

# Canon imagePRESS Server A3200

# Installation and Service Guide

A guide for service technicians



for the Canon imagePRESS C7010VP/C7000VP/ C6010VP/C6000VP/C6010/C6000

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



FACE	1
imagePRESS Server media pack	1
About the documentation	1
Service documentation	1
Customer documentation	1
About this guide	1
About the illustrations in this guide	1
Terminology and conventions	1
Precautions	1
Tools you will need	2
RODUCTION	2
Features	2
How the imagePRESS Server operates	2
Print options	2
TALLATION	2
Installation sequence	
Checking the customer site	2
Setting customer expectations	3
Unpacking the imagePRESS Server	3
Connecting the imagePRESS Server	
Connecting power and the dongle	3
Connecting to the copier	3
Connecting to the network	4
Starting the imagePRESS Server for the first time	4
Completing the installation	4

Using the imagePRESS Server Control Panel	4
Activity light	4
Buttons	4
Commands	45
Using the copier touch panel	40
Printing imagePRESS Server pages	49
Network status LEDs	5
Starting, shutting down, restarting, and rebooting	5
VICE PROCEDURES	5:
Overview	5:
imagePRESS Server overview diagrams	54
Accessing internal components	5
Shutting down the system	59
Opening the imagePRESS Server	60
Removing and replacing boards	60
Copier interface board	67
Graphics board	69
User interface board	7
Motherboard	7:
Motherboard jumpers	7.
Removing the motherboard	78
Replacing the motherboard	83
Replacing parts on the motherboard	90
Motherboard battery	90
Clearing the CMOS	98
DIMMs	99
Motherboard CPUs	102
Fans	107
Front fan	108
Back fan	111

Power supply	113
Hard disk drives	118
Servicing HDDs inside the imagePRESS Server	119
Servicing HDDs inside the security Enclosure	123
Switch bank assembly	124
DVD drive	128
Restoring and verifying functionality after service	130
TEM SOFTWARE	132
Overview	132
Installing system software	133
System updates	138
Fiery Clone Tool	138
DUBLESHOOTING	139
Troubleshooting process	139
Preliminary on-site checkout	140
Checking interface cables	141
Checking internal components	142
Inspecting the system	143
Normal startup sequence	148
Error messages and conditions	149
Clearing the CMOS	171
Diagnostic tools	172
Video Diagnostics	172
Test E-mail	173

SPECIFICATIONS	174		
Hardware features	174		
Physical specifications	174		
Networking and connectivity	174		
User software	175		
Safety and emissions compliance	175		
SERVICING A SYSTEM WITH FURNITURE			
Procedures	176		
INDEX	187		

LIST OF FIGURES 7

# LIST OF FIGURES

FIGURE	1:	Printing system	24
FIGURE	2:	imagePRESS Server functional diagram	25
FIGURE	3:	Summary of installation steps and references	28
FIGURE	4:	Space requirements	29
FIGURE	5:	Contents of imagePRESS Server shipping box	34
FIGURE	6:	imagePRESS Server connections	35
FIGURE	7:	Copier interface cable connectors	37
FIGURE	8:	Copier and imagePRESS Server cable connections	38
FIGURE	9:	Straight-through and crossover Ethernet cables	40
FIGURE	10:	imagePRESS Server power switch	41
FIGURE	11:	imagePRESS Server power button	42
FIGURE	12:	The imagePRESS Server Control Panel	44
FIGURE	13:	Front and back panels	54
FIGURE	14:	imagePRESS Server back and side views	55
FIGURE	15:	Exploded view of imagePRESS Server components	56
FIGURE	16:	Data cable connections in the imagePRESS Server	57
FIGURE	17:	Power cable connections in the imagePRESS Server	58
FIGURE	18:	Removing/replacing the left or right panel	62
FIGURE	19:	Removing the upper faceplate	63
FIGURE	20:	Removing/replacing the front panel	64
FIGURE	21:	Removing/replacing the top panel	65
FIGURE	22:	Diagram of copier interface board (component side)	67
FIGURE	23:	Diagram of the user interface board (front and back)	71
FIGURE	24:	Removing/replacing the user interface board	72

LIST OF FIGURES 8

FIGURE 25:	Removing/replacing the U1B buttons	/3
FIGURE 26:	Diagram of the imagePRESS Server motherboard	76
FIGURE 27:	Removing the motherboard tray	80
FIGURE 28:	Removing the motherboard from the tray	81
FIGURE 29:	Installing the motherboard tray	85
FIGURE 30:	Connecting the single-use dongle	88
FIGURE 31:	Motherboard battery	97
FIGURE 32:	Motherboard DIMM sockets	99
FIGURE 33:	Releasing a DIMM	101
FIGURE 34:	CPU, socket, and cooling assembly	102
FIGURE 35:	Removing/replacing the CPU cooling assembly	104
FIGURE 36:	Replacing a CPU	105
FIGURE 37:	Removing/replacing the front fan assembly	108
FIGURE 38:	Removing/replacing the front fan from the bracket	109
FIGURE 39:	Removing/replacing the back fan	111
FIGURE 40:	Installing the fan grille	112
FIGURE 41:	Removing/replacing the power supply	116
FIGURE 42:	imagePRESS Server hard disk drives (HDDs)	119
FIGURE 43:	Removing/replacing the HDD	120
FIGURE 44:	Removing/replacing the HDD bracket	121
FIGURE 45:	Removing/replacing the component sled	125
FIGURE 46:	Removing/replacing the switch bank assembly	126
FIGURE 47:	Removing/replacing the DVD drive	128
FIGURE 48:	imagePRESS Server verification steps	131
FIGURE 49:	Troubleshooting the system	139
FIGURE 50:	Back panel of imagePRESS Server	141
FIGURE 51:	Normal startup sequence	148
FIGURE 52:	imagePRESS Server installed on the furniture	176

LIST OF FIGURES

FIGURE 53:	Removing the cable cover and monitor cables	177
FIGURE 54:	Loosening the stability bracket	178
FIGURE 55:	Removing the left panel	179
FIGURE 56:	Loosening the monitor pole	180
FIGURE 57:	Removing the monitor pole assembly	181
FIGURE 58:	Routing the cables through the access cutout	182
FIGURE 59:	Tightening the monitor pole assembly	183
FIGURE 60:	Installing the left panel	184
FIGURE 61:	Locking the stability bracket	185
FIGURE 62:	Installing the cable cover	186

# **PREFACE**

The *Installation and Service Guide* is intended for authorized Canon imagePRESS Server A3200 and Canon imagePRESS C7010VP/C7000VP/C6010VP/C6000VP/C6010/ C6000 service technicians installing or servicing the Canon imagePRESS Server A3200. If you are not an authorized service technician, do not attempt to install or service the Canon imagePRESS Server A3200. Electronics for Imaging, Inc. does not warrant the performance if installed or serviced by non-authorized personnel.

**Note:** The term "imagePRESS Server" is used throughout this guide to refer to the Canon imagePRESS Server A3200. The term "copier" is used to refer to the Canon imagePRESS C7010VP/C7000VP/C6010VP/C6000VP/C6010/C6000.

# imagePRESS Server media pack

The imagePRESS Server media pack contains the following:

- System Software DVD1, for service use only
- System Software DVD2, for service use only
- · Fiery Options Utility DVD, for service use only
- User Software DVD
- User Documentation CD
- · Canon Utility and technician-related CDs and documentation
- Printed Welcome
- Printed Secure Erase Administration Guide
- Printed Release Notes
- AutoCal Grayscale strip

In addition, separate media packs contain the Acrobat/PitStop media and the Fiery Clone Tool DVD.

# 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 service the imagePRESS Server. The "Troubleshooting" chapter focuses on individual hardware 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 XP Professional for Embedded Systems (FES) are beyond the scope of this guide.

For details on the content, terminology, and conventions of this guide, see the sections beginning on page 13.

# **Customer documentation**

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

User documentation can be accessed in the following ways:

- Service technicians can access the documentation from the User Documentation CD.
- Client users can access documentation from the User Documentation CD. If the user documentation has been installed on the imagePRESS Server hard disk drives and shared, client users can also access documentation via a shared network folder.

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.

# About this guide

The Installation and Service Guide is divided into the following chapters:

Preface

Provides general information about this guide and information that you should know before you attempt to install or service the imagePRESS Server.

• Introduction

Provides general information about the imagePRESS Server.

• Installation

Provides detailed instructions for checking the customer site and unpacking, installing, and connecting the imagePRESS Server.

• Using the imagePRESS Server

Provides an overview of the imagePRESS Server functions.

• Service Procedures

Describes removal and replacement procedures for imagePRESS Server components.

System Software

Provides detailed instructions for installing system software on the imagePRESS Server.

• Troubleshooting

Identifies the source of common problems and suggests ways of correcting problems.

• Specifications

Summarizes the hardware and networking features of the imagePRESS Server controller.

Servicing a System with Furniture

Provides assembly and disassembly instructions for systems 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 obtain 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 include the following:

- Unpacking, installing, and connecting the imagePRESS Server
- · Servicing the imagePRESS Server components

### **Network administrator**

Based on pre-sale arrangements and the evaluation of the authorized analyst, the service technician may be required to configure some TCP/IP settings for Ethernet and the connection to the Command WorkStation application installed on the imagePRESS Server. The term "network administrator," as used in this guide, refers to a specific person at the customer site, the service technician, or the authorized analyst.

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

- Verifying 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

**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 following terms are used throughout this guide when discussing imagePRESS Server components:

- The terms "replace" and "replacing" are typically used to mean reinstallation of existing components. Install new components only when necessary.
- The term "Control Panel" refers to the area at the top of the imagePRESS Server, including the green/red/amber activity lights, 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 "DVD drive" refers to the imagePRESS Server DVD-RW drive.
- The term "system software" refers to the following software installed on the imagePRESS Server hard disk drives (HDDs):
  - Windows XP Professional for Embedded Systems (FES) operating system and imagePRESS Server Server Software (System Software DVD1)
  - User Software (System Software DVD2)
- The term "Windows XP Professional (FES)" is used throughout this guide to refer to Windows XP Professional for Embedded Systems.

For other terms used to identify components of the imagePRESS Server, see the reference key in Figure 15 on page 56.

### Connectors and components labeled "not used"

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

### Manual conventions

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

Note:

The note indicator highlights important messages and additional information.



The WARNING format indicates a warning concerning operations which, if not performed correctly, may lead to death or 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.

**IMPORTANT** 

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.

imagePRESS Server Control Panel screen messages and commands referenced in the text of this guide appear in the Officina Sans typeface.

# **Precautions**



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

1. Avoid pressing the surface of the LCD.

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

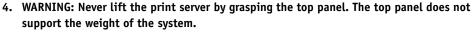
2. Use a soft cloth moistened with Lens and Mirror Cleaner to clean the surface of the imagePRESS Server display window.

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

3. 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 do come in contact with the liquid crystal, wash it off your skin with soap and water immediately.





**AVERTISSEMENT:** Ne jamais soulever le serveur d'impression par sa partie supérieure : celle-ci ne peut pas supporter le poids du système.

AWERTENZA: 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.



- 5. Always disconnect power before removing or opening the imagePRESS Server.
- 6. When connecting or disconnecting the power cable:
  - *Only use* the power cable that shipped with the imagePRESS Server or an appropriate replacement power cable available from an authorized provider.
  - *Always* disconnect the power cable from the imagePRESS Server before opening the system and servicing internal components.
  - *Do not* pull on the power cable when unplugging the imagePRESS Server. Pull the plug instead.
  - *Do not* place objects on the power cable. Place the power cable away from foot traffic.
  - Do not tamper with or disable the power cable 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.

7. 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 the antistatic bags until you are ready to install
  them. When you remove components from an antistatic bag, place them on a grounded
  antistatic surface, component-side up.
- When you remove an electronic component, place it into an antistatic bag immediately. Do not walk across a carpet or vinyl floor while carrying an unprotected board.
- 8. Use care when handling parts of the imagePRESS Server, as some edges on the unit may be sharp. For example, be careful when:
  - Accessing the hard disk drives, DVD drive, power and reset buttons, and front USB ports
  - Plugging in cables at the back of the unit
- 9. Handle printed circuit boards by their opposing edges only and avoid touching the contacts on the edge of the board.
- 10. Never set a cup of coffee—or any liquid—on or near the imagePRESS Server or copier.
- 11. Avoid installing third-party applications onto the imagePRESS Server. Third-party applications are not supported and can cause system problems. Although virus-protection software is permitted on the imagePRESS Server, you should run virus scans only when the imagePRESS Server is in Idle mode (not spooling, processing, or printing any jobs).
- 12. Do not change the Windows XP Professional (FES) 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 XP Professional (FES) system to its factory defaults.

### 13. 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 the shop supervisor.

# 14. 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.

# 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.

**IMPORTANT** 



### Lithium battery notice

A danger of explosion exists 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).

**ADVERTENCIA:** 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

In order to install or service the imagePRESS Server, the following tools and parts are required:

- ESD wrist grounding strap and antistatic mat
- Flathead screwdriver
- #0, #1, and #2 Phillips head screwdrivers
- 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 print on imagePRESS Server supported devices.
- Spool print jobs and select a printing priority for each job. With remote user software
  running on networked Windows and Mac OS computers, users can control spooled print
  jobs sent to the imagePRESS Server.
- Print color, grayscale, and black-and-white files.
- Use the Canon imagePRESS C7010VP/C7000VP/C6010VP/C6000VP/C6010/C6000 as a high-resolution color scanner with Fiery Scan software.
- Use over 100 resident fonts (126 Adobe Type 1 PostScript fonts and 10 TrueType fonts),
  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 e-mail printing and the Microsoft version of Internet Printing Protocol (IPP) for Windows 2000, Windows XP, Windows Server 2003, Windows Vista, and Windows 7.

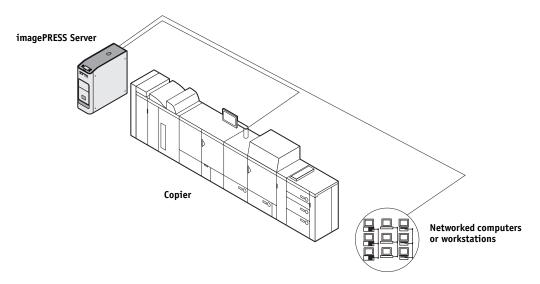


FIGURE 1: Printing system

The imagePRESS Server is one of several imaging products engineered and manufactured by Electronics for Imaging, Inc.

# How the imagePRESS Server operates

The imagePRESS Server enables the customer to use the copier as a high-performance networked PostScript color printer. 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 are responsible for efficient image processing and printing controls. The main functions of imagePRESS Server components and software are described in the following paragraphs.

The imagePRESS Server uses a motherboard and a copier interface board to process image data for printing and scanning images.

The motherboard includes two quad-core Intel Xeon 2.8GHz CPUs that control the image data transfer to and from the copier interface board and run 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 two copier interface cables. 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 4GB of memory.

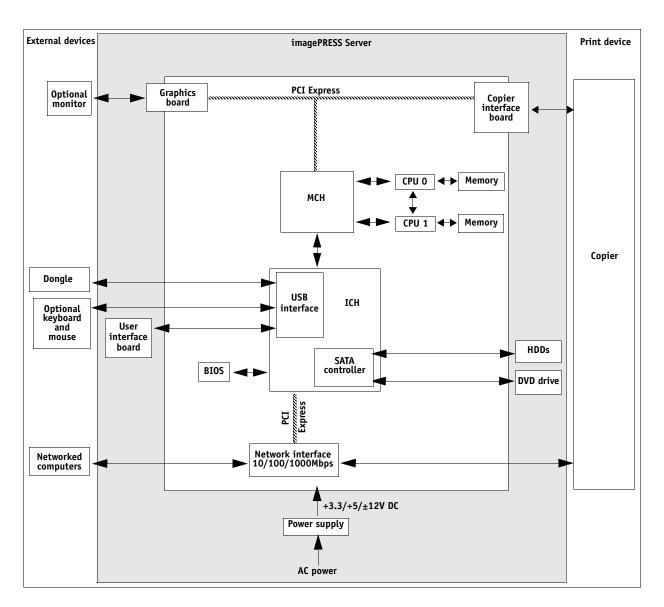


FIGURE 2: imagePRESS Server functional diagram

# **Print options**

The imagePRESS Server allows users to use a variety of applications to create and print pages of text and/or images. The imagePRESS Server operates over a network.

Printing over a network allows imagePRESS Server users to print documents directly from the applications in which the documents were created. In addition, the imagePRESS Server offers an efficient way to print files that are saved in PostScript, Encapsulated PostScript (EPS), Portable Document Format (PDF), or Tagged Image File Format (TIFF). These files can be downloaded directly to the imagePRESS Server using Command WorkStation, one of the remote utilities for the imagePRESS Server.

# **INSTALLATION**

This chapter includes the following information:

- Checking the customer site
- Unpacking the imagePRESS Server
- Installing the imagePRESS Server
- Connecting the imagePRESS Server cables
- Starting the imagePRESS Server for the first time
- Completing the installation

# 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 28 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. Launch Configure, specify the language that you want to display on the imagePRESS Server from Server > General > Choose Server Language, and then click Apply.

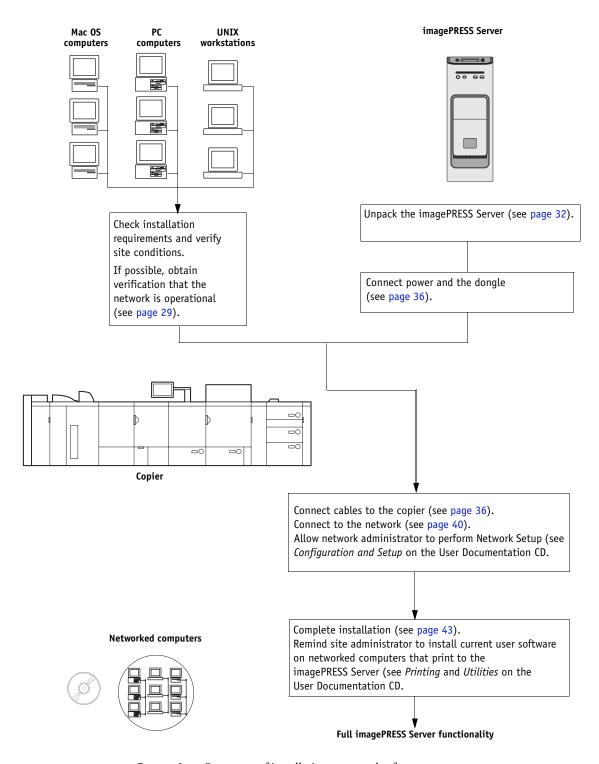


FIGURE 3: Summary of installation steps and references

# 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 there space near the copier for the imagePRESS Server?

Make sure that there is space 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).

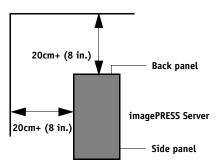


FIGURE 4: Space requirements

# ☐ Does the copier require service or adjustments?

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

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

INSTALLATION 30

# Power □ Verify that there is a dedicated 15Amp grounded electrical outlet near the copier for the imagePRESS Server. Do not run the imagePRESS Server and the copier on the same circuit. • Do not use a 3-prong adapter in a 2-hole ungrounded outlet. • 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. 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 the remote computers and the network.

**IMPORTANT** 

INSTALLATION 31

# Setting customer expectations

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

- 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 have a networked computer available during the
  installation. The appropriate software must be installed in advance. Documentation for
  the networked computer and the 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 will print to the imagePRESS Server (user documentation is also included).

**NOTE:** This guide covers imagePRESS Server hardware installation and service. For additional Setup information, see *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 and documentation (see page 34).



Never lift the print 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.

AWERTENZA: 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 that contains the imagePRESS Server and remove the packing material.
- 2. Remove the contents from the accessory kit inside the imagePRESS Server box and inspect the contents for visible damage. The accessory kit should include the following items:
  - Bags containing network cable (straight-through Ethernet), Command/Status cable (crossover Ethernet), and region-specific power cables
  - Interface Board Kit containing the two copier interface cables and interface board for the copier
  - imagePRESS Server media pack (for a list of contents, see "imagePRESS Server media pack" on page 11)
  - SeeQuence Suite media pack (including the Acrobat/PitStop media and the SeeQuence Suite dongle)
  - Fiery Clone Tool DVD

### 3. Open the imagePRESS Server and SeeQuence Suite media packs.

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.

**NOTE:** Ask the site administrator to make sure that all media shipped with the imagePRESS Server is stored in a safe and accessible place.

- 4. Set aside the remaining components from the accessory kit.
- 5. Remove any packing materials and carefully lift the imagePRESS Server out of its box.

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

# imagePRESS Server

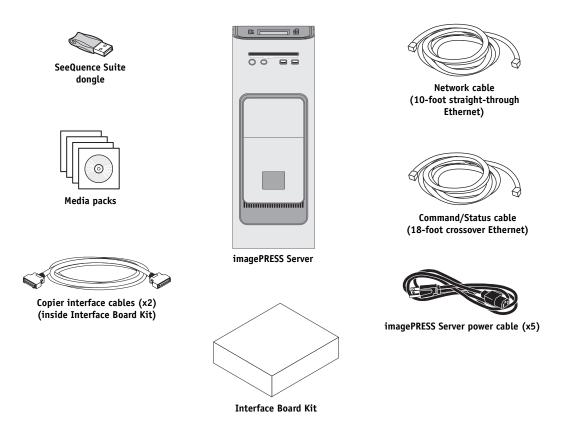


FIGURE 5: Contents of imagePRESS Server shipping box

INSTALLATION 35

# Connecting the imagePRESS Server

You are now ready to make the following connections:

- SeeQuence Suite dongle
- Power
- Copier
- Network



Before you begin, see "Precautions" on page 17.

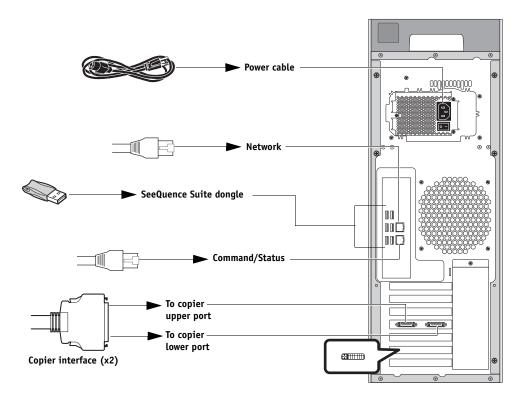


FIGURE 6: imagePRESS Server connections

# Connecting power and the dongle

Use the following procedure to connect power and the dongle to the imagePRESS Server.

### TO CONNECT POWER AND THE DONGLE

 Connect the recessed end of the imagePRESS Server power cable to the power connector on the back of the imagePRESS Server, as shown in Figure 6 on page 35. Connect the other end of the cable to a wall outlet.

Be sure to use the appropriate power cable for your regional outlet type.

To use the SeeQuence Suite features of Command WorkStation on the imagePRESS Server, install the SeeQuence Suite dongle directly on one of the imagePRESS Server USB ports (see Figure 6 on page 35).

The SeeQuence Suite dongle is attached to a keychain labeled "SeeQuence Suite." To use SeeQuence Suite on a client workstation instead of the imagePRESS Server, install the dongle on the client workstation.

**Note:** The dongle is required to use SeeQuence Suite in its fully licensed mode. If the dongle is not installed or is removed during a work session, SeeQuence Suite will be available in Demo mode only—that is, documents can be imposed and saved in .dbp format, but all printed output will display a "DEMO" watermark. To remove the "DEMO" watermark, install the dongle, and then reopen and save the document in the licensed mode of SeeQuence Suite.

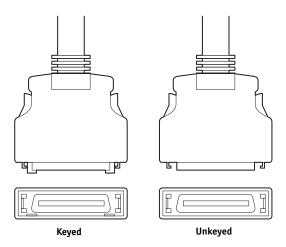
# Connecting to the copier

Use the following procedure to connect the imagePRESS Server to the copier.

### TO CONNECT TO THE COPIER

- 1. Shut down and power off the copier (for instructions, see the documentation that accompanies the copier).
- 2. If needed, shut down the imagePRESS Server (see page 51).
- 3. 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 7:** Copier interface cable connectors

4. Connect the copier interface cables to the interface ports on the copier (see Figure 8 on page 38).

Connect the keyed connector of one cable to the upper port on the copier. Connect the unkeyed connector of the other cable to the lower port on the copier.

**IMPORTANT** 

Each cable connector is designed to fit only one way, and on only one interface port on the copier. Do not force a cable connector on to the wrong port. Forcing the connection may result in permanent damage to the interface port and cable.

5. Connect the other ends of the cables to their corresponding imagePRESS Server copier interface connectors (see Figure 8).

Connect the upper port on the copier to the left interface connector (unkeyed) on the imagePRESS Server. Connect the lower port on the copier to the right interface connector (keyed) on the imagePRESS Server.

**NOTE:** Copier interface cables must connect each interface port on the copier to its corresponding imagePRESS Server connector in order for the system to function correctly.

Each cable connector is designed to fit only one way, and on only one connector on the imagePRESS Server. Do not force a cable connector into the wrong interface connector. Forcing the connection may result in permanent damage to the interface connector and cable.

**IMPORTANT** 

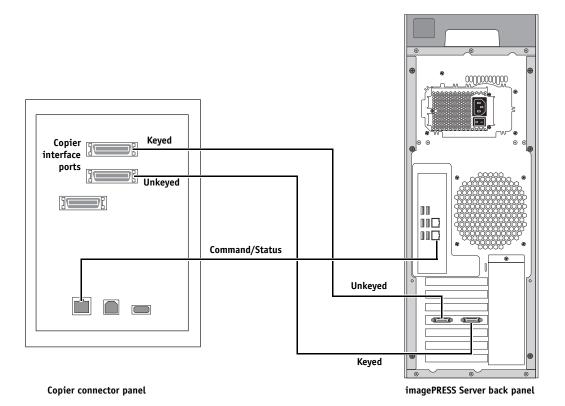


FIGURE 8: Copier and imagePRESS Server cable connections

6. Verify that the cables are firmly connected to the copier and imagePRESS Server.

Make sure that the cable connectors are firmly locked into their respective ports on either end. To verify that the cable connectors are locked in place, gently move each cable connector side to side (not up and down).

**NOTE:** To prevent risk of cross-talk, make sure the copier interface cables do not touch the power cords for the system. Image quality problems or imagePRESS Server shutdowns could result.

Locate the Command/Status (crossover Ethernet) cable that shipped with the imagePRESS Server.

**Note:** Be sure to use the *crossover* Ethernet cable for the Command/Status connection. To verify the cable type, align the connectors on each end of the cable as shown in Figure 9 on page 40. On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable, the wire arrangements are different.

- 8. Connect the cable to the Command/Status connector on the back of the imagePRESS Server, and to the Command/Status connector on the copier (see Figure 8 on page 38).
- 9. Power on the imagePRESS Server (see page 51).
- 10. Power on the copier (for instructions, see the documentation that accompanies the copier).

## Connecting to the network

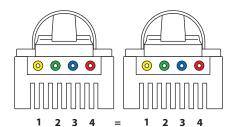
Use the following procedure to connect the imagePRESS Server to the customer network.

#### TO CONNECT TO THE NETWORK

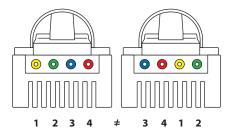
- 1. Shut down the imagePRESS Server before connecting it to any network device (see page 51).
- 2. Obtain the appropriate straight-through Ethernet cable for the customer network connection:
  - For 10BaseT link speed, use a cable that is Category 3 or higher
  - For 100BaseTX, use Category 5 or higher (4-pair/8-wire, short-length)
  - For 1000BaseT, use Category 5e or higher (4-pair/8-wire, short-length)

**NOTE:** Be sure to use a *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 9. On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable, the wire arrangements are different.

Align cable connectors 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 9: Straight-through and crossover Ethernet cables

Connect one end of the network cable to the network connector on the back of the imagePRESS Server (see Figure 6 on page 35).

The motherboard in the imagePRESS Server has an external Ethernet network connector that supports 10/100/1000 Mbps link speed.

4. Connect the other end of the cable to the customer network.

INSTALLATION 41

# Starting the imagePRESS Server for the first time

This section describes how to start the imagePRESS Server for the first time after connecting the cables.

### TO START THE IMAGEPRESS SERVER

1. Make sure that the power switch on the back of the imagePRESS Server is in ON (|) position.

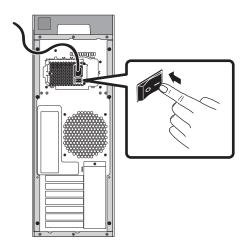


FIGURE 10: imagePRESS Server power switch

INSTALLATION 42

## 2. Power on the imagePRESS Server using the power button on the front panel.

Press once and release the button to power on the system. The power supply automatically senses the correct voltage.

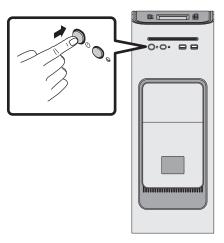


FIGURE 11: imagePRESS Server power button

3. Wait for the system to power on and for the imagePRESS Server to reach Idle.

The imagePRESS Server takes approximately 5 minutes to power on and reach Idle.

# Completing the installation

To complete the installation of the imagePRESS Server at the customer site, do the following:

- 1. Print the Test Page and Configuration page (see "Printing imagePRESS Server pages" on page 49).
- 2. Ask the customer to verify the output.
- Perform any required system upgrades. For instructions, see the documentation that accompanies the system upgrade.
- 4. Inform the network administrator that they should perform Setup and print some test documents over the network.
- 5. After the network administrator has completed Setup, use the Fiery Clone Tool DVD to copy the contents of the imagePRESS Server HDD to an image file.

The resulting clone image file contains the entire contents of the imagePRESS Server C, D, and E HDD partitions, with the exception of any print jobs in the print queues. In the future, if required, this clone image may be used to restore the imagePRESS Server to its initial configuration.

For detailed instructions, see the documentation included on the Fiery Clone Tool DVD. The Fiery Clone Tool DVD is included in one of the media packs that ship with the imagePRESS Server.

- 6. Notify the customer trainers that you are finished (by faxing the output, if necessary).
- 7. Store the output and the current Configuration page(s) near the copier.
- 8. Inform the site administrator that imagePRESS Server user software must be installed on networked computers that print to the imagePRESS Server.
- Ask the site administrator to make sure that all media shipped with the imagePRESS Server is stored in a safe location, accessible to you.
- For additional installation instructions, see any additional service documentation for the imagePRESS Server.

# USING THE IMAGEPRESS SERVER

This chapter includes the following information:

- Using the imagePRESS Server Control Panel
- Accessing imagePRESS Server functions on the copier control panel
- Printing imagePRESS Server pages
- · Checking network status LEDs
- Shutting down and restarting the imagePRESS Server

# Using the imagePRESS Server Control Panel

This section describes the Control Panel at the top of the imagePRESS Server. The Control Panel is used for the following tasks:

- Ejecting media from the DVD drive
- Shutting down, restarting, or rebooting the imagePRESS Server (see page 51)

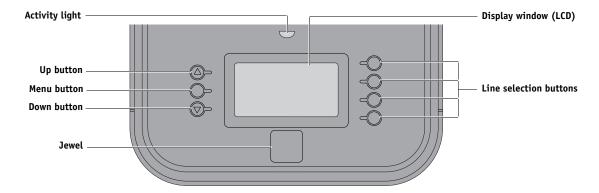


FIGURE 12: The imagePRESS Server Control Panel

# **Activity light**

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

Off, and the display window is not backlit	The imagePRESS Server is powered off and the power cable is not plugged into a power outlet.
Off	The imagePRESS Server is in Idle state.
Solid amber	The imagePRESS Server is powered off but the power cable is plugged into a power outlet. The Control Panel continues to draw power when the imagePRESS Server is in this state.
Solid green	The imagePRESS Server is in Idle state.
Flashing amber	An error has occurred, causing printing to be disabled.
Flashing green	The imagePRESS Server is receiving, processing, or printing a job.
Flashing or solid red	An error has occurred, causing printing to be disabled.

### **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. A special character (*) appears on the LCD next to a button when it is available.
Up and Down buttons	Use these buttons to scroll to different screens in multi-screen lists.
Menu button	Press this button to display the Control Panel commands.

### **Commands**

To display the Control Panel commands, press the Menu button.

Eject CD/DVD	Ejects media from the imagePRESS Server DVD drive.
IP Address	Displays the IP Address of the imagePRESS Server.
Restart Server	Allows you to reset the imagePRESS Server server software or reboot the entire imagePRESS Server system.
Shut Down System	Shuts down all imagePRESS Server software properly and then powers off the system.

**Note:** The Restart Server, Shut Down System, and Reboot System commands on the Control Panel are equivalent to the Restart Server, Shut Down System, and Reboot System commands on the copier touch panel (see page 47). You should always use these commands to restart, shut down, or reboot the system; do not use the power and reset buttons on the imagePRESS Server front panel.

# Using the copier touch panel

The copier touch panel provides access to status and function screens for the imagePRESS Server.

#### TO ACCESS IMAGEPRESS SERVER FUNCTIONS ON THE COPIER



- 1. On the copier touch panel, touch the arrow button.
- 2. Touch the Printer button.
- 3. Touch the Printer Status/Settings button.

The Info screen for the imagePRESS Server is displayed. This screen provides status information about current job activity on the imagePRESS Server.

4. To access the Functions screen, touch the Functions button.

The following options are available from the Functions screen:

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

- Test Page—Enables you to confirm that the imagePRESS Server-to-copier interface is functioning properly. The Test Page provides sample images that can be used 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.
- Configuration—Lists the current server and device configuration. This includes
  information about all current Setup settings, calibration profile, and the Ethernet
  address of the imagePRESS Server. The Configuration page also provides version
  information for the BIOS chip and information on any installed options or special
  features included in the imagePRESS Server.
- Job Log—Provides a log of recent jobs printed by the imagePRESS Server (by default, the last 55 jobs are shown).
- 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—Provides a list of all PostScript fonts resident on the imagePRESS Server HDD.
- E-mail Log—Prints the log of the last 55 e-mail transmissions to or from the imagePRESS Server. E-mail services 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—Provides a log of recent FTP transmissions to or from the imagePRESS Server (by default, the last 55 transmissions are shown). FTP services must be enabled in Setup before the FTP Log can be printed. For more information, see *Configuration and Setup* on the User Documentation CD.

USB Media Server—Allows customers to print a file from a USB device to the imagePRESS Server.

Scan Job—Allows customers to scan a document placed on the scanner glass or in the document feeder of the copier. For more information, see *Utilities* on the User Documentation CD.

Suspend Printing—Suspends the connection from the imagePRESS Server to the copier. This option interrupts the current print job so that you can use the copier to make copies; after you finish making copies, you can select Resume Printing and the copier continues processing and printing jobs.

Resume Printing—Reestablishes the connection from the copier to the imagePRESS Server so that you can resume printing after interrupting the print job to make copies (used with Suspend Printing).

Shut Down—When you select this command, 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 might be lost.
- Shut Down System—Shuts down all imagePRESS Server properly and then powers off the system.
- Reboot System (hard reset)—Shuts down all imagePRESS Server activity properly and then reboots.

**Note:** These commands are equivalent to the Restart Server, Shut Down System, and Reboot System commands on the imagePRESS Server Control Panel (see page 45). You should always use these commands to restart, shut down, or reboot the system; do not use the power and reset buttons on the imagePRESS Server front panel.

Clear Server—Clears all jobs from the server queues. It also clears the Job Log, all jobs saved on the server HDD, 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 HDD, the index of archived jobs, and, finally, all FreeForm masters and the index of FreeForm masters. If you keep Job Logs, print or export the Job Log before you choose Clear Server.

If you select the Clear Server command, you are asked to confirm your selection. If the Administrator password has been set, you are prompted to enter it.

Run Setup—Allows you to access the Setup options in order 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 information about each Setup 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. E-mail services
  must be enabled in Setup before the Test E-mail diagnostic can be run. For more
  information, see *Configuration and Setup* on the User Documentation CD.

Tray Alignment—Use this feature to align input trays for printing. Aligning the trays helps to center an image on the printed page or to 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 color output using ColorCal. For more information, see *Color Printing* on the User Documentation CD.

System Updates—Allows the customer to install system updates to the imagePRESS Server.

# **Printing imagePRESS Server pages**

This section describes how to print the Test Page, the Configuration page, and other Fiery pages.

- Test Page—verifies that all components of the imagePRESS Server-to-copier interface work. The Test Page is a color file that resides on the imagePRESS Server HDD.
- Configuration page—provides general information about the hardware and software configuration of the imagePRESS Server, the customer's current Setup settings, the current calibration, and the IP address of the imagePRESS Server.

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.

#### TO PRINT IMAGEPRESS SERVER PAGES



- 1. On the copier touch panel, touch the arrow button.
- 2. Touch the Printer button.
- 3. Touch the Printer Status/Settings button.

The Info screen for the imagePRESS Server is displayed. This screen provides status information about current job activity on the imagePRESS Server.

- 4. Touch the Functions button.
- 5. Select Print Pages.
- 6. Choose the page that you want to print from the list that appears.

The imagePRESS Server sends the selected page to the copier.

7. If you printed the imagePRESS Server Test Page, examine the quality of the Test Page from the copier.

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, refer to the section on printing problems in Table 6 on page 149.

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

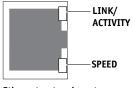
- All color patches should be visible, even though they may be very faint in the 5% and 2% range.
- Each color's patch set should show uniform gradation from patch to patch as the color lightens from 100% to 0%.

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, see printing problems in Table 6 on page 149, or see *Color Printing* on the User Documentation CD.

# **Network status LEDs**

Two LEDs next to the network connector indicate the network link status and speed. For additional network information, see *Configuration and Setup* on the User Documentation CD.

**TABLE 1:** Network link indicators



Ethernet network port (upper RJ-45)

LINK/ACTIVITY LED	Network link status
Off	No link to network
Solid green	Valid link to network
Flashing green	Data transfer is in progress

 TABLE 2:
 Network speed indicators

SPEED LED	Network speed
Off	10 Megabits/second
Solid green	100 Megabits/second
Solid yellow or orange	1000 Megabits/second

# 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 the imagePRESS Server and before you remove or attach any cables to the imagePRESS Server.

If necessary, you can also restart or reboot the imagePRESS Server. Restarting the imagePRESS Server resets the imagePRESS Server system software without restarting the system entirely. Rebooting the imagePRESS Server restarts the system entirely.

**IMPORTANT** 

Always use the following procedures when starting, shutting down, restarting, or rebooting the imagePRESS Server. Use the reset button on the front of the imagePRESS Server only if the system is frozen and unresponsive to keyboard or mouse actions.

#### TO START THE IMAGEPRESS SERVER

1. Make sure that the power switch on the back of the imagePRESS Server is in ON (|) position, and then power on the imagePRESS Server using the power button on the front panel.

For more information, see Figure 10 and Figure 11 on page 42.

2. Wait for the system to power on and reach Idle.

The imagePRESS Server takes approximately 5 minutes to power on and reach Idle.

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

**Note:** Unless instructed otherwise by a service procedure, always shut down the imagePRESS Server from the Control Panel or the copier touch panel. Do not use the power button on the front of the imagePRESS Server to shut down the system.

1. Ensure that the imagePRESS Server is not receiving, processing, or printing any files.

If the system has just finished processing, wait at least 5 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 Menu button on the imagePRESS Server Control Panel.
- 3. Press the line selection button for Shut Down System.

Allow the system to shut down completely.

- 4. If desired, move the power switch on the back of the imagePRESS Server to the OFF (0) position for maximum energy savings.
- If you are shutting down in order to service the imagePRESS Server, wait 10 seconds after powering off, and then remove all external cables from the back of the imagePRESS Server.

#### TO RESTART THE IMAGEPRESS SERVER SOFTWARE FROM THE CONTROL PANEL

**NOTE:** Unless instructed otherwise by a service procedure, always restart the imagePRESS Server from the Control Panel or the copier touch panel. Do not use the reset button on the front of the imagePRESS Server to restart the system.

1. Ensure that the imagePRESS Server is not receiving, processing, or printing any files.

If necessary, wait until the Info screen on the copier control panel shows that the imagePRESS Server is Idle.

- 2. Press the Menu button on the imagePRESS Server Control Panel.
- 3. Press the line selection button for Restart Server.
- 4. At the submenu that appears, press the line selection button for Restart Server.
- 5. Wait for the imagePRESS Server server software to close down and restart.

You may need to wait 1 minute or longer for the server software to restart.

#### TO REBOOT THE IMAGEPRESS SERVER FROM THE CONTROL PANEL

**NOTE:** Unless instructed otherwise by a service procedure, always reboot the imagePRESS Server from the Control Panel or the copier touch panel. Do not use the reset button on the front of the imagePRESS Server to reboot the system.

1. Ensure that the imagePRESS Server is not receiving, processing, or printing any files.

If necessary, wait until the Info screen on the copier control panel shows that the imagePRESS Server is Idle.

- 2. Press the Menu button on the imagePRESS Server Control Panel.
- 3. Press the line selection button for Restart Server.
- 4. At the submenu that appears, press the line selection button for Reboot System.
- 5. Wait for the system to reboot. Do not push any buttons during this time.

The imagePRESS Server takes approximately 3 minutes to power on and reach Idle.

# **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.

# **Overview**

This chapter includes information on servicing the following components:

- · Boards and cables
- Motherboard components (DIMMs, CPUs, battery)
- Fans
- Power supply
- HDDs (hard disk drives)
- DVD drive
- · Switch bank assembly

Replacement parts are available from your authorized service/support center. 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 you have removed is not faulty, reinstall it.



When performing the service procedures described in this chapter, follow the precautions listed on page 17.

The tools required to service the system are listed on page 22.

# imagePRESS Server overview diagrams

The following figures provide an overview of the imagePRESS Server components.

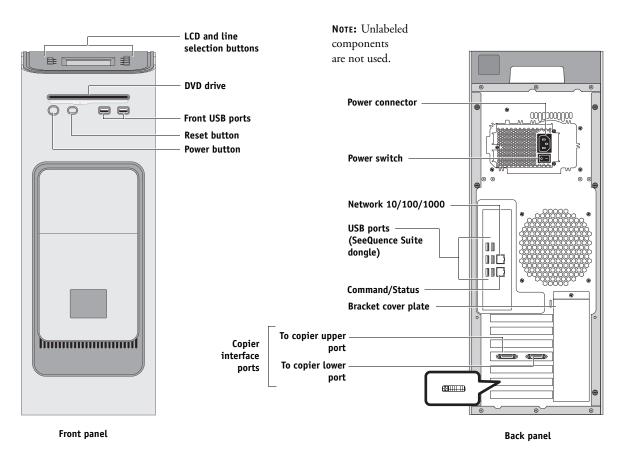
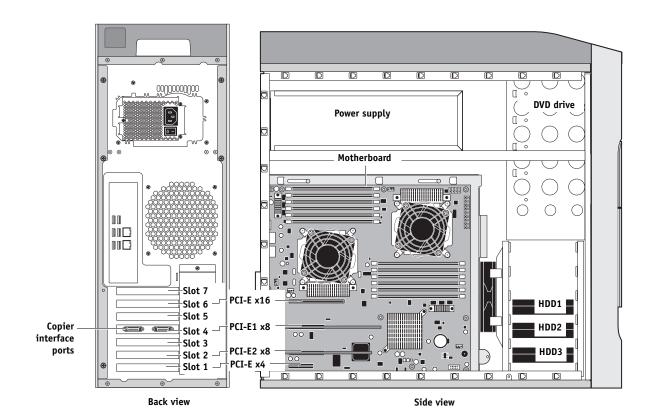


FIGURE 13: Front and back panels



Motherboard connectors:

PCI-E x16—Empty

PCI-E1 x8—Copier interface board

PCI-E2 x8—Graphics board

PCI-E x4—Empty

FIGURE 14: imagePRESS Server back and side views

#### Key

- 1. Plug for top panel
- 2. Top panel
- 3. UIB (user interface board)
- 4. Power supply and power cables
- 5. Chassis
- 6. DVD drive
- 7. Switch bank assembly
- 8. Component sled
- 9. Option sled
- 10. Front panel
- 11. Upper faceplate
- 12. HDDs (hard disk drives)
- 13. Front fan assembly
- 14. Back fan
- 15. Motherboard tray
- 16. Motherboard
- 17. Copier interface boards
- 18. Graphics board
- 19. DIMMs
- 20. CPUs and cooling assemblies
- 21. UIB cable
- 22. DVD drive data/power cable
- 23. HDD data cables

**Note:** Monitor, mouse, keyboard, furniture, and other accessories are not shown.

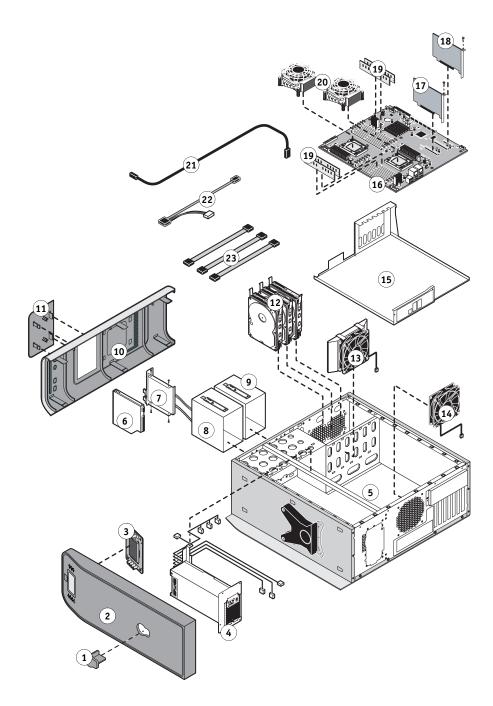
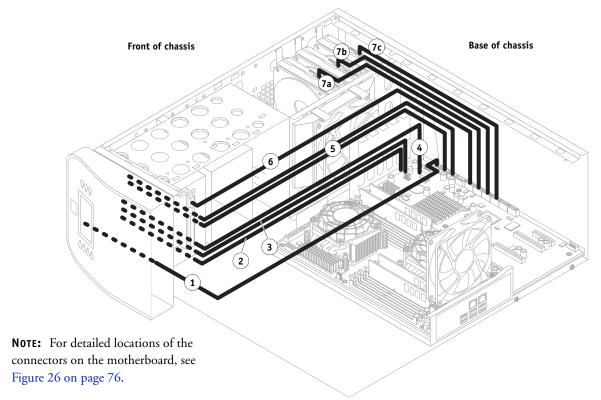
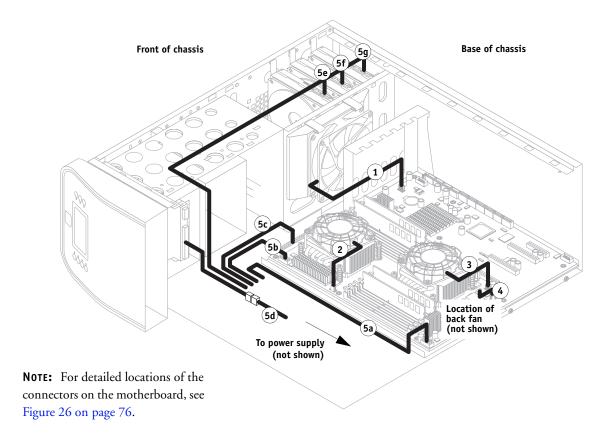


FIGURE 15: Exploded view of imagePRESS Server components



Cable key	From	То
1. UIB cable	User interface board	USB1 connector on motherboard
2. Reset button cable	Reset button in switch bank assembly	Motherboard (J102, pins 5 and 7); align the triangle on the cable connector as shown.
3. Power button cable	Power button in switch bank assembly	Motherboard (J102, pins 6 and 8); align the triangle on the cable connector as shown.
4. Speaker/Buzzer cable	Speaker in switch bank assembly	SPKR connector (J105) on motherboard; align triangle on cable connector as shown.
5. Front USB cables	Front USB ports in switch bank assembly	USB2 and USB3 connectors on motherboard; either connector may be used for either cable.
6. DVD drive data/power cable	DVD drive	SATA0 connector on motherboard
7. HDD data cables	<ul><li>a. HDD1 data connector</li><li>b. HDD2 data connector</li><li>c. HDD3 data connector</li></ul>	a. SATA1 connector on motherboard     b. SATA2 connector on motherboard     c. SATA3 connector on motherboard

FIGURE 16: Data cable connections in the imagePRESS Server



Cable key	From	То
1. Front fan cable	Front fan	Motherboard fan connector (J52, left three pins)
2. CPU0 fan cable	CPU0 fan	Motherboard fan connector (CPU1 FAN)
3. CPU1 fan cable	CPU1 fan	Motherboard fan connector (CPU2 FAN)
4. Back fan cable	Back fan	Motherboard fan connector (REAR FAN J50, top three pins)
5. Power supply cables	Power supply (not shown)	a. 8-pin connector—Motherboard (PW3)
		b. 8-pin connector—Motherboard (PW1)
		c. 24-pin connector—Motherboard (PW2)
		d. SATA power connector—DVD drive data/power cable
		e. SATA power connector—HDD1
		f. SATA power connector—HDD2
		g. SATA power connector—HDD3

FIGURE 17: Power 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

If the imagePRESS Server is powered on, you must shut down the system before you access the internal components.

**Note:** 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.

#### TO SHUT DOWN THE IMAGEPRESS SERVER

1. Ensure that the imagePRESS Server is not receiving, processing, or printing any files.

If the system has just finished processing, wait at least 5 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 Menu button on the imagePRESS Server Control Panel.
- 3. Press the line selection button for Shut Down System.

Allow the system to shut down completely.

- 4. If desired, move the power switch on the back of the imagePRESS Server to the OFF (0) position for maximum energy savings.
- After powering off, wait at least 10 seconds before you begin servicing the imagePRESS Server.

## Opening the imagePRESS Server

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

Never lift the print 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 OPEN THE IMAGEPRESS SERVER

- 1. Shut down the imagePRESS Server (see page 59).
- 2. Wait 10 seconds after the imagePRESS Server powers off, and then remove all external cables from the back of the system.
- 3. Remove all external panels necessary to access the component that you need to service.

At the minimum, you must remove the left panel to service the component. You may also need to remove other panels, depending on the component that you need to access. For guidelines on which panels to remove, see the service procedure for the given component.

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

- Left panel (see page 62)
- Right panel (see page 62)
- Front panel (see page 63)
- Top panel (see page 65)

**Note:** Reverse the listed order when replacing panels.

4. Place the imagePRESS Server on a flat surface. Attach an ESD wrist strap before handling internal parts (see "Precautions" on page 17).

All internal components that you remove must be placed on a grounded, antistatic surface (see page 19).

5. Carefully position the imagePRESS Server so that it is resting on its side and the internal components are facing up.

#### TO REMOVE AND REPLACE THE LEFT OR RIGHT PANEL

Remove the three screws that secure the panel to the back of the chassis (see Figure 18).
 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.

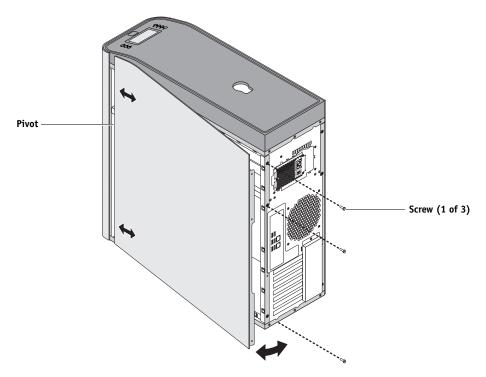


FIGURE 18: Removing/replacing the left or right panel

- 3. To replace the panel, fit the front edge of the panel around the pivot in the chassis (see Figure 18).
- 4. Swing the back edge of the panel closed against the chassis and replace the three screws that you removed earlier.

Be careful not to damage any cables when replacing the panel. Fold all cables inside the chassis before swinging the panel closed.

## 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 panel (see Figure 19).

Pull the bottom edge of the faceplate away from the front panel, and carefully remove the faceplate from the front panel.

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

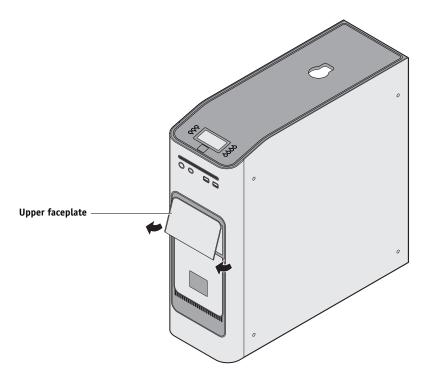


FIGURE 19: Removing the upper faceplate

2. Pull outward to release the six tabs that secure the front panel to the chassis, and lift the panel off the chassis (see Figure 20).

First release the two top tabs, then the two middle tabs, and then the two bottom tabs. Use a screwdriver to release the tabs that are hard to reach.

Make sure that the cutouts in the panel clear the power and reset buttons and the front USB ports.

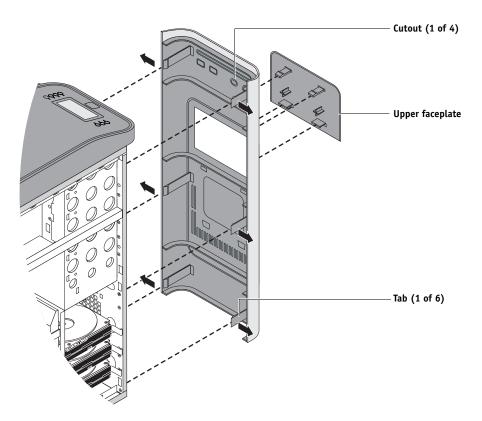


FIGURE 20: Removing/replacing the front panel

- 3. To replace the front panel, align the four cutouts in the panel with the power and reset buttons and front USB ports (see Figure 20 on page 64).
- 4. Press the panel against the chassis to lock the panel into place.

Lock the panel tabs in pairs (first the top tabs, then the middle tabs, then the bottom tabs).

5. Replace the upper faceplate.

Orient the faceplate as shown in Figure 20 on page 64. Insert the top tabs of the faceplate into the chassis (see Figure 19 on page 63). Then carefully press the faceplate against the chassis, making sure that all four tabs of the faceplate are securely locked in 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.

Use a small flathead screwdriver to lift the edge of the plug out of the top panel, and remove the plug.

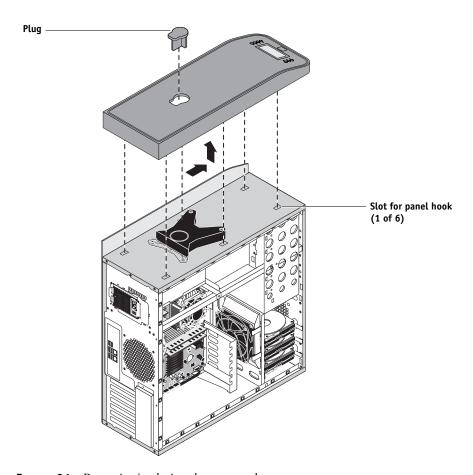


FIGURE 21: Removing/replacing the top panel

## 2. Loosen the panel (see Figure 21).

Slide the top panel toward the front of the chassis to disengage the hooks in the panel from the six 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 its connector on the motherboard.

For the connector location, see Figure 16 on page 57.

4. Remove the panel from the chassis.

Carefully guide the UIB cable out of the chassis as you remove the panel.

To replace the top panel, first route the UIB cable through the chassis and connect it to the motherboard.

For the connector location on the motherboard, see Figure 16 on page 57 and Figure 26 on page 76.

6. Position the top panel on top of the chassis (see Figure 21 on page 65).

Place the six 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.

# Removing and replacing boards

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

- Copier interface board
- · Graphics board
- User interface board
- Motherboard

The imagePRESS Server is shipped from the factory with a standard board configuration, as shown in Figure 14 on page 55. If an optional component is installed, see the documentation that accompanies the option kit.

# Copier interface board

The copier interface board in the imagePRESS Server provides the print interface between the imagePRESS Server and the copier.

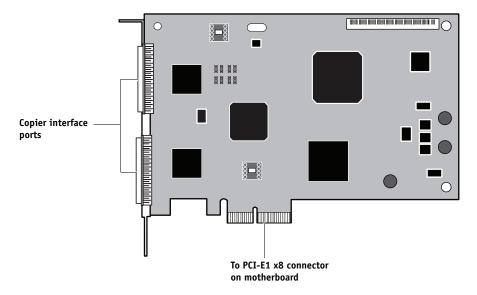


FIGURE 22: Diagram of copier interface board (component side)

#### TO REMOVE THE COPIER INTERFACE BOARD

 Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see page 59).

In order to access the copier interface board, you must remove the left panel. Make sure that you have removed the copier interface cables from the back of the imagePRESS Server.

2. Remove the bracket cover plate from the back panel (see Figure 13 on page 54).

You must remove the bracket cover plate in order to access the bracket screw for the copier interface board.

- Remove and set aside the bracket screw that attaches the board mounting bracket to the back panel.
- 4. Remove the copier interface board from its motherboard PCI connector.

Grasp the board at the front and back edge and gently pull the board straight out of its connector on the motherboard. Remove the board from the chassis.

When removing the board, be careful not to damage or disconnect any motherboard cables that are installed nearby.

Place the removed board in an antistatic bag.

#### TO REPLACE THE COPIER INTERFACE BOARD

1. Install the copier interface board in the PCI-E1 x8 connector on the motherboard.

The copier interface board connector is keyed to fit only one way.

When installing the board, be careful not to disturb any motherboard cables that are installed nearby.

- 2. Replace the bracket screw to the mounting bracket in the back panel slot.
- 3. Replace the bracket cover plate to the back panel (see Figure 13 on page 54).
- 4. Reassemble the imagePRESS Server and verify its functionality (see page 130).

## **Graphics board**

The graphics board provides the external DVI port for the optional monitor video cable connection. You can only connect your monitor to the DVI port. The model and appearance of the board may vary between systems. No additional software is required to use the DVI port provided by the board.

#### TO REMOVE THE GRAPHICS BOARD

1. Shut down the imagePRESS Server, remove all of the cables from the back, and then open the system (see page 59).

In order to access the graphics board, you must remove the left panel. Make sure that you have removed the DVI cable from the back of the imagePRESS Server.

2. Remove the bracket cover plate from the back panel (see Figure 13 on page 54).

You must remove the bracket cover plate in order to access the bracket screws for the graphics board.

- Remove and set aside the bracket screw that attaches the board mounting bracket to the back panel.
- 4. Remove the graphics board from its motherboard PCI connector.

Grasp the board at the front and back edge and gently pull the board straight out of its connector on the motherboard. Be careful not to damage or disconnect any motherboard cables that are installed nearby.

Tilt the board so that the mounting bracket clears the chassis slot, and remove the board from the chassis.

**NOTE:** If you have difficulty clearing the chassis slot, remove the two screws that secure the metal port cover to the mounting bracket. Remove and set aside the cover so that you can reinstall it later.

5. Place the removed board in an antistatic bag.

#### TO REPLACE THE GRAPHICS BOARD

1. Insert the graphics board into the chassis.

Tilt the board to fit the mounting bracket in the chassis slot corresponding to the PCI-E2 x8 connector on the motherboard.

2. Reseat the graphics board by installing it in the PCI-E2 x8 connector on the motherboard (see Figure 26 on page 76).

The component side of the board should be facing down toward the base of the chassis. The board connector is keyed to fit only one way.

When reseating the board, be careful not to disturb any motherboard cables that are installed nearby.

- 3. Replace the bracket screw to the mounting bracket in the back panel slot.
- 4. If you removed the metal port cover from the board mounting bracket earlier, reinstall the cover now.

Reinstall the cover using the two screws that you removed earlier.

- 5. Replace the bracket cover plate to the back panel (see Figure 13 on page 54).
- 6. Reassemble the imagePRESS Server and verify its functionality (see page 130).

## User interface board

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 light LEDs
- Display window (LCD)
- Four line selection buttons
- Up and down buttons
- Menu button

The UIB cable routes from the connector on the back of the user interface board to the designated USB connector on the motherboard (see Figure 16 on page 57 and Figure 26 on page 76).

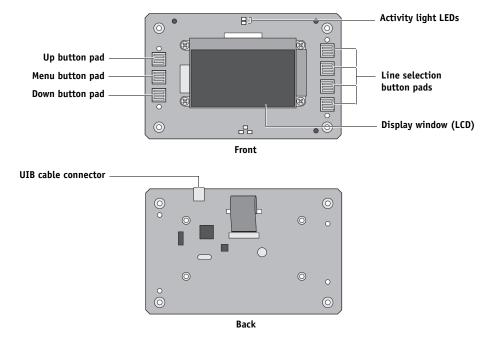


FIGURE 23: Diagram of the user interface board (front and back)

#### TO REMOVE THE USER INTERFACE BOARD

1. Shut down and open the imagePRESS Server (see page 59).

To access the UIB, you must remove the left, right, front, and top panels from the chassis.

**NOTE:** Be sure to detach the UIB cable from its connector on the motherboard, and pull the cable out of the chassis when removing 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 itself.

- 4. Remove the four screws that secure the UIB to the underside of the top panel (see Figure 24).
- 5. Remove the UIB from the top panel. Be sure to remove the plastic lens that covers the display window of the UIB.

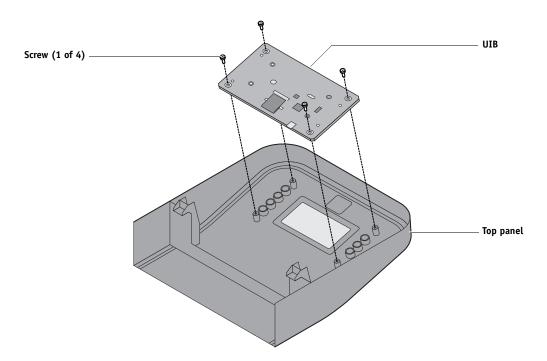


FIGURE 24: Removing/replacing the user interface board

6. If you are removing the UIB to replace it with a new board, remove the buttons from the old UIB.

Carefully pull the buttons out of the anchoring holes on the UIB (see Figure 25 on page 73). Take care not to damage the pointed tabs on the back of each button set.

7. Place the board 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 board (see Figure 25).

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.

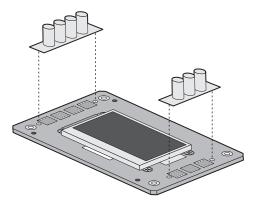


FIGURE 25: Removing/replacing the UIB buttons

- 2. Turn the top panel over to expose its underside and place it on a padded surface.
- 3. Position the plastic lens around the display window of the UIB.

### 4. Secure the UIB to the underside of the top panel (see Figure 24 on page 72).

Hold the plastic lens in place as you position the UIB in the mounting area of the top panel. Carefully fit the UIB buttons through the cutouts in the top panel.

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.

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

Cut the tie wrap securing the old cable to the underside of the top panel and remove the old cable.

**NOTE:** The tie wrap is used to secure the cable during shipment and does not need to be replaced when you replace the cable.

- 6. Attach the UIB cable to the connector on the back of the UIB.
- 7. Replace the top panel (see page 65).

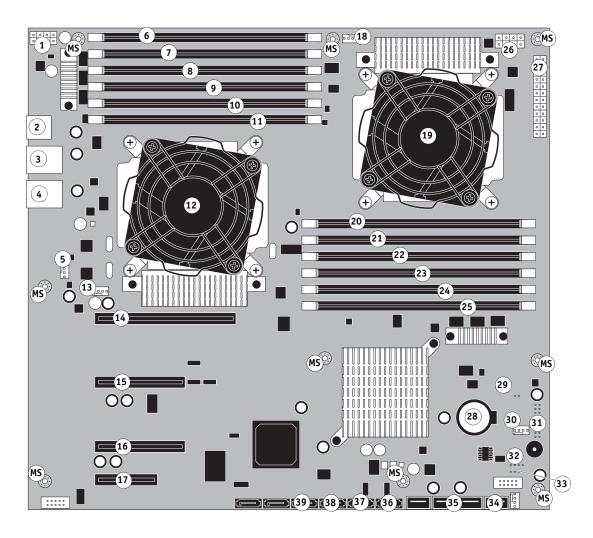
**NOTE:** When replacing the top panel, be sure to route the UIB cable through the chassis and connect it to the UIB connector (USB1) on the motherboard. For the location of the motherboard connector, see Figure 16 on page 57 and Figure 26 on page 76.

8. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# **Motherboard**

The motherboard has two quad-core Intel Xeon 2.8GHz CPUs. The CPUs control the image data transferred to and from the copier interface board. The motherboard controls HDD functions and the communication between the imagePRESS Server and external devices. DIMM sockets on the imagePRESS Server contain four 1GB DIMMs (see page 99). The motherboard also includes:

- One PCI-E (PCI Express) x16 connector
- Two PCI-E x8 connectors
- One PCI-E x4 connector



#### Key

- 1. 8-pin power connector (PW3)
- 2. USB ports
- 3. USB ports and 10/100/1000Mbps connector (network)
- 4. USB ports and 10/100/1000Mbps connector (Command/Status)
- 5. Back fan connector (REAR FAN J50)
- 6. DIMM (J11)
- 7. Empty DIMM connector(J12)
- 8. DIMM (J9)
- 9. Empty DIMM connector (J10)
- 10. Empty DIMM connector(J7)
- 11. Empty DIMM connector(J8)
- 12. CPU1 and cooling assembly
- 13. CPU1 fan connector (CPU2 FAN)

- 14. Empty PCI-E x16 connector
- 15. Copier interface board (PCI-E1 x8)
- 16. Graphics board (PCI-E2 x8)
- 17. Empty PCI-E x4 connector
- 18. CPUO fan connector (CPU1 FAN)
- 19. CPUO and cooling assembly
- 20. Empty DIMM connector(J2)
- 21. Empty DIMM connector(J1)
- 22. Empty DIMM connector(J4)
- 23. DIMM (J3)
- 24. Empty DIMM connector (J6)
- 25. DIMM (J5)
- 26. 8-pin power connector (PW1)
- 27. 24-pin power connector (PW2)

- 28. Battery (BAT)
- 29. Jumper (J19)
- 30. Front fan connector (J52)
- 31. Power and reset button pins (J102)
- 32. Speaker pins (SPKR J105)
- 33. Jumper (J13)
- 34. UIB cable connector (USB1)
- 35. Front USB port cable connectors (USB2 and USB3)
- 36. DVD drive connector (SATAO)
- 37. HDD1 (top) connector (SATA1)
- 38. HDD2 (middle) connector (SATA2)
- 39. HDD3 (bottom) connector (SATA3)
- MS—Mounting screws

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

FIGURE 26: Diagram of the imagePRESS Server motherboard

# **Motherboard jumpers**

IMPORTANT

This section describes the factory default jumper configurations.

Do not move or change any of the default jumper configurations.

**TABLE 3:** Jumper pins on the motherboard

Location on motherboard	Default jumper configuration (when the motherboard is oriented as shown in Figure 26 on page 76)
J13 (near the SPKR pins)	Left two pins:
J19 (near the battery)	No jumper installed:
	00

# Removing the motherboard

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

- · All boards installed on the motherboard
- All cables connecting the motherboard to other components (including the three
  motherboard power cables, front and back fan cables, DVD drive data/power cable, HDD
  data cables, UIB cable, front USB cables, power button cable, reset button cable, and
  speaker cable)

This section also includes information on the following:

- Replacing DIMMs
- Replacing a CPU
- Replacing the battery
- Configuring jumpers



Follow standard ESD precautions (see page 19) when handling components. 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.

#### TO REMOVE MOTHERBOARD COMPONENTS FROM THE MOTHERBOARD

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see page 59).

In order to access the motherboard, you must remove the left panel.

2. Remove the copier interface board from the motherboard (see page 67).

In order to access the mounting screw for the board bracket, you must first remove the bracket cover plate from the back panel.

Remove the mounting screw that secures the board bracket to the back panel. Grasp the board at the front and back edge and gently pull it straight out of its connector on the motherboard. Place the board on an antistatic surface.

- 3. Remove the following cables attached to the motherboard (for the location of each connector on the motherboard, see Figure 16 on page 57 and Figure 17 on page 58):
  - Front fan cable
  - Back fan cable
  - HDD data cables
  - DVD drive data/power cable
  - UIB cable
  - · Front USB cables

To remove the motherboard tray, you may first need to cut the tie wrap that secures the front USB cables to the chassis.

- 8-pin motherboard power cable (PW1)
- 8-pin motherboard power cable (PW3)
- 24-pin motherboard power cable (PW2)
- Power button cable
- Reset button cable
- Speaker cable

### TO REMOVE THE MOTHERBOARD TRAY

**NOTE:** This procedure assumes that you have removed the copier interface board and cables from the motherboard, as described in "To remove motherboard components from the motherboard" on page 79.

- 1. Remove the front fan (see page 108).
- 2. Remove the back fan (see page 111).

**NOTE:** If you do not remove the back fan, you may damage the back fan cable when removing the motherboard.

3. Remove the two screws that secure the connector plate to the back panel of the imagePRESS Server (see Figure 27).

4. Remove the two thumb screws that secure the motherboard tray to the chassis.

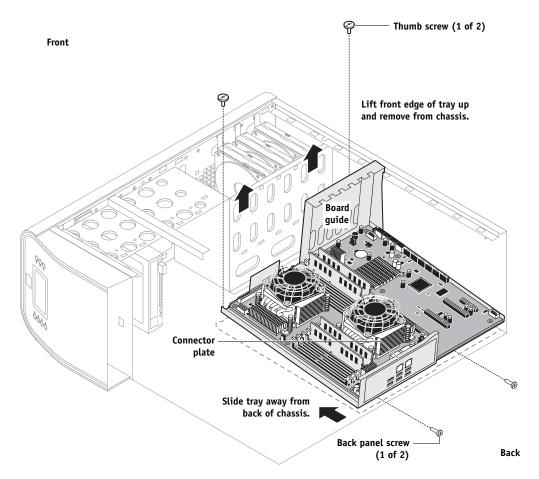


FIGURE 27: Removing the motherboard tray

- 5. Slide the motherboard tray away from the back of the chassis until the connector plate detaches from the back panel (see Figure 27).
- 6. Grasping the board guide, lift the front edge of the motherboard tray and carefully remove the tray from the chassis.

#### TO REMOVE THE MOTHERBOARD FROM THE MOTHERBOARD TRAY



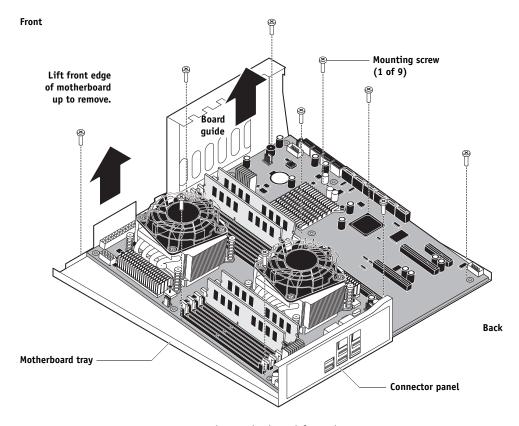
Follow standard ESD precautions (see page 19) when handling the motherboard. Avoid using excessive force and always place the motherboard on a grounded, non-metallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.

- Remove the nine mounting screws that secure the motherboard to the motherboard tray (see Figure 28).
- 2. Remove both CPU cooling assemblies from the motherboard (see page 102).

Each CPU cooling assembly is secured by four screws that attach to posts in the motherboard tray.

**IMPORTANT** 

To avoid flexing and possibly damaging the motherboard during removal of the cooling assemblies, always remove the nine motherboard screws first. Doing so minimizes tension on the motherboard as the cooling assemblies are removed.



**FIGURE 28:** Removing the motherboard from the tray

- 3. Lift the front edge of the motherboard to detach the back connectors from the connector panel.
- 4. Carefully remove the motherboard from the motherboard tray.

As you remove the motherboard, make sure that it clears both the connector panel and the board guide. Avoid handling contacts and using excessive force.

- 5. If you are replacing the motherboard with a new motherboard, remove the following from the old motherboard:
  - DIMMs (see page 99)
  - CPUs (see page 102)

# Replacing the motherboard

Follow the procedures in this section to replace the motherboard. Failure to follow these procedures can cause a corrupted system (not easily repaired in the field) or an incomplete installation (see "Error messages" on page 95).

If you are installing a new motherboard:

- Transfer the DIMMs and CPUs from the old motherboard. Spare motherboards ship with replacement thermal compound for use when transferring the CPUs.
- Make sure that the new motherboard solves the problem that you are troubleshooting
  before you transfer options to the new motherboard. Transferring options permanently
  customizes the new motherboard so that it cannot be returned to inventory and cannot be
  installed in another imagePRESS Server. If the new motherboard does not solve the
  problem, do not transfer options. Return the new motherboard and unused single-use
  dongle to inventory.
- Do not reinstall system software. Reinstalling system software is not necessary when
  installing a new motherboard and can result in an error if done before transferring options.
- BIOS chips are not interchangeable. Do not transfer the BIOS chip from the old motherboard onto the new motherboard. Doing so can damage the imagePRESS Server.
- Do not install a new HDD at the same time that you install a new motherboard. It is unlikely that both the HDD and the motherboard are defective, therefore, avoid replacing both to solve one problem. If troubleshooting strategies (checking cables and connections, etc.) do not resolve the problem and you suspect either the HDD or the motherboard is at fault, use the following order: replace the HDD; install system software; verify the problem still exists; then move on to other procedures, such as replacing the motherboard. Otherwise, you may need to return the imagePRESS Server.
- Transfer options to the new motherboard using the single-use dongle and the Fiery Options Utility DVD (for details, see page 90).

**IMPORTANT** 

**IMPORTANT** 

#### TO INSTALL THE MOTHERBOARD IN THE MOTHERBOARD TRAY

If protective covers are present on the CPU sockets on the new motherboard, remove them.
 Then install the covers on the CPU sockets on the old motherboard to protect the circuitry.

2. If you are installing a new motherboard, install the DIMMs and CPUs from the old motherboard onto the new motherboard. For DIMMs, see page 99; for CPUs, see page 102.

**IMPORTANT** 

Follow these guidelines:

- Make sure to use the fresh thermal compound that came with the new motherboard when transferring CPUs onto the new motherboard (see page 106 for details).
- Make sure that the motherboard is placed on an antistatic surface with some padding.
- Do not transfer the BIOS chip from the old motherboard onto the new motherboard. Doing so can cause the system to shut down due to incompatibility issues.
- 3. Angle the motherboard so the back panel connectors on the motherboard fit into the cutouts in the connector panel of the motherboard tray (see Figure 28 on page 81).
- 4. Align the mounting holes in the motherboard with the mounting posts on the motherboard trav.
- 5. Install the CPU cooling assemblies that you removed earlier.

For detailed installation instructions, see page 102.

6. Insert the nine motherboard mounting screws that attach the motherboard to the motherboard tray (see Figure 28 on page 81).

**IMPORTANT** 

Always install the CPU cooling assemblies before installing the nine motherboard mounting screws. You may flex and damage the motherboard if you perform the installations in the wrong order.

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

#### TO REPLACE THE MOTHERBOARD TRAY

**NOTE:** This procedure assumes that you have installed the motherboard in the motherboard tray, as described on page 84.

1. Carefully insert the motherboard tray into the chassis.

Move all cables aside as you insert the motherboard tray; make sure that the tray is not pinching or covering any cables in the chassis.

2. Place the tray flat in the chassis, fitting the cutouts at the top of the tray over the two standoffs in the chassis (see Figure 29). Slide the tray toward the back of the chassis until the connector plate engages the back panel.

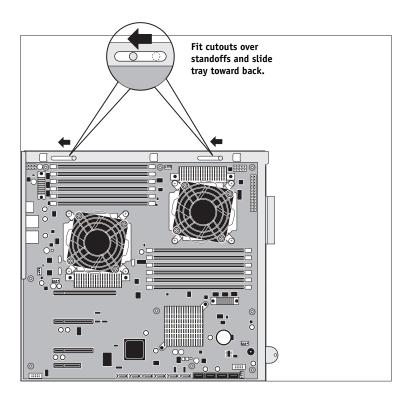


FIGURE 29: Installing the motherboard tray

- 3. Replace the two thumb screws that secure the tray to the chassis (see Figure 27 on page 80).
- 4. Replace the two screws that secure the connector plate to the back panel of the chassis (see Figure 27 on page 80).
- 5. Replace the front fan (see page 108).
- 6. Replace the back fan (see page 111).

You are now ready to replace motherboard components to complete motherboard hardware installation.

#### TO REPLACE MOTHERBOARD COMPONENTS

1. Replace the following cables attached to the motherboard (for the location of each connector on the motherboard, see Figure 26 on page 76):

• Speaker cable (SPKR J105 pins)

Make sure that the triangle on the cable connector is aligned with the correct pin, as shown in Figure 16 on page 57.

• Reset button cable (J102 pins 5 and 7)

Make sure the triangle on the cable connector aligns with pin 5, as shown in Figure 16 on page 57.

• Power button cable (J102 pins 6 and 8)

Make sure that the triangle on the cable connector aligns with pin 6, as shown in Figure 16 on page 57.

- 24-pin motherboard power cable (PW2)
- 8-pin motherboard power cables (PW1 and PW3)

You may connect either 8-pin cable to either power connector.

• Front USB cables (USB2 and USB3)

You may connect either cable to either USB connector.

- UIB cable (USB1)
- DVD drive data/power cable (SATA0)
- HDD data cables

Connect the HDD data cables as follows:

- Top HDD (HDD1)—SATA1
- Middle HDD (HDD2)—SATA2
- Bottom HDD (HDD3)—SATA3
- Back fan cable (REAR FAN J50, top three pins)
- Front fan cable (J52, left three pins)

SERVICE PROCEDURES 87

2. Replace the copier interface board to connector PCI-E1 x8 on the motherboard (see page 67).

When installing the board, verify the following:

- The board is installed in connector PCI-E1 x8 on the motherboard, and the board connector is properly aligned with the PCI connector. For the correct connector and slot assignments, refer to Figure 14 on page 55.
- The bracket screw is installed on the back panel slot.
- Unused slots have slot covers installed on the back panel. Uncovered slots reduce the air flow and could cause the imagePRESS Server to overheat.
- 3. Replace the bracket cover plate to the back panel (see Figure 13 on page 54).
- 4. Reassemble the imagePRESS Server but do not power on the system.

#### Verifying the functionality of a new motherboard installation

After you install a new motherboard and reassemble the system, you first need to verify all functionality by using the single-use dongle to enter Service Mode. Be sure to verify the motherboard functionality *before transferring options to the new motherboard* (described on page 90); do not transfer options prematurely.

Entering Service Mode allows you to make sure that the new motherboard solves the problem that you are troubleshooting. Service Mode is a temporary state that allows you to test the motherboard. Service Mode is exited automatically when you expend the single-use dongle to transfer options (see page 90).

Service Mode is not indicated on the monitor or the imagePRESS Server Control Panel but is entered once you power up with a new motherboard installed and the single-use dongle installed on the USB port.

**IMPORTANT** 

# TO ENTER SERVICE MODE AND VERIFY THE SYSTEM

**NOTE:** This procedure assumes that you have installed a new motherboard and reassembled the imagePRESS Server.

- Remove all dongles (such as for SeeQuence Suite) and USB devices (except for the optional keyboard and mouse) that may be currently installed on the front and back of the imagePRESS Server.
- 2. Unpack the single-use dongle included with the new motherboard and connect it to any available USB port on the imagePRESS Server (see Figure 30).

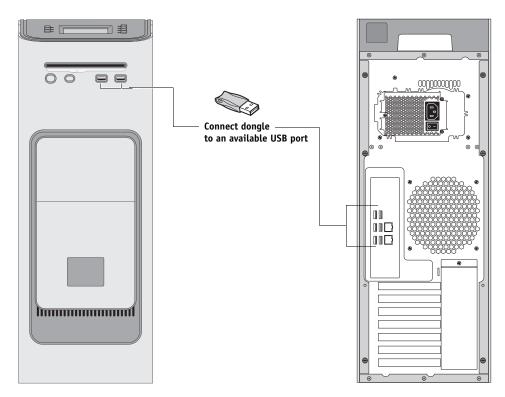


FIGURE 30: Connecting the single-use dongle

3. Power on the imagePRESS Server using the power button on the front panel. Allow the system to start up and reach Idle.

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

- 4. Make sure that the imagePRESS Server is connected to the copier (see page 36) and print the imagePRESS Server Test Page (see page 49).
- 5. Ask the network administrator to connect the imagePRESS Server to the network (see page 40) 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 and 5 above while in Service Mode, the new motherboard has not solved the problem that you are troubleshooting. If this is the case, do not transfer options to the motherboard (described on page 90), and do not attempt any other troubleshooting procedures yet (such as reinstalling system software or replacing the HDD). Reinstall the old motherboard and return the new motherboard with the unused single-use dongle to inventory. You may then perform

additional service and troubleshooting procedures.

If the imagePRESS Server is able to print a Test Page and a print job sent over the network, you may conclude that the new motherboard solves the problem that you are troubleshooting. You may now transfer options to the new motherboard (see page 90).

**IMPORTANT** 

#### 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 DVD and the one-time use dongle to transfer options to the new motherboard.

**IMPORTANT** 

Once the options are transferred, the new motherboard is customized and cannot be used in another system. If your new motherboard kit contains a CD other than the Fiery Options Utility DVD, such as the Feature Update CD, *do not use the procedure described in this section*. Instead, use the procedure described in the documentation that accompanies the motherboard kit to update the system.

#### TO TRANSFER OPTIONS TO THE NEW MOTHERBOARD

**NOTE:** This procedure assumes that the imagePRESS Server is fully assembled, verified in Service Mode (see page 87), and powered off.

 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.

**IMPORTANT** 

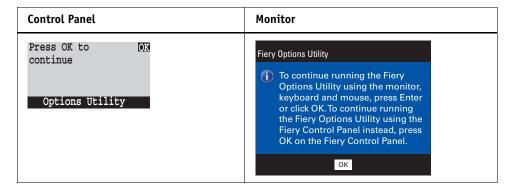
The options transfer process may fail if other dongles and/or USB storage devices are connected to the imagePRESS Server during the process. Reconnect other dongles and devices after you complete the option transfer process.

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

**Note:** The Fiery Options Utility DVD 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 DVD, allow the imagePRESS Server to start up, eject the CD, turn off the imagePRESS Server, and then repeat steps 2 and 3.

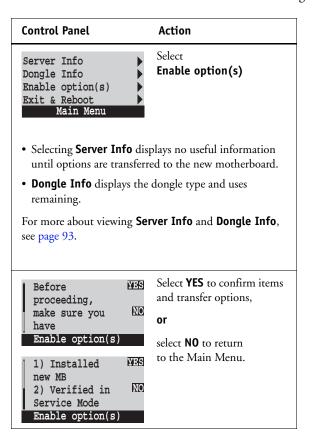
4. To continue, choose the Control Panel or optional monitor (if present) as the interface to use throughout the option transfer process.

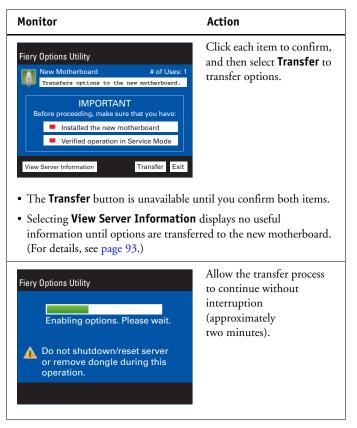
The first screen that displays when you start the Fiery Options Utility allows you to choose the interface that you will use throughout the procedure. Choose an interface by selecting OK on the Control Panel or monitor. The interface not chosen is then disabled during the option transfer process.

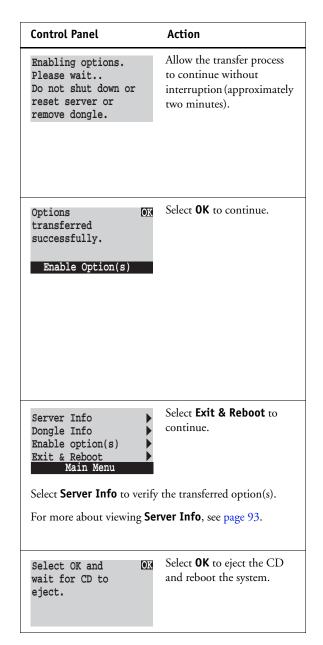


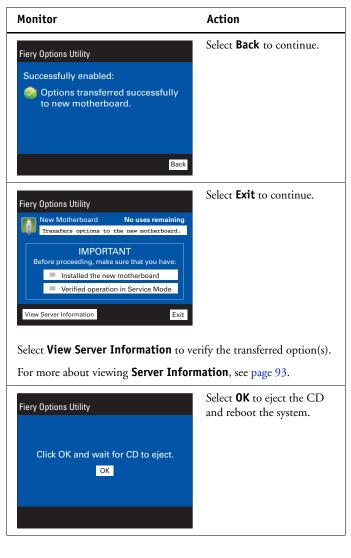
5. Follow the prompts that appear on the chosen interface.

**Note:** If an error message displays during the transfer process, see page 95.









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

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

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

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.

### 8. Wait for Idle to display on FieryBar.

If the imagePRESS Server is not connected to the copier, "Check power and cable" displays instead.

Shut down the imagePRESS Server and reattach any dongle(s) (for example, for SeeQuence Suite) or USB device that you may have removed previously.

# Viewing dongle and server information

This section describes how to view information about the dongle and the server.

**NOTE:** This section is only applicable if your new motherboard kit contains the Fiery Options Utility DVD.

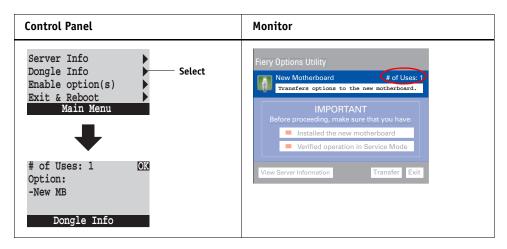
- Selecting Dongle Info (or View Dongle Information on the monitor) before transferring
  options allows you to determine the number of uses remaining on the dongle and the
  option or function that the dongle enables.
- Selecting Server Info (or View Server Information on the monitor) after transferring
  options allows you to determine the imagePRESS Server BIOS version, motherboard
  MAC address, and options currently enabled on the system. This information is useful
  when you want to verify the state of the system before and after you expend the dongle.

#### TO VIEW DONGLE OR SERVER INFORMATION

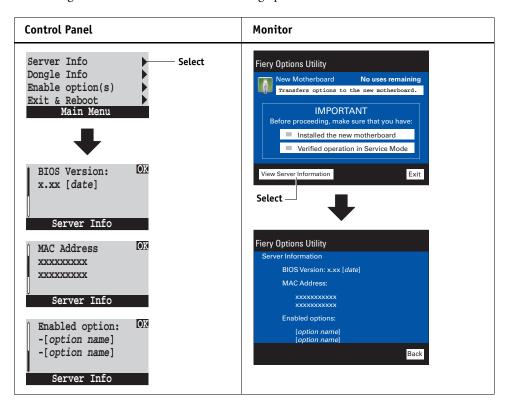
- Make sure that the imagePRESS Server is off, and then attach the one-time use dongle to a USB port on the imagePRESS Server.
- 2. Power on the imagePRESS Server and immediately insert the Fiery Options Utility DVD into the DVD drive in time for the imagePRESS Server to boot from it.
- When the first screen displays, select OK on the Control Panel or the monitor.
   (For more information about choosing an interface when the first screen displays, see step 4 on page 91).

### 4. Follow the onscreen prompts:

• Viewing Dongle Information before transferring options:



• Viewing Server Information after transferring options:



#### Error messages

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

No dongle found! Please connect a dongle to the server—The dongle is missing or improperly attached. Attach the dongle securely to the imagePRESS Server.

Invalid dongle found! Please remove dongle and connect the correct one—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.

This is a base bios. No upgrade can be done—The options transfer process has not been done. Complete the options transfer process using the Fiery Options Utility CD and dongle included in the motherboard spare kit.

Fatal error! Unable to mount hard disk! Update failed—The system was not shut down properly, or there is a faulty HDD connection. Reboot the system and try the options transfer process again. If the error persists, shut down the system properly (see page 51), check and reseat the HDD cable connections, and then try the options transfer process again.

For additional troubleshooting information, see Table 6 on page 149. If an error condition cannot be corrected, restore the previous configuration, if possible, and contact your authorized service/support center.

# Replacing parts on the motherboard

This section describes how to remove and replace the battery, DIMMs, and CPUs on the motherboard. It also discusses how and when to clear the motherboard CMOS.

Before performing any of these procedures, shut down and open the imagePRESS Server (see page 59).

# Motherboard battery

The battery is located at socket BAT on the motherboard.

**Note:** Spare batteries are not available through your authorized service/support center. To replace the battery, use a 3V manganese dioxide lithium coin cell battery (Panasonic CR2032 or equivalent).



There is danger of explosion if the battery is replaced with the incorrect type. Replace 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 dellebatterie 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 MOTHERBOARD BATTERY

1. Shut down the imagePRESS Server, remove all cables from the back, and open the system (see page 59).

In order to access the battery, you must remove the left panel.

- 2. Locate the battery on the motherboard (see Figure 26 on page 76).
- 3. Carefully push the clip away from the battery until the socket ejects the battery.



FIGURE 31: Motherboard battery

- 4. Slide the battery out of its socket.
- 5. To insert a new battery, slide it into the socket so that the positive (+) side of the battery faces up.
- 6. Press the battery down into the socket until it snaps into place.

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

- 7. Reassemble the imagePRESS Server and verify its functionality (see page 130).
- 8. Configure the time and date in Setup.

# **Clearing the CMOS**

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

# TO CLEAR THE CMOS

1. Access and open the imagePRESS Server, as described on page 59.

**NOTE:** Be sure to remove the power cable from the imagePRESS Server before opening the system and clearing the CMOS.

- 2. Remove the battery (see page 97).
- 3. Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- 4. Reinstall the battery (see page 97).
- 5. Reassemble the imagePRESS Server and verify functionality (see page 130).
- 6. Configure the time and date in Setup.

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

# **DIMMs**

The motherboard has twelve DIMM sockets organized into two sets, as shown in Figure 32.

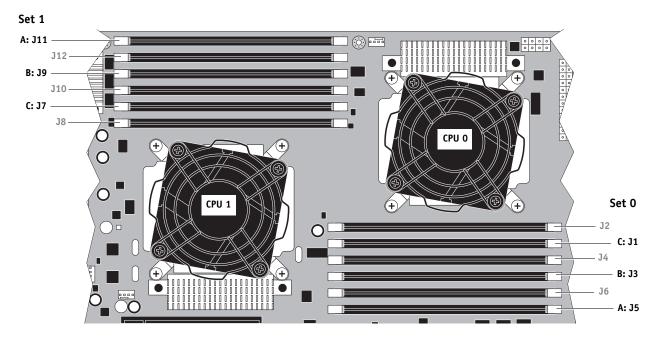


FIGURE 32: Motherboard DIMM sockets

The imagePRESS Server standard configuration provides four 1GB DIMMs for a total of 4GB of memory (J11, J9, J5, and J3 are occupied).

**NOTE:** DIMMs must be correctly installed in order for the imagePRESS Server to function properly. To ensure proper operation, replace DIMMs only with approved replacement 1GB DIMMs obtained from your authorized service/support center.

**Note:** When installing DIMMs, note the following:

• Only the odd-numbered sockets in Figure 32 on page 99 are used. *Do not* install DIMMs in even-numbered sockets J12, J10, J8, J6, J4, or J2.

- The DIMM configurations installed in socket Set 0 and Set 1 must be identical. That is, each set must contain the same number of DIMMs and the total memory capacity installed in each set must be the same.
- DIMMs must first be installed in the A-position sockets, then the B-position sockets, and
  finally the C-position sockets of each set. Higher-capacity DIMMs should be installed first
  in the A-position sockets, with the other DIMMs following in descending order of
  capacity. For example:
  - In a two-DIMM configuration, use the A-position (J11 and J5) sockets.
  - In a four-DIMM configuration, use the A-position (J11 and J5) and B-position (J9 and J3) sockets.
  - In a six-DIMM configuration, use the A-position (J11 and J5), B-position (J9 and J3), and C-position (J7 and J1) sockets.

#### TO REPLACE A DIMM

1. Shut down the imagePRESS Server, remove all cables from the back, and open the system (see page 59).

In order 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.

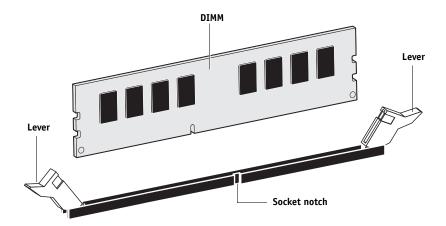


FIGURE 33: Releasing a DIMM

- 3. Lift the DIMM straight out of the socket.
- 4. To replace a DIMM, position the DIMM in the socket and press the DIMM straight down into the socket so that the levers lock the DIMM into place.

**NOTE:** DIMMs fit in the socket only one way. The notch on the bottom of each DIMM should line up with the notch in the socket.

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

5. If you installed a new or additional DIMM, clear the CMOS (see page 98).

You should clear the CMOS after installing a new or additional DIMM to ensure compatibility between the new component and previous settings stored in the BIOS.

**NOTE:** Be sure to remove the power cable from the imagePRESS Server before clearing the CMOS.

- Remove the battery (see page 97).
- Wait two minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see page 97).
- 6. Reassemble the imagePRESS Server and verify its functionality (see page 130).
- 7. If you installed a new DIMM and cleared the CMOS, configure the time and date in Setup.

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

# **Motherboard CPUs**

The CPUs are installed in Zero Insertion Force (ZIF) sockets on the motherboard. Before removing a CPU from its socket, you must disconnect the CPU fan cable from the motherboard and remove the CPU cooling assembly from the motherboard. The CPU cooling assembly consists of a fan and a heatsink.

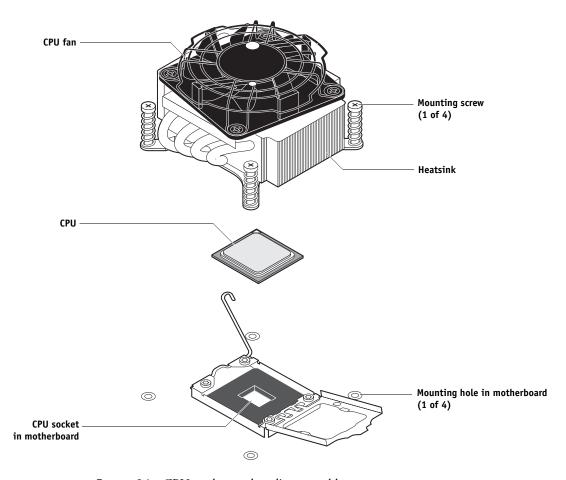
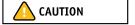


FIGURE 34: CPU, socket, and cooling assembly



Follow standard ESD precautions when handling the motherboard and all components (see page 17).

# TO REMOVE A CPU COOLING ASSEMBLY

#### **IMPORTANT**

To avoid flexing and possibly damaging the motherboard, always service the CPU cooling assemblies one at a time. If you must service both CPU cooling assemblies, observe the following guidelines: remove, service, and replace the first cooling assembly; then remove, service, and replace the second cooling assembly.

An exception is allowed if you are removing the CPU cooling assemblies to service the motherboard. In this case, first remove the motherboard tray (see page 79), remove the 9 motherboard mounting screws to relieve tension on the motherboard, and then remove both cooling assemblies from the motherboard as described in the following steps.

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see page 59).

In order to access the CPU cooling assembly, you must remove the left panel.

2. Remove the CPU fan cable from its connector on the motherboard (see Figure 17 on page 58).

3. Loosen the four mounting screws that secure the CPU cooling assembly to the motherboard and motherboard tray (see Figure 35).

Partially loosen each screw before loosening any one screw entirely.

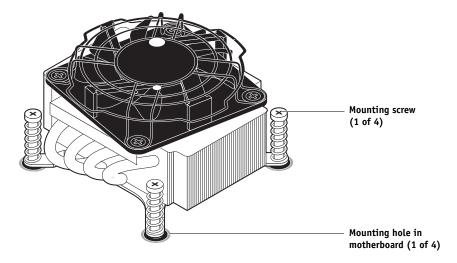


FIGURE 35: Removing/replacing the CPU cooling assembly

4. Lift the CPU cooling assembly off the CPU.



Be aware that both the cooling assembly and the CPU may be very hot. Also, use caution when removing the cooling assembly, as the thermal compound applied to the bottom of the heatsink may damage the CPU if the heatsink is removed too forcefully.

First, carefully rotate the cooling assembly on top of the CPU, applying firm pressure to break the thermal seal. Then lift the cooling assembly off the CPU.

#### TO REMOVE A CPU

**NOTE:** This procedure assumes that you have removed the CPU cooling assembly, as described on page 103.

- 1. Lift the CPU socket lever to release the socket cover (see Figure 36).
- 2. Carefully open the socket cover.
- 3. Grasp the CPU by its edges, gently lift it from the socket and place it on an antistatic surface.

**IMPORTANT** 

You may have to insert a small, non-magnetic flathead screwdriver between the CPU and the socket to partially disengage the CPU. Use caution when removing, handling, and setting aside the CPU, as the pins on the underside can bend easily.

#### TO REPLACE A CPU

 Wipe the contact surface of the CPU chip with a clean, lint-free cloth to ensure proper contact with the new heatsink.

**IMPORTANT** 

If you removed the original CPU from the motherboard in order to install it on a new motherboard, be sure to remove all thermal compound residue from the surface of the CPU and the base of the heatsink. It may help to scrape all the residue off the surface using the flat edge of a non-conductive tool. Use a lint-free cloth moistened with alcohol to clean the base of the heatsink.

- Insert the CPU into the socket. Make sure that you align the arrow indicating pin 1 on the CPU with the arrow on the CPU socket.
- 3. Carefully close the socket cover, and lower the socket lever to secure the cover.

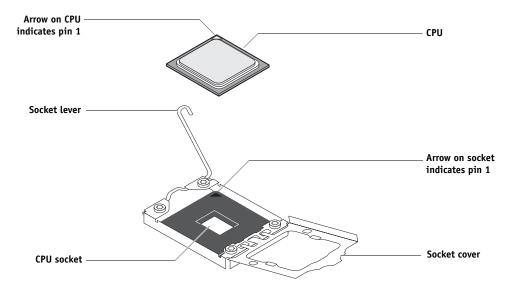


FIGURE 36: Replacing a CPU

#### TO REPLACE A CPU COOLING ASSEMBLY

**NOTE:** This procedure assumes that you have installed the CPU in the motherboard CPU socket, as described in page 105.

#### 1. Prepare the surfaces of the CPU and CPU cooling assembly for proper thermal conduction:

**IMPORTANT** 

- If you removed the original CPU cooling assembly from the motherboard in order to install it on a new motherboard, first remove all thermal compound residue from the surface of each CPU and the base of each heatsink. (Use the flat edge of a non-conductive tool to scrape off the residue, and a lint-free cloth moistened with alcohol to clean the base of the heatsink.) Then apply fresh thermal compound to the surface of each CPU using the applicator provided with the new motherboard.
- If you are installing a new CPU cooling assembly, make sure that fresh thermal compound is present on the base of the new heatsink. New cooling assemblies ship with thermal compound preapplied to the base of the heatsink.
- 2. Place the cooling assembly on the CPU (see Figure 35 on page 104).

Align the four mounting screws in the cooling assembly with the four mounting holes in the motherboard. Make sure that the thermal compound on the base of the assembly completely covers the CPU chip. Incorrect installation could cause the CPU to overheat.

3. Tighten the four screws to secure the cooling assembly to the motherboard and motherboard tray.

To avoid flexing and possibly damaging the motherboard, partially tighten each screw before you tighten any one screw completely.

- 4. Connect the CPU fan cable to its designated connector on the motherboard (see page 76).
- 5. If you installed a new CPU, clear the CMOS (see page 98).

You must clear the CMOS after installing a new CPU to ensure compatibility between the new component and previous settings stored in the BIOS.

**NOTE:** Be sure to remove the power cable from the imagePRESS Server before clearing the CMOS.

- Remove the battery (see page 97).
- Wait two minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see page 97).
- 6. Reassemble the imagePRESS Server and verify its functionality (see page 130).
- 7. If you installed a new CPU and cleared the CMOS, configure the time and date in Setup.

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

# **Fans**

Inside the imagePRESS Server, one front fan and one back fan run continuously when the system is on. The fans circulate air inside the imagePRESS Server in order to cool integrated circuits within the system. You should hear the fans start as soon as you power on the imagePRESS Server. If you do not hear the fans, the most likely problem is a faulty cable connection (see Figure 17 on page 58).

# Front fan

The following procedures describe how to remove and replace the front fan. The front fan is secured to the chassis by a plastic mounting bracket.

# TO REMOVE THE FRONT FAN

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see Figure on page 59).

In order to access the fan, you must remove the left panel.

- 2. Detach the 3-pin fan cable connector from its connector on the motherboard.
- 3. Remove the fan assembly from the chassis (see Figure 37).

Press to unlock the latches on the fan mounting bracket, and lift the assembly out of the chassis. When removing the fan assembly, be careful not to disturb or disconnect any cables that are installed nearby.

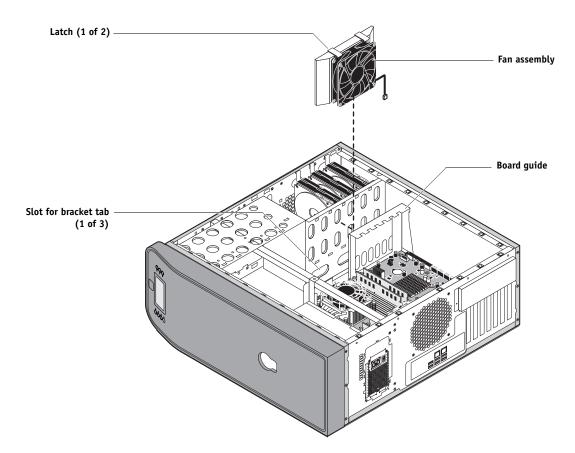


FIGURE 37: Removing/replacing the front fan assembly

4. If you are replacing the old fan with a new fan, remove the four plastic rivets that attach the old fan to the mounting bracket, and remove the fan from the bracket (see Figure 38).

To remove a rivet, use a flathead screwdriver to pry loose the rivet head while squeezing and pushing the locking end of the rivet with your fingers.

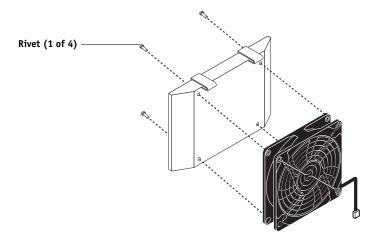


FIGURE 38: Removing/replacing the front fan from the bracket

#### TO REPLACE THE FRONT FAN

1. Position the fan on the mounting bracket.

When correctly positioned, the metal grille on the fan should face away from the bracket and the fan cable should be able to reach its connector on the motherboard.

2. Replace the four plastic rivets that secure the fan to the mounting bracket (see Figure 38 on page 109).

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

**NOTE:** If you are replacing the old fan with a new one and you damaged the original rivets while removing the old fan, use the rivets provided in the bag labeled "FRONT FAN." This bag of rivets accompanies the spare fan kit.

- 3. Insert the fan assembly into the space between the board guide and the chassis (see Figure 37 on page 108).
- 4. Secure the fan assembly to the chassis.

Fit the three tabs at the bottom of the mounting bracket into the three slots in the chassis (see Figure 37 on page 108). Press the assembly flat against the chassis until the latches on the mounting bracket lock into place.

- 5. Connect the 3-pin fan connector to the left three pins of connector J52 on the motherboard (see Figure 17 on page 58 and Figure 26 on page 76).
- 6. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# Back fan

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

#### TO REMOVE THE BACK FAN

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system

(see page 59).

In order to access the fan, you must remove the left panel.

- 2. Detach the 3-pin fan cable connector from its connector on the motherboard.
- 3. Remove the four plastic rivets that attach the fan to the chassis, and then remove the fan.

To remove a rivet, use a flathead screwdriver to pry loose the rivet head while squeezing and pushing the locking end of the rivet with your fingers or a screwdriver.

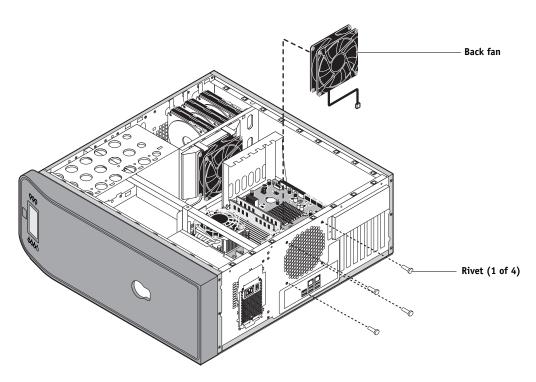


FIGURE 39: Removing/replacing the back fan

#### TO REPLACE THE BACK FAN

1. If you are replacing the old back fan with a new back fan, remove the metal grille from the face of the new fan and reattach it to the opposite face of the new fan (see Figure 40).

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

To reattach the grille, position the grille against the opposite face of the fan, and push each rivet all the way through the mounting hole until the rivet snaps into locked position. When the grille is correctly attached, the airflow arrow on the fan should point away from the grille.

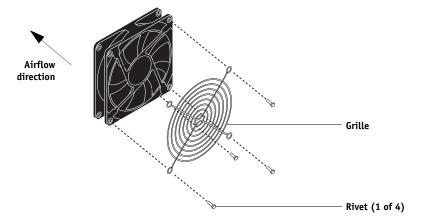


FIGURE 40: Installing the fan grille

**NOTE:** If you damage the original rivets while removing the grille, use the rivets provided in the bag labeled "FRONT FAN." This bag accompanies the spare fan kit and contains rivets that are identical to the original rivets used to secure the grille to the fan.

2. Position the fan against the chassis.

When correctly positioned, the metal grille on the fan should be facing away from the back panel, and the fan cable should be able to reach its connector on the motherboard.

3. Align the four holes on the fan with the four holes in the chassis, and replace the four rivets that secure the fan to the chassis (see Figure 39 on page 111).

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

**NOTE:** If you damaged the original rivets while removing the old fan, use the rivets provided in the bag labeled "BACK FAN." This bag of rivets accompanies the spare fan kit.

- 4. Connect the 3-pin fan connector to the top three pins of connector REAR FAN (J50) on the motherboard (see Figure 17 on page 58 and Figure 26 on page 76).
- 5. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# **Power supply**

This section describes how to remove and replace the power supply. For more information about the power supply, see "Physical specifications" on page 174.

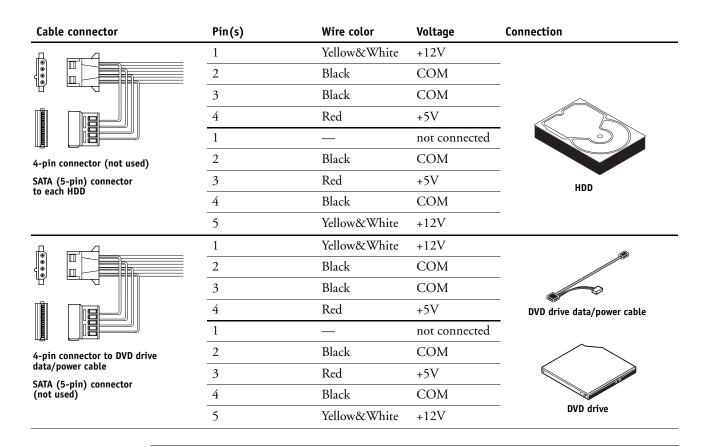


Do not open the power supply for service or troubleshooting purposes. Opening the power supply voids the warranty.

SERVICE PROCEDURES 114

 TABLE 4:
 Power supply cable details

Cable connector	Pin(s)	Wire color	Voltage	Connection
<b>NOTE:</b> All voltages listed in this table are direct current voltages (VDC).				
28 12 22 11 22 10 22 10 22 10 22 18 22 18 18 16 18 16 18 14 15 13 14 12 15 13 16 14 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18 18 1	1, 2, 12	Orange	+3.3V	8-pin CPU 8-pin CPU (PW3) (PW1)
	3, 5, 7, 15, 17, 18, 19, 24	Black	COM	
	4, 6, 21, 22, 23	Red	+5V	
	8	Gray	PW-OK	
	9	Purple	+5Vsb	
	10, 11	Yellow&White	+12V	
	13	Orange	+3.3V	
		Brown	+3.3V sense	
	14	Blue	-12V	
	16	Green	PS-ON	
	20	White	-5V	
84  73  52	1, 2, 3, 4	Black	COM	
8-pin CPU connector to motherboard PW1	5, 6, 7, 8	Yellow&Black	+12V	— 4-pin CPU
84 773 682 51	1, 2, 3, 4	Black	COM	_
8-pin CPU connector to motherboard PW3	5, 6, 7, 8	Yellow&Blue	+12V	_



#### TO REMOVE THE POWER SUPPLY

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see page 59).

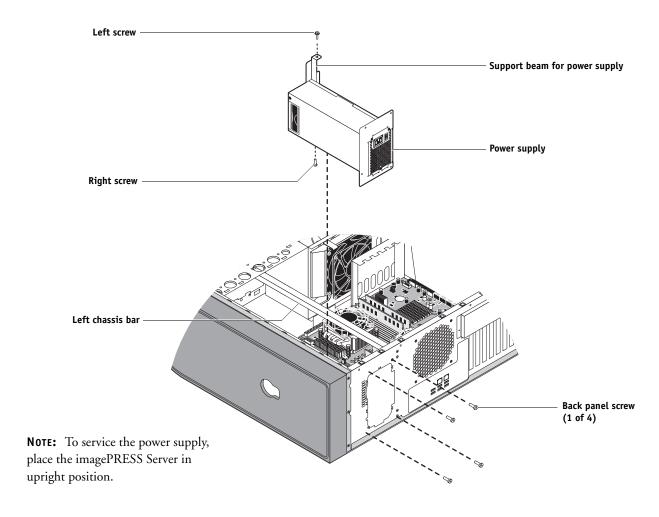
In order to remove the power supply, you must remove the left and right panels.

- 2. Remove the 24-pin power cable from connector PW2 on the motherboard.
- 3. Remove the 8-pin power cables from connectors PW1 and PW3 on the motherboard.
- 4. Remove the SATA power cables from the HDDs.
- 5. Remove the ferrite that is installed around the HDD power cables.

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

- 6. Detach the SATA power cable from the power connector of the dual cable for the DVD drive.
- 7. Remove any tie wraps securing the power cables to the chassis.
- 8. Place the imagePRESS Server in the upright position.

- 9. Remove the four back panel screws that attach the power supply to the back of the chassis (see Figure 41).
- 10. Remove the left and right screws that secure the power supply's support beam to the two chassis bars (see Figure 41).
- 11. Gently lift the power supply with its support beam out of the chassis.



**FIGURE 41:** Removing/replacing the power supply

#### TO REPLACE THE POWER SUPPLY

- 1. Make sure that the imagePRESS Server is in the upright position.
- 2. Position the power supply inside the chassis (see Figure 41 on page 116).

Place the power supply on top of the left and right chassis bars. Fit the ends of the support beam over the chassis bars, and position the power supply so that it is flush against the back panel.

- 3. Secure the support beam to the left and right chassis bars with the two screws you removed earlier (see Figure 41 on page 116).
- 4. Install the four screws that secure the power supply to the back panel of the chassis.
- Connect one of the SATA power cables to the power connector on the dual data/power cable that connects to the DVD drive.
- 6. Connect three of the other SATA power cables to the SATA power connectors on the three HDDs.

**NOTE:** Some HDDs may have both PATA and SATA power connectors. Always connect power to the SATA power connector on the HDD. Do not use the PATA power connector.

7. Install the ferrite around the three SATA power cables that connect to the HDDs.

Use the ferrite that you removed earlier. Place the ferrite around all three cables, and snap the edges of the ferrite closed.

- 8. Connect the power cables to the motherboard (see Figure 17 on page 58 and Figure 26 on page 76):
  - 8-pin power cables to connectors PW1 and PW3
     You may connect either 8-pin cable to either power connector on the motherboard.
  - 24-pin power cable to connector PW2
- 9. Replace the tie wraps that you removed earlier.
- 10. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# Hard disk drives

The factory-installed HDDs (hard disk drives) are formatted and loaded with system software, network drivers, and printer fonts. The HDDs are also used to store spooled print jobs.

If you replace a HDD with a new one, you must reinstall system software and user software on the system. (Replacement HDDs are not shipped with preinstalled software.) The imagePRESS Server remains enabled for features such as SeeQuence Suite and the Fiery Graphic Arts Package, once the software is reinstalled.

This section includes separate procedures for replacing a HDD installed inside the imagePRESS Server and for replacing a HDD installed inside the Enclosure of the HDD Security Option.

## Proper handling

**IMPORTANT** 

Improper handling can damage the HDD. Handle the HDD 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 pressure on the HDDs.
- Handle the HDDs by the 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 connection
- Faulty hard disk drive

If you are replacing a HDD with a new one, you must have the following:

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

# Servicing HDDs inside the imagePRESS Server

This section describes how to remove and replace HDDs installed inside the imagePRESS Server.

**NOTE:** The HDDs are identified as follows:

- HDD1 is the 250GB HDD installed in the top slot of the chassis. HDD1 is partitioned into drive letters c:\ and d:\.
- HDD2 is the 500GB HDD installed in the middle slot of the chassis.
- HDD3 is the 500GB HDD installed in the bottom slot of the chassis. HDD2 and HDD3 are configured together as a single RAID drive, represented by drive letter e:\.

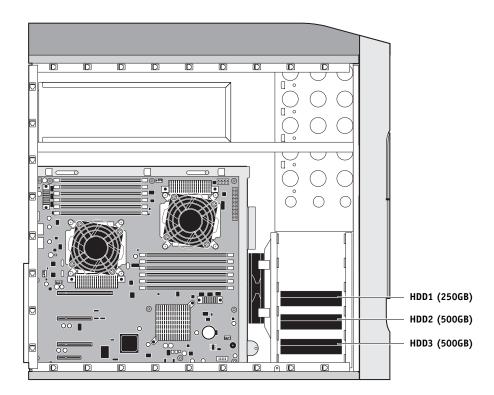


FIGURE 42: imagePRESS Server hard disk drives (HDDs)

## TO REMOVE A HDD

1. If you have not done so already, allow the network administrator the opportunity to print the Job Log and save any custom simulation and output profiles. Also, print the following, if possible:

- Configuration page—lists any installed options and records the customer's current Setup configuration (for more information, see page 49).
- Font List—lists the fonts currently on the HDDs. Along with the fonts provided, the customer may have installed additional fonts (for more information, see page 49).
- 2. Shut down the imagePRESS Server, remove all cables from the back, and then open the system

(see page 59).

In order to access the HDDs, you must remove the left panel.

- 3. Remove the power cables from all three HDDs.
- 4. Remove the data cables from all three HDDs.
- 5. Press the latches on the sides of the HDD and slide the HDD assembly out from the chassis (see Figure 43).

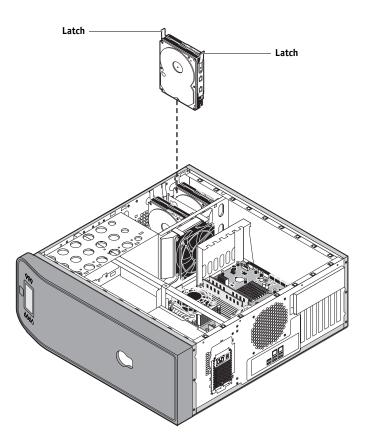


FIGURE 43: Removing/replacing the HDD

6. If you are replacing the old HDD with a new HDD, remove the four screws that attach the old HDD to its bracket, and remove the HDD (see Figure 44).

Set the screws aside so you can replace them later.

**IMPORTANT** 

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

Do not touch the 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.

## 7. Place the HDD in an antistatic bag.

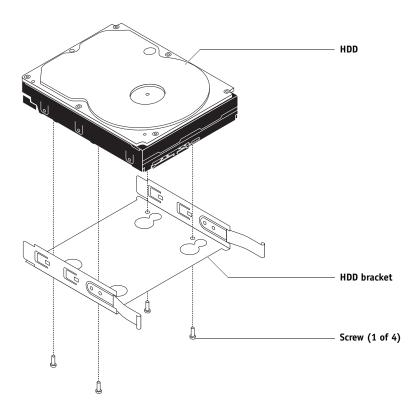


FIGURE 44: Removing/replacing the HDD bracket

Replacement HDDs are not shipped with preinstalled system software. After installing a HDD, you must install the appropriate system software.

#### TO REPLACE A HDD

#### **IMPORTANT**

Do not replace the HDD and the motherboard at the same time. Doing so may result in system corruption.

It is unlikely that both the HDD and the motherboard are defective; therefore, avoid replacing both to solve one problem. If troubleshooting strategies (checking cables and connections, see page 141 and page 142) do not solve the problem and you suspect the HDD or the motherboard are at fault, use the following order to troubleshoot: replace the HDD, install system software, and then check to see if the problem persists. If so, perform other procedures, such as replacing the motherboard (see page 75).

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 mounting holes with the four holes in the bracket.

Position the HDD as shown in Figure 44 on page 121.

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

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

4. Slide the HDD assembly into its slot in the chassis (see Figure 43 on page 120).

Make sure that the latches on the HDD bracket are securely locked in the slot.

- Connect the data cables between the HDDs and their corresponding SATA connectors on the motherboard:
  - Connect HDD1 (the HDD in the top slot) to SATA1 on the motherboard.
  - Connect HDD2 (the HDD in the middle slot) to SATA2 on the motherboard.
  - Connect HDD3 (the HDD in the bottom slot) to SATA3 on the motherboard.

For the locations of the SATA connectors on the motherboard, see Figure 26 on page 76.

6. Connect the SATA power cable connectors to all three HDDs.

**NOTE:** Always connect power to the SATA power connectors on the HDDs. Do not use the PATA power connectors, if they are present on the HDDs.

- 7. Reassemble the imagePRESS Server (see page 130).
- 8. Connect the cables that you removed from the back of the imagePRESS Server.
- 9. If you replaced a HDD with a new HDD, install system software and user software (see page 132).

If a startup error appears on the monitor when you power on the imagePRESS Server, check the connections.

10. Verify imagePRESS Server functionality (see page 131).

# Servicing HDDs inside the security Enclosure

This section describes how to replace HDDs installed inside the Enclosure that ships with the HDD Security Option.

#### TO INSTALL A REPLACEMENT HDD INSIDE THE SECURITY ENCLOSURE

**IMPORTANT** 

Be sure to perform all the steps of this procedure exactly as described. If you fail to perform all of the steps of this procedure, system problems may result.

1. Remove the old HDD from the Enclosure, and install the replacement HDD inside the Enclosure.

For detailed instructions, see the documentation that accompanies the HDD Security Option.

- 2. Install the Removable HDD Firmware Update using the External RHDD Firmware Update CD and the documentation that accompanies the HDD Security Option.
- 3. Power off the Enclosure using the Enclosure's main power button.
- 4. Wait one minute.
- 5. Power on the Enclosure using the Enclosure's main power button.
- 6. Install system software (see page 132).

If a startup error appears on the monitor when you power on the imagePRESS Server, check the connections.

7. Verify imagePRESS Server functionality (see page 131).

# Switch bank assembly

The switch bank assembly attaches to the component sled in the front of the chassis. The switch bank assembly includes the following components:

- DVD drive
- Power button and power button cable
- · Reset button and reset button cable
- Speaker and speaker cable
- Front USB ports and front USB cables

**Note:** For information about servicing the DVD drive, see page 128.

#### TO REMOVE THE SWITCH BANK ASSEMBLY

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system

(see page 59).

In order to remove the switch bank assembly, you must remove the left, right, and front panels.

- 2. Detach the following cables:
  - Data/power cable from the back of the DVD drive
  - Power and reset button cables from the motherboard
  - Speaker cable from the motherboard
  - Front USB port cables from the motherboard
- 3. Remove the ferrite that is installed on the front 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 aside the ferrite so that you can replace it later.

# 4. Remove the component sled from the chassis (see Figure 45).

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

**NOTE:** Be careful not to damage the EMI gasket lining 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.

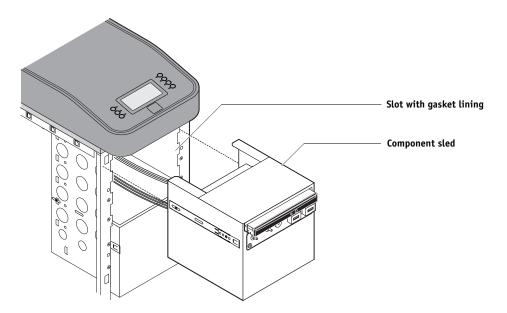


FIGURE 45: Removing/replacing the component sled

5. Remove the switch bank assembly from the component sled (see Figure 46).

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.

**NOTE:** Guide the cables as you remove the switch bank assembly from the component sled. Be careful not to damage the EMI gasket lining the slot in the component sled.

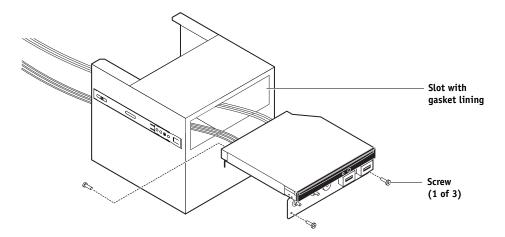


FIGURE 46: Removing/replacing the switch bank assembly

6. If you are removing the switch bank assembly to replace it with a new assembly, remove the DVD drive (see page 128).

#### TO REPLACE THE SWITCH BANK ASSEMBLY

1. If you are installing a replacement switch bank assembly, attach the extension cables for the power and reset button cables.

Locate the two extension cables included in the replacement switch bank assembly kit. Attach each extension cable to its corresponding base cable in the switch bank assembly, aligning the arrow on the extension cable connector with the arrow on the base cable connector.

- If it is not already attached, secure the DVD drive to the switch bank assembly (see page 129).
- 3. Install the switch bank assembly in the component sled (see Figure 46 on page 126).
  - Starting with the cables, insert the switch bank assembly through the slot in the front of the component sled. Be sure to fold the EMI gasket under and in through the slot when inserting the assembly.
  - Replace the three screws that secure the switch bank assembly to the component sled.

#### 4. Install the component sled in the chassis (see Figure 45 on page 125).

- 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 component sled into the front of the chassis until the latches click into the place.

Be careful not the damage the EMI gasket around the slot in the chassis when installing the component sled.

## 5. Connect the following cables (see Figure 26 on page 76 for the location of each connector on the motherboard):

- Data/power cable to the dual connector on the back of the DVD drive
- DVD data cable to motherboard connector SATA0
- Power button cable to motherboard connector J102, pins 6 and 8
   Make sure that the triangle on the cable connector aligns with pin 6, as shown in Figure 17 on page 58.
- Reset button cable to motherboard connector J102, pins 5 and 7
   Make sure that the triangle on the cable connector aligns with pin 7, as shown in Figure 17 on page 58.
- Speaker cable to motherboard connector J105
   Make sure that the triangle on the cable connector aligns with the correct pin, as shown in Figure 17 on page 58.
- Front USB port cables to the USB2 and USB3 connectors on the motherboard (either USB connector may be used for either cable)

#### 6. Install the ferrite around the 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.

7. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# **DVD** drive

The DVD drive is installed in the front of the chassis. The drive is used to install system software and archive data on writable media.

#### TO REMOVE THE DVD DRIVE

1. Shut down the imagePRESS Server, remove all cables from the back, and then open the system (see page 59).

In order to access the DVD drive, you must remove the left, right, and front panels from the chassis.

2. Remove the data/power cable from the dual connector on the back of the DVD drive.

If you are removing the cable assembly to replace it with a new cable assembly, detach the other ends of the cables from the motherboard and the power supply.

- 3. Remove the component sled from the chassis, and then remove the switch bank assembly from the component sled (see page 124).
- 4. Remove the four screws that secure the DVD drive to the switch bank assembly (see Figure 47).

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

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

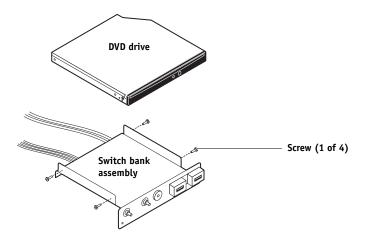


FIGURE 47: Removing/replacing the DVD drive

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

## TO REPLACE THE DVD DRIVE

- 1. Secure the DVD drive to the switch bank assembly using the four screws that you removed earlier (see Figure 47 on page 128).
- 2. Install the switch bank assembly in the component sled, and then install the component sled in the chassis (see page 126).
- 3. Connect the data/power cable to the dual connector on the back of the DVD drive.
  Make sure that the other ends of the cable are connected to the power supply and to SATA0 on the motherboard.
- 4. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# Restoring and verifying functionality after service

Complete your inspection and service by reassembling and verifying the imagePRESS Server.



Do not lift the imagePRESS Server without assistance. Follow standard ESD precautions when handling internal components (see page 17).

#### TO REASSEMBLE AND VERIFY THE IMAGEPRESS SERVER

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

When routing cables in the imagePRESS Server make sure that:

- Covers are securely installed after routing cables
- Cables are not looped around internal circuit boards, or components (such as capacitors and resistors)
- Cable routing does not interfere with the operation of internal components
- Cables do not lie on or against any internal heating element
- Cables do not interfere with removing or replacing components
- Cables do not interfere with opening or closing imagePRESS Server panels
- · Cables are not tangled
- Cable slack is secured with tie wraps
- 2. Restore the system to the upright position.
- Replace any panels that you removed earlier, as described in "Opening the imagePRESS Server" on page 60.
- 4. If you installed a new HDD, install system software (see page 132).

Replacement HDDs are not shipped with pre-installed system software.

- 5. If you replaced the motherboard with a new motherboard, make sure that the new motherboard solves the problem that you are troubleshooting (see page 87), and then transfer options to the new motherboard (see page 90).
- 6. Make sure to configure the date and time in Setup (see *Configuration and Setup* on the User Documentation CD).
- 7. Before you leave the customer site, verify the imagePRESS Server operation (see Figure 48).

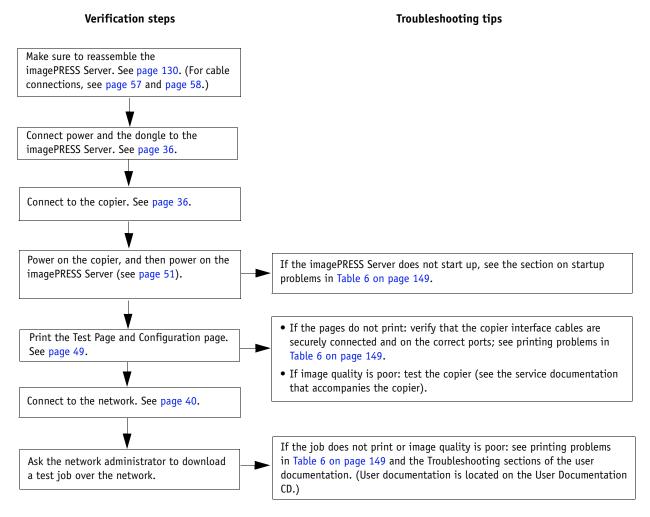


FIGURE 48: imagePRESS Server verification steps

# SYSTEM SOFTWARE

This chapter describes how to install system software from the system software media.

## **Overview**

The imagePRESS Server ships with system software pre-installed on the HDDs (hard disk drives). If you need to reinstall system software in the future, use the two System Software DVDs included in the media pack.

**Note:** You can change the default language of the imagePRESS Server at any time using the Configure tool available through Command WorkStation and WebTools. Launch Configure, specify the language you want to display on the imagePRESS Server from Server > General > Choose Server Language, and then click Apply.

Keep in mind the following when installing system software:

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

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 about managing fonts, see Command WorkStation Help.

- **User Software**—The imagePRESS Server ships with user software pre-installed on the HDDs. During system software reinstallation, you are prompted to reinstall user software using System Software DVD 2.
- **Configuration page**—When upgrading the system software, make sure to print a Configuration page before installing any software (for instructions, see page 49). The Configuration page provides a record of the customer's current Setup configurations.

**IMPORTANT** 

System Software 133

• Save/Restore Configuration—All Setup configurations, as well as all custom files and templates stored on the HDDs, are deleted when you install system software. Always save the current imagePRESS Server configuration (see page 134) before you install system software. After completing the installation, be sure to restore the configuration that you saved earlier (see page 137).

The saved configuration file contains the following: Setup configurations (except for Server Name and Date/Time); custom simulation and custom output profiles saved on the HDDs; Impose templates saved on the default directory on the HDDs; Preflight setup; virtual printer setup; and custom spot colors.

- **Technician-related software**—The Canon software for service technician is deleted when you install system software. Be sure to reinstall the technician-related software after installing system software. This software can only be reinstalled if the imagePRESS Server has the Advanced Controller Interface Kit installed. For details, see the documentation provided on the software CD.
- **Compatibility**—When upgrading the system software, make sure that the latest user software is installed onto all computers that print to the imagePRESS Server. Using incompatible versions of the system and user software may result in system problems.

# Installing system software

System and user software are provided on the following media:

- System Software DVD1—includes the Windows XP Professional (FES) OS and server software for the imagePRESS Server
- System Software DVD2—includes the imagePRESS Server user software installers

Install system and user software when you

- · Replace the HDD.
- Upgrade to a more current version of the software.

Software installation requires approximately 1 hour, not including the time needed to configure or restore Setup.

#### TO INSTALL SYSTEM SOFTWARE

1. Remove all dongles and devices (except the optional keyboard and mouse, if present) from the USB ports on the front and back of the imagePRESS Server.

If you do not remove the dongles and devices, the software installation will fail.

2. Print the Font List, if possible.

The Font List lists all the fonts currently installed on the HDDs. Use this list as a reference to reinstall all customer-supplied fonts after the system software installation is completed.

System Software 134

#### 3. Save the current imagePRESS Server settings, if possible:

 Open a Web browser window on a client computer that is on the same network as the imagePRESS Server.

 In the URL field of the browser, type the IP address of the imagePRESS Server, and press Enter.

The IP address is listed under the Network Setup section of the Configuration page.

- On the WebTools home page, click the Configure tab.
- Click the Launch Configure button. Type the Administrator password for the imagePRESS Server and click OK.

The default Administrator password is Fiery.1. However, the network administrator may have configured a new password for the imagePRESS Server.

- Expand the Server item in the left pane, and click Backup and Restore.
- Click Backup Fiery Settings. Enter a file name and network location for the settings file, and then click Save.
- Close the browser window.

**NOTE:** If it is not possible to save the current imagePRESS Server settings, ask the network administrator to archive any custom color profiles to a network location. For more information, see *Color Printing* on the User Documentation CD.

## 4. Insert System Software DVD1 in the DVD drive.

## 5. Reboot the imagePRESS Server.

Wait while the system boots from the DVD.

System Software 135

#### 6. At the message "All data will be deleted," select Yes.

**Note:** The "All data will be deleted" message is displayed on both the Control Panel and the optional monitor (if present). You can choose which interface to use for the installation process by selecting Yes on either the Control Panel or the optional monitor. The interface that is not chosen is then disabled during the initial segments of the installation process.

#### 7. At the Select Language screen, select the language of the imagePRESS Server system.

If you are using the Control Panel as the installation interface, use the Up and Down buttons to scroll through the list of languages.

Wait while the software files are installed on the system. Progress messages are displayed as the system proceeds through the first step of the installation.

**Note:** This installation segment takes approximately 15 minutes.

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

Allow the imagePRESS Server to reboot several times automatically. Progress messages are then displayed as the system proceeds through additional steps to continue system software installation. The system reboots automatically after each step.

If you are using the Control Panel, it may display a blank screen or the message "Starting up" for extended periods of time during this segment.

Do not interact with the imagePRESS Server during this time; if you interact with the imagePRESS Server, you will need to repeat the installation process.

**Note:** This installation segment takes approximately 25 minutes.

# 9. At the message "Please insert User Software to continue installation," insert System Software DVD2 in the DVD drive.

Wait while the system displays progress messages indicating that installation is under way. During this segment, the entire contents of System Software DVD2 are copied to the imagePRESS Server HDDs. The message "Copying User Software to Fiery shared folder. Please wait" is displayed during this segment.

**Note:** This installation segment takes approximately 20 minutes.

**IMPORTANT** 

10. At the Control Panel message "User Software installation is complete. Remove CD/DVD. System will reboot," remove System Software DVD2.

Allow the system to reboot automatically and reach Idle. When the system reaches Idle, imagePRESS Server logo screen appears on the Control Panel.

**Note:** If the Control Panel activity light flashes red, or the FieryBar on the optional monitor flashes red and displays the message "Unable to detect video boards: Make sure video boards are installed," reboot the system. If the error persists, reboot the system again.

## 11. Reinstall any required software patches:

- If you reinstalled the same version of system software, be sure to reinstall all software patches that were previously installed on the Print Server. For a list of previously installed patches, see the Configuration page that you printed earlier.
- If you installed an upgraded version of system software (for example, version 1.0 to version 2.0), contact your authorized service/support center for a list of valid software patches. Some or all of the patches listed on the Configuration 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—Using the keyboard (if present), choose Start > All Programs > Fiery > System Updates, and then click Check Now.
- Check for Product Updates—In a Web browser, connect to the IP address of the Print Server, click the Configure tab, and then click Check for Product Updates.

**IMPORTANT** 

# 12. If you were able to save the imagePRESS Server settings earlier, restore the settings to the system:

- Open a Web browser window on a client computer that is on the same network as the imagePRESS Server. Type the IP address of the imagePRESS Server in the URL field, and press Enter.
- On the WebTools home page, click the Configure tab, and then click the Launch Configure button. Type Fiery.1 for the password, and click OK
- Expand the Server item in the left pane, and click Backup/Restore.
- Click Restore Fiery Settings. At the reboot warning, click OK. Then locate and select the configuration file that you saved earlier, and click Open.
- Allow the imagePRESS Server to reboot.

**Note:** If you were unable to save the imagePRESS Server settings, you must configure Setup using the Configuration pages you printed earlier. For information on performing setup, see *Configuration and Setup* on the User Documentation CD. Bypass any settings if it is more appropriate for the network administrator to set them. After configuring the desired settings, exit Setup and allow the system to reboot.

#### 13. Reinstall the Canon technician-related software.

The technician-related software is deleted when you install system software and must be reinstalled. The imagePRESS Server must have the Advanced Controller Interface Kit installed in order to install the technician-related software.

For installation instructions, see the documentation provided on the technician-related software CD.

## 14. Have the system administrator reinstall any fonts or custom color profiles.

Remind the system administrator that all preexisting fonts and custom color profiles were deleted when you installed system software.

# System updates

Advise the network administrator at the customer site that the System Updates feature (available through the Start menu on systems equipped with a monitor) 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 equipped) 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 click 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.

Operating system updates for Windows XP Professional (FES) 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 function.

# Fiery Clone Tool

The Fiery Clone Tool DVD can be used to clone (copy) the contents of the imagePRESS Server HDD to an image file. The resulting clone image file contains the entire contents of the imagePRESS Server C, D, and E HDD partitions, with the exception of any print jobs in the print queues. Later, you can restore the clone image to the imagePRESS Server in order to return the system to a previous configuration.

For detailed instructions, see the documentation that accompanies the Fiery Clone Tool DVD. The Fiery Clone Tool DVD is included in one of the media packs that ship with the imagePRESS Server.

# **TROUBLESHOOTING**

This chapter identifies the source of common problems that may occur with the imagePRESS Server and suggests ways of correcting them. Suggested actions may include reading user documentation, located on the User Documentation CD.

# **Troubleshooting process**

The imagePRESS Server is a server for the copier and is generally part of a configuration like the one shown in Figure 49. Problems may occur in one of the following 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

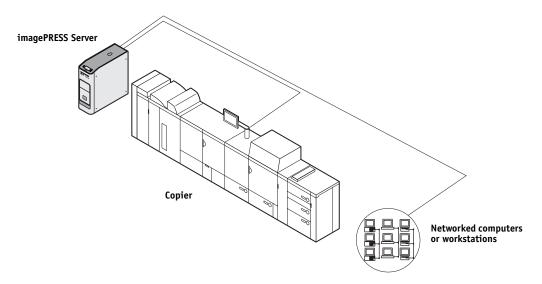
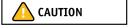


FIGURE 49: Troubleshooting the system

Troubleshooting the copier, network, remote computers, software applications, and Windows XP Professional (FES) is beyond the scope of this chapter.



When performing the service procedures described in this chapter, follow the precautions listed on page 17.

Install new components only when necessary. If you determine that the component that you removed is not faulty, reinstall it.

# Preliminary on-site checkout

Your goal in the preliminary onsite checkout is to solve problems quickly with a minimum of troubleshooting. Start by verifying that the network is functioning, no unauthorized software or hardware is installed on the imagePRESS Server, and the problem is not with a particular print job or application. To help verify these issues, contact the on-site administrator.

Most problems with the imagePRESS Server are caused by loose board or cable connections; therefore, this section begins by describing the quick checks you can do to locate and fix these more obvious problems. Check the external connections to the back of the imagePRESS Server before you check internal board and cable connections or replace any components.

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

This section includes the following:

• "Checking interface cables" on page 141

This section 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 142

This section 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 143

This section provides a more comprehensive checklist that you can use to check the imagePRESS Server internally and externally. If your initial checks fail, you may want to go through this checklist before concluding that you need to replace a cable or component.

To troubleshoot specific symptoms, see Table 6 on page 149.

# Checking interface cables

Before removing the left panel of the imagePRESS Server to check internal components, eliminate the most obvious sources of problems. Verify the following:

- All interface cables to the system are plugged into the proper connectors on the back panel of the imagePRESS Server (see Figure 50).
- The power cable is plugged into the wall supply.
- The imagePRESS Server is powered on.
- The upper LED next to the 10/100/1000 Mbps network port is blinking to indicate network activity (see page 50).

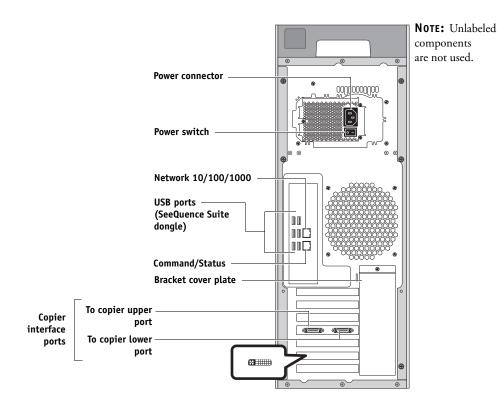
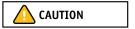


FIGURE 50: Back panel of imagePRESS Server

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

# **Checking internal components**

To check the internal components, you must remove the left panel of the imagePRESS Server.



Before you remove imagePRESS Server panels to inspect and handle internal components, see "Precautions" on page 17. Use standard ESD precautions when handling printed circuit boards and other electronic components.

Use the guidelines and procedures in Service Procedures when disassembling, checking, and reassembling the imagePRESS Server.

#### TO CHECK INTERNAL COMPONENTS

1. Shut down, remove all cables from the back, and then open the imagePRESS Server (see page 59).

In order to access the motherboard, you must remove the left panel.

**IMPORTANT** 

- 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.
  - Make sure that no foreign materials have been dropped into the chassis.
  - Look for loose boards and reseat each board securely in its connector on the motherboard.
  - Look for loose cables. Reseat each connector firmly.
  - Make sure that each connector is properly aligned with its mating connector. If the pins
    are offset from each other, the board affected will not function properly.
- 4. Reassemble the imagePRESS Server and verify its functionality (see page 130).

# Inspecting the system

If checking cable and board connections does not fix the problem, consider inspecting the system component by component (see Table 5) and verifying that each hardware component is properly installed and configured before you decide to replace costly components.

If a component in the system you are servicing does not meet a condition listed in Table 5 and it is not clear how to fix the problem (for example, if the system hangs before reaching Idle), locate the behavior in Table 6 on page 149 to see the suggested action(s) for solving the problem.

**TABLE 5:** Verifying the system

# **Conditions to verify**

#### Part and additional page references

When the problem occurs, verify the following:

- Power cable is connected properly to the imagePRESS Server and to the power outlet.
- The imagePRESS Server is powered on.
- Chassis fans are operating.
- At least one LED on the network connector is lit.
- All external cables required are present, in correct connectors, well-seated.
- Cables, cable connectors, and mating connectors appear undamaged.

Back panel external connectors, chassis fans, and power connector, page 141



If the problem occurs at power up or reboot, verify the following:

- Control Panel LCD lights up and logo displays.
- DVD drive is present and no media is in the drive.
- DVD drive accepts inserted media.
- No error messages or system hangs occur on the Control Panel before Idle.

DVD drive, page 128

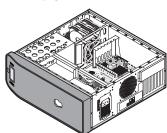


#### Conditions to verify

## Part and additional page references

- All replaceable parts are:
  - Present
  - Properly aligned
  - Installed securely
  - Installed on the appropriate site
  - The correct part for the system
  - Not visibly damaged
- Chassis and contents have not been tampered with (no unauthorized additions or changes have been made).
- Chassis does not contain any foreign objects.
- Motherboard, including components and traces, appears undamaged and no foreign objects are evident.
- Each CPU is present, installed in the correct connector, well-seated, and appears undamaged.
- Each CPU cooling unit is well-aligned and firmly attached.
- Each fan (including fan cable) is well-positioned, installed in the correct connector, and appears undamaged.
- Boards required on the motherboard are present, well-seated, and in the correct slots.
- Battery is installed.

Chassis, page 60



Motherboard (with Fiery Options Utility DVD and single-use dongle), page 75







- Each DIMM is well-seated and installed in the correct slot.
- DIMM connectors are not oxidized (reseating removes oxidation).

DIMM for imagePRESS Server, page 99



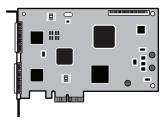
## Board required is:

- Present
- Installed in the correct slot
- Well-seated
- · Not visibly damaged

# Required cables are:

- Present
- Firmly connected to the correct ports on the copier interface board and to the corresponding ports on the copier
- Not visibly damaged

# Copier interface board, page 67



#### **Conditions to verify**

#### Board is:

- Present
- Installed in the correct slot
- Well-seated
- · Not visibly damaged

All fan and ribbon cables on the board are:

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

#### Each CPU is:

- Present
- Installed in the correct socket
- The correct speed (CPU speeds must match)
- Well-seated
- Not visibly damaged

The CPU cooling unit is:

- Ready for efficient thermal transfer
- Well-aligned

#### Each fan is:

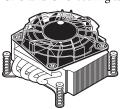
- Properly positioned (not backwards)
- Installed in the correct connector
- Not visibly damaged (fan, fan cable, cable connector, and motherboard connector)

#### Part and additional page references

Graphics board, page 69

(Not pictured; model and appearance of board may vary between systems)

CPU and CPU cooling assembly, page 102







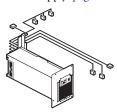
#### The power supply is:

- Present
- Correctly installed
- Not visibly damaged

#### Cable connectors are:

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

Power supply, page 113



#### **Conditions to verify**

#### Part and additional page references

HDD (3), page 118

The HDDs are:

- Present
- Correctly installed
- Not visibly damaged

HDD data cables are:

- Present
- Firmly connected to the correct SATA connectors on the motherboard (see page 122)
- Not visibly damaged

HDD power cables are:

- Present
- Firmly connected to the SATA power connectors on the HDDs. Do not use the PATA power connectors, if they are present on the HDDs.
- Not visibly damaged

The DVD drive is: DVD drive, page 128

- Present
- Correctly installed
- Not visibly damaged

Also verify that the DVD drive data/power cable is connected to SATA0 on the motherboard.



#### Conditions to verify

### Each cable required is:

- Present
- Installed in the correct connector
- Well-seated
- Not visibly damaged (cable or connector)

#### Part and additional page references

UIB cable, page 71



Copier interface cable (2), page 36



Command/status cable, page 36



Data/power cable (to DVD drive), page 128



Cable (to each HDD), page 118



Power cable, page 36



USB dongle is present when using SeeQuence Suite on the imagePRESS Server. (Using SeeQuence Suite on the imagePRESS Server requires a mouse, monitor, keyboard, and Acrobat and PitStop software.)

Dongle for SeeQuence Suite, page 36



### Normal startup sequence

When you power on or reboot the imagePRESS Server, the system runs the following startup routine on the Control Panel. It takes approximately two minutes for the imagePRESS Server to complete the startup routine and reach Idle.

**NOTE:** The following figure is approximate. The screens, times, and sequences you observe may be slightly different.

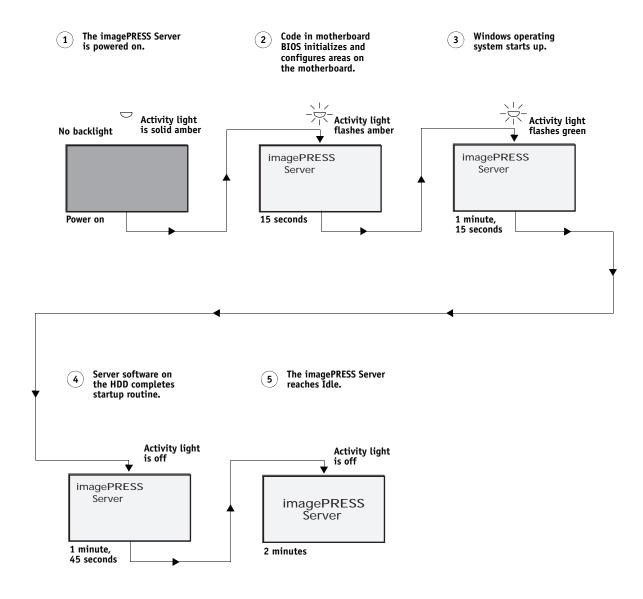


FIGURE 51: Normal startup sequence

### Error messages and conditions

To learn possible causes and solutions for a specific error message or condition, find the symptom in Table 6 and perform the appropriate suggested actions.

For errors or conditions that are described as occurring in a specific stage of the boot up process, see "Normal startup sequence" on page 148 for what normally occurs at each stage.

**IMPORTANT** 

Do not install a new HDD and a new motherboard in the imagePRESS Server 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 perform the system update procedure (see "Replacing the motherboard" on page 83).

IMPORTANT

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

**TABLE 6:** imagePRESS Server error messages and conditions

	B 11.1	
Symptom	Possible cause	Suggested action

#### Beep codes during startup

4 beeps, followed by 3 beeps, followed by 1 beep, followed by 2 beeps

Missing, unmatched, incorrect, or faulty DIMMs

- Check for missing DIMMs and reseat the DIMMs to remove any oxidation on the connectors (see page 99).
- If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and reboot the system.

If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.

**NOTE:** If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.

Symptom	Possible cause	Suggested action
	Startup	
imagePRESS Server does not start up.	The imagePRESS Server is powered off.	Press the power button on the front panel.
	One of the following:	1. Check all cables and connections again.
	<ul> <li>CMOS jumper is missing or incorrectly installed</li> </ul>	<ol> <li>Make sure that the CMOS jumper is correctly installed on the two left pins (pins 1 and 2) of J13 on the motherboard (see page 77).</li> </ol>
	<ul> <li>Faulty power supply (power supply may not be supplying power to the motherboard)</li> </ul>	<ol><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>
	Faulty motherboard (motherboard power plane may not be supplying	If you do not feel air from the power supply fan, you may have a faulty power supply, which you will need to replace (see page 113).
	power to components)	4. Feel for air at the back of the unit where the back fan is located to make sure that air is coming out the fan vent.
		If air is not coming out the back and the drive is not receiving power, clear the CMOS setting (see page 171). If the problem persists, you may need to replace the motherboard (see page 75).
Control Panel LCD does not light up.	One of the following:  • Faulty user interface board (UIB) cable or connections  • Faulty UIB	Recheck the UIB cable connection. If the problem persists, replace the UIB (see page 71).
Control Panel LCD lights but is discolored and/or no logo appears on the LCD.	One of the following:  • Faulty user interface board (UIB) cable or connections	<ol> <li>Recheck the user UIB cable connection. If the problem persists, replace the UIB (see page 71).</li> <li>If the problem persists, verify the CPU and CPU fan connections, and verify that the CPU heatsinks are</li> </ol>
	<ul><li>Faulty UIB</li><li>Loose CPU connection(s)</li><li>Faulty CPU(s)</li><li>Faulty motherboard</li></ul>	securely installed (see page 102).  Test the CPUs by removing the CPU installed in socket CPU1 and rebooting.
		<ul> <li>If the system fails to boot up properly, the CPU in socket CPU0 is faulty and should be replaced.</li> </ul>
		- If the system boots up properly, the CPU in socket CPU0 is good and the CPU that you removed from socket CPU1 may be faulty. To test this, remove the CPU from socket CPU0, install the other CPU in socket CPU0, and reboot. If the system fails to boot up properly, the CPU currently installed in socket CPU0 is faulty and should be replaced.
		3. Clear the CMOS setting (see page 171).
		If the problem persists, you may need to replace the motherboard (see page 75).

Symptom Possible cause Suggeste	ed action
Startup (continued)	
within 5 minutes of powering up.  System was powered off and then powered on before waiting 10 seconds  Missing, unmatched, incorrect, or faulty DIMMs  Faulty or overheated CPU  Faulty motherboard  Mote: If the J11 a different until you is may need to may ne	er off, wait 10 seconds, and then power on again.  The problem persists, check all cables and connections in and reboot.  The billion on the connectors (see page 99).  The problem persists, test the DIMMs by removing the problem persists, test the DIMMs by removing the system.  The system boots to Idle, install a different DIMM in and reboot the system. Continue to install a terent DIMM in the socket and reboot the system is to reach Idle. The last DIMM that installed may be faulty and should be replaced.  The system fails to reach Idle with each DIMM in J11, the DIMM socket may be faulty and you in the replace the motherboard.  The problem persists, verify the CPU and CPU connections, and verify that the CPU heatsinks are rely installed (see page 102).  The CPUs by removing the CPU installed in socket U1 and rebooting.  The system fails to boot up properly, the CPU in socket CPU0 and the CPU that you removed from socket I1 may be faulty. To test this, remove the CPU from at CPU0, install the other CPU in socket CPU0, and the CPU0, install the other CPU in socket CPU0 and cot. If the system fails to boot up properly, the CPU installed in socket CPU0, install the other CPU in socket CPU0, and cot. If the system fails to boot up properly, the CPU installed in socket CPU0 installed installed installed installed installed installed installed installed i

Symptom Possible cause Suggested action

#### Startup (continued)

System hangs during motherboard BIOS control of startup.

One of the following:

- Missing, unmatched, incorrect, or faulty DIMMs
- Faulty or overheated CPU(s)
- 1. Check all cables and connections again and reboot.
- Check the DIMMs and reseat them to remove any oxidation on the connectors (see page 99). Make sure that the DIMM configurations in both socket sets are identical (see page 100).
- If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and reboot the system.

If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.

**NOTE:** If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.

 If the problem persists, verify the CPU and CPU fan connections, and verify that the CPU heatsinks are securely installed (see page 102).

Test the CPUs by removing the CPU installed in socket CPU1 and rebooting.

- If the system fails to boot up properly, the CPU in socket CPU0 is faulty and should be replaced.
- If the system boots up properly, the CPU in socket CPU0 is good and the CPU that you removed from socket CPU1 may be faulty. To test this, remove the CPU from socket CPU0, install the other CPU in socket CPU0, and reboot. If the system fails to boot up properly, the CPU currently installed in socket CPU0 is faulty and should be replaced.

Symptom	Possible cause	Suggested action
Symptom	Possible cause	Suggested action

#### Startup (continued)

System hangs during Windows control of startup.

One of the following:

- Media in DVD drive during startup
- Corrupt system software
- Missing or faulty DIMMs
- Faulty HDD
- Faulty or overheated CPU(s)
- · Faulty motherboard

- 1. Make sure that no media is in the DVD drive during startup, and then reboot the system.
- 2. Recheck all cables and connections.
- 3. If the problem persists, reinstall the system software (see page 132).

Corrupt system software may cause the system to hang at this screen.

- Check the DIMMs and reseat them to remove any oxidation on the connectors (see page 99). Make sure that the DIMM configurations in both socket sets are identical (see page 100).
- If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and reboot the system.

If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.

**NOTE:** If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.

(Suggested actions continued on next page.)

Symptom	Possible cause	Suggested action
Jymptom	i ossibic cause	Juggesteu action

#### Startup (continued)

System hangs during Windows See previous page. control of startup.

(Continued from previous page.)

6. If the problem persists, check for a faulty HDD.

**NOTE:** To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.

Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.

If "No device detected" appears next to:

- Port-01, the 250GB HDD in the top slot of the chassis may be faulty.
- Port-02, the 500GB HDD in the middle slot may be faulty.
- Port-03, the 500GB HDD in the bottom slot may be faulty.

Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

If the problem persists, verify the CPU and CPU fan connections, and verify that the CPU heatsinks are securely installed (see page 102).

Test the CPUs by removing the CPU installed in socket CPU1 and rebooting.

- If the system fails to boot up properly, the CPU in socket CPU0 is faulty and should be replaced.
- If the system boots up properly, the CPU in socket CPU0 is good and the CPU that you removed from socket CPU1 may be faulty. To test this, remove the CPU from socket CPU0, install the other CPU in socket CPU0, and reboot. If the system fails to boot up properly, the CPU currently installed in socket CPU0 is faulty and should be replaced.
- 8. Clear the CMOS setting (see page 171).
- 9. If the problem persists, you may need to replace the motherboard (see page 75).

If replacing the motherboard does not correct the problem, make sure you reinstall the old board in the imagePRESS Server.

Symptom	Possible cause	Suggested action
	Startup (contin	ued)
System hangs during server software control of startup	One of the following:  • Corrupt system software  • Faulty HDD	<ol> <li>Recheck all cables and connections.</li> <li>If the problem persists, reinstall the system software (see page 132).</li> <li>If the problem persists, check for a faulty HDD.</li> </ol>
		<b>NOTE:</b> To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.
		Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.
		<ul> <li>If "No device detected" appears next to:</li> <li>Port-01, the 250GB HDD in the top slot of the chassis may be faulty.</li> <li>Port-02, the 500GB HDD in the middle slot may be faulty.</li> <li>Port-03, the 500GB HDD in the bottom slot may be faulty.</li> </ul>
		Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

Symptom Possible cause Suggested action

#### Startup (continued)

The system takes a long time to start up.

Possibly one of the following:

- The system may be taking longer to boot up in order to finalize installation of a patch or update.
- The HDD may have fallen to the bottom of the boot order in the BIOS. This can happen if the system is powered on when the HDD is missing, faulty, or not connected.
- System software may be corrupted.

- If the slow startup happens following installation of a software patch or update, shut down, and then restart to see if the problem persists.
- If the problem persists, make sure that the HDD is present and properly connected, and then clear CMOS (see page 171). When you reboot the imagePRESS Server, the HDD will be moved to the top of the boot order in the BIOS.
- 3. If the problem persists, reinstall the system software (see page 132).

Symptom	Possible cause	Suggested action
	Shutdown	
Control Panel LCD remains lit even after the system has shut down.	The system has been powered off manually using the power button on the front panel.	<ol> <li>Power on the imagePRESS Server by pressing the power button on the front panel.</li> <li>When the system reaches Idle, choose Shut Down from the Windows Start menu. Select Shut Down and click OK.         Always use this procedure to shut down the imagePRESS Server. If you use the power button to shut down, the LCD will fail to shut down properly.     </li> </ol>
	System proble	ms
DVD drive is not responding or cannot be located; or media cannot be ejected from the drive.	One of the following:  • A CD or DVD is stuck in the drive  • Loose cable connections to the DVD drive or faulty cable  • Faulty DVD drive  • Faulty motherboard	<ol> <li>Press the button on the front of the DVD drive to eject the media.</li> <li>If the media still does not eject, try one of the following:         <ul> <li>On the imagePRESS Server Control Panel, press the Menu button and select Eject CD/DVD.</li> <li>In Windows, go to My Computer. Right-click the icon for the DVD drive and choose Eject.</li> </ul> </li> <li>If the media still does not eject, check the cable connections to the DVD drive (see page 57 and page 58).</li> <li>Check the DVD cable connection to the motherboard.</li> <li>If the problem persists, you may need to replace the DVD drive (see page 128).</li> <li>If the problem persists, you may need to replace the motherboard (see page 75).</li> </ol>
Clock is slow.	Missing or dead battery on the motherboard	Replace the battery on the motherboard and then update the system date and time.

Symptom	Possible cause	Suggested action
Symptom	russible cause	ouggesteu action

#### System problems (continued)

System performs slowly or hangs periodically.

One of the following:

- Missing or faulty DIMMs, or faulty DIMM connections
- Faulty HDD
- Overheated or faulty CPU(s)
- · Faulty motherboard

 Check the DIMMs and reseat them to remove any oxidation on the connectors (see page 99). Make sure that the DIMM configurations in both socket sets are identical (see page 100).

Make sure that an even number of DIMMs is installed. Odd-numbered configurations are not supported.

If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and reboot the system.

If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.

**NOTE:** If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.

3. If the problem persists, check for a faulty HDD.

**NOTE:** To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.

Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.

If "No device detected" appears next to:

- Port-01, the 250GB HDD in the top slot of the chassis may be faulty.
- Port-02, the 500GB HDD in the middle slot may be faulty.
- Port-03, the 500GB HDD in the bottom slot may be faulty.

Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

(Suggested actions continue on the next page.)

Symptom Possible cause Suggested action

#### System problems (continued)

System performs slowly or hangs periodically.

See previous page.

(Continued from previous page.)

- 4. If the problem persists, verify the CPU and CPU fan connections, and verify that the CPU heatsinks are securely installed (see page 102).
  - Test the CPUs by removing the CPU installed in socket CPU1 and rebooting.
- If the system fails to boot up properly, the CPU in socket CPU0 is faulty and should be replaced.
- If the system boots up properly, the CPU in socket CPU0 is good and the CPU that you removed from socket CPU1 may be faulty. To test this, remove the CPU from socket CPU0, install the other CPU in socket CPU0, and reboot. If the system fails to boot up properly, the CPU currently installed in socket CPU0 is faulty and should be replaced.
- 5. If the problem persists, you may need to replace the motherboard (see page 75).

#### **Monitor messages**

Check power and video cable connections

One of the following:

- The copier is not ready to print
- Problem with the connection between the imagePRESS Server and the copier
- 1. Make sure the copier is powered on and ready to print.
- Check again that the network and Command/Status cables are present and properly connected to the correct port on each end (see page 35).
  - Make sure that you are using a straight-through Ethernet cable for the network connection, and a crossover Ethernet cable for the Command/Status connection.
- Check again that the two copier interface cables are present and properly connected to the imagePRESS Server and the copier (see page 38).
- 4. If the problem persists, replace the network cable.
- 5. If the problem persists, replace the Command/Status cable.
- If the problem persists, replace the copier interface cables one at a time (see page 36).
- If the problem persists, you may need to service the copier.

Symptom	Possible cause	Suggested action
		Service messages

1 file(s) copied hangs during system software installation after removing first DVD and recycling power. One of the following:

- Normal behavior
- Corrupted installation
- Lost communication with HDDs due to one of the following:
  - Faulty HDD cable
  - Faulty HDD
  - Faulty motherboard

- Wait 5-10 more minutes to make sure that the system is really hanging. If it is, power off, wait 10 seconds, and then power on again.
- 2. If the problem persists, reinstall the system software (see page 132).
- 3. If the problem persists, check the cables and connections again.
- 4. If the problem persists, check for a faulty HDD.

**NOTE:** To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.

Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.

If "No device detected" appears next to:

- Port-01, the 250GB HDD in the top slot of the chassis may be faulty.
- Port-02, the 500GB HDD in the middle slot may be faulty.
- Port-03, the 500GB HDD in the bottom slot may be faulty.

Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

5. If the problem persists, replace the motherboard (see page 75)

Symptom	Possible cause	Suggested action
	Service messages (c	ontinued)
One of the disks is bad.	System software installer has detected	If the problem persists, check for a faulty HDD.
Cannot continue with installation.	that one of the HDDs is faulty.	<b>NOTE:</b> To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.
		Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.
		<ul><li>If "No device detected" appears next to:</li><li>Port-01, the 250GB HDD in the top slot of the chassis may be faulty.</li></ul>
		<ul> <li>Port-02, the 500GB HDD in the middle slot may be faulty.</li> </ul>
		<ul> <li>Port-03, the 500GB HDD in the bottom slot may be faulty.</li> </ul>
		Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.
Wrong/Missing Dongle	One of the following:  • The wrong dongle or no dongle is installed on the imagePRESS Server	<ol> <li>Install the correct dongle on the imagePRESS Server USB port and repeat the options transfer procedure (see "Transferring options to the new motherboard" on page 90).</li> </ol>
	USB port during the options transfer procedure  • Motherboard USB port is faulty	<ol> <li>If the problem persists, install the dongle on another available USB port and repeat the options transfer procedure.</li> </ol>
		<ol><li>If the problem persists and you are sure you have the proper dongle, you may need to replace the motherboard (see page 83).</li></ol>
Used Dongle	The dongle has already been used to transfer options and cannot be reused.	Obtain an unused dongle and try again.
Unknown Platform	The options transfer procedure is required but has not been done.	Perform the options transfer procedure using the single- use dongle and the Fiery Options Utility DVD (see page 90).

Symptom Possible cause Suggested action

#### Network

If you suspect a network problem, consider the following:

- If the imagePRESS Server does not appear in the list of printers on the network, there may be another device on the network with the same Ethernet hardware address.
- There may be conflicting network settings in Setup and on the customer's workstation.
- Inappropriate Setup options may cause printing problems.
- · Missing or incorrectly placed printer description files may cause application-specific printing errors.

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

Unable to connect to the network, or neither LED on the 10/100/1000Mbps network connector is lit.

One of the following:

- Cable is connected to the wrong Ethernet port. Cable should be connected to the upper Ethernet port.
- Faulty network cable or connection
- Faulty network
- Faulty Ethernet interface on the imagePRESS Server motherboard
- Make sure the network cable is the correct type and connected to the designated network port on the back of the imagePRESS Server (see page 141).
- 2. Check the cable connection to the network.
- 3. Replace the cable with a new or tested cable.
- 4. If the problem persists, request that the network administrator check Network Setup.
- If the problem persists, request that the network administrator check other devices on the network.

If other devices are not functioning, there could be a problem with the network.

If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 75).

System starts up slowly (seems to hang) and then displays one or more DHCP error messages on the monitor.

One of the following:

- · Normal behavior
  - System is searching for a nonexistent DHCP server. DHCP is enabled by default on the imagePRESS Server but the customer's network is not using DHCP.
- If the customer's network is using DHCP:
  - Network cable or connection is faulty.
- Network is faulty.
- Ethernet interface on the imagePRESS Server motherboard is faulty.

- If the problem persists, request that the network administrator change the default in imagePRESS Server Network Setup.
- If neither LED on the 10/100/1000Mbps network connector is lit on the imagePRESS Server back panel, check the cable connection to the back panel and the network. Make sure the cable is the correct type.
- If the network cable is the correct type and is properly connected to the back of the imagePRESS Server, connect a new network cable to the back of the imagePRESS Server.
- If the problem persists, request that the network administrator check other devices on the network.

If other devices are not functioning, it could be a problem with the network.

If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 75).

Reinstall system software.

Symptom	Possible cause	Suggested action
	Printing	
	nality problems are difficult to trace. Before you elf does not need servicing or adjusting.	try to troubleshoot print quality problems, print a Test Page to
Test Page fails to print.	Copier is not ready to print.	Make sure that the copier is powered on and ready to print.
	There is a problem with the connection between the imagePRESS Server and the	Make surethat the copier is powered on and ready to print.
	copier.	<ol><li>Check again that the copier interface cables are present and properly connected to the imagePRESS Server and the copier (see page 36).</li></ol>
		<ol> <li>If the problem persists, power off/on the copier and the imagePRESS Server, waiting 1 minute after the imagePRESS Server reaches Idle before you power on the copier.</li> </ol>
		<ol> <li>Check again that the copier interface board is present and properly connected to the motherboard (see page 67).</li> </ol>
		<ol><li>If the problem persists, replace the copier interface cables one at a time (see page 36).</li></ol>
		<ol><li>If the problem persists, try replacing the copier interface board (see page 67).</li></ol>
		<ol><li>If the problem persists, you may need to service the copier.</li></ol>

Corrupted system software

(Possible causes continue on next page.)

Symptom	Possible cause	Suggested action
	Printing (co	ntinued)
Test Page fails to print.	(continued from previous page)	Check for a faulty HDD.
	Faulty HDD	<b>NOTE:</b> To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.
		Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.
		<ul><li>If "No device detected" appears next to:</li><li>Port-01, the 250GB HDD in the top slot of the chassis may be faulty.</li></ul>
		<ul> <li>Port-02, the 500GB HDD in the middle slot may be faulty.</li> </ul>
		<ul> <li>Port-03, the 500GB HDD in the bottom slot may be faulty.</li> </ul>
		Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.
imagePRESS Server appears on the list of printers on the customer's workstation, but certain jobs do not print.	PostScript error	Make sure Print to PostScript Error in Setup is set to Yes. Check for error messages on the imagePRESS Server output.
	Application problem	<ol> <li>Print a job from a different application to determine if the problem is associated with a particular application.</li> </ol>
		<ol><li>Make sure that the connection between the imagePRESS Server and the workstation is working by downloading a Test Page from the workstation or printing a simple file, such as a text file.</li></ol>
		3. Resend the problem file.

Symptom	Possible cause	Suggested action
	Printing (contin	nued)
Configuration page is completely or mostly blank.	One of the following:  • Missing, unmatched, incorrect, or faulty DIMMs  • Corrupt system software	<ol> <li>Check for missing DIMMs and reseat the DIMMs to remove any oxidation on the connectors (see page 99).</li> <li>If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and repeat the system.</li> </ol>
	Corrupt system sortware	reboot the system.  If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.
		<b>NOTE:</b> If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.
		3. If the problem persists, reinstall the system software.
A print job stalls or stops after one or a few pages.	PostScript or application error	Cancel the imagePRESS Server print job.
		<ol><li>If this fails to clear the problem, reboot the imagePRESS Server.</li></ol>
		3. If the problem persists, ask the network administrator to issue the Clear Server command.
	Missing, incorrect, or faulty DIMMs or faulty DIMM connections	Power off the imagePRESS Server; check for missing DIMMs and reseat the DIMMs to remove any oxidation on the connectors (see page 99).
		Make sure that an even number of DIMMs is installed. Odd-numbered configurations are not supported.
		2. Verify the memory amount on the Configuration page.
		<ol><li>If the problem persists, test the DIMMs by removing all DIMMs except for the one installed in J11, and reboot the system.</li></ol>
		If the system boots to Idle, install a different DIMM in J11 and reboot the system. Continue to install a different DIMM in the socket and reboot the system until the system fails to reach Idle. The last DIMM that you installed may be faulty and should be replaced.
		<b>NOTE:</b> If the system fails to reach Idle with each DIMM installed in J11, the DIMM socket may be faulty and you may need to replace the motherboard.
		<ol> <li>If the problem persists after replacing the DIMMs, you may need to replace the motherboard (see page 75).</li> </ol>

Symptom	Possible cause	Suggested action
	Printing (cont	inued)
Color quality is not consistent.	Problem with the copier	Test the copier and service, if necessary (see copier service documentation).
	File or application problem	<ol> <li>Print the imagePRESS Server Test Page (see page 49).</li> <li>If the quality of the Test Page is good, there may be a file or an application problem.</li> </ol>
	Out of calibration or calibration information/curves on the active partition are corrupted.	<ol> <li>Start Command WorkStation, click the Calibrate icon in the toolbar. Click Restore Device in the Calibrator window, and then click OK.</li> </ol>
	(Possible causes continue on the next page)	Restore Device restores the currently selected imagePRESS Server calibration set to factory defaults.
	P5-7	If restoring default calibration does not solve the problem, you may need to service the copier.
		<ol> <li>If restoring default calibration fixes the color quality, the custom calibration may have been the cause of the problem. Request that the site administrator recalibrate the imagePRESS Server (for details, see Color Printing on the User Documentation CD and any additional calibration documentation for the imagePRESS Server).</li> </ol>
		<ol><li>If the problem persists after recalibration, the calibration information on the HDD may be corrupt. Reinstall the system software.</li></ol>
		4. If the problem persists, check for a faulty HDD.
		<b>NOTE:</b> To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.
		Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.
		If "No device detected" appears next to:  – Port-01, the 250GB HDD in the top slot of the chassis may be faulty.
		<ul> <li>Port-02, the 500GB HDD in the middle slot may be faulty.</li> </ul>
		<ul> <li>Port-03, the 500GB HDD in the bottom slot may be faulty.</li> </ul>
		Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

Symptom	Possible cause	Suggested action
	Printing (contin	ued)
Color quality is not consistent.	Loose or faulty cable connections, or problem with the copier interface boards	<ol> <li>Recheck the copier interface cables and connections at the back of imagePRESS Server and the copier (see page 36).</li> </ol>
(Continued from the previous page)		2. Reboot the imagePRESS Server.
		3. Run the Video Diagnostic (see page 172).
		<ul> <li>If the test fails, follow the suggested actions on page 172.</li> </ul>
		<ul> <li>If the test passes, continue with the suggested actions below.</li> </ul>
		4. Reinstall system software.
		5. Replace the copier interface cables one by one.
		6. Replace the copier interface board.
		7. Replace the motherboard.

Symptom	Possible cause	Suggested action
	Printing (contin	nued)
Print quality is poor.	Missing or outdated printer description file	Make sure that the appropriate printer description file is installed.
	Application cannot find the appropriate printer description file	For information on printer files, see <i>Printing</i> on the User Documentation CD.
	Problem with the copier	Test the copier and service, if necessary (see copier service documentation).
	Out of calibration or calibration information/curves on the active partition are corrupted	<ol> <li>Start Command WorkStation, click the Calibrate icon in the toolbar. Click Restore Device in the Calibrator window, and then click OK.</li> </ol>
	(Possible causes continue on the next	Restore Device restores the currently selected imagePRESS Server calibration set to factory defaults.
	page)	If restoring default calibration does not solve the problem, you may need to service the copier.
		2. If restoring default calibration fixes the color quality, the custom calibration may have been the cause of the problem. Request that the site administrator recalibrate the imagePRESS Server (for details, see <i>Color Printing</i> on the User Documentation CD and any additional calibration documentation for the imagePRESS Server).
		3. If the problem persists after recalibration, the calibration information on the HDD may be corrupt. Reinstall the system software.
		4. If the problem persists, check for a faulty HDD.
		<b>NOTE:</b> To troubleshoot the HDDs, connect a monitor, keyboard, and mouse to the imagePRESS Server.
		Reboot the system. At the Serial ATA AHCI BIOS screen on the monitor, wait for the Port-XX displays to appear and press the Pause/Break key. If a HDD description appears next to the Port-01, Port-02, and Port-03 entries, all three HDDs are good.
		If "No device detected" appears next to:
		<ul> <li>Port-01, the 250GB HDD in the top slot of the chassis may be faulty.</li> </ul>
		– Port-02, the middle 500GB HDD may be faulty.
		- Port-03, the bottom 500GB HDD may be faulty.
		Replace the SATA data cable to the suspected faulty drive. If the problem persists, replace the faulty drive.

Symptom	Possible cause	Suggested action
	Printing (contin	ued)
Print quality is poor.  (Continued from the previous page)	Loose or faulty cable connections, or problem with the copier interface board	<ol> <li>Recheck the copier interface cables and connections at the back of imagePRESS Server and the copier (see page 36).</li> <li>Reboot the imagePRESS Server.</li> </ol>
		<ul> <li>3. Run the Video Diagnostic (see page 172).</li> <li>If the test fails, follow the suggested actions on page 172.</li> <li>If the test passes, continue with the suggested actions below.</li> </ul>
		<ul><li>4. Reinstall system software.</li><li>5. Replace the copier interface cables one by one.</li><li>6. Replace the copier interface board.</li><li>7. Replace the motherboard.</li></ul>

Symptom	Possible cause	Suggested action
	Printing (contin	ued)
Pages come out blank or tinted with a color.	Loose cable connection between the imagePRESS Server and the copier	<ol> <li>Recheck the copier interface cables and connections at the back of imagePRESS Server and the copier (see page 36).</li> <li>Reboot the imagePRESS Server.</li> </ol>
	Problem with the copier	Test the copier and service, if necessary (see copier service documentation).
	Loose or faulty cable connections, or problem with the copier interface boards	<ol> <li>Recheck the copier interface cables and connections at the back of imagePRESS Server and the copier (see page 36).</li> </ol>
		2. Reboot the imagePRESS Server.
		<ol> <li>Run the Video Diagnostic (see page 172).</li> <li>If the test fails, follow the suggested actions on page 172.</li> <li>If the test passes, continue with the suggested actions below.</li> <li>Reinstall system software.</li> <li>Replace the copier interface cables one by one.</li> <li>Replace the motherboard.</li> </ol>

If the user can print the imagePRESS Server Test Page but cannot print a job from a computer on the network, request that the network administrator do the following:

- Check all components of the network, including cables, connectors, terminators, network adapter boards, and network drivers.
- Activate the network and use it to communicate with other printers.
- Check the corrective actions listed in the user documentation on the User Documentation CD.
- Confirm that the applicable network settings in Setup (such as AppleTalk zone, IP address, Subnet mask, and Gateway address) match the settings used in the network.

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

### Clearing the CMOS

Use the following procedure to clear the CMOS for the imagePRESS Server, when suggested as a troubleshooting action.

#### TO CLEAR THE CMOS

- 1. Make sure the imagePRESS Server is powered off, and remove the power cable from the system.
- 2. Access and open the imagePRESS Server (see page 59).
- 3. Remove the battery from the motherboard (see page 96).

Set aside the battery so that you can replace it later.

- 4. Wait two full minutes.
- 5. Reinstall the battery (see page 96).
- 6. Reassemble the imagePRESS Server (see page 130).
- 7. Reconnect the power cable to the imagePRESS Server.
- 8. Power on the imagePRESS Server, and configure the date and time in Setup.

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

### **Diagnostic tools**

Additional diagnostic tools are available through the imagePRESS Server Functions menu on the copier touch panel. These tools include Video Diagnostics and Test E-mail.

### **Video Diagnostics**

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

#### TO RUN VIDEO DIAGNOSTICS



- 1. On the copier touch panel, touch the arrow button.
- 2. Touch the Printer button.
- 3. Touch the Printer Status/Settings button.
- 4. Touch the Functions button.
- 5. Touch Run Diagnostics, and then touch Video Diagnostics.

If the screen displays the message "Video diags passed," the copier interface board is installed properly.

- 6. If the screen displays the message "Video diags failed," then:
  - Power off the imagePRESS Server and open the system (see page 59).
  - Reseat the copier interface board and reassemble the system (see page 67).
  - Power on the imagePRESS Server and run the test again. If the test still fails, you may need to replace the copier interface board.

#### Test E-mail

Test E-mail allows you to perform a quick test of the imagePRESS Server E-mail feature without actually having to scan a document off the copier glass and e-mail it over the network. The test causes the system to send an e-mail to itself. You review the results of the test by printing the E-mail Log.

#### TO RUN TEST E-MAIL



- 1. On the copier touch panel, touch the arrow button.
- 2. Touch the Printer button.
- 3. Touch the Printer Status/Settings button.
- 4. Touch the Functions button.
- 5. Touch Run Diagnostics, and then touch Test E-mail.

The screen displays the message "Sending Test e-mail. See E-mail Log for results."

- 6. Return to the Functions menu.
- 7. Touch Print Pages, and then touch E-mail Log.

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

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

A successful transmission indicates that the imagePRESS Server is capable of sending an email over the network. A failed transmission indicates a problem with the imagePRESS Server setup options. Have the network administrator confirm setup options (see *Configuration and Setup* on the User Documentation CD).

Specifications 174

### **SPECIFICATIONS**

This chapter provides an overview of imagePRESS Server features.

#### **Hardware features**

- Two quad-core Intel Xeon 2.8GHz CPUs
- Memory—4GB
- RJ-45 connector for 10Mbps, 100Mbps, or 1000Mbps connectivity over twisted pair cable
- One 250GB and two 500GB HDDs
- Built-in DVD-RW drive

## **Physical specifications**

- Operating Environment: Temperature: +5°C to +40°C Relative Humidity: 10%-85% (non-condensing)
- Power Supply Rating: 100-240V, 50-60Hz, 5A
- Power Supply Voltage Input: 100-240V, 50-60Hz
- Power Supply Current Input: 100V @ 8A Max.; 240V @ 4A Max.
- Rated Power Consumption: 500W
- Dimensions (Depth x Width x Height):
   58.8 cm (23.17 in.) x 21.2 cm (8.36 in.) x 57.6 cm (22.7 in.)
- Weight: 30.35 kg (66.90 lb)

### **Networking and connectivity**

- Supports AppleTalk and TCP/IP protocols simultaneously
- Supports EtherTalk Phase 2
- RJ-45 Ethernet connector that supports 10BaseT/100BaseTX/1000BaseT twisted pair network connectivity

SPECIFICATIONS 175

### **User software**

Installers for the imagePRESS Server user software are located on the User Software DVD and on the imagePRESS Server hard disk in e:\efi\user\_sw. A complete description of the software is provided in *Welcome* (located on the User Documentation CD). For optimal imagePRESS Server performance, current versions of the user software should be maintained on every network computer that might print to the imagePRESS Server.

### Safety and emissions compliance

The imagePRESS Server has been certified to meet the Restriction of Hazardous Substances Directive (RoHS). In addition, it meets or surpass the following government standards:

Safety approvals	EMI approvals
• UL 60950-1: 2007 (TUV/CU mark)	• FCC Class B
• CAN/CSA-C22.2 No. 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 and A2:2003
• CB scheme IEC 60950-1: 2005 (2nd edition)	• AS/NZS CISPR22: 2006 Class B

## SERVICING A SYSTEM 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 you perform most service procedures.

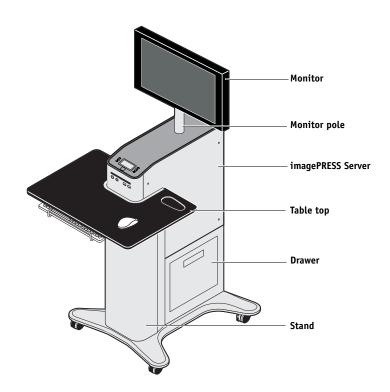


FIGURE 1: imagePRESS Server installed on the furniture

#### REMOVING THE IMAGEPRESS SERVER FROM THE FURNITURE

- 1. Make sure that the imagePRESS Server is powered off 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

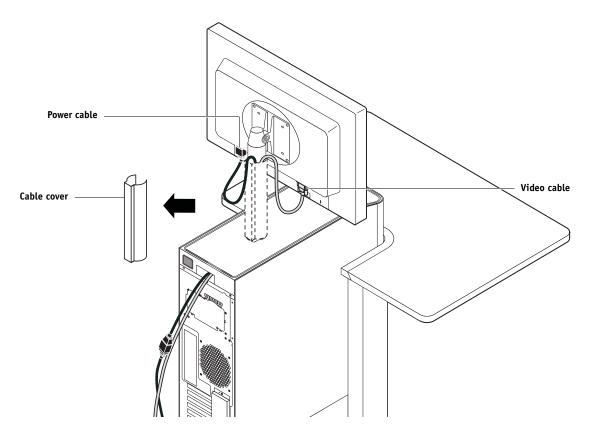


FIGURE 2: Removing the cable cover and monitor cables



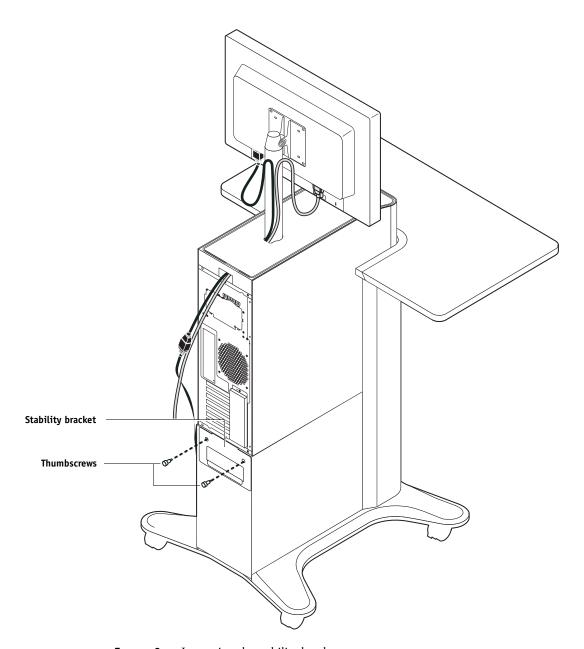


FIGURE 3: Loosening the stability bracket

### 4. Lift the bracket and gently pull the Fiery 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 panel (three screws) so that you can access the monitor pole tightening mechanism.

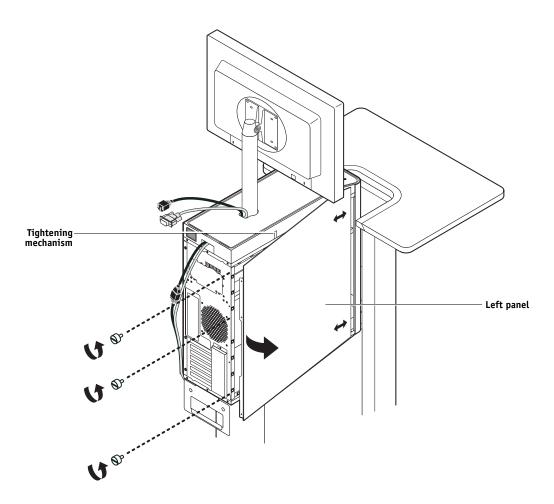


FIGURE 4: Removing the left panel

# 6. Use the 5mm Allen key to loosen the screw that secures the monitor pole to the imagePRESS Server.

The 5mm Allen key should be stored in the side drawer of the furniture.

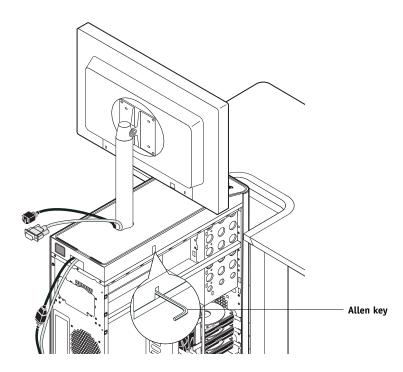
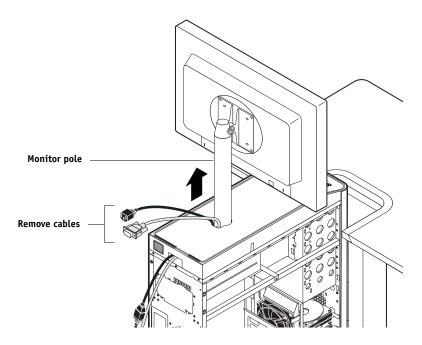


FIGURE 5: Loosening the monitor pole

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



**FIGURE 6:** Removing the monitor pole assembly

8. Remove the monitor cables from the imagePRESS Server and continue with the instructions in "To open the imagePRESS Server" on page 61.

## 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. Feed the monitor cables (power and video) into the access cutout in the back of the imagePRESS Server. Pull each cable out of the top of the imagePRESS Server.

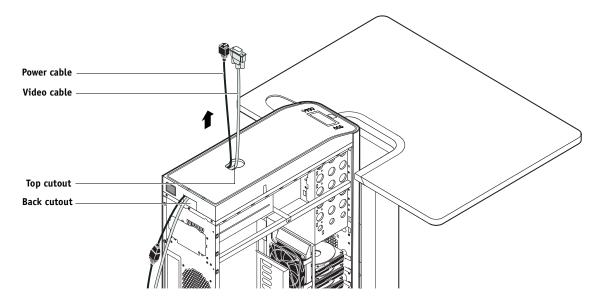


FIGURE 7: Routing the cables through the access cutout

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 5mm Allen key.

Store the 5mm Allen key in the side drawer of the furniture.

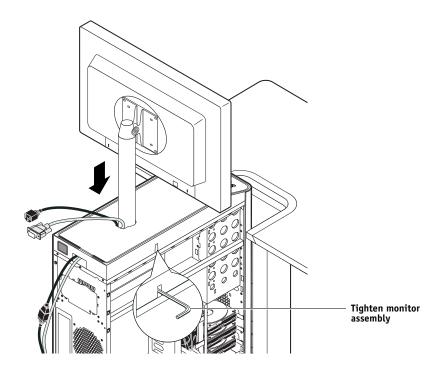


FIGURE 8: Tightening the monitor pole assembly

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

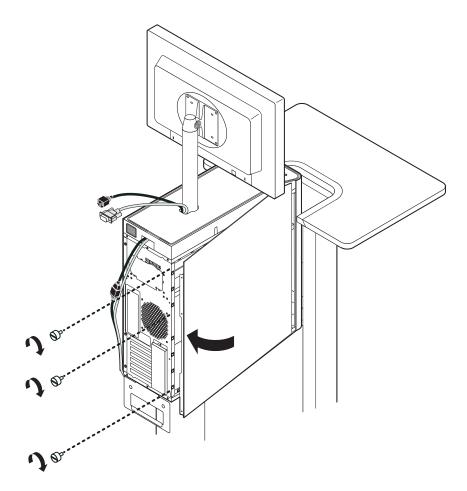


FIGURE 9: Installing the left panel

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.

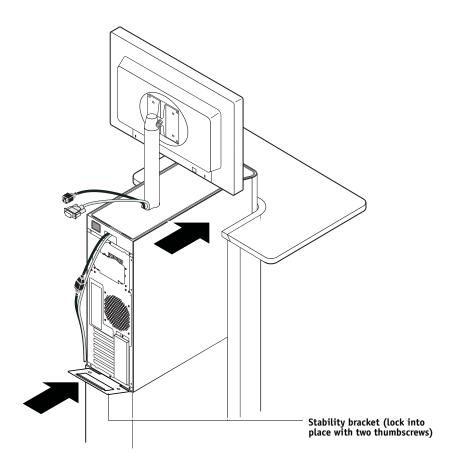


FIGURE 10: Locking the stability bracket

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.

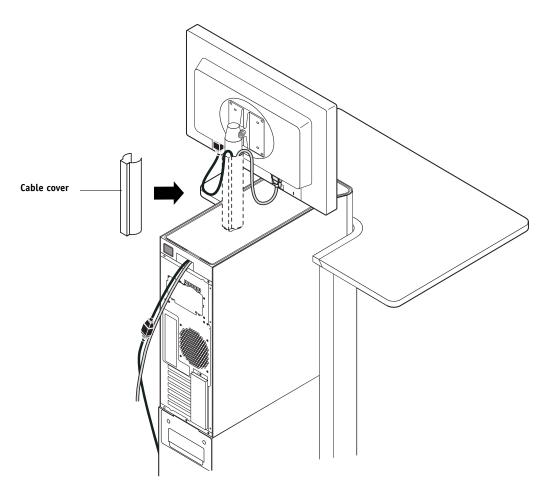


FIGURE 11: Installing the cable cover

9. Replace the Allen key in the furniture drawer and continue with the instructions for reassembling the imagePRESS Server on page 130.

## **INDEX**

Numerics	<b>C</b> cables
1 file(s) copied 160	
A	AC power 33, 34 checking 141
Acrobat/PitStop media 11	Command/Status 33, 34, 38, 39
activity light 44, 45, 71	copier interface 34, 37, 38
administrator 14	CPU fan 58
AppleTalk 23	crossover Ethernet 34, 39, 40
archiving jobs 132	DVD drive 57, 127
AutoCal Grayscale 11	front fan 58
	front USB port 57, 127
В	HDD 57
back fan	keyboard 36
removing 111	monitor 36, 177, 182
replacing 112	mouse 36
back panel	network 33, 34, 40
bracket cover plate 54, 68, 69, 141	power button 57, 127
connectors 54, 55, 141	power supply 58, 117
slot assignments on 55	reset button 57, 127
battery 96, 157	ribbon 57, 127
motherboard location of 76	SATA 57
beep codes 149	speaker 57, 127
BIOS chip 83, 84	straight-through Ethernet 40
boards	UIB 57
copier interface 24, 67	unpacking 33
graphics 69	Calibration command 48
motherboard 75	Canon Software for Service Technician 133
user interface 71	Canon Utility CD 11
boxes, unpacking 32	CD, see media pack
bracket	checking
front fan 109	cables 141
furniture 178, 185	errors 149
hard disk drive 121, 122	internal components 142
stability 178, 185	power & cable message 159
bracket cover plate 54, 68, 69, 141	checklist for service calls 29, 43
buttons	Clear Server command 47
down 44, 45, 71	clearing the CMOS 98, 101, 106, 156, 171
line selection 44, 45, 54, 71	clock 157
menu 44, 45, 71	closing the system 130
UIB, replacing 73	

up 44, 45, 71

CMOS, clearing	D
98, 101, 106, 156, 171	diagnostics
color calibration 48	beep codes 149
Color Charts 46	copier interface board 48, 172
ColorCal 48	error messages 95, 149, 160–161
ColorWise 23	network 162
Command/Status cable 34, 38, 39	printing 163–170
component sled 125	startup 150–156
components	system problems 157–159
checking 142	Test E-mail 48, 173
exploded view of 56	Video Diagnostics 48, 172
Configuration page 46, 49, 132	DIMMs
connections	beep code for 149
Command/Status 38, 39	configurations 24, 99
copier interface 37, 38	removing and replacing 101
connectors	transfer of 83
back panel 54, 55, 141	display window 15
Command/Status 38	documentation 12, 33
copier interface 37, 38, 55	dongle
motherboard 55, 76	error message about 95
network 40	SeeQuence Suite 34, 36
Control Panel	service 87
activity light 44, 45	single-use 87
buttons 44, 45, 71	transferring options (motherboard
commands 45	replacement) 90
defined 15	dongle information 93, 94
using 44	down button 44, 45, 71
copier interface board 24	drives
diagnostics 48, 172	DVD 128
diagram of 67	hard disk 118-123
removing 68	dual-core CPU 24
replacing 68	DVD drive 15
copier interface cable 34, 37, 38	cables 57, 117, 127
copier touch panel 46	ejecting media from 45
cover plate 54, 68, 69, 141	removing 128
CPU 24, 103–106	replacing 129
diagram of assembly 102	DVD, see media pack
dual-core 24	г
fan cables 58	E I CD/DVD 1/5
quad-core 24	Eject CD/DVD command 45
removing 103	E-Mail Log 46
replacing 105	e-mail printing 23
transfer of 83	testing 48, 173
crossover Ethernet cable 40	EMI approvals 175
customer site checklist 29	

Enclosure, for HDD 123	Font List 46
EPS files 26	fonts 23, 132
errors	front fan
beep codes 149	mounting bracket 109
check power & cable 159	removing 108
Fatal error 95	replacing 110
Fiery Options Utility 95	front panel 54, 141
Invalid dongle found 95	removing and replacing 63
More than one dongle found 95	FTP Log 46
network 162	functional diagram 25
No dongle found 95	Functions button 46
No upgrade can be done 95	furniture 176–186
No uses remaining 95	_
printing 163–170	G
shutdown 157	graphics board 69, 145
startup 150–156	Grayscale strip 11
system problems 157–159	grounding strap 22
transferring options 95	
Unable to detect video boards 136	H
Unknown platform 161	hard disk drives 118–122
Used Dongle 161	cable 117
Wrong/Missing dongle 161	description 118
ESD (electrostatic discharge)	firmware update 123
safety precautions 19	mounting screws 122
wrist grounding strap 22	numbering 119
Ethernet cable 40	proper handling 118
exploded view 56	removing 120
_	replacing 83, 122
<b>F</b>	security Enclosure 123 hard reset 47
faceplate 63, 64	
fans	HDD Security Option 123
back fan 111	I
CPU 58, 102	Interface Board Kit 33
front fan 58, 108	Invalid dongle found 95
Fatal error 95	IP address 20
Feature Update CD 90	IP Address command 45
Feature Update DVD 11	IPP 23
ferrite 117, 124, 127	
Fiery Clone Tool DVD 11, 33 Fiery Options Utility DVD 90–94	J
• •	Job Log 46
Fiery pages 49 Fiery Scan 23	printing 46
Fiery.1 password 92	job log 132
firmware update 123	jobs
flathead screwdriver 22	clearing 47
national selection 22	jobs, archiving 132
	jumpers on motherboard 77

L	networks
LAN (local area network) 20	checklist 30
LCD 15, 17, 44	connecting 40
LED 44, 45, 71	precautions 20
left panel 61, 179, 184	supported 23, 24, 174
line selection buttons 44, 45, 54, 71	No dongle found 95
Log On to Windows password 92	No upgrade can be done 95
	No uses remaining 95
М	_
magnetic tools 22	0
magnetic warning 22	One of the disks is bad 161
media pack 11, 33, 34	opening the system 61
System Software DVDs 132	Operator Maintenance Assistance Software 133
media, ejecting 45	options transfer, to new motherboard 90
memory configurations 24, 99	D.
menu button 44, 45, 71	P .
monitor	panels
cables 177, 182	faceplate 63, 64
pole 179, 180, 183	front panel 63
More than one dongle found 95	left panel 61, 179, 184
motherboard	order of removal 61
battery on 76, 96	plug 65
connectors on 55, 76	top panel 65
description of 75	parts, exploded view of 56
DIMMs on 99, 101	password
illustration of 76	Windows 92
installation of 84	PCI-E1 x8 76
jumpers 77	PCI-E2 x8 70, 76
mounting screws for 76	Phillips head screwdriver 22
new 83, 87	plug 65
removal of 78–79	Portable Document Format (PDF) 23, 26
snap top standoffs on 82	PostScript 23, 26
transferring options to 90	power
verification of 87	cable 34
verifying transferred	precautions 30
options 93, 94	power button 45, 54
viewing dongle	cable 57, 127
information 93, 94	removing 124
	replacing 126
N	power supply
NetWise 23, 26	cables 58, 117
network administrator 14, 27, 31	removing 115
network cable 34, 40	replacing 117
network problems 162	voltages 114

precautions 17, 22	SeeQuence Suite 33, 36
Print Pages command 46	server information 93, 94
Printer button 46	service bulletins 22
Printer Status/Settings 46	service calls
printing	checklist 29, 43
Color Charts 46	tools required 22
Configuration page 46, 49	service dongle 87, 90
E-Mail Log 46	Service Mode 87
Font List 46	service procedures, overview 53
FTP Log 46	service technician 14
options 26	Setup options 47
pages 46	restoring 137
print engine test page 29	Setup options, recording 132
Test Page 46	shutting down 45, 47, 51, 59
USB device files 47	single-use dongle 87
printing problems 163–170	sled 125
	slot assignments 55, 76
Q	snap top standoffs 82
quad-core CPU 24	soft reset 47
	software
R	system 11, 83, 133-137
reassembling the system 130	user 14, 31, 133, 175
rebooting system 47, 52	space requirements 29
Release Notes 11	speaker
reset	cable 57, 127
hard 47	removing 124
soft 47	replacing 126
reset button 45, 51, 54	specifications 174
cable 57, 127	startup problems 150–156
removing 124	startup procedure 51
replacing 126	startup sequence 148
restarting server 45, 47, 52	straight-through Ethernet cable 40
Resume Printing command 47	Suspend Printing command 47
Run Diagnostics command 48, 172	switch bank assembly 124
Run Setup command 47	cables 57
£	removing 124
\$	replacing 126
safety approvals 175	system problems 157–159
Scan Job command 47	system software 11, 83
scanning jobs 23, 47	defined 15
screwdriver	description of media 133
flathead 22	installation of 133-137
Phillips 22 Source Frace Administration Cuide 11	updates 48
Secure Erase Administration Guide 11	System Software DVD 133
security Enclosure 123	system updates 138
	System Updates command 48
	-

T	W
Tag 1 24	Welcome documentation 11
TCP/IP 23	Windows XP Pro FES
technician-related software 11, 133, 137	documentation scope 12
terminology 11, 14, 53	installation media 15
Test E-mail diagnostics 48, 173	wrist grounding strap 22
Test Page, print engine 29	Wrong/Missing dongle 161
Test Page, server 46, 49	
thermal compound 84, 106	
TIFF 26	
tools required for service/installation 22	
top panel, removing and replacing 65	
touch panel 46	
transferring options to the motherboard 90	
Tray Alignment command 48	
U	
Unable to detect video boards 136	
Unknown platform 161	
unpacking 32 up button 44, 45, 71	
updating software 138	
USB Media Server command 47	
Used Dongle 161	
User Documentation CD 11, 175	
user interface board (UIB)	
activity light 71	
buttons, replacing 73	
description 71	
display window 71	
line selection buttons 71	
menu button 71	
removing 72	
replacing 73	
up/down buttons 71	
user software 14, 31, 133, 175	
User Software DVD 11, 175	
V	
verifying the motherboard installation 87	
verifying transferred options 93, 94	
Video Diagnostics 48, 172	
viewing dongle and server information 93, 94	
voltages, power supply 114	