

# Installation and Service Guide

A guide for service technicians



Replacement parts and specifications are subject to change. For a current parts list, contact your authorized service/support center.

> Part Number: 45093848 6 October 2010

#### © 2010 Electronics for Imaging, Inc.

This documentation is protected by copyright, and all rights are reserved. No part of it may be reproduced or transmitted in any form or by any means for any purpose without express prior written consent from Electronics for Imaging, Inc. ("EFI"), except as expressly permitted herein. Information in this documentation is subject to change without notice and does not represent a commitment on the part of EFI. The documentation is further covered by "Legal Notices" distributed with this product, which can be found on the User Documentation CD. The documentation. The Software is furnished under license and may only be used or copied in accordance with the terms of the EFI Software End User License Agreement, which can be found in the "Legal Notices" distributed with this product.

## CONTENTS

# **CONTENTS**

REFACE	9
imagePRESS Server customer media pack	
About the documentation	10
Service documentation	1
Customer documentation	1
About this guide	1
About the illustrations in this guide	1
Terminology and conventions	1:
Precautions	1
Creating an ESD safe environment	10
Tools you will need	1
TRODUCTION	19
Features	1;
How the imagePRESS Server operates	20
STALLATION	2.
Installation sequence	2:
Checking the customer site	24
Setting customer expectations	2
Unpacking the imagePRESS Server	20
Connecting the imagePRESS Server	2
Completing installation and starting up	3:

NG THE IMAGEPRESS SERVER	
Overview	
Using the imagePRESS Server Control Panel	
Buttons	
Activity light	
imagePRESS Server Control Panel Functions menu	
Using the copier touch panel	
imagePRESS Server copier touch panel Functions menu	
Print pages menu	
Network Status LEDs	
Starting, shutting down, restarting, and rebooting	
VICE PROCEDURES	
Overview	
imagePRESS Server overview diagrams	
Accessing internal components	
Shutting down the system	
Opening the imagePRESS Server	
Removing and replacing boards	
Copier interface board	
User Interface Board assembly	
Motherboard	
Removing the motherboard	
Replacing the motherboard	
Verifying new motherboard installation and transferring options	
Replacing parts on the motherboard	
DIMMs	
CPU	
Battery	
Clearing the CMOS	

Fan	86
Power supply	87
Hard disk drives	91
Switch bank assembly	97
DVD drive	101
Restoring and verifying functionality after service	104
System and User Software	105
Overview	105
Before you install system software	105
Installing system software	107
System updates	109
TROUBLESHOOTING	110
Troubleshooting process	110
Preliminary on-site checkout	111
Checking external connections	112
Checking internal components	113
Inspecting the system	114
Normal startup sequence	119
Error messages and conditions	120
Diagnostic tools	133
Copier interface board diagnostics	133
Test E-mail	134

SPECIFICATIONS	135
Hardware features	135
Physical specifications	135
Networking and connectivity	136
User software	136
Safety and emissions compliance	136
SERVICING THE IMAGEPRESS SERVER WITH FURNITURE	137
Procedures	137
INDEX	147

# LIST OF FIGURES

FIGURE 1: Printing system	19
FIGURE 2: imagePRESS Server functional diagram	21
FIGURE 3: Summary of installation steps and references	23
FIGURE 4: imagePRESS Server shipping contents	27
FIGURE 5: imagePRESS Server connections	28
FIGURE 6: Copier interface cable connections	29
FIGURE 7: Straight-through and crossover Ethernet cables	30
FIGURE 8: imagePRESS Server Control Panel	32
FIGURE 9: Accessing the imagePRESS Server area of the copier touch panel	35
FIGURE 10: Using the imagePRESS Server Functions menu from the copier touch panel	36
FIGURE 11: Front and back panels	45
FIGURE 12: Back panel and internal side view	46
FIGURE 13: Exploded view of imagePRESS Server components	47
FIGURE 14: Power and data cable connections in the imagePRESS Server	49
FIGURE 15: Removing/replacing the side panels	52
FIGURE 16: Removing/replacing the front panel	53
FIGURE 17: Removing/replacing the top panel	54
FIGURE 18: Diagram of the copier interface board	56
FIGURE 19: Diagram of the User Interface Board (front and back)	58
FIGURE 20: Removing/replacing the User Interface Board	59

FIGURE 21:	Removing/replacing the UIB buttons	60
FIGURE 22:	Diagram of the imagePRESS Server motherboard	62
FIGURE 23:	Removing the motherboard	64
FIGURE 24:	Connecting the dongle	71
FIGURE 25:	Motherboard DIMM sockets	77
FIGURE 26:	Releasing a DIMM	78
FIGURE 27:	CPU cooling assembly	79
FIGURE 28:	Removing/replacing the CPU	81
FIGURE 29:	Inspecting the cooling assembly pins on underside of motherboard	83
FIGURE 30:	Motherboard battery	84
FIGURE 31:	Removing the fan	86
FIGURE 32:	Removing/replacing the power supply	89
FIGURE 33:	imagePRESS Server HDDs	92
FIGURE 34:	Removing/replacing the HDD bracket	93
FIGURE 35:	Removing/replacing the HDDs from the HDD bracket	94
FIGURE 36:	Component Sled with switch bank assembly	97
FIGURE 37:	Removing/replacing the Component Sled from the chassis	98
FIGURE 38:	Removing/replacing the switch bank assembly	99
FIGURE 39:	imagePRESS Server DVD drive	101
FIGURE 40:	Removing/replacing the DVD drive	102
FIGURE 41:	Troubleshooting the system	110
FIGURE 42:	imagePRESS Server external cable connections	112
FIGURE 43:	Normal startup sequence	119
FIGURE 44:	imagePRESS Server installed on the furniture	137

## PREFACE

The *Installation and Service Guide* is intended for authorized imagePRESS Server and copier service technicians installing or servicing the Canon imagePRESS Server A2200. If you are not an authorized service technician, do not attempt to install or service the Canon imagePRESS Server A2200. Electronics for Imaging, Inc. does not warrant the performance of the server if it is installed or serviced by non-authorized personnel.

**NOTE:** The term "imagePRESS Server" is used throughout this guide to refer to the Canon imagePRESS Server A2200. The term "copier" is used to refer to the Canon Color imagePRESS C6000/C6010/C6000VP/C6010VP/C7000VP/C7010VP.

## imagePRESS Server customer media pack

The imagePRESS Server customer media pack contains the following:

- System Software DVD 1, for service use only
- System Software DVD 2, for service use only
- User Software (Drivers) CD
- User Software (Utilities) CDs (Macintosh and Windows)
- Fiery Options Utility
- ATM CD
- Canon Utility CDs and documentation
- User Documentation CD
- Fiery SeeQuence Suite
- Command WorkStation (multiple languages)
- Fiery JDF Connector CD
- Printed Welcome
- Printed Secure Erase Administration Guide
- Printed Release Notes
- Other documentation

## About the documentation

The documentation for the imagePRESS Server is described in the following sections.

## Service documentation

The scope of the *Installation and Service Guide* is limited to describing how to install imagePRESS Server hardware and system software and how to service and troubleshoot the imagePRESS Server. The Troubleshooting chapter focuses on the individual components of the imagePRESS Server hardware, as well as the imagePRESS Server connection to the network and copier.

Details about the copier, network, remote computers, software applications, and Microsoft Windows operating system software are beyond the scope of this guide.

For details about the content, terminology, and conventions of this guide, see the sections beginning on page 11.

## **Customer documentation**

Customer documentation (also known as "user documentation") is designed primarily for users and administrators. It also contains information that may be useful to service technicians; therefore, cross-references to the customer documentation are included in the *Installation and Service Guide*.

Service technicians can obtain user documentation from the User Documentation CD. Client users can download user documentation files from the imagePRESS Server using a Web browser. The documents are provided as Adobe Acrobat PDF (Portable Document Format) files, which are indexed and cross-referenced. In addition, some imagePRESS Server utilities (such as Command WorkStation) offer built-in Help.

For a complete description of the imagePRESS Server user documentation, see *Welcome* on the User Documentation CD.

## About this guide

The Installation and Service Guide is organized into the following topics:

Preface

General information, including a list of precautions.

• Introduction

General description of the imagePRESS Server.

• Installation

Checking the customer site and unpacking the imagePRESS Server; installing and connecting the imagePRESS Server.

Using the imagePRESS Server

Overview of the imagePRESS Server functions and user interfaces; printing system pages; shutting down and restarting the imagePRESS Server.

Service Procedures

Removal and replacement procedures for imagePRESS Server components; restoring and verifying functionality.

• System and User Software

Overview of the system software; installing system and user software.

• Troubleshooting

Common problems and ways of correcting them; startup error messages; general system error conditions.

Specifications

imagePRESS Server specifications.

• Servicing the imagePRESS Server with Furniture (FACI option)

Assembly and disassembly instructions for systems that are mounted on the optional furniture with the optional monitor attached.

**NOTE:** The imagePRESS Server *Installation and Service Guide* is not intended for customer use. Do not leave the *Installation and Service Guide* at the customer site after servicing the imagePRESS Server.

## About the illustrations in this guide

Illustrations reflect the current shipping version of the imagePRESS Server at the time of publication. Components shown in these illustrations are subject to change. To receive information about any imagePRESS Server components that do not match the illustrations in this guide, contact your authorized service/support center.

### Terminology and conventions

The following sections explain the terminology and conventions used throughout this guide.

#### Service technician

In this guide, responsibilities attributed to the service technician may include the following:

- Making sure that the customer site has an appropriate electrical outlet and sufficient
  physical space for the imagePRESS Server
- Unpacking the imagePRESS Server
- Installing and connecting the imagePRESS Server

NOTE: The preceding functions may be performed by a trained rigger or service technician.

- Servicing the imagePRESS Server components
- Installing system and user software on the imagePRESS Server

#### Network administrator

In this guide, responsibilities attributed to the network administrator include the following:

- · Verifying that the customer site is network-ready
- Configuring imagePRESS Server Network Setup options
- Configuring the connection between the imagePRESS Server and the Command WorkStation application installed on the imagePRESS Server
- Installing the user software shipped with the imagePRESS Server onto the networked Windows and Apple Mac OS computers that will print to it
- · Configuring the connection between each remote computer and the imagePRESS Server

#### imagePRESS Server components

The terms "replace" and "replacing" are used throughout this guide to mean the reinstallation of existing components. Install new components only when necessary.

**NOTE:** Replacement parts and specifications are subject to change. When ordering replacement parts, refer to the current parts list maintained by your authorized service/support center. Install the correct parts as directed by your service/support center.

The term "Control Panel" refers to the area on the front of the imagePRESS Server, including the green/red activity light, the display window (LCD—liquid crystal display), and the buttons to the left and right of the display window.

The term "LCD" refers to the display window of the imagePRESS Server Control Panel.

The term "monitor" refers to the optional imagePRESS Server flat panel monitor.

The term "DVD drive" (Digital Versatile Disk drive) refers to the imagePRESS Server DVD drive.

The term "system software" refers to the following software installed on the imagePRESS Server hard disk drive (HDD):

- Windows XP Pro for Embedded Systems operating system and imagePRESS Server Software (System Software DVD 1)
- User Software (System Software DVD 2)

For other terms used to identify components of the imagePRESS Server, see the reference key in Figure 13 on page 47.

#### Connectors and components labeled "not used"

Connectors and components labeled "not used" are disabled or are not used in the standard imagePRESS Server configuration.

#### **Document conventions**

References to imagePRESS Server user documentation, such as *Configuration and Setup*, are displayed in italics. The user documentation files are installed from the User Documentation CD.

NOTE:





IMPORTANT

The NOTE format highlights important messages and additional information.

The WARNING format indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury. To use the imagePRESS Server safely, always pay attention to these WARNINGs.

The CAUTION format indicates a caution concerning operations which, if not performed correctly, may lead to injury. To use the imagePRESS Server safely, always pay attention to these CAUTIONs.

The IMPORTANT format indicates operational requirements and restrictions. To operate the imagePRESS Server correctly and avoid damage to the imagePRESS Server or other property, be sure to read the IMPORTANT items carefully.

## Precautions

Always observe the following general precautions when installing and servicing the imagePRESS Server:

• Avoid pressing the surface of the LCD.

Applying excessive pressure to the LCD window will cause it to change color.

 Use a soft cloth moistened with Lens and Mirror Cleaner to clean the surface of the imagePRESS Server display window.

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

Never lift the imagePRESS Server by grasping the top panel. The top panel does not support the weight of the system.

ATTENTION: Ne jamais soulever le serveur d'impression par sa partie supérieure : celle-ci ne peut pas supporter le poids du système. AVVERTENZA: Il server di stampa non deve essere mai sollevato afferrandolo dal pannello superiore, in quanto quest'ultimo non può sostenere il peso dell'intero sistema.

WARNUNG: Heben Sie den Druckserver nicht an der oberen Gehäuseabdeckung an. Die obere Gehäuseabdeckung ist nicht dafür ausgelegt, das Gesamtgewicht des Systems zu tragen.

**DVERTENCIA:** No levante nunca el servidor de impresión agarrándolo por el panel superior. El panel superior no soporta el peso del sistema.

ADVERTÊNCIA: Nunca erga o servidor de impressão pelo painel superior. O painel superior não suporta o peso do sistema.

**WAARSCHUWING:** Til de afdrukserver nooit op door het bovenpaneel vast te nemen. Het bovenpaneel kan het gewicht van het systeem niet dragen.

#### IMPORTANT

- When connecting or disconnecting the power cord:
  - Only use the power cord that shipped with the imagePRESS Server or an appropriate replacement power cord available from an authorized provider.
  - Always disconnect the power cord from the imagePRESS Server back panel before opening the unit and servicing internal components.
  - Do not pull on the power cord when unplugging the imagePRESS Server. Pull the plug instead.
  - Do not place objects on the power cord. Place the power cord away from foot traffic.
  - *Do not* tamper with or disable the power cord grounding plug.
  - Do not use a 3-prong adapter in a 2-hole ungrounded outlet.
  - Do not use an extension cord.
  - Do not plug the imagePRESS Server into a circuit with heating or refrigeration equipment (including water dispensers).
  - Do not plug the imagePRESS Server into a switchable power outlet. This can result in the imagePRESS Server being turned off accidentally.
- Never set any liquid on or near the imagePRESS Server or copier. If liquid is spilled into the imagePRESS Server or copier, disconnect the power cord immediately.
- Do not attempt to open the power supply, DVD drive, or HDD.



• Handle the imagePRESS Server LCD window with care.

If the imagePRESS Server LCD window breaks and the liquid crystal inside leaks out, avoid contact with it. If you come in contact with the liquid crystal, wash it off your skin immediately with soap and water.

- Use care when handling parts of the imagePRESS Server, as some edges on the unit may be sharp.
- Do not install third-party applications onto the imagePRESS Server. Third-party applications are not supported and can cause system problems. Although virus scans are permitted on the imagePRESS Server, virus-protection software should not be loaded in memory-resident mode.
- Do not change the Windows operating system software preference settings.

Depending on the changes made, the imagePRESS Server may become unstable or even unusable. If this occurs, we recommend that you reinstall the imagePRESS Server System Software, which reliably restores the Windows operating system software to its factory defaults.

• Never alter an existing network without permission.

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

• Unless you are the network administrator, never assign an IP address in imagePRESS Server Network Setup.

In a DHCP environment, the system assigns the IP address automatically. In a non-DHCP environment, you should enter only the IP address that has been assigned by the network administrator. Only the network administrator should assign an IP address to a network device. Assigning the imagePRESS Server an incorrect IP address may cause unpredictable errors on any or all devices connected to the network.

IMPORTANT

### Creating an ESD safe environment

• Follow standard ESD (electrostatic discharge) precautions while working on the internal components of the imagePRESS Server.

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

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

- Attach a grounding strap to your wrist. Attach the other end to a good ground.
- When you unpack the imagePRESS Server from the carton for the first time, touch a metal area of the copier to discharge the static on your body.
- Before you remove any of the imagePRESS Server panels and handle internal components, touch a metal part of the imagePRESS Server.
- Leave new electronic components inside their antistatic bags until you are ready to install them. When you remove components from an antistatic bag, place them on a grounded antistatic surface, component-side up.
- When you remove an electronic component, place it in an antistatic bag immediately. Do not walk across a carpet or vinyl floor while carrying an unprotected board.
- During service to the motherboard, avoid using excessive force and always place the motherboard on a grounded, non-metallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.
- Handle printed circuit boards by their opposing edges only and avoid touching the contacts on the edge of the board.

IMPORTANT

#### Power supply cord notice

The power supply cord is used as the main disconnect device. Ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

**ATTENTION:** Le cordon d'alimentation doit être débranché pour une mise hors tension totale du produit. La prise de courant doit être située ou installée à proximité du matériel et être facilement accessible.

**ATTENZIONE:** Il cavo di alimentazione deve essere scollegato per interrompere completamente la corrente. Accertarsi che la presa di corrente si trovi o sia installata vicino alla macchina e sia facilmente accessibile.

ACHTUNG: Der Netzstecker dient zur sicheren Trennung des Gerätes von der Stromversorgung. Stellen Sie sicher, dass sich die Steckdose in unmittelbarer Nähe des Gerätes befindet und leicht zugänglich ist.

**CUIDADO:** El cable de alimentación eléctrica se utiliza como dispositivo de desconexión principal. Asegúrese de que el enchufetoma esté situado/instalado cerca del equipo y que sea fácilmente accesible.

**CUIDADO:** O cabo de força é usado como dispositivo principal de desconexão. Assegure-se de que a saída de energia esteja localizada/instalada próxima ao equipamento e facilmente acessível.

**VOORZICHTIG:** Het netsnoer moet worden uitgetrokken om de stroomvoorziening te onderbreken. Zorg ervoor dat het stopcontact zich dicht bij het apparaat bevindt en gemakkelijk toegankelijk is.

#### Lithium battery notice

There is a danger of explosion if the battery is replaced with an incorrect type. Replace a battery only with the same type recommended by the manufacturer. Dispose of used batteries according to local regulations.

**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 jeweiligen gesetzlichen Bestimmungen 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 réglementations locales en vigueur.

**ADVARSEL!:** Litiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Batteriet må kun udskiftes med et andet batteri af samme fabrikat og type. Brugte batterier skal bortskaffes i henhold til gældende regler.

VAROITUS: Paristo voi räjähtää, jos se on vaihdetaan väärän tyyppiseen paristoon. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo paikallisten määräysten mukaisesti.

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

VARNING: Risk för explosion om batteriet byts ut mot en felaktig batterityp! Byt bara ut batteriet mot en batterityp som har godkänts av tillverkaren. Hantera använda batterier enligt lokal miljölagstiftning.

**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.





#### Short circuit protection

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. (240 VAC, 10A international) is used on the phase conductors (all current-carrying conductors).

**ATTENTION :** La protection contre les courts-circuits (surtension) du produit est assurée par l'installation électrique du local où il est installé. S'assurer qu'un fusible ou un disjoncteur inférieur ou égal à 120 V CA, 15 A aux Etats-Unis (240 V CA, 10 A dans les autres pays) est utilisé pour les conducteurs de phase (conducteurs de courant).

**AVVERTENZA:** La protezione contro i short-circuit (sovracorrente) del prodotto dipende dall'impianto elettrico dell'edificio in cui è installato. Accertarsi che sui conduttori di fase (che portano la corrente) venga utilizzato un fusibile o interruttore non superiore a 120 Vc.a., 15 A negli Stati Uniti (240 Vc.a., 10 A internazzionale).

**WARNUNG:** Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass eine Sicherung oder ein Unterbrecher von nicht mehr als 240 V Wechselstrom, 10 A (bzw. in den USA 120 V Wechselstrom, 15 A) an den Phasenleitern (allen stromführenden Leitern) verwendet wird.

**DVERTENCIA:** Este producto depende de la instalación del edificio en lo relativo a la protección frente a cortocircuitos (sobretensión). Asegúrese de utilizar un fusible o un interruptor de circuito que no sea de más de 120 V CA, 15A en EE.UU. (240 V CA, 10A internacional) en los conductores de fase (todos los conductores que transportan corriente).

**ADVERTÉNCIA:** Esse produto depende da instalação de proteção contra curto-circuito (sobrecarga) do edifício. Assegure-se de que um fusível ou disjuntor de até 120 VAC, 15A U.S. (240 VAC, 10 A internacional) seja usado nos condutores de fase (todos os condutores de corrente).

**WAARSCHUWING:** Dit apparaat wordt tegen kortsluiting (overstroom) beveiligd via de elektrische installatie van het gebouw. Zorg ervoor dat de fasegeleiders (alle stroomvoerende geleiders) beveiligd zijn met een zekering of stroomonderbreker met een maximale capaciteit van 120 V wisselstroom, 15 A in de V.S. (240 V wisselstroom, 10 A internationaal).

## Tools you will need

To install or service the imagePRESS 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
- imagePRESS Server documentation, including the customer media pack and any related service bulletins

IMPORTANT

Avoid touching magnetic tools to storage media such as HDDs. Contact between magnetic tools and magnetic storage media may result in data corruption.

## **INTRODUCTION**

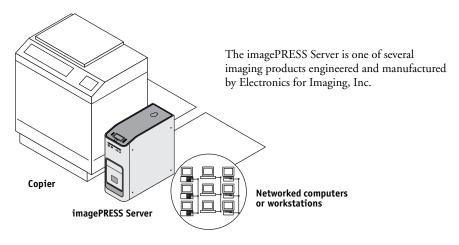
The imagePRESS Server adds computer connectivity and highly efficient Adobe PostScript 3 color printing capability to the copier. It is optimized for high-speed network communications, processing, rasterization, and printing of continuous tone color and monochrome pages.

## Features

The imagePRESS Server, as an integral part of a color printing system, enables users to:

- Send images over AppleTalk and TCP/IP networks to imagePRESS Server supported devices.
- Spool print jobs and select a printing priority for each job. Users can control spooled print
  jobs sent to the imagePRESS Server with remote user software running on networked
  Windows and Mac OS computers.
- Print color, grayscale, and black-and-white jobs.
- Use the copier as a high-resolution color scanner with Fiery Scan software.
- Use 136 resident fonts (126 Adobe Type 1 PostScript, and 10 TrueType), plus several Adobe Multiple Master fonts used for font substitution when printing PDF files. Command WorkStation or any third-party LaserWriter downloader, such as the Adobe Font Downloader, can be used to download additional fonts.
- Use built-in ColorWise color management and NetWise network features.

The imagePRESS Server also supports the Microsoft version of the Internet Printing Protocol (IPP) for Windows XP, Windows Vista, Windows Server 2003/2008/2008 R2, Windows 7, and e-mail printing.



**FIGURE 1:** Printing system

## How the imagePRESS Server operates

The imagePRESS Server enables the customer to use the copier as a high-performance, networked PostScript color printer and scanner. Users at the customer site can print to the imagePRESS Server from networked Windows computers, Mac OS computers, and networked UNIX workstations running TCP/IP.

The imagePRESS Server custom-designed boards and system software provide efficient image processing and printing controls. The main functions of imagePRESS Server components and software are described in the following paragraphs.

The motherboard includes an Intel Core 2 Quad Q9550 QUAD-Core, 2.83GHz CPU that controls the image data transfer to and from the motherboard and runs the interpreter. The interpreter rasterizes the page description file and compresses the image pattern into memory using compression technology.

The interpreter outputs compressed raster data through the image frame buffer memory to the imagePRESS Server copier interface board. The copier interface board decompresses the image data and sends it to the copier through the copier interface cable. The raster data is supplied to the copier, which then renders the final image on paper at full rated engine speed.

High-speed DIMMs (dual in-line memory modules) on the motherboard hold the image data during printing. The imagePRESS Server is configured with two 512MB DIMMs and two 1GB DIMMs, for a total of 3GB of memory.

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

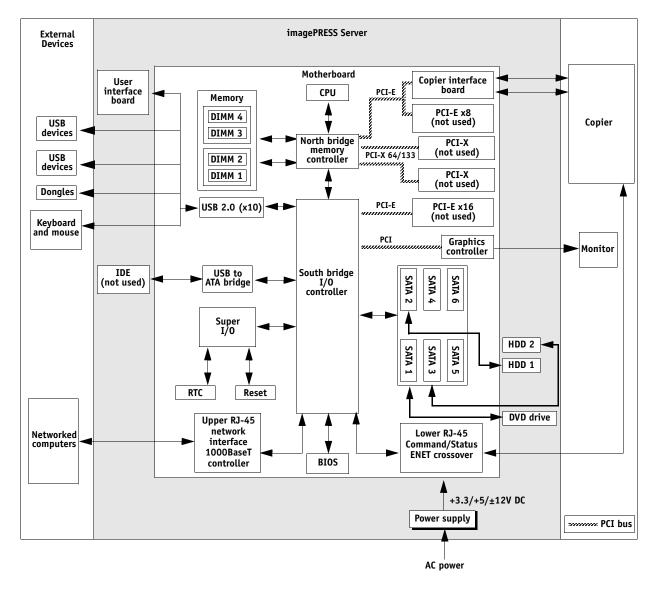


FIGURE 2: imagePRESS Server functional diagram

## **INSTALLATION**

This chapter includes information about the following:

- Installation sequence (see below)
- Checking the customer site (see page 24)
- Unpacking the imagePRESS Server (see page 26)
- Installing the imagePRESS Server and connecting it to the copier and network (see page 28)
- Completing the installation (see page 31)
  - Print a Test Page and Configuration Page (page 40).
  - Remind the site administrator to install current user software on networked computers that print to the imagePRESS Server (see *Printing* and *Utilities* on the User Documentation CD).

## Installation sequence

Familiarize yourself with this chapter before you attempt an installation. The installation sequence described in this chapter is designed to make your job as easy as possible. Installation problems are easier to avoid and diagnose if you proceed from the component to the system level and verify functionality at each stage. Figure 3 on page 23 outlines the recommended installation procedure for connecting the imagePRESS Server to the copier.

Because the imagePRESS Server is a node on the customer's computer network, make sure that you coordinate your scheduled installation with the network administrator at the customer site. For Network Setup information, refer the network administrator to *Configuration and Setup* on the User Documentation CD.

**NOTE:** You can change the default language preinstalled at the factory using the Configure tool available through Command WorkStation and WebTools. Start Configure, navigate to Server > General > Choose Server Language, and then click Apply.

**NOTE: Connecting to a different copier model** — The imagePRESS Server is configured at the factory to connect to a specific copier model within the supported copier series (listed in the note on page 9). If the imagePRESS Server is later connected to a different copier model in the series, it will auto-reboot approximately five minutes after it is powered on, in order to establish communication with the different copier. The auto-reboot is normal and only occurs the first time the imagePRESS Server is powered on with the different copier. Do not press any buttons or interrupt the imagePRESS Server while it is rebooting.

### INSTALLATION

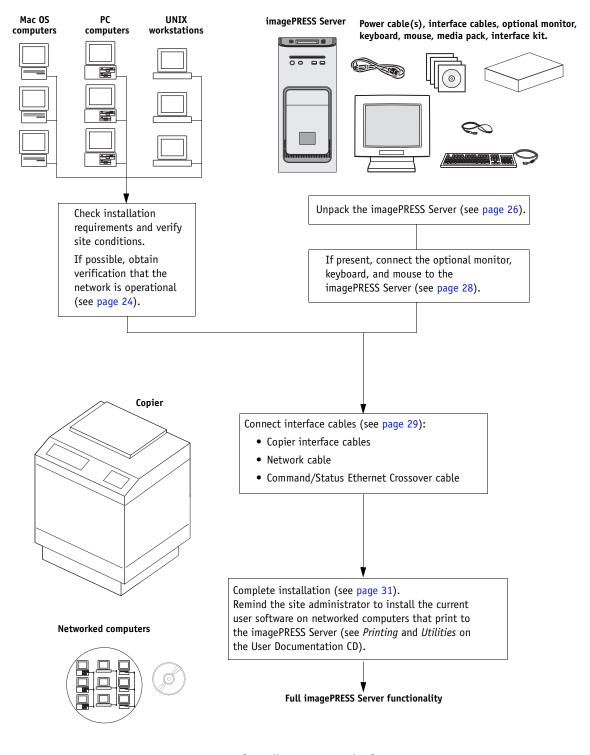


FIGURE 3: Summary of installation steps and references

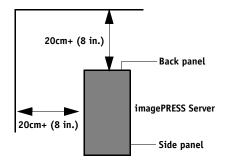
## Checking the customer site

Before you install the imagePRESS Server, check site conditions and inform the customer of any installation requirements.

#### **Copier readiness**

- □ Is the copier configured for use with the imagePRESS Server? (For the proper settings, see the documentation that accompanies the copier.)
- □ Is the service mode COPIER>OPTION>INT-FACE>IMG-CONT set to 3?
- □ Has the Open Interface Board Kit been installed in the copier (see the documentation that accompanies the media pack).
- □ Is space available near the copier for the imagePRESS Server?

Make sure that adequate space is available for the imagePRESS Server. Allow enough space at the back panel for the cables to route easily and at the side panel so that the imagePRESS Server does not interfere with use of or service to the copier (such as clearing a paper jam). You may need to move the copier away from the wall so that the interface connectors are accessible.



#### **Does the copier require service or adjustments?**

Print the copier Test Page before you install the imagePRESS Server.

If the image indicates that the copier needs adjustment, inform the customer. After getting approval, complete the necessary copier service.

#### Power

# □ Is a dedicated, grounded electrical outlet for the imagePRESS Server available near the copier?

Locate the grounded electrical outlet that will supply power to the imagePRESS Server. Do not run the imagePRESS Server and the copier on the same circuit. Use a surge suppressor for the imagePRESS Server if the customer has provided one.

- *Do not* use a 3-prong adapter in a 2-hole ungrounded outlet.
- *Do not* use an extension cord.
- *Do not* plug the imagePRESS Server into a circuit with heating or refrigeration equipment (including water coolers).
- *Do not* plug the imagePRESS Server into a switchable wall outlet. This can result in the imagePRESS Server being turned off accidentally.
- Do not pull on the cable when unplugging the imagePRESS Server. Pull the plug, instead.

Network

- □ Make sure that the network will be available at the time set for installation.
- Verify with the network administrator that the network is functioning before you attach the imagePRESS Server.
- □ Make sure that the configuration requirements specified in *Configuration and Setup* (on the User Documentation CD) have been met for remote computers and the network.

## Setting customer expectations

When the site is ready, installation of the imagePRESS Server takes about one hour. Inform the customer of the following:

- Some nodes on the network may be unavailable for up to one hour.
- The copier may be unavailable for up to one hour.
- 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 imagePRESS Server and confirms network functionality with the connector in place before the date scheduled for the imagePRESS Server installation.

- The network administrator must make a networked computer available during the installation. The appropriate software must be installed in advance. Documentation for the networked computer and network operating software should be available.
- The network administrator must install the user software shipped with the imagePRESS Server onto networked Windows and Mac OS computers that print to the imagePRESS Server (user documentation is also included).

**NOTE:** This guide covers hardware installation and service and provides general information about connecting the imagePRESS Server to the customer's network. Network Setup and configuration information exceeds the scope of this guide. For Network Setup and configuration information, refer the network administrator to *Configuration and Setup* on the User Documentation CD.

## Unpacking the imagePRESS Server



The imagePRESS Server is assembled and shipped from the factory with all necessary cables (except the network cable) and documentation (see page 27).

# Never lift the imagePRESS Server by grasping the top panel. The top panel does not support the weight of the system.

**AVERTISSEMENT:** Ne jamais soulever le serveur d'impression par sa partie supérieure : celle-ci ne peut pas supporter le poids du système. **AVVERTENZA:** Il server di stampa non deve essere mai sollevato afferrandolo dal pannello superiore, in quanto quest'ultimo non può sostenere il peso dell'intero sistema.

WARNUNG: Heben Sie den Druckserver nicht an der oberen Gehäuseabdeckung an. Die obere Gehäuseabdeckung ist nicht dafür ausgelegt, das Gesamtgewicht des Systems zu tragen.

**ADVERTENCIA:** No levante nunca el servidor de impresión agarrándolo por el panel superior. El panel superior no soporta el peso del sistema.

**AVISO:** Nunca erga o servidor de impressão pelo painel superior. O painel superior não suporta o peso do sistema. **WAARSCHUWING:** Til de afdrukserver nooit op door het bovenpaneel vast te nemen. Het bovenpaneel kan het gewicht van het systeem niet dragen.

#### TO UNPACK THE IMAGEPRESS SERVER

1. Open the box and remove the packing material.

Save the original boxes and packing material in case you need to transport the imagePRESS Server at a later date.

- 2. Remove the contents from the top container. Inspect the contents for visible damage. The top container should include the following items:
  - Bags containing a straight-through Ethernet network cable (10 ft), a crossover Ethernet Command/Status cable (18 ft), and five AC power cables (Chinese, E.U., Japan, U.K., and U.S.).
  - Open Interface Board kit (for installation in the copier; copier interface cables included).
  - Fiery SeeQuence Suite (includes a dongle, Adobe Acrobat CD, PitStop installer, and documentation)
  - Command WorkStation (multiple languages)
  - Fiery JDF Connector CD
  - imagePRESS Server Setup Roadmap
  - Customer media pack (includes disks for system software, user software, Fiery Options Utility, user documentation, and other documentation)
- 3. Set aside the remaining components from the top container.
- 4. Remove the top container and any packing material.

Set aside the packing material and note the orientation of the imagePRESS Server inside the shipping container, in case you need to repack it later.

#### 5. Carefully lift the imagePRESS Server out of the box.

If you notice shipping damage to any component, save the shipping container in case the carrier needs to see it. Call the carrier immediately to report the damage and file a claim.

#### 6. Give the media pack to the customer or network administrator.

Let the customer or network administrator know that in order to take full advantage of the imagePRESS Server, the user software must be installed on computers that will print to the imagePRESS Server.

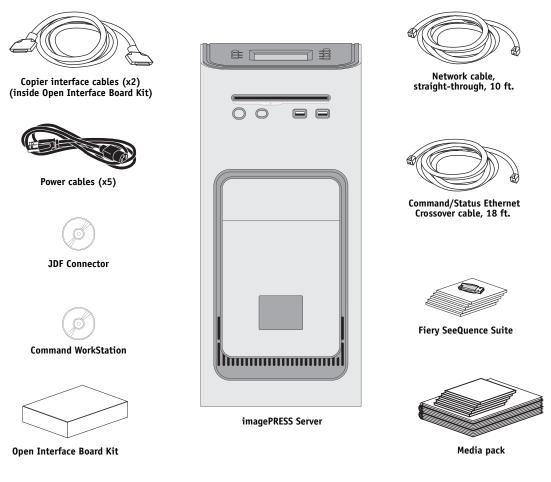


FIGURE 4: imagePRESS Server shipping contents

## Connecting the imagePRESS Server

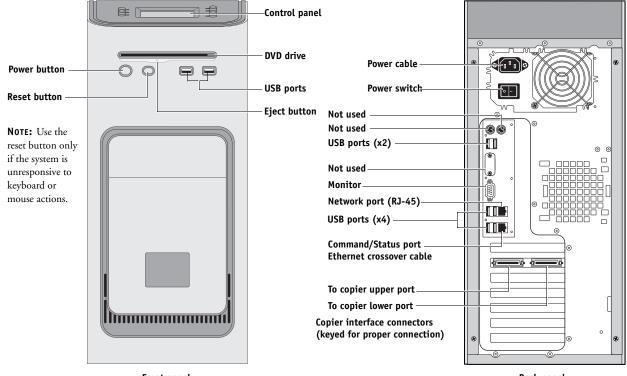
You are now ready to make the following connections:

- Monitor, keyboard, and mouse (if present)
- Dongle (if present)
- Power cable connection
- Copier interface cable connections
- Command/Status Ethernet Crossover cable connection
- Network cable connection

IMPORTANT

For detailed information about the monitor, keyboard, and mouse, see the documentation that accompanies the optional kit.

Follow standard ESD precautions when handling components.





Back panel

FIGURE 5: imagePRESS Server connections

#### TO CONNECT POWER

- 1. Connect the recessed end of the imagePRESS Server power cable to the power connector on the back of the imagePRESS Server (see Figure 5 on page 28).
- 2. Connect the other end of the imagePRESS Server power cable to a wall outlet.

#### TO CONNECT TO THE COPIER

- 1. Make sure that the imagePRESS Server and the copier are powered off.
- 2. Locate the two imagePRESS Server copier interface cables, and identify the keyed and unkeyed connector ends on each cable.

Each cable has one keyed connector and one unkeyed connector.

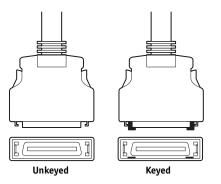


FIGURE 6: Copier interface cable connections

- 3. Connect the copier interface cables to the interface ports on the copier.
- 4. Connect the other ends of the cables to their corresponding ports on the imagePRESS Server.

**IMPORTANT** 

Each cable connector is designed to fit only one way when properly oriented. If a cable connector does not fit into an interface port, change the orientation of the cable. Do not force a connection that is mis-keyed. Doing so may permanently damage the port or the cable (see Figure 5 on page 28).

- 5. Connect one end of the Command/Status Ethernet Crossover cable to the lower RJ-45 port on the back of the imagePRESS Server.
- 6. Connect the other end of the Command/Status Ethernet Crossover cable to the RJ-45 port on the copier.

IMPORTANT

The Command/Status Ethernet Crossover cable and the straight-through Ethernet network cable included with the imagePRESS Server look similar, but are not interchangeable. Make sure that you attach the Command/Status Ethernet Crossover cable to the lower RJ-45 port on the imagePRESS Server back panel (see page 28).

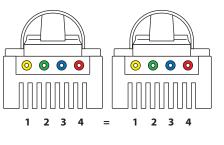
#### TO CONNECT TO THE NETWORK

- 1. Make sure that the imagePRESS Server is powered off.
- 2. Locate the straight-through Ethernet cable that shipped with the imagePRESS Server.

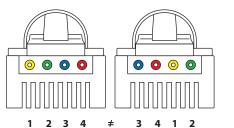
#### IMPORTANT

You must use this *straight-through* Ethernet cable for the network connection. To verify the cable type, align the connectors on each end of the cable as shown in Figure 7. On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable, the wire arrangements are different.

Align cables side by side and examine wires.



Straight-through cable: wire arrangements are identical on both connectors



Crossover cable: wire arrangements are different (The wire arrangement shown here is an example; actual arrangements may vary.)

FIGURE 7: Straight-through and crossover Ethernet cables

3. Connect the network cable to the upper network port on the back of the imagePRESS Server (see Figure 5 on page 28).

The imagePRESS Server network port supports 10/100/1000 Mbps link speed. Use the upper RJ-45 port to connect to the network. The lower RJ-45 port is for the Command/ Status Ethernet Crossover cable.

IMPORTANT

The straight-through Ethernet network cable and the Command/Status Ethernet Crossover cable included with the imagePRESS Server look similar, but are not interchangeable. Make sure that you attach the *straight-through* Ethernet network cable to the upper RJ-45 port on the imagePRESS Server back panel (see Figure 5 on page 28).

4. Make sure the other end of the network cable is connected to the customer network hub.

## Completing installation and starting up

To finish the installation of the imagePRESS Server at the customer site, make sure to do the following:

- 1. Make sure that the copier is powered on.
- 2. Power on the imagePRESS Server (see page 42).

Make sure that the power cord is attached and that the power switch on the back panel is in the ON position. Press the power button on the front panel once and release the button. The power supply automatically senses the correct voltage.

3. Wait for the imagePRESS Server to power on and for the Info screen to display Idle on the copier touch panel (see page 32).

The imagePRESS Server takes approximately two minutes to power on and display Idle on the Info screen of the copier touch panel.

While the imagePRESS Server is booting, the following message displays on the copier touch panel: "Wait a while. (Check the power source of the print server behind the main unit and cable connection if the display does not change in a moment.)" If the message remains for longer than two minutes, verify that the copier interface cable is connected correctly to the copier.

#### 4. Perform any required system software upgrades.

For instructions, see the documentation that accompanies the imagePRESS Server service upgrade.

Updates to Fiery Server Software may be available for the imagePRESS Server from a variety of sources (for example, System Updates (see page 109), patches provided on CD, or patches downloaded by the customer).

Microsoft Windows operating system updates should be obtained from Microsoft directly. Because such updates are available directly from Microsoft, EFI does not maintain or provide these updates via the System Updates feature.

- 5. Print the Test Page and Configuration page (see page 40) and ask the customer to verify the output.
- 6. Ask the network administrator to perform Setup and print some test documents over the network.
- 7. Store the output and the current Configuration page(s) near the copier.
- 8. Inform the site administrator that the imagePRESS Server user software must be installed on networked computers that print to the imagePRESS Server.
- 9. Ask the site administrator to make sure that all media (DVDs and/or CDs) shipped with the imagePRESS Server is stored in a safe location accessible to you.

## USING THE IMAGEPRESS SERVER

This chapter includes the following information:

- Using the imagePRESS Server Control Panel
- Using the copier touch panel
- Checking Network status LEDs
- Shutting down and restarting the imagePRESS Server

## **Overview**

Two main user interfaces are available for the imagePRESS Server:

- The Control Panel on the front of the imagePRESS Server (see following figure)
- The copier touch panel (see page 35)

**NOTE:** A third user interface—the Fiery Advanced Controller Interface (FACI), which includes a monitor, keyboard, and mouse—is sold separately as an optional kit.

## Using the imagePRESS Server Control Panel

The Control Panel on the front of the imagePRESS Server allows you to do the following:

- Eject CDs and DVDs. (A hardware eject button is also provided below the disc slot.)
- Shut down, restart, or reboot the imagePRESS Server (see page 42).

**NOTE:** You can also shut down and restart the imagePRESS Server through the copier touch panel (see page 43).

• Interact with the imagePRESS Server during software installation (see page 105).

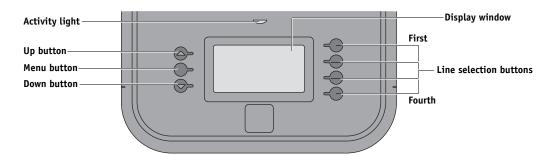


FIGURE 8: imagePRESS Server Control Panel

## Buttons

Line selection buttons	Use the four line selection buttons on the right side of the Control Panel to select the command displayed on the corresponding line of the LCD display.
Up and Down buttons	Use these buttons to scroll to different screens in multi-screen lists or prompts.
Menu button	Press this button to view the Eject CD/DVD, Restart Server, Shut Down System, and Reboot System options.

## Activity light

The activity light on the imagePRESS Server Control Panel indicates current imagePRESS Server activity. If the light is:

Flashing amber	The imagePRESS Server is starting up and the BIOS has established communication with the User Interface Board (UIB).
Flashing green	The imagePRESS Server is continuing startup and the Windows operating system has established communication with the UIB.
Solid green	The imagePRESS Server is powered on and in the Idle state.
Solid amber	The imagePRESS Server is powered off, but the AC power cable is plugged into the power source. The Control Panel LCD continues to draw power when the imagePRESS Server is off.
Flashing or solid red	An error has caused printing to be disabled.
No light	The imagePRESS Server is powered off and the AC power cable is not connected to a power source.

## imagePRESS Server Control Panel Functions menu

The following options are available from the imagePRESS Server Functions menu:



Use the line selection buttons to the right to select an option.

- Eject CD/DVD—Allows you to eject media from the DVD drive. Media is also automatically ejected whenever the imagePRESS Server is restarted, shut down, or rebooted. A hardware eject button is also provided below the disc slot.
- Restart Server (soft reset)—Resets the imagePRESS Server server software but does not reboot the entire system. Network access to the imagePRESS Server is temporarily interrupted and all currently processing jobs are aborted and may be lost.
- Shut Down System—Shuts down all imagePRESS Server server software and powers off the system. Always select this option to power off the system.
- Reboot System (hard reset)—Shuts down all imagePRESS Server activity properly and then reboots.

**NOTE:** Avoid using the reset button on the front panel, as doing so may cause the system to operate unpredictably. Use the reset button on the front of the imagePRESS Server only if the system is frozen and unresponsive to keyboard or mouse actions.

## Using the copier touch panel

The imagePRESS Server area of the copier touch panel is the main user interface for the imagePRESS Server. Navigating to the imagePRESS Server area allows you to view status information, print system pages, set up printing, and shut down the imagePRESS Server.

To access the imagePRESS Server area, scroll as follows: Copy screen > Printer screen > Info screen > Functions menu (see page 36).

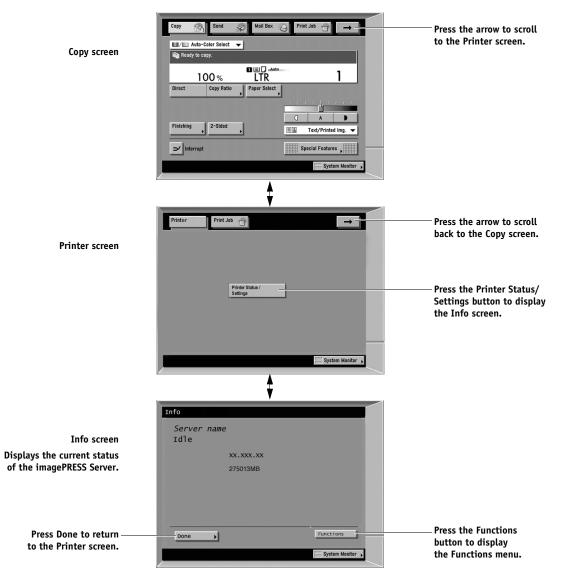


FIGURE 9: Accessing the imagePRESS Server area of the copier touch panel

## imagePRESS Server copier touch panel Functions menu

The imagePRESS Server Functions menu, accessible from the copier touch panel, allows you to perform a variety of administrative functions that do not affect the print jobs of other users. The functions available from the Functions menu are described on page 37. Many of these functions are also available from Command WorkStation.

Functions	
Print Pages	
USB Media Server	
Scan Job	
Shut Down	
Clear Server	
▼ 1/2 ▲	
1/2	Use the selection buttons on the right to select an option.
System Monitor 🔸	Use the up and down buttons
ł	to scroll through the list of functions.
Functions	Press the Done button to return to the Printer screen.
Run Diagnostics	
Tray Alignment	
Calibration	
System Updates	
2/2	
Done	
System Monitor 🔸	

FIGURE 10: Using the imagePRESS Server Functions menu from the copier touch panel

Print Pages—Enables you to print system pages from the imagePRESS Server (see page 40). You can print the following pages from the submenu that appears:

• Test Page—Enables you to confirm that the imagePRESS Server-to-copier connection is functioning properly. The Test Page provides sample images that you can use to troubleshoot the imagePRESS Server. The following information is also listed: Server name, printer model, output profile, calibration information, RGB source, rendering style, date and time printed, CMYK simulation, simulation method, and compression information.

When you print a Test Page to confirm that the imagePRESS Server-to-copier connection is functioning properly, keep in mind that:

All color patches should be visible, even though they may be very faint in the 5% and 2% range.

Each color's patch set should show uniform gradation from patch to patch as the color lightens from 100% to 0%.

Poor image quality may indicate a need to calibrate the system or service the copier. Information on the Test Page includes the date and time of the last calibration, so the Test Page should be kept for future reference. For more information, see *Color Printing* on the User Documentation CD.

Configuration—Prints the current server and device configuration. This includes
information about all current Setup settings, calibration profiles, and the Ethernet address
of the imagePRESS Server. The Configuration page also provides version information for
the BIOS chip and information about any installed options or special features included in
the imagePRESS Server.

Printing the Configuration page can also be helpful during installation, Setup, and service. After installing the imagePRESS Server (including connecting to the network) and before default settings are changed in Run Setup, you can obtain a record of the defaults by printing the Configuration page. Before you perform any service procedure, print the imagePRESS Server Configuration page, if possible, so that you can return the settings to their former configuration, if necessary.

- Job Log—Prints a log of the most recent jobs printed on the imagePRESS Server. By default, the Job Log lists the last 55 jobs. For more information about the Job Log, see *Configuration and Setup* on the User Documentation CD.
- Color Charts—Prints the color reference charts. These pages include swatches of the RGB, CMY, and PANTONE colors available from the imagePRESS Server.
- Font List—A list of all fonts resident on the imagePRESS Server hard disk drive.
- E-mail Log—Prints a log of the last 55 e-mail transmissions to or from the imagePRESS Server. The E-mail printing feature must be enabled in Setup before the E-mail Log can be printed. For more information, see *Configuration and Setup* on the User Documentation CD.
- FTP Log—Lists jobs scanned on the copier and sent to the FTP site designated in the Setup options. The log is available only when Scan to FTP is enabled in Setup. For more information, see *Configuration and Setup* on the User Documentation CD.

USB Media Server—Allows users to print a file from a USB device to one of the published print connections.

Scan Job—Allows users to initiate a scan job from the Control Panel. For more information, see *Utilities* on the User Documentation CD.

Shut Down-When you select this option, you can choose from the following:

- Restart Server (soft reset)—Resets the imagePRESS Server server software but does not reboot the entire system. Network access to the imagePRESS Server is temporarily interrupted and all currently processing jobs are aborted and may be lost.
- Shut Down System—Shuts down all imagePRESS Server server software and powers off the system. Always select this option to power off the system.
- Reboot System (hard reset)—Shuts down all imagePRESS Server activity properly, and then reboots the system.

Clear Server—Clears all jobs from the server queues. It also clears the Job Log, all jobs saved on the imagePRESS Server hard disk drive, and the index of all archived jobs. The Clear Server command enables you to clear all queued print jobs from the imagePRESS Server (jobs in the imagePRESS Server Print, Hold, and Printed queues). Jobs can also be deleted, individually or as a group, from the job management tools. Clear Server also clears the Job Log, all jobs archived on the imagePRESS Server hard disk drive, the index of archived jobs, all FreeForm masters, and the index of FreeForm masters. To preserve the Job Log, print or export the Job Log before you choose Clear Server.

To clear the imagePRESS Server, access the Functions menu and choose Clear Server. You are asked to confirm your selection. You are also prompted to enter the Administrator password.

Run Setup—Allows you to access the Setup options to configure the network and printing environment. Typically it is the network administrator's responsibility to configure Setup according to the network and user environment. Setup may be required the first time the imagePRESS Server is powered on and can be changed at any time. For a list of Setup options and detailed descriptions of each option, see *Configuration and Setup* on the User Documentation CD.

Run Diagnostics—Allows you to run diagnostics on the following:

- Video Diagnostics—Runs diagnostics on the copier interface board.
- Test E-mail—Tests the imagePRESS Server e-mail printing feature.

Tray Alignment—Use this feature to align input trays for printing. Aligning the trays helps to center an image on the printed page or match the front and back images of a duplex printed page. For more information, see *Utilities* on the User Documentation CD.

Calibration—Allows the customer to calibrate the imagePRESS Server using ColorCal. If an Administrator password has been set, you must enter it to access Calibration. For more information, see *Color Printing* on the User Documentation CD.

System Updates—Allows customers to schedule and accept installation of certain software updates from a secure site on the Internet. By default, the feature is configured to display a notification on the monitor (if the FACI option is present) that software updates are available for the imagePRESS Server. You can also check for system updates via the monitor (if present) by choosing Start > All Programs > Fiery > System Updates, and then clicking Check Now. Depending on how it is configured, System Updates operates manually or automatically. For more information about how to configure System Updates, see *Configuration and Setup* on the User Documentation CD.

Microsoft Windows operating system updates should be obtained from Microsoft directly. Because such updates are available directly from Microsoft, EFI does not maintain or provide them via the System Updates feature.

# Print pages menu

This section describes how to print the Test Page and Configuration page from the Print Pages menu (described on page 37). To navigate to the Print Pages menu from the copier touch panel, scroll as follows: Copy screen > Printer screen > Info screen > Functions menu > Print Pages menu.

Printing the Configuration page can be helpful during installation, Setup, and service. After installing the imagePRESS Server (including connecting to the network), and before default settings are changed in Run Setup, you can obtain a record of the defaults by printing the Configuration page.

Before you perform any service procedure, you should print the imagePRESS Server Configuration page, if possible, so that you are prepared to return the settings to their former configuration, if necessary.

Printing the Test Page indicates that the imagePRESS Server is functional and that the connection between the imagePRESS Server and the copier is working.

#### TO PRINT A PAGE FROM THE PRINT PAGES MENU

- 1. If it is not powered on, power on the copier and allow it to warm up.
- 2. If it is not powered on, power on the imagePRESS Server using the power button on the front panel (see page 28) and allow it to start up completely (approximately three minutes).
- 3. Access the Info screen from the copier touch panel and make sure that Idle appears (see page 35).

If Printing or RIPping appears, the imagePRESS Server is processing. You must wait until the system finishes and reaches the Idle state.

- 4. Touch the Functions button.
- 5. Touch Print Pages, and then select the page that you want to print.

The imagePRESS Server sends the selected page(s) to the copier.

6. If you printed the Test Page, examine the quality of the page.

If the Test Page prints, you know the imagePRESS Server is functional and the connection between the imagePRESS Server and the copier is working. If the Test Page fails to print, look up printing problems in the Troubleshooting table on page 130.

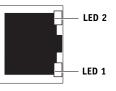
When you examine the Test Page, keep in mind the following:

- All color patches should be visible, even though they may be very faint in the 5% and 2% range.
- Each color's patch set should show uniform gradation from patch to patch as the color lightens from 100% to 0%.

Poor image or color quality may indicate a need to calibrate the system or service the copier. Information on the Test Page includes the date and time of the last calibration, so the Test Page can be kept for future reference. For more information, look up printing problems on page 130, or see *Color Printing* on the User Documentation CD.

# **Network Status LEDs**

Two LEDs next to the Ethernet connector indicate the network speed. When a data transfer occurs between the imagePRESS Server and the network, the appropriate LED(s) blink to indicate network activity. For additional network information, see *Configuration and Setup* on the User Documentation CD.



Network link speed	LED 1	LED 2
10 Megabits/second	Off	Green
100 Megabits/second	Green	Green
1000 Megabits/second	Amber	Green

Ethernet network port (Upper RJ-45)

# IMPORTANT

**NOTE:** The Ethernet network cable at the customer site and the Command/Status Ethernet Crossover cable included with the imagePRESS Server look similar, but are not interchangeable. Make sure that you attach the Command/Status Ethernet Crossover cable to the lower RJ-45 port and the network cable to the upper RJ-45 port on the imagePRESS Server back panel.

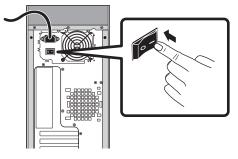
# Starting, shutting down, restarting, and rebooting

The customer will generally leave the imagePRESS Server on all the time. Remember that when the imagePRESS Server is powered off, network access to the copier is interrupted. Power off the imagePRESS Server when you need to service it and before you remove or attach any cables to it.

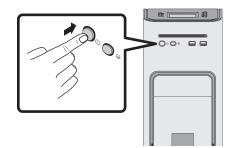
**NOTE:** Use the reset button on the front of the imagePRESS Server only if the system is unresponsive to keyboard or mouse actions.

### TO START THE IMAGEPRESS SERVER

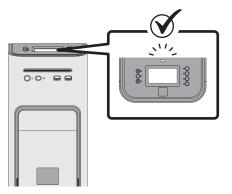
1. Make sure that the power cable is attached and that the power switch (if present) is in the ON position.



2. Press the power button on the front panel.



3. Check the Activity light on the Control Panel.



The power supply automatically senses the correct voltage. Allow startup to proceed without interruption. Do not press any buttons on the Control Panel while the system is starting.

TO SHUT DOWN, RESTART, OR REBOOT FROM THE IMAGEPRESS SERVER CONTROL PANEL

1. Make sure that the Info screen on the copier touch panel displays Idle (see page 35).

If Printing or RIPping appears on the touch panel, the imagePRESS Server is processing. You must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

**NOTE:** Notify the network administrator before you remove the imagePRESS Server from the network.

- 2. At the imagePRESS Server Control Panel, press the Menu button.
- 3. Select Restart Server, Shut Down System, or Reboot System.



Use the line selection button to the right to select Restart Server, Shut Down System, or Reboot System.

Before accessing internal components, make sure that all cables are disconnected from the back of the imagePRESS Server.

#### TO SHUT DOWN, RESTART, OR REBOOT THE IMAGEPRESS SERVER FROM THE COPIER TOUCH PANEL

- 1. Navigate to the Info screen on the copier touch panel (see page 35).
- 2. Make sure that the Info screen reads Idle.

If Printing or RIPping appears on the touch panel, the imagePRESS Server is processing. You must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

**NOTE:** Notify the network administrator before you remove the imagePRESS Server from the network.

- 3. Press the Functions button to display the Functions menu.
- 4. Press the Shut Down button.
- 5. Select Restart Server, Shut Down System, or Reboot System.

Snut	Down	
•	Restart Server	
•	Shut Down System	
	Reboot System	
	· √ 1/1 ^	
_	<u> </u>	Done

Use the line selection buttons to select Restart Server, Shut Down System, or Reboot System.

Before accessing internal components, make sure that all cables are disconnected from the back of the imagePRESS Server.

# SERVICE PROCEDURES

Generally, the imagePRESS Server requires no regular service or maintenance. Use the procedures in this chapter to inspect, remove, reseat, and replace major hardware components, as well as install system software.

# **Overview**

This chapter includes information about servicing the following components:

- Boards and cables
- Motherboard components (DIMMs, CPU, CMOS, jumpers, and battery)
- Fans
- Power supply
- HDDs (hard disk drives)
- DVD drive

Replacement parts are available from your authorized service representative. The terms "replace" and "replacing" are used throughout this guide to mean the reinstallation of existing components. Install new components only when necessary. If you determine that a component that you have removed is not faulty, reinstall it.

**NOTE:** Replacement parts and specifications are subject to change. When ordering replacement parts, refer to the current parts list maintained by your authorized service/support center. Install the correct parts as directed by your service/support center.

IMPORTANT

When performing the service procedures described in this chapter, follow the precautions listed on page 14.

The tools required to service the imagePRESS Server are listed on page 18.

# imagePRESS Server overview diagrams

The following figures provide an overview of imagePRESS Server components.

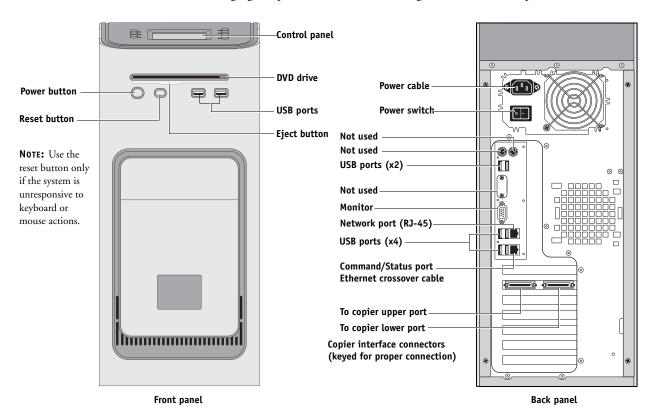
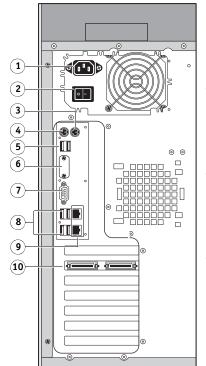
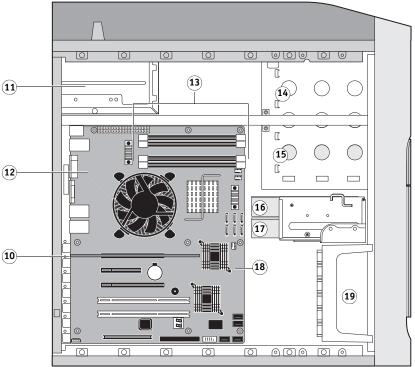


FIGURE 11: Front and back panels





Key

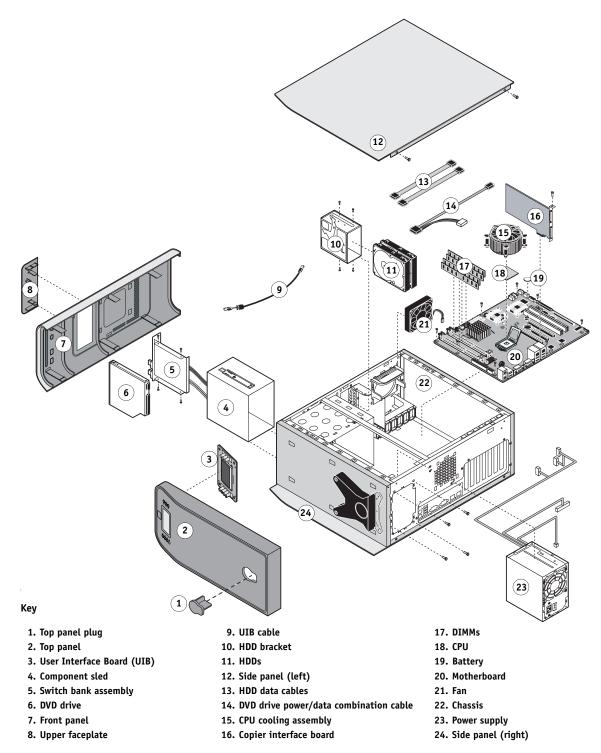
- 1. Power cable connector
- 2. Power switch, back panel
- 3. Not used
- 4. Not used
- 5. USB ports (x2)
- 6. Not used

- 7. Monitor (option)
- 8. USB ports (x4)
- 9. Top = Network; Bottom = Command/Status port
- 10. Copier interface board (J12)
- 11. Power supply
- 12. CPU cooling assembly

- 13. DIMM slots
- 14. DVD drive
- 15. Removable drive (option)
- 16. HDD 2 in bracket
- 17. HDD 1 in bracket
- 18. Motherboard
- 19. Front fan

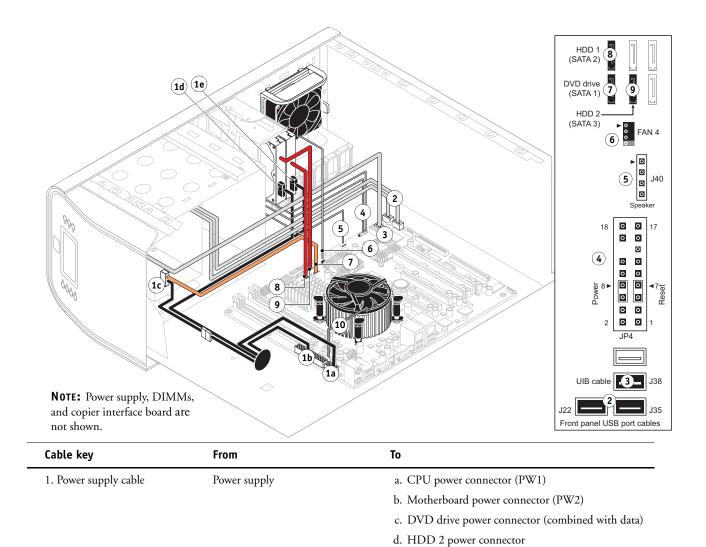
NOTE: Cables, UIB, or front panel USB ports are not shown.

FIGURE 12: Back panel and internal side view



NOTE: UIB buttons, CPU fan cable, tie-wraps, cable clamps, dongle(s), or external cables are not shown.

FIGURE 13: Exploded view of imagePRESS Server components



		e. HDD 1 power connector
2. Front panel USB port cables	Front panel	Motherboard connectors J22, J35 (see detail above)
3. UIB cable	User Interface Board	Motherboard connector J38 (see detail above)
4. Power and reset cables	Front panel	Motherboard connector JP4 (see detail above)
5. Speaker cable	Front panel	Motherboard connector J40 (see detail above)
6. Front panel fan cable	Front panel fan	Motherboard connector FAN 4
7. DVD drive power/data combo cable	DVD drive	Motherboard connector SATA 1 (see detail above)
8. HDD 1 data cable	HDD 1 (Bottom drive in bracket)	Motherboard connector SATA 2 (see detail above)
9. HDD 2 data cable	HDD 2 (Top drive in bracket)	Motherboard connector SATA 3 (see detail above)
10. CPU fan cable	CPU fan	Motherboard connector FAN 1 (If present, keep the cable cover on the CPU fan cable.)

FIGURE 14: Power and data cable connections in the imagePRESS Server

# Accessing internal components

This section describes how to shut down and open the imagePRESS Server. Always use the following procedures when opening the imagePRESS Server for inspection or service.

## Shutting down the system

You can shut down the imagePRESS Server from the imagePRESS Server Control Panel or the copier touch panel. When shutting down the imagePRESS Server, do the following:

- Remove the power cable from the back panel before removing or connecting interface cables or accessing the internal components.
- Remember that when the imagePRESS Server is powered off, network access to the copier is interrupted. Always obtain permission from the network administrator before you take the imagePRESS Server off the network.
- If you are cycling power, wait at least 10 seconds before powering back on.
- If you are unable to shut down the imagePRESS Server through the Control Panel or the copier touch panel, power off by holding down the power button on the front of the imagePRESS Server for up to eight seconds.
- Using the reset button may cause the system to operate unpredictably. Use the reset button on the front of the imagePRESS Server only if the system is frozen and unresponsive to keyboard or mouse actions.

**IMPORTANT** 

IMPORTANT

#### TO SHUT DOWN THE IMAGEPRESS SERVER FROM THE IMAGEPRESS SERVER CONTROL PANEL

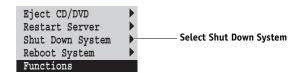
1. Make sure that the Info screen on the copier touch panel displays Idle (see page 35).

If Printing or RIPping appears on the copier touch panel, the imagePRESS Server is processing. You must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

**NOTE:** Notify the network administrator before you remove the imagePRESS Server from the network.

- 2. At the imagePRESS Server Control Panel, press the Menu button.
- 3. Select Shut Down System.



Before accessing internal components, make sure that all cables are disconnected from the back of the imagePRESS Server.

#### TO SHUT DOWN THE IMAGEPRESS SERVER FROM THE COPIER TOUCH PANEL

#### 1. Make sure that the Info screen on the copier touch panel displays Idle (see page 35).

If Printing or RIPping appears on the touch panel, the imagePRESS Server is processing. You must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

**NOTE:** Notify the network administrator before you remove the imagePRESS Server from the network.

- 2. Press the Functions button to display the Functions menu.
- 3. Press the Shut Down button.
- 4. Select Shut Down System.

Before accessing internal components, make sure that all cables are disconnected from the back of the imagePRESS Server.

Shut	Down	
•	Restart Server	•
•	Shut Down System	•
	Reboot System	•
_	▼ 1/1 ▲	_
	System M	

Use the line selection buttons to select Restart Server, Shut Down System, or Reboot System.

## Opening the imagePRESS Server

To service internal components, open the imagePRESS Server as described in the following procedure.

### TO OPEN THE IMAGEPRESS SERVER



Never lift the imagePRESS Server by grasping the top panel. The top panel does not support the weight of the system.

- 1. Shut down the imagePRESS Server (see page 49).
- 2. Remove all cables from the back of the imagePRESS Server.
- 3. If the imagePRESS Server is mounted on the optional furniture, and the optional monitor is attached, perform the disassembly instructions in "Servicing the imagePRESS Server with Furniture" on page 137.
- 4. Remove all panels necessary to access the component that you need to access.

For guidelines on which panels to remove, see the service procedure for the component that you want to access.

NOTE: When removing multiple panels from the imagePRESS Server, use the following order:

- Left panel (see page 52)
- Right panel (see page 52)
- Front panel (see page 53)
- Top panel (see page 54)

**NOTE:** When replacing panels, reverse the order.

- 5. Place the imagePRESS Server on a flat surface. Attach an ESD wrist strap before handling internal parts (see "Precautions" on page 14).
- 6. Carefully position the imagePRESS Server so that it is resting on its side and the internal components are facing up.

Place removed components on a grounded, antistatic surface.

TO REMOVE AND REPLACE THE LEFT OR RIGHT PANEL

1. Remove the screws that secure the panel to the back of the chassis.

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

2. Pull the back edge of the panel away from the chassis and lift the panel off the chassis.

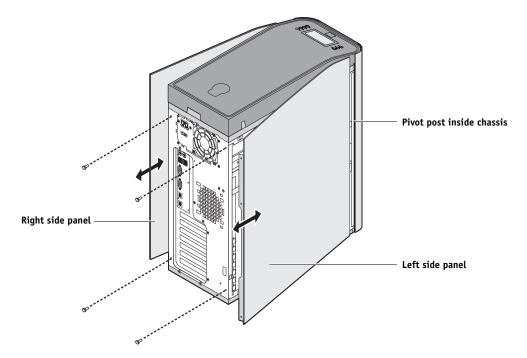


FIGURE 15: Removing/replacing the side panels

- 3. To replace the panel, fit the front edge of the panel on the pivot post in the chassis.
- 4. Rotate the panel closed against the back of the chassis and replace the screws that you removed earlier.

Make sure not to damage cables as you replace the panel. Fold all cables inside the chassis before closing the panel against the chassis.

#### TO REMOVE AND REPLACE THE FRONT PANEL

**NOTE:** To remove the front panel, you must first remove the left and right panels.

1. Remove the upper faceplate from the front of the chassis.

Press down to release the two tabs that secure the upper faceplate to the front panel, and then carefully remove the upper faceplate from the front panel.

**NOTE:** You must remove the upper faceplate in order to remove the front panel from the chassis.

2. Pull outward on the tabs that secure the front panel to the chassis, and then lift the panel off of the chassis.

First remove the two top tabs, then the middle tabs, and then the bottom tabs.

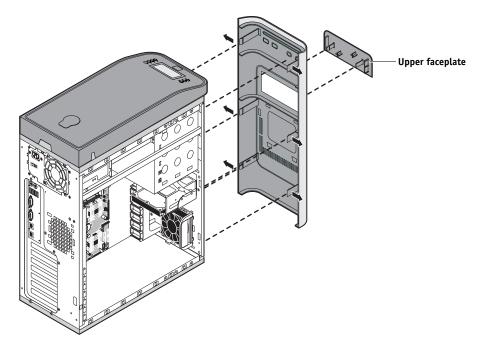


FIGURE 16: Removing/replacing the front panel

- 3. To replace the front panel, align the four cutouts in the panel with the power and reset buttons and front USB ports.
- 4. Press the panel against the chassis to snap it into place.

Snap the tabs in pairs (first the top tabs, then the middle tabs, and then the bottom tabs).

5. Replace the upper faceplate.

Insert the two standoffs at the base of the faceplate into the chassis, and then carefully press the faceplate against the chassis to lock the faceplate into place.

#### TO REMOVE AND REPLACE THE TOP PANEL

NOTE: To remove the top panel, you must first remove the left, right, and front panels.

1. Remove the plug from the top panel.

From the cutout in left side of the top panel, access and loosen the locking bolt, and then remove the plug.

### 2. Loosen the top panel.

Slide the top panel a few inches toward the front of the chassis to disengage the hooks in the panel from the slots in the top of the chassis.

**NOTE:** You may need to tap the back edge of the panel toward the front of the chassis to disengage the panel.

### 3. Detach the UIB cable from the motherboard.

#### 4. Remove the panel from the chassis.

Carefully route the UIB cable out of the hole in the top of the chassis as you remove the top panel.

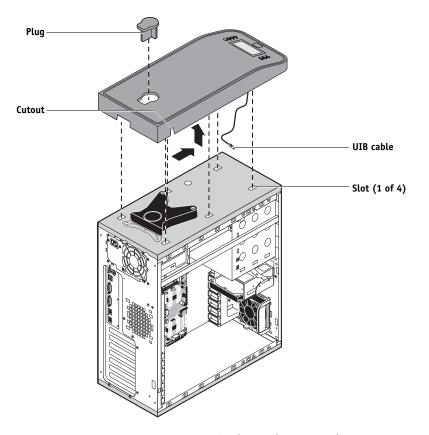


FIGURE 17: Removing/replacing the top panel

5. To replace the top panel, first route the UIB cable through the hole in the top of the chassis and attach it to motherboard connector J38.

#### 6. Position the top panel on the top of the chassis.

Place the hooks on the underside of the panel into the slots in the top of the chassis, and then slide the top panel toward the back of the chassis to engage the hooks.

**NOTE:** You may need to tap the front edge of the panel toward the back of the chassis to engage the panel completely.

### 7. Replace the plug on the top panel.

Correctly align the plug, and then place it into the receptacle on the top panel. Secure the plug by replacing the locking bolt through the cutout in the left side of the top panel.

# **Removing and replacing boards**

This section includes procedures for removing and replacing the following boards:

- Copier interface board
- User Interface Board
- Motherboard

The imagePRESS Server is shipped from the factory with a standard board configuration, as shown in Figure 12 on page 46. If optional components have been installed, see the documentation that accompanies the particular option kit.

# **Copier interface board**

The copier interface board provides the print and scan interface between the imagePRESS Server and the copier. It is installed in motherboard connector J12. The copier interface board processes the image data and sends it to the copier through the copier interface cable available on the imagePRESS Server back panel.

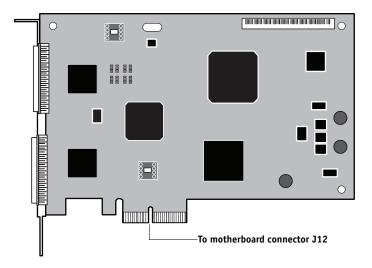


FIGURE 18: Diagram of the copier interface board

#### TO REMOVE THE COPIER INTERFACE BOARD

1. Shut down and open the imagePRESS Server (see pages 49 and 51).

To remove the copier interface board, you must remove the left panel.

- 2. Make sure that the copier interface cable is removed from the imagePRESS Server back panel.
- 3. Remove the board mounting bracket screw that attaches the copier interface board to the chassis.
- 4. Remove the copier interface board from motherboard connector J12.

Grasp the copier interface board at the front and back edges and gently pull the board straight out of its motherboard connector.

5. Place the copier interface board in an antistatic bag.

#### TO REPLACE THE COPIER INTERFACE BOARD

1. Seat the copier interface board in connector J12 on the motherboard (the topmost connector), and then secure it to the chassis with the board mounting bracket screw that you removed earlier.

The copier interface board edge connector is keyed to fit in slot J12 only when properly oriented.

2. Reassemble the imagePRESS Server and verify its functionality (see page 104).

# User Interface Board assembly

The User Interface Board (UIB) provides the interface between the imagePRESS Server and the user. The front of the UIB contains circuitry for the following:

- Activity lights (amber, green, and red LEDs)
- Display window (LCD)
- Four line selection buttons
- Up and Down buttons
- Menu button
- Jewel lights

The UIB cable is routed from a connector on the back of the User Interface Board to connector J38 on the motherboard (see Figure 22 on page 62).

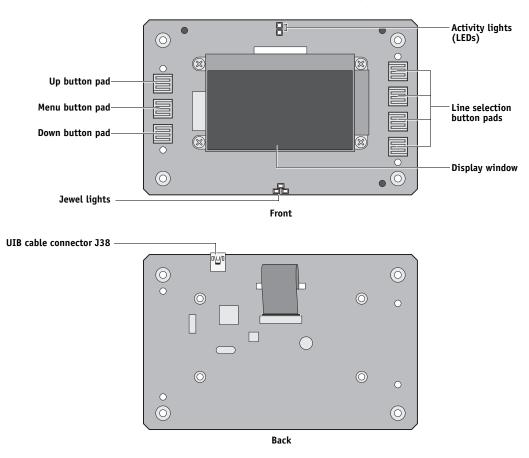


FIGURE 19: Diagram of the User Interface Board (front and back)

#### TO REMOVE THE USER INTERFACE BOARD

1. Shut down and open the imagePRESS Server (see page 49).

To access the User Interface Board, you must remove the left, right, front, and top panels.

**NOTE:** Be sure to detach the UIB cable from its connector on the motherboard, and then carefully route the cable out of the hole in the top of the chassis as you remove the top panel.

- 2. Turn the top panel over to expose its underside and place it on a padded surface.
- 3. Detach the UIB cable from the connector on the back of the UIB.

Detach the UIB cable by grasping the cable connector. Avoid pulling on the cable.

- 4. Remove the four screws that secure the UIB to the underside of the top panel.
- 5. Remove the UIB from the top panel. Be sure to remove the plastic lens that covers the display window of the UIB.

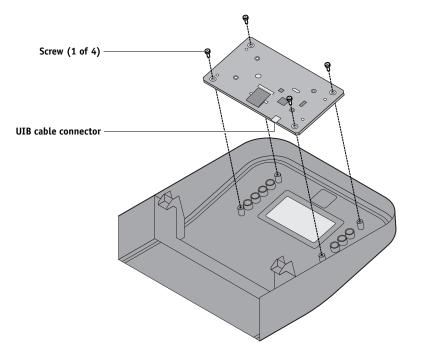


FIGURE 20: Removing/replacing the User Interface Board

6. If you are removing the UIB to replace it with a new board, remove the UIB buttons from the old UIB (see Figure 21 on page 60).

When removing the buttons, take care not to damage the pointed tabs that hold the buttons onto the UIB.

7. Place the UIB in an antistatic bag.

#### TO REPLACE THE USER INTERFACE BOARD

1. If you are installing a new UIB, correctly orient the UIB buttons, and then mount them on the new UIB.

The UIB buttons attach directly to the front of the UIB and extend through channels in the top panel. When correctly positioned, the buttons make contact with the button pads on the front of the UIB and provide users with manual status and control capability from the Control Panel.

Use needlenose pliers to pull the button tabs carefully through the anchoring holes in the UIB until the buttons are secured in place.

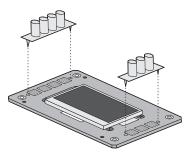


FIGURE 21: Removing/replacing the UIB buttons

- 2. Attach the UIB cable to the connector on the back of the UIB (see Figure 20 on page 59).
- 3. Turn the top panel over to expose its underside and place it on a padded surface.
- 4. Position the plastic lens around the display window of the UIB.
- 5. Secure the UIB to the underside of the top panel.

Grasp the UIB in one hand while using the other hand to hold the plastic lens steady against the UIB display window. Place the UIB in the mounting area of the top panel and carefully fit the buttons through the cutouts in the top panel as you hold the plastic lens in place.

Replace the four screws that secure the UIB to the underside of the top panel. Be sure to use the same screws that you removed earlier.

6. If you are replacing the UIB cable with a new cable, do the following:

If present, cut the clamp securing the old cable to the underside of the top panel and remove the old cable. Attach a new UIB cable to the connector on the UIB. If a new tie-wrap is included in the new UIB cable spare kit, use it to secure the new UIB cable to the underside of the top panel.

7. Replace the top panel (see page 54).

Route the UIB cable through the chassis and connect it to motherboard connector J38 (see Figure 14 on page 49).

8. Reassemble the imagePRESS Server and verify its functionality (see page 104).

# Motherboard

#### IMPORTANT

If you are removing the motherboard in order to replace it with a new motherboard, review the troubleshooting and motherboard cautions on page 65.

The Intel Core 2 Quad Q9550 QUAD-Core, 2.83GHz CPU mounted on the motherboard controls the image data transferred to and from the copier interface board. The motherboard also controls HDD functions and the communication between the imagePRESS Server and external devices. The motherboard has four DIMM sockets. Two sockets contain a 1GB DIMM and two contain a 512MB DIMM, for a total of 3GB of memory (see Figure 25 on page 77). The motherboard also includes the following PCI expansion slots (from top to bottom):

- One PCI-E x16 slots with x8 signal occupied by the copier interface board
- One PCI-E x8 slots with x4 signal (not used)
- One PCI-E x16 slots with x4 signal (not used)
- Two PCI-X 133/100/66MHz (not used)

#### Removing the motherboard

The motherboard attaches to the side of the chassis below the power supply. Before you remove the motherboard, you must remove the following:

- The left panel
- All boards installed on the motherboard

All cables connected to the motherboard (Including the motherboard power cable, CPU power cable, front panel fan cable, HDD data cables, DVD drive power and data combination cable, power button cable, reset button cable, speaker cable, front panel USB port cables, and UIB cable.)

This section also includes information about the following:

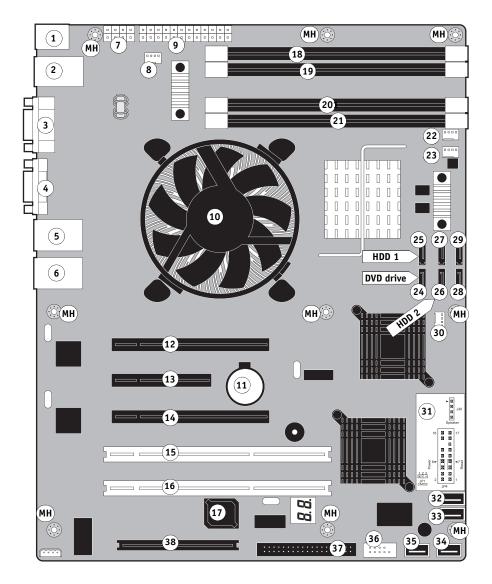
- Replacing DIMMs
- · Replacing the CPU
- Replacing the battery
- Clearing the CMOS
- Jumper configurations

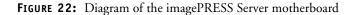
#### IMPORTANT

Follow standard ESD and other safety precautions when handling components (see page 14). During service to the motherboard, avoid using excessive force and always place the motherboard on a grounded, non-metallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.

#### Key

- 1. PS/2 ports (not used)
- 2. USB ports (x2)
- 3. Not used
- 4. Monitor
- 5. Network interface/USB ports (x2)
- 6. Command/Status Ethernet Crossover cable/USB ports (x2)
- 7. CPU power (PW1)
- 8. CPU fan power (FAN 1)
- 9. Motherboard power (PW2)
- 10. CPU, heatsink, CPU fan
- 11. Battery (BT1)
- 12. Copier interface board (J12)
- 13. Empty PCI-E (J11)
- 14. Empty PCI-E (J10)
- 15. Empty PCI-X (J17)
- 16. Empty PCI-X (J16)
- 17. BIOS chip (U29)
- 18. DIMM 4
- 19. DIMM 3
- 20. DIMM 2
- 21. DIMM 1
- 22. Not used (FAN 3)
- 23. Not used (FAN 2)
- 24. SATA 1, DVD drive data connection
- 25. SATA 2, HDD 1 data connection
- 26. SATA 3, HDD 2 data connection
- 27. SATA 4 (Not used)
- 28. SATA 5 (Not used)
- 29. SATA 6 (Not used)
- 30. Front panel fan (FAN 4)
- 31. Speaker (J40); PWR & RST (JP4); CMOS (JP1)
- 32. Unused USB port
- 33. UIB cable (J38)
- 34. Front panel USB port cable (J35)
- 35. Front panel USB port cable (J22)
- 36. Unused (J20)
- 37. Unused (IDE)
- 38. Unused (J15)
- MH—Mounting holes





#### TO REMOVE BOARDS AND CABLES FROM THE MOTHERBOARD

1. Shut down and open the imagePRESS Server (see pages 49 and 51).

To access the motherboard, you must remove the left side panel.

2. Remove all boards installed in slots on the motherboard.

Note the location of the slot where each board resides so that you can reinstall the board in the same slot later.

3. Remove the following cables from the old motherboard:

**NOTE:** First remove any plastic cable clamp(s) securing internal cables and reusable tie-wraps, if present.

- Front panel fan cable (FAN 4)
- Reset button cable (JP4)
- Power button cable (JP4)
- Speaker cable (J40)
- UIB cable (J38)
- Front panel USB port cables (J22 and J35)
- DVD drive cables:
  - SATA data cable from motherboard connector SATA 1
  - Power and data combination cable from the back of the DVD drive
- HDD cables:
  - SATA data cables from motherboard connectors SATA 2 and SATA 3
  - Power supply cables from the backs of the HDD 1 and HDD 2
- Motherboard power cable (20-pin, PW2)
- CPU power cable (8-pin, PW1)

For motherboard connector locations, see Figure 22 on page 62.

#### TO REMOVE THE MOTHERBOARD

**NOTE:** This procedure assumes that you have already performed the procedure "To remove boards and cables from the motherboard" on page 63.

#### 1. Remove the HDD bracket, with HDDs attached (see page 93).

Remove the screw that attaches the bracket to the shelf. Removing the HDD and HDD bracket provides the clearance necessary for removing the motherboard. You must also detach the HDD power cables to remove the HDDs.

# 2. Remove the nine mounting screws securing the motherboard to the chassis (for screw locations, see Figure 22 on page 62).

#### 3. Remove the motherboard from the chassis.

Lift the edge of the motherboard (see Figure 23). Make sure that the back panel connectors on the motherboard clear the chassis while you lift it out of the chassis. Do not touch the contacts and avoid using excessive force.

During service, avoid using excessive force and always place the motherboard on a grounded, non-metallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.

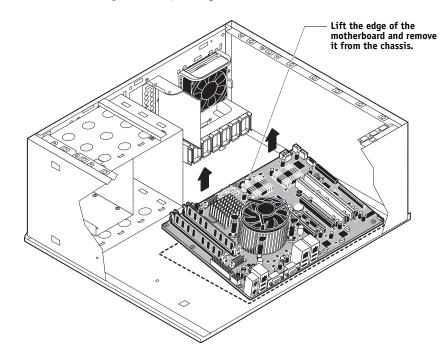


FIGURE 23: Removing the motherboard

#### IMPORTANT

### IMPORTANT

IMPORTANT

**IMPORTANT** 

Follow the procedures in this section to replace the motherboard. Failure to follow the instructions in this section may corrupt the system (not easily repaired in the field) or result in an incomplete installation (see "Error messages" on page 76).

### **Troubleshooting cautions**

Replacing the motherboard

- Before deciding to install a new motherboard, consult "Troubleshooting" on page 110.
- Inspect all cables and internal components as described on pages 112 and 113. If these inspections do not solve the problem, locate symptoms in the troubleshooting table beginning on page 121, and perform the suggested actions in the order listed.
- If troubleshooting strategies (checking cables and connections, reinstalling system software, and so forth) do not solve the problem and you suspect either one of the HDDs or the motherboard is faulty, always troubleshoot in the following order:

(Troubleshooting in the wrong order will cause the system to malfunction. In general, it is highly unlikely that one of the HDDs and the motherboard are both defective; therefore, avoid replacing a HDD and the motherboard to solve one problem.)

- Replace one of the HDDs and install system software.

Always replace a faulty HDD with a new HDD. Transferring a HDD from one imagePRESS Server to another is incorrect and strongly discouraged.

- If the problem persists, reinstall the first HDD you removed earlier, replace the other HDD, install system software again, and then re-check the system.
- If the problem persists, perform other procedures, such as replacing the motherboard. (Make sure to thoroughly review the motherboard replacement procedure beginning on page 65.)

#### **Motherboard cautions**

If you have exhausted all other troubleshooting remedies and determined that you need to install a new motherboard, be sure to observe the following cautions:

- Transfer the DIMMs, CPU, and CPU cooling assembly from the old motherboard onto the new motherboard.
- *Do not* transfer the BIOS chip from the old motherboard onto the new motherboard.

BIOS chips are not interchangeable.

• Do not reinstall system software at this time.

Reinstalling system software is not necessary when installing a new motherboard and can result in an error if done before transferring options to the new motherboard (described on page 73.)

• Before you use the one-time use dongle and Fiery Options Utility to transfer options (for example, Fiery Graphic Arts, Premium Edition, if applicable) to the new motherboard, enter Service Mode and make sure the new motherboard solves the problem that you are troubleshooting.

The imagePRESS Server can remain in Service Mode indefinitely. Use Service Mode to carefully verify the new motherboard before transferring options to the new motherboard.

Transferring options to the new motherboard permanently customizes the new motherboard. Once customized, the motherboard cannot be returned to inventory or installed in another imagePRESS Server. If the new motherboard does not solve the problem in Service Mode (see page 71), do not transfer options. Return the new motherboard and unexpended one-time use dongle to inventory.

- If you are able to verify in Service Mode that the new motherboard solves the problem that you are troubleshooting, transfer options to the new motherboard using the Fiery Options Utility and one-time use dongle included with the new motherboard (see page 73).
- *Do not* remove the one-time use dongle while transferring options to the new motherboard.

Removing the one-time use dongle prematurely will corrupt the dongle and possibly damage the motherboard. If either become corrupted, you must contact your authorized service/support center and order a new replacement motherboard kit.

IMPORTANT

IMPORTANT

#### TO REPLACE THE MOTHERBOARD

- 1. If you are installing a new motherboard, do the following:
  - Unpack the new motherboard.
  - Open the load plate covering the CPU socket (see page 81) and remove the protective plastic cover on the CPU socket on the new motherboard. Later, you will transfer the protective plastic cover to the CPU socket of the old motherboard to protect the circuitry.
  - Remove the DIMMs from the old motherboard and install them on the new motherboard (see page 77).
  - Remove the CPU and cooling assembly from the old motherboard and install them on the new motherboard (see page 79). Make sure that the cable cover (if present) remains on the cooling assembly fan cable when transferring the cooling assembly to the new motherboard.

When transferring the CPU to the new motherboard, make sure to use the fresh thermal compound that came with the new motherboard. For more information about the thermal compound, see page 82.

Do not transfer the BIOS chip from the old motherboard onto the new motherboard. Doing so can damage the imagePRESS Server. BIOS chips are not interchangeable.

#### 2. Install the motherboard in the chassis.

Angle the motherboard so that the back panel connectors on the motherboard fit into the cutouts in the back of the chassis (see Figure 23 on page 64).

Make sure that the flexible grounding tabs on the cutouts for the network ports make contact with the outside of the ports. Do not allow the tabs to fold over or become bent inside the ports. The ports will not function if the tabs are placed improperly. Take care when lowering the new motherboard into the chassis. Do not strike the motherboard against the metal standoffs attached to the chassis, as doing so can damage the components on the underside of the motherboard.

- 3. Align the mounting holes on the motherboard with the standoffs located in the base of the chassis.
- 4. Secure the motherboard to the chassis using the 9 mounting screws that you removed earlier.

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

You are now ready to complete motherboard installation.

IMPORTANT

IMPORTANT

```
IMPORTANT
```

#### TO REPLACE BOARDS, CABLES, AND COMPONENTS

1. Replace the HDD bracket, with HDDs attached (see page 93).

You removed the HDD bracket to provide clearance for removing the motherboard.

- 2. Replace the following cables:
  - CPU power cable (8-pin, PW1)
  - Motherboard power cable (20-pin, PW2)
  - UIB cable (J38; see detail below)
  - HDD cables:
    - Power supply SATA cables to the back of HDD 1 and HDD 2
    - SATA data cable to HDD 1 (lower drive) and motherboard connector SATA 2
    - SATA data cable to HDD 2 (upper drive) and motherboard connector SATA 3
  - DVD drive cables:

**IMPORTANT** 

- Power and data combination cable to the back of the DVD drive
- SATA data cable to motherboard connector SATA 1

**NOTE:** Connect the thin, black SATA power cable connectors to the HDDs and DVD drive. Do not connect the white, 4-pin power cable connectors. Connecting both types of power cables will damage the HDDs and DVD drive.

- Front panel USB port cables (J22 and J35; see detail)
- Speaker cable (J40; see detail)

Make sure that the small triangle on the cable connector is aligned with pin 1 on J40.

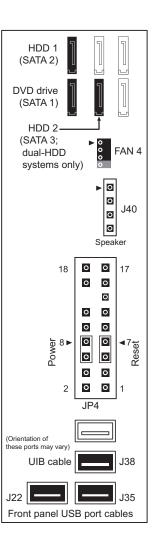
• Power button cable (JP4 pins 6 and 8)

Make sure that the small triangle on the cable connector is aligned with pin 8 on JP4.

• Reset button cable (JP4 pins 5 and 7; see detail)

Make sure that the small triangle on the cable connector is aligned with pin 7 on JP4.

• Front panel fan cable (FAN 4)



- 3. Secure cables as necessary with any plastic cable clamp that you may have removed earlier.
- 4. Replace the copier interface board in motherboard connector J12 (see Figure 22 on page 62).

Make sure to install the board mounting bracket screw to secure the board to the chassis. Press down firmly on the top of the board as you insert the screw.

**NOTE:** Make sure that unused back panel slots are covered with slot covers. Uncovered slots reduce air flow and may cause the imagePRESS Server to overheat.

- 5. If you reinstalled the old motherboard, reassemble the imagePRESS Server and verify its functionality (see page 104).
- 6. If you replaced the motherboard with a new motherboard, clear the CMOS as follows:

**NOTE:** You must clear the CMOS after installing a new motherboard to ensure compatibility between the new component and the previous settings stored in the BIOS. Make sure that the power cable is removed from the power outlet before clearing the CMOS.

- Remove the battery (see page 84).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.
- 7. If you replaced the motherboard with a new motherboard and cleared the CMOS, do the following:
  - Reassemble the imagePRESS Server (see page 104).
  - Reset the time and date in Setup (see the Configuration and Setup).
  - Proceed to "Verifying new motherboard installation and transferring options" on page 70.

IMPORTANT

IMPORTANT

### Verifying new motherboard installation and transferring options

After you install a new motherboard and reassemble the system, do the following:

• Verify all functionality by using the one-time use dongle to enter Service Mode. (Service Mode is not indicated on the monitor or LCD, but is entered once you power on with a new motherboard installed and the one-time use dongle installed on a USB port.)

Service Mode is a temporary state that allows you to make sure that the motherboard solves the problem that you are troubleshooting. Service Mode is exited automatically when you expend the one-time use dongle to transfer options to the new motherboard (see "Transferring options to the new motherboard" on page 73).

**NOTE:** Features of Impose and Compose are not available while in Service Mode.

• If the new motherboard solves the problem that you are troubleshooting, use the one-time use dongle and the Fiery Options Utility to transfer options to the new motherboard.

If you determine while in Service Mode that the problem you are troubleshooting was not fixed by installing a new motherboard, do not expend the one-time use dongle to transfer options to the new motherboard (described below), do not install system software, and do not replace the HDD. Reinstall the old motherboard and return the new motherboard and the unused one-time use dongle to inventory. You may then perform additional service and troubleshooting procedures.

Transferring options (for example, Fiery Graphic Arts, Premium Edition, if applicable) expends the one-time use dongle. For details, see "Transferring options to the new motherboard" on page 73.

*Do not* transfer options to the new motherboard prematurely. Do so only after you verify the new motherboard in Service Mode. Remember that once options are transferred to the new motherboard using the one-time use dongle, the motherboard is customized and cannot be used in another system.

IMPORTANT

#### **Entering Service Mode**

Use the following procedure to verify that the system functions properly after installing a new motherboard.

#### TO ENTER SERVICE MODE AND VERIFY THE SYSTEM

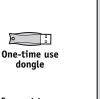
**NOTE:** This procedure assumes that the imagePRESS Server is powered off, no CD is in the DVD drive, you have installed a new motherboard, and that you have reassembled the imagePRESS Server and attached external cables.

**Note:** Do <u>not</u> insert the Fiery Options Utility CD into the DVD drive yet. You will install the Fiery Options Utility CD when you are ready to transfer options to the new motherboard (page 73) *after* you verify the system in Service Mode.

- 1. Make sure that the imagePRESS Server is connected to the copier (see page 28).
- 2. Locate the one-time use dongle provided with the new motherboard and connect it to a USB port on the front or back panel.
- 3. Remove and set aside all other dongles and USB storage devices (such as a flash or thumb drive) that may be connected to any other USB port.

Reconnect other dongles and USB devices only after you verify that the imagePRESS Server starts up successfully in Service Mode.





Connect to an available USB port

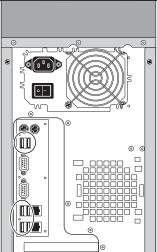


FIGURE 24: Connecting the dongle

4. Power on the imagePRESS Server and allow it to boot without interruption.

If a monitor is connected to the imagePRESS Server:

• At the Log On to Windows dialog box, type Administrator in the user name field, type Fiery.1 in the password field, and then press Enter on the keyboard. Type Fiery.1 exactly as shown. The password is case-sensitive; for example, fiery.1 will not work.

At this point, the imagePRESS Server is in Service Mode, so you can verify that the new motherboard solves the problem that you are trying to troubleshoot. Service Mode is not indicated on the monitor or the imagePRESS Server Control Panel.

- 5. Print the imagePRESS Server Test Page (see page 40).
- 6. Ask the network administrator to connect the imagePRESS Server to the network and download a print job over the network (see *Configuration and Setup* on the User Documentation CD).

If the problem that you are troubleshooting persists, or if you are unable to perform steps 4 through step 6 above while in Service Mode, you may conclude that the old motherboard was not the source of the problem and does not need to be replaced. If so, do not transfer options to the new motherboard (described on page 73), do not install system software, and do not replace the HDD. Reinstall the old motherboard and return the new motherboard with the unexpended one-time use dongle to inventory. For more information about troubleshooting system problems, see "Troubleshooting" on page 110.

If installing a new motherboard solved the problem that you are troubleshooting and you are able to print a Test Page and send a print job over the network, you are ready to transfer options to the new motherboard. Service Mode ends automatically when you transfer options to the new motherboard (see page 73).

### Transferring options to the new motherboard

After you verify that the new motherboard solves the problem that you are troubleshooting, you must use the Fiery Options Utility and the one-time use dongle to transfer options to the new motherboard.

### TO TRANSFER OPTIONS TO THE NEW MOTHERBOARD

**NOTE:** This procedure assumes that the imagePRESS Server is fully assembled, verified in Service Mode (see page 71), and powered off.

1. Make sure that the one-time use dongle is firmly attached to a USB port on the imagePRESS Server and that no other dongles or USB storage devices (for example, a flash or thumb drive) are attached to the imagePRESS Server.

The options transfer process may fail if other dongles and/or USB storage devices are connected to the imagePRESS Server during the process.

- 2. Power on the imagePRESS Server.
- 3. Immediately insert the Fiery Options Utility CD into the DVD drive.

**NOTE:** The Fiery Options Utility CD must be in the DVD drive in time for the imagePRESS Server to boot from it. If the imagePRESS Server does not boot from the Fiery Options Utility, allow the imagePRESS Server to start up, eject the CD, turn off the imagePRESS Server, and then repeat steps 2 and 3.

**NOTE:** If an error message displays, see page 76.

4. To continue, choose the Control Panel or monitor (if present) as the interface to use throughout the option transfer process.

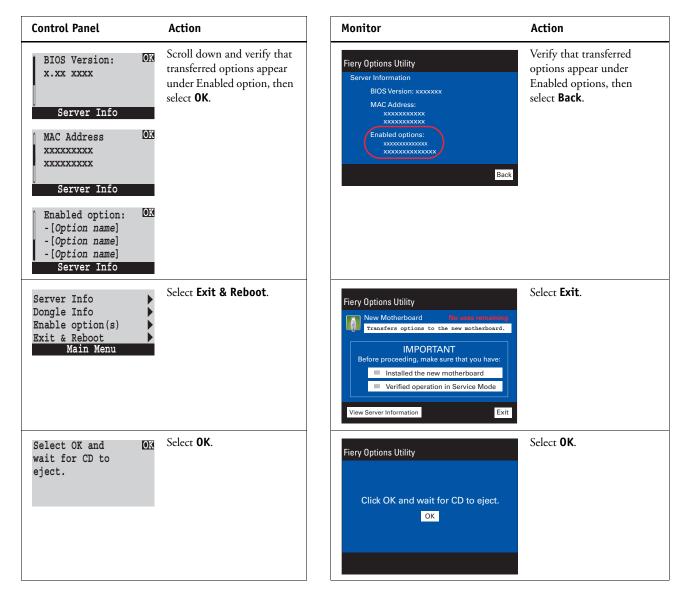
The first screen that displays when you start the Fiery Options Utility allows you to choose the interface that you will use throughout the procedure. Choose an interface by selecting OK on the Control Panel or monitor. The interface not chosen is then disabled during the option transfer process.

Control Panel	Monitor
Press OK to OK continue Options Utility	Fiery Options Utility <ul> <li>To continue running the Fiery Options Utility using the monitor, keyboard and mouse, press Enter or click OK. To continue running the Fiery Options Utility using the Fiery Control Panel instead, press OK on the Fiery Control Panel.</li> </ul>

## 5. Follow the prompts on the interface that you chose.

**NOTE:** If an error message appears during the update process, see page 76.

Control Panel	Action	Monitor	Action
Server Info Dongle Info Enable option(s) Exit & Reboot	Select Enable option(s).	Fiery Options Utility           New Motherboard         # of Uses: 1           Transfers options to the new motherboard.	Click each item to confirm, and then select <b>Transfer</b> to transfer options. The <b>Transfer</b> button is
# of Uses: 1 OX Option: -New MB Dongle Info	To verify the type of dongle connected to the imagePRESS Server, select <b>Dongle Info.</b>	Before proceeding, make sure that you have:  Installed the new motherboard  Verified operation in Service Mode  View Server Information  Transfer Exit	unavailable until you click both items.
Before WES proceeding, make sure you NO have Enable option(s) 1) Installed WES new MB 2) Verified in NO	Select <b>YES</b> to confirm items and transfer options. - or - Select <b>NO</b> to return to the Main Menu.	Fiery Options Utility Enabling options. Please wait. ▲ Do not shutdown/reset server or remove dongle during this operation.	Wait 1 minute or longer for the next prompt.
Service Mode Enable option(s) Enabling options. Please wait Do not shut down or reset server or remove dongle.	Wait 1 minute or longer for the next prompt.	Fiery Options Utility Successfully enabled: ✓ Options transferred successfully to new motherboard.	Select <b>Back</b> .
Options OK transferred successfully. Enable Option(s)	Select <b>0K</b> to continue to the Main menu.	Back	
Server Info Dongle Info Enable option(s) Exit & Reboot Main Menu	Select <b>Server Info</b> .	Fiery Options Utility New Motherboard Mounter remaining Transfers options to the new motherboard. IMPORTANT Before proceeding, make sure that you have: Installed the new motherboard Verified operation in Service Mode View Server Information Exit	Select View Server Information.



After you select OK, the message "Please standby...System restarting..." displays. Allow the system to restart without interruption. The Fiery Options Utility ejects automatically.

### 6. Remove the Fiery Options Utility and the one-time use dongle.

The new motherboard is now customized and cannot be used in another system.

- 7. If a monitor is connected to the imagePRESS Server:
  - When the Log On to Windows dialog box appears on the monitor, type Administrator in the user name field, type Fiery.1 in the password field, and then press Enter on the keyboard.

**NOTE:** Type Fiery.1 exactly as shown. The password is case-sensitive; for example, fiery.1 will not work.

• Wait for Idle to display on FieryBar on the monitor.

If the imagePRESS Server is not connected to the copier, or if the copier is not powered on, a message displays indicating the status. Expect this message. The imagePRESS Server detects the copier after you connect the imagePRESS Server to the copier.

8. Reattach any dongle(s) (for example, for Compose or Impose) or USB storage device you may have removed previously.

### **Error messages**

One of the following error messages may display on the imagePRESS Server Control Panel or monitor when you attempt to transfer options to the new motherboard.

**Could not mount the dos/boot partition**—You have attempted to transfer options using the Feature Update CD. The Feature Update CD is not supported by the imagePRESS Server. Obtain the Fiery Options Utility and try the procedure again.

**Invalid dongle found! Please remove dongle and connect the correct dongle**—The attached dongle is not supported by the Fiery Options Utility. The dongle may have been attached by mistake. Obtain a valid dongle and try again.

**More than one dongle found. Remove all dongles except the correct dongle**—The Fiery Options Utility will not work when more than one dongle is attached to the system.

**No uses remaining**—The dongle has already been used and cannot be reused. Obtain an unused dongle and start again.

**Check power and Video cable connections**—There is a problem with the connection between the imagePRESS Server and the copier. Make sure that the interface cables are properly connected and the copier is on and ready to print.

If an error condition cannot be corrected, restore the previous hardware configuration, if possible, and contact your authorized service/support center.

### Replacing parts on the motherboard

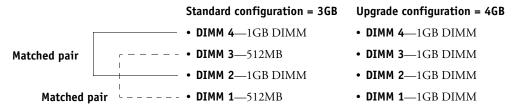
This section describes how to remove and replace the DIMMs, CPU, and battery on the motherboard. Before you perform any of these procedures, shut down and open the imagePRESS Server (see page 49).

### DIMMs

The motherboard has four DIMM sockets. The imagePRESS Server standard memory configuration populates all four sockets, for a total of 3GB of memory.

NOTE: When installing DIMMs, note the following:

- To upgrade the imagePRESS Server to 4GB, remove the 512MB DIMMs from sockets DIMM 1 and DIMM 3 and install the 1GB DIMMs included in the upgrade kit.
- Different capacity DIMMs look alike. Make sure that you know the capacity of each DIMM before you install it in a socket.
- Install only approved DIMMs available from your service representative.
- DIMMs must be installed in matched pairs. A matched pair is comprised of two alternate sockets (see following figure). DIMMs within a pair must be identical (same capacity and same number of chips on each side). For example, in a two-DIMM configuration, populate DIMM 4 and DIMM 2 with DIMMs of identical capacity, with the same number of chips on each side.



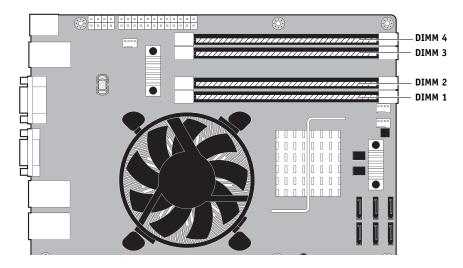


FIGURE 25: Motherboard DIMM sockets

### TO REPLACE A DIMM

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To access the DIMMs, you must remove the left panel.

2. To release a DIMM, push outward on the levers on each side of the DIMM.

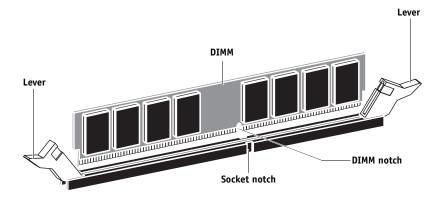


FIGURE 26: Releasing a DIMM

- 3. Pull the DIMM straight out of the socket.
- 4. To replace a DIMM, insert the DIMM straight into the socket and close the levers at each side to lock it into place.

**NOTE:** The socket is keyed so that the DIMM fits only one way. (See the notches in the preceding figure.)

IMPORTANT

Make sure that the entire length of the DIMM (ends and center) is fully seated in the socket and that the levers close securely around the ends of the DIMM.

### 5. If you installed a new DIMM, clear the CMOS as follows:

**NOTE:** You must clear the CMOS after installing a new DIMM to ensure compatibility between the new component and the previous settings stored in the BIOS. Make sure that the power cable is removed from the power outlet before clearing the CMOS.

- Remove the battery (see page 84).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.
- 6. If you installed a new DIMM and cleared the CMOS, make sure to reset the time and date in Setup (see *Configuration and Setup*).
- 7. Reassemble the imagePRESS Server and verify its functionality (see page 104).

### CPU

The CPU is installed in a socket on the motherboard. Before you remove the CPU from its socket, remove the motherboard from the chassis (see page 61), disconnect the CPU fan cable from the motherboard, and then remove the cooling assembly from the imagePRESS Server (see page 80). The CPU cooling assembly consists of a fan and a heatsink.

**NOTE:** Do not remove the CPU fan from the heatsink. If a cable cover is present, make sure that it remains on the CPU fan cable.

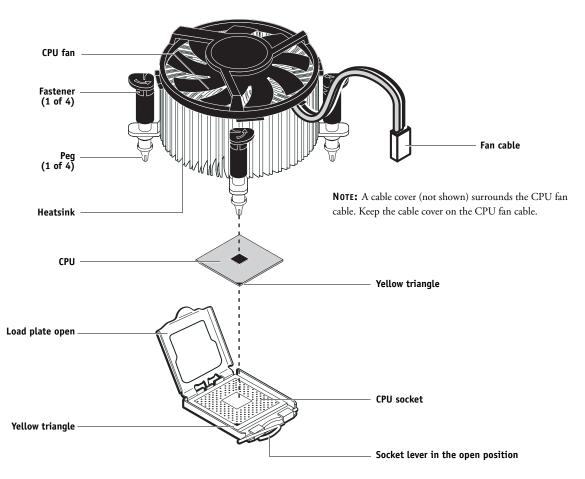


FIGURE 27: CPU cooling assembly

IMPORTANT

If you remove the CPU from the motherboard in order to install it on a new motherboard, unpack the new motherboard and remove the protective plastic cover on the CPU socket. Transfer the protective cover to the CPU socket of the old motherboard to protect the circuitry. Follow standard ESD precautions while handling the motherboard and all components.

### TO REMOVE THE COOLING ASSEMBLY

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To access the CPU, you must remove the left panel.

2. Remove the motherboard (see page 61).

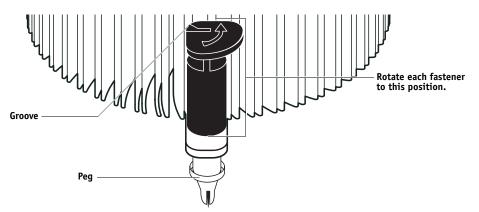
Place the motherboard on a padded, static-free work surface outside of the chassis when removing and replacing the cooling assembly. After you replace the cooling assembly, inspect the back of the motherboard to verify that the cooling assembly is fully mounted on the motherboard (see Figure 29 on page 83).

### 3. Remove the CPU fan cable from motherboard connector FAN 1.

If a cable cover is present, leave it on the CPU fan cable.

- 4. Remove the CPU cooling assembly.
  - Insert a flathead screwdriver into the groove on the top of a fastener cap and rotate the fastener counterclockwise (that is, in the direction of the arrow) to the position shown below.
  - Pull straight up on the fastener cap until the peg is out of the motherboard.

You may need to use moderate force to pull the pegs out of the motherboard. Be careful not to damage the components on the motherboard or the CPU cooling assembly when pulling up on the fasteners.



5. Lift the cooling assembly off the CPU socket and set it aside.



Be aware that the cooling assembly and the CPU may be very hot. You may need to let the components cool before attempting to remove them.

IMPORTANT



**IMPORTANT** 

TO REMOVE AND REPLACE THE CPU

- 1. Unlock the CPU socket lever and raise it into the open position (flex the lever away from the retention post, and then raise it).
- 2. Open the load plate (see Figure 28 on page 81).
- 3. 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.

4. Wipe the contact surface of the CPU (the smooth, gray side of the chip) with a clean, lintfree cloth to ensure proper contact with the new heatsink.

If you remove the CPU from the motherboard to install it on a new motherboard, make sure that you completely remove any thermal compound residue on the surface of the CPU and at the base of the heatsink. It may help to scrape all the residue off of the surface using the flat edge of something non-conductive.

### 5. Prepare the CPU socket by ensuring that:

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

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 yellow triangle on the socket. Do not force the CPU.

- 7. Close the load plate.
- 8. Lower the socket lever and place it in the locked position under the retention post.

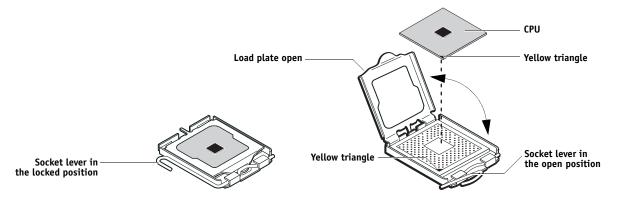


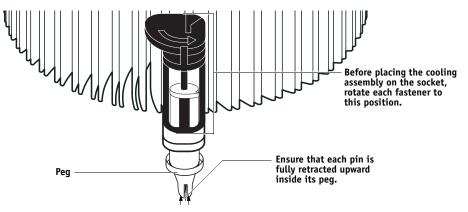
FIGURE 28: Removing/replacing the CPU

### TO REPLACE THE CPU COOLING ASSEMBLY

**NOTE:** Before you install the cooling assembly, completely remove any thermal compound residue on the surface of the CPU and the base of the heatsink, and then apply a fresh thermal compound square to the base of the heatsink. When installing the thermal compound square, make sure to remove the plastic backing **on both sides** of the square. Avoid creating any bubbles or wrinkles on the square. Bubbles and wrinkles reduce the heat-transfer efficiency of the cooling assembly.

### 1. Prepare the CPU cooling assembly for installation.

- Make sure that the motherboard is placed on a padded, static-free work surface.
- Apply a fresh thermal compound square, as described in the note above.
- Rotate fasteners to the position shown below by turning them clockwise (that is, in the *opposite* direction of the arrow on top of the fastener).
- Ensure that the pin inside each peg is fully retracted upward.
- Align the cooling assembly so that when it is installed, the fan cable easily reaches the CPU fan power connector FAN 1 on the motherboard.
- Align the pegs over their mounting holes in the motherboard.



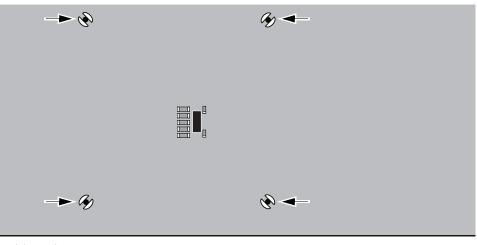
- 2. Place the heatsink over the CPU socket.
- 3. At alternate corners, press down on each fastener to engage the mount on the motherboard. Engage all four pegs.

**NOTE:** Do not rotate the fasteners after installation.

IMPORTANT

Engaging the pegs at alternate corners applies clamping force equally over the CPU and socket. Avoid using excessive force and take care not to flex the motherboard when you engage the pegs.

4. Turn the motherboard over and verify that the black pins protrude through the mounting holes on the underside of the motherboard.



Straight-on view

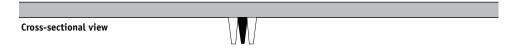


FIGURE 29: Inspecting the cooling assembly pins on the underside of the motherboard

### 5. Connect the CPU fan cable to the motherboard connector FAN 1.

If you are installing a new CPU:

- Secure slack in the fan cable using a tie-wrap. The tie-wrap prevents the fan cable from interfering with the CPU fan.
- If a cable cover is present, make sure that it is on the fan cable.
- Make sure that the connector on the cable is securely connected to the motherboard.

### 6. If you replaced the CPU with a new CPU, clear the CMOS as follows:

IMPORTANT

**IMPORTANT** 

You must clear the CMOS after installing a new CPU to ensure compatibility between the new component and the previous settings stored in the BIOS. Make sure that the power cable is removed from the power outlet before clearing the CMOS.

- Remove the battery (see page 84).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.
- 7. If you installed a new CPU and cleared the CMOS, make sure to reset the time and date in Setup (see *Configuration and Setup*).
- 8. Reassemble the imagePRESS Server and verify its functionality (see page 104).

### Battery

The battery on the motherboard is located at BT1. To replace it, use a 3V manganese dioxide lithium coin cell battery (Sony CR2032 or equivalent).

There is danger of explosion if the battery is replaced with an incorrect type. Replace it only with the same type recommended by the manufacturer. Dispose of used batteries according to local regulations.

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 jeweiligen gesetzlichen Bestimmungen 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 réglementations locales en vigueur.

ADVARSEL!: Litiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Batteriet må kun udskiftes med et andet batteri af samme fabrikat og type. Brugte batterier skal bortskaffes i henhold til gældende regler.

VAROITUS: Paristo voi räjähtää, jos se on vaihdetaan väärän tyyppiseen paristoon. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo paikallisten määräysten mukaisesti.

ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til lokal lovgivning.

VARNING: Risk för explosion om batteriet byts ut mot en felaktig batterityp! Byt bara ut batteriet mot en batterityp som har godkänts av tillverkaren. Hantera använda batterier enligt lokal miljölagstiftning.

**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. Shut down, and then open the imagePRESS Server (see pages 49 and 51).
- 2. Locate the battery on the motherboard (see Figure 22 on page 62).
- 3. Carefully push the clip away from the battery until the socket ejects the battery.



FIGURE 30: Motherboard battery

- 4. Slide the battery out of its socket.
- 5. Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- 6. To insert a new battery, slide it into the socket so that the positive (+) side of the battery faces up.
- 7. Press the battery down into the socket until it snaps into place.

Make sure that the battery is securely installed in the socket.

- 8. Reassemble the system and verify its functionality (see page 104).
- 9. Configure the time and date in Setup (see Configuration and Setup).

```
IMPORTANT
```

Failure to configure the time and date will cause the imagePRESS Server to hang when user software is being installed on the imagePRESS Server. (See page 126.)



### **Clearing the CMOS**

Clear the CMOS after installing a new motherboard, CPU, DIMM, or DVD drive to ensure compatibility between the new component and previous settings stored in the BIOS.

### TO CLEAR THE CMOS

1. Shut down, and then open the imagePRESS Server (see pages page 49 and page 51).

Make sure to remove the AC power cable from the power outlet before opening the imagePRESS Server and clearing the CMOS.

- 2. Remove the battery (see page 84).
- 3. Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- 4. Reinstall the battery (see page 84).
- 5. Reassemble the imagePRESS Server and verify its functionality (see page 104).
- 6. Reset the time and date in Setup (see Configuration and Setup).

IMPORTANT

Failure to configure the time and date will cause the imagePRESS Server to hang when user software is being installed on the imagePRESS Server. (See page 126.)

### Jumpers

Pin 1

This section lists the factory default configuration for jumpers on the motherboard. Jumper configurations should not be changed.

Jumper	Description				
JP1	JP1 is the Clear CMOS and Password jumper.				
• • •	Default configuration: jumper cap installed on pins 1 and 2.				
Pin 1	<b>NOTE:</b> Because JP1 is not easily accessed on the motherboard and 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. Instead, clear the CMOS by denying power to the motherboard, as described earlier.				
JP2	The jumper cap on JP2 should not be removed.				
•••	Default configuration: Jumper cap installed on pins 1 and 2.				
Pin 1					
J2	The jumper cap on J2 should not be removed.				
$\bullet \bullet \bullet$	Default configuration: Jumper cap installed on pins 1 and 2.				

## Fan

A fan mounted inside the imagePRESS Server chassis draws air into the imagePRESS Server to cool components. The fan runs continuously when the system is on. You should hear the fan start as soon as you power on the imagePRESS Server. If you do not hear the fan, there may be a faulty power connection (see page 49).

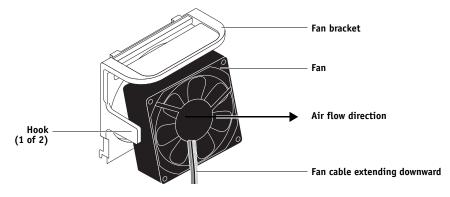
The following procedures describe how to remove and replace the fan.

### TO REMOVE THE FAN

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To access the fan, you must remove the left panel.

- 2. Remove the fan cable from motherboard connector FAN 4.
- 3. Release the fan from the fan bracket by bending the hooks on the bracket.





4. Remove the fan from the chassis.

### TO REPLACE THE FAN

### 1. Align the fan.

An arrow on the side of the fan indicates the airflow direction. Make sure that the fan is positioned so that the arrow points inside the imagePRESS Server and the fan cable extends downward toward the motherboard (see Figure 31).

### 2. Press the fan into the bracket until it clicks into place.

Make sure that the hooks on the bracket close over the edge of the fan.

- 3. Connect the fan cable to motherboard connector FAN 4.
- 4. Reassemble the imagePRESS Server and verify its functionality (see page 104).

# Power supply

The following table describes the power supply cables that connect to imagePRESS Server components. For more information on the power supply, see "Specifications" on page 135.

```
IMPORTANT
```

Do not open the power supply for service or troubleshooting. Opening the power supply will void the warranty.

Cable connector	Pin(s)	Wire color	Voltage	Connection				
NOTE: All voltages listed in this table are direct current voltages (VDC).								
	1, 2	Orange	+3.3V					
	3, 5, 7, 13, 15,	Black	СОМ	_				
	16, 17							
	4, 6, 19, 20	Red	+5V	_				
	8	Gray	PW-OK	8-pin CPU 24-pin ATX connector				
20-pin ATX power connector to motherboard	9	Purple	+5Vsb					
	10	Yellow	+12V					
	11	Orange	+3.3V					
		Brown	+3.3V sense					
	12	Blue	-12V					
	14	Green	PS-ON					
	18	White	-5V					
84 73 €82 51	1, 2, 3, 4	Black	СОМ					
	5, 6, 7, 8	Yellow & Black	+12V					
8-pin CPU power connector to motherboard								
SATA (5-pin) power connector to HDDs	1	Yellow	+12V	_				
	2	Black	COM					
	3	Red	+5V					
	4	Black	COM	the second second				
	5		not connected					
4-pin PATA power connector to DVD drive power/data combo cable	1	Yellow	+12V					
	2	Black	СОМ					
	3	Black	СОМ					
	4	Red	+5V	_				

### TO REMOVE THE POWER SUPPLY

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To access the power supply, you must remove the left panel.

- 2. Remove the power cables from the HDDs.
- 3. Remove the power and data combination cable from the DVD drive.
- 4. Remove the 20-pin motherboard power cable from motherboard connector PW2.
- 5. Remove the 8-pin CPU power cable from motherboard connector PW1.
- 6. Remove the reusable tie-wrap securing the power cables to the chassis support beam.

Do not cut the tie-wrap. Squeeze the tab to unlock it, and then open it completely and remove it. You will reattach the tie-wrap later when you replace the power supply.

7. Remove the ferrites that are installed around the HDD power cables.

Carefully pry open the latches on the sides of the ferrites and remove the ferrites from the cables. Set the ferrites aside so that you can replace them later.

- 8. Remove four of the five screws that attach the power supply to the back of the chassis (see Figure 32 on page 89).
- 9. While supporting the power supply, remove the fifth screw.

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

10. Lift the power supply out of the chassis.

Carefully gather the power supply cables as you remove the power supply.

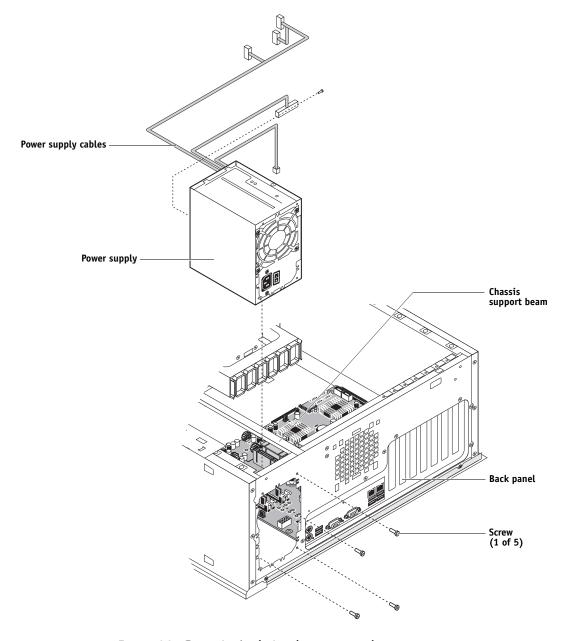


FIGURE 32: Removing/replacing the power supply

TO REPLACE THE POWER SUPPLY

- 1. Support the power supply inside the chassis and align the mounting holes.
- 2. Attach the power supply to the chassis with the four screws that you removed earlier (see Figure 32 on page 89).

If you are installing a new power supply, make sure to use the screws that came with it to attach the new power supply to the chassis.

- 3. Connect the 8-pin CPU power cable to motherboard connector PW1 (for connector locations, see Figure 22 on page 62).
- 4. Connect the 20-pin motherboard power cable to motherboard connector PW2.
- 5. Connect the power and data combination cable to the DVD drive.
- 6. Install the ferrite around the HDD power cables.

Use the ferrite that you removed earlier. Place the ferrite around the cables near the connectors and snap the edges of the ferrite closed.

7. Connect the power cable to the HDDs.

Connect the thin, black SATA power cable connector to the HDDs. Do not connect the white, 4-pin power cable connectors. Connecting both types of power cables will damage the HDDs.

8. Locate the reusable tie-wrap that you removed earlier and use it to attach the loose section of the power cable to the chassis support beam (see Figure 32 on page 89).

Gather the cable against the support beam with the tie-wrap, and then thread the tie-wrap to secure the cable.

9. Reassemble the imagePRESS Server and verify its functionality (see page 104).

IMPORTANT

## Hard disk drives

The factory-installed hard disk drives (HDDs) are formatted and loaded with system software, network drivers, and printer fonts. The HDDs are also used to store spooled print jobs. Available space on the HDDs is displayed on the Info screen of the copier touch panel and in Command WorkStation.

If you replace a HDD with a new one, you must install system software as described on page 105. (Spare HDDs are not shipped with preinstalled system software.)

Do not install a new HDD and the motherboard at the same time. Doing so in the wrong order, without updating the system (see page 65), will cause the system to malfunction.

It is unlikely that a HDD and the motherboard are both defective. Avoid replacing both a HDD and the motherboard to solve one problem. If troubleshooting strategies (checking cables and connections; see pages 112 and 113) do not solve the problem and you suspect a HDD or the motherboard is at fault, troubleshoot in the following order:

### 1. Replace one of the HDDs and install system software.

Always replace a faulty HDD with a new HDD. Transferring a HDD from one imagePRESS Server to another is incorrect and strongly discouraged.

- 2. If the problem persists, reinstall the first HDD that you removed earlier, replace the other HDD, reinstall system software, and then recheck the system.
- 3. If the problem persists, perform other procedures, such as replacing the motherboard. (Make sure to thoroughly review the motherboard replacement procedure beginning on page 65.)

### **Proper handling**

Improper handling can damage a HDD. Handle the HDDs with extreme care.

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

HDD problems may be caused by the following:

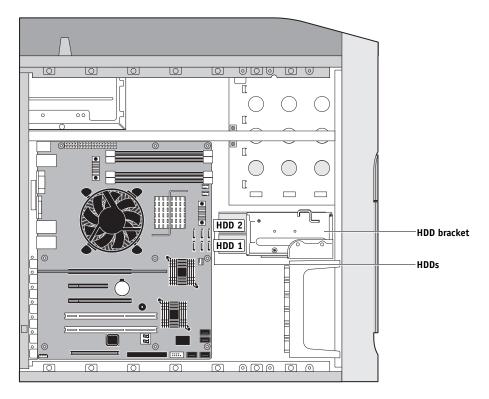
- Loose or faulty connections
- Faulty data or power cables
- Faulty HDDs

### IMPORTANT

Make sure that you attach an ESD grounding wrist strap and follow standard ESD precautions before handling imagePRESS Server components.

IMPORTANT

IMPORTANT



**NOTE:** Copier interface board and internal cables are not shown.

FIGURE 33: imagePRESS Server HDDs

The HDDs are mounted inside a bracket.

If you are replacing a HDD with a new one, you will need:

- The appropriate system software and documentation for the imagePRESS Server that you are servicing.
- A compatible version of the user software for the networked computers that will print to the imagePRESS Server.

### TO REMOVE THE HDDS

- 1. If you are removing a HDD in order to install a new drive, give the network administrator the opportunity to print the Job Log and save any custom simulations. If possible, print the Configuration page and the Font Lists from the Functions menu (see 40).
- 2. Shut down and open the imagePRESS Server (see pages 49 and 51).

To access the HDDs, you must remove the left panel.

- 3. Remove the power supply cables from the HDDs.
- 4. Remove the HDD data cables from the HDDs.
- 5. Remove the screw securing the HDD bracket to the bracket shelf.
- 6. Slide the HDD bracket off the shelf and lift it out of the chassis (see Figure 34).

Unlock the HDD bracket by moving the latch toward the back panel, and then sliding the bracket off the bracket shelf.

Avoid striking the DIMMs as you remove the HDD bracket.

**NOTE:** You will encounter slight resistance as you slide the bracket off the shelf. The resistance is caused by two tension points on the bottom of the bracket. The resistance helps control the bracket's movement during removal and installation.

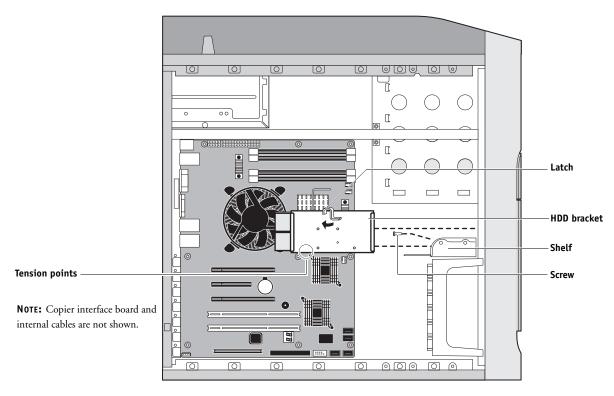
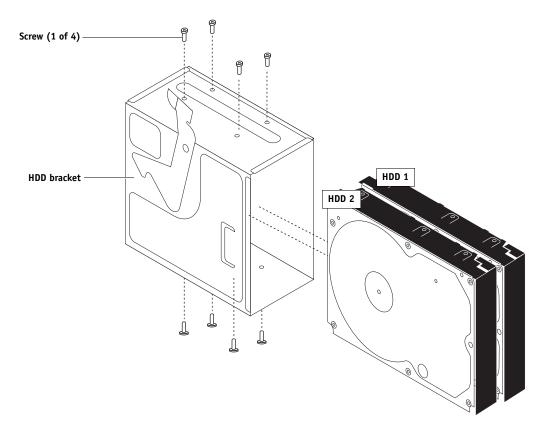


FIGURE 34: Removing/replacing the HDD bracket

#### IMPORTANT



7. Remove the screws that attach the HDDs to the HDD bracket (see Figure 35).

FIGURE 35: Removing/replacing the HDDs from the HDD bracket

### 8. Remove the HDDs from the HDD bracket and place them in antistatic bags.

IMPORTANT

Do not unscrew the screws on the HDD covers. Loosening these HDD screws breaks the seal and voids the HDD warranty.

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

Replacement HDDs are not shipped with pre-installed system software. After you install the drive, you must install the appropriate system software.

IMPORTANT

**IMPORTANT** 

IMPORTANT

# TO REPLACE A HDD NOTE: Do not install a new HDD and a new motherboard at the same time. If you suspect that the imagePRESS Server needs a new HDD and a new motherboard, first install the new HDD and install system software, then install a new motherboard and transfer options to the new motherboard (see pages 65 and 73). 1. If you are installing a new HDD, unpack the drive. Do not drop, jar, or bump the HDD. Do not touch the HDD with magnetic objects or place objects sensitive to magnets near the HDD. 2. Position the HDD inside the HDD bracket and align the front-most mounting holes on the HDD with the four holes in the bracket (see Figure 35 on page 94). When correctly installed, the HDD extends about an inch past the rear of the bracket. 3. Replace the four screws that you removed earlier to attach the HDD to the bracket. 4. Slide the bracket all the way onto the shelf and lock it by moving the latch toward the front panel. Avoid striking the DIMMs as you replace the HDD bracket. NOTE: You will encounter slight resistance as you slide the bracket onto the shelf. The resistance is caused by two tension points on the bottom of the bracket. The resistance helps control the bracket's movement during removal and installation. 5. Secure the HDD bracket to the HDD shelf using the screw that you removed earlier. 6. Connect the correct HDD data cable to the HDD: • HDD 1 (lower drive in the bracket) to SATA 2 on the motherboard • HDD 2 (upper drive in the bracket) to SATA 3 on the motherboard 7. Connect the power cable to the HDD. Connect the thin, black SATA power cable connector to the HDD. Do not connect the white, 4-pin power cable connector. Connecting both types of power cables will damage the HDD. 8. Reassemble the imagePRESS Server (see page 104). (Continued on next page)

9. If you replaced the HDD with a new HDD, install system software (see page 105).

Troubleshooting tips:

- Following system software installation, if the imagePRESS Server boots up much slower than usual, clear the CMOS as follows:
  - Make sure that the power cable is removed from the power outlet, and then remove the battery (see page 84).
  - Wait 2 minutes to allow the motherboard electrical components to fully discharge.
  - Reinstall the battery.
  - After reassembling the system, reset the time and date in Setup (see *Configuration and Setup* on the User Documentation CD).
- If a startup error displays on the Control Panel when you power on the imagePRESS Server, check the connections.
- 10. Verify functionality (see page 104).

## Switch bank assembly

The switch bank assembly attaches to the Component Sled. The switch bank assembly includes the following components:

- DVD drive
- Power button and cable
- Reset button and cable
- Speaker and cable
- Front USB ports and cables

**NOTE:** For more information about servicing the DVD drive, see page 101.

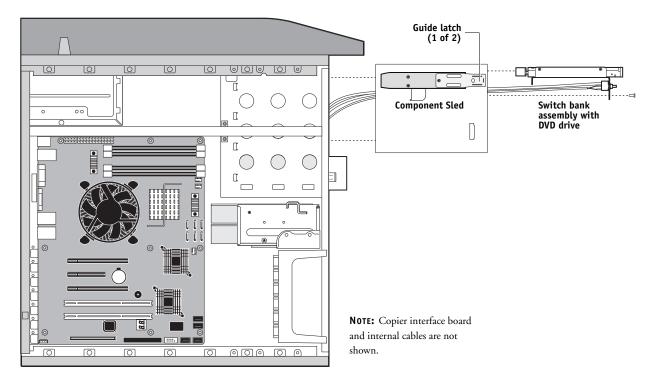


FIGURE 36: Component Sled with switch bank assembly

### TO REMOVE THE SWITCH BANK ASSEMBLY

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To remove the switch bank assembly, you must remove the left, right, and front panels.

- 2. Disconnect the following cables:
  - Power and data combination cable from the back of the DVD drive
  - Power and reset button cables from motherboard connector JP4
  - Speaker cable from motherboard connector J40
  - Front panel USB port cables from motherboard connectors J22 and J35
- 3. Remove the ferrite that is installed around the front panel USB port cables near the motherboard.

Carefully pry open the latch on the side of the ferrite and remove the ferrite from the cables. Set the ferrite aside so that you can replace it later.

- 4. Unharness the cables from the cable clamp(s) and tie-wraps inside the chassis.
- 5. Remove the Component Sled from the chassis (see Figure 36 on page 97).

Press the guide latches on the sides of the Component Sled and carefully pull the sled out of its slot in the front of the chassis.

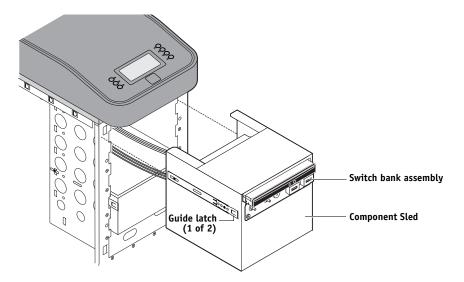


FIGURE 37: Removing/replacing the Component Sled from the chassis

**NOTE:** Be careful not to damage the EMI gasket around the slot in the chassis. Guide the cables out of the chassis as you remove the Component Sled to prevent them from catching or tangling on internal parts.

- 6. Remove the switch bank assembly from the Component Sled.
  - Remove the three screws that attach the switch bank assembly to the Component Sled.
  - Pull the switch bank assembly straight out of the Component Sled.

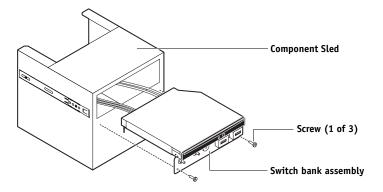


FIGURE 38: Removing/replacing the switch bank assembly

**NOTE:** Guide the cables as you remove the assembly from the Component Sled. Be careful not to damage the EMI gasket around the opening in the Component Sled.

7. If you are removing the switch bank assembly to replace it with a new assembly, remove the DVD drive (see page 102).

### TO REPLACE THE SWITCH BANK ASSEMBLY

- 1. If it is not already attached, attach the DVD drive to the switch bank assembly (see page 103).
- 2. Install the switch bank assembly in the Component Sled (see Figure 38).

**NOTE:** If you are replacing the switch bank assembly with a new one, discard the cable extensions that may be provided with the new switch bank assembly.

- Starting with the cables, insert the switch bank assembly through the opening in the front of the Component Sled. Be sure to fold the EMI gasket under and through the opening when inserting the assembly.
- Replace the three screws that secure the switch bank assembly to the Component Sled.
- 3. Install the Component Sled in the chassis (see Figure 37).
  - Route the cables of the switch bank assembly in through the chassis so that the cables are within reach of their connectors on the motherboard.
  - Slide the sled into the front of the chassis until the guide latches click into place.

**NOTE:** Be careful not to damage the EMI gasket around the slot in the chassis when installing the Component Sled.

- 4. Connect the following cables (see Figure 22 on page 62 for the location of connectors on the motherboard):
  - Power and data combination cable to the back of the DVD drive
  - DVD data cable to motherboard connector SATA 1
  - Power button cable to motherboard connector JP4, pins 6 and 8

Make sure that the small triangle on the cable connector is aligned with pin 8 on JP4.

• Reset button cable to motherboard connector JP4, pins 5 and 7

Make sure that the small triangle on the cable connector is aligned with pin 7 on JP4.

• Speaker cable to motherboard connector J40

Make sure that the small triangle on the cable connector is aligned with pin 1 on J40.

- Front panel USB port cables to motherboard connectors J22 and J35
- 5. Install the ferrite around the two front USB port cables near the motherboard.

Use the ferrite that you removed earlier. Place the ferrite around both cables in between the two preinstalled tie-wraps, and snap the edges of the ferrite closed.

- 6. Secure the cables with the cable clamp(s) inside the chassis.
- 7. Reassemble the imagePRESS Server and verify its functionality (see page 104).

# **DVD** drive

The DVD drive is attached to the switch bank assembly. The DVD drive is used to install system software onto the HDDs and archive data onto writable media.

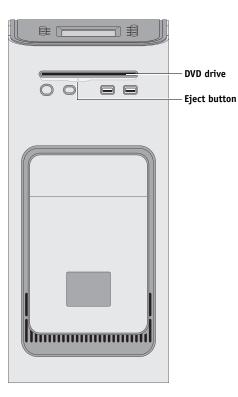


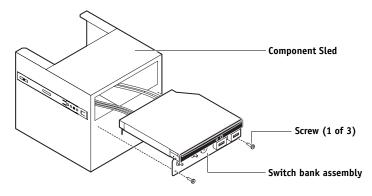
FIGURE 39: imagePRESS Server DVD drive

### TO REMOVE THE DVD DRIVE

1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).

To remove the DVD drive, you must remove the left, right, and front panels, the Component Sled, and the switch bank assembly.

- 2. Remove the power and data combination cable from the back of the DVD drive.
- 3. Remove the Component Sled from the chassis, and then remove the switch bank assembly from the Component Sled (see page 98).



4. Remove the four screws that secure the DVD drive to the switch bank assembly.

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

**NOTE:** On some systems, a small metal post in the switch bank assembly is used in place of one of the screws.

5. Remove the DVD drive from the switch bank assembly.

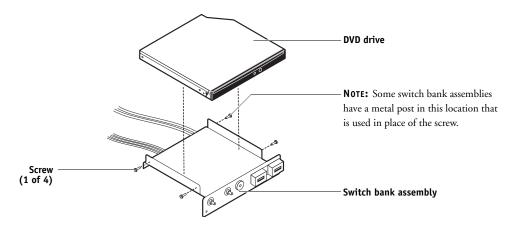


FIGURE 40: Removing/replacing the DVD drive

### TO REPLACE THE DVD DRIVE

- 1. Install the DVD drive in the switch bank assembly.
- 2. Install the switch bank assembly in the Component Sled, and then install the Component Sled in the chassis (see page 100).
- 3. Attach the power and data combination cable to the back of the DVD drive.

Make sure that the other end of the data cable is connected to motherboard connector SATA 1.

4. If you replaced the DVD drive with a new DVD drive, clear the CMOS as follows:

IMPORTANT

You need to clear the CMOS after installing a new DVD drive to ensure compatibility between the new component and the previous settings stored in the BIOS. Make sure the power cable is removed from the power outlet before clearing the CMOS.

- Remove the battery (see page 84).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.
- 5. If you installed a new DVD drive and cleared the CMOS, make sure to reset the time and date in Setup (see *Configuration and Setup*).
- 6. Reassemble the imagePRESS Server and verify its functionality (see page 104).

## Restoring and verifying functionality after service

Before you leave the customer site, make sure that you complete the following steps. If you cannot complete a step, determine the reason and correct the problem before continuing. For more information, see Troubleshooting on page 110.

### TO REASSEMBLE THE IMAGEPRESS SERVER AND VERIFY FUNCTIONALITY

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

When routing cables inside the imagePRESS Server, make sure that:

- Cables are securely installed after routing cables
- Cable routing does not interfere with the operation of internal components nor interfere with removing or replacing components
- Cables are not tangled nor looped around internal circuit boards, or components (such as capacitors and resistors)
- · Cables do not lie on or against any internal heating element
- · Cables do not interfere with opening or closing imagePRESS Server panels
- Cable slack is secured with a tie-wrap
- 2. Restore the imagePRESS Server to the upright position.
- 3. Replace any panels that you removed earlier, as described on page 51.
- If you replaced the motherboard, make sure that the new motherboard solves the problem that you are troubleshooting, and then transfer options to the new motherboard (see page 73).
- 5. If the imagePRESS Server is to be mounted on the optional furniture with the optional monitor, see the reassembly instructions on page 137.
- 6. Connect the power cable to the imagePRESS Server (see page 28).
- 7. If you cleared the CMOS during service, reset the imagePRESS Server time and date in Setup.
- 8. Connect the imagePRESS Server to the copier (see page 28).
- 9. Print the Test Page and Configuration page (see page 40).
  - If the imagePRESS Server does not start up, refer to the startup problems listed on page 121.
  - If pages do not print, verify that the interface cables are properly connected (see printing problems on page 130).
  - If image quality is poor, test the copier. (See the service documentation that accompanies the copier.)
- 10. Connect to the network (see page 28).
- 11. Ask the network administrator to download a test job over the network.

If the job does not print or has poor image quality, see printing problems and the Troubleshooting sections of the user documentation.

# SYSTEM AND USER SOFTWARE

This chapter describes how to install system and user software on the imagePRESS Server HDDs.

### **Overview**

The imagePRESS Server ships with preinstalled system software on the HDDs (hard disk drives). If you must reinstall system and user software when servicing the imagePRESS Server, use the latest System Software and User Software DVDs.

**NOTE:** You can change the default language preinstalled at the factory using the Configure tool available through Command WorkStation and WebTools. Start Configure, navigate to Server > General > Choose Server Language, and then click Apply.

## Before you install system software

When installing software, keep in mind the following:

 Jobs—All jobs in all print queues and all jobs archived locally on the imagePRESS Server HDDs are deleted when you install system software. To save jobs, ask the network administrator to archive them to a CD or location on the network, so that the jobs can be imported back into the imagePRESS Server queue after system software installation. For more information, see Command WorkStation Help.

**NOTE:** Notify the network administrator at the customer site that some archived jobs may no longer print after you install an updated version of system software.

- Job Log—The list of jobs in the Job Log and any jobs in the queues are deleted when you install system software. The network administrator can use Command WorkStation to save a current list of jobs (not the actual jobs) from the Job Log.
- Fonts—All fonts on the HDDs are deleted when you install system software. Resident
  fonts are reinstalled when you reinstall system software. Any customer-supplied fonts must
  be reinstalled by the network administrator using Command WorkStation.

To determine which additional fonts were downloaded to the imagePRESS Server, print the Font List before you install the system software and again after you complete the system software installation. Any fonts *not listed* after installation will need to be reinstalled. For more information, see Command WorkStation Help.

• **Configuration**—The existing Setup configuration is lost when you install system software. Make sure to print a Configuration page before you install system software so that you can reconfigure the settings in Setup (see page 40).

IMPORTANT

- User documentation—All user documentation files, which may be resident on the imagePRESS Server, are deleted when you install system software. If user documentation is resident on the imagePRESS Server, remind the site administrator to reinstall the documentation files after you finish installing system software.
- **Custom simulation and output profiles**—Custom simulation and custom output profiles saved on the HDDs are deleted when you install system software. Ask the site administrator to save a copy of any custom profiles to a CD or network location before you install system software. For more information, see *Color Printing, Fiery Color Reference*, and *Workflow Examples* on the User Documentation CD.
- Monitor profiles—Monitor profiles saved to the HDDs are deleted when you install system software. Monitor profiles for the imagePRESS Server monitor are automatically reinstalled when you reinstall Command WorkStation on the system.
- **System software updates**—All updates to system software (Windows OS and Fiery System Software) which may be available for the imagePRESS Server and installed from any source (for example, System Updates (see page 109), and any patches provided on CD or downloaded by the customer) are deleted when you install system software.

**NOTE:** Microsoft Windows XP PRO operating system updates should be obtained from Microsoft directly. Because such updates are available directly from Microsoft, EFI does not maintain or provide them via the System Updates feature.

- **Technician-related software**—The Operator Maintenance Assistance software and Canon Software for Service Technician software is deleted when you install system software. Be sure to reinstall this software after installing system software. For details, see the documentation provided on each CD.
- **Operator Maintenance Assistance software**—The Operator Maintenance Assistance software is deleted when you install system software. Be sure to reinstall this software after installing system software. For details, see the documentation provided on the Operator Maintenance Assistance software CD.
- Compatibility—When upgrading the software on the imagePRESS Server, make sure that
  the latest user software is installed on all computers that print to the imagePRESS Server.
  Using incompatible versions of the software on the imagePRESS Server and the user
  software on client computers may result in system problems.

## Installing system software

System software is provided on the following media:

- System Software DVD 1
- System Software DVD 2

The System Software DVDs include the system software, fonts, and user software. Install the system software when you do the following:

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

Software installation takes approximately one hour (not including the time required to configure Setup).

#### TO INSTALL SYSTEM SOFTWARE

IMPORTANT

**NOTE:** Notify the network administrator at the customer site that some archived jobs may no longer print after you install an updated version of system software.

- 1. If you have not done so already, allow the network administrator the opportunity to print the Job Log. Also, print the following (if possible):
  - Configuration page—lists any installed options and records the customer's current Setup configuration.
  - Font List—lists the fonts currently on the HDDs. In addition to the resident fonts provided in system software, the customer may have installed other fonts.
- 2. Remove all USB devices and dongles (if any) that may be connected to any imagePRESS Server USB ports (except a keyboard, mouse, or external DVD drive, if present).

IMPORTANT

The system will hang if USB devices or dongles are connected to imagePRESS Server USB ports during software installation.

3. Insert System Software DVD 1 into the DVD/CD-RW drive.

**NOTE:** If you installed a new HDD, power on the system, insert System Software DVD 1, allow the system to boot, and then proceed to step 5.

4. From the imagePRESS Server Control Panel or the copier touch panel (or the Start menu, if a monitor is connected), reboot the imagePRESS Server.

Allow the system to shut down and reboot. Do not push any buttons during this time.

- 5. At the message "All data will be deleted?" select Yes to continue.
- 6. When the Select Language screen displays, select a language by pressing the corresponding line selection button on the Control Panel.

Wait as messages display on the Control Panel describing the installation process. Do not press any buttons during this time. This segment takes approximately 15 minutes.

7. At the message "System Software is copied to the system. Remove media and press OK to reboot," remove System Software DVD 1, and then select OK.

The imagePRESS Server reboots and the Control Panel displays messages as the installation process continues. This segment takes approximately 20 minutes.

8. At the message "Please insert User Software to continue installation," insert System Software DVD 2 into the DVD/CD-RW drive.

During this process, the following installations are performed:

 The entire contents of System Software DVD 2 are copied to a shared folder on one of the imagePRESS Server HDDs, in e:\efi\user\_sw.

After installation, when the imagePRESS Server is connected to the customer's network, users can access the user software in the shared folder and install it onto client computers.

User Software is copied automatically once System Software DVD 2 is inserted into the drive. The message "Copying user software to Fiery shared folder. Please wait." displays on the Control Panel, followed by other messages describing the user software installation process. This segment takes approximately 20 minutes.

9. At the message "User Software installation complete. Remove CD/DVD. System will reboot," remove System Software DVD 2.

The system ejects System Software DVD 2 and reboots automatically. This segment takes approximately four minutes. Wait for the system to boot completely, the imagePRESS Server logo screen to appear on the imagePRESS Server Control Panel, and Idle to appear on the Info screen on the copier touch panel (for details on accessing the Info screen, see page 35).

**NOTE:** The imagePRESS Server takes approximately four minutes to finish rebooting and display Idle on the Info screen of the copier touch panel. While the imagePRESS Server is rebooting, the following message displays on the imagePRESS Server Info screen on the copier touch panel: "Wait a while. (Check the power source of the print server behind the main unit and cable connection if the display does not change in a moment.)" If the message remains for longer than two minutes, verify that the copier interface cable is connected correctly to the copier.

- 10. If user documentation was previously resident on the imagePRESS Server, advise the site administrator to reinstall the documentation files from the User Documentation CD.
- Advise the customer to check the System Updates feature for any required software patches or updates that may be available for the imagePRESS Server (see "System updates" on page 109).
- 12. Reconnect any USB devices or dongles that you may have removed earlier.
- 13. Configure Setup using the Configuration page that you printed earlier.

Access the Functions menu on the copier touch panel (see page 36) and scroll down and select Run Setup. Bypass any settings that are not included on the Configuration page if it is more appropriate for the network administrator to set them. For more information, see *Configuration and Setup* on the User Documentation CD.

#### 14. Reinstall technician-related software:

- Canon Software for Service Technical CD
- Operator Maintenance Assistance Software CD

The technician-related software is deleted when you install system software and must be reinstalled.

For instructions, see the documentation provided on each CD.

#### 15. Reinstall the Operator Maintenance Assistance Software CD.

The Operator Maintenance Assistance Software is deleted when you install system software and must be reinstalled. For installation instructions, see the documentation provided on the CD.

• 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 page 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.

Software patches may be accessed from one or more of the following locations:

- System Updates—On the imagePRESS Server monitor (if present), choose Start > All Programs > Fiery > System Updates, and then click Check Now. (For more information, see "System updates" below.)
- The Functions menu area of the copier touch panel (see page 34).
- "Check for Product Updates"—In a Web browser, connect to the IP address of the imagePRESS Server, click the Configure tab, and click "Check for Product Updates."
- 16. Reinstall fonts or custom simulations that may have been deleted when you installed software.

## System updates

Advise the network administrator at the customer site that the System Updates feature available through the Start menu on FACI-enabled systems allows customers to schedule and accept installation of certain imagePRESS Server software updates from a secure site on the Internet. By default, the feature is configured to display a notification on the monitor (if the FACI option is present) that software updates are available for the imagePRESS Server. You can also check for system updates via the monitor by choosing Start > All Programs > Fiery > System Updates, and then clicking Check Now. Depending on how it is configured, System Updates operates manually or automatically. For more information about how to schedule System Updates, see *Configuration and Setup* on the User Documentation CD.

Microsoft Windows operating system updates should be obtained from Microsoft directly. Because such updates are available directly from Microsoft, EFI does not maintain or provide them via the System Updates feature.

IMPORTANT

# TROUBLESHOOTING

This chapter identifies the source of common problems that may occur with the imagePRESS Server and suggests ways of correcting the problems.

## Troubleshooting process

The imagePRESS Server is a server for copiers, and is generally part of a configuration like the one shown in the following figure. Problems may occur in one of three areas:

- Inside the imagePRESS Server
- In the interface between the imagePRESS Server and the copier
- In the interface between the imagePRESS Server and the workstations or computers to which it is connected

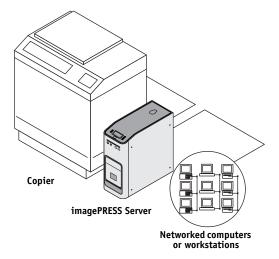


FIGURE 41: Troubleshooting the system

This chapter does not attempt to provide troubleshooting information for attached computers such as PCs or Mac OS computers, copiers, or extensive networks. Refer problems in these areas to the appropriate service departments and network administrators.

When performing the service procedures described in this chapter, follow the precautions listed in "Precautions" on page 14.

The terms "replace" and "replacing" are typically used throughout this guide to mean reinstallation of existing components. Install new components only when necessary. If you determine that a component that you have removed is not faulty, reinstall it. Replacement parts and specifications are subject to change. When ordering replacement parts, refer to the current parts list maintained by your authorized service/support center. Install the correct parts as directed by your service/support center.

IMPORTANT

# Preliminary on-site checkout

Most problems with the imagePRESS Server are caused by loose board or cable connections. This section describes the quick checks that you can do to locate and fix obvious problems. It describes how to eliminate any problems with external connections to the back of the imagePRESS Server, and then addresses checking internal board and cable connections. Check external and internal connections before replacing any components.

**NOTE:** Verify that the network is functioning, no unauthorized software or hardware is installed on the imagePRESS Server, and no problems have occurred with a particular print job or application. The on-site administrator can help you verify these issues.

For problems that persist after you check the external and internal connections, this section provides a comprehensive list of internal and external checks that may help you fix the problem.

This section includes the following:

• "Checking external connections" on page 112

Describes the quick checks that you can do to make sure that the problem is not caused by a loose connection at the back of the imagePRESS Server.

• "Checking internal components" on page 113

Describes the quick checks that you can do to make sure that the problem is not caused by a loose board or cable connection inside the imagePRESS Server.

• "Inspecting the system" on page 114

Provides a more comprehensive checklist that you can use to check the imagePRESS Server internally and externally. If your initial checks fail, complete this checklist before concluding that you need to replace a cable or component.

To troubleshoot problems that present specific symptoms, see "Table 3: imagePRESS Server error messages and conditions" on page 121. Locate symptoms listed in the table to help you determine possible causes and steps to remedy them.

## **Checking external connections**

Before removing the side and front panels of the imagePRESS Server to check internal components, eliminate the most obvious sources of problems. Make sure that:

- All interface cables to the system are plugged into the proper connectors (see Figure 42).
- The power cable is plugged into the wall power outlet.
- The LED on the network port is blinking to indicate network activity.

The network cable at the customer site and the Command/Status Ethernet Crossover cable included with the imagePRESS Server look similar, but are not interchangeable. Make sure that you connect the Command/Status Ethernet Crossover cable to the lower RJ-45 port and the network cable to the upper RJ-45 port.

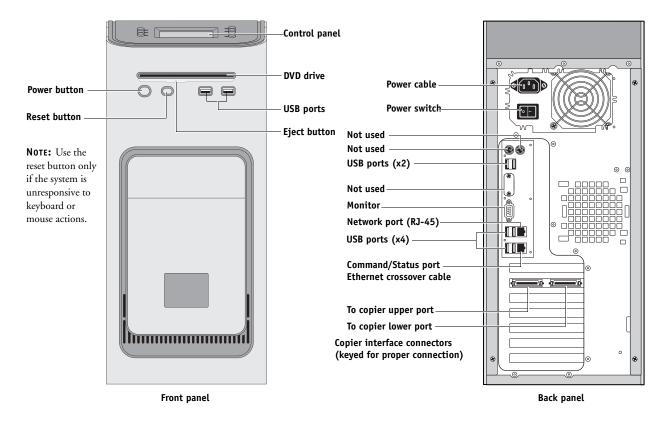


FIGURE 42: imagePRESS Server external cable connections

# IMPORTANT

## **Checking internal components**

To check the internal components, you must remove the side and front panels of the imagePRESS Server.

Before you remove the imagePRESS Server panels, be aware of the safety precautions that you should take when handling the imagePRESS Server. Use standard ESD precautions when handling printed circuit boards and electronic components. To review the safety precautions, see "Precautions" on page 14.

See the disassembly procedures on page 51 and the reassembly procedures on page 104.

#### TO CHECK INTERNAL COMPONENTS

- 1. Shut down, and then open the imagePRESS Server (see pages 49 and 51).
- 2. Before you touch any components inside the imagePRESS Server, attach a grounding strap to your wrist and discharge any static electricity on your body by touching a metal part of the imagePRESS Server.
- 3. Inspect the inside of the imagePRESS Server (see Figure 14 on page 49).

Make sure that no foreign materials have been dropped into the chassis.

- Make sure that the DVD and HDD data cables are connected to the correct SATA connectors on the motherboard (see Figure 14 on page 49):
  - DVD drive power/data combination cable to motherboard SATA connector SATA 1
  - HDD 1 data cable to motherboard SATA connector SATA 2
  - HDD 2 data cable to motherboard SATA connector SATA 3
- Look for obviously loose boards and reseat each board securely in its connector on the motherboard.
- Look for obviously loose cables and reseat each cable connector firmly.
- Make sure that each connector is properly aligned with its mating connector. If the pins are offset from each other, the affected board will not function properly.
- 4. Reassemble the imagePRESS Server and verify its functionality (see page 104).

IMPORTANT

**IMPORTANT** 

IMPORTANT

## Inspecting the system

If your initial checks of the cable and board connections do not fix the problem, you may need to inspect the system on a component-by-component basis, as described in "Table 2: Verifying the system." A comprehensive inspection allows you to verify that each hardware component is properly installed and configured, and helps you avoid replacing expensive components unnecessarily.

If the system you are servicing does not meet a condition listed in Table 2 and it is not obvious what action(s) you should take to fix the problem (for example, if the system hangs before reaching Idle), locate the symptom in "Table 3: imagePRESS Server error messages and conditions" on page 121 and perform the suggested action(s) for the condition.

#### TABLE 2: Verifying the system

well 2. Vellying the system	
Conditions to verify	Part and additional page references
Conditions to verify         When the problem occurs, verify that:         • Power cable is connected properly into the power outlet.         • Chassis fans are operating.         • Network link activity LED on RJ-45 connector is blinking.         • All external cables required are present, in correct connectors, and well-seated.         • Cables, cable connectors, and mating connectors appear undamaged.	Part and additional page references Back panel external connectors, chassis fans, and power button, page 112 and page 113
<ul> <li>Activity light on the Control Panel illuminates.</li> <li>Display window lights up.</li> <li>The system does not hang, and no error messages occur before the systems reaches Idle.</li> <li>After the system reaches Idle, the Control Panel buttons function.</li> </ul>	
<ul> <li>All replaceable parts are:</li> <li>Present</li> <li>Properly aligned</li> <li>Installed securely</li> <li>Installed on the appropriate site</li> <li>The correct part for the system</li> <li>Properly configured, if configurable (such as HDD jumper)</li> <li>Not visibly damaged</li> <li>Chassis and contents have not been tampered with.</li> </ul>	Chassis

· Chassis does not contain any foreign objects.



#### **Conditions to verify**

- Motherboard, including components and traces, appears undamaged, and no foreign objects are evident.
- CPU is present, well-seated, and appears undamaged.
- CPU cooling assembly is well-aligned and firmly attached.
- Each fan required (including fan cable) is well-positioned (not upside down), installed in the correct connector, and appears undamaged.
- Boards required on the motherboard are present, well-seated, and in the correct slots.
- Each DIMM is well-seated.
- Battery is installed.
- BIOS is well seated.
- Each DIMM is well-seated.
- DIMM edge connectors are not oxidized.

## Part and additional page references

Motherboard (with the Fiery Options Utility and one-time use dongle), page 61.



DIMMs for imagePRESS Server, page 77



Copier interface board, page 56

Each board required is:

- Present
- Installed in the correct slot
- Well-seated
- Appears undamaged

Required cables (if applicable) are:

- Present
- · Firmly connected in the correct connectors
- Not visibly damaged

User Interface Board (UIB) is:

- Present
- · Correctly attached to its bracket
- Appears undamaged
- UIB cable is:
- Present
- Firmly connected in the correct connector on the motherboard and the back of the UIB
- Not visibly damaged



User Interface Board page 58



#### **Conditions to verify**

## CPU is:

- Present
- Well-seated
- Not visibly damaged
- The CPU cooling assembly is:
- Well-aligned
- Firmly attached

## Fan is:

- Properly positioned (not backwards)
- Installed in the correct connector

The fan, fan cable, cable connector, and mating connector are not visibly damaged.

## The power supply required is:

- Present
- Correctly installed
- Not visibly damaged

Cable connectors are:

- Firmly connected
- Not visibly damaged
- Installed in the correct devices

## The HDDs required are:

- Present
- Correctly installed
- Appear undamaged

HDD data cables are:

- Present
- Firmly connected in correct motherboard connectors:
  - HDD 1 (lower drive in bracket) to SATA 2
  - HDD 2 (upper drive in bracket) to SATA 3
- Appear undamaged

## Part and additional page references

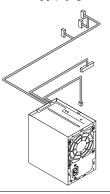
CPU with cooling assembly, page 79



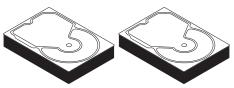
Front panel fan, page 86



Power supply, page 87



Hard disk drives (HDDs), page 91



#### **Conditions to verify**

The drive required is:

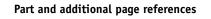
- Present
- Correctly installed
- Not visibly damaged
- Jumpered as the master (secondary) according to label
- Activity LED lights on power up

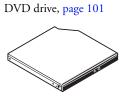
DVD drive SATA cable is:

- Firmly connected to motherboard SATA 1
- Not visibly damaged

Each cable required is:

- Present
- The correct type
- Installed in the correct connector
- Well-seated
- Not visibly damaged (including connectors)





UIB cable, page 49



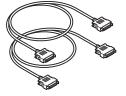
HDD data cables, page 49



Command/Status Ethernet Crossover cable, page 112



Copier interface cable, page 112



DVD drive power and data combination cable, page 49



Power cable(s), page 112



#### **Conditions to verify**

If included in the system, the required mouse, monitor, and keyboard are present and appear undamaged. The mouse and keyboard are connected to the correct ports on the imagePRESS Server back panel.

The cables required are:

- Present
- Installed in the correct connector
- Well-seated
- Not visibly damaged (including connectors)

#### Part and additional page references

For the following items, see the document that accompanies the components, if applicable.

• Mouse (if applicable)



• Monitor (if applicable)



• Keyboard (if applicable)



• Monitor power cord (not pictured)

## Normal startup sequence

When you turn on or reboot the imagePRESS Server, the system runs the following startup routine on the imagePRESS Server Control Panel. The sequence takes approximately 2 minutes to complete.

**NOTE:** The following description is approximate. The screens, times, and sequences that you observe may vary slightly.

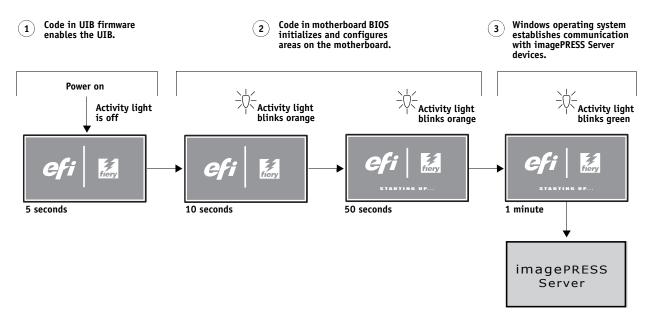


FIGURE 43: Normal startup sequence

## Error messages and conditions

To address specific error messages or conditions, see "Table 3: imagePRESS Server error messages and conditions" on page 121. Use the table to locate the problem or symptom that you want to fix, read about the possible causes, and then perform the suggested actions to solve the problem.

**NOTE:** Do not replace a HDD and the motherboard at the same time. Doing so in the wrong order, without updating the system, will cause the system to malfunction.

If troubleshooting strategies (checking cables and connections, reinstalling system software, and so forth) do not solve the problem and you suspect that one of the HDDs or the motherboard is faulty, note that it is highly unlikely that one of the HDDs and the motherboard are both defective; therefore, avoid replacing both to solve one problem. Always troubleshoot in the following order.

- · Replace one of the HDDs and install system software.
- Always replace a faulty HDD with a new HDD. Transferring a HDD from one imagePRESS Server to another is incorrect and strongly discouraged.
- If the problem persists, reinstall the first HDD that you removed earlier, replace the other HDD, reinstall system software, and then recheck the system.
- If the problem persists, perform other procedures, such as replacing the motherboard. (Make sure to thoroughly review the motherboard replacement procedure beginning on page 65.)

If replacing a component does not correct the problem, make sure that you reinstall the old component back in the imagePRESS Server.

## TABLE 3: imagePRESS Server error messages and conditions

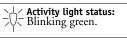
Symptom	Possible cause	Suggested action
	Beep codes duri	ng Startup
1 beep	No error—the imagePRESS Server is starting up normally.	None
1 beep, followed by 3 beeps, followed by 3 beeps, followed by 1 beep	Missing, unmatched, incorrect, or faulty DIMMs	Check for missing, unmatched, incorrect or faulty DIMMs and reseat the DIMMs to remove any oxidation on the connector (see page 77).
	Startu	p
imagePRESS Server auto-reboots unexpectedly approximately 5 minutes after it is powered on.	The imagePRESS Server has probably been connected to a copier model different from the model it was configured to connect to at the factory. The imagePRESS Server is configured at the factory to connect to a specific copier model within the supported copier series (see the note on page 9). If the imagePRESS Server is later connected to a different model in the series, it will auto-reboot approximately 5 minutes after it is powered on in order to establish communication with the different model. The auto-reboot is normal and only occurs the first time the imagePRESS Server is powered-on with the different copier model. Do not press any buttons or interrupt the imagePRESS Server while it is rebooting.	
imagePRESS Server does not start and the Control Panel is black. 	<ul> <li>Possibly one of the following:</li> <li>The imagePRESS Server is powered off</li> <li>Power cable is not plugged into the power connector on the imagePRESS Server back panel,</li> </ul>	<ol> <li>Recheck all cables and connections.</li> <li>Make sure the back panel power switch is in the ON position (see page 42).</li> <li>Listen for the power supply fan and feel for air at the back of the unit where the power supply is located.</li> </ol>
<b>NOTE:</b> If the Activity light is solid yellow while the Control Panel is black, the	or into the wall power outlet	<ul><li>If air is not coming from the power supply fan, isolate a possible faulty power cable as follows:</li><li>Power on using a different power cable.</li></ul>
imagePRESS Server is in Sleep Mode.	• UIB cable is not connected to the motherboard, the user interface board, or both	<ul> <li>Install a new or "known good" power supply.</li> <li>Check the back panel fan vent and feel for air coming out o the back of the system.</li> </ul>
	<ul> <li>Faulty power cable</li> <li>Faulty power supply (power supply may not be supplying power to the motherboard)</li> </ul>	If air is coming out of the power supply fan vent but is not coming out of the back panel fan vent, the motherboard may be faulty. You may need to replace the motherboard (see page 65).
	• The CMOS jumper is not in the default position	<ol> <li>Review the jumper section on page 85 and ensure that the jumper is in the default position, then clear the CMOS (see page 85).</li> </ol>
	• Faulty motherboard (motherboard power plane may not be supplying	( <del></del> ).

Symptom	Possible cause	Suggested action
	Startup (	cont.)
imagePRESS Server is getting power, but the Control Panel is black.	<ul> <li>UIB cable is not connected to the motherboard, the User Interface Board, or both</li> <li>Faulty UIB cable</li> <li>Faulty User Interface Board</li> </ul>	<ol> <li>Recheck all cables and connections.</li> <li>Use a different UIB cable.</li> <li>If the problem persists and you have verified that the power supply and motherboard are functioning properly as described earlier, replace the User Interface Board (see page 58).</li> </ol>
Following installation of a new User Interface Board, the Control Panel remains blank, yet backlit, for more than 5 minutes. $- \oint_{i=1}^{i=1} \frac{Activity light status:}{N/A.}$	System software requires an additional reboot to synchronize with the firmware on the new User Interface Board.	Wait 5 minutes, power off using the power button, wait 10 seconds, and then press the power button to power on again.
NOT following installation of a new User Interface Board, system stops responding at this screen:	Possibly one of the following: • Faulty BIOS • Faulty motherboard	<ol> <li>Recheck all cables and connections.</li> <li>Reboot the imagePRESS Server.</li> <li>If the problem persists, replace the motherboard (see page 65).</li> </ol>

System stops responding at Problem with the Fiery application. this screen:

efi 🛛 🕍

- Recheck all cables and connections.
   Reboot the imagePRESS Server.
- 3. If the problem persists, reinstall system software (see page 105).



Symptom	Possible cause	Suggested action		
Startup (cont.)				
Control Panel screen and Activity light appear as follows: Cfi EA 	<ul> <li>Possibly one of the following:</li> <li>Wrong, missing, incorrectly connected, or faulty DIMM(s)</li> <li>Faulty motherboard</li> </ul>	<ol> <li>Recheck all cables and connections.</li> <li>Reboot the imagePRESS Server.</li> <li>If the problem persists, verify that the DIMMs are installed as described in the DIMM section on page 77. DIMMs must be installed in matching pairs in alternating sockets. Check for incorrect type, wrong capacity, missing, or faulty DIMM(s). Reseat the DIMM(s) to remove any oxidation on the connector (see page 77).</li> <li>If the problem persists, you may need to replace the motherboard (see page 65).</li> </ol>		
Control Panel screen and Activity light appear as follows:	Possibly one of the following: • Faulty disk in the DVD drive • Faulty motherboard	<ol> <li>Reboot the imagePRESS Server.</li> <li>If the problem occurs when you are installing software from bootable media (DVD or CD), the media may be damaged. Try another DVD or CD.</li> <li>If the problem persists, replace the motherboard (see page 65).</li> </ol>		
Control Panel screen and Activity light appear as follows: Activity light status: Blinking amber.	<ul> <li>Possibly one of the following:</li> <li>Faulty or incorrectly connected HDD data cable</li> <li>HDD power cable disconnected</li> <li>Faulty HDD</li> <li>Faulty motherboard</li> </ul>	<ol> <li>Recheck all cables and connections. Make sure that the HDD data cables are connected to the correct SATA ports on the motherboard (see Figure 14 on page 49).</li> <li>Reboot the imagePRESS Server.</li> <li>If the problem persists, replace the HDD SATA cables one at a time (see Figure 14 on page 49).</li> <li>If the problem persists, replace the HDDs one at a time (see page 93).</li> <li>If replacing one of the HDDs does not correct the problem, reinstall the old HDD in the system.</li> <li>Try replacing the other HDD. If replacing that HDD does not correct the problem, reinstall the old HDD back in the system.</li> <li>If the problem persists, replace the motherboard. (see page 65).</li> </ol>		

Symptom	Possible cause	Suggested action
	Startup (co	ont.)
Control Panel screen and Activity light appear as follows: Cefi East Survey of the status: Blinking green, then solid red.	Problem with the Windows operating system.	<ol> <li>Recheck all cables and connections.</li> <li>Reboot the imagePRESS Server.</li> <li>If the problem persists, reinstall system software (see page 105).</li> </ol>
Activity light status progresses from solid green to solid red. 	Possibly one of the following: • Problem with system software • Print job is corrupt or too large • Faulty UIB cable • CPU overheated • Faulty motherboard	<ol> <li>If you suspect that the problem may be caused by a print job, try printing a different job.</li> <li>Recheck all cables and connections.</li> <li>Reboot the imagePRESS Server and check whether the CPU cooling assembly fan is operating. If the fan is properly connected to the motherboard but does not operate, replace the cooling assembly.</li> <li>If the problem persists, reinstall system software (see page 105).</li> <li>If the problem persists, try connecting another UIB cable (see Figure 14 on page 49).</li> <li>If the problem persists, replace the motherboard (see page 65).</li> </ol>
	FieryBar me	ssages
Check copier power & Video cable connections appears on the optional monitor, if present.	<ul> <li>Possibly one of the following:</li> <li>Problem with the connection between the imagePRESS Server and the copier</li> <li>The copier is not powered on</li> <li>The copier is on but is not ready to print</li> </ul>	<ol> <li>Make sure that the copier is powered on and ready to print.</li> <li>Make sure that the copier interface cable is the correct type and is correctly connected to both the copier and the imagePRESS Server.</li> <li>If the problem persists:         <ul> <li>Recycle power on the copier.</li> <li>Recycle power on the imagePRESS Server by shutting down through the imagePRESS Server Control Panel, waiting 10 seconds, and then powering the imagePRESS Server back on (see page 42).</li> </ul> </li> <li>If the problem persists, replace the copier interface cable</li> </ol>
		(see page 112).

- 5. If the problem persists, replace the copier interface board (see page 57).
- 6. If the problem persists, you may need to service the copier.

Symptom	Possible cause	Suggested action
	Touch panel m	essages
Check power & Video cable connections appears on the copier touch panel.	<ul> <li>Possibly one of the following:</li> <li>Problem with the connection between the imagePRESS Server and the copier</li> <li>The copier is on, but is not ready to print</li> </ul>	<ol> <li>Make sure that the copier is powered on and ready to print.</li> <li>Make sure that the copier interface cable is the correct type and is correctly connected to both the copier and the imagePRESS Server.</li> <li>If the problem persists:         <ul> <li>Recycle power on the copier.</li> <li>Recycle power on the imagePRESS Server by shutting down through the Functions menu, waiting 10 seconds, and then powering the imagePRESS Server back on (see page 49).</li> </ul> </li> <li>If the problem persists, replace the copier interface cable (see page 112).</li> <li>If the problem persists, replace the copier interface board (see page 56).</li> <li>If the problem persists, you may need to service the copier.</li> </ol>
	Control Panel r	nessages
Could not mount the dos/ boot partition.	When transferring options following installation of a new motherboard (page 73), you used the Feature Update CD. The imagePRESS Server does not support the Feature Update CD.	Obtain the Fiery Options Utility and try the procedure again.
Invalid dongle found! Please remove dongle and connect the correct dongle.	The attached dongle is not supported by the Fiery Options Utility. The dongle may have been attached by mistake.	Obtain a valid dongle and try again.
More than one dongle found. Remove all dongles except the correct dongle.	The Fiery Options Utility will not work when more than one dongle is attached to the system.	Remove all dongles except the correct dongle.
No uses remaining.	The dongle has already been used and cannot be reused.	Obtain an unused dongle and try again.

Symptom	Possible cause	Suggested action
	Control Panel 1	functions
imagePRESS Server is	Possibly one of the following:	1. Recheck all cables and connections.
getting power, the Control	• Problem with the Fiery application	2. Reboot the imagePRESS Server.
Panel is not black, but the buttons on the Control	• Faulty User Interface Board	3. If the problem persists, reinstall system software (see page 105).
Panel do not function.		4. If the problem persists, replace the User Interface Board (see page 58).
DVD drive is not	DVD dri Possibly one of the following:	ve 1. If the problem persists, check the cable connections to the
responding, cannot be	<ul> <li>A disk is stuck in the DVD drive</li> </ul>	DVD drive (see Figure 14 on page 49).
located, or the disk will not eject.	<ul> <li>Cable connections to the DVD drive are loose or data cable is faulty</li> <li>DVD drive is faulty</li> </ul>	<ol> <li>If a disk in the DVD drive will not eject, remove the front panel (see page 51) to access the eject button on the DVD drive itself. Power on the imagePRESS Server and press the eject button to eject the disk.</li> </ol>
	<ul><li>DVD drive is faulty</li><li>Motherboard is faulty</li></ul>	<ol> <li>Check the DVD drive data cable connection to the motherboard.</li> </ol>
		<ol> <li>If the problem persists, you may need to replace the DVD drive (see page 101).</li> </ol>
		<ol> <li>If the problem persists, you may need to replace the motherboard (see page 65).</li> </ol>

Symptom	Possible cause	Suggested action
	System perfo	rmance
System performs slowly and/or hangs periodically.	<ul> <li>Possibly one of the following:</li> <li>Board or cable connections are loose or faulty</li> <li>System software is corrupted</li> <li>Missing or faulty DIMM(s)</li> <li>CPU is overheated or faulty</li> <li>CMOS settings need to be reset or are corrupted</li> <li>Motherboard is faulty</li> </ul>	<ol> <li>Recheck all cables and connections.</li> <li>Make sure that the CPU is firmly seated in its socket and that the fan cable is connected to the motherboard.</li> <li>If the problem persists, reinstall the system software (see page 105).</li> <li>Check for missing or faulty DIMM and reseat the DIMM to remove any oxidation on the connector (see page 77).</li> <li>Clear the CMOS (see page 85).</li> <li>If the problem persists, you may need to replace the motherboard (see page 65).</li> </ol>
Clock is slow.	<ul> <li>CMOS settings need to be reset or are corrupted</li> <li>Missing or dead battery on the motherboard</li> </ul>	<ol> <li>Clear the CMOS (see page 85).</li> <li>Replace the battery on the motherboard and update the time in the Windows Control Panel (if a monitor is connected), Command WorkStation, or WebTools.</li> </ol>
The imagePRESS Server hangs during the DVD 2 installation segment.	<ul> <li>Possibly one of the following:</li> <li>The time and date need to be configured in the imagePRESS Server BIOS. (If the battery was removed from the imagePRESS Server motherboard during service and the time and date were not configured in Setup afterward, the imagePRESS Server will hang during the user software installation segment.)</li> <li>DVD 2 is corrupted.</li> <li>The DVD drive is faulty.</li> <li>A HDD is faulty.</li> </ul>	<ol> <li>Set the time and date in the BIOS:         <ul> <li>Power off the imagePRESS Server and remove the User Software DVD when it ejects.</li> <li>If not already connected, connect a keyboard and a monitor to the imagePRESS Server.</li> <li>Power on the imagePRESS Server and immediately press F2 repeatedly to launch the BIOS setup utility.</li> <li>Configure the time and date. (To navigate, use the tab key and the -/+ keys).</li> <li>Save changes and exit (F10).</li> <li>When the imagePRESS Server reaches Idle, power off and then begin a full software installation again starting with the System Software DVD (see page 105).</li> </ul> </li> <li>If the problem persists, obtain another DVD 2 and begin software installation again starting with the DVD 1 (see page 105).</li> <li>If the problem persists, you may need to replace the DVD drive (see page 101).</li> <li>If the problem persists, replace the HDDs one at a time (see page 65).</li> <li>If replacing one of the HDDs does not correct the problem, reinstall the old HDD in the system.</li> </ol>

Symptom	Possible cause	Suggested action		
		Network		
If you suspect a n	If you suspect a network problem, keep in mind the following:			
	• If the imagePRESS Server does not appear in the list of printers on the network, another device on the network may have been assigned the same Ethernet hardware address.			
Conflicting net	• Conflicting network settings may have been configured in Setup and on the customer's workstation.			
• Printing problems may be caused by inappropriate Setup options.				
• Application-spe	• Application-specific printing errors may be caused by missing or incorrectly placed printer description files.			

• System software may be corrupted.

For additional information, see Configuration and Setup on the User Documentation CD.

Unable to connect to the network, or the green LED on the RJ-45 network port is not lit.

- Possibly one of the following:
- Network cable is connected to the wrong RJ-45 port
- No cable/wrong type of cable is connected to the network port
- Network cable or connection is fault
- Network is faulty
- · System software is corrupted
- Network interface on the imagePRESS Server motherboard is faulty

- 1. Make sure that the correct cables are connected to the correct ports on the imagePRESS Server back panel. The upper RJ-45 port is the network interface; the lower RJ-45 port is the Command/Status interface.
- 2. If the problem persists, have the network administrator check Network Setup.
- 3. If the problem persists, make sure that the network administrator has checked other devices on the network.

If other devices are not functioning, the problem may be with the network.

4. If the problem persists, reinstall the system software (see page 105).

Corrupt system software may cause the system to hang.

5. If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 65).

128

Symptom	Possible cause	Suggested action
	Network (c	ont.)
System starts up slowly then displays one or more DHCP error messages on the Control Panel.	<ul> <li>Possibly one of the following:</li> <li>Network cable is connected to the wrong RJ-45 port</li> <li>No cable/wrong type of cable is connected to the network port</li> <li>Network cable or connection is faulty</li> <li>Network is faulty</li> <li>System searches for a nonexistent DHCP server because DHCP is enabled by default on the imagePRESS Server, but the customer's network is not using DHCP</li> <li>Ethernet interface on the imagePRESS Server motherboard is faulty</li> <li>System software is corrupted</li> </ul>	<ol> <li>Make sure that the correct cables are connected to the correct ports on the imagePRESS Server back panel. The upper RJ-45 port is the network interface; the lower RJ-45 port is the Command/Status interface.</li> <li>If the problem persists, ask the network administrator to check Network Setup.</li> <li>If the problem persists, ask the network administrator to check other devices on the network. If other devices are not functioning, the problem may be with the network.</li> <li>If the problem persists, reinstall system software (see page 105). Corrupt system software may cause the system to hang.</li> <li>If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 65).</li> </ol>

Symptom	Possible cause	Suggested action
	Print	ing
	ty and color quality problems are difficult to trac ier does not need servicing or adjusting.	ee. Before you try to troubleshoot print quality problems, print a color Test
Test Page fails to print.	The copier is not ready to print.	Make sure that the copier is turned on and ready to print.
	A problem exists with the connection between the imagePRESS Server and the copier.	<ol> <li>Recheck that the copier interface cables are present and properly connected to the imagePRESS Server and the copier (see page 30).</li> </ol>
	1	2. If the problem persists:
		• Recycle power on the copier.
		• Recycle power on the imagePRESS Server by shutting down through the Functions menu, waiting 10 seconds, and then powering the imagePRESS Server back on (see page 42).
		3. If the problem persists, replace the copier interface cable (see page 112).
		4. If the problem persists, replace the copier interface board (see page 56).
		5. If the problem persists, you may need to service the copier.
The imagePRESS Server appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error	Make sure that Print to PostScript Error in Setup is set to Yes. Check for error messages on the imagePRESS Server output.
	An application problem	<ol> <li>Print a job from a different application to determine if the problem is associated with a particular application.</li> </ol>
		2. Make sure that the connection between the imagePRESS Server and the workstation is working by downloading a Test Page from the workstation, or by printing a simple file such as a text file.
		3. Resend the problem file.

Symptom	Possible cause	Suggested action
	Printing	J (cont.)
A print job stalls or stops after one or a few pages.	Possibly one of the following: • A PostScript or application error • System software is corrupted	<ol> <li>Cancel the imagePRESS Server print job.</li> <li>If this fails to clear the problem, reboot the imagePRESS Server (see page 42).</li> <li>If the problem persists, select Clear Server from Command WorkStation.</li> <li>Set Print Cover Page to Yes and resend the problem job. The Cover Page will indicate "PS Error."         For more information about the PostScript error, double-click the problem job in the Command WorkStation window.     </li> </ol>
		<ul><li>5. If the problem persists, reinstall system software (see page 105).</li><li>Corrupt system software may cause the system to hang at this screen.</li></ul>
	Incorrect or faulty DIMM or faulty DIMM connection	<ol> <li>Reseat the DIMMs to remove any oxidation on the connectors (see page 77).</li> <li>Verify memory amount on the Configuration page.</li> <li>If the problem persists after replacing the DIMM, replace the motherboard (see page 65).</li> </ol>
Color quality is inconsistent.	A copier problem	Test the copier and perform service, if necessary. See the service documentation that accompanies the copier.

Printing (cont.)			
Print quality is poor.	<ul> <li>Possibly one of the following:</li> <li>A file or application problem</li> <li>A missing or outdated printer description file</li> <li>The application cannot find the appropriate printer description file</li> </ul>	<ol> <li>Print a imagePRESS Server Test Page (see page 40).</li> <li>If the quality of the imagePRESS Server Test Page is good the error condition may be a file or application problem.</li> <li>Make sure that the appropriate printer description file is installed. (For details, see <i>Printing</i> on the User Documentation CD.)</li> </ol>	
	The system is out of calibration.	Calibrate the system.	

- 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.

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

## **Diagnostic tools**

imagePRESS Server diagnostic tools include copier interface board diagnostics and E-mail diagnostics.

## **Copier interface board diagnostics**

If you suspect that there may be a problem with the copier interface board (for example, the quality of print output is poor), you can run the Video Diagnostics from the copier touch panel to make sure that the copier interface board is installed properly.

#### TO RUN COPIER INTERFACE BOARD DIAGNOSTICS

1. Access the Info screen from the copier touch panel and make sure that Idle appears (see page 35).

If Printing or RIPping appears on the touch panel, the imagePRESS Server is processing and you must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the copier interface board diagnostics.

- 2. Press the Functions button to display the Functions menu.
- 3. Press the down arrow to advance to Run Diagnostics.
- 4. At the Diagnostics screen, select Video Diagnostics.
- 5. If the screen displays the message "Video diags failed," do the following:
  - Power off the imagePRESS Server and open the system.
  - Reseat the copier interface board.
  - Inspect the copier interface cable.
  - Power on the imagePRESS Server and run the test again. If the test still fails, you may need to replace the copier interface board.
- 6. When the message "Video diags passed" appears, select Done to return to the Functions menu.

## Test E-mail

This diagnostic tool allows you to perform a quick test of the imagePRESS Server E-mail feature without actually having to submit a print job as an e-mail attachment. Test E-mail diagnostic causes the system to send an e-mail to itself. You review the results of the test by printing an E-mail log through the Functions menu.

#### TO RUN TEST E-MAIL

# 1. Access the Info screen from the copier touch panel and make sure that Idle appears (see page 35).

If Printing or RIPping appears on the touch panel, the imagePRESS Server is processing and you must wait until the system finishes and reaches the Idle state.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

- 2. Press the Functions button to display the Functions menu.
- 3. Press the down arrow to advance to Run Diagnostics.
- 4. At the Diagnostics screen, select Test E-mail.

The message "Testing test e-mail. Check E-mail log for result" appears on the copier touch panel.

5. To print the E-mail Log, press Done to return to the Functions menu, press Print Pages, and then select E-mail Log.

The imagePRESS Server sends the E-mail Log to the copier.

6. On the E-mail Log, locate the results of the test in the Status column.

A successful transmission indicates that the imagePRESS Server will be able to send an e-mail over the network. A failed transmission indicates a problem with the imagePRESS Server Setup options. Advise the network administrator to confirm Setup options. For more information, see *Configuration and Setup* on the User Documentation CD.

# **SPECIFICATIONS**

This section provides an overview of imagePRESS Server features, specifications, and safety certifications.

**NOTE:** Replacement parts and specifications are subject to change. When ordering replacement parts, refer to the current parts list maintained by your authorized service/support center. Install the correct parts as directed by your service/support center.

## **Hardware features**

- Single Intel Core 2 Quad Q9550 QUAD-Core 2.83GHz CPU
- Memory—3GB (2 x 512MB and 2 x 1GB)
- An RJ-45 connector for 10BaseT/100BaseTX/1000BaseT Mbs connectivity over twisted pair cable (upper port)
- Dual 250GB HDDs
- Built-in DVD drive

# **Physical specifications**

- Operating Environment:
  - Temperature:  $+5^{\circ}$ C to  $+40^{\circ}$ C
  - Relative Humidity: 10%-85% (non-condensing)
- Power Supply Rating: 100-240V, 50-60Hz, 6A
- Power Supply Voltage Input: 100-240V @ 50-60Hz
- Power Supply Current Input: 100V @ 6A Max.; 240V @ 3A Max.
- Rated Power Consumption: 350W
- Dimensions (Height x Depth x Width):
  - 48.5 cm (19.1 in.) x 48.3 cm (19.0 in.) x 21.5 cm (8.5 in.)
- Weight: 19.7 kg (43.4 lb)

## Networking and connectivity

- Supports AppleTalk and TCP/IP protocols simultaneously.
- Supports EtherTalk Phase 2 (allows users to print from a Mac OS computer to the imagePRESS Server using the AppleTalk network protocol over an Ethernet network).
- RJ-45 connector (upper port) that supports 10BaseT/100BaseTX/1000BaseT twisted pair network connectivity.
- RJ-45 connector (lower port) that provides the Command/Status interface between the imagePRESS Server and the copier.

IMPORTANT

**NOTE:** The network cable at the customer site and the Command/Status Ethernet Crossover cable included with the imagePRESS Server are not interchangeable. Make sure to attach the correct cable to the appropriate RJ-45 port on the imagePRESS Server back panel (see page 28).

## User software

A complete description of user software is provided in *Welcome* on the User Documentation CD. For optimal performance, maintain current versions of the user software on every network computer used to print to the imagePRESS Server. User software may be installed directly on client computers equipped with a DVD drive, or over a network via the Fiery User Software Installer that resides on the imagePRESS Server.

## Safety and emissions compliance

The imagePRESS Server has been certified to meet or surpass the following government standards:

Safety approvals	EMI/EMC approvals
UL 60950-1:2007 (TUV/CU mark)	FCC Class B
CAN/CSA-c22.2 #60950-1-07	VCCI Class B
EN 60950-1:2006+A11 (TUV/GS mark)	EN55022:2006+A1:2007-Class B
CB scheme IEC 60950-1:2001 (1st edition)	EN55024:1998+A1:2001&A2:2003
CB scheme IEC 60950-1:2005 (2nd edition)	AS/NZS CISPR22:2006-Class B

# SERVICING THE IMAGEPRESS SERVER WITH FURNITURE

This chapter describes how to remove the imagePRESS Server from the furniture in order to access internal components for service.

## **Procedures**

If the imagePRESS Server is installed in the optional furniture, you must remove it from the furniture before performing most service procedures.

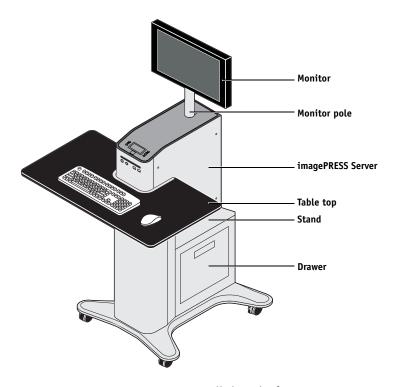


FIGURE 44: imagePRESS Server installed on the furniture

## REMOVING THE IMAGEPRESS SERVER FROM THE FURNITURE

A WARNING

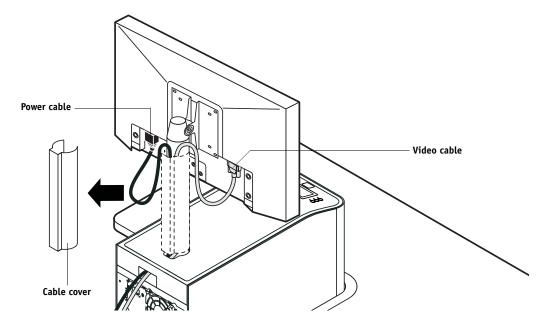


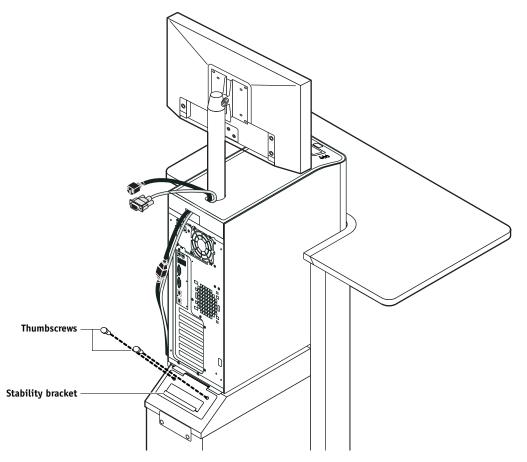
Never lift the imagePRESS Server by grasping the top panel. The top panel does not support the weight of the system.

1. Make sure that the imagePRESS Server is shut down and that all the cables are removed from the back of the imagePRESS Server.

## 2. Remove the cable cover and disconnect the two monitor cables (power and video):

- Power-from the back of the monitor and from the wall outlet
- Video—from the back of the monitor and from the back of the imagePRESS Server

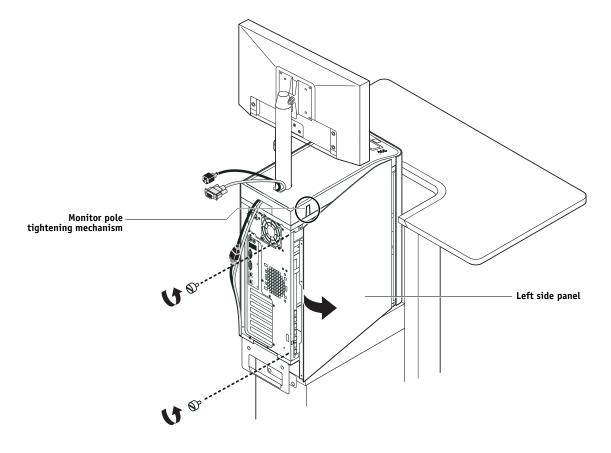




3. Remove the thumbscrews that attach the imagePRESS Server stability bracket to the stand.

4. Lift the bracket and gently pull the imagePRESS Server away from the table top.

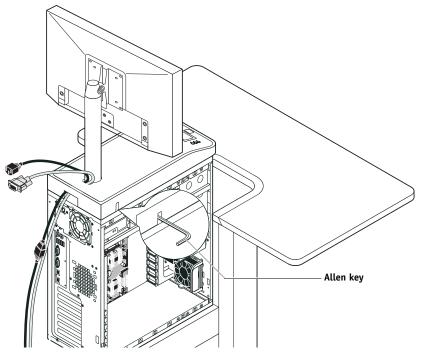
Make sure to pull the imagePRESS Server out just enough so that the front panel of the imagePRESS Server is aligned with the back edge of the table top.



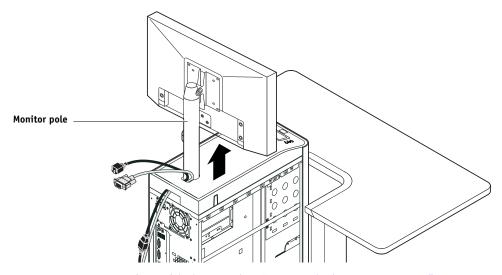
5. Remove the imagePRESS Server left side panel (two screws) so that you can access the monitor pole tightening mechanism.

6. Use the allen key to loosen the screw that secures the monitor pole to the imagePRESS Server.

The allen key should be stored in the side drawer of the furniture.



7. Holding the monitor pole, gently lift the monitor pole assembly up and out of the imagePRESS Server monitor mount.



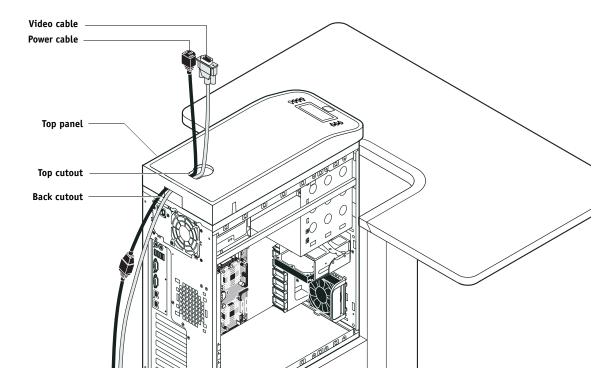
8. Continue with the procedure "To open the imagePRESS Server" on page 51.

**REPLACING THE IMAGEPRESS SERVER IN THE FURNITURE** 

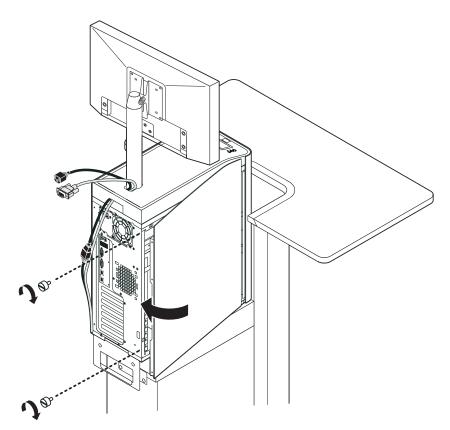
- 1. Make sure that the left side panel is removed from the imagePRESS Server.
- 2. Place the imagePRESS Server upright on the furniture stand. Slide the imagePRESS Server forward just until its front panel is aligned with the back edge of the table top.

Use the handle on the stability bracket to lift the rear of the imagePRESS Server and slide it forward.

3. Route the monitor cables (power and video) into the cutout in the back of the top panel. Pull each cable out of the cutout in the top panel.

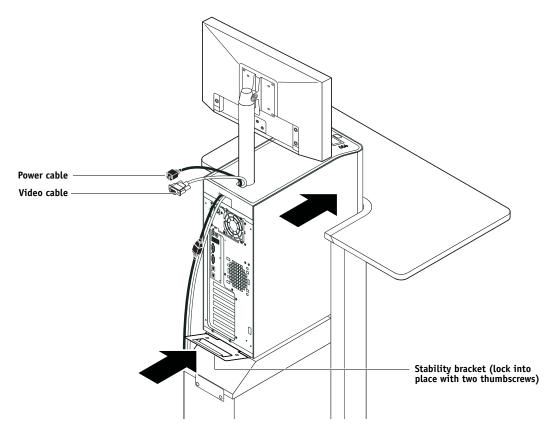


- Tighten the monitor assembly
- 4. Lift up the pole assembly and insert the pole into the top of the imagePRESS Server so that it is inside the monitor mount. Tighten the assembly into place using the allen key.

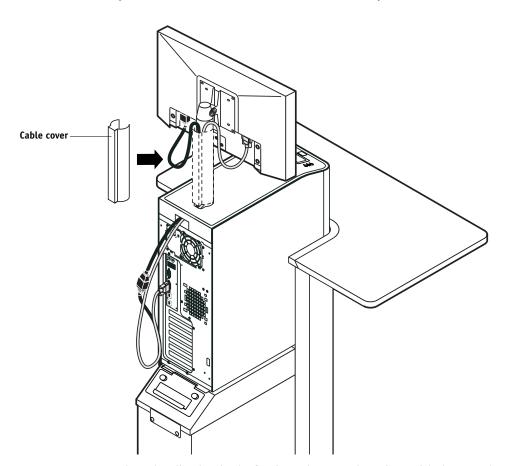


5. Replace the left side panel on the imagePRESS Server with the screws that you removed earlier.

6. Use the handle on the stability bracket to lift the rear of the imagePRESS Server. Slide the imagePRESS Server all the way forward into the stand. Lock the imagePRESS Server into place with the two thumbscrews that you removed earlier.



- 7. Connect the two monitor cables (power and video):
  - Power—to the back of the monitor and to the wall outlet
  - Video-to the back of the monitor and to the back of the imagePRESS Server



8. Replace the cable cover over the cables and monitor pole.

9. Replace the allen key in the furniture drawer and continue with the procedure "To reassemble the imagePRESS Server and verify functionality" on page 104.

## INDEX

# INDEX

## A

AC connector 112 activity light 33, 58, 121, 122, 123 status during startup 123 AppleTalk 19, 136 auto-reboot 22, 121

## B

back panel connectors 28, 45, 112 battery 62, 84, 127 boards motherboard 61 user interface 58 video 56 boxes, unpacking 26 bracket HDD 92, 95 buttons down 32, 58 line selection (move left/right) 32, 58 menu 58 UIB, replacing 60 up 32, 58

## С

cables checking 112 copier interface 56 CPU fan 80, 83 crossover, command and status 29 DVD drive 49, 97 front panel fan 86 front panel USB ports 97, 98, 100 HDD data 49, 93, 95 HDD power 93, 95 power and reset buttons 62, 97, 98, 100 power supply 87 printer interface 112 speaker 97, 98, 100 UIB 49 unpacking 26 Calibration 38

changing the server's default language 22, 105 checklist for service calls 24, 31, 104 Clear Server 38 clearing the CMOS 85 after installing a new CPU 83 after installing a new DIMM 78 after installing a new DVD drive 103 after installing a new HDD 96 after installing a new motherboard 69 to troubleshoot slow performance 127 clock 127 closing the system 104 CMOS 69, 78, 83, 96, 103, 127 CMOS jumper 85 troubleshooting start up problems 121 Color Charts option 37 color profiles 106 command and status cable (crossover) 29 Command WorkStation 19 component sled 97, 98, 102 components checking 113 exploded view of 47 Configuration page 37, 40 Configure tool, using to change the server's default language 22, 105 connections, checking 112, 113 connectors back panel 28, 45, 62, 112 copier interface board 28, 45, 112 CPU fan cable 62 DVD drive data cable 62 front panel fan 62 HDD data cable 62 motherboard 62 network 28, 45, 62, 112 power supply cables 62 power, AC 28, 45, 112 power, reset, and speaker 62 printer interface 62, 112 UIB cable 62 USB ports (dongle) 28, 45, 71, 112 video board 56, 62

Control Panel activity light 122, 123 buttons 58 display window 32 using 32 cooling assembly CPU 79, 80 copier interface board connector 29 copier models 22, 121 covers, removing 51 CPU 20, 83, 135 clearing the CMOS after replacing 83 overview 79 removing and replacing 81 removing the cooling assembly from 80 replacing the cooling assembly on 82 type 61 custom simulation and output profiles 106 customer site checklist 24

## D

damage, reporting 27 diagnostics Run Diagnostics option 134 Test E-mail 38, 134 Test I/F board 133 video board 133 video diagnostics 38 diagnostics, Ethernet address 128 DIMMs clearing the CMOS after replacing 78 configuration 20, 77, 135 removing 78 replacing 78 display window, Control Panel 32 dongle error message about 76, 125 for entering Service Mode (motherboard replacement) 70, 71 transferring options (motherboard replacement) 66, 70, 72, 73, 75 down button 32, 58 drives DVD 101 hard disk drive (HDD) 91, 95

DVD drive 97, 101 clearing the CMOS after replacing 103 power and data cables 49 removing 102 replacing 103

## E

E-mail diagnostics 134 E-mail log 40, 134 E-Mail option 37 E-mail printing 19, 38 EMI approvals 136 error messages 125 check power and cable 31, 108, 124 check power and Video cable connections 125 when transferring options to new motherboard 76, 125 Ethernet address 128 cable 26 connector 28, 45, 62, 112 crossover, command and status 29 exploded view CPU and cooling assembly 79 print server 47

## F

fan CPU 79, 80 front panel 86 ferrite installing on the front panel USB port cables 100 installing on the power supply 90 removing from the front panel USB port cables 98 removing from the power supply 88 Fiery Options Utility 73 Fiery pages 40 Fiery Scan 19 Fiery.1 password 72, 76 Font list definition 105 printing prior to HDD replacement 93 printing prior to system software installation 105

149

front panel 28, 45, 112 fan 86 layout 32 removing 53 front panel USB ports 97 FTP Log 37 functional diagram 21 Functions menu 34, 36 Calibration 38 Color Charts 37 Configuration page 37 e-mail Log 37 Job Log 37 Print Pages 37 **Run Diagnostics 38** Scan job 38 Shut Down 34, 38 System Updates 39 Tray Alignment 38

## Η

hard disk drive (HDD) 91, 95 bracket 92, 93, 95 capacity 135 caution about replacing 95, 120 clearing the CMOS after replacing 96 data cable 93, 95 description 91 mounting screws 94, 95 proper handling 91 removing 93 replacing 95 heatsink, CPU 79, 80

## Ι

installation sequence 22, 23 installing user software on client systems 25, 136 IPP 19

#### J

Job Log 105 option in Functions menu 37 printing 37 jobs 105 jumpers 85

## L

language, changing on the print server 105 language, changing the default 22, 105 LCD 32, 33, 58 line selection buttons 32, 58 Logon Information password 72, 76

## М

master installer 25, 136 media package 26 memory configuration 20, 77, 135 removing 78 replacing 78 menu button 58 menu, Functions 36 monitor profiles 106 motherboard battery 62, 84 cautions about replacing 65 clearing the CMOS after replacing 69 connectors 62 description 61 DIMMs 77, 78 errors when transferring options to 76, 125 illustration 62 mounting holes 62 removing 61, 64 replacing 65 transferring options to 66, 70, 72, 73, 75 verifying in Service Mode 65, 70-72 move left/right buttons 58

## Ν

network connector 28, 45, 62, 112 supported types 136 network administrator 22, 25 networks availability during installation 25 checklist 25 supported 19, 20 normal startup sequence 119

## 0

Open Interface Board kit 24, 26 opening the system 51 Operator Maintenance software 106, 109

## P

panels, removing 51, 53 password 72, 76 Portable Document Format (PDF) 19 PostScript 19 power AC cable 112 AC connector 112 **CPU 62** CPU fan 62, 80, 83 DVD drive 103 front panel fan 86 HDD 95 power and reset cables 48 precautions 24 power and reset buttons 97 power supply cables 87 removing 88 replacing 90 voltages 31, 42, 87, 135 power, AC connector 28, 45, 112 Print E-mail Log option 37 Print Pages option 37 printer interface board 20 printing Color Charts 37 Configuration page 37 e-mail Log 37 Job Log 37 pages 37 profiles 106

## R

reassembling the system 104 reset and power buttons 34, 42, 49 reset button motherboard connector for 62 reusable tie-wrap 88, 90 Run Diagnostics 38

## S

safety approvals 136 scanning 19, 38 screens Functions 36 service calls checklist 24, 31, 104 service dongle 73 Service Mode 65, 70-72 service procedures, overview 44 shutting down 34, 38, 43, 50 side panels removing 52 replacing 52 slot assignments, motherboard 61, 62, 112 software media package 26 system 66, 105 user 25, 66, 105, 136 speaker motherboard connection 48 removing 98, 100 specifications 135 startup 42 normal sequence 119 supported copier series 22, 121 switch bank assembly 97, 102 removing 98 replacing 100 system performance 127 system software 66 installing 105, 107 system updates 39, 109

## T

terminology 44 Test E-mail 38 Test E-mail diagnostics 134 test interface board diagnostics 133 Test Page 40 thermal compound 67, 82 tie-wrap, reusable 88, 90 transferring options (motherboard replacement) 66, 70, 72, 73, 75 Tray Alignment 38

## troubleshooting

beep codes during startup 121 checking external connections 112 checking internal connections 113 control panel functions 126 control panel messages 125 DVD drive 126 error messages and conditions 120 network 128 normal startup sequence 119 preliminary on-site checkout 111 printing 130 startup problems 121 system performance 127

## U

UIB cable, routing diagram 49 unpacking 26 up button 32, 58 updating software 39, 109 updating the system 70 USB ports 62, 97, 112 user documentation 26 user interface board (UIB) activity light 58 buttons on 60 description 58 display window 58 line selection buttons (move left/right buttons) 58 menu button 58 removing 59 replacing 60 up/down buttons 58 user software 66 installing on client systems 25, 136 installing on the print server 105 troubleshooting problems during installation 127

## ۷

verifying functionality 104 verifying new motherboard installation 70 video board connector 56, 62 description 56 diagnostics 133 removing 57 replacing 57 video diagnostics 38 voltages checking 31, 42, 87

## W

Windows XPe password 72, 76