

Fiery XJ-R/R2 Installation and Service Guide

for Ricoh NC5006

Ricoh Aficio Color 5106, 5206

Gestetner 2706, 2606, 2606e

Rex Rotary CC8406, CC8606, CC8606E

nashuatec C406, C606, C606e

infotec 7306, 7316, 7316E

Savin SC106, SDC206, SDC206E

Sharp AR-C860

and Lanier 5506 DC color copiers

A guide for service representatives

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Preface

The *Installation and Service Guide* is intended for certified Fiery XJ-R/R2™ and copier service technicians installing or servicing a Fiery XJ-R/R2 Color Server™. If you have not received installation and service certification, you should not attempt to install or service a Fiery XJ-R/R2 Color Server. Electronics for Imaging, Inc. does not warrant the performance of 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 a Fiery XJ-R/R2.
- Chapter 1, “Introduction”, provides general information about the Fiery XJ-R/R2.
- Chapter 2, “Preparing for Fiery XJ-R/R2 Installation”, describes the steps you need to take before you install the unit. This chapter also includes an overview of the Control Panel.
- Chapter 3, “Connecting the Fiery XJ-R/R2”, tells you how to connect the Fiery XJ-R/R2 to the copier and the network and verify that the system is working correctly.
- Chapter 4, “Setting Up the Fiery XJ-R/R2”, describes how to configure the Setup options.
- Chapter 5, “Service Procedures”, describes removal and replacement procedures for Fiery XJ-R/R2 components.
- Chapter 6, “Troubleshooting Procedures”, identifies the source of common problems and suggests ways of correcting them.

Fiery XJ-R/R2 customers should not use the technical service documentation. Please don't leave your copy of the *Installation and Service 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 XJ-R/R2 at the time of publication. Components shown in these illustrations are subject to change. To receive information about any Fiery XJ-R/R2 components that do not match illustrations in this guide, contact your authorized service/support

center. Technical Support notes will be provided following major Fiery XJ-R/R2 hardware changes.

Terminology and conventions

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

The term *Control Panel*™ is used to describe the area on the front of the Fiery XJ-R/R2 that includes the green/red activity light, the display window (LCD—liquid crystal display), and the buttons to the right of and below the display window.

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 XJ-R/R2 for parallel printing.

When this guide refers to other Fiery XJ-R/R2 manuals, such as the *Administrator Guide*, the title is displayed in italics.



The arrow highlights important notes and additional information.



The caution icon indicates a need for special care and safety when handling the equipment.

Fiery XJ-R/R2 Control Panel screen messages and commands referred to in the text of this guide appear in the Univers typeface.

Precautions

Always observe the following general precautions when installing and servicing the Fiery XJ-R/R2:

1. **Report any shipping damage.**

If there is any evidence of shipping or handling damage to the Fiery XJ-R/R2 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 XJ-R/R2 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 Fiery XJ-R/R2 Network Setup.*

Only the network administrator should enter an IP address on a network device. Assigning a Fiery XJ-R/R2 an incorrect IP address can cause unpredictable errors on any or all devices connected to the network.

4. *Always disconnect power before opening the Fiery XJ-R/R2 chassis.*

Although Fiery XJ-R/R2 circuitry operates on 5V DC and 12V DC, 115V AC is present when the chassis cover is removed. Before you service the Fiery XJ-R/R2, shut it down completely (switch the Fiery XJ-R/R2 off and unplug the AC power cord from the rear of the Fiery XJ-R/R2).

5. *Handle the Fiery XJ-R/R2 Control Panel display window with care.*

The Fiery XJ-R/R2 display window is made of glass. If the glass breaks and the liquid crystal inside leaks out, avoid contact with it. If you do come in contact with the liquid crystal, wash it off with soap and water immediately.

6. *Avoid pressing the surface of the display window.*

Applying pressure to the display window will cause it to change color.

7. *Use a soft cloth moistened with isopropyl or ethyl alcohol to clean the surface of the Fiery XJ-R/R2 display window.*

Other solvents, such as water, may damage the polarizer on the display window.

8. *Follow standard ESD (electrostatic discharge) precautions while working on the internal components of the Fiery XJ-R/R2.*

Static is always a concern when servicing electronic devices. It is highly unlikely that the area around the copier and the Fiery XJ-R/R2 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 XJ-R/R2 from the carton for the first time, touch a metal area of the copier to discharge the static on your body.
 - Before you remove the Fiery XJ-R/R2 cover and before you handle internal components, touch a metal part of the Fiery XJ-R/R2 chassis.
 - 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.
- 9. *Handle printed circuit boards by their edges only, but avoid touching the contacts on the edge of the board.***
- 10. *Never set a cup of coffee—or any liquid—on or near the Fiery XJ-R/R2 or the copier.***

Tools you will need

To install or service the Fiery XJ-R/R2, you should bring the following tools and parts:

- ESD wrist grounding strap
- Wire cutters
- #0 and #1 Phillips head screwdrivers (non-magnetic)
- Small flat-blade screwdriver (non-magnetic)
- Small needlenosed pliers
- 5/16" wrench
- Flashlight

You should also bring this guide and the latest Fiery XJ-R/R2 Technical Support notes for the Fiery XJ-R/R2 and the customer network type.

Chapter 1:

Introduction

The Fiery XJ-R/R2 Color Server adds computer connectivity and highly efficient PostScript® color printing capacity to color copiers.

The Fiery XJ-R/R2, 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 a Fiery XJ-R/R2 supported copier.
- Spool print jobs and select a printing priority for each job. Users can also control spooled print jobs sent to the Fiery XJ-R/R2 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 high-resolution 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.

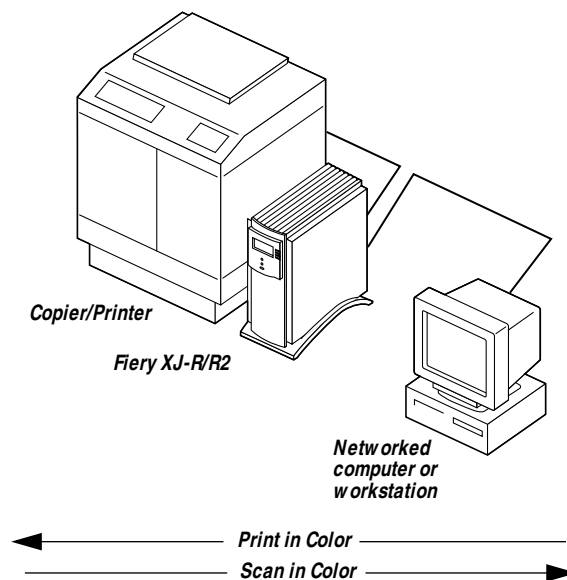


Figure 1-1 Fiery XJ-R/R2 color printing system

The Fiery XJ-R/R2 is one of several color imaging products engineered and manufactured by Electronics for Imaging, Inc.

How the Fiery XJ-R/R2 operates

The Fiery XJ-R/R2 enables the customer to use a color copier as a printer and scanner. Users can print to the Fiery XJ-R/R2 from networked Apple Macintosh computers, from networked IBM PC or compatible computers running Microsoft® Windows™, and from networked UNIX workstations running TCP/IP. In addition, the Fiery XJ-R/R2 parallel port can be used to print directly from a PC.

The Fiery XJ-R/R2's custom-designed boards and operating software are responsible for the Fiery XJ-R/R2's efficient image processing and printing controls. The main functions of Fiery XJ-R/R2 components and software are described below.

The Fiery XJ-R/R2 uses two specialized circuit boards to process image data for printing and scanning color images: the motherboard and the video interface board.

The motherboard includes a MIPS R4600/4700 RISC (Reduced Instruction Set Computer) CPU with a built-in floating point accelerator that runs the CPSI (Configurable PostScript Interpreter). The CPSI (an implementation of Adobe's PostScript language) interprets the PostScript page description file to produce the image pattern in memory. The RipChips™ on the motherboard 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 motherboard hold the color image data during printing. Fiery XJ-R/R2 SIMM configurations include 48, 80, 128, and 256MB (see "SIMMs" on page 5-31).

The CPSI outputs raster data to the Fiery XJ-R/R2 video interface board. Image data is sent from the external video interface board connector (through the copier interface cable) to the copier's interface port. The raster data is supplied to the laser in the copier at full copier rates 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 XJ-R/R2 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.

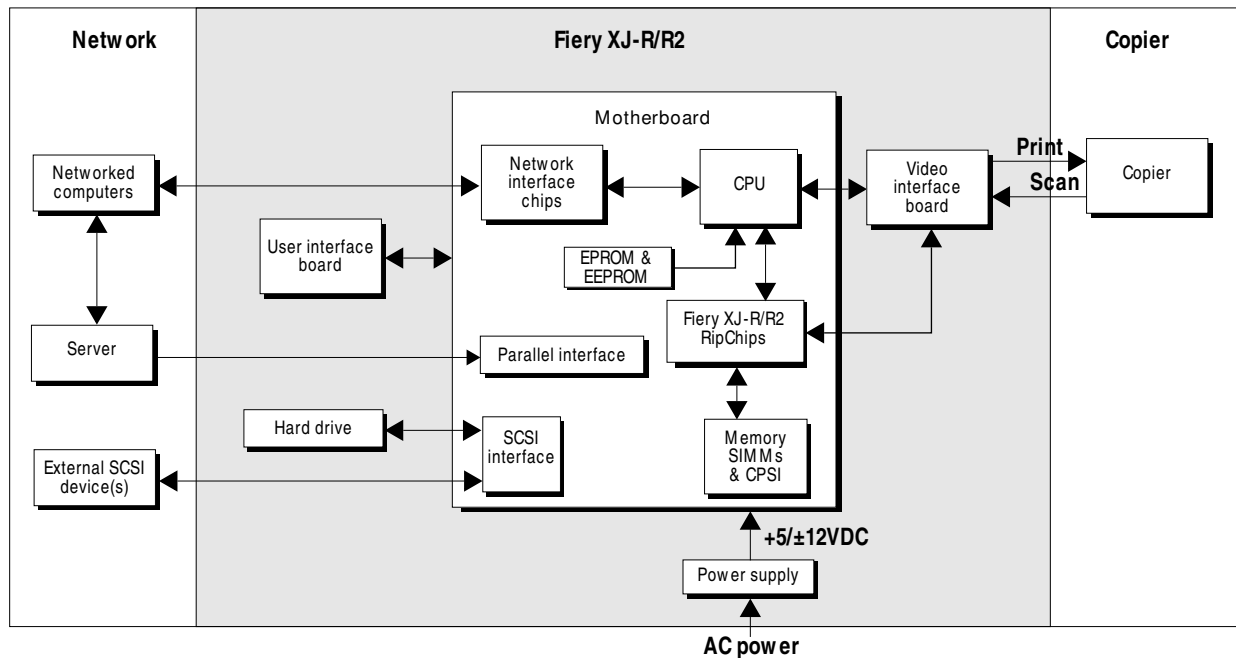


Figure 1-2 Fiery XJ-R/R2 functional diagram

Fiery XJ-R/R2 print options

The Fiery XJ-R/R2's efficient PostScript capabilities allow customers to use a variety of applications to create printed pages with text, images, or a combination of text and images, and print them in Contone or Halftone mode. The Fiery XJ-R/R2 operates over a network or by printing directly to the parallel port. Since the Fiery XJ-R/R2 has the ability to print an image while processing the next image (RIP-While-Print™), it is capable of printing documents at full copier speeds.

Printing over a network allows Fiery XJ-R/R2 users to print documents directly from applications in which they were created. In addition, Fiery XJ-R/R2 offers an efficient way to print files that have been saved in PostScript or EPS (Encapsulated PostScript) format. These files can be downloaded directly to the Fiery XJ-R/R2 using the Fiery XJ Downloader, one of the remote utilities provided with Fiery XJ-R/R2.

With the parallel port option, customers can print documents directly from applications running on a PC-compatible computer or a server that is connected to the Fiery XJ-R/R2's parallel port. PostScript files can also be printed to the parallel port from the DOS prompt or the Windows File Manager.

Fiery XJ-R/R2 remote utility software

Fiery XJ-R/R2 users who are working with Macintosh and PC-compatible computers can download fonts and images, scan color images, and control spooled print jobs using remote software delivered with the Fiery XJ-R/R2. The network administrator at the customer site is responsible for loading software onto computers that will use the Fiery XJ-R/R2 over the network.

The Fiery XJ-R/R2 User Software CD (for PC-compatible or Macintosh computers) contains the following software:

- The Fiery XJ Downloader™ is a Fiery XJ-R/R2 utility that allows the customer to download PostScript or EPS files to the Fiery XJ-R/R2 without opening the file or the application that created the file. The Fiery XJ Downloader also allows the customer to manage the printer fonts on the Fiery XJ-R/R2.
- Fiery XJ Scan™ is a Fiery XJ-R/R2 plug-in for Adobe® Photoshop™. It allows the customer to use the copier as a scanner and acquire digitized color image data on networked PC-compatibles or Macintosh computers.
- Fiery XJ Print Calibrator enables the customer to keep Fiery XJ-R/R2 colors consistent across time.
- The Fiery XJ Spooler™ is a utility that allows a user to control Fiery XJ-R/R2 print jobs from a networked PC or Macintosh computer. It allows the user to view the order and priority of a job, delete jobs, and move jobs between queues.
- Fiery XJ Export™ allows the customer to export RGB files from Adobe Photoshop on Macintosh and PC computers without going through PostScript. It also bypasses the printer driver and internal Fiery XJ-R/R2 processing, which increases print speed.
- A set of Adobe Macintosh screen fonts that correspond to the PostScript printer fonts resident on the Fiery XJ-R/R2.
- Printer description files that allow remote users to access special features when printing.
- Printer drivers for Macintosh and Windows. They allow applications to communicate with the Fiery XJ-R/R2 and use all the printing features of the Fiery XJ-R/R2.
- Color Reference pages to view the range of colors available on the Fiery XJ-R/R2.

The CD also includes EFICOLOR Works™ (Macintosh software) and online documentation.

Chapter 2: Preparing for Fiery XJ-R/R2 Installation

This chapter includes the following information:

- Summary of the Fiery XJ-R/R2 installation procedure
- Preparing a customer site for Fiery XJ-R/R2 installation
- Unpacking the Fiery XJ-R/R2

Overview of the installation procedure

Familiarize yourself with Chapters 2 through 4 of this guide before you attempt an installation. The installation sequence described in this chapter is designed to make your job as easy as possible. Installation problems are easier to avoid and diagnose if you proceed from the component to the system level and verify functionality at each stage. Figure 2-1 on page 2-2 outlines the recommended installation procedure for connecting the Fiery XJ-R/R2 to a single copier.

Because the Fiery XJ-R/R2 is a component of the customer's computer network, make sure that you coordinate your scheduled installation with the network administrator at the customer site. Refer the network administrator to the *Administrator Guide* for network setup information.

For sites that print to the Fiery XJ-R/R2 through a parallel (Centronics) port, you will need the parallel (Centronics) printer cable shipped with the Fiery XJ-R/R2. If you use your own parallel printer cable, it must have a male 36-pin D-shell connector on one end and a 25-pin male D-sub, shielded connector at the other end, and cannot be more than six feet long. Because of the cable arrangement necessary to connect the Fiery XJ-R/R2 to a PC-based server, make sure the customer has enough space near the copier for both the Fiery XJ-R/R2 and the server.

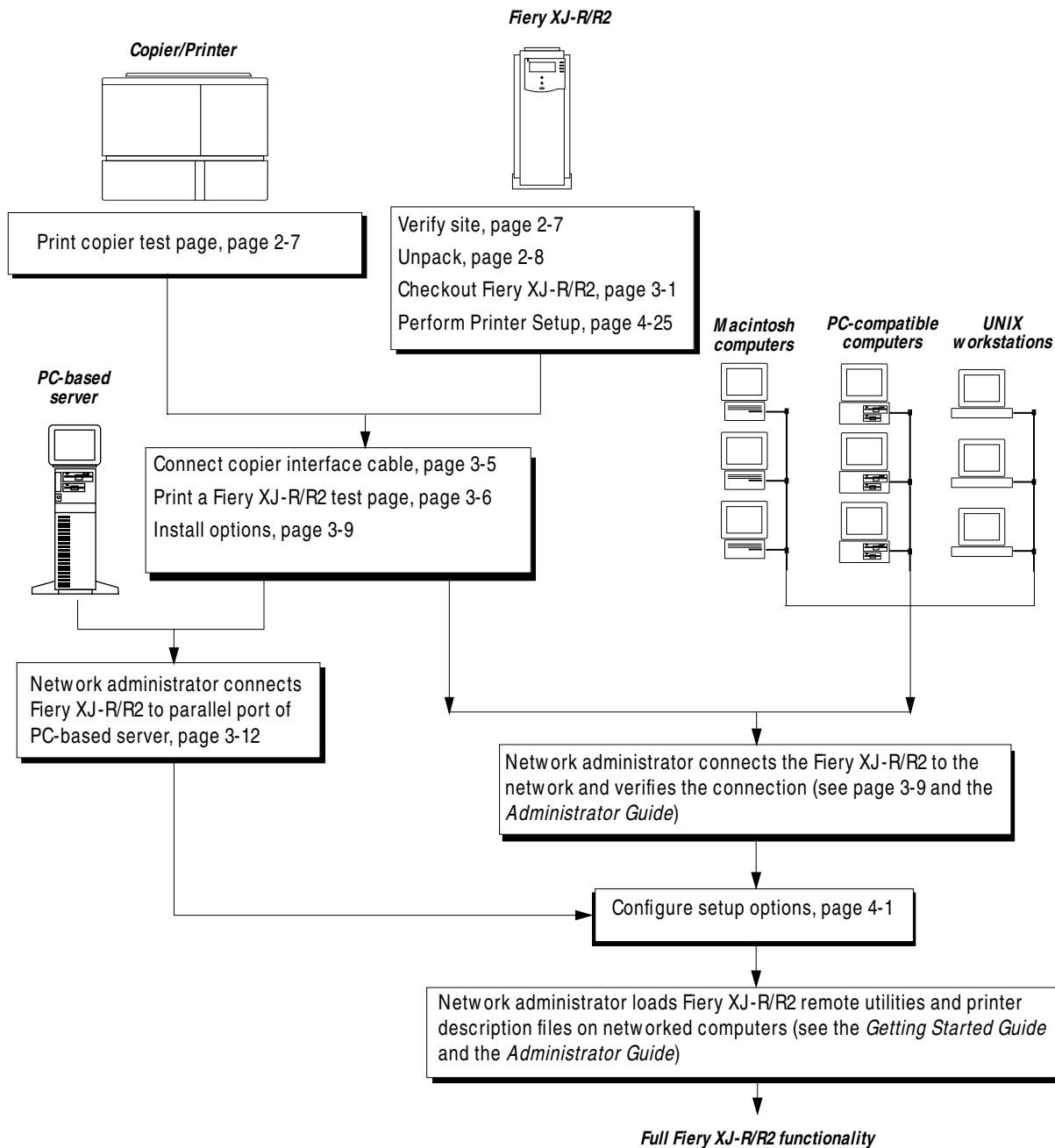


Figure 2-1 Recommended installation steps and references

Preparation for Fiery XJ-R/R2 installation

Before you visit a customer site to install the Fiery XJ-R/R2, call ahead to verify site conditions and inform the customer of installation requirements.



Note that the software versions listed in the checklist below reflect compatible versions at the time of publication. If you are using a later version of the software, contact your authorized service/support center to determine Fiery XJ-R/R2 system compatibility.

Customer site checklist

☐ **1. Copier model**

What copier model is installed?

Are the copier interface card and connector installed in the copier?

Is there space near the copier for the Fiery XJ-R/R2?

☐ **2. Power**

Is there a dedicated grounded electrical outlet near the copier for the Fiery XJ-R/R2?

☐ **3. Computers**

If Macintosh computers on the network will be supported by the Fiery XJ-R/R2:

- Do networked Macintosh computers have an Ethernet card or Ethernet built-in?
- Are networked Macintosh computers running a compatible version of the system software (7.0 through 7.1 or 7.5)?
- Do networked Macintosh computers use a compatible version of the LaserWriter driver (7.0 through 8.1.2) or PSPrinter driver (8.0 through 8.3)?

If 386, 486 or Pentium PC-compatibles on the network will be supported by the Fiery XJ-R/R2:

- Do networked PC-compatible computers use a compatible version of the Adobe PostScript Printer Driver for Windows (2.1 through 3.0.1)?

Version 3.0.1 is included with the Fiery XJ-R/R2 Windows software.

Windows 3.x

- Are PC-compatibles running a compatible version of MS-DOS version 5.0 or later and Windows version 3.1 or later?
- Is COPSTalk for Windows version 1.1 /1.2 or PhoneNET PC 3.1 or later installed on PC-compatibles that will be printing to the Fiery XJ-R/R2?
- Are users printing through a Novell server with NetWare Client software installed?

Windows 95

- Do PC-compatibles that will be printing to the Fiery XJ-R/R2 have Microsoft Windows 95 software with the SPX /IPX networking protocol set up?

Windows NT

- Do PC-compatibles that will be printing to the Fiery XJ-R/R2 have Microsoft Windows NT with TCP/IP networking protocol set up?

☐ 4. **Network**

Will a new network node for the Fiery XJ-R/R2 be ready on the installation date?

What kind of network will the Fiery XJ-R/R2 be installed on?

Is a compatible version of the network software installed?

- AppleTalk (for Macintosh or Windows 3.x)
- SPX/IPX (for Windows 3.x or Windows 95)
- TCP/IP (for Windows NT)

What is the network cable and connection type?

- Thinnet
- Thicknet
- Twisted pair (10Base-T)

Will network hardware be ready for the Fiery XJ-R/R2 installation?

- Thinnet and thicknet: Will a network cable be ready?

☐ **5. TCP/IP networks**

Does the UNIX network support RFC1179 (Berkeley lpr Protocol)?

Does the network administrator already have a valid IP address, subnet mask, and a gateway address to assign in Setup?

Inform the network administrator that it may be necessary to:

- Edit the /etc/hosts file to include the Fiery XJ-R/R2 as a network device.
- Create a spool directory in the /usr/spool directory.
- Add Fiery XJ-R/R2 information to the /etc/printcap file.

Specific instructions and a sample printcap entry for the Fiery XJ-R/R2 are provided in the *Administrator Guide*.

☐ **6. Novell networks**

Will the network administrator be available during installation to configure the system for the Fiery XJ-R/R2 and verify the connection?

Is the Novell file server running Novell NetWare software version 3.11, 3.12, or 4.x in emulation mode that supports Frame Ethernet 802.3 or 802.2?

☐ **7. Parallel port connections to the Fiery XJ-R/R2**

Is a tested parallel (Centronics) printer cable available (cable is provided with the Fiery XJ-R/R2)?

Is there room for both the Fiery XJ-R/R2 and the PC-based server that will be connected to the Fiery XJ-R/R2?

☐ **8. System contact person**

Will the person responsible for the computers and the network be available at the time set for installation? Get a name as a contact.

Setting customer expectations

If the site is ready, installation takes about one hour. The customer should be informed of the following:

- The network may be unavailable for up to one hour.
- The copier may be unavailable for up to one hour.
- The network administrator needs to be available during the installation for network connectivity.



Equipment downtime and impact on the network can be minimized if the network administrator installs a network connector for the Fiery XJ-R/R2 and confirms network functionality with the connector in place before the date scheduled for the Fiery XJ-R/R2 installation.

- The network administrator should have a networked computer available during the installation. The appropriate software should already be installed. Documentation for the networked computer and the network operating software should be available.
- The network administrator should install the remote utility software shipped with the Fiery XJ-R/R2 (a package of user documentation is also included) onto networked Macintosh and PC-compatible computers that will print to the Fiery XJ-R/R2. (See “Fiery XJ-R/R2 remote utility software” on page 1-4.)

Note: This guide covers Fiery XJ-R/R2 hardware installation and service. It provides general information on connecting the Fiery XJ-R/R2 to the customer’s network. However, network setup and configuration information goes beyond the scope of this guide. For network setup and configuration information, the network administrator should refer to the *Administrator Guide*.

Verifying site readiness

Before unloading and installing the Fiery XJ-R/R2, verify that the customer site is prepared.



1. **Check the electrical source.**

Locate the grounded electrical outlet that will supply power to the Fiery XJ-R/R2. You should not run the Fiery XJ-R/R2 and the copier on the same circuit. Use surge suppressors for both the Fiery XJ-R/R2 and the copier.

- *Do not* use a 3-prong adapter in a 2-hole ungrounded outlet.
- *Do not* use an extension cord.
- *Do not* plug the Fiery XJ-R/R2 into a circuit with heating or refrigeration equipment (including water coolers).
- *Do not* plug the Fiery XJ-R/R2 into a switchable wall outlet. This can result in the Fiery XJ-R/R2 being turned off accidentally.

2. **Check the intended location for the Fiery XJ-R/R2.**

Make sure that there is space for the Fiery XJ-R/R2 and the furniture. You may need to move the copier out from the wall for easier access to the copier interface port.

3. **Test copier functionality before installing the Fiery XJ-R/R2.**

Copy the copier color test page before you install the Fiery XJ-R/R2.

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 procedure.

4. **Check the network.**

Verify that the network is functioning before you attach the Fiery XJ-R/R2.

- Ask the network administrator to print a document on a shared printer over the network.
- Ask the network administrator to verify the computer and network requirements as specified in “Customer site checklist” on page 2-3.

Unpacking the Fiery XJ-R/R2

The Fiery XJ-R/R2 is assembled and shipped from the factory in a box that includes all cables and documentation, as shown in Figure 2-2 on page 2-9. In addition to the Fiery XJ-R/R2 Color Server, a box containing the Fiery XJ-R/R2 furniture may be shipped from the factory.

To unpack the Fiery XJ-R/R2

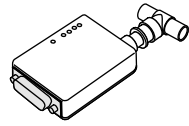


Save the original boxes and packing materials. If you need to transport the Fiery XJ-R/R2 at a later date, the original box and packing material will ensure safe shipment.

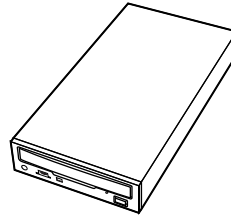
1. ***If Fiery XJ-R/R2 furniture is included with your shipment, open the box and if necessary, assemble the furniture (see the instructions that came in the box with the furniture or Appendix B).***
2. ***Open the Fiery XJ-R/R2 Color Server box and remove the packing material.***
3. ***Remove the contents from the top tray. Inspect the contents for visible damage. The contents of the tray should include the following items:***
 - Bags containing the copier interface cable (16' long, gray, with 100-pin D-connectors), a SCSI cable for connecting removable SCSI devices, a Fiery XJ-R/R2 AC power cable, CD-ROM drive power cable, and a parallel (Centronics) port cable.
 - Fiery XJ-R/R2 stand (includes 2 screws for attaching it to the Fiery XJ-R/R2)
 - CD-ROM drive
 - AUI to BNC Ethernet Transceiver
 - SCSI terminator
 - Media pack (includes user documentation, user software CD and floppy disks, and a scanner target)



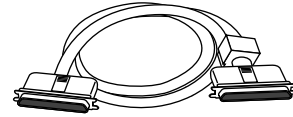
Note that a service kit containing the system software CD is ordered separately.



Ethernet transceiver



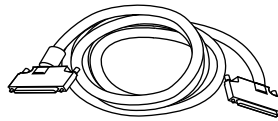
CD-ROM drive



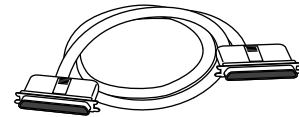
SCSI cable



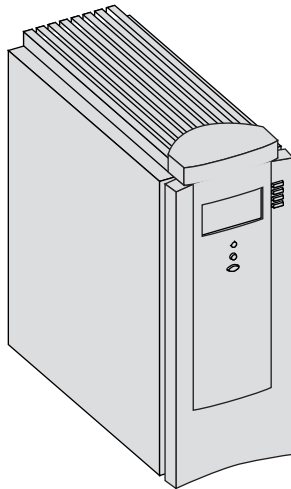
Power cable (US version)



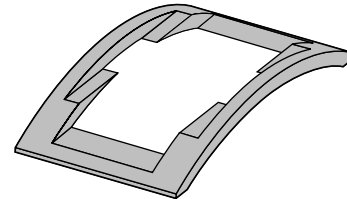
Copier interface cable



Parallel (Centronics) port cable



Fiery XJ-R/R2



Fiery XJ-R/R2 stand

Note: This illustration does not include the media pack, or SCSI terminator.

Figure 2-2 Contents of Fiery XJ-R/R2 shipping box

4. Give the media pack to the customer or the network administrator.

Let the customer or network administrator know that in order to take full advantage of the Fiery XJ-R/R2, the user software must be installed on computers that will print to the Fiery XJ-R/R2.

5. Set aside the remaining Fiery XJ-R/R2 cables, Ethernet transceiver, SCSI terminator, and the Fiery XJ-R/R2 stand.

6. Remove the tray and any packing materials. Set the tray and the packing material aside in case you need to reship the unit.

7. Carefully lift the Fiery XJ-R/R2 out of the box.



If you notice shipping damage to any Fiery XJ-R/R2 component, be sure to save the shipping container in case the carrier needs to see it. Call the carrier immediately to report the damage and file a claim, then call your authorized service/support center. Be ready to furnish the serial number, printed on the back of the Fiery XJ-R/R2 chassis.

To attach the stand to the Fiery XJ-R/R2



If you place the Fiery XJ-R/R2 in the furniture brackets (see Appendix B), you do not need to attach the Fiery XJ-R/R2 stand.

- 1. Set the Fiery XJ-R/R2 on a flat surface, with the front of the chassis facing up (see Figure 2-3 below).**
- 2. Place the stand over the bottom of the Fiery XJ-R/R2 so the holes in the stand line up with the holes on the bottom of the chassis.**
- 3. Attach the stand using the two screws included with the shipment.**

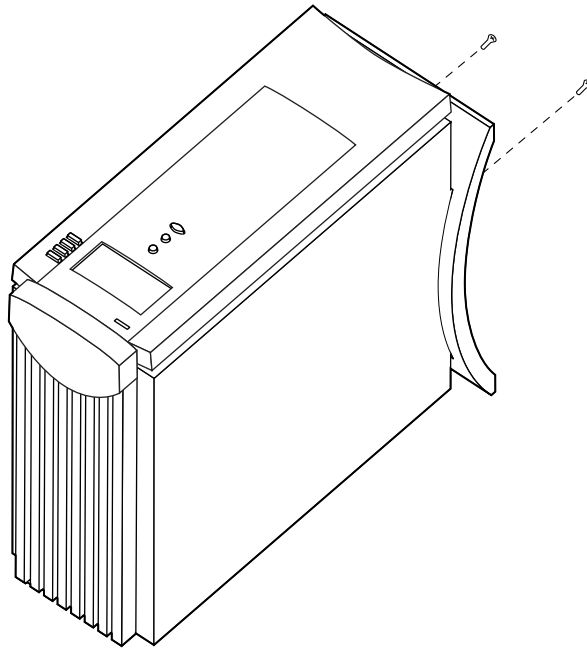


Figure 2-3 Attaching the Fiery XJ-R/R2 stand



You will connect the Fiery XJ-R/R2 to the copier and the network after you verify the Fiery XJ-R/R2 powers up properly. The following section describes the buttons on the front of the Fiery XJ-R/R2 and the different functions available from the Control Panel. You will select functions from the Control Panel when you turn on the Fiery XJ-R/R2.

Using the Fiery XJ-R/R2 Control Panel

This section describes the Control Panel on the front of the Fiery XJ-R/R2. Once you install the Fiery XJ-R/R2 and verify that it powers up correctly (described in “Connecting the Fiery XJ-R/R2” on page 3-1), you will use the Control Panel to access and monitor different functions of the Fiery XJ-R/R2.

The current status of the Fiery XJ-R/R2 and Setup information is displayed in the Fiery XJ-R/R2 display window. Fiery XJ-R/R2 activity can be monitored in the display window, and functions of the Fiery XJ-R/R2 can be controlled locally using the buttons on the Control Panel (such as printing a test page and installing or updating system software).

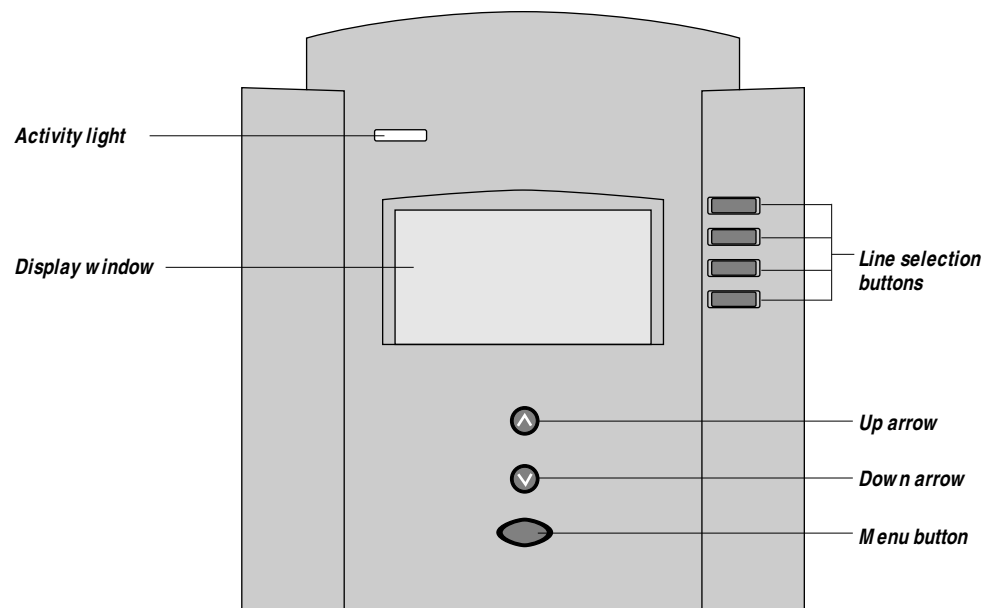


Figure 2-4 The Fiery XJ-R/R2 Control Panel

The physical controls and status indicators on the Control Panel, from the top down, are:

- The activity light at the top of the Control Panel
- The display window
- The four line selection buttons to the right of the display window
- The up and down arrow buttons for scrolling and editing
- The menu button (oval button at the bottom)

Fiery XJ-R/R2 Control Panel screens

When the Fiery XJ-R/R2 is in Print mode, pressing the menu button cycles among four screens: three status screens (Info, RIP, and Print) and the Functions menu (see Figure 2-5). When the Fiery XJ-R/R2 is idle, pressing the menu button cycles between the Info screen and the Functions menu. The Fiery XJ-R/R2 screens display the following information:

- Info status screen—Displays the current system software version, the amount of disk space available on the hard disk drive, the printer name on the network, and the current Fiery XJ-R/R2 status (Printing, Processing, Error, or Idle).
- RIP status screen—Displays information about the job currently being processed and allows you to cancel the job.
- Print status screen—Displays information about the job currently being printed and allows you to cancel the print job.
- Functions menu—Gives you access to administrative functions not normally performed from a remote workstation (see “Functions menu” on page 2-15 for information on the available functions).

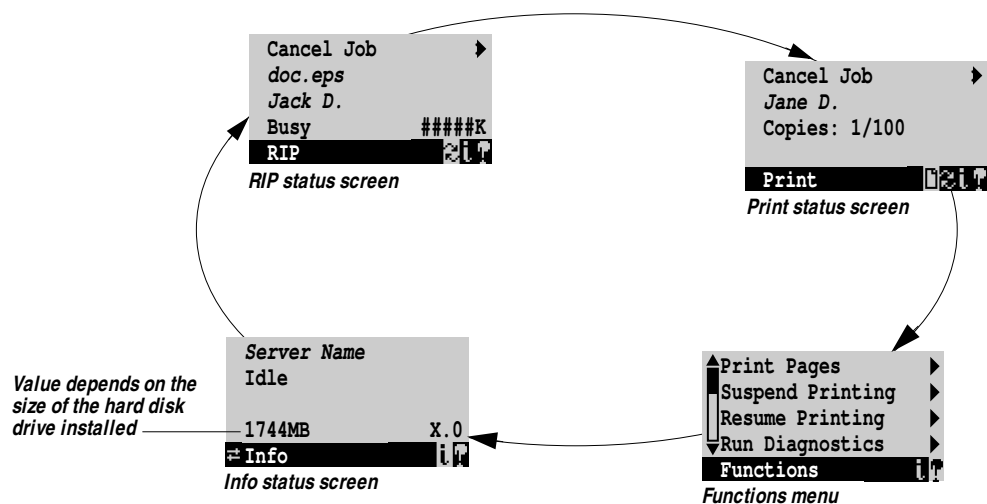








Figure 2-5 Fiery XJ-R/R2 Control Panel screens

Fiery XJ-R/R2 Control Panel screen icons

The row of icons at the bottom of the Control Panel window display information about the current status of the Fiery XJ-R/R2. The highlighted icon corresponds to the screen that is currently displayed. Pressing the menu button allows you to move between the available screens (available screens are displayed in the row of icons at the bottom of the Control Panel). See Table 2-1 for a description of the different icons.

Table 2-1 Fiery XJ-R/R2 Control Panel screen icon descriptions

Fiery XJ-R/R2 screen icon	Description
	The Alert icon is highlighted when the Control Panel shows the Error screen.
	The Print icon is highlighted when the Fiery XJ-R/R2 is printing or scanning a job and the Control Panel shows the Print screen.
	The RIP icon is highlighted when the Fiery XJ-R/R2 is ripping (processing) a job and the Control Panel shows the RIP screen.
	The Information icon is highlighted when the Control Panel shows the Info screen.
	The Function icon (a finger pressing a button) is highlighted when the Fiery XJ-R/R2 Control Panel shows the Functions menu.
	The Network icon is displayed in the bottom left corner of the Control Panel when the Fiery XJ-R/R2 is communicating with the network (for example when downloading a file).

Functions menu

The Functions menu allows you to perform a variety of administrative functions that do not affect print jobs of other users. Use the up/down arrow buttons to scroll through the list of options. Press the line selection button next to the option you want to select.

The following options are available from the Functions menu:

Print Pages—Enables you to print special pages from the Fiery XJ-R/R2. You can print the following pages from the submenu that appears:

- **Test Page**—Prints a Fiery XJ-R/R2 test page to the current print device. This enables you to confirm that the Fiery XJ-R/R2 is properly connected to the copier and to view information about color and grayscale to troubleshoot the Fiery XJ-R/R2. The following information also displays: Fiery XJ-R/R2 server name, Fiery XJ-R/R2 model, Color Mode, Printer Mode, Calibration, Memory Multiplier setting, Color Rendering Dictionary in use, and the Date printed.
- **Configuration**—Prints the current server and device configuration. This includes information about all current Setup settings, calibration profile, and the Ethernet and Token Ring addresses of the Fiery XJ-R/R2.
- **Job Log**—Prints the log of the last 55 jobs. For more information about the job log, see the *User Guide*.
- **Control Panel Map**—Prints the Setup screen help pages. These pages are useful when navigating through the different Setup screens.
- **Color Charts**—Prints the color reference charts. These pages include swatches of the RGB, CMY, and Pantone colors available from the Fiery XJ-R/R2.
- **Font List**—Prints a list of all the fonts resident on the Fiery XJ-R/R2 hard disk drive.

Suspend Printing—Disconnects the Fiery XJ-R/R2 from the copier. This option interrupts the current print job so that you can use the copier to make copies; after you make the copies you can select Resume Printing and the copier will continue processing and printing jobs.

Resume Printing—Connects the copier to the Fiery XJ-R/R2 so that you can resume printing after interrupting the print job to make copies.

Run Diagnostics—When you select this option, you can choose one of the following options:

- Test Scan/Print—Scans whatever is on the copier glass and prints out the image on letter size paper.
- Video Diagnostics—Runs diagnostics on the Fiery XJ-R/R2 video interface board.

Select the diagnostic test you want to run and press the line selection button next to OK.

For more information on these options, see “Troubleshooting Procedures” on page 6-1.

Reboot Server—Shuts down all Fiery XJ-R/R2 activity properly and then restarts.

Chapter 3: Connecting the Fiery XJ-R/R2

Preliminary checkout of the Fiery XJ-R/R2

When you have just unpacked or serviced a Fiery XJ-R/R2, it's a good idea to power it up alone, before you connect the copier and the network. The diagnostics automatically performed during startup check the Fiery XJ-R/R2 for internal problems.



If you changed the SIMM configuration or replaced the motherboard, the system will require you to enter an authorization code after the Fiery XJ-R/R2 reboots. The authorization code is obtained from your authorized service/support center.

To start the Fiery XJ-R/R2



1. **Connect one end of the Fiery XJ-R/R2 power cable to the lower plug at the back of the Fiery XJ-R/R2 (see Figure 3-1).**
2. **Make sure that the Fiery XJ-R/R2 power switch is in the Off position (press O), then plug in the Fiery XJ-R/R2 power cable.**

The power supply automatically senses the correct voltage.

3. **Install the SCSI terminator on the SCSI connector.**

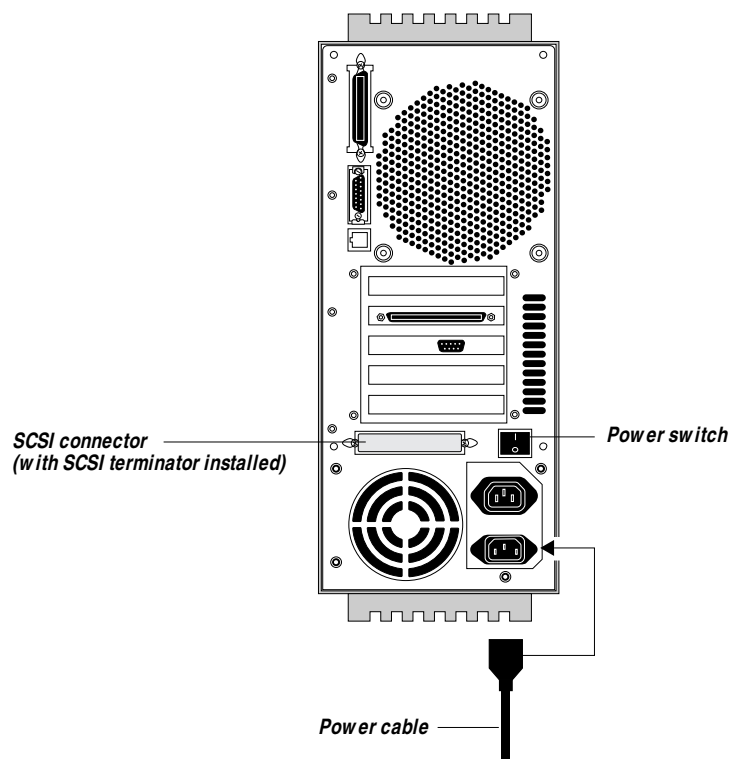


Figure 3-1 Fiery XJ-R/R2 back panel

Standard startup

The following procedure describes the standard startup for the Fiery XJ-R/R2. If you changed the SIMM configuration or replaced the motherboard in the Fiery XJ-R/R2 you are servicing or you received a message in the Control Panel indicating that the software is not authorized, see “Password-required startup” on page 3-3.

1. **Turn on the power switch at the back of the Fiery XJ-R/R2 (press I).**
2. **To confirm normal operation, allow the Fiery XJ-R/R2 startup to proceed without interruption while you watch the Control Panel.**

The Control Panel first shows TESTING: with a graphic of a magnifying glass passing over a circuit board. The Fiery XJ-R/R2 is performing its automatic startup tests.

If no errors occur during the Start-up diagnostics, the activity light on the Control Panel flashes green and goes off at the end of the tests.

If an error occurs during startup, the activity light flashes red and remains on at the end of the tests. The Control Panel then displays the Test Failed screen. Pressing the Details line selection button in the Test Failed screen gives you more information about the failing test. See “Errors during the Start-up diagnostics” on page 6-8 for more information. The most likely cause of a failure is a loose cable or board connection.

3. **If it is the first time you start the Fiery XJ-R/R2:**

- Allow the Fiery XJ-R/R2 to proceed to the Select Language screen, and select the language that you want to appear in the Control Panel. If you change the language, select OK to reboot the Fiery XJ-R/R2. The language you select will then appear in the Control Panel.
- Configure Printer Model with the correct copier type in Printer Setup.

To enter the printer model in Printer Setup, you must enter Server Setup and Network Setup first and Save Changes (you can use default settings for Server and Network Setup). For more information, see “Using Setup” on page 4-1.

- Select Exit Setup from the Setup menu.

Allow the system to proceed to Idle to confirm that the Fiery XJ-R/R2 is operating correctly. You will configure Setup options after you connect the Fiery XJ-R/R2 to the copier and the network.

4. **Following a successful startup, proceed to “Connecting the Fiery XJ-R/R2 to the copier” on page 3-5.**

Password-required startup

If you changed the SIMM configuration in the Fiery XJ-R/R2 or you replaced the motherboard, you will be required to enter an authorization code, obtained from your authorized service/support center, when you turn on the Fiery XJ-R/R2. If you did not change the SIMM configuration or replace the motherboard refer to “Standard startup” on page 3-2.

1. **Install system software (see “Installing Fiery XJ-R/R2 system software” on page 5-44).**

Once you have reinstalled the system software and selected the language you want to appear in the Control Panel, you need to enter the system password.

2. **At the screen shown in Figure 3-2, select OK.**

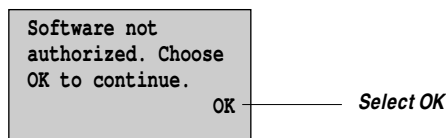


Figure 3-2 Software not authorized screen

3. **At the next screen, carefully write down the ID# that appears in the Control Panel and call your authorized service/support center.**

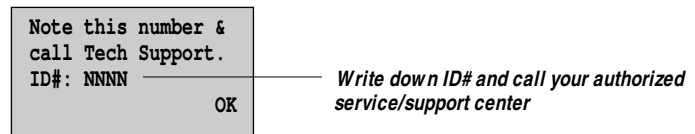


Figure 3-3 ID# screen

You will need to give your authorized service/support center the ID# and the upgrade or service kit number. You will then receive a new authorization code.

4. ***At the screen “Enter Authorization Code”, enter the authorization code and select OK.***

Use the up and down arrow buttons on the Control Panel to select the correct letter or number and the line selection buttons to advance to the next space. Note that the authorization code must be entered exactly.

If you enter the wrong number, you will receive the message “Invalid code. Try again.”, 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 will indicate that the password has been installed.

5. ***Select OK to reboot the Fiery XJ-R/R2.***
6. ***After the Fiery XJ-R/R2 reboots, you will see the Select Language screen. Select the language you want to appear on the Control Panel.***

If you select a different language from the one highlighted on the Control Panel, the Fiery XJ-R/R2 will reboot again. After the Fiery XJ-R/R2 reboots, the language you selected will appear on the Control Panel.

7. ***Allow the Fiery XJ-R/R2 to proceed to the Setup screen, configure Printer Model with the correct copier type in Printer Setup.***

In order to enter the printer model in Printer Setup, you must enter Server Setup and Network Setup first and Save Changes (you can use default settings for Server and Network Setup). For more information see “Using Setup” on page 4-1.

8. ***After you select the correct printer model, select Exit Setup from the menu.***

Allow the system to proceed to Idle to confirm that the Fiery XJ-R/R2 is operating correctly. Setup options may be configured after you connect the Fiery XJ-R/R2 to the copier and the network.



If an error occurs on startup, see “Errors during the Start-up diagnostics” on page 6-8.

9. ***Following a successful startup, proceed to “Connecting the Fiery XJ-R/R2 to the copier” on page 3-5.***

Connecting the Fiery XJ-R/R2 to the copier

After successfully starting the Fiery XJ-R/R2 by itself, you are ready to connect the Fiery XJ-R/R2 to the copier. The Fiery XJ-R/R2 communicates with the copier through a cable from the video interface board to the copier's interface port.

To connect the Fiery XJ-R/R2 to the copier

1. **Turn off the Fiery XJ-R/R2.**
2. **Get permission from the network administrator or supervisor to turn off the copier.**
3. **Turn off the copier.**

Wait for the thermostatically controlled fan to stop.

4. **Locate the Fiery XJ-R/R2 copier interface cable (100-pin) and connect one end of the cable to the copier interface port on the copier.**

Tighten the screws completely.

5. **Make sure the Fiery XJ-R/R2 is near the copier.**
6. **Connect the other end of the cable to the Fiery XJ-R/R2 copier interface connector (see Figure 3-4).**

Tighten the screws completely.

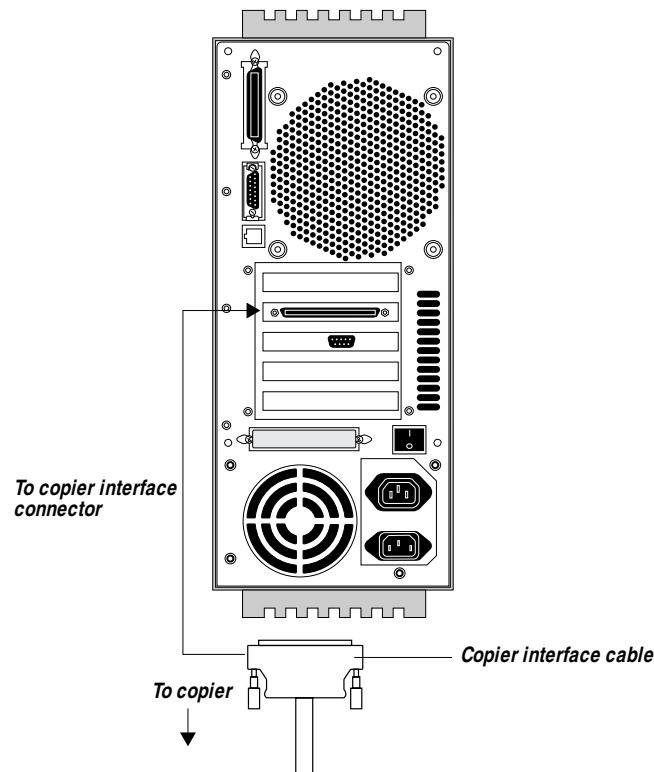


Figure 3-4 Copier interface cable connection

Verifying the connection

After you connect the Fiery XJ-R/R2 to the copier, it is a good idea to print a test page and perform the Test Scan/Print function. Printing a test page and performing the scan/print test verifies the connection between the Fiery XJ-R/R2 and the copier to make sure it is operating properly.

Printing a Fiery XJ-R/R2 test page

Before connecting the Fiery XJ-R/R2 to the network, verify that all components of the Fiery XJ-R/R2-to-copier interface work by printing a test page to the copier. The copier will print the Fiery XJ-R/R2 test page, a color PostScript file that is resident on the Fiery XJ-R/R2's hard disk drive.

To print a test page from the Control Panel

1. *Turn on the copier and allow it to warm up.*
2. *Turn on the Fiery XJ-R/R2 from the power switch on the back panel.*

Messages will appear on the Control Panel as the Fiery XJ-R/R2 runs through its power-up tests.

3. *Before proceeding, make sure that the copier is not in use.*

The Fiery XJ-R/R2 Info screen should read Idle.

4. *At the Idle screen, press the menu button once (see “Using the Fiery XJ-R/R2 Control Panel” on page 2-12).*

The Functions menu displays a scrolling list of options. The full list of options is shown below:

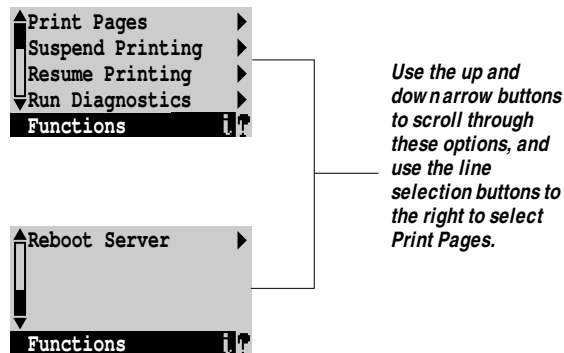


Figure 3-5 Functions menu options

5. *Press the line selection button to the right of Print Pages and then select Test Page from the submenu.*

The Fiery XJ-R/R2 sends the test page to the copier and displays the RIP and Print status screens so you can monitor the job.

6. *Examine the quality of the test page from the copier.*

The test page confirms that the Fiery XJ-R/R2 print engine is functional and that the connection between the Fiery XJ-R/R2 and the copier is good. The next step is to check the Fiery XJ-R/R2 Test Scan/Print function.

Checking scanning and printing

The Test Scan/Print function scans whatever is placed on the copier glass and prints it to the copier. This test can be used to test the scanning capabilities on the Fiery XJ-R/R2. You can compare the original with the output to make sure the connection between the Fiery XJ-R/R2 and the copier is working properly.



Note: The Test Scan/Print function is not implemented in Fiery XJ-R units that have system software version 1.03 or below.

To run Test Scan/Print

1. *Place the document that you want to scan on the copier glass.*
2. *At the Idle screen, press the menu button once to display the Functions menu.*

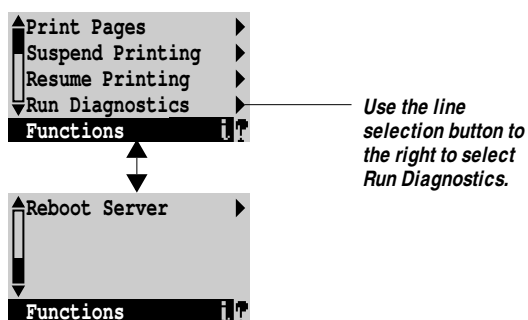


Figure 3-6 Run Diagnostics option in the Functions menu

3. *Select Run Diagnostics from the Functions menu.*
4. *At the screen shown in Figure 3-7, select Test Scan/Print.*

The message Scanning from copier and printing.... is displayed.



Figure 3-7 Test Scan/Print option

5. *When the Fiery XJ-R/R2 is finished printing, compare the output from the copier to the original.*

The next step is to connect the Fiery XJ-R/R2 to the network.

Installing additional options

If the customer has purchased additional options, such as memory, install those before connecting the Fiery XJ-R/R2 to the network. See the documentation included with that particular option for more information.

After installing options, print a test page to verify that the system is operating properly. Checking the installation at each stage allows you to easily pinpoint the cause of problems should they occur.

Connecting the Fiery XJ-R/R2 to the network

The 16-bit Ethernet network adapter chip (Intel 82593 CSMA/CD core LAN Controller) built into the Fiery XJ-R/R2 motherboard provides connectivity to Ethernet networks. Supported Ethernet cabling includes: thinnet, thicknet, and twisted pair.

Other Fiery XJ-R/R2 connectivity includes a high-speed parallel port that enables the Fiery XJ-R/R2 to connect directly to the parallel port of a PC-compatible or a Novell server.

Token ring compatibility is available using the optional token ring kit (see the documentation included with that kit for more information).

Ethernet network connections

The Fiery XJ-R/R2's motherboard 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 10Base-T connector for twisted pair (see Figure 3-8). Only one Ethernet connection should be made to the Fiery XJ-R/R2 at a time. The circuitry on the Fiery XJ-R/R2 automatically determines which connector is being used. For network configuration information, see the *Administrator Guide*.

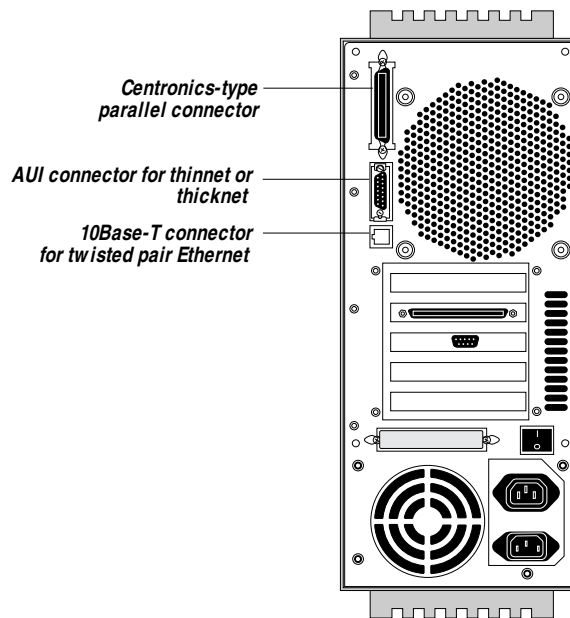


Figure 3-8 Fiery XJ-R/R2 network connectors

To connect a thinnet or thicknet cable to the Fiery XJ-R/R2

Thinnet (thin coaxial Ethernet cable or 10Base-2) connections require an external transceiver attached directly to the AUI connector on the back of the Fiery XJ-R/R2. An AUI to BNC Ethernet transceiver is included with the Fiery XJ-R/R2.

Thicknet (thick coaxial Ethernet cable or 10Base-5) connections require an external transceiver with an AUI drop cable connected to the AUI connector on the back of the Fiery XJ-R/R2.

1. **Turn off the Fiery XJ-R/R2 before connecting it to any network device.**
2. **With the AUI slide latch in the up position, connect the network cable to the AUI connector on the back of the Fiery XJ-R/R2. Slide the latch down to lock the connector in place.**
 - To connect a thinnet cable to the Fiery XJ-R/R2, the AUI to BNC external transceiver must be installed on the Fiery XJ-R/R2 AUI connector. The thinnet cable then connects to the BNC connector on the external transceiver.
 - To connect a thicknet cable to the Fiery XJ-R/R2, connect the AUI drop cable directly to the AUI connector on the back of the Fiery XJ-R/R2.



If you turn on the Fiery XJ-R/R2 without connecting the network cable to the transceiver, the Fiery XJ-R/R2 will hang at the Loading Settings screen. Make sure the network cable is connected to the transceiver before you turn on the Fiery XJ-R/R2.

3. Configure Setup options. See “Using Setup” on page 4-1.

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

Once the network connection has been made and the Fiery XJ-R/R2 has the correct Setup configuration and has reached Idle, the Fiery XJ-R/R2 should be available on the network.

The network administrator should perform any additional network setup, verify the network connection, verify that the Fiery XJ-R/R2 appears on the list of printers, and print a few test documents from a networked computer that will use the Fiery XJ-R/R2. (See the *Administrator Guide* for more information.)

To connect a twisted pair cable to the Fiery XJ-R/R2

Twisted pair (unshielded twisted pair cable or 10Base-T) uses an 8-pin, RJ-45 connector that connects to the RJ-45 socket on the back of the Fiery XJ-R/R2 (see Figure 3-8 on page 3-10).

1. Turn off the Fiery XJ-R/R2 before connecting the Fiery XJ-R/R2 to any network device.

2. Connect the RJ-45 cable to the RJ-45 socket on the back of the Fiery XJ-R/R2.

3. Configure Setup options. See “Using Setup” on page 4-1.

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

Once the network connection has been made and the Fiery XJ-R/R2 has the correct Setup configuration and has reached Idle, the Fiery XJ-R/R2 should be available on the network.

The network administrator should perform any additional network setup, verify the network connection, verify that the Fiery XJ-R/R2 appears in the list of printers, and print a few test documents from a networked computer that will use the Fiery XJ-R/R2. (See the *Administrator Guide* for more information.)

Connecting parallel port devices to the Fiery XJ-R/R2

The parallel (Centronics) connector on the back of the Fiery XJ-R/R2 provides a high-speed interface port that allows the Fiery XJ-R/R2 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 Fiery XJ-R/R2 for parallel printing, the procedure for connecting each of these device types is relatively similar.

The Fiery XJ-R/R2 connects to the parallel port of a PC-based server through the parallel (Centronics) cable (6 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 with the Fiery XJ-R/R2.

To connect the Fiery XJ-R/R2 to a PC-based server



Make sure the Fiery XJ-R/R2 is turned off before you connect it to a PC-based server.

1. ***With the network administrator's permission, turn off the PC-based server.***
2. ***Connect the 25-pin connector on the 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 Fiery XJ-R/R2.

3. ***Connect the 36-pin connector on the Centronics cable to the 36-pin, D connector on the back of the Fiery XJ-R/R2.***

The parallel (Centronics) connector is above the Ethernet connectors on the Fiery XJ-R/R2's back panel (see Figure 3-8 on page 3-10).

4. ***Turn on the PC-based server and the Fiery XJ-R/R2.***
5. ***Configure Setup options. See "Using Setup" on page 4-1.***
6. ***After configuring Setup options, verify the parallel port connection.***

Once the parallel port connection has been made and the Fiery XJ-R/R2 has the correct Setup configuration and has reached Idle, 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 Fiery XJ-R/R2. (See the *Administrator Guide* for more information.)

Connecting a CD-ROM drive to the Fiery XJ-R/R2

Attaching a CD-ROM drive to the Fiery XJ-R/R2 allows you to download system software from the Fiery XJ-R/R2's System Software CD to the Fiery XJ-R/R2's hard disk drive. The SCSI cable from the CD-ROM drive attaches to the SCSI connector on the back of the Fiery XJ-R/R2 (see Figure 3-1 on page 3-1).



Turn off the Fiery XJ-R/R2 when adding or removing devices from the SCSI chain.

To attach a CD-ROM Drive



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 Fiery XJ-R/R2** (see *"To shut down the Fiery XJ-R/R2"* on page 3-14).
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.**
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 SCSI connector on the Fiery XJ-R/R2** (see Figure 3-1 on page 3-1).

Push firmly on the cable connector to the Fiery XJ-R/R2 and to the CD-ROM drive. Make sure that the SCSI connectors are securely connected so that the bails (wire clips) clip easily into the cable connectors.

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 Fiery XJ-R/R2.

Shutting down and restarting the Fiery XJ-R/R2

The customer will generally leave the Fiery XJ-R/R2 on all the time. Remember that when the Fiery XJ-R/R2 is turned off, network access to the copier is interrupted. Print jobs that have been stored on the Fiery XJ-R/R2 hard disk, jobs in the Hold and Printed queues, and jobs that have been processed but not printed are not deleted and are available for printing when you restart the Fiery XJ-R/R2. Fonts that were downloaded to the Fiery XJ-R/R2's hard disk remain installed until they are removed using the Fiery XJ Downloader, no matter how many times the Fiery XJ-R/R2 is turned off and on.

You should turn off the Fiery XJ-R/R2 when you need to service the copier or the Fiery XJ-R/R2, and before you remove or attach any cables to the Fiery XJ-R/R2 or the copier's interface port.



Power down the Fiery XJ-R/R2 when changing the copier's toner. If the Fiery XJ-R/R2 is left on, its fan might draw toner into the Fiery XJ-R/R2.

To shut down the Fiery XJ-R/R2

1. ***Ensure that the Fiery XJ-R/R2 is not receiving, processing, or printing a document.***

If you see Printing or Ripping on the Fiery XJ-R/R2 Control Panel, the Fiery XJ-R/R2 is currently processing a print job. Wait until the job is complete and Idle appears on the Info screen.

2. ***Turn off the Fiery XJ-R/R2 using the power switch on the back panel.***

To restart the Fiery XJ-R/R2

You'll need to restart the Fiery XJ-R/R2 in order to make changes to the Setup options.

1. ***If the Fiery XJ-R/R2 is already on, ensure that it is not receiving, processing, or printing a document.***

Make sure that the status message on the Fiery XJ-R/R2 Control Panel is Idle.

2. ***If the Fiery XJ-R/R2 is already on (at Idle), select Reboot Server from the Functions menu. If the Fiery XJ-R/R2 is turned off, turn on the power switch on the back panel.***

Chapter 4: Setting Up the Fiery XJ-R/R2

Using Setup

The Setup utility enables you to set certain options at startup and save them on the Fiery XJ-R/R2's hard disk drive (some Network Setup information is saved in EEPROM). Certain Setup options must be set during installation in order to connect the Fiery XJ-R/R2 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 Control Panel:

- **Exit Setup**—Saves any changes made in the Setup menus and reboots the Fiery XJ-R/R2. (Note that the Fiery XJ-R/R2 only reboots if changes are made to the Setup configuration).
- **Server Setup**—Configures the Fiery XJ-R/R2. These options do not configure any other devices attached to the Fiery XJ-R/R2.
- **Network Setup**—Affects network connections to the Fiery XJ-R/R2, including active ports and network protocols.
- **Printer Setup**—Configures the device(s) connected to the Fiery XJ-R/R2.
- **Job Log Setup**—Affects the Fiery XJ-R/R2 Job Log.
- **Calibration**—allows you to calibrate the Fiery XJ-R/R2 using this feature and a densitometer connected to the Fiery XJ-R/R2 serial port.
- **Change Password**—Enables you to change the existing password. This password is used to limit access to the Setup menus and to some administrator functions in the Fiery XJ Spooler.
- **Clear Server**—Clears all jobs from the Print, Hold, and Printed queues and clears the Fiery XJ-R/R2 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, restart the Fiery XJ-R/R2 and then select Clear Server. You will be prompted to verify that you want to clear all files from all queues. Select Yes to clear the server.

When to perform Fiery XJ-R/R2 Setup

Setup is required the first time the Fiery XJ-R/R2 is turned on after new system software is loaded. You must enter setup information for Server, Network, and Printer Setup in order. However, as a Fiery XJ-R/R2 installer, you are only concerned with setting the printer model option in Printer Setup. In order to enter the printer model, you must enter Server Setup and Network Setup and Save Changes first. Default settings in the other Setup screens are adequate although they may not be optimal. The customer can reset options later according to the network and user environment. In this first-time setup, you also select the language you want to use for Control Panel screens.

On IPX networks and on some TCP/IP networks, the network servers should be configured for printing to the Fiery XJ-R/R2 before you enter network settings on the Fiery XJ-R/R2.

In most cases you'll need a live network connection so the Fiery XJ-R/R2 can query the network for zones, servers, and server-based queues.

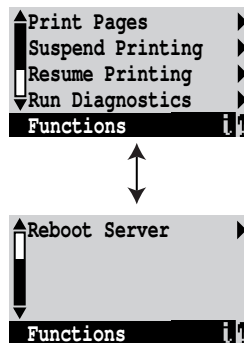
Whenever the configuration of servers, printers, or the network itself changes at the customer site, you can alter individual settings to correspond to the changed environment. Likewise, if printing needs or administrative requirements change, you can alter the corresponding settings.

Accessing Setup options

Before servicing the Fiery XJ-R/R2 print the Configuration page from the Functions menu.

To access Setup when the Fiery XJ-R/R2 is at Idle

1. *When the Fiery XJ-R/R2 displays the Idle screen, press the oval Menu button on the Control Panel to go to the Functions menu.*



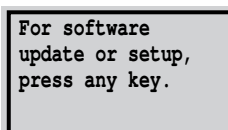
2. *Press the down arrow button to view the second screen of the Functions menu.*
3. *In the second screen, press the top line selection button to select Reboot Server.*

After its automatic startup diagnostics, the Fiery XJ-R/R2 displays the entry screen.

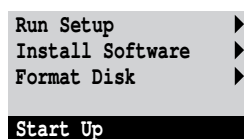
Note: If the dual device option is installed on your system, the Functions menu has an additional line; you'll press the *second* button for Reboot Server.

4. *At the startup message, press any button.*

This displays the Start Up screen.

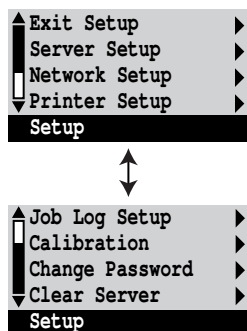


5. *Select Run Setup to access all Setup menus.*



6. Press the line selection button for the Setup you want.

Press the down arrow to view the second screen of the main setup menu.



7. 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. If the dual device option is installed, run Printer Setup for each device.

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 Fiery XJ-R/R2 is off:

- 1. Make sure the Fiery XJ-R/R2 is connected to the copier/printer and connected to the network you will use.**
- 2. Turn on the Fiery XJ-R/R2.**
The startup diagnostics are performed.
- 3. At the startup message, press any button.**
- 4. Select Run Setup.**
- 5. 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. If the dual device option is installed, run Printer Setup for each device.

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.

Review the settings described in this chapter. For more information on calibration, and on Control Panel screens other than those in Setup, see the *User Guide*.

Running Setup

When you restart the Fiery XJ-R/R2 and select Run Setup, you can select one menu after another and enter information about your Fiery XJ-R/R2 and your network and printing environment.

In each setup, the last line of the display window tells you the name of the current Setup menu. The screens you see correspond to screens on the Control Panel Map, a large-format 4-page flowchart that can be printed from the color server. When the color server is displaying the Idle screen, you can print the Control Panel Map by choosing Print Pages from the Functions menu, and then choosing Control Panel Map.

Types of setup screens

There are two types of setup options:

**Multiple
choice
questions**

You are given choices (for example, Yes or No, or a list of options from which to select). Only one choice is displayed at a time, in highlighted text. The currently selected (or the default) value appears first.

Use the up/down arrow buttons to scroll through the selections and select OK when the correct information is displayed.

**Information
entry
options**

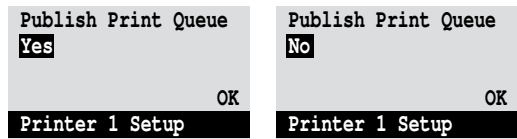
You must specify the information for your site. For example, the printer name or IP address.

In that case, use the up/down arrow buttons to scroll the alphabet and numerals to make your selection.

The cursor position is made evident, and two of the line selection buttons become left/right buttons. Arrows appear on the display window next to the corresponding buttons. Use these buttons to move between positions for entering information.

Note: When you enter text, enter it from left to right, as the left-arrow button will act as a delete key as well as a cursor-moving key. This is indicated in the display by the delete symbol (⌫).

Example: Multiple choice



Press the up or down arrow button to display the other option or options.

When the setting you want is displayed, press OK to continue.

Example: Information entry with fields

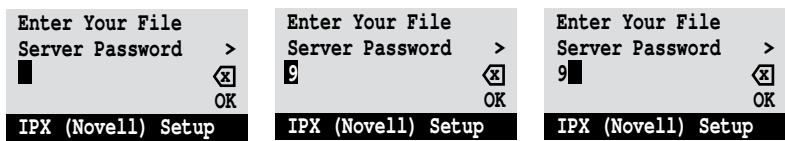


From the starting position, press the right arrow button to move the cursor to the right.

The next field is selected. Press the up or down arrow button to change the number.

When the number is what you want, press the right arrow button to move to the third field or press OK to accept the choice and continue.

Example: Information entry with individual characters



From the starting position, press the up or down arrow button to enter the first character.

When the character is what you want, press the right arrow button to move the cursor to the next position.

Press the up or down arrow to enter a character in the second position. The delete button erases the current character and moves the cursor to the left.

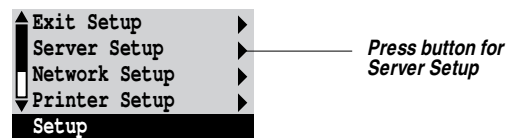
In addition to the up/down arrow buttons and line selection buttons, the Menu button is active during Setup. If you are viewing

a setup screen, pressing the Menu button cancels what you are doing in the current screen to bring you to the next higher level menu. After you have made all the changes you want in a particular setup, press the Menu button.

When you have entered all the settings or made all the changes you want, you need to save the changes. For most setups, a screen will prompt you to save changes. When you have finished Network Setup for all the protocols you use, select Exit Network Setup; you'll be prompted to save changes. If you select Yes, your settings will overwrite previous settings. If you select No, your previous settings will be retained. The Fiery XJ-R/R2 will reboot after you exit from the main setup menu.

Server Setup options

The Server Setup menu enables you to specify system information that pertains to the Fiery XJ-R/R2 itself and all users. Accessing the Control Panel Setup menu is described on page 4-3.



When you select Server Setup, the options appear in sequence, as described below. Default values, where applicable, are shown in square brackets.

Server Name

Use this option to give the Fiery XJ-R/R2 a name (up to 10 characters long). This is the name that will appear in the Chooser on an AppleTalk network.

This is also the name you should enter as the section name for this server in your NET_WSOCK.INI file for IPX/SPX on Windows 95 (see the *User Guide*). The name is used by the utilities to identify the Fiery XJ-R/R2.

If you have two color servers and give them the same name, a unique number is appended to the name that appears in the Chooser. Although this routes jobs correctly, it may be inconvenient to users and is not a recommended practice.

System Date

Use this option to change the system date. The date is entered in the form MM/DD/YY (Month/Day/Year) in all languages. The date and time (next option) are used on the cover page and on job logs.

System Time

Use this option to change the system time. Enter the time based on the 24-hour clock in the form HH:MM (Hours: Minutes).

Print Start Page

No/Yes [No]

Use this option to specify whether the Fiery XJ-R/R2 should print a start page every time it restarts. The start page displays information about the Fiery XJ-R/R2 including the server name, current date and time, Color Mode and Printer Mode, amount of memory installed in the Fiery XJ-R/R2, last calibration date, network protocols enabled, and connections published.

When set to Yes, the Fiery XJ-R/R2 must be connected to a copier before it can reach the Idle status screen.

Use Character Set

Macintosh/DOS/Windows [Macintosh]

Use this option to specify whether the Control Panel should use the Macintosh, DOS, or Windows character set for displaying filenames. This is important if filenames include accented or composite characters (such as é, ü, or æ).

For mixed-platform networks, select the predominant client type, or whichever option gives better overall representation of the special characters you use.

Parallel Port

Disabled/Enabled (Input)/Enabled (Output)

Select Enabled (Input) if you are planning to print from a computer connected to the parallel port on the Fiery XJ-R/R2. Select Disabled if you plan to use only a network connection.

Note: An output option for the parallel port is not available at this time. If the Enabled (Output) option is displayed on the Control Panel, choosing it has the same effect as choosing Disabled.

Enable Printed Queue**Yes/No [Yes]**

Select Yes if you want to enable the Printed queue. This creates a storage location on the Fiery XJ-R/R2 disk for recent jobs that were printed from the Print queue. Anyone who has access to the Fiery XJ-R/R2 Spooler can reprint their own jobs from the Printed queue without sending the jobs to the Fiery XJ-R/R2 again. If you select No, jobs are deleted from the disk after they are printed.

Jobs Saved in Printed Queue**1-99 [10]**

This option appears only if Enable Printed Queue is set to Yes. Specify the number of jobs to be stored in the Printed queue. Note that jobs in the Printed queue take up space on the Fiery XJ-R/R2 hard drive.

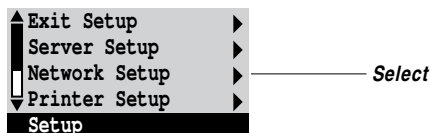
Save Changes**Yes/No [Yes]**

Select Yes to activate any changes made in the Server Setup; select No to return to the main setup menu without making any changes.

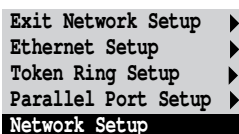
Network Setup options

Network Setup configures the Fiery XJ-R/R2 to receive print jobs over the networks that will be used with it.

In the main setup menu, select Network Setup.



The Network Setup menu lets you select the communication types: Ethernet, Token Ring, and Parallel Port. Each type has its own setup, and in the case of Ethernet, its own menu with three protocols that can be used with Ethernet cabling.



For each enabled protocol, you are prompted to enter settings pertaining to that protocol. For instance, you'll specify network addresses and names that will be used by workstations, servers, and the Fiery XJ-R/R2 when they communicate.

You only need to display and select options for the network systems that are currently used at the customer site. If the network requirements change, you can change the Network Setup at any time.

Parallel port setup is included under Network Setup. If you plan to print to the Fiery XJ-R/R2 parallel port, you must first enable Parallel Port Input in Server Setup.

If the Fiery XJ-R/R2 is configured to enable more than one protocol, it automatically switches to the correct protocol when it receives a print job. When the parallel port and one or two network ports are enabled, print jobs can be received over all of those ports at the same time.

To enter Network setup options

1. Confirm that the network cable is connected to the Fiery XJ-R/R2.

During Network setup, Fiery XJ-R/R2 queries the network for zones, servers, and server-based queues. If you perform Fiery XJ-R/R2 Network Setup without a connected and functioning network, it will use default settings that may not fulfill your needs.

2. Select Network Setup from the main setup menu.

- To use Ethernet, select Ethernet Setup, select the protocol, and enter the appropriate settings.

When you have finished entering settings for one protocol, either select Ethernet Setup again and select another protocol that you use, or select Exit Network Setup.

- To use token ring, select Token Ring Setup, and then select the appropriate token ring and IPX settings.
- To use the parallel port, select Parallel Setup and enter the appropriate settings.

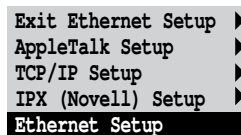
3. When you have finished entering network settings, select Exit Network Setup.

4. Select Yes when prompted to save changes.

5. From the main setup menu, select another setup or select Exit Setup.

For first time setup, or if you have configured a new connection, select Printer Setup after you finish Network Setup.

Ethernet Setup options



You can enable AppleTalk, TCP/IP, and IPX (Novell) communication simultaneously on Ethernet cabling. To configure the color server, select each protocol and enter the settings for that protocol. Since network setups are nested, the names of higher level menus are shown at the left with arrows.

Network Setup ▶
Ethernet Setup ▶

▶ AppleTalk Setup

Enable AppleTalk Yes/No [Yes]

Select Yes if you have an AppleTalk network connected to the Fiery XJ-R/R2. This setting enables the Fiery XJ-R/R2 to communicate over AppleTalk networks.

AppleTalk Zone

The Fiery XJ-R/R2 searches the network for AppleTalk zones. Scroll through the list to select the AppleTalk zone in which you want the Fiery XJ-R/R2 to appear. If you do not enter a zone, the Fiery XJ-R/R2 is assigned to the default AppleTalk zone.

The alert “No AppleTalk zone found” may mean the network has no zones, or the network cable is not connected.

Use AppleTalk

Yes/No [Yes]

This option appears only if the multiple device option is installed, and you have selected Yes for Enable AppleTalk in Network Setup.

With this option you can specify whether the currently selected device will communicate using AppleTalk protocols.

If only one printer is connected, and you selected Yes for Enable AppleTalk in Network Setup, AppleTalk is already available to that printer.

Select the next network type and protocol, or select Exit Network Setup and proceed to Printer Setup.

Network Setup
Ethernet Setup

►
► **TCP/IP Setup**

Enable TCP/IP

Yes/No [No]

Select **Yes** if you have a TCP/IP network connected to the Fiery XJ-R/R2.

Note: If you are using TCP/IP for printing from Windows 95 workstations, enabling TCP/IP here also enables you to use Fiery XJ-R/R2 utilities from Windows NT workstations using TCP/IP protocols, and Windows 95 computers using IPX/SPX protocols.

IP Address

[127.0.0.1]

Enter the Fiery XJ-R/R2 IP address for printing with TCP/IP. The Fiery XJ-R/R2 is shipped with an invalid IP address. If you plan to print with TCP/IP, you must first assign the Fiery XJ-R/R2 a unique, valid IP address. This IP address is all that is required to identify the Fiery XJ-R/R2 on your network; you do not need to give the Fiery XJ-R/R2 a hostname. For information about setting up printing with TCP/IP, see the *Administrator Guide*.

Subnet Mask

[255.0.0.0]

This option lets you modify the subnet mask for printing with TCP/IP. If you notice that some, but not all, users can print to the Fiery XJ-R/R2 using TCP/IP, you may need to set the subnet mask. If you did not set the IP address for the Fiery XJ-R/R2, the subnet mask is set to 255.0.0.0 by default. If you set the IP address and you need to set the subnet mask, enter one of the following values:

- 255.0.0.0—If the IP address starts with a number less than 128.
- 255.255.0.0—If the IP address starts with a number between 128 and 191.
- 255.255.255.0—If the IP address starts with a number that is greater than 191.

Gateway Address
[127.0.0.1]

Use this option to set the gateway address for printing with TCP/IP. By default, no gateway address is set. If your TCP/IP network has a gateway and users outside the gateway plan to print to the Fiery XJ-R/R2 using TCP/IP, you must enter the gateway address here.

Use TCP/IP
Yes/No [Yes]

This option appears only if the multiple device option is installed, and you have selected Yes for Enable TCP/IP in Network Setup.

With this option you can specify whether the currently selected device will communicate over the TCP/IP network.

If only one printer is connected, and you selected Yes for Enable TCP/IP in Network Setup, TCP/IP is already available to that printer.

Select the next network type and protocol, or select Exit Network Setup and proceed to Printer Setup.

Network Setup
Ethernet Setup

►
► **IPX (Novell) Setup**

Note: Before entering IPX (Novell) settings, be sure the Fiery XJ-R/R2 is connected to the network and you have already configured one or more NetWare file servers with a Print Server and a Print Queue for Fiery XJ-R/R2 jobs. The NetWare server must be running. You'll need a login name, and, if access to the file server or print server is restricted, you'll need a login password.

The terms NetWare server, Novell server and IPX file server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

Enable IPX (Novell)
No/Yes [No]

Set this to Yes if you have an IPX (Novell) network connected by Ethernet to the Fiery XJ-R/R2.

You may set this to Yes if you are using an IPX/SPX network between one or more Windows 95 workstations and the color server to run the remote Fiery XJ-R/R2 utilities. The same purpose is served by enabling TCP/IP, so you don't have to do both.

Note: If your IPX network uses token ring to communicate with the Fiery XJ-R/R2, use the separate Token Ring Setup, selected from the Network Setup menu (see page 4-20).

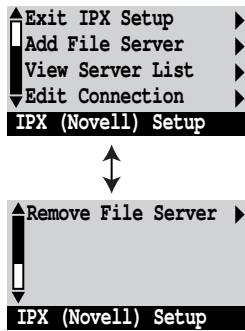
Select Frame Type
Ethernet 802.3/Ethernet 802.2/other

Select the frame type used between the NetWare server(s) and the Fiery XJ-R/R2. Only one frame type can be used.

If the IPX/SPX network does not include a NetWare server, select the Frame type that is used on the workstation or workstations that will print to the Fiery XJ-R/R2. Press OK and then press the menu button, since the remaining IPX (Novell) Setup options do not apply.

IPX (Novell) Setup menu

Because you can set up more than one Novell server to handle Fiery XJ-R/R2 print jobs, an additional menu is displayed for this purpose. The options are:



- **Add File Server**— creates a new file server connection to the Fiery XJ-R/R2. You can set up as many as 8 file server connections to handle Fiery XJ-R/R2 print jobs over Ethernet, and 8 over token ring. (It's possible for both Ethernet and token ring hardware to be active on the same file server.) After you have added a new server, you return to the IPX (Novell) Setup menu, and you can set up another if you wish. Remember that after adding a file server, you have to finish setup in Printer Setup.
- **View Server List**— displays the list of file servers that have already been selected to communicate with the Fiery XJ-R/R2.
- **Edit Connection**—lets you change the NetWare Print Server that will print to the Fiery XJ-R/R2, and change the poll interval.
- **Remove File Server**—lets you disconnect the Fiery XJ-R/R2 from a file server to which it is currently connected. Remove a file server when you want to reduce the number of connections to the Fiery XJ-R/R2 or re-assign the connection to a different NetWare file server.
- **Exit IPX Setup**—after you have viewed a list of file servers or removed a file server from the list.

If you change your mind about any of the menus you have selected, you can use the Menu button to escape and return to the main IPX (Novell) Setup menu.

Network Setup ►
 Ethernet Setup ►
 IPX (Novell) Setup ►

Exit IPX Setup

Select Exit IPX Setup after you have viewed a list of IPX file servers or have removed a file server from the list. After you select Exit IPX Setup, you return to Network Setup.

- Network Setup ▶
- Ethernet Setup ▶
- IPX (Novell) Setup ▶

Add File Server

This option gives you two ways to add a file server.

Select File Server

From List/Search Name

Select the Novell file server from a scrolling list, or by a name search. Select From List if the network doesn't have a large number of file servers. Select Search Name if the number of file servers is so large that scrolling through the list would take too long.

If you selected From List:

Add Server [list of all servers]

The Fiery XJ-R/R2 obtains a list of NetWare file servers by querying the IPX network. Use the up/down arrows to select a NetWare file server from the list. Select the server on which you have configured a print server and print queue to handle Fiery XJ-R/R2 print jobs.

If you selected Search Name:

Enter First Letters of Server Name

Use the up/down arrows to enter the first letters of the name of the file server you want to use, and select OK.

Add Server [list of servers matching the search]

This option is displayed if you entered letters to search. Scroll to select the server you want from the list.

Once you have chosen a file server, the Fiery XJ-R/R2 immediately tries to log in as Guest without a password. If it succeeds, it skips to the NetWare Print Server option.

If you try to add a file server but all Fiery XJ-R/R2 connections are already being used, you will be prompted to remove a file server (see "Remove File Server" on page 4-20).

File Server Login

administrator/supervisor/Enter Login Name [supervisor]

This option appears only if a password is required for login. Select Enter Login name to enter your own login name and password or to log in as a guest. Select administrator or supervisor if you have those privileges.

Enter Your Login Name
[guest]

This option and the next only appear if you selected Enter Login Name for the File Server Login. Enter your login name or select guest.

Enter Your File Server Password

Enter the password for logging in to your NetWare file server. If you enter the password incorrectly, you are prompted to re-enter it.

NetWare Print Server
[list of print servers on selected file server]

This option appears only if there is more than one print server defined on the selected Novell file server. From the list of print server names, select the name of the print server that you have configured in the NetWare utility PCONSOLE. This is the print server that will route print jobs to the Fiery XJ-R/R2 from computers on IPX networks.

Enter Your Print Server Password

This option appears only if your NetWare print server is set up to require you to log in with a password. Enter your print server password.

NetWare Server Poll Interval in Seconds
0-3600 [15]

Specify the interval, in seconds, at which the Fiery XJ-R/R2 communicates with the Novell server to see if there are print jobs waiting. If you specify 0, the Fiery XJ-R/R2 polls the server as frequently as possible for your network configuration.

If you select a short interval, the amount of network traffic increases. This may slow down other network jobs.

Network Setup
 Ethernet Setup
 IPX (Novell) Setup



View Server List

Supported Servers

This option lets you view the list of file server(s) currently connected to the Fiery XJ-R/R2. You are notified if there are none. When you select OK, you return to the IPX (Novell) Setup menu.

Network Setup
 Ethernet Setup
 IPX (Novell) Setup



Edit Connection

On each connected NetWare file server, you have defined a print server to handle Fiery XJ-R/R2 print jobs. Use this option to change the print server assigned to the Fiery XJ-R/R2 or to change the polling interval.

Select File Server

[File server name]

From the list of connected NetWare file servers, select the file server whose print server you wish to change.

NetWare Print Server

[List of print servers on selected file server]

Select the name of the print server that you now wish to use. This is the print server that will route print jobs to the Fiery XJ-R/R2 from computers on IPX networks.

If you change your mind, press the Menu button to return to the IPX (Novell) Setup menu without making a change.

Enter Your Print Server Password

This option appears only if your NetWare print server is set up to require a password. Enter your print server password.

NetWare Server Poll Interval in Seconds

0-3600 [15]

Specify the interval, in seconds, at which the Fiery XJ-R/R2 communicates with the Novell server to see if there are print jobs waiting. If you specify 0, the Fiery XJ-R/R2 polls the server as frequently as possible for your network configuration.

If you select a short interval, the amount of network traffic increases. This may slow down other network jobs.

Network Setup ►
Ethernet Setup ►
IPX (Novell) Setup ►

Remove File Server

Remove support for [File server name]

Allows you to select a NetWare file server from a list of connected file servers and remove the connection to it. You are notified that you have removed the connection, and returned to the IPX (Novell) Setup menu. If you change your mind and don't want to remove any of the file servers, press the Menu button.

You can select another IPX (Novell) Setup option or select Exit Network Setup and proceed to Printer Setup.

Token Ring Setup options

This Setup can only be used if your system has the Token Ring option installed. Token ring networks on the Fiery XJ-R/R2 use IPX protocols. After enabling token ring and selecting the maximum frame size, you continue with IPX (Novell) Setup. You can set up a maximum of 8 token ring connections, but you have to configure a different NetWare file server for each token ring connection.

Network Setup
Token Ring Setup



Enable Token Ring
Yes/No [No]

Select Yes if you use token ring. When you select Yes, the Fiery XJ-R/R2 verifies the token ring hardware configuration.

Maximum Frame Size (bytes)
632/4216/17690 [4216]

Select the maximum size (in bytes) of the data frame along the token ring network. In general, you should leave this at the default 4216. If your network requires it, you can change the value.

The Fiery XJ-R/R2 configures the token ring hardware, and then displays the IPX (Novell) menu (page 4–16). The options are the same as for IPX on Ethernet networks, except that the NetWare Server Poll Interval does not apply to token ring networks.

From the IPX (Novell) menu, select Add File Server. See page 4–16 for details.

When you have configured the servers for the token ring network, select another IPX (Novell) Setup option or select Exit Network Setup and proceed to Printer Setup.

Parallel Port Setup options

You must have set the Server Setup Parallel Port option to Enabled (Input) in order to print to the parallel port and enter the Parallel Port Setup options.

Network Setup
Parallel Port Setup



Enable Parallel Port
No/Yes [No]

Select Yes if you want to print through the parallel port. You can connect a single PC compatible to the parallel port and print directly to the Fiery XJ-R/R2.

Note: Enabling the parallel port does not turn off Ethernet communication with the Fiery XJ-R/R2. Parallel, IPX (Novell), AppleTalk, and TCP/IP communication are enabled simultaneously, as long as all of the necessary connections are made.

Port Timeout in Seconds**5-60 [5]**

This option appears only if Enable Parallel Port is set to Yes. Your setting determines how long the Fiery XJ-R/R2 waits without receiving data from the parallel port before deciding that the current job is complete. Until the timeout, the Fiery XJ-R/R2 cannot receive new jobs through the parallel port, but it can continue to receive network print jobs.

Ignore EOF Character**Yes/No [Yes]**

This option appears only if Enable Parallel Port is set to Yes. This option specifies that the Fiery XJ-R/R2 should ignore end-of-file (EOF) messages in a file. This option must be set to Yes to print PostScript files in binary format (not ASCII); under normal circumstances, it should be set to No. When this option is set to Yes, the Fiery XJ-R/R2 uses the parallel port timeout value to determine when the end of the file has been reached.

When you have configured the parallel port options, select another network type and protocol, or select Exit Network Setup and proceed to Printer Setup.

Fiery XJ-R/R2 printing connections

In Fiery XJ-R/R2 Printer setup you decide how the Fiery XJ-R/R2 will manage print jobs by deciding which printing connections should be published to users over the network. The Direct connection and Print queue are constantly checked for the presence of jobs. If you don't want users to print to a connection, don't publish it.

The Fiery XJ-R/R2 publishes two types of connections: the direct connection and queues. You must publish at least one connection to the Fiery XJ-R/R2.

Direct connection

Jobs are transmitted to the Fiery XJ-R/R2 Direct connection only when the Fiery XJ-R/R2 is ready to print. They remain at the sending workstation until the Fiery XJ-R/R2 is ready, and are processed as soon as a prior job is finished, before the next queued job is processed.

Jobs sent to the Direct connection are not stored on the Fiery XJ-R/R2 hard disk; therefore the Direct connection provides a measure of security for sensitive files.

If you plan to download fonts to the Fiery XJ-R/R2, you must publish the Direct connection.

Queues

A queue is a storage area for print jobs. Queues are particularly useful when many print jobs are being sent to the Fiery XJ-R/R2. When a job is printed to a Fiery XJ-R/R2 queue, it is stored on the Fiery XJ-R/R2 hard disk rather than the user's hard disk, quickly freeing up the user's workstation.

Remote users can only print to published connections. However, job storage areas for all queues exist on the server, so that administrators or other users of the remote spooler utility can move or copy jobs to the Print or Hold queue, whether or not these queues are published.

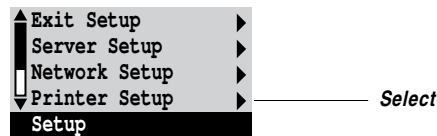
The Fiery XJ-R/R2 hard disk supports up to three queues (Print, Hold and Printed). Users may print to two of them (Print and Hold).

- **Print queue**—This is the standard Fiery XJ-R/R2 queue. The Fiery XJ-R/R2 prints jobs from the Print queue in the order in which they were received. If you plan to use the Fiery XJ-R/R2 utilities, you must publish the Print queue.
- **Hold queue**—The Hold queue can be used for storing jobs that will be printed at a later time, and jobs that will be printed repeatedly. The Hold queue requires some administration. In order to print a job in the Hold queue, the job has to be moved or copied from the Hold queue to the Print queue. Printing and deleting jobs from the Hold queue requires the Fiery XJ-R/R2 Spooler.
- **Printed queue**—The Printed queue is a job storage area on the Fiery XJ-R/R2 disk; it contains the most recent jobs printed from the Print queue. The Printed queue makes it convenient to reprint those jobs. A Server Setup option enables this queue and governs the maximum number of jobs retained in it at any given time (see page 4–9). Reprinting jobs in this queue requires the Fiery XJ-R/R2 Spooler.

Fiery XJ-R/R2 Printer Setup

Printer Setup configures the connections and printing behavior associated with a particular printing device. If the dual device option is installed, you will first select a device. Subsequent choices all pertain to that device.

1. *Select Printer Setup in the main setup menu.*



2. *Enter the options appropriate to the printing requirements at the site and the network protocol or protocols you use.*

If the dual device option is installed, the first screen will be a printer selection menu from which you will select the printer you want to configure.

3. *When you have finished, save changes.*

Printer Setup includes:

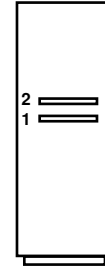
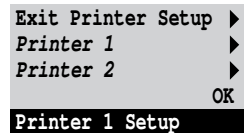
- Specifying the copier or printer model
- Publishing the Direct connection and Print and Hold queues
- Specifying the printer's defaults. Setting these defaults is particularly important for systems that don't transmit printer options or overrides from applications to printers (for example UNIX, the DOS command line, systems that use PostScript Level 1 printer drivers).
- For IPX (Novell) networks, specifying a connection (Direct, Print queue, or Hold queue) for each Novell file server that is supported, since there can be up to 8 Ethernet and 8 token ring connections to the Fiery XJ-R/R2
- Specifying the Fiery XJ-R/R2 connection for parallel jobs when a parallel input connection is enabled
- When the dual device option is installed, specifying the network protocol or protocols, as well as Fiery XJ-R/R2 connections, that will be used for each device.

Printer Setup options

In the list of options that follows, default values, where applicable, appear in square brackets.



Printer Setup options are marked with a dual printer icon if they only appear when the dual device option is installed.



Viewed from the back of the color server, slot 2 is above slot 1

Figure 4-1 Printer selection menu



The menu screen (shown above) appears only if the dual device option is installed. Specify the printer whose connections and protocols you wish to configure. If more than one printer is installed, Printer Setup screens pertain only to the currently selected printer.

Select Printer 1 to configure the connections and protocols for the printer connected to the video card in the color server slot 1; select Printer 2 to set up the printer connected to slot 2. When you have completed Printer Setup, select Exit Printer Setup to return to the main setup menu.

Note: The current version does *not* support dual copier.

Printer Model [Model name]

Use this option to specify the model of copier or printer connected to the Fiery XJ-R/R2. This option appears if more than one model is supported by the software and the currently selected video card on the server.

Publish Direct Connection Yes/No [Yes]

This option enables users to print (or download) jobs to the Fiery XJ-R/R2 without spooling. Note that jobs printed to the Direct connection are not saved in the Printed queue.

If you plan to download fonts from any system to the Fiery XJ-R/R2, you must publish the Direct connection. If you do not want users to print to Direct, select No.

Publish Print Queue**Yes/No [Yes]**

This option enables users to print (or download) jobs to the Print queue. Jobs that are printed to the Print queue are spooled on the Fiery XJ-R/R2 disk. Only queues enabled in the Printer Setup are available to remote users.

TCP/IP users must publish either (or both) the Print queue and the Hold queue.

If you plan to use the Fiery XJ-R/R2 utilities on any system, you must publish the Print queue.

Publish Hold Queue**Yes/No [Yes]**

Use this option to enable users to print (or download) jobs to the Hold queue. Jobs in the Hold queue can only be printed by copying or moving the jobs to the Print queue with the Fiery XJ-R/R2 Spooler. If you do not want users to print to Hold, select No.

Use IPX**Yes/No [Yes]**

This option appears only if the dual device option is installed, and you have selected Yes for Enable IPX (Novell) in Network Setup.

With this option you can specify whether the currently selected device will communicate over the IPX (Novell) network.

If only one printer is connected, and you selected Yes for Enable IPX (Novell) in Network Setup, IPX is already available to that printer.

Note: The current version does *not* support dual copier.

IPX (Novell) options in Printer Setup

The following options are only displayed if you selected Yes for Enable IPX (Novell) in Network Setup. In these screens you attach a IPX (Novell) file server to a device (a copier or printer) and to a Fiery XJ-R/R2 connection (Direct, Print queue, or Hold queue).

Repeat this process for each Novell file server you have configured to print to the Fiery XJ-R/R2.

If you change your mind about a screen you have chosen, press the Menu button to escape. You are prompted to Save Changes, and you return to the main setup menu.

The option IPX File Servers, as well as all the IPX options that follow it, only appear if you have configured Ethernet or token ring servers in Network Setup.

IPX File Servers

View List/Attach [View List]

If you have dual devices installed, you attach all the servers that will print to the first device, and then attach all the servers that will print to the second device, and so on.

Select Attach to attach an IPX file server to the current device and to one of the published connections. Select View List if you want to see a list of the file servers already attached to the currently selected device.

If you selected View List:

Attached IPX File Servers

Use the up/down buttons to scroll through the list of file servers that have been attached to the Fiery XJ-R/R2 in Printer Setup (not in Network Setup).

If you selected Attach:

Attach Novell File Server [File Server 1]

See the next page for explanation.

There are two possible situations:

- If *all* the previously configured file servers are attached to a device and to a Fiery XJ-R/R2 connection, pressing OK will skip the remaining IPX options.
- If one or more file servers are not attached you see a partial list of servers. If no file servers have been attached, the only item in the list is None attached. When you press OK, the alert Unattached file server detected. appears briefly, followed by a prompt to attach a file server.

Attach a File Server?

Yes/No

Select Yes to attach a file server. If the dual device option is installed, select Yes to attach a file server to the currently selected printer or No if you wish to attach the remaining file servers to another printer.

Attach Novell File Server:
[File Server 1]

Use this option to attach a file server to the selected printer.

Use the up/down buttons to scroll through a list of all IPX file servers that were added (with Add File Server) in the IPX (Novell) part of Network Setup. An asterisk beside the name indicates that the file server is already connected to the current device.

Cable to Novell File Server
Ethernet/Token Ring [Ethernet]

This option appears only if both IPX (Novell) and token ring were enabled in Network Setup, and if the selected Novell file server has both Ethernet and token ring cabling. Specify the network cabling that will be used between the selected file server and the Fiery XJ-R/R2.

**Assigned to other printer. Override?**
Yes/No [Yes]

This option appears only if the dual device option is installed, and you have already assigned the same NetWare file server to the other device.

Note: The current version does *not* support dual copier.

Select Connection for File Server 1
Print queue/Hold queue/Direct connection

Select the Fiery XJ-R/R2 connection that should be used for jobs originating from the named file server. Only the connections that you published earlier in Printer Setup will be displayed as choices. If only one connection is published, you will not see this question.

Note: You must select a connection here for each file server you added in Network Setup if you want all NetWare clients to be able to print or connect to the Fiery XJ-R/R2.

Attach another File Server?
Yes/No [No]

This option is only displayed if there is still an unattached server. If you select Yes, the Select Novell File Server screen is displayed again. After you select another file server, you will be prompted to select the connection for it from among the published connections.

You can attach a maximum of 16 NetWare file servers to Fiery XJ-R/R2 queues (a maximum of 8 over Ethernet, 8 over token ring).

**Use Parallel Input**

Yes/No [No]

This option appears only if the dual device option is installed, and you selected Enabled (Input) for the Parallel Port option in Server Setup. Specify that you wish to use input to the Fiery XJ-R/R2 parallel port for printing to the currently selected device.

*Note: The current version does **not** support dual copier.*

**Enabled for other printer. Override?**

Yes/No [No]

This option appears only if the dual device option is installed. It appears only if you selected Enabled (Input) for the Parallel Port option in Server Setup, and you have already elected to Use Parallel Input with a different printer. You can only use parallel input with one printer.

*Note: The current version does **not** support dual copier.*

Parallel Connection**Print Queue/Hold Queue**

Use this option to determine whether jobs printed to the parallel port are sent to the Print queue or Hold queue. Only the queues that you published will be displayed.

This option appears only if you selected Enabled (Input) for the Parallel Port option in Server Setup.

Note: If only one of the queues is published, this option does not appear and parallel port jobs are automatically printed to that queue.

Enable Memory Multiplier

Yes/No [Yes]

Select Yes to enable Memory Multiplier™, so that color jobs print at high quality with half the memory normally required. Note that for color servers with 48MB memory, Memory Multiplier is always on and this option does not appear.

Printer Mode**Contone/Halftone [Contone]**

This option appears only on units that support more than one imaging mode. Specify whether the Fiery XJ-R/R2 should print in Halftone or Contone (continuous tone) mode by default. Contone mode makes the output resemble a photograph, and takes full

advantage of the printer's capabilities. Halftone mode applies screening and makes output resemble screening in offset prints.

Color Mode

CMYK/Grayscale/Other options [CMYK]

Specify whether you will be printing color (CMYK) or Grayscale images to the Fiery XJ-R/R2 by default, or other color options if they are used by your printer or copier. This choice appears only if you specified Contone for the Default Printer Mode option. CMYK gives you full color prints; Grayscale converts all colors into shades of gray.

Default Paper Sizes

US/Metric [default depends on language]

Specify whether to print on US paper sizes (for example, letter, legal, tabloid), or Metric paper sizes (for example, A4, A3) by default. When no page size is defined within a PostScript file, jobs are printed on Letter paper if you selected US, or A4 paper if you selected Metric.

Convert Paper Sizes

No Letter/11x17->A4/A3 A4/A3->Letter/11x17 [No]

Specify whether to convert paper sizes in documents automatically to the default paper sizes specified. For example, if you selected Letter/11x17->A4/A3, a letter size document would automatically be printed on A4 paper. If you select No, the server will only print the document if it finds a media source in the size specified by the file.

Print Cover Page

No/Yes [No]

Use this option to specify whether the Fiery XJ-R/R2 prints a cover (job summary) page at the end of each print job. If you select Yes, each print job is followed by a page containing the name of the user who sent the job, the document name, the color server name, the time the job was printed, the number of pages printed, and the status of the job. If a PostScript error occurred and the Print up to PostScript Error option is set to Yes, the status entry will be the PostScript error message.

Allow Courier Substitution

Yes/No [Yes]

Specify whether to substitute Courier for unavailable fonts. If this option is set to No, jobs with fonts that are not available on the Fiery XJ-R/R2 hard drive or on the workstation sending the job will not print, and you will get a PostScript error.

Print up to PostScript Error**No/Yes [No]**

Use this option to specify whether the Fiery XJ-R/R2 should print the available portion of a print job when it encounters a PostScript error. Select Yes to print the portion of the job that was processed before the error occurred; select No to cancel the print job entirely when a PostScript error is encountered. We recommend leaving this option at No unless you encounter printing problems.

Copier- or Printer-specific default settings

See the Appendix of the *User Guide* for a list of default settings that may be available for your model of copier or printer, and the situations in which you can override them. Only enable default settings that will be acceptable to most users, as they will not be able to change some of the settings.

Save Changes**Yes/No [Yes]**

Select Yes to activate any changes made in the Printer Setup; select No to return to the main setup menu without making any changes.

Administrative functions in the Setup menu

The three remaining options in the Setup menu are intended to help you manage print jobs and color output, but are not required for printing:

- In the Job Log Setup you specify whether you want the Fiery XJ-R/R2 to print and clear its log of printed jobs automatically. See the next section for details.
- The Calibration option enables you to calibrate the copier or printer from the server and lets you preview the results of calibration. It also lets you remove a calibration.
- The Change Password option enables you to create an administrator password on the Fiery XJ-R/R2 so that casual users cannot enter the Setup menus and change settings without permission. In addition, an administrator password controls remote job management functions via the Fiery XJ Spooler utility. A password created using the Setup menu prevents users from reprinting print jobs, moving print jobs (changing their priority or their queue), and deleting or configuring jobs, other than jobs they originated. See the *User Guide* for details.

- The Clear Server option clears all queued print jobs from the server—jobs in the Fiery XJ-R/R2 Print, Hold and Printed queues. The job log is cleared at the same time. If you have set an administrator password (created with the Change Password option), unauthorized users will not see this option (or any of the administrative or setup options).

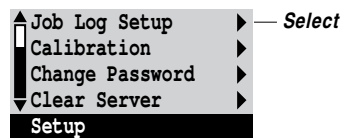
Fiery XJ-R/R2 Job Log Setup

The Fiery XJ-R/R2 job log is a running record of all jobs processed or printed on the Fiery XJ-R/R2, whether they originate from a user workstation, a networked server, the Fiery XJ-R/R2, or a computer attached to the parallel port. The job log can be printed at any time from the server or remotely from a workstation running the Fiery XJ-R/R2 Spooler.

The printed job log lists accounting information about each job including user name, document name, time and date printed, and number of pages. If users print with the latest Adobe printer driver, they can also enter job-specific notes that will appear in the job log. See the *User Guide* for details.

By default, the job log is not printed automatically or cleared automatically. You can change these defaults in Job Log Setup.

1. **Scroll the main setup menu to select Job Log Setup.**



2. **Enter the options as described below. When you have finished, save changes.**

Job Log Setup options

Default values for the following options, where applicable, appear in square brackets.

Auto Print Job Log Every 55 Jobs

Yes/No [No]

Use this option to specify whether you want the Fiery XJ-R/R2 to print the job log after every 55 jobs. If accounting for each printed page is important at your site, and an administrator checks the printed output, set the Job Log for automatic printing.

**Print Job Log to
[Printer name]**

This option appears only if the multiple device option is installed, and you selected Yes for the previous option (Auto Print Job Log Every 55 Jobs). Select the printer that should be used for printing the job log automatically.

**Auto Clear Job Log Every 55 Jobs
Yes/No [No]**

Use this option to specify whether to clear the job log after every 55 jobs.

If you do not enable this option, and do not clear the job log from the Fiery XJ-R/R2 Spooler, the Fiery XJ-R/R2 saves a record of all jobs ever printed.

Note that the job log (together with all queued jobs) is cleared when you select Clear Server from the main setup menu. It is also cleared when a new version or copy of controller software is installed on the Fiery XJ-R/R2.

**Job Log page size
Tabloid/A3 Letter/A4 [Tabloid/A3]**

Select the paper size for printing the job log. Fifty-five jobs are listed on a page, regardless of page size. The paper size used depends on the Default Paper Sizes setting in the Printer Setup. If the Default Paper Sizes setting is US, the job log is printed on tabloid or letter size paper, with tabloid the default.

**Save Changes
Yes/No [Yes]**

Select Yes to activate any changes made in the Job Log Setup; select No to return to the main setup menu without making any changes.

Calibration

The Calibration menu lets you calibrate the copier or printer from the server, either using a densitometer or using AutoCal™ (automatic calibration) from the copier glass. It also lets you remove the current calibration. When the Fiery XJ-R/R2 is calibrated, a color correction curve is applied to every color document that is processed for printing.

The copier or printer can also be calibrated at a remote workstation, using any Status T densitometer and Fiery Print Calibrator software.

For details on remote calibration, see the *User Guide*. Fiery Print Calibrator can be used to load measurements and calibration targets on the Fiery XJ-R/R2 hard disk. These measurements and targets can be used with both server-based and remote calibration.

Calibration is based on a set of density measurements and a series of target density values for specific color patches. Calibration compensates for the difference between measured values and target values. A choice of calibration targets allows you to prepare your Fiery XJ-R/R2 for the type of job you will be printing to it.

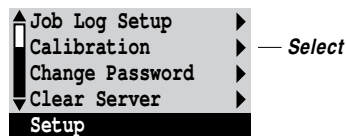
Normally you create a calibration by specifying a standard target to use with measurements that you took or measurements that you previously stored on the Fiery XJ-R/R2. You can also specify an alternative target to be used with the current measurements. You don't need new measurements to calibrate with an alternative target. When you select Overwrite Calibration, the currently specified target will be used with the latest measurements on the color server.

To prepare for calibration:

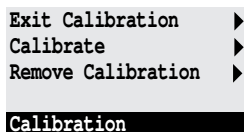
1. *If this is the first time you are setting up the Fiery XJ-R/R2, complete Server Setup, Network Setup, and Printer Setup, and Save All Changes, before you perform a calibration.*
2. *If you are using densitometer calibration, when the Fiery XJ-R/R2 is at Idle, turn the power switch off.*
3. *Plug the transformer for the densitometer into an outlet.*
4. *Connect the densitometer to the serial port of the Fiery XJ-R/R2.*
5. *Turn on the Fiery XJ-R/R2 and the densitometer.*

Note: If you calibrate when the default Printer Mode is Contone, calibration only applies to jobs printed while the Fiery XJ-R/R2 has Contone as its default mode (see page 4–30). If you switch the default mode to Halftone, the calibration will be ignored until you switch back.

6. *Scroll the main setup menu to select Calibration.*



When you select Calibration from the main setup menu, the following menu is displayed:



7. ***Perform calibration as described below. For more information, see the User Guide. When you have finished, save changes.***

Calibrate

Calibration options are summarized below. See the *User Guide* for calibration procedures and a fuller explanation of calibration options. At the server you can print a configuration page to find out when the printer was last calibrated. The start page also contains this information. (To print a configuration page from a Fiery XJ-R/R2 in Idle status, press the Menu button to display the Functions screen, scroll down to select Print Pages, and select Configuration).

Canceling Calibration—If any problems arise during calibration, press the Menu button to escape to the calibration menu.



Select Printer [Printer 1/Printer 2]

This option appears only if the dual device option is installed. Specify the printer you wish to calibrate.

Note: The current version does *not* support dual copier.

Calibration Method Densitometer/Copier glass

This option appears only if the Fiery XJ-R/R2 is equipped with a serial port. Select Densitometer for measuring colors with an X-Rite DTP32 densitometer connected to the Fiery XJ-R/R2 serial port. Select Copier glass for AutoCal, which is quicker and doesn't require a densitometer.

Select Target [Target 1/Target 2/etc.]

Specify the goal of this calibration by choosing a calibration target from a list of targets on the Fiery XJ-R/R2 hard disk. The list includes targets provided with the color server and targets you saved previously from the Fiery XJ-R/R2 Print Calibrator utility. The

provided targets include one based on color measurements of your particular copier or printer, targets based on press standards, and a target to linearize your output.

Print Measurement Page**Yes/No [Yes]**

Select this option to print a page of known color data for measurement. You are notified that the copier is printing a measurement page without calibration.

If you selected Densitometer as the Calibration Method, the Fiery XJ-R/R2 prints a page of color swatches that you will feed through the X-Rite densitometer. If you selected Copier glass, it prints a page of graduated colors that you will place on the copier glass.

Measure Page**Yes/No [Yes]**

Select Yes to measure the colors on the measurement page.

The densitometer configures itself for reading the swatches on the measurement page. You are prompted to position the cyan strip for measurement. The configuration process takes up to 15 seconds and is repeated before reading each strip. The densitometer feeds the paper through and collects the cyan measurements. When it has processed the cyan measurements, you are prompted to insert the magenta, yellow and black strips in turn.

If you previously selected Copier glass as the Calibration Method, you are prompted to position the page on the copier and press OK.

If you select No, measurement is skipped and the Print Comparison Page option is displayed.

Print Comparison Page**Yes/No [Yes]**

Specify Yes if you want the Fiery XJ-R/R2 to print a page with two versions of a test image, one using a calibration based on your most recent measurements and the selected target and one with no calibration.

Overwrite Calibration?**Yes/No [Yes]**

Select Yes if you are satisfied with the calibration shown in the comparison page. The newest calibration will overwrite any previous one.

Select No if for any reason you are not satisfied; you return to the main Calibration setup screen.

This affects all users. Continue?

Yes/No [Yes]

This is a reminder that calibration is a global setting; if you overwrite calibration, every print job is affected by the new calibration.

If you select Yes, calibration is overwritten and you return to the main Calibration setup screen. If you are finished, select Exit Calibration.

If you select No, calibration is not overwritten, and you return to the main Calibration setup screen.

Remove Calibration

Select Remove Calibration when you wish to return the printer to its uncalibrated state. You do not need to remove a calibration before a new calibration.



Select Printer

[Printer 1/Printer 2]

This option appears only if the dual device option is installed. Specify the printer whose calibration you wish to remove.

Note: The current version does *not* support dual copier.

This affects all users. Continue?

Yes/No [Yes]

This option is a reminder that calibration is a global setting; if you remove calibration, every print job is affected by your action.

If you select Yes, the current calibration is removed and you return to the main Calibration setup screen. If you are finished, select Exit Calibration. The Fiery XJ-R/R2 must reboot to continue.

If you select No, the calibration is not removed, but you still return to the main Calibration setup screen. After you select Exit Calibration, the Fiery XJ-R/R2 will reboot.

Exit Calibration

When you select Exit Calibration, the Fiery XJ-R/R2 reboots.

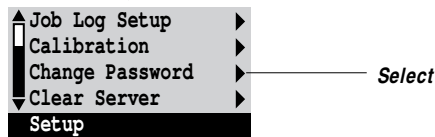
Change Password

Change Password enables you to set or change the password for the Fiery XJ-R/R2. The password determines whether a user can modify the Setup options, and whether a user has system administrator control over jobs in the Fiery XJ-R/R2 Spooler queues. In most cases, only the system administrator should have access to this password.

When the Fiery XJ-R/R2 is installed, there is no password. If you do not create a password, users are not required to enter a password to modify the Setup or use the administrator functions in the Fiery XJ-R/R2 Spooler.

If a password has been set previously, you are required to enter it right after Start Up, when you select Run Setup. Use the up/down arrow keys to select the characters and the left/right arrows to move between them.

1. **Scroll the main setup menu to select Change Password.**



2. **Enter and confirm the password as described below.**

New Password

Use the up/down arrow keys to select the characters and the left/right arrows to move between them. Enter characters from left to right, since the left arrow line selection key is a delete key. The password can be any combination of letters and numbers up to 19 characters. Select OK when you are done. Be sure to write down the password. The only way to remove a password that you can't remember is to re-install controller software.

Verify New Password

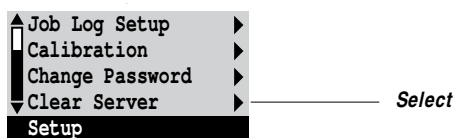
Enter the new password again exactly as before to verify that you have entered it correctly. If you make a mistake, you will be prompted to enter the password again. The new password is effective until you change it again.

Clear Server

Clear Server enables you to clear all queued print jobs from the server—jobs in the Fiery XJ-R/R2 Print, Hold and Printed queues. The job log is cleared at the same time. If you keep job logs, be sure to print or export the job log before you select Clear Server.

Jobs can also be deleted, individually or as a group, from the Fiery XJ-R/R2 Spooler. Note that jobs printed to the Direct connection are not stored on the Fiery XJ-R/R2 at all.

1. ***Scroll the main setup menu to select Clear Server.***

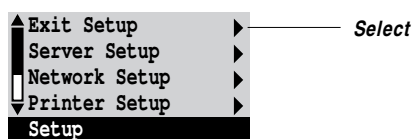


2. ***Select Clear Server if you want to clear all queued print jobs and the job log from the server. You will be asked to confirm your selection.***

Exit Setup

To exit setup options

1. ***Select Exit Setup from the main setup menu when you have finished making setup changes.***



The Fiery XJ-R/R2 reboots and any changes you saved during the setup take effect.

Chapter 5: Service Procedures

Servicing the Fiery XJ-R/R2

Generally, the Fiery XJ-R/R2 requires no regular service or maintenance. Use the procedures in this chapter to inspect, remove, reseal, and replace major hardware components. This chapter includes information on servicing the following components:

- Boards
- Cables
- CPU and switches
- Fuses
- EPROM and EEPROM
- SIMMs (single in-line memory modules)
- Fan
- Power switch
- Power supply
- Hard disk drive

See Figure 5-1 on page 5-2 for an overview of components. Replacement parts are available from your service representative.



When performing the service procedures described in this chapter, follow the precautions listed in “Precautions” on page *xii*.



The tools required to service the system are the same ones used to install it; they are listed in “Tools you will need” on page *xiv*.

Software service

Fiery XJ-R/R2 system software is installed on the hard disk drive at the factory. Use the Fiery XJ-R/R2 software service kit to reinstall Fiery XJ-R/R2 system software when you need to:

- Install system software on a replacement hard disk drive
- Upgrade to a more recent version of the system software
- Upgrade the Fiery XJ-R/R2 SIMM configuration
- Replace the motherboard

For more information, see “The Fiery XJ-R/R2 Software Service Kit” on page 5-44.

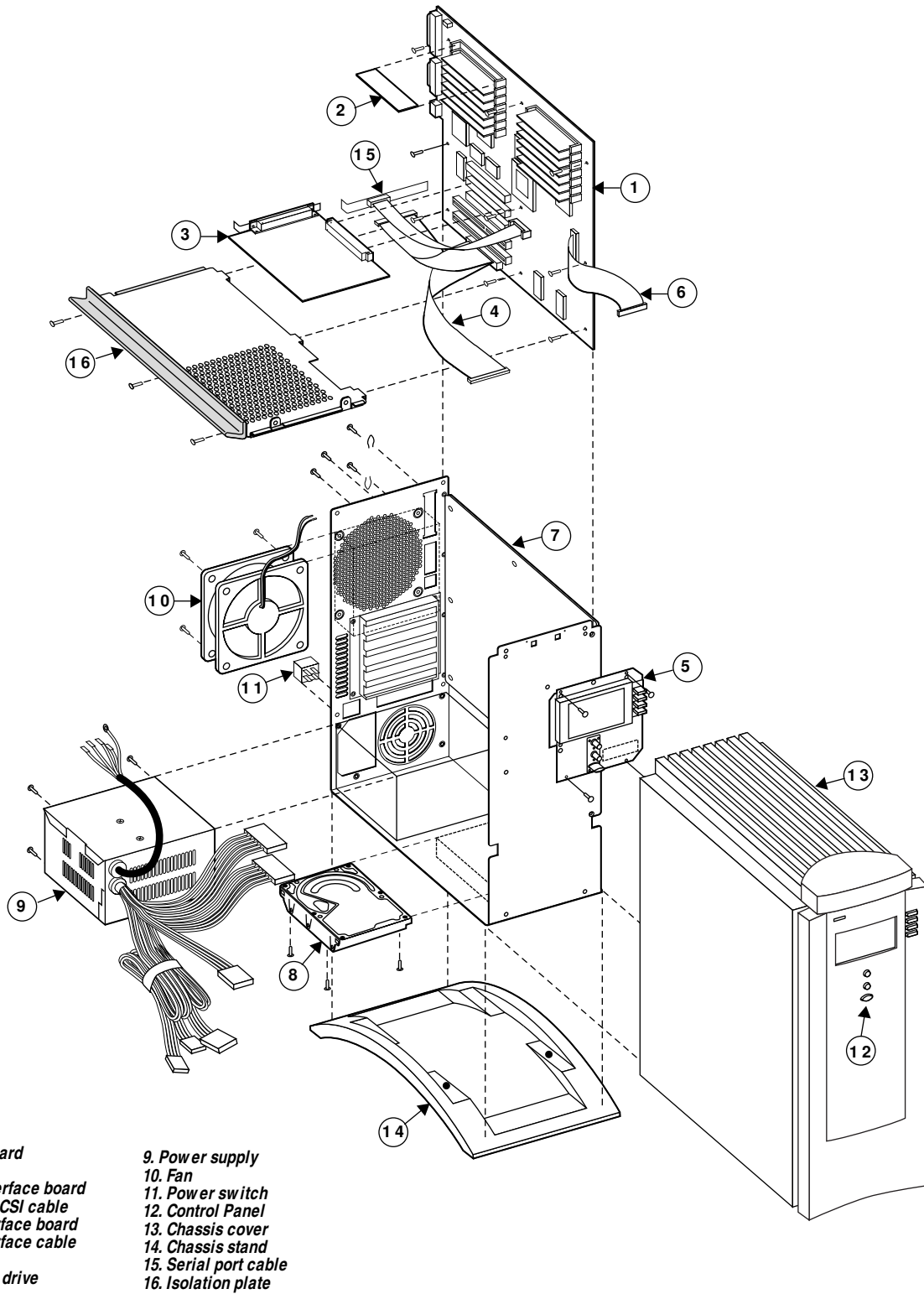


Figure 5-1 Exploded view of Fiery XJ-R/R2 components

Accessing Fiery XJ-R/R2's internal components

Always use the procedure below when opening the Fiery XJ-R/R2 chassis for inspection or service. If the Fiery XJ-R/R2 is turned on, shut down the system first.

To shut down the Fiery XJ-R/R2



Always verify that the Fiery XJ-R/R2 is not being used before you power down or restart it. Make sure that Ripping or Printing does not appear on the Fiery XJ-R/R2 Control Panel.



When procedures in this chapter refer to “right” and “left” on the Fiery XJ-R/R2, it is assumed that you are looking into the Fiery XJ-R/R2 chassis from the side.

1. ***Make sure that the Fiery XJ-R/R2 Info screen reads Idle.***
2. ***Turn off the Fiery XJ-R/R2 using the power switch on the back.***
3. ***Disconnect all cables from the back of the Fiery XJ-R/R2.***

Always obtain permission from the network administrator before you take the Fiery XJ-R/R2 off the network.

To open the Fiery XJ-R/R2 chassis

1. ***Make sure you have shut down the Fiery XJ-R/R2 and removed all the cables from the back of the Fiery XJ-R/R2.***
2. ***Remove the four screws on the back of the Fiery XJ-R/R2 chassis (see Figure 5-2 on page 5-4).***

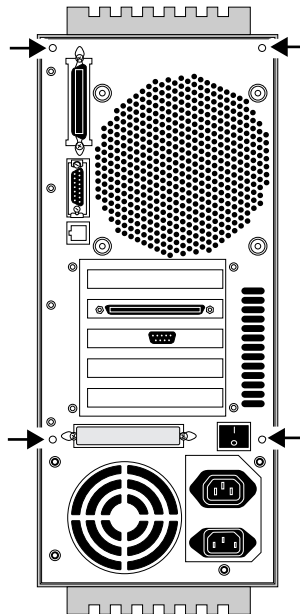


Figure 5-2 Fiery XJ-R/R2 back panel screw locations

3. ***Set the screws aside so you can replace them later (see “Restoring Fiery XJ-R/R2 functionality after service” on page 5-11).***
4. ***If the Fiery XJ-R/R2 stand is attached, remove the two screws on the bottom of the chassis that attach the stand to the Fiery XJ-R/R2. Set the two screws and the stand aside so you can replace them later.***

If you place the Fiery XJ-R/R2 on its back panel to remove the stand, be careful not to damage the connectors. Also, the connectors may cause the Fiery XJ-R/R2 to be slightly unstable.

5. ***Pull the chassis out of the chassis cover (see Figure 5-3 on page 5-5). The internal components of the Fiery XJ-R/R2 are now accessible.***

As you remove the chassis cover, be careful not to damage the user interface board attached to the front of the Fiery XJ-R/R2 chassis. Also, if the chassis cover snags on the power supply cord while you are trying to remove it, gently push the cord into the chassis and proceed.

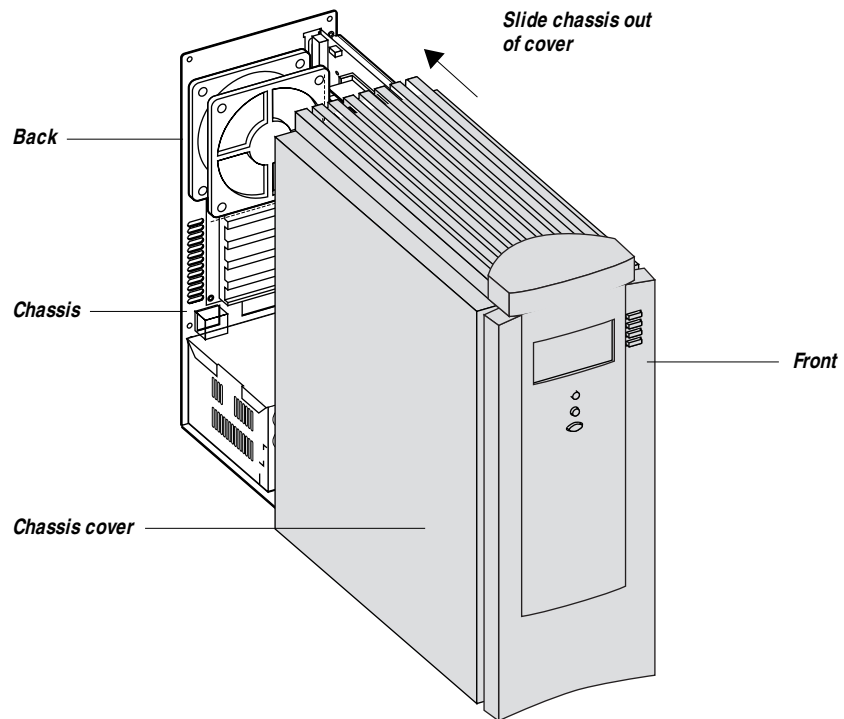


Figure 5-3 Removing the Fiery XJ-R/R2 chassis cover

6. Attach an ESD wrist strap before handling internal parts.

The Fiery XJ-R/R2 is shipped from the factory with a standard board configuration, as shown in Figure 5-4 on page 5-6. For option information, see the documentation that came with the specific kit.

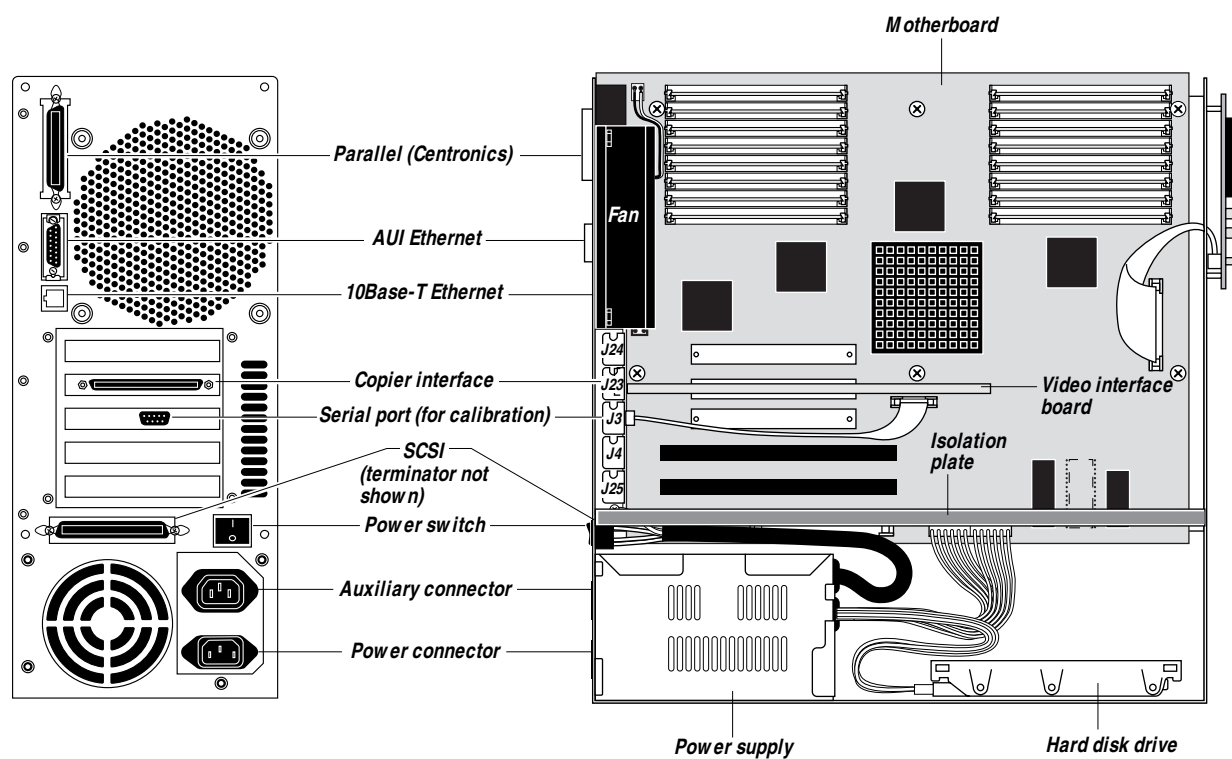


Figure 5-4 Fery XJ-R/R2 plan view and back view

Checking Fiery XJ-R/R2's internal connections

The most common causes of hardware problems are faulty and loose connections. Before you conclude that any board or component has failed, remove, inspect, and reseal all appropriate connections, and then verify that the problem still occurs.



To check board and cable connections

1. ***Before you touch any parts inside the Fiery XJ-R/R2 chassis, attach a grounding wrist strap. Touching the metal part of the power supply case inside the Fiery XJ-R/R2 also discharges static electricity.***
2. ***Visually inspect the Fiery XJ-R/R2 video interface board, as well as any optional boards that may be installed, for secure insertion into the motherboard. Press down firmly on each board to make sure it is securely installed.***

Looking into the chassis from the side, the standard board configuration includes the following (from top to bottom):

- J24 Empty expansion slot
 - J23 Video interface board
 - J3 Empty expansion slot (in the default configuration the serial port cable and connector use the slot cutout on the back panel)
 - J4 Empty expansion slot
 - J25 Empty expansion slot
3. ***Visually inspect the EPROM and the EEPROM for secure insertion into the motherboard.***

EPROM is installed in socket U5 and EEPROM is installed in socket U11 on the motherboard.

4. ***Visually inspect ribbon cables to see if they are intact.***

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

5. ***Make sure that all Fiery XJ-R/R2 ribbon cables are seated on connectors. See Figure 5-5 on page 5-9 and Table 5-1 on page 5-10.***

If you notice any bent pins, straighten them gently with a pair of needlenosed pliers. For a detailed view of the cable connectors used in the Fiery XJ-R/R2, see Figure 5-12 on page 5-16.

6. *Make sure that power cables have not come loose.*

Power connectors are keyed to fit only when properly oriented. For more information, see the Fiery XJ-R/R2 wiring diagram (Figure 5-29 on page 5-39) and the Fiery XJ-R/R2 power connector chart (Table 5-3 on page 5-38).

7. *Check the fan connection to the motherboard.*

The board is labeled so that when the fan wires are plugged in, the red wire is on the left and the blue wire (or black wire depending on the fan model) is on the right.

8. *Check the connections to the power switch at the back of the Fiery XJ-R/R2, near the power supply.*

9. *After tightening connections, if one or more Fiery XJ-R/R2 components are still not getting power, see “Checking voltages” on page 5-38.*

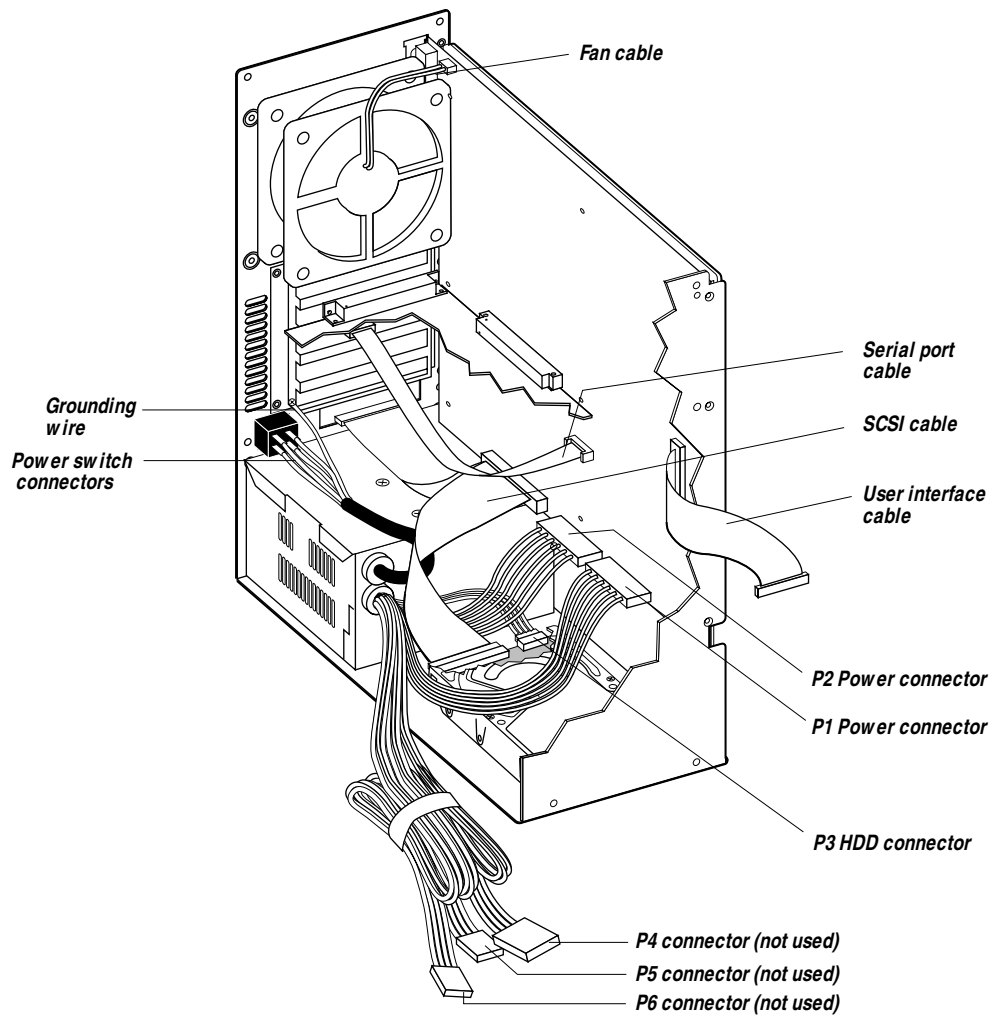


Figure 5-5 Cable connections in the Fiery XJ-R/R2

Table 5-1 Fiery XJ-R/R2 internal cable connections

From	To
SCSI connector on the motherboard (J22)	Hard disk drive and out the Fiery XJ-R/R2 back panel
Serial port connector on the motherboard (J30)	Fiery XJ-R/R2 back panel
User interface connector on the motherboard (J27)	User interface board
Power supply (P1 cable connector)	P1 power connector on the motherboard (J5)
Power supply (P2 cable connector)	P2 power connector on the motherboard (J5)
Power supply (P3 cable connector)	Hard Disk Drive
Power supply (P4 cable connector)	Not used
Power supply (P5 and P6 cable connectors)	Not used
Power supply (power switch connectors)	Power switch connectors on the Fiery XJ-R/R2 back panel. (Note that a grounding wire from the power supply attaches to the back panel of the Fiery XJ-R/R2.)
Fan	Fan connector on the motherboard (J29)

To check motherboard SIM M connections

The SIMMs (single in-line memory modules) on the Fiery XJ-R/R2 motherboard are held in place by metal clips at each end. They occupy the sockets at the top of the motherboard.

- 1. Check that all SIM M strips are locked. If any strips have come loose, release and reseal them.**
- 2. To release a SIM M strip, push outward on the spring clip on one side of the SIM M strip. Then while supporting the SIM M, push outward on the other spring clip to release the SIM M from its socket. (See Figure 5-6, arrows marked 1 and 2.)**

When releasing SIMMs, start at the center of the motherboard and work your way toward the outer edge of the motherboard.

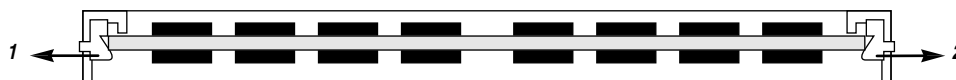


Figure 5-6 Releasing the SIMM spring clips

3. Slide the SIMM strip out of the slot at a 45-degree angle.

In order to release a SIMM, you need to push down on the SIMM (see Figure 5-7).

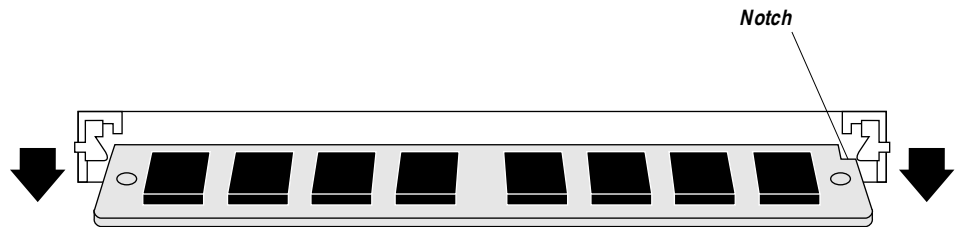


Figure 5-7 Releasing a SIMM strip

4. To replace a SIMM strip, slide the SIMM strip into the socket at a 45-degree angle and lock it into 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 SIMMs fit the socket 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 at the outer edge of the motherboard and work your way toward the center of the motherboard.

Restoring Fiery XJ-R/R2 functionality after service

To reassemble the Fiery XJ-R/R2

1. Reseat all boards, cables, connectors, and other parts that you loosened during inspection or service.

2. Slide the chassis into the chassis cover.

As you replace the cover, line up the tabs on the back of the chassis cover with the cutouts on the front of the chassis. Also, be careful not to damage the user interface board attached to the front of the chassis.

3. Place the Fiery XJ-R/R2 stand over the bottom of the chassis so that the holes in the stand line up with the holes on the bottom of the chassis and replace the two screws.



You do not need to install the stand if the Fiery XJ-R/R2 will be placed in the brackets of the Fiery XJ-R/R2 furniture.

4. Replace the four screws at the back of the Fiery XJ-R/R2 chassis (see Figure 5-2 on page 5-4).



Do not leave the Fiery XJ-R/R2 cover off after servicing. An airflow channel is created by the cover and the fan. Leaving the Fiery XJ-R/R2 cover off for extended periods of time could reduce the operational life expectancy of internal Fiery XJ-R/R2 components.

5. Before you leave the customer site, verify Fiery XJ-R/R2 operation as outlined in Figure 5-8.

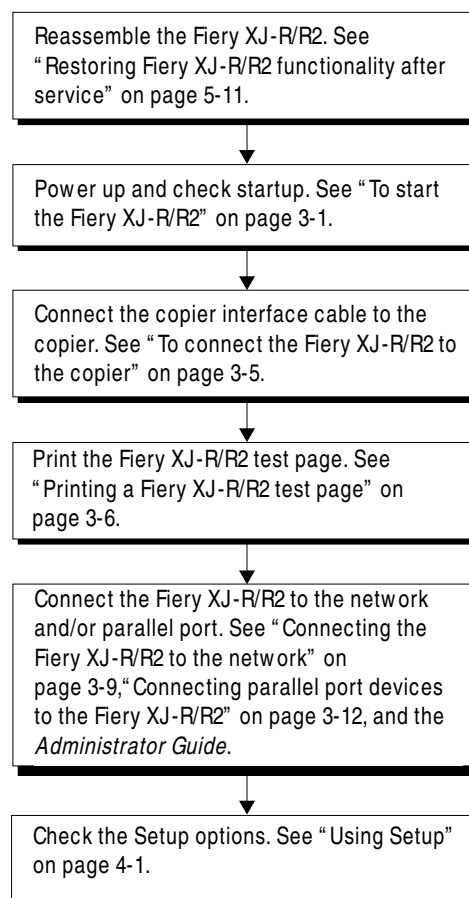


Figure 5-8 Fiery XJ-R/R2 connection verification steps

Removing and replacing circuit boards

This section describes the procedure for removing and replacing the video interface board and the user interface board. For information on installing optional boards such as the token ring board, or the Command Workstation (ISA-XJ) board, see the separate installation instructions that came with that board.

Video interface board

The video interface board in the Fiery XJ-R/R2 (see Figure 5-9 on page 5-14) provides the interface between the Fiery XJ-R/R2 and the copier.

The copier interface connector on one side of the board (outside the Fiery XJ-R/R2 chassis) connects to the interface cable that plugs into the copier's interface port. The other connector on the video interface board attaches to the motherboard connector at J23.

To remove the video interface board

1. ***Shut down the Fiery XJ-R/R2 and open the chassis as described in "To shut down the Fiery XJ-R/R2" on page 5-3 and "To open the Fiery XJ-R/R2 chassis" on page 5-3.***
2. ***Make sure the copier interface cable connected to the back of the Fiery XJ-R/R2 is removed.***
3. ***Remove the video interface board mounting bracket screw.***
4. ***Remove the video interface board from slot J23.***

Grasp the board at the front and back edge. Gently rock the board backward and forward as you pull on it, until it releases from the motherboard.

5. ***Place the board in an antistatic bag.***

To replace the video interface board

1. ***Reseat the video interface board in slot J23.***

The video interface board connector is keyed to fit only one way when properly oriented. Make sure that none of the connector pins are bent. Gently straighten any bent pins with a pair of needlenosed pliers.

2. ***Attach the board mounting bracket screw.***
3. ***Reassemble the Fiery XJ-R/R2 and verify its functionality (see the connection verification steps described in "Restoring Fiery XJ-R/R2 functionality after service" on page 5-11).***
4. ***Make sure to attach the copier interface cable.***

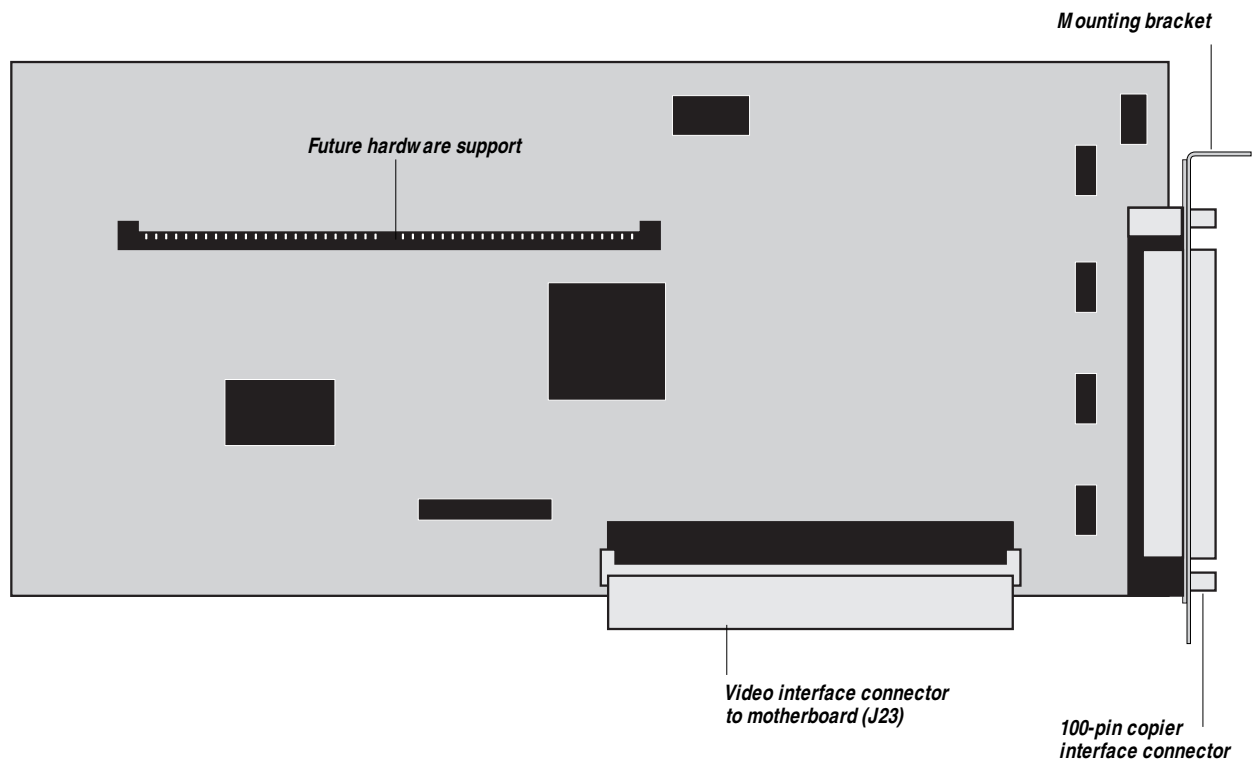


Figure 5-9 Diagram of the Fiery XJ-R/R2 video interface board

User interface board

The user interface board installed on the front of the Fiery XJ-R/R2 chassis (see Figure 5-10) provides the interface between the Fiery XJ-R/R2 server and the user. The physical controls and status indicators on the front of the user interface board are:

- Activity lights (1 green and 1 red LED) at the top of the board
- Display window (LCD)
- Four line selection buttons
- Up and down arrow buttons
- Menu button at the bottom of the board

A cable connector on the back of the board connects the user interface board to the motherboard.

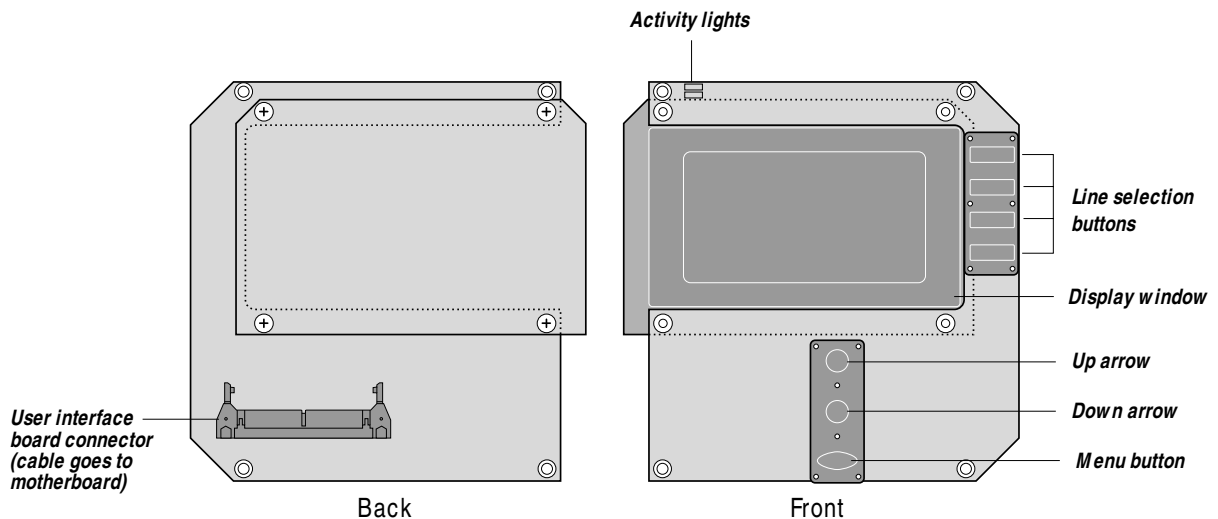


Figure 5-10 Diagram of the user interface board (back and front)

To remove the user interface board

1. *Shut down the Fiery XJ-R/R2 as described in “To shut down the Fiery XJ-R/R2” on page 5-3 and remove the chassis cover as described in “To open the Fiery XJ-R/R2 chassis” on page 5-3.*
2. *Remove the four screws that secure the user interface board and the UIB shield to the Fiery XJ-R/R2 chassis (see Figure 5-13 on page 5-17).*
3. *Some units may have a UIB shield installed around the edges of the user interface board (see Figure 5-11). If the UIB shield is attached, carefully remove it.*

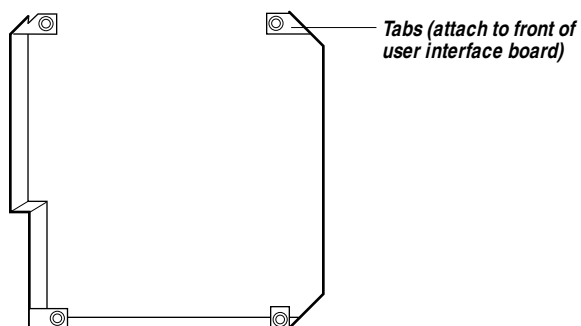


Figure 5-11 UIB shield

4. **Remove the cable connected to the user interface board.**

Press outward on the connector levers on each side of the connector (see Figure 5-12), then pull the connector free. Avoid pulling on the cable itself.

If you are simply replacing the user interface board, leave the end of the ribbon cable that is connected to the motherboard in place.

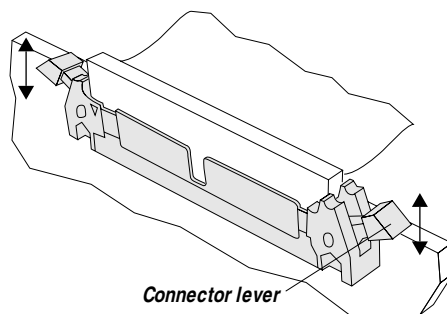


Figure 5-12 Detail of ribbon cable connector

5. *Remove the user interface board.*
6. *Place the board in an antistatic bag.*

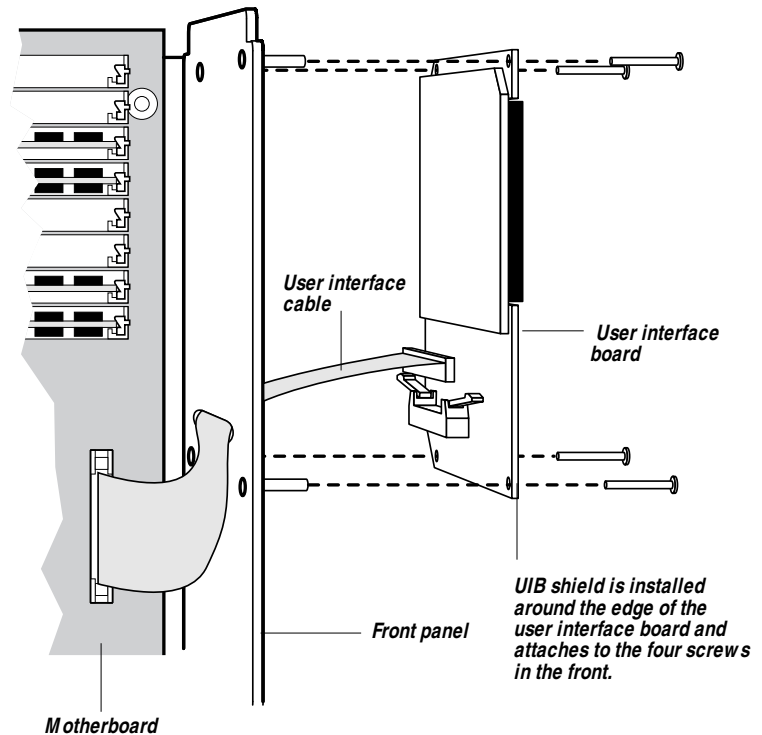


Figure 5-13 User interface board mounting hardware

To replace the user interface board

1. **Attach the ribbon cable connector from the motherboard to the connector on the user interface board.**
When you connect the cable, be sure to snap the levers together to ensure that the connector is securely fastened.
2. **Position the user interface board on the front of the chassis over the holes where the screws will be inserted.**
3. **If the UIB shield is included, place it around the edge of the user interface board and line up the tabs with the screw holes on the user interface board. Make sure the tabs are in front of the board.**
4. **Supporting the user interface board with one hand, replace the four screws that secure the user interface board to the Fiery XJ-R/R2 chassis.**
5. **Reassemble the Fiery XJ-R/R2 and verify its functionality (see the connection verification steps described in “Restoring Fiery XJ-R/R2 functionality after service” on page 5-11).**

Chapter 6: Troubleshooting Procedures

This chapter identifies the source of common problems that may occur with the Fiery XJ-R/R2 and suggests ways of correcting them.

The troubleshooting process

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 XJ-R/R2 system and indicates areas most likely to require troubleshooting.

- ***Problems with initial installation***

If the Fiery XJ-R/R2 fails to complete its first startup and reach the Idle (ready to print) screen, the most likely cause is a loose cable or board connection. See “Accessing Fiery XJ-R/R2’s internal components” on page 5-3 for instructions on opening the Fiery XJ-R/R2 chassis, and “Checking Fiery XJ-R/R2’s internal connections” on page 5-7 for descriptions of Fiery XJ-R/R2 parts and connections.

If a loose part or cable is not the cause of the problem, see “Checking the Fiery XJ-R/R2 as a stand-alone unit” on page 6-8, and “Checking the entire Fiery XJ-R/R2 system” on page 6-31.

- ***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 Fiery XJ-R/R2 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 Fiery XJ-R/R2 internally and externally for the most common problems such as loose cables, connectors, and boards.

- ***Check the Fiery XJ-R/R2 as a stand-alone unit***

“Checking the Fiery XJ-R/R2 as a stand-alone unit” on page 6-8 describes the checks you should perform on the Fiery XJ-R/R2 if the initial checks fail to identify the cause of a problem. With

the Fiery XJ-R/R2 disconnected from the copier and the network, test the Fiery XJ-R/R2 as a stand-alone unit.

This section describes possible startup errors and explains how to run and interpret Fiery XJ-R/R2 diagnostics.

- ***Check the entire Fiery XJ-R/R2 system***

“Checking the copier interface” on page 6-31 explains how to print the test page from the Fiery XJ-R/R2. “Checking network connections” on page 6-33 includes guidelines for checking the network connections between the Fiery XJ-R/R2 and the computers or workstations to which it is connected, and information on several printing problems.

Where problems occur

The Fiery XJ-R/R2 is a server for color copiers, and it is generally part of a configuration like the one shown in Figure 6-1 on page 6-3. Problems may occur in one of three areas:

- Inside the Fiery XJ-R/R2
- In the interface between the Fiery XJ-R/R2 and the color copier
- In the interface between the Fiery XJ-R/R2 and the workstations or computers to which it is connected



This chapter 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.

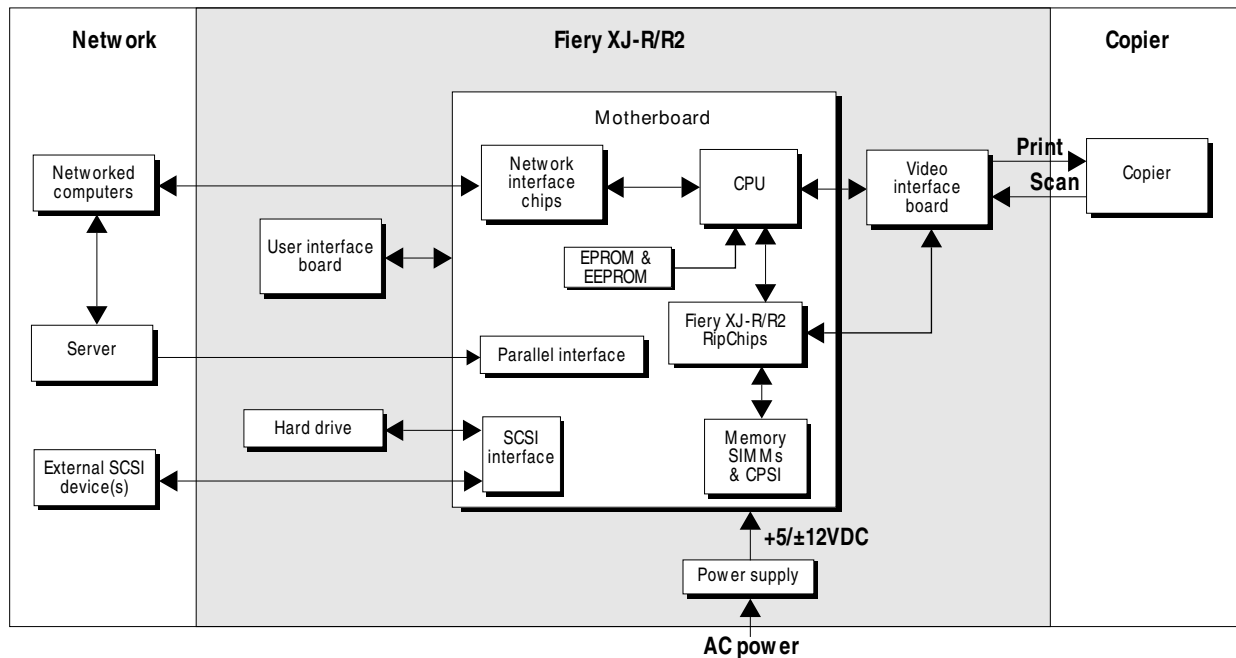


Figure 6-1 Functional diagram of a typical configuration

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 when it is not connected to the Fiery XJ-R/R2?*

If the copier works but the user cannot print a Fiery XJ-R/R2 test page, have the customer check the Control Panel on the Fiery XJ-R/R2 for an error message.

If the Fiery XJ-R/R2 Control Panel reports an error, the customer can check the interface cable connections between the Fiery XJ-R/R2 and the copier.

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

- Is there a printing problem?
 - Does the Fiery XJ-R/R2 test page fail to print?
 - Does the Fiery XJ-R/R2 fail to respond to a print command?
 - Does printing seem to take a long time?
 - Is print quality poor?

- Does the Fiery XJ-R/R2 fail to appear in the list of printers?
- Has the customer noted any error messages on the Fiery XJ-R/R2 or the copier screen?

If the answer to any of these questions is yes, refer the customer to “Fiery XJ-R/R2 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 so, request that the customer’s network administrator verify the Fiery XJ-R/R2 network requirements. See “Checking network connections” on page 6-33.

4. *Has the customer added or removed any equipment that might impact the operation of the Fiery XJ-R/R2?*

If so, obtain a list of the modifications. This should direct you toward possible problem areas. For example, if the hard disk drive has been replaced, system software may need to be reinstalled.

5. *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. The *Color Printing Guide* provides print settings for some popular applications.

If your preliminary phone call fails to clear up the problem, proceed to the second 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, or loosely seated printed circuit boards.

Checking the interface cables

Before you remove the cover of the Fiery XJ-R/R2 to check internal components:

- Check that all interface cables to the system are plugged into the proper connectors on the back panel of the chassis (see Figure 6-2).
- Make sure the power cable is plugged into the wall supply.
- Make sure that the power switch on the back panel of the Fiery XJ-R/R2 is turned on.

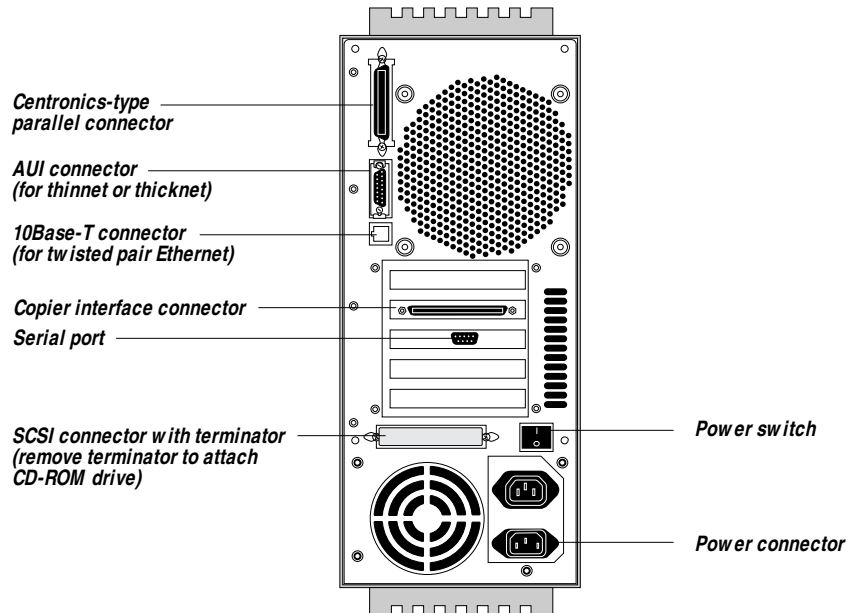


Figure 6-2 Back panel of Fiery XJ-R/R2 showing connectors

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

Checking the internal components

To check the internal components you must remove the cover of the Fiery XJ-R/R2.



Before you remove the cover of the Fiery XJ-R/R2, be aware of the safety precautions you should take when handling the Fiery XJ-R/R2, and use ESD precautions when handling printed circuit boards and electronic components. To review the safety precautions, see “Precautions” on page *xii*.

Use the guidelines in Chapter 5 when disassembling, checking, and reassembling the Fiery XJ-R/R2.

To check internal components

1. ***Shut down the Fiery XJ-R/R2 (see “To shut down the Fiery XJ-R/R2” on page 3-14).***
2. ***Remove the cover (see “To open the Fiery XJ-R/R2 chassis” on page 5-3).***
3. ***Before you touch any components inside the Fiery XJ-R/R2 chassis, attach a grounding strap to your wrist. Discharge any static electricity on your body by touching the metal cover of the Fiery XJ-R/R2.***
4. ***Visually inspect the inside of the chassis. For detailed information, see “Checking Fiery XJ-R/R2’s internal connections” on page 5-7.***



Make sure no foreign materials have been dropped into the chassis. Figure 6-3 on page 6-7 shows an exploded view of the system components.

- Look for obviously loose boards and reseat each board securely in its connector on the motherboard.
 - Look for connectors that are obviously loose. Reseat each connector firmly.
 - Make sure each connector is properly aligned with its mating connector. If the pins are offset from each other, the board affected will not function properly.
5. ***Reassemble the Fiery XJ-R/R2 and verify functionality (see “Restoring Fiery XJ-R/R2 functionality after service” on page 5-11).***

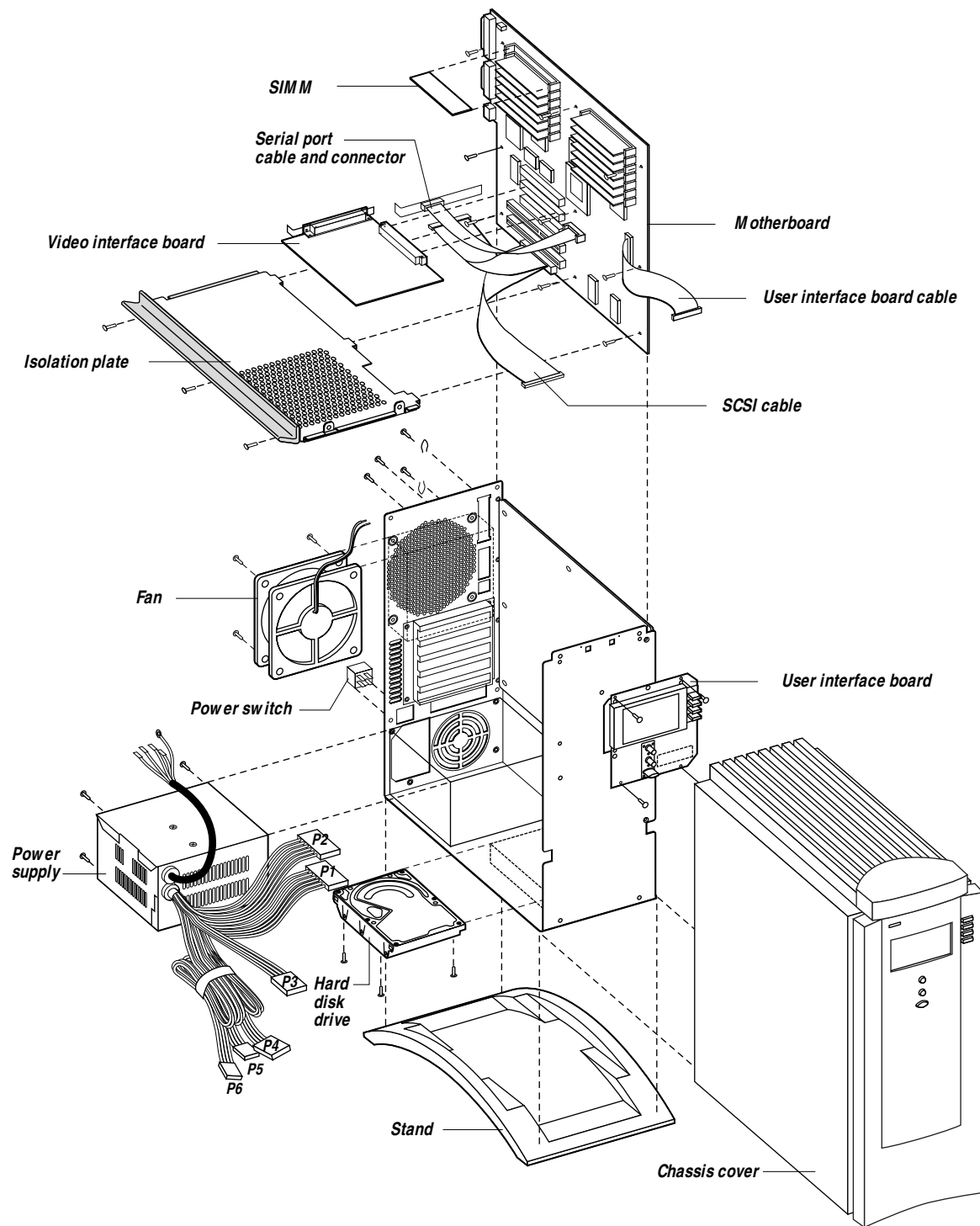


Figure 6-3 Exploded view of Fiery XJ-R/R2 system components

Checking the Fiery XJ-R/R2 as a stand-alone unit

In this phase of troubleshooting, you will test the Fiery XJ-R/R2 as a stand-alone unit. To do this:

- Disconnect the Fiery XJ-R/R2 from the copier and from the network.
- Check for possible start-up problems.
- Check Setup.
- If there are problems, run diagnostics.

Isolating the Fiery XJ-R/R2

1. ***Isolate the Fiery XJ-R/R2 from the copier and from the network by disconnecting the following cables from their connectors on the back panel of the Fiery XJ-R/R2:***
 - Network connector
 - Copier interface cable connector
 - Centronics-type parallel connector (if used)
2. ***Make sure the power connector to the Fiery XJ-R/R2 is still in place.***
3. ***Turn on the Fiery XJ-R/R2.***

Errors during the Start-up diagnostics

When you turn on the Fiery XJ-R/R2 or reboot, the system goes through a series of diagnostic tests that checks the motherboard. While the diagnostic tests are running, the name of the test and a progress bar are displayed on the Control Panel.

Note: To skip a particular diagnostic test while it is running, press the down arrow on the Control Panel. Pressing the menu button during the Start-up diagnostics will skip all the startup tests.

If an error occurs during the Start-up diagnostics, the red activity light on the Fiery XJ-R/R2 Control Panel flashes. At the end of the diagnostics, the red activity light remains on and the Test Failed screen appears on the Control Panel. Select the line selection button to the right of Details in the Test Failed screen for more information about the test that failed.

When you encounter any of these conditions, turn off the Fiery XJ-R/R2 and inspect the inside of the chassis for an obviously loose part or wire. Then check the other components as suggested below. For all service, refer to “Accessing Fiery XJ-R/R2’s internal components” on page 5-3. When you are done, refer to “Restoring Fiery XJ-R/R2 functionality after service” on page 5-11.

If the problems you experience are intermittent, you can also run Fiery XJ-R/R2 diagnostics manually. See “Fiery XJ-R/R2’s diagnostic sets” on page 6-15 for details.

Table 6-1 lists the diagnostic tests that are run at startup, the corresponding error numbers for a failed test, the area of the Fiery XJ-R/R2 being tested, and the suggested corrective action for the failing test.

Table 6-1 Possible errors during Start-up diagnostics

Test name	Error number	Area tested on motherboard	Suggested action
UI LCD	800, F00	J27—User interface board connector <i>Note:</i> An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.	<ul style="list-style-type: none"> • Check the user interface cable connection on the motherboard and on the user interface board. • If the problem persists, first try replacing the user interface cable and then the user interface board.
EPROM	100	U5—EPROM	<ul style="list-style-type: none"> • 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	200	U11—EEPROM	<ul style="list-style-type: none"> • 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	900	U3—CPU	<ul style="list-style-type: none"> • Replace the motherboard.
RTC Self	700	U9—Real Time Clock chip	<ul style="list-style-type: none"> • Replace the motherboard.
RTC R/W Reg	710		
RTC Start	730		
RTC Set	740		

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

Test name	Error number	Area tested on motherboard	Suggested action
DRAM SIMM	310	J6-J21—SIMMs	<ul style="list-style-type: none"> Check the diagnostic report to determine the faulty SIMM (see “Viewing the diagnostic report” on page 6-27). When you locate the faulty SIMM, reseal the SIMM in its socket. If the problem persists, clean the gold contacts on the edge of the strip with a pencil eraser and insert the SIMM into another socket. If the SIMM fails in the second location, replace it. <p>Note: Incorrect S1 switch settings can cause DRAM error code 340. Check the settings for S1 before replacing any SIMMs (see “Motherboard switches” on page 5-34).</p>
DRAM Slot	320		
DRAM Config	330 or 350		
DRAM 64K	D00	J6-J9—SIMMs	
DRAM	340	J6-J21—SIMMs	
ACA DMA Cnfg	B00	U40—RipChips	<ul style="list-style-type: none"> Replace the motherboard.
ACA DMA ADR	B10		
ACA Cntl Reg	A00		
ACA VAdr Reg	5A0		
ACA VCnt Reg	B50		
Eth Fuse	400	FU2—Ethernet fuse	<ul style="list-style-type: none"> Make sure the fuse is installed. If the fuse is installed and the problem persists, replace the fuse.
Eth Quiet	410, F00	U16—Ethernet controller chip Note: An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.	<ul style="list-style-type: none"> Check motherboard switch settings for S2 and S3. If the switches are set incorrectly, change the settings. If this does not correct the problem, you may need to replace the motherboard.
Eth Idle	420, F00		
Eth Self	450, F00		
Eth IntLpBk	440-442, 460-462, 470-472, 490, 4A0-4A2, 4B0-4B3, 4D0, 4E0, 4F0		
SCSI Fuse	600	FU1—SCSI fuse	<ul style="list-style-type: none"> Make sure the fuse is installed. If the fuse is installed and the problem persists, replace the fuse.
SCSI Quiet	650	U15—SCSI controller chip	<ul style="list-style-type: none"> Replace the motherboard.
SCSI Cmd Reg	640		
SCSI R/W Reg	630		
SCSI Rupt Rst	610		
SCSI Rupt II	611		
DUART Int LpBk	250 or 270	U28—DUART chip	Replace the motherboard.

General Fiery XJ-R/R2 system error conditions

When you startup the Fiery XJ-R/R2 or when you install system software, you may encounter error conditions that are not reported during the Start-up diagnostics. Table 6-2 lists some of these error conditions and suggests corrective action.

When you first encounter any of these error conditions, turn off the Fiery XJ-R/R2 and inspect the inside of the chassis for an obviously loose part or cable. Then check other components as suggested below. For service, refer to “Accessing Fiery XJ-R/R2’s internal components” on page 5-3. When you are done, refer to “Restoring Fiery XJ-R/R2 functionality after service” on page 5-11.

Table 6-2 General Fiery XJ-R/R2 system error conditions

Symptom	Probable cause	Suggested action	References
No fan sound and Fiery XJ-R/R2 does not start up.	Power connectors to the power switch are loose or have come off.	<ul style="list-style-type: none"> Check power connections to the power switch. 	See “Power switch” on page 5-36.
	Power supply has failed.	<ul style="list-style-type: none"> Replace the power supply. 	See “Power supply” on page 5-37.
No fan sound, but Fiery XJ-R/R2 powers up.	Fan wires are not connected.	<ul style="list-style-type: none"> Check fan connection. 	See “Intake fan” on page 5-35.
	Red and blue (or black) fan wires are reversed in the fan connector on the motherboard.	<ul style="list-style-type: none"> Remove red and blue (or black) fan wires and insert them into the connector with the red wire on the left and the blue or black wire on the right. 	
	Fan motor is failing.	<ul style="list-style-type: none"> Replace the fan. 	
Fan blows air out the back panel of the Fiery XJ-R/R2.	Fan is installed backwards.	<ul style="list-style-type: none"> Remove the fan and make sure the front of the fan faces the inside of the Fiery XJ-R/R2 chassis. 	See “Intake fan” on page 5-35.
Buttons don’t work on the Control Panel.	Connection to the user interface board is faulty or the user interface board is bad.	<ul style="list-style-type: none"> Check connections to the user interface board. If the problem persists, replace the user interface board. 	See “User interface board” on page 5-15.
	Faulty chip on the motherboard.	<ul style="list-style-type: none"> Replace the motherboard. 	See “Replacing the motherboard” on page 5-24.

Table 6-2 General Fiery XJ-R/R2 system error conditions (*continued*)

Symptom	Probable cause	Suggested action	References
Nothing appeared on the Control Panel when the Fiery XJ-R/R2 was turned on or the backlighting on the Control Panel is discolored.	Connections to the user interface board are faulty or the user interface board is faulty.	<ul style="list-style-type: none"> • Check the user interface cable connection on the motherboard and on the user interface board. • If the problem persists, replace the user interface board. 	See "User interface board" on page 5-15.
	Faulty power supply.	<ul style="list-style-type: none"> • Replace the power supply. 	See "Power supply" on page 5-37.
	EPROM/EEPROM is not installed correctly on the motherboard or has been corrupted. Note: If you plug in EPROM or EEPROM backwards and turn on the Fiery XJ-R/R2, the chip will no longer function.	<ul style="list-style-type: none"> • Make sure EEPROM is installed in socket U11 and EPROM is installed in socket U5. • If the problem persists, try replacing the EEPROM or the EPROM on the motherboard. Call your authorized service/support center for more information. 	See "EPROM and EEPROM" on page 5-30.
	Motherboard switch settings for S1-S4 are configured incorrectly.	<ul style="list-style-type: none"> • Check switch settings for S1-S4. • If settings are set incorrectly, change the settings. 	See "CPU" on page 5-28 and "Motherboard switches" on page 5-34.

Table 6-2 General Fiery XJ-R/R2 system error conditions (*continued*)

Symptom	Probable cause	Suggested action	References
Fiery XJ-R/R2 hangs at the EFI logo when turned on.	Replacement hard disk drive has the wrong SCSI ID setting.	<ul style="list-style-type: none"> Call your authorized service/support center to get the correct jumper setting for the SCSI ID on the replacement hard disk drive. 	
	CD-ROM drive has a SCSI ID setting of 0.	<ul style="list-style-type: none"> Check the back of the CD-ROM drive and change the SCSI ID to be something other than 0 or 7. 	
	Motherboard switch settings for S2 and S3 are set incorrectly.	<ul style="list-style-type: none"> Check settings for motherboard switches S2 and S3. If the switches are set incorrectly, change the settings. 	See "Motherboard switches" on page 5-34.
	Fiery XJ-R/R2 system software is not installed on the hard disk drive.	<ul style="list-style-type: none"> Format the Fiery XJ-R/R2 hard disk drive and install system software. 	See "Installing Fiery XJ-R/R2 system software" on page 5-44.
	Power connector P3 or the SCSI connector is not plugged into the hard disk drive.	<ul style="list-style-type: none"> Check the hard disk drive cable connections. 	See "Hard disk drive" on page 5-41.
	Transceiver is installed on the AUI connector and the network is not connected to it.	<ul style="list-style-type: none"> Turn off the Fiery XJ-R/R2 and remove the transceiver or connect the Fiery XJ-R/R2 to the network. If the Fiery XJ-R/R2 is connected to the network, make sure the rest of the network is live. 	See "Ethernet network connections" on page 3-9.
Fuse is blown in the wall where the Fiery XJ-R/R2 is installed.	Power supply connectors are installed on the switch incorrectly.	<ul style="list-style-type: none"> Remove switch connectors and install them correctly. 	See "Power switch" on page 5-36.
Fiery XJ-R/R2 hangs at the Loading system... or the Loading settings... screen.	System software is not installed on the hard disk drive.	<ul style="list-style-type: none"> Install system software. 	See "Installing Fiery XJ-R/R2 system software" on page 5-44.
	Motherboard switch S1 is set incorrectly.	<ul style="list-style-type: none"> Check the settings for motherboard switch S1. If the switch is set incorrectly, change the setting. 	"Motherboard switches" on page 5-34.
	Serial numbers read from EEPROM and the Real Time Clock don't match.	<ul style="list-style-type: none"> Run diagnostics and check the serial numbers listed in the diagnostic report Info screen. If the two numbers don't match, call your authorized service/support center. 	See "Viewing the diagnostic report" on page 6-27.

Table 6-2 General Fiery XJ-R/R2 system error conditions (*continued*)

Symptom	Probable cause	Suggested action	References
Error: 3 appears on the Control Panel when installing System Software from the CD.	SCSI bus is not properly terminated.	<ul style="list-style-type: none"> Make sure the CD-ROM drive is properly terminated. 	See "Connecting a CD-ROM drive to the Fiery XJ-R/R2" on page 3-13.
	Faulty System Software CD, HDD, or CD-ROM drive.	<ul style="list-style-type: none"> Check HDD and CD-ROM drive connections. If the problem persists, try installing software using a new System Software CD. If the problem still persists, you may need to replace the HDD or the CD-ROM drive. 	See "To check board and cable connections" on page 5-7 and "Connecting a CD-ROM drive to the Fiery XJ-R/R2" on page 3-13
	Replacement hard disk drive has a SCSI ID other than 0.	<ul style="list-style-type: none"> Call your authorized service/support center to get the correct SCSI ID jumper setting for your hard disk drive. 	
Error 52 appears on the Fiery XJ-R/R2 Control Panel when installing system software using the CD-ROM drive.	The CD-ROM drive is not connected or is not turned on.	<ul style="list-style-type: none"> Turn off the Fiery XJ-R/R2. Connect the CD-ROM drive and turn it on. Insert the system software CD. Turn on the Fiery XJ-R/R2. 	See "Connecting a CD-ROM drive to the Fiery XJ-R/R2" on page 3-13 and "Installing Fiery XJ-R/R2 system software" on page 5-44.
	No CD is inserted or the wrong CD is inserted in the CD-ROM drive.	<ul style="list-style-type: none"> Check the CD inserted in the CD-ROM drive. 	
	CD-ROM drive activity light was on when you tried to install the system software.	<ul style="list-style-type: none"> Wait until the activity light is off before you install the system software. 	
Check power & cable appears in the Fiery XJ-R/R2 Control Panel.	Problem with the connection between the Fiery XJ-R/R2 and the copier.	<ul style="list-style-type: none"> Make sure the copier interface cable is connected to the Fiery XJ-R/R2 and the copier. Print a test page. 	See "Connecting the Fiery XJ-R/R2 to the copier" on page 3-5 and "Printing a Fiery XJ-R/R2 test page" on page 3-6.
	Copier is not turned on when trying to print.	<ul style="list-style-type: none"> Turn on the copier and print a test page. 	
	The Printer Model selected in Printer Setup does not match the copier type attached to the Fiery XJ-R/R2.	<ul style="list-style-type: none"> Check the Printer Model listed on the Configuration Page. If the Printer Model listed is incorrect, change the setting in Printer Setup. 	

Fiery XJ-R/R2's diagnostic sets

Fiery XJ-R/R2 diagnostic sets are available to test components on the Fiery XJ-R/R2 motherboard. Fiery XJ-R/R2 diagnostic sets are divided into four groups: Custom, Board, Burn-in, and Start-up. The sets of Custom, Board, and Start-up diagnostics are described in more detail below. Note that Start-up diagnostic tests are the same tests that are run automatically when the Fiery XJ-R/R2 is turned on. Burn-in diagnostic tests are for factory use only.

To run Fiery XJ-R/R2 diagnostics manually

1. *If the Fiery XJ-R/R2 is on, turn off the power switch on the back panel of the Fiery XJ-R/R2.*
2. *Press and hold the up arrow button on the front of the Fiery XJ-R/R2 Control Panel.*
3. *Turn on the Fiery XJ-R/R2.*
4. *Release the up arrow button as soon as you see the Diagnostic Sets display window. See Figure 6-4.*

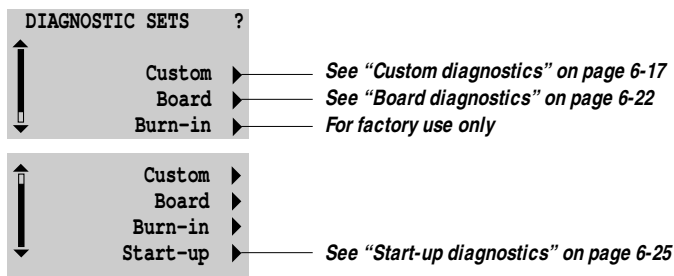


Figure 6-4 Fiery XJ-R/R2 diagnostic sets



Some menu options have the ? symbol in the upper right corner of the Control Panel. Whenever you see the ? symbol, information describing the displayed option is available. Press the line selection button next to the ? symbol to view the information.

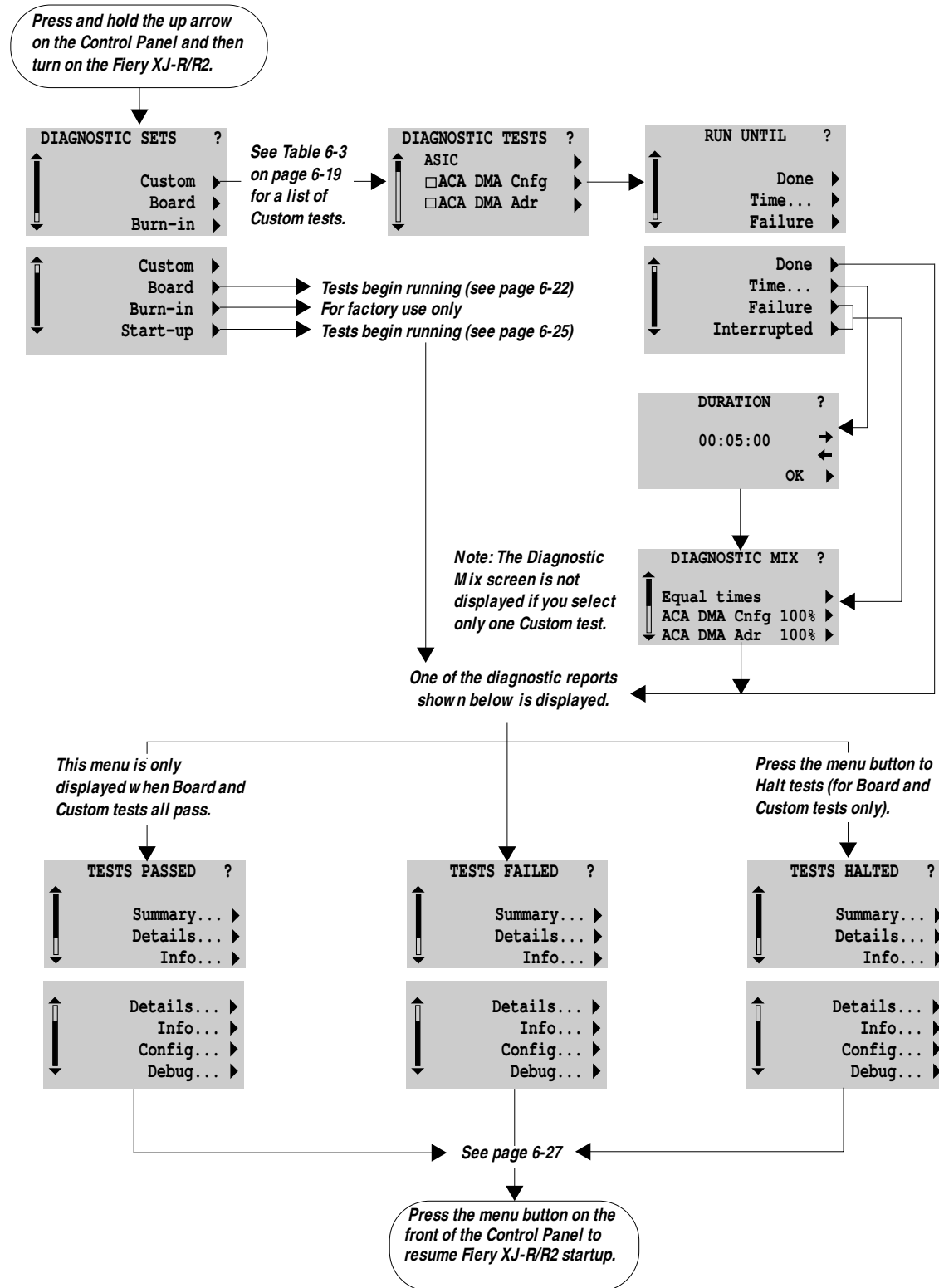


Figure 6-5 Fiery XJ-R/R2 diagnostic summary

Custom diagnostics

Custom diagnostics allow you to run individual tests in order to identify and isolate problems with the Fiery XJ-R/R2. Custom diagnostic options include the set of tests run at startup that focus on testing components on the motherboard, as well as a set of network connection tests and video interface board controller tests. When you select Custom from the list of Diagnostic Sets, a scrolling list of tests appears on the Control Panel (see Figure 6-6). For a complete list of Custom tests, see Table 6-3 on page 6-19.

To run Custom diagnostics

1. ***At the Diagnostic Sets screen, press the line selection button next to Custom.***

See “Fiery XJ-R/R2’s diagnostic sets” on page 6-15 to access the Diagnostic Sets screen.

2. ***Select the tests that you want to run (see Table 6-3 on page 6-19 for a list of all the tests). Use the up and down arrow buttons to scroll through the list.***

To select a particular test, press the line selection button next to the test you want to run. If you decide you don’t want to run a test that is already selected, press the corresponding line selection button again. To run a group of tests, press the line selection button next to the main heading. For example, if you press the line selection button next to ROM, EPROM and EEPROM tests are both selected. A filled-in box next to the test name indicates that the test has been selected; a hollow box means that the test is not selected (see Figure 6-6 below).

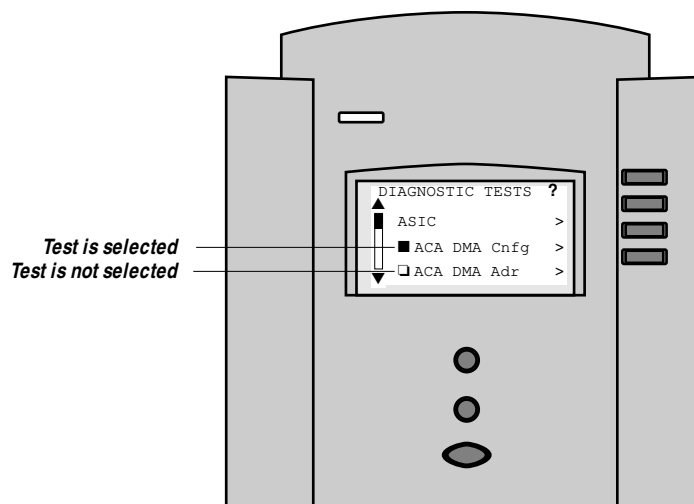


Figure 6-6 Custom diagnostics window

3. ***Press the menu button when you are finished selecting the tests you want to run.***
4. ***At the next screen, RUN UNTIL, select how long you want to run the tests. The following list of options is displayed:***
 - Done—The selected tests run through once. When you select this option the tests start running immediately.
 - Time...—Tests run for a specified amount of time. The length of time is set on the next screen in the Duration menu and is entered in the form HH:MM:SS (hours, minutes, and seconds). Use the up and down arrows to change the time and the line selection button to advance to the next field. After you set the time, select OK.
 - Failure—The selected tests repeat until a failure is detected.
 - Interrupted—The selected tests run until you press the menu button on the Control Panel.
5. ***At the DIAGNOSTIC MIX screen (only appears if you selected more than one test and you selected Time..., Failure, or Interrupted for the RUN UNTIL option), select the percentage of repetition for each test and then press the menu button. If you select the Equal Times option the tests begin running immediately.***

Use the line selection buttons next to each test to change the percentage of repetition for each test (percentages are available in increments of ten). To scroll through the list, use the up and down arrow buttons. If you want to run all tests for an equal amount of time, select the Equal Times option.



If you change the percentage of repetition for the Custom tests, make sure that at least one of the tests has a value of 100%.

6. ***If any of the tests fail, check the Details option in the diagnostic report for more information about the failing test (see “Viewing the diagnostic report” on page 6-27). Then shut off the Fiery XJ-R/R2, and perform the recommended service for the failed test or replace the failed component.***
7. ***If the Custom diagnostics all pass, the Control Panel indicates that all tests passed. Press the menu button to restart the Fiery XJ-R/R2.***

Table 6-3 Summary of Custom diagnostic tests

Group	Test name	Error code	Area tested	Suggested action
ASIC	ACA DMA Cnfg	B00	U40–RipChips on the motherboard	<ul style="list-style-type: none"> Replace the motherboard.
	ACA DMA Adr	B10		
	ACA Cntl Reg	A00		
	ACA VAdr Reg	5A0		
	ACA VCnt Reg	B50		
MIPS	MIPS FPU	900	U3–CPU on the motherboard	<ul style="list-style-type: none"> Replace the motherboard.
Ethernet	Eth Fuse	400	FU2–Ethernet fuse on the motherboard	<ul style="list-style-type: none"> Make sure the Ethernet fuse at FU2 is installed. If the fuse is installed and the problem persists, replace the fuse.
	Eth Quiet	410, F00	U16–Ethernet Controller chip on the motherboard	<ul style="list-style-type: none"> Check motherboard switch settings for S2 and S3. If the switches are set incorrectly, change the settings. If this does not correct the problem, you may need to replace the motherboard.
	Eth Idle	420, F00		
	Eth Self	450, F00		
	Eth Int LpBk	440-442, 460-462, 470-472, 490, 4A0-4A2, 4B0-4B3, 4D0, 4E0, 4F0, F00		
	Eth Ext TDR	480, 481		
	Eth Ext Rcv	490, 4A0-4A2, 4D0	Checks the Ethernet network connections. Note: The Fiery XJ-R/R2 must be connected to the network in order to get accurate results from these tests.	<ul style="list-style-type: none"> If all other Ethernet tests pass, there may be a problem with the network. Ask the network administrator at the customer site to connect a functioning printer to that node in the network. If the printer does work, there may be a problem with the Fiery XJ-R/R2 Ethernet connection and you may need to replace the Fiery XJ-R/R2's motherboard. If the printer doesn't work, there may be something wrong with the network.
	Eth Ext Tx	4B0-4B3		
	Eth Ext LpBk	4A0		

Table 6-3 Summary of Custom diagnostic tests (*continued*)

Group	Test name	Error code	Area tested	Suggested action
RAM	DRAM SIMM	310	J6-J21–SIMMs on the motherboard	<ul style="list-style-type: none">• Check the diagnostic report to determine the faulty SIMM (see “Viewing the diagnostic report” on page 6-27).• When you locate the faulty SIMM, reseal the SIMM in its socket.• If the problem persists, clean the gold contacts on the edge of the SIMM strip with a pencil eraser and insert the SIMM strip into another socket.• If it fails in the second location, replace it. <p>Note: Incorrect S1 switch settings can cause DRAM error code 340. Check the settings for S1 before replacing any SIMMs (see “Motherboard switches” on page 5-34).</p>
	DRAM Slot	320		
	DRAM Config	330 or 350		
	DRAM 64K	D00	J6-J9–First four SIMM strips on the motherboard	
	DRAM	340	J6-J21–SIMMs on the motherboard	
	DRAM CB			
	DRAM AD			
	DRAM RA			
	DRAM RD			
	DRAM MMP			
	DRAM IFA			
ROM	EPROM	100	U5–EPROM on the motherboard	<ul style="list-style-type: none">• Make sure the EPROM is installed correctly.• If the problem persists, you may need to replace the EPROM (call your authorized service/support center for more information).
	EEPROM	200	U11–EEPROM on the motherboard	
RTC (Real Time Clock)	RTC Self	700	U9–Real Time Clock chip on the motherboard	<ul style="list-style-type: none">• Replace the motherboard.
	RTC R/W Reg	710		
	RTC Start	730		
	RTC Set	740		

Table 6-3 Summary of Custom diagnostic tests (*continued*)

Group	Test name	Error code	Area tested	Suggested action
SCSI	SCSI Fuse	600	FU1–SCSI fuse on the motherboard	<ul style="list-style-type: none"> Make sure the fuse is installed. If the fuse is installed and the problem persists, replace the fuse.
	SCSI Quiet	650	U15–SCSI controller chip on motherboard	<ul style="list-style-type: none"> Replace the motherboard.
	SCSI Cmd Reg	640		<p>Note: For error code 621, check the settings for motherboard switches S2 and S3 before replacing the motherboard.</p>
	SCSI R/W Reg	630		
	SCSI Rupt Rst	610		
	SCSI Rupt II	611		
	SCSI FIFO	621		
	SCSI Device	660	Checks for the hard drive.	<ul style="list-style-type: none"> Check the connections to the hard disk drive. If all the connections are in place and the problem persists, replace the hard disk drive.
UI (User interface)	UI LCD	800, F00	J27–User interface board connector on the motherboard. Also checks the cable and the user interface board. <p>Note: An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.</p>	<ul style="list-style-type: none"> Check the user interface cable connection on the motherboard and on the user interface board. If all the connections are installed correctly and the problem persists, first try replacing the cable and then the user interface board.
	VMC0 Respond	F01-F04, F06	Interface between the motherboard and the video interface board installed in slot J23. Also checks the microcontroller on the video interface board.	<ul style="list-style-type: none"> Reseat the video interface board in slot J23. If the problem persists, replace the video interface board.
VMC (Video interface board microcontroller)	VMC0 Data Bus			
	VMC0 Memory			
	VMC1 Respond	F01-F04, F06	Interface between the motherboard and the video interface board installed in slot J24. Also checks the microcontroller on the video interface board.	<ul style="list-style-type: none"> Reseat the video interface board in slot J24. If the problem persists, replace the video interface board. <p>Note: If you select this test and no video interface board is installed in slot J24, the test will fail.</p>
	VMC1 Data Bus			
	VMC1 Memory			

Table 6-3 Summary of Custom diagnostic tests (*continued*)

Group	Test name	Error code	Area tested	Suggested action
DUART (Dual Universal Asynchronous Receiver/Transmitter)	DUART Ext LpBk	260	Note: This test is for factory use only. A special tool is required in order to perform this test.	
	DUART Int LpBk	250 or 270	U28–DUART chip on the motherboard.	<ul style="list-style-type: none"> Replace the motherboard.

Board diagnostics

Board diagnostics include the set of tests run at startup, as well as a more detailed set of SIMM tests. Board tests run for 10 minutes and focus on testing components on the Fiery XJ-R/R2 motherboard. For the complete list of Board tests, see Table 6-4 below.

To run Board diagnostics

1. ***At the Diagnostic Sets screen, press the line selection button next to Board. See “Fiery XJ-R/R2’s diagnostic sets” on page 6-15 to access the Diagnostic Sets screen.***

The tests begin running immediately. Board tests run for approximately 10 minutes.

2. ***If any of the tests fail, check the Details option in the diagnostic report menu for more information about the failing test (see “Viewing the diagnostic report” on page 6-27). Then shut off the Fiery XJ-R/R2, and perform the recommended service for the failed test or replace the failed component.***
3. ***If the Board diagnostics all pass, the Control Panel indicates that all tests passed. Press the menu button to restart the Fiery XJ-R/R2.***

Table 6-4 Summary of Board diagnostics

Test name	Error number	Area tested on motherboard	Suggested action	
UI LCD	800, F00	J27—User interface board connector <i>Note:</i> An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.	<ul style="list-style-type: none">• Check the user interface cable connection on the motherboard and on the user interface board.• If the problem persists, try replacing the user interface cable and then the user interface board.	
EPROM	100	U5—EPROM	<ul style="list-style-type: none">• Make sure the EPROM is installed correctly.• If the problem persists, you may need to replace the EPROM (call your authorized service/support center for more information).	
EEPROM	200	U11—EEPROM	<ul style="list-style-type: none">• Make sure the EEPROM is installed correctly.• If the problem persists, you may need to replace the EEPROM (call your authorized service/support center for more information).	
MIPS FPU	900	U3—CPU	<ul style="list-style-type: none">• Replace the motherboard.	
RTC Self	700	U9—Real Time Clock chip	<ul style="list-style-type: none">• Replace the motherboard.	
RTC R/W Reg	710			
RTC Start	730			
RTC Set	740			
DRAM SIMM	310	J6-J21—SIMMs	<ul style="list-style-type: none">• Check the diagnostic report to determine the faulty SIMM (see “Viewing the diagnostic report” on page 6-27).• When you locate the faulty SIMM, reseal the SIMM in its socket.• If the problem persists, clean the gold contacts on the edge of the strip with a pencil eraser and insert the SIMM into another socket. If the SIMM fails in the second location, replace it. <i>Note:</i> Incorrect S1 switch settings can cause DRAM error code 340. Check the settings for S1 before replacing any SIMMs (see “Motherboard switches” on page 5-34).	
DRAM Slot	320			
DRAM Config	330 or 350			
DRAM 64K	D00	J6-J9—SIMMs		
DRAM CB	340			J6-J21—SIMMs
DRAM AD				
DRAM RA				
DRAM RD				
DRAM MMP				
DRAM IFA				
ACA DMA Cnfg	B00	U40—RipChips	<ul style="list-style-type: none">• Replace the motherboard.	
ACA DMA ADR	B10			
ACA Cntl Reg	A00			
ACA VAdr Reg	5A0			
ACA VCnt Reg	B50			

Table 6-4 Summary of Board diagnostics (*continued*)

Test name	Error number	Area tested on motherboard	Suggested action
Eth Fuse	400	FU2—Ethernet fuse	<ul style="list-style-type: none">• Make sure the fuse is installed.• If the fuse is installed and the problem persists, replace the fuse.
Eth Quiet	410, F00	U16—Ethernet controller chip	<ul style="list-style-type: none">• Check motherboard switch settings for S2 and S3.• If the switches are set incorrectly, change the settings.• If this does not correct the problem, you may need to replace the motherboard.
Eth Idle	420, F00	Note: An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.	
Eth Self	450, F00		
Eth IntLpBk	440-442, 460-462, 470-472, 490, 4A0-4A2, 4B0-4B3, 4D0, 4E0, 4F0, F00		
SCSI Fuse	600	FU1—SCSI fuse	<ul style="list-style-type: none">• Check the fuse to make sure it is installed.• If the fuse is installed and the problem persists, replace the fuse.
SCSI Quiet	650	U15—SCSI controller chip	<ul style="list-style-type: none">• Replace the motherboard. Note: For error code 621, check the settings for motherboard switches S2 and S3 before replacing the motherboard.
SCSI Cmd Reg	640		
SCSI R/W Reg	630		
SCSI Rupt Rst	610		
SCSI Rupt II	611		
SCSI FIFO	621		
DUART Int LpBk	250 or 270	U28—DUART chip	Replace the motherboard.

Start-up diagnostics

Start-up diagnostics include the set of Fiery XJ-R/R2 tests listed in Table 6-5. These tests are the same tests that are run when you turn on the Fiery XJ-R/R2 or reboot the system. The Start-up tests focus on testing components on the Fiery XJ-R/R2 motherboard.

To run Start-up diagnostics

1. *At the Diagnostic Sets screen use the down arrow to scroll through the menu. Press the line selection button next to Start-up. See “Fiery XJ-R/R2’s diagnostic sets” on page 6-15 for information on how to access the Diagnostic Sets screen.*

The tests begin running immediately.

2. *If any of the tests fail, check the Details option in the diagnostic report menu for more information about the failing test (see “Viewing the diagnostic report” on page 6-27). Then shut off the Fiery XJ-R/R2, and perform the recommended service for the failed test or replace the failed component.*
3. *If the Start-up diagnostics all pass the Fiery XJ-R/R2 will automatically continue with the standard startup process.*

Table 6-5 Summary of Start-up diagnostics

Test name	Error number	Area tested on motherboard	Suggested action
UI LCD	800, F00	J27—User interface board connector Note: An error code of F00 indicates that this test could not be run. Check the SIMMs in Bank 0 (J6-J9) first. See “SIMMs” on page 5-31.	<ul style="list-style-type: none"> • Check the user interface cable connection on the motherboard and on the user interface board. • If the problem persists, try replacing the user interface cable and then the user interface board.
EPROM	100	U5—EPROM	<ul style="list-style-type: none"> • Make sure the EPROM is installed correctly. • If the problem persists, you may need to replace the EPROM (call your authorized service/support center for more information).
EEPROM	200	U11—EEPROM	<ul style="list-style-type: none"> • Make sure the EEPROM is installed correctly. • If the problem persists, you may need to replace the EEPROM (call your authorized service/support center for more information).
MIPS FPU	900	U3—CPU	<ul style="list-style-type: none"> • Replace the motherboard.

Table 6-5 Summary of Start-up diagnostics (*continued*)

Test name	Error number	Area tested on motherboard	Suggested action
RTC Self	700	U9—Real Time Clock chip	<ul style="list-style-type: none"> Replace the motherboard.
RTC R/W Reg	710		
RTC Start	730		
RTC Set	740		
DRAM SIMM	310	J6-J21—SIMMs	<ul style="list-style-type: none"> Check the diagnostic report to determine the faulty SIMM (see “Viewing the diagnostic report” on page 6-27). When you locate the faulty SIMM, reseat the SIMM in its socket. If the problem persists, clean the gold contacts on the edge of the strip with a pencil eraser and insert the SIMM into another socket. If the SIMM fails in the second location, replace it. <p>Note: Incorrect S1 switch settings can cause DRAM error code 340. Check the settings for S1 before replacing any SIMMs (see “Motherboard switches” on page 5-34).</p>
DRAM Slot	320		
DRAM Config	330 or 350		
DRAM 64K	D00	J6-J9—SIMMs	
DRAM	340	J6-J21—SIMMs	
ACA DMA Cnfg	B00	U40—RipChips	<ul style="list-style-type: none"> Replace the motherboard.
ACA DMA ADR	B10		
ACA Cntl Reg	A00		
ACA VAdr Reg	5A0		
ACA VCnt Reg	B50		
Eth Fuse	400	FU2—Ethernet fuse	<ul style="list-style-type: none"> Make sure the fuse is installed. If the fuse is installed and the problem persists, replace the fuse.
Eth Quiet	410, F00	U16—Ethernet controller chip	<ul style="list-style-type: none"> Check motherboard switch settings for S2 and S3. If the switches are set incorrectly, change the settings. If this does not correct the problem, you may need to replace the motherboard.
Eth Idle	420, F00		
Eth Self	450, F00		
Eth IntLpBk	440-442, 460-462, 470-472, 490, 4A0-4A2, 4B0-4B3, 4D0, 4E0, 4F0, F00		
SCSI Fuse	600	FU1—SCSI fuse	<ul style="list-style-type: none"> Make sure the fuse is installed. If the fuse is installed and the problem persists, replace the fuse.

Table 6-5 Summary of Start-up diagnostics (*continued*)

Test name	Error number	Area tested on motherboard	Suggested action
SCSI Quiet	650	U15—SCSI controller chip	<ul style="list-style-type: none"> Replace the motherboard.
SCSI Cmd Reg	640		Note: For error code 621, check the settings for motherboard switches S2 and S3 before replacing the motherboard.
SCSI R/W Reg	630		
SCSI Rupt Rst	610		
SCSI Rupt II	611		
SCSI FIFO	621	U28—DUART chip	Replace the motherboard.
DUART Int LpBk	250 or 270		

Viewing the diagnostic report

Results of the Fiery XJ-R/R2 Custom and Board diagnostics are displayed in the diagnostic report menu whether tests pass, fail, or are halted. Start-up diagnostic test results are available in the diagnostic report menu only when a test fails (see Figure 6-5 on page 6-16). The diagnostic report menu includes the following options:



Use the up and down arrows on the Control Panel to scroll through the screens and the menu button to exit any of the screens.

- **Summary**—Pressing the line selection button next to this option displays the name of each diagnostic test, how many times the test passed and how many times the test failed. Also included in this report, are the name of the test, the length of time each test ran, and the total time it took for all the tests to run.
- **Details**—Pressing the line selection button next to this option displays the message All tests that ran passed on the Control Panel if no errors are detected. If an error is detected, this option displays the diagnostic test that failed, the error number, and a description of the failing test.
- **Info**—Pressing the line selection button next to this option displays the following information about the Fiery XJ-R/R2 diagnostics and hardware:

Table 6-6 Information displayed in the Info option

Information displayed	Description
DIAGNOSTICS	Indicates the diagnostic revision and the date.
HARDWARE	Provides the SIMM configuration (for example 48MB) for memory installed on the motherboard.
SIMM	Gives the location and size of each SIMM strip. This information can be used to make sure the largest capacity SIMM strips occupy the lowest banks.
COPIER INTERFACE	Indicates the type of copier connected to the video interface board connector J23 (0) and J24 (1).
SERIAL NUMBER	Gives the Fiery XJ-R/R2 serial number, which is also the Ethernet hardware address. This serial number is different from the serial number listed on the back of the Fiery XJ-R/R2 chassis. This number is listed twice because the Fiery XJ-R/R2 reads it from the Real Time Clock and the EEPROM on the motherboard. Both numbers should be the same.

- **Config**—Displays information about the amount of memory installed on the Fiery XJ-R/R2 and how it is arranged on the motherboard. This option also displays information about what copier is connected to video slot 0 (J23) and video slot1 (J24).
- **Debug**—For factory use only.

Video interface board diagnostics

If you suspect there might be a problem with the video interface board (for example, the print quality of output is poor), you can run the video board diagnostics to test components on the video interface board. Video Diagnostics loop data internally on the Fiery XJ-R/R2's video interface board. The Fiery XJ-R/R2 compares the data sent with the data received to make sure no errors have occurred. You can run Video Diagnostics once or you can select a time interval and run the video diagnostics repeatedly.

To run Video Diagnostics

1. **At the Fiery XJ-R/R2 Idle screen, press the menu button once.**

The Functions menu displays a scrolling list of options. The full list of options is shown below:

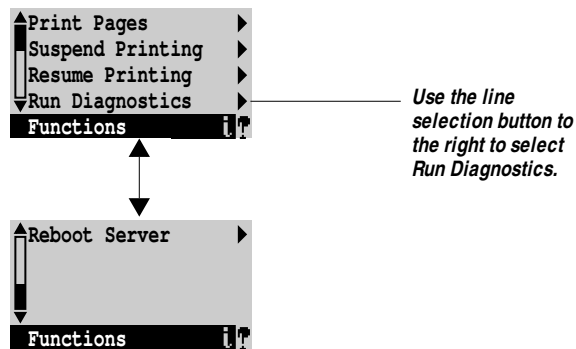


Figure 6-7 Run Diagnostics option on the Functions menu

2. **Select Run Diagnostics from the Functions menu.**
3. **At the screen shown in Figure 6-8, select Video Diagnostics.**



Figure 6-8 Video Diagnostics option

4. *Select Single Pass or Multiple Pass at the screen shown in Figure 6-9.*

If you select Single Pass, the Video Diagnostics run through once. Selecting Multiple Pass runs the Video Diagnostics repeatedly.

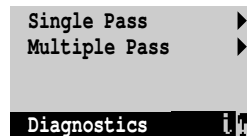


Figure 6-9 Video Diagnostics single pass or multiple pass

5. *If you selected Multiple Pass, enter how long you want to run the Video Diagnostics and then select OK to start the diagnostics.*

Use the up and down arrow buttons on the Control Panel to select the correct number and the line selection buttons to advance to the next space. The time interval is set in minutes.



This option should be set to a value between 1 minute and 8 hours.

6. *If the Video Diagnostics fail, the screen displays the message Video diags failed.*

You should:

- Turn off the Fiery XJ-R/R2 and open the chassis (see “Accessing Fiery XJ-R/R2’s internal components” on page 5-3).
- Reseat the video interface board.
- Turn on the Fiery XJ-R/R2 and run Video Diagnostics again. If the tests still fail you may need to replace the video interface board.

7. *If the video interface board diagnostics all pass, the Control Panel indicates that the video diagnostics passed. Press the line selection button next to OK to reboot the Fiery XJ-R/R2.*

Checking the entire Fiery XJ-R/R2 system

This phase of troubleshooting deals with problems with the entire system, once the Fiery XJ-R/R2 functions as a stand-alone unit.

Checking the copier interface

After the Fiery XJ-R/R2 starts up successfully as a stand-alone unit, turn off the Fiery XJ-R/R2 and connect the copier interface cable. You should make sure the Fiery XJ-R/R2 is working properly with the copier before you connect it to the network. See “Connecting the Fiery XJ-R/R2 to the copier” on page 3-5.

Once you have connected the Fiery XJ-R/R2 to the copier you should print the test page to make sure that the interface between the copier and the Fiery XJ-R/R2 is working properly.

To print a test page

The test page is a color PostScript file resident on the Fiery XJ-R/R2 hard disk drive. The test page is printed to the copier using the settings configured in Setup.

1. ***Make sure the copier is on.***
2. ***Turn on the Fiery XJ-R/R2 from the power switch on the back panel.***

Messages will appear on the Control Panel as the Fiery XJ-R/R2 runs through its startup tests.

3. ***Before proceeding, make sure that the copier is not in use.***

The Fiery XJ-R/R2 Info screen should read Idle.

4. ***Press the menu button once to display the Functions menu.***

If more than one device is connected to the Fiery XJ-R/R2, select one of the devices in the Main menu first.

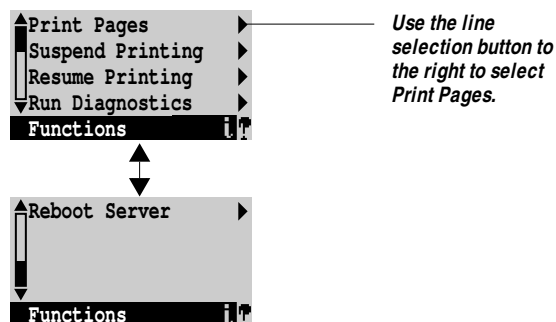


Figure 6-10 Functions menu options

5. **Press the line selection button to the right of *Print Pages* and then select *Test Page* from the menu.**

The Fiery XJ-R/R2 sends the test page to the copier and displays the RIP and Print status screens so you can monitor the job.

6. **Examine the test page from the copier.**

If the test page prints successfully, the Fiery XJ-R/R2 connection to the copier is working properly.

If the test page does not print at all or has a low-quality image, you may have a faulty video interface board or copier interface cable, or the copier may not be functioning properly. In these cases, you should first check Fiery XJ-R/R2 connections and then run the Fiery XJ-R/R2 video interface board diagnostics (see “Video interface board diagnostics” on page 6-29) and the Board diagnostics (see “Board diagnostics” on page 6-22) to locate the problem.

Checking scanning and printing

The Test Scan/Print diagnostic scans whatever is placed on the copier glass and prints it to the copier. This diagnostic test can be used to test the scanning capabilities on the Fiery XJ-R/R2. You can compare the original with the output to make sure the connection between the Fiery XJ-R/R2 and the copier is working properly.



Note: The Test Scan/Print function is not implemented in Fiery XJ-R units that have system software version 1.03 or below.

To run Test Scan/Print

1. **Place the document that you want to scan on the copier glass.**
2. **At the Idle screen, press the menu button once to display the Functions menu.**

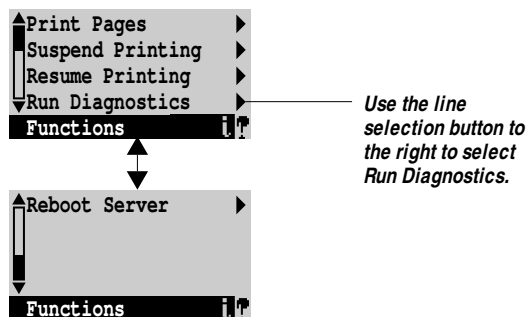


Figure 6-11 Run Diagnostics option in the Functions menu

3. **Select Run Diagnostics from the Functions menu.**
4. **At the screen shown in Figure 6-12, select Test Scan/Print.**

The message Scanning from copier and printing.... is displayed.

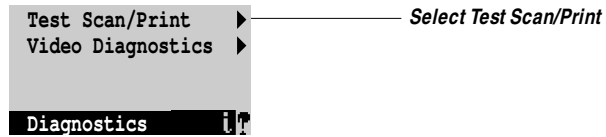


Figure 6-12 Test Scan/Print option

5. **When the Fiery XJ-R/R2 is finished printing, compare the output from the copier to the original.**

Checking network connections

After the Fiery XJ-R/R2 is connected to networked computers, printing problems may arise if the network hardware or software is not set up properly or doesn't match network settings on the Fiery XJ-R/R2. 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 XJ-R/R2 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 XJ-R/R2 not appearing in printer list on the customer's workstation.



If the Fiery XJ-R/R2 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. Check the serial number in the diagnostic report Info menu (see "Viewing the diagnostic report" on page 6-27). If the serial number (also the Ethernet address) in this menu is the same as another device on the network, the Fiery XJ-R/R2 may not appear in the list of printers.

- 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 XJ-R/R2

If the user can print a Fiery XJ-R/R2 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 XJ-R/R2 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, visually check the back panel of the Fiery XJ-R/R2 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 itself does not need servicing or adjusting.



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 6-7.

Table 6-7 Printing problems - General

Symptom	Possible cause	Suggested action
Fiery XJ-R/R2 appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error.	<ul style="list-style-type: none"> Make sure Print up to PostScript Error in Setup is set to Yes. Check for error messages on the Fiery XJ-R/R2 output.
	An application problem.	<ul style="list-style-type: none"> 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 XJ-R/R2 and the workstation.	<ul style="list-style-type: none"> Make sure the connection between the Fiery XJ-R/R2 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.
A print job stalls.	A PostScript or application error.	<ul style="list-style-type: none"> Cancel the Fiery XJ-R/R2 print job. If this fails to clear the problem, reboot the Fiery XJ-R/R2.
Printing stops after one or a few pages.	Faulty SIMM(s).	<ul style="list-style-type: none"> Run the SIMM diagnostics from the Custom diagnostic menu. If faulty SIMMs are detected, replace the faulty SIMMs.
Color quality is uneven.	A copier problem.	<ul style="list-style-type: none"> Use the copier to copy a sample copier test page. If the quality is not good, service the copier.
	A file or application problem.	<ul style="list-style-type: none"> Print a Fiery XJ-R/R2 test page. If the quality of the Fiery XJ-R/R2 test page is good, there may be a file or an application problem.
Print quality is poor.	A missing or outdated printer description file.	<ul style="list-style-type: none"> Make sure the appropriate printer description file is installed. See Fiery XJ-R/R2 <i>Getting Started</i> for a list of printer files used by various applications.
	The application cannot find the appropriate printer description file.	
Pages have the wrong ink colors.	A faulty video interface board.	<ul style="list-style-type: none"> Run the video interface board diagnostics manually (see "Video interface board diagnostics" on page 6-29). If the test fails, you may need to replace the video interface board.
Pages come out blank, or tinted with green or some other color.	A loose cable connection between the Fiery XJ-R/R2 and the copier.	<ul style="list-style-type: none"> Check and tighten the copier interface cable at the back of Fiery XJ-R/R2 and at the copier.
Job never prints and the Fiery XJ-R/R2 activity light flashes green and the RIP screen indicates Busy.	The copier interface cable or the network cable was plugged in when the Fiery XJ-R/R2 was turned on.	<ul style="list-style-type: none"> Turn off the Fiery XJ-R/R2 and turn it back on again.

Table 6-7 Printing problems - General (*continued*)

Symptom	Possible cause	Suggested action
Fiery XJ-R/R2 system locks up completely while printing a page.	A faulty video interface board.	<ul style="list-style-type: none"> Remove the video interface board and check for bent pins on the connector that plugs into the motherboard.
Color has shifted, or the registration is off.		<ul style="list-style-type: none"> Make sure that the video interface board and the copier interface cable are plugged in properly.
Page is totally black, blank, fully discolored, or unintended repetitive patterns appear over the entire page.		<ul style="list-style-type: none"> If this problem persists and the copier test page looks normal, run the video diagnostics (see "Video interface board diagnostics" on page 6-29). If the video diagnostics fail, replace the video board.

Appendix A: Specifications

Hardware features

The Fiery XJ-R/R2 has the following hardware features:

- MIPS R4600 /4700 133MHz CPU (with 175MHz upgrade)
- Fiery XJ-R/R2 400: 256MB
Fiery XJ-R/R2 300: 128MB
Fiery XJ-R/R2 250: 80MB
Fiery XJ-R/R2 170: 48MB
- Supports AppleTalk, TCP/IP, and IPX protocols simultaneously
- Adobe PostScript Level 2 CPSI
- Parallel port for direct connection printing
- Hard disk drive, 850MB standard

Networking and connectivity

The Fiery XJ-R/R2 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 XJ-R/R2 via the Fiery XJ-R/R2's parallel port.
- Optional Token Ring interface using the token ring kit.
- A CD-ROM drive can be connected to the Fiery XJ-R/R2 via the Fiery XJ-R/R2's SCSI port.

Resolution and formats

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

Note: Legal (8.5" x 14"), tabloid (11" x 17"), A3, and legal 13 (8.5" x 13") are printed at 400 x 200 dpi on Fiery XJ-R/R2 170 systems.

Maximum scan resolution

- Fiery XJ-R/R2 170—200 dpi
- Fiery XJ-R/R2 250—400 dpi (for letter and A4); 200 dpi (for A3 and 11" x 17")
- Fiery XJ-R/R2 300 or above—400 dpi

Non-imageable area

The non-imageable area of the Fiery XJ-R/R2 is 85mm on the leading edge and 32mm on the trailing edge, the near edge, and the far edge.

Fiery XJ-R/R2 remote utility software

A complete description of Fiery XJ-R/R2 remote utility software is provided in the *User Guide*. For optimal Fiery XJ-R/R2 performance, current versions of the Fiery XJ-R/R2 remote utility software should be maintained on every network computer that might print to the Fiery XJ-R/R2.

Safety and emissions compliance

The Fiery XJ-R/R2 has been certified to meet or surpass the following government standards:

Safety approvals

- UL 1950
- CSA 22.2 #950
- EN 60950 (TUV/GS mark)

EMI approvals

- FCC Class A
- VDE Class B (VFG 243)
- EN55022 Class B

Appendix B: Assembling the Fiery XJ-R/R2 Furniture

This appendix describes how to assemble the Fiery XJ-R/R2 furniture, if necessary. The Fiery XJ-R/R2 furniture is configured as shown in Figure B-1 below.



Note: The Fiery XJ-R/R2 can be placed in the brackets (if you have a Command Station) or on the accessory shelf. If you place the Fiery XJ-R/R2 in the brackets, you do not need to attach the stand to the bottom of the Fiery XJ-R/R2 chassis.

The oblong box containing the Fiery XJ-R/R2 furniture includes the following:

- Base assembly
- Accessory shelf
- Four flat-head screws (#10-32)



You will need a #1 Phillips-head screwdriver no more than 6" long to assemble the furniture.

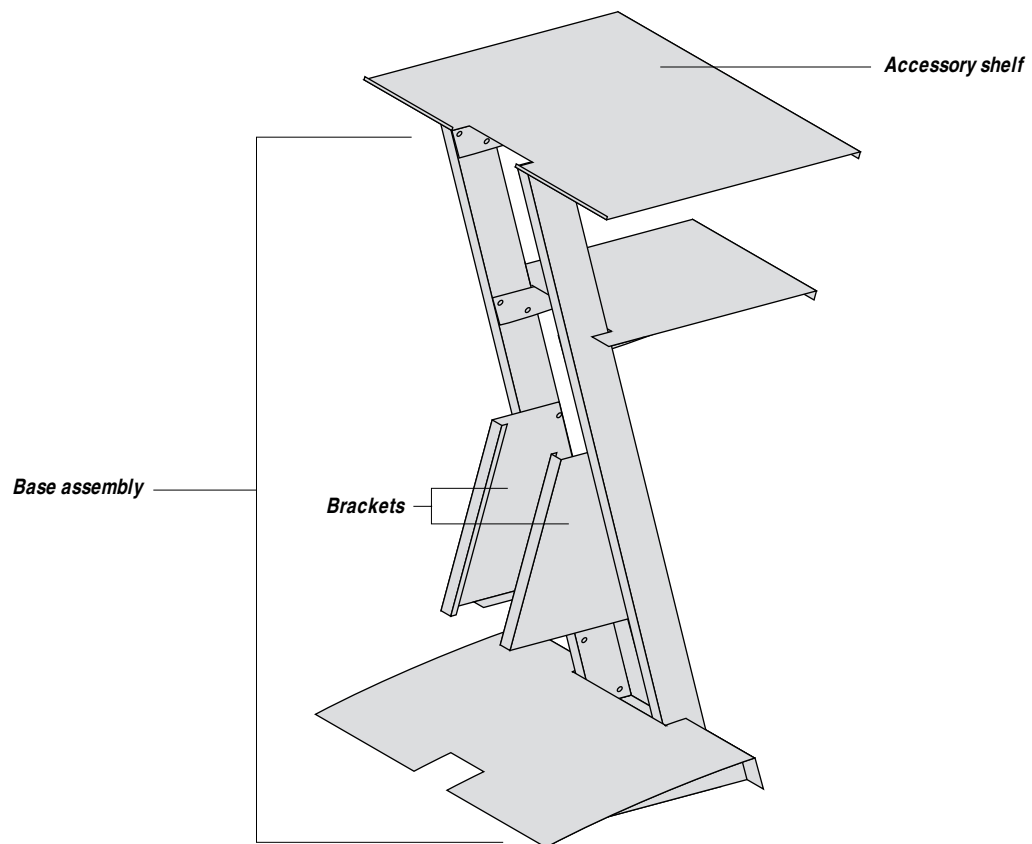


Figure B-1 Fiery XJ-R/R2 furniture assembled

To assemble the furniture

1. *Unpack the oblong box containing the Fiery XJ-R/R2 furniture.*
2. *Set the base assembly on the floor.*
The base assembly is heavy. Be careful lifting it from the box.
3. *Place the large accessory shelf on top of the two support columns on the base assembly. Line up the screw holes in the shelf with the screw holes in the support columns.*
4. *Attach the large accessory shelf to the support columns using the four flat-head screws (see Figure B-2 below).*

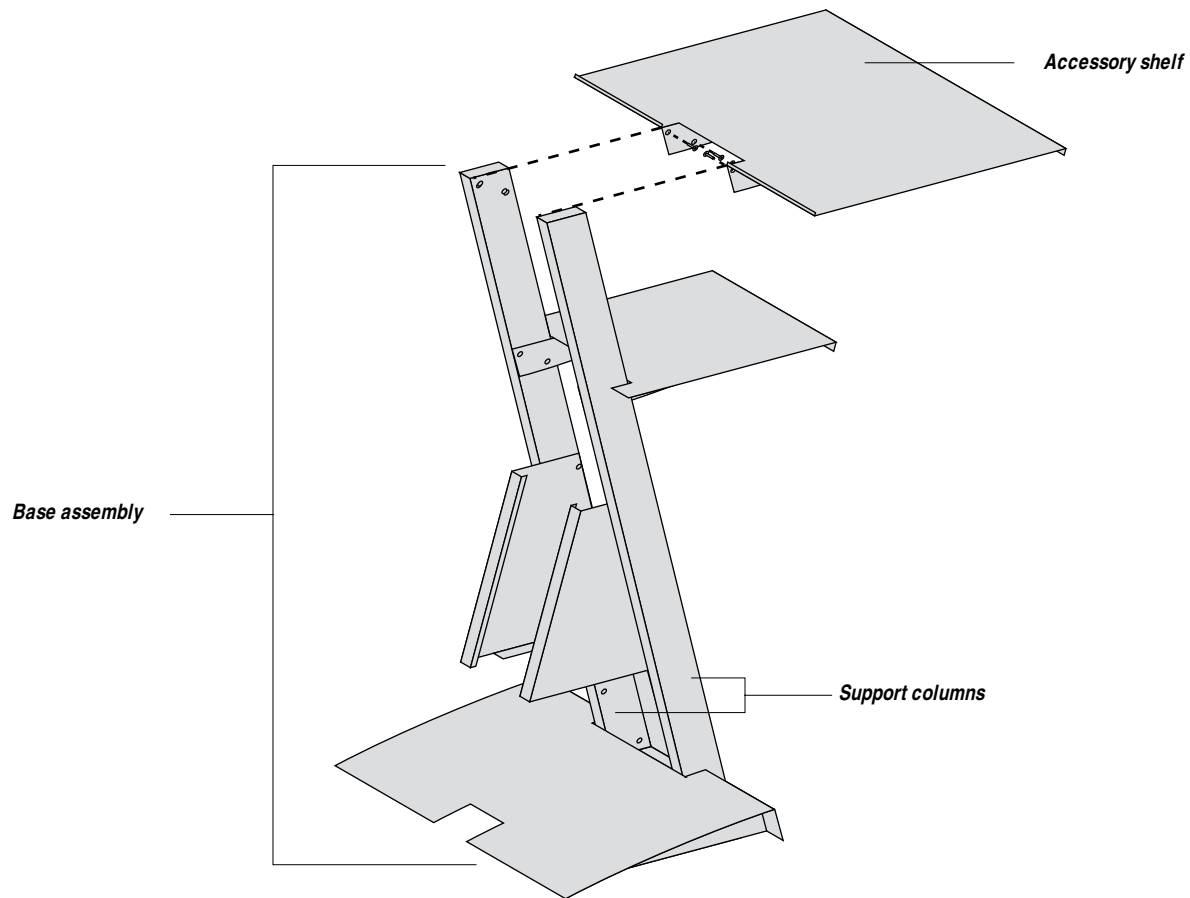


Figure B-2 Fiery XJ-R/R2 furniture — exploded view

Service Addendum—August, 1997

Installation and Service Guide for the Fiery XJ-R/ R2

This document provides an overview of the changes to the Fiery XJ-R/R2 and is intended to supplement the information in the current *Installation and Service Guide*. For information on new features that affect the use of the Fiery XJ-R/R2, see the User Addendum.

- Dual copier support has been added in system software version 3.1. The Fiery XJ-R/R2 can be connected to two copiers using the dual copier kit. The kit includes the following hardware: two dual device daughter cards, two video interface boards, and a copier interface cable. System software version 3.1 or greater must be installed on the Fiery XJ-R/R2 after installing the dual copier kit hardware.

If you convert back to a single copier, make sure you remove both dual device daughter cards and the video interface board in slot J24. After you remove the dual copier hardware, you need to reinstall system software. For more information, see the instructions in the dual copier kit.

- The Fiery XJ-R/R2 can also be connected to a plotter along with a copier. The plotter option kit includes a plotter interface board, a plotter interface cable, plotter system software, and color files. The plotter interface board is installed in Fiery XJ-R/R2 slot J24 and is connected to the plotter using the plotter interface cable. System software with plotter option must be installed on the Fiery XJ-R/R2 after installing the plotter option hardware. For more information, see the instructions in the plotter option kit.
- 100BaseT support has been added to the Fiery XJ-R/R2 using the 100BaseT kit. The kit includes the 100BaseT board that must be installed in Fiery XJ-R/R2 slot J3. For more information, see the instructions in the 100BaseT option kit.

When the 100BaseT option is installed, the following 100BaseT diagnostics are available in Start-up and Custom diagnostics:

Start-up diagnostics	Custom diagnostics	Error codes
100BT Quiet	100BT Quiet	380
100BT Idle	100BT Idle	381
100BT Self	100BT Self	382, 384
100BT RAM	100BT RAM	386, 388, 390, 394, 396, 398
100BT Int LpBk	100BT Int LpBk	388, 39A, 39C, 39F
	100BT Ext Rcv	39E
	100BT Ext Tx	388, 39F
	100BT PMD LpBk	388, 39A, 39C, 39F

The set of 100BaseT Start-up diagnostics run when the 100BaseT board is installed in the Fiery XJ-R/R2.

- In addition to the existing ISA connectivity, the Command WorkStation can be connected to the network using one of the Ethernet connectors (BNC, AUI, or RJ-45) on the back of the Command WorkStation. For more information, see the *Installation Notes Command WorkStation*.
- A high level format is sufficient when formatting the Fiery XJ-R/R2 hard disk drive prior to system software installation. Performing a low level format (referenced on page 5-46 in the *Installation and Service Guide*) is no longer necessary.

A low level format should be done only if you suspect a problem with the hard disk drive. The low level format method corrects any bad sectors on the disk. Depending on the type of hard disk drive, a low level format can take from a few seconds to 60 minutes.

NOTE: Turning off the Fiery XJ-R/R2 while a low level format is in progress could permanently damage the hard disk drive.

- The XJ-PLUS motherboard has a 133MHz CPU that *cannot* be upgraded to 175MHz. The reference on pages 5-28 and 5-29 in the *Installation and Service Guide* to a 175MHz upgrade is no longer valid.


Some versions of the Fiery XJ-R/R2 will include the R5000 motherboard. See below for more information.

NOTE: Current versions of the Fiery XJ-R/R2 with the R5000 motherboard installed ship with 144MB of memory (four 32MB SIMMs and four 4MB SIMMs).

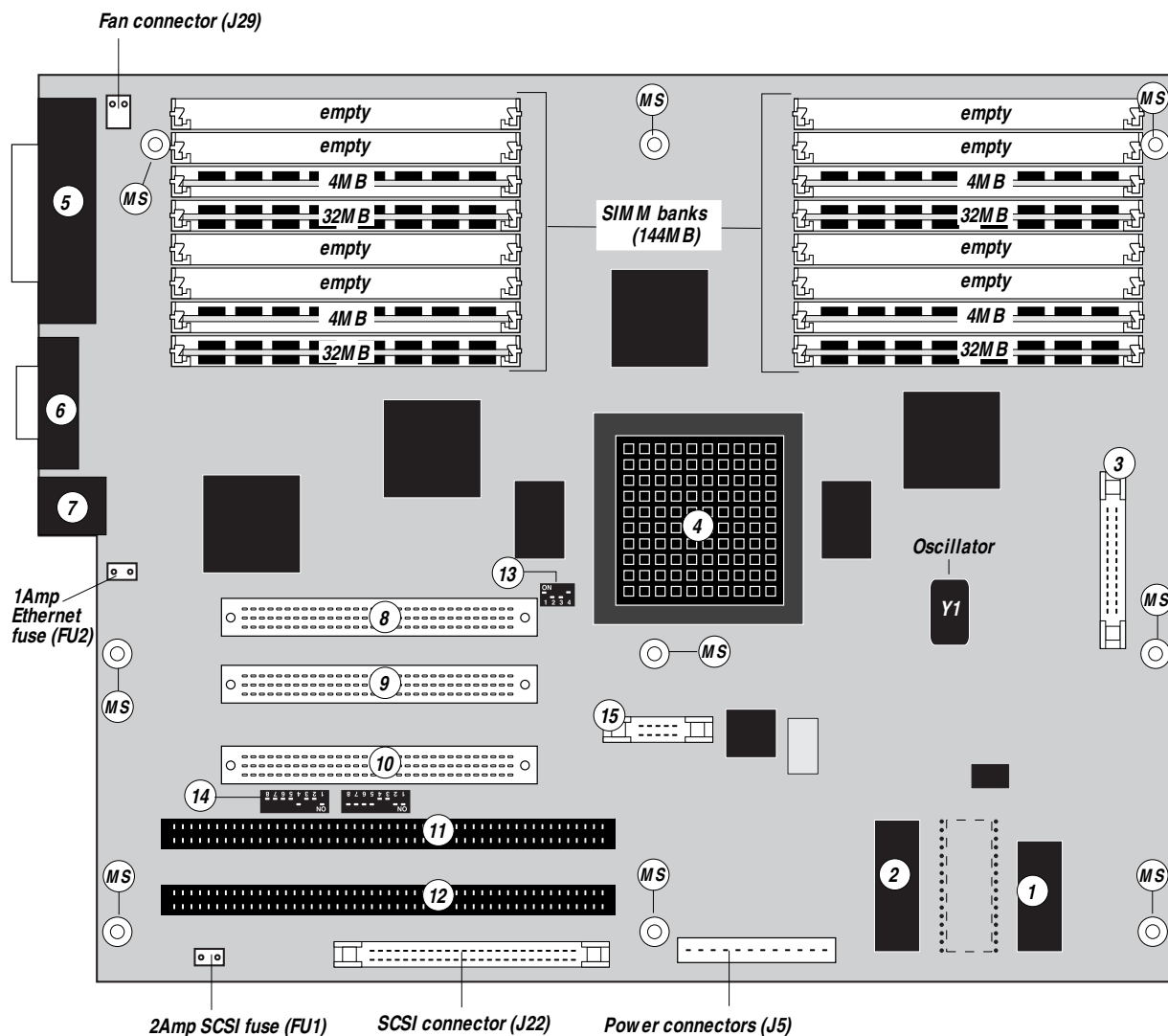
R5000 motherboard differences

The R5000 motherboard includes the following changes (see also the figure on page 2):

- 200MHz CPU installed at U3
- 2Amp SCSI fuse at FU1
- Oscillator Y4 and switch S4 removed from the motherboard
- Changed default switch settings for S1 (referenced on page 5-34 of the *Installation and Service Guide*). See below.

Switch (default configuration for R5000 motherboards)	Description
S1  Positions 1 and 4—ON Positions 2 and 3—OFF	Switch S1 controls secondary cache on the motherboard. The default configuration configures the Fiery XJ-R/R2 for 512K of secondary cache. If positions 1 and 4 are OFF and positions 2 and 3 are ON, only 256K of secondary cache is available. NOTE: Any other switch settings will cause the Fiery XJ-R/R2 to fail the DRAM Startup diagnostics.

R5000 motherboard



Default switch settings:

SI— ON
1 2 3 4

S2— 1 2 3 4 5 6 7 8
NO

S3— 1 2 3 4 5 6 7 8
NO

Key

1. EEPROM (U11)
2. EPROM (U5)
3. User interface board connector (J27)
4. 200M Hz CPU chip (U3)
5. Centronics parallel connector (J26)
6. AUI connector (J1)
7. 10Base-T connector (J2)
8. Video board expansion slot (J24)
9. Video interface board slot (J23)
10. Optional slot (J3)
11. Expansion slot (J4)
12. Expansion or ISA-XJ board slot (J25)
13. Switch (S1)
14. Switches (S3 and S2)
15. Serial port connector (J30)

MS— Mounting screws (9 screws)