



Xerox® EX-i 60C/70C Print Server Powered by Fiery®

## Installation and Service Guide

A guide for service technicians  
E200 version

Replacement parts and specifications are subject to change.

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# Introduction

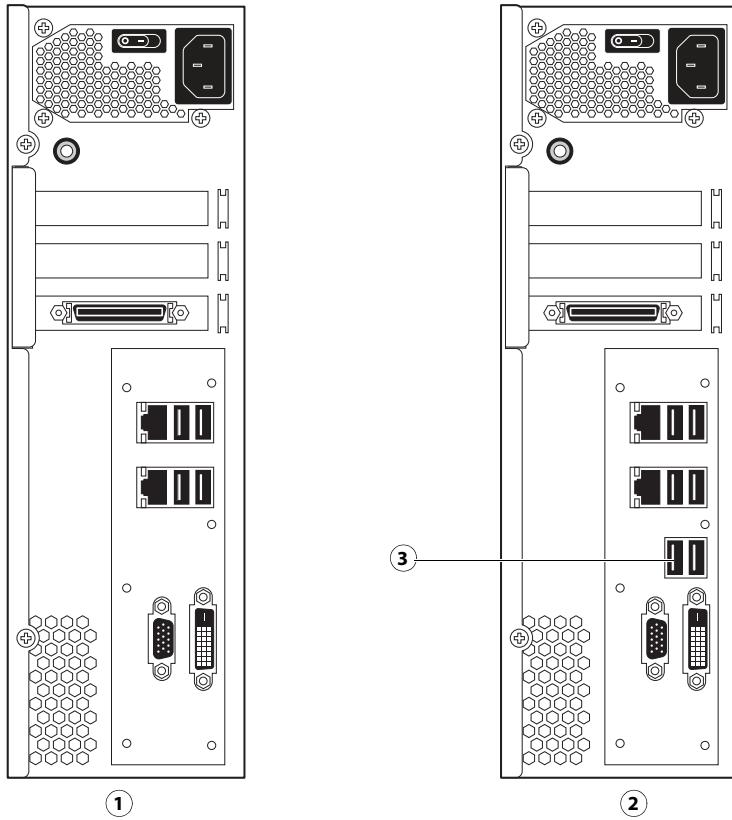
This document includes information about servicing the Xerox® EX-i 60C/70C Print Server Powered by Fiery®. In this document, Xerox® EX-i 60C/70C Print Server Powered by Fiery® is referred to as “the EX-i Print Server.”

## Hardware platforms for EX-i Print Server

There are two hardware platforms that support the EX-i Print Server. This document is for the service technicians who service the EX-i Print Server running on the *E200 hardware platform*. If you are servicing the system running on the E300 hardware platform, refer to the *Installation and Service Guide* (part number 45155260).

The following illustrations show the difference between E200 and E300 hardware platforms.

**Figure 1:** Connector panels of the E200 and E300



1 E200

2 E300

3 E300 has two additional USB ports

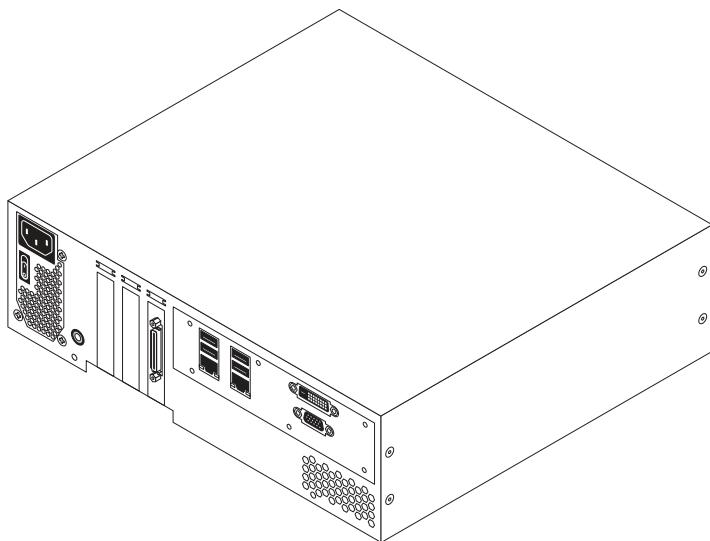
## About the EX-i Print Server

The EX-i Print Server embeds computer connectivity and highly efficient PostScript and PCL printing capacity into the Xerox® Color 60C/70C Printer.

It allows the customer to use the printer as a PostScript printer and scanner, and it provides efficient image processing and printing controls. Once it is connected to the printer through a network, customers can print to the EX-i Print Server from supported client computers on the network (Windows or Mac, or a UNIX workstation running TCP/IP).

The EX-i Print Server ships with system software pre-installed so that customers can use the EX-i Print Server immediately. However, as part of servicing the EX-i Print Server, you may need to reinstall system software.

**Figure 2:** The EX-i Print Server



## About this document

This service document describes how to install EX-i Print Server system software, and how to service the EX-i Print Server hardware. It is not intended for customer use. Information about the printer, network, remote computers, software applications, and EX-i Print Server operating system is not included in this document.

## Illustrations

In this document, illustrations reflect the version of the EX-i Print Server being shipped at the time of publication. Components in illustrations are subject to change. For information about EX-i Print Server components that do not match illustrations in this document, contact your authorized service/support center.

## Terms

In this document, the following terms are used.

- **Replace:** Refers to reinstallation of existing components. Do not install new components unless necessary.
- **Printer touch panel:** Refers to the printer user interface that is used to run the Fiery setup.

- **Linux:** This is the operating system of the EX-i Print Server. Available on System Software DVD.
- **System software:** The software installed on the hard disk drive (HDD) of the EX-i Print Server. Includes Linux operating system software.
- **Server software:** The EX-i Print Server software. Runs on Linux operating system. Available on System Software DVD.

## Document conventions

**Note:** The **Note:** indicator highlights important messages and additional information.

 **Warning:** A warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the equipment safely, always pay attention to these warnings.

 **Caution:** A caution concerning operations that may lead to injury to persons if not performed correctly. To use the equipment safely, always pay attention to these cautions.

 **Important:** Operational requirements and restrictions. Be sure to read these items carefully to operate the equipment correctly, and avoid damage to the equipment or property.

## How the EX-i Print Server operates

When a customer prints, the motherboard and printer interface board process image data. The printer interface board is a custom board and allows the EX-i Print Server to communicate with the printer. The CPU, which is located on the motherboard, controls the transfer of image data to and from the motherboard and runs the interpreter. DIMMs, which are also located on the motherboard, hold image data during printing.

The interpreter rasterizes the page description file and compresses the image pattern into memory using compression technology. The interpreter outputs the compressed raster data through the image frame buffer memory to the printer interface board. The raster data is sent to the printer, which then renders the image on paper at maximum speed.

## Preparing for hardware installation or parts replacement

Before installing or servicing the EX-i Print Server, follow general precautions and obtain the correct tools.

It is strongly recommended that before you service the EX-i Print Server, you carefully read all precautions and notices (see pages 11-13).

Also, keep in mind that the most common cause of a hardware problem is a faulty or loose connection. Before you replace an expensive component, check internal and external connections (see [page 35](#)).

## Precautions

This section includes information about how to safely operate and service the EX-i Print Server and how to avoid damage to EX-i Print Server components.

### Report shipping damage

If there is evidence of shipping damage, save the shipping boxes and damaged parts. Call the shipper immediately to file a claim and notify your authorized service/support center.

### Do not change an existing network

The EX-i Print Server is probably 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 site administrator.

### Do not assign an IP address to the EX-i Print Server

Only the site administrator should assign an IP address to a network device, including the EX-i Print Server. If you enter an incorrect IP address for the EX-i Print Server, errors may occur on connected devices.

### Handling boards

When handling a printed circuit board, do not bend it. Hold it by opposing edges, rather than by the corners.

### Handling the hard disk drive

To ensure that you do not damage the hard disk drive, do the following:

- Follow electrostatic discharge (ESD) precautions.
- Keep magnets and magnetic-sensitive objects away from the hard disk drive.
- Do not loosen or remove the screws on the top of the hard disk drive. Doing so voids the warranty.
- Handle the hard disk drive by its sides and avoid touching the printed circuit board.
- Do not drop, jar, or bump the hard disk drive.
- Before you remove or install a hard disk drive, allow it to reach room temperature.

### Avoid magnets

Keep magnets and magnetic-sensitive objects away from electronic components, especially the hard disk drive.

### Electrostatic discharge

When you work with electronic components, electrostatic discharge is a concern since it can destroy circuits, or damage them, reducing their life span. The area around the printer is most likely not static-free, and electrostatic discharge could occur.

Do the following to avoid damage due to electrostatic discharge:

- Work on a grounded antistatic mat.
- Wear an antistatic wristband, attached to the same location as the antistatic mat.
- Before you remove an electronic component from the shipping box, touch a metal area of the printer to discharge static from your body.
- After you remove an electronic component from the shipping box, place it face up on a grounded antistatic surface.
- Leave electronic components in antistatic bags until you are ready to use them.
- Do not walk on carpet or vinyl while carrying an electronic component, unless it is in an antistatic bag.
- If you remove an electronic component from the printer, immediately place it in an antistatic bag.

### **Power cable**

Observe the following guidelines:

- Only use the power cable that shipped with the EX-i Print Server or an appropriate replacement power cable. For replacement parts, see your authorized service support center.
- Before you open the EX-i Print Server, unplug the EX-i Print Server.
- Keep the power cable away from foot traffic.
- Do not place objects on the power cable.
- Do not plug the EX-i Print Server directly into the printer.
- Do not plug the EX-i Print Server into a 2-hole, ungrounded power outlet by means of a 3-prong adapter.
- Do not plug the EX-i Print Server into a circuit connected to heating or refrigeration equipment (including a water dispenser).
- Do not plug the EX-i Print Server into a switchable power outlet.
- Do not pull the cable to unplug the EX-i Print Server. Instead, pull the plug.
- Do not tamper with or disable the power cable grounding plug.
- Do not use an extension cord.

### **Do not have liquids near the EX-i Print Server**

If liquid spills on the EX-i Print Server, immediately unplug the EX-i Print Server.

### **Do not open the power supply**

For more information about the power supply, see “[Power supply](#)” on page 58.

## Do not open the hard disk drive

For more information about the hard disk drive, see “[Hard disk drive \(HDD\)](#)” on page 62.

## Use caution with sharp edges

The edges of some EX-i Print Server components are sharp.

## Fan notice

 **Warning:** This product contains hazardous moving parts. When servicing this product, keep away from moving fan blades.



**Warnung:** Dieses Produkt enthält gefährliche bewegliche Teile. Wenn dieses Produkt durchführen, halten weg Lüfterflügel bewegt.

**Attention:** Ce produit contient des pièces mobiles dangereuses. Lors de l'entretien de ce produit, garder loin des lames mobiles du ventilateur..

**Advarsel:** Dette produkt indeholder farlige bevægelige dele. Når service af dette produkt, holde sig væk fra bevægelige ventilatorblade.

**Varoitus:** Tämä tuote sisältää vaarallisia liikkuvia osia. Kun huollat täitä tuotetta, pitää poissa pyörivän tuulettimen lavat.

**Advarsel:** Dette produktet inneholder farlige bevegelige deler. Når vedlikehold av dette produktet, holde seg borte fra bevegelige vifteblader .

**Warning:** Denna produkt innehåller farliga rörliga delar. När servas, hålla sig borta från rörliga fläktblad .

**Advertencia:** Este producto contiene partes móviles peligrosas. Al dar servicio a este producto, mantener alejado de las aspas del ventilador.

**Avvertimento:** Questo prodotto contiene parti mobili pericolose. Per la manutenzione di questo prodotto, tenere lontano dal muoversi pale della ventola.

**Atenção:** Este produto contém partes móveis perigosas. Ao fazer a manutenção deste produto, manter afastado de movimento das pás do ventilador.

**Waarschuwing:** Dit product bevat gevaarlijke bewegende onderdelen. Bij onderhoud aan dit product, weg te houden van de bewegende ventilatorbladen.

## Tools you will need

To install or service the EX-i Print Server, you will need the following tools and parts:

- ESD wrist grounding strap and antistatic mat
- Flathead screwdriver
- #0, #1, and #2 Phillips head screwdrivers
- Needlenose pliers
- EX-i Print Server documentation, including the customer media pack and any related service bulletins

 **Important:** Avoid touching magnetic tools to storage media such as hard disk drives. Contact between magnetic tools and magnetic storage media may result in data corruption.

# Installing the Hardware

This chapter describes the process for installing the EX-i Print Server at the customer site. The chapter includes the following information:

- Checking the customer site
- Setting customer expectations
- Unpacking and placing the EX-i Print Server
- Preparing for installation
- Installing the EX-i Print Server
- Connecting the EX-i Print Server
- Verifying the EX-i Print Server installation
- Configuring a static IP address (where applicable)

## Checking the customer site

Before you install the EX-i Print Server, check site conditions and inform the customer of any installation requirements.

### Printer readiness

- Make sure that adequate space is available for the EX-i Print Server.

It may be necessary to move the printer out from the wall for easier access to the back of the unit, where the EX-i Print Server will be mounted.

### Power

- Make sure that a dedicated, grounded electrical outlet is available for the EX-i Print Server near the printer.

Locate the grounded electrical outlet that will supply power to the EX-i Print Server. Do not run the EX-i Print Server and the printer on the same circuit. If the customer has provided one, use a surge suppressor for the EX-i Print Server.

### Network

- Before you connect the EX-i Print Server, verify with the network administrator or Xerox analyst that the network is functioning.
- Make sure that the configuration requirements specified in *Configuration and Setup* (which is part of the user documentation set) have been met for remote computers and the network.

## System contact person

- Make sure that the network is available at the time set for installation.
- Obtain any special instructions from the Xerox analyst.

## Setting customer expectations

Inform the customer of the following:

- Some nodes on the network may be unavailable during the installation.
- The network administrator must 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 EX-i Print Server and confirms network functionality with the connector in place before the date scheduled for the installation.
- The network administrator must have a networked computer available during the installation. The appropriate software must already be installed. Documentation for the networked computer and network operating software should be available.
- The network administrator must install the user software shipped with the EX-i Print Server onto the networked Windows and Mac OS computers that print to the EX-i Print Server.

**Note:** This document covers EX-i Print Server hardware installation and service. It provides general information about connecting the EX-i Print Server to the customer's network. Network Setup and configuration information go beyond the scope of this document. For Network Setup and configuration information, refer the network administrator to *Configuration and Setup*, which is part of the user documentation set.

## Unpacking the EX-i Print Server

The EX-i Print Server is assembled and shipped from the factory in a box. For shipping contents, see the packing list document.

### To unpack the EX-i Print Server

- 1 Open the main shipping box and remove any packing materials.
- 2 Remove the contents of the shipping box and inspect them for visible damage.

If you notice shipping damage, keep the shipping box to show the carrier, if required. Call the carrier immediately to report the damage and file a claim, and then call your authorized service/support center.

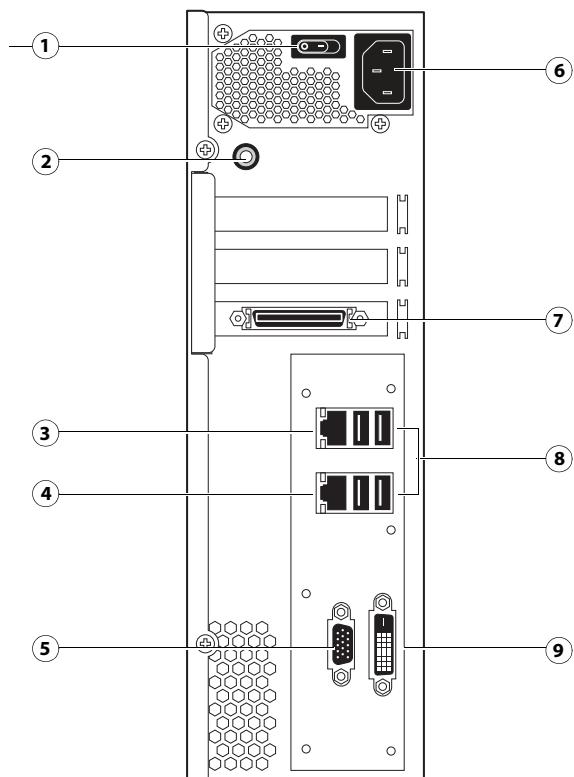
- 3 Give the media pack to the site administrator.

Let the network administrator know that to take full advantage of the EX-i Print Server, the user software must be installed on computers that will print to it.

## EX-i Print Server connectors

After you unpack the EX-i Print Server, familiarize yourself with the connector panel of the EX-i Print Server before you install it.

**Figure 3:** EX-i Print Server connectors



- |   |  |   |                                     |
|---|--|---|-------------------------------------|
| 1 | <i>Power switch</i>                            | 6 | <i>Power connector</i>              |
| 2 | <i>Power button</i>                            | 7 | <i>Printer interface connectors</i> |
| 3 | <i>Scan crossover connector (10/100 BaseT)</i> | 8 | <i>USB ports (x4)P</i>              |
| 4 | <i>Network connector (10/100/1000 BaseT)</i>   | 9 | <i>DVI port (not used)</i>          |
| 5 | <i>Monitor port (not used)</i>                 |   |                                     |

## Preparing for installation

Before installing the EX-i Print Server, do the following:

- Test printer functionality.

Print or photocopy a Test Page before you install the EX-i Print Server.

If the printed image indicates that the printer needs adjustment, inform the customer. After obtaining approval, complete the printer service needed.

- Check the network.

Verify that the network is functioning before you connect the EX-i Print Server.

- 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 *Configuration and Setup*, which is part of the user documentation set.

## Installing and connecting the EX-i Print Server

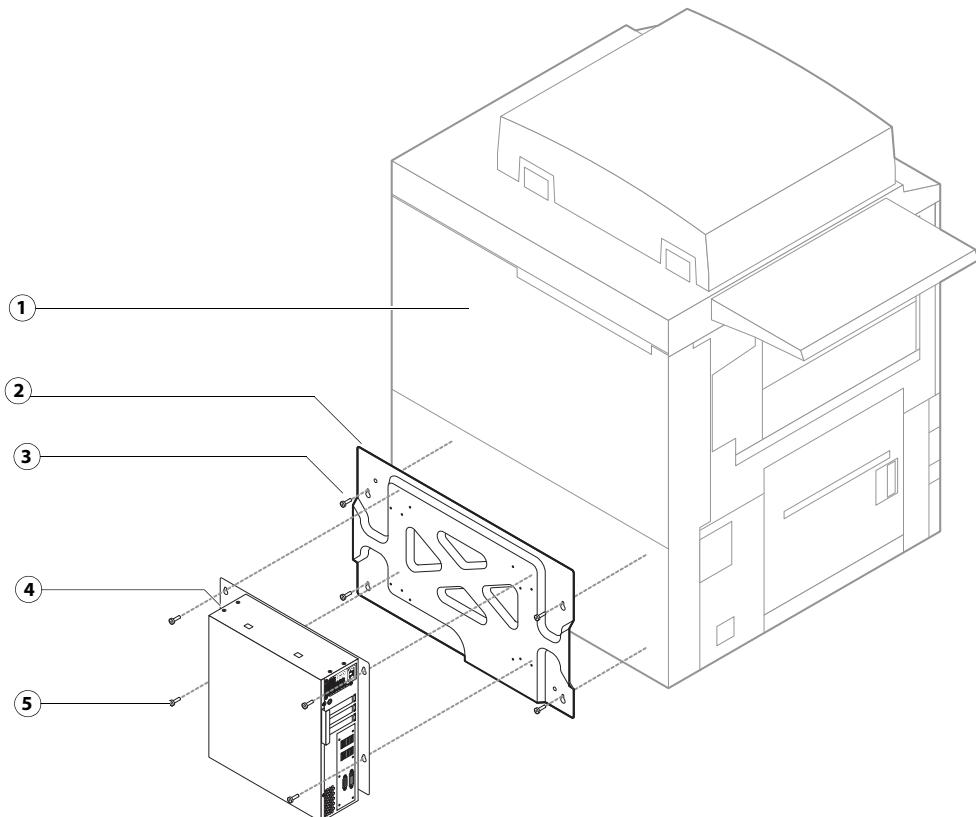
Use the procedures in the following sections to install and connect the EX-i Print Server.

 **Important:** Follow standard ESD (electrostatic discharge) precautions while handling components. For details, see “[Precautions](#)” on page 11.

### Installing the EX-i Print Server on the printer

This section describes how to mount the EX-i Print Server on the back of the printer.

**Figure 4:** Installing the EX-i Print Server on the printer



- 1 Back panel of printer
- 2 Printer plate
- 3 Printer plate screw (1 of 4)
- 4 EX-i Print Server with chassis plate
- 5 Mounting screw (1 of 4)

**To install the EX-i Print Server on the printer**

- 1 Locate the printer plate, provided with the printer. Install the printer plate on the back of the printer (see [Figure 4](#) on page 18).

**Note:** The printer plate is part of the installation kit for the printer. To install the plate, use the existing screws attached to the back of the printer.

Position the printer plate such that the beveled side faces outward and the four slotted holes in the plate align with four of the holes in the printer panel. Attach the printer plate securely, using the four screws.

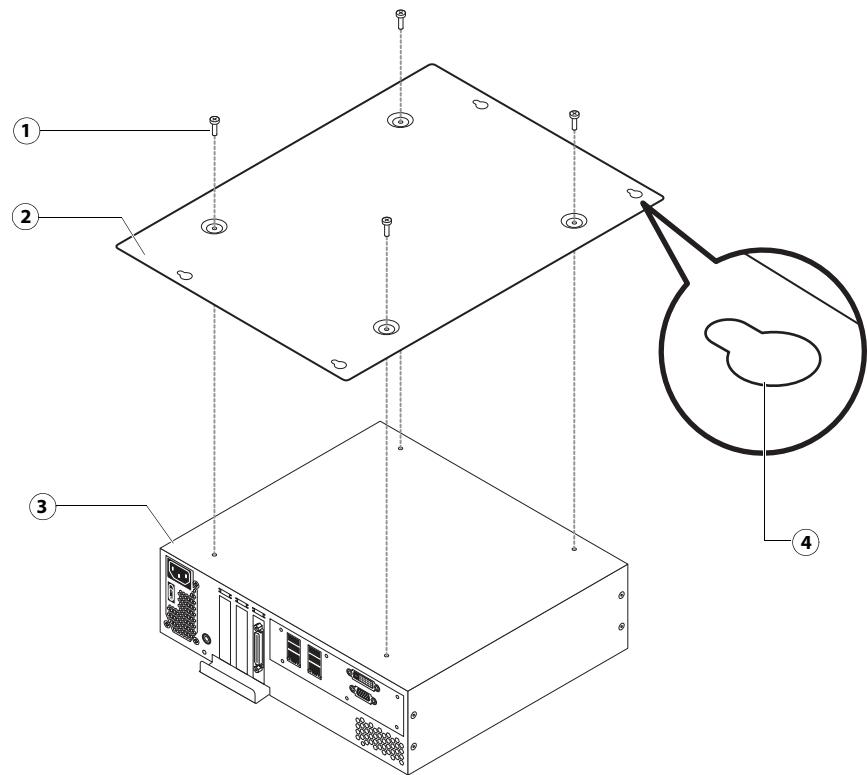
- 2 To prepare the EX-i Print Server for installation of the chassis plate, remove the existing four screws attached to the base of the EX-i Print Server.

**Note:** You will attach the chassis plate with the screws provided in the shipping box.

- 3 Locate the chassis plate and four chassis plate screws (shorter screws) provided in the shipping box.
- 4 Install the chassis plate on the base of the EX-i Print Server using the four chassis plate screws provided in the shipping box.

Position the chassis plate as shown in [Figure 5](#), such that the painted side is directly against the base of the EX-i Print Server and the slotted holes are oriented correctly.

**Figure 5:** Installing the chassis plate on the EX-i Print Server



1 Chassis plate screw provided in the shipping box (1 of 4)

2 Chassis plate

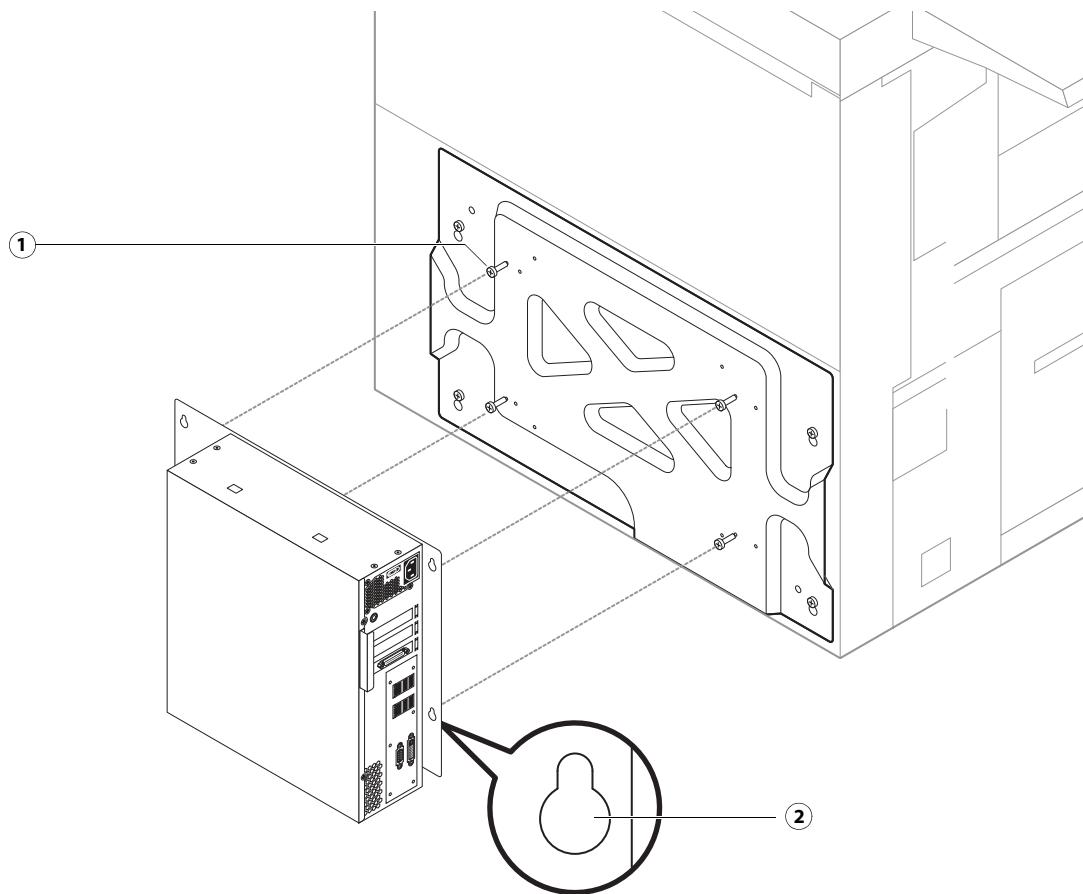
3 EX-i Print Server

4 Slotted hole (1 of 4)

- 5 Locate the four mounting screws (longer screws) provided with the EX-i Print Server. Secure the EX-i Print Server to the printer plate using the screws.

Insert the mounting screws into the four center holes in the printer plate. Tighten each screw halfway.

Align the slotted holes on the EX-i Print Server with the mounting screws (see [Figure 6](#)). Carefully lower the EX-i Print Server until the narrow ends of the slotted holes engage the mounting screws.

**Figure 6:** Mounting the EX-i Print Server on the printer

1 *Mounting screw (1 of 4)*

2 *Slotted hole (1 of 4)*

**6** Tighten all four mounting screws.

Make sure that the screws are fully tightened and that the EX-i Print Server is firmly attached to the printer.

## Connecting the EX-i Print Server

This section describes how to make the following connections:

- Printer interface cable
- Network cable
- Scan crossover cable
- Power cable

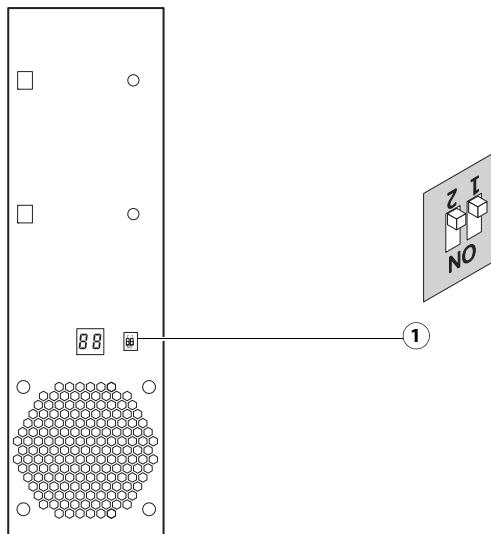
**Note:** For information about the network cable and ports, see [page 24](#).

**To connect the printer interface, network, scan crossover, and power cables**

- 1 Make sure that the EX-i Print Server service switches are set to normal (OFF) position (away from ON).

The service switches are located on the panel opposite the EX-i Print Server connectors.

**Figure 7:** EX-i Print Server service switches



- 1 *Service switches: Make sure that both switches are in normal (OFF) position.*
- 2 Connect one end of the printer interface cable to the printer interface connector on the EX-i Print Server. Connect the other end to the interface port on the printer (see [Figure 8](#)).

**Note:** To prevent risk of cross-talk, make sure that the printer interface cable does not touch any power cords. Image quality problems or EX-i Print Server shutdowns could result.

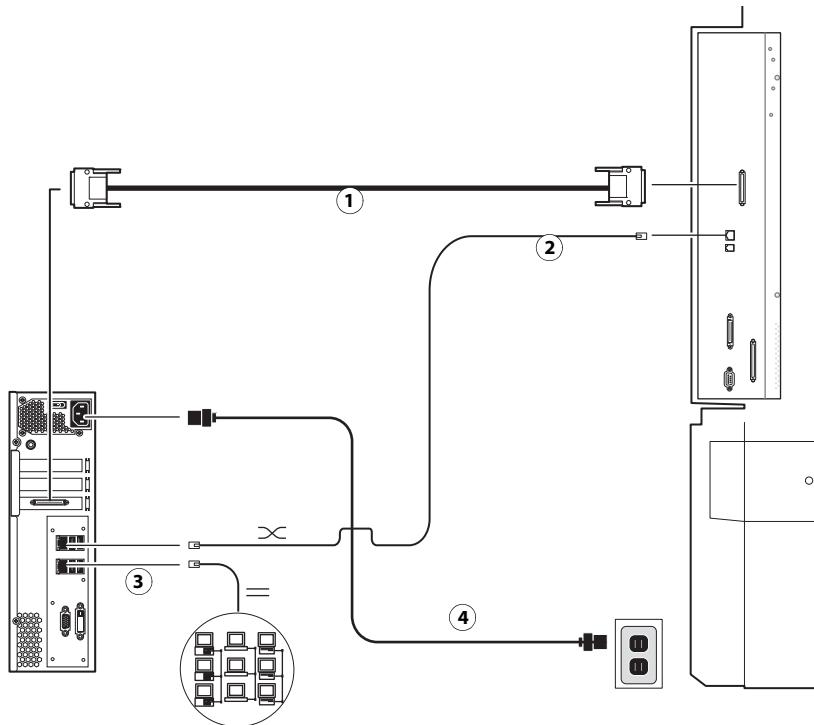
- 3 Connect one end of the network cable to the network connector on the EX-i Print Server. Connect the other end to the customer network (see [Figure 8](#)).

**Note:** Be sure to use a straight-through network cable at the customer site. For information about the network connection, including how to identify a network cable, see [page 24](#).

- 4** Connect one end of the scan crossover cable to the scan crossover connector on the EX-i Print Server. Connect the other end to the Ethernet port on the printer (see [Figure 8](#)).

**Note:** Be sure to use the scan crossover cable that shipped with the EX-i Print Server; this cable is a crossover Ethernet cable. For information about how to identify a crossover Ethernet cable, see [Figure 10](#) on page 25.

**Figure 8:** EX-i Print Server cable connections



1 *Printer interface cable*

2 *Scan crossover cable*

3 *Network cable*

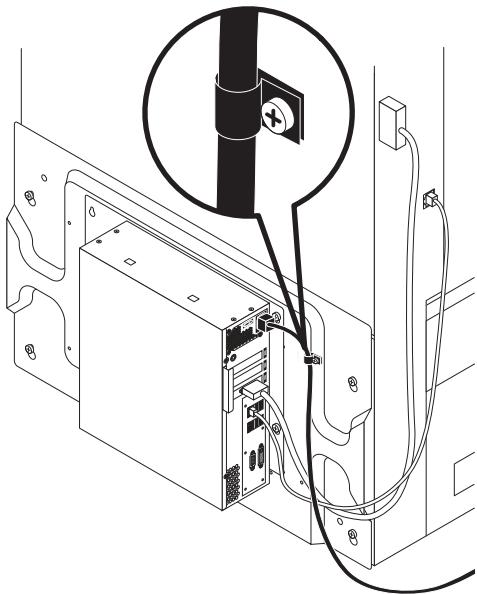
4 *Power cable*

- 5** Connect one end of the power cable to the power connector on the EX-i Print Server (see [Figure 8](#) on page 23). Connect the other end of the cable to the outlet on the wall.

**6** Secure the power cable to the printer using the cable harness.

Insert the power cable into the cable harness, and then install the cable harness on the printer using the remaining mounting screw provided with the EX-i Print Server.

**Figure 9:** Installing the power cable harness



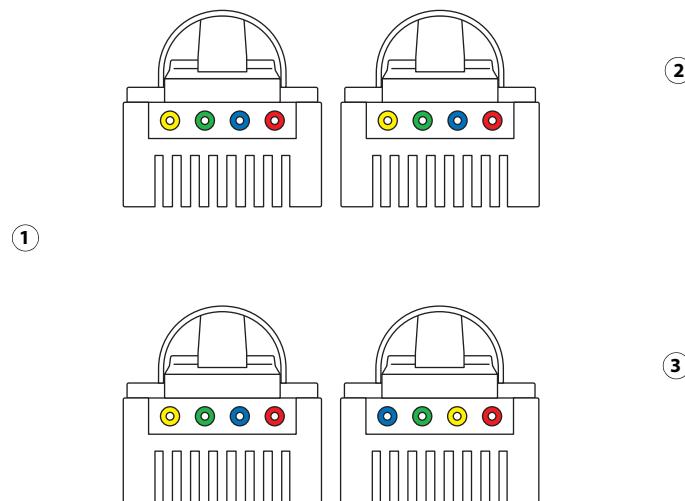
## Network cable and port

The EX-i Print Server network connection requires a straight-through Ethernet cable. Depending on your network speed, the following categories of straight-through Ethernet cables are supported:

- 10BaseT: Category 3 or higher
- 100BaseTX: Category 5 or higher (4-pair/8-wire, short-length)
- 1000BaseT: Category 5e or higher (4-pair/8-wire, short-length)

**⚠️ Important:** If the printer is 230V, use a shielded, straight-through Ethernet cable.

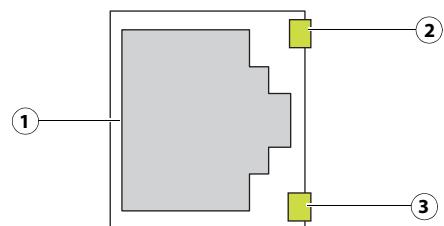
**Note:** The EX-i Print Server connects to the network through a *straight-through* cable, and to the printer through a *crossover* cable. These cable connections are not interchangeable. To verify the Ethernet cable type, align the connectors on each end of the cable, as shown in [Figure 10](#). On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable, the wire arrangements are different.

**Figure 10:** Straight-through and crossover Ethernet cables

- 1 Align cable connectors side by side and examine wires:
- 2 Straight-through cable: wire arrangements are identical on both connectors
- 3 Crossover cable: wire arrangements are different

## Network port LEDs

Figure 11 shows a detailed view of the EX-i Print Server network port.

**Figure 11:** Network port LEDs

- 1 10/100/1000BaseT network port
- 2 Upper LED
- 3 Lower LED

Two LEDs next to the network port indicate the current network link speed, as described in the following table.

**Table 1:** Network LED indicators

Network link speed	Upper LED	Lower LED
10 Megabits/second	Off	Green: Blinks slowly when link is established; blinks rapidly during data transfer.
100 Megabits/second	Steady green	Green: Blinks slowly when link is established; blinks rapidly during data transfer.
1000 Megabits/second	Steady amber	Green: Blinks slowly when link is established; blinks rapidly during data transfer.

## Configuring a static IP address for the EX-i Print Server

If the customer requires the EX-i Print Server to be configured with a static IP address (for example, in a non-DHCP network environment), obtain a valid, static IP address from the network administrator and configure the EX-i Print Server as described in the following procedure.

**Note:** You cannot access the EX-i Print Server over the network from a client computer until the EX-i Print Server has been configured with a valid IP address.

### To configure a static IP address for the EX-i Print Server

- 1 Obtain a static IP address from the network administrator.
- 2 Make sure that the scan crossover cable is connected to the EX-i Print Server and the printer.
- 3 Press the Services Home button, and then press Fiery on the printer touch panel.
- 4 Press Tools tab, and then click Setup.
- 5 Log on with Administrator privileges and type Fiery.1 as the password.
- 6 Configure the IP address settings.
  - Set the IPv4 Address Type to Manual.
  - Set the Gateway Type to Manual.
- 7 Work with the network administrator to configure the following settings:
  - **TCP/IP- Address:** Enter a valid address, then touch Save.
  - **TCP/IP- Subnet Mask:** Enter a valid Subnet mask, then touch Save.
  - **TCP/IP- Gateway Address:** Enter a valid Gateway address, and then touch Save.
- 8 **Save the settings and click OK at the alert prompt.**
- 9 Reboot the EX-i Print Server.

# Using the EX-i Print Server

This chapter describes how to use the EX-i Print Server.

## Starting, shutting down, rebooting, and restarting the EX-i Print Server

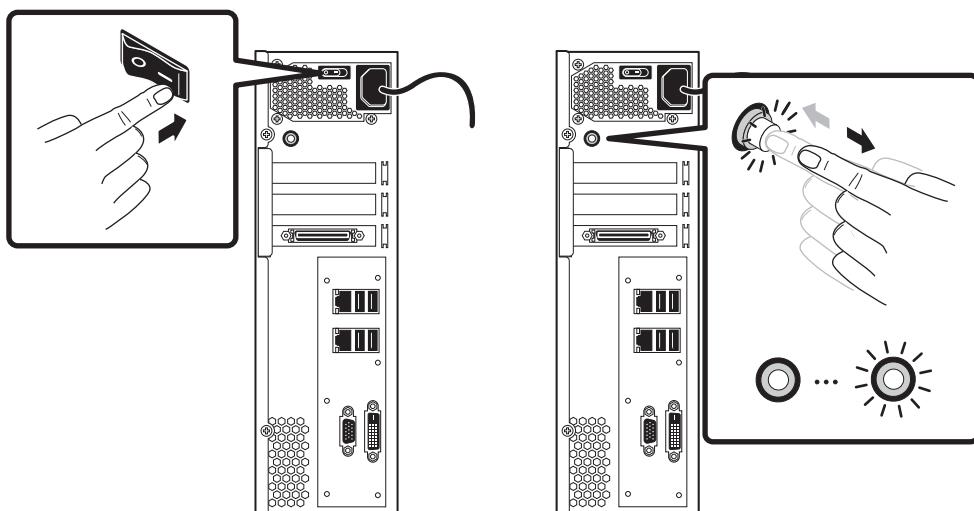
Always use the following procedures to start, shut down, reboot, or restart the EX-i Print Server.

**!** **Important:** Always verify that the EX-i Print Server is not in use before you power off or restart it. Make sure that the system is not processing or printing a job. Before you take the EX-i Print Server off the network, always obtain permission from the network administrator.

### To start the EX-i Print Server

- 1 Make sure that the power switch on the EX-i Print Server is set to ON (|), and then press the power button once to start EX-i Print Server.

**Figure 12:** Starting the EX-i Print Server



- 2 Power on the printer using the main power switch on the front.

Wait approximately five minutes for the printer to warm up and initiate the startup of the EX-i Print Server. To verify that the EX-i Print Server is ready for use, press the Services Home button on the printer touch panel and check that the Fiery icon is active.

If it has been enabled in Setup, the EX-i Print Server Start page will also print automatically when the EX-i Print Server is ready for use.

**Note:** If the EX-i Print Server does not start up within 10 minutes, see the Startup section of “[Table 2: Causes and solutions when printer does not print](#)” on page 97.

### To shut down the EX-i Print Server (for EX-i Print Server service)

- 1 Make sure that the printer is not in use, and power off the printer using the main power switch on the front.

Wait about one minute for the EX-i Print Server and printer to power off completely.

The light on the EX-i Print Server power button turns off when the EX-i Print Server finishes powering off. All LEDs on the printer touch panel turn off when the printer finishes powering off.

- 2 Move the EX-i Print Server power switch to OFF (O) position.

### To shut down the EX-i Print Server (for printer service)

- 1 If needed, press the Services Home button on the printer touch panel.

- 2 Touch Fiery > Info > Restart Server.

- 3 At the login prompt, select the Administrator option. Then touch the Password field.

- 4 Use the keyboard on the touch screen to enter the Administrator password for the EX-i Print Server, and then touch Enter.

The default Administrator password is **Fiery.1**. However, the network administrator may have configured a new password for the EX-i Print Server.

- 5 Touch Login.

- 6 Touch Shut Down System.

Wait about one minute for the EX-i Print Server to power off completely. The light on the EX-i Print Server power button turns off when the EX-i Print Server finishes powering off.

- 7 After the printer service is finished, press the EX-i Print Server power button once to start the system.

### To force a system shutdown

 **Important:** If the EX-i Print Server is unresponsive and it is not possible to shut down the system from the printer, use this procedure to force a system shutdown. Force a shutdown only as a last resort, when the normal shutdown method is unavailable.

- Press and hold down the power button on the EX-i Print Server for five seconds, until the green light goes out and the system powers off.

### To reboot or restart the EX-i Print Server

- 1 If needed, press the Services Home button on the printer touch panel.

- 2 Touch Fiery > Info > Restart Server.

- 3 At the login prompt, select the Administrator option. Then touch the Password field.

- 4 Use the keyboard on the touch screen to enter the Administrator password for the EX-i Print Server, and then touch Enter.

The default Administrator password is **Fiery.1**. However, the network administrator may have configured a new password for the EX-i Print Server.

- 5 Touch Login.

- 6 Touch one of the following:

- Reboot Server: Resets both the EX-i Print Server server software and the underlying operating system, and then reboots the EX-i Print Server.
- Restart Server: Resets the EX-i Print Server server software without rebooting the underlying operating system.

- 7 Wait approximately 5 minutes for the EX-i Print Server to finish rebooting or restarting.

Do not interact with the EX-i Print Server or the printer during this time. Ignore any messages about clearing settings and any messages reporting communication errors with the server; these messages occur normally during the reboot or restart process.

If it has been enabled in Setup, the EX-i Print Server Start page will also print automatically when the EX-i Print Server has finished rebooting or restarting.

### To force a system reboot

 **Important:** If the EX-i Print Server is unresponsive and you cannot reboot the system from the printer, use this procedure to force a system reboot. You should force a reboot only as a last resort, when the normal reboot method is unavailable.

- 1 Press and hold down the power button on the EX-i Print Server for five seconds until the green light goes out and the system powers off.
- 2 Press the power button once to power on the system.

# Replacing Parts

Generally, the EX-i Print Server does not require regular maintenance. Use the procedures in this chapter to inspect, remove, reseat, or replace major hardware components.

## Overview

This chapter includes information about the following:

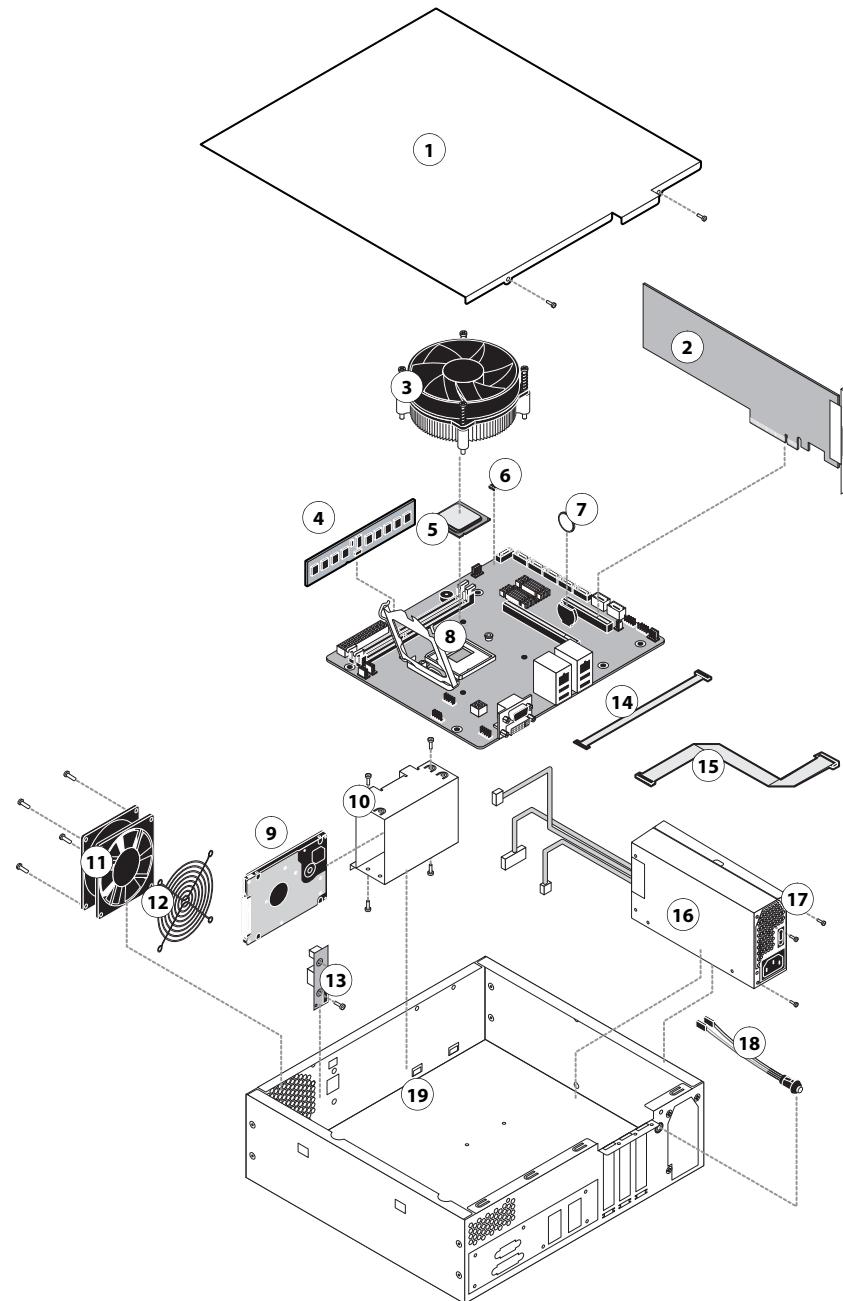
- Diagrams of EX-i Print Server components ([page 31](#))
- Connector panel and LED display codes ([page 32](#))
- Accessing the EX-i Print Server ([page 33](#))
- Cable connections ([page 35](#))
- Removing and replacing EX-i Print Server components ([page 38](#))

 **Important:** When performing the procedures described in this chapter, see “[Precautions](#)” on page 11 and “[Tools you will need](#)” on page 14.

## EX-i Print Server components

The figures in this section provide an overview of components in the EX-i Print Server.

**Figure 13:** Exploded view of EX-i Print Server components

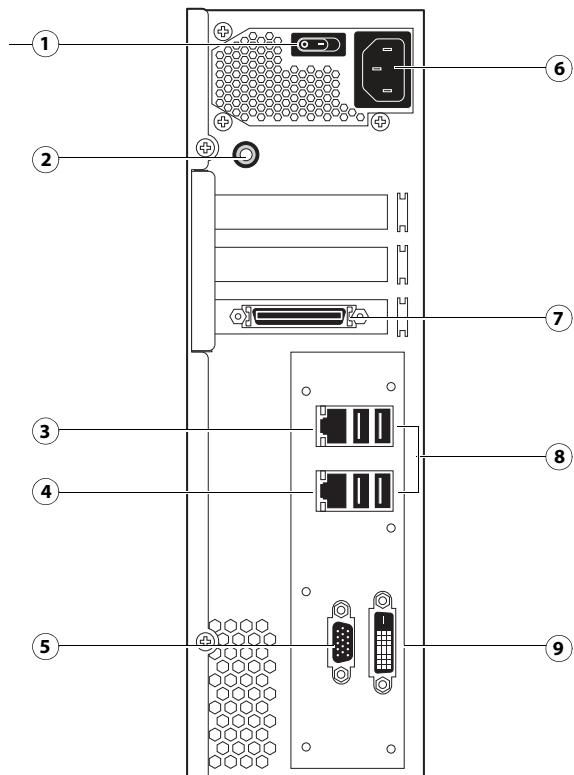


1	<i>Chassis cover</i>	6	<i>Security chip</i>	10	<i>HDD bracket</i>	15	<i>Service board cable</i>
2	<i>Printer interface board</i>	7	<i>Battery</i>	11	<i>Chassis fan</i>	16	<i>Power supply</i>
3	<i>CPU cooling assembly</i>	8	<i>Motherboard</i>	12	<i>Chassis fan guard</i>	17	<i>Power switch</i>
4	<i>2GB DIMM</i>	9	<i>500GB SATA HDD (hard disk drive)</i>	13	<i>Service board</i>	18	<i>Power button</i>
5	<i>2.7GHz CPU</i>			14	<i>HDD SATA data cable</i>	19	<i>Chassis</i>

## EX-i Print Server connector panel and LED diagnostic codes

The connector panel of the EX-i Print Server has the external connectors, power switch, and power button. Familiarize yourself with the connector panel of the EX-i Print Server.

**Figure 14:** EX-i Print Server connectors

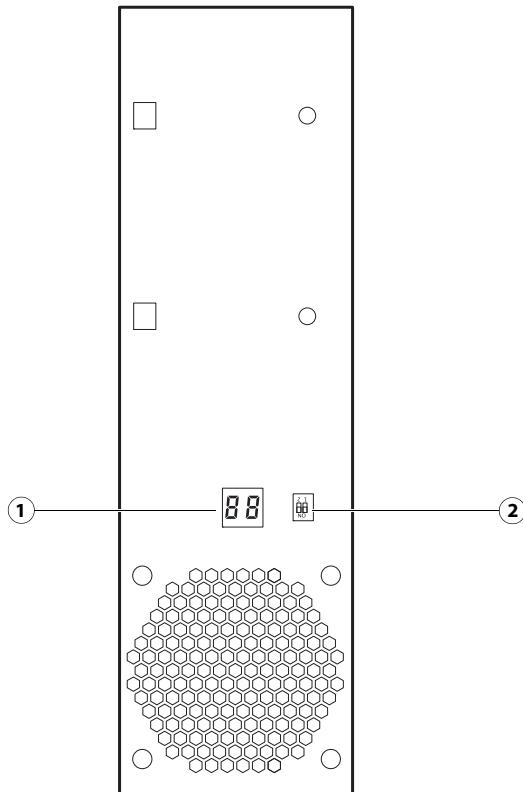


- |   |  |   |                                     |
|---|--|---|-------------------------------------|
| 1 | <i>Power switch</i>                            | 6 | <i>Power connector</i>              |
| 2 | <i>Power button</i>                            | 7 | <i>Printer interface connectors</i> |
| 3 | <i>Scan crossover connector (10/100 BaseT)</i> | 8 | <i>USB ports (x4)P</i>              |
| 4 | <i>Network connector (10/100/1000 BaseT)</i>   | 9 | <i>DVI port (not used)</i>          |
| 5 | <i>Monitor port (not used)</i>                 |   |                                     |

During startup, the EX-i Print Server advances through a standard diagnostic sequence. Each diagnostic code flashes rapidly on the LED display during this sequence, until the EX-i Print Server reaches Idle. At Idle, the LED display shows the 00 code.

**Note:** The LED display is mounted in upside-down orientation.

**Figure 15:** LED display



If the LED display hangs on a code other than 00, one or more diagnostic tests may have failed. Look up the diagnostic code in ["Table 2: Causes and solutions when printer does not print"](#) on page 97 to determine the troubleshooting actions that you should take.

## Accessing the EX-i Print Server

Always use the following procedure to disconnect the EX-i Print Server from the printer and open the unit for inspection and service.



**Important:** Make sure that you attach an ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions before following this procedure. For details, see ["Precautions"](#) on page 11.

### To access the EX-i Print Server

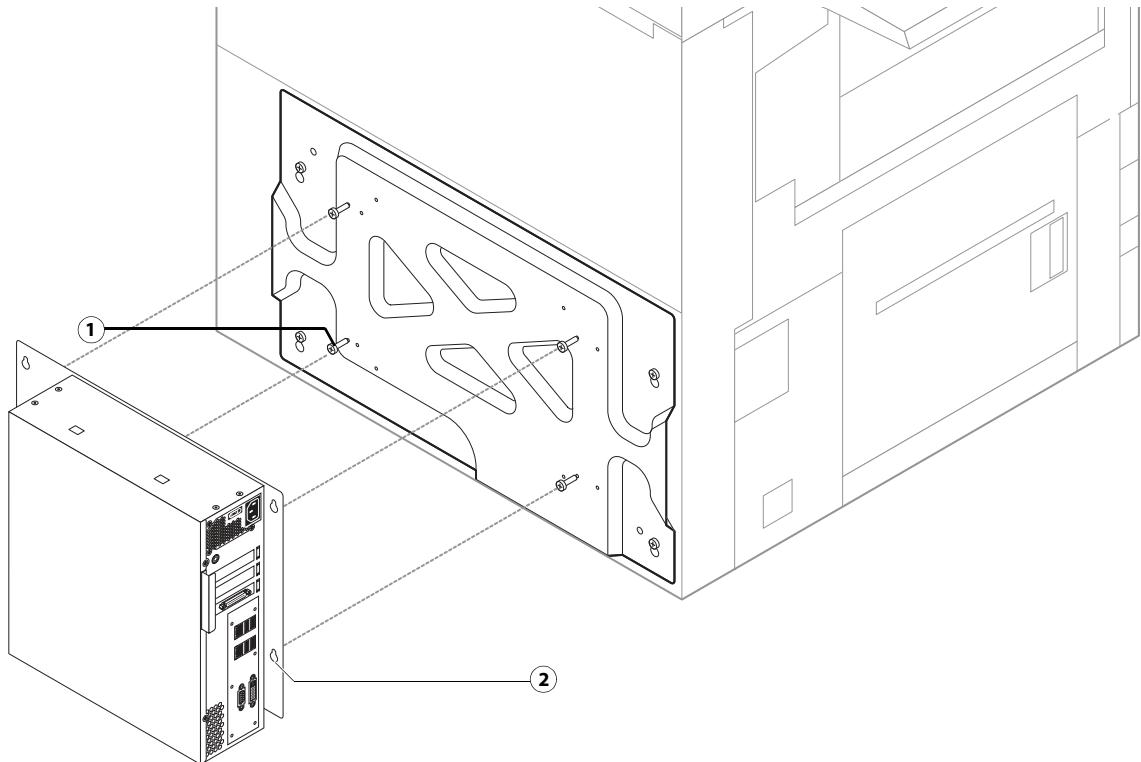
- 1 Make sure that the EX-i Print Server is not receiving, processing, or printing any jobs.
  - 2 Make sure that the printer is not in use, and power off the printer using the main power switch on the front.
- Wait for the printer and the EX-i Print Server to power off completely.

- 3 Move the EX-i Print Server power switch to the OFF (O) position.
- 4 Remove all external cables from the EX-i Print Server connectors.
- 5 Loosen the four mounting screws that secure the EX-i Print Server to the back of the printer.

Loosen, but do not remove, the mounting screws.
- 6 Carefully lift up to release the EX-i Print Server from the mounting screws.

Lift up until the four slotted holes in the EX-i Print Server clear the four mounting screws (see [Figure 16](#)).

**Figure 16:** Removing the EX-i Print Server from the printer



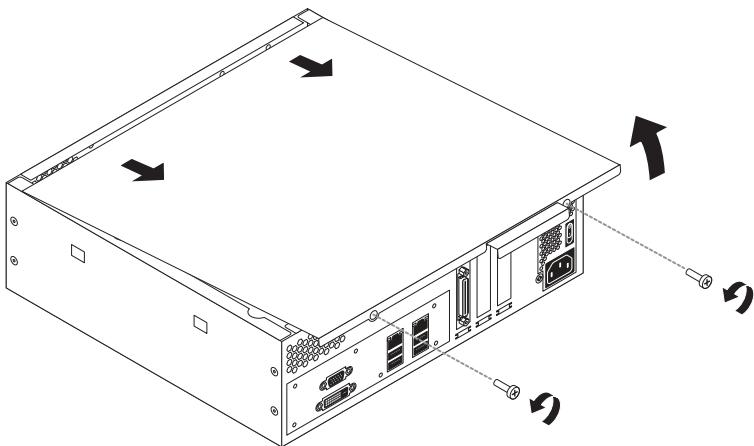
1 *Mounting screw (1 of 4)*

2 *Slotted hole (1 of 4)*

- 7 Remove the two screws that secure the cover of the EX-i Print Server to the chassis (see [Figure 17](#)).
- Set aside the screws so that you can replace them later.
- 8 Raise the cover and slide it toward the connector panel of the chassis to remove it.
- Set aside the cover so that you can replace it later.

The EX-i Print Server internal components are now accessible.

**Figure 17:** Removing the chassis cover



## Checking EX-i Print Server internal connections

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

**! Important:** Before you touch any parts inside the EX-i Print Server, attach a grounding wrist strap. Touching the chassis also discharges static electricity.

### To check cable connections

- 1 Access and open the EX-i Print Server (see [page 33](#)).
- 2 Place the EX-i Print Server on a flat surface so that the internal components are facing up.
- 3 Make sure that the battery is properly installed (see [page 42](#)).
- 4 Inspect the HDD data cable to make sure that it is intact and connected to the SATA\_6G 0 connector on the motherboard (see [page 45](#)).

**Note:** The EX-i Print Server will not boot up if the HDD data cable is connected to any other SATA connector on the motherboard.

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

- 5 Check the fan cables of the chassis fan and CPU fan.

Make sure that the cables are intact.

- 6 Check the service board cable.

Make sure that the cable is intact and properly connected to the service board and the motherboard. For more information, see [page 54](#).

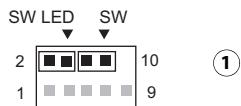
- 7 Make sure that the internal power cables are intact and properly connected to the power supply, HDD, and motherboard.
- 8 Check the cables for the power button.

Make sure that the SW and SW LED cables are intact and connected to the power button and to the correct pins of connector J20 on the motherboard:

- SW LED cable: Red wire to pin 2, black wire to pin 4
- SW cable: Red wire to pin 6, yellow wire to pin 8

Align the triangle on each cable connector with the correct pin as shown in [Figure 18](#).

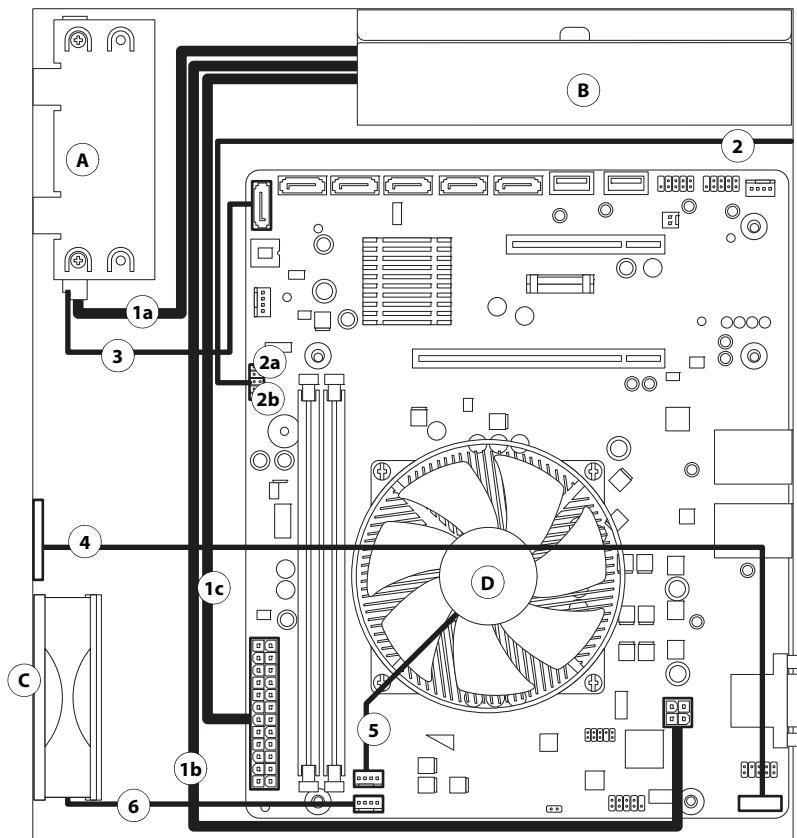
**Figure 18:** Cable connections for power button



1 *J20 on the motherboard*

The following diagrams illustrate the internal cable connections between hardware components and the motherboard.

**Figure 19:** EX-i Print Server internal cable connections



<b>Cable key</b>	<b>From</b>	<b>To</b>
1	Power supply cables	<p><i>Power supply</i></p> <p>a. SATA power connector—HDD</p> <p>b. 4-pin motherboard connector (J24)</p> <p>c. 24-pin motherboard connector (ATX24P_1)</p>
2	Power button cables	<p><i>Power button</i></p> <p>a. SW LED cable—J20 (pins 2 and 4) (For details, see <a href="#">Figure 18</a> on page 36.)</p> <p>b. SW cable—J20 (pins 6 and 8)</p>
3	HDD data cable	<i>HDD data connector</i> <i>SATA_6G_0 on motherboard</i>
4	Service board cable	<i>Service board connector</i> <i>PORT80 connector on motherboard</i>
5	CPU fan cable	<i>CPU fan</i> <i>CPU FAN connector on motherboard (J16)</i>
6	Chassis fan cable	<i>Chassis fan</i> <i>SYSFAN connector on motherboard (J21)</i>

## Removing and replacing EX-i Print Server components

Before replacing costly components, be sure to verify the connections between the printer and the EX-i Print Server. Also, verify the connections of each replaceable EX-i Print Server component. For more information about troubleshooting, see [Troubleshooting](#).

The following sections describe how to remove and install replaceable parts on the EX-i Print Server:

- Printer interface board
- DIMM
- Battery
- Motherboard
- CPU and CPU cooling assembly
- Service board
- Chassis fan
- Power supply
- Power button
- Hard disk drive (HDD)

For information about replacing other components, see the documentation that accompanies your printer.

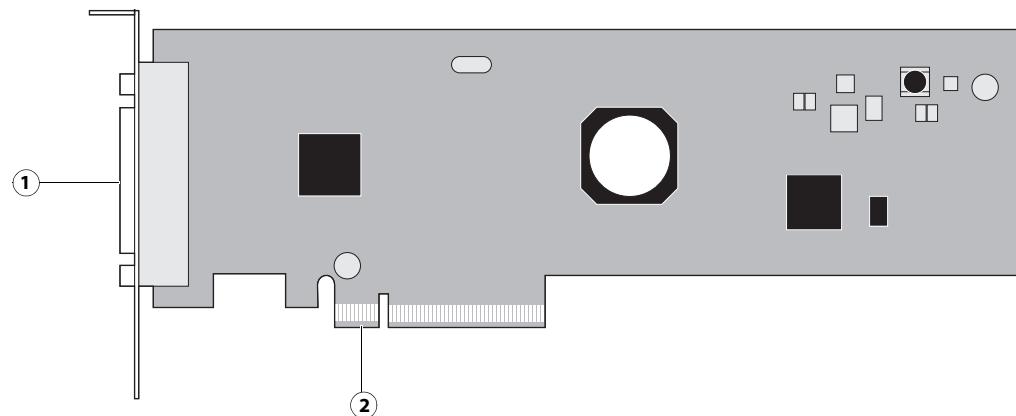
 **Important:** Be sure to use an ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions while performing these procedures. For details, see ["Precautions"](#) on page 11.

**Note:** There may be tie-wraps used to secure the cables to the chassis. If necessary, cut these tie-wraps before removing the components.

## Printer interface board

The printer interface board is installed in PCIE x16 on the motherboard.

**Figure 20:** Detail of printer interface board (component side)



1 60-pin printer interface connector

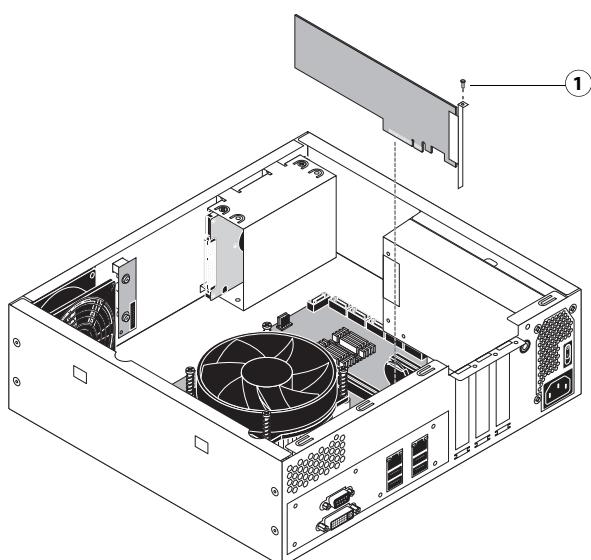
2 PCIE x16 connector

### To remove the printer interface board

- 1 Access and open the EX-i Print Server, as described on [page 33](#).
- 2 Remove the mounting screw that secures the printer interface board to the EX-i Print Server chassis (see [Figure 21](#)).

Set aside the mounting screw so that you can replace it later.

**Figure 21:** Removing the printer interface board



1 Mounting screw

**3** Remove the printer interface board from the chassis.

Gently pull the printer interface board straight out of the PCI slot on the riser card. Place the printer interface board on an antistatic surface.

**To replace the printer interface board****1** Firmly seat the printer interface board in PCIE x16 on the motherboard.

For the location of PCIE x16, see [Figure 24](#) on page 45. The riser card is keyed to fit only one way.

**2** Replace the mounting screw that secures the printer interface board to the chassis.

Insert the mounting screw through the chassis and into the hole on the board mounting bracket (see [Figure 21](#) on page 39). Tighten the screw completely.

**3** Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).**DIMM**

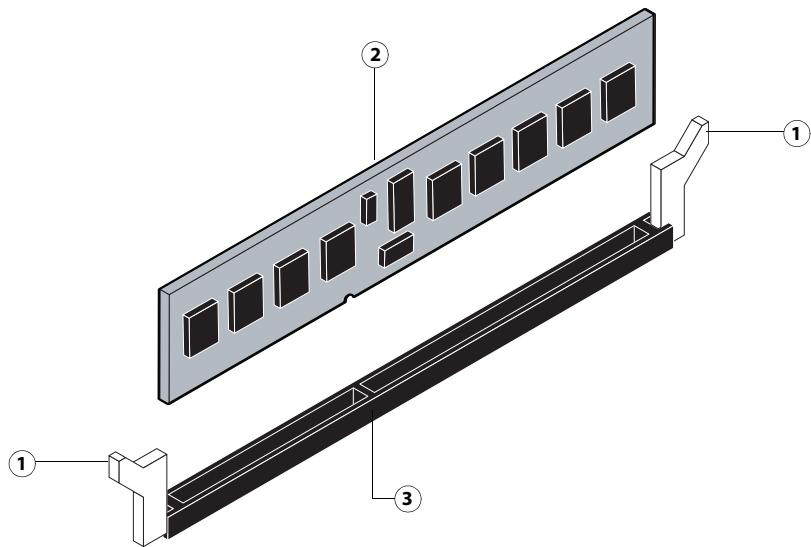
DIMM (dual in-line memory module) is held in place by a lever at end of the DIMM socket. The motherboard contains one DIMM socket.

**Note:** Approved DIMMs are available from your authorized service/support center.

**To replace a DIMM****1** Access and open the EX-i Print Server, as described on [page 33](#).

- 2** To release a DIMM, push outward on the levers on each side of the DIMM (see [Figure 22](#)).

**Figure 22:** Releasing a DIMM



1 Lever

2 DIMM

3 Socket notch

- 3** Lift the DIMM straight out of the socket.

- 4** To replace a DIMM, position the DIMM in the socket and press the DIMM straight down into the socket, so that the levers lock the DIMM into place (see [Figure 22](#) on page 41).

**Note:** DIMM fits in the socket only one way. The notch on the bottom of the DIMM should line up with the notch in the socket.

Make sure that the levers close securely around the ends of the DIMM and that the DIMM is fully seated in its socket.

- 5** Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).

## Motherboard

This section describes the battery and default jumper settings on the EX-i Print Server motherboard, as well as procedures for removing and replacing the motherboard.

### Battery

The battery is located on the motherboard. Spare batteries are not provided by your authorized service/support center. If you must replace the battery, use a 3V manganese dioxide lithium coin cell battery (Panasonic CR2032 or equivalent).

 **Caution:** There is a danger of explosion if the battery is replaced with the incorrect type. Replace it only with the same type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

**ACHTUNG:** Es besteht Explosionsgefahr, wenn die Batterie durch eine Batterie falschen Typs ersetzt wird. Als Ersatz dürfen nur vom Hersteller empfohlene Batterien gleichen oder ähnlichen Typs verwendet werden. Verbrauchte Batterien müssen entsprechend den Anweisungen des Herstellers entsorgt werden.

**ATTENTION:** Il y a risque d'explosion si la pile est remplacée par un modèle qui ne convient pas. Remplacez-la uniquement par le modèle recommandé par le constructeur. Débarrassez-vous des piles usées conformément aux instructions du constructeur.

**ADVARSEL:** Lithiumbatteri - Eksplorationsfare ved fejlagtig håndtering. Udskiftning må kun ske med samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

**VAROITUS:** Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä Käytetty paristo valmistajan ohjeiden mukaisesti.

**ADVARSEL:** Eksplorationsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

**WARNING:** Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparat-tillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

**CUIDADO:** Existe peligro de explosión si la batería se sustituye por una batería del tipo incorrecto. Sustituya la batería sólo por una batería del mismo tipo que recomienda el fabricante. Deseche las baterías usadas respetando la normativa local.

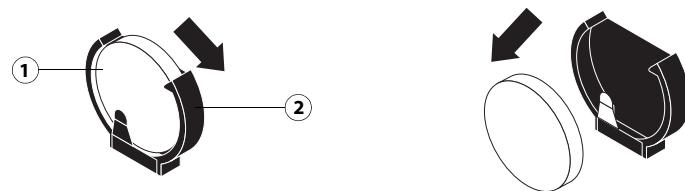
**ATTENZIONE:** Esiste pericolo di esplosione se la batteria viene sostituita con una di tipo non corretto. Sostituirla solamente con un tipo raccomandato dal produttore. Lo smaltimento delle batterie usate deve essere eseguito secondo le normative locali.

**AVISO:** Existe o perigo de explosão se a bateria for substituída por uma do tipo incorreto. Substitua somente por uma do tipo recomendado pelo fabricante. Descarte as baterias conforme as normas locais.

**GEVAAR:** Er bestaat ontploffingsgevaar indien de batterij door een verkeerd type wordt vervangen. Vervang de batterij uitsluitend door hetzelfde door de fabrikant aanbevolen type. Ruim gebruikte batterijen op volgens de plaatselijke voorschriften.

**To replace the battery**

- 1 Access and open the EX-i Print Server as described on [page 33](#).
- 2 Locate the battery on the motherboard (see [Figure 24](#) on page 45).
- 3 While pushing and holding the right-hand side of the socket, carefully push the battery out of the socket.

**Figure 23:** Removing the motherboard battery

- 1 *Battery*  
2 *Socket*

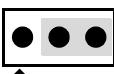
- 4 Wait two minutes to allow the motherboard electrical components to fully discharge.
- 5 To insert a new battery, slide it into the socket so that the positive (+) side of the battery faces front.
- 6 Press the battery down into the socket until it snaps into place.  
Make sure that the battery is securely installed in the socket.
- 7 Reassemble the EX-i Print Server and verify functionality (see [page 65](#)).
- 8 Configure the date and time in Setup (see [page 43](#)).

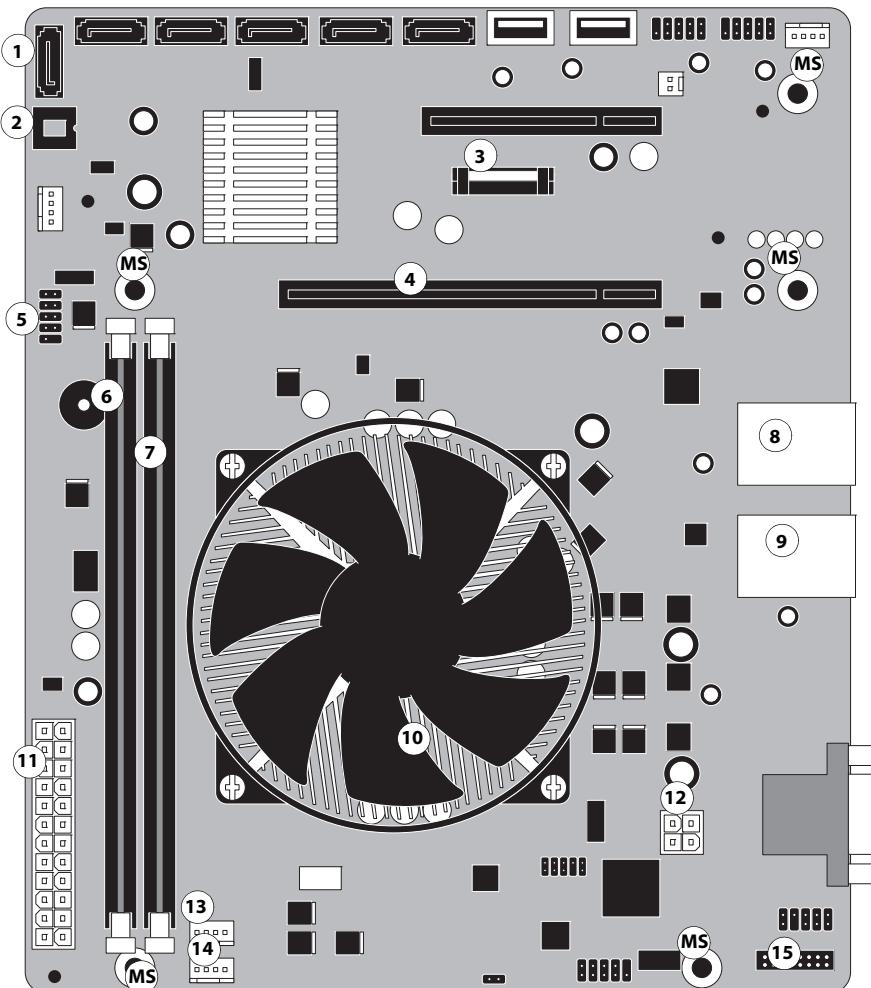
**To configure the system date and time**

- 1 On a client computer that is connected to the same network as the EX-i Print Server, open a Web browser window.
- 2 In the URL field of the browser, type the IP address or DNS name of the EX-i Print Server, and press Enter.  
The IP address is listed under the Network Setup section of the EX-i Print Server Configuration page.
- 3 On the WebTools home page, click the Configure tab.
- 4 Click Launch Configure.
- 5 Type the administrator account in User name and the corresponding password in Password, then click Log In.  
You can enter “Administrator” or “admin” for the administrator account name. The default password is **Fiery.1** (case-sensitive). However, the site administrator may have configured a new password for the EX-i Print Server.
- 6 Select Fiery Server > Regional Settings and specify the current date and time, and click Save.
- 7 Click Log Out to exit Configure.

## Motherboard jumpers

 **Important:** Jumper configuration should not be changed.

Jumper	Description
<i>J4</i>  <i>Pin 1</i>	<p>J4 is the Clear CMOS and Password jumper. Default configuration: jumper cap installed on pins 2 and 3.</p> <p><b>Note:</b> Because the jumper cap is very small, it is not necessary—and could introduce an error—to remove the jumper cap in order to clear the CMOS settings.</p>

**Figure 24:** Diagram of the motherboard

- |   |   |    |  |    |   |
|---|---|----|--|----|---|
| 1 | <i>HDD data connector (SATA_6G_0)</i>     | 7  | <i>Crossover Ethernet port / Type A USB ports (x2)</i> | 12 | <i>4-pin power connector (J24)</i>        |
| 2 | <i>Security chip (J12/CRYPTO)</i>         | 8  | <i>Type A USB ports (x2) / Network port (RJ-45) /</i>  | 13 | <i>CPU fan connector (CPU FAN J16)</i>    |
| 3 | <i>Battery (XBT1)</i>                     | 9  | <i>Type A USB connector (x2)</i>                       | 14 | <i>Chassis fan connector (SYSFAN J21)</i> |
| 4 | <i>Printer interface board (PCIE x16)</i> | 10 | <i>CPU and cooling assembly</i>                        | 15 | <i>Service board connector (PORT80)</i>   |
| 5 | <i>Power button pins (J20)</i>            | 11 | <i>24-pin power connector (ATX24P_1)</i>               | MS | <i>Mounting screws</i>                    |
| 6 | <i>DIMM</i>                               |    |  |    |   |

**Note:** Any connectors not listed are not used.

## Removing the motherboard

Before you remove the motherboard, you must remove:

- All boards installed on the motherboard
- All cables connected from other components to the motherboard (these include both motherboard power cables, chassis fan cable, HDD data cable, power button cables, and service board cable)

 **Important:** Follow standard ESD precautions while handling the motherboard and all components. For details, see “[Precautions](#)” on page 11.

### To remove motherboard components from the motherboard

- 1 Access and open the EX-i Print Server, as described on [page 33](#).
- 2 Remove the printer interface board from the motherboard (see [page 39](#)).
- 3 Remove the following cables attached to the motherboard:
  - Chassis fan cable
  - HDD data cable
  - 4-pin power cable
  - 24-pin power cable
  - Service board cable
  - SW and SW LED cables for power button

For the location of each connector on the motherboard, see [Figure 19](#) on page 37.

### To remove the motherboard

 **Important:** Follow standard ESD and other safety precautions when handling the motherboard. Do not touch the contacts and avoid using excessive force. Place the motherboard on a grounded, antistatic surface.

- 1 Remove the five mounting screws that secure the motherboard to the base of the chassis (see [Figure 24](#) on page 45 for the screw locations on your motherboard).

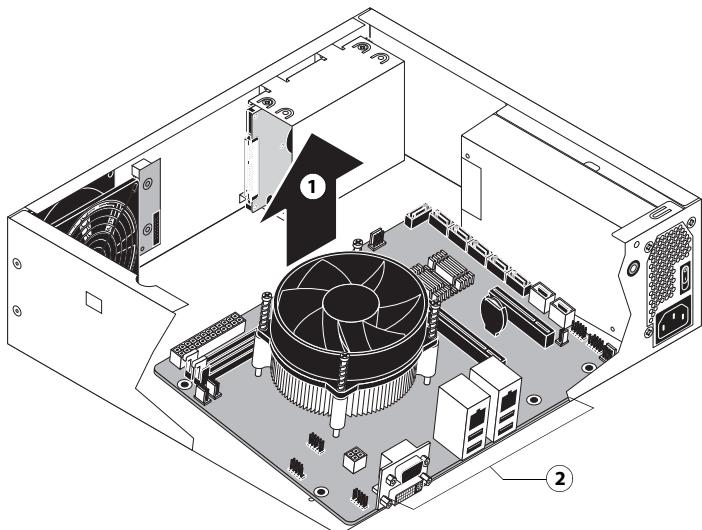
To minimize tension on the motherboard, loosen all the screws partially before removing any one screw completely.

- 2 Lift the edge of the motherboard opposite the connector panel to release the motherboard from the chassis, and then gently slide the motherboard out of the chassis.

**Note:** Make sure to lift the edge of the motherboard near jumper area SPKR1 so that the underside of this area clears the nearby screw standoff.

Make sure that the connectors on the motherboard clear the cutouts in the chassis as you remove the board. Avoid handling contacts or using excessive force.

**Figure 25:** Removing the motherboard from the chassis



- 1 Lift edge of motherboard and remove from chassis.
  - 2 Make sure that the motherboard connectors clear the cutouts in the chassis (cutouts not shown).
- 3** If you are replacing the motherboard with a new motherboard, remove the following from the old motherboard:
- DIMM (see [page 40](#))
  - CPU (see [page 50](#))
  - Security chip (see [page 47](#))

### Transferring the security chip

Transferring the security chip from the old motherboard to the new motherboard ensures that all customer-purchased software options are transferred.

**!** **Important:** Make sure to remove the security chip from the old motherboard *before* returning the old motherboard to your authorized service/support center. If you fail to install the security chip on the new motherboard, the EX-i Print Server will not start up and all customer-purchased software options will be lost.

### To transfer the security chip to the new motherboard

- 1 Locate the extraction tool provided in the new motherboard kit.

**2** Remove the security chip from socket J12(CRYPTO) on the old motherboard (see [Figure 24](#) on page 45).

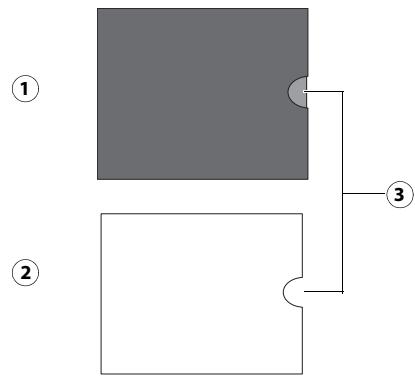
Carefully position the extraction tool around the edges of the security chip, and pull the chip straight out of the socket. Make sure not to put stress on surrounding components.

 **Important:** Do not rock the chip from side to side when removing it from the socket. Doing so may result in permanent damage to the security chip.

**3** Inspect the security chip and carefully straighten any bent pins with needlenose pliers.**4** Install the security chip in socket J12(CRYPTO) on the new motherboard.

**Note:** Be sure to align the small notch in the security chip with the notch in the outline that appears inside socket J12(CRYPTO). If you install the security chip incorrectly, you may corrupt the security chip and/or the motherboard.

**Figure 26:** Aligning the security chip



1 J12(CRYPTO)

2 Security chip

3 Align notches

## Replacing the motherboard

Use the following procedure to install the motherboard in the EX-i Print Server chassis.

### To replace the motherboard

**1** If you are installing a new motherboard, do the following:

- Remove the security chip from the old motherboard and install it onto the new motherboard (see [page 47](#)).
- Install the DIMM(s) from the old motherboard onto the new motherboard (see [page 40](#)).
- Install the CPU from the old motherboard onto the new motherboard (see [page 50](#)).

When installing these components, make sure that the motherboard is placed on an antistatic surface with some padding.

*Do not* transfer the BIOS chip from the old motherboard onto the new motherboard. Doing so can cause the system to shut down due to incompatibility issues.

- 2** Angle the motherboard so that the connectors on the motherboard fit into the cutouts in the connector panel of the chassis, and gently slide the motherboard into the chassis (see [Figure 25](#) on page 47).

**Note:** As you slide the motherboard into position, lift the connector edge to ensure that the underside of jumper area SPKR1 clears the nearby screw standoff.



**Important:** Be sure to fit the motherboard Ethernet connectors under the metal grounding tabs in the cutouts. Failure to position the grounding tabs correctly may result in permanent damage to the motherboard and power supply.

- 3** Align the mounting holes on the motherboard with the screw holes located in the base of the chassis (see [Figure 24](#) on page 45 for the mounting hole locations).
- 4** Insert the five mounting screws that attach the motherboard to the chassis.

Partially tighten each screw before completely tightening any one screw. Do not overtighten the screws; doing so could damage traces on the motherboard.

Now you are ready to replace the remaining motherboard components to complete the motherboard installation.

### To replace motherboard components

- 1** Replace the following cables to the motherboard (see [Figure 19](#) on page 37 for the location of each connector):

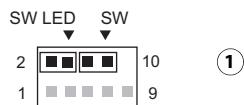
- Power button cables

Be sure to connect each cable to the correct pins on J20:

- SW LED cable: Red wire to pin 2, black wire to pin 4
- SW cable: Red wire to pin 6, yellow wire to pin 8

Align the triangle on each cable connector with the correct pin, as shown in [Figure 27](#).

**Figure 27:** Motherboard connections for power button cables



- 1** *J20 on the motherboard*

- Service board cable
- 24-pin power cable. The cable connector is keyed to fit only one way.
- 4-pin power cable. The cable connector is keyed to fit only one way.
- HDD data cable
- Chassis fan cable

- 2** Replace the printer interface board (see [page 40](#)).

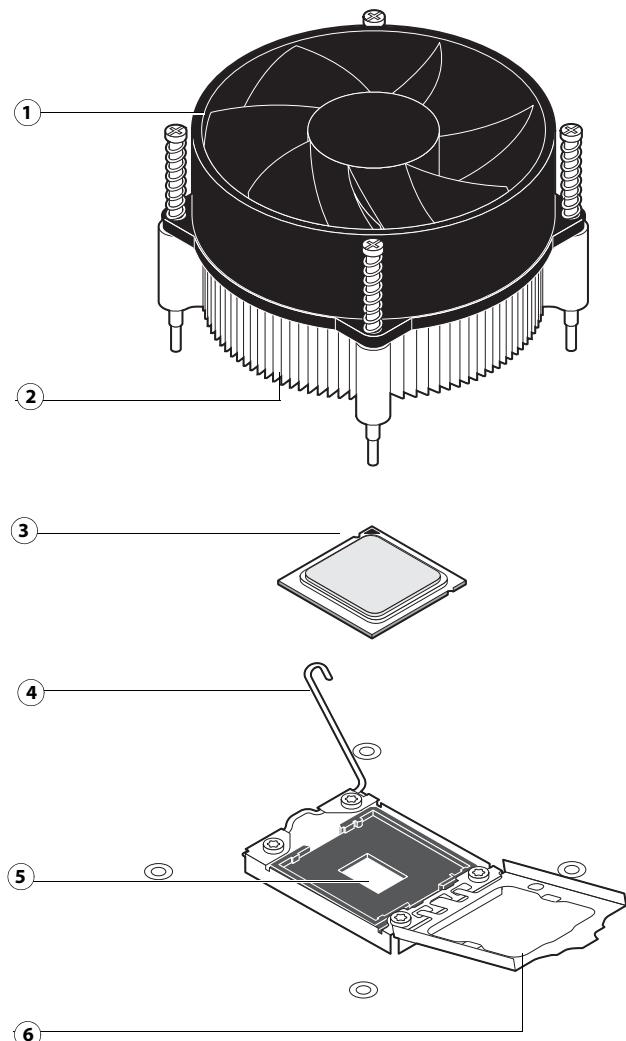
- 3** Reassemble the EX-i Print Server (see [page 65](#)).

## CPU and CPU cooling assembly

The CPU is installed in a socket on the motherboard. Before removing the CPU from its socket, remove the motherboard from the chassis (see [page 46](#)), disconnect the CPU fan cable from the motherboard, and remove the cooling assembly from the CPU socket (see [page 51](#)). The CPU cooling assembly consists of a fan and a heatsink.

**Note:** Do not remove the CPU fan from the heatsink.

**Figure 28:** CPU cooling assembly



- |   |                 |   |                                  |
|---|-----------------|---|----------------------------------|
| 1 | <i>CPU fan</i>  | 4 | <i>Socket lever</i>              |
| 2 | <i>Heatsink</i> | 5 | <i>CPU socket on motherboard</i> |
| 3 | <i>CPU</i>      | 6 | <i>Load plate</i>                |

**To remove a CPU**

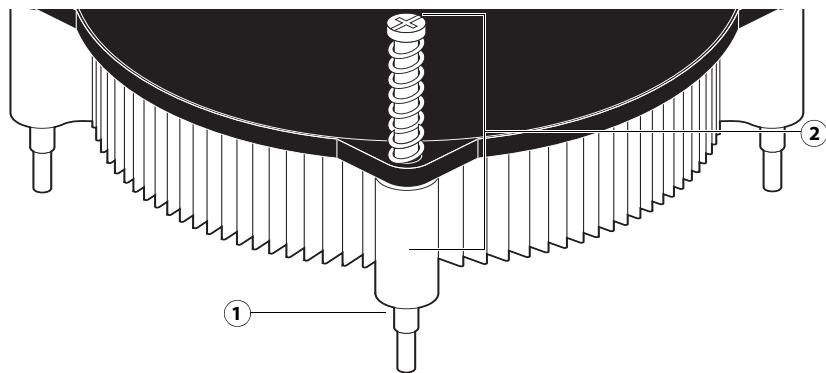
- 1 Access and open the EX-i Print Server, as described on [page 33](#).
  - 2 Remove the motherboard components (see [page 46](#)).
  - 3 Remove the motherboard from the chassis (see [page 46](#)).
- Place the motherboard on a flat, antistatic surface.
- 4 Remove the CPU fan cable from motherboard connector CPU FAN.
  - 5 Remove the CPU cooling assembly:



**Caution:** Be aware that both the cooling assembly and the CPU may be very hot. You may need to allow the components to cool before you attempt to remove them.

- Loosen the four screws that secure the cooling assembly to the motherboard. Partially loosen all the screws before loosening any one screw all the way.
- Lift the cooling assembly off the CPU socket and set it aside.

**Figure 29:** Removing the CPU cooling assembly



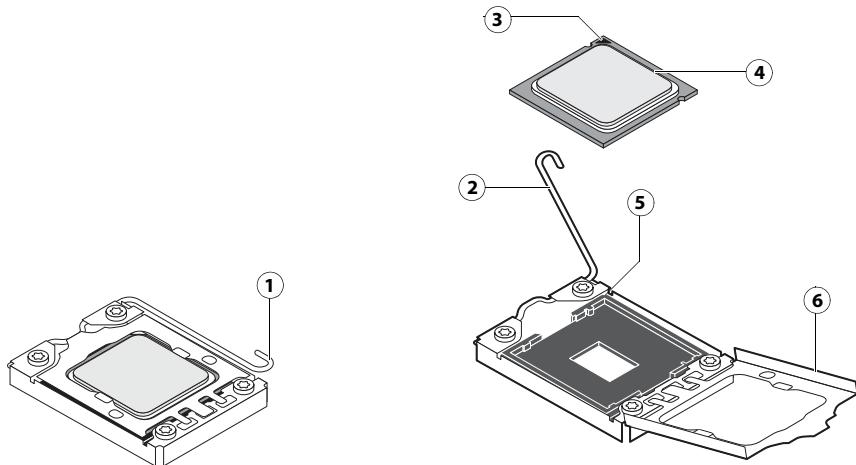
1 Screw (1 of 4)

2 Loosen each screw to this position.

- 6 Unlock the CPU socket lever and raise it into the open position (flex the lever away from the retention post, and then raise it).

7 Open the load plate (see Figure 30).

**Figure 30:** Removing/replacing the CPU



- |  |                                       |
|--|---------------------------------------|
| 1 <i>Socket lever in the locked position</i> | 4 <i>CPU</i>                          |
| 2 <i>Socket lever in the open position</i>   | 5 <i>Flat corner of socket border</i> |
| 3 <i>Yellow triangle</i>                     | 6 <i>Load plate open</i>              |

8 Grasp the CPU by its edges, lift it out of the socket, and then place the CPU in a safe place.

**Note:** If you remove the CPU from the motherboard to install it on a new motherboard, unpack the new motherboard and remove the protective plastic cover from the CPU socket. Transfer the protective cover to the CPU socket of the old motherboard to protect the circuitry.

#### To replace a CPU

1 Do one of the following:

- If you are installing a new CPU cooling assembly on an existing CPU, clean the contact surface of the CPU to remove any old thermal compound residue. A thermal pad is preinstalled on the underside of the new CPU cooling assembly.



**Important:** Be sure to remove all thermal compound residue from the surface of the CPU. It may help to scrape all the residue off the surface using the flat edge of a nonconductive tool. Then use a lint-free cloth moistened with alcohol to clean the surface.

- If you are installing the existing CPU and CPU cooling assembly on a new motherboard, clean the contact surfaces of the CPU and cooling assembly as described earlier. Then apply fresh thermal compound to the contact surface of the CPU using the applicator provided with the new motherboard.

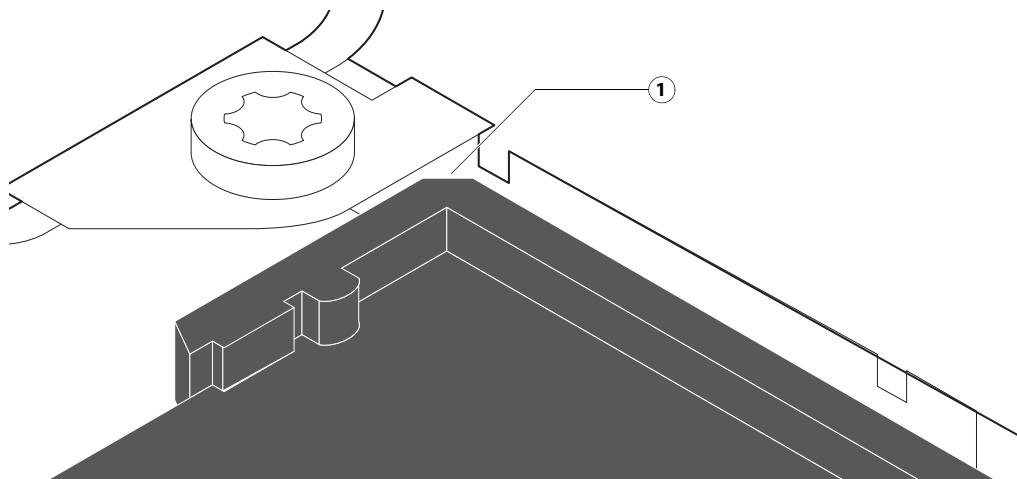
2 Prepare the CPU socket by ensuring that:

- The socket lever is in the open position.
- The load plate is open.

**3** Place the CPU in the socket (see [Figure 30](#) on page 52).

The CPU and the socket are keyed to ensure correct installation. The notches on the edges of the CPU correspond with the two small posts inside the socket. Align the yellow triangle on the CPU with the flat corner of the socket. A yellow arrow stenciled on the motherboard next to the socket points to the flat corner. Do not force the CPU.

**Figure 31:** Locating the flat corner of the CPU socket



1 Flat corner of socket

**4** Close the load plate.**5** Lower the socket lever and place it in the locked position under the retention post.**6** Prepare the CPU cooling assembly for installation.

- Make sure that the motherboard is placed on a padded, antistatic work surface.
- Apply the fresh thermal compound square, as described in step 1 on page 52.
- Align the cooling assembly so that when it is installed, the fan cable easily reaches the CPU fan power connector CPU FAN on the motherboard.

**7** Place the cooling assembly on the CPU.

- Make sure that the thermal pad on the underside of the heatsink is positioned on top of the CPU.



**Caution:** Be sure to remove any protective material that may be covering the surface of the thermal pad. Otherwise, the CPU may overheat.

- Align the four screws with the four screw posts.
- Tighten the screws. Partially tighten all the screws before tightening any one screw all the way.

**8** Connect the CPU fan cable to the motherboard connector CPU FAN.

The cable connector is keyed to fit only one way. Make sure that the connector on the cable is securely attached to connector CPU FAN on the motherboard.

- 9 Install the motherboard in the chassis (see [page 48](#)).
- 10 Replace the motherboard components (see [page 49](#)).
- 11 Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).
- 12 If you installed a new CPU, configure the time and date in Setup (see [page 43](#)).

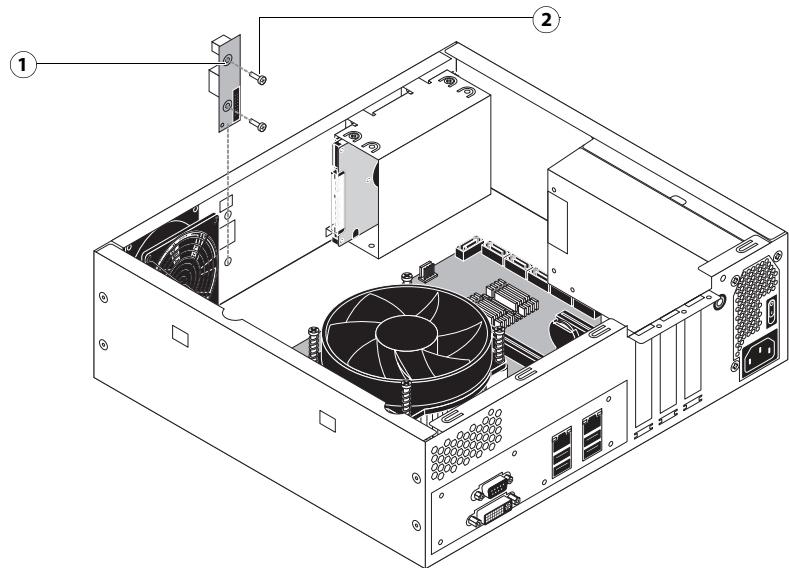
## Service board

The service board contains the LED display and service switches.

### To remove the service board

- 1 Access and open the EX-i Print Server, as described on [page 33](#).
- 2 Disconnect the service board cable from the service board and motherboard.
- 3 If you are replacing the service board cable, remove the cable from the plastic clips that secure it to the chassis.
- 4 Remove the two screws that secure the service board to the chassis, and remove the board from the chassis (see [Figure 32](#)).

**Figure 32:** Removing/replacing the service board



1 Service board

2 Screw (1 of 2)

### To replace the service board

- 1 If you are replacing the old service board with a new one, unpack the new board and cable.
- 2 Position the new service board inside the chassis, fitting the LED display and service switches through the cutouts in the chassis.

- 3 Secure the service board to the chassis using the two screws that you removed earlier (see [Figure 32](#) on page 54).
- 4 Connect the service board cable to the connector on the service board.

The cable is keyed to fit in the connector only one way.
- 5 Connect the free end of the service board cable to connector PORT80 on the motherboard.

The cable is keyed to fit in the connector only one way.
- 6 Make sure that the service switches are set to the OFF position (both switches are away from ON). See [Figure 15](#) on page 33.
- 7 Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).

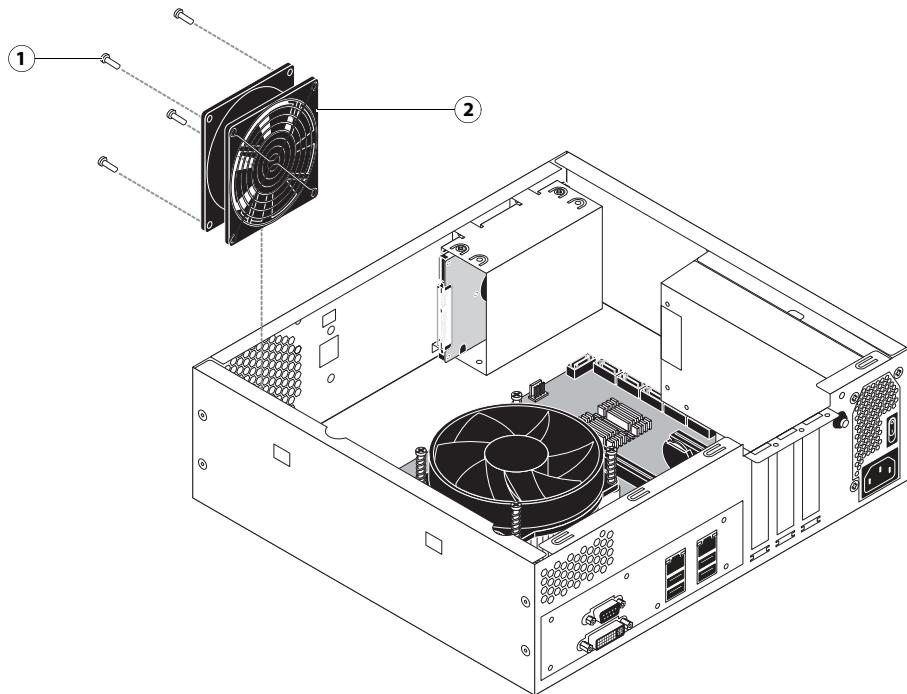
## Chassis fan

One chassis fan is installed in the EX-i Print Server, near the service board. Use the following procedures to remove or replace the fan.

### To remove the chassis fan

- 1 Access and open the EX-i Print Server, as described on [page 33](#).
- 2 Disconnect the 4-pin fan cable connector from the motherboard.
- 3 Remove the four plastic rivets that attach the fan to the chassis, and remove the fan.

To remove a rivet, use a flathead screwdriver to pry loose the rivet head on the outside of the chassis while squeezing and pushing the locked end of the rivet with your fingers or a pair of pliers. Set the rivets aside so that you can replace them later.

**Figure 33:** Removing the chassis fan

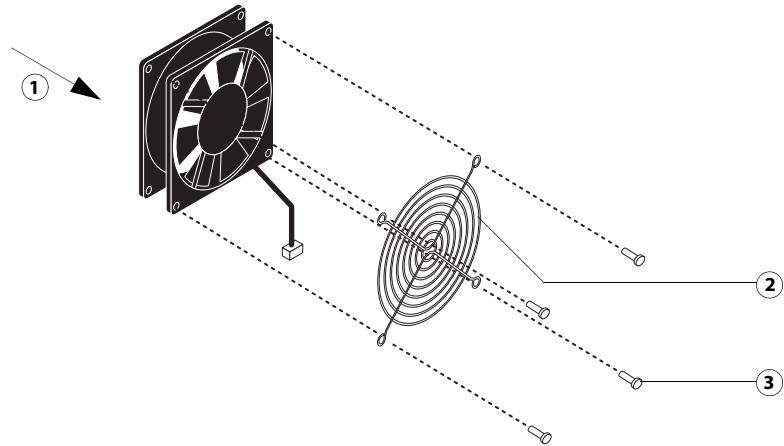
1 *Rivet (1 of 4)*

2 *Chassis fan*

- 4** If you are removing the chassis fan in order to replace it with a new one, remove the fan guard from the face of the fan (see [Figure 34](#)).

To remove the plastic rivets that secure the fan guard to the fan, use a flathead screwdriver to pry loose the rivet head while squeezing and pushing the locking end of the rivet with your fingers or a pair of pliers.

Set aside the fan guard and rivets so that you can install them later on the new chassis fan.

**Figure 34:** Removing/replacing the chassis fan guard

1 *Airflow direction*

2 *Fan guard*

3 *Rivet (1 of 4)*

### To replace the chassis fan

- 1 If you are installing a new chassis fan, attach the fan guard to the correct face of the new fan.

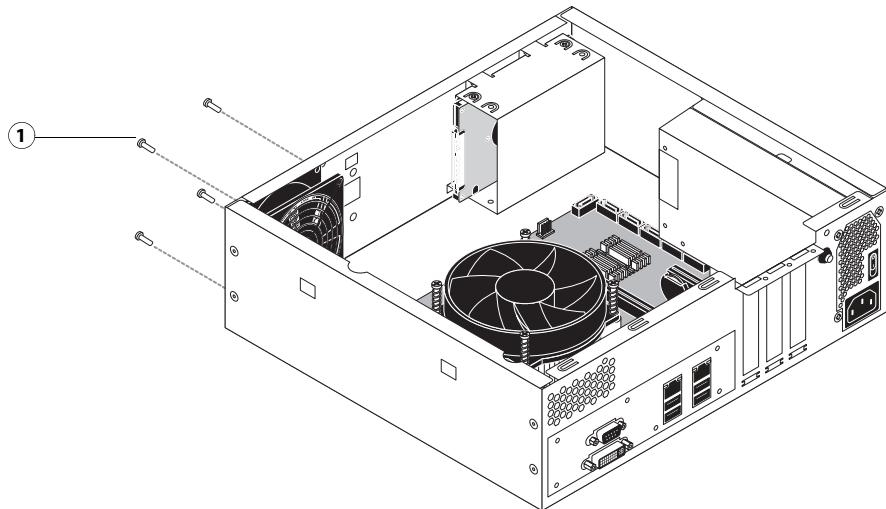
Use the fan guard and four rivets that you removed from the old chassis fan. Position the guard against the face of the new fan so that the airflow arrow on the fan points toward the guard (see [Figure 34](#)). Push each rivet all the way through its mounting hole until the rivet snaps into the locked position.

- 2 Position the fan against the chassis.

When correctly positioned, the fan guard on the fan should face the motherboard, and the fan cable should reach its connector on the motherboard.

- 3 Align the four holes on the fan with the four holes in the chassis, and replace the four rivets that secure the fan to the chassis (see [Figure 35](#)).

Hold the fan firmly against the chassis, and push each rivet all the way until it snaps into the locked position. Make sure that the fan is tightly secured to the chassis.

**Figure 35:** Replacing the chassis fan

1 Rivet (1 of 4)

- 4 Connect the fan cable connector to connector SYSFAN on the motherboard.

The cable connector is keyed to fit only one way.

- 5 Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).

## Power supply

This section describes how to remove and replace the power supply. For more information about the power supply, see [“Specifications” on page 99](#).

**!** **Important:** Do not open the power supply for service or troubleshooting purposes. Opening the power supply voids the warranty.

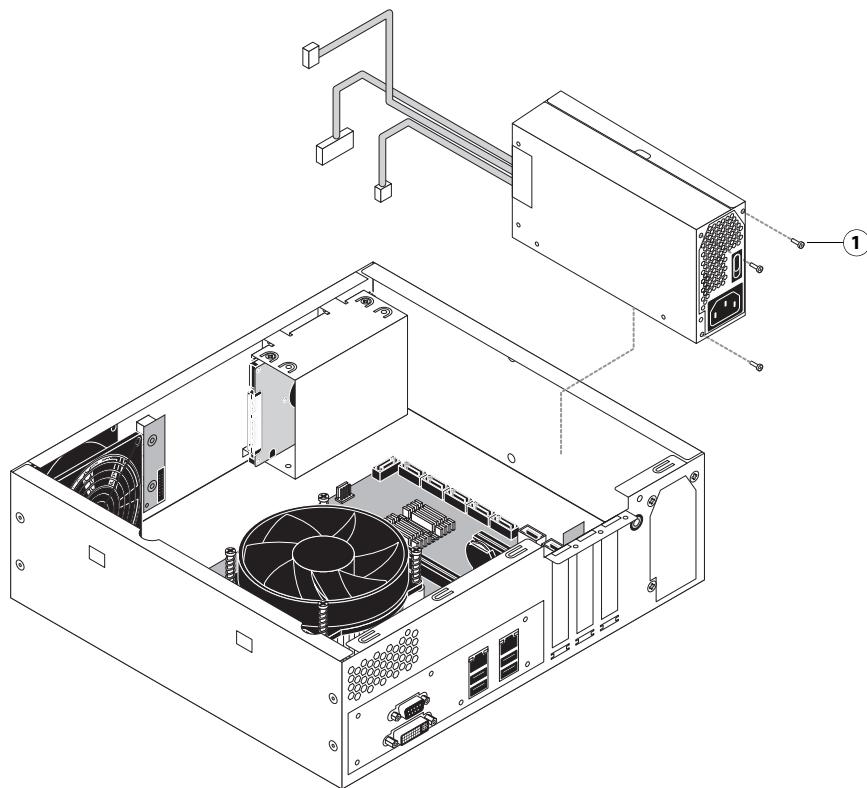
### To remove the power supply and power switch

- 1 Access and open the EX-i Print Server, as described on [page 33](#).
- 2 Remove the 24-pin power cable from the motherboard (see [page 45](#)).
- 3 Remove the 4-pin power cable from the motherboard (see [page 45](#)).
- 4 Remove the power cable from the power connector on the HDD (see [page 45](#)).
- 5 Remove the power supply cables from the plastic clips that secure them to the chassis.
- 6 Remove the four screws that attach the power supply to the chassis (see [Figure 36](#)).

Set the screws aside so that you can replace them later.

- 7 Gently lift the power supply out of the chassis.

**Figure 36:** Removing the power supply



1 Screw (1 of 4)

#### To replace the power supply

- 1 If you are replacing the power switch, locate the new power switch included with the replacement power supply kit. Orient the power switch as shown in [Figure 36](#) on page 59.
- 2 Push the power switch firmly into the chassis cutout until the switch is locked in place.  
Make sure that the beveled sides of the power switch are secured to the inside of the chassis.
- 3 Place the power supply inside the chassis (see [Figure 36](#) on page 59).  
Make sure to fit the power connector through the cutout in the chassis. Align the mounting holes in the power supply with the holes in the chassis.
- 4 Using the four screws that you removed earlier, secure the power supply to the chassis.
- 5 Connect the HDD power cable to the SATA power connector on the HDD.



**Important:** Always connect power to the SATA power connector on the HDD. Do not use the PATA (4-pin) power connector, if it is present on the HDD, and do not connect power to both the SATA and PATA power connectors on the HDD. An incorrect power connection will result in system errors.

**6** Connect the 4-pin (2x2) power cable to the 4-pin connector on the motherboard.

For the location of the motherboard connector, see [page 45](#). Connect the power cable to pins 1 through 4 of the motherboard connector. The cable is keyed to fit only one way.

**7** Connect the 24-pin power cable to the 24-pin connector on the motherboard.

For the location of the motherboard connector, see [page 45](#). The cable is keyed to fit only one way.

**8** Make sure that all power connectors are properly aligned and securely connected.**9** Secure the power cables to the chassis using the two plastic clips on the base of the chassis.**10** Replace any tie-wraps that you may have removed or cut while removing the power cables earlier.**11** Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).

## Power button

The following procedures describe how to remove and replace the power button assembly in the system. The power button assembly includes the power button along with the SW and SW LED cables.

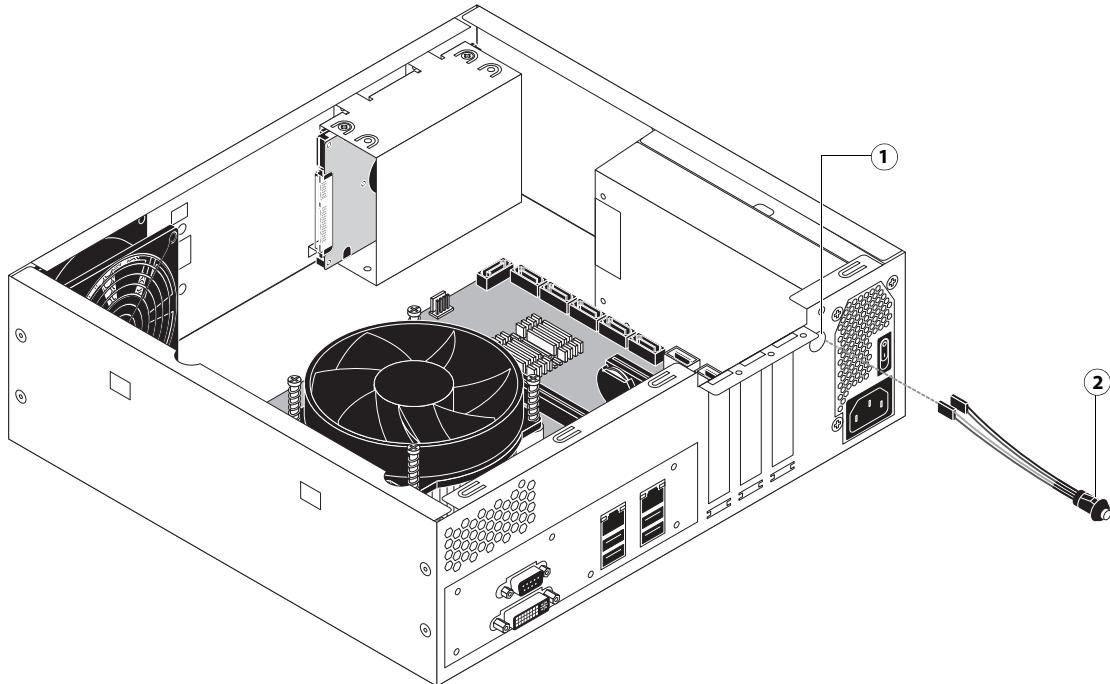
**To remove the power button assembly**

- 1** Access and open the EX-i Print Server, as described on [page 33](#).
- 2** Remove the power button cables (SW and SW LED) from J20 on the motherboard.
- 3** Remove the power button cables (SW and SW LED) from J352 on the printer interface board.((Only for SPARTAN Canon I/F board))

- 4** Use needlenose pliers to pinch the beveled sides of the button casing, and push the button assembly out through the cutout in the chassis.

Carefully thread the power button cables, one pair at a time, out through the cutout.

**Figure 37:** Removing the power button assembly



1 *Cutout*

2 *Pinch beveled sides to unlock button from the chassis.*

### To replace the power button assembly

- 1** Carefully thread the power button cables, one pair at a time, through the cutout in the chassis (see [Figure 37](#) on page 61).
- 2** Push the button assembly firmly into the cutout until the assembly locks in place.

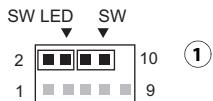
Make sure that the beveled sides of the button casing are completely secured to the inside of the chassis.

**3** Connect the power button cables to the correct pins on J20:

- SW LED cable: Red wire to pin 2, black wire to pin 4
- SW cable: Red wire to pin 6, yellow wire to pin 8

Align the triangle on each cable connector with the correct pin as shown in [Figure 27](#).

**Figure 38:** Motherboard connections for power button cables



1 *J20 on the motherboard*

**4** Reassemble the EX-i Print Server and verify its functionality (see [page 65](#)).

## Hard disk drive (HDD)

The factory-installed HDD is formatted and loaded with system software, network drivers, and printer fonts. The HDD is also used to store spooled print jobs.

If you must replace the HDD, you must install the system software on the new HDD. If you are replacing the HDD, you need:

- The appropriate system software
- The latest version of user software (for networked computers that will print to the EX-i Print Server)

For information about installing system software, see [page 68](#).

### Proper handling

 **Important:** Improper handling can damage the HDD. Handle the HDD with extreme care:

- Use standard ESD precautions when grounding yourself and the EX-i Print Server.
- Keep magnets and magnetic-sensitive objects away from the HDD.
- Do not remove the screws on top of the HDD. Loosening these screws voids the warranty.
- Never drop, jar, bump, or put excessive pressure on the HDD.
- Handle the HDD by the sides and avoid touching the printed circuit boards.
- Allow the HDD to reach room temperature before installation.

HDD problems may be caused by the following:

- Loose or faulty connection
- Faulty HDD (bad sectors, read/write errors, or physical damage)

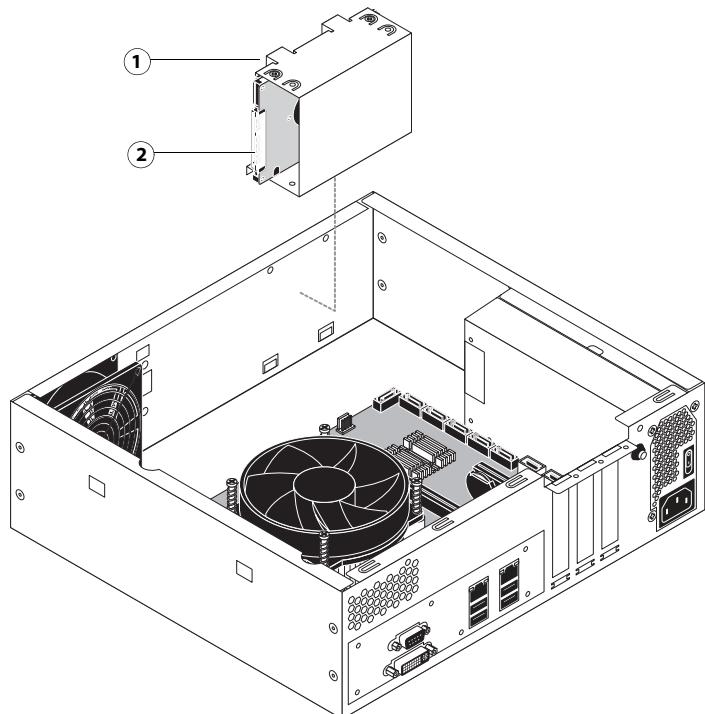
## To remove the HDD

- 1 If you are replacing the HDD with a new HDD, allow the site administrator the opportunity to print the Job Log and save any custom simulation and output profiles. If possible, print the following:
  - Configuration pages: Provide records of any installed options and the customer's current Setup configuration.
  - Font List: Lists the fonts currently on the HDD. Along with the fonts provided, the customer may have installed additional fonts.

For information about how to print the Configuration page and Font List, see *Configuration and Setup*, which is part of the user documentation set.

- 2 Access and open the EX-i Print Server, as described on [page 33](#).
  - 3 Remove the power cable from the HDD.
  - 4 Remove the data cable from the HDD by pulling the connector (not the cable) straight out from the HDD.
  - 5 Remove the two screws that secure the HDD assembly to the chassis (see [Figure 39](#)).
- Set aside the screws so that you can replace them later.
- 6 Carefully lift the HDD assembly to release its lower edge from the mounting posts in the chassis, and then remove the HDD assembly from the chassis.

**Figure 39:** Removing the HDD assembly



1 Screw (1 of 2)

2 HDD assembly

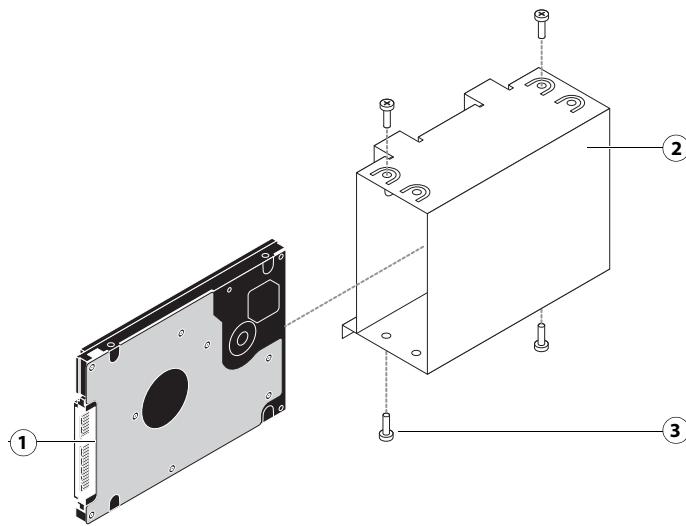
- 7** If you are replacing the HDD with a new HDD, remove the HDD from its bracket.

Remove the four screws that secure the HDD to the HDD bracket (see [Figure 40](#)). Remove the HDD bracket and set it aside so that you can replace it later.

**! Important:** Make sure to support the HDD as you remove the screws. Do not loosen or remove the screws on the HDD covers. Loosening or removing these screws will break the seal and void the HDD warranty.

Do not touch the HDDs with magnetic objects (such as magnetic screwdrivers), and avoid placing magnetic-sensitive items, such as credit cards and employee ID cards, near the HDDs.

**Figure 40:** Removing the HDD bracket



1 HDD (connector side)

2 HDD bracket

3 Screw (1 of 4)

- 8** Place the HDD in an antistatic bag.

Replacement HDDs are shipped without any pre-installed system software. After installing a HDD, you must install the appropriate system software.

#### To replace the HDD

- 1** If you are installing a new HDD, unpack the drive. If you are not installing a new HDD, skip to [step 4](#).

Do not drop, jar, or bump the HDD. Do not touch the HDD with magnetic objects or place magnetic-sensitive items near the HDD.

- 2** Place the HDD inside the HDD bracket, and align the two holes on either side of the HDD with the holes in the bracket.

Position the HDD inside the HDD bracket as shown in [Figure 40](#) on page 64.

- 3 Replace the four screws that attach the bracket to the HDD.

Make sure that you use the same screws that you removed earlier.

- 4 Position the HDD assembly inside the chassis, as shown in [Figure 39](#) on page 63.

Position the lower edge of the HDD bracket over the mounting posts in the chassis, and press down firmly to engage the posts.

- 5 Using the two screws that you removed earlier, secure the HDD assembly to the chassis.

- 6 Connect the SATA data cable to the SATA data connector on the HDD. Make sure that the other end of the cable is connected to SATA\_6G 0 on the motherboard.

- 7 Connect the SATA power cable connector to the SATA power connector on the HDD.

The cable connector is keyed to fit only one way.

- 8 Reassemble the EX-i Print Server (see [page 65](#)).

- 9 Connect the external cables that you removed from the EX-i Print Server.

- 10 If you replaced the HDD with a new HDD, install system software (see [page 68](#)).

- 11 Verify the functionality of the EX-i Print Server (see [page 65](#)).

## Restoring EX-i Print Server functionality after service

Complete your inspection and service by reinstalling and verifying the EX-i Print Server.

### To reinstall and verify the EX-i Print Server

- 1 Reseat all boards, cables, connectors, and other parts loosened or removed during service.

When routing cables in the EX-i Print Server make sure that:

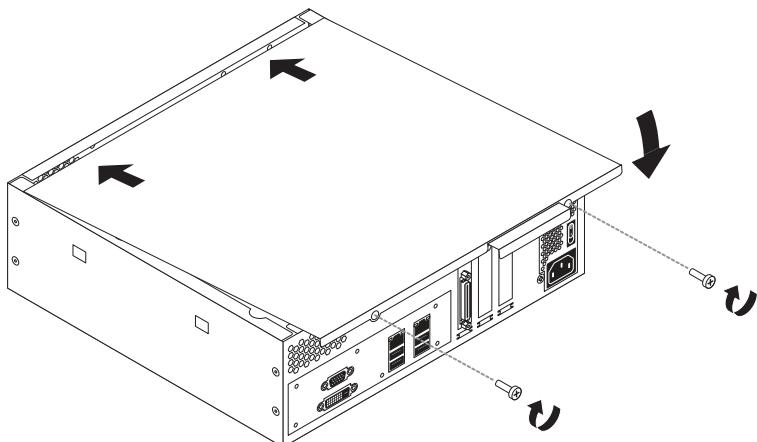
- Covers are securely installed after routing cables.
- Cables are not looped around circuit boards or components (such as capacitors and resistors).
- Cable routing does not interfere with the operation of internal components.
- Cables do not lie on or against any internal heating element.
- Cables do not interfere with removing or replacing components.
- Cables do not interfere with opening or closing EX-i Print Server panels.
- Cables are not tangled.
- Cable slack is secured with a tie-wrap.



**Important:** Improper connection of the internal power cables can damage the EX-i Print Server. See [“Checking EX-i Print Server internal connections”](#) on page 35, which includes [Figure 19 \(page 37\)](#).

**2** Replace the cover on the EX-i Print Server.

Make sure that all cables are fully inside the chassis before you replace the cover. Slide the cover until it engages the edge of the chassis opposite the connector panel, and then lower the cover.

**Figure 41:** Replacing the chassis cover**3** Replace the two screws that you removed earlier.

Tighten the screws to secure the cover to the EX-i Print Server.

**4** Reinstall the EX-i Print Server on the back of the printer.

Align the four slotted holes on the EX-i Print Server with the four mounting screws on the back of the printer (see [Figure 16](#) on page 34). Carefully lower the EX-i Print Server until the narrow ends of the slotted holes engage the mounting screws. Tighten all four mounting screws.

**5** Connect the external cables that you removed during inspection or service.

Be sure to properly connect the following cables (see [Figure 14](#) on page 32):

- Network cable
- Scan crossover cable between the EX-i Print Server and printer
- Printer interface cable
- EX-i Print Server power cable

**6** If you installed a new HDD, install system software (see [page 68](#)).

A spare HDD is shipped without preinstalled system software.

**7** Make sure to configure the date and time in Setup (see *Configuration and Setup*, which is part of the user documentation set).

**8** Before you leave the customer site, verify the EX-i Print Server operation.

- Connect the EX-i Print Server to the network (see [page 35](#)).
- Ask the site administrator to check the Setup options (see *Configuration and Setup*).
- Power on the printer and wait for the EX-i Print Server LED display to reach and remain at 00; then wait for the Fiery icon to become active (see [page 27](#)).
- In the event of an error condition, see the Startup section of the table on [page 88](#). If the Fiery icon does not become active after 10 minutes, check and reseat all external cables; make sure that the cables are connected to the correct ports. If image quality is poor, test the printer (see the service documentation that accompanies the printer).

# Installing System Software

The EX-i Print Server system software is installed on the HDD at the factory. You must install system software if a more recent version is required, you replace the HDD, or you discover problems with the current system.

Use one of the following methods to install system software:

- Network port method via crossover Ethernet cable (see [page 72](#))
- USB flash drive method (see [page 77](#))

## System software installation reminders

Keep in mind the following when installing system software:

- **Compatibility:** The latest user software must be installed onto all computers that print to the EX-i Print Server. Using incompatible versions of the system and user software may result in system problems.
- **Backup/Restore Settings:** All Setup configurations, as well as all custom files stored on the HDD, are deleted when you install system software. Always save the current EX-i Print Server settings before you install system software. After the installation is complete, restore the settings that you saved earlier.

The saved settings file contains the following: Setup configurations (except for Server Name and Date/Time), and custom color profiles saved on the HDD.

- **Configuration:** When upgrading or reinstalling the system software, make sure to print the Configuration pages before installing any software (for instructions, see [page 82](#)). The Setup configurations are lost when you install system software.
- **Static IP address:** If the EX-i Print Server requires a static IP address (for example, in a non-DHCP network environment), be aware that the previous IP address configuration is deleted when system software is reinstalled. To reconfigure a static IP address (if applicable), work with the network administrator as described on [page 26](#).
- **Fonts:** Installing system software deletes all fonts that the customer has installed on the EX-i Print Server. Only resident fonts are restored during system software installation. Use Command WorkStation to reinstall additional fonts.

To determine which additional fonts were downloaded to the EX-i Print Server, ask the site administrator to print the Font List before you format the HDD and again after you complete the system software installation. Any fonts not listed after installation must be reinstalled.

- **Jobs:** All jobs in all print queues and all jobs archived locally on the EX-i Print Server HDD are deleted when you install system software. To save jobs, ask the site administrator to archive them to a location on the network, so that the jobs can be imported back into the EX-i Print Server queue after system software installation. For more information, see Command WorkStation Help.

- **FreeForm masters:** All FreeForm master jobs are deleted when you install system software. To save FreeForm master jobs, ask the site administrator to archive them to a location on the network, so that the jobs can be imported back into the EX-i Print Server queue after system software installation. For more information, see Command WorkStation Help.

## Backing up and restoring the system configuration

The following sections describe how to back up and restore the system configuration.

### Backing up the system configuration

If you back up the system configuration you can restore it after you reinstall system software. When you back up the system configuration, you save a configuration file that includes one or more of the following:

- Fiery System Settings
- Color Settings
- Scan Settings
- FreeForm/VDP Resources
- Virtual Printers
- Server Presets
- Fonts
- Job Log

**Note:** If you cannot create a configuration file as described in the following procedure, ask the site administrator to archive custom files (such as color profiles and customer-installed fonts) to removable media or a network location.

#### To back up the system configuration

- 1 Ask the site administrator to print the Job Log, Configuration page, and Font List (if possible).

For more information, see [page 82](#).

- 2 Connect your computer to the same network as the EX-i Print Server, and open a Web browser window.

**Note:** Request the permission from the network administrator before you connect your computer to the network.

- 3 In the URL field of the browser, type the IP address or server name of the EX-i Print Server, and press Enter to open the WebTools page.

The IP address and server name are listed on the Configuration page.

- 4 In WebTools, click Configure tab > Launch Configure.

- 5 Log on with Administrator privileges and click OK.

The default Administrator password is **Fiery.1** (case-sensitive), but the site administrator may have changed the password.

- 6 Select Fiery Server > Backup.

- 7 Select the settings you want to back up and specify the backup filename, then click Backup.

The backup process starts. Wait until the “Backup Completed!” message appears.

The backup reference file and data file will be created. Click each download button to save the files.

- 8 Click OK.

## Restoring the system configuration

You can restore the configuration of the EX-i Print Server to an earlier state using a configuration file. For more information about creating a configuration file, see [“Backing up and restoring the system configuration”](#) on page 69.

**Note:** If you were unable to create a configuration file, you must configure Setup. After you exit Setup and the EX-i Print Server reboots, ask the site administrator to restore any archived settings and files that were saved. For more information, see *Configuration and Setup*, which is part of the user documentation set.

### To restore the system configuration

- 1 Connect your computer to the same network as the EX-i Print Server, and open a Web browser window.

**Note:** Request the permission from the network administrator before you connect your computer to the network.

- 2 In the URL field of the browser, type the IP address or server name of the EX-i Print Server, and press Enter to open the WebTools page.

The IP address and server name are listed on the Configuration page.

- 3 In WebTools, click Configure tab > Launch Configure.

- 4 Log on with Administrator privileges.

The default Administrator password is **Fiery.1** (case-sensitive), but the site administrator may have changed the password.

- 5 Select Fiery Server > Restore.

- 6 Select the reference file and the data file that you saved earlier, and click Next.

- 7 Select the settings to restore, and then click Restore.

The restore process starts. Wait until the “Restore Completed!” message appears.

- 8 Click Reboot.

## Using Fiery System Restore

Fiery System Restore allows you to create a backup of the EX-i Print Server for quick recovery later when any problem happens. You can restore the EX-i Print Server either from images stored on the local hard disk, or from a bootable USB drive. Fiery System Restore also provides the feature of creating the scheduled backups. You can access the Fiery System Restore from the WebTools Home tab.

You must login to the system as a system administrator to use the Fiery System Restore features.

### To access the Fiery System Restore features

- 1 From a client computer, start a web browser and enter the IP address or the DNS name of the EX-i Print Server.
- 2 Select Home tab.

The available features are listed under Fiery System Restore section.

You must log in to the system as a system administrator before performing any of the backup/restore process.

### To setup automatic scheduled backup

- 1 In the WebTools Home tab, select Schedule Automatic Backup.
  - 2 Select Enable automatic backup, and select when you want to start the backup process on the EX-i Print Server.
- Note:** The backup process takes more than an hour to complete and it requires the EX-i Print Server to be Idle status. If the EX-i Print Server is not in Idle status, the backup process does not start.

- 3 Click Save.

### To create a backup

- 1 In the WebTools Home tab, select one of the options below.

- **Create Backup > USB:** Select this option when you create a backup on a USB flash drive. If you want to create a backup of the current EX-i Print Server on the USB flash drive, select New image. You can select Create bootable image to make the USB flash drive a bootable media.

If you want to create a factory image backup on a USB flash drive, select Fiery factory image.

**Note:** The minimum size for the USB flash drive depends on the actual size of the backup file. You can determine the size of the backup file by checking the Estimated size: field in the Create USB Backup dialog box. Prepare the USB flash drive with enough capacity.

**Note:** The maximum size of the USB flash drive is 32GB if you select Create bootable image option. You can use the USB flash drive with more than 32GB capacity if you do not select Fiery factory image.

- **Create Backup > Internal hard drive:** Select this option when you create a backup on the HDD of the EX-i Print Server. You must specify the file name of the backup image. The default image name is the server name of the EX-i Print Server.

- 2 Make sure to connect the USB drive to the USB connector on the EX-i Print Server.

**Note:** If the capacity of the USB flash drive is less than size of the value listed in Estimated size: field, the backup process will not take place.

- 3 Click Continue.

#### To restore the backup image

- 1 In the WebTools Home tab, select Restore.
- 2 Select one of the following restore options:
  - Restore from a local image
  - Restore from a USB storage device
  - Restore from the factory default image
- 3 If you select a restore from a USB drive, make sure to connect the USB drive to the USB connector on the EX-i Print Server.
- 4 Click Continue.

### Installing system software over the network port

The System Software DVD contains the system software and the Fiery System Software Installer.

To install system software over the network port of the EX-i Print Server, you need the following items:

- Crossover Ethernet cable (4-pair/8-wire, short-length)  
The scan crossover cable between the EX-i Print Server and printer is a crossover Ethernet cable and may be used for system software installation.
- A Windows Vista/7/8/10 computer with:
  - A DVD media drive, built-in or attached
  - Support for 100BaseTX or 1000BaseT
  - 512MB minimum memory capacity
- System Software DVD and User Software DVD

#### To install system software over the network port

- 1 Remove all USB devices that may be connected to the EX-i Print Server.
- 2 If possible, print the Configuration pages (see [page 82](#)).

The Configuration pages contain a list of any installed options and a record of the customer's current Setup configuration.

- 3 If you are reinstalling the same version of system software, back up the current system configuration (see [page 69](#)).

**4** Power on the Windows computer and do the following:

- Close all software applications.
- Stop all File Transfer Protocol (FTP) and Trivial File Transfer Protocol (TFTP) services.
- Disable all antivirus and antispyware programs.
- Make sure that the Windows computer is configured to obtain its IP address automatically (DHCP).
- Remove any network cables between the Windows computer and the customer network.
- Disable all wireless network connections.
- Turn off the Windows firewall.
- Disable all power-save and hibernation settings.

 **Important:** It is important that you complete all of the tasks in the preceding list. If you do not complete these tasks, the installation may fail.

**5** Insert the System Software DVD into the media drive of the Windows computer and wait for the Fiery System Software Installer to start automatically.

If the Fiery System Software Installer does not start automatically, browse to the location of the System Software DVD, and double-click the DVD icon.

**6** At the Welcome screen, click Next.

**7** Read the Software License Agreement. Select “I Agree” to continue the installation process, and then click Next.

**8** At the Connection Type screen, make sure Ethernet is selected. Click Next to advance to the Confirmation screen.

**Note:** To avoid confusion, ignore the text and graphics on the Confirmation screen. The graphics on this screen may not accurately depict EX-i Print Server hardware.

**9** Power off the printer using the main power switch on the front.

The EX-i Print Server will automatically shut down. Make sure to leave the EX-i Print Server power switch in the ON (|) position.

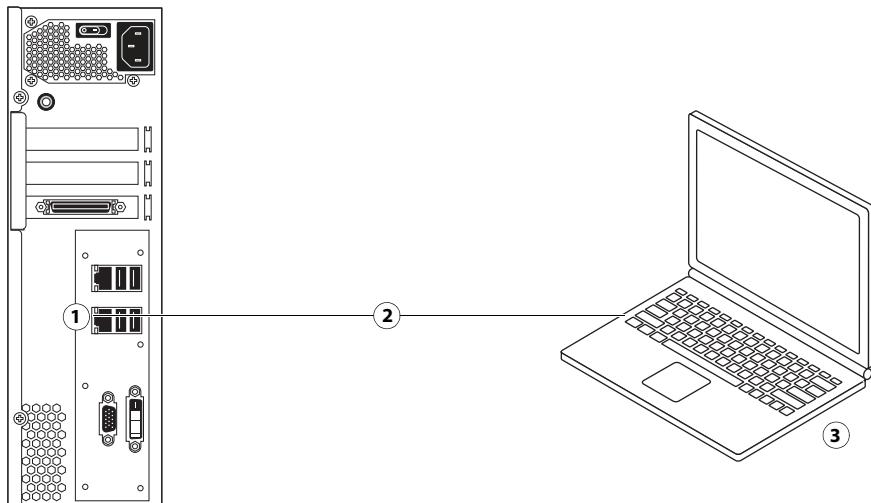
**10** Remove all external cables from the EX-i Print Server, *except* the power cable.

**Note:** Be sure to leave the power cable connected between the EX-i Print Server and the power outlet.

- 11** Connect the crossover Ethernet cable between the EX-i Print Server network port and an Ethernet port on the Windows computer.

The scan crossover cable that you disconnected between the EX-i Print Server and printer is a crossover Ethernet cable and may be used for this step.

**Figure 42:** Creating an isolated Ethernet network using a crossover Ethernet cable

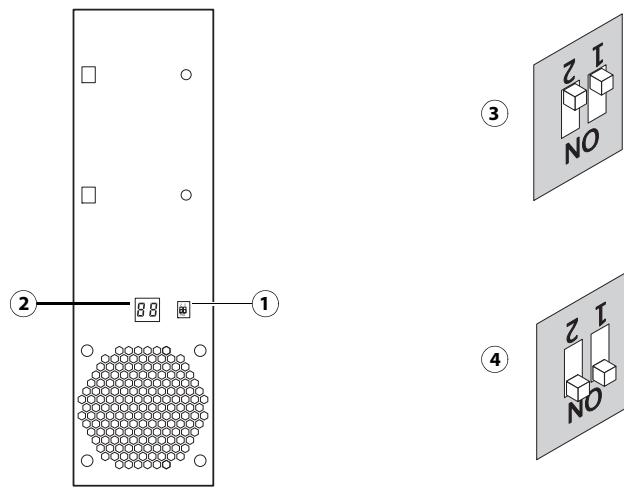


- 1 *Network connector*
- 2 *Crossover Ethernet cable*
- 3 *Windows computer*

**12** Flip both of the EX-i Print Server service switches to the ON position.

**Note:** The LED display is mounted in upside-down orientation.

**Figure 43:** EX-i Print Server service switches



- 1 Service switches
- 2 LED display
- 3 Flip the service switches from normal (OFF) position...
- 4 ...to Boot mode (ON) position.

**Note:** After you install system software, return the service switches to normal mode (both switches set to OFF).

**13** Power on the EX-i Print Server by pressing the power button once.

Wait approximately 15 seconds for the EX-i Print Server to start up and show 00 on the LED display.

**14** At the Windows computer, click Next on the Confirmation screen.

**15** At the “Commence Installation?” screen, click Next to begin installation. Wait while the files are transferred from the Windows computer to the EX-i Print Server.

Installation must be started within 30 seconds of the EX-i Print Server power on.

If you were not able to start the installation within 30 seconds, power off the EX-i Print Server by pressing and holding down the power button for five seconds until the green light goes out. Exit the installation program on the Windows computer and repeat the procedure from [step 5](#).

**Note:** It may take up to three minutes for progress to show on the progress bar.

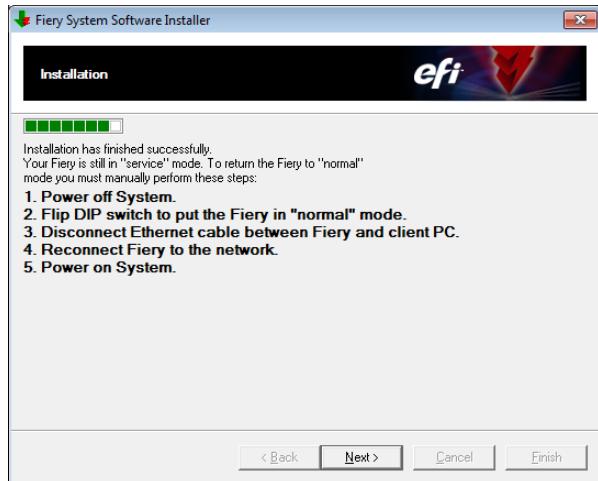
**Note:** If prompted, select the computer network card to use for the installation, and then click OK. If you receive a Windows firewall or security alert, select the option to unblock the Fiery installer so that installation can proceed.

**!** **Important:** This segment of the installation takes approximately 10 minutes. *Do not* click Cancel or close the installer screen during this time.

**16** At the “Please Insert Disk 2 and Press OK to Continue.” message, remove the System Software DVD, insert the User Software DVD, and click OK.

**17** Wait until the following screen appears on the Windows computer, indicating that all of the files have been transferred successfully.

**Figure 44:** Installer screen indicating that file transfers are complete



**Note:** To avoid confusion, ignore the text and graphics shown on the screen. This screen may not accurately depict EX-i Print Server hardware.

**18** Do the following at the Windows computer:

- Click Next, and then click Finish to close the installer screen.
- Remove the User Software DVD.
- Restore the settings that you changed in [step 4](#).

**19** Power off the EX-i Print Server by pressing and holding down the power button for five seconds until the green light goes out.

**20** Move the service switches to normal position (away from ON).

For an illustration of the correct position of the service switches, see [Figure 43](#) on page 75.

**21** Disconnect the crossover Ethernet cable from the EX-i Print Server network port and the Windows computer.

**22** Reconnect the cables to the EX-i Print Server (see [Figure 7](#) on page 21):

- Connect the network cable between the EX-i Print Server and the customer network.
- Connect the crossover Ethernet cable between the EX-i Print Server and the printer.
- Connect the printer interface cable between the EX-i Print Server and the printer.

**Note:** Be sure to use the correct cable for each connection. For an illustration of the differences between the crossover Ethernet cable and network (straight-through Ethernet) cable, see [Figure 8](#) on page 22.

**23** Make sure that the EX-i Print Server power switch is in the ON (|) position.

**24** Power on the printer using the main power switch.

Allow the EX-i Print Server to start up and reach Idle ("00" should appear on the EX-i Print Server LED display).

Wait approximately five minutes longer for the EX-i Print Server Start page to print.

**25** If you saved a configuration file earlier, restore the system configuration (see [page 70](#)).

**Note:** If it was not possible to save a configuration file, or if you installed an upgraded version of system software, you must configure Setup using the Configuration pages you printed earlier. For information about performing Setup, see *Configuration and Setup*, which is part of the user documentation set. Bypass any settings if it is more appropriate for the network administrator to set them. After you exit Setup and allow the system to reboot, ask the network administrator to restore the custom files that were archived earlier.

**26** Install any required software patches:

- If you reinstalled the same version of system software, be sure to reinstall all software patches that were installed earlier on the EX-i Print Server. For a list of installed patches, see the Configuration pages that you printed earlier.
- If you installed an upgraded version of system software (for example, version 1.0 to version 2.0), contact your authorized service/support center for a list of valid software patches. Some or all of the patches listed on the Configuration pages that you printed earlier may no longer be valid. Before installing a patch, be sure to verify with your authorized service/support center that it is valid for your system version. Installing an invalid patch may result in system corruption.

**27** Reconnect any USB devices that you may have removed earlier.

**28** If the EX-i Print Server requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it as described on [page 23](#).

## Installing system software using a USB flash drive

To install system software using a USB flash drive attached to the EX-i Print Server, you need the following items:

- Fiery USB Setup Tool DVD (provided with the EX-i Print Server media pack)
- System Software DVD, or an ISO image file for the system software (provided with the EX-i Print Server, the option kit, or the spare kit)
- User Software DVD (provided with the EX-i Print Server media pack)
- USB 2.0/3.0 flash drive (*not provided*). If the drive has a write-protection feature, make sure that write-protection is switched off. The drive must have a minimum capacity of 8GB (up to 32GB).

Not all USB 2.0 or 3.0 flash drives have been validated for use with the EX-i Print Server. If the drive that you are using does not work, try another brand.

- Any computer (*not provided*) with:
  - Windows Vista, Windows 7, Windows 8, or Windows 10.
  - DVD drive, built-in or attached

A DVD drive is not required if the system software is provided as an ISO file.

- Support for USB 2.0 or USB 3.0 (USB 1.1 may work, but it will be very slow.)
- Minimum of 500MB of available memory

The procedures in this section are:

- [“To install the Fiery USB Setup Tool application” on page 78](#)
- [“To copy software to a USB flash drive” on page 78](#)
- [“To install system software using a prepared USB flash drive” on page 79](#)

### To install the Fiery USB Setup Tool application

- 1 Insert the Fiery USB Setup Tool DVD into the media drive of the computer.
- 2 Double-click the executable file (the file type is Application) located on the root directory of the DVD to start the installer.
- 3 At the Welcome screen click Next.
- 4 Accept the terms of the license agreement and then click Next.

Wait while the installer verifies the installation requirements.

**Note:** If the computer does not already have .Net framework installed, click Accept to accept the terms of the license agreement that appears on the screen. Wait up to 10 minutes as the .Net framework files are installed.

- 5 At the next screen, accept or change the destination location, and then click Install.
  - 6 When prompted, click Install to begin the installation.
- Wait while the application is installed on the computer.
- 7 At the InstallShield Wizard Complete screen, click Finish.
  - 8 Remove the Fiery USB Setup Tool DVD.

### To copy software to a USB flash drive

**Note:** This procedure uses the Fiery USB Setup Tool application to copy the software to the USB flash drive.

- 1 If necessary, start the Fiery USB Setup Tool application by clicking Start on the Windows computer and choosing All Programs > EFI > Fiery USB Setup Tool.

**2** Attach the USB flash drive to the Windows computer.

**Important:** All data on the USB flash drive is lost when the drive is reformatted during the preparation procedure. Make sure that no valuable data resides on the USB flash drive.

**3** Depending on the file format of the system software provided, do one of the followings:

- If the system and user software are provided as ISO image files, drag and drop the ISO image files onto the Fiery USB Setup Tool window.
- If the system and user software are provided as DVD media, insert the System Software DVD into the DVD drive, drag and drop the DVD drive (for example, d:) onto the Fiery USB Setup Tool window.
  - When prompted to insert another media into the DVD drive, remove the System Software DVD and insert the User Software DVD in the media drive. Drag and drop the DVD drive icon onto the Fiery USB Setup Tool window.
- Once you have copied the contents, remove the DVD from the media drive.

**4** Select the drive letter for the USB flash drive, and click Next.**5** When a message appears indicating that the USB flash drive is prepared, click Close to exit the Fiery USB Setup Tool.**6** Eject the USB flash drive from the computer.

**Important:** Do not leave the prepared USB flash drive attached to the computer. If the drive is still attached when the computer starts up or reboots, system corruption may result.

**7** Label the prepared USB flash drive with identifying information.

For example, copy onto a label tag (1) the product name, and (2) the system software version number that you find printed on the System Software DVD label. The USB flash drive is now prepared and can be used to install system software.

**To install system software using a prepared USB flash drive****1** Remove all USB devices that may be connected to the EX-i Print Server.**2** If possible, print the Configuration pages (see [page 82](#)).

The Configuration pages contain a list of any installed options and a record of the customer's current Setup configuration.

**3** If you are reinstalling the same version of system software, back up the current system configuration (see [page 69](#)).

**4** Power off the printer using the main power switch on the front.

The EX-i Print Server will automatically shut down. Make sure to leave the EX-i Print Server power switch in the ON (|) position.

**Note:** If you cannot shut down the EX-i Print Server through the printer touch panel, press and hold down the power button on the EX-i Print Server until the green light goes out and the system shuts down.

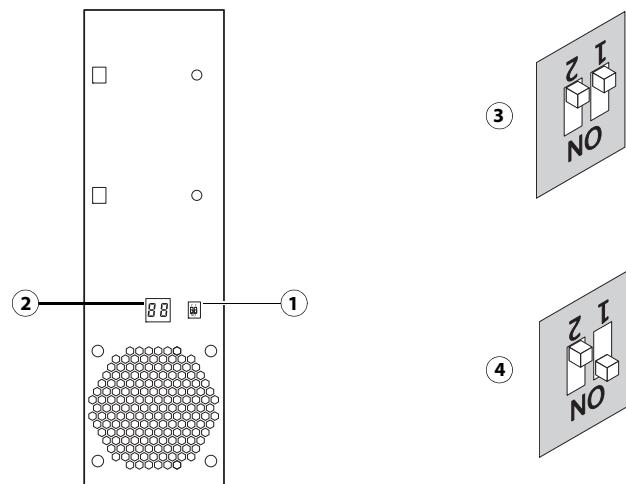
**5** Disconnect all external cables from the EX-i Print Server, *except* the power cable and the printer interface cable.

**Note:** Be sure to leave the power cable connected between the EX-i Print Server and the power outlet.

**6** Flip the service switches to boot mode (switch 1 set to ON; switch 2 set to OFF).

**Note:** The LED display is mounted in upside-down orientation.

**Figure 45:** Service switches on the EX-i Print Server



1 Service switches

2 LED display

3 Flip the service switches from normal (OFF) position...

4 ...to service mode (ON) position.

**7** Attach the prepared USB flash drive to one of the USB connectors on the EX-i Print Server (see [Figure 3](#) on page 17).

**Note:** If dust covers are attached to the USB connectors, remove one dust cover using needlenose pliers.

**8** Power on the EX-i Print Server by pressing the power button once.

Make sure that the EX-i Print Server turns on.

**9** Wait while the files are transferred.

The file transfer can take from 5 to 15 minutes depending on the USB flash drive.

The LED on the flash drive shows sporadic activity during this time. After the EX-i Print Server LED display shows the cyclic codes (C1 > C2 > C3 > C1 . . .), it eventually settles on 00. When all of the files have been transferred, the EX-i Print Server automatically shuts down.

**10** Remove the USB flash drive from the EX-i Print Server.**11** Flip the service switches to normal mode (both switches set to OFF).

For an illustration of the service switch modes, see [Figure 45](#) on page 80.

 **Important:** Be sure to flip the service switches to normal mode and remove the USB flash drive from the EX-i Print Server. If you do not perform these actions, the EX-i Print Server may fail to start up.

**12** Reconnect the cables to the EX-i Print Server (see [Figure 14](#) on page 32):

- Connect the network cable between the EX-i Print Server and the customer network.
- Connect the crossover Ethernet cable between the EX-i Print Server and the printer.

**Note:** Be sure to use the correct cable for each connection. For an illustration of the differences between the crossover Ethernet cable and network (straight-through Ethernet) cable, see [Figure 10](#) on page 25.

**13** Make sure that the EX-i Print Server power switch is in the ON (|) position.**14** Power on the printer using the main power switch.

Allow the EX-i Print Server to start up and reach Idle (00 should appear on the EX-i Print Server LED display).

Wait approximately five minutes longer for the EX-i Print Server Start page to print.

**15** If you saved a configuration file earlier, restore the system configuration (see [page 70](#)).

**Note:** If it was not possible to save a configuration file or if you installed an upgraded version of system software, you must configure Setup using the Configuration pages you printed earlier. For information about performing Setup, see *Configuration and Setup*, which is part of the user documentation set. Bypass any settings if it is more appropriate for the site administrator to set them. After you exit Setup and allow the system to reboot, ask the site administrator to restore the custom files that were archived earlier.

**16** Install any required software patches:

- If you reinstalled the same version of system software, be sure to reinstall all software patches that were previously installed on the EX-i Print Server. For a list of installed patches, see the Configuration pages that you printed earlier.
- If you installed an upgraded version of system software (for example, version 1.0 to version 2.0), contact your authorized service/support center for a list of valid software patches. Some or all of the patches listed on the Configuration pages that you printed earlier may no longer be valid. Before installing a patch, be sure to verify with your authorized service/support center that it is valid for your system version. Installing an invalid patch may result in system corruption.

**17** Reconnect any USB devices that you may have removed earlier.**18** If the EX-i Print Server requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it as described on [page 26](#).

## Fiery Clone Tool

With the Fiery Clone Tool, you can copy the contents of the EX-i Print Server hard disk drive to an image file, and then save the image file to a folder on the EX-i Print Server hard disk drive or a USB storage device connected to the EX-i Print Server. For more information, see the documentation that accompanies the Fiery Clone Tool.

## Printing the Configuration pages

This section describes how to print the Configuration pages. The Configuration pages list all installed options on the EX-i Print Server, as well as the customer's current Setup configuration (for more information, see [page 68](#)).

### To print the Configuration pages

- 1 Press the Services Home button on the printer touch panel.
- 2 Touch Fiery icon > Info > Print Pages.
- 3 Touch Configuration on the touch screen, and then touch Yes.

Wait for the Configuration pages to print.

## Installing and activating Fiery options

This section describes how to install and activate a server-based or client-based Fiery option.

### Activating a server-based Fiery option

#### To activate a server-based option on a EX-i Print Server using Command WorkStation:

- 1 On a client computer that has a network connection to the EX-i Print Server, click Start > All Programs > Fiery > Fiery Command WorkStation.

- 2** Choose Connect New from the Server menu and type the IP address or DNS name of the EX-i Print Server. Then click Connect.

See the Command WorkStation Help for more information.

- 3** Choose Administrator from the user menu and type the appropriate password. Then click Login.

The default Administrator password is “Fiery.1”, but may have been changed by the site administrator.

- 4** Go to Device Center > General > General Info, and click Manage.

- 5** Use the controls in the activation window to activate the Fiery option.

You will need the License Activation Code (LAC) that is provided with the Fiery option kit. For help with the activation process, click the “?” link in the activation window.

- If the EX-i Print Server has an Internet connection, see the help topic on automatic activation.
- If the EX-i Print Server has an Internet connection but cannot connect to the licensing server, see the help topic on configuring a proxy server.
- If the EX-i Print Server does not have an Internet connection, see the help topic on manual activation.

#### **To activate a server-based option on a EX-i Print Server using WebTools:**

- 1** On a client computer that has a network connection to the EX-i Print Server, start a web browser.

- 2** In the address field of the browser, type the IP address or DNS name of the EX-i Print Server and press Enter.

The WebTools page is displayed.

- 3** Click the Home tab and then click Manage.

- 4** Use the controls in the activation window to activate the Fiery option.

You will need the License Activation Code (LAC) that is provided with the Fiery option kit. For help with the activation process, click the “?” link in the activation window.

- If the EX-i Print Server has an Internet connection, see the help topic on automatic activation.
- If the EX-i Print Server has an Internet connection but cannot connect to the licensing server, see the help topic on configuring a proxy server.
- If the EX-i Print Server does not have an Internet connection, see the help topic on manual activation.

#### **Installing a client-based Fiery option**

To install a client-based Fiery option (such as Fiery Impose), you must:

- Activate the Fiery option on the computer that will be using the Fiery option

- Install Adobe Acrobat and Enfocus PitStop Edit on the computer

**Note:** You must activate the client-based Fiery option and install software on each computer that will be using the Fiery option.

#### To activate a client-based Fiery option:

- 1 Make sure that Command WorkStation is installed and configured on the computer.

For detailed installation and configuration instructions, see *Utilities*, which is part of the user documentation set.

- 2 On the computer, click Start > All Programs > Fiery > Fiery Command WorkStation.

- 3 In the server list, select the EX-i Print Server.

- 4 Choose Administrator from the user menu and type the appropriate password. Then click Login.

The default Administrator password is “Fiery.1”, but may have been changed by the site administrator.

- 5 Right-click a held job and choose Preview.

- 6 In the Preview window, choose Help > Manage License.

- 7 Use the controls in the activation window to activate the option.

You will need the License Activation Code (LAC) that is provided with the Fiery option kit. For help with the activation process, click the “?” link in the activation window.

- If the computer has an Internet connection, see the help topic on activating the Fiery option automatically.
- If the computer has an Internet connection but cannot connect to the licensing server, see the help topic on configuring a proxy server.
- If the computer does not have an Internet connection, see the help topic on activating the Fiery option manually.

#### To install Acrobat and PitStop Edit:

- 1 If needed, uninstall all versions of Acrobat and PitStop Edit that currently reside on the computer.

Be sure to restart the computer after uninstalling any applications.

- 2 Close all open applications.

- 3 Insert the Adobe Acrobat/Enfocus PitStop disc (Windows or Mac OS) into the media drive of the computer.

The Adobe Acrobat/Enfocus PitStop disc is provided with the Fiery option kit.

- 4 If the installer does not start automatically, navigate to the root level of the disc and double-click Setup.exe (Windows) or Setup.app (Mac OS).

- 5 Click Install and follow the on-screen instructions.

- 6 (Mac OS only) Start Acrobat. When prompted, type the license number from the license.txt file that is located on the root level of the disc.

The client-based Fiery option is now ready for use on the computer.

# Troubleshooting

This chapter identifies the source of common problems that may occur with the EX-i Print Server and suggests ways of correcting them.

## Troubleshooting process

The following sections identify the sources of common problems that may occur with the EX-i Print Server and suggest ways of correcting them.

These sections do not attempt to provide troubleshooting information for attached computers such as PCs, for the printer, or for extensive networks. Refer problems in these areas to the appropriate service departments and site administrators.

The troubleshooting process is designed to eliminate the most obvious causes of failure before progressing to more complex issues. [“Where problems occur”](#) on page 85 gives an overview of the EX-i Print Server components and indicates areas most likely to require troubleshooting.

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

[“Before you go to the customer site”](#) on page 86 suggests areas you should check 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 printer and loose connections at a power strip or outlet.

- Check for obvious causes of problems.
- Check network connections.

[“On-site checkout”](#) on page 86 takes you through the initial visual checks you should make when you arrive at the customer site.

[“Checking the network”](#) on page 96 provides guidelines for checking the network connections between the printer and the computers to which it is connected, as well as information on several printing problems.

## Where problems occur

The EX-i Print Server is a built-in print server for the printer. Problems may occur in one of the following areas:

- The EX-i Print Server or the printer
- The printer interface between the EX-i Print Server and the printer
- The printer interface between the EX-i Print Server and computers that print to it

## 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 the following items:

**1** Does the printer work?

If the printer works, but the user cannot print the EX-i Print Server Test Page, a service call is probably required.

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

- Is there a printing problem?

- Does the EX-i Print Server Test Page fail to print?

- Does the EX-i Print Server fail to respond to a print command?

- Does printing seem to take a long time?

- Is print quality poor?

- Does the EX-i Print Server fail to appear in the list of printers?

If the answer to any of these questions is yes, refer the customer to Command WorkStation Help or *Configuration and Setup*, which is part of the user documentation set.

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

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

If network changes have occurred, request that the customer's site administrator verify the EX-i Print Server network requirements.

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

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

If your telephone call fails to solve the problem, proceed to the next phase, the preliminary on-site checkout.

## On-site checkout

The most common cause of a hardware problem is a faulty or loose connection. Before you replace a costly component, check the connections between the printer and the EX-i Print Server first, and then check the connections between each EX-i Print Server component.

For more information, see the following topics:

- [“EX-i Print Server connector panel and LED diagnostic codes”](#) on page 32
- [“Checking EX-i Print Server internal connections”](#) on page 35

For more information about servicing and troubleshooting problems with the printer, see the documentation that accompanies the printer.

## Symptoms and solutions

For various problems and possible actions, see the following table. To learn possible causes and solutions for a specific error condition, find the symptom in the charts and perform the appropriate suggested actions in the order listed in the numbered steps. Verify functionality after each numbered step. Proceed to the next numbered step only if the problem persists. For example, in the steps:

- 1 Check and reseat the printer interface cable.
- 2 Replace the printer interface cable.

Perform step 1, and then verify functionality. If the problem is resolved, do not perform step 2.

Symptom	Possible cause	Suggested action
<b>LED codes</b>		
<p><b>Note:</b> If the EX-i Print Server is turned on and hanging on a diagnostic code, first perform the following actions to see if they fix the problem:</p> <ol style="list-style-type: none"> <li>1 Press and hold down the power button on the EX-i Print Server for five seconds until the green light turns off and the system powers off.</li> <li>2 Wait another 30 seconds.</li> <li>3 Press the power button once to restart the EX-i Print Server.</li> <li>4 Wait approximately five minutes to see if the EX-i Print Server reaches Idle.</li> <li>5 If the problem persists, make sure that you have reseated internal cable connections and verified system components.</li> <li>6 If the problem persists, see the code/symptom and suggested actions in the following pages.</li> </ol>		
00	<p>When the EX-i Print Server is Idle and in Operational mode, the LED display shows 00.</p> <p>If the LED display shows 00, but the system is not functioning properly, one or more of the following may be the cause of the problem:</p> <ul style="list-style-type: none"> <li>• Faulty connection between the EX-i Print Server and the printer</li> <li>• Service switches are set to an incorrect mode</li> <li>• Improper service board cable connection</li> <li>• Corrupted system software</li> <li>• Missing, faulty, or dead battery</li> <li>• Corrupted BIOS settings on the motherboard</li> <li>• Missing or faulty chassis fan</li> <li>• Faulty CPU and/or CPU cooling assembly</li> <li>• Faulty HDD or HDD connection</li> <li>• Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 Check and reseat all cable connections between the EX-i Print Server and printer.</li> <li>2 Make sure that the EX-i Print Server service switches are set to OFF (both away from ON).</li> <li>3 If the server date/time cannot be set or responds slowly, replace the battery on the motherboard, and then update the date/time in Server Setup.</li> <li>4 Shut down and open the EX-i Print Server, and do the following: Reseat the power and data cables to the HDD. Make sure that the data cable is connected to the proper connector on the motherboard.</li> <li>5 Reinstall system software.</li> <li>6 If no airflow or fan noise is evident at the vent holes of the chassis where the chassis fan is located, replace the chassis fan.</li> <li>7 Replace external cables, one at a time.</li> <li>8 Check and reseat the CPU cooling assembly.</li> <li>9 Replace the CPU cooling assembly.</li> <li>10 Replace the CPU.</li> <li>11 Replace the HDD data cable.</li> <li>12 Replace the HDD.</li> <li>13 Replace the motherboard.</li> </ol>

Symptom	Possible cause	Suggested action
<b>LED codes (continued)</b>		
FF, A7, A8	Possibly one of the following: <ul style="list-style-type: none"> <li>• Faulty motherboard</li> <li>• Faulty or missing CPU</li> </ul>	1 Replace the motherboard. 2 Replace the CPU.
3b, 50, 52, E1	Possibly one of the following: <ul style="list-style-type: none"> <li>• Missing or faulty DIMM</li> <li>• Faulty motherboard</li> </ul>	Replace the motherboard.
55	Possibly one of the following: <ul style="list-style-type: none"> <li>• Missing or faulty DIMM</li> <li>• Faulty motherboard</li> </ul>	1 Check and reseat the DIMM. 2 Replace the DIMM (see <a href="#">page 40</a> ). 3 Replace the motherboard.
90	• Faulty motherboard	Replace the motherboard.
FF (during the startup, EX-i Print Server hangs displaying FF)	Possibly one of the following: <ul style="list-style-type: none"> <li>• Faulty motherboard</li> <li>• Faulty or missing CPU</li> </ul>	1 Replace the motherboard. 2 Replace the CPU. <b>Note:</b> FF shown after the EX-i Print Server becomes Idle or shortly at the startup does not indicate an error status.
Any other code that the system hangs on before reaching the idle state	• Faulty motherboard	3 Make sure that you reseated the internal cable connections and verified system components. 4 Replace the motherboard.
<b>Startup</b>		
EX-i Print Server starts up and then shuts down	One of the following: <ul style="list-style-type: none"> <li>• Faulty connection between EX-i Print Server and printer</li> <li>• Corrupted security chip</li> <li>• Faulty power supply</li> <li>• Faulty motherboard</li> <li>• Faulty CPU</li> <li>• Faulty printer interface board</li> </ul>	1 Check and reseat the printer interface cable between the EX-i Print Server and the printer. 2 Replace the printer interface cable. 3 Listen for the power supply fan and feel for airflow. 4 If you do not feel air from the power supply fan, you may need to replace a faulty power supply. 5 Replace the motherboard. 6 Replace the CPU. 7 Replace the printer interface board.

Symptom	Possible cause	Suggested action
<b>Startup (continued)</b>		
EX-i Print Server starts up, but the Fiery screens on the printer touch panel are unavailable for more than 10 minutes	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Printer interface firmware has been upgraded and a system reboot is required</li> <li>Required settings have not been enabled in Centreware Internet Services</li> <li>Faulty connection between the EX-i Print Server and the printer</li> </ul>	<ol style="list-style-type: none"> <li>1 Reboot the printer and wait for the printer and the EX-i Print Server to start up and reach Idle.</li> <li>2 After the EX-i Print Server has finished starting up, press the Services Home button on the printer.</li> <li>3 Verify that the EX-i Print Server and the printer have the same time and date information. If the time and date information do not match on both devices, the Fiery icon may fail to appear. For information on how to check and set the time and date on the EX-i Print Server, see <i>Configuration and Setup</i>, which is part of the user documentation set. For information on how to check and set the time and date on the printer, see the printer documentation.</li> <li>4 Reboot the EX-i Print Server.</li> <li>5 Check and reseat the cable connections between the EX-i Print Server and the printer.</li> <li>6 Replace the external cables one by one.</li> </ol>
EX-i Print Server starts up, and stays on, but does not reach Idle	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Service switches are not set for Normal operation</li> <li>System software is corrupt</li> <li>Hard disk drive is faulty</li> <li>Missing or faulty DIMM(s), or faulty DIMM connections</li> <li>Motherboard is faulty</li> <li>CPU missing or faulty</li> </ul>	<ol style="list-style-type: none"> <li>1 Make sure that the EX-i Print Server service switches are both set to OFF for Normal operation (away from "ON").</li> <li>2 Power off/on the EX-i Print Server.</li> <li>3 Reinstall system software.</li> <li>4 Reseat the cables to the hard disk drive.</li> <li>5 Replace the hard disk drive cable.</li> <li>6 Replace the hard disk drive.</li> <li>7 Check the DIMM(s) and reseat them to remove any oxidation on the connectors.</li> <li>8 Replace the motherboard.</li> <li>9 Replace the CPU.</li> </ol>
User authentication feature of the printer does not work	<ul style="list-style-type: none"> <li>Faulty printer interface connections</li> </ul>	<ul style="list-style-type: none"> <li>Check connections of the printer interface board and replace associated cables or the printer interface board, if necessary.</li> </ul>
<b>System problems</b>		
Clock is slow; time listed on Configuration page is earlier or later than the actual time	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Missing or dead battery on the motherboard</li> <li>Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 Replace the battery on the motherboard, and then update the time in EX-i Print Server Setup. For information about EX-i Print Server Setup, see <i>Configuration and Setup</i>, which is part of the user documentation set.</li> <li>2 Replace the motherboard.</li> </ol>

Symptom	Possible cause	Suggested action
<b>System problems (continued)</b>		
System performs slowly or hangs periodically	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Missing or faulty DIMM(s), DIMM installed in wrong slot, or faulty DIMM connections</li> <li>Faulty hard disk drive</li> <li>Overheated or faulty CPU</li> <li>Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>Check that the DIMM is installed in the correct slot (see <a href="#">page 40</a>).</li> <li>Reseat to remove any oxidation on the connector.</li> <li>Reseat the cables to the hard disk drive.</li> <li>Replace the hard disk drive cable.</li> <li>Replace the hard disk drive.</li> <li>Make sure that the CPU on the motherboard is present and firmly seated and that the fan cable is connected.</li> <li>Replace the CPU.</li> <li>Replace the motherboard.</li> </ol>
Enclosed chassis fan is noisy, or is not spinning	Fan is faulty	Replace the chassis fan.
<b>System software installation</b>		
EX-i Print Server remains on for 30 minutes (or longer) after beginning installation	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Service switches are set to the wrong mode</li> <li>EX-i Print Server must be reset</li> <li>Faulty USB flash drive</li> <li>Faulty hard disk drive cable or hard disk drive</li> <li>Corrupted CMOS</li> <li>Faulty motherboard</li> <li>Faulty CPU</li> </ul>	<ol style="list-style-type: none"> <li>Make sure that the EX-i Print Server service switch 1 is set to ON and service switch 2 is set to OFF. If the service switches are in the wrong position, power off the EX-i Print Server, set the switches correctly, power on, and allow the installation to resume.</li> <li>Power off the EX-i Print Server, wait 10 seconds, and then power on again.</li> <li>Check the LED on the USB flash drive. If the LED is not blinking (remains off or solid), the flash drive may be improperly seated. Power off the EX-i Print Server, reseat the flash drive, power on, and then allow the installation to resume.</li> <li>Retry the installation using a different USB flash drive.</li> <li>Reseat the cables to the hard disk drive.</li> <li>Replace the hard disk drive cable.</li> <li>Replace the hard disk drive.</li> <li>Replace the motherboard.</li> <li>Replace the CPU.</li> </ol>
During installation, the LED on the flash drive remains off or solid (not blinking)	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Faulty or improperly seated USB flash drive</li> <li>Faulty motherboard</li> <li>Faulty hard disk drive</li> </ul>	<ol style="list-style-type: none"> <li>Power off the EX-i Print Server, reseat the flash drive, power on, and then allow the installation to resume.</li> <li>Retry the installation using a different USB flash drive.</li> <li>Replace the motherboard.</li> <li>Reseat the cables to the hard disk drive.</li> <li>Replace the hard disk drive cable.</li> <li>Replace the hard disk drive.</li> </ol>
The LED on the EX-i Print Server shows error codes EE -> 11.-> EE -> 11....	Failed to retrieve product information. It is not EX-i Print Server.	If the EX-i Print Server is found, the hardware might not have initialized properly to retrieve the product name.

Symptom	Possible cause	Suggested action
<b>System software installation (continued)</b>		
The LED on the EX-i Print Server shows error codes EE -> 02.-> EE -> 02....	This is not supported server.	Product information is found, but the installer does not support this product.
The LED on the EX-i Print Server shows error codes EE -> 09.-> EE -> 09....	Hard disk drive is missing.	Check the EX-i Print Server to verify the hard disk drive installation.
The LED on the EX-i Print Server shows error codes EE -> 43.-> EE -> 43....	Failed to format the hard disk drive.	Replace the hard disk drive.
The LED on the EX-i Print Server shows error codes EE -> 44.-> EE -> 44....	The USB device may have a corrupted image file, or your hard disk drive cannot be accessed.	<ol style="list-style-type: none"> <li>1 Run Windows Disk Error Check on the USB device.</li> <li>2 Prepare the USB device again using the Fiery USB Setup Tool.</li> <li>3 Use another computer with an external connection to format the hard disk drive, if the installer cannot write to the hard disk drive.</li> <li>4 If the above actions do not work, replace the hard disk drive.</li> </ol>
The LED on the EX-i Print Server shows error codes EE -> 45.-> EE -> 45....	Failed to install bootloader.	<ol style="list-style-type: none"> <li>1 Use another computer with an external connection to format the hard disk drive, if the installer cannot write to the hard disk drive.</li> <li>2 If the above actions do not work, replace the hard disk drive.</li> </ol>
<b>Backup and restore</b>		
The LED on the EX-i Print Server shows error codes EE -> 21.-> EE -> 21....	Failed to mount hard disk drive partition.	The EX-i Print Server is not properly installed. Reinstall the EX-i Print Server.
The LED on the EX-i Print Server shows error codes EE -> 43.-> EE -> 43....	Failed to format the hard disk drive.	Replace the hard disk drive.
The LED on the EX-i Print Server shows error codes EE -> 44.-> EE -> 44....	The USB device may have a corrupted image file, or your hard disk drive cannot be accessed.	<ol style="list-style-type: none"> <li>1 Run Windows Disk Error Check on the USB device.</li> <li>2 Prepare the USB device again using the Fiery USB Setup Tool.</li> <li>3 Use another computer with an external connection to format the hard disk drive, if the installer cannot write to the hard disk drive.</li> <li>4 If the above actions do not work, replace the hard disk drive.</li> </ol>

Symptom	Possible cause	Suggested action
<b>Network</b>		
If you suspect a network problem, keep in mind the following:		
<ul style="list-style-type: none"> <li>If the EX-i Print Server 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.</li> <li>Conflicting network settings may be set in Setup and on the customer's workstation.</li> <li>Inappropriate Setup options may cause printing problems.</li> <li>Missing or incorrectly placed printer description files may cause application-specific printing errors.</li> </ul>		
For additional information, see <i>Configuration and Setup</i> , which is part of the user documentation set.		
Unable to connect to the network; or neither LED on the 10/100/1000BaseT network connector is lit	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Wrong cable. Do not use a crossover cable.</li> <li>Wrong port. Do not use the printer port. The printer port is reserved for the printer and for installing system software from a PC.</li> <li>Faulty network cable or connection</li> <li>Faulty network</li> <li>Faulty Ethernet port on the motherboard</li> </ul>	<ol style="list-style-type: none"> <li>Make sure that the network cable is the correct type and connected to the designated LAN port on the EX-i Print Server connector panel.</li> <li>Check the cable connection to the network.</li> <li>Replace the cable with a new or tested cable.</li> <li>Request that the network administrator check Network Setup.</li> <li>Request that the network administrator check other devices on the network.</li> </ol> <p>If other devices are not functioning, there could be a problem with the network.</p> <ol style="list-style-type: none"> <li>If the rest of the network is functioning properly and the problem persists, replace the motherboard.</li> </ol>
System starts up slowly (seems to hang) and the Configuration page displays an error on the "IP Address" line under "Network Setup"	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Normal behavior</li> <li>System is searching for a nonexistent DHCP server. DHCP is enabled by default on the EX-i Print Server, but the customer's network is not using DHCP.</li> <li>If the customer's network is using DHCP: <ul style="list-style-type: none"> <li>–Network cable or connection is faulty</li> <li>–Network is faulty</li> <li>–Faulty Ethernet port on the motherboard</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>Request that the network administrator change the default in EX-i Print Server Network Setup.</li> <li>If neither LED on the designated network port is lit on the EX-i Print Server, check the cable connection to the EX-i Print Server and the network. Make sure that the cable is the correct type.</li> <li>If the network cable is the correct type and is properly connected to the EX-i Print Server, connect a new network cable to the EX-i Print Server.</li> <li>Request that the network administrator check other devices on the network.</li> </ol> <p>If other devices are not functioning, there could be a problem with the network.</p> <ol style="list-style-type: none"> <li>Replace the motherboard.</li> </ol>
<b>Scanning</b>		
Problems with scanning or sending files	<ul style="list-style-type: none"> <li>Loose, incorrect, or missing connection between the EX-i Print Server and printer</li> <li>The printer does not have an IP address</li> </ul>	<ol style="list-style-type: none"> <li>Check and reseat the printer interface cable between the EX-i Print Server and the printer.</li> <li>Power off/on the printer.</li> <li>Replace the printer interface cable.</li> </ol>

Symptom	Possible cause	Suggested action
<b>Printing</b>		
<b>Note:</b> Intermittent print quality problems are difficult to trace. Before you try to troubleshoot print quality problems, print a test page to make sure that the printer itself does not need servicing or adjusting.		
Test page fails to print	Print engine is not ready to print	<ol style="list-style-type: none"> <li>1 Make sure that the printer is powered on and ready to print.</li> <li>2 Check the printer touch panel for indications or messages about the printer status.</li> </ol>
	There is a problem with the connection between the EX-i Print Server and the printer	<ol style="list-style-type: none"> <li>1 Make sure that the EX-i Print Server power button LED is lit. If not, press and hold the power button for a few seconds to turn on the EX-i Print Server.</li> <li>2 Power off/on the printer.</li> <li>3 Make sure the network and scanning options are available from the printer touch panel.</li> <li>4 Check again that the printer interface cable is present and properly connected to the EX-i Print Server and the printer.</li> <li>5 Check again that the printer interface board is present and properly connected to the motherboard.</li> <li>6 Replace the printer interface cable.</li> <li>7 Replace the printer interface board.</li> <li>8 If the problem persists, you may need to service the printer.</li> </ol>
	Corrupted system software	Reinstall system software.
	Faulty hard disk drive	<p>Replace the hard disk drive.</p> <p>If replacing the hard disk drive does not correct the problem, make sure you install the old hard disk drive back into the EX-i Print Server.</p>
EX-i Print Server appears in the list of printers on the customer's workstation, but certain jobs do not print	PostScript error	<p>Make sure that Print to PostScript Error in Setup is set to Yes. Check for error messages on the EX-i Print Server output.</p>
	Application problem	<ol style="list-style-type: none"> <li>1 Print a job from a different application to determine if the problem is associated with a particular application.</li> <li>2 Make sure that the connection between the EX-i Print Server and the workstation is working by downloading a test page from the workstation or printing a simple file, such as a text file.</li> <li>3 Resend the problem file.</li> </ol>
Configuration page is completely or mostly blank	<ul style="list-style-type: none"> <li>• Missing, incorrect, or faulty DIMM(s)</li> <li>• Corrupted system software</li> </ul>	<ol style="list-style-type: none"> <li>1 Check the DIMM(s) and reseat them to remove any oxidation on the connectors.</li> <li>2 Reinstall system software.</li> <li>3 Replace the motherboard.</li> </ol>
A print job stalls or stops after one or a few pages	PostScript or application error	<ol style="list-style-type: none"> <li>1 Cancel the EX-i Print Server print job.</li> <li>2 If this fails to clear the problem, power off/on the printer.</li> </ol>
	Missing, incorrect, or faulty DIMM(s), or faulty DIMM connections	<ol style="list-style-type: none"> <li>1 Power off the EX-i Print Server; check for missing DIMMs and reseat the DIMMs to remove any oxidation on the connectors.</li> <li>2 Replace the motherboard.</li> </ol>

Symptom	Possible cause	Suggested action
<b>Printing (continued)</b>		
Color quality is not consistent	Problem with the printer	Test the printer and service, if necessary (see the service documentation that accompanies the printer).
	File or application problem	<ol style="list-style-type: none"> <li>1 Print a different color test page from another application.</li> <li>2 If the quality of the test page is good, there may be a file or application problem.</li> </ol>
	Out of calibration or calibration information/curves on the active partition are corrupted	<ol style="list-style-type: none"> <li>1 If you suspect that a custom calibration setting is causing the problem, reset the calibration setting to its default measurements: In Command WorkStation &gt; Device Center &gt; General &gt; Tools, click Manage. Calibrator opens. In Calibrator, select the calibration setting that you suspect is causing the problem, and then click View Measurements. Click Reset to Default Measurements, and then click Yes to confirm. If resetting to default calibration does not solve the problem, you may need to service the printer.</li> <li>2 If restoring default measurements fixes the color quality, the custom calibration may have been the cause of the problem. Request that the site administrator recalibrate the EX-i Print Server. For details, see <i>Color Printing</i>, which is part of the user documentation set.</li> <li>3 If the problem persists after recalibration, the calibration information on the hard disk drive may be corrupt. Reinstall system software.</li> <li>4 If the problem persists, the hard disk drive may be corrupt. Verify that all hard disk drive cabling is correct.</li> <li>5 If hard disk drive cabling is correct, you may need to replace the hard disk drive.</li> </ol>

Symptom	Possible cause	Suggested action
<b>Printing (continued)</b>		
Print quality is poor	Missing or outdated printer description file	Make sure that the appropriate printer description file is installed.
	Application cannot find the appropriate printer description file	For information about printer files, see <i>Printing</i> , which is part of the user documentation set.
	Problem with the printer	Test the printer and service, if necessary (see the service documentation that accompanies the printer).
	Out of calibration or calibration information/curves on the active partition are corrupted	<ol style="list-style-type: none"> <li data-bbox="796 618 1438 703">1 If you suspect that a custom calibration setting is causing the problem, reset the calibration setting to its default measurements:</li> <p data-bbox="828 713 1390 766">In Command WorkStation &gt; Device Center &gt; General &gt; Tools, click Manage.</p> <p data-bbox="828 777 1010 804">Calibrator opens.</p> <p data-bbox="828 815 1430 868">In Calibrator, select the calibration setting that you suspect is causing the problem, and then click View Measurements.</p> <p data-bbox="828 878 1430 931">Click Reset to Default Measurements, and then click Yes to confirm.</p> <p data-bbox="828 941 1343 994">If resetting to default calibration does not solve the problem, you may need to service the printer.</p> <li data-bbox="796 1005 1438 1163">2 If restoring default measurements fixes the color quality, the custom calibration may have been the cause of the problem. Request that the site administrator recalibrate the EX-i Print Server. For details, see <i>Color Printing</i>, which is part of the user documentation set.</li> <li data-bbox="796 1174 1438 1258">3 If the problem persists after recalibration, the calibration information on the hard disk drive may be corrupt. Reinstall system software.</li> <li data-bbox="796 1269 1438 1322">4 If the problem persists, the hard disk drive may be corrupt. Verify that all hard disk drive cabling is correct.</li> <li data-bbox="796 1332 1438 1385">5 If hard disk drive cabling is correct, you may need to replace the hard disk drive.</li> </ol>

Symptom	Possible cause	Suggested action
<b>Printing (continued)</b>		
Pages come out blank, or tinted with green or some other color	Loose cable connection between the EX-i Print Server and the printer	<ol style="list-style-type: none"> <li>1 Check again the printer interface cable and connection at the EX-i Print Server and the printer.</li> <li>2 Power off/on the printer.</li> <li>3 Replace the printer interface cable.</li> </ol>
	Problem with the printer	Test the printer and service, if necessary (see the service documentation that accompanies the printer).
<p>If the user can print the Configuration page from the printer touch panel but cannot print a job from a computer on the network, request that the site administrator do the following:</p> <ul style="list-style-type: none"> <li>• Check all printer components of the network, including cables, connectors, terminators, network adapter boards, and network drivers.</li> <li>• Activate the network and use it to communicate with other printers.</li> <li>• Confirm 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.</li> </ul> <p><b>Note:</b> EPS file generation is not completely standardized among applications. Some users may encounter problems while printing certain EPS files.</p>		

## Checking the network

Printing problems may arise if the network hardware or software is not set up properly or does not match network settings on the EX-i Print Server. 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 EX-i Print Server malfunction. The customer's site administrator can eliminate many printing problems without requiring you to make a service call. The site administrator deals with:

- Error conditions on the printer
- Network connection problems that result in the printer not appearing in the list of printers on the customer's computers

**Note:** If the printer does not appear in the list of printers on the network, there may be another device on the network with the same IP address.

- Conflicting network settings in Setup and on the customer's computers
- Printing problems caused by inappropriate Setup options
- Application-specific printing errors caused by missing or incorrectly installed printer description files

## Printing to the EX-i Print Server

If the customer can print the EX-i Print Server Test Page but cannot print a job from a computer on the network, you may have to make a service call. However, first make sure that the site 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.
- Confirmed that the applicable network settings in Setup (such as AppleTalk zone, IP address, subnet mask, and gateway address) match the settings used in the network.

When you make a service call, check the EX-i Print Server connector panel to make sure that the appropriate network connection is in place. Print quality problems are difficult to trace. Before you try to troubleshoot print quality problems, print a Test Page to make sure that the printer does not need servicing or adjusting. Also, make sure that the correct paper is being used in the printer.

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

### If the printer does not print

The following table lists possible causes and solutions when the printer does not print.

**Table 2:** Causes and solutions when printer does not print

Possible Cause	Solution
Is the power on?	<ul style="list-style-type: none"><li>• Press and hold the power button on the EX-i Print Server to turn it on and/or when the EX-i Print Server is ready, power on the printer.</li></ul>
Are the cables between the EX-i Print Server and the printer connected?	<ul style="list-style-type: none"><li>• Make sure that the printer interface cables are completely and correctly connected to the printer and the EX-i Print Server.</li></ul>
Is the specified paper loaded?	<ul style="list-style-type: none"><li>• Load the specified paper in any of the input trays.</li></ul>
Can you print a Test Page from the printer driver?	<ul style="list-style-type: none"><li>• If you cannot print the Test Page, the printer may be out of order. You may need to service the printer.</li></ul>
Is the enclosed fan present and functioning?	<ul style="list-style-type: none"><li>• Verify that the enclosed fan is present, oriented correctly, and functioning (see <a href="#">page 65</a>).</li></ul>

## Other printing problems

The following table lists other printing problems and what to do about them.

**Table 3:** Other printing problems

Problem	Action
An image is printed on the reverse side of the paper.	<ul style="list-style-type: none"><li>Reload the paper in the paper tray upside down.</li></ul>
Multiple pages are fed through the printer at once.	<ul style="list-style-type: none"><li>Remove all the pages from the paper tray and fan them gently before reloading.</li></ul>
Paper misfeeds occur frequently.	<ul style="list-style-type: none"><li>Check the paper size settings. Use the recommended paper. Avoid using curled, folded, wrinkled, perforated, or glossy paper.</li></ul>
It takes too long to complete the print job.	<ul style="list-style-type: none"><li>The data is so large or complex that it takes additional time to process. If the Data indicator is blinking, data is being processed. Wait until it is finished.</li></ul>

# Specifications

The EX-i Print Server has, or makes use of, the following features.

## Hardware features

- 2.9GHz Intel Pentium dual core G850 CPU
- 2GB DIMM
- Hard disk drive (500GB)
- 4 USB2.0 ports
- 10BaseT/100BaseTX/1000BaseT network port for network printing
- 10BaseT/100BaseTX printer port for a Ethernet cable to the printer
- 3V manganese dioxide lithium coin cell battery (Panasonic CR2032 or equivalent)
- Dedicated power supply
- Power switch
- Power button

## Physical specifications

- Operating Environment:

Temperature: +10°C to +40°C

Relative Humidity: 10% - 85% (non-condensing)

- Power Supply Rating: 100 - 240V, 50-60Hz, 2-4A

- Power Consumption: 100W (typical)

- Dimensions (Depth x Width x Height):

9.3 cm (3.5 in.) x 28.5 cm (11.2 in.) x 29.5 cm (11.7 in.)

- Weight: 4.3 kg (9.5 lb.)

## Networking and connectivity

The EX-i Print Server has the following networking features:

- Supports AppleTalk and TCP/IP protocols simultaneously
- RJ-45 Ethernet LAN port for twisted pair (10BaseT/100BaseTX/1000BaseT) network connection

**Note:** The latest user software must be installed onto all computers that print to the EX-i Print Server. Using incompatible versions of the system and user software may result in system problems. For more information, see the user documentation.

## Safety and emissions compliance

The EX-i Print Server has been certified to meet or surpass the following standards:

### Safety approvals

- UL 60950-1:2007 (TUV/CU mark)
- CAN/CSA-c22.2 #60950-1-07
- EN 60950-1:2006+A11+A1+A12 (TUV/GS mark)
- CB scheme IEC 60950-1:2005 (2nd edition) + A1: 2009

### EMC approvals

- FCC Class A
- EN55022: 2010-Class A
- EN55024: 2010
- AS/NZS CISPR22:2009-Class A

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