ELECTRONICS
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Fiery XJ80e Built-in Color Server Installation and Service Guide

A guide for service representatives

Note: *Both the Fiery XJ80e Controller kit and the Controller Interface Type D kit must be installed by a customer service representative who has completed the training course on the base copier and the Fiery XJ80e controller.*

Part number: 10016261

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Electronics for Imaging, Inc.
2855 Campus Drive
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Contents

Preface

This guide is intended for customer service representatives who have completed the training course on the base copier and the Fiery XJ80e controller. If you have not received this training, you should not attempt to install or service the contents of the Fiery XJ80e Controller kit or the Controller Interface Type D kit. Electronics for Imaging, Inc. does not warrant the performance of Fiery XJ80e built-in Color Servers installed or serviced by non-certified personnel.

About this guide

This guide is divided into the following sections:

- "Preface" gives general information about this guide and general information that you should know before you attempt to install the Fiery XJ80e Controller and Controller Interface Type D kits.
- Chapter 1, "Introduction", provides general information about kit installation as well as kit contents.
- Chapter 2, "A166/A187 Installation", describes the steps you need to take in order to install the Fiery XJ80e board and Controller Interface Type D kits in A166/A187 copiers.
- Chapter 3, "A189 Installation", describes the steps you need to take in order to install the Fiery XJ80e board and Controller Interface Type D kits in A189 copiers.
- Chapter 4, "Using the Operation Panel", tells you how to use the Fiery XJ80e functions on the Operation Panel.
- Chapter 5, "Setting Up the Fiery XJ80e", describes how to access the Setup options.
- Chapter 6, "Troubleshooting Procedures", identifies the source of common problems and suggests ways of correcting them.
- Chapter 7, "Service Procedures", describes removal and replacement procedures for Fiery XJ80e components.

Customers should not use the technical service documentation. Do not leave your copy of this guide behind after you make a service call.

About the illustrations in this guide

The illustrations in this guide reflect the current shipping version of the Fiery XJ80e Controller kit and the Controller Interface Type D kit at the time of publication. Components shown in these illustrations are subject to change. To receive information about any components that do not match illustrations in this guide, contact your authorized service/support center.

Terminology and conventions

The term *A166/A187/A189 copiers* refers to the following copiers in which the Controller Interface Type D kit and the Fiery XJ80e Controller kit are installed:

Copier	Basic Manual Duplex (A166) Product Name	Basic Auto Duplex (A187) Product Name	Edit Model (A189) Product Name
Ricoh	Aficio Color 2003	Aficio Color 2103	Aficio Color 2203
Gestetner	Gestetner 2703 nashuatec C503 RexRotary CC8403	Gestetner 2703d nashuatec C503d RexRotary CC8403D	Gestetner 2703de nashuatec C503de RexRotary CC8403DE
infotec	7212Z	7212DZ	7212EZ
Savin	SDC103	SDC103A	SDC103E
Lanier	5603DC (AG)	5603DC (AD AG)	5603DC (E AG)

The term *network administrator* refers to the person responsible for maintaining the network at the customer site.

The term *Operation Panel* is used to describe the area on the front of the copier that includes the guidance display/touch panel display (LCD—liquid crystal display), and the surrounding keys.

The term *PC-compatible* refers to any IBM PC-compatible computer capable of running MS-DOS® version 5.0 or later.

The term *PC-based server* refers to any device that may be connected to the Fiery XJ80e for parallel printing.

When this guide refers to other manuals, such as the *Administrator Guide*, the title is displayed in italics.

Precautions

Always observe the following general precautions when installing and servicing the Fiery XJ80e:

1. ***Report any shipping damage.***

   If there is any evidence of shipping or handling damage to the kit packing boxes or their contents, save the damaged boxes and parts, call the shipper immediately to file a claim, and notify your authorized service/support center.

2. ***Never alter an existing network without permission.***

   The Fiery XJ80e will probably be connected to an existing Local Area Network (LAN) based on Ethernet® hardware. The network is the link between the customer's computer, existing laser printers, and other prepress equipment. Never disturb the LAN by breaking or making a network connection, altering termination, installing or removing networking hardware or software, or shutting down networked devices without the knowledge and express permission of the system or network administrator or the shop supervisor.

3. ***Never enter an IP address in Network Setup.***

   Only the network administrator should enter an IP address on a network device. Assigning the Fiery XJ80e an incorrect IP address can cause unpredictable errors on any or all devices.

4. ***Follow standard ESD (electrostatic discharge) precautions while working on the internal components of the copier.***

   Static is always a concern when servicing electronic devices. It is highly unlikely that the area around the copier is static-free. Carpeting, leather-soled shoes, synthetic clothing fibers, silks, and plastics may generate a static charge of more than 10,000 volts. Static discharge is capable of destroying the circuits etched in silicon microchips, or dramatically shortening their life span. By observing standard precautions, you may avoid extra service calls and save the cost of a new board.

When possible, work on a ground-connected antistatic mat. Wear an antistatic wristband, grounded at the same place as the antistatic mat. If that is not possible:

- Attach a grounding strap to your wrist. Attach the other end to a good ground.
- When you unpack the Fiery XJ80e board and other kit components for the first time, touch a metal area of the copier to discharge the static on your body.
- Leave new electronic components inside their antistatic bags until you are ready to install them. When you remove components from an antistatic bag, place them on a grounded antistatic surface, component-side up.
- When you remove an electronic component, place it into an antistatic bag immediately. Do not walk across a carpet or vinyl floor while carrying an unprotected board.

5. ***Handle the printed circuit boards by their edges only.***
6. ***Never set a cup of coffee—or any liquid—on or near any components or the copier.***

Chapter 1: Introduction

The Fiery XJ80e adds computer connectivity and highly efficient PostScript® color printing capacity to A166/A187/A189 copiers.

The Fiery XJ80e, as an integral part of a color printing system, enables users of Macintosh® computers, PC-compatibles, and UNIX workstations to:

- Send images over AppleTalk®, TCP/IP, Novell® networks, and through a parallel (Centronics®) port to print on an A166/A187/A189 copier with a built-in Fiery XJ80e Color Server.
- Spool print jobs and select a printing priority for each job. Users can also control spooled print jobs sent to the copier/printer with remote utility software running on networked Macintosh and PC-compatible computers.
- Print PostScript and EPS files, in color and grayscale.
- Use the copier as a color scanner with Fiery XJ Scan software.
- Use 39 resident fonts. The customer can download additional PostScript Type 1 or Type 3 fonts, as needed.

The Fiery XJ80e enables the customer to use an A166/A187/A189 color copier as a printer and scanner. Users can print to the copier/printer from networked Apple Macintosh computers, from networked IBM PC or compatible computers running Microsoft® Windows® 3.1x, Windows NT or Windows 95, and from networked UNIX workstations running TCP/IP. In addition, the Fiery XJ80e parallel port can be used to print directly from a PC.

The custom-designed Fiery XJ80e board and operating software are responsible for efficient image processing and printing controls. The main functions of Fiery XJ80e components and software follow.

The Fiery XJ80e board includes a MIPS R4700 RISC (Reduced Instruction Set Computer) CPU with a built-in floating point accelerator that runs Adobe's PostScript Interpreter. This software interprets the PostScript page description file to produce the image pattern in memory. The RipChips™ on the board control data management and other system functions, freeing up the CPU for efficient image data processing.

High-speed SIMMs (single in-line memory modules) on the Fiery XJ80e board hold the color image data during printing. SIMM configurations include 32MB and 64MB.

Image data is sent from the video connector (through the CIVIC cable) to the EXU board. The raster data is supplied to the laser in the copier at full copier rated speeds in order to charge the drum and render the final image on paper.

When Fiery XJ Scan software uses the copier as a scanner, the Fiery XJ80e acquires RGB (red, green, and blue) image data from the copier, stores it in memory, and transmits it to the computer that requested the scan.

Kit contents

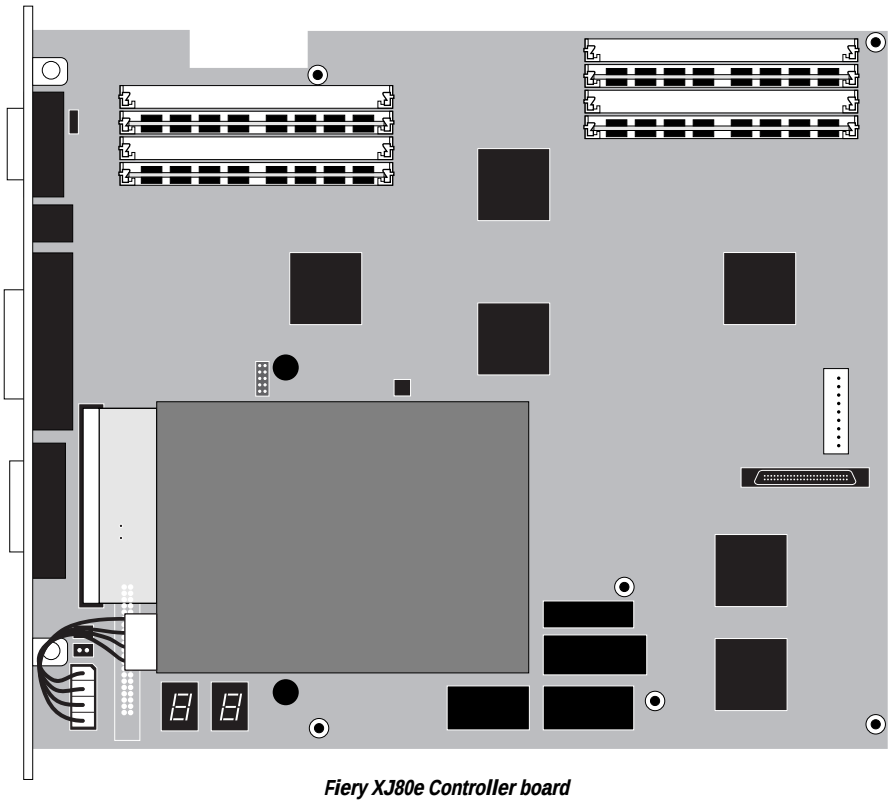
The Fiery XJ80e Controller kit and the Controller Interface Type D kit contain the following:

Fiery XJ80e Controller kit

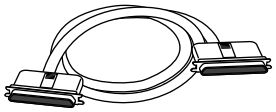
- Fiery XJ80e board (includes 6 screws, 6 washers, and 6 standoffs)
- Parallel cable
- AUI-to-BNC transceiver
- 5 screws used to attach the faceplate to the copier
- Fiery driven/Adobe logo decal
- User software CD and floppy disks
- EMI shield kit (not provided in some kits)
- Documentation, including *Getting Started*, *User Guide*, *Administrator Guide*, *Release Notes*, and installation notes
- ESD grounding wrist strap

Controller Interface Type D kit

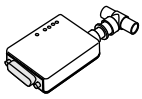
- EXU board (includes 5 screws for mounting)
- 3 EXU brackets
- 1 large EXU bracket (for A189 copiers only)
- Power Supply (includes 6 screws for mounting)
- Fan
- Cables, including Copier power (AC), Fiery XJ80e power (DC), EXU/SCU SCSI, and CIVIC
- Connector plate
- PRN ROM
- Pre-transfer lamp (PTL)
- A189 EXU shield
- A166/A187 EXU shield
- 4 clamps
- Keytop buttons (7 small buttons and 1 large button-for A166/A187 copiers)
- Keytop decals (for A166/A187 copiers)



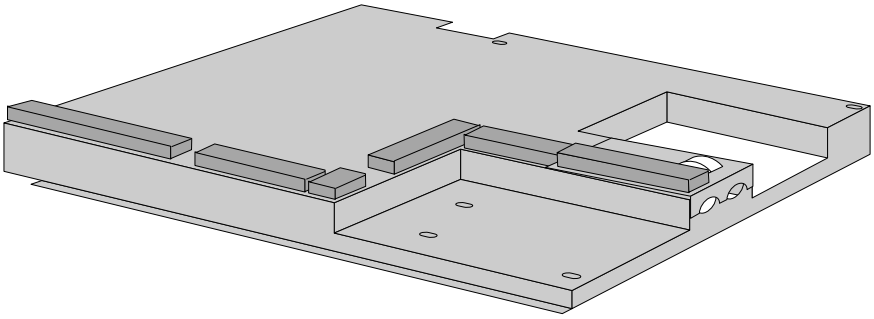
Fiery XJ80e Controller board



Parallel Cable



AUI-to-BNC transceiver

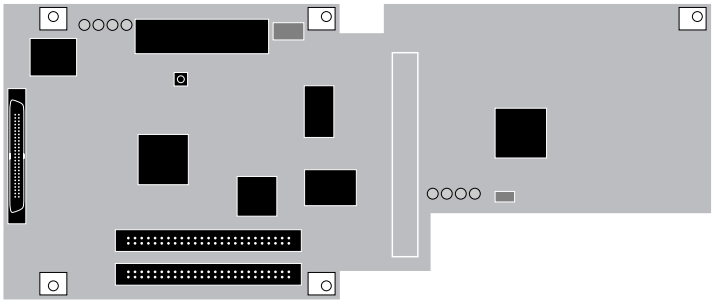


Fiery XJ80e EMI shield (not included in some kits)

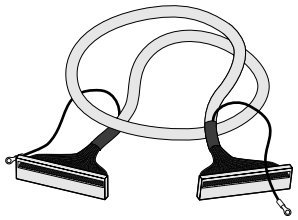
The EMI shield is required in 220V, 230V, and 240V copiers only. See the separate instructions for installation information.

Note: The kit also contains a package with the documentation, CD, floppy disks, logo decal and mounting hardware (not shown).

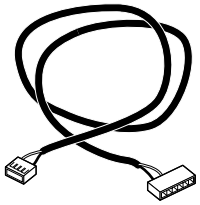
Figure 1-1 Fiery XJ80e Controller kit contents



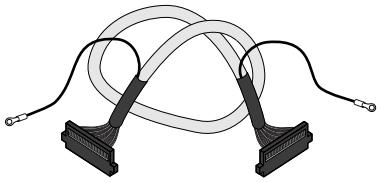
EXU board



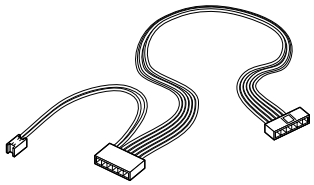
EXU/SCU SCSI cable
(some cables have only one grounding wire)



Copier power cable
(some cables include a grounding wire)

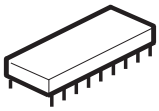


CIVIC cable
(some cables have only one grounding wire)

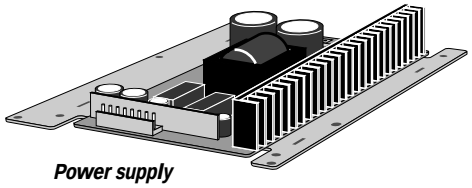


Fiery XJ80e power cable

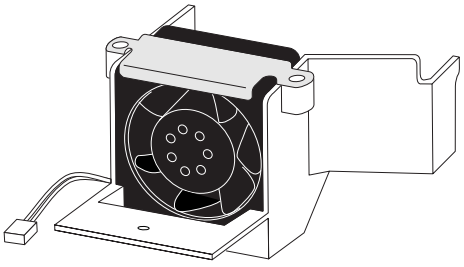
Clamps



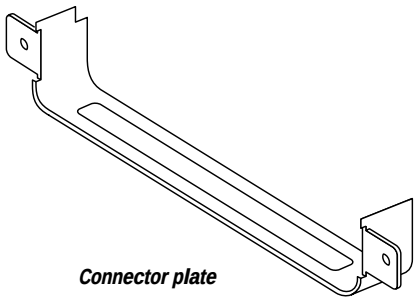
PRN ROM



Power supply

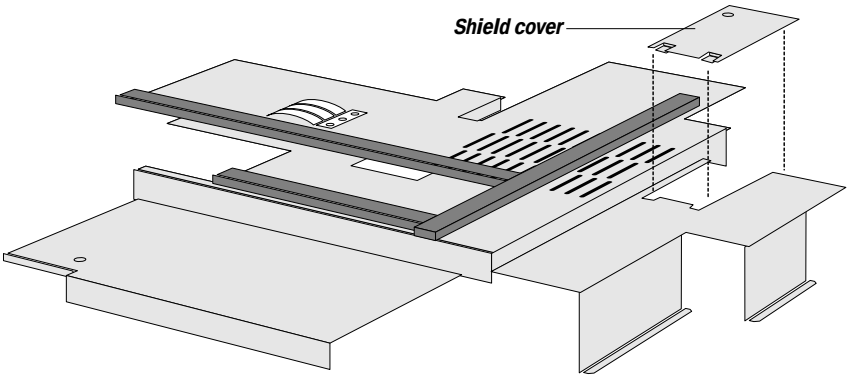


Fan



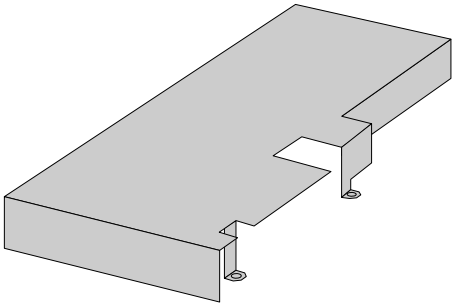
Connector plate

Figure 1-2 Controller Interface Type D kit contents



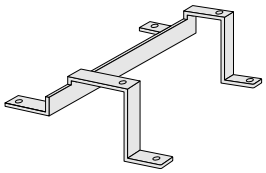
A189 EXU shield

The A189 EXU shield is required in 220V, 230V, and 240V copiers only. See the separate instructions for installation information.

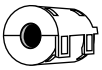


A166/A187 EXU shield

The A166/A187 EXU shield is required in 220V, 230V, and 240V copiers only. See the separate instructions for installation information.

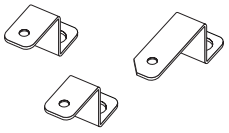


EXU bracket (for A189 copiers only)

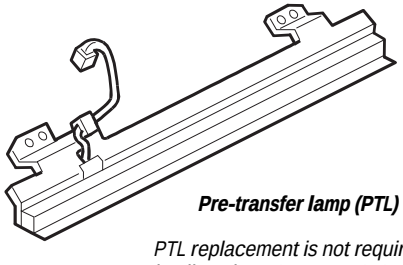


Ferrite core (A189 installations)

The ferrite core is required in 220V, 230V, and 240V copiers only. See the separate instructions for installation information.



EXU brackets



Pre-transfer lamp (PTL)

PTL replacement is not required in all copiers. See page 2–27 and page 3–28.

Note: The kit also contains mounting hardware, Operation Panel keys and decals for A166/A187 copiers (not shown).

Figure 1-3 Controller Interface Type D kit contents (continued)

Tools needed

To install the Fiery XJ80e Controller kit and the Interface kit, you need #0 and #1 (stubby) Phillips head screwdrivers and a wrench.

Overview of installation

A166/A187copiers

- Shut down the copier
- Remove copier covers and screws
- Remove the Operation Panel
- Unpack the Interface kit
- Replace the switch cover in the rear cover with the connector plate
- Install PRN ROM
- Install the power supply
- Install the fan
- Install the EXU board
- Unpack the Fiery XJ80e Controller kit and install the Fiery XJ80e board
- Connect cables from the Interface kit
- Verify installation
- Reassemble the copier
- Replace the PTL (not required in some units)
- Install Operation Panel keys and decals
- Start the copier and print a test page

A189 copiers

- Shut down the copier
- Remove copier covers and screws
- Remove the Operation Panel
- Unpack the Fiery XJ80e Controller kit and install the Fiery XJ80e board
- Unpack the Interface kit
- Replace the switch cover in the rear cover with the connector plate
- Install PRN ROM
- Install the power supply
- Install the fan
- Install the EXU board
- Connect cables from the Interface kit
- Verify installation
- Reassemble the copier
- Replace the PTL (not required in some units)
- Start the copier and print a test page

Chapter 2: A166/A187 Installation

This chapter describes the process for installing the Controller Interface Type D kit and the Fiery XJ80e Controller kit in the following copiers:

Copier	Basic Manual Duplex (A166) Product Name	Basic Auto Duplex (A187) Product Name
Ricoh	Aficio Color 2003	Aficio Color 2103
Gestetner	Gestetner 2703 nashuatec C503 RexRotary CC8403	Gestetner 2703d nashuatec C503d RexRotary CC8403D
infotec	7212Z	7212DZ
Savin	SDC103	SDC103A
Lanier	5603DC (AG)	5603DC (AD AG)

Preparing for installation

Before you install the contents of the Interface and Fiery XJ80e Controller kits, make sure the Operation mode setting for Auto Reset is on, shut down the copier, and remove the copier covers to access the copier's printer control box (PRN box).

To test functionality and set copier modes

1. ***Make sure that the copier is not in use.***
2. ***Test copier functionality before installing the kits.***

   Copy the copier color test page before you install any components in the copier. If the copied image indicates that the copier needs adjustment, inform the customer. After getting approval, complete the copier service needed. Make a new copy of the test page and continue with the next step.
3. ***Make sure the Operation Mode setting for* Auto Reset *is On.***

   This allows control of the Operation Panel to be transferred to the Fiery XJ80e.

To turn off the copier

1. ***Turn off the copier using the power switch on the side of the copier.***
2. ***Disconnect the power cable from the wall outlet.***

Accessing the A166/A187 PRN box

To install the components in this kit, you need to remove the following parts to access the PRN box (printer control box):

- Rear cover
- Scanner unit screws on the back of the copier
- Upper covers (includes right and left upper brackets, front upper cover, upper left cover) and the right rear cover
- Operation Panel

Note: If the ARDF (automatic reverse document feeder) unit is installed, remove it before removing any covers or panels. Refer to the Copier Service documentation for more information.

To remove the rear copier cover and scanner unit screws

1. ***Make sure you have shut down the copier and disconnected any cables.***
2. ***Remove three of the screws that secure the rear copier cover.***
3. ***While supporting the cover, remove the fourth screw.***
4. ***Gently slide the rear cover off the copier.***

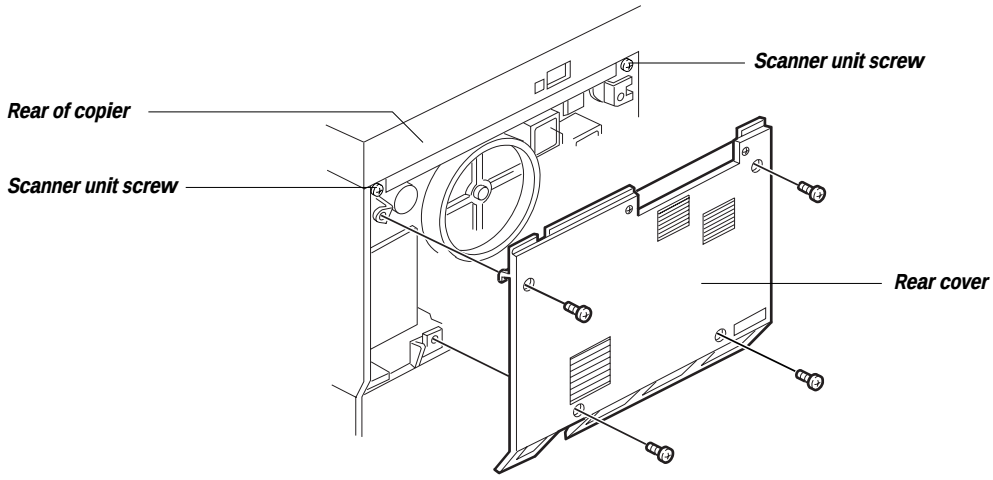


Figure 2-1 Removing the rear cover and scanner unit screws

5. ***While you are at the rear of the copier, remove the two screws that attach the scanner unit to the copier (see Figure 2-1).***

   Note: Serious damage can result from leaving these screws installed; make sure they are removed before lifting up the scanner unit.

To remove covers

Refer to Figure 2-2 when performing the following procedure.

1. ***Remove the screws that attach the upper right and upper left brackets to the copier.***

   Gently angle the bracket to the side in order to remove it.

2. ***Loosen the two screws on the top of the upper front cover.***
3. ***Open the front door on the copier, and then remove the upper front cover.***
4. ***Remove the two screws that attach the upper left cover to the copier.***
5. ***Remove the two screws that attach the right rear cover to the copier.***

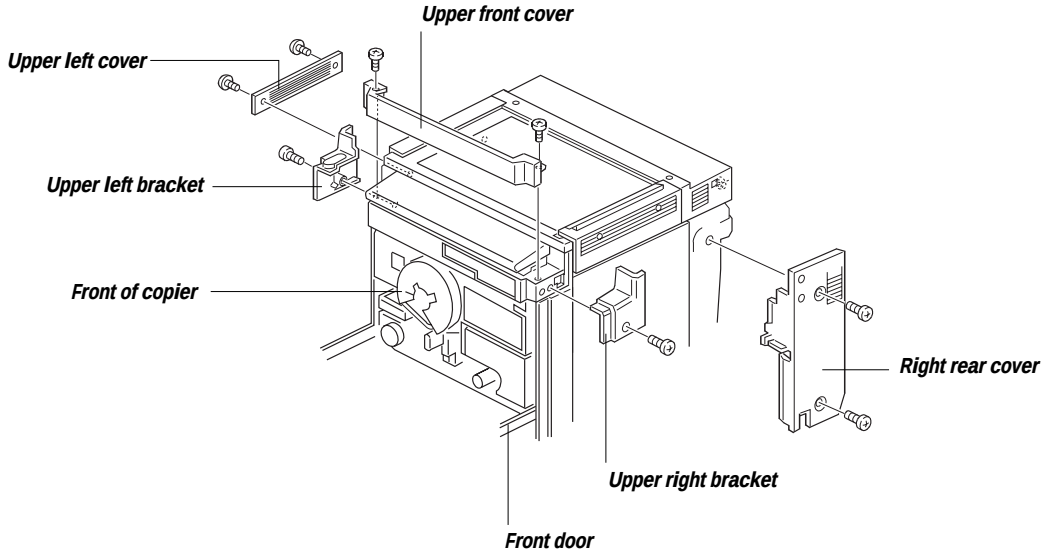


Figure 2-2 Removing the covers on the copier

To remove the Operation Panel

Once all the necessary covers are removed, you can access the screws that secure the Operation Panel to the copier. You should completely remove the Operation Panel before you lift up the scanner unit. Refer to Figure 2-3 when performing the following procedure.

1. ***Remove the two Operation Panel screws on the right and left side of the copier (where the upper left and right brackets were installed).***

   These two screws attach the Operation Panel to the copier.

2. ***Loosen the two screws on the front of the Operation Panel.***

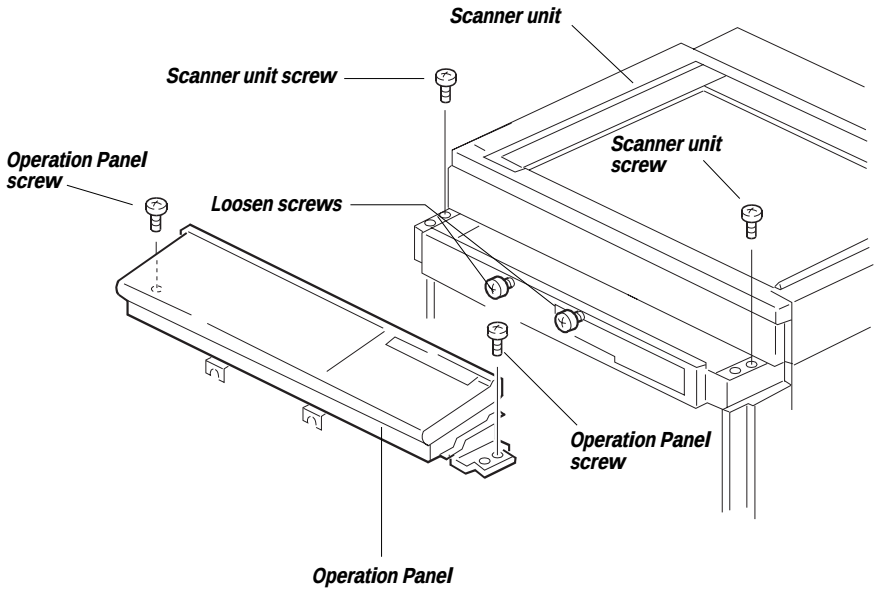


Figure 2-3 Removing Operation Panel and scanner unit screws

3. ***Gently slide the Operation Panel off the copier and place it on the scanner unit so that the bottom is facing up.***
4. ***Remove the SCSI cable that attaches to the SCSI connector on the SCU board.***

   You need to install the SCSI cable on the EXU board later.

5. ***Gently move the Operation Panel out of the way, and remove the two screws that secure the scanner unit to the copier.***

6. Lift the scanner unit and prop it up with the stopper bar (see Figure 2-4).

You can now access the PRN box to install the Controller Interface Type D and Fiery XJ80e Controller kits.

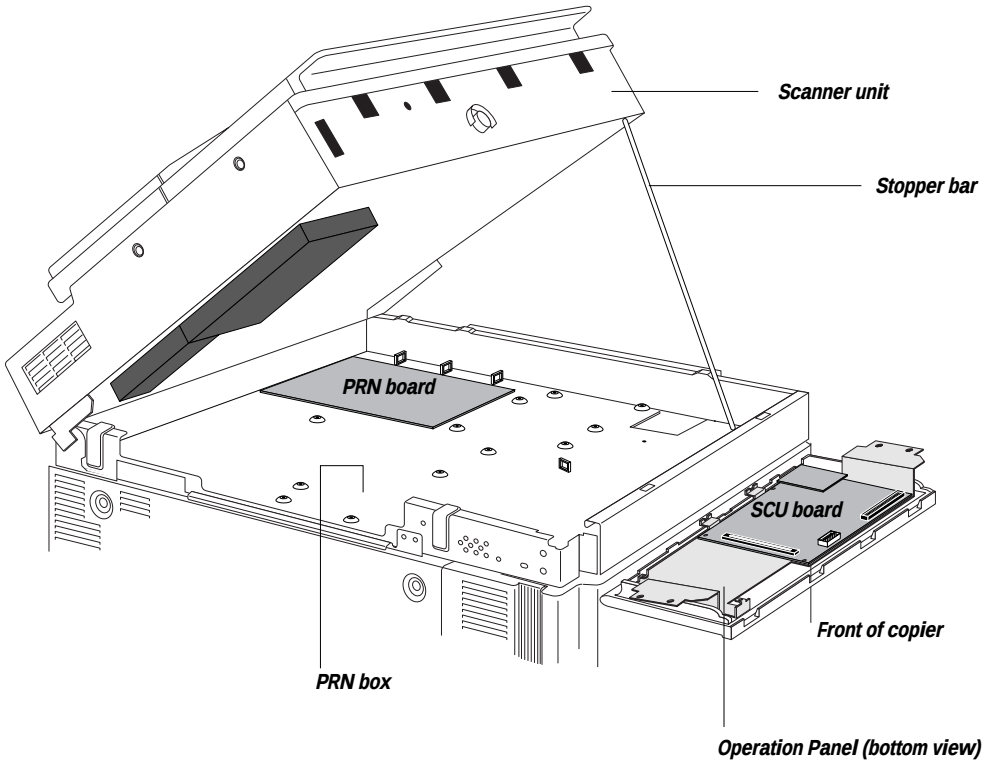


Figure 2-4 Accessing the PRN box

Installing the Interface kit

The procedures in this section describe installing the following Controller Interface Type D kit components:

- Connector plate on rear cover
- PRN ROM
- Power supply
- Fan
- EXU board and brackets

Note: Set all the cables, PTL, keytops, and Operation Panel decals aside; you will install those later.

Follow standard ESD (electrostatic discharge) precautions while handling components.

To install the connector plate

1. ***With the rear cover removed from the copier, gently pry out the black rivets that attach the switch cover to the rear cover.***

   Set the switch cover aside.

2. ***Place the connector plate in the empty slot on the inside of the rear cover (see Figure 2-5 on page 2-7).***

   Make sure the holes in the connector plate line up with the holes in the rear cover.

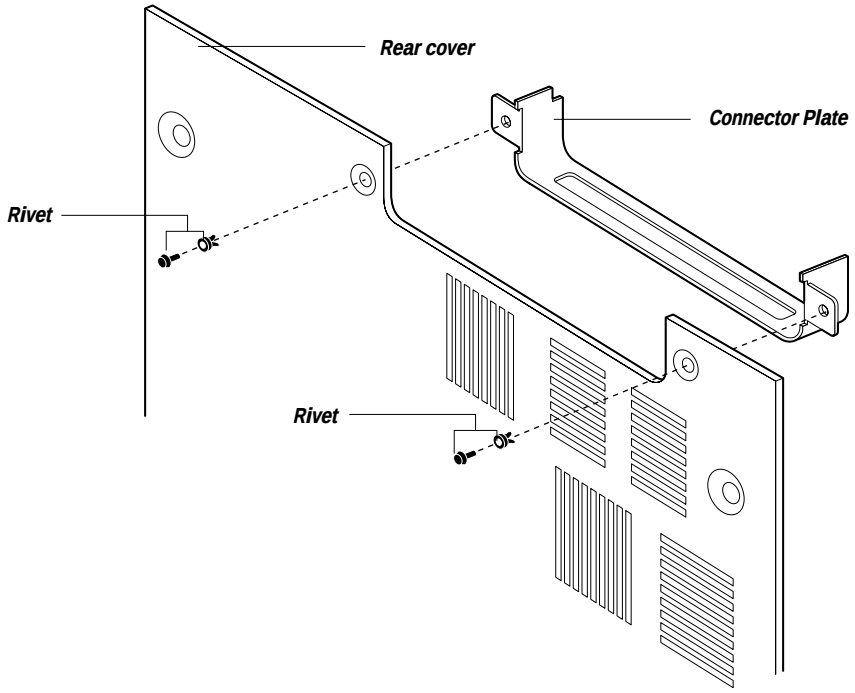


Figure 2-5 Installing the connector plate in the rear cover

3. ***Insert the black rivets into the connector plate to secure it to the rear cover as shown in Figure 2-5.***
4. ***Set the rear cover aside; you will reinstall it on the back of the copier later in "Reassembling the copier" on page 2-24.***

To install the PRN ROM

In this procedure you will remove the ROM in socket IC238 on the PRN board and replace it with the PRN ROM provided in this kit. Note that if the version of the PRN ROM installed on the board is more recent than the version in the kit, you do not need to replace the PRN ROM.

1. ***Unpack the PRN ROM.***

   Take ESD precautions and be very careful when handling the ROM.

2. ***Remove the ROM installed in socket IC238 on the PRN board and replace it with the new PRN ROM.***

   Make sure the notch in the chip is aligned with the notch in the socket. Also, make sure you carefully align the pins in the chip with the holes in the socket. If you notice any bent pins, straighten them gently with a pair of needlenose pliers.

To install the power supply

1. ***Unpack the power supply and the six mounting screws.***
2. ***Before you install the power supply, move the voltage selection cable to the correct connector for the customer's voltage requirements (connector CN5 for 230V or connector CN4 for 115V).***

   The power supply is shipped with the voltage selection cable installed on CN5 for 230V. If 115V is required, be sure to move the cable to the 115V connector. See Figure 2-6.

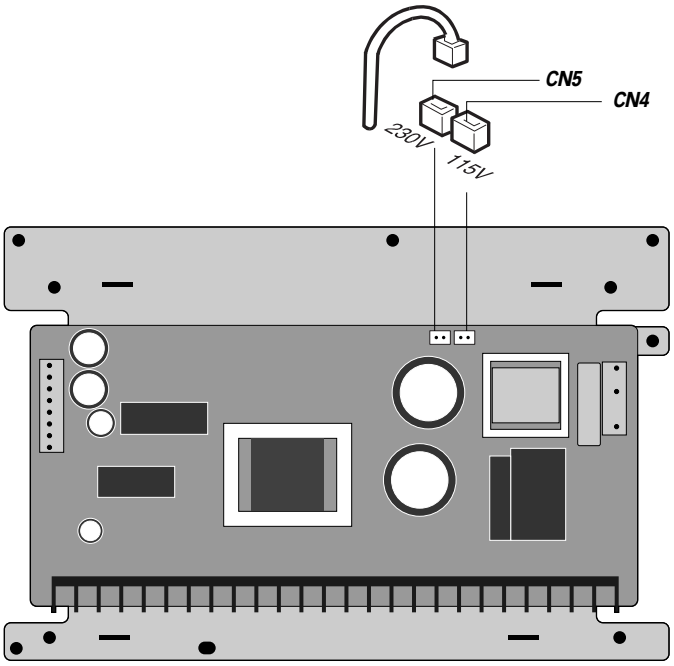


Figure 2-6 Power supply voltage selection (top view)

3. Place the power supply on the mounting holes at the base of the PRN box (see Figure 2-7 on page 2-9).

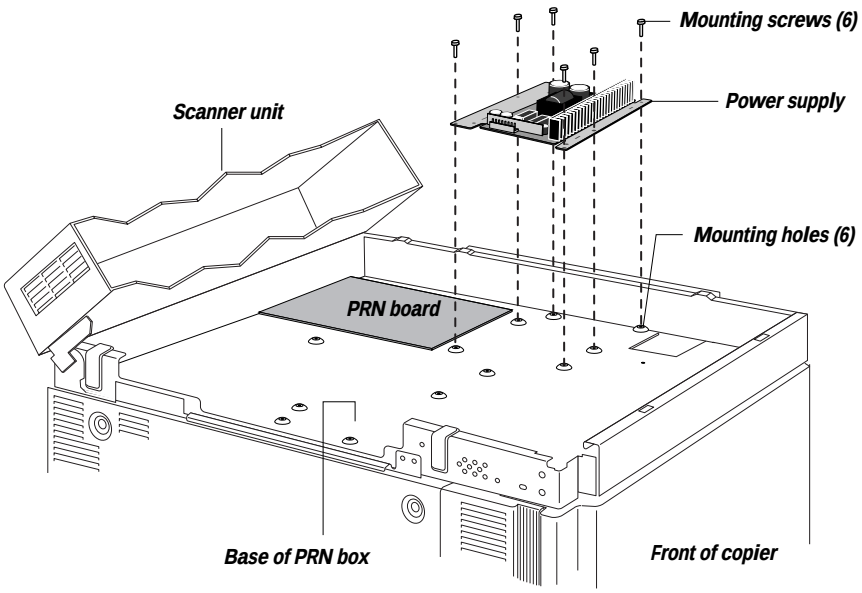


Figure 2-7 Installing the power supply

4. Secure the power supply to the base of the PRN box using the six mounting screws.

To install the fan

1. ***Unpack the fan.***
2. ***Remove the screw that attaches the metal cover plate to the base of the PRN box. The metal cover plate is located next to the stopper bar that holds up the scanner unit.***

   Retain the screw as you need it to secure the fan to the base of the PRN box.
3. ***With the fan label facing the edge of the copier, angle the fan so that the bottom of it rests in the slot (see Figure 2-8).***

   Gently move any cables out of the way so you can easily access the fan slot.

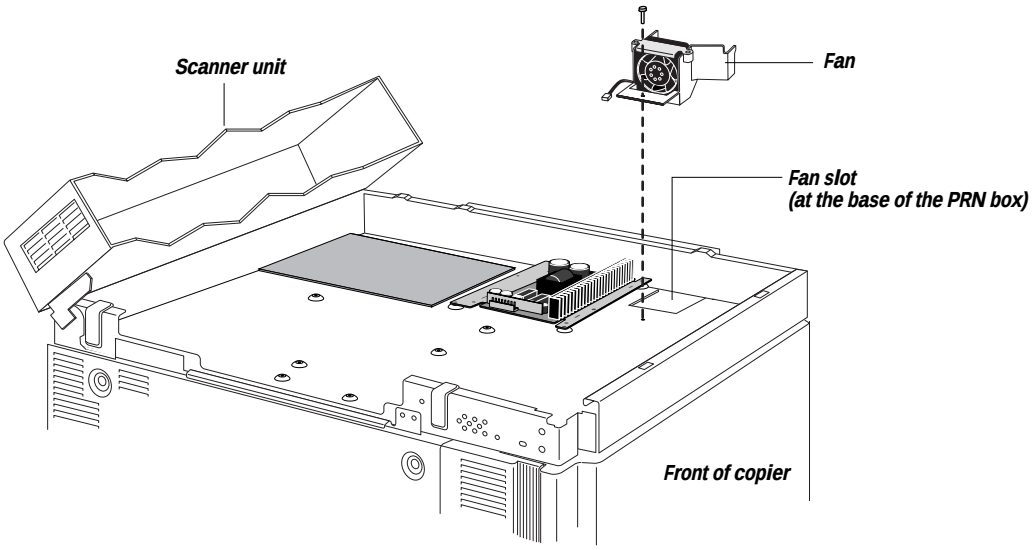


Figure 2-8 Installing the fan

4. ***Using the screw you removed from the metal cover plate, secure the fan to the base of the PRN box.***

   Make sure the fan wire is facing the inside of the PRN box. You will connect the fan wire to a cable connector from the power supply in “Installing interface and Fiery XJ80e kit cables” on page 2-19.

To install the EXU board

The EXU board is installed on the SCU board in the Operation Panel.

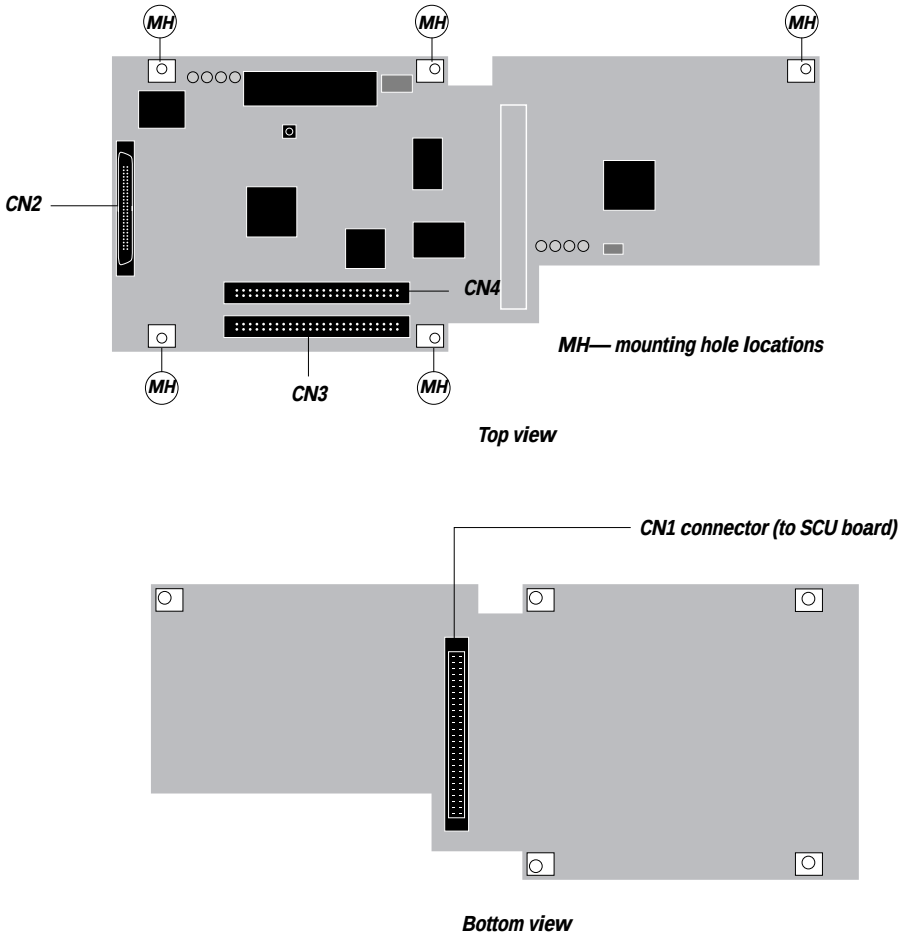


Figure 2-9 EXU board (top and bottom view)

1. ***Make sure the bottom of the Operation Panel is facing up so you can access the SCU board.***
2. ***Remove three of the mounting screws that secure the SCU board to the Operation Panel (see Figure 2-10 on page 2-12).***

   Retain the mounting screws from the SCU board as you need to replace them when the mounting brackets are installed.

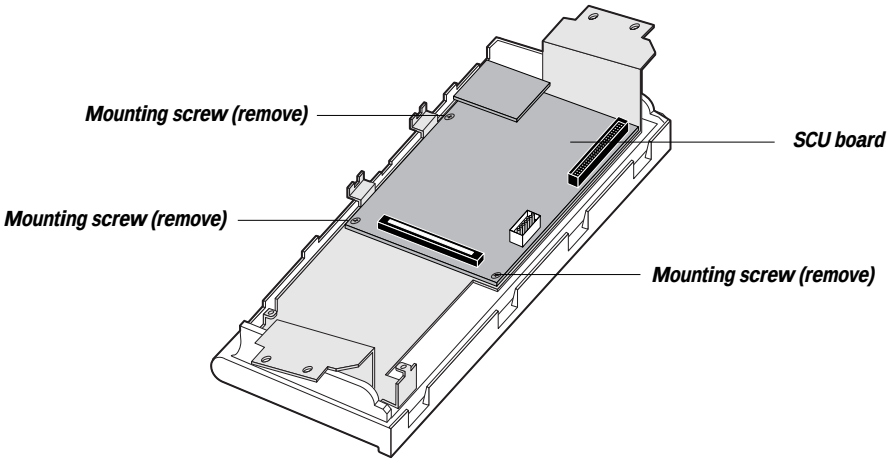


Figure 2-10 Removing SCU board mounting screws

3. ***Place the long mounting bracket as indicated in Figure 2-11 on page 2-13.***

   This kit contains two short brackets and one long bracket that must be installed as indicated in Figure 2-11.
4. ***Secure the mounting bracket to the SCU board using one of the screws you removed from the SCU board.***

   Do not tighten the screw completely. You may need to adjust the bracket slightly in order to correctly line it up with the mounting holes on the EXU board.
5. ***Repeat step 3 and step 4 to secure the two remaining short mounting brackets to the SCU board.***
6. ***Plug connector CN1 on the EXU board into connector CN351 on the SCU board.***

   Connector CN1 on the EXU board is on the bottom of the board.
7. ***Insert the five screws (M3x5 Phillips pan-head) into the five mounting holes on the EXU board (see Figure 2-11 on page 2-13).***

   Line up the mounting holes in the brackets with the mounting holes in the EXU board.

8. Tighten the rest of the screws in order to secure the EXU board to the SCU board.

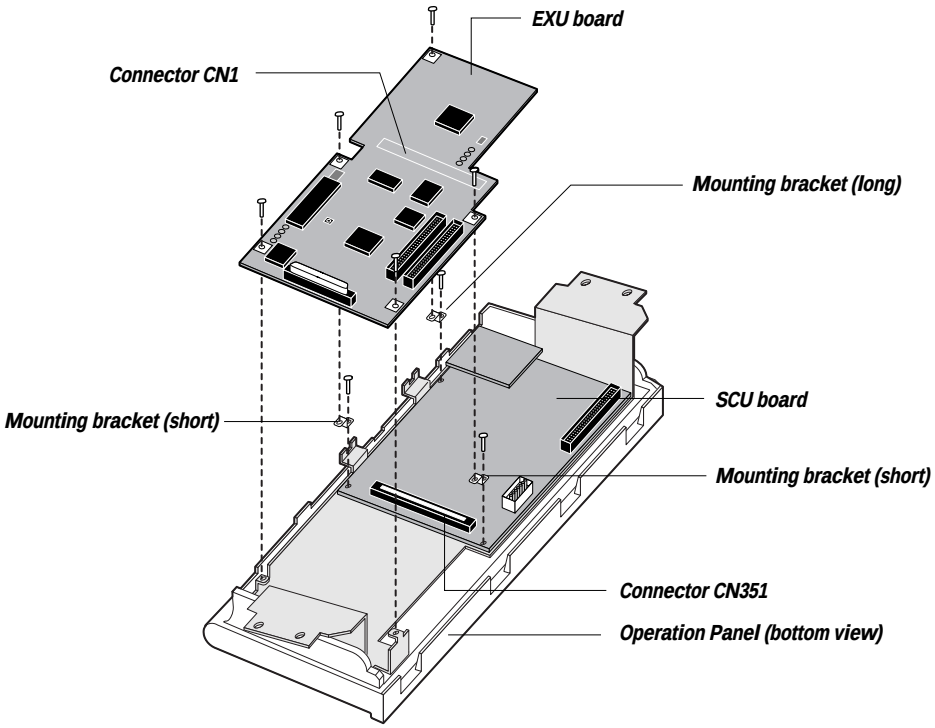


Figure 2-11 Installing the EXU and brackets

9. Set the rest of the Interface kit contents aside. You will install those items later.

Installing the Fiery XJ80e

After the contents of the Controller Interface Type D kit are installed, you need to install the Fiery XJ80e board in the copier.

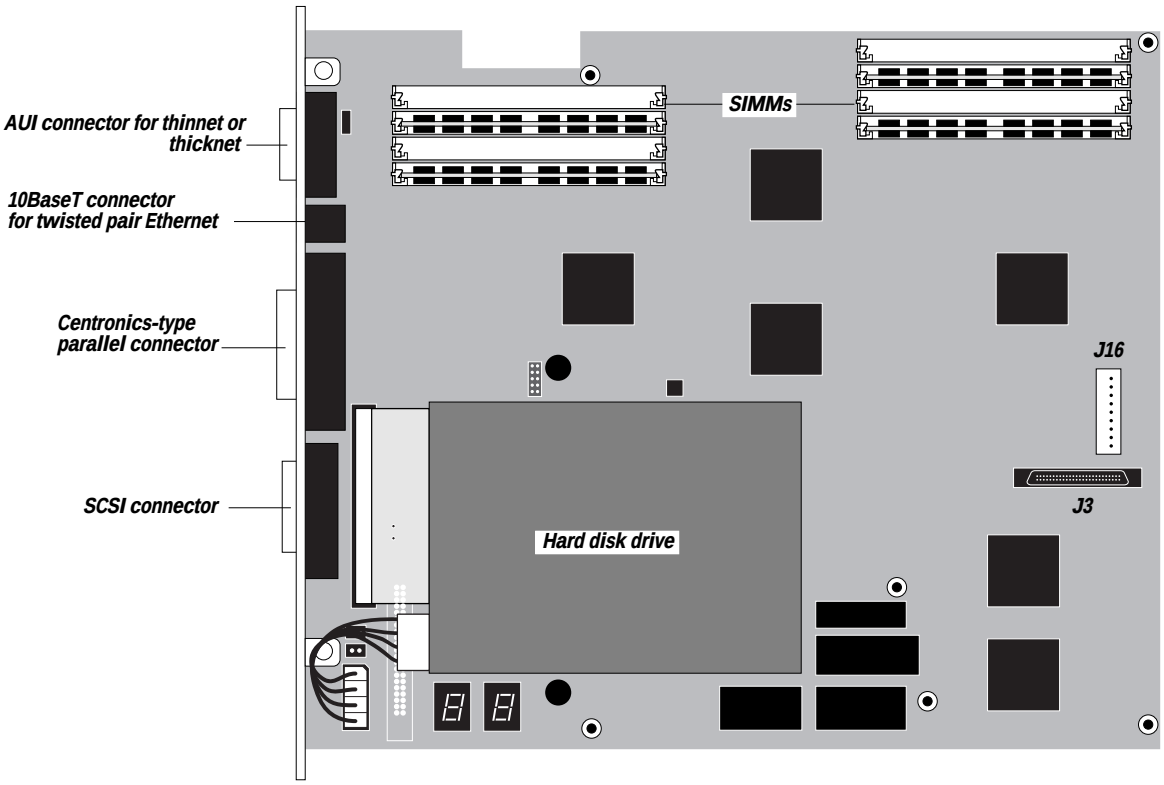


Figure 2-12 Fiery XJ80e controller board

Upgrading the memory configuration

If additional memory is needed, install it on the Fiery XJ80e board before you install the Fiery XJ80e board in the copier.

Memory is located in the eight sockets at the top of the Fiery XJ80e board and is divided into two banks: bank 0 (J6-J9) and bank 1 (J10-J13).

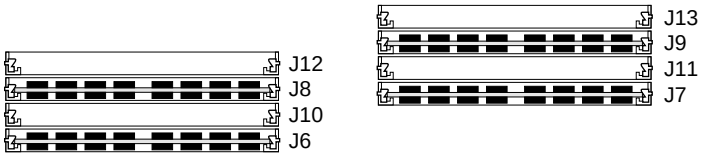


Figure 2-13 Fiery XJ80e SIMM banks (32MB)

Note: Fiery XJ80e SIMMs are *not* interchangeable with off-the-shelf SIMMs.

The following table gives an overview of the different configurations for each bank of memory on the Fiery XJ80e board.

Fiery XJ80e configurations	Bank 0				Bank 1			
	J6	J7	J8	J9	J10	J11	J12	J13
32MB	8MB	8MB	8MB	8MB	empty	empty	empty	empty
64MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB

Make sure you attach the ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before handling the SIMMs.

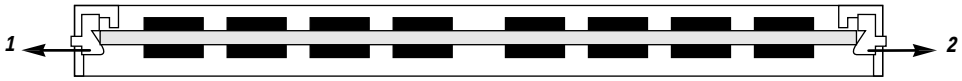
To upgrade the SIMM configuration

The following steps describe the procedure for upgrading the Fiery XJ80e board with 32MB to 64MB of memory. If the board does not require a memory upgrade, continue with "To install the Fiery XJ80e board" on page 2-17.

1. ***Unpack the SIMMs (four 8MB SIMMs total).***
2. ***Remove the SIMMs in bank 0 (J6-J9).***

   In order to install the additional SIMMs, first you need to remove the SIMMs that are already installed. These SIMMs are reinstalled later.

   To release a SIMM, push outward on the spring clips (see arrows **1** and **2** in the figure below). Pull the SIMM toward you and slide it out of the socket at a 45-degree angle.

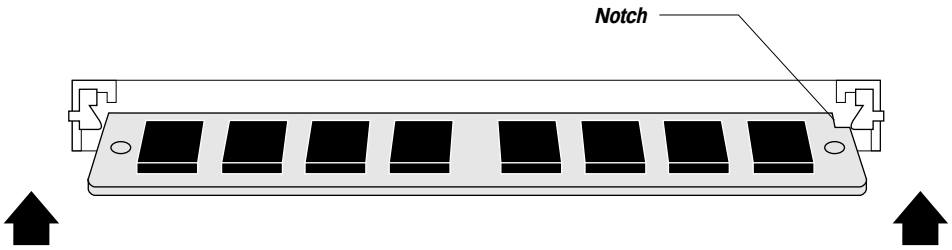


3. ***First insert the additional SIMMs, and then insert the SIMMs you removed from bank 0.***

   Make sure you start at the top of each SIMM bank (J12 and J13) and work your way toward the bottom.

   To insert the SIMM, slide it into the socket at a 45-degree downward angle and push it up, or away from you, to lock it in place. Make sure that the spring clips close securely around the ends of the SIMM and that each strip is fully seated in its slot.

   Note that SIMMs fit into the socket in only one way. The index notch at one end of each SIMM (near pin 1) fits in the right side of the socket.



To install the Fiery XJ80e board

Note: If the EMI shield is included, see the separate installation instructions for information on installing it along with the Fiery XJ80e board.

1. ***Unpack the Fiery XJ80e Controller kit (for a list of contents, see "Kit contents" on page 1-2).***
2. ***Remove the four screws on the back of the copier that attach the grounding plate to the PRN box.***

   This is required for 220V, 230V, and 240V machines only.

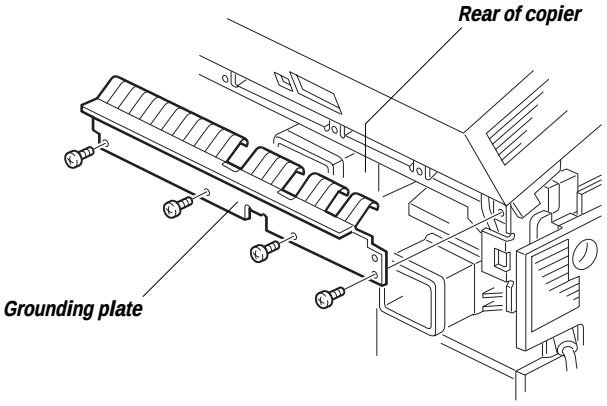


Figure 2-14 Removing the grounding plate

3. ***Install the six standoffs with washers in the mounting holes on the base of the PRN box (see Figure 2-15).***

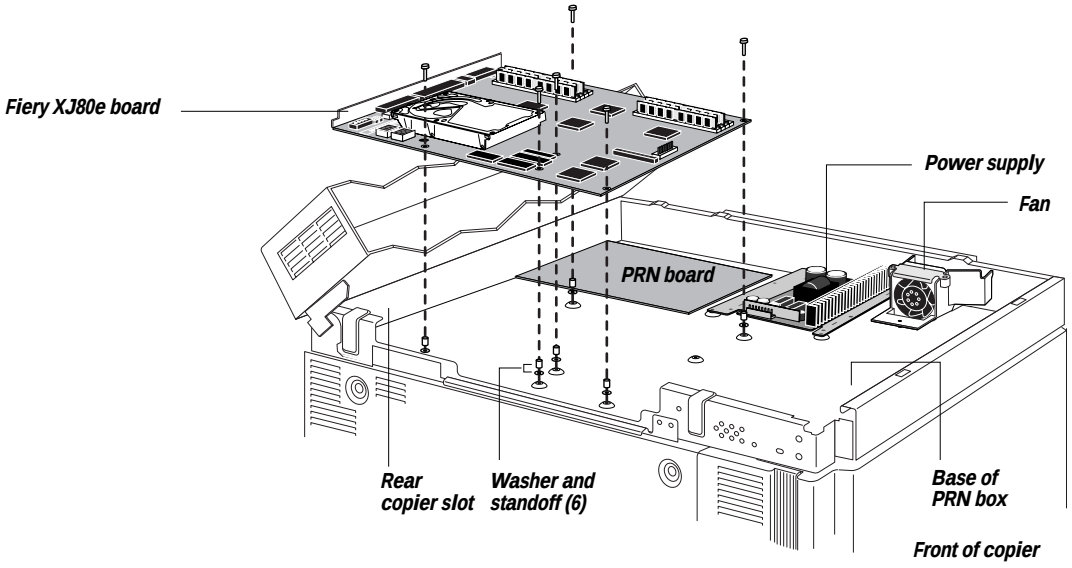


Figure 2-15 Installing Fiery XJ80e board

4. ***Place the Fiery XJ80e board on top of the standoffs so that the faceplate on the board fits in the rear slot of the copier.***

   You may need to slide the board toward the left side of the copier to fit the faceplate in the rear slot of the copier. The faceplate should rest on the outside edge of the copier.

   Make sure the mounting holes in the board line up with the standoffs installed in the base of the PRN box.

5. ***Access the rear of the copier and insert the five screws that secure the faceplate to the copier (see Figure 2-16).***

   The two center screw holes are covered. For newer models, you need to break the seal covering two of the screw holes to insert the screws. These screws are not required in some copiers.

Arrows indicate screw placement.

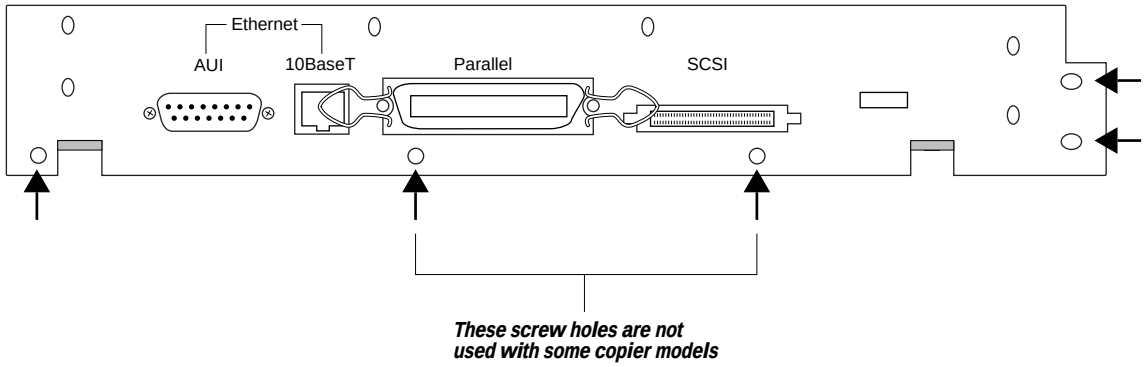


Figure 2-16 Installing screws in the faceplate

6. ***Insert the six screws into the screw holes on top of the Fiery XJ80e board to secure it (see Figure 2-15 on page 2-17).***

   If you are installing the Fiery XJ80e EMI shield, you need to install standoffs on top of the Fiery XJ80e board instead of the screws. See the separate Fiery XJ80e EMI shield installation instructions for information on installing the shield along with the Fiery XJ80e board.

Installing interface and Fiery XJ80e kit cables

In this procedure you will connect the following cables:

- Copier power (AC) cable
- Fiery XJ80e power (DC) cable (includes fan power)
- EXU/SCU SCSI cable (50-pin)
- PRN SCSI cable (attached to the PRN board)
- CIVIC cable (52-pin)

To install cables

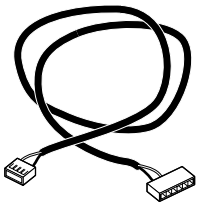
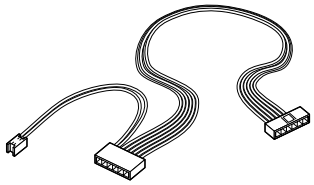
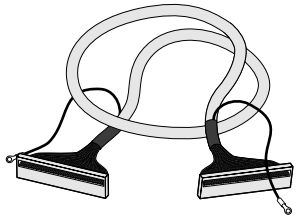
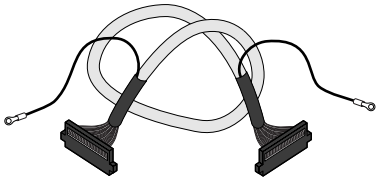
1. ***Unpack the two power cables, the EXU/SCSI cable, and the CIVIC cable.***
2. ***Remove the 4-pin connector cover on the copier power connector in the base of the PRN box.***

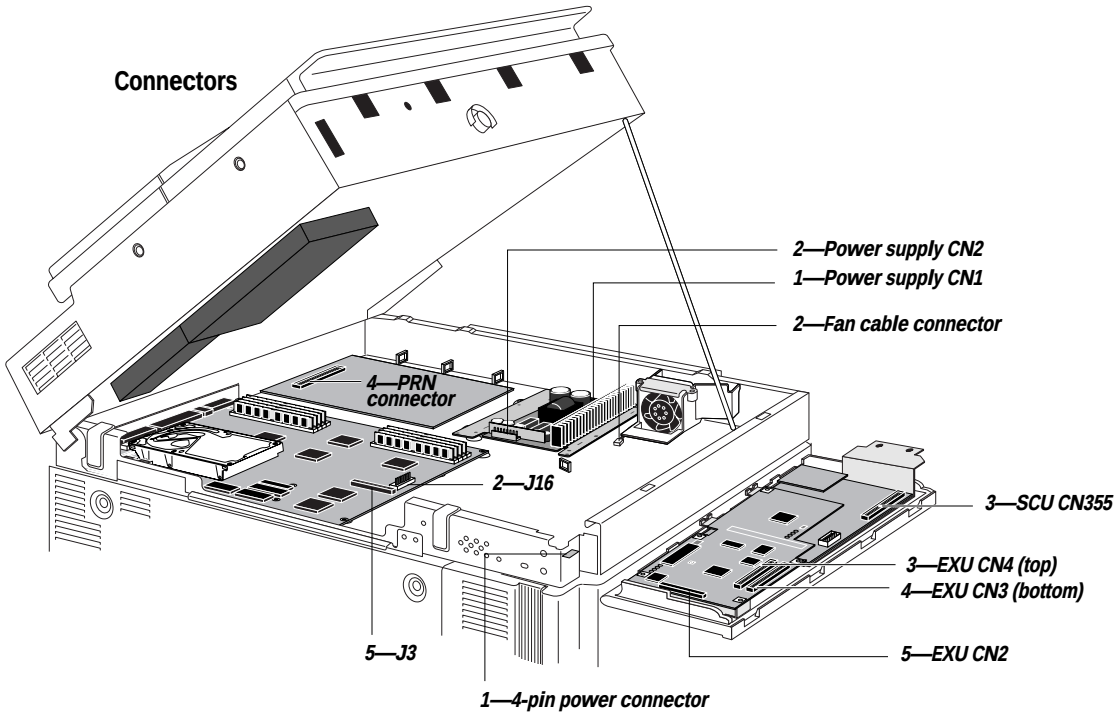
   The copier power connector is located in the base of the PRN box in the front left corner of the copier.
3. ***Install the 4 clamps into the holes at the front of the PRN box (see Figure 2-17 on page 2-21).***
4. ***Connect the cables as detailed in the following table and Figure 2-17 on page 2-21.***

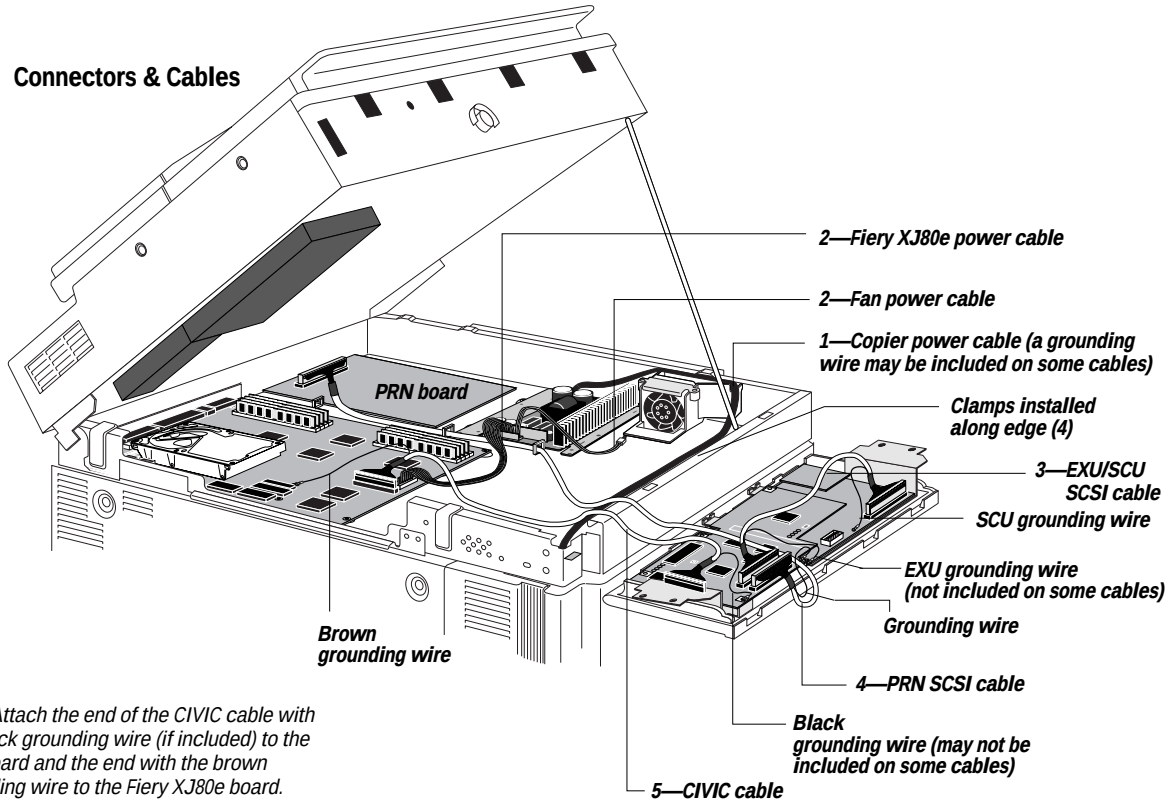
   Route any loose cables through the cable clamps on the base of the PRN box.

   Attach any grounding wires from the EXU/SCU SCSI cable, CIVIC cable, and the Copier power cable to the nearest grounding point as indicated in Figure 2-17 on page 2-21. You may need to remove mounting screws in order to attach the grounding wires. Grounding wires should not come in contact with any other components.

Note: 220V, 230V, and 240V copiers require that you install the EXU shield over the EXU board after you install the cables. For EXU shield installation information, see the separate EMI shield document.

Cable	From	To
1—Copier Power (AC) 	Power supply CN1 connector ***Note:*** Some cables may have a grounding wire included.	4-pin power connector at the front of the PRN box ***Note:*** You need to remove the connector cover before you connect the copier power cable.
2—Fiery XJ80e Power (DC) 	Power supply CN2 connector	Fiery XJ80e board connector J16 Fan cable connector (2-pin connector)
3—EXU/SCU SCSI 	EXU board CN4 (top) connector	SCU board CN355 connector ***Note:*** Some cables have only one grounding wire. Connect the end with the grounding wire to the SCU board.
4—PRN SCSI	PRN connector (already connected)	EXU board CN3 (bottom) connector
5—CIVIC 	EXU board CN2 connector ***Note:*** This cable has a brown and black grounding wire. Make sure you attach the end of the cable with the black grounding wire (if included) to the EXU board and the end with the brown grounding wire to the Fiery XJ80e board. Each connector is labeled with the correct mounting location.	Fiery XJ80e board J3 connector





Note: *Attach the end of the CIVIC cable with the black grounding wire (if included) to the EXU board and the end with the brown grounding wire to the Fiery XJ80e board.*

Figure 2-17 Cable connections and ground points

Completing installation

To complete the installation, you need to do the following:

- Run Fiery XJ80e Start-up diagnostics to verify installation
- Replace copier covers
- Replace the Pre-transfer lamp (PTL)—some copiers do not require PTL replacement.
- Install Operation Panel keytops and decals
- Start the copier and print a Test Page

Note: Give the user software and documentation to the customer or the network administrator. Let them know that in order to take full advantage of the Fiery XJ80e, the user software must be installed on computers that will print to the Fiery XJ80e.

Verifying installation

To eliminate any possible connection errors that may have occurred during installation, turn on the copier and allow the Fiery XJ80e to complete the initial startup sequence before reassembling the copier. See the following procedure for information on how to check Fiery XJ80e and Interface kit installation.

To verify interface and Fiery XJ80e kit installation

1. ***Plug the power cable into the copier and a wall outlet.***

   Leave the scanner unit open so you can view printer components.

   Do not touch the electrical components inside the copier once the power cable is plugged into the wall outlet. Touching electrical components while the copier is plugged in can cause electrical shock.

2. ***Turn on the copier and watch the Operation Panel and 7-segment LED display on the Fiery XJ80e board.***

   Test numbers are quickly displayed on the Fiery XJ80e board 7-segment LEDs. If any of the tests fail, the red LED (D4) remains on at the end of the tests. Check the Operation Panel or the 7-segment LED display for the error number of the failed test. See “Fiery XJ80e diagnostics” on page 6-11 for more information. If the diagnostic tests run slowly or do not run at all, turn off the copier and check each SIMM for secure insertion in its slot. Also check cable connections to the Fiery XJ80e board.

3. ***Once you confirm that all the Start-up diagnostics pass, turn off the copier and gently close the scanner unit.***

   You need to close the scanner unit in order to run a complete startup sequence.

4. ***Turn on the copier and allow the system to proceed through startup without interruption.***

   After the copier ready light goes on, the Printer/Scanner light flashes. If the Printer/Scanner light does not flash during the startup sequence, the most likely cause is a faulty cable connection (see “General Fiery XJ80e system error conditions” on page 6-18). Also make sure the copier Operation Mode setting for Auto Reset is on.

5. ***If the copier Ready light is on, the Printer/Scanner light flashes, and the Fiery XJ80e reaches the Select Language screen, turn off the copier and continue with “Reassembling the copier” on page 2-24.***

Reassembling the copier

Replace the following covers and panels to reassemble the copier:

- Rear cover
- Scanner unit screws on the back of the copier
- Operation Panel
- Upper covers (includes right and left upper brackets, front upper cover, upper left cover)
- Right rear cover

To replace the rear copier cover and scanner unit screws

1. ***Replace the two scanner unit screws at the rear of the copier. These two screws secure the scanner unit to the copier (see Figure 2-18).***
2. ***Gently slide the rear cover into place on the back of the copier.***
3. ***Replace the four screws that secure the rear cover to the copier.***

   Insert the top right screw first.

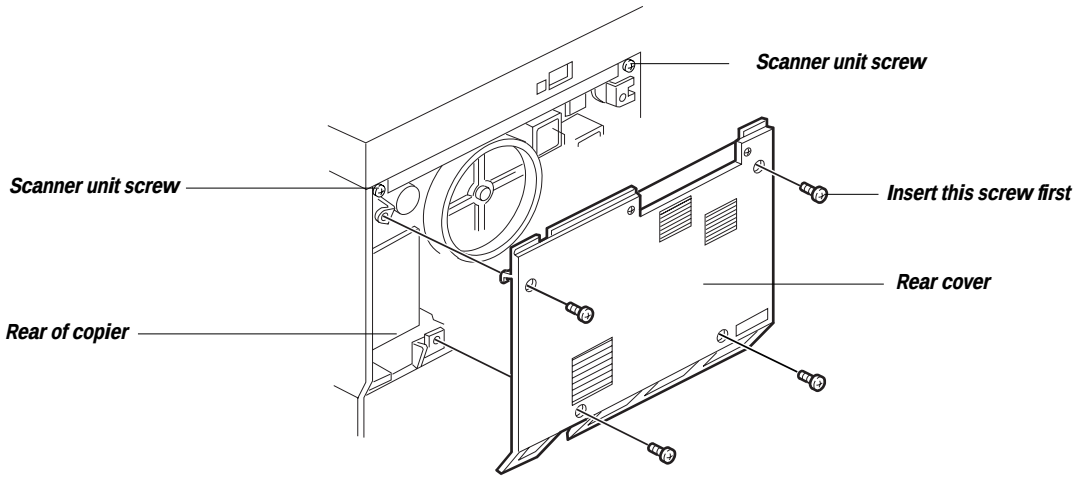


Figure 2-18 Replacing the rear cover

To replace the Operation Panel

Refer to Figure 2-19 when performing the following procedure.

1. ***Make sure all the cables inside the PRN box are out of the way and then remove the stopper bar and gently close the scanner unit.***

   Replace the stopper bar in the holder on the front of the scanner unit.

2. ***Replace the two screws that secure the scanner unit to the copier.***
3. ***Gently set the Operation Panel on the front of the copier so the mounting holes in the Operation Panel line up with the holes in the copier.***
4. ***Replace the two Operation Panel screws on the right and left side of the copier.***
5. ***Tighten the two screws on the front of the Operation Panel.***

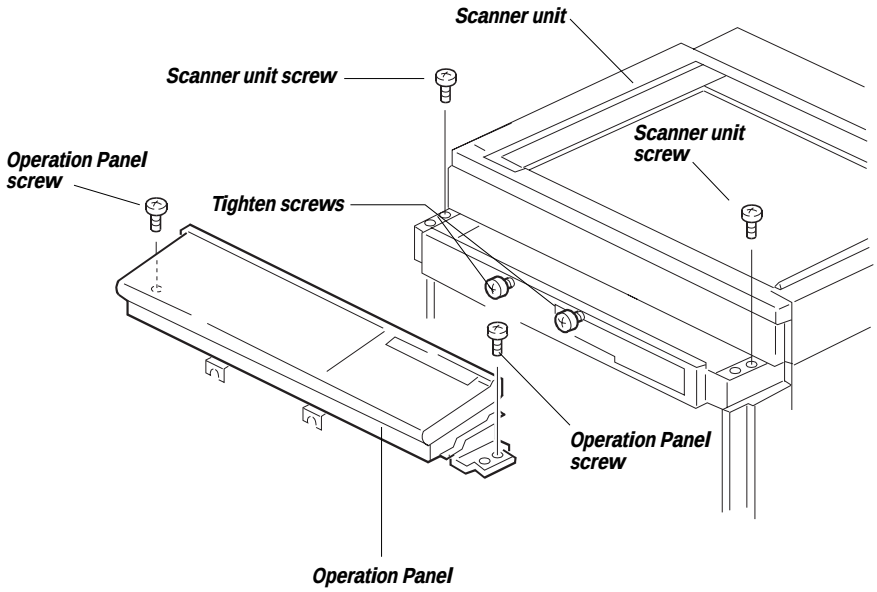


Figure 2-19 Replacing the Operation Panel and scanner unit screws

To replace covers

Refer to Figure 2-20 when performing the following procedure.

1. ***Replace the upper right and upper left brackets.***

   Gently angle the brackets to the side in order to replace them.

2. ***With the front door of the copier open, replace the upper front cover.***
3. ***Replace the upper left cover.***
4. ***Replace the right rear cover.***
5. ***Close the front door of the copier.***

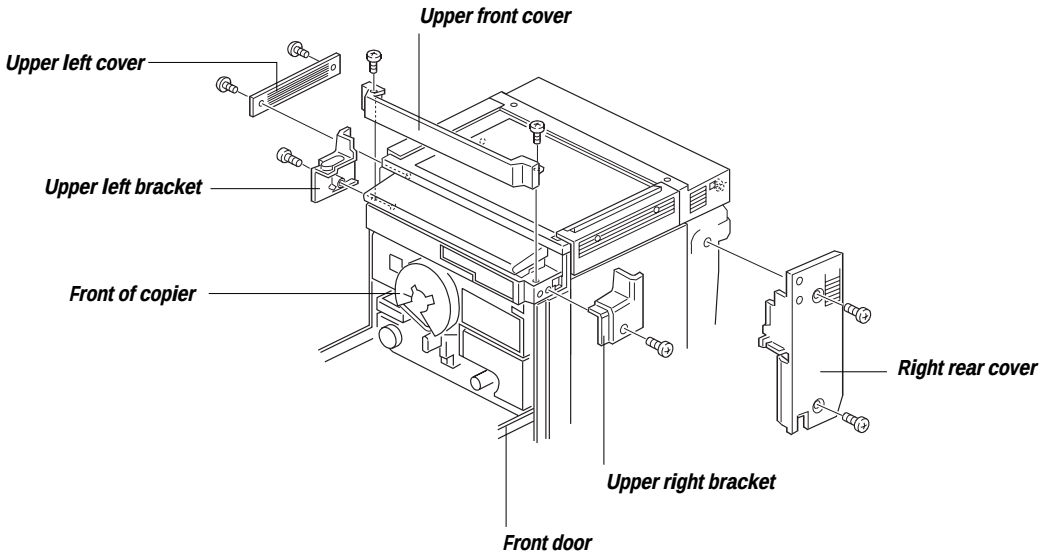


Figure 2-20 Replacing the covers on the copier

Installing the Pre-Transfer Lamp (PTL)

The following section describes PTL installation. You do not need to replace the PTL in copier models with the following serial numbers and above:

Model	Code	Serial Number
nashuatec C503 Gestetner 2703	A166-10	A167075001
Savin SDC103	A166-15	4A17070001
Aficio Color 2003	A166-17	A3967080001
nashuatec C503 Gestetner 2703 Rex Rotary CC8403	A166-22	A157080001
infotec 7212Z	A166-26	3J10870001
Aficio Color 2003	A166-27	A3967080116
Aficio Color 2003	A166-29	A3967080325
Lanier 5603 DC (AG)	A166-55	L0117100256
nashuatec C503d Gestetner 2703d	A187-10	All
Savin SDC103A	A187-15	4A27070001
Aficio Color 2103	A187-17	A3977070001
nashuatec C503d Gestetner 2703d Rex Rotary CC8403D	A187-22	A177070001
infotec 7212DZ	A187-26	3J20770001
Aficio Color 2103	A187-27	A3977070101
Aficio Color 2103	A187-29	A3977070159
Lanier 5603DC (AD AG)	A187-55	L0127070046
nashuatec C503de Gestetner 2703de	A189-10	A207125001
Savin SDC103E	A189-15	4A37070001
Aficio Color 2203	A189-17	A3997070001
nashuatec C503de Gestetner 2703de Rex Rotary CC8403DE	A189-22	A197070001
infotec 7212EZ	A189-26	3J30770001
Aficio Color 2203	A189-27	A3997070117
Aficio Color 2203	A189-29	A3997070145
Lanier 5603DC (E AG)	A189-55	L0137070155

To replace the PTL

Refer to the Copier Service documentation for detailed information on replacing the PTL.

1. ***Remove the development unit.***
2. ***Remove the transfer belt unit.***
3. ***Replace the PTL on the transfer belt unit with the PTL provided in this kit (see Figure 2-21).***

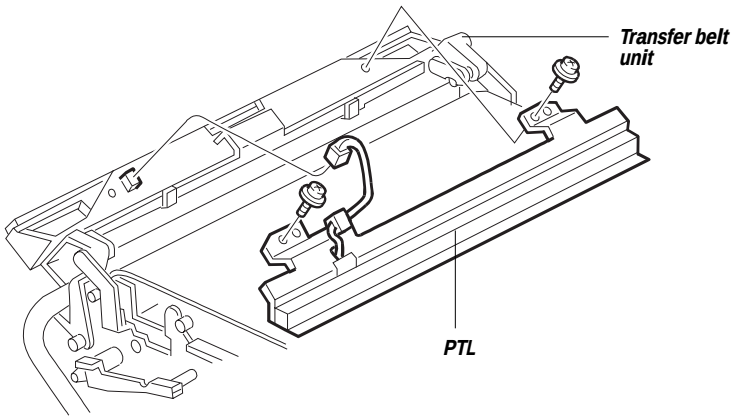


Figure 2-21 Installing the PTL

4. ***Replace the transfer belt unit and the development unit.***

Installing Operation Panel keytops and decals

The following procedure is applicable to A166/A187 copiers only.

1. ***Unpack the eight keytops and the keytop decals.***
2. ***Open the keytop cover on the Operation Panel (see Figure 2-22).***

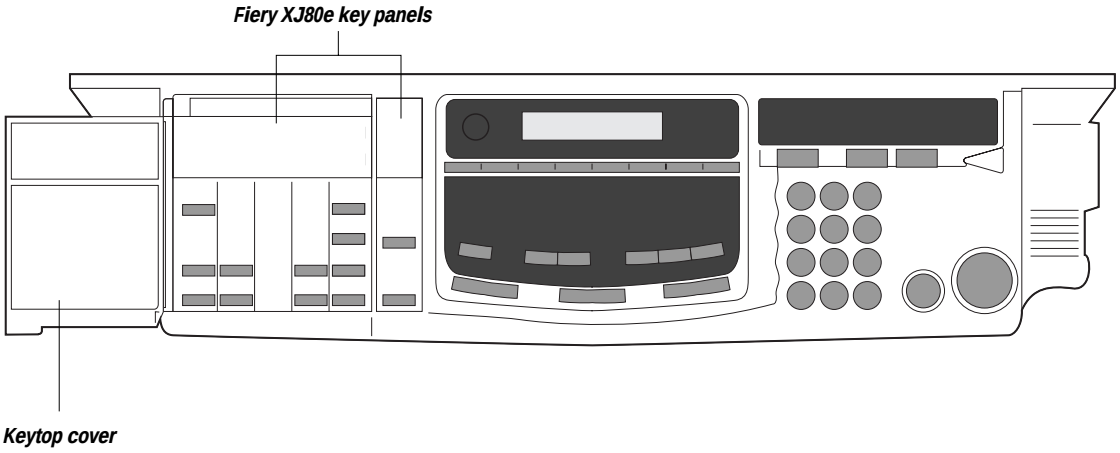


Figure 2-22 Operation Panel

3. ***Using a flat head screwdriver, pry out the covers installed over the Fiery XJ80e key panels as shown in the following figure.***

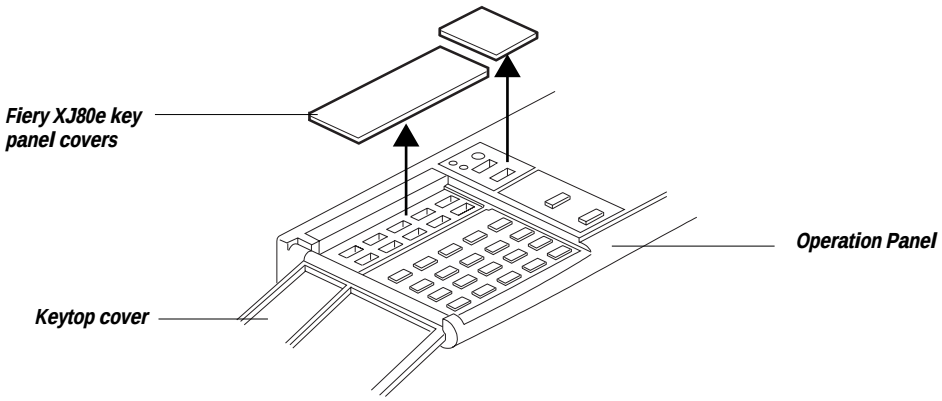


Figure 2-23 Removing key panel covers

4. ***Peel the adhesive backing off the large and small decals and place them over the areas indicated in Figure 2-24.***

   Align the lower left corner of the decal with the left corner on the Operation Panel.

5. ***Insert the eight keytops in the available sockets.***

   The large keytop is installed in the Printer/Scanner space and the rest of the keytops are installed in the remaining spaces.

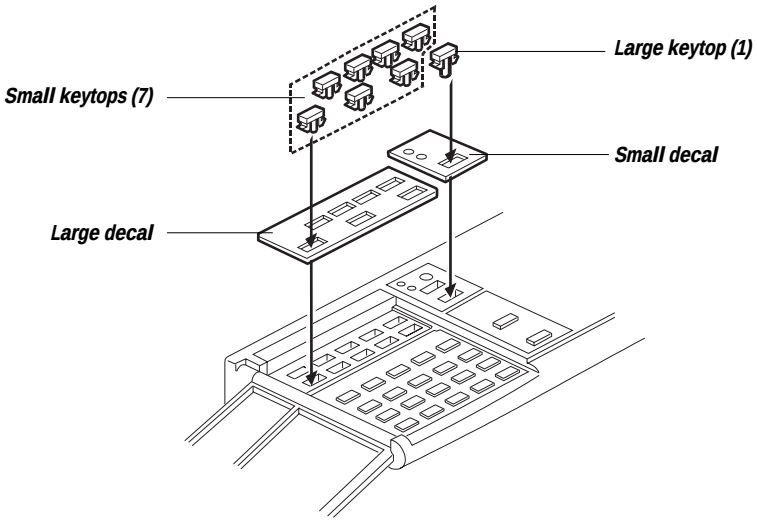


Figure 2-24 Installing Operation Panel keytops

6. Peel the adhesive backing off the Fiery driven and Adobe PostScript logo decal and install it on the front of the copier (see Figure 2-25).

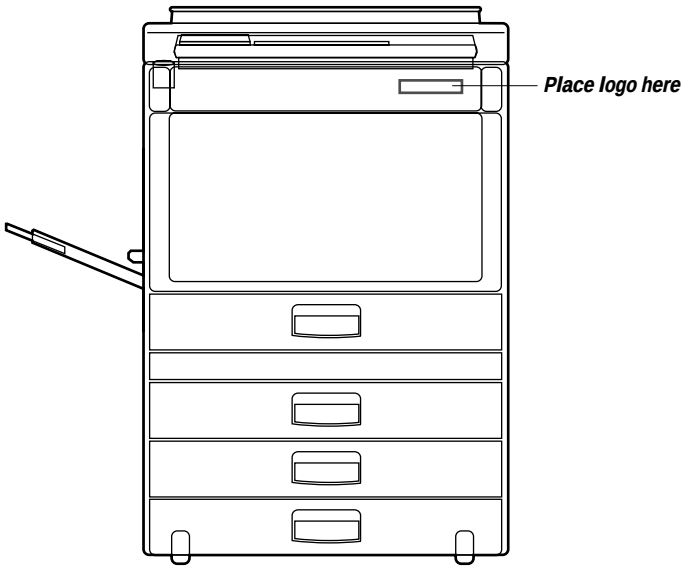


Figure 2-25 Installing the logo decal on the copier

Starting the copier

The first time the copier is turned on after you install the Controller Interface Type D and the Fiery XJ80e Controller kits, select the language displayed on the copier Operation Panel for Fiery XJ80e functions. See Figure 2-26 for information on using the Fiery XJ80e keys on the Operation Panel during startup. For more detailed information on Fiery XJ80e functions using the Operation Panel, see “Using the Operation Panel” on page 4-1.

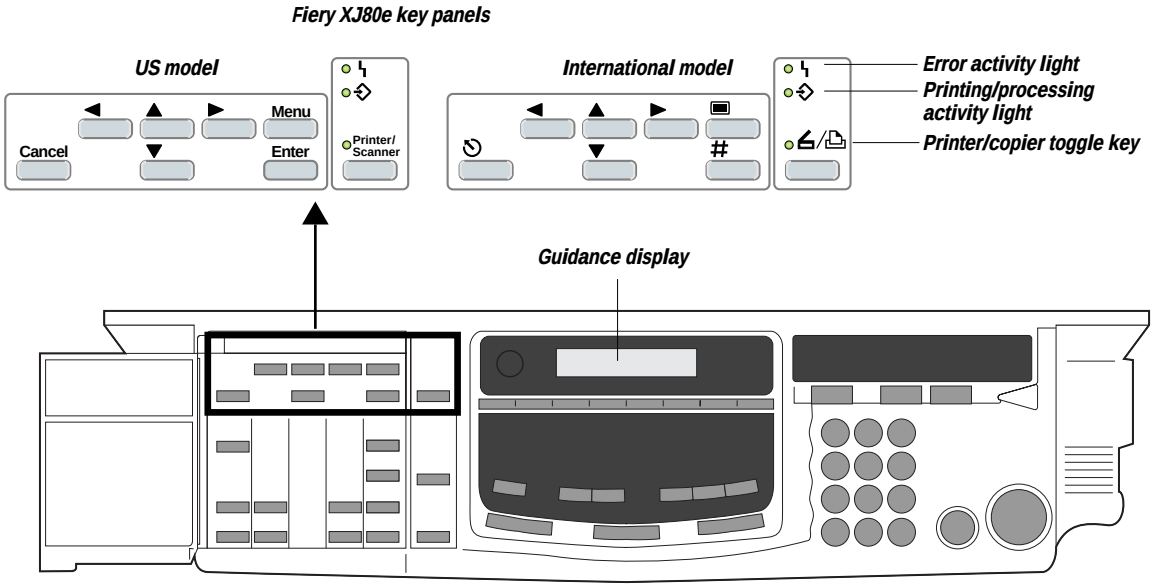


Figure 2-26 Operation Panel

To start the copier

See Figure 2-27 on page 2-35 for an illustration of the startup sequence.

1. ***Plug the power cable into an outlet.***
2. ***Turn on the copier and allow startup to proceed without interruption.***

   If the memory configuration was changed on the Fiery XJ80e board, or you replaced the Fiery XJ80e board (not the hard disk drive), you need to provide a password for verification. See “To start the copier when a password is required” on page 2-33.

   Note: When you turn on the copier, make sure the copier Operation Mode setting for Auto Reset is set to On.

3. ***At the language screen, use the up and down arrow keys to scroll through the available languages. Press the Enter key when the language you want is displayed on the Operation Panel.***

   Make sure you select the correct language. Once you select a language, the only way to change it is to reinstall Fiery XJ80e system software.

4. ***At the Setup screen, press the Enter key to select Server Setup.***

   The first time you turn on the copier after installing these kits you must enter setup options for Server, Network, and Printer Setup, in this order.

5. ***Scroll through the options using the up arrow key and Save Changes to configure Server Setup with the default settings.***

   It is the network administrator's responsibility to configure the setup according to the network and user environment.

6. ***Configure Network and Printer Setup with default settings and Save Changes.***

7. ***At the Setup screen, use the up arrow key to scroll to Exit Setup and then press the Enter key.***

8. ***Following a successful startup, proceed to "Printing a test page" on page 2-37.***

To start the copier when a password is required

A password is only required if you changed the memory configuration, or you replaced the Fiery XJ80e board (but not the hard disk drive). Replacing the hard disk drive only does not require a password. See Figure 2-27 on page 2-35.

1. ***At the screen "Software not authorized," press the Enter key.***

2. ***At the next screen, carefully write down the ID# that appears in the guidance display and call your authorized service/support center.***

   You need to give your authorized service/support center the ID#. You will then receive an authorization code.

3. ***At the screen "Enter Auth. Code," enter the authorization code and then press the Enter key.***

   Use the up and down arrow keys on the Operation Panel to select the correct letter or number. Use the left and right arrow keys to advance to the next space. Note that the authorization code must be entered exactly.

   If you enter the wrong number, the message "Invalid code. Please try again" is displayed on the screen. Re-enter the authorization code. If you still get the invalid code message, call your authorized service/support center.

If the installation is successful, the screen indicates that the password has been installed.

4. ***Press the Enter key to reboot the system.***
5. ***At the language screen, use the up and down arrow keys to scroll through the available languages. Press the Enter key when the language you want is displayed on the Operation Panel.***

   Make sure you select the correct language. Once you select a language, the only way to change it is to reinstall Fiery XJ80e system software.

6. ***At the Setup screen, press the Enter key to select Server Setup.***

   The first time you turn on the copier after installing these kits you must enter setup options for Server, Network, and Printer Setup, in this order.

7. ***Scroll through the options using the up arrow key and Save Changes to configure Server Setup with the default settings.***

   It is the network administrator's responsibility to configure setup according to the network and user environment.

8. ***Configure Network and Printer Setup with default settings and Save Changes.***
9. ***At the Setup screen, use the up arrow key to scroll to Exit Setup and then press the Enter key.***
10. ***Following a successful startup, proceed to "Printing a test page" on page 2-37.***

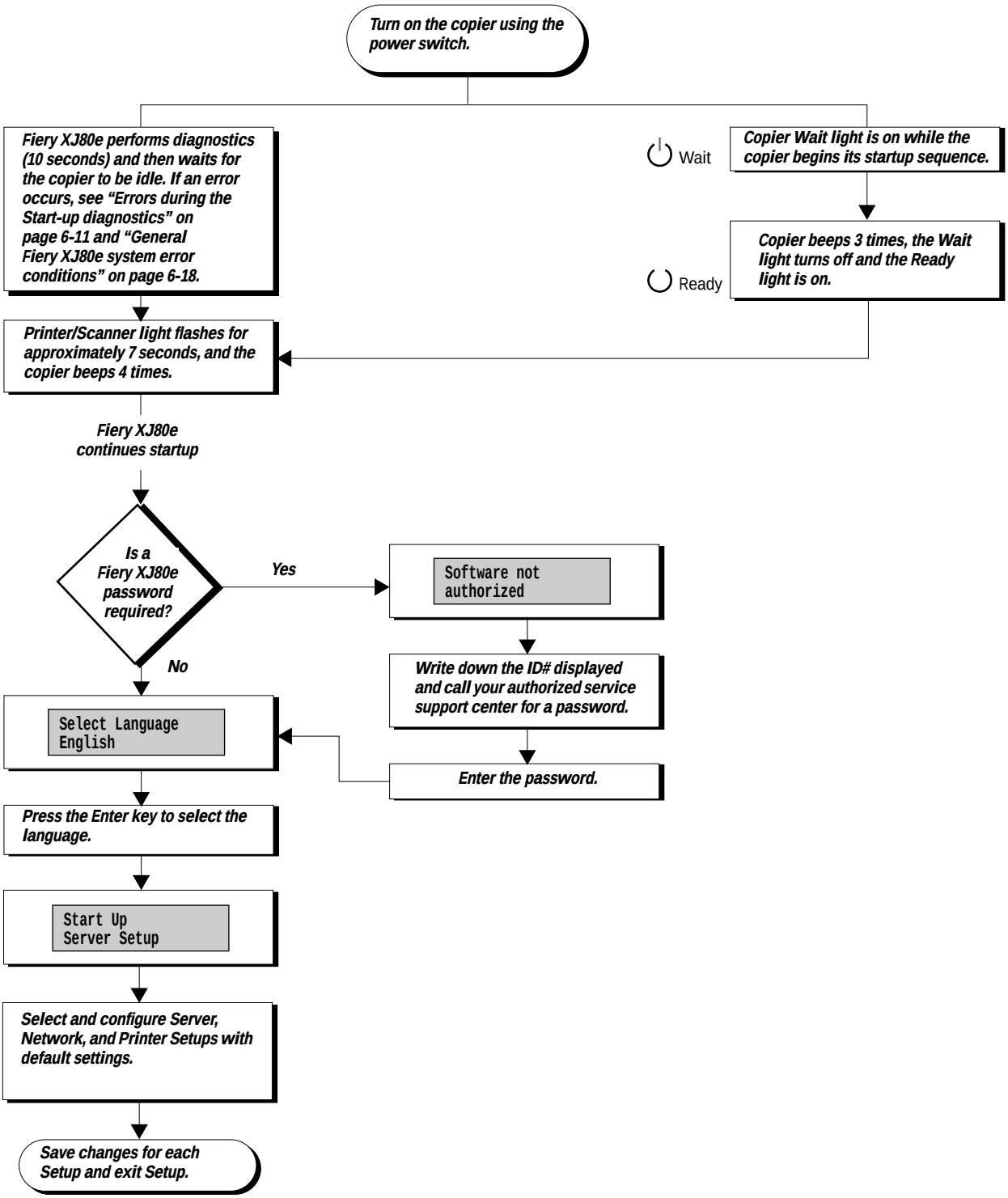


Figure 2-27 Initial startup sequence (after installing kit components)

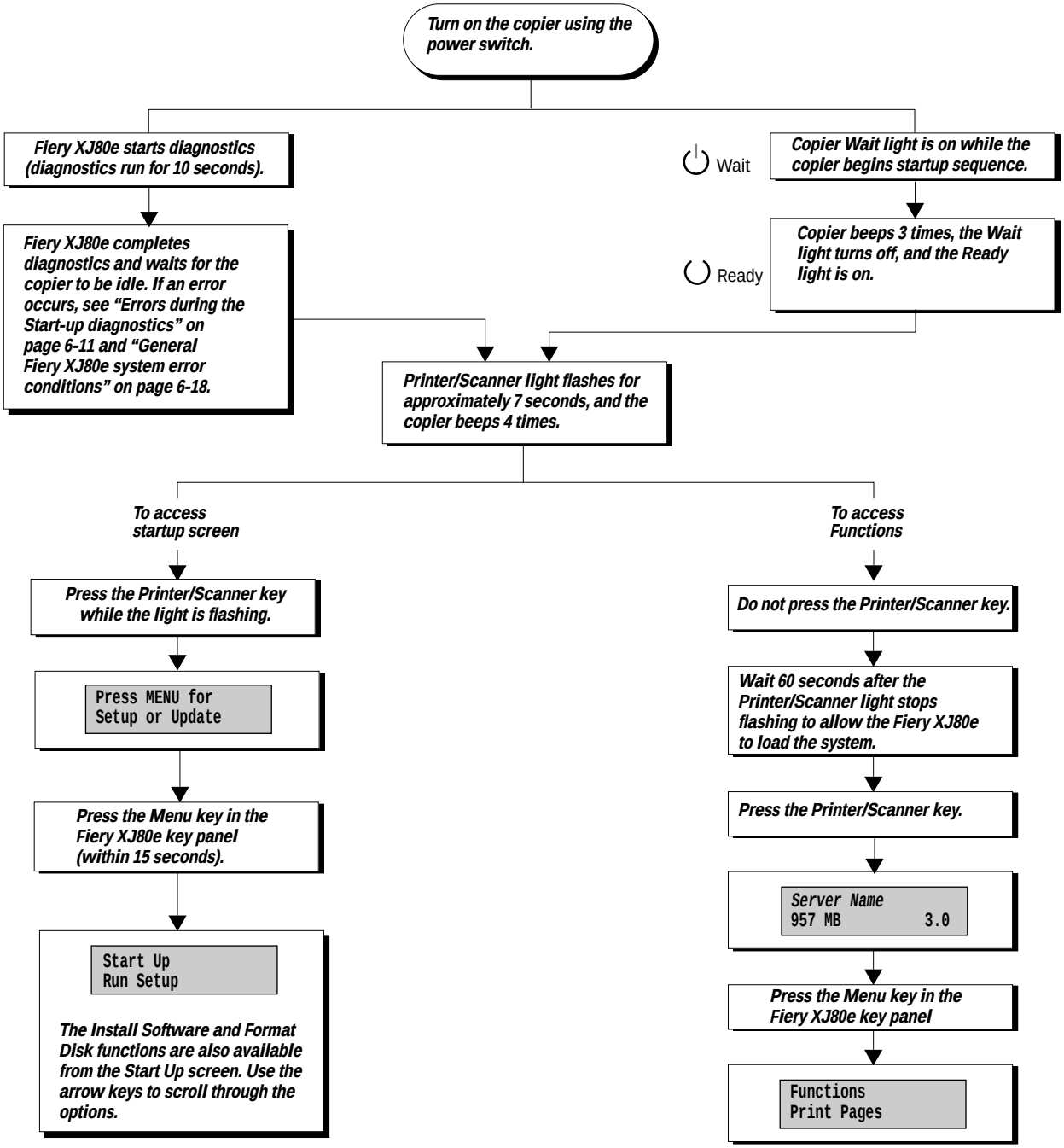


Figure 2-28 Standard startup sequence

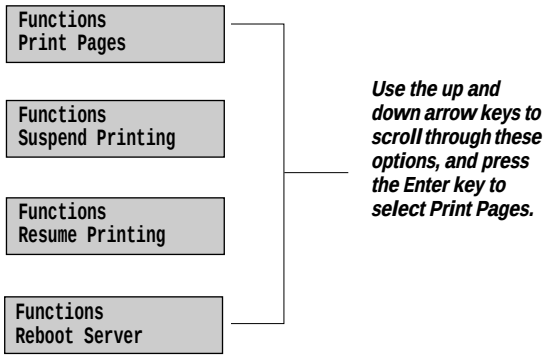
Printing a test page

Before attaching the copier to the network, verify that all components of the Fiery XJ80e-to-copier interface are working by printing a test page. The copier prints the test page, a color PostScript file that is resident on the Fiery XJ80e hard disk drive.

To print a test page from the Operation Panel

1. ***If the copier is off, turn it on and allow it to warm up.***
2. ***Before you print the Fiery XJ80e Test Page, perform the copier ACC (Auto Color Calibration) function using the Image Adjustment key. See the Copier service documentation for information.***
3. ***Use the Fiery XJ80e AutoCal function using the copier target to calibrate the Fiery XJ80e. See the* User Guide *for information.***
4. ***When the copier is in the ready condition, press the Printer/Scanner key on the Operation Panel to access printer functions (see "Using the Operation Panel" on page 4-1).***
5. ***Press the Menu key.***

   The Functions menu displays a scrolling list of options.



6. ***Press the Enter key when* Print Pages *is displayed and then press the Enter key again when* Test Page *is displayed.***

   The Processing and Printing status screens are displayed as the test page is printed.

7. ***Examine the quality of the test page.***

   The test page confirms that the print engine is functional and that the connection between the Fiery XJ80e board and the copier is good.

Connecting Fiery XJ80e network cables

The 16-bit Ethernet network adapter chip (Intel 82593 CSMA/CD core LAN Controller) built into the Fiery XJ80e board provides connectivity to Ethernet networks. Supported Ethernet cabling includes: thinnet, thicknet, and twisted pair.

Other Fiery XJ80e connectivity includes a high-speed parallel port that enables the Fiery XJ80e to connect directly to the parallel port of a PC-compatible or a Novell server.

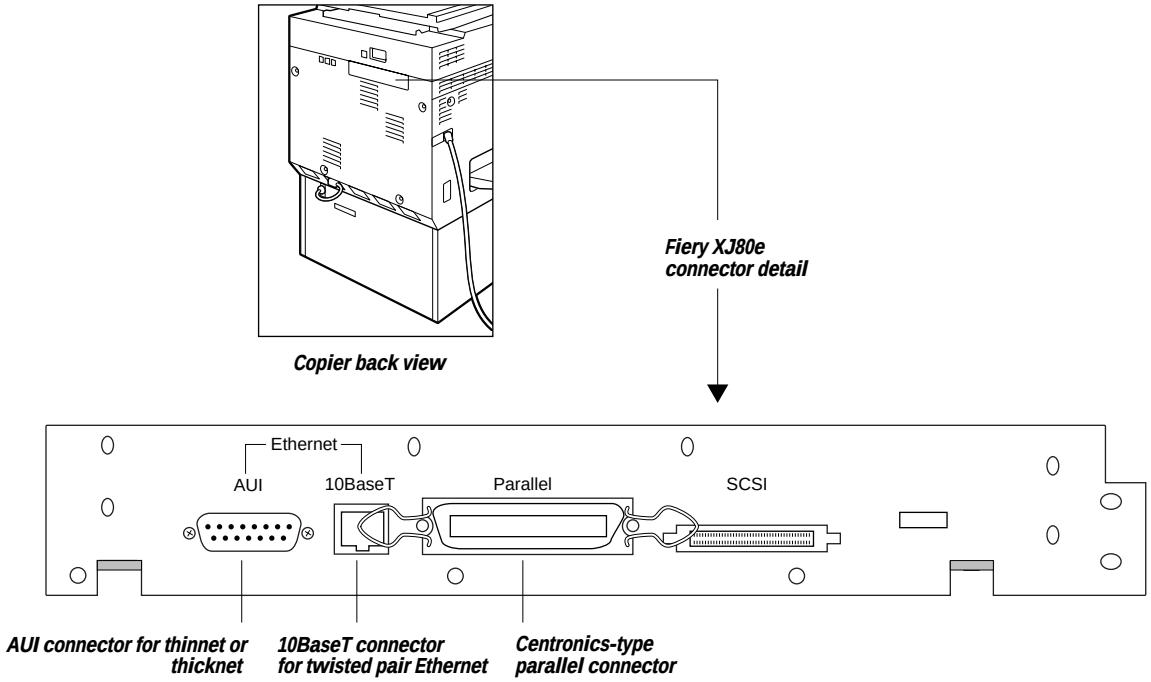


Figure 2-29 Fiery XJ80e network connectors

Ethernet network connections

The Fiery XJ80e board has two external Ethernet network connectors: an AUI (Attachment Unit Interface) connector for a thin Ethernet cable (thinnet) or a thick Ethernet cable (thicknet), as well as a 10BaseT connector for twisted pair (see Figure 2-29). Only one Ethernet connection should be made to the Fiery XJ80e at a time. The circuitry on the Fiery XJ80e automatically determines which connector is being used. For network configuration information, see the *Administrator Guide*.

To connect a thinnet or thicknet cable to the Fiery XJ80e

Thinnet (thin coaxial Ethernet or 10Base2 cable) connections require an external transceiver attached directly to the AUI connector on the back of the Fiery XJ80e. An AUI-to-BNC Ethernet transceiver is included in the Fiery XJ80e Controller kit.

Thicknet (thick coaxial Ethernet or 10Base5 cable) connections require an external transceiver with an AUI drop cable that connects to the AUI connector on the back of the Fiery XJ80e.

1. ***Make sure the copier/printer is not in use and then turn it off.***
2. ***Connect the thinnet or thicknet network cable to the Fiery XJ80e.***

   - To connect a thinnet cable to the Fiery XJ80e, the AUI-to - BNC external transceiver (with the T-connector) must be installed on the Fiery XJ80e AUI connector. The thinnet cable then connects to the BNC connector on the external transceiver. Slide the latch to the right to lock the connector in place.
   - To connect a thicknet cable to the Fiery XJ80e, connect the AUI drop cable directly to the AUI connector on the back of the Fiery XJ80e. Slide the latch to the right to lock the connector in place.

   If you turn on the Fiery XJ80e without connecting the network cable to the transceiver, you may receive a startup error. Make sure the network cable is connected to the transceiver before you turn on the copier.

3. ***Turn on the copier and configure Setup options. For information on accessing Setup, see "Using setup" on page 5-1.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.

4. ***After configuring Setup options, verify the network connection.***

   Once the network connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the copier should be available on the network.

   The network administrator should perform any additional network setup, verify the network connection, verify that the copier appears on the list of printers, and print a few test documents from a networked computer that uses the copier. See the *Administrator Guide* for more information.

To connect a twisted pair cable to the Fiery XJ80e

Twisted pair (unshielded twisted pair cable or 10BaseT) uses an 8-pin, RJ-45 connector that connects to the RJ-45 socket on the back of the Fiery XJ80e board (see Figure 2-29 on page 2-38).

1. ***Make sure the copier/printer is not in use and then turn it off.***
2. ***Connect the RJ-45 cable to the RJ-45 socket on the back of the copier.***
3. ***Turn on the copier and configure Setup options. For information on accessing Setup, see "Using setup" on page 5-1.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.
4. ***After configuring Setup options, verify the network connection.***

   Once the network connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the copier should be available on the network.

   The network administrator should perform any additional network setup, verify the network connection, verify that the copier appears in the list of printers, and print a few test documents from a networked computer that prints to the copier. See the *Administrator Guide* for more information.

Connecting a parallel port device to the copier

The parallel (Centronics) connector on the back of the copier provides a high-speed interface port that allows the copier to connect directly to the parallel port of a PC-based server (such as a Novell server). Although there are a number of PC-based devices that may be connected to the copier for parallel printing, the procedure for connecting each of these device types is similar.

The copier connects to the parallel port of a PC-based server through the parallel (Centronics) cable (six feet long or less, with a male 36-pin connector on one end and a 25-pin male D-sub, shielded connector on the other end). The parallel (Centronics) cable is shipped in the Fiery XJ80e Controller kit.

To connect the copier to a PC-based server

Make sure the copier is turned off before you connect it to a PC-based server.

1. ***With the network administrator's authorization, turn off the PC-based server and the copier.***
2. ***Connect the 25-pin connector on the parallel (Centronics) cable to the parallel port of the PC-based server.***

   If there is more than one parallel port connector on the back of the PC-based server, ask the network administrator to indicate the preferred parallel port to use for the copier.
3. ***Connect the 36-pin connector on the Centronics cable to the 36-pin, D connector on the back of the Fiery XJ80e board.***

   The parallel (Centronics) connector is next to the Ethernet connectors on the Fiery XJ80e (see Figure 2-29 on page 2-38).
4. ***Turn on the PC-based server and the copier.***
5. ***Configure Setup options.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.
6. ***After configuring Setup options, verify the parallel port connection.***

   Once the parallel port connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the network administrator should print a few test documents from the *host PC*—a PC-compatible or a Novell server with a parallel (lpt) port connected to the copier. See the *User Guide* for more information.

Chapter 3:
A189 Installation

This chapter describes the process for installing the Fiery XJ80e Controller kit and the Controller Interface Type D kit in the following copiers:

Copier	Edit Model (A189) Product Name
Ricoh	Aficio Color 2203
Gestetner	Gestetner 2703de nashuatec C503de RexRotary CC8403DE
infotec	7212EZ
Savin	SDC103E
Lanier	5603DC (E AG)

Preparing for installation

Before you install the contents of the Fiery XJ80e Controller and the Interface kits, you need to make sure Auto Reset in User Tools is on, shut down the copier, and remove the copier covers to access the copier's printer control box (PRN box).

To test functionality and set copier modes

1. ***Make sure that the copier is not in use.***
2. ***Test copier functionality before installing the kits.***

   Copy the copier color test page before you install any components in the copier. If the copied image indicates that the copier needs adjustment, inform the customer. After getting approval, complete the copier service needed. Make a new copy of the test page and continue with the next step.
3. ***Make sure* Auto Reset *is set to On in User Tools.***

   This allows control of the Operation Panel to be transferred to the Fiery XJ80e.

To turn off the copier

1. ***Turn off the copier using the power switch on the side of the copier.***
2. ***Disconnect the power cable from the wall outlet.***

Accessing the A189 PRN box

To install the components in this kit, you need to remove the following parts to access the PRN box (printer control box):

- Rear cover
- Scanner unit screws on the back of the copier
- Upper covers (includes right and left upper brackets, front upper cover, upper left cover) and the right rear cover
- Operation Panel

Note: If the ARDF (automatic reverse document feeder) unit is installed, remove it before removing any covers or panels. Refer to the Copier Service documentation for more information.

To remove the rear copier cover and scanner unit screws

1. ***Make sure you have shut down the copier and disconnected any cables.***
2. ***Remove three of the screws that secure the rear copier cover.***
3. ***While supporting the cover, remove the fourth screw.***
4. ***Gently slide the rear cover off the copier.***

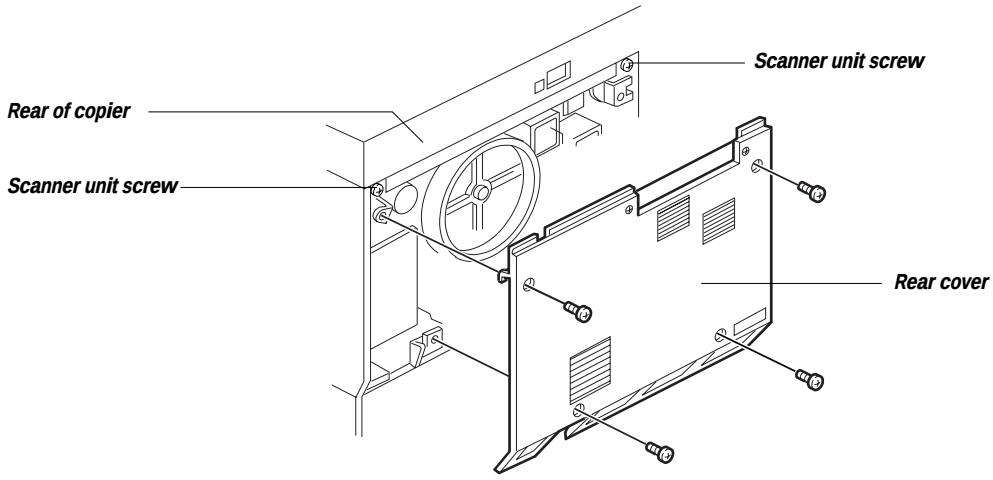


Figure 3-1 Removing the rear cover and scanner unit screws

5. ***While you are at the rear of the copier, remove the two screws that attach the scanner unit to the copier (see Figure 3-1).***

   Note: Serious damage can result from leaving these screws installed; make sure they are removed before lifting up the scanner unit.

To remove covers

Refer to Figure 3-2 when performing the following procedure.

1. ***Remove the screws that attach the upper right and upper left brackets to the copier.***

   Gently angle the bracket to the side in order to remove it.

2. ***Loosen the two screws on the top of the upper front cover.***
3. ***Open the front door on the copier, and then remove the upper front cover.***
4. ***Remove the two screws that attach the upper left cover to the copier.***
5. ***Remove the two screws that attach the right rear cover to the copier.***

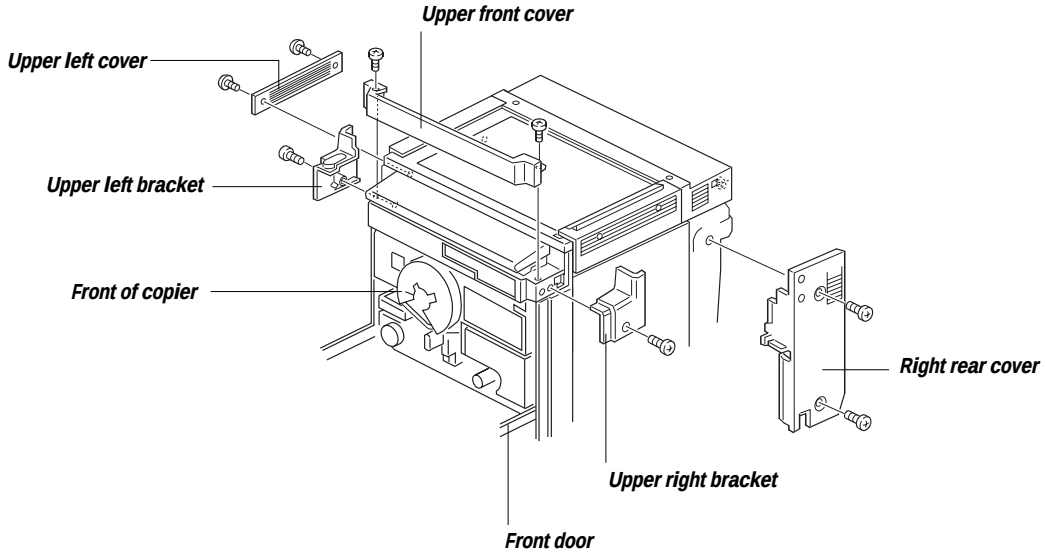


Figure 3-2 Removing the covers on the copier

To remove the Operation Panel

Once all the necessary covers are removed, you can access the screws that secure the Operation Panel to the copier. You should completely remove the Operation Panel before you lift up the scanner unit. Refer to Figure 3-3 when performing the following procedure.

1. ***Remove the two Operation Panel screws on the right and left side of the copier (where the upper left and right brackets were installed).***

   These two screws attach the Operation Panel to the copier.

2. ***Loosen the two screws on the front of the Operation Panel.***

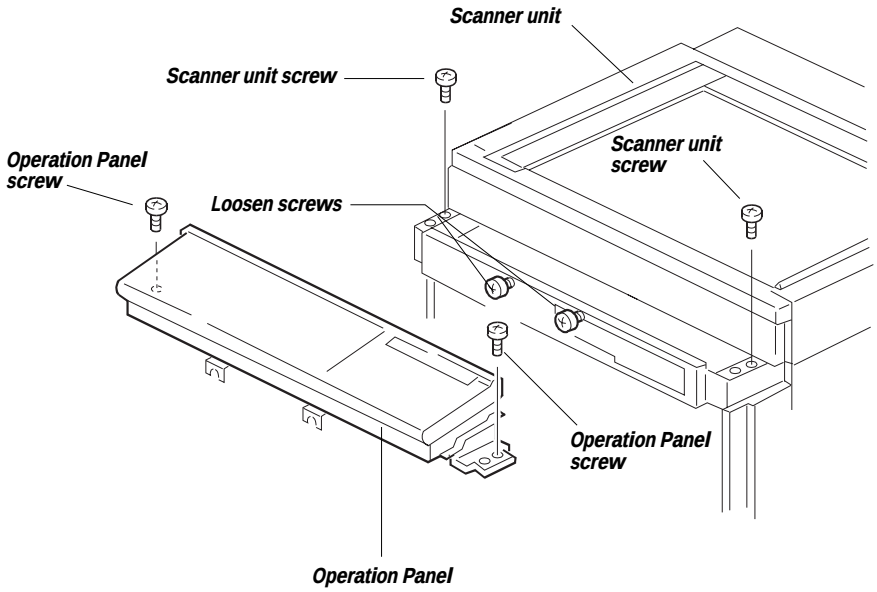


Figure 3-3 Removing Operation Panel and scanner unit screws

3. ***Gently slide the Operation Panel off the copier and place it on the scanner unit so that the bottom is facing up.***
4. ***Remove the three Operation Panel cables that attach to the SCU board.***

   You may also need to remove the ferrite attached to the base of the PRN box.

5. ***Gently move the Operation Panel out of the way, and remove the two screws that secure the scanner unit to the copier.***

6. Lift the scanner unit and prop it up with the stopper bar (see Figure 3-4).

You can now access the PRN box to install the Fiery XJ80e Controller and Controller Interface Type D kits.

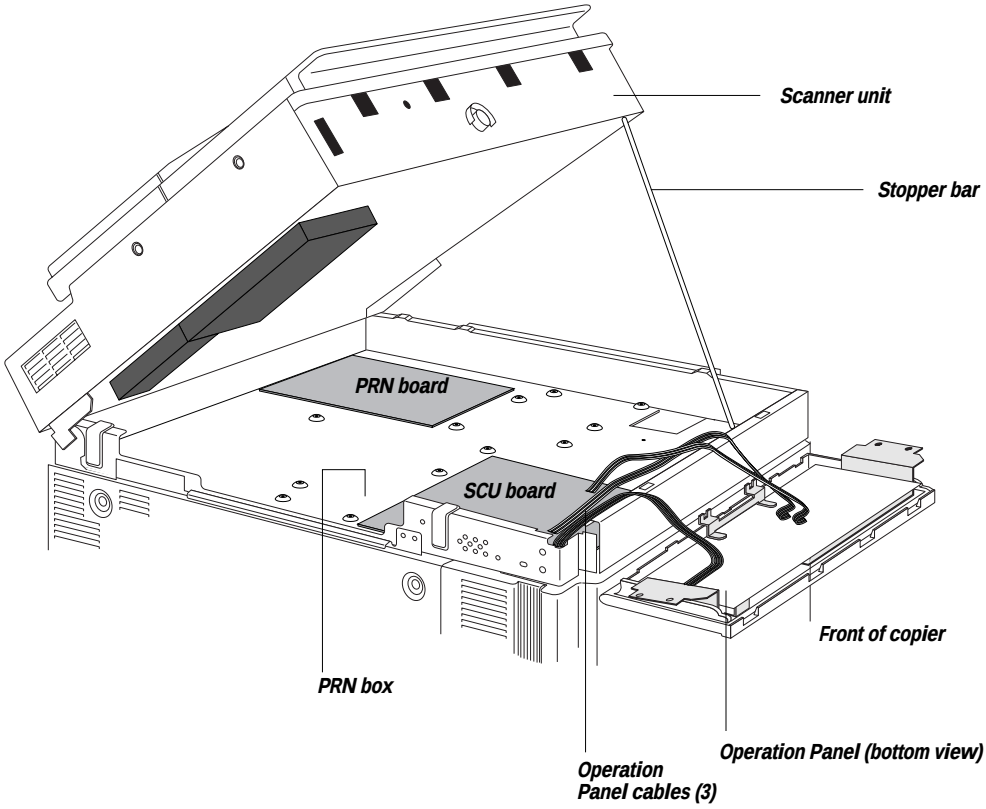


Figure 3-4 Accessing the A189 PRN box

Installing the Fiery XJ80e

Before you install the contents of the Controller Interface Type D kit, you need to install the Fiery XJ80e board in the copier.

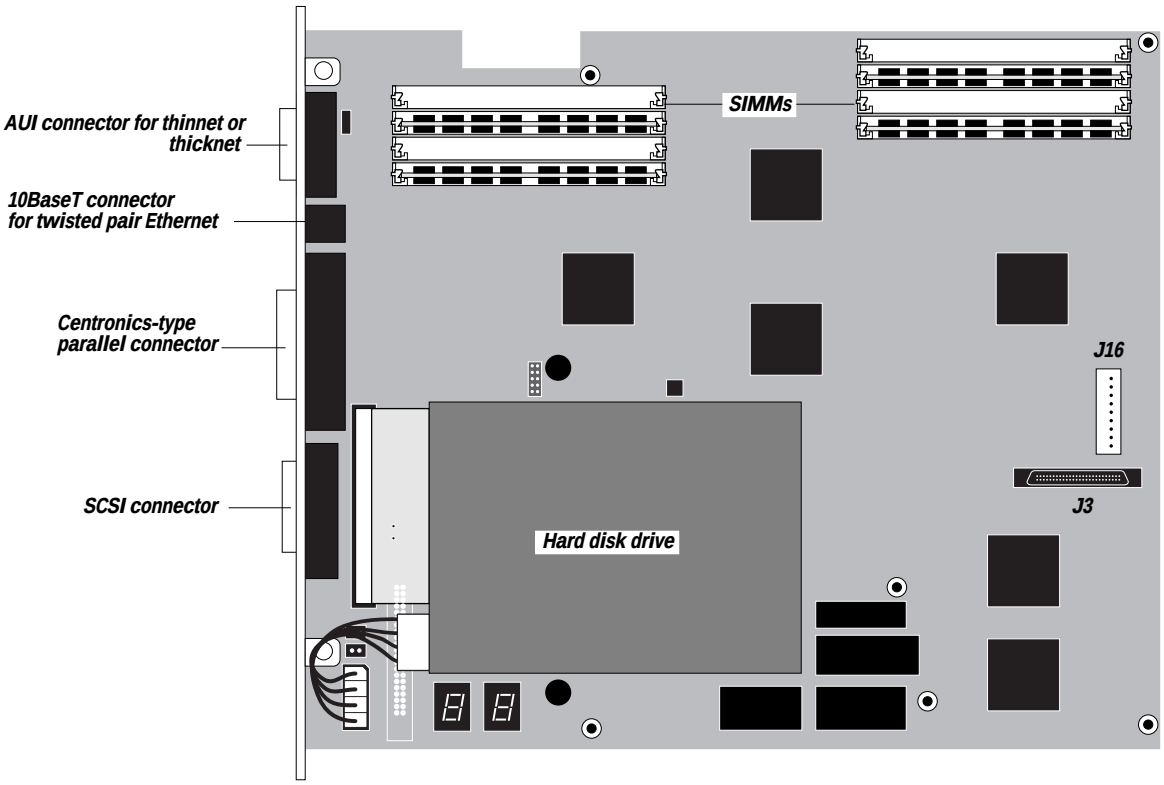


Figure 3-5 Fiery XJ80e controller board

Upgrading the memory configuration

If additional memory is needed, install it on the Fiery XJ80e board before you install the Fiery XJ80e board in the copier.

Memory is located in the eight sockets at the top of the Fiery XJ80e board and is divided into two banks: bank 0 (J6-J9) and bank 1 (J10-J13).

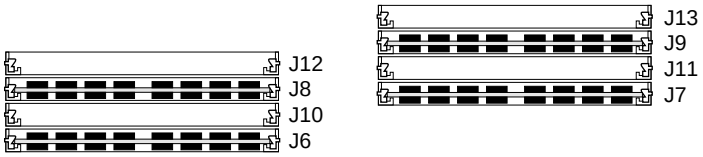


Figure 3-6 Fiery XJ80e SIMM banks (32MB)

Note: Fiery XJ80e SIMMs are *not* interchangeable with off-the-shelf SIMMs.

The following table gives an overview of the different configurations for each bank of memory on the Fiery XJ80e board.

Fiery XJ80e configurations	Bank 0				Bank 1			
	J6	J7	J8	J9	J10	J11	J12	J13
32MB	8MB	8MB	8MB	8MB	empty	empty	empty	empty
64MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB

Make sure you attach the ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before handling the SIMMs.

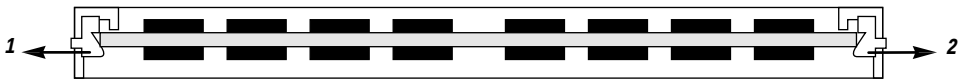
To upgrade the SIMM configuration

The following steps describe the procedure for upgrading the Fiery XJ80e board with 32MB to 64MB of memory. If the board does not require a memory upgrade, continue with "To install the Fiery XJ80e board" on page 3-9.

1. ***Unpack the SIMMs (four 8MB SIMMs total).***
2. ***Remove the SIMMs in bank 0 (J6-J9).***

   In order to install the additional SIMMs, first you need to remove the SIMMs that are already installed. These SIMMs are reinstalled later.

   To release a SIMM, push outward on the spring clips (see arrows **1** and **2** in the figure below). Pull the SIMM toward you and slide it out of the socket at a 45-degree angle.

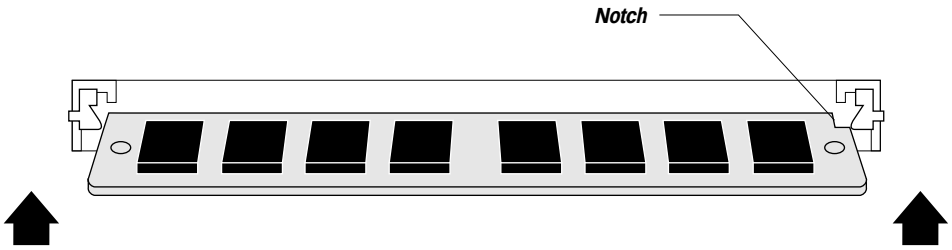


3. ***First insert the additional SIMMs, and then insert the SIMMs you removed from bank 0.***

   Make sure you start at the top of each SIMM bank (J12 and J13) and work your way toward the bottom.

   To insert the SIMM, slide it into the socket at a 45-degree downward angle and push it up, or away from you, to lock it in place. Make sure that the spring clips close securely around the ends of the SIMM and that each strip is fully seated in its slot.

   Note that SIMMs fit into the socket in only one way. The index notch at one end of each SIMM (near pin 1) fits in the right side of the socket.



To install the Fiery XJ80e board

Note: If the EMI shield is included in the kit, refer to the separate installation instructions for information on installing it and the Fiery XJ80e board.

1. ***Unpack the Fiery XJ80e Controller kit (for a list of contents, see "Kit contents" on page 1-2).***
2. ***Remove the four screws on the back of the copier that attach the grounding plate to the PRN box.***

   This is required for 220V, 230V, and 240V machines only.

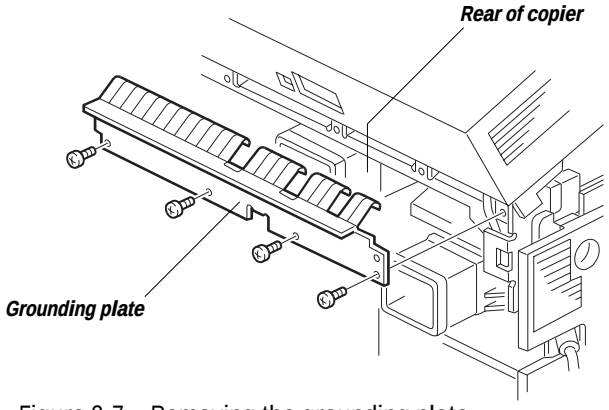


Figure 3-7 Removing the grounding plate

3. ***Install the six standoffs with washers in the mounting holes on the base of the PRN box (see Figure 3-8).***

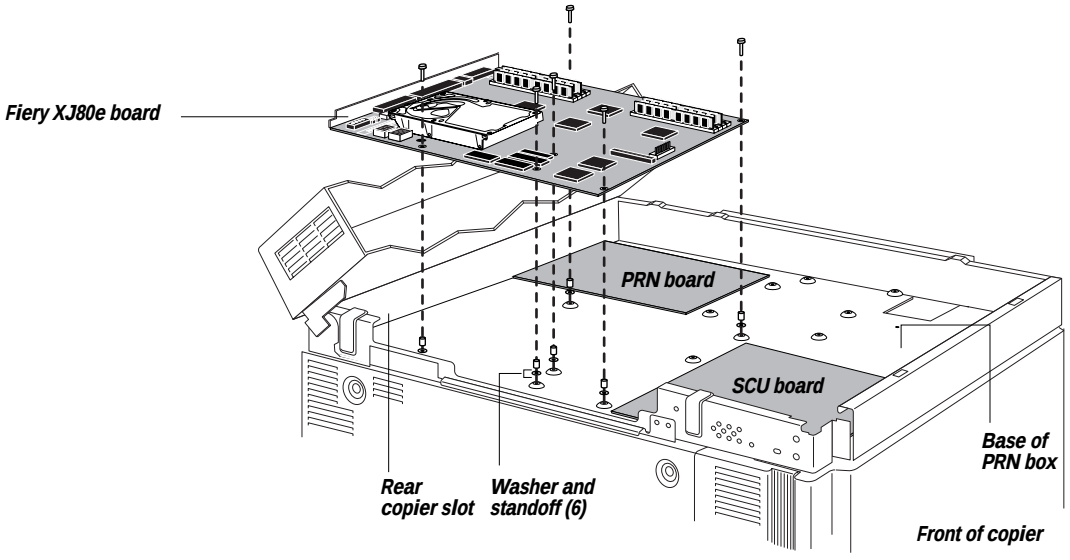


Figure 3-8 Installing Fiery XJ80e board

4. ***Place the Fiery XJ80e board on top of the standoffs so that the faceplate on the board fits in the rear slot of the copier.***

   You may need to slide the board toward the left side of the copier to fit the faceplate in the rear slot. The faceplate should rest on the outside edge of the copier.

   Make sure the mounting holes in the board line up with the standoffs installed in the base of the PRN box.

5. ***Access the rear of the copier and insert the five screws that secure the faceplate to the copier (see Figure 3-9).***

   The two center screw holes are covered. For newer models, you need to break the seal covering these two screw holes to insert the screws. These screws are not required in some copiers.

Arrows indicate screw placement.

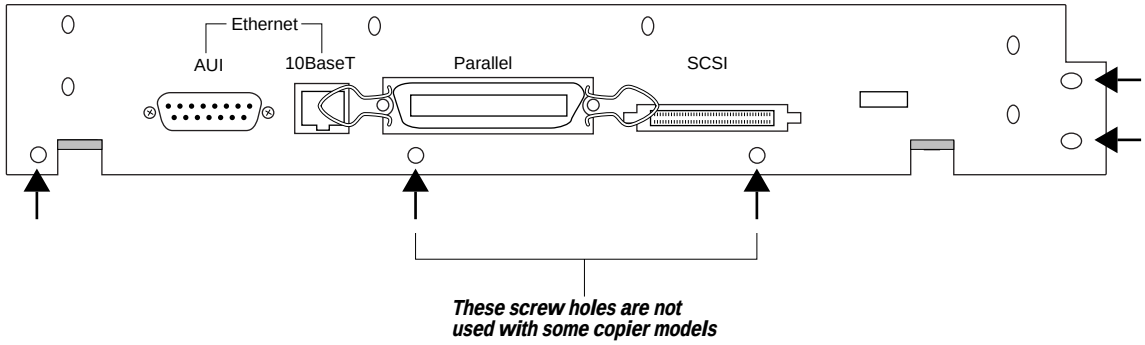


Figure 3-9 Installing screws in the faceplate

6. ***Insert the six screws into the screw holes on top of the Fiery XJ80e board to secure it (see Figure 3-8 on page 3-9).***

   If you are installing the Fiery XJ80e EMI shield, you need to install standoffs on top of the Fiery XJ80e board instead of the screws. See the separate Fiery XJ80e EMI shield installation instructions for information on installing the shield along with the Fiery XJ80e board.

Installing the Interface kit

The procedures in this section describe installing the following Controller Interface Type D kit components:

- Connector plate on rear cover
- PRN ROM
- Power supply
- Fan
- EXU board and brackets

Note: Set all the cables, and the PTL aside; you will install those items later. The keytops and the Operation Panel decals are used in A166/A187 installations only.

Follow standard ESD (electrostatic discharge) precautions while handling components.

To install the connector plate

1. ***With the rear cover removed from the copier, gently pry out the black rivets that attach the switch cover to the rear cover.***

   Set the switch cover aside.

2. ***Place the connector plate in the empty slot on the inside of the rear cover (see Figure 3-10 on page 3-12).***

   Make sure the holes in the connector plate line up with the holes in the rear cover.

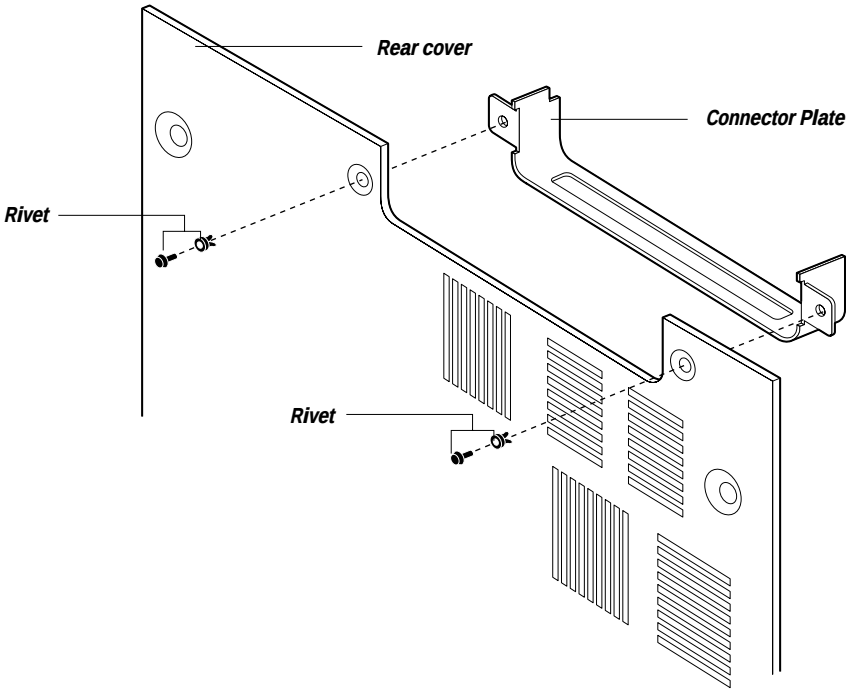


Figure 3-10 Installing the connector plate in the rear cover

3. ***Insert the black rivets into the connector plate to secure it to the rear cover as shown in Figure 3-10.***
4. ***Set the rear cover aside; you will reinstall it on the back of the copier later in "Reassembling the copier" on page 3-24.***

To install the PRN ROM

In this procedure you will remove the ROM in socket IC238 on the PRN board and replace it with the PRN ROM provided in this kit. Note that if the version of the PRN ROM installed on the board is more recent than the version in the kit, you do not need to replace the PRN ROM.

1. ***Unpack the PRN ROM.***

   Take ESD precautions and be very careful when handling the ROM.

2. ***Remove the ROM installed in socket IC238 on the PRN board and replace it with the new PRN ROM.***

   Make sure the notch in the chip is aligned with the notch in the socket. Also, make sure you carefully align the pins in the chip with the holes in the socket. If you notice any bent pins, straighten them gently with a pair of needlenose pliers.

To install the power supply

1. ***Unpack the power supply and the six mounting screws.***
2. ***Before you install the power supply, move the voltage selection cable to the correct connector for the customer's voltage requirements (connector CN5 for 230V or connector CN4 for 115V).***

   The power supply is shipped with the voltage selection cable installed on CN5 for 230V. If 115V is required, be sure to move the cable to the 115V connector. See Figure 3-11.

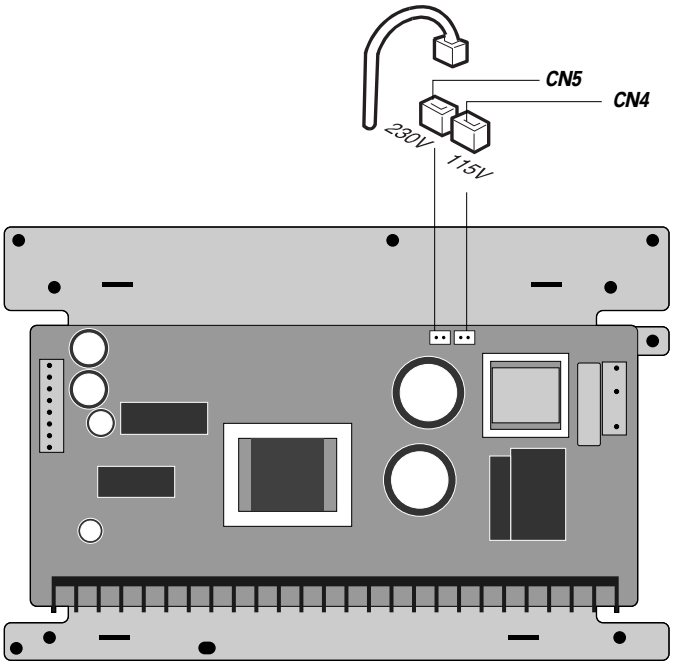


Figure 3-11 Power supply voltage selection (top view)

3. ***Place the power supply on the mounting holes at the base of the PRN box (see Figure 3-12 on page 3-14).***

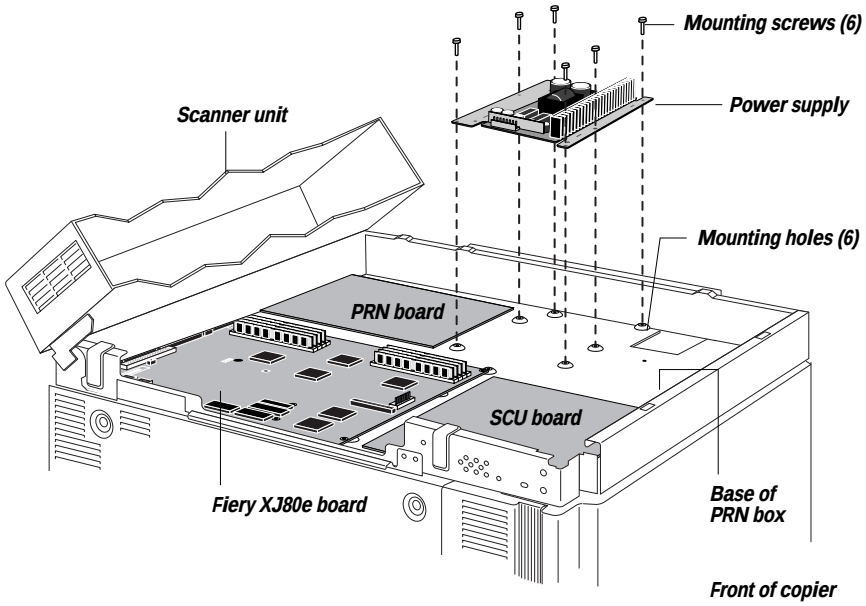


Figure 3-12 Installing the power supply

4. Secure the power supply to the base of the PRN box using the six mounting screws.

To install the fan

1. ***Unpack the fan.***
2. ***Remove the screw that attaches the metal cover plate to the base of the PRN box. The metal cover plate is located next to the stopper bar that holds up the scanner unit.***

   Retain the screw as you need it to secure the fan to the base of the PRN box.
3. ***With the fan label facing the edge of the copier, angle the fan so that the bottom of it rests in the slot (see Figure 3-13).***

   Gently move any cables out of the way so you can easily access the fan slot.

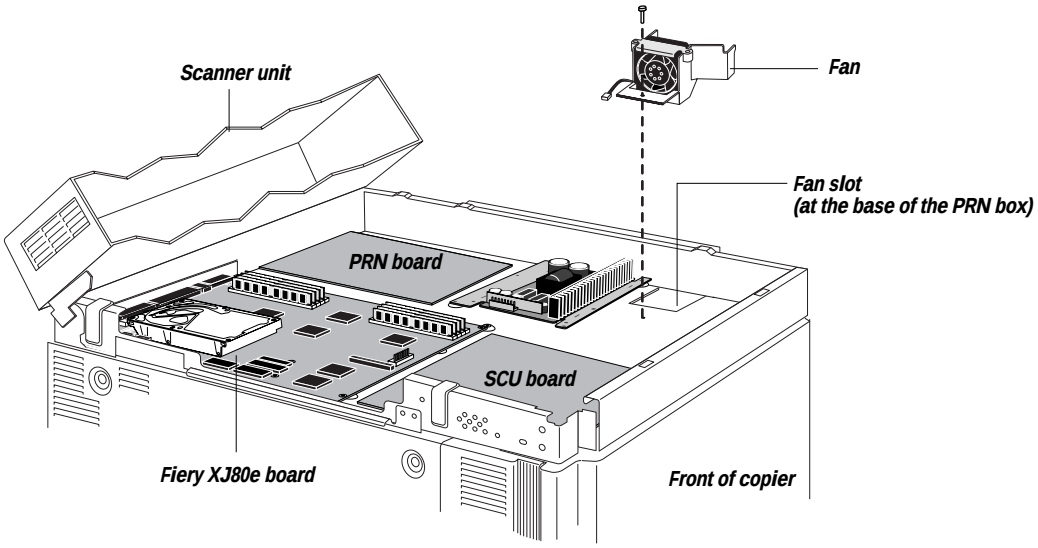


Figure 3-13 Installing the fan

4. ***Using the screw you removed from the metal cover plate, secure the fan to the base of the PRN box.***

   Make sure the fan wire is facing the inside of the PRN box.

   You will connect the fan wire to a cable connector from the power supply in “Installing interface and Fiery XJ80e kit cables” on page 3-19.

To install the EXU board

The EXU board is installed on the SCU board installed in the base of the PRN box.

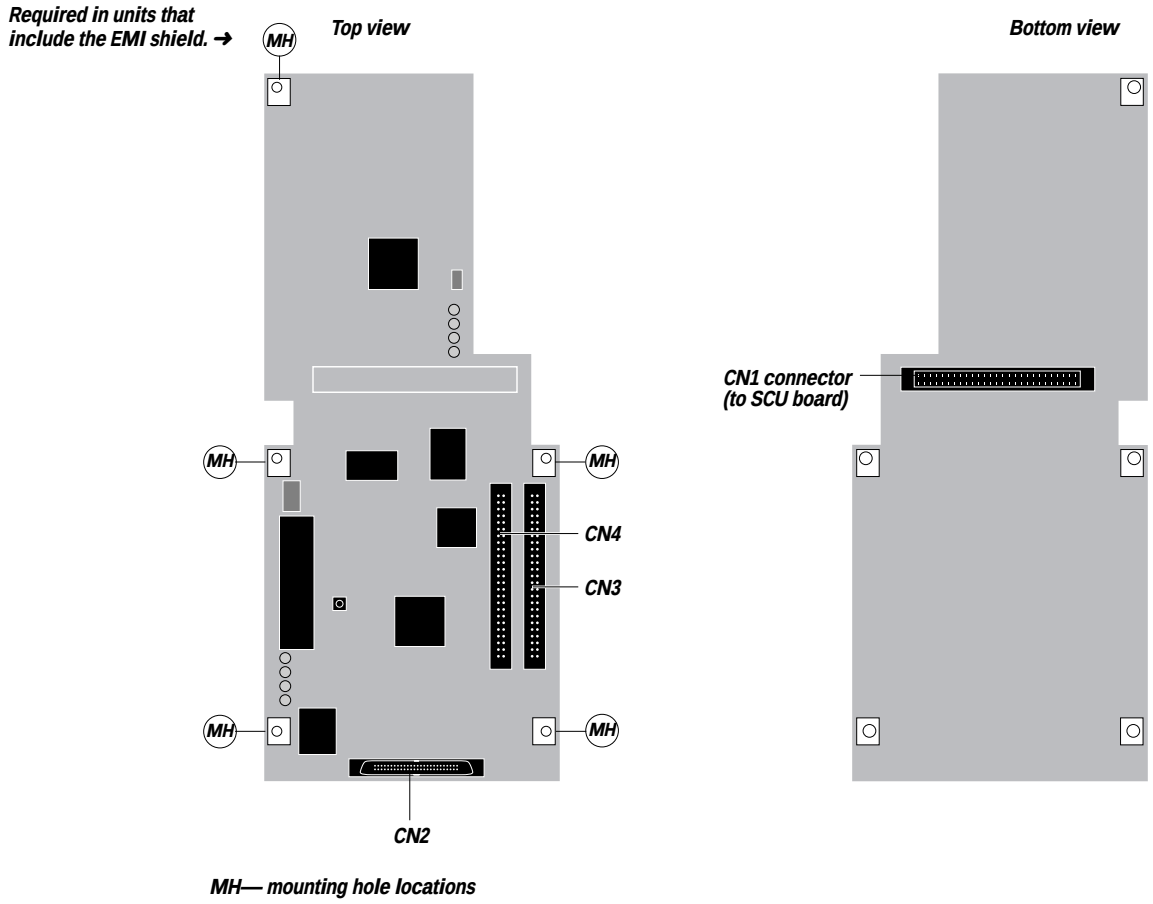


Figure 3-14 EXU board (top and bottom view)

1. ***Remove four of the mounting screws that secure the SCU board to the copier (see Figure 3-15 on page 3-17).***

   Retain the mounting screws from the SCU board as you need to replace them when installing the mounting brackets.

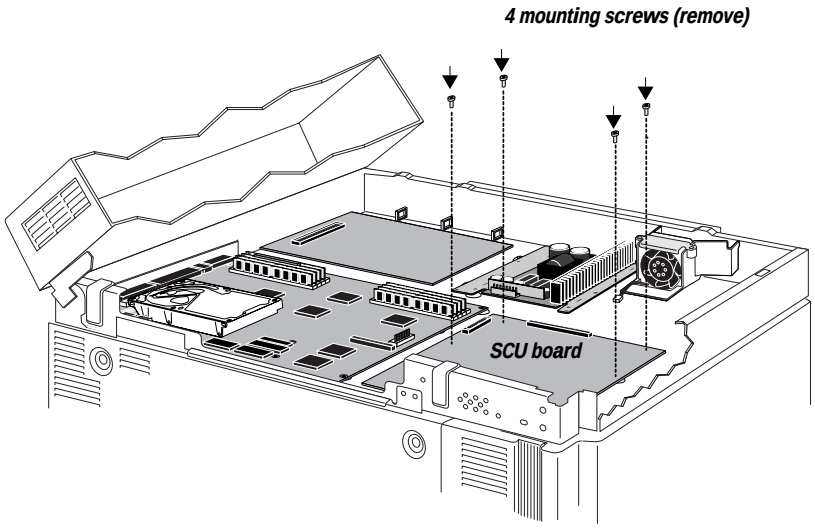


Figure 3-15 Removing SCU board mounting screws

2. ***Place the A189 EXU bracket as indicated in Figure 3-16 on page 3-18.***
3. ***Secure the A189 EXU bracket to the SCU board using the two screws you removed from the SCU board.***

   Do not tighten the screws completely. You may need to adjust the bracket slightly in order to correctly line it up with the mounting holes on the EXU board.
4. ***Secure the two short mounting brackets to the SCU board using the two remaining mounting screws.***

   This kit contains two short brackets and one long bracket. The two short brackets must be installed as indicated in Figure 3-16. The long bracket is not used in A189 installations.
5. ***Plug connector CN1 on the EXU board into connector CN366 on the SCU board.***

   Connector CN1 on the EXU board is on the bottom of the board.
6. ***Insert four of the mounting screws (M3x5 Phillips pan-head) into the mounting holes on the EXU board (see Figure 3-16 on page 3-18).***

   Line up the mounting holes in the brackets with the mounting holes in the EXU board.
7. ***Tighten the rest of the screws in order to secure the EXU board to the SCU board.***

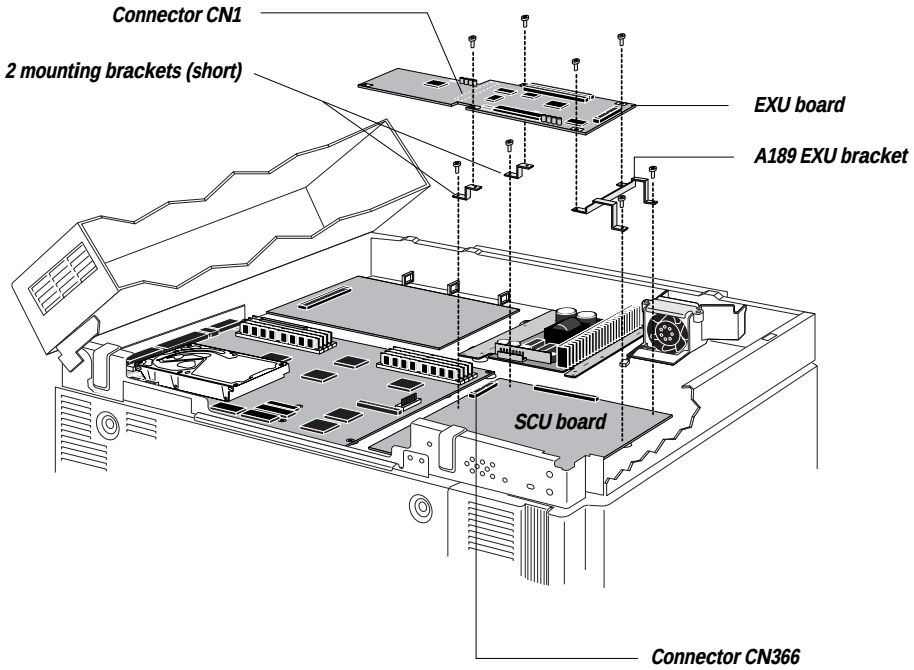


Figure 3-16 Installing the EXU and brackets

8. Set the rest of the Interface kit contents aside. You will install those items later.

Installing interface and Fiery XJ80e kit cables

In this procedure you will connect the following cables:

- Copier power (AC) cable
- Fiery XJ80e power (DC) cable (includes fan power)
- EXU/SCU SCSI cable (50-pin)
- PRN SCSI cable (attached to the PRN board)
- CIVIC cable (52-pin)

To install cables

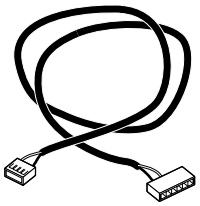
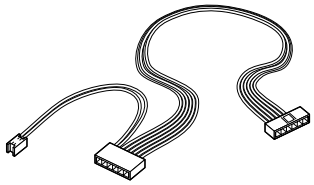
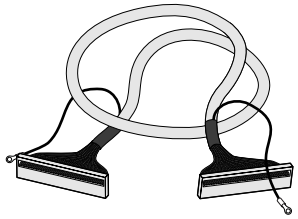
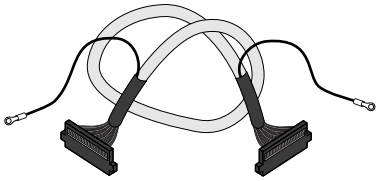
1. ***Unpack the two power cables, the EXU/SCSI cable, and the CIVIC cable.***
2. ***Remove the 4-pin connector cover on the copier power connector in the base of the PRN box.***

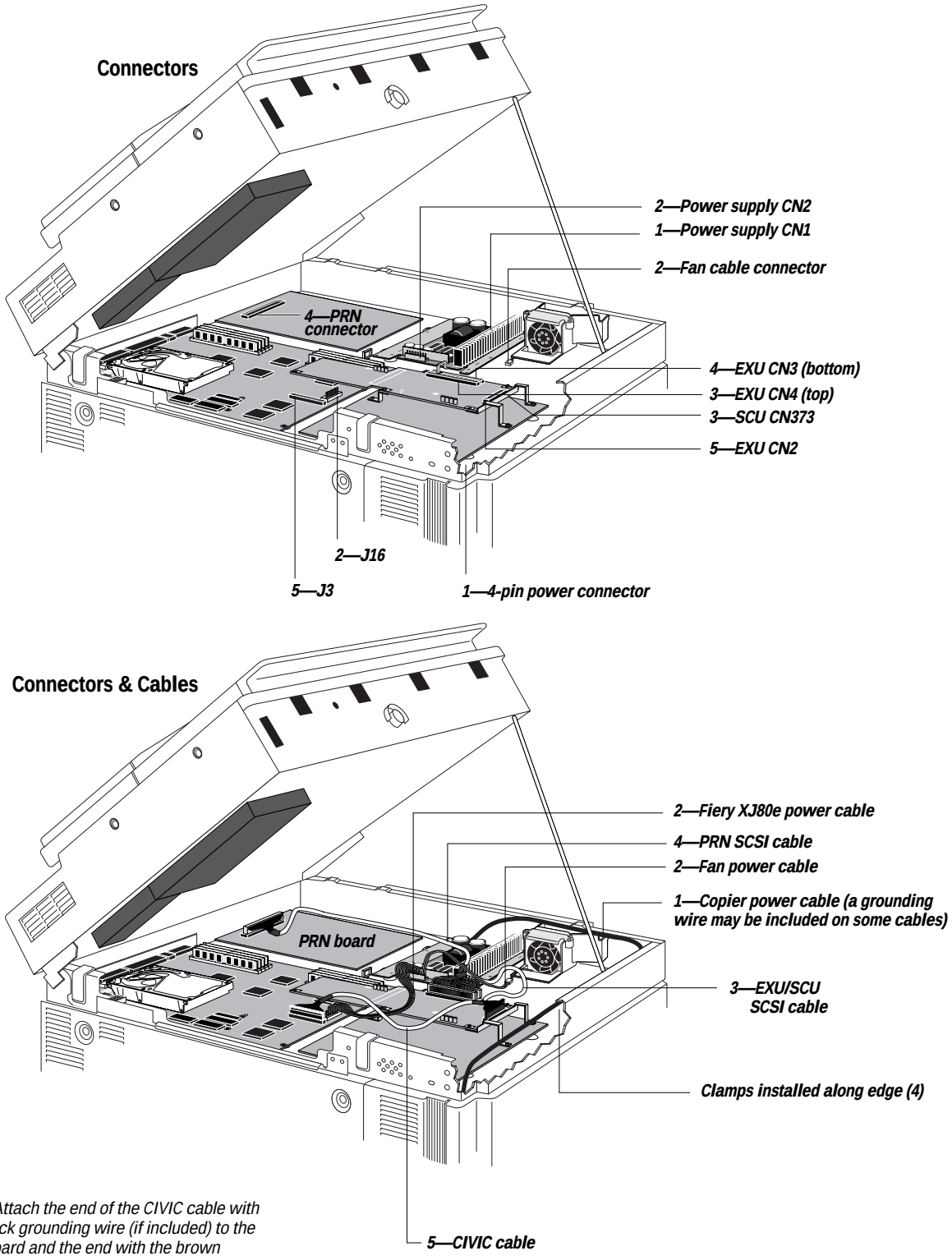
   The copier power connector is located in the base of the PRN box in the front left corner of the copier.
3. ***Install the 4 clamps into the holes at the front of the PRN box (see Figure 3-17 on page 3-21).***
4. ***Connect the cables as detailed in the following table and Figure 3-17 on page 3-21.***

   Route any loose cables through the cable clamps on the base of the PRN box.

   Attach any grounding wires from the EXU/SCU SCSI cable, CIVIC cable, and the Copier power cable to the nearest grounding point. You may need to remove mounting screws in order to attach the grounding wires. Grounding wires should not come in contact with any other components.

Note: 220V, 230V, and 240V copiers require that you install the EXU shield over the EXU board after you install the cables. For EXU shield installation information, see the separate EMI shield document.

Cable	From	To
1—Copier Power (AC) 	Power supply CN1 connector ***Note:*** Some cables may have a grounding wire included.	4-pin power connector at the front of the PRN box ***Note:*** You need to remove the connector cover before you connect the copier power cable.
2—Fiery XJ80e Power (DC) 	Power supply CN2 connector	Fiery XJ80e board connector J16 Fan cable connector (2-pin connector)
3—EXU/SCU SCSI 	EXU board CN4 (top) connector	SCU board CN373 connector ***Note:*** Some cables have only one grounding wire. Connect the end with the grounding wire to the SCU board.
4—PRN SCSI	PRN connector (already connected)	EXU board CN3 (bottom) connector
5—CIVIC 	EXU board CN2 connector ***Note:*** This cable has a brown and black grounding wire. Make sure you attach the end of the cable with the black grounding wire (if included) to the EXU board and the end with the brown grounding wire to the Fiery XJ80e board. Each connector is labeled with the correct mounting location.	Fiery XJ80e board J3 connector



Note: *Attach the end of the CIVIC cable with the black grounding wire (if included) to the EXU board and the end with the brown grounding wire to the Fiery XJ80e board.*

Figure 3-17 Cable connections and ground points

Completing installation

To complete the installation, you need to do the following:

- Run Fiery XJ80e Start-up diagnostics to verify installation
- Replace copier covers
- Replace the Pre-transfer lamp (PTL)—some copiers do not require PTL replacement.
- Start the copier and print a Test Page

Note: Give the user software and documentation to the customer or the network administrator. Let them know that in order to take full advantage of the Fiery XJ80e, the user software must be installed on computers that will print to the Fiery XJ80e.

Verifying installation

To eliminate any possible connection errors that may have occurred during installation, turn on the copier and allow the Fiery XJ80e to complete the initial startup sequence before reassembling the copier. See the following procedure for information on how to check Fiery XJ80e and Interface kit installation.

To verify interface and Fiery XJ80e kit installation

1. ***Plug the power cable into the copier and a wall outlet.***

   Leave the scanner unit open so you can view printer components.

   Do not touch the electrical components inside the copier once the power cable is plugged into the wall outlet. Touching electrical components while the copier is plugged in can cause electrical shock.

2. ***Turn on the copier and watch the Operation Panel and 7-segment LED display on the Fiery XJ80e board.***

   Test numbers are quickly displayed on the Fiery XJ80e board 7-segment LEDs. If any of the tests fail, the red LED (D4) remains on at the end of the tests. Check the Operation Panel or the 7-segment LED display for the error number of the failed test. See "Fiery XJ80e diagnostics" on page 6-11 for more information. If the diagnostic tests run slowly or do not run at all, turn off the copier and check each SIMM for secure insertion in its slot. Also check cable connections to the Fiery XJ80e board.

3. ***Once you confirm that all the Start-up diagnostics pass, turn off the copier and gently close the scanner unit.***

   You need to close the scanner unit in order to run a complete startup sequence.

4. ***Turn on the copier and allow the system to proceed through startup without interruption.***

   After the copier is ready, the Printer/Scanner key flashes and the copier beeps. If the Printer/Scanner key does not flash during the startup sequence, the most likely cause is a faulty cable connection (see "General Fiery XJ80e system error conditions" on page 6-18).

5. ***If the copier is ready, the Printer/Scanner key flashes, and the Fiery XJ80e reaches the Select Language screen. Turn off the copier and continue with "Reassembling the copier" on page 3-24.***

Reassembling the copier

Replace the following covers and panels to reassemble the copier:

- Rear cover
- Scanner unit screws on the back of the copier
- Operation Panel
- Upper covers (includes right and left upper brackets, front upper cover, upper left cover)
- Right rear cover

To replace the rear copier cover and scanner unit screws

1. ***Replace the two scanner unit screws at the rear of the copier. These two screws secure the scanner unit to the copier (see Figure 3-18).***
2. ***Gently slide the rear cover into place on the back of the copier.***
3. ***Replace the four screws that secure the rear cover to the copier.***

   Insert the top right screw first.

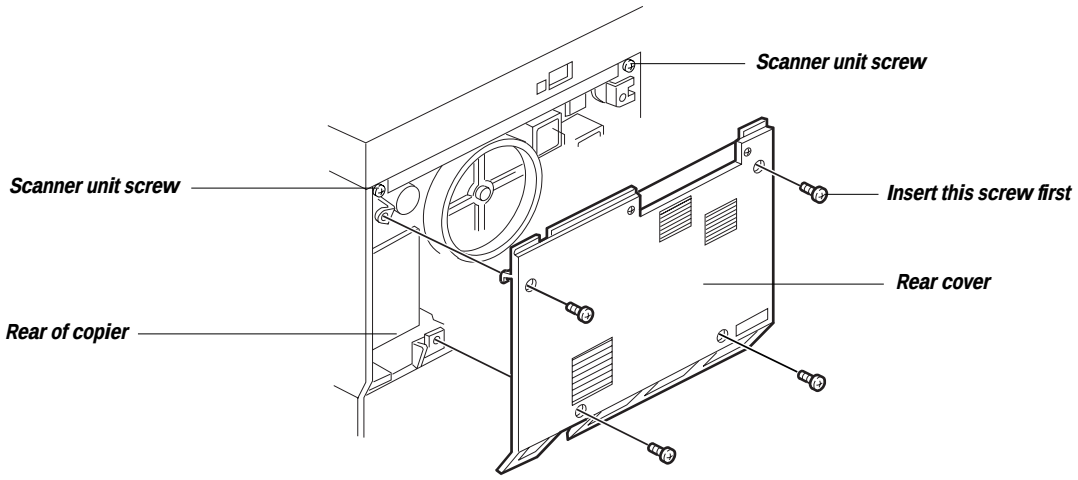


Figure 3-18 Replacing the rear cover

To replace the Operation Panel

Refer to Figure 3-19 when performing the following procedure.

1. ***Replace the three Operation Panel cables to connectors on the SCU board.***

   If necessary, connect the ferrite to the base of the PRN box.

2. ***Make sure all the cables inside the PRN box are out of the way and then remove the stopper bar and gently close the scanner unit.***

   Replace the stopper bar in the holder on the front of the scanner unit.

3. ***Replace the two screws that secure the scanner unit to the copier.***
4. ***Gently set the Operation Panel on the front of the copier so that the mounting holes in the Operation Panel line up with the holes in the copier.***
5. ***Replace the two Operation Panel screws on the right and left side of the copier.***
6. ***Tighten the two screws on the front of the Operation Panel.***

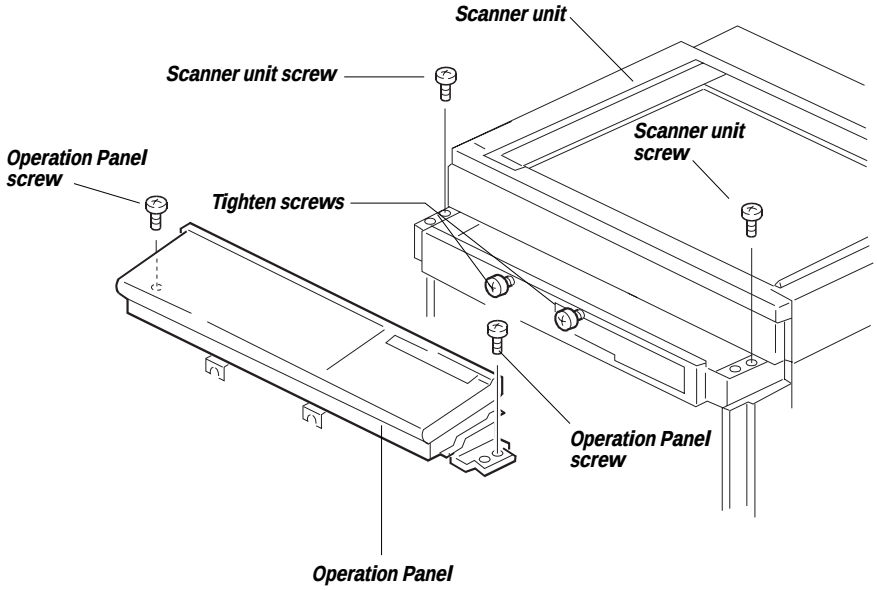


Figure 3-19 Replacing the Operation Panel and scanner unit screws

To replace covers

Refer to Figure 3-20 when performing the following procedure.

1. ***Replace the upper right and upper left brackets.***

   Gently angle the brackets to the side in order to replace them.

2. ***With the front door of the copier open, replace the upper front cover.***
3. ***Replace the upper left cover.***
4. ***Replace the right rear cover.***
5. ***Close the front door of the copier.***

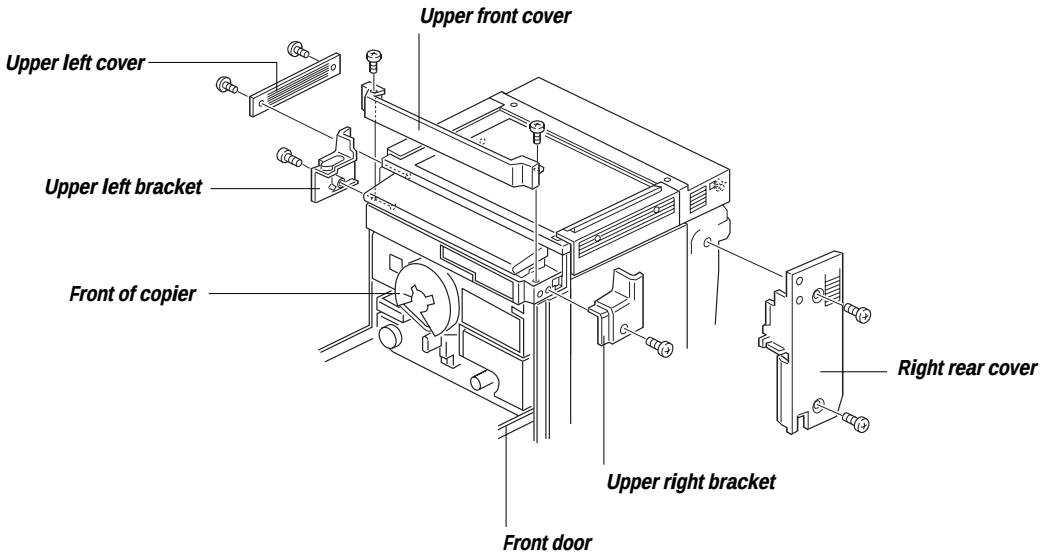


Figure 3-20 Replacing the covers on the copier

6. Peel the adhesive backing off the Fiery driven and Adobe PostScript logo decal and install it on the front of the copier (see Figure 3-21).

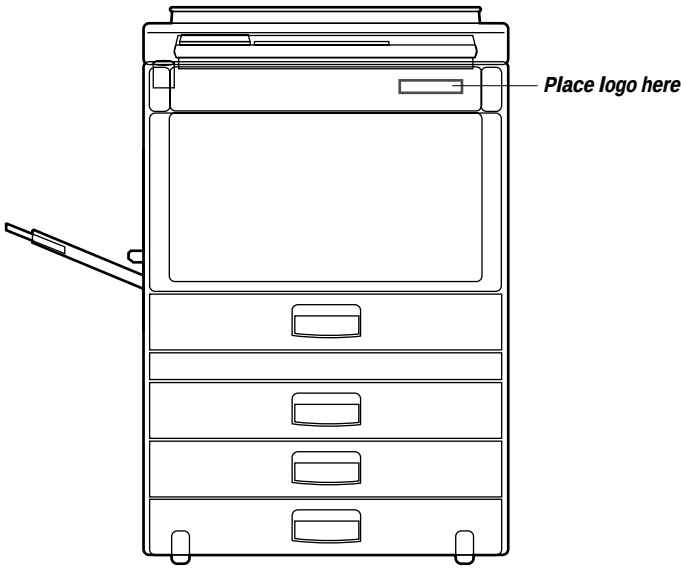


Figure 3-21 Installing the logo decal on the copier

Installing the Pre-Transfer Lamp (PTL)

The following section describes PTL installation. You do not need to replace the PTL in copier models with the following serial numbers and above:

Model	Code	Serial Number
nashuatec C503 Gestetner 2703	A166-10	A167075001
Savin SDC103	A166-15	4A17070001
Aficio Color 2003	A166-17	A3967080001
nashuatec C503 Gestetner 2703 Rex Rotary CC8403	A166-22	A157080001
infotec 7212Z	A166-26	3J10870001
Aficio Color 2003	A166-27	A3967080116
Aficio Color 2003	A166-29	A3967080325
Lanier 5603 DC (AG)	A166-55	L0117100256
nashuatec C503d Gestetner 2703d	A187-10	All
Savin SDC103A	A187-15	4A27070001
Aficio Color 2103	A187-17	A3977070001
nashuatec C503d Gestetner 2703d Rex Rotary CC8403D	A187-22	A177070001
infotec 7212DZ	A187-26	3J20770001
Aficio Color 2103	A187-27	A3977070101
Aficio Color 2103	A187-29	A3977070159
Lanier 5603DC (AD AG)	A187-55	L0127070046
nashuatec C503de Gestetner 2703de	A189-10	A207125001
Savin SDC103E	A189-15	4A37070001
Aficio Color 2203	A189-17	A3997070001
nashuatec C503de Gestetner 2703de Rex Rotary CC8403DE	A189-22	A197070001
infotec 7212EZ	A189-26	3J30770001
Aficio Color 2203	A189-27	A3997070117
Aficio Color 2203	A189-29	A3997070145
Lanier 5603DC (E AG)	A189-55	L0137070155

To replace the PTL

Refer to the Copier Service documentation for detailed information on replacing the PTL.

1. ***Remove the development unit.***
2. ***Remove the transfer belt unit.***
3. ***Replace the PTL on the transfer belt unit with the PTL provided in this kit (see Figure 3-22).***

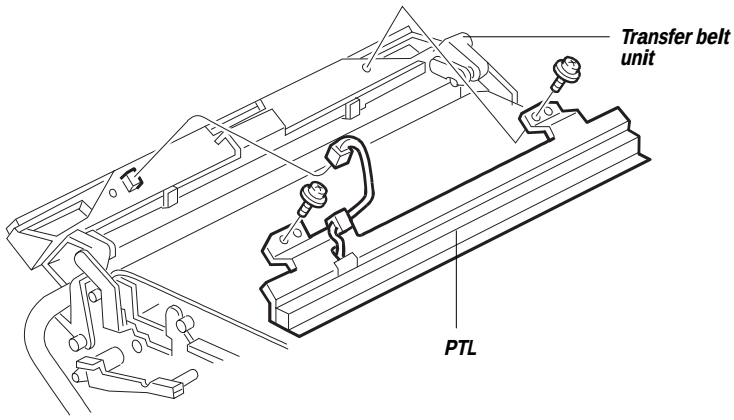


Figure 3-22 Installing the PTL

4. ***Replace the transfer belt unit and the development unit.***

Starting the copier

The first time the copier is turned on after you install the Fiery XJ80e Controller and the Interface Type D kits, select the language displayed on the copier Operation Panel for Fiery XJ80e functions. See Figure 3-23 for information on using the Fiery XJ80e keys on the Operation Panel during startup. For more detailed information on Fiery XJ80e functions using the Operation Panel, see “Using the Operation Panel” on page 4-1.

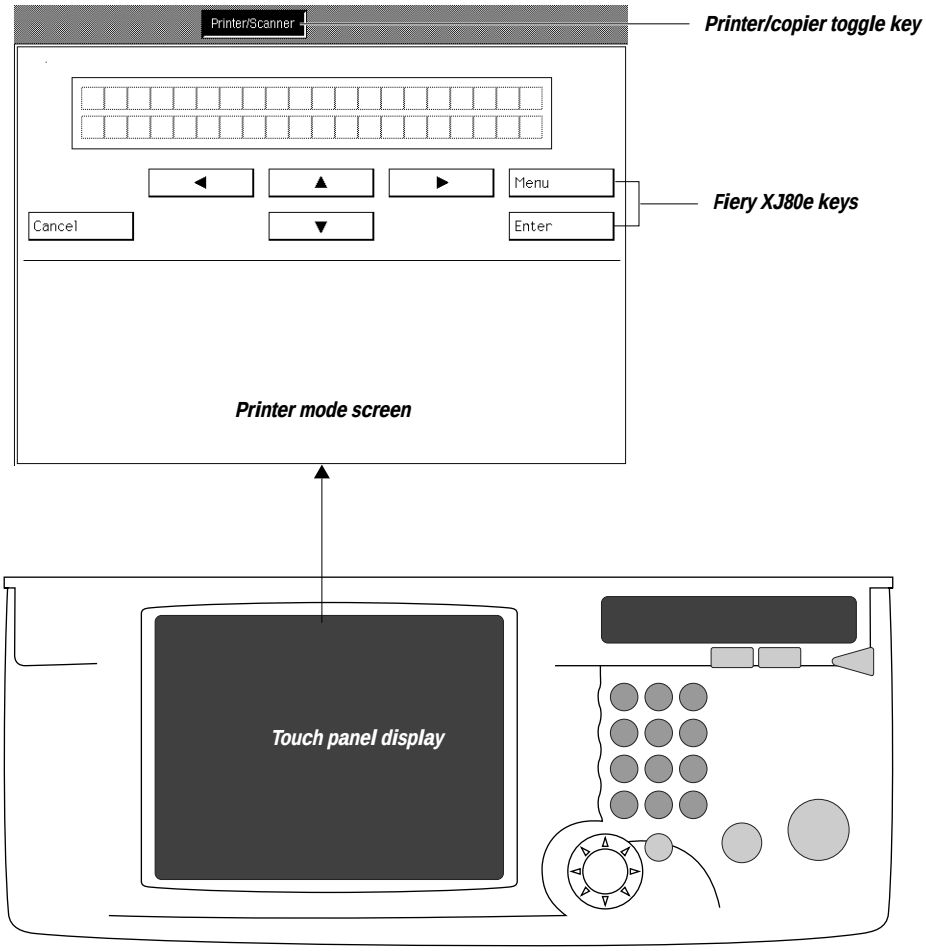


Figure 3-23 Operation Panel

To start the copier

See Figure 3-24 on page 3-33 for an illustration of the startup sequence.

1. ***Plug the power cable into an outlet.***
2. ***Turn on the copier and allow startup to proceed without interruption.***

   If the memory configuration was changed on the Fiery XJ80e board, or you replaced the Fiery XJ80e board (not the hard disk drive), you need to provide a password for verification. See "To start the copier when a password is required" on page 3-31.

   Note: When you turn on the copier, make sure Auto Reset in User Tools is set to On.
3. ***At the language screen, use the up and down arrow keys to scroll through the available languages. Press the Enter key when the language you want is displayed on the Operation Panel.***

   Make sure you select the correct language. Once you select a language, the only way to change it is to reinstall Fiery XJ80e system software.
4. ***At the Setup screen, press the Enter key to select Server Setup.***

   The first time you turn on the copier after installing these kits you must enter setup options for Server, Network, and Printer Setup, in this order.
5. ***Scroll through the options using the up arrow key and Save Changes to configure Server Setup with the default settings.***

   It is the network administrator's responsibility to configure the setup according to the network and user environment.
6. ***Configure Network and Printer Setup with default settings and Save Changes.***
7. ***At the Setup screen, use the up arrow key to scroll to Exit Setup and then press the Enter key.***
8. ***Following a successful startup, proceed to "Printing a test page" on page 3-35.***

To start the copier when a password is required

A password is only required if you changed the memory configuration, or you replaced the Fiery XJ80e board (but not the hard disk drive). Replacing the hard disk drive only, does not require a password. See Figure 3-24 on page 3-33.

1. ***At the screen "Software not authorized," press the Enter key.***
2. ***At the next screen, carefully write down the ID# that appears on the Operation Panel and call your authorized service/support center.***

   You need to give your authorized service/support center the ID#. You will then receive an authorization code.
3. ***At the screen "Enter Auth. Code," enter the authorization code and then press the Enter key.***

   Use the up and down arrow keys on the Operation Panel to select the correct letter or number. Use the left and right arrow keys to advance to the next space. Note that the authorization code must be entered exactly.

   If you enter the wrong number, the message "Invalid code. Please try again" is displayed on the screen. Re-enter the authorization code. If you still get the invalid code message, call your authorized service/support center.

   If the installation is successful, the screen indicates that the password has been installed.
4. ***Press the Enter key to reboot the system.***
5. ***At the language screen, use the up and down arrow keys to scroll through the available languages. Press the Enter key when the language you want is displayed on the Operation Panel.***

   Once you select a language, the only way to change it is to reinstall Fiery XJ80e system software.
6. ***At the Setup screen, press the Enter key to select Server Setup.***

   The first time you turn on the copier after installing these kits you must enter setup options for Server, Network, and Printer Setup, in this order.
7. ***Scroll through the options using the up arrow key and Save Changes to configure Server Setup with the default settings.***

   It is the network administrator's responsibility to configure setup according to the network and user environment.
8. ***Configure Network and Printer Setup with default settings and Save Changes.***
9. ***At the Setup screen, use the up arrow key to scroll to Exit Setup and then press the Enter key.***
10. ***Following a successful startup, proceed to "Printing a test page" on page 3-35.***

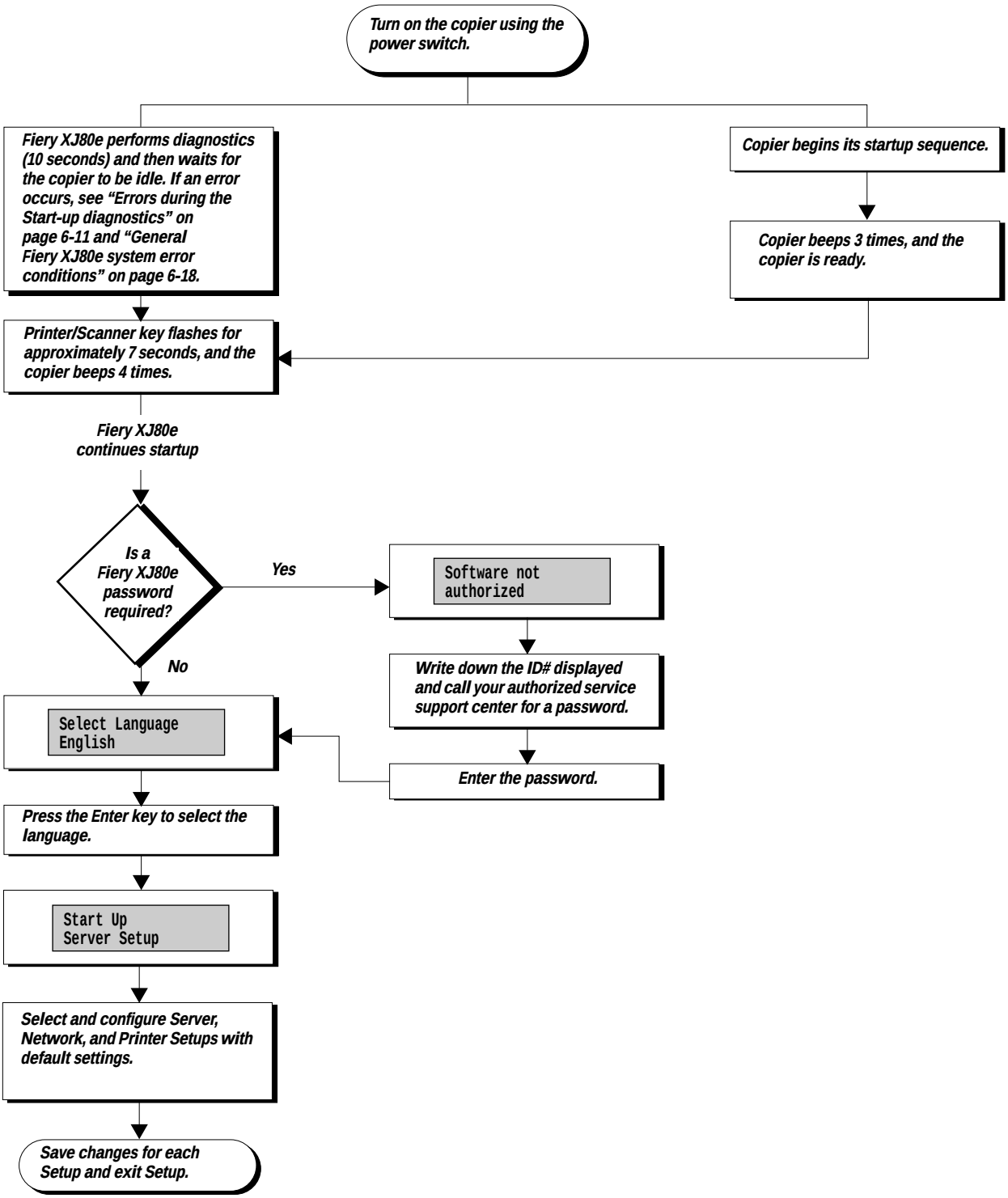


Figure 3-24 Initial startup sequence (after installing kit components)

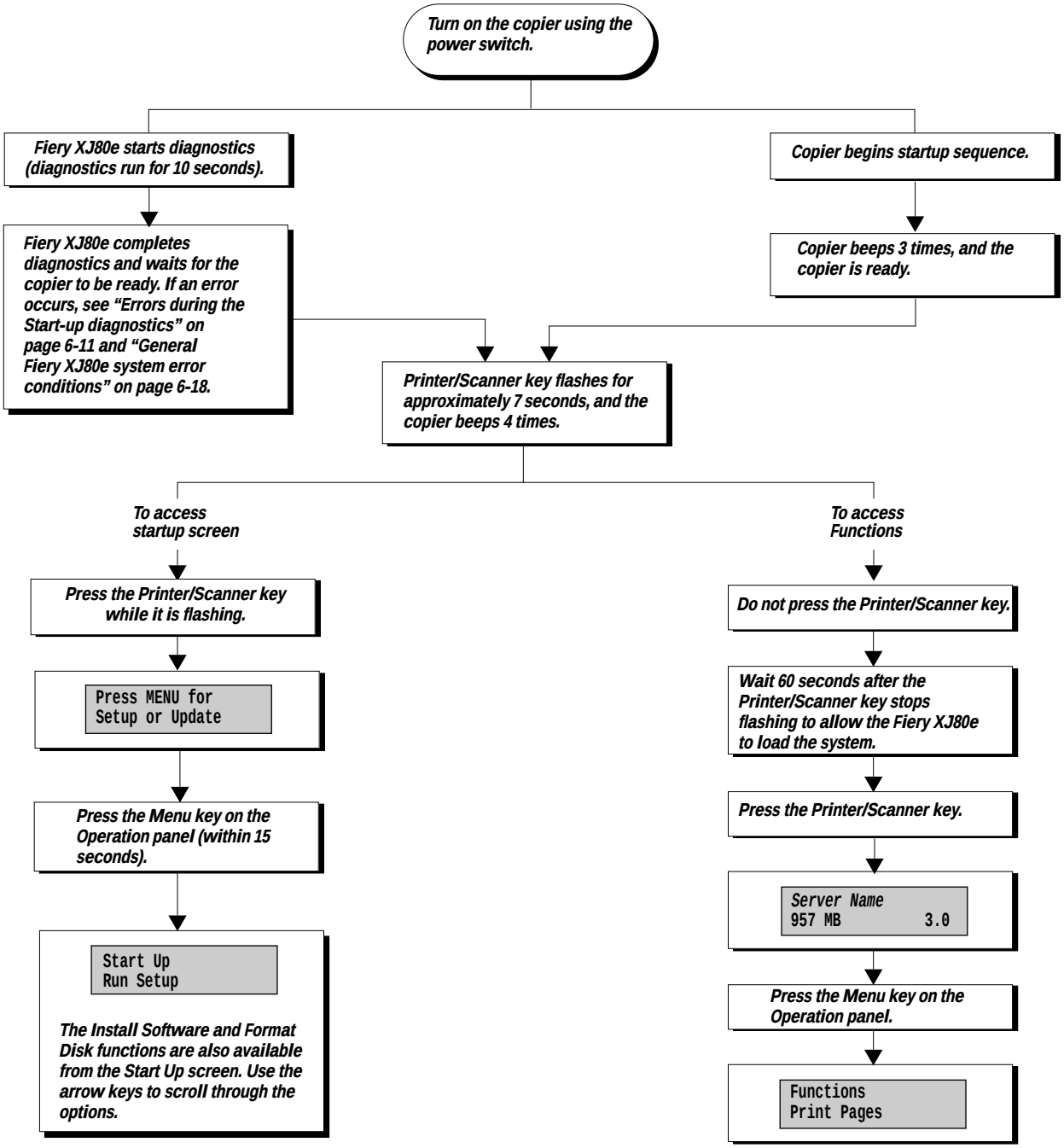


Figure 3-25 Standard startup sequence

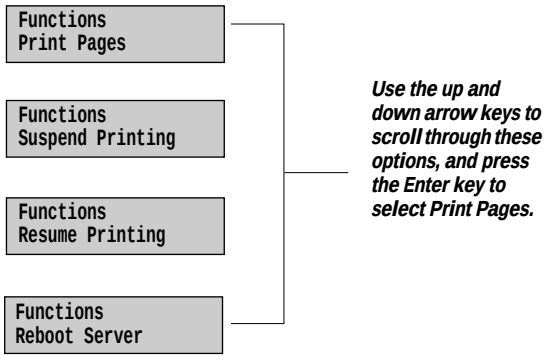
Printing a test page

Before attaching the copier to the network, verify that all components of the Fiery XJ80e-to-copier interface are working by printing a test page. The copier prints the test page, a color PostScript file that is resident on the Fiery XJ80e hard disk drive.

To print a test page from the Operation Panel

1. ***If the copier is off, turn it on and allow it to warm up.***
2. ***Before you print the Fiery XJ80e Test Page, perform the copier ACC (Auto Color Calibration) function using the Image Adjustment key. See the Copier service documentation for information.***
3. ***Use the Fiery XJ80e AutoCal function using the copier target to calibrate the Fiery XJ80e. See the* User Guide *for information.***
4. ***When the copier is in the ready condition, press the Printer/Scanner key on the Operation Panel to access server functions (see "Using the Operation Panel" on page 4-1).***
5. ***Press the Menu key.***

   The Functions menu displays a scrolling list of options.



6. ***Press the Enter key when* Print Pages *is displayed and then press the Enter key again when* Test Page *is displayed.***

   The Processing and Printing status screens are displayed as the test page is printed.

7. ***Examine the quality of the test page.***

   The test page confirms that the print engine is functional and that the connection between the Fiery XJ80e board and the copier is good.

Connecting Fiery XJ80e network cables

The 16-bit Ethernet network adapter chip (Intel 82593 CSMA/CD core LAN Controller) built into the Fiery XJ80e board provides connectivity to Ethernet networks. Supported Ethernet cabling includes: thinnet, thicknet, and twisted pair.

Other Fiery XJ80e connectivity includes a high-speed parallel port that enables the Fiery XJ80e to connect directly to the parallel port of a PC-compatible or a Novell server.

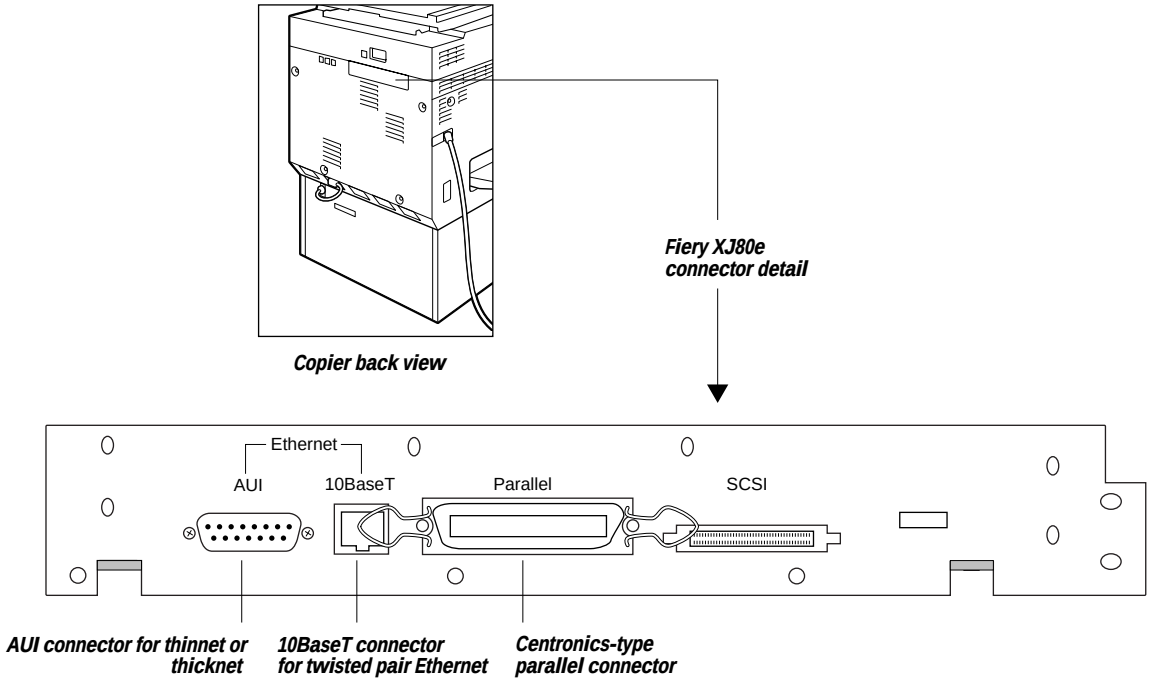


Figure 3-26 Fiery XJ80e network connectors

Ethernet network connections

The Fiery XJ80e board has two external Ethernet network connectors: an AUI (Attachment Unit Interface) connector for a thin Ethernet cable (thinnet) or a thick Ethernet cable (thicknet), as well as a 10BaseT connector for twisted pair (see Figure 3-26). Only one Ethernet connection should be made to the Fiery XJ80e at a time. The circuitry on the Fiery XJ80e automatically determines which connector is being used. For network configuration information, see the *Administrator Guide*.

To connect a thinnet or thicknet cable to the Fiery XJ80e

Thinnet (thin coaxial Ethernet or 10Base2 cable) connections require an external transceiver attached directly to the AUI connector on the back of the Fiery XJ80e. An AUI-to-BNC Ethernet transceiver is included in the Fiery XJ80e Controller kit.

Thicknet (thick coaxial Ethernet or 10Base5 cable) connections require an external transceiver with an AUI drop cable that connects to the AUI connector on the back of the Fiery XJ80e.

1. ***Make sure the copier/printer is not in use and then turn it off.***
2. ***Connect the thinnet or thicknet network cable to the Fiery XJ80e.***

   - To connect a thinnet cable to the Fiery XJ80e, the AUI-to - BNC external transceiver (with the T-connector) must be installed on the Fiery XJ80e AUI connector. The thinnet cable then connects to the BNC connector on the external transceiver. Slide the latch to the right to lock the connector in place.
   - To connect a thicknet cable to the Fiery XJ80e, connect the AUI drop cable directly to the AUI connector on the back of the Fiery XJ80e. Slide the latch to the right to lock the connector in place.

   If you turn on the Fiery XJ80e without connecting the network cable to the transceiver, you may receive a startup error. Make sure the network cable is connected to the transceiver before you turn on the copier.

3. ***Turn on the copier and configure Setup options. For information on accessing Setup, see "Using setup" on page 5-1.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.

4. ***After configuring Setup options, verify the network connection.***

   Once the network connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the copier should be available on the network.

   The network administrator should perform any additional network setup, verify the network connection, verify that the copier appears on the list of printers, and print a few test documents from a networked computer that uses the copier. See the *Administrator Guide* for more information.

To connect a twisted pair cable to the Fiery XJ80e

Twisted pair (unshielded twisted pair cable or 10BaseT) uses an 8-pin, RJ-45 connector that connects to the RJ-45 socket on the back of the Fiery XJ80e board (see Figure 3-26 on page 3-36).

1. ***Make sure the copier/printer is not in use and then turn it off.***
2. ***Connect the RJ-45 cable to the RJ-45 socket on the back of the copier.***
3. ***Turn on the copier and configure Setup options. For information on accessing Setup, see "Using setup" on page 5-1.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.
4. ***After configuring Setup options, verify the network connection.***

   Once the network connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the copier should be available on the network.

   The network administrator should perform any additional network setup, verify the network connection, verify that the copier appears in the list of printers, and print a few test documents from a networked computer that prints to the copier. See the *Administrator Guide* for more information.

Connecting a parallel port device to the copier

The parallel (Centronics) connector on the back of the copier provides a high-speed interface port that allows the copier to connect directly to the parallel port of a PC-based server (such as a Novell server). Although there are a number of PC-based devices that may be connected to the copier for parallel printing, the procedure for connecting each of these device types is similar.

The copier connects to the parallel port of a PC-based server through the parallel (Centronics) cable (six feet long or less, with a male 36-pin connector on one end and a 25-pin male D-sub, shielded connector on the other end). The parallel (Centronics) cable is shipped in the Fiery XJ80e Controller kit.

To connect the copier to a PC-based server

Make sure the copier is turned off before you connect it to a PC-based server.

1. ***With the network administrator's authorization, turn off the PC-based server and the copier.***
2. ***Connect the 25-pin connector on the parallel (Centronics) cable to the parallel port of the PC-based server.***

   If there is more than one parallel port connector on the back of the PC-based server, ask the network administrator to indicate the preferred parallel port to use for the copier.
3. ***Connect the 36-pin connector on the Centronics cable to the 36-pin, D connector on the back of the Fiery XJ80e board.***

   The parallel (Centronics) connector is next to the Ethernet connectors on the Fiery XJ80e (see Figure 3-26 on page 3-36).
4. ***Turn on the PC-based server and the copier.***
5. ***Configure Setup options.***

   Setup is required the first time the copier is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. It is the network administrator's responsibility to configure setup according to the network and user environment. Refer the network administrator to the *Administrator Guide* for Setup information.
6. ***After configuring Setup options, verify the parallel port connection.***

   Once the parallel port connection has been made, the copier has the correct Setup configuration, and it has reached the copier-ready screen, the network administrator should print a few test documents from the *host PC*—a PC-compatible or a Novell server with a parallel (lpt) port connected to the copier. See the *User Guide* for more information.

Chapter 4:
Using the Operation Panel

This section describes the Fiery XJ80e functions on the Operation Panel. Once you install the Fiery XJ80e board in the copier and verify that the unit powers up correctly, you will use the Fiery XJ80e keys on the Operation Panel to access and monitor different features of the Fiery XJ80e. This installation guide does not attempt to describe all functions of the Operation Panel, only those functions that pertain to the installation of the Fiery XJ80e board.

The current status of the printer/copier and Setup information is displayed on the Operation Panel when the copier is in printer mode. Print activity can be monitored in the window, and Fiery XJ80e specific functions (such as printing a test page and installing or updating system software) can be controlled locally using Fiery XJ80e keys.

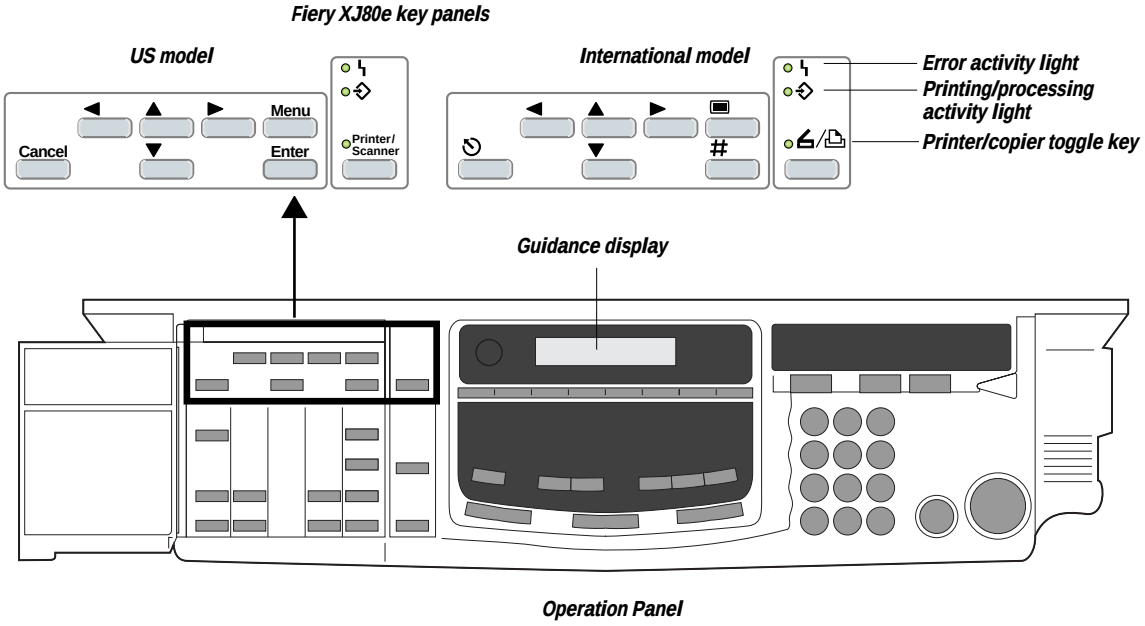


Figure 4-1 Fiery XJ80e key panels (A166/A187 copiers)

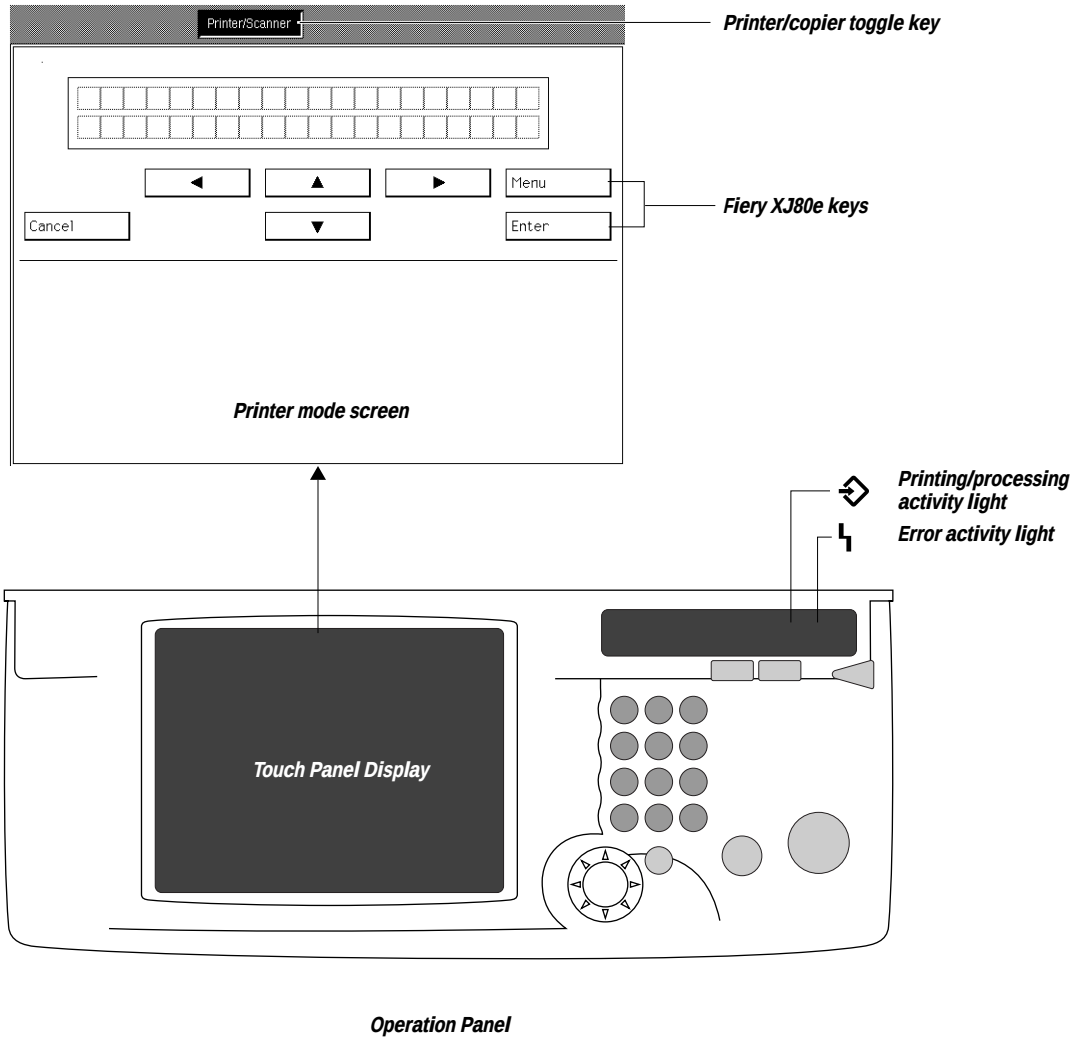
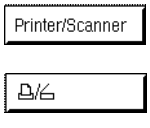
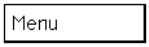
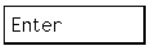
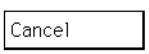


Figure 4-2 Fiery XJ80e key panels (A189 copiers)

Keys

Once the Fiery XJ80e board is installed in the copier, the Fiery XJ80e keys on the Operation Panel perform the following functions:

Key (A166/A187)	Key (A189)	Description
		Toggles between copier and printer functions. This key allows you to access the following: • When this key flashes during startup, pressing it accesses the startup menus. • When the copier is in its ready condition, pressing this key allows you to access and view printer functions. If the copier is not in the ready condition, you should wait approximately 60 seconds after the key stops flashing before pressing this key.
		In the setup menus, takes you back one level. When the copier is in printer mode, switches between the status windows and the Functions window (and the warning window if a message is displayed).
		
		Selects the currently displayed choice and proceeds to the next option.
		
		The up arrow takes you to the next entry in the list.
		The down arrow takes you to the previous entry in the list.
		The right arrow in the setup menus advances the cursor to the text-entry position to the right.
		The left arrow in the setup menus backspaces the cursor to the text-entry position to the left. In a text field, it deletes the character to the left.
		Cancels a job that is printing or processing (the job is canceled from the printing or processing screen). During setup, this key has the same function as the Menu key.
		

Activity indicators

Once the Fiery XJ80e board is installed in the copier, the activity lights on the Operation Panel indicate printer status and perform the following functions:

Activity indicator (A166/A187)	Activity indicator (A189)	Description
○ ↳	↳	Flashes red when there is an error that prevents printing or scanning (see the *User Guide* for more information). Solid red for more than 30 seconds when a communication error occurs between the Fiery XJ80e and the copier (see "General Fiery XJ80e system error conditions" on page 6-18).
○		Flashes green when the printer is processing/ripping a print job, or communicating with a remote computer. Also flashes green briefly during startup while the Fiery XJ80e checks connected SCSI devices (Scanning devices... displays on the Operation Panel).
○ Printer/ Scanner ○	Printer/Scanner	Flashes during startup to indicate that pressing the Printer/Scanner key allows you to access startup menus. If you do not press the Printer/Scanner key during this time (within 7 seconds), the normal startup sequence continues. On when the copier is in printer mode, allowing you to access and view printer functions (for A166/A187 copiers this key is green when it is on; for A189 copiers the text on the key is white with a black background when it is on). Pressing the Printer/Scanner key toggles between copier and printer mode. If you do not perform any Fiery XJ80e functions within 30 seconds of pressing this key, the system will timeout back to the copier ready screen.

Screens

When the copier is in printer mode, pressing the Menu key cycles among four screens: three status screens (Server Info, Processing, and Printing) and the Functions menu. When the copier is in the ready condition, pressing the Printer/Scanner key accesses the Server Info screen. Pressing the Menu key at the Server Info screen cycles between the Server Info screen and the Functions menu. The screens that display on the copier contain the following information:

- Server Info status screen—Displays the current system software version, the amount of disk space available on the hard disk drive, and the printer name on the network.
- Processing status screen—Displays information about the job currently being processed.

- Printing status screen—Displays information about the job currently being printed.
- Functions menu—Gives you access to administrative functions not normally performed from a remote workstation (see "Functions menu" below for information on the available functions).

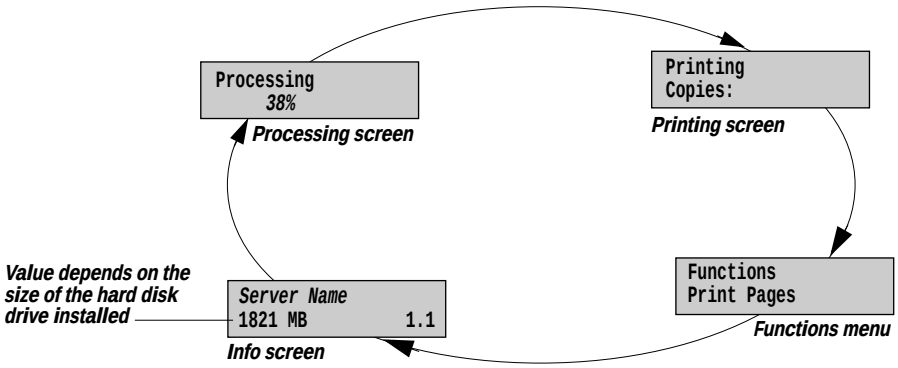


Figure 4-3 Fiery XJ80e screens displayed on the Operation Panel

Functions menu

The Functions menu allows you to perform a variety of administrative functions that do not affect print jobs of other users. To access the Functions menu, press the Printer/Scanner key when the copier is in the ready condition and then press the Menu key. Use the up/down arrow keys to scroll through the list of options. Press the Enter key when the option you want to select is displayed.

The following options are available from the Functions menu:

Print Pages—Enables you to print special pages from the copier. You can print the following pages from the submenu that appears:

- Test Page—Prints the test page resident on the Fiery XJ80e hard disk drive. The Test Page confirms that the Fiery XJ80e is properly installed in the copier and allows you to view information about color and grayscale to troubleshoot Fiery XJ80e functions. The following information also displays: Server name, Printer name, Color Mode, Calibration, Target, Color Rendering Dictionary in use, and the Date printed.

- Configuration—Prints the current device configuration, including information about all current Setup settings, calibration profile, and the Ethernet address of the Fiery XJ80e board.
- Job Log—Prints the log of the last 55 jobs. For more information about the job log, see the *User Guide*.
- Help Map—Prints the Fiery XJ80e help pages. The Help Map is useful when navigating through the different Fiery XJ80e Setup screens.
- Color Charts—Prints the color reference charts, including swatches of the RGB, CMY, and Pantone colors available from the Fiery XJ80e.
- Font List—Prints a list of all the fonts resident on the Fiery XJ80e hard disk drive.
- Start Page—Prints the start page which displays information about the copier, including the copier name, current date and time, Color Mode, amount of memory installed on the Fiery XJ80e, last calibration date, network protocols enabled, and connections published.

Suspend Printing— This option interrupts the current print job so you can use the copier to make copies; you can then select Resume Printing and the copier will continue processing and printing jobs.

Resume Printing—Resumes printing after interrupting the print job to make copies.

Reboot Server—Shuts down all printing activity properly and then restarts the Fiery XJ80e. Access to Fiery XJ80e Setup options are made available at this time (when the Printer/Scanner key flashes and the copier beeps four times).

Chapter 5:
Setting Up the Fiery XJ80e

Using setup

The Setup utility enables you to set certain options at startup and save them on the Fiery XJ80e hard disk drive (some Network Setup information is saved in EEPROM). Certain Setup options must be set after installation in order to connect the Fiery XJ80e to the customer's computer network (see the *Administrator Guide* for more information). The following is a list of the different Setup options as they appear on the Operation Panel:

- Server Setup—Configures the Fiery XJ80e (print server). These options do not configure any other devices.
- Network Setup—Affects network connections to the copier, including active ports and network protocols.
- Printer Setup—Configures the copier.
- Job Log Setup—Affects the Fiery XJ80e Job Log.
- Calibration—Calibrates the copier. The Fiery XJ80e reboots on exit of this menu.
- Change Password—Changes the existing password. This password is used to limit access to the Setup menus and to certain administrator functions in the Fiery XJ Spooler.
- Clear Server—Clears all jobs from the Print, Hold, and Printed queues and clears the Job Log. In general, you should not have to use this option. If a job fails to print and you are unable to cancel it, reboot the server and then select Clear Server. You are prompted to verify that you want to clear all files from all queues. Select Yes to clear the server.
- Exit Setup—Saves any changes made in the Setup menus and reboots the Fiery XJ80e. (Note that the Fiery XJ80e only reboots if changes are made to the Setup configuration.)

Note: For specific Setup information, refer to the *Administrator Guide*.

When to perform Fiery XJ80e Setup

Setup is required after installing the Interface kit and Fiery XJ80e Controller kit and after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup, in this order. However, it is the network administrator's responsibility to configure setup according to the network and user environment. Default settings in setup are adequate, although they may not be optimal for the user's environment. Refer the network administrator to the *Administrator Guide* for Setup information.

On IPX networks and on some TCP/IP networks, the network servers should be configured for printing to the copier before you enter network settings on the server.

In most cases, you need a live network connection so the Fiery XJ80e can query the network for zones, servers, and server-based queues.

Whenever the configuration of servers, printers, or the network itself changes at the customer site, individual settings can be altered to correspond to the changed environment. Likewise, if printing needs or administrative requirements change, the corresponding settings can be altered.

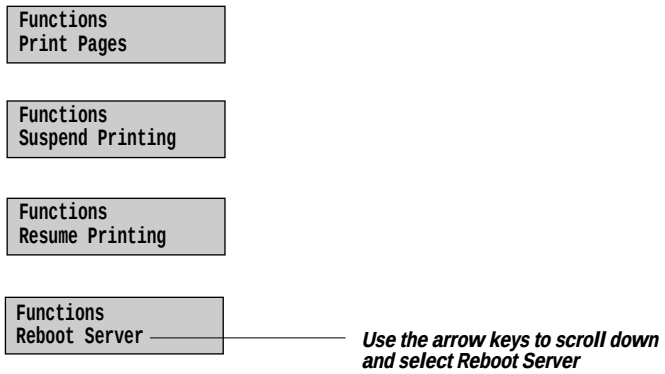
Accessing Setup options

Before servicing a copier that already has the Fiery XJ80e installed, print the Configuration page from the Functions menu.

To access Setup when the copier is on

1. ***Confirm that the copier is in the ready condition.***
2. ***Press the Printer/Scanner key on the Operation Panel to access printer mode.***

3. ***At the Server Info screen, press the Menu key to go to the Functions menu.***



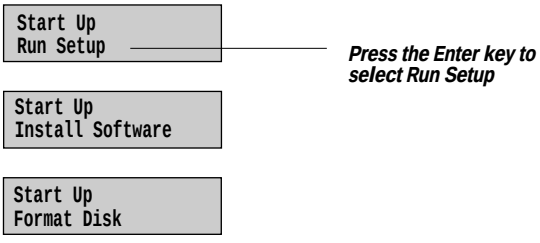
4. ***Press the down arrow key to display Reboot Server. Then press the Enter key to select it.***
5. ***Allow the copier to go through its startup sequence. After the copier beeps three times and the Printer/Scanner key flashes, press the Printer/Scanner key.***

   The following printer screen is displayed.

6. ***Press the Menu key.***

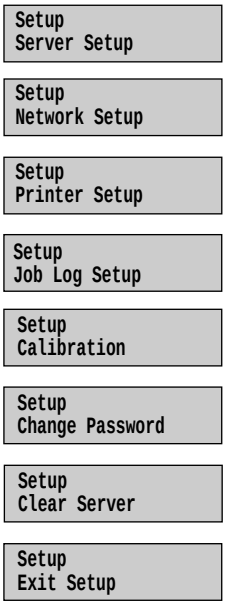
   If you do not press the Menu key within 15 seconds, the copier continues its startup sequence. Reboot the Fiery XJ80e and try again.

7. ***The following startup screen is displayed. Press the Enter key when Run Setup is displayed in the window.***



8. Press the Enter key for the Setup you want.

Press the up arrow key to view the next screen of the main setup menu.



9. Select setups in the same order as they appear in the menu: Server Setup, Network Setup, Printer Setup, and then Job Log Setup.

The sequence is important for first-time setup.

Later, just skip to the menu you want to change. However, if you make changes in Network Setup, you may need to change some settings in Printer Setup as well.

To access Setup when the copier is off

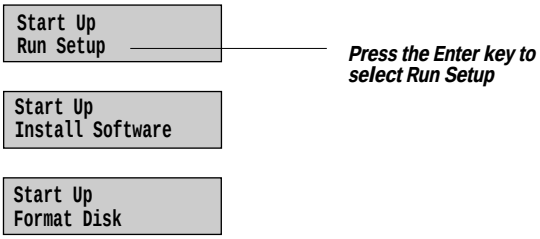
1. ***Move the On/Off switch on the side of the copier to the On position.***
2. ***Allow the copier to go through its startup sequence. After the copier beeps three times and the Printer/Scanner key flashes, press the Printer/Scanner key.***

   The following printer screen is displayed.

3. ***Press the Menu key.***

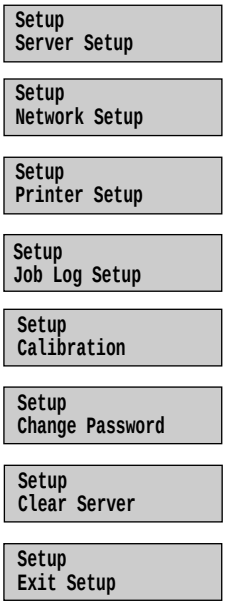
   If you do not press the Menu key within 15 seconds, the copier continues its startup sequence. Reboot the Fiery XJ80e and try again.

4. ***The following startup screen is displayed. Press the Enter key when Run Setup is displayed in the window.***



5. ***Press the Enter key for the Setup you want.***

   Press the up arrow key to view the next screen of the main setup menu.



6. ***Select setups in the same order as they appear in the menu: Server Setup, Network Setup, Printer Setup, and then Job Log Setup.***

   The sequence is important for first-time setup.

   Later, just skip to the menu you want to change. However, if you make changes in Network Setup, you may need to change some settings in Printer Setup as well.

Chapter 6: Troubleshooting Procedures

The troubleshooting process

This section identifies the sources of common problems that may occur with the Fiery XJ80e and suggests ways of correcting them. This section does not attempt to provide detailed troubleshooting procedures for Interface kit components. Some problems that appear to be associated with the Fiery XJ80e board may actually be the result of an Interface kit component failure. When a failure occurs, also check Interface kit components, such as the EXU board and the power supply.

The troubleshooting process is designed to eliminate the most obvious causes of failure before progressing to more complex issues. "Where problems occur" on page 6-2 gives an overview of the Fiery XJ80e system and indicates areas most likely to require troubleshooting.

- ***Problems with initial installation***

  If the Fiery XJ80e fails to complete its first startup and the copier does not reach the copier-ready condition, the most likely cause is a loose cable or board connection. See "Errors during the Start-up diagnostics" on page 6-11 for the different error messages that are reported to the copier Operation Panel and "Checking board and internal cable connections" on page 6-5 for descriptions of Fiery XJ80e parts and connections.

- ***Try a phone check before you go to the customer site***

  "Before you go to the customer site" on page 6-3 suggests areas you should check out before making a service call to the customer site. With a phone call, you can find out if the problem is a simple operating failure or a failure caused by a network or configuration change. You can ask the customer to check for loose cables on the back of the copier and loose connections at a power strip or outlet.

- ***Check for obvious causes of problems***

  "Preliminary on-site checkout" on page 6-4 takes you through the initial visual checkouts you should make when you arrive at the customer site. You should check the copier Operation Panel and the LEDs on the back of the copier for an error message and then inspect the copier internally and externally for the most common problems, such as loose cables, connectors, or boards.

- ***Check the Fiery XJ80e network connections***

  "Checking network connections" on page 6-22 includes guidelines for checking the network connections between the

Fiery XJ80e and the computers or workstations to which it is connected, and information on several printing problems.

Where problems occur

The Fiery XJ80e is a built-in color server for color copiers, and it is generally part of a configuration like the one shown in Figure 6-1. Problems usually occur within one of the following areas:

- With the Fiery XJ80e board, interface kit components, or the copier
- In the interface between the Fiery XJ80e and the color copier
- In the interface between the Fiery XJ80e and the workstations or computers to which it is connected

This section does not attempt to provide troubleshooting information for attached computers such as the Macintosh or PC-compatibles, for color copiers, or for extensive networks. You should refer problems in these areas to the appropriate service departments and network administrators.

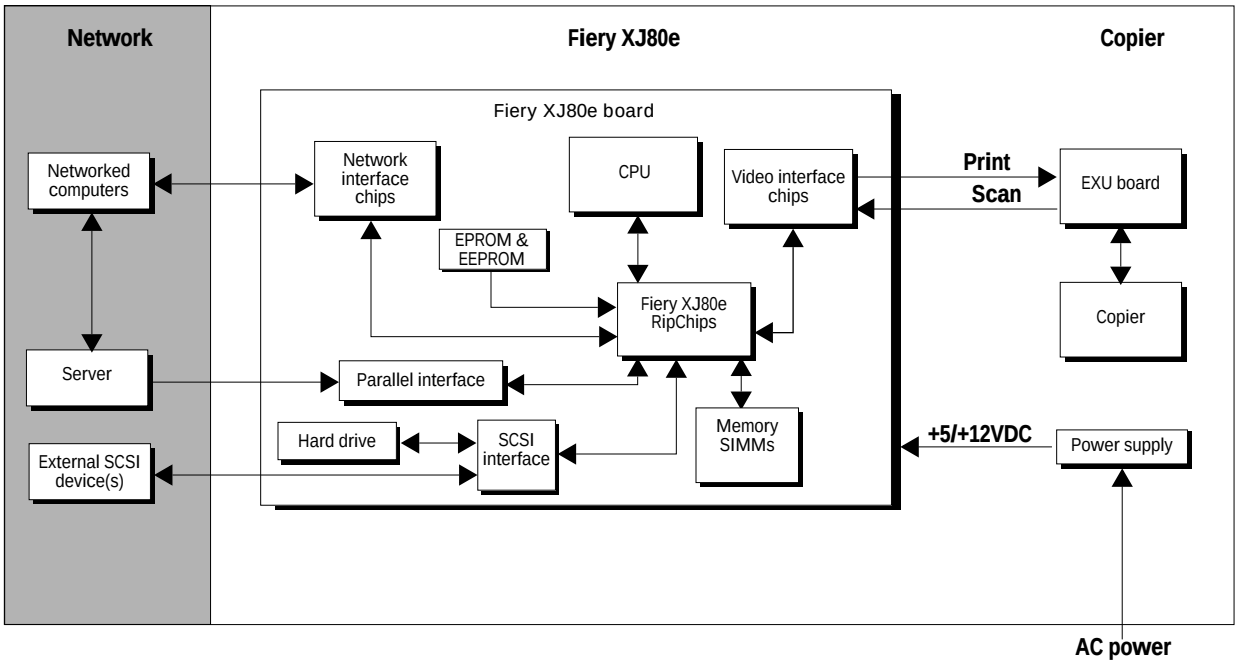


Figure 6-1 Functional diagram of a typical configuration

Before you go to the customer site

Before you make a service call to a customer site, talk to the customer on the phone, and check out the following items:

1. ***Does the copier work?***

   If the copier works, but the user cannot print a Fiery XJ80e test page, have the customer press the Printer/Scanner key and check for any error messages displayed on the Operation Panel. Also have the customer check the Fiery XJ80e panel on the back of the copier for a red LED. If the red LED is on, an error has occurred on the Fiery XJ80e board that probably requires a service call.

2. ***Is the failure caused by a simple operating problem?***

   - Is there a printing problem?
     - Does the Fiery XJ80e test page fail to print?
     - Does the Fiery XJ80e fail to respond to a print command?
     - Does printing seem to take a long time?
     - Is print quality poor?
     - Does the Fiery XJ80e fail to appear in the list of printers?
   - Has the customer noted any error messages on the copier Operation Panel?

   If the answer to any of these questions is yes, refer the customer to "Fiery XJ80e Error Messages," in the *User Guide*.

   If the customer has followed the corrective actions in the *User Guide* and has failed to solve the problem, be prepared to make a service call. Keep a log of the failures and messages the customer has observed.

3. ***Has the customer made any network changes?***

   If network changes have occurred, request that the customer's network administrator verify the Fiery XJ80e network requirements.

4. ***Is the user having printing problems with a particular image file?***

   If there are problems with files from particular applications, the user may be more successful using different print settings.

If your preliminary phone call fails to clear up the problem, proceed to the next phase, the preliminary on-site checkout.

Preliminary on-site checkout

Your goal in the preliminary on-site checkout is to eliminate obvious problems, such as loose or missing cables and connectors. If an error message was reported to the Operation Panel, see "Fiery XJ80e diagnostics" on page 6-11 for more information.

Checking external cable connections

Before you remove the copier covers to inspect internal cables in the PRN box:

- Check that all external interface cables to the system are plugged into the proper connectors on the back of the copier (see Figure 6-2).
- Make sure the power cable is plugged into the wall outlet.

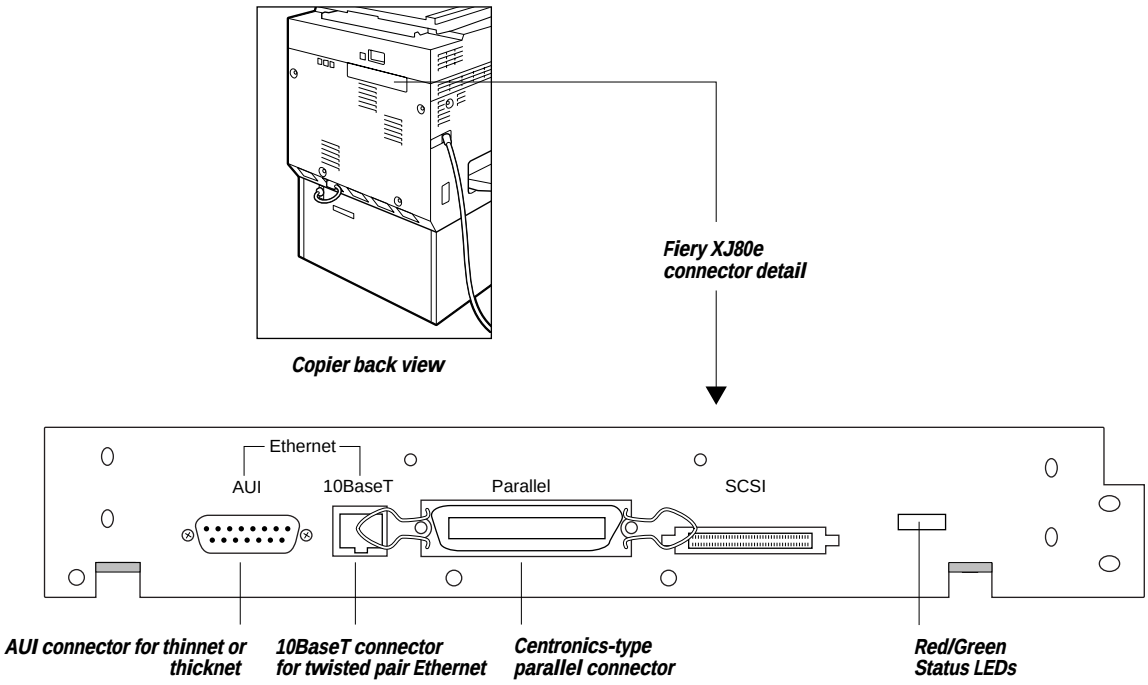


Figure 6-2 Fiery XJ80e connectors on the back of the copier

If all the connectors are properly in place and the power is on, proceed to the next stage of troubleshooting.

Checking board and internal cable connections

The most common causes of hardware problems are faulty and loose connections. Before you conclude that the board or a component has failed, check for the following, then verify that the problem still occurs.

- Make sure no foreign materials have been dropped into the system.
- Look for an obviously loose SIMM connection on the Fiery XJ80e board and reseat the SIMM securely in its socket.
- Look for cable connections that are obviously loose. Reseat each connector firmly.
- Make sure each cable connector is properly aligned with its mating connector. If the pins are offset from each other, the affected board will not function properly.
- Look for a red LED that may indicate an error on the Fiery XJ80e board.

To check board and cable connections

1. ***Access the copier PRN box. See "Accessing the A166/A187 PRN box" on page 2-2 or "Accessing the A189 PRN box" on page 3-2.***

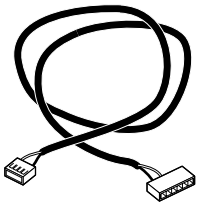
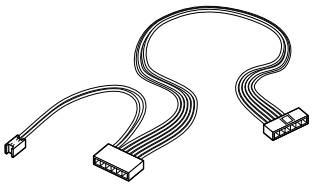
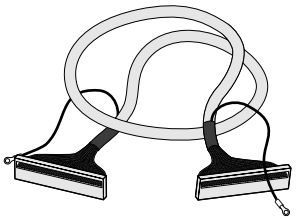
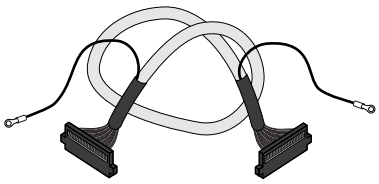
2. ***Before you touch any parts inside the copier, attach a grounding wrist strap. Touching the metal part of the copier also helps to discharge any static electricity.***
3. ***Inspect the SIMMs and confirm their secure insertion into sockets on the Fiery XJ80e board (see "SIMMs" on page 7-3 for more information).***
4. ***Inspect the EPROM and the EEPROM and confirm their secure insertion into sockets on the Fiery XJ80e (see Figure 7-1 on page 7-2).***

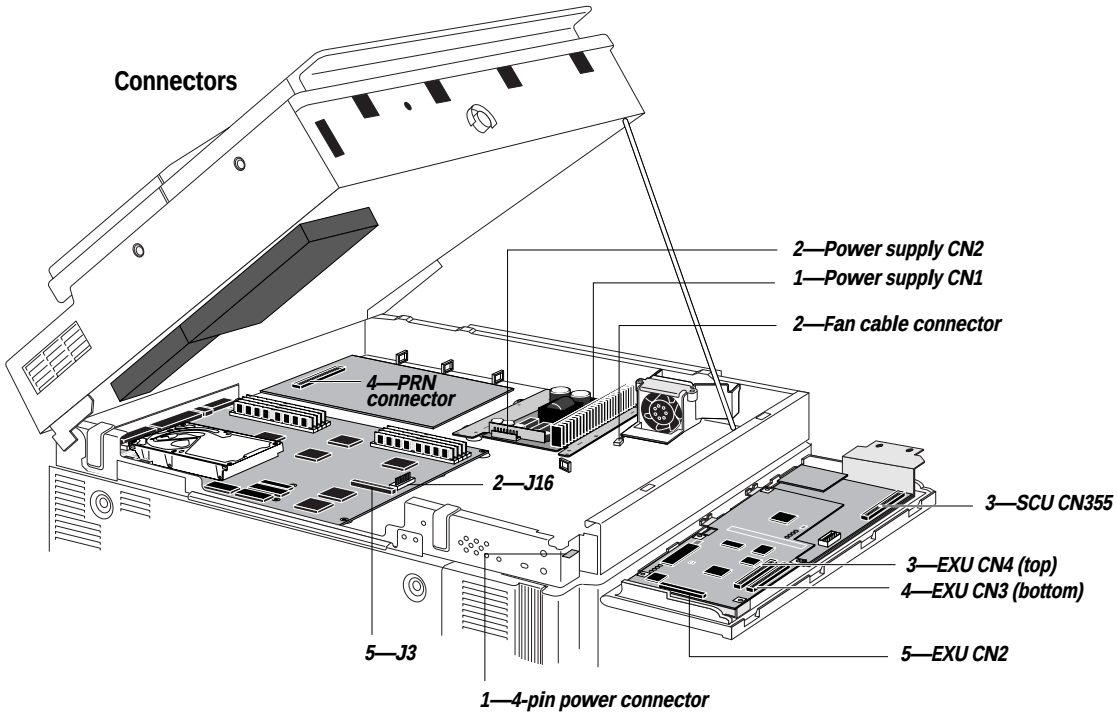
   EPROM is installed in socket U5 and EEPROM is installed in socket U11 on the Fiery XJ80e board.

5. ***Inspect cables to confirm they are intact and securely connected.***

   Faulty ribbon cables are easily overlooked. Check the contact point between the cable and the connector to ensure that it has not separated. If a cable is suspect, substitute it with a tested cable.

   Note: In addition to the cables described in the following table, check the cable connections to the hard disk drive (HDD) on the Fiery XJ80e.

Cable	From	To
1—Copier Power (AC) 	Power supply CN1 connector ***Note:*** Some cables may have a grounding wire included.	4-pin power connector at the front of the SCU
2—Fiery XJ80e Power (DC) 	Power supply CN2 connector	Fiery XJ80e board connector J16 Fan cable connector (2-pin connector)
3—EXU/SCU SCSI 	EXU board CN4 (top) connector	A166/A187—SCU board CN355 connector A189—SCU board CN373 ***Note:*** Some cables have only one grounding wire. Connect the end with the grounding wire to the SCU board.
4—PRN SCSI	PRN connector	EXU board CN3 (bottom) connector
5—CIVIC 	EXU board CN2 connector ***Note:*** This cable has a brown and black grounding wire. Make sure the end of the cable with the black grounding (if included) wire is attached to the EXU board and the end with the brown grounding wire is attached to the Fiery XJ80e board. Each connector is labeled with the correct mounting location.	Fiery XJ80e board J3 connector



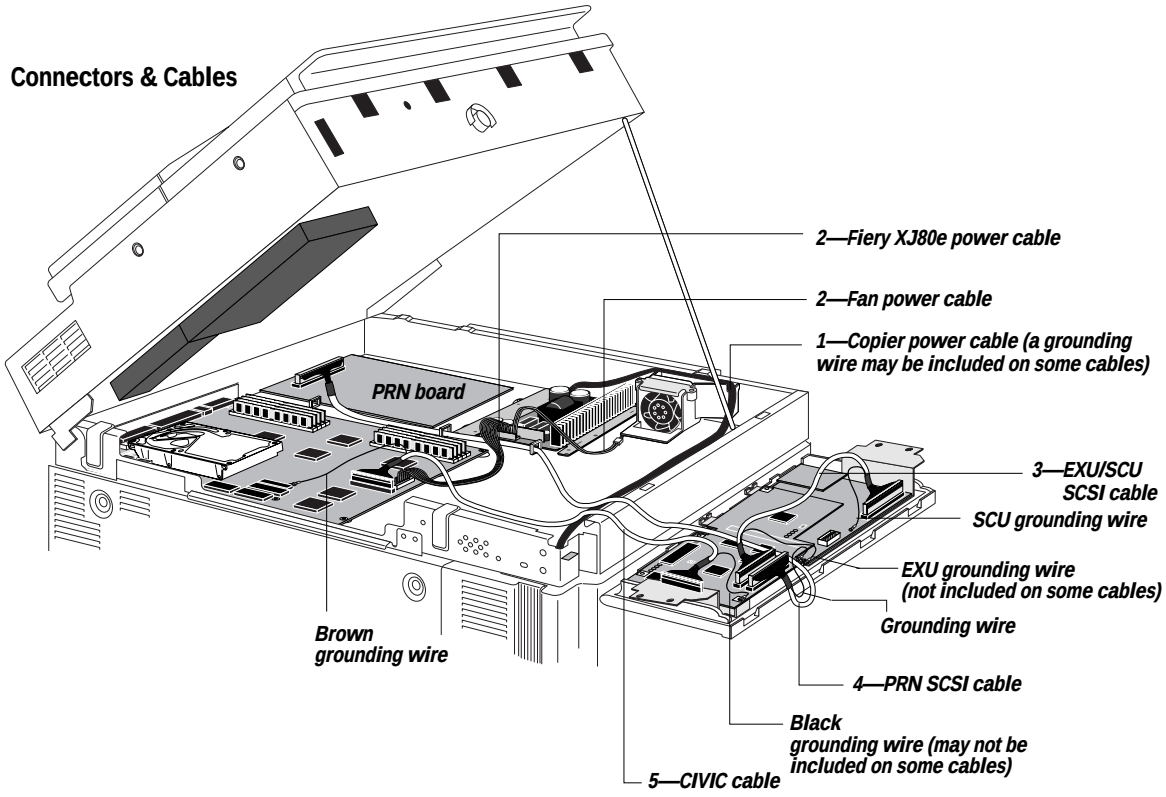
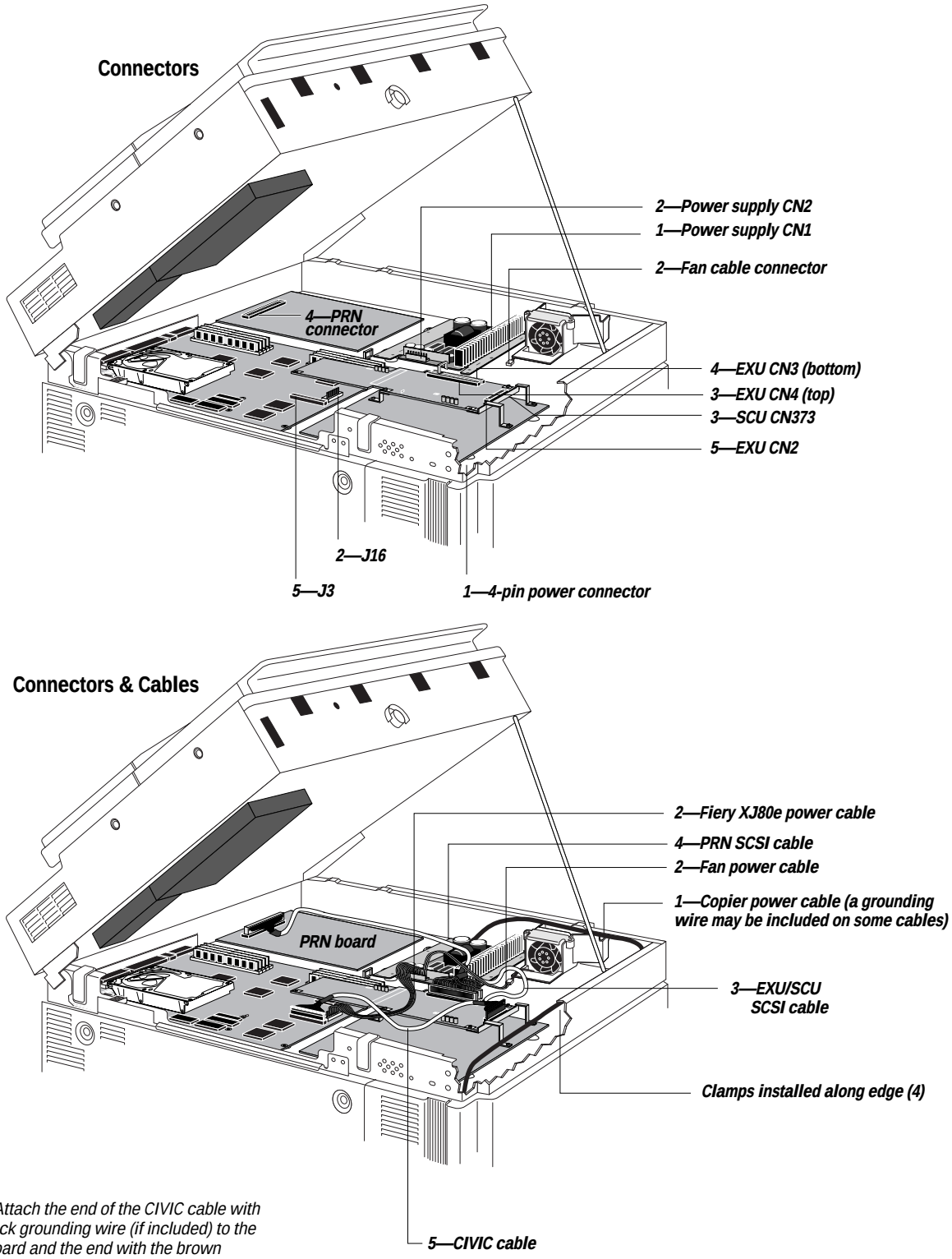


Figure 6-3 A166/A187copiers—Connections inside the PRN box



Note: *Attach the end of the CIVIC cable with the black grounding wire (if included) to the EXU board and the end with the brown grounding wire to the Fiery XJ80e board.*

Figure 6-4 A189 copiers—Connections inside the PRN box

Checking the EXU board

The EXU board is installed on the SCU board. If you suspect a problem with the EXU board, check the LEDs and switches for status information (see Figure 6-5).

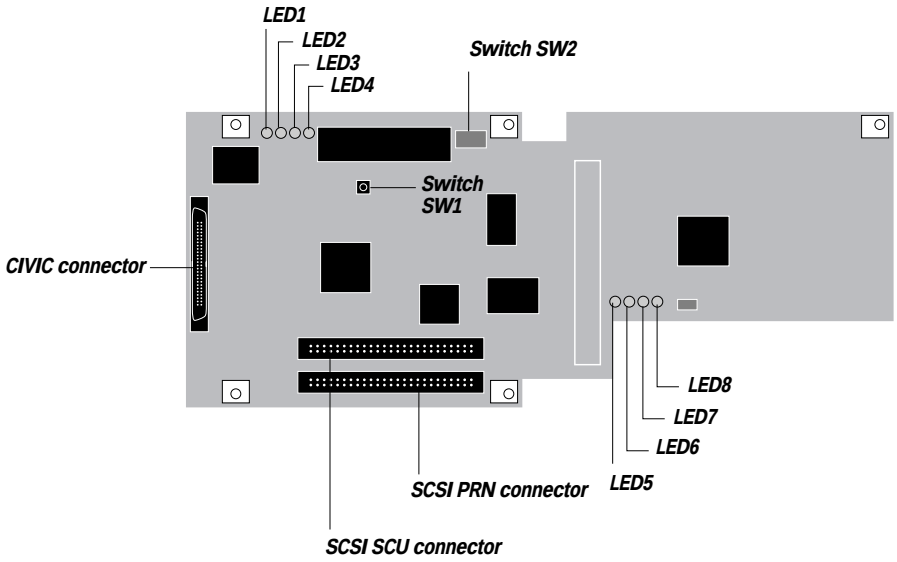


Figure 6-5 EXU board

To check the EXU board

1. ***Turn off the copier and access the EXU board. (see "Accessing the A166/A187 PRN box" on page 2-2 or "Accessing the A189 PRN box" on page 3-2).***
2. ***Make sure the EXU board is securely seated in the connector on the SCU board and that all cables connected to the board are secure.***
3. ***Inspect the board for an incorrect SW2 switch setting.***

   Switch SW1 and SW2 are for factory use only. Do not change the default switch settings for SW2.

Default settings for SW2

4. ***Turn on the copier and check the LEDs on the EXU board for errors.***

   See the following table for information on EXU board LEDs 1-8.

LEDs	Function
LED 1	Not used
LED 2	Not used
LED 3	Not used
LED 4	Not used
LED 5	Always flashing. If this LED is not flashing, the board is defective.
LED 6	Flashes during board initialization and stops flashing once the board is initialized.
LED 7	Flashes during board initialization and stops flashing once the board is initialized.
LED 8	Flashes during board initialization and stops flashing once the board is initialized.

Fiery XJ80e diagnostics

Errors during the Start-up diagnostics

When you turn on the copier, the system goes through a series of diagnostic tests that check the Fiery XJ80e board. The diagnostic tests run for 10 seconds during the startup sequence while the copier is warming up (see Figure 6-6 on page 6-12).

The red LED (D4) on the Fiery XJ80e board remains on if an error occurs during the Start-up diagnostics. The red and green LEDs can be viewed from the back of the copier on the Fiery XJ80e panel. For certain tests, the error number and the name of the test is displayed on the Operation Panel. If more than one test fails, use the up and down arrow keys on the Operation Panel to scroll through the error numbers. A corresponding test number is also displayed on the 7-segment LEDs (D5 and D6) on the Fiery XJ80e board. If the error is not reported to the Operation Panel, you need to access the PRN box to view the 7-segment LEDs on the Fiery XJ80e board in order to determine the test that failed. To scroll through the error numbers on the 7-segment LEDs, press switches S7 and S9.

Note: Press the Cancel key to bypass a failed test and continue the boot-up process. If the Fiery XJ80e will not boot up, check the errors listed in Table 6-1 on page 6-13.

If all the tests pass, — — is displayed on the 7-segment LEDs. Once you access the Fiery XJ80e screen, on is displayed on the 7-segment LEDs.

Do not touch electrical components inside the copier when the copier is turned on (except for switches S7-S9). Touching electrical components while the copier is plugged in can cause electrical shock.

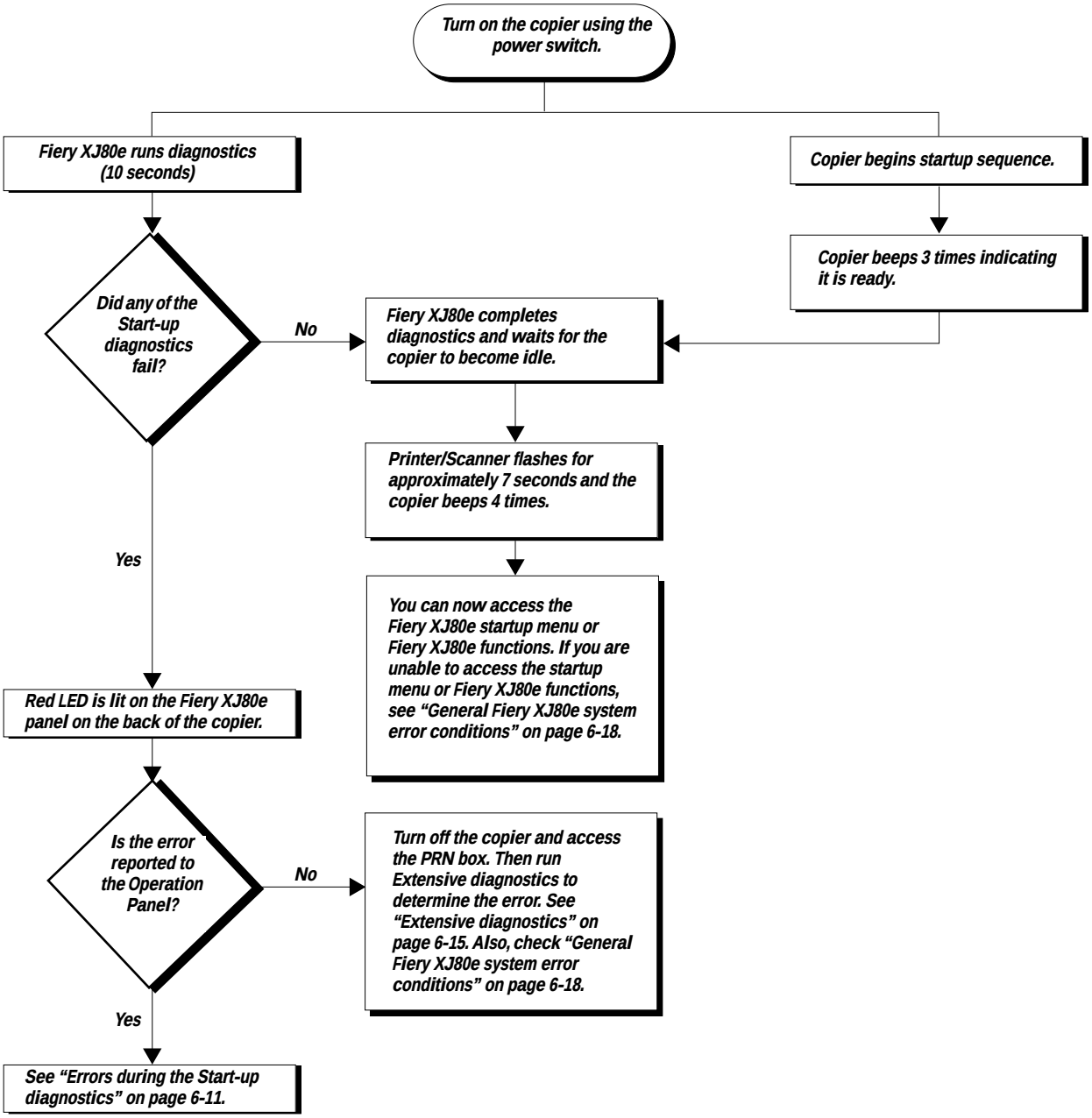


Figure 6-6 Start-up diagnostics

When you encounter an error condition, check components as listed in Table 6-1. The table details the following information:

- Test name of the diagnostic test run at startup
- Corresponding error numbers that display on the Fiery XJ80e 7-segment LEDs
- Corresponding error numbers that display on the Operation Panel
- Area on the Fiery XJ80e being tested
- Suggested corrective action

Table 6-1 Possible errors during Start-up diagnostics

Test name	Error number displayed on the 7-segment LEDs	Error number displayed on Operation Panel	Area tested on motherboard	Suggested action
EPROM	01	100	U5—EPROM ***Note:*** This error may not display on the Operation Panel.	• Make sure the EPROM is installed correctly. • If the problem persists, you may need to replace the EPROM (call your authorized service/support center).
EEPROM	02	200	U11—EEPROM	• Make sure the EEPROM is installed correctly. • If the problem persists, you may need to replace the EEPROM (call your authorized service/support center).
MIPS FPU	03	900	U3—CPU	• Replace the Fiery XJ80e board.
RTC Self	04	700	U9—Real Time Clock chip	• Replace the Fiery XJ80e board.
RTC R/W Reg	05	710		
RTC Start	06	730		
RTC Set	07	740		

Table 6-1 Possible errors during Start-up diagnostics *(continued)*

Test name	Error number displayed on the 7-segment LEDs	Error number displayed on Operation Panel	Area tested on motherboard	Suggested action
DRAM SIMM	08	310	J6-J13—SIMMs ***Note:*** These errors may not display on the Operation Panel.	• Run Extensive diagnostics to determine the faulty SIMM (see "Extensive diagnostics" on page 6-15). • When you locate the faulty SIMM, reseat the SIMM in its socket (see "SIMMs" on page 7-3). • If the problem persists, insert the SIMM into another socket. If the SIMM fails in the second location, replace it. • If the problem persists, you may need to replace the Fiery XJ80e board.
DRAM Slot	17	320		
DRAM Config	26	330 or 350		
DRAM Lite	27	D00	J6-J9—SIMMs ***Note:*** This error may not display on the Operation Panel.	
ACA DMA Cnfg	34	B00	U40—RipChips ***Note:*** These errors may not display on the Operation Panel.	• Replace the Fiery XJ80e board.
ACA DMA ADR	35	B10		
ACA Cntl Reg	36	A00		
ACA VAdr Reg	37	5A0		
ACA VCnt Reg	38	5B0		
Eth Fuse	39	400	FU2—Ethernet fuse	• Replace the Fiery XJ80e board.
Eth Quiet	40	410, F00	U16—Ethernet controller chip ***Note:*** An error number of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See "SIMMs" on page 7-3.	• Replace the Fiery XJ80e board.
Eth Idle	41	420, F00		
Eth Self	42	450, F00		
Eth IntLpBk	43	440-442, 460-462, 470-472, 490, 4A0-4A2, 4B0-4B3, 4D0, 4E0, 4F0		
SCSI Fuse	46	600	FU1—SCSI fuse	• Replace the Fiery XJ80e board.

Table 6-1 Possible errors during Start-up diagnostics *(continued)*

Test name	Error number displayed on the 7-segment LEDs	Error number displayed on Operation Panel	Area tested on motherboard	Suggested action
SCSI Quiet	47	650	U15—SCSI controller chip	• Replace the Fiery XJ80e board.
SCSI Cmd Reg	48	640		
SCSI R/W Reg	49	630		
SCSI Rupt Rst	50	610		
SCSI Rupt II	51	611		
SCSI FIFO	52	621 or 622		
SCSI Device	53	660	Fiery XJ80e HDD.	• Check cable connections to the Fiery XJ80e HDD. • If this does not correct the problem, you may need to replace the HDD.
Parallel ASIC	54	—	U90—Serial parallel controller chip	• Replace the Fiery XJ80e board.

Extensive diagnostics

Extensive diagnostics include the set of tests run at startup that focus on testing components on the Fiery XJ80e board, as well as more detailed SIMM tests and network connection tests. You need to access the switches on the Fiery XJ80e board in the copier PRN box in order to run Extensive diagnostics.

When you run Extensive diagnostics, the number of each test flashes on the 7-segment LEDs as the test is active (see Figure 7-1 on page 7-2). If a test fails, the red status LED (D4) is on and the number of the test that failed is displayed on the 7-segment LEDs. If more than one test fails, you can scroll through the list for the number of each test that failed. For a complete list of Extensive tests, see Table 6-2 on page 6-16.

Note: The Test number is also the error number displayed on the 7-segment LEDs.

Do not touch electrical components inside the copier when the copier is turned on (except for switches S7-S9). Touching electrical components while the copier is plugged in can cause electrical shock.

To run Fiery XJ80e Extensive diagnostics

1. ***Turn off the copier and access the copier PRN box. See "Accessing the A166/A187 PRN box" on page 2-2 or "Accessing the A189 PRN box" on page 3-2.***
2. ***Locate the Fiery XJ80e board, and the three switches (S7-S9) next to the HDD.***
3. ***Hold down switch S9 and then turn on the copier.*** **HI** ***displays on the 7-segment LEDs to indicate that the tests have started.***

   You can release switch S9 once you see 01 displayed on the 7-segment LEDs.
4. ***Watch the 7-segment LEDs while the tests are running. Each test number is displayed as the test is run.***
5. ***If all the tests pass, the tests continue to run. Allow all the tests to run through twice and then press switch S7 and S9 simultaneously to stop the diagnostics and continue the boot-up process. If all the tests pass, — — displays on the 7-segment LEDs, and the green LED on the back of the copier remains on.***

   Once you access the Fiery XJ80e screen, on is then displayed on the 7-segment LEDs.
6. ***If any of the tests fail, the red LED (D4) remains on at the end of one complete test cycle (01-54) and the diagnostics stop. The green LED is on while the tests are running and goes off at the end of the diagnostics.***

   Check the 7-segment LED display for the error number of the failed test. If more than one test failed, press switch S7 to scroll up and S9 to scroll down the list of error numbers. See the following table for information on the different tests.

Table 6-2 Possible errors during Extensive diagnostics

Error number	Test name	Area tested on Fiery XJ80e board	Suggested action
01	EPROM	U5—EPROM	• Make sure the EPROM is installed correctly. • If the problem persists, you may need to replace the EPROM (call your authorized service/support center).
02	EEPROM	U11—EEPROM	• Make sure the EEPROM is installed correctly. • If the problem persists, you may need to replace the EEPROM (call your authorized service/support center).
03	MIPS FPU	U3—CPU	• Replace the Fiery XJ80e board.

Table 6-2 Possible errors during Extensive diagnostics

Error number	Test name	Area tested on Fiery XJ80e board	Suggested action
04	RTC Self	U9—Real Time Clock chip	• Replace the Fiery XJ80e board.
05	RTC R/W Reg		
06	RTC Start		
07	RTC Set		
08	DRAM SIMM	J6-J13—SIMMs	• Locate the faulty SIMM and reseat it in its socket. • Run Extensive diagnostics again. • If the problem persists, insert the SIMM into another socket. If the SIMM fails in the second location, replace it. • If the problem persists, you may need to replace the Fiery XJ80e board.
09	DRAM SIMM J6	J6—SIMM	
10	DRAM SIMM J7	J7—SIMM	
11	DRAM SIMM J8	J8—SIMM	
12	DRAM SIMM J9	J9—SIMM	
13	DRAM SIMM J10	J10—SIMM	
14	DRAM SIMM J11	J11—SIMM	
15	DRAM SIMM J12	J12—SIMM	
16	DRAM SIMM J13	J13—SIMM	
17	DRAM Slot	J6-J13—Slot	• Locate the faulty SIMM and reseat it in its socket. • Run Extensive diagnostics again. • If the problem persists, insert the SIMM into another socket. If the SIMM fails in the second location, replace it. • If the problem persists, you may need to replace the Fiery XJ80e board.
18	DRAM Slot J6	J6—Slot	
19	DRAM Slot J7	J7—Slot	
20	DRAM Slot J8	J8—Slot	
21	DRAM Slot J9	J9—Slot	
22	DRAM Slot J10	J10—Slot	
23	DRAM Slot J11	J11—Slot	
24	DRAM Slot J12	J12—Slot	
25	DRAM Slot J13	J13—Slot	
26	DRAM Config	J6-J13—SIMMs	• Locate the faulty SIMM and reseat it in its socket. • Run Extensive diagnostics again. • If the problem persists, insert the SIMM into another socket. If the SIMM fails in the second location, replace it. • If the problem persists, you may need to replace the Fiery XJ80e board.
27	DRAM Lite	J6-J9—SIMMs	
28	DRAM CB	J6-J13—SIMMs	• Locate the faulty SIMM and reseat it in its socket. • Run Extensive diagnostics again. • If the problem persists, insert the SIMM into another socket. If the SIMM fails in the second location, replace it. • If the problem persists, you may need to replace the Fiery XJ80e board.
29	DRAM AD		
30	DRAM RA		
31	DRAM RD		
32	DRAM MMP		
33	DRAM IFA		

Table 6-2 Possible errors during Extensive diagnostics

Error number	Test name	Area tested on Fiery XJ80e board	Suggested action
34	ACA DMA Cnfg	U40—RipChips	• Replace the Fiery XJ80e board.
35	ACA DMA ADR		
36	ACA Cntl Reg		
37	ACA VAdr Reg		
38	ACA VCnt Reg		
39	Eth Fuse	FU2—Ethernet fuse	• Replace the Fiery XJ80e board.
40	Eth Quiet	U16—Ethernet controller chip ***Note:*** An error number of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See "SIMMs" on page 7-3.	• Replace the Fiery XJ80e board.
41	Eth Idle		
42	Eth Self		
43	Eth IntLpBk		
46	SCSI Fuse	FU1—SCSI fuse	• Replace the Fiery XJ80e board.
47	SCSI Quiet	U15—SCSI controller chip	• Replace the Fiery XJ80e board.
48	SCSI Cmd Reg		
49	SCSI R/W Reg		
50	SCSI Rupt Rst		
51	SCSI Rupt II		
52	SCSI FIFO		
53	SCSI Device	Fiery XJ80e HDD	• Check cable connections to the Fiery XJ80e HDD. • If this does not correct the problem, you may need to replace the HDD.
54	Parallel ASIC	U90—Serial parallel controller chip	• Replace the Fiery XJ80e board.

General Fiery XJ80e system error conditions

When you start up the Fiery XJ80e, or when you install system software, you may encounter error conditions that are not reported during the Start-up diagnostics. Table 6-3 lists some of these error conditions and suggests corrective action.

Note: When a failure occurs, make sure you also check Interface kit components, such as the EXU board and the power supply. Some failures that may appear to be the Fiery XJ80e board may actually be the result of an Interface kit component failure. Table 6-3 does not

include detailed troubleshooting procedures for Interface kit components.

Table 6-3 General Fiery XJ80e system error conditions

Symptom	Probable cause	Suggested action	References
Printer/Scanner key never flashes during startup	Copier is not in the ready condition	• Check the copier Operation Mode setting for Auto Reset to make sure it is set correctly. Auto reset should be set to ON.	Check your Copier service documentation.
	CIVIC cable is loose or is not installed correctly.	• Turn off the copier and access the copier PRN box. • Check the CIVIC cable connections. • Make sure the end of the cable with the brown grounding wire is connected to the Fiery XJ80e board and the end with the black grounding wire (if included) is connected to the EXU board. • If the problem persists, you may need to replace the cable.	See "Checking board and internal cable connections" on page 6-5.
	Video interface is not working correctly.	• Replace the Fiery XJ80e board.	See "Installing the Fiery XJ80e" on page 2-14 or page 3-6.
	EXU board is faulty or installed incorrectly.	• Turn off the copier and access the copier PRN box. • Reseat the EXU board on the SCU board. • Close the cover on the PRN box and turn on the copier. • If the Printer/Scanner still does not flash, you may need to replace the EXU board.	See "Accessing the A166/A187 PRN box" on page 2-2 or "Accessing the A189 PRN box" on page 3-2 and "Checking the EXU board" on page 6-9.
Pressing the Printer/Scanner key when the copier is in the ready condition does not access printer functions.	You did not wait long enough after the Printer/Scanner key stopped flashing during startup.	• Wait at least 60 seconds after the Printer/Scanner key stops flashing before pressing it.	See "Installing the Fiery XJ80e" on page 2-14 or page 3-6.
	System software is not installed on the HDD (hd may be displayed on the 7-segment LEDs).	• Install system software.	See "Installing Fiery XJ80e system software" on page 7-8.
	Fiery XJ80e HDD is faulty (hd may be displayed on the 7-segment LEDs)	• Replace the HDD installed on the Fiery XJ80e board.	See "Hard disk drive" on page 7-6.

Table 6-3 General Fiery XJ80e system error conditions *(continued)*

Symptom	Probable cause	Suggested action	References
Printer/Scanner key continues to flash and Fiery XJ80e printer functions are not available.	Fiery XJ80e is not able to get control of the Operation panel.	• Press the Clear Modes/Standby key on the Operation Panel.	Check your Copier service documentation.
Diagnostics run slowly.	SIMMs are not installed correctly or are faulty.	• Check each SIMM to make sure it is securely seated in its socket. • Run Extensive diagnostics. If a faulty SIMM is indicated, replace the faulty SIMMs. • If the problem persists, contact your authorized service support center.	See "Extensive diagnostics" on page 6-15 and "SIMMs" on page 7-3.
Fiery XJ80e HDD does not spin up during startup.	Faulty Fiery XJ80e HDD.	• Replace the HDD installed on the Fiery XJ80e board.	See "Hard disk drive" on page 7-6.
	Loose Fiery XJ80e power cable connections, HDD power cable, or a faulty power supply.	• Check power cable, and HDD cable connections. • If the problem persists, you may need to replace the faulty cable or the power supply. Contact your authorized service support center.	See "Checking board and internal cable connections" on page 6-5.
When using the format disk option, a SCSI device number other than 0 is displayed on the screen.	Wrong SCSI ID is set on the hard disk drive	• Contact your authorized service support center to determine the correct SCSI ID setting for the drive.	
7-segment LEDs on the Fiery XJ80e board do not display diagnostic test numbers when the copier is turned on.	Loose Fiery XJ80e power cable connections, HDD power cable, or a faulty power supply.	• Check power cable, and HDD cable connections. • If the problem persists, you may need to replace the faulty cable or the power supply. Contact your authorized service support center.	See "Checking board and internal cable connections" on page 6-5.
Error loading boot file message displayed on the Operation Panel or hd is displayed on the 7-segment LEDs.	Fiery XJ80e system software is not installed on the HDD.	• Press the Cancel or Menu key to reboot the system and then install Fiery XJ80e system software.	See "Installing Fiery XJ80e system software" on page 7-8.
No readable file system message is displayed on the Operation Panel.	Replacement HDD does not have Fiery XJ80e system software installed.	• Press the Cancel or Menu key to reboot the system and then install Fiery XJ80e system software.	See "Installing Fiery XJ80e system software" on page 7-8.

Table 6-3 General Fiery XJ80e system error conditions *(continued)*

Symptom	Probable cause	Suggested action	References
SC607 error message is displayed on the Operation Panel	Fiber optic cable to the PRN board is loose or disconnected.	• Check the fiber optic cable connection to the PRN board. • If the problem persists, the cable may be faulty.	Check your Copier service documentation
The Fiery XJ80e hangs at the Scanning devices screen.	Problem with the HDD.	• Reboot the copier using the power switch. • Reinstall system software. • If the problem persists, check the HDD cable connections inside the PRN box. • If the problem still persists, contact your authorized service support center.	See "Installing Fiery XJ80e system software" on page 7-8 and "Hard disk drive" on page 7-6.
	Problem with the CD-ROM drive.	• Check the following on the CD-ROM drive: -cable connections -SCSI ID (setting should not be 0) -termination • Reinstall system software. • If the problem persists, contact your authorized service support center.	See "Connecting a CD-ROM drive" on page 7-10 and "Installing Fiery XJ80e system software" on page 7-8.
The Fiery XJ80e hangs at the Scanning file system or Scanning directories screen.	System software CD is damaged or the wrong CD is inserted in the CD-ROM drive.	• Check the CD inserted in the CD-ROM drive. • If the CD looks dirty, clean it with a lint-free cloth. • If the CD looks damaged, replace it.	
	Problem with the CD-ROM drive.	• Check the following on the CD-ROM drive: -cable connections -SCSI ID (setting should not be 0) -termination • Reinstall system software. • If the problem persists, contact your authorized service support center.	See "Connecting a CD-ROM drive" on page 7-10 and "Installing Fiery XJ80e system software" on page 7-8.
-E, -F is displayed on the Fiery XJ80e 7-segment LEDs.	The Printer/Scanner key was pressed before the copier was able to go into printer mode.	• Wait a few seconds for the Fiery XJ80e to obtain control of the Operation Panel.	

Table 6-3 General Fiery XJ80e system error conditions *(continued)*

Symptom	Probable cause	Suggested action	References
E1-EF is displayed on the Fiery XJ80e 7-segment LEDs, or the error activity light on the front of the copier is flashing red.	Copier print error such as a paper jam or the paper tray is empty.	• Refer to the *User Guide* for more information on user errors. • If the problem persists, see your Copier service documentation or contact your authorized service support center.	See the *User Guide*.
Ui, Ur, Uo is displayed on the Fiery XJ80e 7-segment LEDs, or the error activity light on the front of the copier is solid red.	Communication error between the copier and the Fiery XJ80e.	• Reboot the copier. • If the problem persists, contact your authorized service support center.	

Checking network connections

After the Fiery XJ80e is connected to networked computers, printing problems may arise if the network hardware or software is not set up properly or does not match network settings on the Fiery XJ80e. Problems may also arise when printing from a specific application or printing a particular file.

Most of these problems show up as printing problems, and do not necessarily indicate a Fiery XJ80e malfunction. The customer's network administrator can eliminate many printing problems without requiring you to make a service call. The network administrator deals with:

- Copier error conditions.
- Network connection problems that result in the Fiery XJ80e not appearing in printer list on the customer's workstation.

  Note: If the Fiery XJ80e does not appear in the list of printers on the network, there may be another device on the network with the same Ethernet hardware address.
- Conflicting network settings in Setup and on the customer's workstation.
- Printing problems caused by the inappropriate Setup options.
- Application-specific printing errors caused by missing or incorrectly placed printer description files.

Printing to the Fiery XJ80e

If the user can print a Fiery XJ80e test page, but cannot print a job from a workstation on the network, you may have to make a service call. However, first make sure the network administrator has done the following:

- Checked all components of the network including cables, connectors, terminators, network adapter boards, and network drivers.
- Activated the network and used it to communicate with other printers.
- Checked the corrective actions listed in "Fiery XJ80e Error Messages" in the *User Guide*.
- Confirmed that the applicable network settings in Setup (such as AppleTalk zone, IP address, Subnet mask, and Gateway address) match the settings used in the network.

When you make a service call, check the Fiery XJ80e panel on the back of the copier to make sure that the appropriate network connections are in place.

Intermittent print quality and color quality problems are difficult to trace. Before you try to troubleshoot print quality problems, copy a color test page to make sure that the copier does not need servicing or adjusting. Also, make sure the correct paper is being used in the copier.

Note: EPS file generation is not completely standardized among applications. Some users may encounter problems while printing certain EPS files.

General printing problems

If the copier is working properly, and the corrective actions listed in the *User Guide* have not solved a printing problem, check the items listed in Table 6-4 on page 6-24.

Table 6-4 Printing problems - General

Symptom	Possible cause	Suggested action
Fiery XJ80e Test Page quality is poor.	Copier and Fiery XJ80e require calibration.	• Perform copier Auto Color Calibration (ACC) function using the Image Adjustment key (see the Copier service documentation for more information). • After checking the output from the copier to confirm the ACC was done correctly, perform Fiery XJ80e AutoCal (see the *User Guide* for information). ***Note:*** After performing ACC, the copier's base gamma curve is updated and downloaded to the Fiery XJ80e board. The curve is also downloaded to the Fiery XJ80e when the copier is turned on. SP4-910 to SP4-922 settings for the copier's color adjustment are not downloaded. This has no impact on the output.
Fiery XJ80e appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error	• Make sure Print up to PostScript Error in Setup is set to Yes. Check for error messages on the Fiery XJ80e output.
	An application problem	• Try printing a job from a different application to determine if the problem is associated with a particular application.
	A faulty cable between the Fiery XJ80e and the workstation	• Make sure the connection between the Fiery XJ80e and the workstation is working by downloading a test page from the workstation, or by printing a simple file such as a text file. • Resend the problem file. • If the problem persists, it may be a network problem. Inform the network administrator.
A print job stalls.	A PostScript or application error	• Cancel the Fiery XJ80e print job. • If this fails to clear the problem, reboot the Fiery XJ80e.
Printing stops after one or a few pages.	Faulty SIMM(s)	• Reboot the copier and allow the Start-up diagnostics to run. If faulty SIMMs are detected, replace the faulty SIMMs. • If this fails to clear the problem, try reinstalling the system software.
Color quality is uneven.	A copier problem	• Use the copier to copy a sample copier test page. If the quality is not good, service the copier.
	A file or application problem	• Print a Fiery XJ80e test page. • If the quality of the Fiery XJ80e test page is good, there may be a file or an application problem.
Print quality is poor.	A missing or outdated printer description file	• Make sure the appropriate printer description file is installed. See *Getting Started* for a list of printer files used by various applications.
	The application cannot find the appropriate printer description file.	
Pages come out blank, or tinted with green or some other color.	The CIVIC cable may be loose between the Fiery XJ80e board and the EXU board.	• Check the cable connections to the Fiery XJ80e board. See "Checking board and internal cable connections" on page 6-5.

Table 6-4 Printing problems - General *(continued)*

Symptom	Possible cause	Suggested action
Job never prints and the and the RIP screen indicates Busy.	The network cable was plugged in when the copier was already on.	• Turn off the copier and turn it back on again. • Make sure Setup is configured correctly.
Copier locks up completely while printing a page.	A faulty video interface	• Reboot the Fiery XJ80e. • If the problem persists try the following: -Select Clear Server from the Setup menu -Reinstall system software -Check cable connections
Color has shifted, or the registration is off.		
Page is totally black, blank, fully discolored, or unintended repetitive patterns appear over the entire page.		

Printer SP mode settings

SP modes SP2-602 and SP2-603 should have the following settings:

- SP2-602

  Display—PTL ON/OFF: COPIER

  Function—Selects whether PTL works or not in copier mode

  Default—0

  Settings—0: No, 1: Yes

  Comments—Do not change the default setting.

  Report—o

- SP2-603

  Display—PTL ON/OFF: PRINTER

  Function—Selects whether PTL works or not in printer mode

  Default—1

  Settings—0: No, 1: Yes

  Comments—This prevents the toner from scattering in printer mode. When the setting is 1 (Yes), the PTL works on the following timing:

  1C: OFF

  2C: When the first color is reproduced on the drum, the PTL is on.

  4C: When the second and third color is reproduced on the drum, the PTL is on.

  ACS: When each color is reproduced on the drum, the PTL is on.

  Report—o

Chapter 7:
Service Procedures

Servicing the Fiery XJ80e

Generally, the Fiery XJ80e requires no regular service or maintenance. Use the procedures in this section to inspect, remove, reseat, and replace major hardware components on the Fiery XJ80e board. This section includes information on servicing the following components of the Fiery XJ80e system:

- SIMMs
- EPROM and EEPROM
- Hard disk drive (HDD)
- System software

  Fiery XJ80e boards ship with system software installed on the Fiery XJ80e HDD. Use the software service kit to reinstall Fiery XJ80e system software when you need to:

  - Upgrade to a more recent version of the system software
  - Replace the HDD

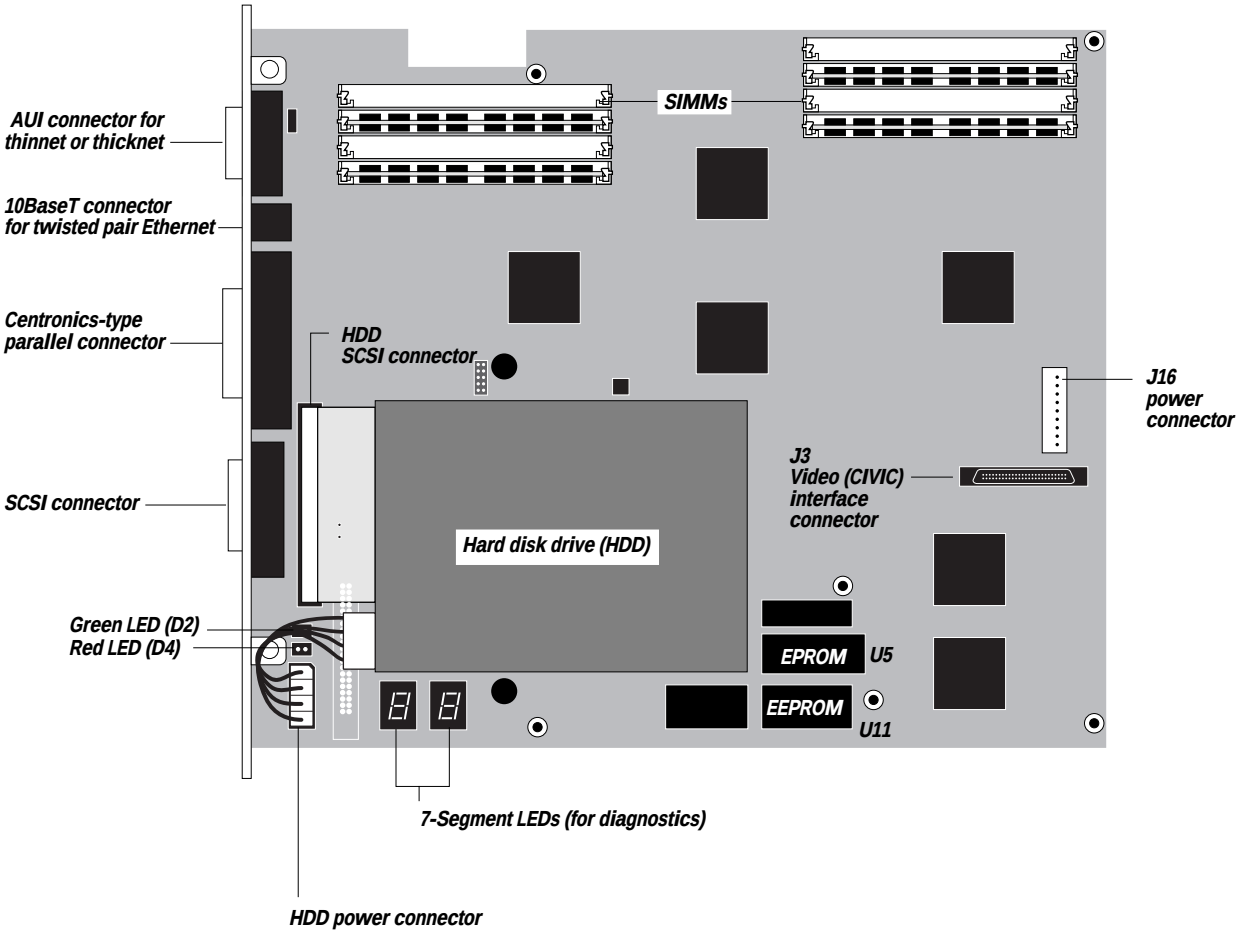


Figure 7-1 Fiery XJ80e controller board

Checking and replacing components

SIMMs

Memory is located in the eight sockets at the top of the Fiery XJ80e board and is divided into two banks: bank 0 (J6-J9) and bank 1 (J10-J13).

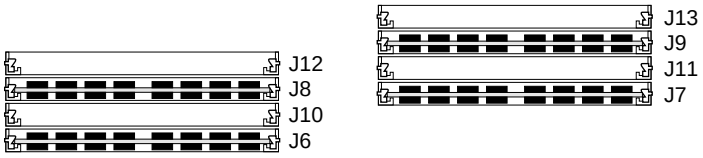


Figure 7-2 Fiery XJ80e SIMM banks (32MB)

Note: Fiery XJ80e SIMMs are *not* interchangeable with off-the-shelf SIMMs.

The following table gives an overview of the different configurations for each bank of memory on the Fiery XJ80e board.

Fiery XJ80e configurations	Bank 0				Bank 1			
	J6	J7	J8	J9	J10	J11	J12	J13
32MB	8MB	8MB	8MB	8MB	empty	empty	empty	empty
64MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB

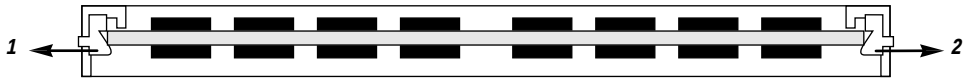
Make sure you attach the ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before handling the SIMMs.

To check motherboard SIMM connections

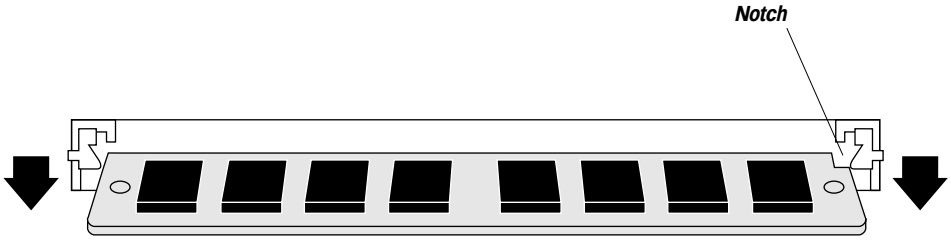
The SIMMs (single in-line memory modules) on the Fiery XJ80e board are held in place by metal clips at each end; they occupy sockets J6-J13 on the Fiery XJ80e board.

1. ***Check that all SIMMs are locked into place on the board. If any SIMMs have come loose, release and reseat them.***
2. ***To release a SIMM strip, push outward on the spring clips (see the arrows marked 1 and 2 in the figure below).***

   When releasing SIMMs, start with SIMMs in sockets J6 and J7 and work your way up to J12 and J13.



3. ***Slide the SIMM strip out of the slot at a 45-degree downward angle (see the figure below).***



4. ***To replace a SIMM strip, slide the SIMM strip into the socket at a 45-degree downward angle and push up or away from you to lock it in place.***

   Make sure that the spring clips close securely around the ends of the SIMM strip and that each strip is fully seated in its slot.

   If you removed the SIMMs completely, note that it fits into the socket in only one way. The index notch at one end of each SIMM (near pin1) fits in the right side of the socket.

   When installing SIMMs, start with SIMMs installed in sockets J12 and J13 and work your way down to SIMM sockets J6 and J7.

Fiery XJ80e EPROM and EEPROM

The EPROM is located in socket U5 on the Fiery XJ80e board. The EPROM contains boot information, such as the Start-up diagnostics that the Fiery XJ80e runs when you turn on the copier.

The EEPROM is located in socket U11 on the Fiery XJ80e board and contains configuration information required when printing to the copier. Some Setup information is also stored in the EEPROM.

To replace EPROM and EEPROM

Make sure you attach the ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before handling the EPROM/EEPROM.

1. ***Gently pull the chip out of its socket on the Fiery XJ80e board. Use a PROM remover or a flat-head screwdriver in order to remove the chip.***

   EPROM is located in socket U5 and EEPROM is located in socket U11 on the Fiery XJ80e board.

2. ***Insert the new chip so that the notch in the chip is aligned with the notch in the socket.***

   Also make sure to align the pins on the chip with the holes in the socket. If you notice any bent pins, straighten them gently with a pair of needlenose pliers.

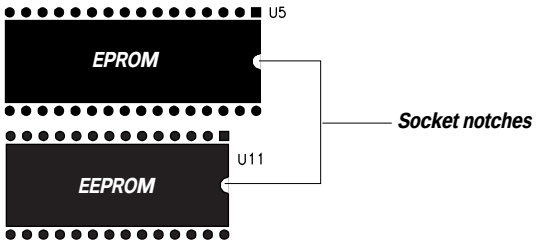


Figure 7-3 Removing EPROM and EEPROM

3. ***If you are replacing the EEPROM, verify that the Setup options are set correctly after you replace the chip.***

Hard disk drive

Factory-installed Fiery XJ80e hard disk drives (HDD) are thoroughly tested and burned in before shipment. HDDs are formatted and loaded with all Fiery XJ80e software, including the Fiery XJ80e operating software, Fiery XJ80e system software, network drivers, and the set of Fiery XJ80e Adobe printer fonts. Additionally, the HDD is used to store spooled print jobs. Available space on the hard disk drive is displayed on the Operation Panel when it is in printer mode.

HDD problems may be a result of the following:

- Loose or faulty cable connections
- Faulty HDD

Before you decide that the HDD needs to be replaced, check to make sure that all cables are connected properly. Replacement drives from Electronics for Imaging, Inc. are shipped without Fiery XJ80e system software installed.

To remove the HDD

Make sure you attach the ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before handling Fiery XJ80e components.

1. ***Print the Configuration page from the Functions menu (if possible) to record the customer's settings before you shut down the copier.***
2. ***Shut down the copier and access the PRN box in the copier, as described in "Accessing the A166/A187 PRN box" on page 2-2 or "Accessing the A189 PRN box" on page 3-2.***
3. ***Locate the Fiery XJ80e board and remove it from the PRN box.***

   Use ESD precautions when handling internal components.
4. ***Remove the HDD SCSI ribbon cable from connector J14 on the Fiery XJ80e board.***
5. ***Disconnect the HDD white power connector from connector J5 on the Fiery XJ80e board.***
6. ***On the bottom of the Fiery XJ80e board, locate and remove the four screws that secure the HDD to the Fiery XJ80e board.***
7. ***Remove the four standoffs on the bottom of the HDD.***
8. ***Place the HDD and cables in an antistatic bag.***

   Do not touch the drive with magnetic objects, such as magnetic screwdrivers. Do not place items near the HDD that are sensitive to magnets, such as credit cards and employee ID cards.

To install a new HDD

Replacement drives are not shipped with Fiery XJ80e system software installed; therefore, you need to install the software after you install the HDD.

1. ***Unpack the new HDD, cables, and mounting hardware.***

   Do not touch the HDD with magnetic objects or place objects sensitive to magnets near the drive.

2. ***Screw the four standoffs into the holes on the bottom of the HDD.***
3. ***Orient the HDD on the Fiery XJ80e board so that the HDD SCSI connector faces the SCSI, Parallel, and Ethernet connectors on the board.***
4. ***Attach the HDD SCSI ribbon cable to connector J14 on the Fiery XJ80e board. Make sure the other end of the cable is attached to the connector on the HDD.***
5. ***Connect the HDD power cable to connector J5 on the Fiery XJ80e board and make sure the other end is connected to the HDD.***
6. ***Supporting the HDD against the Fiery XJ80e, align the four holes in the HDD with the holes in the board and secure it to the Fiery XJ80e board with the four screws (see Figure 7-4).***

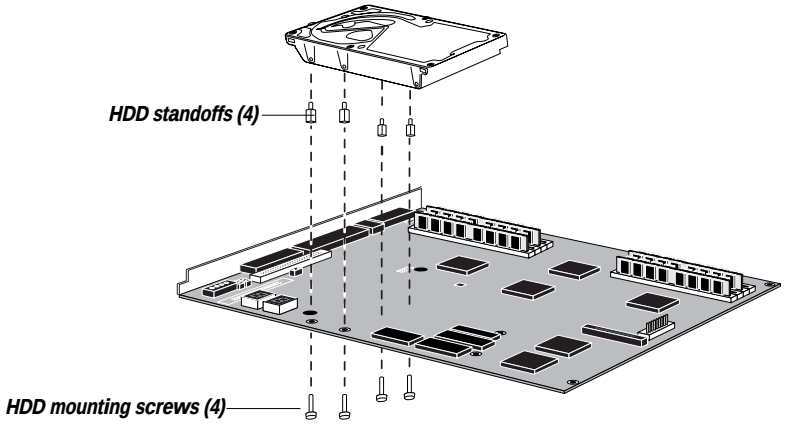


Figure 7-4 Installing the HDD

7. ***Replace the Fiery XJ80e board and connect cables, then reassemble the copier.***
8. ***Reestablish any connections to the back of the copier and use the software service kit to install Fiery XJ80e system software.***

Installing Fiery XJ80e system software

The software service kit for the Fiery XJ80e includes a system software CD. Fiery XJ80e system software is downloaded to the HDD installed on the Fiery XJ80e board.

To install Fiery XJ80e software

Note: Screens for installing the system software and formatting the disk are always displayed in English, even if you configured the copier for a language other than English.

1. ***If you have not done so already, print the Configuration page from the Functions menu (if possible) to record the customer's Setup Configuration.***

   Setup settings are lost when system software is installed.

2. ***With the copier turned off, connect a CD-ROM drive to the Fiery XJ80e SCSI port (see "Connecting a CD-ROM drive" on page 7-10). Make sure the CD-ROM drive is terminated.***

   Push firmly on the cable connector to the copier and to the CD-ROM drive. Make sure the cable connector is securely connected.

3. ***Turn on the CD-ROM drive, wait for the drive to be free of activity, and then push the eject button and insert the System Software CD.***

   The System Software CD *must* be inserted into the CD-ROM drive before you turn on the copier.

4. ***Make sure the CD-ROM drive is free of activity and then turn on the copier.***

5. ***Allow the copier to perform its startup sequence and when the Printer/Scanner key flashes, press the Printer/Scanner key.***

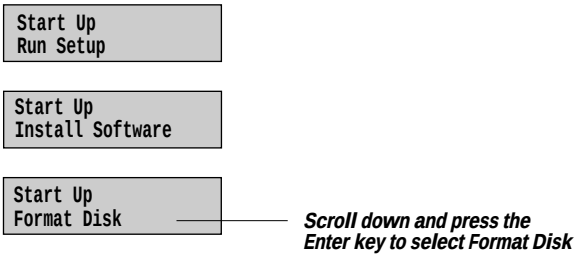
   The following printer screen is displayed.

   ```
   Press Menu for
   Setup or Update
   ```

6. ***Press the Menu key.***

   If you do not press the Menu key within 15 seconds, the copier continues its startup sequence. If this occurs, reboot the Fiery XJ80e using Reboot Server in the Functions menu and try again.

7. ***The following startup screens are available. Before you install system software, you should reformat the Fiery XJ80e hard disk drive. Scroll down and press the Enter key when* Format Disk *is displayed on the screen.***



8. ***At the screen, "Deletes contents, OK?" use the down arrow and press the Enter key when Yes is displayed on the screen.***

9. ***At the Format Method screen, press the Enter key to select a* High Level *format.***

   The Fiery XJ80e HDD is reformatted.

10. ***At the Start Up screen, scroll down and press the Enter key to select* Install Software*.***

    Make sure the CD-ROM drive is free of activity before you install the software. If it is not free of activity and you attempt to install software, you may encounter an error. If an error does occur, turn off the copier, check the CD-ROM drive connections, make sure you have the correct CD inserted, and try again.

11. ***The next screen allows you to confirm that you want to install software; scroll down and press the Enter key to select* Yes*.***

    A progress screen is displayed while system software is copied from the system software CD.

    If the installation is successful, you are be prompted to reboot the copier.

12. ***Before you reboot the system, press the eject button on the CD-ROM drive and remove the System Software CD.***

    Make sure the CD-ROM drive is free of activity before you remove the System Software CD.

13. ***Turn off the CD-ROM drive and the copier. Remove the CD-ROM drive SCSI cable from the back of the copier.***

14. ***After you remove the CD-ROM drive, turn on the copier.***

15. ***After the copier completes startup, the Language Setup screen is displayed. Scroll down to view the different languages and press the Enter key when the language you want is displayed.***

    Note: If you changed the SIMM configuration on the Fiery XJ80e board or you replaced the Fiery XJ80e board but not the hard disk drive, you need to provide a password for system verification. See"To start the copier when a password is required" on page 2-33 or page 3–32.

16. ***The Setup screen is displayed. Re-enter the customer's settings from the Configuration page printout.***

Connecting a CD-ROM drive

Attaching a CD-ROM drive to the Fiery XJ80e allows you to download system software from the Fiery XJ80e System Software CD to the hard disk drive installed on the Fiery XJ80e board. The SCSI cable from the CD-ROM drive attaches to the SCSI connector on the back of the copier.

CD-ROM drives and SCSI cables are available from Electronics for Imaging, Inc.

Turn off the copier when adding or removing devices from the SCSI chain.

To attach a CD-ROM Drive

Note: Make sure the drive is terminated and does not use SCSI ID 0 or SCSI ID 7. For CD-ROM drives obtained from Electronics for Imaging, the SCSI ID is set on the back of the drive.

1. ***Turn off the copier.***
2. ***Make sure that the CD-ROM drive power switch is in the Off position (press O).***
3. ***Make sure the SCSI terminator is connected to the bottom SCSI connector on the CD-ROM drive (for drives obtained from Electronics for Imaging).***
4. ***Connect the power cable to the back of the CD-ROM drive.***
5. ***Connect the SCSI cable to the top connector on the CD-ROM drive.***

6. Connect the other end of the SCSI cable to the Fiery XJ80e SCSI connector on the back of the copier. See Figure 7-5.

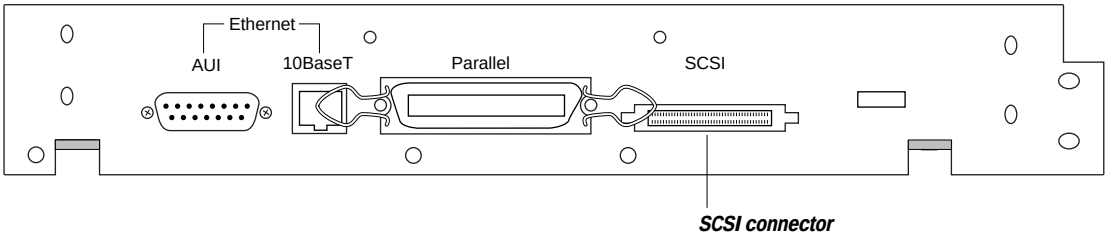


Figure 7-5 Fiery XJ80e connectors on the rear of the copier

Push firmly on the cable connector to the copier and to the CD-ROM drive. Make sure that the cable connectors are securely connected.

7. Plug the power cable into the wall outlet or power strip.

Always turn on the CD-ROM drive first and make sure it is free of activity before you turn on the copier.

Appendix A: Specifications

Hardware features

The Fiery XJ80e has the following hardware features:

- MIPS 4700 100MHz CPU
- Fiery XJ80e memory configurations: 32MB or 64MB
- Supports AppleTalk, TCP/IP, and IPX protocols simultaneously
- Adobe PostScript Level 2 CPSI
- Parallel port for direct connection printing
- 2.1GB Hard disk drive, minimum

Networking and connectivity

The Fiery XJ80e has the following networking features:

- AUI connector for thin or thick Ethernet.
- RJ-45 connector that supports twisted pair network connectivity.
- Novell network servers and other PC-based servers can be connected to the Fiery XJ80e via the Fiery XJ80e's parallel port.
- A CD-ROM drive can be connected to the copier via the SCSI port on the Fiery XJ80e.

Resolution and formats

All supported paper sizes —letter, letter SEF, A4, A4 SEF, A6 SEF, A5, A5 SEF, 8 x 10 SEF, legal SEF (8.5" x 14"), tabloid (11" x 17"), A3, and legal 13 (8.5" x 13")— are printed at a resolution of 400 x 400 dpi.

Maximum scan resolution

- 32MB configuration—400 dpi for an area up to 25 inches (161.2cm) square; 200 dpi for letter or A4; 100 dpi for tabloid or A3 paper sizes.
- 64MB configuration—400 dpi for an area up to 77 inches (496.7cm) square paper size; 200 dpi for tabloid, A3, letter, or A4 paper sizes.

Remote utility software

A complete description of remote utility software is provided in the *User Guide*. For optimal performance, current versions of the remote utility software should be maintained on every network computer that might print to the copier.

Safety and emissions compliance

The Fiery XJ80e board has been certified to meet or surpass the following standards:

Safety approvals

- UL, C-UL
- EN 60950
  (TUV Bauart geprüft)

EMI approvals

- FCC Class A
- VCCI Class 1
- EN55022 Class B (for International kits only)