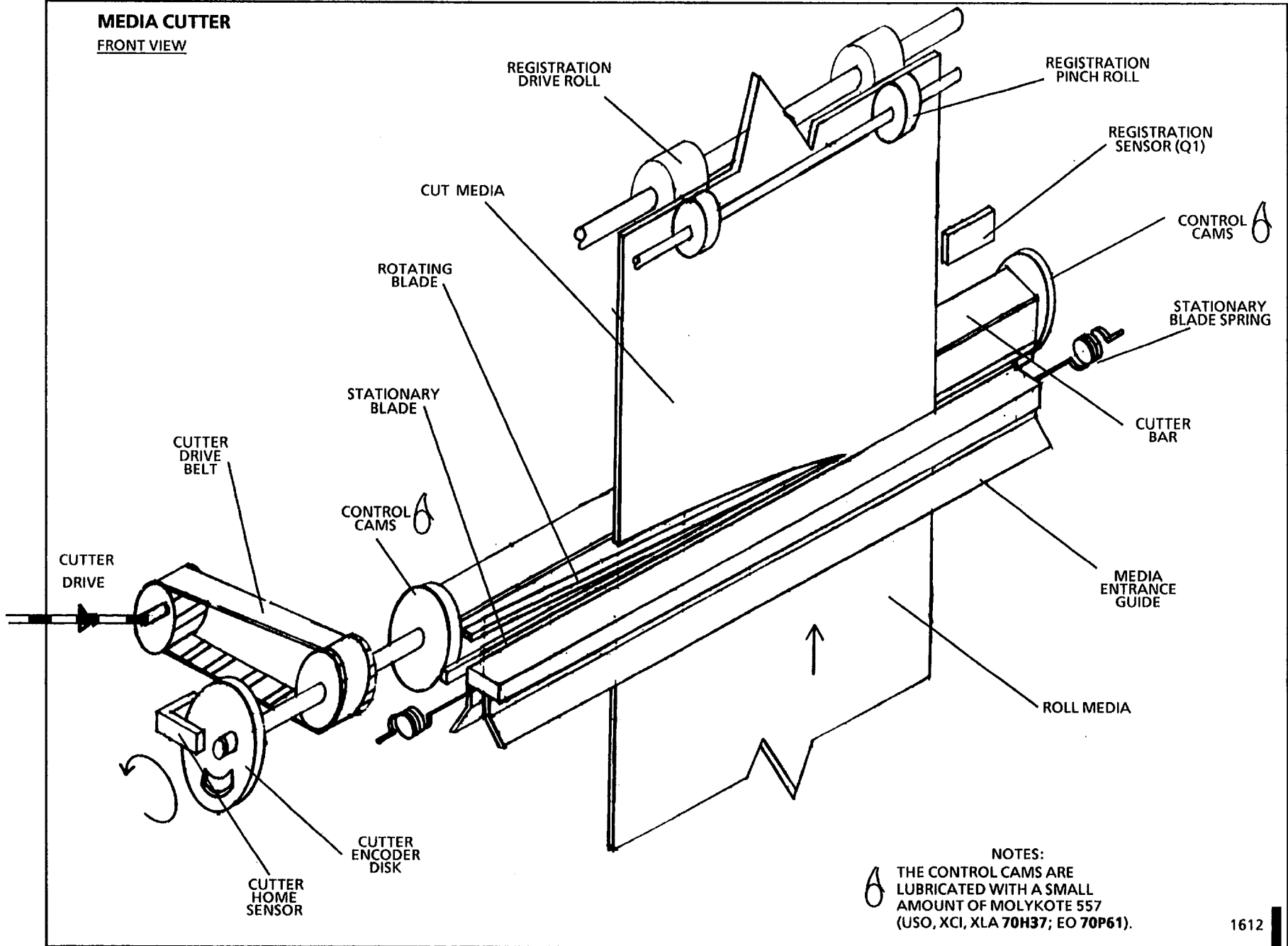


NOTE:  
 ① OUTPUT SIGNAL IS GENERATED BY CUTTER DRIVE (SERVO) MOTOR. SIGNAL IS AN ANALOG VOLTAGE READING OF APPROXIMATELY (+ 5.0 VDC) WITH MULTIMETER PEAK HOLD SELECTED.

## Notes

**MEDIA CUTTER**

FRONT VIEW



NOTES:  
THE CONTROL CAMS ARE  
LUBRICATED WITH A SMALL  
AMOUNT OF MOLYKOTE 557  
(USO, XCI, XLA 70H37; EO 70P61).

1612

## C1.01/ C2.07/ C3.07 Media Feed RAP

(8/20/92)

The status code C1.01 or C2.07 or C3.07 is displayed when the logic detects that there is a media feed problem. As media is fed or rewound along the media path, the Roll 1 Position Sensor is blocked and not blocked, causing the sensor signal to change state. The logic detects a change in the state of the Roll 1 Position Sensor signal.

**C1.01** Indicates that the logic detected that either media was not fed to, or media was not fed or rewound past, the Roll 1 Position Sensor. The sensor signal does not change state from a HIGH to LOW or from a LOW to HIGH as the media is being fed from Roll 1.

**C2.07** Indicates that the logic detected that media was not fed to the Roll 1 Position Sensor. The sensor signal does not change state from a HIGH to LOW as the media is being fed from Roll 2.

**C3.07** Indicates that the logic detected that media was not fed to the Roll 1 Position Sensor. The sensor signal does not change state from a HIGH to LOW as the media is being fed from Roll 3.

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

### Initial Actions

- Open the front doors and pull out the Top Drawer. Check the media path for obstructions.
- Remove the rear covers and the Roll 1 Position Sensor (Q1) from the rear frame. Clean the Roll 1 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check that the connectors for the Roll 1 Position Sensor (Q1 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.

### Procedure

Enter the code [0707] in order to check the Roll 1 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

If a (01) is displayed without media in the sensor window and a (00) is displayed with media in the sensor window, do the following:

- When C1.01 is displayed, go to the 7.1 Roll 1 Feed RAP.
- When C2.07 is displayed, go to the 7.2 Roll 2 Feed RAP.
- When C3.07 is displayed, go to the 7.3 Roll 3 Feed RAP.

If the display does not change from (01) to (00) when the media is positioned in the sensor window, continue with this procedure.

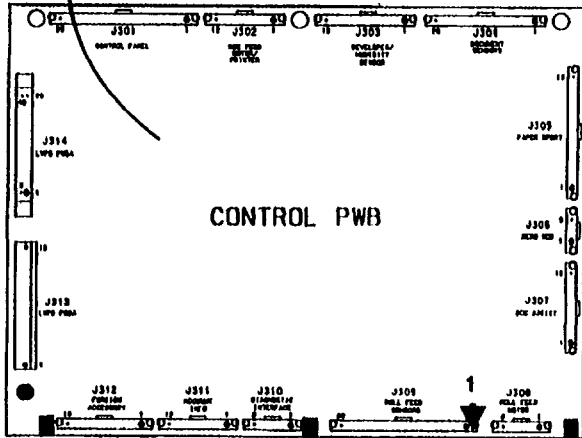
Go to FLAG 1 and check the wiring between the Roll 1 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 1 Position Sensor (Q1).

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



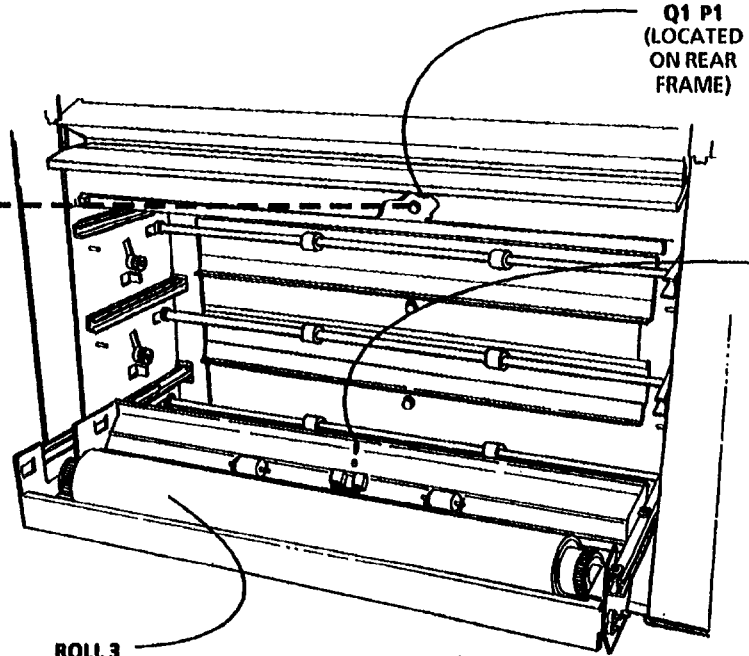
CONTROL PWB (A3)



1590

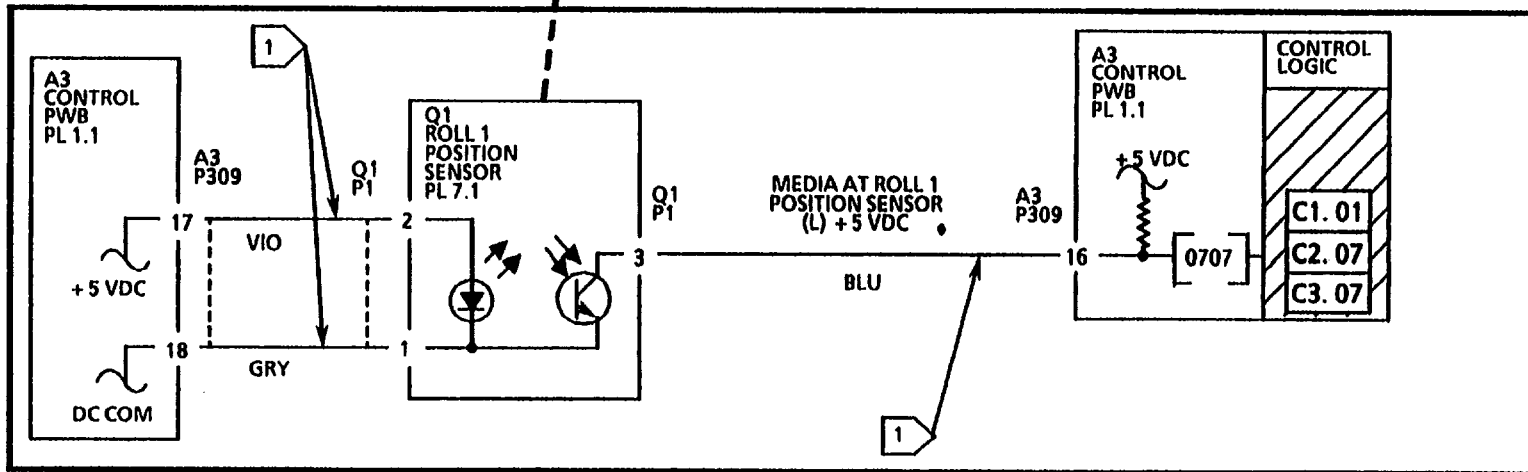
A3  
P309

VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



## C1.04/ C2.04/ C3.04 Media Transportation RAP

(8/20/92)

The status codes C1.04, C2.04, and C3.04 are displayed when the logic detects that the media is jammed in the registration area of the Media Transport. The media that is moving through the Media Transport, alternately blocks and clears the Media Registration Sensor, causing the sensor signal to change state. The logic detects a change in the state of the Media Registration Sensor signal.

**C1.04** Indicates that the logic detected that the media did not reach the Media Registration Sensor. The sensor signal did not change state from HIGH to LOW as the media was being fed from the Roll 1.

**C2.04** Indicates that the logic detected that the media did not reach the Media Registration Sensor. The sensor signal did not change state from HIGH to LOW as the media was being fed from the Roll 2.

**C3.04** Indicates that the logic detected that the media did not reach the Media Registration Sensor. The sensor signal did not change state from HIGH to LOW as the media was being fed from the Roll 3.

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

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

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

### Initial Actions

#### WARNING

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

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

### Procedure

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

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

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

Y N

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

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

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

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

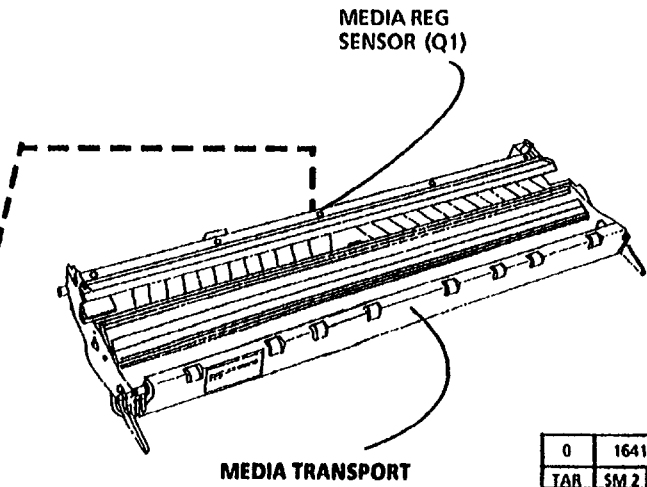
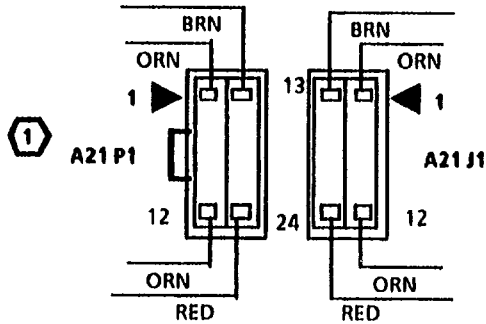
Go to one of the following RAPs:

- When C1.04 is displayed, go to the 7.1 Roll 1 Feed RAP.
- When C2.04 is displayed, go to the 7.2 Roll 2 Feed RAP.
- When C3.04 is displayed, go to the 7.3 Roll 3 Feed RAP.

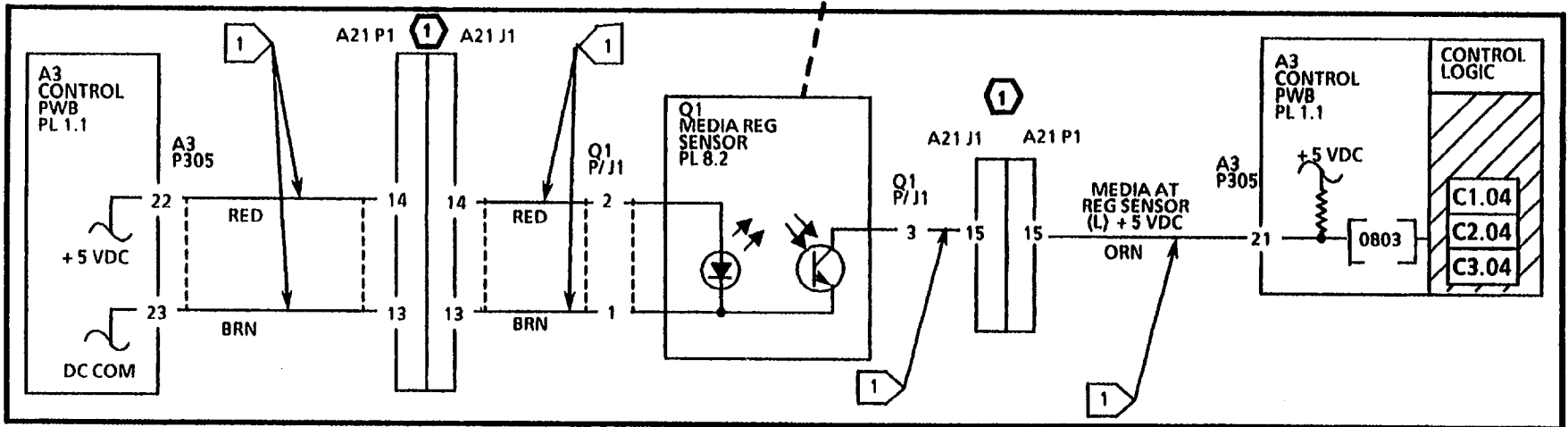
If the problem persists, go to the 8.1 Media Transport RAP.

NOTES:

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



0	1641	A
TAR	SM 2	M 0



# NOTES

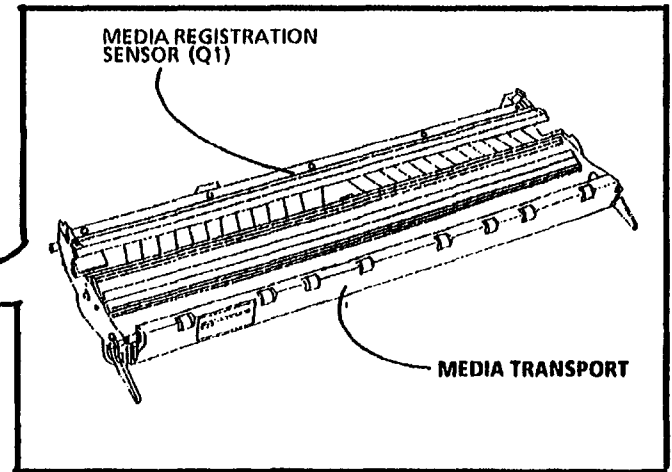
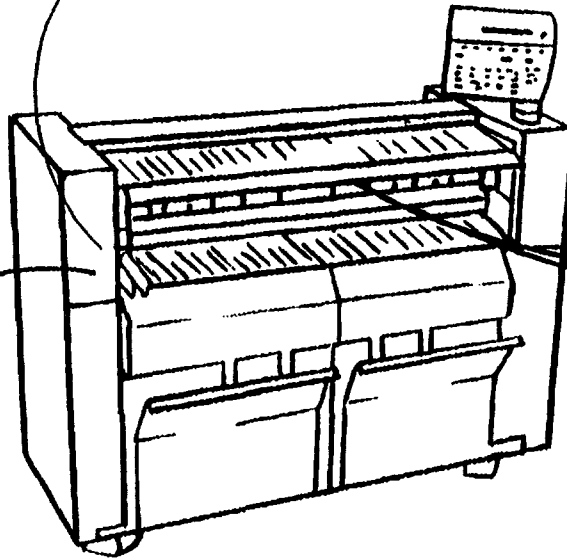
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10/92

2-24

3050

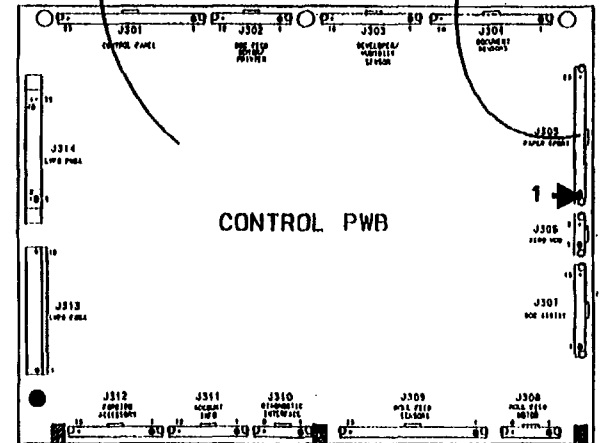
A21  
P/J21



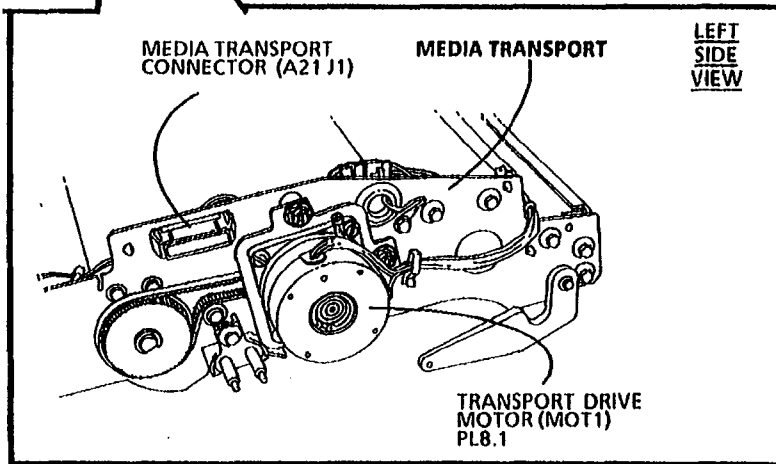
0	2066	A
TAR	SM 2	X 0

CONTROL PWB (A3)

A3  
P305



0	1590	A
TAR	SM 2	X 0



## C1.05 Media Feed RAP

(2/11/93)

The status code C1.05 is displayed when the logic detects that there is a Roll 1 media feed problem. As media is fed from Roll 1 or rewound onto Roll 1; the roll rotates, causing the Roll 1 Motion Sensor to be alternately blocked and not blocked by the rotating encoder disk. The logic senses a change in the state of the Roll 1 Motion Sensor signal.

**C1.05** Indicates that no motion is detected by the logic from the Roll 1 Motion Sensor. The sensor signal does not continuously change state from a HIGH to LOW as the media is being fed or rewound..

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

### Initial Actions

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 1 in the forward and reverse directions.
- Check the connectors for the Roll 1 Motion Sensor (Q4 P1) and the Control PWB (A3 P309) for damage and ensure that they are seated correctly.

### Procedure

Enter the code [0710] in order to check the Roll 1 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 1.

If the display alternately change from (00) to (01) when the roll is rotated, go to the 7.1 Roll 1 Feed RAP. On copiers equipped with Tag/ MOD 05 (Firmware Revision 7/1/92) or Tag/ MOD 16 (Firmware Revision 2/8/93) go to the C1.01 Media Feed RAP. Perform the RAP before going to the 7.1 Roll 1 Feed RAP.

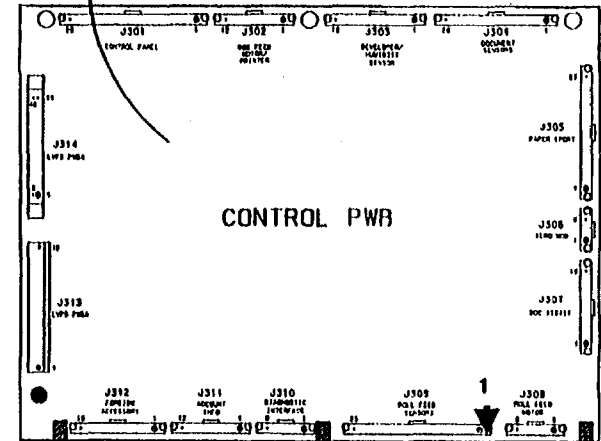
If the display does not change from (00) to (01) when the roll is rotated, continue with this procedure.

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

If there is no open circuit or short circuit, replace the Roll 1 Motion Sensor (Q4).

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

CONTROL PWB (A3)

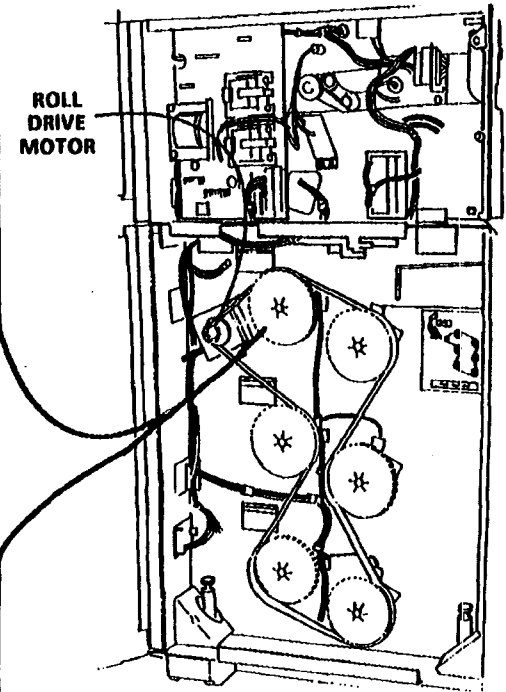
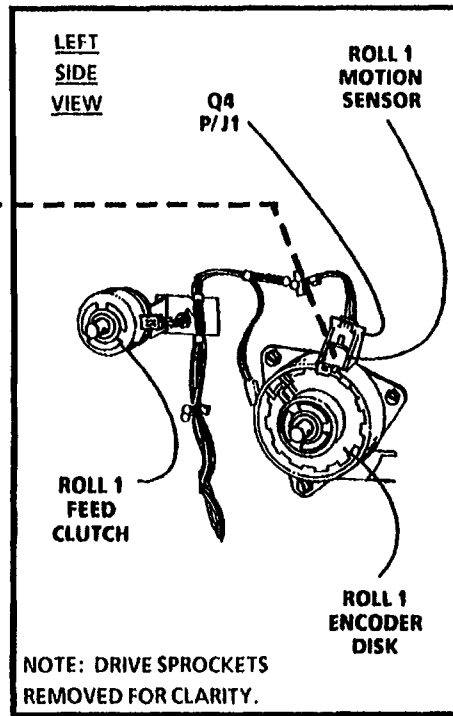


A3  
P309

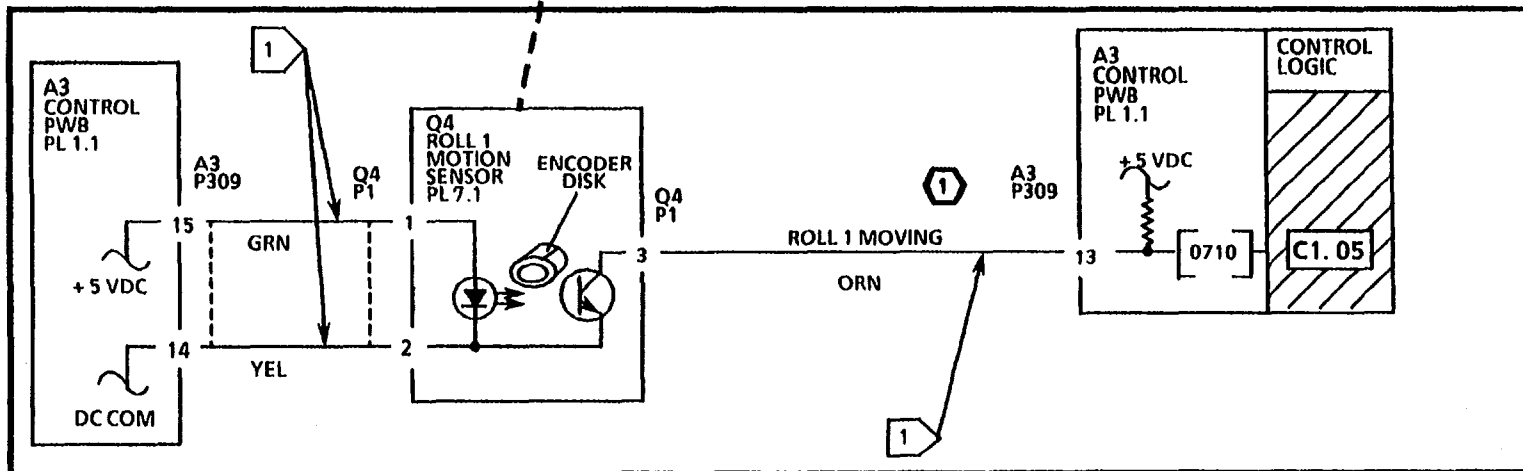
1590

NOTES:

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



1876



## C2.01/ C3.06 Media Feed RAP

(8/20/92)

The status code C2.01 or C3.06 is displayed when the logic detects that there is a media feed problem. As media is fed or rewound along the media path the Roll 2 Position Sensor is blocked and not blocked, causing the sensor signal to change state. The logic detects a change in the state of the Roll 2 Position Sensor signal.

**C2.01** Indicates that the logic detected that either media was not fed to, or media was not fed or rewound past, the Roll 2 Position Sensor. The sensor signal does not change state from a HIGH to LOW or from a LOW to a HIGH as the media is being fed from Roll 2.

**C3.06** Indicates that the logic detected that the media did not feed past the Roll 2 Position Sensor. The sensor signal does not change state from a LOW to HIGH as the media is being fed from Roll 3.

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

### Initial Actions

- Open the front doors and pull out the Middle Drawer. Check the media path for obstructions.

- Remove the rear covers and the Roll 2 Position Sensor (Q2) from the rear frame. Clean the Roll 2 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check that the connectors for the Roll 2 Position Sensor (Q2 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.

### Procedure

Enter the code [0708] in order to check the Roll 2 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

If a (01) is displayed without media in the sensor window and a (00) is displayed with media in the sensor window, do the following:

- When C2.01 is displayed, go to the 7.2 Roll 2 Feed RAP.
- When C3.06 is displayed, go to the 7.3 Roll 3 Feed RAP.

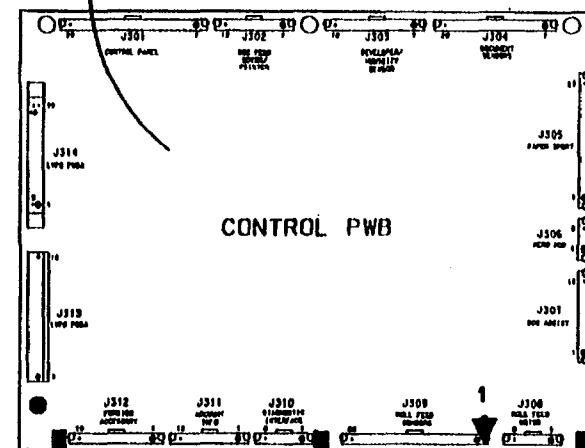
If the display does not change from (01) to (00) when the media is positioned in the sensor window, continue with this procedure.

Go to FLAG 1 and check the wiring between the Roll 2 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 2 Position Sensor (Q2).

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

CONTROL PWB (A3)

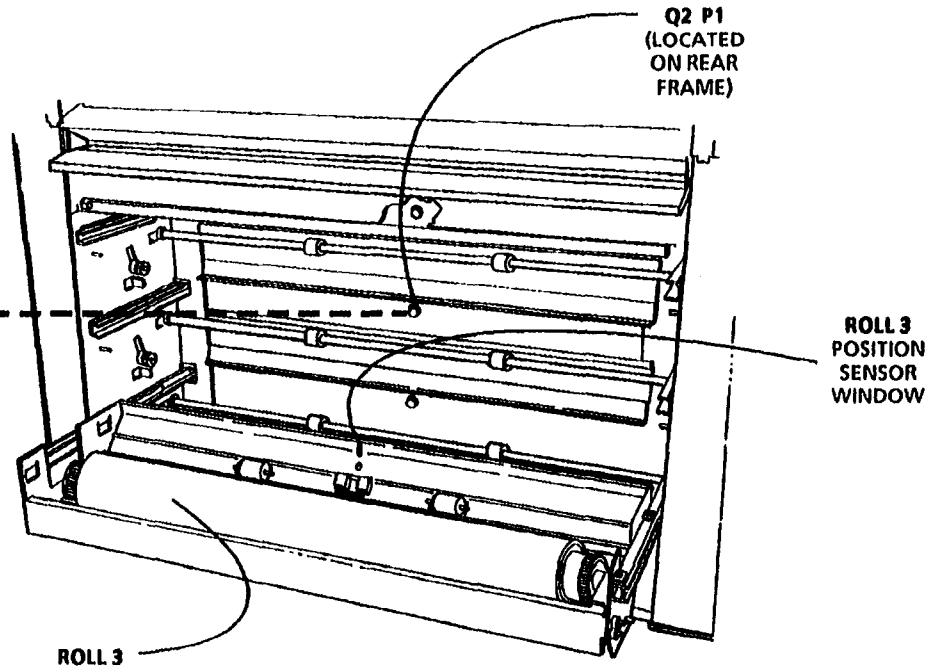


1590

A3  
P309

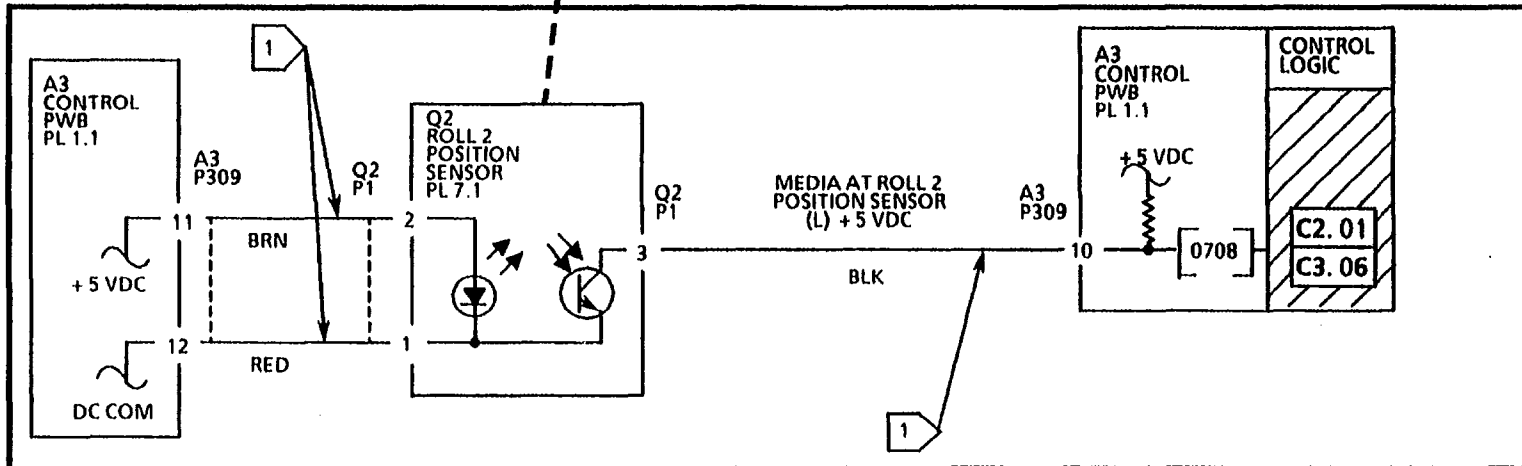


VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



## C2.05 Media Feed RAP

(8/21/92)

The status code **C2** is displayed when the logic detects that there is a Roll 2 media feed problem. As media is fed from Roll 2 or rewound onto Roll 2; the roll rotates, causing the Roll 2 Motion Sensor to be alternately blocked and not blocked by the rotating encoder disk. The logic detects a change in the state of the Roll 2 Motion Sensor signal.

**C2.05** Indicates that no motion is detected by the logic from the Roll 2 Motion Sensor. The sensor signal did not continuously change state from a HIGH to LOW as the media is being fed or rewound.

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

### Initial Actions

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 1 in the forward and reverse directions.
- Check the connectors for the Roll 2 Motion Sensor (Q5 P1) and the Control PWB (A3 P309) for damage and ensure that they are seated correctly.

### Procedure

Enter the code [0711] in order to check the Roll 2 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 2.

If the display alternately change from (00) to (01) when the roll is rotated, go to the 7.2 Roll 2 Feed RAP.

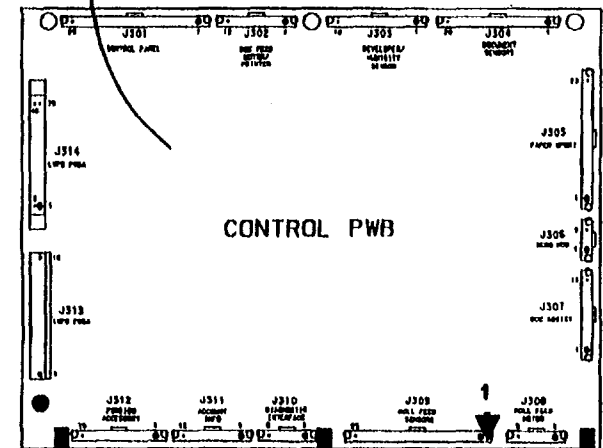
If the display does not change from (00) to (01) when the roll is rotated, continue with this procedure.

Go to FLAG 1 and check the wiring between the Roll 2 Motion Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 2 Motion Sensor (Q5).

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

CONTROL PWB (A3)

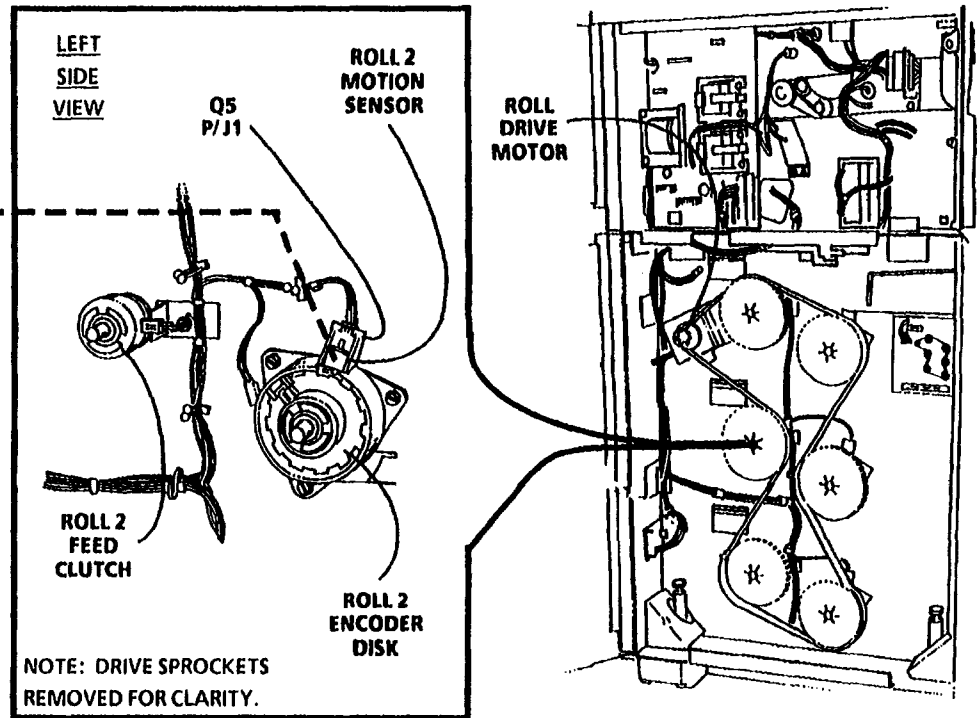


1590

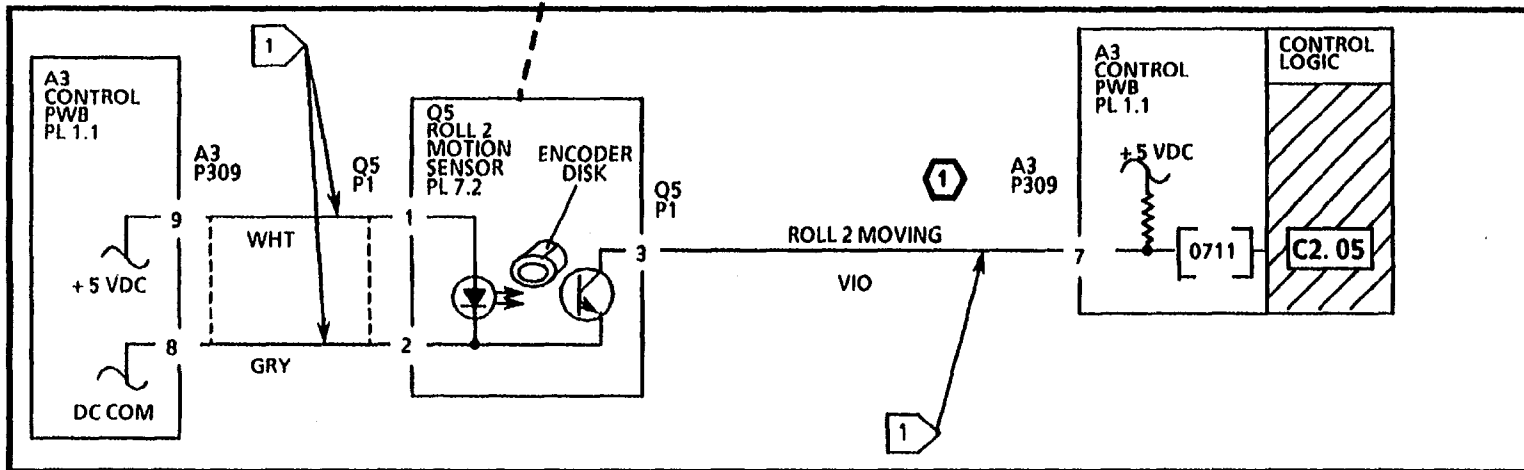
A3  
P309

NOTES:

- ① THE ROLL 2 MOVING SIGNAL IS EITHER + 5 VDC OR 0 VDC WHEN THE ROLL 2 IS NOT MOVING. THE SIGNAL IS APPROXIMATELY + 2.4 VDC WITH THE ROLL 2 MOVING.



2027



## C3.01 Media Feed RAP

(8/21/92)

The status code **C3.01** is displayed when the logic detects that there is a media feed problem. As media is fed or rewound along the media path, the Roll 3 Position Sensor is blocked and not blocked, causing the sensor signal to change state. The logic detects a change in the state of the Roll 3 Position Sensor signal.

**C3.01** Indicates that the logic detected that either media was not fed to, or media was not fed or rewound past, the Roll 3 Position Sensor. The sensor signal does not change state from a HIGH to LOW or from a LOW to HIGH as the media is being fed from Roll 3.

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

### Initial Actions

- Open the front doors and pull out the Bottom Drawer. Check the media path for obstructions.
- Remove the rear covers and the Roll 3 Position Sensor (Q3) from the rear frame. Clean the Roll 3 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check that the connectors for the Roll 3 Position Sensor (Q3 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.

### Procedure

Enter the code [0709] in order to check the Roll 3 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

If a (01) is displayed without media in the sensor window and a (00) is displayed with media in the sensor window, go to the 7.3 Roll 3 Feed RAP.

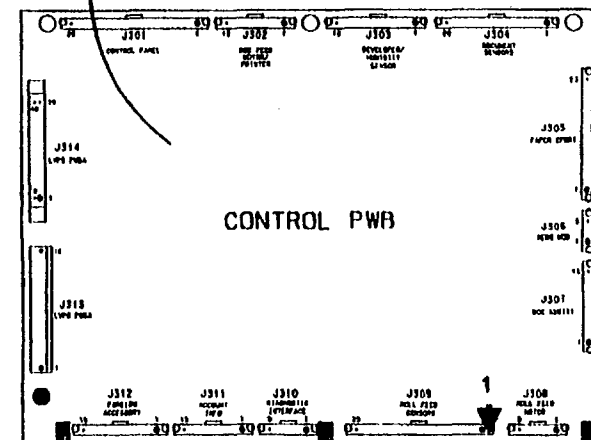
If the display does not change from (01) to (00) when the media is positioned in the sensor window, continue with this procedure.

Go to FLAG 1 and check the wiring between the Roll 3 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 3 Position Sensor (Q3).

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

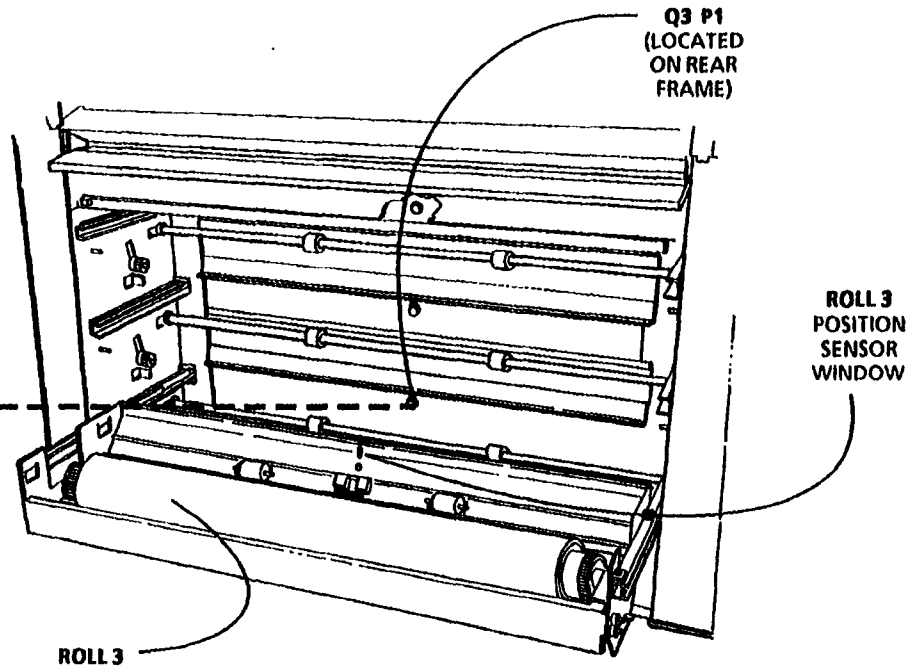
CONTROL PWB (A3)



1590

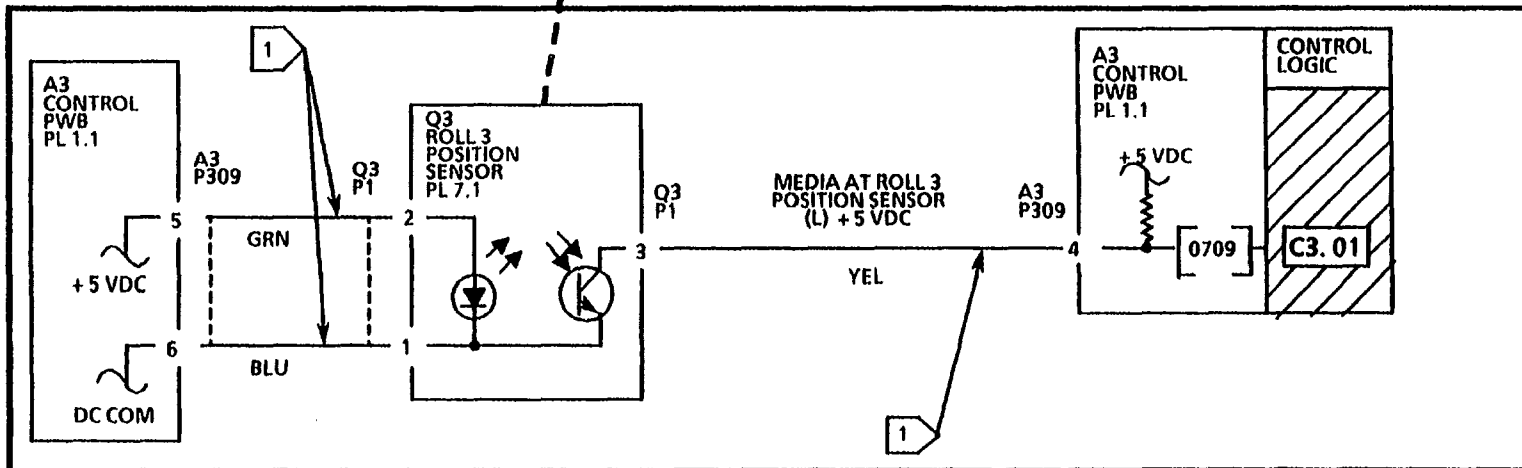
A3  
P309

VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



## C3.05 Media Feed RAP

(8/21/92)

The status code **C3.05** is displayed when the logic detects that there is a Roll 3 media feed problem. As media is fed from Roll 3 or rewind onto Roll 3; the roll rotates, causing the Roll 3 Motion Sensor to be alternately blocked and not blocked by the rotating encoder disk. The logic detects a change in the state of the Roll 3 Motion Sensor signal.

**C3.05** Indicates that no motion is detected by the logic from the Roll 3 Motion Sensor. The sensor signal does not continuously change state from a HIGH to LOW as the media is being fed or rewind.

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

### Initial Actions

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 1 in the forward and reverse directions.
- Check the connectors for the Roll 3 Motion Sensor (Q6 P1) and the Control PWB (A3 P309) for damage and ensure that they are seated correctly.

### Procedure

Enter the code [0712] in order to check the Roll 3 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 3.

If the display alternately changes from (00) to (01) when the roll is rotated, go to the 7.3 Roll 3 Feed RAP.

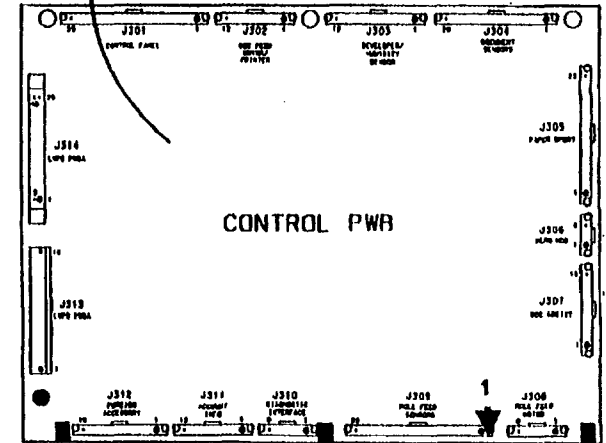
If the display does not change from (00) to (01) when the roll is rotated, continue with this procedure.

Go to FLAG 1 and check the wiring between the Roll 3 Motion Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 3 Motion Sensor (Q6).

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

CONTROL PWB (A3)

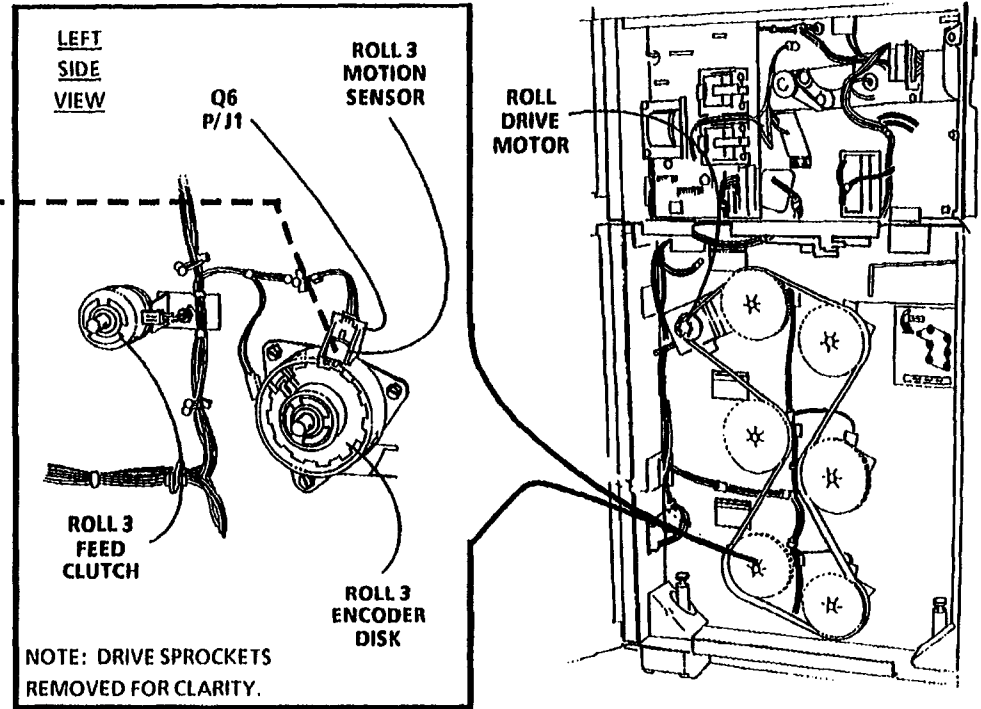


A3  
P309

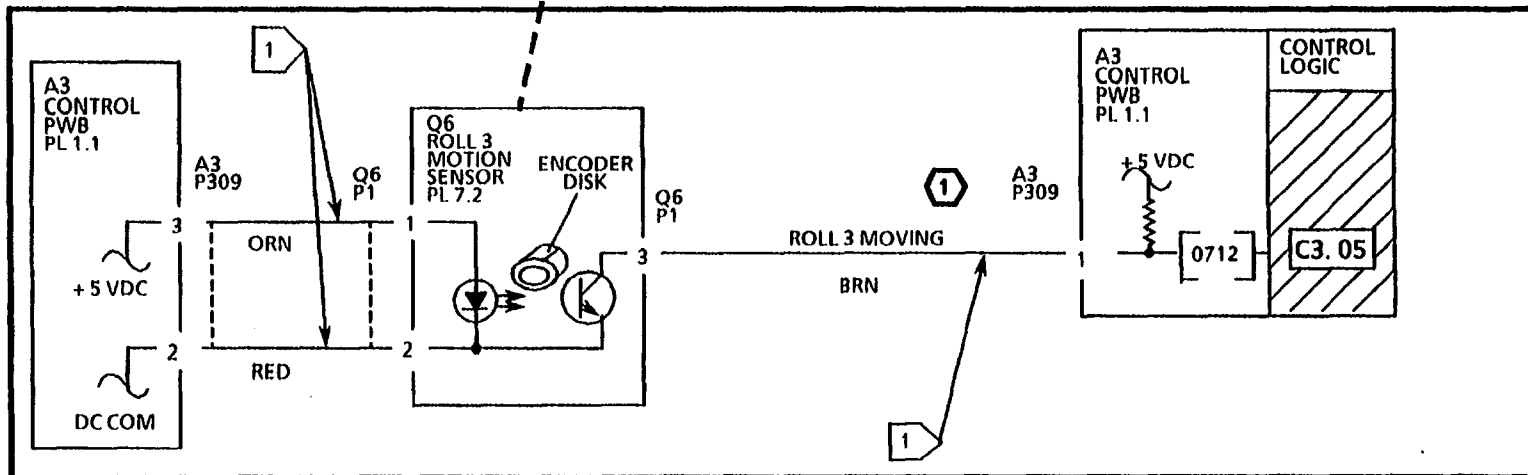
1590

NOTES:

- ① THE ROLL 3 MOVING SIGNAL IS EITHER + 5 VDC OR 0 VDC WHEN THE ROLL 3 IS NOT MOVING. THE SIGNAL IS APPROXIMATELY + 2.4 VDC WITH THE ROLL 3 MOVING.



2027



## C4.01/ C4.34 Sheet Feed RAP

(2/2/93)

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

**C4.01** Indicates that the logic detected that:

(a) the sheet media is blocking the Sheet Feed Sensor at Power On. The sensor signal is HIGH when the Power On (1) switch was pressed.

(OR)

(b) during the run mode, the sheet media was inserted into the copier when the copier was in the auto roll feed mode of operation. The Sheet Feed Sensor signal was HIGH as the copier began feeding the media from one of the supply rolls.

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

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

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

### Initial Actions

#### WARNING

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

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

### Procedure

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

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

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

Y N

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

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

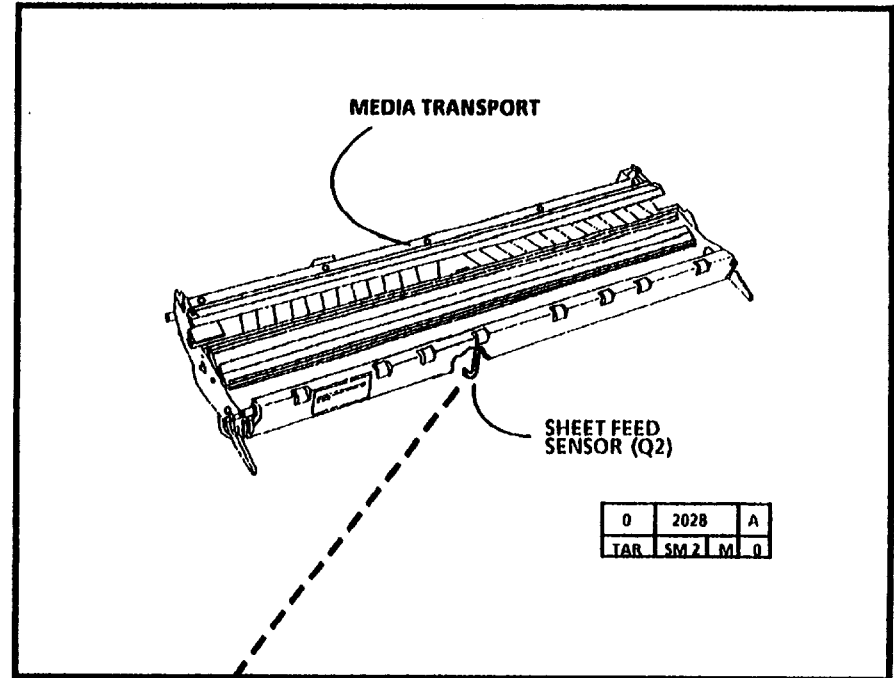
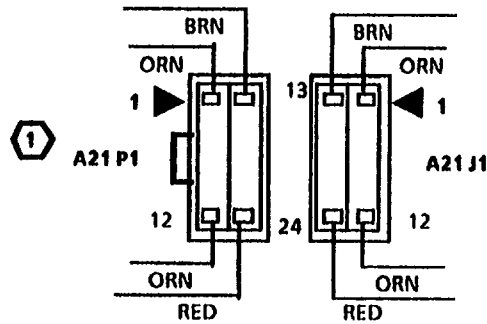
If the problem persists, replace the Control PWB (A3).

Go to the 8.1 Media Transport RAP.

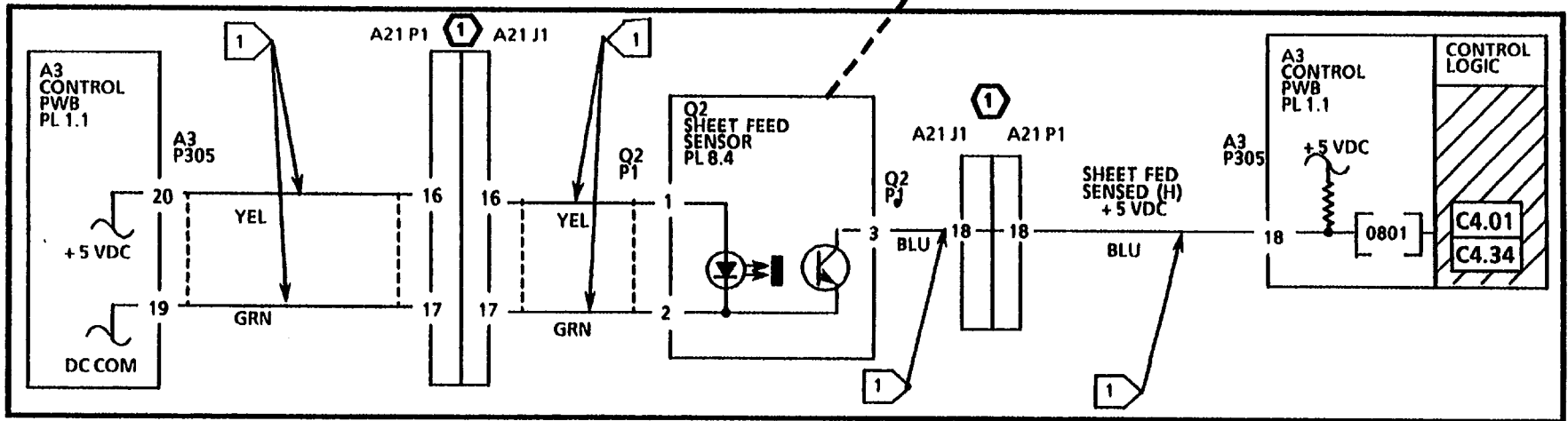


NOTES:

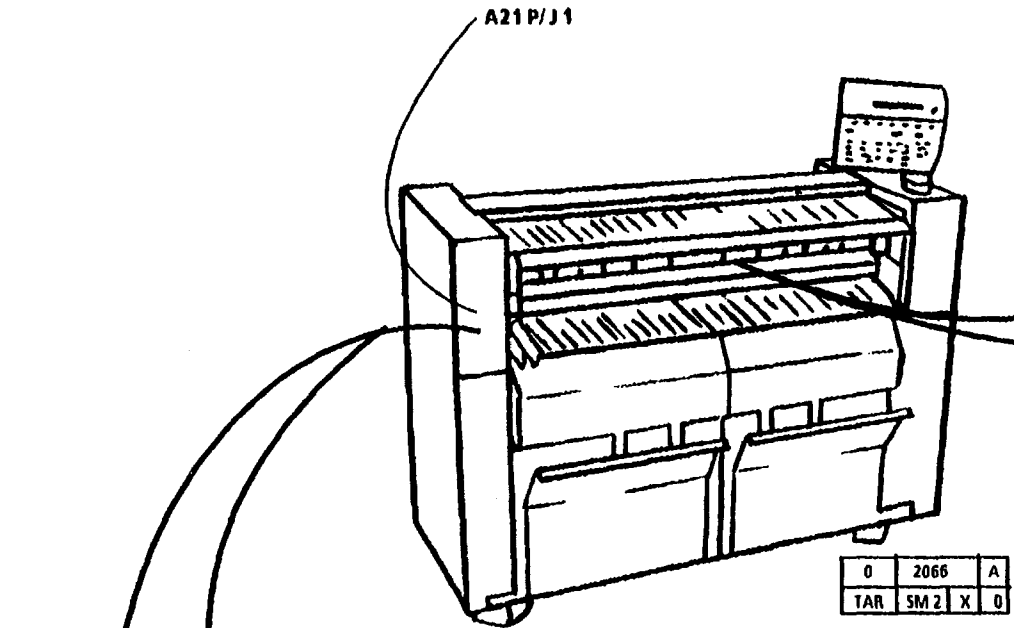
① CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



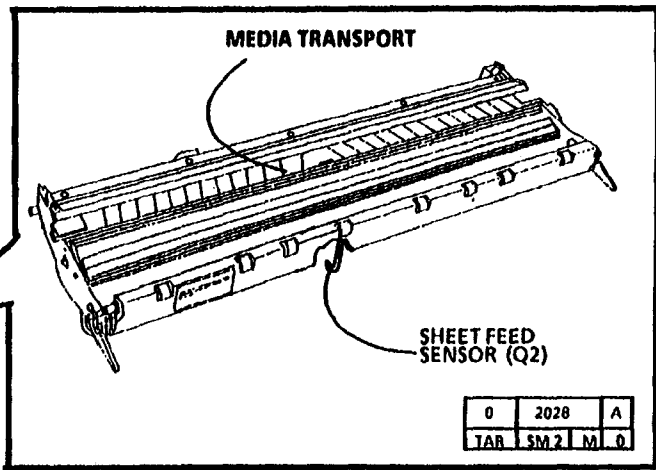
0	2028	A
TAR	SM 2	M 0



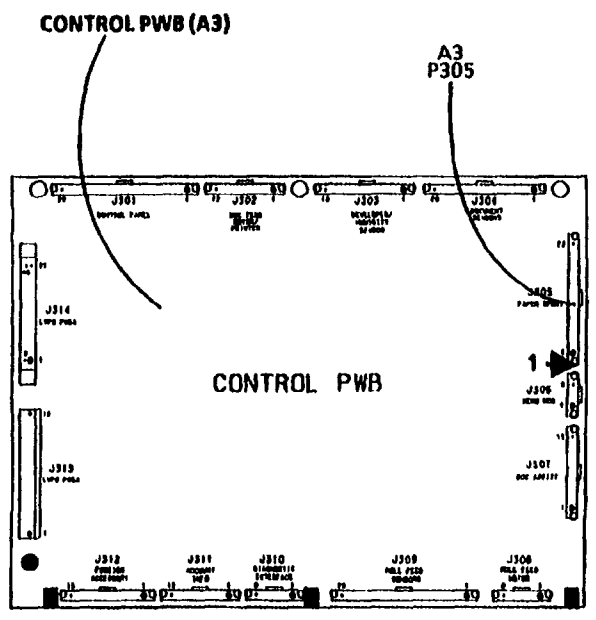
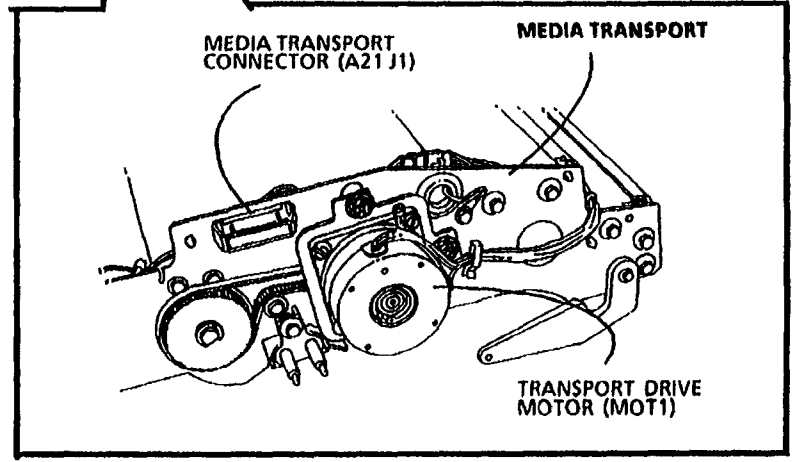
# NOTES



0	2066	A
TAR	SM 2	X 0



0	2028	A
TAR	SM 2	M 0



0	1590	A
TAR	SM 2	X 0

## C4.24 Sheet Feed RAP

(8/25/92)

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

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

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

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

### Initial Actions

#### WARNING

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

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

### Procedure

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

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

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

Y N

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

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

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

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

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

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

Y N

A B

**A B**

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

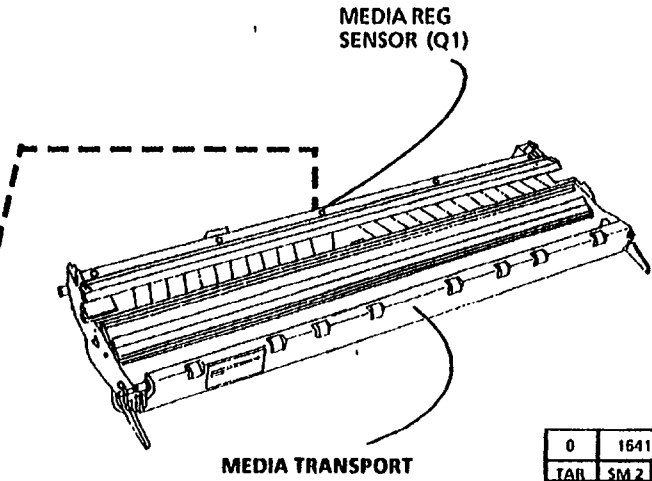
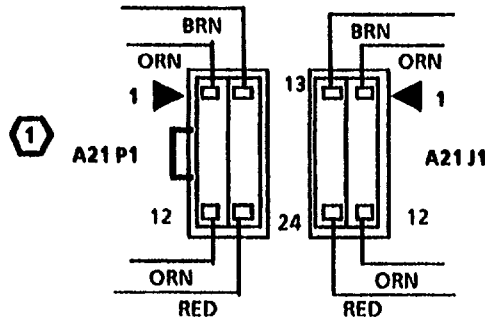
If there is no open or short circuit, replace the Sheet Feed Sensor (Q2).

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

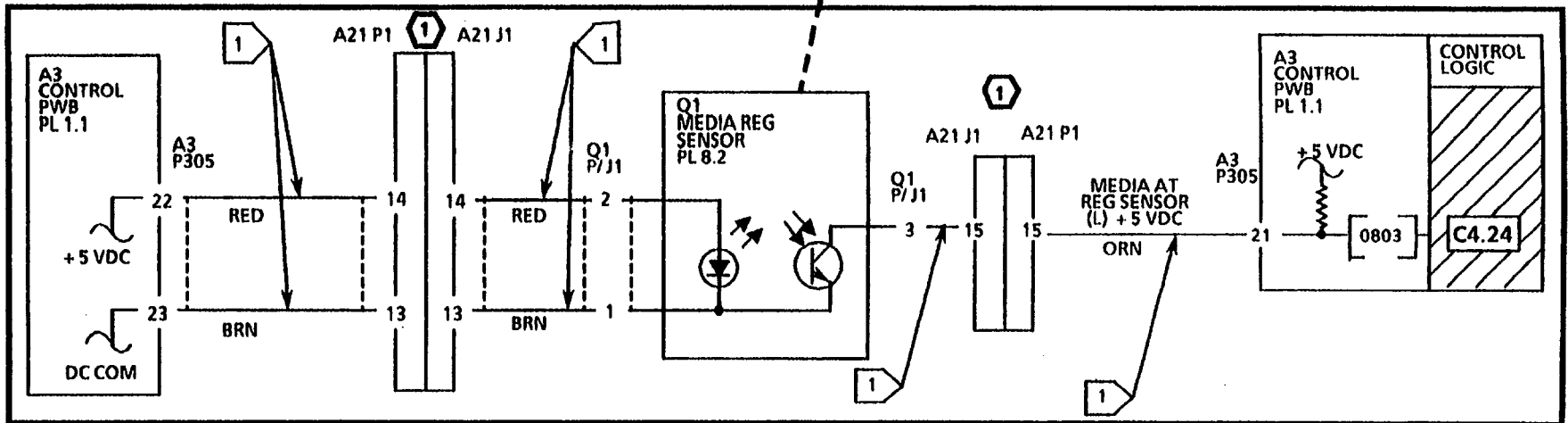
Go to the 8.1 Media Transport RAP.

NOTES:

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

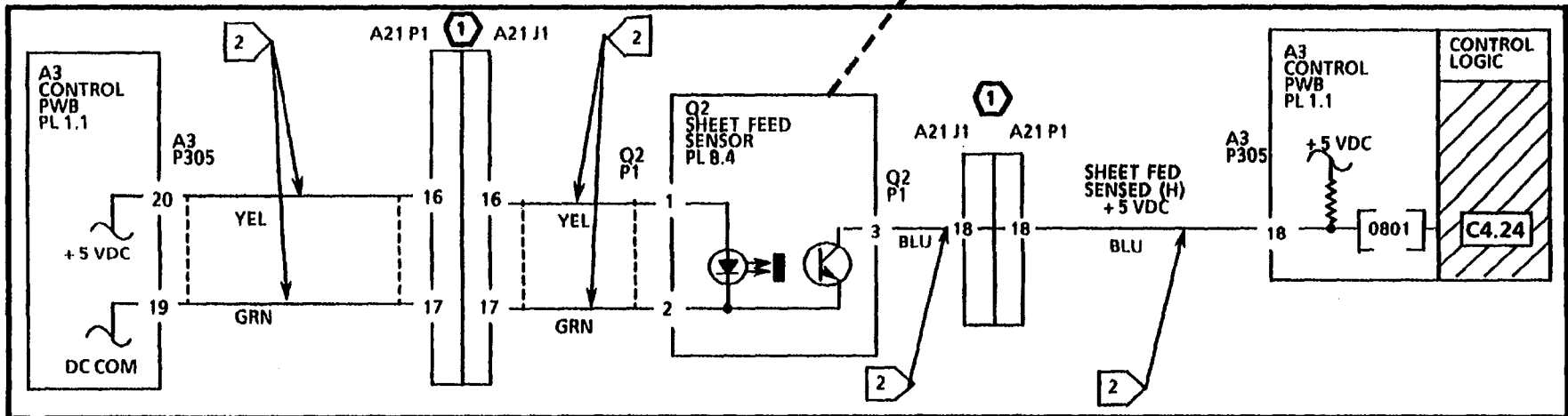
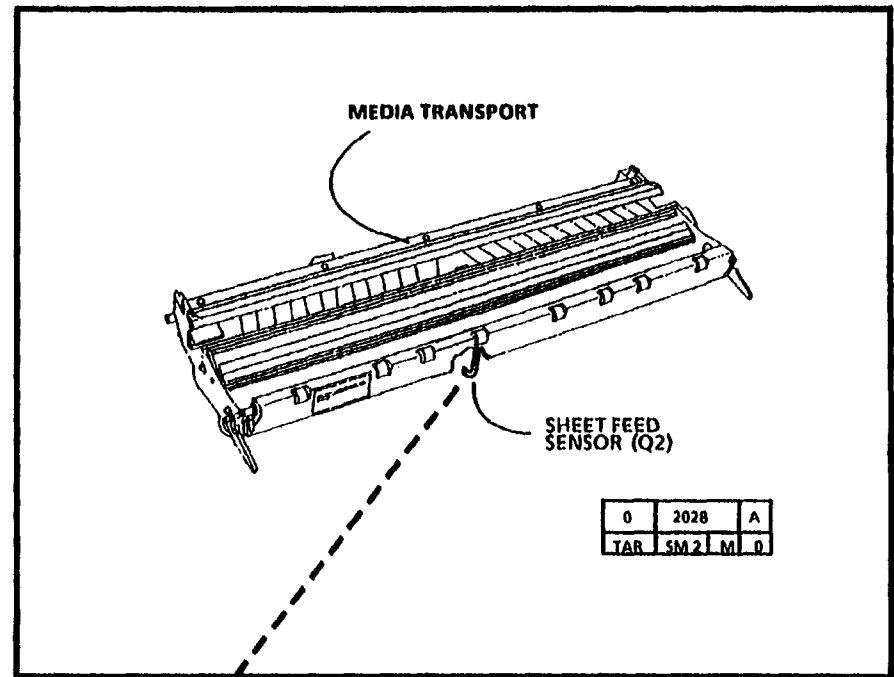
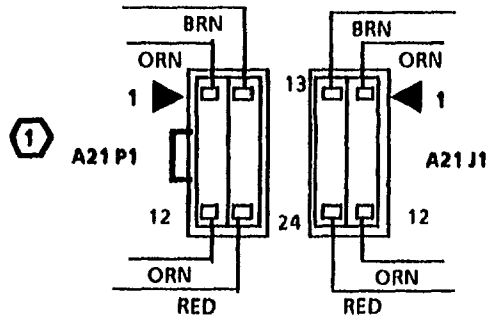


0	1641	A
TAR	SM 2	M 0



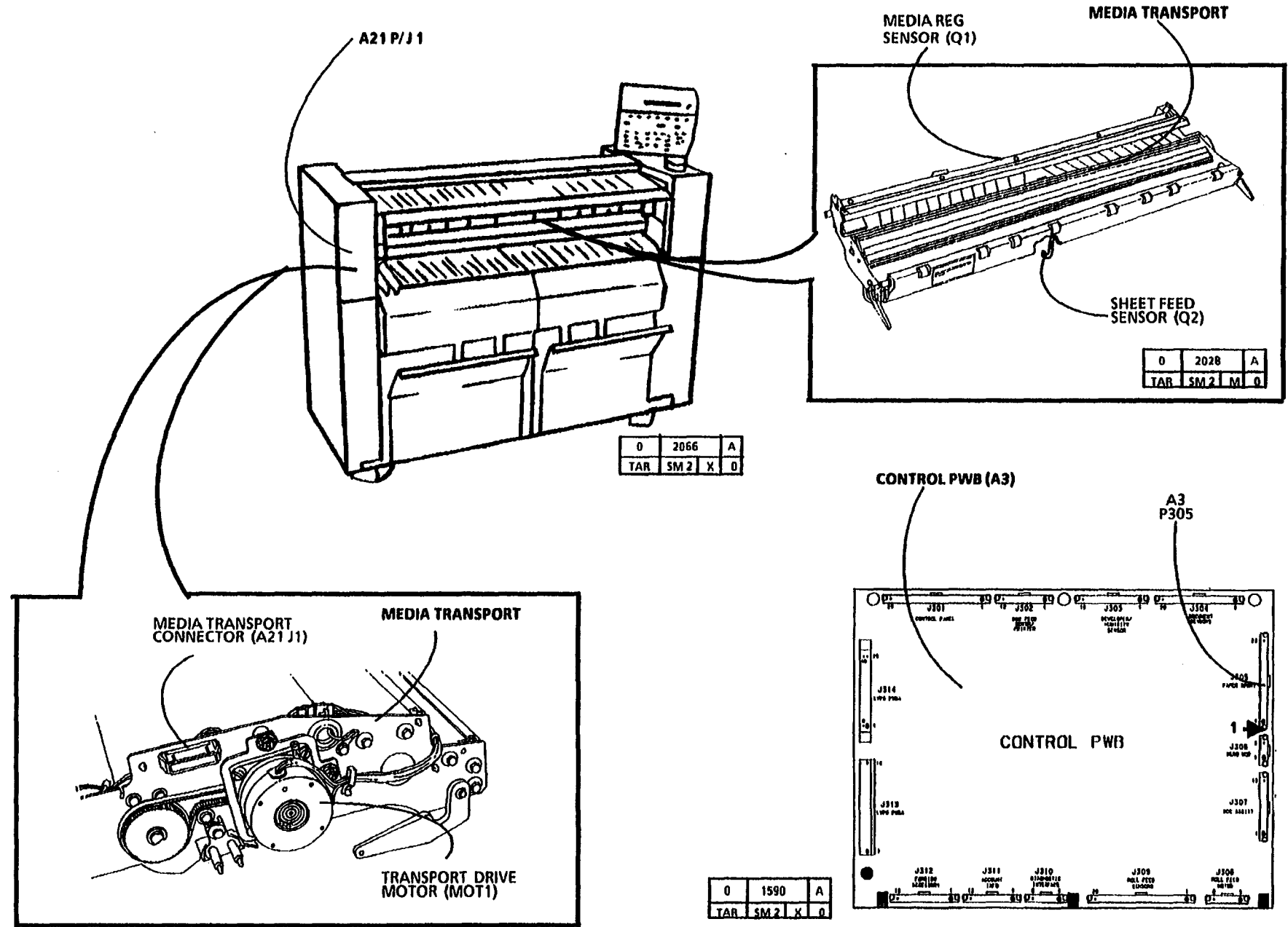
NOTES:

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



# NOTES





## E2.01 Media Transportation RAP

(2/2/93)

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

**E2.01** Indicates that the logic detected that :

(a) the media is blocking the Media Registration Sensor at Power On. The sensor signal is LOW when the Power On (1) switch was pressed.

(OR)

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

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

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

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

### Initial Actions

#### WARNING

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

- Lower the Sheet Feed-in Shelf and the Latching Cover. Check the Media Transport for a media jam. Remove any obstructions in the media path.
- Clean the Media Registration Sensor by wiping the face of the sensor with a clean, dry cloth.
- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Media Registration Sensor (A3 P305) for damage and ensure that the connector and pins are seated correctly.
- Check the Media Exit Guide on the Cutter Assembly for damage (burrs on the metal bracket; bent, damaged or misaligned plastic guide).

### Procedure

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

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

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

Y N

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

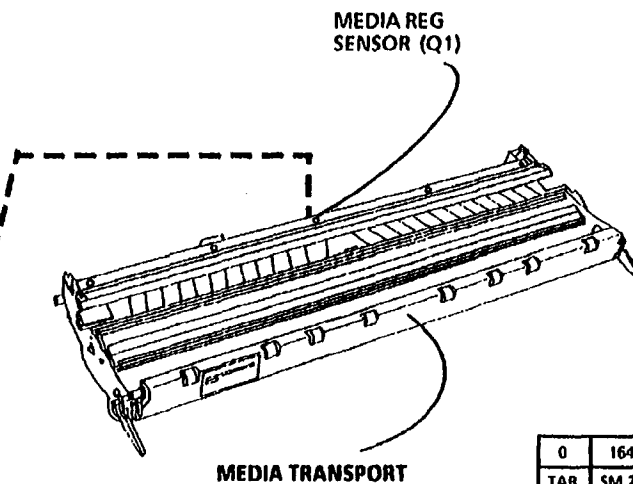
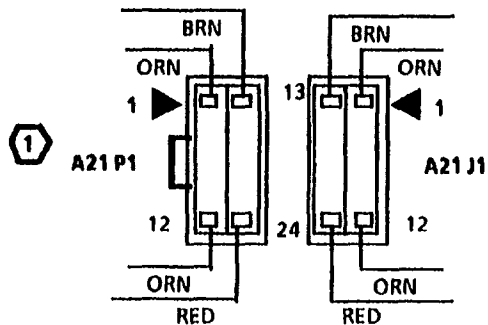
If there is no open or short circuit, replace the Media Registration Sensor (Q1).

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

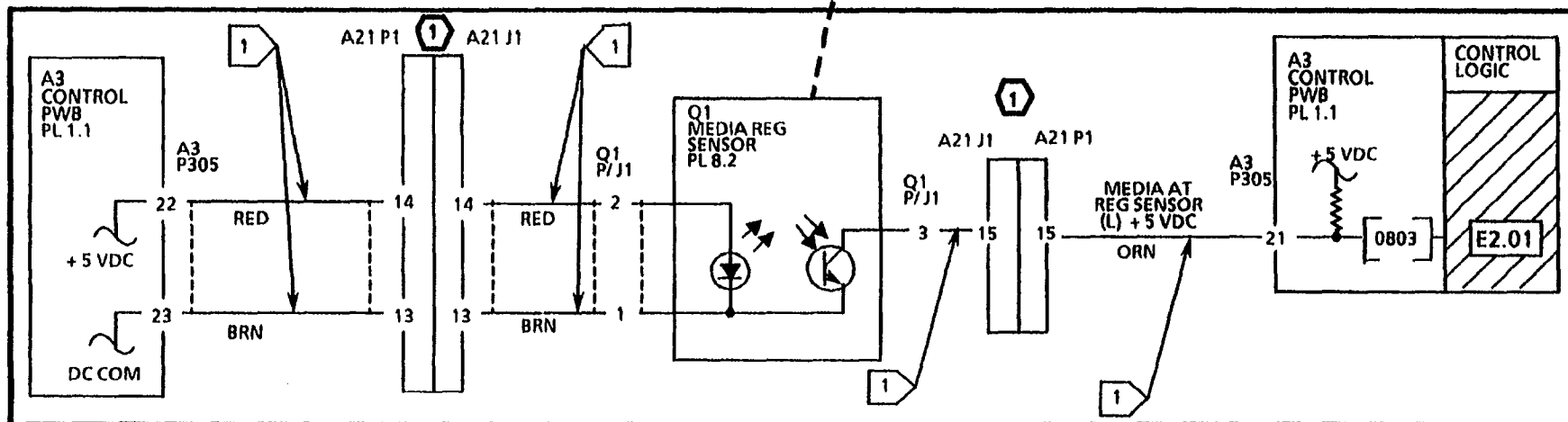
Go to the 8.1 Media Transport RAP.

NOTES:

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



0	1641	A
TAR	SM 2	M 0



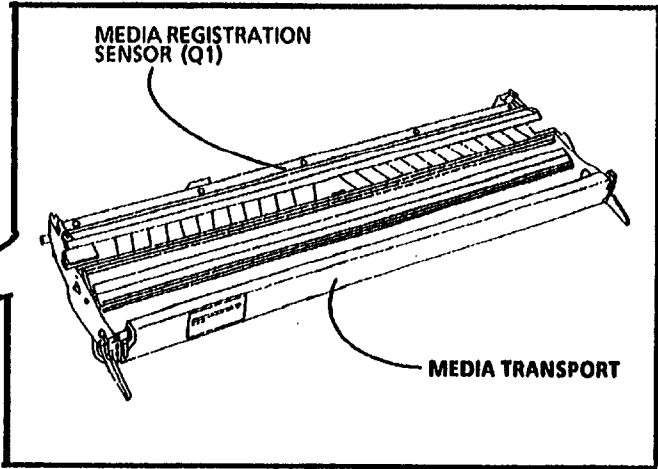
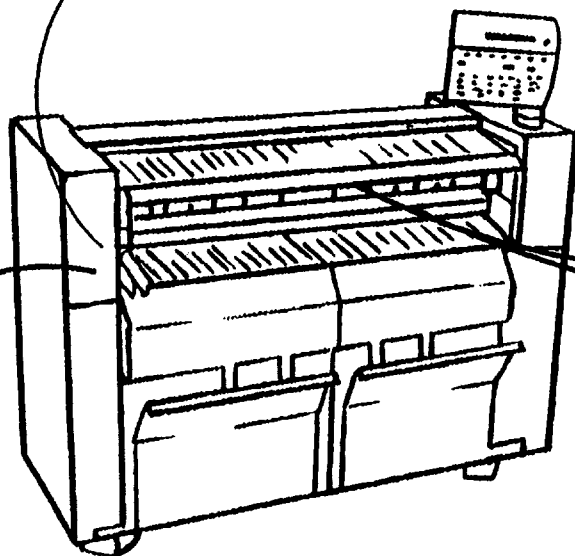
# NOTES

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10/92  
2-48

3050

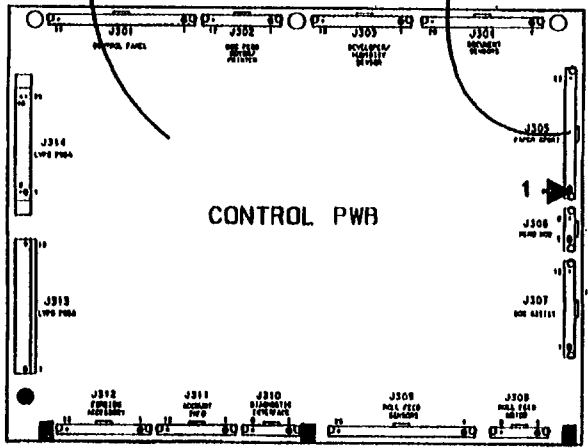
A21  
P/J21



0	2066	A
TAR	SM 2	X 0

CONTROL PWB (A3)

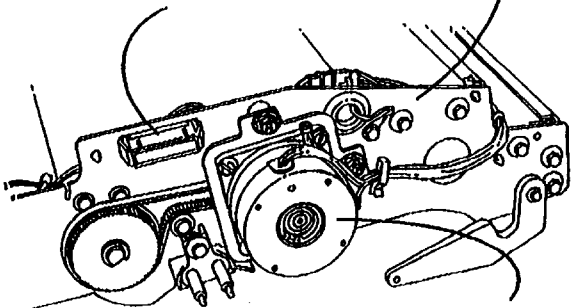
A3  
P305



0	1590	A
TAR	SM 2	X 0

MEDIA TRANSPORT CONNECTOR (A21 J1)      MEDIA TRANSPORT

LEFT  
SIDE  
VIEW



TRANSPORT DRIVE MOTOR (MOT1)  
PL7.2

## E4.01/ E4.02 Media Transportation RAP

(2/2/93)

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

**E4.01** Indicates that the logic detected that :

(a) the media is blocking the Media Exit Switch at Power On. The switch signal is HIGH when the Power On (1) switch was pressed.

(OR)

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

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

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

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

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

### Initial Actions

#### WARNING

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

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

### Procedure

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

Manually actuate the Media Exit Switch.

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

Y N

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

If there is no open or short circuit, replace the Media Exit Switch (Q3).

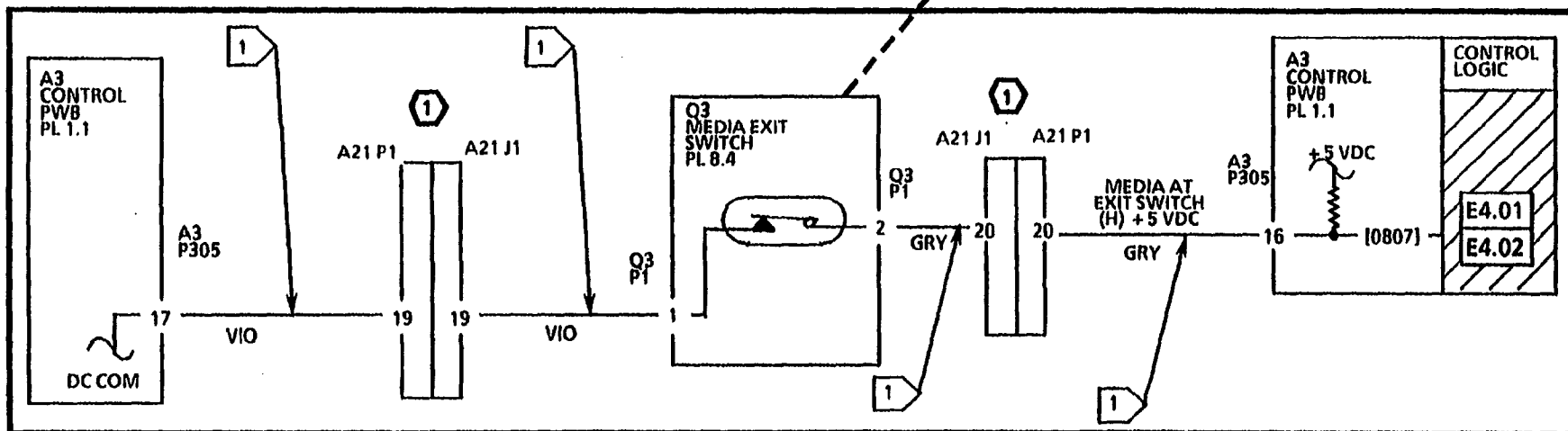
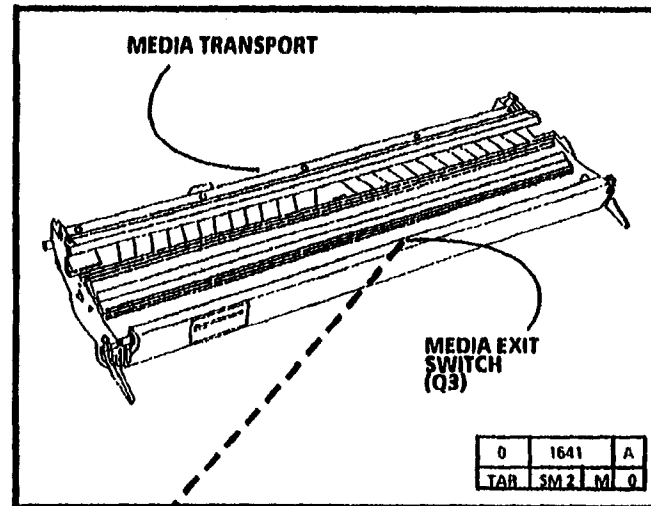
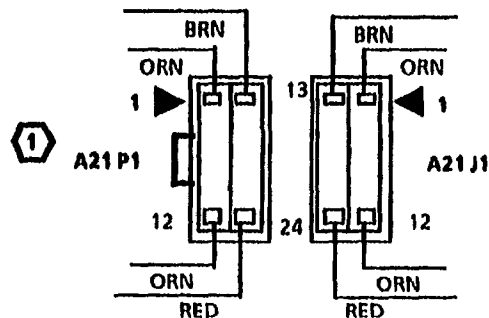
If the problem persists, replace the Control PWB (A3).

**W/O Tag 17:** Go to the 8.1 Media Transport RAP.

**W/Tag 17:** Go to the E4.03 Media Transportation RAP W/Tag 17.

NOTES:

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



## E4.03 Media Transportation RAP W/Tag/MOD 17

(4/26/93)

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

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

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

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

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

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

### Initial Actions

#### WARNING

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

- Lower the Sheet Feed-in Shelf and the Latching Cover. Check the Fuser Heat Roll, Stripper Fingers and Media Transport for a media jam. Remove any obstructions in the Stripper Finger area and media path. Use caution and do not damage the Stripper Fingers.
- Check the actuator of the Stripper Finger Jam Switch for binding or damage.
- Ensure that the Stripper Finger Assembly is seated correctly and that the fingers are not damaged.
- Check that the Roll Media is installed correctly on the Roll Support Tube. Ensure that the edges of the Roll are aligned with the correct alignment marks on the Roll Support Tube.

- Check the Media Transport connector (A21 P/ J1) for damage and ensure that the connector and pins are seated correctly.
- Check the Control PWB connector for the Stripper Finger Jam Switch (A3 P305) for damage. Ensure that the connector and pins are seated correctly.



## Procedure

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

With the Latching Cover in the normal operating position, the Jam Switch (S1) is actuated by the Stripper Finger Assembly and a (01) is displayed.

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

A (01) is displayed with the Latching Cover in the normal operating position, and the display changes from (01) to (00) when the Latching Cover in the lowered position.

Y N

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

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

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

A

A

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

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

Y N

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

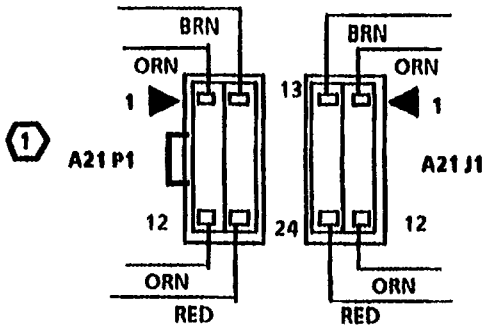
Check that the Stripper Fingers are installed correctly (REP 10.8).

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

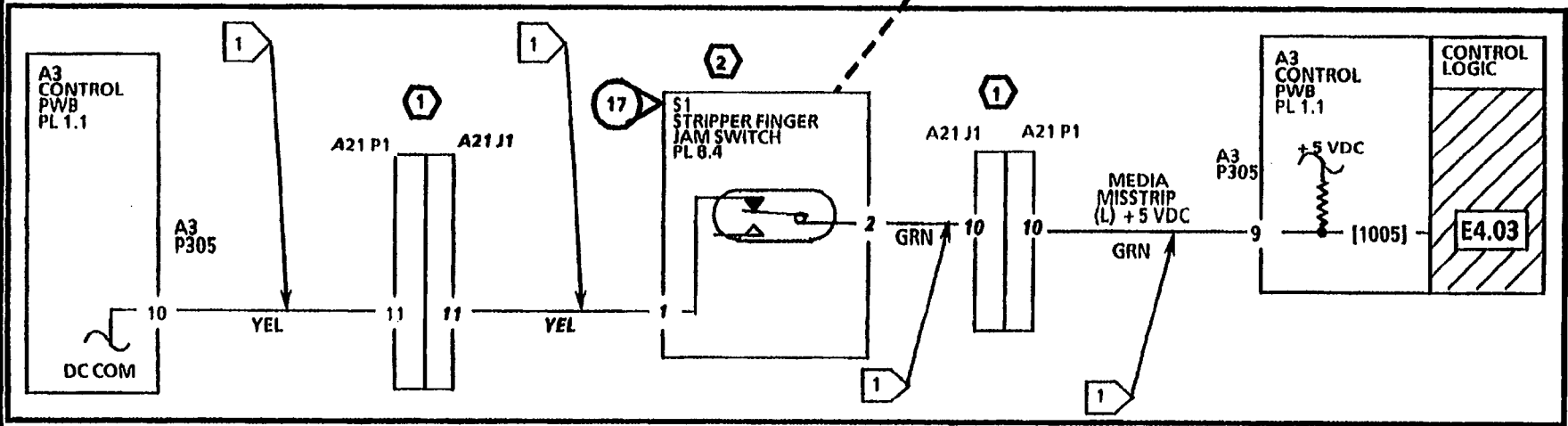
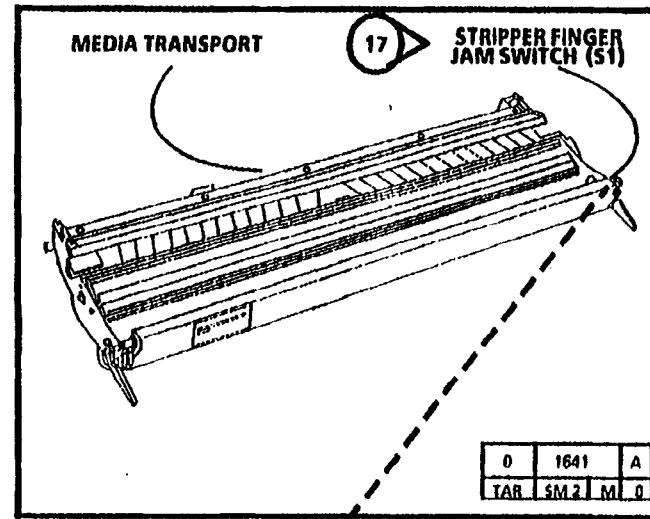
Go to the 8.1 Media Transport RAP.

**NOTES:**

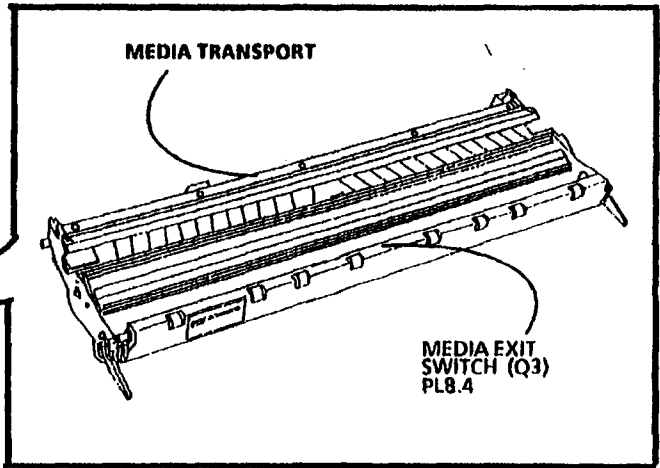
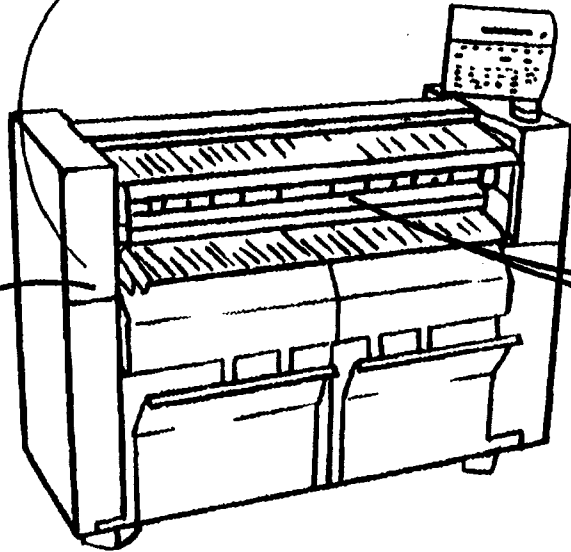
**1** CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



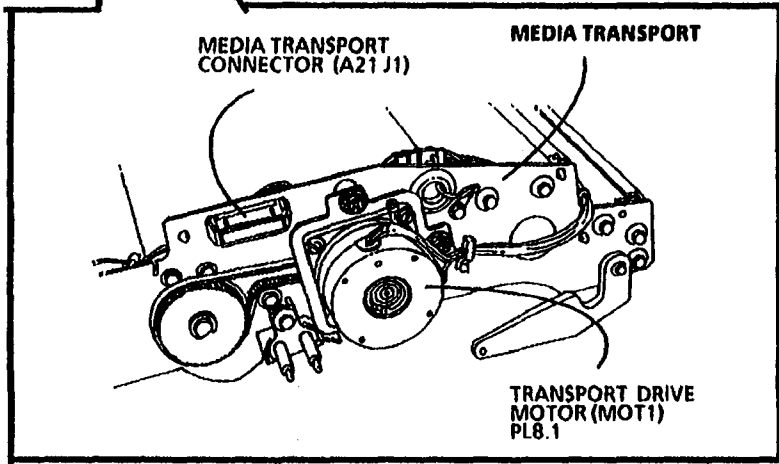
**2** SWITCH (S1) IS A NORMALLY CLOSED (NC) SWITCH WHICH IS HELD ACTUATED (OPEN) BY THE STRIPPER FINGER ASSEMBLY. MEDIA MISSTRIP JAMS CAUSE THE STRIPPER FINGER ASSEMBLY TO MOVE OUT OF POSITION CAUSING THE SWITCH (S1) TO DEACTUATE (CLOSE) RESULTING IN THE MEDIA MISSTRIP SIGNAL TO GO LOW (L).



A21  
P/J21

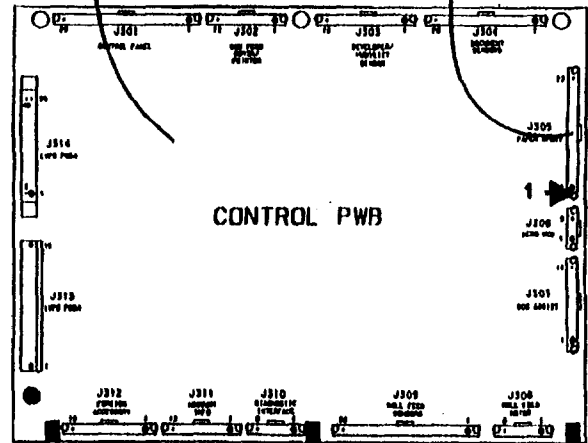


0	20660	A
TAR	SM 2	X 0



CONTROL PWB (A3)

A3  
P305



0	1590	A
TAR	SM 2	X 0

## E5.03 Upper Rear Door Open RAP

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

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

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

### Initial Actions

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

### Procedure

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

The Switch has continuity.

Y N

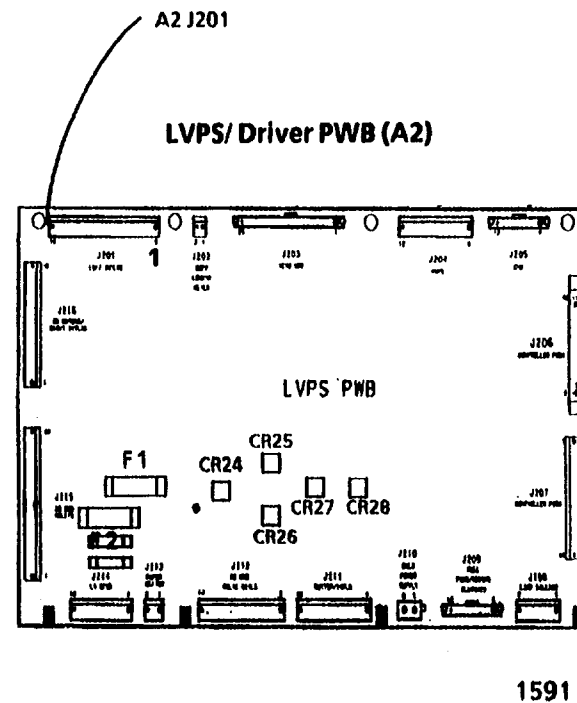
Replace the Upper Rear Door Interlock Switch (S26).

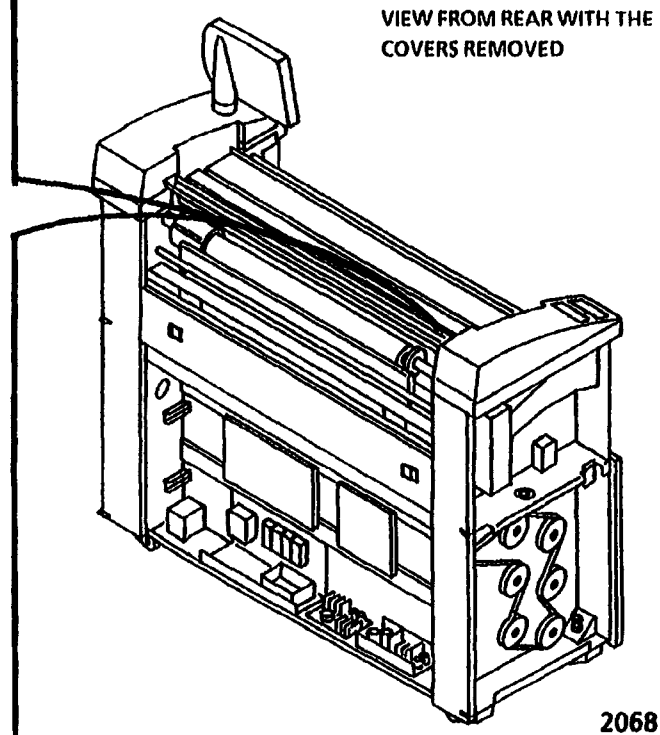
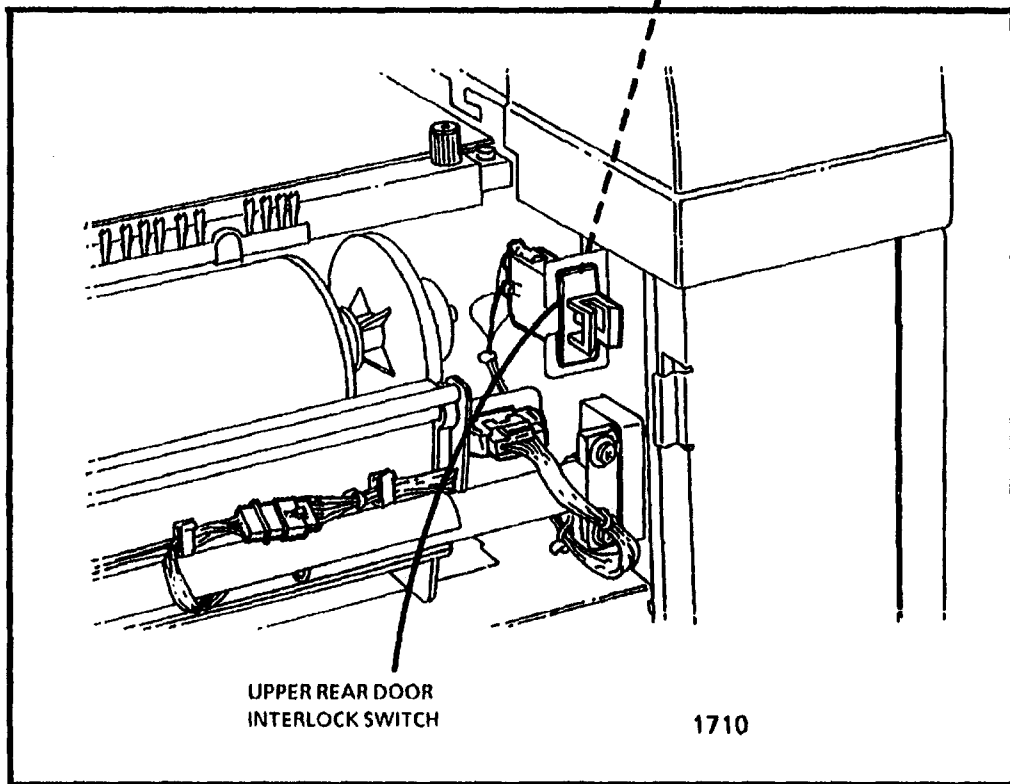
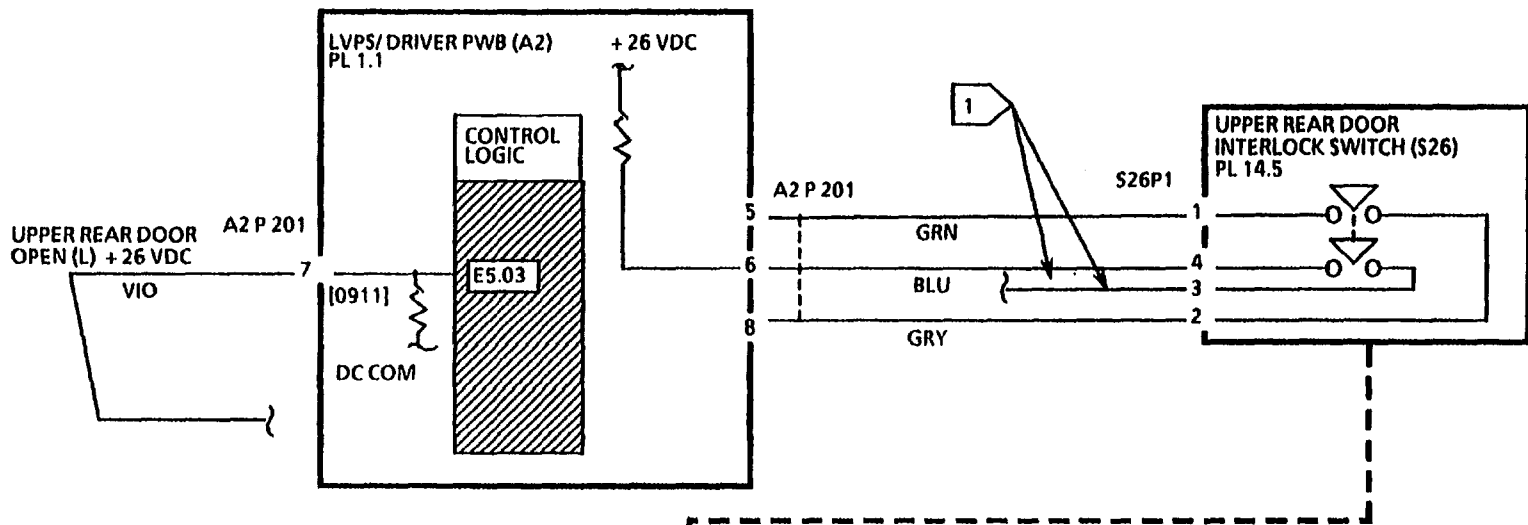
A

A

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

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





## E5.04 Cutter Cover Open RAP

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

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

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

### Initial Actions

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

### Procedure

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

The Switch has continuity.

Y N

Replace the Cutter Cover Interlock Switch (S1).

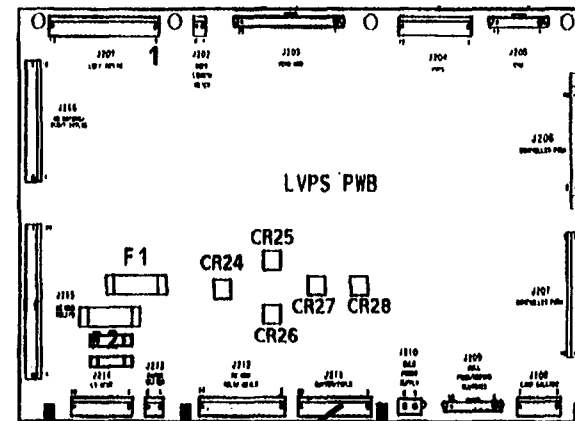
A

A

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

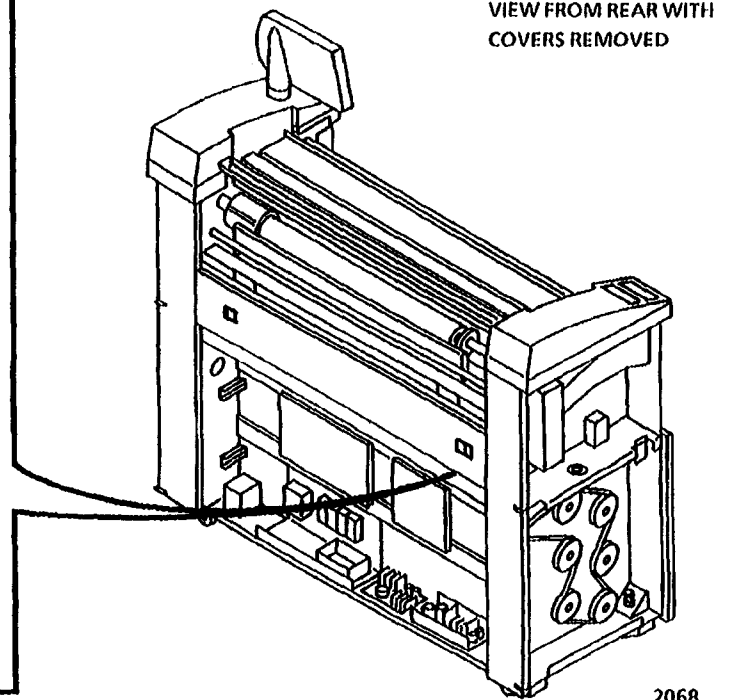
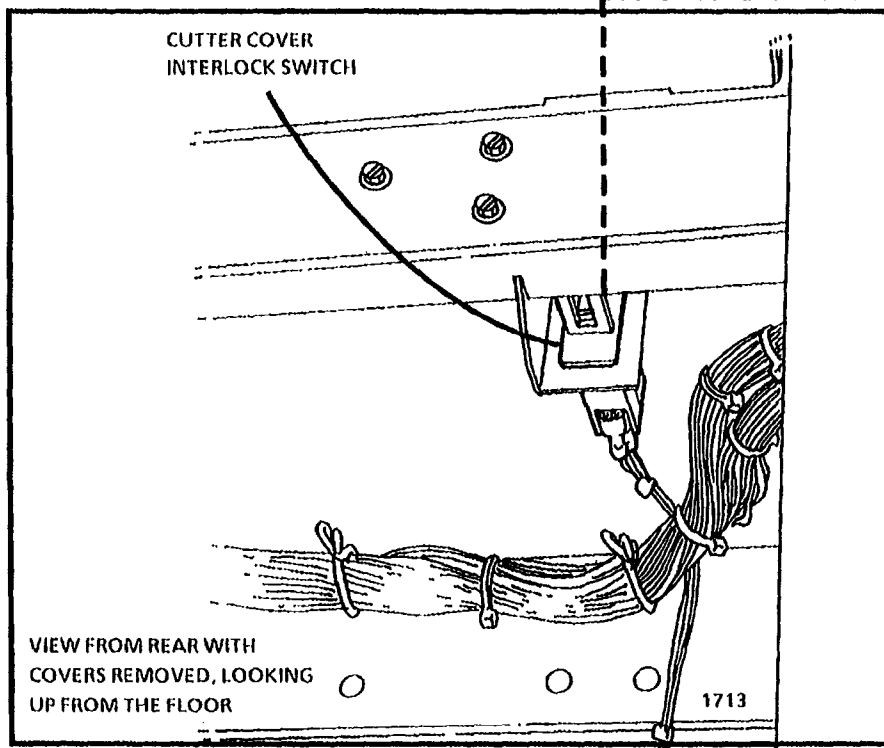
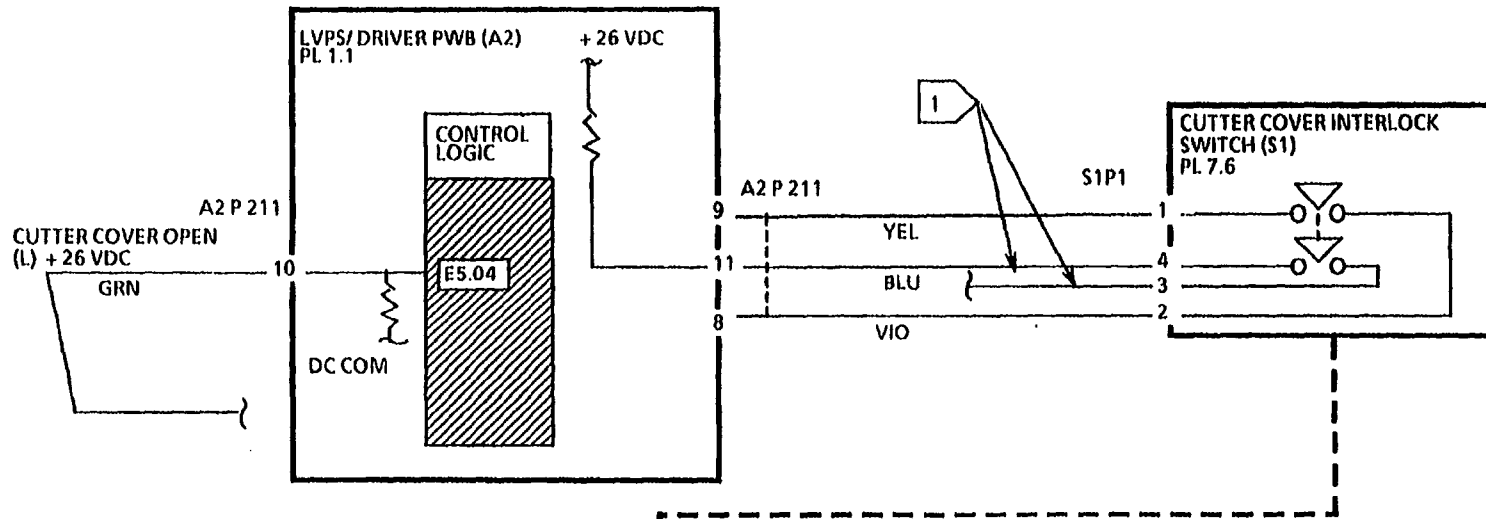
If the problem still exists, replace the LVPS/ Driver PWB (A2).

LVPS/ DRIVER PWB (A2)



1591

A2 J211



## E5.05 Sheet Feed Shelf Open RAP

This RAP is used to locate problems in the interlock circuitry for the Cut Sheet Feed Shelf.

The problem may occur if there is a malfunction in the Cut Sheet Feed In Shelf Interlock Switch S29 or the associated wires.

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

### Initial Actions

- Check the Connectors A2 P201 on the LVPS/ Driver PWB (A2) and S29 P1 on the Cut Sheet Feed In Shelf Interlock Switch for damage, and ensure that the connectors are seated correctly.
- Ensure the magnet on the Media Feed Shelf is in the correct position.

### Procedure

Disconnect S29 P1. Set the DMM to read +26 VDC. Connect the (+) lead to Pin 2 of the Sheet Feed In Shelf (S29). Connect the (-) lead to pin 1. Manually actuate the switch with a magnet.

The Switch has continuity.

Y N

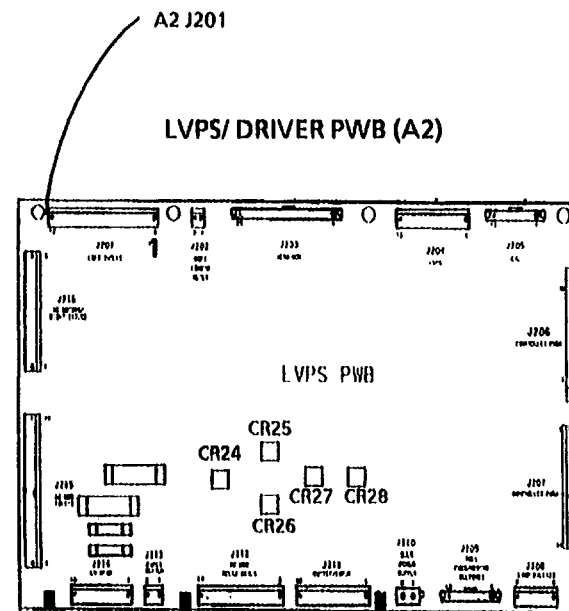
Replace the Cut Sheet Feed Shelf Interlock Switch (S29).

A

A

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

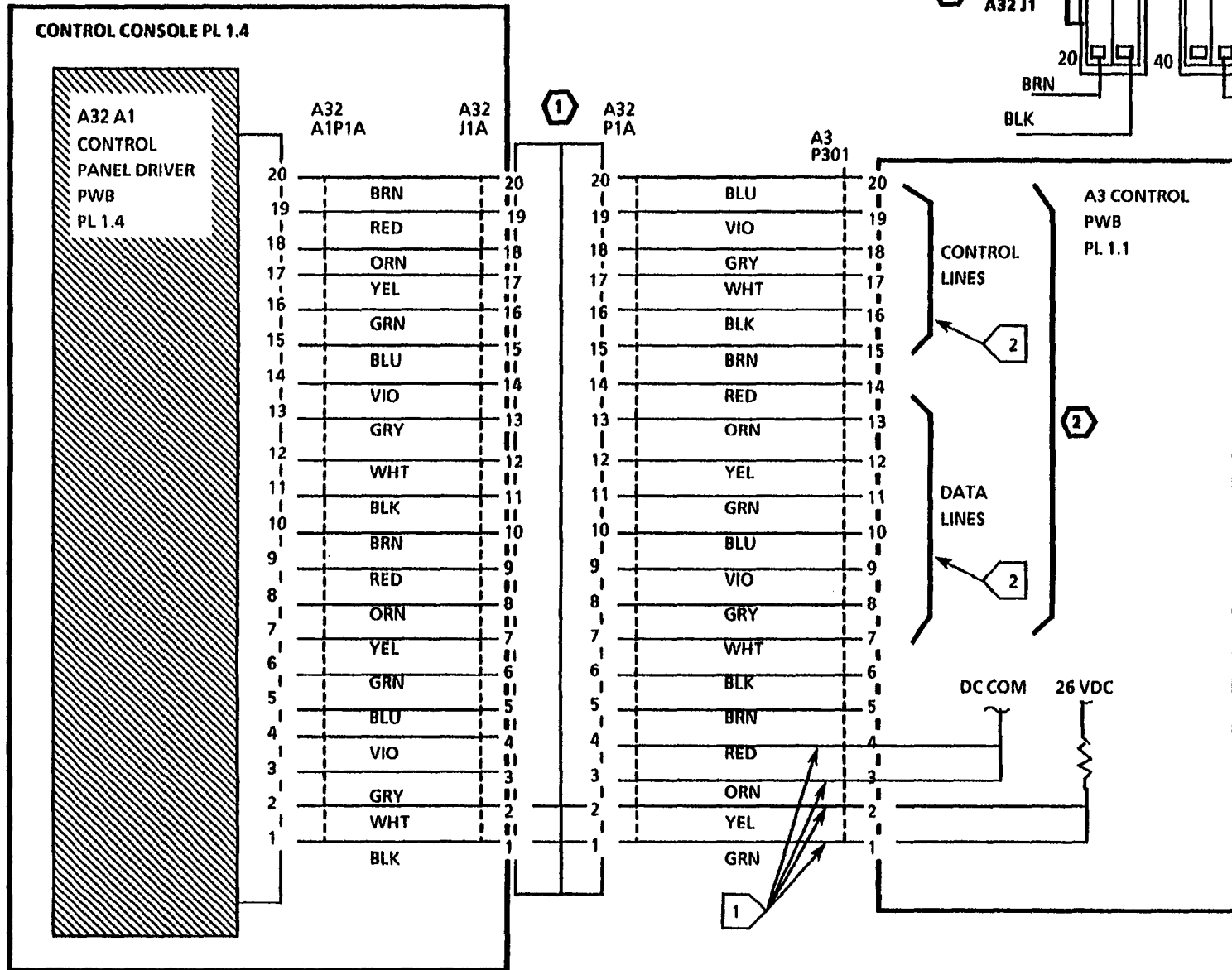
If the problem still exists, replace the LVPS/ Driver PWB (A2).





NOTES:

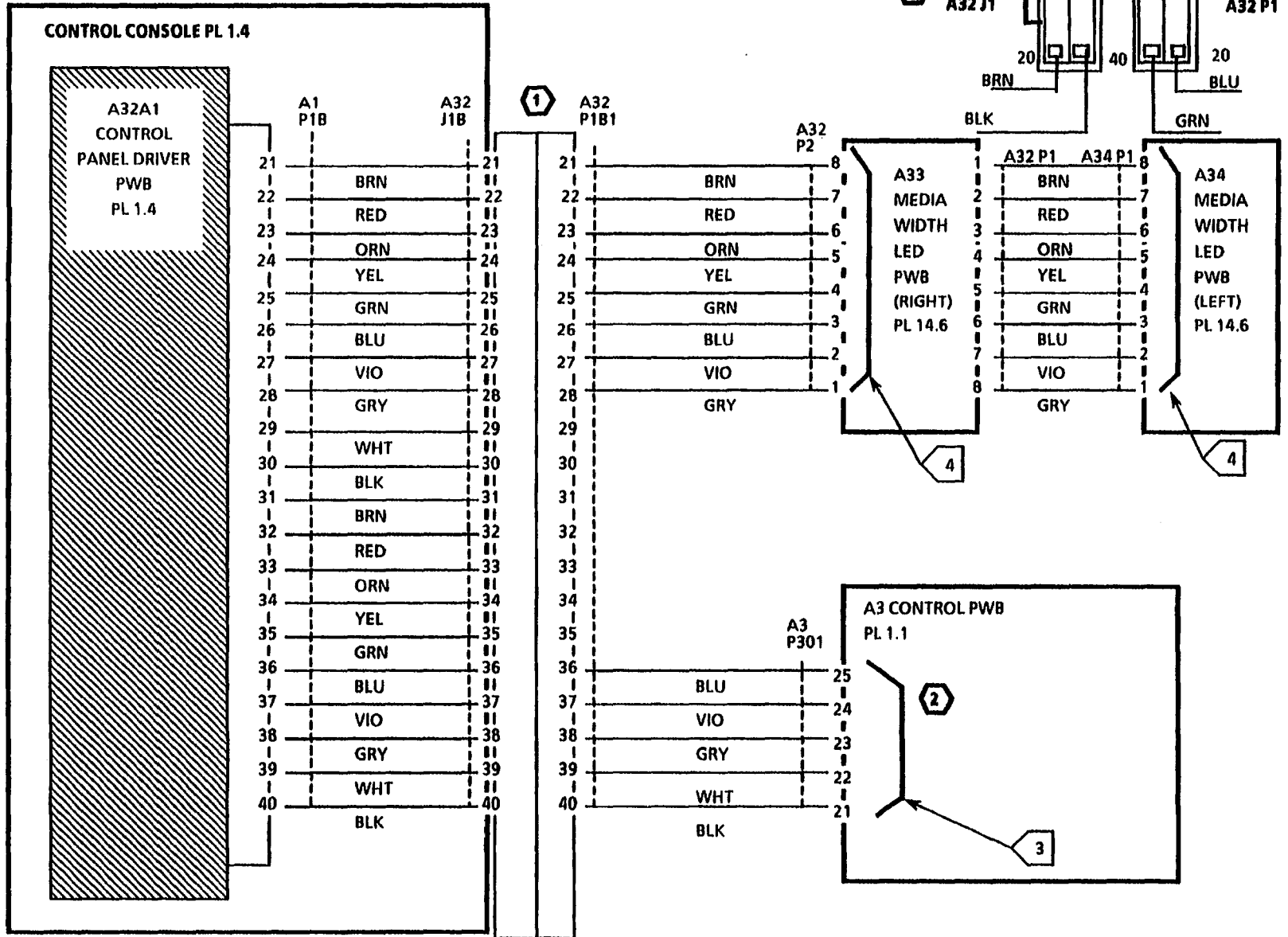
- ① CONNECTOR IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.
- ② PARALLEL DATA BUS SENDS DATA TO THE LCD MESSAGE DISPLAY FROM THE CONTROL PWB.



**NOTES**

NOTES:

- ① CONNECTOR IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.
- ② SERIAL DATA LINE SENDS AND RECEIVES INFORMATION BETWEEN THE CONTROL PWB, AND THE LED DISPLAYS AND KEYPAD MATRIX IN THE CONTROL PANEL.



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

(2/3/93)

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

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

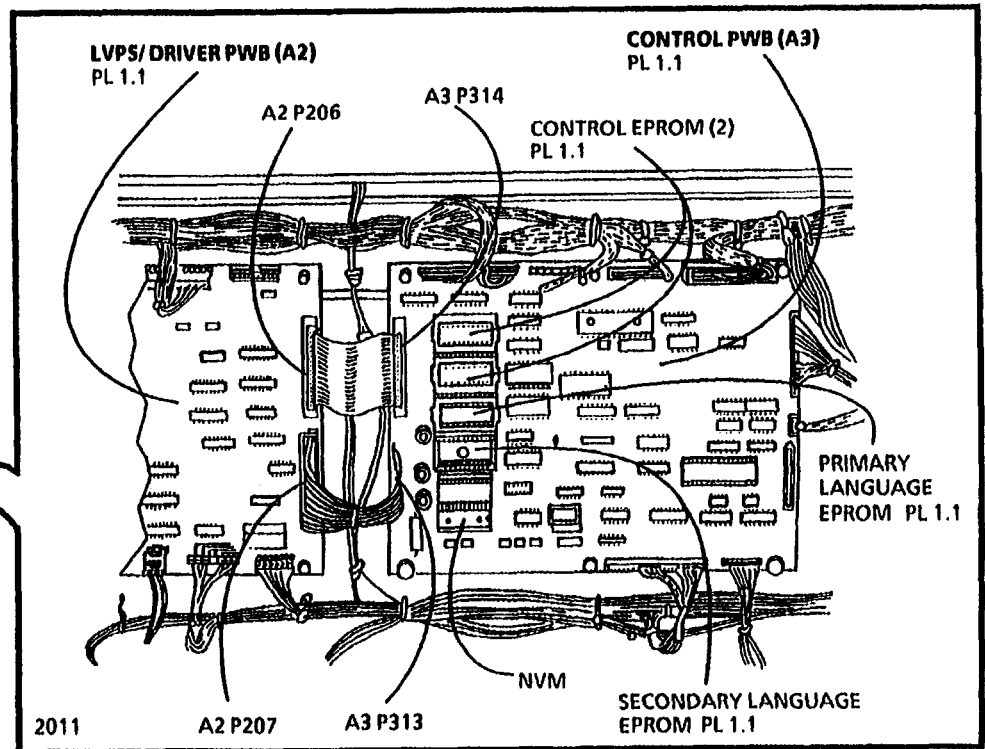
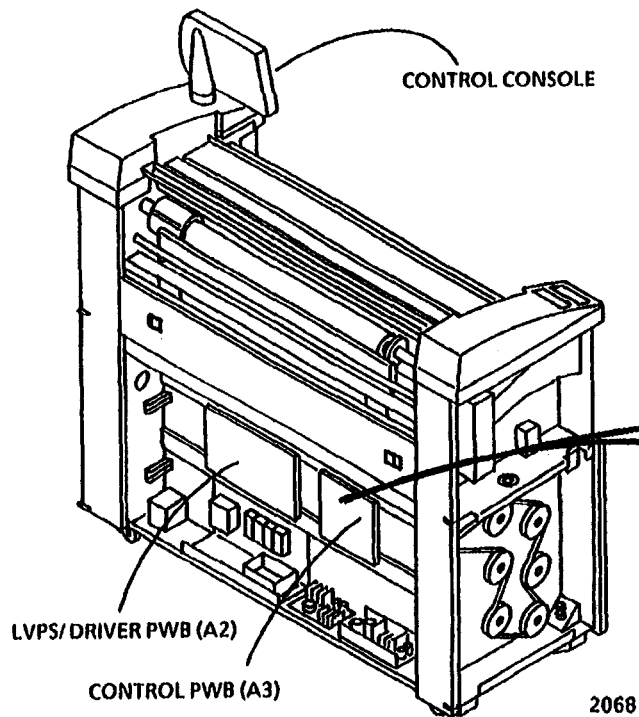
2. The copier may or may not be equipped with a Secondary Language EPROM.

### Initial Actions

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

### Procedure

Refer to the table on the following page.



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

### Probable Cause

### Corrective Action

- |   |  |   |
|---|--|---|
| 1. The number 1 or 2 is displayed on the Control Panel, or the display is blank. The copier does not initialize.    | 1. There is a fault in the RAM memory.   | 1. Replace the Control PWB(A3) (REP 3.1).   |
| 2. The number 3 is displayed. The copier does not initialize.   | 2A. The contents of the Control EPROMs does not agree with the checksum.<br><br>2B. The Control PWB (A3) is damaged.   | 2A. Replace both Control EPROMs.<br><br>2B. Replace the Control PWB (A3) (REP 3.1).   |
| 3. The number 4 is displayed. The copier does not initialize.   | 3. There is a fault in the Analog-to-Digital Converter or the Digital-to-Analog Converter.                             | 3. On copiers built W/ O Tag/ MOD 16, replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3) (REP 3.1).<br>On copiers built W/ Tag/ MOD 16, replace the Control PWB (A3) (REP 3.1). |
| 4. The number 5 is displayed. The copier does not initialize.   | 4A. There is a fault in the printer port output circuitry.<br><br>4B. There is a fault in the copier timing circuitry. | 4A. Replace the Control PWB (A3) (REP 3.1).<br><br>4B. Replace the Control PWB (A3) (REP 3.1). If the problem persists, replace the LVPS/ Driver PWB (A2).  |
| 5. The number 6 is displayed. The copier does not initialize.   | 5. There is a fault in the Digital-to-Analog Converter.  | 5. Replace the LVPS/ Driver PWB (A2). If the problem persists, replace the Control PWB (A3) (REP 3.1).  |
| 6. The number 7 is displayed. The copier does not initialize.   | 6. There is a fault in the printer port output circuitry.  | 6. Replace the Control PWB (A3) (REP 3.1).  |
| 7. The following message is displayed: <b>MESSAGE ROMS 1 AND 2 FAILED CHECKSUM.</b> The copier does not initialize. | 7. There is an internal fault in the Language EPROMs.  | 7. Replace the Language EPROMs. If the problem persists, replace the Control PWB (A3) (REP 3.1).  |
| 8. Primary and Secondary Language EPROMs are installed, but one of the languages cannot be selected.                | 8. There is a fault in the EPROM corresponding to the Language that cannot be selected.                                | 8. Replace the Language EPROM that cannot be selected. If the problem persists, replace the Control PWB (A3) (REP 3.1).   |

**NOTES**

## 4.1 Drum/ Developer Drive Motor (MOT 21) (W/ O Tag/ MOD 28) RAP

This RAP is used for problems with the Drum/ Developer Drive Motor (MOT 21) on copiers equipped with **TWO** AC Drive Motors. Copiers equipped with two AC Drive Motors are identified as Without Tag/ MOD 28, (W/ O Tag/ MOD 28).

On copiers equipped with **ONE** AC Drive Motor use the (4.3 Main Drive Motor MOT 21 (W/ Tag/ MOD 28)) RAP.

The fault may or may not be indicated by a status code. The problem may occur if there is a fault in the Drum/ Developer Drive Motor, the motor control circuitry or the mechanical components.

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

### Initial Actions



#### WARNING

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

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

### Procedure

**CAUTION:** In order to prevent damage to the copier, the Fuser Heat Roll must be at the run temperature before the Drum/ Developer Drive and Fuser Drive Motors are switched on.

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

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

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

With the Fuser Roll at the run temperature, the Drum/ Developer Drive Motor is switched on.

Y N

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

Y N

A B C

A B C

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

There is ACH between 2B and E1.

Y N

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

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

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

Y N

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

Y N

D E F G H

D E F G H

Replace the LVPS/ DRIVER PWB (A2).

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

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

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

Y N

Replace the LVPS/ DRIVER PWB.

Replace the Drum/ Developer Motor Relay (K3).

Press Power Off (0). Disconnect the Drum/ Developer Drive Motor connector (M21 P/ J1). Set the Multimeter (600T1616) to ohms, DC, +, 200 ohms.

The motor resistance is approximately 16.0 ohms as measured between (M21 J1) pins 1 and 2.

Y N

J K L

J K L

Replace the Drum/ Developer Drive Motor.

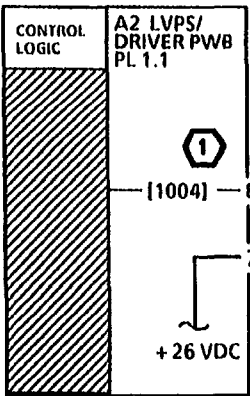
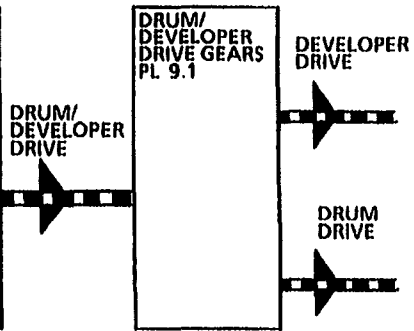
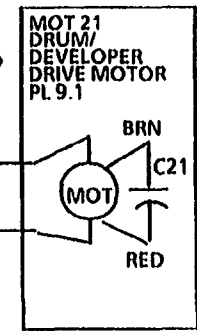
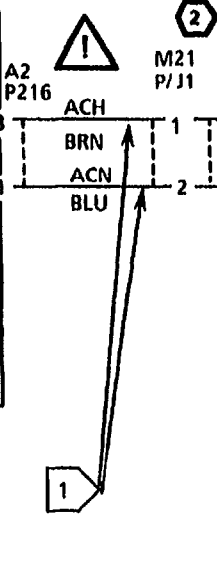
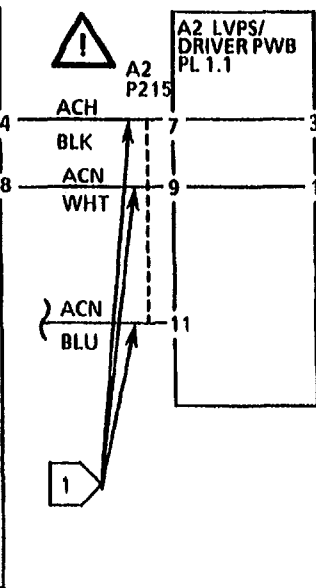
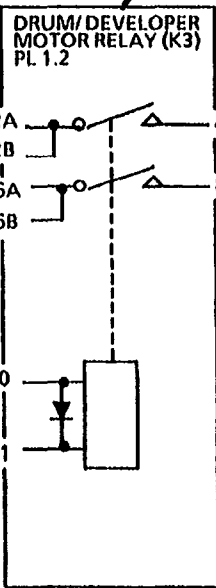
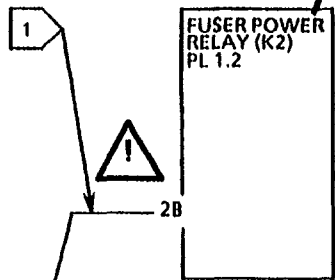
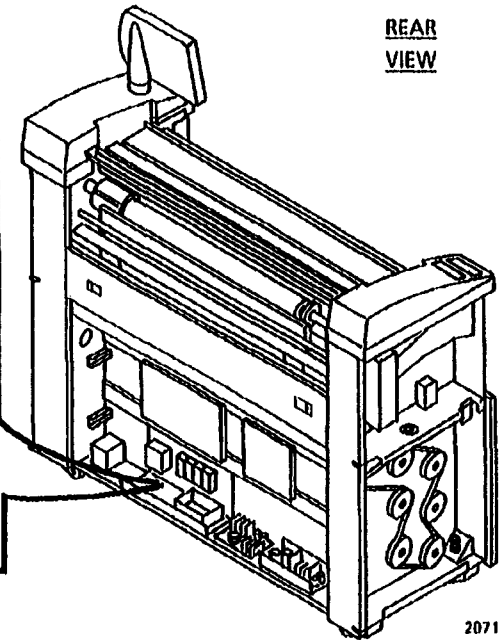
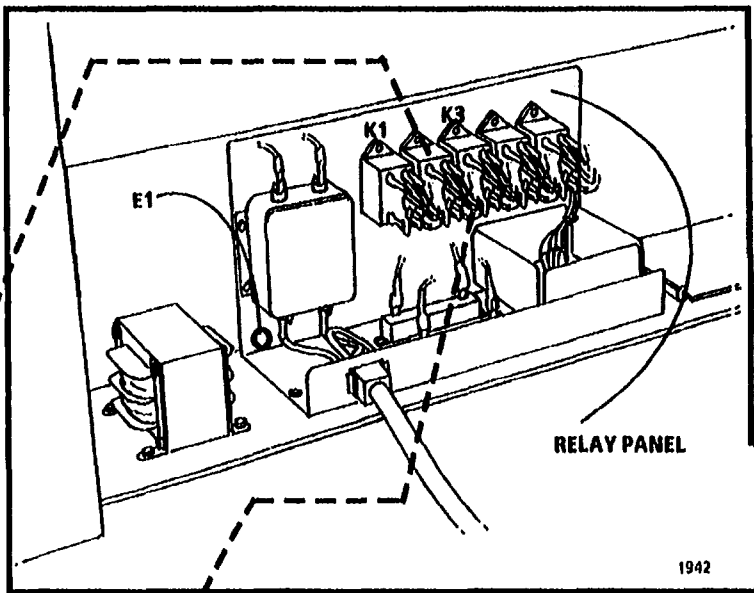
Check the drive system for binding by manually rotating the motor shaft. Rotate the shaft by turning the motor cooling fan which is attached to the motor shaft. If the system is binding, check the Drum/ Developer Drive Gears and the Cleaner Blade Drive Gear for damage.

Check the following items for damage:

- Drum/ Developer Drive Gears
- Cleaner Blade Drive Gear
- Mixing Auger Drive Gears
- Mag Roll Drive Gear



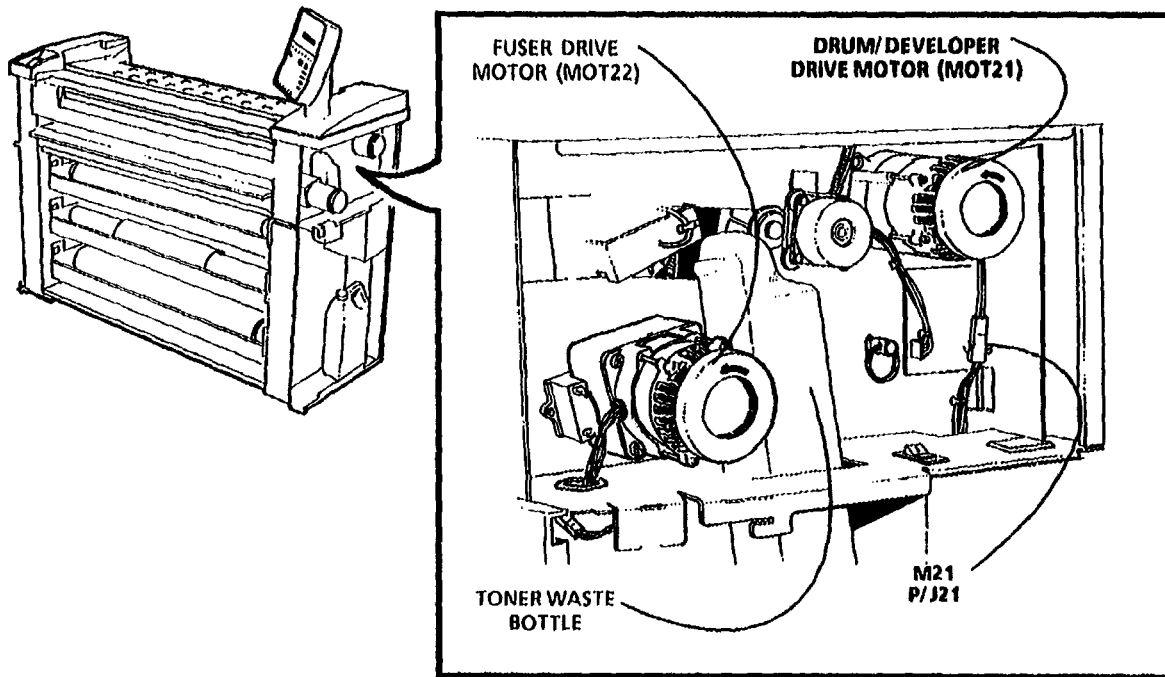
**WARNING**  
DANGEROUS VOLTAGE.



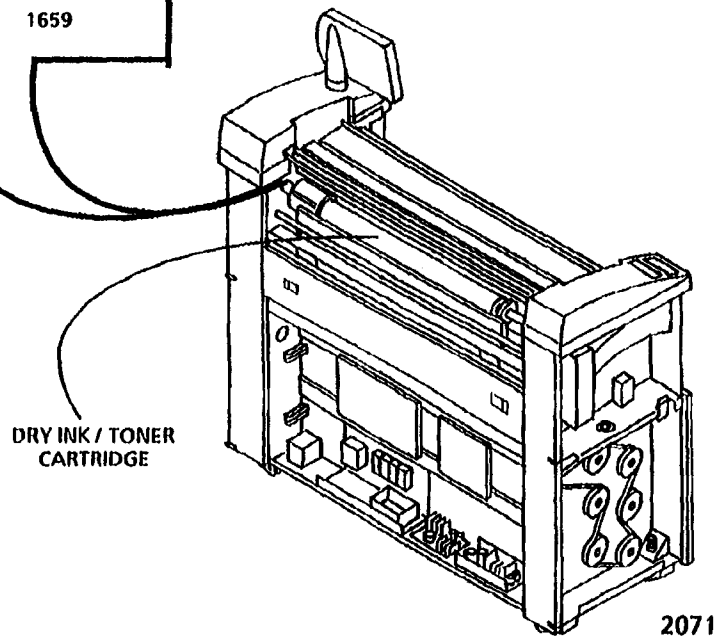
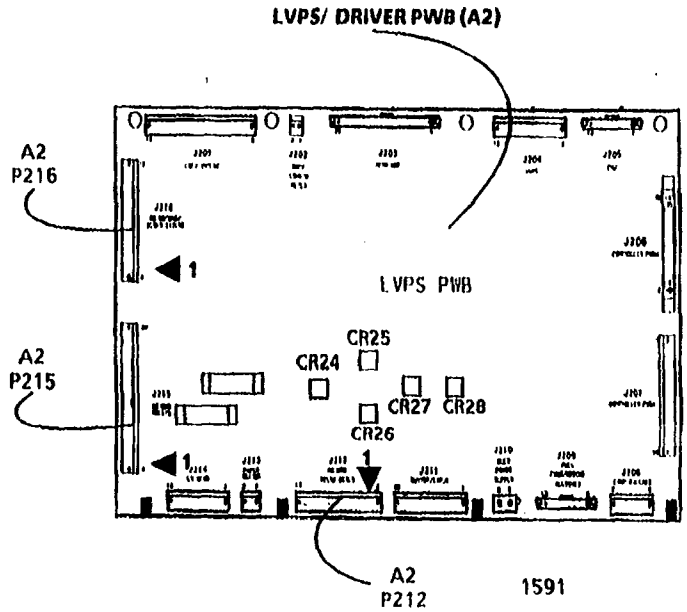
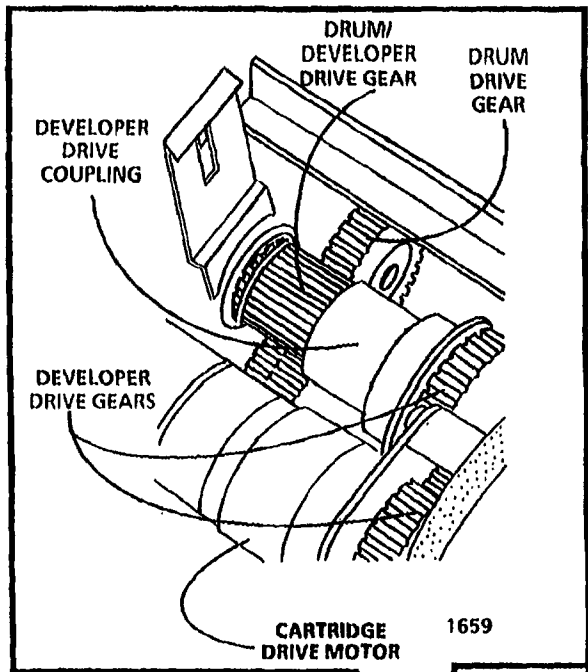
**NOTES:**

- ① [1004] ENERGIZES THE HEAT ROD AND INCREASES THE HEAT ROLL TEMPERATURE TO THE RUN TEMPERATURE. +26 VDC IS SWITCHED LOW WHEN THE HEAT ROLL REACHES THE RUN TEMPERATURE.
- ② M21 APPROXIMATE RESISTANCE: (M21 P/J1 DISCONNECTED) PIN 1 TO PIN 2 = 16.0 OHMS.

**NOTES**



0	1758	A
TAR	TROO	X 0



## 4.2 Fuser Drive Motor (MOT 22) (W/ O Tag/ MOD 28) RAP

(11/16/95)

This RAP is used for problems with the Fuser Drive Motor (MOT 22) on copiers equipped with TWO AC Drive Motors. Copiers equipped with two AC Drive Motors are identified as Without Tag/ MOD 28, (W/ O Tag/ MOD 28).

On copiers equipped with ONE AC Drive Motor use the (4.3 Main Drive Motor MOT 21 (W/ Tag/ MOD 28)) RAP.

The fault may or may not be indicated by a status code. The problem may occur if there is a problem with the Fuser Drive Motor, the motor control circuitry or the mechanical components.

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

### Initial Actions



#### WARNING

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

- Check the Fuser Drive Motor connector (M22 P/ J1) for damaged and ensure that the connector is seated correctly.
- Check that the Drive Belt that drives the Fuser Heat Roll is in good condition and is positioned on the drive pulleys correctly.

### Procedure

**CAUTION:** In order to prevent damage to the copier, the Fuser Heat Roll must be at the run temperature before the Drum/ Developer Drive and Fuser Drive Motors are switched on.

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

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

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

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

Y N

There is ACH between pins P1 and P2 of the Fuser Drive Motor connector (M22).

Y N

A B C

A B C

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

There is ACH between 2B and E1.

Y N

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

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

There is +26VDC at A2 P212 pin 10 of the LVPS/ DRIVER PWB.

Y N

There is +26VDC at A2 P212 pin 9 of the LVPS/ DRIVER PWB.

Y N

D E F G H

D E F G H

Replace the LVPS/ DRIVER PWB (A2).

Go to FLAG 2 and check the wiring for an open circuit in the wires. If there is no open circuit, replace the Fuser Motor Relay (K4).

Enter the code [1004] in order to energize the Fuser Heat Rod and increase the Fuser Heat Roll temperature to the run temperature. The message, "1004 FUSER TEMP TEST TEMP = XXX CELSIUS, XXX FAHRENHEIT", is displayed when the Heat Roll is at the run temperature. The Fuser Motor Relay (K4) is switched on, when the Fuser Roll reaches the run temperature.

The voltage at A2 P212 pin 10 of the LVPS/ DRIVER PWB goes LOW when the Fuser Roll reaches the run temperature.

Y N

Replace the LVPS/ DRIVER PWB (A2).

Replace the Fuser Motor Relay (K4).

Press Power Off (0). Disconnect the Fuser Drive Motor connector (M22 P/ J1). Set the Multimeter (600T1616) to ohms, DC, +, 200 ohms.

The motor resistance is approximately 16.0 ohms as measured between (M22 J1) pins 1 and 2.

Y N

J K L

J K L

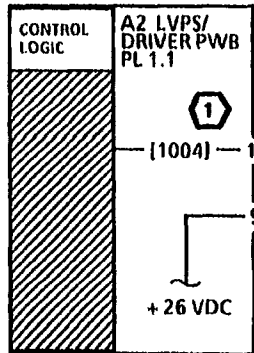
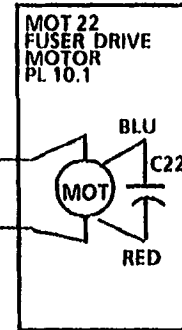
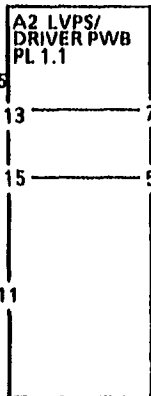
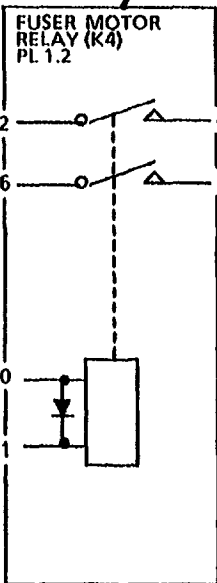
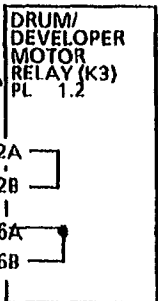
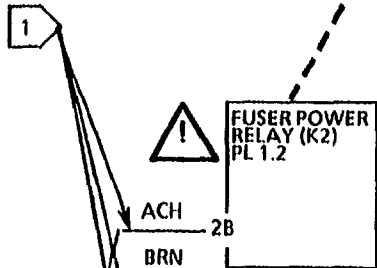
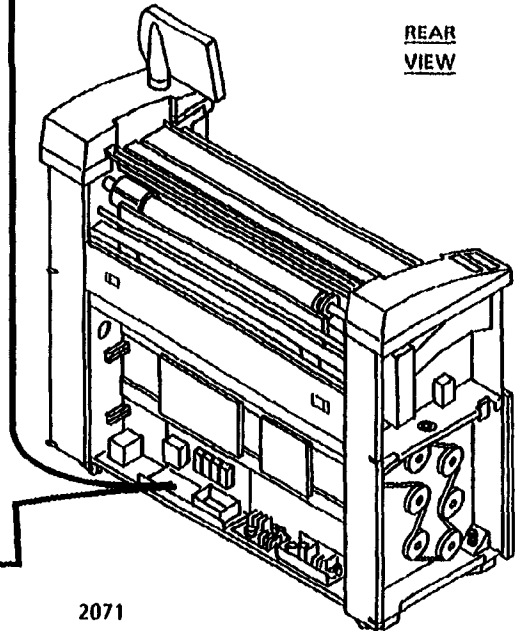
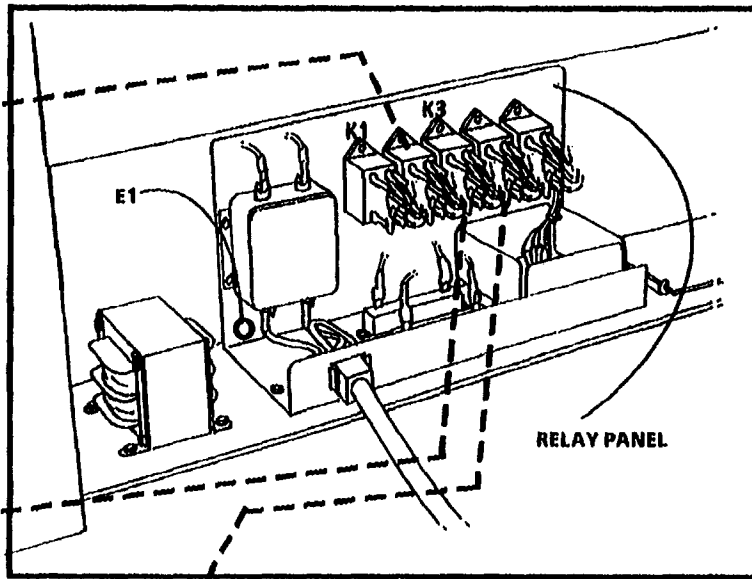
Replace the Fuser Drive Motor.

Check the drive system for binding by manually rotating the motor shaft. Rotate the shaft by turning the motor cooling fan which is attached to the motor shaft. If the system is binding, check the Fuser Heat Roll, the Fabric Guide and the Pressure Pivot Assembly for damage.

Check the following items for damage:

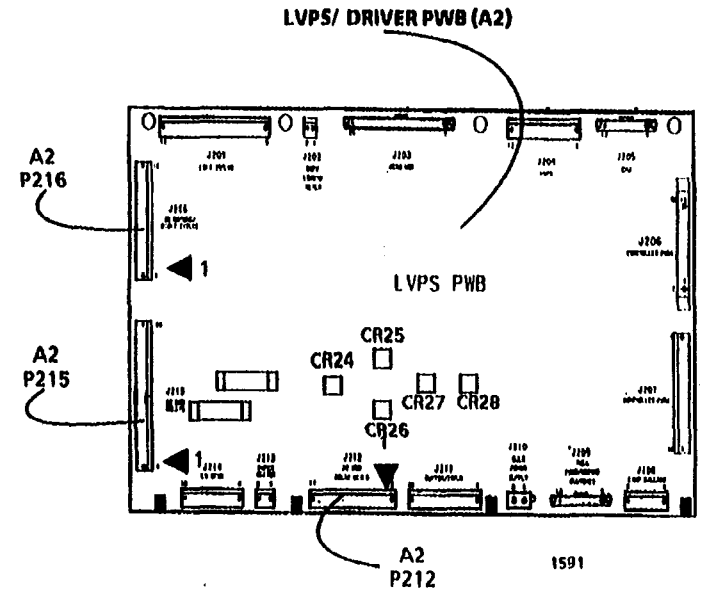
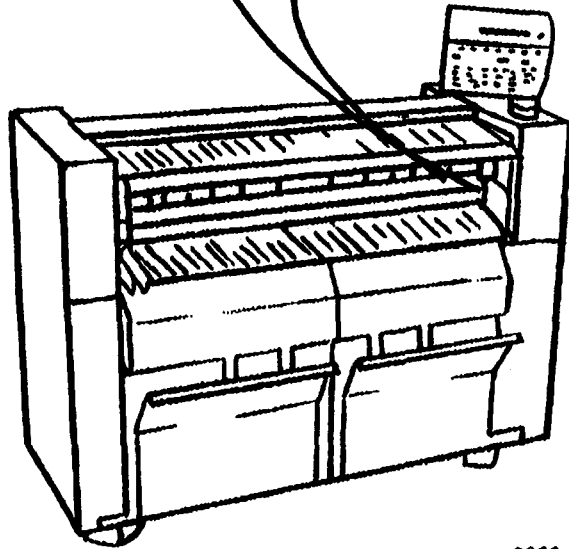
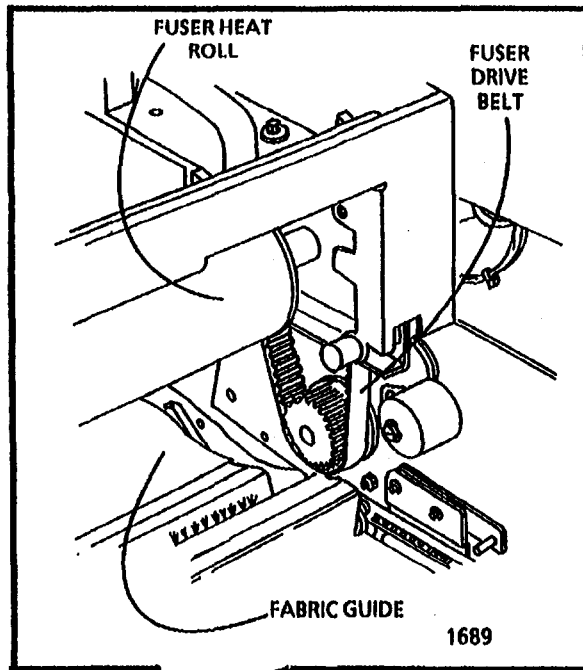
- Fuser Drive Pulleys and Drive Belt
- Fuser Heat Roll
- Heat Roll Bearings
- Fabric Guide
- Pressure Pivot Assembly

**WARNING**  
DANGEROUS VOLTAGE.

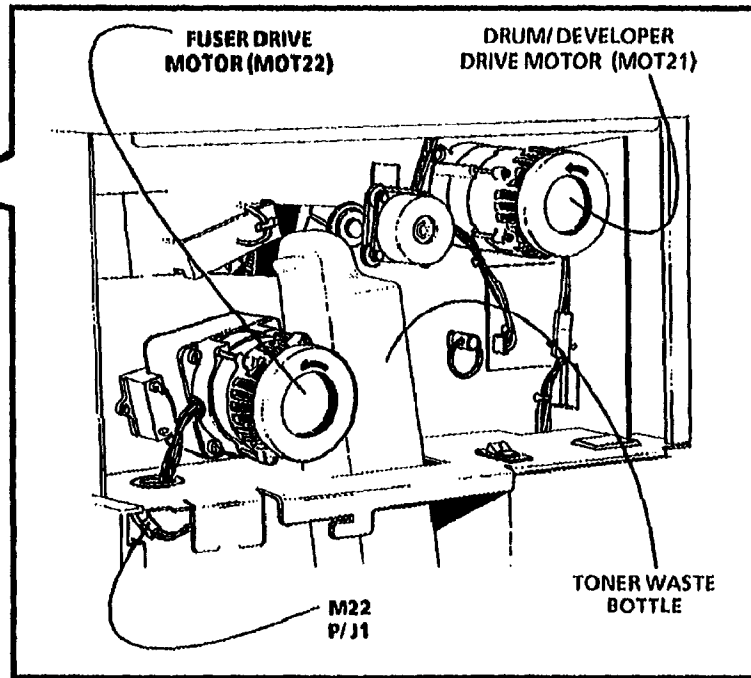
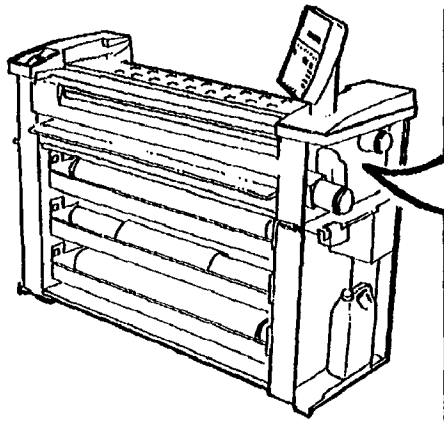


NOTES:

- ① [1004] ENERGIZES THE HEAT ROD AND INCREASES THE HEAT ROLL TEMPERATURE TO THE RUN TEMPERATURE. + 26 VDC IS SWITCHED LOW WHEN THE HEAT ROLL REACHES THE RUN TEMPERATURE.
- ② M22 APPROXIMATE RESISTANCE: (M22 P/ J1 DISCONNECTED) PIN 1 TO PIN 2 = 16.0 OHMS.







0	1758	A
TAR	TR00	X 0

**NOTES**

### 4.3 Main Drive Motor (MOT 21) (W/ Tag/ MOD 28) RAP

(11/08/95)

This RAP is used for problems with the Main Drive Motor (MOT 21) on copiers equipped with ONE AC Main Drive Motor. Copiers equipped with one AC Drive Motor are identified as With Tag/ MOD 28, (W/ Tag/ MOD 28).

On copiers equipped with TWO AC Drive Motors use the (4.1 Developer Drive Motor MOT 21 (W/ O Tag/ MOD 28)) or the (4.2 Fuser/ Drum Drive Motor MOT 22 (W/ O Tag/ MOD 28)) RAP.

The fault may or may not be indicated by a status code. The problem may occur if there is a fault in the Main Drive Motor, the motor control circuitry or the mechanical components.

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

#### Initial Actions



#### WARNING

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

- Check the Main Drive Motor connector (M21 P/ J1) for damage and ensure that the connector is seated correctly.
- Check that the Main Drive Gears are in good condition, are not contaminated with foreign matter and are engaged correctly.
- Check that the Developer Drive Coupling is in good condition and is engaged fully.

#### Procedure

#### CAUTION

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

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

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

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

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

Y N

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

Y N

A B C

A B C

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

There is ACH between 2B and E1.

Y N

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

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

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

Y N

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

Y N

A B D E F

A B D E F

Replace the LVPS/ DRIVER PWB (A2).

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

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

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

Y N

Replace the LVPS/ DRIVER PWB.

Replace the Main Drive Motor Relay (K3).

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

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

Y N

A G H

A G H

Replace the Main Drive Motor (MOT 21).

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

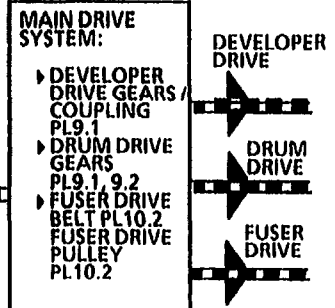
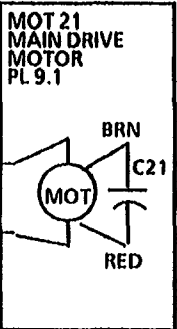
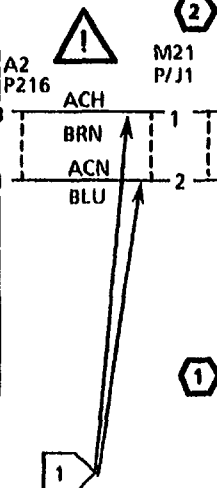
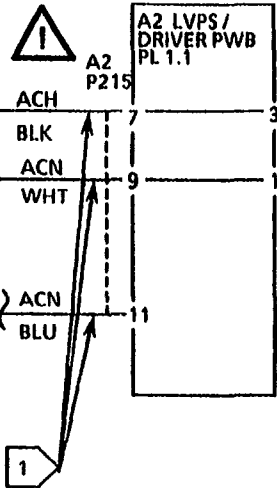
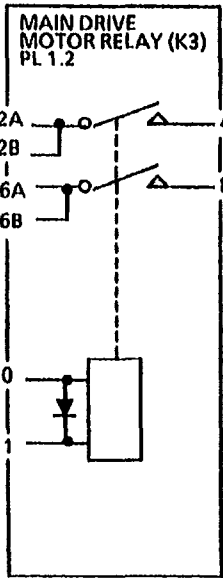
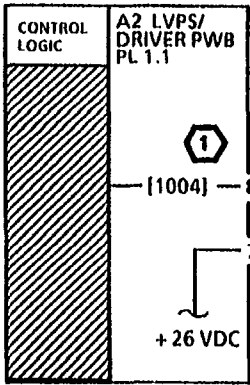
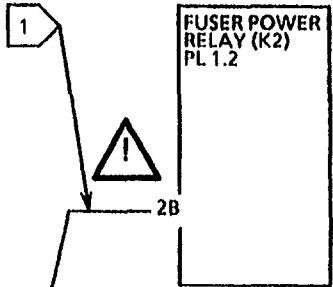
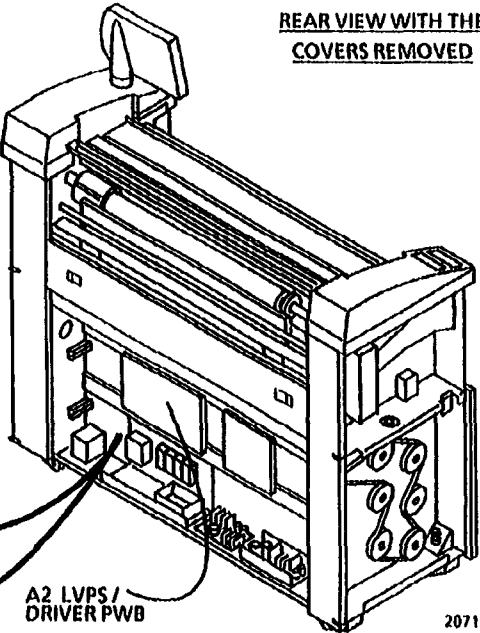
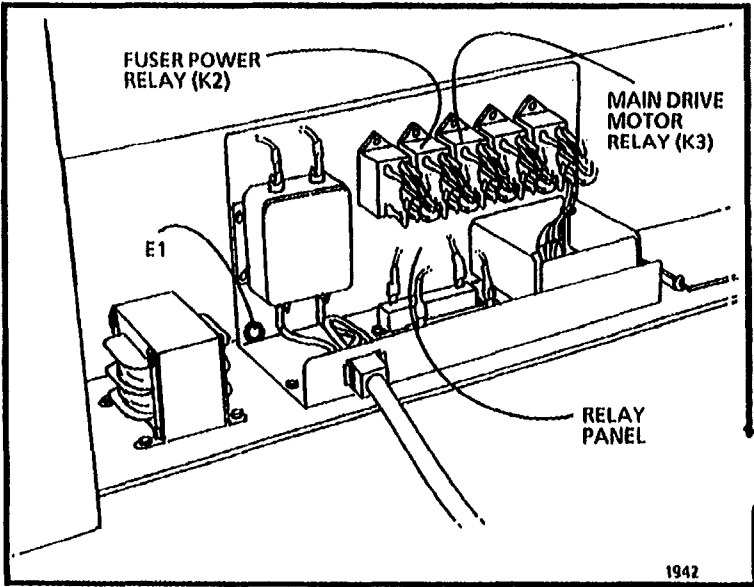
Check the following items for excessive wear, contamination, and/or damage:

- Main Drive Gear
- Developer Drive Gear
- Developer Drive Coupling
- Auger Drive Gears (2)
- Magnetic Roll Drive Gear
- Drum Drive Gears
- Fuser Drive Belt
- Fuser Drive Pulleys
- Cleaner Blade Drive Gear

Replace items as required.

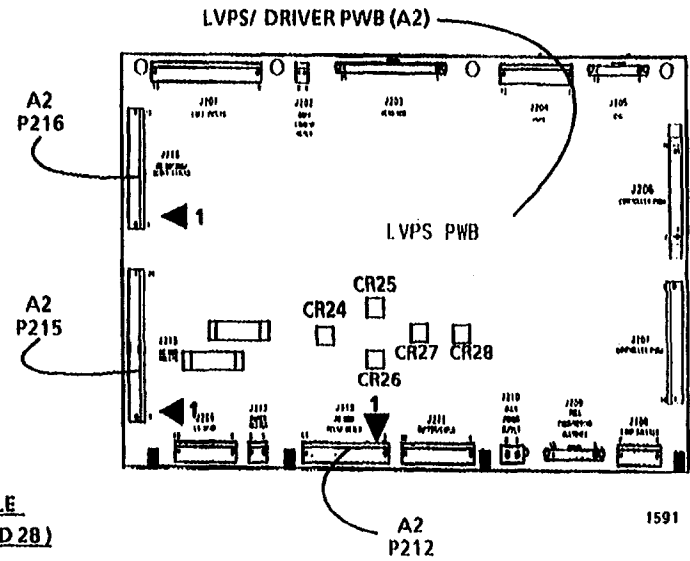
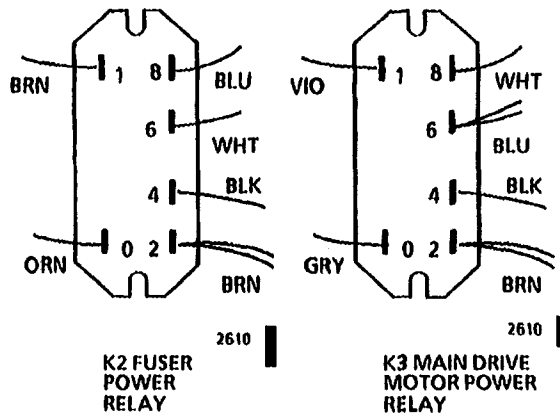
**WARNING**  
DANGEROUS VOLTAGE.

REAR VIEW WITH THE  
COVERS REMOVED

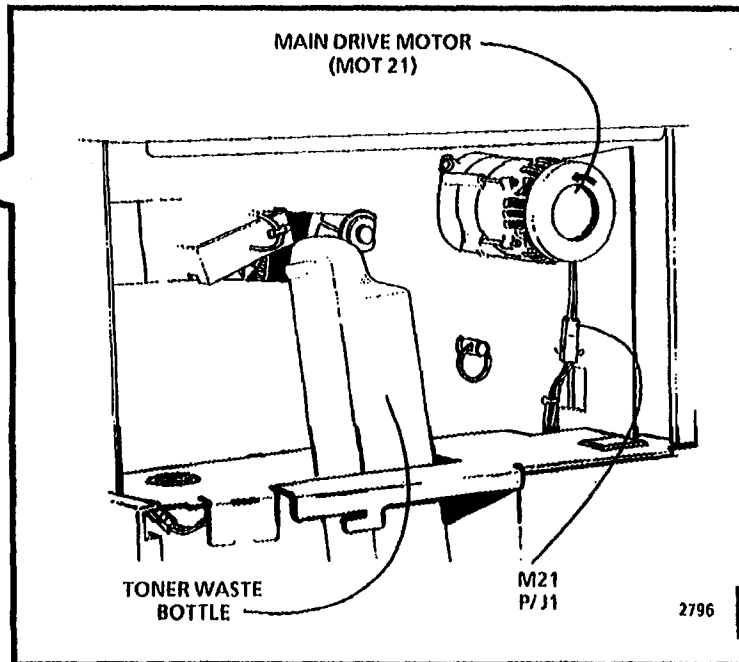
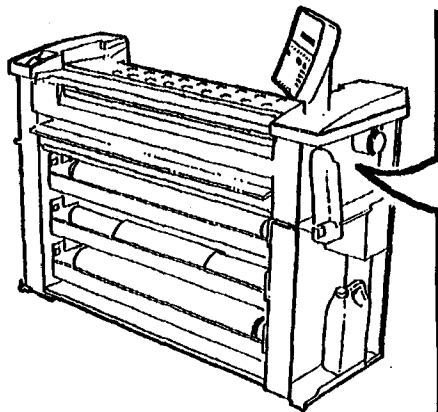


NOTES:

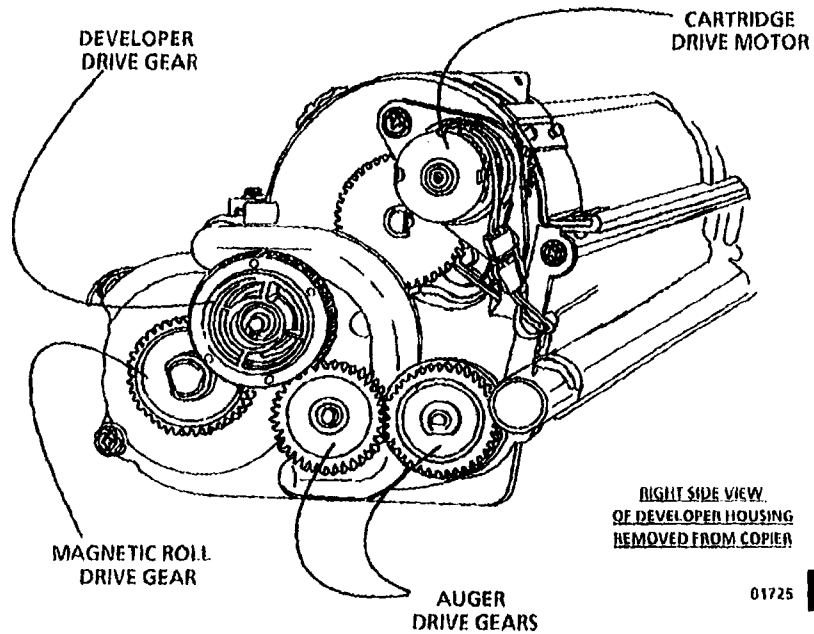
- ① [1004] ENERGIZES THE HEAT ROD AND INCREASES THE HEAT ROLL TEMPERATURE TO THE RUN TEMPERATURE. +26 VDC IS SWITCHED LOW WHEN THE HEAT ROLL REACHES THE RUN TEMPERATURE.
- ② M21 APPROXIMATE RESISTANCE: (M21 P/J1 DISCONNECTED) PIN 1 TO PIN 2 = 60 OHMS.



RIGHT SIDE VIEW WITH SINGLE  
AC DRIVE MOTOR (W/ TAG/ MOD 28)

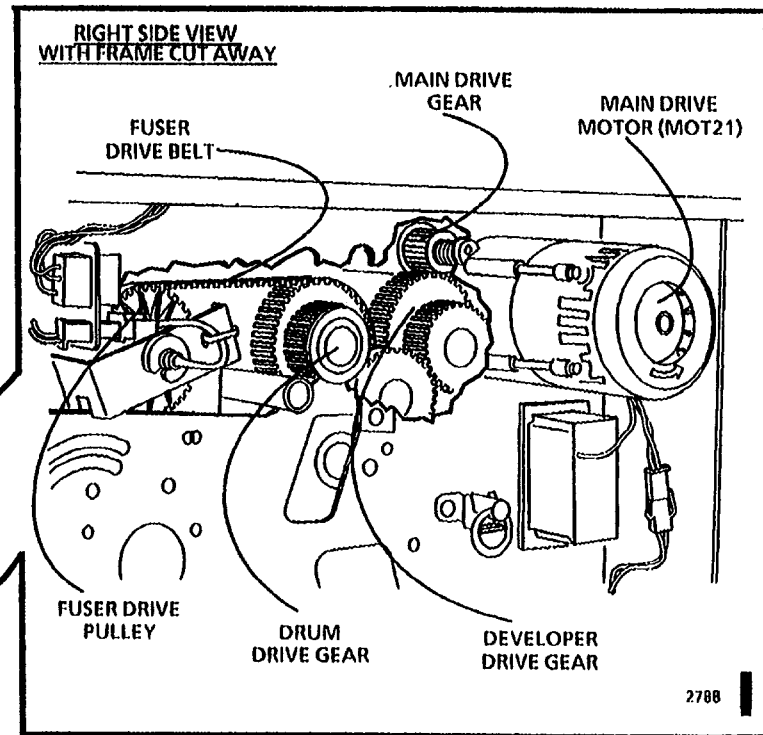
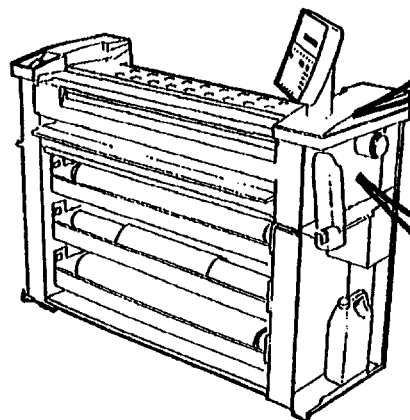
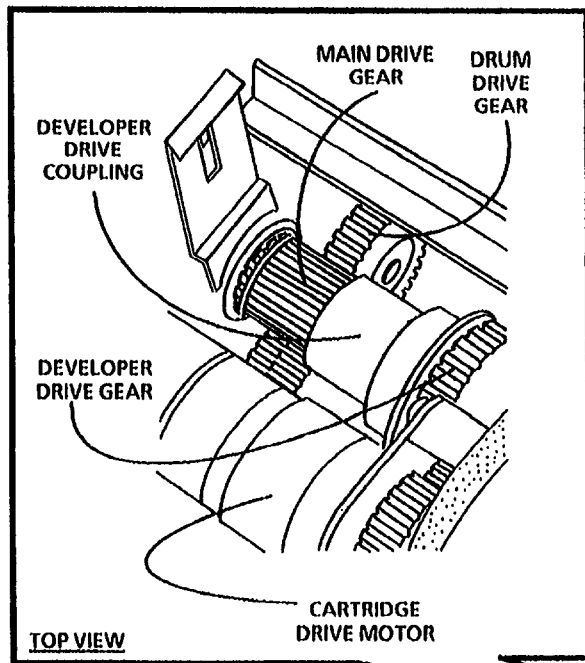


# DEVELOPER HOUSING



RIGHT SIDE VIEW  
OF DEVELOPER HOUSING  
REMOVED FROM COPIER

01725





## 5.1 Document Handler RAP

(7/29/92)

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

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

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

### Initial Actions

- Ensure that the document is in good condition.
- Check that the Upper Document Handler is positioned correctly.
- Check the document path for obstructions and the top and bottom platens for damage and for correct installation.
- Check that the copier has Tag/ MOD 02 installed (Document Sensor - O Rings).
- Check that the actuators of the Document Sensors are not binding or damaged.
- Check each Document Sensor to ensure that the O Rings are positioned correctly.

- Check that the Document Sensor connectors are seated fully and are not damaged.
- Check the Document Drive Belt and Pulleys for damage and for the correct installation.
- Check the Document Drive Motor for binding by rotating the Document Drive Pulleys manually.
- Check the connectors for the Document Drive Motor (A31 P2), Drive Motor PWB (A31 P1) and Control PWB (A3 P302) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the document meets the size specification.
- Remove the Upper Document Handler Assembly. Check the document drive rolls, pinch rolls, the roll load springs, and the feed shelf for contamination or damage. Clean or replace the components as required.

### Procedure

Cheat the Document Handler Interlock Switch (S30).

Enter the code [0601-BOND] in order to check that the Document Drive Motor drives in the scan direction. Then, enter the code [0601-2] in order to check that the Document Drive Motor drives in the rescan direction.

The Feed Drive Roll rotates in both directions.

Y N

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

The check is good.

Y N

Repair or replace the wires as required.

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

The check is good.

Y N

A B C

**A B C**

Replace the MOT 23 Document Drive Motor.

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

The check is good.

**Y N**

Replace the A3 Control PWB.

Replace the A31 Drive Motor PWB.

Check the following items:

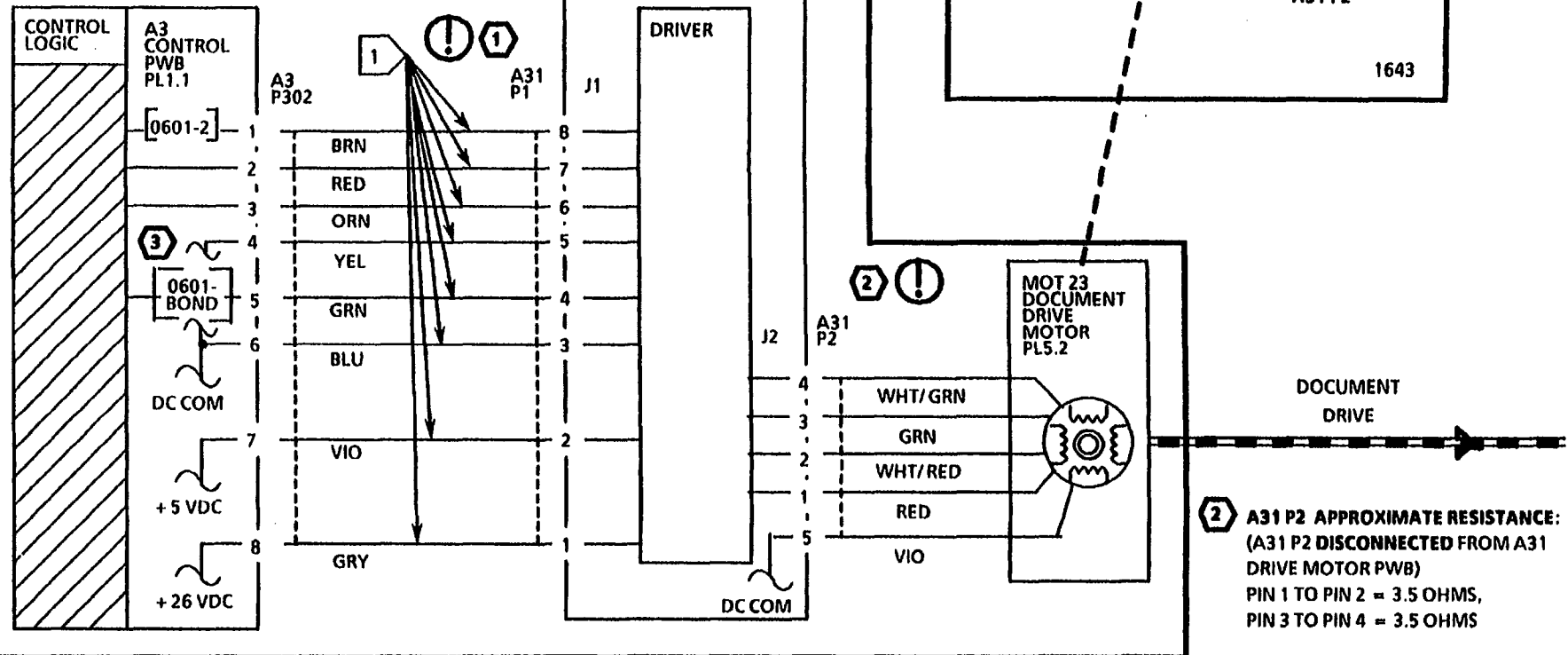
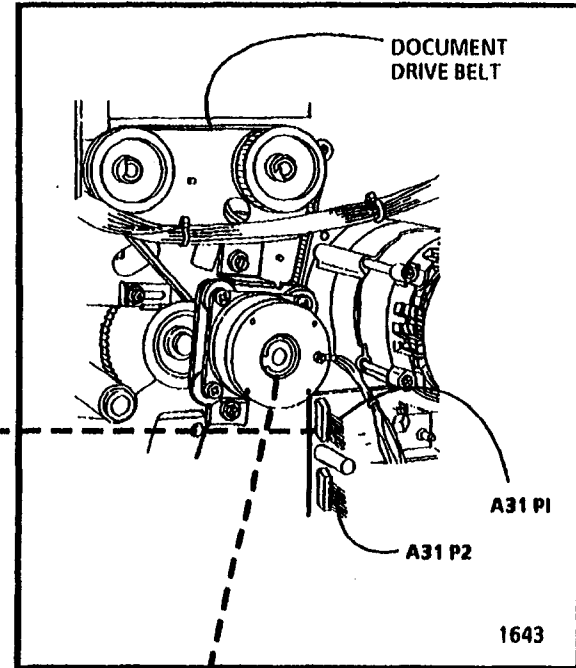
- Document Drive Belt has the correct tension.
- Document Stop Position (ADJ 5.2).

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

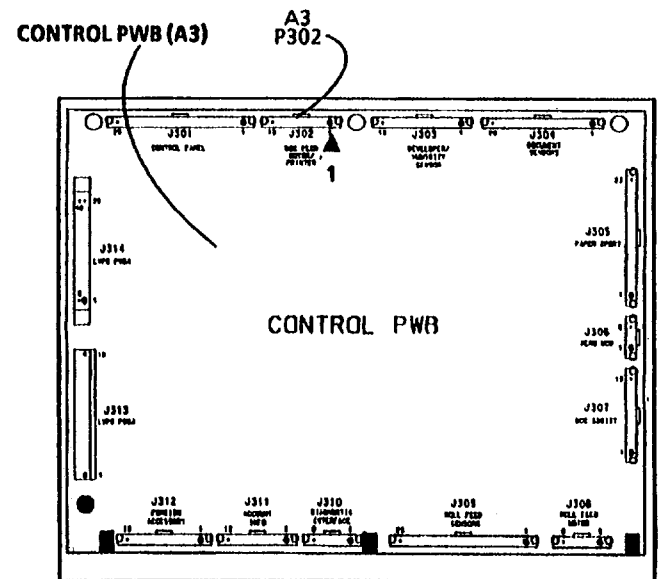
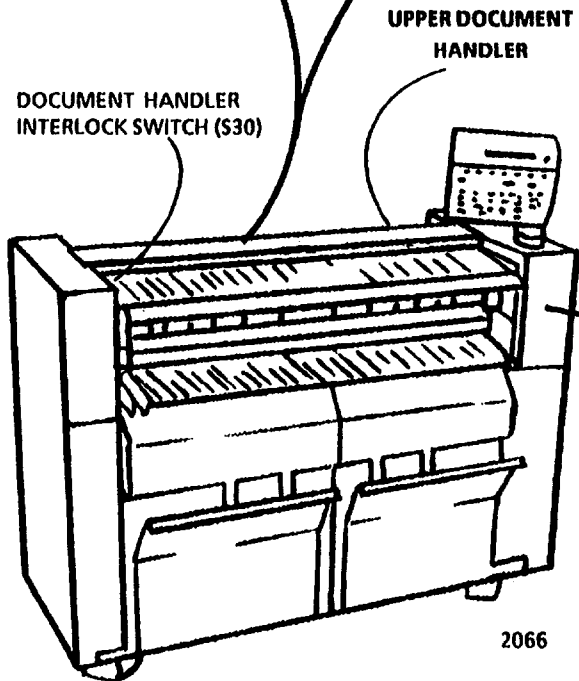
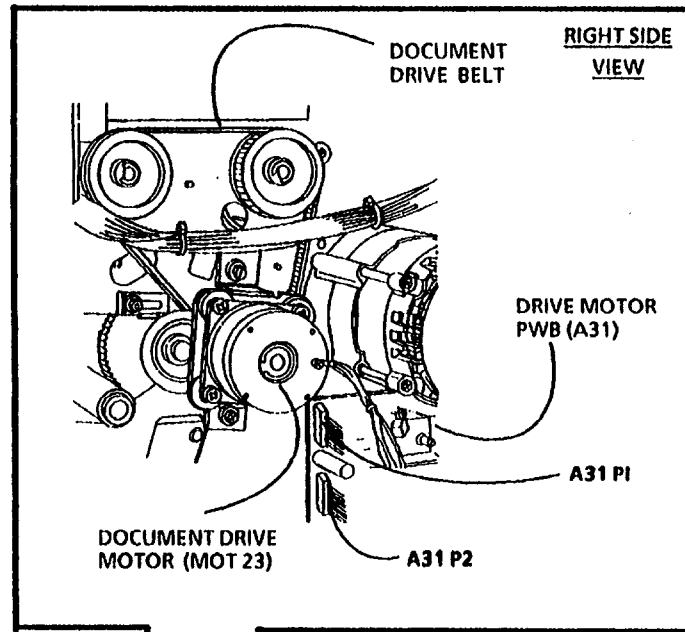
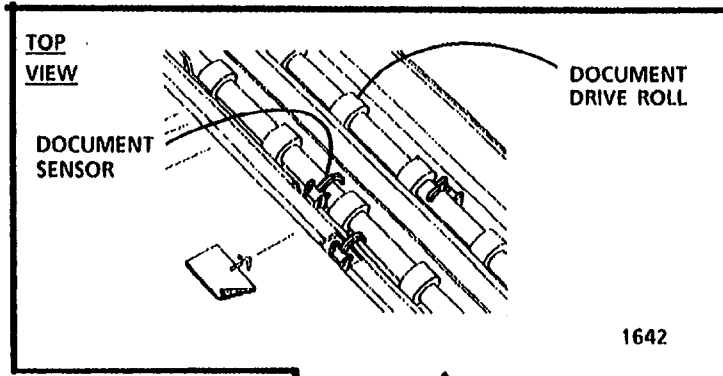
PIN	STANDBY VOLTAGE	[0601 - BOND] VOLTAGE	[0601 - 2] VOLTAGE
P1-8	+ 5.0 VDC	+ 0.1 VDC	+ 4.5 VDC
P1-7	+ 5.0 VDC	+ 4.5 VDC	+ 4.5 VDC
P1-6	+ 5.0 VDC	+ 0.1 VDC	+ 0.1 VDC
P1-4	+ 5.0 VDC	+ 2.0 VDC	+ 2.0 VDC

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

**3** [0601 - BOND] ENERGIZES THE  
DOCUMENT DRIVE MOTOR AND THE  
MOTOR ROTATES IN THE SCAN  
DIRECTION.  
[0601 - 2] ENERGIZES THE  
DOCUMENT DRIVE MOTOR AND THE  
MOTOR ROTATES IN THE RESCAN  
DIRECTION.

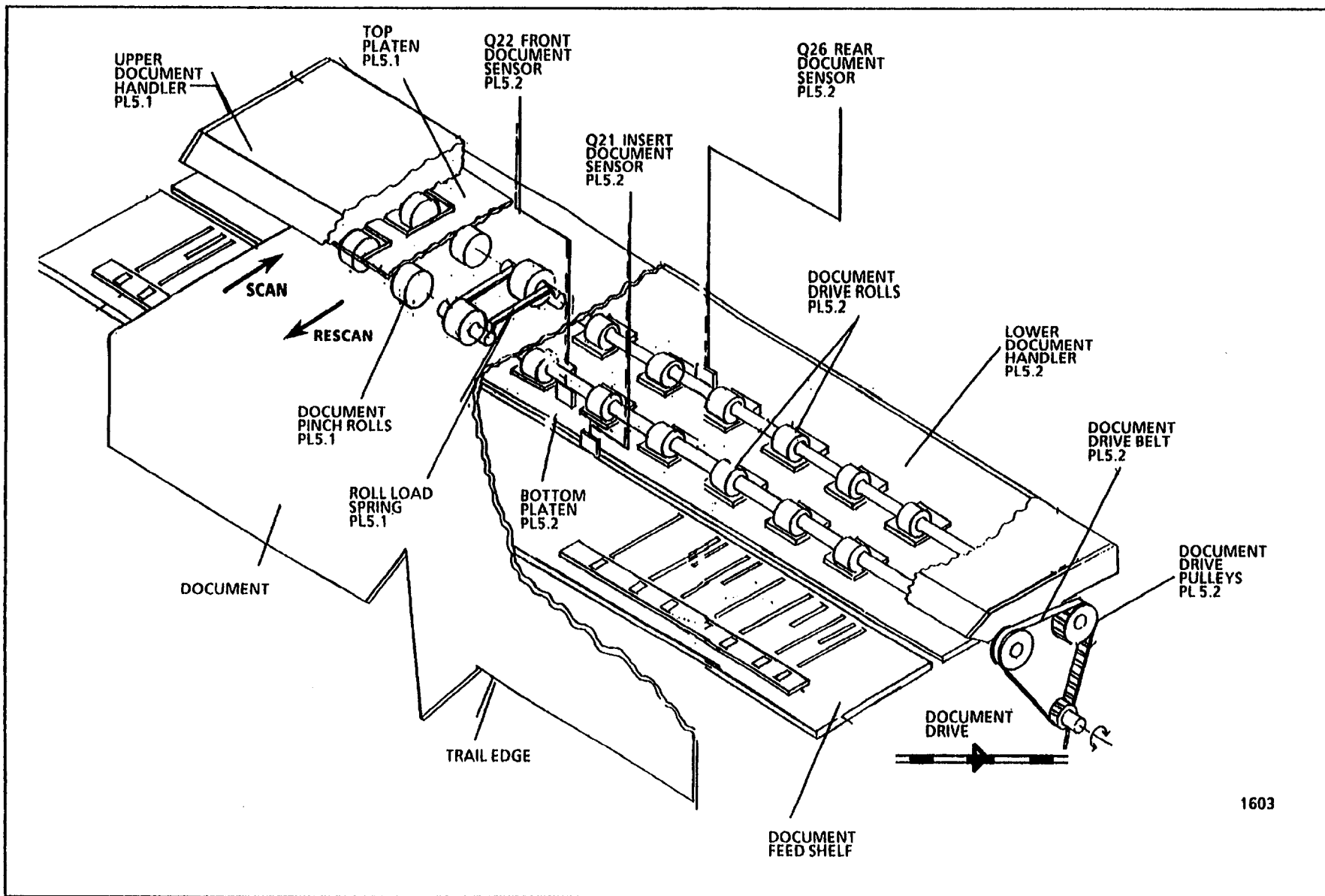


**2** A31 P2 APPROXIMATE RESISTANCE:  
(A31 P2 DISCONNECTED FROM A31  
DRIVE MOTOR PWB)  
PIN 1 TO PIN 2 = 3.5 OHMS,  
PIN 3 TO PIN 4 = 3.5 OHMS



# DOCUMENT HANDLER

## FRONT VIEW



## 7.1 Roll 1 Feed RAP

(9/18/92)

This RAP is used for Roll 1 feed problems that may or may not indicate a status code.

The problem may occur if there is a problem with the Roll 1 drive mechanical components, the Roll Drive Motor or the motor control circuitry.

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

### Initial Actions

- Check that the media is in good condition and is loaded correctly.
- Check the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the media path for obstructions.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Pull out the Drawer 1. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.

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

### Procedure

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

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

The Roll 1 Feed Drive Roll rotates.

Y N

The Roll Drive Motor is energized.

Y N

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

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

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

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

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

Y N

A B C

A B C

There is +26 VDC at pin 11 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

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

If there is no open circuit, replace the Feed Clutch (CL1).

Enter the code [0730] in order to check the Feed Clutch.

The voltage goes from +26 VDC to less than +1 VDC at pin 12 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

Replace the Feed Clutch (CL1).

Enter the codes [0703] and [0727] in order to check the Roll Drive Motor and the Roll 1 Rewind Clutch.

The Roll 1 rotates in the rewind direction.

Y N

There is +26 VDC at pin 10 of A2 P209 of the LVPS/ Driver PWB.

Y N

D E F

D E F

There is +26 VDC at pin 9 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 3 and check for an open circuit in the wires to the Rewind Clutch.

If there is no open circuit, replace the Rewind Clutch (CL2).

Enter the code [0727] in order to check the Rewind Clutch.

The voltage goes from +26 VDC to less than +1 VDC at pin 10 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

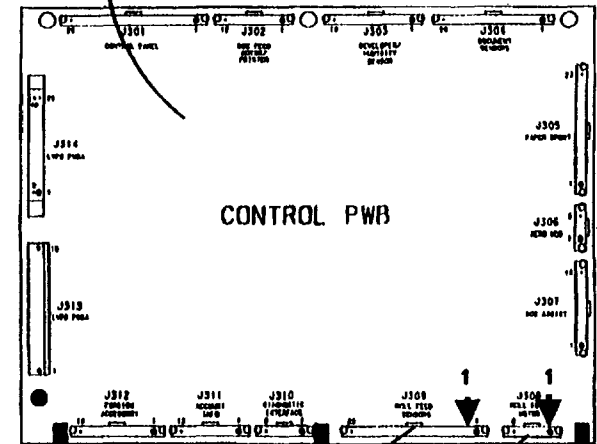
Replace the Rewind Clutch (CL2).

Check the following items:

- Media Guide Baffles for obstruction, damage or misalignment.
- Drawer Lock for correct operation.
- Feed Drive Chain tension.

If the problem persists, go to the Damaged Media RAP, located in Section 3.

CONTROL PWB (A3)



A3 P309

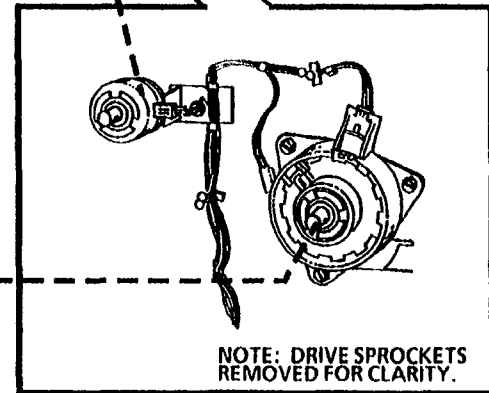
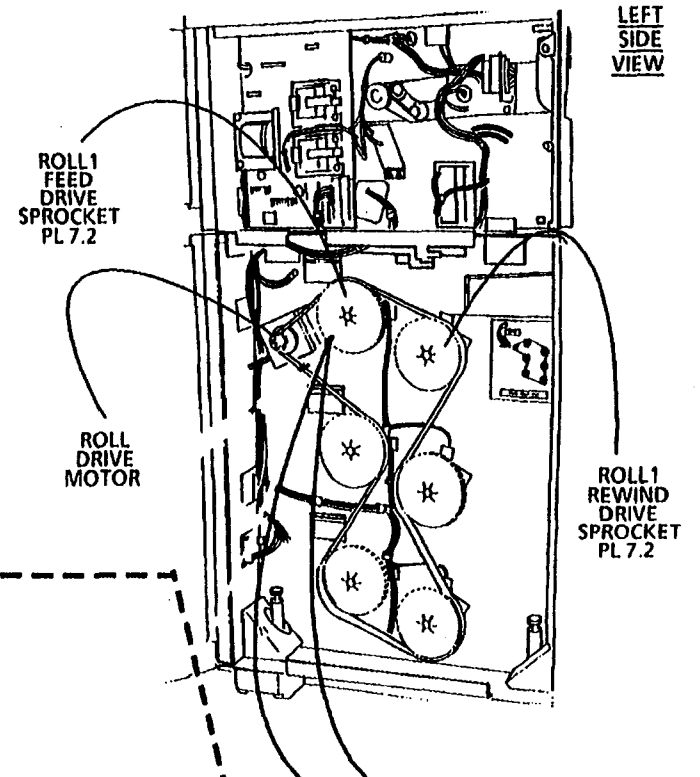
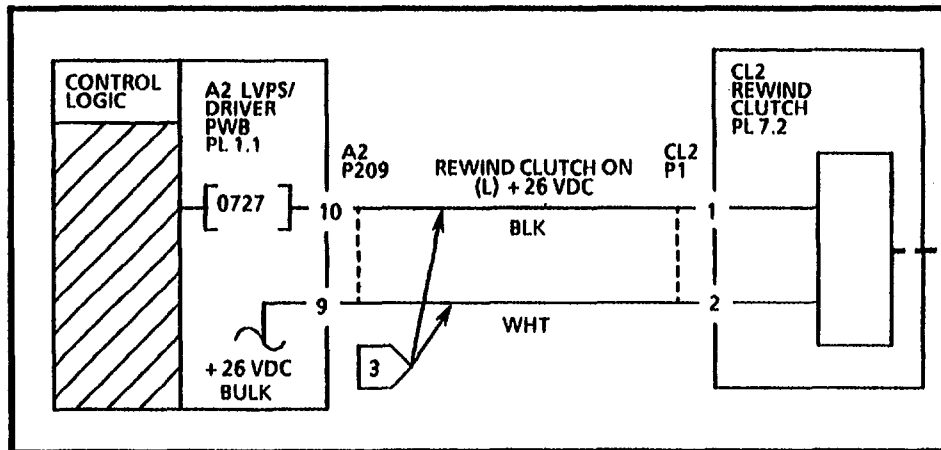
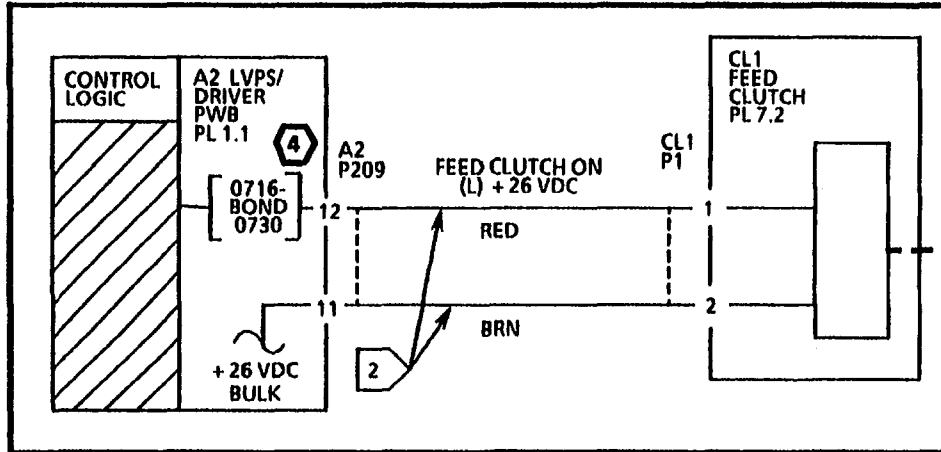
A3 P308

0	1590	A
TAR	SM 2	X 0

NOTES:

4

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



0	1916	A
TAR	SM 2	M 0

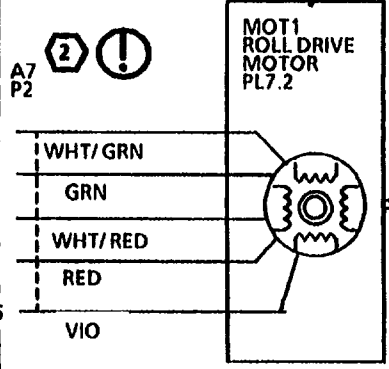
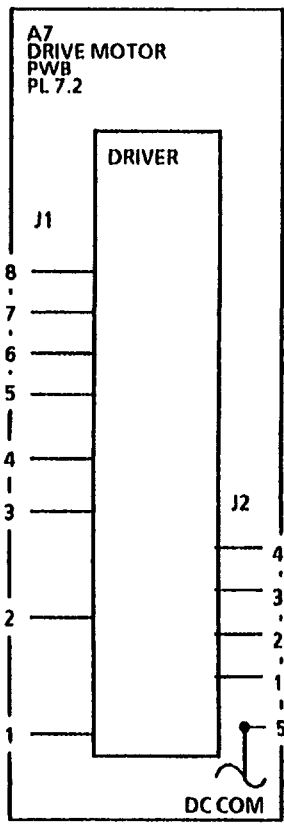
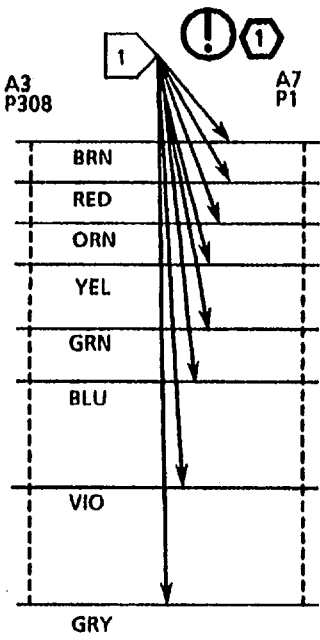
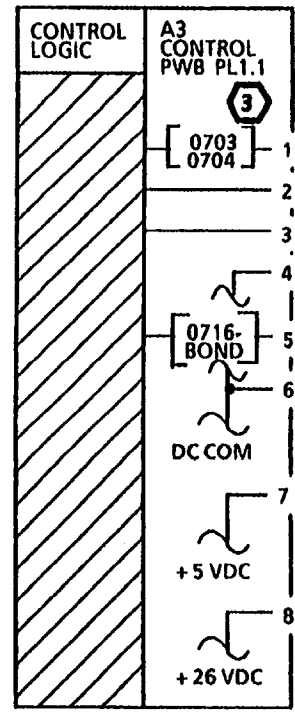


**1** A7 P1 APPROXIMATE VOLTAGES:  
(A7 P1 DISCONNECTED FROM A7 DRIVE MOTOR PWB).

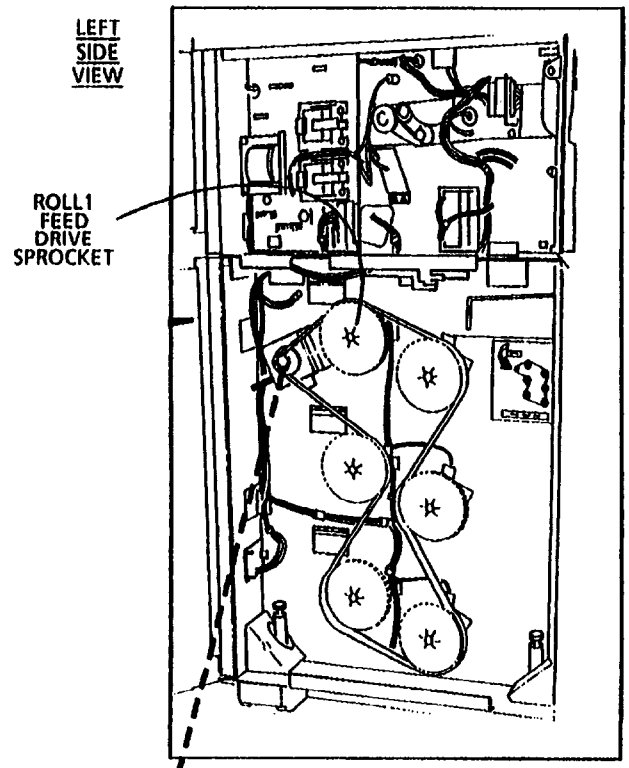
PIN	STANDBY VOLTAGE	[0703] VOLTAGE	[0704] VOLTAGE
P1-8	+ 5 VDC (OR) + 0.1 VDC	+ 0.1 VDC	+ 4.5 VDC
P1-7	+ 5 VDC (OR) + 0.1 VDC	+ 4.5 VDC	+ 4.5 VDC
P1-6	+ 5.0 VDC	+ 0.1 VDC	+ 0.1 VDC
P1-4	+ 2.4 VDC	+ 2.0 VDC	+ 2.0 VDC

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

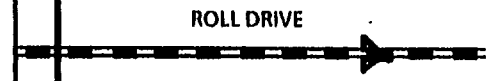
**3** [0703] ENERGIZES THE ROLL DRIVE MOTOR AND THE MOTOR ROTATES IN THE COUNTERCLOCKWISE DIRECTION. [0704] ENERGIZES THE ROLL DRIVE MOTOR AND THE MOTOR ROTATES IN THE CLOCKWISE DIRECTION.

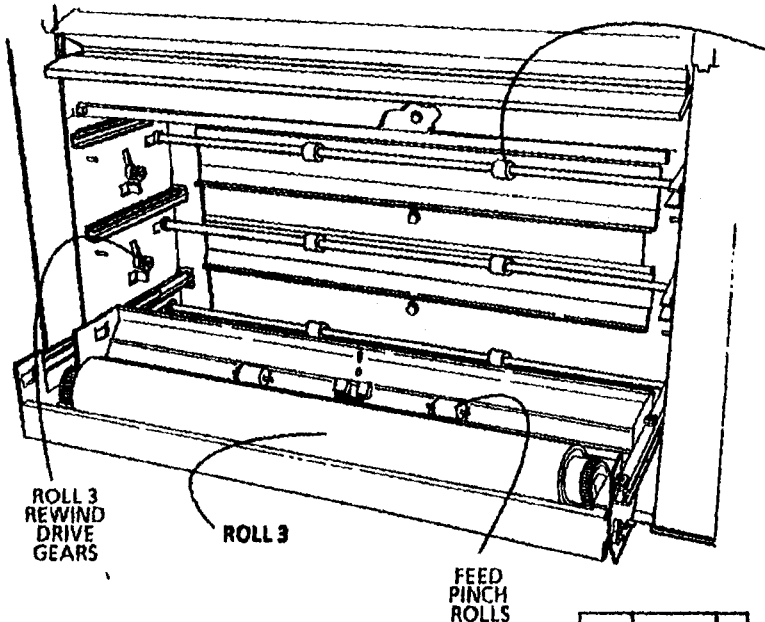


**2** A7 P2 APPROXIMATE RESISTANCE:  
(A7 P2 DISCONNECTED FROM A7 DRIVE MOTOR PWB)  
PIN 1 TO PIN 2 = 3.5 OHMS  
PIN 3 TO PIN 4 = 3.5 OHMS



0	1919	A
TAR	SM 2	M 0





ROLL 1  
FEED  
DRIVE  
ROLLS

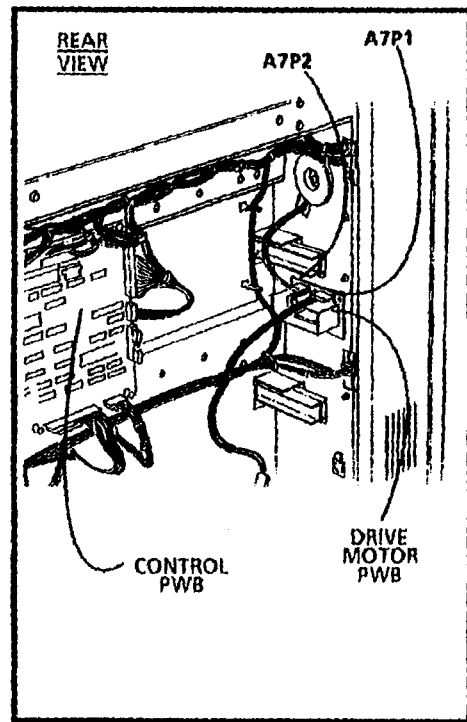
ROLL 3  
REWIND  
DRIVE  
GEARS

ROLL 3

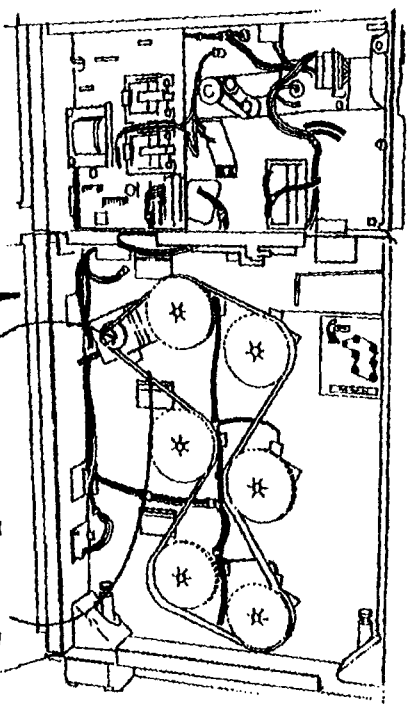
FEED  
PINCH  
ROLLS

NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

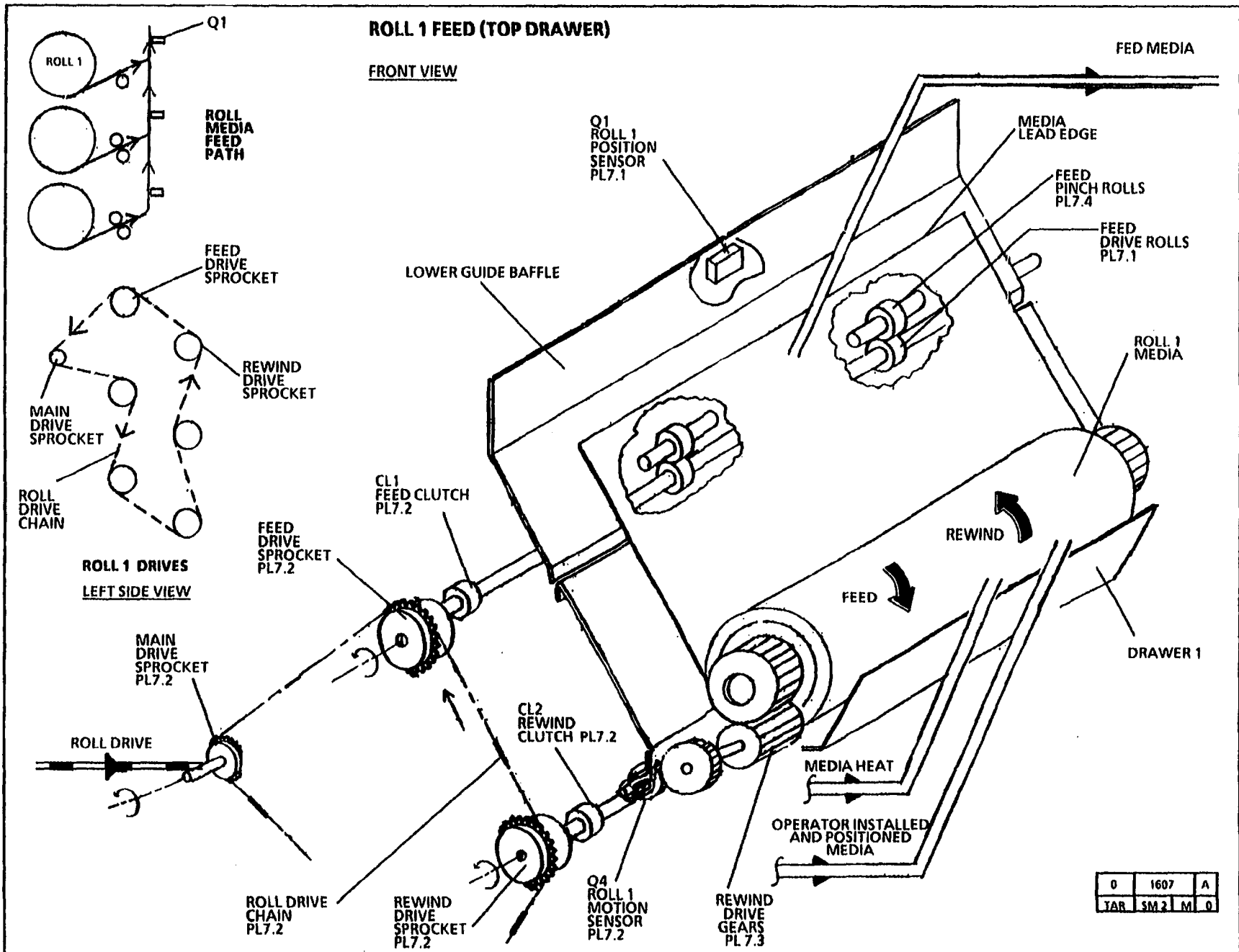
D	1921	A
TAR	SM 2	X D



LEFT  
SIDE  
VIEW



D	1920	A
TAR	SM 2	X D



## 7.2 Roll 2 Feed RAP

(9/23/92)

This RAP is used for Roll 2 feed problems that may or may not indicate a status code.

The problem may occur if there is a problem with the Roll 2 drive mechanical components, the Roll Drive Motor or the motor control circuitry.

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

### Initial Actions

- Check that the media is in good condition and is loaded correctly.
- Check the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the media path for obstructions.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Pull out the Drawer 2. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.

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

### Procedure

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

Remove the Roll 2 Media from the Feed Drive and Pinch Rolls. Cheat the Front Covers Interlocks. Enter the code [0717-BOND] in order to check the Roll Drive Motor and Roll 2 Feed Clutch.

The Roll 2 Feed Drive Roll rotates.

Y N

The Roll Drive Motor is energized.

Y N

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

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

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

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

There is +26 VDC at pin 8 of A2 P209 of the LVPS/ Driver PWB.

Y N

A B C

A B C

There is + 26 VDC at pin 7 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

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

If there is no open circuit, replace the Feed Clutch (CL3).

Enter the code [0731] in order to check the Feed Clutch.

The voltage goes from + 26 VDC to less than + 1 VDC at pin 8 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

Replace the Feed Clutch (CL3).

Enter the codes [0704] and [0728] in order to check the Roll Drive Motor and Rewind Clutch.

The Roll 2 rotates in the rewind direction.

Y N

There is + 26 VDC at pin 6 of A2 P209 of the LVPS/ Driver PWB.

Y N

D E F

D E F

There is + 26 VDC at pin 5 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 3 and check for an open circuit in the wires to the Rewind Clutch.

If there is no open circuit, replace the Rewind Clutch (CL4).

Enter the code [0728] in order to check the Rewind Clutch.

The voltage goes from + 26 VDC to less than + 1 VDC at pin 6 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

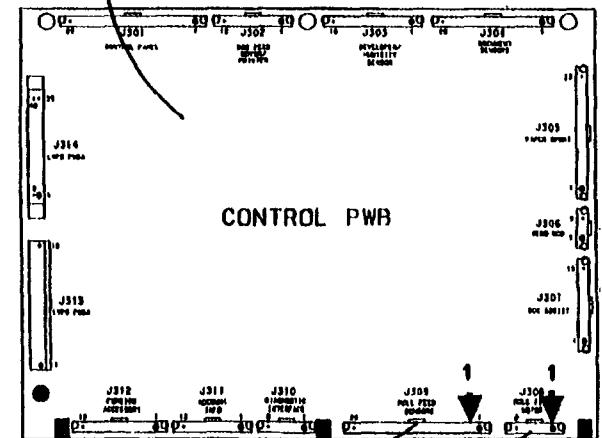
Replace the Rewind Clutch (CL4).

Check the following items:

- Media Guide Baffles for obstruction, damage or misalignment.
- Drawer Lock for correct operation.
- Feed Drive Chain tension.

If the problem persists, go to the Damaged Media RAP, located in Section 3.

CONTROL PWB (A3)



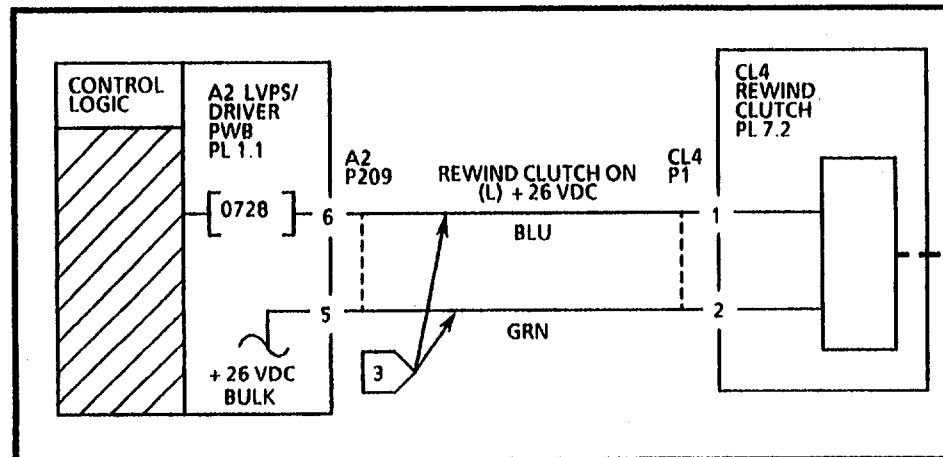
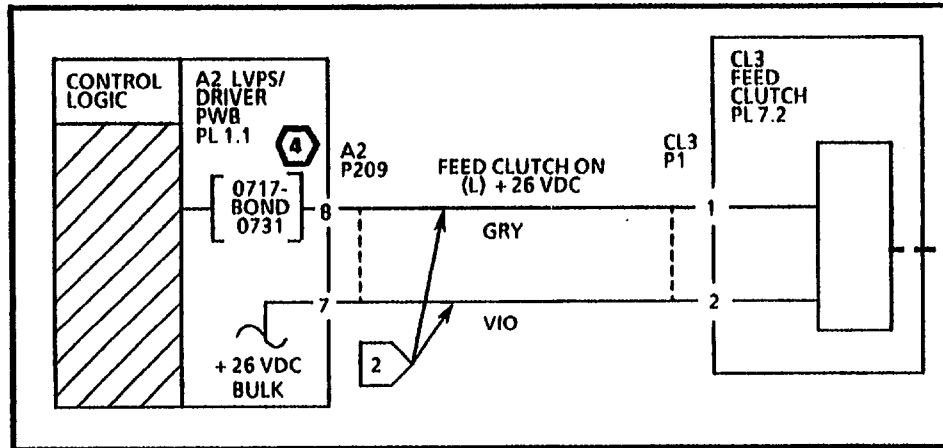
A3 P309

A3 P308

0	1590	A
TAR	SM 2	X 0

4

[0717-BOND] ENERGIZES THE ROLL DRIVE MOTOR AND THE ROLL 2 FEED CLUTCH (CL3).  
 [0731] ENERGIZES THE ROLL 2 FEED CLUTCH (CL3).

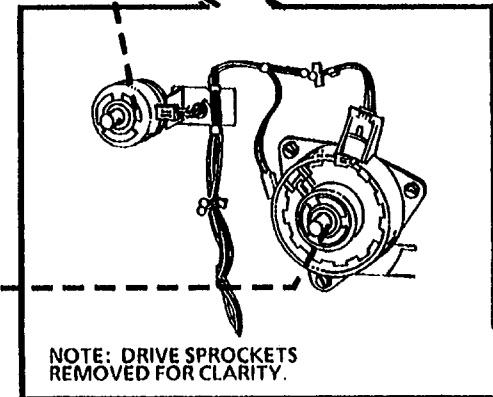


LEFT  
SIDE  
VIEW

ROLL2  
FEED  
DRIVE  
SPROCKET  
PL 7.2

ROLL  
DRIVE  
MOTOR

ROLL2  
REWIND  
DRIVE  
SPROCKET  
PL 7.2



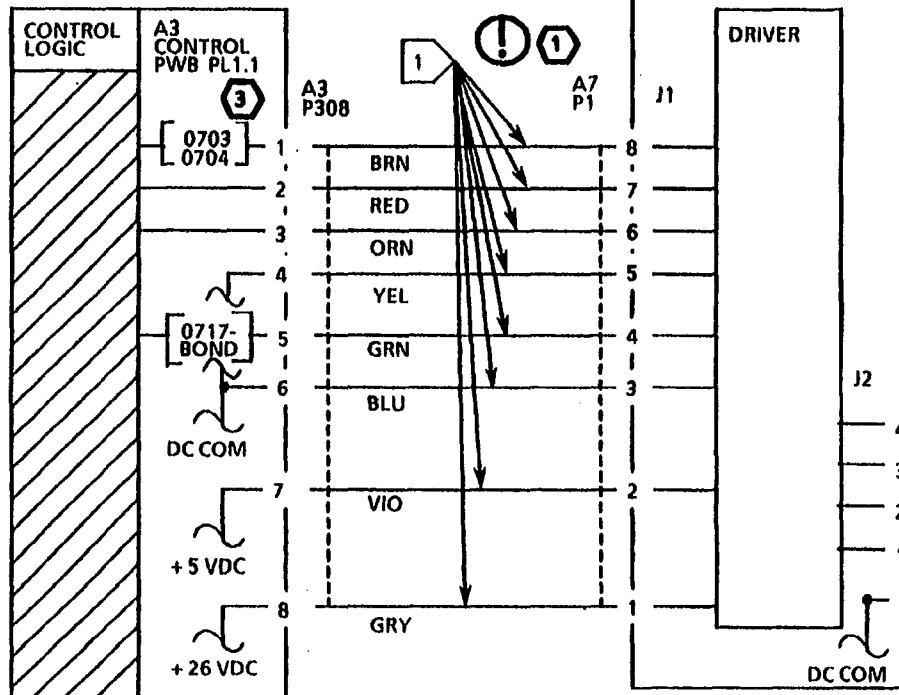
0	1917	A
TAR	SM 2	M 0

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

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

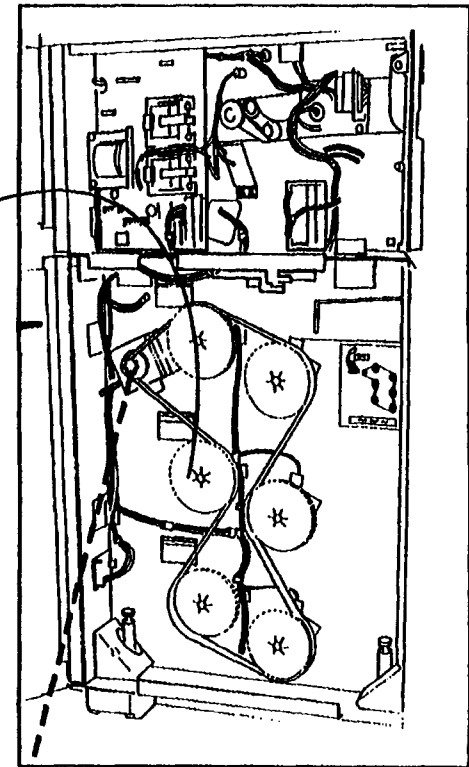
! CAUTION  
TO PREVENT DAMAGE TO THE  
COMPONENTS, PRESS THE POWER OFF (O)  
SWITCH BEFORE DISCONNECTING THE  
PLUGS.

3 [0703] ENERGIZES THE ROLL DRIVE  
MOTOR AND THE MOTOR ROTATES IN  
THE COUNTERCLOCKWISE DIRECTION.  
[0704] ENERGIZES THE ROLL DRIVE  
MOTOR AND THE MOTOR ROTATES IN  
THE CLOCKWISE DIRECTION.



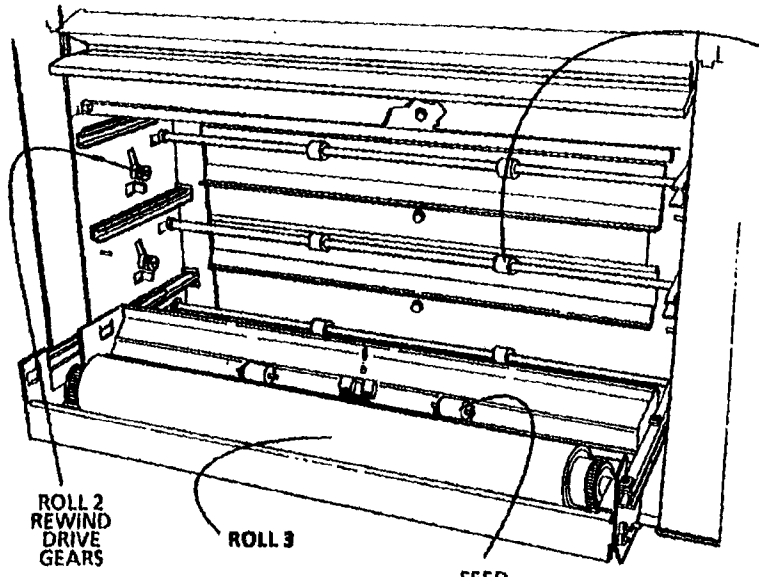
LEFT  
SIDE  
VIEW

ROLL2  
FEED  
DRIVE  
SPROCKET



0	1919	A
TAR	SM2	M 0

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



ROLL 2  
FEED  
DRIVE  
ROLLS

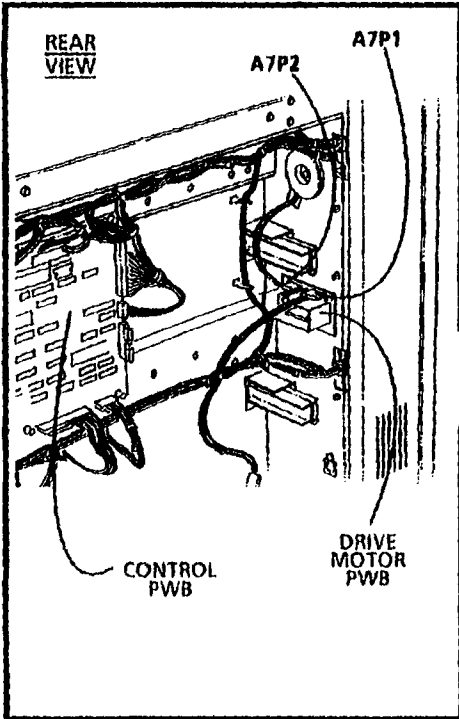
ROLL 2  
REWIND  
DRIVE  
GEARS

ROLL 3

FEED  
PINCH  
ROLLS

NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

0	1921	A
TAR	SM 2	X 0



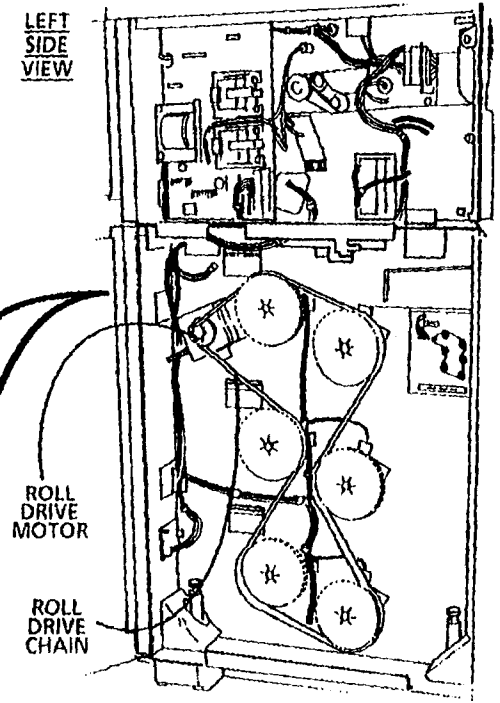
REAR  
VIEW

A7P2

A7P1

CONTROL  
PWB

DRIVE  
MOTOR  
PWB



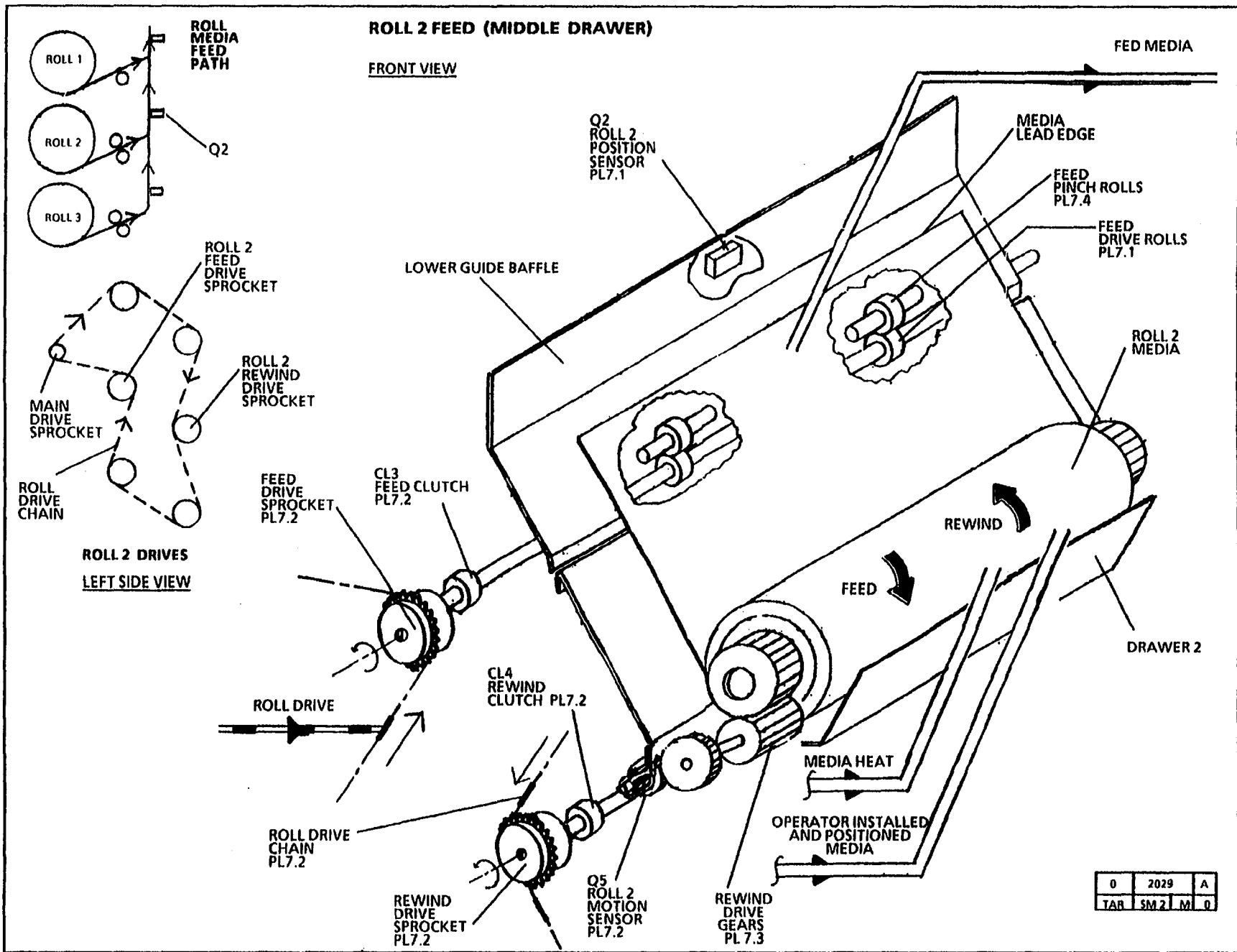
LEFT  
SIDE  
VIEW

ROLL  
DRIVE  
MOTOR

ROLL  
DRIVE  
CHAIN

0	1920	A
TAR	SM 2	X 0





## 7.3 Roll 3 Feed RAP

(9/28/92)

This RAP is used for Roll 3 feed problems that may or may not indicate a status code.

The problem may occur if there is a problem with the Roll 3 drive mechanical components, the Roll Drive Motor or the motor control circuitry.

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

### Initial Actions

- Check that the media is in good condition and is loaded correctly.
- Check the Upper Feed Baffle that houses the Feed Pinch Rolls is latched in the correct position.
- Check the media path for obstructions.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Pull out the Drawer 3. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.

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

### Procedure

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

Remove the Roll 3 Media from the Feed Drive and Pinch Rolls. Cheat the Front Covers Interlocks. Enter the code [0718-BOND] in order to check the Roll Drive Motor and the Roll 3 Feed Clutch.

The Feed Drive Roll rotates.

Y N

The Roll Drive Motor is energized.

Y N

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

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

If the check is good, set the Multimeter to V, DC, +, 200V. Connect the (-) lead to the GND point on the LVPS/ DRIVER (A2) PWB. Measure the voltages at the Motor PWB connector (A7 P1). Refer to Note 1 for voltages at pins A7 P1-8, 7, 6 and 4.

If the check is good, replace the A7 Drive Motor PWB. If the check is not good, replace the A3 Control PWB.

There is +26 VDC at pin 4 of A2 P209 of the LVPS/ Driver PWB.

Y N

A B C

A B C

There is + 26 VDC at pin 3 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

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

If there is no open circuit, replace the Feed Clutch (CL5).

Enter the code [0732] in order to check the Feed Clutch.

The voltage goes from + 26 VDC to less than + 1 VDC at pin 4 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

Replace the Feed Clutch (CL5).

Enter the codes [0703] and [0729] in order to check the Roll Drive Motor and the Roll 3 Rewind Clutch.

The Roll 3 rotates in the rewind direction.

Y N

There is + 26 VDC at pin 2 of A2 P209 of the LVPS/ Driver PWB.

Y N

D E F

D E F

There is + 26 VDC at pin 1 of A2 P209 of the LVPS/ Driver PWB.

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 3 and check for an open circuit in the wires to the Rewind Clutch.

If there is no open circuit, replace the Rewind Clutch (CL6).

Enter the code [0729] in order to check the Rewind Clutch.

The voltage goes from + 26 VDC to less than + 1 VDC at pin 2 of A2 P209.

Y N

Replace the LVPS/ Driver PWB (A2).

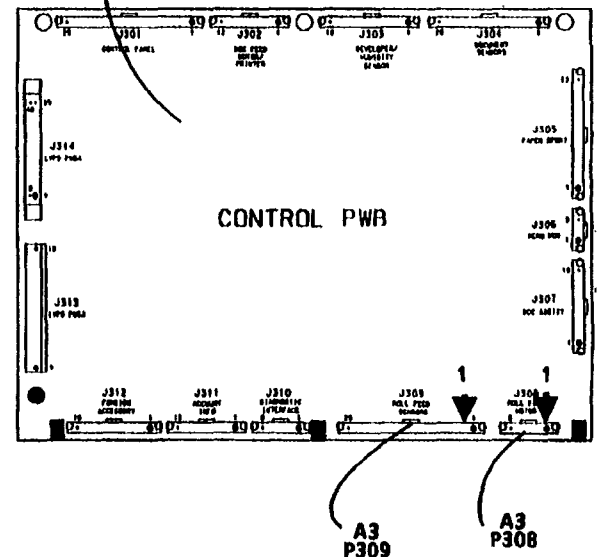
Replace the Rewind Clutch (CL6).

Check the following items:

- Media Guide Baffles for obstruction, damage or misalignment.
- Drawer Lock for correct operation.
- Feed Drive Chain tension.

If the problem persists, go to the Damaged Media RAP, located in Section 3.

CONTROL PWB (A3)

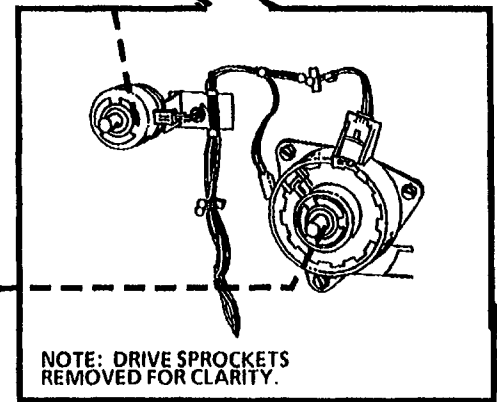
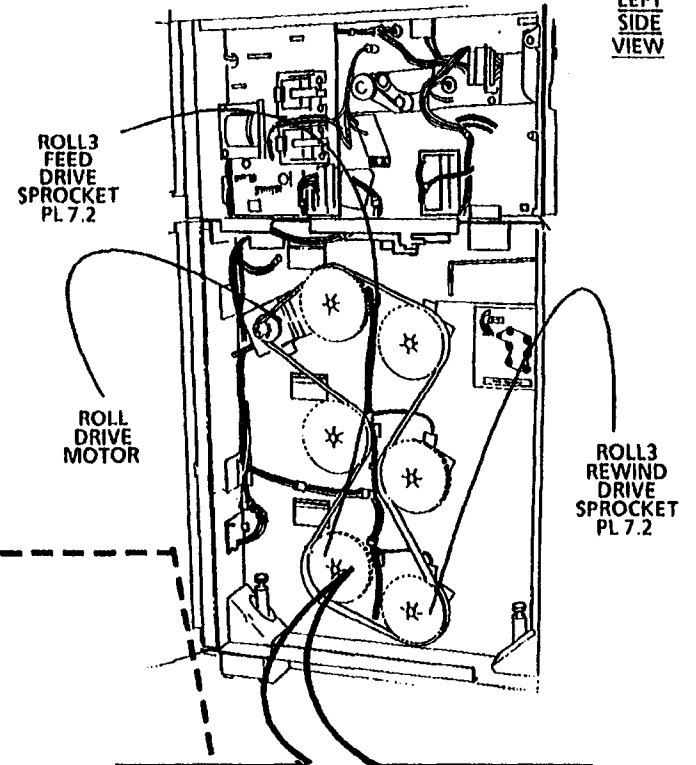
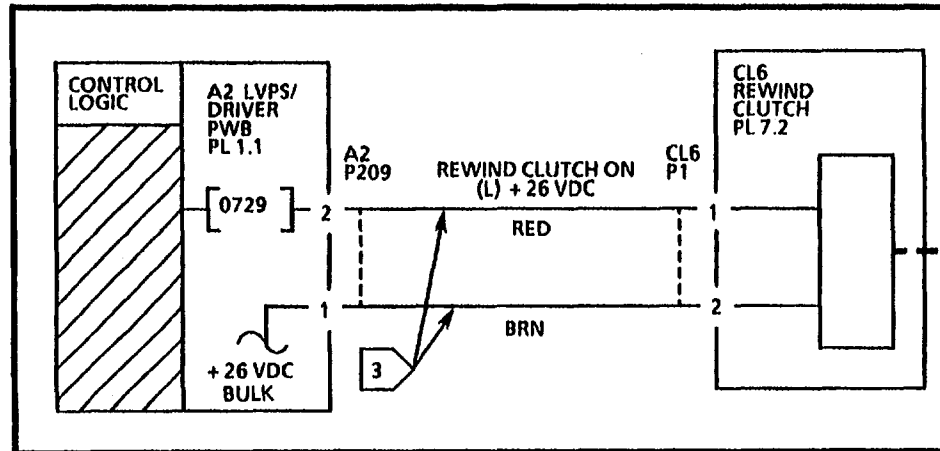
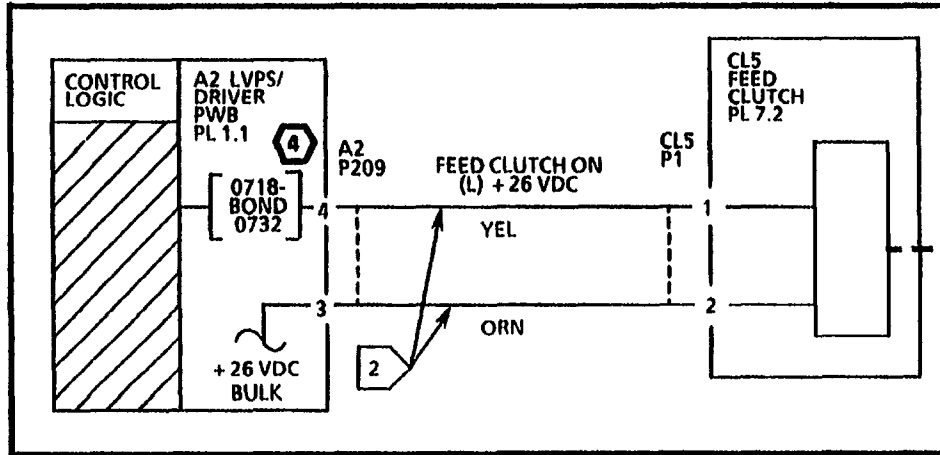


0	1590	A
TAR	SM 2	X 0

4

[0718-BOND] ENERGIZES THE ROLL DRIVE MOTOR AND THE ROLL 3 FEED CLUTCH (CL5).  
 [0732] ENERGIZES THE ROLL 3 FEED CLUTCH (CL5).

LEFT  
SIDE  
VIEW



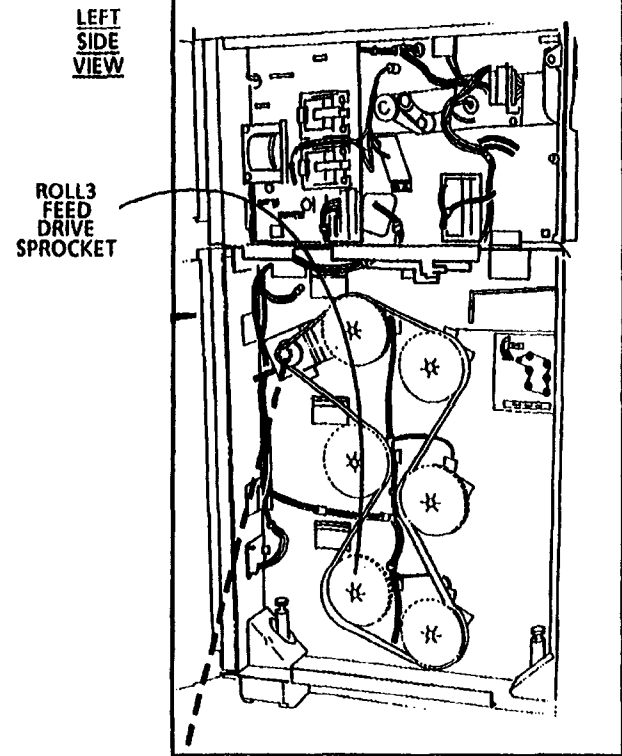
0	1917	A
TAR	SM 2	M 0

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

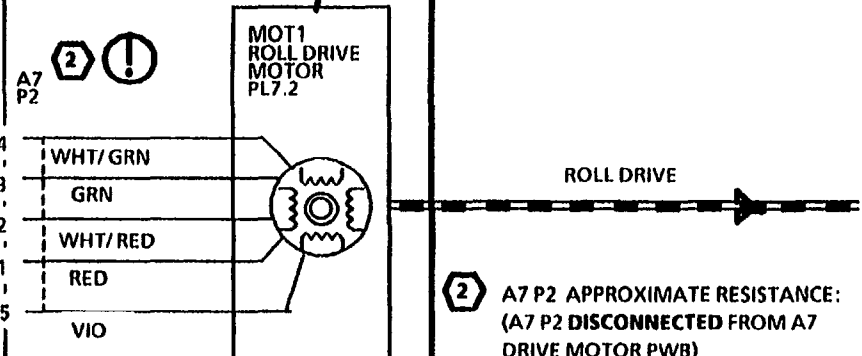
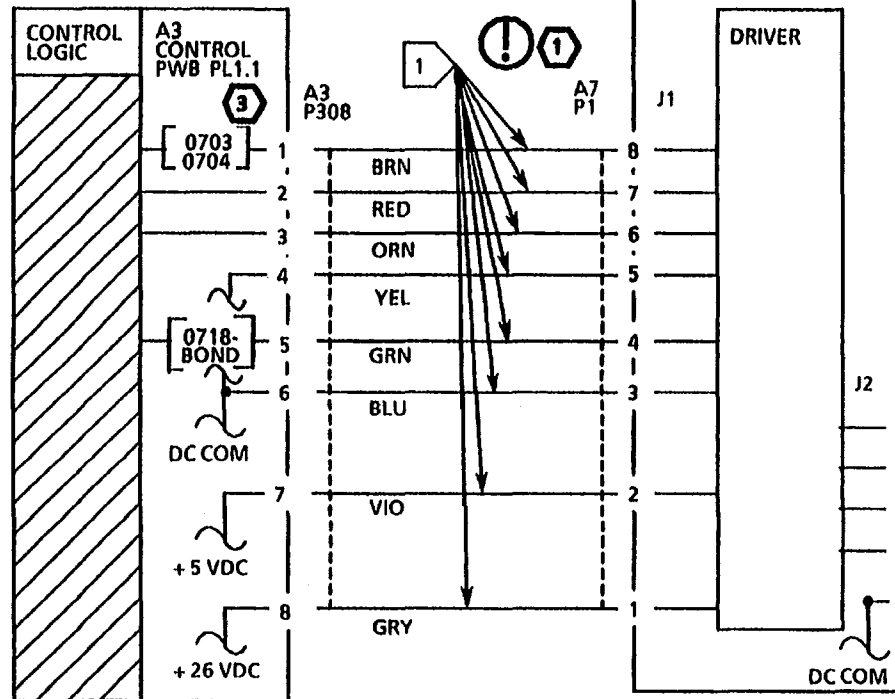
PIN	STANDBY VOLTAGE	[0703] VOLTAGE	[0704] VOLTAGE
P1-8	+ 5 VDC (OR) + 0.1 VDC	+ 0.1 VDC	+ 4.5 VDC
P1-7	+ 5 VDC (OR) + 0.1 VDC	+ 4.5 VDC	+ 4.5 VDC
P1-6	+ 5.0 VDC	+ 0.1 VDC	+ 0.1 VDC
P1-4	+ 2.4 VDC	+ 2.0 VDC	+ 2.0 VDC

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

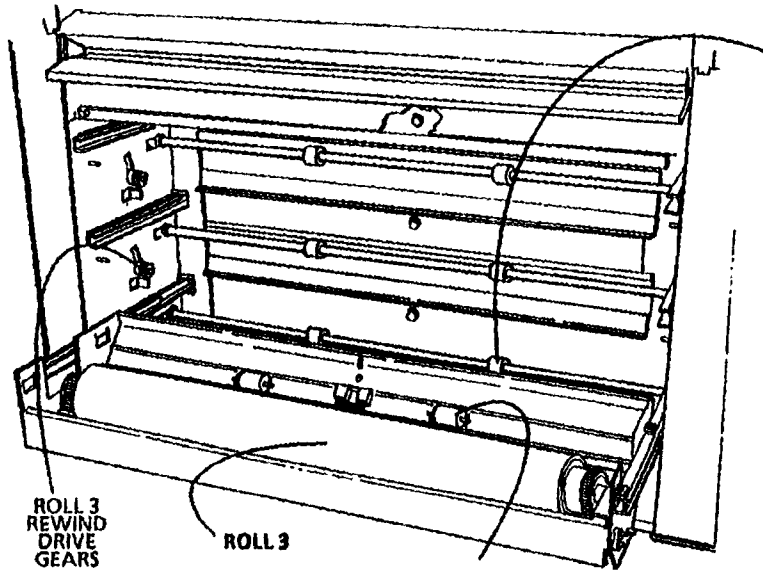
3 [0703] ENERGIZES THE ROLL DRIVE  
MOTOR AND THE MOTOR ROTATES IN  
THE COUNTERCLOCKWISE DIRECTION.  
[0704] ENERGIZES THE ROLL DRIVE  
MOTOR AND THE MOTOR ROTATES IN  
THE CLOCKWISE DIRECTION.



0	1919	A
TAR	SM 2	M 0



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



ROLL 3  
FEED  
DRIVE  
ROLLS

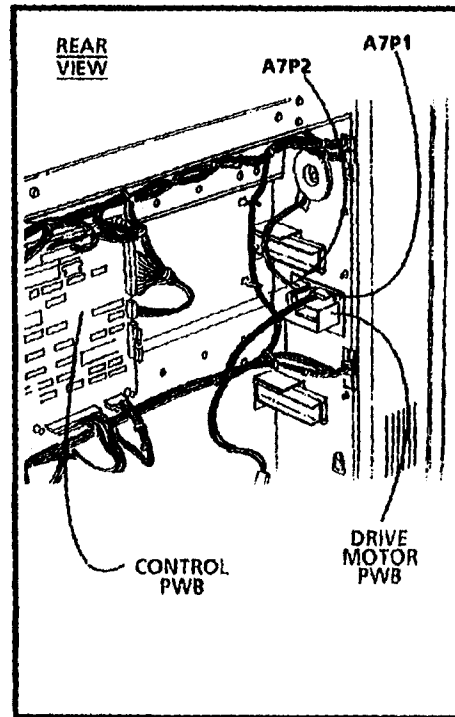
ROLL 3  
REWIND  
DRIVE  
GEARS

ROLL 3

FEED  
PINCH  
ROLLS

NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

0	1921	A
TAR	SM 2	X 0



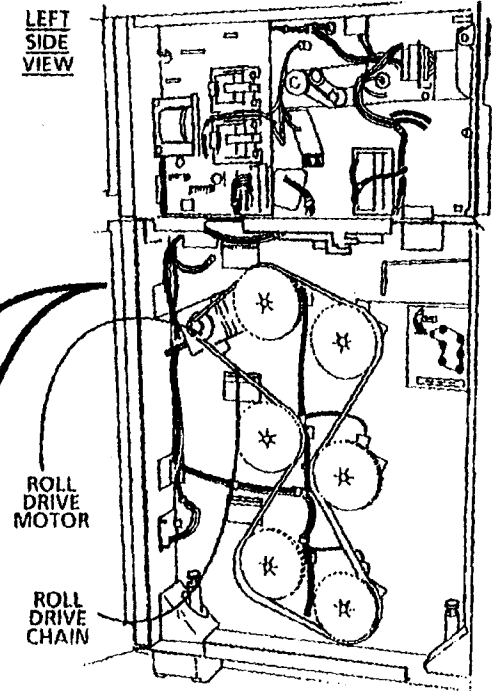
REAR  
VIEW

A7P2

A7P1

CONTROL  
PWB

DRIVE  
MOTOR  
PWB

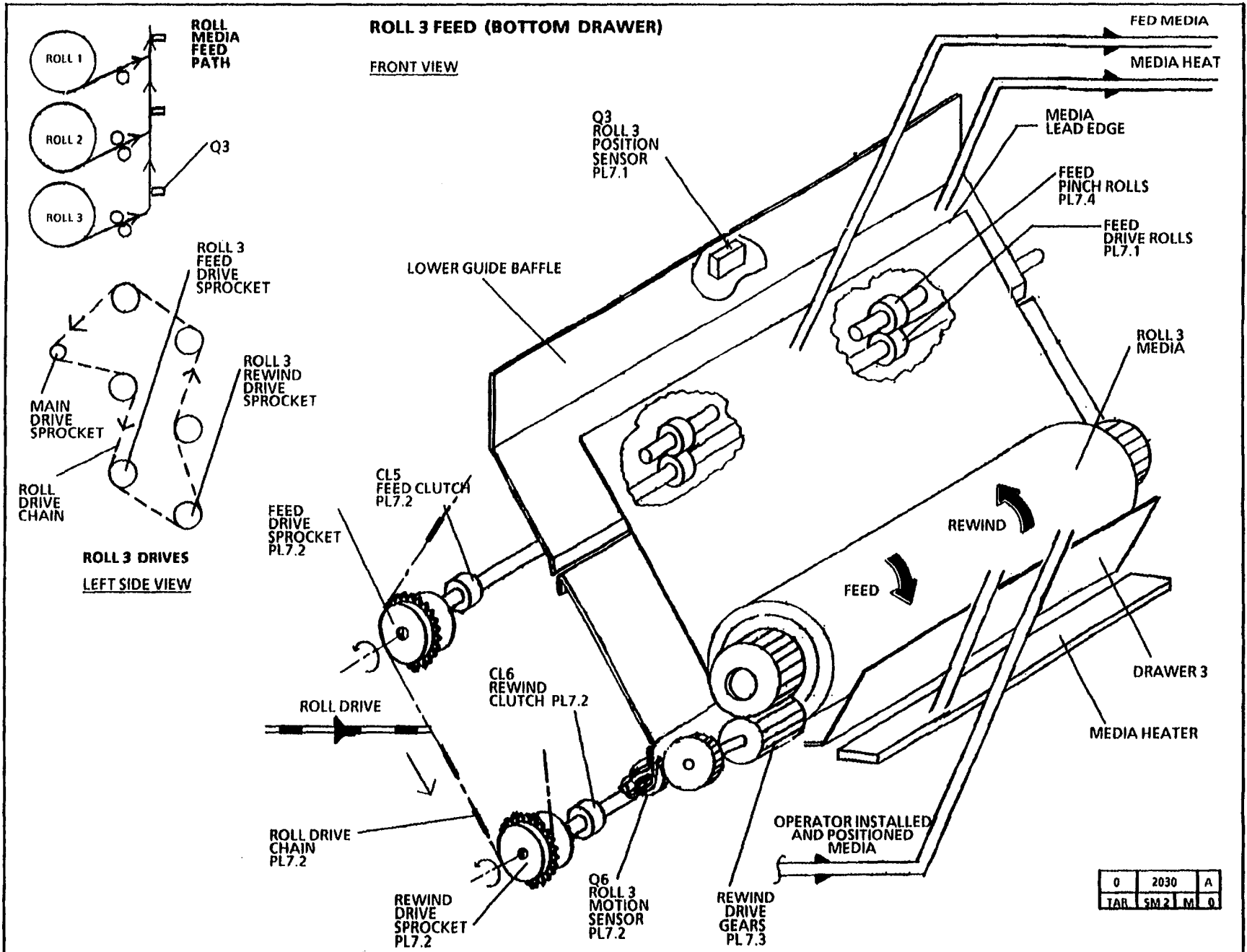


LEFT  
SIDE  
VIEW

ROLL  
DRIVE  
MOTOR

ROLL  
DRIVE  
CHAIN

0	1920	A
TAR	SM 2	X 0



**NOTES**



## 8.1 Media Transport RAP

(9/25/92)

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

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

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

### Initial Actions



#### WARNING

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

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

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

### Procedure

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

The Cut Sheet Drive Belt rotates.

Y N

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

The Transport Drive Motor is energized.

Y N

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

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

The check is good.

Y N

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

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

A B C

A B C

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

If the check is good, replace the A24 Drive Motor PWB. If the check is not good, replace the A3 Control PWB.

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

**CAUTION:** In order to prevent damage to the copier, the Fuser Heat Roll must be at the run temperature before the Drum/ Developer Drive and Fuser Drive Motors are switched on.

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

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

D

D

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

With the Fuser Roll at the run temperature, the Fuser Drive Motor is switched on and the Heat Roll rotates.

Y N

The Fuser Drive Motor is energized.

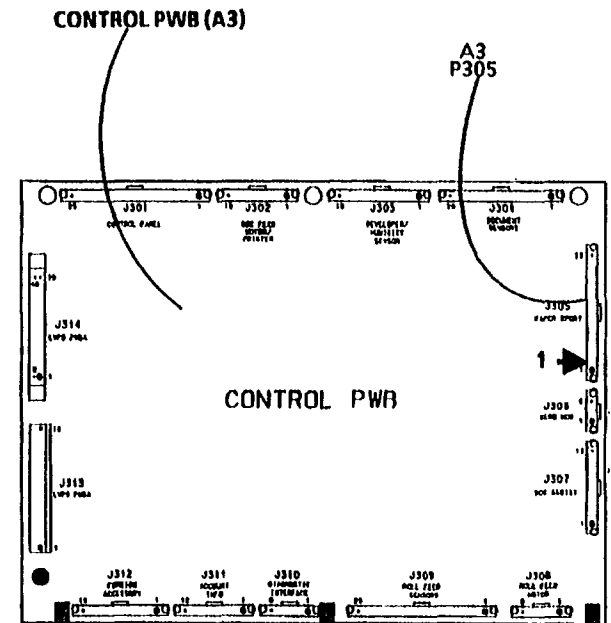
Y N

Go to the 4.2 Fuser Drive Motor Rap.

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

Check the following items:

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



0	1590	A
TAR	SM2	X 0

NOTES:

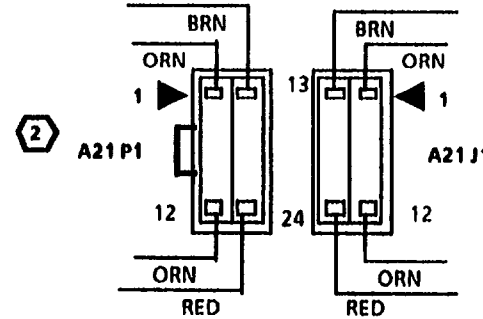
**1** A24 P1 APPROXIMATE VOLTAGES:  
(A24 P1 DISCONNECTED FROM A24 DRIVE MOTOR PWB)

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

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

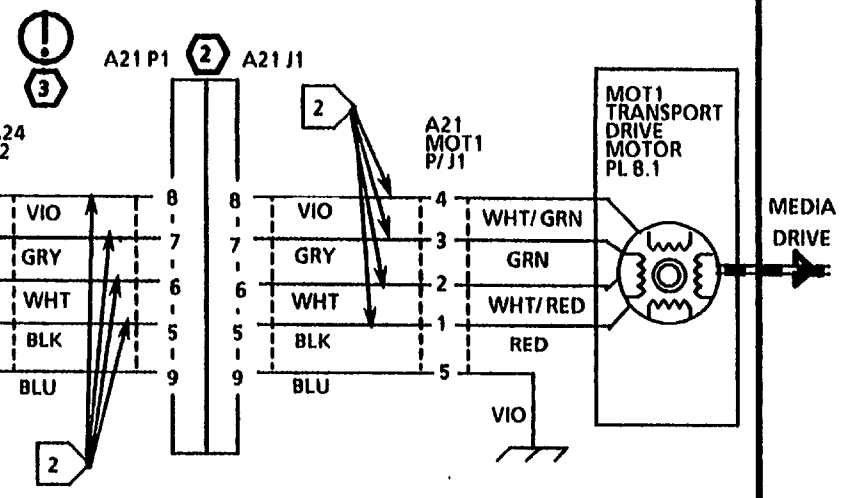
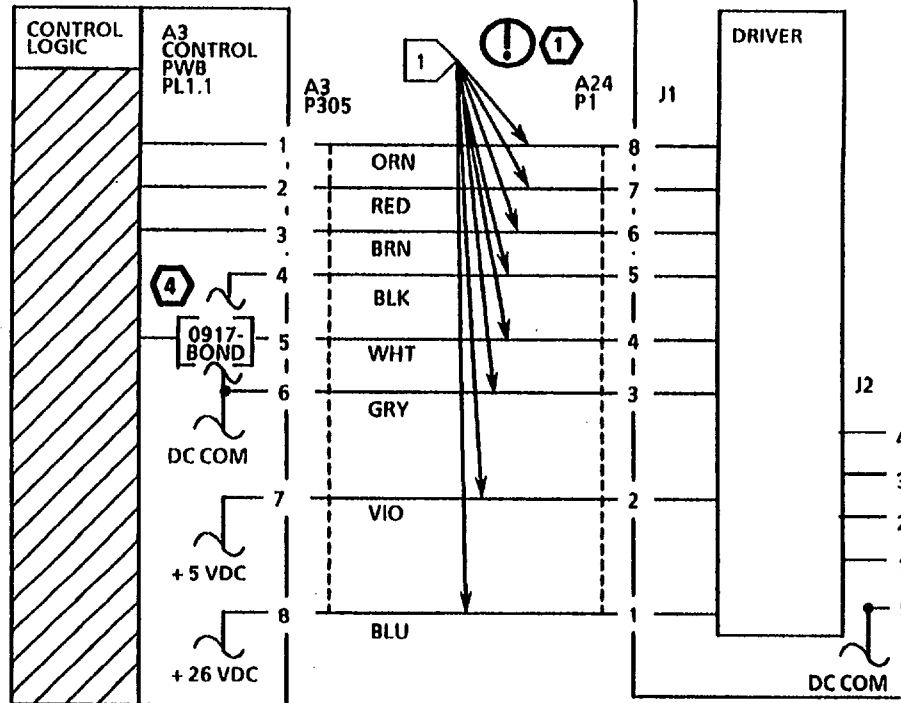
NOTES:

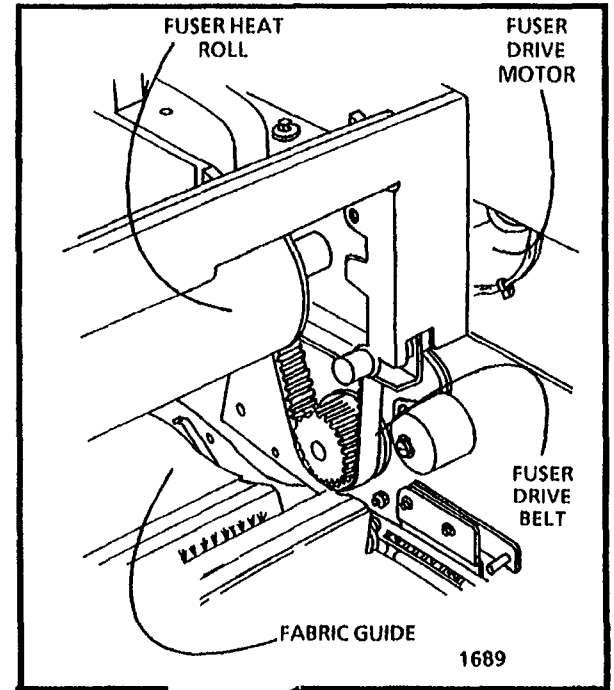
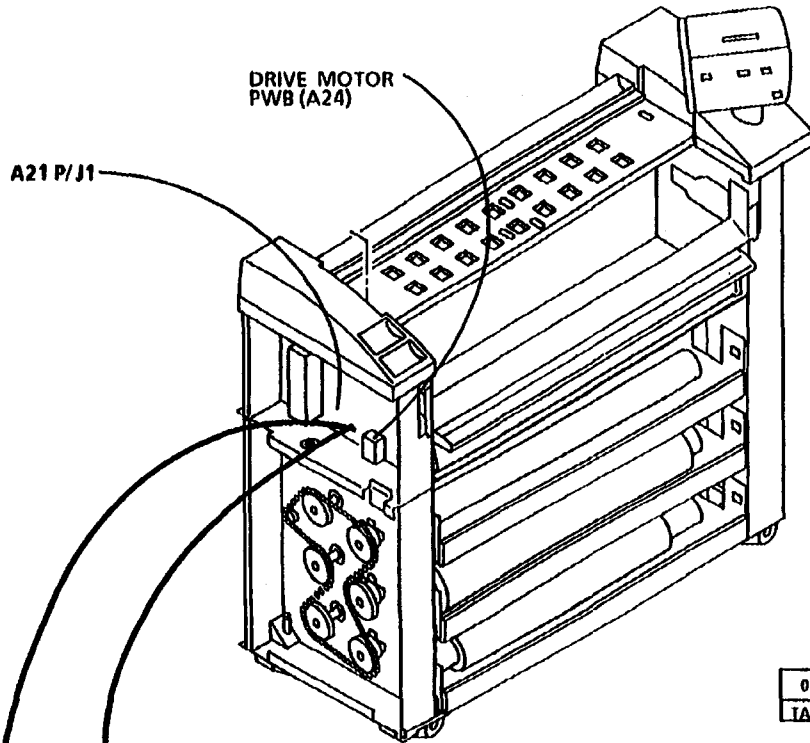
**2** CONNECTOR A21 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



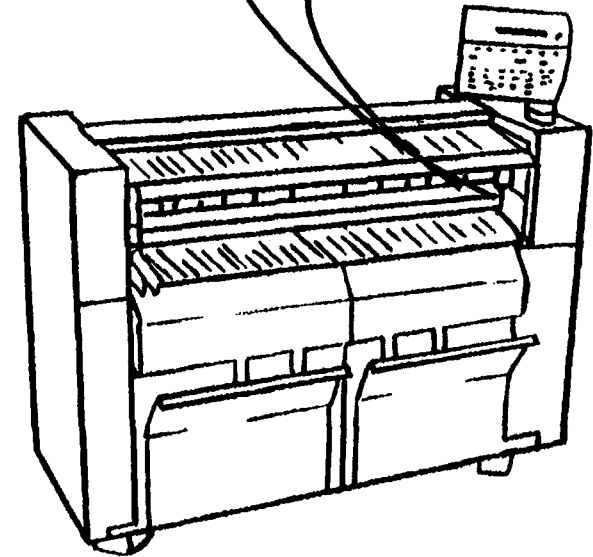
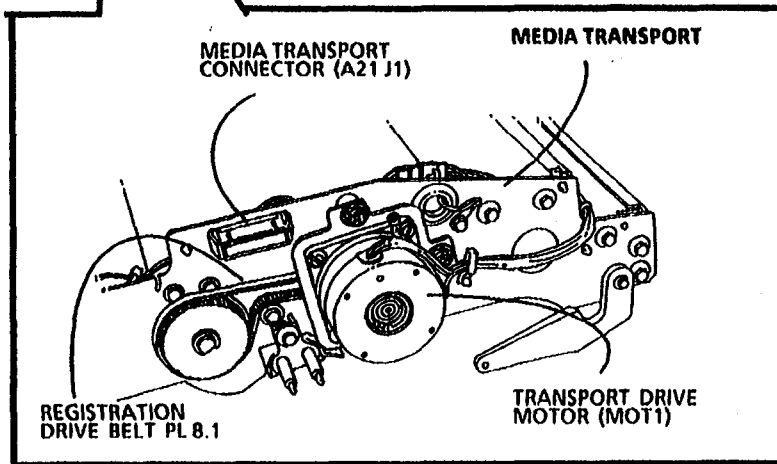
**3** A24 P2 APPROXIMATE RESISTANCE:  
(A24 P2 DISCONNECTED FROM A24 DRIVE MOTOR PWB)  
PIN 1 TO PIN 2 = 3.5 OHMS  
PIN 3 TO PIN 4 = 3.5 OHMS

**4** [0917-BOND] ENERGIZES THE TRANSPORT DRIVE MOTOR AND THE MOTOR ROTATES IN THE MEDIA FEED DIRECTION.





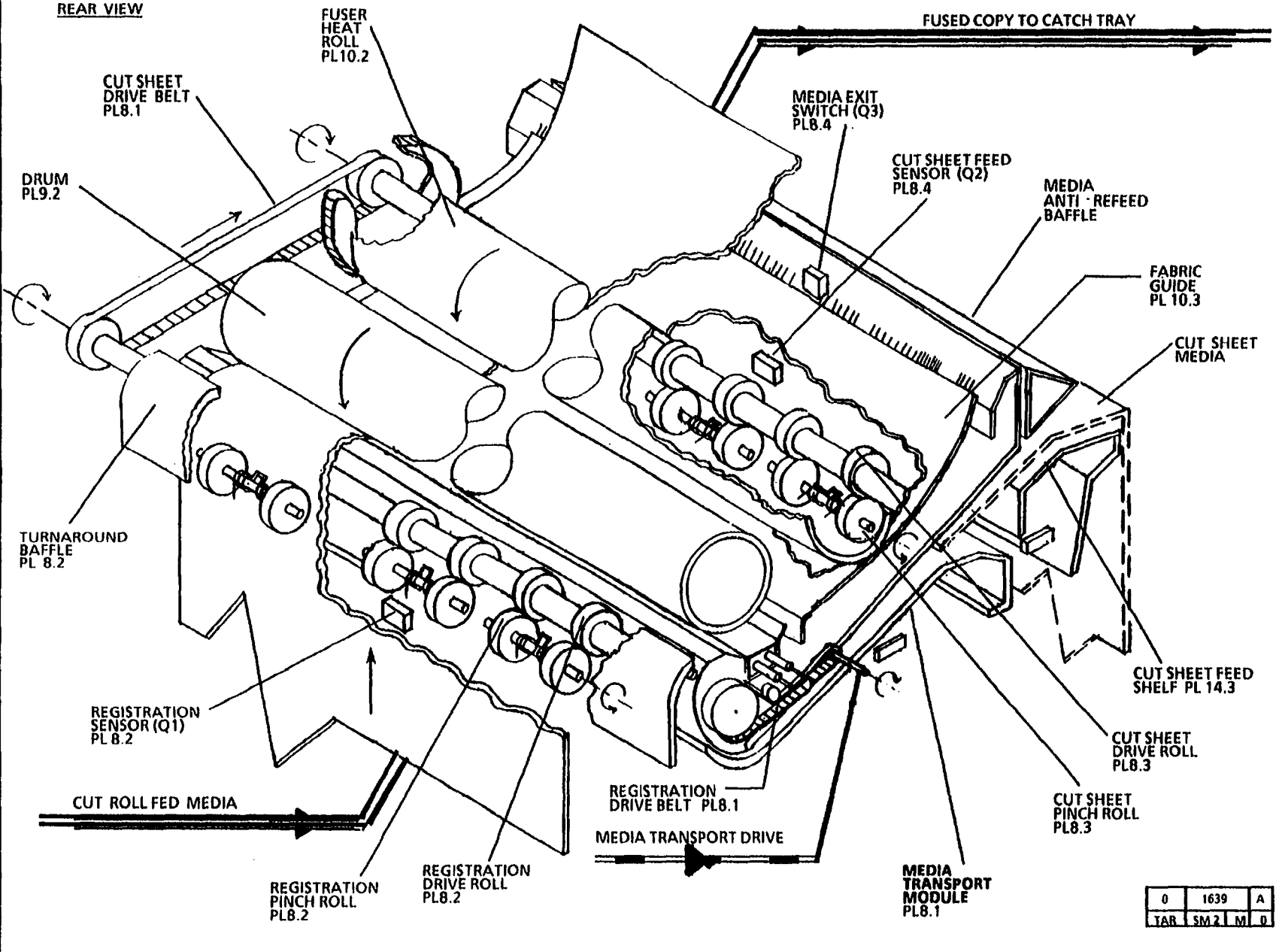
0	1640	A
TAR	SM 2	X 0



2066

# MEDIA TRANSPORT

REAR VIEW



0	1639	A
TAR	SM 2	M 0

## OF1 Media Heater RAP

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

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

### Initial Actions



**WARNING**  
Dangerous Voltage.

- Ensure that Connectors A2P213 on the Low Voltage Power Supply (A2) and HR1P/J1 on the Media Heater are correctly installed and fully seated.
- Ensure that Fuse F1 on the Low Voltage Power Supply has continuity. If not, replace the Fuse F1.

### Procedure

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

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

ACH is present.

Y N

A B

A B

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

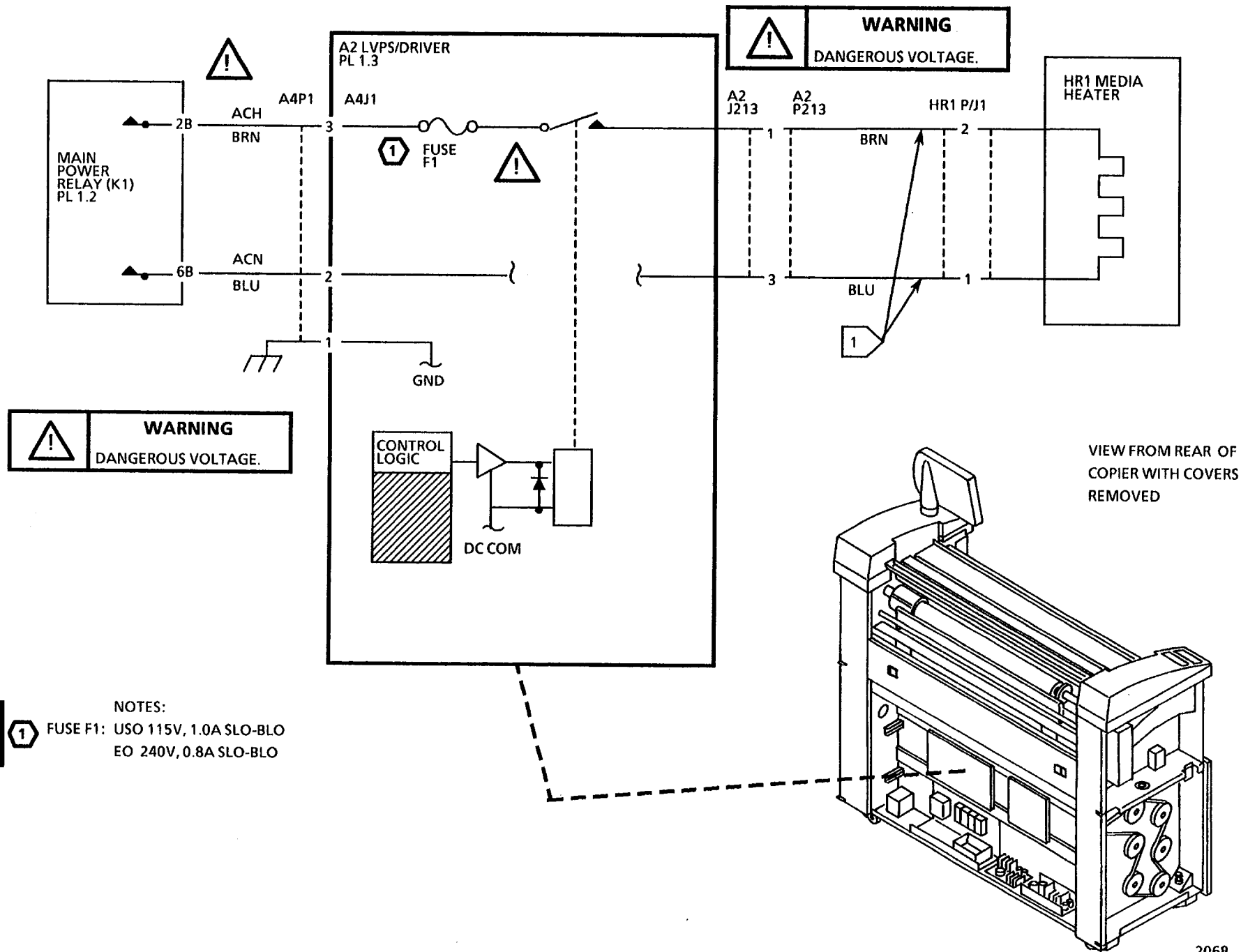
ACH is present

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 1 and repair the open circuit.

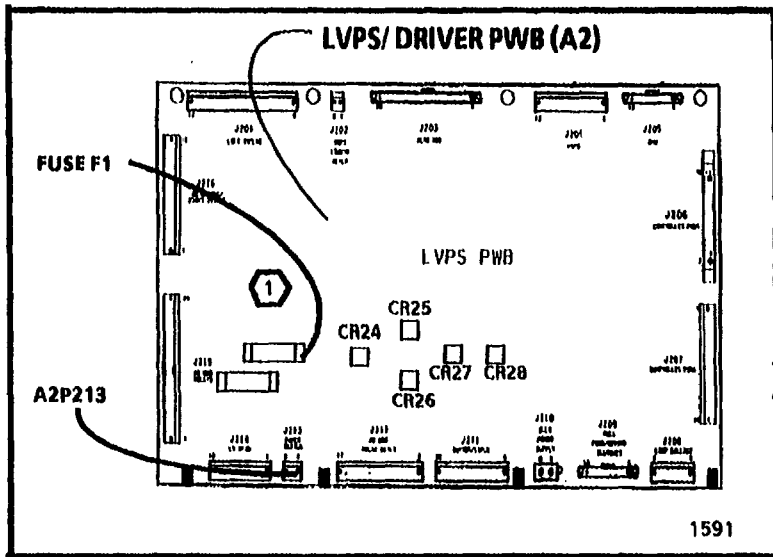
Replace the Media Heater HR1.



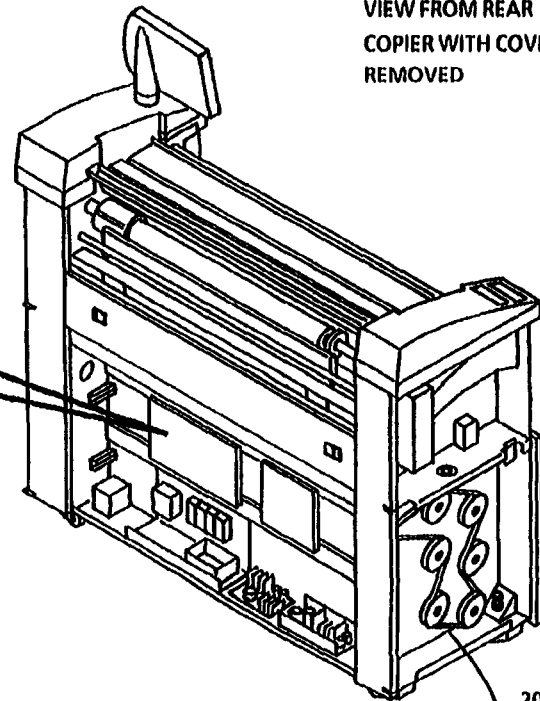
2068

**NOTES**

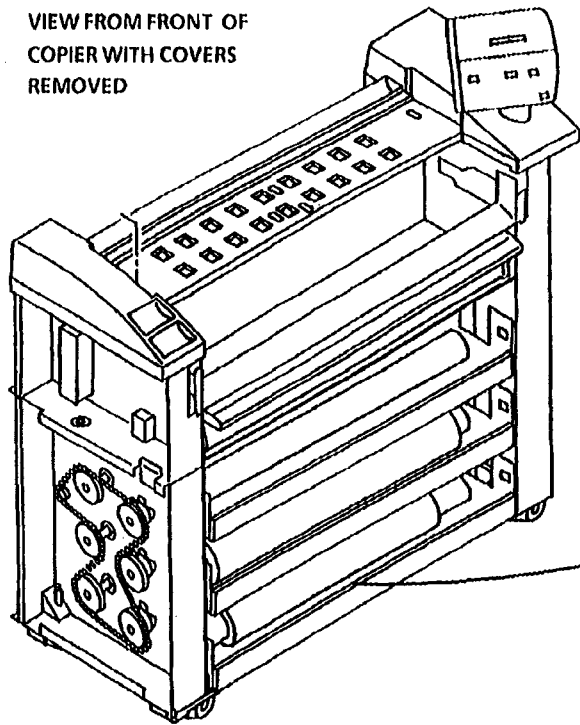




VIEW FROM REAR OF  
COPIER WITH COVERS  
REMOVED



VIEW FROM FRONT OF  
COPIER WITH COVERS  
REMOVED



MEDIA HEATER (HR1) IS  
LOCATED UNDER THE ROLL 3  
(BOTTOM) SUPPLY DRAWER

**1** NOTE: On some copiers  
the designators F1 & F2  
are reversed. F2 is the  
bottom fuse.

## OF 2 Document Does Not Scan RAP

(9/4/92)

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

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

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

### Initial Actions

- Ensure that the document is in good condition.
- Check that the Upper Document Handler is positioned correctly.
- Check the document path for obstructions and the top and bottom platens for damage and for correct installation.
- Check that the actuators of the Document Sensors are not binding or damaged.

- Check each Document Sensor to ensure that the O Rings are positioned correctly.
- Ensure that the connector for each of the following Document Sensors are not damaged and are seated correctly:
  - Front Document Sensor (Q22 P1)
  - Rear Document Sensor (Q26 P1)
- Ensure that the Control PWB connector (A3 P304) is not damaged and is seated correctly.

### Procedure

Remove the Upper Document Handler.

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

Manually activate the Front Document Sensor.

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

**A B**

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

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

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

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

Manually activate the Rear Document Sensor.

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

**Y N**

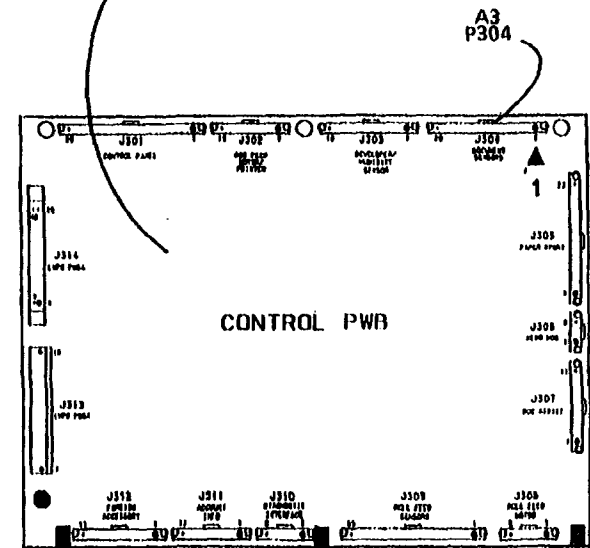
Go to FLAG 3 and check the wiring between the Rear Document Sensor and the Control PWB for an open circuit or a short circuit to ground.

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

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

Go to the 5.1 Document Handler RAP.

**CONTROL PWB (A3)**



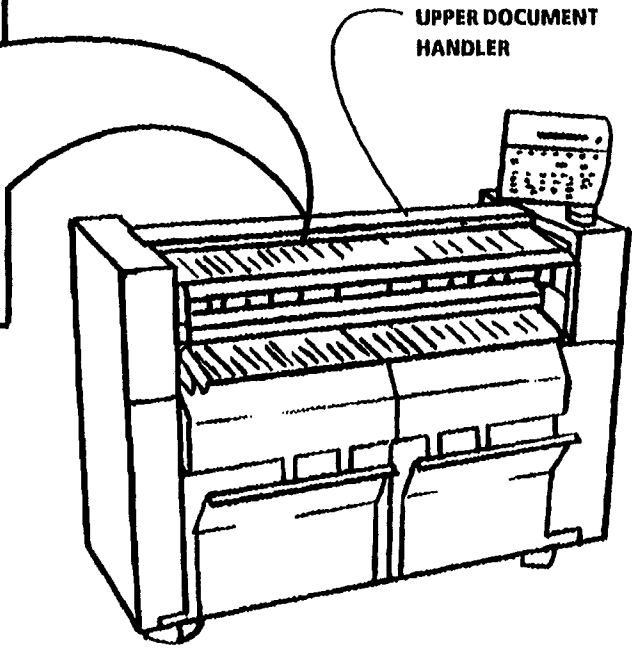
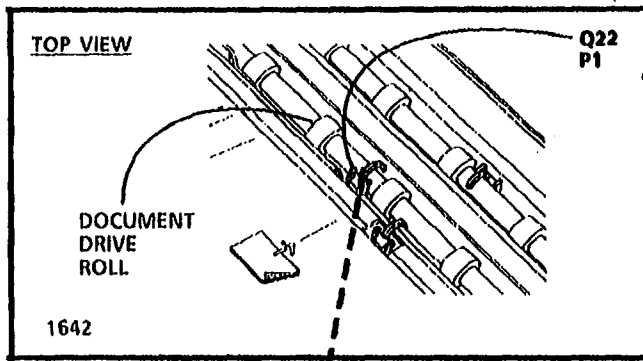
1590

NOTES

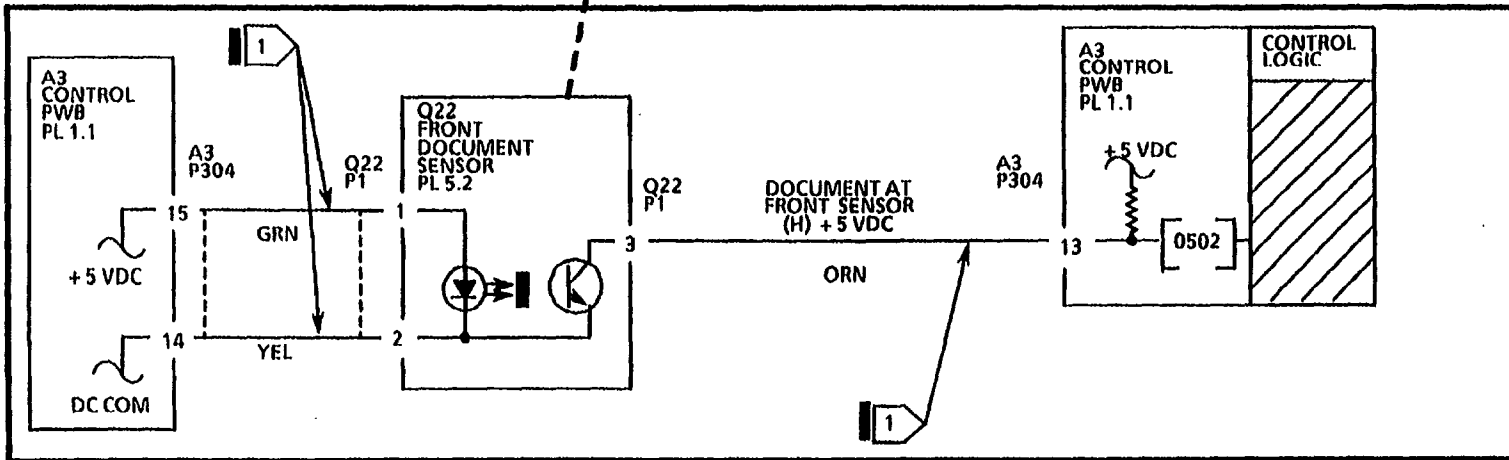
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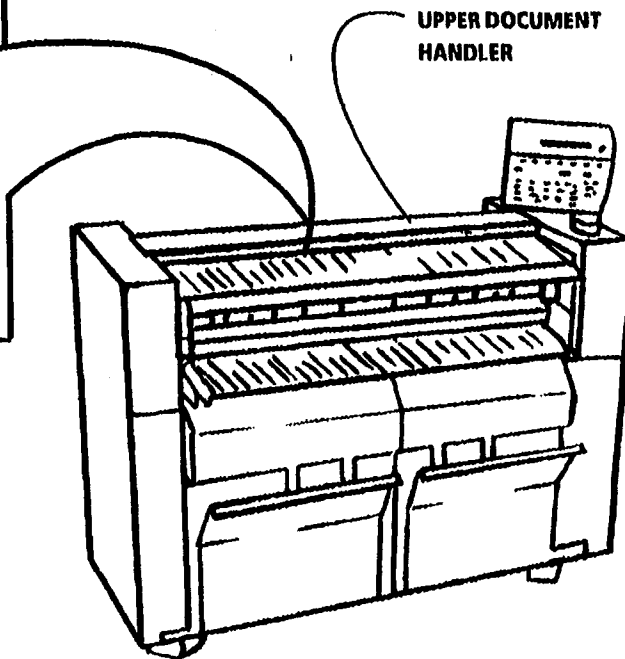
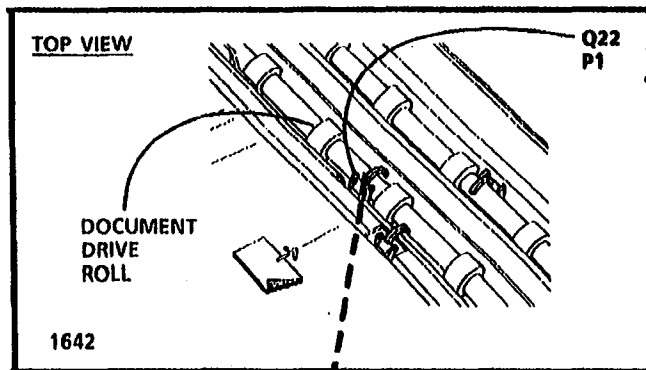
4/96  
2-206

3050

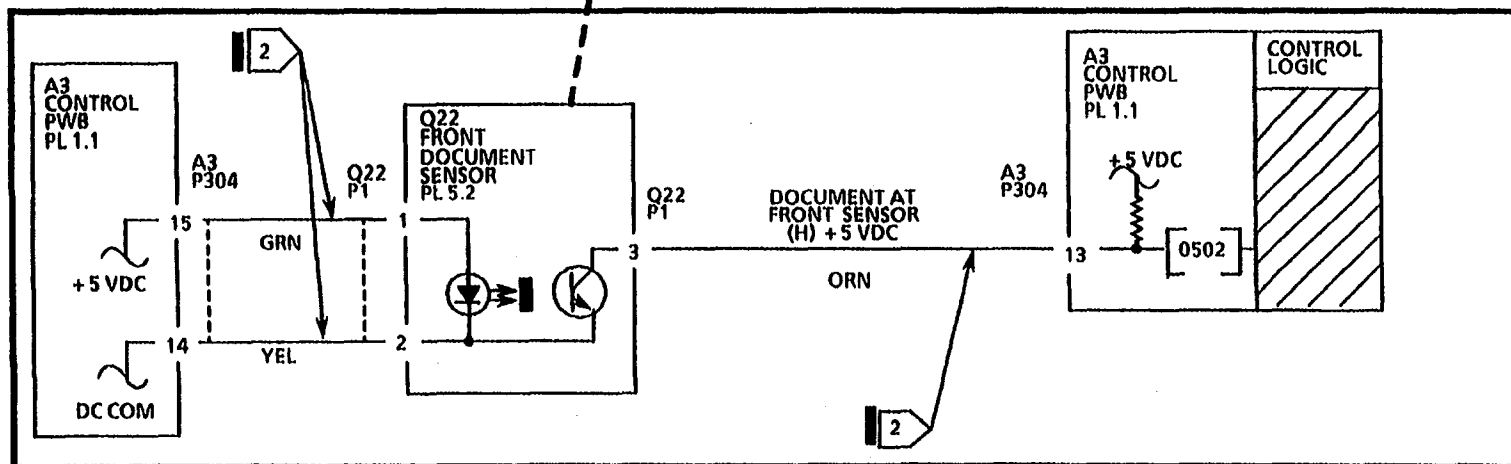


2066





2066



## OF 3 Media Does Not Feed RAP

(9/22/92)

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

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

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

### Initial Actions

Follow these actions for Roll Media feed problems:

- Ensure that the roll media is in good condition and is loaded correctly.
- Pull out each of the 3 Roll Supply Draws. Check the Feed Drive Rolls, Feed Pinch Rolls, and Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check the roll media feed path for obstructions.

- Check that each of the 3 Upper Feed Baffles that house the Feed Pinch Rolls are latched in the correct position.
- Check the Roll Drive Motor, drive chain and sprockets for binding by rotating the Feed Drive Sprocket manually. The sprocket will drive the Media Drive Chain, which will rotate the motor and sprockets.
- Check the Rewind Gears, Roll Arbors, and Arbor Support Rolls for binding or damage.
- Check the connectors for the Roll Drive Motor (A7 P2), Drive Motor PWB (A7 P1) and Control PWB (A3 P308) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the customer is running media that meets the type and size specification.

Follow these actions for Cut Sheet feed problems:

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

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

### Procedure

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

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

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

Y N

A B

**A B**

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

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

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

If the copier exhibits Roll Media feed problems go to one of the following RAPs:

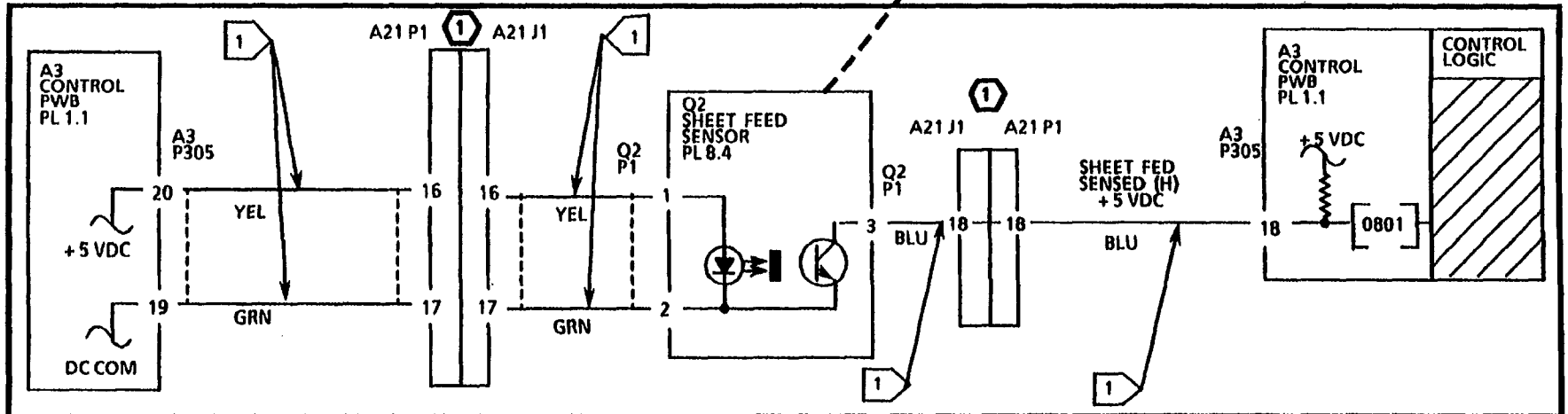
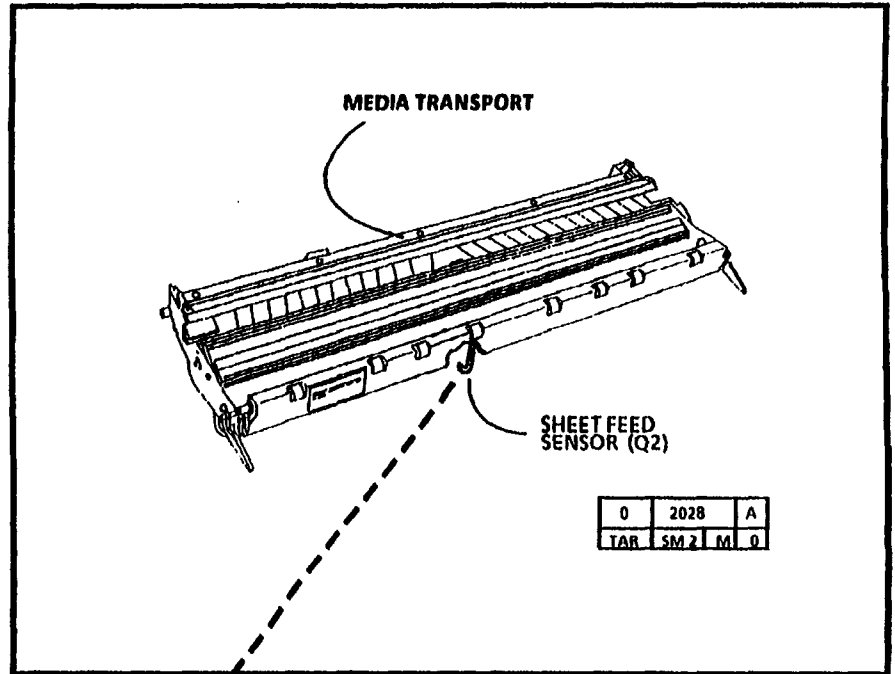
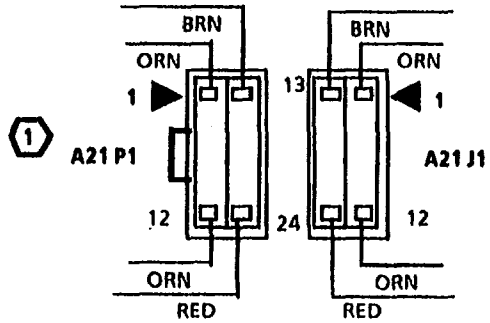
- 7.1 Roll 1 Feed RAP
- 7.2 Roll 2 Feed RAP
- 7.3 Roll 3 Feed RAP

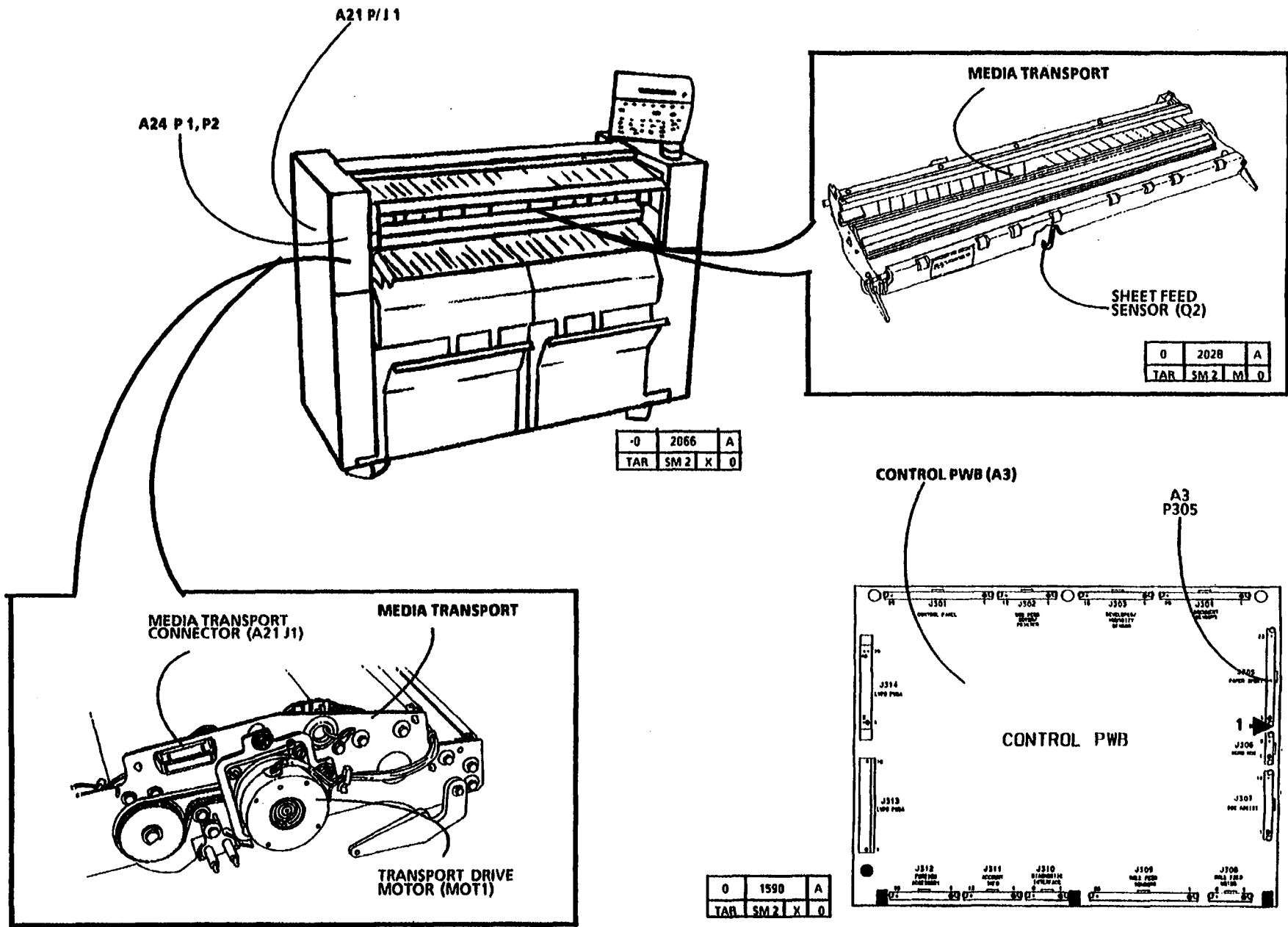
If the copier exhibits Cut Sheet Media feed problems go to the 8.1 Media Transport RAP.



NOTES:

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





## OF 4 Component Failure with No Status Code RAP

(2/11/93)

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

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

### Initial Actions

- If the Document will not scan, go to the **OF2 Document Does Not Scan RAP**.
- If the Media will not feed, go to the **OF3 Media Does Not Feed RAP**.
- If the Control Panel displays the message, "REFEED ROLL 1 or 2 or 3", go to one of the following RAPs:
  - Refeed Roll 1 RAP,
  - Refeed Roll 2 RAP,
  - Refeed Roll 3 RAP
- If the Control Panel displays the message, "NVM Fault Call for Assistance", go to the **NVM Fault Call for Assistance RAP**.
- If the Control Panel displays only the number 2, 3, 4, 5, 6 or 7, go to the **2.2 POST 2, 3, 4, 5, 6 and 7 RAP**.

### Procedure

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

TABLE 1

COMPONENT	GO TO
Drum/ Developer Drive Motor (MOT21)	4.1 Drum/ Developer Drive Motor (W/O TagMOD 28) RAP
Fuser Drive Motor (MOT22)	4.2 Fuser Drive Motor(W/O TagMOD 28) RAP
Cleaner Blade Solenoid (SOL3)	CQ 15 Residual Image (Section 3)
Media Transport Drive Motor (MOT1)	8.1 Media Transport RAP
Roll Drive Motor (MOT1)	7.1 Roll 1 Feed RAP
Document Drive Motor (MOT23)	5.1 Document Handler RAP
Cooling Fans	1.3 Cooling Fans RAP
Toner Cartridge Drive Motor (M4)	J2.02 Toner Cartridge Home Position RAP
Cutter Drive Motor (MOT1)	C0.01 Media Cut RAP
Main DriveMotor	4.3 Main Drive Motor W/O Tag /MOD 28 RAP

**NOTES**

# Copier is Disabled by the Key Lock (Key Lock switch Open) RAP (W/O Tag/MOD 25)

(3/12/93)

This RAP is used to locate problems with the Key Lock Switch and associated circuitry. The following message will be displayed: Copier is Disabled by the KeyLock.

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

## Initial Actions

- Ensure that Connectors A2P216 on the Low Voltage Power Supply (A2) and S23 J1/P1 are correctly installed and fully seated.

## Procedure

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

There is + 5 VDC at A2 P/J 216 Pin 15 with the Key Switch open (in the off Position).

Y N

Replace the LVPS Driver PWB (A2).

A2 P/J 216 Pin 15 goes from + 5 VDC to less 1 VDC when the Key Switch is turned on.

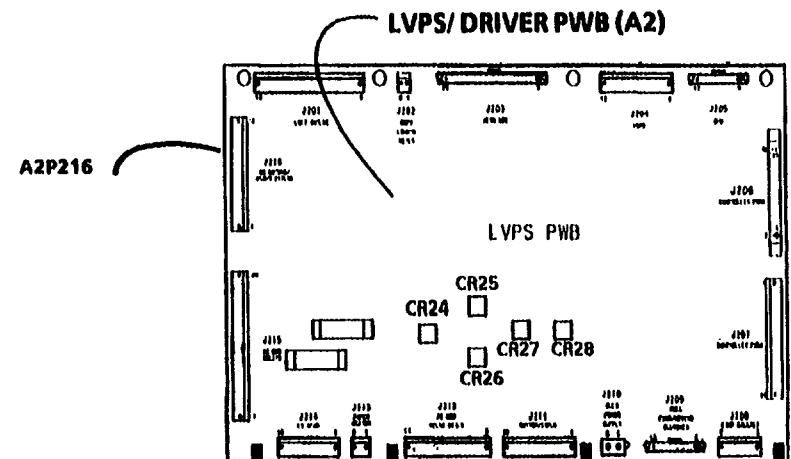
Y N

Go to FLAG 1 and check the wiring for an open circuit. If there is no open circuit replace the Key Switch (S23). If the problem persists, replace the LVPS Driver PWB (A2).

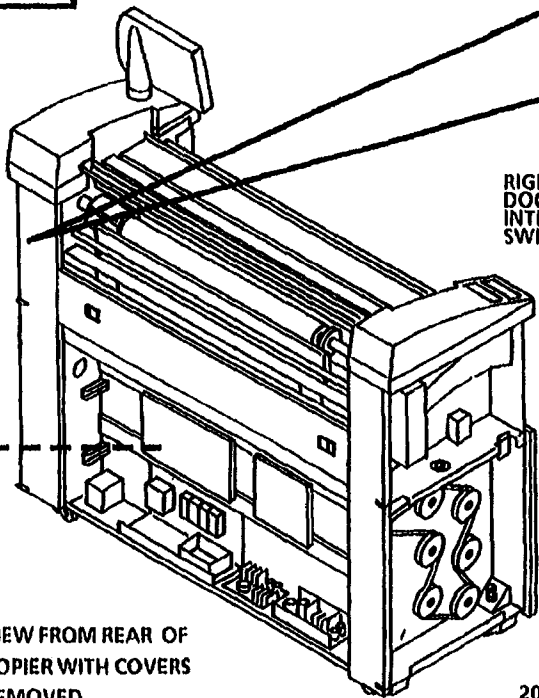
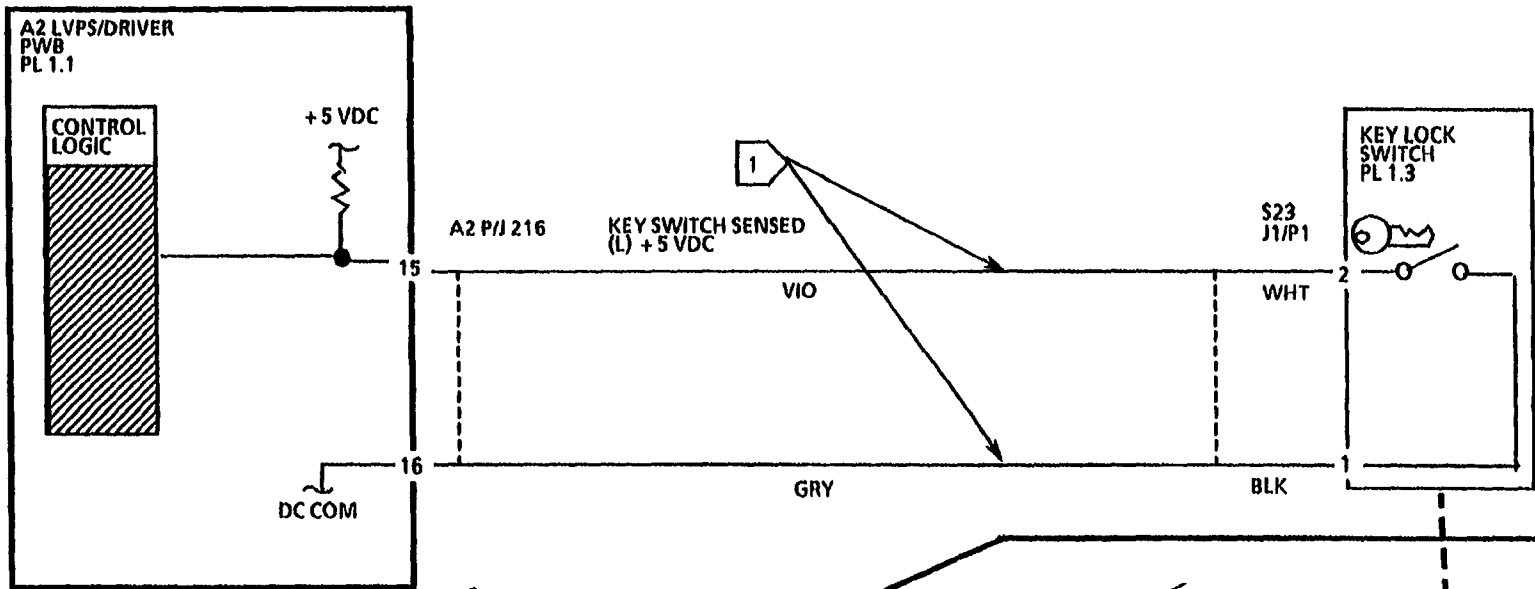
A

A

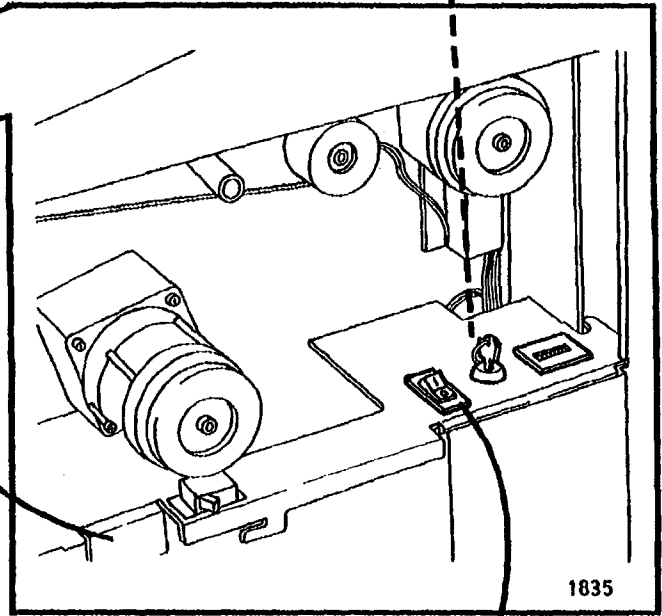
If the problem persists, replace the Controller PWB (A3).



1591B



RIGHT SIDE  
DOOR  
INTERLOCK  
SWITCH (S21)



MAIN POWER  
SWITCH

## OF 5 Document Handling Problem RAP

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

The problem may occur if there is a problem with poor quality documents, the platen, the document sensors, mechanical components, or the antistatic brushes.

### Initial Actions

- Ensure that the document is in good condition. If the Document is worn, torn, fragile, or folded, the document carrier should be used.
- Check that the Upper Document Handler is positioned correctly.
- Check the document path for obstructions and the top and bottom platens for damage and for correct installation.
- If the Platen is contaminated or a static condition exists, clean the Platen with antistatic cleaner.
- If the problem occurs with Rolled Documents, ensure that the customer is using the document carrier.
- If the problem occurs with rigid documents, fragile documents, and documents in Document Carriers, ensure that the customer is using the Sets Mode.

### Diagnostic Procedure

1. Prepare to make a copy. Choose a Document that is similar to the customer's Document.
2. Place Document on the Document Feed Shelf and feed the Document into the Document Handler.
3. Observe the operation of the Document in order to isolate the problem.
4. If you isolate a particular Document Handling problem, refer to that problem in the Problem list and perform the indicated checks and corrective actions.
5. If you can not isolate a particular problem, refer to the Problem list and perform all the Checks and the Corrective Action in the sequence provided.

### Problem

The Document does not Scan and Rescan correctly.

### Perform the Following Checks and Corrective Actions:

1. An excessive static condition exists with the Document Handler. Check the Document Static Brushes for contamination. Clean and/ or replace as required, refer to (PL 5.2).
2. The Platen is not positioned or seated correctly. Ensure that the Platen is secured by the securing hardware, refer to (PL 5.2).
3. The Document Sensors are not actuating or deactuating correctly.
  - Ensure that the Document Sensors are in the correct location and are secured correctly. Reseat the Sensors and secure as required, refer to (PL 5.2).
  - Ensure that (2) "O" Rings are positioned around each actuator, and the actuators operate correctly, refer to (PL 5.2).
4. The Document Feed Shelf is not positioned correctly or not secured. Reposition the Shelf and secure the Shelf with the retaining hardware, refer to (PL 14.6).

5. Check the platen for excessive wear. Replace the Platen as required, refer to (PL 5.1).
6. Ensure that the Upper (White) Platen is seated correctly, not damaged, or bound. Repair the Platen as required, refer to (PL 5.1).
8. Check the Document Drive Rolls for excessive wear or contamination. Clean and/ or replace the Rolls as required, refer to (PL 5.2).
9. Check the Document Handler right and left End Caps for damage. Ensure that the Locating Tabs are not broken. Replace the Caps as required, refer to (PL 5.1).
10. The Document Pinch Rolls may be dirty or contaminated. Clean the Rolls as required, refer to (PL 5.1).
11. The Pinch Rolls Load Springs, Roll Yokes or associated parts may be worn, broken or not positioned correctly. Repair or replace the components as required, refer to Figure 1 and (PL 5.1).
12. Check the Document Drive Belts, Pulleys, and Bearings for wear or contamination. Clean or replace the components as required, refer to (PL 5.2).
13. Check the Document Stop Position (ADJ 5.2).

**NOTE:** *The Upper Document Handler Assembly contains (9) Idler Roll Assemblies. Each assembly contains (2) Load Springs. Each Spring has a notch, refer to Figure 3. Each pair of springs must have the notches oriented so that, the notches face the same direction.*

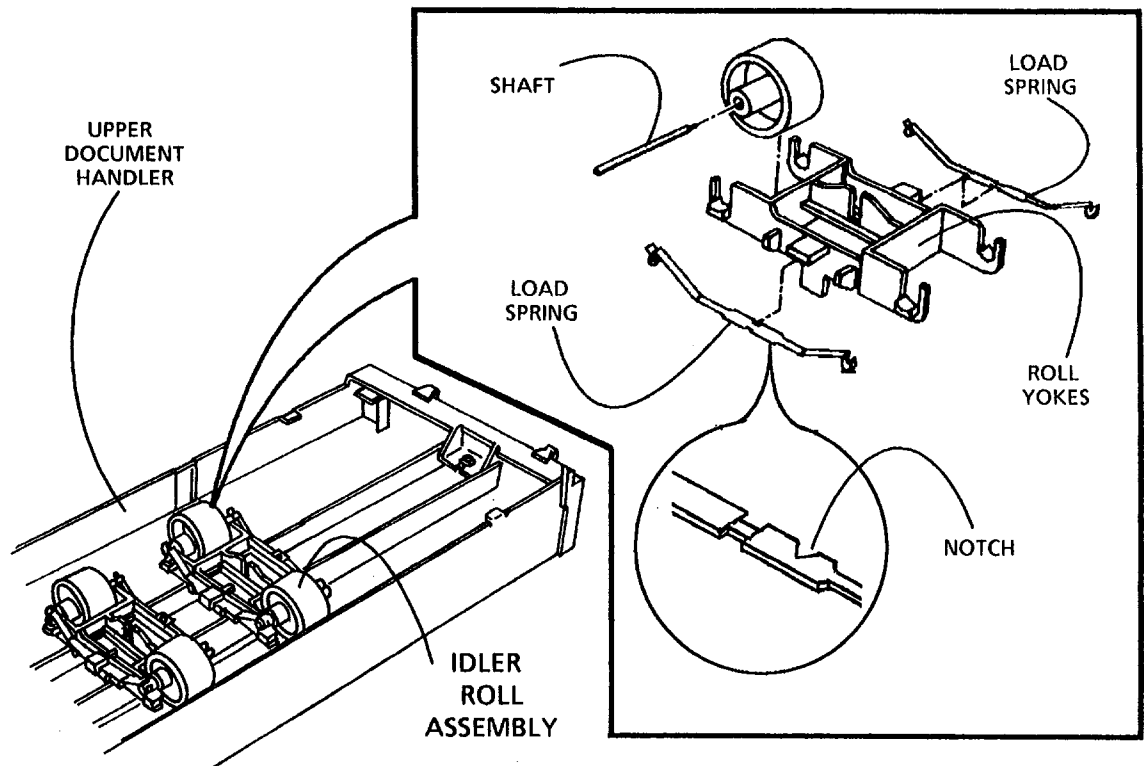


Figure 1. Location of Load Spring Notch

W2719



**F G**

The wires have continuity.

**Y N**

Repair the wires

Replace the LVPS/ Driver PWB (A2)

Enter the diagnostic code [10.09] to turn on the Fuser Power Relay (K2).

CR25 on the LVPS/ Driver PWB is lit.

**Y N**

Replace the LVPS/ Driver PWB.

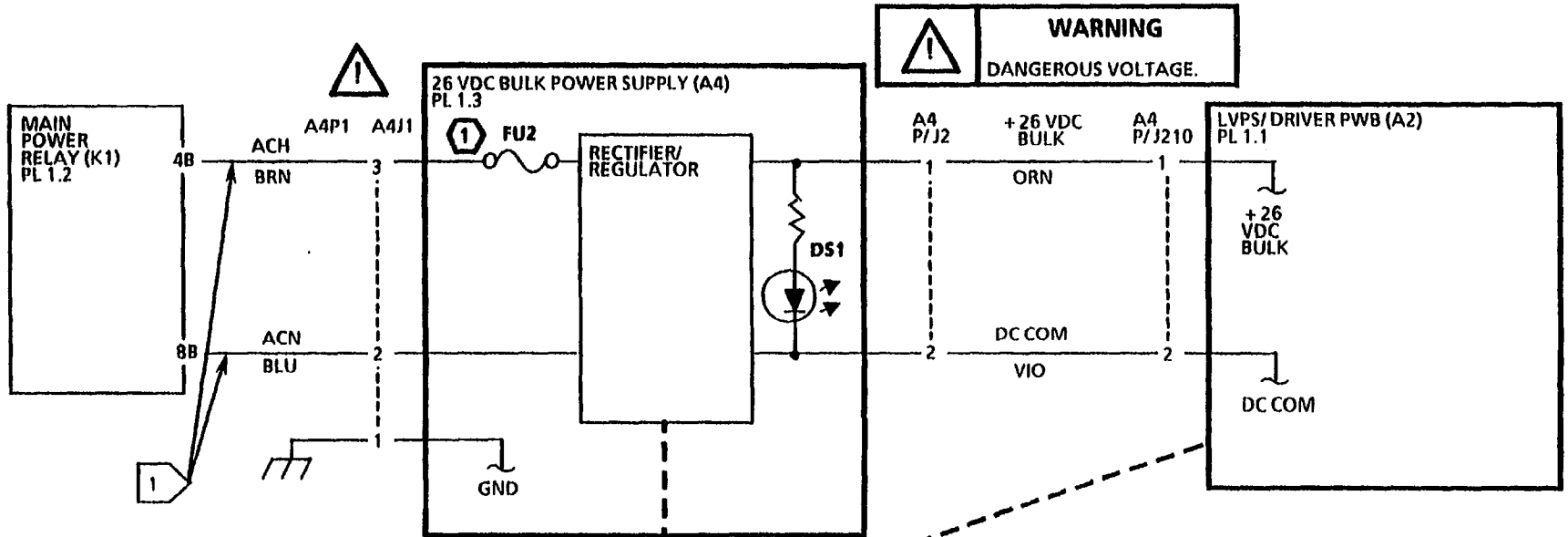
Go to FLAG 3 and check that 26 VDC is present.

26 VDC is present.

**Y N**

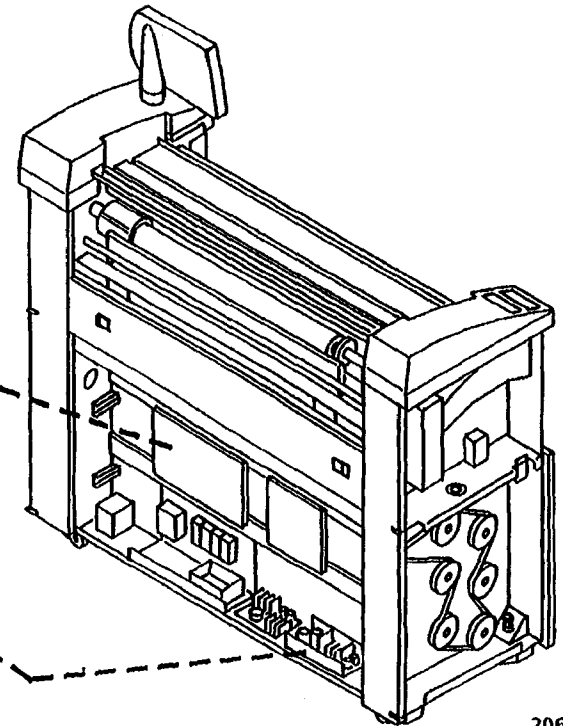
Repair the open circuit in the wires.

Replace the Fuser Power Relay (K2).



**NOTE:**

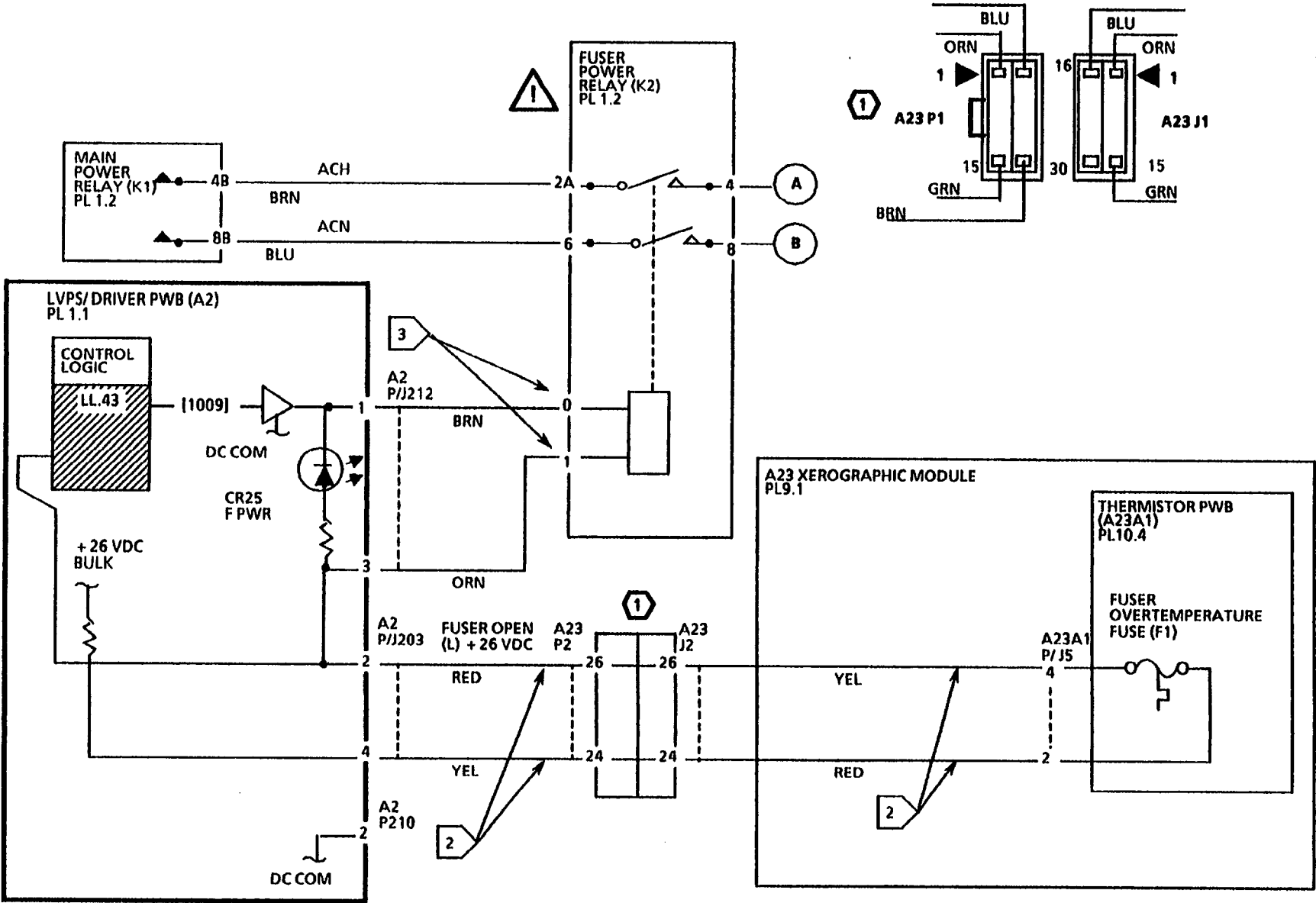
**1** DO NOT REPLACE FUSE FU2. IF FU2 IS OPEN, REPLACE THE 26 VDC BULK POWER SUPPLY (A4).




2068

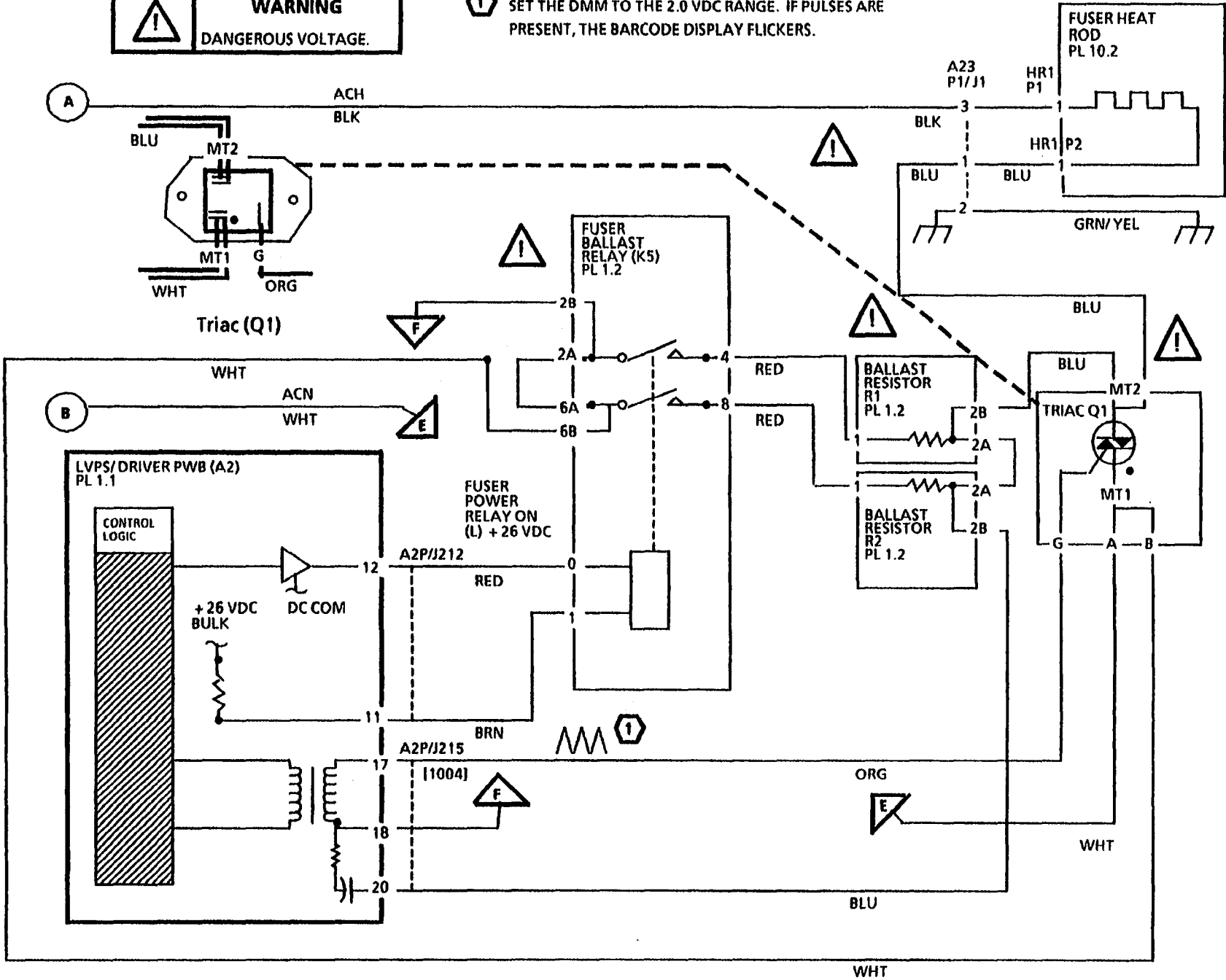
**WARNING**  
DANGEROUS VOLTAGE.

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



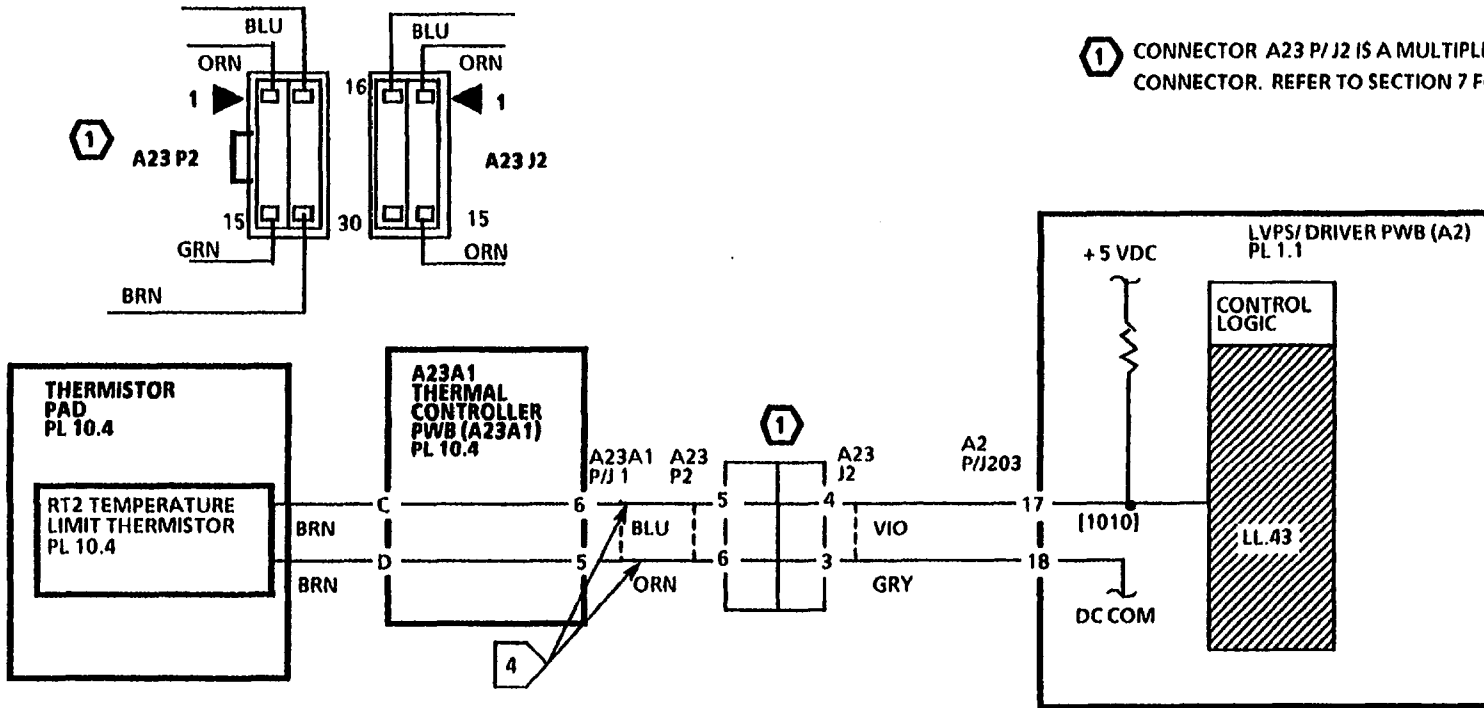
 **WARNING**  
DANGEROUS VOLTAGE.

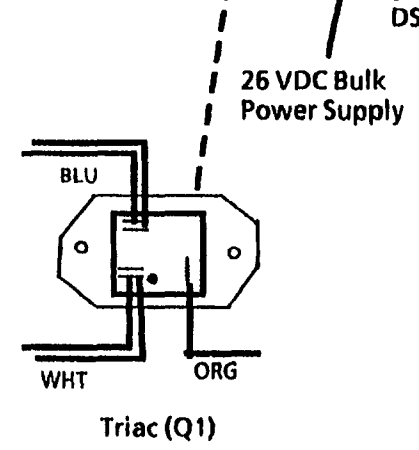
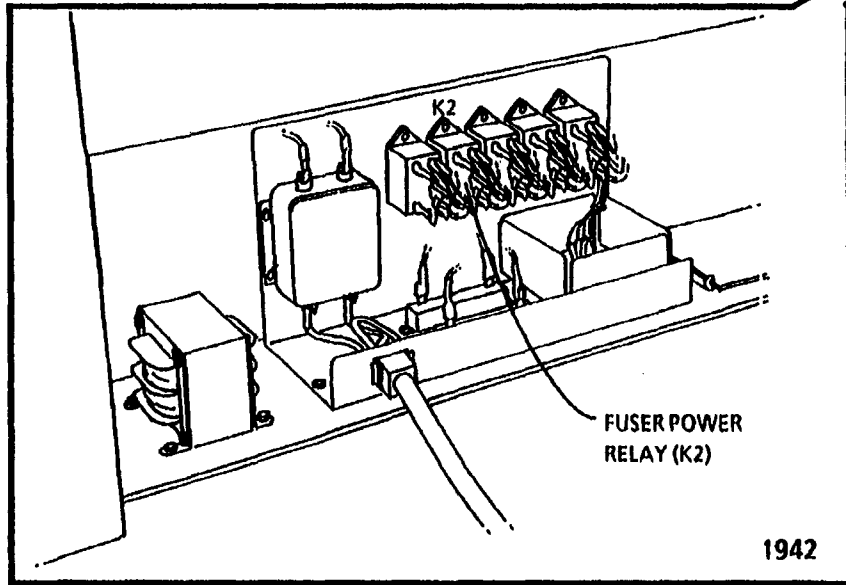
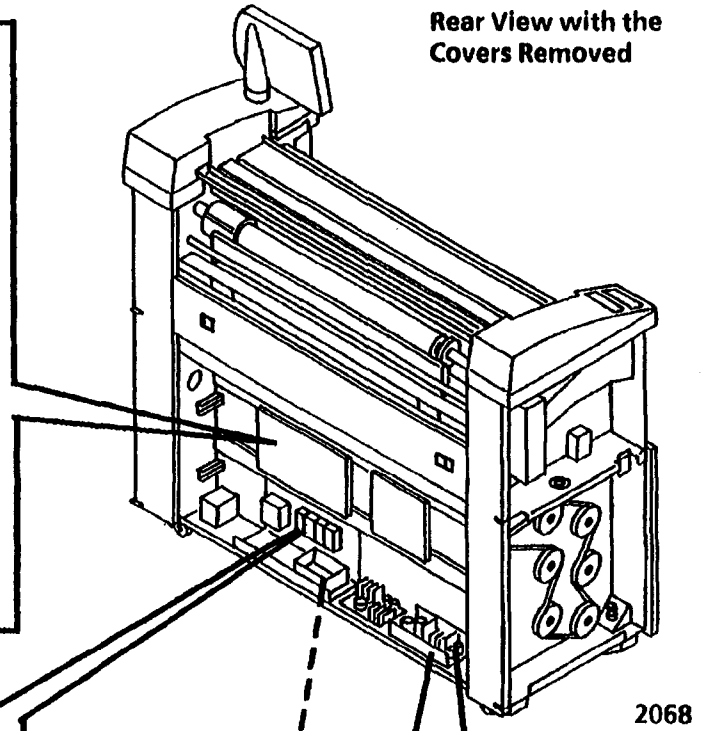
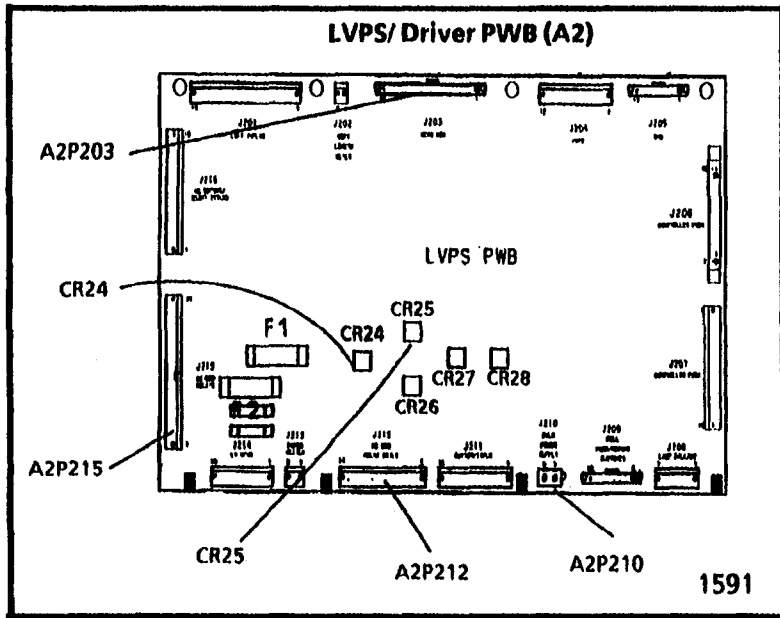
 SET THE DMM TO THE 2.0 VDC RANGE. IF PULSES ARE PRESENT, THE BARCODE DISPLAY FLICKERS.

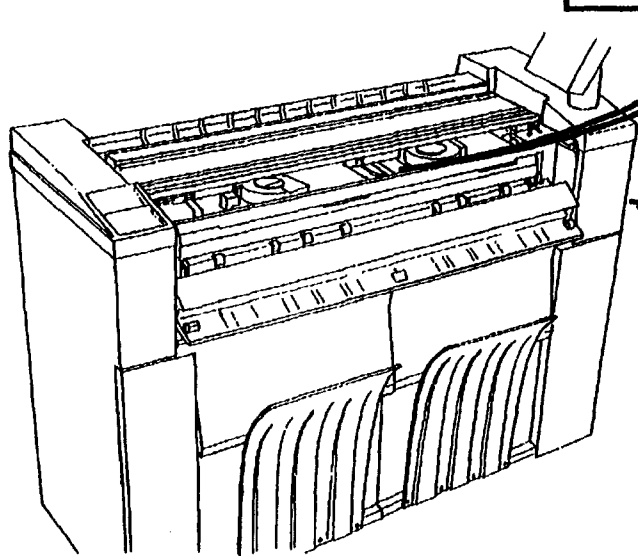
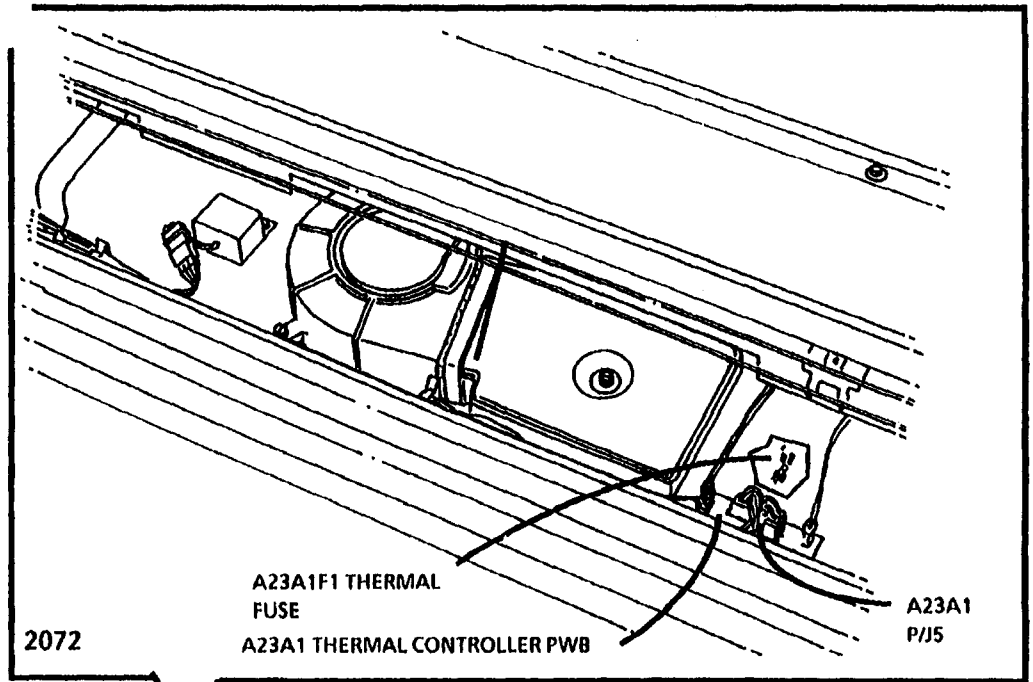


NOTES:

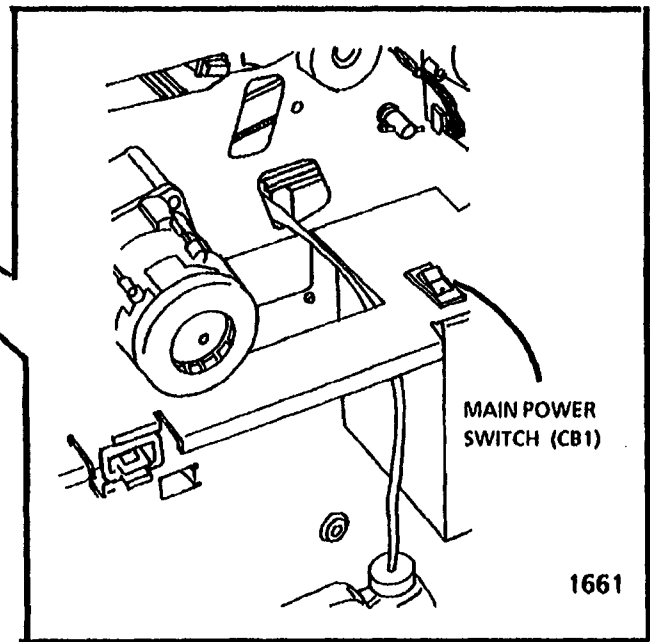
① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.







1690



MAIN POWER SWITCH (CB1)

1661

## LL.44 Fuser Too Hot RAP (6/1/91)

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

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

### Initial Actions

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



**WARNING**  
Dangerous Voltage.

### Procedure

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

The resistance is infinite.

Y N

A B

A B

Replace the Triac. Reconnect the wires.

Reconnect the wires. Disconnect A23A1P1 on the Thermal Controller PWB. Connect the Power Cord and switch on the copier. Set the DMM to read 5 VDC. Connect the (+) lead to A23A1P1-6. Connect the (-) lead to A23A2P1-5.

5 VDC is present.

Y N

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

5 VDC is present.

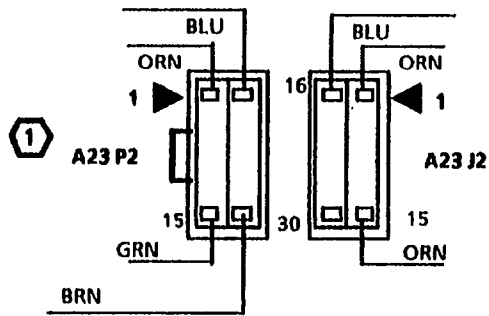
Y N

Replace the LVPS/Driver PWB (A2).

Repair the wires.

Replace the Thermal Controller PWB (A23A1).

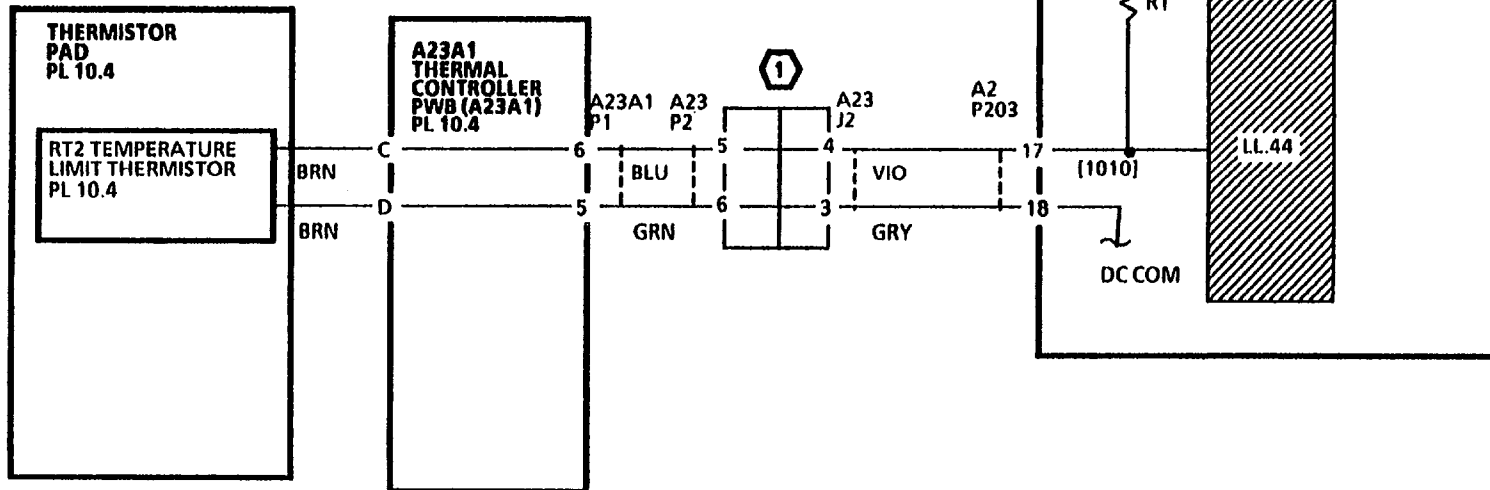


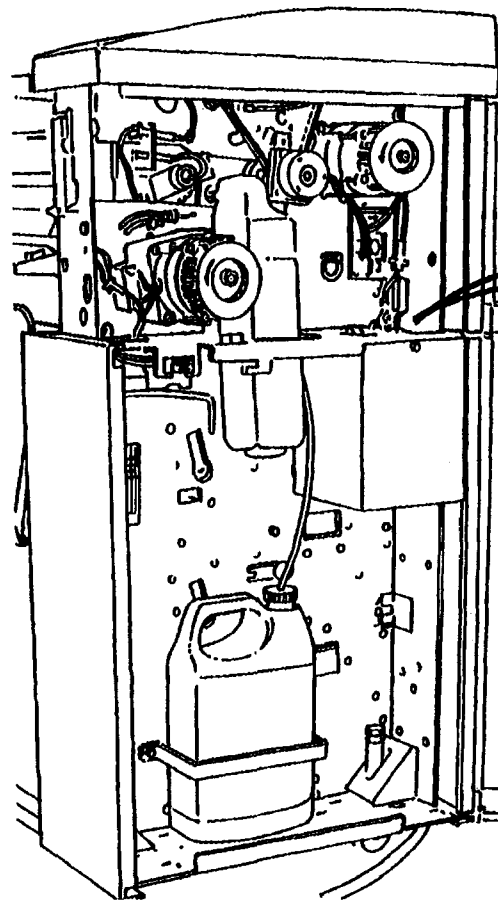


**WARNING**  
DANGEROUS VOLTAGE.

NOTES:

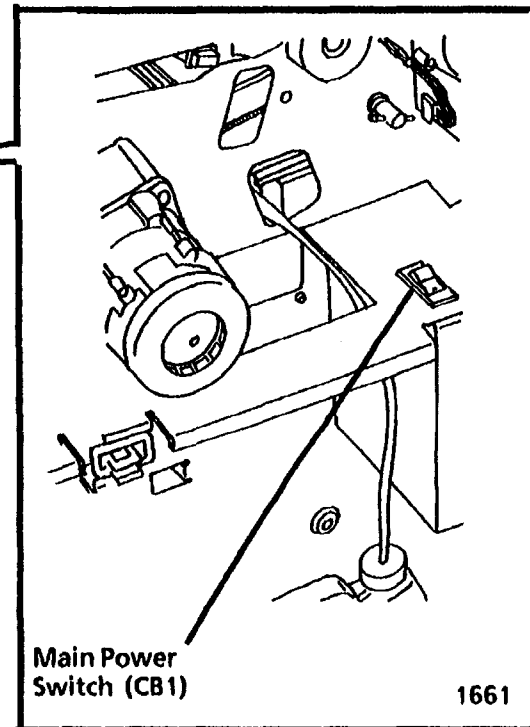
① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.





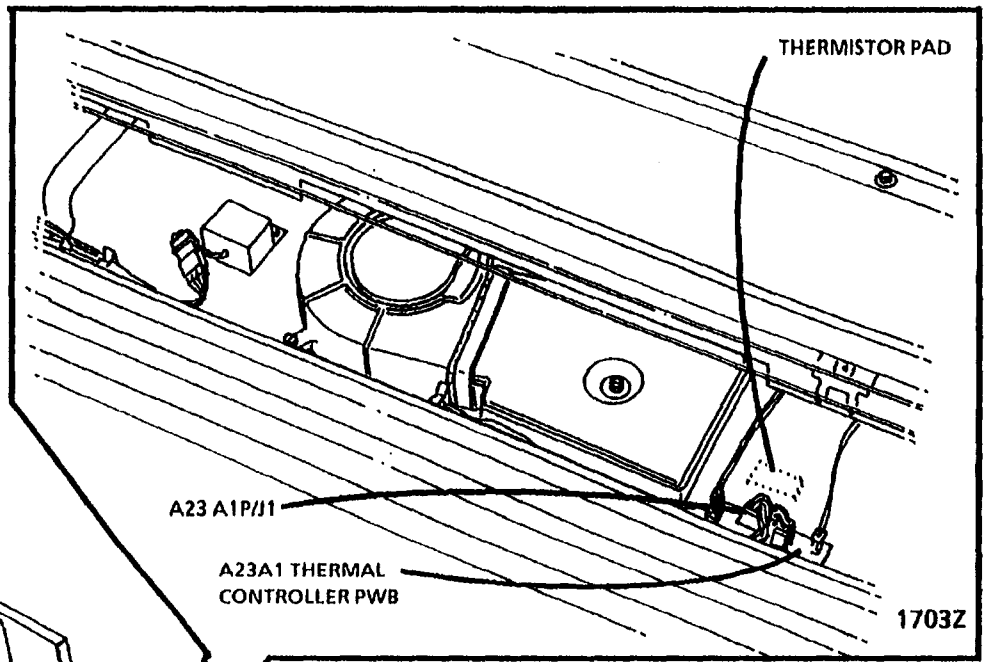
Right Side View

01711



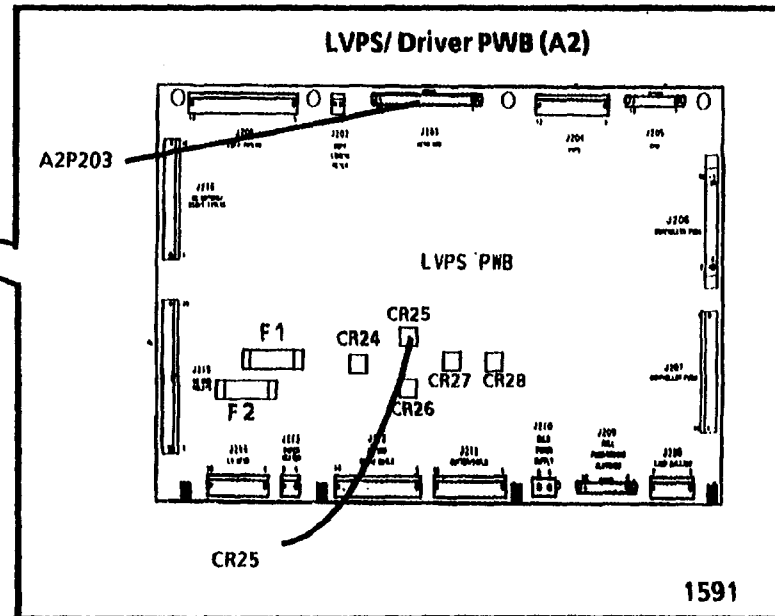
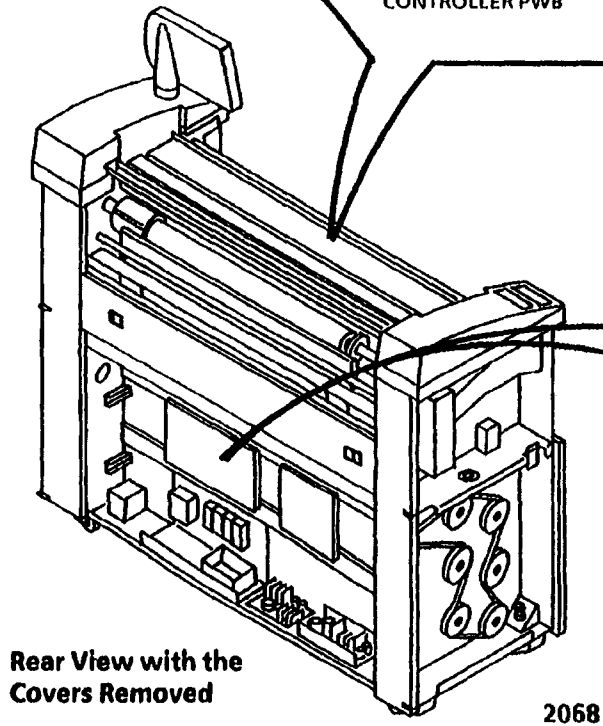
Main Power Switch (CB1)

1661

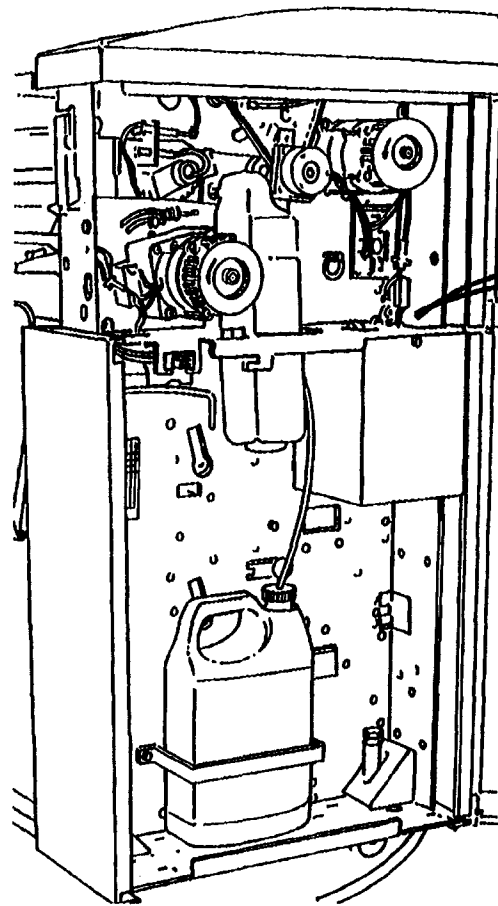


NOTES:

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

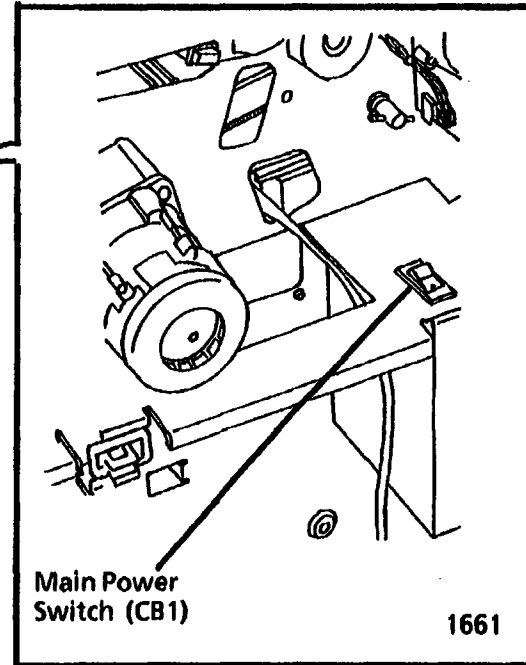


**NOTES**



Right Side View

01711



Main Power  
Switch (CB1)

1661

## LL.50 Bulk Power Supply RAP

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

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

### Initial Actions



**WARNING**  
Dangerous Voltage.

- Ensure that Connectors A4P1 and A4P2 on the 26 VDC Bulk Power Supply are correctly installed and fully seated.
- Ensure that Fuse FU2 on the 26 VDC Bulk Power Supply has continuity. If not, the power supply has an internal fault. Replace the power supply.
- Before troubleshooting, ensure that all AC Interlocks are closed. An open interlock will cause the Main Power relay to open. Check the Document Handler Left End Cap for damage that might cause the Document Handler Interlock to be partially actuated.

### Procedure

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

Y N

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

Y N

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

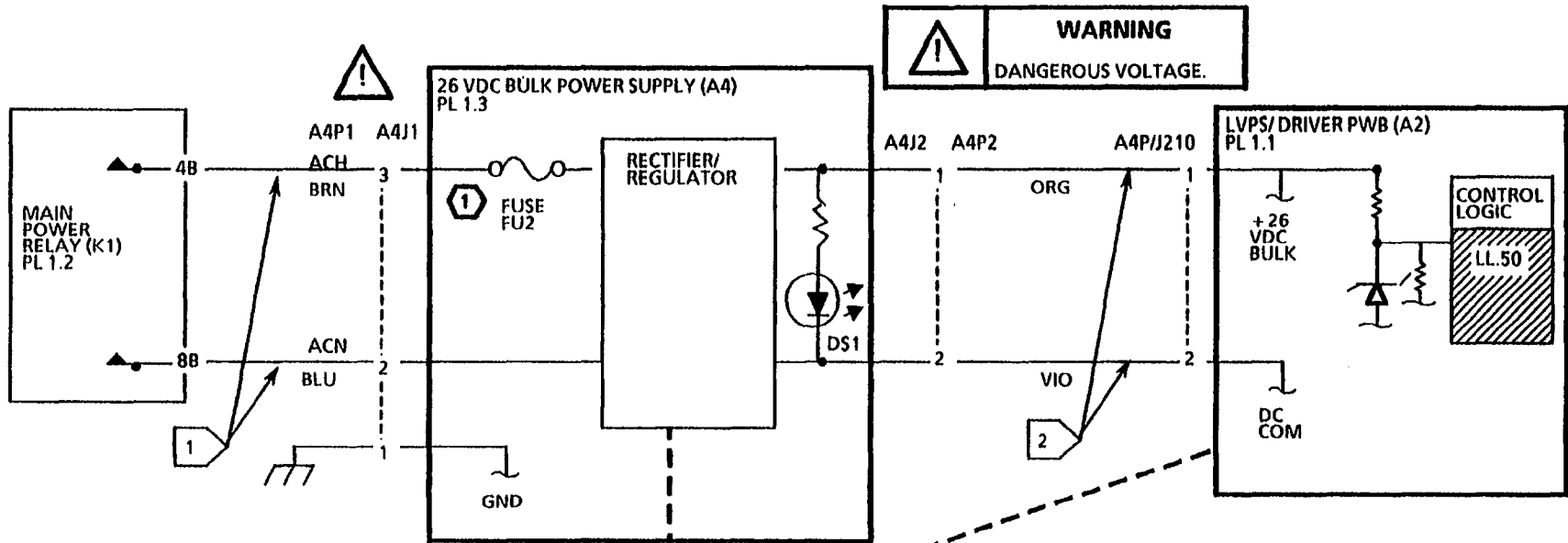
There is 26 VDC at A4P/J2 Pins 1 and 2.

Y N

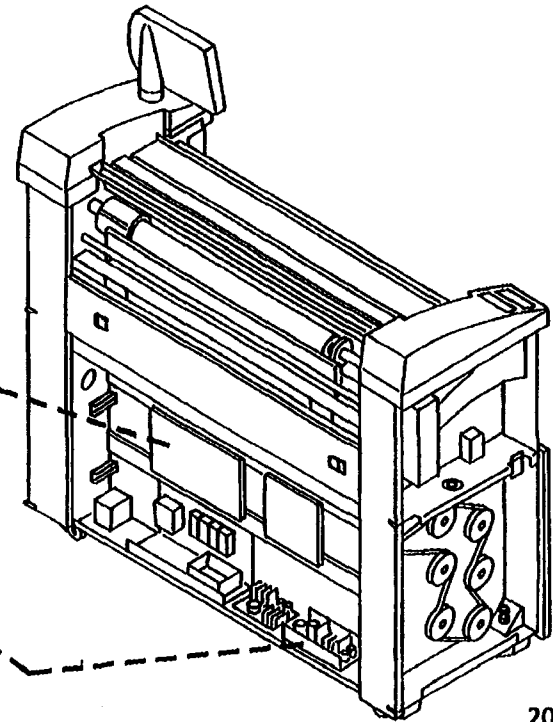
Replace the 26 VDC Bulk Power Supply.

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

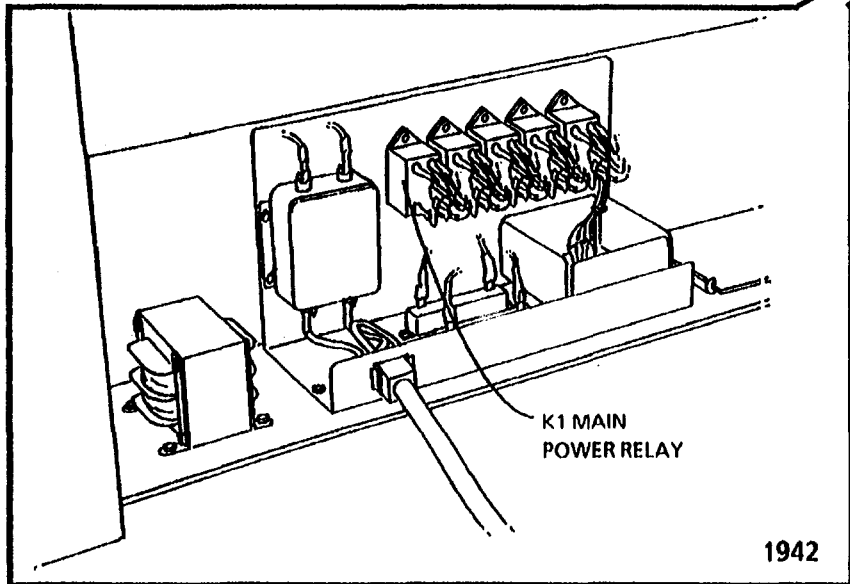
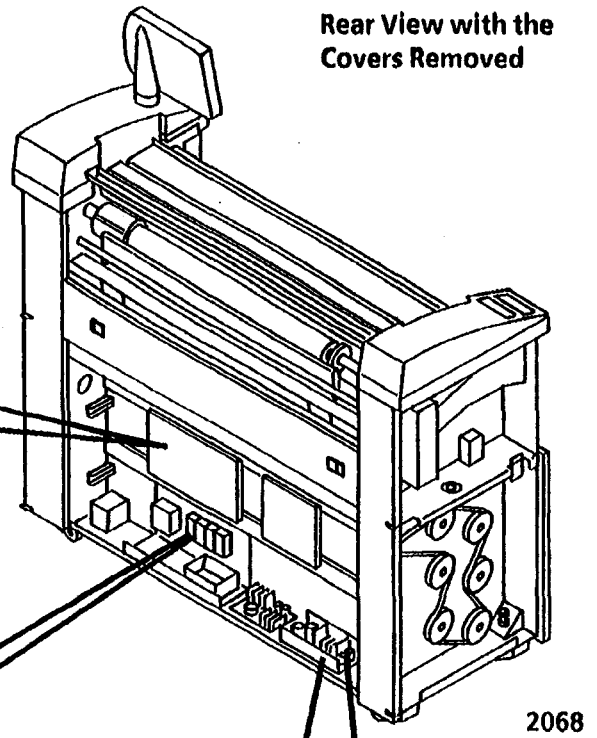
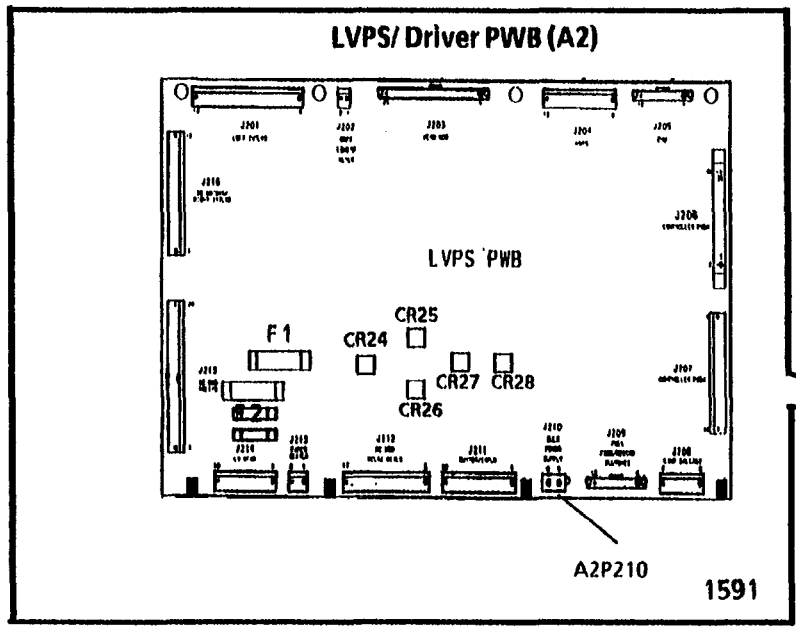
Replace the LVPS/ Driver PWB (A2). If the problem persists replace the Controller PWB.



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



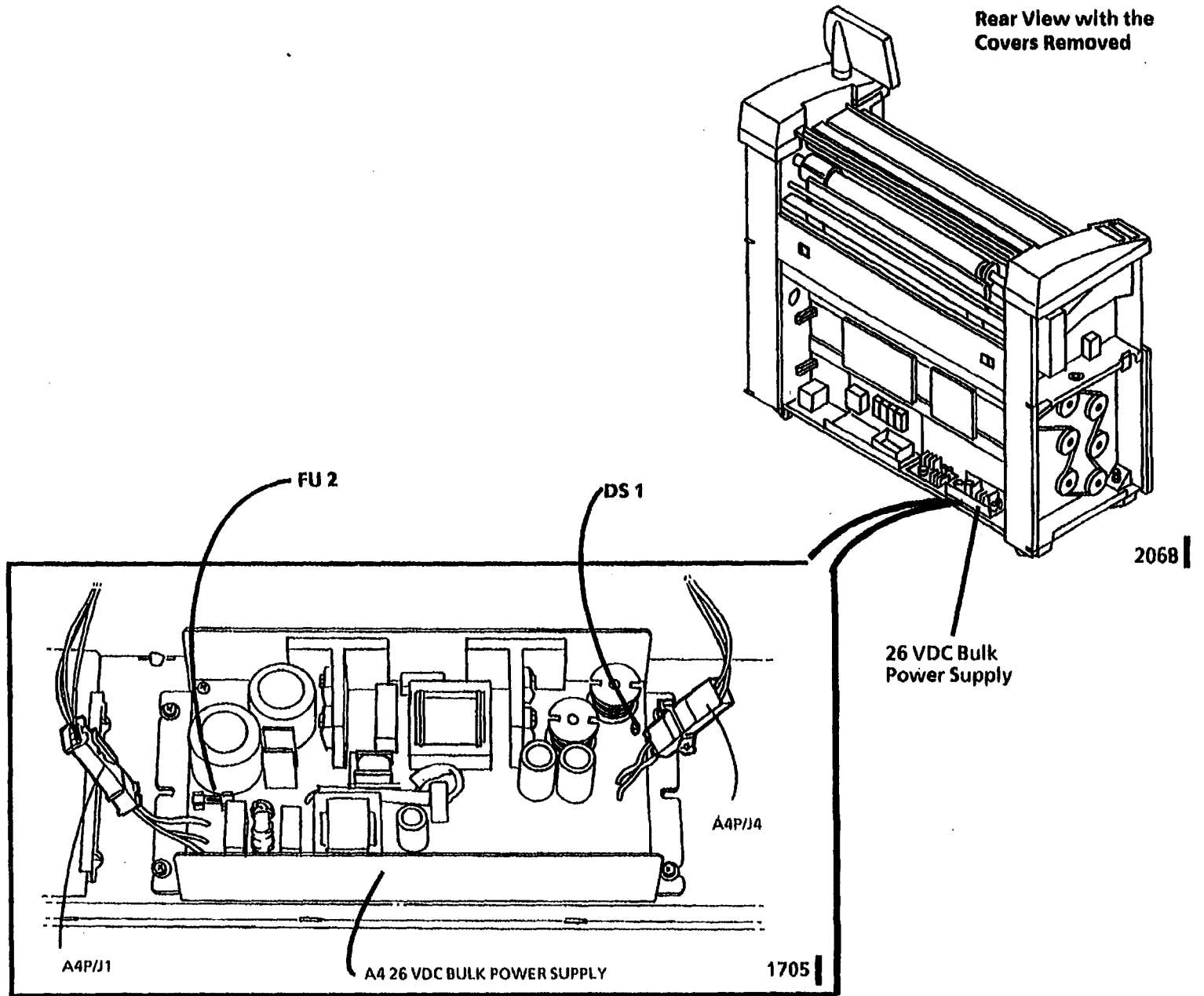
2068



DS1  
26 VDC Bulk Power Supply



Rear View with the  
Covers Removed



## LL.90 Excessive Toner Fault RAP

the status code LL.90 is displayed when the logic detects that the toner concentration is significantly greater than the control point value.

the toner control system is designed to maintain the toner concentration within an acceptable operating range. the control point operating range is from 5.3 vdc to 6.5 vdc. the toner sensor continuously senses the toner concentration. a change in the toner concentration results in a corresponding change of the sensor signal. as the toner concentration increases, the toner sensor signal voltage decreases. the logic monitors the sensor signal.

LL.90 Indicates that the logic detected that the toner concentration increased greater than the allowable limit.

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

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

### Initial Actions

- A Check the Service Log to determine the amount of copies run with the Developer Material. Replace the Developer Material, if greater than 40K feet, (11K m) of media has been run. Clean the Pressure Equalizing Tubes with a vacuum cleaner in order to remove toner from inside the tubes. Clean the Augers and Magnetic Roll. Record the Developer Batch Number in the Service Log.
- B Check the connectors for the Toner Sensor (Q1) Q1 P/ J1, A22 P/ J1 and the Control PWB (A3) A3 P303 for damage. Ensure that the connectors are seated correctly.
- C Ensure that the Toner Cartridge is not damaged and that the seal is secured to the Cartridge in the correct location.
- D Ensure that the Developer Housing Auger and Drive Gears are not damaged and are installed correctly, refer to Figure 1, on one of the following pages.
- E Examine the Developer Housing and check for a large amount of toner in the area of the Toner Dispenser.
- F Ensure that the correct amount of developer material, one charge (7.0 lbs, 3.3 kg) is installed into the Developer Housing.
- G. Ensure that the copier is level, (ADJ 14.1).

### Procedure

Enter diagnostic code [0922] then press Yes, in order to enable the copier to run copies with the copier in an LL fault condition. Enter the code [0361] in order to exit the diagnostics mode. Make (3) copies of Test Pattern 82E5980 in the Normal copy mode.

The LL.90 Code is displayed as the copies are being run.

Y N

Complete the service call.

Use the last copy to check the image density.

The copy density of the 1.0 Solid Square in the center of the Test Pattern is equal to or less than the 1.20 Density Square on the Output Reference 82P520.

Y N

Perform Decrease the Image Density Adjustment (ADJ 9.4). If the density can not be decreased, replace the Developer Material and perform the ADJ 9.2 Electrostatic Series and the ADJ 9.4 to adjust the image density.

Enter the code [0921-4] in order to display the Control Point and Sensor Reading Voltages.

There is + 15 VDC at connector Q1 P/ J1 Pin 2.

Y N

Go to FLAG 1 and check for an open or short circuit to ground in the wires. If there is no open or short circuit, replace the Control PWB (A3).

A

A

There is between + 5.3 and 6.5 VDC at connector A3 P303 Pin 14.

Y N

Go to FLAG 2 and check for an open or short circuit to ground in the wires. If there is no open or short circuit, replace the Toner Sensor (Q1) (PL 9.9). Enter the code [0926] in order to reset the NVM. Then perform the ADJ 9.2 Electrostatic Series and ADJ 9.4 to adjust the image density. See Note

There is between + 5.3 and 6.5 VDC at connector A3 P303 Pin 14.

Y N

Press Stop. Replace the Developer Material. Enter the code [0926] in order to reset the NVM. Then perform the ADJ 9.2 Electrostatic Series and ADJ 9.4 to adjust the image density.

Complete the Service Call.

Replace the Control PWB (A3) .

*NOTE: If the image density cannot be adjusted to equal paragraph 24 on the SIR test pattern 82E7030, ensure that the image density is within paragraphs 18 and 30.*

NOTES:

- ① ENSURE THAT REAR AUGER DRIVE GEAR IS POSITIONED WITH FLANGE AS SHOWN,
- ② ENSURE THAT DEVELOPER HOUSING DRIVE GEAR IS POSITIONED WITH FLANGE AS SHOWN,
- ③ ENSURE THAT FRONT AUGER DRIVE GEAR IS CAPTURED IN POSITION BY THE REAR AUGER DRIVE GEAR FLANGE AND THE DEVELOPER HOUSING DRIVE GEAR FLANGE.

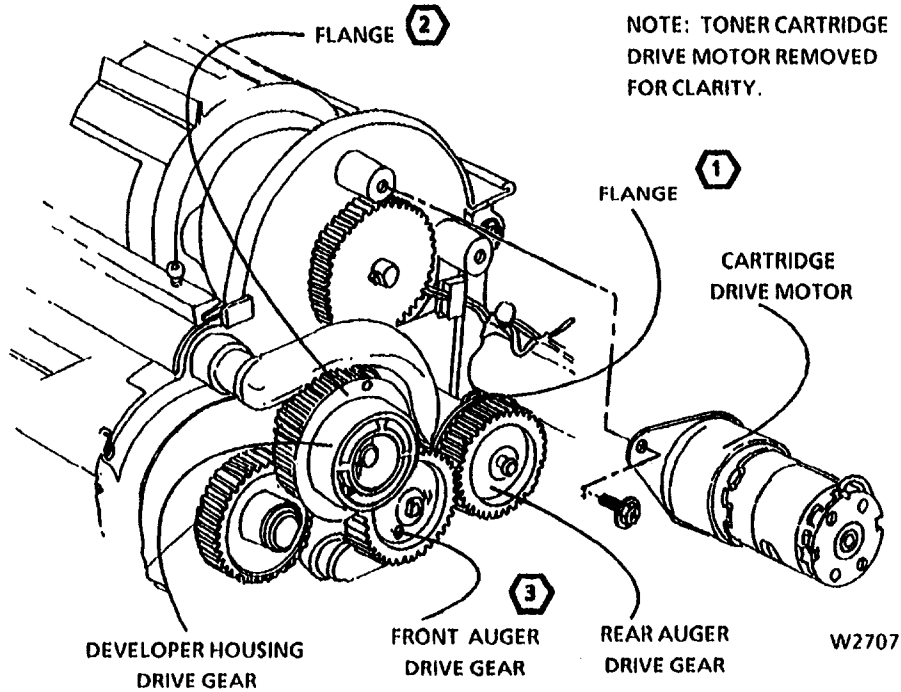
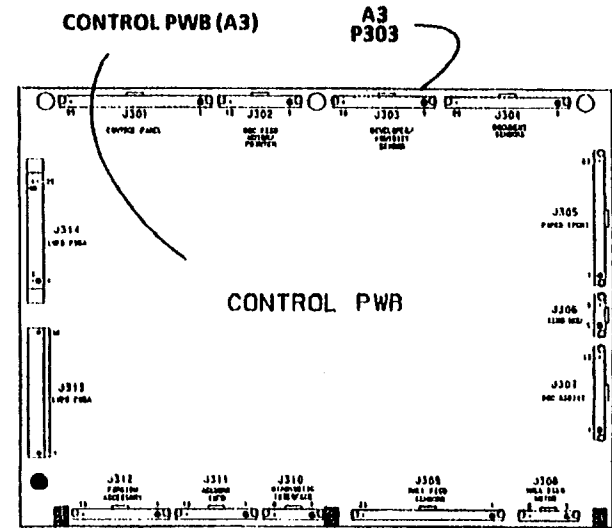
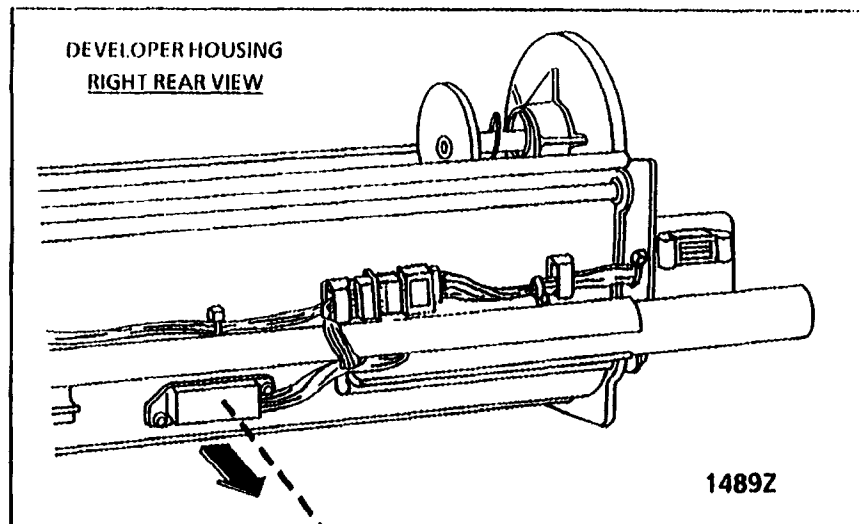
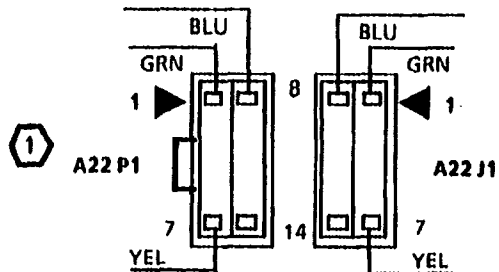


Figure 1. Developer Housing and Auger Drive Gears

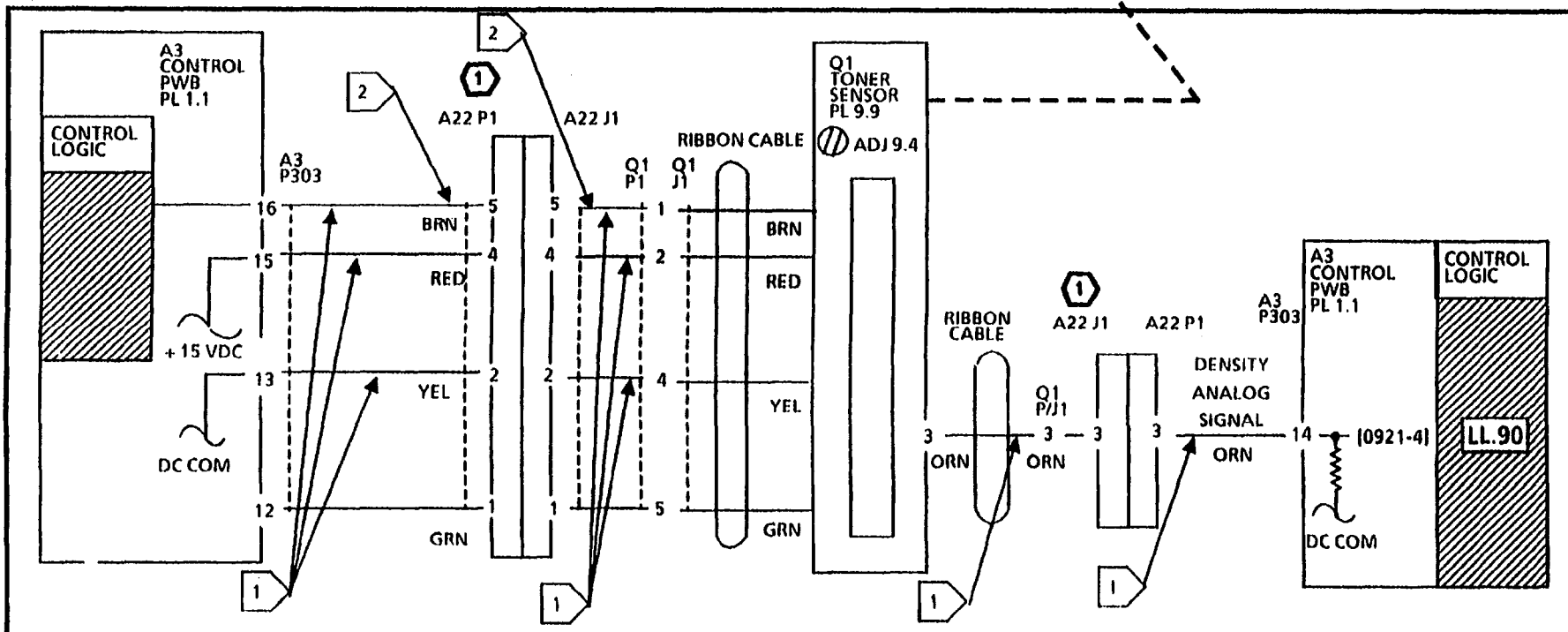


NOTES:

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



1489Z



## LL.91 Low Toner Fault RAP

02/09/94

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

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

### Initial Actions

- Proceed to REP. 9.5 and ensure that the developer material is being mixed properly.
- Ensure that the developer level is correct, minimum of 7.0 lbs..
- Ensure that the toner cartridge is not defective and that enough toner is dispensed into the developer housing.
- Ensure that the Developer Housing Auger and Drive Gears are not damaged and are installed correctly, refer to the LL.90 Excessive Toner Fault RAP, Figure 1.

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

### Procedure

Enter the code [0921-4]. The sensor voltage is greater than or equal to (+) 8 VDC.

Y N

Enter the code [0926] in order to reset the toner control NVM values to default.

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

Y N

Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

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

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

Y N

Proceed to wrap up the call.

Replace the Toner Sensor (Q1). If the problem is not corrected, Replace the NVM. If the problem persists, replace the Control PWB (A3). Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

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

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

Y N

Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

A

A

Enter the code [0926] in order to reset the toner control NVM values to default.

The LL.91 code is still present.

Y N

Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

Replace the Developer material (REP 9.7). If problem persists, replace the Toner Sensor (Q1). Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

The LL.91 code is still present.

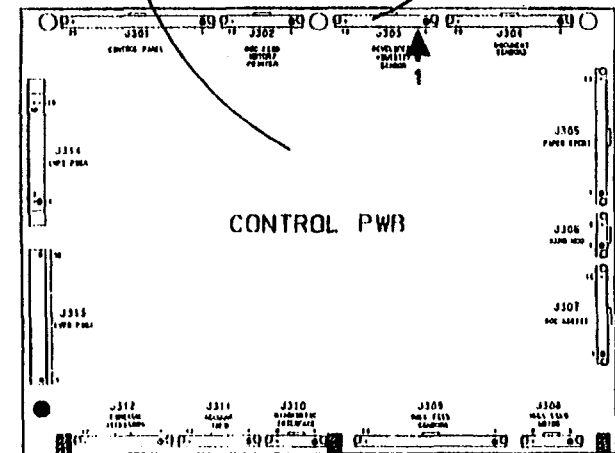
Y N

Proceed to wrap up the call.

Replace the NVM. If the problem persists, replace the Control PWB (A3). Go to the ADJ 9.2 Electrostatic Series, Initial Density Adjustment to check/ adjust the image density.

CONTROL PWB (A3)

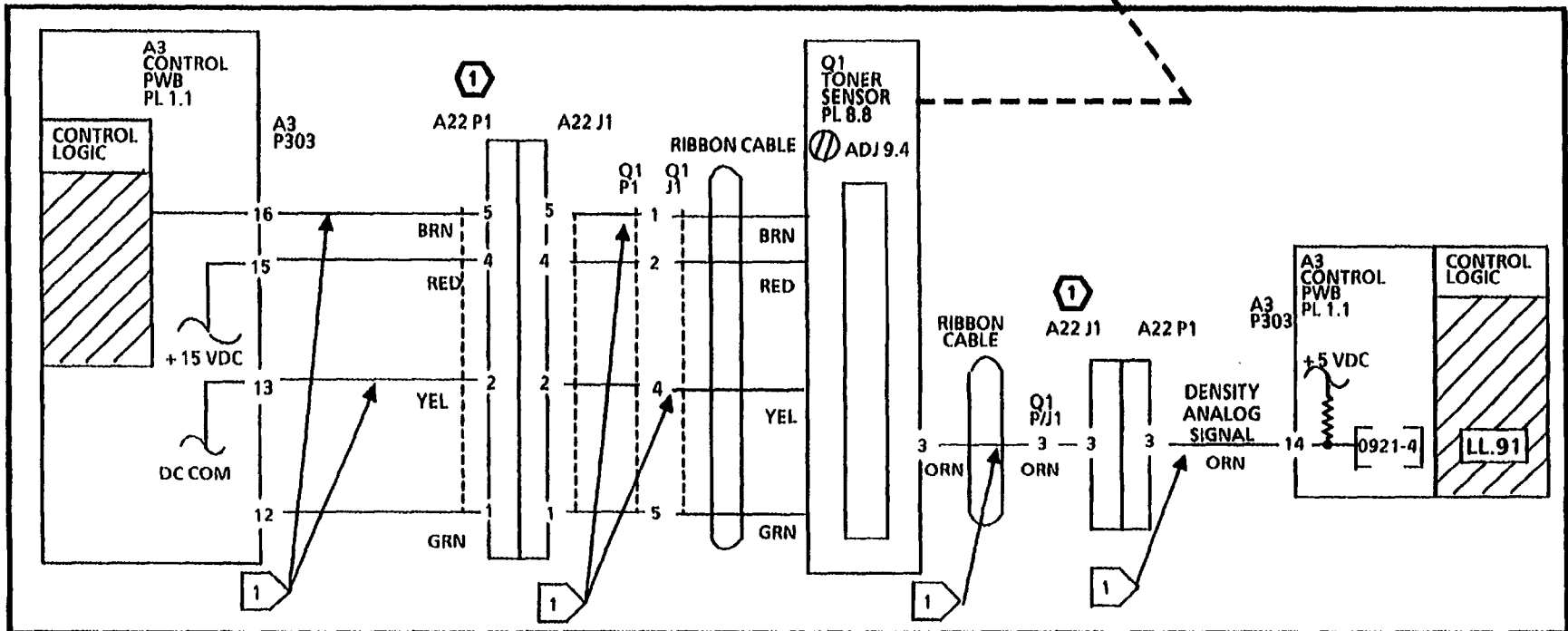
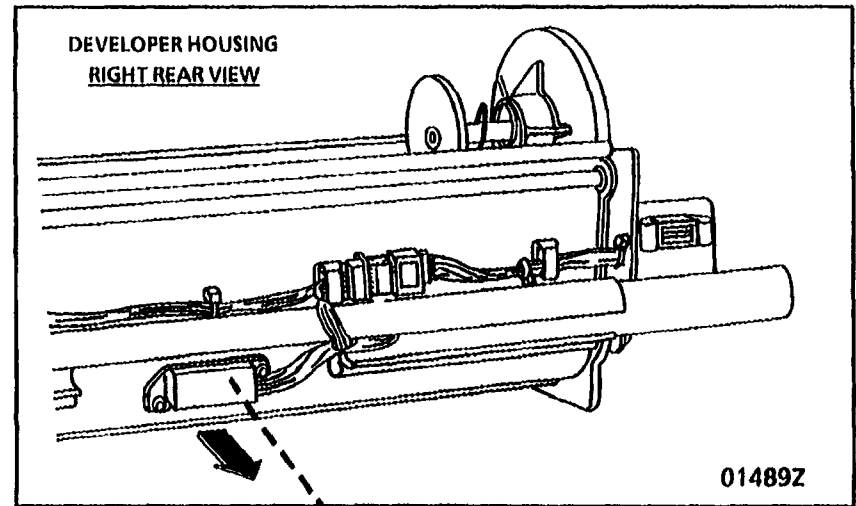
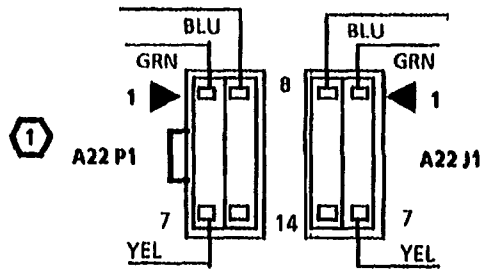
A3  
P303



1590

NOTES:

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



## U1.01 Copy Counter RAP

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

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

### Initial Actions

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

### Procedure

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

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

Y N

There is 26 VDC at A2 P202 Pin 2.

Y N

There is 26 VDC at A2 P202 Pin 1.

Y N

Replace the LVPS Driver PWB (A2).

Replace the Copy Count meter.

A B

A B

Enter the diagnostic code [0203].

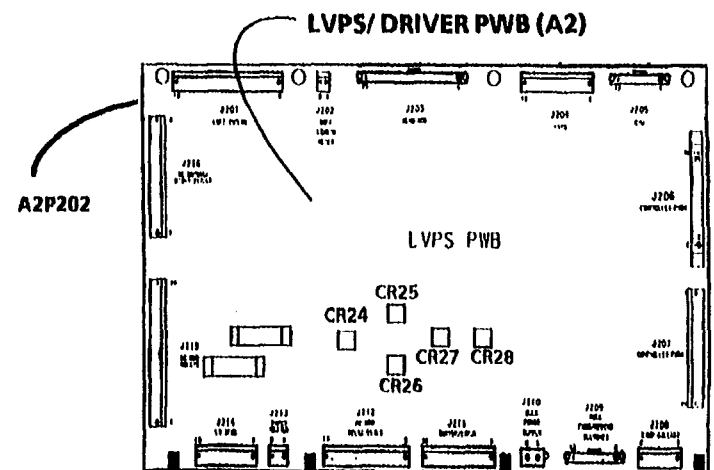
The voltage goes from 26 VDC to less than + 1 VDC at Pin 1 of A2 P202.

Y N

Replace the LVPS Driver PWB (A2).

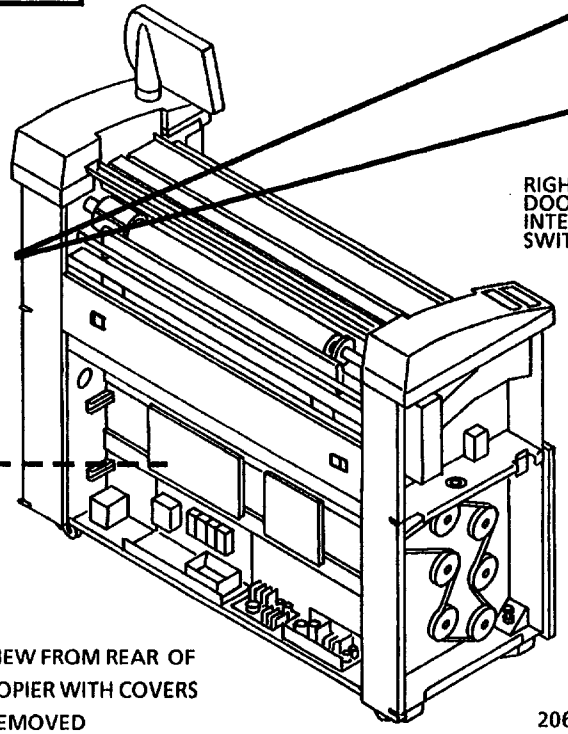
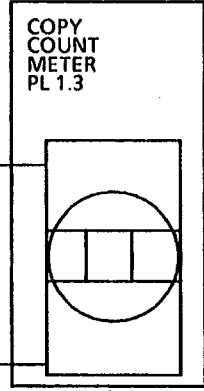
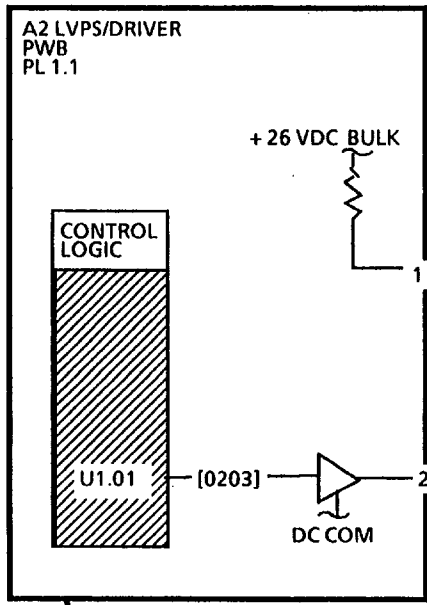
Replace the Copy Count meter.

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



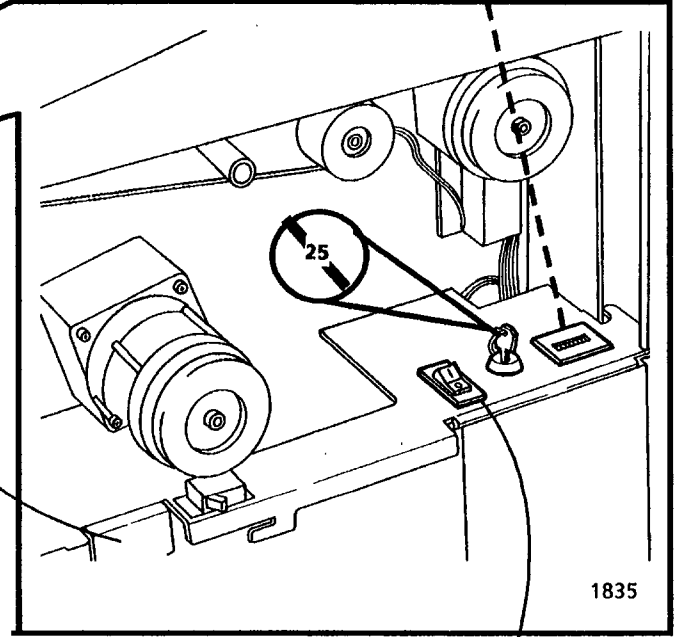
1591B





RIGHT SIDE  
DOOR  
INTERLOCK  
SWITCH (S21)

RIGHT SIDE VIEW



MAIN POWER  
SWITCH

## Refeed Roll 1 RAP

This RAP is used for Roll 1 Media Feed problems that are not indicated by a status code and the Control Panel displays the message "REFEED ROLL 1".

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

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

### Initial Actions

- Ensure that there is an adequate supply of media, the media is in good condition and is loaded correctly.
- Pull out the Roll 1 Supply Drawer. Check the Feed Drive Rolls, Feed Pinch Rolls, and the Pinch Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check that the Upper Feed Baffle that house the Feed Pinch Rolls is latched in the correct position.
- Check the roll media feed path for obstructions.

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 1 in the forward and reverse directions.
- Check the connectors for the Roll 1 Motion Sensor (Q4 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Remove the rear covers and the Roll 1 Position Sensor (Q1) from the rear frame. Clean the Roll 1 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check that the connectors for the Roll 1 Position Sensor (Q1 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the customer is running media that meet the type and size specifications.

### Procedure

Enter the code [0710] in order to check the Roll 1 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 1.

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

Y N

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

If there is no open circuit or short circuit, replace the Roll 1 Motion Sensor (Q4).

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

Enter the code [0707] in order to check the Roll 1 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

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

Y N

A B

**A B**

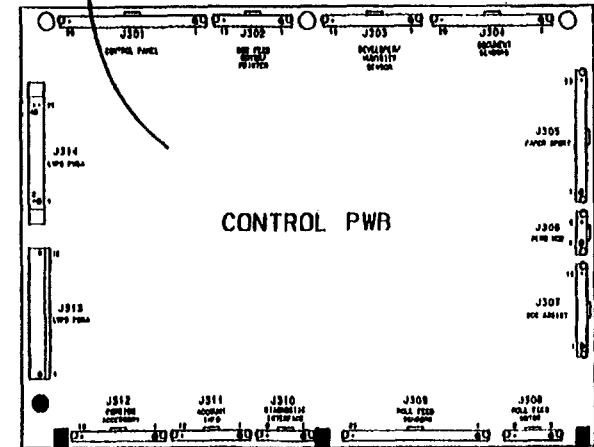
Go to FLAG 2 and check the wiring between the Roll 1 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 1 Position Sensor (Q1).

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

Go to the 7.1 Roll 1 Feed RAP.

**CONTROL PWB (A3)**

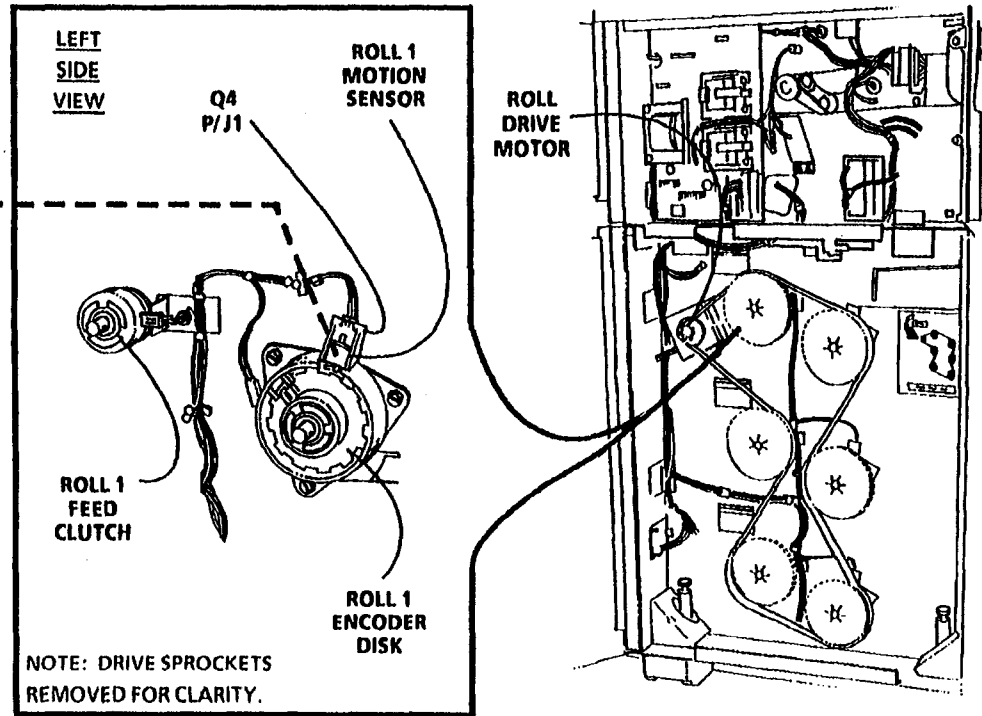


**A3  
P309**

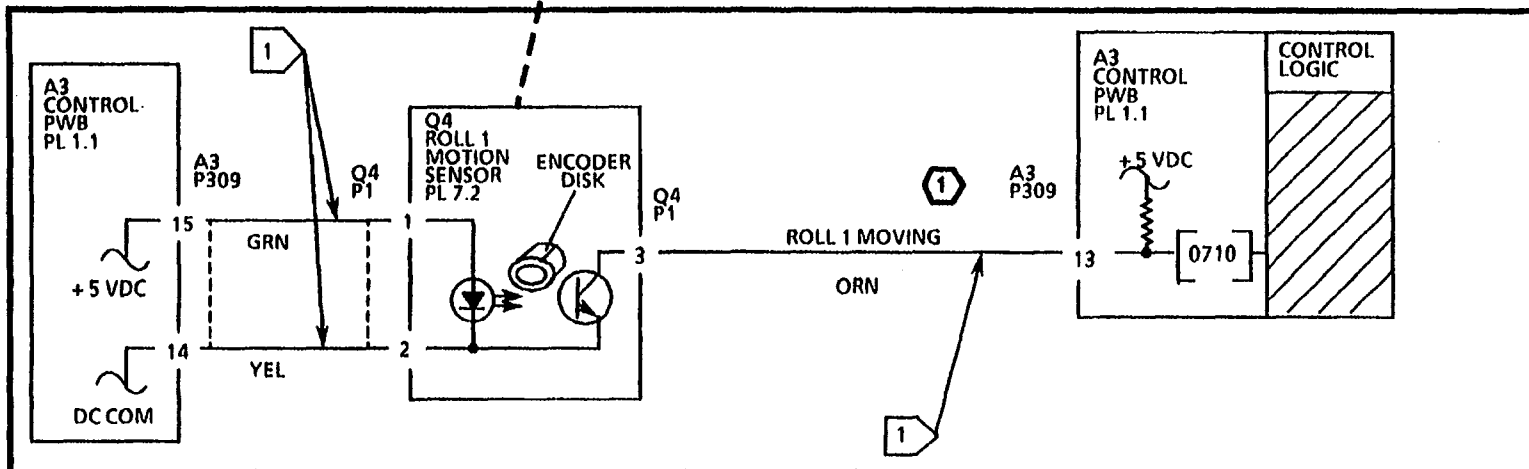
**1590**

NOTES:

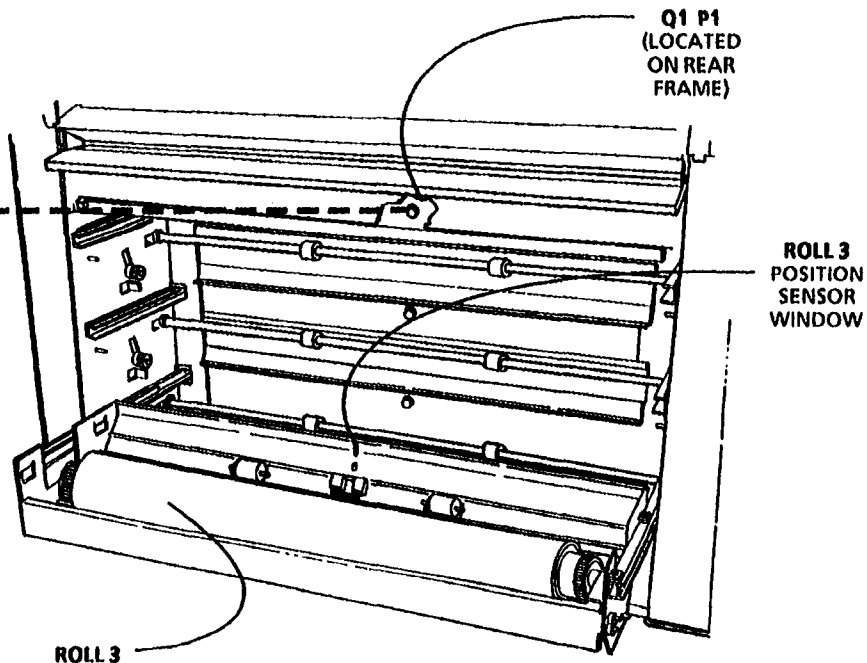
- 1 THE ROLL 1 MOVING SIGNAL IS EITHER +5 VDC OR 0 VDC WHEN THE ROLL 1 IS NOT MOVING. THE SIGNAL IS APPROXIMATELY +2.4 VDC WITH THE ROLL 1 MOVING.



1876

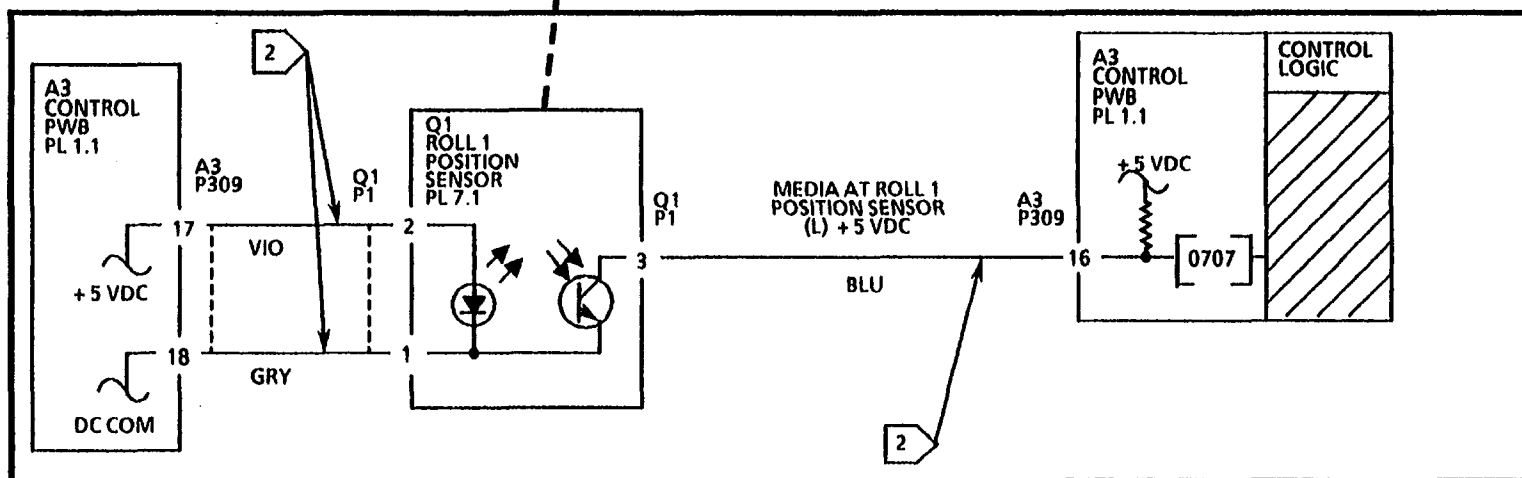


VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



## Refeed Roll 2 RAP

(9/24/92)

This RAP is used for Roll 2 Media Feed problems that are not indicated by a status code and the Control Panel displays the message "REFEED Roll 2".

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

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

### Initial Actions

- Ensure that there is an adequate supply of media, the media is in good condition and is loaded correctly.
- Pull out the Roll 2 Supply Drawer. Check the Feed Drive Rolls, Feed Pinch Rolls, and the Pinch Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check that the Upper Feed Baffle that house the Feed Pinch Rolls is latched in the correct position.
- Check the roll media feed path for obstructions.

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 2 in the forward and reverse directions.
- Check the connectors for the Roll 2 Motion Sensor (Q5 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Remove the rear covers and the Roll 2 Position Sensor (Q2) from the rear frame. Clean the Roll 2 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check the connectors for the Roll 2 Position Sensor (Q2 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the customer is running media that meet the type and size specifications.

### Procedure

Enter the code [0711] in order to check the Roll 2 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 2.

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

Y N

Go to FLAG 1 and check the wiring between the Roll 2 Motion Sensor (Q5) and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 2 Motion Sensor (Q5).

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

Enter the code [0708] in order to check the Roll 2 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

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

Y N

A B

A B

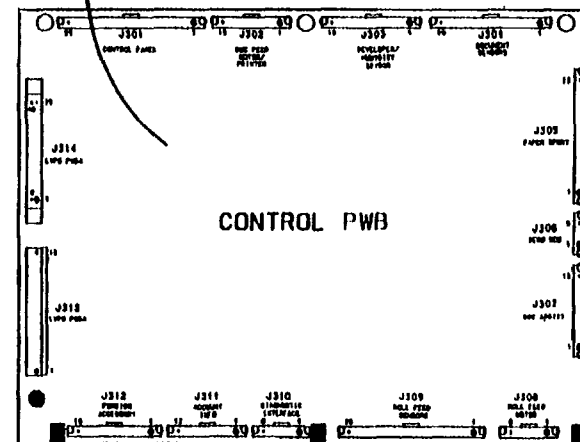
Go to FLAG 2 and check the wiring between the Roll 2 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 2 Position Sensor (Q2).

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

Go to the 7.2 Roll 2 Feed RAP.

CONTROL PWB (A3)

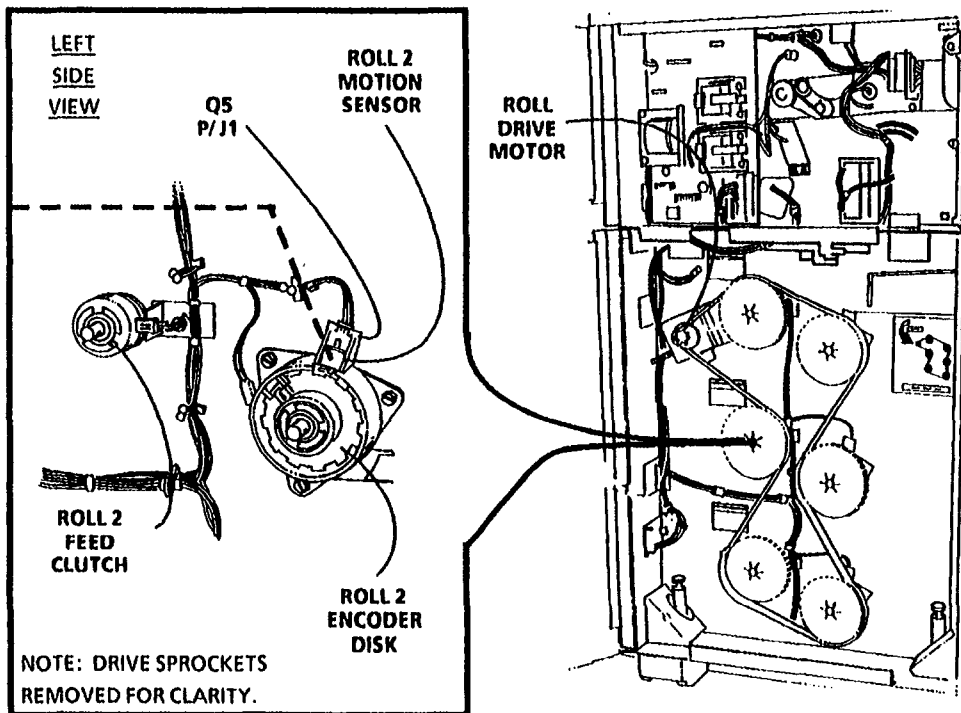


A3  
P309

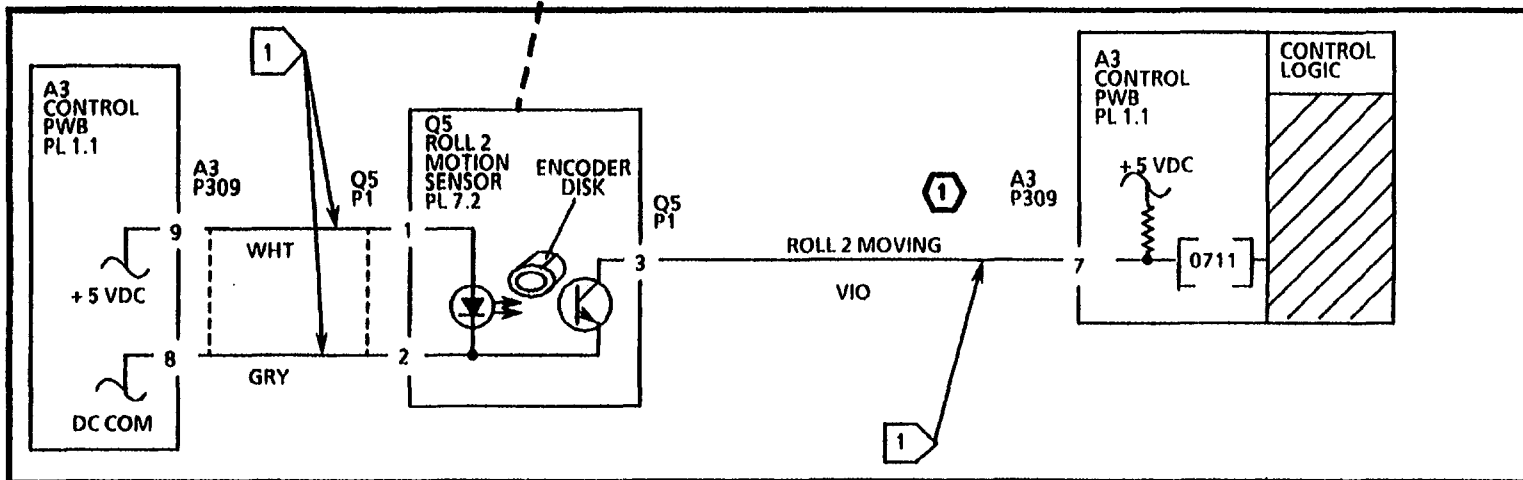
1590

NOTES:

- ① THE ROLL 2 MOVING SIGNAL IS EITHER + 5 VDC OR 0 VDC WHEN THE ROLL 2 IS NOT MOVING. THE SIGNAL IS APPROXIMATELY + 2.4 VDC WITH THE ROLL 2 MOVING.

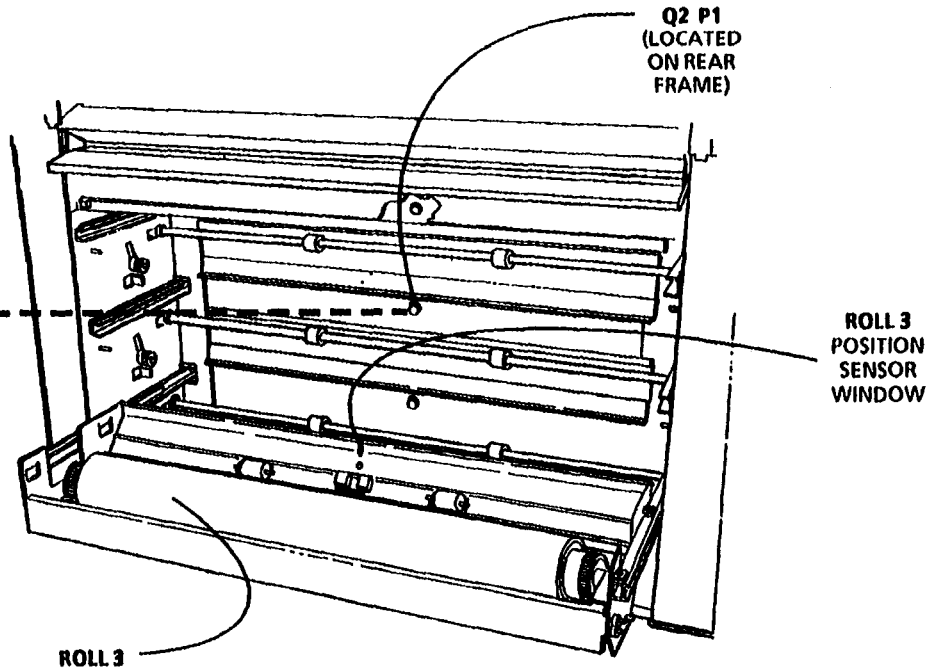


2027



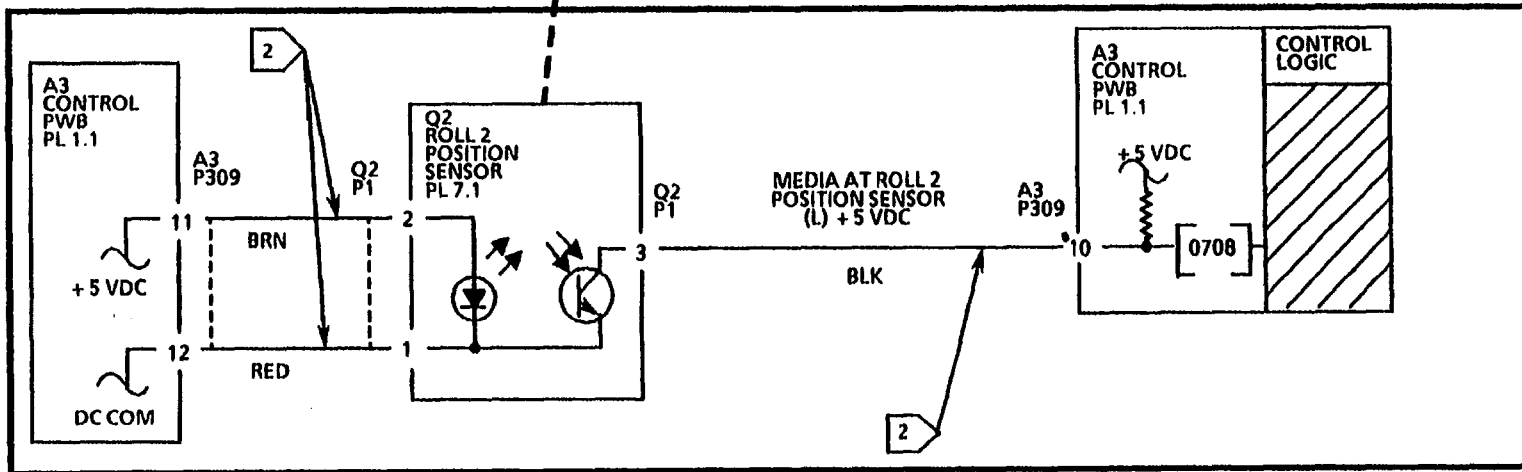


VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



## Refeed Roll 3 RAP

(9/24/92)

This RAP is used for Roll 3 Media Feed problems that are not indicated by a status code and the Control Panel displays the message "REFEED Roll 3".

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

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

### Initial Actions

- Ensure that there is an adequate supply of media, the media is in good condition and is loaded correctly.
- Pull out the Roll 3 Supply Drawer. Check the Feed Drive Rolls, Feed Pinch Rolls, and the Pinch Roll Load Springs for contamination or damage and correct installation. Clean or replace as required.
- Check that the Upper Feed Baffle that house the Feed Pinch Rolls is latched in the correct position.
- Check the roll media feed path for obstructions.

- Open the front and the left side doors. Check the motion sensor and encoder disk for binding or damage by rotating the Roll 3 in the forward and reverse directions.
- Check the connectors for the Roll 3 Motion Sensor (Q6 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Remove the rear covers and the Roll 3 Position Sensor (Q3) from the rear frame. Clean the Roll 3 Position Sensor by wiping the face of the sensor with a clean cloth. Reinstall the Sensor.
- Check the connectors for the Roll 3 Position Sensor (Q3 P1) and the Control PWB (A3 P309) for damage. Ensure that the connectors and pins are seated correctly.
- Ensure that the customer is running media that meet the type and size specifications.

### Procedure

Enter the code [0712] in order to check the Roll 3 Motion Sensor. The Control Panel will alternately display a (01) and a (00) when the roll is rotated.

Slowly rotate the Roll 3.

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

Y N

Go to FLAG 1 and check the wiring between the Roll 3 Motion Sensor (Q6) and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 3 Motion Sensor (Q6).

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

Enter the code [0709] in order to check the Roll 3 Position Sensor. The Control Panel will display a (01) when the media is not sensed and a (00) when the media is sensed.

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

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

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

Y N

A B

A B

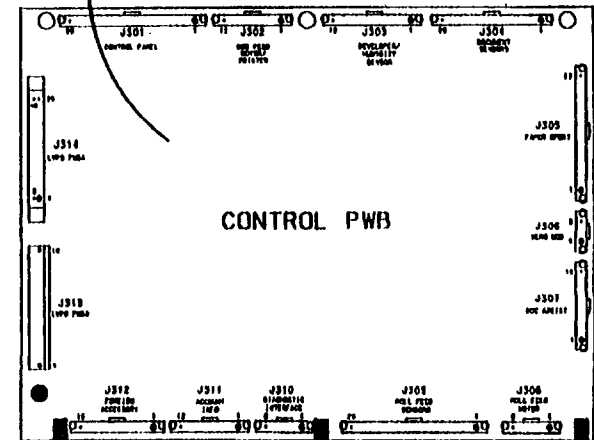
Go to FLAG 2 and check the wiring between the Roll 3 Position Sensor and the Control PWB for an open circuit or a short circuit to ground.

If there is no open circuit or short circuit, replace the Roll 3 Position Sensor (Q3).

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

Go to the 7.3 Roll 3 Feed RAP.

CONTROL PWB (A3)

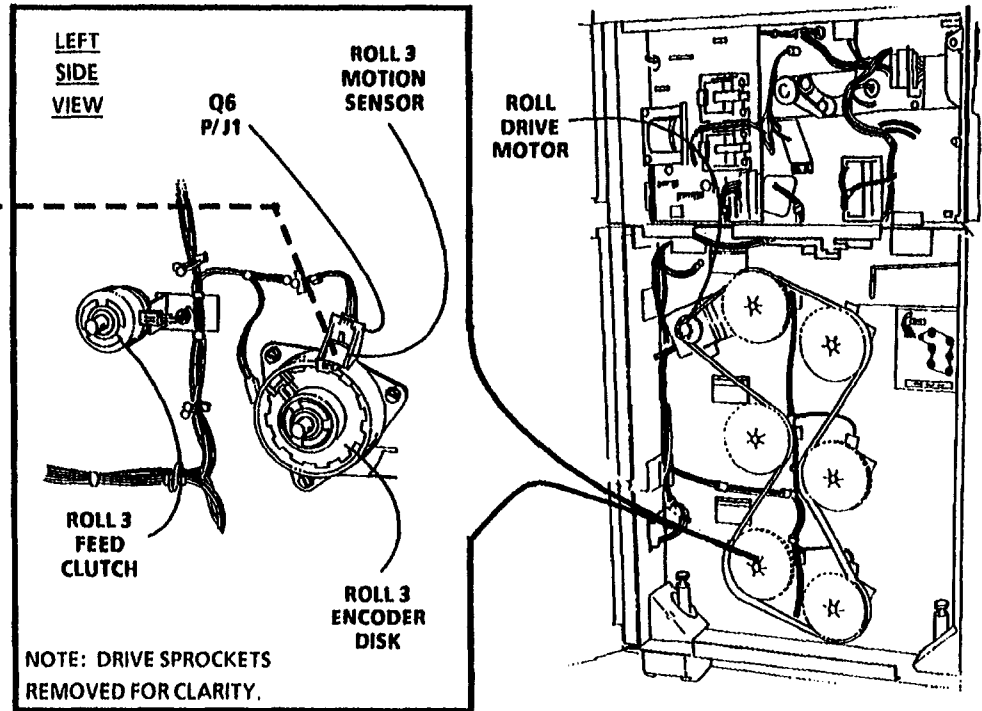


A3  
P309

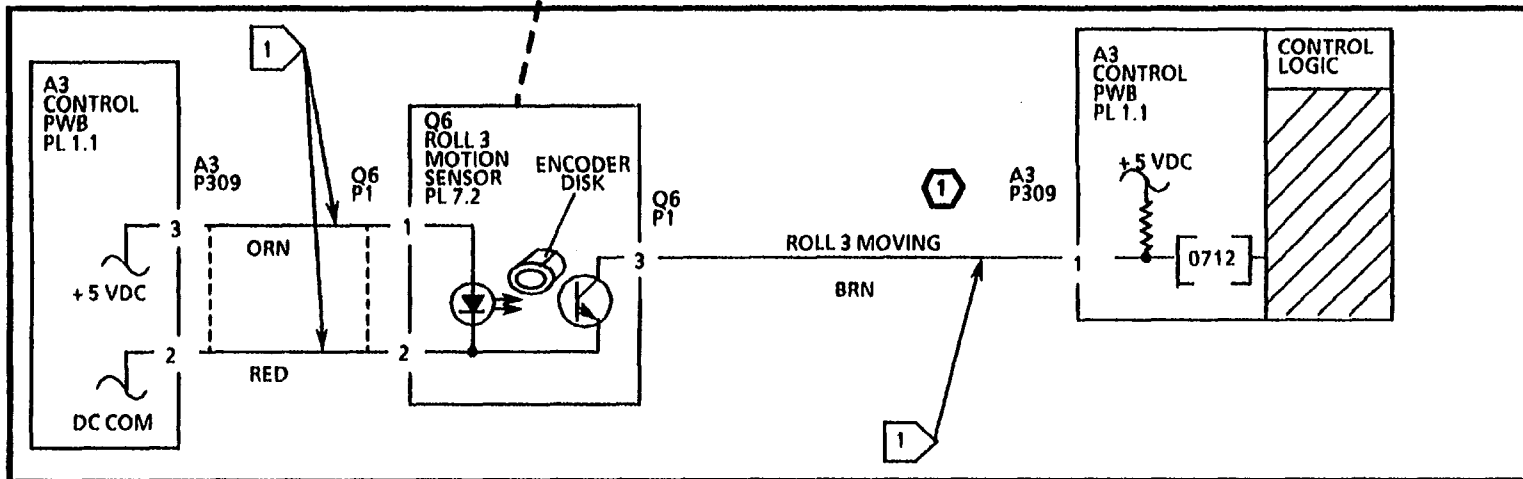
1590

NOTES:

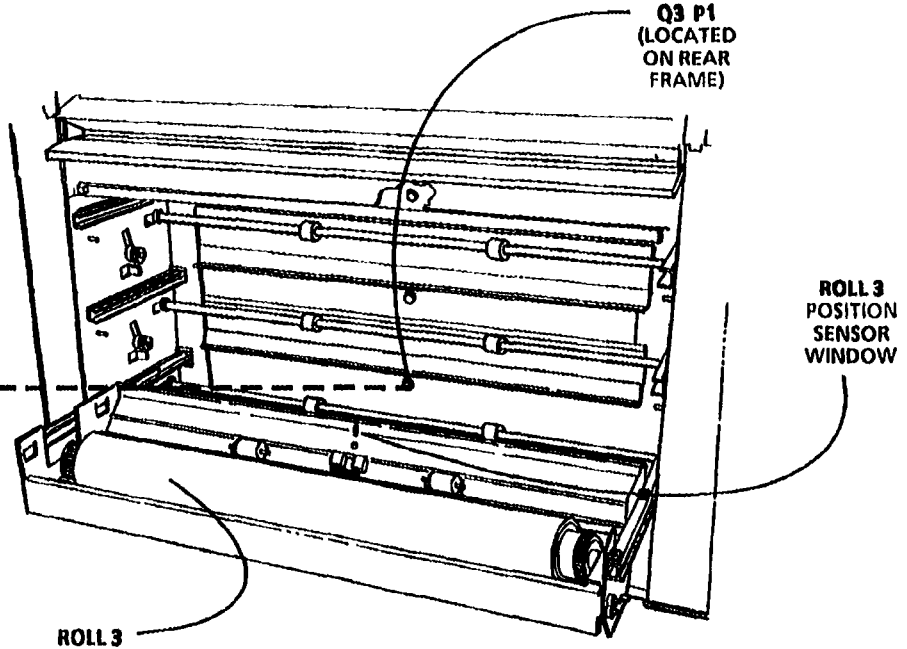
- ① THE ROLL 3 MOVING SIGNAL IS EITHER +5 VDC OR 0 VDC WHEN THE ROLL 3 IS NOT MOVING. THE SIGNAL IS APPROXIMATELY +2.4 VDC WITH THE ROLL 3 MOVING.



2027

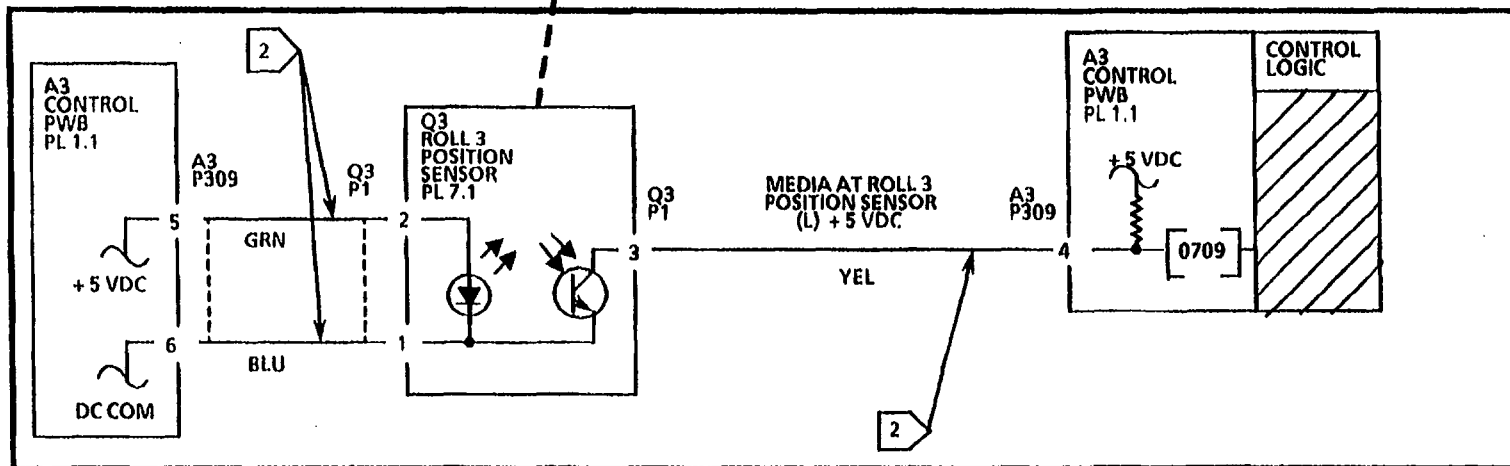


VIEW  
FROM  
FRONT



NOTE: DRAWER 1 AND 2  
REMOVED FOR CLARITY.

1879



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

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

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

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

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

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

### Procedure

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

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

[0261] Country Configuration value  
[0360-2] Electronic Billing Meters value  
[0860] Registration value  
[0862] Cut length value  
[0921-3] Illumination (Exposure) value  
[0921-4] Toner Control value

2. Enter the SPECIAL TEST code, (USO copiers [0360-1], EO copiers [0360-3]) in order to reset the contents of the NVM to the factory default values.
3. Compare the values recorded in step 1 to previously recorded values for this machine. Enter the codes listed in step 1 and change the default values as required.

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

4. Check/ adjust the following:

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

*NOTE: If the values entered are not retained, replace the NVM chip and perform steps 2 - 4 again.*

## 1.1 AC Power RAP

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

The problem may occur if there is a malfunction in the Main Power Relay (K1), the Main Power Switch (CB1), the Noise Filter (FL-2), Fuse F2 on the LVPS/ Driver PWB (A2), Main Transformer (T1) or a ground fault exists.

*NOTE: The component locator drawings and the circuit diagram are on the following pages. The 60 Hz configurations are shown in one circuit diagram. The 50 Hz configuration is shown in another circuit diagram.*

### Initial Actions

- Check that the correct voltage is being applied to the copier at the wall outlet.
- Ensure that Connectors A2P215 and A2P214 are correctly installed and fully seated.
- W/ Tag/ MOD12: The Ground Fault Protection Device is activated (red flag not up), go to 1.6 Ground Fault RAP.

### Procedure

Switch on the copier.

The Main Power Switch (CB1) remains on.

Y N

Go to the 1.2 Main Power Switch Opens RAP.

The Control Panel illuminates.

Y N

A B

A B

Go to FLAG 1 and check that line voltage is present.

Line voltage is present.

Y N

Go to FLAG 3 and check that ACH voltage is present.

ACH voltage is present.

Y N

Go to the Line side of the Ground Fault Protector. ACH voltage is present.

Y N

Replace the power cord.

Go to the 1.6 Ground Fault Protector RAP.

Go to Flag 2 and check that line voltage is present.

ACH voltage is present.

Y N

Replace the Line Filter.

Replace the Main Power Switch (CB1).

Go to Flag 4 and check that ACH voltage is present.

ACH voltage is present.

Y N

Replace the bottom Fuse (A2F2).

ACH voltage is present.

Y N

Go to FLAG 5 and check that ACH voltage is present.

C D E F

C D E F

ACH voltage is present.

Y N

Repair the wires between A2P215 and the Main Power Relay (K1).

Replace the LVPS/ Driver PWB (A2)

Return the copier to normal operation.

Go to FLAG 6 and check for 22 VAC and 11 VAC.

22 VAC and 11 VAC is present.

Y N

Replace the Main Power Transformer (T1).

Go to the 1.5 DC Power RAP.

Go to FLAG 7 and check that ACH voltage is present.

ACH voltage is present.

Y N

Go to FLAG 8 and check that 24 VDC is present.

24 VDC is present.

Y N

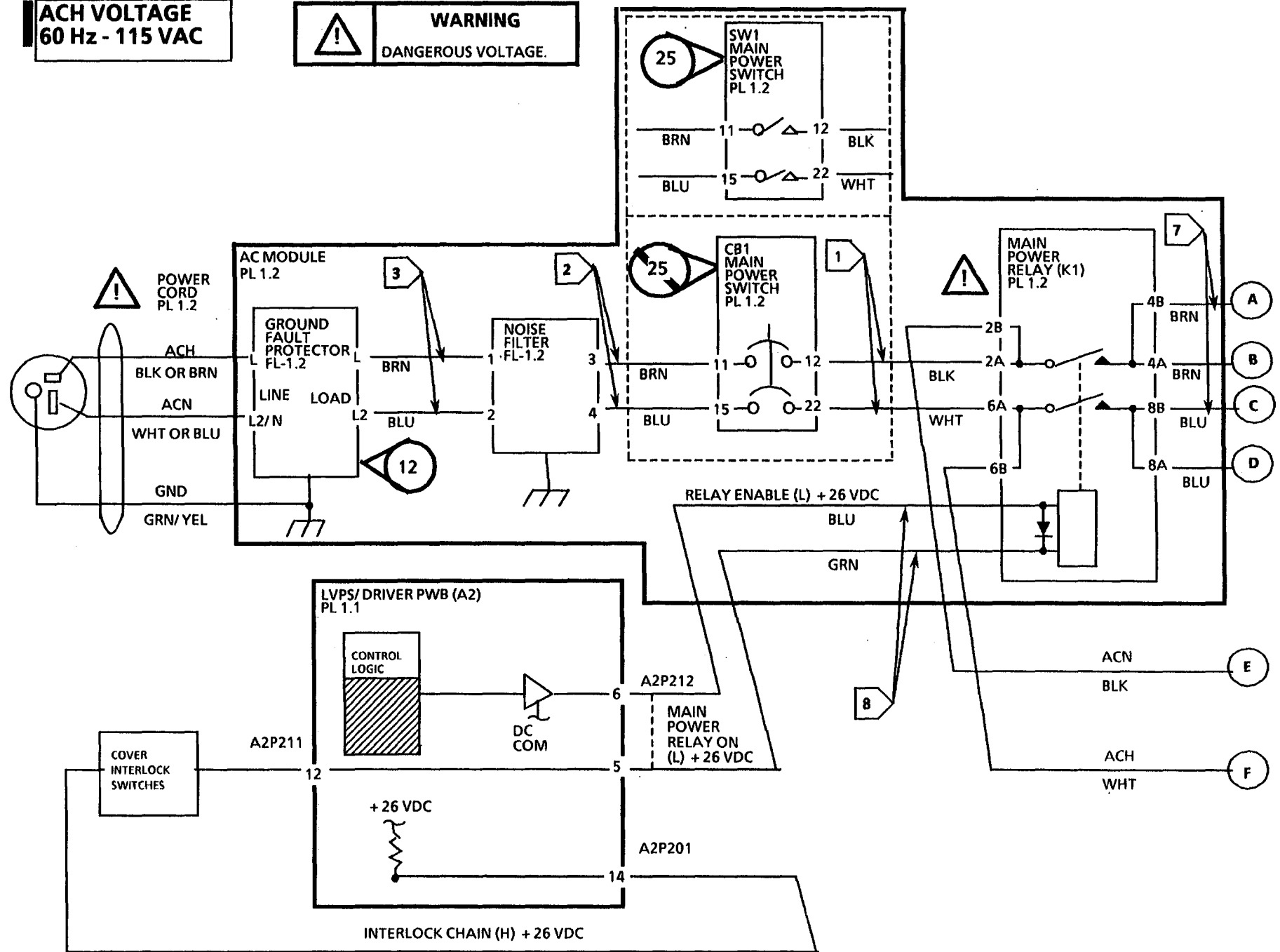
Go to 1.5 Cover Interlock RAP.

Replace the Main Power Relay (K1).

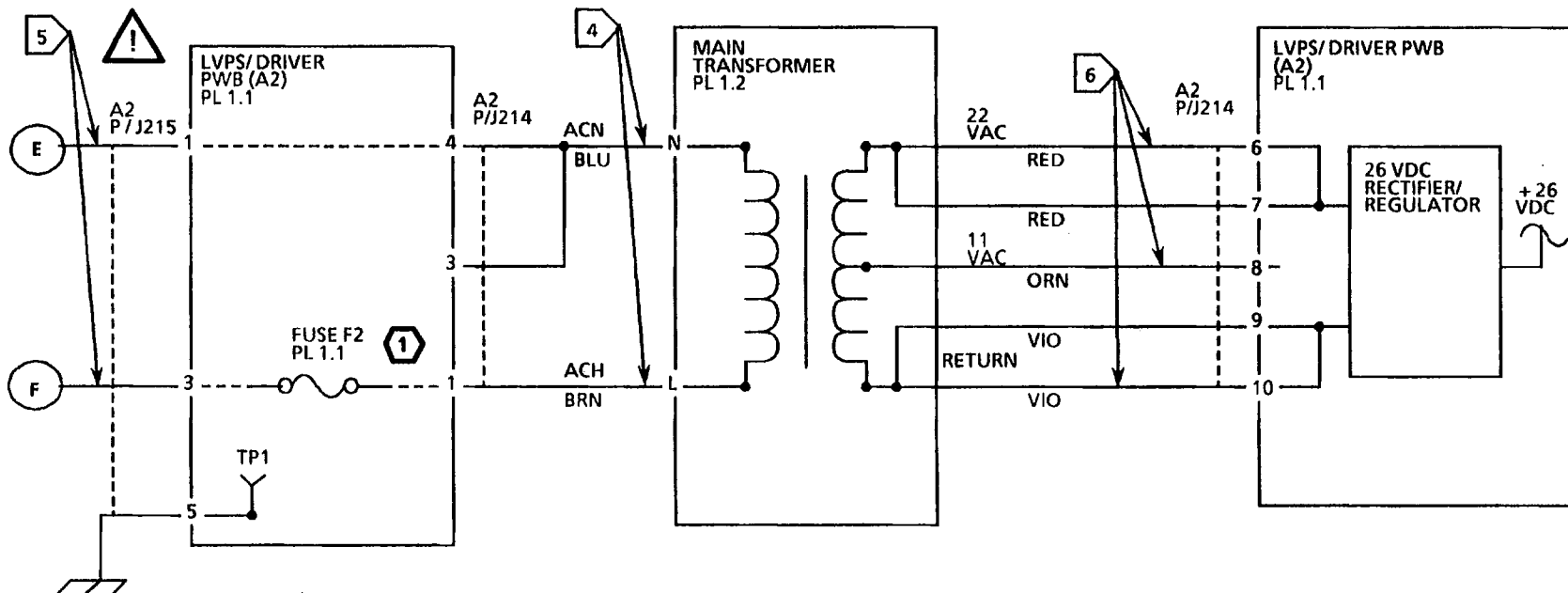
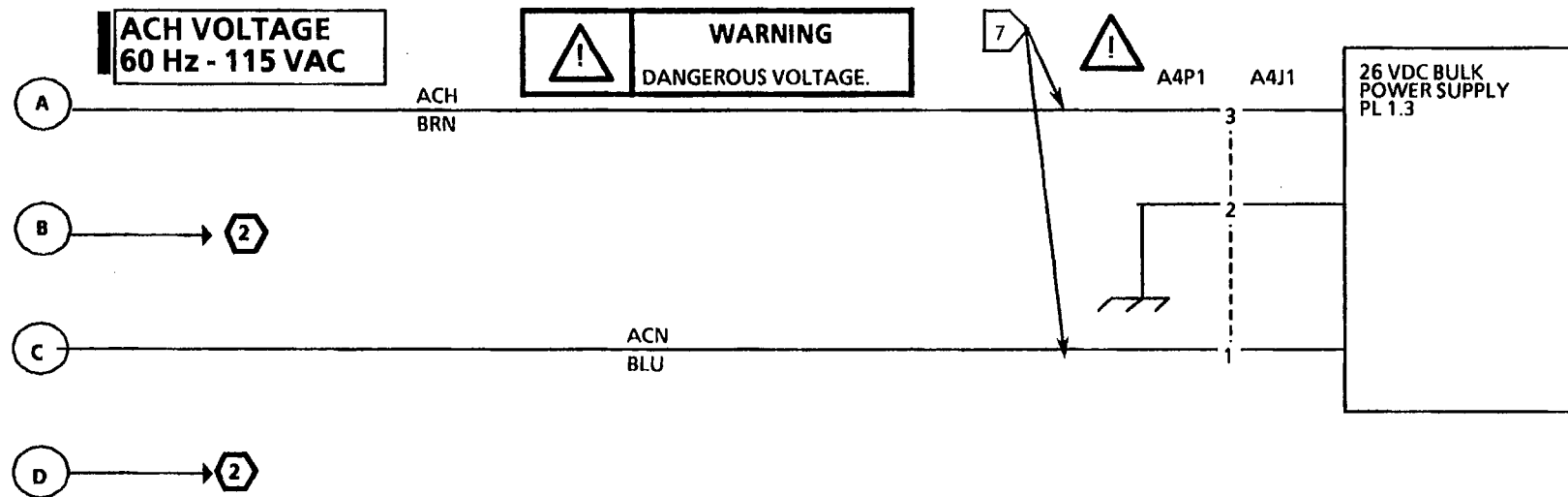
Go to the LL.43 Fuser Overtemperature RAP.

**ACH VOLTAGE  
60 Hz - 115 VAC**

**WARNING**  
DANGEROUS VOLTAGE.





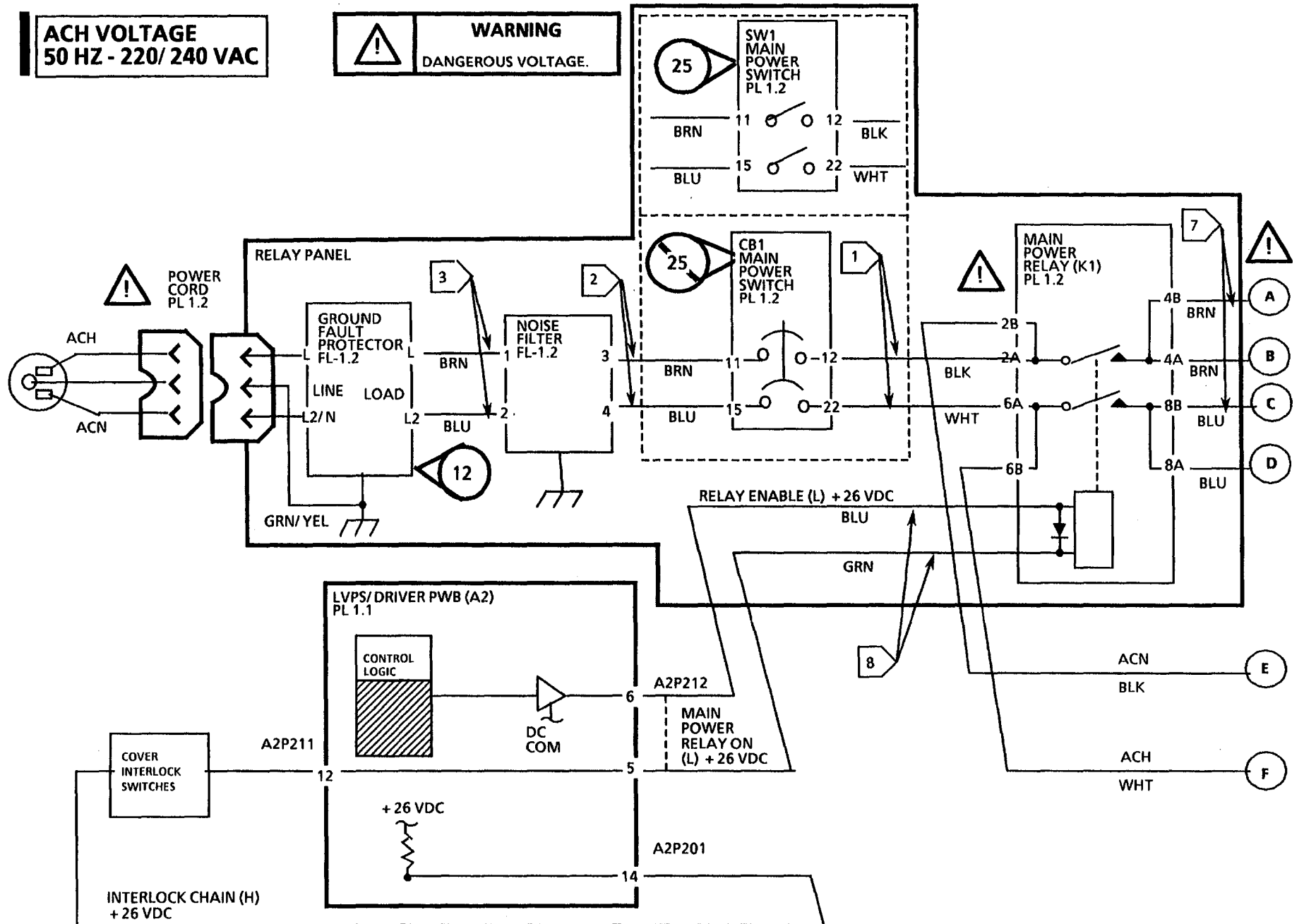


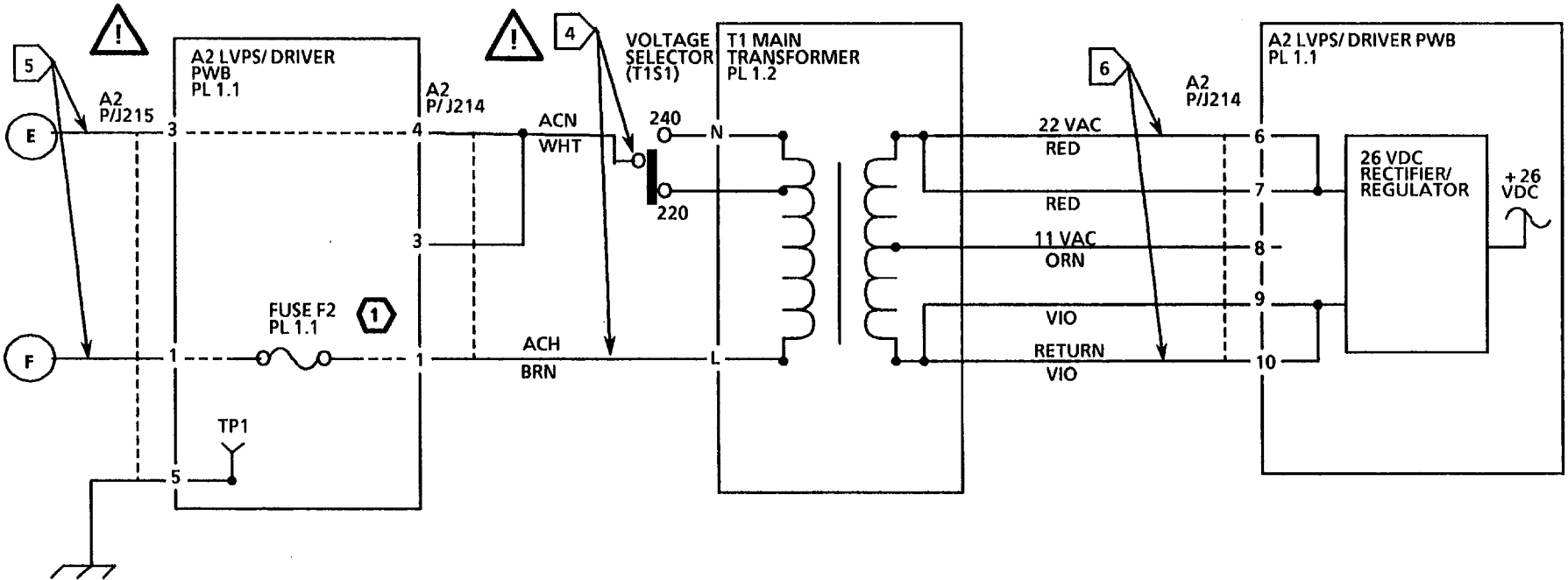
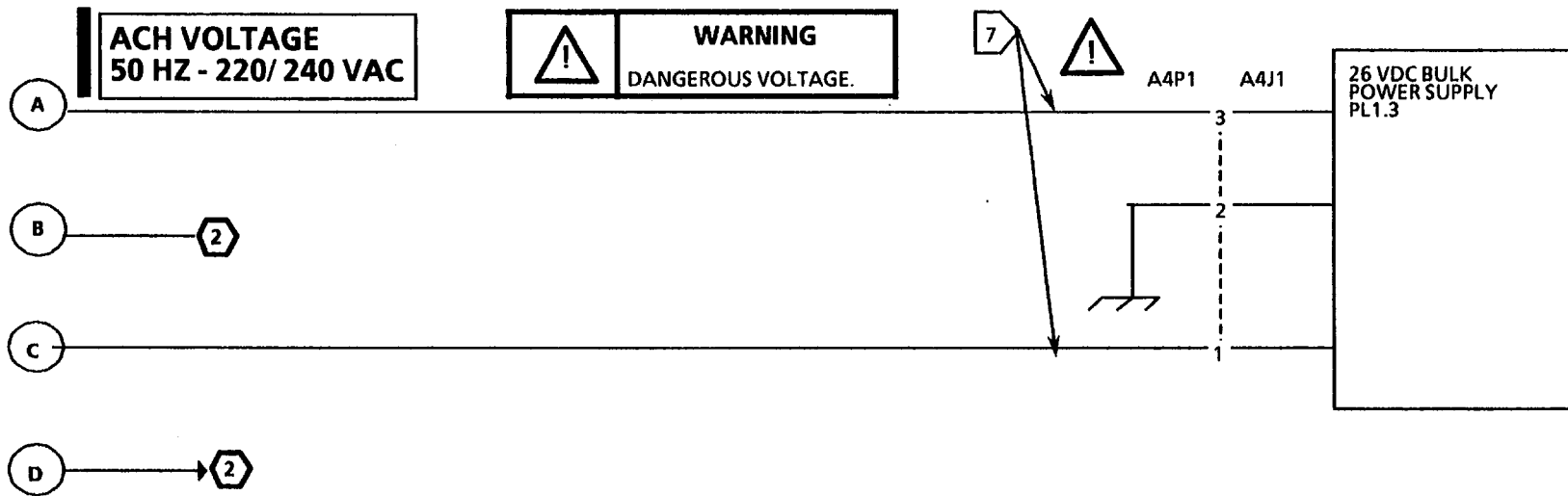
1 FUSE F1:  
USO, 250 V 1.0A SLO-BLO

2 TO DRUM/ DEVELOPER MOTOR RELAY (K3)  
AND FUSER POWER RELAY (K2)

**ACH VOLTAGE  
50 HZ - 220/ 240 VAC**

**WARNING  
DANGEROUS VOLTAGE.**

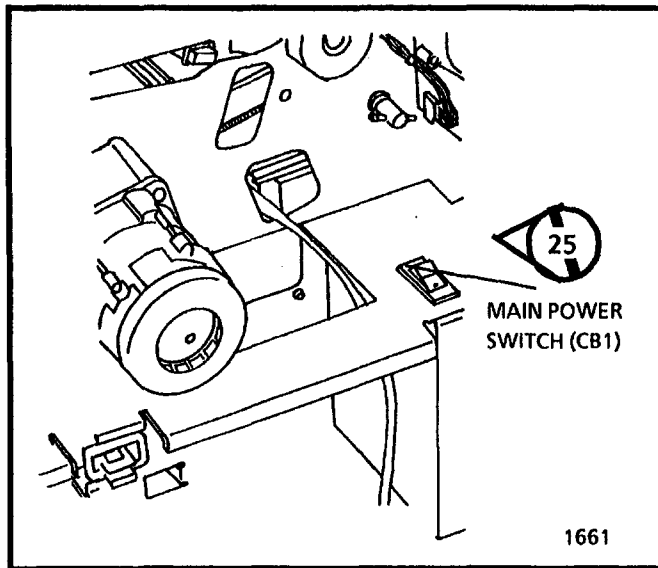




1 FUSE F2:  
RX 250 V 0.8A

2 TO DRUM/ DEVELOPER MOTOR RELAY (K3)  
AND XEROGRAPHIC MOTOR POWER RELAY (K4)

REAR VIEW WITH  
COVERS REMOVED

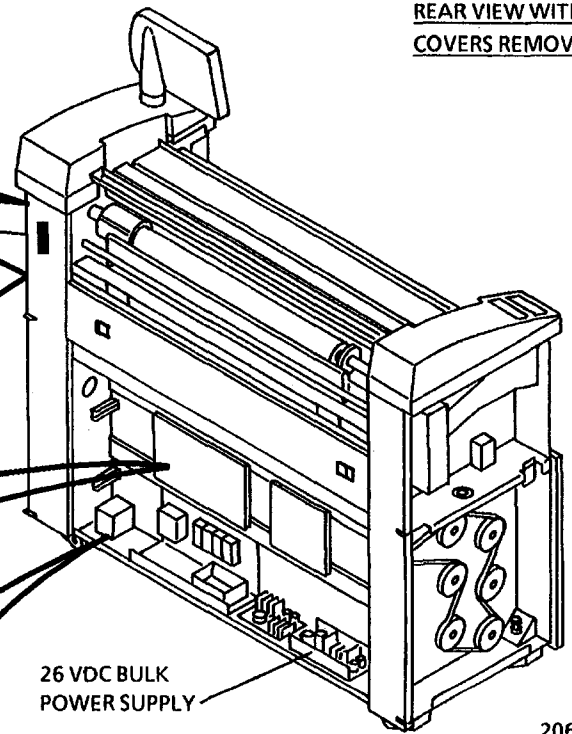


25

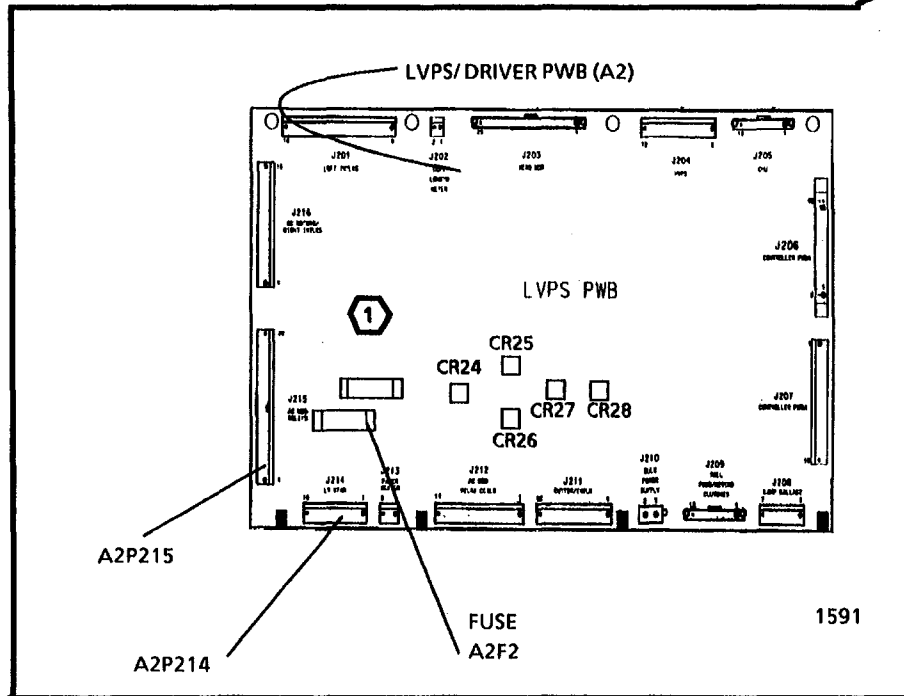
MAIN POWER  
SWITCH (CB1)

MAIN POWER  
SWITCH (SW1)

25



26 VDC BULK  
POWER SUPPLY



LVPS/DRIVER PWB (A2)

LVPS PWB

1

CR25  
CR24  
CR27  
CR28  
CR26

A2P215

A2P214

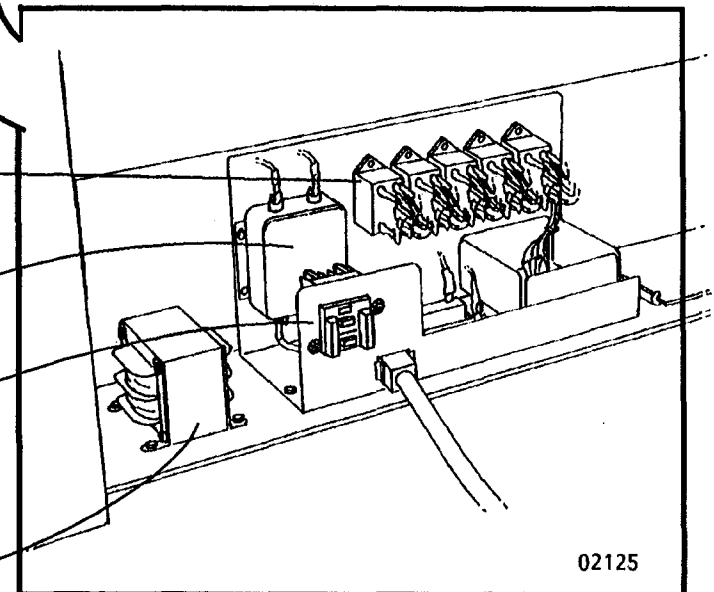
FUSE  
A2F2

MAIN POWER  
RELAY (K1)

NOISE FILTER  
(FL-1)

GROUND FAULT  
PROTECTOR  
(W/TAG/MOD 12)

MAIN  
TRANSFORMER  
(T1)



1 ON SOME COPIERS THE DESIGNATORS F1 & F2  
ARE REVERSED. F2 IS THE BOTTOM FUSE.

## 1.2 Main Power Switch Opens RAP

This RAP is used to troubleshoot short circuits from ACH to ACN.

The problem may occur if the connector A23P1 is improperly connected, causing a short circuit from ACH to ACN at connector A23 P/J 1.

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



**WARNING**  
Dangerous Voltage

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

### Procedure

Set the DMM to the 20K resistance scale. Switch off the Main Power and unplug the power cord. Disconnect the wires from 4A and 8A on the Main Power Relay. Connect the power cord to the AC power. Switch on the Main Power Switch CB-1.

The Main Power Switch opens.

Y N

Disconnect A23P1 and go to FLAG 1 and check for a short between ACH and ACN. Look for pinched wires or wires with frayed insulation. Reconnect the wires from 4A and 8A on the Main Power Relay.

The problem is still present.

Y N

A B Return to Section 1 Call Flow.

A B

Disconnect M22P1 at the Fuser Drive Motor and go to FLAG 2 and check for a short between ACH and ACN. Look for pinched wires or wires with frayed insulation.

If no path from ACH to ACN was found, disconnect M21P1 at the Drum/ Developer Drive Motor and go to FLAG 3 and check for a short between ACH and ACN. Look for pinched wires or wires with frayed insulation. If there is no short circuit reconnect M22P1 and M21P1. Connect the power cord to the AC power. Switch on the Main Power Switch CB-1.

The problem is still present.

Y N

Return to Section 1 Call Flow.

Go to the 4.1 Drum/ Developer Motor RAP and check for a shorted motor. If the problem is still present, Go to the 4.2 Fuser Motor RAP and check for a shorted motor.

Disconnect the wires from 4B and 8B on the Main Power Relay. Switch on the Main Power Switch CB-1. The Main Power Switch opens.

Y N

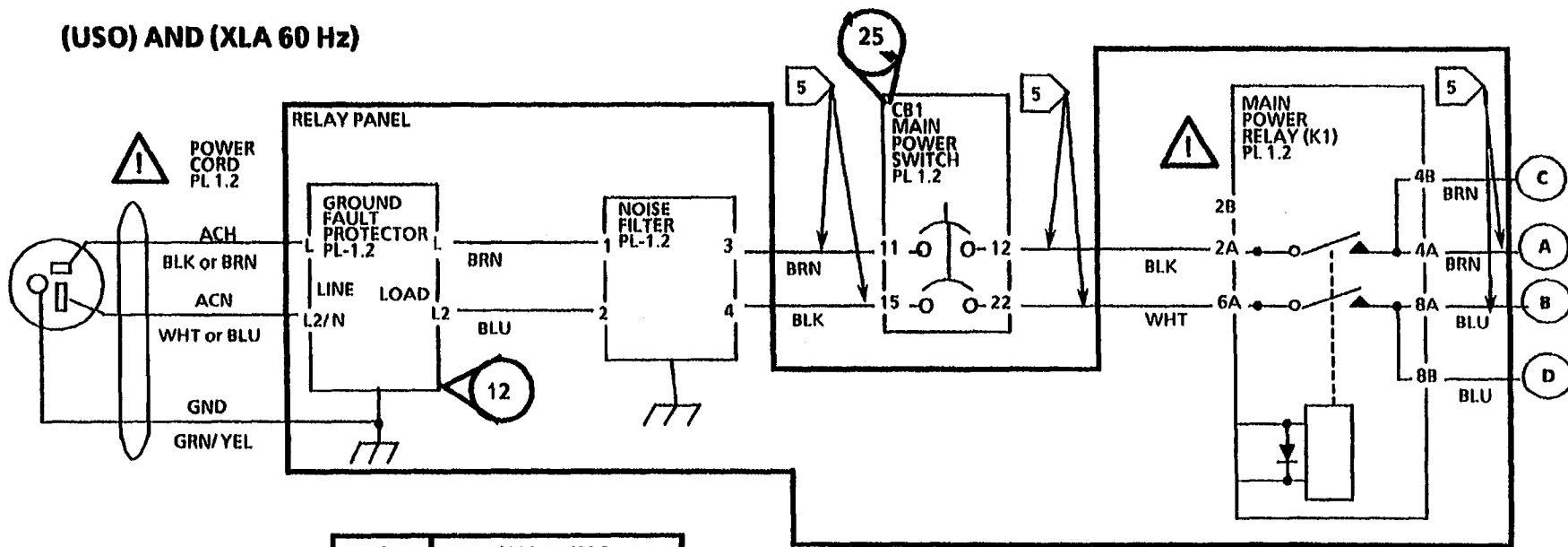
Disconnect A4P1 at the 26 VDC Bulk Power Supply and go to FLAG 4 and check for a short between ACH and ACN. If no short circuit from ACH to ACN was found reconnect 4B and 8B on the Main Power Relay and replace the 26 VDC Bulk Power Supply.

C

C

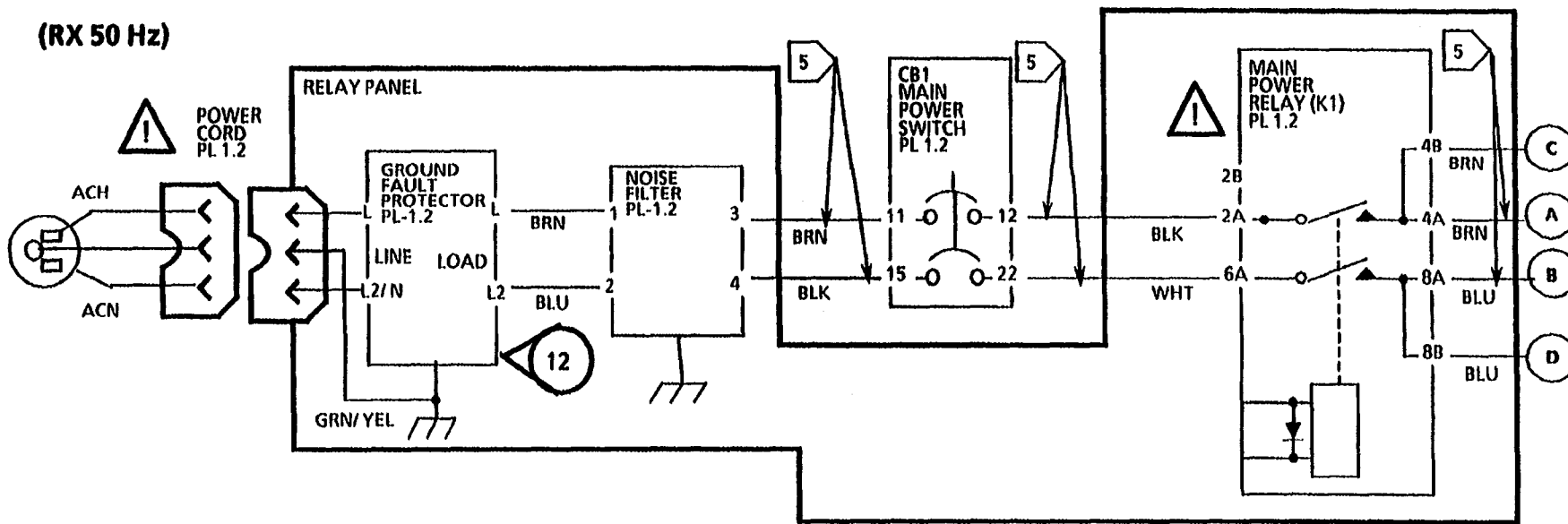
Go to FLAG 5 and check for a short between ACH and ACN. If no short circuit from ACH to ACN was found replace the Main Power Switch CB1.

**(USO) AND (XLA 60 Hz)**



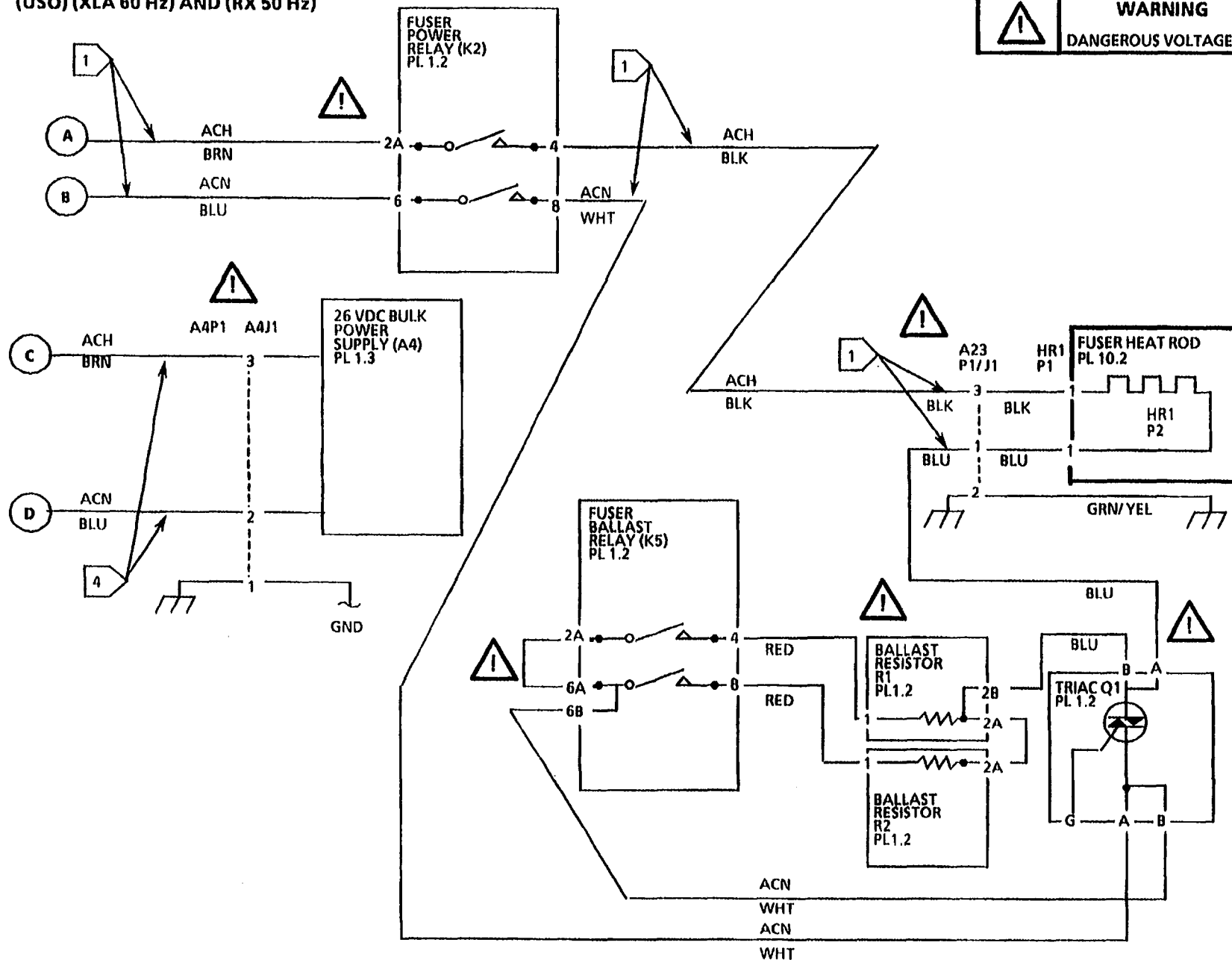
**WARNING**  
DANGEROUS VOLTAGE.

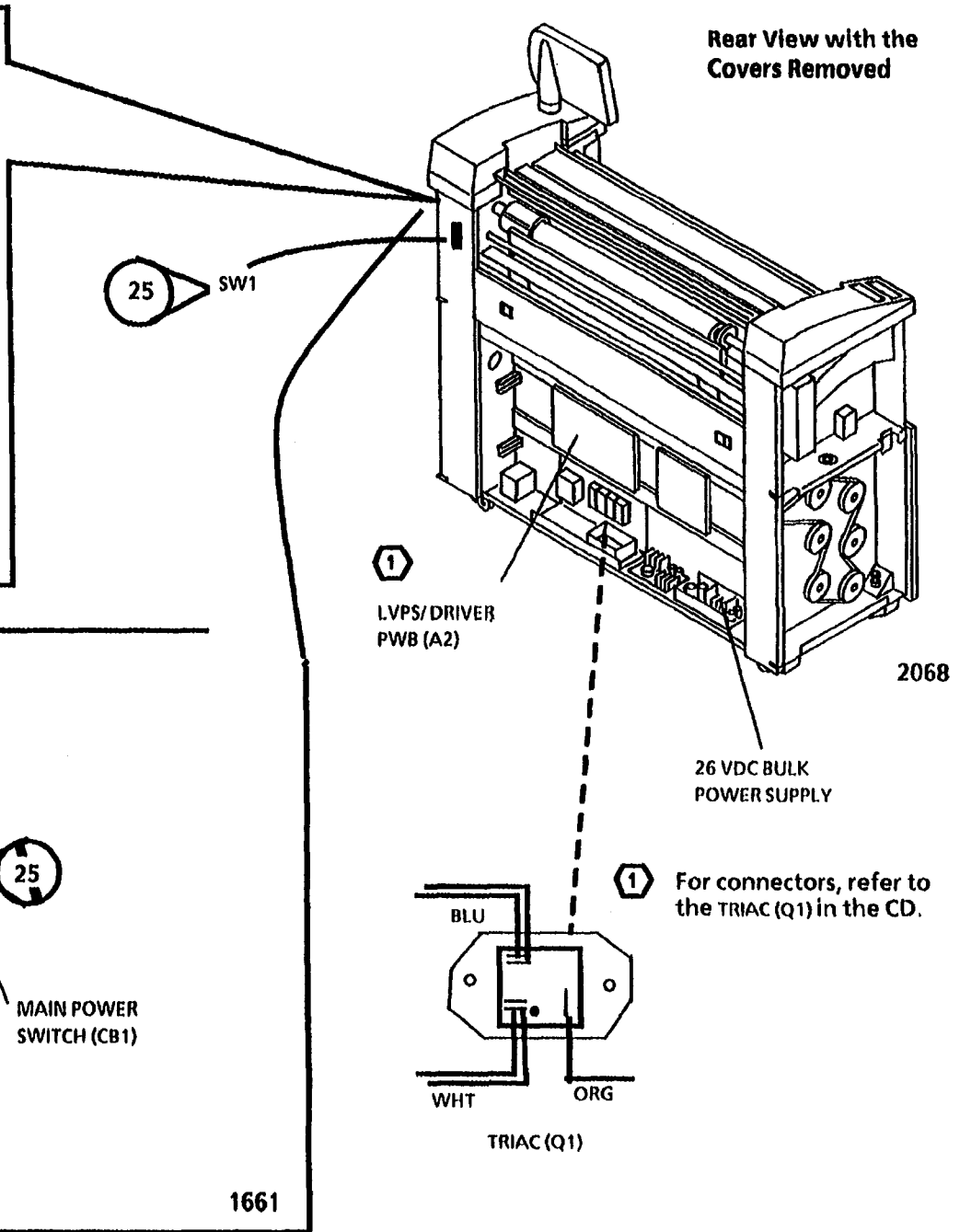
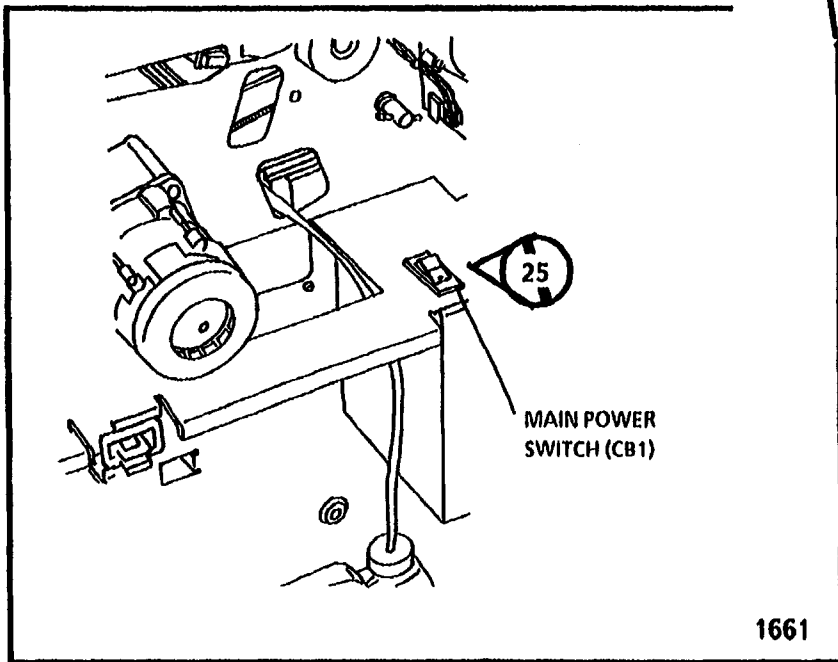
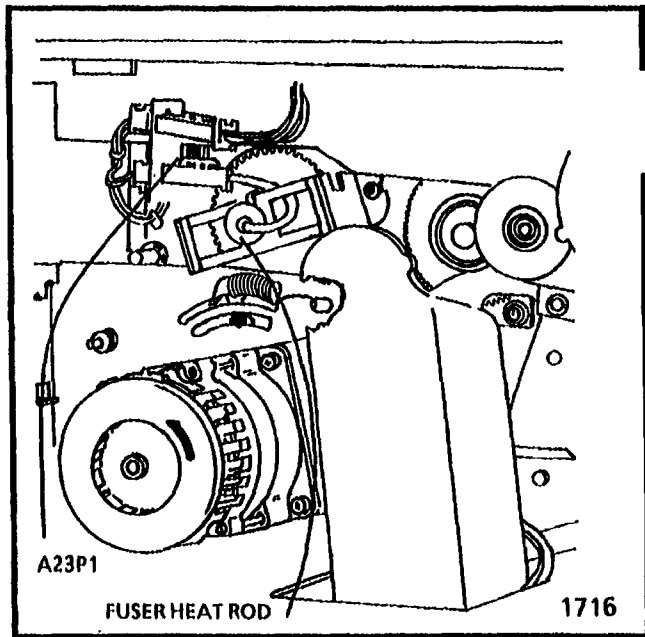
**(RX 50 Hz)**



(USO) (XLA 60 Hz) AND (RX 50 Hz)

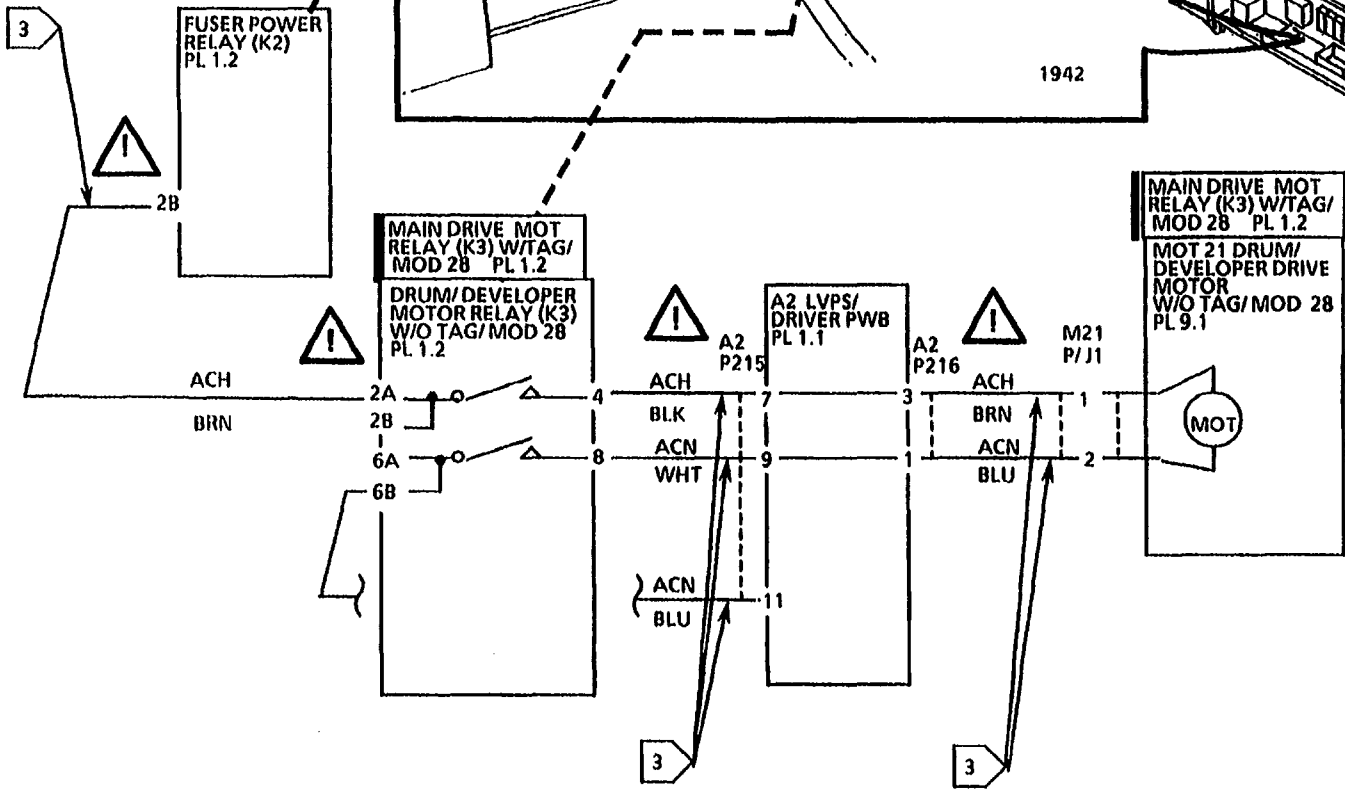
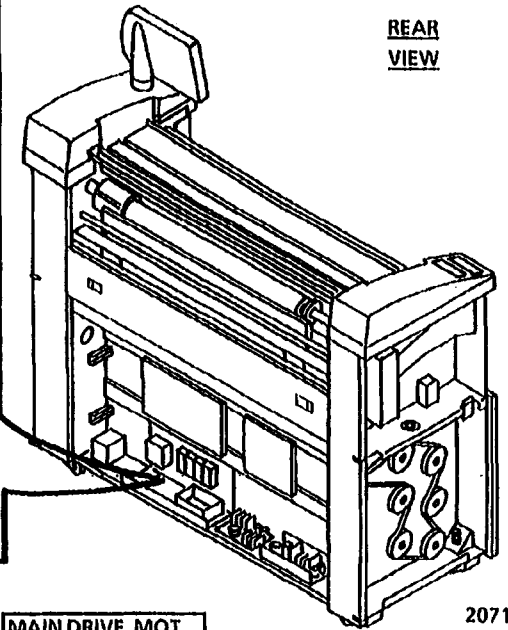
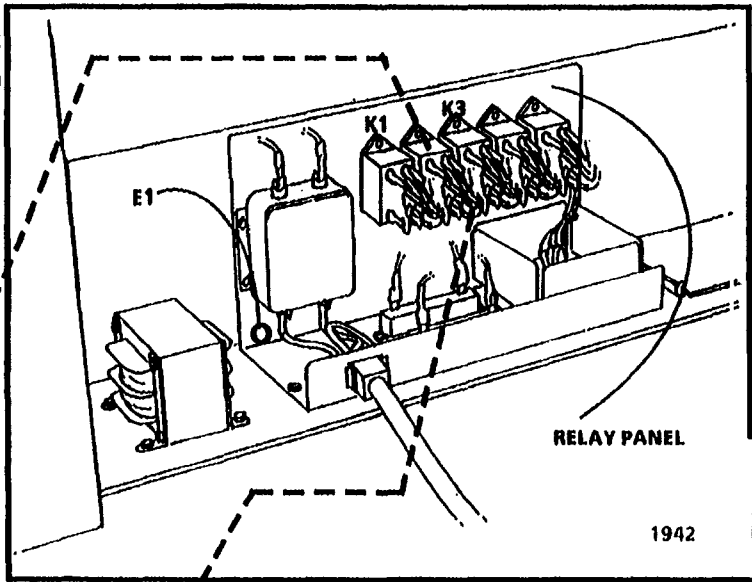
⚠	<b>WARNING</b> DANGEROUS VOLTAGE.
---	--------------------------------------





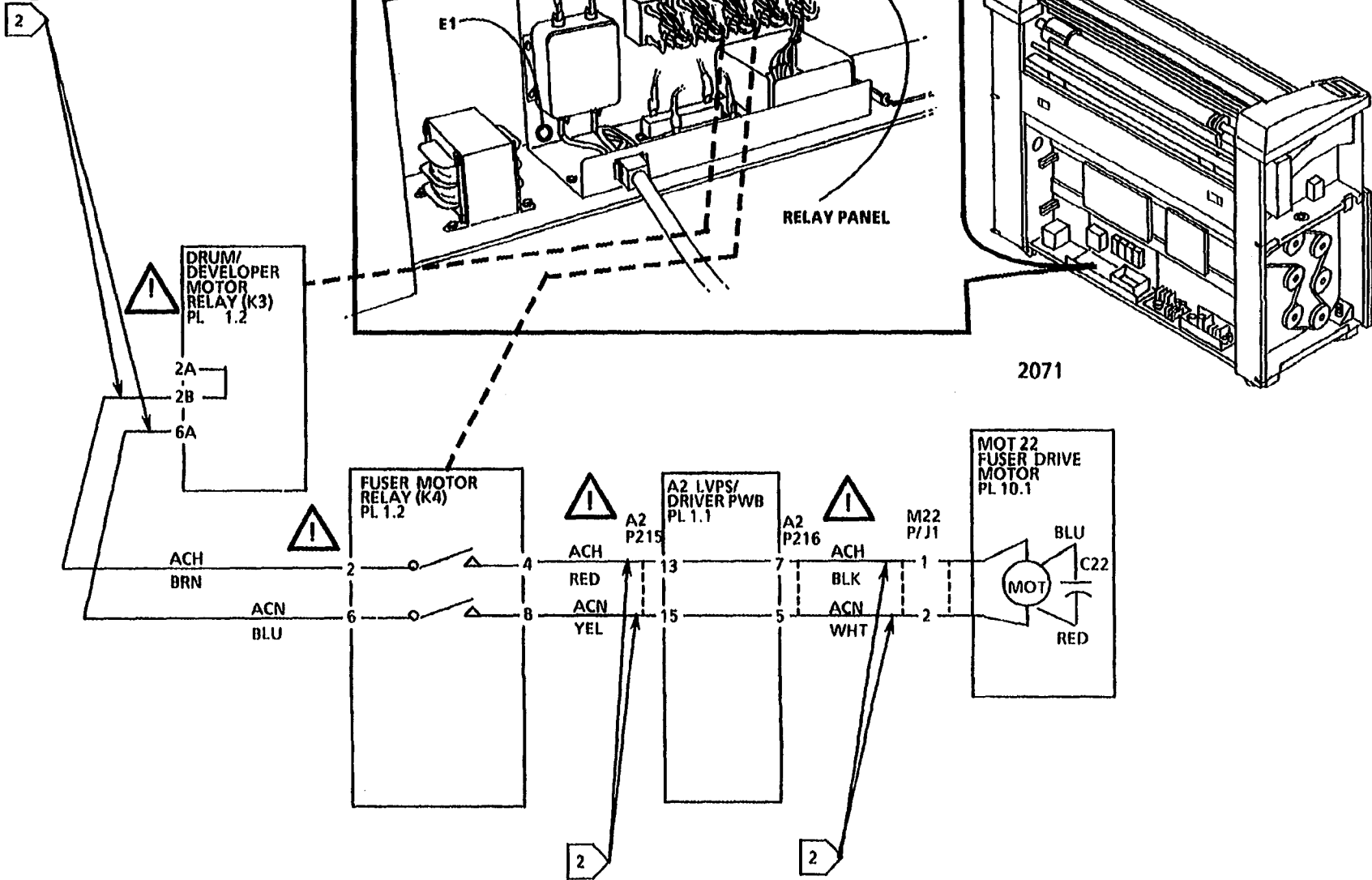


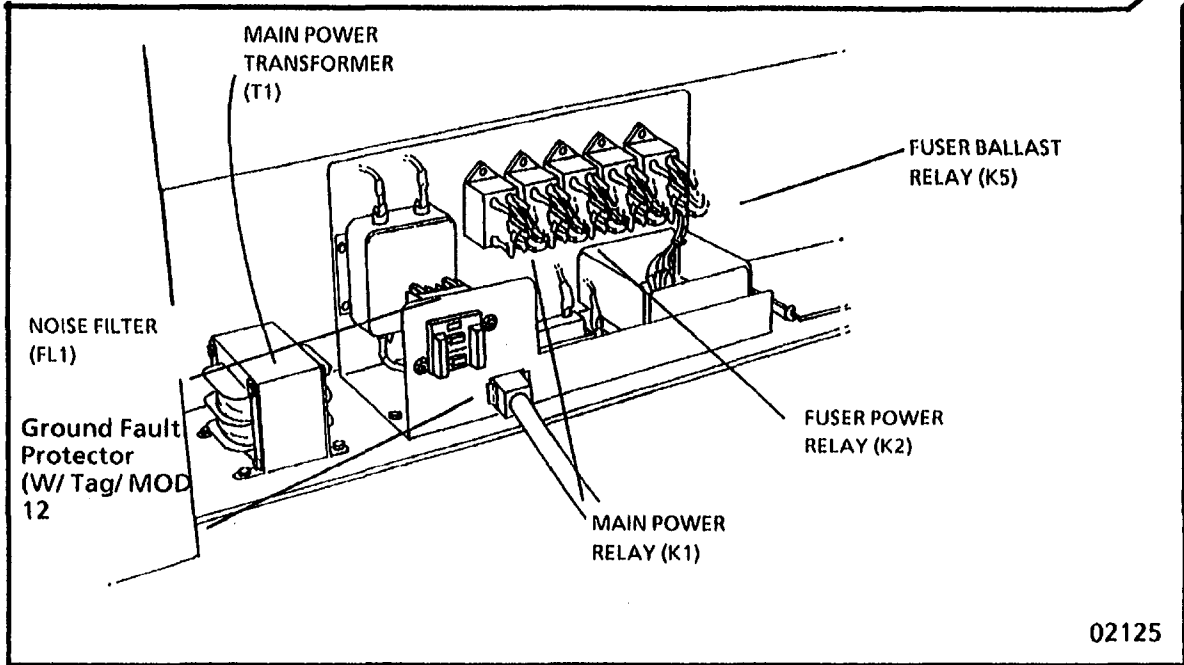
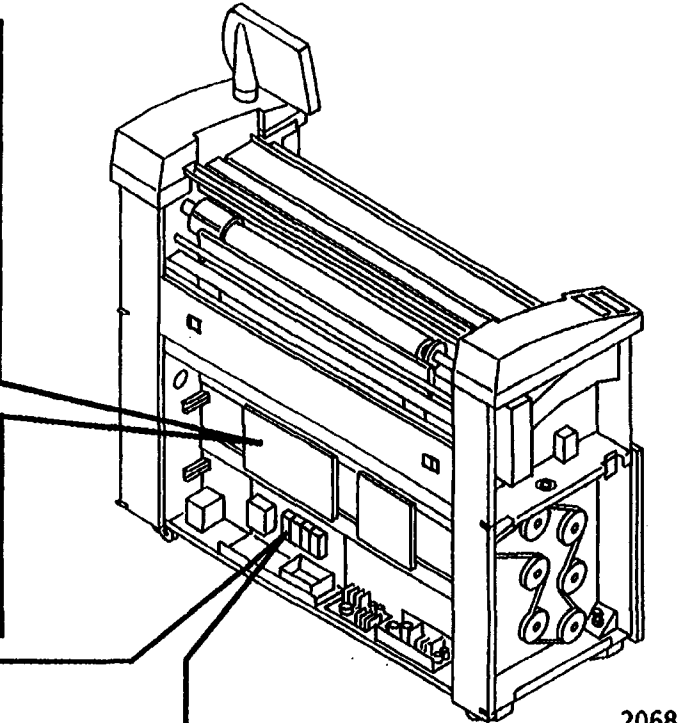
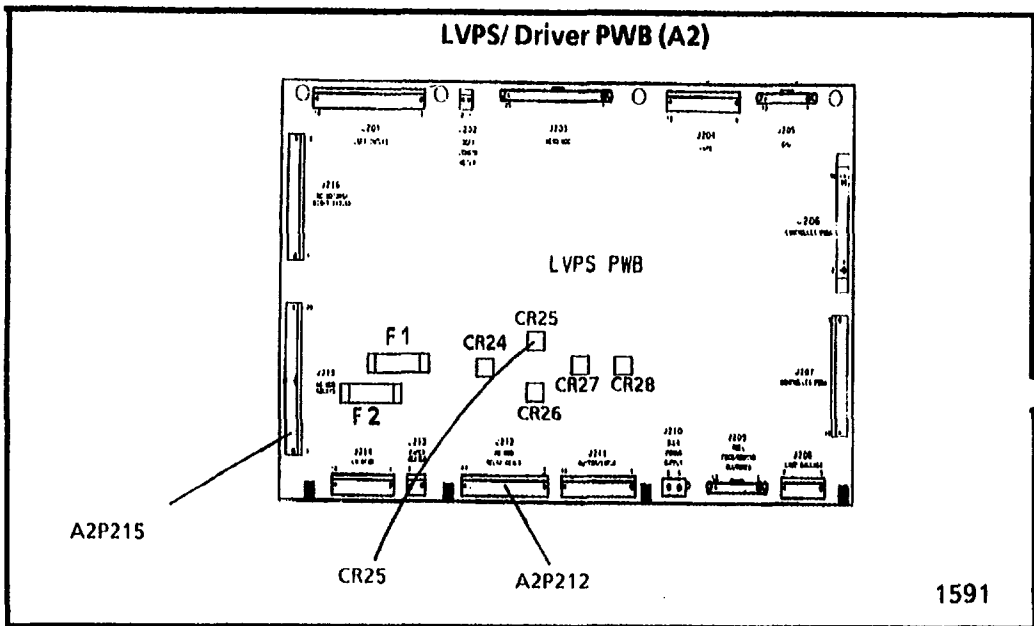
**WARNING**  
DANGEROUS VOLTAGE.



**WARNING**  
DANGEROUS VOLTAGE.

W/O Tag/MOD 28





## 1.3 Cooling Fans RAP

(04 Feb 92)

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

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

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

### Initial Actions

- Check the Connectors A1P1, A1P2, A1P3, A1P4, A2P203, and A23P2 on the Xerographic Assembly (A23) for damage, and ensure that the connectors are seated correctly.
- If one of the fans still operates, perform the following initial check:  

Switch off the copier. Connect A1P3 to A1J4. Connect A1P4 to A1J3. Switch on the copier. If the same fan still operates, replace the fan that fails to operate. Otherwise, perform the procedure below.

### Procedure

Switch off, then switch on the copier.

**The Left Cooling Fan operates.**

Y N

A B

A B

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

**The voltage at pin 15 goes LOW.**

Y N

Replace the LVPS/ Driver PWB (A2).

Go to FLAG 1 and check the wires for continuity.

**The wires have continuity.**

Y N

Repair the wires.

Replace the Thermal Controller PWB (A23A1).

**The Right Cooling Fan operates.**

Y N

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

**The voltage at pin 15 goes LOW.**

Y N

C D E

C D E

Replace the LVPS/ Driver PWB (A2).

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

**The wires have continuity.**

Y N

Repair the wires.

Replace the Thermal Controller PWB (A23A1).

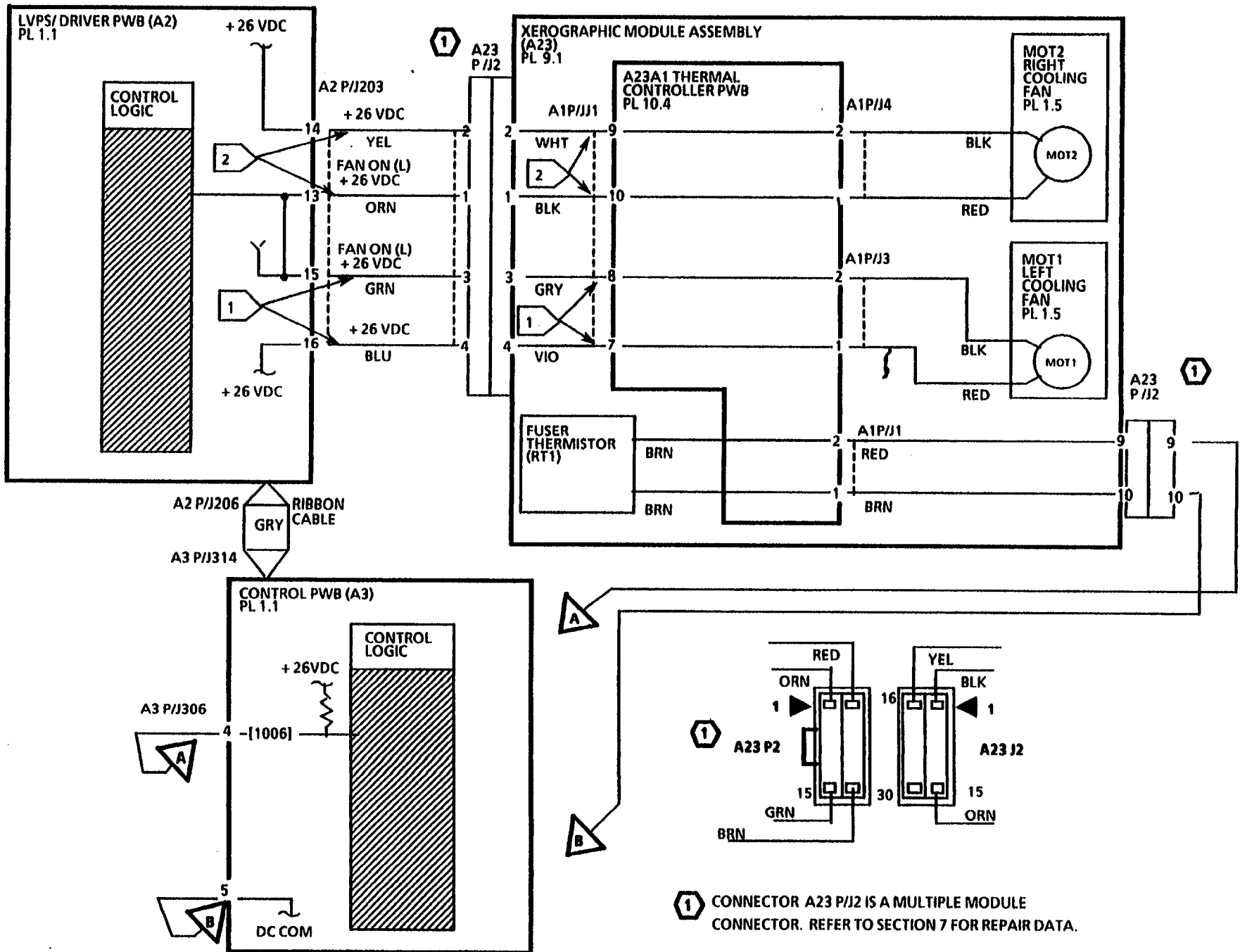
Enter the diagnostic mode. Enter the code [0914] and observe the sound of the fans.

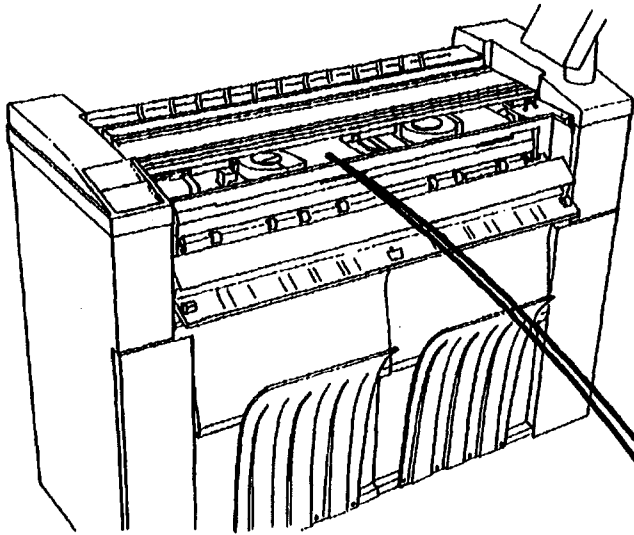
**The Cooling Fans operate at high speed for approximately 2 seconds, then operate at low speed.**

Y N

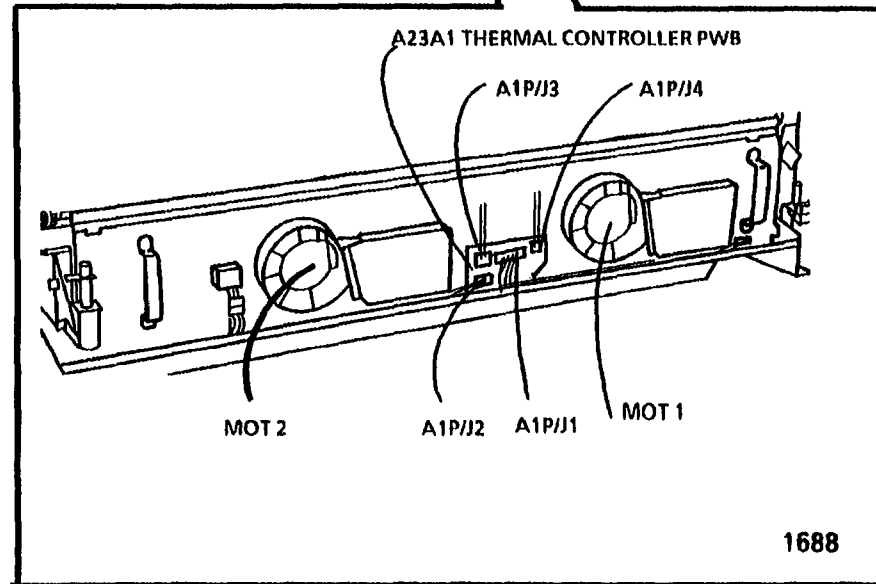
Replace the LVPS/ Driver PWB.

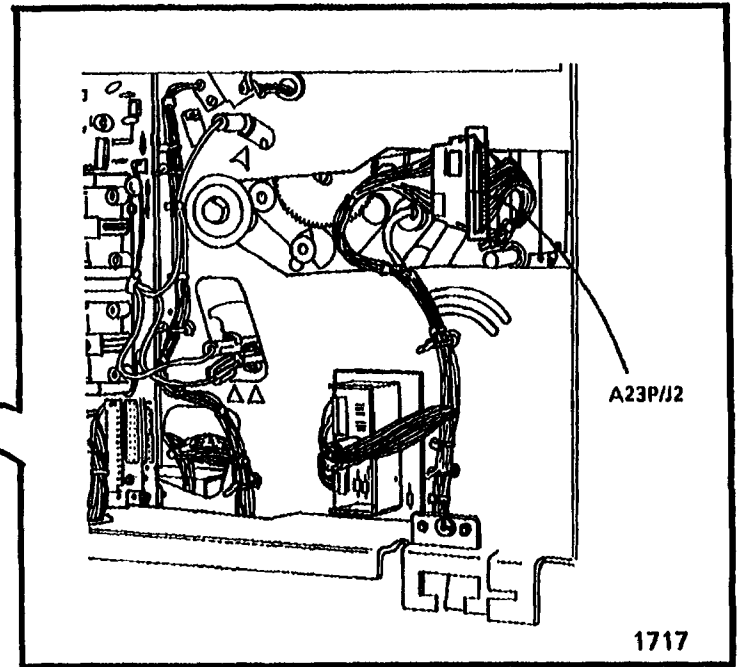
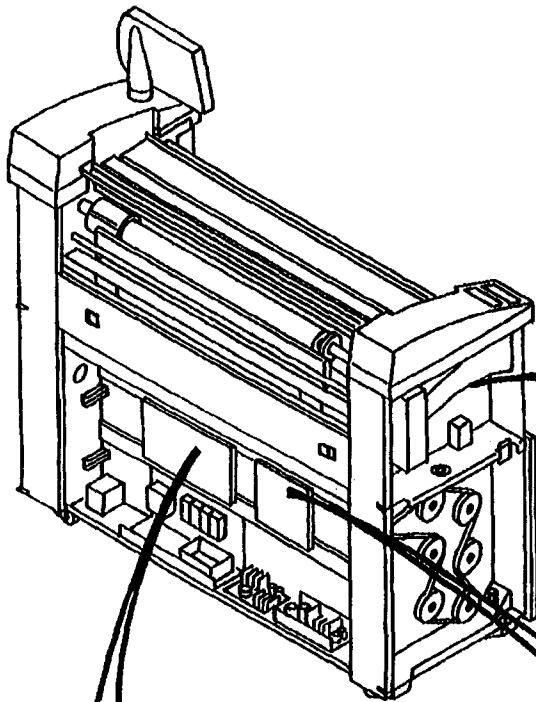
**The Cooling fans operate correctly. Return to normal operation.**





1690

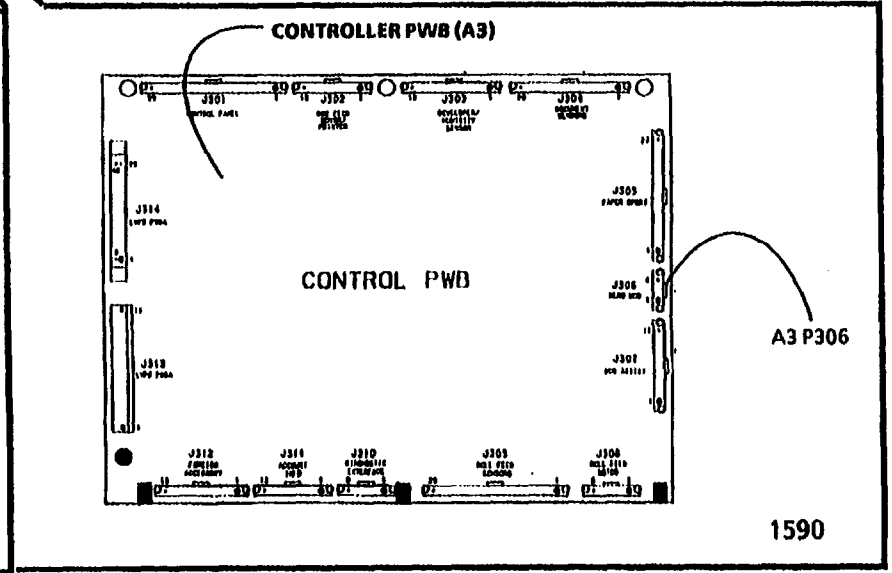
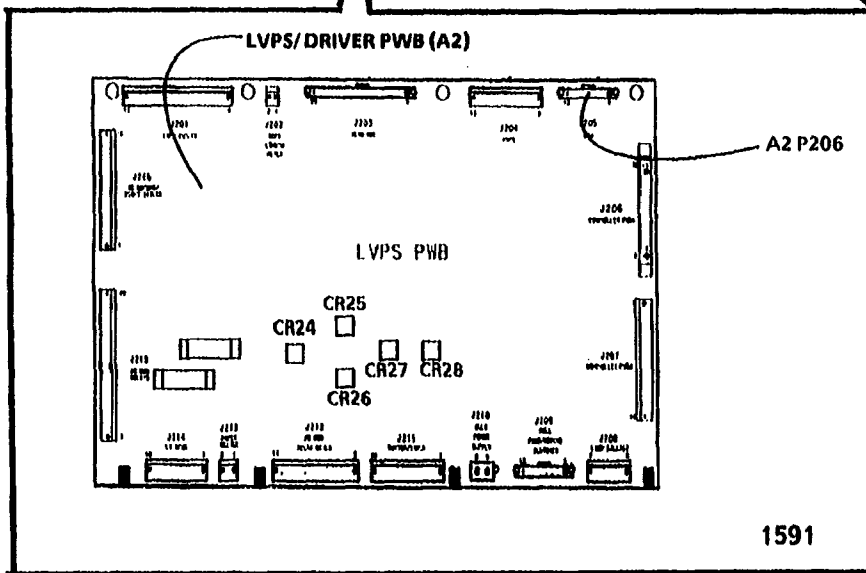




2068

A23P/J2

1717



## 1.4 Main Power Interlock RAP

(12 Feb 92)

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

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

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

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

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

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

### Initial Actions

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

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

### Procedure

Switch off, then switch on, the copier.

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

**Y N**

Check that all the following interlock switches are actuated:

- Right Side Door
- Upper Rear Cover (Developer Cover)
- Document Handler
- Cutter Cover.
- On copiers W/Tag/MOD: 28, ensure that plug S23 P/J1 is seated correctly.

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

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

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

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

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

**A**

Set the DMM to read 26 VDC. Connect the (+) lead to A2 P212-5. Connect the (-) lead to frame ground.

**There is +26 VDC.**

**Y N**

Replace the LVPS/ Driver PWB (A2).

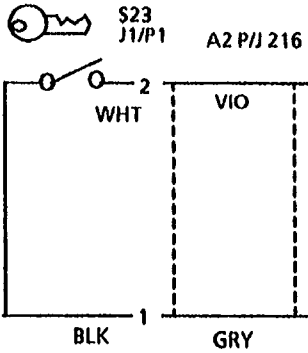
Go to FLAG 1 and check the wires for continuity. If the wires are good, replace the Main Power Relay (K1).

**A**

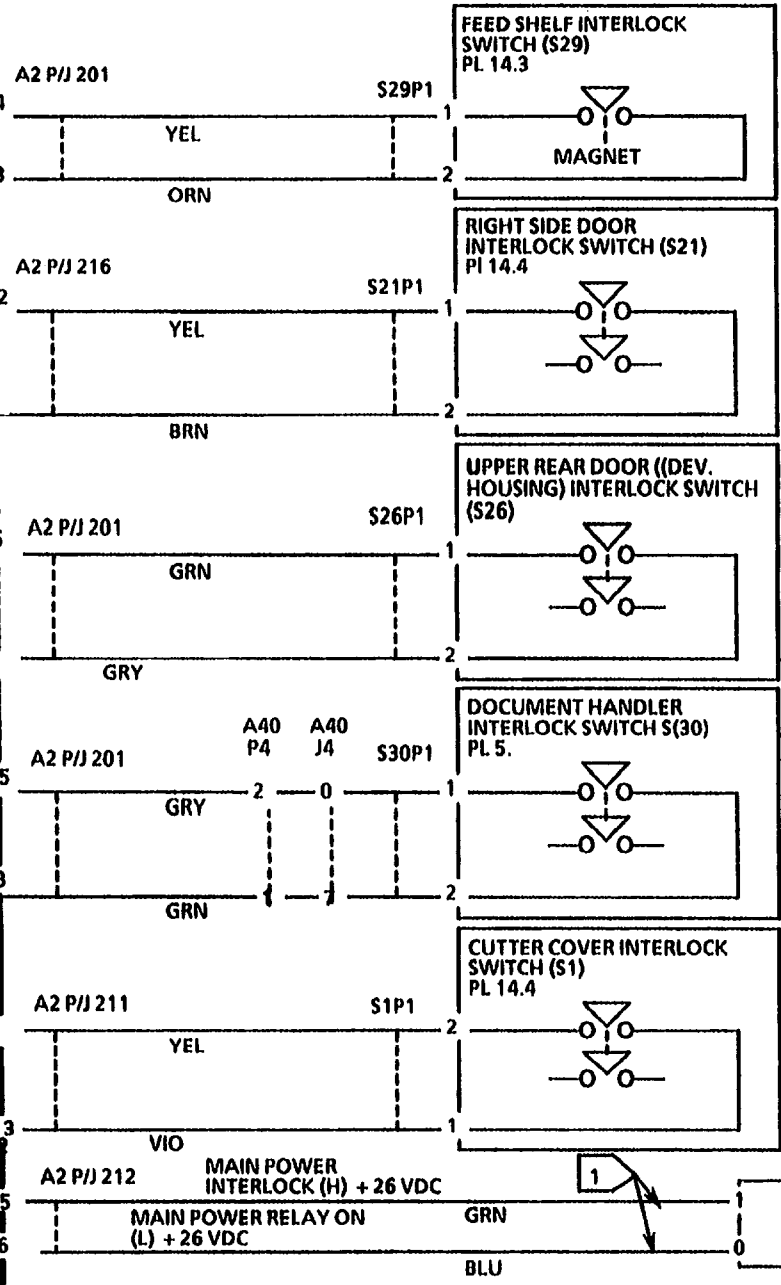
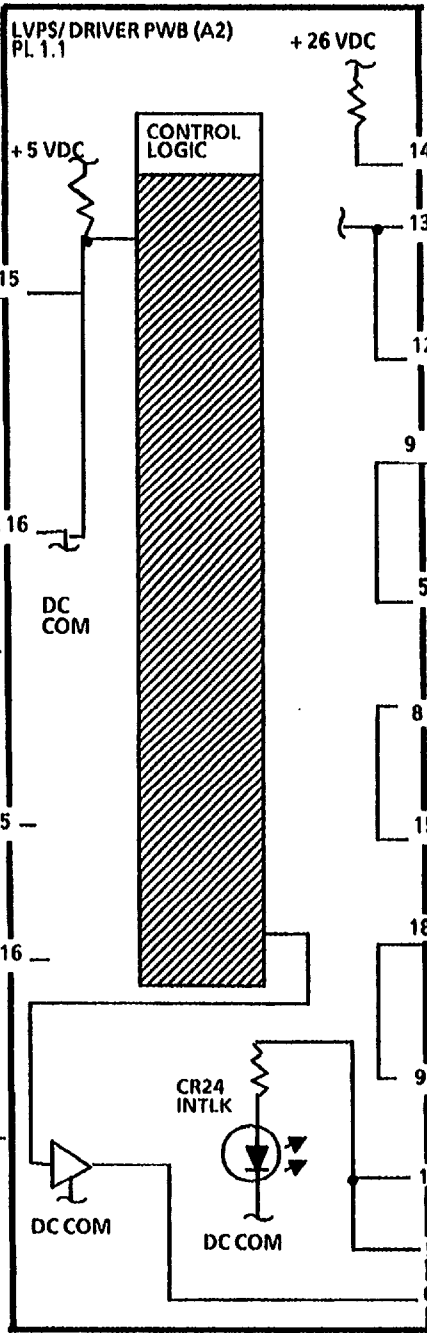
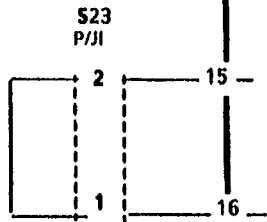


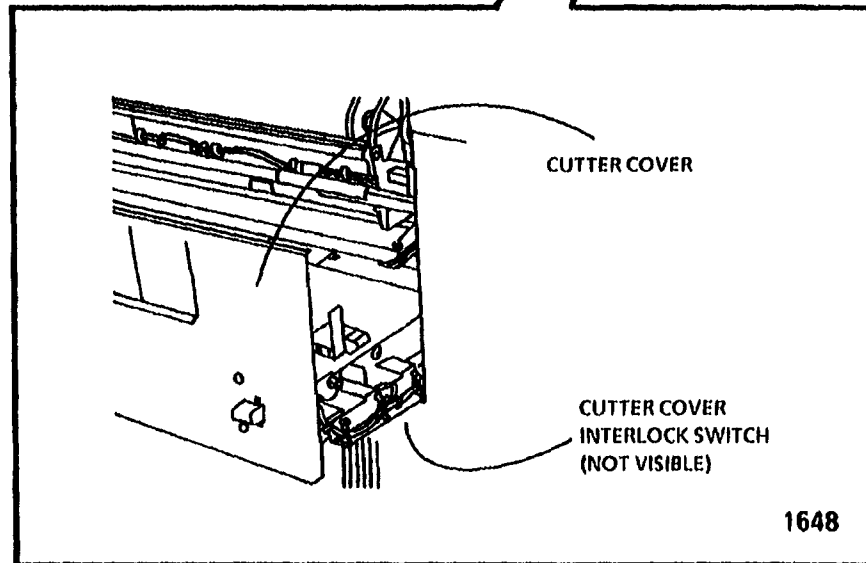
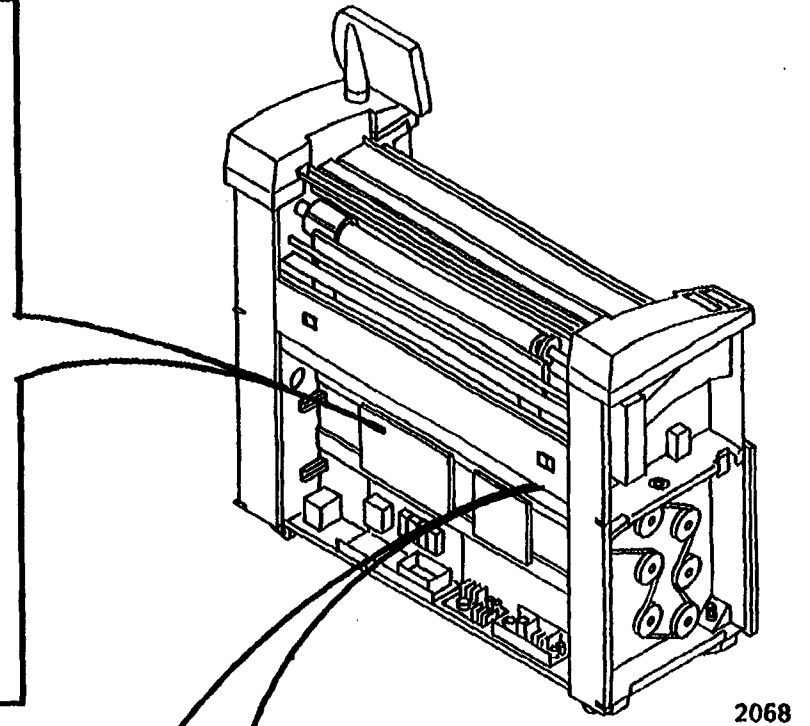
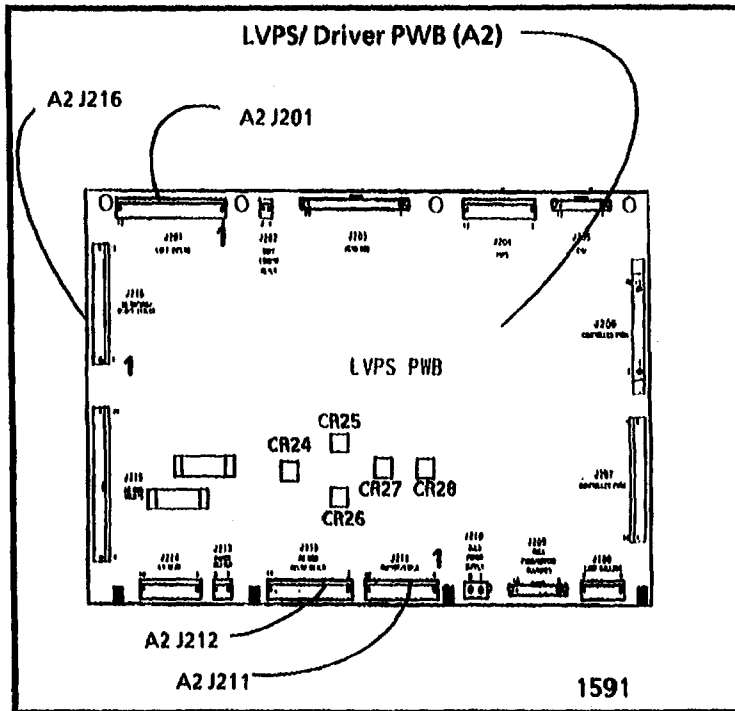
**MAIN POWER INTERLOCK CIRCUIT**

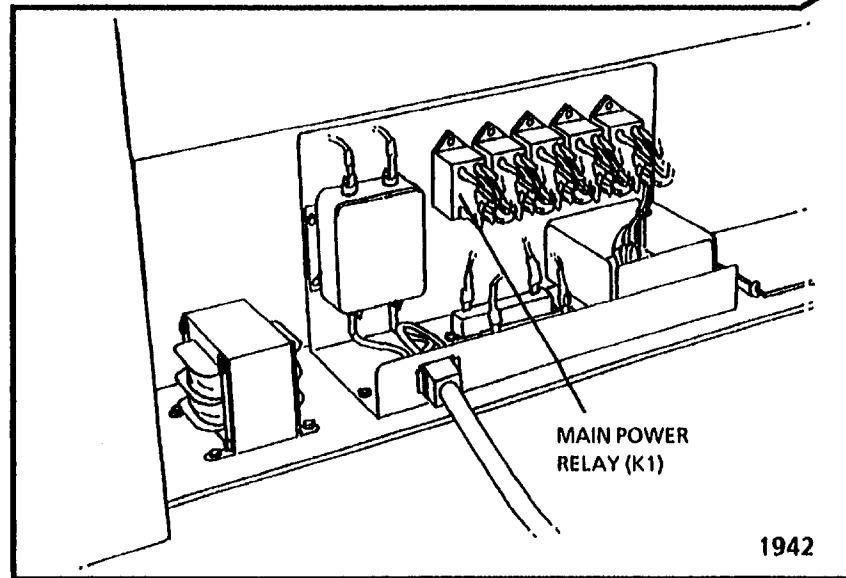
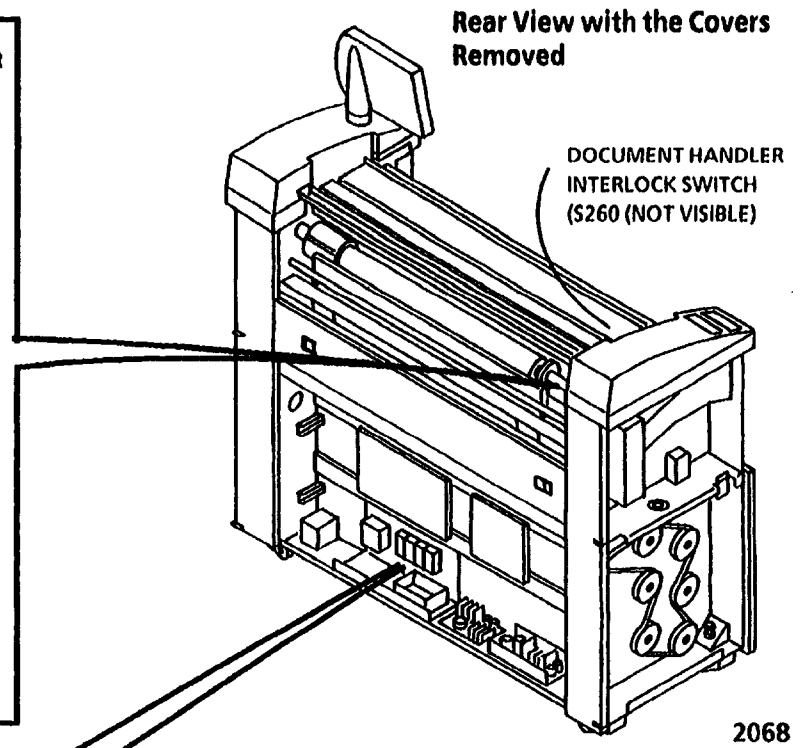
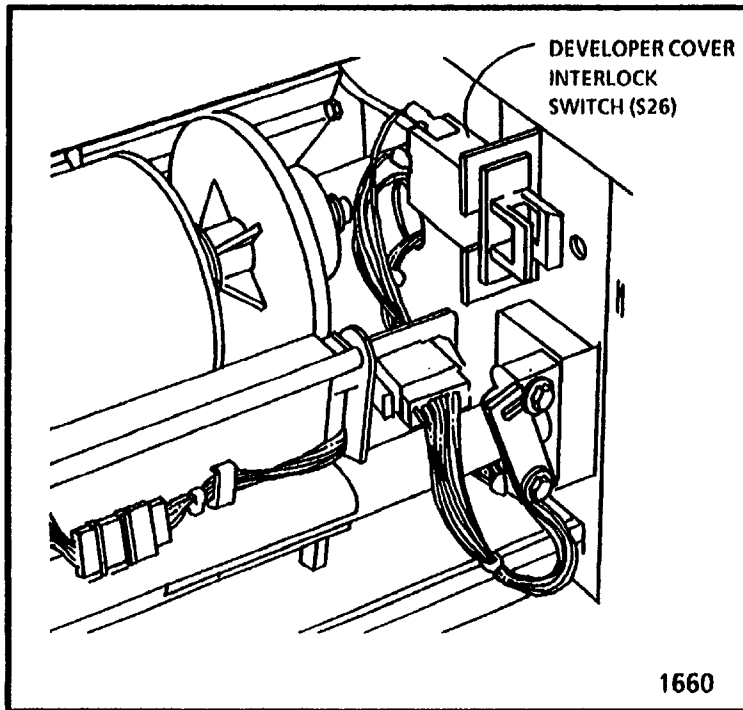
**W/O Tag /MOD 28 Key Lock Switch**



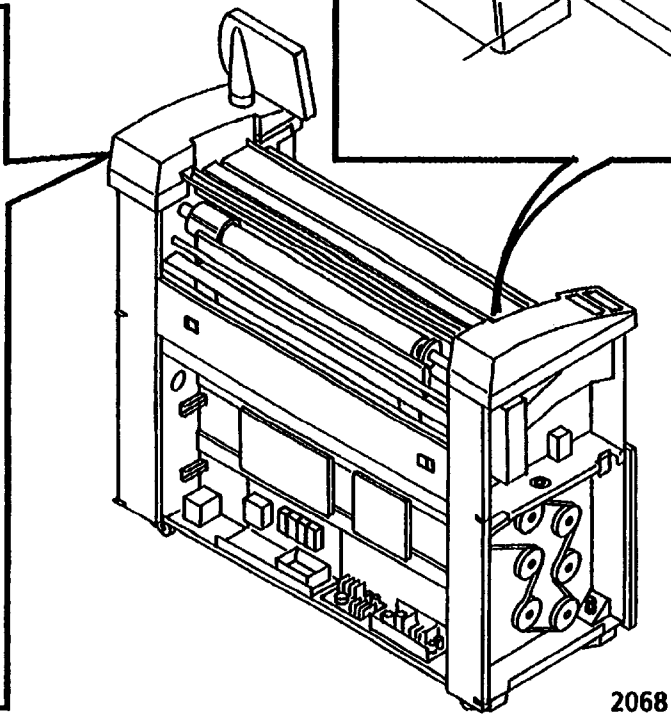
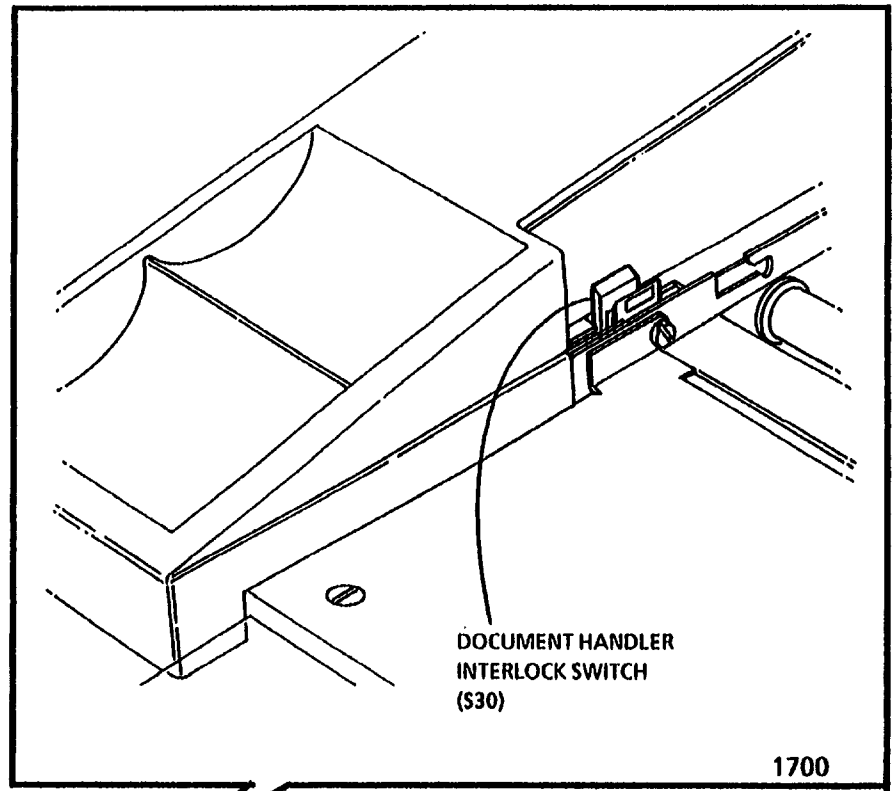
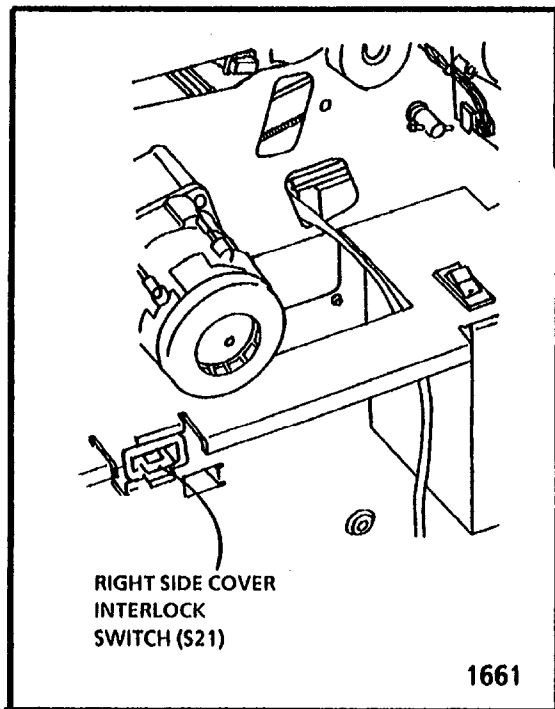
**W/ Tag /MOD 28**







# NOTES



## 1.5 DC Power RAP

(05 Feb 92)

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

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

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

### Initial Actions

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

### Procedure

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

Y N

Switch off the power and disconnect the Power Cord.

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

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

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

Y N

A B C

A B C

Set the DMM to read ACH. Connect the (+) lead to A2 P214 pin 1. Connect the (-) lead to pin 4.

There is ACH.

Y N

Replace the LVPS/ Driver PWB (A2).

Set the DMM to measure 22 VAC.

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

There is 22 to 25 VAC.

Y N

Replace the Main Power Transformer (T1).

Replace the LVPS/ Driver PWB (A2).

Go to connector A2P207 and check each of the power pins for a short circuit to the frame.

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

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

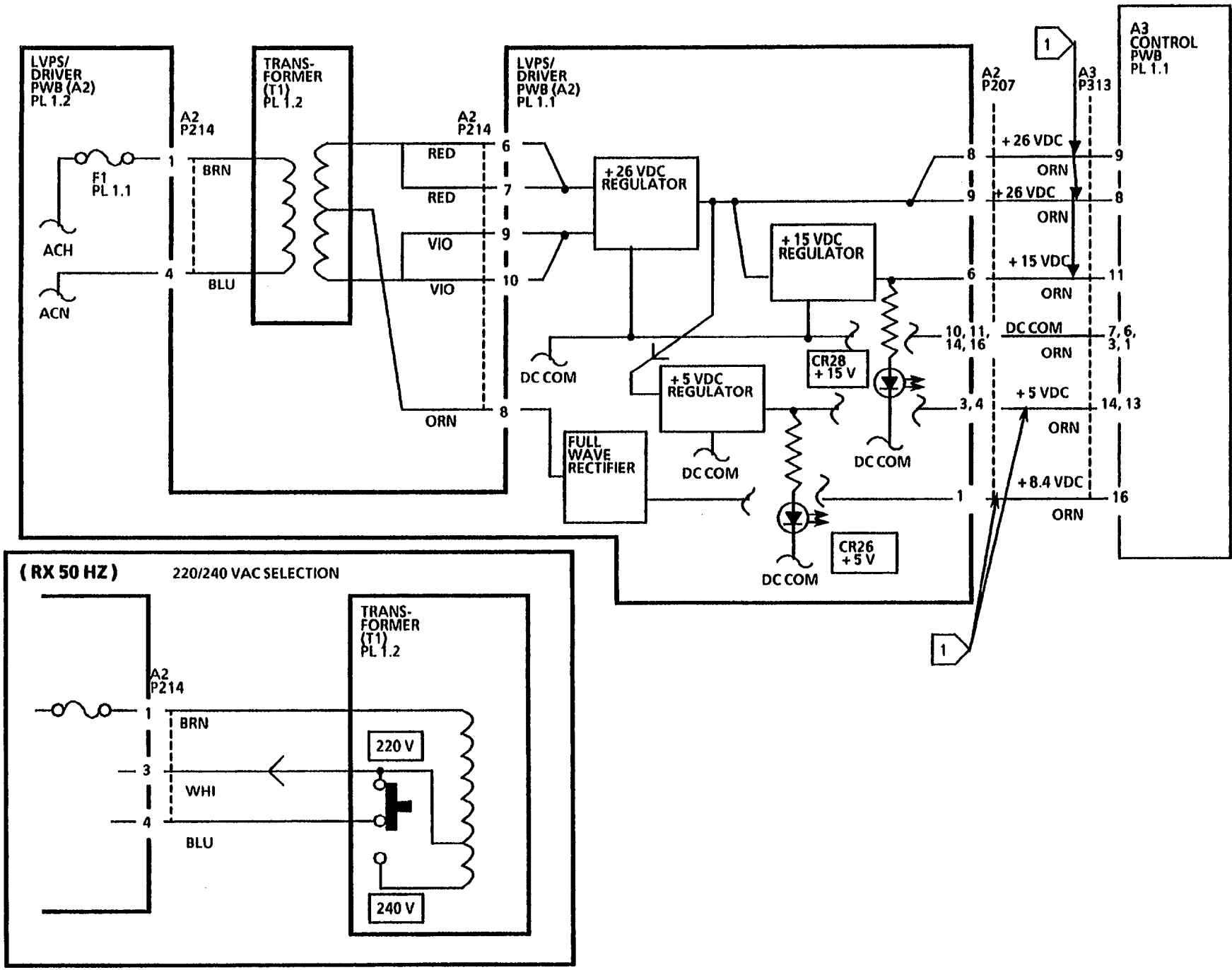
PIN (+)	VOLTAGE
A2 P207-8	+ 26 VDC
A2 P207-6	+ 15 VDC
A2 P207-4	+ 5 VDC
A2P207-1	+ 8.4 VDC

D

D

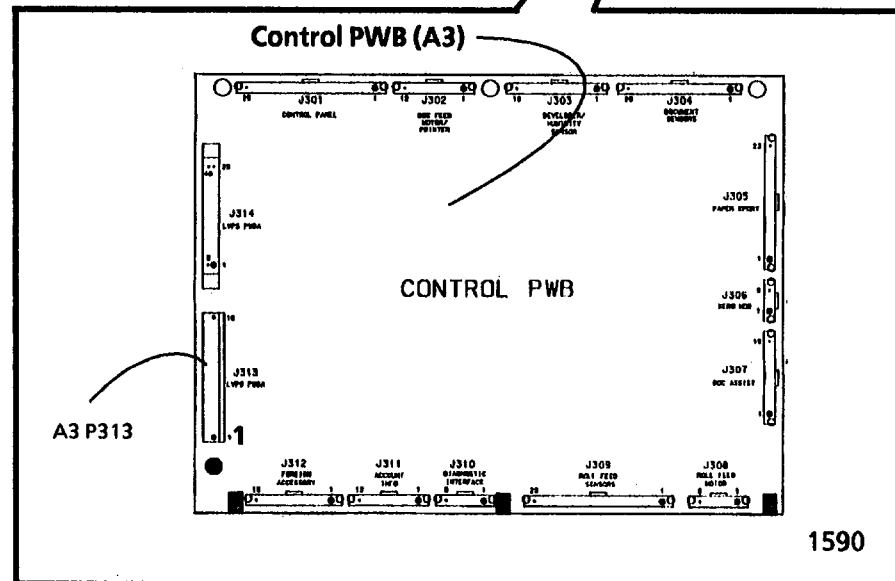
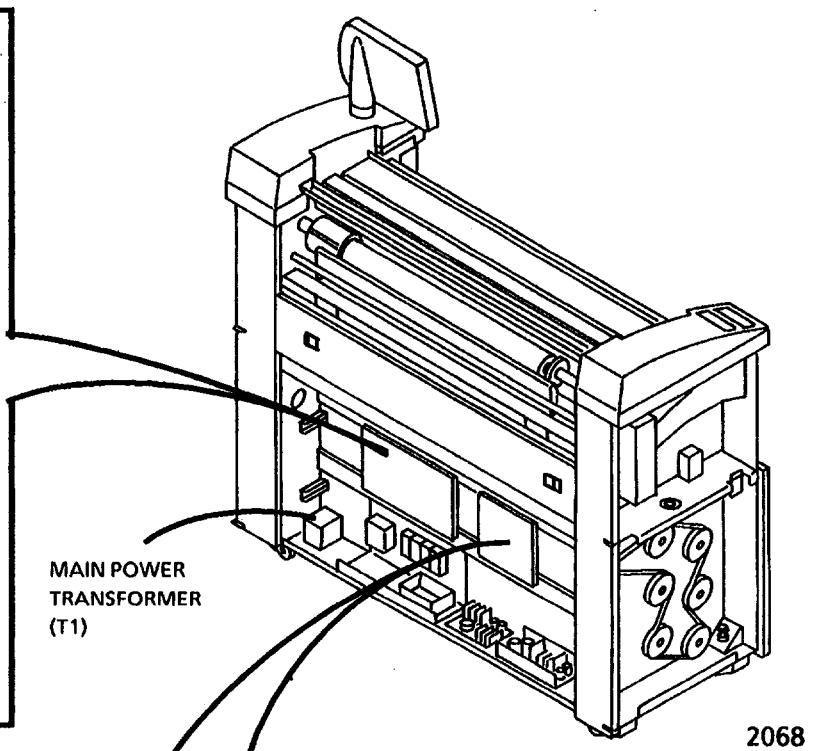
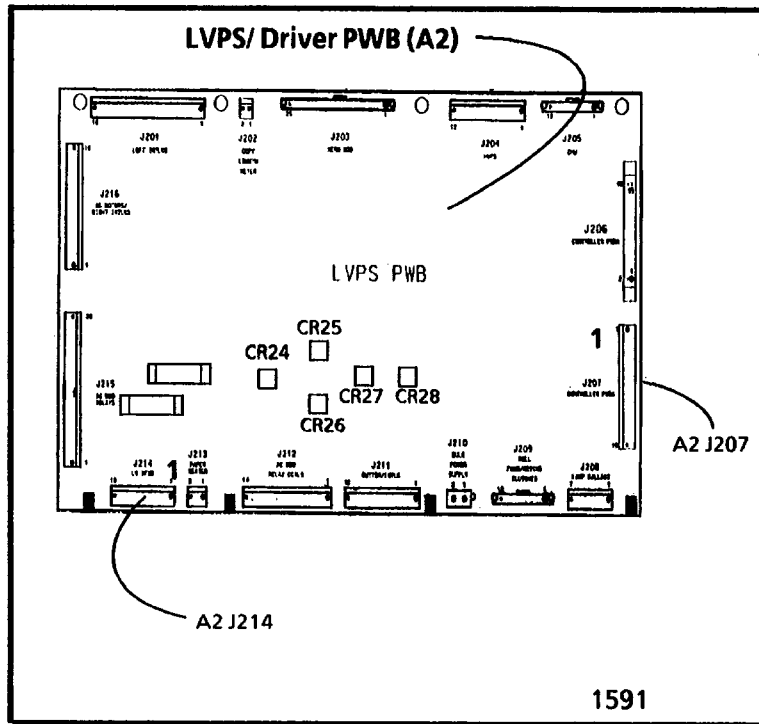
If any voltage is not at specification, replace the LVPS/ Driver PWB (A2).

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



# NOTES





## 1.6 Ground Fault (W/ TAG/ MOD 12) RAP

(12/15/97)

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

The 3050 copier is equipped with a Ground Fault Protection (GFP) device (Tag/ MOD 12), 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 outlet and the Main Power Switch is On (1).

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 Ground Fault Protector (PL 1.2).

Go to the 1.1 AC Power RAP.

A

A

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

Y N

Replace the GFP (PL 1.2).

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

Y N

Go to the 1.1 AC Power RAP.

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

The GFP is in the tripped Position (red flag is not up) after the Main Power Switch is switched on.

Y N

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

Y N

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

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

Y N

B C D E

B

C

D E

Go to the Call Flow Diagram in Section 1.

Note: Two wiring configurations are provided in the Circuit Diagrams. One for copiers equipped with two drive motors, identified as (W/ O Tag/ MOD 28), Drum/ Developer and Fuser Drive Motors. The other for one drive motor, identified as (W/ Tag/ MOD 28), Main Drive Motor. Ensure to refer to the correct diagram.

Go to FLAG 5 and disconnect the wires at 4B, 4A, 8B, and 8A. Go to FLAGS 5 through 8 and check for a high resistance path to ground. Look for pinched wires or wires with frayed insulation. Reconnect the wires at FLAG 5.

The GFP is in the tripped Position (red flag is not up) after the Main Power Switch is switched on.

Y N

Go to the Call Flow Diagram in Section 1.

Disconnect the following components separately:

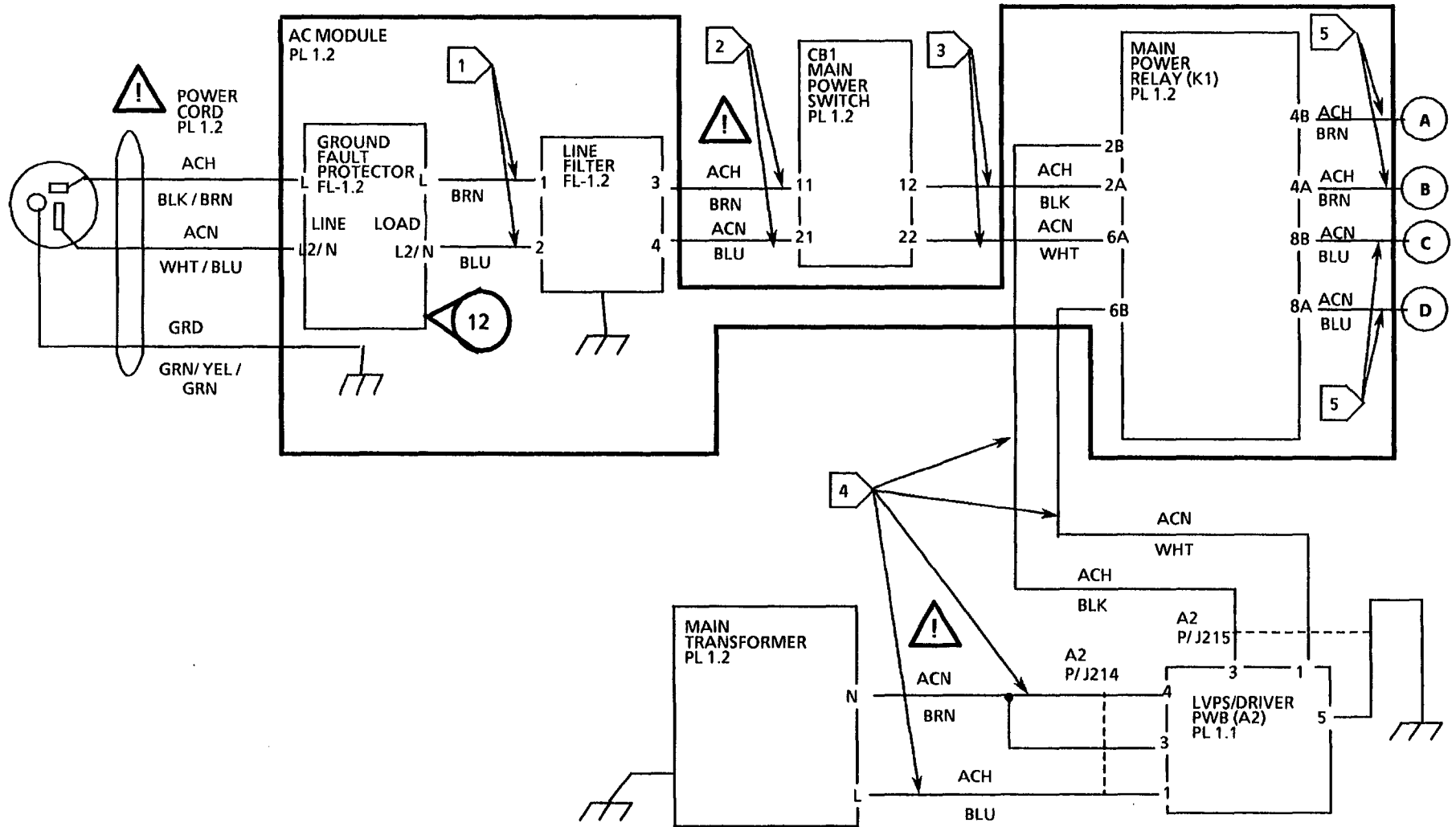
- Main Transformer
- LVPS/Driver PWB

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

Replace the Main Power Switch (PL 1.2).

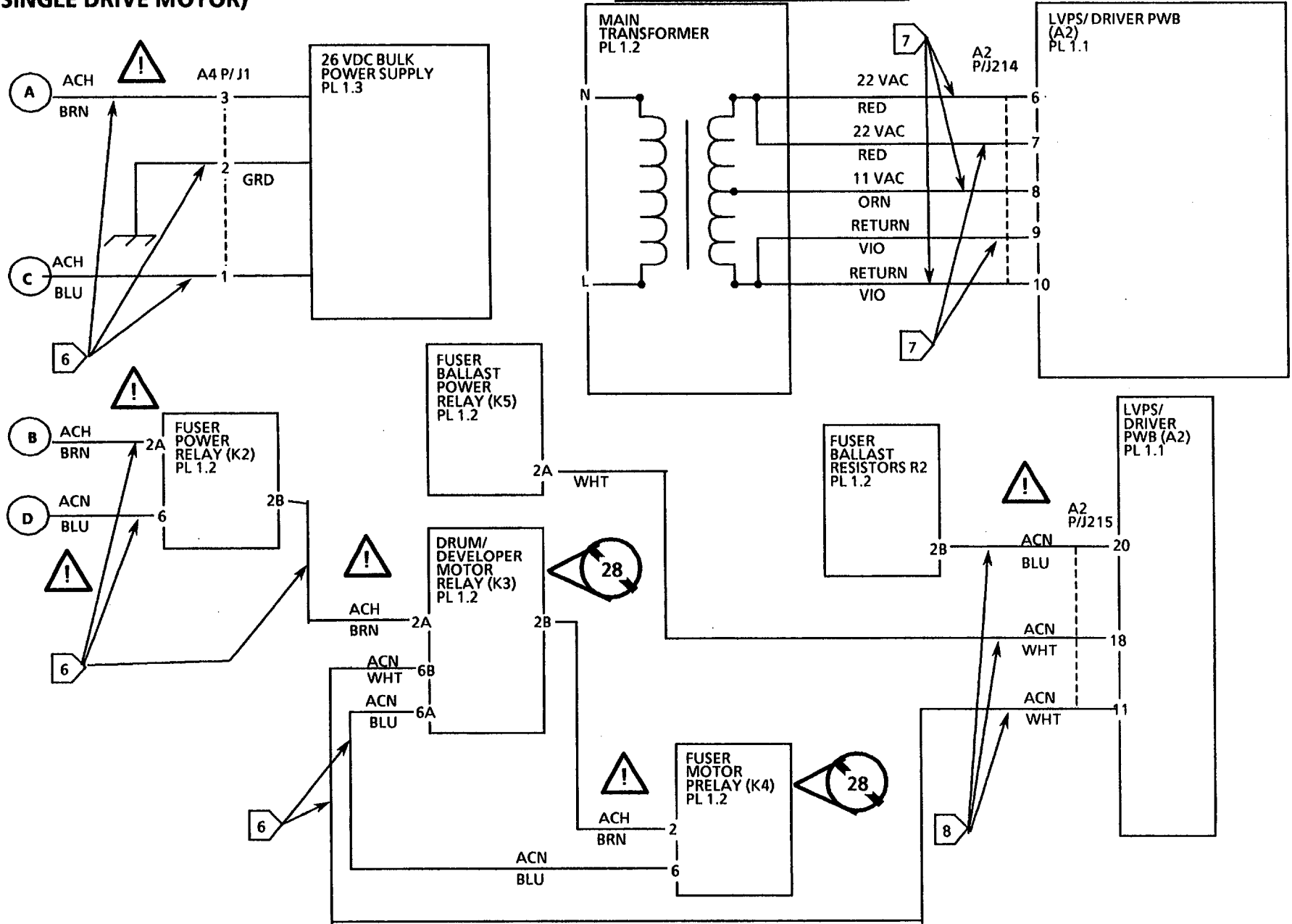
Replace the Line Filter (PL 1.2).

(USO) AND (XLA 60 Hz)

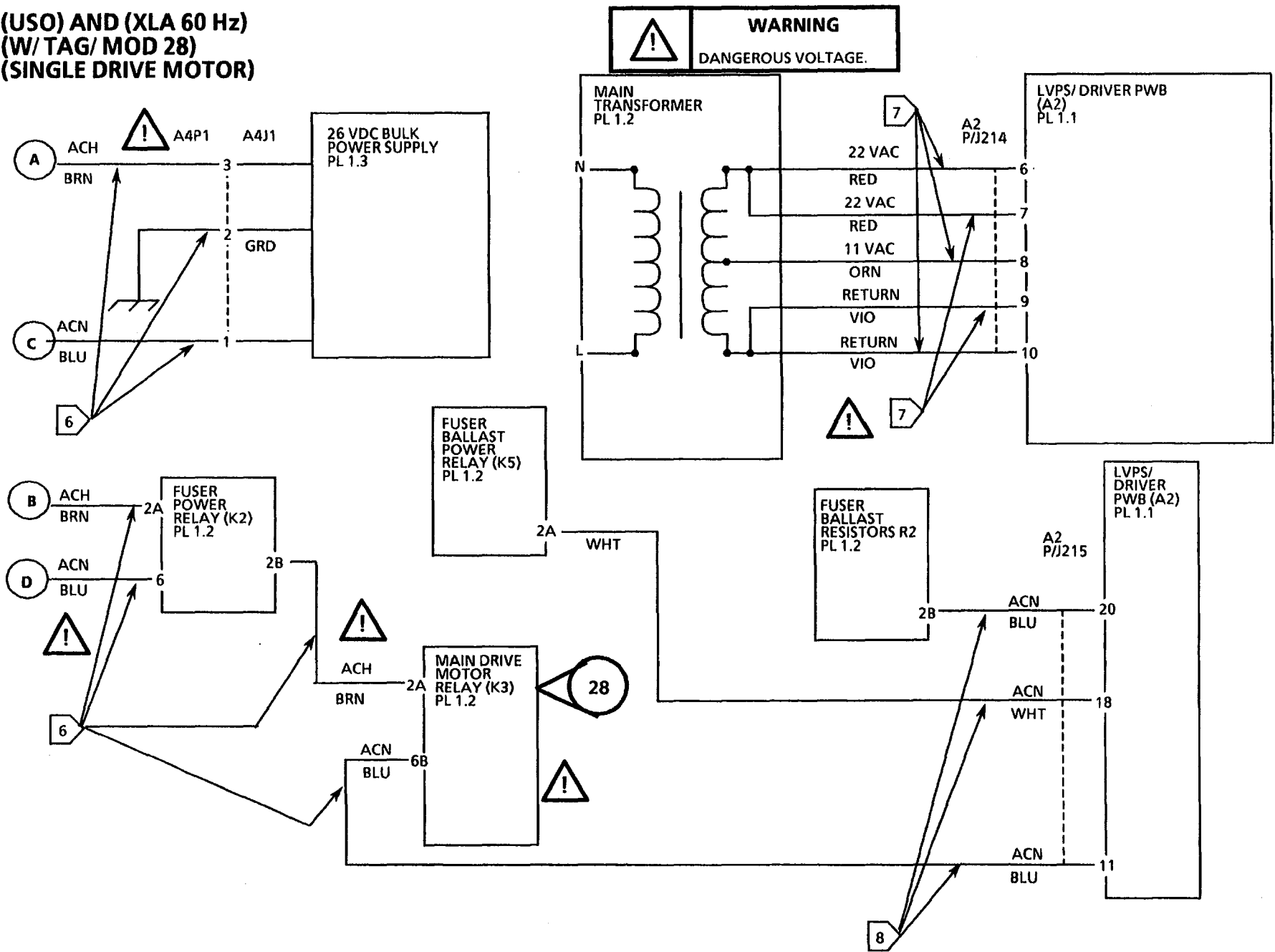


**(USO) AND (XLA 60 Hz)  
(W/ O TAG/ MOD 28)  
(SINGLE DRIVE MOTOR)**

**WARNING**  
DANGEROUS VOLTAGE.

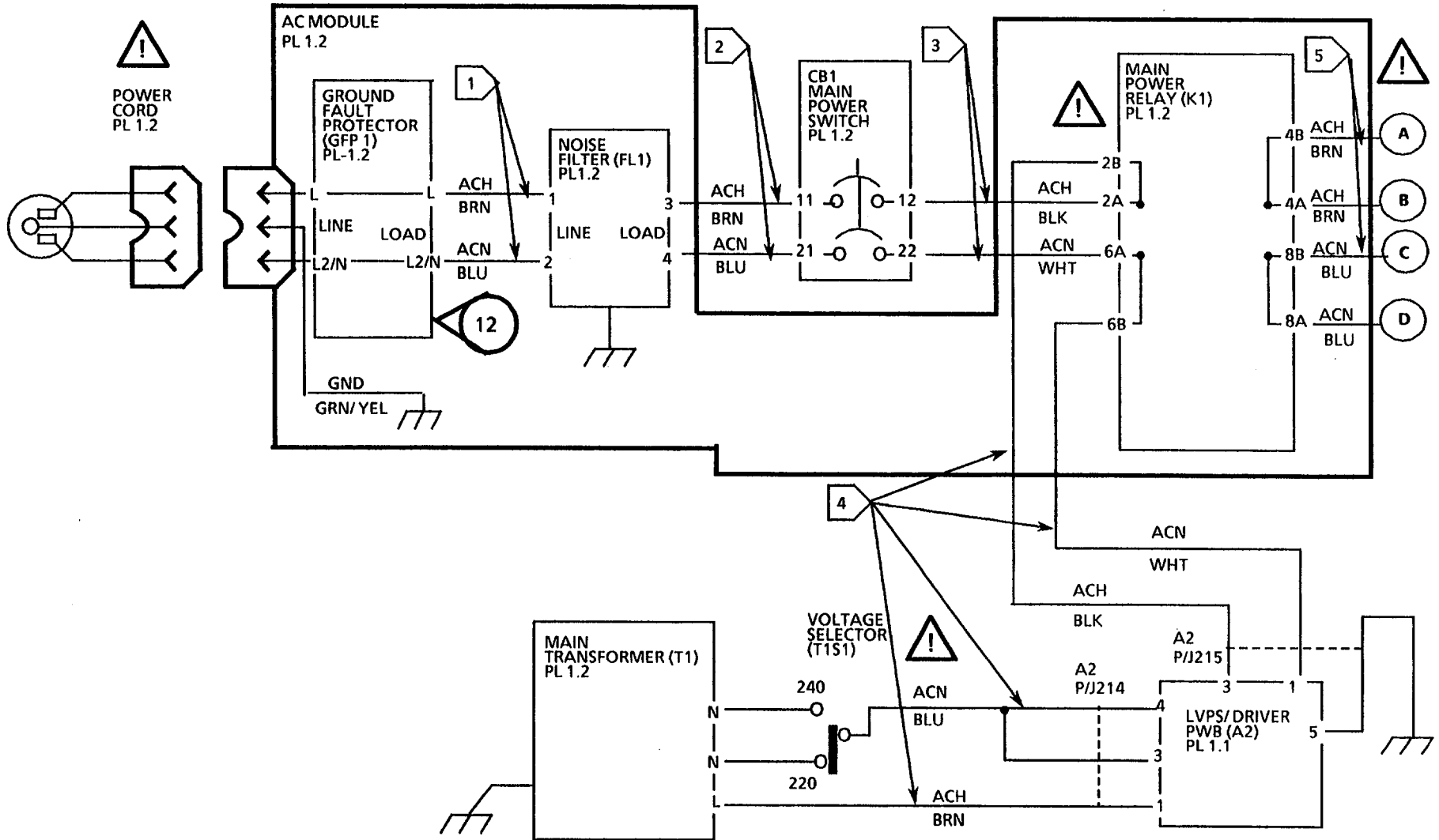


**(USO) AND (XLA 60 Hz)  
(W/ TAG/ MOD 28)  
(SINGLE DRIVE MOTOR)**



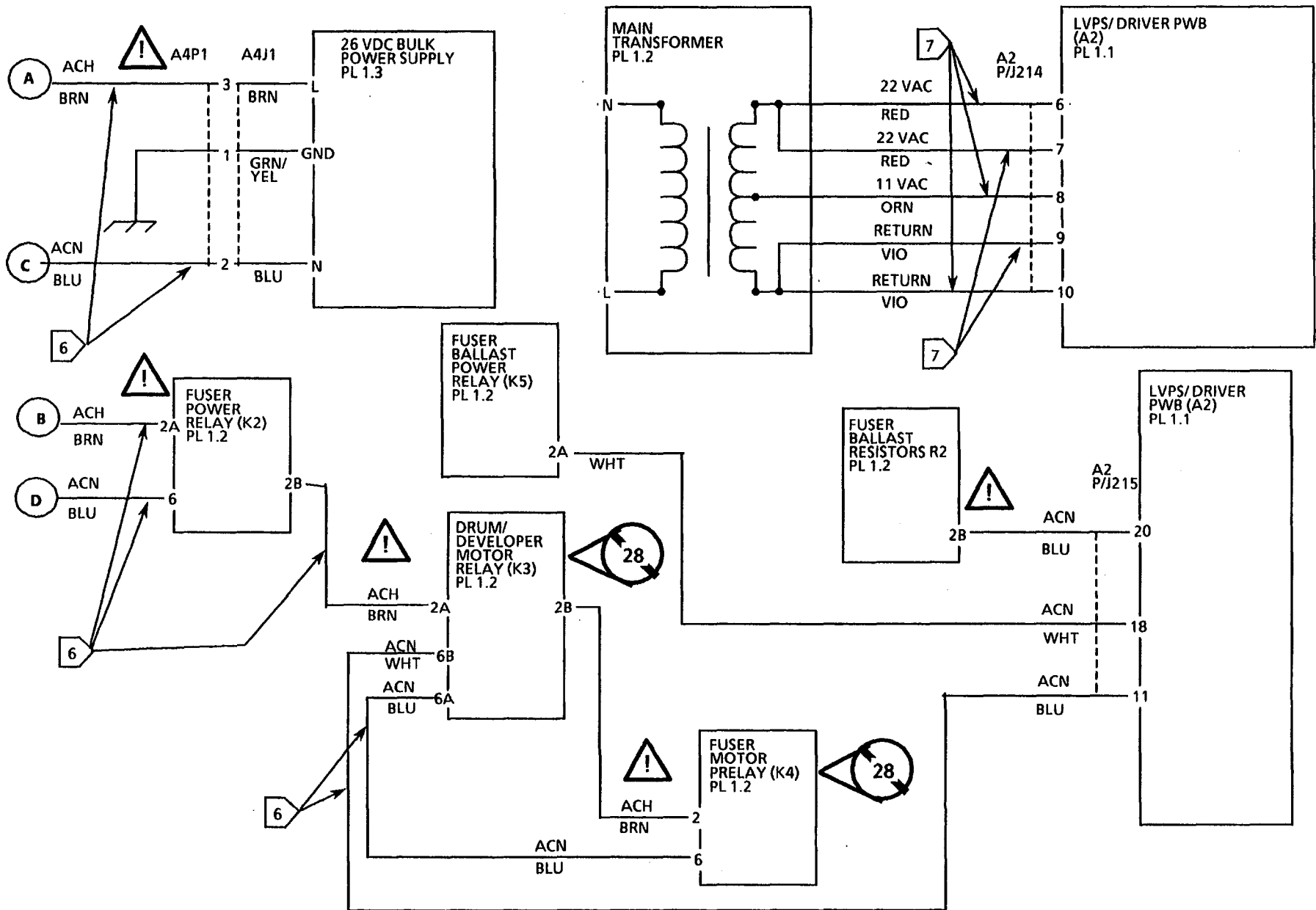
(EO 50 Hz)

**WARNING**  
DANGEROUS VOLTAGE.

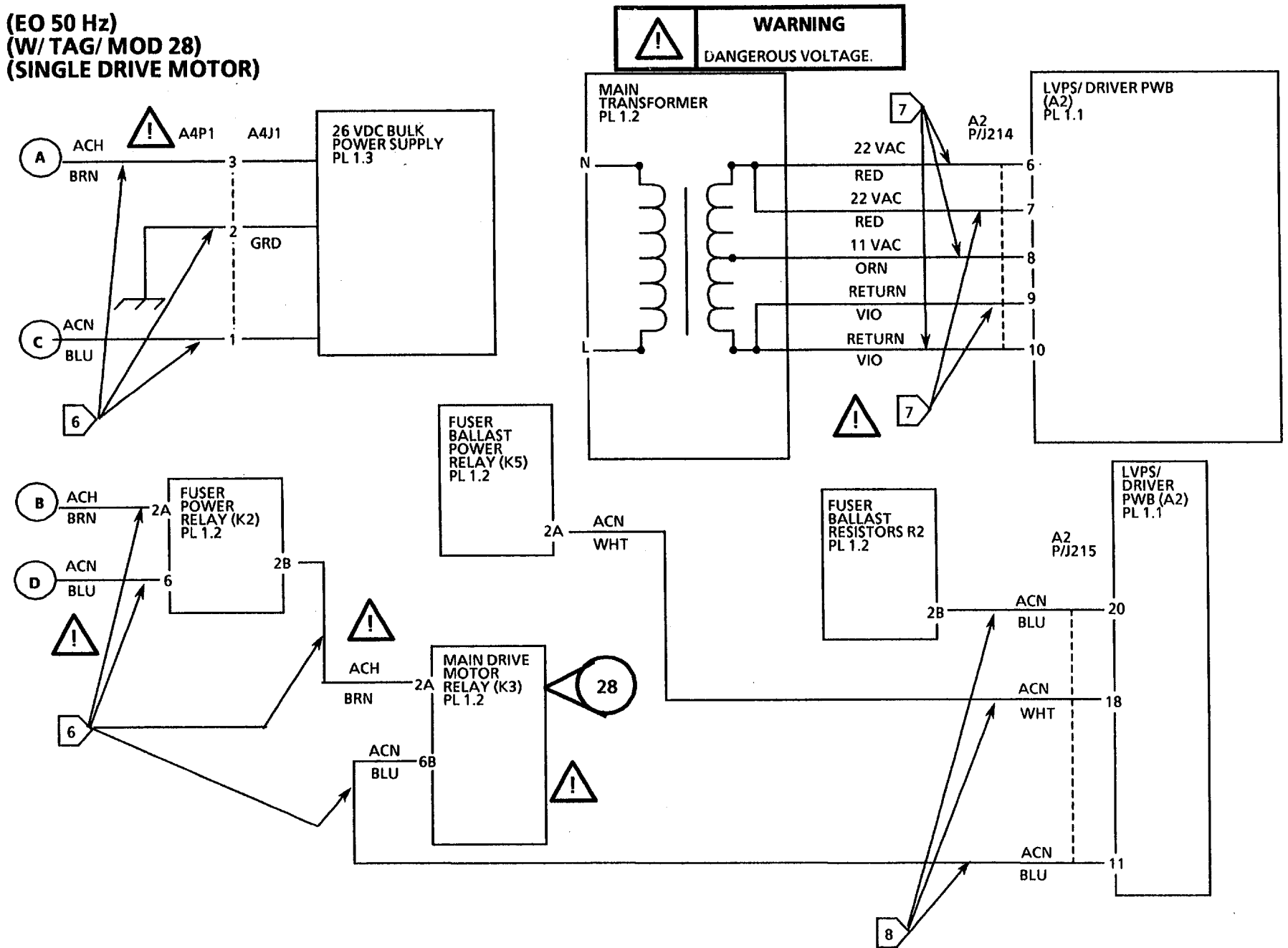


**(EO 50 Hz)  
(W/ O TAG/ MOD 28)  
(SINGLE DRIVE MOTOR)**

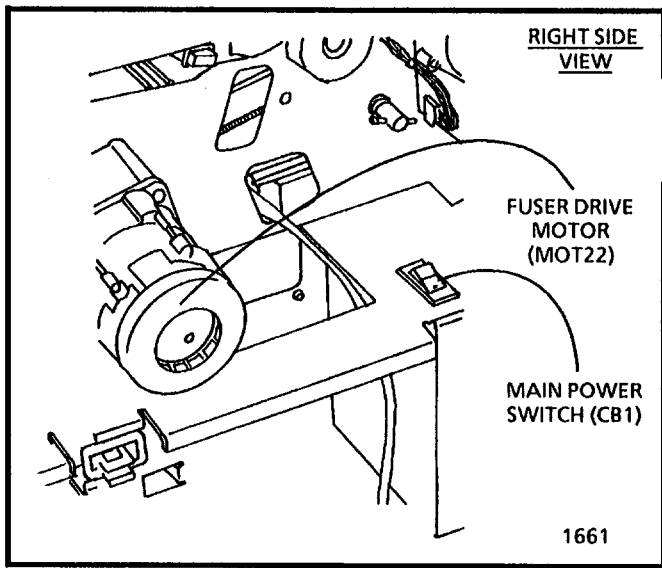
**WARNING**  
DANGEROUS VOLTAGE.



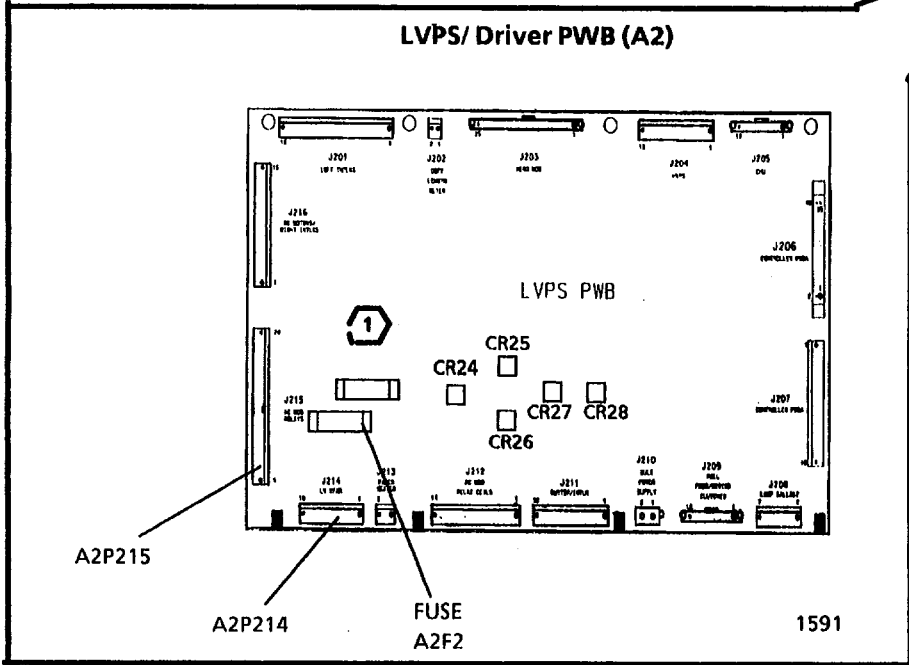
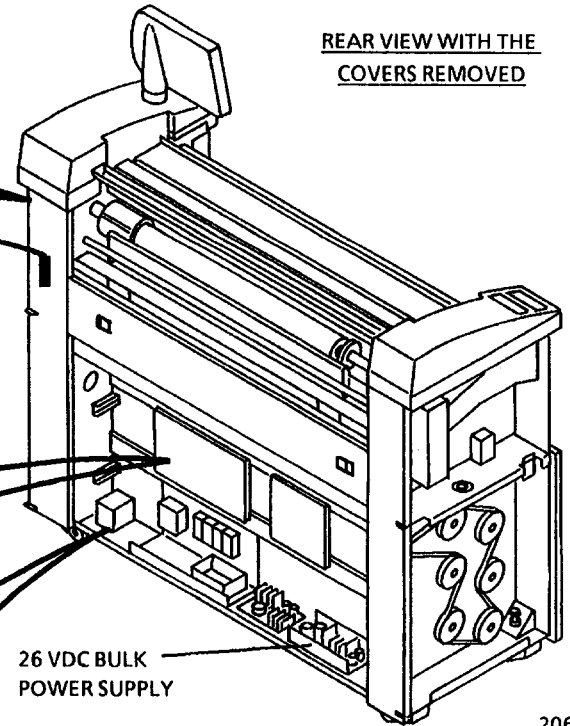
**(EO 50 Hz)  
(W/ TAG/ MOD 28)  
(SINGLE DRIVE MOTOR)**



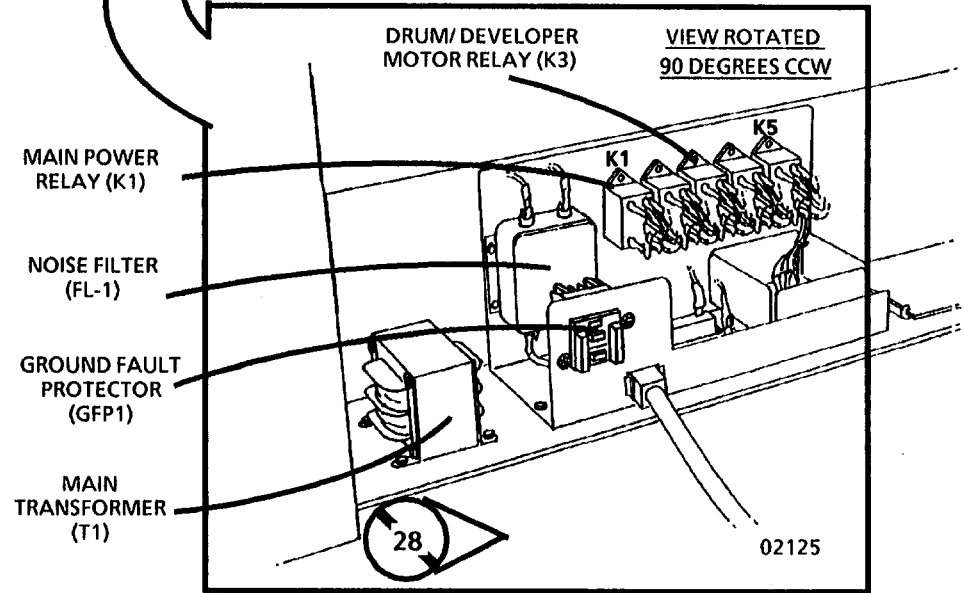




Main Power Switch (SW1)  
W/Tag/MOD 25



① ON SOME COPIERS THE DESIGNATORS F1 & F2 ARE REVERSED. F2 IS THE BOTTOM FUSE.



## 2.1 Control Panel RAP

(2/4/93)

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

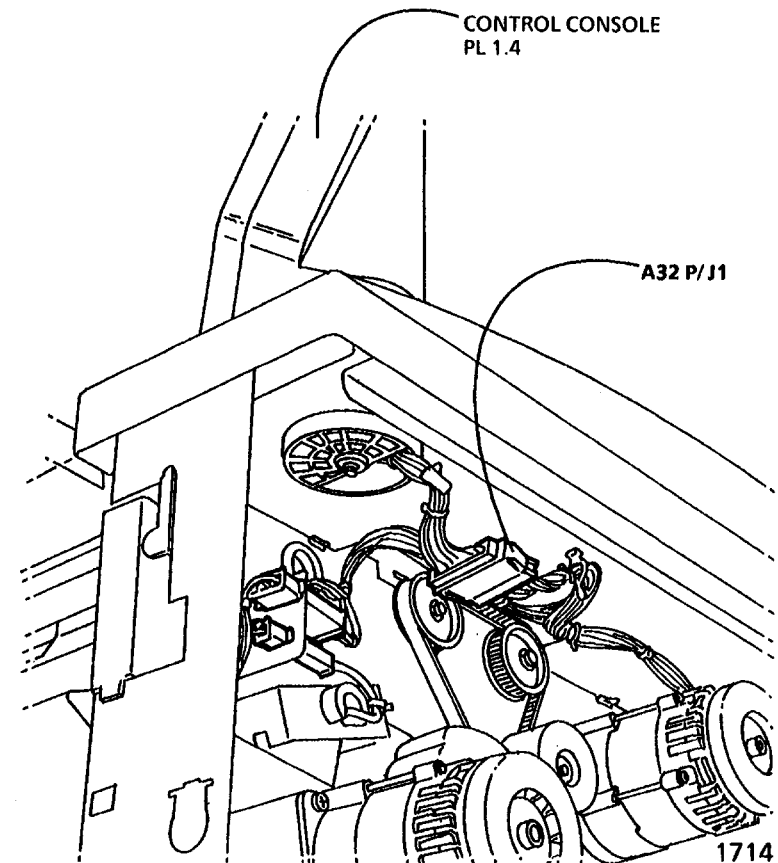
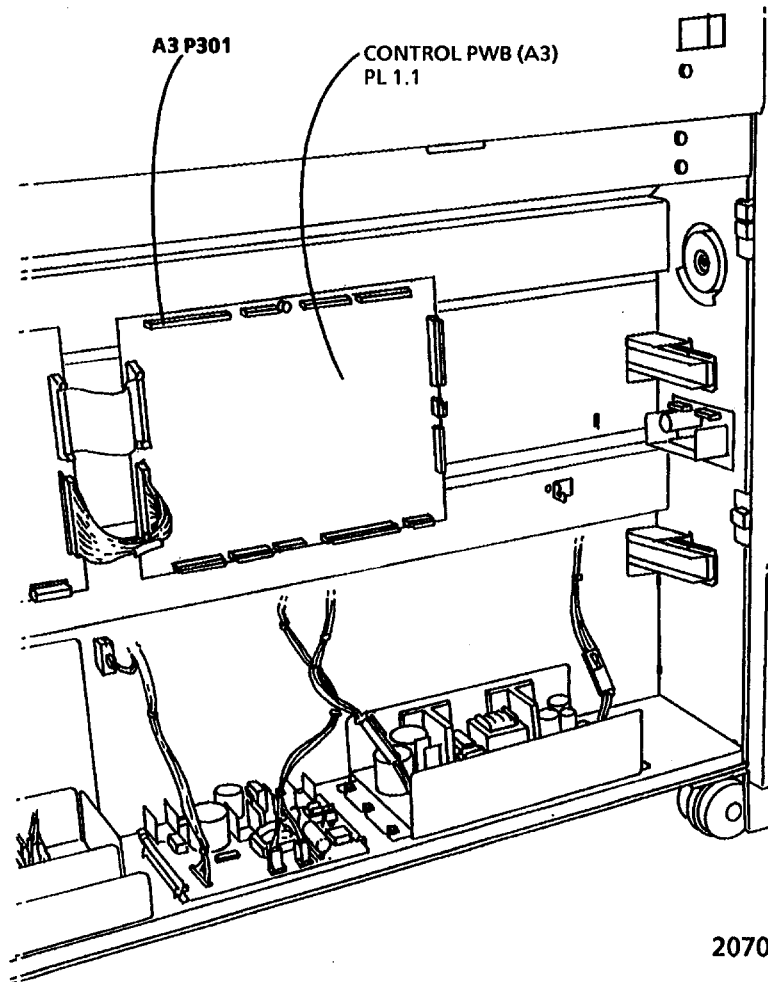
**NOTE:** The circuit diagram is on the following pages.

### Initial Actions

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

### Procedure

Refer to the table on the next two pages.



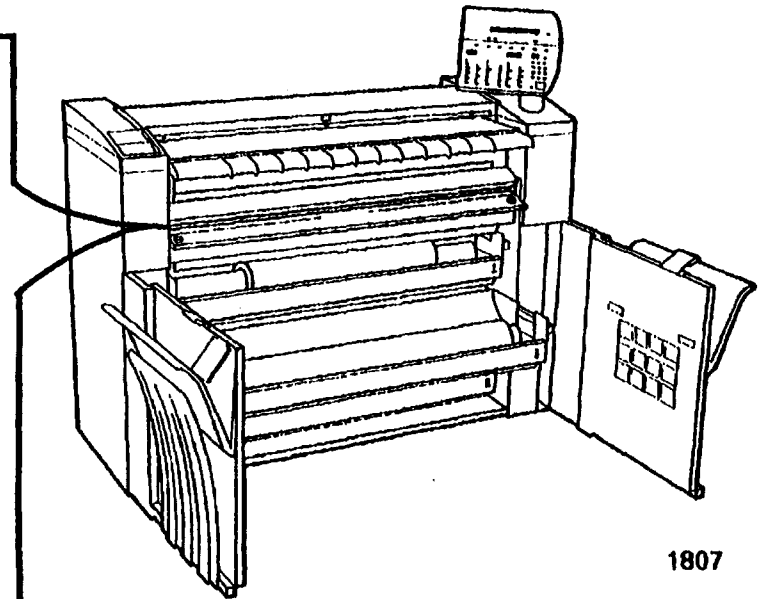
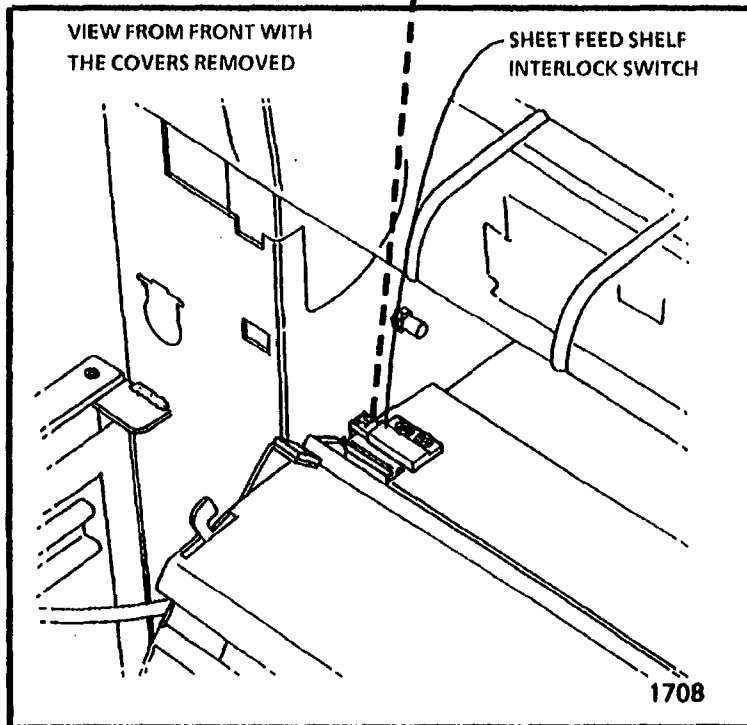
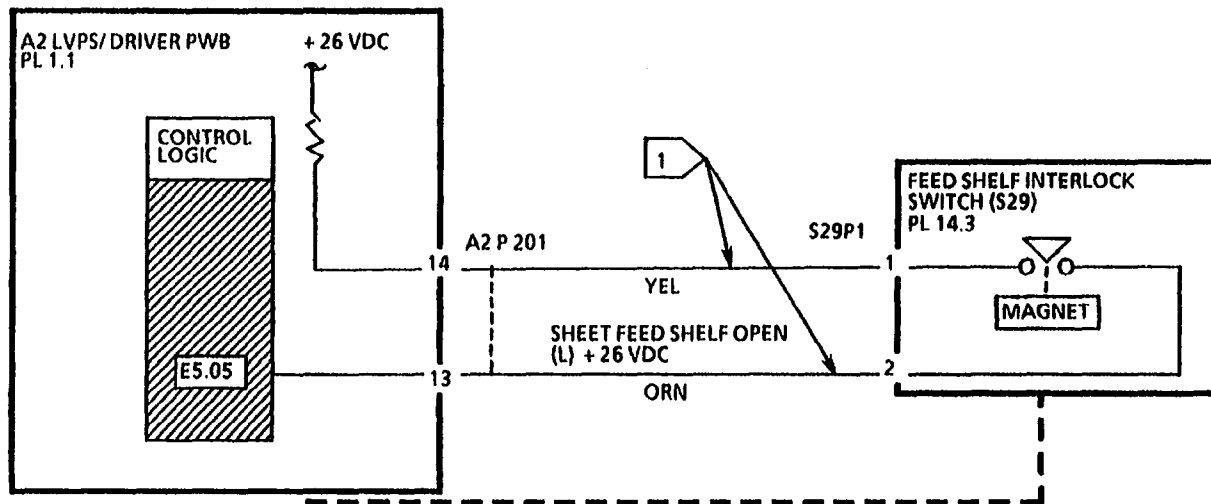
## 2.1 Control Panel

	Probable Cause	Corrective Action
1. The Message Display is not illuminated, no LEDs are lit, no characters are displayed.	1A. There is no 26 VDC.	1A. Go to the 1.1 AC Power RAP. Go to 1.5 DC Power RAP.
	1B. There is an open circuit in the wires.	1B. Go to FLAG 1 and check for an open circuit in the wires between A3P301 and A32P1.
	1C. There is an internal fault in the Control Console circuits or Control PWB (A3).	1C. Order the Control Console Assembly and Control PWB (A2). Replace the Console Assembly. If the problem persists, replace the Control PWB (A2).
2. The Message Display is illuminated, no characters or random characters appear.	2A. There is an open circuit in the Control Console wires.	2A. Go to FLAG 2 and check for an open circuit in the wires between A3P301 and A32P1.
	2B. There is an internal fault in the Control Console circuits or Control PWB (A3).	2B. Order the Control Console Assembly and Control PWB (A2). Replace the Console Assembly. If the problem persists, replace the Control PWB (A2).
3. The Message Display is illuminated, but the keys and LEDs do not operate.	3A. There is an open circuit in the Control Console wires.	3A. Go to FLAGS 1 and 3 and check for an open circuit in the wires between A3P301 and A32P1.
	3B. There is no 8.4 VDC supplied to the Control PWB (A3).	3B. Go to the 1.5 DC Power RAP.
	3C. There is an internal fault in the Control Console circuits or Control PWB (A3).	3C. Order the Control Console Assembly and Control PWB (A2). Replace the Console Assembly. If the problem persists, replace the Control PWB (A2).

(Continued)

## 2.1 Control Panel

	<b>Probable Cause</b>	<b>Corrective Action</b>
4. The Message Display is illuminated, but some keys or LEDs do not operate.	4A. There is an internal fault in the Control Console circuits.	4A. Replace the Control Console Assembly.
5. All the LEDs or all the keys do not operate.	5A. There is an open circuit in the wires.	5A. Go to FLAGS 1 and 3 and check for an open circuit in the wires between A3P301 and A32P1.
	5B. There is an internal fault in the Control Console Circuits or Control PWB (A3).	5B. Order the Control Console Assembly and Control PWB (A2). Replace the Console Assembly. If the problem persists, replace the Control PWB (A2).
6. The backlight does not operate and all other components operate.	6. There is an internal fault in the Control Console circuits.	6. Replace the Control Console Assembly.
7. The Media Width Lamps do not operate correctly, but the Control Panel displays do operate correctly.	7. There is an internal fault in the Control Console circuits.	7. Go to FLAG 4 and check for an open circuit. If there is no open circuit, replace the Control Console Assembly.



## E5.06 Right Side Door Open RAP

This RAP is used to locate problems in the interlock circuitry for the Right Side Door.

The problem may occur if there is a malfunction in the Right Side Door Interlock Switch S21 or the associated wires.

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

### Initial Actions

- Check the Connectors A2 P216 on the LVPS/ Driver PWB (A2) and S21 P1 on the Right Side Door Interlock Switch for damage, and ensure that the connectors are seated correctly.
- Ensure that the Actuator on the Right Side Door correctly actuates the switch.

### Procedure

Disconnect S21 P1. Set the DMM to read continuity. Connect the (+) lead to Pin 4 of the Right Side door Interlock Switch (S21). Connect the (-) lead to pin 3. Manually actuate the switch.

The Switch has continuity.

Y N

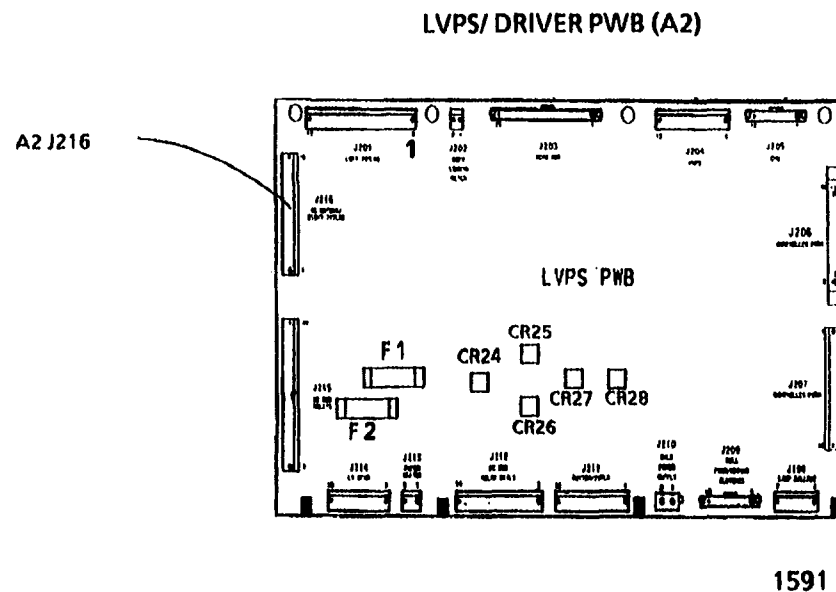
Replace the Developer Cover Interlock Switch (S21).

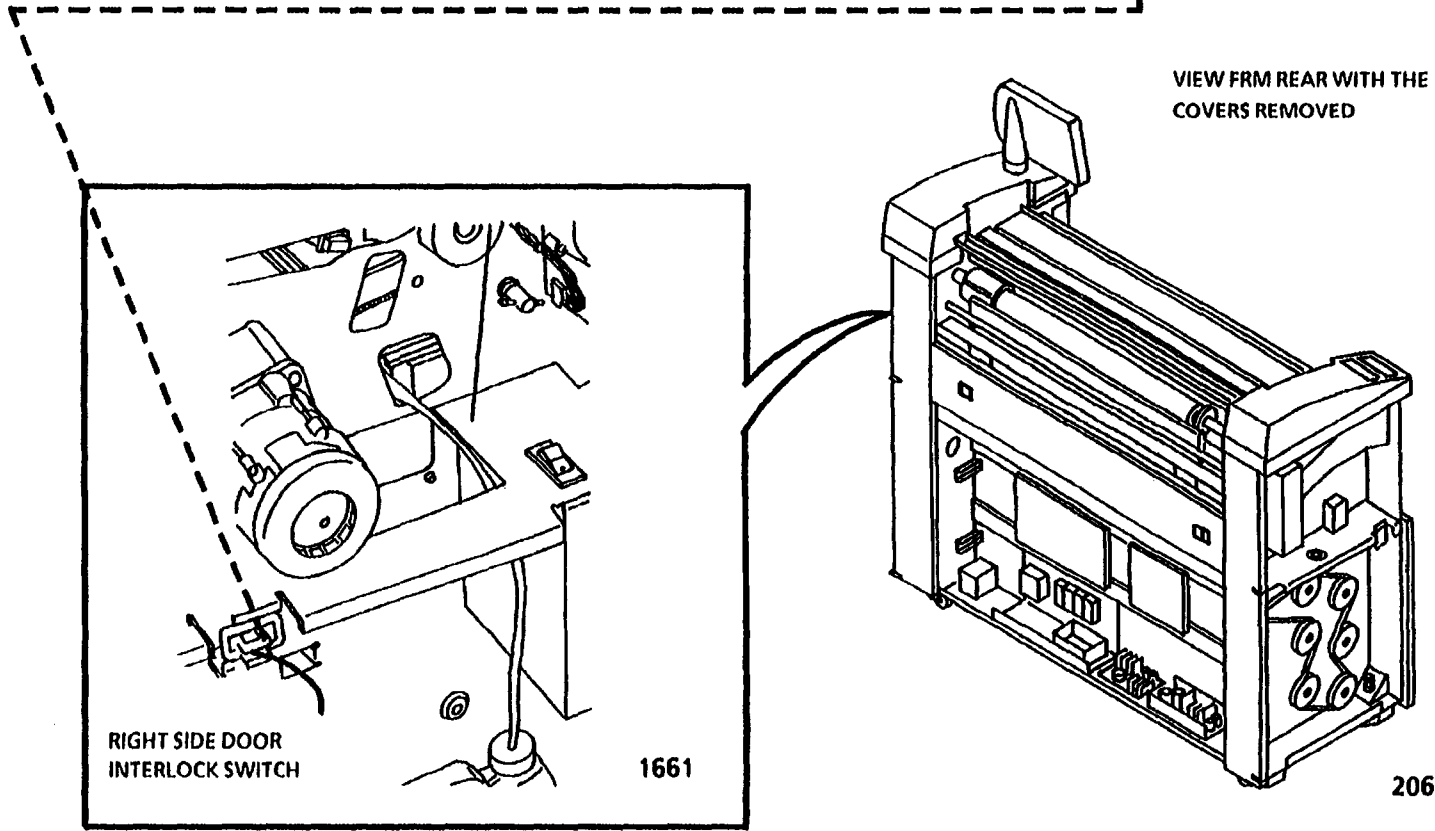
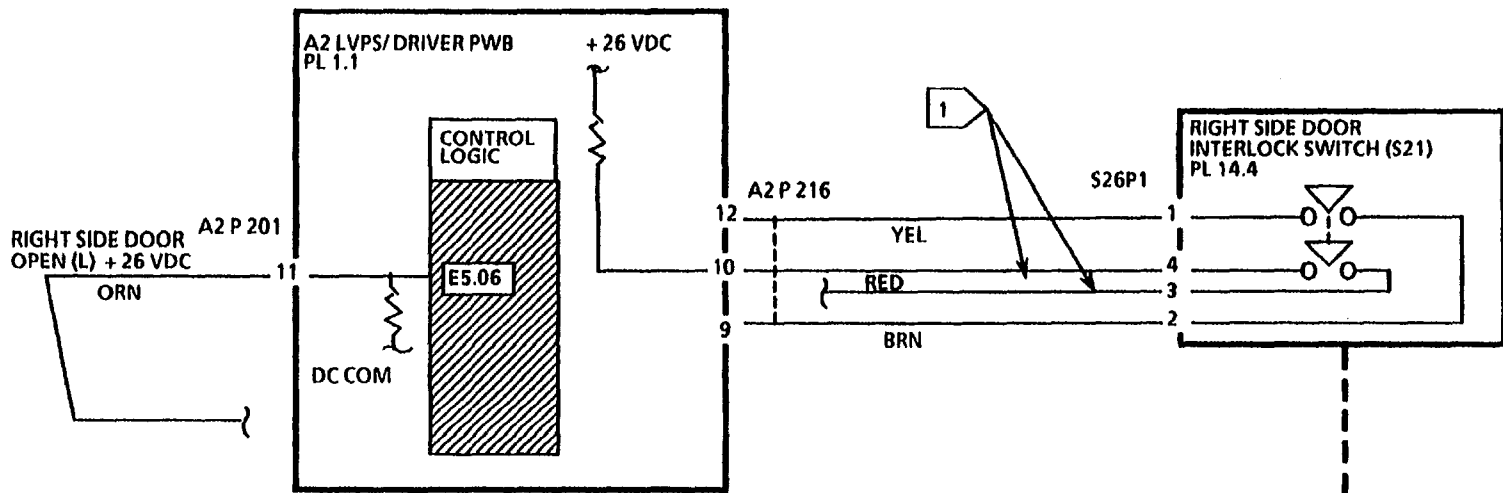
A

A

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

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





## E5.07 Document Handler Open RAP

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

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

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

### Initial Actions

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

### Procedure

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

The Switch has continuity.

Y N

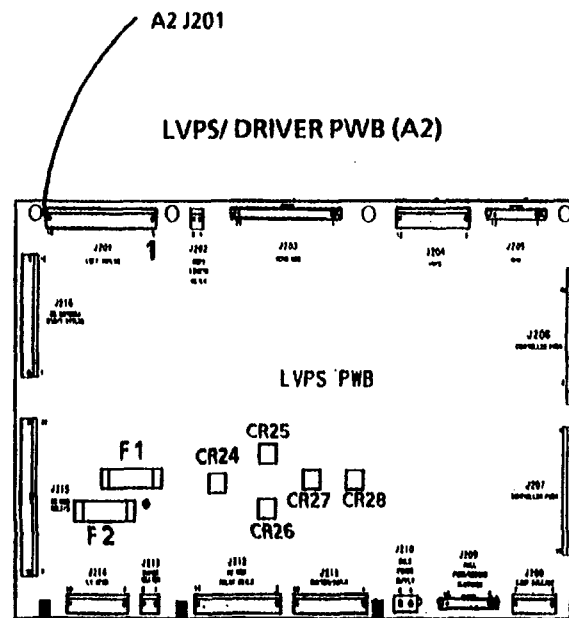
Replace the Document Handler Interlock Switch (S30).

A

A

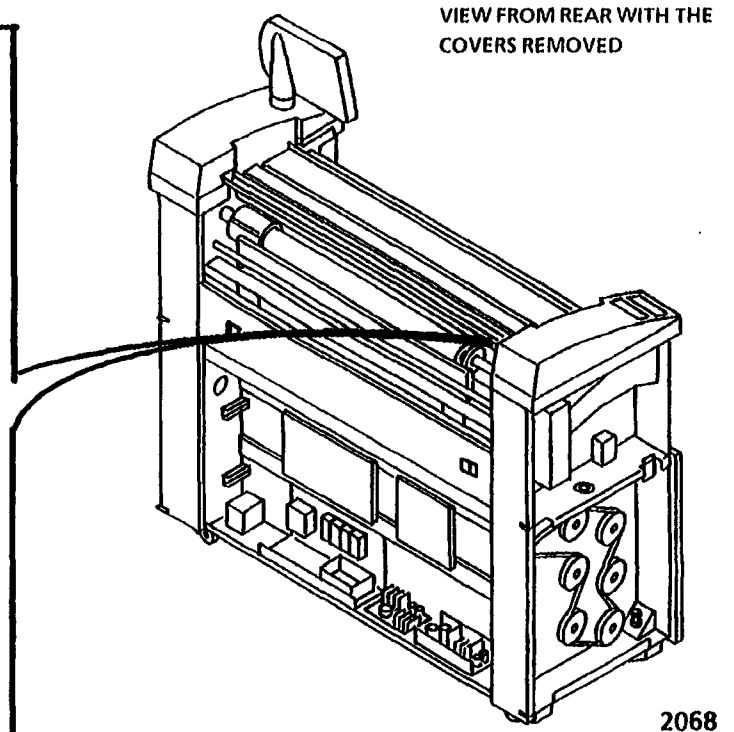
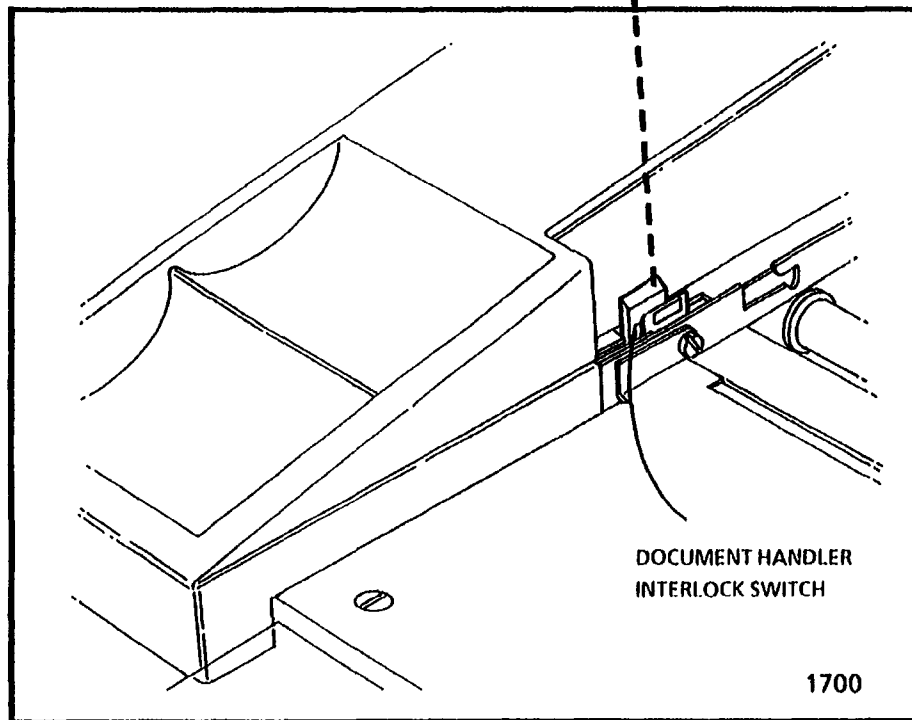
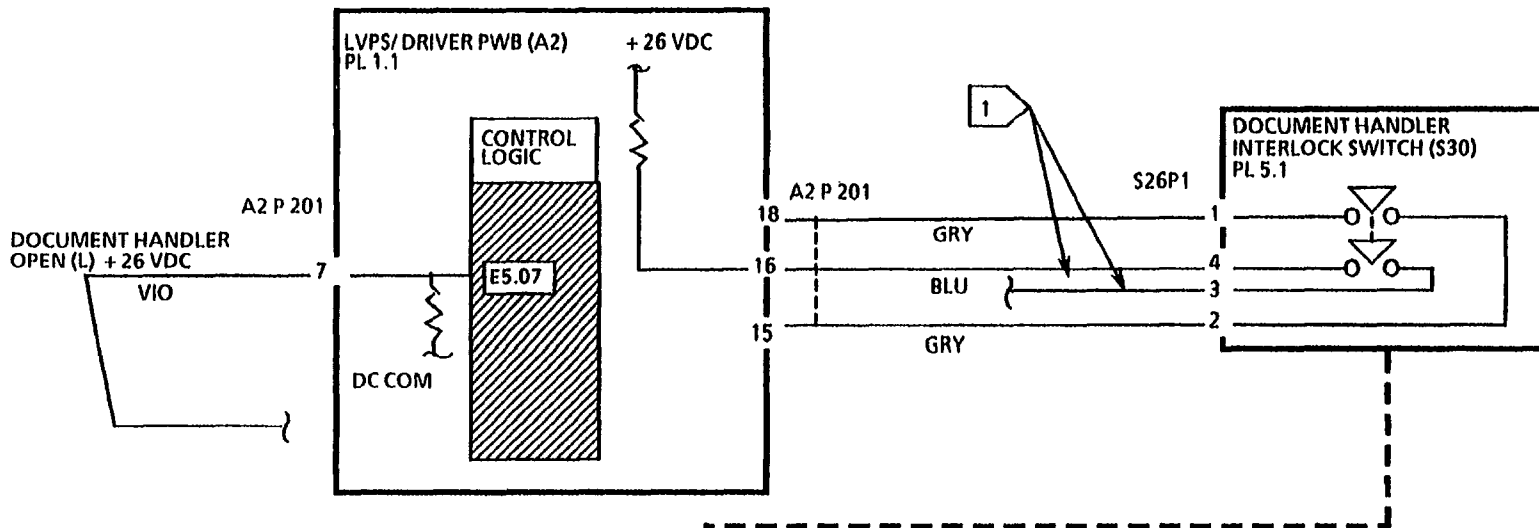
Go to FLAG 1 and check the wires for an open circuit.

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



1591





## E6.00 Media Supply Doors Open RAP

(1/26/93)

The status code **E6.00** is displayed when the logic detects that the Left Front Door Interlock Switch (S28) and/ or the Right Front Door Interlock Switch (S22) are open.

This RAP is used to locate problems in the interlock circuitry for the Roll Drive Motor (MOT1). When the Interlock Switches are opened, +26 VDC Bulk is prevented from being supplied to the Roll Drive Motor (MOT1).

The problem may occur if the Front Door magnets are not positioned correctly or the Doors are not adjusted correctly. A problem may also exist, if there is a malfunction in the Door Interlock Switches (S28) or (S22) and the associated wires.

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

### Initial Actions

- Ensure that the magnets which are located on the rear of the Front Doors are positioned directly in front of the Interlock Switches, when the Doors are closed.
- Check the Connectors A2 P201 and A2 P216 on the LVPS/ Driver PWB (A2) for damage. Check the Connector S28 P1 on the Left Front Door Interlock Switch (S28) and Connector S22 P1 on the Right Front Door Interlock Switch (S22) for damage. Ensure that the connectors are seated correctly.

### Procedure

Enter the code [0110] in order to check the Door Interlock Switches. The Control Panel will display an (00) with the Doors open and an (01) with both Doors closed.

Open the Front Doors and then slowly close one Door at a time. Ensure that the Doors are closed fully.

The display changes from (00) to (01) when the Doors are closed.

Y N

There is +26VDC at A2 P216 pin 14 of the LVPS/ DRIVER PWB (A2).

Y N

There is +26VDC at A2 P201 pin 11 of the LVPS/ DRIVER PWB (A2).

Y N

There is +26VDC at A2 P201 pin 12 of the LVPS/ DRIVER PWB (A2).

Y N

Replace the LVPS/ Driver PWB (A2).

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

If there is no open circuit, replace the Left Front Door Interlock Switch (S28).

Replace the LVPS/ Driver PWB (A2).

A B

A B

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

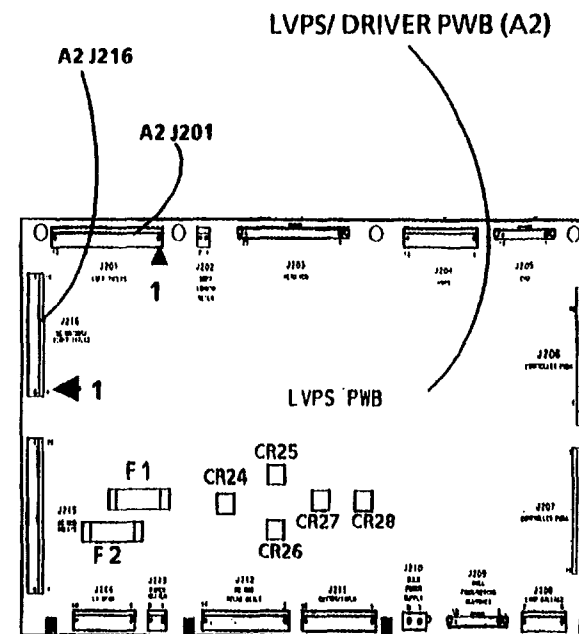
Y N

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

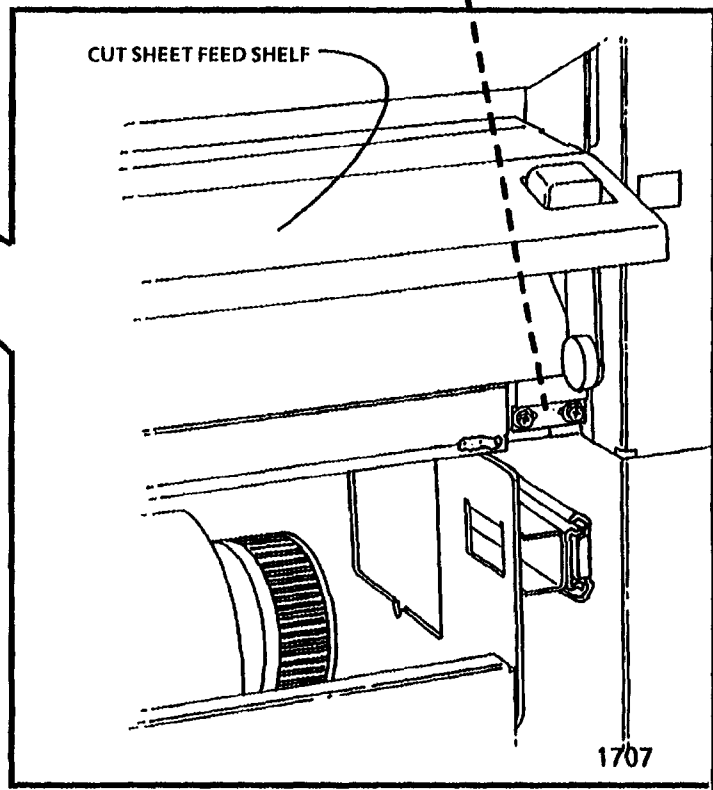
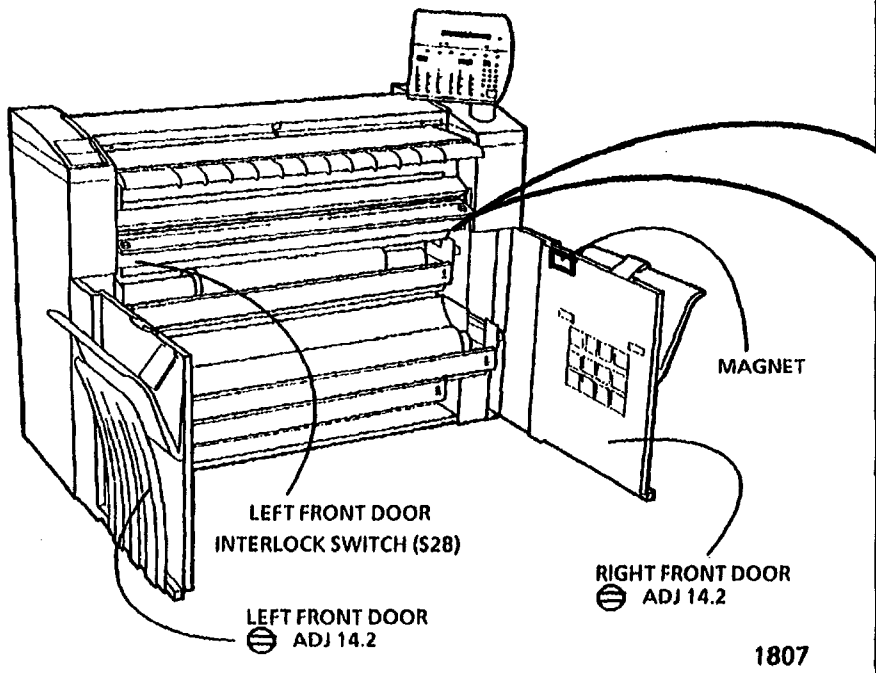
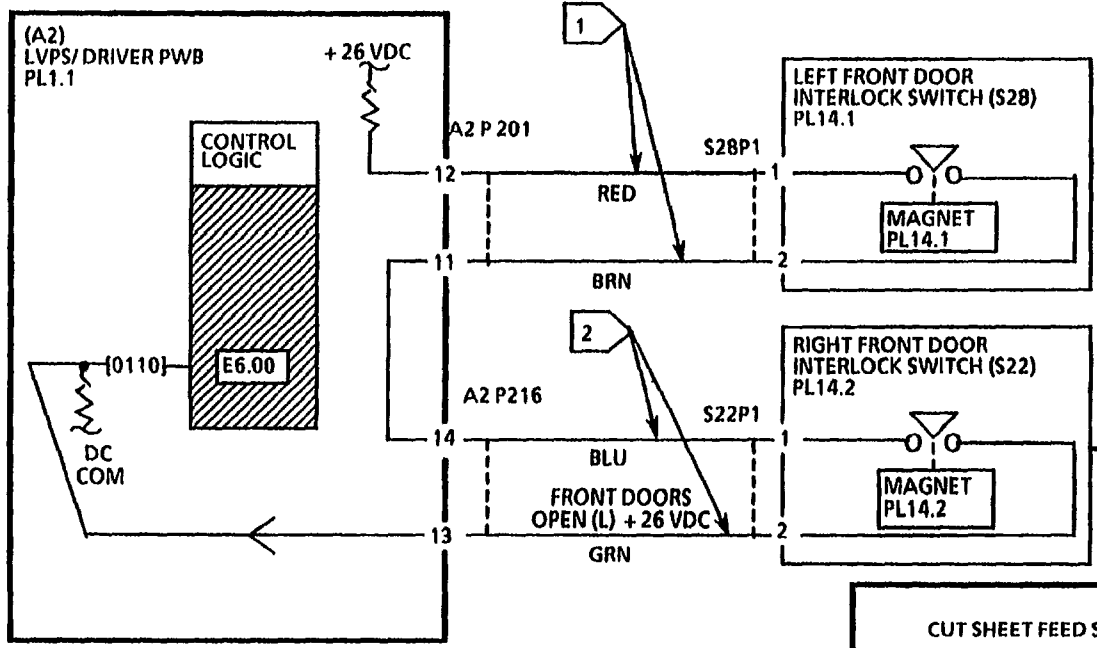
If there is no open circuit, replace the Right Front Door Interlock Switch (S22).

Replace the LVPS/ Driver PWB (A2).

Perform the Front Doors Check/ Adjustment (ADJ 14.2).



1591



# J1.01 Out of Toner RAP

This RAP is used if the J1.01 code occurs too often or does not go away. The status code J1.01 is displayed when the toner concentration drops significantly below the set value.

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

### Initial Actions

- Go to REP. 9.5 and ensure that the developer material is being mixed properly.
- Ensure that the Toner Cartridge is not empty and is installed properly.
- Ensure that the Toner Cartridge is not defective and enough toner is dispensed into the developer housing.
- Ensure that the Developer Auger Gears are not defective.
- Customer document has excessive area coverage.

### Procedure

Enter the diagnostic code [0921-4] and compare the toner sensor reading to the control point voltage. The sensor voltage is at least 1.1 VDC higher than the control point voltage.

Y N

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

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

Y N

A B C

A B C

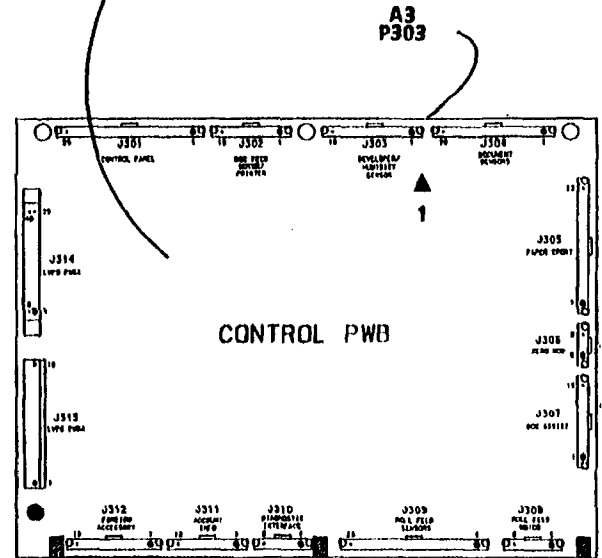
Go to Flag 1 and check the wiring for an open or a short circuit in the wires to ground. If there are no open or short circuits, replace the following components one at a time beginning with "a". After replacing the component, enter the code [0921-06] in order to calibrate the Toner Control System.

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

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

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

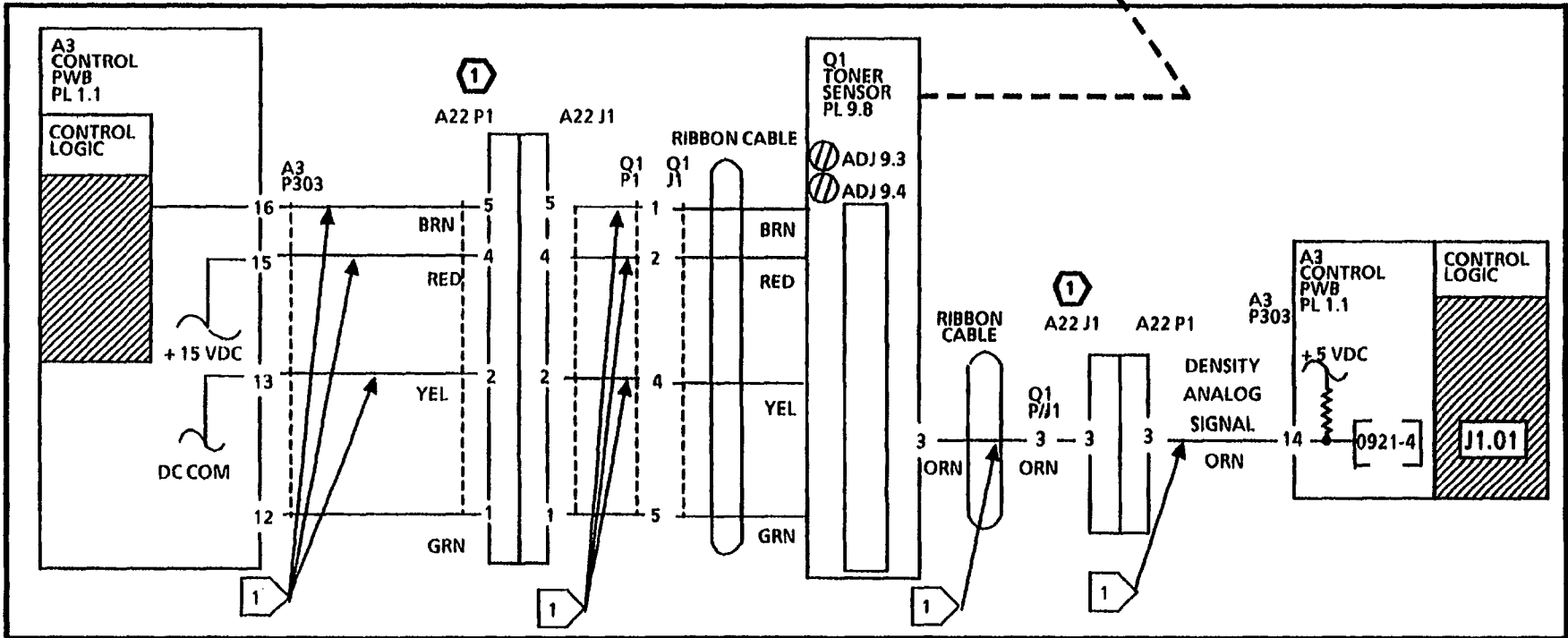
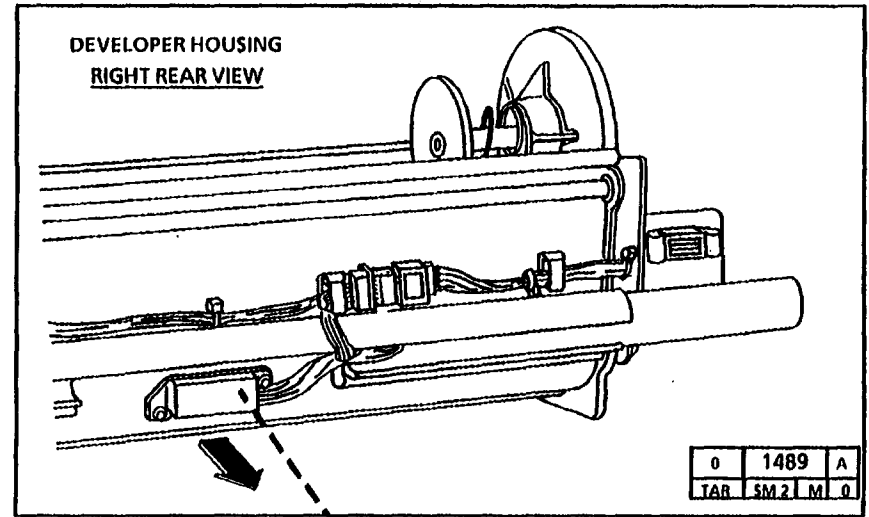
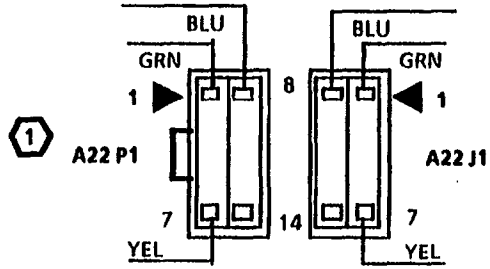
CONTROL PWB (A3)



0	1590	A
0JR	SM 2	X 0

NOTES:

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



## J2.02 Toner Cartridge Home Position RAP

6/6/92

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

### Initial Actions

- Ensure that the toner cartridge is installed properly.
- Ensure that the toner cartridge is not defective.
- Ensure that the developer motor and the cartridge home switch are plugged in.
- Inspect the developer drives for damage.

### Procedure

Enter the diagnostic mode.

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

Y N

The cartridge drive motor rotates for more than one revolution.

Y N

There is 26 VDC at A3 P303 Pin 9.

Y N

Replace the Controller PWB.

A B C

A B C

There is 26 VDC at A3 P303 Pin 8.

Y N

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

Go to FLAG 2 and check the wiring for an open or a short circuit.

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

Y N

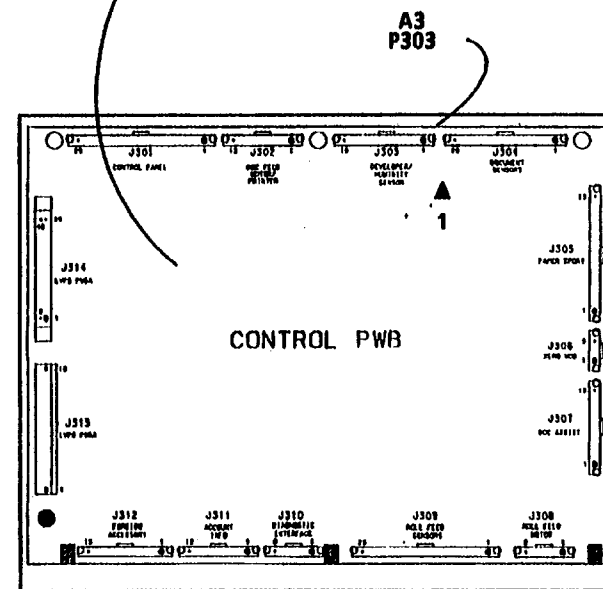
Go to FLAG 2 and check the wires for an open or short circuit. If there is no open or short circuit, adjust or replace the Cartridge Home Switch.

Replace the Control Board (A3).

Wrap up the service call.

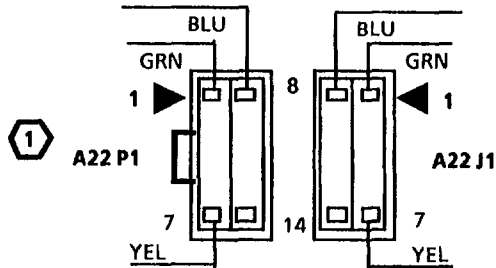
**Note:** If the cartridge magnet is missing or not positioned properly, the cartridge drive motor may rotate for more than one revolution when diagnostic code [0925] is entered.

CONTROL PWB (A3)

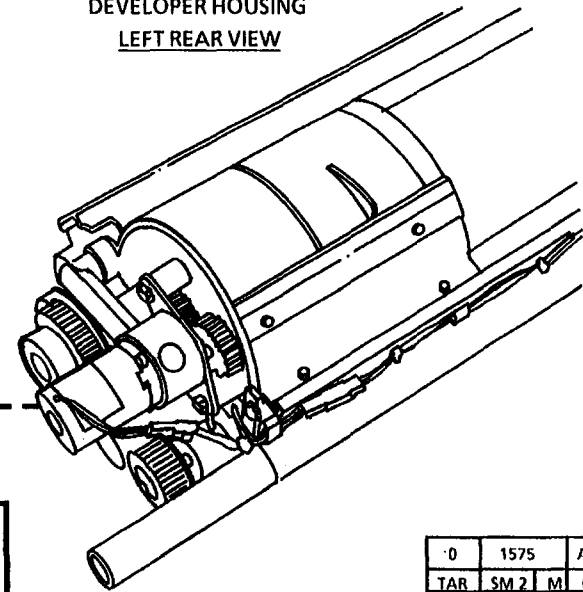


NOTES:

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

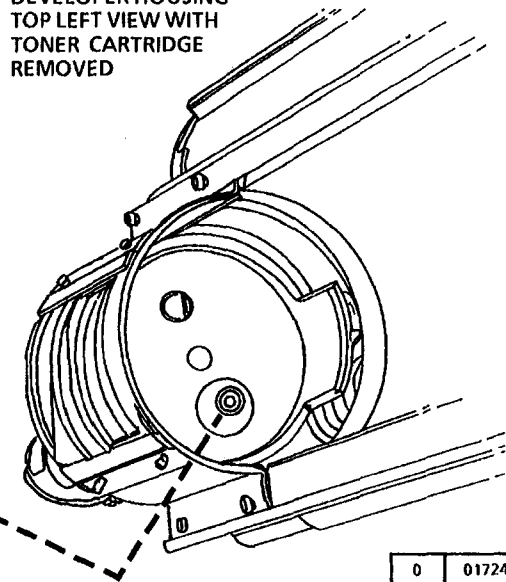


DEVELOPER HOUSING  
LEFT REAR VIEW

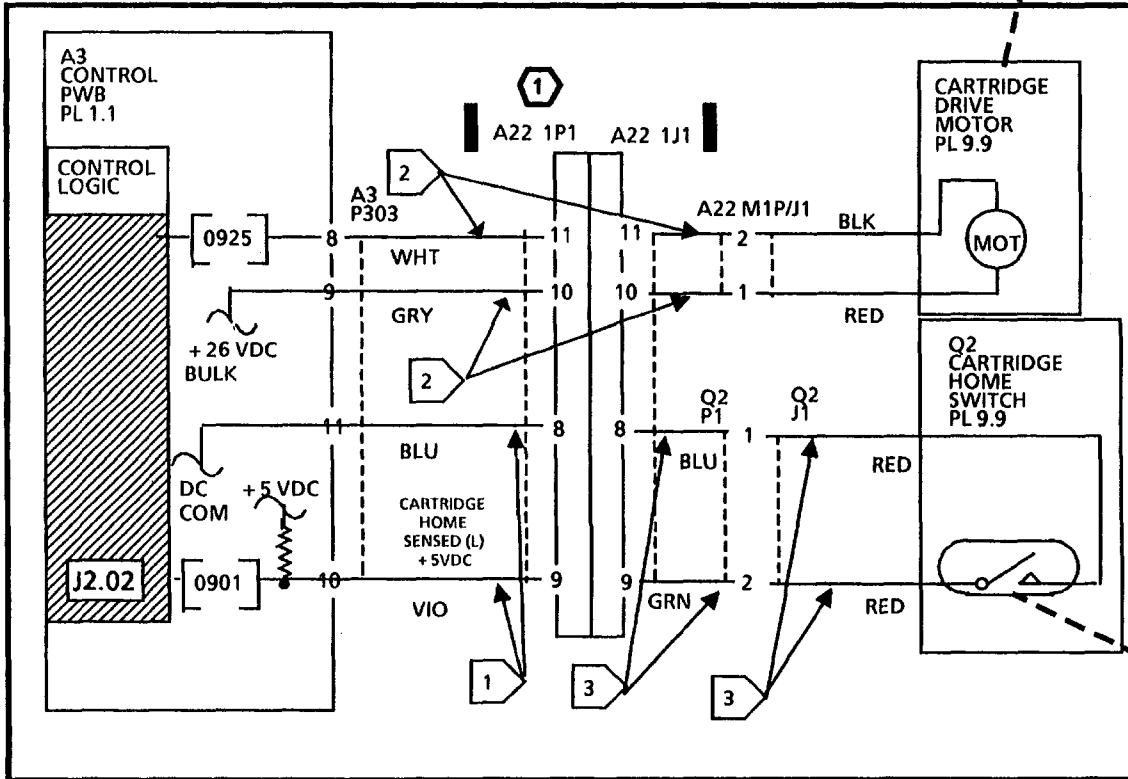


0	1575	A
TAR	SM 2	M 0

DEVELOPER HOUSING  
TOP LEFT VIEW WITH  
TONER CARTRIDGE  
REMOVED



0	01724	A
TAR	SM 2	M 0



## LL.10 Cutter Interlock Loop Open RAP

(2/19/93)

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

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

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

### Initial Actions

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

### Procedure

CR27 on the LVPS/ Driver is lit.

Y N

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

A B

A B

There is +26 VDC.

Y N

Replace the LVPS/ Driver PWB (A2).

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

There is +26 VDC

Y N

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

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

There is 26 VDC.

Y N

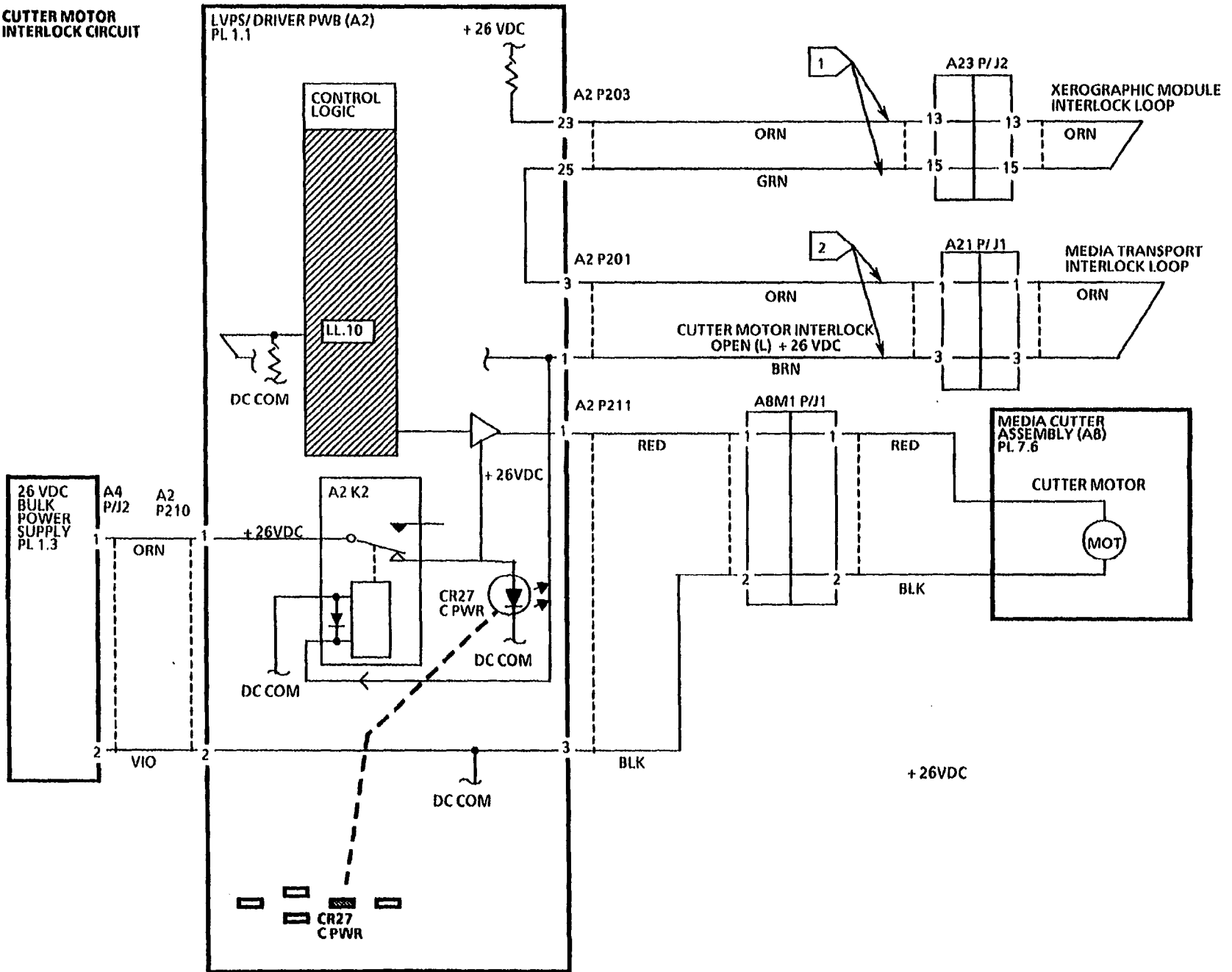
Go to FLAG 2 and check for an open circuit in the wires.

Replace the LVPS/ Driver PWB.

Replace the LVPS/ Driver PWB.



**CUTTER MOTOR INTERLOCK CIRCUIT**



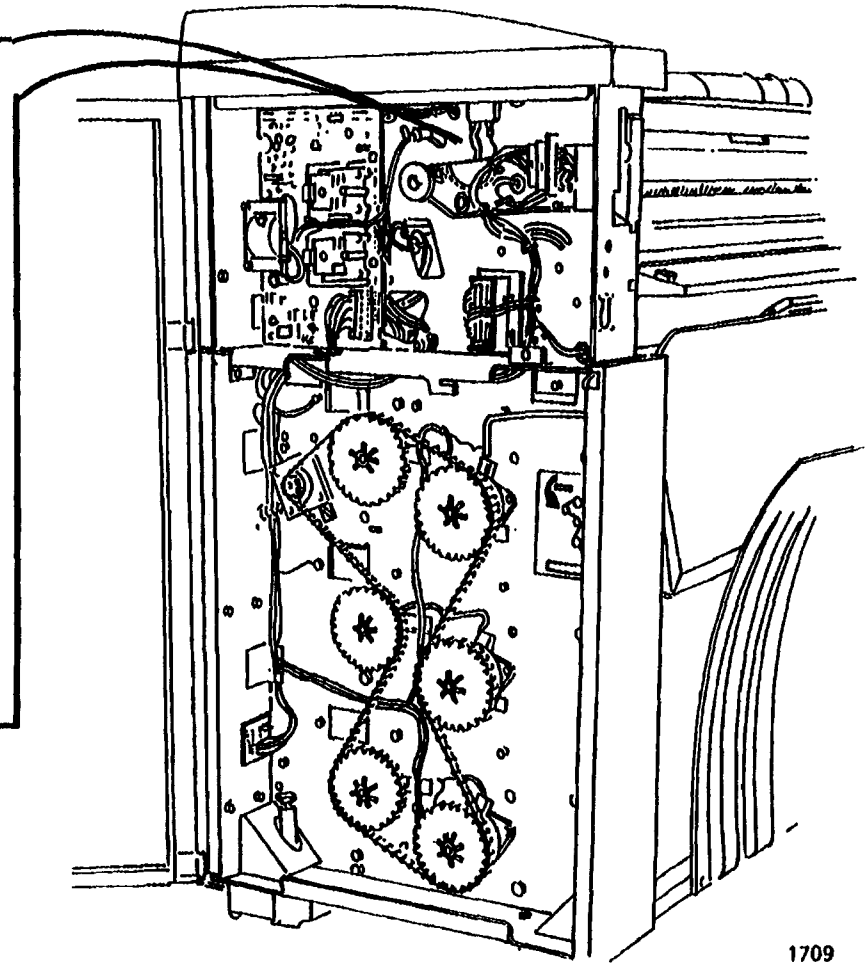
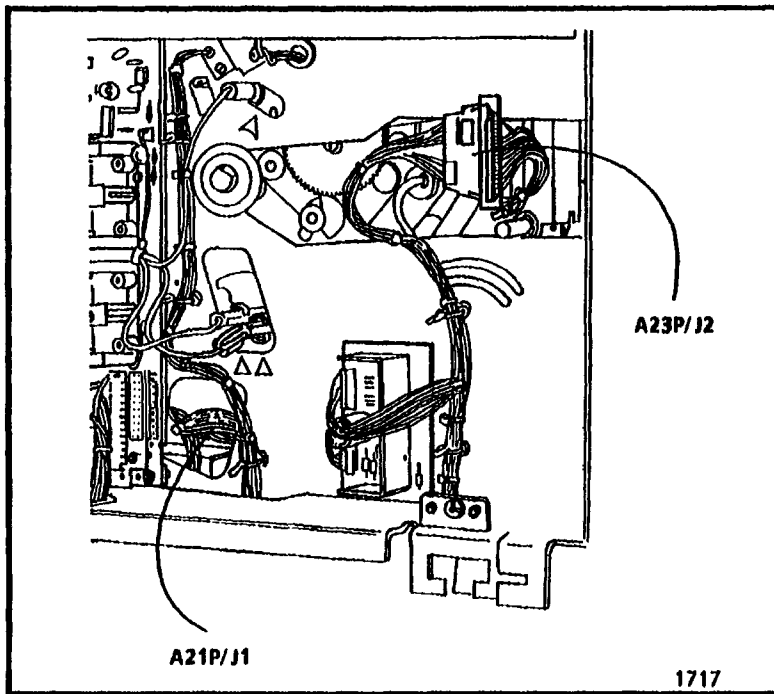
# NOTES

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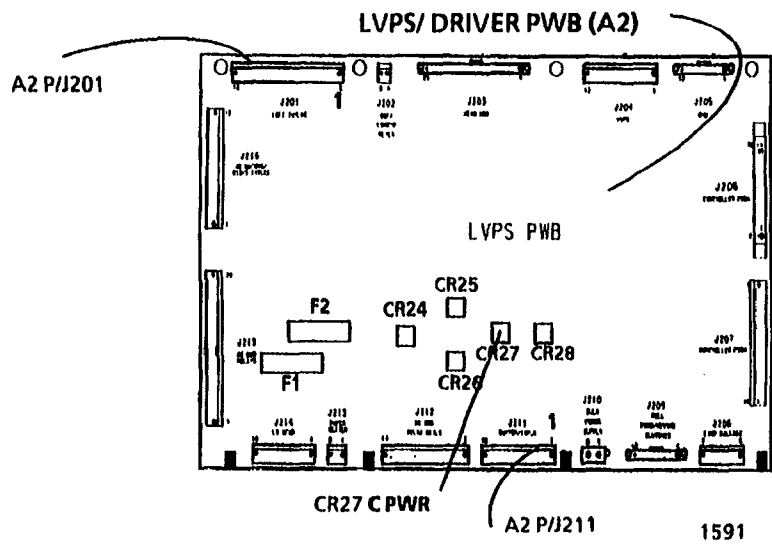
**LL.10 Cutter Interlock Loop Open RAP**

4/96  
2-70

3050



LEFT SIDE VIEW WITH THE COVER OPEN



## LL.26 Loss of Illumination RAP

(04/04/94)

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

### Initial Actions

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

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

### Procedure

Enter the diagnostic code [0921-05].  
The Exposure Lamp lights.

Y N

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

Y N

Replace the LVPS PWB (A2).

A B

A B

Press STOP, in order to cancel the code.  
There is approximately (+26 VDC) at A2 P208 Pin 4 of the LVPS PWB (A2).

Y N

Replace the Lamp Ballast (A5).

Enter the code [0921] while observing the DMM.

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

Y N

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

Press STOP, in order to cancel the code.

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

Y N

Replace the Lamp Ballast (A5).

Enter the code [0921-05].

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

Y N

C D E

C D E

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

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

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

Y N

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

Replace the Exposure Lamp.

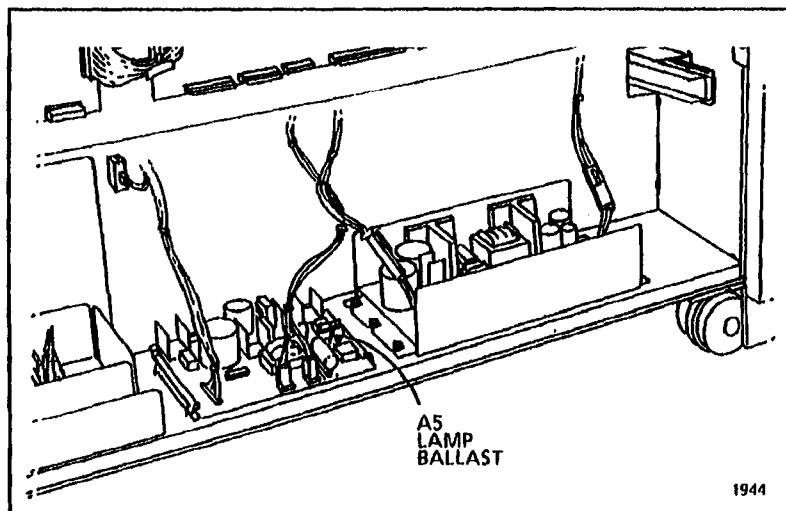
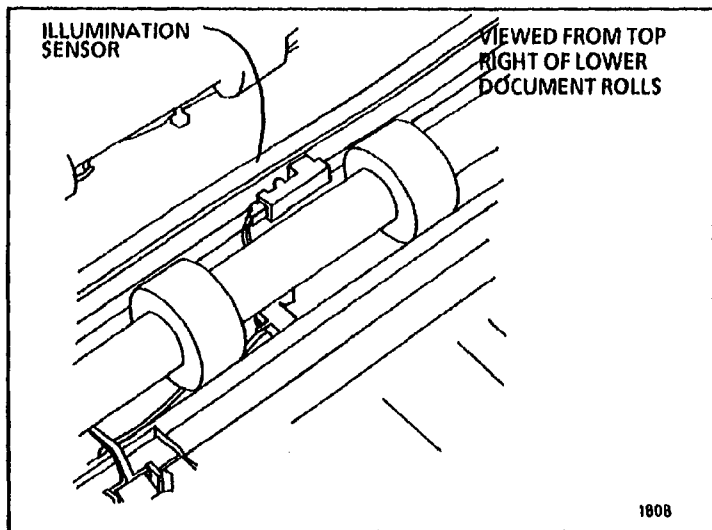
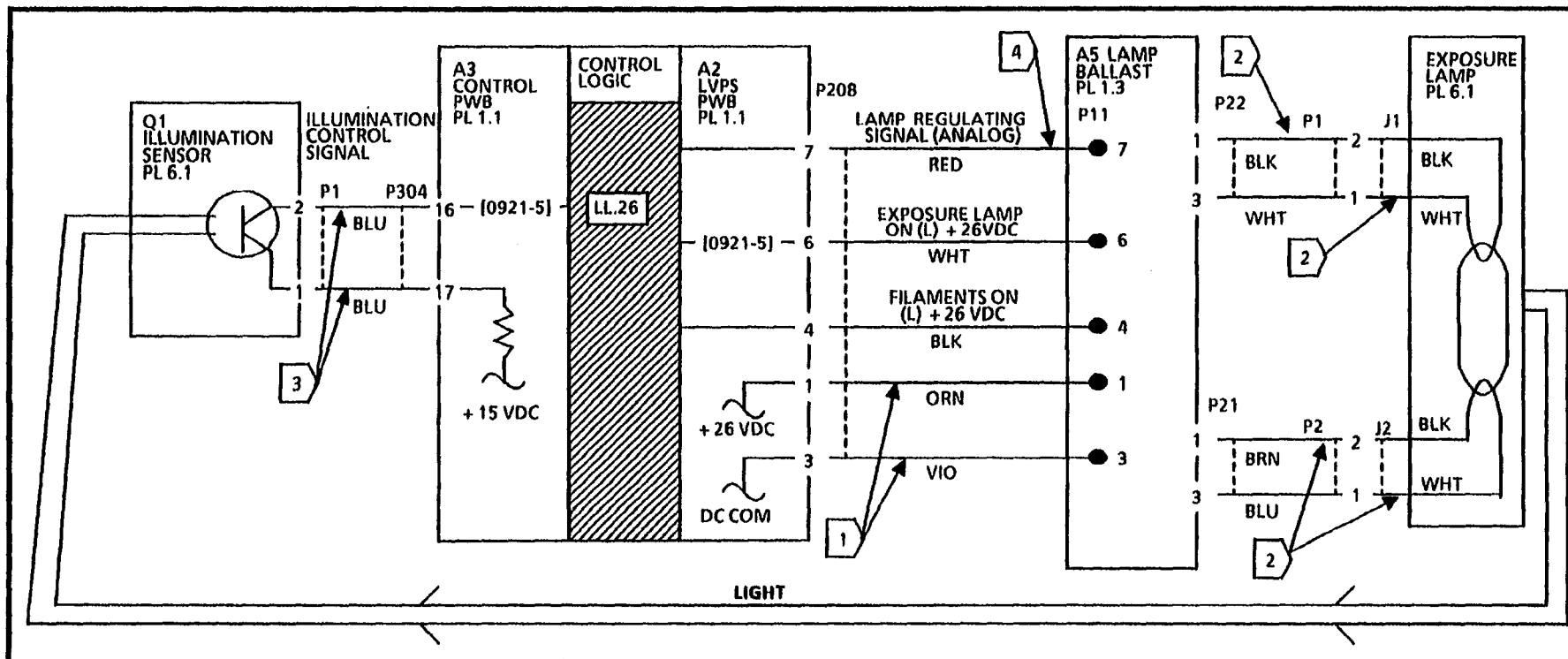
The Exposure Lamp illuminates.

Y N

Go to FLAG 2 and check the wiring for an open or short circuit to ground in the wires. Repair the wires as required. If the problem still exists, replace the Lamp Ballast PWB (A5).

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

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



# NOTES

## LL.41, LL.45 Fuser Warmup Fault RAP

(6/1/92)

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

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

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

### Initial Actions

Ensure that the following connectors are properly seated:

- A23 P/J1 near the Heat Rod
- HR1P1 and HR1P2 on the Fuser Heat Rod
- A2 P212 on the LVPS/ Driver PWB (A2)
- A23 A1P1 on the Thermal Controller PWB
- A23J2 inside the Left Side Door.
- A3P306 on the Controller PWB (A3)
- Check that the Fuser Temperature is correct (ADJ 10.1).



**WARNING**  
Dangerous Voltage.

### Procedure

**NOTE:** After entering the code [10.04], the Fuser Power Relay (K2) and CR25 are energized for only five minute.

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

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

Y N  
A B

A B

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

The resistance is less than 30 ohms.

Y N

Go to FLAG 7 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Replace the Heat Rod.

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

ACH is present.

Y N

Go to FLAG 2.

ACH is present.

Y N

Repair the wires.

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

26 VDC is present.

Y N

C D E F

C D E F

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

26 VDC is present.

Y N

Replace the LVPS/Driver PWB (A3).

Repair the wires.

Replace the Fuser Power Relay (K2).

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

ACH is present.

Y N

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

Go to FLAG 8 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Go to FLAG 9 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

G H

G H

Set the DMM to read 2 VDC. Connect the (+) lead to the G terminal on Triac (Q1). Connect the (-) lead to MT1. Switch off, then switch on, the copier. Wait 10 seconds.

**NOTE:** The bargraph display on the DMM will flicker if pulses are present.

Pulses are present.

Y N

Connect the (+) lead to A2P215-17 on the LVPS/ Driver PWB (A2).

Pulses are present.

Y N

Replace the LVPS/ Driver PWB (A2).

Repair the wire between terminal G on Triac (Q1) and A2P215-17.

I J

I J

Switch off the copier. Disconnect the Power Cord. Replace Triac (Q1); then perform the following steps to check that the ballast resistor circuit is operating correctly:

Disconnect the wire on terminal G on Triac (Q1). Set the DMM to read 60 VAC (USO) or 120 VAC (RX). Connect the (+) lead to terminal MT2 on Triac (Q1). Connect the (-) lead to MT1. Connect the Power Cord and switch on the copier.

The following AC voltage is present for approximately 5 seconds:

- at least 60 VAC (USO)
- at least 120 VAC (RX).

Y N

Switch off the copier and disconnect the power cord. Set the DMM to read 8 to 21 ohms of resistance. Disconnect the wires on each Ballast Resistor before measuring the resistance.

The resistance of each ballast resistor (R1) and (R2) is as follows:

- 7 to 9 ohms (USO)
- 19 to 21 ohms (RX)

Y N

K L M N

K L M N

Replace both resistors.

Go to FLAGS 4 and 5 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires.

Set the DMM to read 26 VDC. Connect the (+) lead to terminal 1 of the Ballast Relay (K5). Connect the (-) lead to terminal 0. Connect the Power Cord and switch on the copier.

26 VDC is present for approximately 5 seconds.

Y N

Connect the (+) lead to A2P212-11. Connect the (-) lead to A2P212-12. Switch off, then switch on, the copier.

26 VDC is present for approximately 5 seconds.

Y N

O P Q R S



O P Q R S

Replace the LVPS/ Driver PWB (A2).

Repair the wires.

Replace the Ballast Relay (K5).

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

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

Y N

Replace the Thermal Controller PWB (A23A1).

The Thermistor Pad is free of contamination.

Y N

Clean the pad with a white cloth.

Go to FLAG 6 and check the wires for continuity.

The wires have continuity.

Y N

Repair the wires

T

T

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

The resistance is less than 200K ohms.

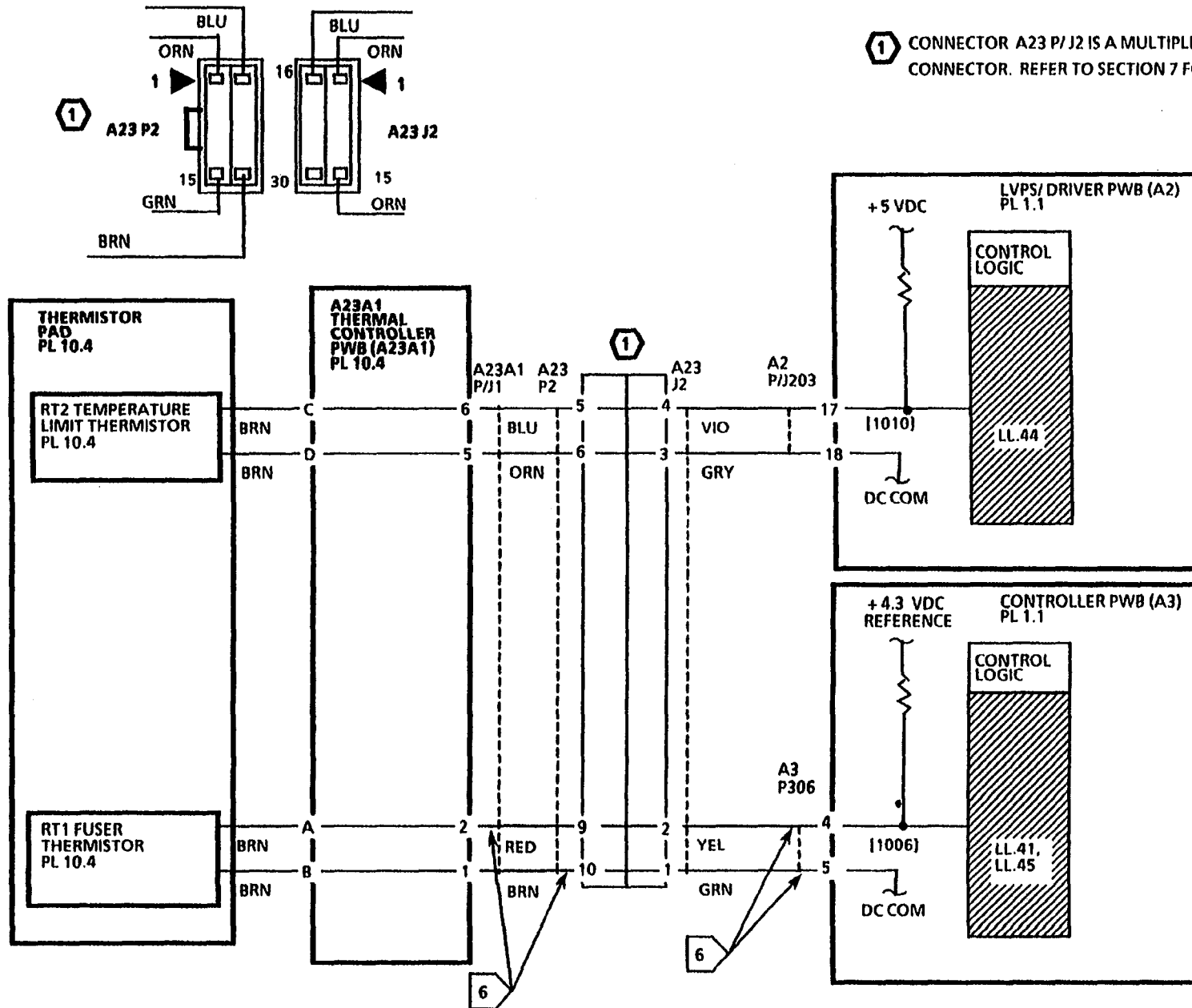
Y N

Replace the Thermal Controller PWB (A23A1).

Replace the Controller PWB (A3).

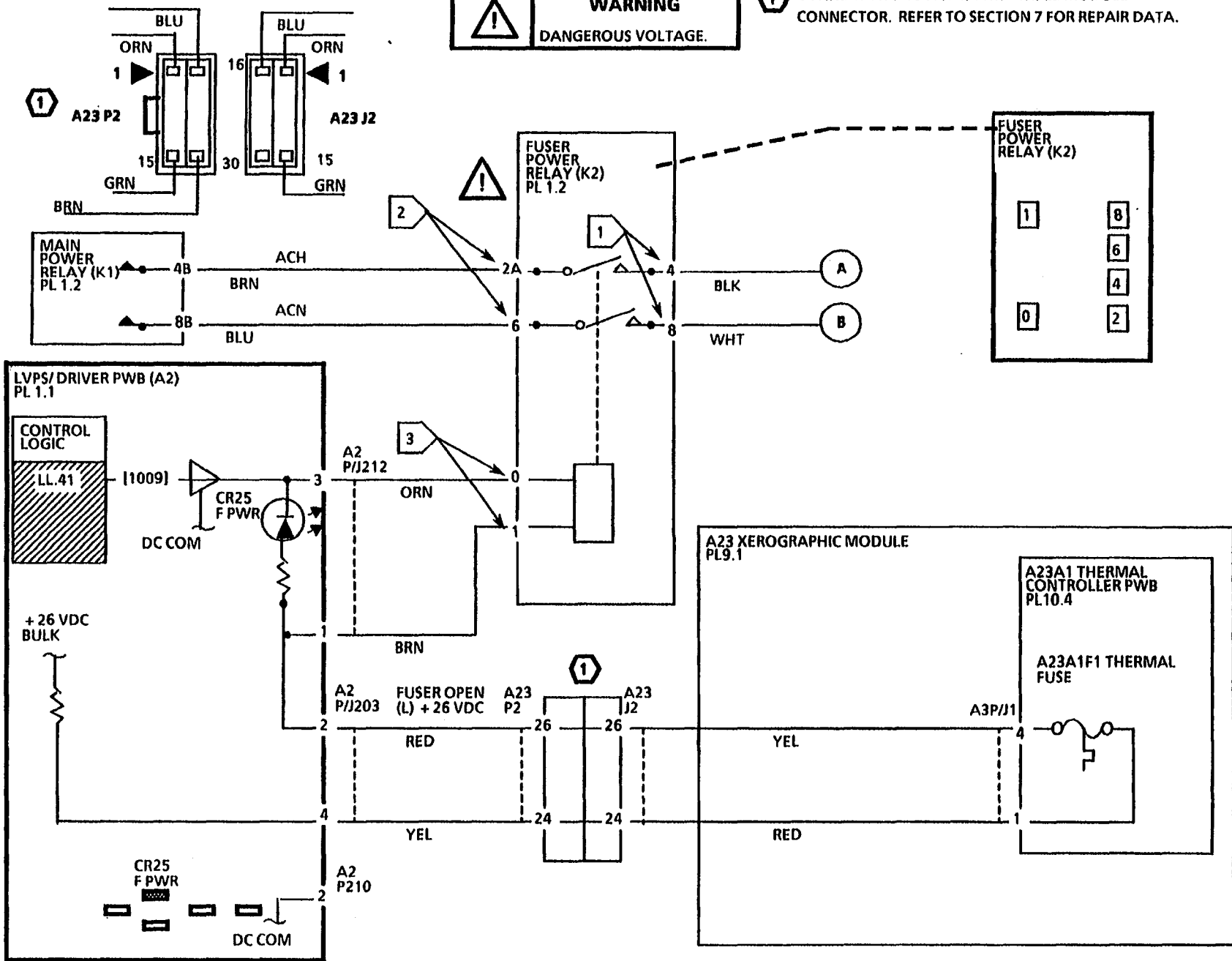
NOTES:

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



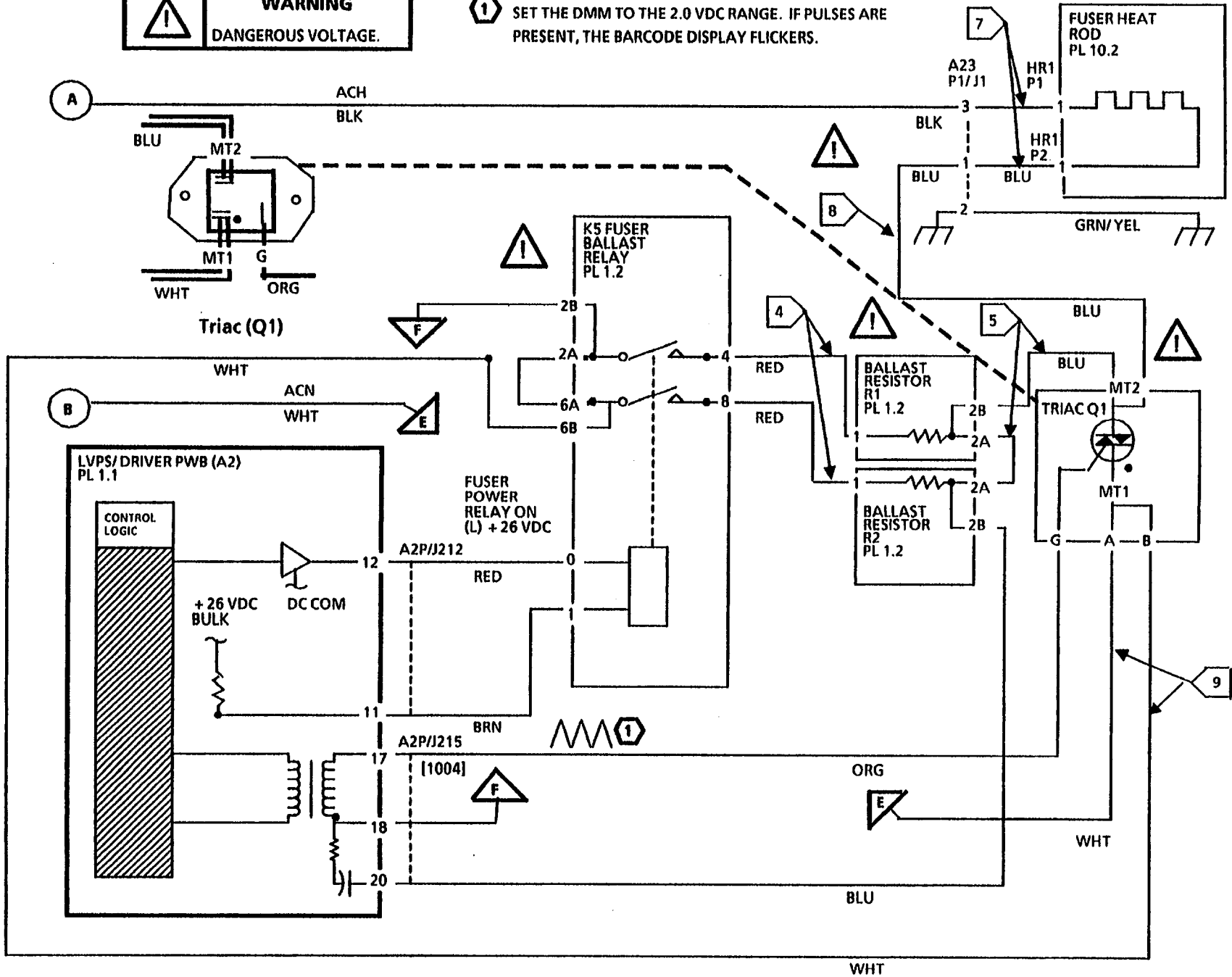
**WARNING**  
DANGEROUS VOLTAGE.

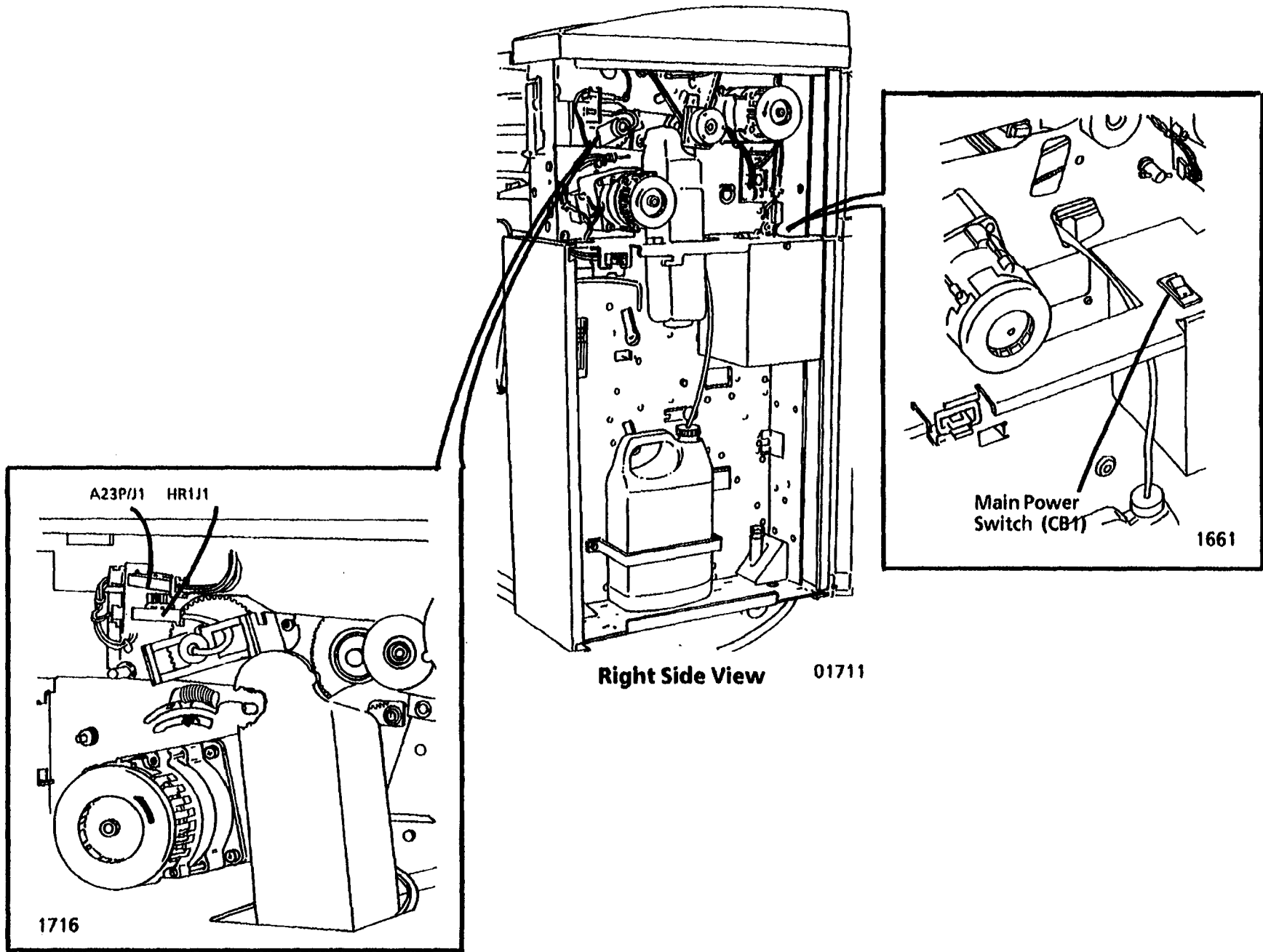
1 CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.

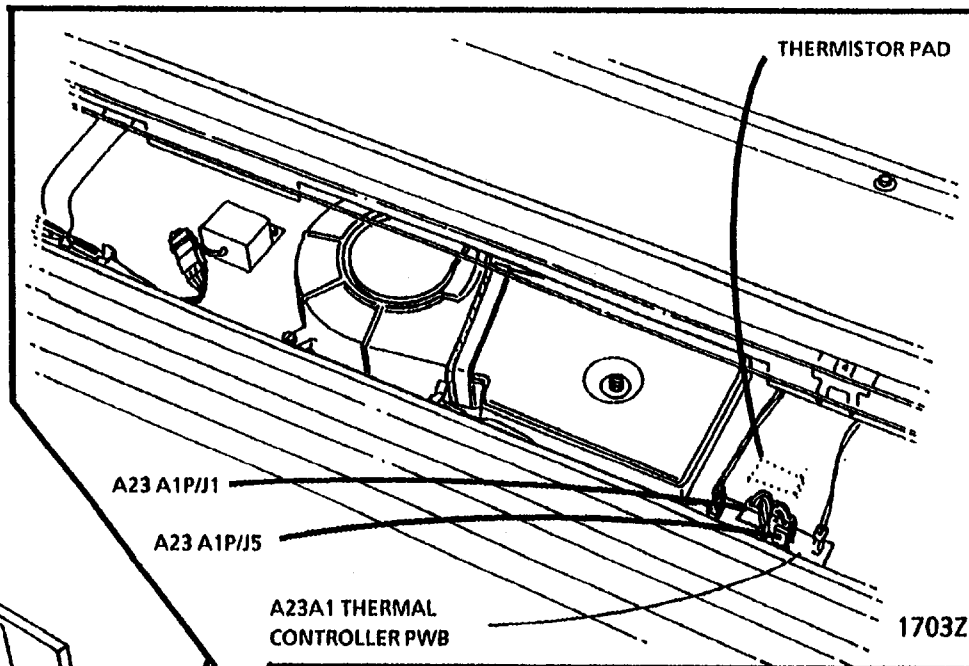


**WARNING**  
DANGEROUS VOLTAGE.

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

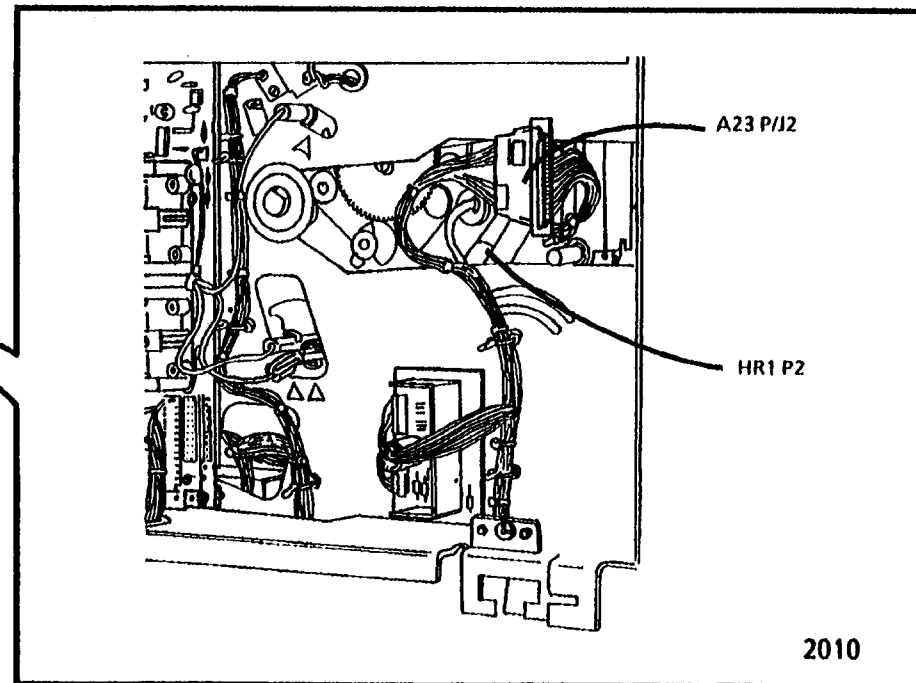
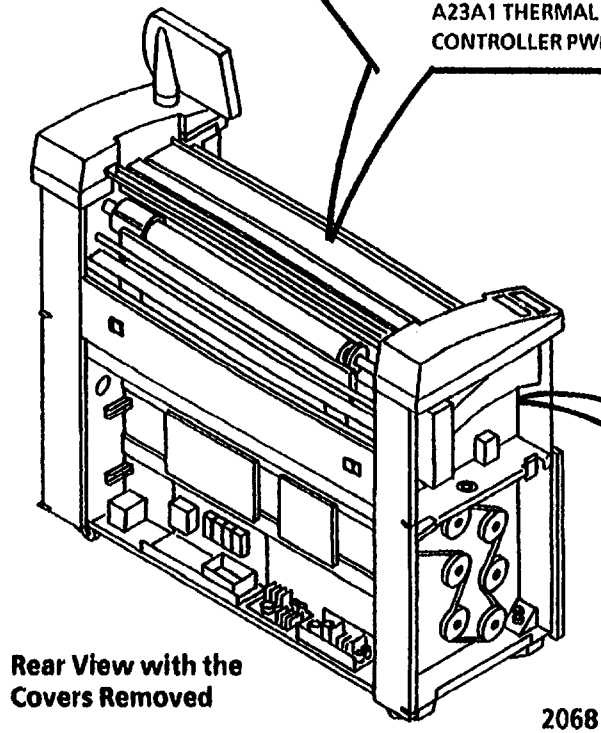


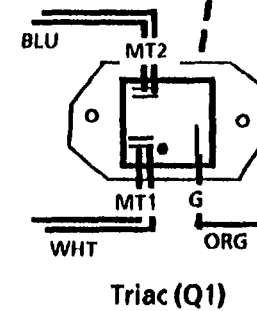
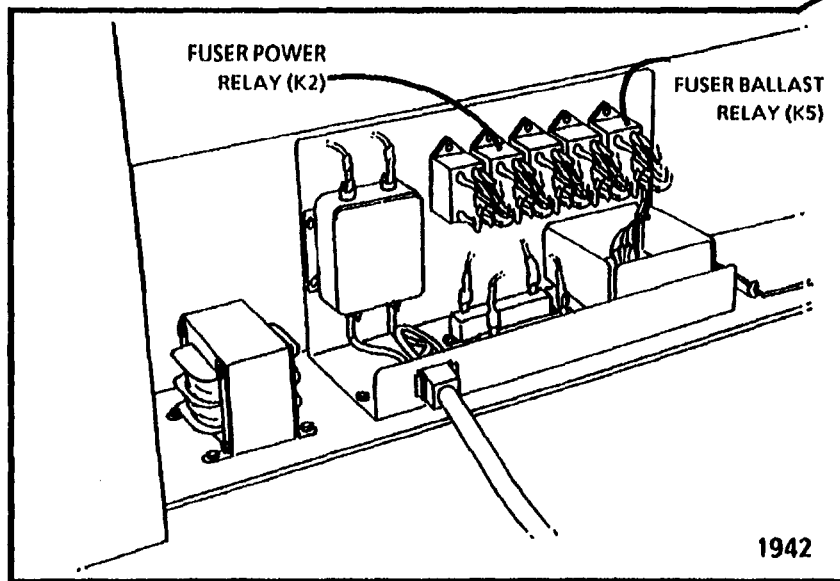
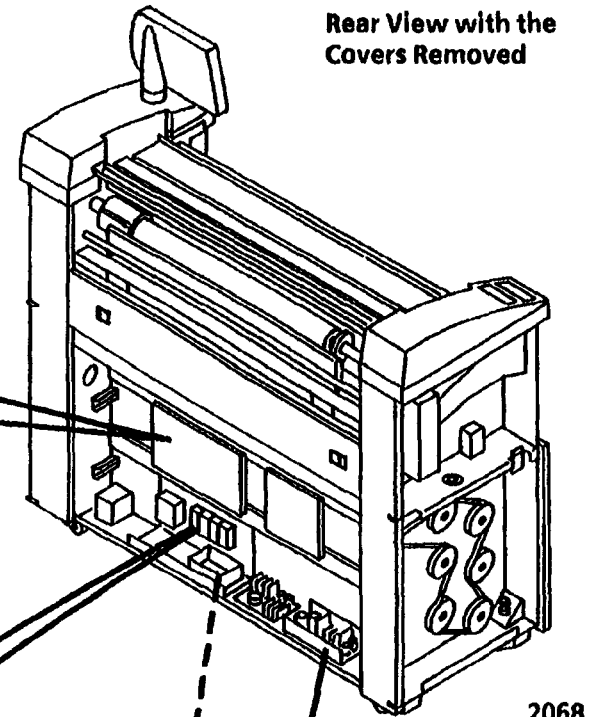
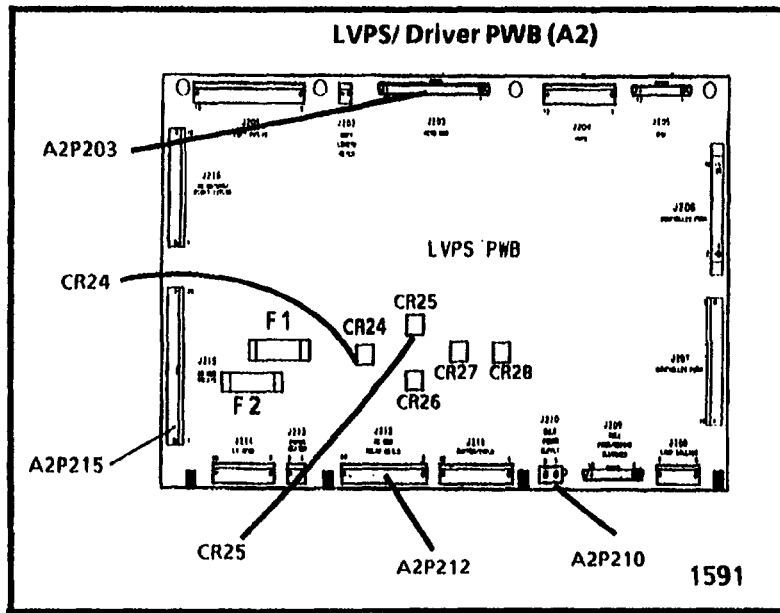




NOTES:

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





## LL.42 Thermal Control RAP

(6/1/92)

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

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

### Initial Actions

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

### Procedure

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

After 5 seconds, the Fuser Heat Rod is off.

Y N

Replace Triac (Q1).

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

The resistance is greater than 100 ohms.

Y N

A B

A B

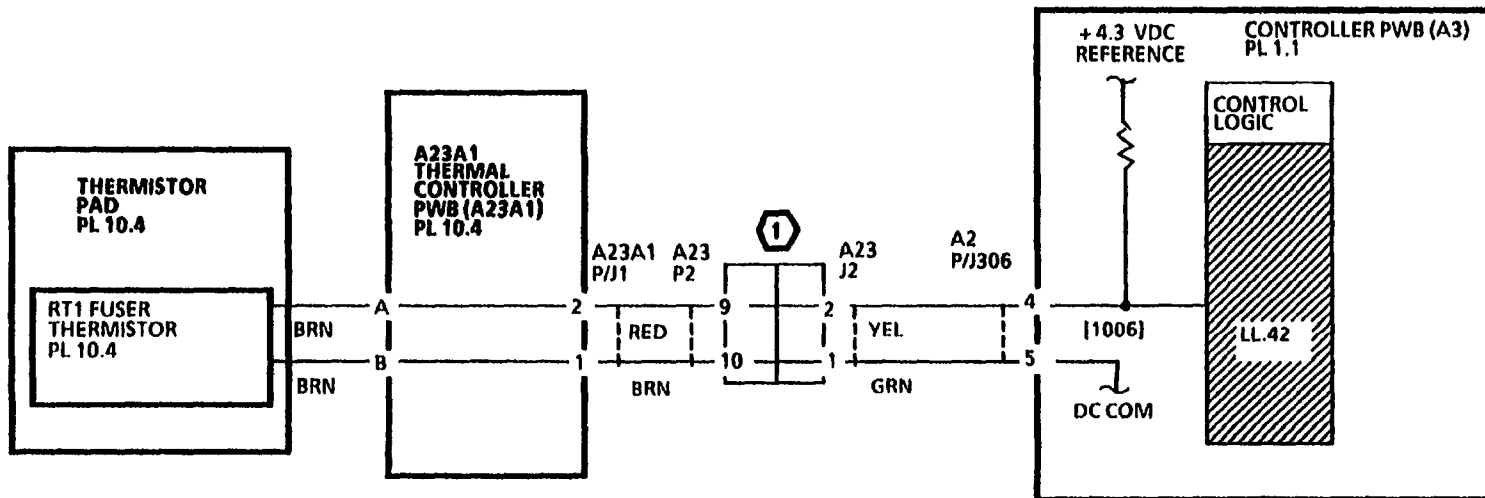
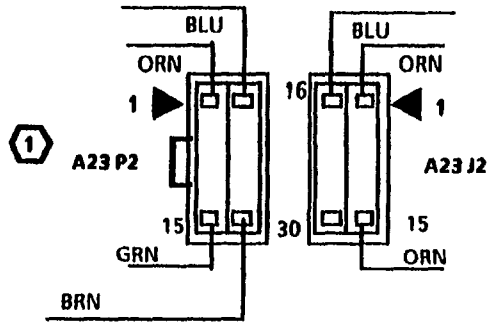
Replace the Thermal Controller PWB (A23A1).

Replace the Controller PWB (A3).



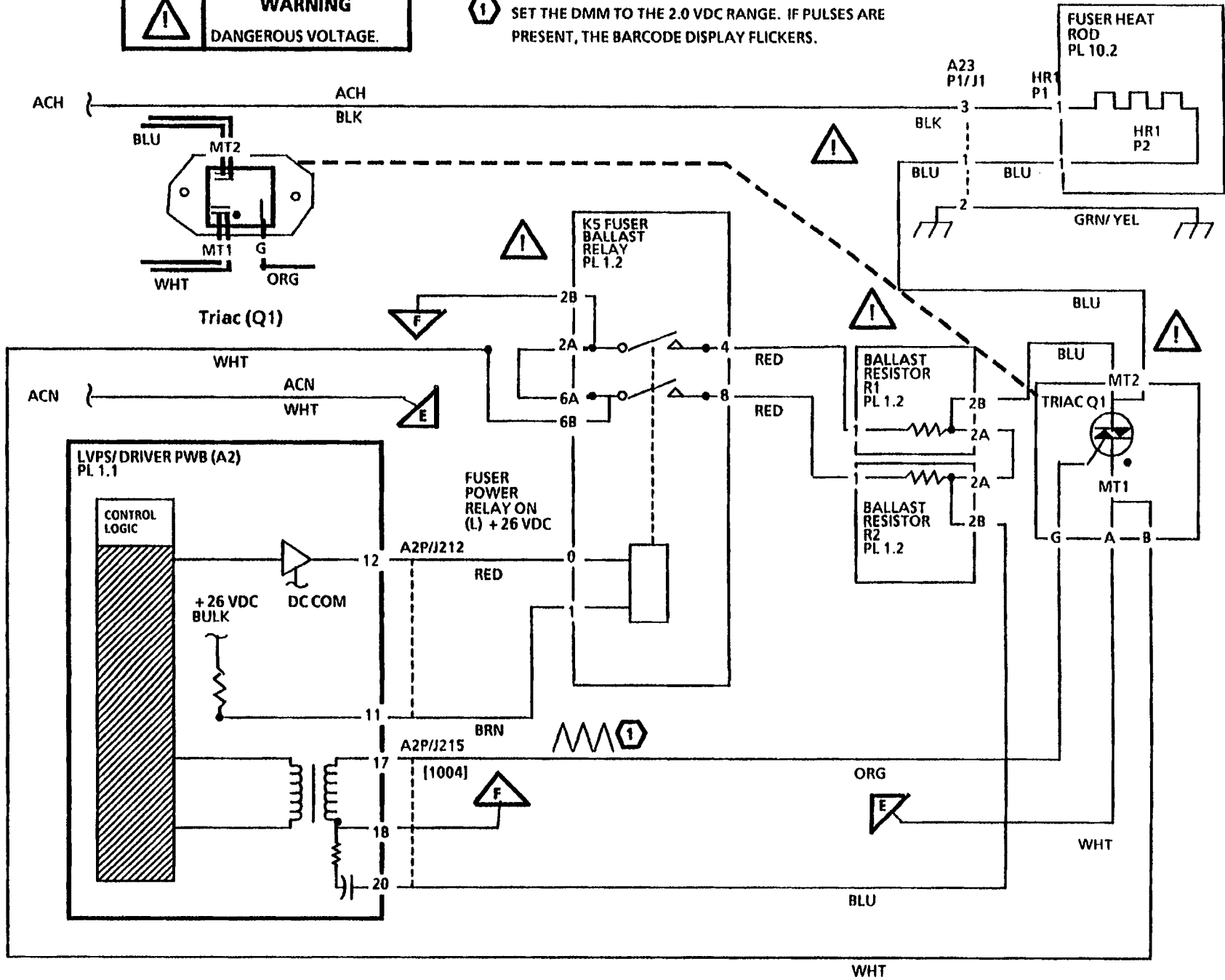
NOTES:

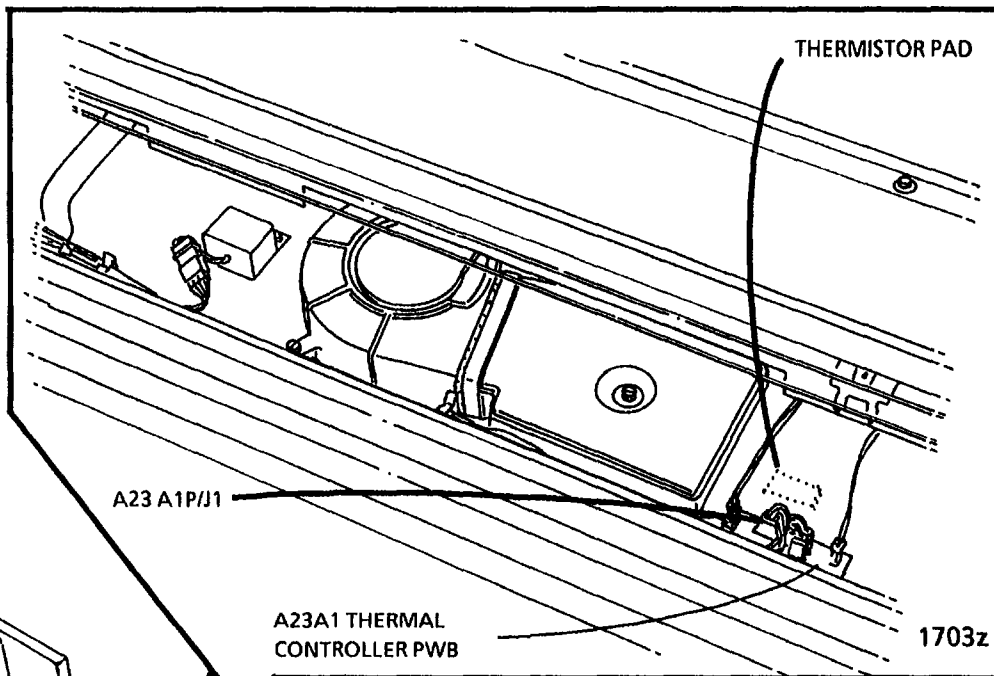
① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



**WARNING**  
DANGEROUS VOLTAGE.

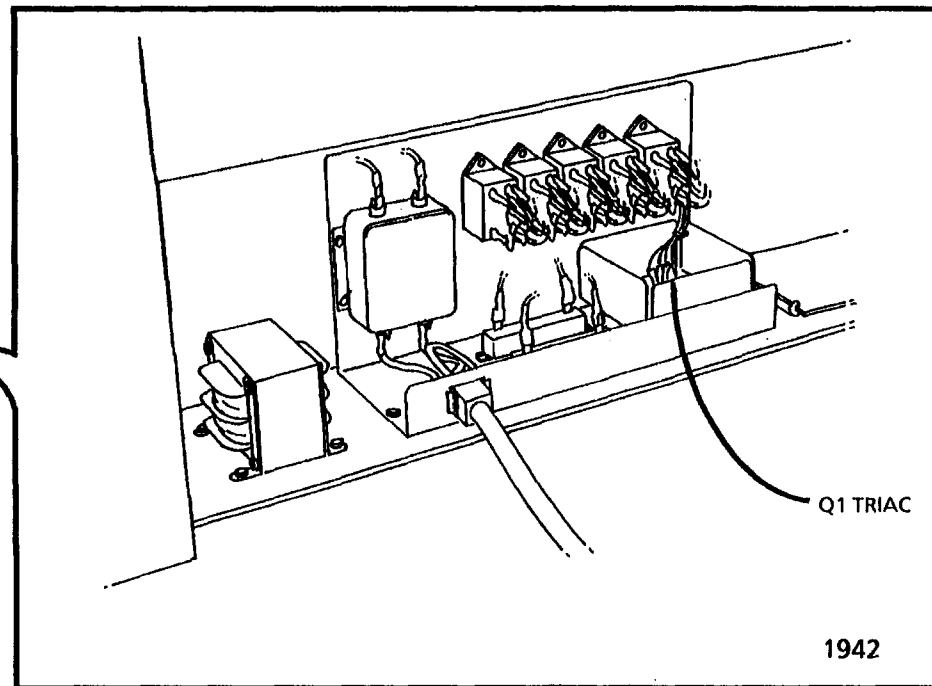
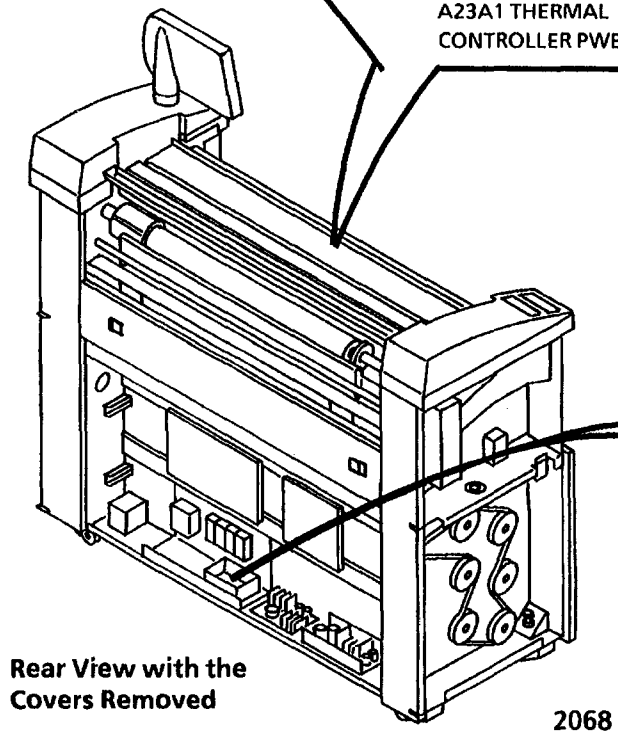
① SET THE DMM TO THE 2.0 VDC RANGE. IF PULSES ARE PRESENT, THE BARCODE DISPLAY FLICKERS.





NOTES:

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



## LL.43 Fuser Overtemperature RAP

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

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

### Initial Actions



**WARNING**  
Dangerous Voltage.

- Ensure that Connectors A4P1 and A4P2 on the 26 VDC Bulk Power Supply, A2P210 AND A2P203 on the LVPS/ Driver PWB (A2), A23A1P5 on the Thermal Controller PWB (A23A1), and A23P/J2 are correctly installed and fully seated.
- Ensure that all interlock switches are closed.

### Procedure

Switch on the copier.

Both Cooling Fans operate.

Y N

Go to the 1.3 Cooling Fan RAP.

W/Tag/MOD 6: Go to "A" in second column.  
CR24 on the LVPS/ Driver PWB is lit.

Y N

Go to the 1.4 Main Power Interlock RAP.

DS1 on the 26 VDC Bulk Power Supply is lit.

Y N

A B

A B

Set the DMM to read ACH. There is ACH at Bulk Power Supply (A4) connector A4 P/ J2.

Y N

Replace the 26 VDC Bulk Supply.

CR27 on the LVPS/ Driver PWB is lit.

Y N

Go to the 1.4 Main Power Interlock RAP.

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

"A" W/Tag/MOD 6: Continue from this point.

There is an open circuit.

Y N

Replace the 26 VDC Bulk Power Supply (A4).

Repair the wires.

Set the DMM to read 26 VDC. Connect the (+) probe to Connector A2P203-4. Connect the (-) probe to Connector A2P210-2.

26 VDC is present.

Y N

Replace the LVPS/Driver PWB (A2).

Connect the (+) probe to Connector A2P203-2.

26 VDC is present.

Y N

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

There is continuity.

Y N

C D E

C D E

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

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

The wires have continuity.

Y N

Repair the wires.

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

The resistance is less than 200K ohms.

Y N

Replace the Thermal Controller PWB A23A1.

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

F G

# 3. Image Quality Repair Analysis Procedures

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## How to Use the Image Defect Samples

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

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

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

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

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

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

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

## Image Quality Definitions

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

### Background

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

### Black Copy

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

### Blank Copy

A copy entirely without an image.

### Cold Flow

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

(Continued)

## Image Quality Definitions

(Continued)

### Crystallization

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

### Deletions

An area of the copy where information has been lost.

### Darkness

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

### Developer Bead Carryover

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

### Fuser Fix

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

### Image Distortion or Skew

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

### Lichtenberg Spots

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

### The Light Copy

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

### Media Damage

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

### Misregistration

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

### Offsetting

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

### Resolution

The uniformity or clarity of fine line detail.

### Residual Image

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

### Skips

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

### Smear

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

(Continued)

## **Image Quality Definitions**

(Continued)

### **Line Darkness**

The darkness and uniformity for a line.

### **Spots**

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

### **Streak**

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

### **Unfused Copy**

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

### **Vertical Line Distortion**

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



## Image Quality Analysis RAP

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

### Note:

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

## Image Quality Specifications

### Image Reference Scale 82E7030

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

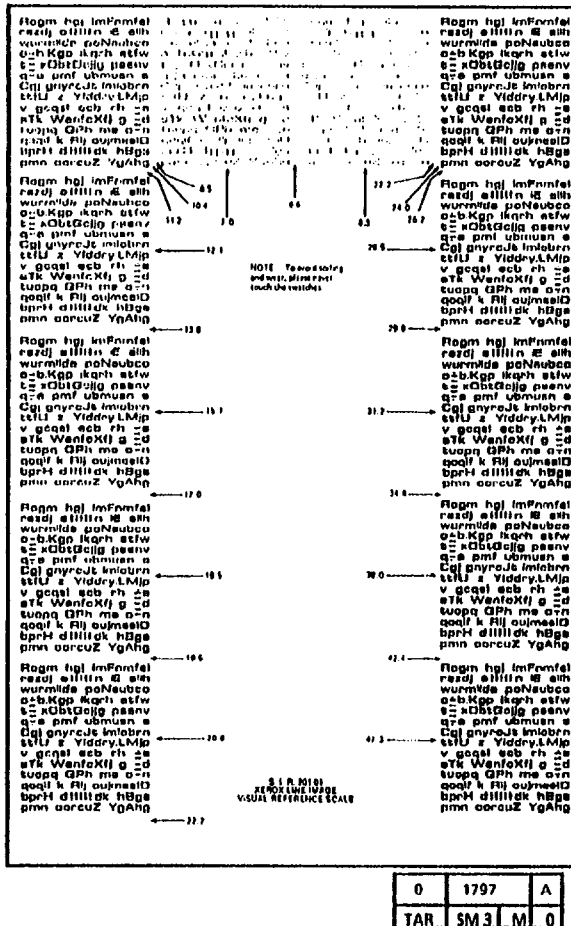


Figure 1. Image Reference Scale 82E7030

## Image Quality Specifications

### Image Reference Scale 82P520

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

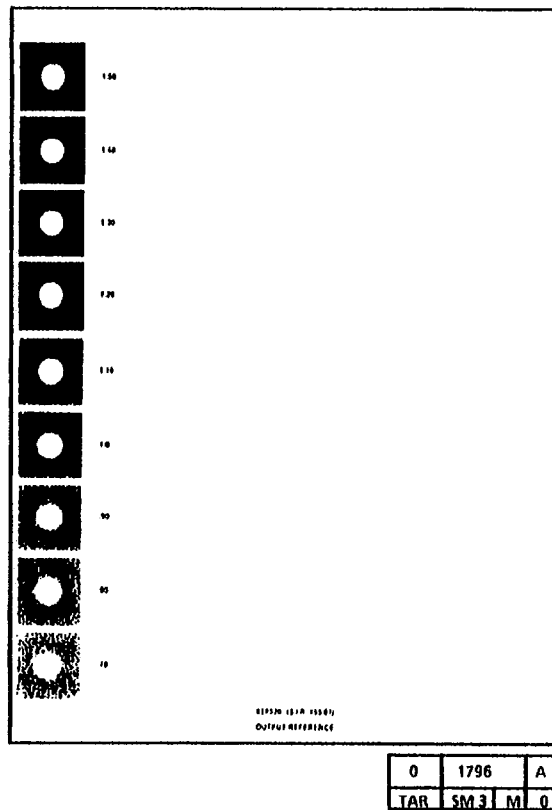


Figure 2 Image Reference Scale 82P520

## Image Quality Specifications

### Image Reference Scale 82P502

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

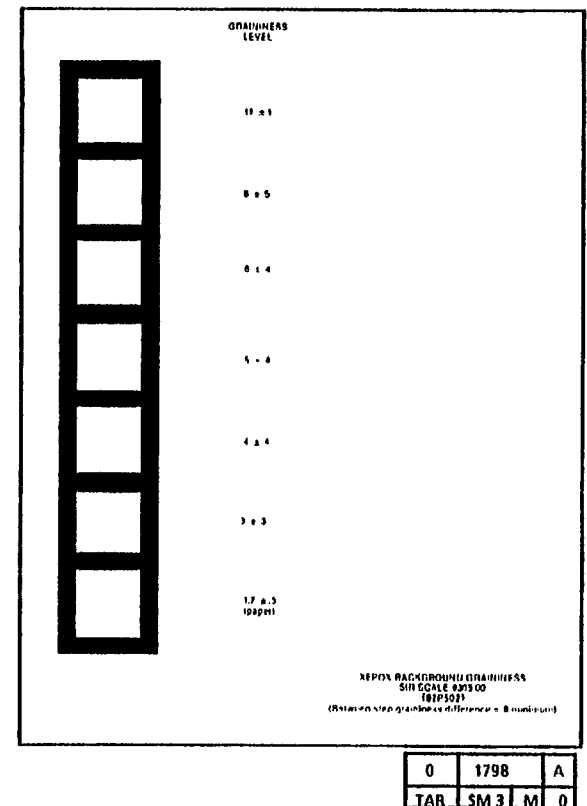


Figure 3. Image Reference Scale 82P502

(Continued)

# Image Quality Specifications

## Test Pattern 82E5980

This test pattern is the standard test pattern that is used for the evaluation of the copy quality of the 3050 copier. Copies of this test pattern are evaluated against the specifications that are listed in this section.

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

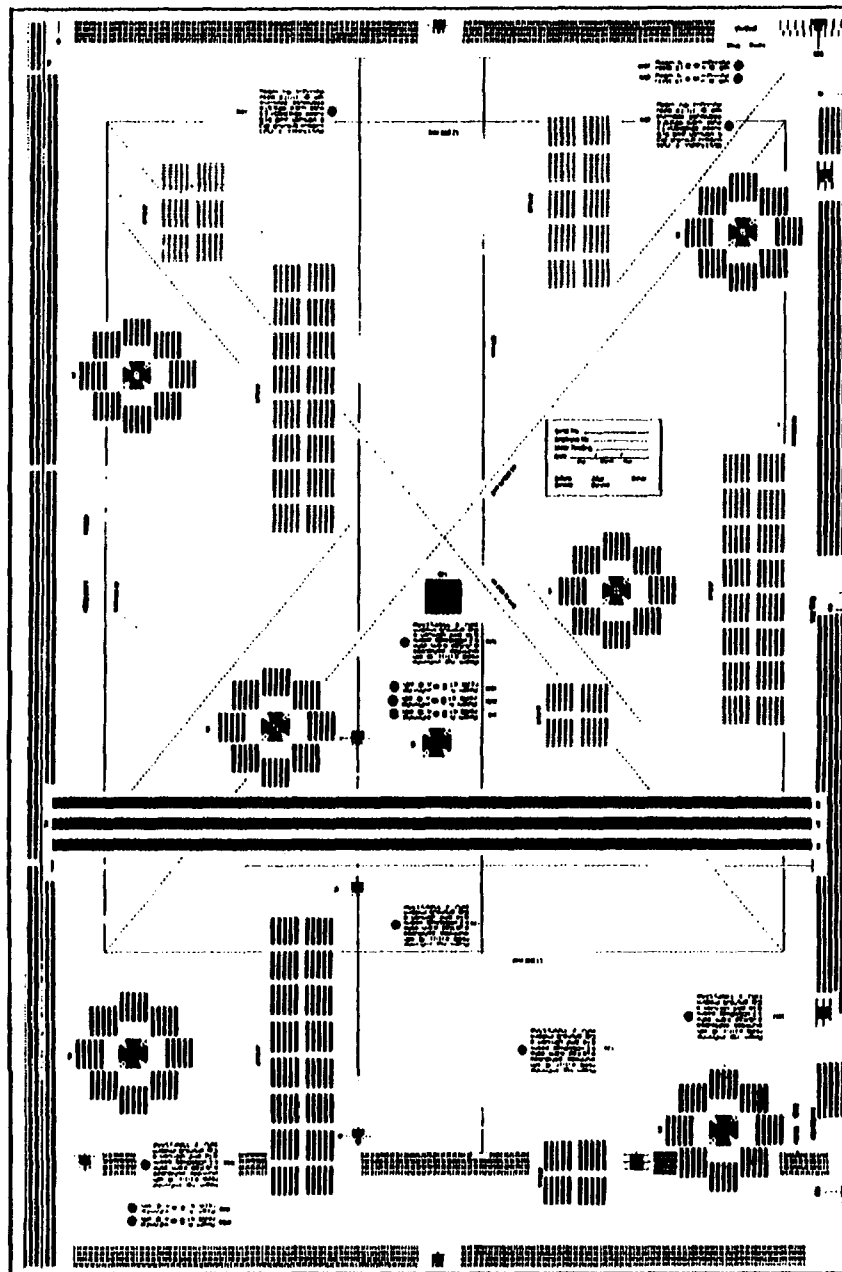
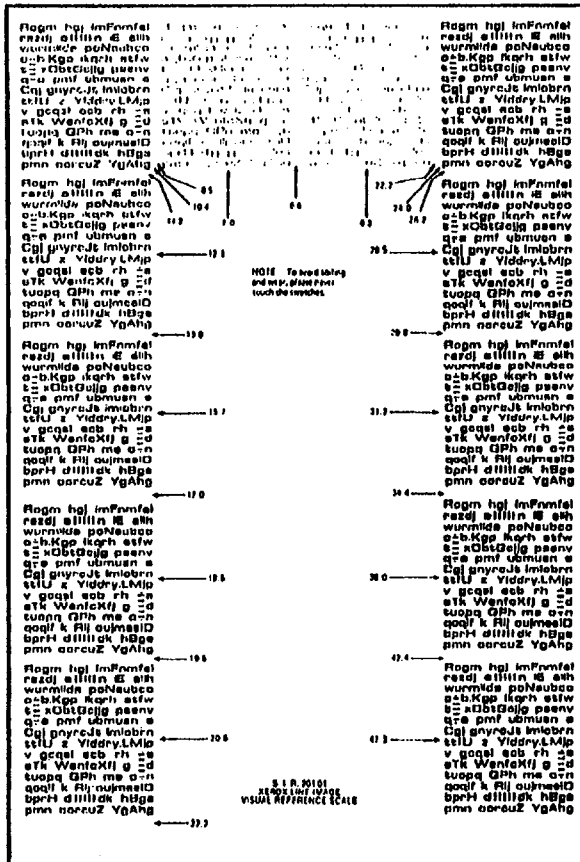


Figure 4. Test Pattern 82E5980

0	1820	A
TAR	SM 3	M 0

## Line Darkness

The copy of the 0.70G5 pattern in the center of Test Pattern 82E5980 should be greater than paragraph 24 but less than paragraph 34.4 on Test Pattern 82E7030. For corrective action check with procedure CQ 11.



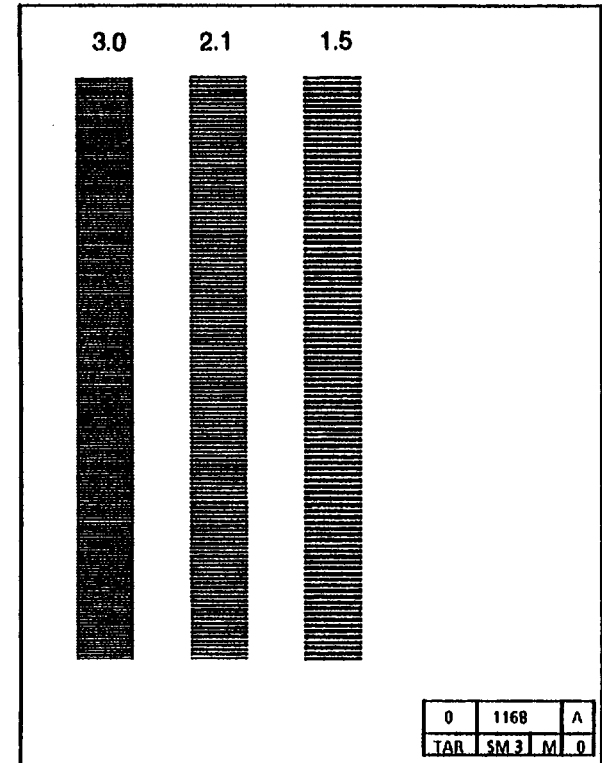
0	1797	A
TAR	SM 3	M 0

## Uniformity

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

## Skips and Smears

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

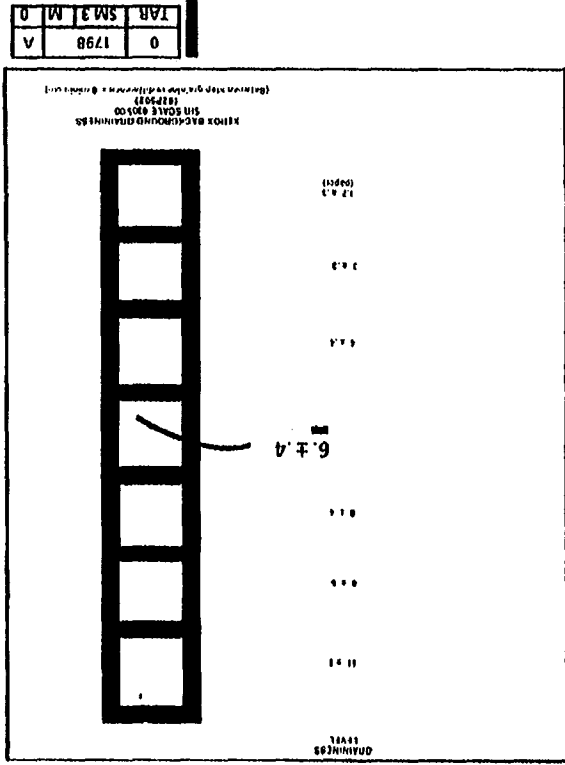


0	1168	A
TAR	SM 3	M 0

## Background

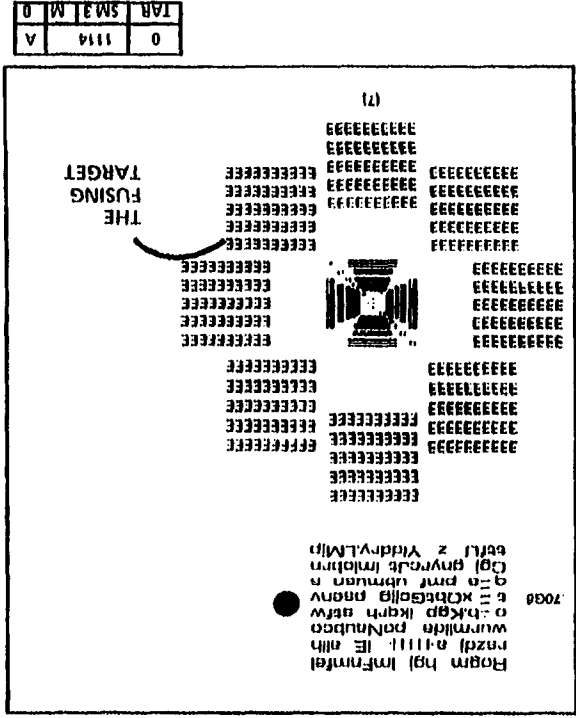
Background must be less than the background of the 6. ± .4 patch on the Image Reference Scale 82P502.

**NOTE:** Evaluate the worst areas on the copy. For corrective action, check the procedures CQ 1 and 2.



## Fusing

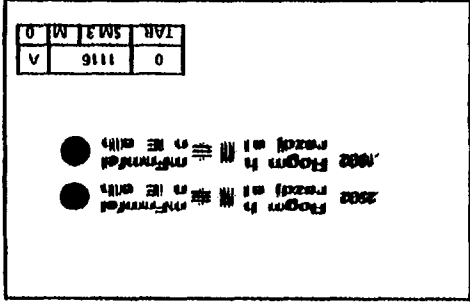
Run one copy of the Test Pattern 82E5980 with the 0.7G paragraph on the copy equal to the 1.2G paragraph on the Test Pattern. Check the fusing targets (1), (2), (3), (4), (6), and (7). Gently rub the targets four times with a paper towel (twice top-to-bottom and twice side-to-side). The image must not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



## Exposure Level/Low Contrast Lines

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

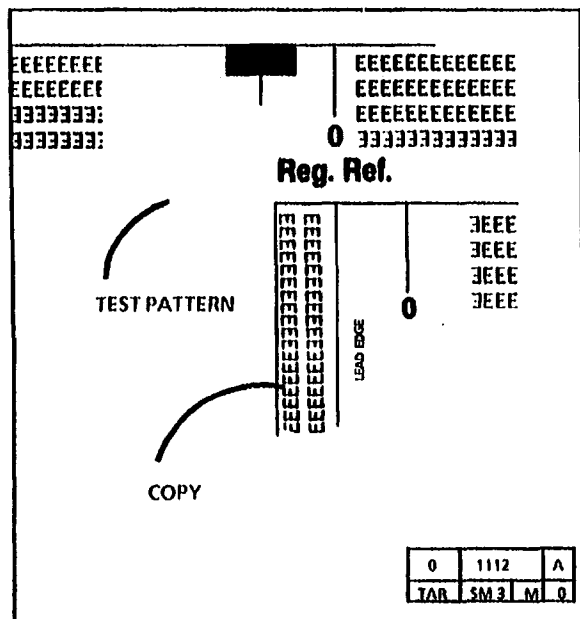
For corrective action, check the procedure CQ 11, 16, or 27.



## Lead Edge Registration

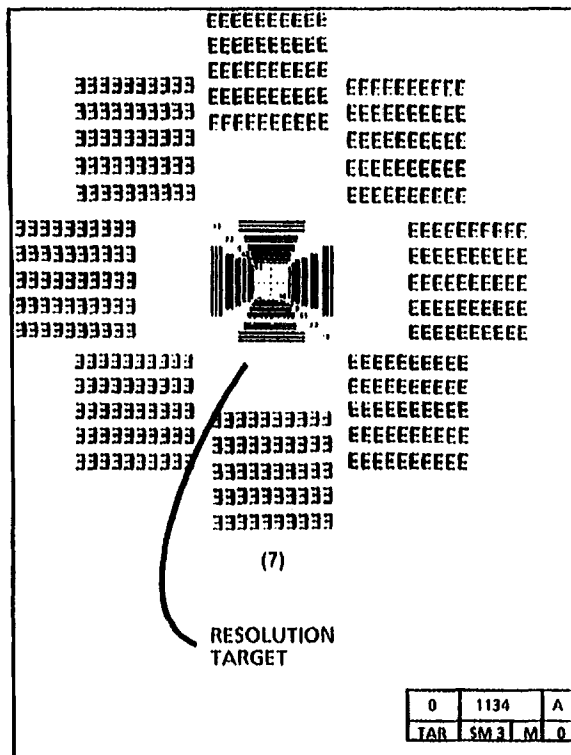
When the Lead Edge reference line on the copy is aligned with the 0 reference line on the test pattern, the lead edge of the copies of Test Pattern 82E5980 must be within the black box on Test Pattern 82E5980.

For corrective action, check the procedure CQ 14.



## Resolution

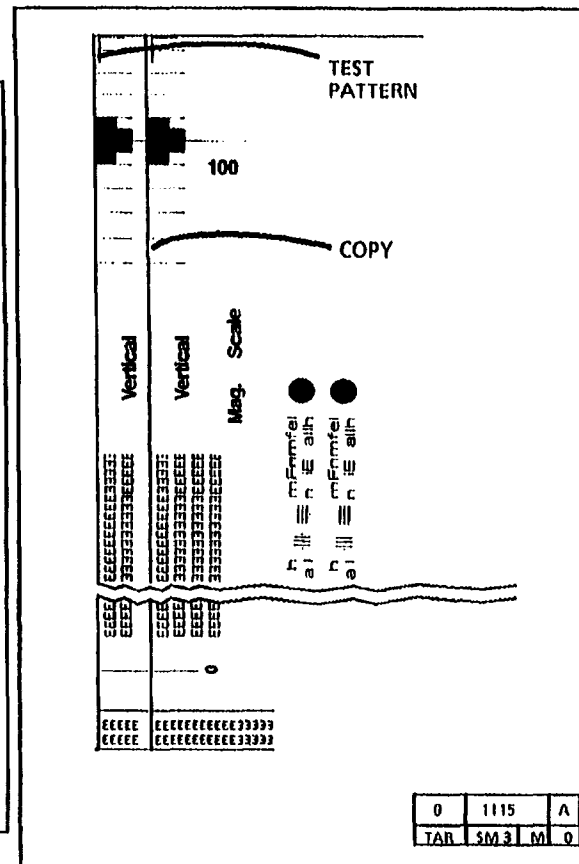
The copies of the Test Pattern 82E5980 must exhibit 100% of the 2.5 line pairs in each direction and 50% of the 3.5 line pairs in each direction. Check the resolution targets at the (1), (2), (5), (6), and (7) patterns. For corrective action, check the procedure CQ 16.



## Vertical Magnification

Align the 0 reference line of the copy with the 0 reference line of the Test Pattern 82E5980.

The 100 reference line of the Vertical Mag. Scale on the copy must be within the narrow black area at the 100 reference line on the 82E5980 test pattern. For corrective action, check the ADJ 5-1.

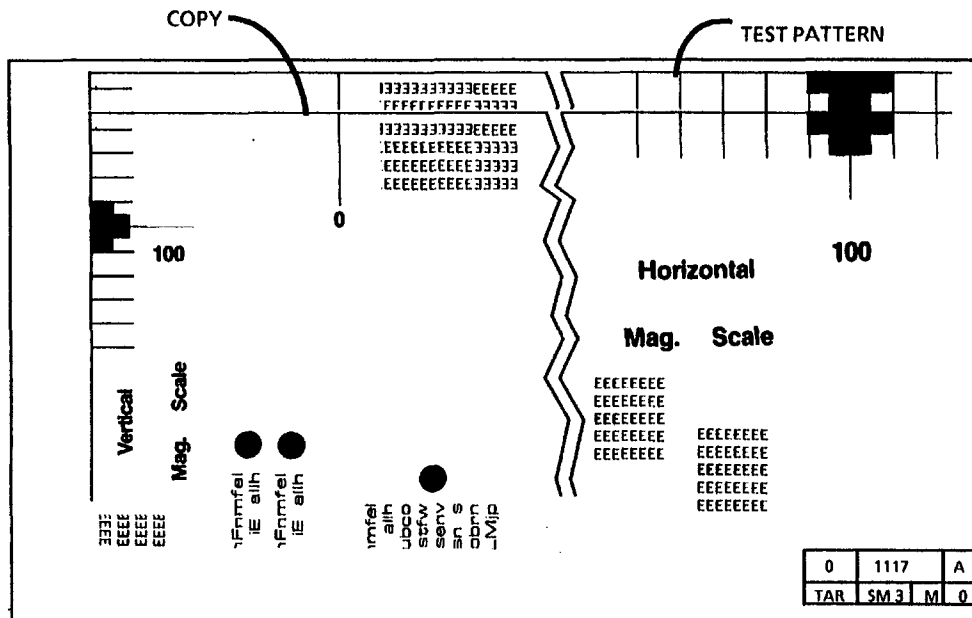


**Notes:**

## Horizontal Magnification

Align the 0 reference line of the copy with the 0 reference line of the Test Pattern 82E5980.

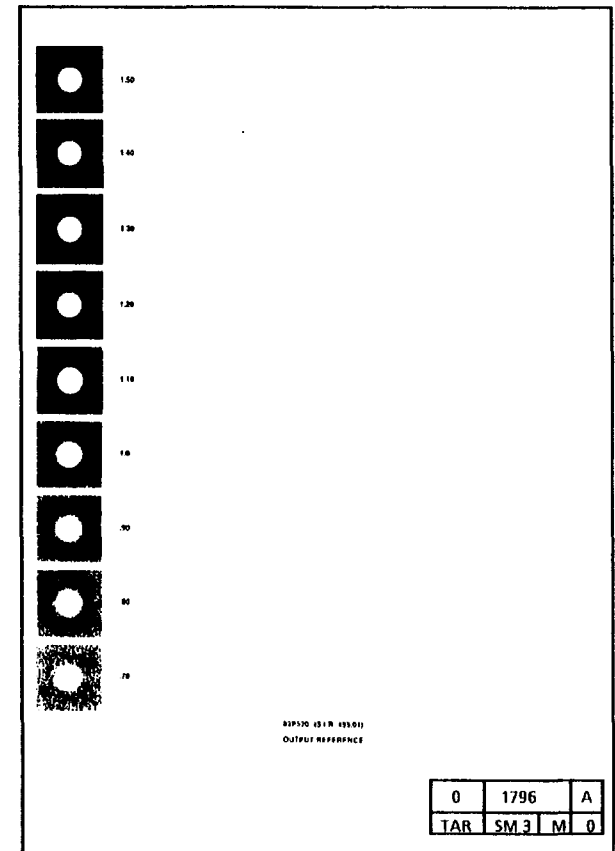
The 100 reference line of the Horizontal Mag. Scale on the copy must be within the narrow black area at the 100 reference line on the Test Pattern.



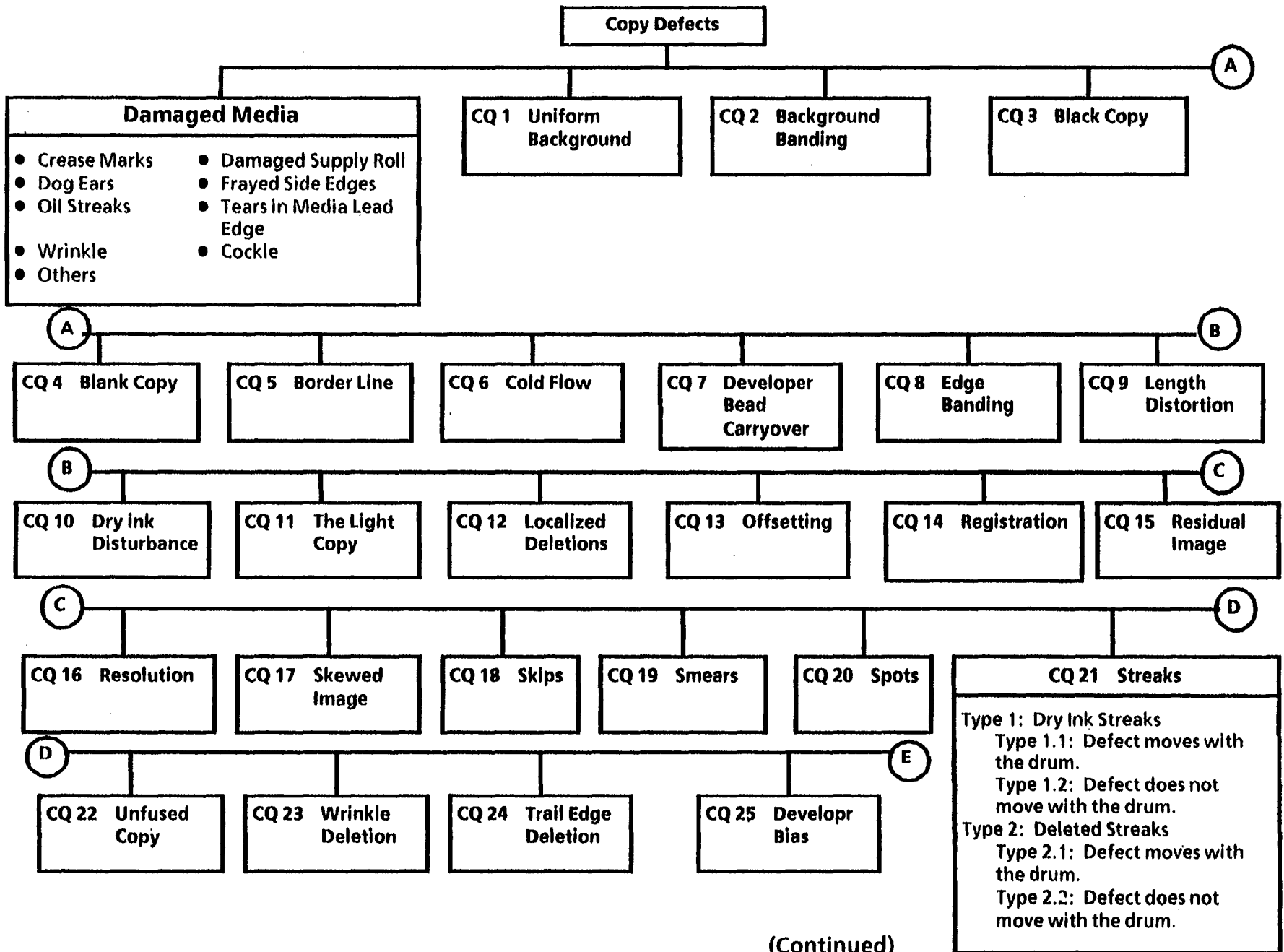
## Solid Area Density

The (1.00) density black square located in the center of the Test Pattern, must be greater than or equal to the (0.7) Solid Area density square; and must be less than or equal to the (1.0) Solid Area Density square on Test Pattern 82P520.

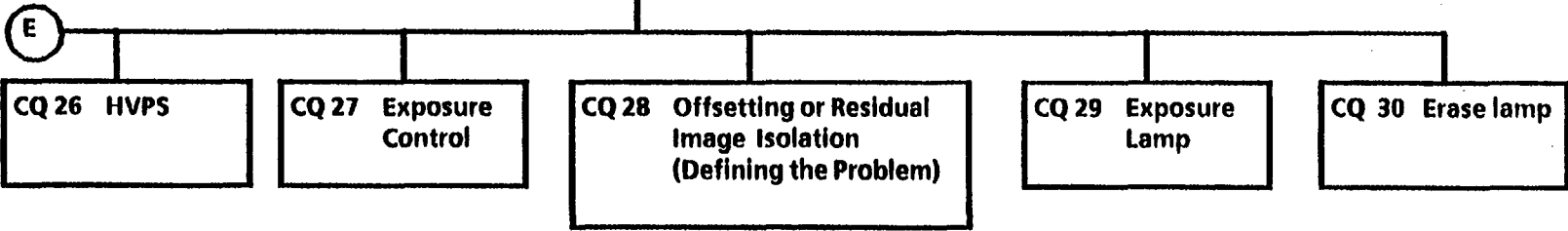
For corrective action, perform either the (ADJ 9.3) Increase the Image Density, or (ADJ 9.4) Decrease the Image Density Adjustment.







**Copy Defects (continued)**





## Damaged Media RAP

## Probable Cause

## Corrective Action

### 1. Crease Marks

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

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

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

### 2. Damaged Supply Roll

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

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

2. Replace the media roll.

### 3. Dog Ears

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

3. Curled or roll cut media.  
Detack corotron.  
Media guides in the media supply area.  
Obstruction in the fuser area.

3. Use the cut sheet media.  
Check for an obstruction in the area of the transfer/detack corotron.  
Check for an obstruction or damaged guides in the media area.

### 4. Frayed Side Edge

This is damage to the sides of the copy.

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

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

### 5. Oil Streaks

Streaks on the copy.

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

5. Clean or replace the Oil Pad (REP 10.9) and Wick ( REP 10.11).

**W/Tag/Mod 18:** Check that the Dispense Roll Springs have not been removed from inside the roll.

(Continued)

## Damaged Media RAP (Continued)

## Probable Cause

## Corrective Action

- |  |  |   |
|--|--|---|
| <p><b>6. Tears in the Media Lead Edge</b></p>  | <p><b>6. Damaged Stripper Finger.</b><br/>Media side-to-side registration.</p>   | <p><b>6. Replace the Stripper Finger (PL 10.4).</b><br/>Reposition the media roll on the Roll Support Tube.<br/>Check for an obstruction in the area of the transfer/detack corotron.<br/>Check for an obstruction or damaged guides in the media area.</p> |
| <p><b>7. Wrinkle</b><br/>A severe case of creases that runs in the direction of the media travel.<br/>This is damage that is probably caused by the fuser subsystem.</p> | <p><b>7. Damage or obstruction in the handling system for the media.</b><br/>Fuser is too hot.<br/>Damp media.<br/>Fuser Pressure Plates or Fabric Guide ( PL 10.3) is damaged or incorrectly installed.<br/>Tightly rolled media.<br/>Fuser Heat Roll is damaged or contaminated.</p> | <p><b>7. Check the media path for an obstruction or damage.</b><br/>Check/Adjust the Fuser Temperature (ADJ 10.1)<br/>Try a new media roll or a cut sheet.<br/>Replace the Fuser Roll (PL 10.2).<br/>Replace Pressure Plates.</p>                           |
| <p><b>8. Cockle</b><br/>The media has a rough surface like an orange peel.<br/>This damage could be caused by the fuser subsystem.</p>                                   | <p><b>8. Damage or obstruction in the handling system for the media.</b><br/>Fuser is too hot.<br/>Damp media.<br/>Fuser Pressure Plates or Fabric Guide (PL 10.3) is damaged or incorrectly installed.<br/>Tightly rolled media.</p>  | <p><b>8. Check the media path for an obstruction or damage.</b><br/>Check/Adjust the Fuser Temperature (ADJ 10.1)<br/>Try a new media roll or a cut sheet.</p>  |
| <p><b>9. Other Damage</b></p>  |  | <p><b>9. If there are other defects that are on the copy, go to the Media Handling Problems on the following pages.</b></p>   |

## Media Handling Problems

### Introduction

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

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

Pre-fuser jams  
Copy quality defects  
Physical distortion of media

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

## Media Check

1. Check the type of media:
  - a. Some vellum (a tracing paper) or bond paper less than 20 lb (80 gsm) performs with less reliability than Xerox 20 lb (80 gsm) media. Some film less than 0.004 inches thick will perform with less reliability.
  - b. Other brands of media may have different design specifications than Xerox media and may not give acceptable performance in the 3050 copier.
  
2. Check the storage of media:
  - a. Media that is exposed to the environment may have damp areas.
  - b. Media may have curled ends or become distorted from storing the media on end.

## Corrective Actions

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

(Continued)

**Media Check****Corrective Actions**

3. Check the grain direction of Cut Sheet media:

a. Media with the grain direction perpendicular to the feed direction will have fewer wrinkles and jams than media fed with the grain parallel to the feed direction.

b. To test for grain direction, tear a corner from a sheet of media, moisten one side, and the media will curl. Place your finger in the curl, place the piece in the sheet, and your finger will point in the direction of the grain.

a. Try feeding the Cut Sheet media with the grain direction perpendicular to the feed direction.

b. Roll cut media can only be made with the grain in the process direction

**Copier Check**

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

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

6. Check, clean or replace the following components:

a. Transfer/detack Corotron (REP 9.9).

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

c. Oil dispense wick is clogged.

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

5. Perform Electrostatic Series (ADJ 9.2).

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

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

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

(Continued)

## Media Handling Problems (Continued)

### Copier Check

### Corrective Action

6. Check, clean or replace the following component (continued):

d. Fabric Guide.

d. Replace the Fabric Guide (REP 8.9).

e. Fuser roll.

e. Replace the Fuser Roll (REP 10.2) if it is glazed or contaminated.

f. Fuser Pressure Plates.

f. Check that the plate is positioned correctly and is not bent or damaged. (PL 10.3).

g. Media Transport Module is not latched against the pins on the Xerographic Module.

g. Ensure that the media transport module is against the pins. Check the latching bars and transport latching cover for damage.

h. Fuser Stripper Fingers

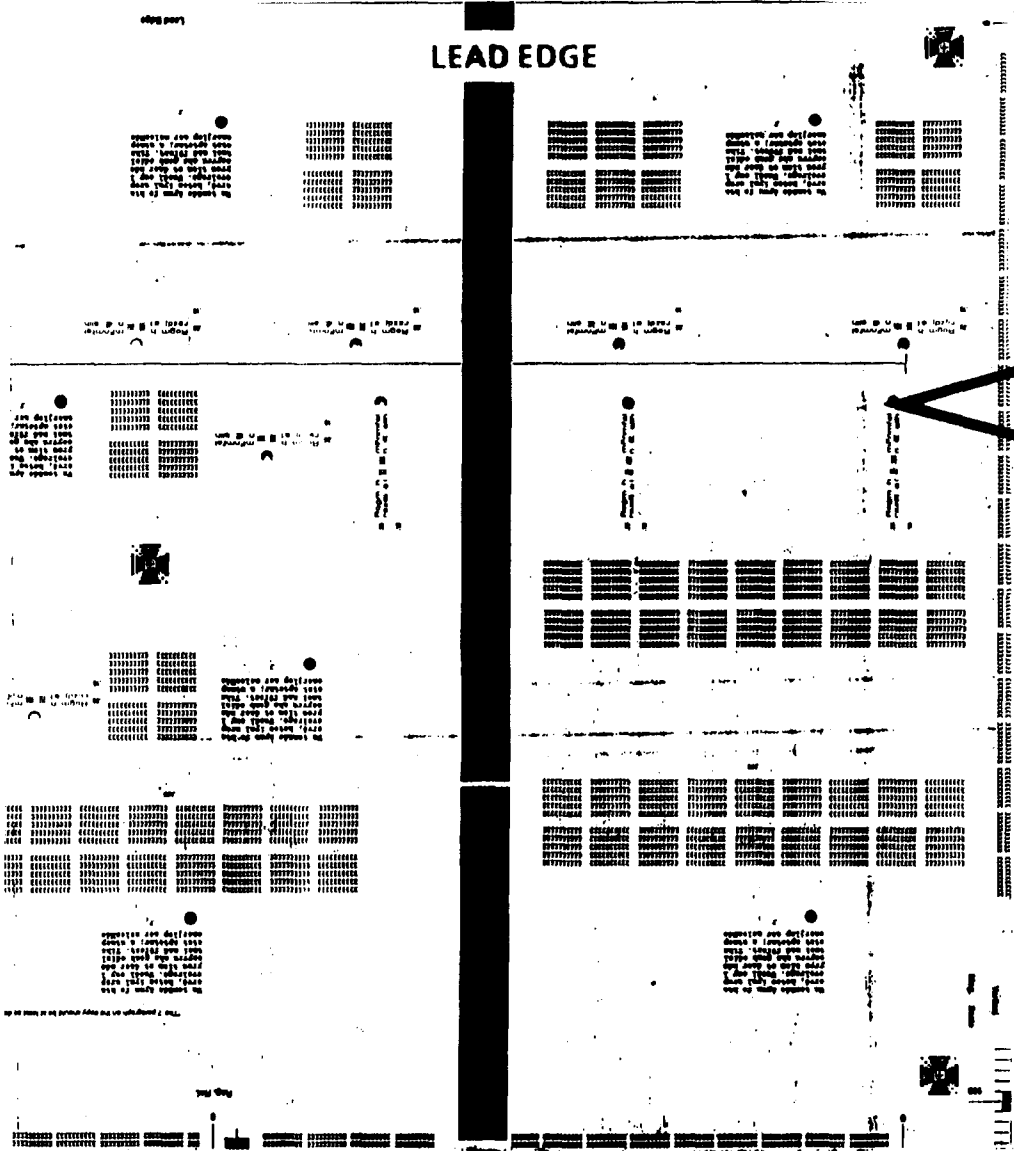
h. Ensure that the fuser stripper fingers (REP 10.8) are not damaged.

i. Excessive oil

i. Check the oil pads (REP 10.9); replace the wick (REP 10.11).  
**(W/ Tag/ MOD 18):** Check that the Dispense Roll Springs have not been removed from inside the Roll.

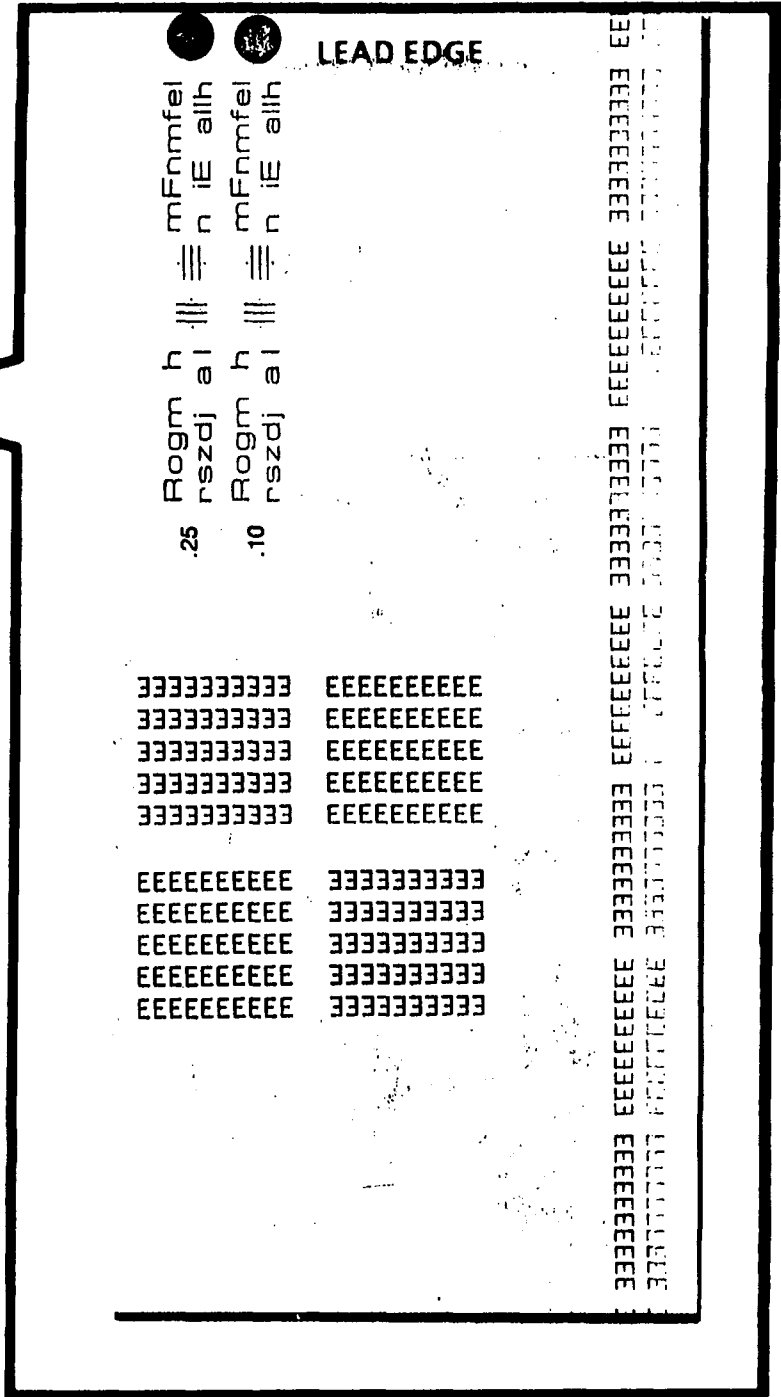
7. After completing the previous checks, run several copies with dry Xerox media in order to verify that the problem is fixed, then perform the Final Actions.





**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

- |  |  |
|--|--|
| <p>1. Dirty transport platen, platen, exposure lamp, or lens.</p>  | <p>1. Clean the transport platen and the platen with Anti-static Cleaner.<br/>If required, apply a small amount of Film Remover (USO), General Purpose Cleaner (RX), to a towel to remove excess contaminants from the lens and exposure lamp. Then, apply Anti-static Cleaner to the towel and wipe the lens and exposure lamp.</p> |
| <p>2a. On copiers (W/ O Tag/ MOD 30): Ensure that the Erase Lamp illuminates.</p> <p>2b. On copiers (W/ Tag/ MOD 30): Ensure that the Erase LEDs illuminate.</p> | <p>2 a. Refer to CQ 30, if the Erase Lamp is not illuminating.</p> <p>2 b. Refer to CQ 31, if the Erase LEDs are not illuminating.<br/>Both configurations, ensure that Exposure Lamp is installed correctly (REP 6.1).</p>  |
| <p>3. Electrostatic voltages are out of specification.</p>   | <p>3. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4) procedures.</p>  |
| <p>4. Developer bias has a short circuit to ground.</p>  | <p>4. Go to the CQ 25 Developer Bias RAP.</p>  |
| <p>5. Photoreceptor drum has been exposed to the light (Light Shock).</p>  | <p>5. Make five copies in a lighter contrast mode then check the copy quality.</p>   |
| <p>6. Photoreceptor Drum is not being cleaned correctly.</p>   | <p>6. Enter the diagnostic mode and then enter the code [0913]. Press the <b>Start</b> button and the cleaner blade solenoid should actuate.<br/><br/>Go to CQ 15.</p>   |
| <p>7. Developer material has made more than 40K feet (12K metres) of copies.</p>   | <p>7. Replace the developer material (REP 9.8) and perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4) procedures.</p>   |

(Continued)

**CQ 1 Uniform Background (Continued)****Probable Cause****Corrective Action**

8. Dry ink concentration is too high.

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

Make a copy of Test Pattern 82E5980. Check the solid area density. If it is greater than 1.2, perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4).

If this is not successful, replace the developer material. Perform the Electrostatic Series.

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

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

10. Defective or incorrect photoreceptor drum.

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

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

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

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

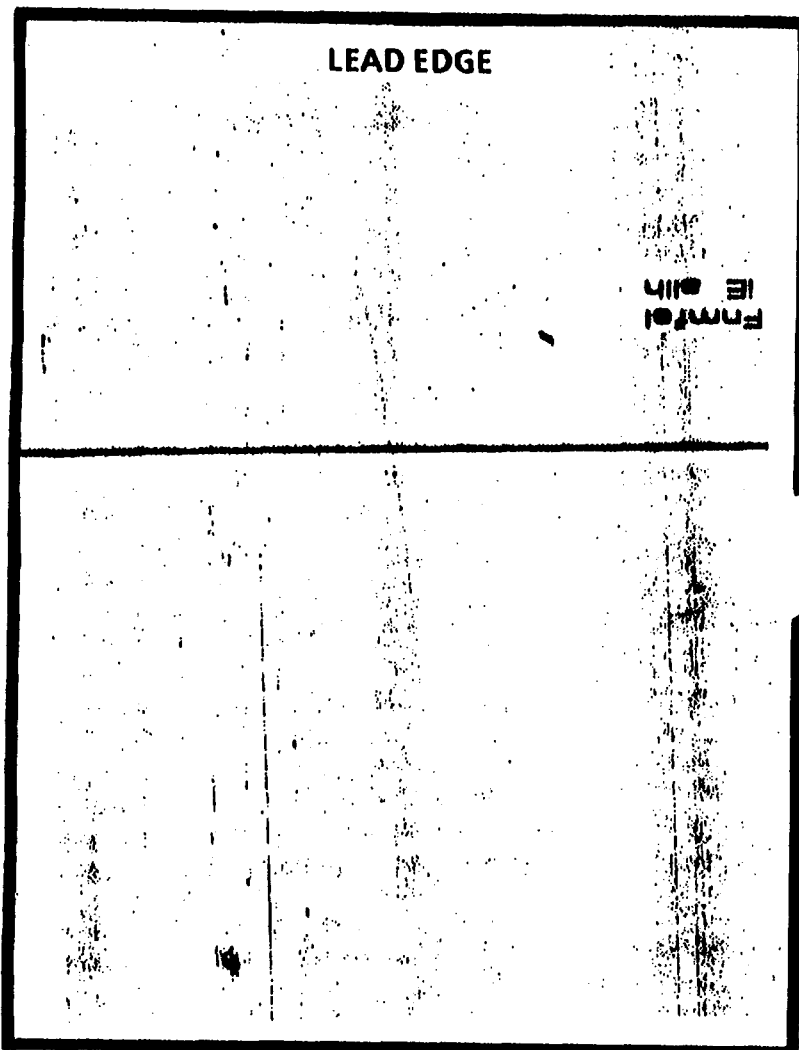
12. Check the Photoreceptor Drum Seal for damage (PL 9.5).

13. Dry ink waste bottle is full.

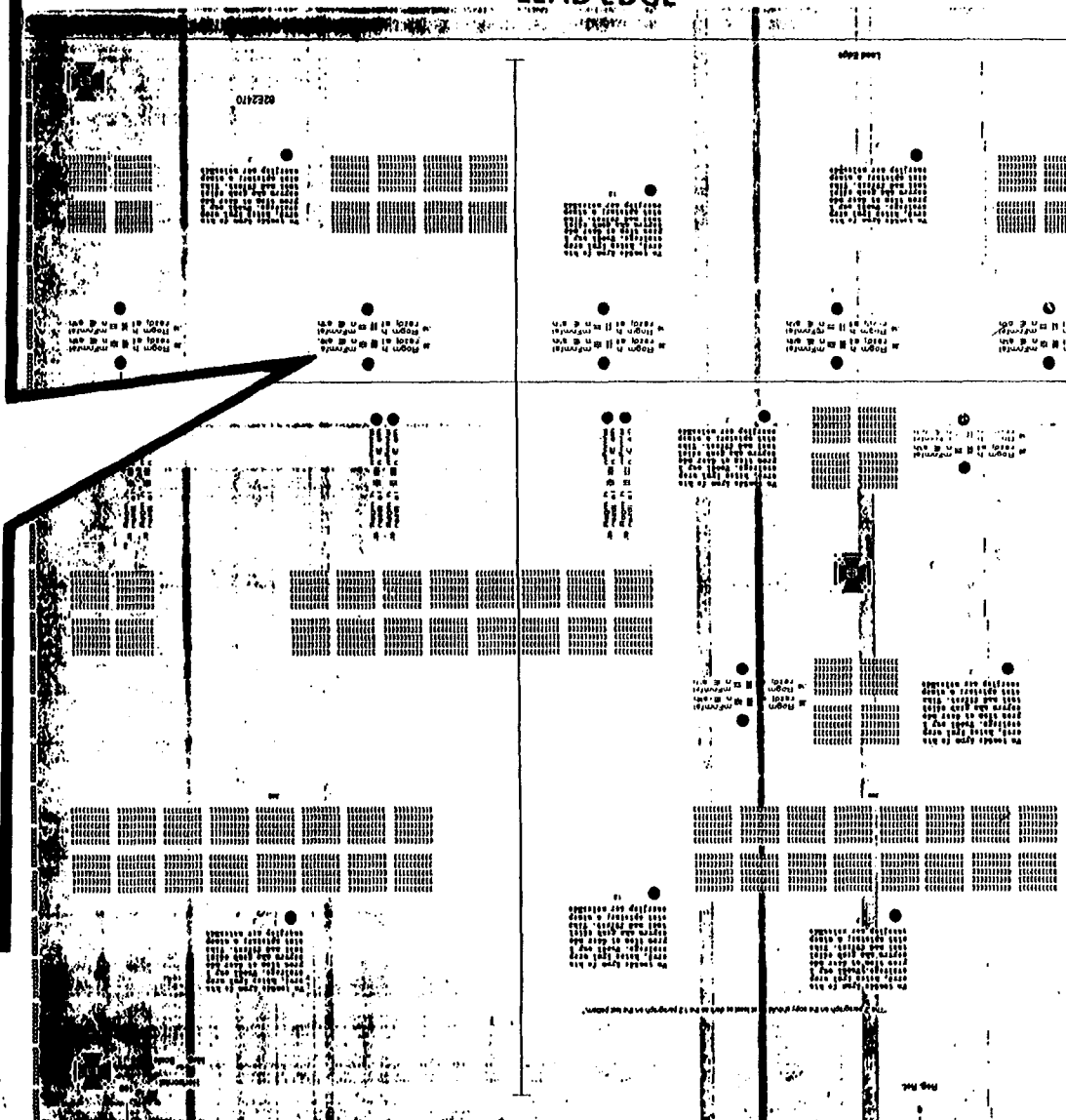
13. Replace the waste bottle. Check the augers for binding by rotating the auger drive gears.

## CQ 2 Background Banding/ Streaks

LEAD EDGE



LEAD EDGE



### 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.
- 2a. On copiers (W/ O Tag/ MOD 30): Ensure that the Erase Lamp illuminates.
- 2b. On copiers (W/ Tag/ MOD 30): Ensure that the Erase LEDs illuminate.
3. Contamination on corotron(s).
4. The cleaner blade is not cleaning the photoreceptor drum correctly.

### Corrective Action

1. Clean the transport platen and the platen with Antistatic Cleaner.  
  
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 Antistatic Cleaner to the towel and wipe the lens and exposure lamp.
- 2 a. Refer to CQ 30 if the Erase Lamp is not illuminating.
- 2 b. Refer to CQ 31 if the Erase LEDs are not illuminating.  
Both configurations: ensure that the Exposure Lamp is installed correctly (REP 6.1).
3. Clean, repair, or replace the corotrons and then perform the Electrostatic Series (ADJ 9.2).
4. Enter the diagnostic mode and then enter code [0913]. Press **Start** and the cleaner blade solenoid should actuate. If it does not:  
Check the following:  
Cleaner blade solenoid adjustment (ADJ 9.1).  
The cleaner blade weight moves freely (REP 9.4).  
The cleaner blade assembly translates across the photoreceptor drum.  
No wires are interfering with the cleaner blade weight.  
Cleaner auger and belt.  
Cleaner plunger moves freely.

(Continued)

**CQ 2 Background Banding/ Streaks**  
(Continued)

**Probable Cause**

**Corrective Action**

4. (Continued)  
Photoreceptor drum is not being cleaned correctly.

4. (Continued)  
Remove the photoreceptor drum and check the following for damage or contamination:

Cleaner blade seal assembly (REP 9.4)

Cleaner blade (REP 9.4)

Cleaner blade retainers (REP 9.4)

Drum seal

Cleaner blade Housing (PL 9.5)

If the cleaning problem is not corrected change the cleaner blade (REP 9.4).

5. Photoreceptor drum is Contaminated or damaged .

5. Polish the photoreceptor drum ( Section. 6, General Procedures). If this does not remove the contamination, replace the photoreceptor drum (REP 9.3).

If the photoreceptor drum is damaged, determine the cause of the damage and correct before replacing the photoreceptor drum. Perform the Electrostatic Series (ADJ 9.2).

6. The lower document feed rolls are contaminated.

6. Clean the feed rolls with the following: USO or XLA Formula A Cleaner or RX General Purpose Cleaner.

(Continued)

**CQ 2 Background Banding/ Streaks**  
(Continued)

**Probable Cause**

**Corrective Action**

- |  |  |
|--|--|
| <p>7. Uneven distribution of developer material within the developer housing.</p> <p>8. The media path components are contaminated.</p> <p>9. Dry ink concentration is too high.</p> | <p>7. Ensure that the copier is level front-to-back and side-to-side (ADJ 14.1).</p> <p>8. Clean the areas on the transport module and xerographic module that could come in contact with the media.</p> <p>9. Remove the dry ink cartridge and inspect it for damage and dry ink leakage. If the cartridge is damaged, replace that cartridge and waste bottle (PL 9.1 ).</p> <p>Make a copy of Test Pattern 82E5980. Check the solid area density. If it is greater than 1.2, perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4).</p> <p>If this is not successful, replace the developer material. Perform the Image Density (ADJ 9.3 or 9.4).</p> |
| <p>10. The cooling fans are not operating or they are defective or damaged.</p>  | <p>10. Go to the 1.3 Cooling Fan RAP in Section 2.</p> <p>11. If the problem still exists, go to the CQ 1 Uniform Background RAP.</p>  |
| <p>12. Document stops over the lens during scan and/or rescan.</p>   | <p>12. Check document Stop Position (ADJ 5.2).</p>   |
| <p>13. Photoreceptor Drum Seal is damaged or missing.</p>  | <p>13. Check the Photoreceptor Drum Seal for damage (PL 9.5).</p>  |

## **CQ 3 Black Copy**

No copy defect sample is needed.

### **Probable Cause**

1. Exposure lamp does not light.
2. Exposure lamp is installed backwards.
3. Photoreceptor is not properly grounded.

### **Corrective Action**

1. Go to the LL.26 Loss of Illumination RAP.
2. Refer to REP 6.1
3. Go to REP 9.1 and 9.2 to remove the drum assembly and check the contact of the Ground Clip to the left side of the drum assembly.

### **Definition**

The entire copy is excessively dark.



## CQ 4 Blank Copy

## Probable Cause

## Corrective Action

### Initial Action

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

No copy defect sample is needed.

- |   |  |
|---|--|
| 1. The Corotrons are dirty or defective .               | 1. Check that the high voltage leads are fully plugged into the corotrons. Clean, repair, or replace the corotron and perform the Electrostatic Series (ADJ 9.2) |
| 2. Magnetic roll is not rotating.                       | 2. Check the Drum/Developer drive for damage. Ensure that the Drive coupling gear is engaged. Go to Developer Drive Motor RAP (4.1)                              |
| 3. There is no charge or transfer 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 (ADJ 9.2)  |

### Definition

There is no image on the copy.

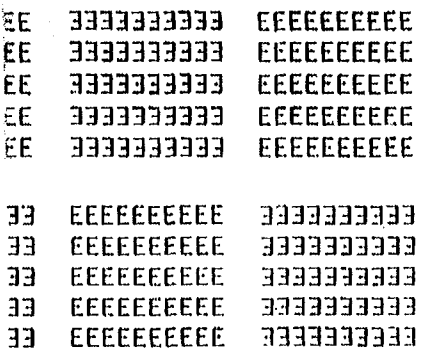
## Notes

CQ 5 Border Line

Probable Cause

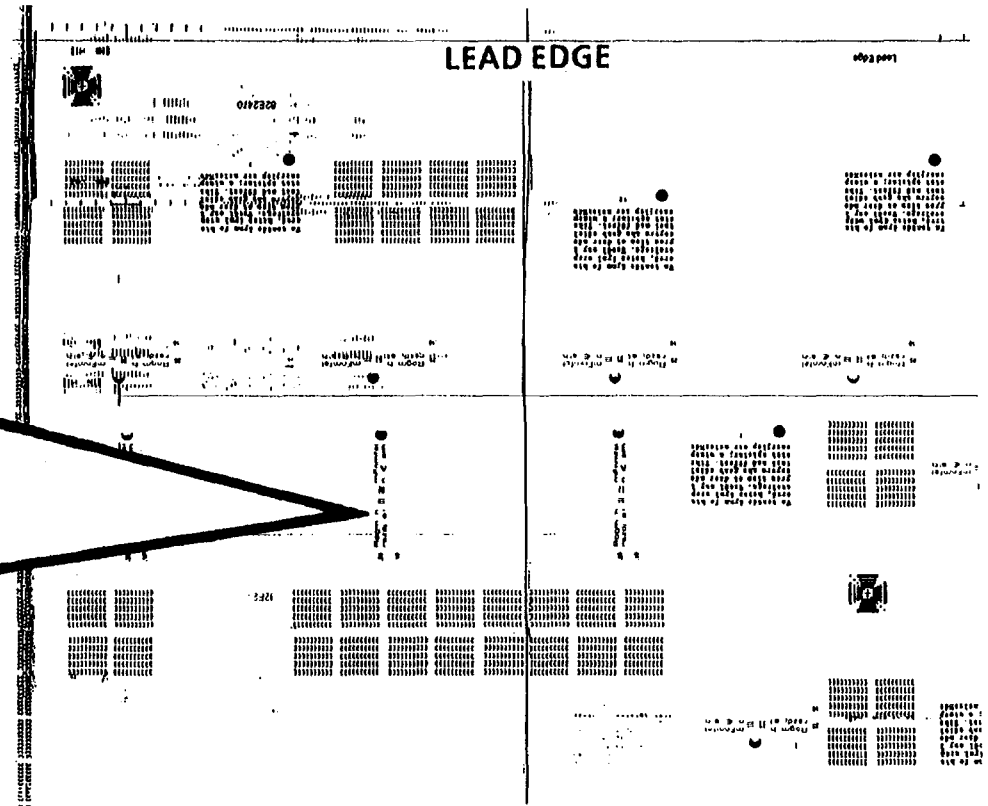
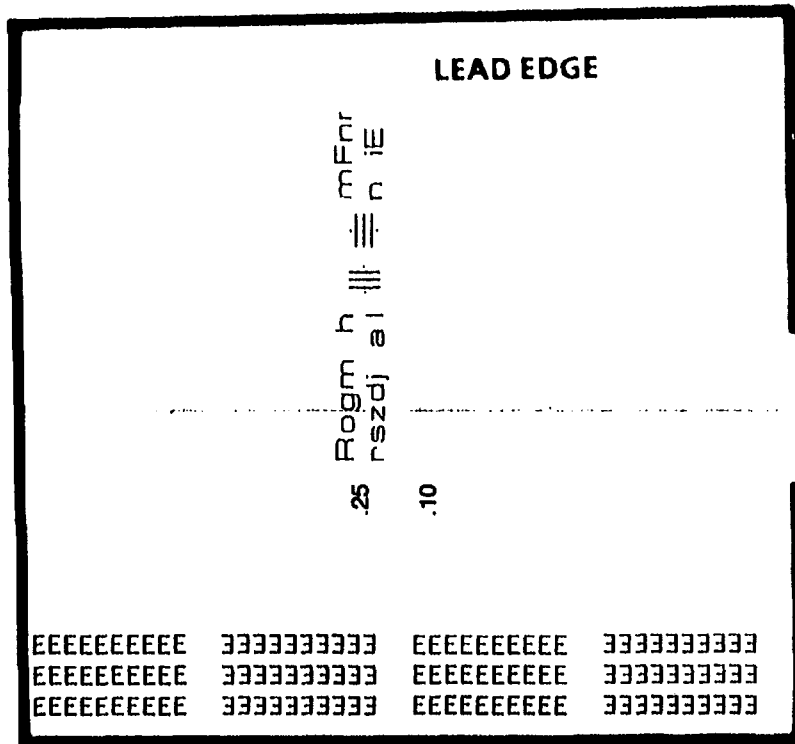
Corrective Action

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Document is smaller than the copy media.</li> <li>2. Paste-up documents.</li> <li>3. The transport, platen, and/or lens is dirty.</li> <li>4. Registration is not adjusted correctly.</li> <li>5. Media registration side-to-side is incorrect.</li> </ol> | <ol style="list-style-type: none"> <li>1. This is normal operation. If the document is smaller than the copy media, the edges of the document will be copied. If this is not acceptable, try either of the following:             <ol style="list-style-type: none"> <li>a. Cut the media to the same size as the document.</li> <li>b. Select the lightest setting on the Copy Contrast.</li> </ol> </li> <li>2. Instruct the customer.</li> <li>3. Clean the components with Anti-static Cleaner.</li> <li>4. Adjust the Registration (ADJ 8.1).</li> <li>5. Reposition the media roll on the Media Roll Support Tube.</li> </ol> |
|--|---|



Definition

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



**Probable Cause**

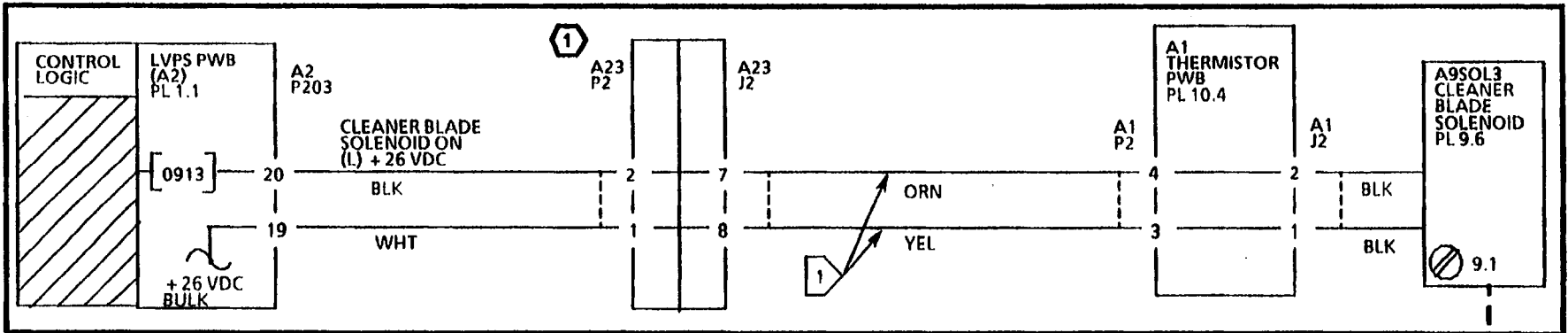
1. The cleaning blade is not being raised off the photoreceptor drum during the Standby mode.

**Corrective Action**

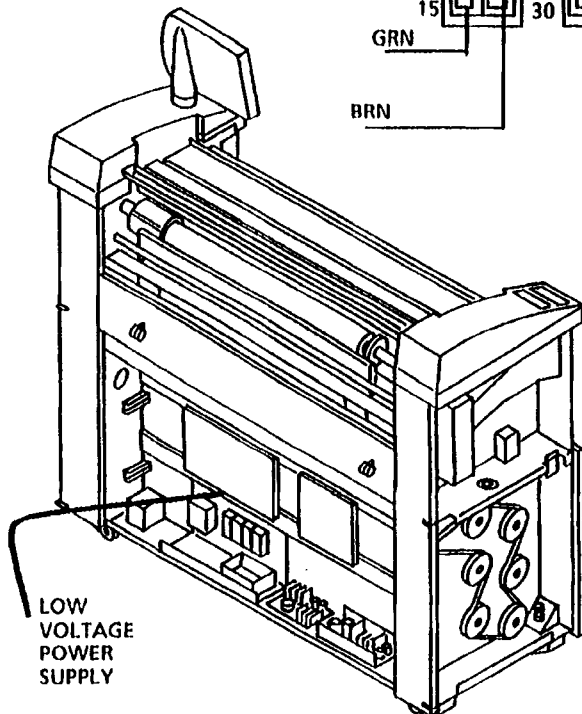
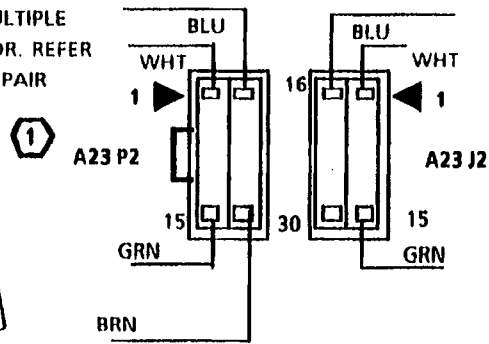
1. Check the following:
  - a. Adjustment of the Cleaning Blade Solenoid (ADJ 9.1).
  - b. The Cleaning blade assembly (PL 9.5) for free movement.
2. Go to FLAG 1 and check the wiring for a short circuit to ground. If there is no short circuit, replace the Cleaner Blade Solenoid.
3. Replace the Photoreceptor Drum (REP 9.3) and perform the Electrostatic Series (ADJ 9.2).

**Definition**

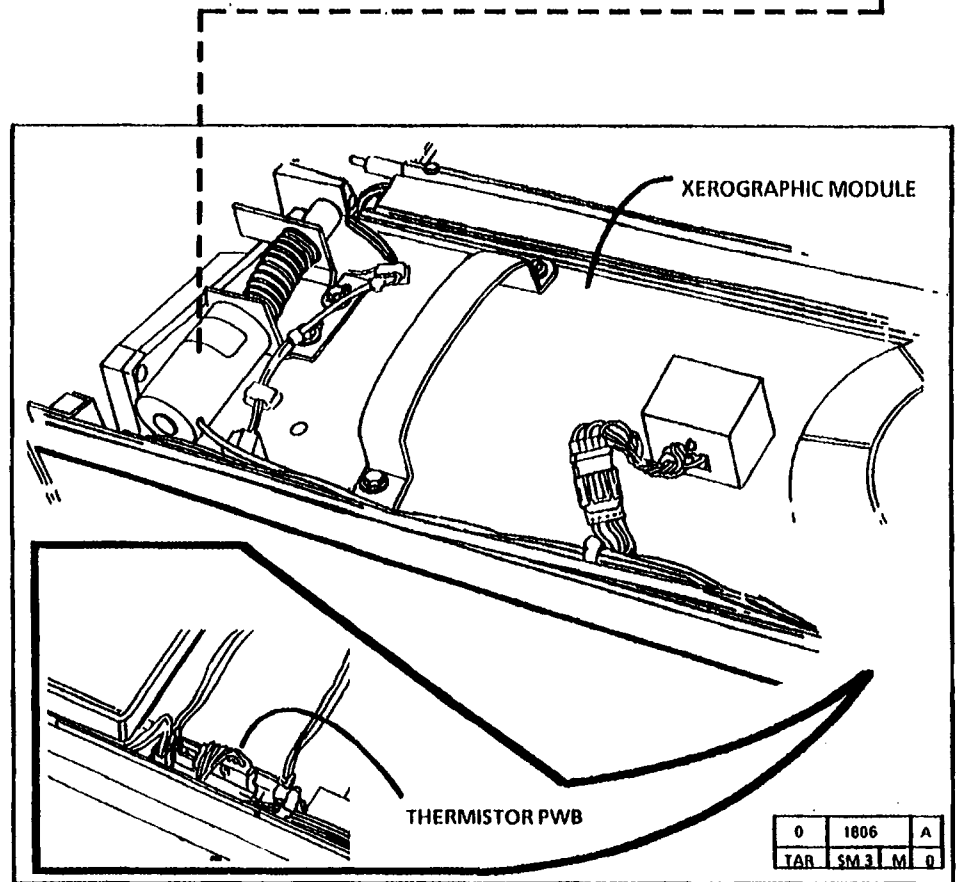
Cold Flow is a distortion in the selenium alloy coating on the photoreceptor drum. This defect can appear anywhere on the copy and is perpendicular to the paper feed direction. Defect will also appear every 10.4 inches (264 mm).



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



0	1606	A
TAR	SM 3	M 0



0	1806	A
TAR	SM 3	M 0

## CQ 7 Developer Bead Carryover

### Probable Cause

1. Charge voltage on photoreceptor drum is too high.
2. Developer material has more than 40K feet (9K metres) of copies.

### Corrective Action

1. Perform the Electrostatic Series (ADJ 9.2)
2. Replace the developer material (REP 9.8) and perform the Electrostatic Series ( ADJ 9.2) and the Image Density (ADJ 9.3 or 9.4.) procedures

No copy defect sample is needed.

### Definition

Bead carryover is one or more small deletions in the copy image that appear randomly over the entire copy. In some cases a single developer bead can be seen in the middle of the deletion.

## CQ 8 Edge Banding

## Probable Cause

## Corrective Action

1. High background or Banding/Streaks.
2. Photoreceptor drum is not being cleaned correctly.

1. Go to the CQ 1 Uniform Background RAP or go to CQ 2 Background Banding/Streaks RAP.
2. Enter the diagnostic mode and then enter code [0913]. Press **Start** and the cleaner blade solenoid should actuate. If it does not, Check the following:

Cleaner Blade Solenoid (ADJ 9.1).  
The cleaner blade weight moves freely (REP 9.4).  
The cleaner blade assembly translates across the photoreceptor drum.  
No wires are interfering with the cleaner blade weight.  
Cleaner auger and belt.

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

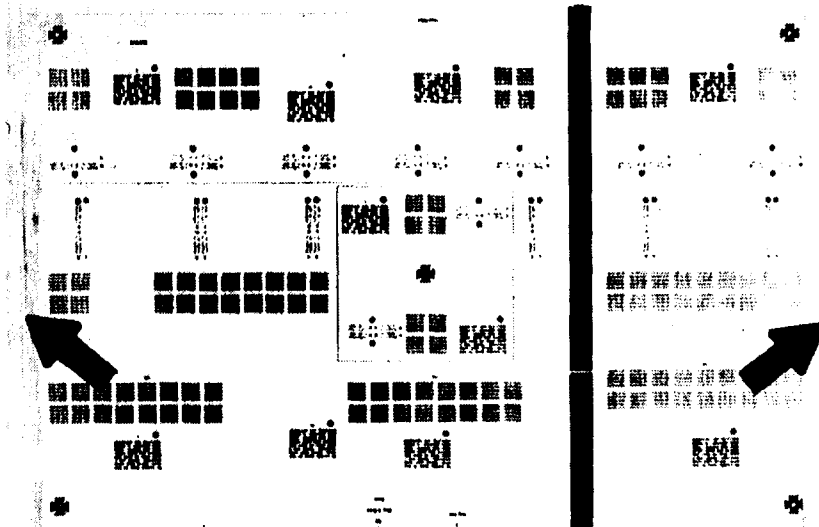
If the cleaning problem persists, change the cleaner blade (REP 9.4).

3. Distribution of developer material within the developer housing is uneven .
4. Contamination on the ends of corotrons, Exposure Lamp, or Lens.

3. Ensure that the copier is level.
4. Clean corotron with a brush, repair, or replace. Clean Lamp or Lens.

### Definition

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



(Continued)

**CQ 8 Edge Banding (Continued)**

**Probable Cause**

**Corrective Action**

- 5a. On copiers (W/ O Tag/ MOD 30): The Erase Lamp is contaminated or defective.
- 5b. On copiers (W/ Tag/ MOD 30): The Erase LEDs are contaminated or defective.

- 5a. Clean or replace the Erase Lamp. Refer to CQ 30, as required.
- 5b. Clean or replace the Erase LEDs. Refer to CQ 31, as required.



## CQ 9 Length Distortion

### Probable Cause

1. There is contamination or static on the platen.
2. Document speed is too fast or too slow.
3. Media is damp .

### Corrective Action

1. Clean the platen with Antistatic Cleaner.
2. Perform the Copy Size Adjustment (ADJ 5.1).
- 3a. Cut sheet media:  
Make a copy, using a sheet of media from a new pack of media.  
  
If the problem is corrected, ensure that the roll media is being stored correctly.
- 3b. Roll media:  
  
Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.  
  
If the problem is corrected, ensure that the roll media is being stored correctly.  
  
Refer to section 2 and ensure that the media heater is working.

### Definition

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

- a. The image on the media is longer than the image on the document.
  - b. The image on the media is shorter than the image on the document. .
  - c. One side of the media image is larger than the other side
4. Media speed at the fuser is incorrect. Media is moving too slowly.
  5. The lower document feed rolls are contaminated.
  6. Worn fabric guide

4. There is too much or too little oil on the fuser roll. Check the oil dispense wick for contamination and sufficient oil. Clean the Oil Dispense Roll with Film Remover.
5. Go to the CQ 17 Skewed Image RAP.
6. Replace Fabric Guide (REP 8.9)

(Continued)

**Image Tolerance Specification.** The copier has a tolerance specification; nominal 1:1  $\pm$  0.5% horizontal and vertical. As a general guide the following table illustrates the expected variance over the length of the print when the copier is set to specification.

<b>PAPER SIZE (INCHES)</b>	<b>DECIMAL (INCHES)</b>	<b>NEAREST FRACTION (INCHES)</b>	<b>METRIC (mm)</b>
8.5	$\pm$ 0.040	$\pm$ 3/64	$\pm$ 1.02
11	$\pm$ 0.055	$\pm$ 2/32	$\pm$ 1.40
17	$\pm$ 0.085	$\pm$ 3/32	$\pm$ 2.16
24	$\pm$ 0.120	$\pm$ 1/8	$\pm$ 3.05
36	$\pm$ 0.180	$\pm$ 5/32	$\pm$ 4.57
48	$\pm$ 0.240	$\pm$ 15/64	$\pm$ 6.10
52	$\pm$ 0.260	$\pm$ 17/64	$\pm$ 6.6
56	$\pm$ 0.280	$\pm$ 9/32	$\pm$ 7.11

**CQ 10 Dry Ink Disturbance**

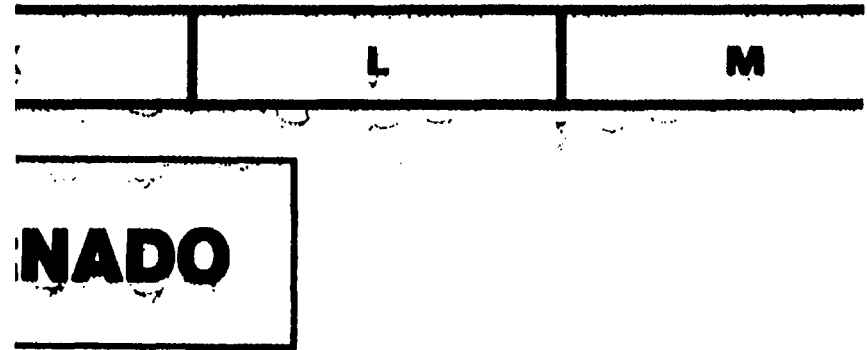
<b>REFERENCE DWG. NO.</b>	
<b>—UNLESS OTHERWISE SPECIFIED</b>	
<b>MARK TOOL WITH PART NO. &amp; TOOL NO. REMOVE ALL BURRS &amp; SHARP EDGES FROM MACHINED</b>	
<b>MANUFACTURING TOLERANCES</b>	
<b>11</b>	
<b>INCH DIMENSIONS</b>	<b>METRIC DIMENSIONS</b>
<b>±.020 FOR 2 OR LESS DECIMALS</b>	<b>±0.5 FOR 1 DECI</b>
<b>±.005 FOR 3 DECIMALS</b>	<b>±0.13 FOR 2 DECI</b>
<b>±.0002 FOR 4 DECIMALS</b>	<b>±0.005 FOR 3 DECI</b>
<b>± FOR ANGLES</b>	<b>± FOR ANGLE</b>

**TYPE 1**

**Definition**

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

The samples show various amounts of the defect.



**TYPE 2**



**TYPE 3 Lichtenberg Spots**



## CQ 10 Dry ink Disturbance

### Probable Cause

1. Transfer/detack corotron hardware is not seated correctly.
2. An electrostatic voltage is out of specification.

### Corrective Action

1. Ensure that the Transfer/Detack corotron is seated correctly (REP 9.9).
2. Perform the Electrostatic Series ( ADJ 9.2).

## CQ 11 The Light Copy (Overall)

### Probable Cause

### Corrective Action

No copy defect sample needed.

- |  |   |
|--|---|
| <ol style="list-style-type: none"><li>1. There is not enough dry ink in the developer material, possibly caused by a dry ink sensor with a malfunction. This may cause the developer material to fail prematurely.</li><li>2. Excessive use of high density documents will deplete the dry ink supply.</li><li>3. The image on the document is light.</li><li>4. An electrostatic voltage is out of specification.</li><li>5. Corotron Dampers are missing or defective.</li></ol> | <ol style="list-style-type: none"><li>1. Ensure that there is dry ink in the cartridge. If a new dry ink cartridge has been installed recently, do not install another new dry ink cartridge.</li><li>2. Discuss the use of high density documents with the Customer.</li><li>3. Select a darker Copy Contrast setting for light copy.</li><li>4. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 or 9.4).</li><li>5. Ensure Charge and Transfer corotron dampers are in place. Repair or replace corotrons as necessary.</li></ol> |
|--|---|

### Definition

Light copies are copies where the line darkness and/or solid area is lighter than the line darkness and/or solid area specifications for the copier.

(Continued)

**CQ 11 The Light Copy (Overall)**  
(Continued)

**Probable Cause**

**Corrective Action**

6. Media is damp.

6a. Cut sheet media:

Make a copy, using a sheet of media from a new pack of media.

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

6b. Roll media:

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

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

Refer to Section 2 and ensure that the Media Heater is working.

7. Developer material has more than 40K feet (12.2K meters) of copies on it.

7. Replace the Developer Material (REP 9.7).

8. The developer bias is out of specification.

8. Go to the CQ 25 Developer Bias RAP.

9. Developer mixing Augers are not turning.

9. Check that the Developer Drive coupling is in position and the Augers are turning.

10. There are airborne chemicals.

10. Some chemicals can cause damage or contamination of the drum.  
Wash (General Procedures) or replace the drum (REP 9.3), and perform the Electrostatic Series (ADJ 9.2). If the problem still exists, notify technical support.

(Continued)

# NOTES

## CQ 11 The Light Copy (Partial)

### Probable Cause

### Corrective Action

- |  |  |
|--|--|
| 1. Copier is not level (difference in side-to-side density).                     | 1. Level the copier (ADJ. 14.1)  |
| 2. Developer Module or Xerographic Module is not seated fully against the stops. | 2. Ensure that the Developer Module and Xerographic Module are installed and secured correctly.  |
| 3. The light can enter the copier through an opening in the covers.              | 3. Ensure that the Covers are not damaged and that they are seated correctly. Allow the Photoreceptor Drum to rest before trying to make copies. |
| 4. Fans not functioning.   | 4. Go to the 1.3 Copier Cooling Fan RAP in Section 2.  |
| 5. The Magnet and lens are not installed correctly against the reflector.        | 5. Check the installation of components and if any are incorrect, reinstall correctly.   |
| 6. The lens shield is separated from the lens assembly.                          | 6. Replace the lens (REP 6.2).   |
| 7. Charge and /or Transfer/Detack Corotron are contaminated                      | 7. Clean/ Replace the corotron (REP 9.8 and/or 9.9). Perform the Electrostatic Series (ADJ 9.2) procedure.                                       |
| 8. Corotron Dampers are missing or defective.                                    | 8. Ensure Charge and Transfer corotron dampers are in place. Repair or replace corotrons as necessary.   |
| 9. Air Manifold/Heat shield is damaged.  | 9. Replace the Air Manifold/Heat shield (PL 10.2).   |
| 10. Photoreceptor is contaminated or defective.                                  | 10. Replace the Photoreceptor (REP 9.3).   |



## CQ 12 Localized Deletions

### Probable Cause

1. Media is damp.
2. Fabric Guide is contaminated or wrinkled.
3. Fabric Guide not tensioned correctly.
4. Corotrons are dirty, have loose wires or the corotron connectors are not connected correctly.

### Corrective Action

- 1a. Cut sheet media:  
Make a copy, using a sheet of media from a new pack of media.  
If the problem is corrected, ensure that the media is being stored correctly.
- 1b. Roll media:  
Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.  
If the problem is corrected, ensure that the roll media is being stored correctly.  
Refer to Section 2 and ensure that the Media heater is working.
2. Replace the Fabric Guide (REP 8.9).
3. Ensure that the Fabric Guide is installed correctly.
4. Check for connector damage or loose wires. Clean the corotron if it is dirty. Repair or replace corotron if it is damaged and perform the Electrostatic Series ( ADJ 9.2).

(Continued)

### Definition

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

**CQ 12 Localized Deletions (Continued)****Probable Cause****Corrective Action**

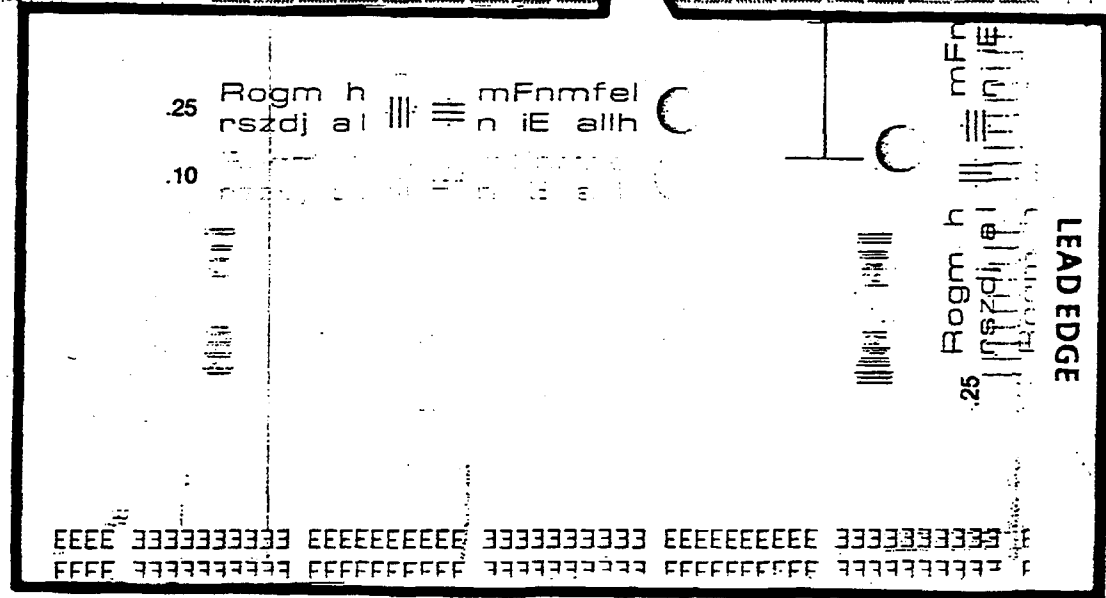
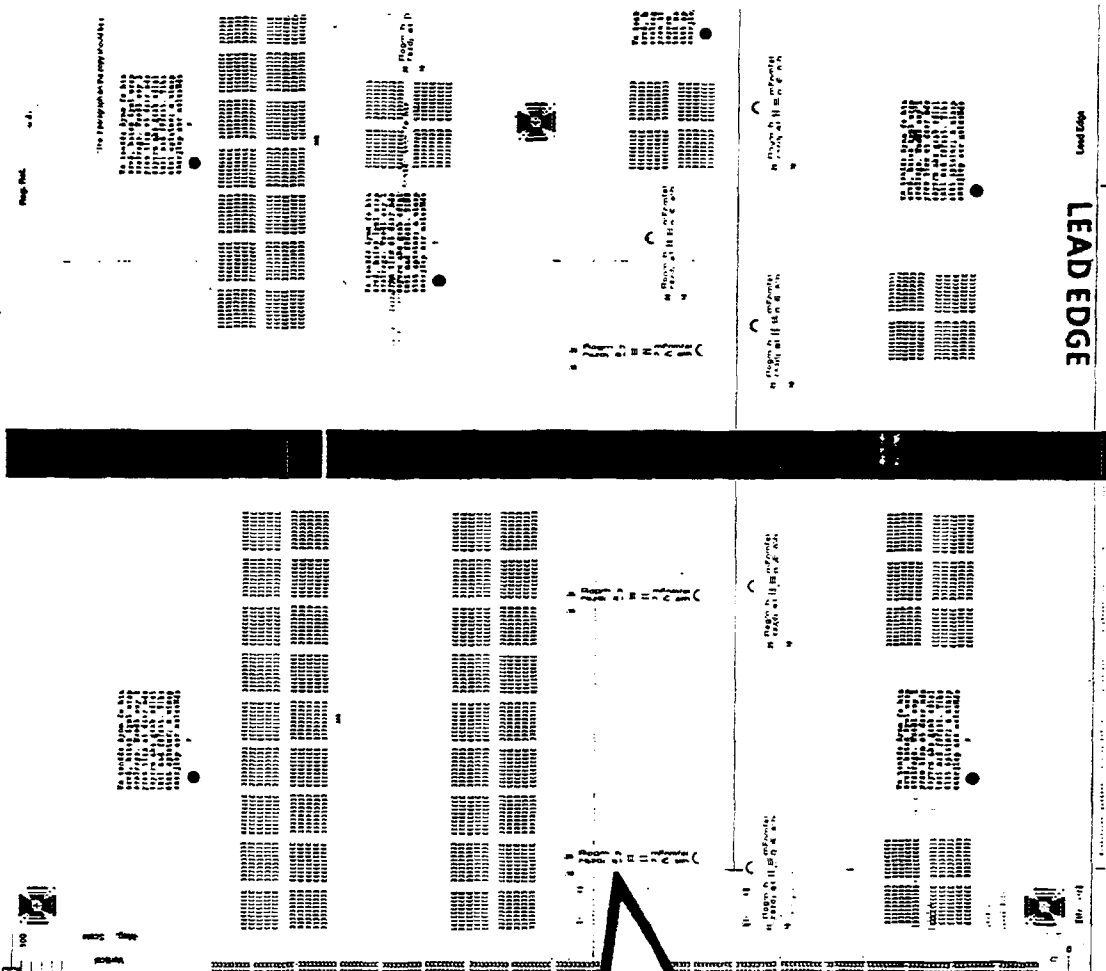
- |   |   |
|---|---|
| 5. The fuser temperature is too high.                                       | 5. Check the Fuser Temperature (ADJ 10.1)   |
| 6. Oil dispense assembly is contaminated.                                   | 6. Replace the Oil Pads ( PL 10.9) and Wick ( PL 10.11). Clean the Oil Dispense Roll with Film Remover.   |
| 7. Lens is not mounted correctly or the light shield is damaged or missing. | 7. Check the following:<br>a. The Light Seal is separated from lens (PL 6.1). Fix the seal with black electrical tape.<br>b. Ensure that the magnet and lens are positioned correctly against frame.<br>c. Check for direct room light or sunlight on the copier.   |
| 8. Not enough developer material is in developer housing.                   | 8. Replace developer material (REP 9.7) and perform the Electrostatic Series ( ADJ 9.2).  |
| 9. There are light leaks.   | 9. Ensure that the covers are not damaged and that they are seated correctly. Allow the photoreceptor drum to rest before trying to make copies.  |
| 10. Copier is not level.  | 10. Level the copier.   |
| 11. There is Developer bead carryover.                                      | 11. Refer to the CQ 7 Developer Bead Carryover RAP.   |
| 12. There is Crystallization of the Photoreceptor Drum.                     | 12. Replace the drum (REP 9.3) and then perform the Electrostatic Series ( ADJ 9.2). If this is a continuing problem, ask the customer if chemicals are used or stored in the area. If chemicals are suspected, discuss with the customer the possibility of moving the machine or chemicals to another location. |

(Continued)

**CQ 12 Localized Deletions (Continued)****Probable Cause****Corrective Action**

- |  |  |
|--|--|
| <p>13. Customer's document are in poor condition.</p> <p>14. The Fuser pressure plates are not positioned correctly or they are damaged.</p> <p>15. An electrostatic voltage is out of specification.</p> <p>16. There are Powder Deficiency Spots - Small size spot on the photoreceptor drum surface that will not accept a charge.</p> <p>17. There are airborne contaminants.</p> <p>18. The fans are not functioning.</p> <p>19. Speed mismatch between photoreceptor, registration Rolls, and Fuser.</p> | <p>13. Replace the document if possible, or use a document carrier to make the copy or a new document.</p> <p>14. Check that the Fuser Pressure Plate ( PL 8.1) is positioned in the extrusion. Replace the fuser pressure plates if they are damaged. The plates must be flat with the foam pads in good condition.</p> <p>15. Perform the Electrostatic Series (ADJ 9.2) and the Image Density (ADJ 9.3 or 9.4).</p> <p>16. Replace the Photoreceptor Drum (REP 9.3).</p> <p>17. Wash (General Procedures) or replace the Photoreceptor Drum (REP 9.3) as required and perform the Electrostatic Series (ADJ 9.2) and the Image Density (ADJ 9.3 or 9.4).<br/><br/>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.</p> <p>18. Go to the 1.3 Cooling Fans RAP in Section 2.</p> <p>19. Check the following:<br/>10.2 Fusing Temperature (Probe)<br/>5.1 Copy Size Adjustment<br/>8.1 Image Registration<br/>8.2 Auto Length</p> |
|--|--|

LEAD EDGE



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

## CQ 13 Offsetting

### Probable Cause

1. There is Offsetting or Residual Image.
2. There is insufficient oil on the fuser.
3. The Fuser temperature is out of specification.
4. The Image Density is too high.
4. Media is damp.
5. Pressure Plates are deformed.
6. Fabric Guide is not smooth.

### Corrective Action

1. Go to the CQ 28 Isolation procedure to determine if the problem is offsetting or residual image. Return to this RAP if the problem is offsetting.
2. Replace Oil Pads (REP 10.9), and replace the Wick (REP 10.11).  
  
Perform the procedure, Initialization of the Fuser Roll (General Procedures).
3. Check/adjust the Fuser Temperature (ADJ 10.1).  
  
*Note: If the Fuser temperature is reduced too much, poor toner fix could occur.*
4. Reduce Image Density (ADJ 9.4).  
  
4a. 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.
- 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, check that the media heater is working and ensure that the roll media is being stored correctly.
5. Replace Pressure Plates (PL 10.3).
6. Replace the Fabric Guide (PL 10.3).

## **CQ 14 Registration**

**No copy defect sample is available.**

### **Definition**

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

## CQ 14 Registration

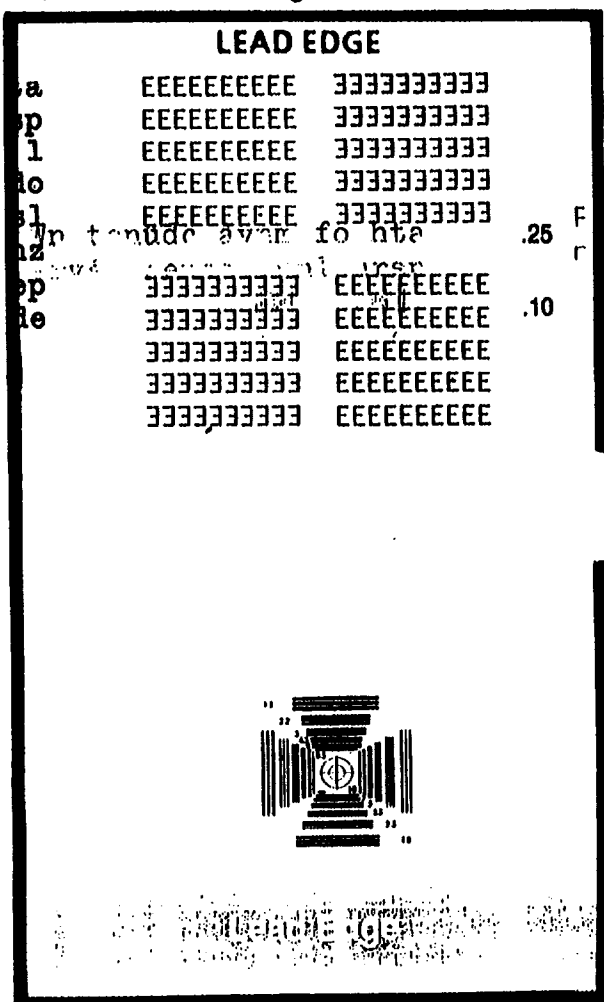
### Probable Cause

1. Registration is not adjusted correctly.
2. Document sensor is incorrect or defective.
3. Operator did not insert the document correctly or interfered with the movement of the document.
4. There is a build-up of static electricity on the platen, the document feed-in shelf and/ or the upper rear door.

### Corrective Action

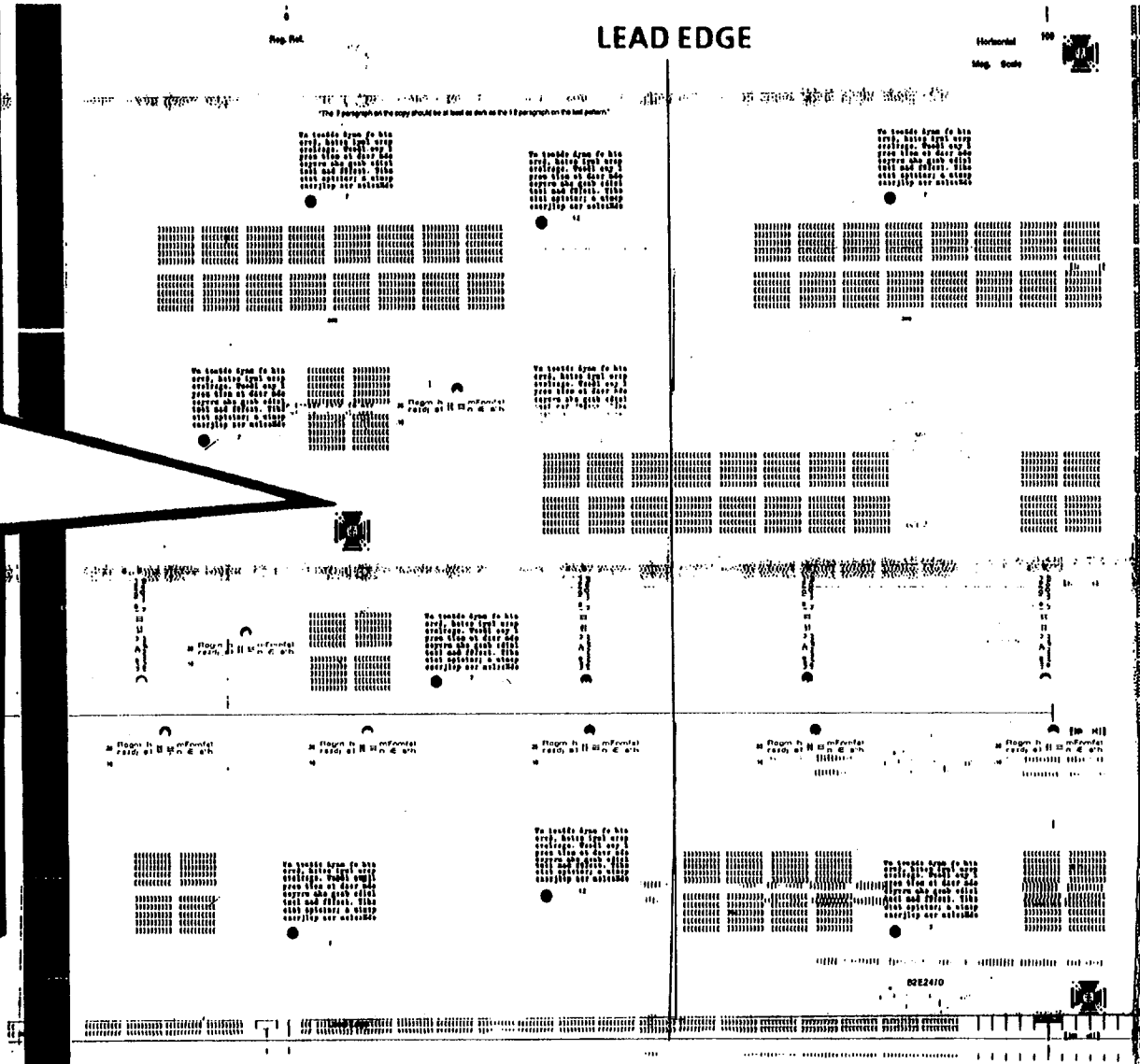
1. Perform the Image Registration (ADJ 8.1).
2. Ensure that the front document sensor is installed correctly so that the actuator actuates 0.040 inch (1 mm) above the maximum height of the document drive rolls.
3. Instruct the operator on how to insert the document into the document handler.
4. Clean the platen, the document feed-in shelf and the upper rear door with Antistatic Cleaner.

# CQ 15 Residual Image



## Definition

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





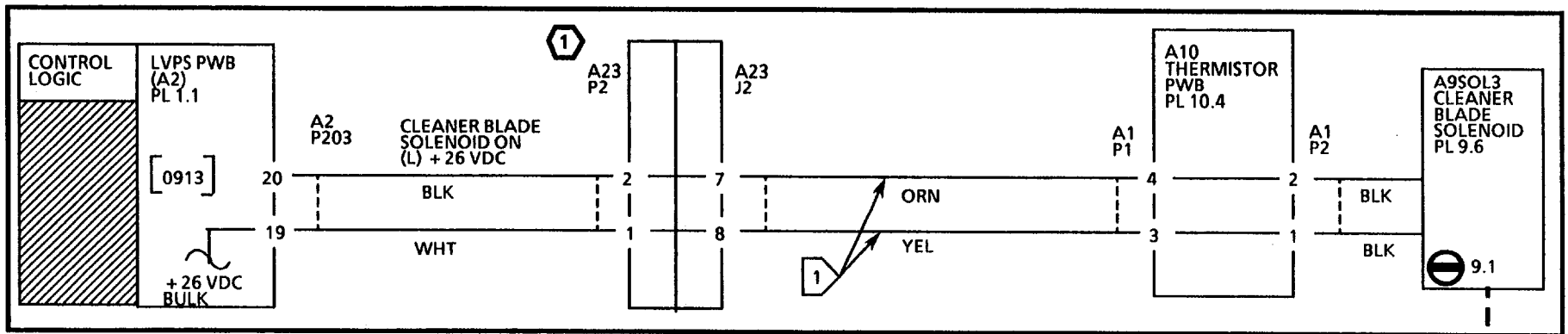
## CQ 15 Residual Image

### Probable Cause

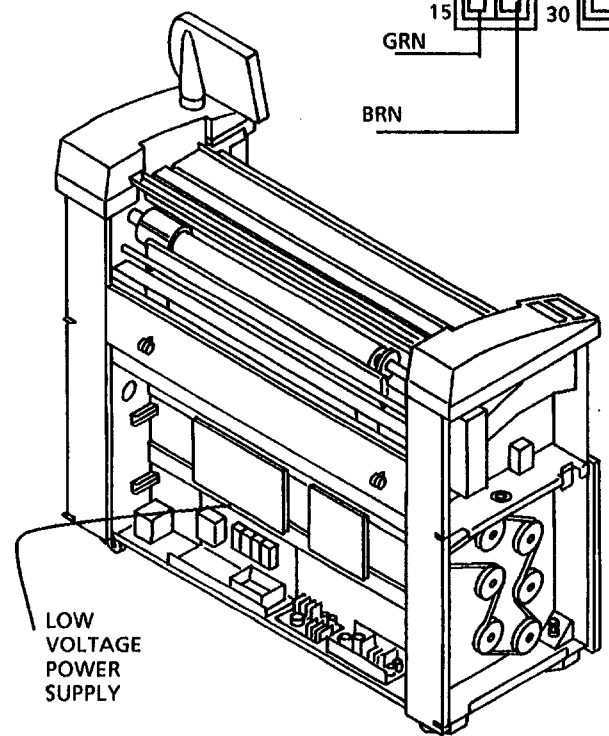
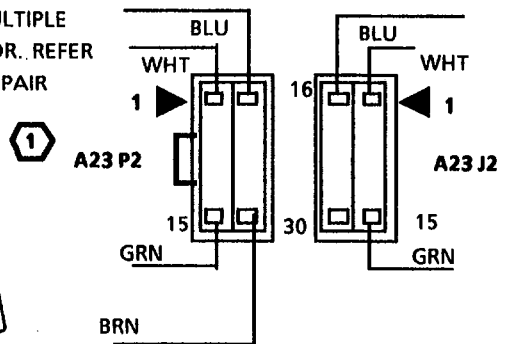
1. There is Offsetting or Residual Image.
2. Photoreceptor drum is not being cleaned correctly.
3. Light shocked Photoreceptor.
- 4a On copiers (W/ O Tag/ MOD 30): the Erase Lamp is not functioning correctly.
- 4 b. On copiers (W/ Tag/ MOD 30): the Erase LEDs do not function correctly.
5. An Electrostatic voltage is out of specification.

### Corrective Action

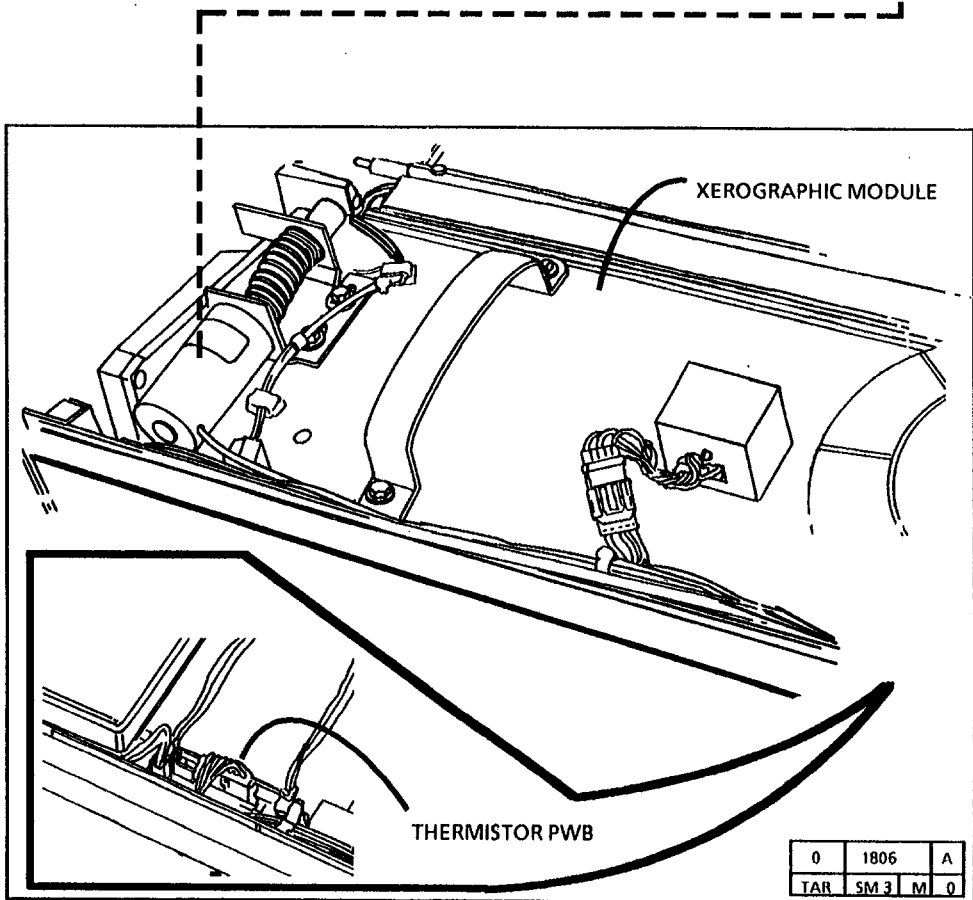
1. Go to the CQ 28 Isolation procedure to determine if the problem is offsetting or residual image. Return to this RAP if the problem is residual image.
2. Enter the diagnostic mode and then enter code [0913]. While listening for the sound of the Cleaner Blade Solenoid, press Start. The Cleaner Blade Solenoid should actuate. If it does not, refer to the Cleaner Blade Solenoid circuit located on the following page.  
Check the following items:
  - a. The Cleaner Blade Weight moves freely (no wires interfere with the cleaning blade weight). (REP 9.4).
  - b. Cleaner Blade Solenoid (ADJ 9.1).
  - c. No wires are interfering with the cleaner blade weight.
  - d. Cleaner auger and belt.Remove the Xerographic Module. Check that the Cleaner Blade assembly translates across the photoreceptor drum.  
Remove the photoreceptor drum and check the following items for damage or contamination:
  - a. Cleaner Blade Seal Assembly (REP 9.4).
  - b. Cleaner Blade (REP 9.4). and Cleaner Blade Housing (PL 9.5)
  - c. Cleaner Blade Retainers (REP 9.4).
  - d. Drum Seal.
  - e. If the problem persists, replace the Cleaner Blade (REP 9.4).
3. Make five copies in **Normal** (center LED) contrast mode, then check the copy quality against the specification, Section 3, and CQ 14 Registration .
- 4 a. Refer to CQ 30, if the Erase Lamp is not functioning correctly.
- 4 b. Refer to CQ 31, if the Erase LEDs are not functioning correctly.
5. Check/adjust the Electrostatic Series ( ADJ 9.2).
6. If the residual image problem occurs again within a short period of time, replace the photoreceptor (REP 9.3) and the Cleaning Blade (REP 9.4).



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



0	1606	A
TAR	SM 3	M 0



0	1806	A
TAR	SM 3	M 0

## CQ 16 Resolution

### Probable Cause

### Corrective Action

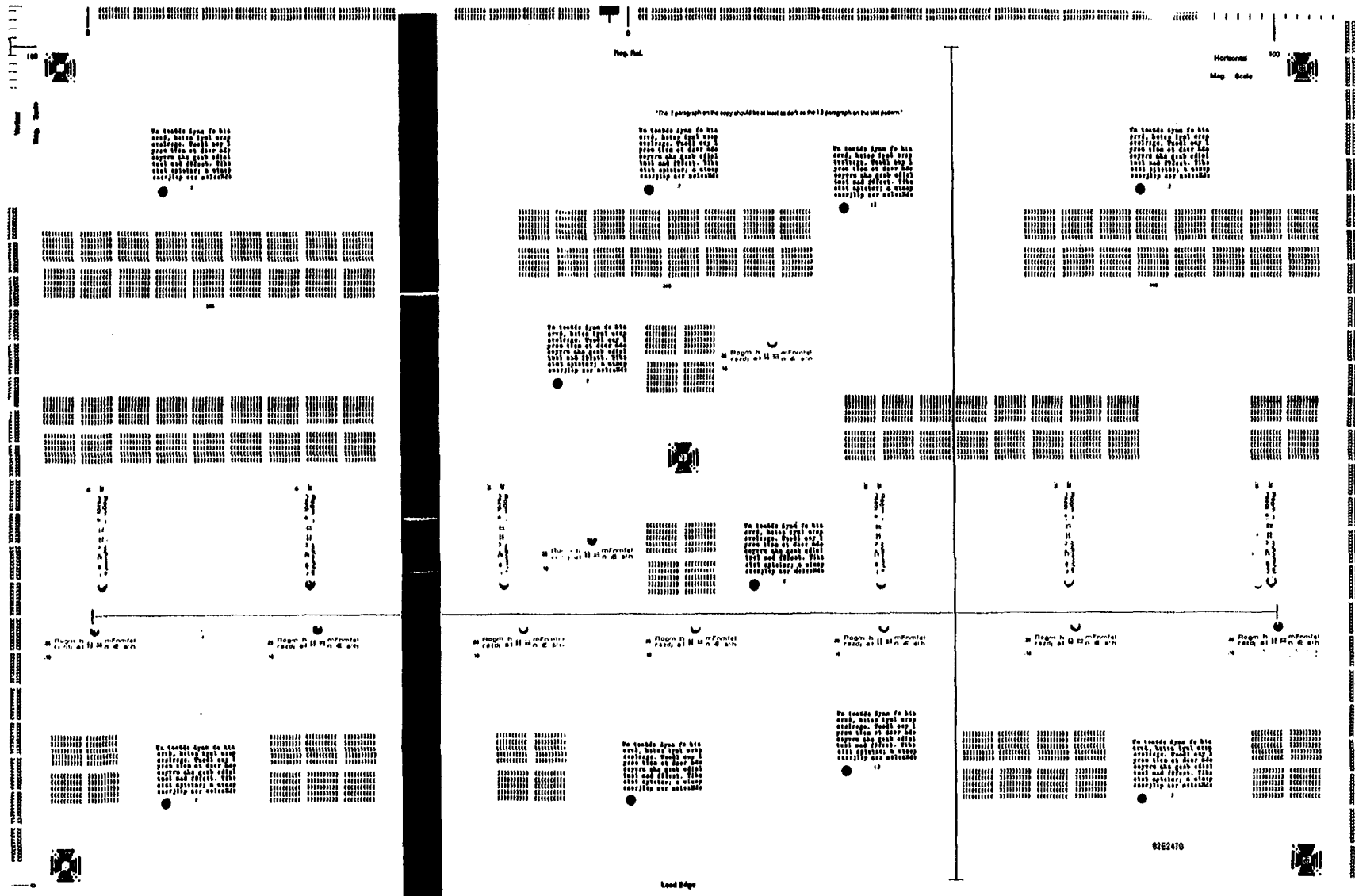
- |   |  |
|---|--|
| 1. Lens is damaged or is not installed correctly.             | 1. Ensure that the Lens is installed correctly (REP 6.2) and that it is not damaged.   |
| 2. Document handler is not installed correctly.               | 2. Ensure that the Document Handler is installed correctly.  |
| 3. The lower document feed rolls are contaminated or damaged. | 3. Clean the Feed Rolls with Formula A Cleaner (USO, RX, and XLA) and water. Replace the rolls if they are damaged (PL 5.1). |
| 4. The platen is not installed correctly or is damaged.       | 4. Ensure that the Platen is installed correctly. Replace the platen (PL 6.1) if it is damaged.                              |
| 5. There is a buckle in the document.                         | 5. Straighten the creases in the document.   |
| 7. Exposure level is incorrect.                               | 7. Perform the Electrostatic Series (ADJ 9.2).   |

No copy defect sample is needed.

### Definition

The image is out of focus and is blurred.  
Refer to the Image Quality Specification.

# CQ 17 Skewed Image



## Definition

Skewed image defect: The copy image is not parallel with the edges of the copy media.

## Skew Isolation Procedure

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

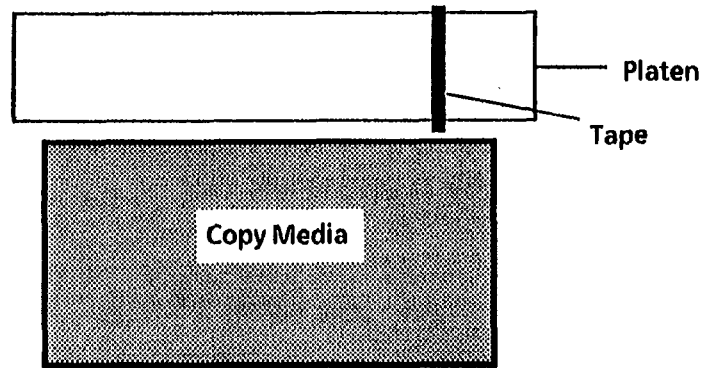


Figure 1. Installing the Tape

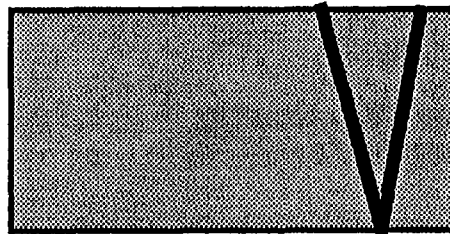


Figure 2

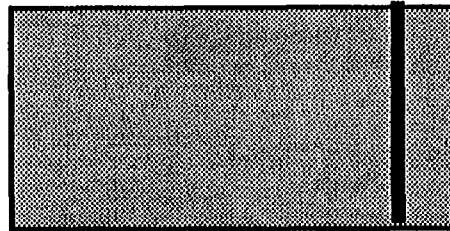


Figure 3

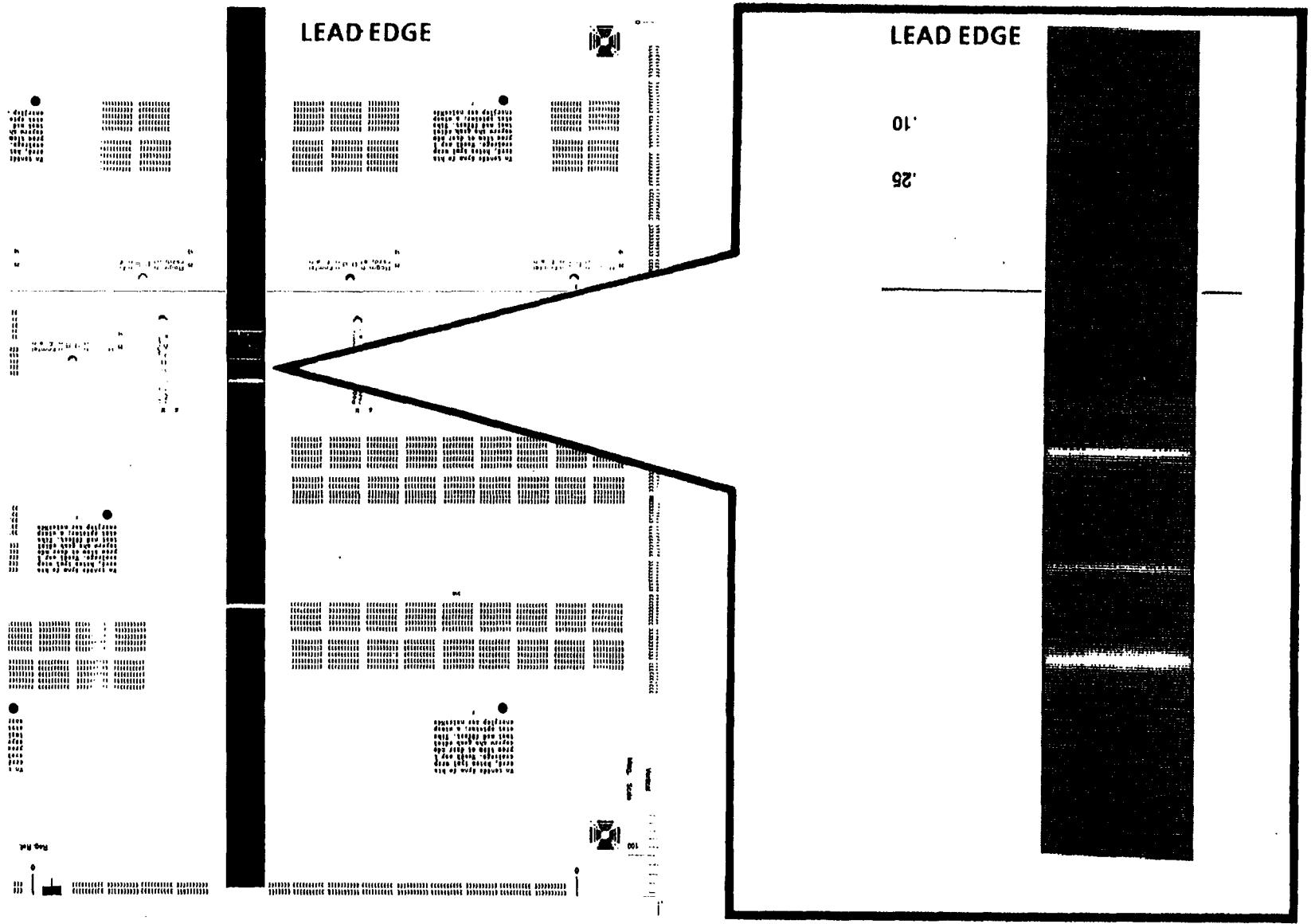
## CQ 17 Skewed Image

### Probable Cause

### Corrective Action

- |  |  |
|--|--|
| <p>1. Document entered the document handler incorrectly aligned, or the cut sheet media entered the feed rolls incorrectly aligned.</p> <p>2. There is static on the platen or the platen is damaged.</p> <p>3. Document Idler Rollers are contaminated or damaged.</p> <p>4. There is an obstruction in the document return path. More probable in the multiple copy mode.</p> <p>5. Registration Drive and or pinch rolls are contaminated or damaged.</p> <p>6. Media Feed Drive and/or pinch rolls are contaminated or damaged.</p> <p>7. The lead edge of the document or of the copy media is damaged.</p> | <p>1. Ensure that the document and the copy media are fed in straight.</p> <p>2. Clean the Platen with Antistatic Cleaner .<br/>Replace the Platen (PL 6.1) if it is damaged.</p> <p>3. Check that the Lower Document Drive rolls and Document Pinch Rolls (PL 5.2) are not binding. Replace the rolls and bearings if necessary.</p> <p>4. Check the document return path.</p> <p>5. Clean the Registration rolls (PL 8.2):<br/>USO and XLA: Formula A Cleaner and water.<br/><br/>RX: General Purpose Cleaner<br/>Replace the rolls if they are damaged.</p> <p>6. Clean the rolls (PL 8.2):<br/>USO and XLA: Formula A Cleaner and water.<br/><br/>RX: General Purpose Cleaner<br/>Replace the rolls if they are damaged.</p> <p>7. Ensure that the lead edges of the document and the copy media are straight and are not damaged.</p> |
|--|--|

# CQ 18 Skips



## Definition

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

## CQ 18 Skips

### 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 Cleaner. Ensure that the document is not moved or disturbed as it feeds through the document transport.             |
| 2. Document transport drive belt is slipping on the drive pulleys.        | 2. Check that the lower document feed rolls and document idler rollers are not binding.<br>A. Ensure belt is tensioned properly and is not damaged.<br>B. Check photoreceptor drives. |
| 3. Document Transport Drive Belt and pulleys are contaminated or damaged. | 3. Replace the damaged or contaminated parts (PL 5.1).  |
| 4. Ensure document drive pulleys are not loose.                           | 4. Replace pulleys.   |
| 4. Document handler is not seated correctly.                              | 4. Ensure that the Document handler is seated correctly and that it is latched correctly.   |
| 5. Photoreceptor drive pulley is damaged.                                 | 5. Replace the photoreceptor shaft assembly (PL 9.2).   |



**Definition**

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

## CQ 19 Smears

### Probable Cause

1. Operator interfered with the copy media as the media fed into or out of the copier.
2. Photoreceptor drum is not secured correctly on drum shaft, causing the drum to slip.
3. Transfer/detack corotron current is out of specification.
4. Media is contacting the extrusion between the photoreceptor drum and the fuser roll.
5. Drum/Developer drive moter gear mesh is too tight.
6. The copy media hesitates as it goes through the fuser, causing the media to buckle. This allows the media to contact the bottom of the xerographic module and smudge the image.
7. The copy stalls in the fuser.
8. Worn or defective D holes in the Document Drive pulley.
9. Fuser drive belt is loose.

### Corrective Action

1. Question the operator as to how the media is inserted into the copier.
2. Tighten the Photoreceptor Drum hardware (REP 9.3). Ensure Photoreceptor Drive Gear is not damaged.
3. Perform the Electrostatic Series (ADJ 9.2).
4. Try to make a copy using a Xerox approved media to see if the defect is corrected. Replace the media, if required.
5. Check the condition of the gears.
6. Go to the Media Transportation Problems located in this section. Check the media Pressure Plates for damage (PL 10.3).
7. Check the following:
  - a. Fuser Temperature (ADJ 10.1)
  - b. Damage or contamination of the Fabric Guide (PL 8.1).
  - c. The position of the fuser pressure plate and media guide plate (PL 10.3).
  - d. Inspect the Fuser Drive Belt tension, and the Fuser drives for damage.
8. Replace pulley (PL 5.2).
9. Tighten the Fuser drive belt (PL 10.2).

## CQ 20 Spots

### Probable Cause

### Corrective Action

No copy sample defect is needed.

- |   |   |
|---|---|
| 1. Photoreceptor drum is contaminated or damaged. Defect appears every 10.4 inches (264 mm).              | 1. Wash (General Procedures) or replace (REP 9.3) the photoreceptor drum as required.   |
| 2. Developer material is contaminated.  | 2. Inspect and clean any contamination on the developer housing. Check the developer for correct operation. Perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 & 9.4). |
| 3. Fuser roll or oil dispense wick is contaminated or damaged. Defect appears every 10.4 inches (264 mm). | 3. Clean or replace the fuser roll (REP 10.9) (PL10.1) and wick (REP 10.11).  |
| 4. Media feed drive and/or pinch rolls is contaminated or damaged.  | 4. Clean or replace media feed drive and/or pinch rolls (REP 8.2).  |
| 5. Media is defective or damaged.   | 5. Use Xerox approved media and make a copy to see if the defect is corrected. Replace the media, if required.  |
| 6. Developer material has made more than 40K feet (12K metres) of copies.                                 | 6. Replace the developer material (REP 9.8) and perform the Electrostatic Series (ADJ 9.2) and Image Density (ADJ 9.3 & 9.4).   |
| 7. Photoreceptor seal is Damaged.   | 7. Replace the photoreceptor seal (PL 9.3).   |

### Definition

These defects are 0.2 inches (5 mm) or smaller in diameter. These could appear at intervals that are in the process direction. Defect may appear every 10.4 inches (264 mm) if the defect is on the photoreceptor or fuser roll.

(Continued)

## CQ 20 Spots (Continued)

### Probable Cause

### Corrective Action

8. Excessive dry ink contamination is on the turnaround baffle near the transfer/detack corotron.

8. Clean the contamination, then check that the developer housing is seated correctly. Check for an obstruction between the magnetic roll and the developer housing. Check the developer housing for damage.

### **Definition**

Copy defects that appear in the process direction (from lead edge to trail edge). Streaks may be uniform, nonuniform ( a smudge with no clearly defined line pattern), or periodic.

## CQ 21 Streaks (Continued)

### Probable Cause

### Corrective Action

- |  |   |
|--|---|
| 1. There is moisture on the photoreceptor.                           | 1. Empty the moisture collection bottle. Drain moisture from the media transport. Check for obstruction in the drain system.  |
| 2. Something is blocking the optical path to the photoreceptor drum. | 2. Remove the photoreceptor drum assembly (REP 9.2) and cover it with a shield. Look for an obstruction in the optical path.  |
| 3. Photoreceptor drum is not being cleaned correctly.                | 3. Enter the diagnostic mode and then enter code [0913]. Press <b>Start</b> and the Cleaner Blade Solenoid should actuate. If it does not:<br><br>Check the following:<br>The cleaner blade weight moves freely (REP 9.4).<br>Cleaner Blade Solenoid (ADJ 9.1).<br><br>Remove the Xerographic module. Check the following:<br>The cleaner blade assembly transitions across the photoreceptor drum.<br>No wires are interfering with the cleaner blade weight.<br>Cleaner auger and belt.<br><br>Remove the photoreceptor drum and check the following for damage or contamination:<br>Cleaner blade seal assembly (REP 9.4).<br>Cleaner blade (REP 9.4).<br>Cleaner blade retainers (REP 9.4).<br>Drum seal.<br><br>If the cleaning problem persists, replace the cleaner blade (REP 9.4). |

## CQ 21 Streaks (Continued)

### Definition

### Probable Cause

### Corrective Action

- |   |  |
|---|--|
| 4. Developer housing is not functioning correctly or is not seated correctly. | 4. Replace the developer material (REP 9.8) if it has made more than 40K feet (12K metres) of copies. Perform the Electrostatic Series (ADJ 9.2). Check the developer roll and material for contamination. Replace material as required. Ensure that the developer housing is seated and operating correctly. Also, ensure that the material in the developer housing is level.  |
| 5. Fuser components are contaminated or damaged.                              | 5. Check the fuser roll for contamination, damage, or offsetting. If the fuser roll is damaged, check the stripper fingers (PL 10.2) for damage. If there is material from the fuser roll on the air flow manifold, check the air flow manifold (PL 9.2) for interference to the fuser roll. Check the oil dispense assembly for the correct operation. Check for contamination of the fuser wick. Check the fabric guide for damage that may have caused the contamination of the drum because of excessive moisture. |
| 6. Media path components and baffles are contaminated                         | 6. Clean the contaminated media path baffles and components.   |

(Continued)

## CQ 21 Streaks (Continued)

### Probable Cause

7. Media supply is contaminated.
8. Copier is not level (side-to-side).
9. Dry ink concentration is too high.
10. The photoreceptor drum has been subjected to Light shock, crystallization, contamination, or it is defective.

### Corrective Action

7. Clean the media supply area.
8. Ensure that the copier is level (side-to-side).
9. Remove cartridge and inspect for damage and dry ink leakage. If the cartridge is damaged, replace the cartridge and the waste bottle.  
Ensure that the Image Density is not greater than 1.2.
10. Wash (General Procedures) or replace the photoreceptor drum (REP 9.3) as required. Check for damage to other components that touched the photoreceptor drum in the area where the defect occurred. Check for contamination or damage of the following parts: cleaner blade, cleaner assembly seal, magnetic seal, developer material, or developer roll.  
Perform the Electrostatic Series (ADJ 9.2). Check that the line darkness is in specification; adjust the Image Darkness (ADJ 9.3 or 9.4), if required.

(Continued)



- |  |   |
|--|---|
| 11. Corotrons are contaminated or defective.                         | 11. Make a copy and perform the Image on Drum (Panic Stop) procedure in Section 6 to isolate the cause of the defect.<br><br>If the defect is on the developed image on the photoreceptor drum, replace the charge corotron (PL 9.1B).<br><br>If the defect is not on the photoreceptor drum, but it is on the media, replace the transfer corotron (PL 8.3).<br><br>Perform the Electrostatic Series (ADJ 9.2). Check that the line darkness is in specification, adjust the Image Density (ADJ9.3 or 9.4), if required. |
| 12. The light leaks because the covers are misadjusted or are loose. | 12. Ensure that the covers are not damaged and are seated correctly.  |
| 13. The light lens seal is loose from the magnet.                    | 13. Replace the light lens seal (PL 6.1).   |
| 14. Media is damaged or damp media.                                  | 14. Cut sheet media:<br><br>Make a copy using a sheet of media from a new pack of media.<br><br>If the problem is corrected, check that the media is being stored correctly.  |

(Continued)

**CQ 21 Streaks (Continued)**

**Probable Cause**

15. Media is damp or Damaged.

**Corrective Action**

15. Roll media:

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

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

## CQ 22 Marginal Fused Copy

### Probable Cause

1. Inadequate input power.
2. The fusing temperature is too low.
3. Media is damp .

### Corrective Action

1. Refer to Section 6 Installation Procedure and check the AC line voltage and the machine ground.
2. Check/adjust the Fuser Temperature (ADJ 10.1).
- 3a. Cut sheet media:  
Make a copy using a sheet of media from the middle of the stack.  
If the problem is corrected, check that the media is being stored correctly.
- 3b. Roll media:  
Remove and discard the first 3 to 6 feet (1 to 2 metres) of media from the roll. Make a copy on the new media.  
If the problem is corrected, ensure that the media heater is working and that the roll media is being stored correctly.
4. Check that the fabric guide is installed correctly .
5. Ensure that the fuser pressure plates are seated correctly. The plates should be flat and foam pads should be in good condition.

There is no copy defect sample needed.

4. Fabric guide tension is incorrect .
5. Fuser pressure plates are not seated correctly.

### Definition

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

(Continued)

**CQ 22 Marginal Fused Copy**  
(Continued)

**Probable Cause**

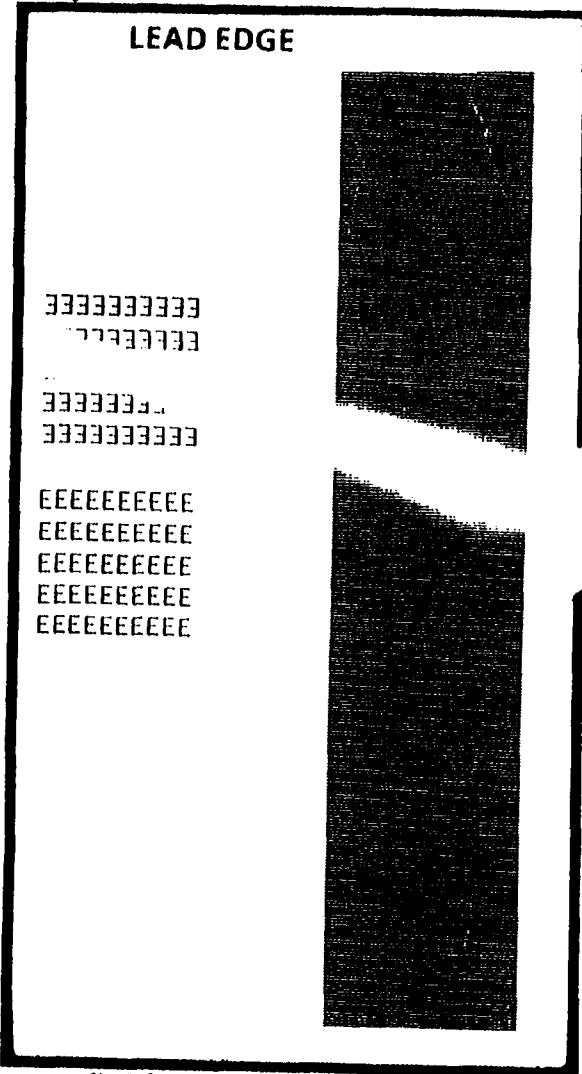
**Corrective Action**

- |  |   |
|--|---|
| 6. Fuser Heat Roll surface is worn or damaged. | 6. Replace Fuser Roll. Check and replace Stripper Fingers as necessary. |
| 7. The Image Density is greater than 1.2.      | 7. Perform the Electrostatic Series (ADJ 9.2).                          |

# CQ 23 Wrinkle Deletions

# Probable Cause

# Corrective Action

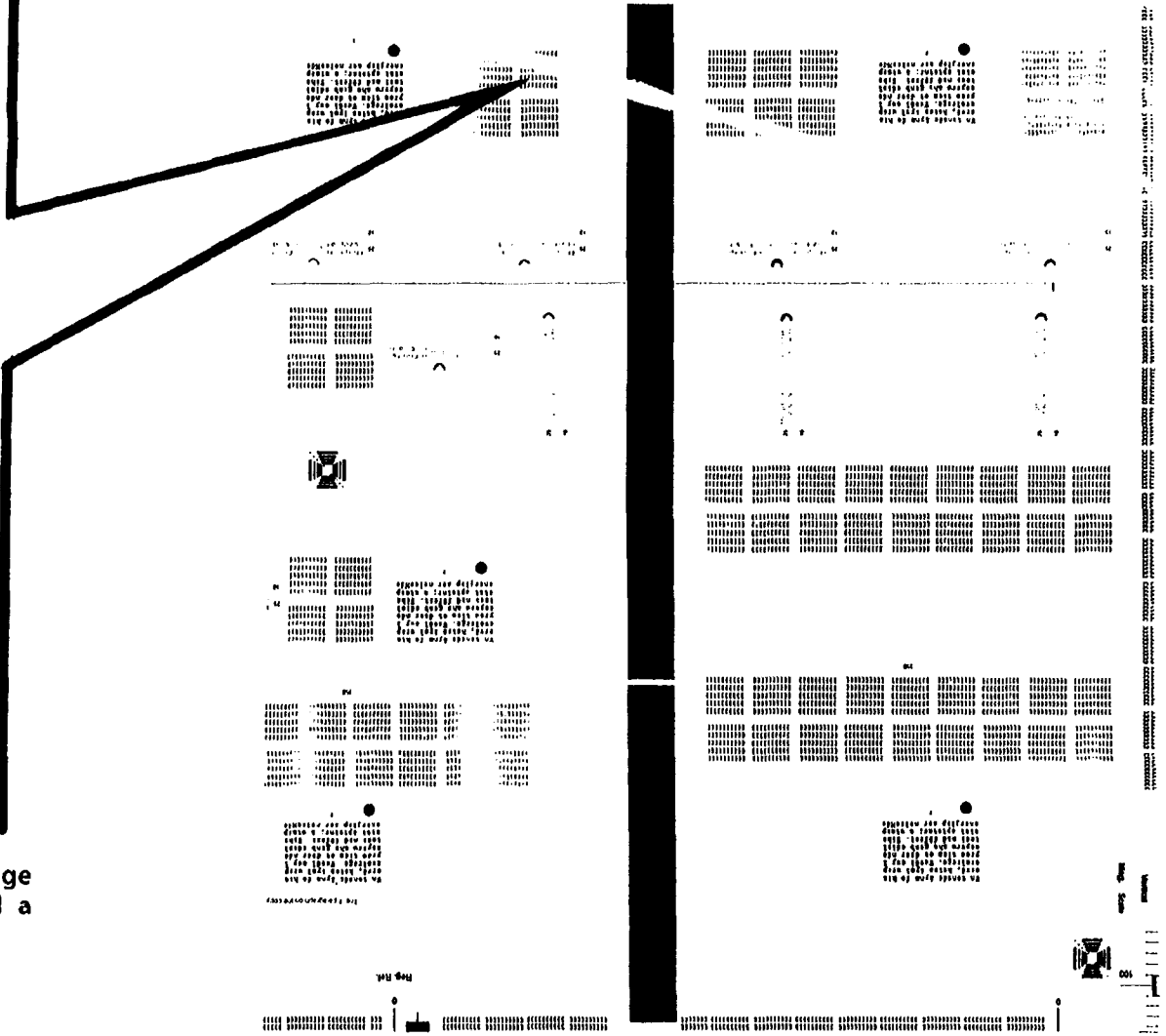


- 1. Media is wrinkled.

- 1. Go to Media Handling Problems located in the front of this Section.
  - a. Refer to the damaged Media RAP.

# LEAD EDGE

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



## CQ 24 Trail Edge Deletion

### Probable Cause

1. Excessive curl in the media.

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

### Corrective Action

1. Use media that has been cut 0.24 inches (6 mm) longer than what is actually required for the image area.

No copy defect sample

### Definition

A Trail Edge Deletion exists when an image deletion greater than 0.24 inches (6 mm) on the trail edge of the copy is observed.

## CQ 25 Developer Bias RAP

This RAP is used for background and copy contrast related problems.

### Initial Actions

- Ensure that the developer bias connector, A25 P25, is seated correctly on the high voltage power supply (HVPS) and that the developer bias lead is connected to the developer bias clip.
- Go to FLAG 1 and check the developer bias lead for a short circuit to frame or an open circuit.

### Procedure

Set the meter to measure + 300 VDC.

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

Plug in and switch on the copier. Cheat the AC interlock switch and the upper rear cover interlock switch. Make a copy in the light input, normal copy mode.

The voltage at the developer bias clip goes from approximately 0.00 VDC to approximately +200 VDC while a copy is being made.

Y N

The voltage at A25 P25 Pin 8 of the High Voltage Power Supply goes from +14.1 VDC to +4.9 VDC while a copy is being made.

Y N

A B C

A B  
Y N  
A

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

If there is no open circuit, replace the Control PWB (PL 1.4).

The voltage at A25 P25A Pin 12 goes low while a copy is being made.

Y N

Switch off the copier. Go to FLAG 3 and check the wiring for an open circuit.

If there is no open circuit, replace the Control PWB (PL 1.4).

Replace the HVPS PWB and perform the Electrostatic Series (ADJ 9.2).

A

Make a copy in the Dark Input, normal copy mode.

The voltage at the developer bias clip goes from approximately 0.00 VDC to approximately +300 VDC while a copy is being made.

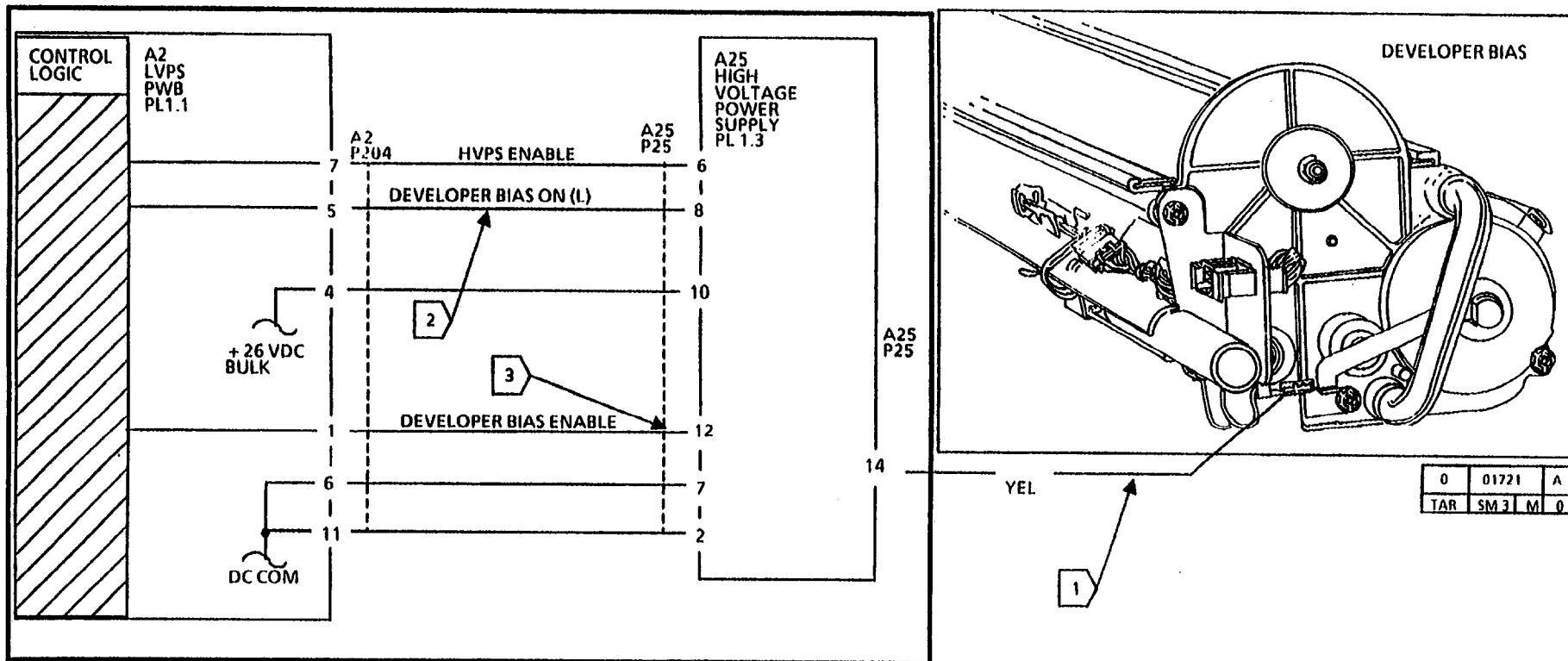
Y N

Replace the High Voltage Power Supply and perform the Electrostatic Series (ADJ 9.2).

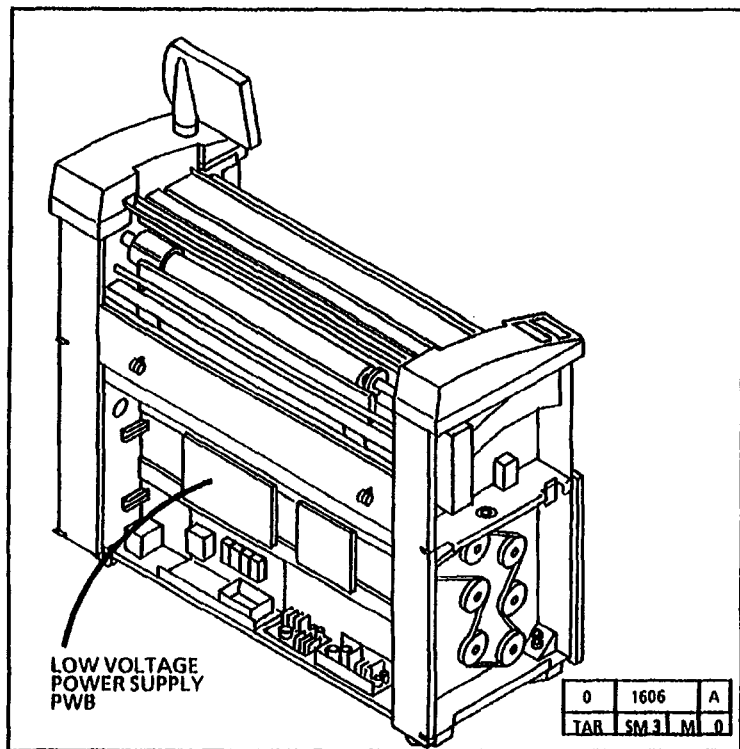
Go to the Copy Quality RAP that directed you here and continue troubleshooting the copy quality problem.

Developer Bias Voltages While Copies Are Being Made

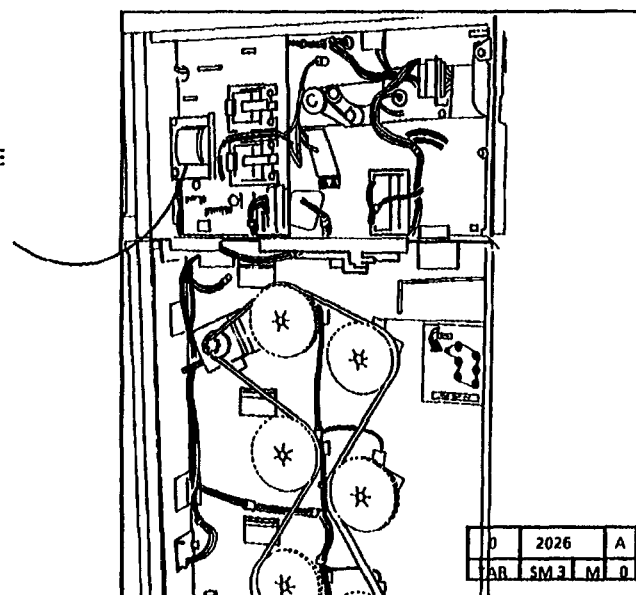
Document Input	Copy Contrast						
	3 DARK	2 DARK	1 DARK	NORMAL	1 LIGHT	2 LIGHT	3 LIGHT
DARK	200 VDC	200 VDC	250 VDC	300 VDC	350 VDC	400 VDC	400 VDC
LIGHT	100 VDC	150 VDC	150 VDC	200 VDC	200 VDC	300 VDC	350 VDC







HIGH  
VOLTAGE  
POWER  
SUPPLY



## CQ 26 High Voltage Power Supply RAP

This RAP is used for copy quality problems related to the loss of Charge or Transfer voltage. Also used to check Detack problems.

### Initial Actions

- Switch off and unplug the copier.
- Ensure that the connectors are correctly seated on the high voltage power supply.
- Ensure that all corotrons are connected and free of contamination.

### Procedure

Set the meter to measure +26 VDC.

Connect the (-) lead to the GND test point and the (+) lead to (TP4) on the HVPS.

Plug in and switch on the copier.

There is +26 VDC at pins 1 and 10 of A25 P25 of the HVPS.

Y N

If there is +26 VDC at Pins 4 and 12 of A2 P204 go to FLAG 1 and check the wiring for an open circuit. If there is not +26 VDC at pins 4 and 12 of A2 P204 replace the LVPS.

A

A

Enter the diagnostic code [0921-1] and connect the (-) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 6 and A2 P204 Pin 7. If there is not a low at both pins, go to FLAG 2 and check the wiring. If the wiring is OK replace the LVPS. If the problem still exists, replace the Controller PWB.

Enter the diagnostic code [0921-2] and connect the (-) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 3 and A2 P204 Pin 10. If there is not a low at both pins, go to FLAG 3 and check the wiring. If the wiring is OK, replace the LVPS. If the problem still exists, replace the Controller PWB.

*NOTE: The wire between A25 P25 Pin 3 and A2 P204 Pin 10 is used for charge bias. During rescan of a normal copy run the charge bias will momentarily go from 0 VDC to about 14.5 VDC. This bias change effectively shuts down the Charge Current during rescan, enabling the copier to run cleaner with decreased toner consumption.*

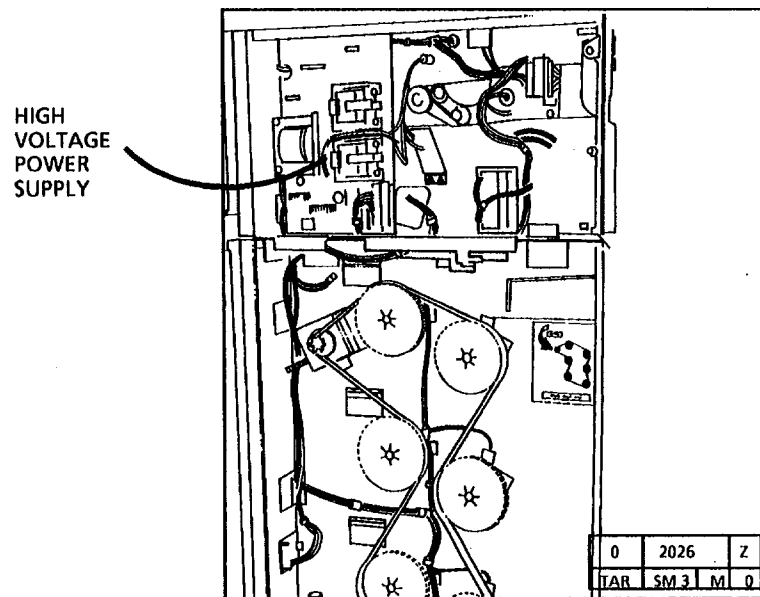
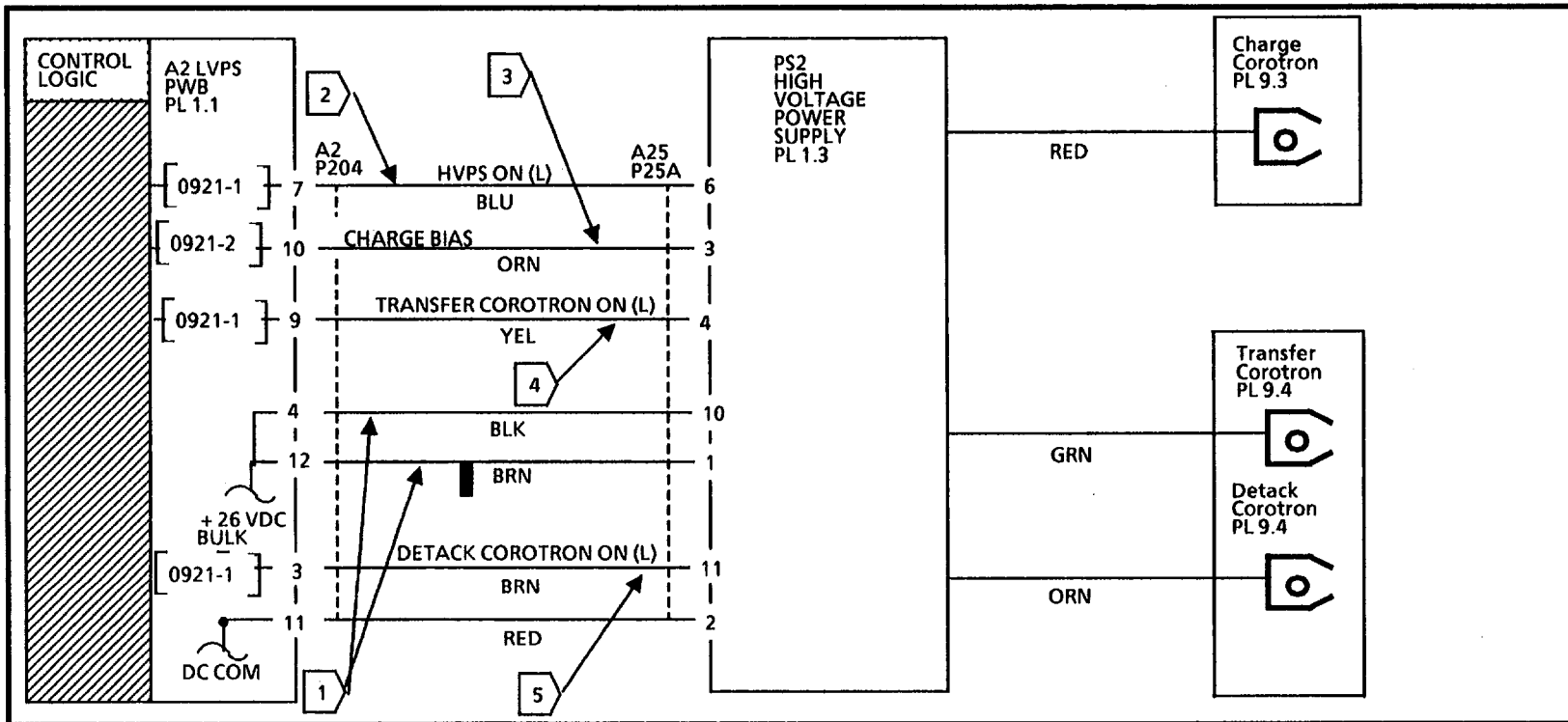
Enter the diagnostic code [0921-1] and connect the (-) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 4 and A2 P204 Pin 9. If there is not a low at both pins, go to FLAG 4 and check the wiring. If the wiring is OK replace the LVPS. If the problem still exists, replace the Controller PWB.

Enter the diagnostic code [0921-1] and connect the (-) to Pin 2 of A25 P25 and check for a low at A25 P25 Pin 11 and A2 P204 Pin 3. If there is not a low at both pins, go to FLAG 5 and check the wiring. If the wiring is OK replace the LVPS. If the problem still exists, replace the Controller PWB.

Go to ADJ. 9.2, if any of the outputs cannot be set, check for an open circuit in the wiring from the HVPS to the corotrons.

If the problem still exists, repair or replace the problem corotrons.

If the problem still exists, replace the HVPS and perform the Electrostatic Series (ADJ 9.2).



0	2026	Z
TAR	SM 3	M 0

## CQ 27 Exposure Control RAP

(11/02/92)

This RAP is used if the photoreceptor background voltage cannot be set in ADJ 9.2, Uniform Background, Banding/Streaks, Light Copy, and Poor Resolution.

### Initial Actions

- Ensure that connectors A2 P208, A3 P304, A4 P21, A4 P22 are connected/seated properly.
- Ensure that the exposure lamp and the Jacket is positioned properly.

### Procedure

1 *The exposure lamp, charge, developer bias, erase lamp, main drive, fuser, and the drum cleaning blade are active when diagnostic code [0921-5] is entered.*

Enter the diagnostic code [0921-5]. Note the Illumination sensor voltage on the message display. Press copy contrast down button 3 times.

The illumination sensor voltage decreases by greater than 2.0 VDC.

Y N

The illumination sensor voltage changed by less than 2.0 VDC, but more than zero change.

Y N

Press stop and enter [0921-5]. While observing the lamp intensity press the copy contrast down button 3 times.

The lamp intensity decreased.

Y N

A B C D

A B C D

Press stop and connect the DMM between A2 P208 pin 7 and ground. Enter [0921-5] and note the illumination Bias voltage on the top line of the message display. Press copy contrast down button 3 times.

The Bias voltage and DMM voltage both decreased by at least 7.0 VDC.

Y N

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

Replace the Lamp Ballast PWB. If the problem is still present go to Flag 3 and check the wiring for a short circuit. If the problem still exists, replace the Exposure Lamp

Go to Flag 1 and check the wiring for an open or short circuit. If the problem still exists, replace the Illumination sensor. If the problem still exists, replace the Controller PWB.

Press stop and connect the DMM between A2 P208 pin 7 and ground. Enter [0921-5] and note the illumination Bias voltage on the top line of the message display. Press copy contrast down button 3 times.

A E

A E

The Bias voltage and DMM voltage both decreased by at least 7.0 VDC.

Y N

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

Press stop and connect the DMM (-) lead to A3 P304 pin 16 and the (+) lead to pin 17. Enter [0921-5] and press the copy contrast down button 3 times.

The DMM voltage increased by more than 2.0 VDC.

Y N

Go to Flag 1 and check the wiring for an open or short circuit. If the problem still exists, replace the Illumination sensor. If the problem still exists, replace the Lamp Ballast PWB. If the problem is still present go to Flag 3 and check the wiring for a short circuit. If the problem still exists, replace the Exposure Lamp. If the problem still exists, replace the Controller PWB.

Replace the Controller PWB.

Press stop then press start and enter [0921-5]. The illumination sensor voltage on the message display is at least 3.3 VDC.

Y N

Check for a physical light blockage of the Illumination sensor. The illumination sensor voltage on the message display is at least 3.3 VDC.

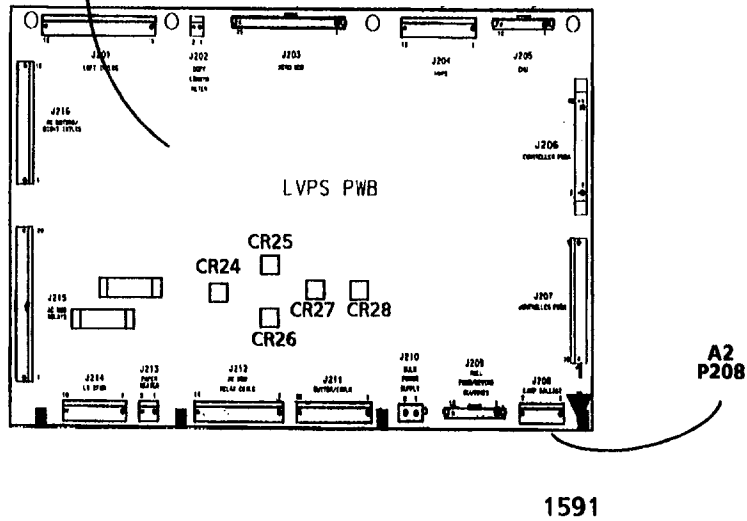
Y N

Return to path C.

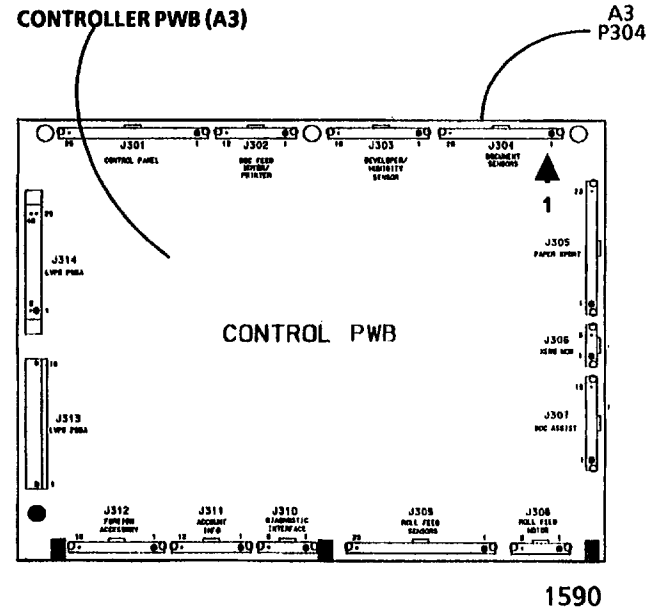
Return to the RAP that directed you here.

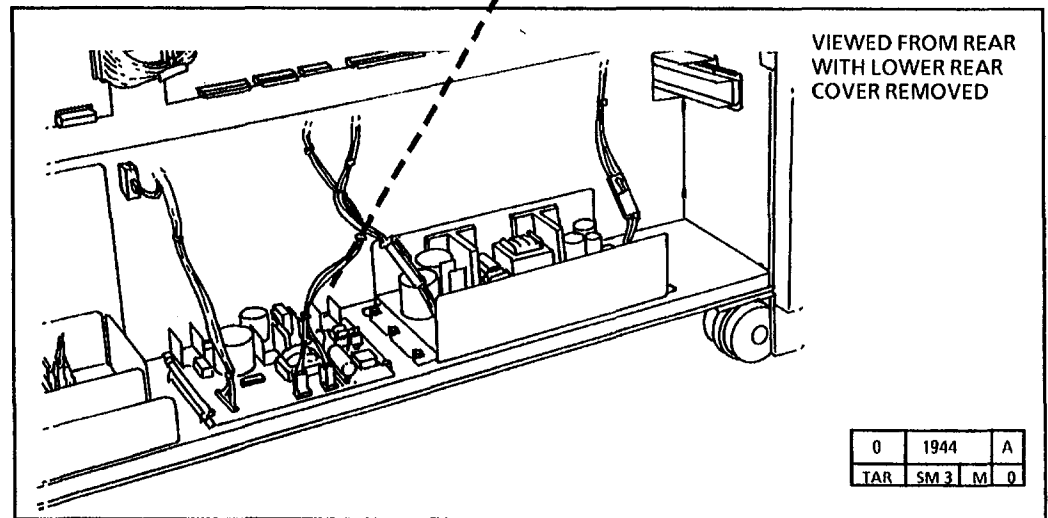
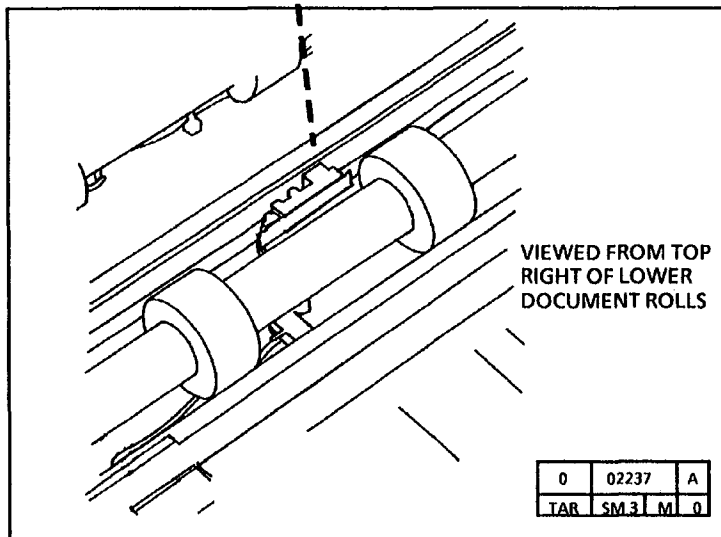
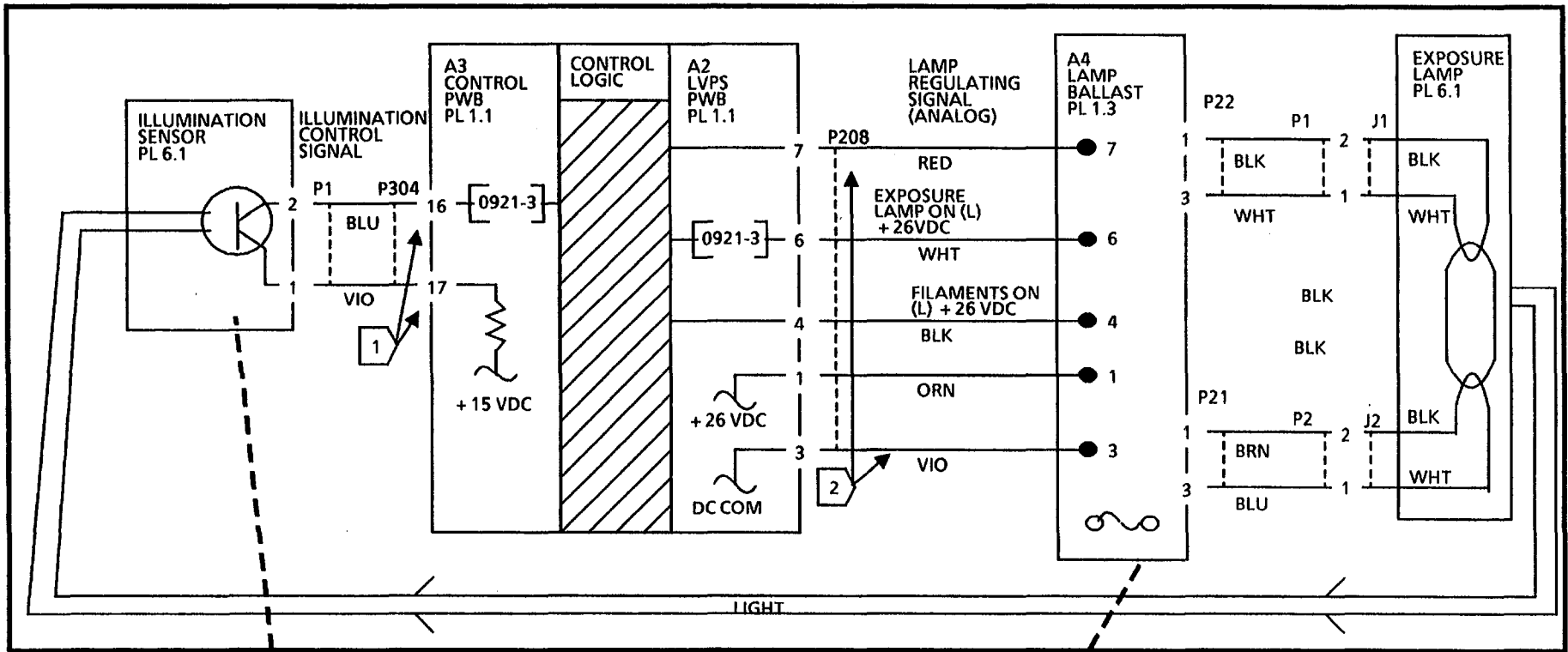
Return to the RAP that directed you here.

LVPS/DRIVER PWB (A2)



CONTROLLER PWB (A3)





## CQ 28 Offsetting and Residual Image Isolation RAP

This RAP is used to differentiate between the Fuser and the Photoreceptor as the source of an offsetting or residual image copy quality problem. It may be necessary to make several copies to see if the problem can be repeated.

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

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

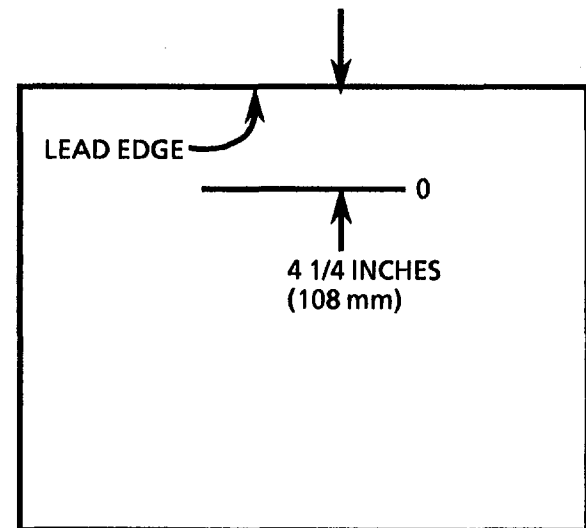
7. Open the transport latching cover and remove the partially made copy. Ensure that the copy is not dragged against the photoreceptor or fuser roll.
8. Examine the new copy 10 3/8 inches (264 mm) (circumference of the drum) away from the lead edge.

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

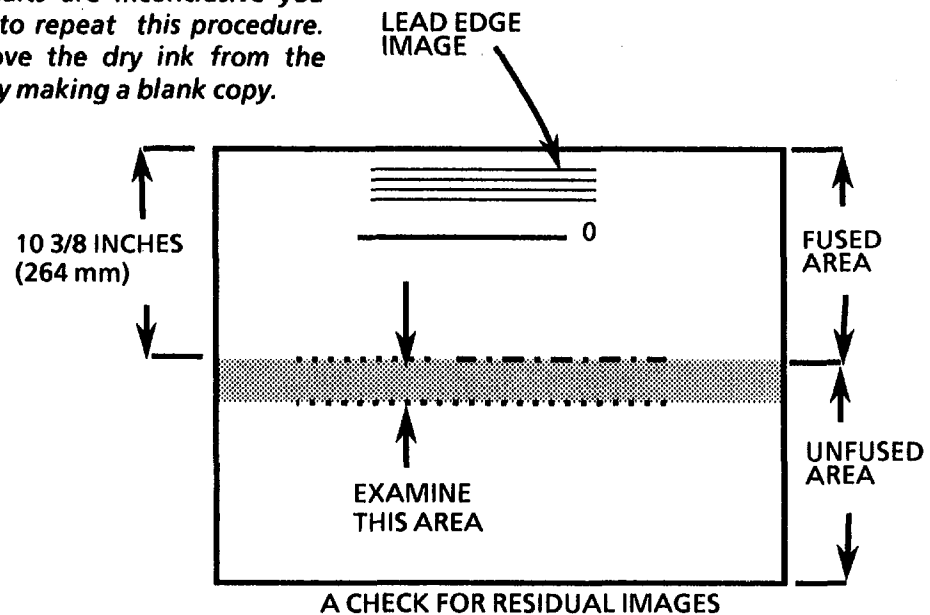
*If defect is in the unfused area, it indicates that the photoreceptor is the source of the problem.*

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

**NOTE:** If your results are inconclusive you may need to repeat this procedure. First, remove the dry ink from the fuser roll by making a blank copy.



THE PREPARED MEDIA



A CHECK FOR RESIDUAL IMAGES

## CQ 30 Erase Lamp (W/ O Tag/ MOD 30) RAP

(12/97)

This RAP is used for copy quality problems related to the loss of light intensity from the Photoreceptor Drum Erase Lamp. Copiers equipped with an Erase Lamp are identified as being without Tag 30 (W/ O Tag/ MOD 30).

### Initial Actions

- Switch off and unplug the copier.
- Ensure that all connectors are correctly seated.
- Ensure that the Erase lamp is clean and properly installed.

### Procedure

Set the Multimeter to measure +26 VDC.  
Connect the (-) lead to GND.  
Plug in and switch on the copier

There is +26 VDC at Pin 12 of A2 P203 of the LVPS PWB (A2).

Y N

There is +26 VDC at Pin 11 of A2 P203.

Y N

Replace the LVPS PWB (A2).

Go to FLAG 1 and check for open or short circuits in the wires. If the wiring is OK, replace the Power Inverter.

Enter the diagnostic code [0966] while observing the meter.

The voltage at Pin 12 of (A2 P203) changes from approximately (+26 VDC) to less than (1.0 VDC).

Y N

A B

A B

Replace the LVPS/ Driver (A2) PWB.

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

The Erase Lamp illuminates.

Y N

There is 100 to 120 VAC between Pins 1 and 3 of A2 P1.

Y N

Replace the Power Inverter.

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

If the wiring is OK, replace the Erase lamp.

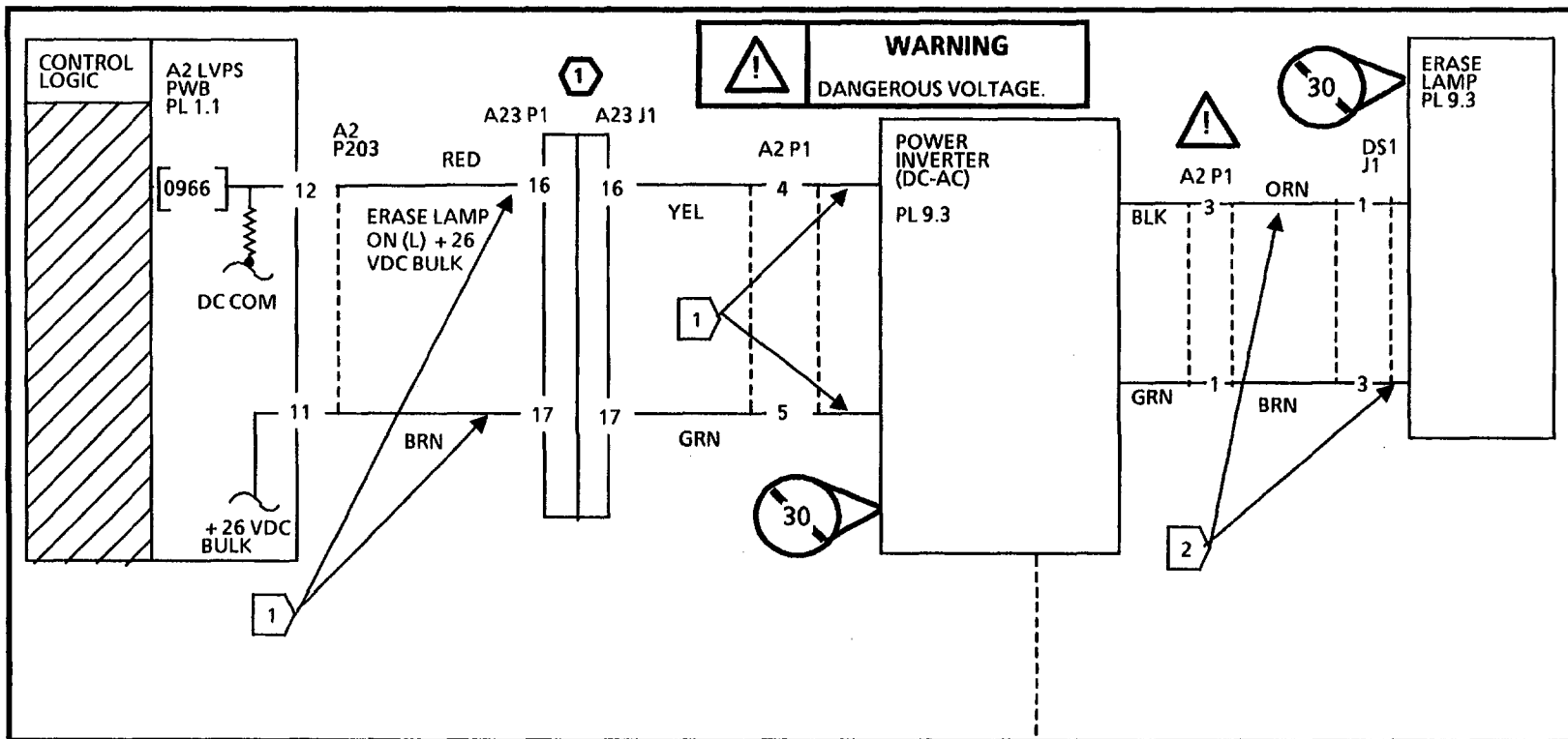
If the problem persists, replace the Controller PWB.

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

Ensure that the Erase LED's are clean, then go to ADJ. 9.2 and check that the Electrostatic Series of Adjustment settings are in specification.

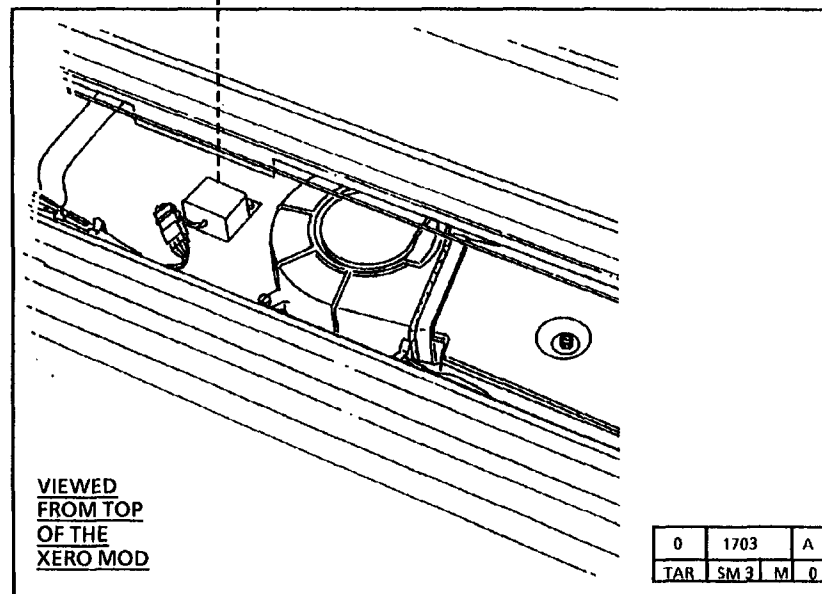
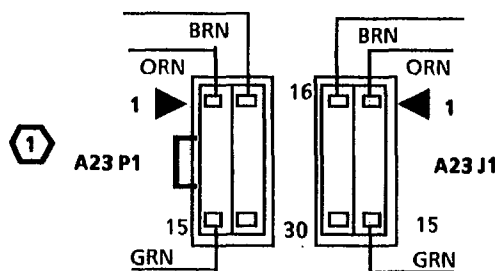
Run 5 copies of Test Pattern 82E5980 and check that the copy quality is in specification.





NOTES:

- ① CONNECTOR A23 P/J1 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 7 FOR REPAIR DATA.



## CQ 31 Erase LEDs (W/ Tag/ MOD 30) RAP

(12/97)

This RAP is used for copy quality problems related to the loss of light intensity from the Photoreceptor Drum Erase LED's. Copiers equipped with Erase LED's are identified as having Tag 30 (W/ O Tag/ MOD 30).

### Initial Actions

- Switch off and unplug the copier.
- Ensure that all connectors are correctly seated.
- Ensure that the Erase LED's are clean and properly installed.

### Procedure

Set the meter to measure (+ 26 VDC).

Connect the (-) lead to GND.

Plug in and switch on the copier.

There is (+ 26 VDC) at Pin 12 of A2 P203 of the LVPS/ Driver (A2).

Y N

There is + 26 VDC at Pin 11 of A2 P203.

Y N

Replace the LVPS/ Driver (A2).

Go to FLAG 1 and check for open or short circuit in the wires. If there is no problem with the wires, replace the Erase LED (DS1).

Enter the code [0966] while observing the meter.

The voltage at Pin 12 of (A2 P203) changes from approximately (+ 26 VDC) to less than (1.0 VDC).

Y N

A B

A B

Replace the LVPS/ Driver (A2) PWB.

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

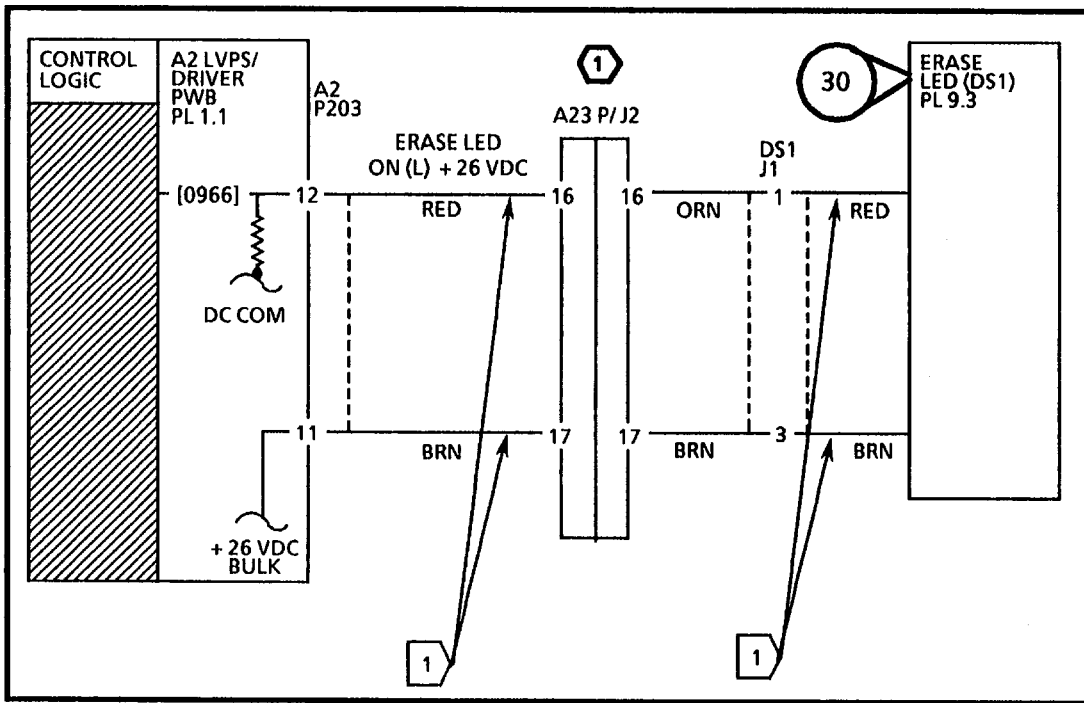
The Erase LED's are illuminated.

Y N

Replace the Erase LED (DS1).

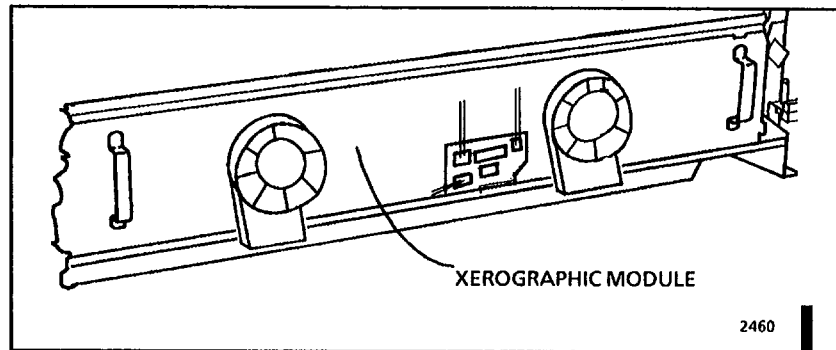
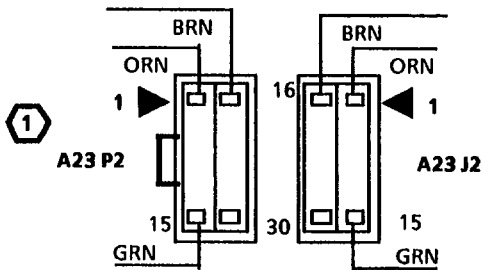
Ensure that the Erase LED's are clean, then go to the Electrostatic Series adjustment (ADJ 9.2) and verify that the Electrostatic settings are in specification.

Run 5 copies of Test Pattern 82E5980 and check that the copy quality is in specification.



NOTES:

① CONNECTOR A23 P/J2 IS A MULTIPLE MODULE CONNECTOR. REFER TO SECTION 6 FOR REPAIR DATA.



NOTES:

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# REP 3.1 Control PWB



## Parts List on PL 1.1

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the back covers.

**1** **STEP 3 B:** If the copier is not equipped with a second language, there will only be 3 EPROMs. Save the EPROMs that were removed here for reinstallation on the new Control PWB.

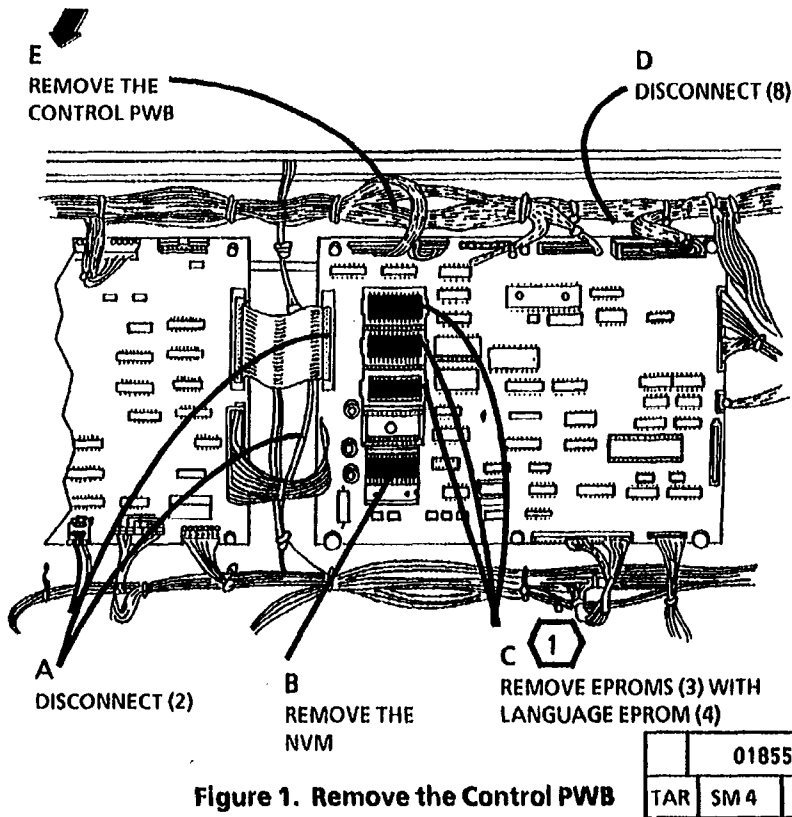


Figure 1. Remove the Control PWB

3. (Figure 1): Remove the Control PWB.

### Replacement

**2** **STEP 1 B:** Reinstall all the EPROMs that were removed from the old Control PWB except the NVM. The NVM will be installed in step 1 C.

**3** **STEP 1 C:** Ensure that the dot on the NVM is located as shown in Figure 2.

1. (Figure 2): Install the new Control PWB.

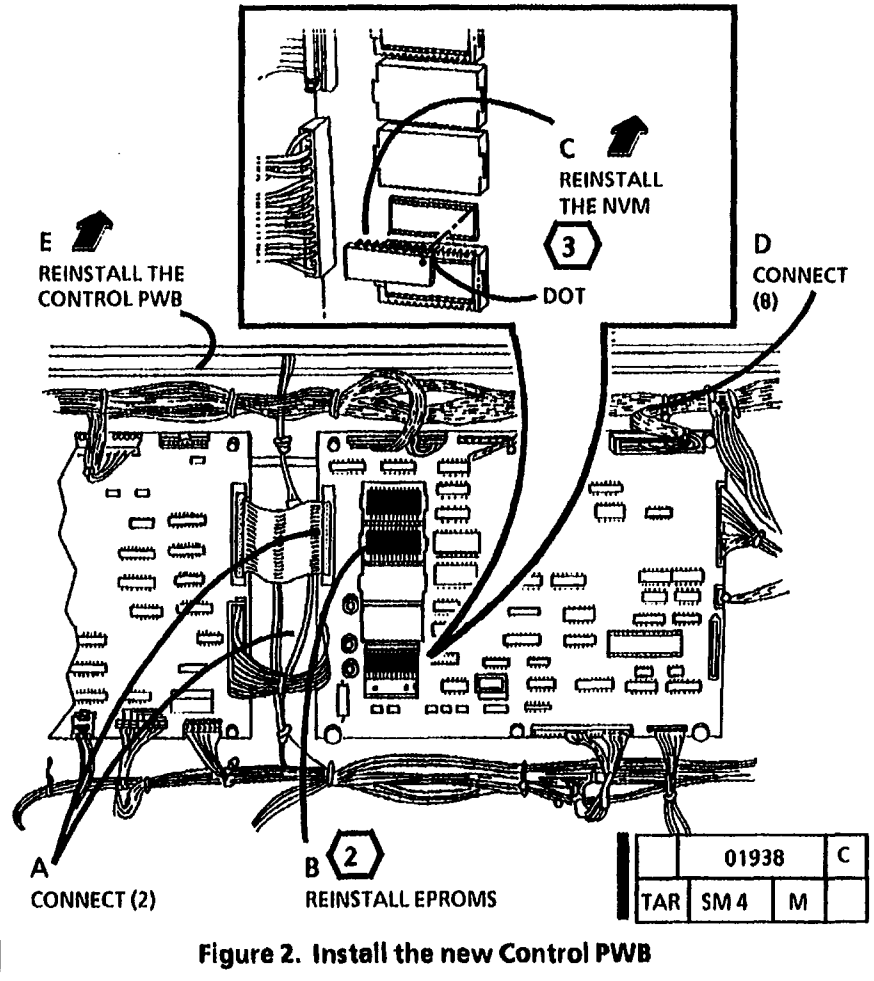


Figure 2. Install the new Control PWB



## REP 3.2 High Voltage Power Supply (HVPS)

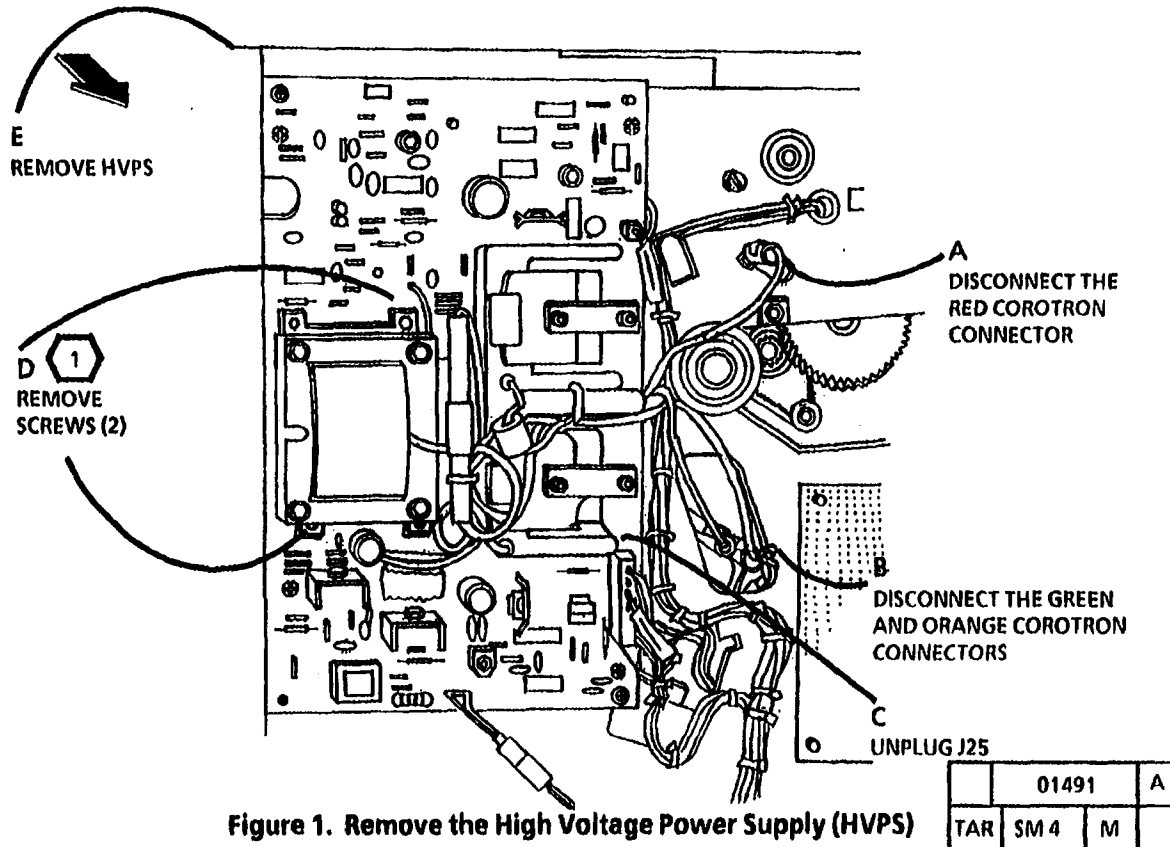
### Parts List on PL 1.3

#### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the left side door (REP 14.1).
3. (50 Hz only): Remove shield that covers HPVS.
4. (Figure 1): Remove the High Voltage Power Supply (HVPS).

#### Replacement

-  **Step 3 F in Removal:** Ensure that the screws are reinstalled for a proper electrical ground.
-  **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 (ADJ 9.2).





# REP 5.1 Document Pinch Rolls (Shaft, Load Spring)

## Parts List on PL 5.1

### Removal

1. **Warning: Disconnect the power cord.**
2. Rotate the Control Panel.
3. Remove the Document Handler.
3. (Figure 1): Remove the Document Platen.

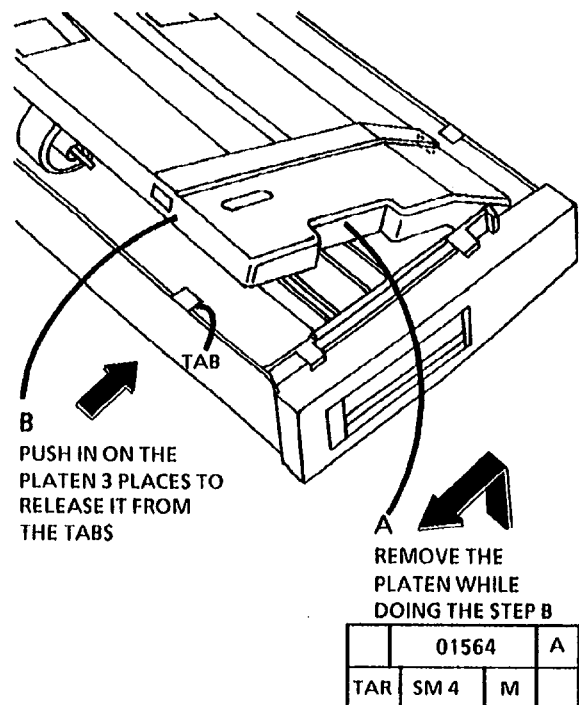


Figure 1. Remove the Document Platen

4. (Figure 2): Remove the Document Pinch Rolls.

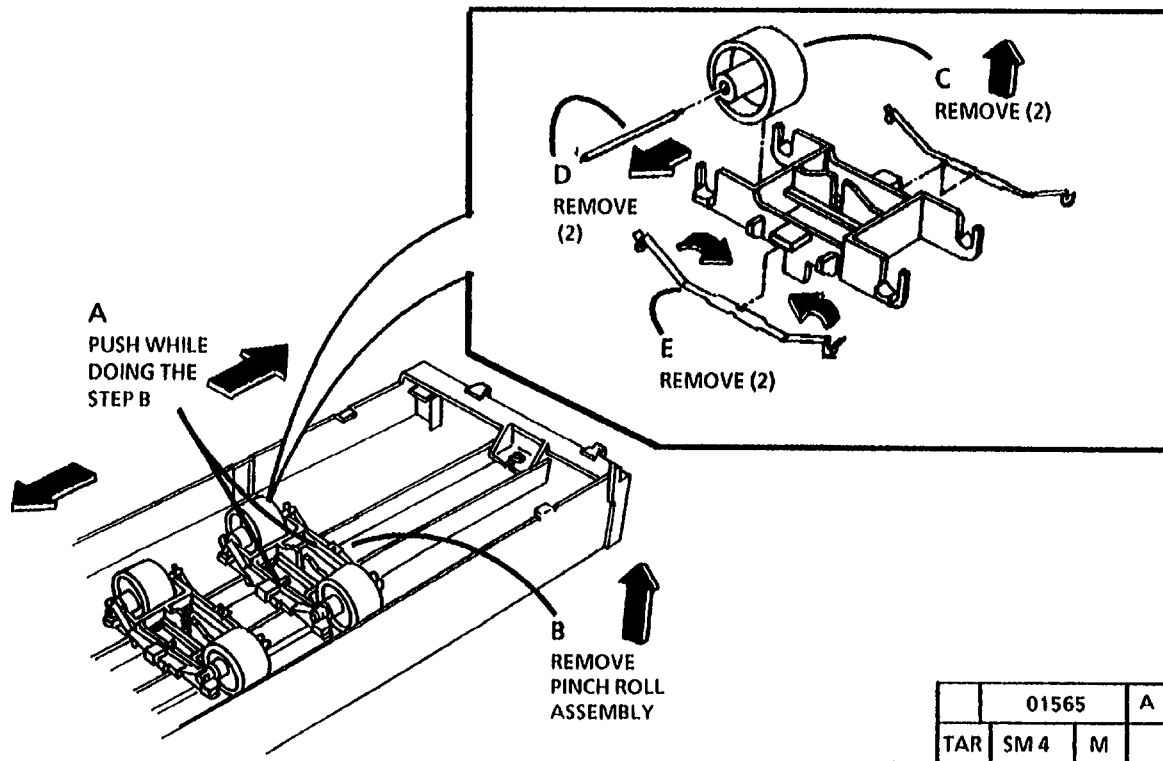


Figure 2. Remove the Pinch Rolls

(Continued)

(Continued)

## Replacement

1. (Figure 3): Install the Document Platen.

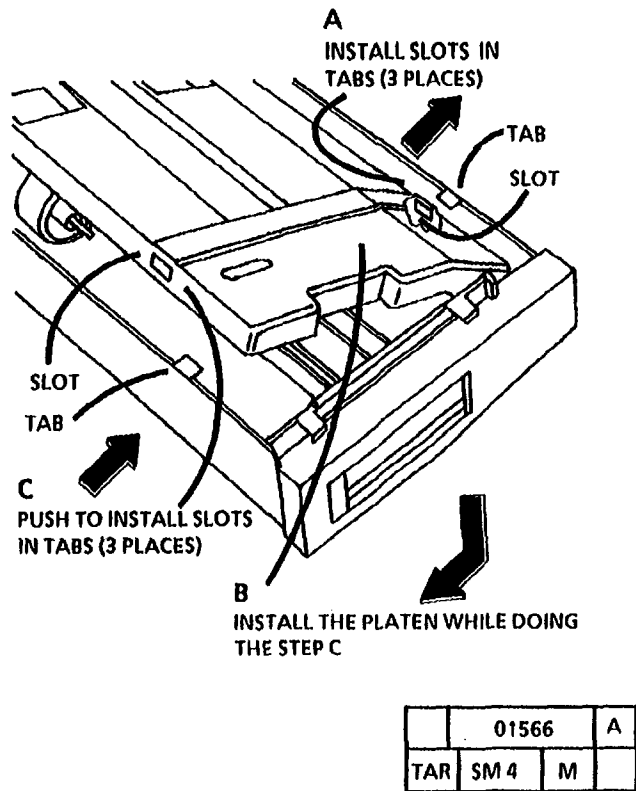


Figure 3. Install the Document Platen

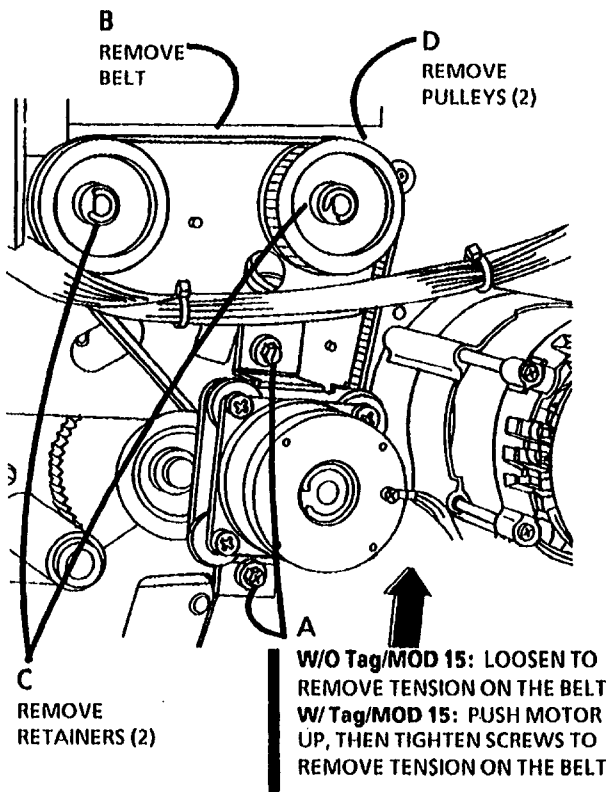
## REP 5.2 Document Drive Rolls

### Parts List on PL 5.2

### Removal

1. **Warning: Disconnect the power cord.**
2. Rotate the Control Panel.
3. Remove the Document Handler.

4. Remove the right and left side doors (REP 14.1).
5. Remove the waste bottle.
6. (Figure 1): Remove the Drive Pulleys.



	01471	B
TAR	SM 4	M

Figure 1. Remove the Drive Pulleys

(Continued)

(Continued)

7. (Figure 2): W/ Tag/MOD 2: Remove the Platen.

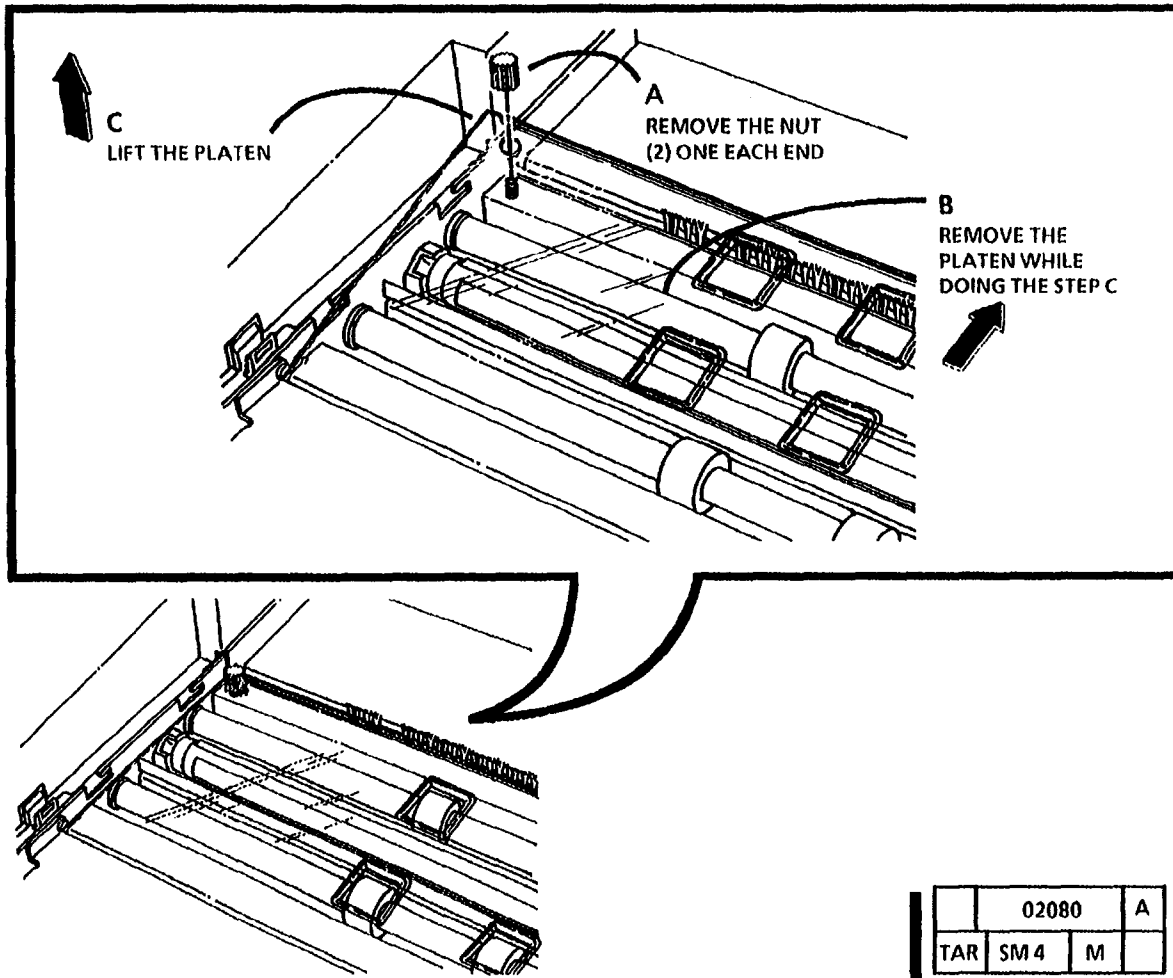


Figure 2. Remove the Platen

8. (Figure 3): Remove the bearings.

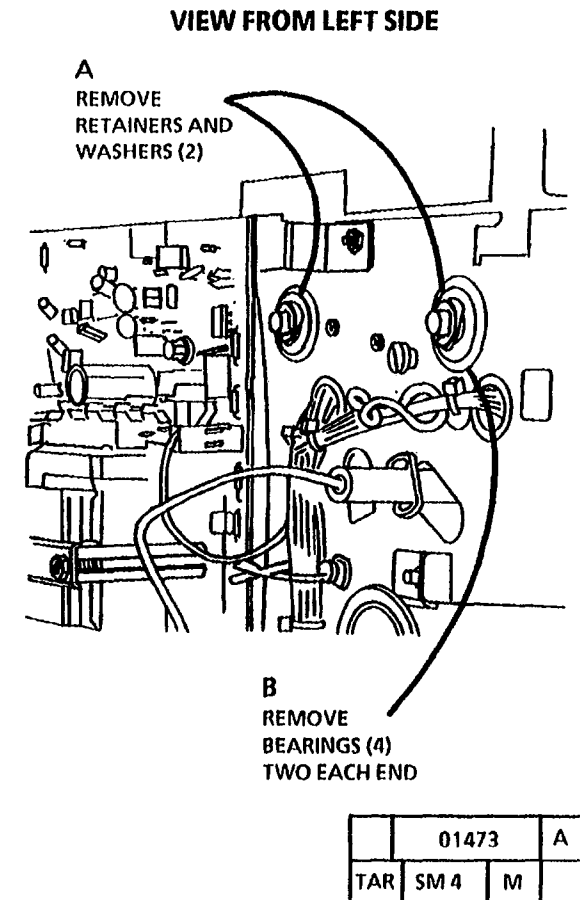


Figure 3. Remove the Bearings from Left Side

(Continued)

(Continued)

9. (Figure 4): Remove the Document Drive Rolls.

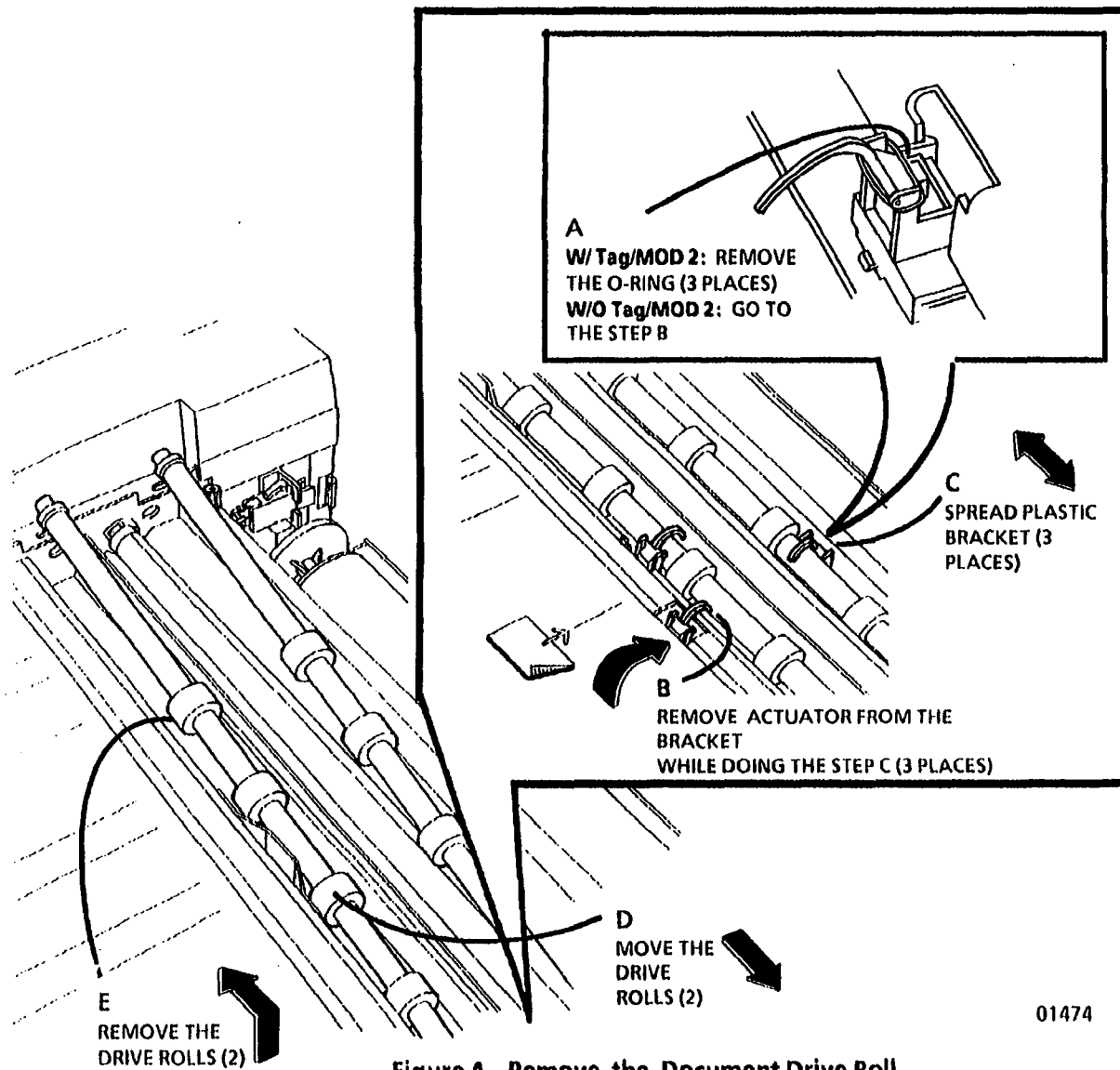


Figure 4. Remove the Document Drive Roll

## Replacement

1. Reinstall the Document Drive Rolls and Bearings.
2. (Figure 5): Reinstall the Belt.

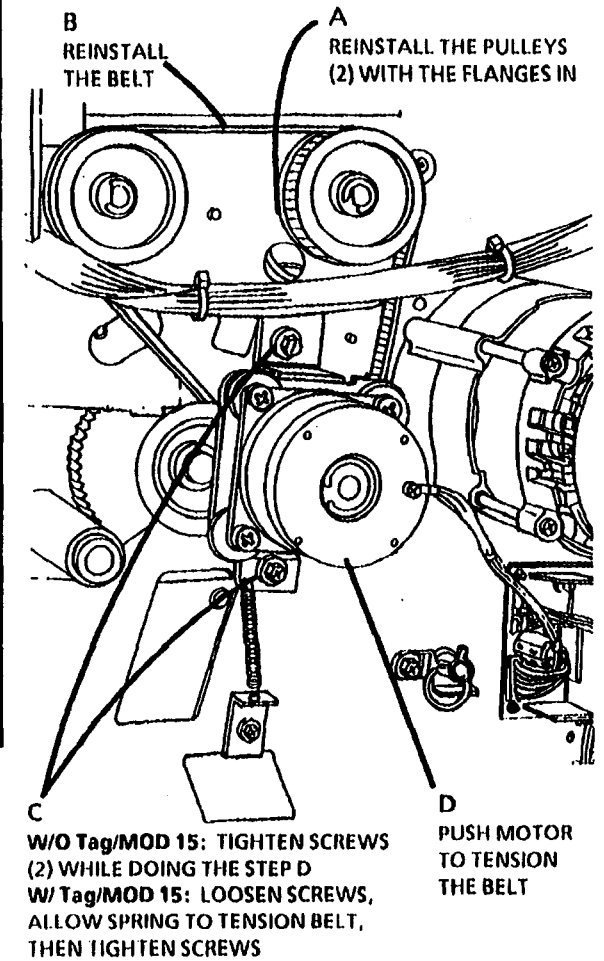


Figure 5. Reinstall the Belt

(Continued)

(Continued)

3. (Figure 6): Reinstall the Actuators.

1

*WI Tag/MOD 2: STEP 3 B: Ensure that the O-ring is under the notch in the front of the sensor, and over the back part of the actuator.*

4. Reinstall the Platen.
5. Reinstall the Document Handler.

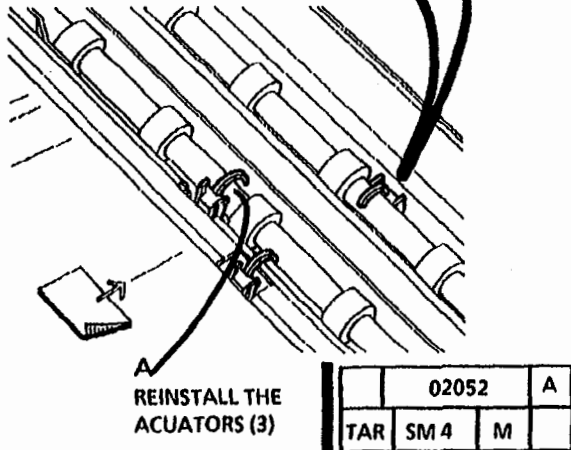
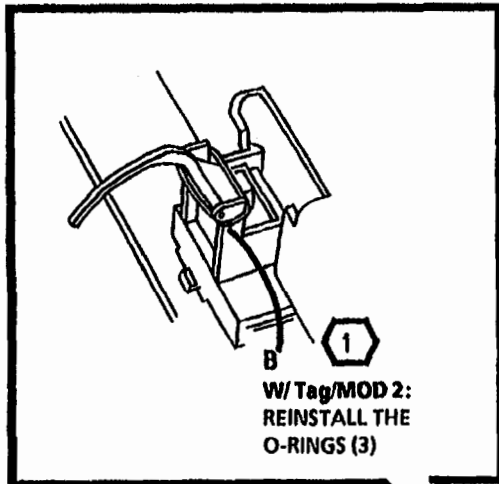


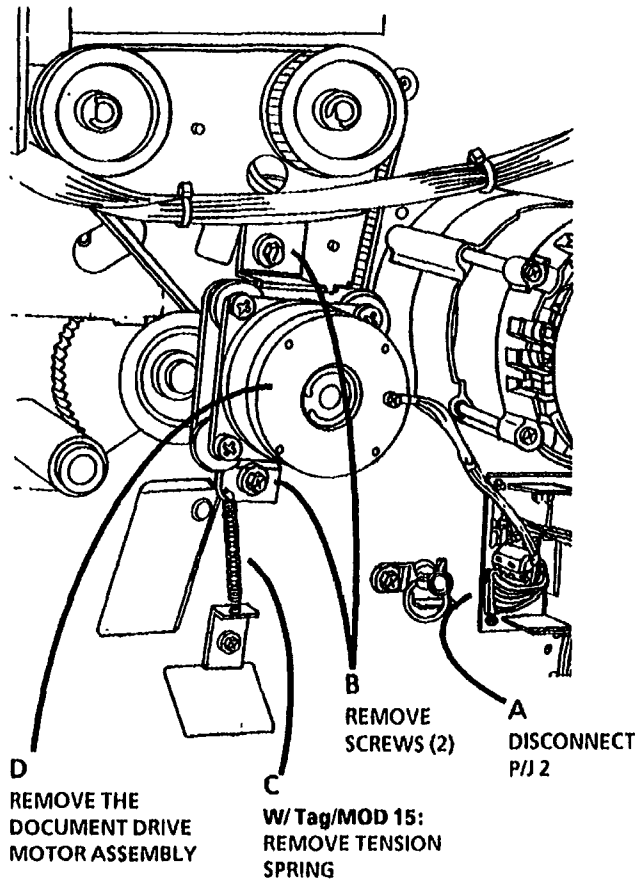
Figure 6 . Reinstall the Actuators

## REP 5.3 Document Drive Motor

### Parts List on PL 5.2

### Removal

1. **Warning: Disconnect the power cord.**



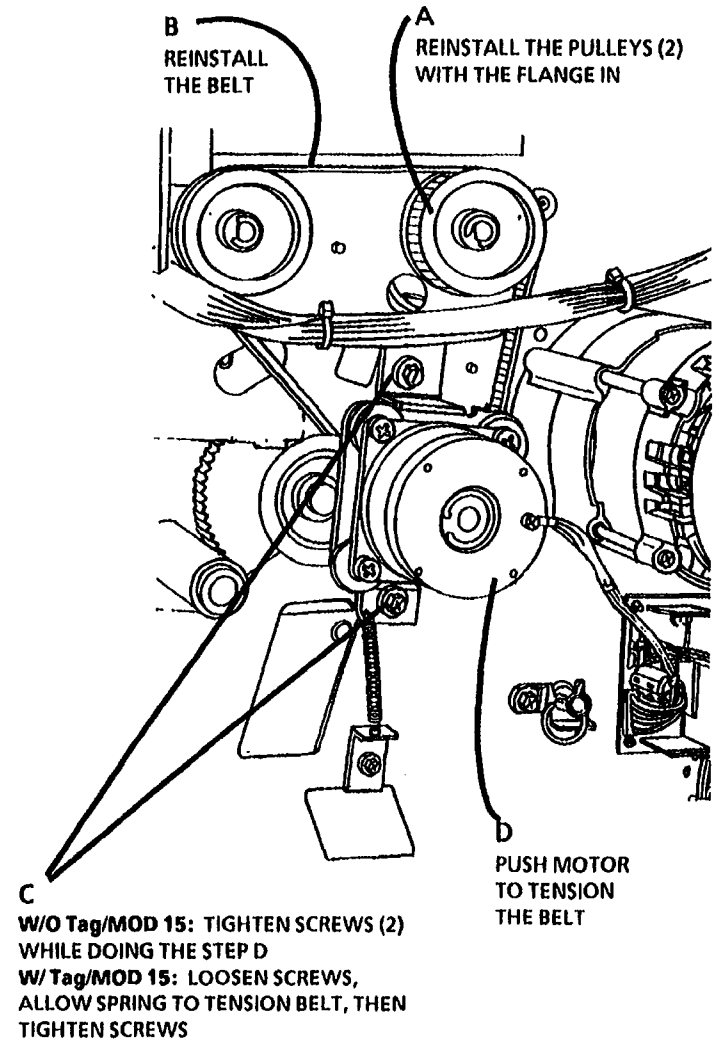
**Figure 1. Remove the Document Drive Motor Assembly**

01477

2. Remove the Right Side Door (REP 14.1).
3. (Figure 1): Remove the Document Drive Motor Assembly.

### Replacement

1. Reinstall the Document Drive Motor Assembly.
2. (Figure 2): Reinstall the Belt.



**Figure 2. Reinstall the Belt**

01471

## REP 6.1 Exposure Lamp

### Parts List on PL 6.1

### Removal

1. **Warning: Disconnect the power cord.**
2. Rotate the Control Console and remove the Document Handler.

3. (Figure 1): **W/ Tag/MOD 2:** Remove the Platen.
4. Remove the Exposure lamp.
5. Remove the black Lamp Shield.

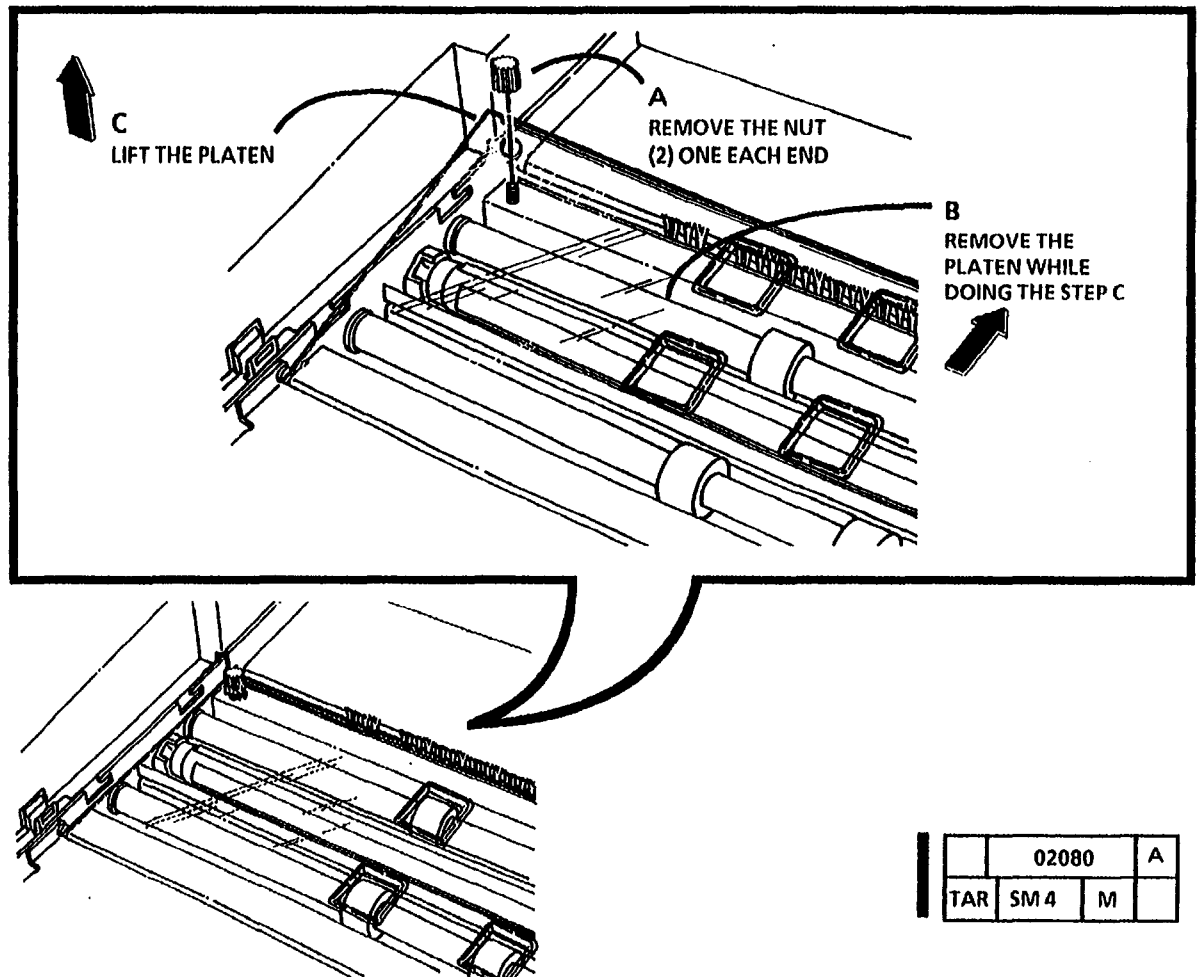


Figure 1. Remove the Platen

(Continued)



(Continued)

## Replacement

- 1** STEP 1 B: Ensure that the lamp part number is at the right side of the machine.
- 2** STEPS 1 A and B: Ensure that the black shield is positioned so that the clear portion of the exposure lamp is exposed and faces toward the front of the copier.

1. (Figure 2): Install the Exposure Lamp.

2. Enter the diagnostic mode.



### WARNING

There will be a time delay between the time the code [0921-3] is entered and the time the fuser motor starts to turn. The fuser motor will not start until the fuser is at the correct temperature.

3. Enter the code [0921-3].

- 3** When the fuser is at the correct temperature, the main drive motors will turn on. The exposure lamp will also come on at the same time.

6. When the motors and exposure lamp turn off (approximately 2 2/3 minutes), exit the diagnostic mode.

- 4** If the Background (Exposure) Check/Adjust section of the Electrostatic Series is not within specification, perform the entire Electrostatic Series.

7. Perform the Background (Exposure) Check/Adjust of the Electrostatic Series (ADJ 9.2).

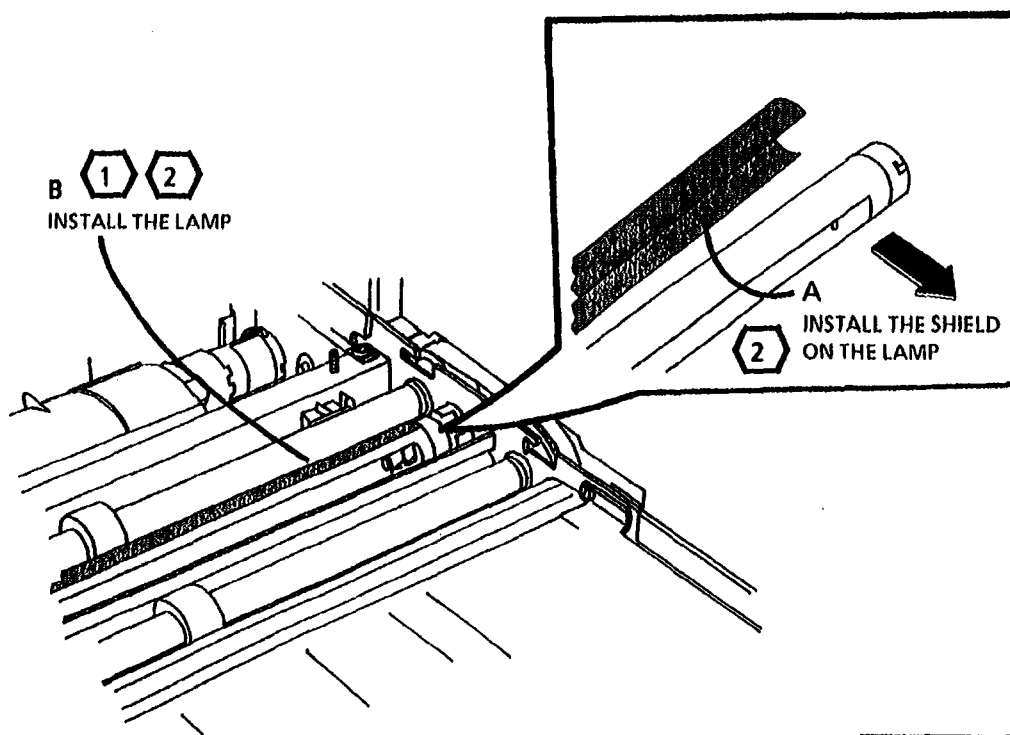


Figure 2. Install the Exposure Lamp

	01856	B
TAR	SM 4	M

## REP 6.2 Lens Assembly

### Parts List on PL 6.1

#### Removal

1. **Warning:** Disconnect the power cord.
2. Rotate the Control Console and remove the Document Handler.

3. (Figure 1): W/ Tag/MOD 2: Remove the Platen.
4. Remove the Exposure lamp.

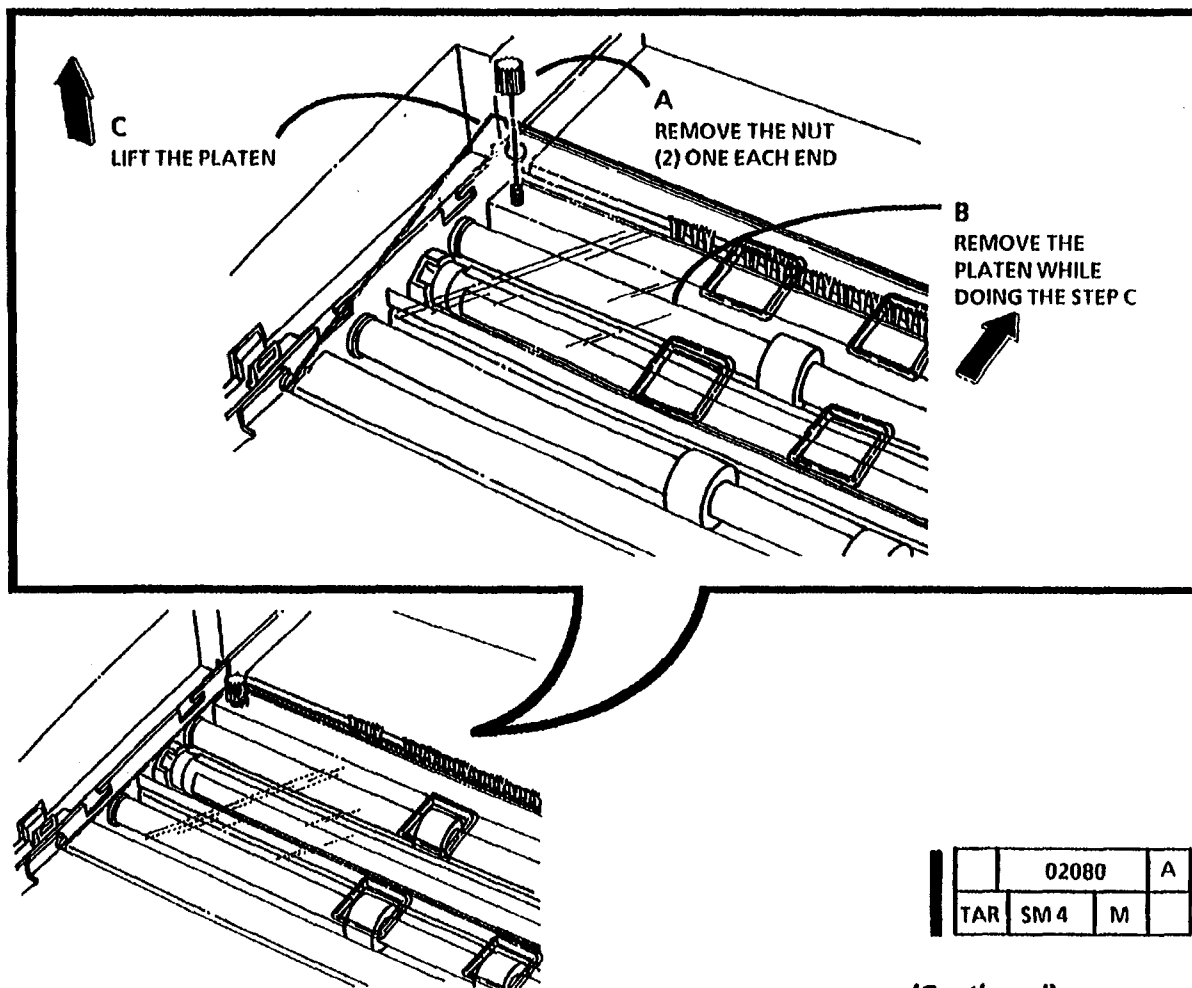


Figure 1. Remove the Platen

(Continued)

(Continued)

5. (Figure 2): Remove the Lens Assembly.

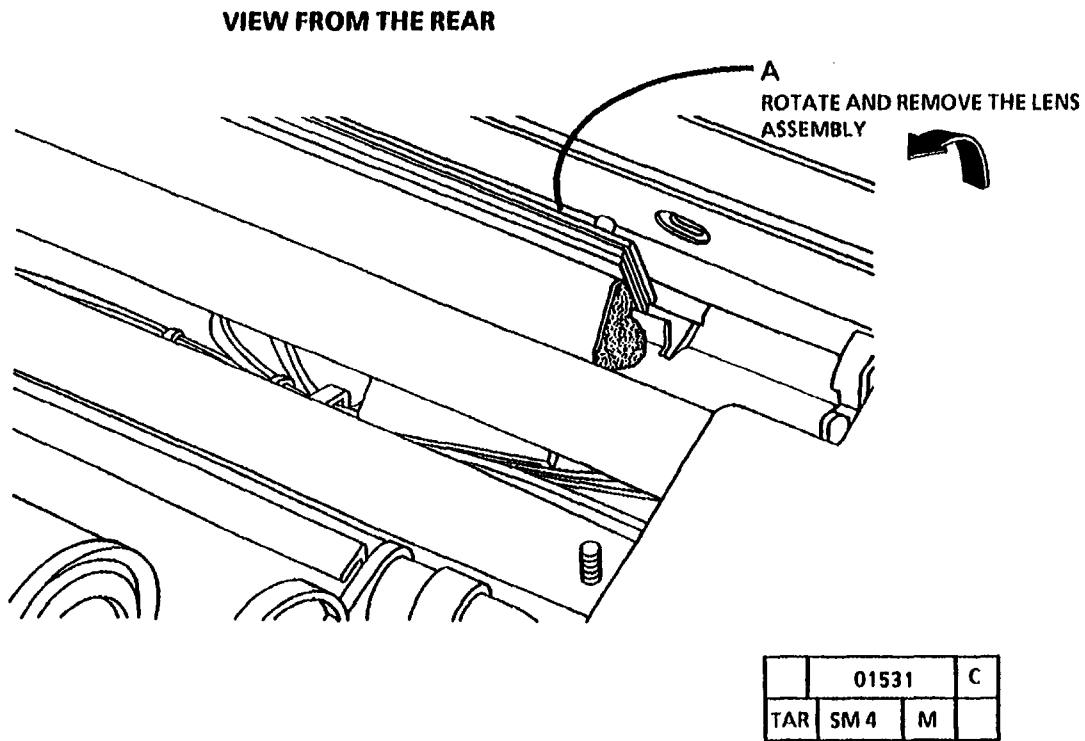


Figure 2. Remove the Lens Assembly

(Continued)

(Continued)

## Replacement

**1** STEP 1 A: Ensure that the pins on the lens are completely installed in the slots in the frame.

1. (Figure 3): Reinstall the Lens Assembly.

2. Reinstall the Exposure Lamp.

**2** Ensure that the exposure lamp is installed correctly. Refer to the Replacement section of REP 6.1.

3. Reinstall the Platen and the Document Handler.

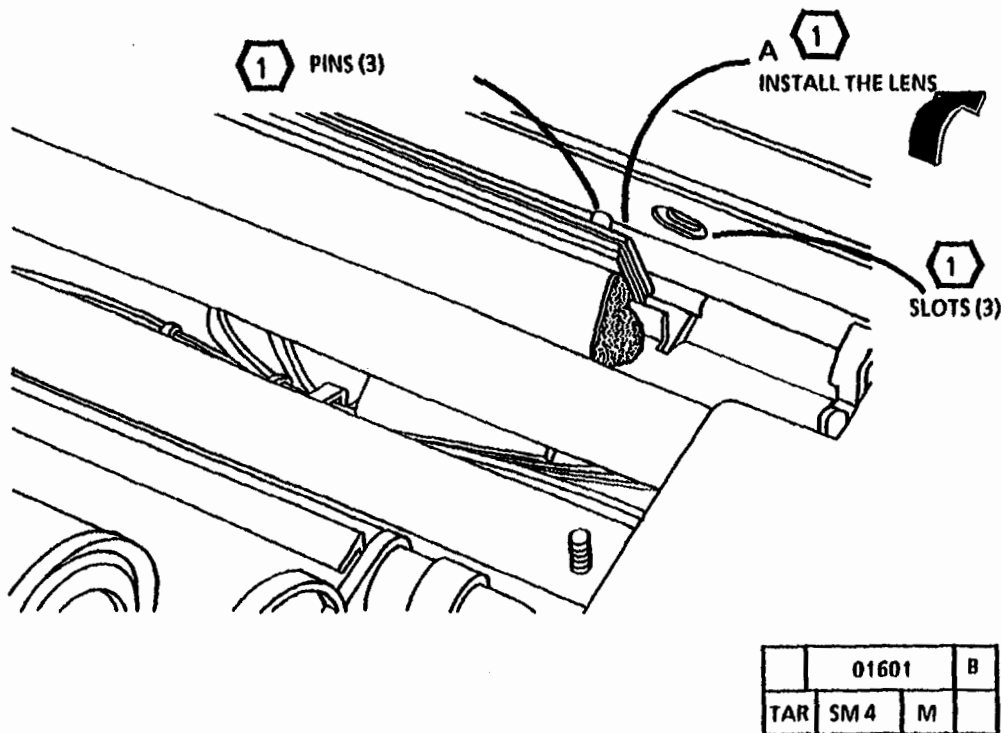


Figure 4. Reinstall the Lens Assembly

## REP 6.3 Illumination Sensor

### Parts List on PL 6.1

### Removal

1. **Warning: Disconnect the power cord.**
2. Rotate the Control Console and remove the Document Handler.

3. (Figure 1): W/ Tag/MOD 2: Remove the Platen.

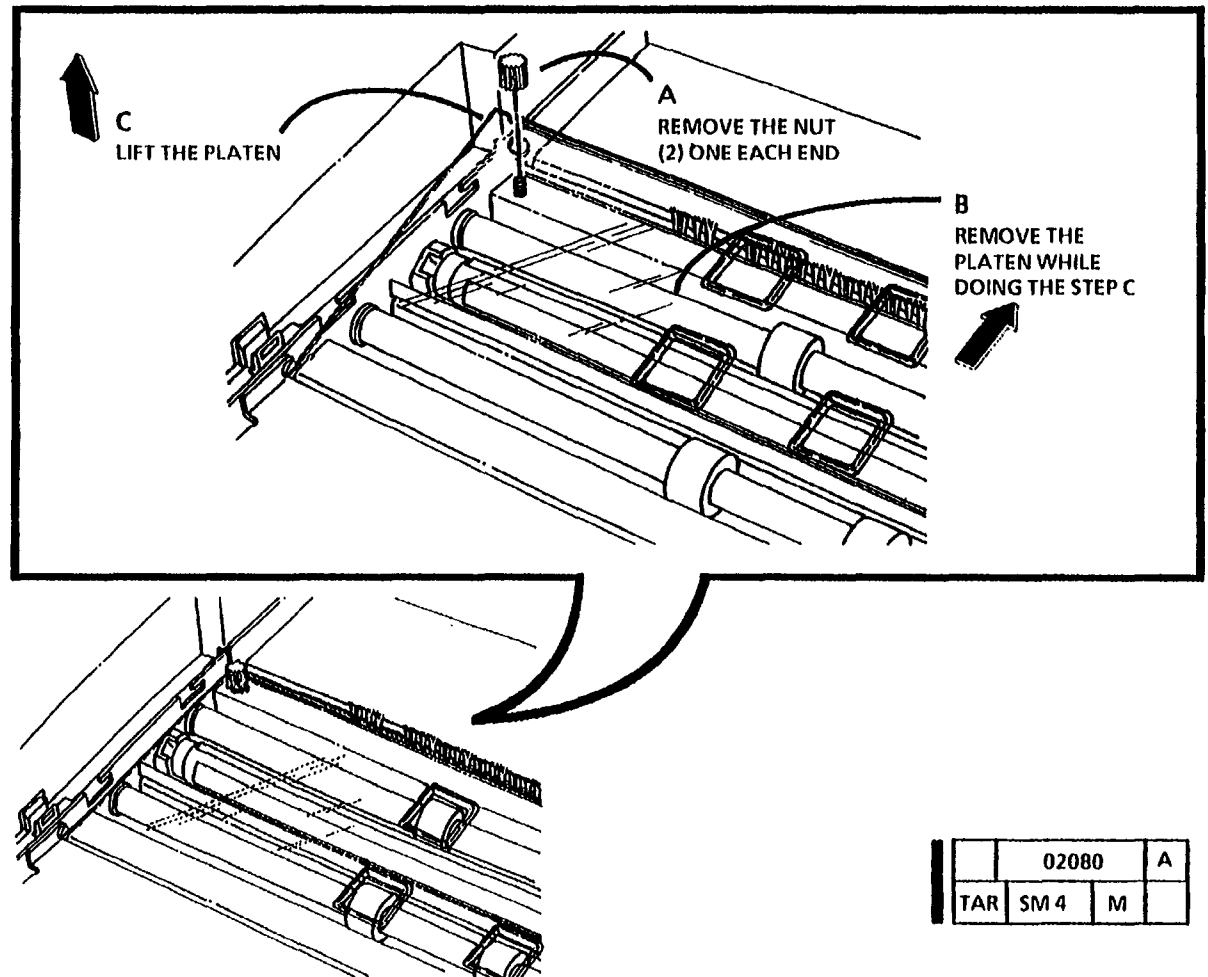
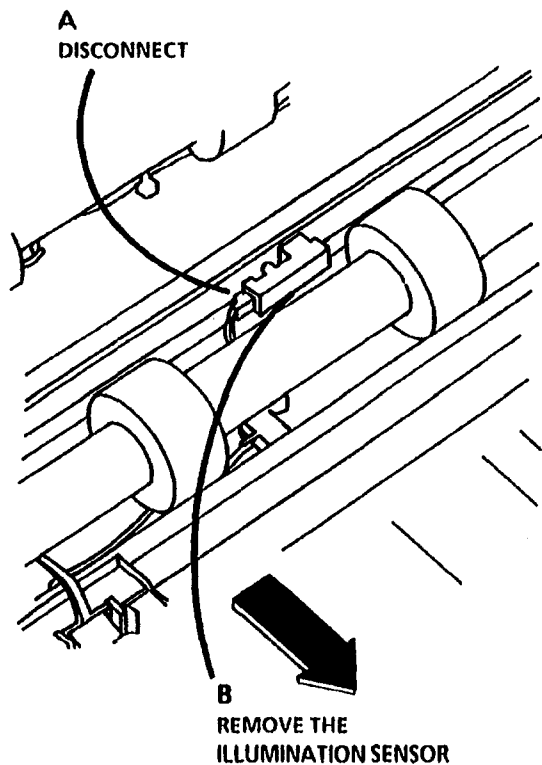


Figure 1. Remove the Platen

(Continued)

(Continued)

4. (Figure 2): Remove the Illumination Sensor.



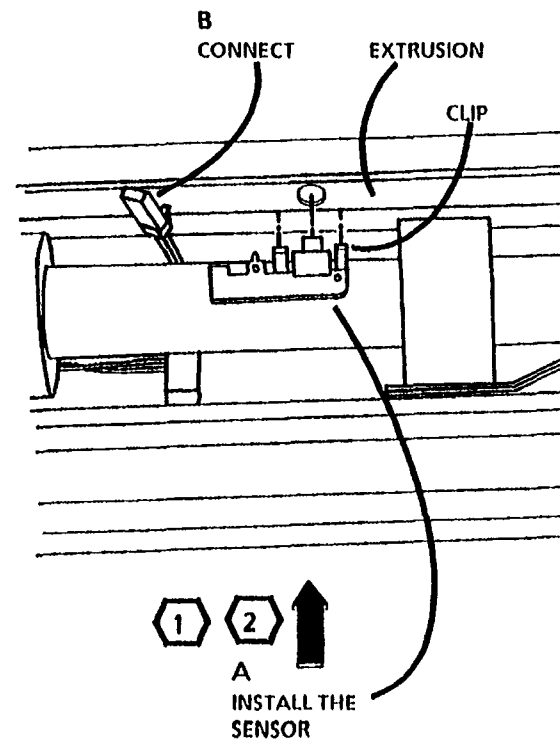
	01857	A
TAR	SM 4	M

Figure 2. Remove the Illumination Sensor

## Replacement

- 1 STEP 1 A: Ensure that the sensor is centered in the opening in the extrusion.
- 2 STEP 1 A: Ensure that the clips are fastened under the extrusion.

1. (Figure 3): Reinstall the Illumination Sensor.
2. The remainder of the replacement is a reversal of the removal.



	01858	A
TAR	SM 4	M

Figure 3. Reinstall the Illumination Sensor

## REP 6.4 Reflector Assembly

### Parts List on PL 6.1

### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the following:
  - a. Document Drive Rolls (REP 5.2)
  - b. Exposure Lamp (REP 6.1)
  - c. Lens Assembly (REP 6.2)
  - d. Illumination Sensor (REP 6.3)

**1** STEP 3 A: When removing the screws, use caution that the retainer does not fall into the copier.

3. (Figure 1): Remove the retaining clip and pins.

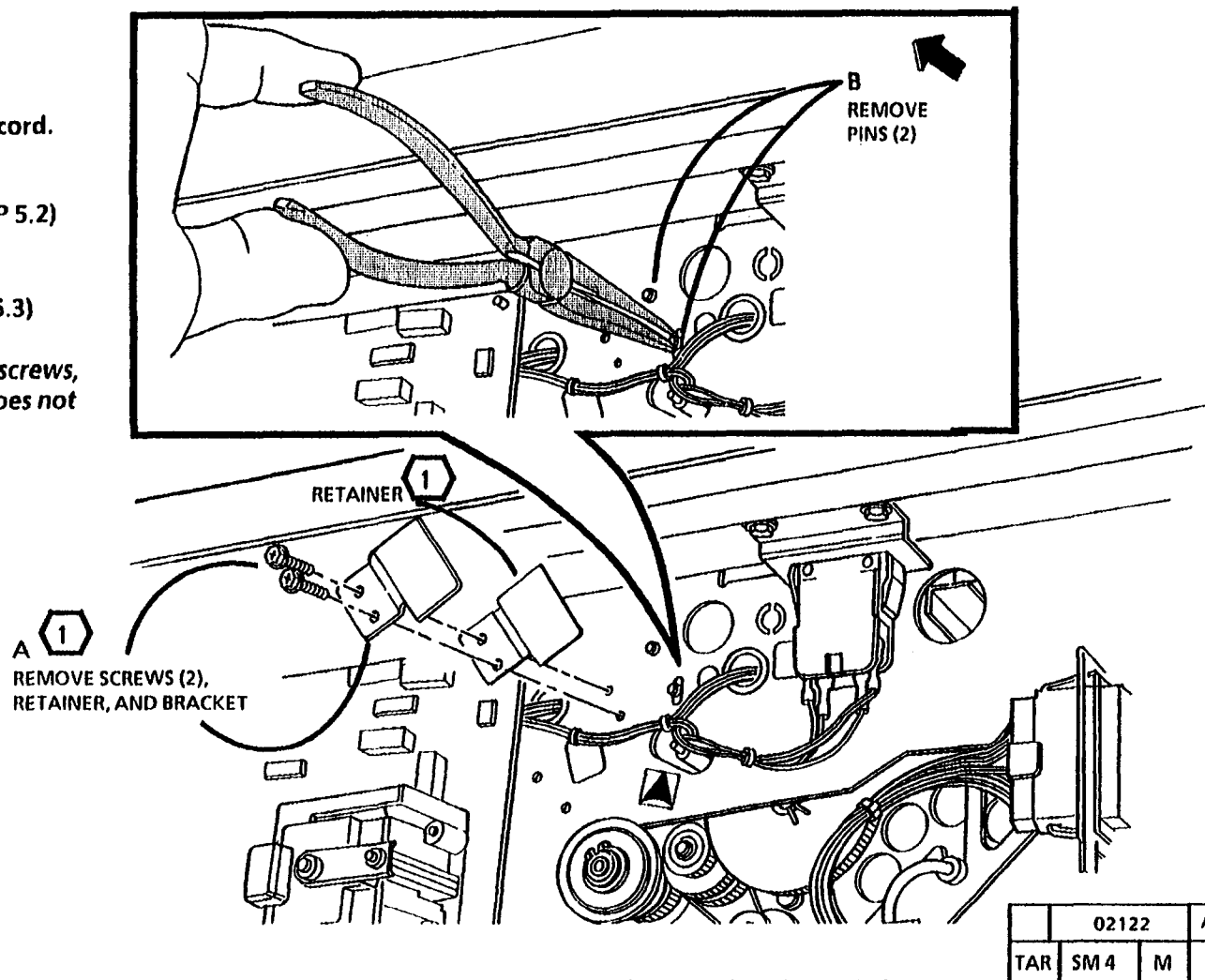


Figure 1. Remove the retaining clip and pins

(Continued)

(Continued)

4. (Figure 2): Remove the Reflector Assembly.

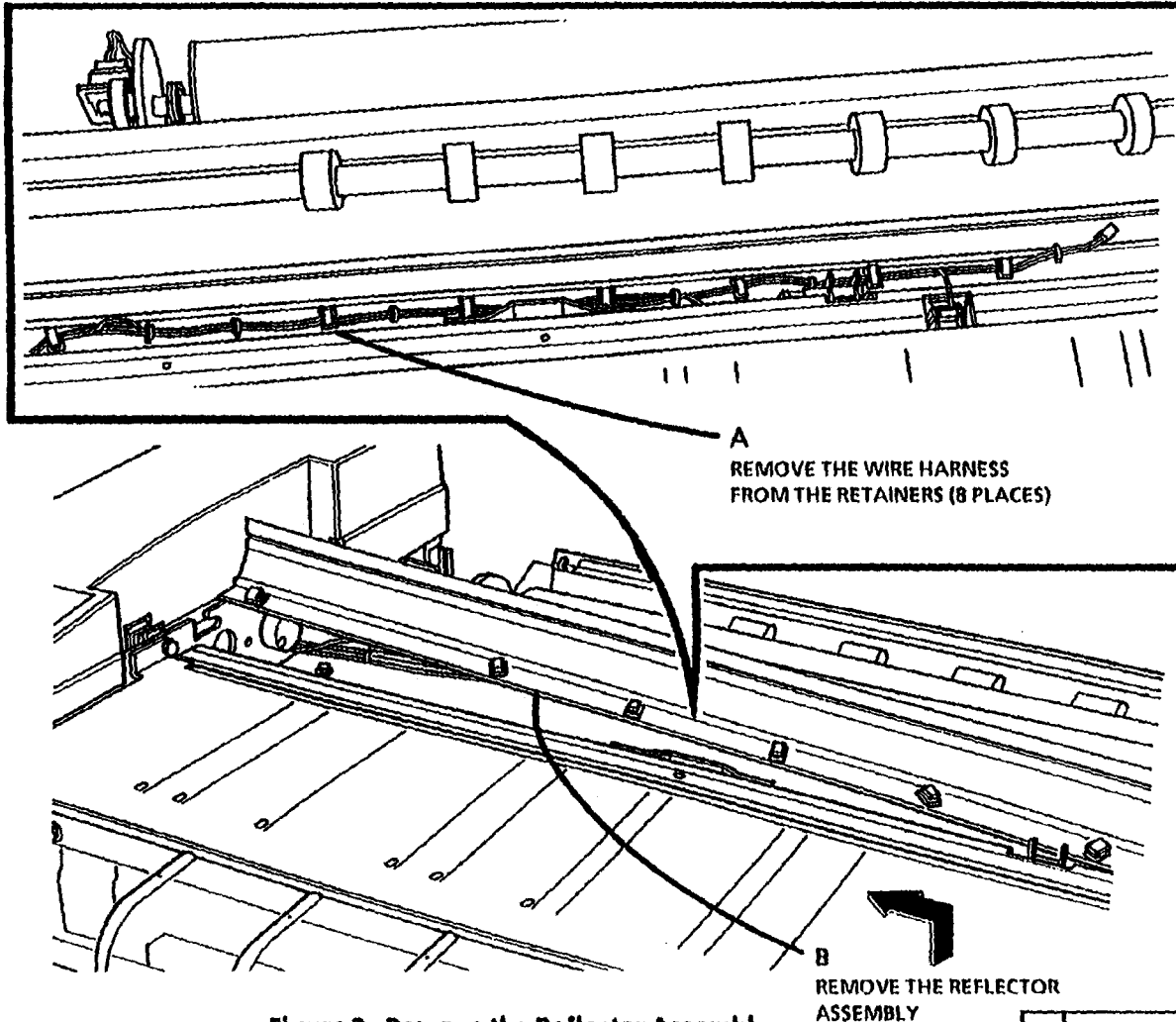


Figure 2. Remove the Reflector Assembly

	02123	A
TAR	SM 4	M

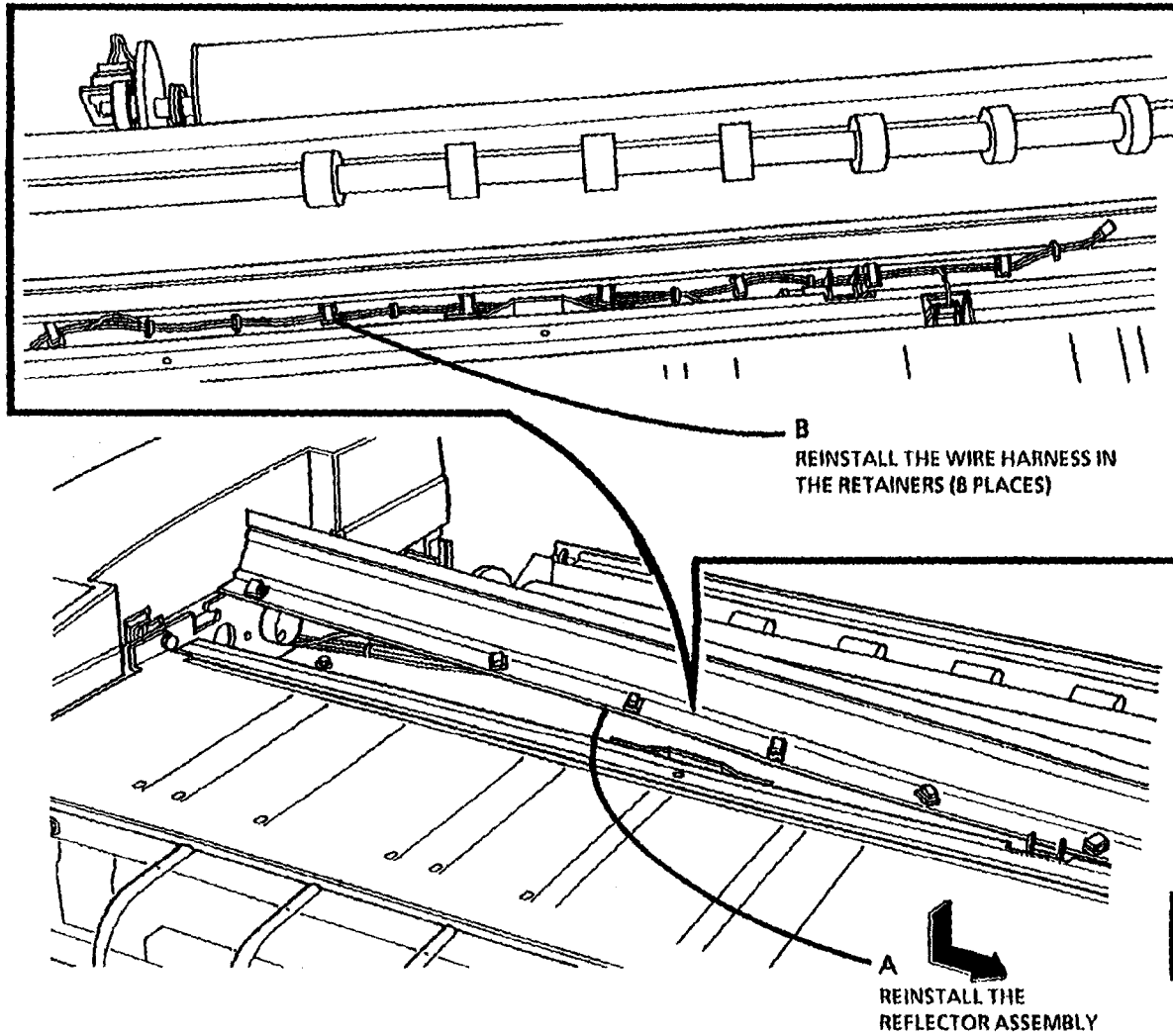
(Continued)



(Continued)

## Replacement

1. (Figure 3): Reinstall the Reflector Assembly.



(Continued)

Figure 3. Reinstall the Reflector Assembly

(Continued)

**2** STEP 2 A: Install the pins through the frame and into the holes in the end of the Reflector Assembly.

2. (Figure 4): Reinstall the pins and the retaining clip.

3. Reinstall the following:

- a. Illumination Sensor (REP 6.3)
- b. Lens Assembly (REP 6.2)
- c. Exposure Lamp (REP 6.1)
- d. Document Drive Rolls (REP 5.2)

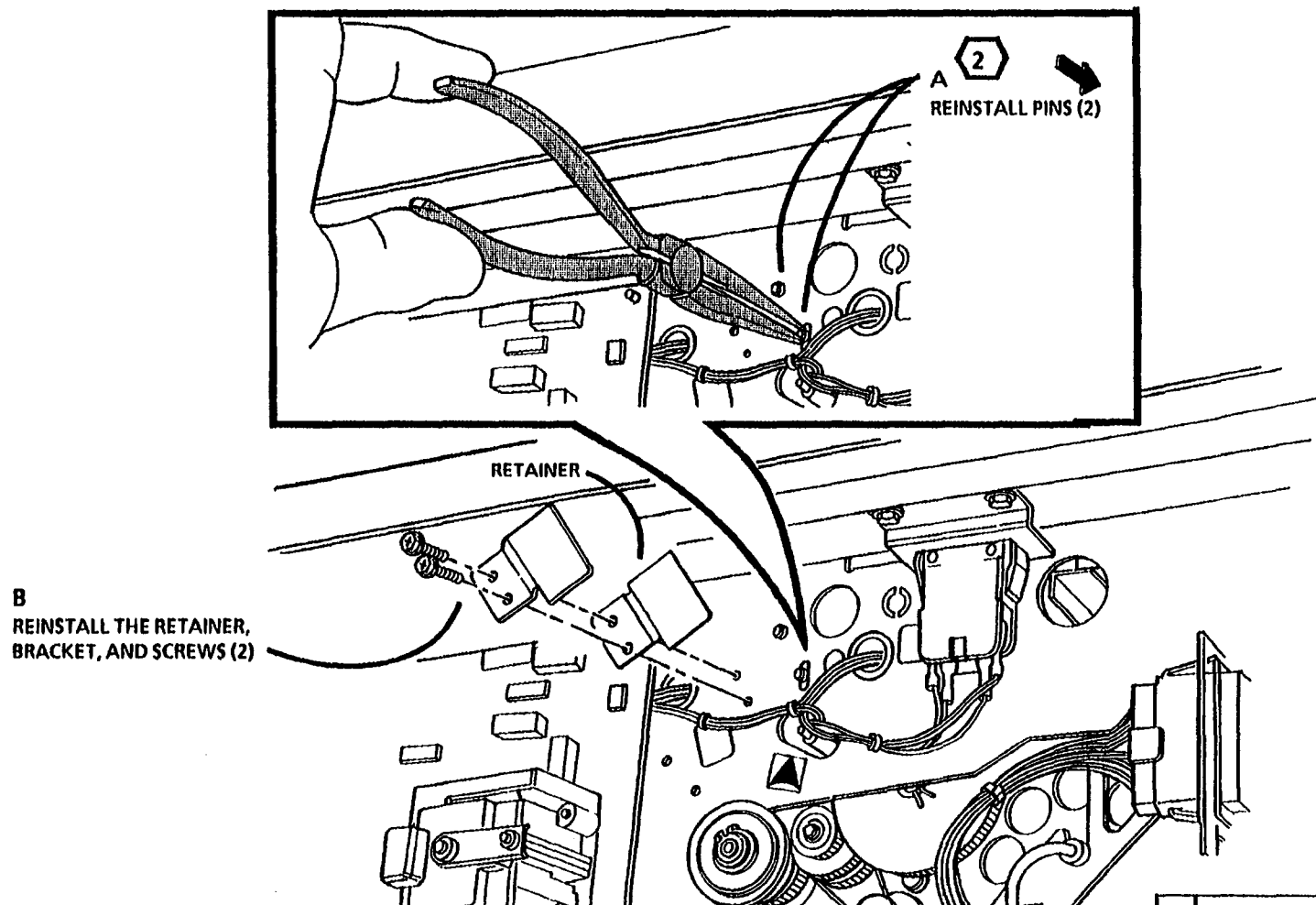


Figure 4. Reinstall the pins and the retaining clip

	02122	B
TAR	SM 4	M

## REP 7.1 Roll Supply Drawer

### Parts List on PL 7.1

### Removal

**1** All three Roll Supply Drawer Assemblies are removed the same way. Roll supply Drawer Assembly three (3) is shown.

1. **Warning:** Disconnect the power cord.
2. Open the Media Supply Doors.
3. Pull the Roll Supply Drawer out and remove the roll of media.
4. (Figure 1): Remove the Roll Supply Drawer.

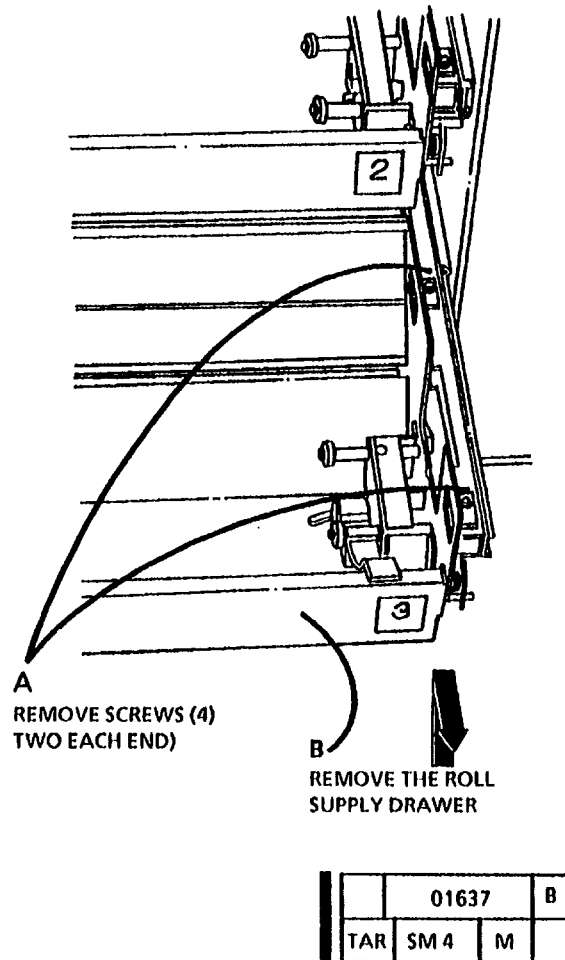


Figure 1. Remove the Roll Supply Drawer

## REP 7.2 Rewind Gear and Rewind Internal Gear

### Parts List on PL 7.3

#### Removal

1. **Warning: Disconnect the power cord.**
2. Open the Media Supply Doors.

3. Pull the Roll Supply Drawer Assembly out and remove the roll of media.
4. (Figure 1): Remove the Gears.

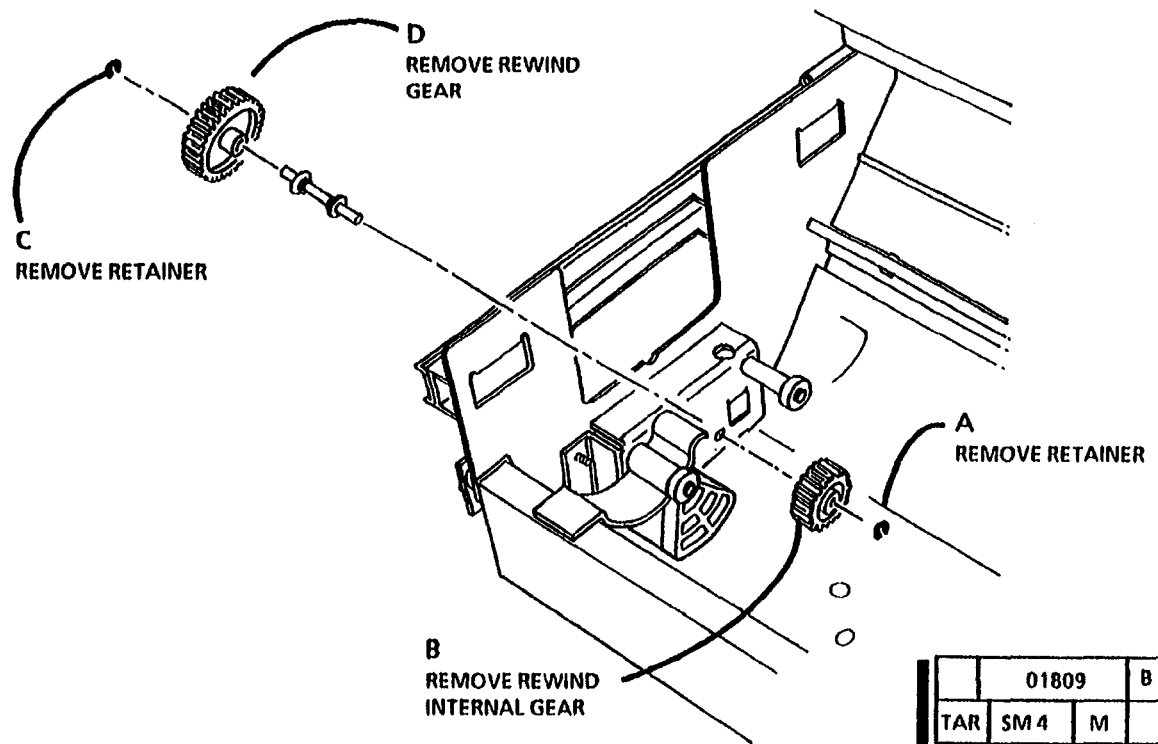


Figure 1. Remove the Rewind Gears

## REP 7.3 Roll Feed Pinch Rolls

### Parts List on PL 7.5

### Removal

1. **Warning:** Disconnect the power cord.
2. Open the Media Supply Doors.
3. Pull out the Media Supply Drawer on which the Pinch Rolls are being repaired.
4. Remove the roll of media.

5. (Figure 1): Remove the Roll Feed Pinch Rolls.

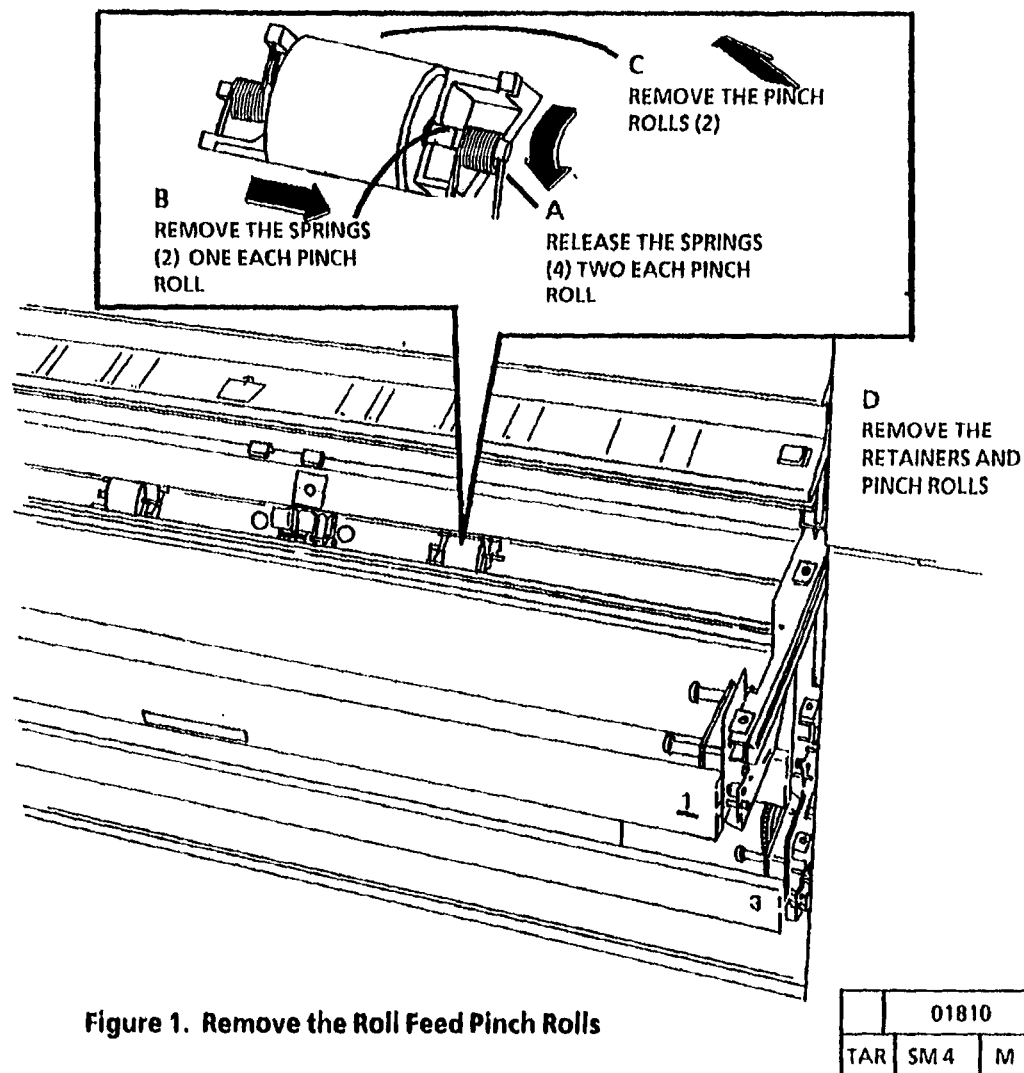


Figure 1. Remove the Roll Feed Pinch Rolls

	01810	A
TAR	SM 4	M

## REP 7.4 Roll Feed Drive Rolls

### Parts List on PL 7.1

### Removal

1. **Warning:** Disconnect the power cord.
2. Open the Media Supply Doors.

3. Pull out the Media Supply Drawer required to access the roll being repaired.
4. Remove the roll of media.
5. Remove the Roll Supply Drawer (REP 7.1).
6. Remove the Feed Clutch of the roll being repaired (CL 2, 4, 6) (REP 7.5).

1

All three Feed Drive Rolls are removed the same way. The Drive Roll for the Supply Drawer number 1 is shown.

6. (Figure 1): Remove the Roll Feed Drive Rolls.

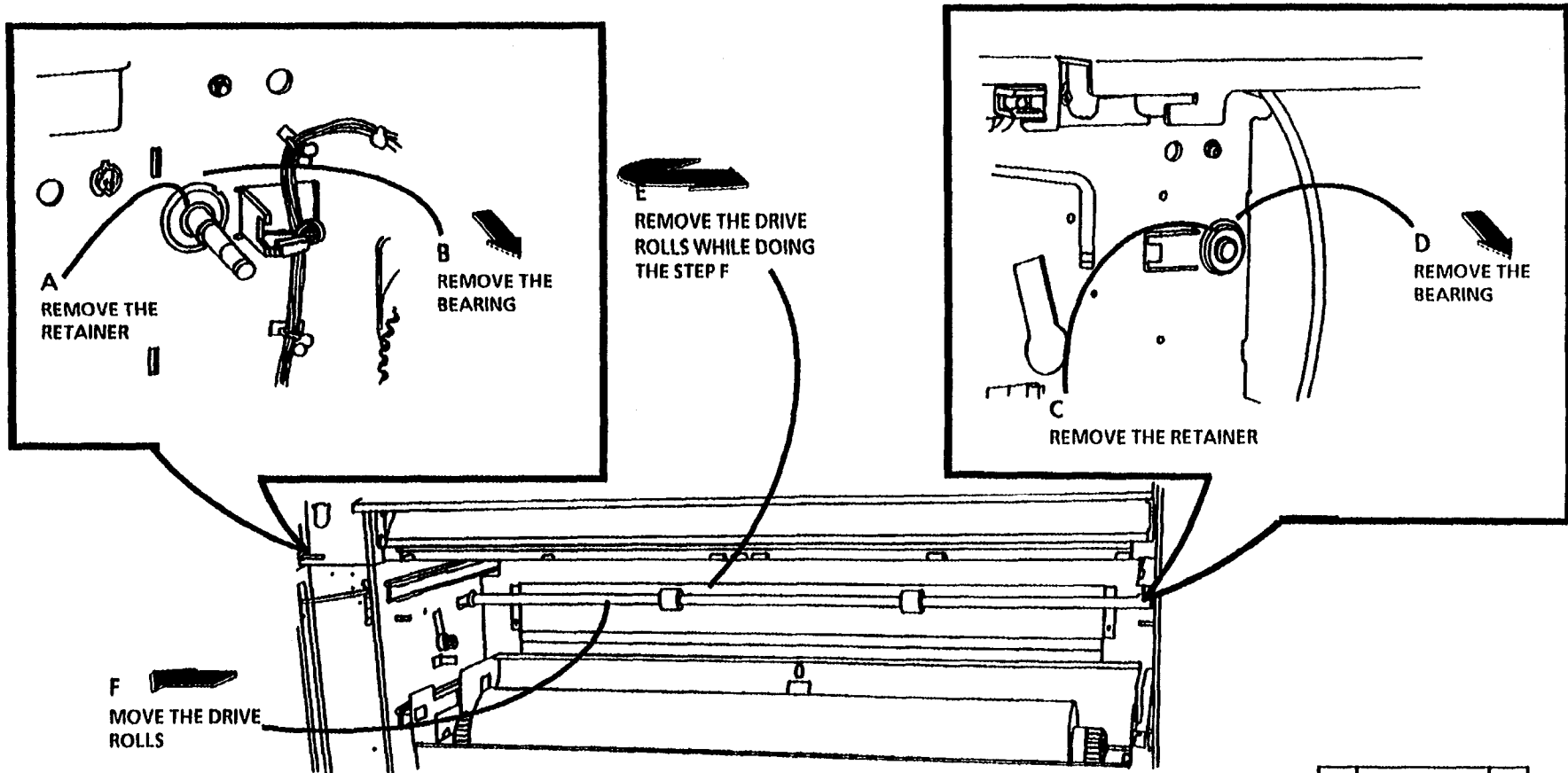


Figure 1. Remove the Roll Feed Drive Rolls

	01859	A
TAR	SM 4	M

# REP 7.5 Feed Clutch (CL 2, 4, 6)

## Parts List on PL 7.2

### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the Left Side Door (REP 14.1).
- 3, (Figure 1): Remove the Clutch.

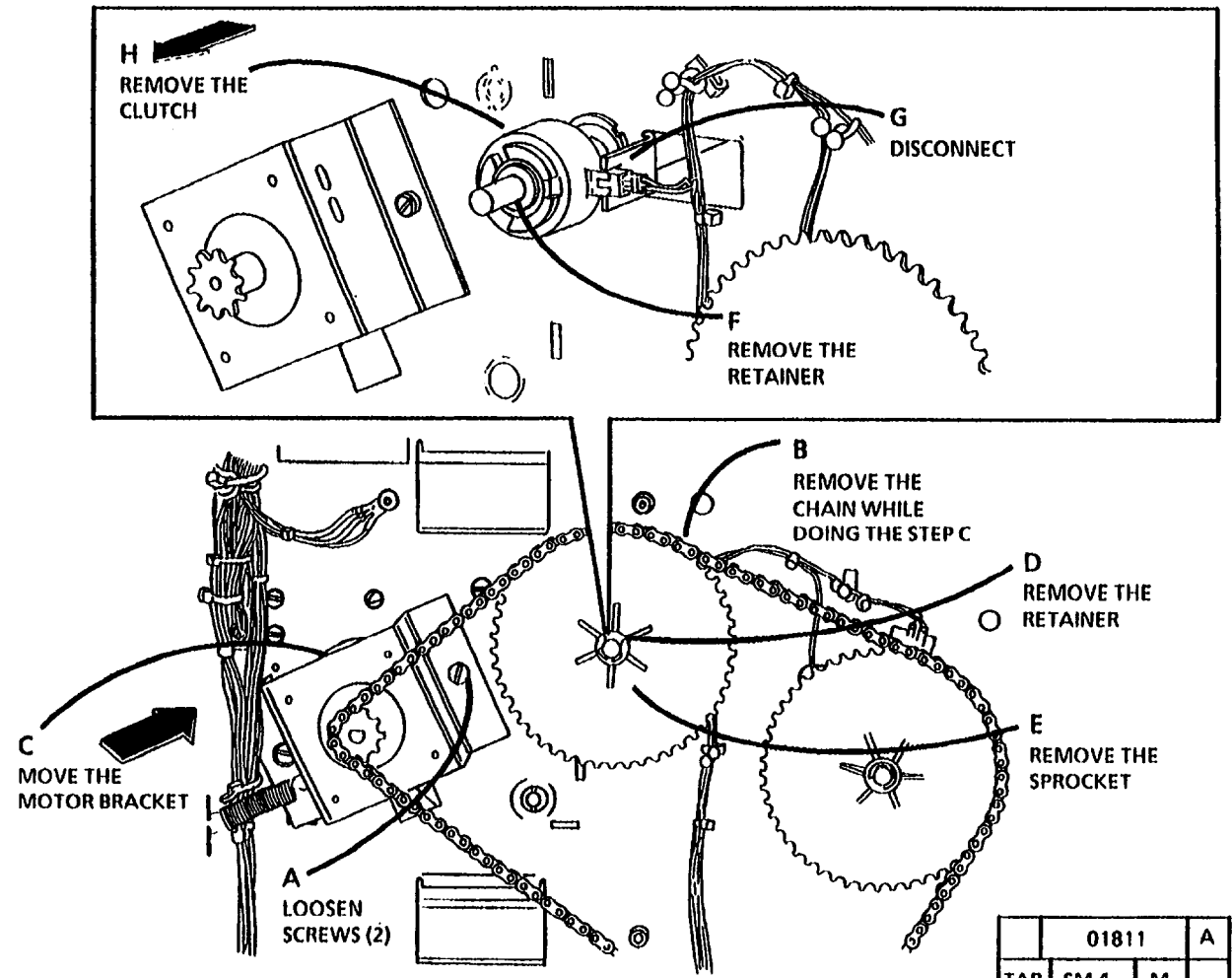


Figure 1. Remove the Clutch

## REP 7.6 Rewind Clutch (CL 1, 3, 5)

### Farts List on PL 7.2

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Left Side Door (REP 14.1).
3. (Figure 1): Remove the Clutch.

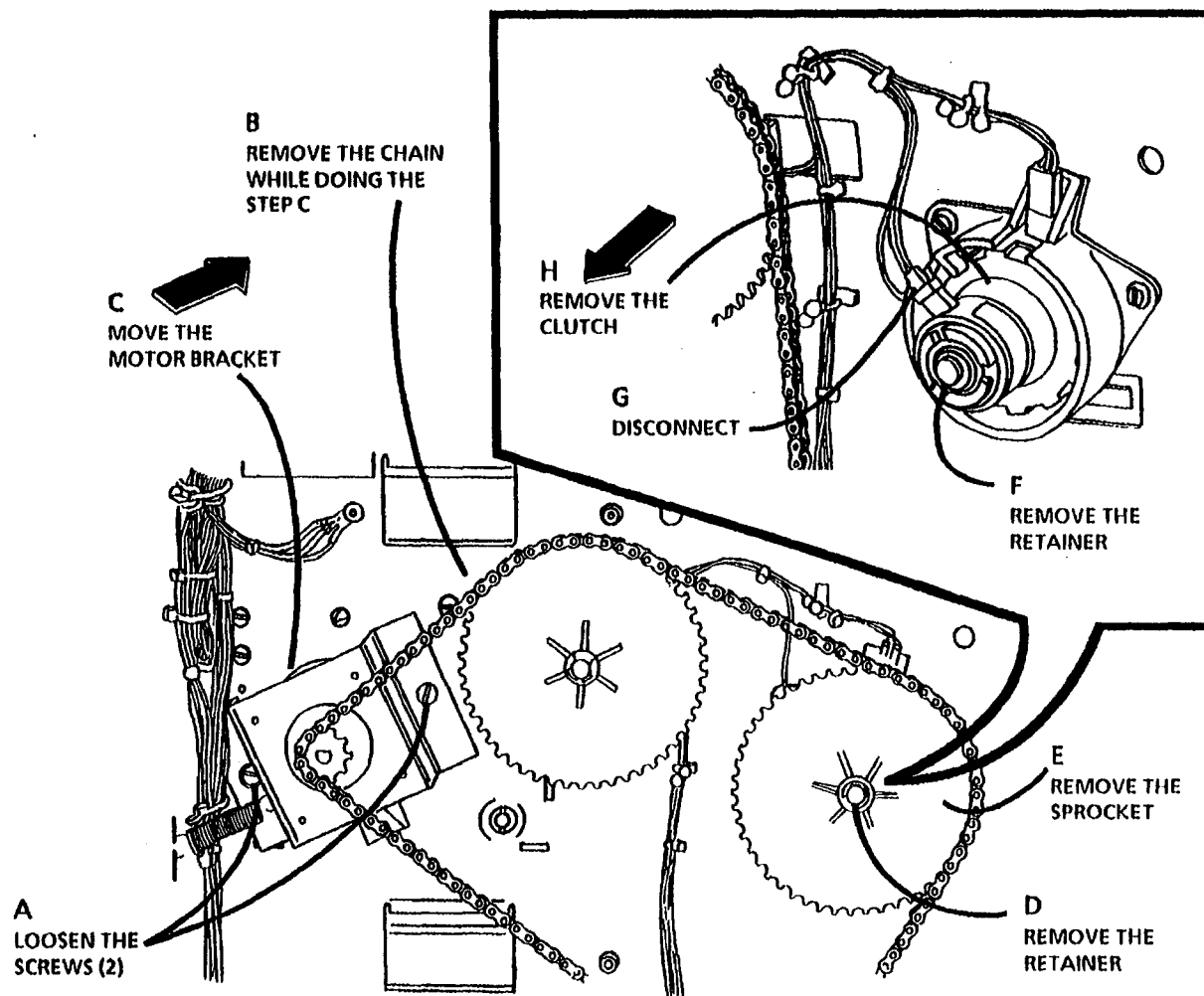


Figure 1. Remove the Clutch

	01862	A
TAR	SM 4	M



## REP 7.7 Motion Sensor

### Parts List on PL 7.2

#### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Left Side Door (REP 14.1).

3. Remove the Rewind Clutch (CL 1, 3, 5) (REP 7.6).
4. (Figure 1): Remove the Motion Sensor.

#### Replacement

1. Install the Motion Sensor and the Rewind Housing.
2. (Figure 2): Install the Encoder Disk.
3. Reinstall the Clutch.
4. The remainder of the replacement is a reversal of the removal.

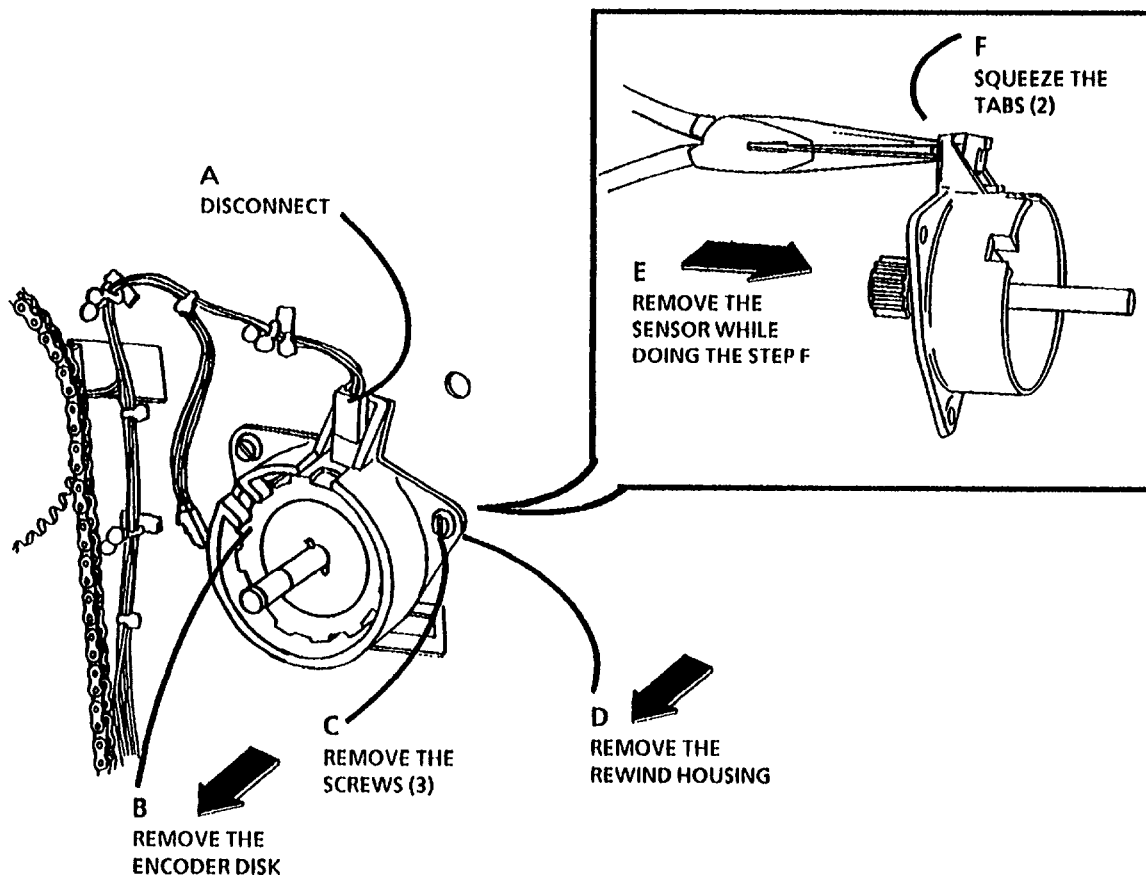


Figure 1. Remove the Encoder Sensor

	01863	A	
TAR	SM 4	M	

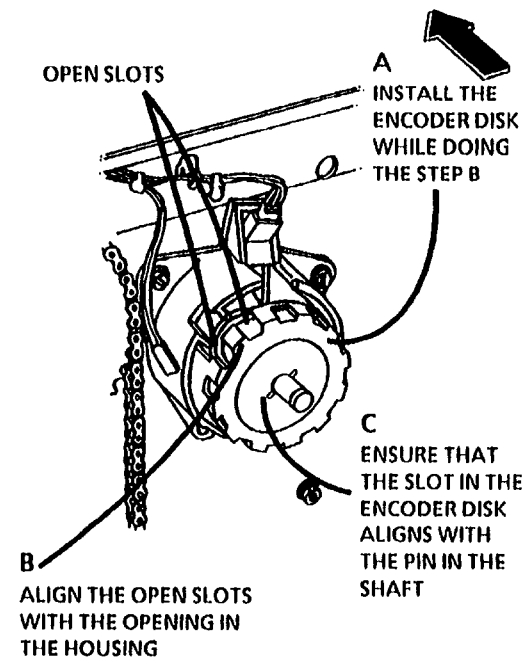


Figure 2. Install the Encoder

	01865	A	
TAR	SM 4	M	

## REP 7.8 Rewind Housing

### Parts List on PL 7.2

#### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the Left Side Door (REP 14.1).
3. Remove the following:
  - a. Rewind Clutch (CL 1, 3, 5) (REP 7.6)
  - b. Motion Sensor (REP 7.7)

4. (Figure 1): Remove the Rewind Housing.

#### Replacement

1. Reinstall the following:
  - a. Rewind Housing
  - b. Motion Sensor (REP 7.7)
  - c. Rewind Clutch (CL 1, 3, 5)

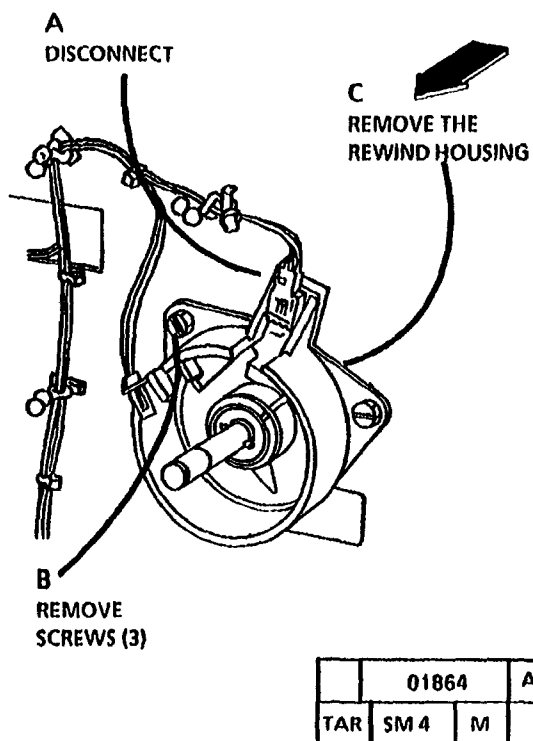


Figure 1. Remove the Rewind Housing

# REP 7.9 Roll Drive Motor

## Parts List on PL 7.2

### Removal

1. **Warning:** Disconnect the power cord.

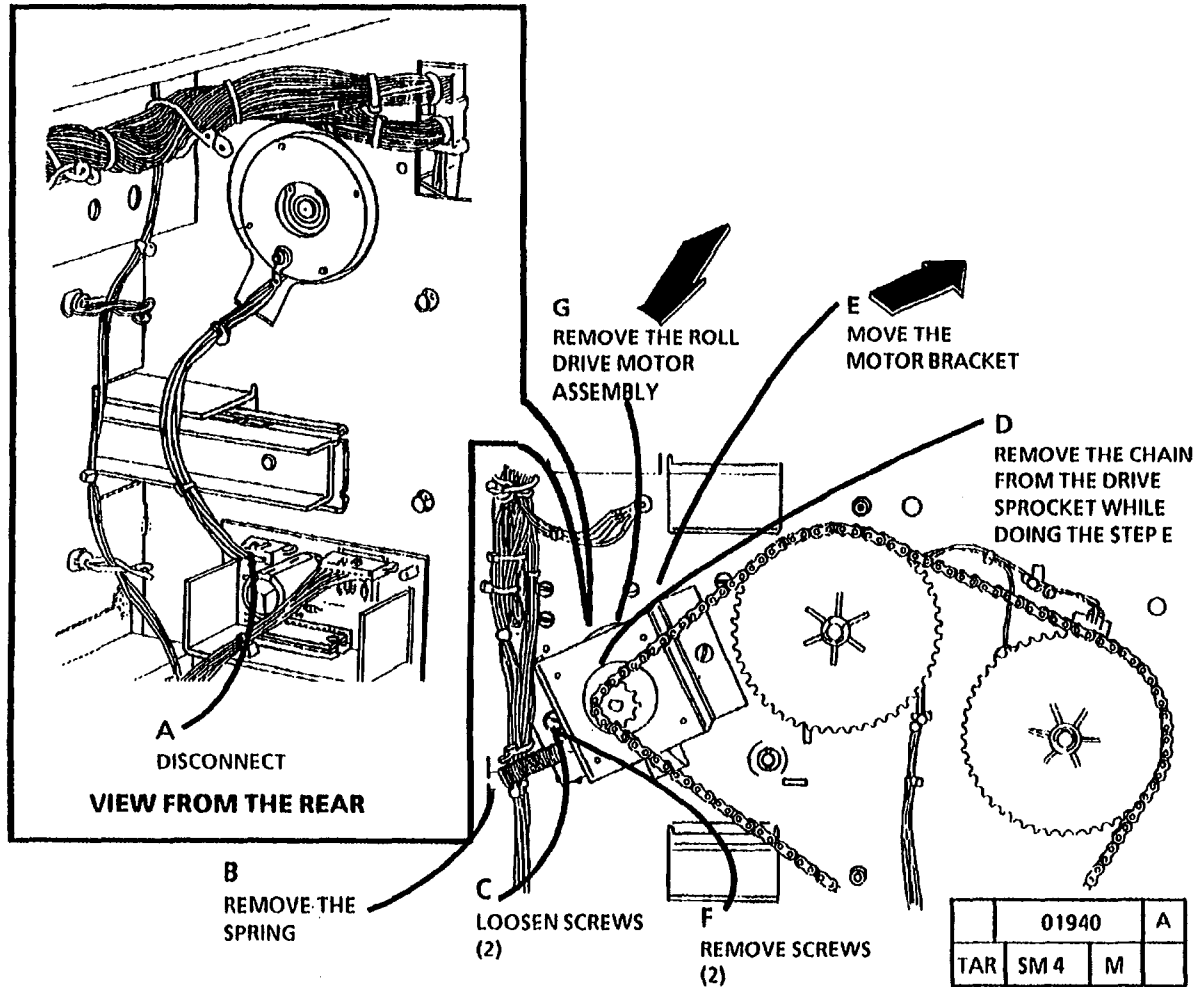
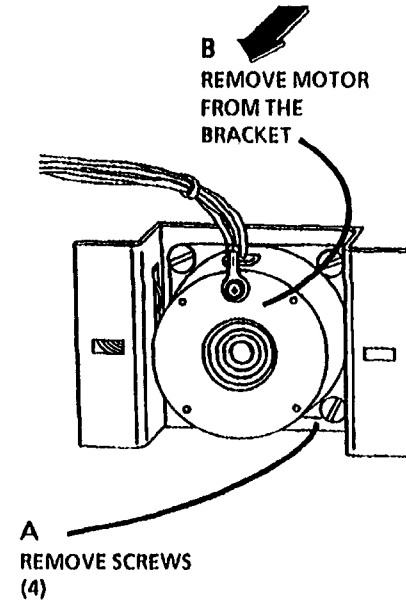


Figure 1. Remove the Roll Drive Motor Assembly

2. Remove the Left Side Door (REP 14.1).
3. (Figure 1): Remove the Roll Drive Motor Assembly.

4. (Figure 2): Remove the Motor from the Bracket.



	01868	A
TAR	SM 4	M

Figure 2. Remove the Motor from the Bracket

## REP 7.10 Media Roll Heater

6. (Figure 1): Remove the Media Roll Heater.

### Parts List on PL 7.2

### Removal

1. **Warning: Disconnect the power cord.**
2. Open the Media Supply Doors.
3. Remove the Roll Supply Drawer 2 (REP 7.1).
4. Pull the bottom Roll Supply Drawer out.
5. Remove the Left Side Door (REP 14.1).

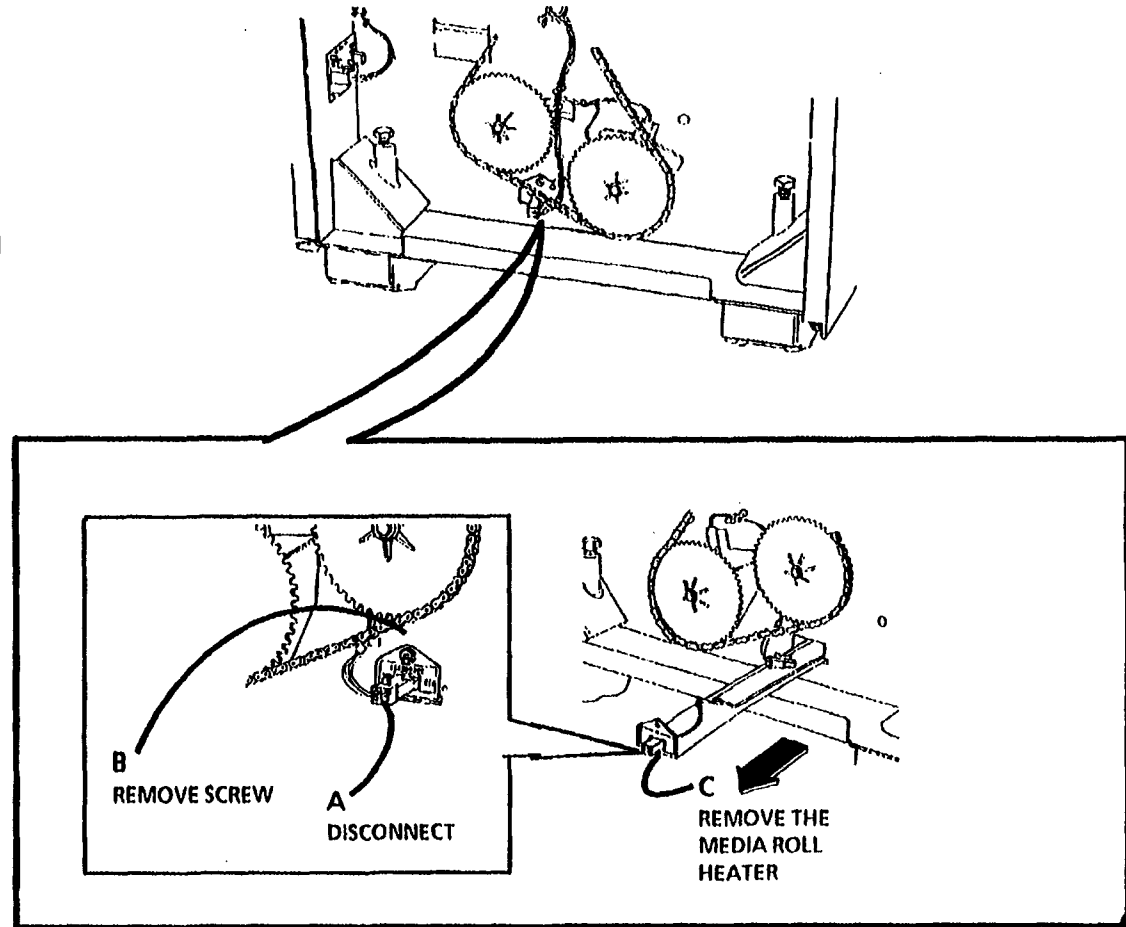


Figure 1. Remove the Media Roll Heater

	01941	C
TAR	SM 4	M

## REP 7.11 Encoder Disk

### Parts List on PL 7.2

#### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the Left Side Door (REP 14.1).

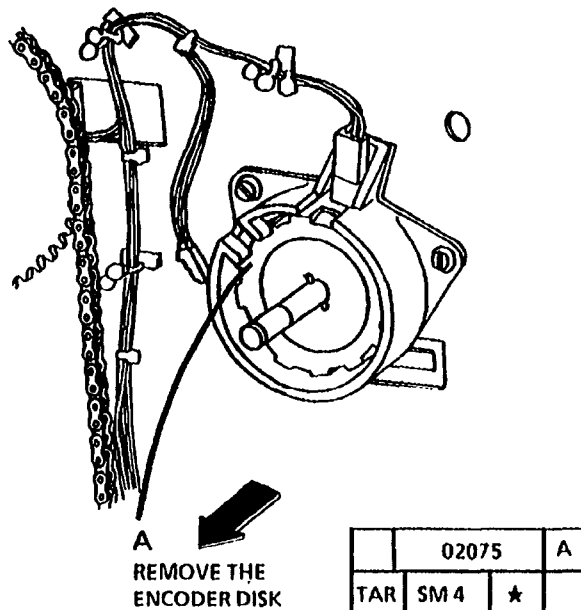


Figure 1. Remove the Encoder

3. Remove the Rewind Clutch (CL 1, 3, 5) (REP 7.6).
4. (Figure 1): Remove the Encoder Disk.

#### Replacement

1. (Figure 2): Install the Encoder Disk.
2. Reinstall the Clutch.
3. The remainder of the replacement is a reversal of the removal.

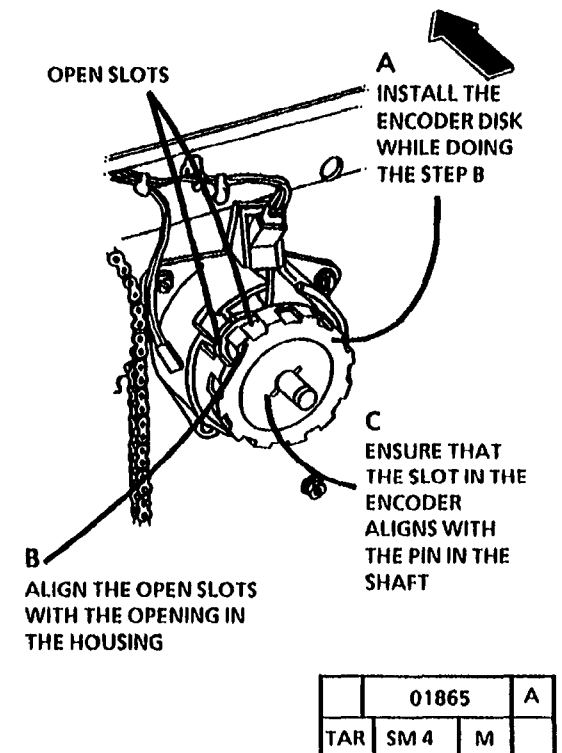


Figure 2. Install the Encoder

# REP 8.1 Media Transport Module

## Parts List on PL 8.1

### Removal

1. **Warning:** Disconnect the power cord.

2. Remove the Left and Right Side Doors (REP 14.1).

**!** *STEP 3: Use caution when removing the xerographic module. The fuser may be hot.*

3. Remove the Xerographic Module (REP 9.1) and store in a safe place.

4. (Figure 1): Prepare to remove the Media Transport Module.

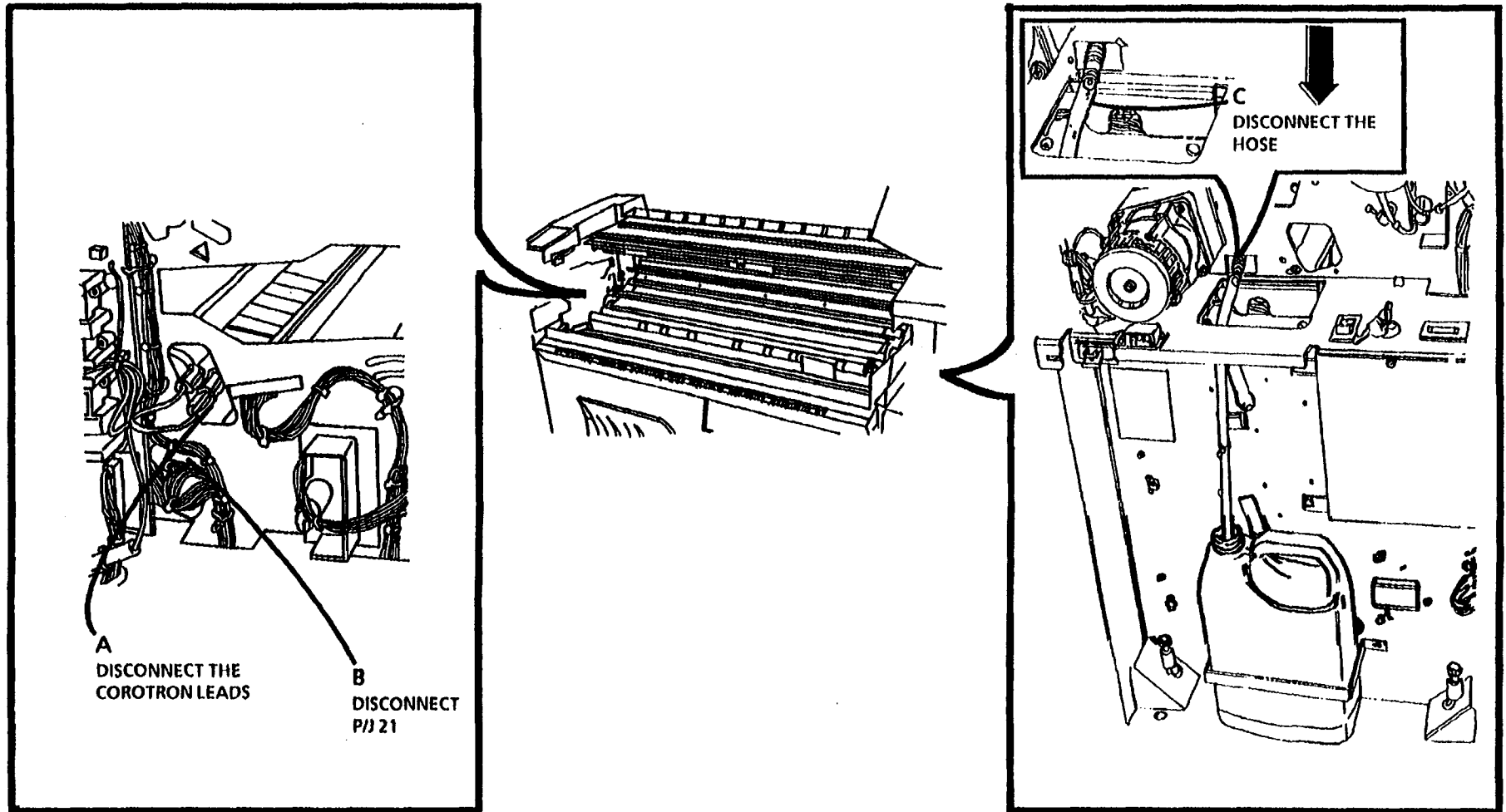


Figure 1. Prepare to Remove the Media Transport Module

	01584	B
TAR	SM 4	M

(Continued)

(Continued)

1 Before removing the Media Transport Assembly, ensure that there is a clean area on which to place the assembly.

5. (Figure 2): Remove the Media Transport Assembly.

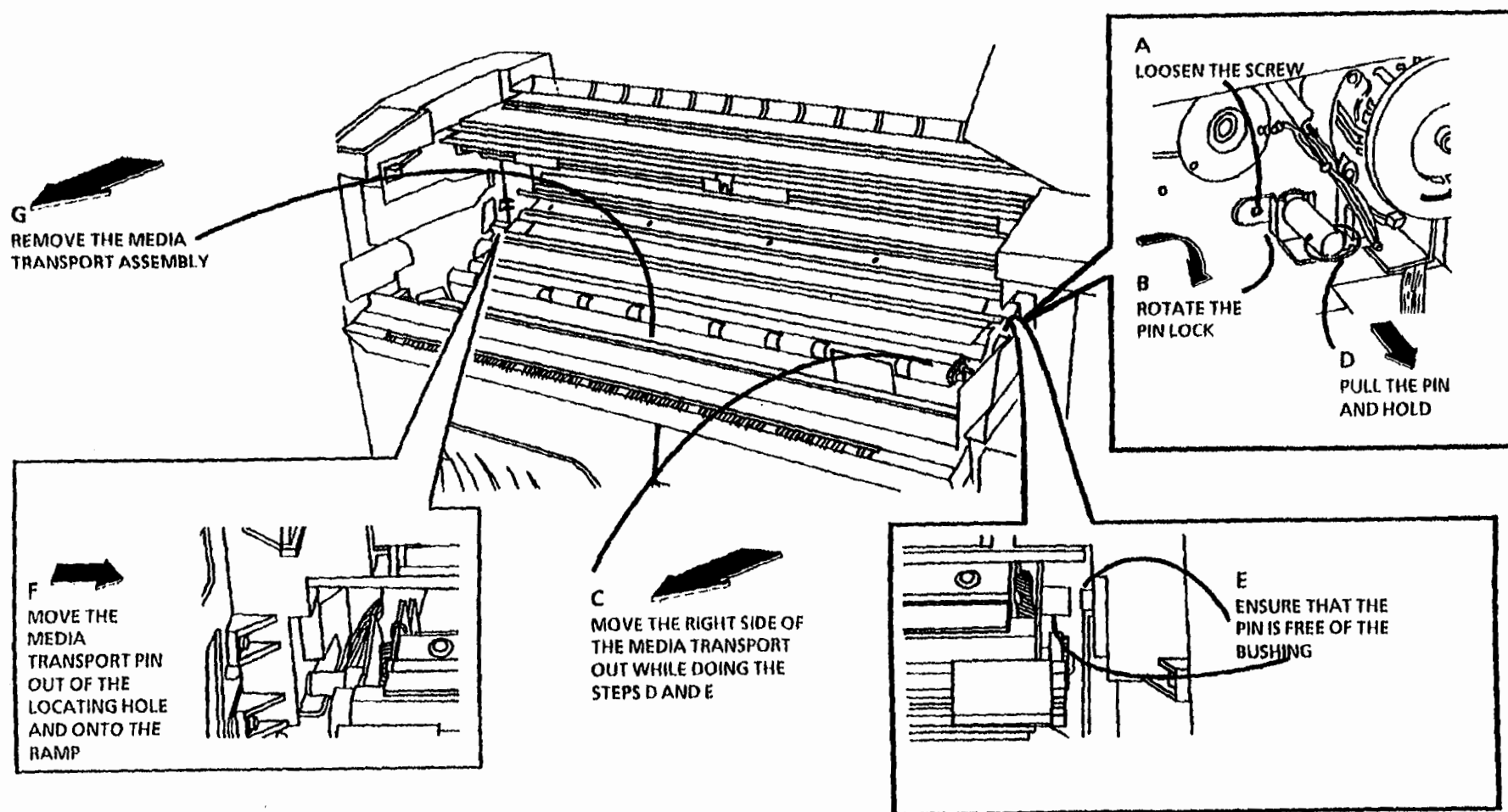


Figure 2. Remove the Media Transport Assembly

	01567	C
TAR	SM 4	M

(Continued)

(Continued)

## Replacement

1. (Figure 3): Install the Media Transport Assembly.

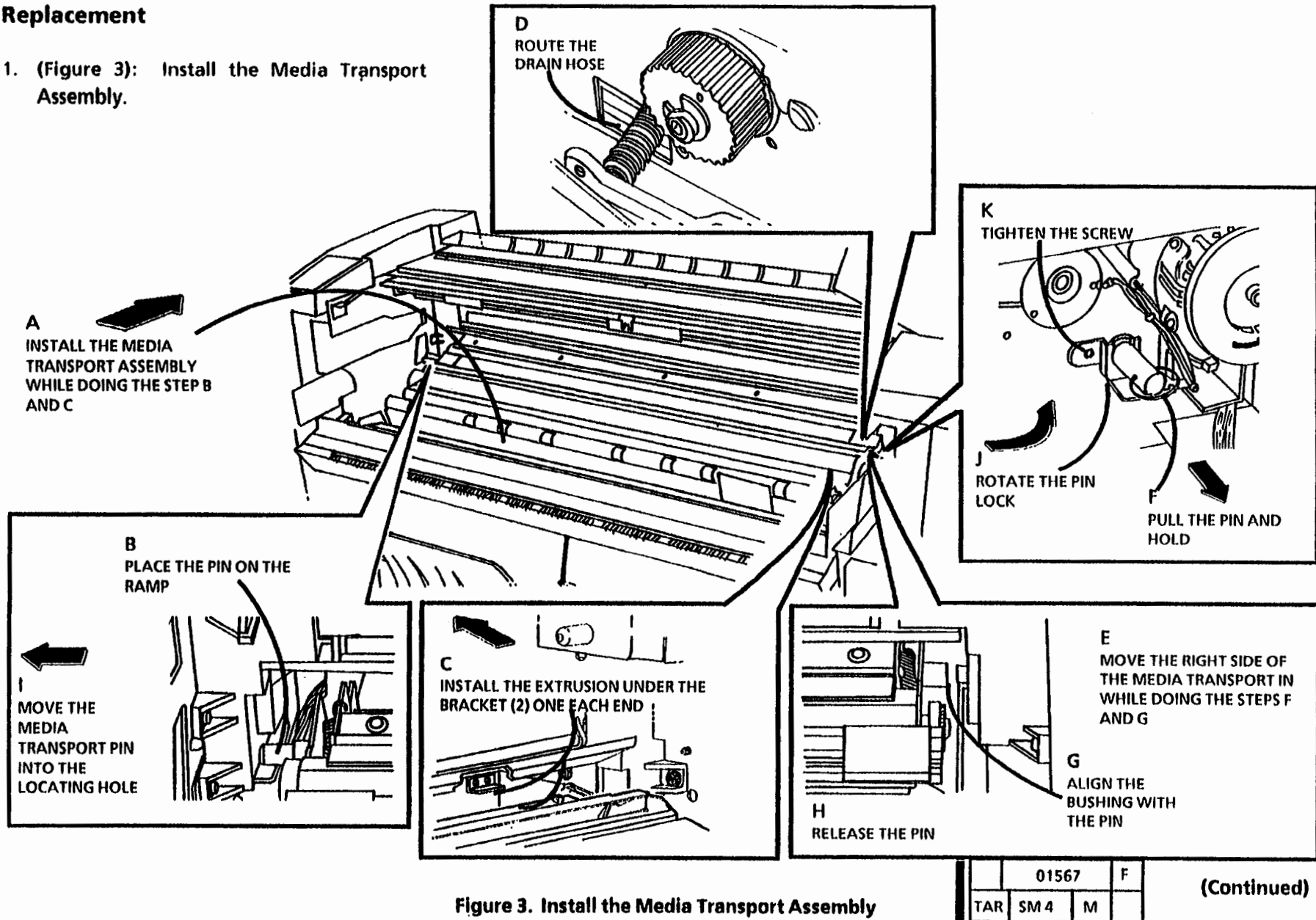


Figure 3. Install the Media Transport Assembly

(Continued)



(Continued)

**ⓘ** **STEP 2A:** Support the media transport up on the latching bars in order to avoid damage to the drain tube, .

2. (Figure 4): Connect the drain hose.
3. The remainder of the replacement is the reverse of the removal procedure.

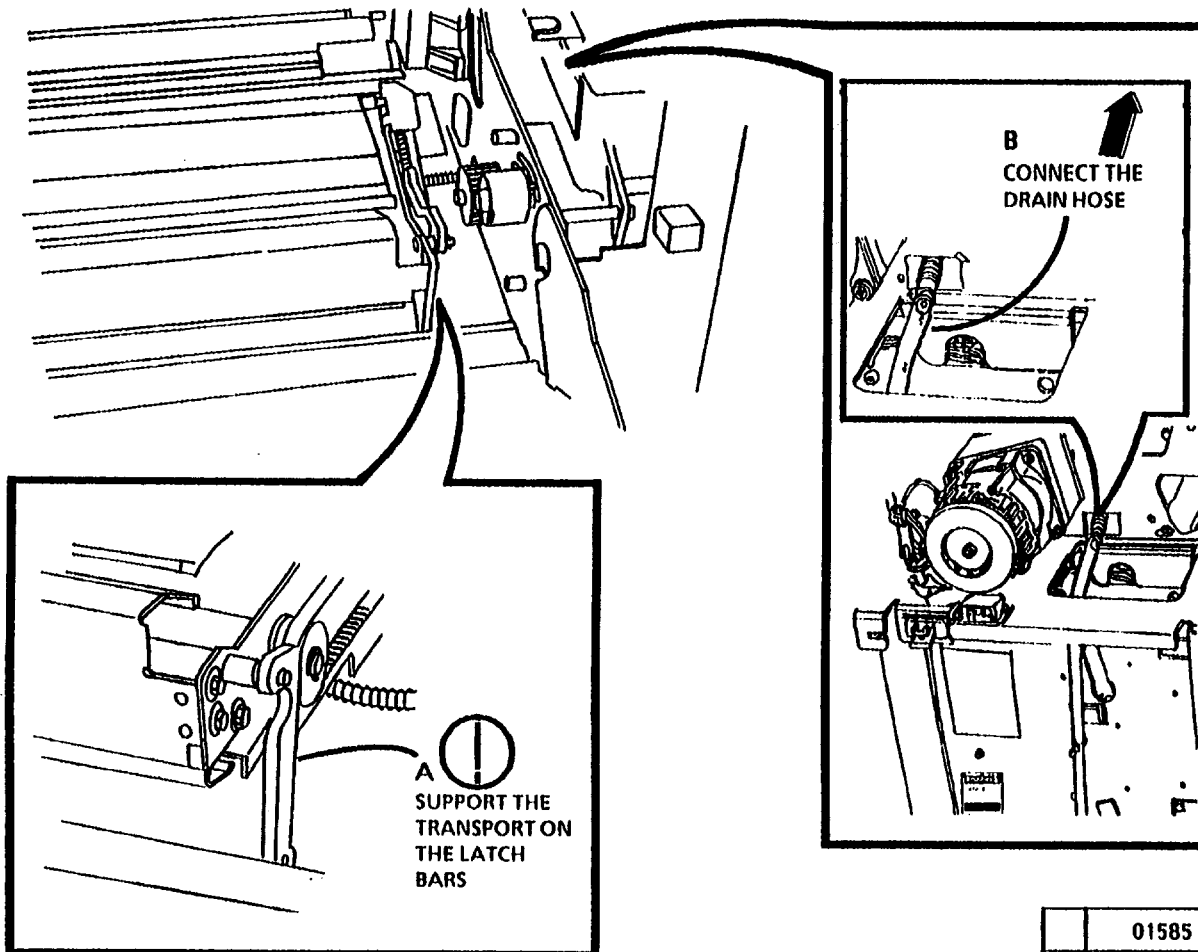


Figure 4 . Install the Drain Hose in the Moisture Collection Bottle

	01585	B
TAR	SM 4	M

## REP 8.2 Media Exit Switch

### Parts List on PL 8.4

#### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the Document Handler and raise the Document Feed-in Shelf.
3. Remove the Right and Left Side Doors (REP 14.1)
4. **STEP 4: Use caution when removing the xerographic module. The fuser may be hot.**
5. Remove Xerographic Module (REP 9.1).
6. Remove Media Transport (REP 8.1).

**!** STEP 4: Use caution when removing the xerographic module. The fuser may be hot.

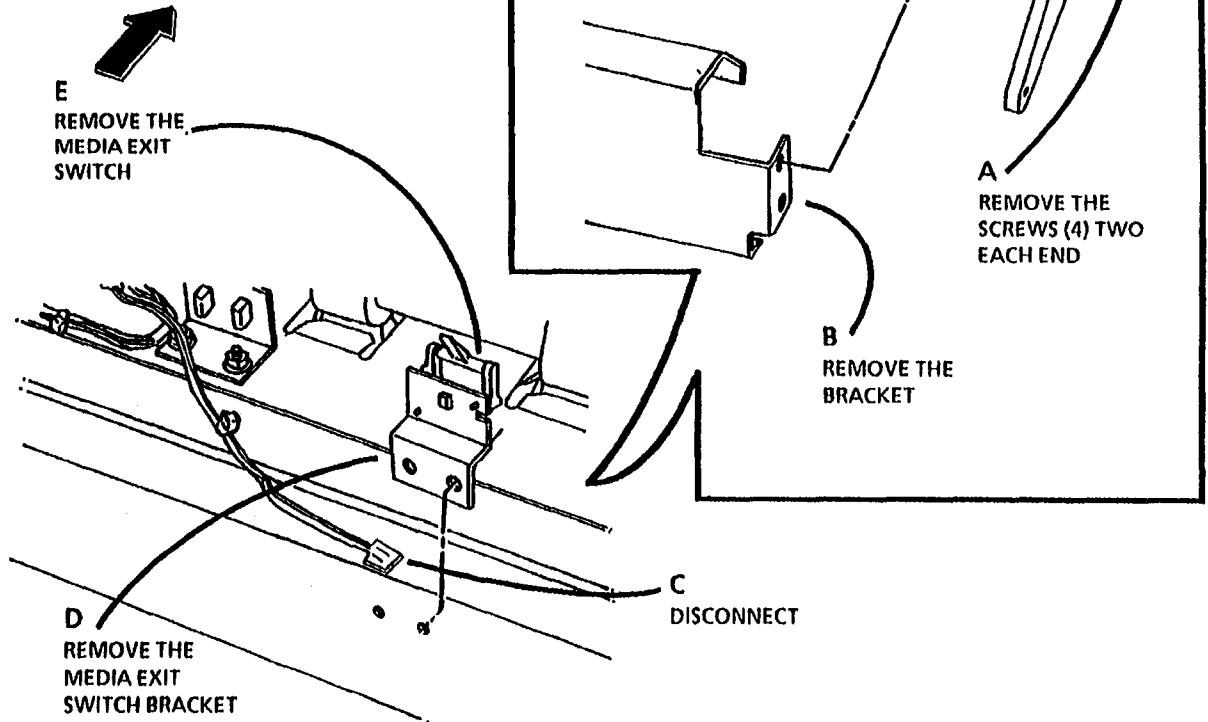


Figure 1. Remove the Media Exit Switch

(Continued)

	01589	B
TAR	SM 4	M

## REP 8.6 Sheet Drive Roll

### Parts List on PL 8.3

### Removal

1. **Warning:** Disconnect the power cord.

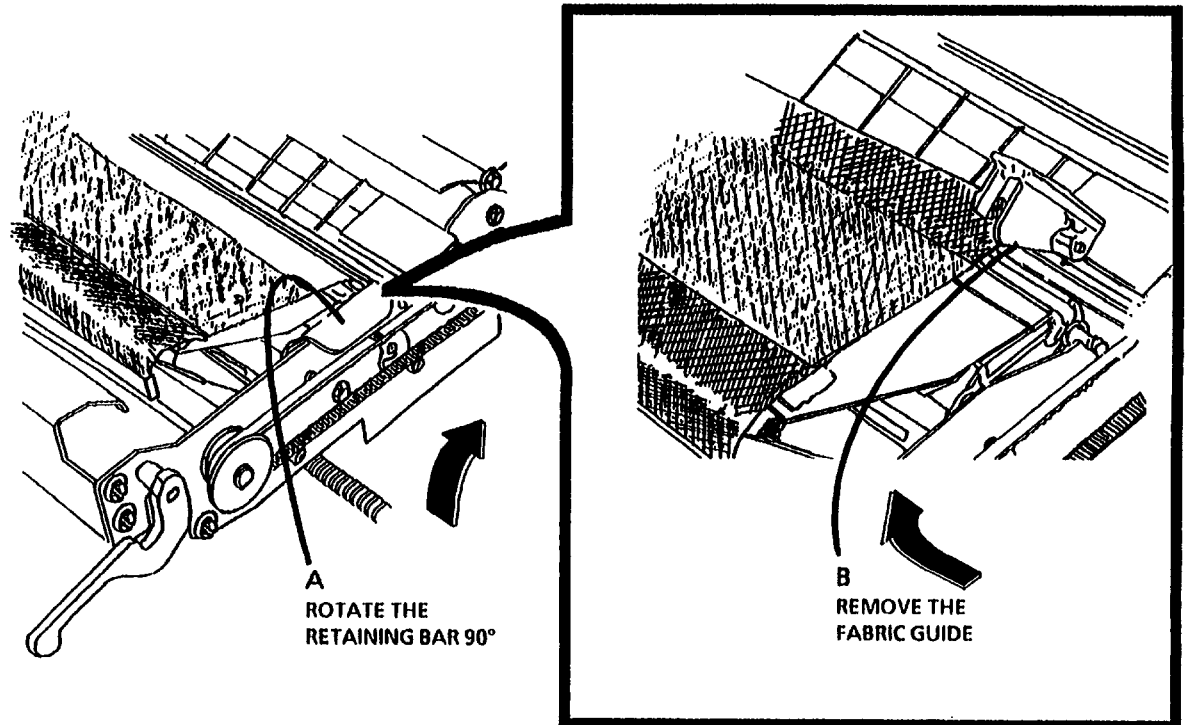
2. Remove the Left and Right Side Doors (REP 14.1).

**!** **STEP 3:** Use caution when removing the xerographic module. The fuser may be hot.

3. Remove the Xerographic Module (REP 9.1).

4. Remove the Media Transport Module (REP 8.1).

5. (Figure 1): Remove the Fabric Guide.

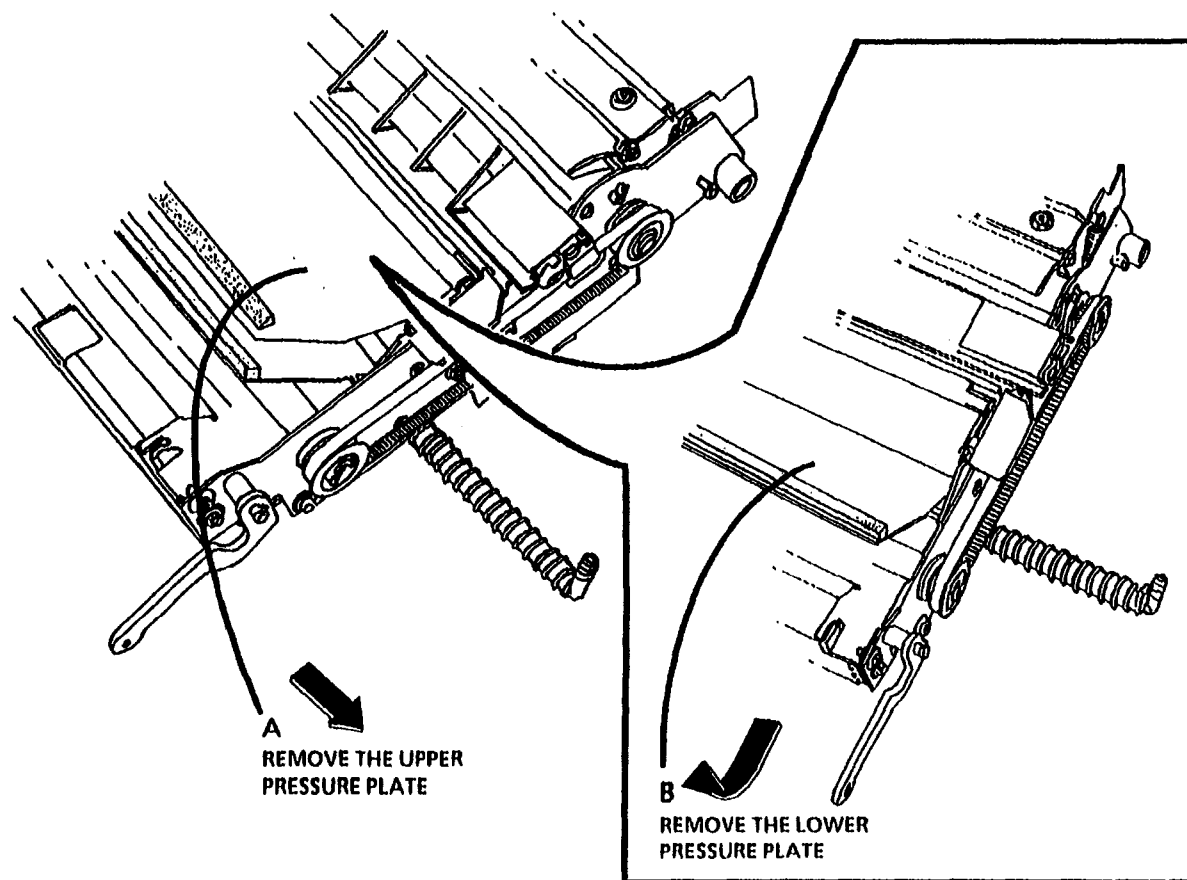


	01518	C
TAR	SM 4	M

Figure 1. Remove the Fabric Guide

(Continued)

6. (Figure 2): Remove the Upper and Lower Pressure Plates.



	01519	C
TAR	SM 4	M

Figure 2. Remove the Upper and Lower Pressure Plates

(Continued)

(Continued)

8. (Figure 3): Prepare to Remove the Sheet Drive Roll.

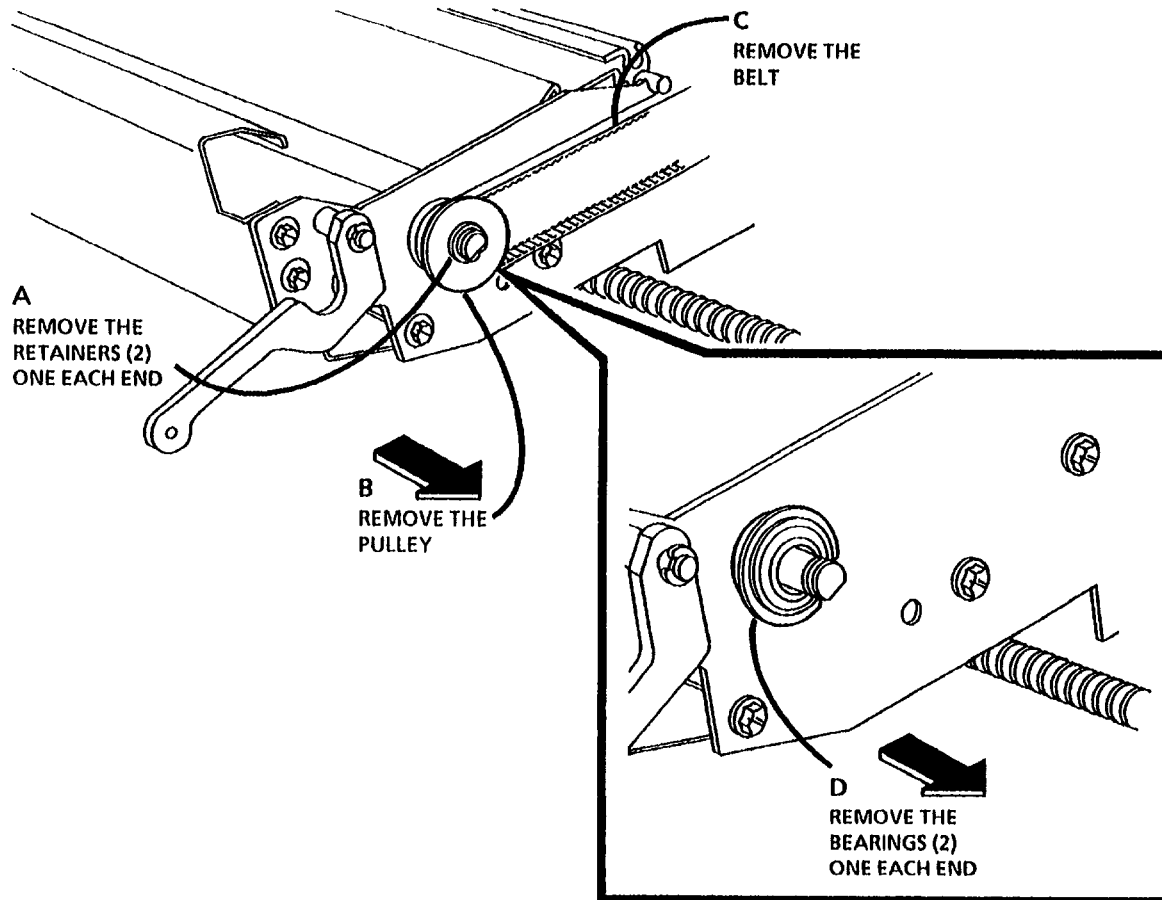



Figure 3. Prepare to Remove the Sheet Drive Roll

	01515	C
TAR	SM 4	M

(Continued)

(Continued)

 **STEP 8A:** Be careful not to damage the actuator arm on the sheet media feed switch.

8. (Figure 4): Remove the Sheet Drive Roll.

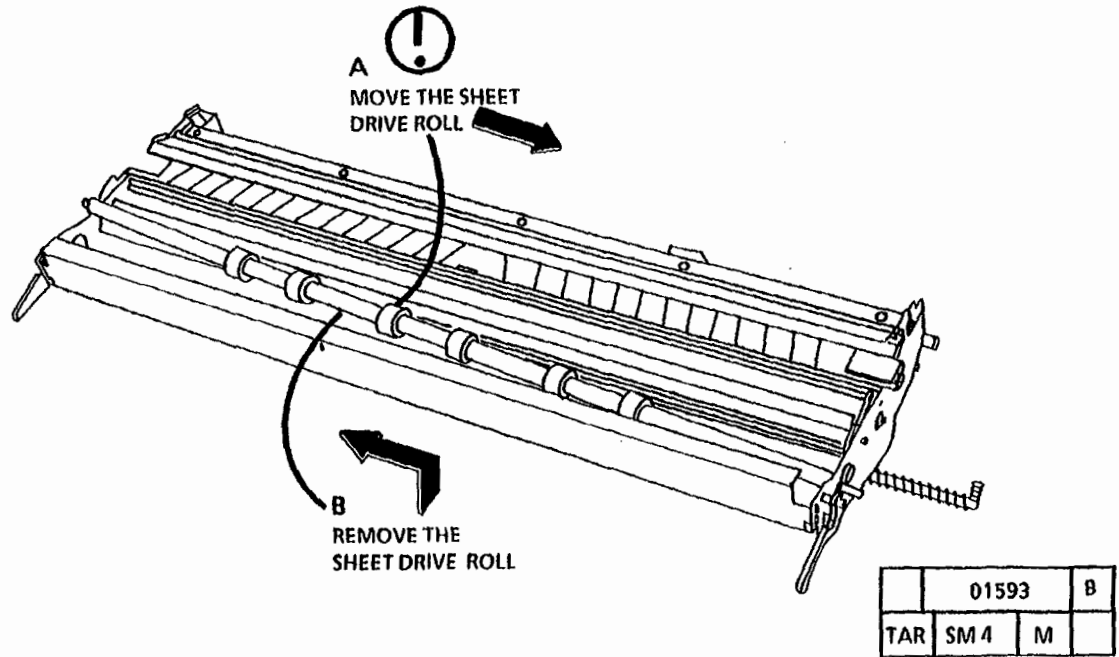



Figure 4. Remove the Sheet Drive Roll

(Continued)

(Continued)

## Replacement

 **STEP 1A:** Be careful not to damage the actuator arm on the sheet media feed switch.

1. (Figure 5): Install the Sheet Drive Roll.

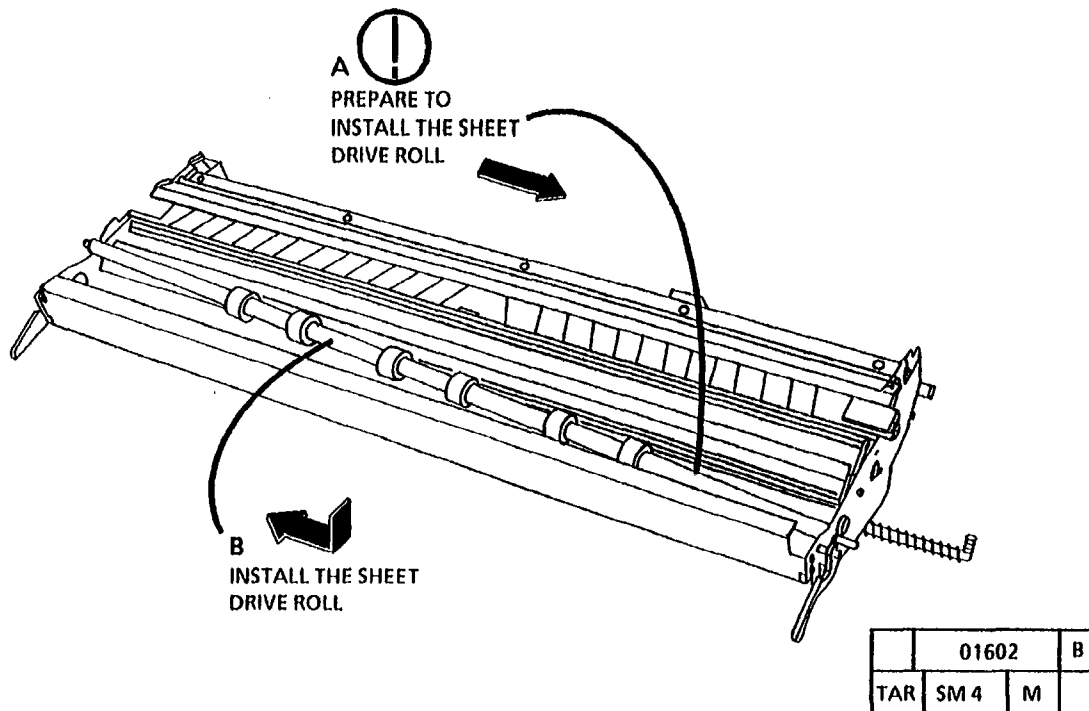


Figure 5. Install the Sheet Drive Roll

(Continued)

(Continued)

3. (Figure 6): Reinstall the Pressure Plates.

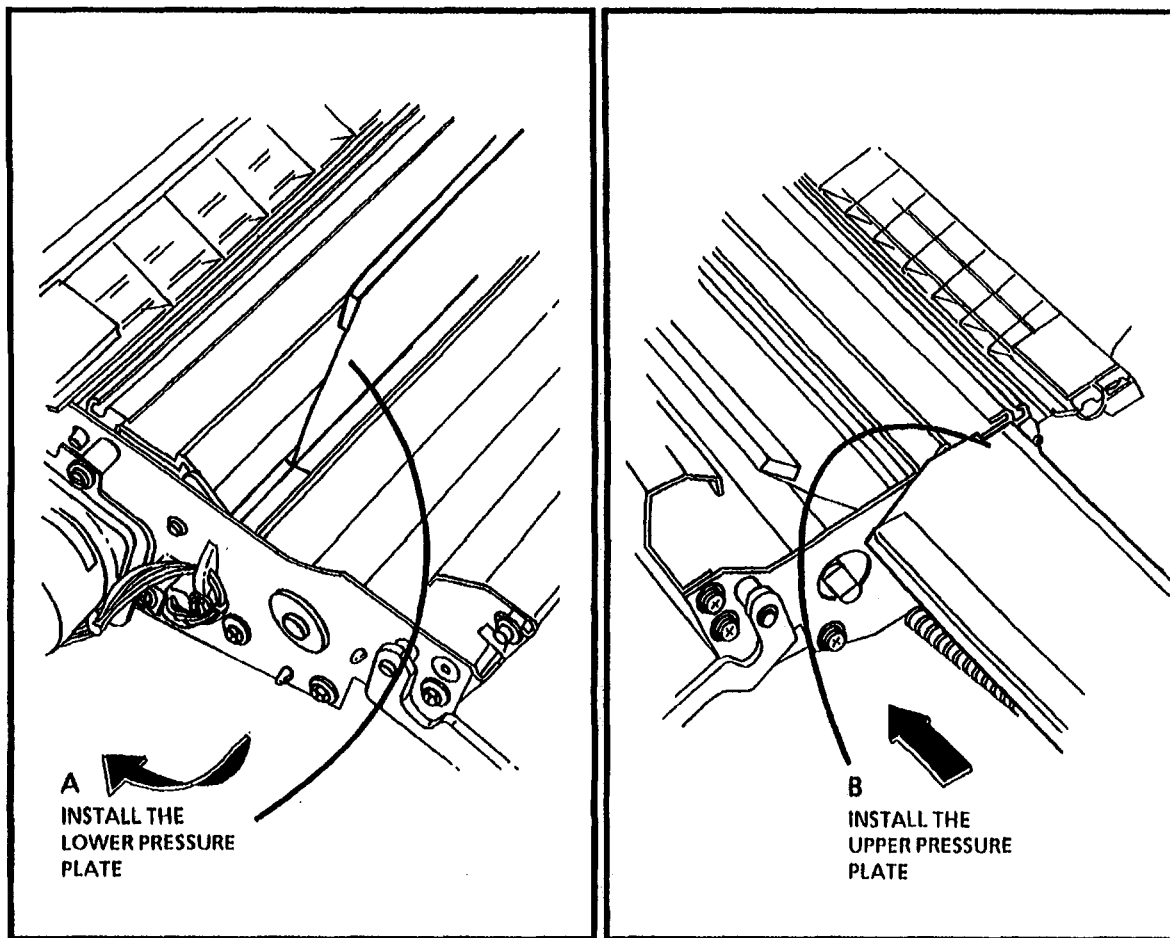


Figure 6. Reinstall the Pressure Plates

	01594	B
TAR	SM 4	M

(Continued)



(Continued)

4. (Figure 7): Reinstall the Fabric Guide.
5. The remainder of the replacement is the reverse of the removal.

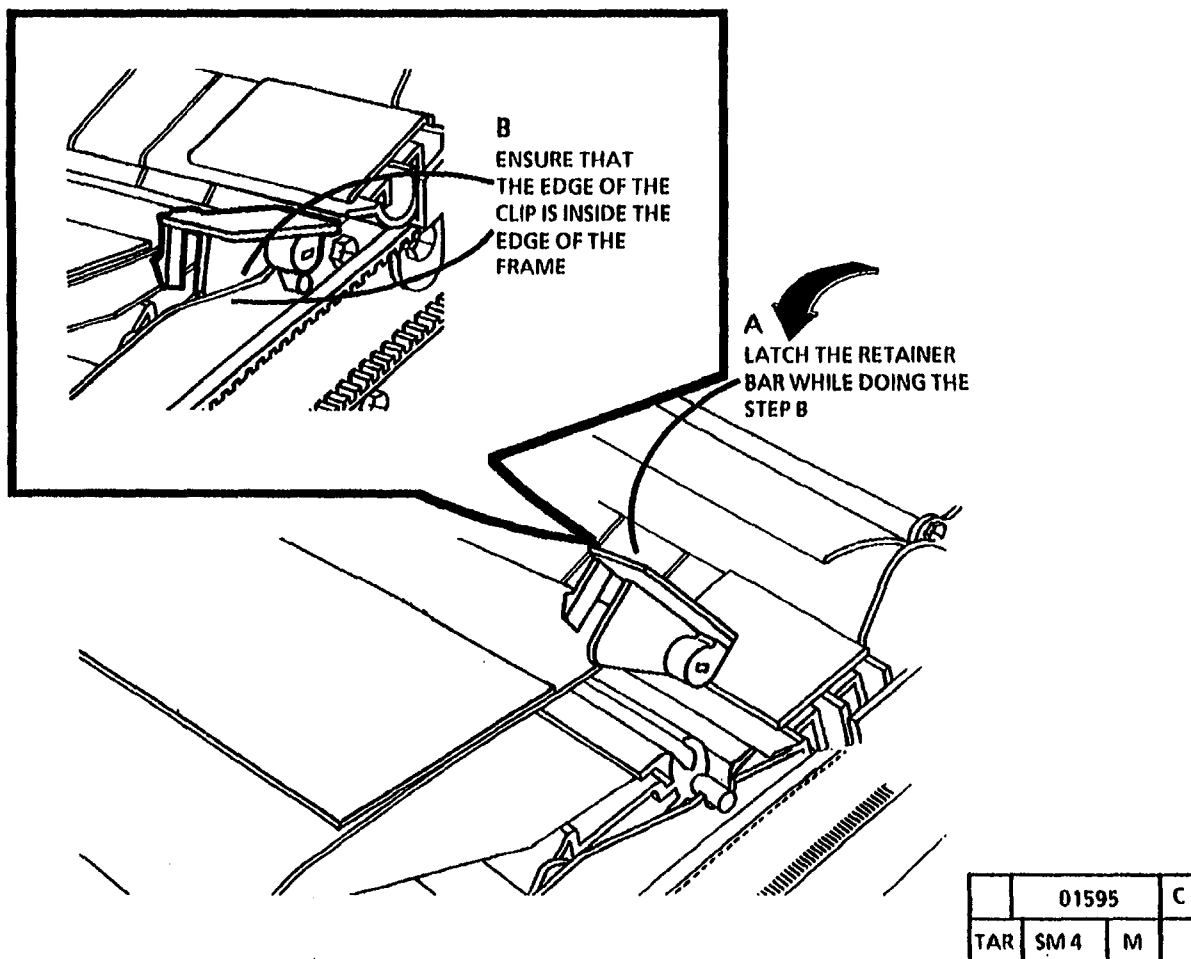


Figure 7. Reinstall the Fabric Guide

## REP 8.7 Sheet Pinch Roll, Spring and Shaft

### Parts List on PL 8.3

### Removal

1. **Warning:** Disconnect the power cord.

2. Remove the Right and Left Side Doors (REP 14.1).

**!** **STEP 3:** Use caution when removing the xerographic module. The fuser may be hot.

3. Remove the Xerographic Module (REP 9.1).
4. Remove the Media Transport Module (REP 8.1).

5. Turn the Media Transport Module over.
6. (Figure 1): Remove the Sheet Pinch Rolls.

### Replacement

1. Reinstall the Spring, the inside Retainer, Pinch Rolls, the Bearings, and the outside Retainers on the Shaft.
2. (Figure 2): Reinstall the Sheet Pinch Roll Assembly.

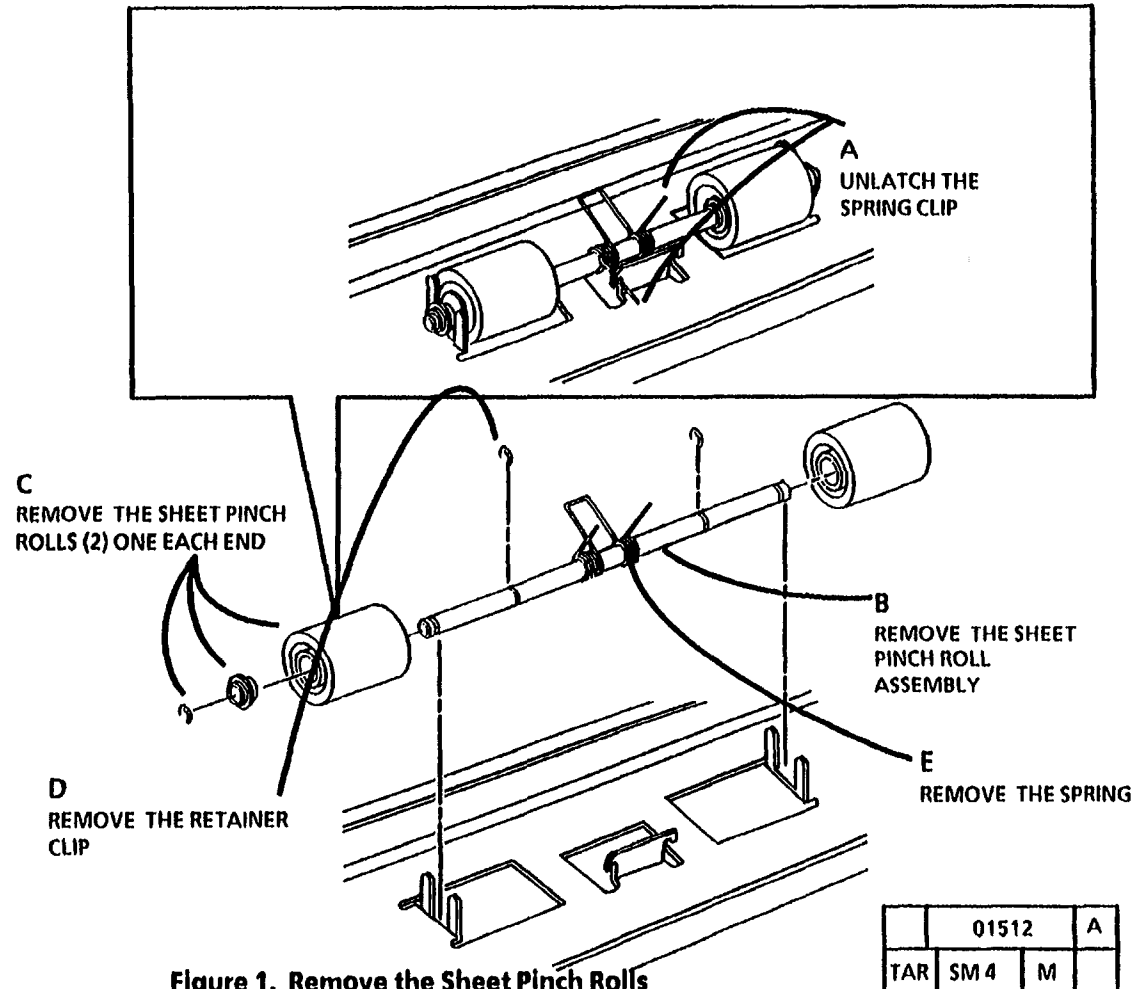


Figure 1. Remove the Sheet Pinch Rolls

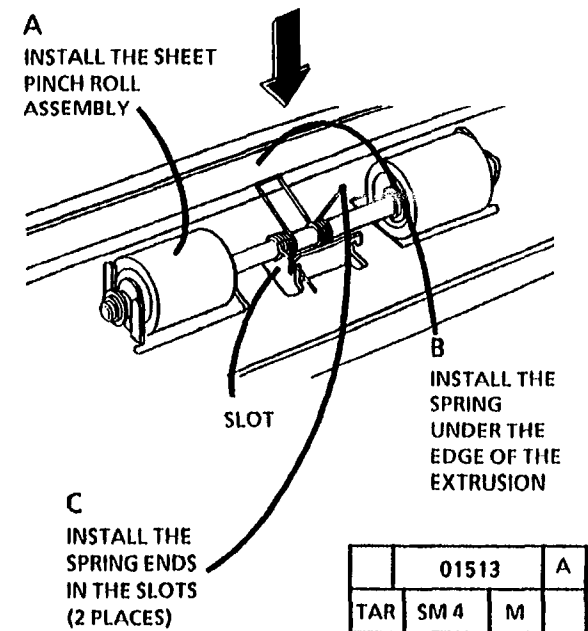


Figure 2. Reinstall the Sheet Pinch Rolls

## REP 8.8 Media Registration Sensor

### Parts List on PL 8.2

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Right and Left Side Doors (REP 14.1).

**!** **STEP 3:** Use caution when removing the xerographic module. The fuser may be hot.

3. Remove Xerographic Module (REP 9.1).
4. Remove Media Transport (REP 8.1).
5. (Figure 1): Remove the Media Registration Sensor.

### Replacement

1. The replacement is a reverse of the removal.

**!** To avoid damage to the media registration sensor, ensure that the sensor is centered in the window before tightening the screws that were removed in step B of the removal.

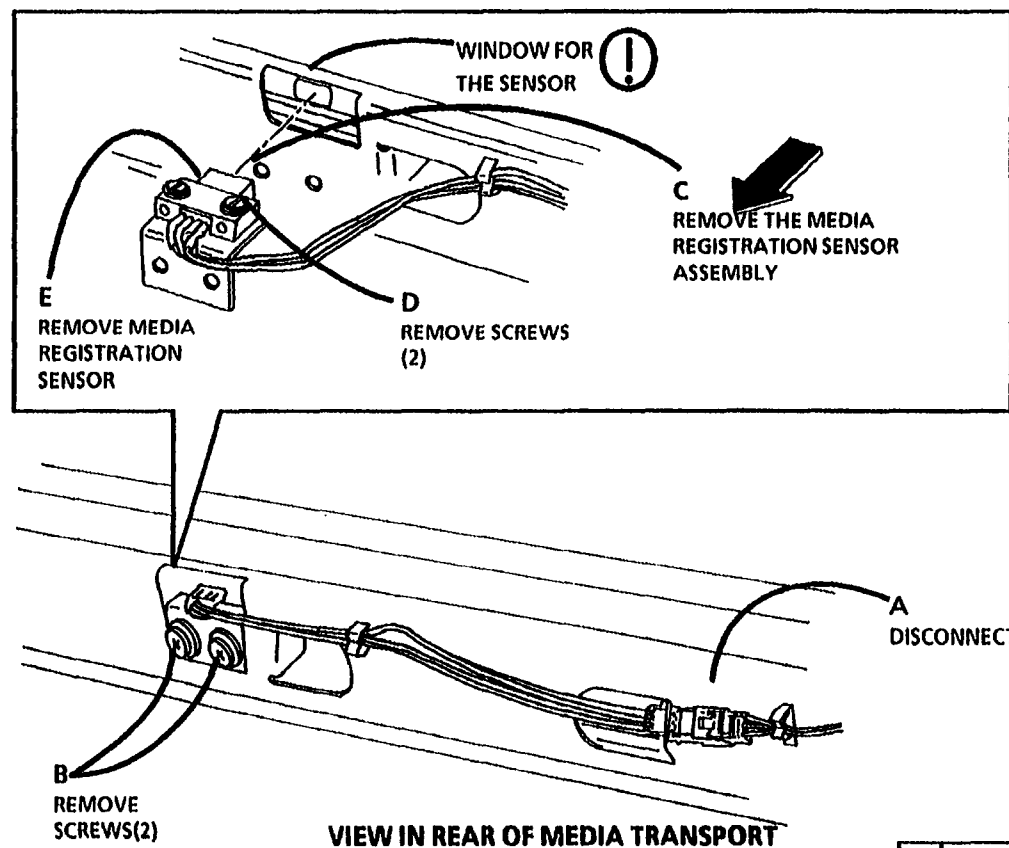


Figure 1. Remove the Media Registration Sensor

	01510	B
TAR	SM 4	M

## REP 8.9 Fabric Guide

### Parts List on PL 10.3

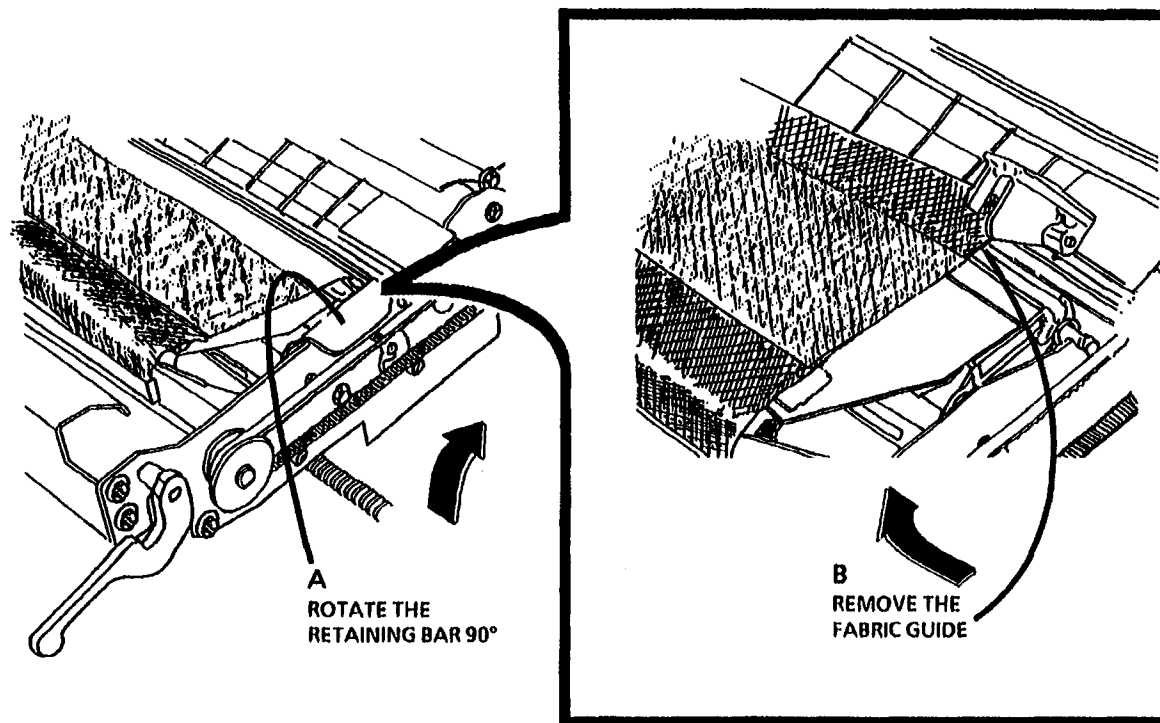
### Removal

1. **Warning: Disconnect the power cord.**

1

*STEP 2: It is not necessary to remove the Xerographic Module to replace the Fabric Guide. The module is shown removed for clarity.*

2. (Figure 1): Remove the Fabric Guide.



	01518	C
TAR	SM 4	M

Figure 1. Remove the Fabric Guide

(Continued)

(Continued)

2. The remainder of the replacement is reverse of the removal.

## Replacement

1. (Figure 2): Install the Fabric Guide.

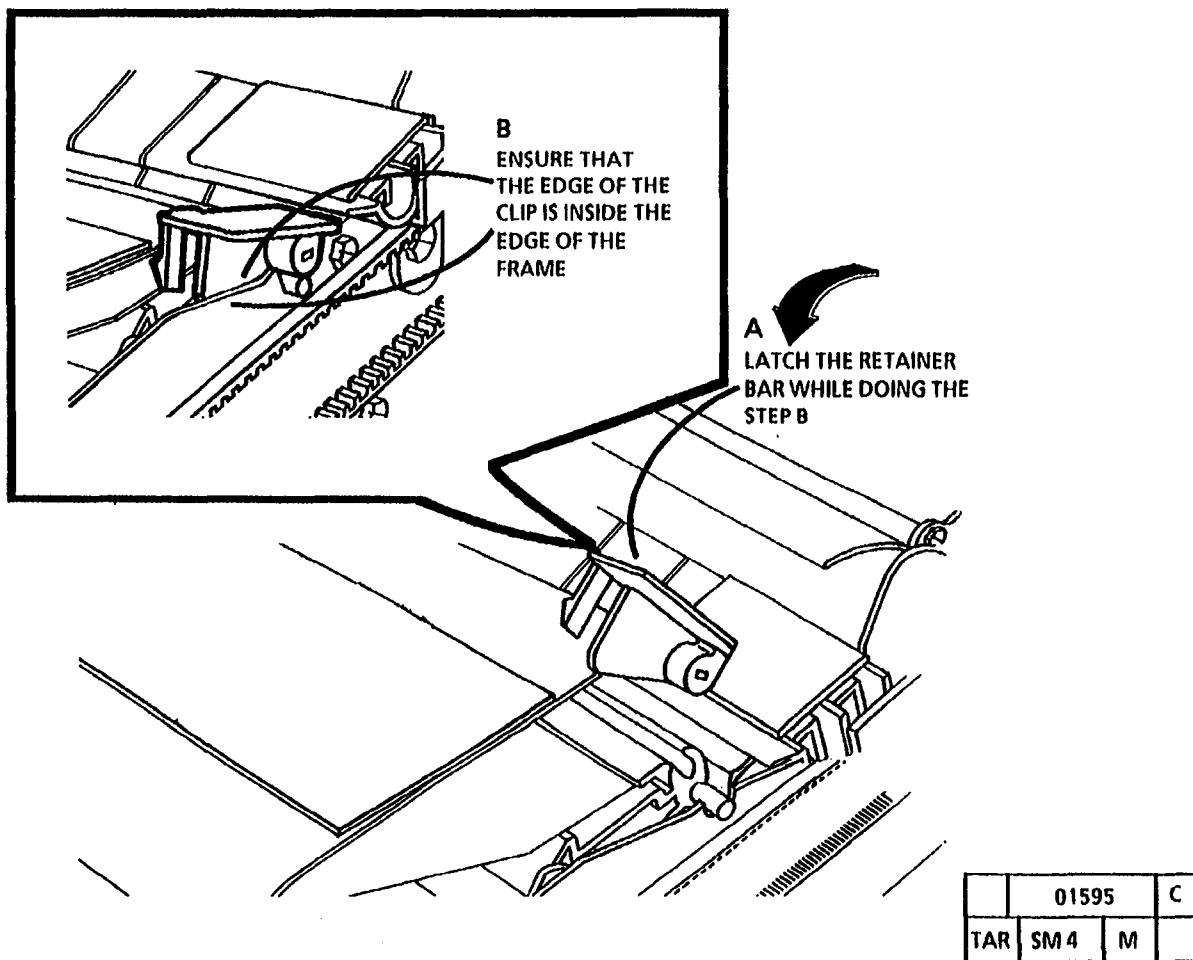


Figure 2. Install the Fabric Guide

## REP 8.10 Media Transport Drive Motor

**!** *STEP 3: Use caution when removing the xerographic module. The fuser may be hot.*

### Parts List on PL 8.1

### Removal

1. **Warning:** disconnect the power cord.
2. Remove the Right and Left Side Doors (REP 14.1).
3. Remove Xerographic Module (REP 9.1).
4. Remove Media Transport (REP 8.1).
5. Turn the Media Transport Module over.
6. (Figure 1): Remove the Media Transport Drive Motor Assembly.

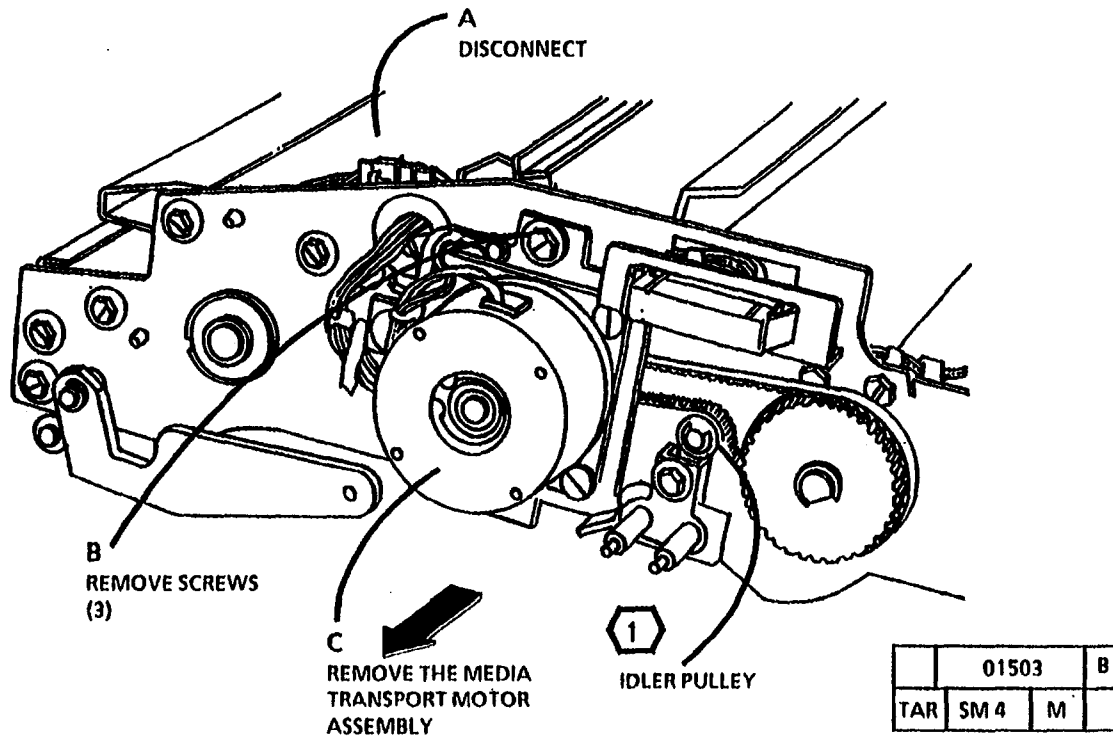


Figure 1. Remove the Media Transport Motor

(Continued)

(Continued)

7. (Figure 2): Remove the Media Transport Drive Motor from the Mounting Plate.

## Replacement

1. The replacement is the reverse of the removal

① For Replacement of the Media Transport Drive Motor, refer to Figure 1 of the Removal: Ensure that the belt is over the idler pulley, as shown in the Figure 1.

② If a new motor is being installed, install the gear on the new motor.

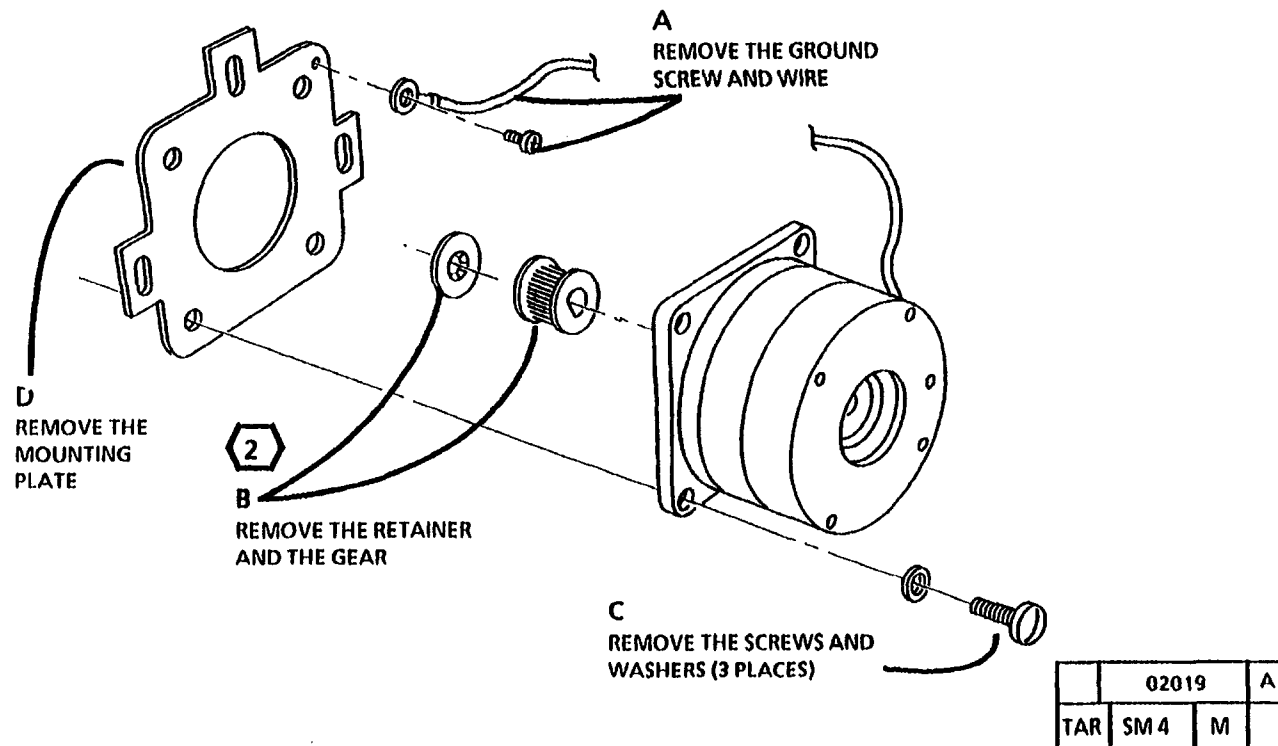


Figure 2. Remove the Media Transport Drive Motor from the mounting plate

## REP 8.11 Sheet Feed Switch

### Parts List on PL 8.4

### Removal

1. **Warning:** Disconnect the power cord.

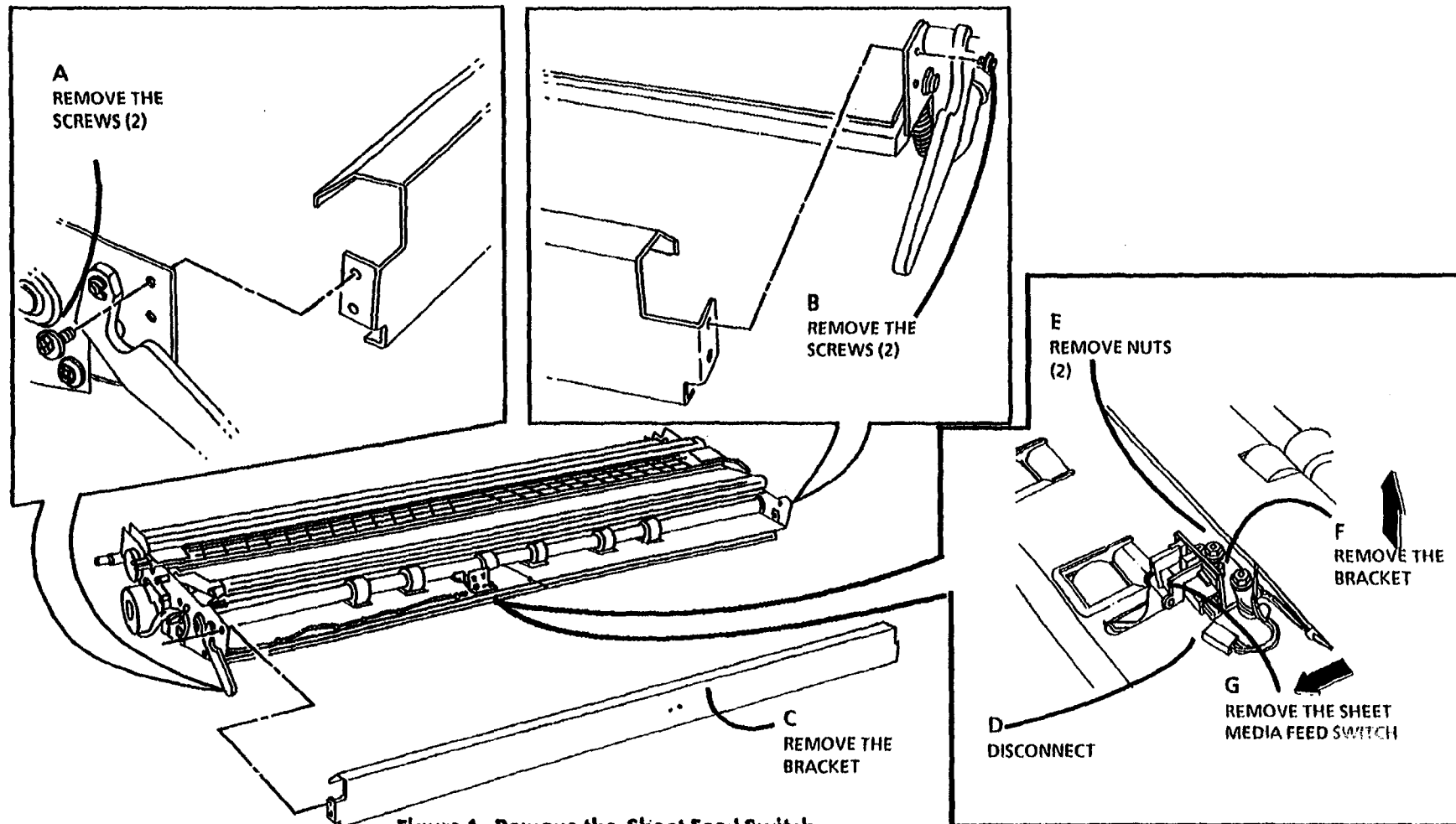
2. Remove the Right and Left Side Doors (REP 14.1).

**!** **STEP 3:** Use caution when removing the xerographic module. The fuser may be hot.

3. Remove Xerographic Module (REP 9.1).

4. Remove Media Transport (REP 8.1).

5. (Figure 1): Remove the Sheet Feed Switch.





## REP 8.12 Registration Pinch Rolls

Parts List on PL 8.2

### Removal

1. **Warning:** Disconnect the power cord.

2. Remove the Right and Left Side Doors (REP 14.1).

**!** STEP 3: Use caution when removing the xerographic module the fuser may be hot.

3. Remove Xerographic Module (REP 9.1).

4. Remove Media Transport (REP 8.1).

**1** STEP 5 D: Ensure that the screw is free of the frame.

5. (Figure 1): Prepare to remove the Registration Pinch Rolls.

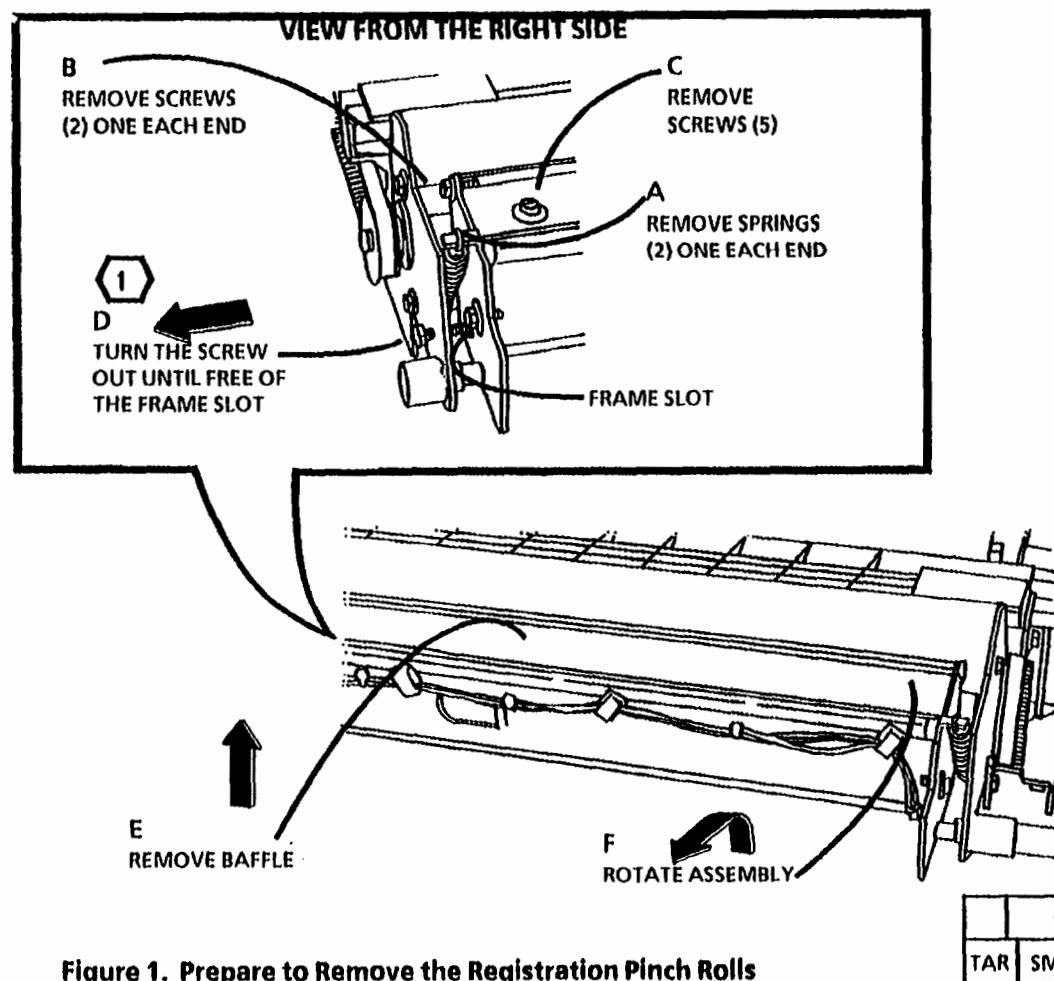


Figure 1. Prepare to Remove the Registration Pinch Rolls

(Continued)

(Continued)

6. (Figure 2): Remove the Registration Pinch Rolls.

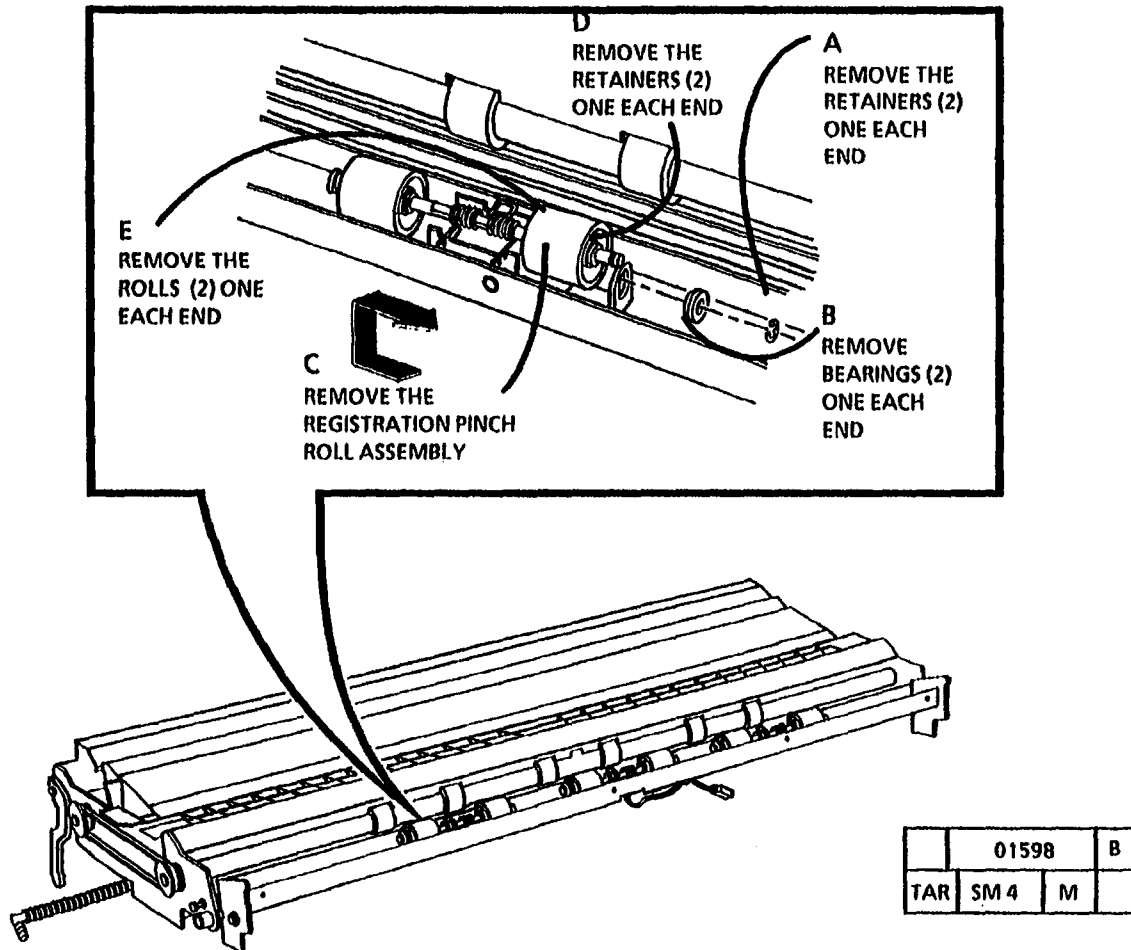


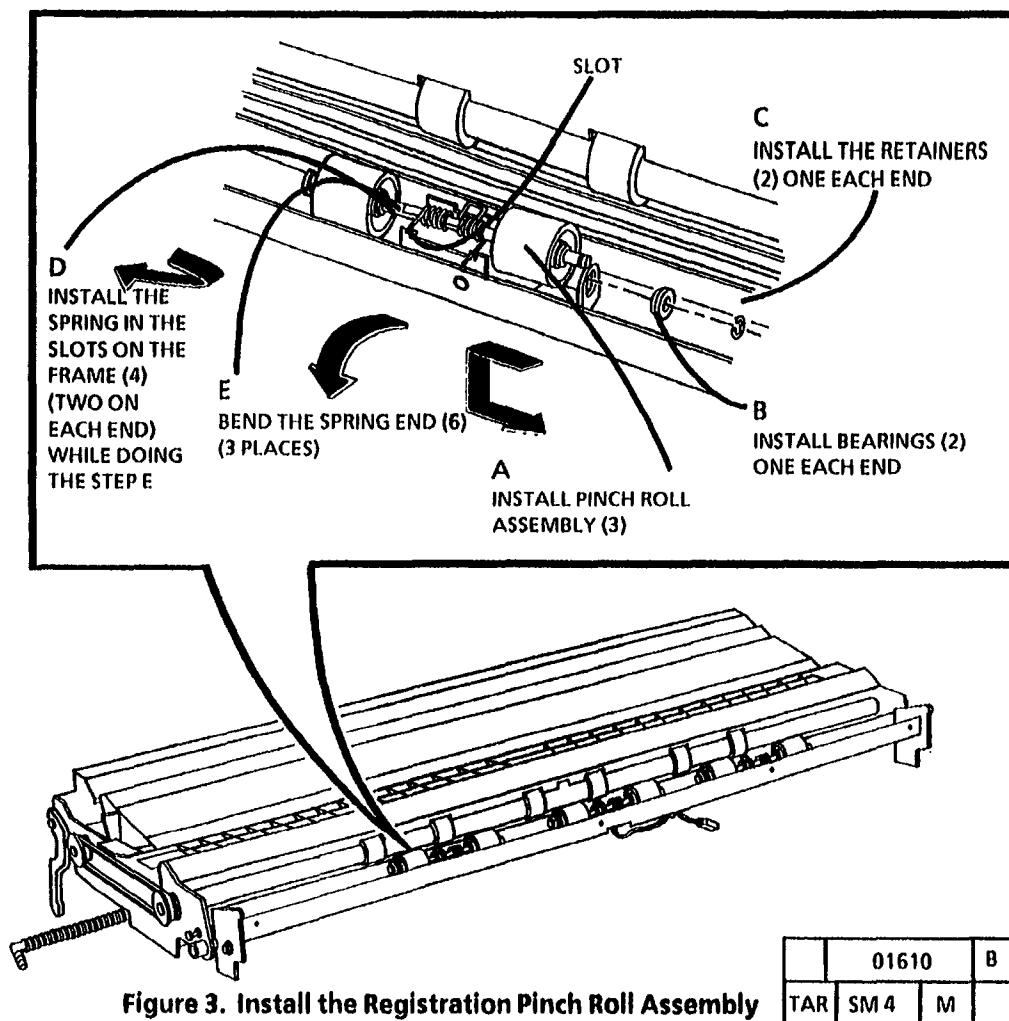
Figure 2. Remove the Registration Pinch Rolls

(Continued)

(Continued)

## Replacement

1. Reinstall the rolls and retainers on the shaft.
2. (Figure 3): Install the Registration Pinch Roll Assembly.



(Continued)

**2** *STEP 2D: To restrict the movement of the pinch roll housing, the screw must be through the slot in the frame.*

2. (Figure 4): Install the Springs.
3. The remainder the replacement is a reversal of the removal.

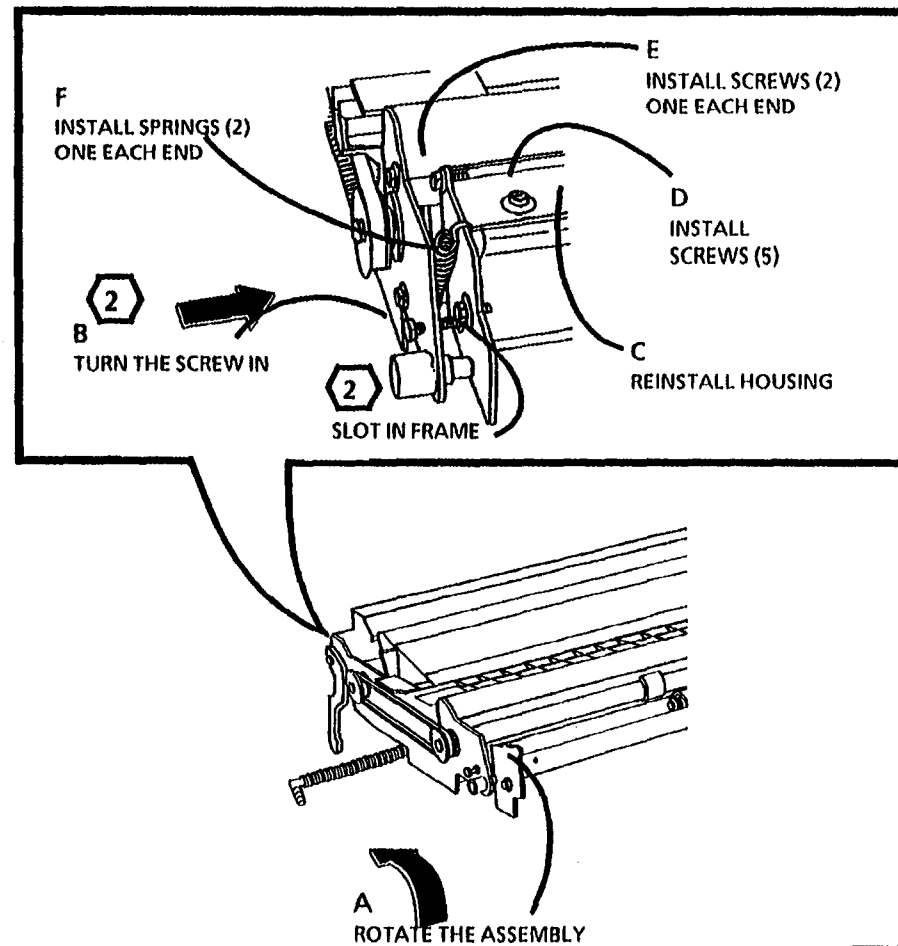


Figure 4. Install the Springs

	01812	B
TAR	SM 4	M

## REP 8.13 Registration Drive Belt

### Parts List on PL 8.1

#### Removal

1. **Warning: Disconnect the power cord.**
2. Remove the Right and Left Side Doors (REP 14.1).

**!** **STEP 3:** Use caution when removing the xerographic module. The fuser may be hot.

3. Remove Xerographic Module (REP 9.1).
4. Remove Media Transport (REP 8.1).
5. Turn the Media Transport over.
6. (Figure 1): Remove the Media Feed Drive Belt.

#### REPLACEMENT

**1** Refer to Figure 1 in the Removal and ensure that the belt is installed over the idler pulley.

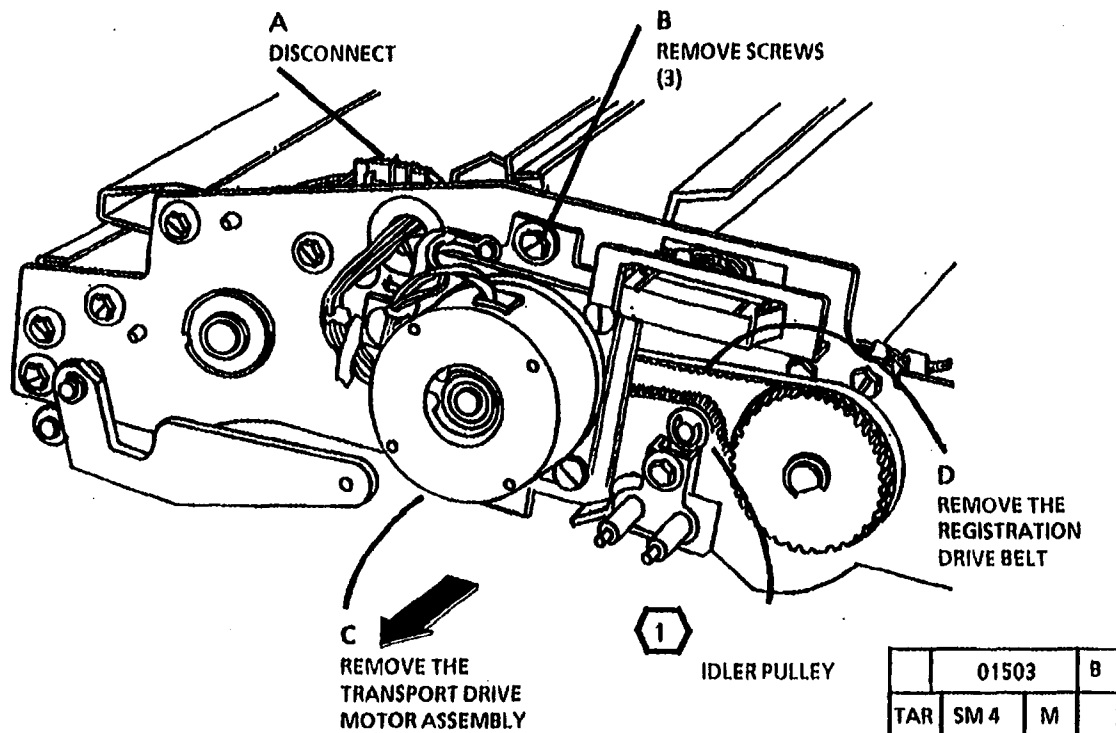


Figure 1. Remove the Media Feed Drive Belt

**BLANK**

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**9/93  
4-57A**

**3050**

# REP 8.14 Stripper Finger Jam Sitch (W/ Tag/ Mod 17)

Parts List on PL 8.4

## Removal

1. **Warning:** Disconnect the power cord.

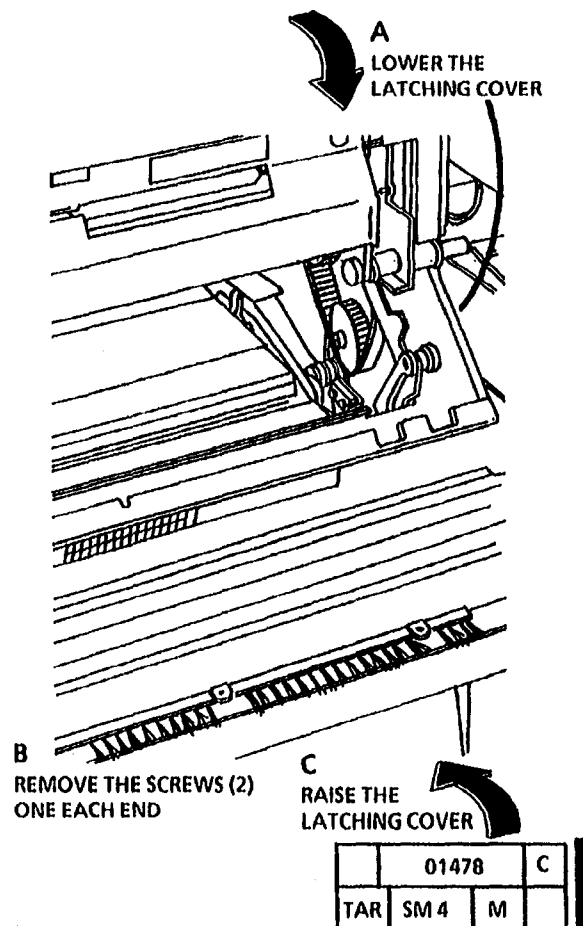


Figure 1. Disconnect the Media Transport

2. (Figure 1): Disconnect the Media Transport from the Latching Cover.
3. (Figure 2): Remove the Stripper Finger Jam Switch.

## REPLACEMENT

1 Ensure that the switch plunger is located in the front.

1. The replacement is a reversal of the removal.

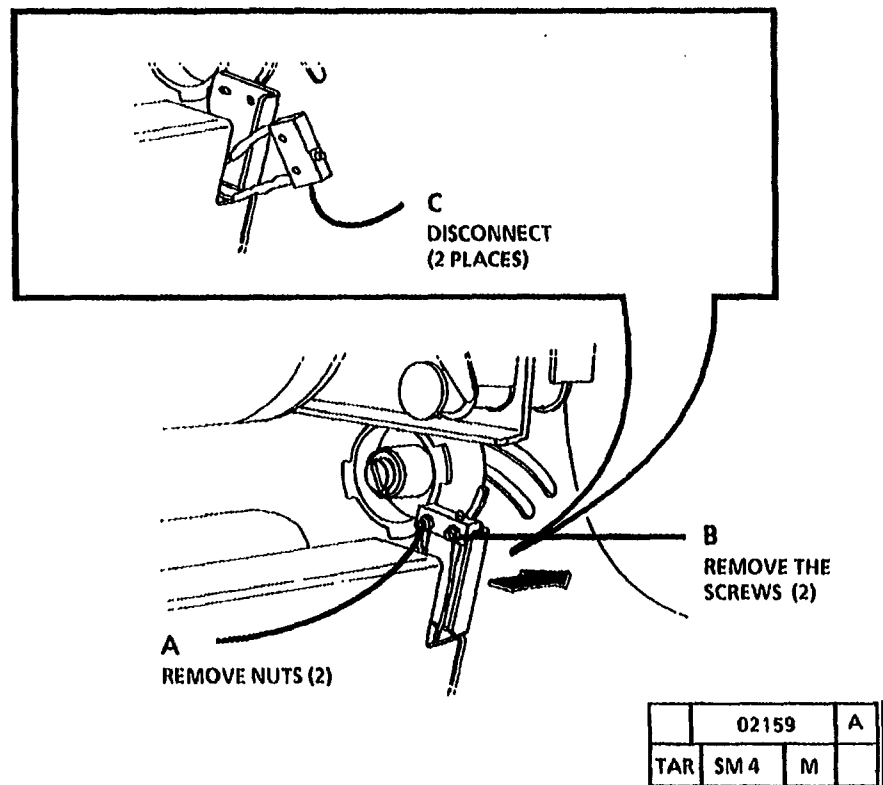


Figure 2. Remove the Stripper Finger Jam Switch

## REP 9.1A Xerographic Module (W/ O Tag/ MOD 28)

### Parts List on PL 9.1

**Note:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as Without Tag / MOD 28, (W I O Tag / MOD 28).

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as With Tag / MOD 28, (W I Tag / MOD 28).

Use this procedure on copiers equipped with TWO AC Drive Motors, (W I O Tag / MOD 28).

On copiers equipped with ONE AC Drive Motor, refer to the (REP 9.1B Xerographic Module (W/ Tag/ MOD 28) removal procedure.

### Removal



### WARNING

1. Switch off the Main Power Switch. Disconnect the Power Cord.
2. Lift and rotate the Control Console.
3. Remove the Document Handler.
4. Remove the Right and Left Side Doors (REP 14.1).

5. (Figure 1): Lift the Document Feed-In Shelf.

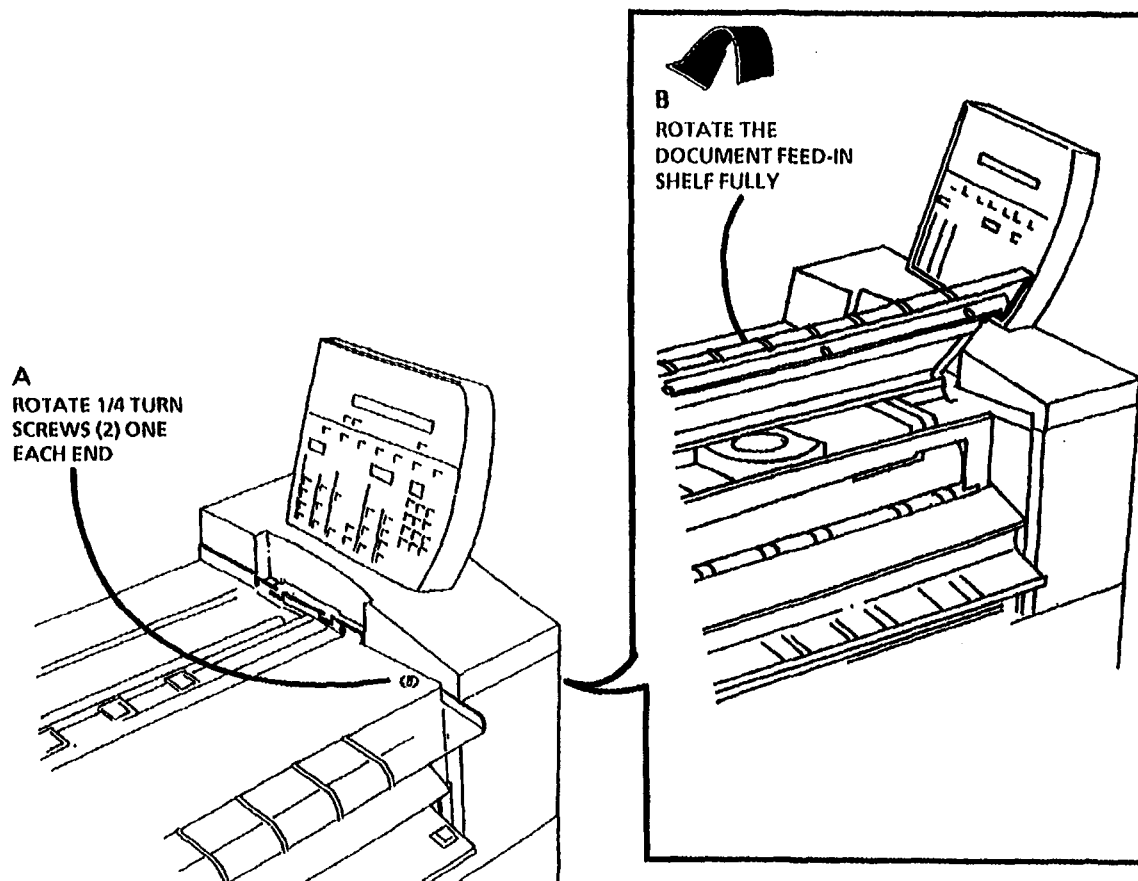


Figure 1. Lift the Document Feed-In Shelf

	01568	C
TAR	SM 4	M

(Continued)



(Continued)

6. (Figure 2): Lower the Cut Sheet Feed-in Shelf.

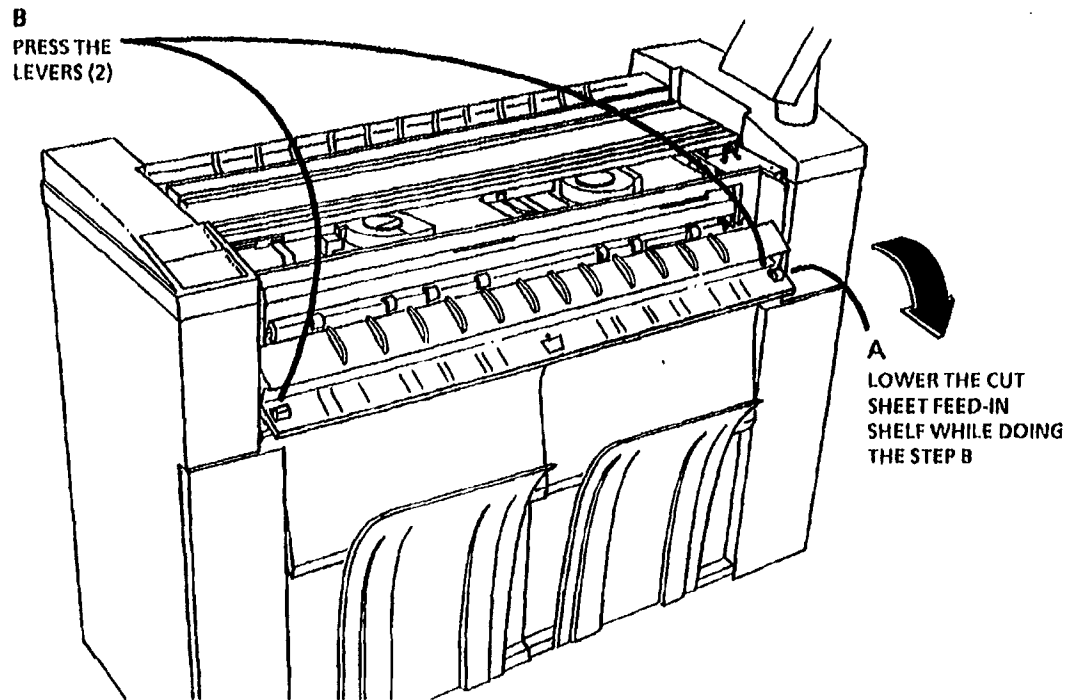


Figure 2. Lower the Cut Sheet Feed-in Shelf

	01571	B
TAR	SM 4	M

(Continued)

(Continued)

7. (Figure 3): Remove the Latch Supports.

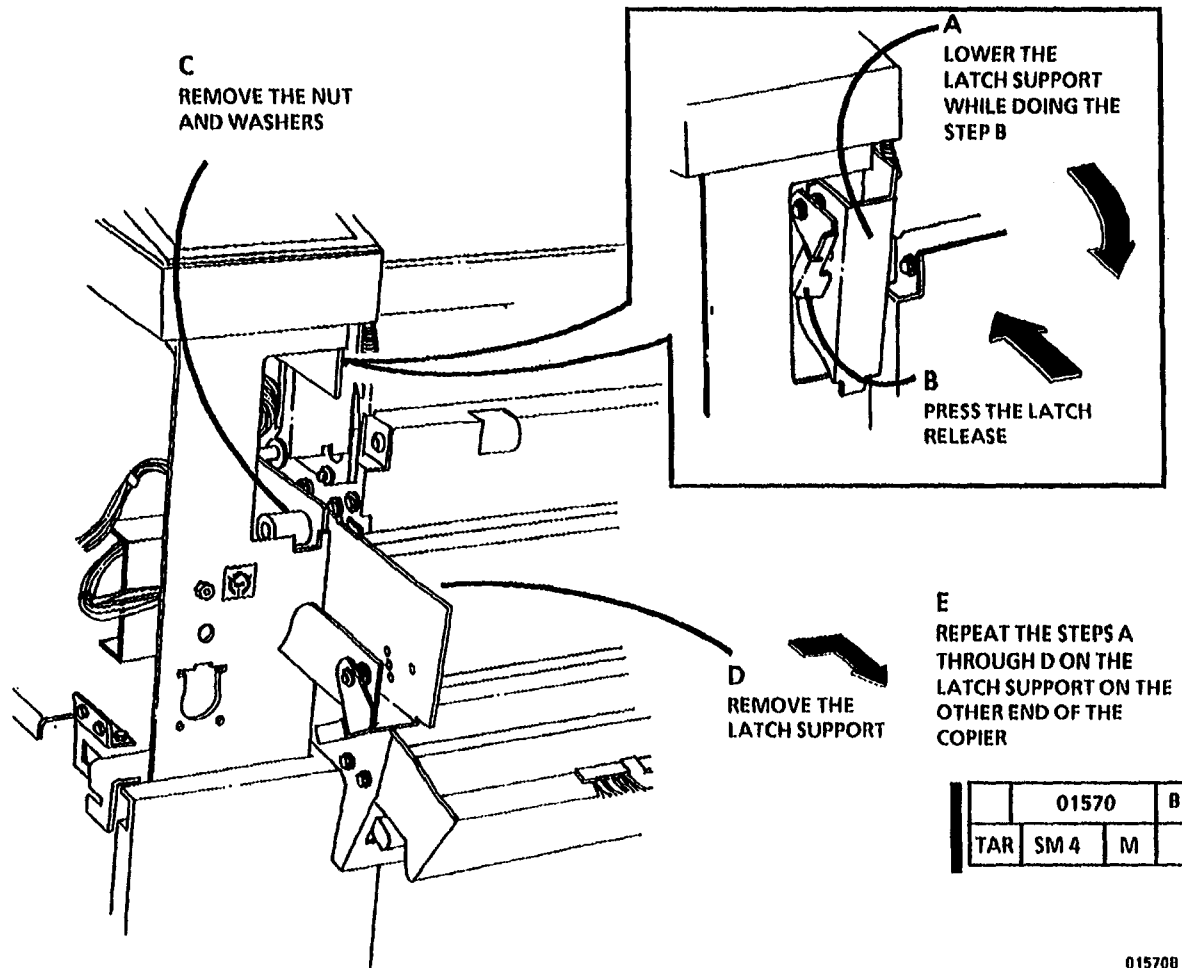


Figure 3. Remove the Latch Supports

8. (Figure 4): Remove the Latch Bars.

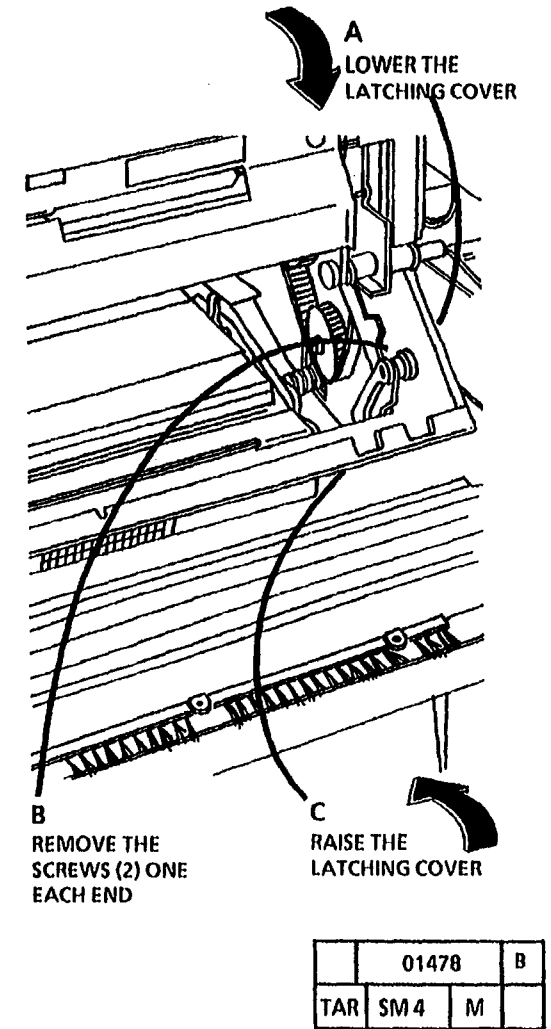


Figure 4. Remove the Latch Bars

(Continued)

(Continued)

① The service rails are stored in the Left Side Door of the Copier.

9. (Figure 5): Remove the service rails from the storage area.

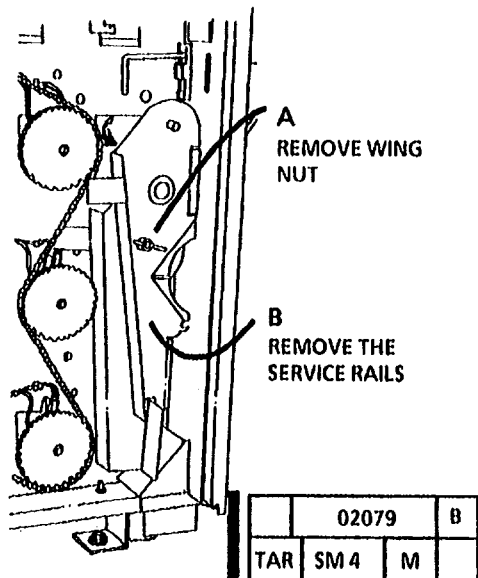


Figure 5. Remove the service rails

ⓘ STEP 9 B: The media supply doors must remain closed when the service rails are in use. The tab on the bottom of the service rails is there to ensure that the media supply doors remain closed.

10. (Figure 6): Install the Xerographic Module Service Rails.

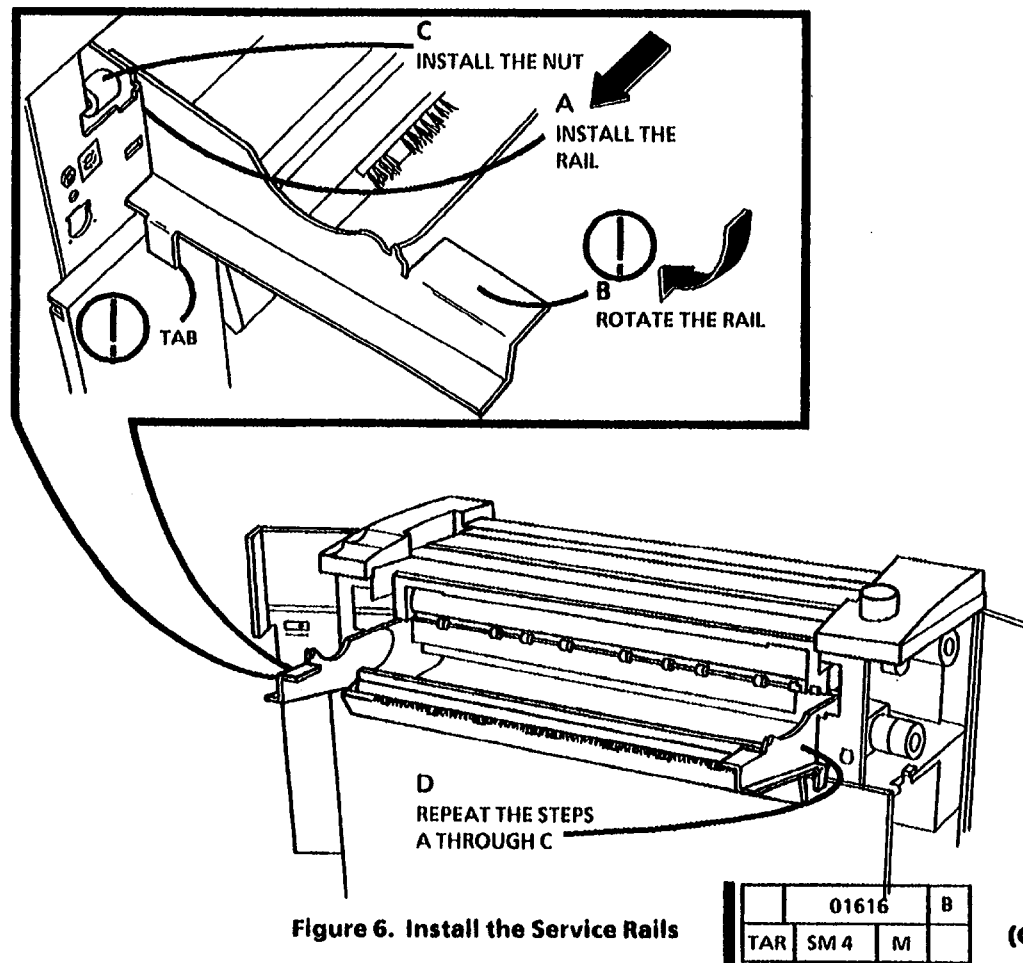


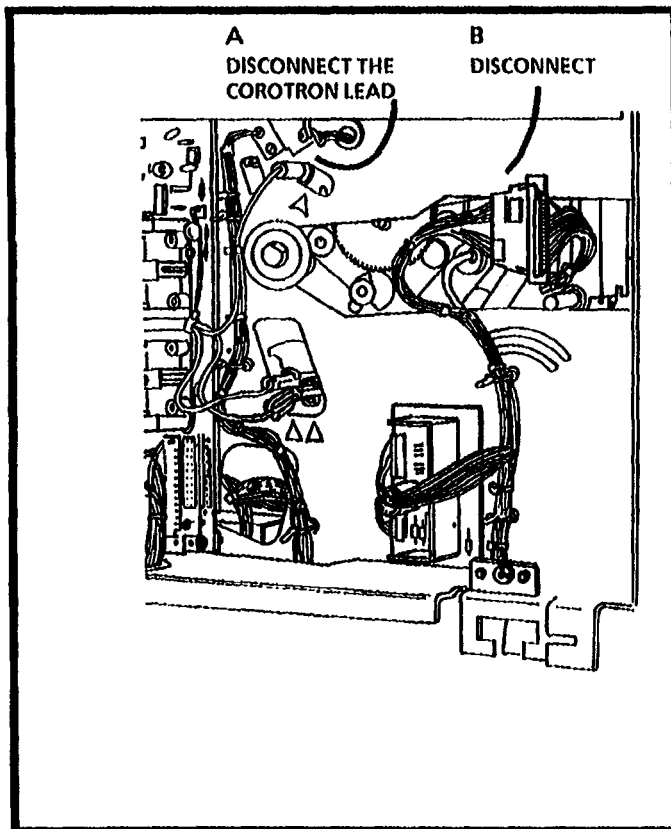
Figure 6. Install the Service Rails

(Continued)

(Continued)

11. (Figure 7): Prepare to Remove the Xerographic Module.

VIEW FROM THE LEFT SIDE



VIEW FROM THE RIGHT SIDE

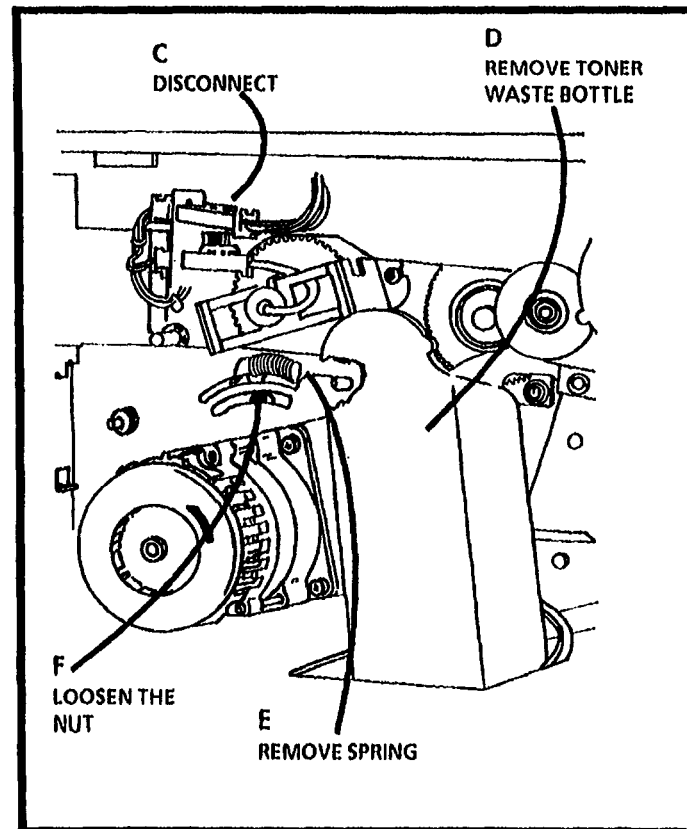


Figure 7. Prepare to Remove the Xerographic Module

(Continued)

	01480	A
TAR	SM 4	M

(Continued)

**!** STEP 12 B: To avoid damage to the flanges on the sides of the idler pulley if the latching cover is lowered, raise the idler fully up as shown in Figure 7.

12. (Figure 8): Remove the Fuser Drive Belt.

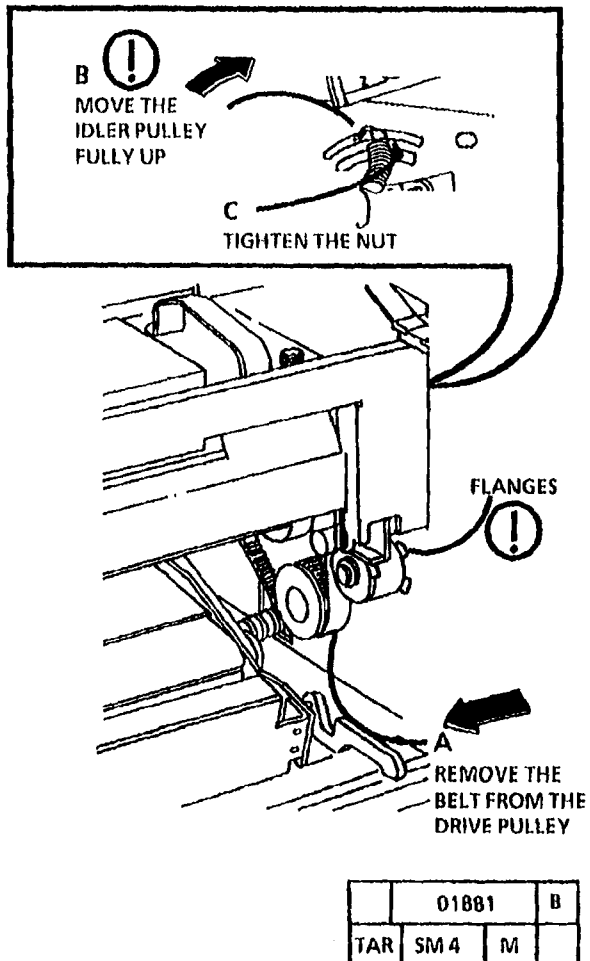


Figure 8. Remove the Fuser Drive Belt



**WARNING:** The fuser may be hot

**!** Cover the photoreceptor drum with a light shield to prevent damage.

**!** STEP 12 B: Be careful when removing the module. The module is heavy and it is difficult to handle.

2

The xerographic module may remain on the service rails for some of the repair procedures. It may also be removed to a flat, clean surface for service or storage.

13. (Figure 9): Remove the Xerographic Module to clean, flat surface if not being serviced on the service rails.

14. Continue with Step 15 if the service is being performed on the service rails.

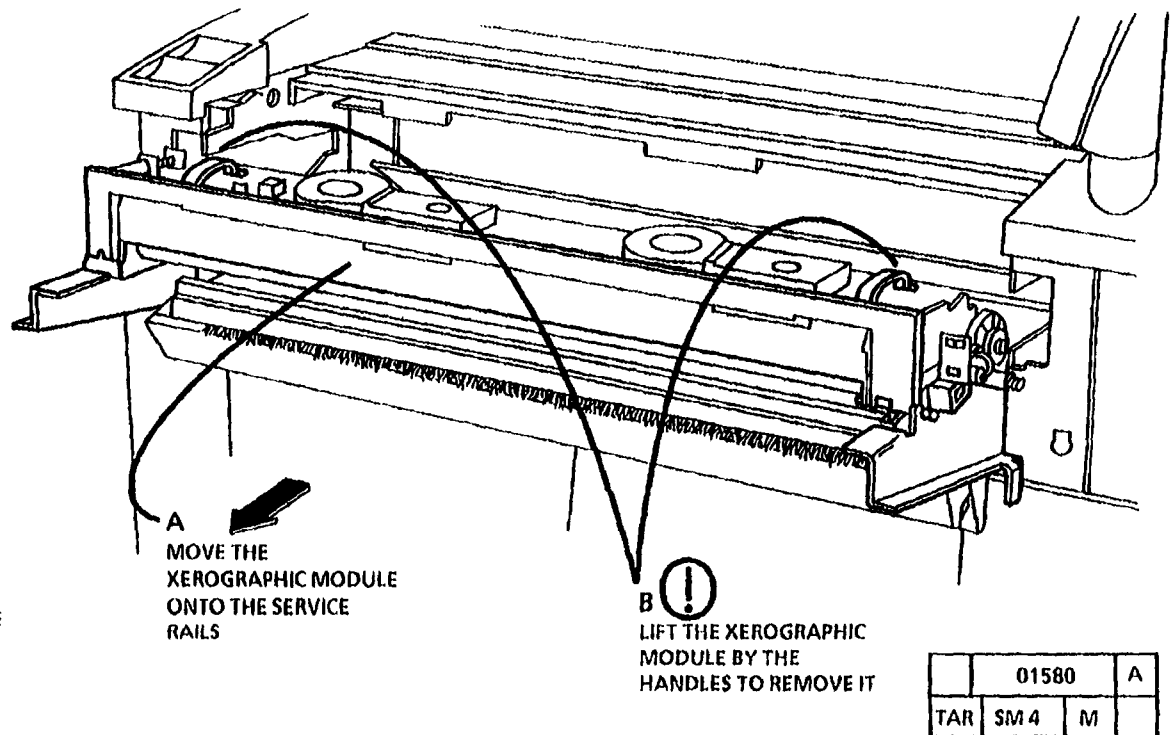


Figure 9. Remove the Xerographic Module to a Clean Flat Surface (Continued)

(Continued)

15. (Figure 10): Set the Xerographic Module on the Service Rails in Position A or B.

**ⓘ** *STEP A: The pins (2) on the Xerographic Module must be positioned in the slots (2) on the Service Rails (2). The Xerographic Module is secured correctly when the pins are positioned in the slots.*

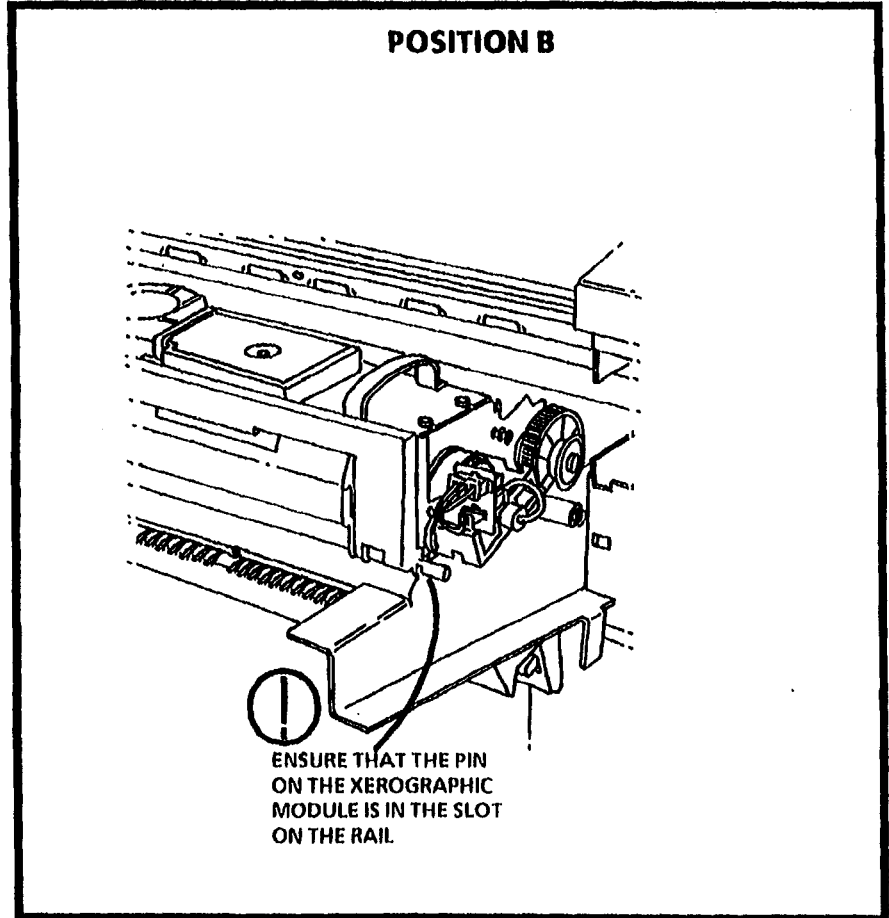
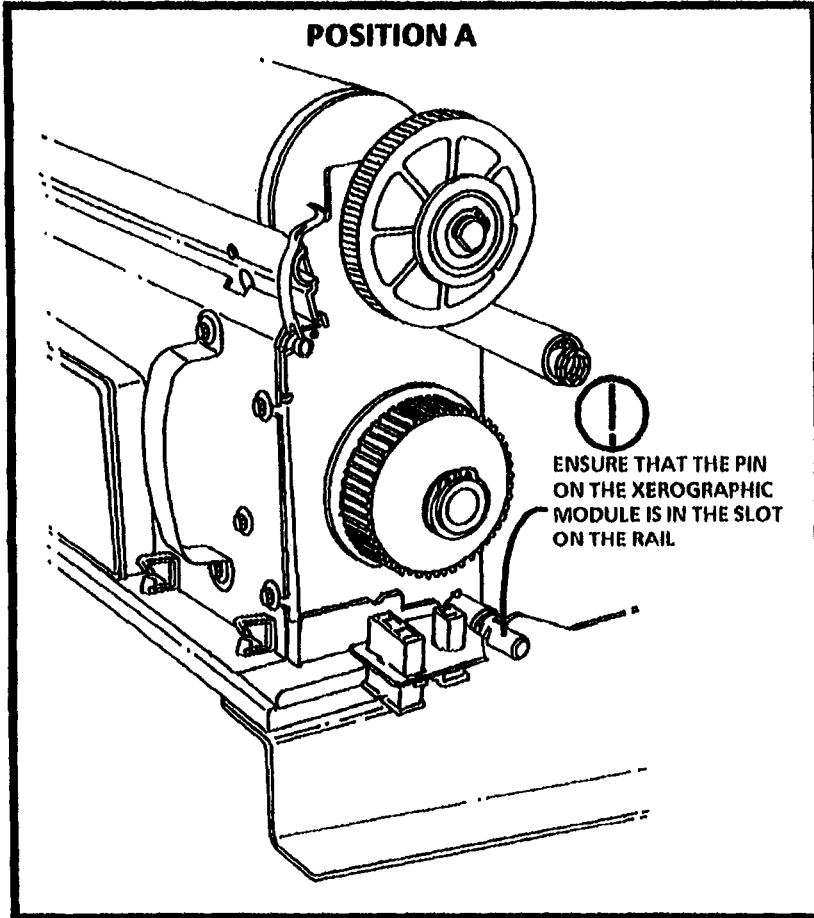


Figure 10. Position the Xerographic Module on the Service Rails

	01581	B
TAR	SM 4	M

## REP 9.1B Xerographic Module (W/ Tag/ MOD 28)

### Parts List on PL 9.1

**Note:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as Without Tag / MOD 28, (W / O Tag / MOD 28).

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as With Tag / MOD 28, (W / Tag / MOD 28).

Use this procedure on copiers equipped with ONE AC Drive Motors, (W / Tag / MOD 28).

On copiers equipped with TWO AC Drive Motor, refer to the (REP 9.1A Xerographic Module (W / O Tag / MOD 28) removal procedure.

### Removal



### WARNING

1. Switch off the Main Power Switch. Disconnect the Power Cord.
2. Lift and rotate the Control Console.
3. Remove the Document Handler.
4. Remove the Right and Left Side Doors (REP 14.1).

5. (Figure 1): Lift the Document Feed-in Shelf.

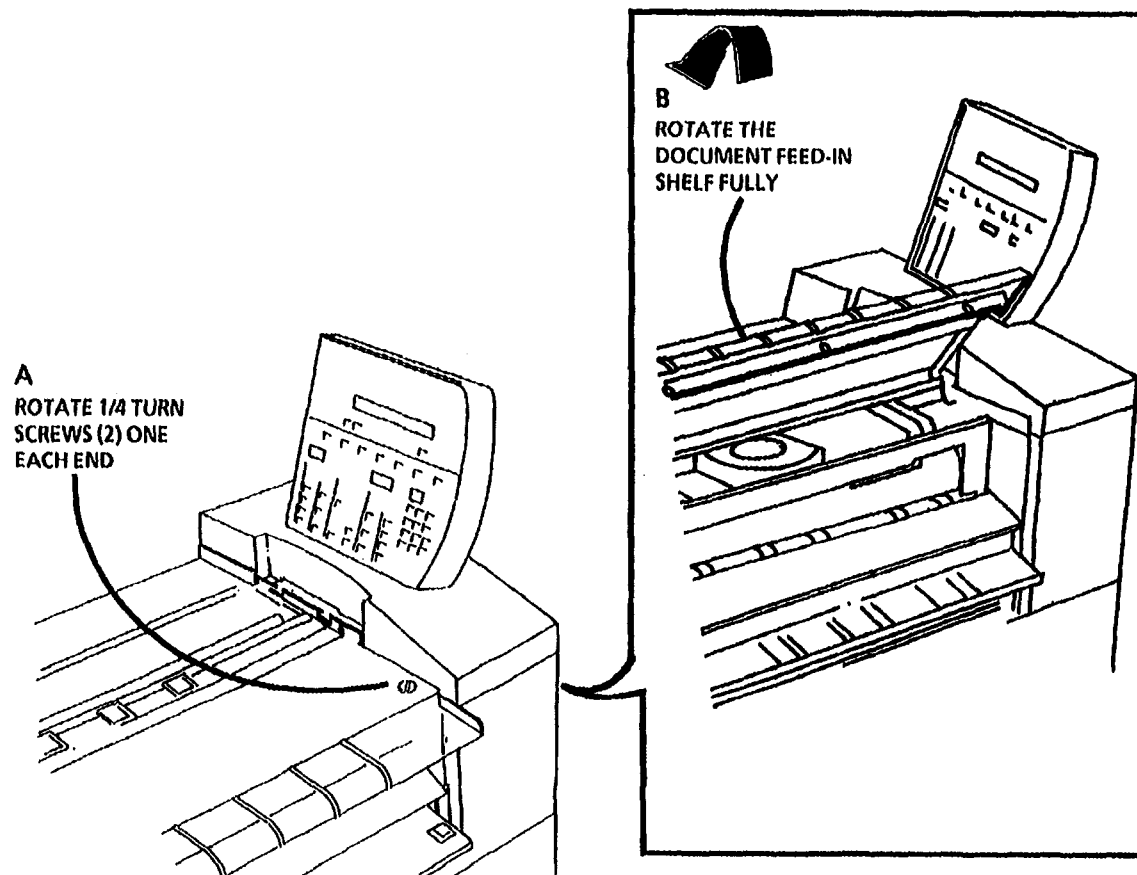


Figure 1. Lift the Document Feed-in Shelf

	01568	C
TAR	SM 4	M

(Continued)

(Continued)

6. (Figure 2): Lower the Cut Sheet Feed-in Shelf.

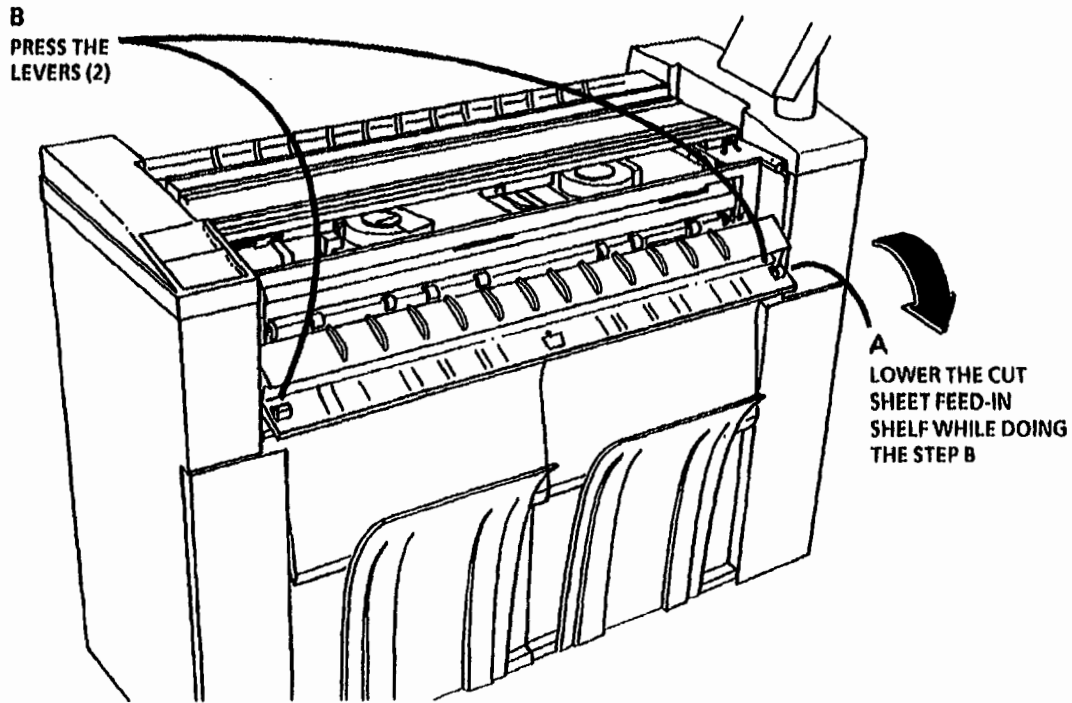


Figure 2. Lower the Cut Sheet Feed-in Shelf

	01571	B
TAR	SM 4	M

(Continued)



(Continued)

7. (Figure 3): Remove the Latch Supports.

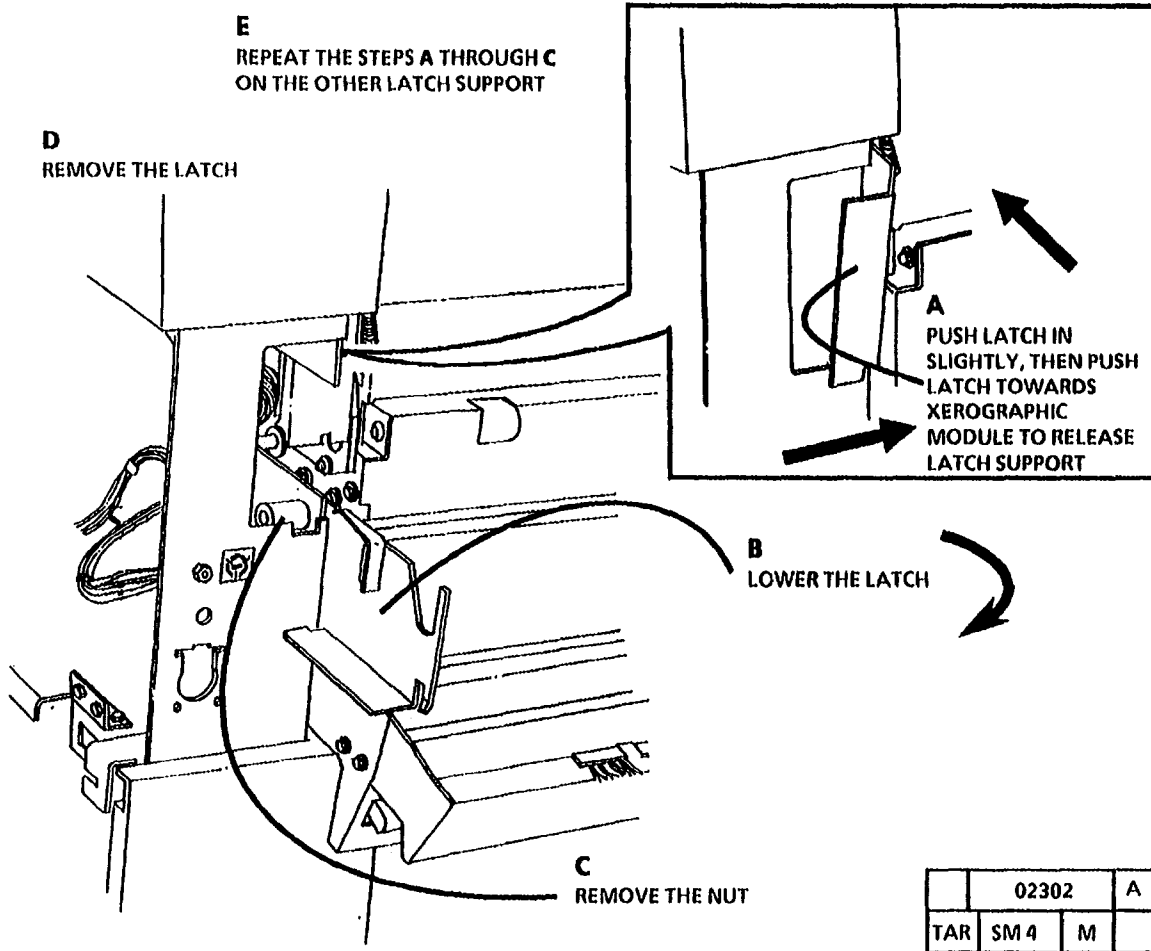
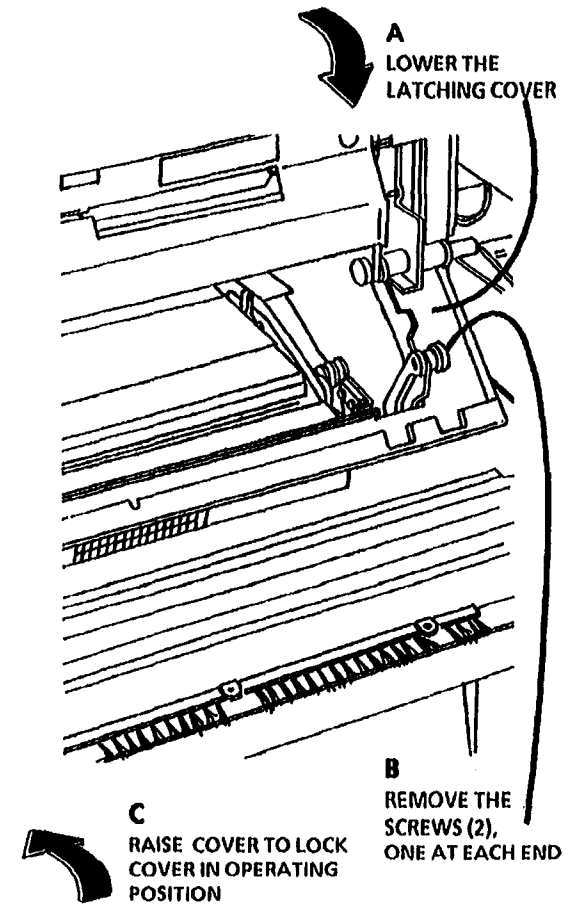


Figure 3. Remove the Latch Supports

8. (Figure 4): Remove the Latch Bars.



2791

Figure 4. Remove the Latch Bars

(Continued)

(Continued)

1 The service rails are stored in the Left Side Door of the Copier.

9. (Figure 5): Remove the service rails from the storage area.

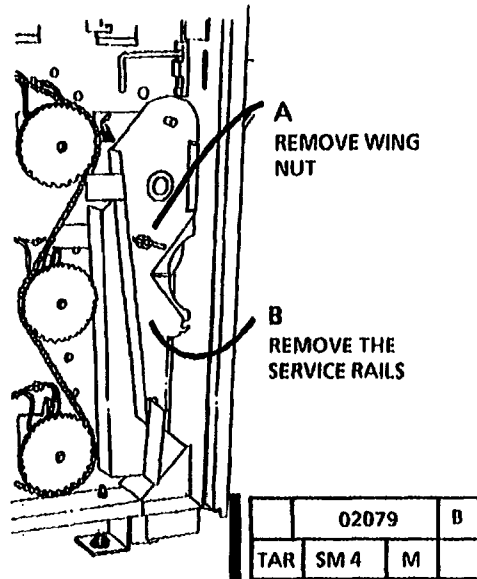


Figure 5. Remove the Service Rails

ⓘ STEP 10 B: The media supply doors must remain closed when the service rails are in use. The tab on the bottom of the service rails is there to ensure that the media supply doors remain closed.

10. (Figure 6): Install the Xerographic Module Service Rails.

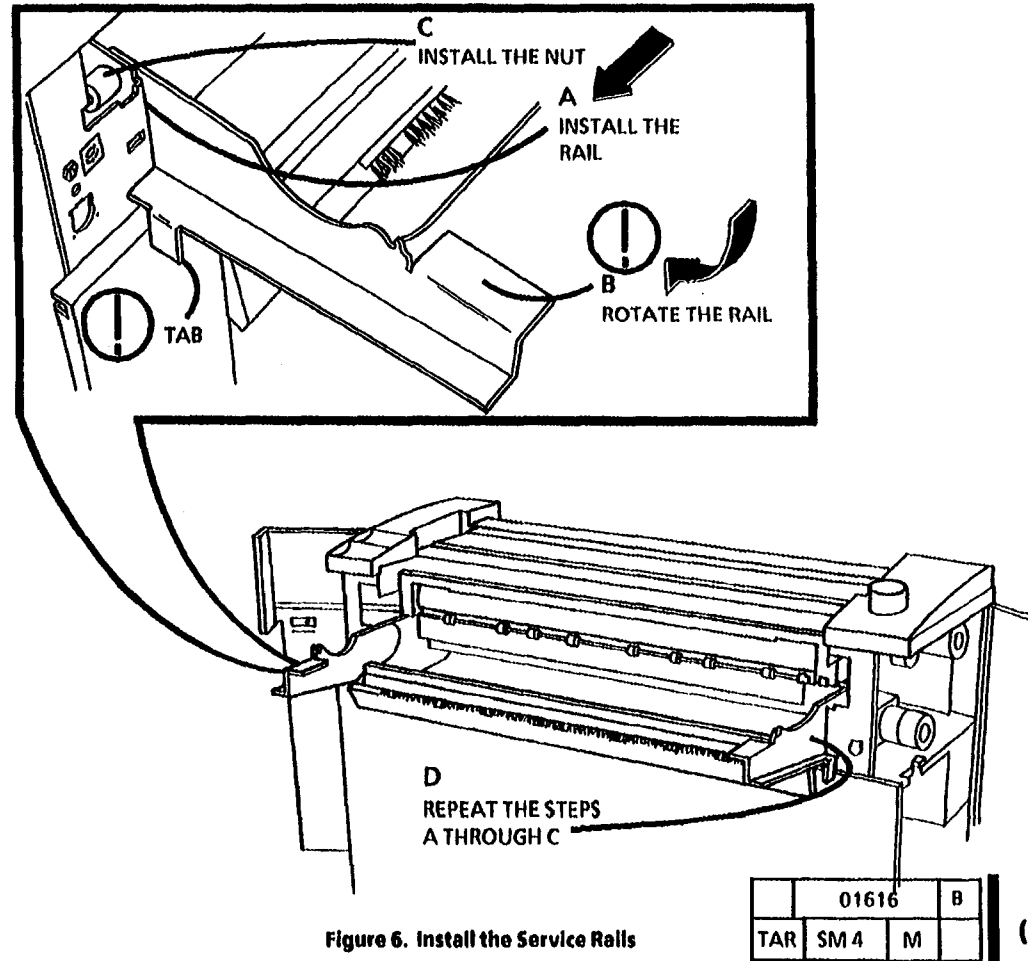


Figure 6. Install the Service Rails

(Continued)

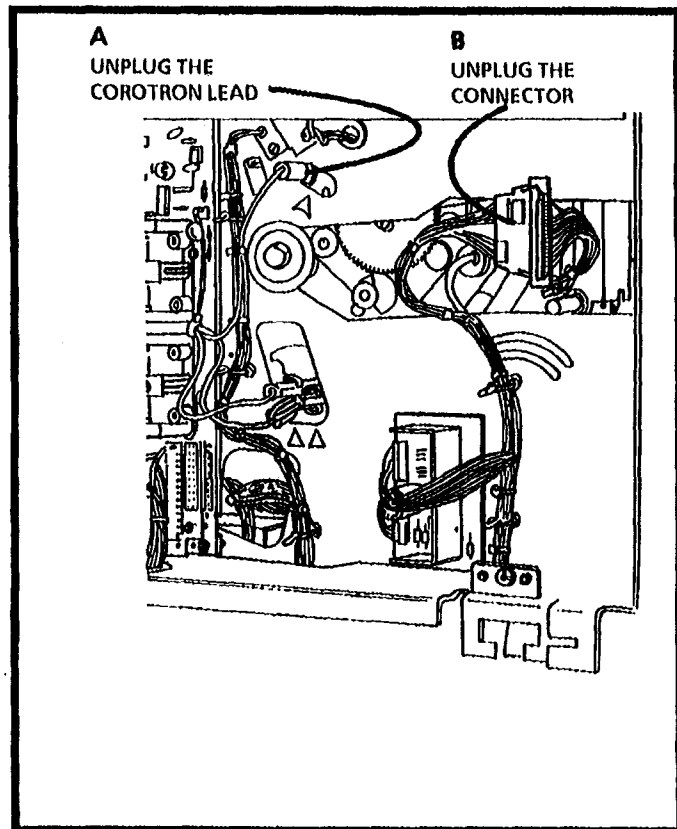
(Continued)

**1** STEP 11 D: Use caution and do not spill Toner when removing the Toner Waste Bottle. Lay bottle down on a protected surface with the opening facing up.

**2** STEP 11 E: Ensure to seal the auger tube with the Cap or a paper towel, in order to prevent contaminating the copier and floor with Toner.

11. (Figure 7): Prepare to remove the Xerographic Module.

VIEW FROM THE LEFT SIDE



VIEW FROM THE RIGHT SIDE

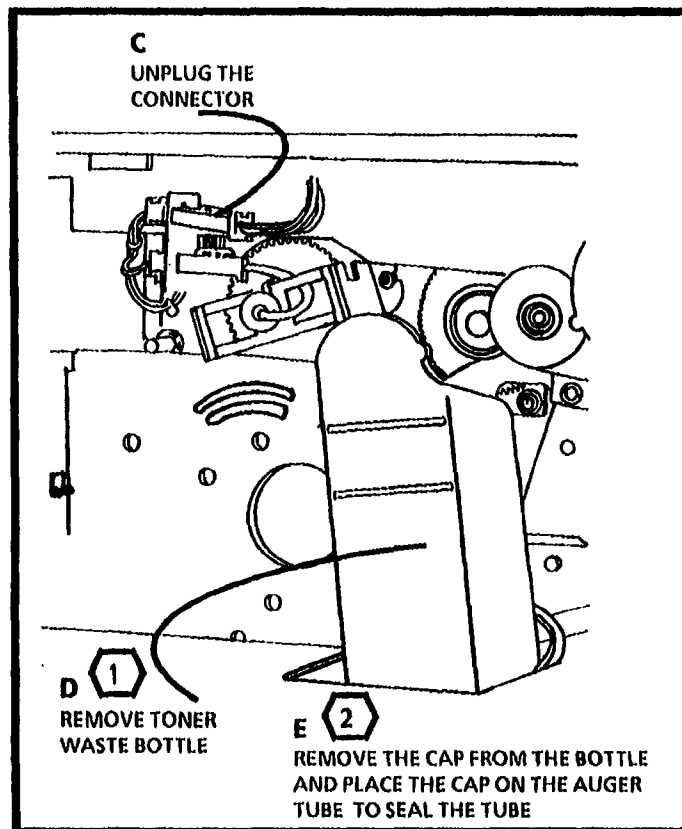


Figure 6. Prepare to Remove the Xerographic Module

2792

(Continued)

## WARNING



The Fuser Heat Roll may be hot.

## CAUTIONS



**STEP 12 B:** Cover the Photoreceptor Drum with a light shield in order to prevent damage to the Drum.



**STEP 12 B:** Be careful when removing the module. The module is heavy and is difficult to handle. The module cannot be placed on any surface without supports under each end of the module frame. The supports prevent the Fuser Heat Roll and Photoreceptor Drum from being damaged.

## NOTE:

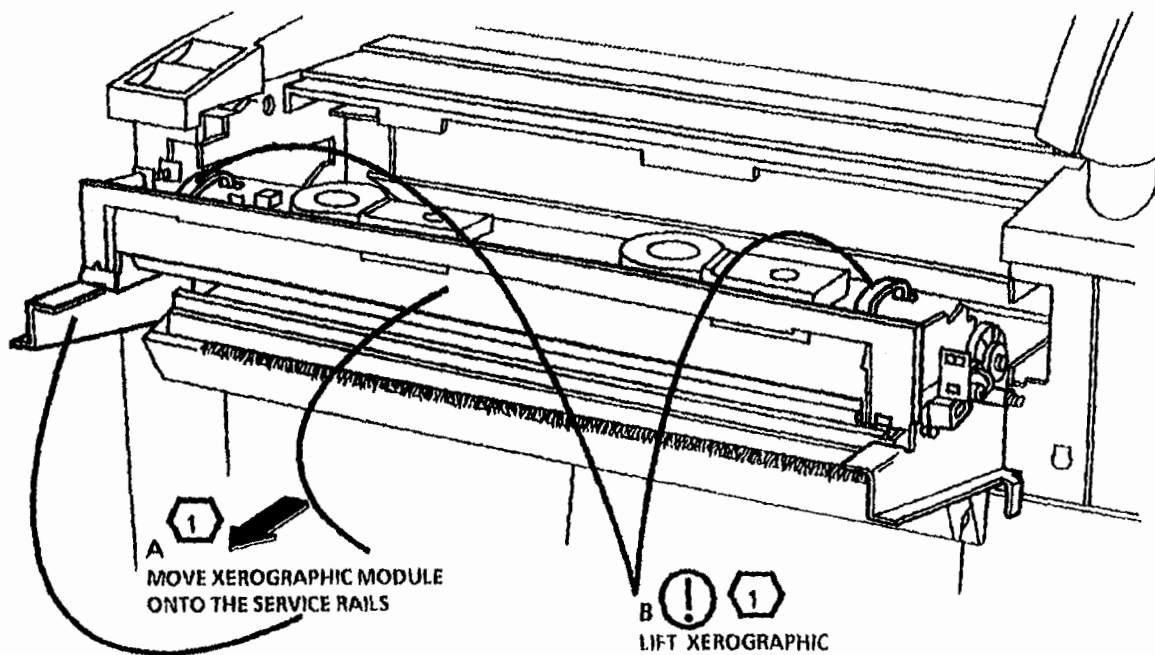


The Xerographic Module may be moved onto the Service Rails or removed from the copier for service. When removed, the Module must be placed on a flat clean surface for service or storage.

12. (Figure 8): Move the Xerographic Module onto the service rails.

(OR)

Move the Xerographic Module to a clean, flat surface for service. Ensure to place supports under each end of the module frame.



A  
MOVE XEROGRAPHIC MODULE  
ONTO THE SERVICE RAILS

B  
LIFT XEROGRAPHIC  
MODULE BY THE  
HANDLES TO REMOVE

	01580	A
TAR	SM 4	M

Figure 8. Remove the Xerographic Module

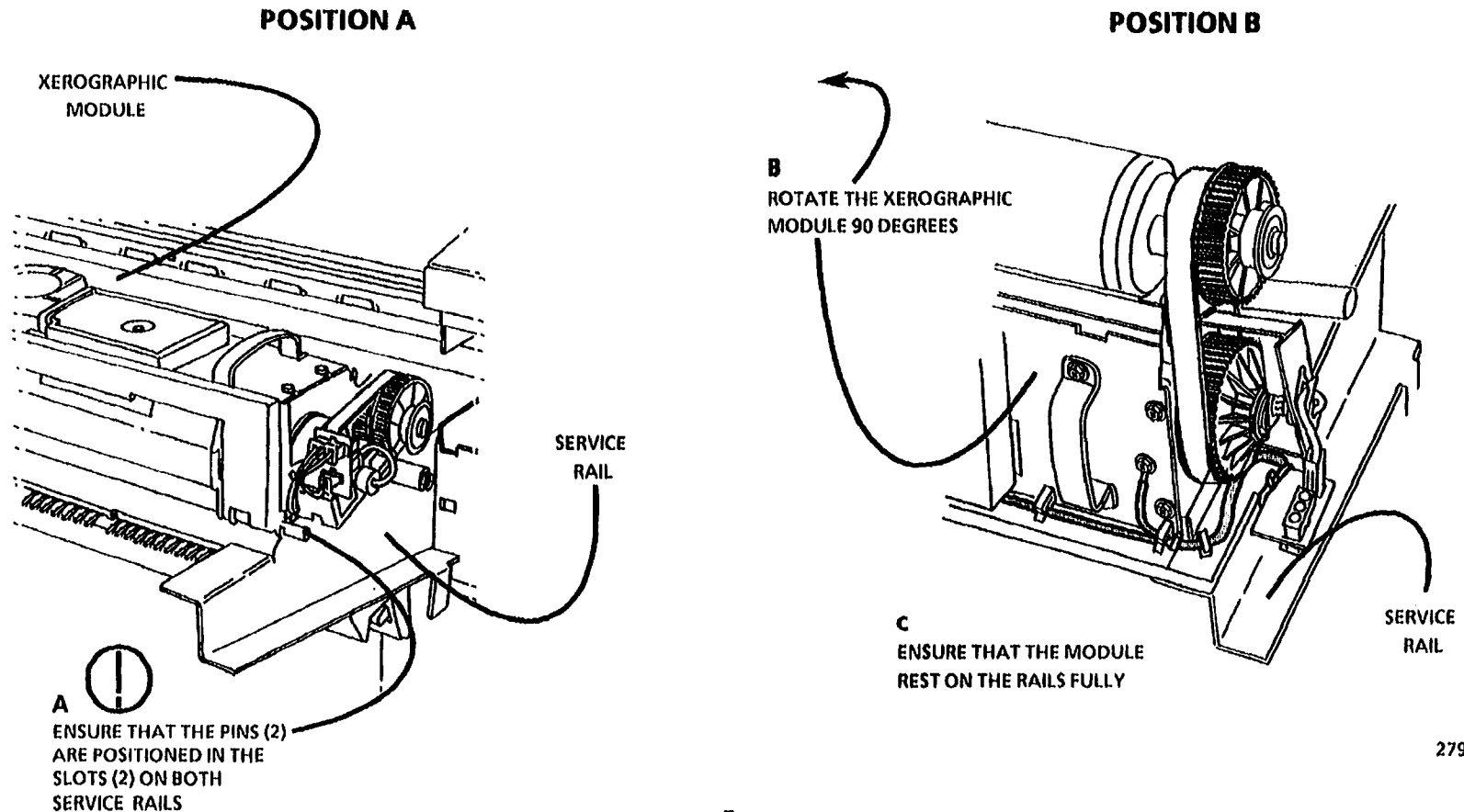
(Continued)

(Continued)



**STEP 13 A:** The pins (2) on the Xerographic Module must be positioned in the slots (2) on the Service Rails (2). The Xerographic Module is secured correctly when the pins are positioned in the slots.

13. (Figure 9): Set the Xerographic Module on the Service Rails in Position A or B.



2794

2793

Figure 9. Position the Xerographic Module on the Service Rails

NOTES:

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4-64H

3050

## REP 9.2A Photoreceptor Drum Assembly (W/ O Tag/ MOD 27)

### Parts List on PL 9.2

**Note:** Some copiers are equipped with a Wing Nut located on the end of the Drum Shaft. The Wing Nut is identified as Tag/ MOD 27. Copiers equipped with a Wing Nut


are identified as With Tag / MOD 27, (W I Tag / MOD 27).

Copiers not equipped with a Wing Nut are identified as Without Tag / MOD 27, (W I O Tag / MOD 27).

Use this procedure on copiers not equipped with a Wing Nut, (W I O Tag/ MOD 27).

On copiers equipped with a Wing nut, refer to the (REP 9.2B Photoreceptor Drum Assembly W I Tag/ MOD 27) removal procedure.

### Removal

1. **WARNING!** Disconnect the Power Cord.
2. Open the Right and the Left Side Doors.
3. Remove the Xerographic Module (REP 9.1).  
 Cover the photoreceptor drum with a light shield in order to prevent damage.
4. (Figure 1): Remove the Photoreceptor Drum Assembly.

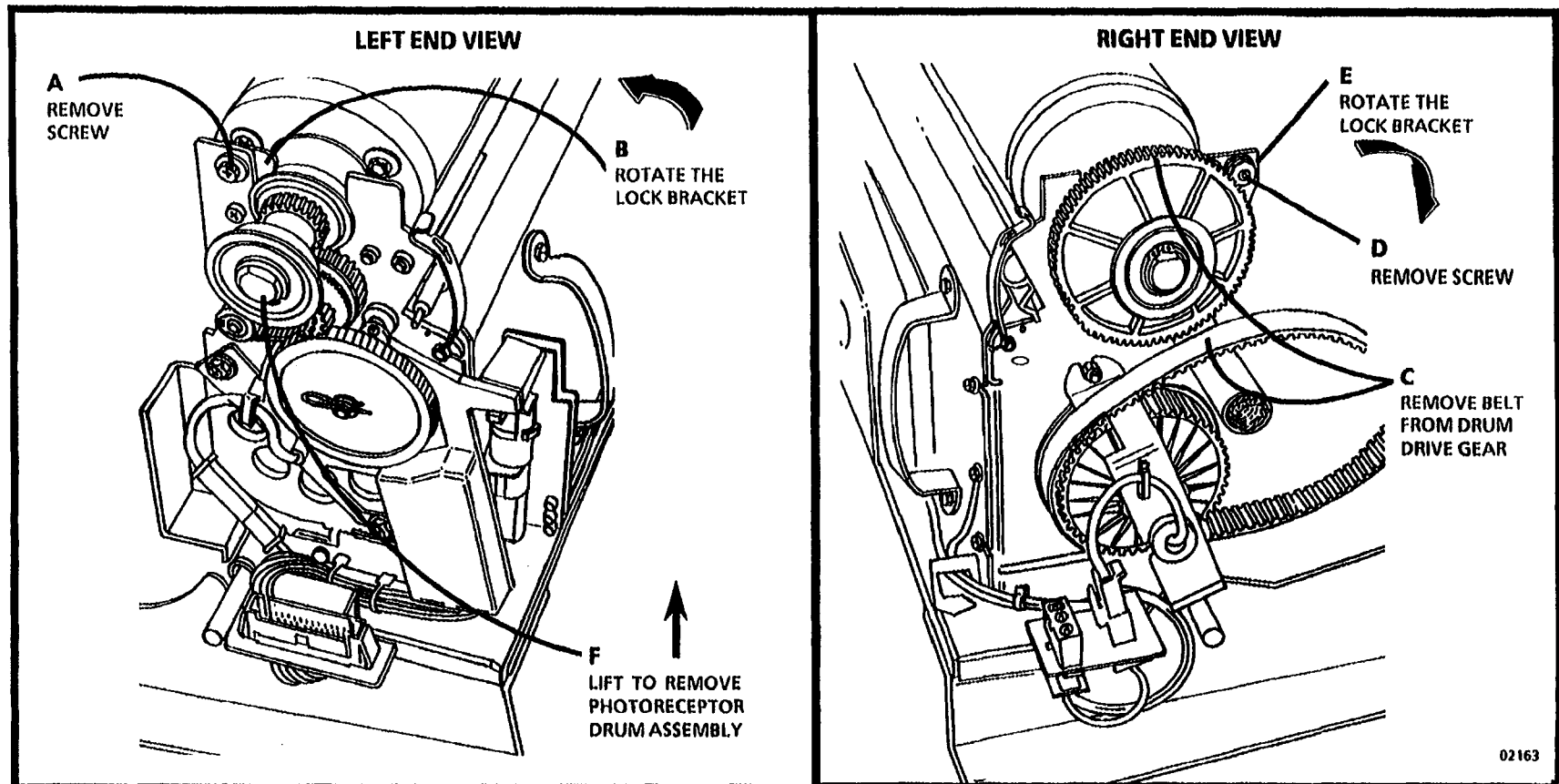


Figure 1. Remove the Photoreceptor Drum Assembly

## Replacement

**!** **STEP 1 A:** Reinstall the left side of the drum assembly first in order to avoid damaging the drum ground bracket.

1. (Figure 2): Reinstall the Photoreceptor Assembly.

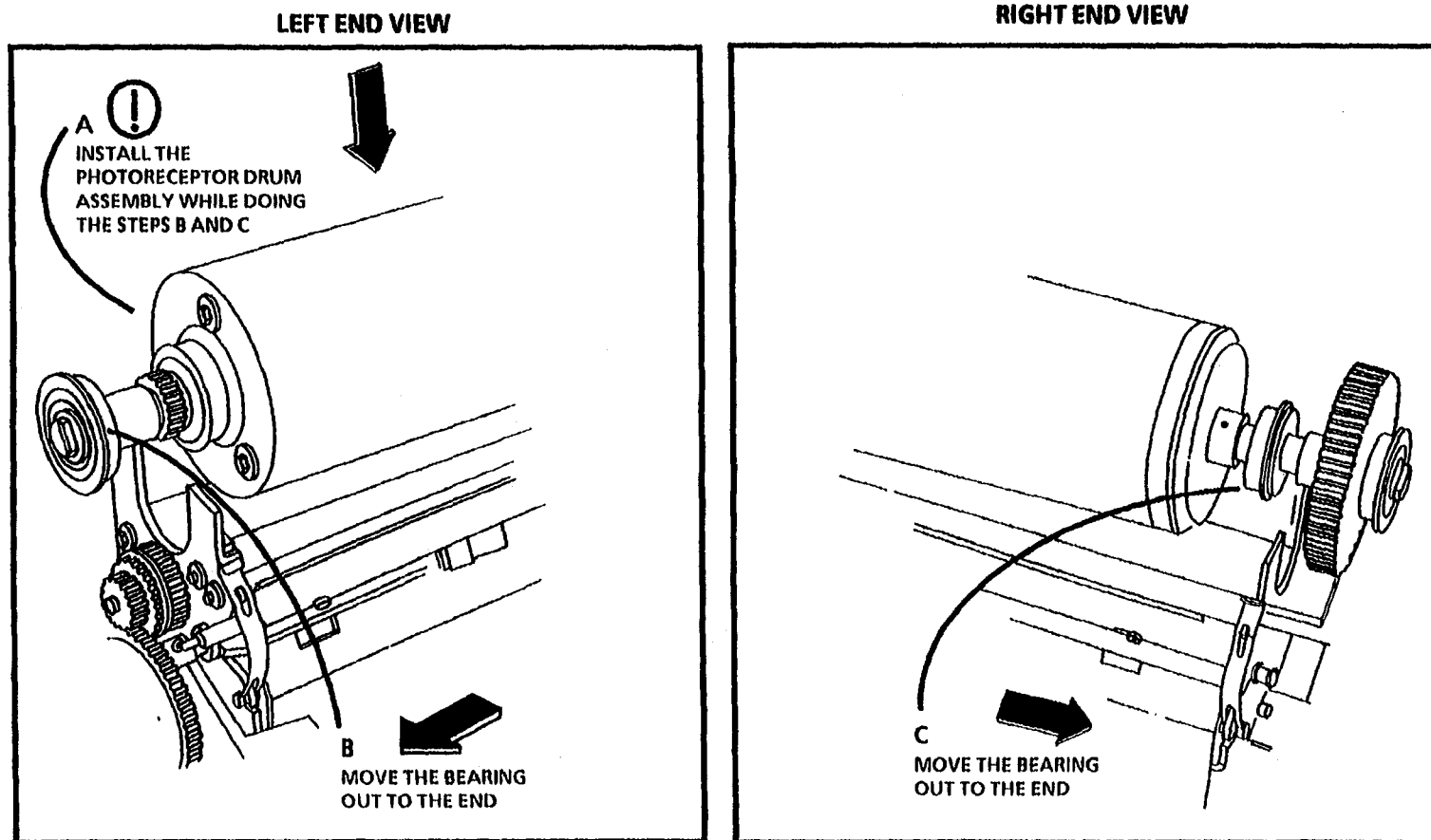


Figure 2. Reinstall the Photoreceptor Assembly

	01493	C
TAR	SM 4	M

(Continued)



(Continued)

ⓘ **STEPS 2 A AND C:** Ensure that the photoreceptor is seated completely down and secure in order to avoid movement.

2. (Figure 3): Secure the Photoreceptor Drum Assembly.

3. The remainder of the replacement is the reverse of the removal.

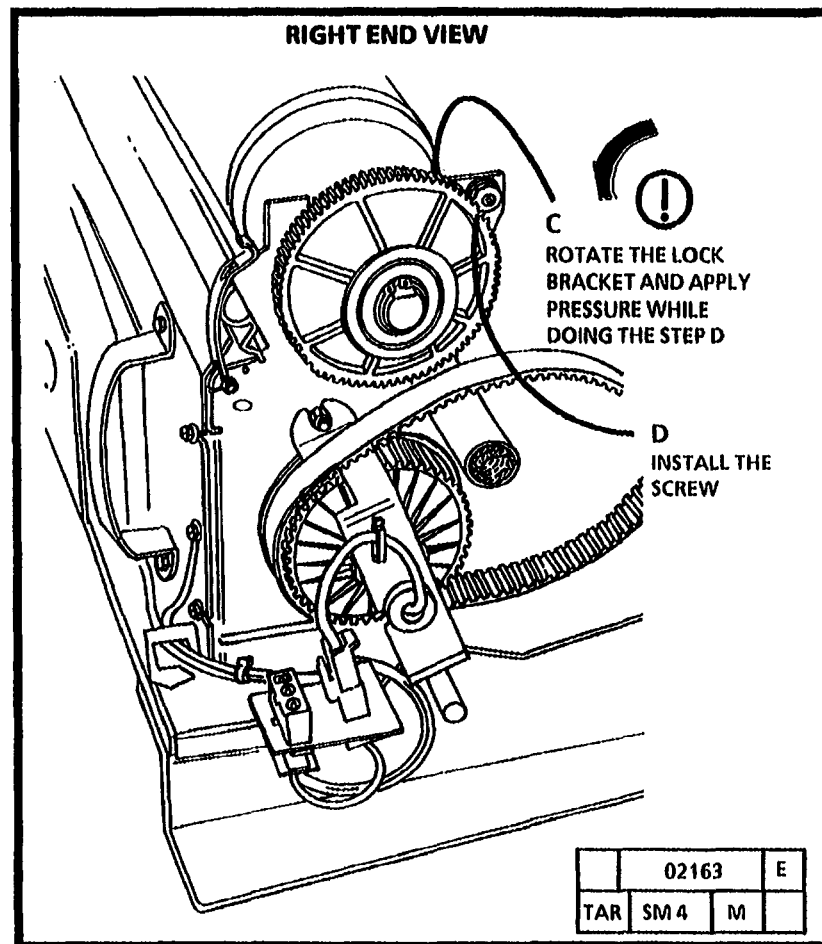
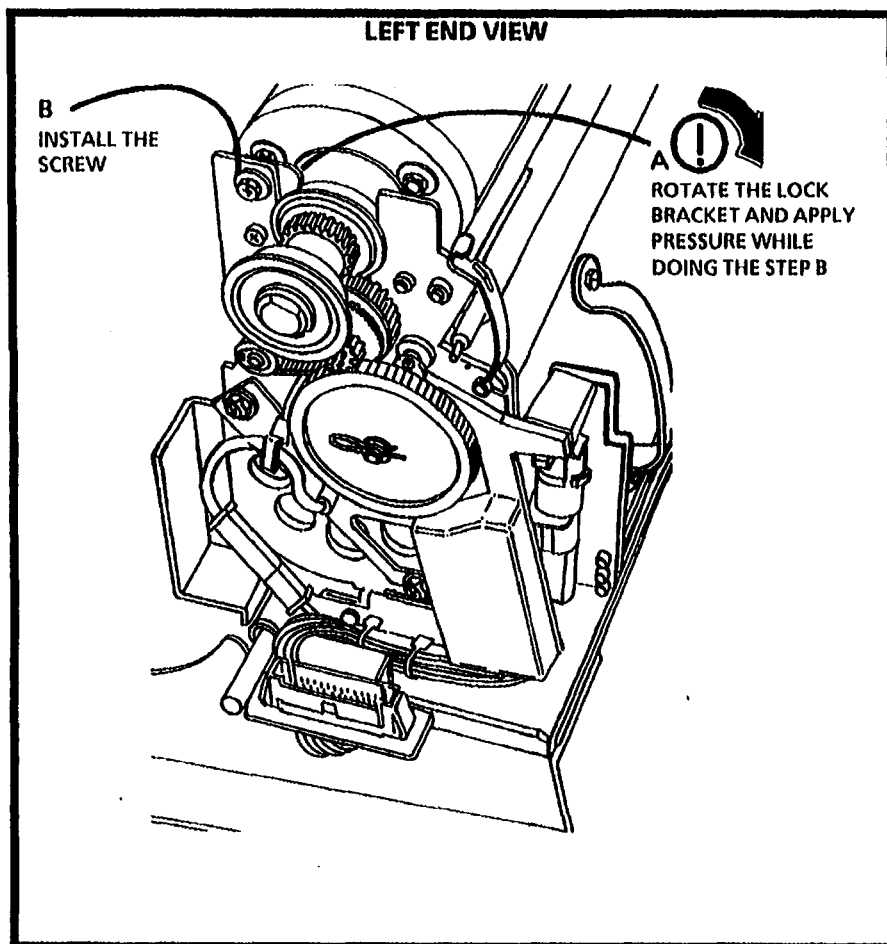


Figure 3. Secure the Photoreceptor Assembly

## REP 9.2B Photoreceptor Drum Assembly (W/ Tag/ MOD 27)

Parts List on PL 9.2A

**Note:** Some copiers are equipped with a Wing Nut located on the end of the Drum Shaft. The Wing Nut is identified as Tag/ MOD 27. Copiers equipped with a Wing Nut

are identified as (W/ Tag / MOD 27).

On copiers with out a Wing Nut, refer to the (REP 9.2A Photoreceptor Drum Assembly W/ O Tag/ MOD 27) removal procedure.

### Removal

**WARNING !** Switch off the Main Power Switch. Disconnect the Power Cord.

1. Remove the Right and the Left Side Doors (REP 14.1).

2. Remove the Xerographic Module (REP 9.1):

ⓘ Cover the photoreceptor drum with a light shield in order to prevent damage.

3. (Figure 1): Remove the Photoreceptor Drum Assembly.

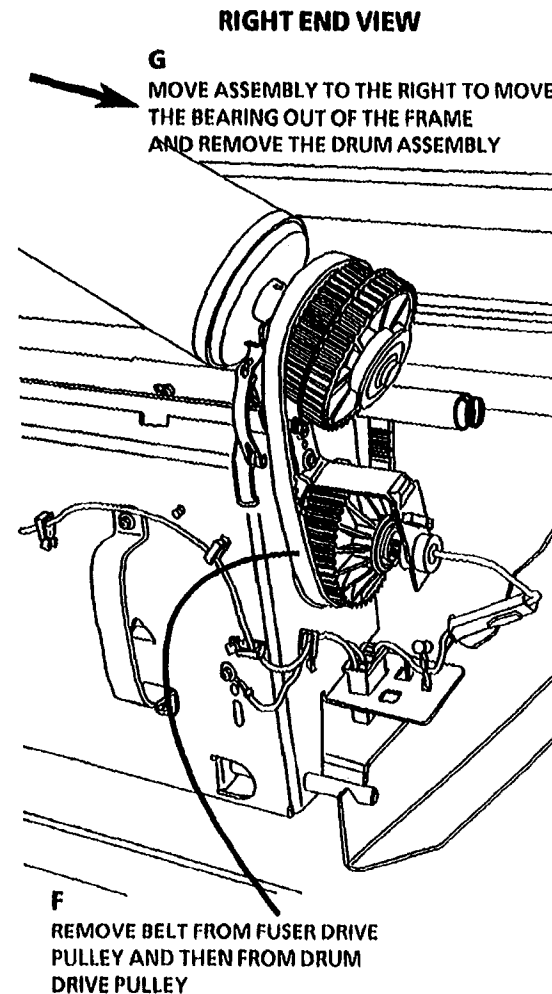
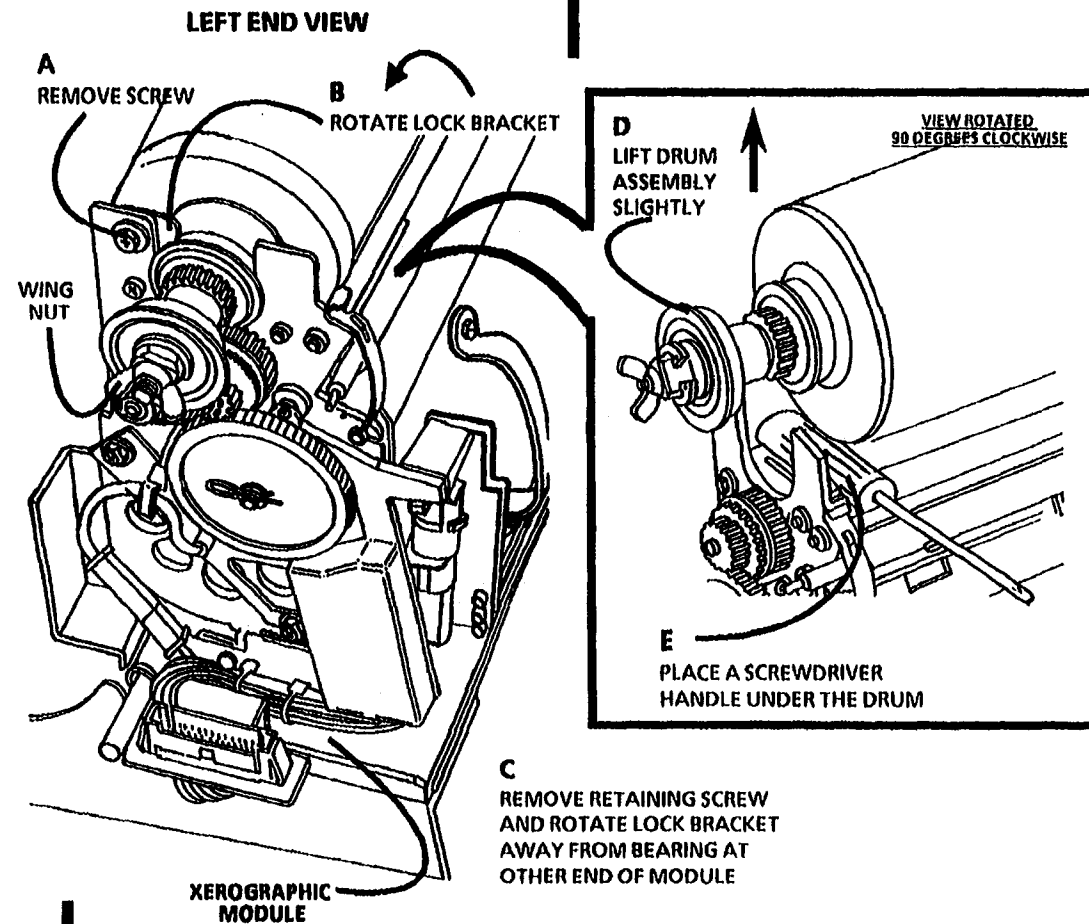


Figure 1. Removal of the Photoreceptor Drum Assembly

2795

W2516

## Replacement



Cover the photoreceptor drum with a light shield in order to prevent damage.

1

**STEP 1:** Before installing the photoreceptor drum, reform the photoreceptor seal so that it is pointing to the charge corotron.

1. (Figure 2): Reinstall the Photoreceptor Assembly.

(Continued)

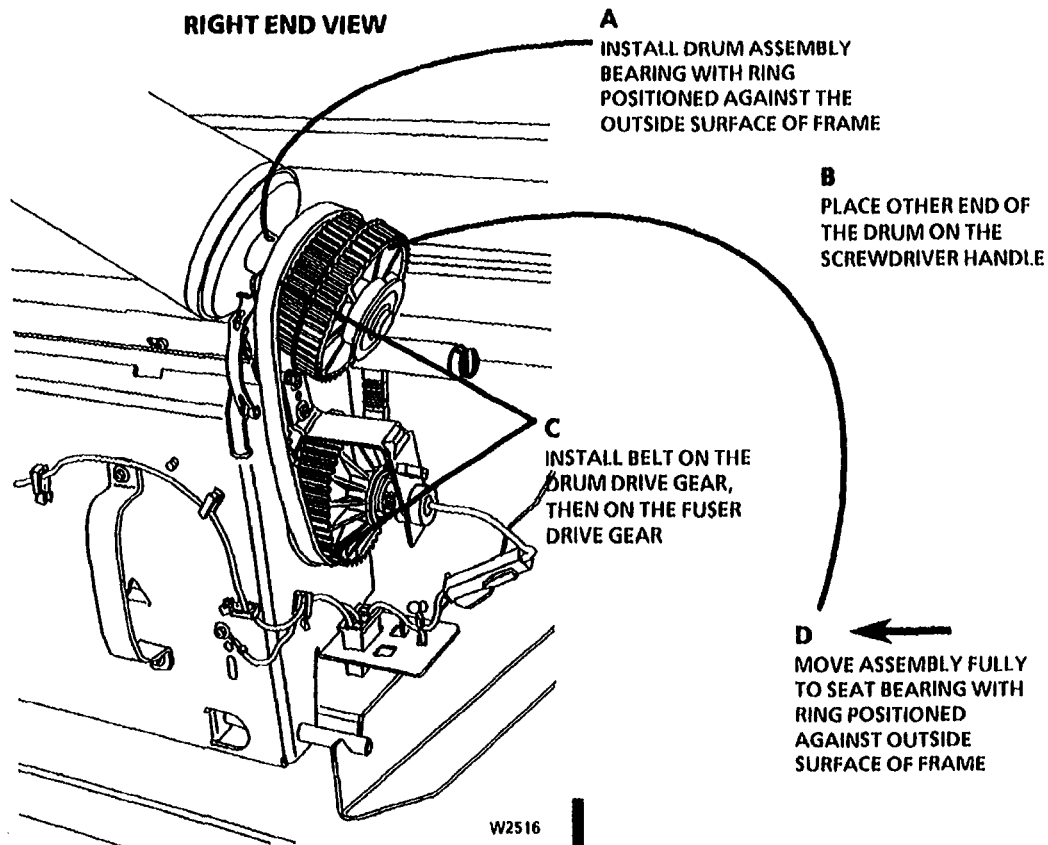


Figure 2. Reinstall the Photoreceptor Assembly

**BLANK**

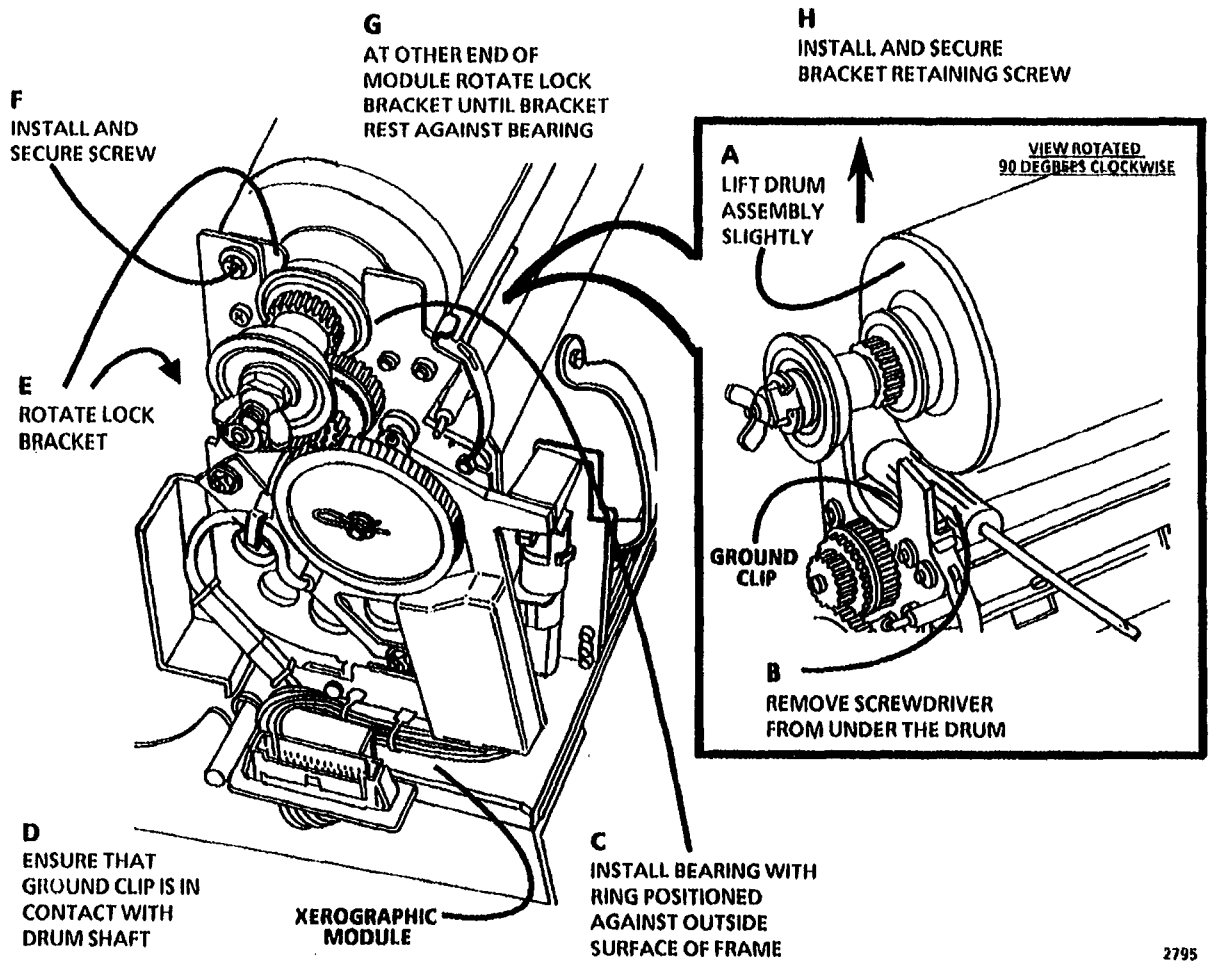
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**4/96  
4-67C**

**3050**

(Continued)

2. (Figure 3): Secure the Photoreceptor Assembly.



2795

Figure 3. Secure the Photoreceptor Assembly

## REP 9.3A Photoreceptor Drum (W/ O Tag/ MOD 27)

### Parts List on PL 9.2

**Note:** Some copiers are equipped with a Wing Nut located on the end of the Drum Shaft. The Wing Nut is identified as Tag/ MOD 27. Copiers without a Wing Nut are identified as (W I O Tag/ MOD 27).

Use this procedure on copiers without a Wing Nut, (W I O Tag/ MOD 27).

Copiers equipped with a Wing Nut are identified as With Tag / MOD 27, (W I Tag / MOD 27).

### Removal

1. **Warning:** Disconnect the Power Cord.

2. Remove the Right and the Left Side Doors.
3. Remove the Xerographic Module (REP 9.1).
4. Remove the Photoreceptor Drum Assembly (REP 9.2).
5. (Figure 1): Remove the Photoreceptor Drum.

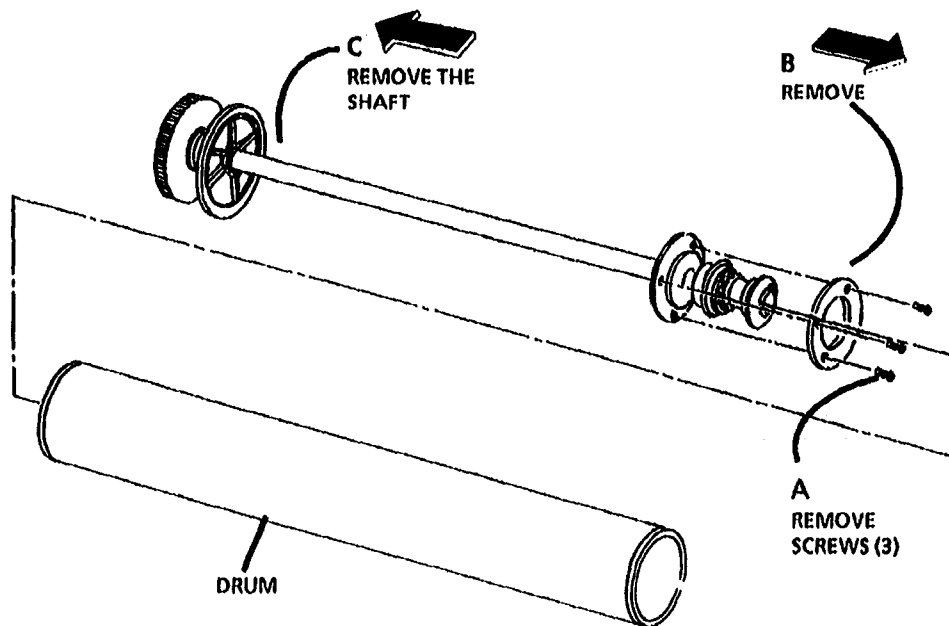


Figure 1. Remove the Photoreceptor Shaft Assembly

	01494	A
TAR	SM 4	M

(Continued)

(Continued)

## Replacement

**!** Do not remove the light shield until Step 2 when the photoreceptor is ready to be installed in the xerographic module.

**1** STEP 1 A: Ensure that the top of the drum box is up before opening the box.

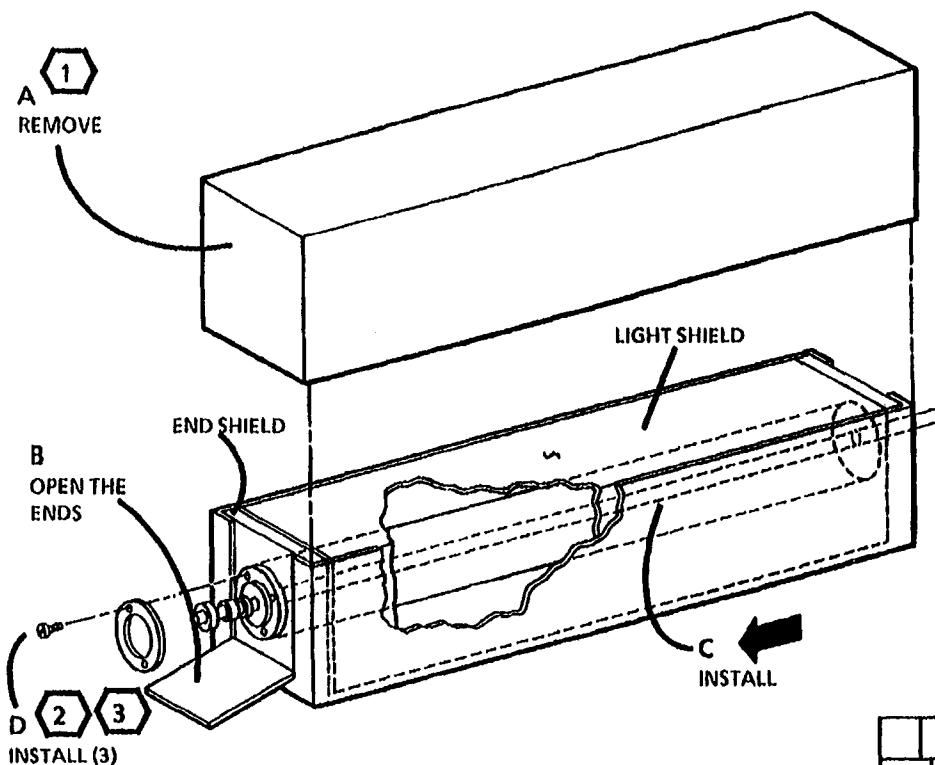


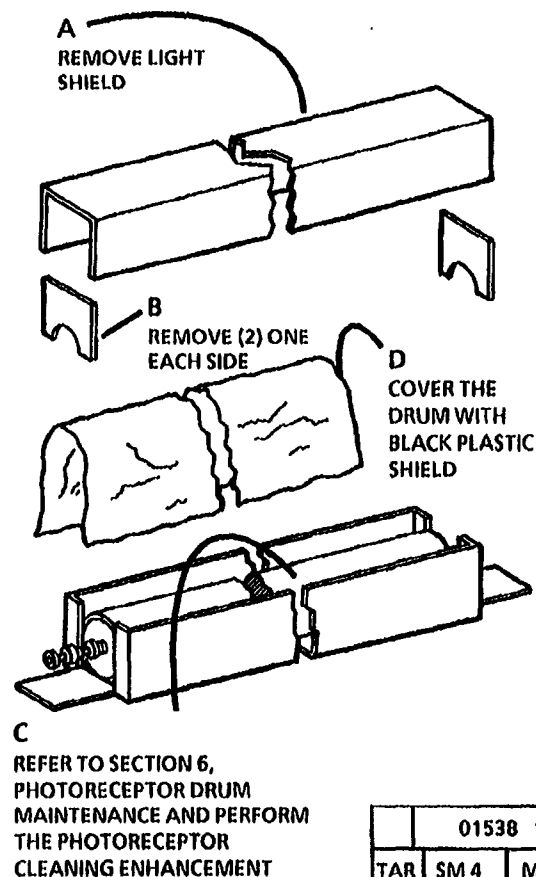
Figure 2. Install the Assembly Shaft

**2** STEP 1 D: The end shields (2) must be raised in order to position the drum shaft end plates fully against the drum.

**3** STEP 1 D: When installing the drum shaft, be sure to tighten the three retaining screws evenly and with equal pressure.

1. (Figure 2): Install the Photoreceptor Assembly Shaft

2. (Figure 3): Prepare the Drum for Installation.



		01538	A
TAR	SM 4	M	

Figure 3. Prepare the Drum for Installation

		01537	A
TAR	SM 4	M	

(Continued)

(Continued)

**4** Replace the seal if it is damaged.

3. Clean the Photoreceptor Seal (PL 9.5, Item 12). Move the Seal towards the photoreceptor drum, in order to provide a seal between the photoreceptor drum and the auger extrusion. Reform the seal as required so that, the Seal is pointing towards the Charge Corotron.

**5** Removal of the Charge Corotron /Erase Lamp is required in order to avoid contaminating the Corotron, with stearate dust.

4. Remove the Charge Corotron / Erase Lamp.

**6** If an excessive amount of stearate is applied to the cleaning blade, the stearate may contaminate the Transfer/ Detack Corotron. A contaminated Corotron can cause a copy quality problem. Do not apply an excessive amount of stearate to the cleaner blade.

5. Apply a light coating of stearate dust to the Cleaner Blade.

6. Reinstall the Charge Corotron / Erase Lamp.

7. Install the Photoreceptor Drum Assembly in the Xerographic Module (REP 9.2).

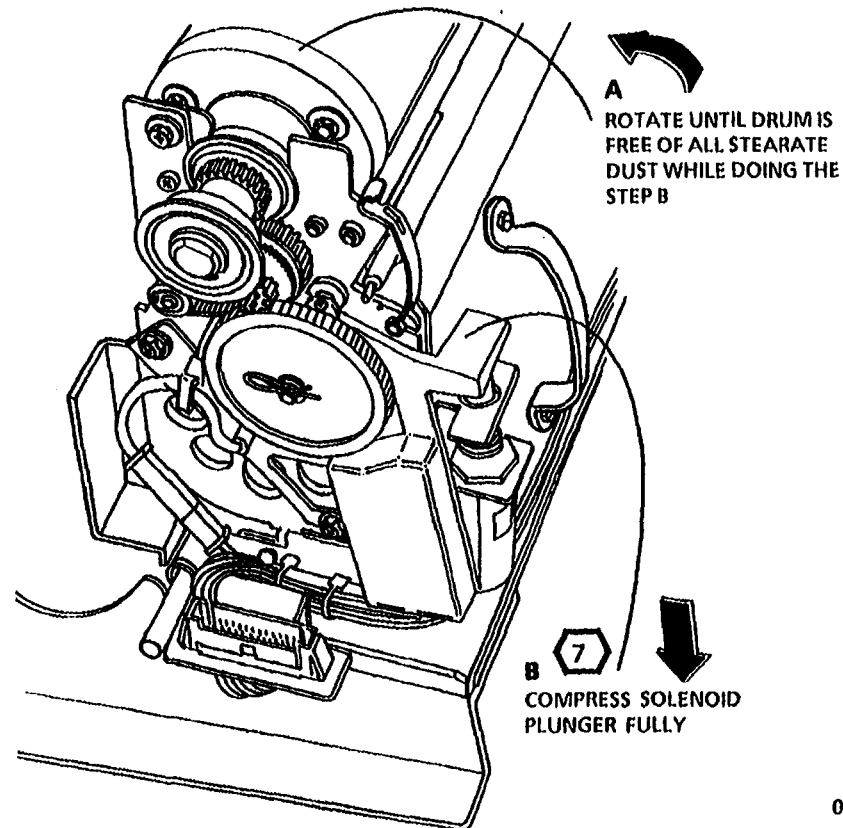
**7** STEP 8B: Compress the solenoid plunger so that, the cleaner blade comes in contact with the Photoreceptor Drum.

8. (Figure 4): Remove the stearate from the Photoreceptor Drum..

9. Install the Xerographic Module (REP 9.1).

10. Perform the Cleaner Blade Solenoid Adjustment (ADJ 9.1).

11. Perform the Electrostatics Series (ADJ 9.2).



01611B

Figure 4. Removal of the Stearate from the Photoreceptor



## REP 9.3B Photoreceptor Drum (W/ Tag/ MOD 27)

### Parts List on PL 9.2 B

**Note:** Some copiers are equipped with a Wing Nut located on the end of the Drum Shaft. The Wing Nut is identified as Tag/ MOD 27. Copiers equipped with a Wing Nut are identified as *With Tag / MOD 27, (W I Tag / MOD 27)*.

Copiers not equipped with a Wing Nut are identified as *Without Tag / MOD 27, (W I O Tag / MOD 27)*.

Use this procedure on copiers equipped with a Wing Nut, (W I Tag/ MOD 27).

On copiers not equipped with a Wing nut, refer to the (REP 9.3A Photoreceptor Drum W I O Tag/ MOD 27) removal procedure.

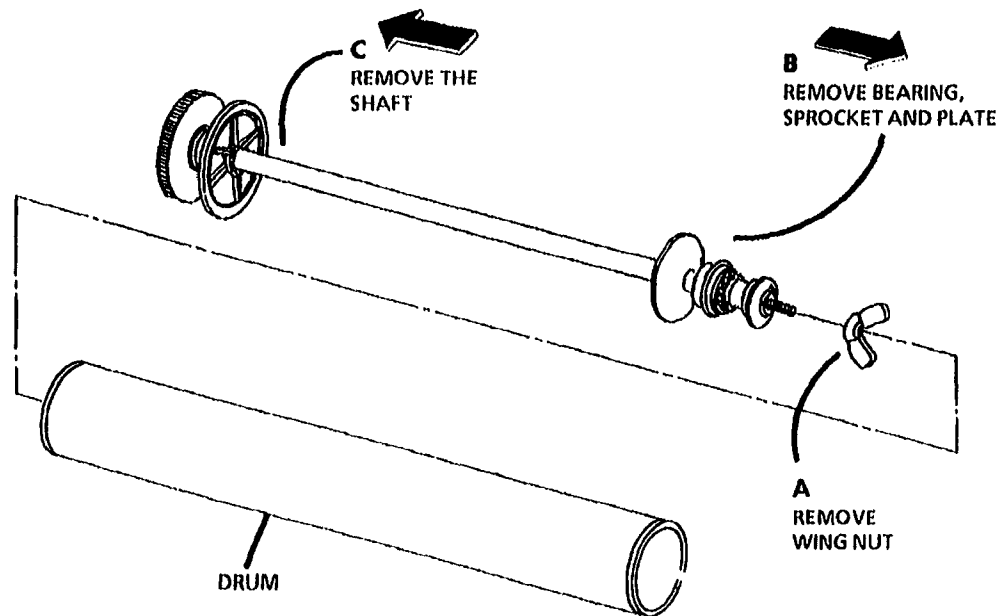
### Removal



#### WARNING

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

1. Remove the Right and the Left Side Doors.
2. Remove the Xerographic Module (REP 9.1).
3. Remove the Photoreceptor Drum Assembly (REP 9.2).
4. (Figure 1): Remove the Photoreceptor Drum.



W2565

Figure 1. Removal of the Photoreceptor Shaft Assembly

NOTES

## Replacement

**!** Do not remove the light shield until Step 2 when the photoreceptor is ready to be installed in the xerographic module.

**1** STEP 1 A: Ensure that the top of the drum box is up before opening the box.

**2** STEP 1 D: Ensure that the Drum End Plates (2) are seated into the Drum fully.

1. (Figure 2): Install the Photoreceptor Assembly Shaft.

2. (Figure 3): Prepare the Drum for installation.

(Continued)

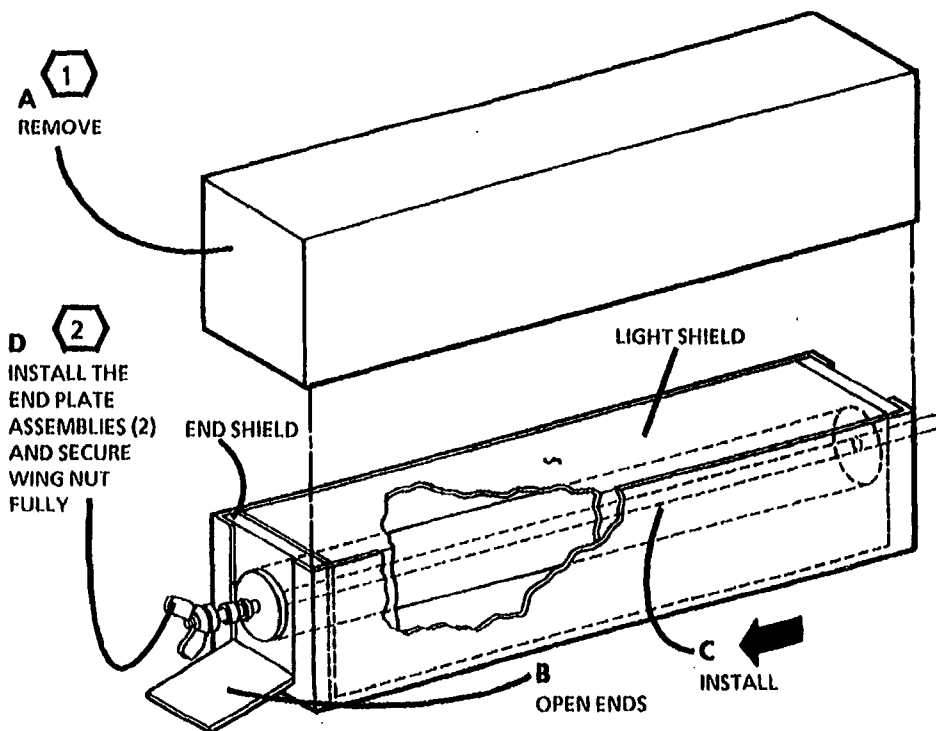


Figure 2. Installation of the Assembly Shaft

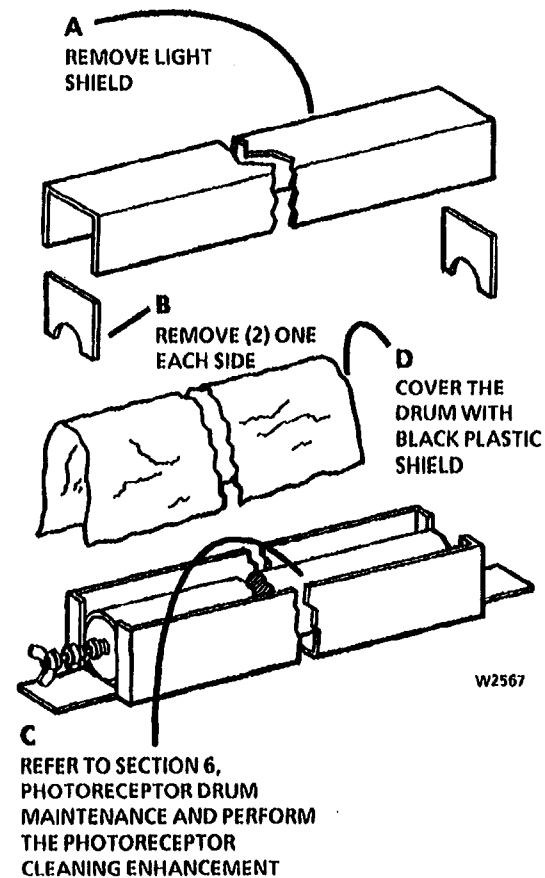


Figure 3. Prepare the Drum for Installation

(Continued)

4 Replace the seal if it is damaged.

3. Clean the Photoreceptor Seal (PL 9.5, Item 12). Move the Seal towards the photoreceptor drum, in order to provide a seal between the photoreceptor drum and the auger extrusion. Reform the seal as required so that, the Seal is pointing towards the Charge Corotron.

5 Removal of the Charge Corotron /Erase Lamp is required in order to avoid contaminating the Corotron, with stearate dust.

4. Remove the Charge Corotron / Erase Lamp.

6 If an excessive amount of stearate is applied to the cleaning blade, the stearate may contaminate the Transfer/ Detack Corotron. A contaminated Corotron can cause a copy quality problem. Do not apply an excessive amount of stearate to the cleaner blade.

5. Apply a light coating of stearate dust to the Cleaner Blade.

6. Reinstall the Charge Corotron/ Erase Lamp.

7. Install the Photoreceptor Drum Assembly in the Xerographic Module (REP 9.2).

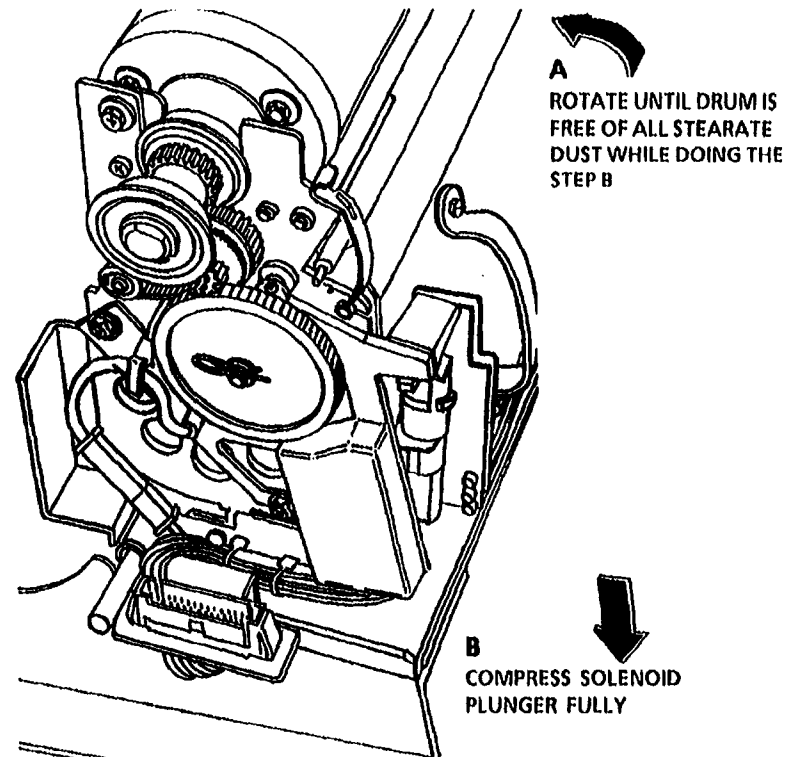
*STEP 8B: Compress the solenoid plunger so that, the cleaner blade comes in contact with the Photoreceptor Drum.*

8. (Figure 4): Remove the stearate from the Photoreceptor Drum.

9. Install the Xerographic Module (REP 9.1).

10. Perform the Cleaner Blade Solenoid Adjustment (ADJ 9.1).

11. Perform the Electrostatics Series (ADJ 9.2).



01611C

Figure 4. Removal of the Stearate from the Photoreceptor

# REP 9.4 Cleaner Blade

## Parts List on PL 9.5

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Xerographic Module (Rep 9.1).

3. Remove Photoreceptor Drum Assembly (REP 9.2).
5. (Figure 2): Remove the Cleaner Blade Assembly.

**1** STEPS 4 A AND B: Use care when removing the retainer and the transition gear. The cleaner blade assembly is spring-loaded.

4. (Figure 1): Remove Transition Gear and Weight.

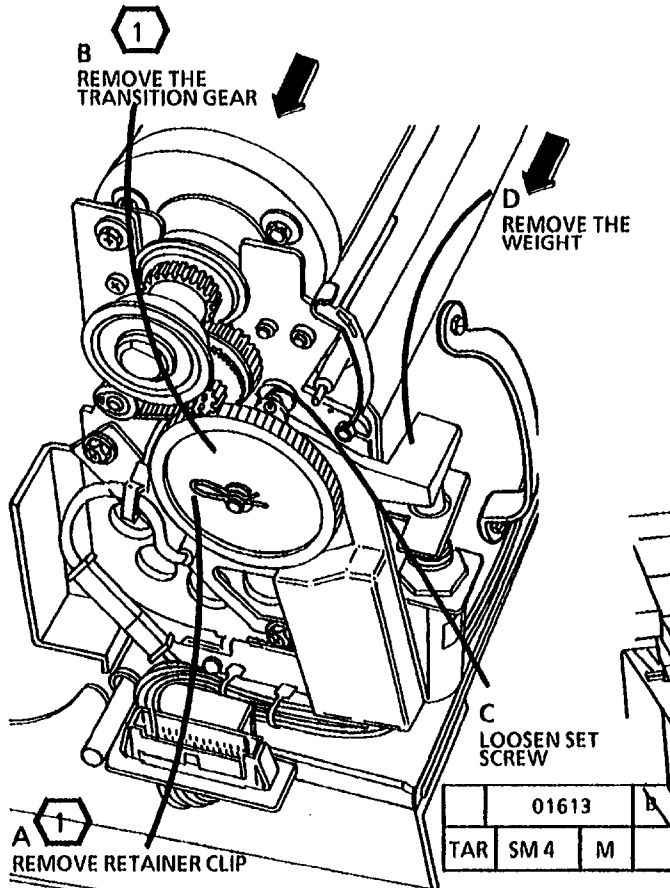


Figure 1. Remove the Transition Gear and Weight

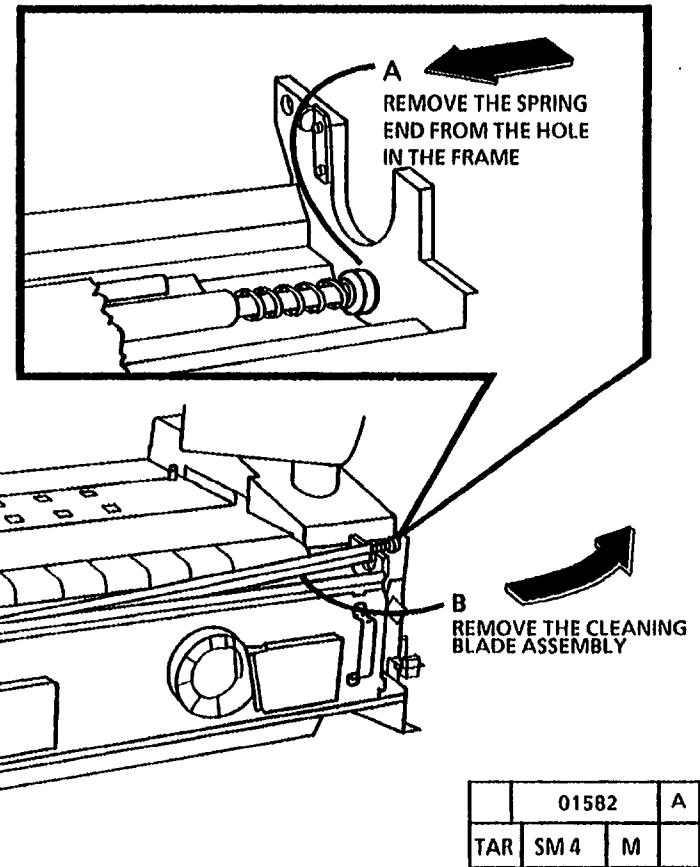
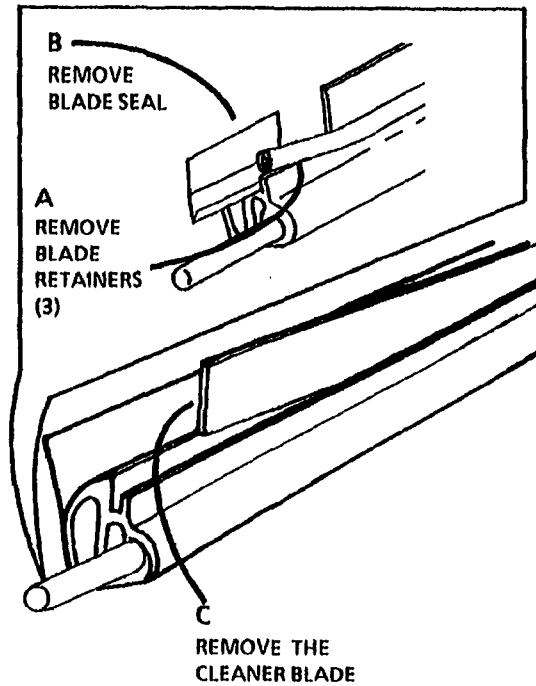


Figure 2. Remove the Cleaning Blade Assembly

(Continued)

5. (Figure 3): Remove the Cleaner blade.



	01541	A
TAR	SM 4	M

Figure 3. Remove the Cleaner Blade

## Replacement

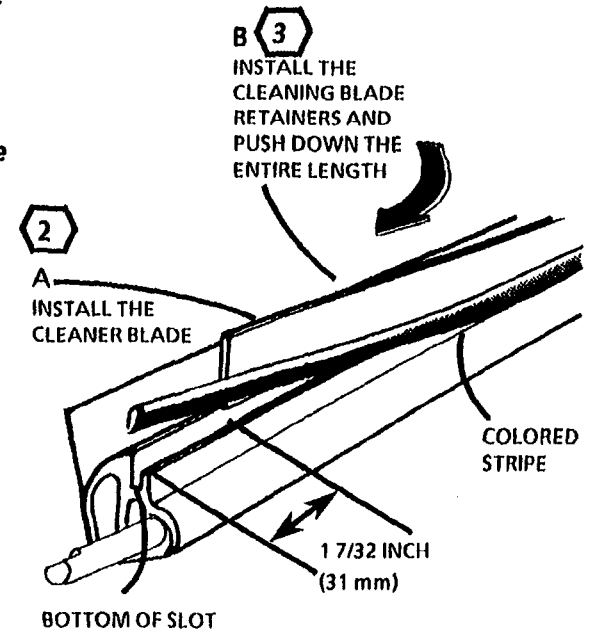
1 Applying a coat of zinc stearate to the cleaning blade before installing the cleaning blade and retainers will lubricate them for easier installation of the retainers.

1. Apply a light coating of zinc stearate to the cleaning blade.

2 STEP 2 A: With the cleaner housing positioned as shown, install the cleaner blade with the arrow pointed up and the words, **THIS SIDE TOWARD PHOTORECEPTOR**, facing towards you. Do not touch the edge of the cleaner blade with your fingers. If the edge is touched, clean the blade with film remover and dust again with zinc stearate.

3 STEP 2 B: When installing the cleaner blade retainers, ensure that the colored stripe is installed to the outside and that the holders are completely seated.

2. (Figure 4): Install the Cleaning Blade.



	01542	A
TAR	SM 4	M

Figure 4. Install the Cleaner Blade

(Continued)

(Continued)

**!** **STEP 3 B:** Do not touch the wiping edge of the cleaner blade with your fingers.

3. (Figure 6): Install the Cleaner Blade Seal.

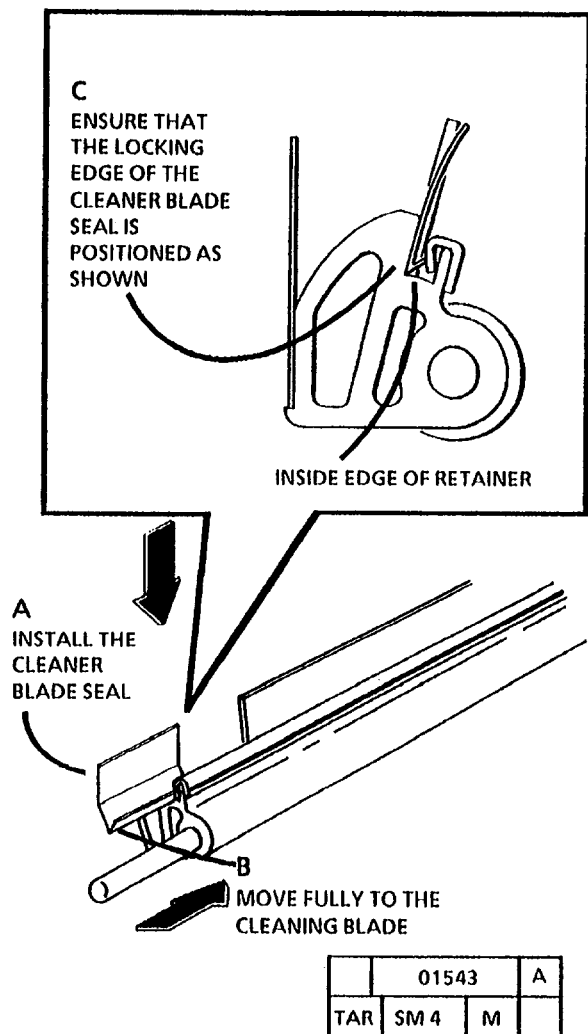
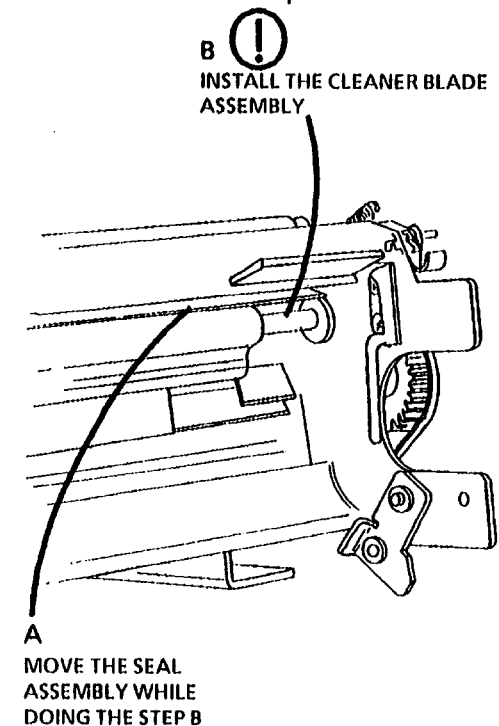


Figure 6. Install the Cleaner Blade Seal

**!** **STEP 4:** Apply the zinc stearate before installing the cleaner blade assembly into the xerographic module to prevent contamination to the charge corotron/erase lamp.

4. Apply a light coating of Zinc Stearate to the Cleaner Blade.

5. (Figure 6): Install the Cleaner Blade Assembly.
6. The remainder of the replacement is the reverse of the removal procedure.



	01583	A
TAR	SM 4	M

Figure 6. Install the Cleaner Blade Assembly

7. Check the Cleaner Blade Solenoid (ADJ 9.1).

# REP 9.5 Developer Module

## Parts List on PL 9.7

### Removal

① Before removing the developer module, ensure that there is a clean area to place the assembly.

1. **Warning:** Disconnect the power cord.

⚠ **STEP 2A:** To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

2. (Figure 1): Lower the Upper Rear Door.

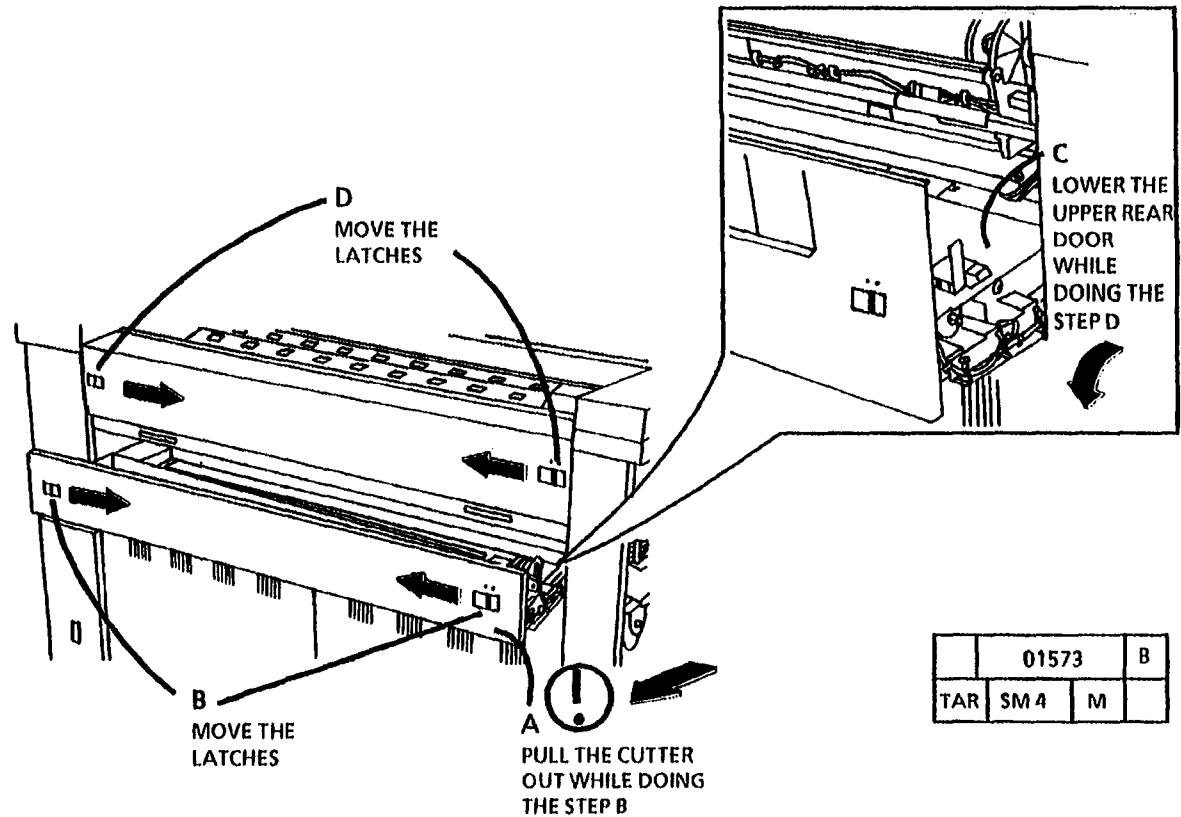


Figure 1. Lower the Upper Rear Door

(Continued)



(Continued)

**!** **STEP 3 B:** Tape the toner cartridge dispense holes in order to prevent toner from pouring out when the toner cartridge is tipped up for removal.

3. (Figure 2): Remove the Toner Cartridge.

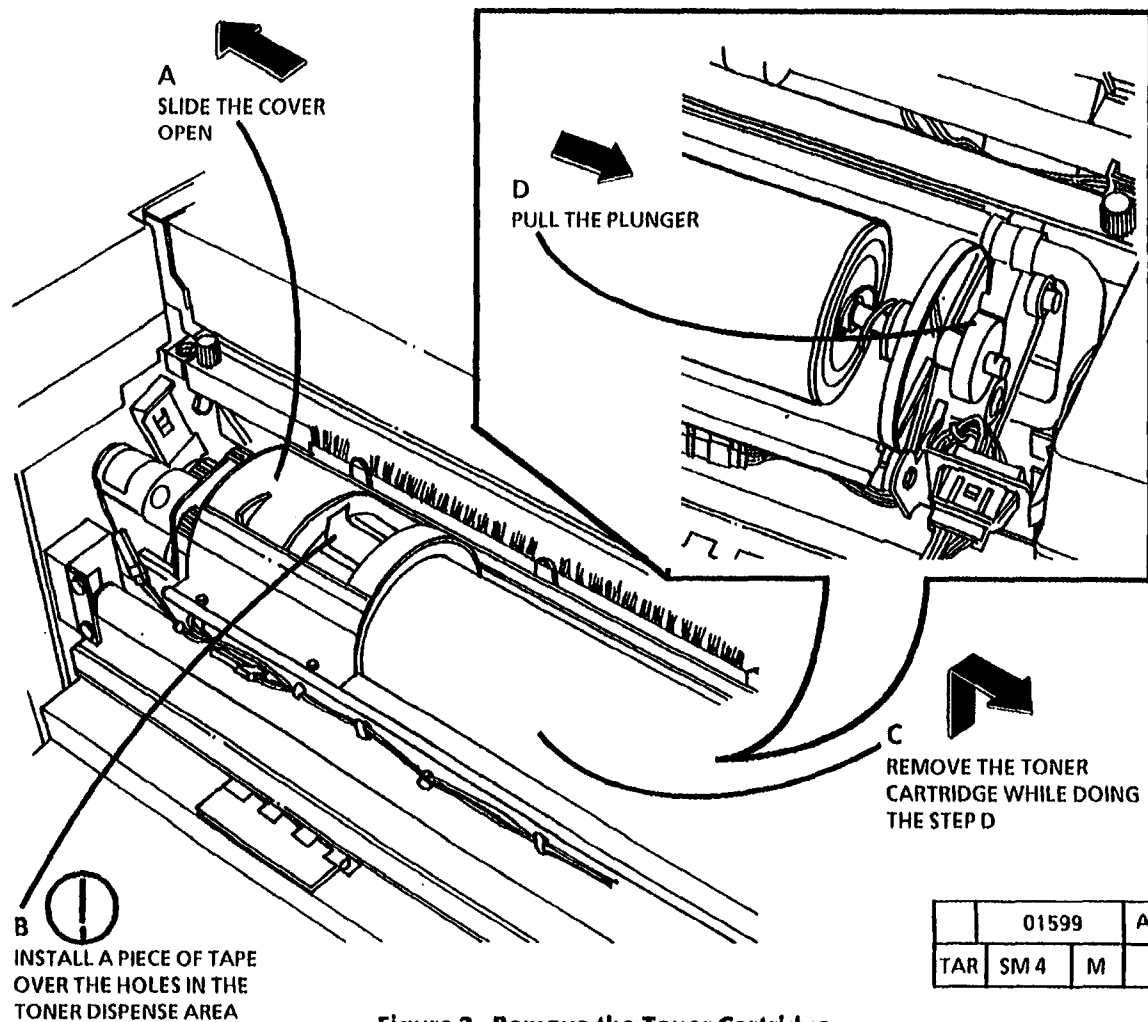


Figure 2. Remove the Toner Cartridge

(Continued)

(Continued)

4. (Figure 3): Remove the Developer Module.

2 STEP 4 E and F: Ensure that the clamp will not cause interference when removing the developer module.

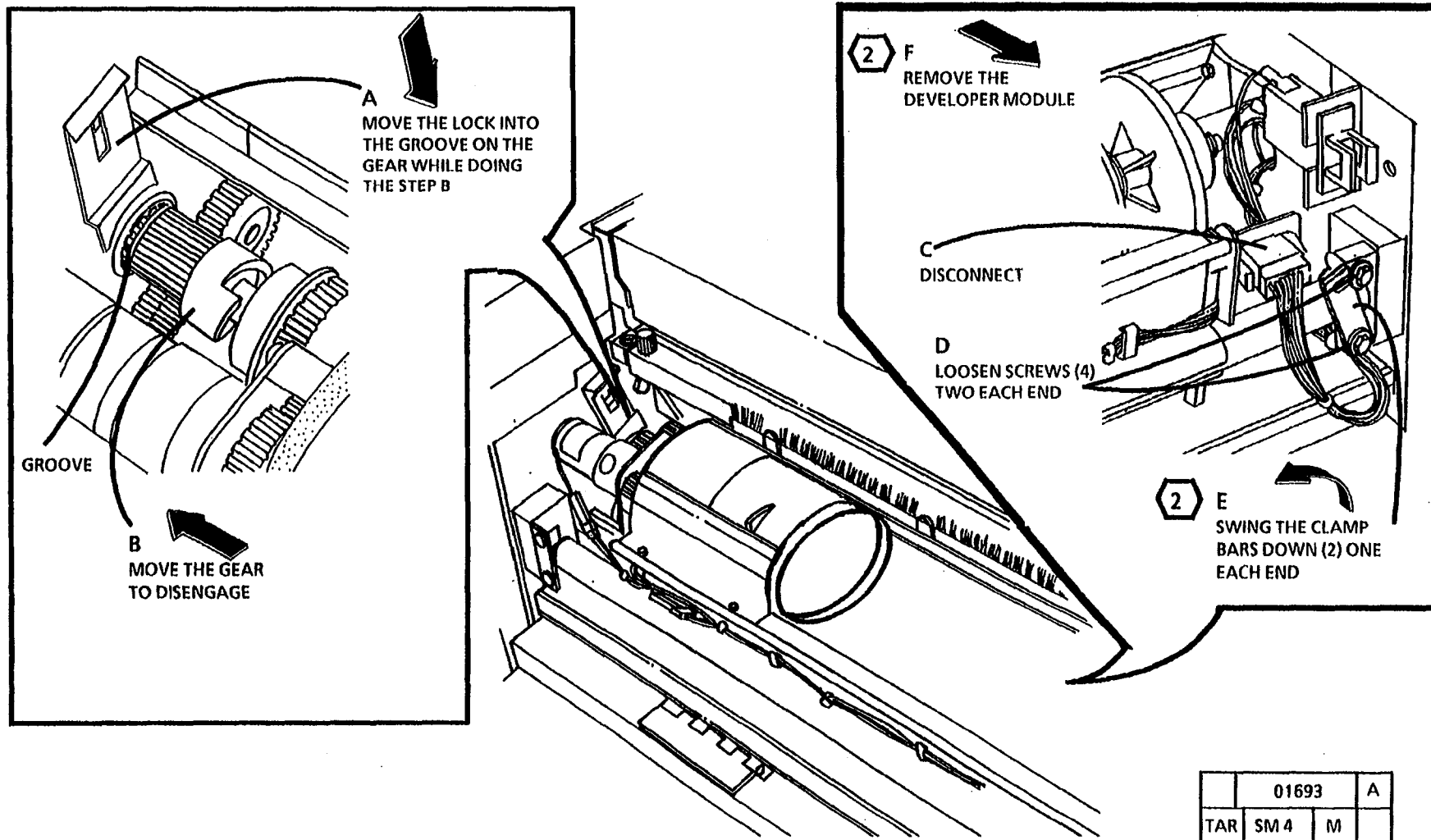


Figure 3. Remove the Developer Module

(Continued)

(Continued)

## Replacement

1. (Figure 4): Install the Developer Module.

**3** STEP 1 A: Ensure that the developer module is fully installed in the brackets.

**4** STEP 1 E: Ensure that the gear is free to engage with the developer module drive gears.

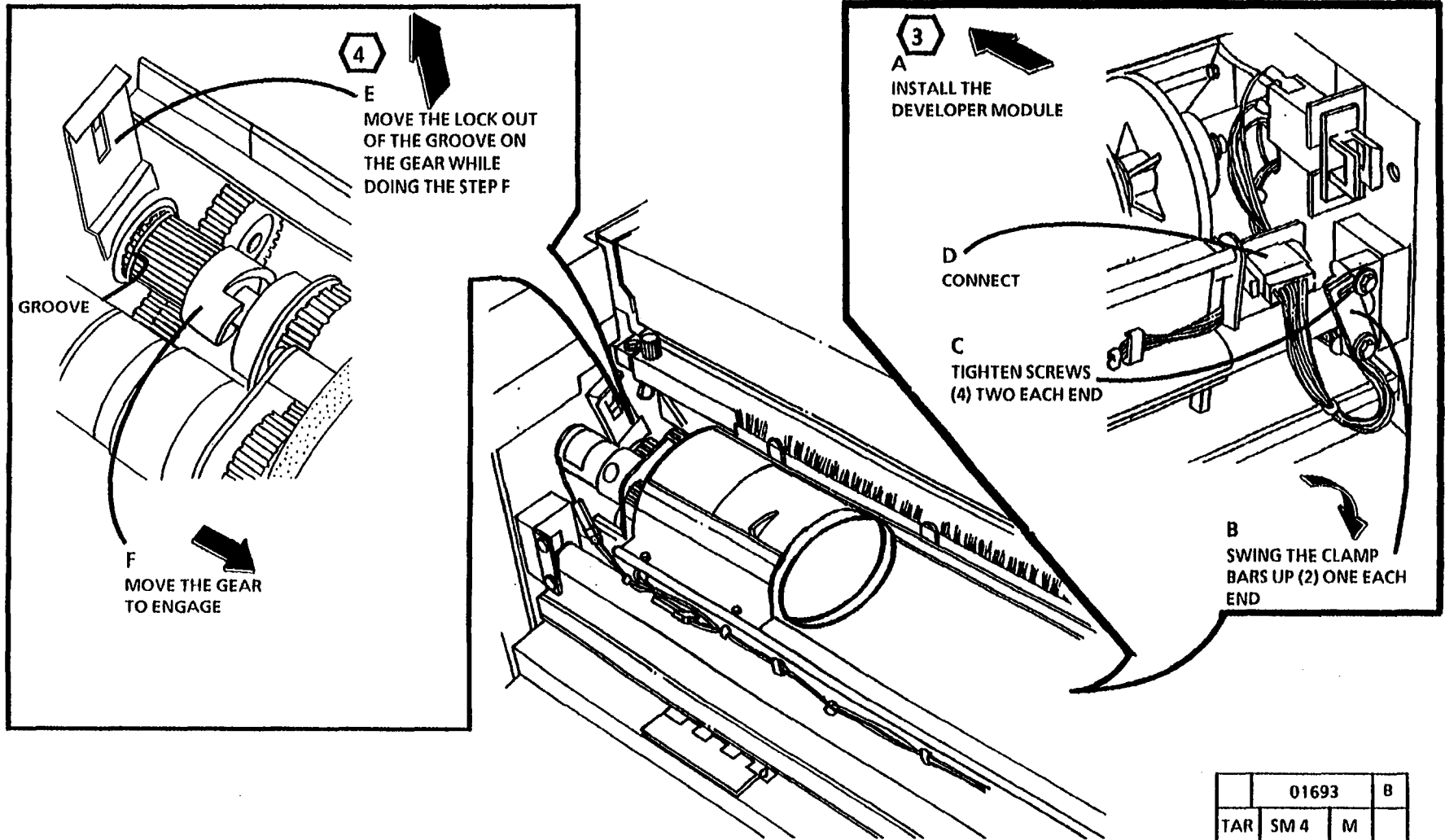


Figure 4. Install the Developer Module

(Continued)

(Continued)

**5** STEP 2 C: To ensure that the toner cartridge is engaged in the drive plate, rotate the cartridge.

3. If new developer has been installed, perform the Initial Density portion of the Electrostatic Series (ADJ 9.2).

2. (Figure 5): Reinstall the Toner Cartridge.

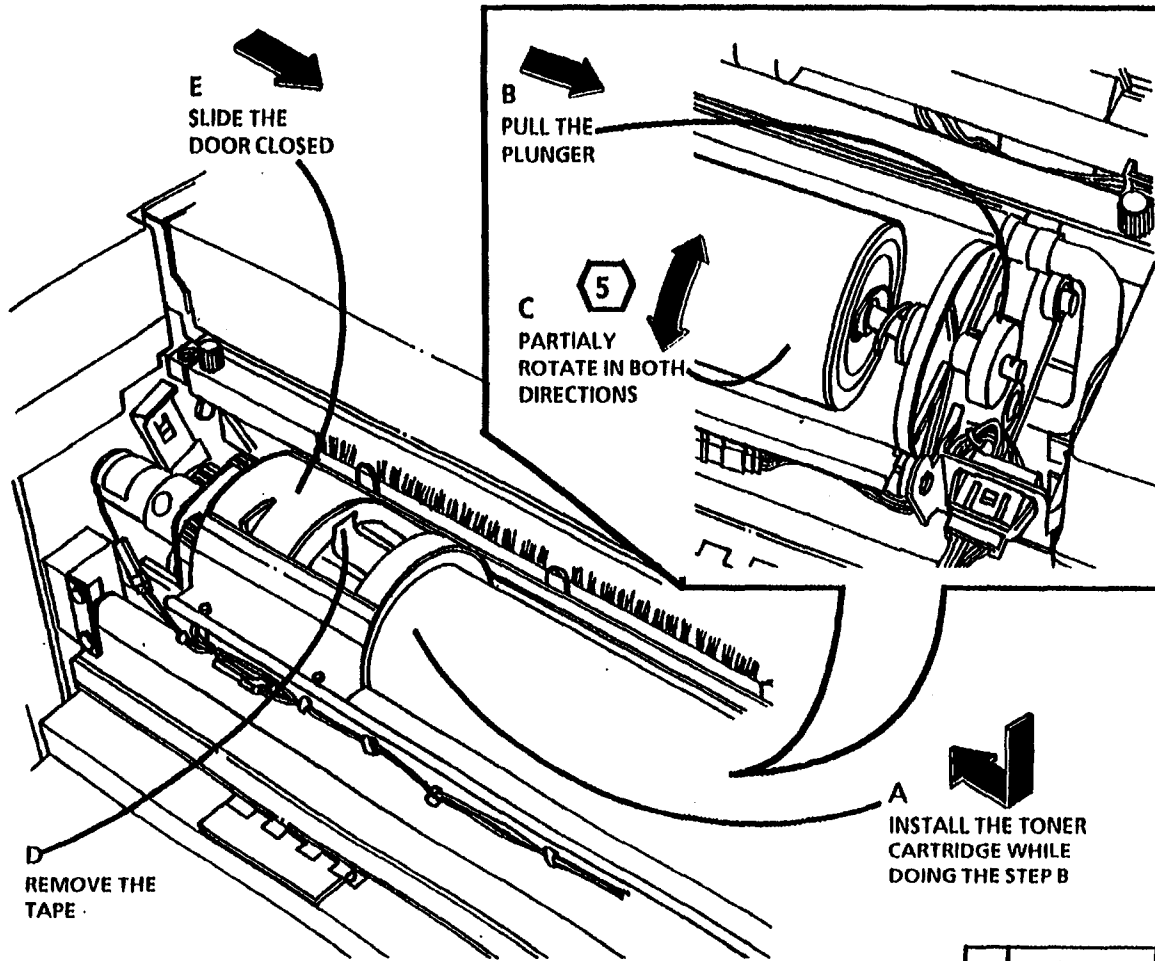


Figure 5. Reinstall the Toner Cartridge

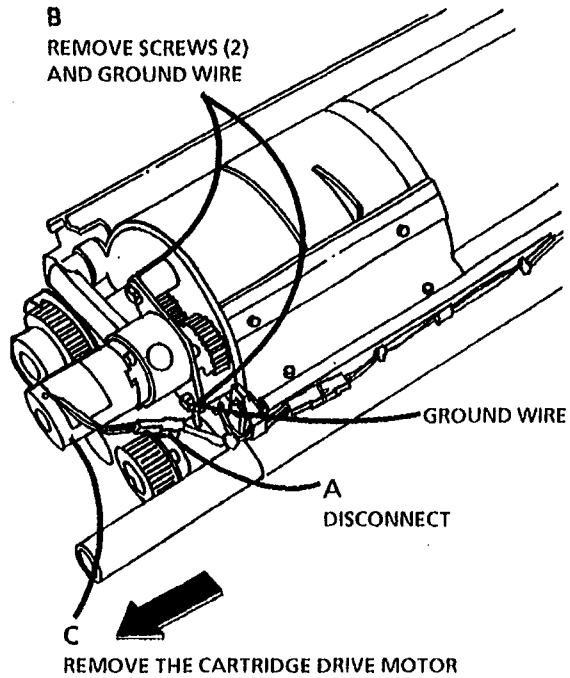
	01599	B
TAR	SM 4	M

## REP 9.6 Cartridge Drive Motor

### Parts List on PL 9.9

### Removal

1. **Warning:** Disconnect the power cord.

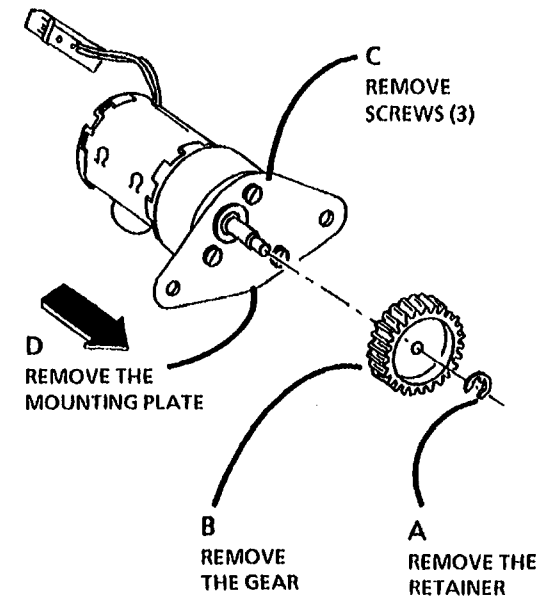


	01575	A
TAR	SM 4	M

Figure 1. Remove the Cartridge Drive Motor

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

4. (Figure 2): Remove the Cartridge Drive Motor from the mounting plate.



	01813	A
TAR	SM 4	M

Figure 2. Remove the Cartridge Drive Motor from the Mounting Plate

## REP 9.7 Developer Material

**Parts List** (Refer to Supplemental Tools and Supplies, Machine Consumables in Section 6.)

### Removal

1. **Warning:** Disconnect the power cord.

2. Remove the Developer Module (REP 9.5).

**!** Do not rotate the Developer Module in the vertical position. This may cause developer to get into the toner cartridge clutch in the end of the Developer Module.

3. Place the Developer Module on a drop cloth on the floor.

4. (Figure 1): Remove the Sump Shield from the Developer Module.

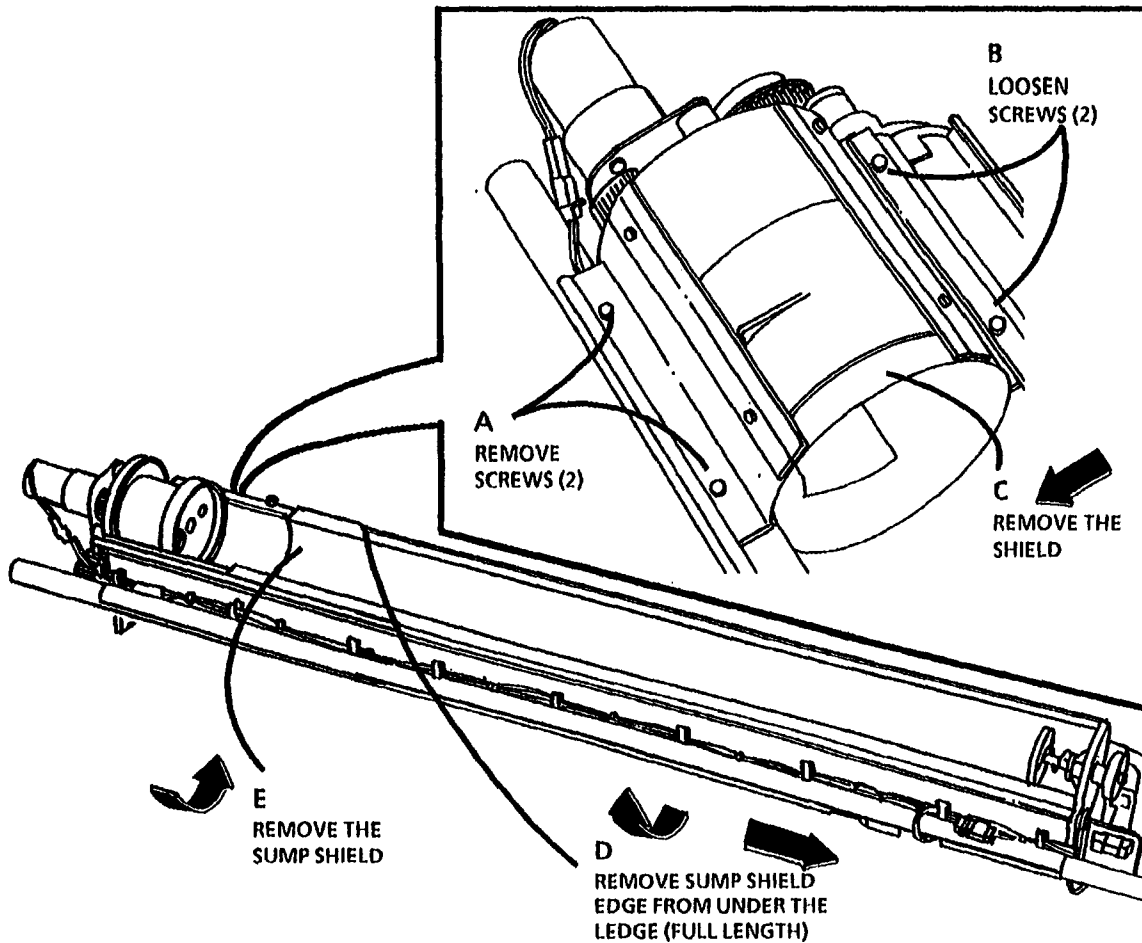


Figure 1. Remove the Sump Shield from the Developer Module

(Continued)

	01626	A
TAR	SM 4	M

(Continued)

1 STEP 5 A: Rotate the developer module away from the Magnetic Roll.

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

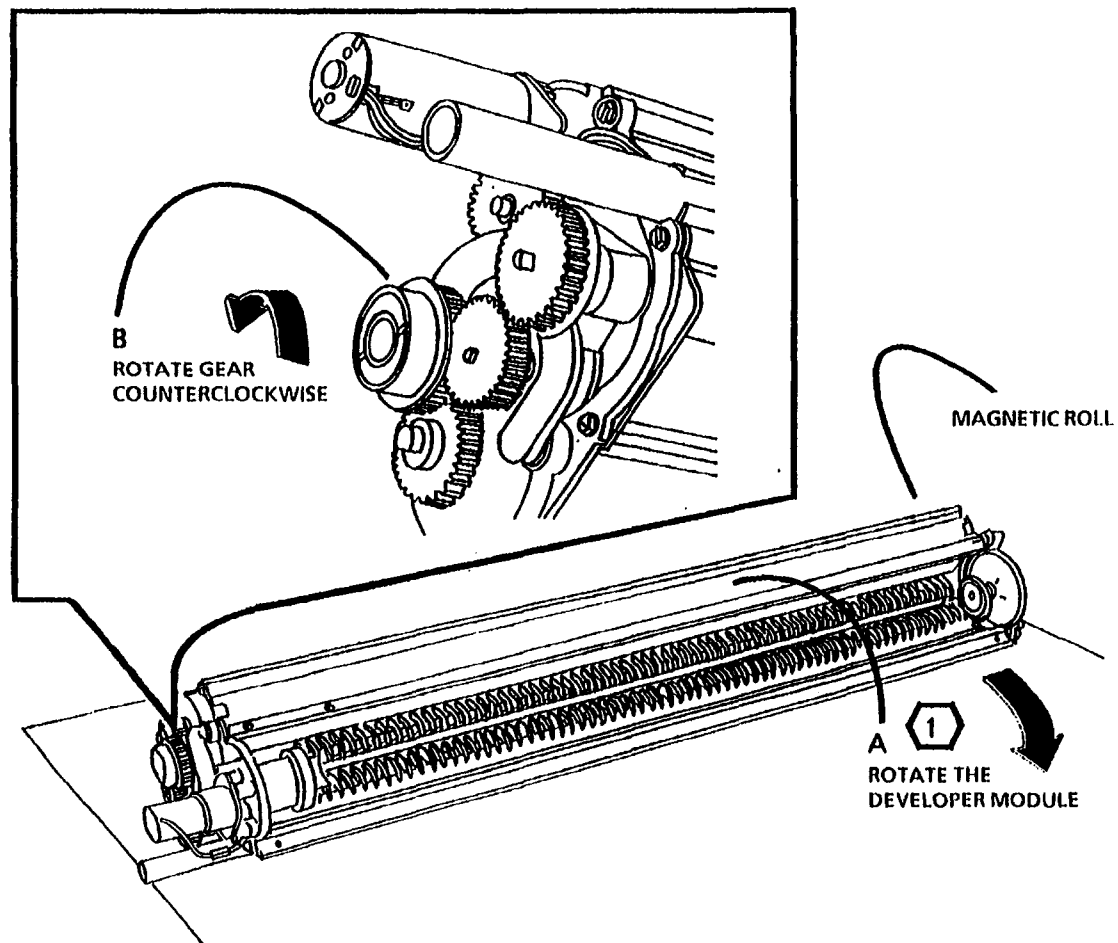


Figure 2. Dump the Developer Material

	01780	C
TAR	SM 4	M

(Continued)

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

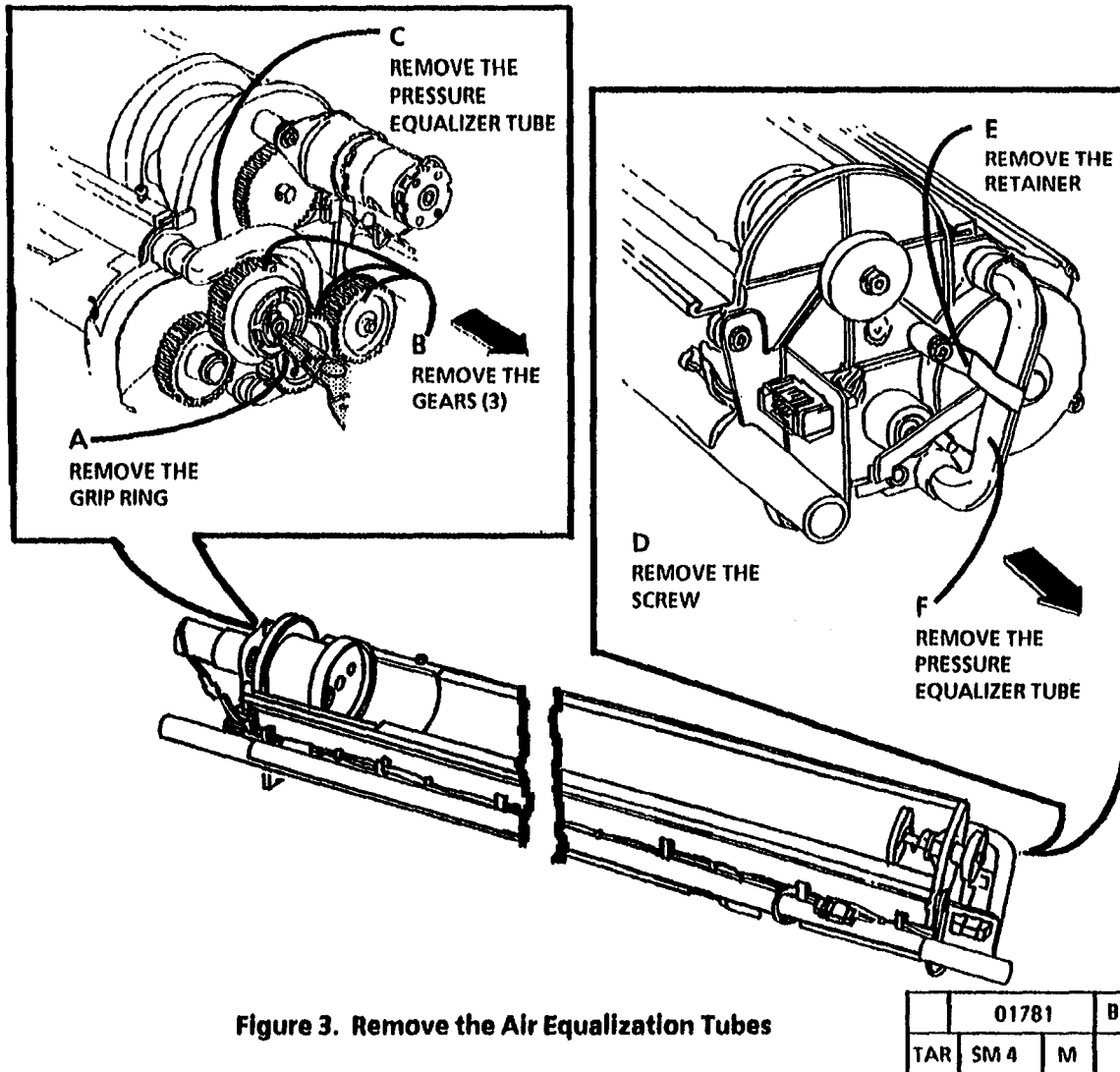


Figure 3. Remove the Air Equalization Tubes

7. Using a vacuum cleaner, clean the entire developer module, magnetic roll, and pressure equalizer tubes thoroughly.

2 STEP 8 A: Ensure that the entire length of the tube on the developer module is clear of any developer.

8. (Figure 4): Using a vacuum cleaner, clean the housing where the pressure equalizer tubes attach.

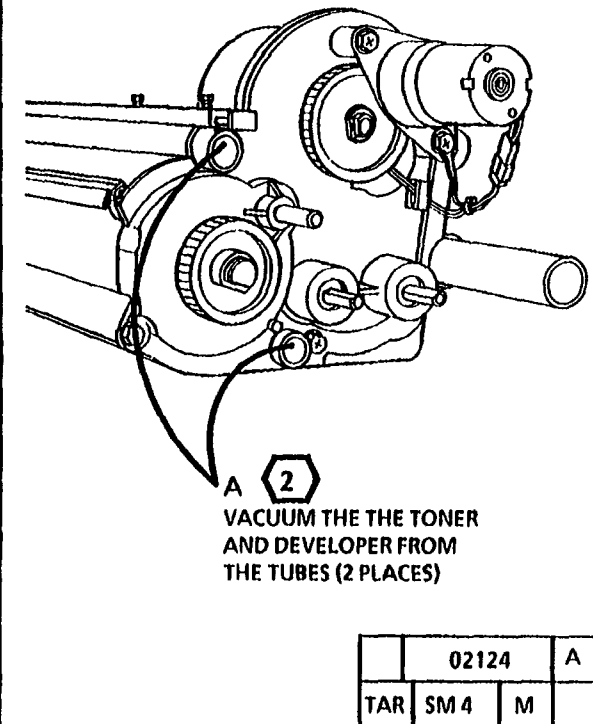


Figure 4. Vacuum the tubes on the developer module

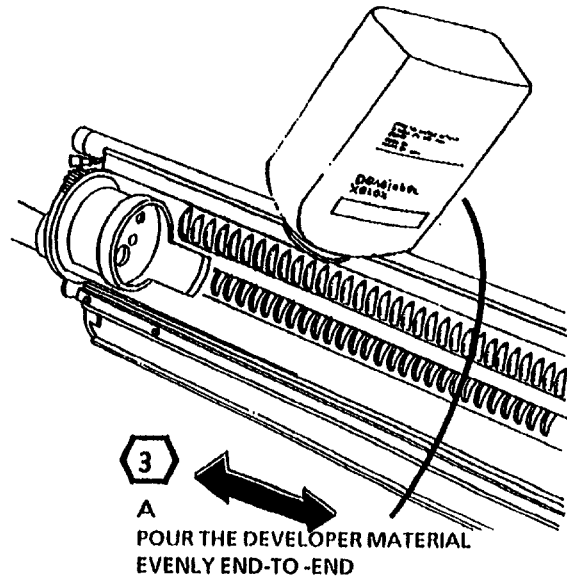
(Continued)



(Continued)

9. (Figure 5): Install the Developer material and record the batch number on the machine log.

3 STEP 9A: Pour the developer material evenly over the full length of the two augers.

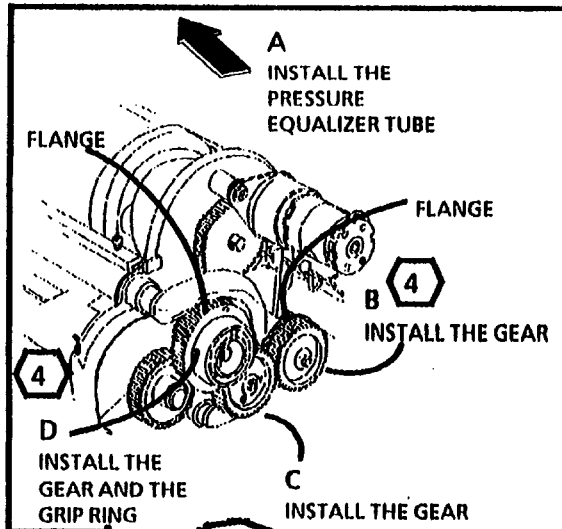


	01627	B
TAR	SM 4	M

Figure 5. Install the Developer

## Replacement

4 STEP 1 B and D: The gears must be reinstalled with the flanges as shown to ensure that all the gears are secured.



1. (Figure 6): Reinstall the Pressure Equalizer Tubes.

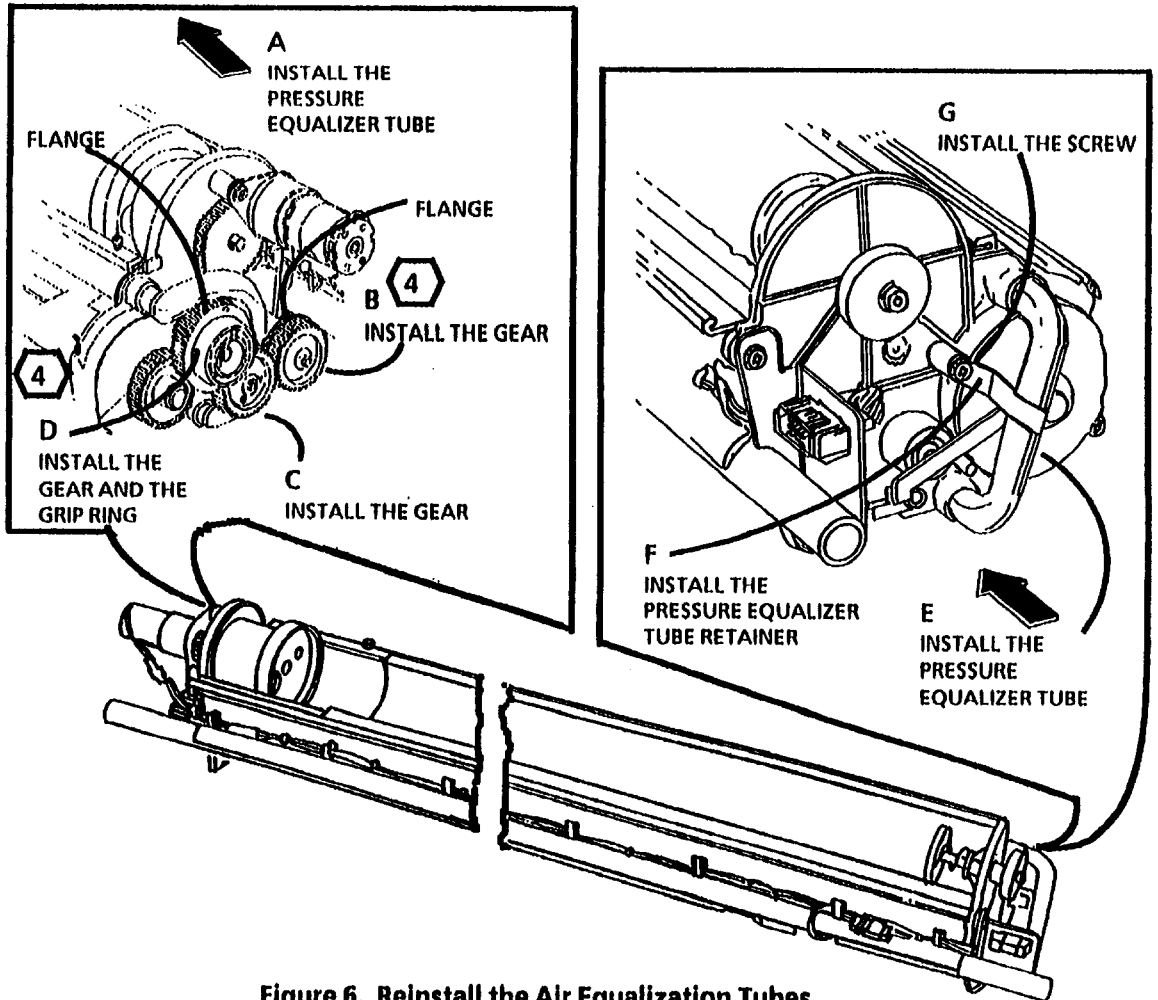


Figure 6. Reinstall the Air Equalization Tubes

	01782	B
TAR	SM 4	M

(Continued)

(Continued)

**5** STEP 4 B AND C: *Ensure that the full length of the edge of the shield is under the edge of the housing.*

2. (Figure 7): Install the Sump Shield in the Developer Module.

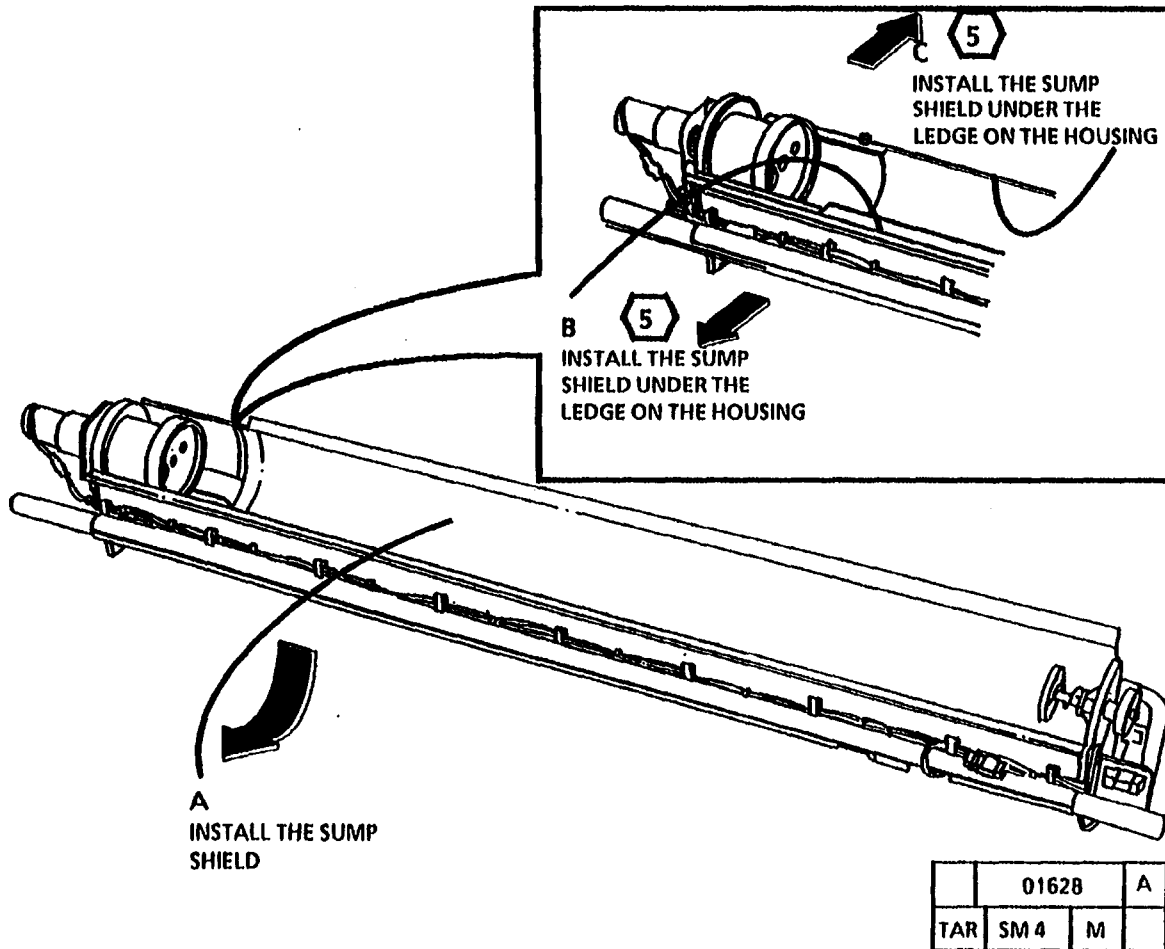


Figure 7. Install the Sump Shield in the Developer Module

**6** STEP 3 C: *Do not overtighten the screws.*

3. (Figure 8): Reinstall the Top Shield.

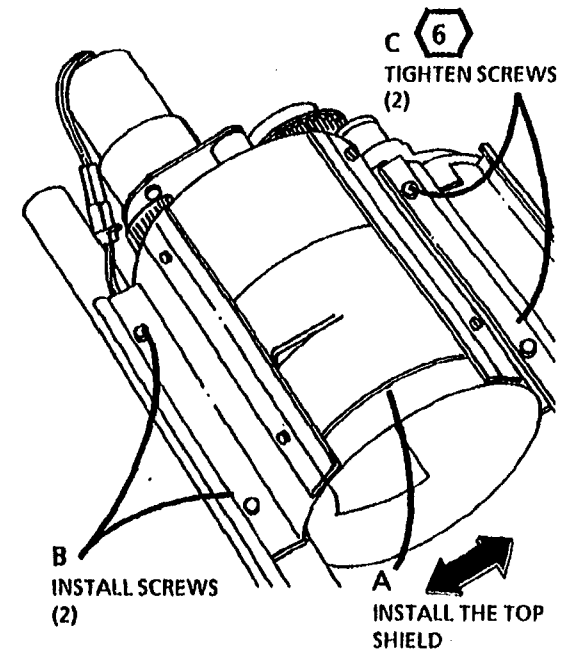


Figure 8. Reinstall the Top Shield

4. Reinstall the developer module.

(Continued)

(Continued)

**7** STEP 5 C: Rotate the cartridge to ensure that the Toner Cartridge is engaged in the drive plate.

5. (Figure 9): Reinstall the Toner Cartridge.
6. Perform the Initial Density Adjustment section of the Electrostatic Series (ADJ 9.2).

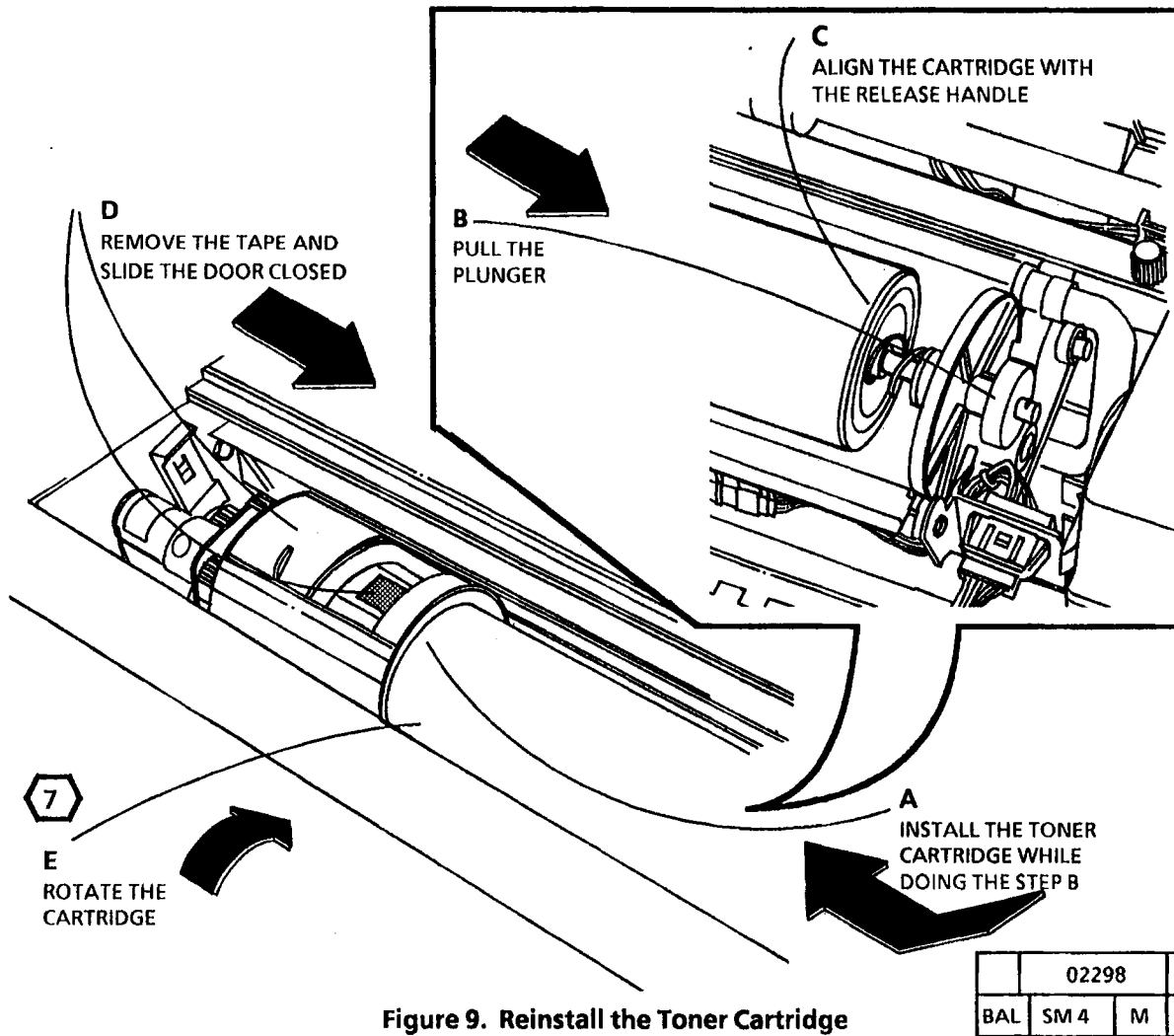


Figure 9. Reinstall the Toner Cartridge

## REP 9.8 Charge Corotron/ Erase Lamp

Parts List on PL 9.3

### Removal

1. **Warning:** Disconnect the power cord.

2. Open the Right and Left Side Doors.
3. Remove the Xerographic Module (REP 9.1).
4. (Figure 1): Remove the Charge Corotron/ Erase Lamp.

### Replacement

1. The replacement is a reversal of the removal.
2. Perform the Electrostatic Series (ADJ 9.2).

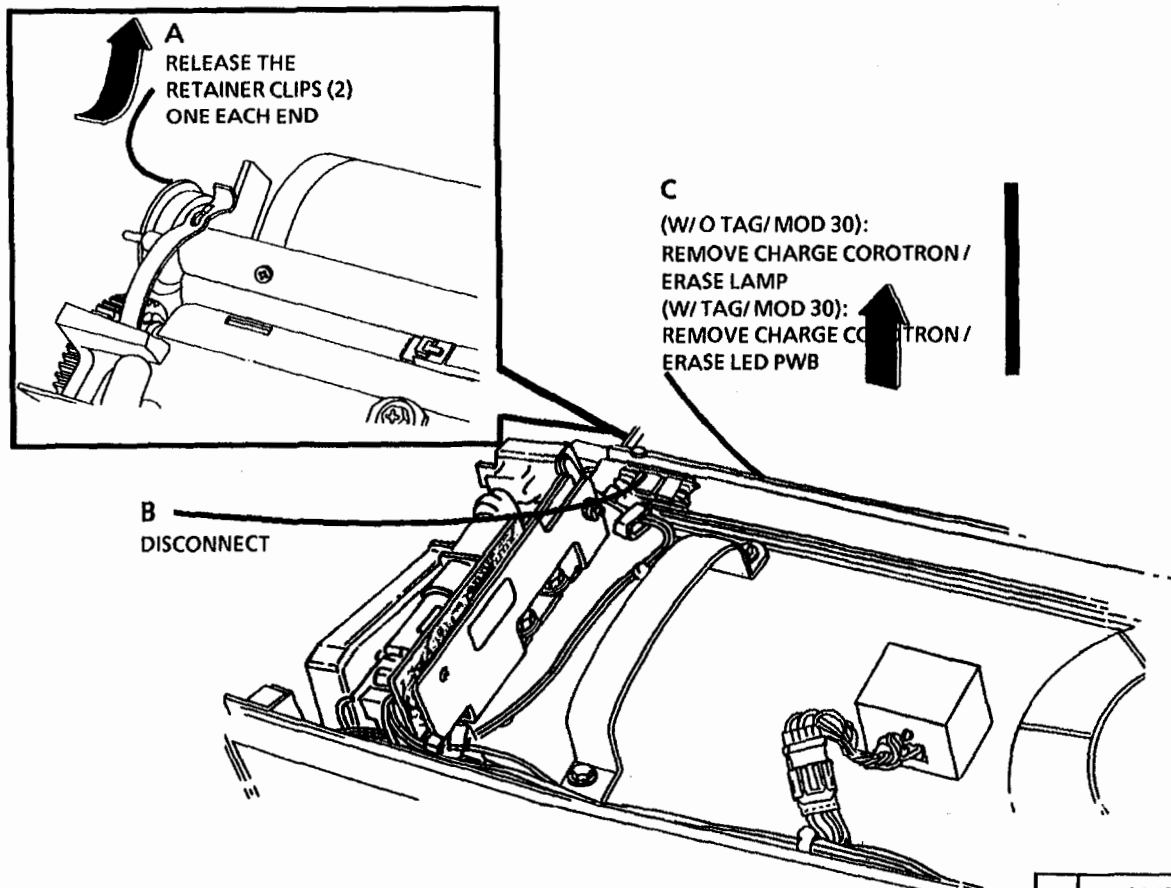


Figure 1. Remove the Charge Corotron/Erase Lamp

	01498	D
TAR	SM 4	M

# REP 9.9 Transfer/Detack Corotron

## Parts List on PL 9.4

### Removal

1. **Warning:** Disconnect the power cord.



#### WARNING

Be careful not to burn your hands when removing the Transfer/ Detack Corotron. The fuser may be hot.



STEP 2 B, C, AND D: Use caution and do not damage the drum when removing the transfer/ detack corotron.

2. (Figure 1): Remove the Transfer/ Detack Corotron.

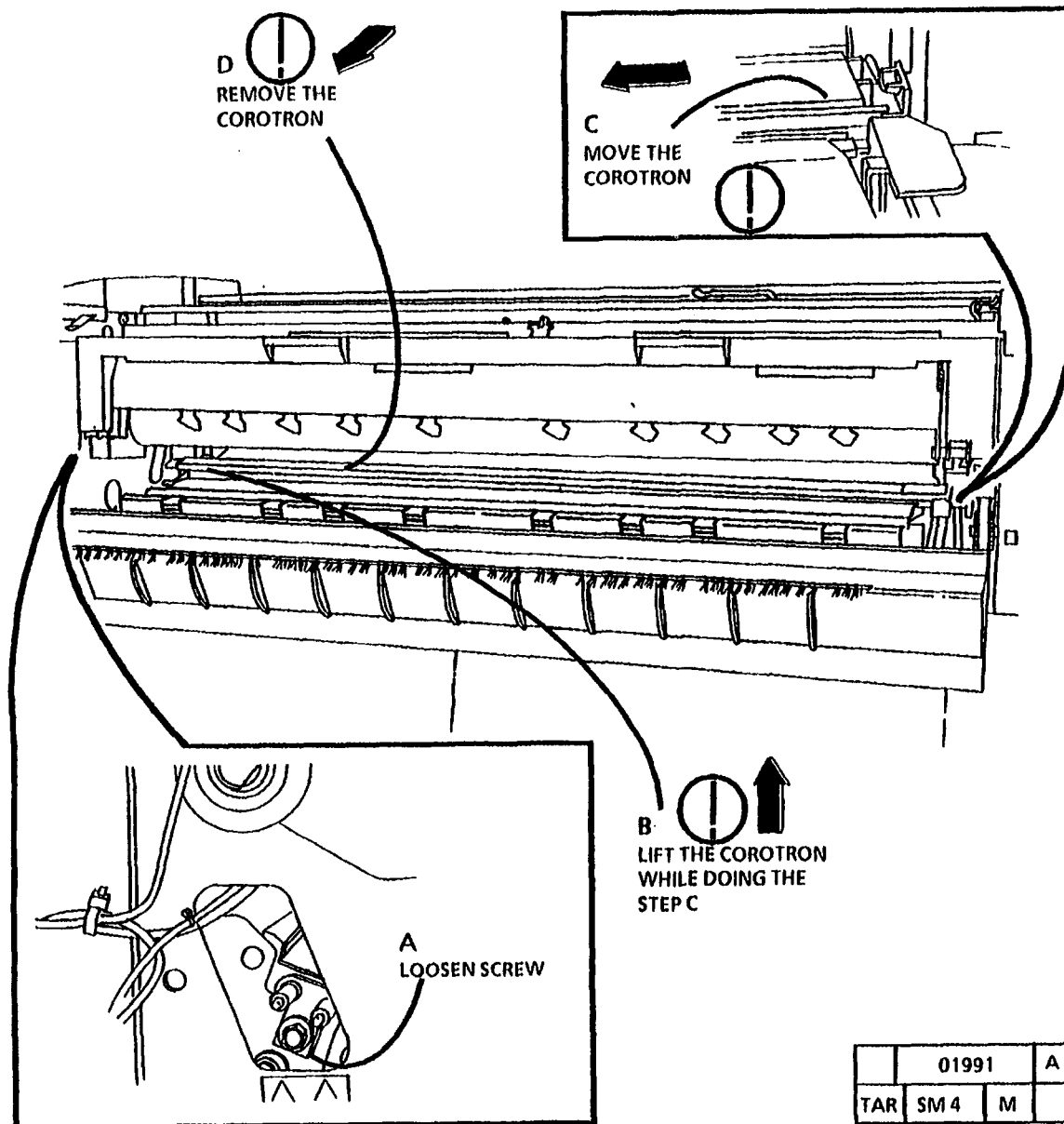



Figure 1. Remove the Transfer/ Detack Corotron

## REP 9.11 Toner Sensor

### PARTS LIST ON PL 9.8

#### Removal

1. **Warning: Disconnect the power cord.**

 *The developer material must be removed before removing the toner sensor assembly.*

2. Remove the Developer Module (REP 9.5).
3. Remove the Developer Material (REP 9.7).
4. (Figure 1): Remove the Toner Sensor.
5. Remove the spacer from behind the Toner Sensor.

#### Replacement

1. Install the Toner Sensor Assembly (including the spacer).
2. Install the Developer Module.
3. Install the developer material (REP 9.7 Replacement).
4. Perform the Initial Density Adjustment section of the Electrostatic Series (ADJ 9.2).

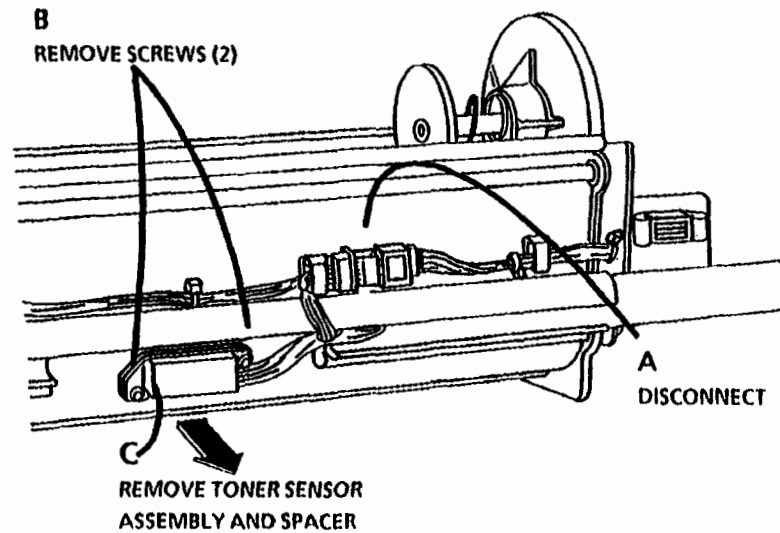


Figure 1. Remove the Toner Sensor

	01489	B
TAR	SM 4	M

## REP 9.12 Toner Home Sensor

### Parts List on PL 9.8

### Removal

1. **Warning:** Disconnect the power cord.

2. Remove the Developer Module (REP 9.5).
3. (Figure 1): Prepare to remove the Toner Home Sensor.

- 1 **STEPS 4 C and D:** The toner home sensor is threaded. The wires need to be straightened to rotate the sensor for removal.

4. (Figure 2): Remove the Toner Home Sensor.

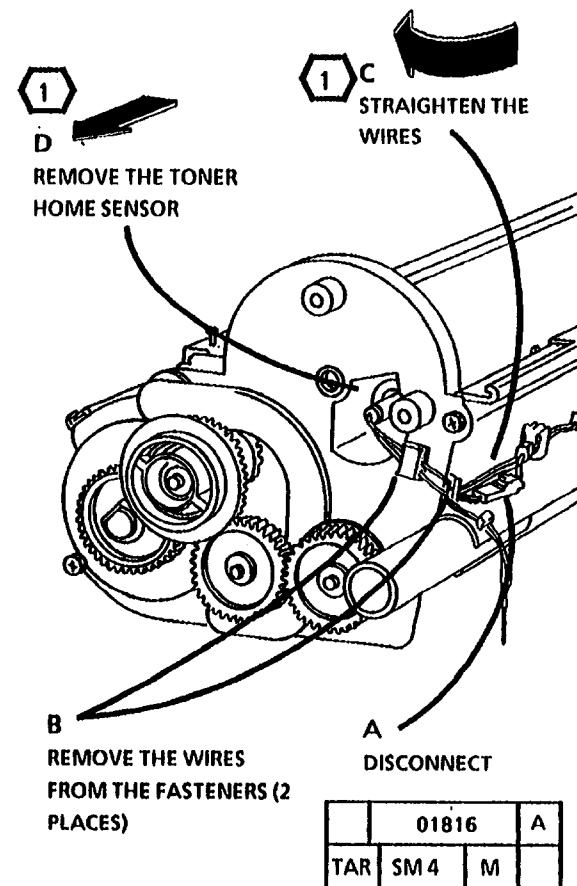
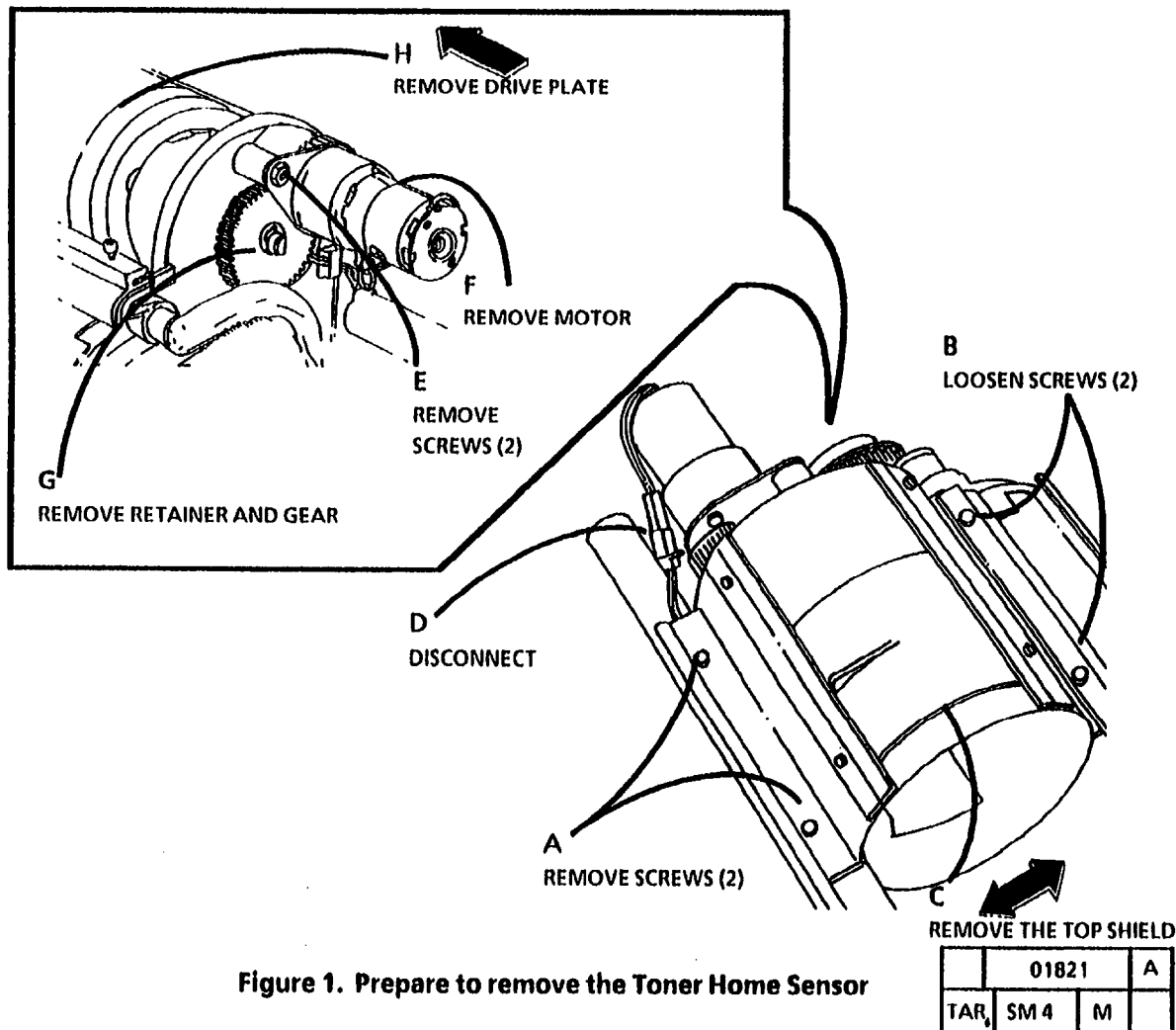



Figure 2. Remove the Toner Home Sensor

(Continued)


(Continued)

## Replacement

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

 **STEP 3 C:** To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 3.

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

 **STEP 3 C:** Do not overtighten the screws.

4. (Figure 4): Reinstall the Top Shield.
5. Reinstall the Developer Module.

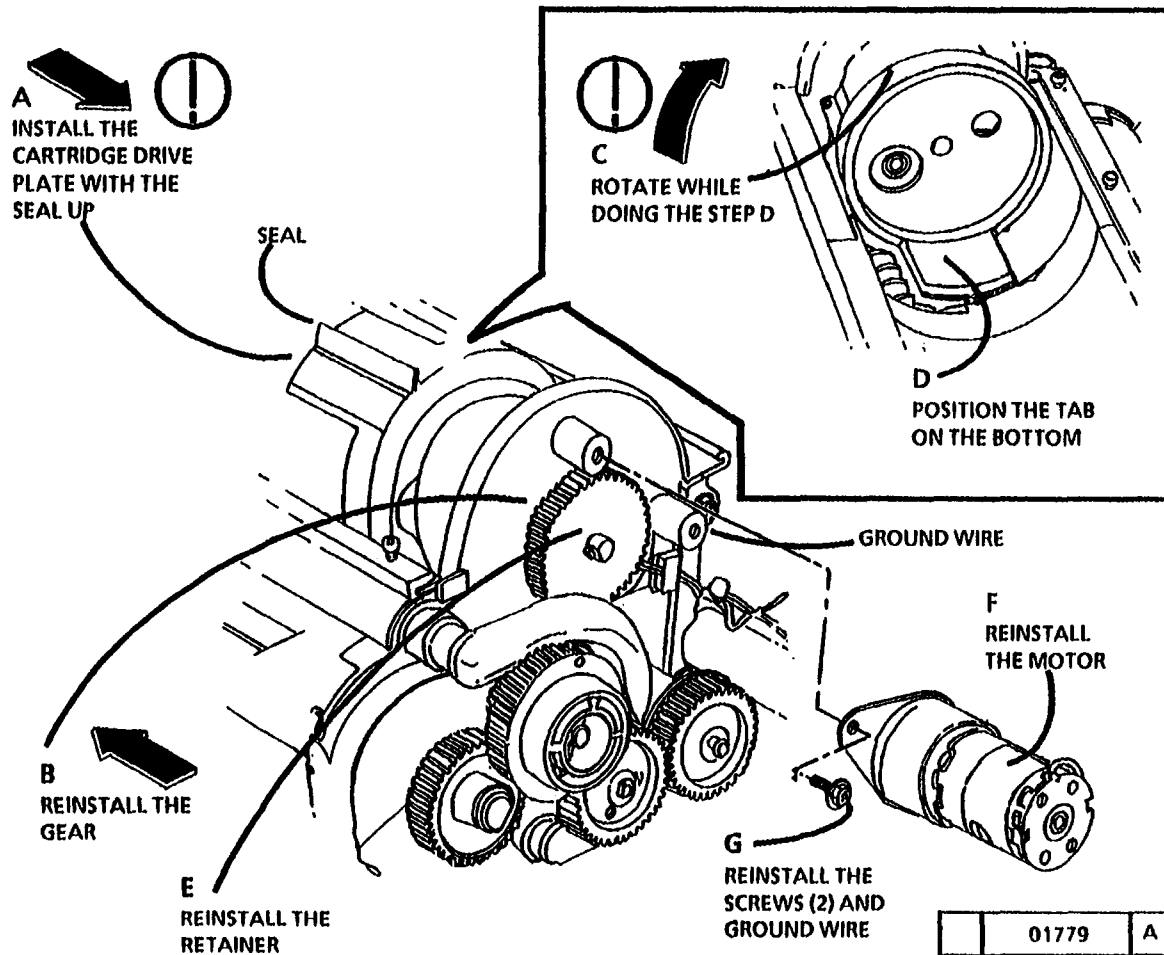
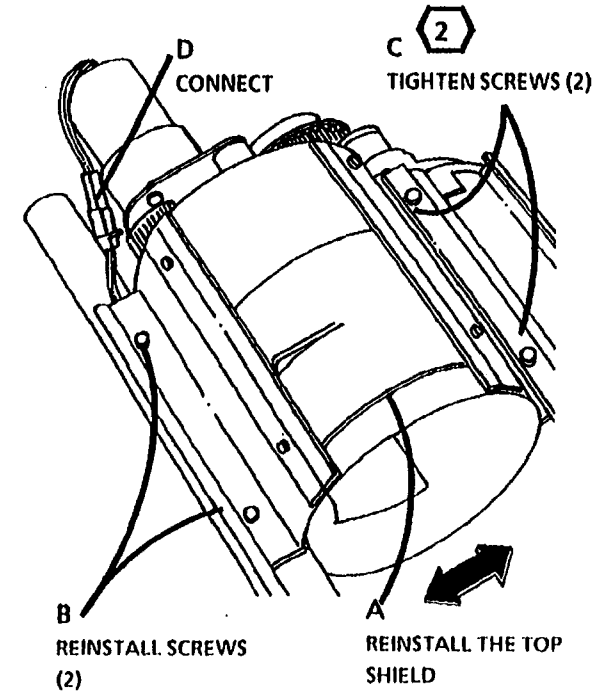


Figure 3. Install the Cartridge Drive Plate

	01779	A
TAR	SM 6	M



	01731	A
TAR	SM 4	M

Figure 4. Reinstall the Top Shield



## REP 9.13 Sump Shield

Parts List on PL 9.8

### Removal

1. **Warning: Disconnect the power cord.**

2. Remove the Developer Module (REP 9.5).
3. (Figure 1): Remove the Sump Shield.

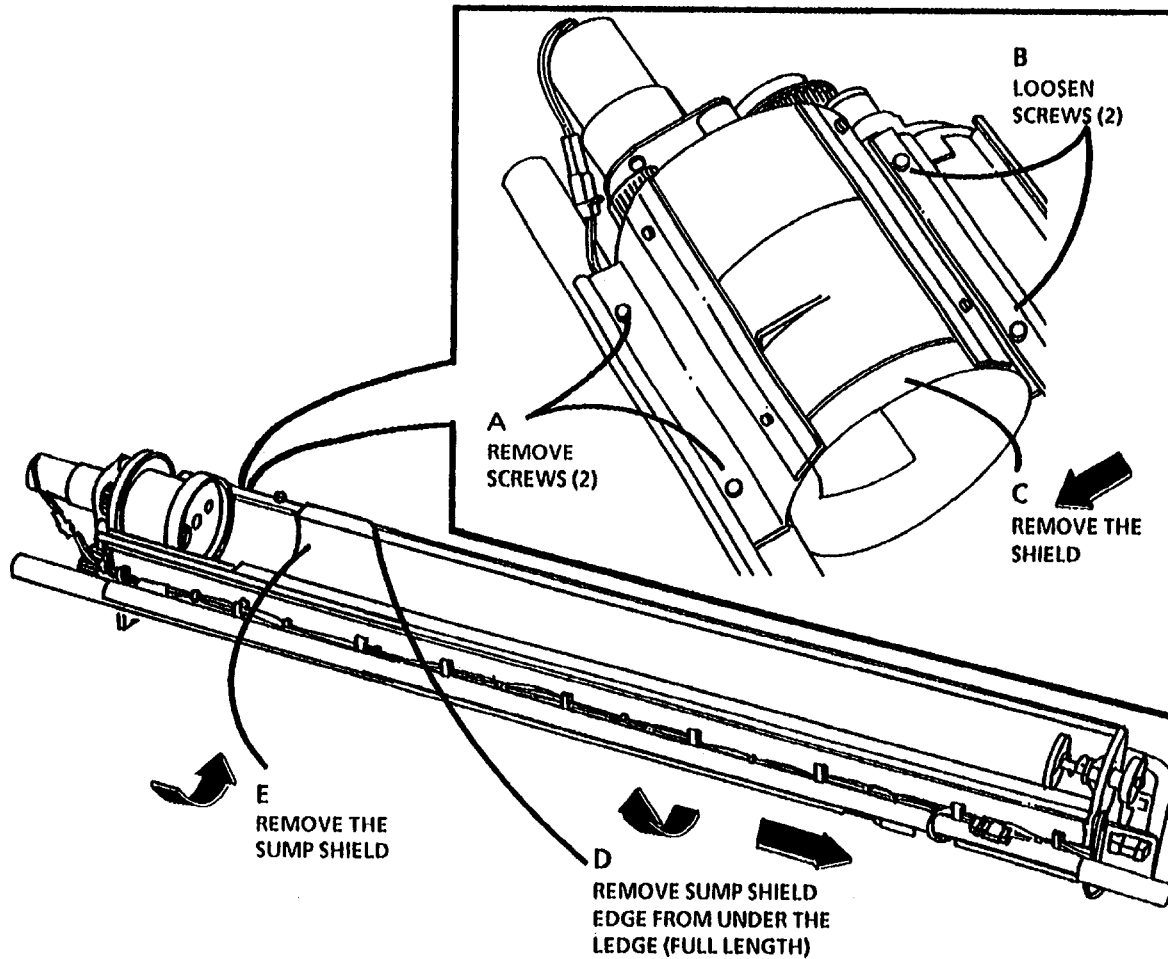


Figure 1. Remove the Sump Shield

(Continued)

(Continued)

## Replacement

**1** STEP 1 B AND C: *Ensure that the full length of the edge of the shield is under the edge of the housing.*

1. (Figure 2): Install the Sump Shield in the Developer Module.
2. The remainder of the replacement is a reversal of the removal.

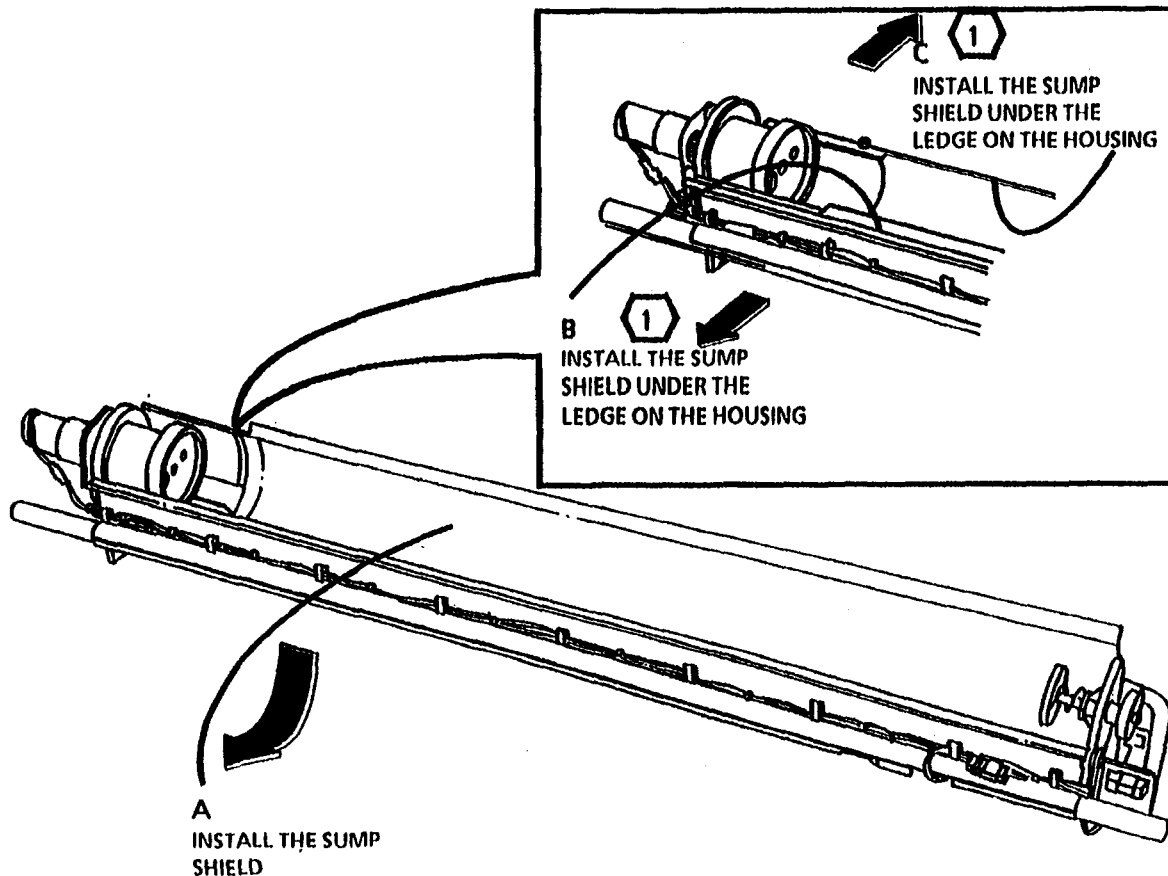


Figure 2. Install the Sump Shield in the Developer Module

	01628	A
TAR	SM 4	M

## REP 9.14 Cartridge Drive Plate

Parts List on PL 9.8

### Removal

1. **Warning:** Disconnect the power cord.

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

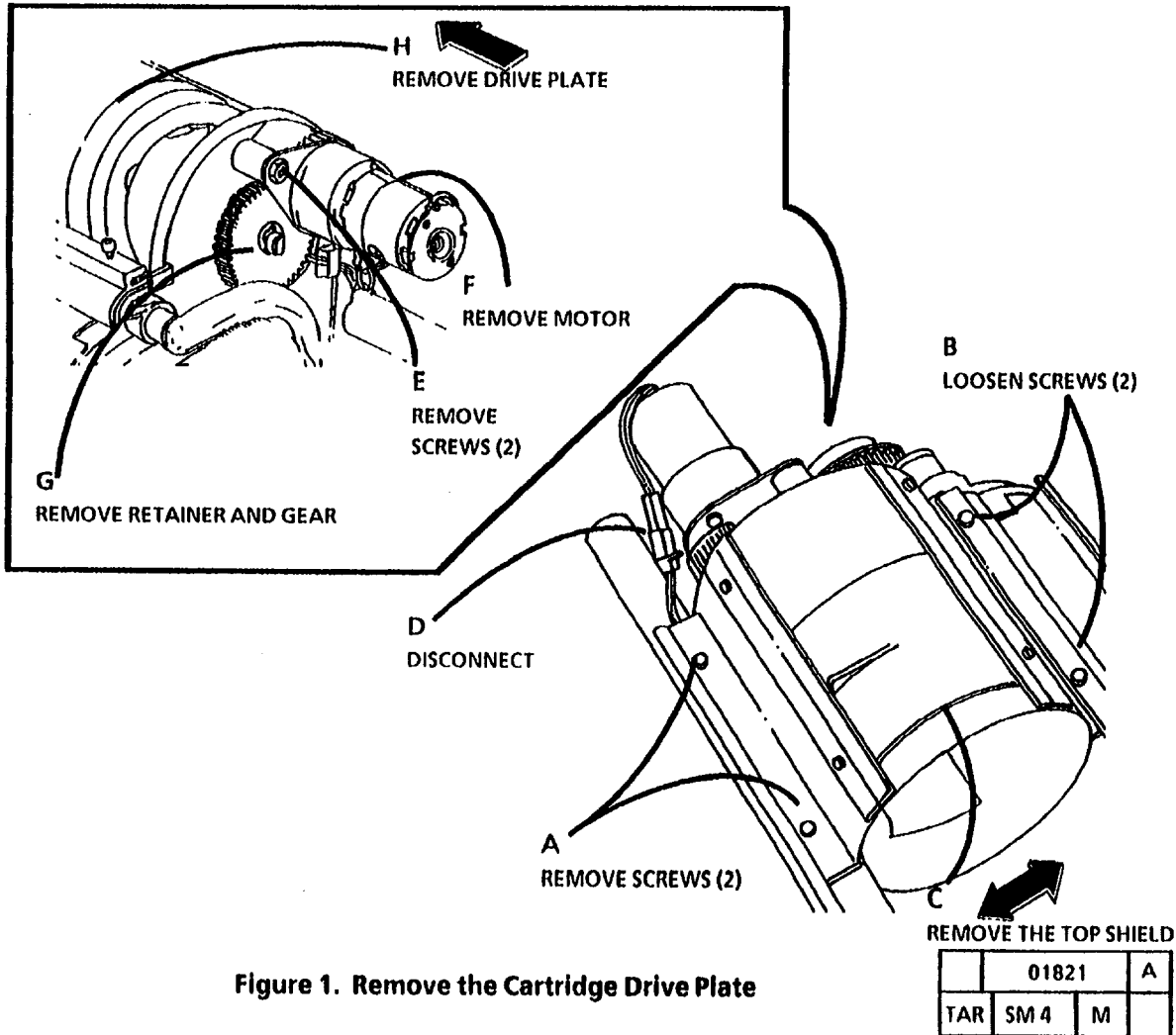


Figure 1. Remove the Cartridge Drive Plate

(Continued)

(Continued)

## Replacement

**ⓘ** **STEP 1 C:** To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 2.

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

**ⓘ** **STEP 2 C:** Do not overtighten the screws.

2. (Figure 3): Reinstall the Top Shield.

3. Reinstall the Developer Module.

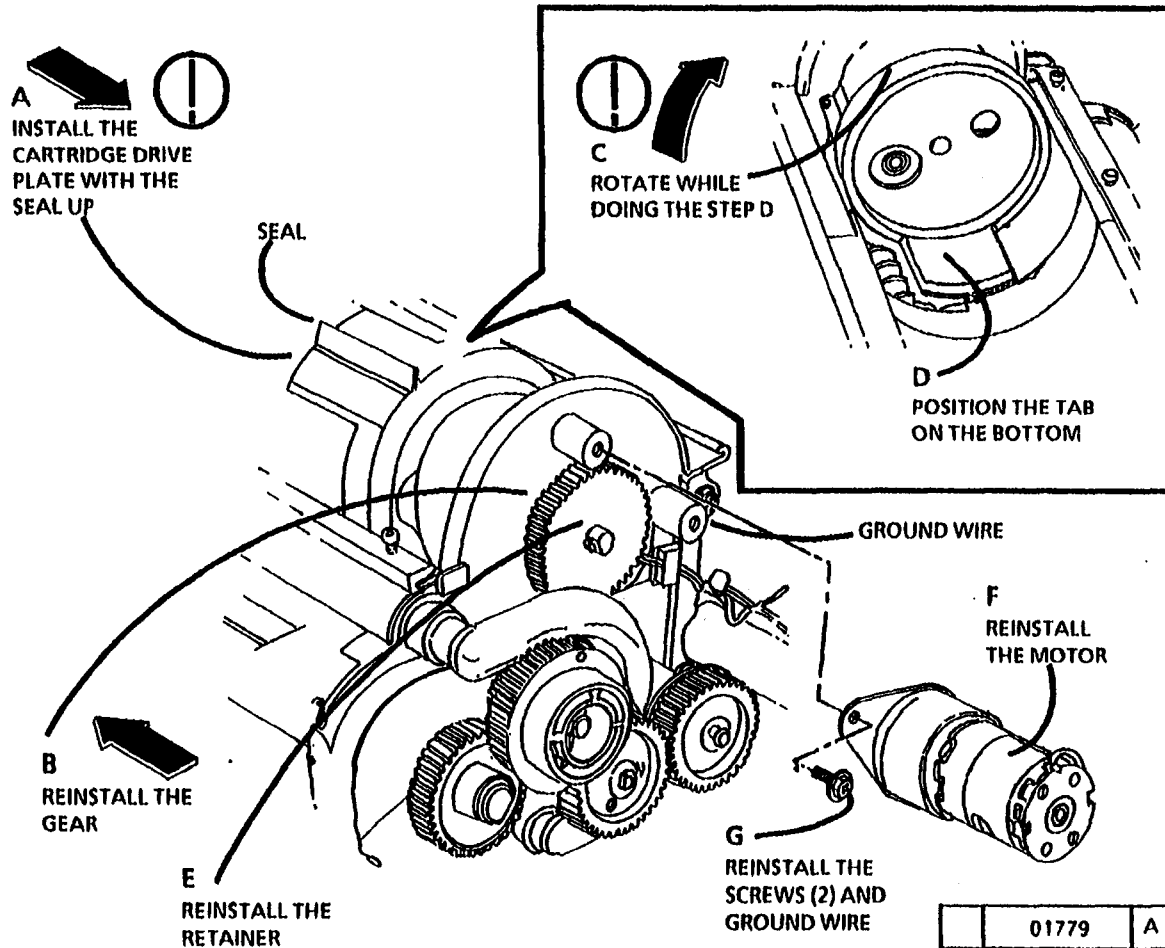


Figure 2. Install the Cartridge Drive Plate

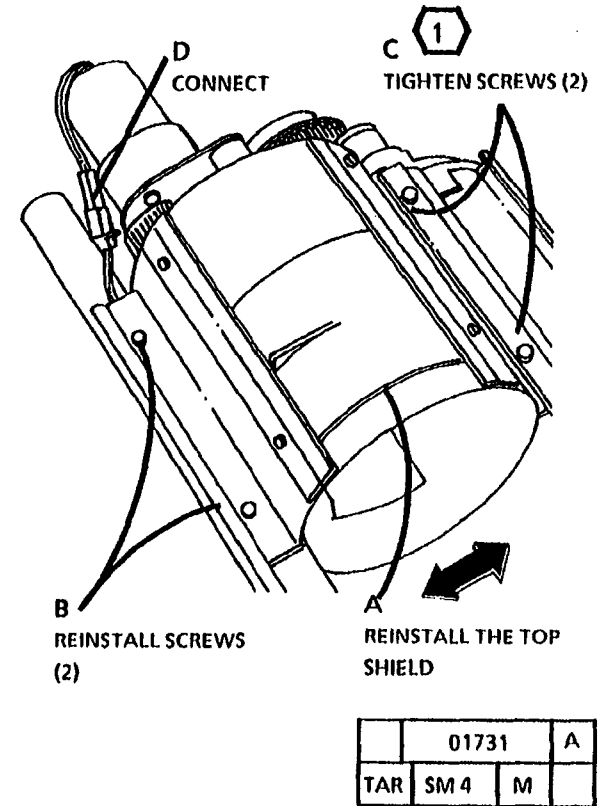


Figure 3. Reinstall the Top Shield

## REP 9.15 Contamination Seal

### Parts List on PL 9.5

#### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the following:
  - a. Right and Left Side Doors (REP 14.1)
  - b. Xerographic Module (REP 9.1)
  - c. Photoreceptor Drum (REP 9.3)
  - d. Cleaner Blade (REP 9.4)
  - e. Charge Corotron/Erase Lamp (REP 9.8)

**1** STEP 3 A: Do not remove the Photoreceptor Seal.

**A** **1**  
REMOVE THE  
CONTAMINATION SEAL

3. (Figure 1): Remove the Contamination Seal.
4. Vacuum the Waste Toner Auger and the area where the Contamination Seal will be installed.

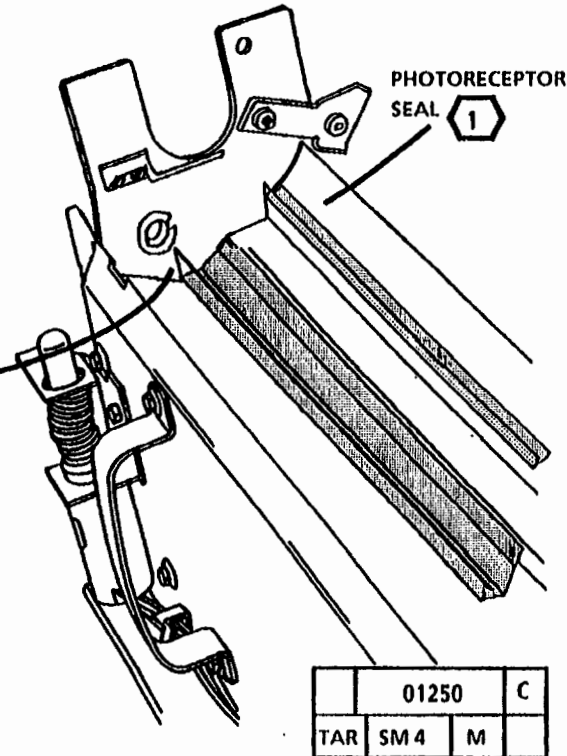


Figure 1. Remove the Cartridge Drive Plate

#### Replacement

1. (Figure 2): Place the new Contamination Seal in the Xerographic Module.

**B**  
PLACE THE SEAL IN THE  
MODULE AND AGAINST THE  
SIDE OF THE MODULE

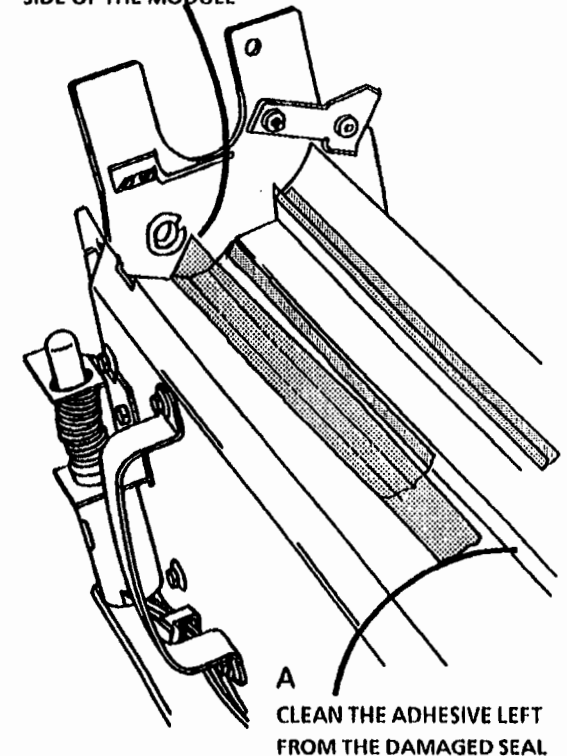


Figure 2. Place the Contamination Seal in the Module

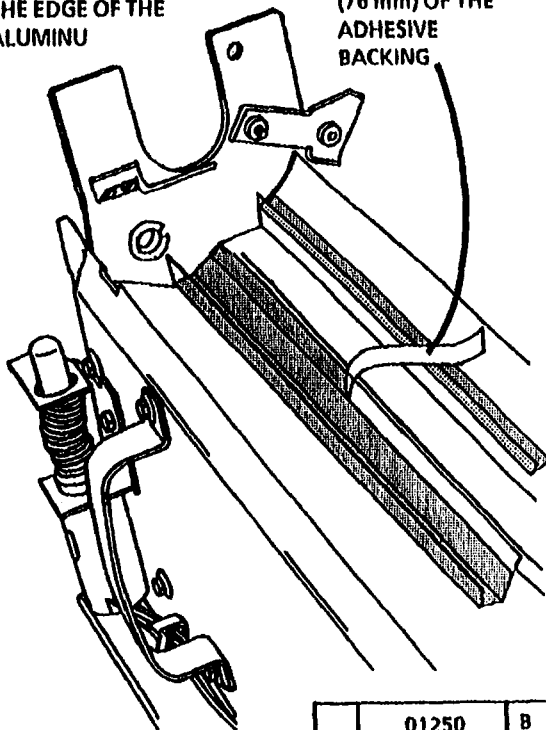
(Continued)

(Continued)

2. (Figure 3): Install the Contamination Seal.

B **2**  
ALIGN THE EDGE  
OF THE SEAL WITH  
THE EDGE OF THE  
ALUMINUM

A  
REMOVE 3 INCHES  
(76 mm) OF THE  
ADHESIVE  
BACKING



	01250	B
TAR	SM 4	M

Figure 3. Install the Contamination Seal

3. (Figure 4): Check the seal for correct installation.
4. Remove any raised areas by moving your finger across the top of the seal and push the raised area to either end of the Cleaner Blade Assembly.

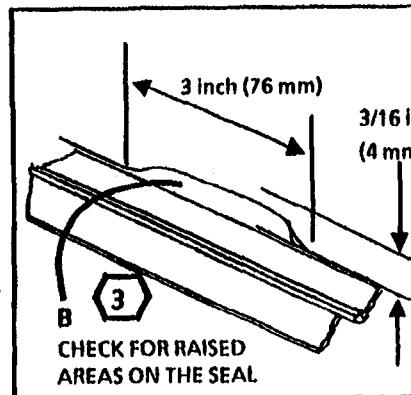
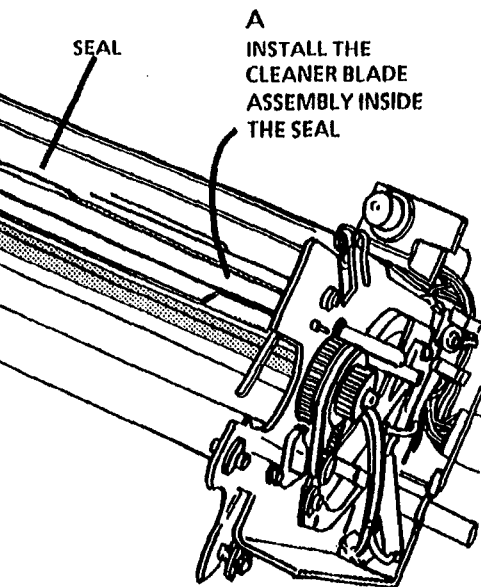


Figure 4. Check for correct installation

5. Reinstall the following:
- Charge Corotron/Erase Lamp (REP 9.8)
  - Photoreceptor Drum (REP 9.3)
  - Xerographic Module (REP 9.1)
  - Right and Left Side Doors (REP 14.1)



	01240	B
TAR	SM 4	M

## REP 10.1A Fuser Heat Rod (W/ O Tag/ MOD 28)

### Parts List on PL 10.2

**NOTE:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as *Without Tag / MOD 28, (W I O Tag / MOD 28)*.

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as *With Tag / MOD 28, (W I Tag / MOD 28)*.

Use this procedure on copiers equipped with TWO AC Drive Motors, (W I O Tag / MOD 28). On copiers equipped with ONE AC Drive Motor, refer to the (REP 10.1B Fuser Heat Rod (W/Tag/MOD 28) removal procedure.

### Removal

#### WARNINGS



Switch off the Main Power Switch and disconnect the Power Cord.



The Fuser Heat Roll may be HOT! To prevent burns, allow the Roll to cool before removing the Xerographic Module.

1. Ensure that the Heat Roll is cool.
2. Lift and rotate the Control Console.

3. Remove the Document Handler.
4. Remove the Right and Left Side Door (REP 14.1).
5. Remove the Oil Dispense Assembly (REP 10.7).
6. Remove the Xerographic Module (REP 9.1).
7. (Figure 1): Prepare to Remove the Heat Rod.

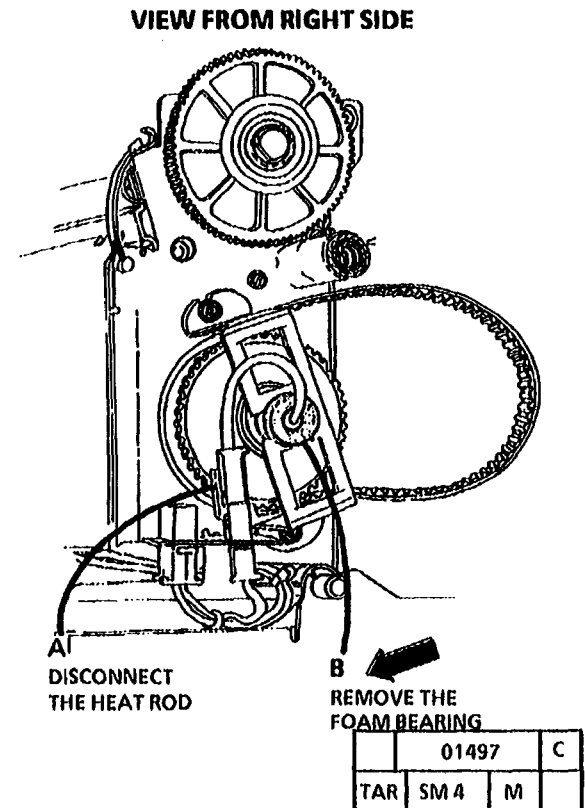


Figure 1. Prepare to Remove the Heat Rod

(Continued)

**1** STEP 8 A and B: Use care when removing the retainer clip and the transition gear. The cleaner blade assembly is spring-loaded.

8. (Figure 2): Remove the Transition Gear and Weight.

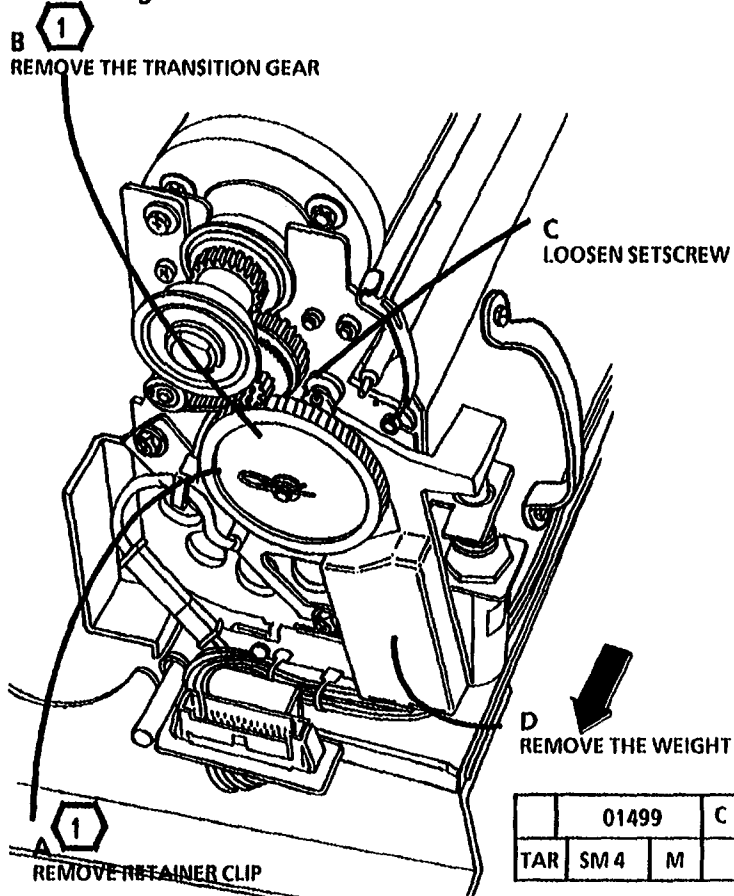


Figure 2. Remove the Transition Gear and Weight

(Continued)



(Continued)

9. (Figure 3): Prepare to Remove the Fuser Heat Rod.



**STEP 10 A:** Wear gloves or wrap a sheet of paper around the heat rod when handling the heat rod. Oil from your fingers can damage the heat rod.

10. (Figure 4): Remove the Fuser Heat Rod.

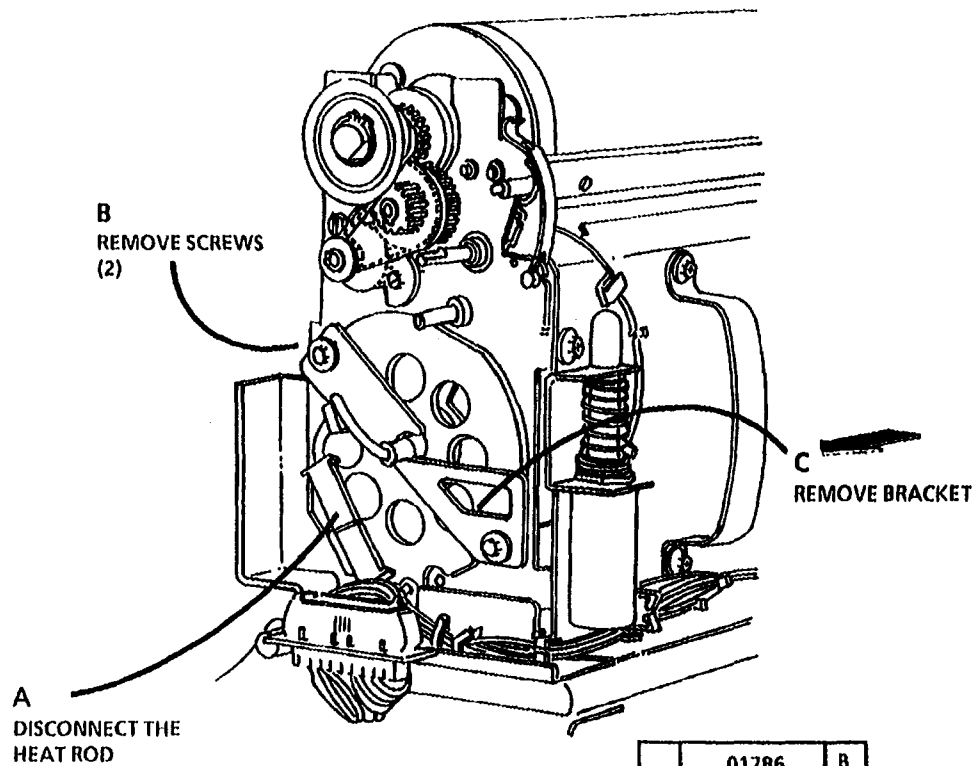


Figure 3. Prepare to Remove the Heat Rod

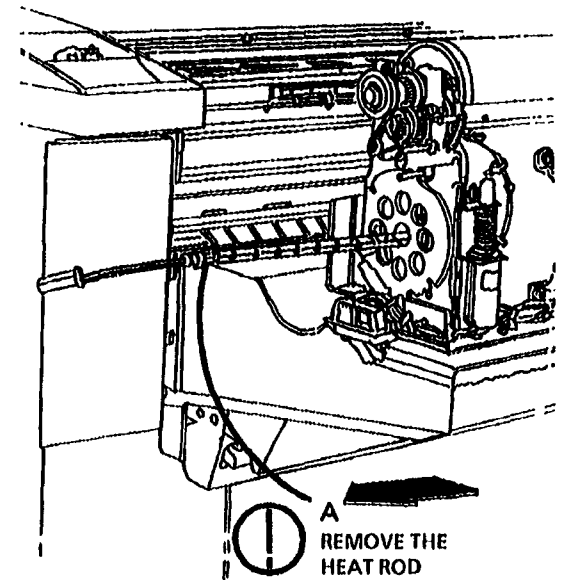


Figure 4. Remove the Fuser Heat Rod

	01785	A
TAR	SM 4	M

(Continued)

(Continued)

## Replacement

1. (Figure 6): Install the Heat Rod.

**!** **STEP 1 A:** Wear gloves or wrap a sheet of paper around the Heat Rod when handling the heat rod. Oil from your fingers can damage the Heat Rod.

**1** **STEP 1 A:** 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.

2. The remainder of the replacement is a reversal of the removal.

**2** **By heating the fuser roll to the operating temperature and allowing it to run, fuser oil will be evenly applied to the surface of the fuser roll.**

3. Enter diagnostic mode.



### WARNING

There will be a time delay between the time the code [1003-1] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

4. Enter the code [1003-1]. Allow the Fuser Drive Motor to cycle. When the Fuser Drive Motor stops, exit the diagnostic mode.

5. Ensure that the Thermistor is clean and touches the Fuser Roll after assembly.

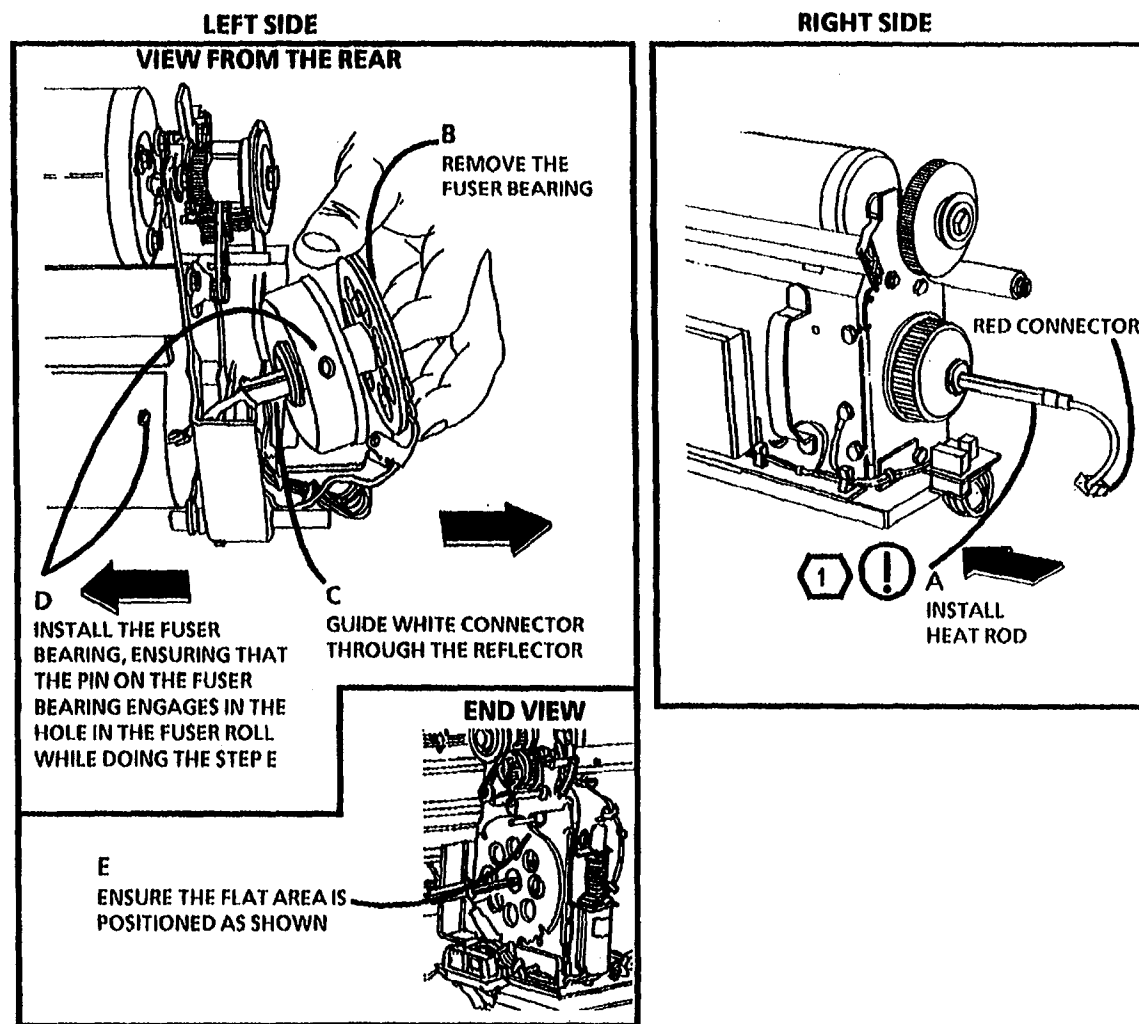


Figure 6. Install the Heat Rod

	01544	B
TAR	SM 4	M

## REP 10.1B Fuser Heat Rod (W/ Tag/ MOD 28)

### Parts List on PL 10.2

**NOTE:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as *Without Tag / MOD 28, (W / O Tag / MOD 28)*.

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as *With Tag / MOD 28, (W / Tag / MOD 28)*.

Use this procedure on copiers equipped with ONE AC Drive Motor, (W / Tag / MOD 28). On copiers equipped with TWO AC Drive Motors, refer to the (REP 10.1A Fuser Heat Rod (W / O Tag / MOD 28) removal procedure.

### Removal

#### WARNINGS



Switch off the Main Power Switch and disconnect the Power Cord.



The Fuser Heat Roll may be HOT! To prevent burns, allow the Roll to cool before removing the Xerographic Module.

1. Open the Right and Left Side Doors and then remove the following:
  - a. Xerographic Module (REP 9.1).
  - b. Stripper Finger Assembly (REP 10.6).
  - c. Oil Dispense Assembly (REP 10.7).

2. (Figure 1): Prepare to remove the Heat Rod.

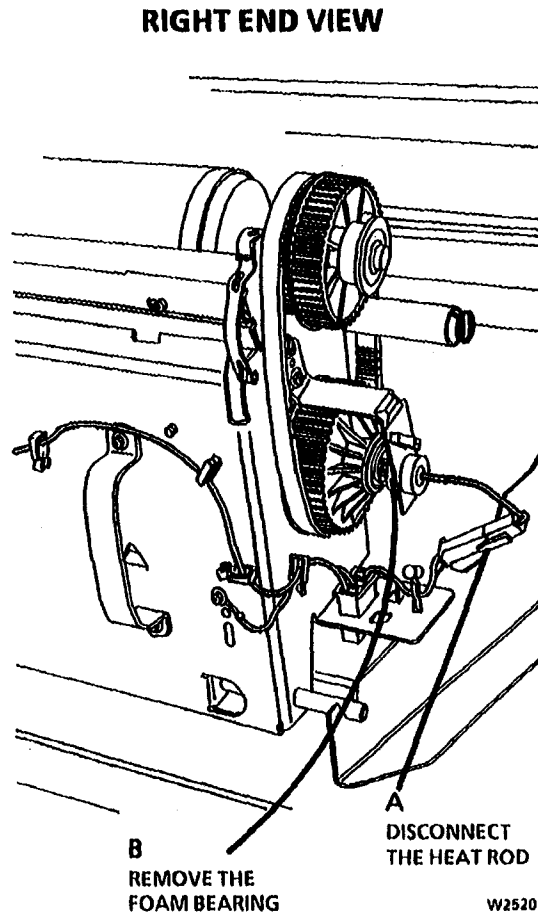


Figure 1. Prepare to Remove the Heat Rod

3. (Figure 2): Remove the Transition Gear and Weight.
- STEP 3 A and B:** Use care when removing the retainer clip and the transition gear. The cleaner blade assembly is spring-loaded.

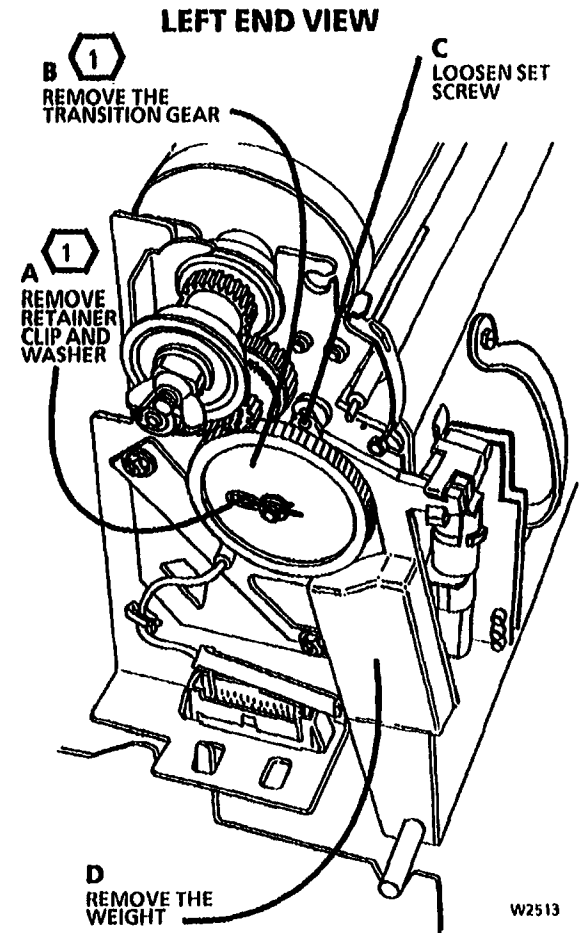
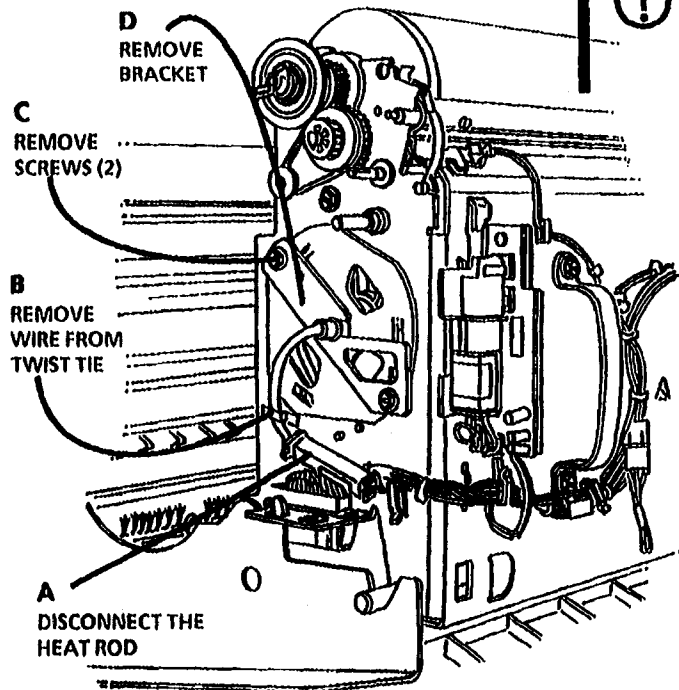


Figure 2. Remove the Transition Gear and Weight

4. (Figure 3): Prepare to remove the Heat Rod from the Heat Roll.

**LEFT END VIEW**



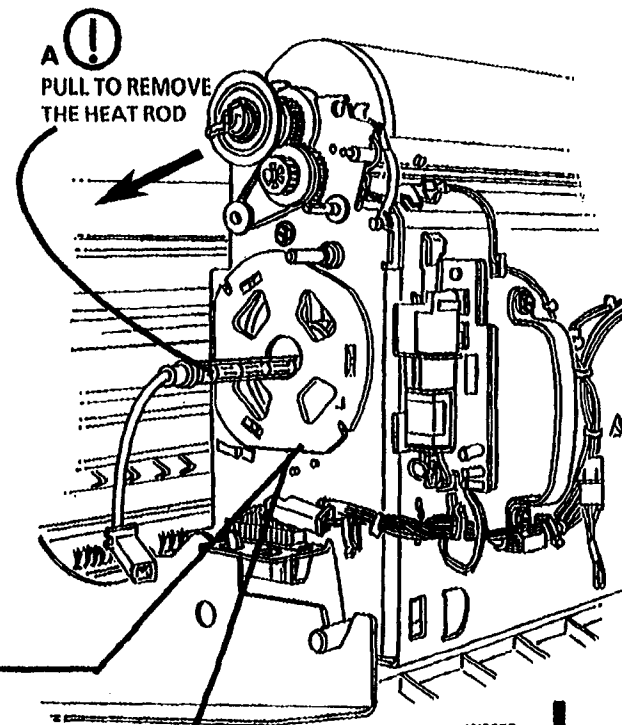
W2680

Figure 3. Preparing to Remove the Heat Rod

5. (Figure 4): Remove the Fuser Heat Rod.

**CAUTION**

⚠ STEP 5 A: Wear gloves or wrap a sheet of media around the Heat Rod when handling the Rod. Oil from your hands can damage the Heat Rod.



W2679

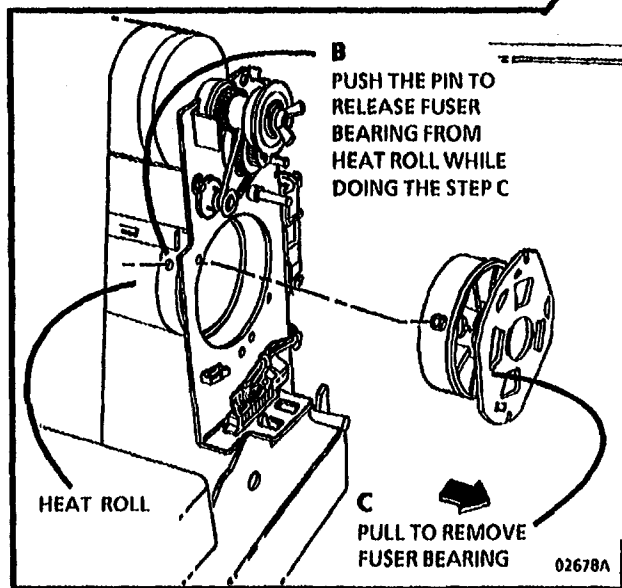


Figure 4. Removing the Fuser Heat Rod

## Replacement

### CAUTION

① STEP 1 B: Wear gloves or wrap a sheet of paper around the Heat Rod when handling the Rod. Oil from your fingers can damage the Heat Rod.

1. (Figure 5): Install the Heat Rod.

① STEP 1 A: Install the Heat Rod, RED connector first. **DO NOT** remove the connectors from the wires on the ends of the heat rod. The heating element inside the rod is closer to the end with the white connector.

② STEP 1 A: Insert the red connector into the Heat Roll, while looking into the Roll. Align the red connector with the hole in the Fuser Drive Gear and insert the connector through the gear. If the connector will not go through, use the rod that secures the fabric guide. Insert the rod through the right side of the xerographic module. Secure the red connector to the rod and pull the heat rod into the fuser roll.

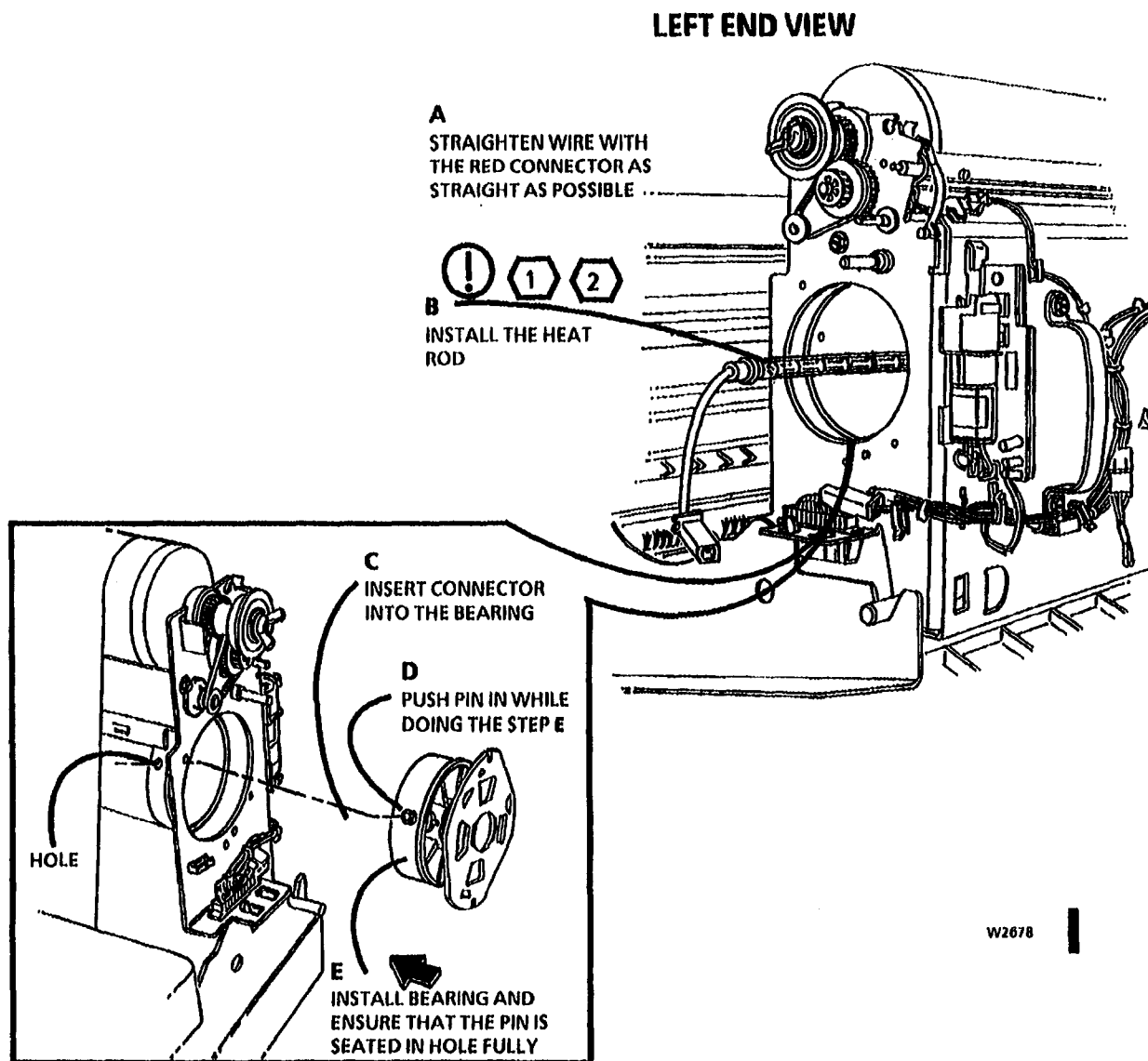
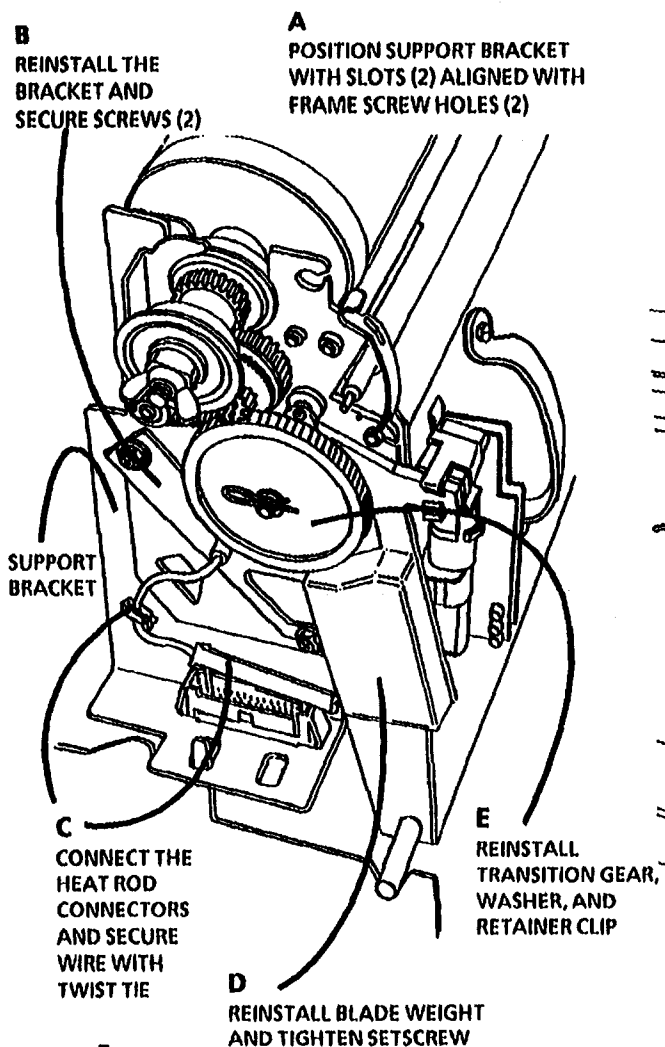


Figure 5. Install the Heat Rod

2. (Figures 6 and 7): Complete the installation of the Heat Rod.



W2513

Figure 6. Completing the Installation

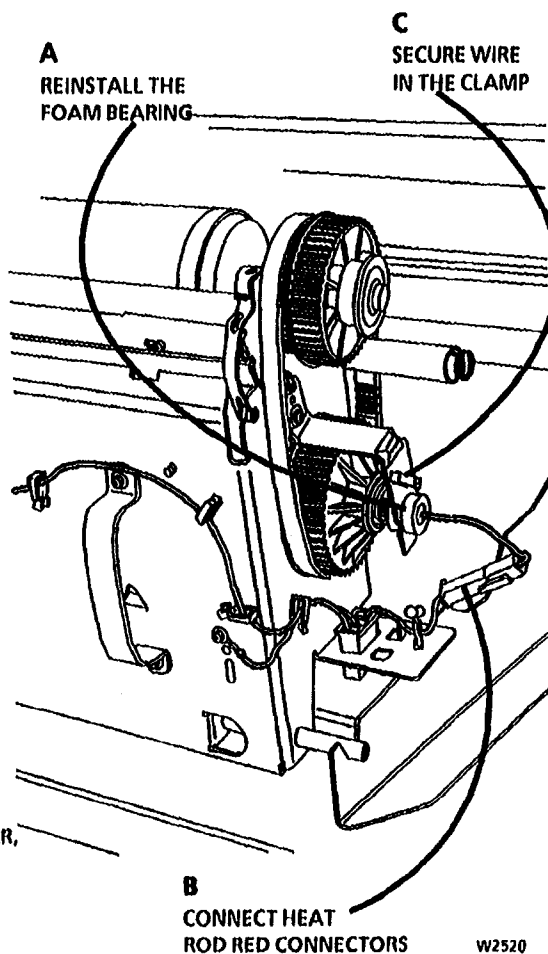


Figure 7. Completing the Installation

3. Reinstall the following:
- Oil Dispense Assembly (REP 10.7).
  - Stripper Finger Assembly (REP 10.6).
  - Xerographic Module (REP 9.1).
  - Right and Left Side Door (REP 14.1).

2 **By heating the fuser roll to the operating temperature and allowing it to run, fuser oil will be evenly applied to the surface of the fuser roll.**

4. Enter the Diagnostic Mode.



**WARNING**

There will be a time delay between the time the code [1003-1] is entered and the time the Main Drive Motor is energized. The Drive Motor will not start until the Fuser Heat Roll is at the correct operating temperature.

- Enter the code [1003-1]. Allow the Main Drive Motor to cycle. When the Drive Motor stops, exit the Diagnostic Mode.
- Ensure that the Thermistor is clean and is in contact with the Fuser Heat Roll after reassembly.

## REP 10.2 Fuser Heat Roll

### Parts List on PL 10.2

#### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Oil Dispense Assembly (REP 10.7).
3. Remove the Right and Left Side Doors (REP 14.1).

**!** Allow fuser to cool before removing the xerographic module. The fuser may be hot.

4. Remove the Xerographic Module (REP 9.1).
5. Remove the Heat Rod (REP 10.1).
6. (Figure 1): Prepare to Remove the Fuser Heat Roll .

#### VIEW FROM REAR LEFT SIDE

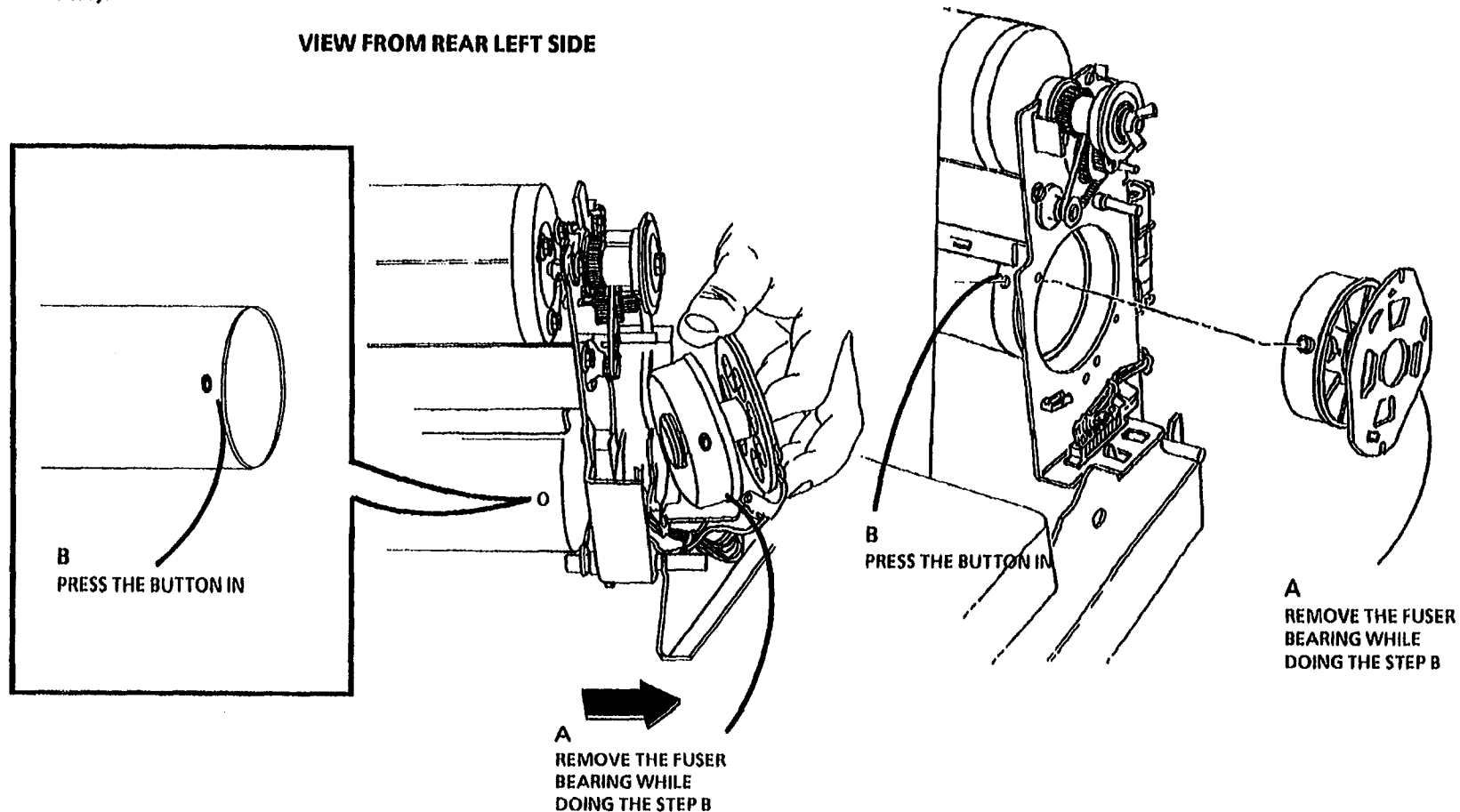


Figure 1. Prepare to Remove the Fuser Heat Roll (W/O Tag /MOD 28)

01501

Figure 1. Prepare to Remove the Fuser Heat Roll (W/Tag /MOD 28)

02677

(Continued)

7. (Figure 2): Remove the Fuser Heat Roll.
8. Remove the Thermistor Assembly PWB (RT1) (REP 10.5).
9. Clean the thermistor contact where it contacts the fuser roll with a clean dry cloth to remove any loose dirt.

## Replacement

1

*STEP 1: Do not install the fuser bearing after installing the fuser roll. It will be installed during Heat Rod (REP 10.1) in step 3.*

1. Install the Fuser Roll.
2. Install the Thermistor Assembly PWB (RT1) (REP 10.5).

3. Install the Heat Rod (REP 10.1).
4. Perform the Fuser Heat Roll Initialization procedure (3050 Service Manual, Section 6, General Procedures).

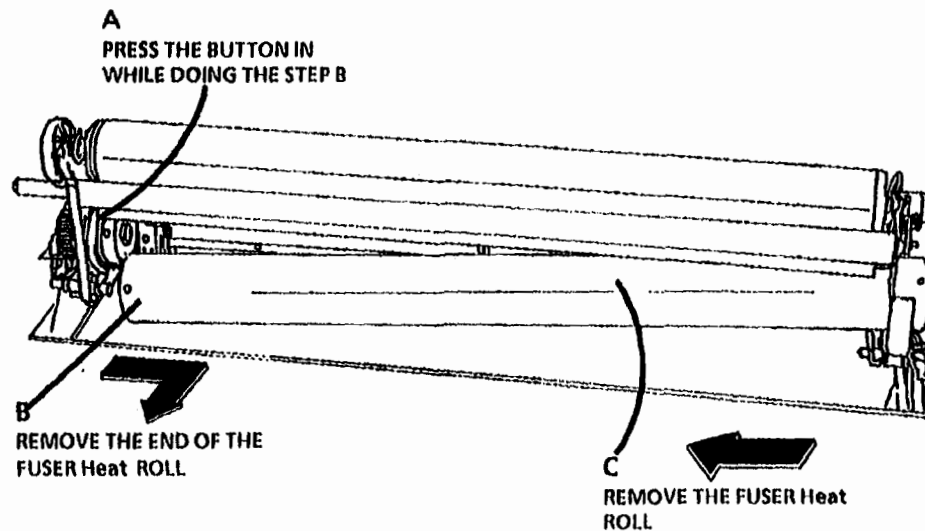


Figure 2. Remove the Fuser Heat Roll

w2596

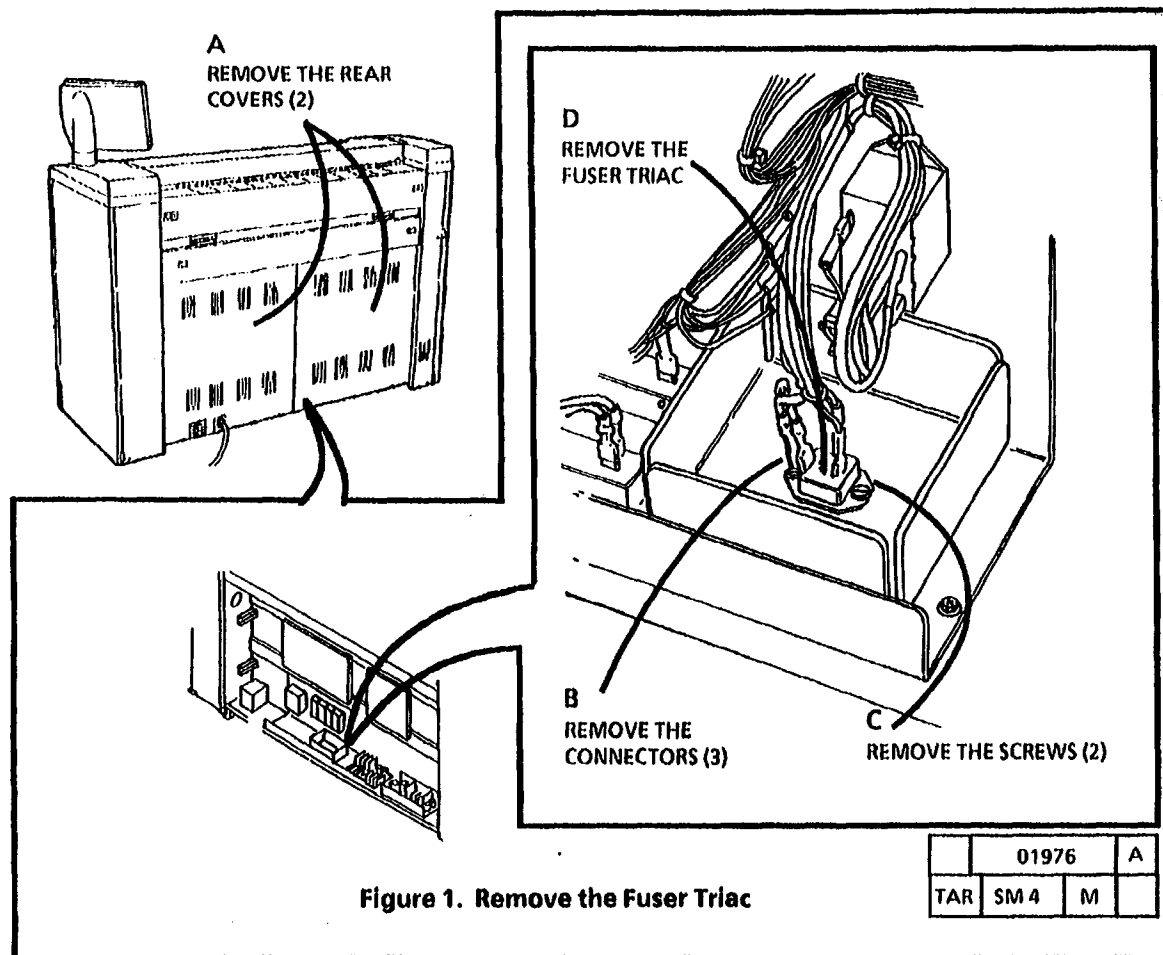


## REP 10.3 Fuser Triac

### Parts List on PL 1.2

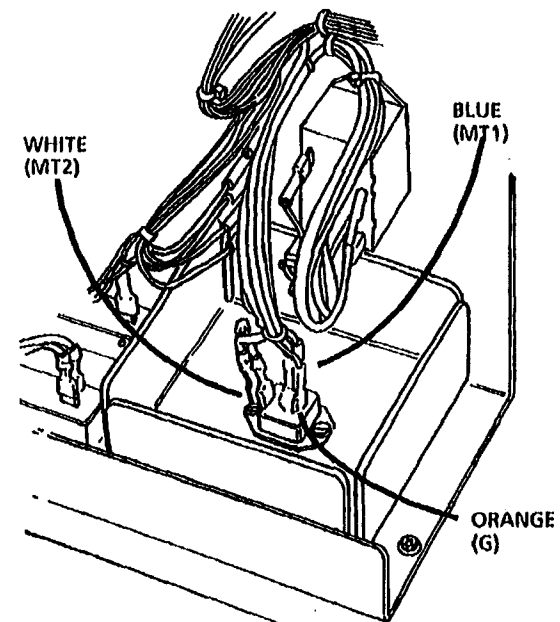
### Removal

1. **Warning:** Disconnect the Power Cord.



### Replacement

1. Cover the entire surface where the triac mounts to the frame with a film of thermal compound.
2. (Figure 2): Fuser Triac.



## REP 10.4A Fuser Drive Pulley (W/ O Tag/ MOD 28)

### Parts List on PL 10.2

**NOTE:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as Without Tag / MOD 28, (W I O Tag / MOD 28).

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as With Tag / MOD 28, (W I Tag / MOD 28).

Use this procedure on copiers equipped with TWO AC Drive Motors, (W I O Tag / MOD 28).

On copiers equipped with ONE AC Drive Motor, refer to the (REP 10.4B Fuser Drive Pulley (W/Tag/ MOD28) removal procedure.

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Right and Left Side Doors (REP 14.1).
3. Remove the Xerographic Module (REP 9.1).

4. (Figure 1): Remove the Lamp Bracket.

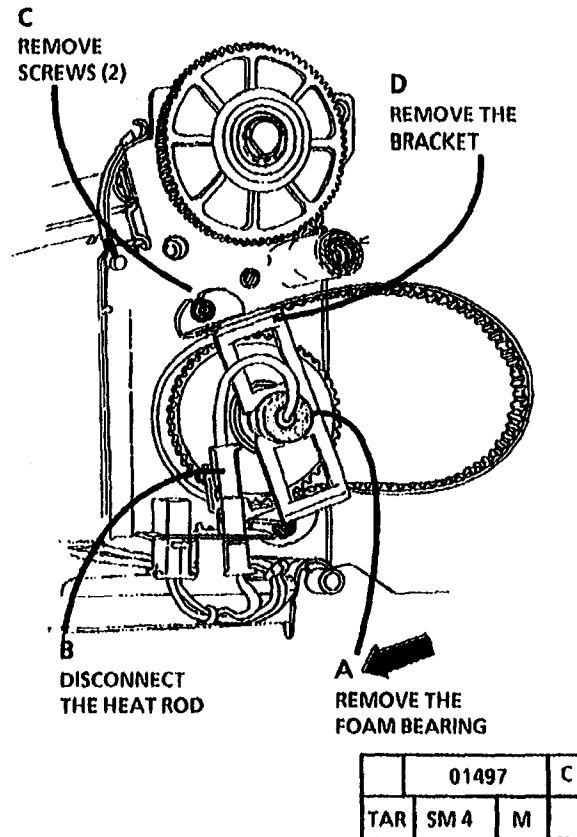


Figure 1. Remove the Bracket

5. (Figure 2): Remove the Fuser Drive Pulley.

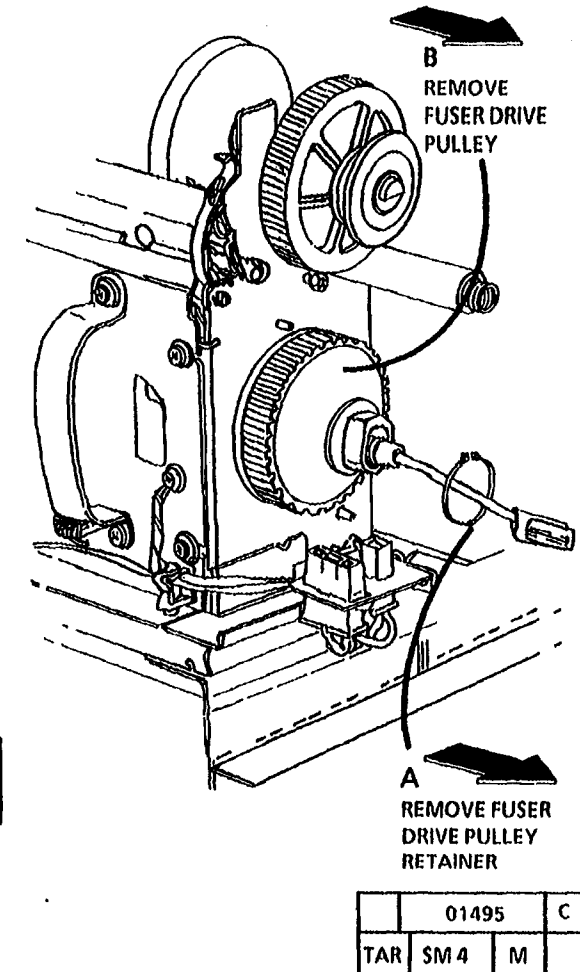


Figure 2. Remove the Fuser Drive Pulley

## REP 10.4B Fuser Drive Pulley (W/ Tag/ MOD 28)

### Parts List on PL 10.2

**NOTE:** Some copiers are equipped with TWO AC Drive Motors, Developer Drive Motor (MOT 21), and Fuser/ Drum Drive Motor (MOT 22).

Copiers equipped with TWO AC Drive Motors are identified as *Without Tag / MOD 28*, (*W I O Tag / MOD 28*).

Other copiers are equipped with ONE AC Drive Motor, Main Drive Motor (MOT21). Copiers equipped with ONE AC Drive Motor are identified as *With Tag / MOD 28*, (*W I Tag / MOD 28*).

Use this procedure on copiers equipped with ONE AC Drive Motor, (*W I Tag / MOD 28*).

On copiers equipped with TWO AC Drive Motors, refer to the (REP 10.4A Fuser Drive Pulley (*W I O Tag/ MOD 28*) removal procedure.

### Removal

1. **Warning:** Disconnect the power cord.
2. Remove the Right and Left Side Doors (REP 14.1).
3. Remove the Xerographic Module (REP 9.1).

4. (Figure 1): Remove the Lamp Bracket.

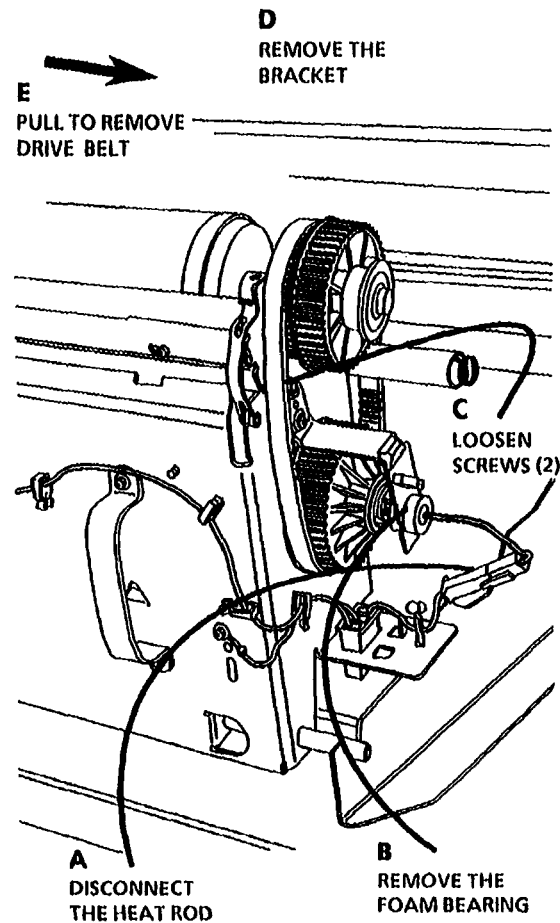


Figure 1. Remove the Bracket

5. (Figure 2): Remove the Fuser Drive Pulley.

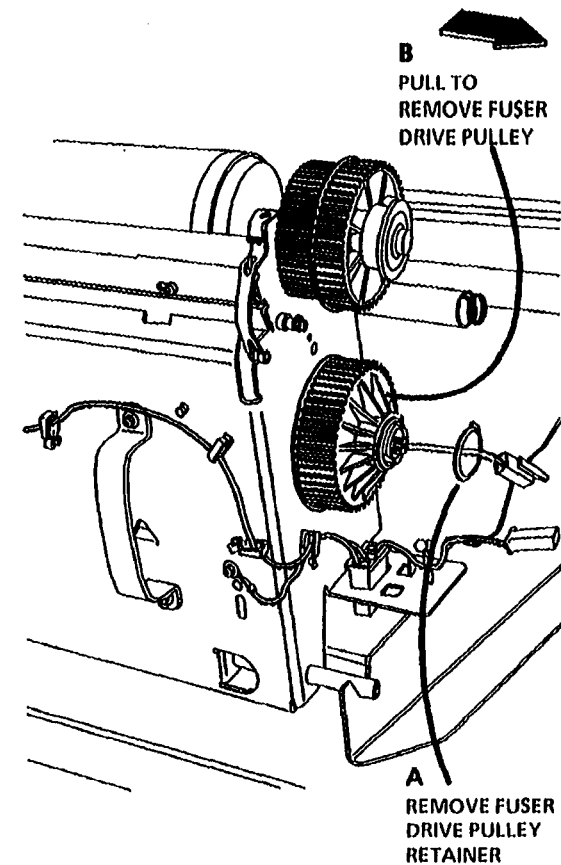


Figure 2. Remove the Fuser Drive Pulley

NOTES

## REP 10.5 Thermistor Assembly PWB (RT1)

Parts List on PL 10.4

### REMOVAL

1. **Warning:** Disconnect the power cord.
2. Remove the Oil Dispense Assembly (REP 10.7).
3. Rotate the Control Console and remove the Document Handler.
4. Raise the Document Feed-in Shelf.

**!** Allow the fuser to cool before removing the thermistor assembly. The fuser roll may be hot.

5. (Figure 1): Remove the Thermistor Assembly PWB (RT1).

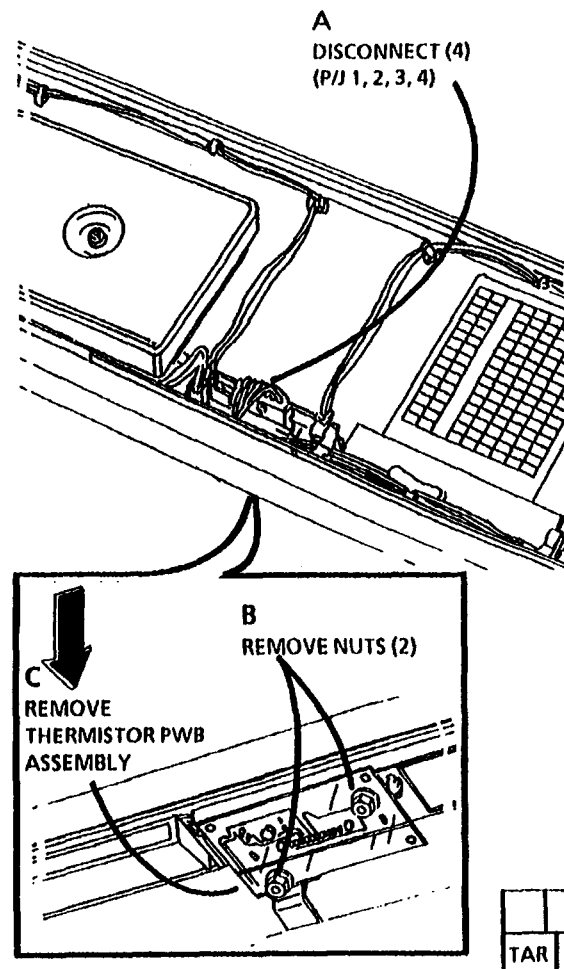


Figure 1. Remove the Thermistor Assembly

### Replacement

**1** Lightly lubricate the fuser roll with silicon oil in the area where the thermistor comes in contact with the roll.


1. Adjust the Fuser Temperature (ADJ 10.1).

## REP 10.6 Stripper Finger Assembly

### Parts List on PL 10.4

#### Removal

1. **Warning:** Disconnect the power cord.

 Handle the Stripper Finger Assembly with care in order to avoid bending the stripper fingers.

2. Remove the Xerographic Module to the service rails (REP 9.1).
3. (Figure 1): Remove the Front Cover.

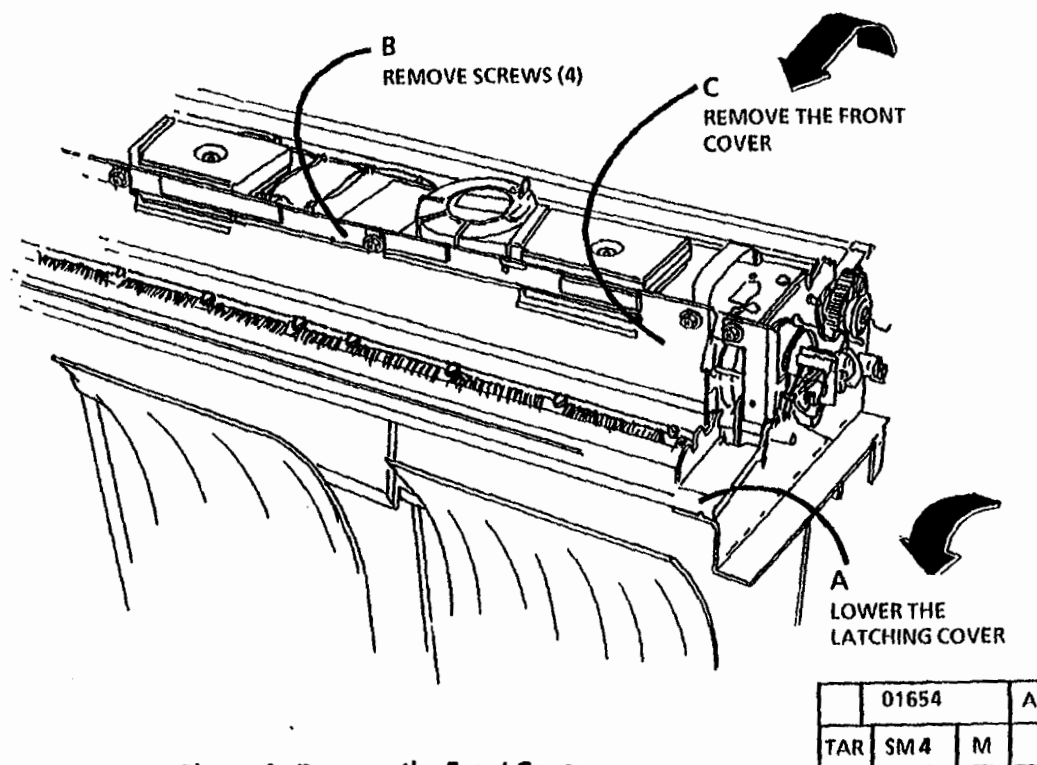


Figure 1. Remove the Front Cover

(Continued)

(Continued)

4. (Figure 2): Remove the Stripper Finger Assembly.

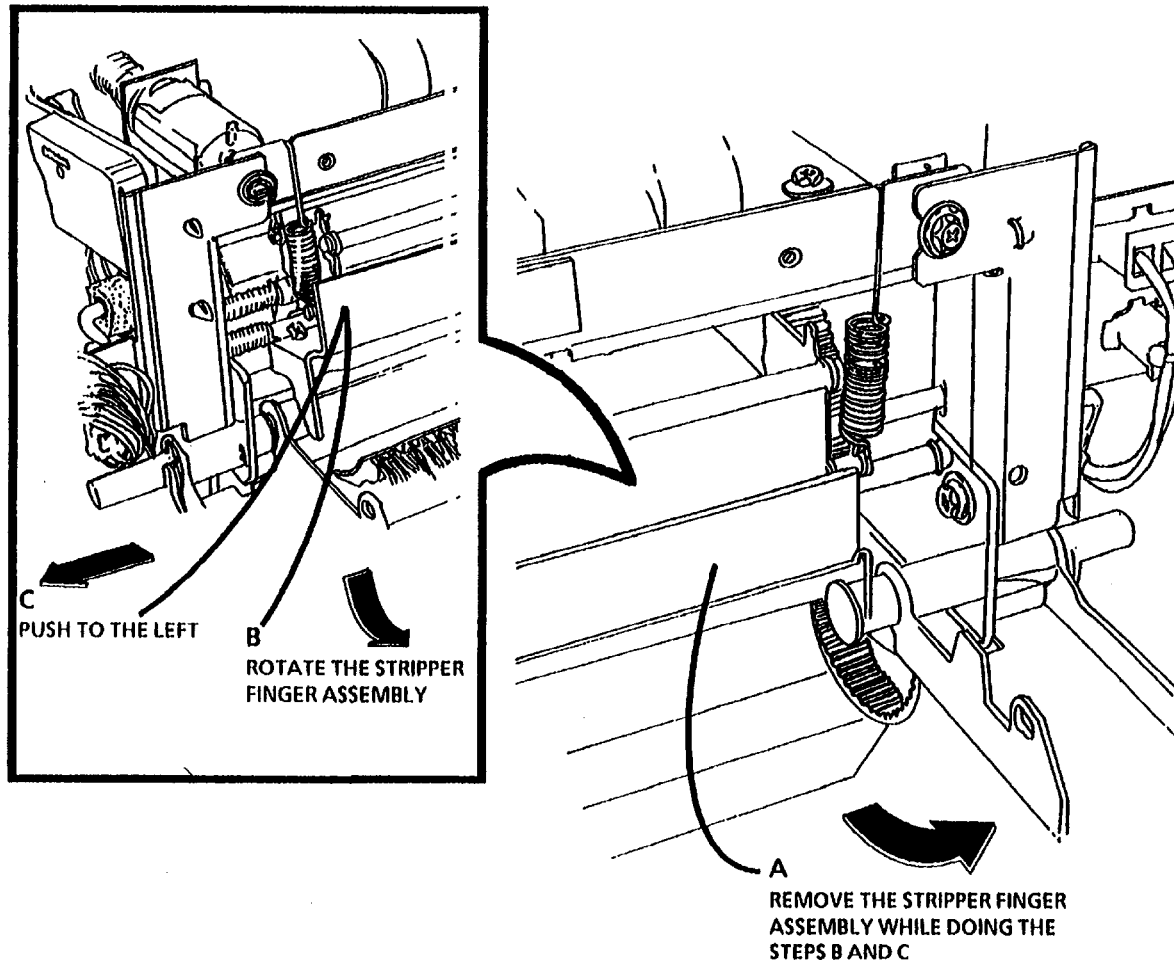


Figure 2. Remove the Stripper Finger Assembly


	01652	A
TAR	SM 4	M

## REP 10.7 Oil Dispense Assembly

### Parts List on PL 10.5

### Removal

1. **Warning:** Disconnect the power cord.

 **Handle the Stripper Finger Assembly with care in order to avoid bending the stripper fingers.**

2. Lower the Front Latching Cover.

3. Remove the Stripper Finger Assembly (REP 10.6)
4. (Figure 1): Remove the Oil Dispense Assembly.

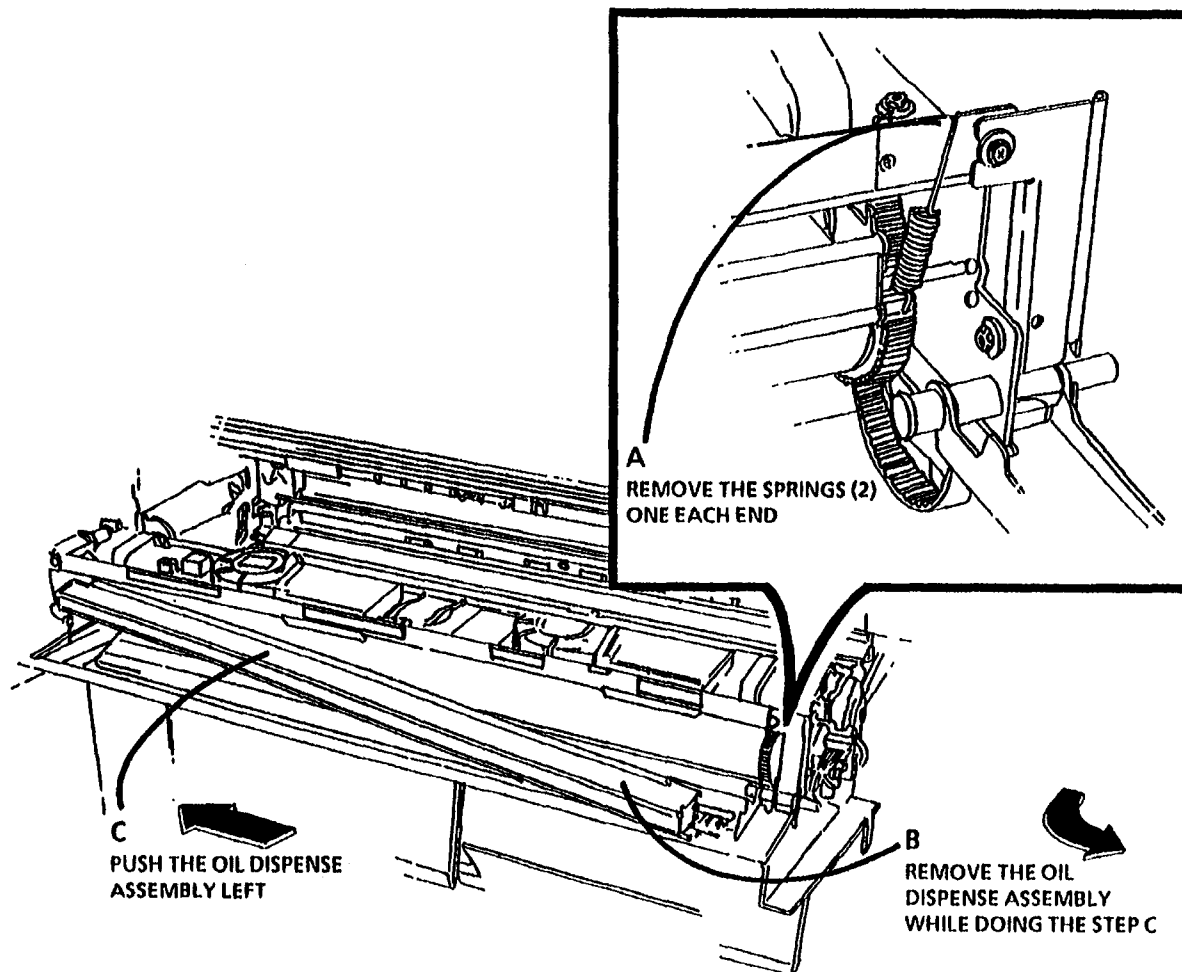


Figure 1. Remove the Oil Dispense Assembly

	01653	B
TAR	SM 4	M




## REP 10.8 Stripper Fingers

Parts List on PL 10.4

### Removal

1. **Warning:** Disconnect the power cord.

 Handle the Stripper Finger Assembly with care in order to avoid bending the stripper fingers.

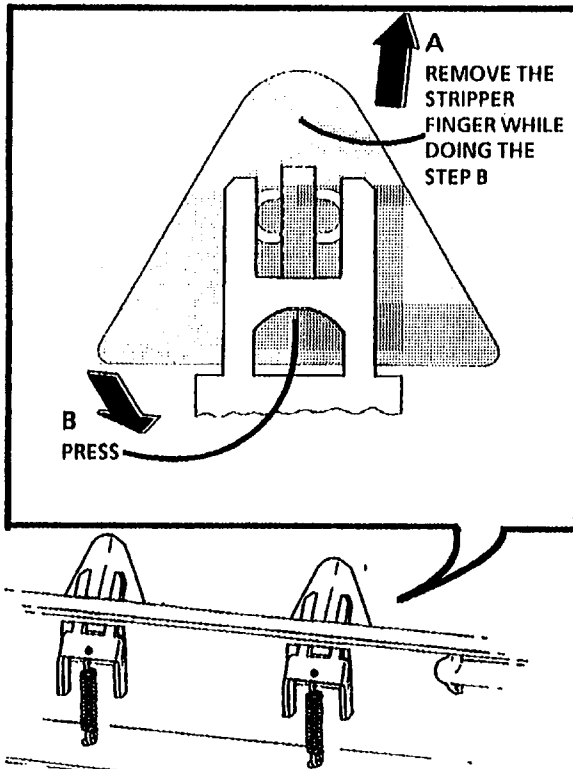


Figure 1. Remove the Stripper Fingers

	01655	B
TAR	SM 4	M



**WARNING:** The fuser roll may be hot.

2. Remove the Stripper Finger Assembly (REP 10.6)
3. (Figure 1): Remove the Stripper Fingers.

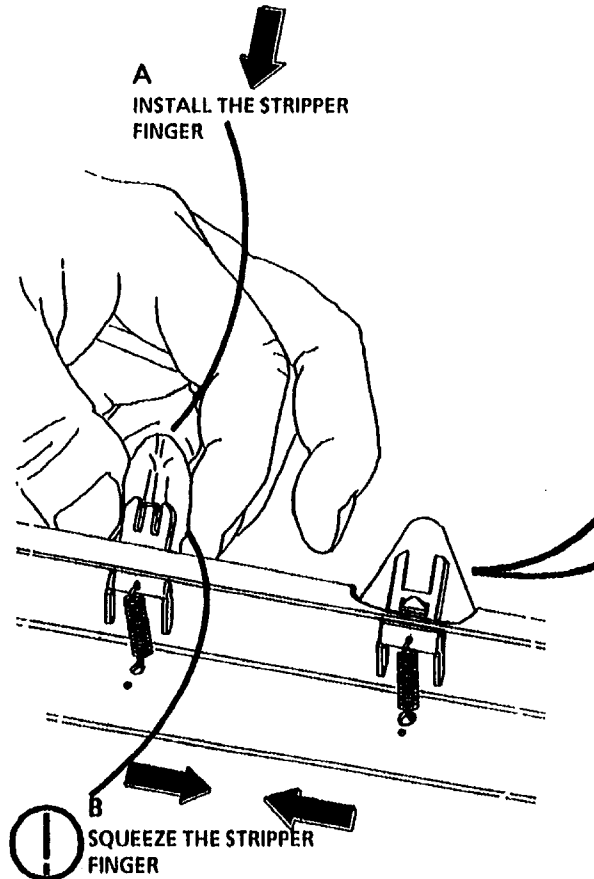



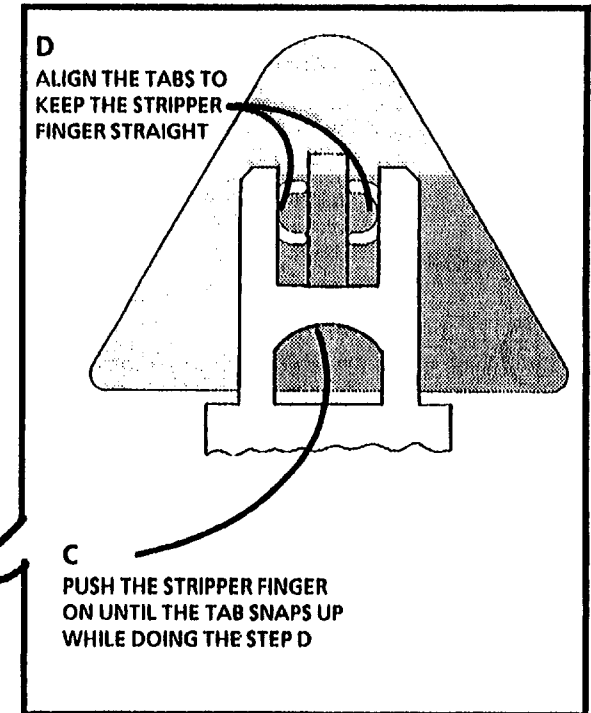
Figure 2. Install the Stripper Fingers

	01656	B
TAR	SM 4	M

### Replacement

 **STEP 1 B:** To avoid damage to the stripper fingers, do not bend them too far causing them to fold.

1. (Figure 2): Install the Stripper Fingers.
2. The remainder the the replacement is a reversal of the removal procedure.



## REP 10.9 Oil Pads

### Parts List on PL 10.5

#### Removal

1. **Warning: Disconnect the power cord.**
2. Lower the Front Latching Cover.
3. Remove the following:
  - a. Stripper Finger Assembly (REP 10.6)
  - b. Oil Dispense Assembly (REP 10.7)
4. (Figure 1): Remove the Oil Pads.

#### Replacement

- ⓘ *To avoid damaging the oil dispense roll, do not pull the wick too tight over the extrusion.*
- ⓘ *STEP 1 A: To avoid folding the wick or pulling the wick too tight, use the oil pad covers as guides when installing the oil pads.*

1. (Figure 2): Install the Oil Pads.
2. Reinstall the Oil Pad Covers.

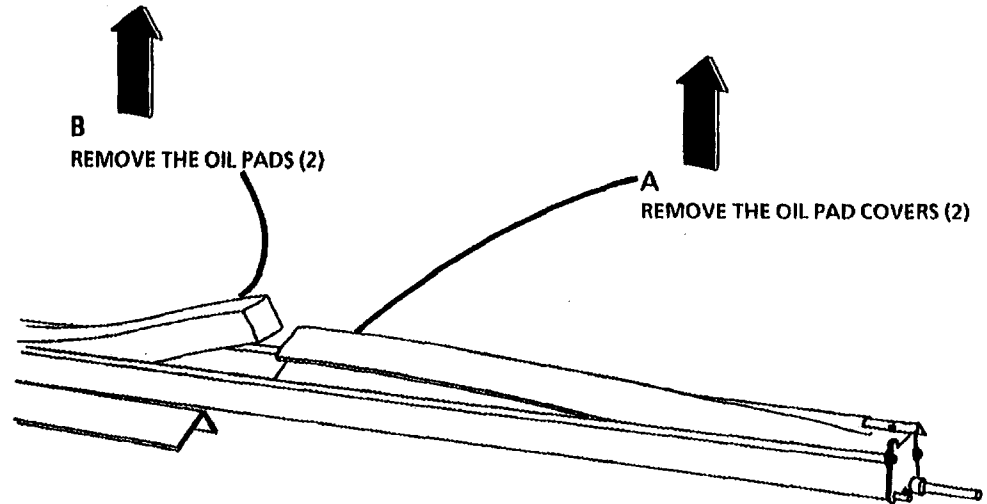


Figure 1. Removing the Oil Pads

01814

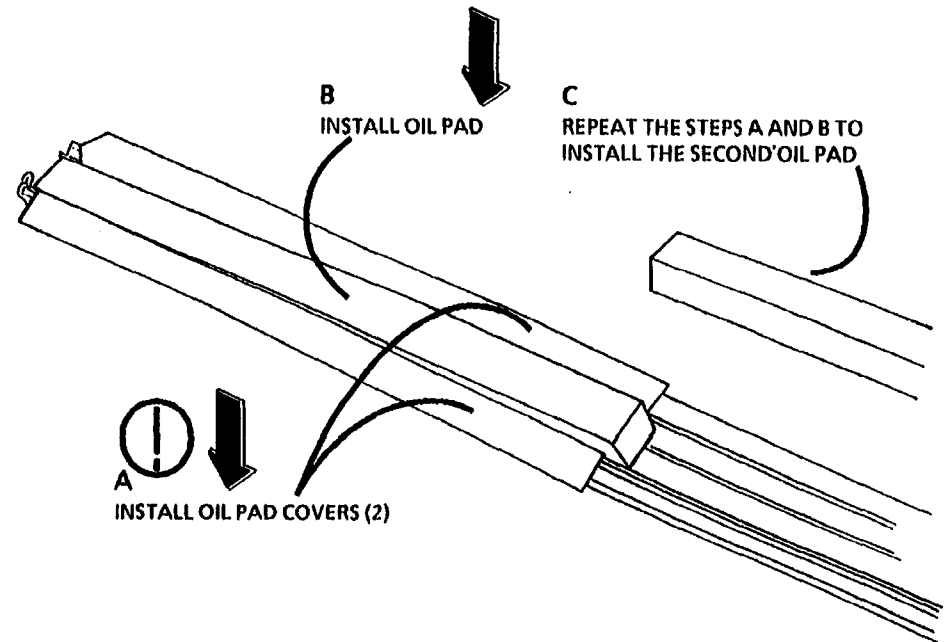


Figure 2. Installing the Oil Pads

01815

(Continued)



### WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



### WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll **WILL** be hot.




### WARNING

Ensure that the area where components with fuser oil is present is protected by a drop cloth. Clean any fuser oil spills with warm water and soap to avoid the possibility of bodily injury due to falls.

3. Connect the Power Cord and enter diagnostics.
4. Lower the Cut Sheet Feed-in shelf, and place a magnet on the Cut Sheet Feed-in Shelf Interlock Switch.
5. Enter the code [09 21 4] and wait for the Fuser roll to warm to run temperature.



*If [09 21 4] times out while performing the oiling process, re-enter the code [09 21 4] and continue.*

6. Apply part of an 8cc tube of fuser oil (93E00811) to a folded soft cloth.
7. Wipe the fuser oil soaked cloth evenly across the entire surface of the Fuser Roll.
8. Repeat steps 6 and 7 until the entire contents of the tube of oil is used.  
 *Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.*
9. Inspect for dry and/or contaminated areas on the Fuser Roll. If dry or contaminated areas are found, wipe the pad with oil back and forth across the area while applying pressure.
10. Press the Stop button two times.
11. Wipe the Fabric Guide with the same cloth to remove any excess oil and debris that may be present.
12. Clean the Fabric Guide with a clean dry pad.
13. Reinstall the following:
  - a. Oil Dispense Assembly (REP 10.7)
  - b. Stripper Finger Assembly (REP 10.6)
14. Remove the magnet from the Cut Sheet Feed-in Shelf Interlock Switch and raise the Cut Sheet Feed-in Shelf.
15. Perform the Fuser Temperature Adjustment (ADJ 10.1).

16. Exit diagnostics and select a quantity of 6 to make 6 copies of the blank side of the test pattern (82E5980) (all white) to remove any excess oil from the Fuser Roll surface.



### WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The Stripper Finger Assembly **WILL** be hot.

17. Use a thick soft clean cloth to wipe any excess Fuser Oil from the ends of the Fuser Roll and the Fabric Guide.

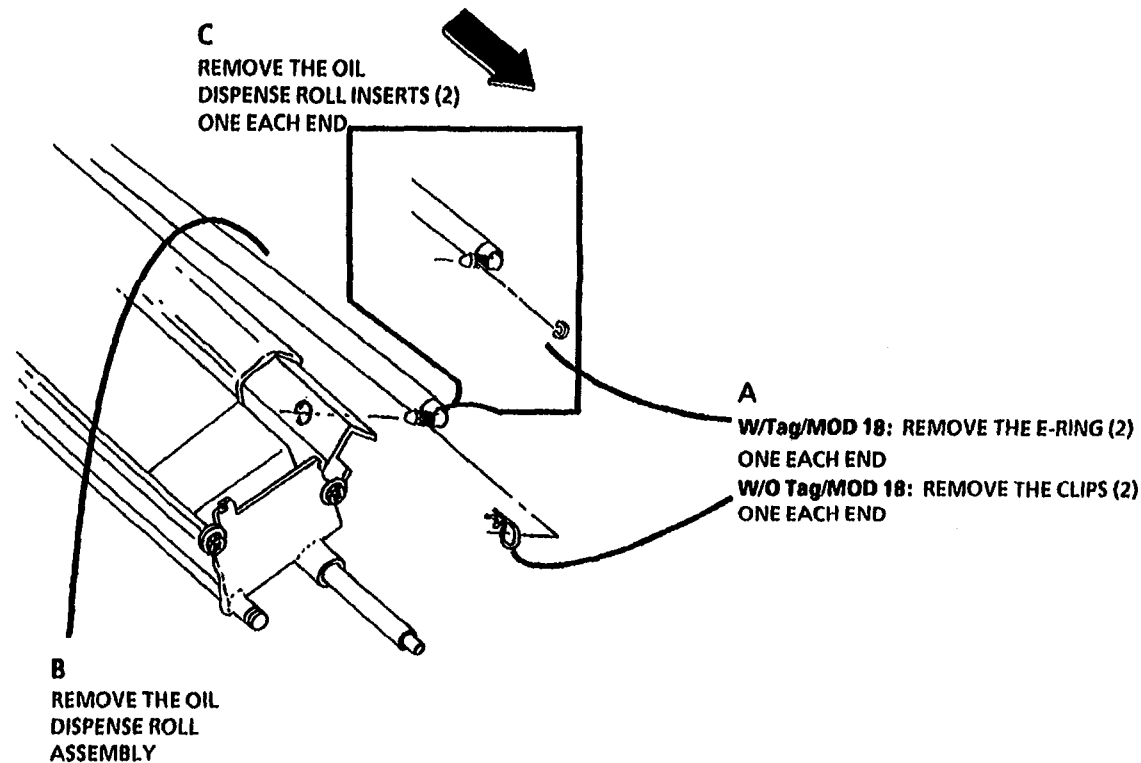
## REP 10.10 Oil Dispense Roll

### Parts List on PL 10.5

### Removal

1. **Warning: Disconnect the power cord.**
2. Lower the Front Latching Cover.

3. Remove the following:
  - a. Stripper Finger Assembly (REP 10.6)
  - b. Oil Dispense Assembly (REP 10.7).
4. (Figure 1): Remove the Oil Dispense Roll Assembly.



01817B

Figure 1. Remove the Oil Dispense Roll Assembly

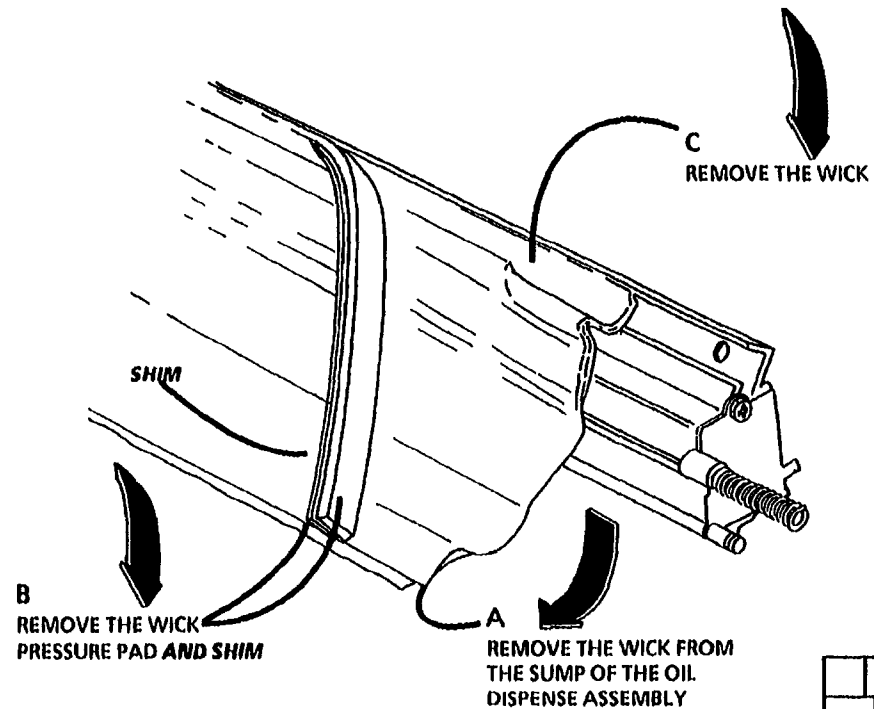
## REP 10.11 Wick

### 4. (Figure 1): Remove the Wick.

#### Parts List on PL 10.5

#### Removal

1. **Warning: Disconnect the power cord.**
2. Lower the Front Latching Cover.
3. Remove the following:
  - a. Stripper Finger Assembly (REP 10.6).
  - b. Oil Dispense Assembly (REP 10.7).
  - c. Oil Dispense Roll Assembly (REP 10.10).
  - d. Oil Pads (REP 10.9)



	01818	B
TAR	SM 4	M

Figure 1. Remove the Wick

(Continued)

(Continued)

## Replacement

- 1** STEPS 1 A and B: Ensure that the pressure pad does not stretch while installing it. The length of the pressure pad should not exceed the length of the wick. Trim any extra length off.
- 2** STEPS 1 B and C: Center the Wick. Ensure that the holes at each end are not covered.

1. (Figure 2): Prepare to install the Wick.

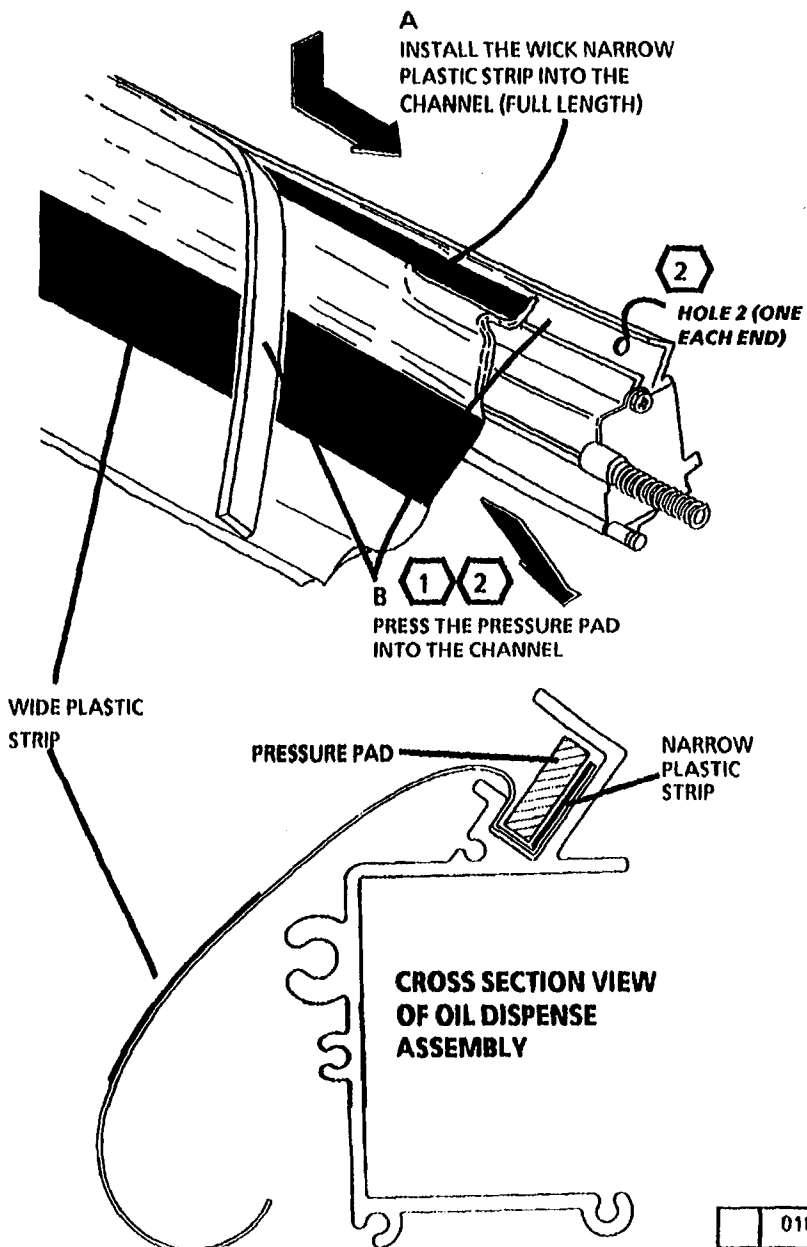


Figure 2. Prepare to Install the Wick

(Continued)

	01888	A
TAR	SM 4	M

(Continued)

2. (Figure 3): Install the Wick.
3. Install the Oil Pads (REP 10.9) omitting the steps to initialize the Fuser Roll. This will be done latter in this procedure.

**3** STEP 4 C: Ensure that the holes at each end are not blocked by the wick after installing the shim.

4. (Figure 4): Install the Shim.

5. Clean the Oil Dispense Roll with film remover.
6. Reinstall the Oil Dispense Roll (REP 10.10).

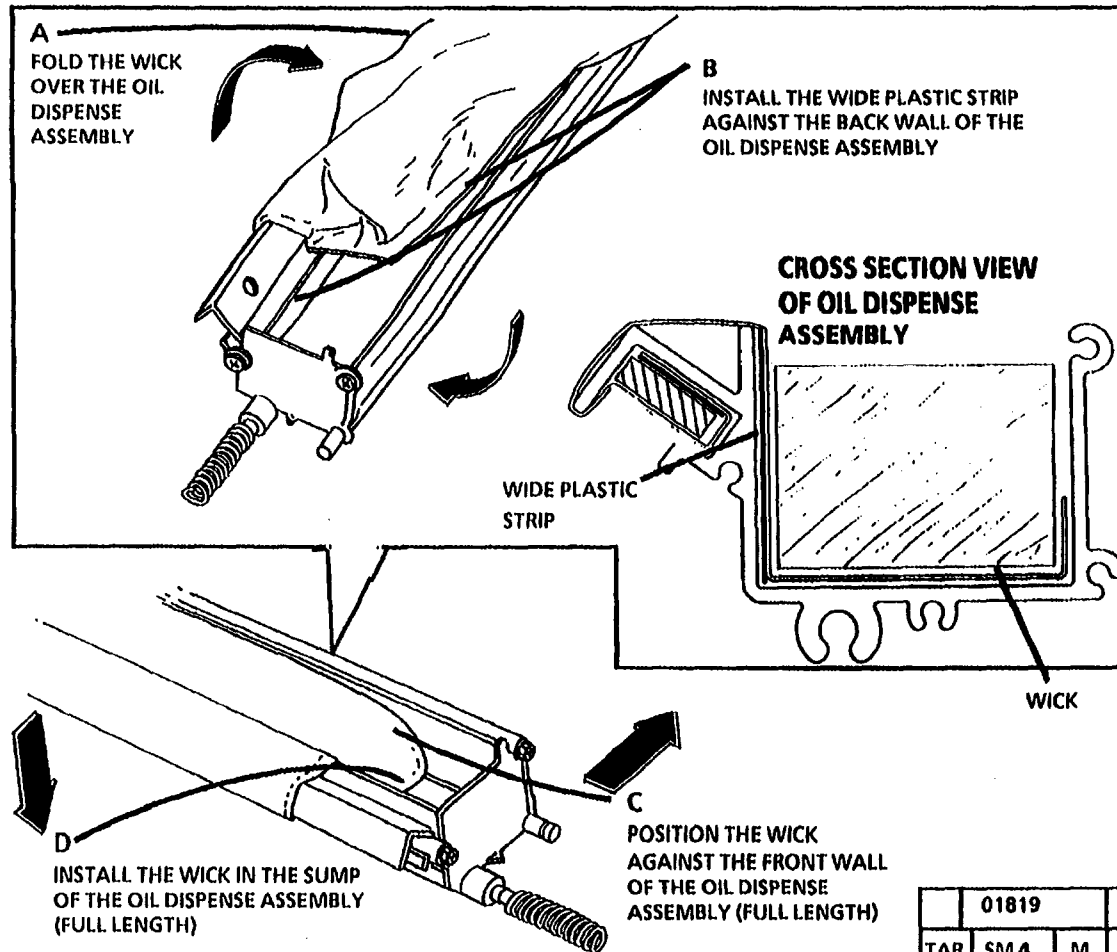


Figure 3. Installing the Wick

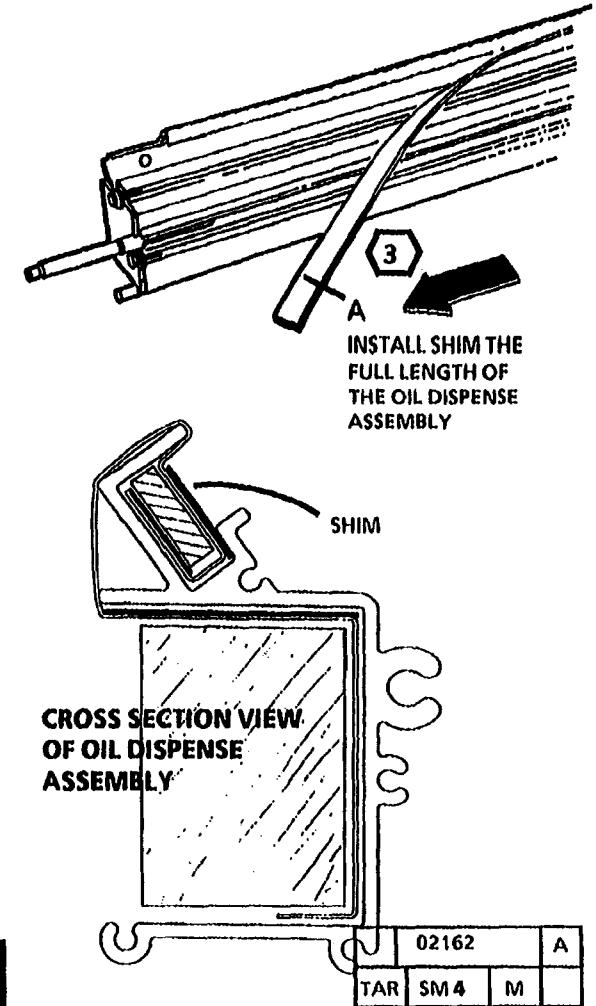


Figure 4. Install the Shim  
(Continued)

(Continued)



**WARNING**

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



**WARNING**

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll **WILL** be hot.



**WARNING**

Ensure that the area where components with fuser oil is present is protected by a drop cloth. Clean any fuser oil spills with warm water and soap to avoid the possibility of bodily injury due to falls.

7. Connect the Power Cord and enter diagnostics.
8. Place a magnet on the Copy Feed Shelf Interlock Switch.
9. Enter the code [09 21 4] and wait for the Fuser roll to warm to run temperature.



*If [09 21 4] times out while performing the oiling process, re-enter the code [09 21 4] and continue.*

10. Apply part of an 8cc tube of fuser oil (93E00811) to a folded soft cloth.

11. Wipe the fuser oil soaked cloth evenly across the entire surface of the Fuser Roll.

12. Repeat Steps 10 and 11 until the entire contents of the tube of oil is used.



*Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.*

13. Inspect for dry and/or contaminated areas on the Fuser Roll. If dry or contaminated areas are found, wipe the pad with oil back and forth across the area while applying pressure.

14. Press the Stop button two times.

15. Wipe the Fabric Guide with the same cloth to remove any excess oil and debris that may be present.

16. Clean the Fabric Guide with a clean dry pad.

17. Reinstall the following:
  - a. Oil Dispense Assembly (REP 10.7)
  - b. Stripper Finger Assembly (REP 10.6)

18. Remove the magnet from the Copy Feed Shelf Interlock Switch and raise the Copy Feed Shelf.

20. Perform the Fuser Temperature Adjustment (ADJ 10.1).

21. Exit diagnostics and select a quantity of 6 to make 6 copies of the blank side of the test pattern (82E5980) (all white) to remove any excess oil from the Fuser Roll surface.



**WARNING**

Use extreme caution when working in the fuser area and do not touch any heated components. The Stripper Finger Assembly **WILL** be hot.

22. Use a thick soft clean cloth to wipe any excess Fuser Oil from the ends of the Fuser Roll and the Fabric Guide.





# REP 14.1 Right and Left Side Doors

Parts List on PL 14.1, PL 14.2

## Removal

1. **Warning: Disconnect the power cord.**

**1** This procedure shows the removal of the Left Side Door. Use the same technique to remove the Right Side Door.

2. Remove the Upper Right Cover (REP 14.3) or Upper Left Cover (REP 14.2).

3. (Figure 1): Remove the Left Side Cover.

## Replacement

1. (Figure 2): Install the Left Side Door.

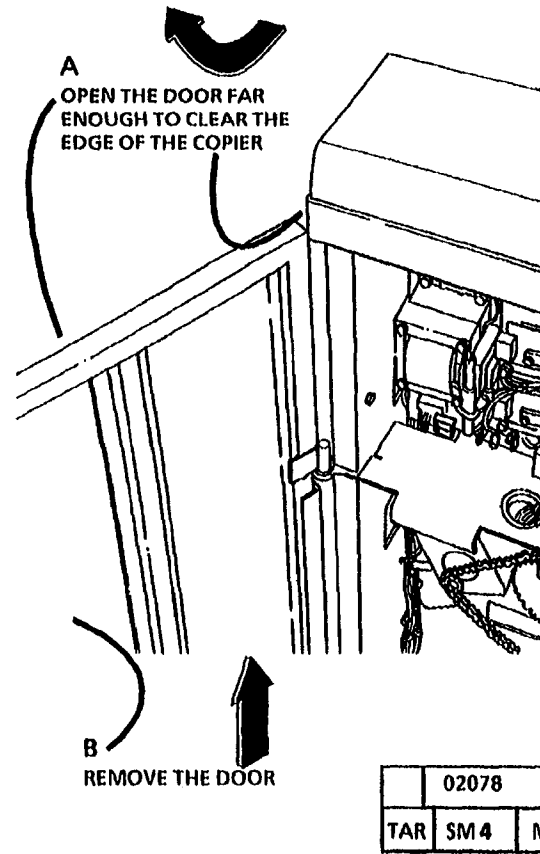


Figure 1. Remove the Left Side Door

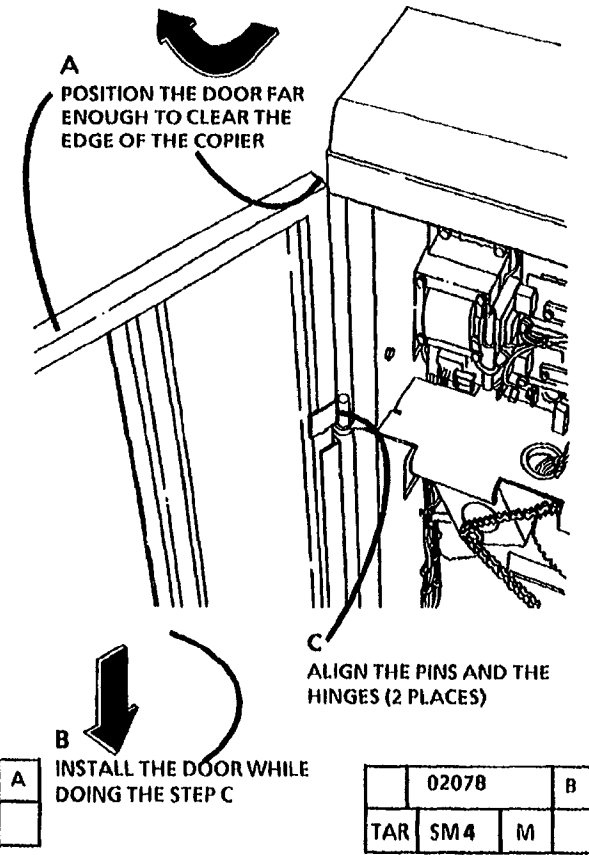


Figure 2. Install the Left Side Door

## ADJ 3.2 Country Configuration

### Purpose

The purpose of this procedure is to set up the correct input power, media width, and billing meter configuration.



**WIO TagIMOD 6: 50 Hz copiers requiring 240VAC: DO NOT set the code [0261] to 240 VAC. Set the code [0261] to 220 VAC. When the code [0261] is set to 240 VAC, a fusing temperature run away may occur in normal copy mode or when using the codes [1004] and [0921].**  
**WI TagIMOD 6: 50 Hz copiers requiring 240VAC: The code [0261] may be set to 240 VAC.**

### Adjust

1. Enter the diagnostic mode.
2. Enter the code [0261].
3. To adjust the Input power configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value that is displayed on the Control Console.

Adj	Configuration
0	115 V, 60 Hz
1	240 V, 50 Hz
2	220 V, 50 Hz

4. Press the **Start** button to enter the new value.
5. Press the **Stop** button two times.

6. Enter the code [0262].
7. To adjust the media width configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value displayed on the Control Console.

Adj	Configuration
1	inch
2	metric
3	both

8. Press the **Start** button to enter the new value.
9. Press the **Stop** button two times.
10. Enter the code [0263].

11. To adjust the billing meter configuration, use the **Copy UP** button in order to increase or the **Copy DOWN** button in order to decrease the value displayed on the Control Console.

Adj	Configuration
0	feet
1	metric

12. Press the **Start** button to enter the new value.
13. Exit the diagnostic mode.

# ADJ 5.1 Copy Size Adjustment

## Purpose

The purpose of this adjustment is to obtain a size-for-size copy of the Document on the customer supplied media. The size of the image is adjusted by changing the speed at which the document is scanned. This adjustment compensates for the media stretching or shrinking as the media passes through the copier.

## Prerequisite

Perform the Check/ Adjustment of the Fuser Temperature (Through NVM) (ADJ 10.1).

## Check

1

The test pattern 82E5980 must be fed Lead Edge first in the 36 inch (914 mm) direction. Keep the copy media within the 36 inch (914 mm) marks on the feed-in shelf.

1. Ensure that the copier is programmed for the correct media type. Review the following P codes: P41, P42, and P43. Refer to the User Guide.
2. Make 3 copies of test pattern 82E5980 on the customer supplied 20 pound (80 GSM) bond paper (roll and cut sheet).

2

To give the copy media time to stabilize, wait 5 minutes before checking the third copy with the test pattern. Discard the first 2 copies from the two media sources (roll and cut sheet media).

3. Place the third copy from the two media sources on top of the test pattern.
4. (Figure 1): Compare the Vertical Mag. Scale reference marks on the test pattern with the marks on the copy.

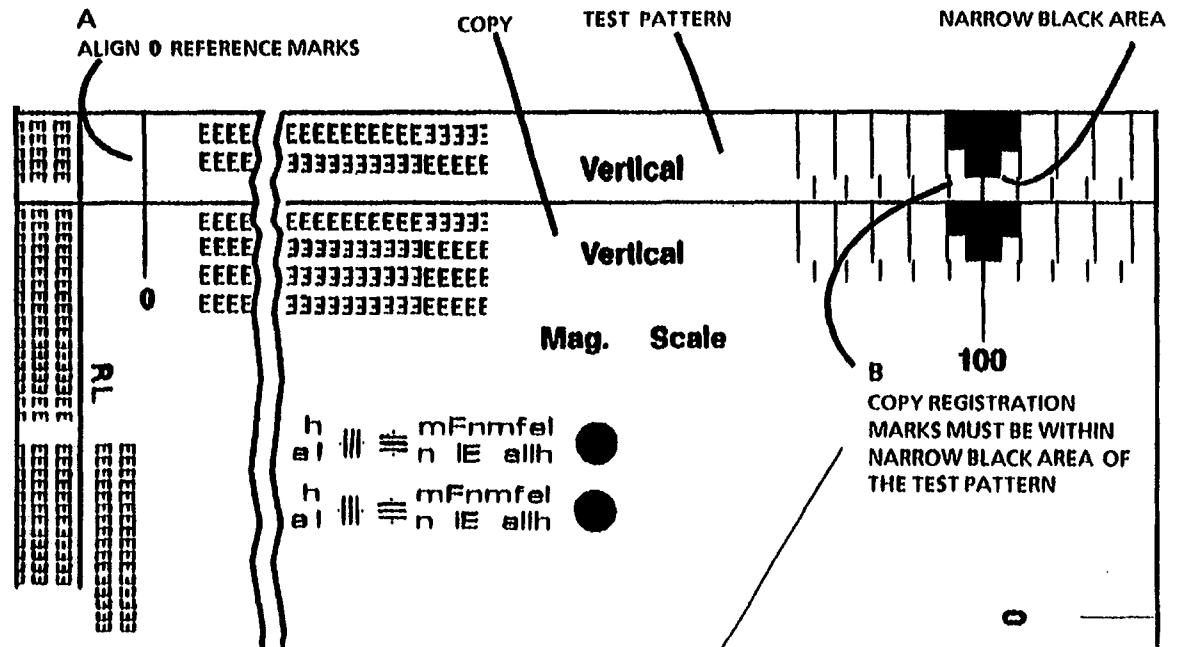



Figure 1. Compare the Reference Marks on the Test Pattern with the Marks on the Copy

	01663	A
TAR	SM 4	M

(Continued)

(Continued)

## Adjustment

1. Enter the diagnostic mode.
  2. Enter the code [0601] in order to adjust the speed at which the Document Drive Motor drives the Document.
  3. Select **Bond**.
  4. Record the NVM value.
  5. Use the **Copy** contrast up arrow button in order to increase the Output value, or the **Copy** contrast down arrow button in order to decrease the Output value that is displayed on the Control Console. A change of 5 will equal approximately 1/32 inch (1 mm).
  6. Press the **Start** button to store the new setting in NVM.
-  *When making a copy on cut sheet to check the adjustment, ensure that the correct Copy Media button is pressed. This will ensure the correct document speed is selected.*
7. Exit the diagnostic mode and repeat the **Check** and **Adjust** until the copy size is in specification.
  8. If the customer uses vellum and/ or film media, perform the **Check** and the **Adjustment** again while using film and/or vellum media.
  9. This adjustment affects other copier adjustments. Perform the following **Check/ Adjustments** in the sequence as listed:
    - a. **Image Registration (ADJ 8.1)**
    - b. **Auto Length (ADJ 8.2)**

## ADJ 5.2 Document Stop Positions (W/ Tag/ MOD 2) Check

### Purpose

The purpose of this adjustment is to ensure that the leading or trailing edge of the document does not stop over the lens. When the document is over the lens at the start or end of scan, streaks will occur on the leading or trailing edge of the copy.

### Check

1. Remove the Document Handler.

① *The document must be approximately 5/16 inch (8 mm) from the center of the lens.*

2. (Figure 1): Mark the position of the start of scan and the end of scan on the back of the document.

3. Reinstall the Document Handler.

4. Select Lead Margin, Trail Margin and a quantity of 5 in the normal run mode.

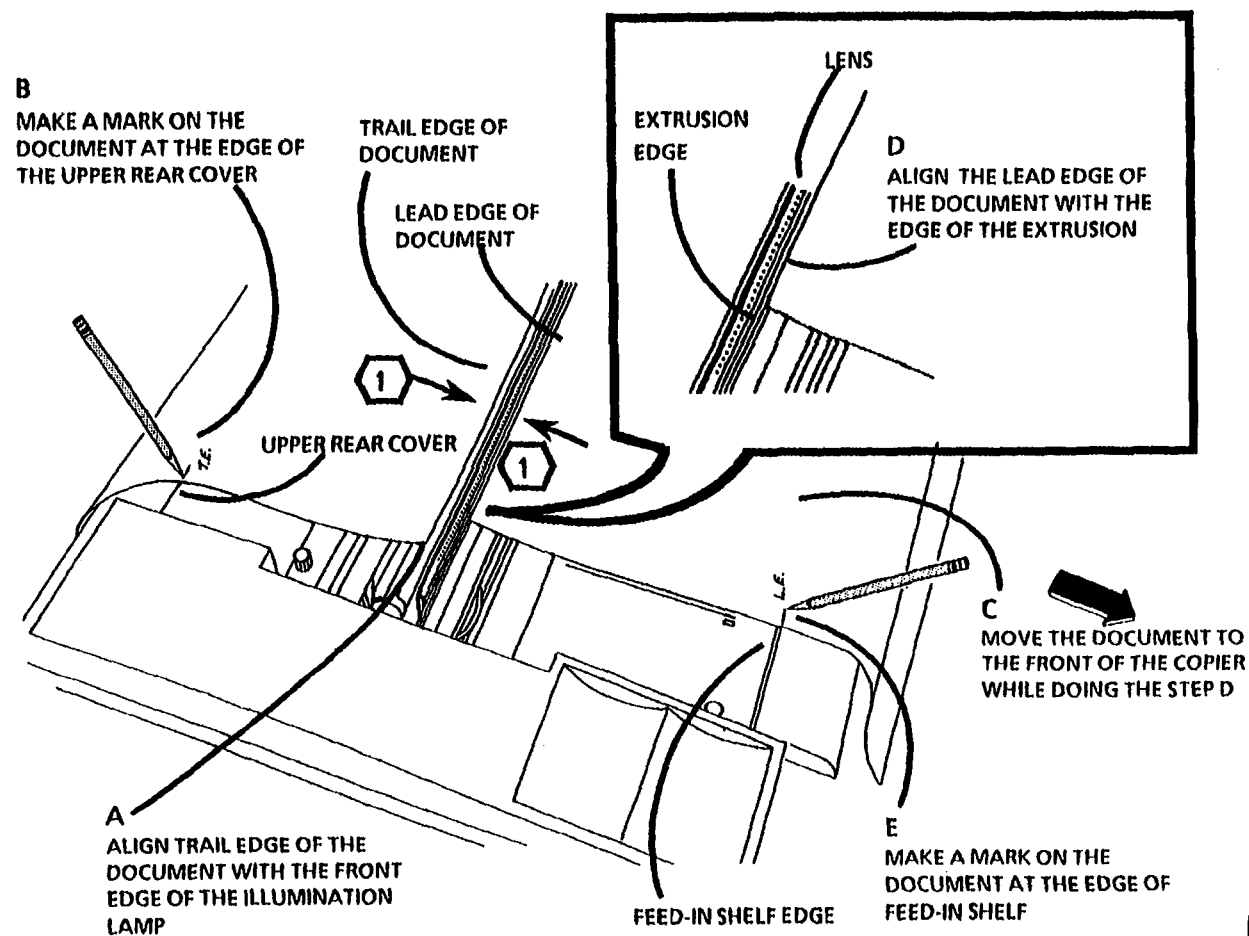


Figure 1. Mark the scan positions

(Continued)

	02043	A
TAR	SM 4	M

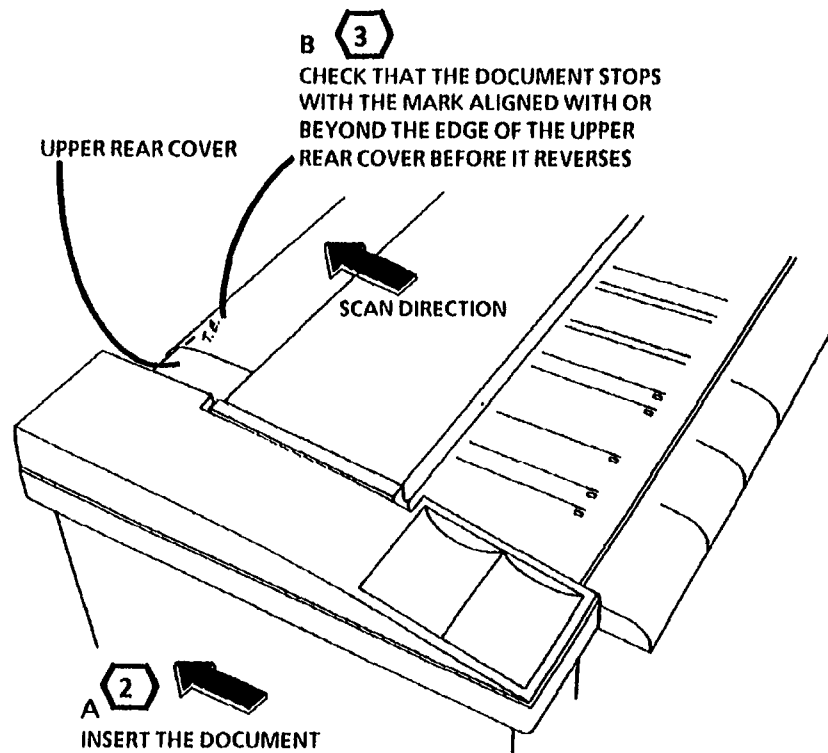
(Continued)

**2** STEP 5 A: Before inserting the document, read steps B and C in figure 2. The check will be made while the document is moving.

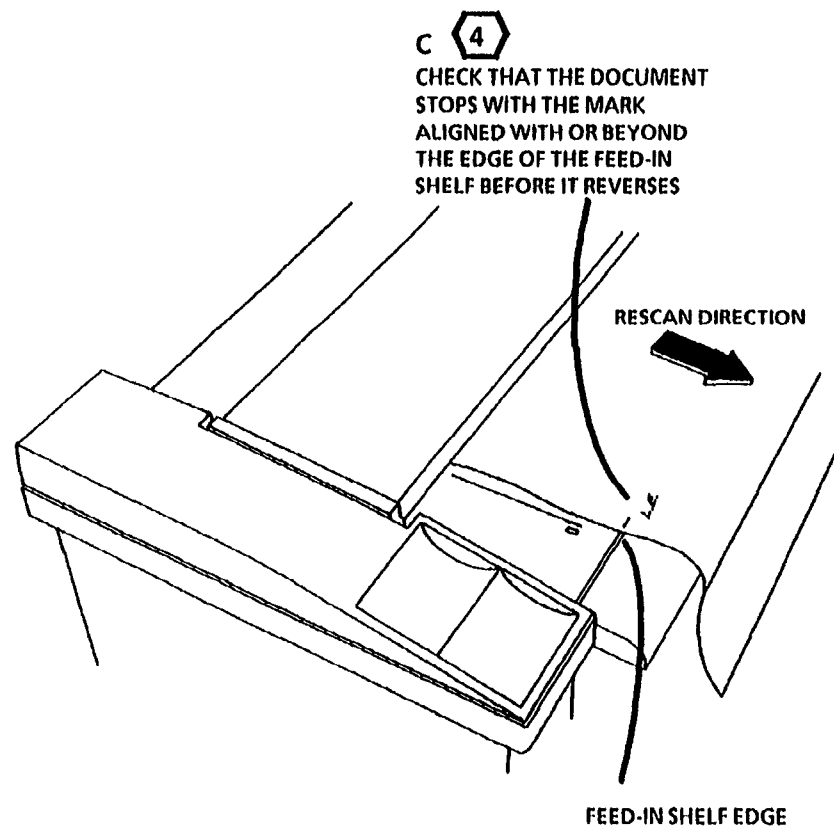
**3** STEP 5 B: The trailing edge mark made in the step 2 must be at the edge of the upper rear door or beyond.

**4** STEP 5 C: The leading edge mark made in the step 2 must be at the edge of the feed-in shelf or beyond.

5. (Figure 2): Check the trail edge position and the lead edge position..



	02045	A
TAR	SM 4	M



	02044	A
TAR	SM 4	M

Figure 2. Check the trail edge position and the lead edge position

(Continued)

(Continued)

## Adjustment

1. If the trailing edge mark checked in step 5 is not at or beyond the edge of the upper rear cover, enter the diagnostic mode.

2. Enter the code [0561].

**5** *Each increment represents approximately 1/32 inch (1 mm) movement of the document.*

3. Increase the value to have the document trailing edge move farther from the front of the copier, decrease the value to have the document trailing edge move towards the front of the copier.

4. Repeat the check.

5. If the leading edge mark checked in step 6 is not at or beyond the edge of the feed-in shelf, enter the diagnostic mode.

6. Enter the code [0562].

**6** *Each increment represents approximately 1/8 inch (3.5 mm) movement of the document.*

7. Increase the value to have the document leading edge move farther from the rear of the copier, decrease the value to have the document leading edge move towards the rear of the copier.

8. Repeat the check.



## ADJ 8.1 Image Registration

### Purpose

The purpose is to obtain the correct registration of the image on the copy. The correct registration is obtained by adjusting the time at which the Media Transport Drive Motor is energized. The motor drives the Registration Drive Rolls which drive the media to the drum.

### Prerequisite

Perform the following Check/ Adjustments in the sequence as listed:

- a. Fuser Temperature (NVM) (ADJ 10.1)
- b. Copy Size Adjustment (ADJ 5.1).

### Check

1. Make a copy of the test pattern 82E5980, using bond media.  
  
**1** *STEP 2 A: Folding the copy will allow checking the RL line with the REG. REF. RO line in the middle of the copy media.*
2. (Figure 1): Fold the copy.

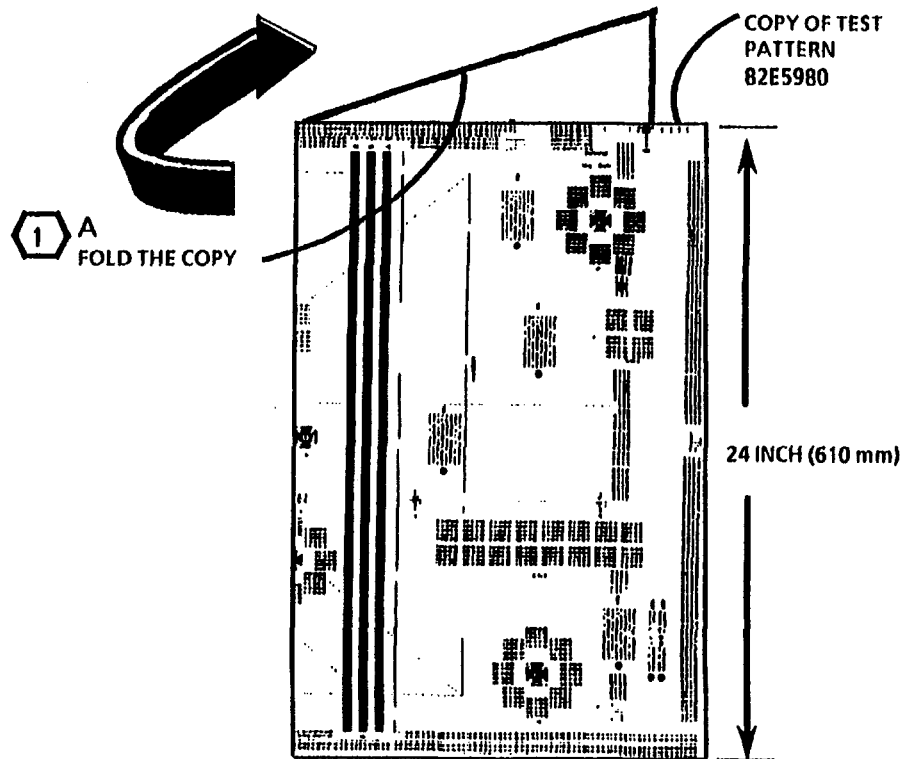


Figure 1. Fold the Copy

(Continued)

	01967	A
TAR	SM 4	M

(Continued)

**2** **STEP 3 B:** The Lead Edge at the center of the copy must be within the black box area of the test pattern.

3. (Figure 2): Check the image registration of the copy.

4. If the image registration on the copy is out of specification, perform the adjustment.

## Adjustment

1. Enter the diagnostic mode.
2. Enter the code [0860] in order to adjust the time at which the Media Transport Drive Motor is energized.

**3** Each increment will change the lead edge by approximately 1/32 inch (0.8 mm).

3. Use the Copy contrast up button to make the lead edge shorter and the Copy contrast down button to make the lead edge longer.
4. Press the Start button to enter the new value into NVM.
5. Exit the diagnostic mode.
6. Perform the Check.
7. Repeat this adjustment until registration is within specification.
8. If the customer uses vellum and/ or film media, perform the Check and the Adjustment again while using the film and/or vellum media.
9. This adjustment affects another copier adjustment. Perform the Check/ Adjustment of the Auto Length (ADJ 8.2).

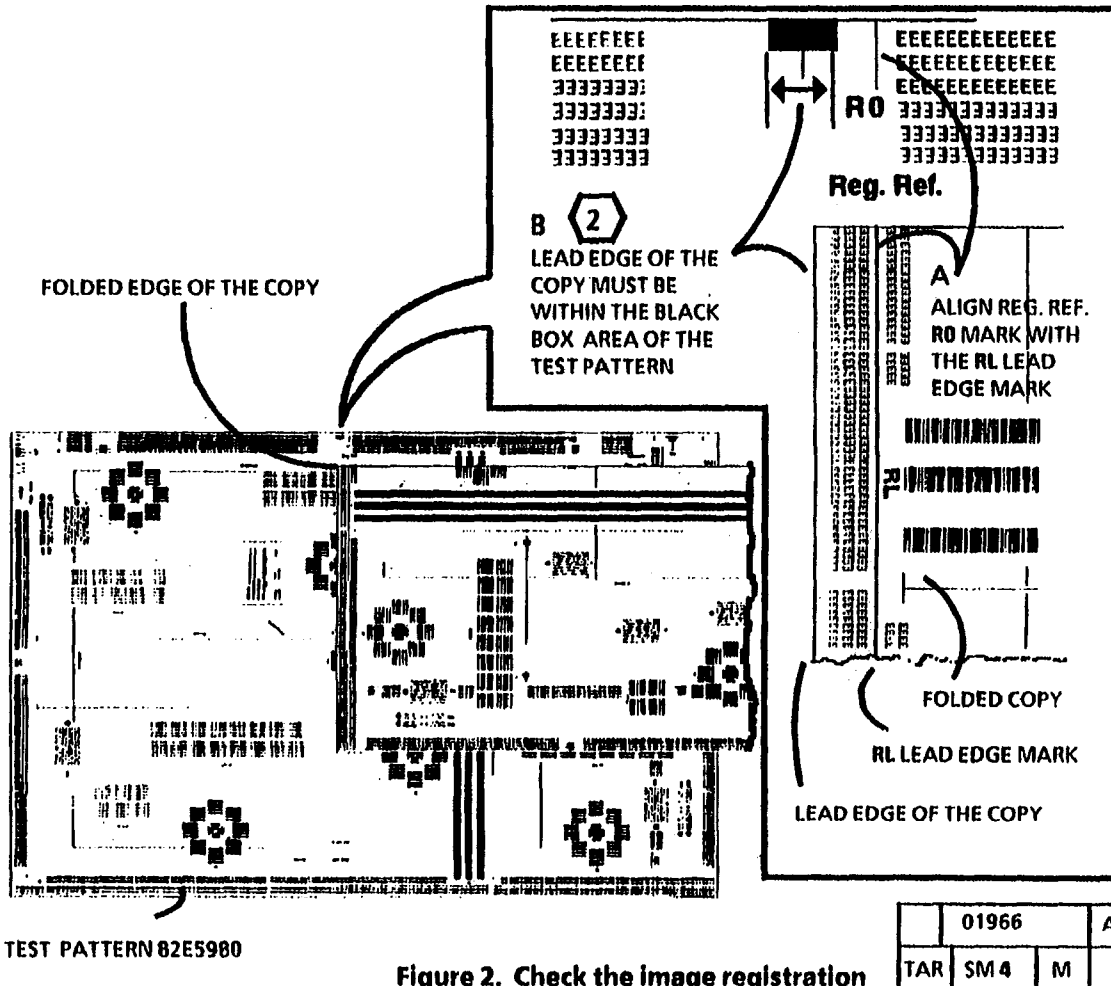


Figure 2. Check the image registration

## ADJ 8.2 Auto Length

### Purpose

The purpose is to obtain the correct copy length. The correct copy length is obtained by adjusting the time at which the Cutter Drive Motor is energized. The motor when energized, drives the Cutter Bar which rotates to cut the media.

### Prerequisite

Perform the following Check/ Adjustments in the sequence as listed:

- Fuser Temperature Adjustment (ADJ 10.1)
- Copy Size Adjustment (ADJ 5.1)
- Image Registration (ADJ 8.1).

### Check

- Make 3 copies of test pattern 82E5980 using bond media.

① To give the copy media time to stabilize, wait 5 minutes before checking the third copy with the test pattern. Discard the first 2 copies.

② STEP 2 A: Folding the copy in half will allow measuring the length of the copy media in the middle.

- (Figure 1): Fold the copy in half.

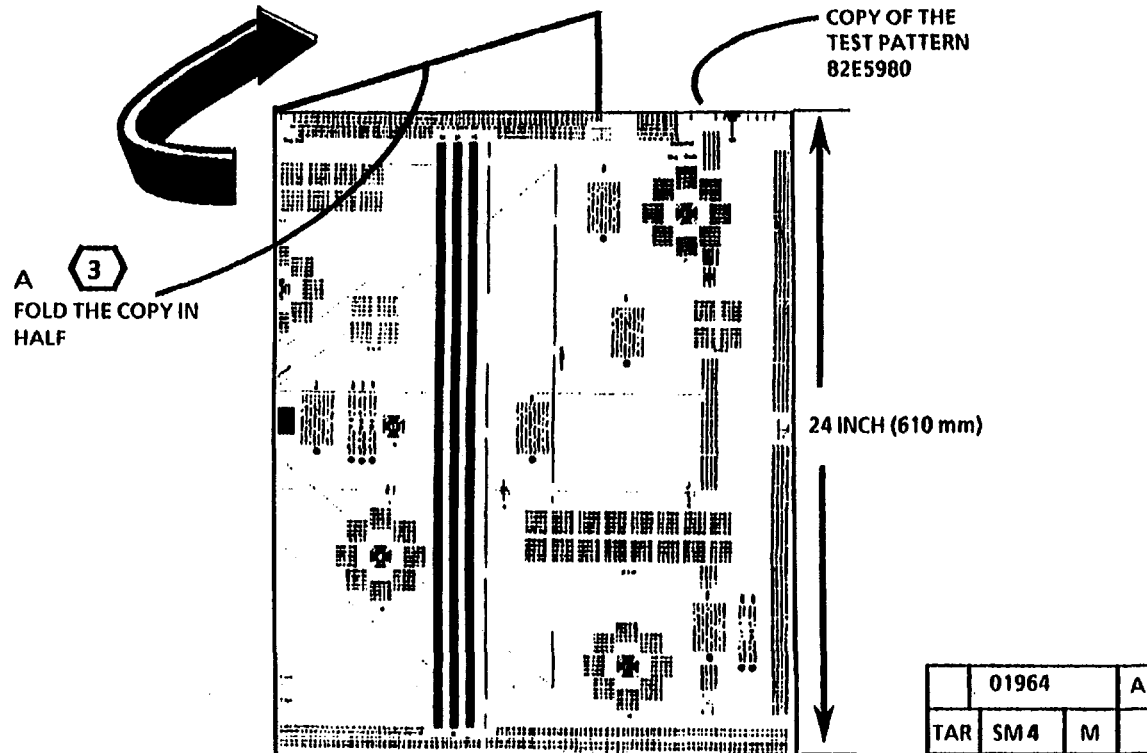


Figure 1. Fold the Copy in Half

(Continued)

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3. (Figure 2): Check the length difference between the test pattern and the copy.

### Adjustment

1. Enter the diagnostic mode.
2. Enter the code [0862] in order to adjust the time at which the Cutter Drive Motor is energized.

4

Each increment on the display equals 1/32 inch (0.8 mm) of change on the copy.

3. Use the Copy contrast up arrow button in order to increase the length of the copy media, or the Copy contrast down arrow button in order to decrease the length of the copy media.

4. Press the Start button in order to enter the new value into NVM.
5. Exit the diagnostic mode.
6. Repeat the Check/Adjust until the copy is within  $\pm 1/8$  inch ( $\pm 3.0$  mm) of the test pattern.

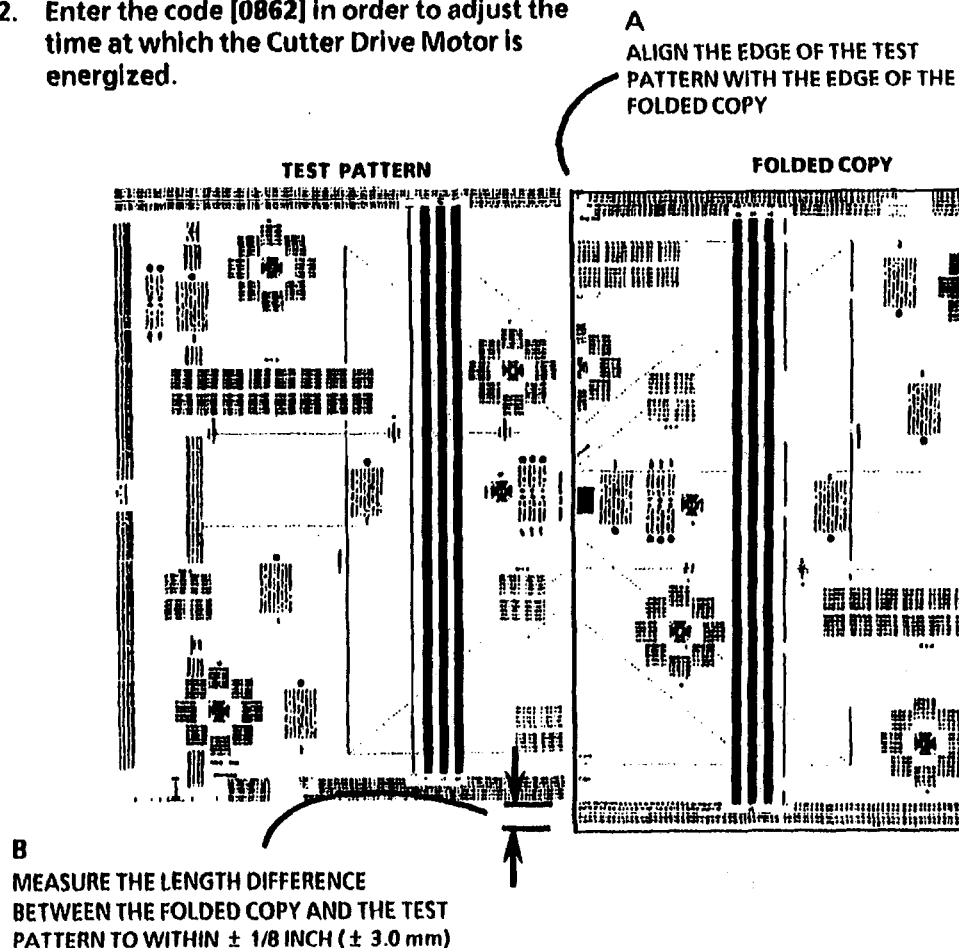


Figure 2. Measure the Length Difference Between the Test Pattern and the Copy

## ADJ 9.1 Cleaner Blade Solenoid

### Purpose

The purpose is to adjust the Cleaner Blade Solenoid to ensure that the Cleaner Blade applies the correct force to clean the Drum.

### Prerequisite

Check the Level of the Copier (ADJ 14.1).

### Check/Adjust

1. Rotate the Control Console and remove the Document Handler.
2. Lift the Document Feed-in Shelf.
3. Enter the diagnostic mode.

**1** Ensure that all the interlocks are closed.

4. Enter the code [0913] to energize the Cleaner Blade Solenoid.

**2** **STEP 5 B:** If the solenoid is at 0.050 inch (1.3 mm) this Check/Adjust is complete; proceed to step 6. If the solenoid needs adjustment, continue with Step 5 C.

5. (Figure 2): Check/Adjust the Solenoid.
6. Exit the diagnostic mode.
7. Close the Upper Rear Door and the Side Doors.

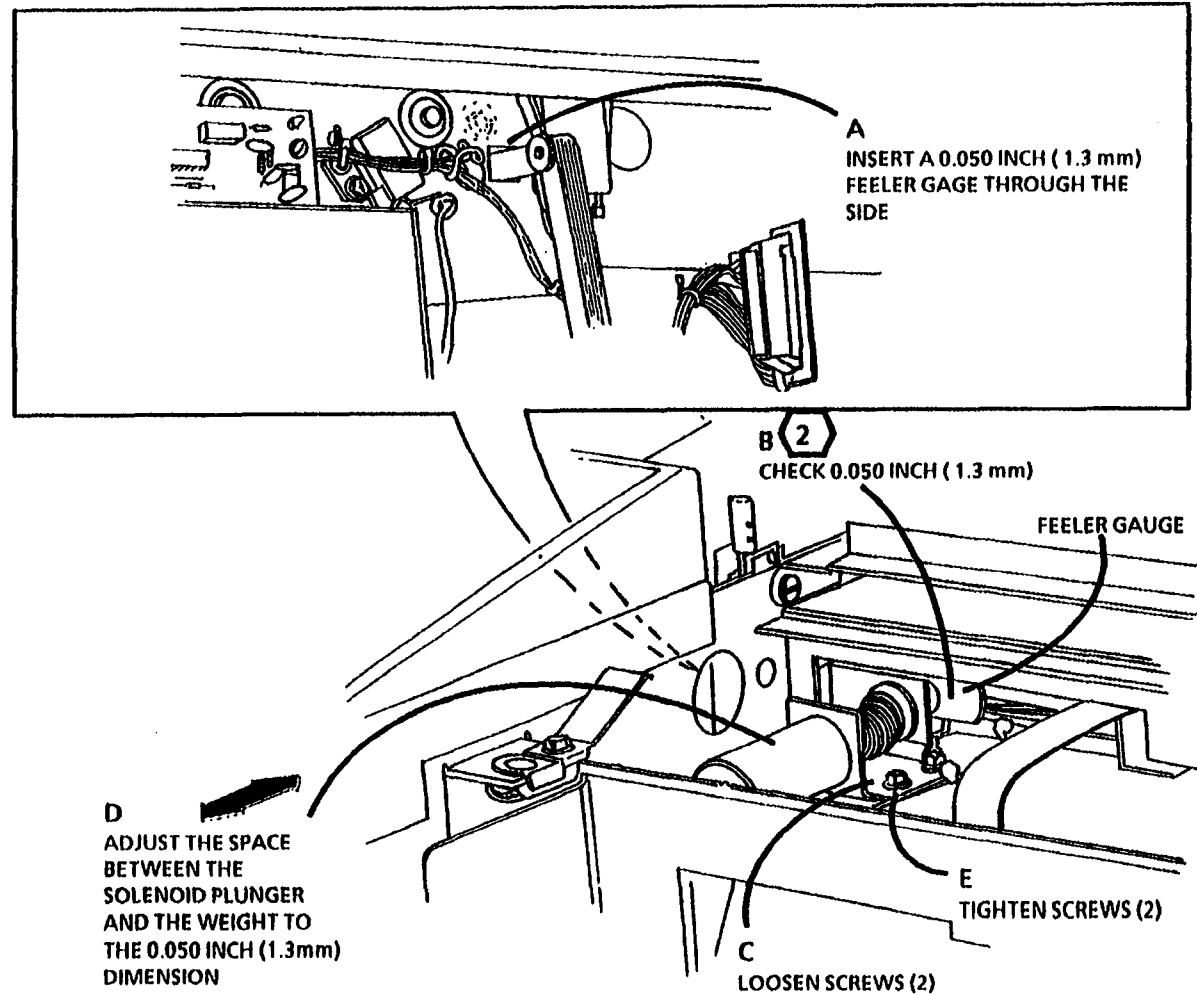


Figure 2. Adjust the Solenoid

	01871	A
TAR	SM 4	M

## ADJ 9.2 Electrostatic Series

- 1 The Electrostatic Series must be performed in the exact sequence as written when setting up a new or used photoreceptor drum to nominal parameters.

### Purpose

The purpose is to adjust the corotron outputs and the photoreceptor background voltage in order to obtain good copy quality as specified in Section 3 of this manual.

- 2 When setting the Electrostatic parameters with a new photoreceptor drum, the image density will be slightly lighter than with a used photoreceptor drum. To ensure that the photoreceptor drum is correctly conditioned before doing the electrostatic series or part within the series, perform the next step.

1. **Used Photoreceptor Drum:** Run one copy and wait 3 minutes.

**New Photoreceptor Drum:** Run 25 feet (7.6 meters) of copy and wait 3 minutes.

2. Open the Right Door and switch off the power.
3. Open the Left Side Door.
4. (Figure 1): Install Electrometer Probe in the Probe Holder.

- 3 **STEP 4 B:** Install the probe into the end of the probe holder that has part number of the probe holder on the side. When installing the probe, align the indent on the probe with the edge of the probe holder. Ensure that the indent is adjacent to the corner with the dot.

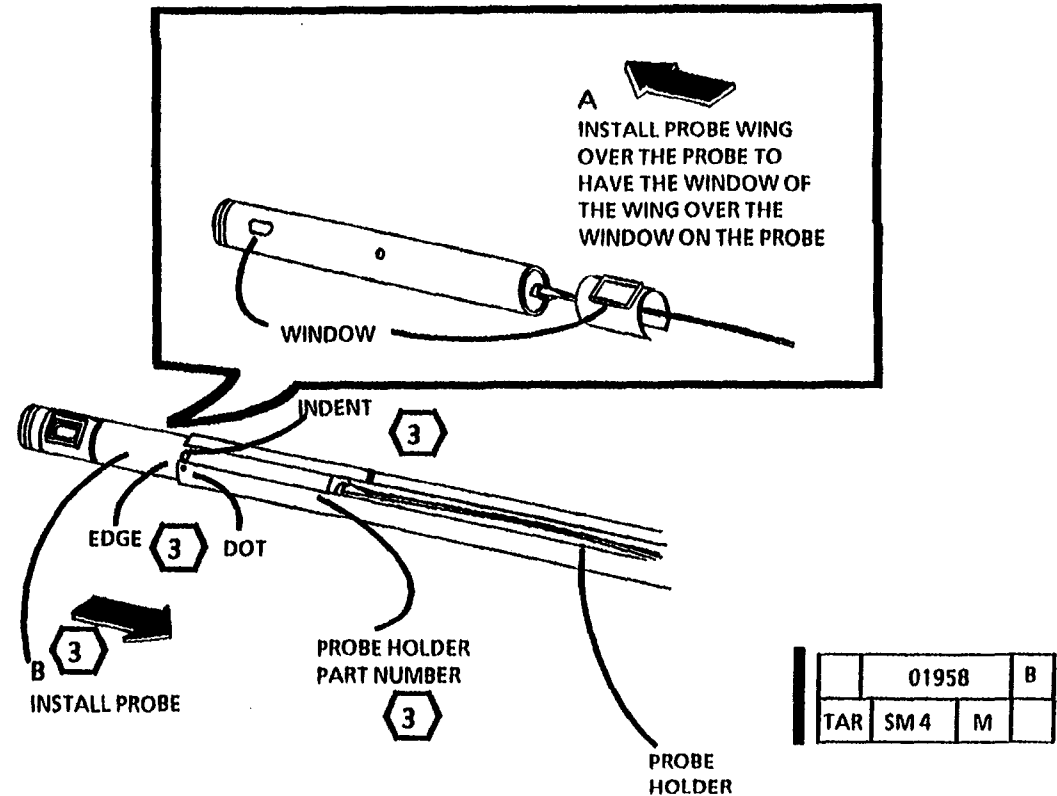


Figure 1. Install the Electrometer Probe in the Probe Holder

(Continued)

(Continued)

4 STEP 5 A: To position the probe in the center of the photoreceptor, ensure that the mark on the probe holder is aligned with the edge of the frame.

5 Window in the probe must face the photoreceptor.

5. (Figure 2): Install the Electrometer Probe.

6. Place two sheets of clean 20 pound (80 gsm) white paper on the entire surface of the Platen before installing the Document Handler. This prevents light leaks when setting the charge voltage and ensures the correct conditions for checking the background voltages.

6 For correct operation of diagnostics, ensure that the document handler is fully seated.

7. Install the Document Handler.

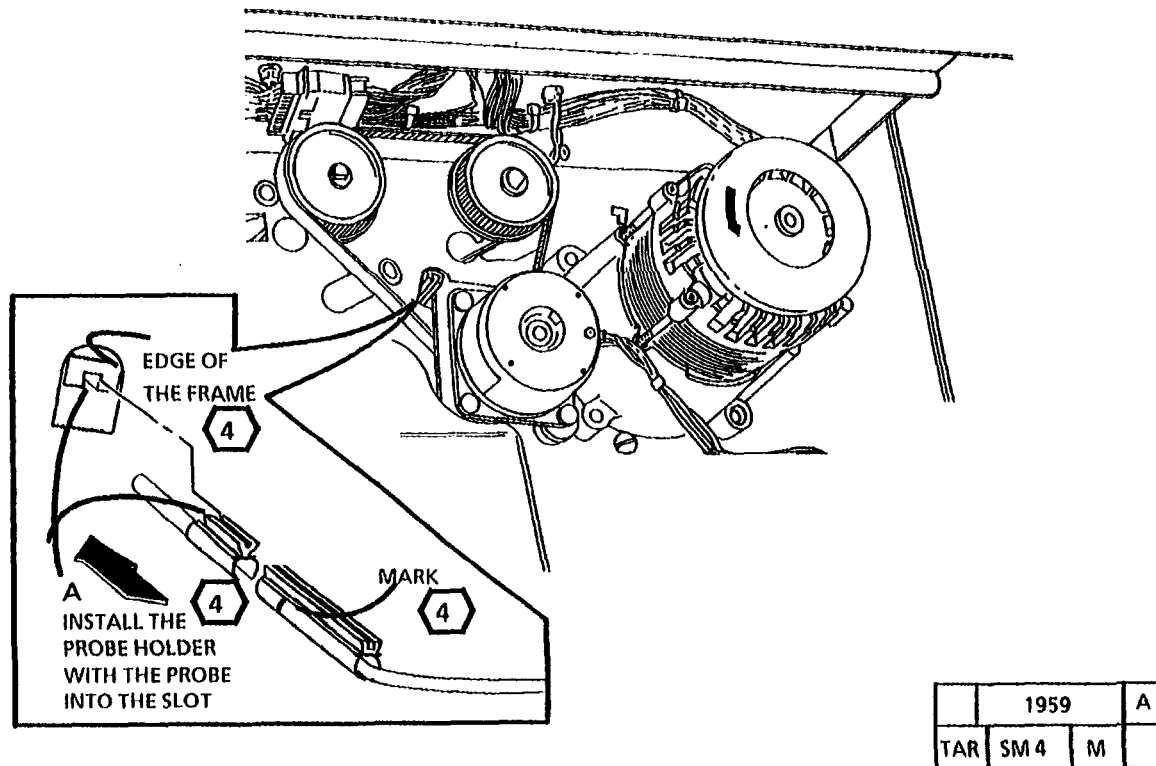


Figure 2. Install the Electrometer Probe

(Continued)

(Continued)

8. (Figure 3): The correct position of the electrometer, meter and the leads.

7

**STEP 8 A:** The electrometer, meter and the leads must be positioned away from the HVPS in order to obtain the correct voltage measurement. The meter and electrometer must also be separated as shown in Figure 3. Position the electrometer, meter, and the leads in this way for the remainder of the procedure. Do not connect the meter and the electrometer at this time. The purpose of this illustration is to show the correct position. Attach the components as needed in subsequent steps.

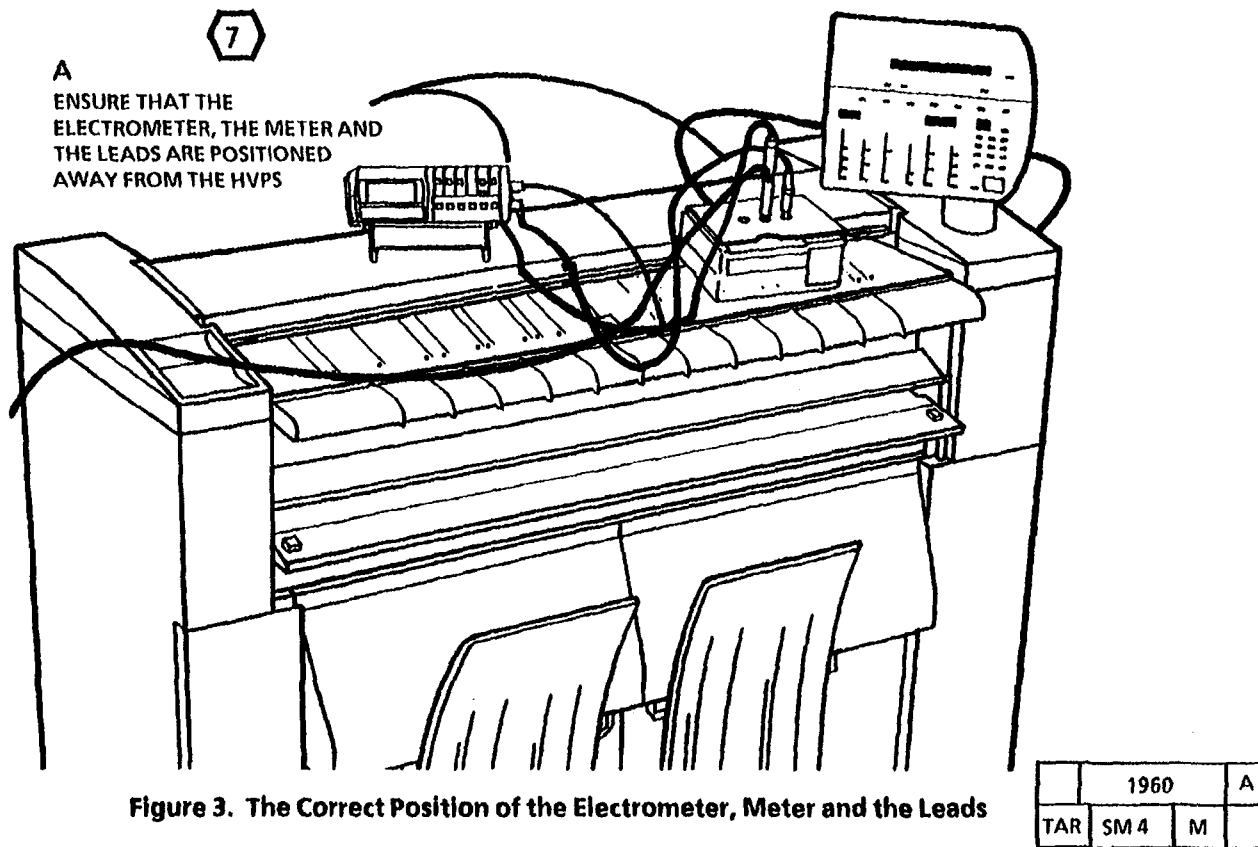


Figure 3. The Correct Position of the Electrometer, Meter and the Leads

(Continued)



### Transfer/Detack Check and Adjust

9. Enter the diagnostic mode.

8 The code [1] must be added to the code [0921] to turn the transfer / detack corotron on.



#### WARNING

There will be a time delay between the time the code [0921-1] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

10. Enter the code [0921-1].

9 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

10 STEPS 11 B and C and 12 B: Ensure that the probe tips do not touch the machine frame. Touching the machine will result in no readings.

11. (Figure 4): Adjust the detack corotron voltage.

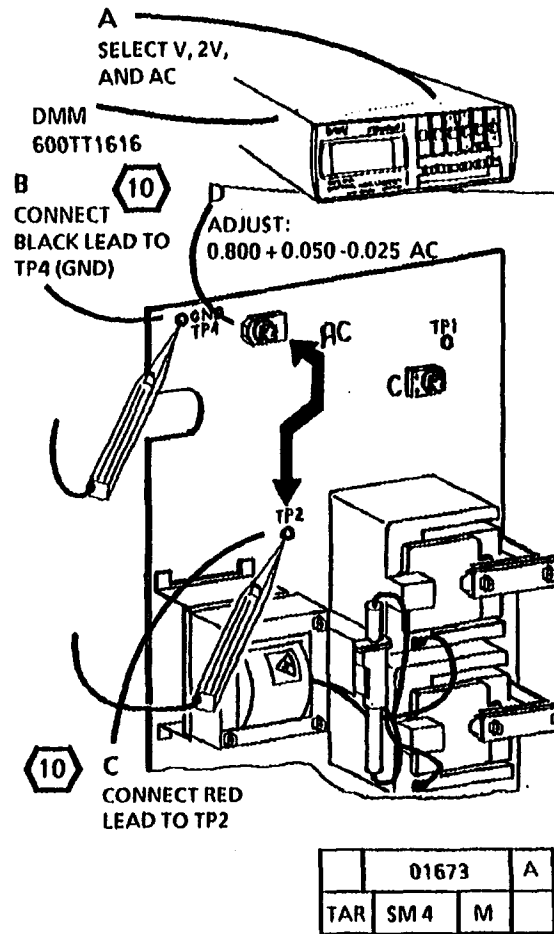


Figure 4. Adjustment of the Detack Corotron

11 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

12. (Figure 5): Adjust the transfer corotron voltage.

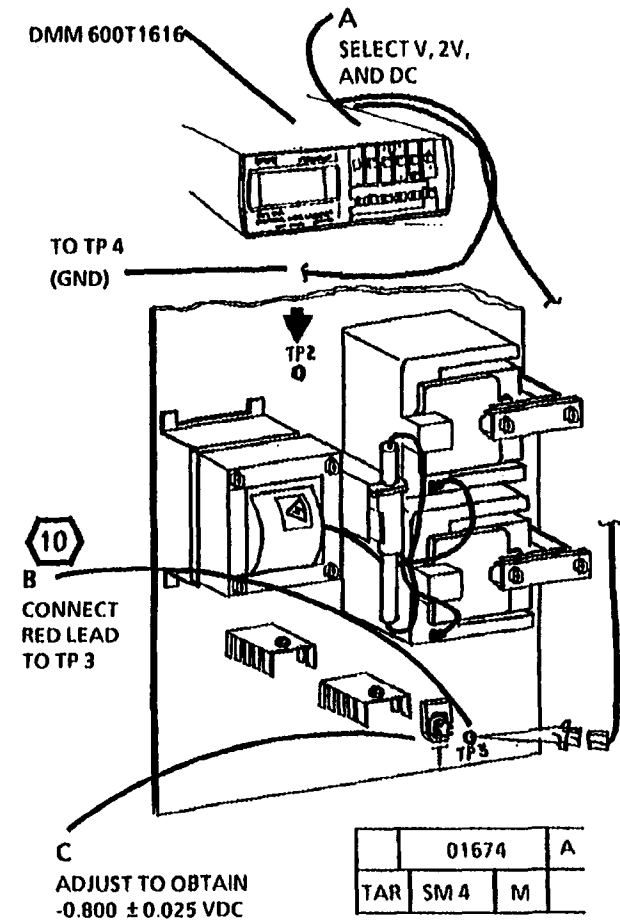


Figure 5. Adjust the Transfer Corotron (Continued)

(Continued)

### Charge Check and Adjust

13. (Figure 6): Connect the DMM to the Electrometer.

12 If the **LOW BATTERY** light stays on, replace the batteries. **DO NOT** continue the electrostatic series if the **LOW BATTERY** light is on.



#### WARNING

There will be a time delay between the time the code [0921-2] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

14. Enter the code [0921-2]

13 The Electrometer, meter, and the leads are shown in this position only for clarity. Figure 3 of this procedure shows the correct position when the Electrostatic Series is performed.

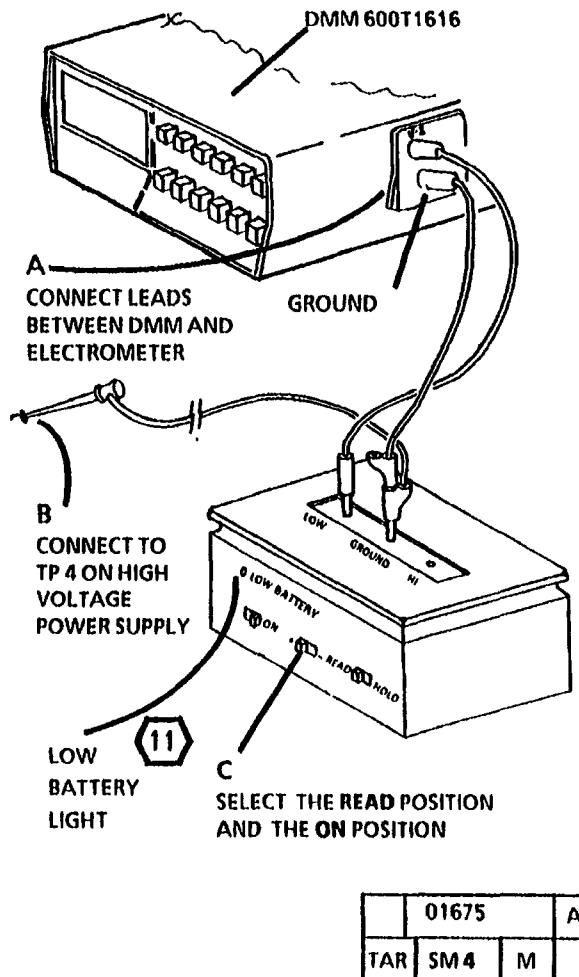


Figure 6. Connecting the Electrometer

15. (Figure 7): Adjust the charge voltage.

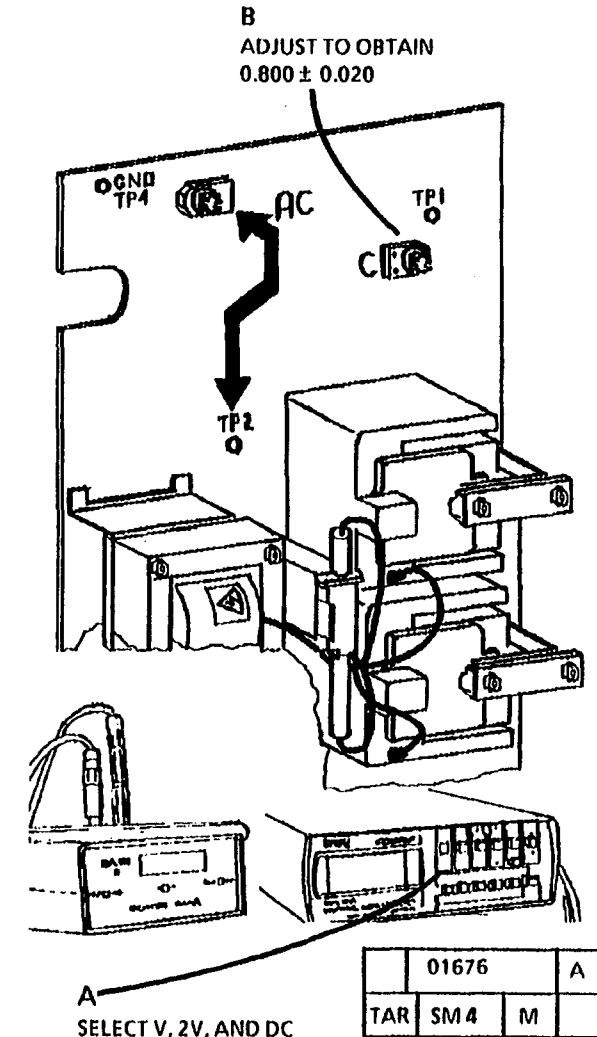



Figure 7. Adjust the Charge Voltage


(Continued)

(Continued)

 Position the DMM and the Electrometer as shown in Step 7, Figure 3. Ensure that the doors are closed.

16. Press the Stop button.

### Background (Exposure) Check and Adjust


 The background voltage on the drum is adjusted by adjusting the voltage to the exposure lamp.



#### WARNING

There will be a time delay between the time the code [0921-3] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

17. Enter the code [0921-3].

 When code [0921-3] is entered, the setpoint will automatically start at [9].


18. Adjust the exposure voltage.

A. Wait 15 seconds and note the average readings at set point [9].

B. If the voltage measured in Step A is more than 0.200 VDC, check the following:

- Electrometer to meter leads are in the correct position (refer to Figure 3)
- Check the Exposure Control RAP (CQ 27)
- Document Handler is in place
- Ensure that the lens is clean
- Ensure that the (2) sheets of white paper are on the entire surface of the platen.
- Ensure that the photoreceptor was not exposed to sun light. If it was, rest the photoreceptor overnight.
- Ensure that the correct Photoreceptor Drum is installed (1R81).
- If the voltage at set point [9] is still above 0.200 VDC and all the above conditions are checked and correct, replace the Photoreceptor Drum.

C. Scroll down from [9] stopping at each setpoint (8,7,6,...). At each setpoint wait 15 seconds and note the meter reading. At the first setpoint that displays an average reading of 0.020 to 0.050 VDC over the average reading noted at set point [9], press the Start button to enter this setpoint value into NVM.

 If the exposure voltage can not be adjusted to specification, go to CQ 27 Exposure Control RAP.

19. Press the Stop button and switch off Electrometer.


20. Switch the power off.

21. Remove the Electrometer.

22. Remove the Document Handler and the two (2) sheets of clean 20 pound (80 gsm) white paper.

23. Reinstall the Document Handler.

24. Switch the power on.

 If the copy quality at this point is unacceptable, and the Electrostatics are set correctly, **DO NOT CHANGE THE EXPOSURE**. Shifting of the nominal electrostatic setup introduces premature failures and early recalls. Go to the appropriate Copy Quality Procedure.

(Continued)

(Continued)

## Initial Density Adjustment

25. Enter the diagnostic mode.



### WARNING

There may be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

26. Enter the code [0921-4].

**19** STEP 28 B: Each time the Copy contrast down button is pressed, the next lower LED will be lit, indicating a lower Control Point setting. A control point of 5.3 is the lowest sensor voltage that can be attained.

**20** To prevent toner control faults, the Control Point must be as close as possible to the Sensor Reading before running copies to check copy quality and adjusting the density.

27. (Figure 8): Adjust the Control Point to read as close as possible to the Sensor Reading.

28. Make a copy of the Test Pattern 82E5980. Check that the density of the (1.0) Solid square is between 0.7 and 1.0 on the copy, using the output reference 82P520.

- A. If the density is less than (0.7), perform the Increase the Image Density Adjustment (ADJ 9.3).
- B. If the density is greater than (1.0), perform the Decrease the Image Density Adjustment (ADJ 9.4).

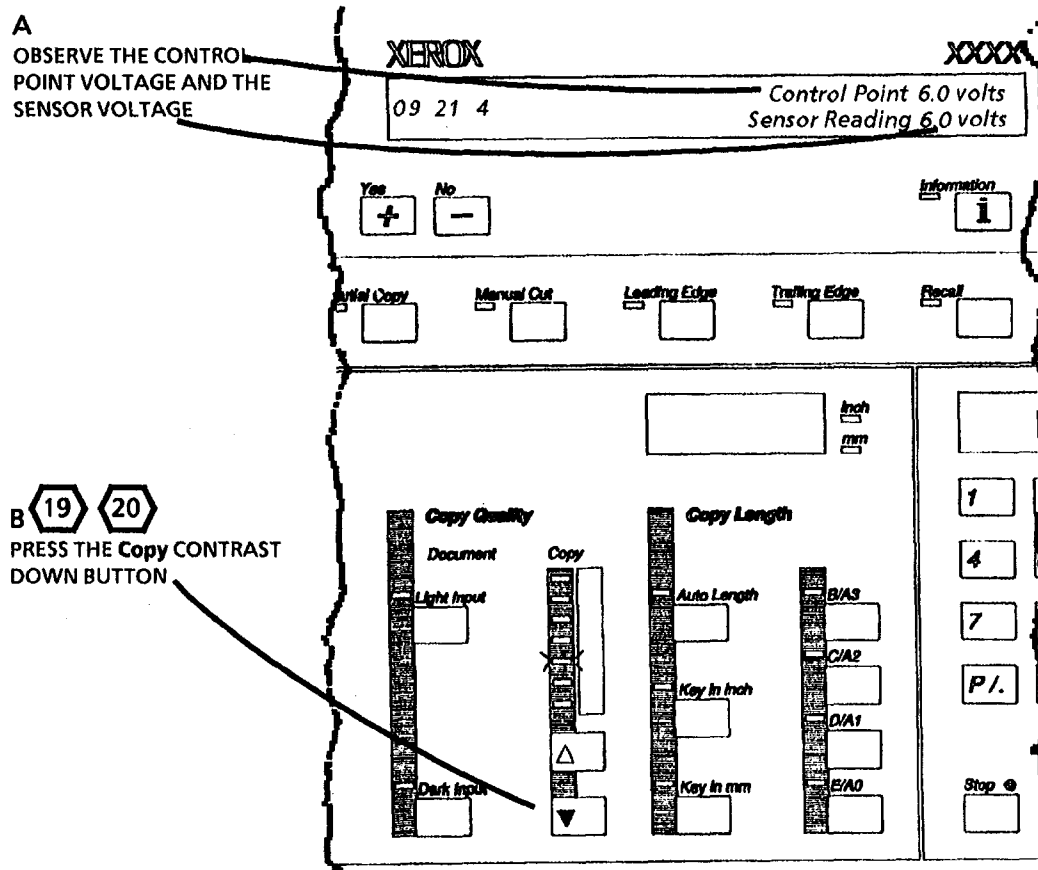


Figure 8. Adjust the Control Point

	01764	A
TAR	SM 4	M

## ADJ 9.3 Increase the Image Density

### Purpose

The purpose is to adjust the toner concentration level to increase the image density level.

### Prerequisite

The Electrostatic Series **MUST** be performed prior to performing the image density adjustment to ensure that all the parameters are at nominal. Failure to do this may result in premature failures or other damage due to excessive contamination.

### Check

Refer to the Image Quality Specifications in Section 3 of this Service Manual. Check the line darkness. The copy of the (0.70G5) pattern in the center of Test Pattern 82E5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030.

**1** For higher toner concentration (increase the image density), the toner sensor voltage must be decreased.

### Adjust

1. Enter the diagnostic mode.



### WARNING

There may be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

2. Enter the code [0921-4].

**2** **STEP 3 B:** Each time the Copy contrast down button is pressed, the next lower LED will be lit, indicating a lower Control Point setting. A control point of 5.3 is the lowest sensor voltage that can be attained. Do not move more than (2) increments at one time. This may result in a fault.

3. (Figure 1): Increase the Image Density.

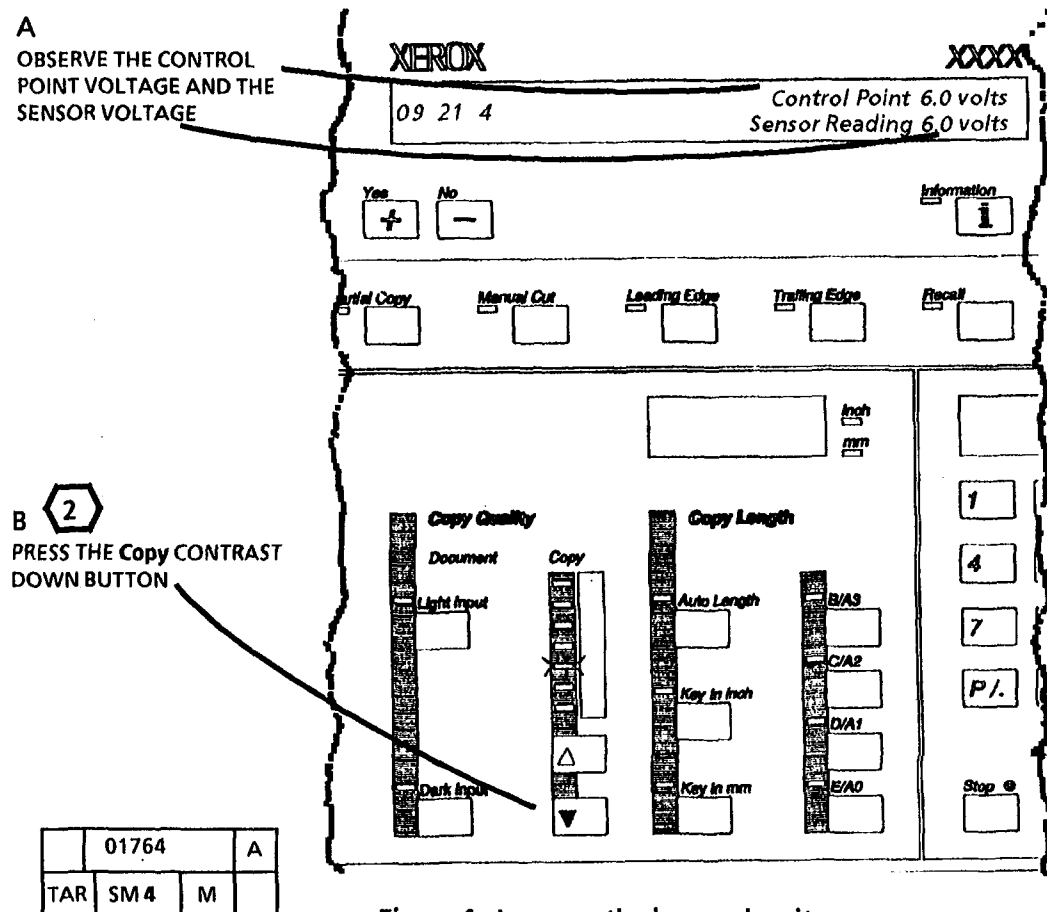


Figure 1. Increase the image density

(Continued)

(Continued)

4. Exit the diagnostic mode.
5. Run 5 blank copies to add the toner required by the lower toner sensor voltage.
6. Enter the diagnostic mode.



### WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

7. Enter the code [0921-4].

3

The Control Point and the Sensor Reading should be the same. The Sensor Reading may vary  $\pm .2$  volts.

8. (Figure 2): Verify that the toner sensor voltage has been decreased.
9. Exit the diagnostic mode.

10. Repeat the Check. Adjust only 2 times if necessary. If the image density remains out of specification after the second adjustment, go to CQ 11 Light Copy RAP.

A  
VERIFY THAT THE  
VOLTAGES HAVE  
CHANGED

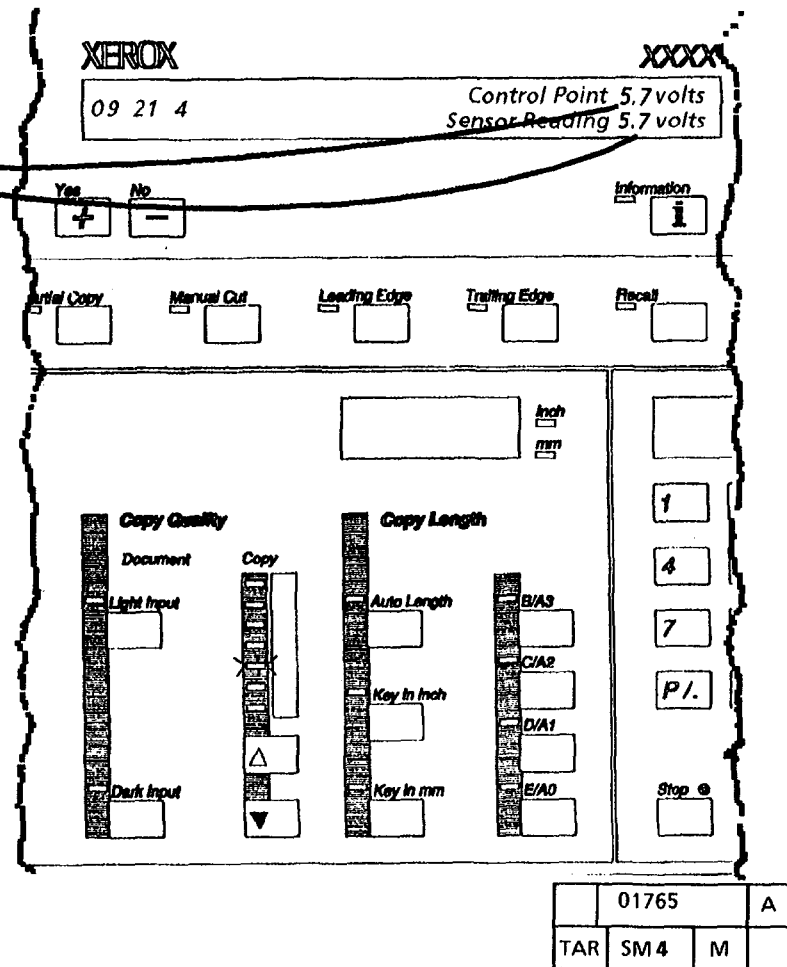


Figure 2. Verify the Toner Sensor Voltage

(Continued)

## ADJ 9.4 Decrease the Image Density

### Purpose

The purpose is to adjust the toner concentration level to decrease the image density level.

### Prerequisite

The Electrostatic Series **MUST** be performed prior to performing the image density adjustment to ensure that all the parameters are at nominal. Failure to do this may result in premature failures or other damage due to excessive contamination.

### Check

Refer to the Image Quality Specifications in Section 3 of this Service Manual. Check the line darkness. The copy of the (0.70G5) pattern in the center of Test Pattern 82E5980 should be greater than or equal to paragraph 24 on Test Pattern 82E7030.

**1** For a lower toner concentration (decrease the image density), the toner sensor voltage must be increased.

### ADJUST

1. Enter the diagnostics mode.



### WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

**2**

**STEP 3 B:** Each time the up button is pressed, the next higher LED will light, indicating a higher control point setting. A control point of 6.5 to 6.7 is the highest sensor voltage that can be attained. Do not move more than (2) increments at one time. This may result in a fault.

2. Enter the code [0921-4].

3. (Figure 1): Decrease the image density.

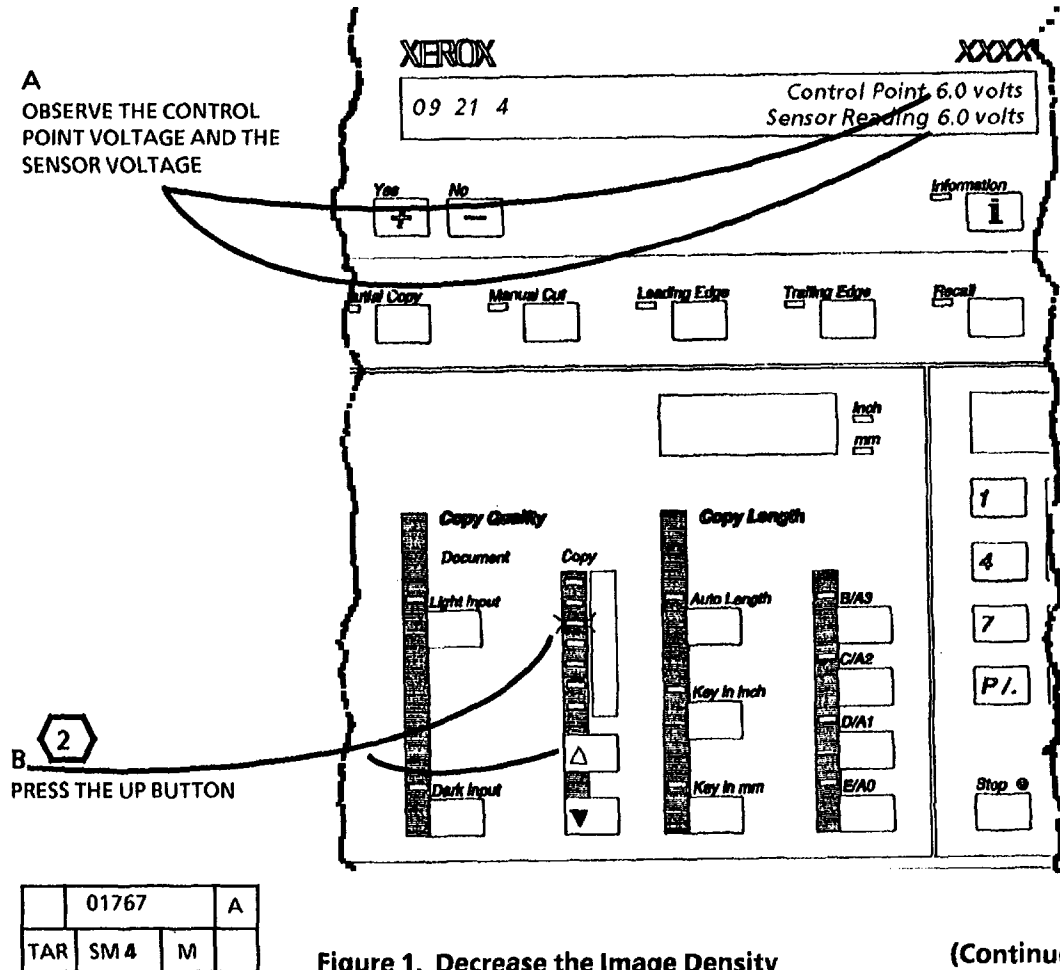


Figure 1. Decrease the Image Density

(Continued)

(Continued)

4. Exit the diagnostic mode.

**3** Step 5: With the Developer Cover lowered, the Cartridge Drive Motor is visible.

5. Lower the Developer Module Cover and bypass the interlock.

**4** Step 6: The cardboard from a media package may be used as a dark document.

6. Run copies of a dark document until the Toner Cartridge Drive Motor switches on, indicating that the toner concentration is low enough.

7. Enter the diagnostics mode.



### WARNING

There will be a time delay between the time the code [0921-4] is entered and the time the fuser drive motor starts to turn. The fuser drive motor will not start until the fuser is at the correct temperature.

8. Enter the code [0921-4].

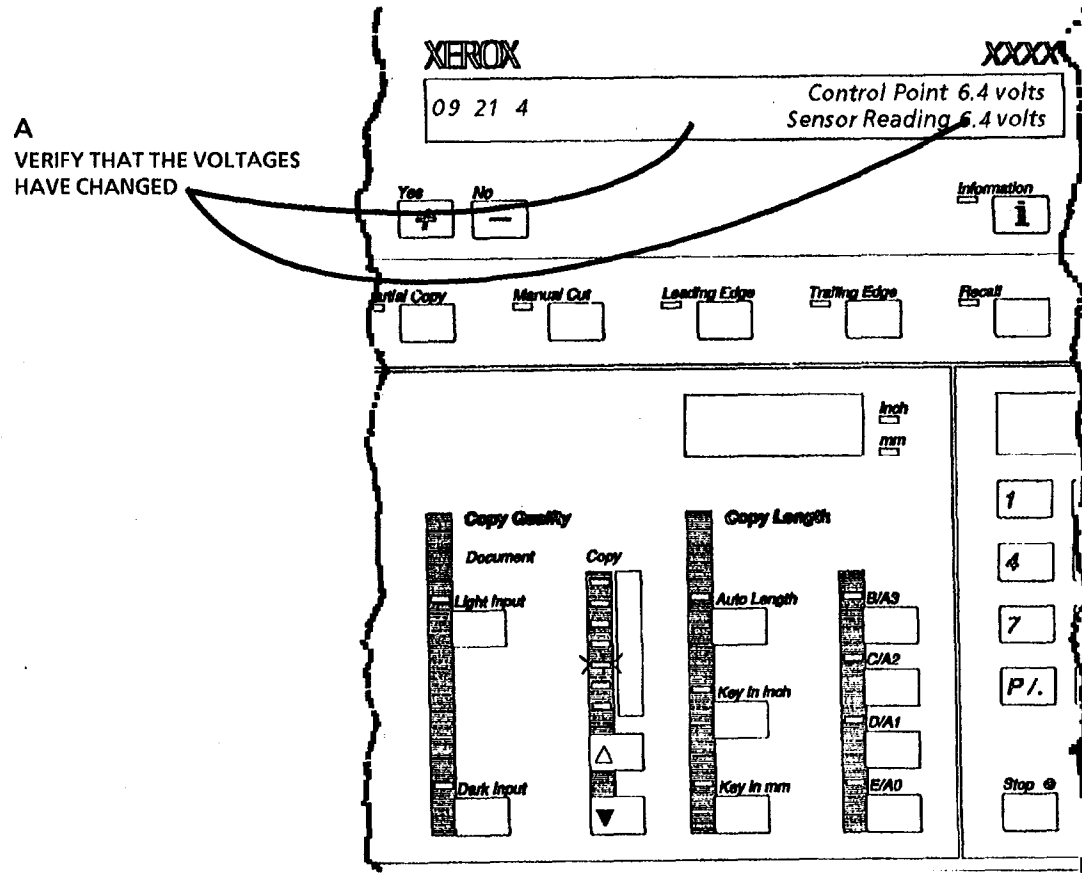
**5**

Step 9: The Control Point and the Sensor Reading should be the same. The Sensor Reading may vary  $\pm 0.2$  volts.

9. (Figure 2): Verify that the Toner Sensor Voltage has been increased.

10. Exit the diagnostic mode.

11. Repeat the Check. Adjust only (2) times if necessary. If the image density remains out of specification after the second adjustment, go to the CQ 11 Light Copy RAP.



A  
VERIFY THAT THE VOLTAGES  
HAVE CHANGED

	01766	A
TAR	SM 4	M

Figure 2. Verify the Toner Sensor Voltage



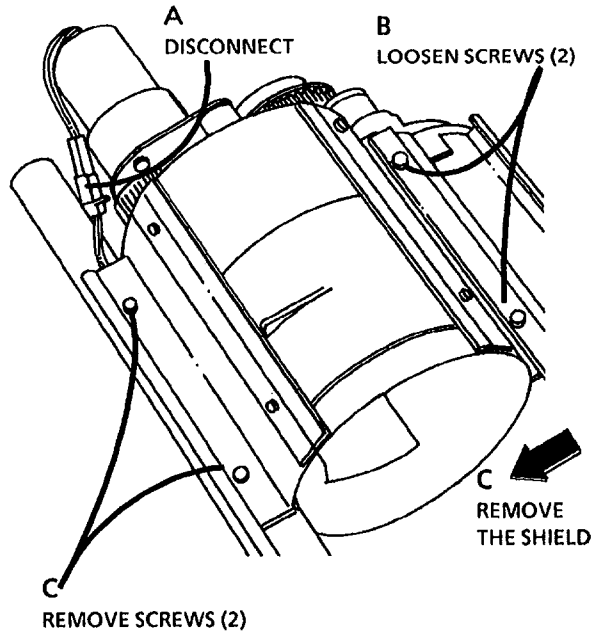
# ADJ 9.5 Toner Cartridge Home Sensor

## Purpose

The purpose is to adjust the Toner Cartridge Home Sensor to the correct distance from the magnet on the Toner Cartridge.

## Check

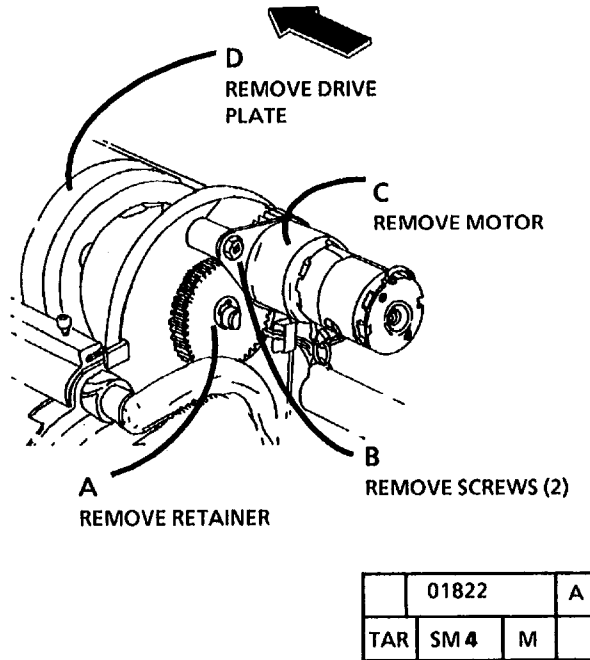
1. Remove the Toner Cartridge.
2. Remove the Developer Module (REP 9.5).



	01762	A
TAR	SM 4	M

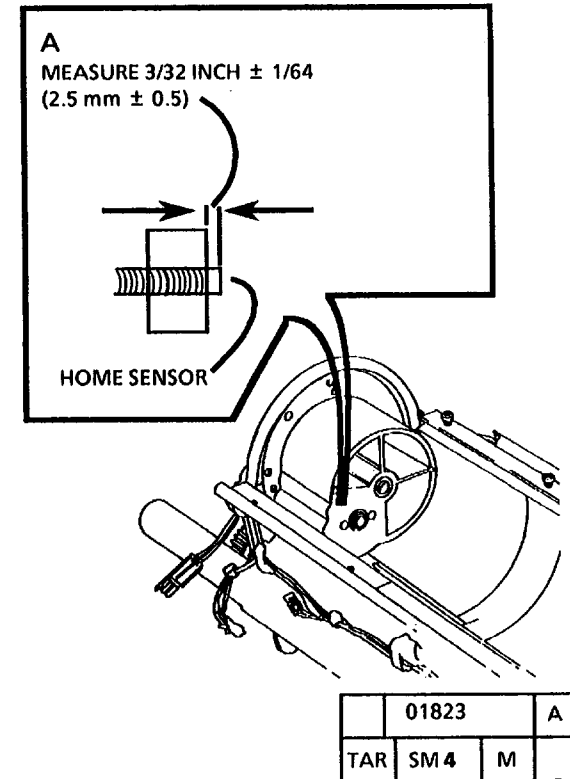
Figure 1. Remove the Top Shield

3. (Figure 1): Remove the Top Shield.
4. (Figure 2): Remove the Cartridge Drive Plate.
5. (Figure 3): Check the Toner Home Sensor adjustment.



	01822	A
TAR	SM 4	M

Figure 2. Remove the Cartridge Drive Plate



	01823	A
TAR	SM 4	M

Figure 3. Check the Toner Home Sensor Adjustment

(Continued)

## Adjust

**1** STEPS 1 C and D: The toner home sensor is threaded. The wires need to be straightened to rotate the sensor for adjustment.

1. (Figure 3): Adjust the Toner Home Sensor.
2. Reconnect the sensor and secure the wires.

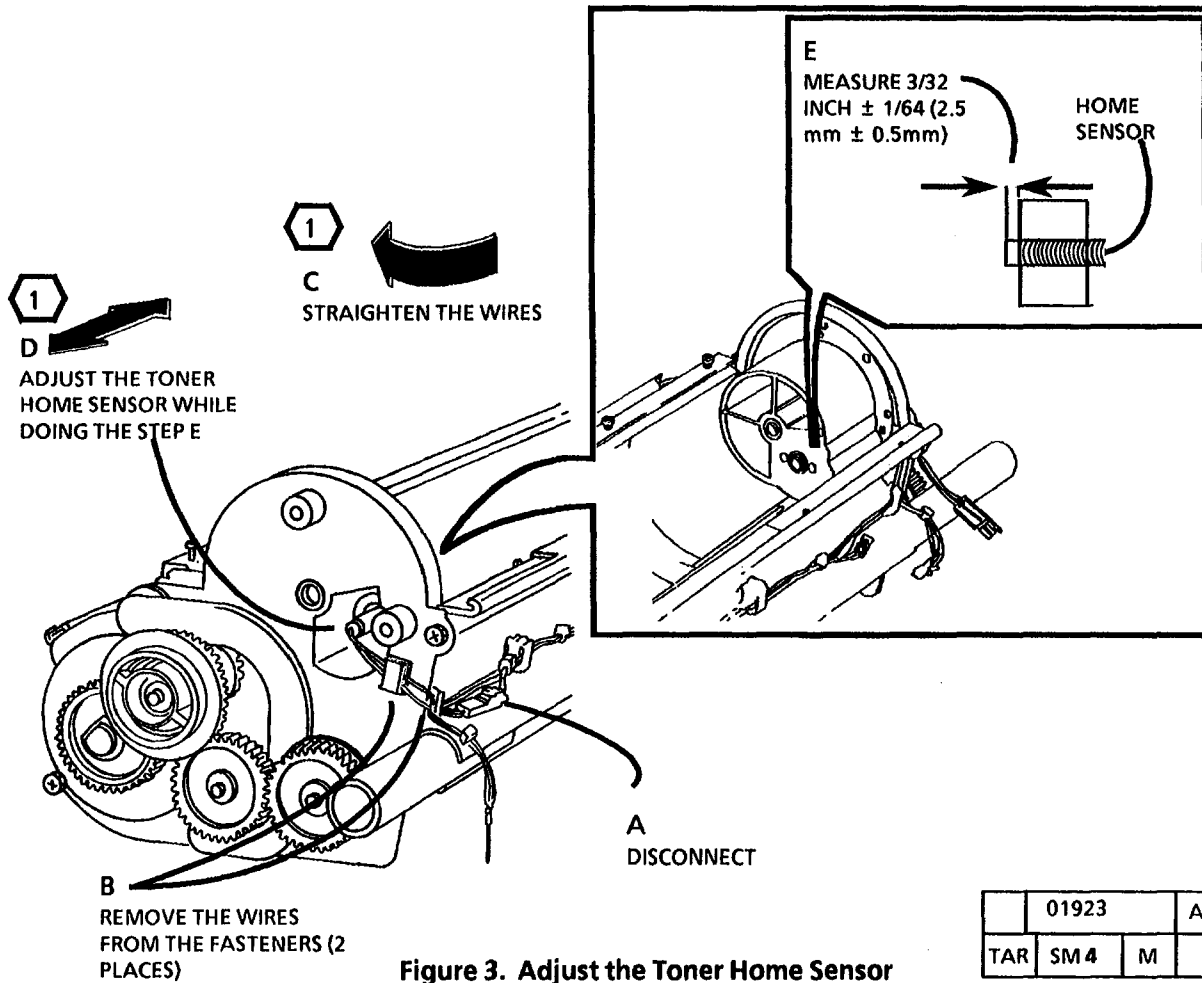


Figure 3. Adjust the Toner Home Sensor

	01923	A
TAR	SM 4	M

(Continued)

(Continued)

**STEP 3 D:** To avoid damage to the drive plate seal, always rotate the drive plate in the direction shown in Figure 4.

3. (Figure 4): Reinstall the Cartridge Drive Plate.

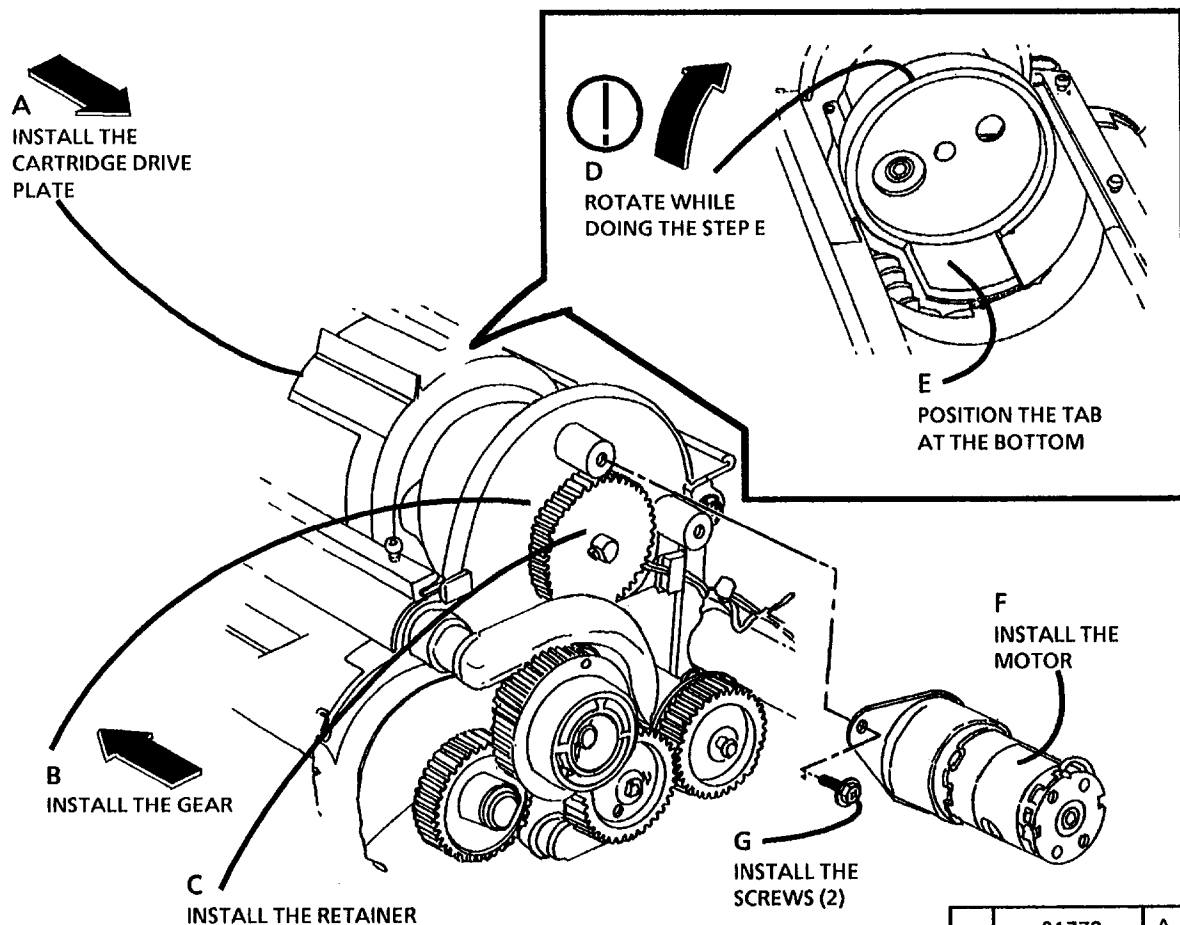


Figure 4. Install the Cartridge Drive Plate

	01779	A
TAR	SM 4	M

**STEP 4 C:** Do not overtighten the screws.

4. (Figure 5): Reinstall the Top Shield.

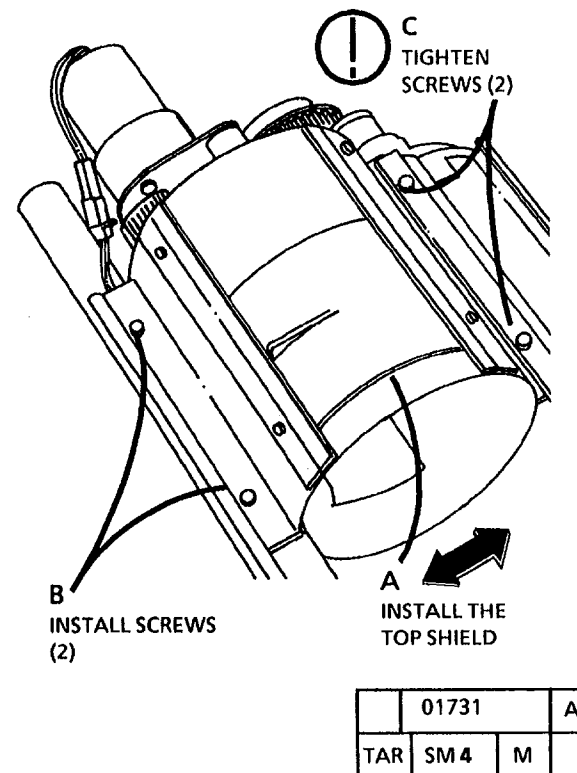


Figure 5. Reinstall the Top Shield

	01731	A
TAR	SM 4	M

5. Reinstall the following:  
a. Toner Cartridge  
b. Developer Module

NOTES

---

12/97  
4-141A

3050

## ADJ 9.6 Developer Module Positioning Blocks

### Purpose

The purpose is to adjust the Developer Module Positioning Blocks in order to obtain the correct spacing between the Photoreceptor Drum and the Developer Module.

### Adjustment

1. Remove the High Voltage Power Supply (HVPS) (REP 3.2).
2. (Figure 1): Prepare to adjust the Developer Module Positioning Blocks.
3. Push Developer Module towards Drum fully and tighten the Right Side Securing Screws fully.
4. Push Developer Module towards Drum fully and tighten the Left Side Securing Screws fully.
5. Unlock the Developer Drive Gear Coupling and allow the Coupling to engage the Developer Module.
6. Refer to (ADJ 9.2) and perform the Electrostatic Series Adjustment.

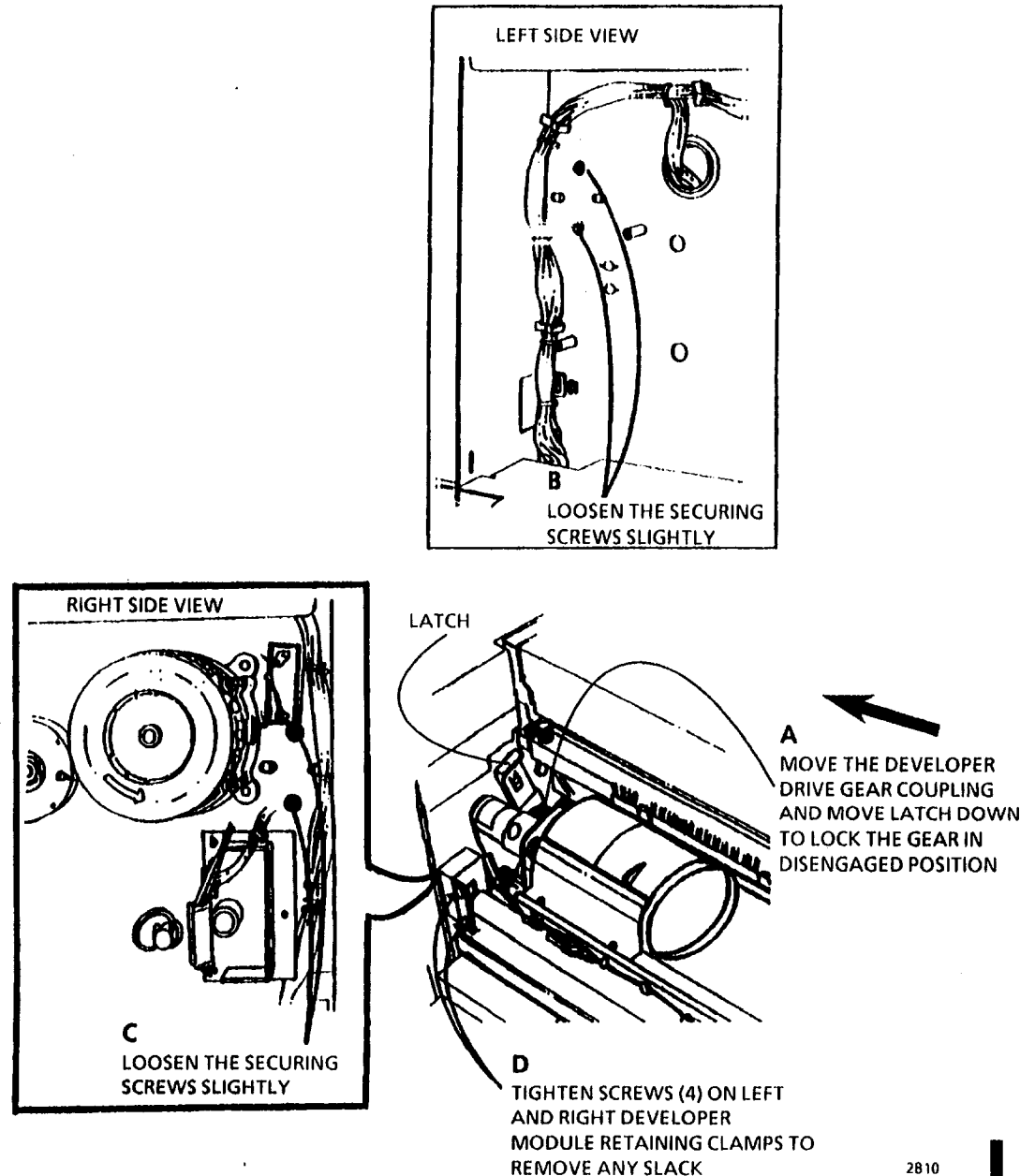


Figure 1. Adjustment of the Positioning Blocks

# ADJ 10.1 Fuser Temperature (Through NVM)

## Purpose

The purpose is to adjust the fuser roll temperature to maintain the correct copy fusing.

**1** This procedure can be started only when the fuser is not in a ready to copy condition. If the fuser is in the ready to copy condition, power the copier off and allow the fuser to cool.

**2** Ensure that all the interlocks are closed.

## Check the Temperature

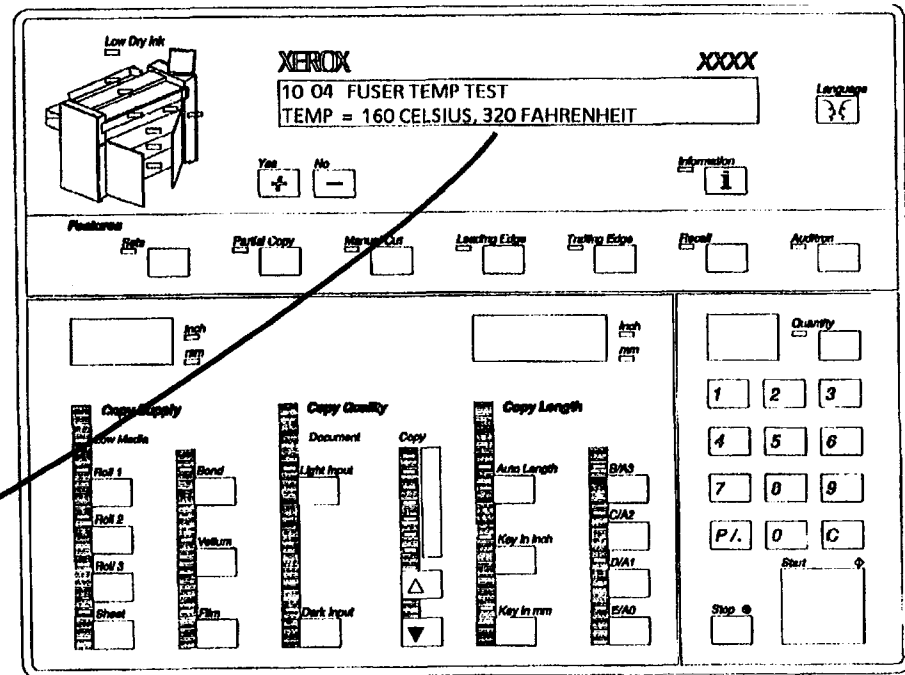
1. Enter the diagnostic mode.
2. Enter the code [1004] in order to switch the Fuser Heat Rod on and increase the Fuser temperature to the run temperature. The Drum/ Developer and Fuser Drive Motors are switched on when the Heat Roll Temperature reaches the run temperature. The temperature is then displayed on the Control Panel.

3. (Figure 1): Check the Fusing Temperature.
4. Press the Stop button 2 times.

**3** STEP 3 B: Ensure to wait until the temperature reading stabilizes in order to obtain the correct temperature. The temperature will increase and decrease 1 or 2 degrees when the temperature is stabilized.

(Continued)

**B** **3**  
CHECK:  
320° F ± 2°  
(160° C)



**A**  
WAIT FOR THE FUSER TO REACH THE RUN TEMPERATURE

	01768	A
TAR	SM 4	M

Figure 1. Check the Fusing Temperature

(Continued)

(Continued)

## Adjustment

1. Enter the code [1060] in order to adjust the Fuser Temperature.

**5** STEP 2 A: Pressing the Copy contrast up or down buttons will scroll the setpoint on the display. Each number represents approximately a 1 °F (0.5°C) change in the fuser temperature.

2. (Figure 2): Adjust the fusing temperature.

3. Enter the code [1004] in order to repeat the Check the Temperature procedure to ensure that the correct adjustment has been made.

4. This adjustment affects other copier adjustments. Perform the following Check/ Adjustments in the sequence as listed:

- a. Copy Size Adjustment (ADJ 5.1)
- b. Image Registration (ADJ 8.1)
- c. Auto Length (ADJ 8.2)

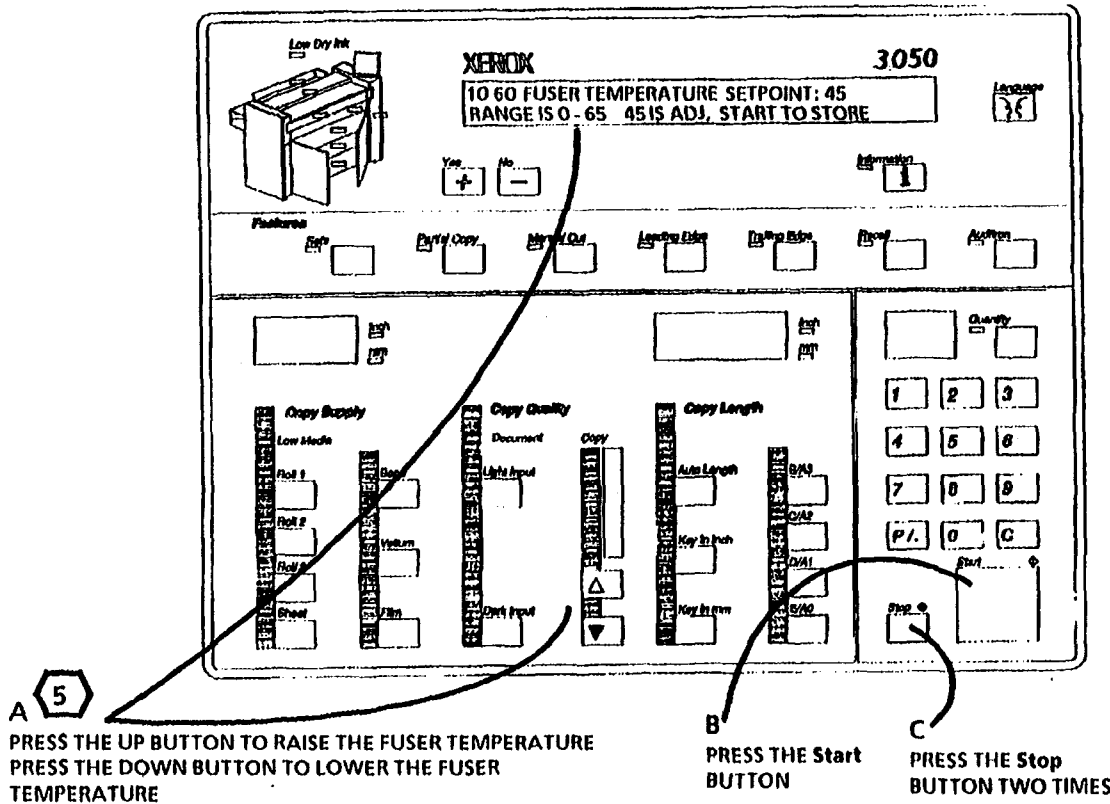


Figure 2. Adjust the fusing temperature

	01883	A
TAR	SM 4	M

# ADJ 10.2 FUSER TEMPERATURE (With Probe)

## PURPOSE

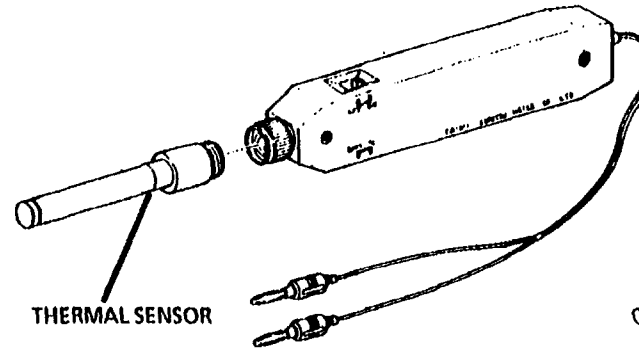
The purpose is to adjust the fuser roll temperature to maintain the correct copy fusing.

1 Ensure that the fuser thermistor, RT1, is in positive contact with the fuser roll.

2 This procedure must be performed after the machine becomes ready.

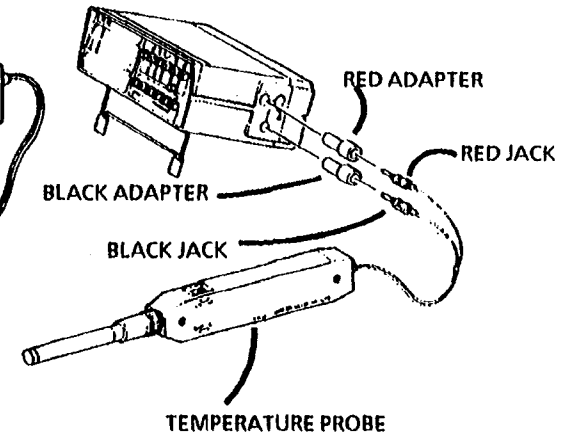
### HOW TO SET UP TEMPERATURE PROBE

1. (Figure 1): Connect the Thermal Sensor to the Temperature Probe.



THERMAL SENSOR

2. (Figure 2): Connect the Temperature Probe to the DMM.



	01804	A
TAR	SM 4	M

Figure 2. Connect Temperature Probe to DMM

(Continued)

	01685	A
TAR	SM 4	M

Figure 1. Connect the Thermal Sensor to the Temperature Probe



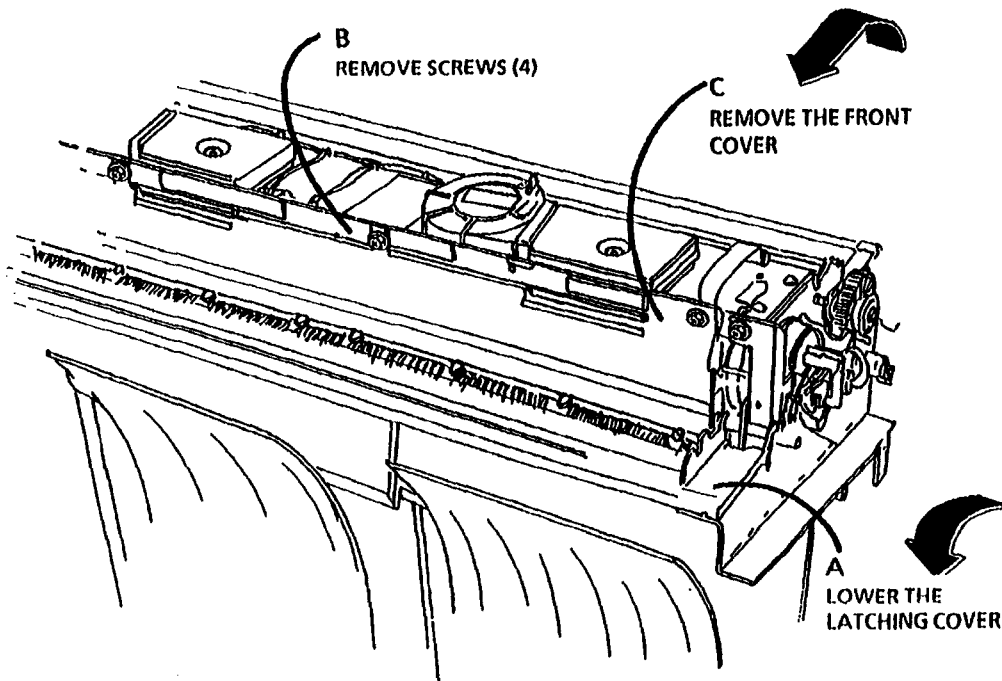
(Continued)

3. Switch the DMM on and then switch the Temperature Probe on.
4. Switch the functional switch of the DMM to the DC voltage measurement mode.
5. Press the 20V range switch of DMM.
6. Rotate the select switch of the temperature Probe to **BATT TEST**. If the voltage is lower than 1.7V, replace the battery of the Temperature Probe with a new battery.
7. Rotate the select switch of the temperature probe to °C position, and press the 200mV range switch of the DMM.

**3** You are now ready to check the temperature after you expose the fuser roll for easy access.

### Check the Temperature

1. (Figure 3): Remove the Front Cover.



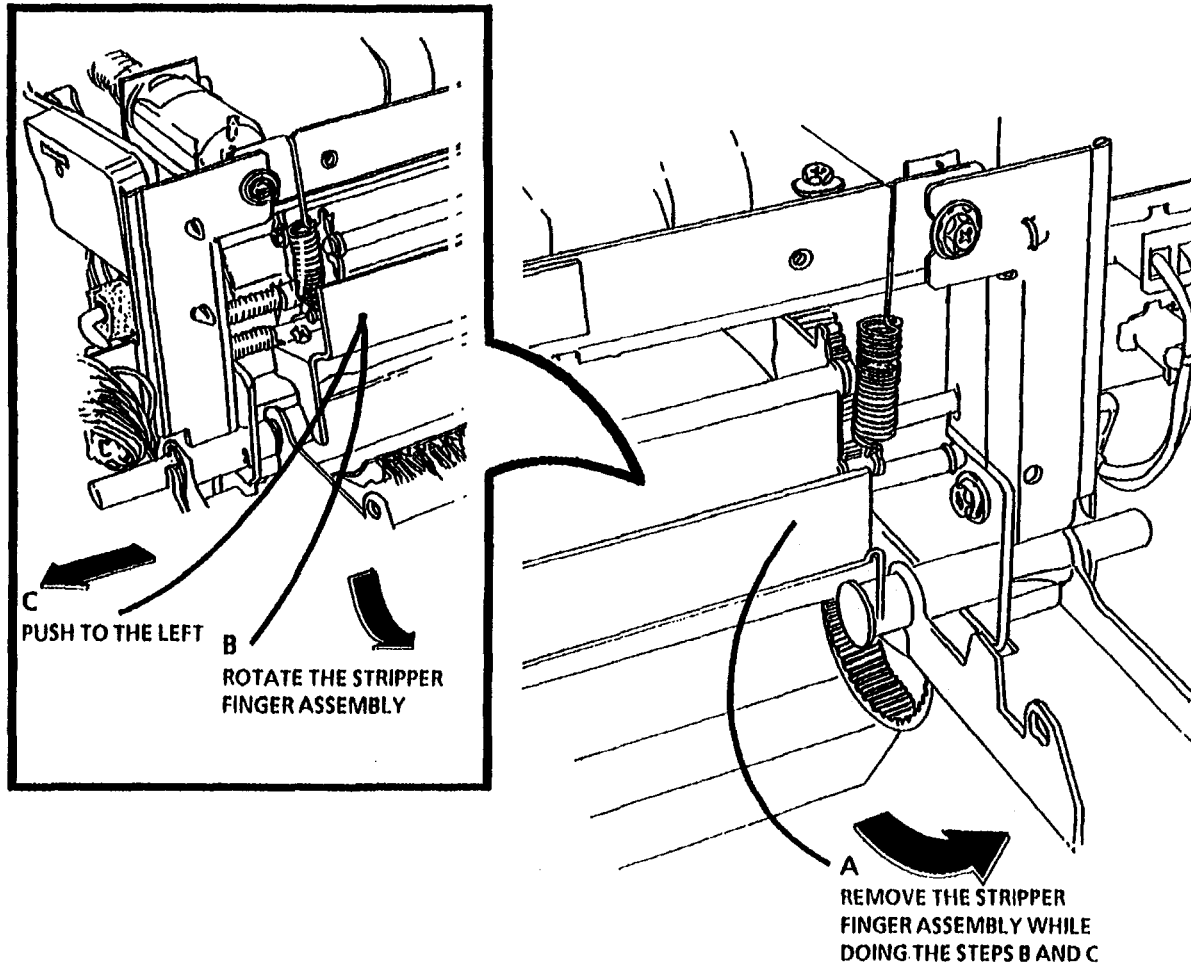
(Continued)

Figure 3. Remove the Stripper Fingers

	01654		A
TAR	SM 4	M	

(Continued)

2. (Figure 4): Remove the Stripper Finger Assembly.



3. Enter the diagnostic mode.
4. Enter the code [1004] in order to switch the the Fuser Heat Rod on and increase the Fuser temperature to the run temperature. The Drum/ Developer and Fuser Drive Motors are switched on when the Heat Roll Temperature reaches the run temperature. The temperature is then displayed on the Control Panel.

(Continued)

Figure 4. Remove the Stripper Finger Assembly

	01652	A
TAR	SM 4	M

(Continued)

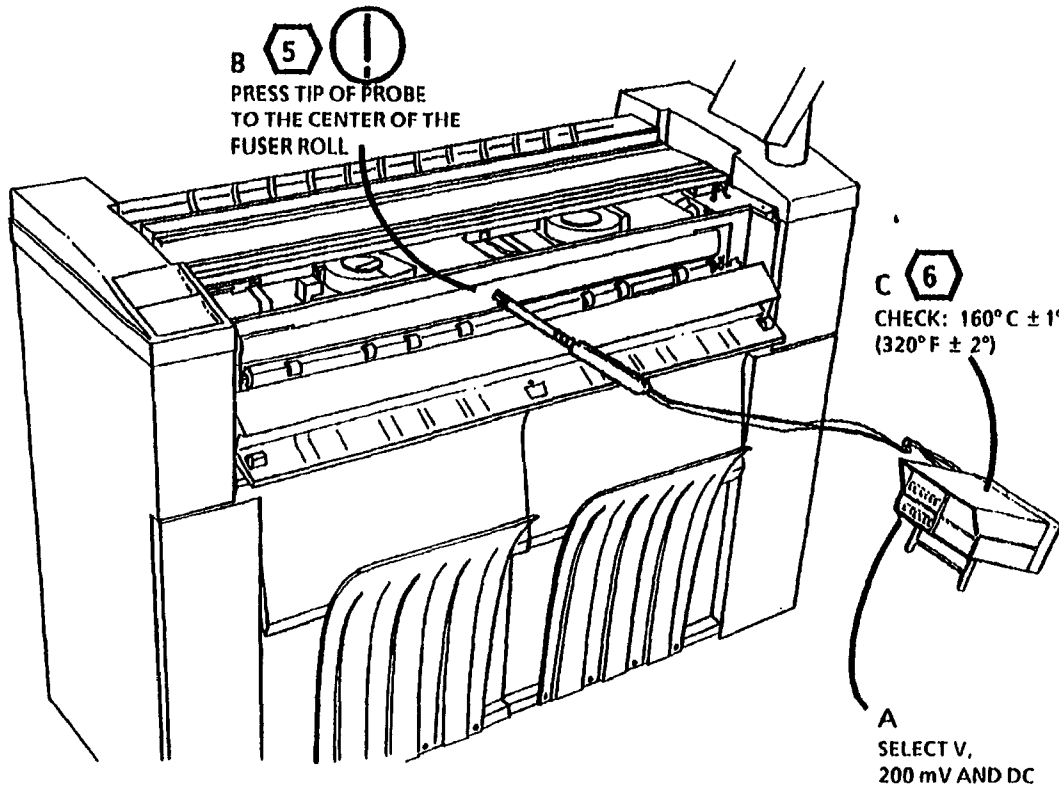
**!** STEP 5B: Orient the metal strips of the temperature probe vertically in order to avoid scratching the surface of the fuser roll.

**5** STEP 5 B: With the fuser roll rotating, press the temperature sensor firmly to the surface of the fuser roll in order to obtain an accurate reading.

**6** STEP 5 C: The  $160 \pm 2$  reading on the 200mV scale is  $160^\circ\text{C} \pm 2^\circ$  ( $320^\circ\text{F} \pm 2^\circ$ ).

5. (Figure 5): Check the fusing temperature with the Temperature Probe.

6. Press the Stop button 2 times.



(Continued)

Figure 5. Check the Fusing Temperature

	01806	A
TAR	SM 4	M

(Continued)

## Adjustment

1. While in the diagnostic mode, enter the code [1060] in order to adjust the Fuser Temperature.

7

**STEP 2 A:** Pressing the UP or DOWN buttons will scroll the temperature set point on the display. Each number represents approximately 1 degree change in the fuser temperature.

2. (Figure 6): Adjust the fusing temperature.

3. Exit the diagnostic mode.
4. Repeat the Check the Temperature procedure with the probe again to ensure that the correct adjustment has been made.
5. Reinstall the Stripper Fingers and the Front Cover.

6. This adjustment affects other copier adjustments. Perform the following Check/ Adjustments in the sequence as listed:

- a. Copy Size Adjustment (ADJ 5.1)
- b. Image Registration (ADJ 8.1)
- c. Auto Length (ADJ 8.2)

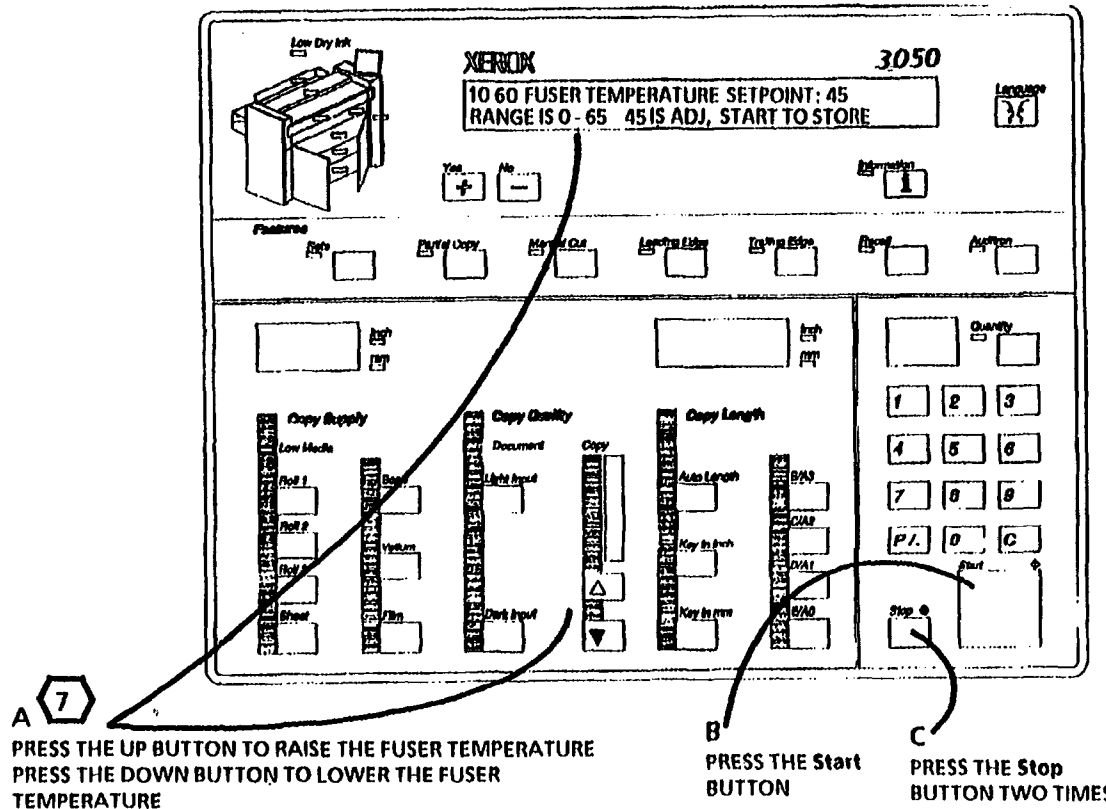


Figure 6. Adjust the Fusing Temperature

	01883	A
TAR	SM 4	M


## ADJ 14.1 Level the Copier

### Purpose

The purpose of this adjustment is to level the copier in a non-twisted condition.

### Check

1. Check and ensure that the castors are adjusted fully up (copier at the lowest position).

 **STEP 1A:** To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

2. (Figure 1): Lower the Upper Rear Door.

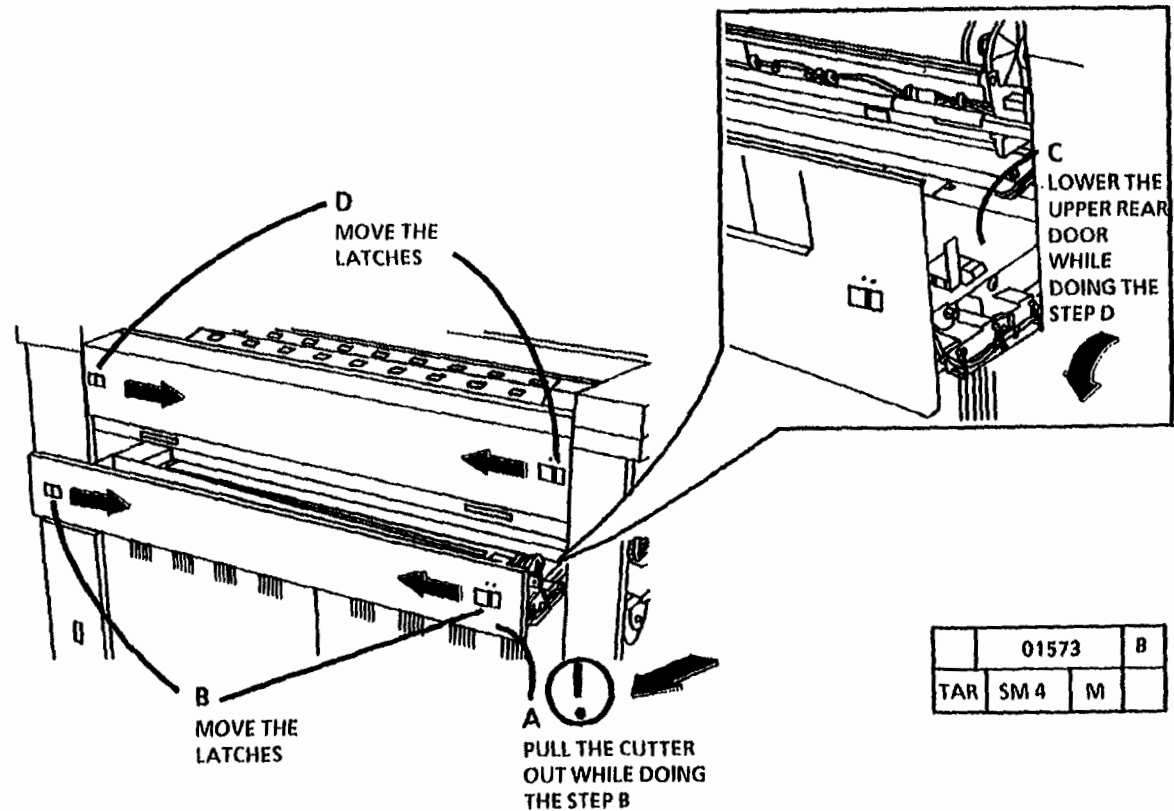


Figure 1. Lower the Upper Rear Door

(Continued)

(Continued)

**1** STEPS 3 A and B: To ensure that the copier is not twisted, perform the front-to-back check on both ends of the copier.

**2** STEPS 33 A and B: The bubble must be centered between the lines on the level.

3. (Figure 2): Check the level of the copier.

4. Determine on which side of the copier the front-to-back level is the farthest out of level.

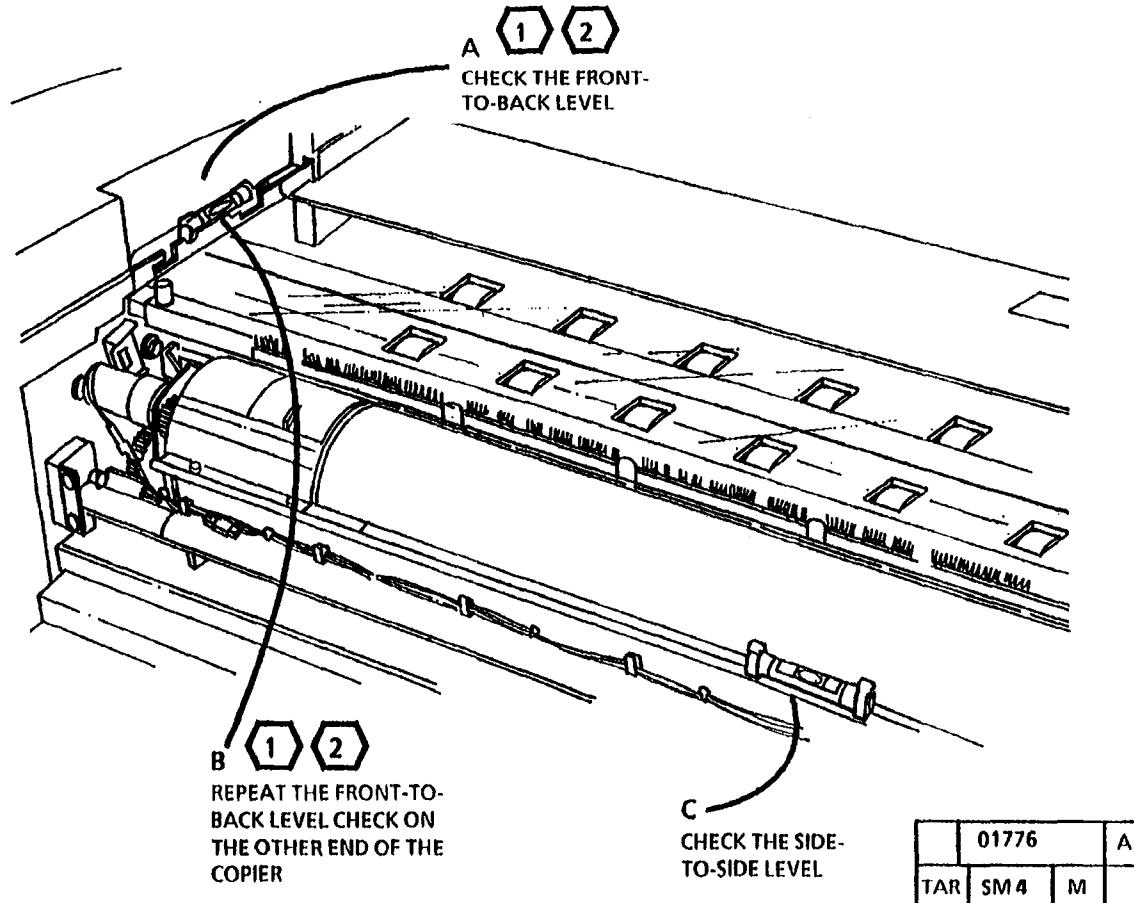


Figure 2. Check the level of the copier

(Continued)

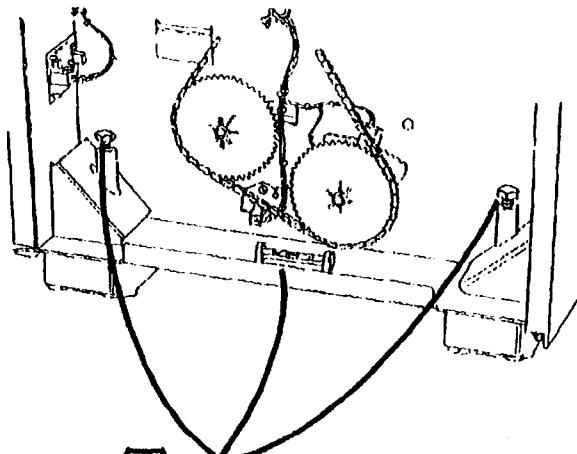
(Continued)

## Adjust

1. Adjust the side which is the farthest out of specification first.

**3** STEPS 1 A and 2 B: The bubble must be centered between the lines on the level.

2. (Figure 3): Adjust the Front-to-back Level.



**3**

A  
ROTATE THE  
SCREWS TO  
ADJUST THE LEVEL  
OF THE COPIER

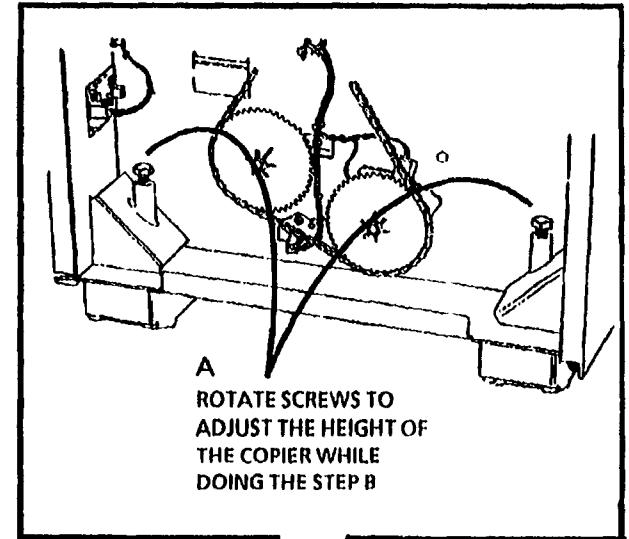
B

REPEAT THE STEP  
A ON THE OTHER  
END OF THE  
COPIER

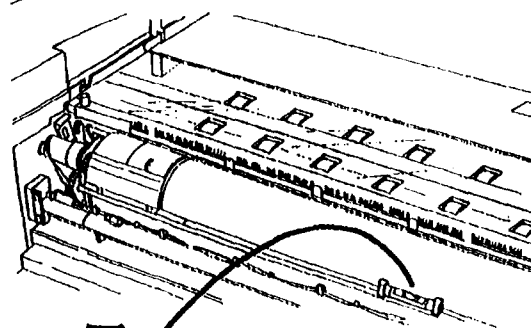
	01870	A
TAR	SM 4	M

Figure 3. Adjust the Front-to-back Level

3. (Figure 4): Adjust the Side-to-side level.
4. Perform Steps 3 and 4 of the Check.
5. Perform Steps 1 and 2 of the Adjust until the level is within specification.



A  
ROTATE SCREWS TO  
ADJUST THE HEIGHT OF  
THE COPIER WHILE  
DOING THE STEP B



**3**

B  
LEVEL THE COPIER

	01778	A
TAR	SM 4	M

Figure 4. Adjust the Side-to-side Level

## ADJ 14.2 Front Doors Adjustment

### Purpose

The purpose of this adjustment is to ensure that the left and right front door interlock switches can make contact. When these switches are opened, there is no power to the Roll Drive Motor and roll feed copies cannot be made. The adjustment also corrects machine appearance.

### Check/Adjust

**1** STEP 1 E: Ensure that the doors are high enough to engage the latches when closed.

1. (Figure 1): Check/Adjust the Front Doors.

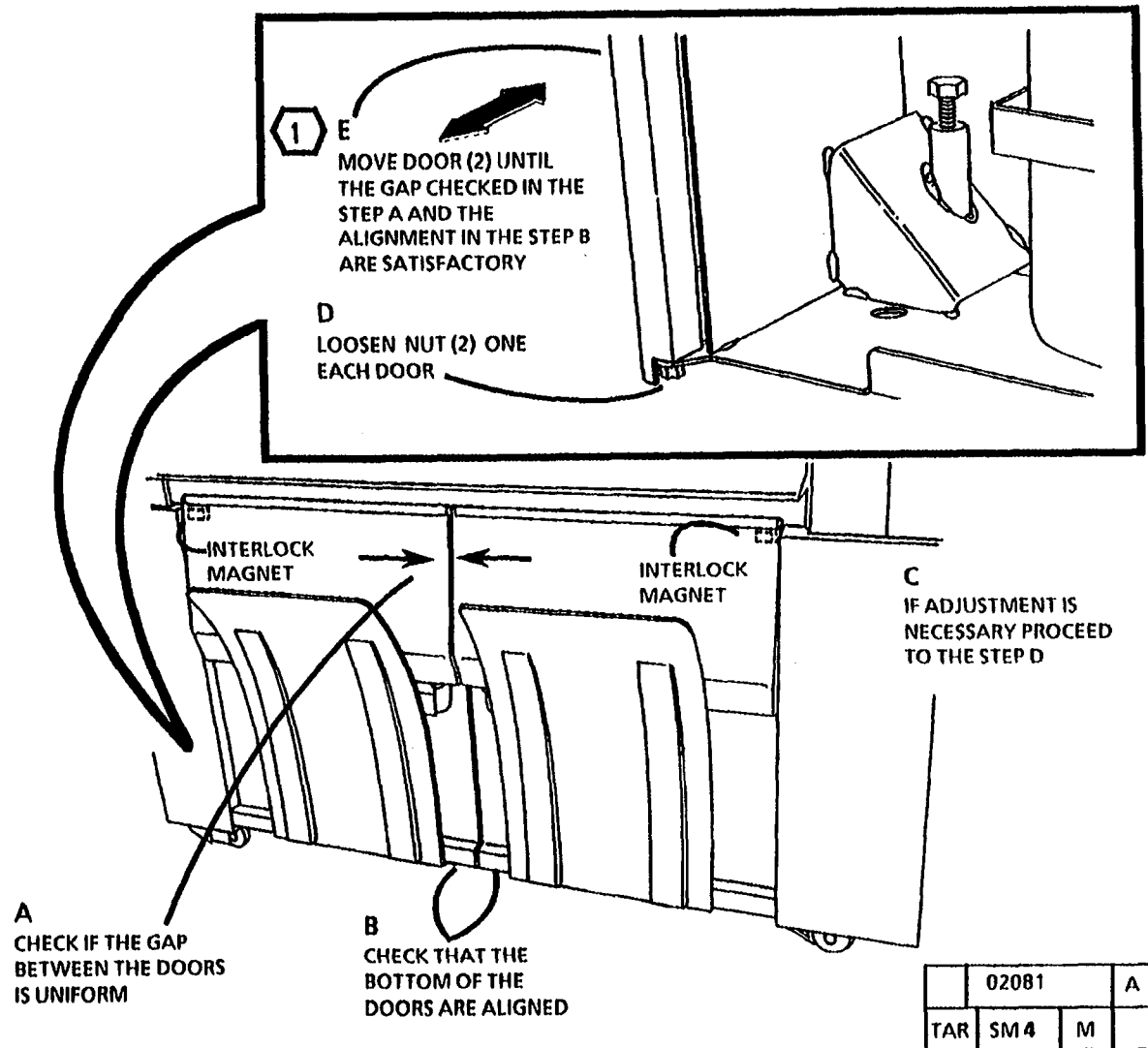


Figure 1. Check/ Adjust the Front Doors



## 5. PARTS LIST SECTION

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## OVERVIEW

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

## ORGANIZATION

### PARTS LISTS

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

### ELECTRICAL CONNECTORS AND FASTENERS

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

### COMMON HARDWARE

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

### PART NUMBER INDEX

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

## OTHER INFORMATION

### ABBREVIATIONS

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

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

### SYMBOLOLOGY

Symbology used in the Parts List section is identified in the Symbology section.

## SUBSYSTEM INFORMATION

### USE OF THE TERM "ASSEMBLY"

The term "assembly" will be used for items in the part number listing that include other itemized parts in the part number listing. When the word "assembly" is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

### BRACKETS

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

### Tag

The notation "W/Tag" in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as "W/Tag," install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

## SYMBOLGY

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.

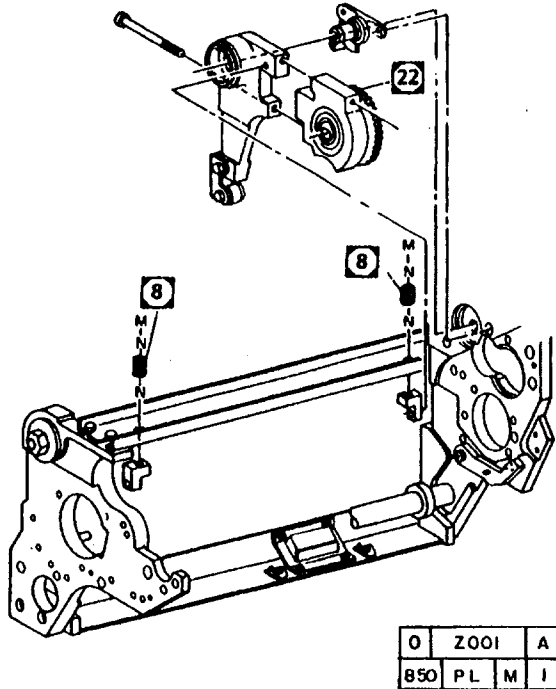


Figure 1. Adjustment Symbol

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.

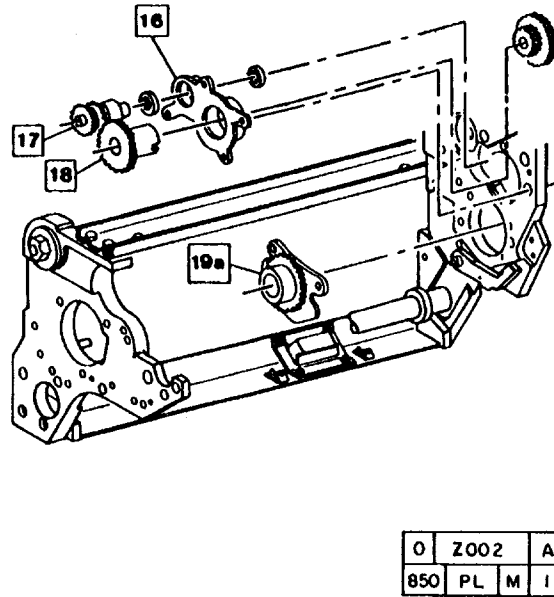


Figure 2. Repair Symbol

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.

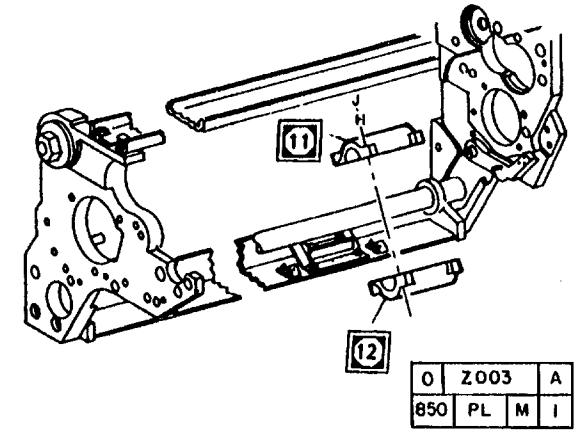
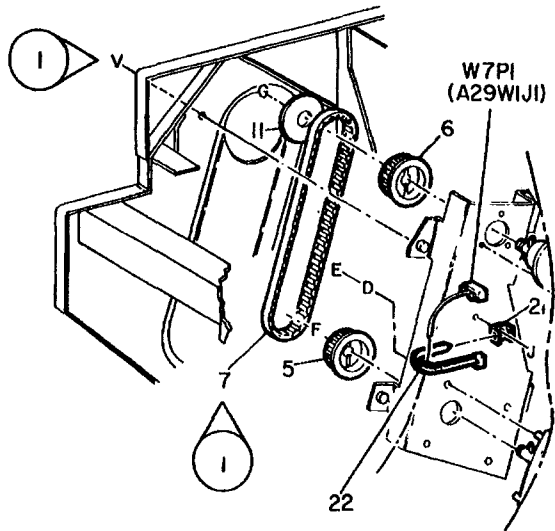


Figure 3. Adjustment and Repair Symbol

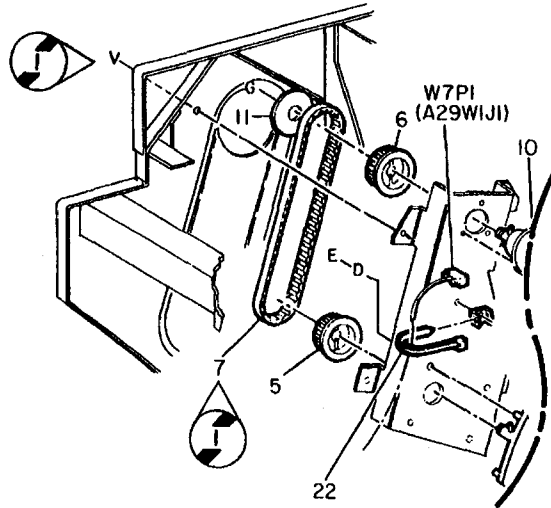
A tag number within a circle and pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 4). Information on the modification is in the Change Tag Index.



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850	PL	M I

Figure 4. With Tag Symbol

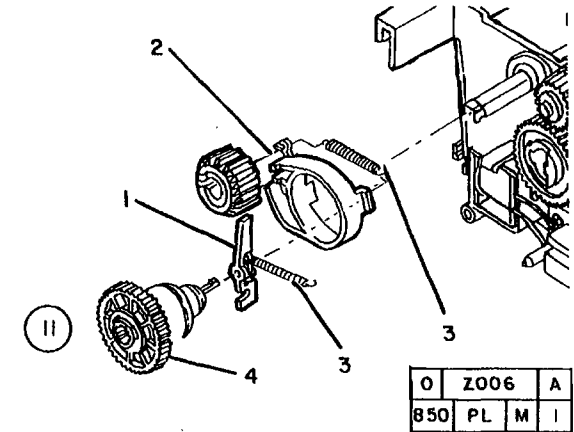
A tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the tag number within the circle (Figure 5).



O	Z005	A
850	PL	M I

Figure 5. Without Tag Symbol

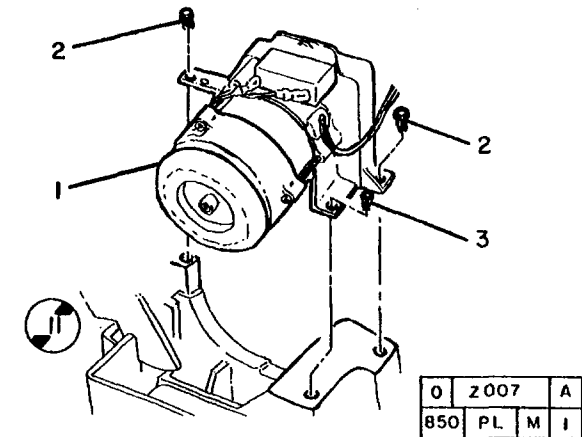
A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 6). Information on the modification is in the Change Tag Index.



O	Z006	A
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Figure 6. Entire Drawing With Tag Symbol

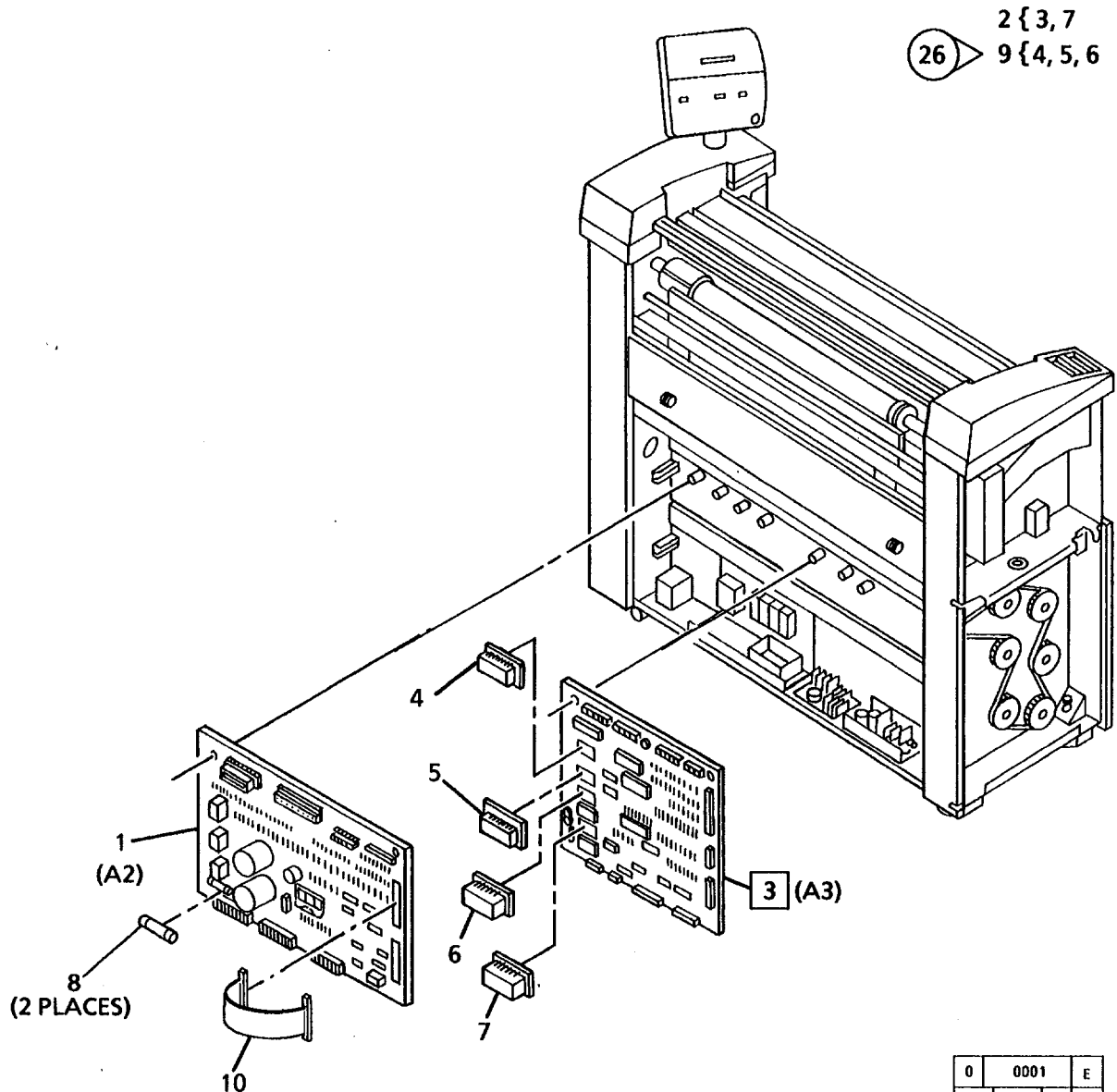
A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 7).



O	Z007	A
850	PL	M I

Figure 7. Entire Drawing Without Tag Symbol

**PL 1.1 ELECTRICAL CONTROL COMPONENTS/DC POWER GENERATION**

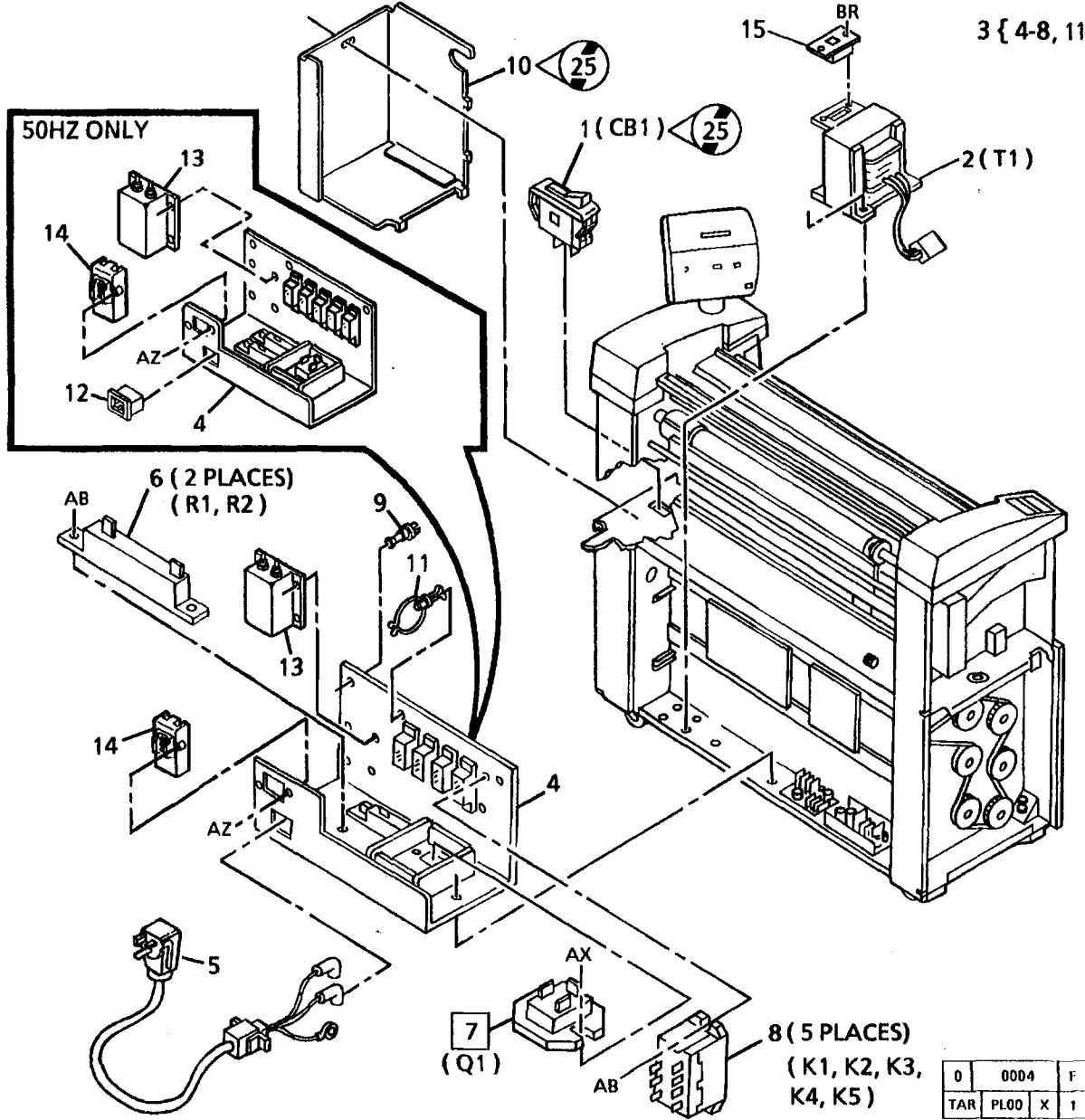


2 { 3, 7  
 9 { 4, 5, 6  
 26

ITEM	PART	DESCRIPTION
1	160K36680	LOW VOLTAGE POWER SUPPLY DRIVER PWB (A2)
2	--	CONTROLLER ASSEMBLY (TO BE AVAILABLE AT LATER DATE)
3	140K69980	CONTROL PWB (A3)
4	--	CONTROL EPROM NO.2 (P/O ITEM 9) (W/TAG 2, 5)
5	--	CONTROL EPROM NO.1 (P/O ITEM 9) (W/TAG 2, 5)
6	--	PRIMARY LANGUAGE EPROM (P/O ITEM 9) (W/TAG 2, 5)
7	537K6920	NVM (NON-VOLATILE MEMORY)
8	708W4001	FUSE (1 AMP) (60HZ)
-	708W3901	FUSE (0.5AMP) (50HZ)
9	133K5345	CIRCUIT ASSEMBLY KIT (USO ONLY) (W/TAG 5, 16, 26)
-	133K6644	CIRCUIT ASSEMBLY KIT (RX ONLY) (W/TAG 5, 16, 26)
10	152K36241	JUMPER HARNESS

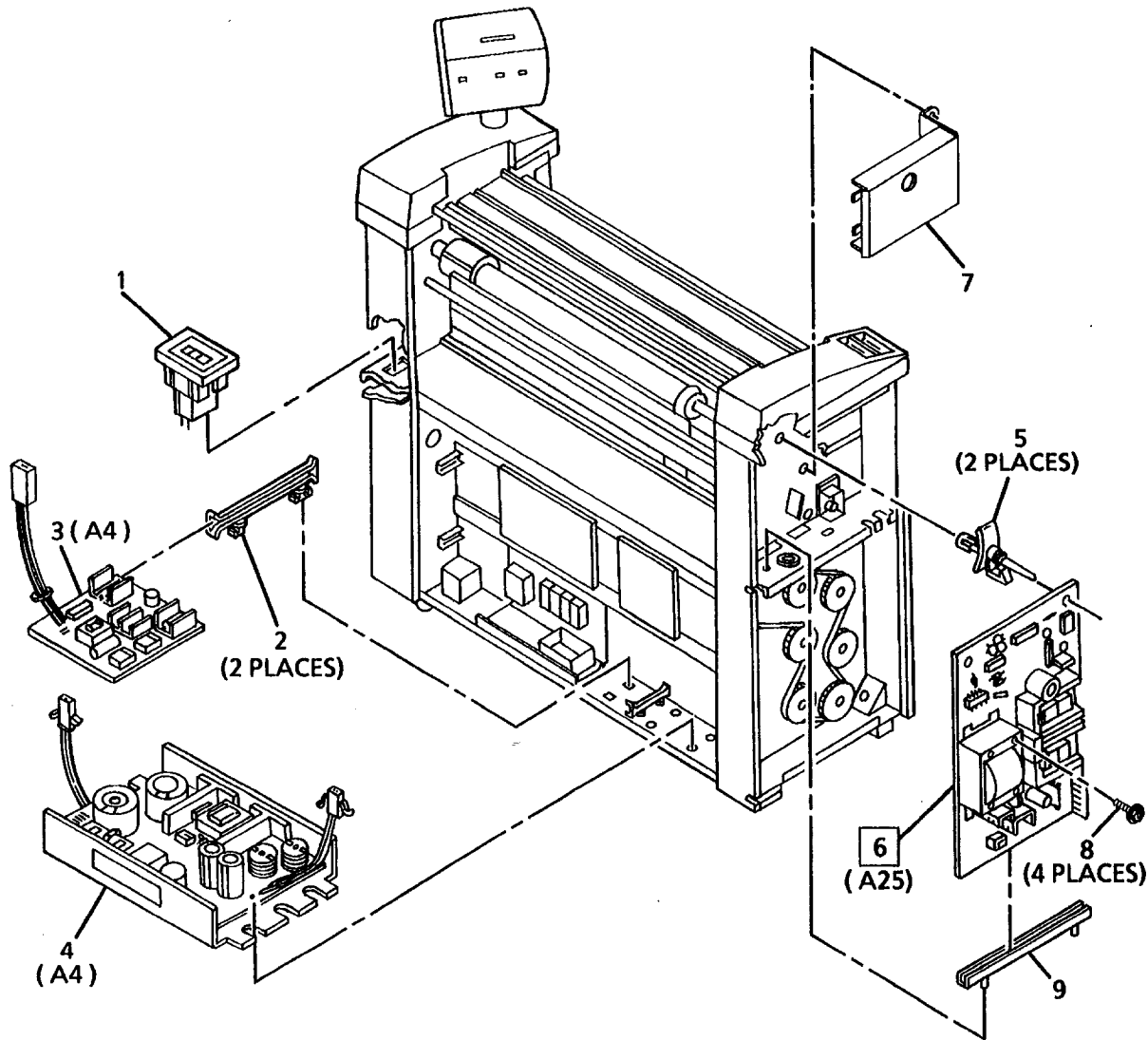
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PL 1.2 AC ELECTRICAL COMPONENTS



ITEM	PART	DESCRIPTION
1	108E2870	MAIN POWER SWITCH (CB1) (W/O TAG 25)
2	105K833	MAIN TRANSFORMER (60HZ) (T1)
-	105K1084	MAIN TRANSFORMER (50HZ) (T1)
3	--	AC MODULE (60HZ) (50HZ) (NOT SPARED)
4	--	AC COMPONENT (60HZ) (50HZ) (P/O ITEM 3)
5	117K10591	POWER CORD (60HZ ONLY)
6	103E2721	BALLAST RESISTOR (60HZ) (R1, R2)
-	103E2731	BALLAST RESISTOR (50HZ) (R1, R2)
7	707W1652	FUSER TRIAC (Q1)
8	109E1040	AC RELAY (K1, K2, K3, K4, K5)
9	3P25202	STANDOFF
10	2E40132	COVER (W/O TAG 25)
11	120E2150	TWIST CLAMP
12	114K492	INLET CONNECTOR (50HZ ONLY)
13	142E440	FILTER (60HZ)
-	142E1131	FILTER (50HZ)
14	108E1762	GROUND FAULT PANEL
15	110E7290	VOLTAGE SWITCH

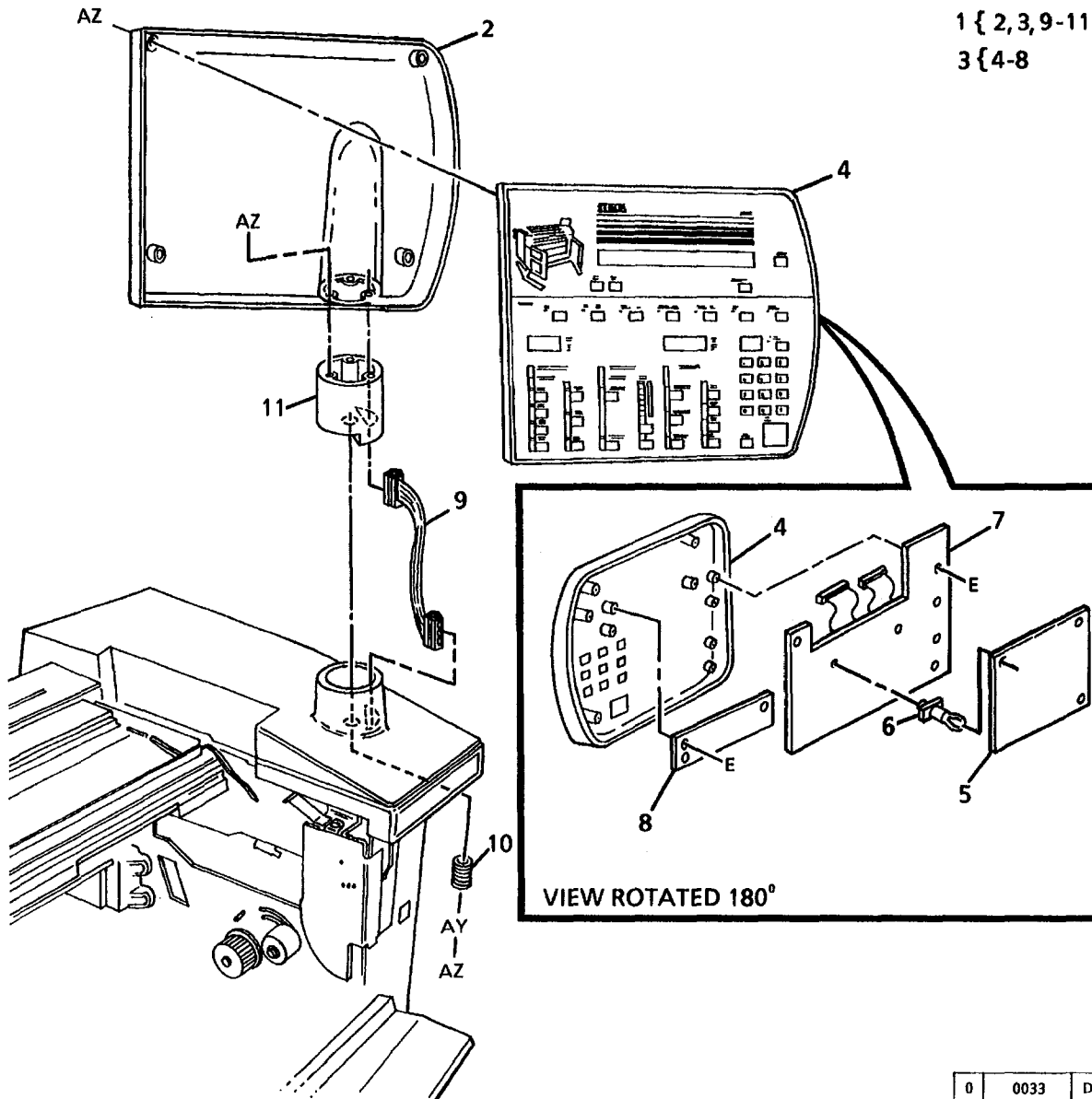
PL 1.3 DC ELECTRICAL COMPONENTS



ITEM	PART	DESCRIPTION
1	111K21	MEDIA COUNTER
2	101E1020	CIRCUIT BOARD GUIDE
3	104K53	EXPOSURE LAMP
		BALLAST (A4)
4	105K5274	BULK POWER SUPPLY
		(+26VDC) (60HZ) (A4)
-	105K5554	BULK POWER SUPPLY
		(+26VDC) (50HZ) (A4)
5	--	STANDOFF (NOT SPARED)
6	105K5480	HIGH VOLTAGE
		POWER SUPPLY (A25)
7	55K14940	SHIELD (50HZ ONLY)
8	26E3460	LOCKING SCREW
9	101E7930	PWB GUIDE

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PL 1.4 CONTROL CONSOLE



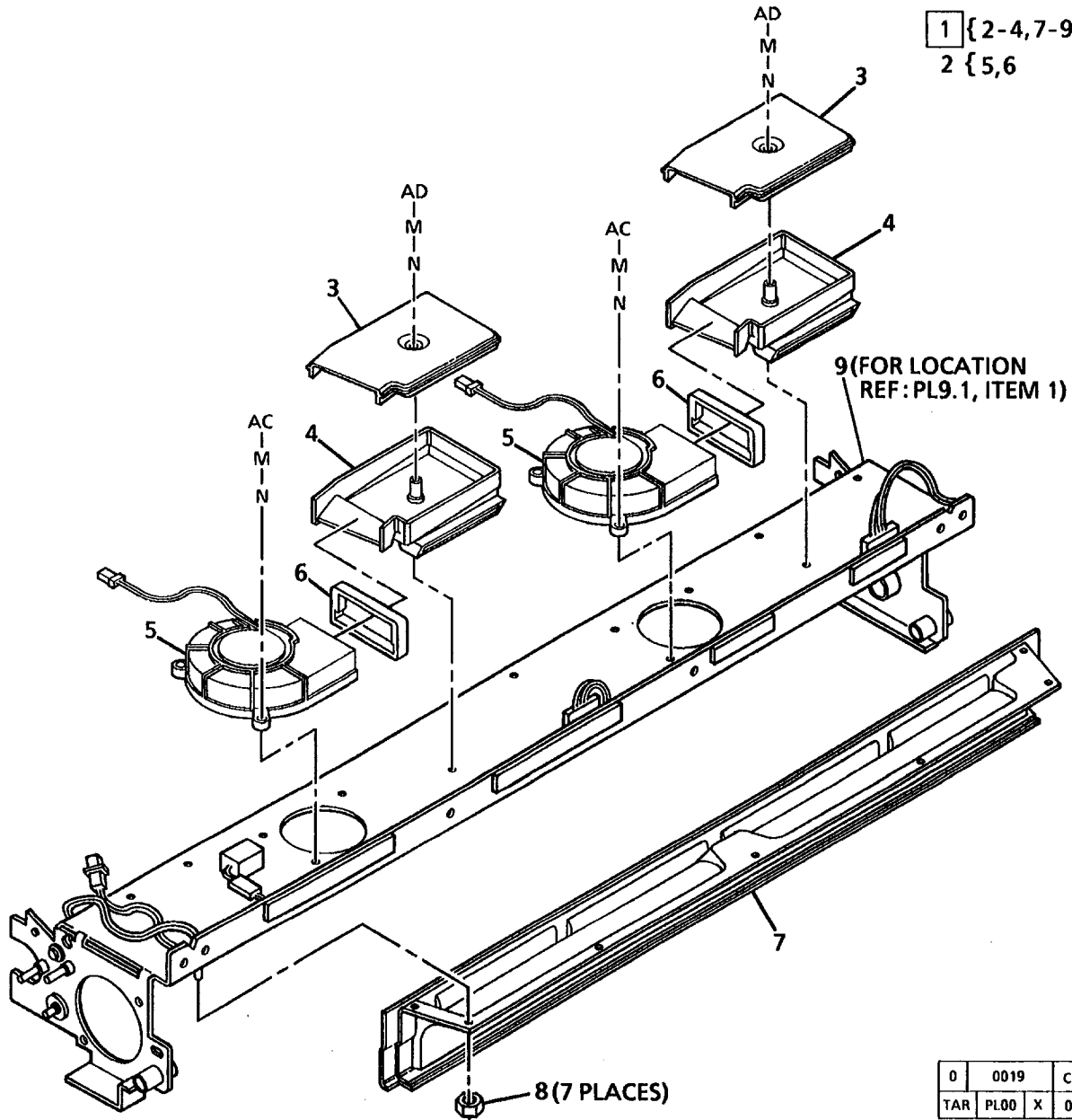
1 { 2,3,9-11  
3 { 4-8

ITEM	PART	DESCRIPTION
1	2K38363	CONTROL CONSOLE ASSEMBLY (60HZ)
-	2K44363	CONTROL CONSOLE ASSEMBLY (50HZ)
2	--	REAR COVER (P/O ITEM 1)
3	--	CONTROL PANEL ASSEMBLY (P/O ITEM 1)
4	--	FRONT COVER (P/O ITEM 3)
5	140K16586	CONTROL PANEL DRIVER PWBA
6	--	STANDOFF (P/O ITEM 3)
7	140K17944	CONTROL PANEL DISPLAY PWB
8	140K37880	DISPLAY PWB
9	--	HARNESS (P/O ITEM 1)
10	409W1671	SPRING
11	17E4721	SWIVEL POST

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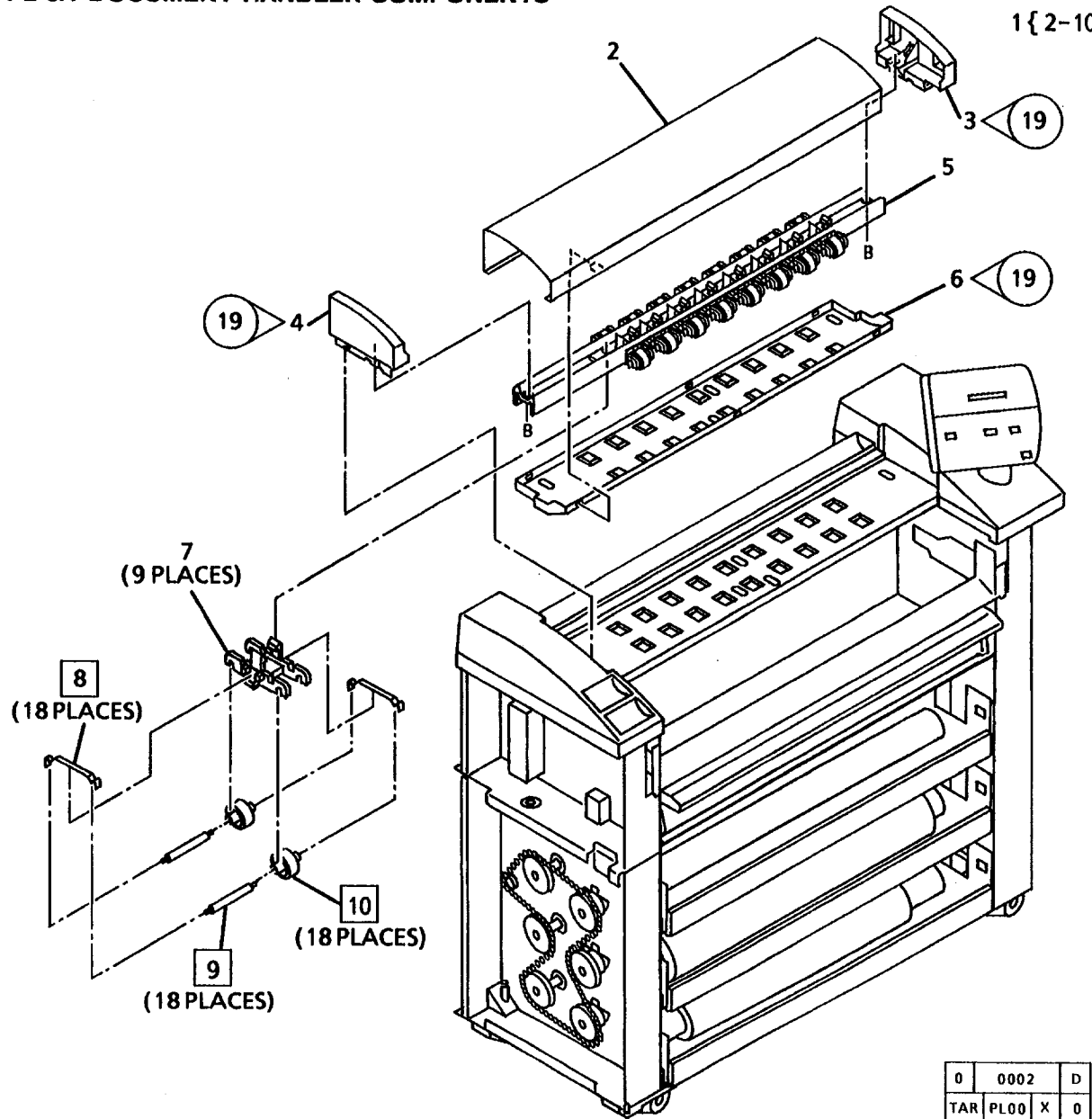


PL 1.5 MACHINE COOLING



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	BLOWER ASSEMBLY (P/O ITEM 1)
3	2E13120	COVER
4	2E13110	HOUSING
5	127K17160	BLOWER (COOLING FAN) (60HZ)
-	127K2671	BLOWER (COOLING FAN) (50HZ)
6	--	BLOWER SEAL (P/O ITEM 2)
7	600K52780	AIR MANIFOLD/HEATSHIELD KIT
8	--	NUT (P/O ITEM 1)
9	--	XEROGRAPHIC MODULE FRAME (P/O ITEM 1)

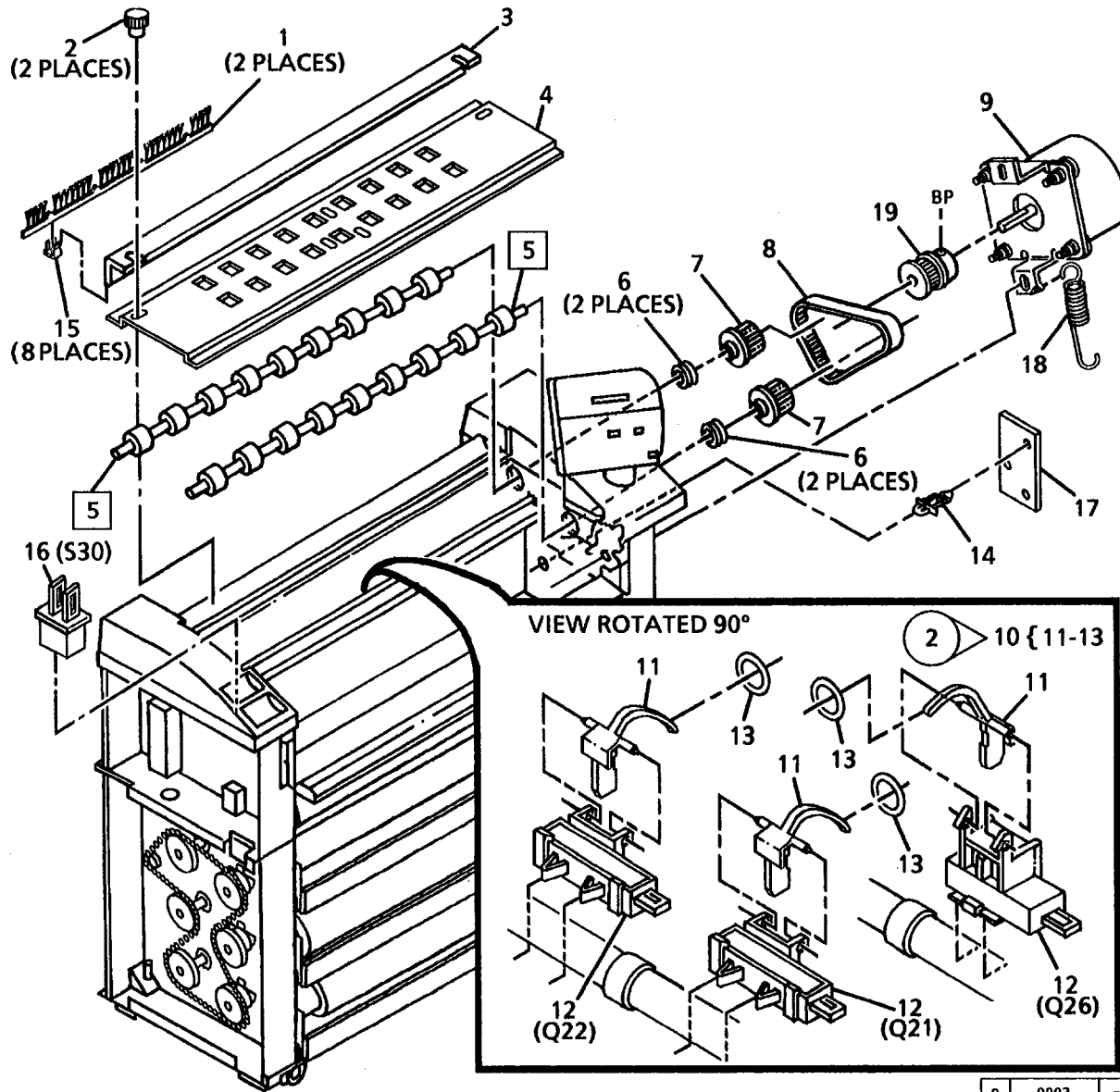
PL 5.1 DOCUMENT HANDLER COMPONENTS



ITEM	PART	DESCRIPTION
1	22K18105	DOCUMENT HANDLER ASSEMBLY (FIELD SPARE)
2	--	DOCUMENT HANDLER COVER (P/O ITEM 1)
3	21E6210	RH END CAP (W/TAG 19)
4	21E6220	LH END CAP (W/TAG 19)
5	--	PINCH ROLL SUPPORT (P/O ITEM 1)
6	38K10460	DOCUMENT PLATEN (W/TAG 2, 19)
7	31E3561	PINCH ROLL YOKE
8	9E21410	ROLL LOAD SPRING
9	6E19570	PINCH ROLL SHAFT
10	22E7280	DOCUMENT PINCH ROLL

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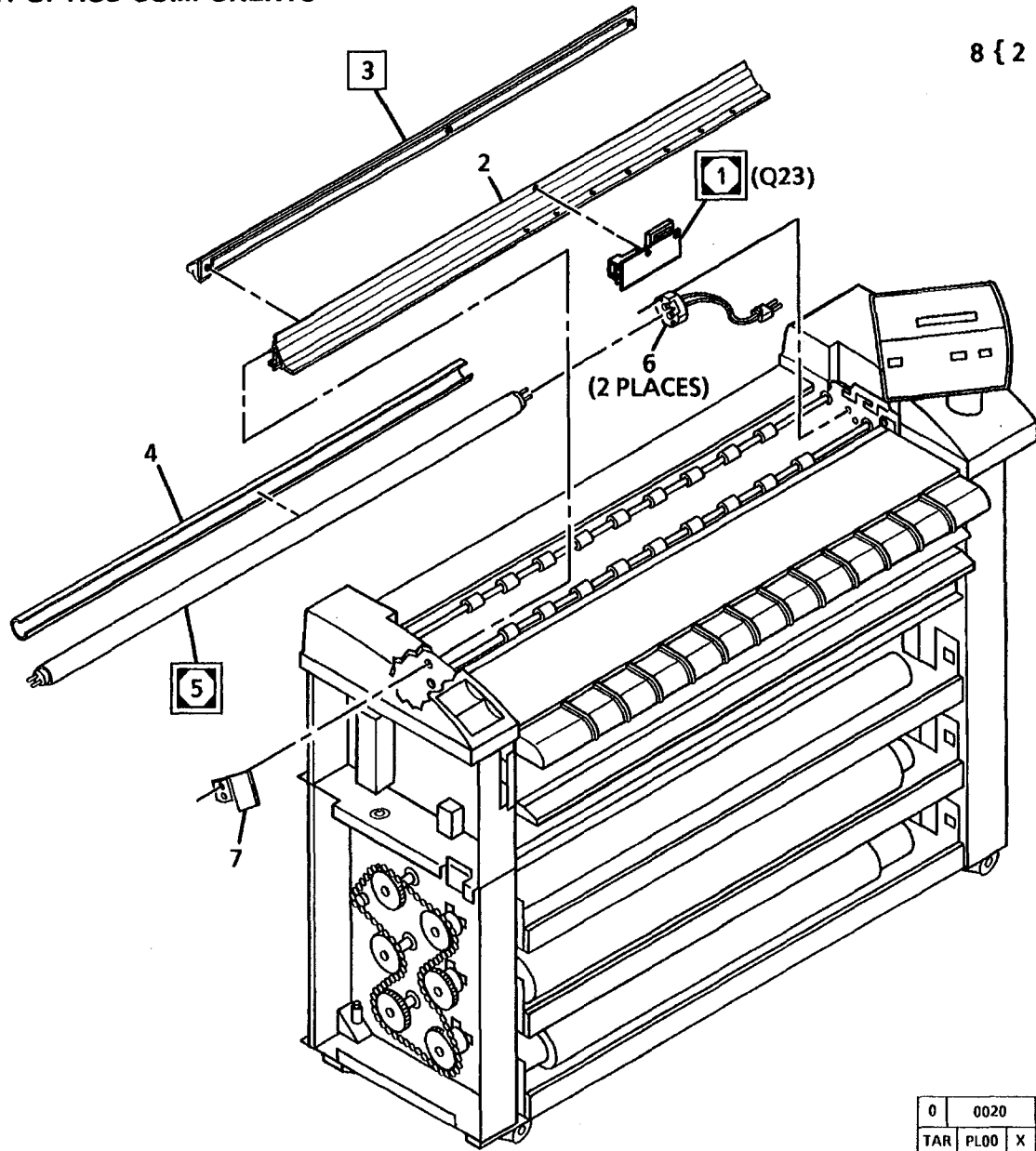
PL 5.2 DOCUMENT DRIVE COMPONENTS



ITEM	PART	DESCRIPTION
1	115E3100	STATIC ELIMINATOR
2	27E2251	NUT
3	--	PLATEN RETAINER BRACKET (NOT SPARED)
4	90E754	DOCUMENT BOTTOM PLATEN
5	22K16301	DOCUMENT DRIVE ROLL
6	413W30854	DOCUMENT DRIVE BEARING
7	20E22550	DOCUMENT DRIVE PULLEY
8	23E6570	DOCUMENT DRIVE BELT
9	127K8861	DOCUMENT DRIVE MOTOR
10	130K52273	DOCUMENT SENSOR ASSEMBLY(Q21, Q22, Q26) (W/TAG 2)
11	120E6821	DOCUMENT ACTUATOR
12	--	DOCUMENT SENSOR (P/O ITEM 10)
13	35E31270	O-RING
14	--	STANDOFF (NOT SPARED)
15	19E15041	CLIP
16	110E2640	DOCUMENT HANDLER INTERLOCK SWITCH (S30)
17	140K15953	DRIVE MOTOR PWB
18	809E770	SPRING
19	20E14550	PULLEY (28T)

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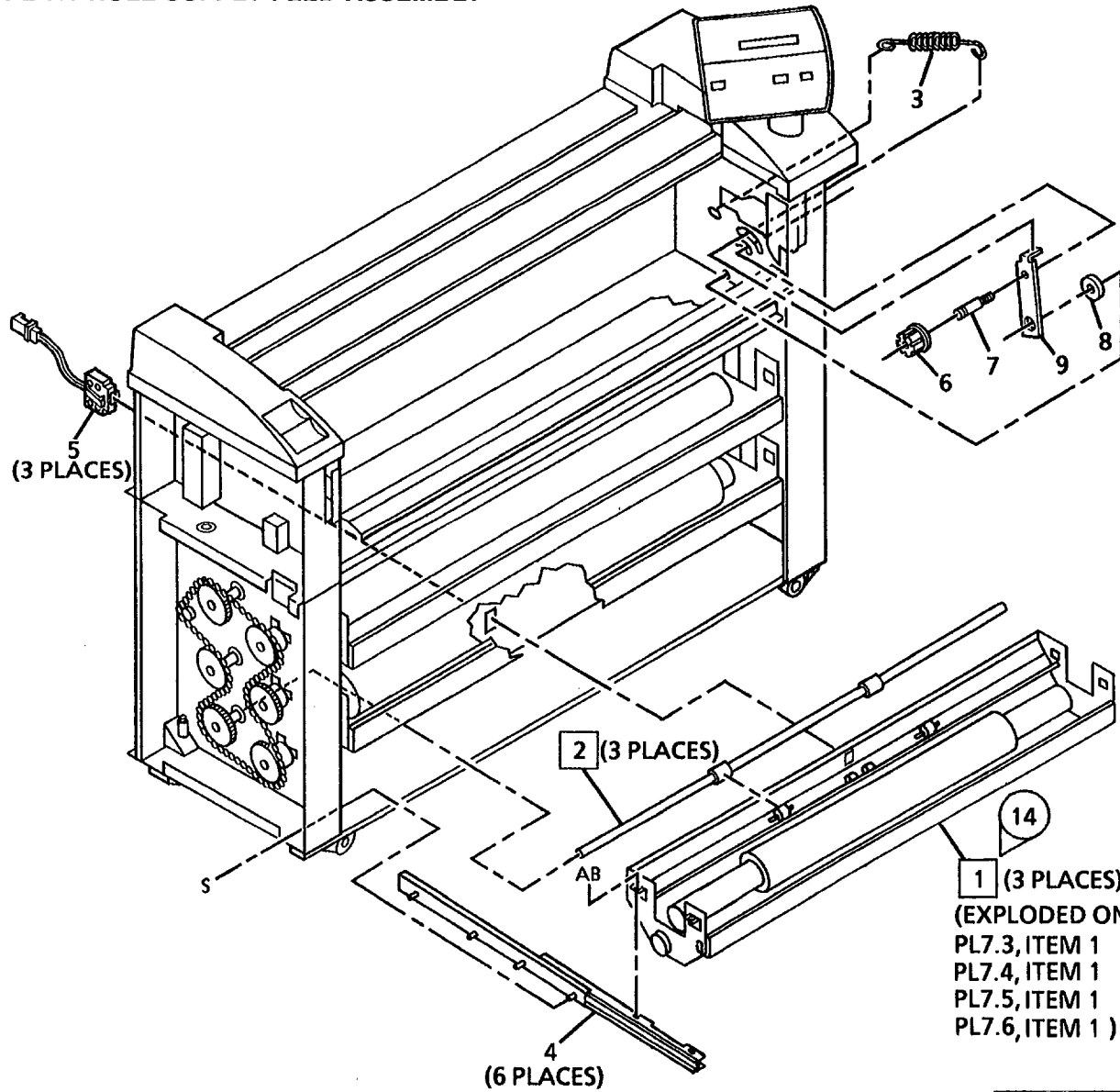
PL 6.1 OPTICS COMPONENTS



ITEM	PART	DESCRIPTION
1	130K54470	ILLUMINATION SENSOR (Q23)
2	--	REFLECTOR (P/O ITEM 8)
3	62K4841	LENS
4	113E7881	LAMP SHIELD
5	122E302	EXPOSURE LAMP
6	113K1221	LAMP SOCKET
7	9E42461	OPTICS SPRING
8	62K5450	REFLECTOR ASSEMBLY

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**PL 7.1 ROLL SUPPLY FEED ASSEMBLY**

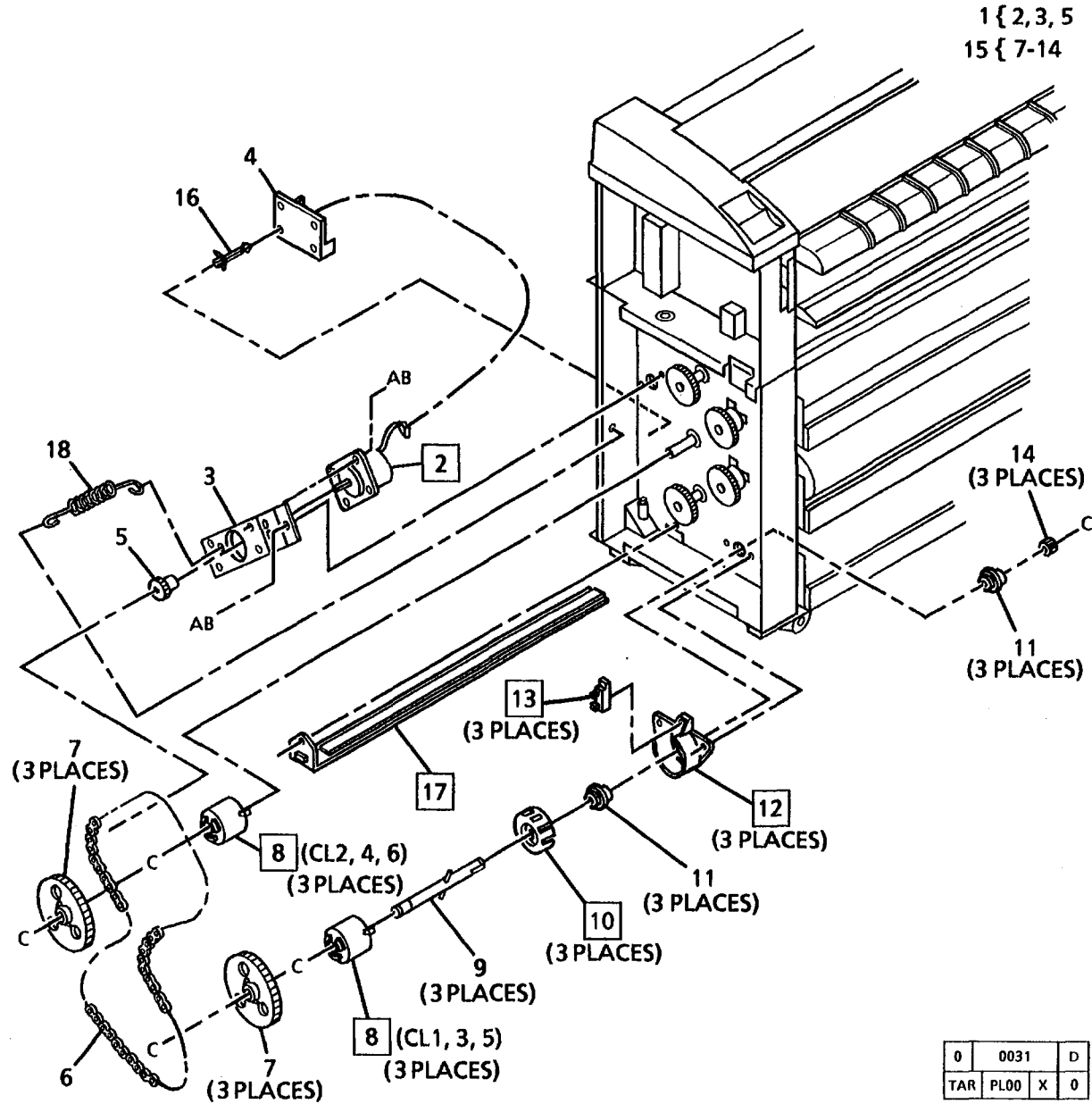


ITEM	PART	DESCRIPTION
1	600K39821	ROLL SUPPLY DRAWER ASSEMBLY KIT (TAG 14)
2	22K28930	ROLL FEED DRIVE ROLL
3	9E32921	IDLER SPRING
4	10K1351	SLIDE
5	130K51801	POSITION SENSOR
6	22E11411	FUSER DRIVE IDLER
7	6E26780	IDLER SHAFT
8	14E19730	SPACER
9	11E3833	IDLER ARM

**1** (3 PLACES)  
 (EXPLODED ON  
 PL7.3, ITEM 1  
 PL7.4, ITEM 1  
 PL7.5, ITEM 1  
 PL7.6, ITEM 1 )

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PL 7.2 ROLL SUPPLY DRIVES



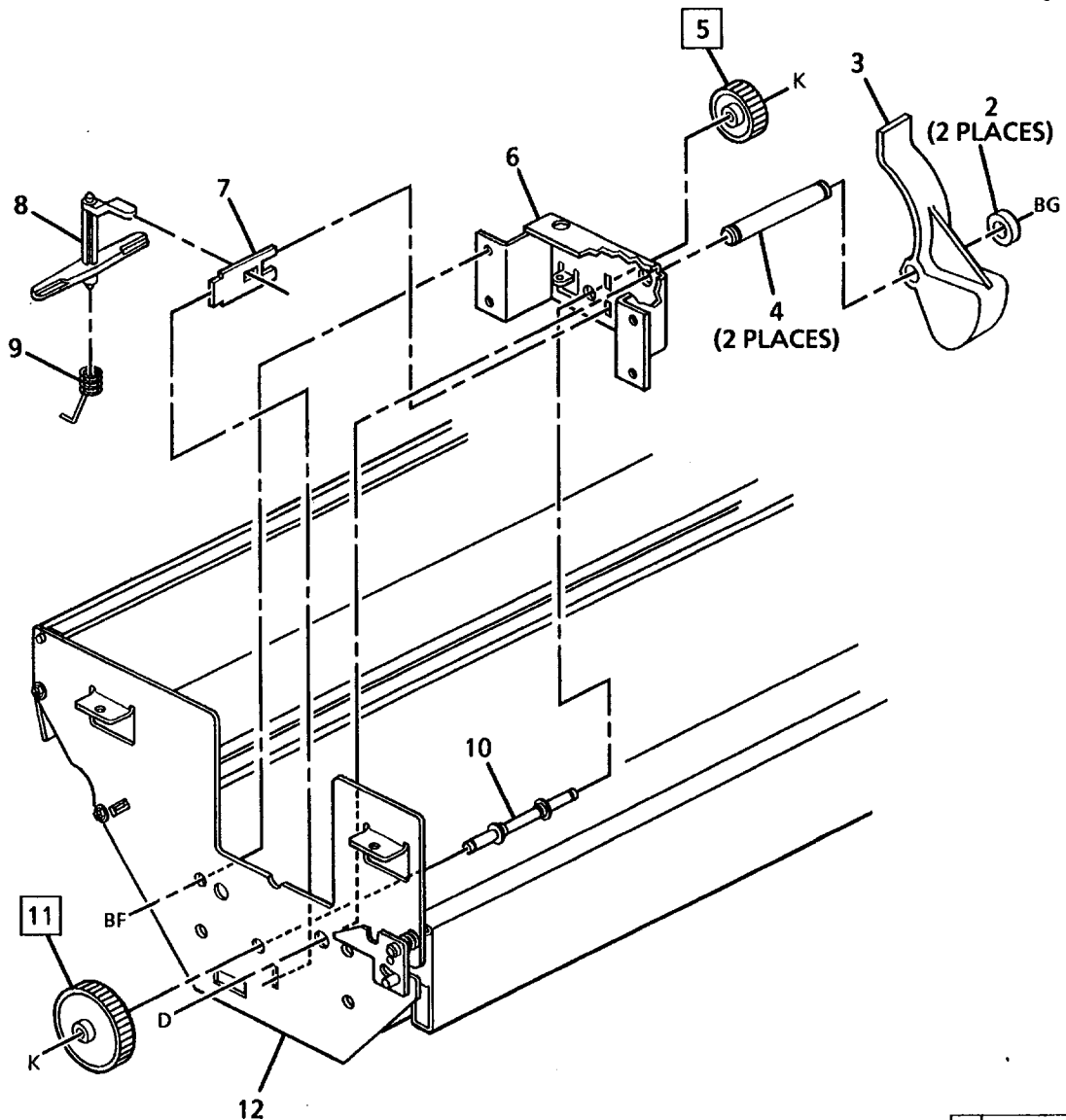
1 { 2, 3, 5  
15 { 7-14

ITEM	PART	DESCRIPTION
1	7K7561	ROLL DRIVE MOTOR ASSEMBLY
2	127K4293	ROLL DRIVE MOTOR
3	--	BRACKET (P/O ITEM 1)
4	140K15953	DRIVE MOTOR PWB
5	7E16410	MAIN DRIVE SPROCKET (10T)
6	23E6750	CHAIN
7	7E19071	SPROCKET (50T)
8	121E7510	CLUTCH (FEED, REWIND)
9	--	REWIND SHAFT (P/O ITEM 15)
10	5E6810	ENCODER DISK BEARING
11	413W30854	REWIND HOUSING (P/O ITEM 15)
12	--	REWIND DRIVE MOTOR SENSOR
13	130E3250	MOTION SENSOR
14	7E14610	REWIND DRIVE GEAR (12T)
15	7K5760	REWIND DRIVE ASSEMBLY
16	--	STANDOFF (NOT SPARED)
17	126K2521	MEDIA ROLL HEATER (60HZ)
-	126K2980	MEDIA ROLL HEATER (50HZ)
18	9E43260	MOTOR SPRING

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PL 7.3 ROLL SUPPLY DRAWER COMPONENTS (PART 1 OF 4)

1 { 2-12

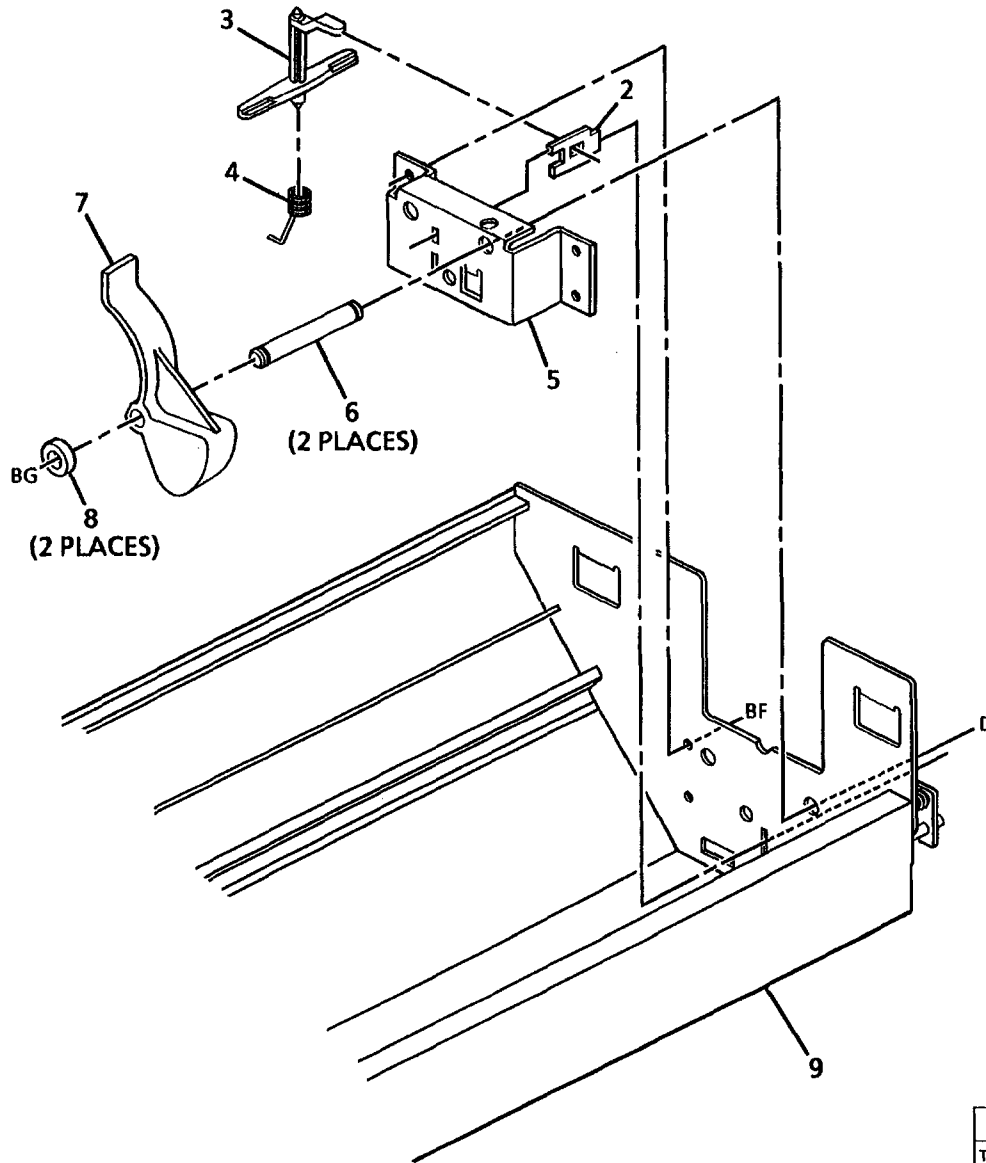


ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY KIT (REF: PL7.1 ITEM 1)
2	22E11540	SUPPORT ROLLER
3	55E23520	GEAR GUARD
4	29E14760	LH SUPPORT PIN
5	7E14650	REWIND INTERNAL GEAR (20T)
6	--	LH CRADLE BRACKET (P/O ITEM 1)
7	--	LH ROLL LOCK (P/O ITEM 1)
8	3E17610	ROLL LOCK
9	9E27340	ROLL LOCK SPRING
10	--	REWIND SHAFT (P/O ITEM 1)
11	7E14600	REWIND GEAR (32T)
12	--	DRAWER FRAME (P/O ITEM 1)

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PL 7.4 ROLL SUPPLY DRAWER COMPONENTS (PART 2 OF 4)

1 { 2-9



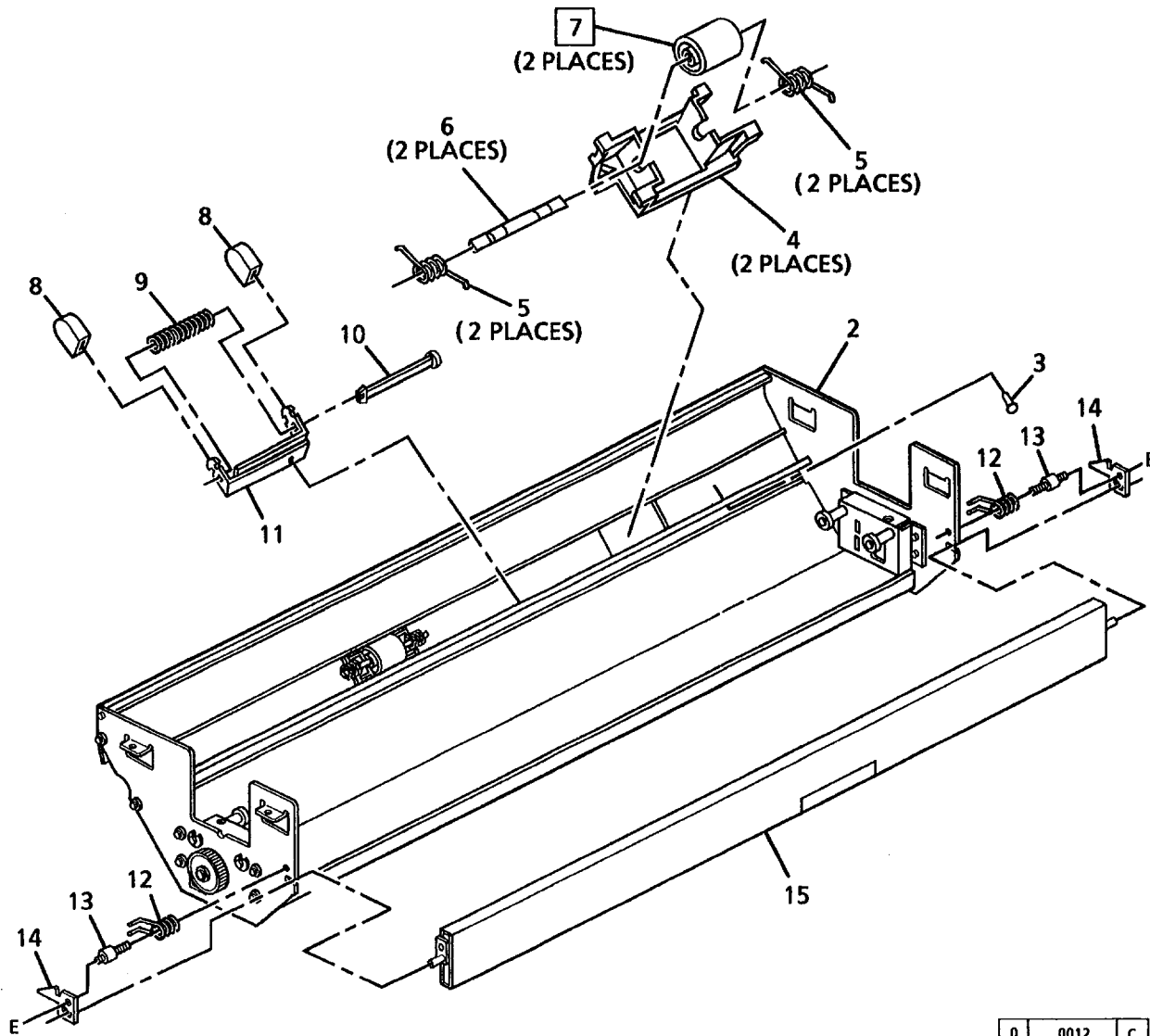
ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY KIT (REF: PL7.1 ITEM 1)
2	--	RH ROLL LOCK (P/O ITEM 1)
3	3E17610	ROLL LOCK
4	9E27340	ROLL LOCK SPRING
5	--	RH CRADLE BRACKET (P/O ITEM 1)
6	29E14750	RH SUPPORT PIN
7	55E23520	GEAR GUARD
8	22E11540	SUPPORT ROLLER
9	--	DRAWER FRAME (P/O ITEM 1)

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PL 7.5 ROLL SUPPLY DRAWER COMPONENTS (PART 3 OF 4)

1{2-15



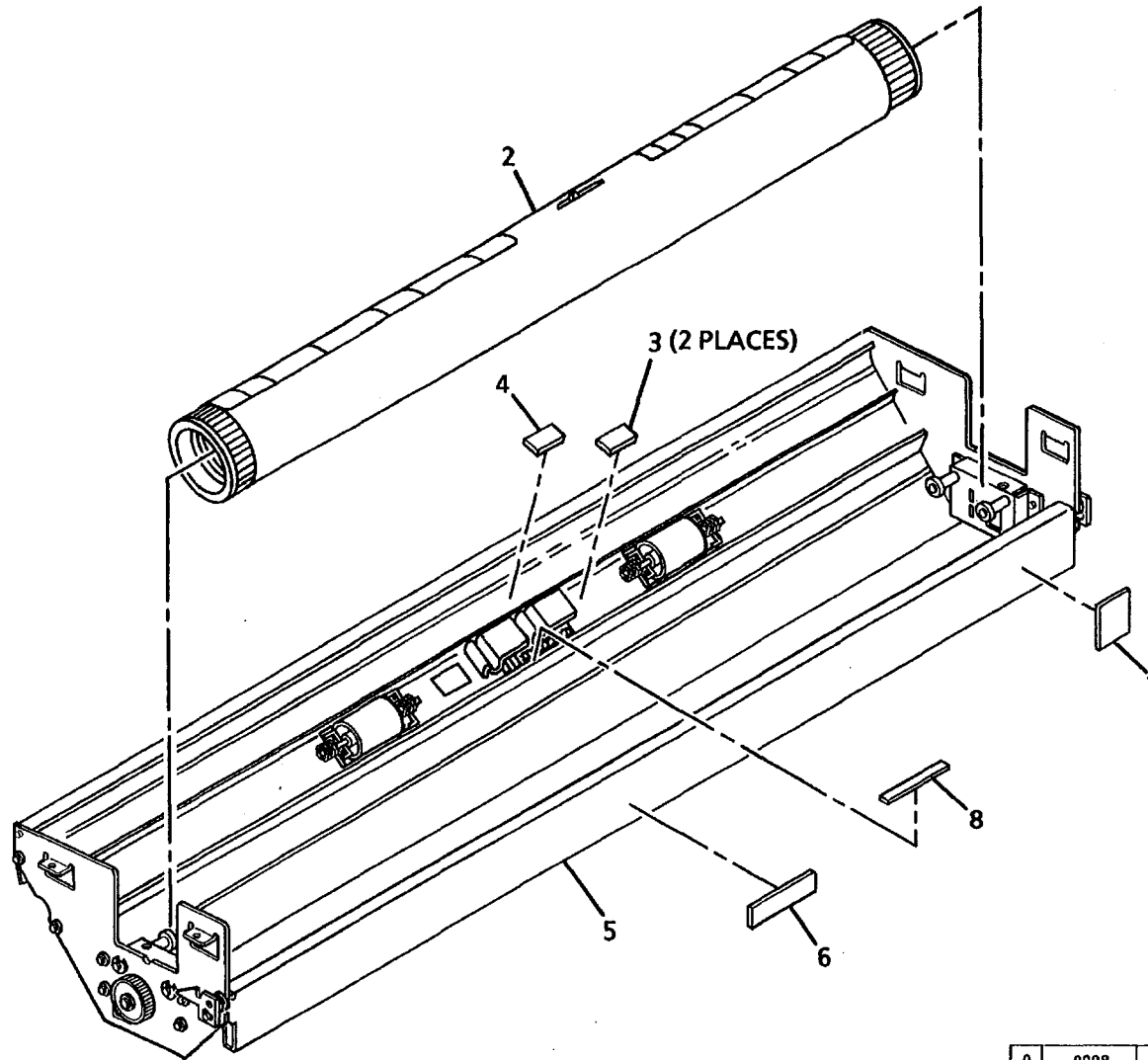
ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY KIT (REF: PL7.1 ITEM 1)
2	--	DRAWER FRAME (P/O ITEM 1)
3	17E4250	BAFFLE STOP
4	68E17221	BRACKET
5	9E27351	PINCH ROLL SPRING
6	--	PINCH ROLL SHAFT (P/O ITEM 1)
7	22E10060	ROLL FEED PINCH ROLL
8	3E17191	LOCK RELEASE HANDLE
9	9E32790	LOCK SPRING
10	29E14460	RETAINER
11	--	LATCH (P/O ITEM 1)
12	9E27330	DRAWER LATCH SPRING
13	29E13701	LATCH PIN
14	--	SUPPLY DRAWER LATCH (P/O ITEM 1)
15	3K5840	HANDLE

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PL 7.6 ROLL SUPPLY DRAWER COMPONENTS (PART 4 OF 4)

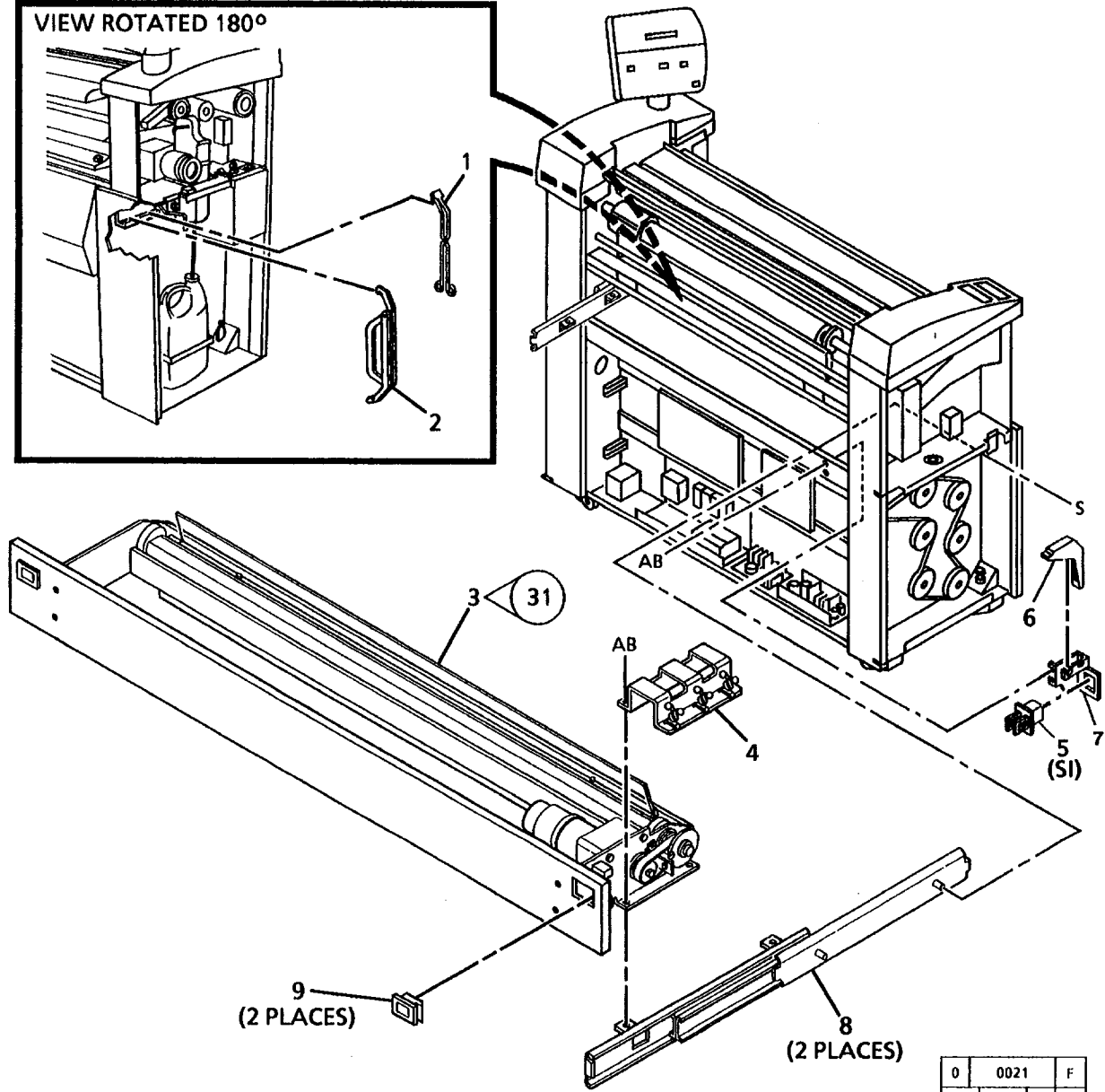
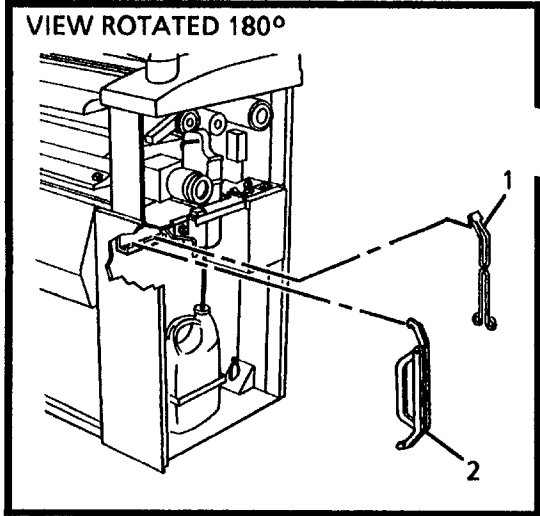
1 {3-8

ITEM	PART	DESCRIPTION
1	--	PART OF ROLL SUPPLY DRAWER ASSEMBLY KIT (REF: PL7.1 ITEM 1)
2	52K3191	ROLL SUPPORT TUBE
3	92E22541	LABEL (PUSH HERE)
4	92E36431	LABEL (MEDIA LEAD)
5	--	DRAWER FRAME (P/O ITEM 1)
6	92E22550	LABEL (PULL HERE)
7	92E36460	LABEL (ROLL NUMBER) (W/TAG 14)
8	92E22560	LABEL (PINCH ARROWS)



0	0008	B
TAR	PL00	X 2

**PL 7.7 MEDIA CUTTER ASSEMBLY**

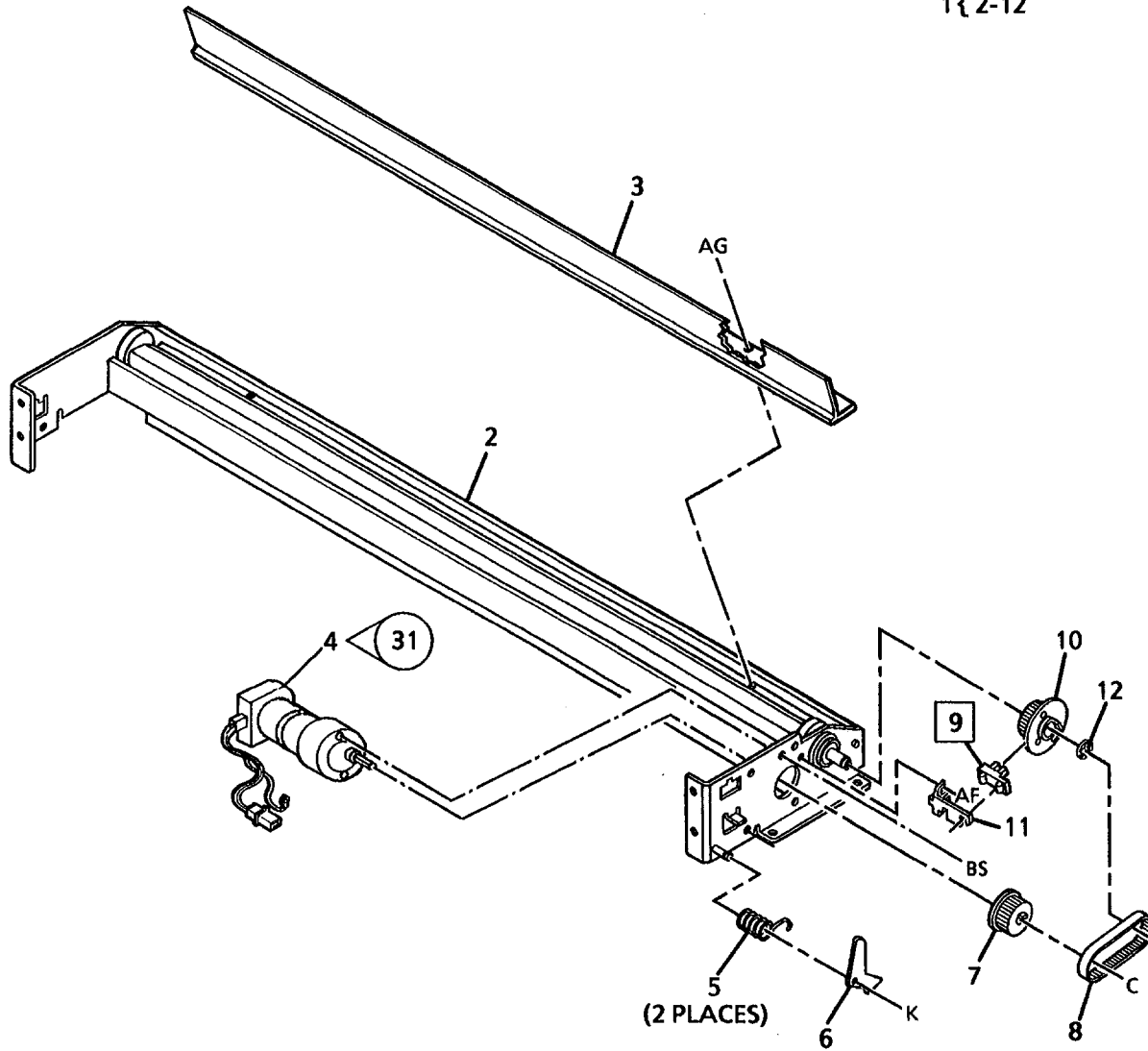


ITEM	PART	DESCRIPTION
1	19E19250	TONGS
2	2K61921	MEDIA ROLL CARRIER
3	37K1100	MEDIA CUTTER ASSEMBLY (W/TAG 22, 31)
4	--	BRACKET (NOT SPARED)
5	110E2640	MEDIA CUTTER COVER INTERLOCK SWITCH (S1)
6	11E4470	CUTTER INTERLOCK ACTUATOR LEVER
7	--	BRACKET (NOT SPARED)
8	10K1360	MEDIA CUTTER SLIDE
9	3E18781	LATCH

0	0021	F
TAR	PL00	X 1

PL 7.8 MEDIA CUTTER COMPONENTS

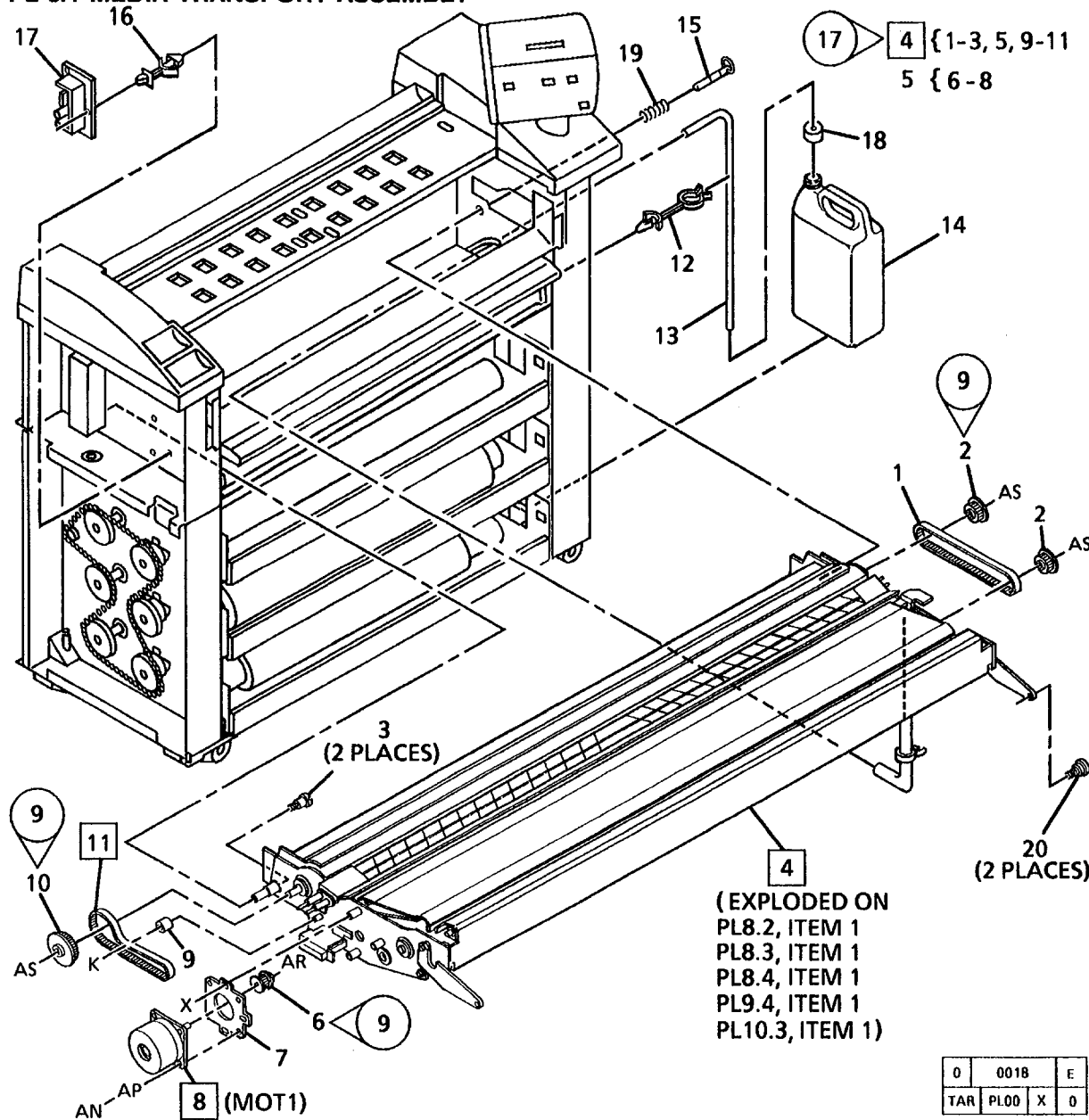
1{2-12



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA CUTTER ASSEMBLY (REF: PL7.7 ITEM 3)
2	--	MEDIA CUTTER FRAME (P/O ITEM 1)
3	38K6601	MEDIA EXIT GUIDE
4	127K26580	CUTTER DRIVE MOTOR (W/TAG 31)
5	9E27340	LATCH SPRING
6	3E16521	CUTTER LATCH
7	20E20680	DRIVE PULLEY (34T)
8	423W57550	DRIVE BELT
9	130E3250	CUTTER HOME SENSOR
10	20E18830	CUTTER DRIVE PULLEY
11	68E62740	SENSOR BRACKET
12	28E7430	RETAINING RING

0	0022	F
TAR	PL00	X 1

**PL 8.1 MEDIA TRANSPORT ASSEMBLY**

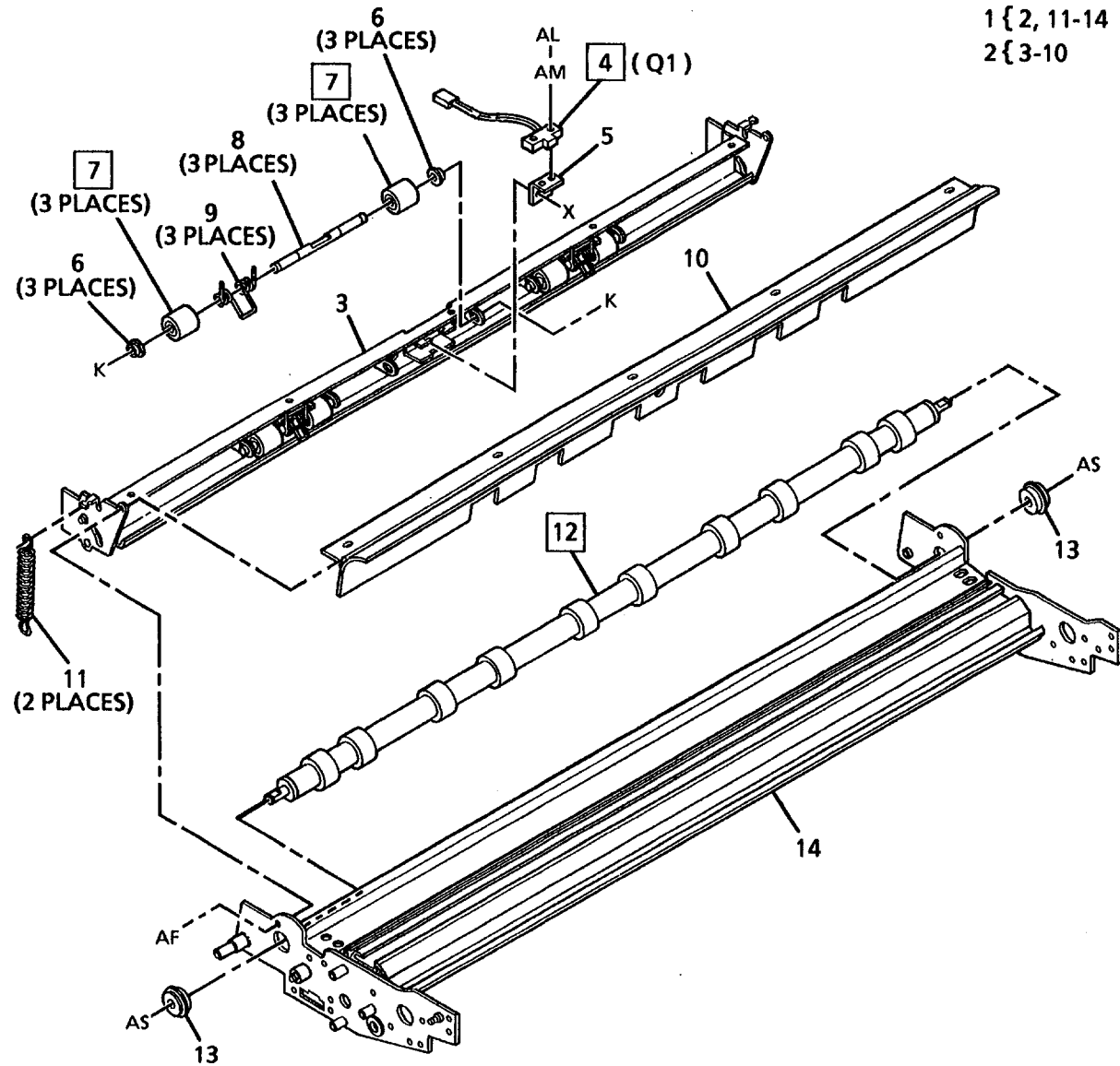


ITEM	PART	DESCRIPTION
1	423W72201	SHEET DRIVE BELT
2	20E13853	SHEET DRIVE PULLEY (W/TAG 9)
3	26E11970	SHOULDER SCREW
4	22K60080	MEDIA TRANSPORT ASSEMBLY (FIELD SPARE) (W/TAG 7, 9, 17) (SEE NOTE 1)
5	--	TRANSPORT DRIVE MOTOR ASSEMBLY (NOT SPARED)
6	20E13603	DRIVE MOTOR PULLEY (W/TAG 9)
7	--	MOTOR MOUNTING PLATE (P/O ITEM 5)
8	127K4293	TRANSPORT DRIVE MOTOR (MOT1)
9	22E11441	IDLER ROLLER
10	20E12353	REGISTRATION DRIVE PULLEY (W/TAG 9)
11	423W64001	REGISTRATION DRIVE BELT
12	--	TWIST CLAMP (NOT SPARED)
13	52E7910	MOISTURE COLLECTION TUBE
14	93E1501	MOISTURE COLLECTION BOTTLE
15	29K1111	PIN
16	--	STANDOFF (NOT SPARED)
17	140K15953	DRIVE MOTOR PWB
18	--	BOTTLE CAP (NOT SPARED)
19	9E32510	COMPRESSION SPRING
20	26E18800	SHOULDER SCREW

NOTE 1: COPIERS W/O TAG 17, WHEN ORDERING ITEM 4, ALSO ORDER ITEMS 8 AND 13 ON PL10.4

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TAR	PL00	X 0

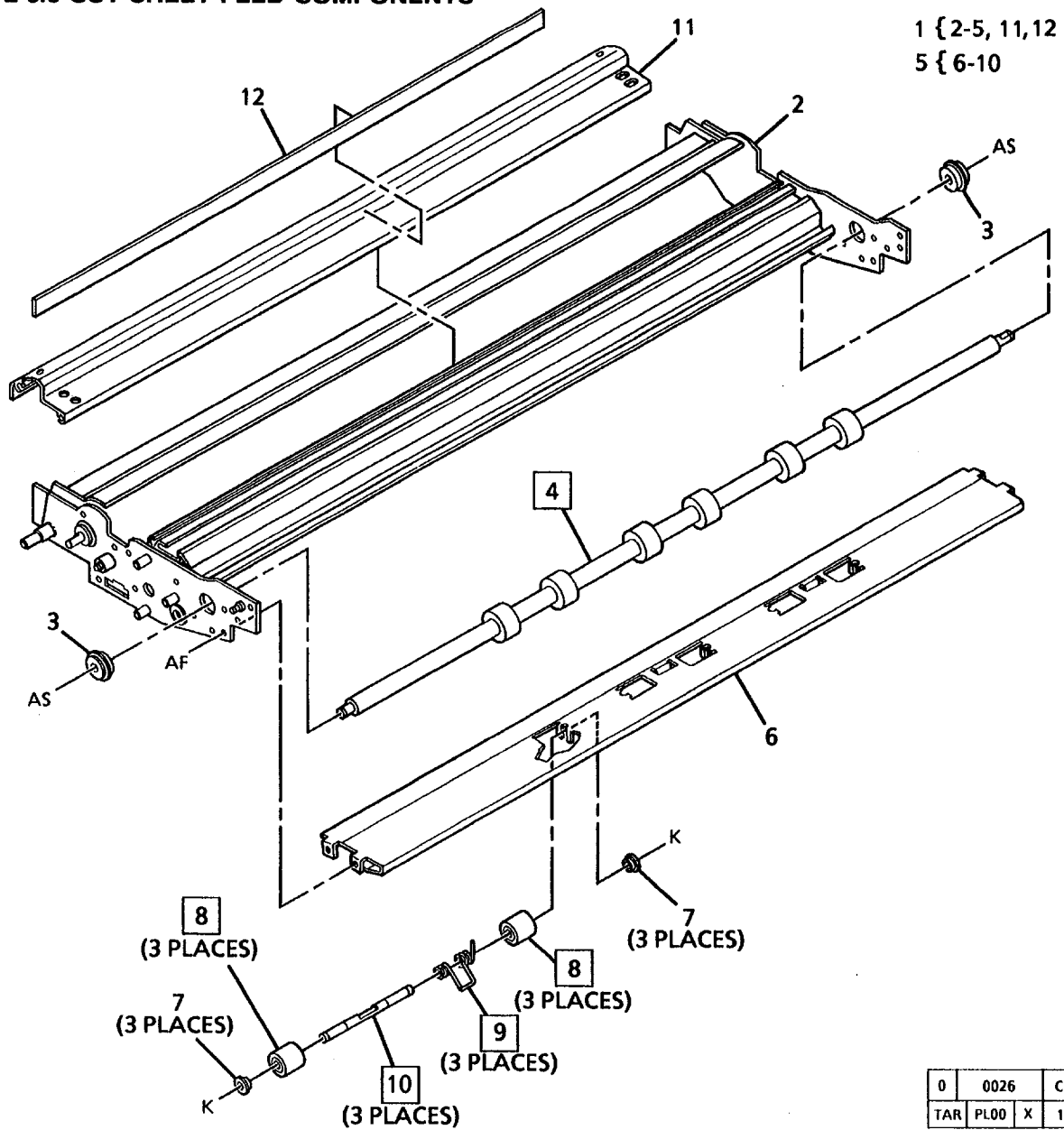
**PL 8.2 MEDIA REGISTRATION COMPONENTS**



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF: PL8.1 ITEM 4)
2	--	REGISTRATION SUPPORT ASSEMBLY (P/O ITEM 1)
3	--	REGISTRATION SUPPORT (P/O ITEM 2)
4	130E5990	MEDIA REGISTRATION SENSOR (Q1)
5	30K52430	REGISTRATION SENSOR BRACKET
6	16E6020	BUSHING
7	22E10531	REGISTRATION PINCH ROLL
8	6E42300	PINCH ROLL SHAFT
9	9E32500	PINCH ROLL SPRING
10	--	TURNAROUND BAFFLE (P/O ITEM 2)
11	--	REGISTRATION SUPPORT SPRING (P/O ITEM 1)
12	6K9723	REGISTRATION DRIVE ROLL (W/O TAG 34)
-	6K17790	REGISTRATION DRIVE ROLL (W/TAG 34)
13	413W31054	BEARING
14	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)

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TAR	PL00	X 0

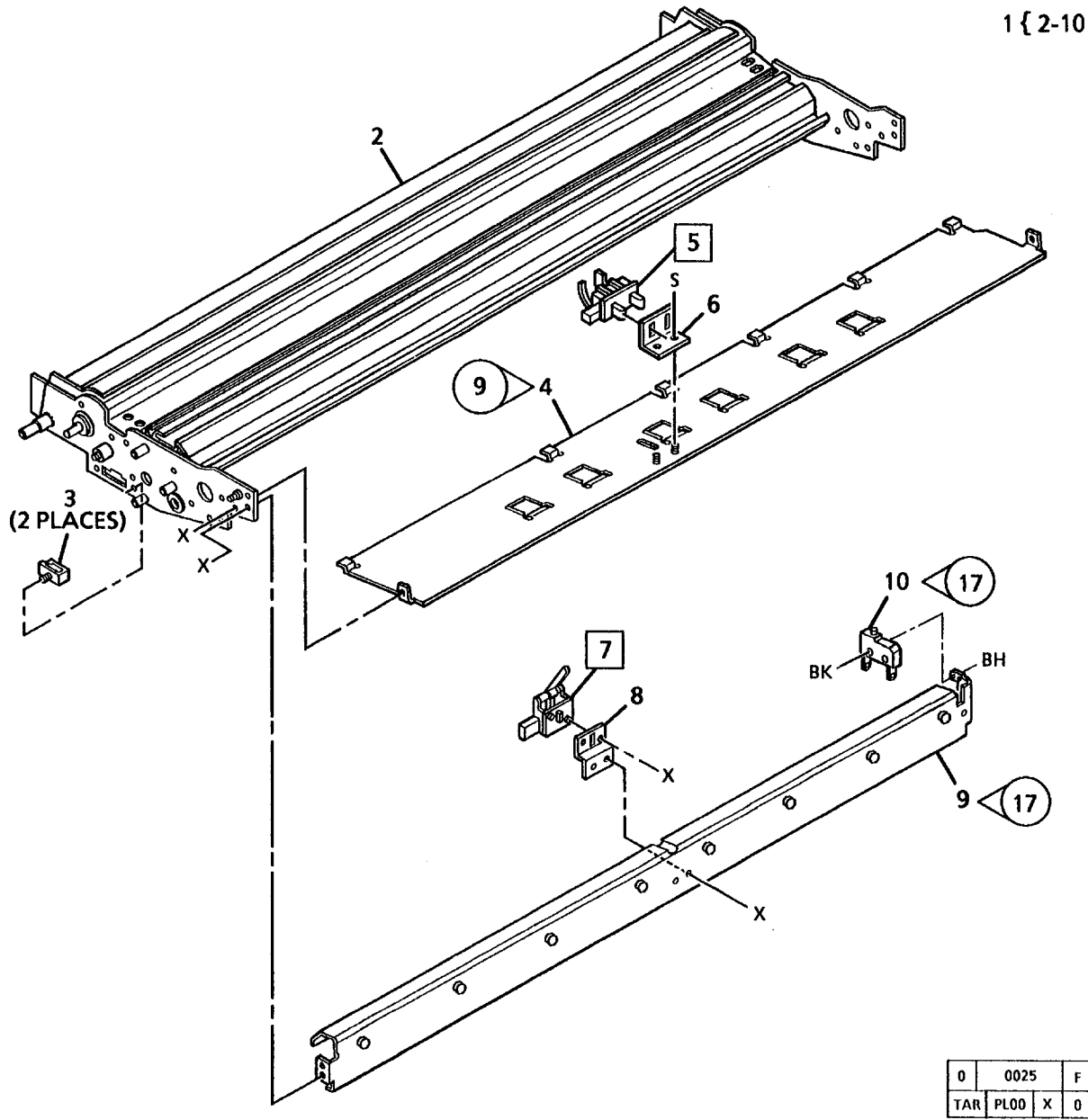
PL 8.3 CUT SHEET FEED COMPONENTS



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF: PL8.1 ITEM 4)
2	--	MEDIA TRANSPORT FRAME (P/O ITEM 1)
3	413W31054	BEARING
4	6K17800	SHEET DRIVE ROLL
5	--	SHEET SUPPORT ASSEMBLY (P/O ITEM 1)
6	--	SHEET LOWER BAFFLE (P/O ITEM 1)
7	16E6020	BUSHING
8	22E9390	SHEET PINCH ROLL
9	9E32490	SHEET PINCH SPRING
10	6E23540	SHEET PINCH SHAFT
11	--	TOP GUIDE (P/O ITEM 1)
12	55K14530	SHIELD

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TAR	PL00	X 1

**PL 8.4 MEDIA TRANSPORT COMPONENTS**

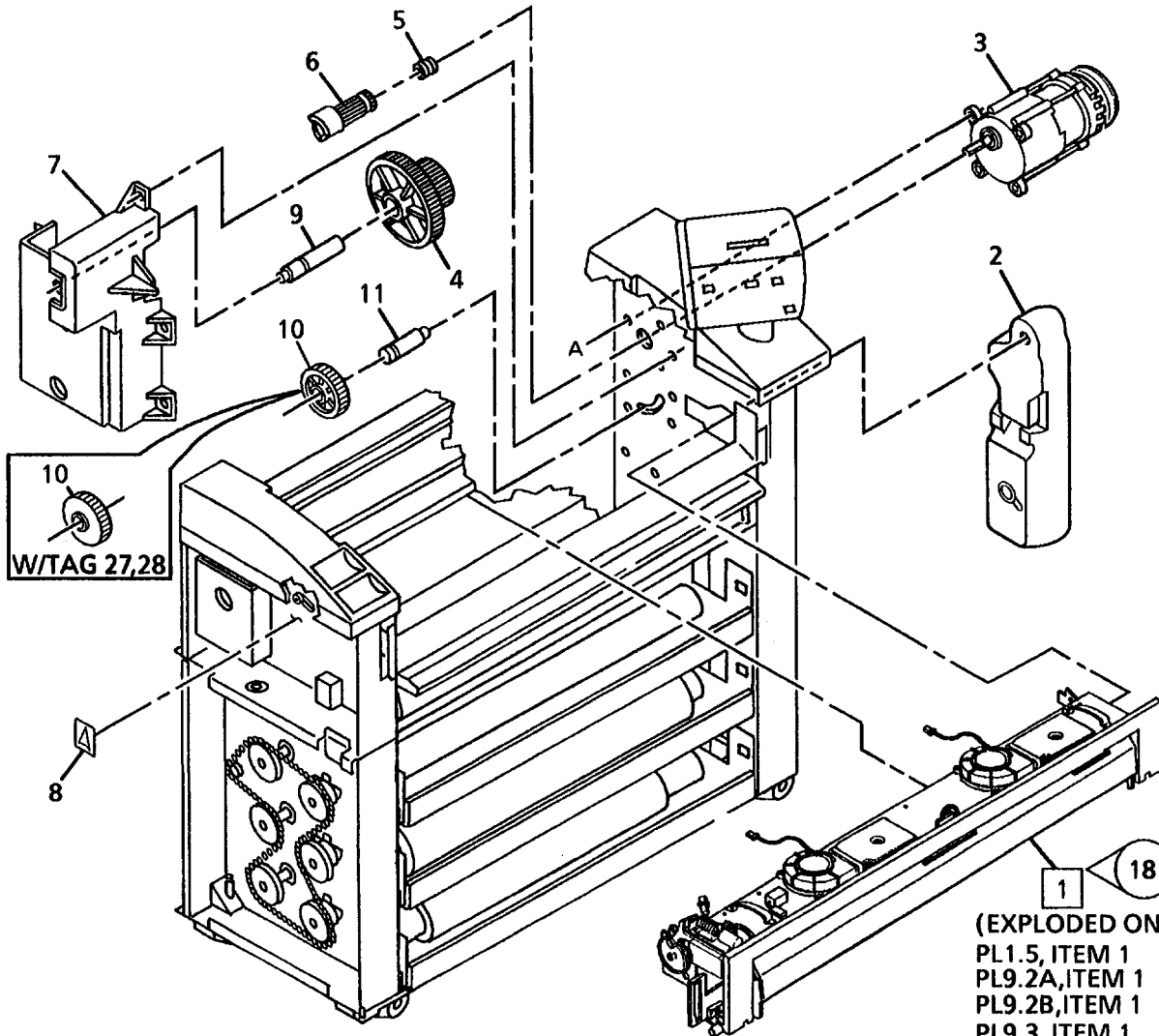


ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF: PL8.1 ITEM 4)
2	--	TRANSPORT FRAME (P/O ITEM 1)
3	--	CABLE CLIP (P/O ITEM 1)
4	38K7214	SHEET UPPER BAFFLE (W/TAG 9)
5	110K3731	SHEET FEED SENSOR BRACKET (P/O ITEM 1)
6	--	MEDIA EXIT SWITCH
7	110K3340	BRACKET (P/O ITEM 1)
8	--	EXIT SUPPORT (P/O KIT, PL10.4 ITEM 13C)
9	30K58590	STRIPPER FINGER JAM SWITCH (P/O KIT, PL10.4 ITEM 13D) (W/TAG 17)
10	110E5500	STRIPPER FINGER JAM SWITCH (P/O KIT, PL10.4 ITEM 13D) (W/TAG 17)

0	0025	F
TAR	PL00	X 0



**PL 9.1 XEROGRAPHIC MODULE ASSEMBLY**



ITEM	PART	DESCRIPTION
1	600K54071	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (TAG 17, 18) (SEE NOTE 1)
-	600K54081	XEROGRAPHIC MODULE ASSEMBLY (50HZ) (TAG 17, 18) (SEE NOTE 1)
2	93K960	TONER WASTE BOTTLE (60HZ)
-	93K970	TONER WASTE BOTTLE (50HZ)
3	127E5073	DRUM/DEVELOPER DRIVE MOTOR (60HZ)
-	127E6891	DRUM/DEVELOPER DRIVE MOTOR (50HZ)
4	7E15332	DRUM DRIVE GEAR (36T/68T) (W/O TAG 27, 28)
-	7E26981	DRUM DRIVE GEAR (36T/68T) (W/TAG 27, 28)
5	9E41251	COUPLING SPRING
6	7E15351	DRIVE GEAR/COUPLING (W/O TAG 27, 28)
-	7E27001	DRIVE GEAR/COUPLING (W/TAG 27, 28)
7	--	GEAR HOUSING (NOT SPARED)
8	92E36450	LABEL (RED ARROW)
9	6E23761	IDLER SHAFT
10	7E15342	GEAR (48T) (W/O TAG 27, 28)
-	7K7510	GEAR (48T) (W/TAG 27, 28)
11	29E13641	DRUM/DEVELOPER DRIVE PIN

NOTE 1: COPIERS W/O TAG 17, WHEN ORDERING ITEM 1, ALSO ORDER ITEM 9 ON PL8.4

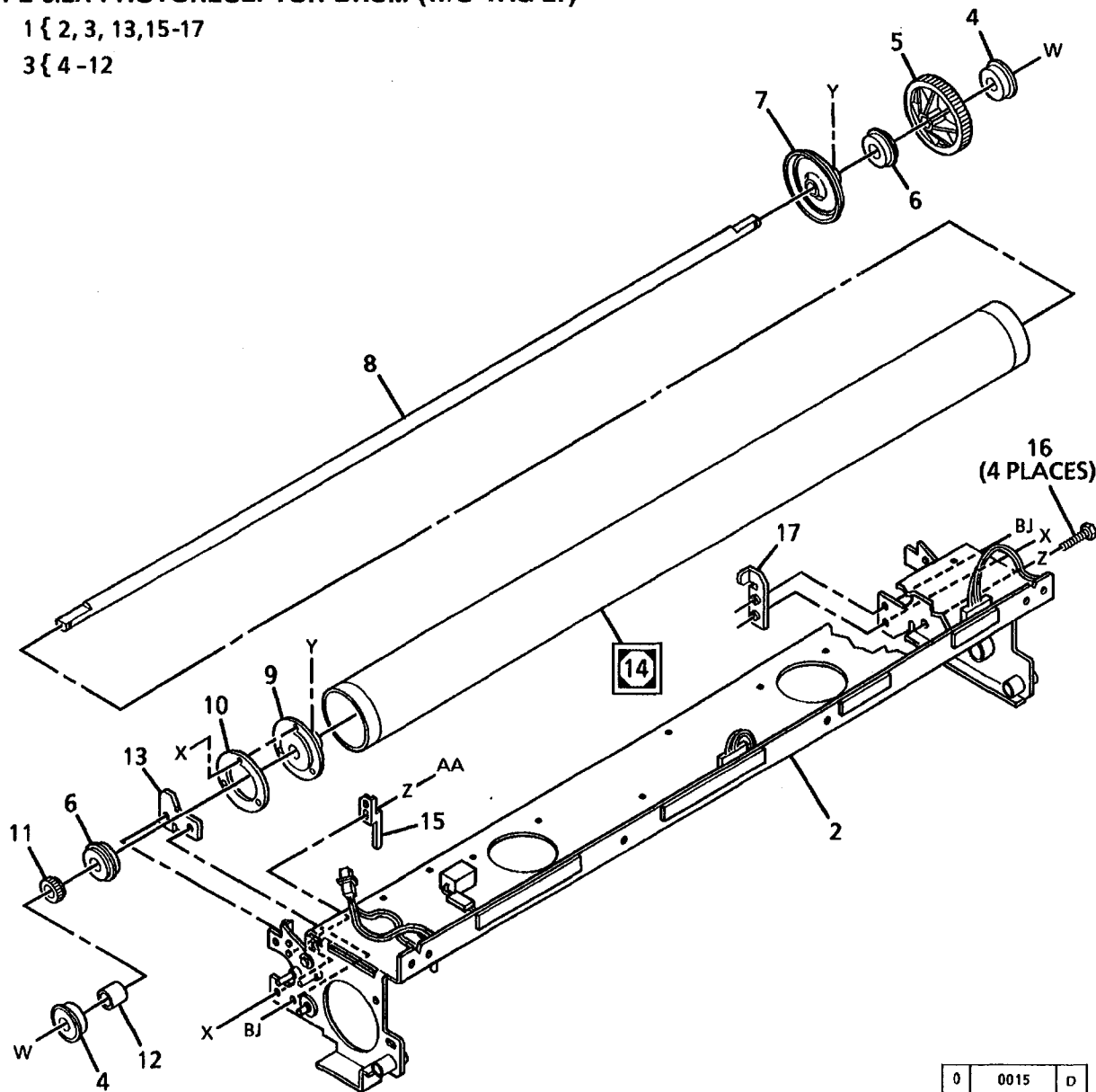
(EXPLODED ON  
 PL1.5, ITEM 1  
 PL9.2A, ITEM 1  
 PL9.2B, ITEM 1  
 PL9.3, ITEM 1  
 PL9.5, ITEM 1  
 PL9.6, ITEM 1)

0	0006	G
TAR	PL00	X 0

**PL 9.2A PHOTORECEPTOR DRUM (W/O TAG 27)**

1 { 2, 3, 13, 15-17

3 { 4-12



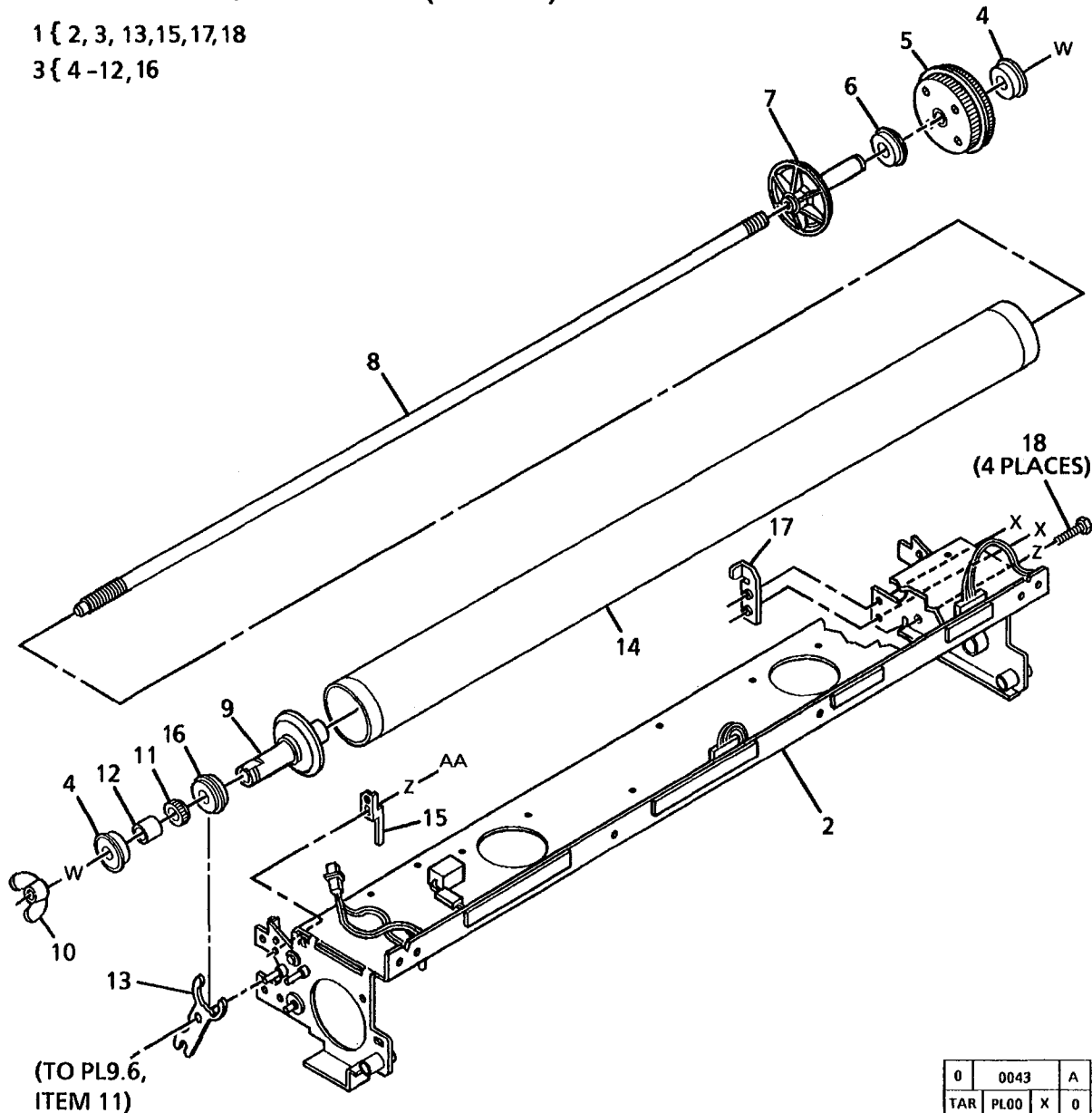
ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	6K9654	PHOTORECEPTOR SHAFT ASSEMBLY
4	13K380	BEARING
5	--	DRUM DRIVE GEAR (P/O ITEM 3)
6	413W31553	BEARING
7	--	RH END CAP (P/O ITEM 3)
8	--	SHAFT (P/O ITEM 3)
9	--	LH HUB (P/O ITEM 3)
10	--	LH END CAP (P/O ITEM 3)
11	7E1340	CLEANER BLADE AND TONER AUGER DRIVE GEAR
12	--	SPACER (P/O ITEM 3)
13	--	LH SUPPORT (P/O ITEM 1)
14	1R81	PHOTORECEPTOR DRUM
15	30E16161	GROUND CLIP
16	26E3931	SCREW (NO.8-TAPPING)
17	--	RH SUPPORT (P/O ITEM 1)

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TAR	PL00 X 0	

PL 9.2B PHOTORECEPTOR DRUM (W/TAG 27)

1 { 2, 3, 13, 15, 17, 18

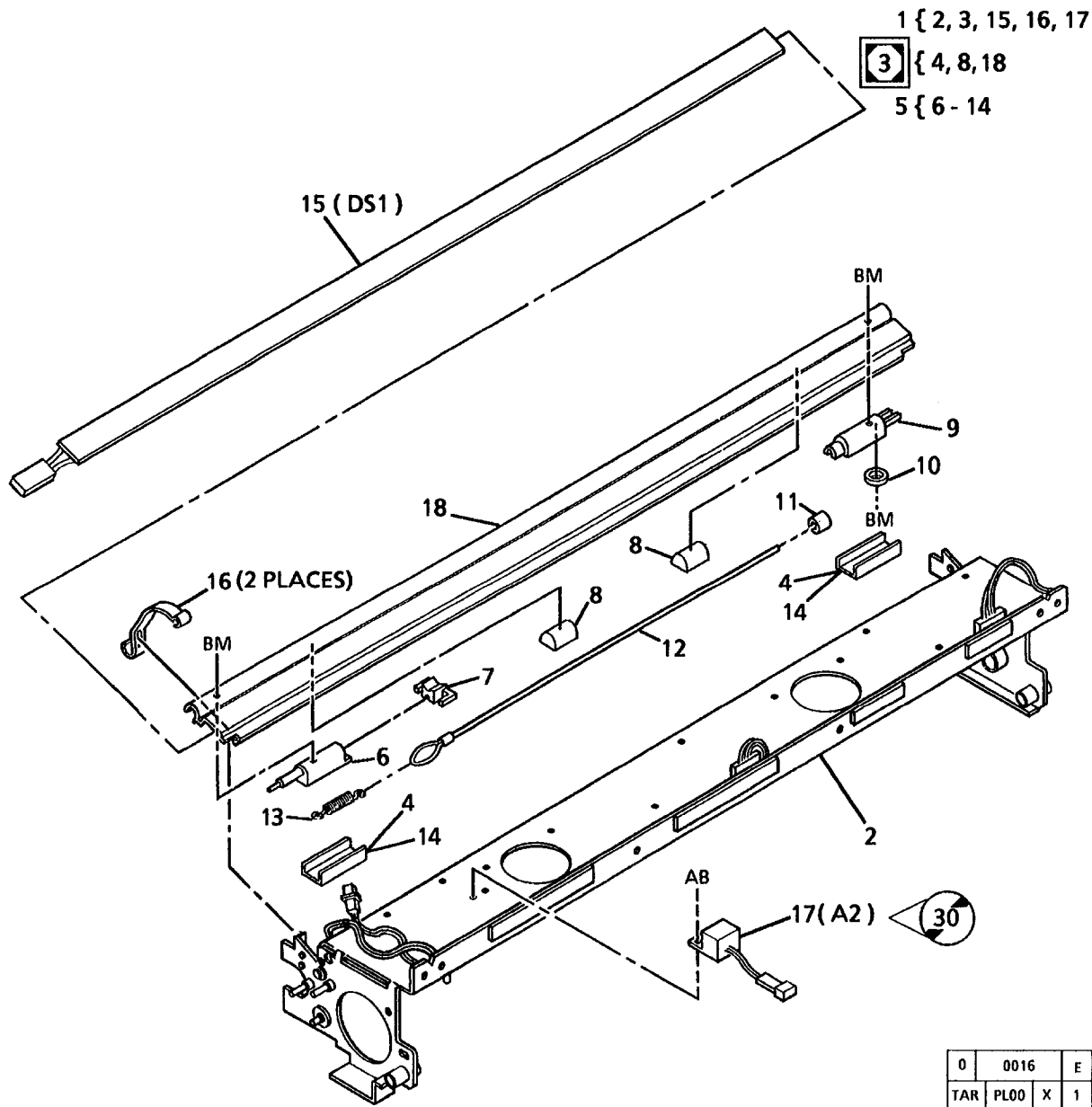
3 { 4 - 12, 16



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	6K15830	PHOTORECEPTOR SHAFT ASSEMBLY
4	13K380	BEARING
5	7E27031	DRUM DRIVE GEAR
6	413W31553	BEARING
7	--	RH END CAP (P/O ITEM 3)
8	--	SHAFT (P/O ITEM 3)
9	--	LH HUB (P/O ITEM 3)
10	230W652	WING NUT
11	7E1340	CLEANER BLADE AND TONER AUGER DRIVE GEAR
12	--	SPACER (P/O ITEM 3)
13	--	LH SUPPORT (P/O ITEM 1)
14	1R81	PHOTORECEPTOR DRUM
15	30E16161	GROUND CLIP
16	--	BEARING (P/O ITEM 3)
17	--	RH SUPPORT (P/O ITEM 1)
18	26E3931	SCREW (NO.8-TAPPING)

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TAR	PL00	X 0

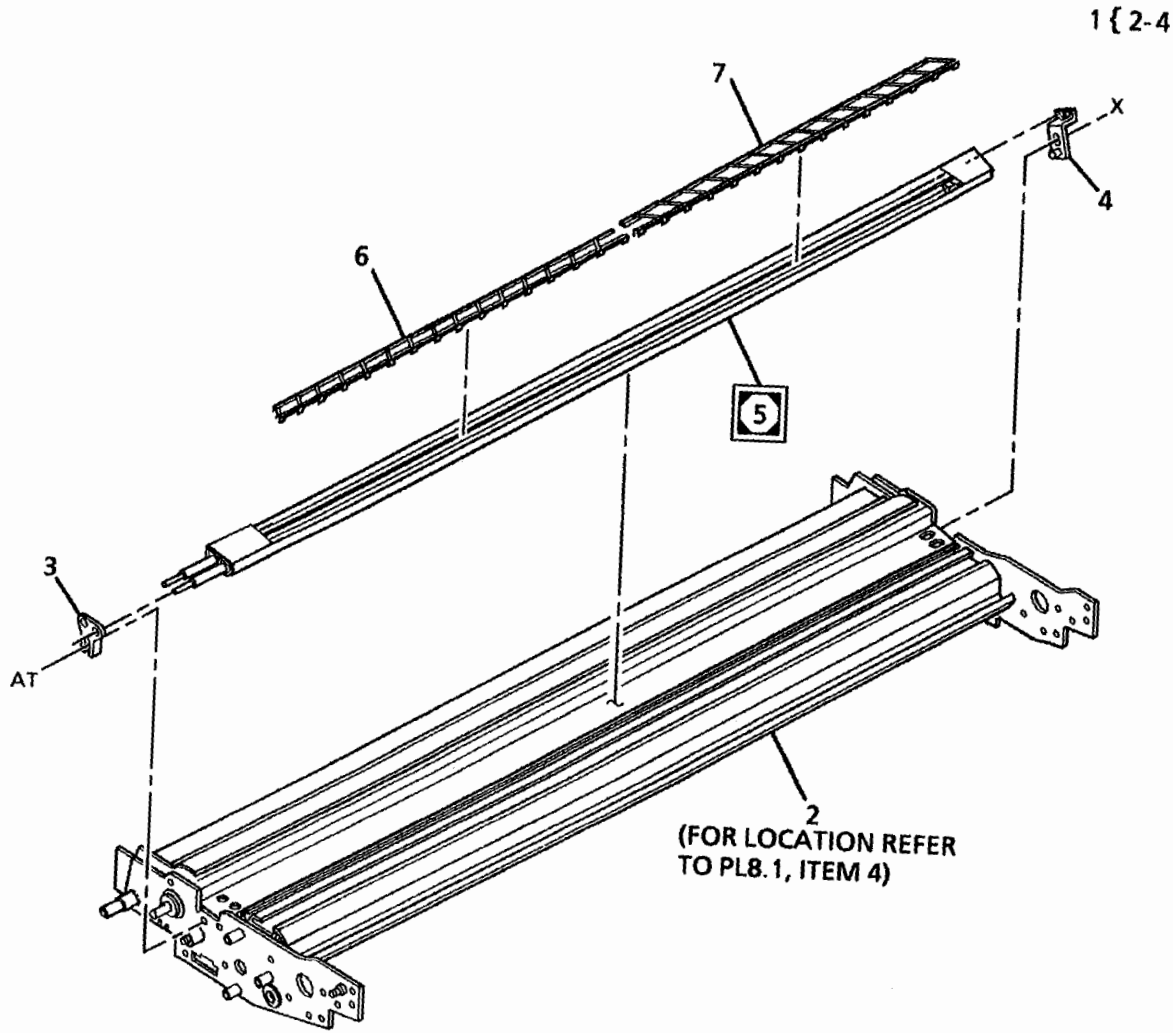
**PL 9.3 CHARGE COROTRON AND ERASE LAMP**



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	125K1412	CHARGE COROTRON/ ERASE LAMP ASSEMBLY
4	--	ARC SHIELD (P/O ITEM 3)
5	600K37740	COROTRON REPAIR KIT
6	--	REAR BLOCK (P/O ITEM 5)
7	--	WIRE GUIDE (P/O ITEM 5)
8	4E502	FOAM DAMPER
9	--	FRONT BLOCK (P/O ITEM 5)
10	--	CLAMP (P/O ITEM 5)
11	--	FERRITE BEAD (P/O ITEM 5)
12	--	WIRE (GOLD)(P/O ITEM 5)
13	--	SPRING (P/O ITEM 5)
14	--	ARC SHIELD (P/O ITEM 5)
15	101K18880	ERASE LAMP (DS1) (W/TAG 30)
-	122K1011	ERASE LAMP (DS1) (W/O TAG 30)
16	9E34222	COROTRON RETAINER
17	112E200	POWER INVERTER (A2) (W/O TAG 30)
18	--	CHARGE COROTRON/ ERASE LAMP HOUSING (P/O ITEM 3)

0	0016	E
TAR	PL00	X 1

PL 9.4 TRANSFER/DETACK COROTRON



ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF: PL8.1 ITEM 4)
2	--	TRANSPORT FRAME (P/O ITEM 1)
3	19E16080	LEFT COROTRON CLAMP
4	19E19971	RIGHT COROTRON CLAMP
5	125K2261	TRANSFER/DETACK COROTRON (W/TAG 34)
	125K1402	TRANSFER/DETACK COROTRON (W/O TAG 34)
6	38E6610	LEFT PAPER GUIDE
7	38E6620	RIGHT PAPER GUIDE

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TAR	PL00	X 0

**PL 9.5 PHOTORECEPTOR DRUM CLEANING (PART 1 OF 2)**

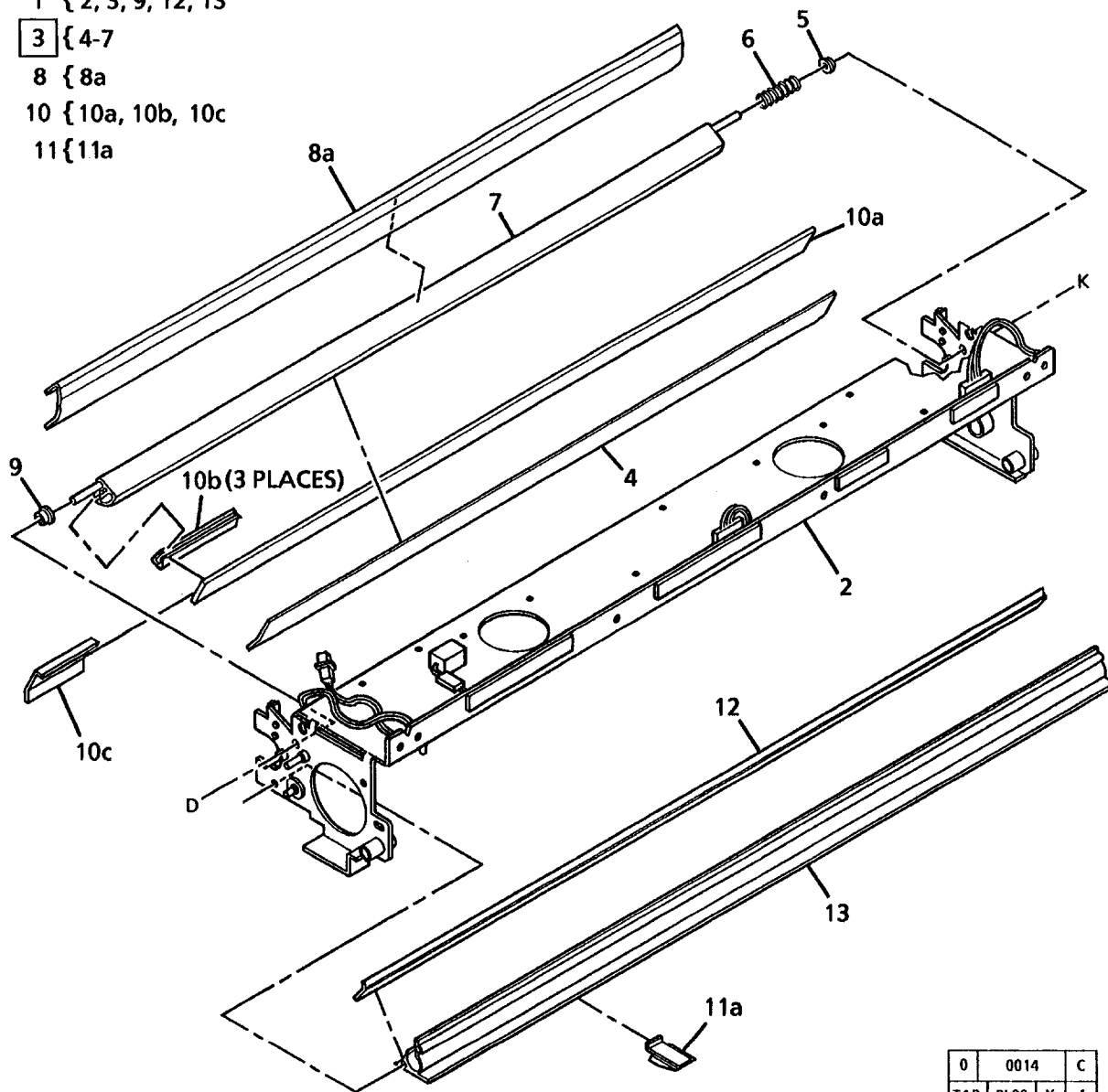
1 { 2, 3, 9, 12, 13

3 { 4-7

8 { 8a

10 { 10a, 10b, 10c

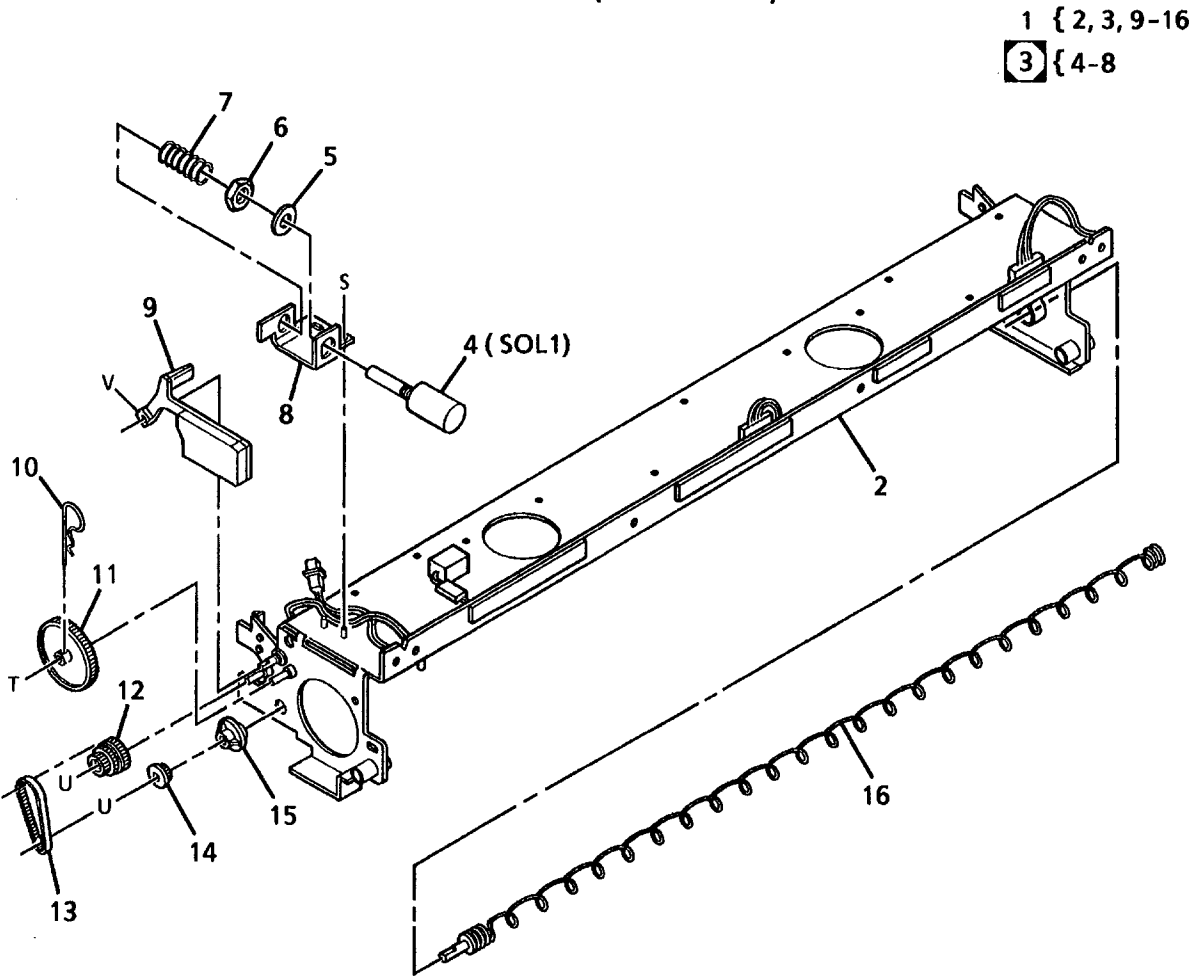
11 { 11a



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	42K1390	CLEANER BLADE ASSEMBLY
4	35E3580	BLADE SEAL
5	13E1571	BEARING
6	9E6960	SPRING
7	--	CLEANER HOUSING (P/O ITEM 3)
8	600K29981	SEAL CONTAMINATION KIT
8a	--	SEAL
9	13E7161	BEARING
10	600K25780	CLEANER BLADE REPAIR KIT
10a	--	CLEANER BLADE
10b	--	CLEANER BLADE RETAINER
10c	--	CLEANER BLADE SEAL
11	600K8481	MEDIA DEFLECTOR KIT (7/KIT)
11a	--	MEDIA GUIDE
12	35K1222	PHOTORECEPTOR SEAL HOUSING (P/O ITEM 1)
13	--	

0	0014	C
TAR	PL00	X 1

PL 9.6 PHOTORECEPTOR DRUM CLEANING (PART 2 OF 2)

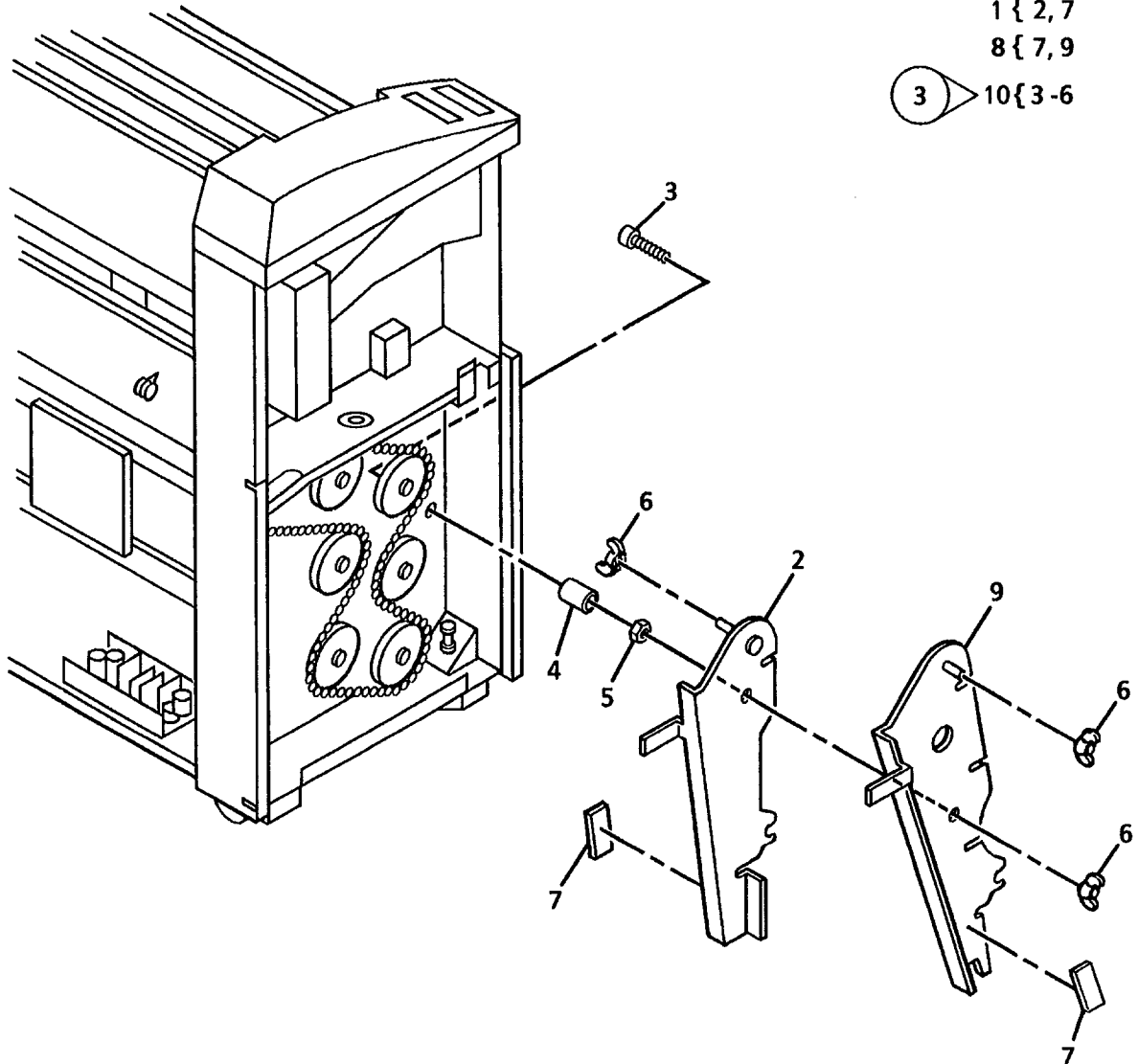


1 { 2, 3, 9-16  
**3** { 4-8

ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL9.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	121K1751	CLEANER BLADE SOLENOID ASSEMBLY (P/O ITEM 3)
4	--	CLEANER BLADE SOLENOID (SOL1) (P/O ITEM 3)
5	--	LOCKWASHER (P/O ITEM 3)
6	--	NUT (P/O ITEM 3)
7	--	SPRING (P/O ITEM 3)
8	--	BRACKET (P/O ITEM 3)
9	36E93	BLADE WEIGHT
10	29E3560	COTTER PIN
11	7E1331	TRANSITION GEAR
12	7E5221	GEAR PULLEY
13	23E1620	AUGER DRIVE BELT
14	20E4350	AUGER PULLEY
15	13E803	AUGER BEARING
16	94K85	WASTE TONER AUGER

0	0013	C
TAR	PL00	X 0

**PL 9.7 XEROGRAPHIC MODULE SERVICE RAILS**

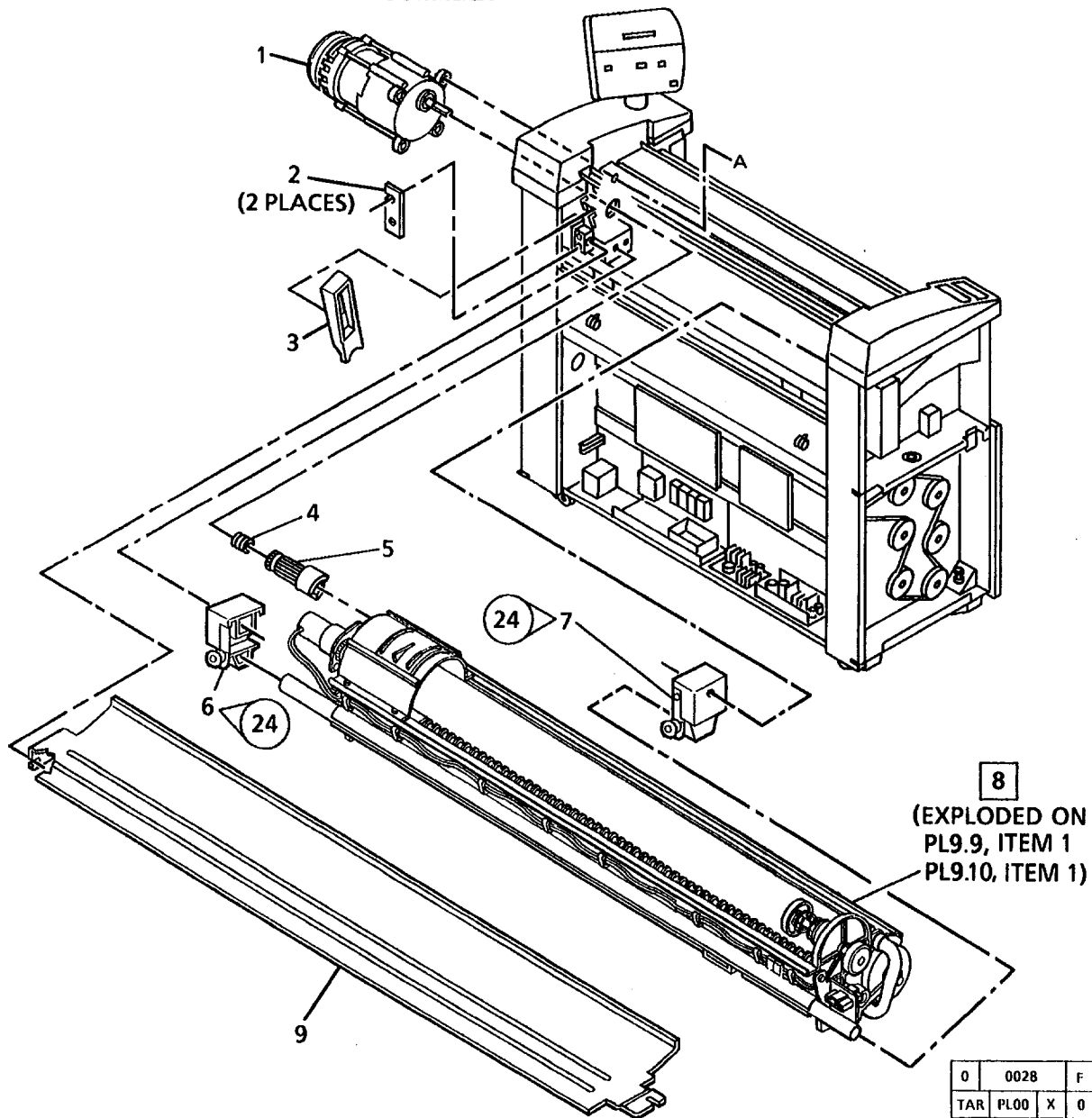


ITEM	PART	DESCRIPTION
1	68K2881	RH SERVICE RAIL ASSEMBLY
2	--	RH SERVICE RAIL (P/O ITEM 1)
3	--	BOLT (P/O ITEM 10)
4	--	STANDOFF (P/O ITEM 10)
5	--	NUT (P/O ITEM 10)
6	--	WING NUT (M10) (P/O ITEM 10)
7	--	LABEL (CAUTION) (P/O ITEM 1 AND 8)
8	68K2891	LH SERVICE RAIL ASSEMBLY
9	--	LH SERVICE RAIL (P/O ITEM 8)
10	600K39110	SERVICE BRACKET STORAGE KIT (TAG 3)

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TAR	PL00 X	0



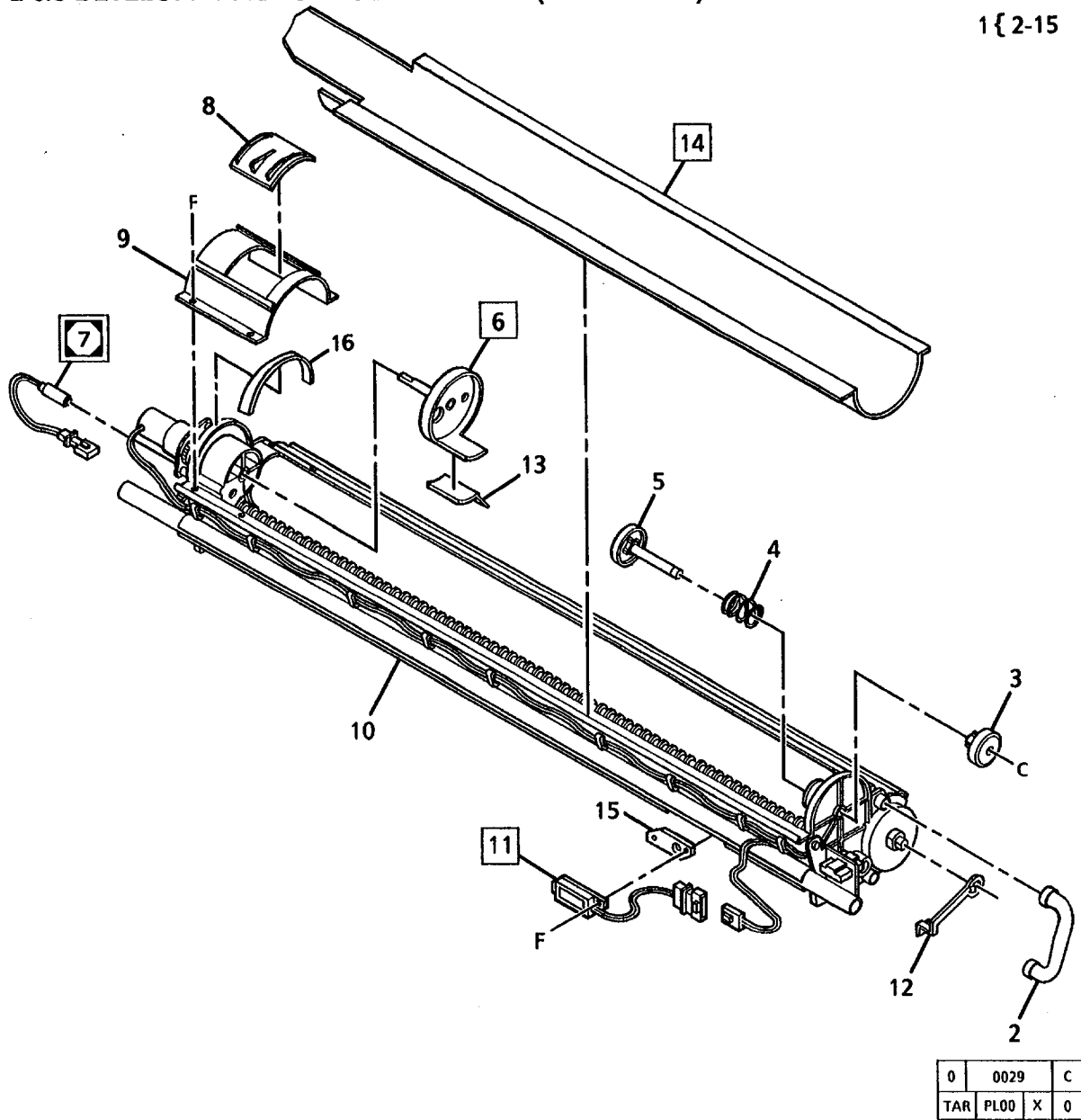
# PL 9.8 DEVELOPER MODULE ASSEMBLY



ITEM	PART	DESCRIPTION
1	127E5073	DRUM/DEVELOPER DRIVE MOTOR (60HZ)
-	127E6891	DRUM/DEVELOPER DRIVE MOTOR (50HZ)
2	19E16240	CLAMP
3	28E7771	RETAINER
4	9E41251	COUPLING SPRING
5	7E15351	DRIVE GEAR/COUPLING
6	30K53710	RIGHT DEVELOPER SUPPORT (W/TAG 24)
7	30K53720	LEFT DEVELOPER SUPPORT (W/TAG 24)
8	121K4822	DEVELOPER MODULE ASSEMBLY
9	55E16352	DEVELOPER BAFFLE

PL 9.9 DEVELOPER MODULE COMPONENTS (PART 1 OF 2)

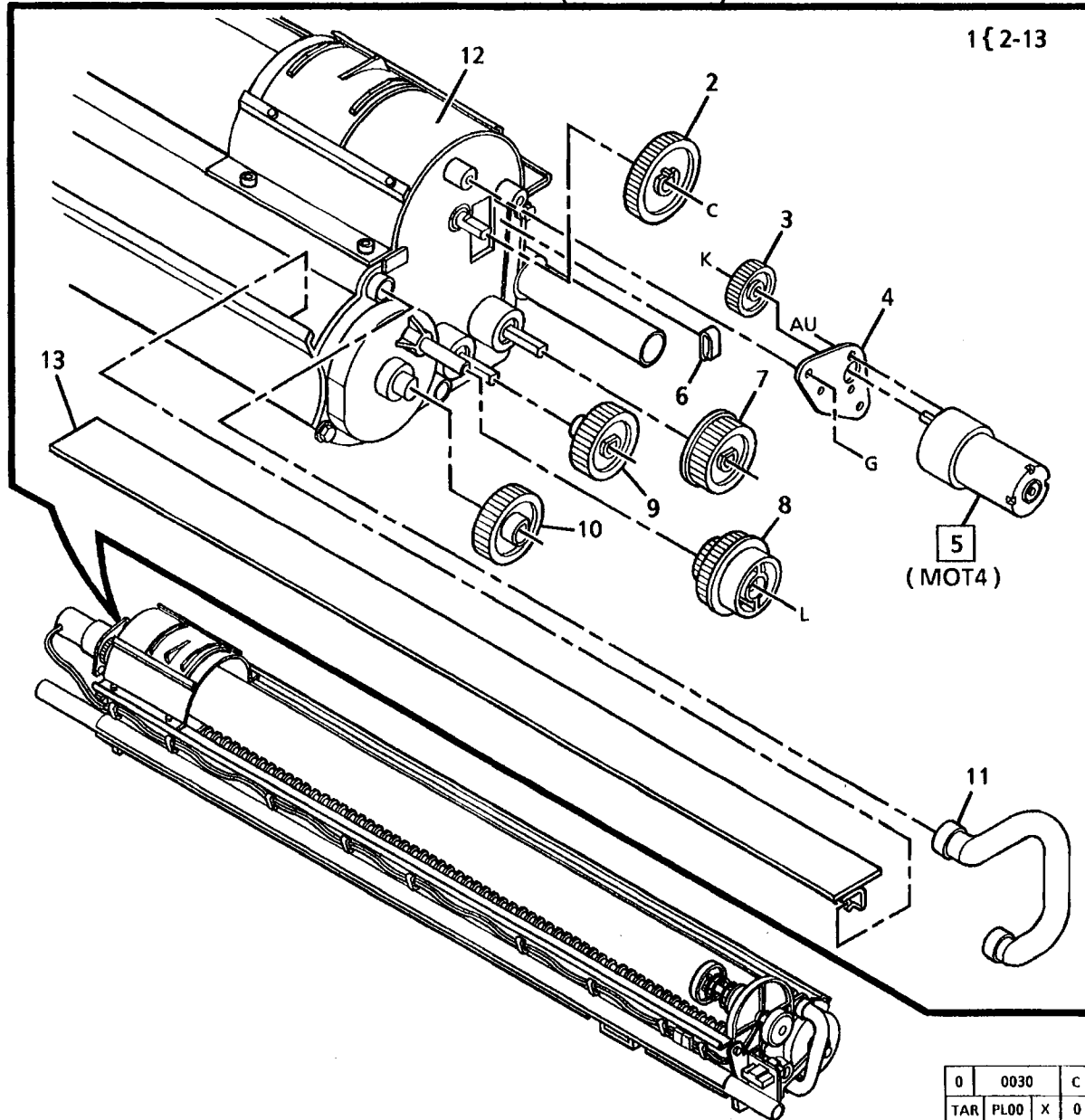
1 { 2-15



ITEM	PART	DESCRIPTION
1	--	PART OF DEVELOPER ASSEMBLY (REF: PL9.8 ITEM 8)
2	54E3181	PRESSURE EQUILIZER TUBE
3	3E19330	CARTRIDGE KNOB
4	--	SPRING (P/O ITEM 1)
5	5K1351	CARTRIDGE HUB
6	6K9871	CARTRIDGE DRIVE PLATE
7	130K30381	TONER HOME SENSOR
8	2E40470	TOP SHIELD DOOR
9	55K13840	TOP SHIELD
10	--	DEVELOPER FRAME (P/O ITEM 1)
11	130K53300	TONER SENSOR
12	19E15551	BIAS CLIP
13	1E23080	TONER STRIP
14	55K13830	SUMP SHIELD
15	--	SENSOR SPACER (P/O ITEM 1)
16	35E12210	SEAL

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TAR	PL00	X 0

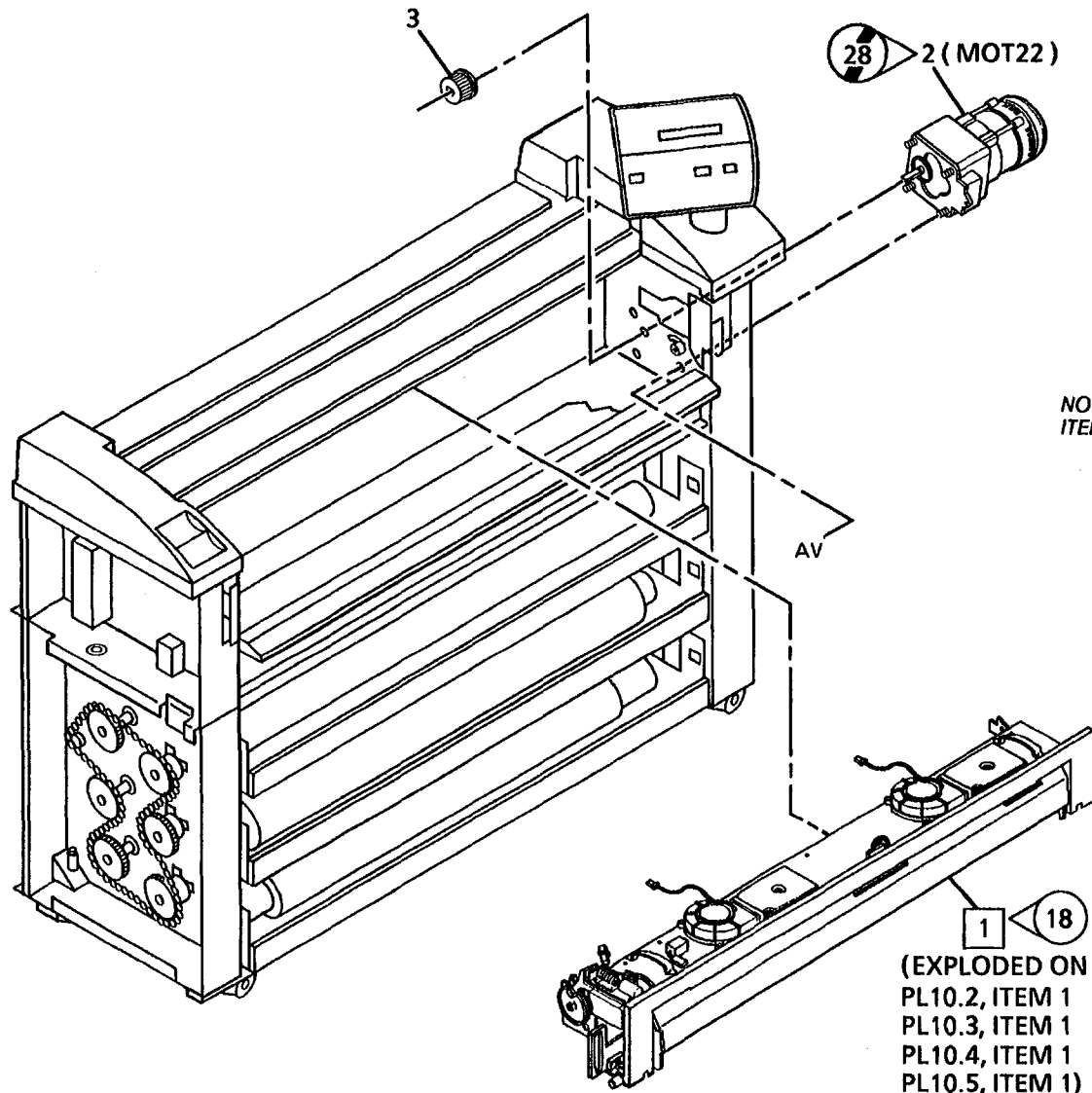
PL 9.10 DEVELOPER MODULE COMPONENTS (PART 2 OF 2)



ITEM	PART	DESCRIPTION
1	--	PART OF DEVELOPER ASSEMBLY (REF: PL9.8 ITEM 8)
2	7E16330	CARTRIDGE GEAR (44T)
3	7E16341	CARTRIDGE DRIVE GEAR (26T)
4	15E17790	MOTOR MOUNTING PLATE
5	127K8920	CARTRIDGE DRIVE MOTOR (MOT4)
6	120E4750	CABLE CLIP (P/O KIT, REF: PL10.4, ITEM 13E)
7	7E14690	AUGER DRIVE GEAR (37T)
8	7K5260	DEVELOPER DRIVE GEAR (43T/25T)
9	7E14700	AUGER DRIVE GEAR (37T)
10	7E14710	MAGNETIC ROLL DRIVE GEAR (40T)
11	54E3491	PRESSURE EQUILIZER TUBE
12	--	DEVELOPER FRAME (P/O ITEM 1)
13	35K4581	SEAL

0	0030	C
TAR	PL00 X	0

**PL 10.1 XEROGRAPHIC MODULE ASSEMBLY**



ITEM	PART	DESCRIPTION
1	600K54071	XEROGRAPHIC MODULE ASSEMBLY (60HZ) (TAG 17, 18) (SEE NOTE 1)
-	600K54081	XEROGRAPHIC MODULE ASSEMBLY (50HZ) (TAG 17, 18) (SEE NOTE 1)
2	127E6911	FUSER DRIVE MOTOR (60HZ) (MOT22) (W/O TAG 28)
-	127E6901	FUSER DRIVE MOTOR (50HZ) (MOT22) (W/O TAG 28)
3	20E13751	DRIVE PULLEY (28T)

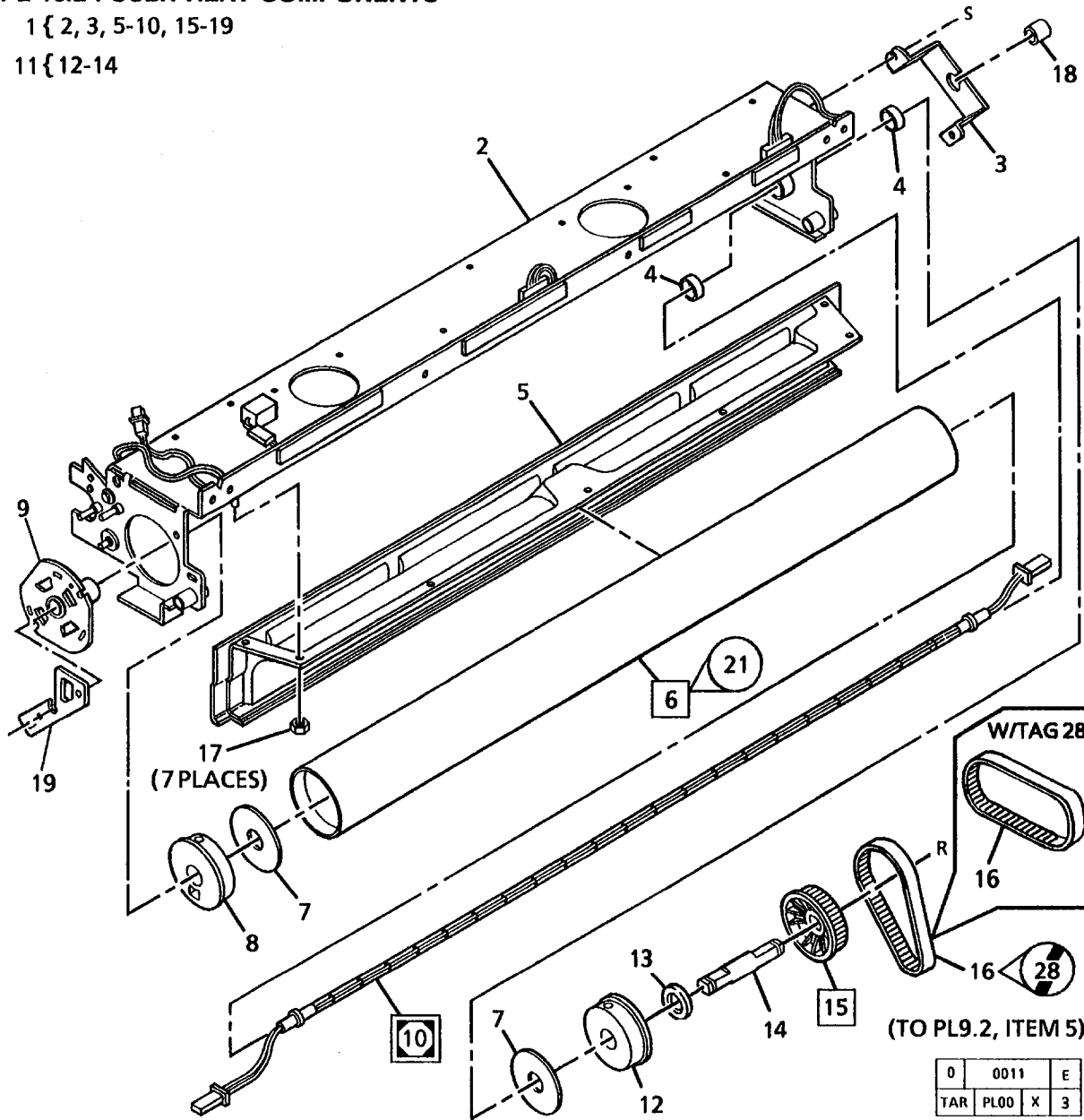
NOTE 1: COPIERS W/O TAG 17, WHEN ORDERING ITEM 1, ALSO ORDER ITEM 9 ON PL8.4

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TAR	PL00 X	1

**PL 10.2 FUSER HEAT COMPONENTS**

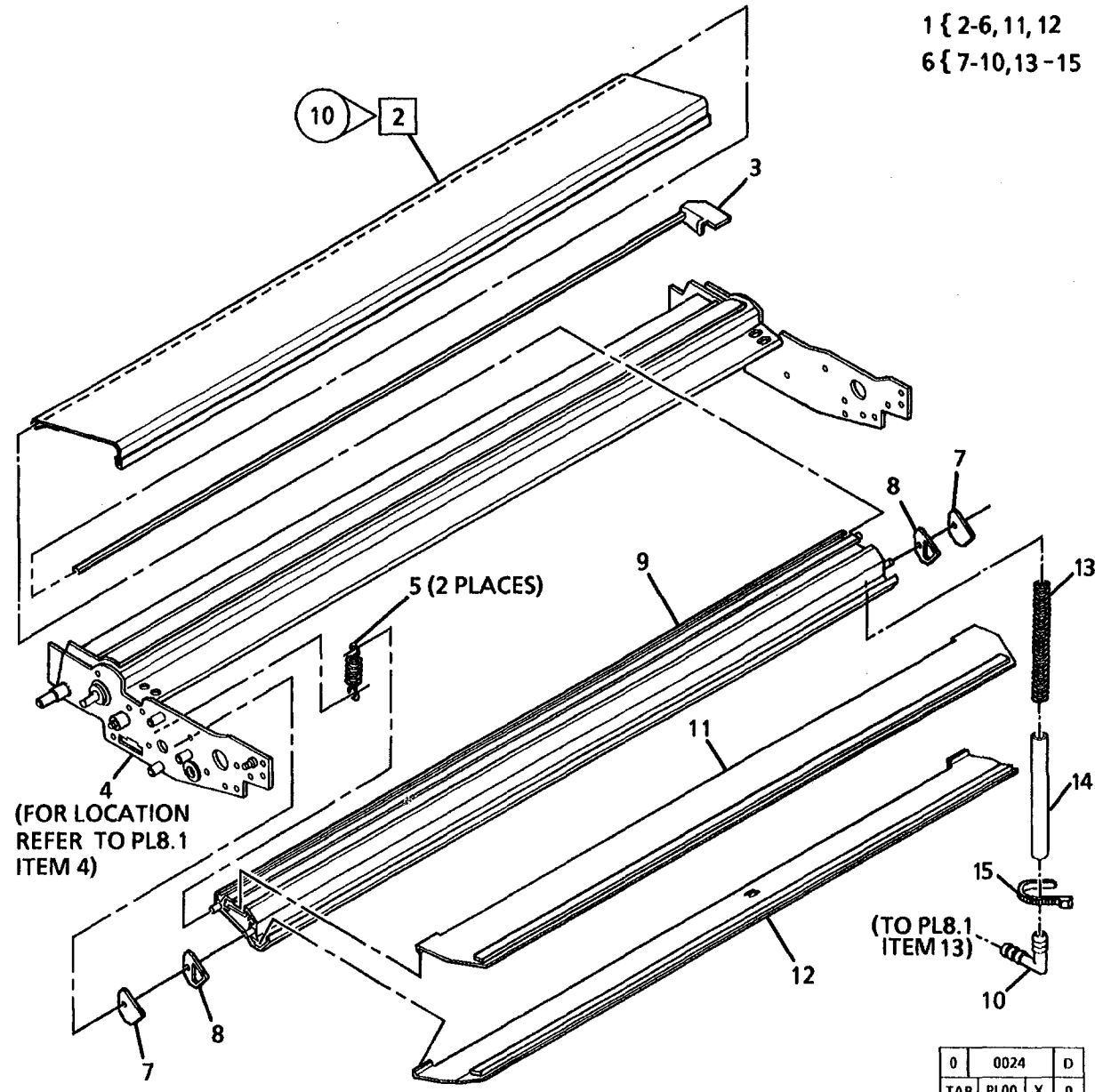
1 { 2, 3, 5-10, 15-19

11 { 12-14



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	68E4213	LAMP BRACKET
4	13E2881	BEARING
5	600K52780	AIR MANIFOLD/ HEATSHIELD KIT
6	22K40050	FUSER HEAT ROLL (W/TAG 21)
7	62E5461	REFLECTOR
8	5K2613	LH FUSER BEARING
9	5K3430	FUSER HUB
10	126E492	FUSER HEAT ROD (60HZ)
-	126E821	FUSER HEAT ROD (50HZ)
11	600K45270	FUSER DRIVE SHAFT KIT
12	--	RH FUSER BEARING (P/O ITEM 11)
13	--	GROUND RING (P/O ITEM 11)
14	6E23471	FUSER DRIVE SHAFT
15	20E12832	FUSER DRIVE PULLEY
16	23E11181	FUSER DRIVE BELT (W/TAG 28)
-	23E6581	FUSER DRIVE BELT (W/O TAG 28)
17	--	NUT (P/O ITEM 1)
18	16E8080	GROMMET
19	--	LH LAMP BRACKET (P/O ITEM 1)

**PL 10.3 FUSER PRESSURE COMPONENTS AND MOISTURE COLLECTION**



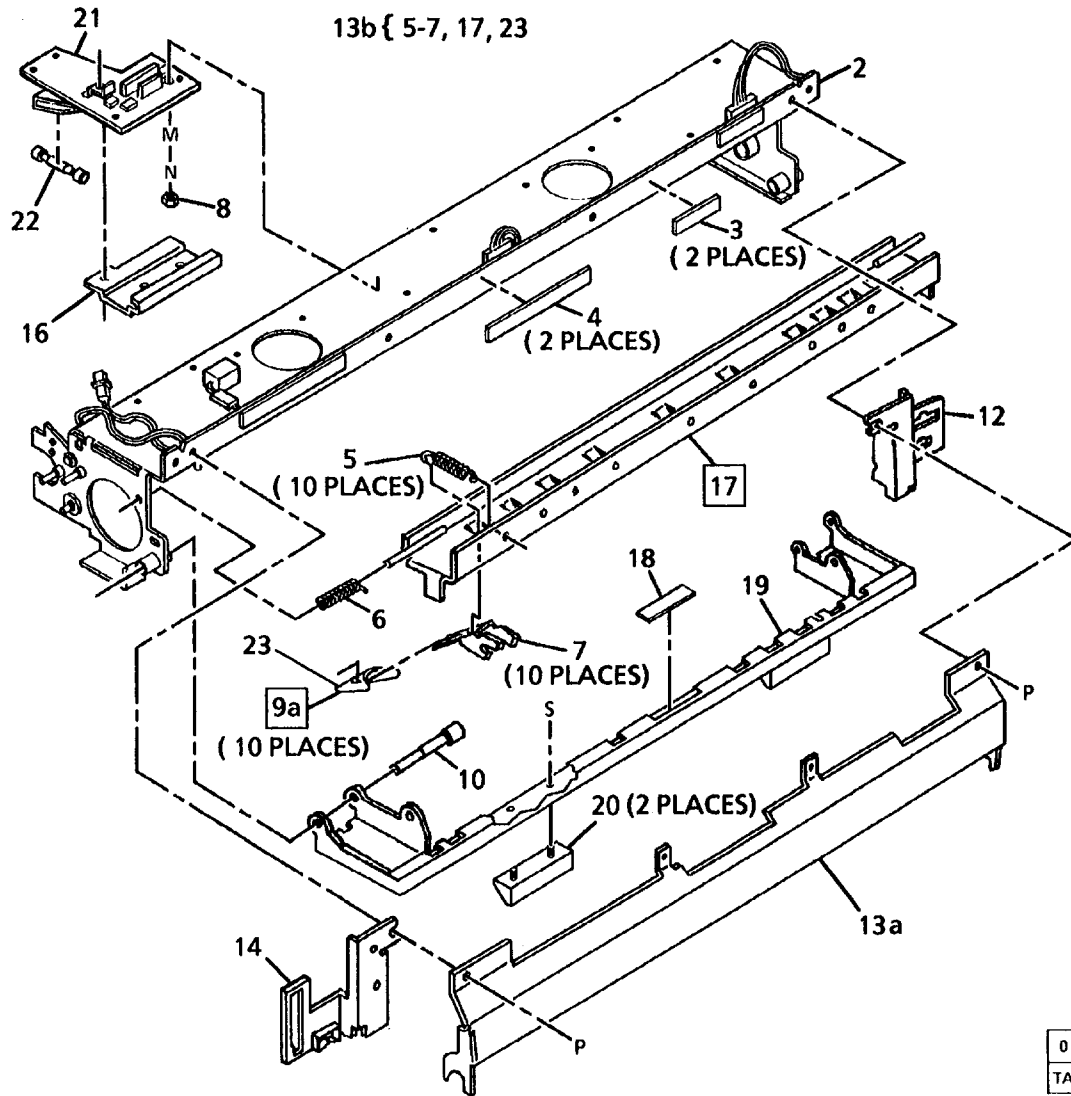
1 { 2-6, 11, 12  
6 { 7-10, 13-15

ITEM	PART	DESCRIPTION
1	--	PART OF MEDIA TRANSPORT ASSEMBLY (REF: PL8.1 ITEM 4)
2	23K471	FABRIC GUIDE ASSEMBLY (FIELD SPARE)(W/TAG 10)
3	3K6360	FABRIC GUIDE
4	--	RETAINER HANDLE
5	9E32480	TRANSPORT FRAME (P/O ITEM 1)
6	--	SPRING
7	21E4990	HOUSING ASSEMBLY (NOT SPARED)
8	35E15280	END CAP
9	--	GASKET
10	--	HOUSING (P/O ITEM 6)
11	33K1272	ADAPTER (P/O ITEM 6)
12	33K1282	PRESSURE PLATE A
13	9E46870	PRESSURE PLATE B
14	52E7900	DRAIN TUBE SPRING
15	--	MOISTURE DRAIN TUBE CABLE TIE (P/O ITEM 6)

0	0024	D
TAR	PL00	X 0

**PL 10.4 FUSER HEAT CONTROL AND STRIPPER FINGERS**

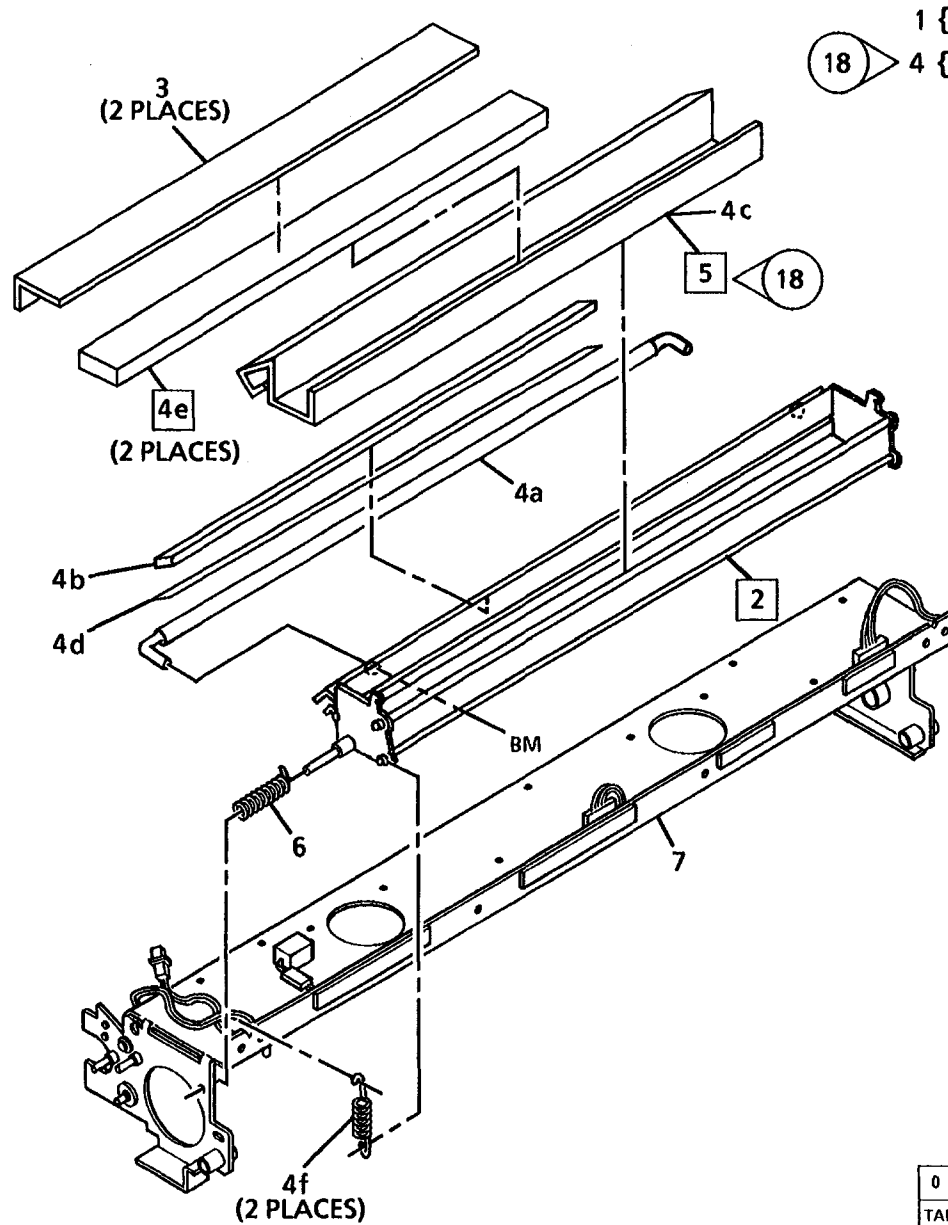
- 1 { 2-4, 8, 10-12, 14, 15 }  
 9 { 9a }  
 11 { 18-20 }  
 13 { 13a, 13b, 13c, (REF: PL8.4, ITEM 9), 13d, (REF: PL8.4, ITEM 10), 13e, (REF: PL9.10, ITEM 6) }  
 15 { 16, 21, 22 }  
 17 { 13b { 5-7, 17, 23 } }



ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1 ITEM 1)
2	--	XEROGRAPHIC FRAME (P/O ITEM 1)
3	121E3120	MAGNET
4	121E1402	MAGNET
5	9E42610	SPRING
6	9E38060	SPRING
7	68E38113	STRIPPER FINGER BRACKET
8	--	NUT (P/O ITEM 1)
9	600K35880	STRIPPER FINGER SPARE KIT
9a	--	STRIPPER FINGER
10	--	PIVOT PIN (P/O ITEM 1)
11	3K6222	LATCHING COVER ASSEMBLY
12	--	RH BRACKET (P/O ITEM 1)
13	600K42350	JAM DETECTION KIT (TAG 17)
13a	2E62610	COVER
13b	--	STRIPPER BRACKET ASSEMBLY
13c	--	EXIT SUPPORT (REF: PL8.4, ITEM 9)
13d	--	SWITCH (REF: PL8.4, ITEM 10)
13e	--	CABLE CLIP (REF: PL9.10, ITEM 6)
14	--	LH BRACKET (P/O ITEM 1)
15	130K52351	THERMISTOR ASSEMBLY
16	118E7492	INSULATOR
17	--	STRIPPER FINGER SUPPORT (P/O ITEM 13B)
18	--	LABEL (P/O ITEM 11)
19	--	LATCHING COVER (P/O ITEM 11)
20	3K6670	COVER HANDLE
21	--	THERMISTOR (P/O ITEM 15)
22	108E1830	THERMAL FUSE
23	--	STRIPPER FINGER (P/O ITEM 13B)

0	0009	H
TAR	PL00 X	0

PL 10.5 FUSER OILER

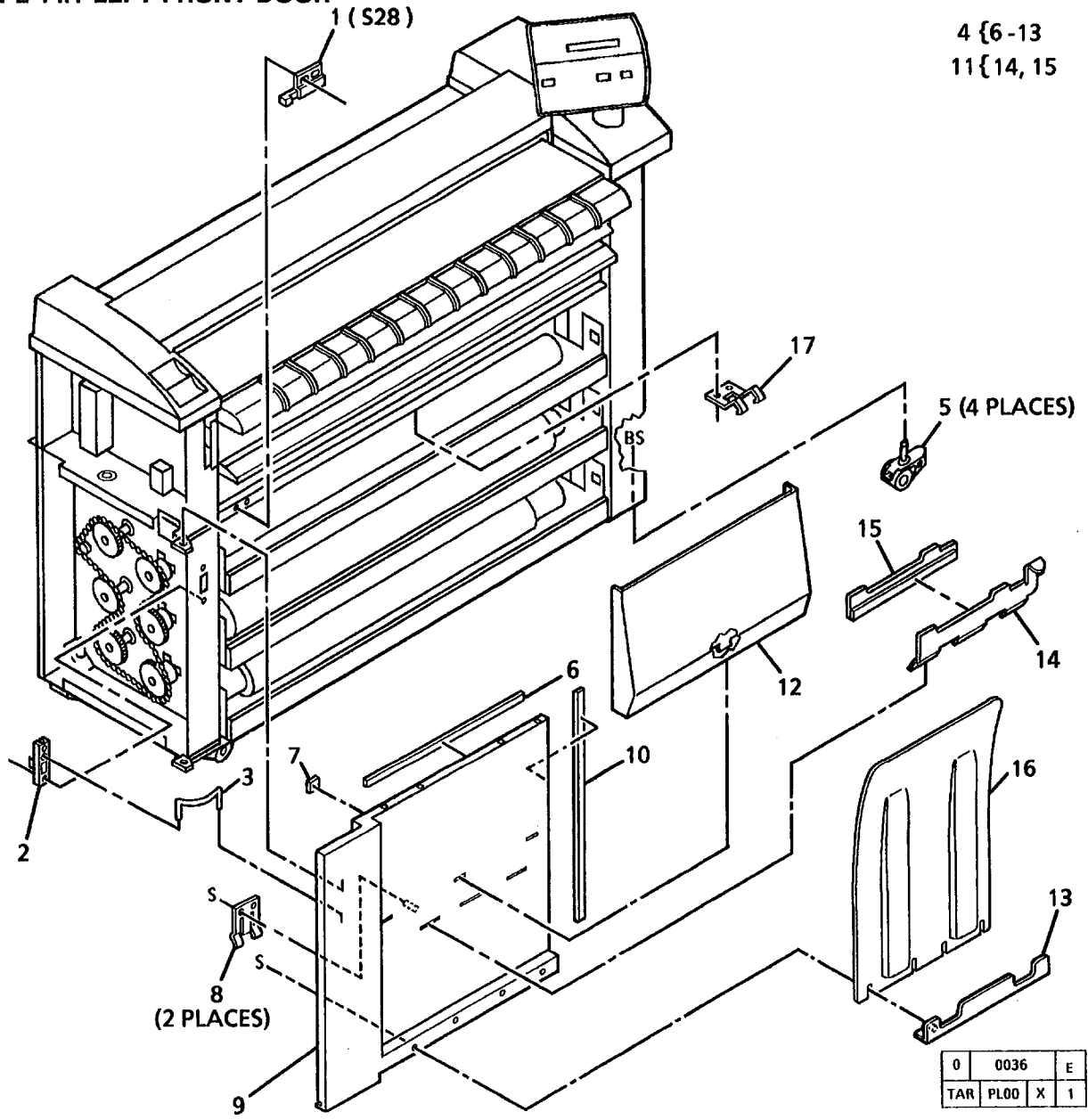


ITEM	PART	DESCRIPTION
1	--	PART OF XEROGRAPHIC MODULE ASSEMBLY (REF: PL10.1 ITEM 1)
2	48K22810	OIL DISPENSE HOUSING
3	--	OIL PAD COVER (NOT SPARED)
4	600K43030	OILER UPGRADE KIT (TAG 18)
4a	22K34060	OIL DISPENSE ROLL
4b	19E24110	PRESSURE PAD
4c	--	WICK
4d	1E27610	SHIM
4e	19K3310	OIL PAD
4f	9E51080	SPRING
5	94K2660	WICK (W/TAG 18)
6	9E38060	SPRING
7	--	XEROGRAPHIC FRAME (P/O ITEM 1)

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TAR	PL00 X	0

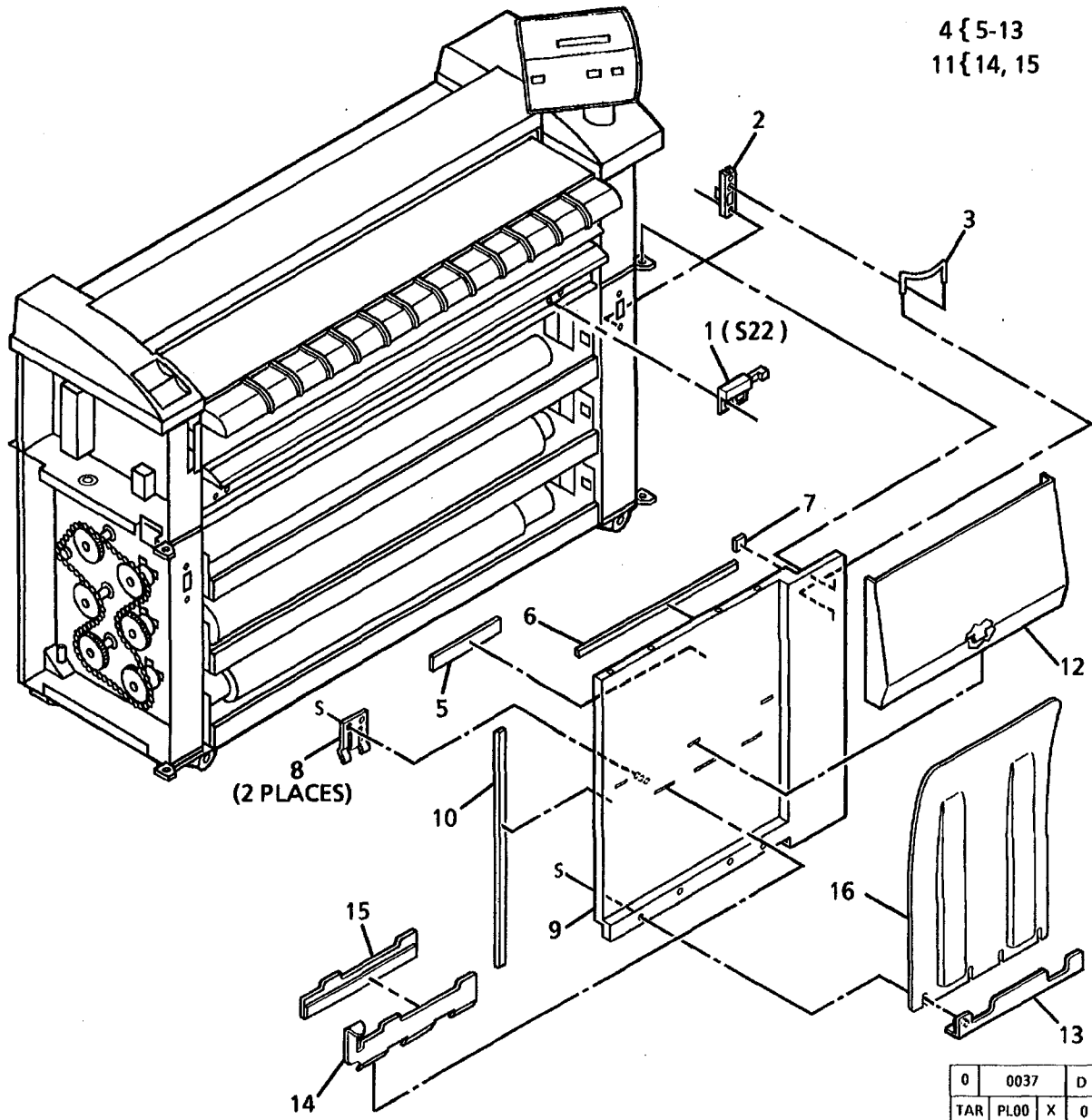


PL 14.1 LEFT FRONT DOOR



ITEM	PART	DESCRIPTION
1	130E2271	LEFT FRONT DOOR INTERLOCK SWITCH (S28)
2	3E19511	DOOR DETENT
3	--	DOOR KEEPER (NOT SPARED)
4	2K58165	LEFT FRONT DOOR ASSEMBLY
5	17K1120	LOCKING CASTER
6	--	DOOR TRIM (TOP) (P/O ITEM 4)
7	121E9040	INTERLOCK MAGNET
8	9E44960	STACKER LATCH
9	--	LEFT FRONT DOOR (P/O ITEM 4)
10	--	DOOR SEAL (SIDE) (P/O ITEM 4)
11	17K1441	UPPER STACKER ASSEMBLY
12	--	STACKER SHIELD (P/O ITEM 4)
13	--	LOWER STACKER (P/O ITEM 4)
14	--	UPPER STACKER (P/O ITEM 11)
15	35K4550	UPPER STACKER SEAL
16	50E8072	COPY CATCH SHIELD
17	3E19460	DOOR LATCH

PL 14.2 RIGHT FRONT DOOR



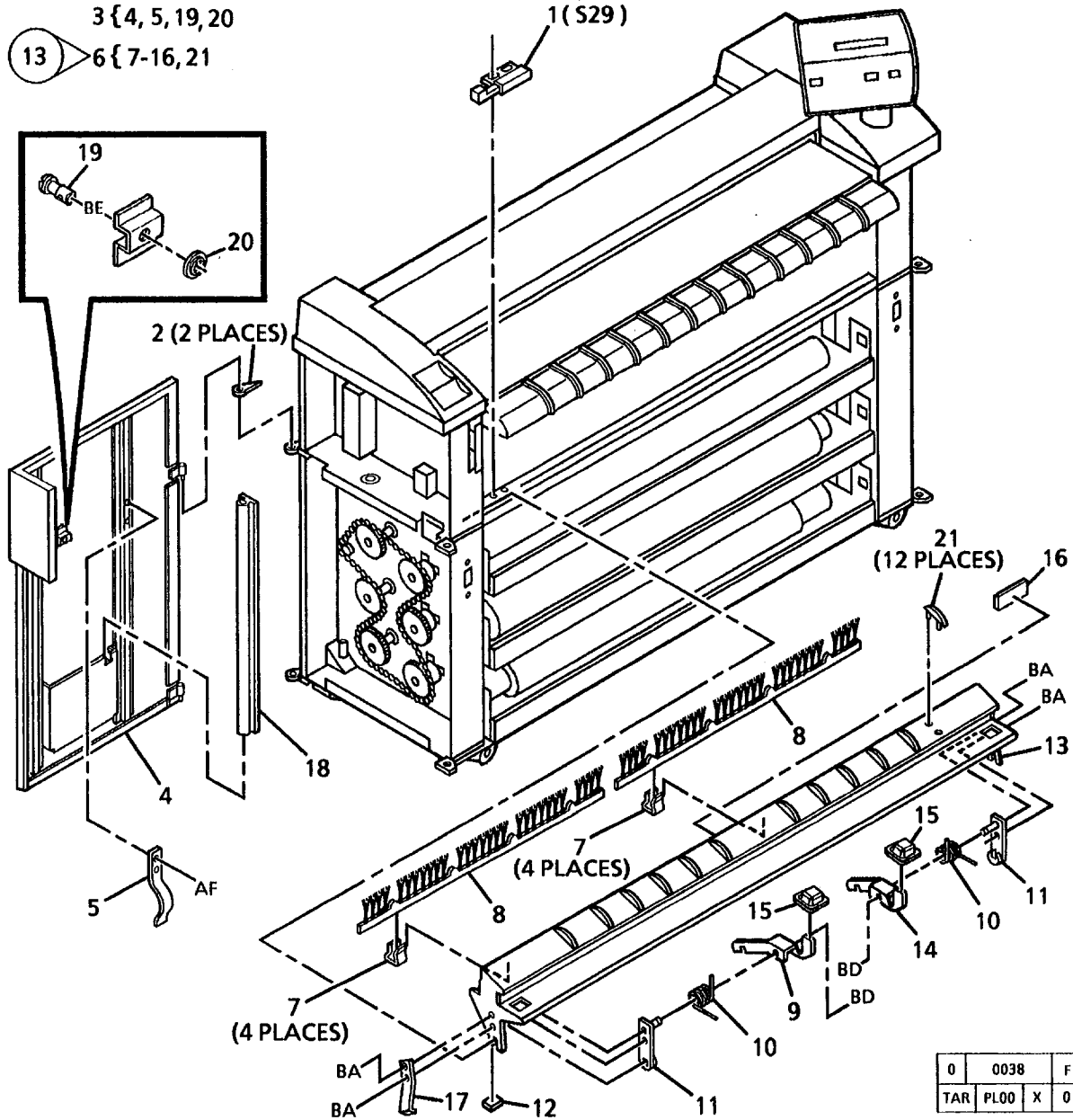
ITEM	PART	DESCRIPTION
1	130E2271	RIGHT FRONT DOOR INTERLOCK SWITCH (S22)
2	3E19511	DOOR DETENT
3	--	DOOR KEEPER (NOT SPARED)
4	2K58176	RIGHT FRONT DOOR ASSEMBLY
5	--	LABEL (MEDIA LOAD AND LEAD EDGE CUT) (P/O ITEM 4)
6	--	DOOR SEAL (TOP) (P/O ITEM 4)
7	121E9040	INTERLOCK MAGNET
8	9E44960	STACKER LATCH
9	--	RIGHT FRONT DOOR (P/O ITEM 4)
10	--	DOOR SEAL (SIDE) (P/O ITEM 4)
11	17K1431	UPPER STACKER ASSEMBLY
12	--	STACKER SHIELD (P/O ITEM 4)
13	--	LOWER STACKER (P/O IETM 4)
14	--	UPPER STACKER (P/O ITEM 11)
15	35K4560	UPPER STACKER SEAL
16	50E8072	COPY CATCH SHIELD

0	0037	D
TAR	PL00	X 0

**PL 14.3 CUT SHEET FEED-IN SHELF AND LEFT SIDE DOOR**

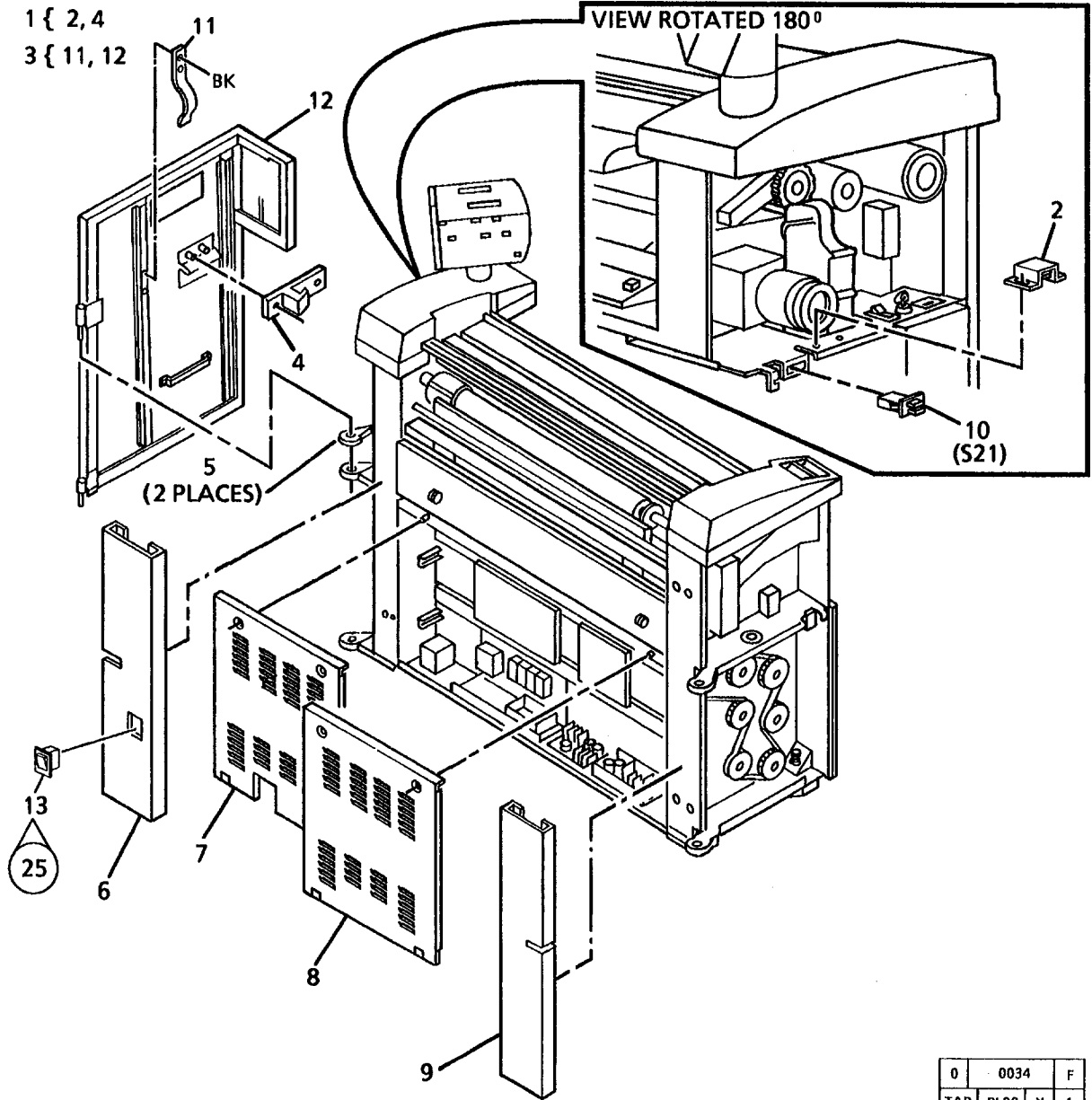
3 {4, 5, 19, 20}

13 6 {7-16, 21}



ITEM	PART	DESCRIPTION
1	130E2271	CUT SHEET FEED-IN SWITCH (S29)
2	14E20541	SHELF INTERLOCK
3	2K48945	LEFT HINGE SPACER
4	--	LEFT DOOR ASSEMBLY
5	--	LEFT DOOR (P/O ITEM 3)
6	30K45663	LEFT DOOR SPRING (P/O ITEM 3)
	30K45683	CUT SHEET FEED-IN SHELF ASSEMBLY (60HZ) (W/TAG 13)
	30K45683	CUT SHEET FEED-IN SHELF ASSEMBLY (50HZ) (W/TAG 13)
7	19E15041	CLIP
8	115E3100	ANTI-STATIC BRUSH
9	--	LH SHELF LATCH (P/O ITEM 6)
10	9E42580	SPRING
11	28E7811	RETAINER
12	121E7680	INTERLOCK MAGNET
13	--	CUT SHEET FEED-IN SHELF (P/O ITEM 6)
14	--	RH SHELF LATCH (P/O ITEM 6)
15	--	LATCH BUTTON (P/O ITEM 6)
16	92E22590	LABEL (JAM CLEARANCE)
17	19E21520	CLIP
18	120E5511	PROBE HOLDER
19	29E15040	LEFT DOOR FASTENER
20	429W20350	GROMMET
21	38E11492	GUIDE

**PL 14.4 REAR AND RIGHT SIDE COVERS**

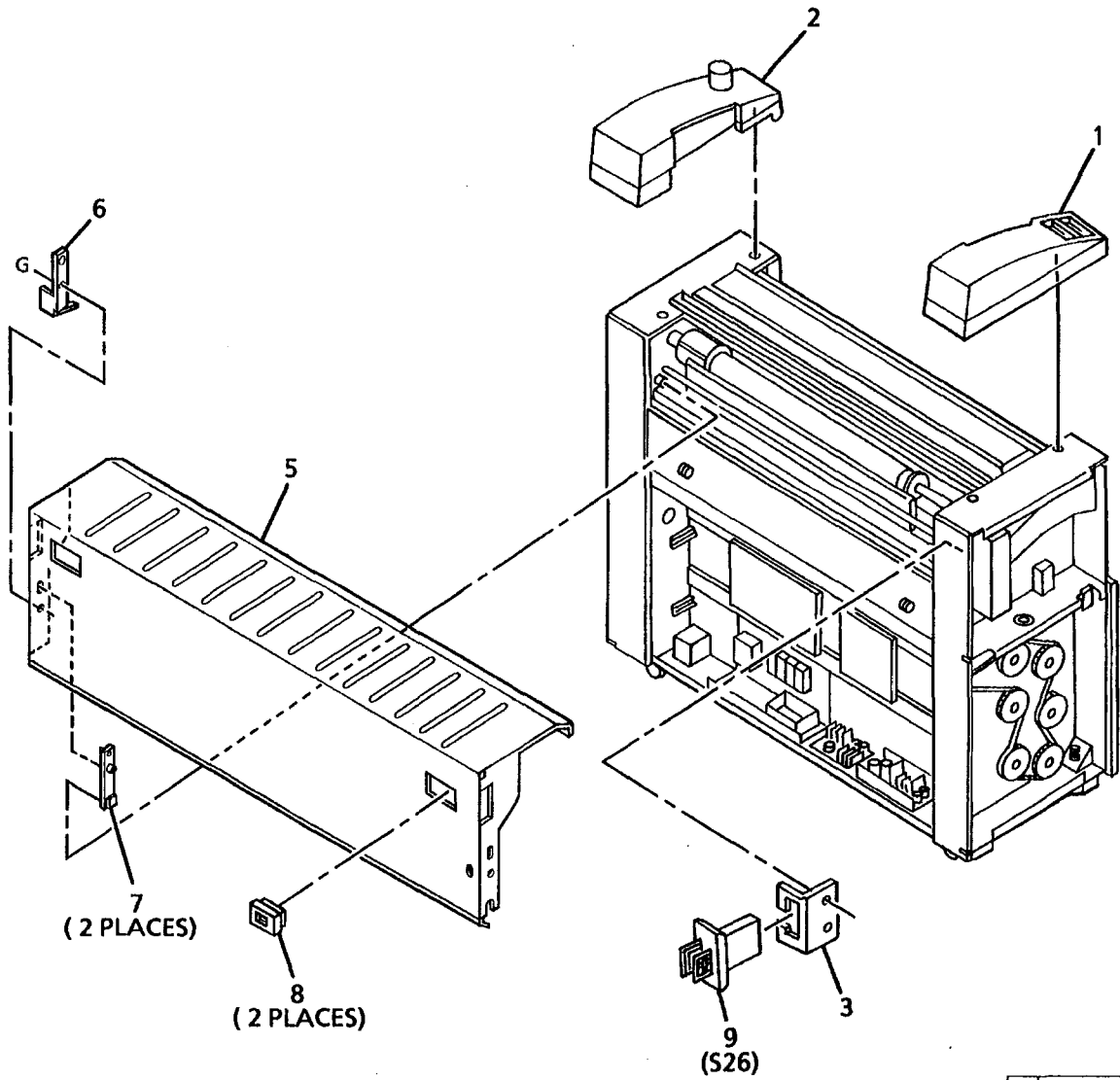


ITEM	PART	DESCRIPTION
1	3E18740	RIGHT DOOR LATCH ASSEMBLY
2	--	LATCH (P/O ITEM 1)
3	2K48977	RIGHT SIDE DOOR ASSEMBLY
4	--	KEEPER (P/O ITEM 1)
5	14E20551	RIGHT HINGE SPACER
6	--	RIGHT REAR COVER (NOT SPARED)
7	2K64501	LOWER RIGHT REAR COVER (60HZ)
-	2K64491	LOWER RIGHT REAR COVER (50HZ)
8	48K10040	LOWER LEFT REAR COVER
9	--	LEFT REAR COVER (NOT SPARED)
10	110E2640	RIGHT SIDE DOOR INTERLOCK SWITCH (S21)
11	--	GROUNDING SPRING (P/O ITEM 3)
12	--	RIGHT SIDE DOOR (P/O ITEM 3)
13	110E6020	ON/OFF SWITCH (W/TAG 25)

0	0034	F
TAR	PL00	X 1

PL 14.5 LEFT AND RIGHT CAPS AND UPPER REAR DOOR

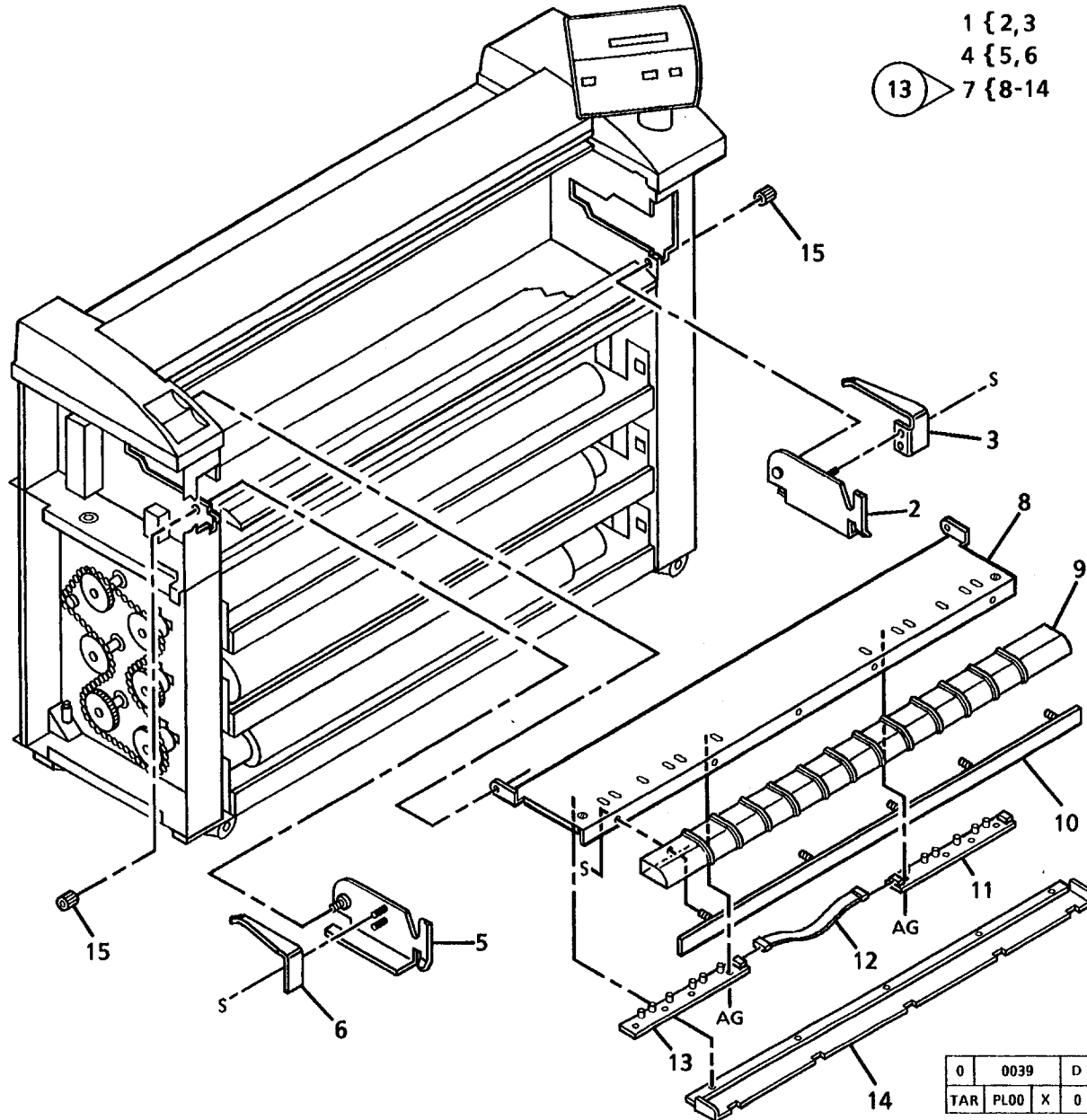
4 { 5-8



ITEM	PART	DESCRIPTION
1	21E4873	LEFT CAP
2	21E4882	RIGHT CAP
3	--	INTERLOCK BRACKET (NOT SPARED)
4	2K55982	UPPER REAR DOOR ASSEMBLY
5	--	UPPER REAR DOOR (P/O ITEM 4)
6	--	UPPER REAR DOOR SPRING GROUND (P/O ITEM 4)
7	--	PIVOT GUIDE (P/O ITEM 4)
8	3E18781	LATCH
9	110E2640	DEVELOPER COVER (UPPER REAR DOOR) INTERLOCK SWITCH (S26)

0	0035	8
TAR	PL00 X	0

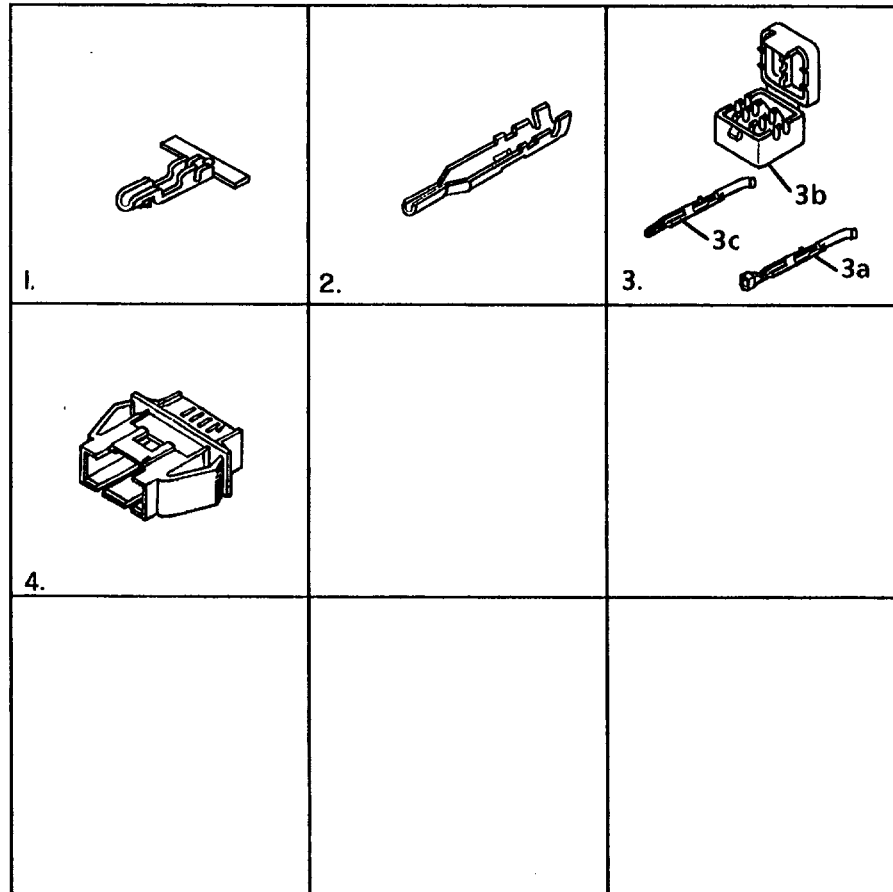
**PL 14.6 LEFT AND RIGHT LATCH SUPPORTS AND DOCUMENT FEED-IN SHELF**



ITEM	PART	DESCRIPTION
1	48K62230	RH XEROGRAPHIC MODULE LATCH COVER ASSEMBLY
2	--	RH XEROGRAPHIC MODULE LATCH COVER (P/O ITEM 1)
3	--	RH RETAINER SPRING (P/O ITEM 1)
4	--	LH XEROGRAPHIC MODULE LATCH COVER ASSEMBLY (NOT SPARED)
5	--	LH XEROGRAPHIC MODULE LATCH COVER (P/O ITEM 4)
6	--	LH RETAINER SPRING (P/O ITEM 4)
7	30K44994	DOCUMENT FEED-IN SHELF ASSEMBLY (60HZ) (W/TAG 13)
-	30K45024	DOCUMENT FEED-IN SHELF ASSEMBLY (50HZ) (W/TAG 13)
8	--	DOCUMENT FEED-IN SHELF (P/O ITEM 7)
9	38E10581	DOCUMENT SEPARATOR
10	--	DOCUMENT SEPARATOR SUPPORT (P/O ITEM 7)
11	140K45672	RH MEDIA WIDTH PWBA (60HZ)
-	140K45692	RH MEDIA WIDTH PWB (50HZ)
12	--	HARNESS (P/O ITEM 7)
13	140K45662	LH MEDIA WIDTH PWBA (60HZ)
-	140K45682	LH MEDIA WIDTH PWB (50HZ)
14	--	COVER (P/O ITEM 7)
15	27E2690	KNURLED NUT

**PL 15.1 MISCELLANEOUS ELECTRICAL CONNECTORS AND FASTENERS**

ITEM	PART	DESCRIPTION
1	--	CONTACT SOCKET (20-26 AWG) (NOT SPARED)
2	--	CONTACT PIN (20-26 AWG) (NOT SPARED)
3	600K30680	WIRE AND CONNECTOR REPAIR KIT
3a	--	SOCKET WIRE (10/KIT)
3b	--	CONNECTOR (20/KIT)
3c	--	PIN WIRE (10/KIT)
4	713W96432	CONNECTOR



0	0040	C
TAR	PL00	X 0

ITEM	PART	DESCRIPTION	ITEM	PART	DESCRIPTION
A	112W11655	HEX SCREW (6 X 16)	BJ	136W36050	SCREW (M4 X 6)
B	112W7455	SCREW (M4 X 12)	BK	215W10102	NUT (8-48)
C	354W21052	RETAINING RING (7-9MM)	BL	251W16755	WASHER (M8)
D	354W21252	RETAINING RING (9-12MM)	BM	354W20752	RETAINING RING (4-5MM)
E	153W23352	SCREW (M2.9 X 6.5)	BN	102W10355	SCREW (M4) FLATHEAD
F	132W253	SCREW (M3 X 6LG)	BP	158W17452	SCREW (M4)
G	156W27555	SCREW (M4.2 X 14)	BR	158W35452	SCREW (M3 X 8)
H	156W27655	SCREW (4.2 X 16)	BS	131W20853	SCREW (M10 X 1.5)
J	251W10856	PLAIN WASHER			
K	354W20852	RETAINING RING (5-7MM)			
-	354W24251	ALTERNATE			
L	356W2502	RETAINING RING			
M	251W10455	WASHER (M4)			
N	256W20454	LOCKWASHER (M4)			
P	112W27255	SCREW (M4 X 8)			
R	351W12551	RETAINING RING (M25)			
S	220W450	NUT (M4)			
T	251W10655	WASHER (M6)			
U	351W10651	RETAINING RING (M6)			
V	121W30455	SET SCREW (M4 X 6)			
W	351W11551	RETAINING RING (M15)			
X	112W27355	SCREW (M4 X 10)			
Y	286W3954	SPRIAL PIN (3 X 22)			
Z	259W30351	LOCKWASHER (M4)			
AA	131W37153	SCREW (M4 X 8)			
AB	153W27452	SCREW (4.2 X 9.5)			
AC	131W37553	SCREW (M4 X 16)			
AD	131W37853	SCREW (M4 X 30)			
AE	131W40253	SCREW (M5 X 10)			
AF	153W17452	SCREW (M4.2 X 9.5)			
AG	112W7255	SCREW (M4 X 8)			
AH	156W27455	SCREW (4.2 X 9.5)			
AJ	156W23355	SCREW (M2.9 X 6.5)			
AK	286W2354	SPRING PIN (2-19MM)			
AL	113W6455	SCREW (M3 X 10)			
AM	251W10355	WASHER (M3)			
AN	113W50555	SCREW (M5 X 12)			
AP	256W20554	LOCKWASHER (M5)			
AR	236W651	SPEED NUT			
AS	354W21152	RETAINING RING (8-11MM)			
AT	112W27655	SCREW (M4 X 16)			
AU	113W6355	SCREW (M3 X 8LG)			
AV	220W650	NUT (M6)			
AW	112W27455	SCREW (M4 X 12)			
AX	153W23452	SCREW (M2 9 X 9.5)			
AY	251W22602	FLAT WASHER (NO. 10)			
AZ	153W42353	SCREW (M4 X 12)			
BA	153W17451	SCREW (M4.2 X 9.5)			
BB	201W455	NUT (HEX M4)			
BC	265W650	LOCKWASHER (M6)			
BD	236W851	SPEEDNUT			
BE	265W850	LOCKWASHER (M8)			
BF	153W27552	SCREW (4.2 X 13)			
BG	354W555	RETAINING RING (6MM)			
BH	113W13802	SCREW (2-56 X 1/2)			



<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>	<u>PART NUMBER</u>	<u>PL LOC.</u>
1R81	9.2A										
1R81	9.2B	7E5221	9.6	13E803	9.6	22K60080	8.1	38E11492	14.3	108E2870	1.2
1E23080	9.9	7K5260	9.10	13E1571	9.5	23K471	10.3	42K1390	9.5	109E1040	1.2
1E27610	10.5	7K5760	7.2	13E2881	10.2	23E1620	9.6	48K10040	14.4	110E2640	5.2
2E13110	1.5	7K7510	9.1	13E7161	9.5	23E6570	5.2	48K22810	10.5	110E2640	7.7
2E13120	1.5	7K7561	7.2	14E19730	7.1	23E6581	10.2	48K62230	14.6	110E2640	14.4
2K38363	1.4	7E14600	7.3	14E20541	14.3	23E6750	7.2	50E8072	14.1	110E2640	14.5
2E40132	1.2	7E14610	7.2	14E20551	14.4	23E11181	10.2	50E8072	14.2	110K3340	8.4
2E40470	9.9	7E14650	7.3	15E17790	9.10	26E3460	1.3	52K3191	7.6	110K3731	8.4
2K44363	1.4	7E14690	9.10	16E6020	8.2	26E3931	9.2A	52E7900	10.3	110E5500	8.4
2K48945	14.3	7E14700	9.10	16E6020	8.3	26E3931	9.2B	52E7910	8.1	110E5500	14.4
2K48977	14.4	7E14710	9.10	16E8080	10.2	26E11970	8.1	54E3181	9.9	110E7290	1.2
2K55982	14.5	7E15332	9.1	17K1120	14.1	26E18800	8.1	54E3491	9.10	111K21	1.3
2K58165	14.1	7E15342	9.1	17K1431	14.2	27E2251	5.2	55K13830	9.9	112E200	9.3
2K58176	14.2	7E15351	9.1	17K1441	14.1	27E2690	14.6	55K13840	9.9	113K1221	6.1
2K61921	7.7	7E15351	9.8	17E4250	7.5	28E7430	7.8	55K14530	8.3	113E7881	6.1
2E62610	10.4	7E16330	9.10	17E4721	1.4	28E7771	9.8	55K14940	1.3	114K492	1.2
2K64491	14.4	7E16341	9.10	19K3310	10.5	28E7811	14.3	55E16352	9.8	115E3100	5.2
2K64501	14.4	7E16410	7.2	19E15041	5.2	29K1111	8.1	55E23520	7.3	115E3100	14.3
3K5840	7.5	7E19071	7.2	19E15041	14.3	29E3560	9.6	55E23520	7.4	117K10591	1.2
3K6222	10.4	7E26981	9.1	19E15551	9.9	29E13641	9.1	62K4841	6.1	118E7492	10.4
3K6360	10.3	7E27001	9.1	19E16080	9.4	29E13701	7.5	62K5450	6.1	120E2150	1.2
3K6670	10.4	7E27031	9.2B	19E16240	9.8	29E14460	7.5	62E5461	10.2	120E4750	9.10
3E16521	7.8	9E6960	9.5	19E19250	7.7	29E14750	7.4	68K2881	9.7	120E5511	14.3
3E17191	7.5	9E21410	5.1	19E19971	9.4	29E14760	7.3	68K2891	9.7	120E6821	5.2
3E17610	7.3	9E27330	7.5	19E21520	14.3	29E15040	14.3	68E4213	10.2	121E1402	10.4
3E17610	7.4	9E27340	7.3	19E24110	10.5	30E16161	9.2A	68E17221	7.5	121K1751	9.6
3E18740	14.4	9E27340	7.4	20E4350	9.6	30E16161	9.2B	68E38113	10.4	121E3120	10.4
3E18781	7.7	9E27340	7.8	20E12353	8.1	30K44994	14.6	68E62740	7.8	121K4822	9.8
3E18781	14.5	9E27351	7.5	20E12832	10.2	30K45024	14.6	90E754	5.2	121E7510	7.2
3E19330	9.9	9E32480	10.3	20E13603	8.1	30K45663	14.3	92E22541	7.6	121E7680	14.3
3E19460	14.1	9E32490	8.3	20E13751	10.1	30K45683	14.3	92E22550	7.6	121E9040	14.1
3E19511	14.1	9E32500	8.2	20E13853	8.1	30K52430	8.2	92E22560	7.6	121E9040	14.2
3E19511	14.2	9E32510	8.1	20E14550	5.2	30K53710	9.8	92E22590	14.3	122E302	6.1
3P25202	1.2	9E32790	7.5	20E18830	7.8	30K53720	9.8	92E36431	7.6	122K1011	9.3
4E502	9.3	9E32921	7.1	20E20680	7.8	30K58590	8.4	92E36450	9.1	125K1402	9.4
5K1351	9.9	9E34222	9.3	20E22550	5.2	31E3561	5.1	92E36460	7.6	125K1412	9.3
5K2613	10.2	9E38060	10.4	21E4873	14.5	33K1272	10.3	93K960	9.1	126E492	10.2
5K3430	10.2	9E38060	10.5	21E4882	14.5	33K1282	10.3	93K970	9.1	126E821	10.2
5E6810	7.2	9E41251	9.1	21E4990	10.3	35K1222	9.5	93E1501	8.1	126K2521	7.2
6K9654	9.2A	9E41251	9.8	21E6210	5.1	35E3580	9.5	94K85	9.6	126K2980	7.2
6K9723	8.2	9E42461	6.1	21E6220	5.1	35K4550	14.1	94K2660	10.5	127K2671	1.5
6K9871	9.9	9E42580	14.3	22E7280	5.1	35K4560	14.2	101E1020	1.3	127K4293	7.2
6K15830	9.2B	9E42610	10.4	22E9390	8.3	35K4581	9.10	101E7930	1.3	127K4293	8.1
6K17790	8.2	9E43260	7.2	22E10060	7.5	35E12210	9.9	101K18880	9.3	127E5073	9.1
6K17800	8.3	9E44960	14.1	22E10531	8.2	35E15280	10.3	103E2721	1.2	127E5073	9.8
6E19570	5.1	9E44960	14.2	22E11411	7.1	35E31270	5.2	103E2731	1.2	127E6891	9.1
6E23471	10.2	9E46870	10.3	22E11441	8.1	36E93	9.6	104K53	1.3	127E6891	9.8
6E23540	8.3	9E51080	10.5	22E11540	7.3	37K1100	7.7	105K833	1.2	127E6901	10.1
6E23761	9.1	10K1351	7.1	22E11540	7.4	38K6601	7.8	105K1084	1.2	127E6911	10.1
6E26780	7.1	10K1360	7.7	22K16301	5.2	38E6610	9.4	105K5274	1.3	127K8861	5.2
6E42300	8.2	11E3833	7.1	22K18105	5.1	38E6620	9.4	105K5480	1.3	127K8920	9.10
7E1331	9.6	11E4470	7.7	22K28930	7.1	38K7214	8.4	105K5554	1.3	127K17160	1.5
7E1340	9.2A	13K380	9.2A	22K34060	10.5	38K10460	5.1	108E1762	1.2	127K26580	7.8
7E1340	9.2B	13K380	9.2B	22K40050	10.2	38E10581	14.6	108E1830	10.4	130E2271	14.1

<u>PART NUMBER</u>	<u>PL LOC.</u>
130E2271	14.2
130E2271	14.3
130E3250	7.2
130E3250	7.8
130E5990	8.2
130K30381	9.9
130K51801	7.1
130K52273	5.2
130K52351	10.4
130K53300	9.9
130K54470	6.1
133K5345	1.1
133K6644	1.1
140K15953	5.2
140K15953	7.2
140K15953	8.1
140K16586	1.4
140K17944	1.4
140K37880	1.4
140K45662	14.6
140K45672	14.6
140K45682	14.6
140K45692	14.6
140K69980	1.1
142E440	1.2
142E1131	1.2
152K36241	1.1
160K36680	1.1
409W1671	1.4
413W30854	5.2
413W30854	7.2
413W31054	8.2
413W31054	8.3
413W31553	9.2A
413W31553	9.2B
423W57550	7.8
423W64001	8.1
423W72201	8.1
429W20350	14.3
537K6920	1.1
600K8481	9.5
600K25780	9.5
600K29981	9.5
600K30680	15.1
600K35880	10.4
600K37740	9.3
600K39110	9.7
600K39821	7.1
600K42350	10.4
600K43030	10.5
600K45270	10.2
600K52780	1.5
600K52780	10.2
600K54071	9.1

<u>PART NUMBER</u>	<u>PL LOC.</u>
600K54071	10.1
600K54081	9.1
600K54081	10.1
707W1652	1.2
708W3901	1.1
708W4001	1.1
713W96432	15.1
809E770	5.2

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## Diagnostic Tests

**1** Ensure that all interlocks are closed.

This section contains the Input and Output and Special Test diagnostic procedures.

### To Enter the Diagnostic Mode:

The diagnostic mode is entered by pressing and holding the zero (0) button while switching on the copier. While powering up in the diagnostic mode the Message Display will indicate the Copyright message, the message ROM configuration, and the software revision level.

The following message will be displayed when the diagnostic mode is entered.

**CHAIN 00                    PRESS START TO ENTER**  
**PLEASE ENTER THE CHAIN NUMBER**

The top and bottom Copy Contrast LEDs will flash off and on alternately.

Enter the first two digits of the code, and press the Start button, then enter the second two digits of the code, and press the Start button to begin the test.

The code entered will be displayed in the Media Length display. The code will also be displayed in the top line of the Message Display. The test name will be in the bottom line of the display along with test feedback information. There also may be additional information displayed depending on the test being run.

The Stop button is used to stop the tests.

The Clear button is used to clear the entry.

The test codes consist of a chain number and a test number. The chain numbers correspond to the same chain numbers that are used in the Service Manual to identify functional areas in the copier. The test numbers are sequential numbers to identify the tests within a chain.

The chain numbers used are listed below.

Chain Number	Functional Area
01	Standby Power
02	User Interface (Control Panel)
03	Machine Run Control
04	Drives
05	Document Transportation
06	Exposure
07	Media Supply
08	Media Transportation
09	Xerographics
10	Fusing/Copy Transportation

### To Exit the Diagnostic Mode:

Enter the test [0361] or switch the copier power off, wait 5 seconds, then switch it on.

### Input Diagnostic Test Procedure

1. Enter the diagnostic mode.
2. Enter the test code.
3. Press the Start button to begin the test.
4. Manually operate the component that is being tested.
5. The condition of the component will be indicated in the message display window and the Quantity window. The state of the component is indicated by a 0 for low state and a 1 for high state.
6. Press the Stop button to stop the diagnostic Test.
7. Press the Stop button again to clear the chain.

## Input Diagnostic Test Codes

Codes	Component
0101	Right Door Interlock
0102	ACH Sensed
0103	Line Frequency Sense
0104	Key lock Switch
0110	Media Supply Doors Interlock
0210	Control Panel LEDs
0500	Document Handler Interlock
0501	Document Insert Sensor
0502	Document Front Sensor
0503	Document Rear Sensor
0701	Transport Module Interlock
0702	Cutter Drawer Interlock
0707	Roll 1 Position Sensor
0708	Roll 2 Position Sensor
0709	Roll 3 Position Sensor
0710	Roll 1 Motion Sensor
0711	Roll 2 Motion Sensor
0712	Roll 3 Motion Sensor
0721	Cutter Home Sensor
0801	Cut Sheet Media Switch
0803	Media Registration Sensor
0807	Copy Exit Sensor
0901	Cartridge Home Sensor
0910	Cut Sheet Feed Shelf Interlock
0911	Upper Rear Door Interlock
1008	Fuser Overtemperature Sensor

## Output Diagnostic Test Procedure

The output diagnostic test is used to ensure that the electrical output components of the copier are operating correctly. The output diagnostic test allows the operation of the individual or multiple (chaining) output component (s) in order to verify its operation.

Refer to section on entering and exiting from multiple codes before continuing.

1. Enter the diagnostic mode.
2. Enter the chain number (first two numbers on the code)
3. Press the Start button.
4. Enter the test number (last two numbers of the code).
5. Press the **Start** button to begin the test.
6. Observe the component for the correct operation. If the component and its circuitry are functioning correctly, the component will operate. If they are not, refer to the documentation to locate the problem.
7. Press the **Stop** button to stop the Diagnostic Test.
8. To exit the diagnostic mode, enter the test [0361] or switch the copier power off, wait 5 seconds, then switch it on.

**Note:** The Fuser must be at operating temperature before making voltage checks or operating the diagnostics.

## Output Diagnostic Test Codes

Code	Component Tested
0203	Billing Meter Index
0206	Auditron/CVA
0210	Control Panel LEDs
0306	Ready Foreign Interface
0307	Count Pulse Foreign Interface
0308	Reduction/Enlargement
	Premium Foreign Interface
0309	Large Paper Premium Foreign Interface
0703	Roll Drive Motor (Motor rotates in the counterclockwise direction) 2
0704	Roll Drive Motor ( Motor rotates in the clockwise direction) 1
0601-Bond	Document Drive Motor drives in the Feed direction
0601-2	Document Drive Motor drives in the Rescan direction
0716-Bond	Roll Drive Motor and Roll 1 Feed Clutch (CL1)
0717-Bond	Roll Drive Motor and Roll 2 Feed Clutch (CL3)
0718-Bond	Roll Drive Motor and Roll 3 Feed Clutch (CL5)
0720	Brake
0723	Cutter Drive Motor
0727	Roll 1 Rewind Clutch (CL2)
0728	Roll 2 Rewind Clutch (CL4)
0729	Roll 3 Rewind Clutch (CL6)
0730	Roll 1 Feed Clutch (CL1)
0731	Roll 2 Feed Clutch (CL3)
0732	Roll 3 Feed Clutch (CL5)
0902	Transfer Corotron <sup>3</sup> (W/O Tag/ MOD 5)
0903	Charge Corotron <sup>3</sup> (W/O Tag/ MOD 5)
0905	Toner Dispense Motor

Code	Component Tested
0907	Developer Bias Float (W/O Tag/ MOD 5)
0913	Cleaner Blade Solenoid 4
0914	Cooling Fans On at slow speed if fuser is cold.
0917-Bond	Transport Drive Motor
0922	Run with LL faults
0923	Detack Relay ( W/ O Tag / MOD 5)
0925	Toner Cartridge (1 Revolution)
0926	Reset toner control NVM's
0966	Erase Lamp
1004	Fuser Run Temperature Display and Drum/ Developer and Fuser Drive Motors <sup>5</sup> (Refer to Special Test)
1006	Fuser Temperature Display
1009	Fuser Power Relay On

### NOTES:

- 1 Codes [0728] and [0731] must be chained with [0704] in order to check the operation of the Feed and Rewind clutches for Roll 2.
- 2 Codes [0727] and [0730] must be chained with [0703] in order to check the operation of the Feed and Rewind Clutches for Roll 1. Codes [0729] and [0732] must be chained with [0703] in order to check the operation of the Feed and Rewind Clutches for Roll 3.
- 3 (W/O Tag/ MOD 5): Enter the codes [0403] and [0966] before entering this code.
- 4 Cooling fans will also come on when this code is entered if the Fuser is cold.
- 5 Fuser must be at the run temperature before the Drive Motors are switched on to prevent copier damage.

## To Enter Multiple Codes (Chaining)

The **Roll 1** button is used when entering more than one code. Enter the desired code. If the code can be chained, **ROLL 1 TO CHAIN** will appear on the message display. Press the **Roll 1** button, then enter the next code.

## To Exit the Multiple Codes

Multiple codes can be switched off by two methods.

1. Enter the codes in the reverse sequence from how they were entered, pressing the **Stop** button after each code.
2. Press and hold the **P** button while pressing the **Stop** button. This will clear all the codes that were entered.

## Special Tests

The following tables give special diagnostic tests that are used to enable or disable features or to change the operating parameters of the copier. To enter a special test, the copier must first be in the diagnostics mode.

Each special test has a value that is stored in non-volatile memory (NVM). If there is a default value, it is found in the Value column.

NVM values may be changed by entering the special test, pressing the **Start** button, and then using the **Copy contrast** UP and DOWN arrow keys to select the desired NVM value. To enter the selected value, press the **Start** button again. To exit the test, press the **Stop** button.

If there is a reference to a procedure, the procedure must be followed in order to correctly perform the test.

Code	Description	Value
0211	Language ROM Test 0 = Both Language ROMs are defective. 1 = Primary Language ROM is good. 2 = Secondary Language ROM is good. 3 = Both Language ROMs are good.	
0261	Country Configuration 0 = 115 V 1 = 240 V (Refer to Note 1) 2 = 220 V	
0262	Media Width This code is used to control what media width can be used in the copier. 1 = inch 2 = metric (mm) 3 = both	USO 1 RX 2
0263	Billing Meter Count This code is used to select the billing in meters or inches. 0 = inch 1 = metric (decimeter)	USO 0 RX 1

Note 1: **W/O Tag/ MOD 6: 50 Hz copiers requiring 240VAC: DO NOT set the code [0261] to 240 VAC. Set the code [0261] to 220 VAC. When the code [0261] is set to 240 VAC, a fusing temperature run away may occur in normal copy mode or when using the codes [1004] and [0921].**  
**W/ Tag/ MOD 6: 50 Hz copiers requiring 240VAC: The code [0261] may be set to 240 VAC.**

Code	Description	Value
0360	NVM reset to default. Entering the number 1 or 3 resets all the NVM values to the default values.  Entering the number 2 allows the electronic billing to be reset to any desired value. 1 = USO NVM Default 2 = Billing 3 = EO NVM Defaults	
0361	Watchdog timer test. This code can be use to exit the diagnostics mode.	
0362	Diagnostic timeout interval. This code allows the adjustment of the time interval that the copier will stay in the diagnostic mode. The time interval range is 5 to 50 minutes.	5 min.
0363	NVM Reset This code allows the NVM values to be reset back to the previously adjusted values. The software compares the NVM values to a backup file and will reset the values that are not the same as the values in the backup file.	
0364	NVM Check sum.	
0370	Auditron NVM Reset to nominal.	
0371	This code allows the Technical Representative to change the administrator number without resetting NVM.	

Code	Description	Value
0373	Auditron NVM Reset to nominal. This code allows the NVM values to be reset to the recorded Auditron values. The software compares the NVM values to a backup file and will reset the values that are not the same as the values in the backup file.	
0374	Auditron NVM Reset of checksum.	
0379	Auditron/ EFA (External Foreign Accessory) Enable 0 = Auditron/ EFA Off 1 = Auditron On 2 = External Foreign Accessory On, billing in square feet 3 = External Foreign Accessory On, billing once per copy	1
0561	(W/ Tag/ MOD 2): This code adjusts how far the document travels on the scan cycle before it starts the rescan. Refer to ADJ 5.2 Document Stop Position	
0562	(W/ Tag/ MOD 2): This code adjusts how far the document travels on the rescan cycle before it gets scanned again or stops at the end of the copy cycle.. Refer to ADJ 5.2 Document Stop Position	

CODE	DESCRIPTION	VALUE
0601	Document Drive Motor This code allows the adjustment of the document drive motor speed.  Refer to ADJ 5.1 Copy Size Adjustment	
0860	Image Registration This code allows the adjustment of the image on the media. Adjustment scale is from 0 to 20. Adjustment range is zero to 5/8 inch (1.6 mm) in increments of 1/32 (0.8 mm)  Refer to ADJ 8.1 Image Registration.	10 5/16 inch (8 mm)
0862	Copy Media Length This code enables the adjustment of the copy media length by determining when the cutter is to cut the media. Adjustment scale is from 0 to 20. Adjustment range is zero to 5/8 inch (1.6 mm) in increments of 1/32 (0.8 mm).  Refer to ADJ 8.2 Auto Length	10 5/16 inch (8 mm)
0908	Enables and disables photoreceptor indexing feature	

CODE	DESCRIPTION	VALUE
0920	Displays main drive time on	
0921	Electrostatic Setup This code is used to adjust the corotrons, exposure, and the developer bias. 1 Adjusts the Transfer/Detack Corotron voltage 2 Adjusts the Charge Corotron Voltage ( $V_0$ ) 3 Adjusts the Exposure ( $V_{BK}$ ) 4 Adjusts the image density 5 Displays Illumination Bias Voltage and Illumination Sensor output voltage  Refer to ADJ 9.2 Electrostatic Series	

CODE	DESCRIPTION	VALUE
0922	This code disables toner faults to enable the running of copies while in a LL toner fault. While in diagnostics enter the code [0922] and select [YES] for running with toner faults. Enter the code [0361] to exit the diagnostic mode. Run copies.	
0926	Resets the toner control values to nominal	
0960	This code adjusts the time between indexes of the photoreceptor while the cleaning blade is against the photoreceptor.	
0961	This code adjusts the length of time the cleaning blade is against the photoreceptor after the end of the copy cycle. The code [0960] is disabled when the cleaning blade is away from the photoreceptor.	20 minutes



CODE	DESCRIPTION	VALUE
1004	<p>Fuser Run Temperature Display. This code switches the fuser heat rod on and increases the fuser heat roll temperature to the run temperature. The run temperature is displayed in degrees (F) and degrees (C). At run temperature, the Drum/ Developer and Fuser Drive Motors are switched on. The following conditions may exist when the message, <b>FUSER CAN NOT BE TURNED ON, CONDITION XX</b> is displayed:</p> <ul style="list-style-type: none"> <li>03 Developer Cover is open</li> <li>04 Cutter Cover is open</li> <li>05 Xerographic interlock is open</li> <li>06 Right side door is open</li> <li>07 Document Handler interlock is open</li> <li>08 Fuser status problem, Turn power off and try again</li> <li>09 Illumination status problem, Turn power off and try again</li> </ul>	
1010	<p>Fuser Scorch Sensor (Thermistor RT2). Signal is 1 with Fuser temperature = &lt; 420° F (215° C). Signal is 0 with Fuser temperature = &gt; 420° F (215° C). Note: Power must be switched off then on, in order to reset signal.</p>	

CODE	DESCRIPTION	VALUE
1026	Resets the fuser control NVM to default values.	
1060	<p>Fuser Temperature Adjust This code allows the adjustment of the fuser run temperature. Run temperature is 320° F (160° C) with 36 inch wide bond media.</p> <p>Refer to ADJ 10.1 Fuser Temperature</p>	
1061	This code adjusts the temperature at which the main drive starts turning.	
1062	This code adjusts the temperature offset between bond and vellum.	
1063	This code adjusts the temperature offset between bond and film.	
9903	This code initializes all the stepper motor values to default values.	

### Image on Drum (Panic Stop) Procedure

This procedure allows the isolation of copy quality problems by observing the image on the drum before the transfer of the toner to the media. If the defect is visible on the drum before the transfer, the defect is related to the charge, the imaging, or the developer. If the defect is visible on the copy after the transfer, the defect is related to the transfer or fuser.

1. Make a copy of Test Pattern, **82E5980**; open the right door interlock when the test pattern is almost half way into the document handler.
2. Remove the Developer Module.
3. If the defect is visible on the developed image, the defect cause is related to the charge, the imaging, or the developer. If the defect is not visible, the defect cause is related to the transfer or the fuser.


## Photoreceptor Drum Maintenance



### WARNING

When performing the photoreceptor drum maintenance do the following:

- Ensure that there is adequate ventilation in the area.
- Use protective gloves at all times.
- Do not smoke.
- Wash your hands when the procedures are completed.


 These procedures must be completed in the shortest possible time in order to reduce the effects of light shock.

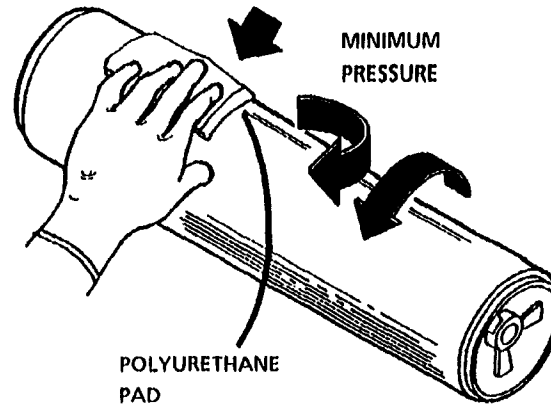
### Washing Procedure

The Washing Materials:

Photoreceptor Maintenance Kit, Film Remover

1. Remove the photoreceptor drum assembly from the xerographic module (REP 9.2).
2. Put on gloves.
3. Gently remove any dry ink/ toner and developer from the surface of the drum, using a dry polyurethane pad.
4. Apply Film Remover to a clean polyurethane pad.
5. (Figure 1): Wash the drum from end-to-end using a circular movement.


 Ensure that the ends of the drum are washed.



	01927	A
TAR	SM 6	M

Figure 1. Washing the Drum

6. Using the clean side of the polyurethane pad, continue washing the drum until the entire surface of the drum is covered with film remover.
7. Allow enough time for the air to dry the surface of the drum.
8. Use the dusting pouch to apply a thin layer of zinc stearate over the entire surface of the drum.
9. Buff the surface of the drum using the clean side of the dry polyurethane pad.


 Ensure that the ends of the drum are buffed as well as the center of the drum.


10. Continue to buff the surface of the drum for three complete revolutions of the drum.
11. Apply a final thin layer of zinc stearate over the entire surface of the drum.
12. Reinstall the drum.
13. Enter diagnostic mode. Enter tests [1004] and allow the copier to run for 5 more minutes.
14. Place the used washing materials in the disposal bag.
15. Wash your hands.

### The Polishing Procedure

The Polishing Materials:

Photoreceptor Maintenance Kit,  
Photoreceptor Polish

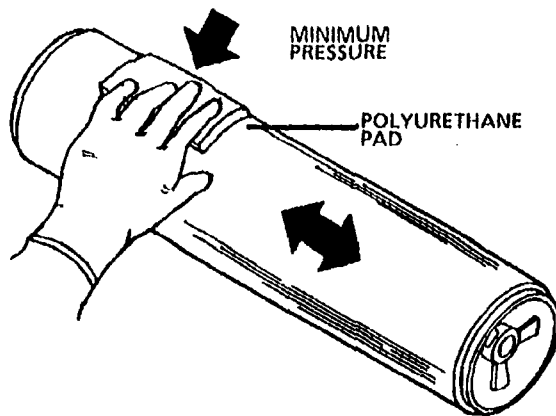
 This procedure can be used to remove large areas of filming or fine scratches.

 Do not allow compounds to become dry on the drum. Small scratches on the surface of the drum will occur.

(Continued)

(Continued)

1. Remove the photoreceptor drum assembly from the xerographic module (REP 9.2).
2. Put on gloves.
3. Gently remove any dry ink / toner and developer from the surface of the drum, using a dry polyurethane pad.
4. Completely soak two sponges with water.
5. Using a paper towel, remove some water from one of the sponges until the sponge is only slightly damp.
6. Using another paper towel, remove some water from the second sponge until it is drier than the first sponge.
7. Shake the container of polish thoroughly.
8. Put a large amount of polish on a clean polyurethane pad.
9. (Figure 2): Polish the drum.



	01927	A
TAR	SM 6	M

Figure 2. Polishing the Drum

**2** Ensure that the entire surface of the drum is polished.

10. Remove the polish from the drum, using the first sponge. Then remove any residual polish, using the second sponge.
11. Buff the surface of the drum, using the clean side of the dry polyurethane pad.
12. Use the dusting pouch in order to apply a thin layer of zinc stearate over the entire surface of the drum.
13. Buff the surface of the drum again.

**3** Ensure that the ends of the drum are buffed as well as the center of the drum.

14. Continue to buff the surface of the drum for three complete revolutions of the drum.
15. Apply a final thin layer of zinc stearate over the entire surface of the drum.

**!** After completing the polishing procedure, the drum must be used immediately. If the drum is stored, crystallization problems may occur.

16. Reinstall the drum.
17. Enter the diagnostic mode. Enter the test [1004] and allow the copier to run for 5 more minutes.
18. Place the used polishing materials in the disposal bag.
19. Wash your hands.

## Photoreceptor Cleaning Enhancement

1. Remove the photoreceptor drum assembly (REP 9.2).
2. Use the dusting pouch (8R171) to apply a thin layer of zinc stearate over the entire surface of the photoreceptor.
3. With a new lint free cloth (600S4372), wipe the entire surface of the photoreceptor using moderately heavy pressure. Use a back and forth motion of 6 - 10 strokes while revolving the photoreceptor 3 revolutions.
4. Repeat steps 2 and 3 one time and then continue with step 5.
5. Apply a thin layer of zinc stearate over the entire surface of the photoreceptor.
6. Reinstall the photoreceptor drum assembly (REP 9.2).

## Initialization of the Fuser Roll

### Purpose

Correct operation of the Fuser Roll requires that the Fuser Roll be initialized by coating the roll evenly with fuser oil. The following steps specify the correct technique for initializing the fuser roll. Perform the procedure exactly as written and do not omit any steps. The Fuser Roll must be initialized cold then hot.

### Introduction

This procedure must only be used to initialize a new Fuser Roll or when installing a new 3030 Copier. Do not use this procedure when replacing the wick or oil pads. These components have their own procedures.



### WARNING

Wear protective gloves when handling the parts with fuser oil on them. Use caution and do not allow the fuser oil to contact your eyes. Fuser oil can cause severe eye irritation. Wash hands after handling any components that are covered with fuser oil.



### WARNING

Use extreme caution when working in the fuser area and do not touch any heated components. The fuser roll may be hot.

### Items Required

2 Tube (8 cc) fuser oil  
1 pair disposable gloves  
Heavy-duty towels

1. Press power off and disconnect the power cord.



**STEP 2 E:** To avoid damaging the stripper fingers, handle the Stripper Finger Assembly with care.

2. Remove the Stripper Finger Assembly (REP 10.6).
3. Remove the Oil Dispense Assembly (REP 10.7).
4. Leave the Media Feed-in Shelf open and bypass the Feed-in Shelf Interlock.
5. Enter the diagnostic mode and enter the code [0403] to turn on the Main Drive Motor in order rotate the Fuser Roll.
6. Fold a cloth or paper towel into a pad and apply half the tube of oil to the pad.
7. Being very careful, apply the oil to the surface of the fuser roll over the full length.
8. Apply the remainder of the oil on the pad and repeat step 7.
9. Inspect the entire surface of the roll for dry areas.
10. If there are any dry areas on the Fuser Heat Roll, wipe the oil from the surrounding areas to the dry areas, using a towel.
11. Using the same pad clean the Fabric Guide on the Media Transport, then discard the pad.
12. Exit the code [0403] and enter the code [09 21 4] in order to bring the Fuser Roll to operating temperature.
13. While the fuser is warming up, fold another cloth or paper towel into a pad and apply approximately one quarter of the oil on the pad.
14. When the Fuser Roll begins rotating, very carefully apply oil on the surface of the roll over the full length.
15. Apply another one quarter of oil to the pad and apply oil on the surface of the roll over the full length.
16. Clean the Oil Dispense Roll with Film Remover.
17. Reinstall the following:
  - a. Oil Dispense Assembly
  - b. Stripper Finger Assembly
18. Remove the interlock bypass and close the Media Feed-in Shelf.
19. Switch the copier off then on..



**1** Dry areas appear as dull spots, as opposed to oiled areas that appear as glossy areas.

**2** *The copies made in the next step are not for copy quality. They are run to remove any excess fuser oil from the fuser heat roll.*

20. Make 5 copies on 36 inch (914 mm) bond media. Use the white side of test pattern 82E5980.

21. Switch the copier off.

**!** *Use extreme caution in the next steps. Use a thick cloth to wipe the excess oil from the ends of the fuser heat roll and the fabric guide. The Fuser Heat Roll and the Fabric Guide will be very hot. .*

22. Lower the Media Feed-in Shelf.

23. Remove the Stripper Finger Assembly.

24. Wipe excess oil from the ends of the Fuser Heat Roll and the Fabric Guide.

25. Reinstall the Stripper Finger Assembly.

26. Wash your hands to remove any fuser oil that may remain on them.

27. Switch on the copier

28. Make 5 copies of test pattern 82E5980 and check the copy quality.

## ENABLING THE AUDITRON

### PURPOSE

The purpose of this procedure is to provide information on enabling the auditron feature.

### INTRODUCTION

The auditron feature can be disabled and enabled by the Service Representative using special diagnostic code [0379]. The copier is shipped from the factory with this feature enabled; default is set to 1. At this point however, the auditron is still not ready to be used. The customer must still further enable the auditron by selecting and entering an administrator's code, and selecting the mode of operation that best fits their needs. These modes (0, 3, 4, and 5) are described in the *Auditron Guide* section of the copier User Guide.

The first step in setting up the auditron is for the customer to assign an Auditron Administrator.

Step two is having the assigned Auditron Administrator choose an Administrator's User Number, up to twelve digits.

Step three is to assign the Administrator's User Number to account 100. This is done by referring the *Entering the Auditron Mode* procedure in the *Administrator's Guide* section of the User Guide.

The auditron provides 250 accounts that can be used to monitor the number of copies, in square feet or metres, that are made in the account being used. These accounts are assigned to individual users (one individual or a group of individuals) by the auditron administrator.

To use this account the individual must enter a User Number to access the account number. The individual user must choose their own number. The Auditron Administrator then enters the User Number for the account assigned to the individual.

### PROCEDURE

1. Enter the diagnostic mode. Enter [0379] in order to check that the default is 1. If not, and the customer will be using the auditron, change the default to 1.
2. Refer to the *Administrator Guide* section of the User Guide to complete the enabling of the Auditron. The individual that will be the Auditron Administrator should do this part of the enabling with your assistance.
3. Refer to the *Entering the Auditron Mode* procedure and follow the procedure to enable the Auditron. Two enabling tasks are done in the procedure. They are:
  - The administrator's must choose a number of up to twelve digits, and this number must be assigned to account 100. This number will be used to access all the Auditron functions.
  - The administrator must choose an Auditron Mode 0, 3, 4, or 5. They are listed in the *Administrators Guide*. The Auditron is shipped set to Mode 0, Auditron off.



*The modes 3 and 4 are the modes that the Auditron is used to monitor the copies made in each account. Mode 0 turns off the Auditron and copies can be made without entering a user number. Mode 5 disables the copier so that no copies can be made. In order to make copies the Auditron must be set to Modes 0, 3, or 4.*

4. Using the *Entering the Auditron Mode* procedure in the User Guide, assist the individual who will be the Auditron Administrator to enable the Auditron.

## DISABLING THE AUDITRON

### PURPOSE

The purpose is to provide instructions for disabling or turning off the Auditron feature.

### INTRODUCTION

There are two methods that can be used to get out of the auditron mode.

#### Method 1

The first method is to change the auditron mode to 0 (zero). Using this method allows the customer to enable the Auditron without calling for service.

#### Method 2

The second method is to disable the Auditron in diagnostics using the code [0379]. If this method is used, the Service Representative must enable the Auditron feature.

### PROCEDURE

#### Method 1

1. Have the Auditron Administrator enter their User Number. The following message will appear on the display:

#### SELECT THE SYSTEM LEVEL FUNCTION

2. Enter 99. The following message will appear on the display:

#### AUDITRON MODE X



*The X will be a 3 of 4 depending on the mode the customer was using.*

3. Enter 0 (zero).
4. Press th P/. key to exit. The copier is out of the auditron mode.

#### Method 2

1. Enter the diagnostic mode.
2. Enter the code [0379] and change the default value to 0 (zero).
3. Exit the diagnostic mode.

## CHANGING THE AUDITRON ADMINISTRATOR USER NUMBER

### PURPOSE

The purpose is to allow changing the Auditron Administrator user number if the administrator forgets the number.

### INTRODUCTION

Performing this procedure returns the administrator number back to the default number of 11111 (five ones).

### PROCEDURE

1. Enter the diagnostic mode.
2. Enter the code [0371] and change the default value to 0 (zero).
3. Exit the diagnostic mode.
4. Have the individual who is the auditron administrator select a number.
5. Using the *Entering the Auditron Mode* procedure in the User Guide, assist the individual who will be the Auditron Administrator to enable the Auditron.

## Molex SLConnector Repair Procedure

### 1. (Figure 1): Molex Extraction Tool.

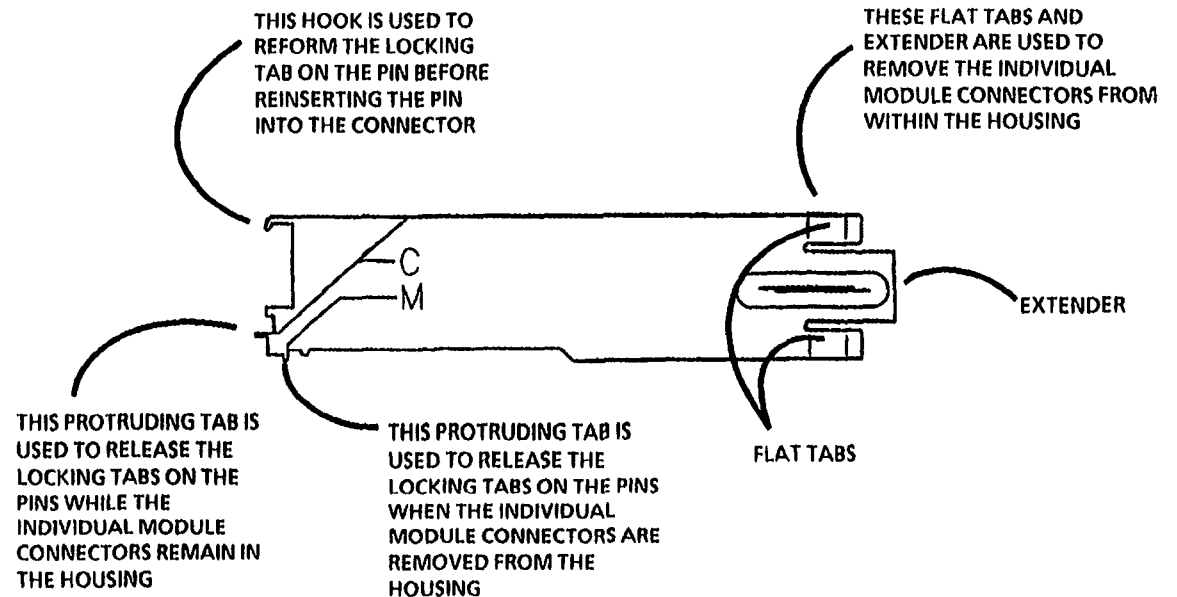
### Purpose

The purpose of this procedure is to show the approved method of repair or replacement of the wire terminals in either the Pin Housing Connectors or the Socket Housing Connectors without damaging them.

**!** *The Molex connectors will break easily. Use only approved tools and procedures when extracting modules or terminals or resetting the terminal locking tabs.*

### Items Required

600T1825 Extraction Tool



	01994	A
TAR	SM 6	M

Figure 1. Molex Extraction Tool

(Continued)



(Continued)

ⓘ **Note the location of the individual module connectors in the housing before removing them. This will ensure that they are reinstalled correctly after the repair to the terminals is complete. Failure to locate the individual connectors correctly will cause the copier to malfunction causing damage.**

ⓘ **STEP 2 B: Use caution when forcing the housing body away from the module connector. Too much force could cause damage to the housing body.**

2. (Figure 2): Remove the individual module connectors from the housing.

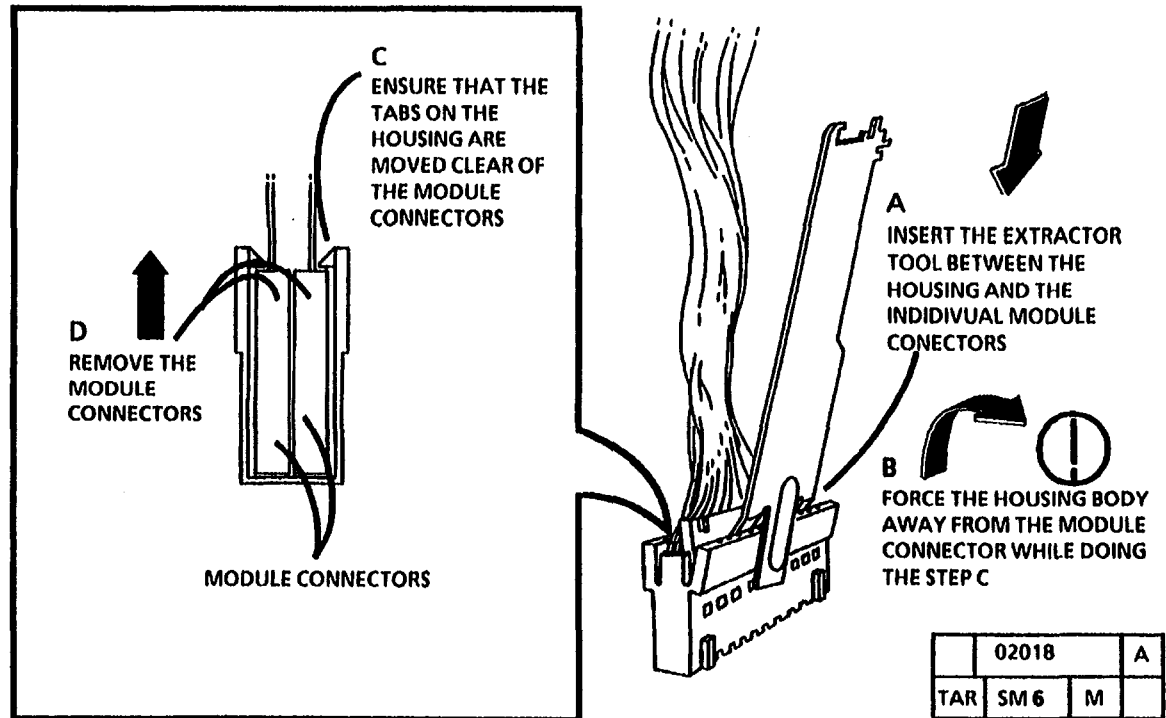


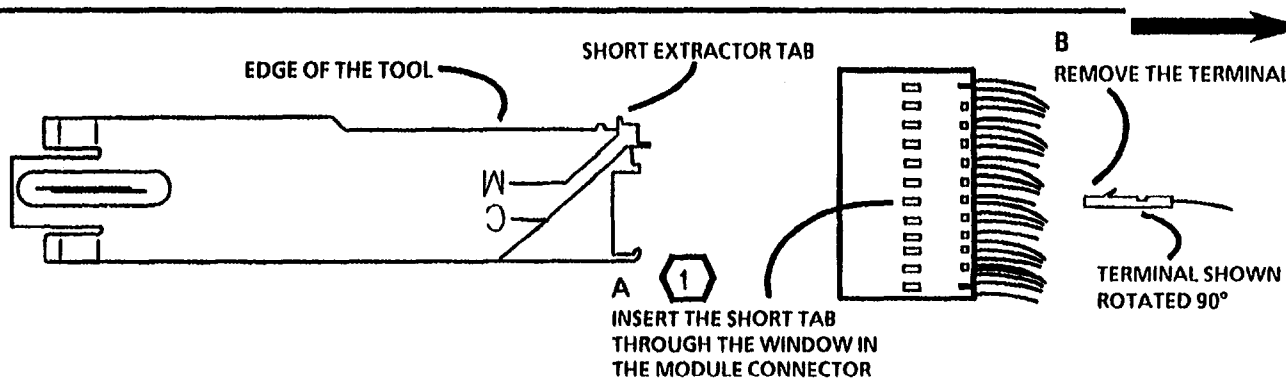
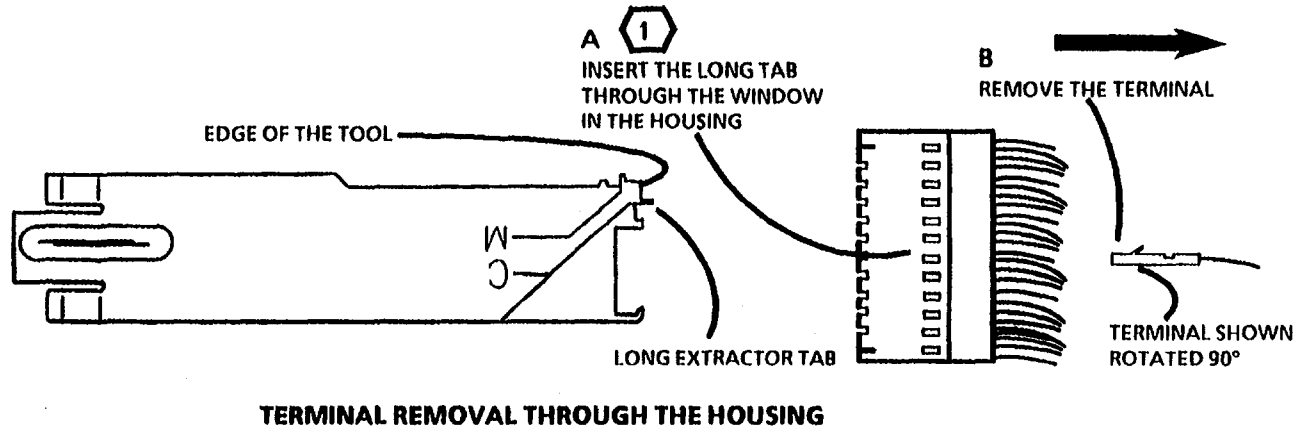
Figure 2. Remove the individual module connectors from the housing

(Continued)

(Continued)

**1** STEP 3 A: Insert the extractor tabs until the face of the tool is flush with the connector housing.

3. (Figure 3): Remove the Terminals from the Connectors.



**TERMINAL REMOVAL FROM MODULE CONNECTOR REMOVED FROM THE HOUSING**

Figure 3. Remove the Terminals from the Connectors

	01995	B
TAR	SM 6	M

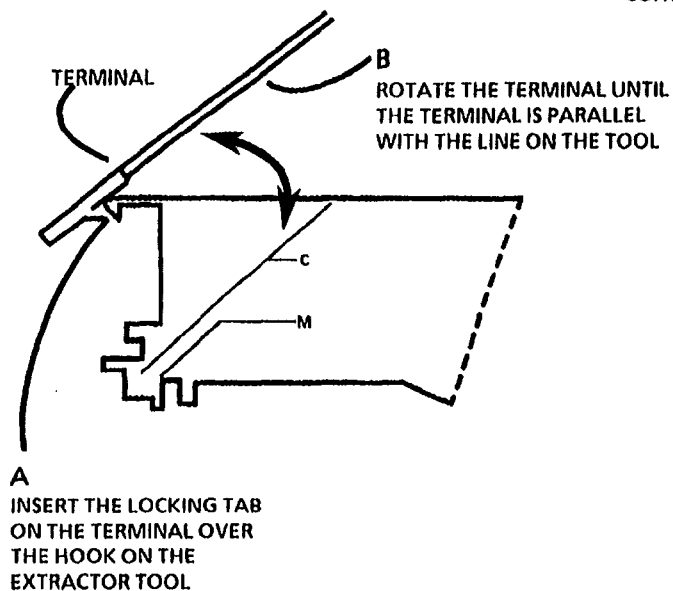
(Continued)

(Continued)

4. (Figure 4): Reform the Terminal Locking Tab.

5. Reinstall the terminal to the pin position it was removed from.

6. Reinstall the individual module connectors to the correct locations noted at the beginning of this procedure. Refer to section 7 for detail of connector configuration



	01996		A
TAR	SM 6	M	

Figure 4. Reform the Terminal Locking Tab

## Specifications

### Product Codes

The product code is located on the serial number plate and identifies the product configuration.

60 Hz 14P  
50 Hz 0K4

### Physical Characteristics

Weight	619 pounds	281.4 kg
Depth	27 inches	68.6 cm
Width	57 inches	144.8 cm
Height	58 inches	147.3 cm

### Installation Space Required

105 inches (267 cm) X 87 inches (221 cm)

### Copy Rate

First copy out: 20 seconds  
Three inches per second (3 metres per minute)

### Maximum Number of Copies Selected

Multiple Mode:

W/ O Tag/ MOD 16: 99 Copies

W/ Tag/ MOD 16: 15 Copies

Sets Mode: one Copy

### Cut Length Accuracy

Copies up to 24 inches (610 mm), will be cut within  $\pm 1/8$  inch (4.5 mm). For lengths greater than 24 inches (610 mm), any copy will be within  $\pm 0.5$  % of the specified copy length. From the first copy to the last copy of a multiple copy run, the difference in length will be no more than 5/32 inch (6 mm).

### Magnification

1:1 nominal ( $\pm 1/2$ %) with 20 lb (75 gsm) bond and test pattern 82E5980.

### Cut Squareness

The cut length of the copy will be square within  $\pm 0.4$  % of the copy width. The edge will not vary from a straight line more than 0.040 inch (1mm).

### Electrical Power Requirements

USO/XCI: The power outlet must be on a 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: 104-127 VAC, 60 Hz, single phase

50 Hz: 220/240 VAC, 50 Hz, single phase

Current at 115 VAC:

Standby (Power Saver): 6 amperes

Running: 16 amperes

Current at 230 VAC:

Standby (Low Power): 2 amperes

Running: 6 amperes

Power Consumption:

Standby (Power Saver/ Low Power):  
690 watts

Running: 1840 watts (60 Hz);  
1400 watts (50 Hz)

Power cord length: 10 Feet (3 metres)

Audible Noise: 67 db (A) or less.

### Document (Original) Size

Minimum Size: (USO) 8.5 inches (216 mm) wide X 11 (280 mm) long; (RX) 210 mm wide X 297 mm long (A4).

Maximum Size: (USO) 36 inches (914 mm) wide X 82 feet (25 meters) long; (RX) 841 mm wide X 25 meters long. Note: Any Document greater than 60 inches (152.4 cm) in length must be run in the Sets Mode of Operation.

### Side Edge Registration

For all modes, copy misalignment is 6 mm to the machine center (media location) for copies 1-10. The recommended maximum multiple copy job is 15 copies. The maximum number of copies that can be selected is limited to 15.

## Specifications (Continued)

### Media Type and Size

Type specification: USO, XC, XLA: bond, vellum, film. EO: bond, tracing paper, film.

### Size specification:

Auto Continuous Roll - WIDTH 18 inches (432 mm) to 36 inches (914 mm). LENGTH 11 inches (279 mm) to 60 inches (1524 mm) with the copier in the multiple copy mode. Up to 82 feet (25 meters) with the copier in the SETS mode.

Manual Feed (Pre-Cut Sheets) - WIDTH 11 inches (280 mm) to 36 inches (914 mm).

### Media Roll Supply

Three rolls, each with 36 inch (914 mm) X 500 feet (152 metres) for bond and vellum (tracing paper) and 36 inch (914 mm) X 150 feet (45.7 metres) for film.

### Environmental Data

Maximum Temperature: 90° F, 32° C

Maximum Humidity: 85%

Minimum Temperature: 60° F, 16° C

Minimum Humidity: 15%

Maximum Altitude: 7000 feet (2133 metres) above sea level

### Heat Emission (Average)

#### Standby:

(Power Saver - 60 Hz): 2350 BTU/ HR

(Low Power - 220V/ 50 Hz): 3242 BTU/ HR

(Low Power - 240V/ 50 Hz): 3242 BTU/ HR

#### Running:

(60 Hz): 6270 BTU/ HR

(297326.7 K-JOULES / HR)

(220V/ 50 Hz): 7509 BTU/ HR

(240V/ 50 Hz): 7748 BTU/ HR

## Installation and Removal

### Ground and AC Voltage Check

**!** Before installing the 3050 Copier, check for correct voltage, polarity and the grounding of the AC outlet that is provided by the customer. Use the Polarity Checker (600T467) or a multimeter. Incorrect voltage applied to the 3050 could result in poor performance or damage to the copier.

**1** The power line outlet must be a 20 amp single dedicated line (wired directly to the circuit breaker panel) with no shared neutral and on a different phase from the lighting circuits.

**!** If specifications are not met, the AC outlet is wired or grounded incorrectly. Inform the Customer and request that a licensed electrician correct the problem. DO NOT make the correction yourself.

The appliance coupler (power supply cord) is the disconnect device for this equipment. Ensure that the installation is near the outlet and is easily accessible.

1. (Figure 1): Check the ground and the AC voltage.

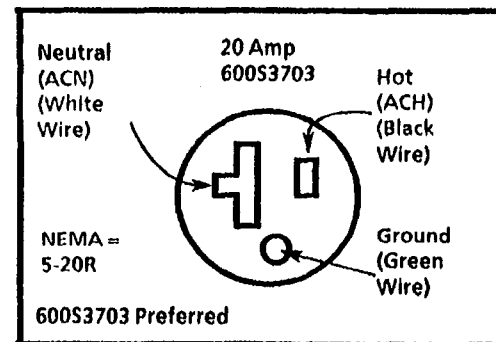


Figure 1. Check the Ground and the AC Voltage

#### 60Hz

- A. Check for 105-125 VAC between AC Hot and AC Neutral.
- B. Check for 105-125 VAC between AC Hot and Ground.
- C. Check for less than 2 VAC between AC Neutral and Ground.

#### 50Hz

- A. Check for 220-240 VAC between AC Hot and AC Neutral.
- B. Check for 220-240 VAC between AC Hot and Ground.
- C. Check for less than 2 VAC between AC Neutral and Ground.

## Floor Space Required:

105 inches x 87 inches (2667mm x 2210mm)

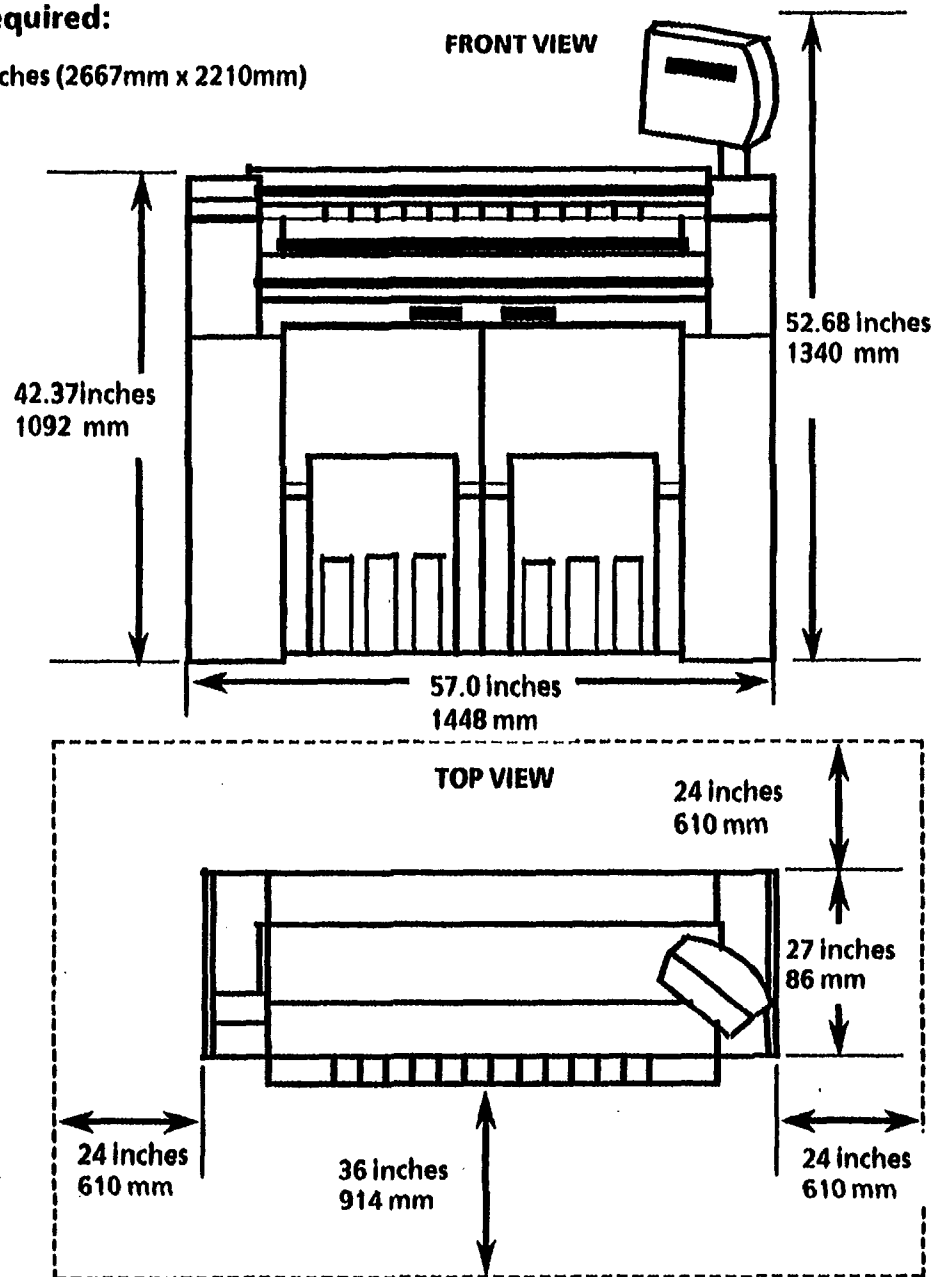


Figure 2. Minimum Space Requirements

2. (Figures 2): This shows the minimum allowable space requirements.



## WARNING

This product will produce ozone during operation. The ozone that is produced is dependent on the copy volume and is heavier than air. Providing the correct environmental parameters as specified in Xerox installation procedures will ensure that concentration levels meet safe limits.

USO only: If additional information concerning ozone is needed, request the Xerox publication 600P83222, Ozone, by calling 1-800-828-6571.

(Continued)

## Installation Procedure

1. (Figure 3): Remove the packing material.

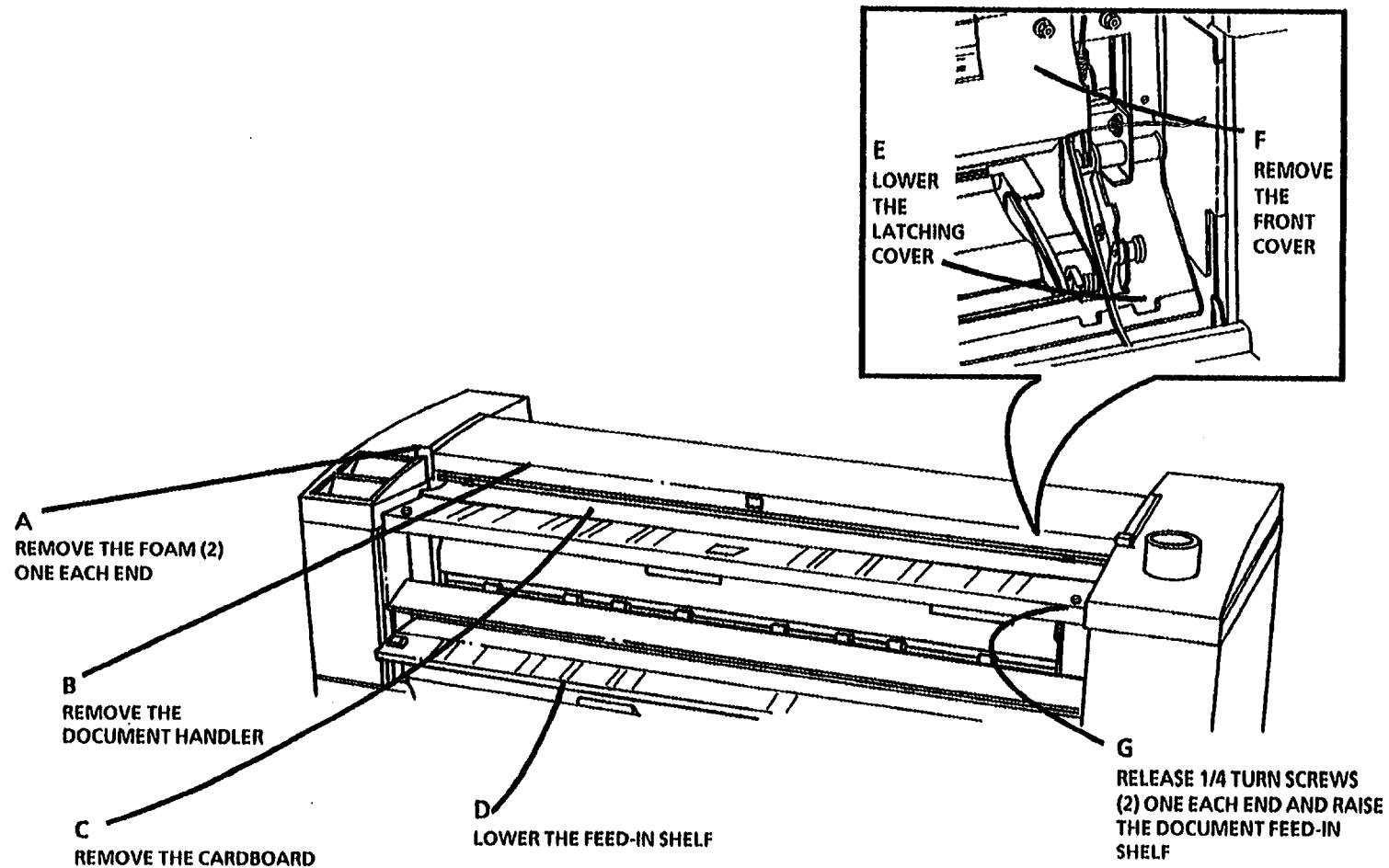


Figure 3. Remove Document Handler

	01623	B
TAR	SM 6	M

(Continued)

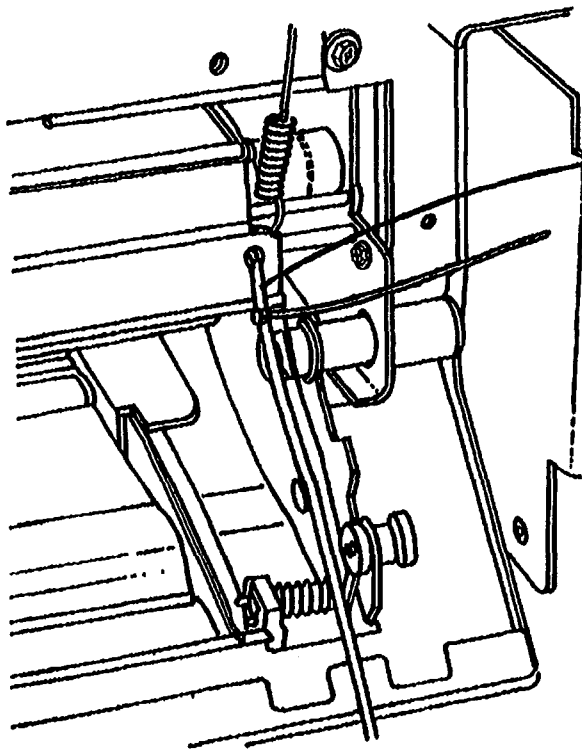


(Continued)

2. (Figures 4A): Remove the cable ties.

1A

STEP B: Place your index finger on the head of the cable tie behind the bracket to ensure that the end of the cable tie does not fall into the copier.



1A

B  
CUT AND REMOVE  
THE CABLE TIES  
FROM THE STRIPPER  
FINGER BRACKET

C  
REINSTALL THE  
FRONT COVER

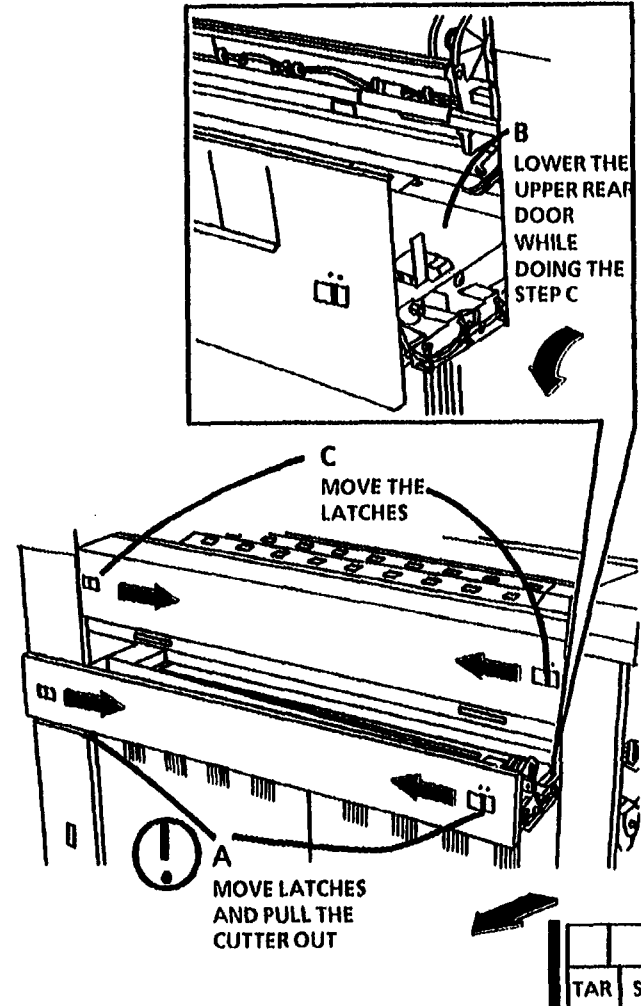
	02184	A
TAR	SM 4	M

Figure 4A. Removing the Cable Ties



STEP 2 A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

2A. (Figure 5): Prepare to Remove the Developer Module.



1A

A  
MOVE LATCHES  
AND PULL THE  
CUTTER OUT

B  
LOWER THE  
UPPER REAR  
DOOR  
WHILE  
DOING THE  
STEP C

C  
MOVE THE  
LATCHES

	01573	B
TAR	SM 4	M

Figure 5. Prepare to Remove the Developer Module

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

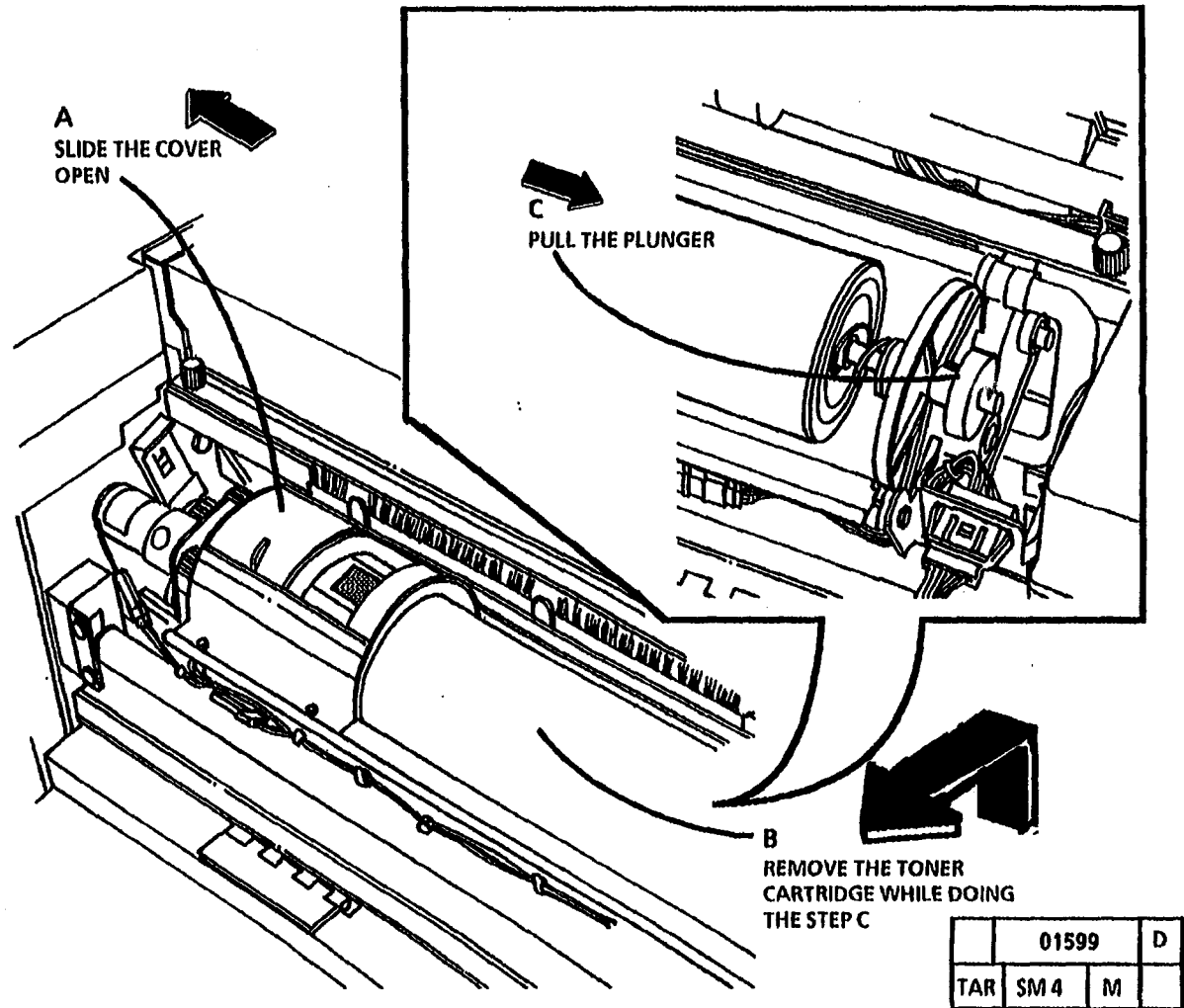


Figure 5. Remove the Toner Cartridge

(Continued)

(Continued)

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

**2** STEP 4 F: Before removing the developer module, ensure that there is a clean area to place the assembly.

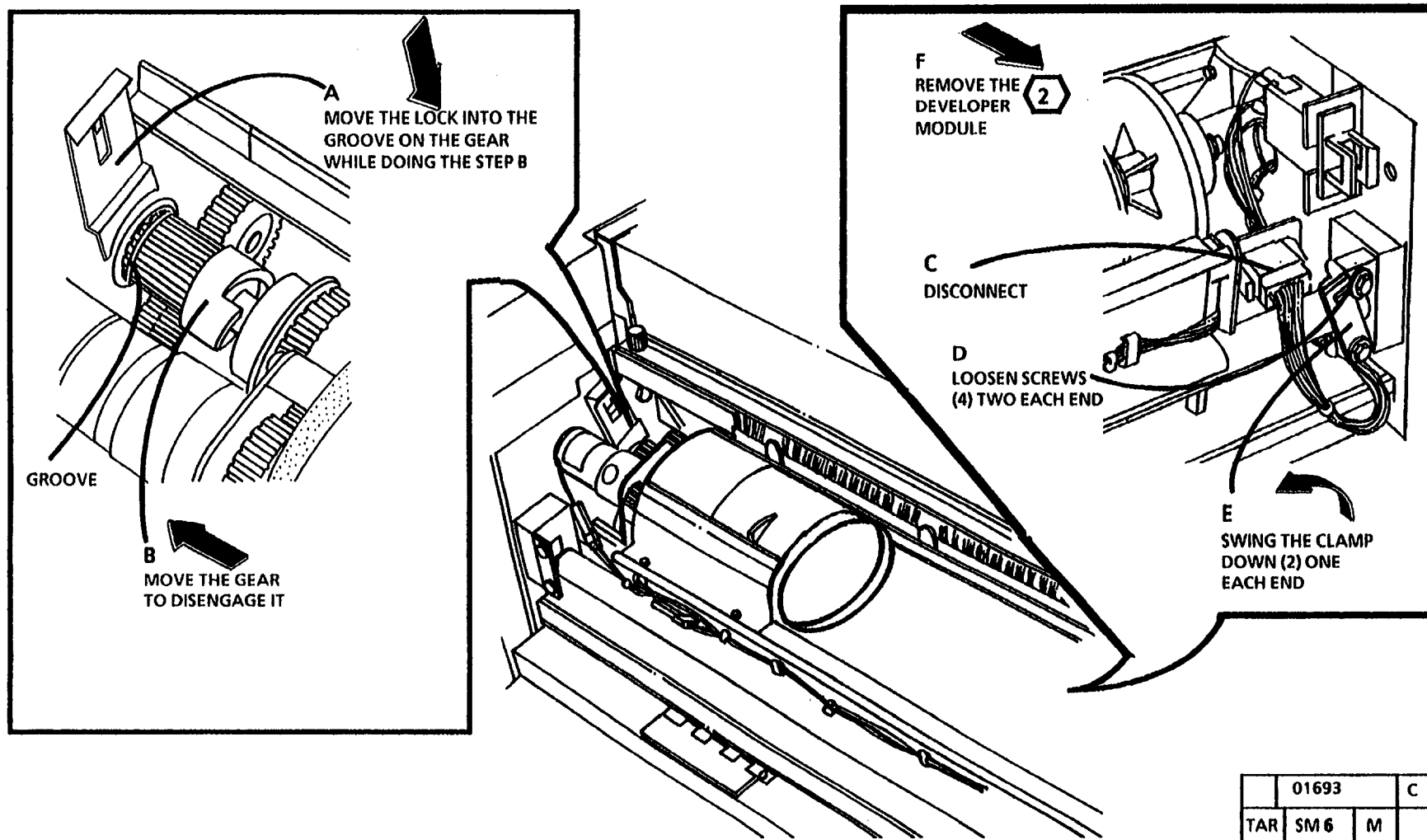


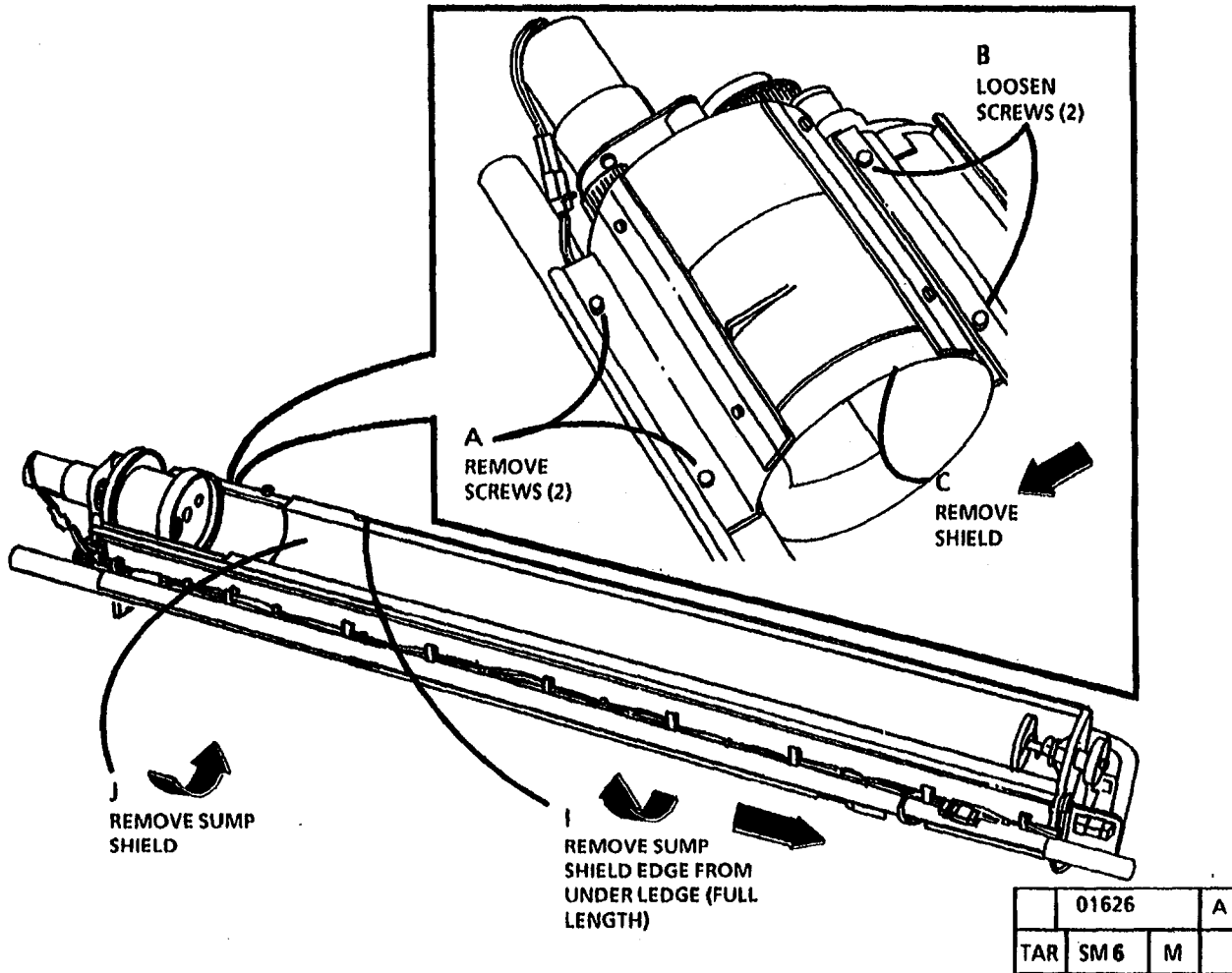
Figure 6. Remove the Developer Module

(Continued)

	01693	C
TAR	SM 6	M

(Continued)

5. (Figure 7): Remove the Sump Shield from under the toner cartridge.

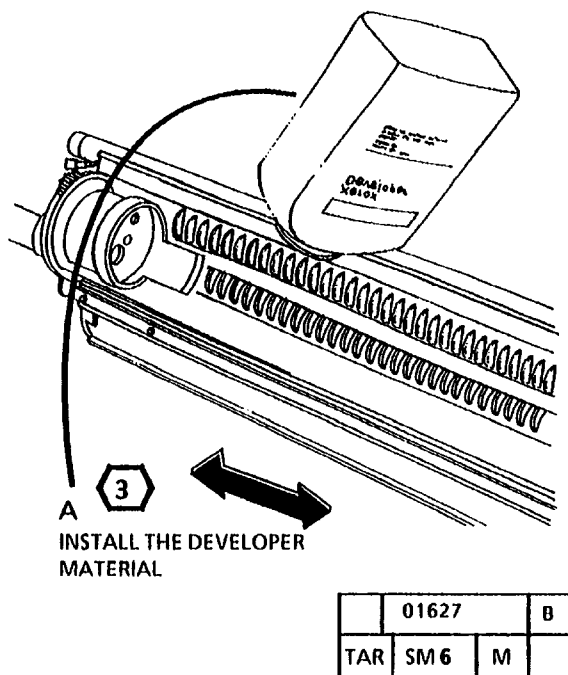


(Continued)

Figure 7. Remove the Sump Shield from under the toner cartridge

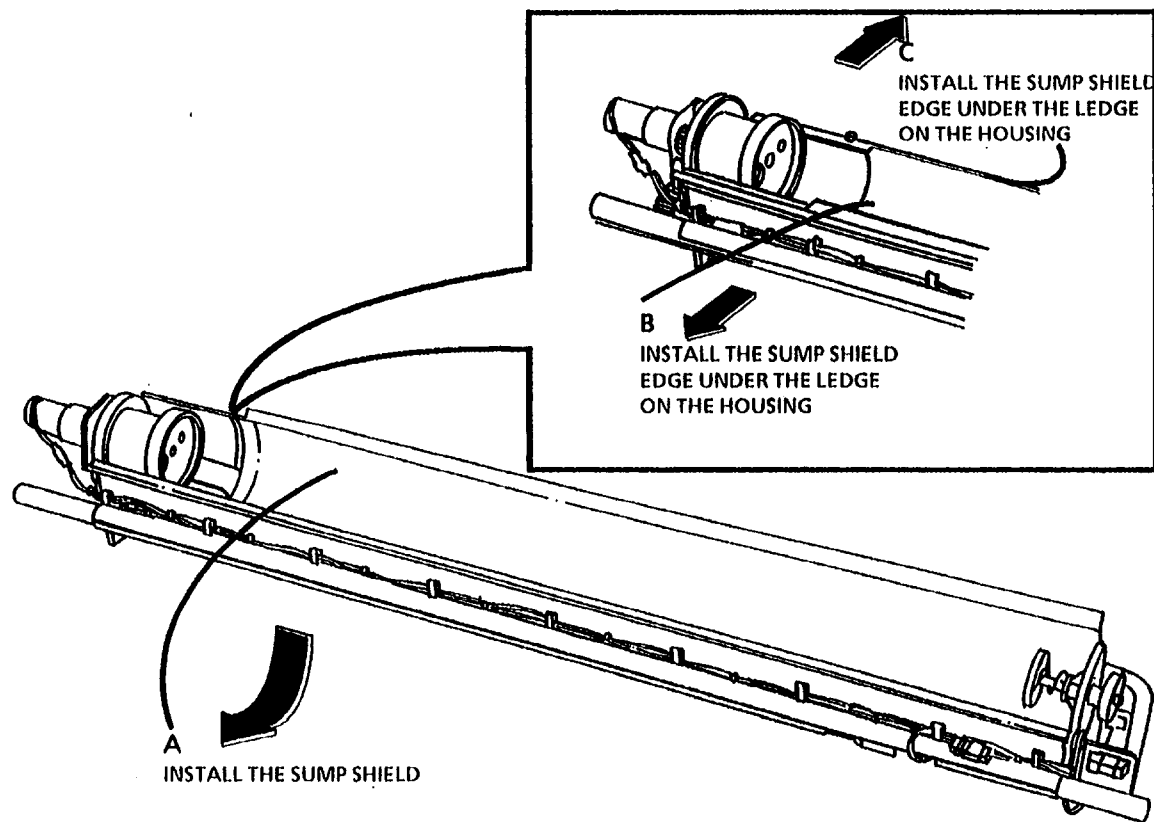
**3** **STEP 6A:** Pour the developer material evenly over the full length of the augers.

**6.** (Figure 8): Install the Developer Material and record the batch number on the machine log.



**Figure 8. Install the Developer Material**

**7.** (Figure 9): Reinstall the Sump Shield on the bottom of the Developer Module.



**Figure 9. Reinstall the Sump Shield on the bottom of the Developer Module**

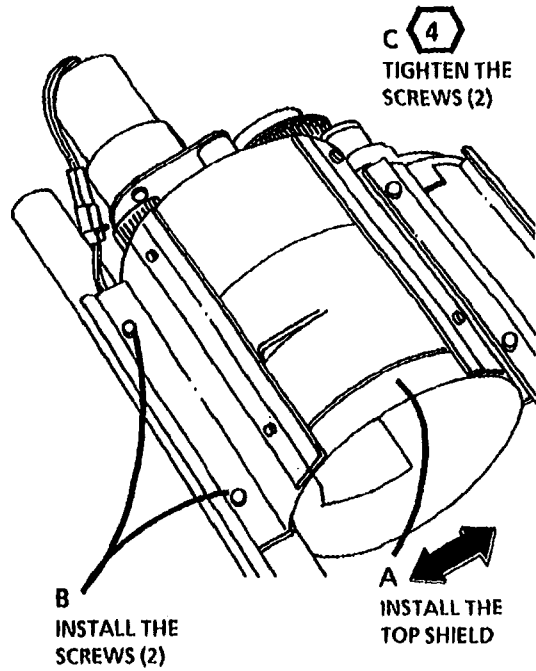
	01628		A
TAR	SM 6	M	

(Continued)

(Continued)

**4** STEP 8 C: Do not overtighten the screws.

8. (Figure 10): Reinstall the Top Shield.



	01731	A
TAR	SM 6	M

Figure 10. Reinstall the Top Shield

(Continued)

(Continued)

**5** STEP 9 C: Ensure that the developer module is fully installed in the brackets.

**6** STEP 9 A: Ensure that the gear is free to engage with the developer module drive gears.

9. (Figure 11): Reinstall the Developer Module.

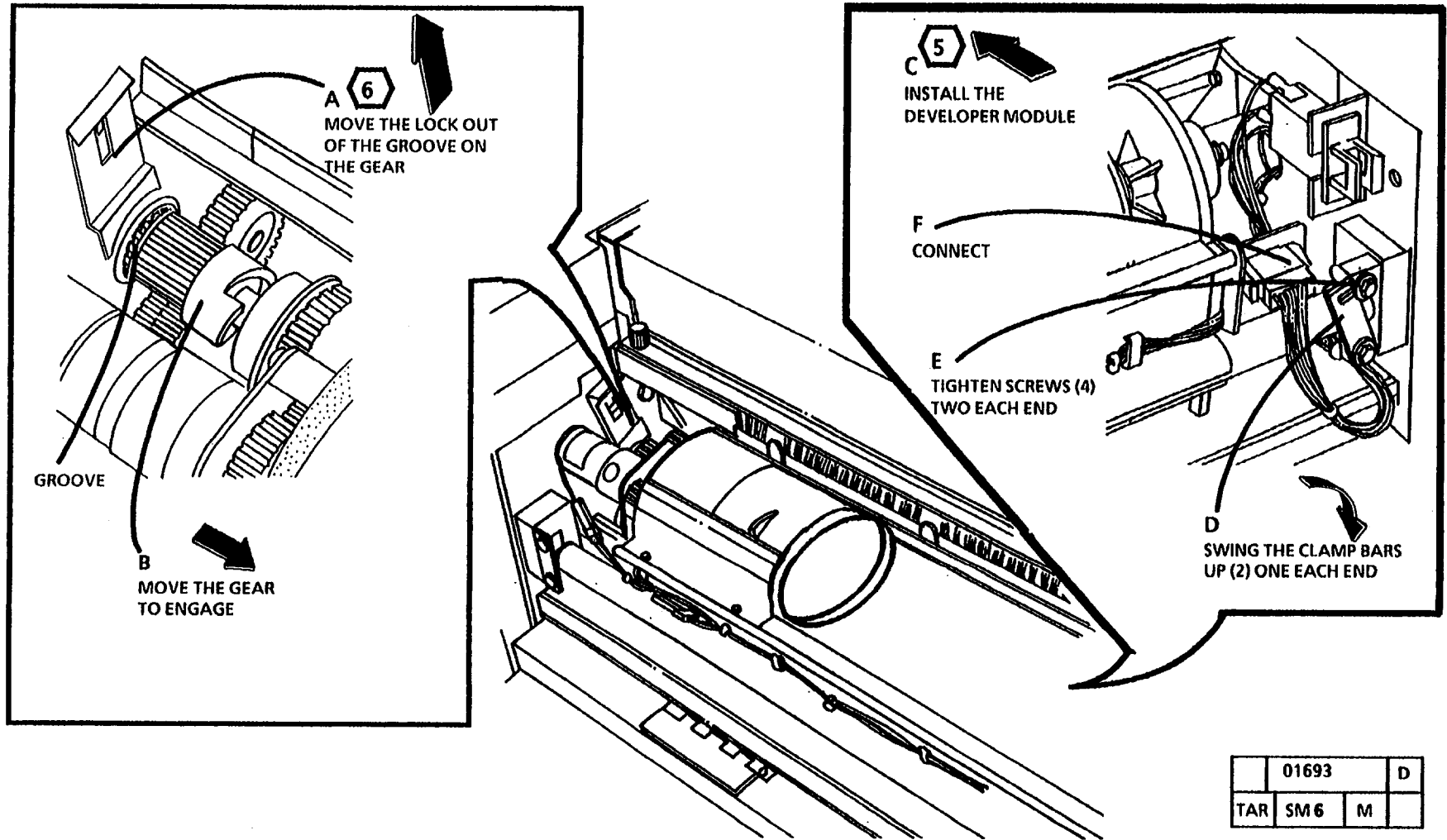
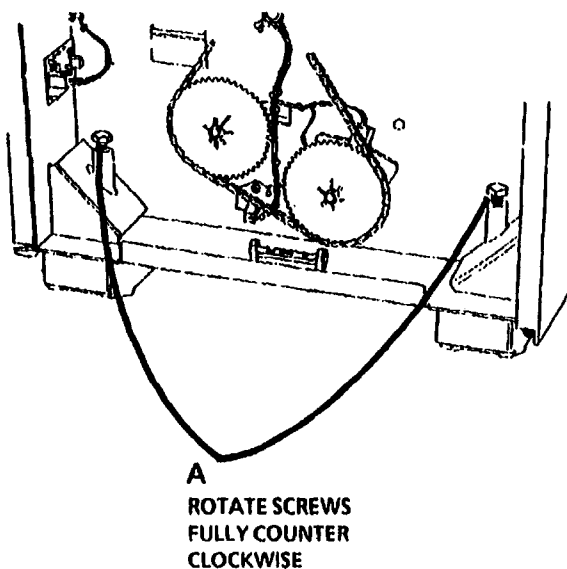


Figure 11. Reinstall the Developer Module

(Continued)

(Continued)

10. (Figure 12): Lower the copier to the lowest position.



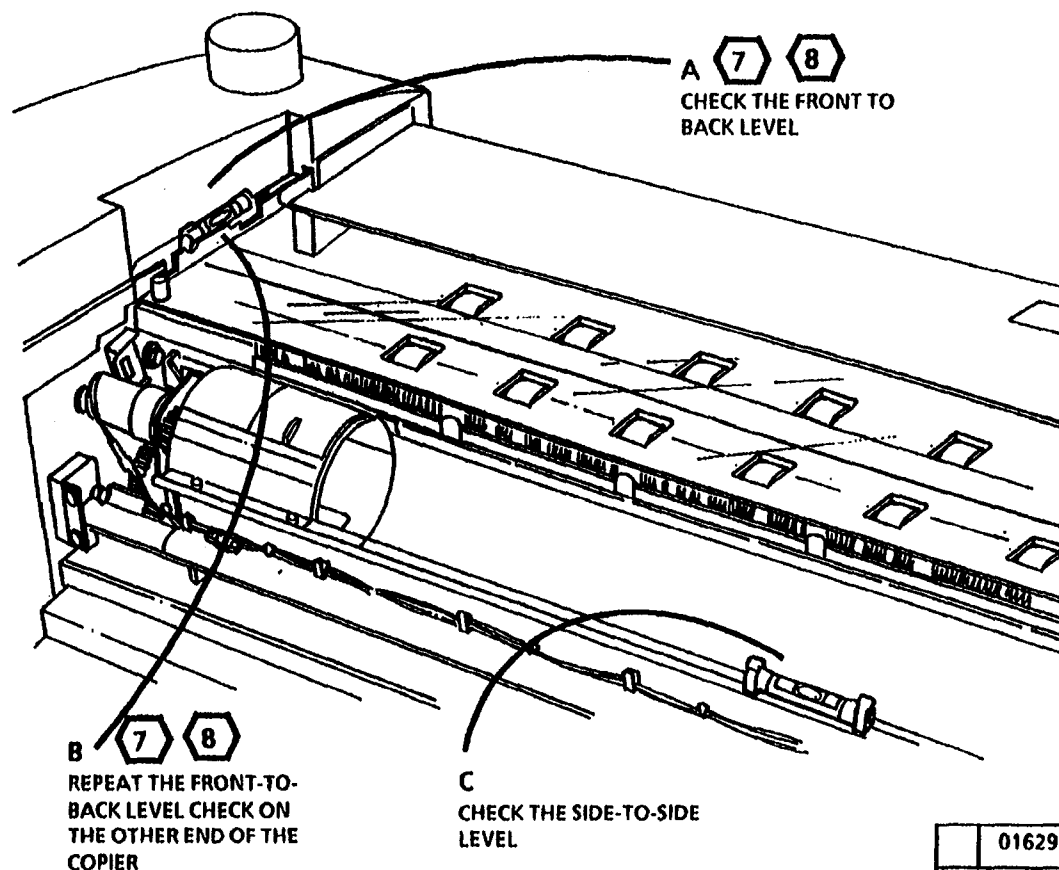
	01870	A
TAR	SM 6	M

Figure 12. Lower the copier to the lowest position

(Continued)

- 7 STEPS 11 A and B: To ensure that the copier is not twisted, perform the front-to-back check on the frame at the ends of the copier.

- 8 STEPS 11 A and B: The bubble must be centered between the lines on the level.



	01629	B
TAR	SM 6	M

Figure 13. Check the Level of the Copier

11. (Figure 13): Check the Level of the Copier.

12. Determine on which side of the copier the front-to-back level is the farthest out of level.

(Continued)

01629B

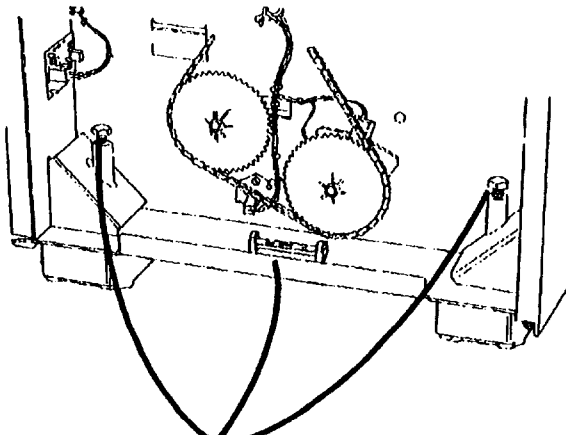


(Continued)

9 Adjust the side which is the farthest out of level first.

10 STEP 13 A : The bubble must be centered between the lines on the level.

13. (Figure 14): Adjust the front-to-back level.



10 A ROTATE SCREWS TO ADJUST THE LEVEL OF THE COPIER  
B REPEAT THE STEP A ON THE OTHER END OF THE COPIER

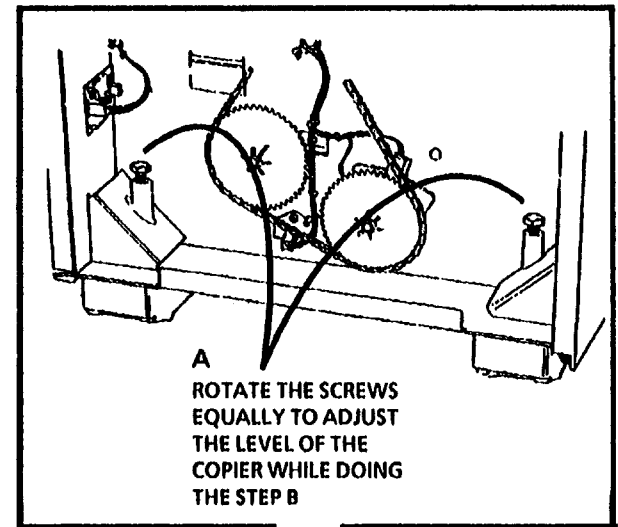
	01870	A
TAR	SM 6	M

Figure 14. Adjust the front-to-back level

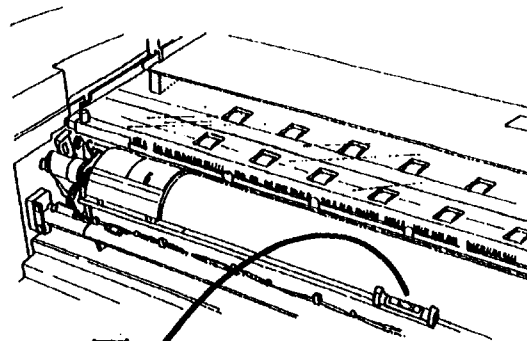
11 STEP 14 B: The bubble must be centered between the lines on the level.

14. (Figure 15): Adjust the side-to-side level.

15. Perform steps 11 through 14 until the level is within specification.



A ROTATE THE SCREWS EQUALLY TO ADJUST THE LEVEL OF THE COPIER WHILE DOING THE STEP B



11 B LEVEL THE COPIER

	01778	A
TAR	SM 6	M

Figure 15. Adjust the side-to-side level

(Continued)

(Continued)

**12** STEP 16 C: To ensure that the toner cartridge is engaged in the drive plate, rotate the cartridge.

16. (Figure 16): Install the Toner Cartridge.

17. Close the Upper Rear Cover and push the Cutter Module in.

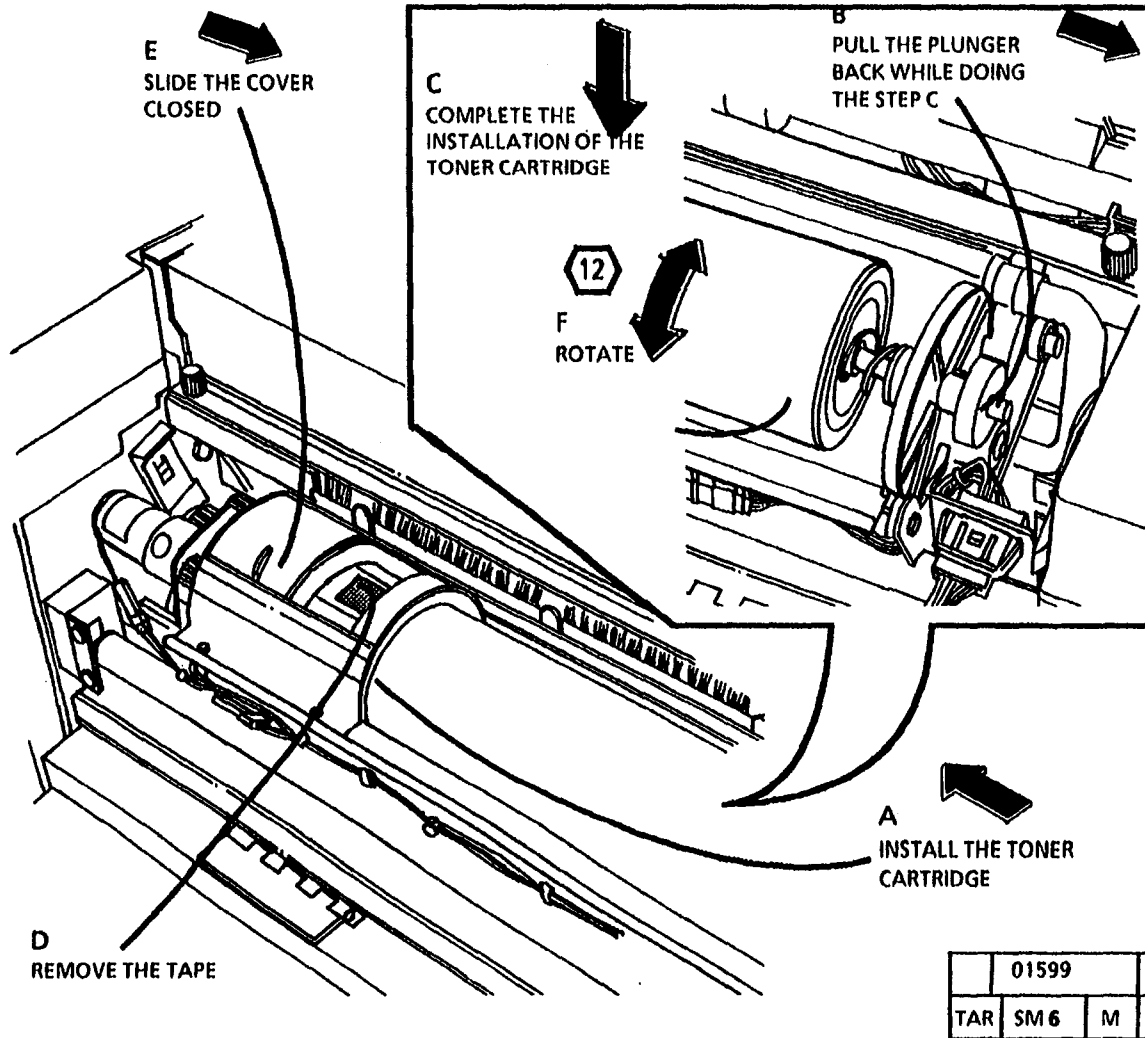


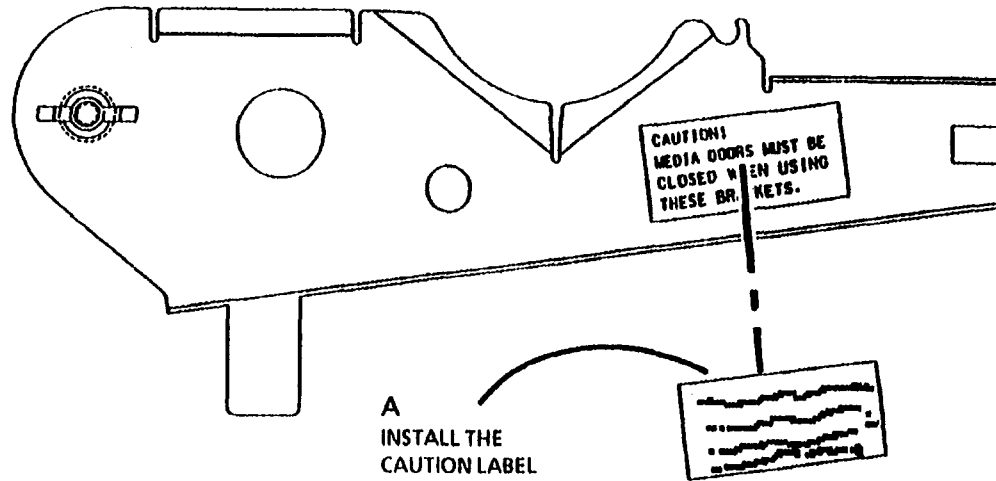
Figure 16. Install the Toner Cartridge.

(Continued)

(Continued)

13 The Service Rails are stored in the left side door of the copier. These service rails are used for the safe removal of the xerographic module. The xerographic module can also be serviced on the rails.

18. RX only: (Figure 17): Install the correct language caution label over the existing label.



	01963	A
TAR	SM 6	M

RX Only: Figure 17. Install the correct language label over the existing label

(Continued)

(Continued)

20. (Figure 19): Remove the Latch Supports.

19. (Figure 18): Remove the Latch Bars.

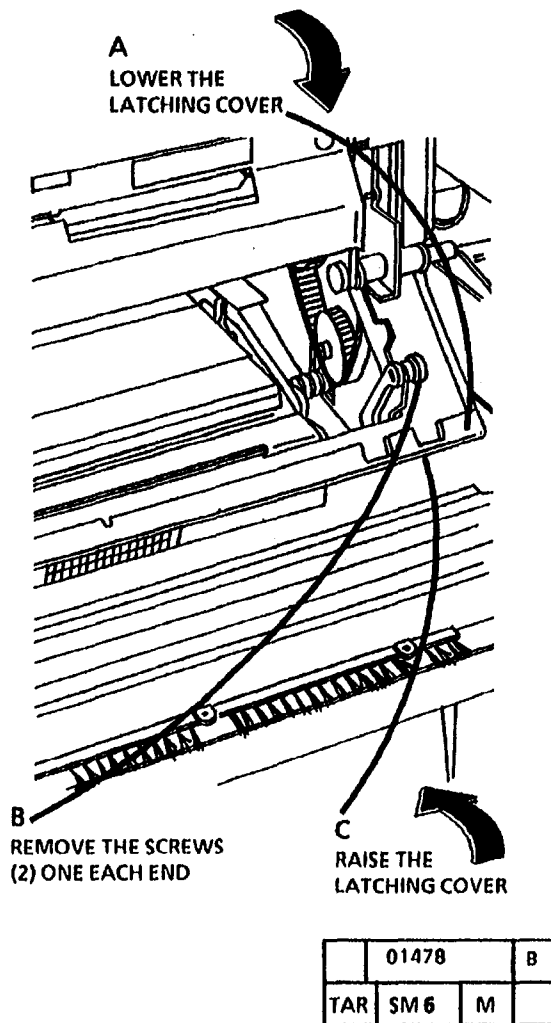


Figure 18. Remove the Latch Bars

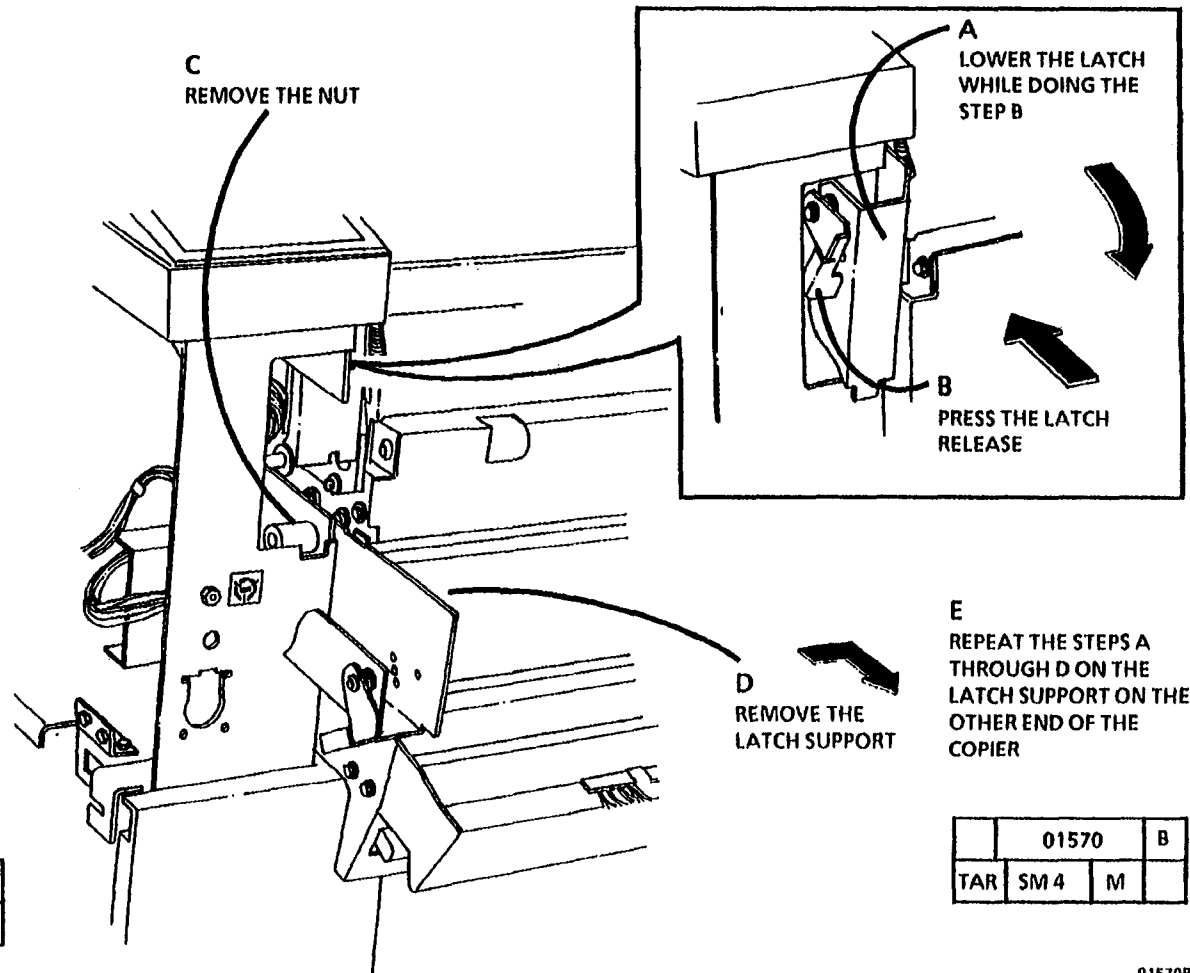


Figure 19. Remove the Latch Supports

01570B

(Continued)

(Continued)

**!** **STEP 21:** The media supply doors must remain closed when the service rails are in use. The tab on the bottom of the rail is there to ensure that the media supply doors remain closed.

**14** **STEP 21C:** The nut is drilled and tapped with different threads on each end. One end secures the latch supports, the other end secures the service rails.

21. (Figure 20): Install the Service Rails.

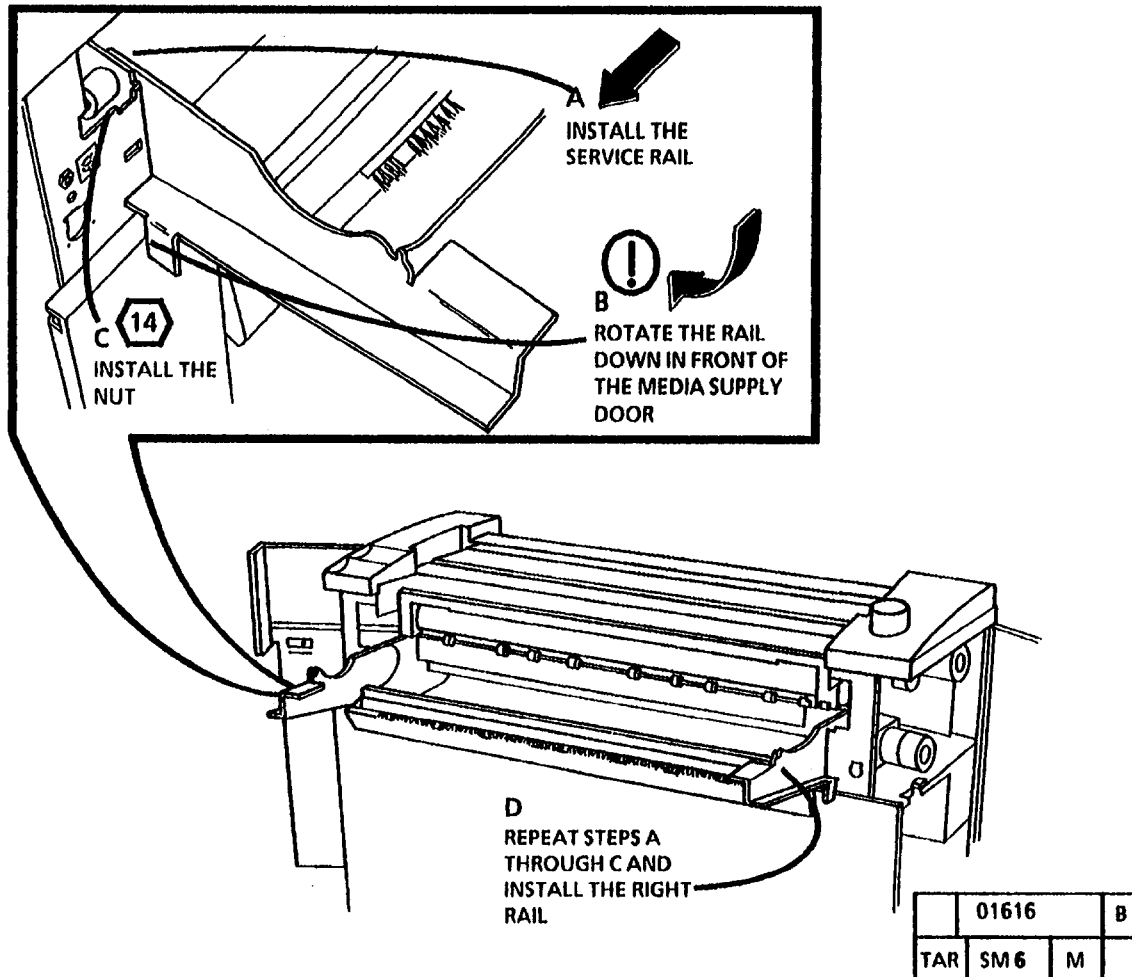


Figure 20. Install the Service Rails

(Continued)

(Continued)

22. (Figure 21): Prepare to Remove the Xerographic Module.

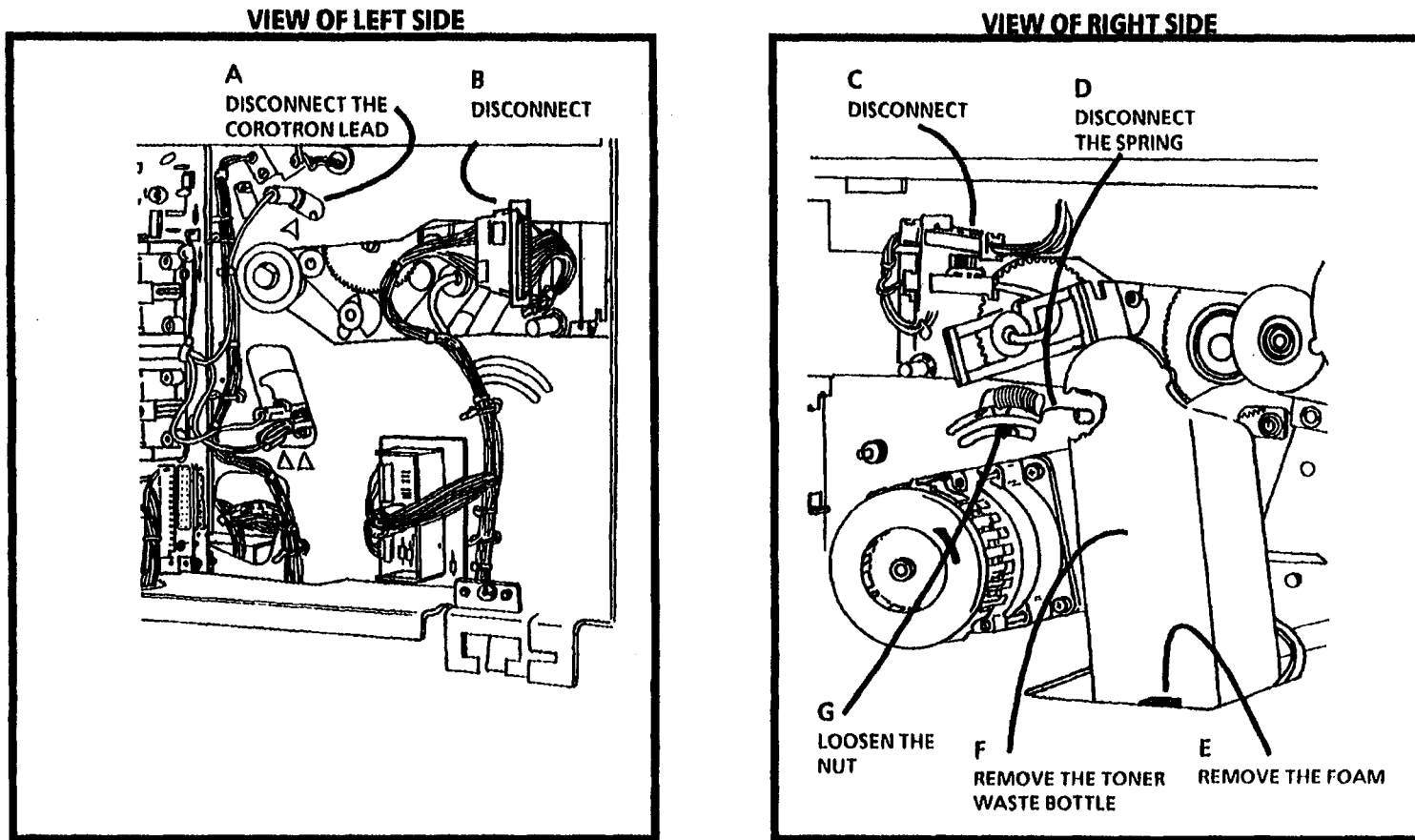


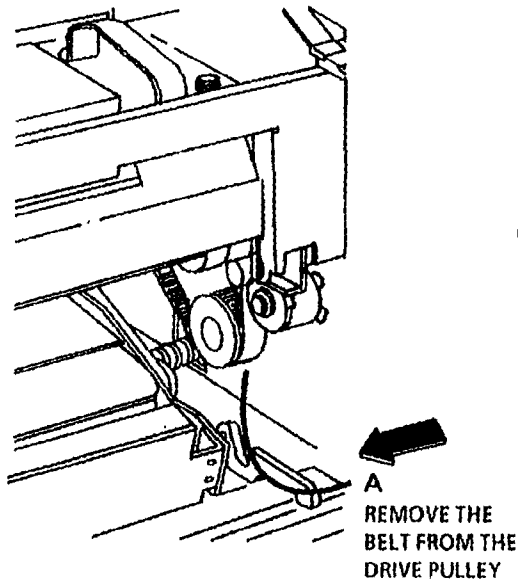
Figure 21. Prepare to Remove the Xerographic Module

	01480	B
TAR	SM 6	M

(Continued)

(Continued)

23. (Figure 22): Remove the Fuser Drive Belt.



	01479	C
TAR	SM 6	M

Figure 22. Remove the Fuser Drive Belt

**!** **STEP 24 B:** To ensure a safe position of the xerographic module on the service rails, the pins on the module must be in the slots on the rails. The module is heavy and it is difficult to handle.

**15** The xerographic module may remain on the service rails to install the photoreceptor.

24. (Figure 23): Remove the Xerographic Module.

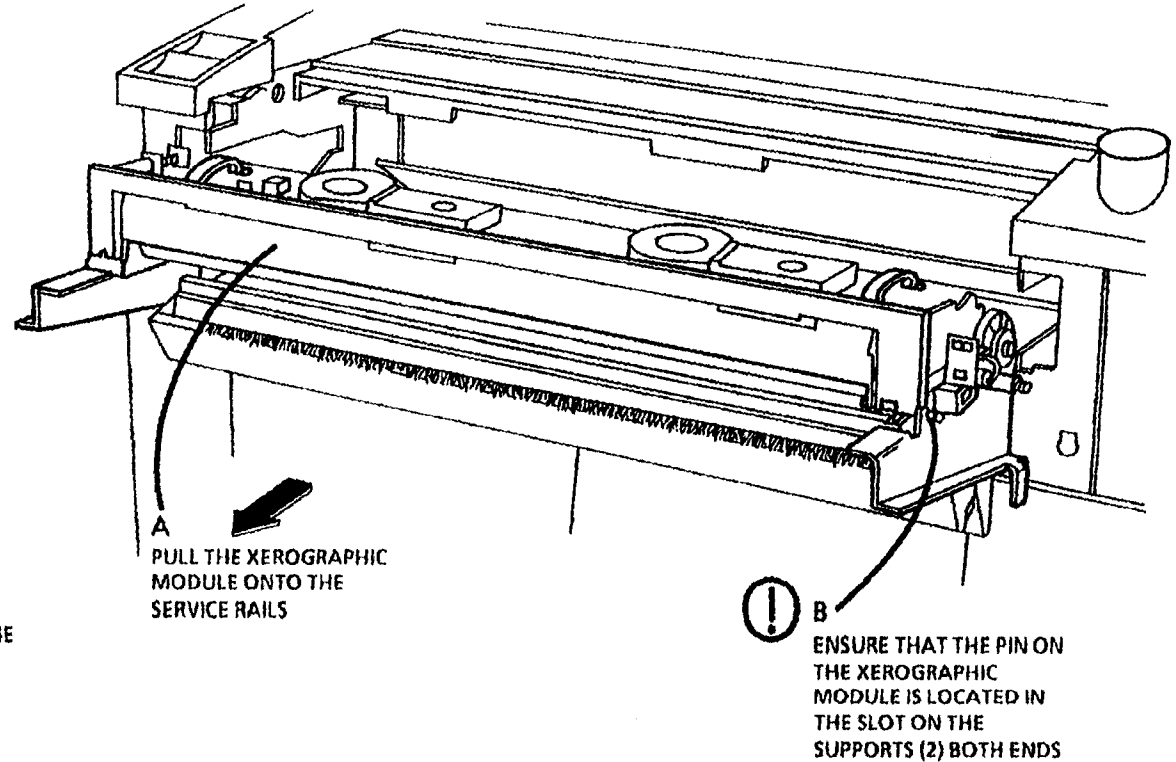


Figure 23. Remove the Xerographic Module

	01617	A
TAR	SM 6	M

(Continued)

(Continued)

- 16 The photoreceptor for the 3050 copier is packed separately and will be installed in the next step.

! STEP 25 A: Ensure that the pins on the module remain located in the slots on the supports.

17 STEP 26: DO NOT perform the electrostatic series after installing the photoreceptor drum. It will be done later in the installation

25. (Figure 24): Remove the Photoreceptor Drum Assembly.

26. Install the Photoreceptor Drum (REP 9.3).

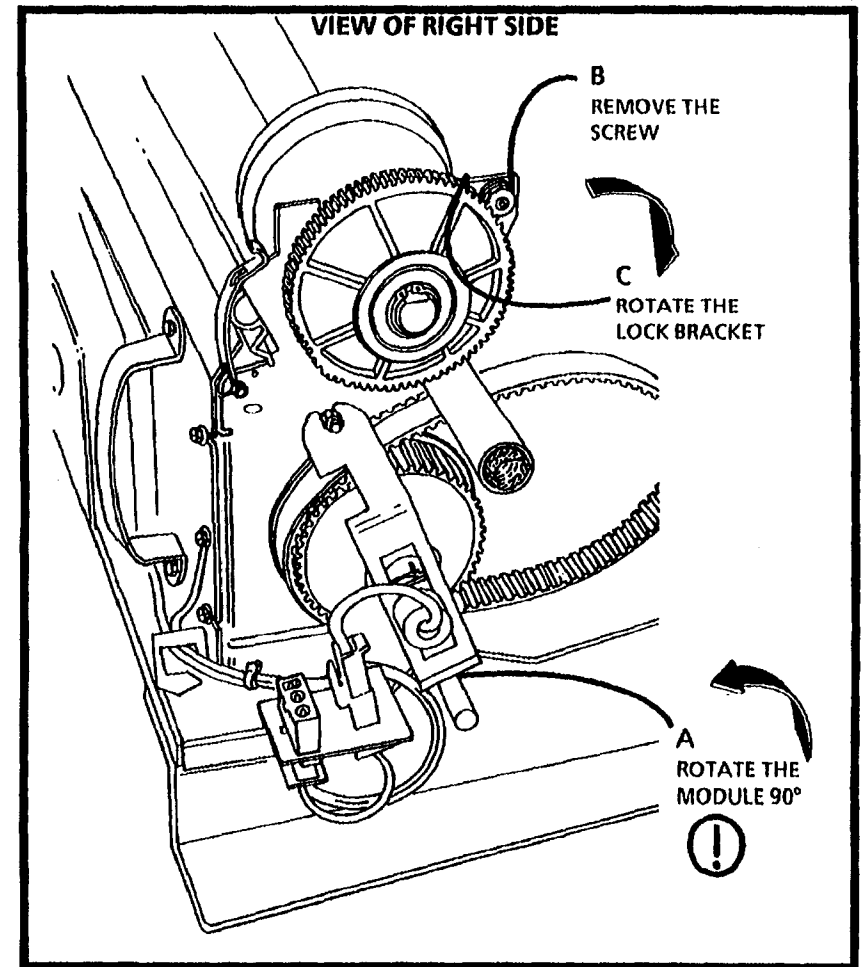
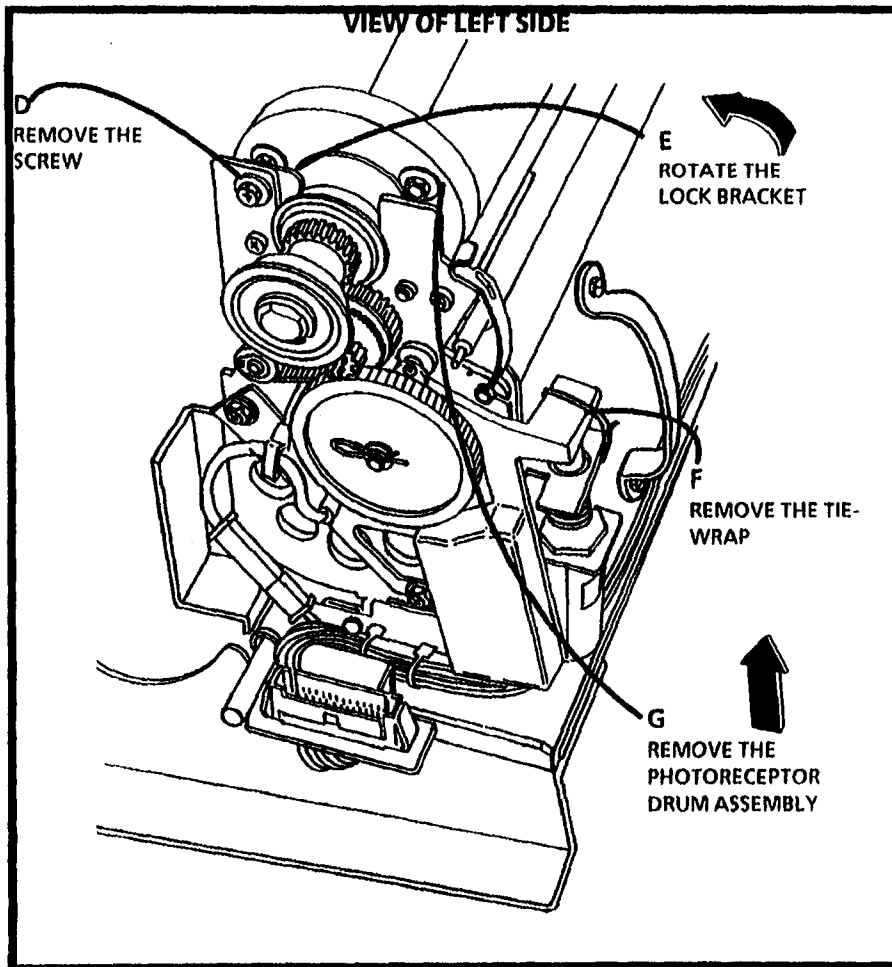


Figure 24. Remove the Photoreceptor Drum Assembly

	01492		F
TAR	SM 6	M	

(Continued)



(Continued)

**17A** To prevent contaminating the Charge Corotron/Erase Lamp with zinc stearate, remove the Charge Corotron/Erase Lamp before applying the zinc stearate to the cleaner blade. Reinstall the Charge Corotron/Erase Lamp after applying the zinc stearate to the cleaner blade.

27. Apply zinc stearate to the cleaner blade.

**!** STEPS 28 A AND B: Reinstall the left side of the drum assembly first to avoid damaging the drum ground bracket.

28. (Figure 25): Reinstall the Photoreceptor Drum Assembly.

VIEW OF LEFT SIDE

VIEW OF RIGHT SIDE

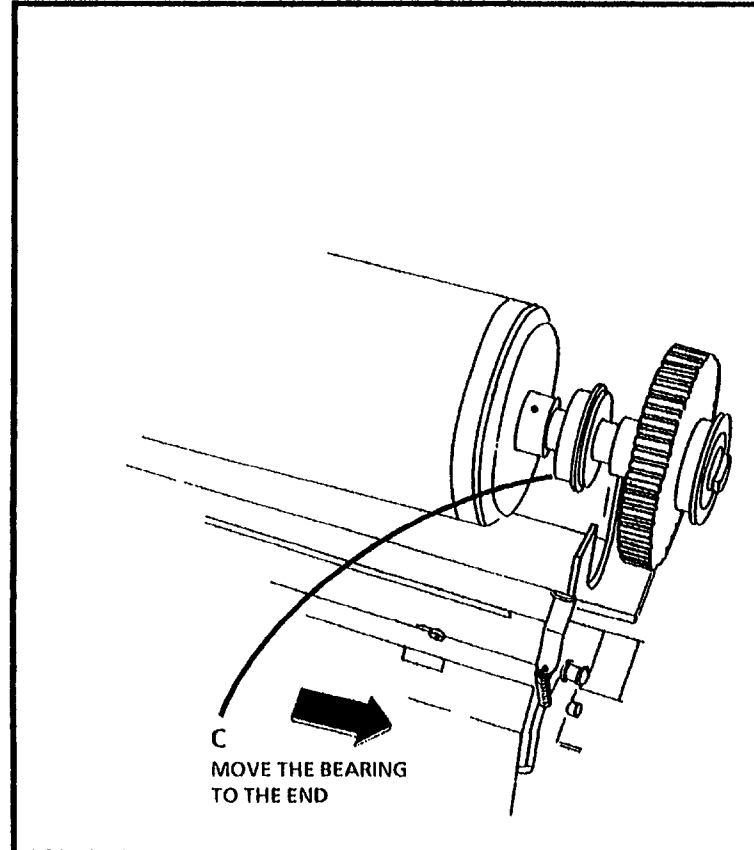
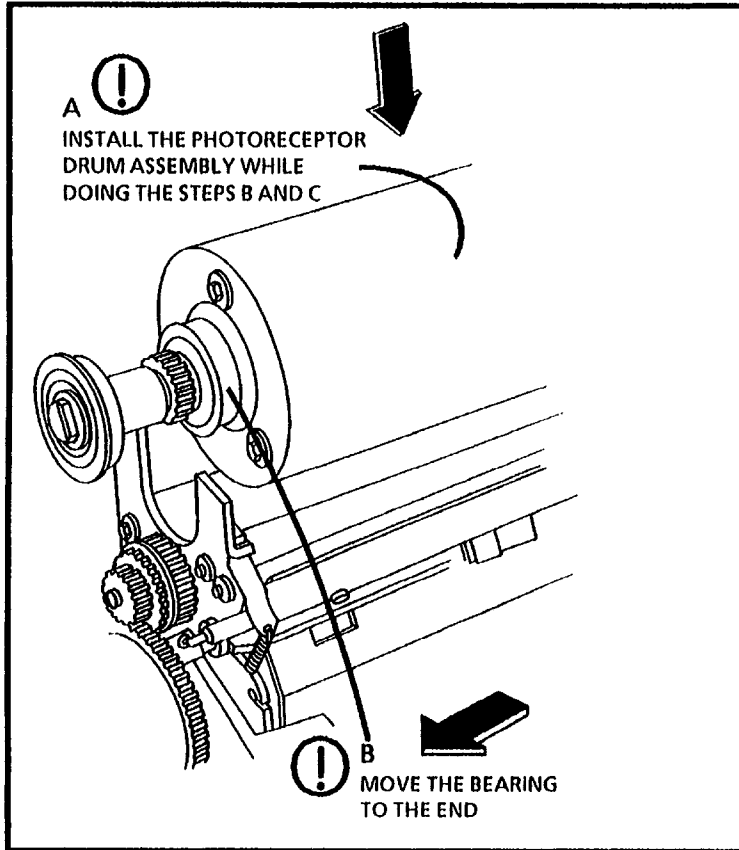


Figure 25. Reinstall the Photoreceptor Assembly

	01493	C
TAR	SM 6	M

(Continued)

(Continued)

**!** STEPS 29 A AND C: Ensure that the photoreceptor is seated completely down and is secure to avoid movement.

29. (Figure 26): Secure the Photoreceptor Drum Assembly.

30. Reinstall the Xerographic Module and the perform the following:
- reconnect all connectors at both ends of the xerographic module
  - reinstall the fuser drive belt
  - reconnect the idler spring and tighten the nut
  - reinstall the toner waste bottle

- Remove the service rails and reinstall the latch assemblies.
- Close the latch assemblies.
- Rotate the document feed in shelf closed.
- Reinstall the document handler.

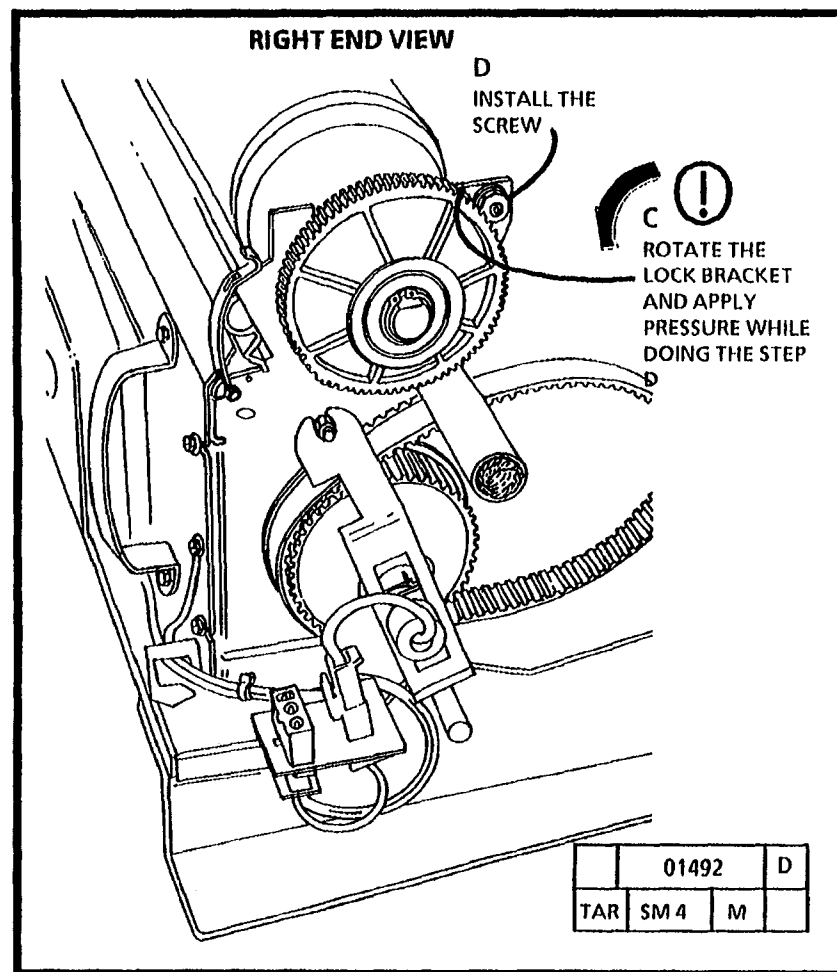
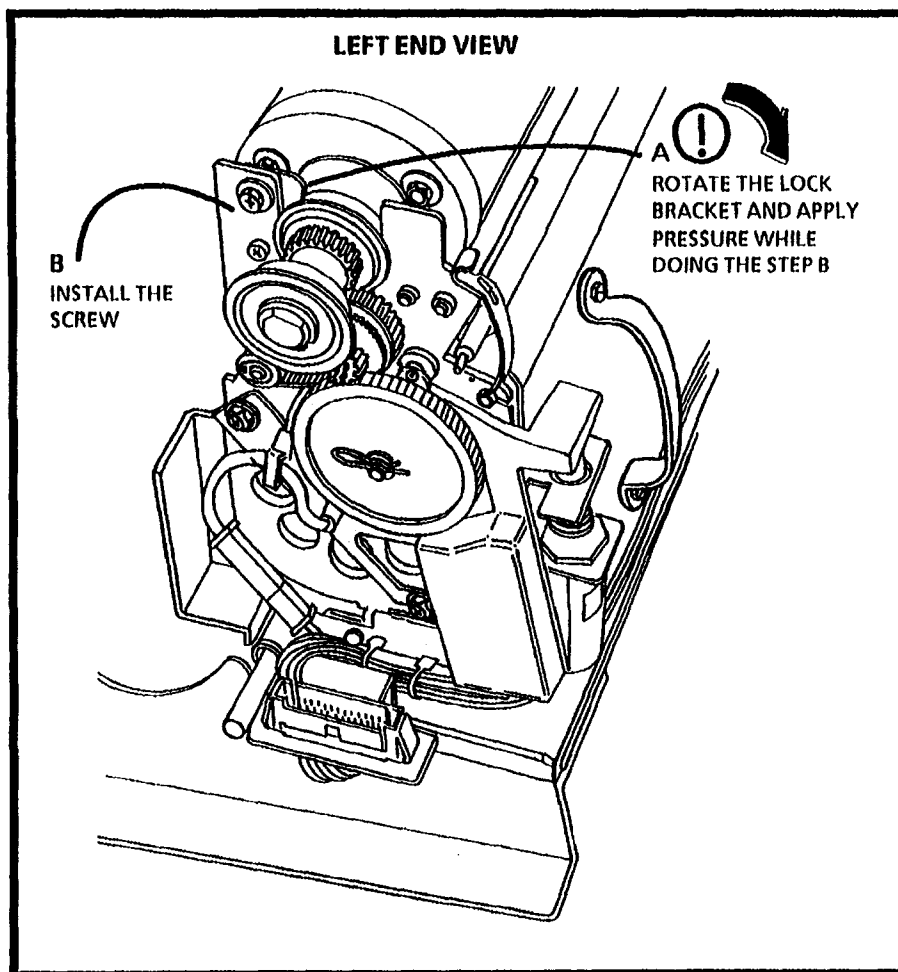


Figure 26. Secure the Photoreceptor Drum Assembly

(Continued)

(Continued)

35. (Figure 27): Install the Control Console.

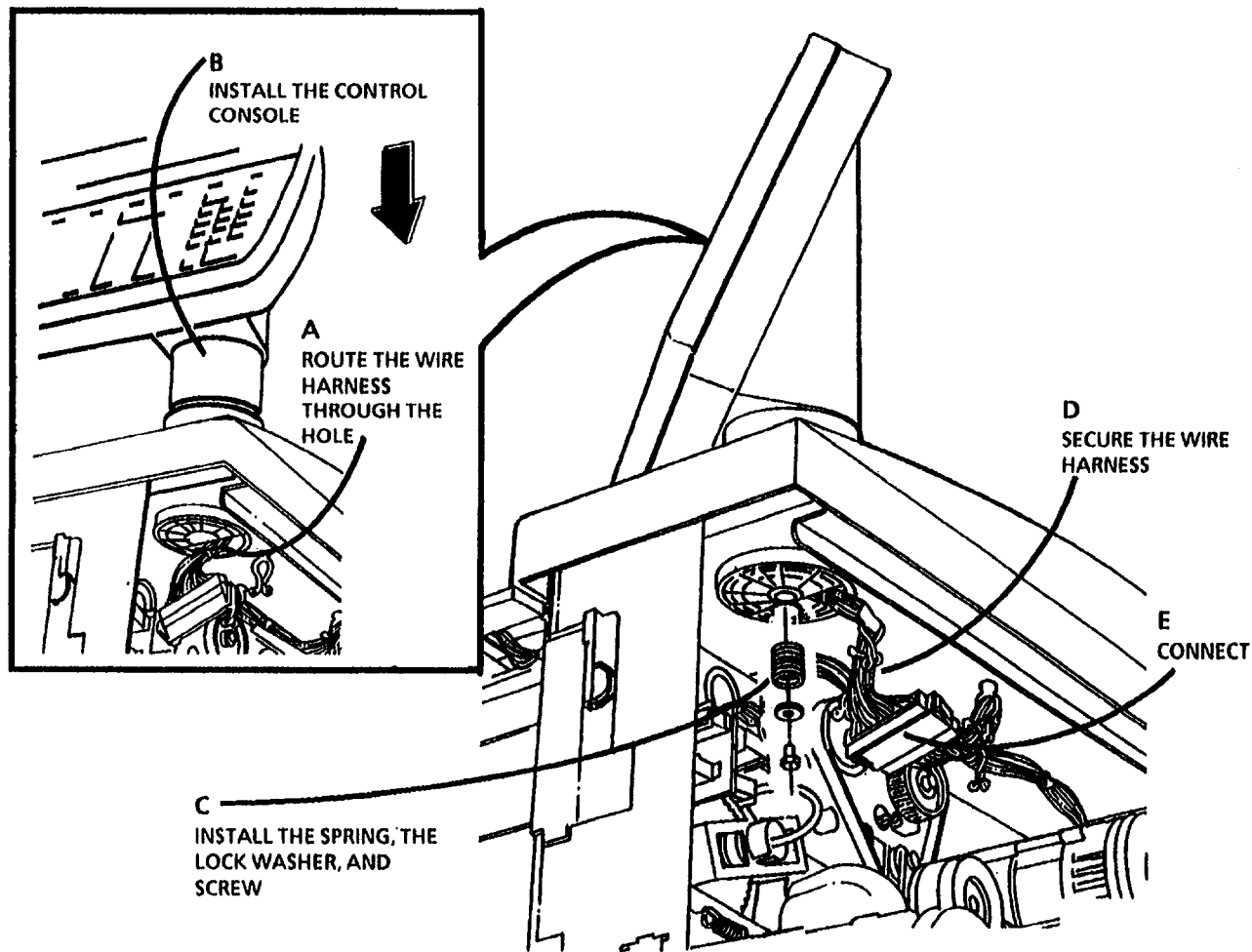
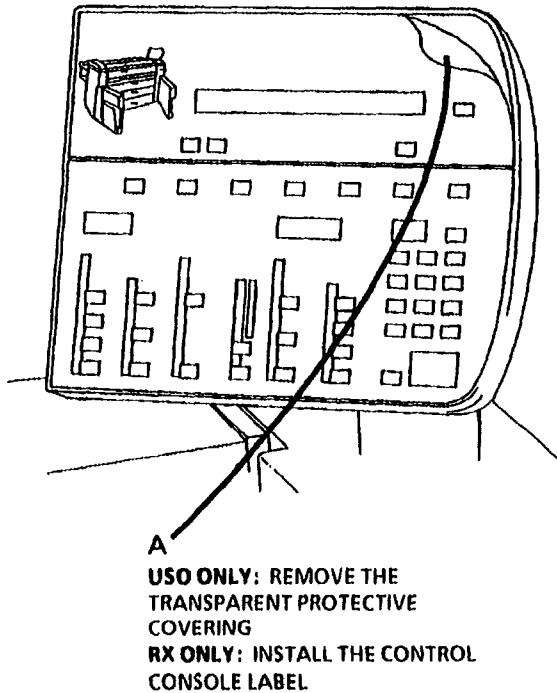


Figure 27. Install the Control Console

	01630	A
TAR	SM 6	M

(Continued)

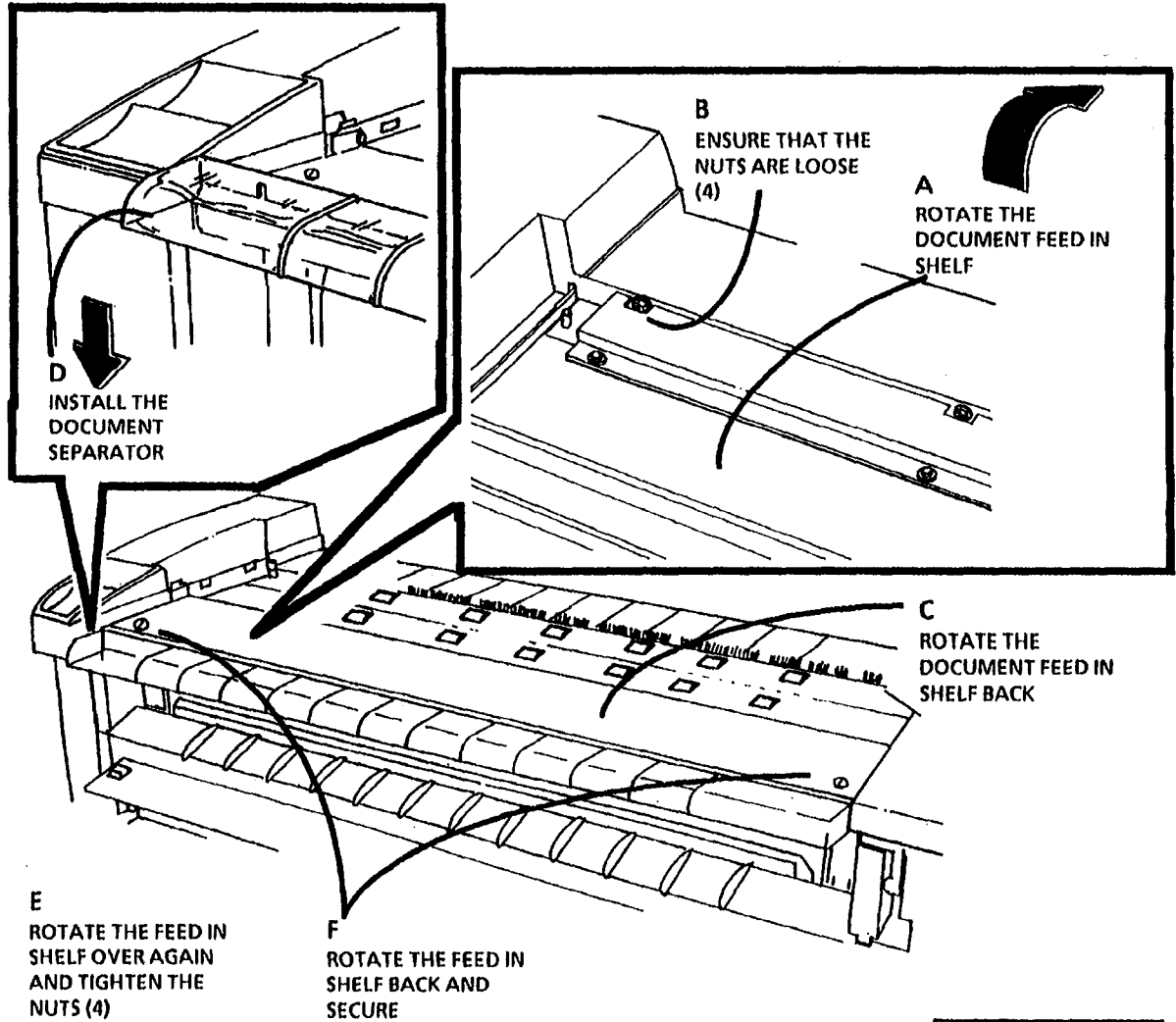
36. (Figure 28): **USO only:** Remove the protective covering from the Control Console.  
**RX only:** Install the Control Console label.



	01631	A
TAR	SM 6	M

Figure 28. **USO only:** Remove the transparent protective covering  
**RX only:** Install the Control Console Label

37. (Figure 29): Install the Document Separator.



	02101	A
TAR	SM 6	M

Figure 29. Install the Document Separator

(Continued)

(Continued)

38. (Figure 30): Install the Copy Catch Shields.

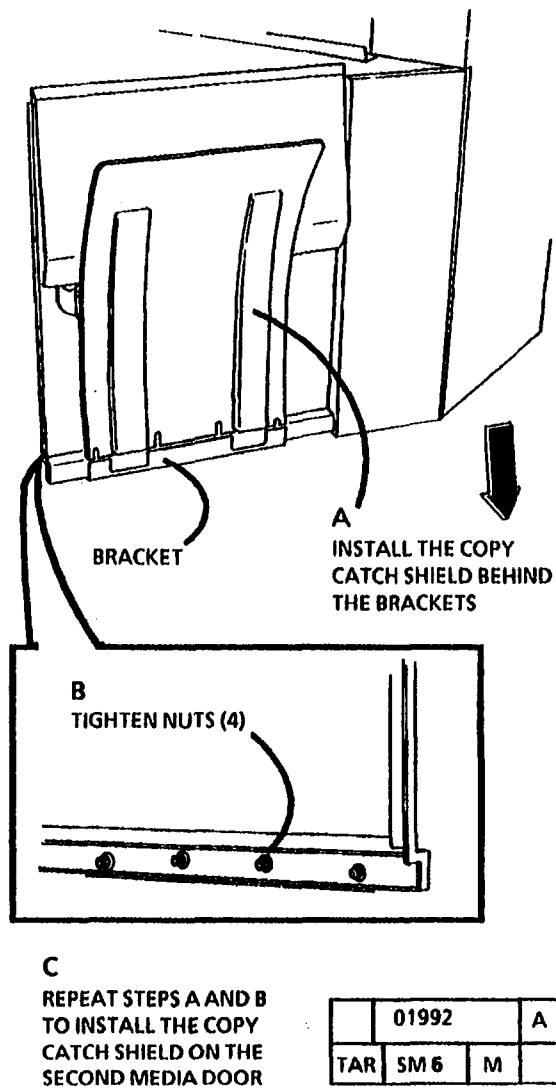


Figure 30. Install the Copy Catch Shields

18 STEP 39E: Ensure that the doors are high enough to engage the latches when closed.

39. (Figure 31): Check/ Adjust the Front Doors.

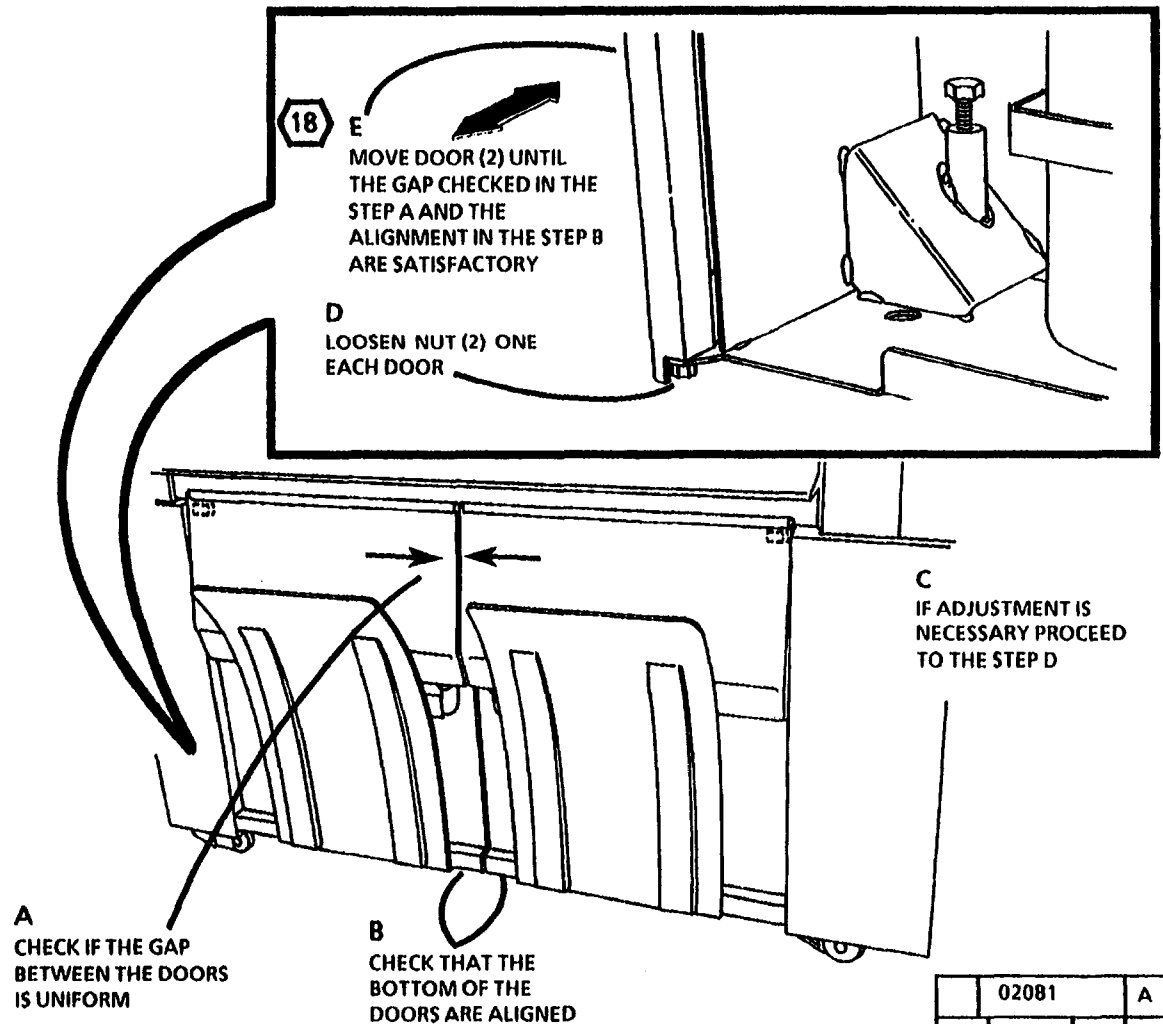


Figure 31. Check/ Adjust the Front Doors

	02081	A
TAR	SM 6	M

(Continued)

(Continued)

40. Install a roll of 36 inch (914 mm) bond media in Roll 1 Media Supply. Refer to the 3050 User Guide.

41. (Figure 32): Install the Language Proms.

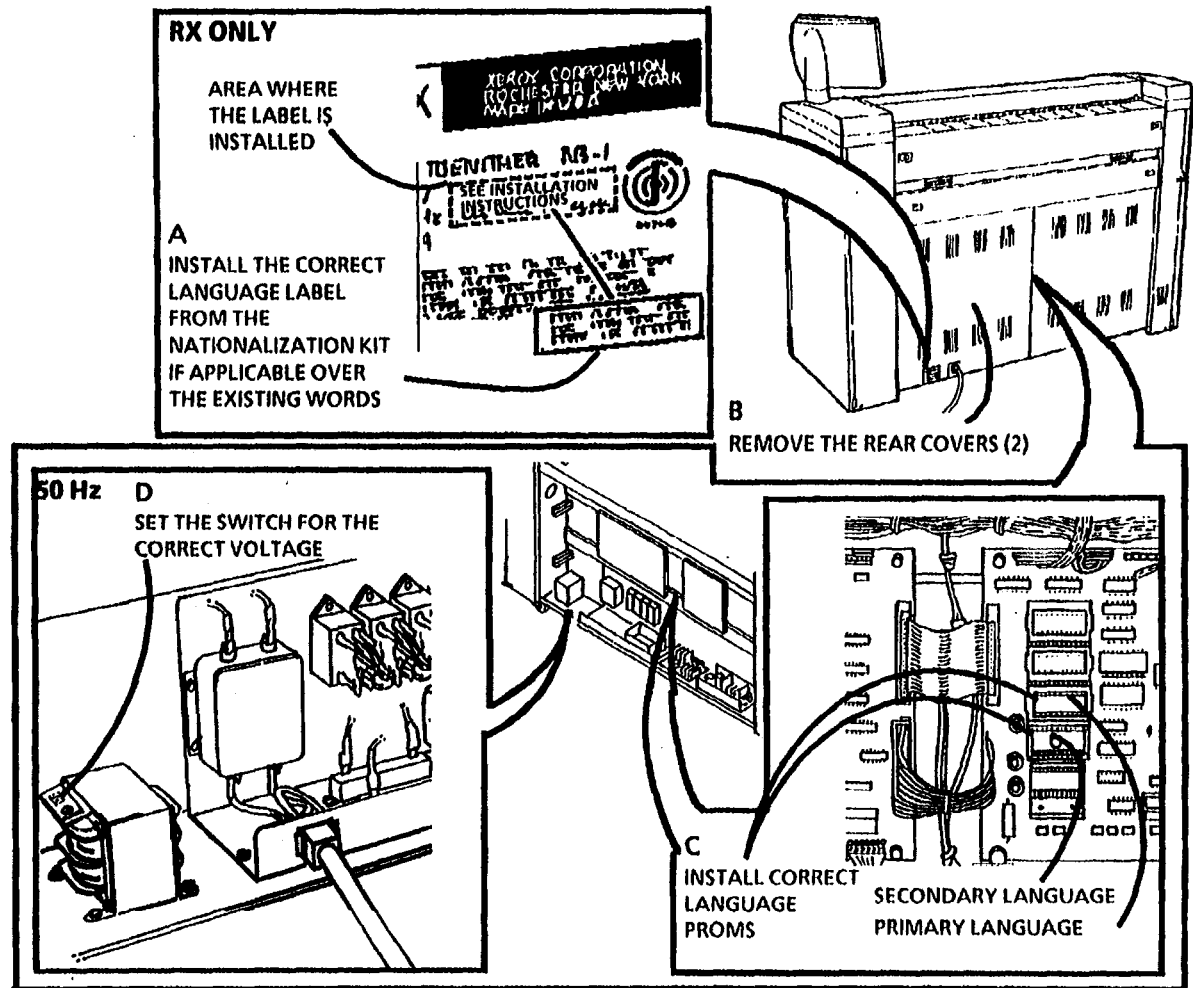


Figure 32. Install the Language Proms

	01962	A
TAR	SM 6	M

(Continued)

## Functional Check

1. Remove the document handler.
2. (Figure 33): Remove the platen.
3. Clean both sides of the platen with anti-static cleaner.
4. Reinstall the platen.
5. Plug the power cord into the wall outlet.

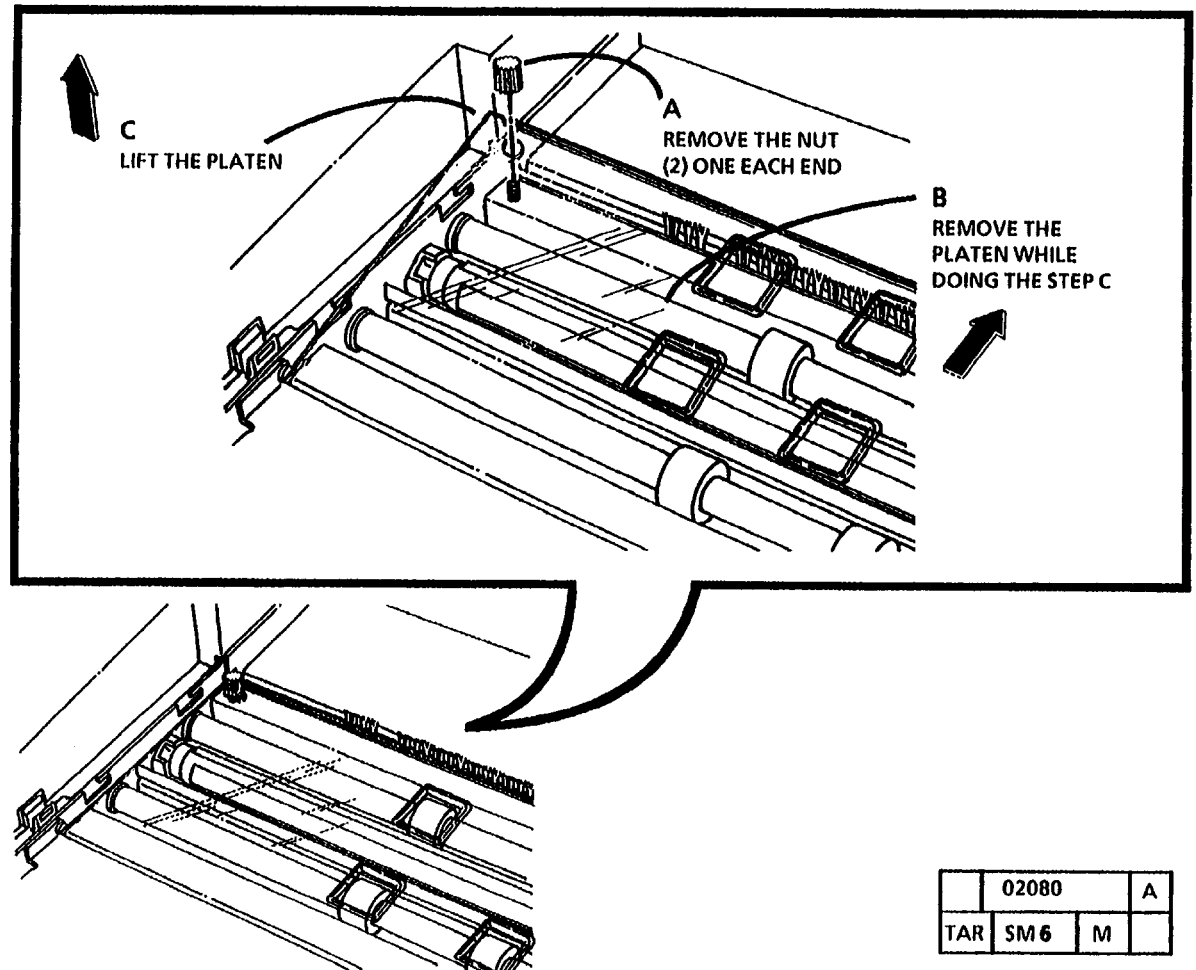


Figure 33. Remove the Platen

(Continued)

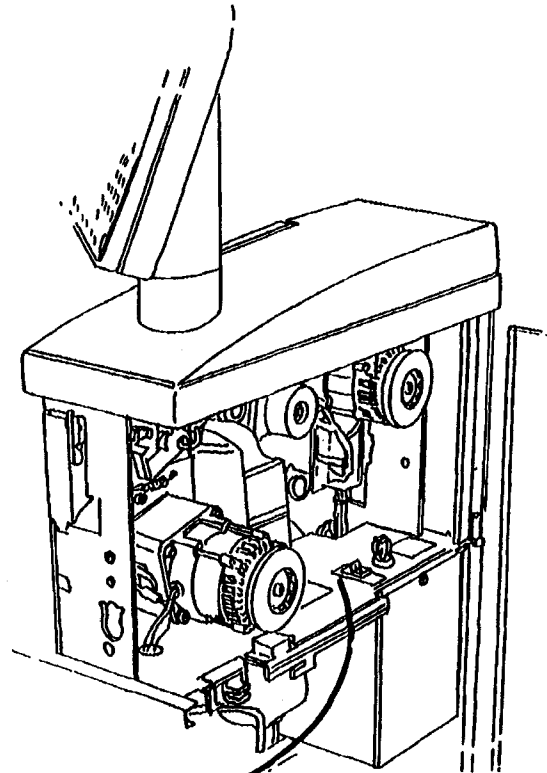
(Continued)

19

**DO NOT run copies prior to performing the Initial Density Adjustment section of the Electrostatic Series (ADJ 9.2). Running copies prior to this adjustment may cause toner faults and/or premature copy quality defects.**

6. (Figure 34): Switch the copier on and enter the diagnostic mode.
7. Perform **ONLY** the Initial Density Adjustment Section of the Electrostatic Series (ADJ 9.2). The total Electrostatic Series will be performed later in this procedure.
8. Refer to the Service Manual and perform the following adjustments:
  - a. Country Configuration (ADJ 3.2)
  - b. Cleaner Blade Solenoid (ADJ 9.1)
  - c. Electrostatic Series (ADJ 9.2)
  - d. Fuser Temperature (ADJ 10.1)
  - e. Copy Size Adjustment (ADJ 5.1)
  - f. Image Registration (ADJ 8.1) (Part of ADJ 5.1)
  - g. Auto Cut Length (ADJ 8.2) (Part of ADJ 5.1)
9. Exit the diagnostic mode.

10. Inform the operator that the following adjustments are operator adjustments and can be changed to fit their needs. Refer to the User Guide and perform the following adjustments:
  - a. Feature Timeout
  - b. Power Saver Mode (RX: Low Power Mode)
  - c. Standby Mode
  - d. Lead Edge Margin
  - e. Trail Edge Margin



A  
SWITCH THE COPIER  
ON

	01636	A
TAR	SM 6	M

Figure 34. Switch the Copier on

(Continued)



11. (Figure 35 and 36): Record the copy count meter readings.

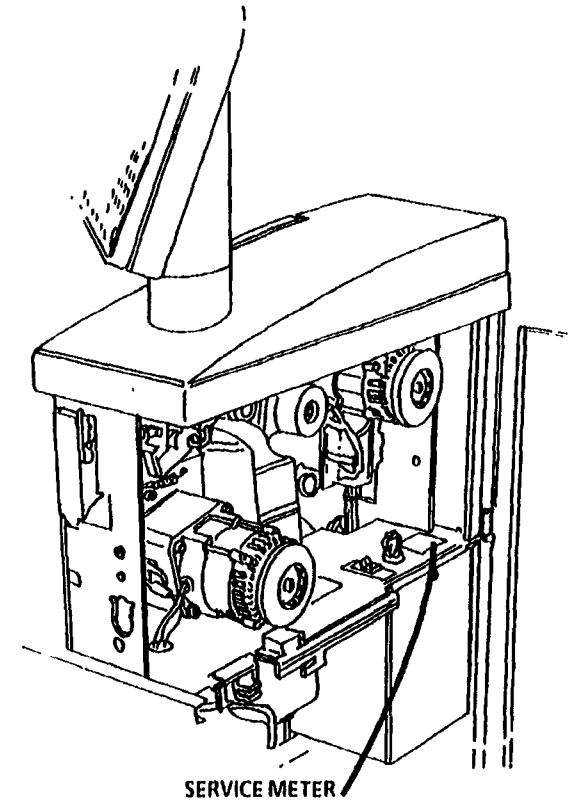
Xerox Service Call Report										This Is Not An Invoice										CALL ID									
CUSTOMER NAME															DATE														
ADDRESS															CITY					STATE					ZIP				
CUSTOMER CONTACT										TELEPHONE										SERVICE REP NAME/ID									
PROBLEM DESCRIPTION															DISTRICT NO.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

**B**  
ENTER THE READING FROM THE METER LOCATED NEXT TO THE ON/OFF SWITCH (REFERENCE FIGURE 36)

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

02059			A
TAR	SM 6	M	

Figure 35. Record the copy count readings



01636			A
TAR	SM 6	M	

Figure 36. Service meter location

(Continued)

12. Separate the **First Call Report 3050** card from the **Installation Quality Report 3050** card and insert the **First Call Report 3050** card into the Machine Log Pouch.

13. Record the following on the copier **Installation Quality Report 3050** card:

- Copy count reading
- Copier serial number
- Installation date
- Comments (as required)

14. Mail the copier **Installation Quality Report 3050** card.

## Product Demonstration

To demonstrate the capabilities of the 3050, refer to the User Guide. Perform the following procedures to train an operator:

1. Getting To Know Your Copier
2. Control Console
3. Loading the media
4. Making the copies in the multiple copy and sets modes. When to use them.
5. Making the copies using the roll media supply.
6. Making the copies using the cut sheet media
7. Scale Adjust
8. Partial Copy
9. Document Input/ Copy Contrast
10. The Copy Output Selections
11. Adding toner and how to clear the J1 status code

12. Cleaning the Platen and the Optical System

13. Problem Solving Status Codes

14. Clearing the Copier

## Installation Checklist

### Site Preparation

\_\_\_\_\_ Supply Voltage Check

\_\_\_\_\_ Space Requirements

### Installation

\_\_\_\_\_ Remove the packing material.

\_\_\_\_\_ Remove the Xerographic Module

\_\_\_\_\_ Remove the tie-wrap on the Cleaning Blade Solenoid Weight.

\_\_\_\_\_ Install the Photoreceptor Drum

\_\_\_\_\_ Reinstall the Xerographic Module

\_\_\_\_\_ Remove the Toner Cartridge.

\_\_\_\_\_ Level the copier.

\_\_\_\_\_ Add developer

\_\_\_\_\_ Install the Toner Cartridge.

\_\_\_\_\_ Clean the Platen

\_\_\_\_\_ Install the Document Handler

\_\_\_\_\_ **RX only:** Adjust the 220/240 switch

\_\_\_\_\_ Enable the correct language

### Functional Check

\_\_\_\_\_ Switch on the copier and allow the copier to warm up.

\_\_\_\_\_ Perform the Country Configuration (ADJ 3.2)

\_\_\_\_\_ Perform Copy Size Adjustment (ADJ 5.1)

\_\_\_\_\_ Perform the Cleaner Blade Solenoid adjustment (ADJ 9.1)

\_\_\_\_\_ Perform the Electrostatic Series (ADJ 9.2)

\_\_\_\_\_ Make five copies.

\_\_\_\_\_ Check the copy quality.

\_\_\_\_\_ Check the operator adjustments

### Product Demonstration Checklist

\_\_\_\_\_ ON/OFF switch, copy count meter, and serial number plate

\_\_\_\_\_ Control Console

\_\_\_\_\_ Making the Copies

\_\_\_\_\_ Scale Adjust

\_\_\_\_\_ Partial Copy

\_\_\_\_\_ Adding the toner

\_\_\_\_\_ Cleaning the Optical System


\_\_\_\_\_ Problem Solving Status Codes

\_\_\_\_\_ Clearing the Copier

## Removal Procedure

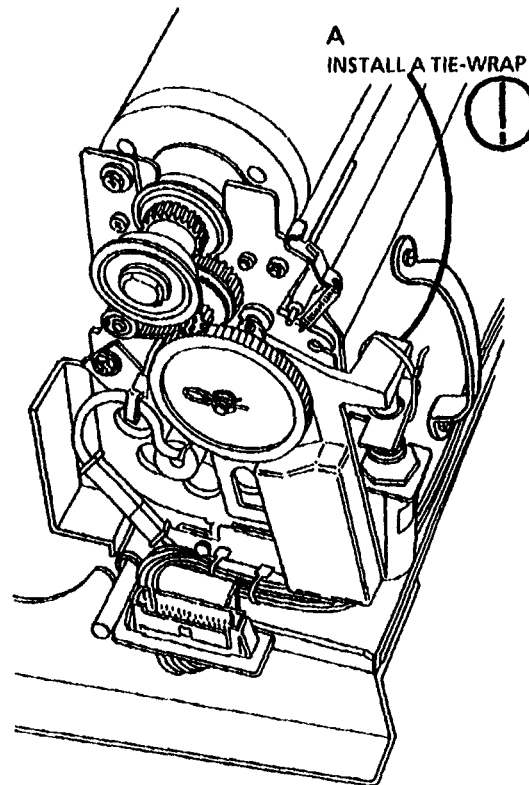
If the installation becomes an abort, or if the 3050 must be moved to a different location and repacked, the following procedures will be necessary.

1. **Warning: Disconnect the power cord.**
2. Remove the Xerographic Module (REP 9.1).

 *To prevent damaging the photoreceptor, the 3050 must be shipped with the cleaning blade not touching the photoreceptor.*

3. (Figure 1): Install a tie-wrap on the Cleaning Blade Solenoid Weight.

4. Remove the Photoreceptor Drum Assembly (REP 9.2).
5. Remove the Cleaner Blade (REP 9.4).



	01694	A
TAR	SM 6	M

**Figure 1. Install a Tie-Wrap on the Cleaning Blade Solenoid Weight**

(Continued)

(Continued)

9. (Figure 2): Remove the Control Console.

6. Clean the entire cleaner blade area with a vacuum cleaner.

7. Clean the Cleaner Blade with film remover and put a light coating of zinc stearate on the Cleaner Blade.

**1** Do not reinstall the toner waste bottle on the xerographic module.

8. Reinstall the following:

- a. Reinstall the Cleaner Blade (REP 9.4)
- b. Cleaner Blade Assembly
- c. Photoreceptor Drum Assembly
- d. Xerographic Module

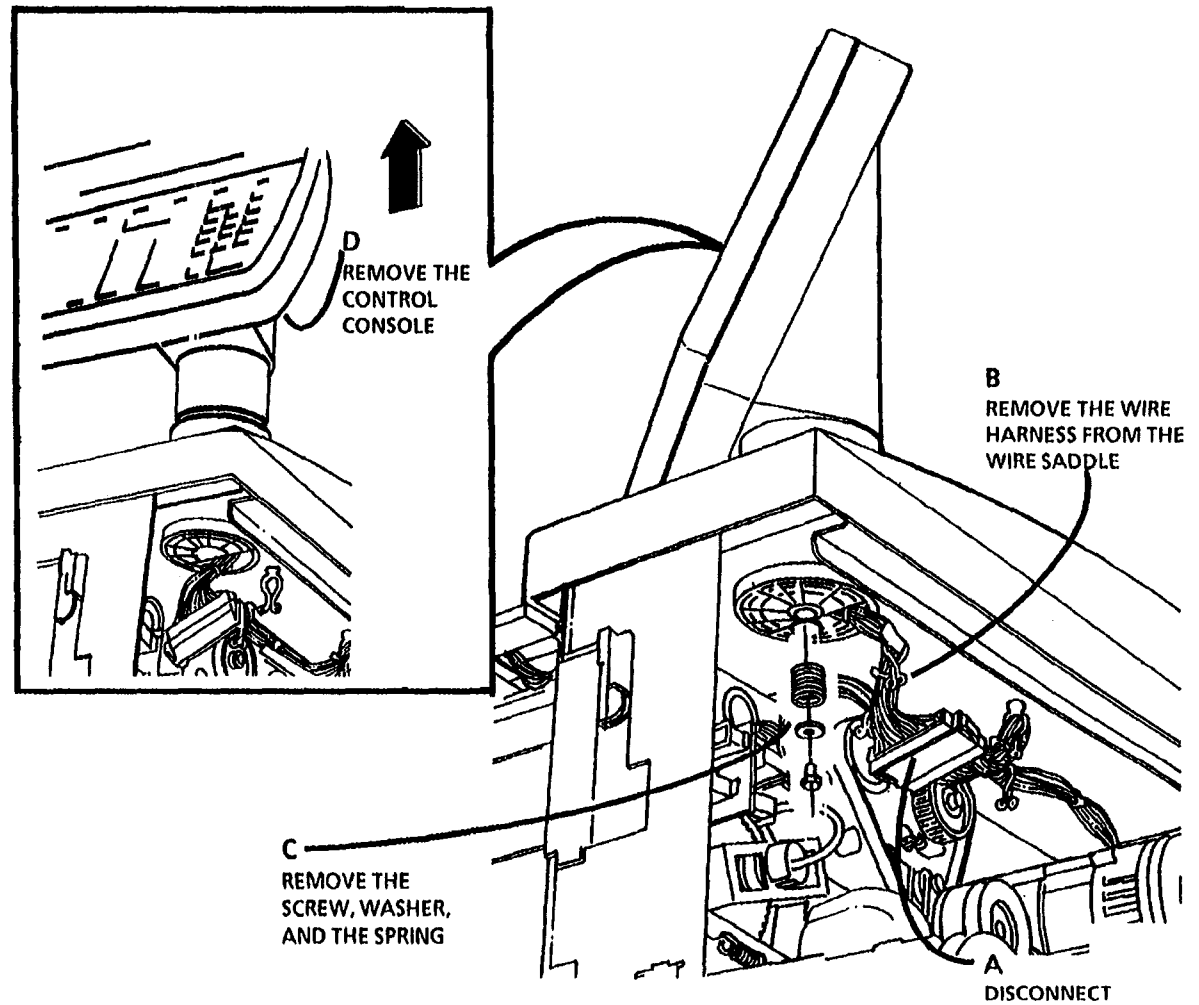


Figure 2. Remove the Control Console

	01696	A
TAR	SM 6	M

(Continued)

(Continued)

10. (Figure 3): Remove the Document Handler.

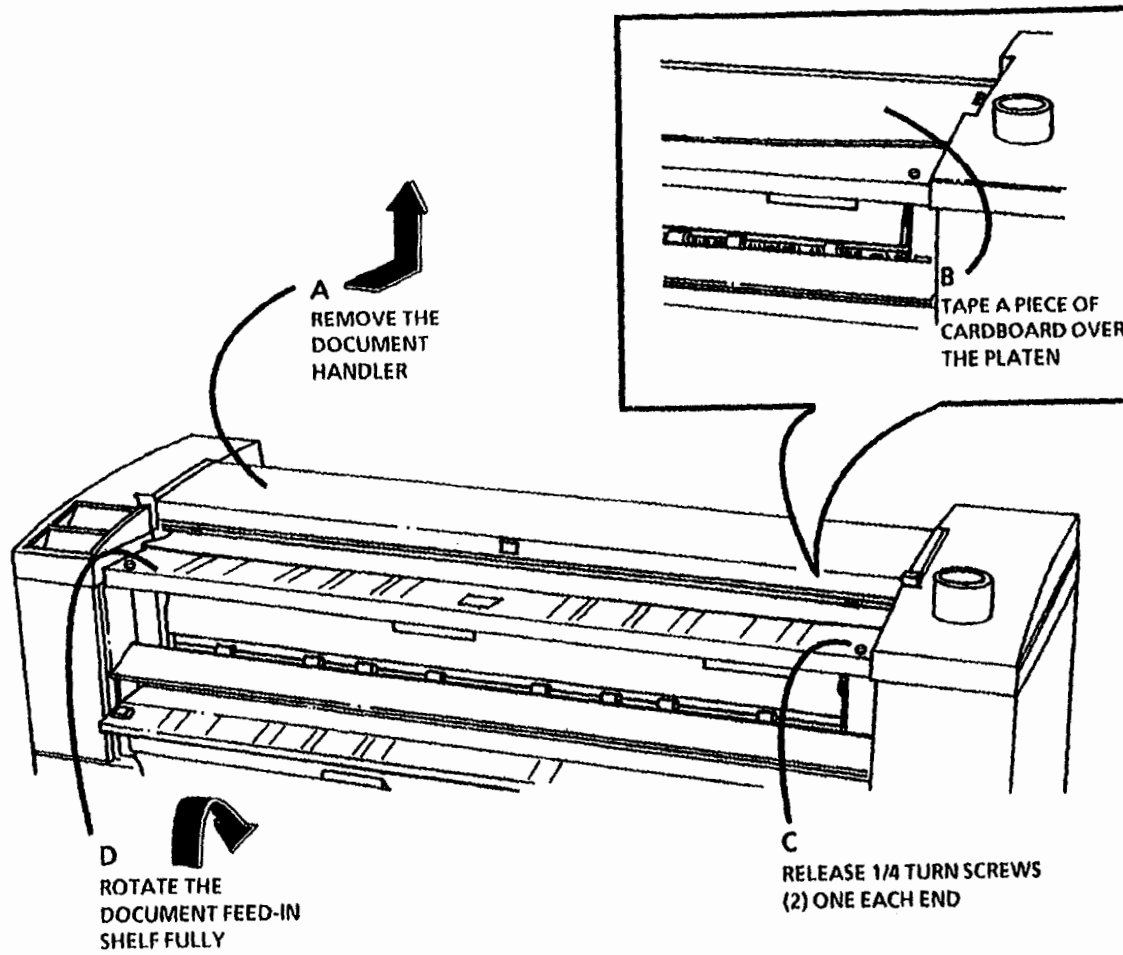


Figure 3. Remove the Document Handler

	01623	A
TAR	SM 6	M

(Continued)

(Continued)

9. (Figure 4): Remove the Document Separator.

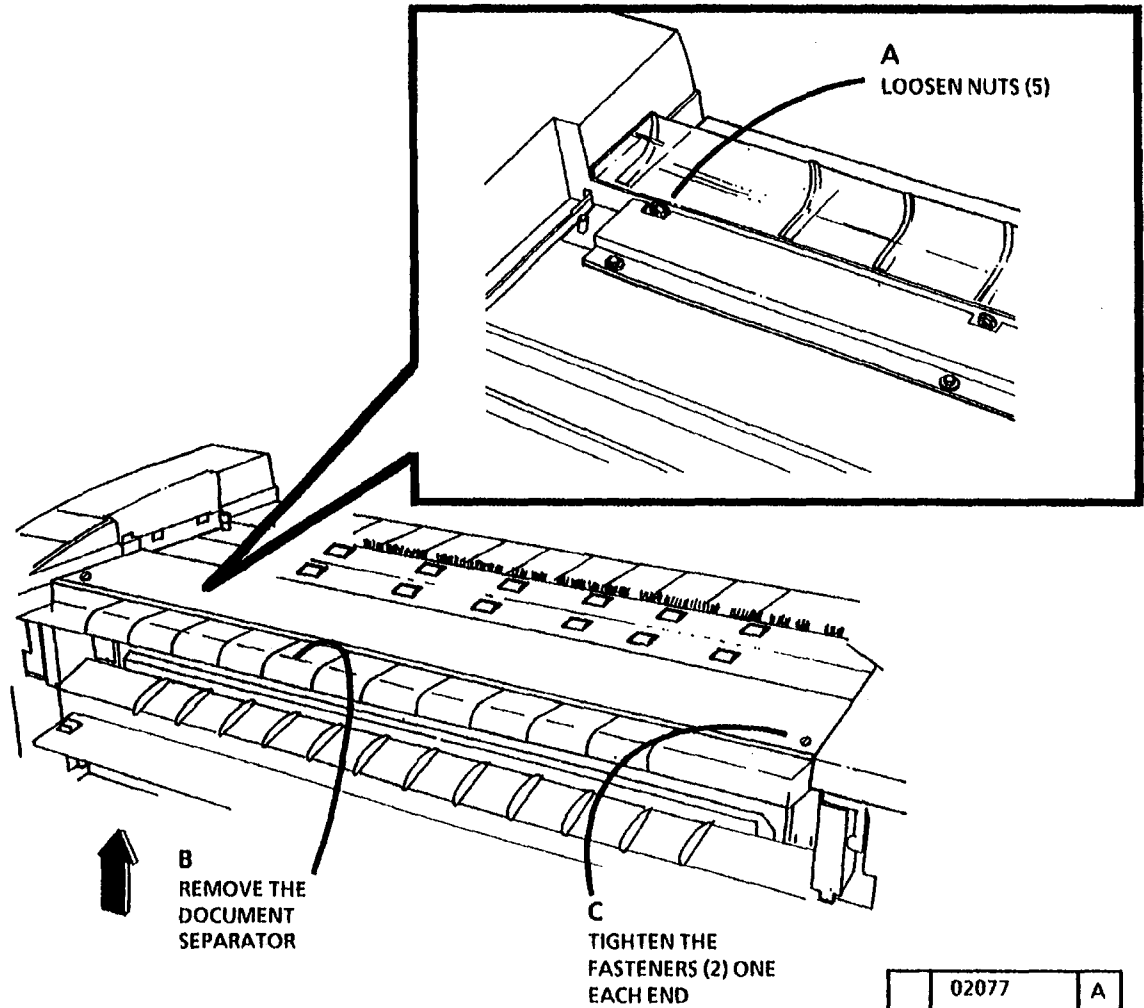


Figure 4. Remove the Document Separator

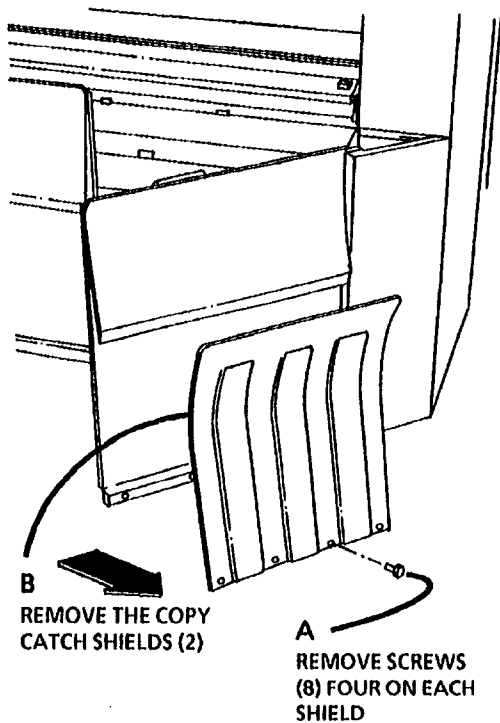
	02077	A
TAR	SM 6	M

(Continued)

(Continued)

12. (Figure 5): Remove the Copy Catch Shields.

12A. Remove the rolls of media from the media drawers.

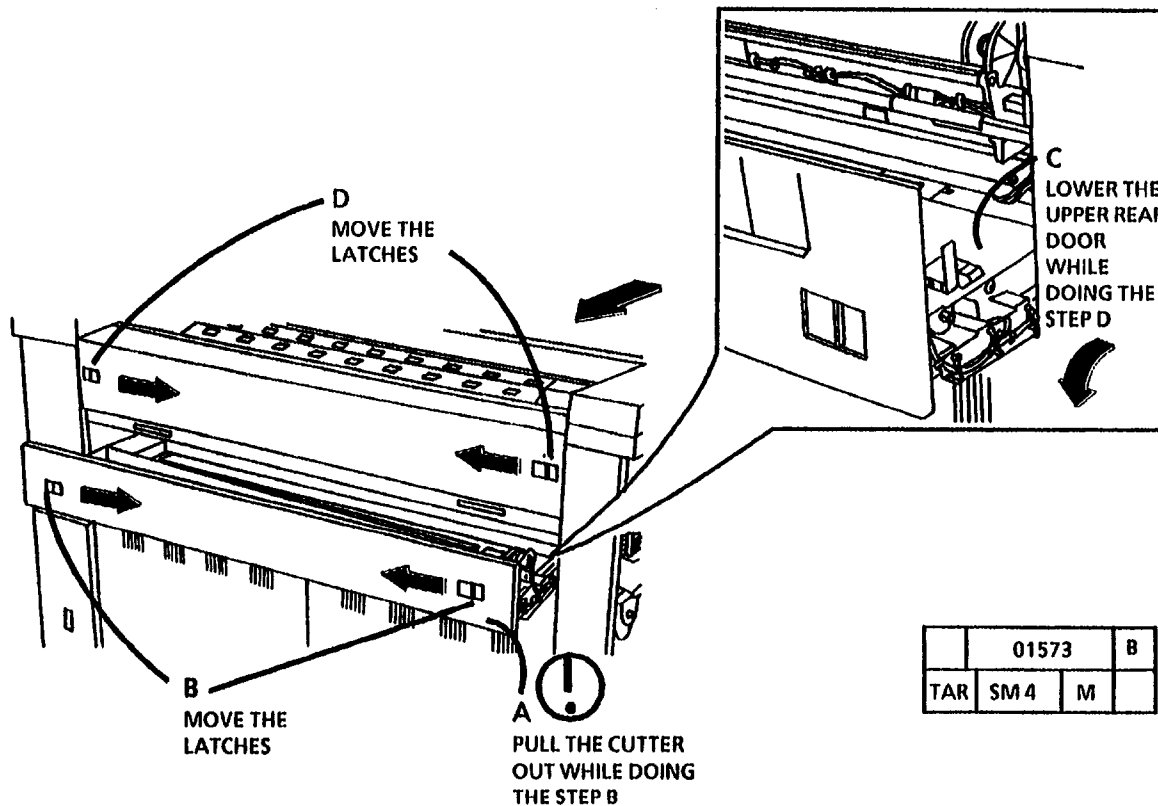


	01719	A
TAR	SM 6	M

Figure 5. Remove the Copy Catch Shields

**!** STEP 13 A: To avoid damage to the hinges on the upper rear door, pull the cutter out to support the upper rear door.

13. (Figure 6): Prepare to remove the Developer Module.



	01573	B
TAR	SM 4	M

Figure 6. Prepare to Remove the Developer Module

(Continued)

(Continued)

14. (Figure 7): Remove the Toner Cartridge.

**!** **STEP 14 B:** Tape the toner cartridge dispense holes to prevent toner from spilling out when the toner cartridge is tipped up for removal.

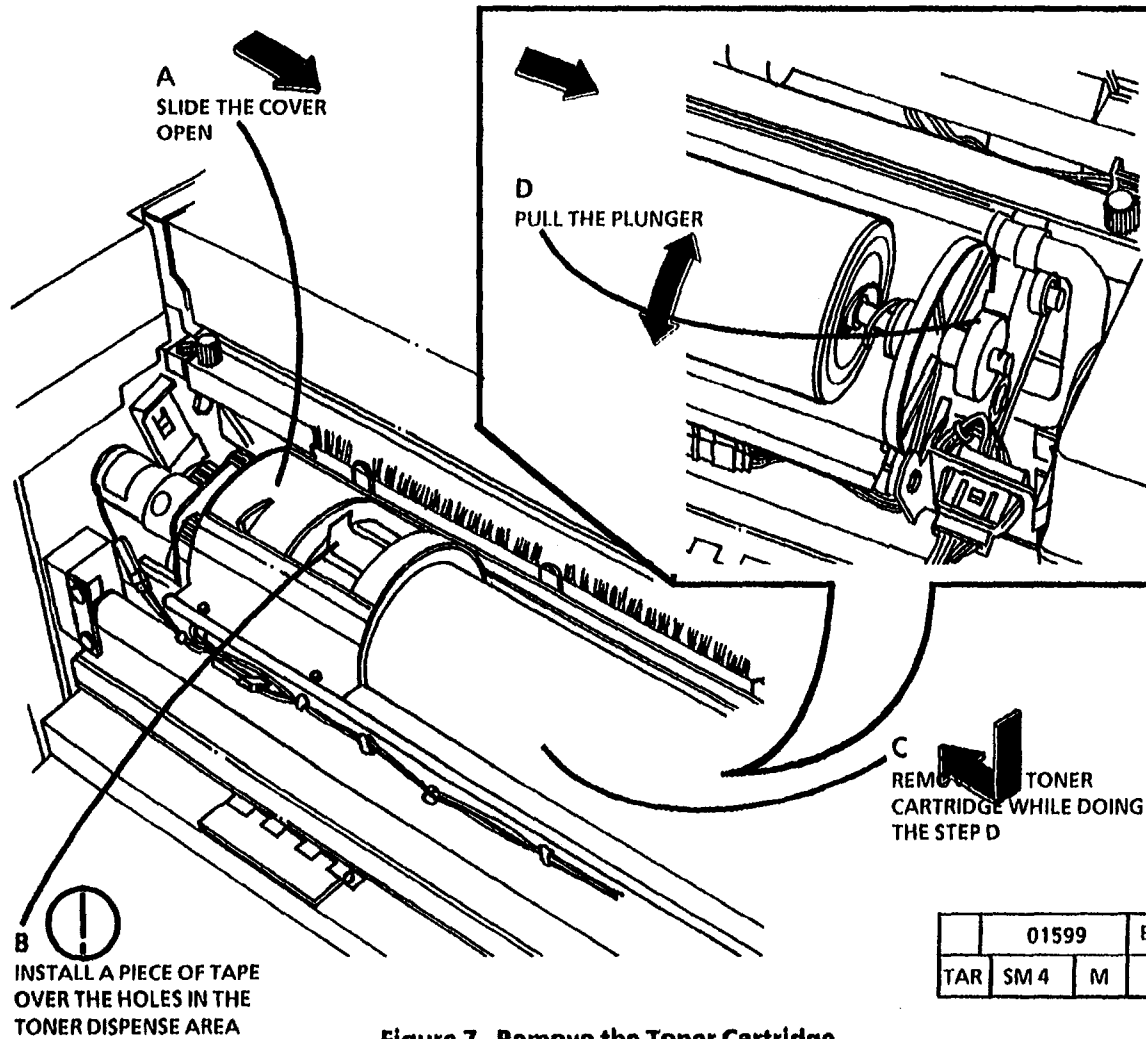


Figure 7. Remove the Toner Cartridge

(Continued)



(Continued)

**2** STEP 15F: Before removing the developer module, ensure that there is a clean area to place the module.

15. (Figure 8): Remove the Developer Module.

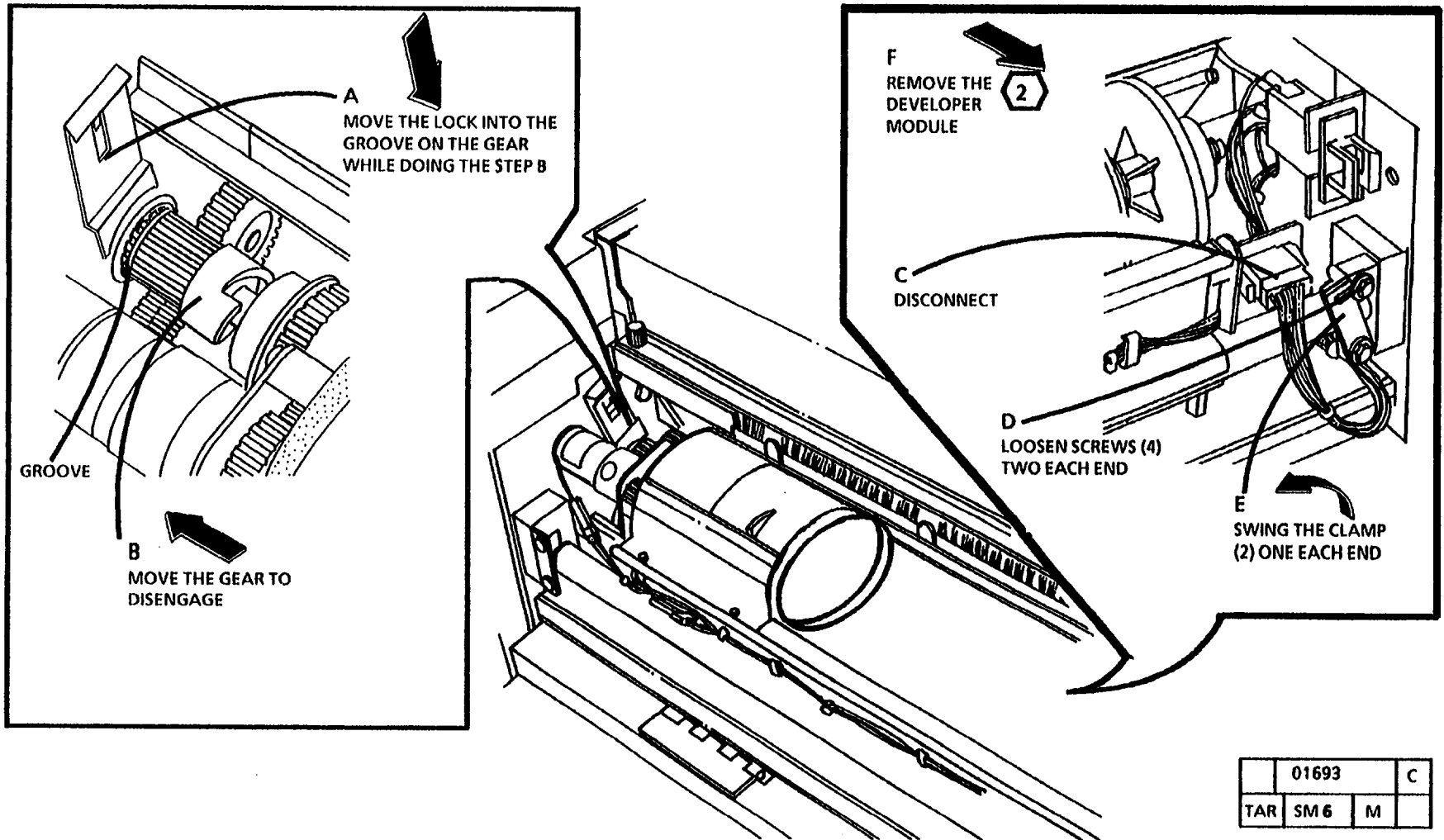


Figure 8. Remove the Developer Module

(Continued)

(Continued)

16. (Figure 9): Remove the Sump Shield from under the Toner Cartridge.

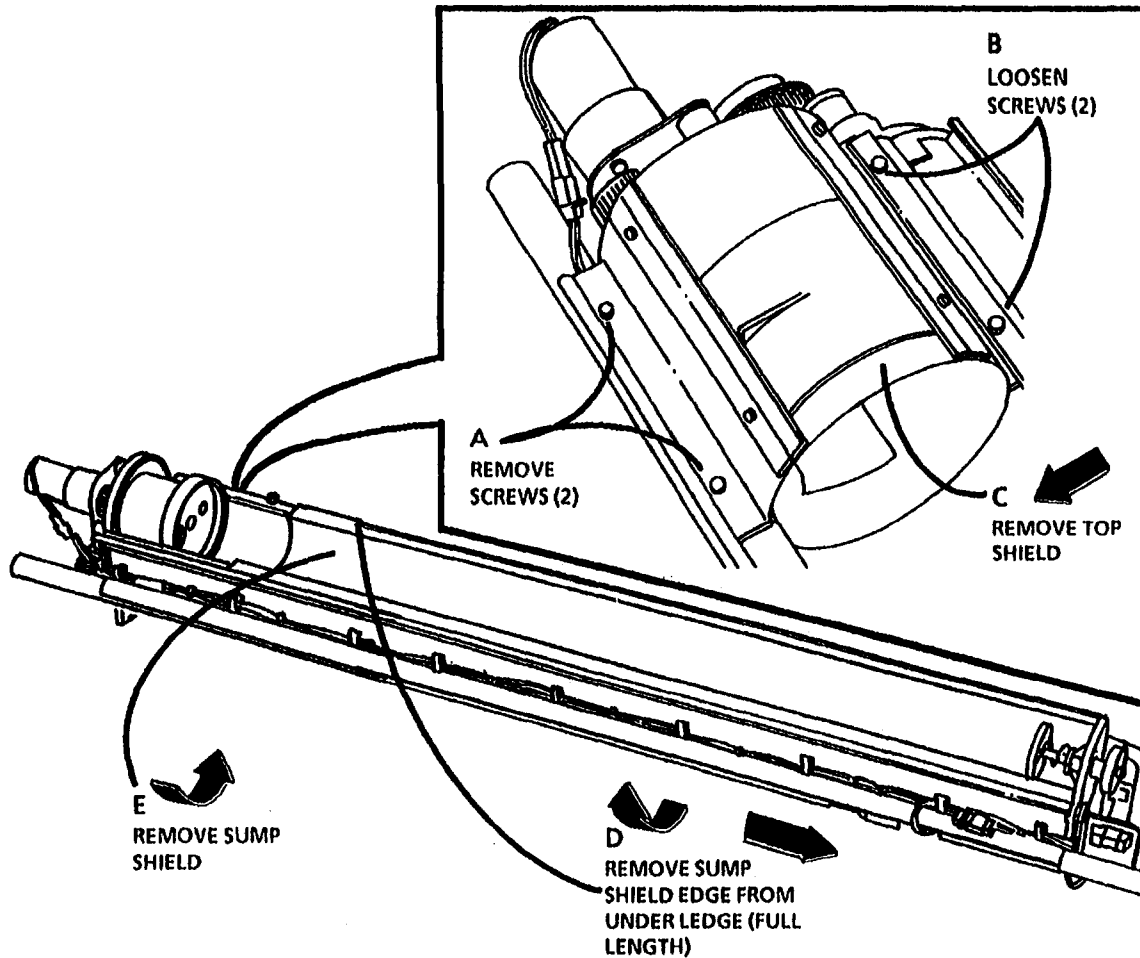


Figure 9. Remove the Sump Shield from under the Toner Cartridge

	01626	A
TAR	SM 6	M

(Continued)

(Continued)

17. (Figure 10): Dump the Developer Material.

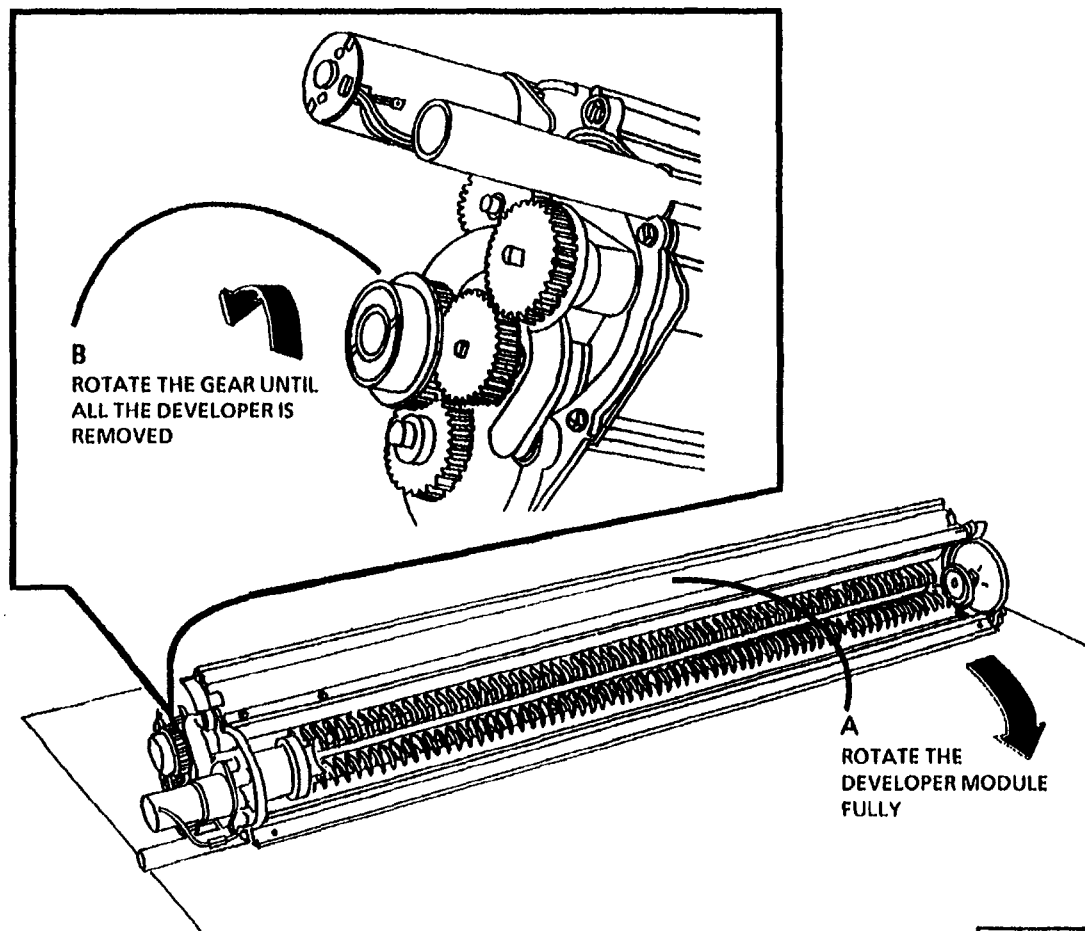


Figure 10. Dump the Developer Material

	01780	C
TAR	SM 6	M

(Continued)

(Continued)

18. (Figure 11): Remove the Pressure Equalizer Tubes.

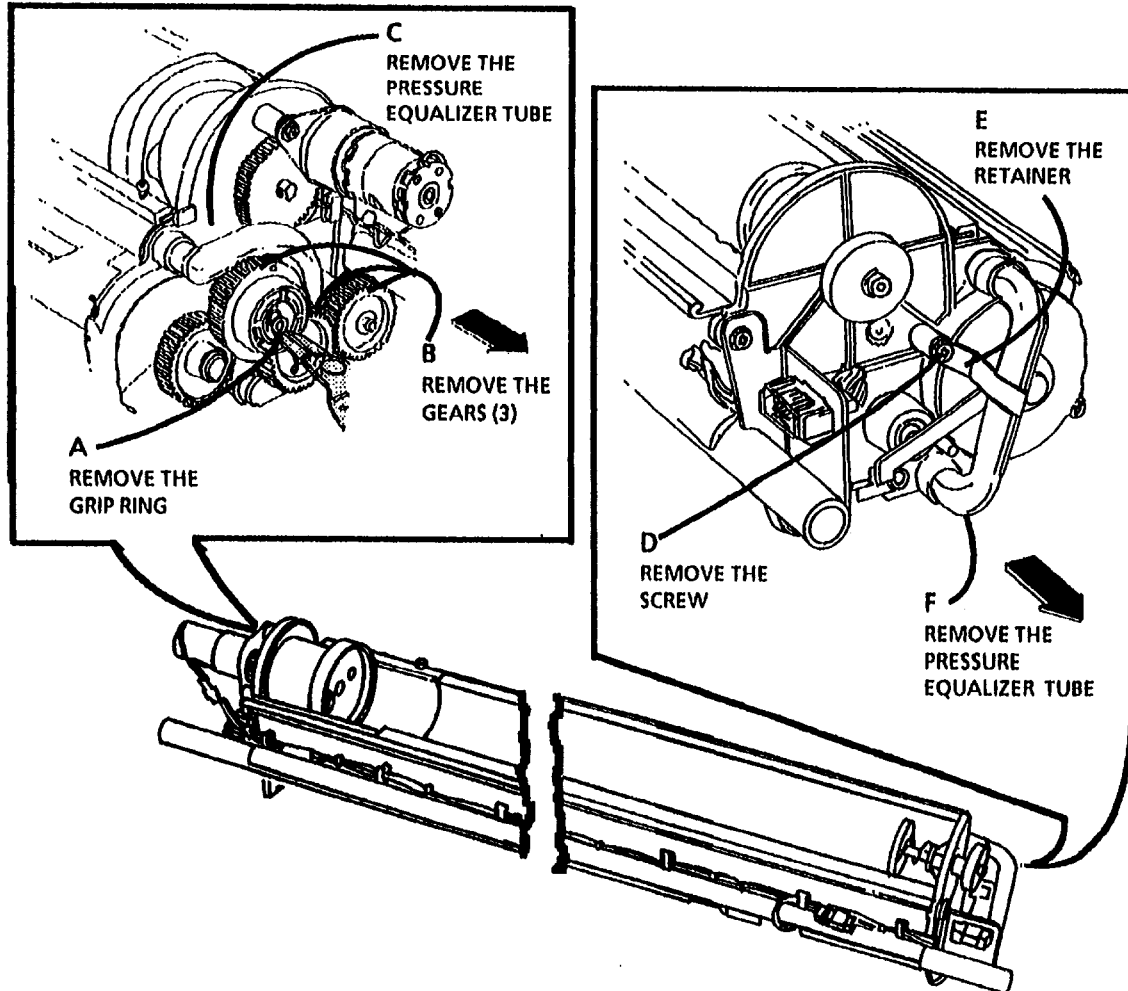


Figure 11. Remove the Pressure Equalizer Tubes

	01781	B
TAR	SM 6	M

(Continued)

(Continued)

19. Clean the entire Developer Module, Magnetic Roll, and the Pressure Equalizer Tubes thoroughly with a vacuum cleaner.

**3** STEP 21 B and D: The gears must be reinstalled with the flanges as shown to ensure that all the gears are secured.

20. (Figure 12): Reinstall the Pressure Equalizer Tubes.

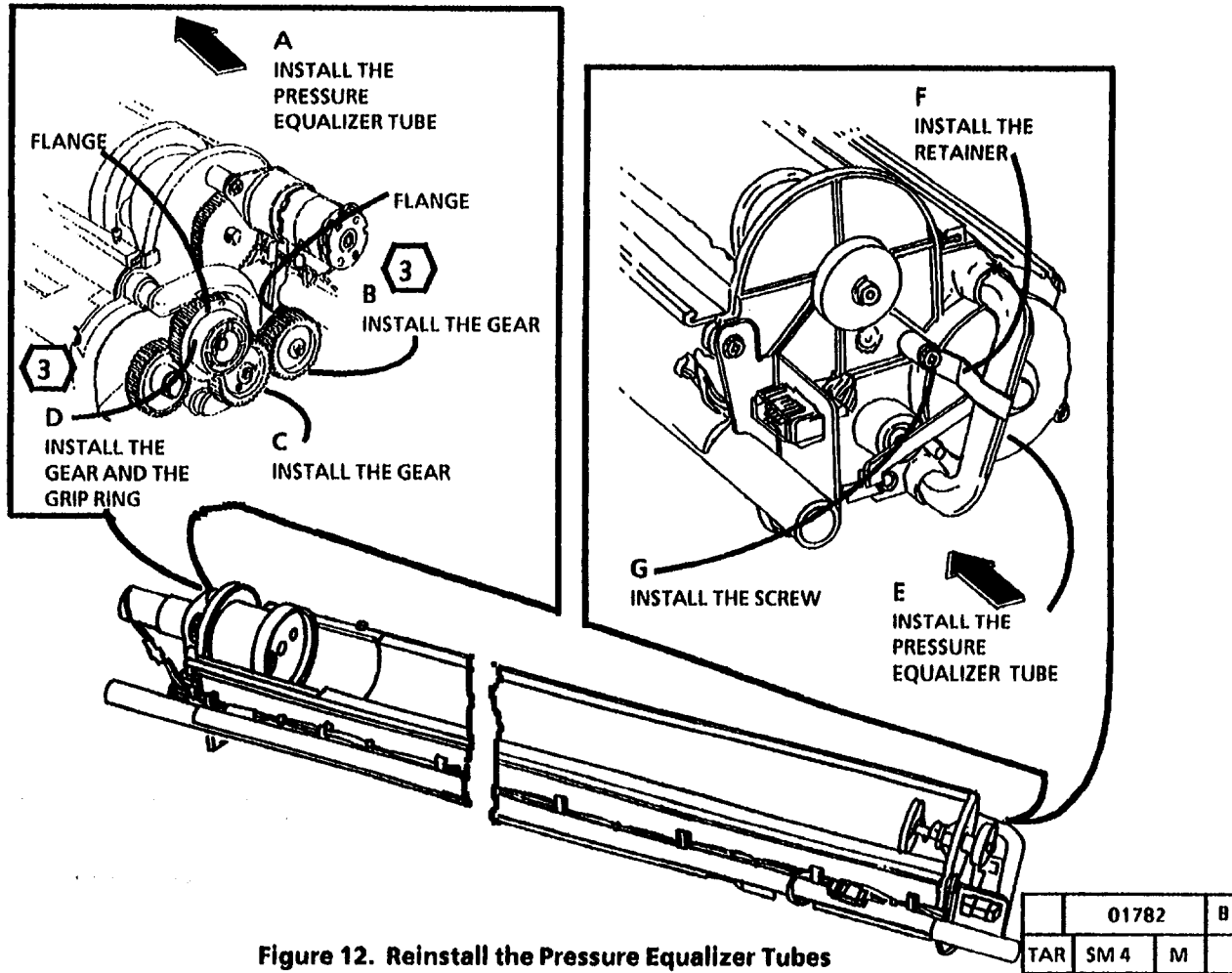


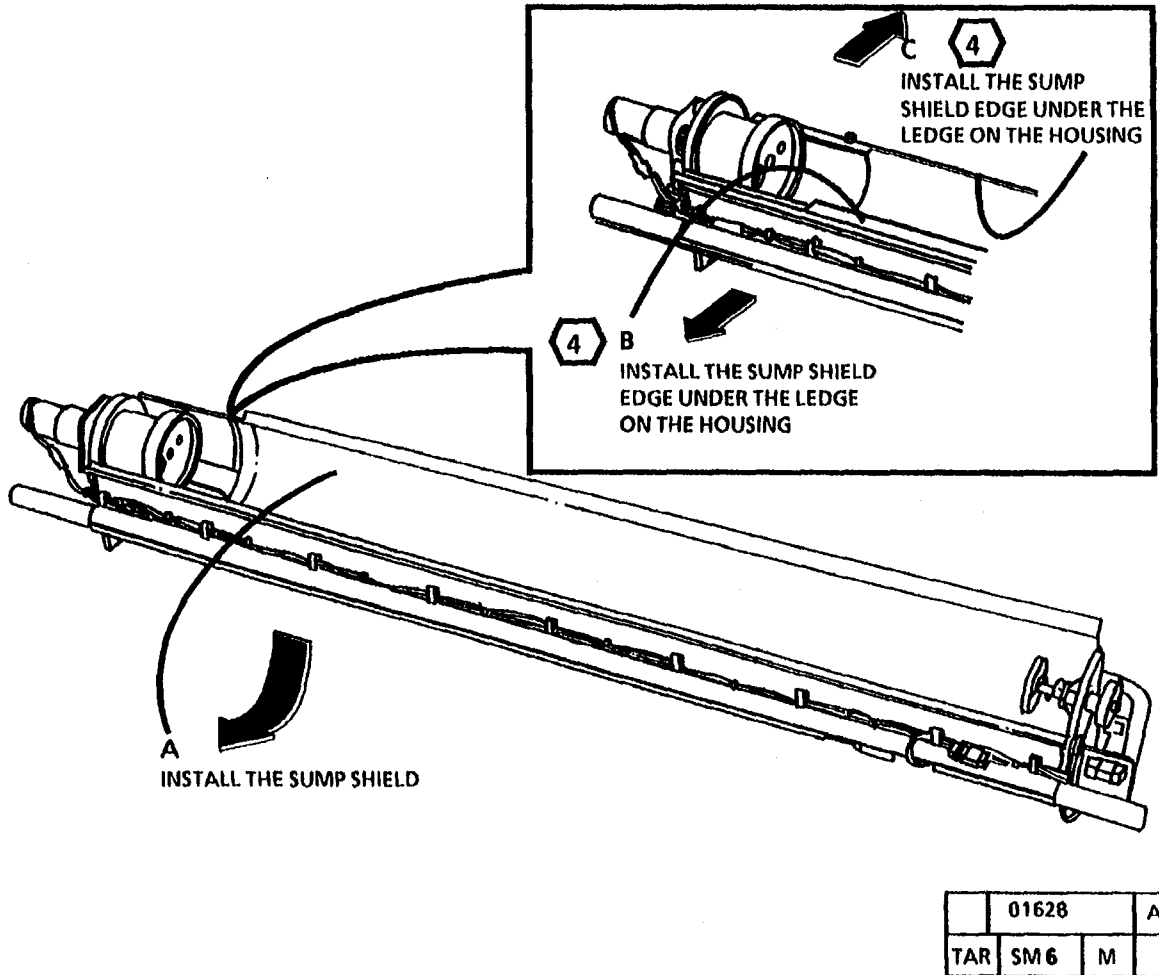
Figure 12. Reinstall the Pressure Equalizer Tubes

(Continued)

(Continued)

**4** STEP 21 B and C: Ensure that the full length of the edge of the shield is under the edge of the housing.

21. (Figure 13): Reinstall the Sump Shield on the bottom the Developer Module.



	01628	A
TAR	SM 6	M

Figure 13. Reinstall the Sump Shield on the bottom of the Developer Module

(Continued)

(Continued)

**5** STEP 22 C: Do not overtighten the screws.

22. (Figure 14): Reinstall the Top Shield.

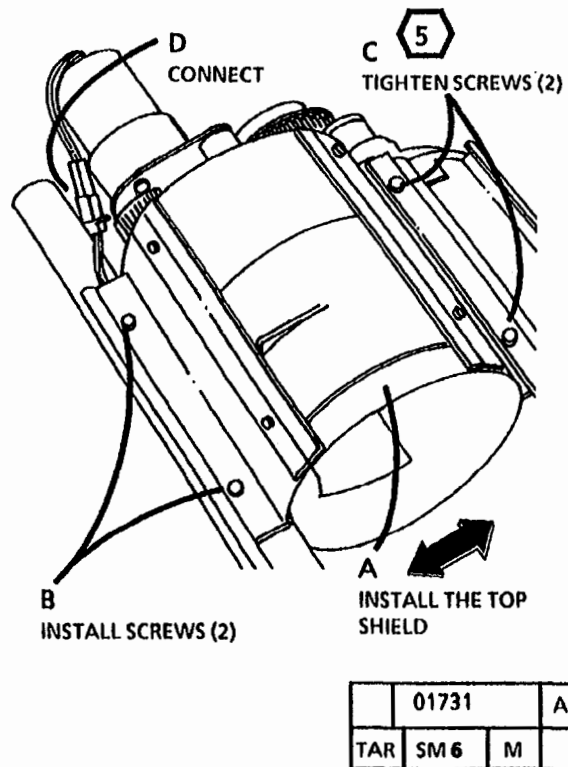


Figure 14. Reinstall the Top Shield

(Continued)

(Continued)

**6** STEP 23A: Ensure that the developer module is fully installed in the brackets.

**7** STEP 23 E: Ensure that the gear is free to engage with the developer module drive gears.

23. (Figure 15): Reinstall the Developer Module.

24. Close the Upper Rear Cover and push the Cutter in.

25. Cap the toner waste bottle and tape it to the toner cartridge for shipment with the copier.

26. Remove and empty the moisture collection bottle. Reinstall the empty bottle.

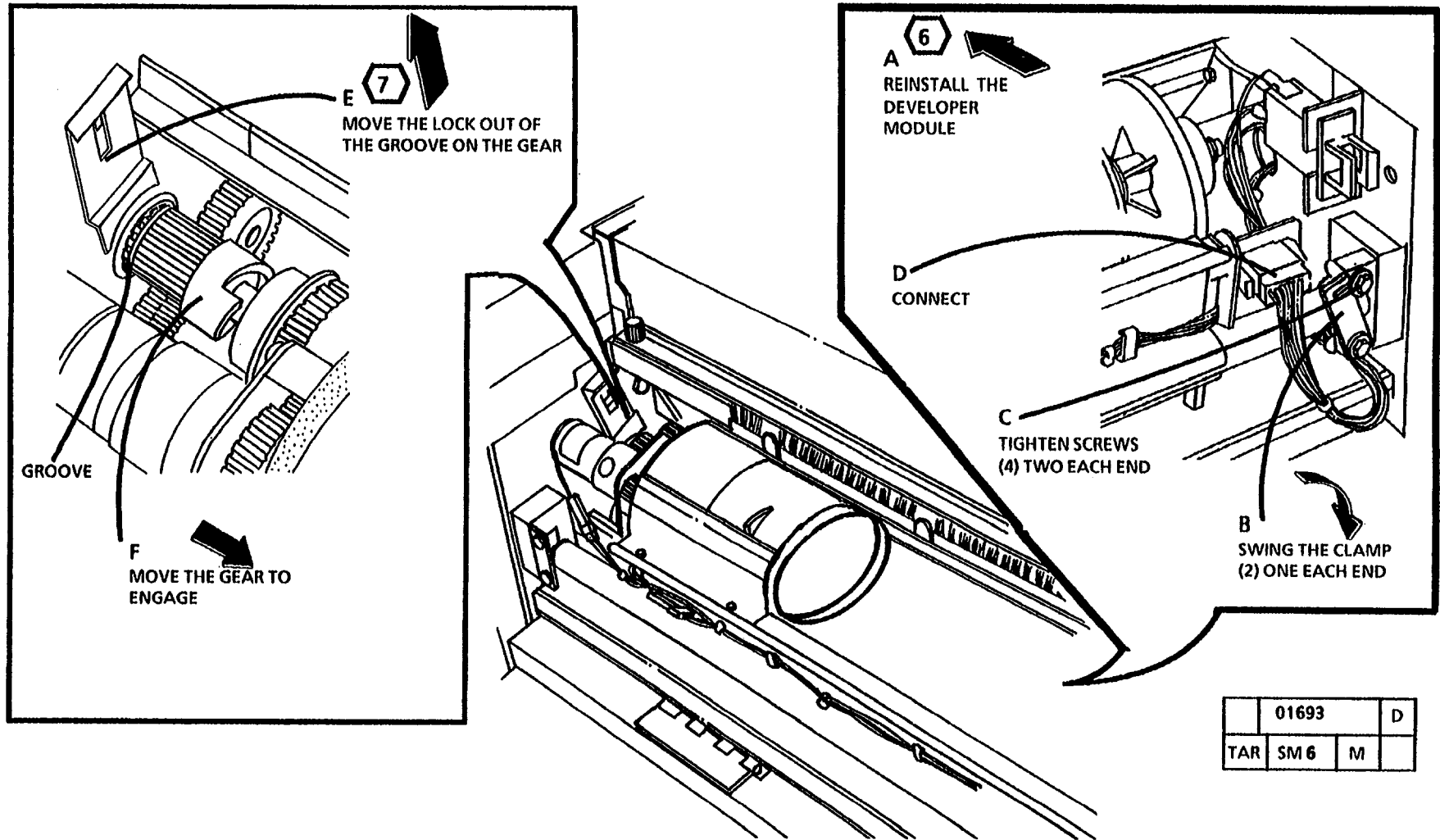


Figure 15. Reinstall the Developer Module



## General Tools And Supplies

### Supplies

Description	Part
Service Manual Binder	600P88124

### Tools

Description	Part
Basic Multinational Tool Kit	600T1835
Supplemental Tool Kit	600T1837
Metric Supplemental Tool Kit	600T1836
Digital Multimeter	600T1616
■ DMM Test Lead 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 Jumper Lead (Mod III, IV Electrometer)	600T1652
Probe Holder	120E5510
Interlock Tool	600T91616
Outlet Tester	600T647
Vacuum Cleaner	600T1820
Vacuum Cleaner Bags (10)	93E3270

Description	Part
Vacuum Cleaner Filter Module	600T1832
Electrometer Probe Wing	600T1728
Screwdriver Blade	600T40203
6 inch x 3/16	
Pocket Screwdriver	600T40205
5.5 mm Wrench	600T40501
7 mm Wrench	600T40502
5.5 mm Socket	600T40701
7 mm Socket	600T40702
Longnose Pliers	600T40901
Diagonal Cutting Pliers	600T40903
Metric Hex Key Set	600T41101
Retaining Ring Pliers	600T41401
150 mm Rule	600T41503
2 m Tape Measure	600T41505
Line Level	600T41510

Description	Part
Round File 6 inch	600T41801
Flat File 6 inch	600T41802
Cleaning Brush	600T41901
Scribing Tool	600T41903
Magnetic pickup and Mirror	600T41911
Socket Driver	600T1751
Metric Feeler Gauge Set	600T41509
Screwdriver Handle	600T40212
13 mm Wrench	600T40505
10 mm Wrench	600T40504

### Test Pattern

Test Pattern	82E5980
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### Image Reference Pattern

Solid Area	82P520
Image Darkness	82E7030
Background	82P502

## Machine Consumables

Description	Part
Photoreceptor	1R81
Toner Cartridge (with reclaim bottle)	6R395
Developer (7 pound bottle)	5R310
Dusting Pouch	8R181

## Cleaning Materials

Description	Part
Treated Cleaning Cloth (not for use on corotrons)	35P1638
Cleaning Solvent	43P10
Disposable Gloves	99P3024
Drop Cloth	35P1737
Drum Polish	43P76
Film Remover	43P45
Formula A	43P48
Heavy Duty Towels	35P3191
Lint-Free Cloth	600S4372
Polyurethane Pads (40)	600S4653
Antistatic Fluid	43E110
Photoreceptor Maintenance Kit	600S5838

## Other Tools and Supplies

### Supply Kit 73K78570

Description	Part
20 pound Roll Bond Media	22E630
Oil Tube (8 cc)	93E811
Toner Cartridge (1) (with reclaim bottle)	6R395
Developer (7 pound bottle)	5R310
Dusting Pouch (Zinc Stearate)	8R181
Antistatic Fluid	43E110
Media Load Tool	2K61921
Document Guide	38E10581
Jam Clearance Tool	19E19250
Log Holder	600P293
Media Message	600P60017
Electrometer Probe Holder	120E5511
Machine Log	611P22478
Left Service Rail	68K2891
Right Service Rail	68K2881

## Installation Kit 73K78581

Description	Part
Cut Media Starter Pack	3R3509
Test Pattern	82E5980
Drop Cloth	35P1737
Heavy Duty Towels	35P3191
Machine Dispatch Label	600P2404
Forbidden Copy Card	610P0002
Machine Warranty Card	611P21698
Limited Warranty Card	600E32400
Machine Specification Sheet	600E61670
Photoreceptor MSDS	600P30010
Developer MSDS	600P29920
Fuser Oil MSDS	600E30050
Stearate MSDS	600P9019
Antistatic MSDS	600P9820
User Guide	700P96287

## General Tools and Supplies (RX)

### Tools

Description	Part
Screwdriver Blade	
6 inch x 3/16 inch	600T40203
Pocket Screwdriver	600T40205
5.5mm Combination Spanner	600T40501
7mm combination Spanner	600T40502
5.5mm Socket	600T40701
7mm Socket	600T40702
Longnose Pliers	600T40901
Diagonal Cutting Pliers	600T40903
Gland Nut Pliers	600T40904
Hex Key Set	600T91702
Retaining Ring Pliers	600T41401
150mm Rule	600T41503
2m Tape Measure	600T41505
Line Level	600T41510
Round File 6 inch	600T41801
Flat File 6 inch	600T41802
Cleaning Brush	600T41901
Scribing Tool	600T41903
Magnetic Pickup and Mirror	600T41911
Handle Male 1/4 Drive	600T1751
Metric Feeler Gauge Set	600T41509
Interlock Cheater	600T91616
Screwdriver Handle	600T40212
Vacuum Cleaner	600T91720
10 Spare Bags	603T80130
13mm Combination Spanner	600T40505
Light Shield	600T1198
Digital Multimeter	600T1616
Digital Multimeter Lead Set	600T1617
Mod 4 Electrometer	600T1620
Electrometer probe Holder	120E5510
Electrometer Probe Wing	600T1728

### Machine Consumables (RX)

Description	Part
Photoreceptor	1R81
Toners	6R90202
Developer	5R90179

### Cleaning Materials (RX)

Description	Part
Dusting Pouch	8R90139
Photoreceptor Maintenance Kit	600S92126
Photoreceptor Polish	43P69
Photoreceptor Wash Solvent/ General Cleaning Solvent	8R90176
Anti Static Fluid	43E110
Anti Static Fluid (Alternate)	8R90273
Cleaning Cloth	8R90019
Cleaning Cloth Treated (not for use on corotrons)	35P1638
Lint Free Cloth (Rayon)	600S4372
Cleaner General Purpose Formula A	8R90175 43P48

### Test Pattern

Test Pattern	82E5980
--------------	---------

### Image Reference Pattern

Solid Area	82P520
Image Darkness	82E7030
Background	82P502

### Branch Tools (RX)

Description	Part
Temperature Probe Assembly	499T9570
Straight Temperature Probe (Use with 499T9570)	499T9572
Adapter Plugs	600T91711

## OTHER TOOLS AND SUPPLIES (RX)

### Supply Kit 73K82970

Description	Part
Developer	5R90179
Toner Cartridge (with reclaim bottle)	6R90202
Anti -Static Fluid	43E110
Oil (8cc)	93E811
Electrometer Probe Holer	120E05511
Jam Clearance Tongs	19E19250
Service Rail Assembly L H	68K2891
Service Rail Assembly R H	68K2881
Media Roll Carrier	2K61921

### Lubricants

Description	Part
Oil Tellus 68	8R90180
Grease Alvania No.2	600T90340
Silicone Grease	600T90429

### Nationalization Kits

Generic Contents	Part
User Guide	Ref. Only
Control Panel Label	Ref. Only
Safety Label (non English)	Ref. Only
Safety Label, Rails (Non English)	Ref. Only
Power Cord	Ref. Only
Log Book	Ref. Only
Proms (Message Sets)	Ref. Only
Media, AO Roll 80 GSM Bond	Ref. Only
Media Starter Pack (A1)	Ref. Only

# Change Tag/ MOD Index

## Introduction

All important modifications are identified by a Tag/ MOD number on a matrix label attached to each 3050 inside the right side door (see Figure 1).

This section describes all the tags as well as multinational applicability, classification codes, and permanent or temporary modification information.

## Classification Codes

A Tag/ MOD number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, the repairs, installation, or adjustment procedures. A Tag/ MOD number may also be required to identify the presence of optional hardware, firmware, or if mandatory modifications have been installed. Each Tag/ MOD number is given a classification code to identify the type of a change the Tag/ MOD has made.

M- Mandatory

N- Not installed in the field

O- Optional

R- Repair

S- Situational

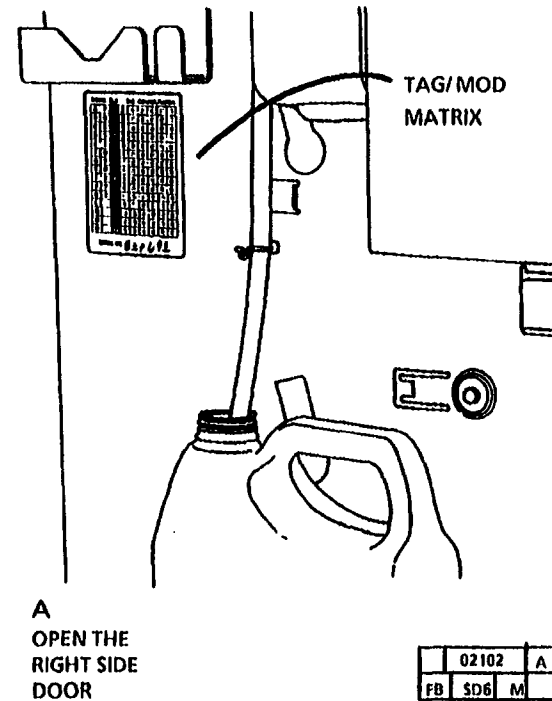
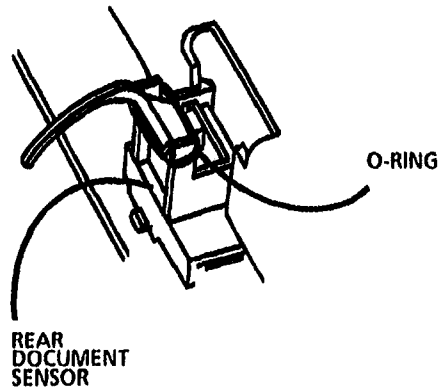


Figure 1. Location of the Change Tag/ MOD Index

## Change Tag/ MOD Index

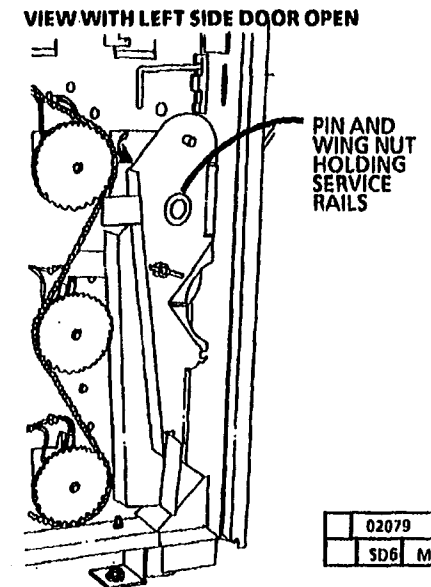
**Tag/ MOD:** 1  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.-14P004519, RX-110564506  
**Name:** Firmware upgrade dated 5/15/92  
**Purpose:**  
**Kit Number:** N/A  
**Reference:**

**Tag/ MOD:** 2  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.-14P004539, RX-110564528  
**Name:** 6/1/92 Firmware, new document platen, CVT switches, upgraded with O-Ring.  
**Purpose:** 'O' Rings added to the front and rear sensors to improve copy quality.  
**Kit Number:** Piece Part  
**Reference:** PL 5.2



2073	A
SD6	M

**Tag/ MOD:** 3  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.-14P004764, RX-110564640  
**Name:** Service Rails Storage Pin  
**Purpose:** Provide the pin that holds the service rails in storage.  
**Kit Number:** 600K39110  
**Reference:**



02079	A
SD6	M

## Change Tag/ MOD Index

**Tag/ MOD:** 4  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.-14P004678, RX-110564661  
**Name:** Fuser Roll  
**Purpose:** New material used on the fuser roll to improve the offsetting lattitude.  
**Kit Number:** Piece Part  
**Reference:** PL 10.2

**Tag/ MOD:** 5  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.-14P004721, RX-110564661  
**Name:** Firmware upgraded dated 7/1/92  
**Purpose:** A1.26 fault code added to check when the document is sensed by the rear document sensor. Also made other software changes.  
**Kit Number:** Piece Part  
**Reference:** PL 1.1

**Tag/ MOD:** 6  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.- 14P004932, RX-110564825  
**Name:** Firmware upgraded dated 8/24/92  
**Purpose:** Combined C codes. RX Country Configuration NVM check  
**Kit Number:** Piece Part  
**Reference:** PL 1.1

## Change Tag/ MOD Index

**Tag/ MOD:** 7  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.- 14P005179, RX-110565173-9  
**Name:** Stabilizing Transport Pin (Not Spared)  
**Purpose:** Lengthened and locked pin for more stability. Old configuration could cause trail edge deletion on left side.  
**Kit Number:**  
**Reference:** Not Spared

**Tag/ MOD:** 8  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.- 14P005296, RX-110565209-3  
**Name:** Right and Left Xerographic Module Latch Supports  
**Purpose:** Provide better support and latching.  
**Kit Number:** Piece Part  
**Reference:** PL 14.6

**Tag/ MOD:** 9  
**Class:** R  
**Use:**  
**Mfg. Serial No:** U.S.- 14P005470, RX-110565417-7  
**Name:** Transport Upgrade  
**Purpose:** Provide fixes including the following:

- Clicking noise in the transport area by adding extra ribs to all pulleys
- Vibration noise when the copier is in standby

**Kit Number:** Piece Part  
**Reference:** PL 8.1

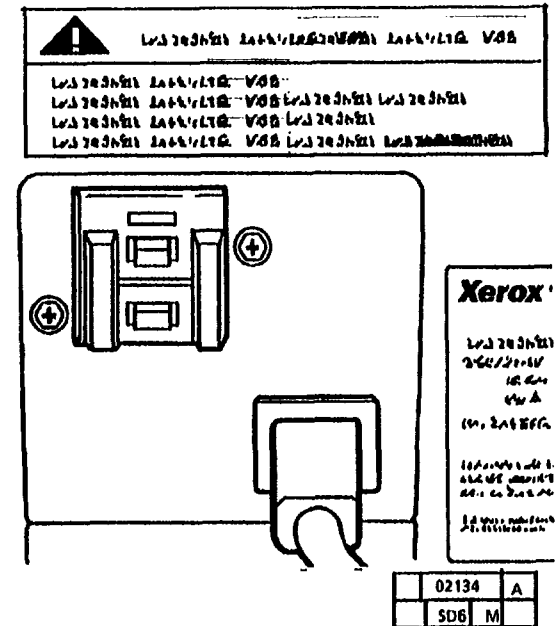


## Change Tag/ MOD Index

**Tag/ MOD:** 10  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.- 14P005470, RX-110565417-7  
**Name:** Fabric Guide  
**Purpose:** Help eliminate static build up to enhance copy quality.  
**Kit Number:** Piece Part  
**Reference:** PL 8.1

**Tag/ MOD:** 11  
**Class:** R  
**Use:**  
**Mfg. Serial No:** 14P005936 and up  
**Name:** Oil Dispense Assembly  
**Purpose:** Pin clip was replace with an E-ring clip to prevent Dispense Roll feed-out .  
**Kit Number:** Piece Part  
**Reference:** PL 10.5

**Tag/ MOD:** 12  
**Class:** R  
**Use:**  
**Mfg. Serial No:** U.S.- 14P005473, RX-110565324-3  
**Name:** Ground Fault Interrupt (GFI)  
**Purpose:**  
**Kit Number:** Piece Part  
**Reference:** PL 1.2



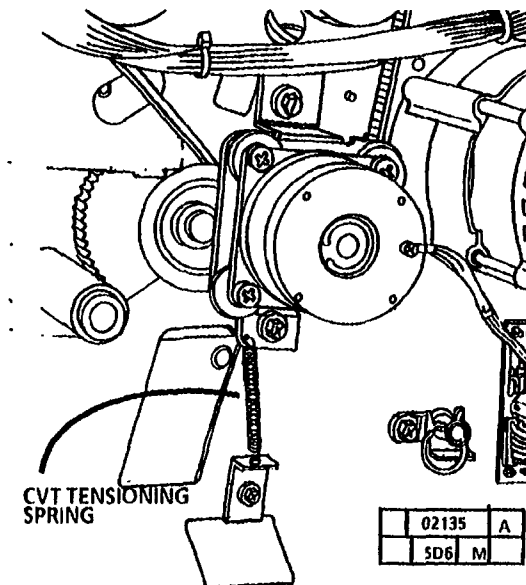
## Change Tag/ MOD Index

**Tag/ MOD:** 13  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** 14P005944  
**Name:** Single Color Document  
Feed-in and Cut Sheet  
Feed-in Shelves  
**Purpose:**  
**Kit Number:** Piece Part  
**Reference:** PL 14.3, PL 14.6

*NOTE: To maintain the integrity of the machine appearance, if one of the shelves is being replaced with a single color shelf, replace both shelves.*

**Tag/ MOD:** 14  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S.- 14P005329, RX-  
110565309-0  
**Name:** RFC Media Drawer Frame  
**Purpose:**  
**Kit Number:** 600K39820  
**Reference:**

**Tag/ MOD:** 15  
**Class:** R  
**Use:** All  
**Mfg. Serial No:** U.S. 14P005390, RX-  
110565331-6  
**Name:** CVT Tensioning Spring  
**Purpose:** Automatically tensions the  
CVT drive belt.  
**Kit Number:** Piece Part  
**Reference:** PL 5.2



## Change Tag/ MOD Index

Tag/ MOD: 16

Class: R

Use:

Mfg. Serial No: US 14P005828 and up  
RX 110565891-1 and up  
Name: Firmware upgraded dated  
05/01/93

Purpose: Automatically cuts media  
left in processor when  
detected at Power On.  
Displays Status Code if  
Document and/ or media is  
detected in processor at  
Power On. Does not  
monitor low media  
condition at Power On.  
Consequently, Media Roll  
Initialization process is  
increased.

Kit Number: Piece Part

Reference: PL 1.1

Note: Kit 133K5344 contains only the  
firmware EPROMs. Kit 600K42200 contains  
the EPROMs and a User Guide.

Tag/ MOD: 17

Class: R

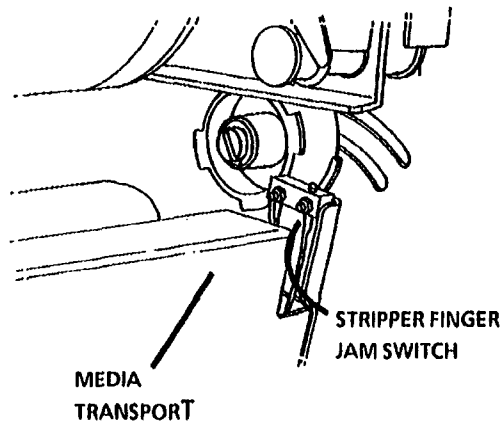
Use: All

Mfg. Serial No: US 14P006193 and up  
RX 110566734-1 and up  
Name: Stripper Finger Jam Switch  
Purpose: A switch was added to the  
Media Transport to shut  
down the copier in the  
event of a media jam at the  
stripper fingers. This was  
done to prevent additional  
damage to the Fuser Roll.

Kit Number: 600K42350

Reference:

Copier must have Tag 6 in order to install this  
kit and make it functional.



02275	A
SD6	M

Tag/ MOD: 18

Class: R

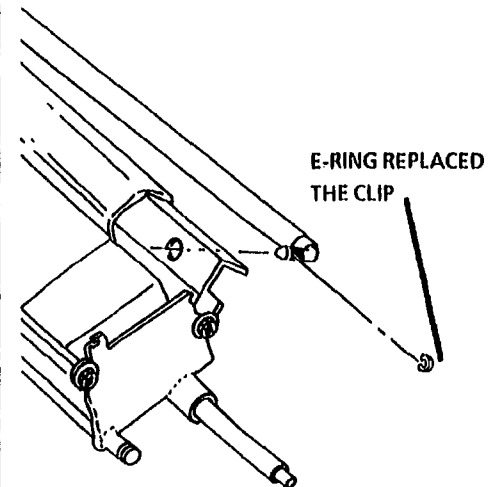
Use: All

Mfg. Serial No: 14P006389 and up  
RX 110567067-9  
Name: Oil Dispense Roll Assembly

Purpose: To improve oil dispensing  
by adding an improved oil  
dispense roll assembly  
mounting. This prevents  
the dispense assembly from  
coming loose and  
damaging the fuser.  
Dispense Roll is now spared  
as an assembly.

Kit Number: 600K43030

Reference:



02276	A
SD6	M

**Tag/ MOD:** 19  
**Class:** R  
**Use:**  
**Mfg. Serial No:** US 14P006239 and up  
RX 110566920-4 and up  
**Name:** Document Platen and  
Document Handler End  
Caps  
**Purpose:** New platen with beveled  
switch actuator slots and  
the platen front entrance  
angle was raised to  
improve folded document  
feeding reliability. End  
caps are made with a  
stronger material to  
reduce the frequency of  
damage to mounting tabs.  
**Kit Number:** Piece Part  
**Reference:** PL 5.1

**Tag/ MOD:** 20  
**Class:** R  
**Use:**  
**Mfg. Serial No:**  
**Name:** On/Off Switch  
**Purpose:** Increased breaker  
amperage to prevent f to  
improve reliability.  
**Kit Number:** Piece Part  
**Reference:** PL 1.2

**Tag/ MOD:** 21  
**Class:** R  
**Use:**  
**Mfg. Serial No:** US 14P006389 and up  
RX 110567067-9  
**Name:** New Process Fuser Roll  
**Purpose:** Improved durability and  
reliability. Surface is less  
susceptable to damage.  
**Kit Number:** Piece Part  
**Reference:** PL 10.2

**Tag/ MOD:** 22  
**Class:** R  
**Use:** ALL  
**Mfg. Serial No:** USO: 14P006712  
EO: 110567745-2  
**Name:** Redesigned Universal  
Cutter Drive Motor  
**Purpose:** To issue a more reliable and  
lower cost Cutter Assembly.  
**Kit Number:** 600K46410  
**Reference:** PL 7.7

**Tag/ MOD:** 25  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO:  
EO: 1105686923  
**Name:** Elimination of the Key lock  
Switch. Circuit Breaker  
Switch and Width Lights.  
**Purpose:** To enhance the design and  
improve the reliability of  
the copier.  
**Kit Number:** USO: NA  
EO: NA  
**Reference:** PL1.2

**Tag/ MOD:** 23  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P006923  
EO: 110568108-5  
**Name:** New design GFI (Ground  
Fault Interrupt) device  
**Purpose:** To provide a less  
susceptible to false tripping  
GFI.  
**Kit Number:** USO:  
EO:  
**Reference:** PL1.2

**Tag/ MOD:** 26  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P007313  
EO: 1105685706  
**Name:** Firmware Upgrade Kit  
**Purpose:** To provide firmware that  
supports copiers with  
either one or two AC Drive  
Motors.  
**Kit Number:** USO: 600K42201  
EO: 600K53570  
**Reference:** PL 1.1

**Tag/ MOD:** 24  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P007023  
EO: 110568259-6  
**Name:** New design Developer  
Module spring loaded  
support blocks  
**Purpose:** To provide a spring force  
that holds the Developer  
Module seated correctly.  
**Kit Number:** USO:  
EO:  
**Reference:** PL9.8

**Tag/ MOD:** 27  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P007313  
EO: 1105685706  
**Name:** Redesigned Photoreceptor  
Drum Shaft  
**Purpose:** To improve the reliability  
of the copier.  
**Kit Number:** USO:  
EO:  
**Reference:** PL9.2B

**Tag/ MOD:** 28  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P007313  
EO: 1105685706  
**Name:** Single Drive Motor  
**Purpose:** To enhance the design and improve the reliability of the copier.  
**Kit Number:** USO:  
EO:  
**Reference:** PL.9.2  
**Note:** Main Drive Motor replaces Drum/ Developer Drive and Fuser Drive Motors

**Tag/ MOD:** 31  
**Class:** N  
**Use:** ALL  
**Mfg. Serial No:** USO:  
EO: 110569480-2  
**Name:** Redesigned Cutter Drive Motor  
**Purpose:** To issue a more reliable and lower cost Cutter Assembly.  
**Kit Number:**  
**Reference:** PL 7.8

**Tag/ MOD:** 29  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO: 14P007449  
EO:  
**Name:** Redesigned Xero Module Cooling Fans  
**Purpose:** To enhance the design and improve the reliability of the copier.  
**Kit Number:** USO:  
EO:  
**Reference:** PL.1.5

**Tag/ MOD:** 33  
**Class:** REPAIR  
**Use:** ALL  
**Mfg. Serial No:** USO:  
EO:  
**Name:** Media Heater  
**Purpose:** To issue a Media Heater Assembly.  
**Kit Number:**  
**Reference:** PL 7.2

**Tag/ MOD:** 30  
**Class:** REPAIR  
**Use:** All  
**Mfg. Serial No:** USO:  
EO:  
**Name:** Photoreceptor Drum Erase LEDs  
**Purpose:** To enhance the design and improve the print quality of the copier.  
**Kit Number:** USO: NA  
EO: NA  
**Reference:** PL.9.3  
**Note:** Drum Erase LEDs replaces Erase Lamp and Power Inverter

**Tag/ MOD:** 34  
**Class:** N  
**Use:** ALL  
**Mfg. Serial No:** USO:  
EO:  
**Name:** Redesigned Media Transport  
**Purpose:** To issue a common Media Transport to the 3500 Family of copiers.  
**Kit Number:**  
**Reference:** PL 8.1

**Tag/ MOD:** 40  
**Class:** REPAIR  
**Use:** NA  
**Mfg. Serial No:** USO: 14P007896  
EO:  
**Name:** New design Cutter Drive Motor  
**Purpose:** To issue a more reliable Cutter Drive Motor  
**Kit Number:**  
**Reference:** PL 7.8

**Tag/ MOD:** 90  
**Class:** MANDATORY  
**Use:** 3050 Copiers without Tag/ MOD 90  
**Mfg. Serial No:** US (14P004501) through (14P004757)  
**Name:** Harness Replacement Safety Kit  
**Purpose:** To eliminate a potential safety problem caused by the wire harnesses on some 3050 copiers.  
**Kit Number:** 605K07610  
**Reference:** Not spared

*Note: Mandatory kit contains replacement harnesses that must be installed in order to eliminate an unsafe condition.*

**Tag/ MOD:** 255  
**Class:** REPAIR  
**Use:** ALL  
**Mfg. Serial No:** USO:  
EO:  
**Name:** Firmware Upgrade Kit  
**Purpose:** To provide firmware that supports copiers with either one or two AC Drive Motors.  
**Kit Number:** USO: 600K42211  
EO: 600K53570  
**Reference:** PL1.1

*Notes: 1. Tag/ MOD 26 is the equivalent manufacturing installed Firmware Upgrade.  
2. Tag/ MOD 255 must be used on copiers with Tag/ MOD 28 (Copiers equipped with a Single AC Drive Motor)*

**Tag/ MOD:**  
**Class:**  
**Use:**  
**Mfg. Serial No:**  
**Name:**  
**Purpose:**  
**Kit Number:**  
  
**Reference:**

**Tag/ MOD:**  
**Class:**  
**Use:**  
**Mfg. Serial No:**  
**Name:**  
**Purpose:**  
**Kit Number:**  
  
**Reference:**

**Tag/ MOD:**  
**Class:**  
**Use:**  
**Mfg. Serial No:**  
  
**Name:**  
**Purpose:**  
**Kit Number:**  
  
**Reference:**



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## Plug / Jack Listings and Locations

CONNECTOR	FIGURE	PAGE	CONNECTOR	FIGURE	PAGE
A0A1P/J2	1	7-4	A3P/J304	2	7-5
A0ESDP1	4	7-7	A3P/J305	2	7-5
A0L1P/J1	6	7-9	A3P/J306	2	7-5
A0L2P/J1	6	7-9	A3P/J308	2	7-5
A0L3P/J1	6	7-9	A3P/J309	2	7-5
A0L4P/J1	6	7-9	A3J311	2	7-5
A0L5P/J1	6	7-9	A3J312	2	7-5
A0L6P/J1	6	7-9	A3P/J313	2	7-5
A0Q1P/J1	3	7-6	A3P/J314	2	7-5
A0Q2P/J1	3	7-6	A4P/J1	3	7-6
A0Q3P/J1	3	7-6	A4P/J2	3	7-6
A0Q4P/J1	6	7-9	A5P21	3	7-6
A0Q5P/J1	6	7-9	A5P22	3	7-6
A0Q6P/J1	6	7-9	A7P/J1	3	7-6
A2P/J201	1	7-4	A7P/J2	3	7-6
A2P/J202	1	7-4	A8M1P/J1	14	7-16
A2P/J203	1	7-4	A8Q1P/J1	14	7-16
A2P/J204	1	7-4	A20M21P/J1	4	7-7
A2P/J206	1	7-4	A20M22P/J1	4	7-7
A2P/J207	1	7-4	A20P/J3	4	7-7
A2P/J208	1	7-4	A20P2	4	7-7
A2P/J209	1	7-4	A20P3	4	7-7
A2P/J210	1	7-4	A20Q21P/J1	8	7-11
A2P/J211	1	7-4	A20Q22P/J1	8	7-11
A2P/J212	1	7-4	A20Q23P/J1	8	7-11
A2P/J213	1	7-4	A20Q26P/J1	8	7-11
A2P/J214	1	7-4	A20XDS21P/J1	8	7-11
A2P/J215	1	7-4	A20S21 - RIGHT SIDE DOOR INTERLOCK SW.	4	7-7
A2P/J216	1	7-4			
A3P/J301	2	7-5			
A3P/J302	2	7-5			
A3P/J303	2	7-5			

# Plug / Jack Listings and Locations

(continued)

CONNECTOR	FIGURE	PAGE	CONNECTOR	FIGURE	PAGE
A20XDS21P/J2	8	7-11	A33P/J1	15	7-16
A20S22P/J1	4	7-7	A33P/J2	15	7-16
A20S23P/J1	5	7-8	A34P/J1	15	7-16
A20S28P/J1	5	7-9	A1CB1 - AC POWER SWITCH	5	7-8
A20S29P/J1	5	7-9	A1FL1 - LINE FILTER	37	7-25
A20S30 - DOCUMENT HANDLER INTERLOCK SW.	7	7-10	L21 - COUNTER	5	7-8
A20S26 - UPPER REAR DOOR INTER LOCK SW.	12	7-14	S23 - KEYLOCK SWITCH	5	7-8
A21P/J1	7	7-10			
A21Q1P/J1	9	7-12			
A21Q2P/J1	9	7-12			
A21Q3P/J1	9	7-12			
A21M1P/J1	10	7-13			
A22DR1P/J1	12	7-14			
A22M1P/J1	12	7-14			
A22P/J1	12	7-14			
A22Q1P/J1	12	7-14			
A22Q2P/J1	12	7-14			
A23ED2P/J1	7	7-10			
A23A1P/J1	13	7-15			
A23A1P/J2	13	7-15			
A23A1P/J3	13	7-15			
A23A1P/J4	13	7-15			
A23A1P/J5	13	7-15			
A23A2P/J1	13	7-15			
A23HR1P/J1	5	7-8			
A23HR1P/J2	7	7-10			
A23P/J1	5	7-8			
A23P/J2	7	7-10			
A24P/J1	7	7-10			
A24P/J2	7	7-10			
A25P/J25A	7	7-10			
A31P/J1	4	7-7			
A31P/J2	4	7-7			
A32P/J1	5	7-8			

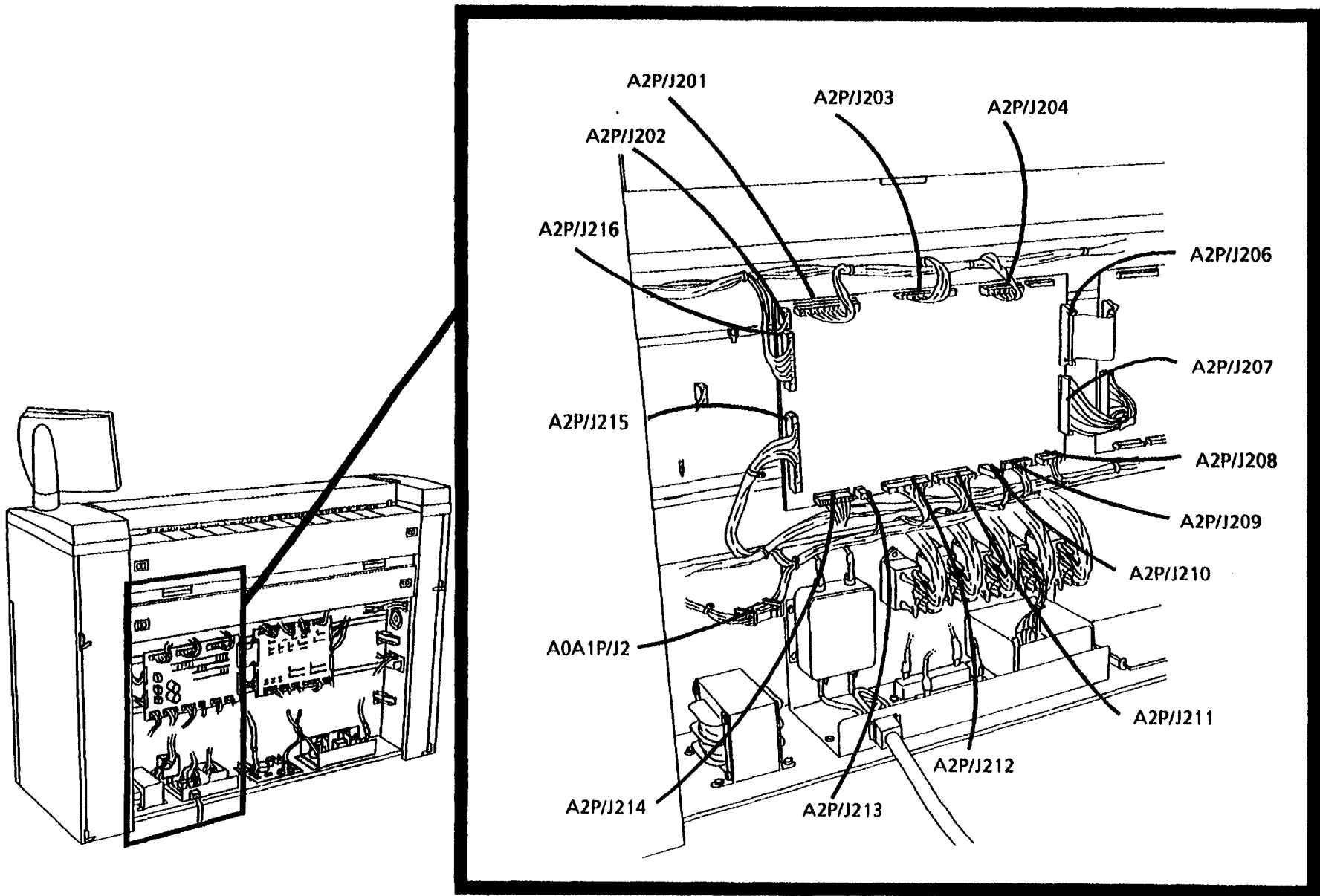


Figure 1. Low Voltage Power Supply (A2)

TR1980

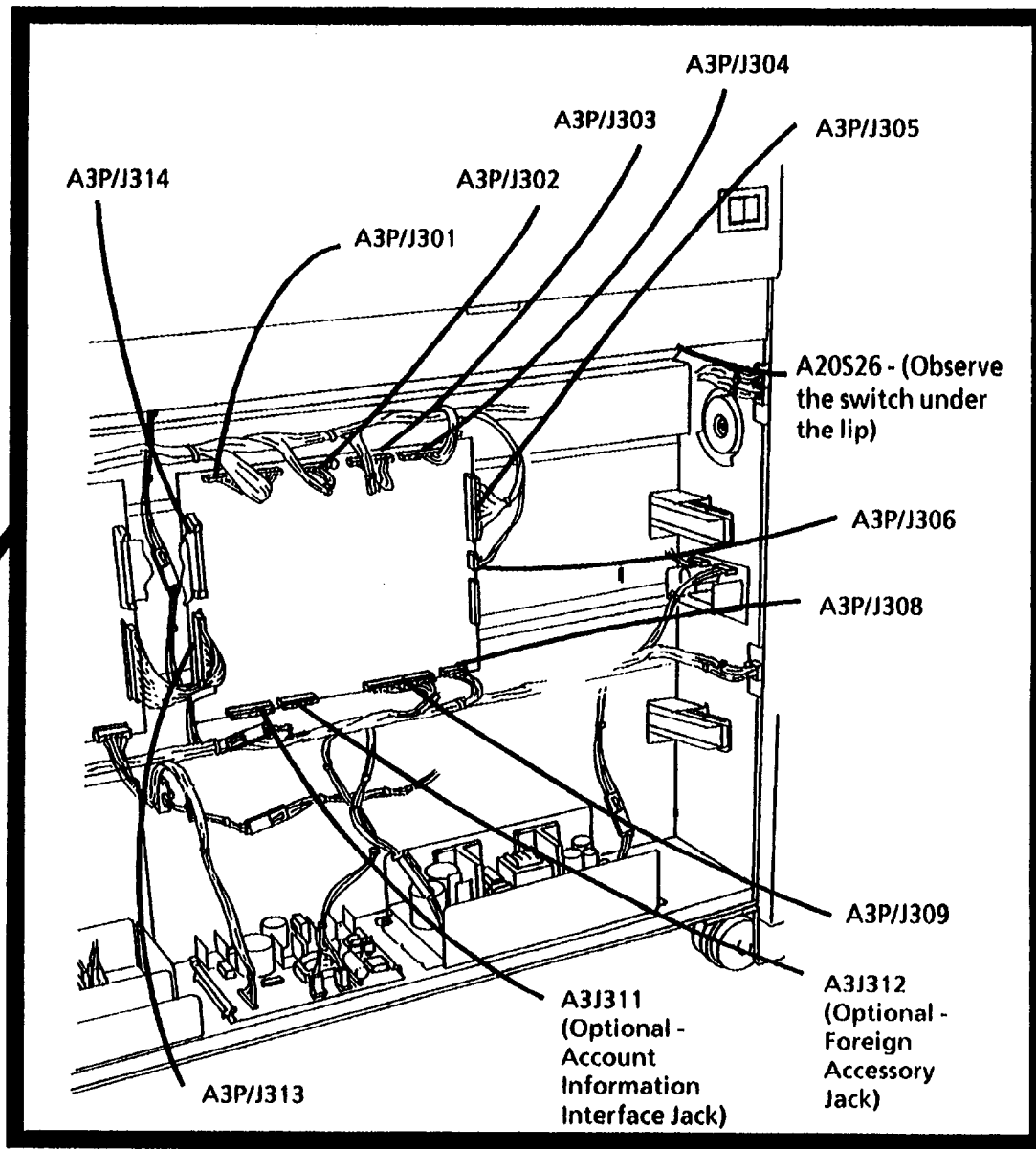
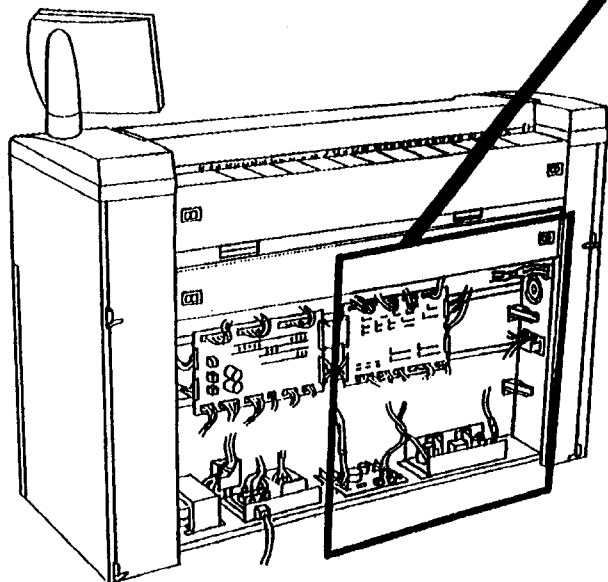


Figure 2. Controller PWB (A3)

TR1981

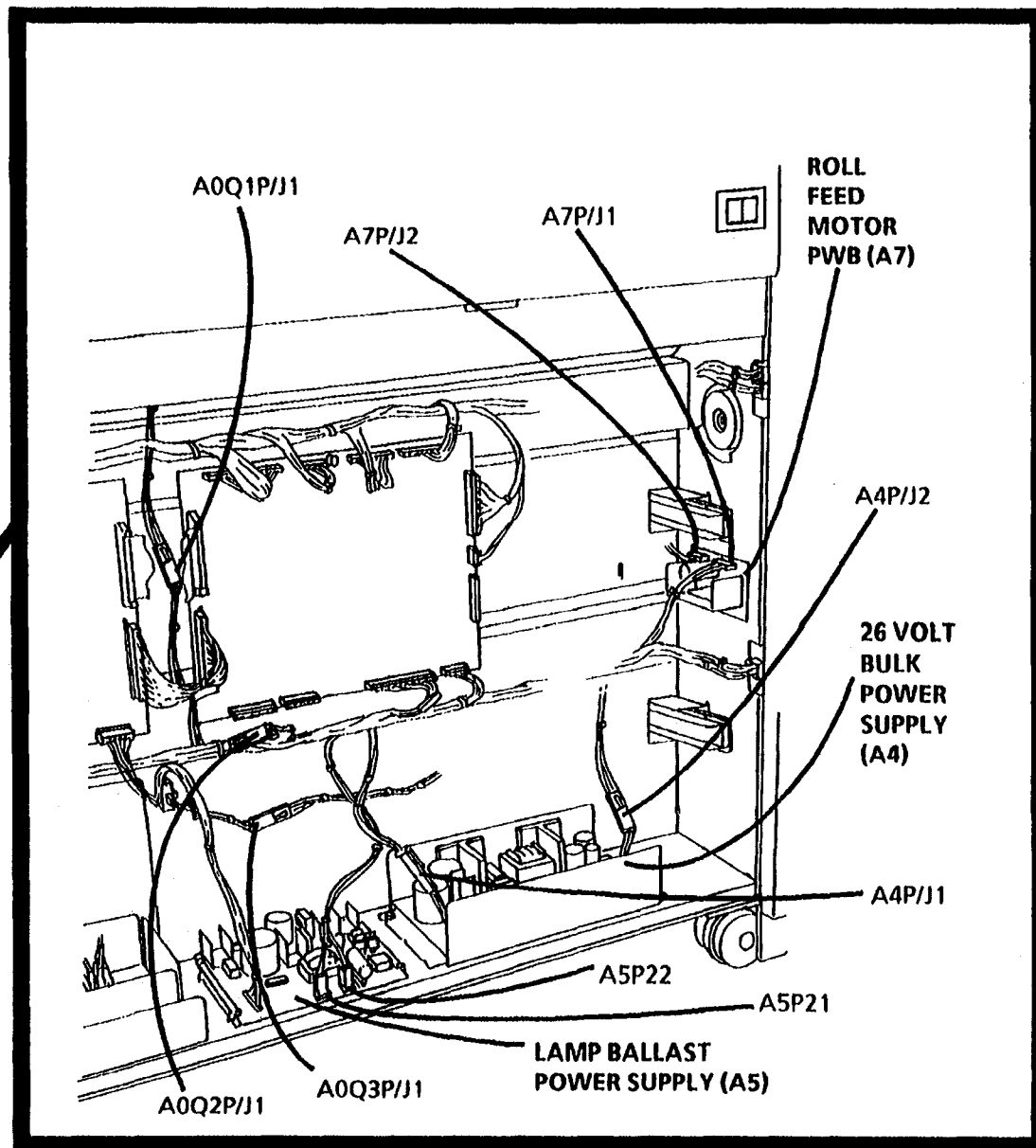
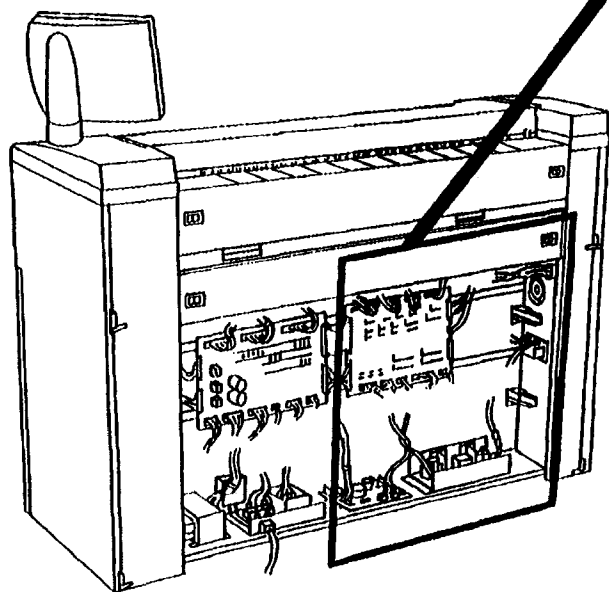
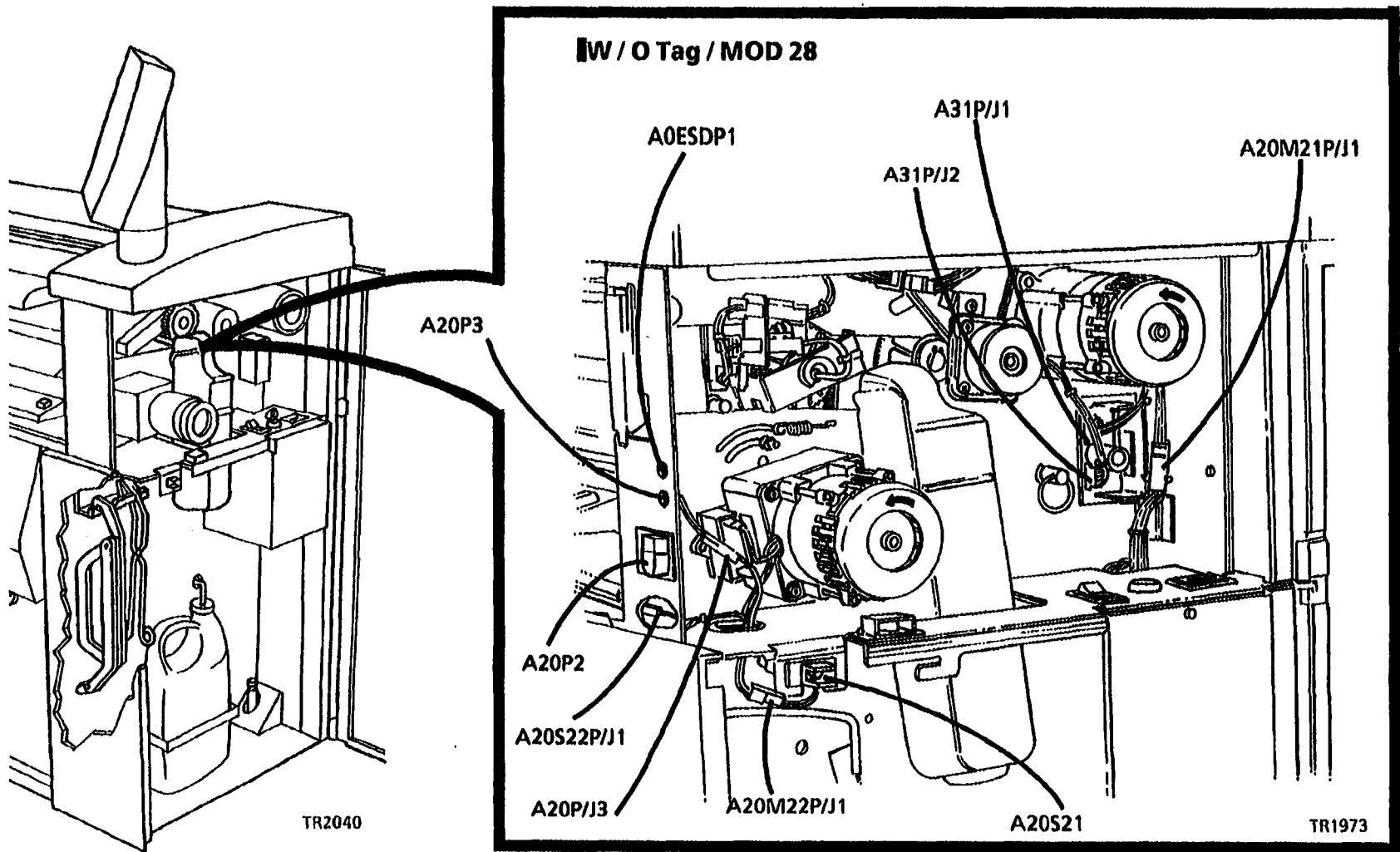


Figure 3. Lower Frame Assembly (A0)

TR1981



**Figure 4. Right Side Upper Frame Assembly (A20)**

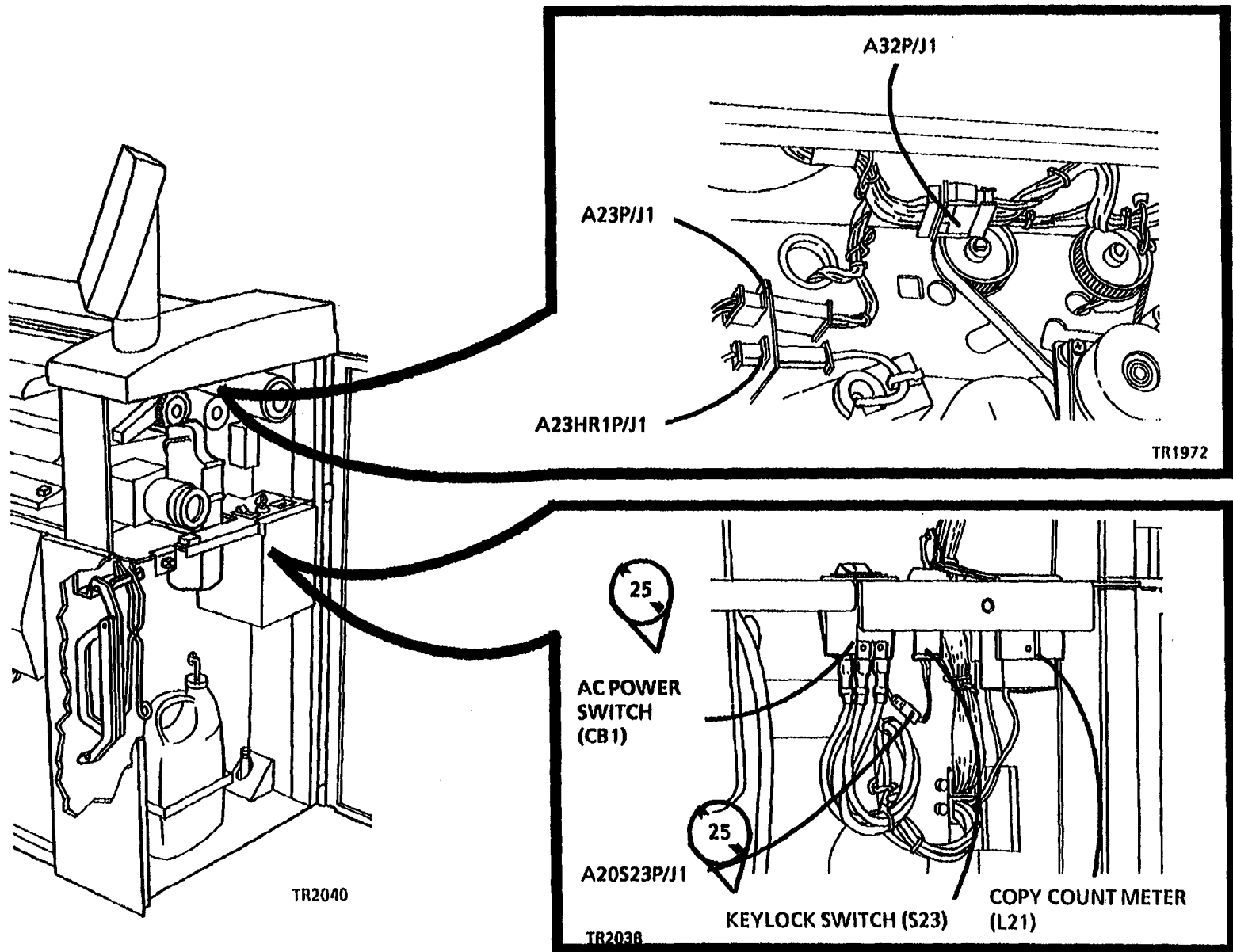
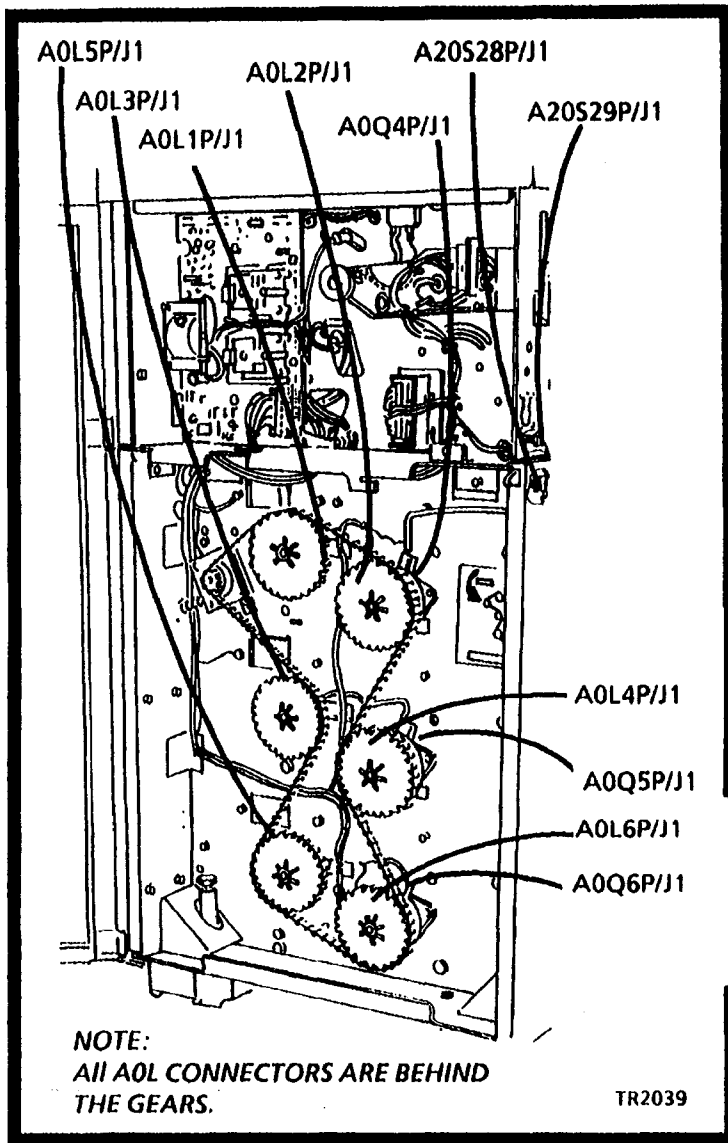
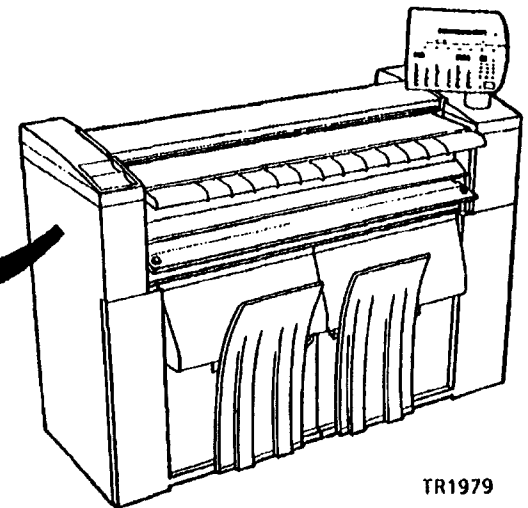


Figure 5. Right Side Upper Frame





**Figure 6. Left Side, Lower Frame Assembly (A0)**



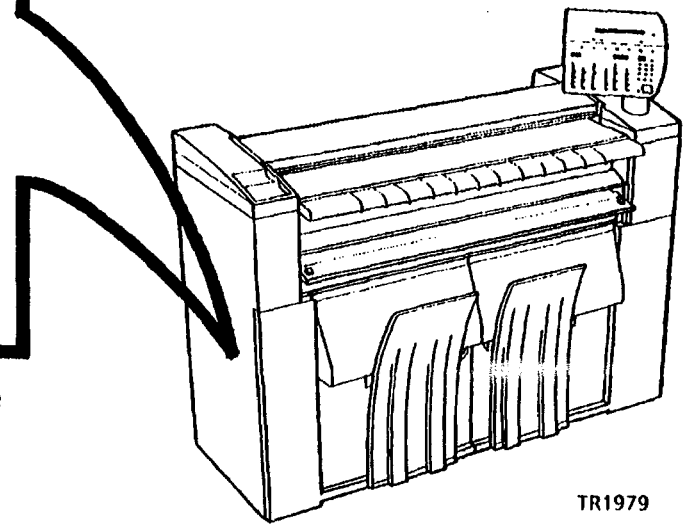
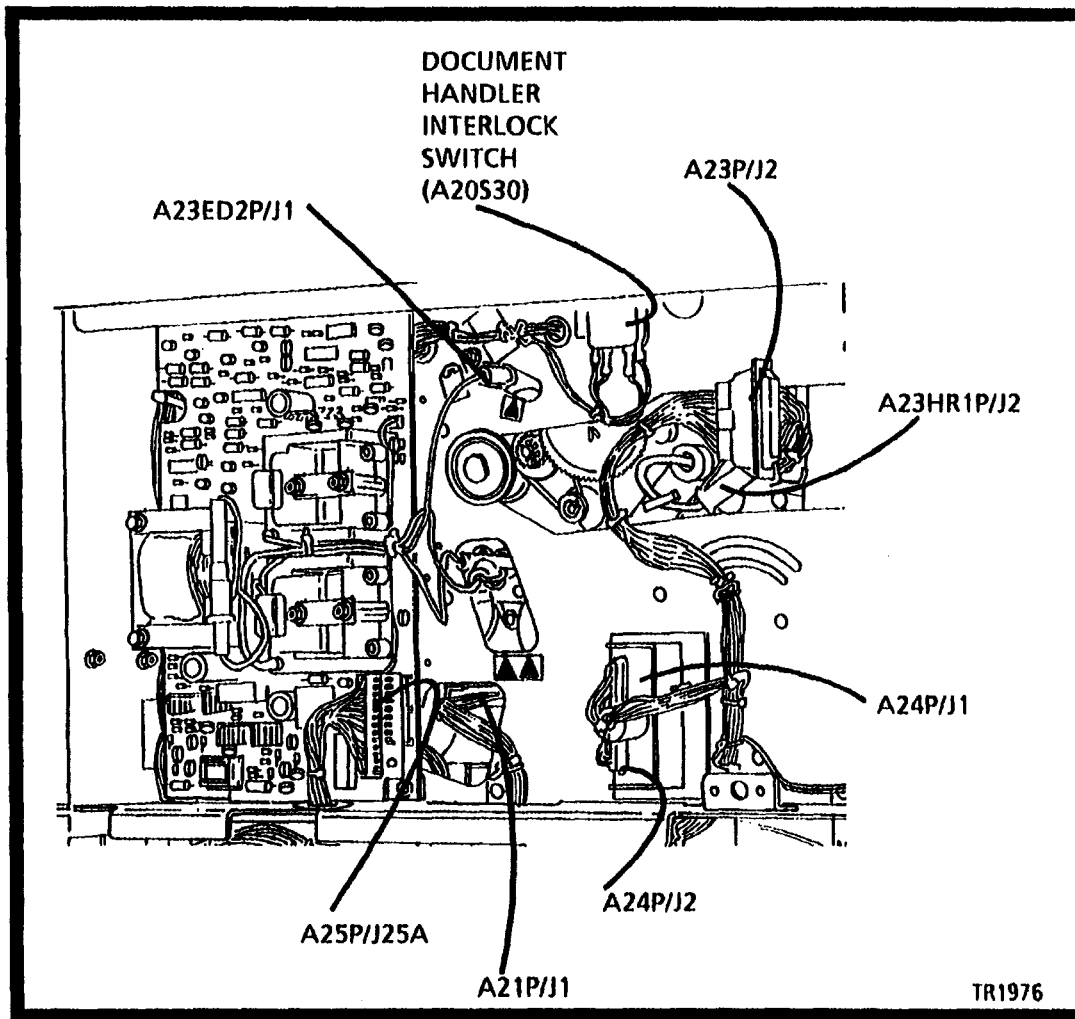
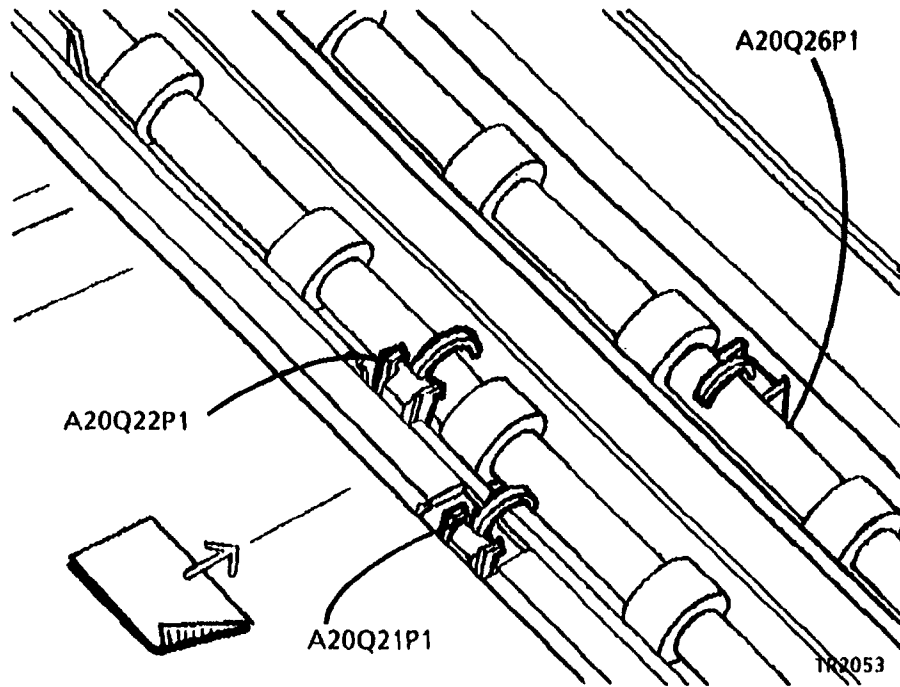
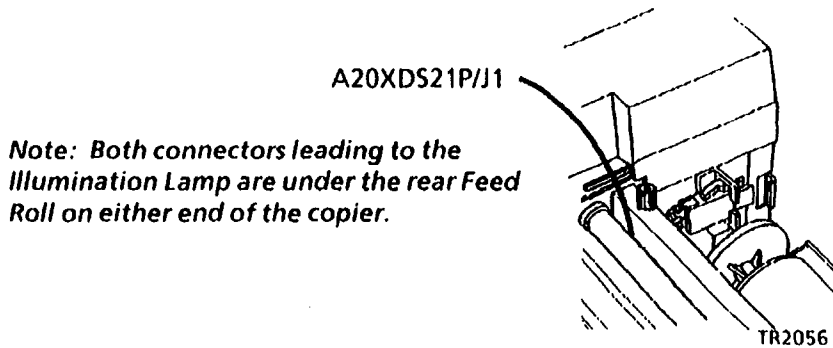
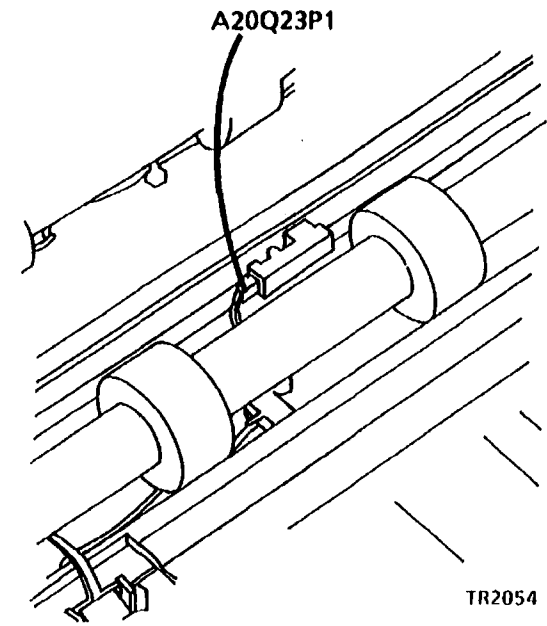


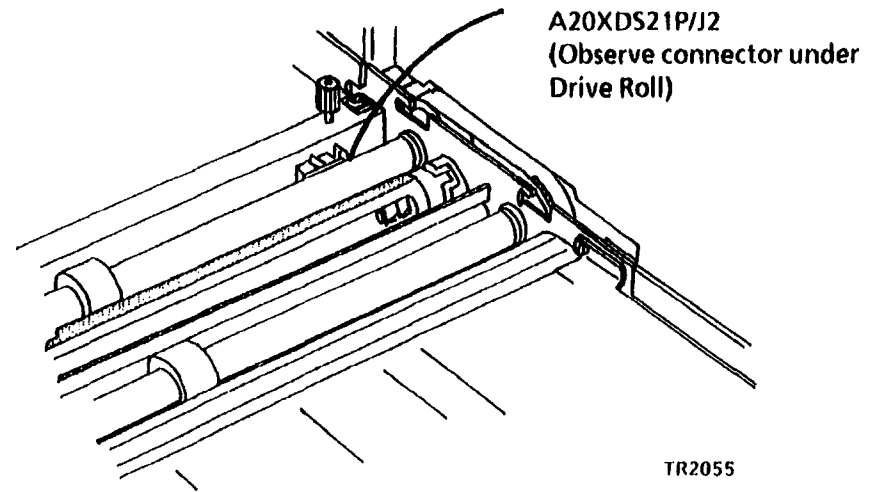
Figure 7. Left Side, High Voltage Power Supply (A25) and Upper Frame



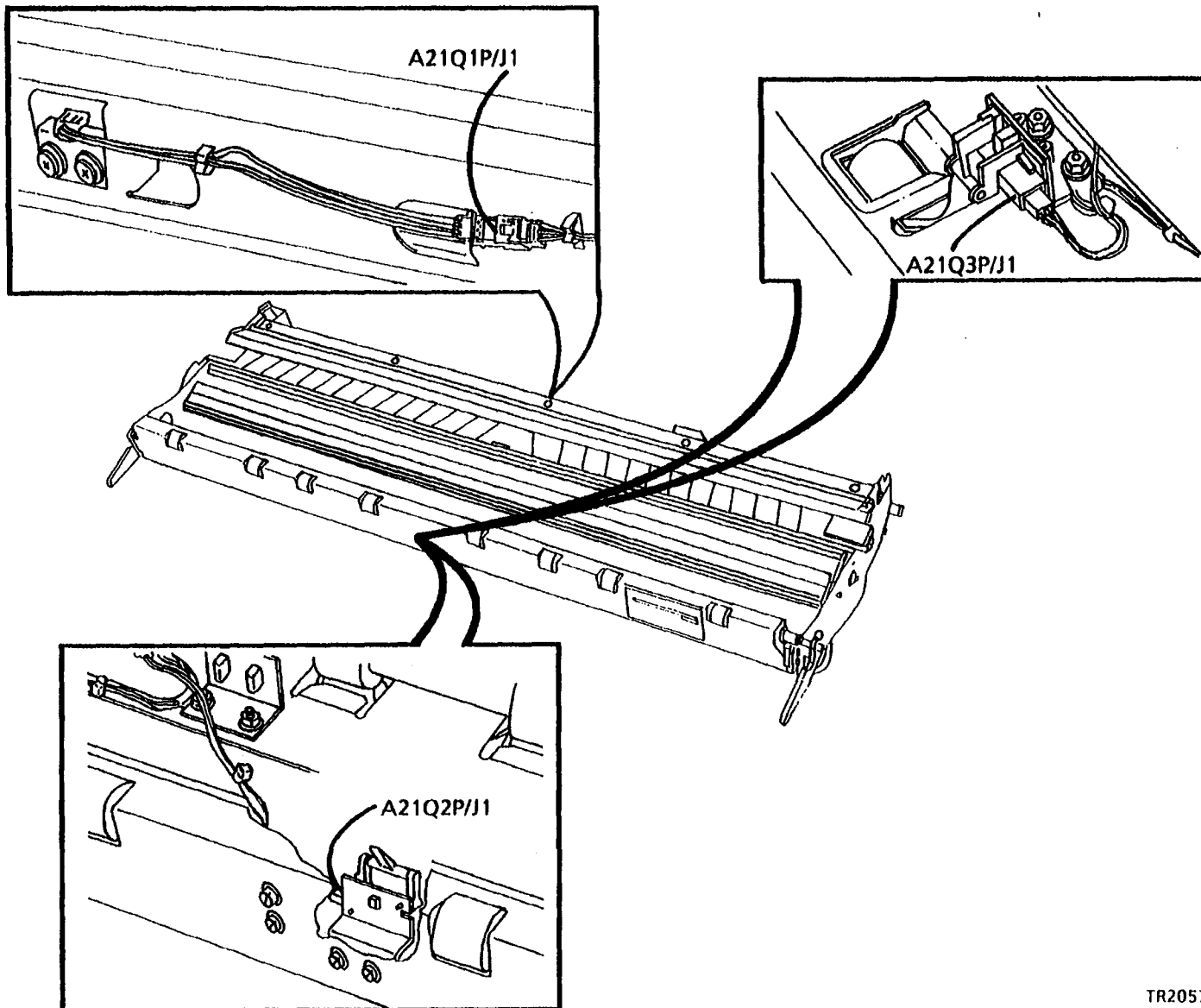
*Note: The plugs attached to the Document Sensors are on the bottom of the switches.*



*Note: Both connectors leading to the Illumination Lamp are under the rear Feed Roll on either end of the copier.*



**Figure 8. Document Feed and Illumination**



TR2057

**Figure 9. Media Transport Assembly (A21)**

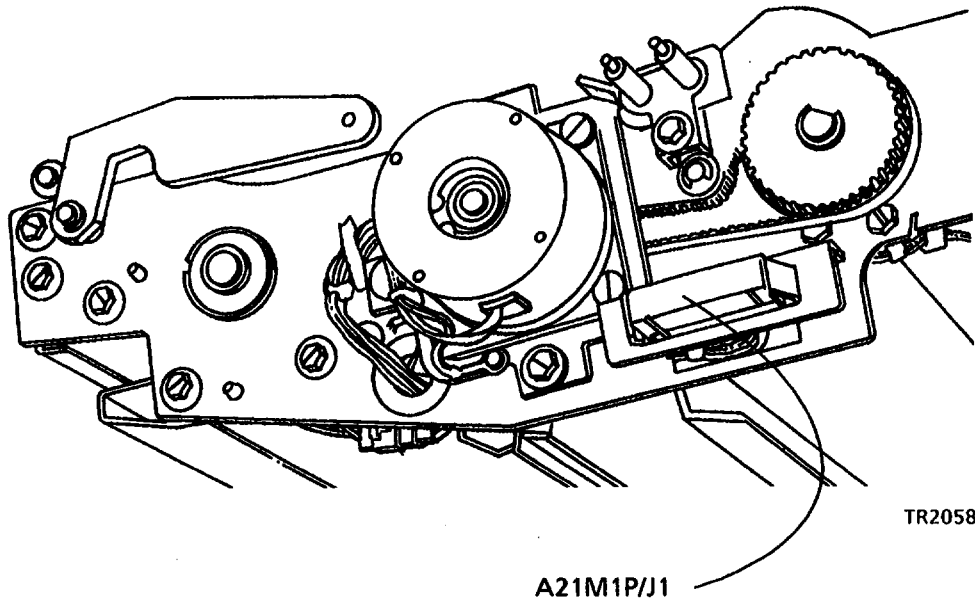


Figure 10. Media Transport Assembly (A21)

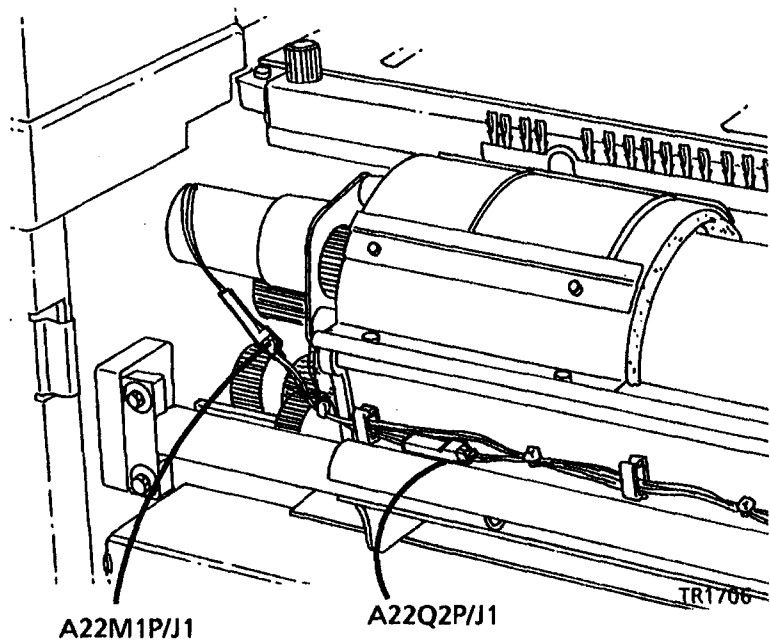


Figure 11. Developer Assembly, Right Side (A22)

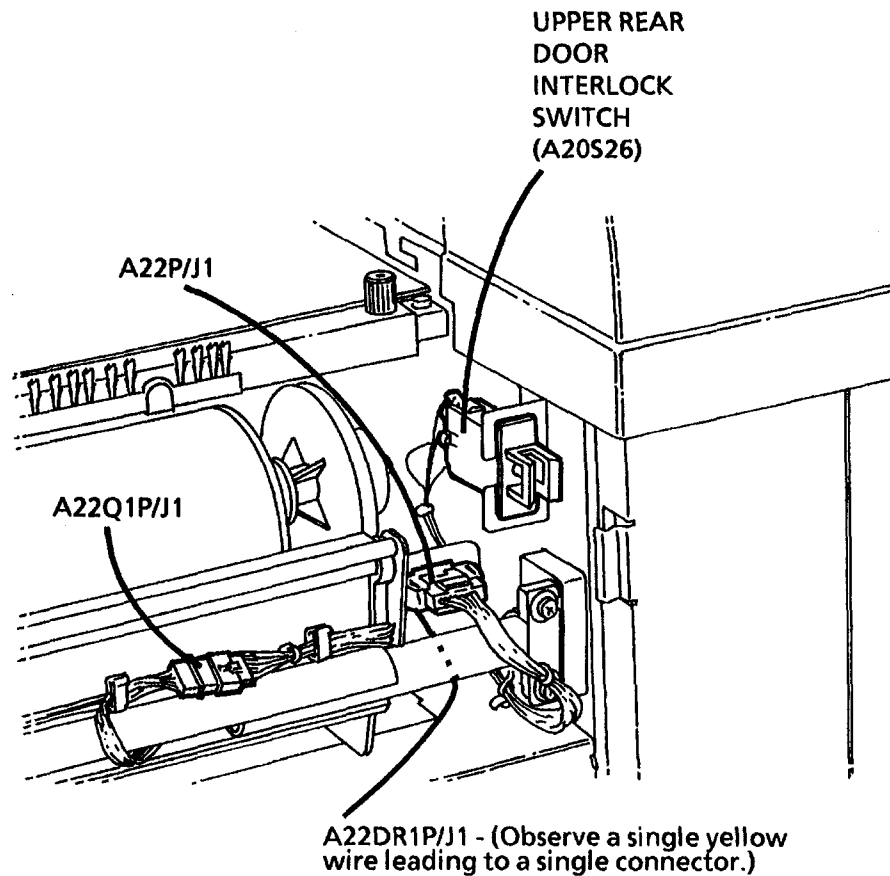
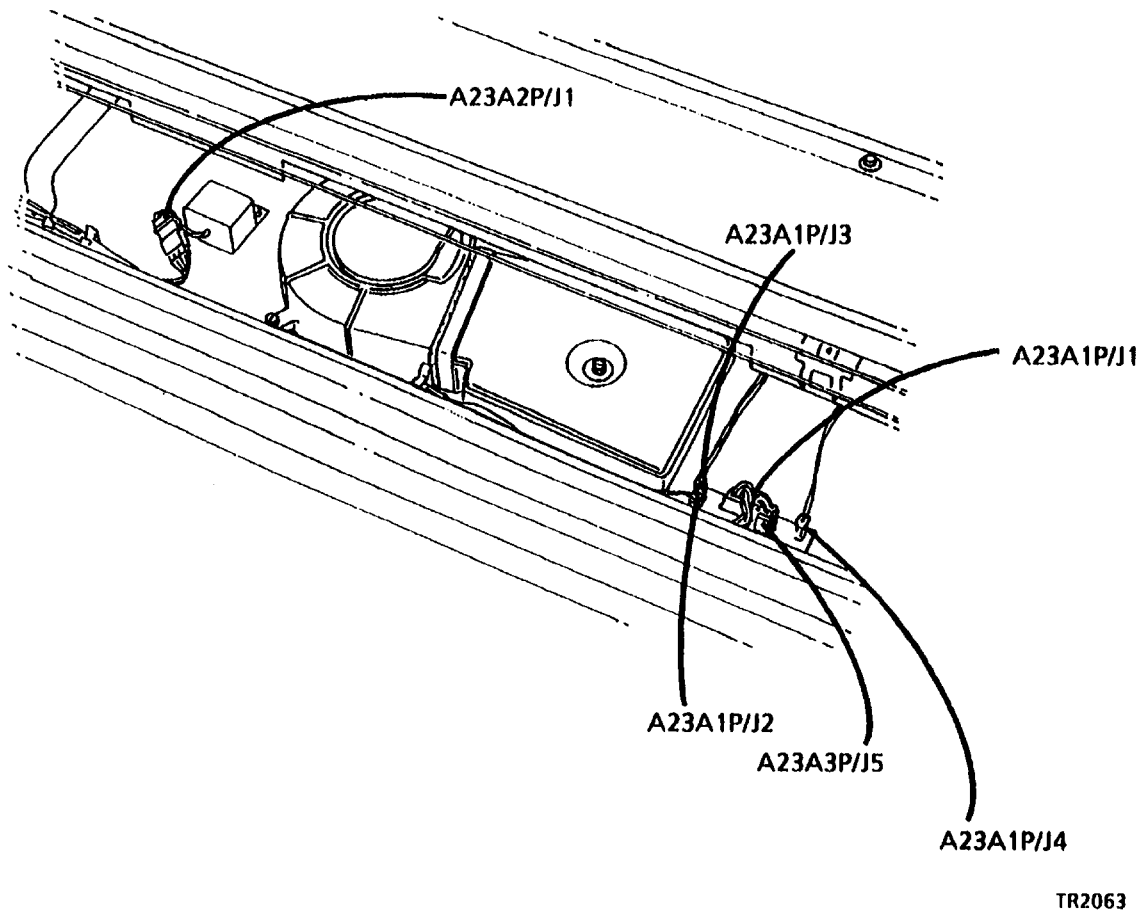
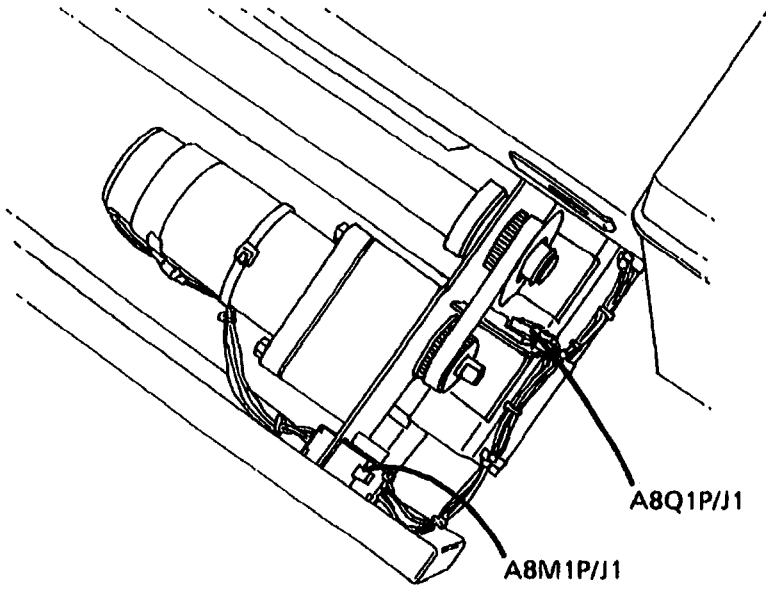


Figure 12. Developer Assembly, Left Side (A22)

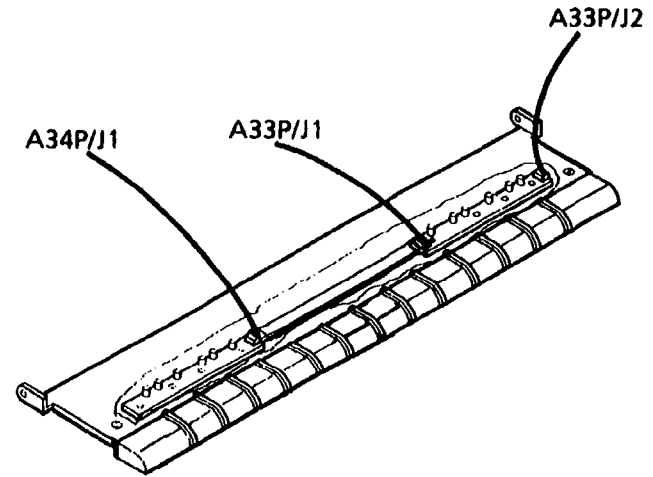


**Figure 13. Xerographic Assembly (A23)**



TR1698

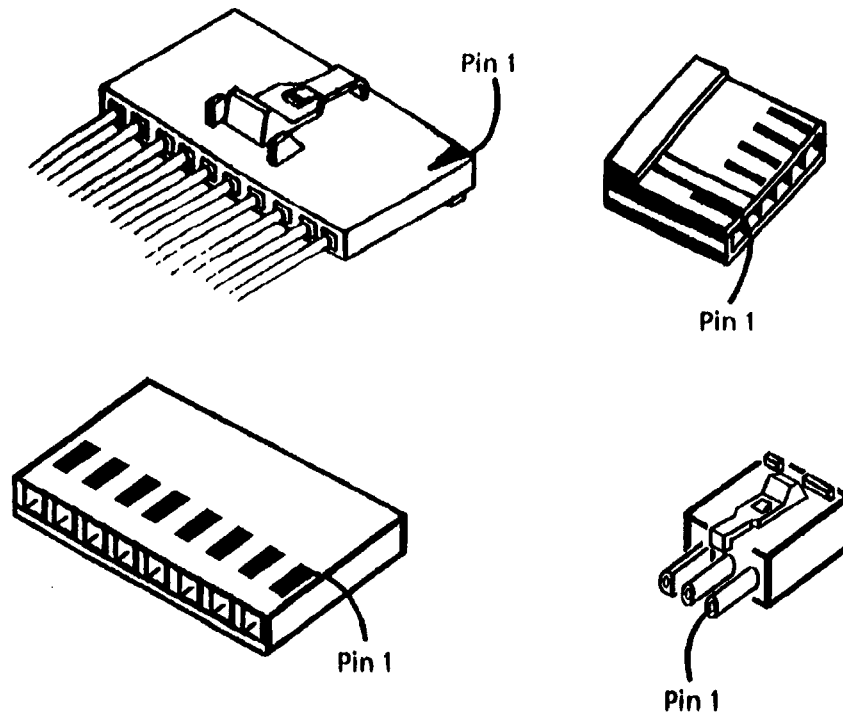
**Figure 14. Media Cutter Assembly (A8)**



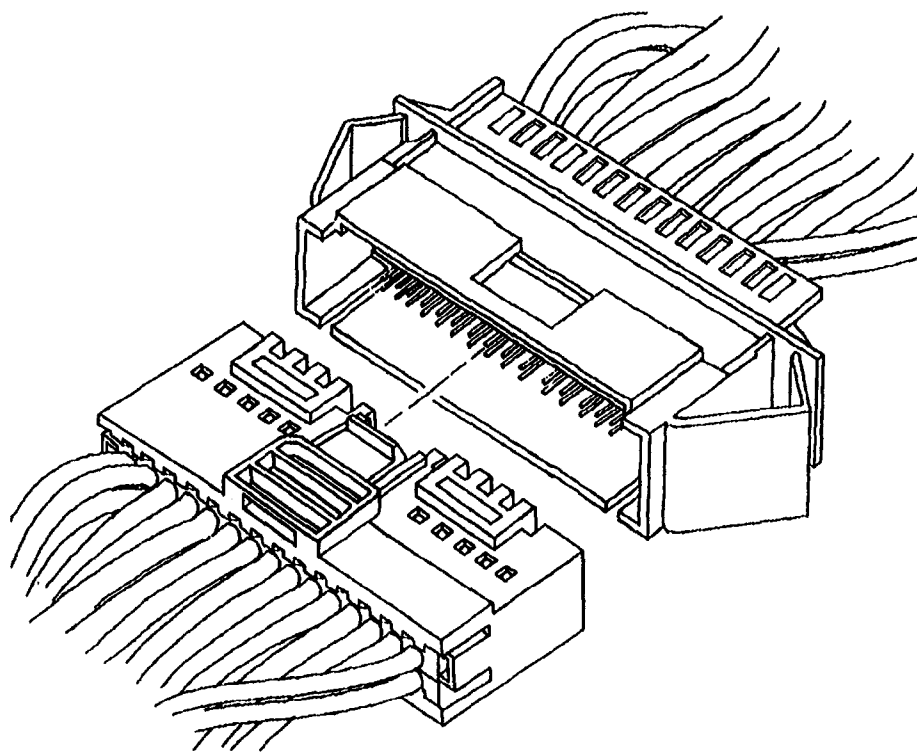
TR2048

**Figure 15. Media Width LED PWB (A33 and A34)**

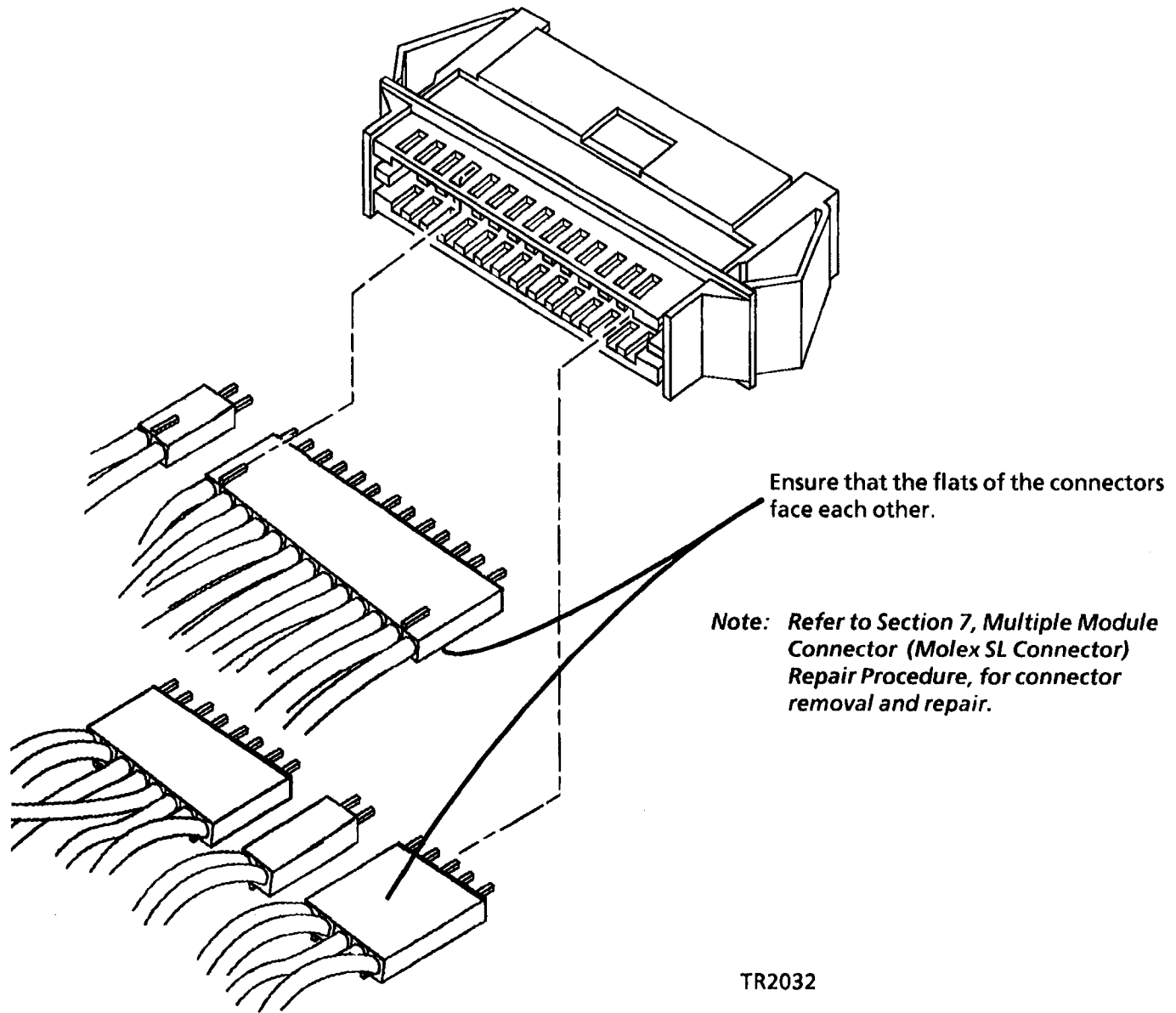




**Figure 16. Connector Pin Numbering**

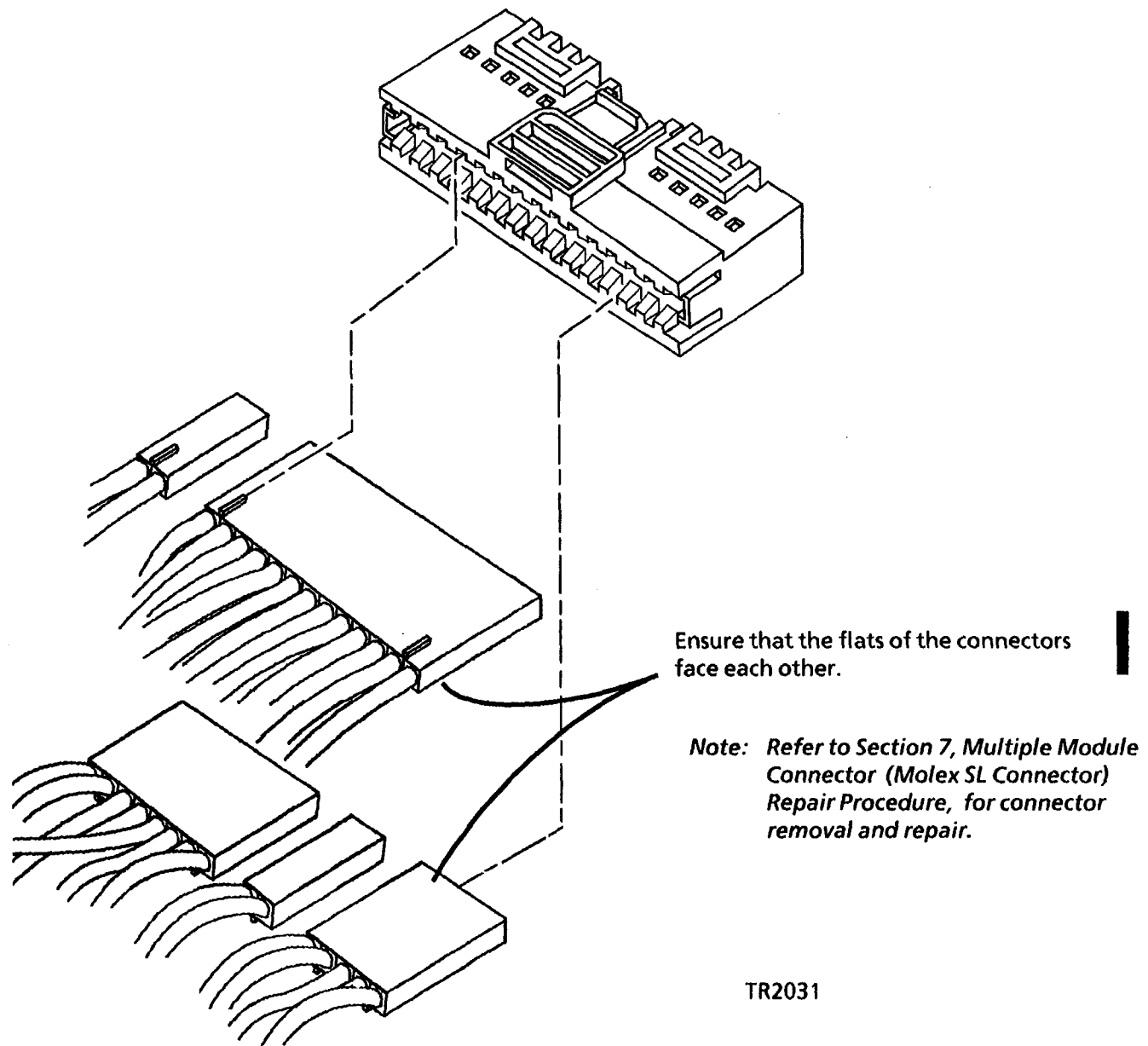


**Figure 17. Connecting a Molex Connector**

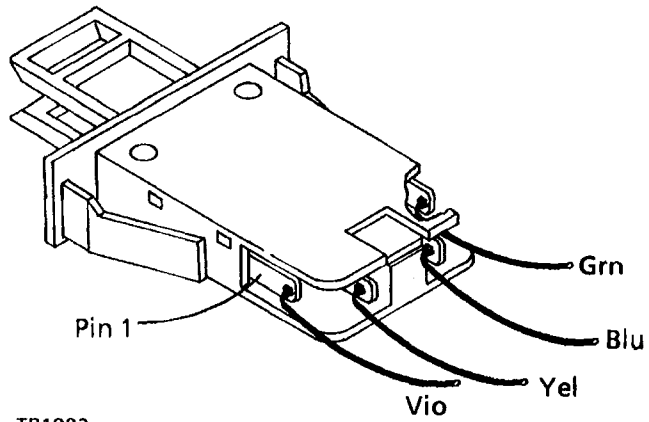


**Figure 18. Assembling a Molex Male Connector**

TR2032

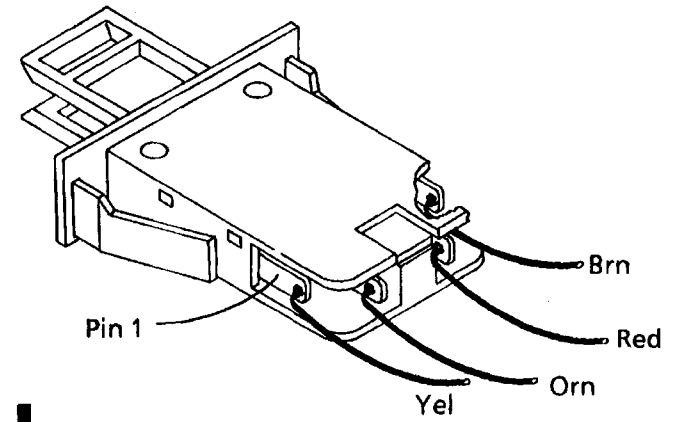


**Figure 19. Assembling a Molex Female Connector**



TR1982

**Figure 20. Cutter Drawer Interlock Switch (A0S1)**



TR1982

**Figure 21. Right Side Door Interlock Switch (A20S21)**

Figure 22. Illustration Deleted

Figure 23. Illustration Deleted

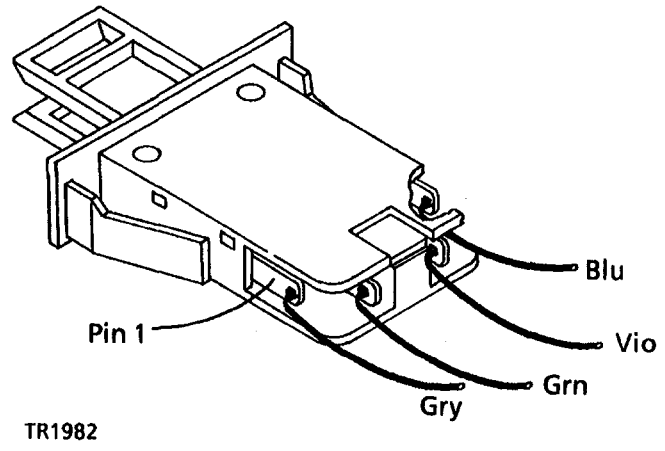
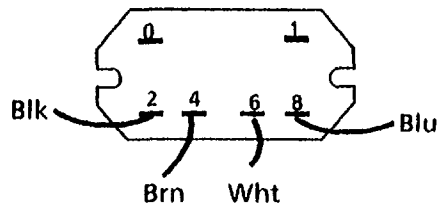
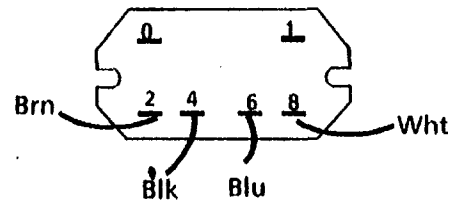


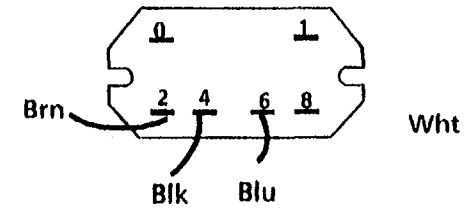
Figure 24. Document Handler Interlock Switch (A20S30)



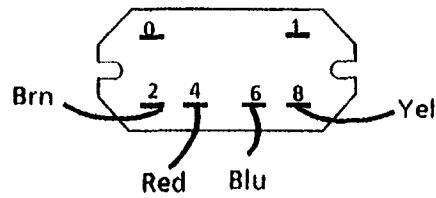
**Figure 27. Main Power Relay (K1)**



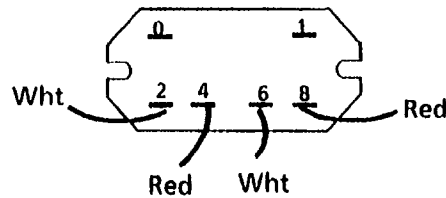
**Figure 28. Fuser Power Relay (K2)**



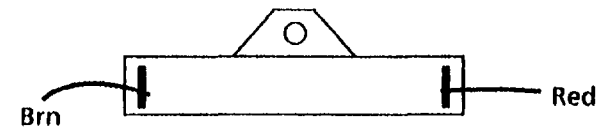
**Figure 29. Driver Motor Power Relay (K3)**



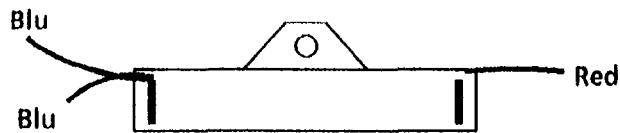
**Figure 30. Fuser Motor Power Relay (K4)**



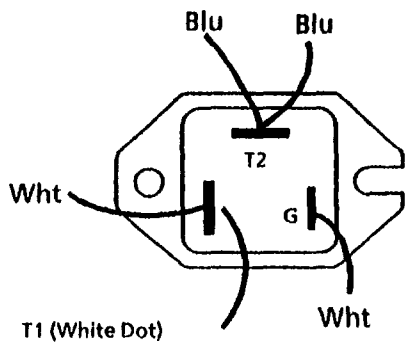
**Figure 31. Fuser Ballast Power Relay (K5)**



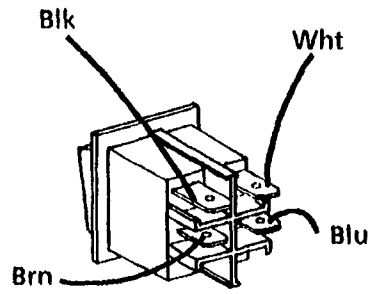
**Figure 32. Motor Capacitors C1 and C2**



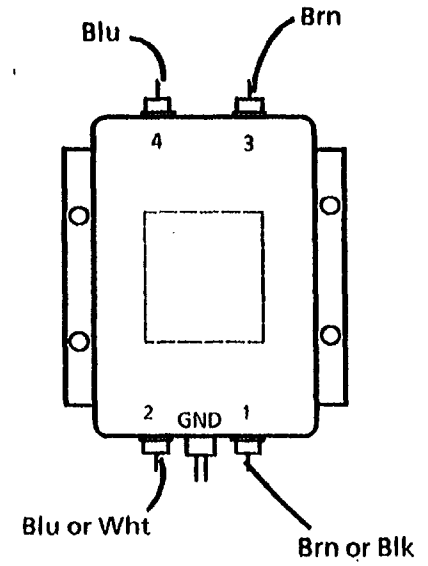
**Figure 33. Ballast Resistors R1 and R2**



**Figure 34. Fuser Triac (Q1)**



**Figure 35. AC Power Switch (CB1)**



**Figure 36. Line Filter (FL1)**



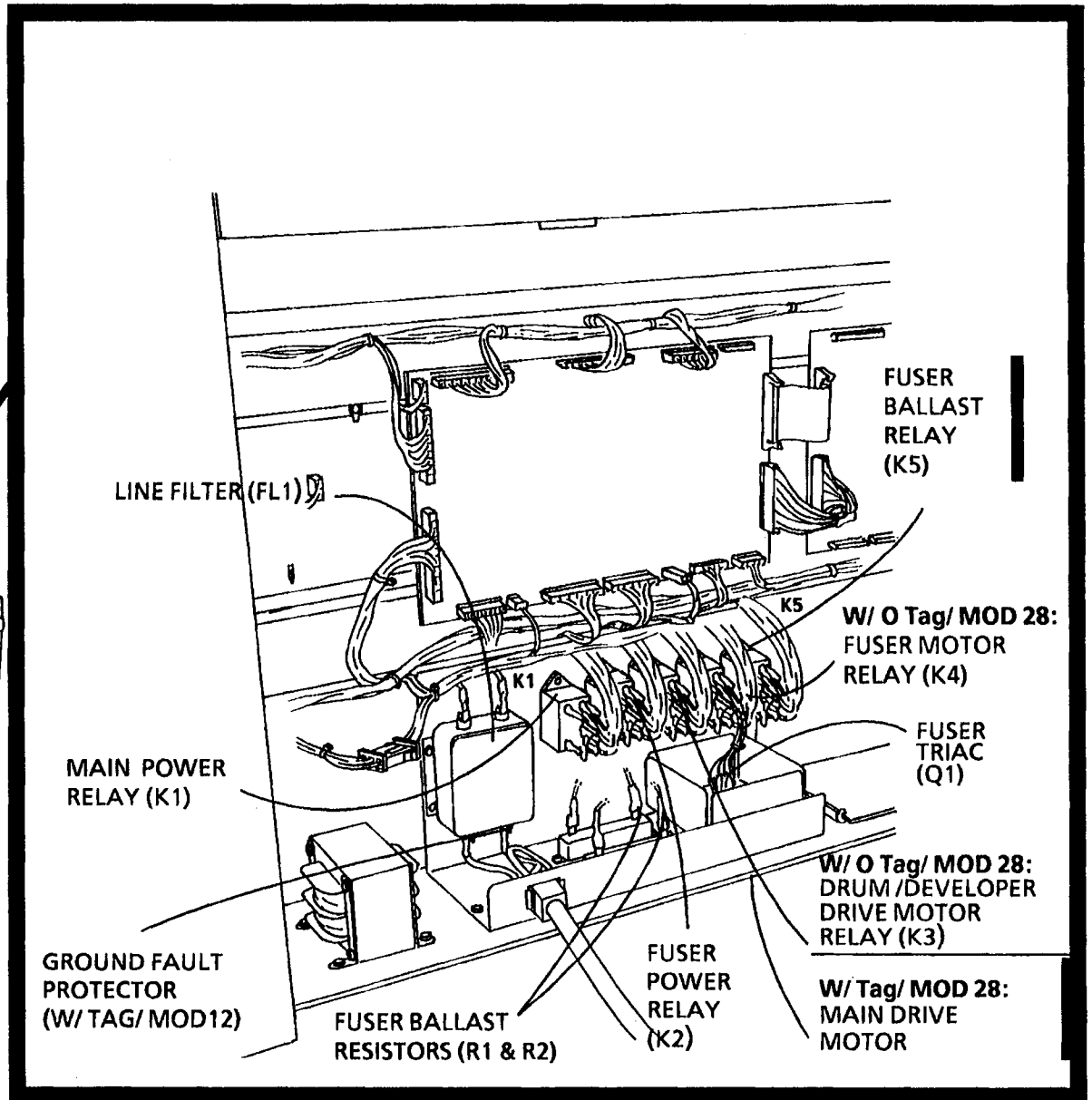
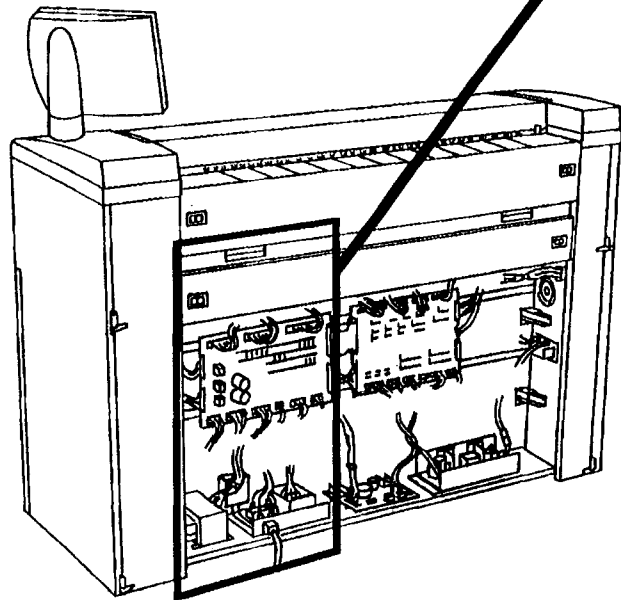


Figure 36. AC Panel (A1) Components

TR1980A

A0L1P/J1 MEDIA ROLL 1 FEED CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-12	Roll 1 Feed	Red
2	A2P209-11	26 Volt DC Bulk	Brn

A0L5P/J1 MEDIA ROLL 3 FEED CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-4	Roll 3 Feed	Yel
2	A2P209-3	26 Volt DC Bulk	Orn

A0L2P/J1 MEDIA ROLL 1 REWIND CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-10	Roll 1 Rewind	Blk
2	A2P209-9	26 Volt DC Bulk	Wht

A0L6P/J1 MEDIA ROLL 3 REWIND CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-2	Roll 3 Rewind	Red
2	A2P209-1	26 Volt DC Bulk	Brn

A0L3P/J1 MEDIA ROLL 2 FEED CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-8	Roll 2 Feed	Gry
2	A2P209-7	26 Volt DC Bulk	Vio

A0Q1P1 MEDIA ROLL 1 MEDIA FEED SENSOR

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-18	DC Com	Gry
2	A3P309-17	+ 5 VDC	Vio
3	A3P909-16	Roll 1 Feed Sensor	Blu

A0L4P/J1 MEDIA ROLL 2 REWIND CLUTCH

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P209-6	Roll 2 Rewind	Blu
2	A2P209-5	26 Volt DC Bulk	Grn

A0Q1J1 MEDIA ROLL 1 MEDIA FEED SENSOR

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Pin-1	Roll 1 Sensor	Vio
2	Pin-2	Roll 1 Sensor	Orn
3	Pin-3	Roll 1 Sensor	Blk

**A0Q2P1 MEDIA ROLL 2 MEDIA FEED SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-12	DC Com	Red
2	A3P309-11	+ 5 VDC	Brn
3	A3P909-10	Roll 2 Feed Sensor	Blk

**A0Q4P1 MEDIA ROLL 1 MOTION SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-15	+ 5 VDC	Grn
2	A3P309-14	DC Com	Yel
3	A3P909-13	Roll 1 Moving	Orn

**A0Q2J1 MEDIA ROLL 2 MEDIA FEED SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Pin-1	Roll 2 Sensor	Vio
2	Pin-2	Roll 2 Sensor	Orn
3	Pin-3	Roll 2 Sensor	Blk

**A0Q5P1 MEDIA ROLL 2 MOTION SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-9	+ 5 VDC	Wht
2	A3P309-8	DC Com	Gry
3	A3P909-7	Roll 2 Moving	Vio

**A0Q3P1 MEDIA ROLL 3 MEDIA FEED SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-6	DC Return	Blu
2	A3P309-5	+ 5 VDC	Grn
3	A3P909-4	Roll 3 Feed Sen	Yel

**A0Q6P1 MEDIA ROLL 3 MOTION SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P309-6	+ 5 VDC	Orn
2	A3P309-5	DC Com	Red
3	A3P909-4	Roll 3 Moving	Brn

**A0Q3J1 MEDIA ROLL 3 MEDIA FEED SENSOR**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Pin-1	Roll 3 Sensor	Vio
2	Pin-2	Roll 3 Sensor	Orn
3	Pin-3	Roll 3 Sensor	Blk

**A1P/J2 LOWER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Triac - A		Blu
2	Ground		Grn/Yel
3	K2-4		Blk

**A2P202 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Copy Count Meter	Copy Length (L)	Blk
2	Copy Count Meter	26 Volt DC Bulk	Blk

**A2P201 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A21P1A1-4	26 VDC Media Transport	Brn
2	No Contact	-	-
3	A21P1A1-1	26VDC Xerogr.	Orn
4	No Contact	-	-
5	S26 Int. Sw.-2	26 VDC Right Side Door Interlock	GRN
6	S26 Int. Sw.-4	Upper Rear Door Interlock	Blu
7	S26 Int. Sw.-3	26 VDC Upper Rear Door Interlock	Vio
8	S26 Int. Sw.-1	26VDC Upper Rear Door Interlock	Gry
9	No Contact	-	-
10	No Contact	-	-
11	S28 Int. Sw.-2	26 VDC Left Front Door	Brn
12	S28 Int. Sw.-1	26 VDC Left Front Door Interlock	Red
13	S29 Int. Sw.-2	26 VDC Xero. Interlock	Orn
14	S29 Int. Sw.-1	26 VDC Xero.	Yel
15	S30 Int. Sw.-2	26VDC Dry Ink Interlock	Grn
16	S30 Int. Sw.-4	26VDC Doc. Han.	Blu
17	S30 Int. Sw.-3	Doc. Han. Interlock	Vio
18	S30 Int. Sw.-1	26VDC Doc. Han. Interlock	Gry

A2P203 LOW VOLTAGE POWER SUPPLY PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	-	No Contact	-
2	A23P2B1-27	Fuser Open	Red
3	-	No Contact	-
4	A23P2B1-24	26 VDC Fuser Out	Yel
5	-	No Contact	-
6	A23P2B1-22	26 VDC Bulk	Blu
7	A23P2B1-21	No Contact	Vio
8	A23P2B1-20	26 VDC Xero. Intlk.	Gry
9	A23P2B1-19	26 VDC Low Xero.	Wht
10	-	-	-
11	A23P2B1-17	26 VDC Bulk	Brn
12	A23P2B1-16	Lamps On	Red

A2P203 LOW VOLTAGE POWER SUPPLY PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
13	A23P2A1-1	Fan On	Orn
14	A23P2A1-2	26 VDC	Yel
15	A23P2A1-3	Fan On	Grn
16	A23P2A1-4	26 VDC	Blu
17	A23P2A1-5	Thermistor	Vio
18	A23P2A1-6	DC Com	Gry
19	A23P2A1-7	26 VDC Bulk	Wht
20	A23P2A1-8	Blade Solenoid	Blk
21	A23P2A3-11	Spare Sensor	Brn
22	A23P2A3-12	DC Com	Red
23	A23P2A3-13	26 VDC	Orn
24	A23P2A3-14	No Contact	Yel
25	A23P2A3-15	26 VDC	Grn

**A2P204 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A25P25A-12	Dev . Bias	Red
2	-	No Contact	-
3	A25P25A-11	Detack On	Brn
4	A25P25A-10	26 VDC Bulk	Blk
5	A25P25A-8	Dev Bias	Gry
6	A25P25A-7	DC Com	Vio
7	A25P25A-6	HV On	Blu
8	A25P25A-5	DC Com	Grn
9	A25P25A-4	Transfer On	Yel
10	A25P25A-3	Charge Bias	Orn
11	A25P25A-2	DC Com	Red
12	A25P25A-1	26 VDC Bulk	Brn

A2P206 LOW VOLTAGE POWER SUPPLY PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P314-1	Digital Sig.	40 Cond. Gry Ribbon Cable
2	A3P314-2	DC Com	
3	A3P314-3	Digital Sig.	
4	A3P314-4	DC Com	
5	A3P314-5	Digital Sig.	
6	A3P314-6	DC Com	
7	A3P314-7	Digital Sig.	
8	A3P314-8	DC Com	
9	A3P314-9	Digital Sig.	
10	A3P314-10	DC Com	
11	A3P314-11	Digital Sig.	
12	A3P314-12	DC Com	
13	A3P314-13	Digital Sig.	
14	A3P314-14	DC Com	
15	A3P314-15	Digital Sig.	
16	A3P314-16	DC Com	
17	A3P314-17	Digital Sig.	
18	A3P314-18	DC Com	
19	A3P314-19	Digital Sig.	
20	A3P314-20	DC Com	↓

A2P206 LOW VOLTAGE POWER SUPPLY PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
21	A3P314-21	Digital Sig.	40 Cond. Gry Ribbon Cable
22	A3P314-22	DC Com	
23	A3P314-23	Digital Sig.	
24	A3P314-24	DC Com	
25	A3P314-25	Digital Sig.	
26	A3P314-26	DC Com	
27	A3P314-27	Digital Sig.	
28	A3P314-28	DC Com	
29	A3P314-29	Digital Sig.	
30	A3P314-30	DC Com	
31	A3P314-31	Digital Sig.	
32	A3P314-32	DC Com	
33	A3P314-33	Spare	
34	A3P314-34	Spare	
35	A3P314-35	Spare	
36	A3P314-36	Spare	
37	A3P314-37	Digital Sig.	
38	A3P314-38	DC Com	
39	A3P314-39	Toner Control	
40	A3P314-40	DC Com	↓

**A2P207 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P313-16	10 Volts	Orn
2	-	No Contact	-
3	A3P313-14	5 VDC	Orn
4	A3P313-13	5 VDC	Orn
5	A3P313-12	26 VDC Ref.	Orn
6	A3P313-11	15 VDC	Orn
7	A3P313-10	26 VDC Bulk	Orn
8	A3P313-9	26 VDC	Orn
9	A3P313-8	26 VDC	Orn
10	A3P313-7	DC Com	Orn
11	A3P313-6	DC Com	Orn
12	A3P313-5	26 VDC Bulk	Orn
13	A3P313-4	26 VDC Bulk	Orn
14	A3P313-3	DC Com	Orn
15	-	No Contact	-
16	A3P313-1	DC Com	Orn

**A2P208 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A5 Lam.Bal.-1	26 VDC Bulk	Orn
2	No Contact	-	-
3	A5 Lam.Bal.-3	Return	Vio
4	A5 Lam.Bal.-4	Filiment On	Blk
5	A5 Lam.Bal.-5	Return	Vio
6	A5 Lam.Bal.-6	-	Wht
7	A5 Lam.Bal.-7	-	Red



**A2P209 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A0L6 P1-2	26 VDC Bulk	Brn
2	A0L6 P1-1	Roll 3 Rewind	Red
3	A0L5 P1-2	26 VDC Bulk	Orn
4	A0L5 P1-1	Roll 3 Feed	Yel
5	A0L4 P1-2	26 VDC Bulk	Grn
8	A0L4 P1-1	Roll 2 Rewind	Blu
7	A0L3 P1-2	26 VDC Bulk	Vio
8	A0L3 P1-1	Roll 2 Feed	Gry
9	A0L2 P1-2	26 VDC Bulk	Wht
10	A0L2 P1-1	Roll 1 Rewind	Blk
11	A0L1 P1-2	26 VDC Bulk	Brn
12	A0L1 P1-1	Roll 1 Feed	Red

**A2P210 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A4P2-2	26 VDC Bulk	Orn
2	A4P2-1	DC Com	Vio

**A2P211 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A8M1P1-1	Cutter Motor +	Red
2		No Contact	
3	A8M1P1-2	Cutter Motor -	Blk
4	A8M1P1-3	Cut Dig. Sig.	Blu
5	A8M1P1-4	DC Com	Yel
6	A8Q1P1-1	Sig. Cut. Sen.	Brn
7	A8Q1P1-2	DC Com	Red
8	A8Q1P1-3	Cut. Home Sen.	Orn
9	A0S1-2, Cut. Cov. Interlock	26 VDC Doc. Handler	Yel
10	A0S1-4, Cut. Cov. Interlock	Cutter Cover Interlock	Grn
11	A0S1-3, Cut. Cov. Interlock	26 VDC Cutter Cover	Blu
12	A0S1-1, Cut. Cov. Interlock	26 VDC Cutter Cover Interlock	Vio

**A2P212 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A1K2-1	Fuser Open	Brn
2	-	No Contact	-
3	A1K2-0	Fuser Power On	Orn
4	-	No Contact	-
5	A1K1-1	26 VDC Cut. Intlk.	Grn
6	A1K1-0	Main Pwr. On	Blu
7	A1K3-1	26 VDC Bulk	Vio
8	A1K3-0	Dev. Motor On	Gry
9	A1K4-1	26 VDC Bulk	Wht
10	A1K4-0	Xero. Motor On	Blk
11	A1K5-1	26 VDC Bulk	Brn
12	A1K5-0	Fuser Ballast. On	Red
13	-	No Contact	-
14	-	No Contact	-

**A2P214 US LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	T1 100/115 VAC	AC High	Brn
2	-	No Contact	-
3	A2P214-4		Blu
4	T1-N	AC Neutral	Blu
5	-	No Contact	-
6	T1-22 VAC	22 VAC	Red
7	T1-22 VAC	22 VAC	Red
8	T1-11V CT	22 VAC Center Tap	Orn
9	T1-22 VAC	22 VAC	Vio
10	T1-22 VAC	22 VAC	Vio

**A2P213 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A0HR1P1-2	AC - Media Heater	Brn
2		No Contact	
3	A0HR1P1-1	AC Neutral	Blu

**A2P214 RX LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	T1 220/240 VAC	AC High	Brn
2	-	No Contact	-
3	A2P214-4	AC Neutral	Wht
4	Voltage Select Switch	AC Neutral	Blu
5	-	No Contact	-
6	T1-22 VAC	22 VAC	Red
7	T1-22 VAC	22 VAC	Red
8	T1-11V CT	22 VAC Center Tap	Orn
9	T1-22 VAC	22 VAC	Vio
10	T1-22 VAC	22 VAC	Vio

**A2P215 LOW VOLTAGE POWER SUPPLY PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A0K1-6B	AC Neutral	Wht
2	-	No Contact	-
3	A0K1-2B	AC High	Blk
4	-	No Contact	-
5	Ground	Earth Ground	Grn/Yel
6	-	No Contact	-
7	A0K3-4		Blk
8	-	No Contact	-
9	A0K3-8		Wht
10	-	No Contact	-
11	A0K3-6B	AC Neutral to Motor	Blu
12	-	No Contact	-
13	A0K4-4	AC High Fuser Motor	Red
14		No Contact	-
15	A0K4-4	AC High Fuser Motor	Yel
16		No Contact	-
17	Q1 Fuser Triac	Triac Gate	Orn
18		AC Neutral to Motor	Wht
19		No Contact	-
20	A1R2-2B	Triac MT2	Blu

A2P216 LOW VOLTAGE POWER SUPPLY PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A20M21P1-2	AC Neut. Dev. Mot.	Blu
2	-	No Contact	-
3	A20M21P1-1	AC High Dev. Mot.	Brn
4	-	No Contact	-
5	A20M22P1-2	AC Neut. Fus. Mot.	Wht
6	-	No Contact	-
7	A20M22P1-1	AC High Fus. Mot.	Blk
8	-	No Contact	-
9	A20S21-2	26 VDC Right Side Door Interlock	Brn
10	A20S21-4	26 VDC Right Side Door Interlock	Red
11	A20S21-3	Right Side Door Interlock	Orn
12	A20S21-1	26 VDC Xero. Interlock	Yel
13	A20S22P1-2	26 VDC Right Front Door	Orn
14	A20S22P1-1	26 VDC Right Front Door	Blu
15	A20S23P1-2	Key Lock Sensor	Vio
16	A20S23P1-1	DC Com	Gry

A3P301 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A32P1A-2	26 VDC	Grn
2	A32P1A-2	26 VDC	Yel
3	A32P1A-3	DC Com	Orn
4	A32P1A-4	DC Com	Red
5	A32P1A-5	Spare	Brn
6	A32P1A-6	Spare	Blk
7	A32P1A-7	Data	Wht
8	A32P1A-8	Data	Gry
9	A32P1A-9	Data	Vio
10	A32P1A-10	Data	Blu
11	A32P1A-11	Data	Grn
12	A32P1A-12	Data	Yel

A3P301 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
13	A32P1A-13	Data	Orn
14	A32P1A-14	Data	Red
15	A32P1A-15	LCD	Brn
16	A32P1A-16	LCD	Blk
17	A32P1A-17	LCD	Wht
18	A32P1A-18	DC Com	Gry
19	A32P1A-19	Data	Vio
20	A32P1A-20	DC Com	Blu
21	A32P1B2-40	Data	Grn
22	A32P1B2-39	DC Com	Yel
23	A32P1B2-38	Data	Orn
24	A32P1B2-37	DC Com	Red
25	A32P1B2-36	Digital Signal Out	Brn

**A3P302 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A31P1-8	CCW Signal	Brn
2	A31P1-7	High Current Sig.	Red
3	A31P1-6	ENo Contactoder Signal	Orn
4	A31P1-5	DC Com	Yel
5	A31P1-4	Motor-step DC	Grn
6	A31P1-3	DC Com	Blu
7	A31P1-2	5 VDC	Vio
8	A31P1-1	26 VDC Bulk	Gry
9	A20P3-2	DC	Wht
10	A20P3-1	Printer Signal	Blk
11	-	No Contact	-
12	-	No Contact	-

**A3P303 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	-	No Contact	-
2	-	No Contact	-
3	-	No Contact	-
4	-	No Contact	-
5	-	No Contact	-
6	-	No Contact	-
7	-	No Contact	-
8	A22P1B-11	Toner Motor	Wht
9	A22P1B-10	26 VDC Bulk	Gry
10	A22P1B-9	Toner Home Sensor	Vio
11	A22P1B-8	DC Com	Blu
12	A22P1A1-1	No Contact	Grn
13	A22P1A1-2	GND	Yel
14	A22P1A1-3	Toner Sensor	Orn
15	A22P1A1-4	15 VDC	Red
16	A22P1A1-5	Toner Control	Brn

**A3P304 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1		No Contact	
2		No Contact	
3		No Contact	
4	A0Q26P1-3	Rear Doc. Sensor	Yel
5	A0Q26P1-2	DC Com	Grn
6	A0Q26P1-1	Control Signal	Blu
7		No Contact	
8		No Contact	
9		No Contact	
10	A0Q21P1-3	Insert Document Sensor	Blk
11	A0Q21P1-2	DC Com	Brn
12	A0Q21P1-1	Control Signal	Red
13	A0Q22P1-3	Front Doc. Sensor	Orn
14	A0Q22P1-2	DC Com	Yel
15	A0Q22P1-1	Control Signal	Grn
16	A0Q23P1-2	Illum. Sensor	Blu
17	A0Q23P1-1	15 VDC	Vio
18		No Contact	
19		No Contact	
20		No Contact	

**A3P305 CONTROLLER PWB (continued)**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A24P1-8	Control Signal	Orn
2	A24P1-7	Control Signal	Red
3	A24P1-6	Control Signal	Brn
4	A24P1-5	DC Com	Blk
5	A24P1-4	Control Signal	Wht
6	A24P1-3	DC Com	Gry
7	A24P1-2	5 VDC	Vio
8	A24P1-1	26 VDC	Blu
9	A21P1-10	Spare	Grn
10	A21P1-11	DC Com	Yel
11	A21P1-12	Spare	Orn
12	A21P1-13	26 VDC	Red

A3P305 (continued) CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
13	A21P1-23	Fan 2	Brn
14	A21P1-22	26 VDC	Blk
15	A21P1-21	Fan 1	Wht
16	A21P1-20	Media Exit Switch	Gry
17	A21P1-19	DC Com	Vio
18	A21P1-18	Sheet Feed Sensor	Blu
19	A21P1-17	DC Com	Grn
20	A21P1-16	Control Signal	Yel
21	A21P1-15	Reg. Sensor	Orn
22	A21P1-14	Control Signal	Red
23	A21P1-13	DC Com	Brn

A3P306 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A23P2-30	Spare	Brn
2	A23P2-29	DC Com	Red
3	A23P2-28	Spare	Orn
4	A23P2-9	Fuser/Thermistor	Yel
5	A23P2-10	Ground	Grn

A3P308 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A7P1-8	Control Signal	Brn
2	A7P1-7	Control Signal	Red
3	A7P1-6	Control Signal	Orn
4	A7P1-5	DC Com	Yel
5	A7P1-4	Control Signal	Grn
6	A7P1-3	DC Com	Blu
7	A7P1-2	5 VDC	Vio
8	A7P1-1	26 Vdc	Gry



**A3P309 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A0Q6P1-3	Roll 3 Motion Sen.	Brn
2	A0Q6P1-2	DC Com	Red
3	A0Q6P1-1	Control Signal	Orn
4	A0Q3P1-3	Roll 3 Feed Sen.	Yel
5	A0Q3P1-2	Control Signal	Grn
6	A0Q3P1-1	DC Com	Blu
7	A0Q5P1-3	Roll 2 Motion Sen.	Vio
8	A0Q5P1-2	DC Com	Gry
9	A0Q5P1-1	Control Signal	Wht
10	A0Q2P1-3	Roll 2 Feed Sen.	Blk
11	A0Q2P1-2	Control Signal	Brn
12	A0Q2P1-1	DC Com	Red

**A3P309 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
13	A0Q5P1-3	Roll 1 Motion Sen.	Orn
14	A0Q5P1-2	DC Com	Yel
15	A0Q5P1-1	Control Signal	Grn
16	A0Q1P1-3	Roll 3 Feed Sen.	Blu
17	A0Q1P1-2	Control Signal	Vio
18	A0Q1P1-1	DC Com	Gry
19		No Contact	
20		No Contact	
21		No Contact	
22		No Contact	
23		No Contact	
24		No Contact	
25		No Contact	

**A3P312 CONTROLLER PWB Foreign Accessory Interface**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A0P1-1	Enable	Brn
2	A0P1-2	No Contact	Red
3	A0P1-3	DC Com	Orn
4	A0P1-4	-	Yel
5	A0P1-5	-	Grn
6	A0P1-6	-	Blu
7	A0P1-7	-	Vio
8	A0P1-8	Copy Count +	Gry
9	A0P1-9	Copy Count -	Wht
10	A0P1-10	Copy Exit +	Blk
11	A0P1-11	Copy Exit -	Brn
12	A0P1-12	Not ready +	Red
13	A0P1-13	Not ready -	Orn
14	A0P1-14	DC Com	Yel
15	A0P1-15	26 VDC	Grn

Note: A0P1 is on the Foreign Accessory Interface and is optional.

**A3P313 CONTROLLER PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P207-16	DC Com	Orn
2	-	No Contact	-
3	A2P207-14	DC Com	Orn
4	A2P207-13	26 VDC	Orn
5	A2P207-12	26 VDC	Orn
6	A2P207-11	DC Com	Orn
7	A2P207-10	DC Com	Orn
8	A2P207-9	26 VDC	Orn
9	A2P207-8	26 VDC	Orn
10	A2P207-7	26 VDC	Orn
11	A2P207-6	15 VDC	Orn
12	A2P207-5	26 VDC	Orn
13	A2P207-4	5 VDC	Orn
14	A2P207-3	5 VDC	Orn
15	-	No Contact	-
16	A2P207-1	10 Volts	Orn

A3P314 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P206-1	Digital Sig.	40 Cond. Gry Ribbon Cable
2	A2P206-2	DC Com	
3	A2P206-3	Digital Sig.	
4	A2P206-4	DC Com	
5	A2P206-5	Digital Sig.	
6	A2P206-6	DC Com	
7	A2P206-7	Digital Sig.	
8	A2P206-8	DC Com	
9	A2P206-9	Digital Sig.	
10	A2P206-10	DC Com	
11	A2P206-11	Digital Sig.	
12	A2P206-12	DC Com	
13	A2P206-13	Digital Sig.	
14	A2P206-14	DC Com	
15	A2P206-15	Digital Sig.	
16	A2P206-16	DC Com	
17	A2P206-17	Digital Sig.	
18	A2P206-18	DC Com	
19	A2P206-19	Digital Sig.	
20	A2P206-20	DC Com	↓

A3P314 CONTROLLER PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
21	A2P206-21	Digital Sig.	40 Cond. Gry Ribbon Cable
22	A2P206-22	DC Com	
23	A2P206-23	Digital Sig.	
24	A2P206-24	DC Com	
25	A2P206-25	Digital Sig.	
26	A2P206-26	DC Com	
27	A2P206-27	Digital Sig.	
28	A2P206-28	DC Com	
29	A2P206-29	Digital Sig.	
30	A2P206-30	DC Com	
31	A2P206-31	Digital Sig.	
32	A2P206-32	DC Com	
33	A2P206-33	Digital Sig.	
34	A2P206-34	DC Com	
35	A2P206-35	Digital Sig.	
36	A2P206-36	DC Com	
37	A2P206-37	Digital Sig.	
38	A2P206-38	DC Com	
39	A2P206-39	Toner Control	
40	A2P206-40	DC Com	↓

A4P1 26 VDC BULK POWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Ground	Ground	Grn/Yel
2	A0K1-8B	-	Blu
3	A0K1-4B	-	Brn

A4J1 26 VDC BULK POWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A4 PWB-GND	Ground	Grn/Yel
2	A4 PWB-N	-	Blu
3	A4 PWB-L	-	Brn

A4P2 26 VDC BULK POWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P210-1	26 VDC Bulk	Orn
2	A2P210-2	DC Com	Vio

A4J2 26 VDC BULK POWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A426 VDC P.S. PWB	26 VDC +	Orn
2	A426 VDC P.S. PWB	26 VDC -	Vio

A5P2 LAMP BALLAST PPOWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A20XDS21P2-2	-	Brn
2	-	No Contact	-
3	A20XDS21P2-1	-	Blu

A5P22 LAMP BALLAST PPOWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A20XDS21P1-2	-	Blk
2	-	No Contact	-
3	A20XDS21P1-1	-	Wht

A7P1 ROLL FEED MTOR PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P308-8	26 VdC	Gry
2	A3P308-7	5 VDC	Vio
3	A3P308-6	DC Com	Blu
4	A3P308-5	Control Signal	Grn
5	A3P308-4	DC Com	Yel
6	A3P308-3	Control Signal	Orn
7	A3P308-2	Control Signal	Red
8	A3P308-1	Control Signal	Brn

A7P1 ROLL FEED MTOR PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	M1 Roll Feed Motor	Control Signal	Red
2	M1 Roll Feed Motor	Control Signal	Wht/Red
3	M1 Roll Feed Motor	Control Signal	Grn
4	M1 Roll Feed Motor	Control Signal	Wht/Grn
5	M1 Roll Feed Motor	DC Com	Vio

**A8M1P1 MEDIA CUTTER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P211-1	Motor +	Red
2	A2P211-3	Motor -	Blk
3	A2P211-4	Cut	Blu
4	A2P211-5	DC Com	Yel
5	Ground	Ground	Grn/Yel
6	-	No Contact	-

**A8M1J1 MEDIA CUTTER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	M1 Cut. Mot.		Red
2	M1 Cut. Mot.		Blk
3	M1 Cut. Mot.		Blu
4	M1 Cut. Mot.		Yel
5	M1 Cut. Mot.		Grn/Yel
6	-	No Contact	-

**A8Q1P1 MEDIA CUTTER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P211-6	Control Signal	Brn
2	A2P211-7	Dc Com	Red
3	A2P211-8	Cut. Home Sensor	Orn

**A20M21J1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	M22 Dev. Mot		Blu
2	M22 Dev. Mot		Brn

**A20M21P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P216-1	AC Neut.	Blu
2	A2P216-3	AC High	Brn

**A20M22J1 UPPER FRAME ASSEMBLY [**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	M22 Fus. Mot	AC Neut.	
2	M22 Fus. Mot	AC High	

**A20M22P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P216-5	AC Neut.	
2	A2P216-7	AC High	

**A20P3 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P302-10	Control Signal	Blk
2	A3P302-9	Control Signal	Wht

**A20S22P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P216-14	26 V R.F. Door	Brn
2	A2P216-13	26 V L.F. Door	Blu

**A20S23P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P216-15	DC Com	Vio
2	A2P216-16	Key Lock Sensor	Gry

**A20Q21P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P304-12	Control Signal	Red
2	A3P304-11	DC Com	Brn
3	A3P304-10	PreGrip Sensor	Blk

**A20J3 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Printer Interface		Blk
2	Printer Interface		Wht

**A20S23J1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	S23 KeyLock Sw.	DC Com	Wht
2	S23 KeyLock Sw.	Key Lock Sensor	Blk

**A20Q22P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P304-15	Control Signal	Grn
2	A3P304-14	DC Com	Yel
3	A3P304-13	Front Doc. Sensor	Orn

**A20Q23P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P304-17	15 VDC	Vio
2	A3P304-16	Illum. Sensor	Blu

**A20Q26P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P304-6	Control Signal	Blu
2	A3P304-5	DC Com	Grn
3	A3P304-4	Rear Doc. Sensor	Yel

**A20XDS21P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A5P22-3	-	Wht
2	A5P22--1	-	Blk

**A20XDS21J1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	XDS21-L	-	Wht
2	XDS21-L	-	Blk

**A20XDS21P2 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A5P21-3	-	Blu
2	A5P21--1	-	Brn

**A20XDS21J2 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	XDS21-R	-	Blk
2	XDS21-R	-	Wht

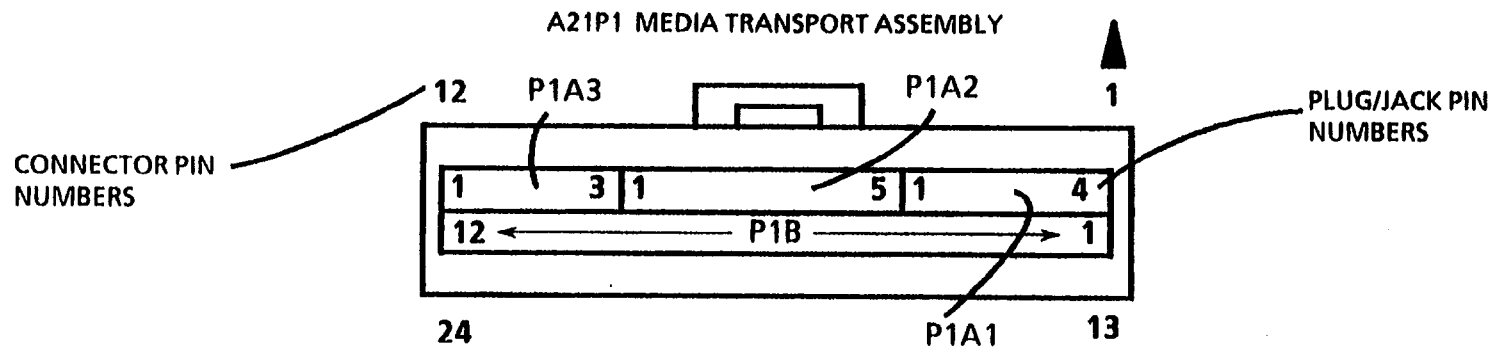
**A20S28P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P201-12	26 VDC	Red
2	A2P201-11	26 VDC Left Front Door Interlock	Brn

**A20S29P1 UPPER FRAME ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P201-14	26 VDC	Yel
2	A2P201-13	26 VDC Xerographic Interlock	Orn

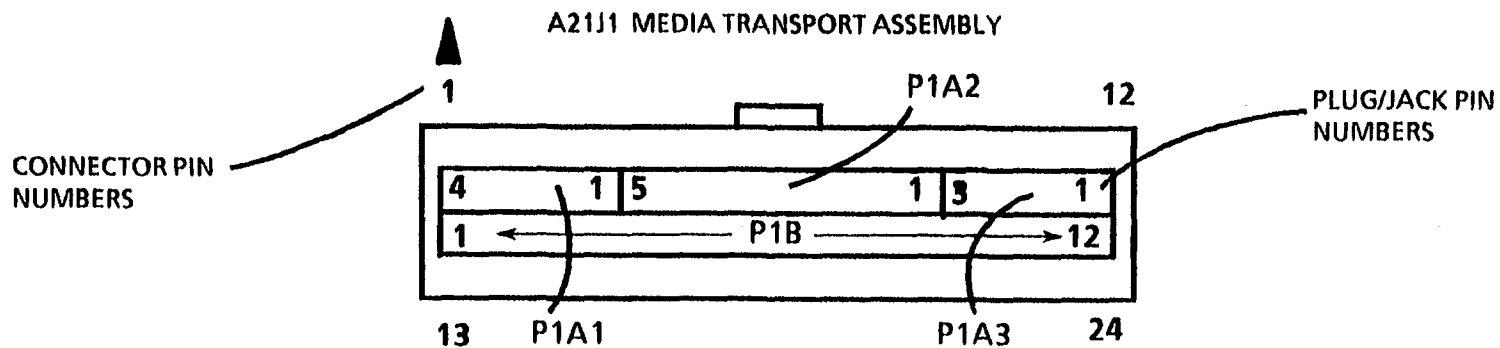




*Note: Connector viewed from wire end (rear).*

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A21P1A1-4		26 VDC	Orn
2	A21P1A1-3	A2P204-1	No Contact	-
3	A21P1A1-2	No Contact	26 VDC	Brn
4	A21P1A1-1	A2P204-1	Ground	Grn/Yel
5	A21P1A2-5	A24P2-1	Control Signal	Blk
6	A21P1A2-4	A24P2-2	Control Signal	Wht
7	A21P1A2-3	A24P2-3	Control Signal	Gry
8	A21P1A2-2	A24P2-4	Control Signal	Vio
9	A21P1A2-1	A24P2-5	DC Com	Blu
10	A21P1A3-3	A3P305-9	Spare Sensor	Grn
11	A21P1A3-2	A3P305-10	DC Com	Yel
12	A21P1A3-1	A3P305-11	Spare Sensor	Orn

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
13	A21P1B-1	A3P305-23	DC Com	Brn
14	A21P1B-2	A3P305-22	Con. Sig. Reg.	Red
15	A21P1B-3	A3P305-21	Reg. Sensor	Orn
16	A21P1B-4	A3P305-20	Con. Sig. PreFd.	Yel
17	A21P1B-5	A3P305-19	DC Com	Grn
18	A21P1B-6	A3P305-18	SheetFeed Sensor	Blu
19	A21P1B-7	A3P305-17	DC Com	Vio
20	A21P1B-8	A3P305-16	Media Exit Switch	Gry
21	A21P1B-9	A3P305-15	Fan 1	Wht
22	A21P1B-10	A3P305-14	26 VDC	Blk
23	A21P1B-11	A3P305-13	Fan 2	Brn
24	A21P1B-12	A3P305-12	26 VDC	Red



*Note: Connector viewed from wire end (rear).*

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A21J1A3-1	A21J1A3-3		Orn
2	A21J1A3-2		No Contact	-
3	A21J1A3-3	A21J1A3-1		Brn
4	A21J1A3-4		Ground	Grn/Yel
5	A21J1A2-1	A21M1J1A-5	Xpt. Fd. Roll Mot.	Blk
6	A21J1A2-2	A21M1J1A-4	Xpt. Fd. Roll Mot.	Wht
7	A21J1A2-3	A21M1J1A-3	Xpt. Fd. Roll Mot.	Gry
8	A21J1A2-4	A21M1J1A-2	Xpt. Fd. Roll Mot.	Vio
9	A21J1A2-5	A21M1J1A-1	Xpt. Fd. Roll Mot.	Blu
10	A21J1A1-1	-	No Contact	Grn
11	A21J1A1-2	-	No Contact	Yel
12	A21J1A1-3	-	No Contact	Orn

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
13	A21J1B-12	A21Q1P1-1	Media Reg. Sen.	Brn
14	A21J1B-11	A21Q1P1-2	Media Reg. Sen.	Red
15	A21J1B-10	A21Q1P1-3	Media Reg. Sen.	Orn
16	A21J1B-9	A21Q2P1-1	Insert Document Sen.	Yel
17	A21J1B-8	A21Q2P1-2	Insert Document Sen.	Grn
18	A21J1B-7	A21Q2P1-3	Insert Document Sen.	Blu
19	A21J1B-6	A21Q3P1-1	Media Exit Switch	Vio
20	A21J1B-5	A21Q3P1-2	Media Exit Sensor	Gry
21	A21J1B-4	No Contact	-	Wht
22	A21J1B-3	No Contact	-	Blk
23	A21J1B-2	No Contact	-	Brn
24	A21J1B-1	No Contact	-	Red

**A21Q1P1 MEDIA TRANSPORT ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A21J1-13	DC Com	Brn
2	A21J1-14	Control Signal	Red
3	A21J1-15	Media Reg. Sensor	Orn

**A21Q1J1 MEDIA TRANSPORT ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Q1Reg. Sen.	DC Com	Vio
2	Q1Reg. Sen.	Control Signal	Orn
3	Q1Reg. Sen.	Q1Reg. Sen.	Blk

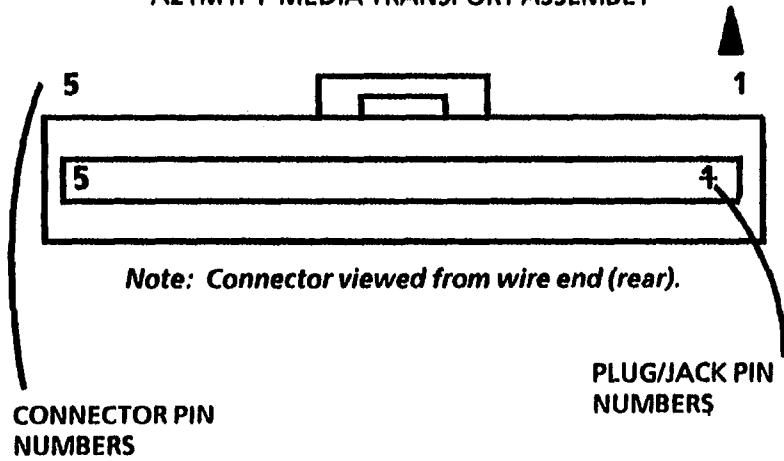
**A21Q2P1 MEDIA TRANSPORT ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A21J1-16	Control Signal	Yel
2	A21J1-17	DC Com	Grn
3	A21J1-18	Pre Feed Sensor	Blu

**A21Q3P1 MEDIA TRANSPORT ASSEMBLY**

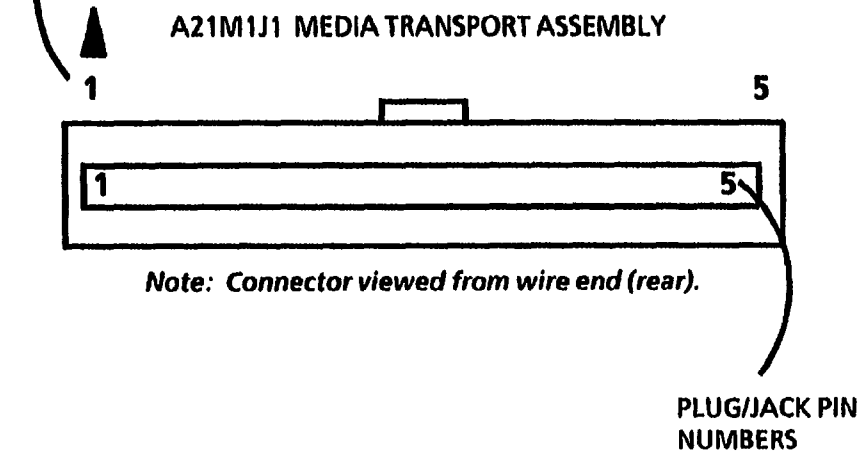
PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A21J1-19	DC Com	Vio
2	A21J1-20	Media Exit Switch	Gry

**A21M1P1 MEDIA TRANSPORT ASSEMBLY**



CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A21M1P1-1	Fd. Roll Mot.	Xpt. Fd. Roll Mot.	Red
2	A21M1P1-2	Fd. Roll Mot.	Xpt. Fd. Roll Mot.	Wht/Red
3	A21M1P1-3	Fd. Roll Mot.	Xpt. Fd. Roll Mot.	Grn
4	A21M1P1-4	Fd. Roll Mot.	Xpt. Fd. Roll Mot.	Wht/Grn
5	A21M1P1-5	Ground	Ground	Vio

**A21M1J1 MEDIA TRANSPORT ASSEMBLY**



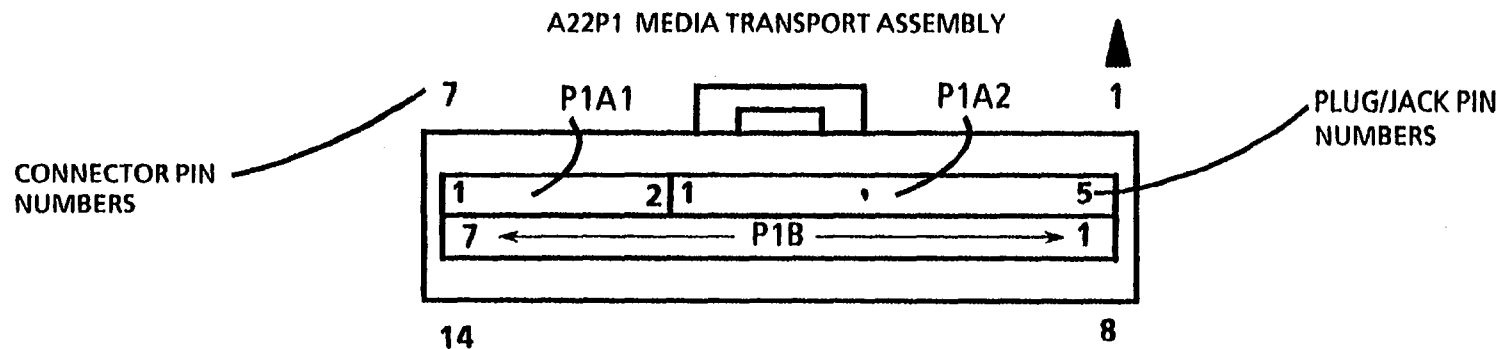
CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A21M1J1A-1	A21J1-9	Control Signal	Blk
2	A21M1J1A-2	A21J1-8	Control Signal	Wht
3	A21M1J1A-3	A21J1-7	Control Signal	Gry
4	A21M1J1A-4	A21J1-6	Control Signal	Vio
5	A21M1J1A-5	A21J1-5	DC Com	Blu

**A22Q1P1 DEVELOPER ASSEMBLY**

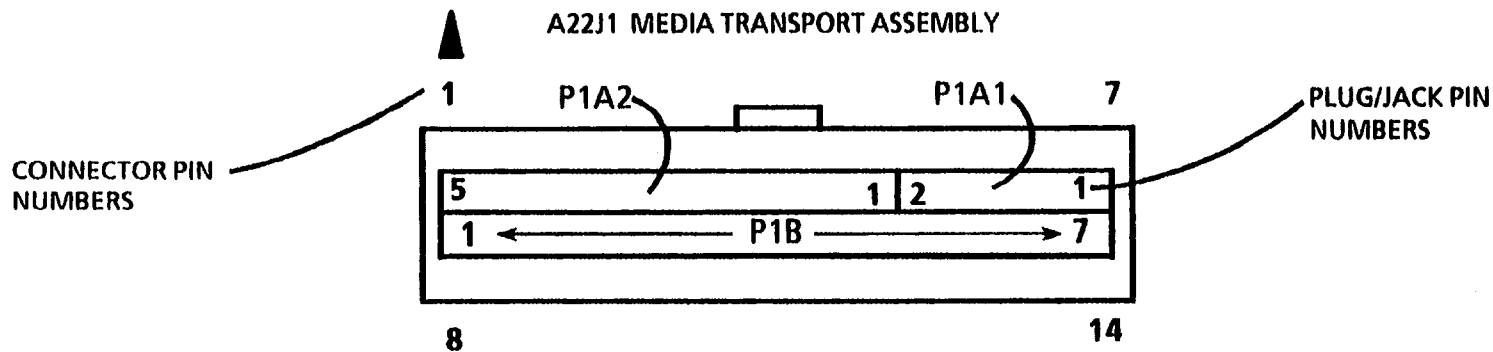
PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A22J1-5	Toner Control	Brn
2	A22J1-4	15 VDC	Red
3	A22J1-3	Toner Sensor	Orn
4	A22J1-2	Gnd	Yel
5	A22J1-1	No Contact	Grn

**A22Q1J1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Q1 Toner Sensor	Toner Control	Brn
2	Q1 Toner Sensor	15 VDC	Red
3	Q1 Toner Sensor	Toner Sensor	Orn
4	Q1 Toner Sensor	Gnd	Yel
5	Q1 Toner Sensor	No Contact	Grn



CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A22P1A1-5	A3P303-12	No Contact	Grn
2	A22P1A1-4	A3P303-13	Ground	Yel
3	A22P1A1-3	A3P303-14	Toner Sensor	Orn
4	A22P1A1-2	A3P303-14	15 VDC	Red
5	A22P1A1-1	A3P303-16	Toner Control	Brn
6	A22P1A2-2	No Contact	No Contact	-
7	A22P1A2-1	A25P25A-14	Dev. Bias Sw.	Yel
8	A22P1B-1	A3P303-11	DC Com	Blu
9	A22P1B-2	A3P303-10	Ton. Home Sen.	Vio
10	A22P1B-3	A3P303-9	26 VDC	Gry
11	A22P1B-4	A3P303-8	Toner Motor	Wht
12	A22P1B-5	Ground	Ground	Blk
13	A22P1B-6	No Contact	No Contact	-
14	A22P1B-7	No Contact	No Contact	-



CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A22J1A2-1	A22Q1P1-1	Q1 Toner Sen.	Grn
2	A22J1A2-2	A22Q1P1-2	Q1 Toner Sen.	Yel
3	A22J1A2-3	A22Q1P1-3	Q1 Toner Sen.	Orn
4	A22J1A2-4	A22Q1P1-4	Q1 Toner Sen.	Red
5	A22J1A2-5	A22Q1P1-5	Q1 Toner Sen.	Brn
6	A22J1A1-1	No Contact	No Contact	-
7	A22J1A1-2	A22DR1P1	DR1 Dev. Roll	Yel
8	A22J1B-7	A22Q2P1-1	Toner Can. Hm. Sen.	Blu
9	A22J1B-6	A22Q2P1-2	Toner Can. Hm. Sen.	Vio
10	A22J1B-5	A22M1P1-1	Toner Disp. Motor	Gry
11	A22J1B-4	A22M1P1-2	Toner Disp. Motor	Wht
12	A22J1B-3	Ground	Ground	Blk
13	A22J1B-2	No Contact	No Contact	-
14	A22J1B-1	No Contact	No Contact	-

**A22Q2P1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A22J1-8	DC Com	Blu
2	A22J1-9	Toner Home Sen.	Vio

**A22Q2J1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Q2 Toner Can. Home Sensor	DC Com	Red
2	Q2 Toner Can. Home Sensor	Toner Home Sen.	Red

**A22M1P1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A22J1-10	26 VDC	Gry
2	A22J1-11	Toner Motor	Wht

**A22M1J1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Ton. Dis. Motor	26 VDC	Red
2	Ton. Dis. Motor	Toner Motor	Blk

**A22DR1P1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A22J1-7	Dev. Bias Sw.	Yel

**A22DR1J1 DEVELOPER ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	DR1 Dev. Roll	Dev. Bias Sw.	Bias Clip

**A23A1P2 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Clean. Bld. Sol.	To Clean. Bld. Sol.	Blk
2	Clean. Bld. Sol.	To Clean. Bld. Sol.	Blk

**A23A1P3 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Left Fan		Red
2	Left Fan		Blk



A23A1P3 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	Right Fan		Red
2	Right Fan		Blk

A23A1P5 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	-	No Contact	-
2	A23J2-24	26 VDC	Red
3	-	No Contact	-
4	A23J2-26	Fuser Open	Yel
5	-	No Contact	-

A23A2P1 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A23DSJ1-3		Brn
2	-	No Contact	-
3	A23DSJ1-1		Orn
4	A23J2-17	Erase Lamp On	Yel
5	A23J2-16	26 VDC	Grn

A23A2P1 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2 Pow. Inv.		Grn
2	-	No Contact	-
3	A2 Pow. Inv.		Blk
4	A2 Pow. Inv.	Erase Lamp On	Brn
5	A2 Pow. Inv.	26 VDC	Red

A23DS1J1 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A23A2P1-3		Orn
2	-	No Contact	-
3	A23A2P1-1		Brn

**A23HR1P1 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A23J1-3	AC High - Fuser	Blk

**A23HR1P2 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A23J1-1	AC High - Fuser	Blu

**A23HR1J1 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	FUSER HEATER	115 VAC	WHT

**A23HR1J2 XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	FUSER HEATER	115 VAC	WHT

**A23HR1J1 RX XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	FUSER HEATER	220/240 VAC	BLU

**A23HR1J2 RX XEROGRAPHIC ASSEMBLY**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	FUSER HEATER	220/240 VAC	BLU

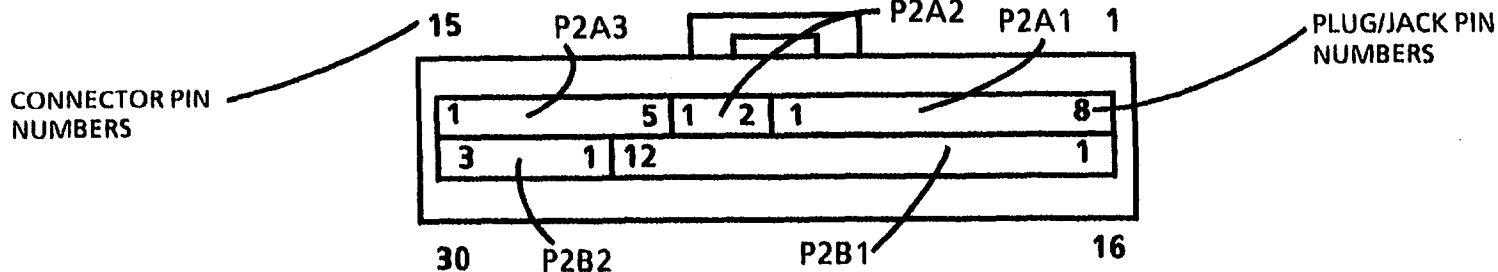
A23P1 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A1J1-1	AC High - Fuser	Blu
2	A1J1-2	Ground	Grn/Ywl
3	A1J1-3	AC High - Fuser	Blk

A23ED2P1 XEROGRAPHIC ASSEMBLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A25HVPS	HVPS - CHARGE	RED

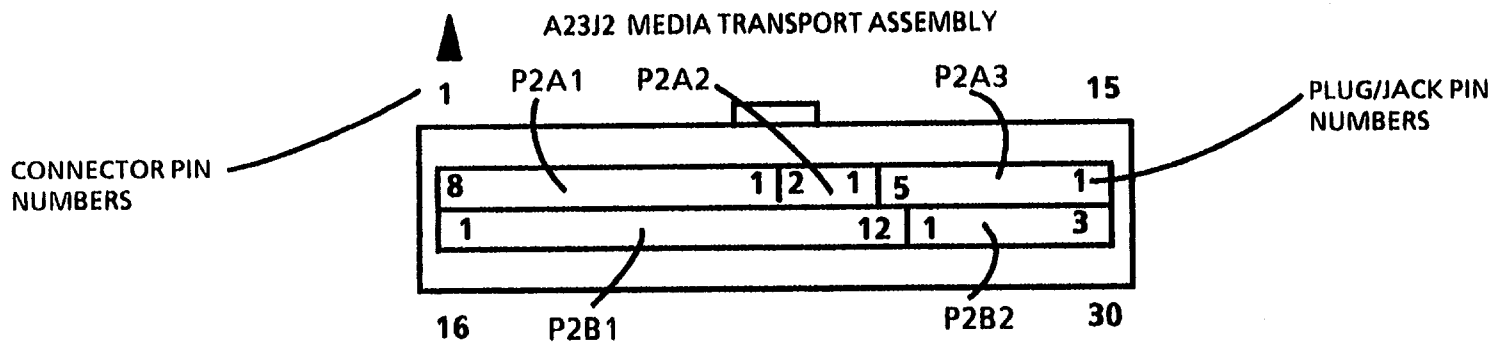
A23P2 MEDIA TRANSPORT ASSEMBLY



Note: Connector viewed from wire end (rear).

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A23P2A1-8	A2P203-13	Fan On	Orn
2	A23P2A1-7	A2P203-14	26 VDC	Yel
3	A23P2A1-6	A2P203-15	Fan On	Grn
4	A23P2A1-5	A2P203-16	26 VDC	Blu
5	A23P2A1-4	A2P203-17	Scorch Thermis.	Vio
6	A23P2A1-3	A2P203-18	DC Com	Gry
7	A23P2A1-2	A2P203-19	26 VDC	Wht
8	A23P2A1-1	A2P203-20	Cl. Blade Sol.	Blk
9	A23P2A2-2	A3P306-4	Fuser Therm.	Yel
10	A23P2A2-1	A3P306-5	Ground	Grn
11	A23P2A3-5	A2P203-21	Spare	Brn
12	A23P2A3-4	A2P203-22	DC Com	Red
13	A23P2A3-3	A2P203-23	26 VDC	Orn
14	A23P2A3-2	A2P203-24	No Contact	Yel
15	A23P2A3-1	A2P203-25	26 VDC	Grn

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
16	A23P2B1-1	A2P203-12	Erase Lamp On	Red
17	A23P2B1-2	A2P203-11	26 VDC	Brn
18	A23P2B1-3	A2P203-10	No Contact	-
19	A23P2B1-4	A2P203-9	26 VDC	Wht
20	A23P2B1-5	A2P203-8	26 VDC	Gry
21	A23P2B1-6	A2P203-7	No Contact	Vio
22	A23P2B1-7	A2P203-6	26 VDC	Blu
23	A23P2B1-8	A2P203-5	No Contact	-
24	A23P2B1-9	A2P203-4	26 VDC	Yel
25	A23P2B1-10	A2P203-3	No Contact	-
26	A23P2B1-11	A2P203-2	Fuser Open	Red
27	A23P2B1-12	A2P203-1	No Contact	-
28	A23P2B2-1	A3P306-3	Spare	Orn
29	A23P2B2-2	A3P306-2	DC Com	Red
30	A23P2B2-3	A3P306-1	Xero. Sen.	Brn



CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A23J2A2-1	A23A1P1-10	A1Therm. PWB	Blk
2	A23J2A2-2	A23A1P1-9	A1Therm. PWB	Wht
3	A23J2A2-3	A23A1P1-8	A1Therm. PWB	Gry
4	A23J2A2-4	A23A1P1-7	A1Therm. PWB	Vio
5	A23J2A2-5	A23A1P1-6	A1Therm. PWB	Blu
6	A23J2A2-6	A23A1P1-5	A1Therm. PWB	Grn
7	A23J2A2-7	A23A1P1-4	A1Therm. PWB	Yel
8	A23J2A2-8	A23A1P1-3	A1Therm. PWB	Orn
9	A23J2A2-9	A23A1P1-2	A1Therm. PWB	Red
10	A23J2A2-10	A23A1P1-1	A1Therm. PWB	Brn
11	A23J2A1-1	No Contact	No Contact	-
12	A23J2A1-2	No Contact	No Contact	-
13	A23J2A1-3	A23J2A1-5	-	Orn
14	A23J2A1-4	No Contact	No Contact	-
15	A23J2A1-5	A23J2A1-3	-	Orn

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
16	A23J2B-15	A23A2P1-4	A2 Pow. Inv.	Yel
17	A23J2B-14	A23A2P1-5	A2 Pow. Inv.	Grn
18	A23J2B-13	No Contact	No Contact	-
19	A23J2B-12	No Contact	No Contact	-
20	A23J2B-11	No Contact	No Contact	-
21	A23J2B-10	No Contact	No Contact	-
22	A23J2B-9	No Contact	No Contact	-
23	A23J2B-8	No Contact	No Contact	-
24	A23J2B-7	No Contact	No Contact	-
25	A23J2B-6	No Contact	No Contact	-
26	A23J2B-5	No Contact	No Contact	-
27	A23J2B-4	No Contact	No Contact	-
28	A23J2B-3	No Contact	No Contact	-
29	A23J2B-2	No Contact	No Contact	-
30	A23J2B-1	No Contact	No Contact	-

**A24P1 MEDIA TRANSPORT FEED MOTOR PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P305-8	26 VDC	Orn
2	A2P305-7	5 VDC	Red
3	A2P305-6	DC Com	Brn
4	A2P305-5	Control Signal	Blk
5	A2P305-4	DC Com	Wht
6	A2P305-3	Control Signal	Gry
7	A2P305-2	Control Signal	Vio
8	A2P305-1	Control Signal	Blu

**A24P2 MEDIA TRANSPORT FEED MOTOR PWB**

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A21P1-5	Control Signal	Blk
2	A21P1-6	Control Signal	Wht
3	A21P1-7	Control Signal	Gry
4	A21P1-8	Control Signal	Vio
5	A21P1-9	DC Com	Blu

A25P25A HIGH VOLTAGE POWER SUPPLY

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A2P204-12	26 VDC	Brn
2	A2P204-11	DC Com	Red
3	A2P204-10	Charge Bias	Orn
4	A2P204-9	Transfer On	Yel
5	A2P204-8	DC Com	Grn
6	A2P204-7	HV On	Blu
7	A2P204-6	DC Com	Vio
8	A2P204-5	Dev. Bias	Gry
9		No Contact	
10	A2P204-4	26 VDC	Blk
11	A2P204-3	Detack On	Brn
12	A2P204-1	Dev. Bias	Red
13		No Contact	
14	A22P1-7	Dev. Roll	Yel

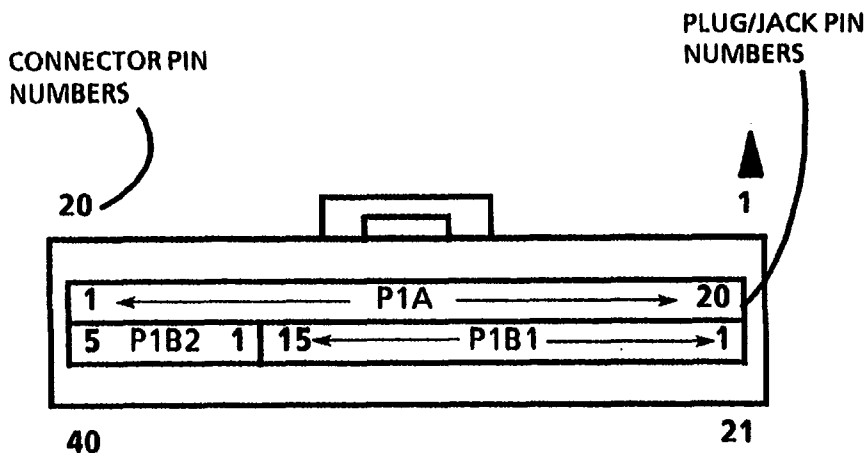
A31P1 DOCUMENT FEED MOTOR PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A3P302-8	26 VDC	Gry
2	A3P302-7	5 VDC	Vio
3	A3P302-6	DC Com	Blu
4	A3P302-5	Control Signal	Grn
5	A3P302-4	DC Com	Yel
6	A3P302-3	Control Signal	Orn
7	A3P302-2	Control Signal	Red
8	A3P302-1	Control Signal	Brn

A31P2Z DOCUMENT FEED MOTOR PWB

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	M23 Document Feed Motor	Control Signal	Red
2	M23 Document Feed Motor	Control Signal	Wht
3	M23 Document Feed Motor	Control Signal	Orn
4	M23 Document Feed Motor	Control Signal	Wht/Grn
5	M23 Document Feed Motor	DC Com	Vio

# A32P1 MEDIA TRANSPORT ASSEMBLY



Note: Connector viewed from wire end (rear).

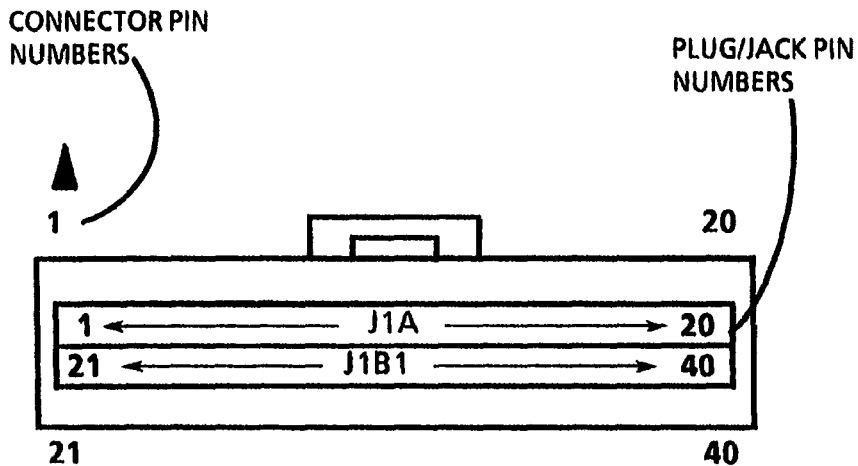
CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A32P1A-20	A3P301-20	26 VDC	Grn
2	A32P1A-19	A3P301-	26 VDC r	Yel
3	A32P1A-18	A3P301-	DC Com	Orn
4	A32P1A-17	A3P301-	DC Com	Red
5	A32P1A-16	A3P301-	Spare	Brn
6	A32P1A-15	A3P301-	Spare	Blk
7	A32P1A-14	A3P301-	Con. Pan. D7	Wht
8	A32P1A-13	A3P301-	Con. Pan. D6	Gry
9	A32P1A-12	A3P301-	Con. Pan. D5	Vio
10	A32P1A-11	A3P301-	Con. Pan. D4	Blu
11	A32P1A-10	A3P301-	Con. Pan. D3	Grn
12	A32P1A-9	A3P301-	Con. Pan. D2	Yel
13	A32P1A-8	A3P301-	Con. Pan. D1	Orn
14	A32P1A-7	A3P301-	Con. Pan. D0	Red
15	A32P1A-6	A3P301-	LCD	Brn
16	A32P1A-5	A3P301-	LCD Enable	Blk
17	A32P1A-4	A3P301-	LCD Reg S	Wht
18	A32P1A-3	A3P301-	DC Com	Gry
19	A32P1A-2	A3P301-	Control Signal	Vio
20	A32P1A-1	A3P301-	DC Com	Blu

continued



CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
21	A32P1B1-1	A33P2-8	Disp Col 1L im	Brn
22	A32P1B1-2	A33P2-7	Disp Col 2L im	Red
23	A32P1B1-3	A33P2-6	Disp Col 3L im	Orn
24	A32P1B1-4	A33P2-7	Row 7	Yel
25	A32P1B1-5	A33P2-5	Row 8	Grn
26	A32P1B1-6	A33P2-3	Row 9	Blu
27	A32P1B1-7	A33P2-2	Row 10	Vio
28	A32P1B1-8	A33P2-1	Row 11	Gry
29	A32P1B1-9	No Contact	No Contact	-
30	A32P1B1-10	No Contact	No Contact	-
31	A32P1B1-11	No Contact	No Contact	-
32	A32P1B1-12	No Contact	No Contact	-
33	A32P1B1-13	No Contact	No Contact	-
34	A32P1B1-14	No Contact	No Contact	-
35	A32P1B1-15	No Contact	No Contact	-
36	A32P1B2-1	A3P301-25	Contrl Signal	Blu
37	A32P1B2-2	A3P301-24	DC Com	Vio
38	A32P1B2-3	A3P301-23	Contrl Signal	Gry
39	A32P1B2-4	A3P301-22	DC Com	Wht
40	A32P1B2-5	A3P301-21	Contrl Signal	Blk

# A32J1 MEDIA TRANSPORT ASSEMBLY



*Note: Connector viewed from wire end (rear).*

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
1	A32J1A-1	A32A1P1-20	DC Com	Brn
2	A32J1A-2	A32A1P1-19	Control Signal	Red
3	A32J1A-3	A32A1P1-18	DC Com	Orn
4	A32J1A-4	A32A1P1-17	LCD	Yel
5	A32J1A-5	A32A1P1-16	LCD	Grn
6	A32J1A-6	A32A1P1-15	LCD	Blu
7	A32J1A-7	A32A1P1-14	CPD0	Vio
8	A32J1A-8	A32A1P1-13	CPD1	Gry
9	A32J1A-9	A32A1P1-12	CPD2	Wht
10	A32J1A-10	A32A1P1-11	CPD3	Blk
11	A32J1A-11	A32A1P1-10	CPD4	Brn
12	A32J1A-12	A32A1P1-9	CPD5	Red
13	A32J1A-13	A32A1P1-8	CPD6	Orn
14	A32J1A-14	A32A1P1-7	CPD7	Yel
15	A32J1A-15	A32A1P1-6	Spare	Grn
16	A32J1A-16	A32A1P1-5	Spare	Blu
17	A32J1A-17	A32A1P1-4	DC Com	Vio
18	A32J1A-18	A32A1P1-3	DC Com	Gry
19	A32J1A-19	A32A1P1-2	26 VDC	Wht
20	A32J1A-20	A32A1P1-1	26 VDC	Blk

continued

CONNECTOR PIN NO.	PLUG/JACK PIN NO.	TERMINATION POINT	SIGNAL NAME	WIRE COLOR
21	A32J1B-20	A32A1P1-21	Disp Col 1L im	Brn
22	A32J1B-19	A32A1P1-22	Disp Col 2L im	Red
23	A32J1B-18	A32A1P1-23	Disp Col 3L im	Orn
24	A32J1B-17	A32A1P1-24	Row 7	Yel
25	A32J1B-16	A32A1P1-25	Row 8	Grn
26	A32J1B-15	A32A1P1-26	Row 9	Blu
27	A32J1B-14	A32A1P1-27	Row 10	Vio
28	A32J1B-13	A32A1P1-28	Row 11	Gry
29	A32J1B-12	A32A1P1-29	Disp Col 3	Wht
30	A32J1B-11	A32A1P1-30	Spare	Blk
31	A32J1B-10	A32A1P1-31	Spare	Brn
32	A32J1B-9	A32A1P1-32	Spare	Red
33	A32J1B-8	A32A1P1-33	Switch Row 14	Orn
34	A32J1B-7	A32A1P1-34	Switch Row 15	Yel
35	A32J1B-6	A32A1P1-35	Switch Row 16	Grn
36	A32J1B-5	A32A1P1-36	Contrl Signal	Blu
37	A32J1B-4	A32A1P1-37	DC Com	Vio
38	A32J1B-3	A32A1P1-38	Contrl Signal	Gry
39	A32J1B-2	A32A1P1-39	DC Com	Wht
40	A32J1B-1	A32A1P1-40	Contrl Signal	Blk

A33P1 MEDIA WIDTH LED PWB (Right)

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A34P1-8		Brn
2	A34P1-7		Red
3	A34P1-6		Orn
4	A34P1-5		Yel
5	A34P1-4		Grn
6	A34P1-3		Blu
7	A34P1-2		Vio
8	A34P1-1		Gry

A33P2 MEDIA WIDTH LED PWB (Right)

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A32P1-28		Brn
2	A32P1-27		Red
3	A32P1-26		Orn
4	A32P1-25		Yel
5	A32P1-24		Grn
6	A32P1-23		Blu
7	A32P1-22		Vio
8	A32P1-21		Gry

A34P1 MEDIA WIDTH LED PWB (Left)

PIN	TERMINATION POINT	SIGNAL	WIRE COLOR
1	A33P1-8		Brn
2	A33P1-7		Red
3	A33P1-6		Orn
4	A33P1-5		Yel
5	A33P1-4		Grn
6	A33P1-3		Blu
7	A33P1-2		Vio
8	A33P1-1		Gry

## **Multiple Module Connector (Molex SL Connector) Repair Procedure**

### **Purpose**

The purpose of this procedure is to provide the approved method for repair and / or replacement of the Multiple Module Connectors (Molex SL) used throughout the copier. This procedure also illustrates the wire terminal replacement procedure in either the Pin Housing Connectors or the Socket Housing Connectors. The procedure should be followed carefully in order to prevent damage to the connectors.

### **CAUTION**



The Molex connectors break easily. Use only approved tools and procedures when extracting modules or terminals and/ or resetting the terminal locking tabs.

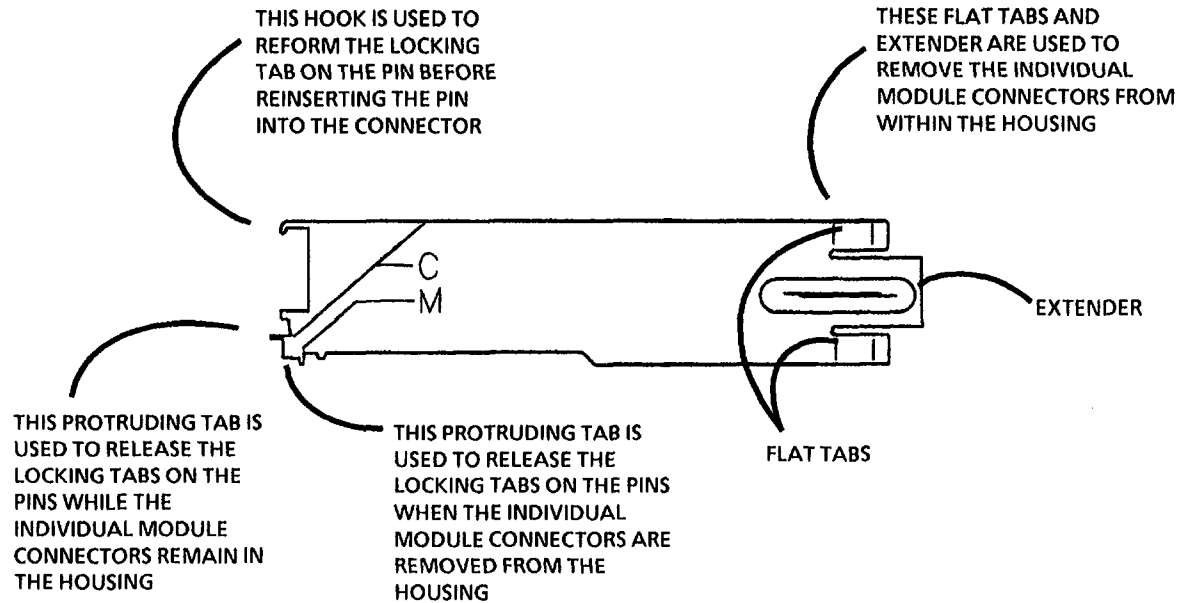
### **Special Tools Required**

(600T1825) Extraction Tool

(Continued)

## Removal

1. (Figure 1): Examine the Molex Extraction Tool in order to become familiar with the different uses of the Tool.



	01994	A
TAR	SM 6	M

Figure 1. Molex Extraction Tool

(Continued)

(Continued)

ⓘ Note the location of the individual module connectors in the housing before removing them. This will ensure that they are reinstalled correctly after the repair to the terminals is complete. Failure to locate the individual connectors correctly will cause the copier to malfunction causing damage.

ⓘ STEP 2 B: Use caution when forcing the housing body away from the module connector. Too much force could cause damage to the housing body.

2. (Figure 2): Remove the individual module connectors from the housing.

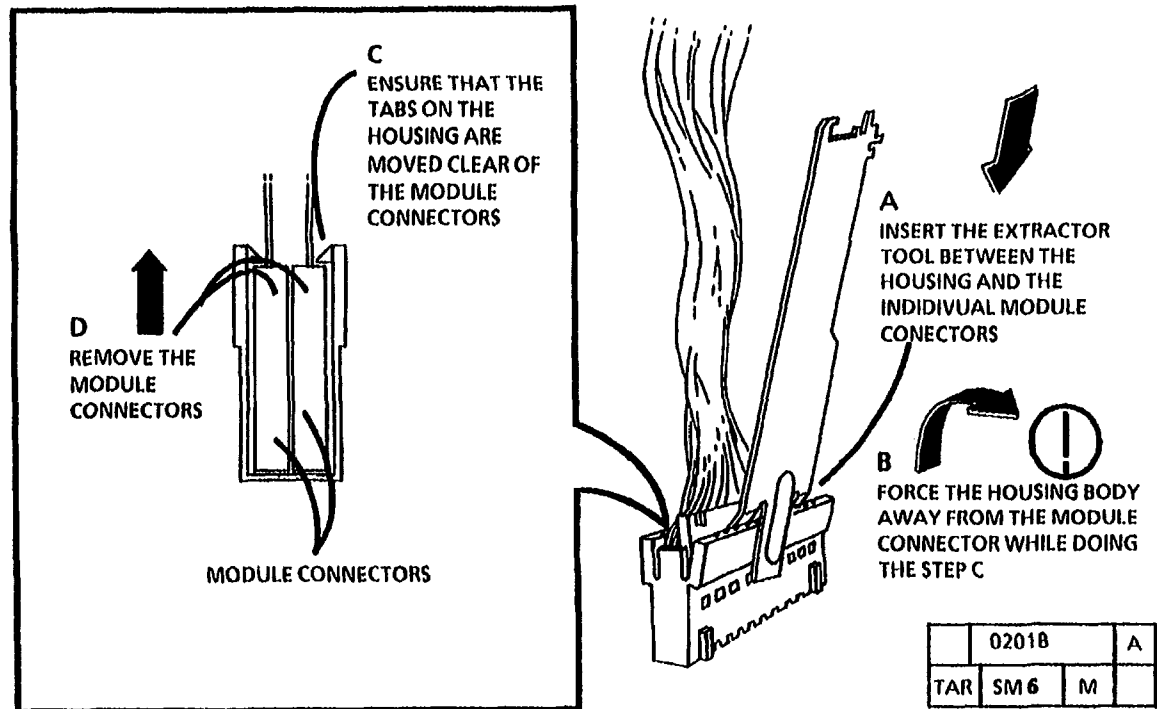


Figure 2. Remove the individual module connectors from the housing

(Continued)

(Continued)

**1** STEP 3 A: Insert the extractor tabs until the face of the tool is flush with the connector housing.

3. (Figure 3): Remove the Terminals from the Connectors.

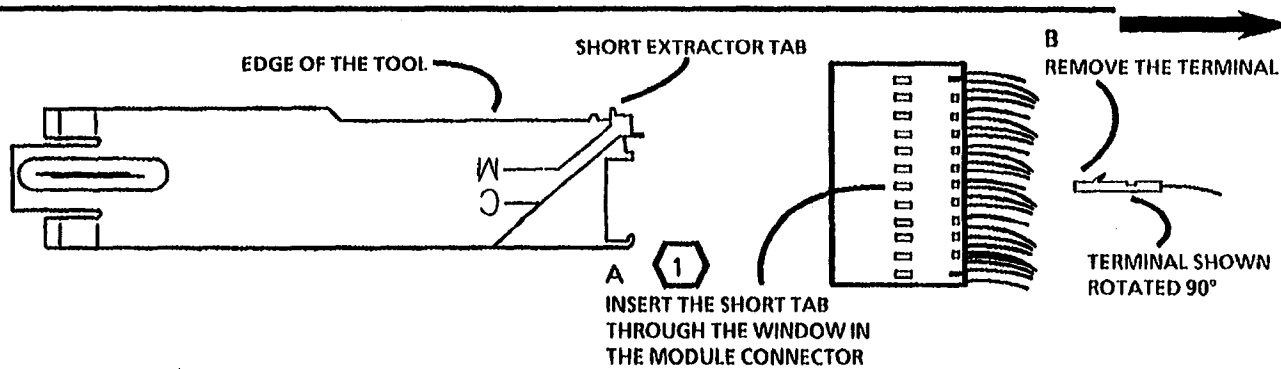
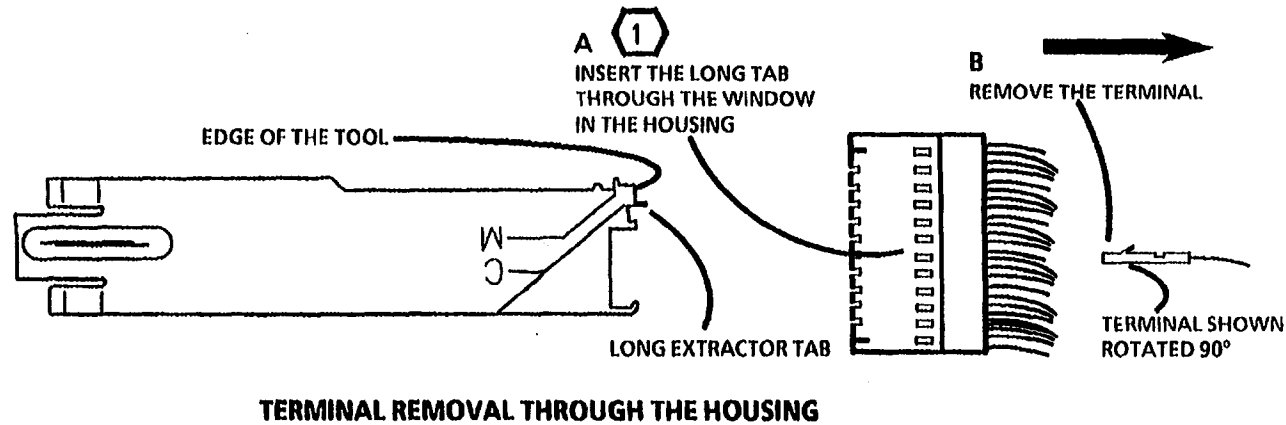


Figure 3. Remove the Terminals from the Connectors

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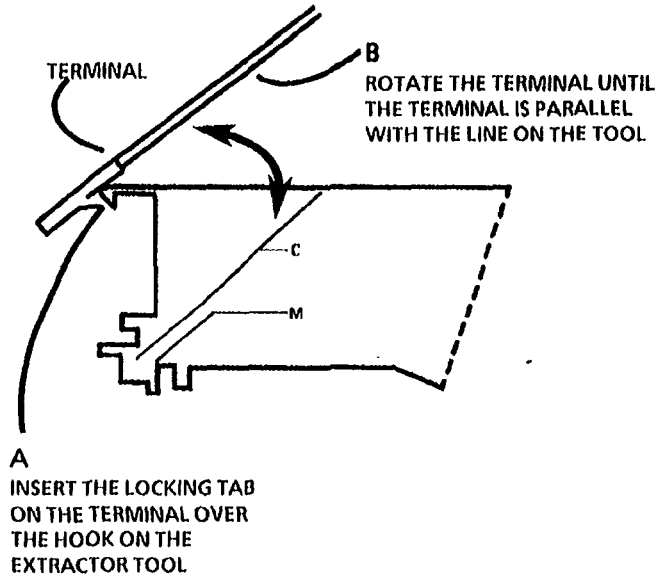
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(Continued)

4. (Figure 4): Reform the Terminal Locking Tab.

5. Reinstall the terminal to the pin position it was removed from.
6. Reinstall the individual module connectors to the correct locations noted at the beginning of this procedure. Refer to section 7 for detail of connector configuration



	01996	A
TAR	SM 6	M

Figure 4. Reform the Terminal Locking Tab

**NOTES**