



Printer Controller EB-1357

Installation and Service Guide

A guide for service technicians



efi™ print to win.

Part Number: 45076605
14 July 2009

© 2009 Electronics for Imaging, Inc.

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

CONTENTS

PREFACE	9
EB-1357 customer media pack	9
About the documentation	10
Service documentation	10
Customer documentation	10
About this guide	11
About the illustrations in this guide	11
Terminology and conventions	12
Precautions	14
Creating an ESD safe environment	16
Tools you will need	18
INTRODUCTION	19
Features	19
How the EB-1357 operates	20
INSTALLATION	22
Installation sequence	22
Checking the customer site	24
Setting customer expectations	25
Unpacking the EB-1357	26
Connecting the EB-1357	28
Completing installation and starting up	32

USING THE EB-1357	33
Overview	33
Using the EB-1357 Control Panel	33
Activity light	34
Buttons	34
EB-1357 Control Panel Functions menu	35
Using the copier display panel	36
Main tab	36
Job List tab	37
Tools tab	37
Scan tab	37
Fiery tab	38
Network Status LEDs	39
Starting, shutting down, restarting, and rebooting	40
SERVICE PROCEDURES	42
Overview	42
EB-1357 overview diagrams	43
Accessing internal components	47
Shutting down the system	47
Opening the EB-1357	49
Removing and replacing boards	53
Video board	53
User Interface Board	55

Motherboard	57
Removing the motherboard	57
Replacing the motherboard	61
Verifying new motherboard installation and transferring options	66
Replacing parts on the motherboard	73
DIMM(s)	73
CPU and CPU cooling assembly	75
Battery	81
Clearing the CMOS	83
Jumpers	83
Chassis fan	84
Power supply	85
Hard disk drive	88
DVD drive	92
Restoring and verifying functionality after service	95

SYSTEM AND USER SOFTWARE 96

Overview	96
Before you install system software	96
Installing system and user software	98
Backing up and restoring the EB-1357 Setup Configuration	101
Updating EB-1357 system and user software	102
Before updating the EB-1357	102
System Updates	103
Check for Product Updates (Software Downloads Site)	109

TROUBLESHOOTING	111
Troubleshooting process	111
Preliminary on-site checkout	112
Checking external connections	113
Checking internal components	114
Inspecting the system	115
Normal startup sequence	120
Error messages and conditions	121
Diagnostic tools	134
Video board diagnostics	134
Test E-mail	135
SPECIFICATIONS	136
Hardware features	136
Physical specifications	136
Networking and connectivity	137
User software	137
Safety and emissions compliance	137
INDEX	139

LIST OF FIGURES

FIGURE 1: Printing system	19
FIGURE 2: EB-1357 functional diagram	21
FIGURE 3: Summary of installation steps and references	23
FIGURE 4: EB-1357 shipping contents	27
FIGURE 5: EB-1357 connections	28
FIGURE 6: Copier and EB-1357 cable connection	30
FIGURE 7: Straight-through and crossover Ethernet cables	31
FIGURE 8: EB-1357 Control Panel	33
FIGURE 9: Front and back panels	43
FIGURE 10: Back panel and internal side view	44
FIGURE 11: Exploded view of EB-1357 components	45
FIGURE 12: Data and power cable connections in the EB-1357	46
FIGURE 13: Removing/replacing the side panel	50
FIGURE 14: Removing/replacing the top panel	51
FIGURE 15: Removing/replacing the front panel	52
FIGURE 16: Diagram of the video board	53
FIGURE 17: Diagram of the User Interface Board (front and back)	55
FIGURE 18: Removing/replacing the User Interface Board	56
FIGURE 19: Diagram of the EB-1357 motherboard	58
FIGURE 20: Removing the motherboard	60
FIGURE 21: Connecting the dongle to a USB port	67
FIGURE 22: Standard DIMM configuration	73
FIGURE 23: Removing or replacing a DIMM	74

FIGURE 24: CPU cooling assembly	75
FIGURE 25: Removing/replacing the CPU mounting bracket	77
FIGURE 26: Removing/replacing the CPU fan guard	77
FIGURE 27: Removing/replacing a CPU	78
FIGURE 28: Motherboard battery	82
FIGURE 29: Removing/replacing the chassis fan	84
FIGURE 30: Removing/replacing the power supply	86
FIGURE 31: Removing/replacing the HDD bracket	89
FIGURE 32: Removing/replacing the HDD from the HDD bracket	90
FIGURE 33: EB-1357 DVD drive	92
FIGURE 34: Removing/replacing the DVD drive bracket	93
FIGURE 35: Removing/replacing the DVD drive	94
FIGURE 36: Troubleshooting the system	111
FIGURE 37: EB-1357 external cable connections	113
FIGURE 38: Normal startup sequence	120

PREFACE

The *Installation and Service Guide* is intended for authorized Printer Controller EB-1357 and copier service technicians installing or servicing the Printer Controller EB-1357. If you are not an authorized service technician, do not attempt to install or service the Printer Controller EB-1357. Electronics for Imaging, Inc. does not warrant the performance of the Printer Controller EB-1357 if it is installed or serviced by non-authorized personnel.

NOTE: The term “EB-1357” is used throughout this guide to refer to the Printer Controller EB-1357. The term “copier” is used to refer to the Copier Main Unit.

EB-1357 customer media pack

The EB-1357 customer media pack contains the following:

- System Software media (includes the Microsoft Windows XPe OS and the Fiery Server Software; for service use only)
- User Software media
- Fiery Options Utility
- Printed *Welcome* document
- Printed *Secure Erase Administration Guide*
- Printed *Release Notes*
- Other documentation

About the documentation

The documentation for the EB-1357 is described in the following sections.

Service documentation

The scope of the *Installation and Service Guide* is limited to describing how to install EB-1357 hardware and system software and how to service and troubleshoot the EB-1357. The [Troubleshooting](#) chapter focuses on individual hardware components of the EB-1357 hardware, as well as the EB-1357 connection to the network and the copier.

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

For details on the content, terminology, and conventions of this guide, see the sections beginning on [page 11](#).

Customer documentation

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

Service technicians can obtain user documentation from the User Documentation CD. Client users can obtain user documentation by using a Web browser to download documentation files from the EB-1357. The documents are provided as Adobe Acrobat PDF (Portable Document Format) files, which are indexed and cross-referenced. In addition, some EB-1357 utilities (such as Command WorkStation) offer built-in Help.

For a complete description of the EB-1357 user documentation, see *Welcome* on the User Documentation CD.

About this guide

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

- [Preface](#)
General information, including a list of precautions.
- [Introduction](#)
General description of the EB-1357.
- [Installation](#)
Checking the customer site and unpacking the EB-1357; installing and connecting the EB-1357.
- [Using the EB-1357](#)
Overview of the EB-1357 functions and user interfaces; printing system pages; shutting down and restarting the EB-1357.
- [Service Procedures](#)
Removal and replacement procedures for EB-1357 components; restoring and verifying functionality.
- [System and User software](#)
Overview of the system and user software; installing system and user software; backing-up and restoring configuration settings; updating system and user software.
- [Troubleshooting](#)
Common problems and ways of correcting them; startup error messages; general system error conditions.
- [Specifications](#)
EB-1357 specifications.

NOTE: The EB-1357 *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 EB-1357.

About the illustrations in this guide

Illustrations reflect the current shipping version of the EB-1357 at the time of publication. Components shown in these illustrations are subject to change. To receive information about any EB-1357 components that do not match the illustrations in this guide, contact your authorized service/support center.

Terminology and conventions

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

Service technician

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

- Ensuring that the customer site has an appropriate electrical outlet and sufficient physical space for the EB-1357
- Unpacking the EB-1357
- Installing and connecting the EB-1357

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

- Servicing the EB-1357 components
- Installing system and user software on the EB-1357

Network administrator

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

- Verifying that the customer site is network-ready
- Configuring EB-1357 Network Setup options
- Configuring the connection between the EB-1357 and the Command WorkStation application installed on the EB-1357
- Installing the user software shipped with the EB-1357 onto the networked Windows and Mac OS computers that will print to the EB-1357
- Configuring the connection between each remote computer and the EB-1357

EB-1357 components

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

The term “Control Panel” refers to the area on the front of the EB-1357 including the green/red activity light, the display window (LCD—liquid crystal display), and the buttons to the left and right of the display window.

The term “LCD” refers to the display window of the EB-1357 Control Panel.

The term “monitor” refers to the EB-1357 optional flat panel monitor.

The term “DVD drive” (Digital Versatile Disk drive) refers to the EB-1357 DVD drive.

The term “system software” refers to the following software installed on the EB-1357 HDD (hard disk drive):

- Windows XP® OS Workstation and EB-1357 Server Software (System Software DVD)
- User Software (User Software DVD)

For other terms used to identify components of the EB-1357, see the reference key in [Figure 11](#) on page 45.

Connectors and components labeled “not used”

Connectors and components labeled “not used” are disabled or are not used in the standard EB-1357 configuration.

Document conventions

References to EB-1357 user documentation, such as *Configuration and Setup*, are displayed in italics. The user documentation files are installed from the User Documentation CD.

NOTE: The note format highlights important messages and additional information.



The warning icon indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.



The caution icon indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to equipment.

Precautions



Always observe the following general precautions when installing and servicing the EB-1357:

- **Avoid pressing the surface of the LCD.**

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

- **Use a soft cloth moistened with Lens and Mirror Cleaner to clean the surface of the EB-1357 display window.**

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

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

AVVERTENZA: Il server di stampa non deve essere mai sollevato afferrandolo dal pannello superiore, in quanto quest'ultimo non può sostenere il peso dell'intero sistema.

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

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

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

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

- **When connecting or disconnecting the power cord:**
 - *Only use* the power cord that shipped with the EB-1357 or an appropriate replacement power cord available from an authorized provider.
 - *Always* disconnect the power cord from the EB-1357 back panel before opening the unit and servicing internal components.
 - *Do not* pull on the power cord when unplugging the EB-1357. Pull the plug instead.
 - *Do not* place objects on the power cord. Place the power cord away from foot traffic.
 - *Do not* tamper with or disable the power cord grounding plug.
 - *Do not* use a 3-prong adapter in a 2-hole ungrounded outlet.
 - *Do not* use an extension cord.
 - *Do not* plug the EB-1357 into a circuit with heating or refrigeration equipment (including water dispensers).
 - *Do not* plug the EB-1357 into a switchable power outlet. This can result in the EB-1357 being turned off accidentally.
- **Never set any liquid on or near the EB-1357 or copier. If liquid is spilled into the EB-1357 or copier, disconnect the power cord immediately.**
- **Do not attempt to open the power supply, DVD drive, or HDD.**
- **Handle the EB-1357 LCD window with care.**

If the EB-1357 LCD window breaks and the liquid crystal inside leaks out, avoid contact with it. If you come in contact with the liquid crystal, wash it off your skin with soap and water immediately.

- **Use care when handling parts of the EB-1357, as some edges on the unit may be sharp.**
- **Do not install third-party applications onto the EB-1357. Third-party applications are not supported and can cause system problems. Although virus scans are permitted on the EB-1357, virus-protection software should not be loaded in memory-resident mode.**
- **Do not change the Windows XPe preference settings.**

Depending on the changes made, the EB-1357 may become unstable or even unusable. If this occurs, we recommend that you reinstall the EB-1357 System Software, which reliably restores the Windows XPe system to its factory defaults.

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

The EB-1357 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.

- **Unless you are the network administrator, never assign an IP address in EB-1357 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 EB-1357 an incorrect IP address may cause unpredictable errors on any or all devices connected to the network.

Creating an ESD safe environment

- **Follow standard ESD (electrostatic discharge) precautions while working on the internal components of the EB-1357.**

Static is always a concern when servicing electronic devices. It is highly unlikely that the area around the copier and the EB-1357 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 EB-1357 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 EB-1357 panels and handle internal components, touch a metal part of the EB-1357.
- Leave new electronic components inside their antistatic bags until you are ready to install them. When you remove components from an antistatic bag, place them on a grounded antistatic surface, component-side up.
- When you remove an electronic component, place it in an antistatic bag immediately. Do not walk across a carpet or vinyl floor while carrying an unprotected board.
- During service to the motherboard, avoid using excessive force and always place the motherboard on a grounded, nonmetallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.
- **Handle printed circuit boards by their opposing edges only and avoid touching the contacts on the edge of the board.**



Power Supply Cord Notice

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

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

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

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

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

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

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



Lithium Battery Notice

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

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

ATTENTION: Il y a un 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.

WARNING: 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

WARNING: 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 internazionale).

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).

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

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

Tools you will need

To install or service the EB-1357, the following tools and parts are required:

- ESD wrist grounding strap and antistatic mat
- Flathead screwdriver
- #0, #1, and #2 Phillips-head screwdrivers
- Needlenose pliers
- EB-1357 documentation, including the customer media pack and any related service bulletins



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 EB-1357 adds computer connectivity and highly efficient Adobe PostScript 3 printing capability to the copier. It is optimized for high-speed network communications, processing, rasterization, and printing.

Features

The EB-1357, as an integral part of a digital printing system, enables users to:

- Send images over AppleTalk and TCP/IP networks to print on EB-1357 supported devices.
- Spool print jobs and select a printing priority for each job. Users can control spooled print jobs sent to the EB-1357 with remote user software running on networked Windows and Mac OS computers.
- Print grayscale and black-and-white jobs.
- Use the copier as a high-resolution scanner with Fiery Scan software.
- Use 136 resident fonts (126 Adobe Type 1 PostScript and 10 TrueType), plus two 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.

The EB-1357 also supports the Microsoft version of Internet Printing Protocol (IPP) for Windows 2000, Windows XP, Windows Server 2003, Windows Vista, and e-mail printing.

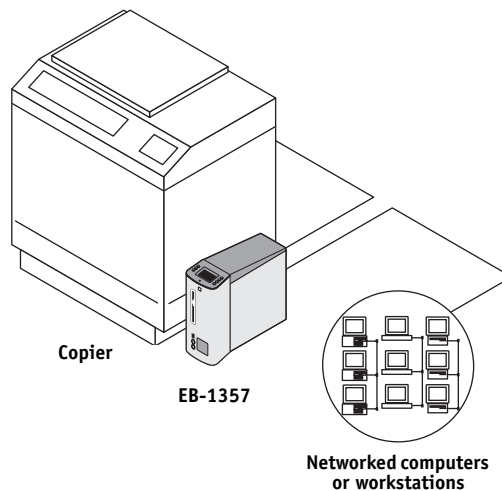


FIGURE 1: Printing system

The EB-1357 is one of several imaging products engineered and manufactured by Electronics for Imaging, Inc.

How the EB-1357 operates

The EB-1357 enables the customer to use the copier as a high-performance, networked PostScript printer and scanner. Users at the customer site can print to the EB-1357 from networked Windows computers, Mac OS computers, and networked UNIX workstations running TCP/IP.

The EB-1357 custom-designed boards and system software provide efficient image processing and printing controls. The main functions of EB-1357 components and software are described in the following paragraphs.

The EB-1357 uses the motherboard and a custom video board to process image data for printing and scanning images.

The motherboard includes an Intel Core Duo Processor T2500 2.0GHz CPU that controls the image data transfer to and from the motherboard and runs the interpreter. The interpreter rasterizes the page description file and compresses the image pattern into memory using compression technology.

The interpreter outputs compressed raster data through the image frame buffer memory to the EB-1357 video board. The video board decompresses the image data and sends it to the copier through a crossover copier interface cable connected to the upper RJ-45 on the EB-1357 back panel. The raster data is supplied to the copier, which then renders the final image on paper at full rated engine speed.

Two 1GB high-speed DIMM (dual in-line memory modules) on the motherboard hold the image data during printing, providing a total of 2GB of memory.

Three external USB ports provide connectivity to a variety of USB devices, such as an optional keyboard, mouse, as well as dongles enabling optional features.

When Fiery Scan uses the copier as a scanner, the EB-1357 acquires image data from the copier, stores it in memory, and transmits it to the computer that requested the scan.

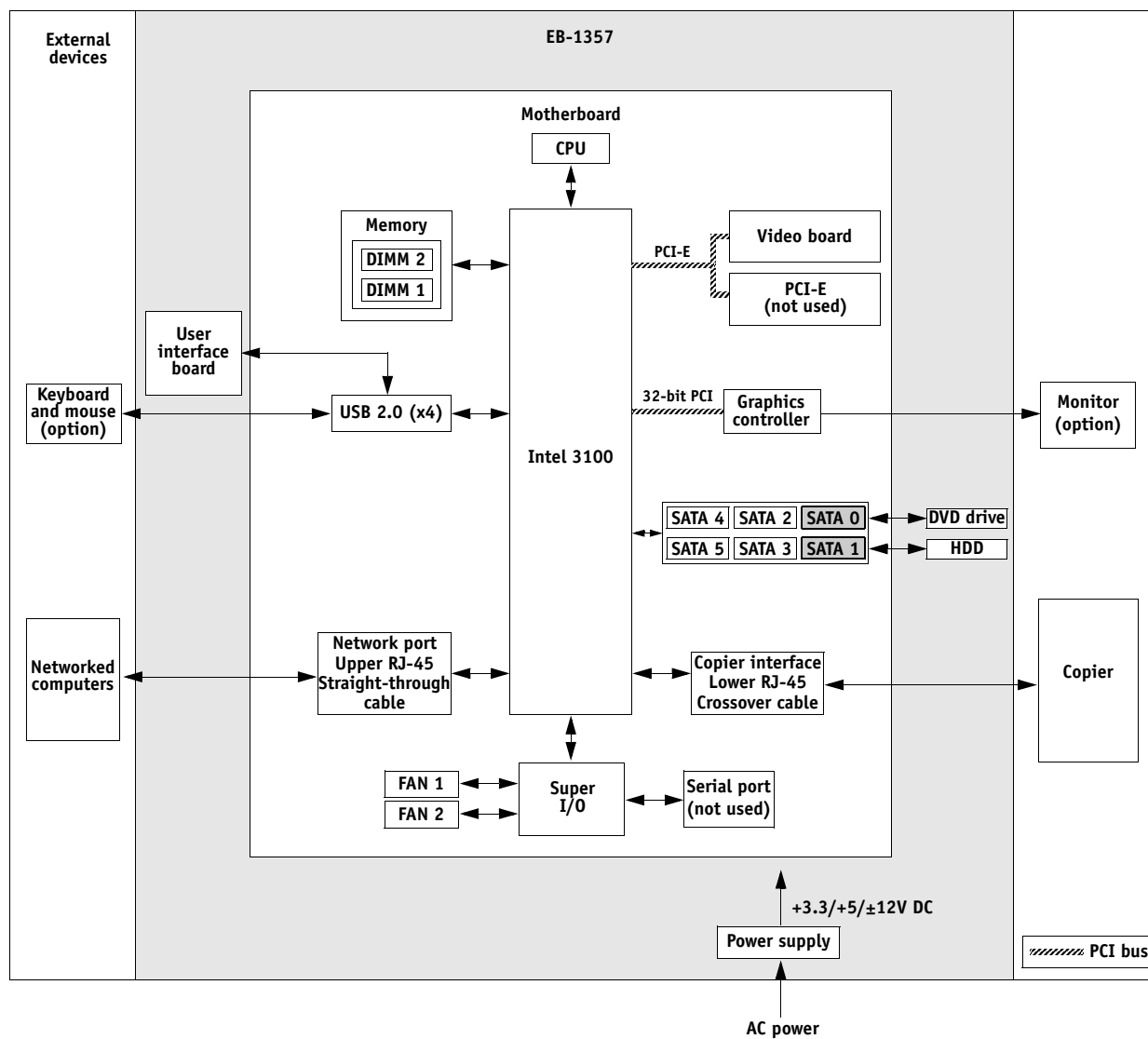


FIGURE 2: EB-1357 functional diagram

INSTALLATION

This chapter includes information about the following:

- Checking the customer site
- Unpacking the EB-1357
- Installing the EB-1357 and connecting it to the copier and the network
- 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 23](#) outlines the recommended installation procedure for connecting the EB-1357 to the copier.

Because the EB-1357 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: If you need to change the default language pre-installed at the factory, you must reinstall system and user software using the system software DVDs. For details, see [“System and User software”](#) on page 96.

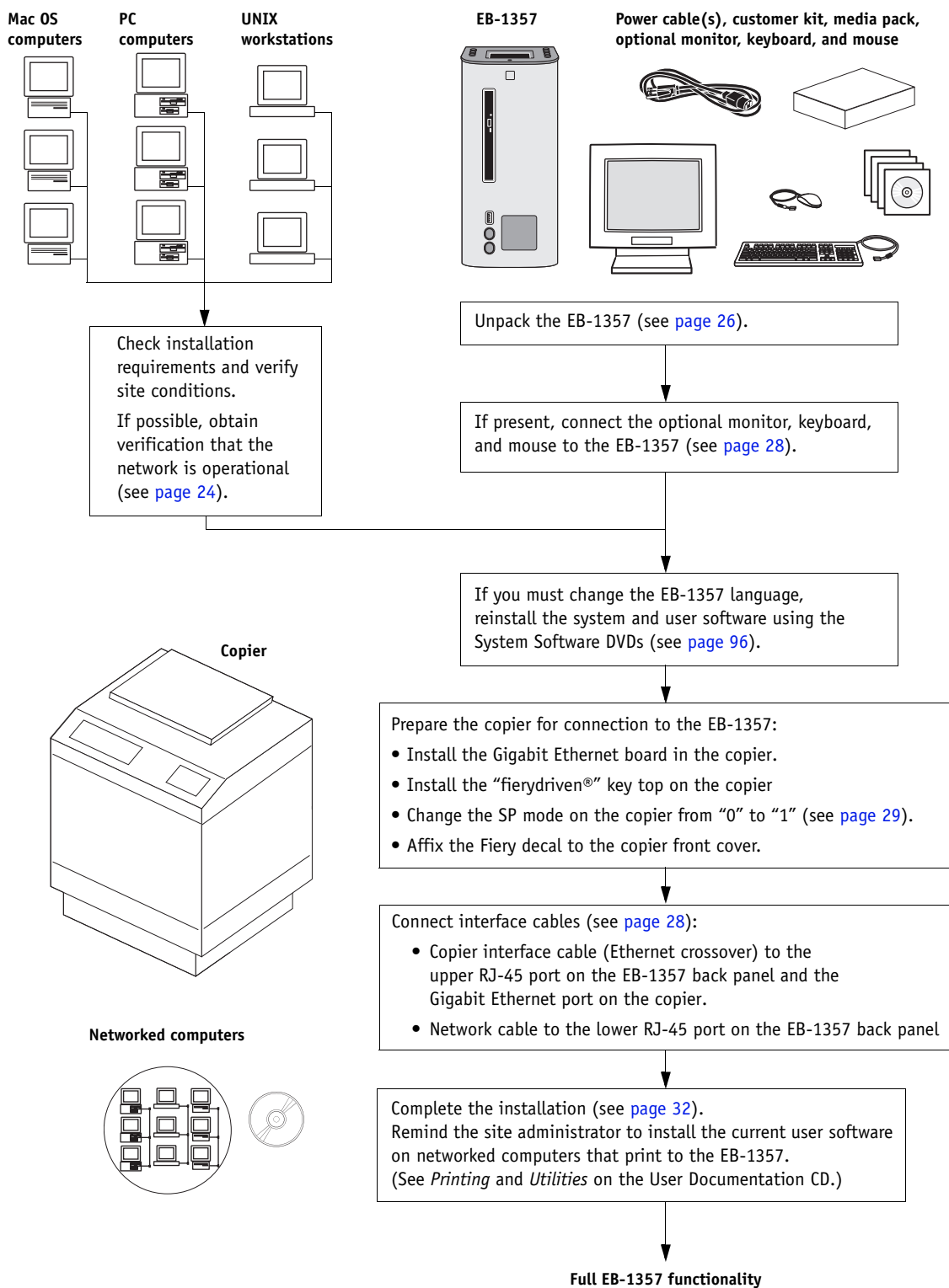


FIGURE 3: Summary of installation steps and references

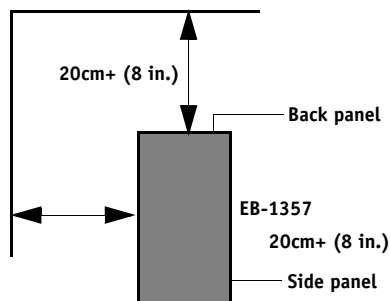
Checking the customer site

Before you install the EB-1357, check site conditions and inform the customer of any installation requirements.

Copier readiness

- ☐ **Is the copier configured for use with the EB-1357? (See [page 29](#).)**
- ☐ **Is space available near the copier for the EB-1357?**

Make sure that adequate space is available for the EB-1357. Allow enough space at the back panel for the cables to route easily and at the side panel so that the EB-1357 does not interfere with use of or service to the copier (such as clearing a paper jam). You may need to move the copier away from the wall so that the interface connectors are accessible.



- ☐ **Does the copier require service or adjustments?**

Print the copier Test Page before you install the EB-1357.

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

Power

- ☐ **Is there a dedicated, grounded electrical outlet for the EB-1357 near the copier?**

Locate the grounded electrical outlet that will supply power to the EB-1357. Do not run the EB-1357 and the copier on the same circuit. Use a surge suppressor for the EB-1357 if the customer has provided one.



- *Do not* use a 3-prong adapter in a 2-hole ungrounded outlet.
- *Do not* use an extension cord.



- *Do not* plug the EB-1357 into a circuit with heating or refrigeration equipment (including water coolers).



- *Do not* plug the EB-1357 into a switchable wall outlet. This can result in the EB-1357 being turned off accidentally.



- *Do not* pull on the cable when unplugging the EB-1357. Pull the plug instead.

Network

- ☐ Make sure that the network will be available at the time set for installation.
- ☐ Verify with the network administrator that the network is functioning before you attach the EB-1357.
- ☐ Make sure that the configuration requirements specified in *Configuration and Setup* (on the User Documentation CD) have been met for remote computers and the network.

Setting customer expectations

When the site is ready, installation of the EB-1357 takes about one hour. Inform the customer of the following:

- Some nodes on the network may be unavailable for up to one hour.
- The copier may be unavailable for up to one hour.
- The network administrator must be available during the installation for network connectivity.

Equipment downtime and impact on the network can be minimized if the network administrator installs a network connector for the EB-1357 and confirms network functionality with the connector in place before the date scheduled for the EB-1357 installation.

- The network administrator must make a networked computer available during the installation. The appropriate software must already be installed. Documentation for the networked computer and the network operating software must be available.
- The network administrator must install the user software shipped with the EB-1357 (user documentation is also included) onto networked Windows and Mac OS computers that will print to the EB-1357.

NOTE: This guide covers hardware installation and service and provides general information about connecting the EB-1357 to the customer's network. Network Setup and configuration information exceeds the scope of this guide. For Network Setup and configuration information, refer the network administrator to *Configuration and Setup* on the User Documentation CD.

Unpacking the EB-1357

The EB-1357 is assembled and shipped from the factory with all necessary cables (except for the network cable) and documentation (see [page 27](#)).

To UNPACK THE EB-1357

1. Open the box and remove the packing material.

Save the original boxes and packing material in case you need to transport the EB-1357 at a later date.

2. Remove the contents from the top container. Inspect the contents for visible damage. The top container should include the following items:

- Bags containing the copier interface cable (Ethernet crossover, 16.4 ft.), and five AC power cables (Australia, E.U., Japan, U.K., and U.S.).
- Customer Kit containing the Gigabit Ethernet board, “fierydriven®” key top, and Fiery decal.
- EB-1357 Setup Roadmap
- Media pack (includes disks for system software, user software, Fiery Options Utility, user documentation, and other documentation)

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

Let the customer or network administrator know that in order to take full advantage of the EB-1357, the user software must be installed on computers that will print to the EB-1357.

4. Set aside the remaining components from the top container.

5. Remove the top container and any packing material.

Set aside the packing material and note the orientation of the EB-1357 inside the shipping container, in case you need to repack it later.

6. Carefully lift the EB-1357 out of the box.

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

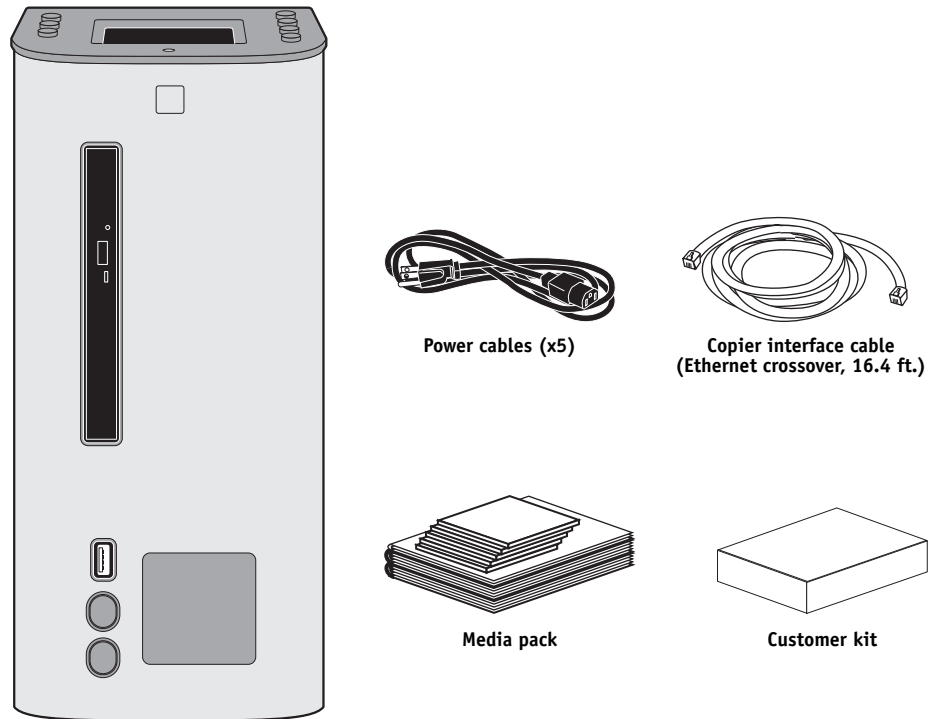


FIGURE 4: EB-1357 shipping contents

Connecting the EB-1357

You are now ready to make the following connections:

- Monitor, keyboard, and mouse (if present)
- Dongle (if present)
- Power cable connection
- Copier interface cable connection
- Network cable connection

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



Follow standard ESD precautions when handling components.

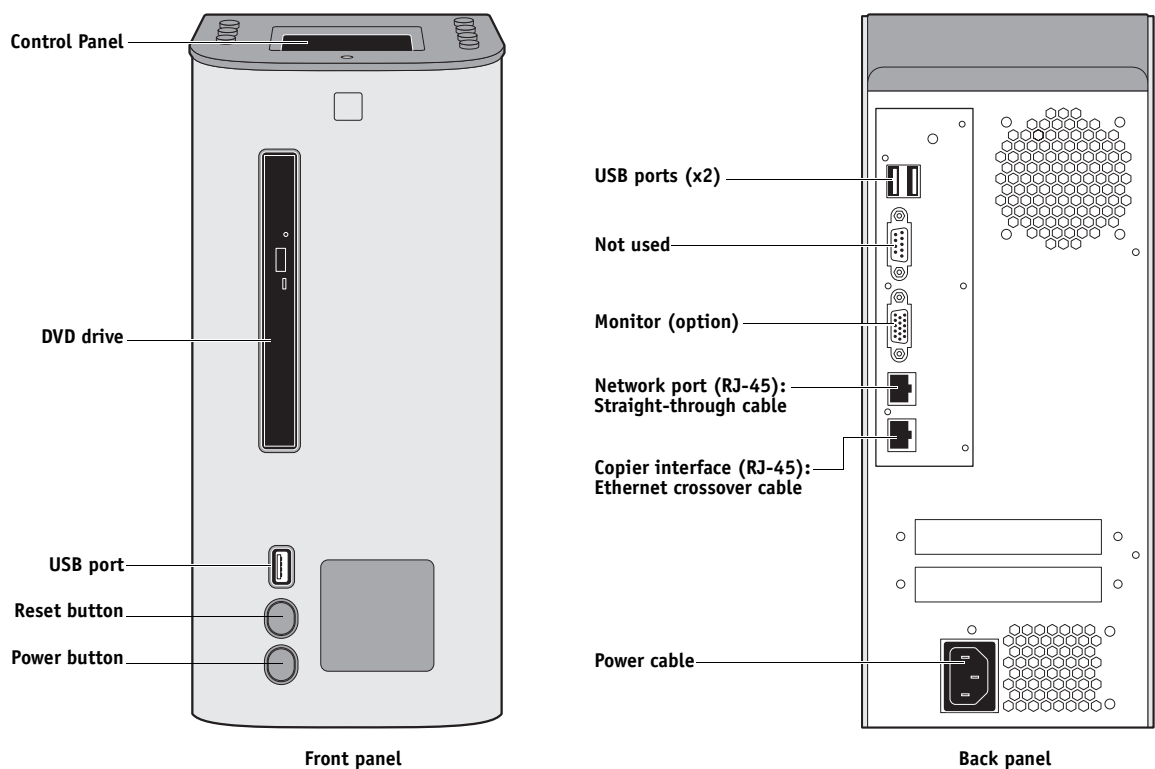


FIGURE 5: EB-1357 connections

TO CONNECT POWER

1. Connect the female end of the EB-1357 power cable to the power connector on the back of the EB-1357 (see [Figure 5 on page 28](#)).

TO CONNECT TO THE COPIER

1. Enter SP mode on the copier and specify the correct SP5193-001 setting to enable communication between the copier and the EB-1357:
 - On the copier display panel, press the Clear Modes button.
 - Type 107 and hold down the Clear (C) button until the SP mode menu appears.
 - Touch System Sp.
 - Type 5193# to navigate to the External Controller Info. Settings.
 - Change the setting to “1.” (The initial setting is “0.”) To change the setting, type 1 and press the Enter (#) key.
 - Touch Exit at the message reminding you to reboot the copier.

You will power off and power on the copier during the process of connecting the EB-1357.

2. Power off the copier using the main power switch located behind the front cover.
3. If needed, shut down the EB-1357 (see [page 40](#)).
4. Locate the copier interface cable (crossover Ethernet cable) that shipped with the EB-1357.



NOTE: The copier interface cable included with the EB-1357 is a 16.4 ft. Ethernet *crossover* cable that connects to the **lower** RJ-45 port on the EB-1357 back panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the **upper** RJ-45 port on the EB-1357 back panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see [Figure 5 on page 28](#)).

5. Connect one end of the cable to the video board interface port on the EB-1357 and the other end of the cable to the correct Ethernet port on the copier, as shown in [Figure 6](#).

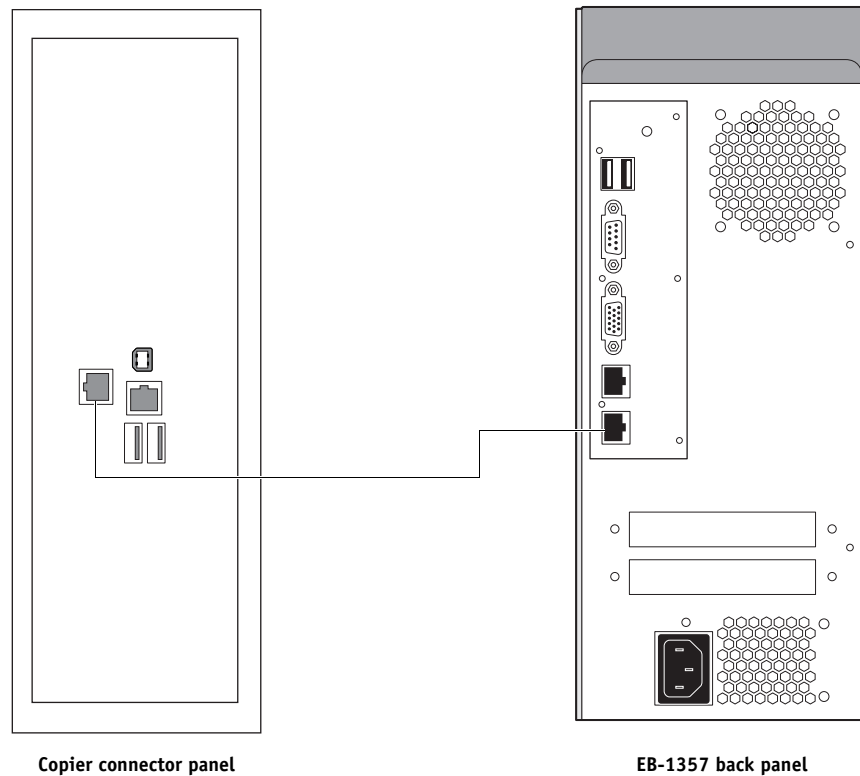


FIGURE 6: Copier and EB-1357 cable connection

NOTE: To prevent risk of cross-talk, make sure that the copier interface cable does not touch the system power cables. Image quality problems or EB-1357 shutdowns could result.

6. Power on the EB-1357 by pressing the power button on the front of the system. Wait approximately 2 minutes for the system to reach Idle.

The static Fiery logo and server name appear on the EB-1357 Control Panel when the system reaches Idle.

7. After the EB-1357 reaches Idle, power on the copier using the main power switch.

TO CONNECT TO THE NETWORK

1. Shut down the EB-1357 before connecting it to any network device (see [page 40](#)).
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. It connects to the **upper** RJ-45 port on the EB-1357 back panel. The copier interface cable included with the EB-1357 is a 16.4 ft. Ethernet *crossover* cable that connects to the **lower** RJ-45 port on the EB-1357 back panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see [Figure 5 on page 28](#)).

To verify the cable type, align the connectors on each end of the cable as shown in [Figure 7](#). On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable (such as the copier interface cable), the wire arrangements are different.

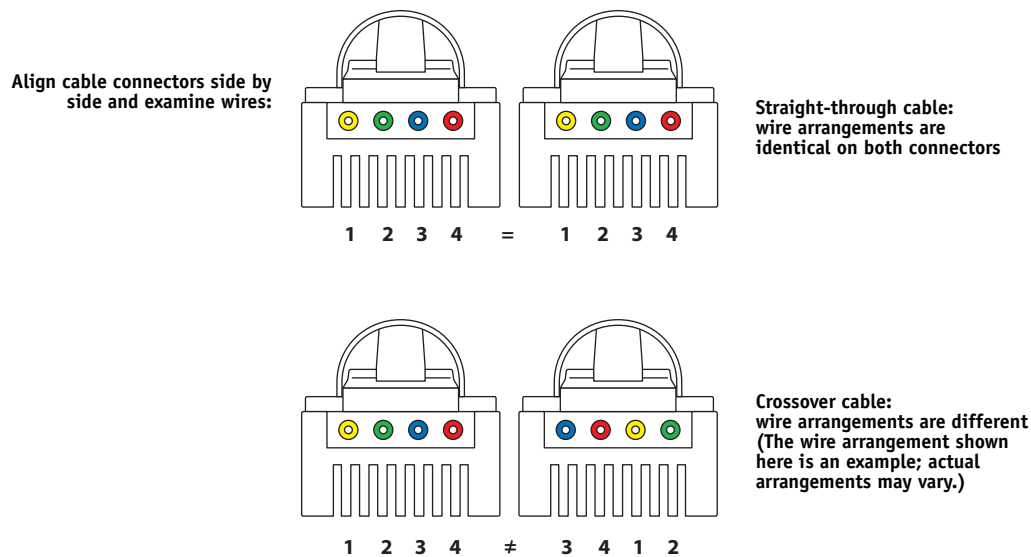


FIGURE 7: Straight-through and crossover Ethernet cables

3. Connect one end of the network cable to the network connector on the back of the EB-1357 (see [page 28](#)).

The motherboard in the EB-1357 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.

NOTE: After power on, the network administrator should perform Network Setup, verify the network connection, verify that the EB-1357 appears in the list of printers, and print a few test documents from a networked computer that will use the EB-1357. For more information, see *Configuration and Setup* on the User Documentation CD.

Completing installation and starting up

To finish the installation of the EB-1357 at the customer site, make sure to do the following:

1. **Power on the EB-1357 using the power button on the front panel (see [Figure 5 on page 28](#)).**

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

2. **When the EB-1357 has finished starting, access the Fiery menu screen by pressing the “fierydriven®” button on the copier display panel to (see [page 33](#)).**

The EB-1357 takes approximately three minutes to finish starting and display Idle on the Fiery menu screen of the copier display panel.

3. **Perform any required system software upgrades.**

For instructions, see the additional EB-1357 service upgrade documentation provided separately.

4. **Print the Test Page and Configuration page (see [page 38](#)) and ask the customer to verify the output.**
5. **If more than one EB-1357 is (or will be) installed at the customer site, advise the site administrator that it may be helpful to create a backup of the Setup configuration settings and place the backup file on a thumb drive or CD, which can then be used to configure Setup on other EB-1357 print servers. For details, see *Configuration and Setup*.**
6. **Ask the network administrator to perform Setup and print some test documents over the network.**
7. **Store the output and the current Configuration page(s) near the copier.**
8. **Inform the site administrator that the EB-1357 user software must be installed on networked computers that print to the EB-1357.**
9. **Ask the site administrator to make sure that all media (DVDs and/or CDs) shipped with the EB-1357 are stored in a safe location accessible to you.**

USING THE EB-1357

This chapter includes the following information:

- Using the EB-1357 Control Panel
- Using the copier display panel
- Checking Network status LEDs
- Shutting down and restarting the EB-1357

Overview

Two user interfaces are available for the EB-1357:

- The Control Panel on the front of the EB-1357 (see below)
- The display panel on the copier (see [page 36](#))

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

Using the EB-1357 Control Panel

The Control Panel on the front of the EB-1357 allows you to do the following:

- Eject CDs and DVDs.
- View the IP address of the EB-1357.
- Shut down, restart, or reboot the EB-1357 (see [page 40](#)). You can also shut down, restart, or reboot the EB-1357 through the copier display panel (see [page 40](#)).
- Interact with the EB-1357 during software installation (see [page 96](#)).

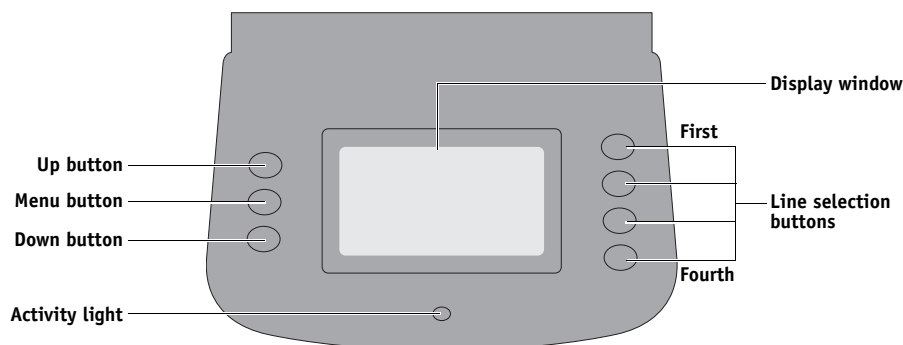


FIGURE 8: EB-1357 Control Panel

Activity light

The activity light on the EB-1357 Control Panel indicates current EB-1357 activity. If the light is:

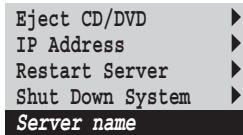
Flashing amber	The EB-1357 is starting up and the BIOS has established communication with the User Interface Board (UIB).
Flashing green	The EB-1357 is continuing startup and the Windows XPe operating system has established communication with the UIB.
Solid green	The EB-1357 is powered on and in the Idle state.
Solid amber	The EB-1357 is powered off, but the AC power cable is plugged into the power source. The Control Panel LCD continues to draw power when the EB-1357 is powered off.
Flashing or solid red	An error has caused printing to be disabled.
No light	The EB-1357 is powered off and the AC power cable is not connected to a power source.

Buttons

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

EB-1357 Control Panel Functions menu

The following options are available from the EB-1357 Functions menu:

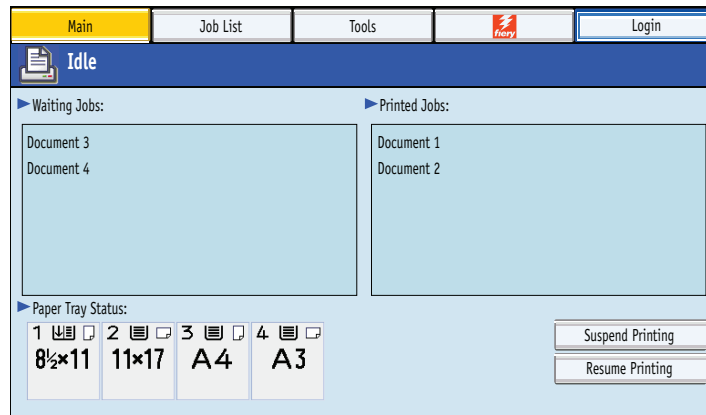


- Eject CD/DVD—Allows you to eject media from the DVD drive. Media is also automatically ejected whenever the EB-1357 is restarted, shut down, or rebooted.
- IP Address—Displays the current IP address of the EB-1357.
- Restart Server—Includes options to Restart (soft reset) or Reboot (hard reset) the EB-1357. Selecting Restart resets the EB-1357 server software, but does not reboot the entire system. Selecting Reboot shuts down all EB-1357 activity and reboots the system. When you select Restart or Reboot, network access to the EB-1357 is temporarily interrupted and all currently processing jobs are aborted and may be lost.
- Shut Down System—Shuts down all EB-1357 server software and powers off the system. Always select this option to power off the system.

NOTE: Avoid using the reset button on the front panel, as doing so may cause the system to operate unpredictably. Use the reset button on the front of the EB-1357 only if the system is frozen and unresponsive to keyboard or mouse actions.

Using the copier display panel

The “fierydriven®” area of the copier display panel allows you to interact with the EB-1357 from the copier. The menus provide access to many of the same options available from Command WorkStation.



Main tab

The Main tab is displayed as the starting point. It summarizes waiting and printed jobs and displays paper tray status and other information.

- | | |
|------------------|--|
| Suspend Printing | Suspend print activity between the EB-1357 and the copier. Use this command to interrupt the current EB-1357 job, for example, to perform maintenance tasks. Jobs continue to process on the EB-1357. After you complete maintenance tasks, choose Resume Printing to continue printing jobs from the EB-1357. |
| Resume Printing | Resume print activity between the copier and the EB-1357 after you select Suspend Printing. |

(Continued below)

Job List tab

The Job List tab on the copier display panel provides access to jobs according to the status of the job, similar to the Active and Printed Jobs windows in Command WorkStation. The lists are as follows:

Active	Jobs currently waiting to print.
Held	Held jobs.
Printed	Printed jobs.
Secure	Allows you to log on to display secure print jobs.

To change from one list to another, press the desired tab at the bottom of the copier touch panel.

On each of these lists, you can scroll up and down one line at a time, or advance to the top or bottom of the job list. Select a job, and choose the appropriate button to Print, Print and Hold, Delete, or display the Properties of the job. On the Properties tab, you can change the number of copies, but not any other job properties.

Tools tab

The Tools tab allows you to perform tray alignment and calibration.

Tray Alignment	Adjust the placement of text and images on a page so that they are correctly aligned on the sheet of paper and both sides of a duplex sheet have the exact same alignment. For more information about this function, see Utilities .
----------------	--

Scan tab

The Scan tab allows you to scan documents. For more information, see [Utilities](#).

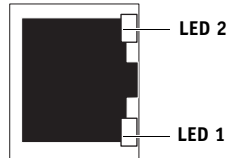
Fiery tab

The Fiery tab provides access to many of the same features available through Command WorkStation.

Fiery Info	Displays information about the current configuration of the EB-1357.
Printable Info	<p>Print these system pages from the EB-1357:</p> <p>PS Test Page/PCL Test Page: Confirms that the EB-1357 is properly connected to the copier, and provides color and grayscale samples to troubleshoot problems with the copier or the EB-1357. Settings on the Test Page may include: Server Name, color settings, printer model, and date and time the Test Page was printed.</p> <p>PS Font List/PCL Font List: Prints a list of all fonts currently on the EB-1357 hard disk.</p> <p>Configuration: Provides general information about the hardware and software configuration of the EB-1357, the current settings for Setup, the current calibration, the IP address of the EB-1357, and a log of system updates.</p> <p>Control Panel Map: Prints the Control Panel Map, which is an overview of the screens you can access from the copier touch panel.</p> <p>Job Log: Prints a log of the last 55 jobs.</p> <p>E-mail Log: Prints a log listing recent e-mail activity.</p> <p>FTP Log: Prints a log listing recent FTP activity.</p> <p>NOTE: To print the E-mail or FTP log, you must first enable the appropriate service.</p>
Setup	Enter the Setup menu and change Setup option settings.
Run Diagnostics	To troubleshoot video board or e-mail printing issues, choose this menu. For more information, see page 134 .
Clear Server	Clear all jobs in all server queues, as well as all jobs archived on the EB-1357 hard disk, the index of archived jobs (in the Archive window), all FreeForm masters, and the index of FreeForm masters (in the FreeForm window). Consult your administrator or operator before choosing Clear Server.
Restart Fiery	<p>Shut down all EB-1357 activity in the correct manner, and then restart. The following options are available from the submenu that appears:</p> <p>Restart Fiery Service: Resets the server software but does not reboot the entire system. Network access to the EB-1357 is temporarily interrupted and all currently processing jobs are aborted and may be lost.</p> <p>Restart System: Shuts down and then reboots the EB-1357. Network access to the EB-1357 is terminated and all currently processing jobs are aborted and may be lost.</p> <p>Shut Down: Shuts down all EB-1357 activity properly.</p>

Network Status LEDs

Two LEDs next to the Ethernet network port indicate the network speed. When data transfer occurs between the EB-1357 and the network, the appropriate LED(s) blink to indicate network activity. For additional network information, see *Configuration and Setup* on the User Documentation CD.



Ethernet network port
(Upper RJ-45)

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



NOTE: The network cable at the customer site is a *straight-through* Ethernet cable that connects to the **upper** RJ-45 port on the EB-1357 back panel. The copier interface cable included with the EB-1357 is a 16.4 ft. Ethernet *crossover* cable that connects to the **lower** RJ-45 port on the EB-1357 back panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see [Figure 5 on page 28](#) and [Figure 7 on page 31](#)).

Starting, shutting down, restarting, and rebooting

The customer will generally leave the EB-1357 on all the time. Remember that when the EB-1357 is powered off, network access to the copier is interrupted. Power off the EB-1357 when you need to service it and before you remove or attach any cables to it.

Always use the following procedures when shutting down, restarting, or rebooting the EB-1357. For descriptions of restart, shutdown and reboot, see [page 40](#).

NOTE: Use the reset button on the front of the EB-1357 only if the system is unresponsive to keyboard or mouse actions.

TO START THE EB-1357

- **Power on the EB-1357 by pressing the power button on the front panel.**

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

TO SHUT DOWN, RESTART, OR REBOOT THE EB-1357 FROM THE COPIER DISPLAY PANEL

1. **Press the “fierydriven®” button on the copier and make sure that Idle appears on the copier display panel (see [page 33](#)).**

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

NOTE: Notify the network administrator before you remove the EB-1357 from the network.

2. **Press the Fiery tab.**
3. **Press Restart Fiery.**
4. **At the next screen, select one of the following options:**
 - **Restart Fiery Service (soft reset)**—Resets the EB-1357 server software but does not reboot the entire system. Network access to the EB-1357 is temporarily interrupted and all currently processing jobs are aborted and may be lost. If you choose this option, you may need to wait 1 minute or more for the server software to reset.
 - **Reboot System (hard reset)**—Shuts down all EB-1357 activity properly and then reboots. Network access to the EB-1357 is temporarily interrupted and all currently processing jobs are aborted and may be lost.
 - **Shut Down**—Shuts down all EB-1357 server software and powers off the system. You should always select this option when you want to power off the system. Network access to the EB-1357 is terminated and all currently processing jobs are aborted and may be lost.

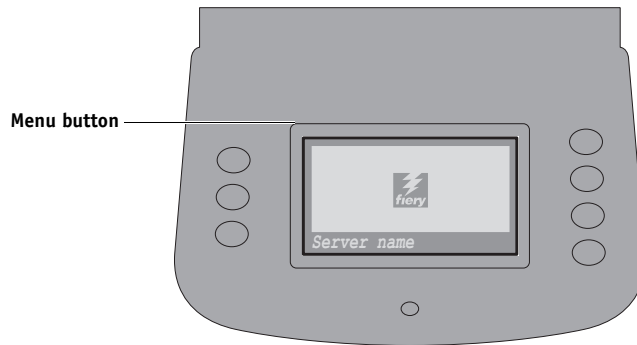
NOTE: Use the reset button on the front of the EB-1357 only if the system is unresponsive to keyboard or mouse actions.

5. **Press OK.**

Before accessing internal components, make sure that all cables are disconnected from the back of the EB-1357.

TO SHUT DOWN, RESTART, OR REBOOT THE EB-1357 FROM THE EB-1357 CONTROL PANEL

1. Make sure that the following logo screen is displayed on the EB-1357 Control Panel.



This logo screen indicates that the EB-1357 is Idle.

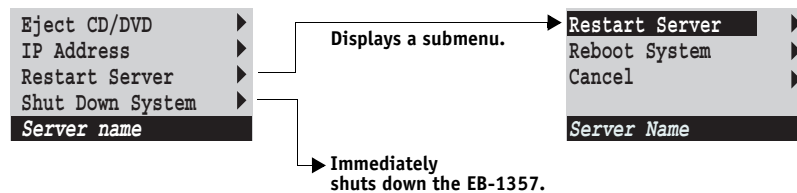
If the system has just finished processing, wait at least five seconds before beginning the shutdown procedure.

NOTE: Notify the network administrator before you remove the EB-1357 from the network.

2. Press the Menu button once to display the Functions menu.

3. Make a selection:

- To restart or reboot the EB-1357, select Restart Server. A submenu displays, allowing you to select Restart Server, Reboot System, or Cancel.
- To shut down the EB-1357 immediately, select Shut Down System.



NOTE: Use the reset button on the front of the EB-1357 only if the system is unresponsive to keyboard or mouse actions.

Allow the system to shut down and power off or restart.

If you selected Restart Server, you may need to wait one minute or more for the server software to restart.

Before accessing internal components, make sure that all cables are disconnected from the back of the EB-1357.

SERVICE PROCEDURES

Generally, the EB-1357 requires no regular service or maintenance. Use the procedures in this chapter to inspect, remove, reseal, and replace major hardware components, as well as install system software.

Overview

This chapter includes information about servicing the following components:

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

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



When performing the service procedures described in this chapter, follow the precautions listed on [page 14](#).

The tools required to service the EB-1357 are listed on [page 18](#).

EB-1357 overview diagrams

The following figures provide an overview of EB-1357 components.

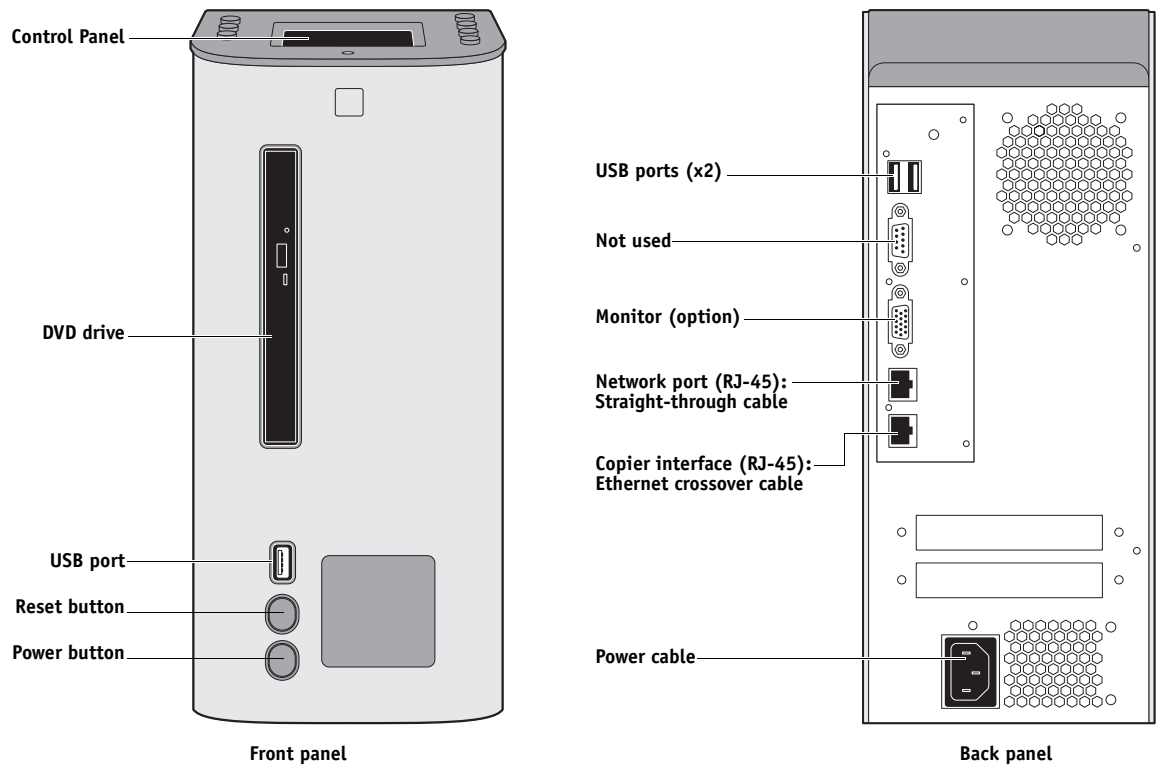
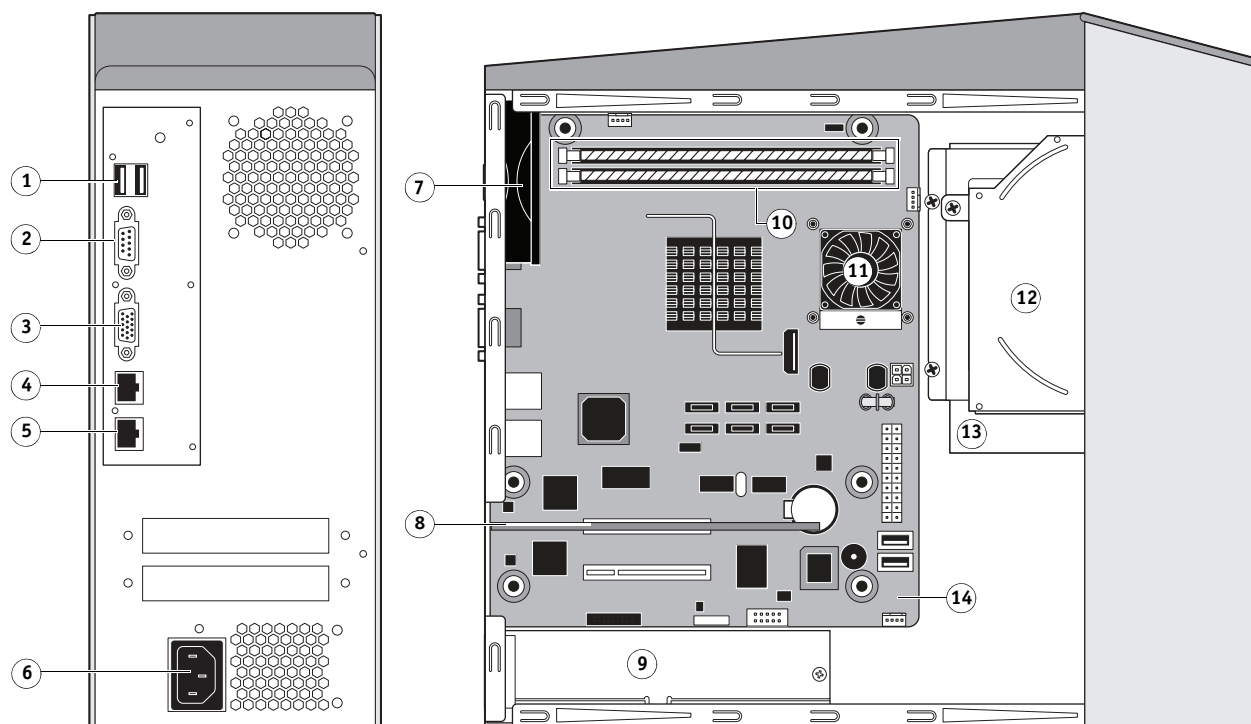


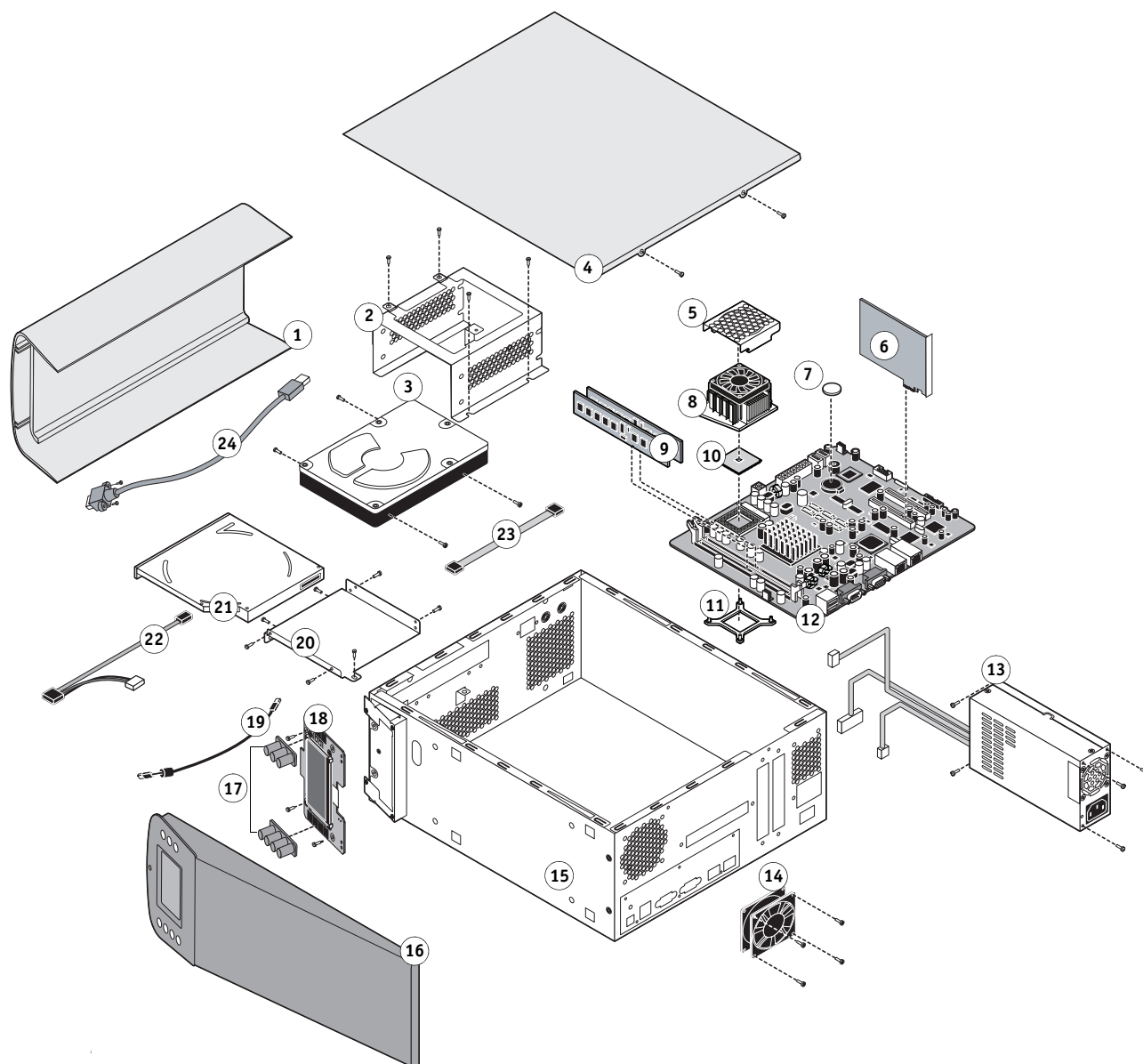
FIGURE 9: Front and back panels

**Key**

- | | | |
|--|-------------------------------|--------------------------|
| 1. USB ports (x2) | 6. Power cable connector | 11. CPU cooling assembly |
| 2. Not used | 7. Chassis fan | 12. DVD drive |
| 3. Monitor (option) | 8. Video board in slot PCIE 1 | 13. HDD |
| 4. Network port (Straight-through cable) | 9. Power supply | 14. Motherboard |
| 5. Copier interface (Crossover cable) | 10. DIMM slots | |

NOT SHOWN: Cables, UIB, and front panel USB port

FIGURE 10: Back panel and internal side view

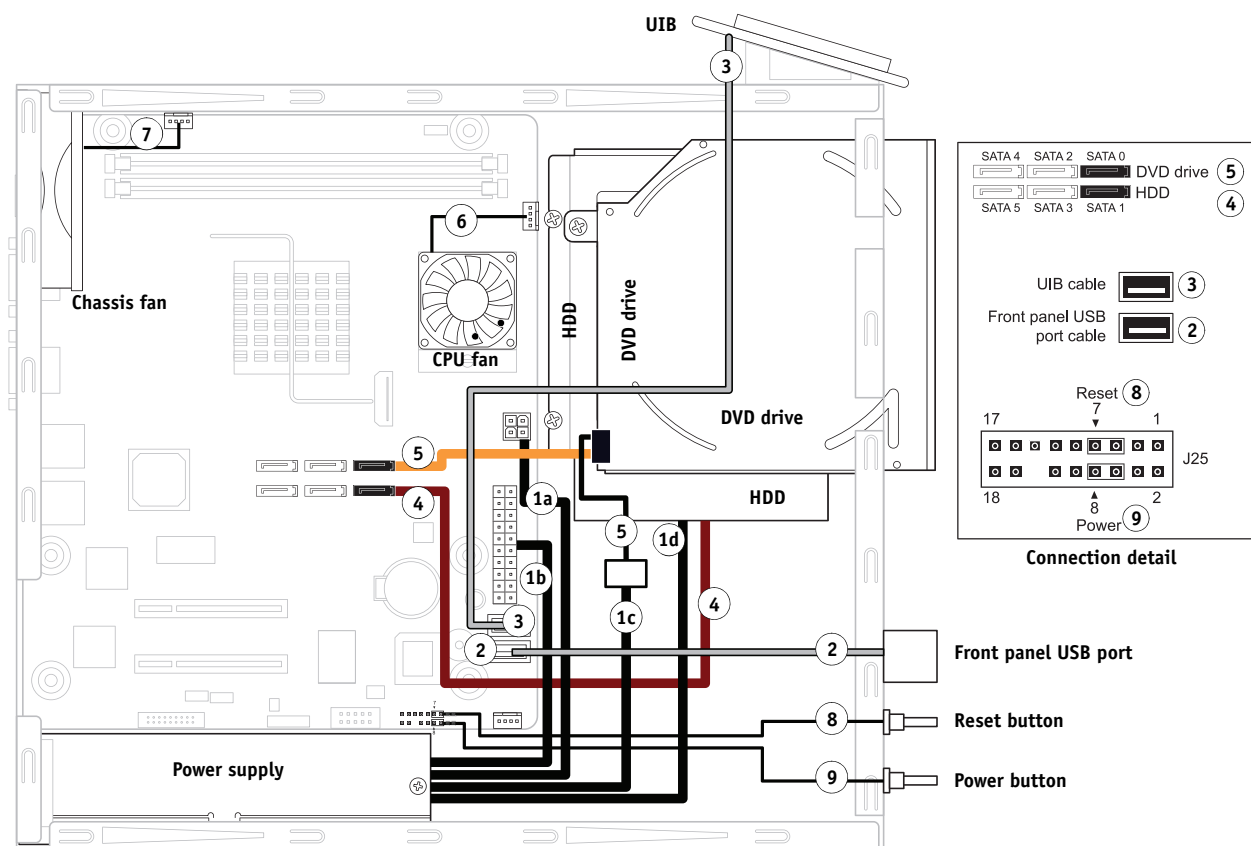


Key

- | | | |
|-------------------------|-----------------------|--------------------------------------|
| 1. Front panel | 9. DIMM | 17. UIB buttons |
| 2. HDD bracket | 10. CPU | 18. UIB |
| 3. HDD | 11. CPU heatsink post | 19. UIB cable |
| 4. Side panel | 12. Motherboard | 20. DVD drive bracket |
| 5. CPU fan guard | 13. Power supply | 21. DVD drive |
| 6. Video board | 14. Chassis fan | 22. DVD drive power/data combo cable |
| 7. Battery | 15. Chassis | 23. HDD SATA cable |
| 8. CPU cooling assembly | 16. Top panel | 24. Front panel USB port and cable |

NOT SHOWN: Tie-wraps, cable clamps, dongle(s), and external cables

FIGURE 11: Exploded view of EB-1357 components



Cable key	From	To
1. Power supply cable	Power supply	a. CPU power connector, 4-pin (PW2) b. Motherboard power connector, 20-pin (PW1) c. DVD drive power/data combo cable d. HDD power connector
2. Front panel USB port cable	Front panel USB port	Motherboard USB connector
3. UIB cable	User Interface Board	Motherboard USB connector
4. HDD data cable	HDD	Motherboard connector SATA 1
5. DVD drive power/data combo cable	DVD drive	Motherboard connector SATA 0
6. CPU fan cable	CPU fan	Motherboard connector FAN 1
7. Chassis fan cable	Chassis fan	Motherboard connector FAN 2
8. Reset cable	Front panel reset button	Motherboard connector J25, pins 5 and 7
9. Power cable	Front panel power button	Motherboard connector J25, pins 6 and 8

FIGURE 12: Data and power cable connections in the EB-1357

Accessing internal components

This section describes how to shut down and open the EB-1357. Always use the following procedures when opening the EB-1357 for inspection or service.

Shutting down the system

If the EB-1357 is powered on, you must shut down the system and remove the power cable from the back panel before removing or connecting interface cables or accessing the internal components.



NOTE: Remember that when the EB-1357 is powered off, network access to the copier is interrupted. Always obtain permission from the network administrator before you take the EB-1357 off the network.

If you are cycling power, wait at least 10 seconds before powering back on.

If you are unable to shut down the EB-1357 through the Control Panel, power off by holding down the power button on the front of the EB-1357 for up to eight seconds.

Using the reset button may cause the system to operate unpredictably; therefore, use the reset button on the front of the EB-1357 only if the system is frozen and unresponsive to keyboard or mouse actions.

TO SHUT DOWN THE EB-1357 FROM THE COPIER DISPLAY PANEL

1. Press the “fierydriven®” button on the copier and make sure that Idle appears on the copier display panel (see [page 36](#)).

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

NOTE: Notify the network administrator before you remove the EB-1357 from the network.

2. Press the Fiery tab.
3. Press Restart Fiery.
4. At the next screen, select Shut Down.

This option shuts down all EB-1357 server software and powers off the system. You should always select this option when you want to power off the system. Network access to the EB-1357 is terminated and all currently processing jobs are aborted and may be lost.

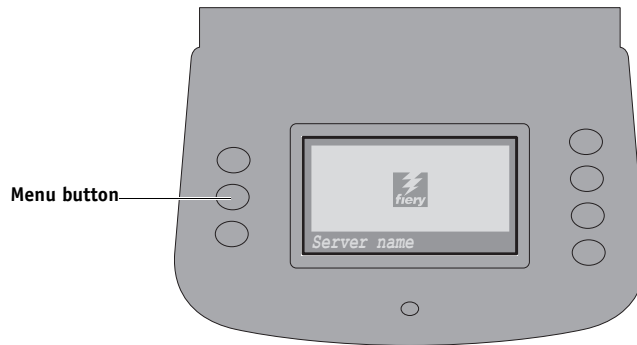
NOTE: Use the reset button on the front of the EB-1357 only if the system is unresponsive to keyboard or mouse actions.

5. Press OK.

Before accessing internal components, make sure that all cables are disconnected from the back of the EB-1357.

TO SHUT DOWN THE EB-1357 FROM THE EB-1357 CONTROL PANEL

1. Make sure that the following logo screen is displayed on the EB-1357 Control Panel.

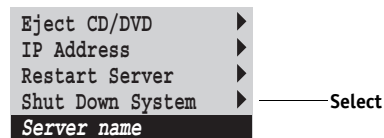


This logo screen indicates that the EB-1357 is Idle.

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

NOTE: Notify the network administrator before you remove the EB-1357 from the network.

2. Press the Menu button once to display the Functions menu.
3. Select Shut Down System.



NOTE: Use the reset button on the front of the EB-1357 only if the system is unresponsive to keyboard or mouse actions.

Before accessing internal components, make sure that all cables are disconnected from the back of the EB-1357.

Opening the EB-1357

To service internal components, open the EB-1357 as described in the following procedure.

TO OPEN THE EB-1357

1. Shut down the EB-1357 (see [page 47](#)).
2. Remove all cables from the back of the EB-1357.
3. Remove all panels necessary to access the component that you want to service.

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

NOTE: When removing multiple panels from the EB-1357, use the following order:

- Side panel (see [page 50](#))
- Top panel (see [page 51](#))
- Front panel (see [page 52](#))

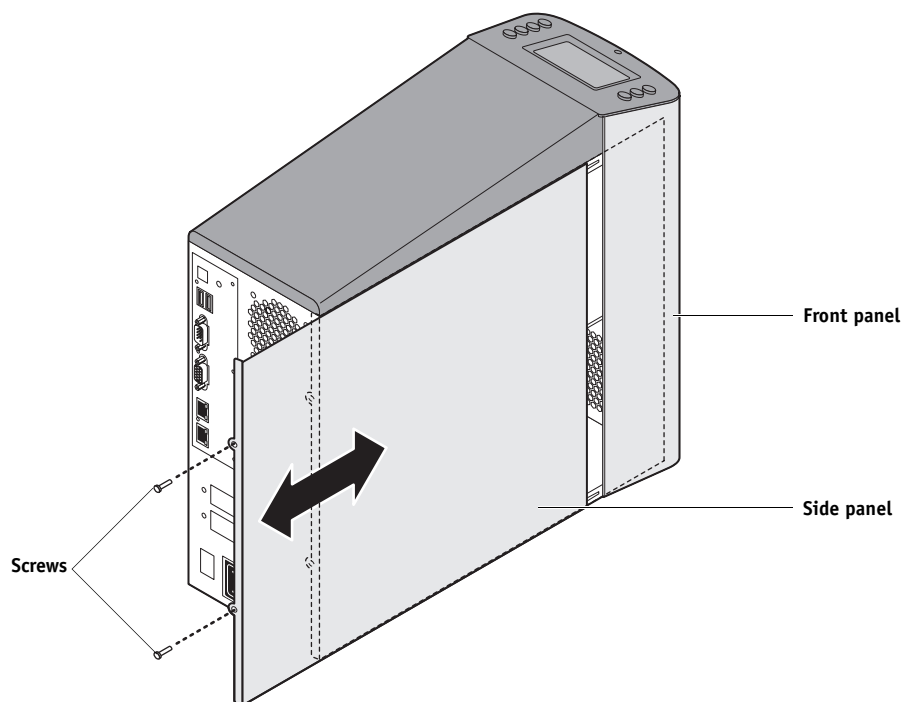
NOTE: When replacing panels, reverse the order.

4. Place the EB-1357 on a flat surface. Attach an ESD wrist strap before handling internal parts (see [“Precautions” on page 14](#)).
5. Carefully position the EB-1357 so that it is resting on its side and the internal components are facing up.

Place removed components on a grounded, antistatic surface.

TO REMOVE AND REPLACE THE SIDE PANEL

1. **Shut down the EB-1357** (see [page 47](#)).
2. **Remove the screws that attach the side panel to the back of the chassis.**
Set aside the screws so that you can replace them later.
3. **Slide the side panel toward the back panel.**
It may help to use the palm of your hand to press down on the side panel as you slide it.
4. **Lift the side panel off the chassis.**

**FIGURE 13:** Removing/replacing the side panel

NOTE: Before you replace the side panel, make sure the top and front panels are installed.

5. **To replace the side panel, fit the front edge of the panel under the front panel, and then slide the side panel in place.**
6. **Replace the screws that you removed earlier.**

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

TO REMOVE AND REPLACE THE TOP PANEL

NOTE: To remove the top panel, you must first remove the side panel.

1. Shut down the EB-1357 (see [page 47](#)).
2. From inside the chassis, bend the four tabs that secure the top panel to the chassis until they disengage the slots in the chassis, and then lift the top panel away from the chassis.

It may help to partially loosen the tabs one at a time as you disengage them from the chassis.

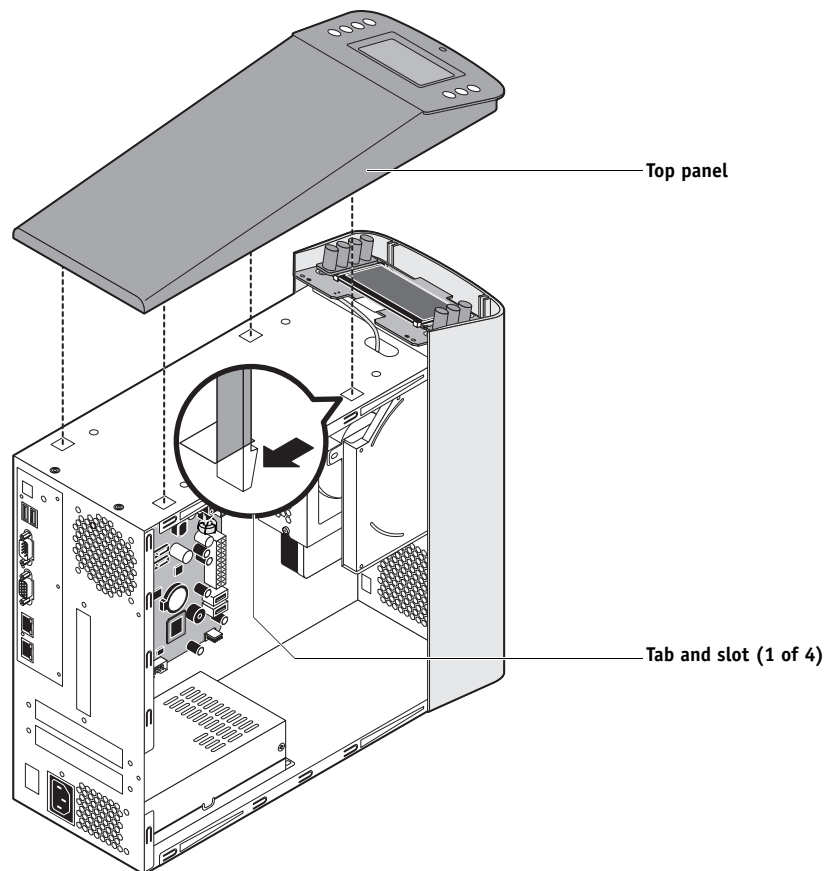


FIGURE 14: Removing/replacing the top panel

3. To replace the top panel, align the tabs on the underside of the panel with the slots on the top of the chassis.
4. Press the top panel against the chassis and snap it into place.

Snap the tabs into place one at a time until all four tabs have engaged the chassis.

TO REMOVE AND REPLACE THE FRONT PANEL

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

1. Shut down the EB-1357 (see [page 47](#)).
2. From inside the chassis, bend outward on the four tabs that secure the front panel to the chassis, and then lift the panel away from the chassis.

It may help to partially loosen the tabs one at a time as you disengage them from the chassis.

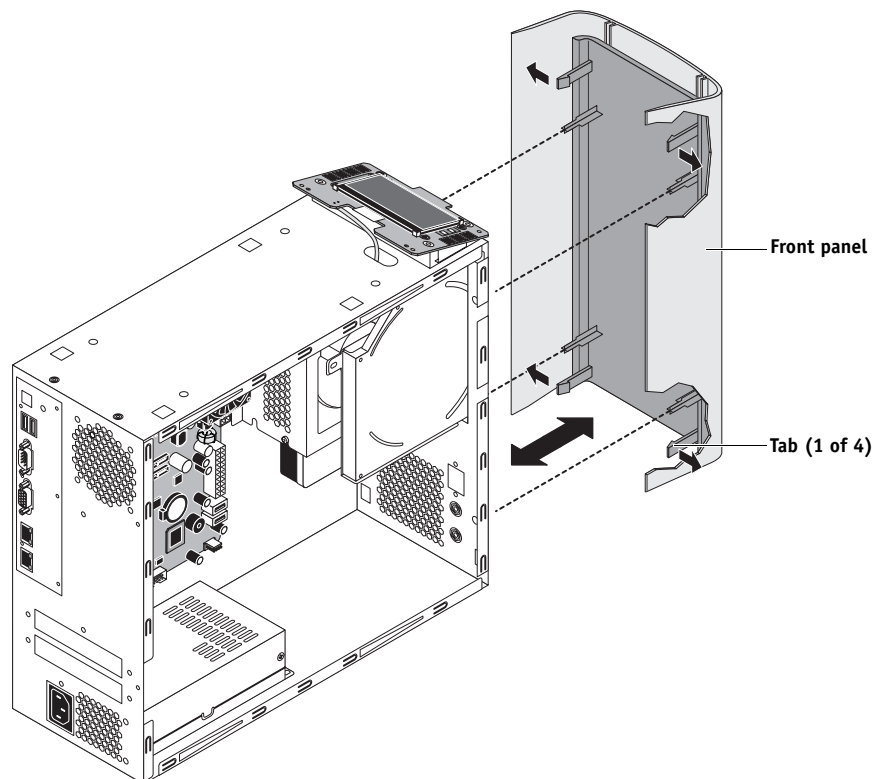


FIGURE 15: Removing/replacing the front panel

3. To replace the front panel, align the openings in the panel with the DVD drive, power and reset buttons, and USB port.
4. Press the panel against the chassis and snap it into place.

Snap the tabs into place one at a time until all four tabs have engaged the chassis.

Removing and replacing boards

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

- Video board
- User Interface Board (UIB)
- Motherboard

The EB-1357 is shipped from the factory with a standard board configuration, as shown in [Figure 10 on page 44](#). If optional components have been installed, see the documentation that accompanies the particular option kit.

Video board

The video board is installed in motherboard connector PCIE 1. The video board processes the image data and sends it to the copier through a crossover cable connected to the lower RJ-45 port on the EB-1357 back panel.

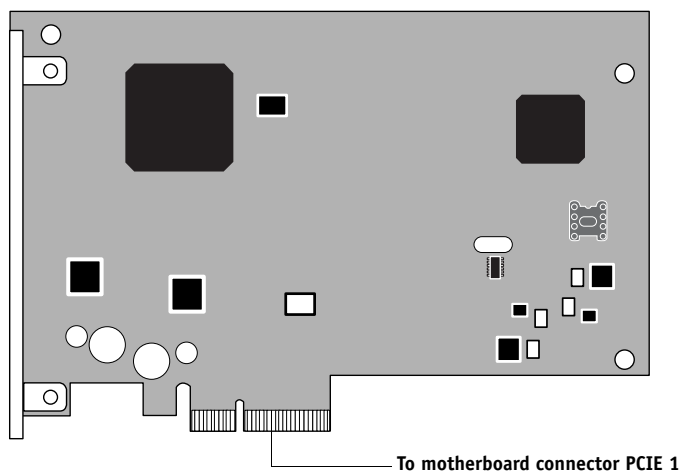


FIGURE 16: Diagram of the video board

TO REMOVE THE VIDEO BOARD

1. **Shut down and open the EB-1357 (see pages [47](#) and [49](#)).**

To remove the video board, you must remove the side panel.

2. **Remove the two mounting bracket screws that attach the video board to the chassis.**
3. **Remove the video board from the motherboard.**

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

4. **Place the video board in an antistatic bag.**

TO REPLACE THE VIDEO BOARD

1. **Seat the video board in connector PCIE 1 on the motherboard (the topmost connector), and then secure it to the chassis with the mounting bracket screws that you removed earlier.**

The video board edge connector is keyed to fit in the motherboard only when properly oriented.

2. **Reassemble the EB-1357 and verify its functionality (see [page 95](#)).**

User Interface Board

The User Interface Board (UIB) provides the interface between the EB-1357 and the user. The front of the UIB contains circuitry for the following:

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

The UIB cable is routed from a connector on the User Interface Board to a USB connector on the motherboard (see [Figure 19 on page 58](#)).

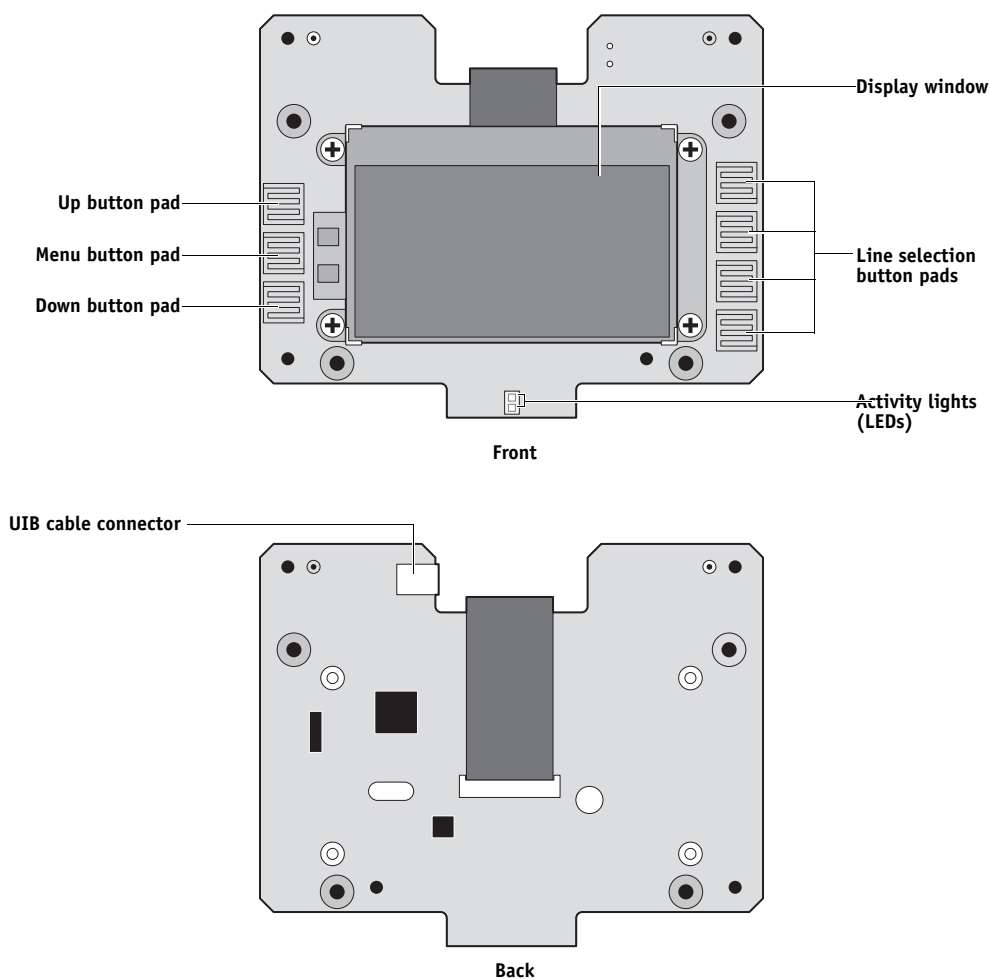


FIGURE 17: Diagram of the User Interface Board (front and back)

TO REMOVE THE USER INTERFACE BOARD

1. Shut down and open the EB-1357 (see pages 47 and 49).

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

2. Detach the UIB cable from the connector on the top of the UIB.

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

3. Remove the four screws that secure the UIB to the mount on the top panel.

4. Lift the UIB off the mount.

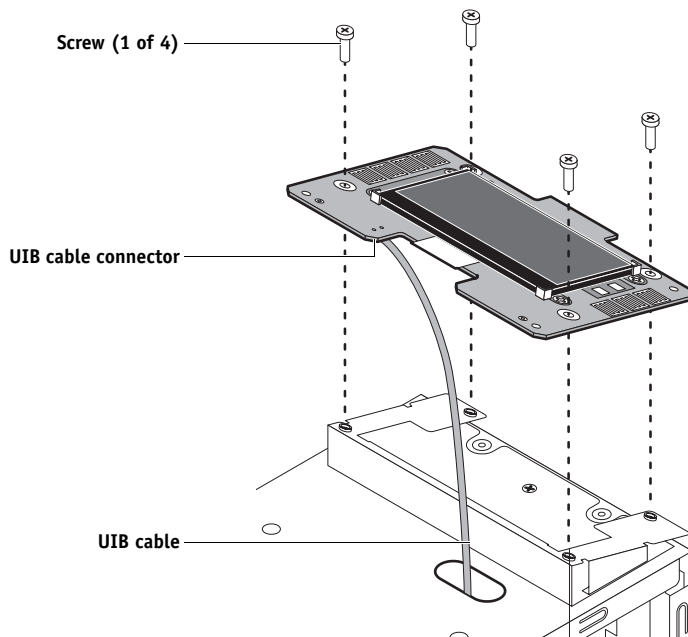


FIGURE 18: Removing/replacing the User Interface Board

5. Place the UIB in an antistatic bag.

6. Attach the UIB cable to the connector on the top of the UIB (see [Figure 18 on page 56](#)).

7. Secure the UIB to the mount on the top panel.

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

8. If you are replacing the UIB cable with a new cable, attach the new UIB cable to the connector on the top of the UIB, and then route the cable through the hole in the top of chassis and connect it to a USB port on the motherboard.

9. Replace the top panel (see [page 51](#)).

10. Reassemble the EB-1357 and verify its functionality (see [page 95](#)).

Motherboard



If you are removing the motherboard to replace it with a new motherboard, review the troubleshooting and motherboard cautions on [page 61](#).

The Intel Core Duo Processor T2500 2.0GHz CPU mounted on the motherboard controls the image data transferred to and from the video board. The motherboard controls HDD functions and the communication between the EB-1357 and external devices. The motherboard has two DIMM sockets. One socket contains a 1GB DIMM (see [Figure 23 on page 74](#)). The motherboard also includes two PCI-Express x4 slots, one of which is occupied by the video board.

Removing the motherboard

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

- Side, top, and front panels
- All boards installed on the motherboard
- DVD drive and bracket
- HDD inside the HDD bracket
- All cables connected to the motherboard
(including the 20-pin motherboard power cable, 4-pin CPU power cable, chassis fan cable, HDD data cable, DVD drive data cable, power button cable, reset button cable, front panel USB port cable, and UIB cable)

This section also includes information about the following:

- Replacing DIMM(s)
- Replacing the CPU
- Replacing the battery
- Clearing the CMOS
- Jumper configurations



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

Key

1. USB ports (x2)
 2. Not used
 3. Monitor (option)
 4. Network interface (RJ-45)
 5. Copier interface (RJ-45)
 6. Chassis fan power (FAN 2)
 7. DIMM 2
 8. DIMM 1
 9. Video board (PCIE 1)
 10. Not used (PCIE 2)
 11. Not used (J26)
 12. DVD drive data cable (SATA 0)
 13. HDD data cable (SATA 1)
 14. Not used (SATA 2)
 15. Not used (SATA 3)
 16. Not used (SATA 4)
 17. Not used (SATA 5)
 18. Battery
 19. BIOS (U34)
 20. Power and Reset pins
 21. Not used (J15)
 22. CPU fan power (FAN 1)
 23. CPU fan and heatsink
 24. CPU power PW 2 (4-pin)
 25. Motherboard power PW 1 (20-pin)
 26. Speaker
 27. USB port: To User Interface Board (UIB)
 28. USB port: To front panel USB port
 29. Not used (FAN 3)
- MH—Mounting holes

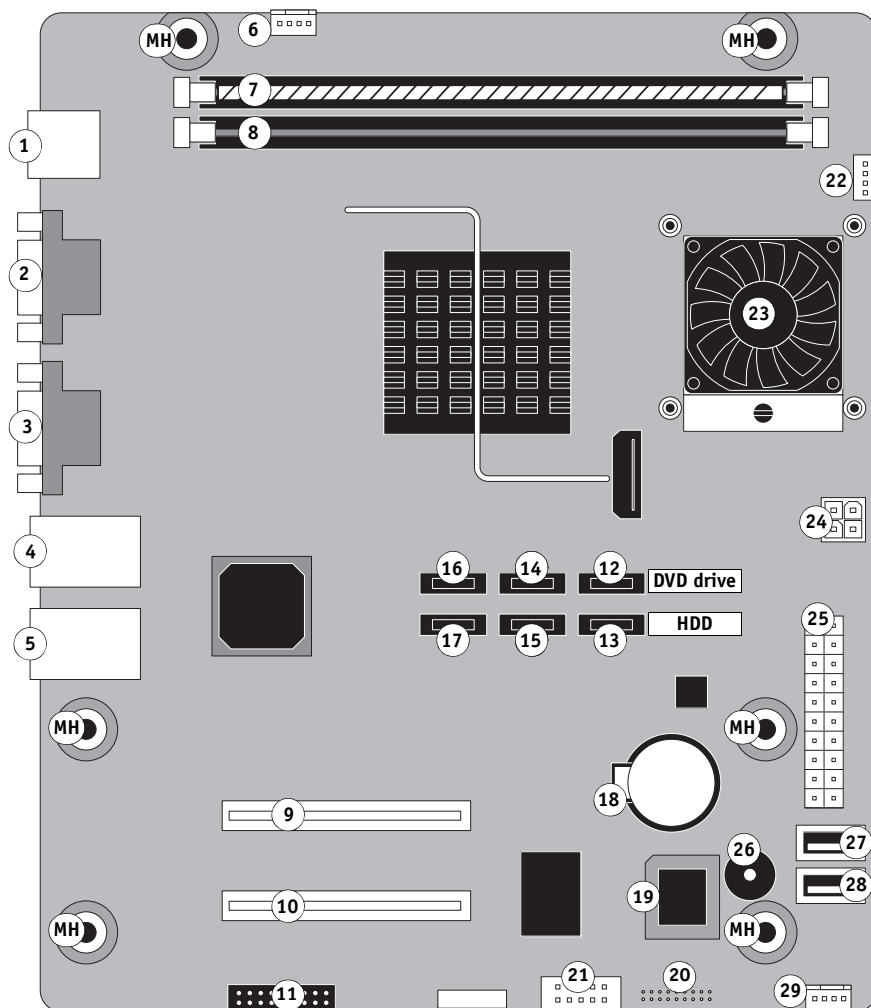


FIGURE 19: Diagram of the EB-1357 motherboard

TO REMOVE MOTHERBOARD COMPONENTS

1. **Shut down and open the EB-1357 (see pages 47 and 49).**

To access the motherboard, you must remove the side, top, and front panels.

2. **Remove the video board from slot PCIE 1 on the motherboard.**
3. **Remove any plastic cable clamp(s) securing internal cables and reusable tie-wraps, if present.**
4. **Remove the following cables attached to the motherboard:**
 - Reset button cable
 - Power button cable
 - UIB cable
 - DVD drive power/data combination cable
 - HDD data cable
 - Motherboard power cable (20-pin)
 - CPU power cable (4-pin)
 - Chassis fan power cable

For motherboard connector locations, see [Figure 19 on page 58](#).

TO REMOVE THE MOTHERBOARD

NOTE: This procedure assumes that you have already performed the procedure “To remove motherboard components” on page 59.

1. Remove the DVD drive bracket with the DVD drive attached (see [page 93](#)).
2. Remove the HDD bracket with the HDD attached (see [page 89](#)).

You must also detach the HDD power cable to remove the HDD.

3. Remove the 6 mounting screws securing the motherboard to the chassis (for screw locations, see [Figure 19 on page 58](#)).
4. Remove the motherboard from the chassis.

Lift the edge of the motherboard (see [Figure 20](#)). Make sure that the back panel connectors on the motherboard clear the chassis while you lift it out of the chassis.



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

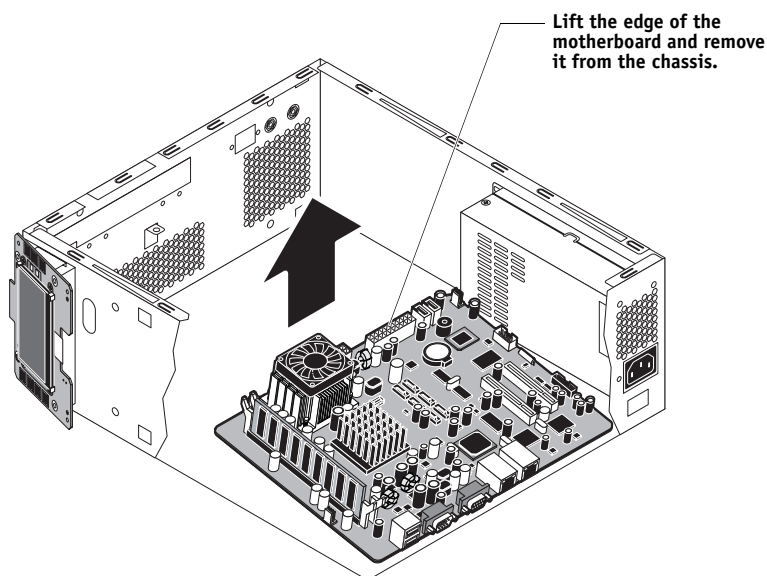


FIGURE 20: Removing the motherboard

Replacing the motherboard



Follow the procedures in this section to replace the motherboard. Failure to follow the instructions in this section may corrupt the system (not easily repaired in the field) or result in an incomplete installation (see [“Error messages” on page 72](#)).



Troubleshooting cautions

- Before deciding to install a new motherboard, consult [“Troubleshooting” on page 111](#).
- Also review [“Motherboard cautions” on page 62](#).
- Inspect all cables and internal components as described on pages [113](#) and [114](#). If these inspections do not solve the problem, locate symptoms in the troubleshooting table beginning on [page 122](#), and perform the suggested actions in the order listed.
- If troubleshooting strategies (checking cables and connections, reinstalling system software, and so forth) do not solve the problem and you suspect either the HDD or the motherboard is faulty, always troubleshoot in the following order:

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

- First, replace the HDD and install system software.

Always replace a faulty HDD with a new HDD. Transferring a HDD from one EB-1357 to another is incorrect and strongly discouraged.

- If the problem persists, reinstall the original HDD in the system, and then replace the motherboard.

Motherboard cautions

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



- Follow ESD and other safety precautions when handling the motherboard. If you need to remove the motherboard during service, place it on a grounded, anti-static surface.
- Transfer the DIMM, CPU, and CPU cooling assembly from the old motherboard onto the new motherboard.



- *Do not* transfer the BIOS chip from the old motherboard onto the new motherboard. BIOS chips are not interchangeable.



- Do not replace the HDD and the motherboard at the same time.

Replacing both in the wrong order, without updating the system, will cause the system to malfunction. For the correct order, see [“Troubleshooting cautions” on page 61](#).

- *Do not* reinstall system software at this time.

Reinstalling system software is not necessary when installing a new motherboard and can result in an error if done before transferring options to the new motherboard (described on [page 69](#).)

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

The EB-1357 can remain in Service Mode indefinitely. Use Service Mode to carefully verify the new motherboard before transferring options to the new motherboard.

Transferring options to the new motherboard permanently customizes the new motherboard. Once customized, the motherboard cannot be returned to inventory or installed in another EB-1357. If the new motherboard does not solve the problem in Service Mode (see [page 67](#)), do not transfer options. Return the new motherboard and unexpended one-time use dongle to inventory.

- If you are able to verify in Service Mode that the new motherboard solves the problem that you are troubleshooting, transfer options to the new motherboard using the Fiery Options Utility and one-time use dongle included with the new motherboard (see [page 69](#)).



- *Do not* remove the one-time use dongle while transferring options to the new motherboard.

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

TO REPLACE THE MOTHERBOARD

1. **If you are installing a new motherboard, install the DIMM(s) and CPU from the old motherboard onto the new motherboard. For DIMM(s), see [page 74](#); for the CPU, see [page 75](#).**

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 damage the EB-1357. BIOS chips are not interchangeable. (See “[Motherboard cautions](#)” on [page 62](#).)

2. **Install the motherboard in the chassis.**

Angle the motherboard so that the back panel connectors on the motherboard fit into the cutouts in the back of the chassis (see [Figure 20 on page 60](#)).



IMPORTANT: Make sure that the flexible grounding tabs on the cutouts for the network ports make contact with the outside of the ports. Do not allow the tabs to fold over or become bent inside the ports. The ports will not function if the tabs are placed improperly.

Take care when lowering the new motherboard into the chassis. Do not strike the motherboard against the metal standoffs attached to the chassis, as doing so can damage the components on the underside of the motherboard.

3. **Align the mounting holes on the motherboard with the screw holes located in the base of the chassis (for mounting hole locations, see [Figure 19 on page 58](#)).**
4. **Secure the motherboard to the chassis using the 10 mounting screws that you removed earlier.**

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

You are ready to replace motherboard components and complete motherboard installation.

TO REPLACE MOTHERBOARD COMPONENTS

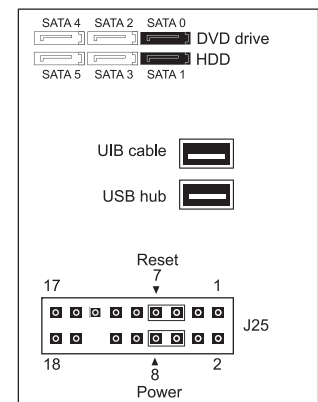
1. Replace the HDD bracket with the HDD attached (see [page 91](#)).
2. Replace the DVD drive bracket with the DVD drive attached (see [page 94](#)).
3. Replace the following cables:

- Chassis fan power cable (FAN 2)
- CPU power cable (PW2, 4-pin)
- Motherboard power cable (PW1, 20-pin)
- HDD data cable (SATA 1)



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

- DVD drive power/data combo cable (SATA 0)
 - UIB cable (USB port on motherboard)
 - Power button cable (J25, pins 6 and 8)
 - Reset button cable (J25, pins 5 and 7)
- Make sure that the small triangle on the cable connector is aligned with pin 8 on J25
- Make sure that the small triangle on the cable connector is aligned with pin 7 on J25



4. Secure cables as necessary with any plastic cable clamp that you may have removed earlier.
5. Replace the video board in motherboard connector PCIE 1 (see [Figure 19 on page 58](#)).

Make sure to secure the board to the chassis with the board mounting bracket screws.



NOTE: Make sure that unused back panel slots are covered with slot covers. Uncovered slots reduce air flow and may cause the EB-1357 to overheat.

(Continued on next page)

6. If you reinstalled the old motherboard, reassemble the EB-1357 and verify its functionality (see [page 95](#)).
7. If you replaced the motherboard with a new motherboard, clear the CMOS (see [page 83](#)).

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



NOTE: Make sure that the power cable is removed from the power outlet before clearing CMOS.

- Remove the battery (see [page 81](#)).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see [page 81](#)).

8. Reassemble the EB-1357 (see [page 95](#)) and proceed to “[Verifying new motherboard installation and transferring options](#)” on [page 66](#).



NOTE: Do not reconnect any USB dongle(s) that may have been connected to the EB-1357 (for example, for Impose or Compose) until you verify that the EB-1357 starts up successfully in Service Mode (see [page 67](#)).

Verifying new motherboard installation and transferring options

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

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

Service Mode is a temporary state that allows you to make sure that the motherboard solves the problem that you are troubleshooting. Service Mode is exited automatically when you expend the one-time use dongle to transfer options to the new motherboard (see [“Transferring options to the new motherboard” on page 69](#)).

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

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

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

Transferring options (for example, FACI Enablement Kit, if applicable) expends the one-time use dongle. For details, see [“Transferring options to the new motherboard” on page 69](#).



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

Entering Service Mode

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

TO ENTER SERVICE MODE AND VERIFY THE SYSTEM

NOTE: This procedure assumes that the EB-1357 is powered off, no CD is in the DVD drive, and that you have installed a new motherboard, reassembled the EB-1357, and attached external cables.

NOTE: Do not insert the Fiery Options Utility into the DVD/CD-ROM drive yet. You will install the Fiery Options Utility when you are ready to transfer options to the new motherboard ([page 69](#)) *after* you verify the system in Service Mode.

1. **Make sure that the EB-1357 is connected to the copier (see [page 28](#)).**
2. **Locate the one-time use dongle provided with the new motherboard and connect it to a USB port on the front or back panel.**
3. **Remove and set aside all other dongles and USB storage devices (such as a Flash or thumb drive) that may be connected to any other USB port.**

Reconnect other dongles and USB devices only after you verify that the EB-1357 starts up successfully in Service Mode.

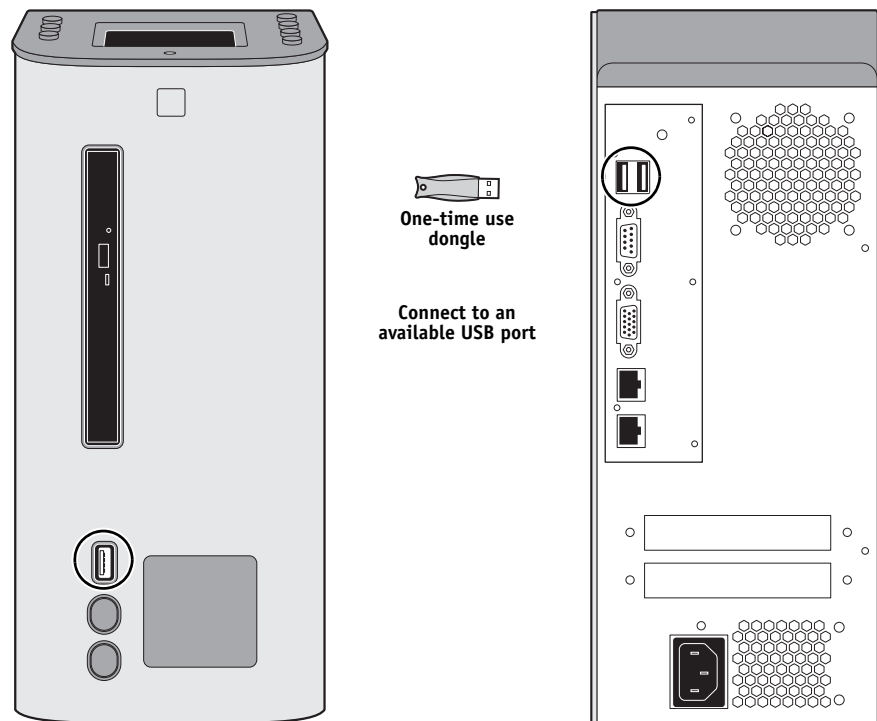


FIGURE 21: Connecting the dongle to a USB port

4. Power on the EB-1357 and allow it to boot without interruption.

If a monitor is connected to the EB-1357:

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

At this point, the EB-1357 is in Service Mode so you can verify that the new motherboard solves the problem you are trying to troubleshoot. Service Mode is not indicated on the monitor or on the EB-1357 Control Panel.

5. Print the EB-1357 Test Page (see [page 38](#)).**6. Ask the network administrator to connect the EB-1357 to the network and download a print job over the network (see *Configuration and Setup* on the User Documentation CD).**

If the problem you are troubleshooting persists, or if you are unable to perform [steps 4](#) through [step 6](#) above while in Service Mode, you may conclude that the old motherboard was not the source of the problem and does not need to be replaced. If so, do not transfer options to the new motherboard (described on [page 69](#)), do not install system software, and do not replace the HDD. Reinstall the old motherboard and return the new motherboard with the unexpended one-time use dongle to inventory. For more information about troubleshooting system problems, see “[Troubleshooting](#)” on [page 111](#).

If installing a new motherboard solved the problem you are troubleshooting and you are able to print a Test Page and send a print job over the network, you are ready to transfer options to the new motherboard. Service Mode ends automatically when you transfer options to the new motherboard (see [page 69](#)).

Transferring options to the new motherboard

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



NOTE: If the new motherboard kit includes a different CD and option transfer procedure than described in this document, use the CD and procedure included in the new motherboard kit.

TO TRANSFER OPTIONS TO THE NEW MOTHERBOARD

NOTE: This procedure assumes that the EB-1357 is fully assembled, verified in Service Mode (see [page 67](#)), and powered off.

1. **Make sure that the one-time use dongle is firmly attached to a USB port on the EB-1357 and that no other dongles or USB storage devices (for example, a Flash or thumb drive) are attached to the EB-1357.**

The options transfer process may fail if other dongles and/or USB storage devices are connected to the EB-1357 during the process.

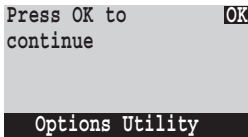
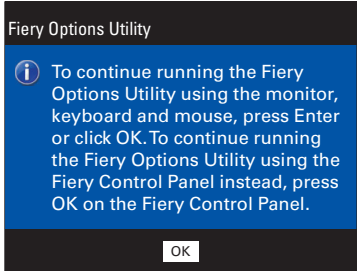
2. **Power on the EB-1357.**
3. **Immediately insert the Fiery Options Utility into the DVD drive.**

NOTE: The Fiery Options Utility must be in the DVD drive in time for the EB-1357 to boot from it. If the EB-1357 does not boot from the Fiery Options Utility, allow the EB-1357 to start up, eject the CD, turn off the EB-1357, and then repeat steps 2 and 3.

NOTE: If an error message displays, see [page 72](#).

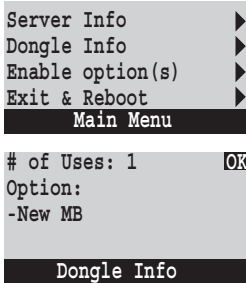
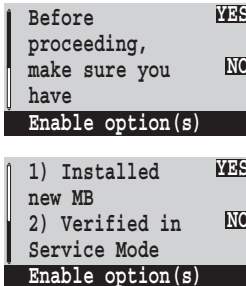
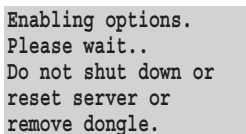
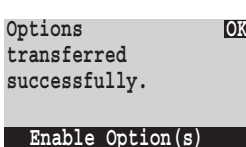
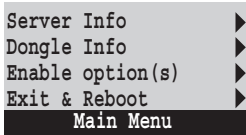
4. **To continue, choose the Control Panel or the monitor (option, if present) as the interface that you will use throughout the option transfer process.**

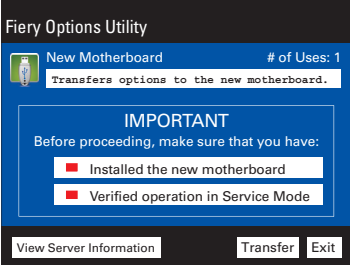
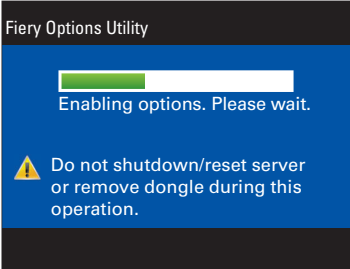
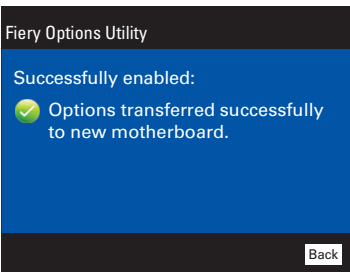
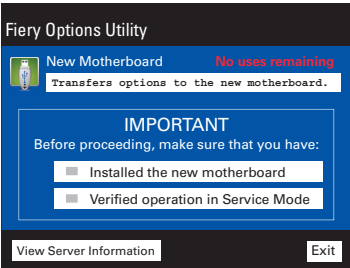
The first screen that displays when you start the Fiery Options Utility allows you to choose the interface that you will use throughout the procedure. Choose an interface by selecting **OK** on the Control Panel or the monitor. The interface not chosen is then disabled during the option transfer process.

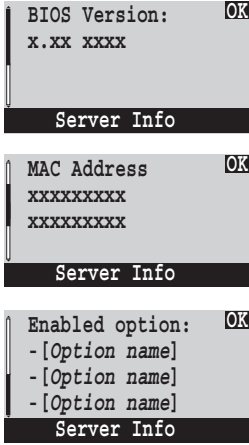
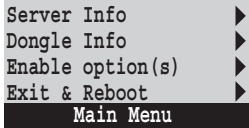
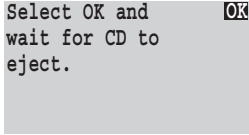
Control Panel	Monitor
	

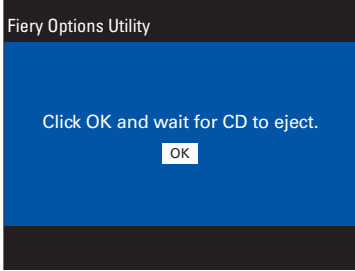
5. Follow the prompts on the interface that you chose.

NOTE: If an error message appears during the update process, see [page 72](#).

Control Panel	Action
	<p>Select Enable option(s).</p> <p>To verify the type of dongle connected to the EB-1357, select Dongle Info.</p>
	<p>Select YES to confirm items and transfer options.</p> <p>- or -</p> <p>Select NO to return to the Main Menu.</p>
	<p>Wait 1 minute or longer for the next prompt.</p>
	<p>Select OK to continue to the Main menu.</p>
	<p>Select Server Info.</p>

Monitor	Action
	<p>Click each item to confirm, and then select Transfer to transfer options.</p> <p>The Transfer button is unavailable until you click both items.</p>
	<p>Wait 1 minute or longer for the next prompt.</p>
	<p>Select Back.</p>
	<p>Select View Server Information.</p>

Control Panel	Action
	Scroll down and verify that transferred options appear under Enabled option, then select OK .
	Select Exit & Reboot .
	Select OK .

Monitor	Action
	Verify that transferred options appear under Enabled options, then select Back .
	Select Exit .
	Select OK .

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

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

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

7. If a monitor is connected to the EB-1357:

- When the Log On to Windows dialog box appears on the monitor, type Administrator in the user name field, type Fiery.1 in the password field, and then press Enter on the keyboard.

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

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

If the EB-1357 is not connected to the copier, or if the copier is not powered on, a message displays indicating the status. Expect this message. The EB-1357 detects the copier after you connect the EB-1357 to the copier.

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

One of the following error messages may display on the EB-1357 Control Panel or the monitor when you attempt to transfer options to the new motherboard.

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

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

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

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

Replacing parts on the motherboard

This section describes how to remove and replace the DIMM(s), CPU, and battery on the motherboard. Before you perform any of these procedures, shut down and open the EB-1357 (see [page 47](#)).

DIMM(s)

Each DIMM (dual in-line memory module) is held in place by levers at each end of the DIMM socket. The motherboard provides two DIMM sockets (DIMM1 and DIMM2).

The standard memory configuration populates both DIMM sockets with a 1GB DIMM for a total of 2GB of memory.



NOTE: A DIMM must be installed in DIMM 2 in order for the EB-1357 to start up. If no DIMM is installed in DIMM 2, the system will sound six long beeps.

When installing DIMMs of different capacities, be sure to install the lower-capacity DIMM in socket DIMM2. Approved DIMMs are available from your authorized service/support center.

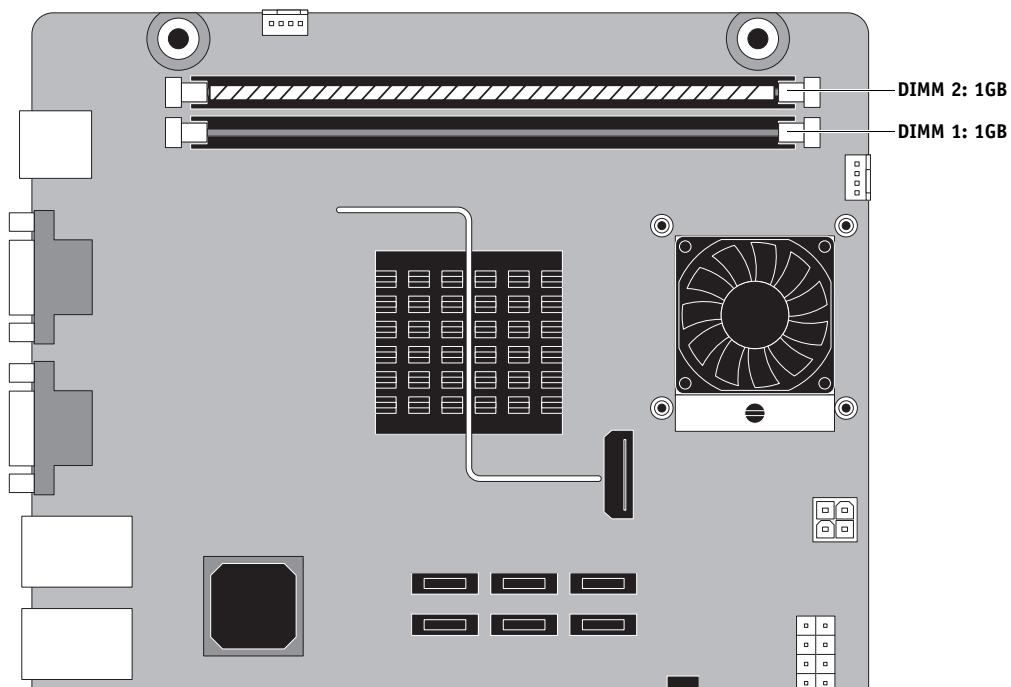


FIGURE 22: Standard DIMM configuration

TO REMOVE OR REPLACE A DIMM

1. Shut down and open the EB-1357 (see pages 47 and 49).

To remove a DIMM, you must remove the side panel.

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

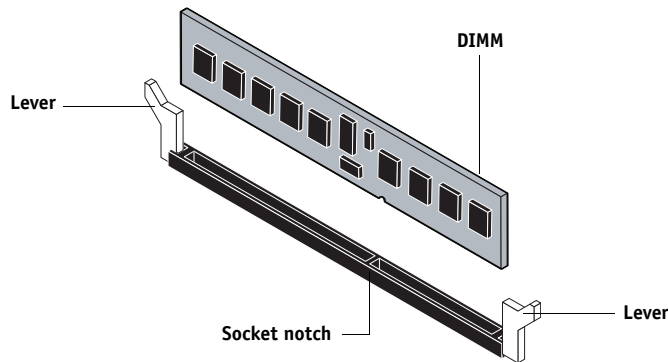


FIGURE 23: Removing or replacing a DIMM

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 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.

NOTE: For a single-DIMM configuration, you must install the DIMM in socket DIMM2. Installing the single DIMM in socket DIMM1 is incorrect and can cause problems with system performance.

5. If you installed a new DIMM(s), clear the CMOS (see page 83).

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



NOTE: Make sure that the power cable is removed from the power outlet before clearing CMOS.

- Remove the battery (see page 81).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see page 81).

6. Reassemble the EB-1357 and verify functionality (see page 95).
7. If you installed a new DIMM and cleared CMOS, make sure to reset the date and time in Setup (see *Configuration and Setup*).

CPU and CPU cooling assembly

The CPU is installed in a Zero Insertion Force (ZIF) socket on the motherboard. Before removing the CPU from its socket, disconnect the CPU fan cable from the motherboard and remove the cooling assembly from the CPU socket (see [page 76](#)).

The CPU cooling assembly consists of a fan guard, a fan, and a heatsink. The cooling assembly is secured to a mounting bracket installed on the underside of the motherboard.

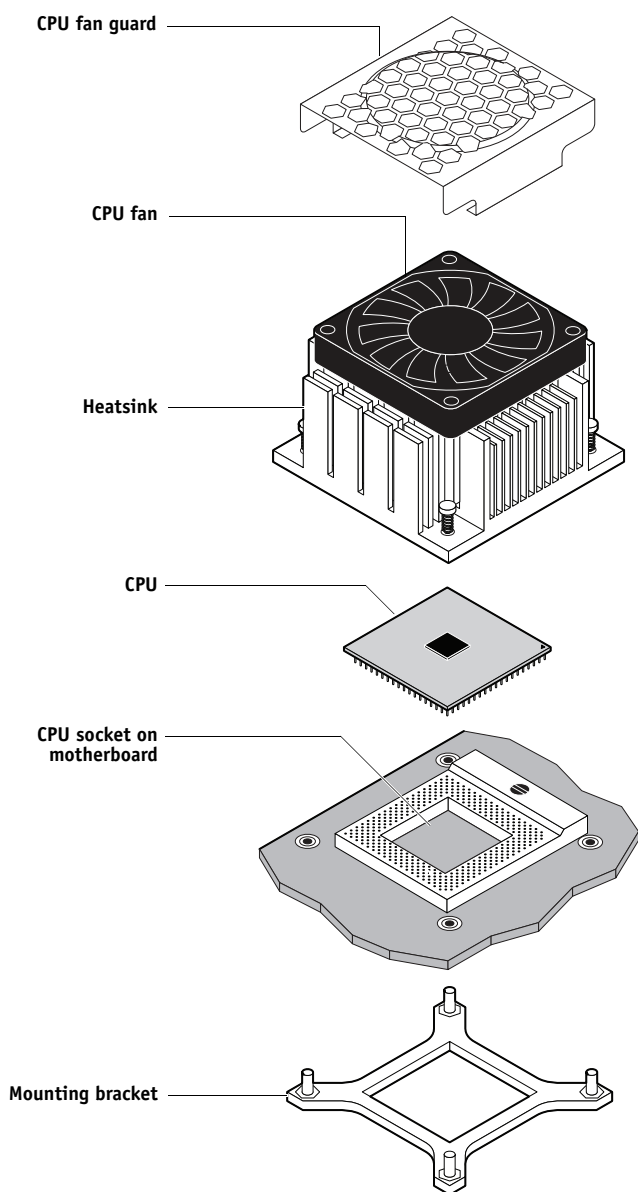


FIGURE 24: CPU cooling assembly

TO REMOVE THE CPU

1. **Shut down and open the EB-1357 (see pages 47 and 49).**

To remove the CPU, you must remove the side, top, and front panels.

2. **Remove the motherboard components (see page 59).**
3. **Remove the motherboard from the chassis (see page 60).**

Place the motherboard on a flat, anti-static surface.

4. **Remove the CPU fan cable from motherboard connector FAN1.**

5. **Remove the CPU cooling assembly:**



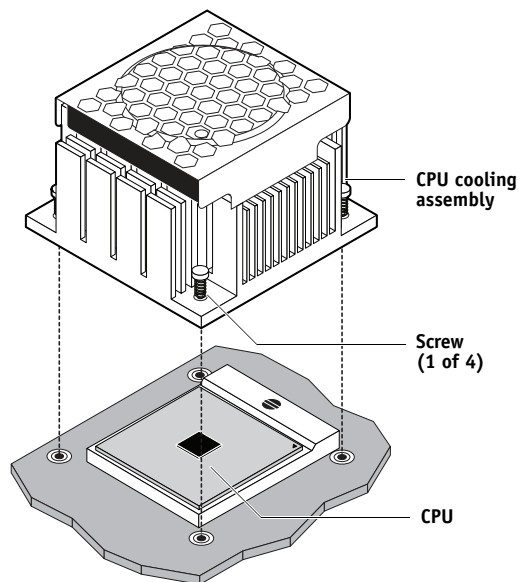
Be aware that both the cooling assembly and the CPU may be very hot. You may need to allow the components to cool before you attempt to remove them.

Several motherboard components are very close to the cooling assembly. Be sure not to damage these components when removing or replacing the cooling assembly.

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



Use caution when lifting the cooling assembly off the CPU, because the thermal compound at the base of the heatsink may damage the CPU if the heatsink is removed too forcefully.



6. If you are removing the motherboard in order to replace it with a new one, remove the mounting bracket from the underside of the motherboard (see [Figure 25](#)).

Push the four screw posts of the bracket through the post holes in the motherboard, and carefully pry the bracket away from the motherboard.

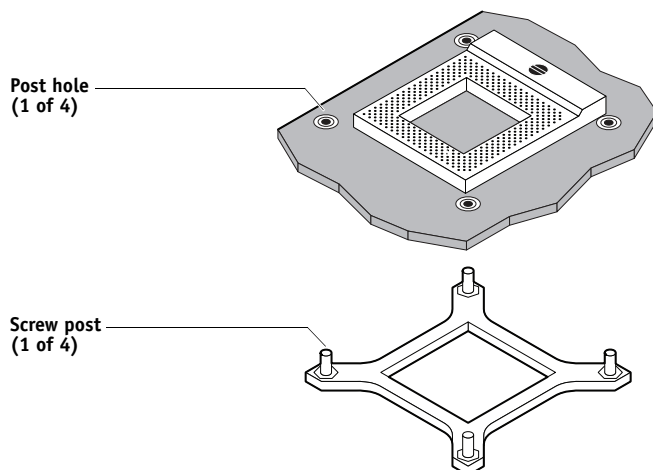


FIGURE 25: Removing/replacing the CPU mounting bracket

7. If you are removing the CPU cooling assembly in order to replace it with a new one, remove the fan guard from the CPU fan (see [Figure 26](#)).

Press down to relieve the tension from the fan guard, and carefully pry the bottom edges of the guard away from the CPU fan. If needed, use the blade of a small flathead screwdriver to pry away the edges.

Set aside the guard so that you can install it later on the new CPU cooling assembly.

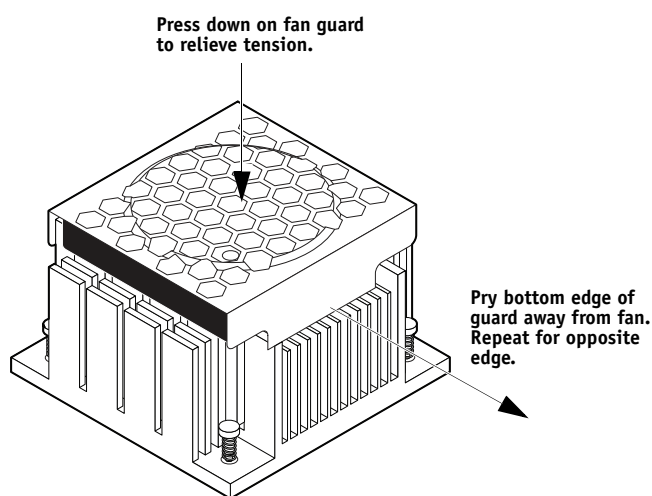


FIGURE 26: Removing/replacing the CPU fan guard

8. Unlock the CPU socket (see Figure 27).

Rotate the socket screw 180 degrees counterclockwise until the CPU socket unlocks.

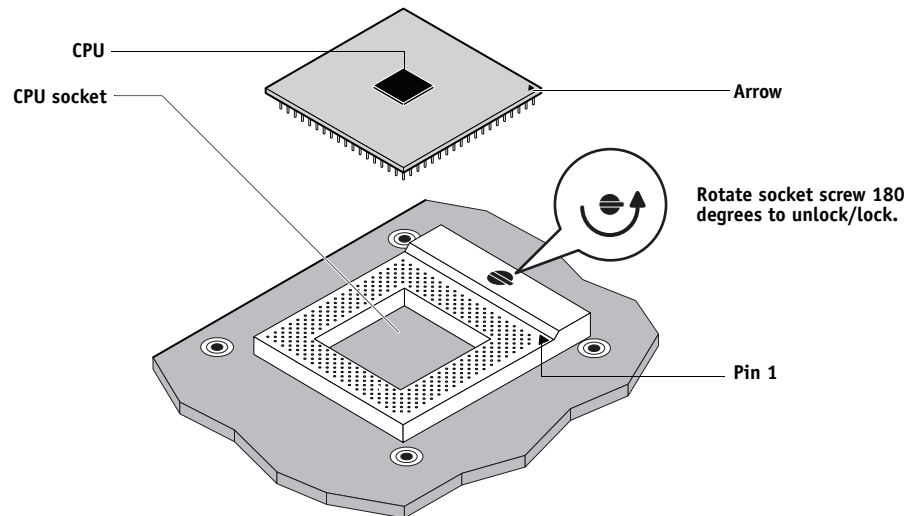


FIGURE 27: Removing/replacing a CPU

9. Grasp the CPU by its edges and carefully lift it from the socket.

TO REPLACE A CPU**1. Install the CPU in the CPU socket on the motherboard.**

Make sure that you align the arrow on the CPU with the arrow indicating pin 1 in the CPU socket (see [Figure 27 on page 78](#)).

2. Make sure that the CPU is correctly seated in the socket, and then lock the socket.

Rotate the socket screw 180 degrees clockwise to lock the socket.

3. Do one of the following:

- If you are installing a new CPU cooling assembly on an existing CPU, clean the contact surface of the CPU.



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

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

4. If needed, install the CPU mounting bracket on the underside of the motherboard (see [Figure 25 on page 77](#)).

Push the four screw posts of the bracket into the four post poles in the motherboard.

5. If you are installing a new CPU cooling assembly, install the fan guard from the old cooling assembly.

Place the fan guard on top of the new CPU fan, and firmly press down until the bottom edges of the fan guard fasten around the fan.

6. If you are installing a new CPU cooling assembly, install the screws in the heatsink.

Insert each screw into a spring, and then insert the screw assembly into the heatsink. Turn the screw until the screw threads completely protrude through base of heatsink.

7. Replace the CPU cooling assembly:

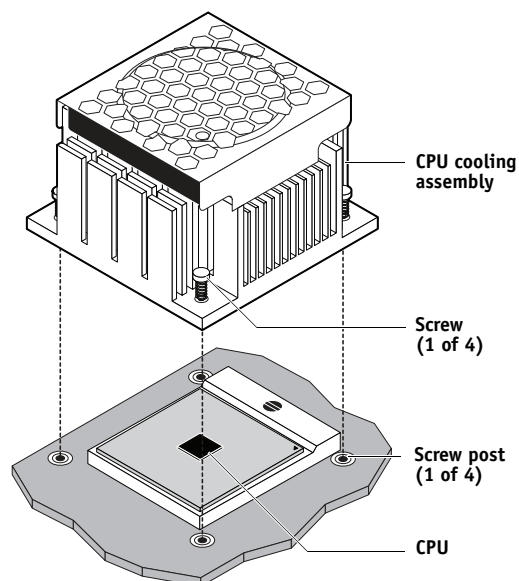
- Orient the cooling assembly so that the fan cable is near the CPU fan connector on the motherboard (FAN1).

- Place the cooling assembly on the CPU.

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

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

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



8. Connect the CPU fan cable to the motherboard connector FAN1.

The cable connector is keyed to fit only one way. Make sure the connector on the cable is securely attached to connector FAN1 on the motherboard.

9. Install the motherboard in the chassis (see [page 63](#)).

10. Replace the motherboard components (see [page 64](#)).

11. If you installed a new CPU, clear the CMOS (see [page 83](#)).

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



NOTE: Make sure that the power cable is removed from the power outlet before clearing the CMOS.

- Remove the battery (see [page 81](#)).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see [page 81](#)).

12. Reassemble the EB-1357 and verify functionality (see [page 95](#)).

13. If you installed a new CPU and cleared the CMOS, make sure to reset the date and time in Setup (see *Configuration and Setup*).

Battery

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



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

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

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

ADVARSEL!: Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering Udsiftning må kun ske med bat-teri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

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

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

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

TO REMOVE OR REPLACE THE BATTERY

1. Shut down and open the EB-1357 (see pages 47 and 49).

To access the battery, you must remove the side panel.



NOTE: Make sure to remove the AC power cable from the power outlet before opening the EB-1357 and removing the battery.

2. Remove the video board (see page 54).
3. Locate the battery on the motherboard (see Figure 19 on page 58).
4. Carefully push the clip away from the battery until the socket ejects the battery.

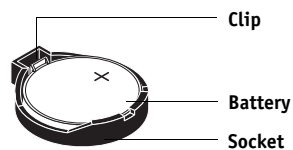


FIGURE 28: Motherboard battery

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

Make sure the battery is securely installed in the socket.
9. Replace the video board (see page 54).
10. Reassemble the EB-1357 and verify functionality (see page 95).
11. Configure the date and time in Setup (see *Configuration and Setup*).

Clearing the CMOS

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

To CLEAR THE CMOS



1. Shut down and open the EB-1357 (see pages 47 and 49).

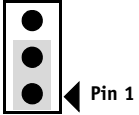
NOTE: Make sure to remove the AC power cable from the power outlet before opening the EB-1357 and clearing the CMOS.

2. Remove the battery (see page 81).
3. Wait 2 minutes to allow the motherboard electrical components to fully discharge.
4. Reinstall the battery (see page 81).
5. Reassemble the EB-1357 and verify its functionality (see page 95).
6. Reset date and time in Setup (see *Configuration and Setup*).

Jumpers

The following table describes the factory default configuration for jumpers on the motherboard. Jumper configurations should not be changed.

TABLE 1: Jumper pins on the motherboard

Location on motherboard	Default jumper configuration
JP1 — Clear CMOS jumper. (near the SATA connectors) 	Jumper cap installed on pins 1 and 2. NOTE: Because the jumper cap is very small, it is not necessary—and could introduce an error—to remove the jumper cap in order to clear the CMOS. Instead, clear the CMOS by denying power to the motherboard as described above.
JP4 (near SATA connectors)	No jumper cap is installed.
JP5 (on edge of motherboard, near connector J26)	No jumper cap is installed.
JP6 (on edge of motherboard, near connector J26)	No jumper cap is installed.
JP7 (on edge of motherboard, near the copier interface port)	No jumper cap is installed.
JP8 (on edge of motherboard, near the copier interface port)	No jumper cap is installed.

Chassis fan

A fan mounted inside the chassis blows air out of the EB-1357 to cool components. The chassis fan runs continuously when the system is on. You should hear the chassis fan start as soon as you power on the EB-1357. If you do not hear the chassis fan, there may be a faulty power connection (see [page 46](#)).

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

TO REMOVE/REPLACE THE CHASSIS FAN

1. **Shut down and open the EB-1357 (see pages 47 and 49).**

To access the chassis fan, you must remove the side panel.

2. **Remove the fan cable from motherboard connector FAN 2.**

3. **Remove the four screws that attach the chassis fan to the chassis, and then remove the fan.**

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

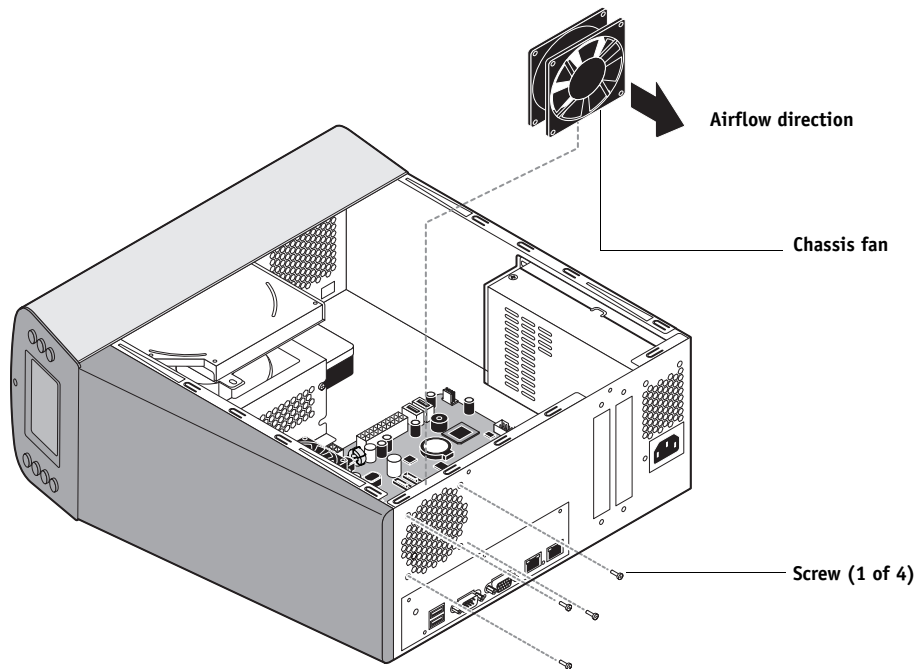


FIGURE 29: Removing/replacing the chassis fan

4. **To replace the chassis fan, reverse the removal steps.**

An arrow on the side of the chassis fan indicates the airflow direction. Make sure that the chassis fan is positioned with the label against the chassis. The chassis fan should blow air out of the vents in the back panel when the system is reassembled and powered on (see [Figure 29](#)).

5. **Verify EB-1357 functionality (see [page 95](#)).**


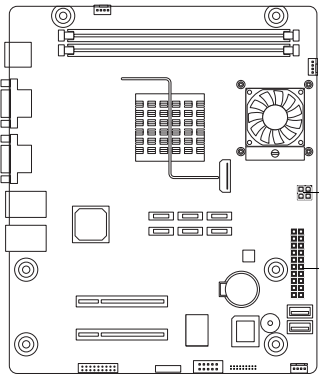
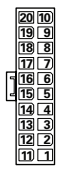
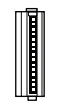
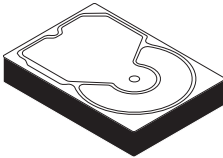

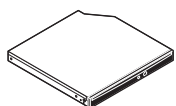
Power supply

The following table describes the power supply cables that connect to EB-1357 components. For more information on the power supply, see “Specifications” on page 136.



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

TABLE 2: Power supply cable details

Cable connector	Pin(s)	Wire color	Voltage	Connection
NOTE: All voltages listed in this table are direct current voltages (VDC).				
 4-pin CPU power connector to motherboard PW2	1, 2	Black	COM	 PW2, 4-pin CPU PW1, 20-pin ATX connector
	3, 4	Yellow & Black	+12V	
 20-pin ATX power connector to motherboard PW1	1, 2	Orange	+3.3V	
	3, 5, 7, 13, 15, 16, 17	Black	COM	
	4, 6, 19, 20	Red	+5V	
	8	Gray	PW-OK	
	9	Purple	+5Vsb	
	10	Yellow	+12V	
	11	Orange	+3.3V	
		Brown	+3.3V sense	
	12	Blue	-12V	
	14	Green	PS-ON	
	18	—	not connected	
 SATA (5-pin) power connector to HDD	1	Yellow	+12V	
	2	Black	COM	
	3	Red	+5V	
	4	Black	COM	
	5	—	not connected	
 4-pin PATA power connector to DVD drive power/data combo cable	1	Yellow	+12V	
	2	Black	COM	
	3	Black	COM	
	4	Red	+5V	

TO REMOVE THE POWER SUPPLY

1. Shut down and open the EB-1357 (see pages 47 and 49).

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

2. Remove the power and reset button cables from the USB ports on the motherboard.

Remove these cables to provide room for removing the power supply.

3. Remove the power cable from the HDD.
4. Disconnect the power supply cable from the DVD drive power and data combination cable.
5. Remove the 20-pin motherboard power cable from the motherboard.
6. Remove the 8-pin CPU power cable from the motherboard.
7. Remove the power supply cables secured by the cable harness in the chassis.
8. Remove the four screws that attach the power supply to the chassis (see Figure 30 on page 86).

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

9. Lift the power supply out of the chassis.

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

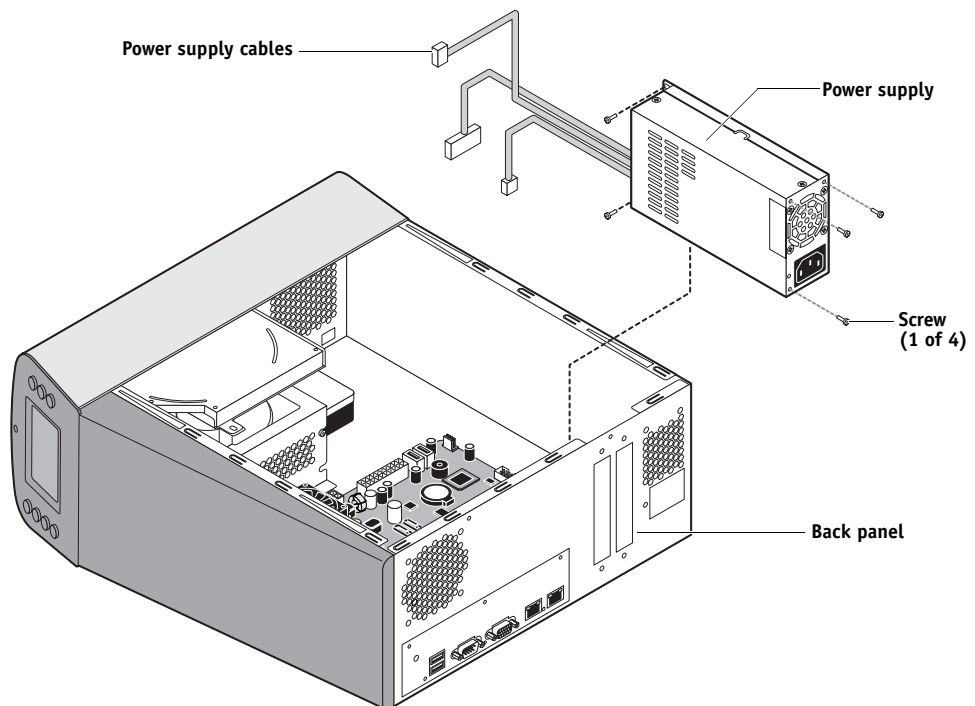


FIGURE 30: Removing/replacing the power supply

TO REPLACE THE POWER SUPPLY

1. Place the power supply inside the chassis and align the mounting holes.
2. Attach the power supply to the chassis with the four screws that you removed earlier (see [Figure 30 on page 86](#)).
3. Connect the 8-pin CPU power cable to motherboard connector PW 2 (for connector locations, see [Figure 19 on page 58](#)).
4. Connect the 20-pin motherboard power cable to motherboard connector PW 1.
5. Connect a white, 4-pin power supply cable to the DVD drive power and data combination cable.
6. Connect the power cable to the HDD.



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

7. Secure the power supply cable in the cable harness in the chassis.
8. Reassemble the EB-1357 and verify its functionality (see [page 95](#)).

Hard disk drive

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

If you replace the HDD with a new one, you must install system software as described on [page 96](#). (Spare HDDs are shipped without system software installed.)



Do not replace the HDD and the motherboard at the same time. Doing so in the wrong order, without updating the system (see [page 61](#)), will cause the system to malfunction.

It is unlikely that both the HDD and the motherboard are defective. Avoid replacing both to solve one problem. If troubleshooting strategies (such as checking cables and connections; see [pages 113 and 114](#)) do not solve the problem, and you suspect the HDD or the motherboard is at fault, use the following order to troubleshoot: replace the HDD, install system software, and then check to see if the problem persists. If it does, perform other procedures, such as replacing the motherboard (see [page 61](#)).

Proper handling

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

- Use proper ESD practices when grounding yourself and the EB-1357.
- Keep magnets and magnetic-sensitive objects away from the HDD.
- Do not remove the screws on top of the HDD. Loosening these screws voids the warranty.
- Never drop, jar, bump, or put excessive pressure on the HDD.
- Handle the HDD by its sides and avoid touching the printed circuit board.
- Allow the HDD to reach room temperature before installation.

HDD problems may be caused by the following:

- Loose or faulty connection
- Faulty data cable
- Faulty HDD



Make sure that you attach an ESD grounding wrist strap and follow standard ESD precautions before handling EB-1357 components.

The HDD is mounted inside a bracket.

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

- The appropriate system software and documentation for the EB-1357.
- A compatible version of the user software for the networked computers that will print to the EB-1357.

TO REMOVE THE HDD

1. If you are removing the HDD in order to install a new drive, give the network administrator the opportunity to print the Job Log and save any custom simulations. If possible, print the Configuration page and the Font Lists (see [page 38](#)).
2. Shut down and open the EB-1357 (see [pages 47 and 49](#)).
To access the HDD, you must remove the side and front panels.
3. Remove the DVD drive (see [page 93](#)).
4. Remove the power supply cable from the HDD.
5. Remove the HDD data cable from the HDD.
6. Remove the four screws securing the HDD bracket to the chassis.
7. Lift the HDD bracket out of the chassis (see [Figure 31](#)).



NOTE: Avoid striking the motherboard as you remove the HDD bracket.

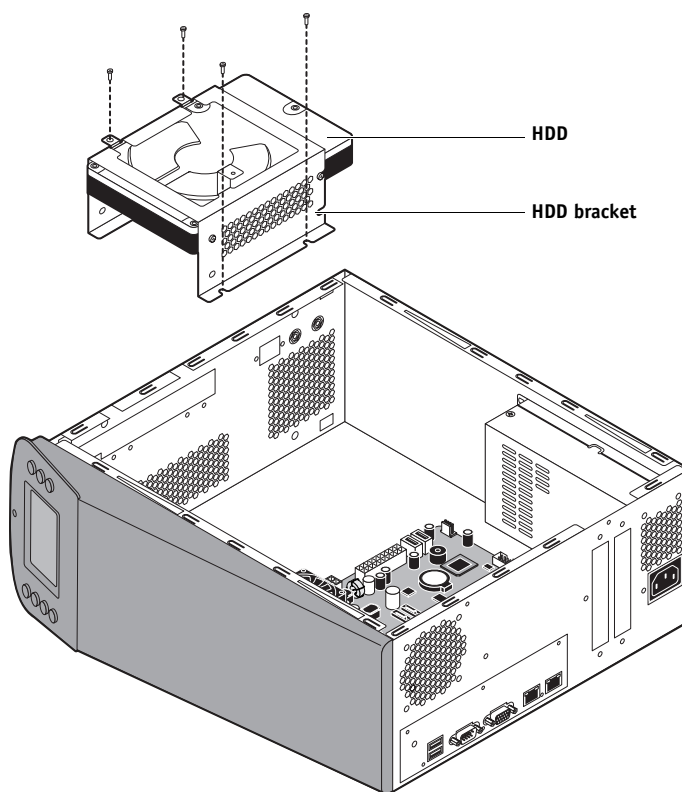


FIGURE 31: Removing/replacing the HDD bracket

8. Remove the four screws that attach the HDD to the HDD bracket (see [Figure 32 on page 90](#)).

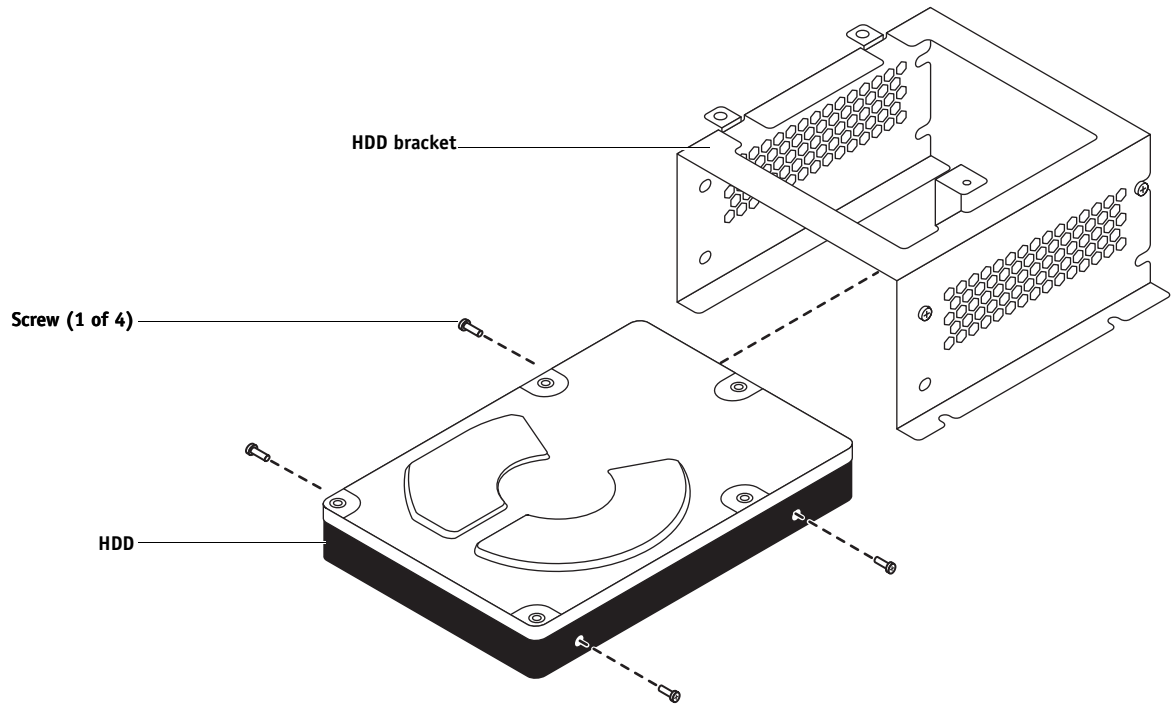


FIGURE 32: Removing/replacing the HDD from the HDD bracket

9. Remove the HDD from the HDD bracket and place it in an antistatic bag.



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

Do not touch the drive 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 HDD.

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

TO REPLACE THE HDD

NOTE: Do not install a new HDD and a new motherboard at the same time. If you suspect that the EB-1357 needs a new HDD and a new motherboard, first install the new HDD and install system software (see [page 96](#)), and then install a new motherboard (see [page 61](#)).

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 on the HDD with the four holes in the bracket (see [Figure 32 on page 90](#)).

When correctly installed, the HDD extends about an inch past the rear of the bracket.

3. Attach the HDD to the bracket using the four screws that you removed earlier.

4. Place the bracket inside the chassis and secure it using the four screws that you removed earlier.



NOTE: Avoid striking the motherboard as you replace the HDD bracket.

5. Connect one end of the HDD data cable to the HDD.

6. Connect the other end of the HDD data cable to SATA 1 on the motherboard (see [Figure 12 on page 46](#)).

7. Connect the power cable to the HDD.



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

8. If you replaced the HDD with a new HDD, clear the CMOS (see [page 83](#)).

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



NOTE: Make sure the power cable is removed from the power outlet before clearing CMOS.

- Remove the battery (see [page 81](#)).
- Wait two minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see [page 81](#)).

9. Reassemble the EB-1357 (see [page 95](#)).

10. If you replaced the HDD with a new HDD, install system software (see [page 96](#)).

If a startup error displays on the Control Panel when you power on the EB-1357, check the connections.

11. If you installed a new HDD and cleared CMOS, make sure to reset the date and time in Setup (see *Configuration and Setup*).

12. Verify functionality (see [page 95](#)).

DVD drive

The DVD drive is attached to a bracket mounted to the HDD bracket and the chassis. The DVD drive is used to install system software onto the HDD and archive data onto writable media.

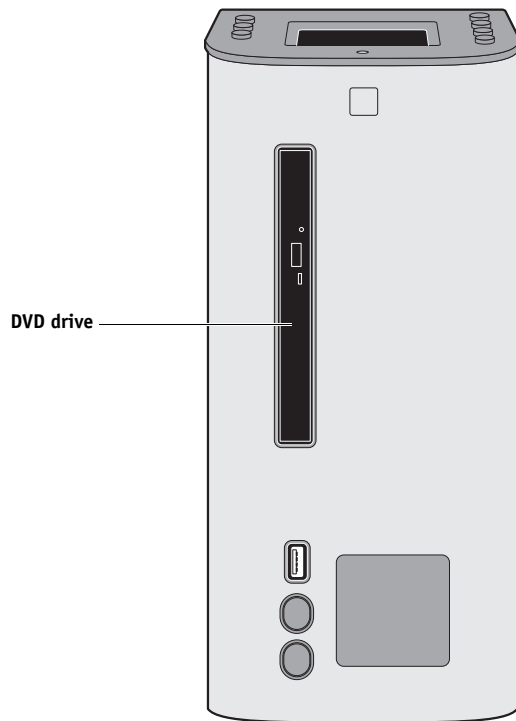


FIGURE 33: EB-1357 DVD drive

TO REMOVE THE DVD DRIVE

1. Shut down and open the EB-1357 (see pages 47 and 49).

To remove the DVD drive, you must remove the side and front panels.

2. Remove the DVD drive power/data combination cable from the back of the DVD drive.
3. Remove the screw that attaches the DVD drive bracket to the HDD bracket.
4. Remove the two screws that attach the DVD drive bracket to the chassis.

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

5. Slide the DVD drive bracket out the front of the chassis.

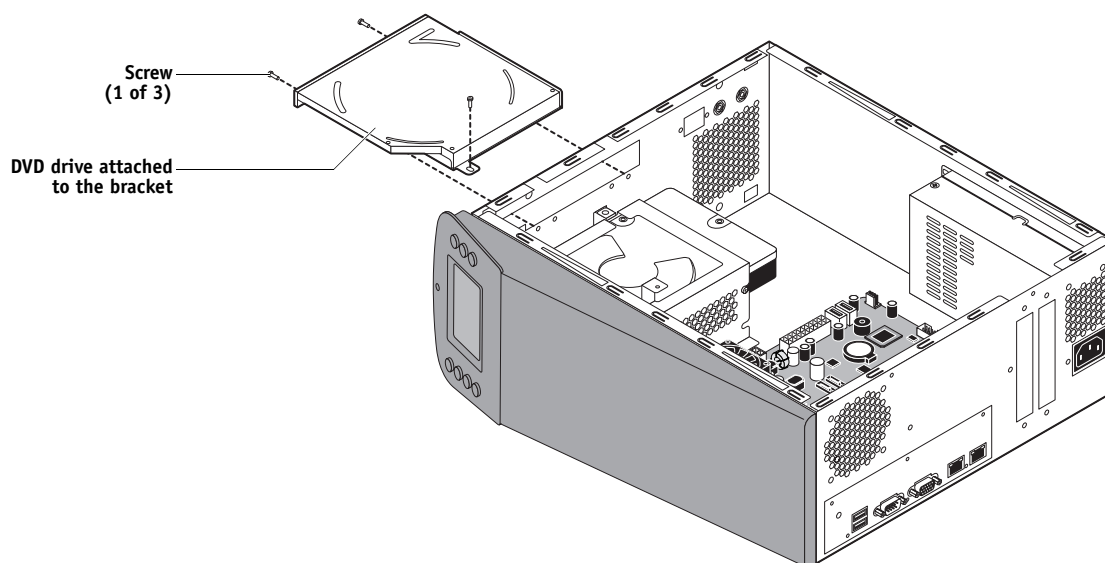


FIGURE 34: Removing/replacing the DVD drive bracket

6. Remove the four screws that attach the DVD drive to the bracket.

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

7. Lift the DVD drive out of the bracket.

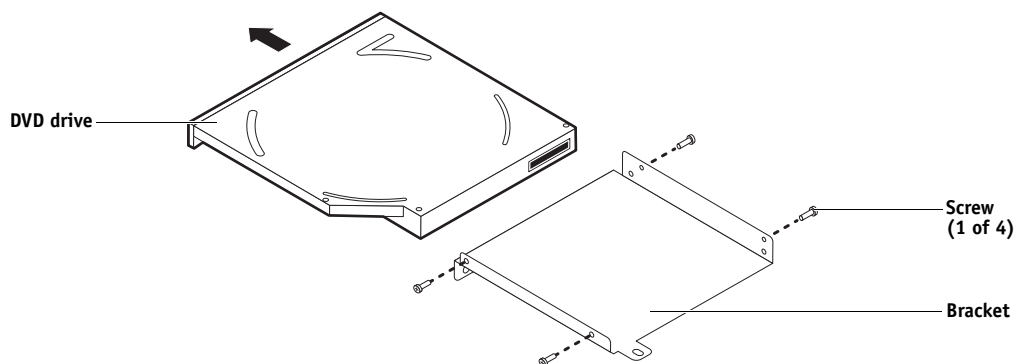


FIGURE 35: Removing/replacing the DVD drive

TO REPLACE THE DVD DRIVE

- 1. Position the DVD drive inside the bracket and align the mounting holes on the DVD drive with the four holes in the bracket (see [Figure 34 on page 93](#)).**
- 2. Place the bracket inside the chassis and secure it using the three screws that you removed earlier.**
- 3. Attach the power and data combination cable to the back of the DVD drive.**

Make sure that the data segment of the cable is connected to motherboard connector SATA 0.

4. If you installed a new DVD drive, clear the CMOS (see [page 83](#)).

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



NOTE: Make sure the power cable is removed from the power outlet before clearing CMOS.

- Remove the battery (see [page 81](#)).
- Wait 2 minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery (see [page 81](#)).

5. Reassemble the EB-1357 and verify functionality (see [page 95](#)).

6. If you installed a new DVD drive and cleared CMOS, make sure to reset the date and time in Setup (see *Configuration and Setup*).

Restoring and verifying functionality after service

Before you leave the customer site, make sure that you complete the following steps. If you cannot complete a step, determine the reason and correct the problem before continuing. For more information, see [Troubleshooting](#) on [page 111](#).

TO REASSEMBLE THE EB-1357 AND VERIFY FUNCTIONALITY

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

When routing cables inside the EB-1357, make sure that:

- Cables are securely installed after routing cables
- Cable routing does not interfere with the operation of internal components nor interfere with removing or replacing components
- Cables are not tangled nor looped around internal circuit boards, or components (such as capacitors and resistors)
- Cables do not lie on or against any internal heating element
- Cables do not interfere with opening or closing EB-1357 panels
- Cable slack is secured with a tie-wrap

2. Restore the EB-1357 to the upright position.

3. Replace any panels that you removed earlier, as described on [page 50](#).

4. If you replaced the motherboard, make sure that the new motherboard solves the problem that you are troubleshooting, and then transfer options to the new motherboard (see [page 69](#)).

5. Connect the power cable to the EB-1357 (see [page 28](#)).

6. If you cleared CMOS during service, reset the EB-1357 date and time in Setup.

7. Connect the EB-1357 to the copier (see [page 28](#)).

8. Print the Test Page and Configuration page (see [page 38](#)).

- If the EB-1357 does not start up, see startup problems on [page 122](#).
- If pages do not print, verify that the interface cables are properly connected (see printing problems on [page 131](#)).
- If image quality is poor, test the copier. (See the service documentation that accompanies the copier.)

9. Connect to the network (see [page 28](#)).

10. Ask the network administrator to download a test job over the network.

If the job does not print or has poor image quality, see printing problems on [page 122](#) and the Troubleshooting sections of the user documentation located on the User Documentation CD.

SYSTEM AND USER SOFTWARE

This chapter describes how to install system and user software on the EB-1357 HDD. It also details backing up and restoring Setup configuration (see [page 101](#)) and updating system and user software (see [page 102](#)).

Overview

This chapter describes how to install system and user software on the EB-1357 HDD.

The EB-1357 ships with pre-installed system software on the HDD (hard disk drive). If you must reinstall system software in the future (for example, when you replace the HDD, remedy an error condition, or change the language), use the System Software DVDs included in the media pack.

Before you install system software

When installing software, keep in mind the following:

- **Jobs**—All jobs in all print queues and all jobs archived locally on the EB-1357 HDD are deleted when you install system and user software. To save jobs, ask the network administrator to archive them to a CD or location on the network, so that the jobs can be imported back into the EB-1357 queue after software installation. For more information, see Command WorkStation Help.



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

- **Job Log**—The list of jobs in the Job Log and any jobs in the queues are deleted when you install system and user 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 HDD are deleted when you install system and user software. Resident fonts are reinstalled when you reinstall system and user software. Any customer-supplied fonts must be reinstalled by the network administrator using Command WorkStation.

To determine which additional fonts were downloaded to the EB-1357, print the Font List before you install the software and again after you complete the software installation. Any fonts not listed after installation must be reinstalled. For more information, see Command WorkStation Help.

- **Backing-up/Restoring Setup configuration**—The existing Setup configuration (typically configured by the customer; see *Configuration and Setup*) is deleted when you install system and user software. The Setup configuration can be backed-up before installing system software and saved to a file on a client computer, then restored to the EB-1357 after system software reinstallation (see [page 101](#)). Print a Configuration page (see [page 38](#)) before you install system and user software in order to preserve a record of the Setup configuration settings.

- **User documentation**—All user documentation files that are resident on the EB-1357 are deleted when you install system and user software. If user documentation is resident on the EB-1357, remind the site administrator to reinstall the documentation files after you finish installing system and user software.
- **Custom simulation and output profiles**—Custom simulation and custom output profiles saved on the HDD are deleted when you install system and user software. Ask the site administrator to save a copy of any custom profiles to a CD or network location before you install system software. For more information, see *Color Printing*, *Fiery Color Reference*, and *Workflow Examples* on the User Documentation CD.
- **Monitor profiles**—Monitor profiles saved to the HDD are deleted when you install system and user software. Monitor profiles for the EB-1357 monitor are automatically reinstalled when you reinstall Command WorkStation on the system.
- **System software updates**—All updates to system software (Windows OS and Fiery System Software) which may be available for the EB-1357 and installed from any source (for example, System Updates (see [page 102](#)), patches provided on CD or downloaded by the customer) are deleted when you install system and user software.
- **Compatibility**—When upgrading the software on the EB-1357, make sure that the latest user software is installed on all computers that print to the EB-1357. Using incompatible versions of the software on the EB-1357 and the software on client computers may result in system problems.

Installing system and user software

System and user software are provided on the following media:

- System Software DVD
- User Software DVD

The System and User Software DVDs include the system software, fonts, and user software. You install system and user software when you:

- Remedy an error condition (see [page 121](#)).
- Replace the HDD.
- Upgrade to a more recent version of the software.
- Change languages.

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

TO INSTALL SYSTEM AND USER SOFTWARE



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

1. **If you have not yet done so, consider backing up configuration settings. The settings are deleted when you install system and user software (see [page 101](#)).**
2. **Allow the network administrator the opportunity to print the Job Log. Also, print the following (if possible):**
 - Configuration page—lists any installed options and records the customer's current Setup configuration.
 - Font List—lists the fonts currently on the HDD. In addition to the fonts provided in system software, the customer may have installed other fonts.
3. **Remove all USB storage devices and dongles (if any) that may be connected to any EB-1357 USB ports.**



The system will hang if USB storage devices or dongles are connected to EB-1357 USB ports during software installation.

4. **Insert the System Software DVD into the DVD/CD-RW drive.**

NOTE: If you installed a new HDD, power on the system, insert the System Software DVD, allow the system to boot, and then proceed to [step 6](#).

5. **From the EB-1357 Control Panel or the copier display panel (or the Start menu, if a monitor is connected), reboot the EB-1357.**

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

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

7. At the Select Language message, select a language.

Wait as messages display describing the installation process.

NOTE: This installation segment takes approximately 7 minutes.

8. At the message “System Software is copied to the system. Remove media and select OK to reboot,” remove the System Software DVD, and then select OK.

The EB-1357 reboots several times and status messages display as the installation process continues.

NOTE: This installation segment takes approximately 30 minutes.

9. At the message “Please insert User Software to continue installation,” insert the User Software DVD into the DVD/CD-RW drive.

NOTE: If a monitor is connected (FACI), click OK to continue.

During this process, the following installations are performed:

- The entire contents of the System Software DVD are copied to a shared folder on the EB-1357 HDD, in e:\efi\user_sw.

After installation, when the EB-1357 is connected to the customer’s network, users can access the user software in the shared folder and install it onto client computers.

“Copying user software to Fiery shared folder, please wait” and other messages display describing the user software installation process.

NOTE: This installation segment takes approximately 20 minutes.

10. At the message “Setup finished. Remove CD/DVD. Press OK to reboot,” remove the User Software DVD.

The EB-1357 reboots automatically. If the User Software DVD does not eject automatically, wait for the system to boot completely and the following logo screen to display on the EB-1357 Control Panel. Access the Functions menu on the EB-1357 Control Panel and select Eject CD/DVD to remove the User Software DVD.



This logo screen indicates that the EB-1357 is Idle.

NOTE: This installation segment takes approximately 5 minutes.

11. If user documentation was previously resident on the EB-1357, remind the site administrator that user documentation files may be reinstalled to the EB-1357 shared folder from the User Documentation CD as follows:

- If the EB-1357 is equipped with FACL:
 - Insert the User Documentation CD into the EB-1357 DVD drive.
 - Browse to the desired language folder on the CD.
 - Select and copy the files that you want to place in the shared folder on the EB-1357.
 - Browse to the shared file location: e:\efi\user_software\Documentation and paste the documentation files.
 - From a client computer on the same network as the EB-1357 (assumes that the EB-1357 is powered on, has an IP address, and is accessible on the customer's network):
 - Insert the User Documentation CD into the CD drive of the client computer.
 - Browse to the desired language folder on the CD.
 - Open a web browser and type two back-slashes followed by the EB-1357 IP address.
 - For example: \\xx.xx.xx.x, where xx.xx.xx.x is the IP address of the EB-1357.
 - Open the User-Docs folder.
 - Copy and paste the documentation files into the folder.
12. **Use the System Updates feature to install required software updates that may be available for the EB-1357 that would have been deleted when you installed system software (see [“Updating EB-1357 system and user software”](#) on page 102).**
 13. **Reconnect any USB storage devices or dongles that you may have removed earlier.**
 14. **Input the settings from the Configuration page that you printed earlier, or restore settings, if they were backed up prior to system software installation.**

If a backup file of the configuration settings exists, restore it after the network configuration is completed (see [“Backing up and restoring the EB-1357 Setup Configuration”](#) on page 101).

Bypass any settings that are not included on the Configuration page if it is more appropriate for the network administrator to set them. For more information, see *Configuration and Setup* on the User Documentation CD.
 15. **Reinstall fonts or custom simulations that may have been deleted when you installed software.**

Backing up and restoring the EB-1357 Setup Configuration

The current EB-1357 Setup configuration settings can be backed-up before system software installation and restored afterward using WebTools.

The following configuration settings can be backed up:

- Settings made using the Configure WebTool (except Server Name)
- Custom editing curves
- Custom spot colors
- Impose templates saved in the default directory for these files on the Print Server
- Preflight setup
- Address books
- Paper Catalog

NOTE: The configuration file is saved on the computer from which you access the Configure WebTool. Make sure that you do not save the configuration file to the EB-1357. Otherwise, when you reinstall system software, the configuration file residing on the EB-1357 is deleted.

TO BACK UP OR RESTORE EB-1357 SETTINGS

1. From a client computer, start an Internet browser and type the IP address or DNS name of the EB-1357.

The EB-1357 home page appears.

2. Click **Launch Configure**.
3. At the Login prompt, select **Administrator** in the user name field (if needed), type **Fiery.1** in the password field, and then select **OK**.

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

4. Choose **Server > Backup/Restore**, and then choose one of the following options:

To backup settings	To restore settings
<ul style="list-style-type: none"> • Click Backup Fiery Settings. • In the dialog box that appears, accept the default file name or type a new name for the backup file. • Click Save. 	<ul style="list-style-type: none"> • Click Restore Fiery Settings. • In the dialog box that appears, type the name of the configuration settings file or select it from the list. • Click Open.

5. Click **Backup Fiery Settings**.
6. In the dialog box that appears, accept the default file name or type a new name for the backup file.
7. Click **Save**.

Updating EB-1357 system and user software

Using the tools **System Updates** and **Check for Product Updates (Software Downloads Site)**, you can obtain updates to EB-1357 System Software and User Software from a secure site on the Internet (referred to throughout this documentation as the Update Server).

Before updating the EB-1357

Keep in the mind the following before updating the EB-1357 using System Updates or Check for Product Updates:



- If you reinstall system software onto the EB-1357 HDD from DVDs, all patches and updates previously downloaded and installed are deleted and must be reinstalled. You should obtain the most recent patches from the Update Server immediately after system software is reinstalled.
- The term **FACI** refers to the optional Fiery Advanced Controller Interface Kit which includes a monitor, keyboard, mouse, and enablement mechanism.
- If the EB-1357 is behind a firewall and unable to access the Internet, the site administrator can configure a proxy server at the customer's organization to allow the EB-1357 to receive updates (see [page 106](#)).
- While updates are being installed, you cannot print to the EB-1357. Schedule the automatic updates when no one plans to print. While updates are being installed, the EB-1357 may need to reboot several times.
- To view updates that have already been installed, print the Configuration page or access **Check Now** and select the History tab (see [“Using Check Now”](#) on page 107). Check Now is available when you access System Updates directly from a FACI-equipped EB-1357 or a client computer using Remote Desktop (see [page 108](#)).
- The list that displays when you access Check for Product Updates (Software Downloads Site) may include:
 - Updates that are unavailable through System Updates and/or are not approved for all users.
 - Updates that may already be installed on some EB-1357 print servers. To help you choose the updates to download, compare the list displayed with the EB-1357 print server's Configuration Page > Updates log.

NOTE: Check Now is not available when you access System Updates from Command WorkStation or WebTools.

System Updates

System Updates allows you to schedule regular inquiries to an Update Server on the Internet for available EB-1357 updates. The EB-1357 checks automatically for updates by contacting the Update Server periodically.

System Updates also allows users to obtain updated versions of EB-1357 user software (utilities) and install them onto client computers that connect to the EB-1357. The updated applications are first downloaded from the Update Server to a partition on the EB-1357 HDD. Users access the EB-1357 over the Internet and download the updated applications onto client computers and then manually install them.

You can also view and download updates at any time using the Check Now feature (requires FACI or a Remote Desktop connection; see [page 107](#)). Use Check Now to view and manually download updates that are available for installation (Patches tab) and/or view a list of updates that have already been installed (History tab).

You can also start Check Now by clicking an update notification in the task bar on the EB-1357 monitor.

System Updates can be accessed in the following ways:

- Directly from a FACI-equipped EB-1357
- From a client computer through a Remote Desktop connection (must be enabled in Setup and on the client computer; see [“Enabling Remote Desktop”](#) on page 108)
- From a client computer through WebTools > Configure > Launch Configure
- From a client computer through Command WorkStation > Server > Setup > Server > System Update

For a detailed procedure, see [“To schedule System Updates”](#) on page 104.

Make sure to review [“Before updating the EB-1357”](#) on page 102 before scheduling System Updates.

To SCHEDULE SYSTEM UPDATES

1. Access System Update.

You can access System Updates directly from a FACI-equipped EB-1357, a Remote Desktop connection from a client computer (see [page 108](#)), or a client computer using WebTools or Command WorkStation.

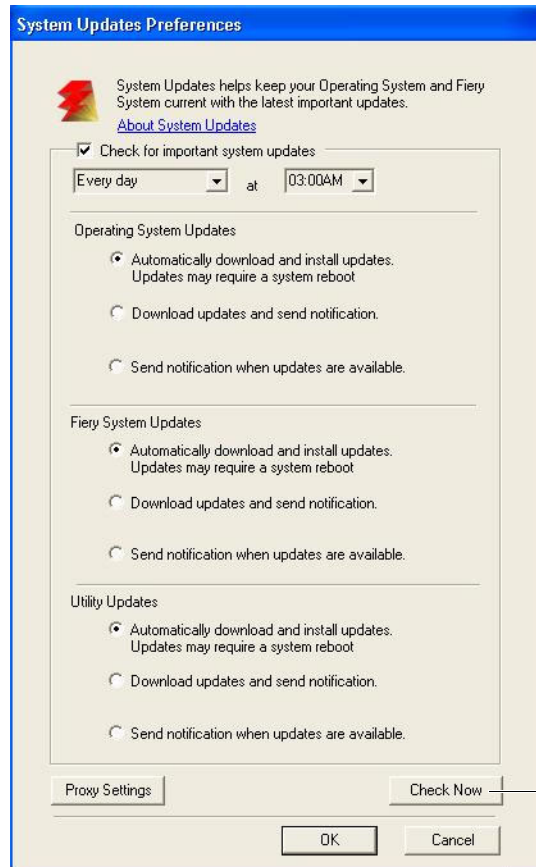
If you access System Updates directly from a FACI-equipped EB-1357 or through Remote Desktop, an additional feature, Check Now, is available (see [page 107](#)). Check Now lists the updates that are currently available (Patches tab) and the updates that have already been installed (History tab).

NOTE: Check Now is not available when you access System Updates from Command WorkStation or WebTools.

From the EB-1357 (requires FACI or Remote Desktop)	From a client using Command Workstation	From a client using WebTools
<ul style="list-style-type: none">Click Start > All Programs > Fiery > System Updates. <p>NOTE: If the EB-1357 is not equipped with FACI, you can access System Updates on the EB-1357 from a client computer using Remote Desktop (see page 108).</p>	<ul style="list-style-type: none">Start Command Workstation.Log on with Administrator privileges.Choose Server > Setup.Choose Server > System Update.	<ul style="list-style-type: none">Open your web browser, type the IP address or DNS name of the EB-1357, and then press Enter.Click the Configure tab, and then click Launch Configure.Log on with Administrator privileges.Choose Configure > Server > System Update.Choose Server > System Update.

NOTE: While updates are being installed, you cannot print to the EB-1357. Schedule the automatic updates when no one plans to print. The EB-1357 may also need to reboot several times during the update process.

2. Select “Check for important system updates” (or “Enable System Updates” in Command WorkStation or WebTools).



Not available when accessed from WebTools or Command WorkStation

3. Specify how often the EB-1357 contacts the Update Server.

This feature sets a schedule for installing, downloading, and/or notification of updates.

4. Choose a method for updating the EB-1357 operating software, system software, and utility software:

- **Automatically download and install updates (preferred method)**—Automatically downloads updates to the EB-1357 and installs them. Your intervention is not required.
- **Download updates and send notification**—Automatically downloads updates to the EB-1357 but does not install them; sends a notification that updates have been downloaded. After the updates are downloaded, you can install the updates manually.
- **Send notification when updates are available**—A notification displays in the EB-1357 task bar when new updates are available for download from the Update Server. To manually download the updates to the EB-1357, access Check Now by clicking the notification in the task bar. (Requires FACI or a Remote Desktop connection; see “Using Check Now” on page 107.)

5. If you use a proxy server to connect through a firewall to the Update Server, click **Proxy Settings**, select **Enable Proxy**, and type the appropriate information in the following fields:
 - Address—proxy server IP address
 - Port—port used by the proxy server
 - User Name—user name for accessing the proxy server
 - Password—password for accessing the proxy server
6. Click **Save** in the **Proxy Settings** window.
7. Click **Apply**.

Using Check Now

Check Now is available when you access System Updates directly from a FACI-equipped EB-1357 (see definition on [page 102](#)) or by using a Remote Desktop connection from a client computer (see [page 108](#)).

Use Check Now to view updates that are available for installation (Patches tab) and updates that have already been installed (History tab).

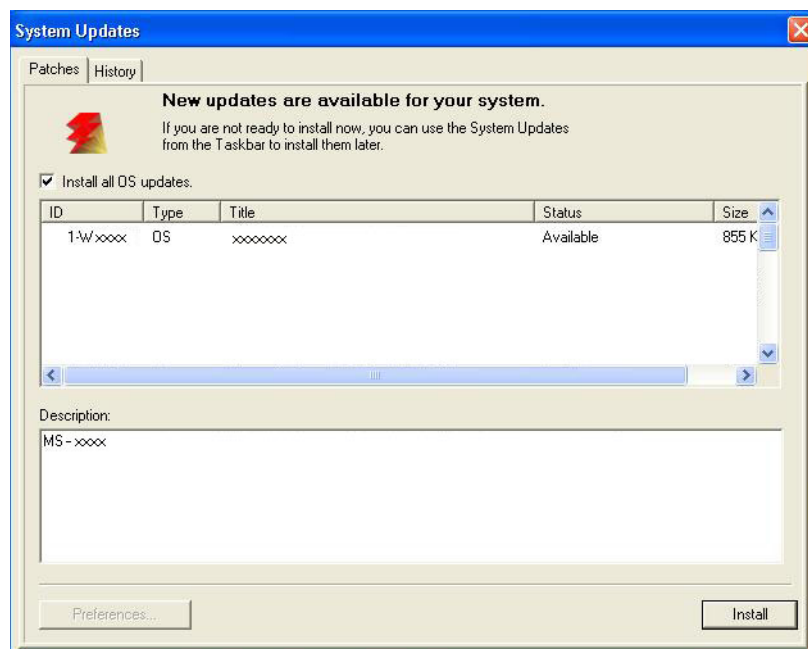
NOTE: Check Now is not available when you access System Updates from Command WorkStation or WebTools.

TO VIEW AND INSTALL UPDATES USING CHECK NOW

1. At the EB-1357 (or a client computer using Remote Desktop; see [page 108](#)) click Start and choose All Programs > EB-1357 > System Updates.

The System Update Preferences dialog box appears.

2. Click Check Now at the bottom of the screen, and then do any of the following:
 - To view a description of an update, select it in the list.
 - To install the update, click Install.
 - To view updates that have already been installed, click the History tab.
 - To close the window without installing an update, click the X in the upper-right corner.



Enabling Remote Desktop

Remote Desktop is a Microsoft application that allows client computers to manage and control the Windows desktop features of the EB-1357. You can enable Remote Desktop to access the Check Now feature ([page 107](#)) of System Updates on EB-1357s that are not equipped with FACI.

Remote Desktop must be enabled in both EB-1357 Setup and on the client computer, as described in the following procedure.

TO ENABLE REMOTE DESKTOP

1. Enable Remote Desktop on the EB-1357.

- Open your web browser, type the IP address or DNS name of the EB-1357, and then press Enter.
- Click the Configure tab, and then click Launch Configure.
- Log on with Administrator privileges.
- Choose Configure > Server > General.
- Select Enable Remote Desktop.
- Click Apply.
- Click Reboot.

2. Enable Remote Desktop on the client computer.

- Click Start and choose All Programs > Accessories > Communications > Remote Desktop Connection.
- Make sure that the EB-1357 is Idle, type the IP address or DNS name of the EB-1357, and then click Connect.
- Type the Administrator password, if prompted.

Check for Product Updates (Software Downloads Site)

The Check for Product Updates URL (also known as the Software Downloads Site) allows you to access the Update Server to view and manually download all available updates for EB-1357 System and User Software. You can access Check for Product Updates by copying and pasting a unique URL into a web browser from a client computer. (For details, see [page 110](#).)

NOTE: The list that displays when you access Check for Product Updates may include:

- Updates that are unavailable through System Updates and/or are not approved for all users.
- Updates that may already be installed on some EB-1357 print servers. To help you choose the updates to download, compare the list displayed with the EB-1357 print server's Configuration Page > Updates log.

Check for Product Updates is especially useful if your EB-1357 cannot access the Internet, is behind a firewall, or is otherwise unable or not configured to seek and accept automatic updates from the Update Server (for instance, if you do not want—or the EB-1357 is unable—to take advantage of the auto-download/auto-installation/auto-notification features available through System Updates).

For a detailed procedure, see [“To install updates using Check for Product Updates”](#) on [page 110](#).

Make sure to review [“Before updating the EB-1357”](#) on [page 102](#) before using Check for Product Updates.

TO INSTALL UPDATES USING CHECK FOR PRODUCT UPDATES

1. From a client computer, open a web browser, copy and paste or type the following URL, and then press Enter.

<https://liveupdate.efi.com/webupdater/default.aspx?sid=a7c65b5379b59fa6704f4589e0898185EF890424.PPD>

A window appears, listing available updates.

NOTE: The list that displays when you access Check for Product Updates may include:

- Updates that are unavailable through System Updates and/or are not approved for all users.
- Updates that may already be installed on some EB-1357 print servers. To help you choose which updates to download, compare the list displayed with the EB-1357 print server's Configuration Page > Updates log.

Software Downloads Site Powered by EFI

*By downloading any items from this page, you agree:

1. to the terms of EFI's [Privacy Statement](#) and [Terms of Use](#); and
2. that your personally identifiable information may be transferred to, processed and stored in the United States and any other country in which EFI and its affiliates, agents and partners maintain facilities.

Software available for Print Server

File Name: 1-Uxxx.exe
File Size: 1.13 MB
Date Posted: 7/10/2009
Criticality: Critical
Description:
ID: 1-Uxxx.exe
Installation Order: 1
Notes: Installation on FACL systems:

1. Execute 1-Uxxx.exe and follow the instructions
2. Fiery must be restarted in order for changes to take effect.

Installation on non-FACL systems:

1. Enable remote desktop on the server.
2. With a Windows XP client, using remote desktop to the Fiery server
3. Execute 1-Uxxx.exe and follow the instructions
4. Fiery must be restarted in order for changes to take effect.

Download
[1-Uxxx.exe](#)

2. For each update that you want to download, click the file name under Download and then select Save to download the update file to a location on the client computer.
3. When the updates files have been downloaded, browse to the location of the update file on the client computer and handle it according to the file type, circumstances, and site conditions.

TROUBLESHOOTING

This chapter identifies the source of common problems that may occur with the EB-1357 and suggests ways of correcting the problems.

Troubleshooting process

The EB-1357 is a server for copiers, and is generally part of a configuration like the one in the following illustration. Problems may occur in one of three areas:

- Inside the EB-1357
- In the interface between the EB-1357 and the copier
- In the interface between the EB-1357 and the workstations or computers to which it is connected

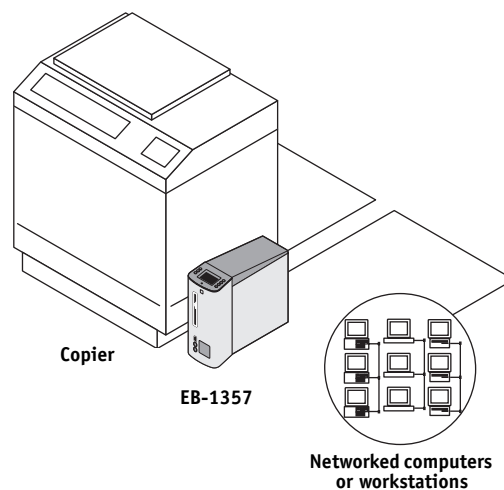


FIGURE 36: Troubleshooting the system

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



When performing the service procedures described in this chapter, follow the precautions listed in [“Precautions”](#) on page 14.

The terms “replace” and “replacing” are typically used throughout this guide to mean reinstallation of existing components. Install new components only when necessary. If you determine that a component you have removed is not faulty, reinstall it.

Preliminary on-site checkout

Most problems with the EB-1357 are caused by loose board or cable connections. This section describes the quick checks you can do to locate and fix obvious problems. It describes how to eliminate any problems with external connections to the back of the EB-1357, and then addresses checking internal board and cable connections. Check external and internal connections before replacing any components.

NOTE: Verify that the network is functioning, no unauthorized software or hardware is installed on the EB-1357, and no problems have occurred with a particular print job or application. The on-site administrator can help you verify these issues.

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

This section includes the following:

- [“Checking external connections”](#) on page 113
Describes the quick checks you can do to make sure that the problem is not caused by a loose connection at the back of the EB-1357.
- [“Checking internal components”](#) on page 114
Describes the quick checks you can do to make sure that the problem is not caused by a loose board or cable connection inside the EB-1357.
- [“Inspecting the system”](#) on page 115
Provides a more comprehensive checklist for checking the EB-1357 internally and externally. If your initial checks fail, complete this checklist before concluding that you need to replace a cable or component.

To troubleshoot problems that present specific symptoms, see [“Table 4: EB-1357 error messages and conditio”](#) on page 122. Locate symptoms listed in the table to help you determine possible causes and steps to remedy them.

Checking external connections

Before removing the side and front panels of the EB-1357 to check internal components, eliminate the most obvious sources of problems. Make sure that:

- All interface cables to the system are plugged into the proper connectors (see [Figure 37](#)).
- The power cable is plugged into the wall power outlet.
- The LED on the network port is blinking to indicate network activity.



NOTE: The copier interface cable included with the EB-1357 is a 16.4 ft. Ethernet *crossover* cable that connects to the **lower** RJ-45 port on the EB-1357 back panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the **upper** RJ-45 port on the EB-1357 back panel. The cables look similar but are not interchangeable. Make sure you connect the cables to the correct ports (see [Figure 37](#)).

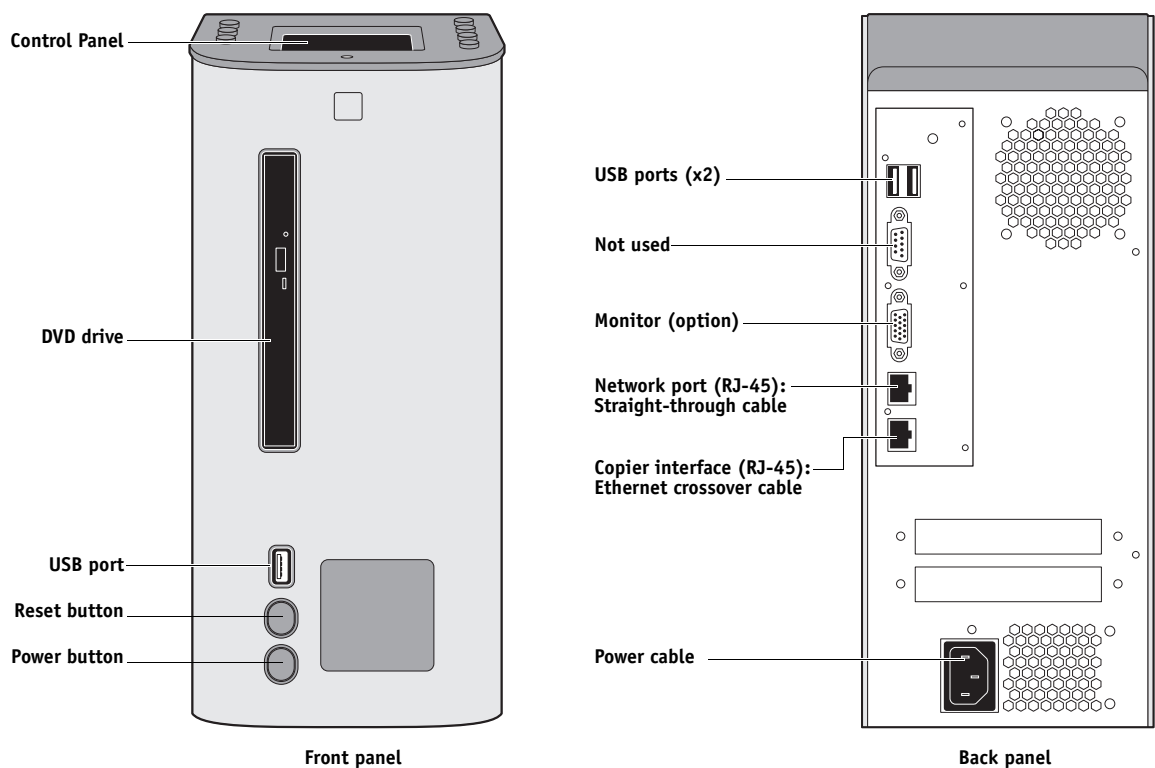


FIGURE 37: EB-1357 external cable connections

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 side and front panels of the EB-1357.



Before you remove the EB-1357 panels, be aware of the safety precautions that you should take when handling the EB-1357. Use ESD precautions when handling printed circuit boards and electronic components. To review the safety precautions, see “Precautions” on page 14.

See the disassembly procedures on [page 47](#) and the reassembly procedures on [page 95](#).

TO CHECK INTERNAL COMPONENTS



1. Shut down and open the EB-1357 (see [pages 47 and 49](#)).
2. Before you touch any components inside the EB-1357, attach a grounding strap to your wrist and discharge any static electricity on your body by touching a metal part of the EB-1357.
3. Inspect the inside of the EB-1357.

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

 - Make sure that the DVD and HDD data cables are connected to the correct SATA connectors on the motherboard (see [Figure 12 on page 46](#)):
 - DVD drive power/data combination cable to motherboard SATA connector SATA 0
 - HDD data cable to motherboard SATA connector SATA 1
 - Look for obviously loose boards and reseat each board securely in its connector on the motherboard.
 - Look for obviously loose cables and reseat each cable connector firmly.
 - Make sure that each connector is properly aligned with its mating connector. If the pins are offset from each other, the affected board will not function properly.
4. Reassemble the EB-1357 and verify its functionality (see [page 95](#)).

Inspecting the system



If your initial checks of the cable and board connections do not fix the problem, you may need to inspect the system on a component-by-component basis, as described in “[Table 3: Verifying the system.](#)” A comprehensive inspection allows you to verify that each hardware component is properly installed and configured, and helps you avoid replacing expensive components unnecessarily.

If the system you are servicing does not meet a condition listed in [Table 3](#) and it is not obvious what action(s) you should take to fix the problem (for example, if the system hangs before reaching Idle), locate the symptom in “[Table 4: EB-1357 error messages and conditio](#)” on page 122 and perform the suggested action(s) for the condition.

TABLE 3: Verifying the system

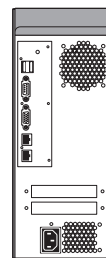
Conditions to verify

When problem occurs, verify that:

- Power cable is connected properly into the power outlet.
- Chassis fan is operating.
- Network link activity LED on network port is blinking.
- All external cables required are present, in correct connectors, and well-seated.
- Cables, cable connectors, and mating connectors appear undamaged.

Part and additional page references

Back panel external connectors, chassis fans, and power button, [page 113](#) and [page 114](#)



If problem occurs at power up or reboot, verify that:

- Activity light on the Control Panel illuminates.
- Display window lights up.
- The system does not hang, nor do error messages occur before the systems reaches Idle.
- DVD drive is present and no disk is in the drive.
- DVD LED blinks briefly.
- After the system reaches Idle, the Control Panel buttons function.

Control Panel, [page 33](#)



All replaceable parts are:

- Present
- Properly aligned
- Installed securely
- Installed on the appropriate site
- The correct part for the system
- Properly configured, if configurable (such as HDD jumper)
- Appear undamaged
- Chassis and contents have not been tampered with.
- Chassis does not contain any foreign objects.

Chassis

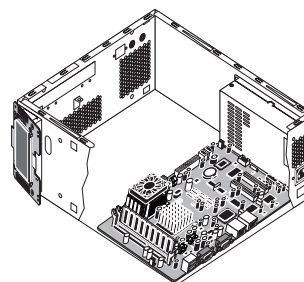


TABLE 3: Verifying the system**Conditions to verify**

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

Each board required is:

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

Required cable(s) (if applicable) are:

- Present
- Firmly connected in the correct connectors
- Appear undamaged

User Interface Board (UIB) is:

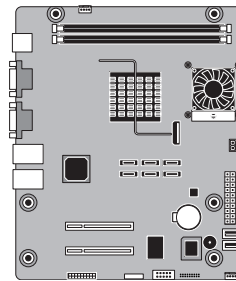
- Present
- Correctly attached to its bracket
- Appears undamaged

UIB cable is:

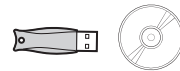
- Present
- Firmly connected in the correct connector on the motherboard and the back of the UIB
- Appears undamaged

Part and additional page references

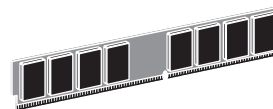
Motherboard (with the Fiery Options Utility and single-use dongle), [page 57](#)



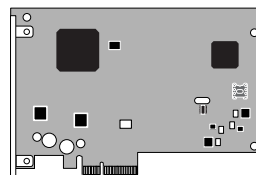
IMPORTANT: When replacing the motherboard, carefully review the cautions on [page 61](#).



DIMM(s) for EB-1357, [page 73](#)



Video board, [page 53](#)



User Interface Board [page 55](#)

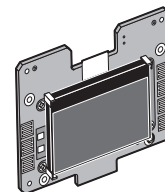


TABLE 3: Verifying the system

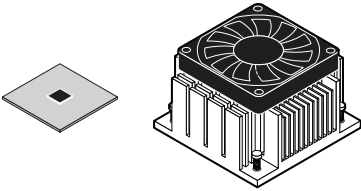
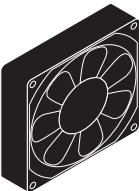
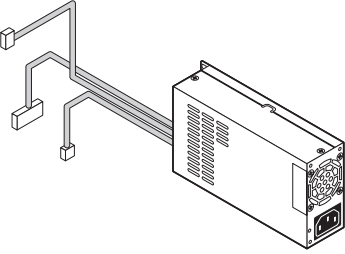
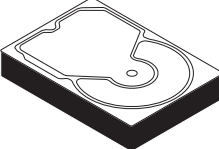
Conditions to verify	Part and additional page references
<p>CPU is:</p> <ul style="list-style-type: none"> • Present • Well-seated • Appears undamaged <p>The CPU cooling assembly is:</p> <ul style="list-style-type: none"> • Well-aligned • Firmly attached 	<p>CPU with cooling assembly, page 75</p> 
<p>Fan is:</p> <ul style="list-style-type: none"> • Properly positioned (not backwards) • Installed in the correct connector <p>Fan, fan cable, cable connector, and mating connector appear undamaged</p>	<p>Chassis fan, page 84</p> 
<p>The power supply required is:</p> <ul style="list-style-type: none"> • Present • Correctly installed • Appears undamaged <p>Cable connectors are:</p> <ul style="list-style-type: none"> • Firmly connected • Appear undamaged • Installed in the correct devices 	<p>Power supply, page 85</p> 
<p>The HDD required is:</p> <ul style="list-style-type: none"> • Present • Correctly installed • Appears undamaged • Jumped as the master (primary) according to label <p>HDD data cable is:</p> <ul style="list-style-type: none"> • Present • Firmly connected to motherboard connector SATA 1 • Appears undamaged 	<p>HDD (hard disk drive), page 88</p> 

TABLE 3: Verifying the system

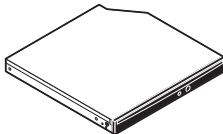



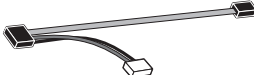

Conditions to verify	Part and additional page references
<p>The drive required is:</p> <ul style="list-style-type: none"> • Present • Correctly installed • Appears undamaged • Jumped as the master (secondary) according to label • Activity LED lights on power up <p>DVD drive power/data combination cable:</p> <ul style="list-style-type: none"> • Data segment is firmly connected to motherboard connector SATA 0 • Power segment is firmly connected to an available 4-pin power supply wire • Appears undamaged 	<p>DVD drive, page 92</p> 
<p>Each cable required is:</p> <ul style="list-style-type: none"> • Present • The correct type • Installed in the correct connector • Well-seated • Appears undamaged (including connectors) 	<p>UIB cable, page 46</p>  <p>HDD data cable, page 46</p>  <p>Copier interface cable, page 113</p>  <p>DVD drive power and data combination cable, page 46</p>  <p>Power cable(s), page 113</p> 

TABLE 3: Verifying the system

Conditions to verify	Part and additional page references
<p>If included in the system, the required mouse, monitor, and keyboard are present and appear undamaged. The mouse and keyboard are connected to the correct ports on the EB-1357 back panel.</p> <p>The cables required are:</p> <ul style="list-style-type: none"> • Present • Installed in the correct connector • Well-seated • Appear undamaged (including connectors) 	<p>For the following items, see the document that accompanies the optional components, if applicable.</p> <ul style="list-style-type: none"> • Mouse (if applicable) <div data-bbox="954 531 1160 604" data-label="Image"> </div> • Monitor (if applicable) <div data-bbox="954 674 1203 890" data-label="Image"> </div> • Keyboard (if applicable) <div data-bbox="954 961 1342 1029" data-label="Image"> </div> • Monitor power cord (not pictured)

Normal startup sequence

When you turn on or reboot the EB-1357, the system runs the following startup routine on the EB-1357 Control Panel. The sequence takes approximately two minutes to complete.

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

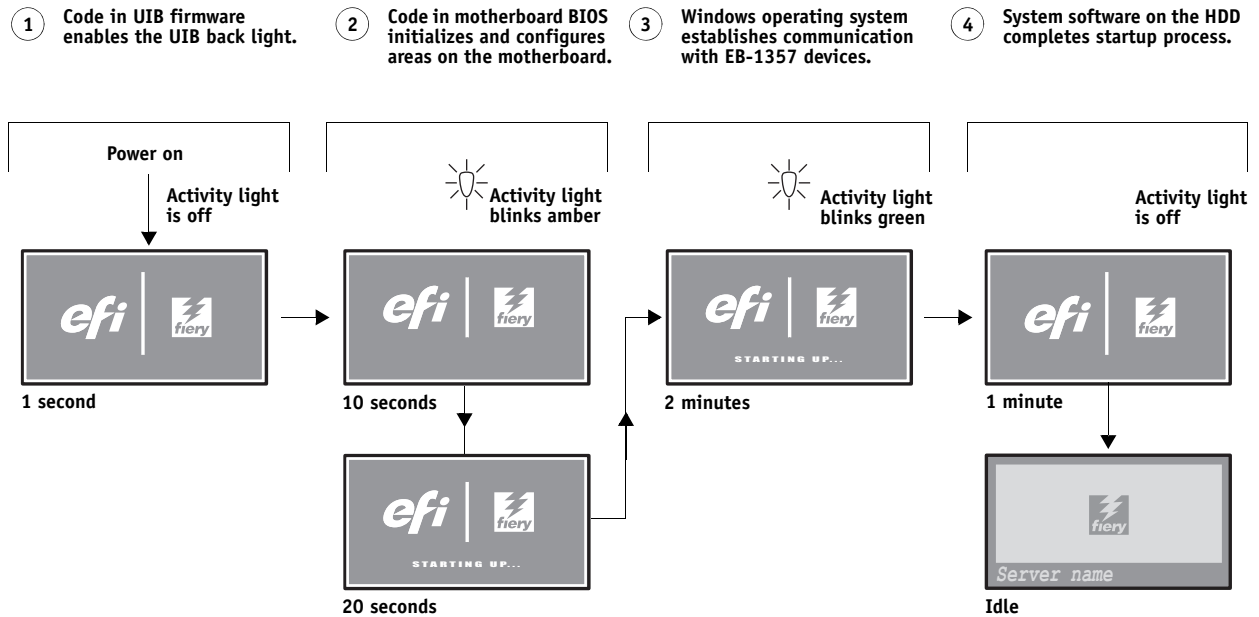


FIGURE 38: Normal startup sequence

Error messages and conditions

To address specific error messages or conditions, see “[Table 4: EB-1357 error messages and conditions](#)” on page 122. Use the table to locate the problem or symptom that you want to fix, read about the possible causes, and then perform the suggested actions to solve the problem.



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

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


- First, replace the HDD and install system software.







Always replace a faulty HDD with a new HDD. Transferring a HDD from one EB-1357 to another is incorrect and strongly discouraged.







- If the problem persists, reinstall the original HDD in the system, and then replace the motherboard.




If replacing a component does not correct the problem, make sure that you reinstall the old component in the EB-1357.

TABLE 4: EB-1357 error messages and conditio

Symptom	Possible cause	Suggested action
Beep codes during startup		
1 beep	No error—the EB-1357 is starting up normally.	None
6 long beeps	Missing, unmatched, incorrect, or faulty DIMM(s)	Check for missing, unmatched, incorrect or faulty DIMM(s) and reseal the DIMM(s) to remove any oxidation on the connector (see page 73).
Startup		
<p>EB-1357 does not start and the Control Panel is black.</p> <div>  Activity light status: Off. </div> <p>NOTE: If the Activity light is solid yellow while the Control Panel is black, the EB-1357 is in Sleep Mode.</p>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • The EB-1357 is powered off. • Power cable is not plugged into the power connector on the EB-1357 back panel or into the wall power outlet. • UIB cable is not connected to the motherboard, the user interface board, or both. • Faulty power cable. • Power cable is not plugged into the power connector on the EB-1357 back panel. • Faulty power supply (power supply may not be supplying power to the motherboard). • The CMOS jumper is not in the default position or the CMOS needs to be cleared. • Faulty motherboard (motherboard power plane may not be supplying power to components). 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Listen for the power supply fan and feel for air at the back of the unit where the power supply is located. If air is not coming from the power supply fan, isolate possible faulty power cable as follows: <ul style="list-style-type: none"> • Power on using a different power cable. • Install a new or “known good” power supply. 3. Check the chassis and feel for air coming out of the back of the system. If air is coming out of the power supply fan vent but is not coming out of the back panel fan vent, the motherboard may be faulty. You may need to replace the motherboard (see page 57). 4. Review the jumper section on page 83 and ensure that the jumper is in the default position, then clear the CMOS (see page 83).

Symptom	Possible cause	Suggested action
Startup (cont.)		
<p>EB-1357 is getting power, but the Control Panel is black.</p>  Activity light status: Off.	<ul style="list-style-type: none"> • UIB cable is not connected to the motherboard, the User Interface Board, or both. • Faulty UIB cable • Faulty User Interface Board 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Use a different UIB cable. 3. If the problem persists and you have verified that the power supply and the motherboard are functioning properly as described above, replace the User Interface Board (see page 55).
<p>Following installation of a new User Interface Board, the Control Panel remains blank, yet backlit, for more than five minutes.</p>  Activity light status: N/A.	<ul style="list-style-type: none"> • System software requires an additional reboot to synchronize with the firmware on the new User Interface Board. 	<p>Wait 5 minutes, power off using the power button, wait 10 seconds, and then press the power button to power on again.</p>
<p>NOT following installation of a new User Interface Board, system stops responding at this screen:</p>   Activity light status: Off.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Faulty BIOS • Faulty motherboard 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Reboot the EB-1357. 3. If the problem persists, replace the motherboard (see page 61).
<p>System stops responding at this screen:</p>   Activity light status: Blinking green.	<p>Problem with the Fiery application.</p>	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Reboot the EB-1357. 3. If the problem persists, reinstall system software (see page 96).

Symptom	Possible cause	Suggested action
Startup (cont.)		
<p>Control Panel screen and Activity light appear as follows:</p>  <div>  Activity light status: Off, then solid red. </div>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Wrong, missing, incorrectly connected, or faulty DIMM(s) • Faulty motherboard 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Reboot the EB-1357. 3. If the problem persists, verify that the DIMM(s) are installed as described in the DIMM section on page 73. DIMM(s) must be installed in matching pairs in alternating sockets. Check for incorrect type, wrong capacity, missing, or faulty DIMM(s). Reseat the DIMM(s) to remove any oxidation on the connector (see page 74). 4. If the problem persists, you may need to replace the motherboard (see page 61).
<p>Control Panel screen and Activity light appear as follows:</p>  <div>  Activity light status: Blinking amber, then solid red. </div>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Faulty disk in the DVD drive • Faulty motherboard 	<ol style="list-style-type: none"> 1. Reboot the EB-1357. 2. If the problem occurs when you are trying to install software from bootable media (DVD or CD), the media may be damaged. Try another DVD or CD. 3. If the problem persists, replace the motherboard. (see page 61).
<p>Control Panel screen and Activity light appear as follows:</p>  <div>  Activity light status: Blinking amber. </div>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Faulty or incorrectly connected HDD data cable • HDD power cable disconnected • Faulty HDD • Faulty motherboard 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. Make sure that the HDD data cable is connected to SATA 1 on the motherboard (see Figure 12 on page 46). 2. Reboot the EB-1357. 3. If the problem persists, replace the HDD SATA cable (see Figure 12 on page 46). 4. If the problem persists, replace the HDD (see page 88). If replacing the HDD does not correct the problem, reinstall the old HDD in the system. 5. If the problem persists, replace the motherboard. (see page 61).

Symptom	Possible cause	Suggested action
Startup (cont.)		
<p>Control Panel screen and Activity light appear as follows:</p>  <div>  Activity light status: Blinking green, then solid red. </div>	<p>Problem with the Windows operating system</p>	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Reboot the EB-1357. 3. If the problem persists, reinstall system software (see page 96).
<p>Activity light status progresses from solid green to solid red.</p> <div>  Activity light status: Solid green, then solid red. </div>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Problem with system software • Print job is corrupt or too large • Faulty UIB cable • CPU overheated • Faulty motherboard 	<ol style="list-style-type: none"> 1. If you suspect that the problem may be caused by a print job, try printing a different job. 2. Recheck all cables and connections. 3. Reboot the EB-1357 and check whether the CPU cooling assembly fan is operating. If the fan is properly connected to the motherboard but does not operate, replace the cooling assembly. 4. If the problem persists, reinstall system software (see page 96). 5. If the problem persists, try connecting another UIB cable (see Figure 12 on page 46). 6. If the problem persists, replace the motherboard (see page 61).
<p>The system takes a long time to start up.</p>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • 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. 	<ol style="list-style-type: none"> 1. If the slow start up happens following installation of a software patch or update, shut down, and then restart to see if the problem persists. 2. If the problem persists, make sure that the HDD is present and properly connected, and then clear CMOS (see page 83). When you reboot the EB-1357, the HDD will be moved to the top of the boot order in the BIOS. 3. If the problem persists, reinstall system software (see page 96).

Symptom	Possible cause	Suggested action
FieryBar messages		
Check copier power & cable connections appears on the optional monitor, if present.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Problem with the connection between the EB-1357 and the copier. • The copier is not powered on. • The copier is on but is not ready to print. 	<ol style="list-style-type: none"> 1. Make sure that the copier is powered on and ready to print. 2. Make sure that the copier interface cable is the correct type and is correctly connected to both the copier and the EB-1357. 3. If the problem persists: <ul style="list-style-type: none"> • Recycle power on the copier. • Recycle power on the EB-1357 by shutting down through the EB-1357 Control Panel, waiting 10 seconds, and then powering the EB-1357 back on (see page 47). 4. If the problem persists, replace the copier interface cable (see page 113). 5. If the problem persists, replace the video board (see page 54). 6. If the problem persists, you may need to service the copier.
Control Panel messages		
Check copier power & cable connections appears on the EB-1357 Control Panel (and the optional monitor, if present).	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Problem with the connection between the EB-1357 and the copier. • The copier is not powered on. • The copier is on but is not ready to print. 	<ol style="list-style-type: none"> 1. Make sure that the copier is powered on and ready to print. 2. Make sure that the copier interface cable is the correct type and that the cable is correctly connected to both the copier and the EB-1357. 3. If the problem persists: <ul style="list-style-type: none"> • Recycle power on the copier. • Recycle power on the EB-1357 by shutting down through the Functions menu, waiting 10 seconds, and then powering the EB-1357 back on (see page 40). 4. If the problem persists, replace the copier interface cable (see page 113). 5. If the problem persists, replace the video board (see page 54). 6. If the problem persists, you may need to service the copier.

Symptom	Possible cause	Suggested action
---------	----------------	------------------

Control Panel messages (cont.)

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

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

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

Control Panel functions

EB-1357 is getting power, the Control Panel is not black, but the buttons on the Control Panel do not function.	Possibly one of the following: <ul style="list-style-type: none"> • Problem with the Fiery application • Faulty User Interface Board 	<ol style="list-style-type: none"> 1. Recheck all cables and connections. 2. Reboot the EB-1357. 3. If the problem persists, reinstall the system software (see page 96). 4. If the problem persists, replace the User Interface Board (see page 55).
---	--	---

DVD drive

DVD drive is not responding, cannot be located by software, the disk will not eject, or the LED on the drive tray remains lit.	Possibly one of the following: <ul style="list-style-type: none"> • A disk is stuck in the DVD drive. • Cable connections to the DVD drive are loose or power/data combo cable is faulty. • Faulty DVD drive • Faulty motherboard 	<ol style="list-style-type: none"> 1. Press the eject button to open the drive tray. 2. Insert a paper clip into the small hole near the eject button to force the drive tray to open. 3. If the problem persists, check the cable connections to the DVD drive (see Figure 12 on page 46). 4. Check DVD drive data cable connection to the motherboard. 5. If the problem persists, you may need to replace the DVD drive (see page 93). 6. If the problem persists, you may need to replace the motherboard (see page 61).
---	---	--

Symptom	Possible cause	Suggested action
System performance		
System performs slowly and/or hangs periodically.	<p>Possibly one of the following:</p> <ul style="list-style-type: none">• Board or cable connections are loose or faulty.• Corrupted system software• Missing or faulty DIMM(s)• Faulty or overheated CPU• CMOS settings need to be reset or are corrupted.• Faulty motherboard	<ol style="list-style-type: none">1. Recheck all cables and connections.2. Make sure that the CPU is firmly seated in its socket and that the fan cable is connected to the motherboard.3. If the problem persists, reinstall the system software (see page 96).4. Check for missing or faulty DIMM and reseal the DIMM to remove any oxidation on the connector (see page 74).5. Clear the CMOS (see page 83).6. If the problem persists, you may need to replace the motherboard (see page 61).
Clock is slow.	<p>Possibly one of the following:</p> <ul style="list-style-type: none">• CMOS settings need to be reset or are corrupted.• Missing or dead battery on the motherboard	<ol style="list-style-type: none">1. Clear the CMOS (see page 83).2. If the problem persists, replace the battery on the motherboard and then update the time in the Windows Control Panel (if a monitor is connected), or in Command WorkStation or WebTools.

Symptom	Possible cause	Suggested action
---------	----------------	------------------

Network

If you suspect a network problem, keep in mind the following:

- If the EB-1357 does not appear in the list of printers on the network, there may be another device on the network with the same Ethernet hardware address.
- Conflicting network settings may have been configured in Setup and on the customer's workstation.
- Printing problems may be caused by inappropriate Setup options.
- Application-specific printing errors may be caused by missing or incorrectly placed printer description files.
- System software may be corrupted.

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

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

Possibly one of the following:

- Network cable is connected to the wrong RJ-45 port.
- No cable/wrong type of cable is connected to the network port.
- Network cable or connection is faulty.
- Network is faulty.
- System software is corrupted.
- Network interface on the EB-1357 motherboard is faulty.

1. Make sure that the correct cables are connected to the correct ports on the EB-1357 back panel. The upper RJ-45 port is the network interface; the lower RJ-45 port is the scan interface.
2. If the green LED on the (upper) RJ-45 network port is not lit, check the cable connection of the upper RJ-45 network port and the network. Make sure that the cable is a straight-through cable, not a crossover cable (see [page 113](#)).
3. If the network cable is a straight-through cable and not a crossover cable and is properly connected to the (upper) RJ-45 network port, connect a new network cable to the (upper) RJ-45 network port.
4. If the problem persists, ask the network administrator to check Network Setup.
5. If the problem persists, make sure that the network administrator has checked other devices on the network.
If other devices are not functioning, there could be a problem with the network.
6. If the problem persists, reinstall the system software (see [page 96](#)).
Corrupt system software may cause the system to hang.
7. If the rest of the network is functioning properly and the problem persists, replace the motherboard (see [page 61](#)).

Symptom	Possible cause	Suggested action
Network (cont.)		
System starts up slowly then displays one or more DHCP error messages on the Control Panel.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> • Network cable is connected to the wrong RJ-45 port. • No cable/wrong type of cable is connected to the network port. • Network cable or connection is faulty. • Network is faulty. • System searches for a nonexistent DHCP server because DHCP is enabled by default on the EB-1357, but the customer's network is not using DHCP. • Ethernet interface on the EB-1357 motherboard is faulty. • System software is corrupted. 	<ol style="list-style-type: none"> 1. Make sure that the correct cables are connected to the correct ports on the EB-1357 back panel. The upper RJ-45 port is the network interface; the lower RJ-45 port is the scan interface. 2. If the green LED on the (upper) RJ-45 network port is not lit, check the cable connection of the upper RJ-45 network port and the network. Make sure that the cable is a straight-through cable, not a crossover cable (see page 113). 3. If the network cable is a straight-through cable and not a crossover cable and is properly connected to the (upper) RJ-45 network port, connect a new network cable to the (upper) RJ-45 network port. 4. If the problem persists, ask the network administrator to check Network Setup. 5. If the problem persists, ask the network administrator to check other devices on the network. If other devices are not functioning, the problem may be with the network. 6. If the problem persists, reinstall system software (see page 96). Corrupt system software may cause the system to hang. 7. If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 61).

Symptom	Possible cause	Suggested action
Printing		
NOTE: Intermittent print quality problems are difficult to trace. Before you try to troubleshoot print quality problems, print a Test Page to make sure that the copier does not need servicing or adjusting.		
Test Page fails to print.	The copier is not ready to print.	Make sure that the copier is turned on and ready to print.
	A problem exists with the connection between the EB-1357 and the copier.	<ol style="list-style-type: none"> 1. Recheck that the copier interface cable is present and properly connected to the EB-1357 and the copier (see page 113). 2. If the problem persists: <ul style="list-style-type: none"> • Recycle power on the copier. • Recycle power on the EB-1357 by shutting down through the Control Panel, waiting 10 seconds, and then powering the EB-1357 back on (see page 41). 3. If the problem persists, replace the copier interface cable (see page 113). 4. If the problem persists, replace the video board (see page 54). 5. If the problem persists, you may need to service the copier.
EB-1357 appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error	Make sure that Print to PostScript Error in Setup is set to Yes. Check for error messages on the EB-1357 output.
	An application problem	<ol style="list-style-type: none"> 1. Print a job from a different application to determine if the problem is associated with a particular application. 2. Make sure that the connection between the EB-1357 and the workstation is working by downloading a Test Page from the workstation, or by printing a simple file such as a text file. 3. Resend the problem file.

Symptom	Possible cause	Suggested action
Printing (cont.)		
A print job stalls or stops after one or a few pages.	Possibly one of the following: <ul style="list-style-type: none"> • A PostScript or application error. • System software is corrupted. 	<ol style="list-style-type: none"> 1. Cancel the EB-1357 print job. 2. If this fails to clear the problem, reboot the EB-1357 (see page 40). 3. If the problem persists, select Clear Server from the copier display panel or Command WorkStation. 4. Set Print Cover Page to Yes and resend the problem job. The Cover Page will indicate "PS Error." For more information about the PostScript error, double-click the problem job in the Command WorkStation window. 5. If the problem persists, reinstall system software (see page 96). <p>Corrupt system software may cause the system to hang at this screen.</p>
	Incorrect or faulty DIMM or faulty DIMM connection	<ol style="list-style-type: none"> 1. Reseat the DIMM(s) to remove any oxidation on the connectors (see page 74). 2. Verify memory amount on the Configuration page. 3. If the problem persists after replacing the DIMM, replace the motherboard (see page 61).
Quality is inconsistent.	A copier problem	Test the copier and if necessary service it (see the service documentation that accompanies the copier).

Symptom	Possible cause	Suggested action
Printing (cont.)		
Print quality is poor.	Possibly one of the following: <ul style="list-style-type: none">• A file or application problem.• A missing or outdated printer description file.• The application cannot find the appropriate printer description file.	<ol style="list-style-type: none">1. Print a EB-1357 Test Page (see page 38).2. If the quality of the EB-1357 Test Page is good, the error condition may be a file or application problem.3. Make sure that the appropriate printer description file is installed. (For details, see <i>Printing on the User Documentation CD</i>.)

If the user can print the EB-1357 Test Page but cannot print a job from a computer on the network, make sure that the network administrator has:

- Checked all components of the network, including cables, connectors, terminators, network adapter boards, and network drivers.
- Activated the network and used it to communicate with other printers.
- Confirmed that the applicable network settings in Setup (such as AppleTalk zone, IP address, Subnet mask, and Gateway address) match the settings used in the network.

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

Diagnostic tools

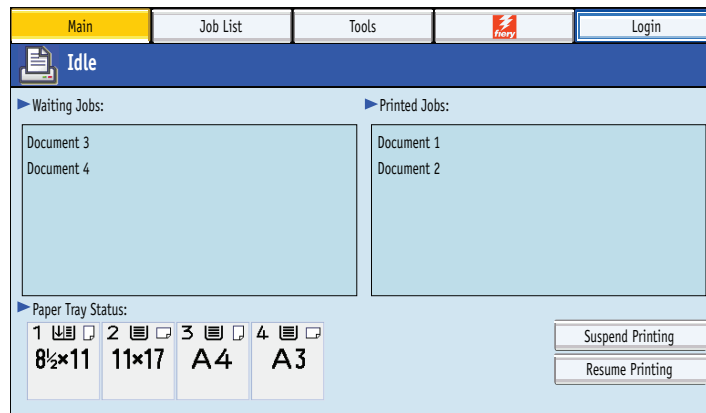
EB-1357 diagnostic tools include video board diagnostics and E-mail diagnostics.

Video board diagnostics

If you suspect that there may be a problem with the video board (for example, the quality of print output is poor), run the Check Video Board diagnostics from the copier display panel to make sure that the video board is installed properly.

TO RUN VIDEO BOARD DIAGNOSTICS

1. Access the Fiery Main menu by pressing the “fierydriven®” button on the copier display panel.



2. Make sure that Idle appears on the Fiery Main menu.

If Busy or Printing appears, the EB-1357 is processing and you must wait until Idle appears.

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

3. Touch the Fiery tab.
4. Touch Run Diagnostics.
5. Touch Check Video Board, and then touch OK.
6. If the message “Video diags failed” appears, do the following:
 - Power off the EB-1357 and open the system.
 - Reseat the video board.
 - Inspect the copier interface cable.
 - Power on the EB-1357 and run the test again. If the test fails again, you may need to replace the video board.
7. When the message “Video diags passed” appears, touch OK.

Test E-mail

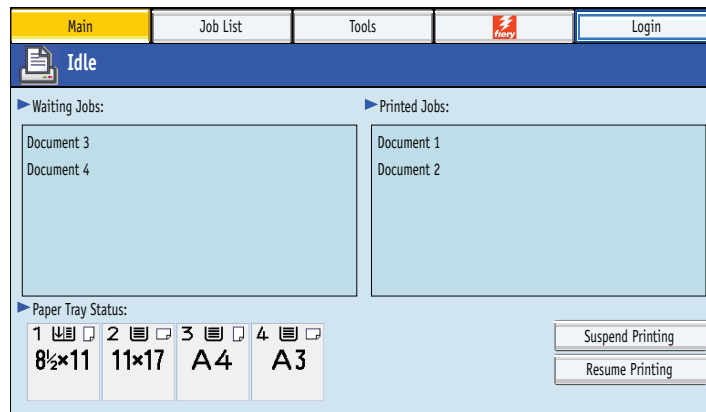
This diagnostic tool allows you to perform a quick test of the EB-1357 E-mail feature without actually having to submit a print job as an e-mail attachment. You review the results of the test by printing an E-mail log through the Functions menu.

NOTE: E-mail services must be enabled in Setup for Test E-mail to be available. Test E-mail can also be run through the copier display panel, Setup tab (see [page 38](#)).

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

TO RUN E-MAIL DIAGNOSTICS

1. Access the Fiery Main menu by pressing the “fierydriven®” button on the copier display panel.



2. Make sure that Idle appears on the Fiery Main menu.

If Busy or Printing appears, the EB-1357 is processing and you must wait until Idle appears.

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

3. Touch the Fiery tab.
4. Touch Run Diagnostics.
5. Touch Check Email System, and then touch OK.
6. If the message “Email service is not enabled” appears, touch OK to exit Email diagnostics. The network administrator must enable E-mail printing in Setup.
7. If E-mail printing is enabled and the message “Sending Test E-mail. Please print the E-mail log for the diagnostic result” appears, do the following:
 - Touch OK.
 - Touch Printable Info.
 - At the message “Confirm Print Page: E-mail Log,” touch OK.

SPECIFICATIONS

This section provides an overview of EB-1357 features, specifications, and safety certifications.

Hardware features

- Single Intel Core Duo Processor T2500 2.0GHz CPU
- Memory—2GB (2 x 1GB)
- An RJ-45 connector for 10BaseT/100BaseTX/1000BaseT Mbs connectivity over twisted pair cable (upper port)
- 80GB HDD standard
- Built-in DVD drive

Physical specifications

- Operating environment:
 - Temperature: +5°C to +40°C
 - Relative Humidity: 10%-85% (non-condensing)
- Power supply voltage input: 100-240V @ 50-60Hz
- Power supply current input: 100V @ 2A Max.; 240V @ 4A Max.
- Dimensions (height x depth x width):
34.3 cm (13.5 in.) x 46.2 cm (18.2 in.) x 14.0 cm (5.5 in.)
- Weight: 6.7 kg (14.8 lbs.)

Networking and connectivity

- Supports AppleTalk and TCP/IP protocols simultaneously.
- Supports EtherTalk Phase 2 (allows users to print from a Mac OS computer to the EB-1357 using the AppleTalk network protocol over an Ethernet network).
- RJ-45 connector (upper port) that supports 10BaseT/100BaseTX/1000BaseT twisted pair network connectivity.
- RJ-45 connector (lower port) that provides the print and scan interface between the EB-1357 and the copier.

NOTE: The copier interface cable included with the EB-1357 is a 16.4 ft. Ethernet *crossover* cable that connects to the **lower** RJ-45 port on the EB-1357 back panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the **upper** RJ-45 port on the EB-1357 back panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see [page 28](#)).

User software

A complete description of user software is provided in *Welcome* on the User Documentation CD. For optimal performance, maintain current versions of the user software on every network computer used to print to the EB-1357. User software may be installed directly on client computers equipped with a DVD drive, or over a network via the Fiery User Software Installer that resides on the EB-1357.

Safety and emissions compliance

The EB-1357 has been certified to meet or surpass the following government standards.

Safety approvals

- UL 60950-1: 2003(UL)
- CAN/CSA 22.2 #60950-1-03
- EN 60950-1 (TUV/GS mark)
- CB scheme IEC 60950-1: 2001

EMI/EMC approvals

- FCC Class A
- VCCI Class A
- EN55022 Class A
- EN55024
- AS/NZS CISPR22: Class A

INDEX

Numerics

10BaseT/100BaseTX/1000BaseT 31

A

AC connector 113

activity light 34, 55, 122, 123, 124
status during startup 124

AppleTalk 19, 137

B

back panel connectors 28, 43, 63, 113

battery 58, 81, 82, 128

BIOS 58

boxes, unpacking 26

bracket

CPU mounting 75, 77

DVD drive 93, 94

HDD 88, 91

buttons

down 33, 34, 55

line selection 33, 34, 55

menu 34, 55

power and reset 40

up 33, 34, 55

C

cables

chassis fan 46, 84, 117

copier interface 28, 43, 53, 113, 118, 129,
130, 131

CPU fan 76, 80

crossover Ethernet 30

DVD drive power/data combination 46,
114, 118

HDD data 46, 89, 91, 114, 118, 124

HDD power 89, 91, 118

network cable, straight-through 28, 31, 43,
113, 118, 129, 130

power and reset buttons 58

power supply 85

printer/copier interface 30

UIB 46, 55, 56, 118

unpacking 26

chassis fan 46, 84, 117

check for product updates 109

Check Now feature, system updates
103, 107

checklist for service calls 24, 32, 95

Clear Server command 38

clearing the CMOS 83, 125, 128

after installing a new CPU 80

after installing a new DIMM(s) 74

after installing a new DVD drive 94

after installing a new HDD 91

after installing a new motherboard 65

procedure 83

to troubleshoot slow performance 128

clock 128

closing the system 95

CMOS 65, 74, 80, 83, 91, 94, 122, 125, 128

components

checking 114

exploded view of 45

Configuration page

printing 38

configuring a proxy server, system

updates 106

connections

printer/copier interface 30

connections, checking 113, 114

connectors

back panel 28, 43, 113

chassis fan 58

CPU fan cable 58

DIMMs 58

DVD drive data cable 58

front panel USB port 58

HDD data cable 58

monitor (option) 58

motherboard 58

network 28, 31, 43, 58, 113

power and reset pins on motherboard 58

power supply cables 58

power, AC 28, 43, 113

printer/copier interface 30

UIB cable 58

USB ports (dongle) 28, 43, 67, 113

video board 28, 43, 53, 113

- Control Panel
 - activity light 123, 124
 - buttons 34, 55
 - display window 33
 - using 33
 - Control Panel Map 38
 - cooling assembly, CPU 76, 80
 - copier interface board
 - diagnostics 134
 - copier operation panel 36
 - copier, SP mode settings 29
 - copier/printer interface cable 30
 - covers, removing 49
 - CPU 20, 57, 75–80, 136
 - clearing CMOS after replacing 80
 - cooling assembly 76, 80
 - fan cable 76, 80
 - fan guard 75, 77
 - mounting bracket 75, 77
 - removing 76, 78
 - replacing 79
 - crossover Ethernet cable 30
 - custom simulation and
 - output profiles 97
 - customer site checklist 24
- D**
- damage, reporting 26
 - diagnostics
 - copier interface 134
 - Run Diagnostics option 135
 - Test E-mail 135
 - Test I/F board 134
 - diagnostics, Ethernet address 129
 - DIMMs
 - clearing CMOS after installing 74
 - configuration 20, 73, 136
 - installing 74
 - replacing 74
 - display window, Control Panel 33
 - dongle
 - error message about 72
 - for entering Service Mode
 - (motherboard replacement) 66, 67
 - transferring options (motherboard replacement)
 - 62, 66, 68, 69, 70, 71
 - down button 33, 34, 55
- drives
 - DVD 92
 - hard disk drive (HDD) 88
 - DVD drive 92
 - bracket 94
 - clearing CMOS after replacing 94
 - power/data combination cable
 - 46, 118
 - removing 93
 - replacing 94
- E**
- E-mail diagnostics 135
 - E-mail log 38, 135
 - E-mail printing 19
 - EMI approvals 137
 - error messages 72, 127, 131
 - check power and cable 126
 - Ethernet
 - address 129
 - cable 26, 30, 31
 - connector 28, 31, 43, 58, 113
 - exploded view 45
 - External Controller Info. Settings 29
- F**
- fan
 - chassis 46, 84, 117
 - CPU 76, 80
 - fan guard, CPU 75, 77
 - Fiery Options Utility 69, 70, 71
 - Fiery Scan 19
 - Fiery.1 password 68, 72, 101
 - Font list
 - definition 96
 - printing 89
 - printing prior to system software installation 96
 - fonts 19
 - printer fonts on server 38
 - printing font list 38
 - front panel 28, 43, 113
 - buttons 40
 - layout 33
 - removing 52
 - FTP Log 38
 - functional diagram 21
 - Functions menu 35, 36
 - Shut Down 35, 40

H

hard disk drive (HDD) 88, 91
 bracket 88, 89, 91
 capacity 136
 caution about replacing 91, 121
 clearing CMOS after replacing 91
 data cable 89, 91
 description 88
 mounting screws 90, 91
 proper handling 88
 removing 89
 replacing 91
heatsink, CPU 76, 80

I

installation sequence 23
installing user software on client systems
 25, 137
IPP 19

J

Job Log 96
 Printable Info menu 38
jobs 96
jumpers 83, 122

L

LCD 33, 34, 55
line selection buttons 33, 34, 55
Log On to Windows password 101
Logon On to Windows password 68, 72

M

master installer 137
media package 26
memory
 configuration 20, 73, 136
menu button 34, 55
Menu tabs, copier operation panel 36
monitor profiles 97
motherboard
 battery 58, 81
 cautions about replacing 61
 clearing CMOS after replacing 65
 connectors 58
 description 57
 DIMMs 73
 removing 57, 60
 replacing 61

transferring options to
 61, 62, 66, 68, 69, 71
verifying in Service Mode 61, 66–68

mounting bracket
 CPU 75, 77

N

network
 cable, straight-through 31
 connector 28, 31, 43, 58, 113
 supported types 137
network administrator 22, 25
networks
 availability during installation 25
 checklist 25
 supported 19, 20
normal startup sequence 120

O

one-time-use dongle 67, 69
opening the system 49
operation panel, copier 36

P

panels, removing 49, 52
password 68, 72, 101
Portable Document Format (PDF) 19
PostScript 19
power
 AC cable 28, 43, 113
 AC connector 113
 chassis fan 84
 CPU fan 76, 80
 DVD drive 94
 HDD 91
 precautions 24
power and reset buttons 40
power supply
 cables 85
 removing 86
 replacing 87
 voltages 32, 40, 85, 136
Print Pages command 38
printer/copier interface cable 30
printing
 Configuration page 38
 font list 38
 server information pages 38
 Test Page 38
profiles 97
proxy server 106

R

- reassembling the system 95
- remote desktop, enabling for system
 - updates 108
- reset and power buttons 35, 40, 47, 58
- reset button, when not to use 40, 41, 47, 48
- Resume Printing command 36
- Run Diagnostics command 38

S

- safety approvals 137
- scanning 19
- service calls
 - checklist 24, 32, 95
- Service Mode 61, 66–68
- service procedures, overview 42
- Setup 36
- shutting down 35, 40, 41, 47, 48
- side panel
 - removing 50
 - replacing 50
- software
 - media package 26
 - system 62, 96
 - user 25, 62, 96, 137
- SP mode 29
- speaker 58
- specifications 136
- startup 40
 - normal sequence 120
- straight-through network cable 28, 31, 43, 113, 129, 130
- Suspend Printing command 36
- system software 62, 96
 - installing 98
 - updating 102, 103, 105, 106, 107, 108, 109
- system updates 103
 - cautions 102
 - check for product updates 103
 - Check Now feature 103, 107
 - enabling a proxy server 106
 - enabling Remote Desktop 108
 - scheduling 105

T

- Test E-mail diagnostics 135
- test interface board diagnostics 134

Test Page

- copier test page 24
- printing 38
- transferring options (motherboard replacement) 62, 66, 68, 69, 71
- Tray Alignment command 37
- troubleshooting
 - preliminary on-site checkout 112

U

- UIB cable 46, 55, 56, 118
- unpacking 26
- up button 33, 34, 55
- updating the system
 - 102, 103, 105, 107, 109
- updating the system to use a new motherboard 66, 69
- USB ports 28, 43, 67, 113
- user documentation 26
- user interface board (UIB)
 - activity light 55
 - description 55
 - display window 55
 - line selection buttons 55
 - menu button 55
 - removing 56
 - up/down buttons 55
- user software 25, 62, 96, 137
- using check for product updates 109
- using system updates 103

V

- verifying functionality 95
- verifying new motherboard installation 66
- video board 20, 44, 45
 - connector 53
 - description 53
 - removing 54
 - replacing 54
- voltages
 - checking 32, 40, 85

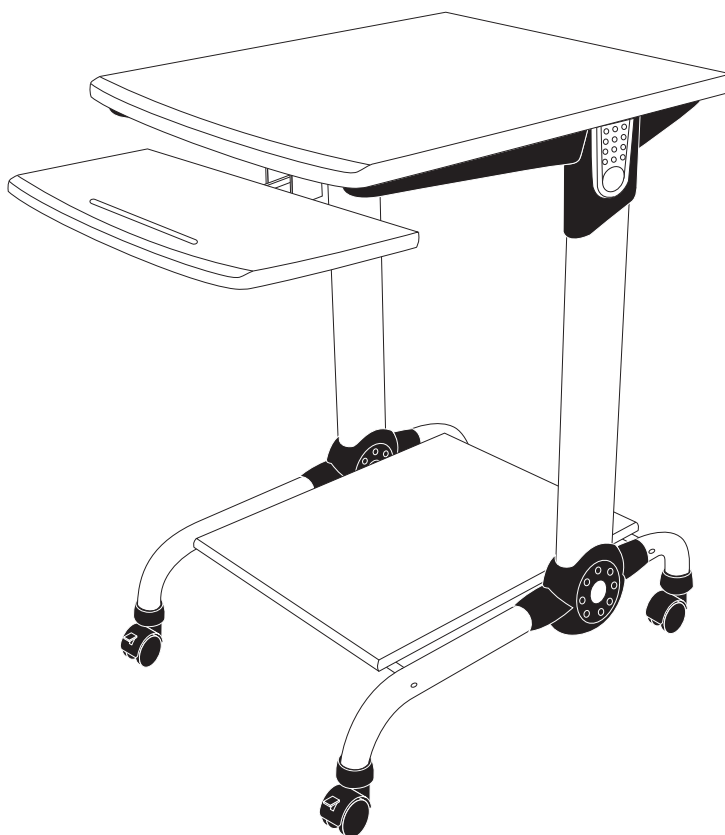
W

- Windows XPe
 - password 68, 72



Assembling the Fiery Furniture

For select Fiery Print Servers



EFI Part Number: 45079694

19 September, 2008



© 2008 Electronics for Imaging, Inc.

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

Introduction

This document describes how to assemble the furniture. In addition to this document, the box containing the furniture includes the following:

Key:

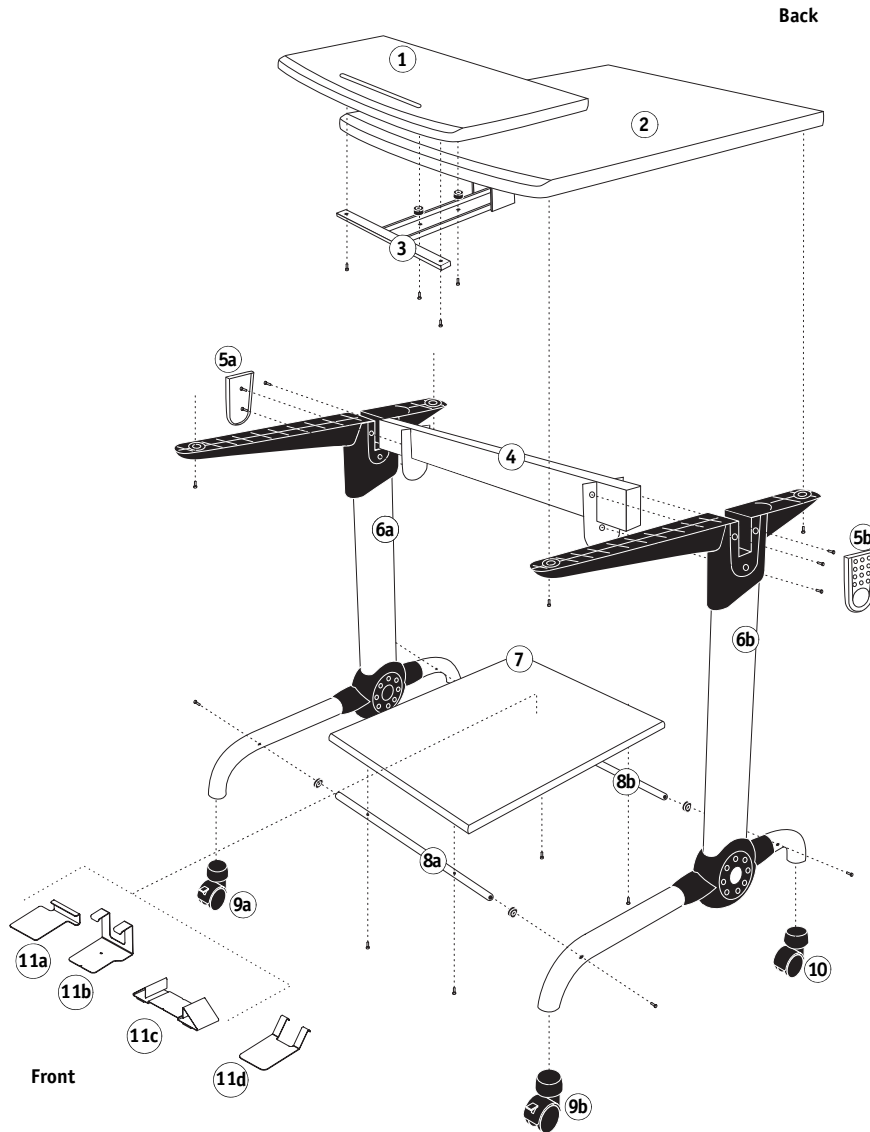
1. Keyboard tray
2. Table top
3. Keyboard slide
4. Upper cross-bar
5. Leg caps (2)
6. Legs (left and right)
7. Bottom shelf
8. Lower cross-bars (2)
9. Locking casters (2)
10. Non-locking casters (2)
11. Anti-tilt bracket
 - a) For S-series Print Servers.
 - b) For X-series Print Servers.
 - c) For SP30 Print Servers.
 - d) This bracket is not used.

Additional hardware:

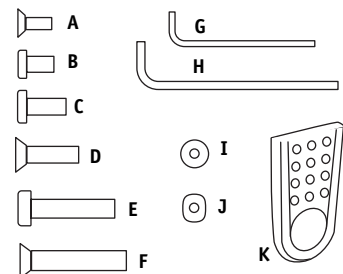
[Numbers inside brackets correspond to reference numbers on hardware bag labels.]

- A [#16]—1/4 x 5/8 screws (4)
 B [#15]—1/4 x 3/4 screws (2)
 C [#14]—1/4 x 7/8 screws (6)
 D [#12]—1/4 x 1-1/8 screws (4)
 E [#13]—1/4 x 2 screws (6)
 F [#11]—1/4 x 2-1/2 screws (4)
 G—Small Allen wrench
 H—Large Allen wrench
 I—Flat-face washers (2)
 J—Contour washers (4)
 K—Leg caps (2)

NOTE: In addition to the tools provided, you will need a pencil.



NOTE: For components that have left and right pairs, direction is determined when standing in front of and facing the furniture.



Before you begin installation, sort all screws according to their size so that the necessary screws are easily accessible during the different stages of installation. The easiest way to sort the screws is to compare each screw with the dimensions listed in Figure on page 3.

The small open-end wrench (if it is included in the furniture box) is not required for assembling the furniture.

Also, note that in some cases you may need to use force or tweaking to ensure proper alignment of parts during installation.



WARNING: To avoid injury, do not lift the Print Server or the furniture without assistance.

AVERTISSEMENT: Ne soulevez pas le serveur d'impression ou le meuble sans aide, vous risqueriez de vous blesser.

AVVERTENZA: Per evitare di farsi male, non sollevare il server di stampa o il mobile senza assistenza.

WARNUNG: Vermeiden Sie Gefahren für Ihre Gesundheit. Heben Sie daher den Druckserver oder den Unterschrank nicht alleine an.

ADVERTENCIA: Para evitar lesiones, solicite ayuda si necesita elevar el servidor de impresión o cualquier mueble.

WAARSCHUWING: Om blessures te voorkomen, wordt u aangeraden de printserver of het meubel niet alleen te verplaatsen.

AVISO: Para evitar ferimentos, peça ajuda para levantar o servidor de impressão ou o móvel.

The box containing the Print Server weighs 71.5 lbs; the box containing the furniture weighs approximately 60 lbs. Two people are required to lift the unit.

To avoid possibly scratching the furniture during assembly, place the packaging materials over the work surface and assemble the furniture on top of the packaging materials.

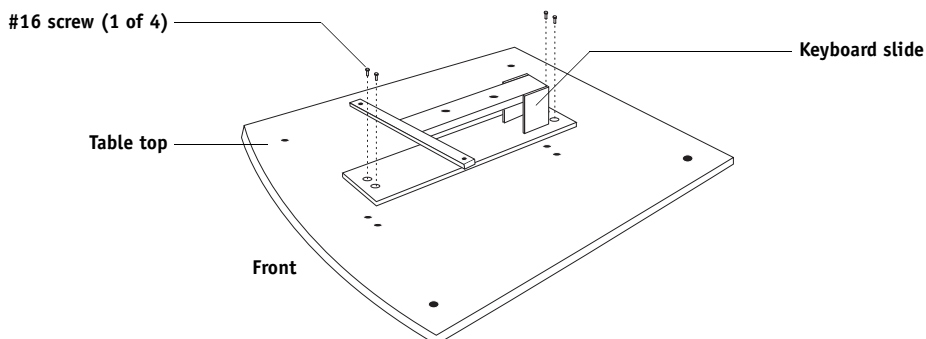
Procedure

Use the following procedure to assemble the furniture.

TO ASSEMBLE THE FURNITURE

1. **Attach the keyboard slide to the base of the table top using four 1/4 x 5/8 [#16] screws. Set aside the table top assembly when you are finished.**

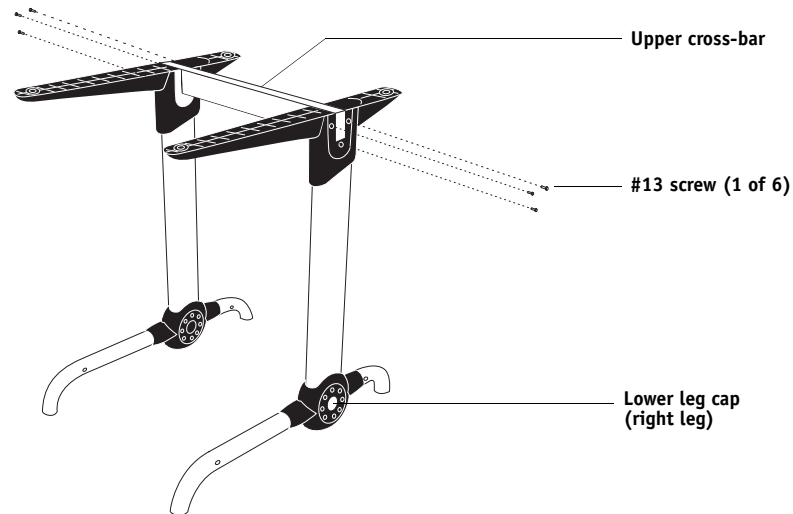
With the base of the table top facing up, align the holes in the rail of the keyboard slide with the four center holes in the table top. The T-shaped portion of the slide should face toward the front (curved edge) of the table top.



2. Insert the upper cross-bar into the notches at the top of the left and right legs. Once the cross-bar is inserted, secure it to the legs using six 1/4 x 2 [#13] screws (three screws on each side).

You may need to use force to insert the cross-bar into the notches in the legs.

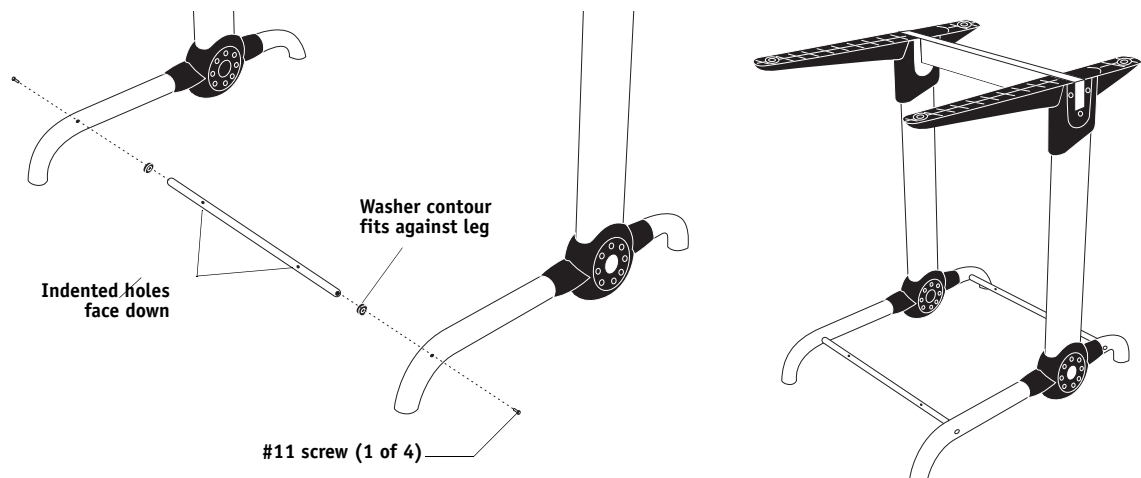
Be sure to orient the left and right legs properly (the lower leg cap on each leg should face out).



3. Install the lower cross-bars on the left and right legs using the 1/4 x 2-1/2 [#11] screws and contour washers.

Use the following guidelines when installing the cross-bars:

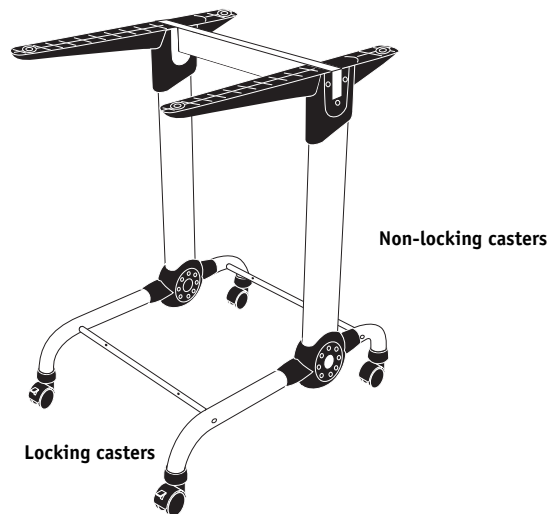
- Position the cross-bars so that the indented holes in the length of each cross-bar face down.
- Align each washer so that the contour makes contact with the inside of the leg. When properly installed, the contour should fit snugly against the indentation in the inside leg.
- Attach the lower cross-bars to the legs, but do not tighten the screws completely.



4. Install the casters onto the posts at the base of the left and right legs.

- Lay the assembly on its side so that you can access the base.
- Push the casters onto the posts until they are fully secured.

The locking casters are installed on the posts at the front of the leg and the non-locking casters are installed at the back of the leg.



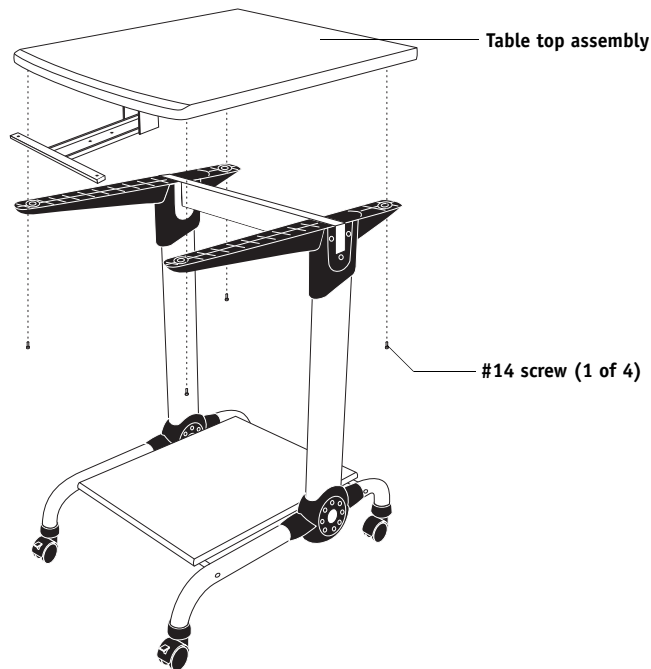
5. Place the bottom shelf on the lower cross-bars. Align the four holes on the base of the shelf with the holes in the lower cross-bars, and secure using four $\frac{1}{4} \times 1\frac{1}{8}$ [#12] screws.



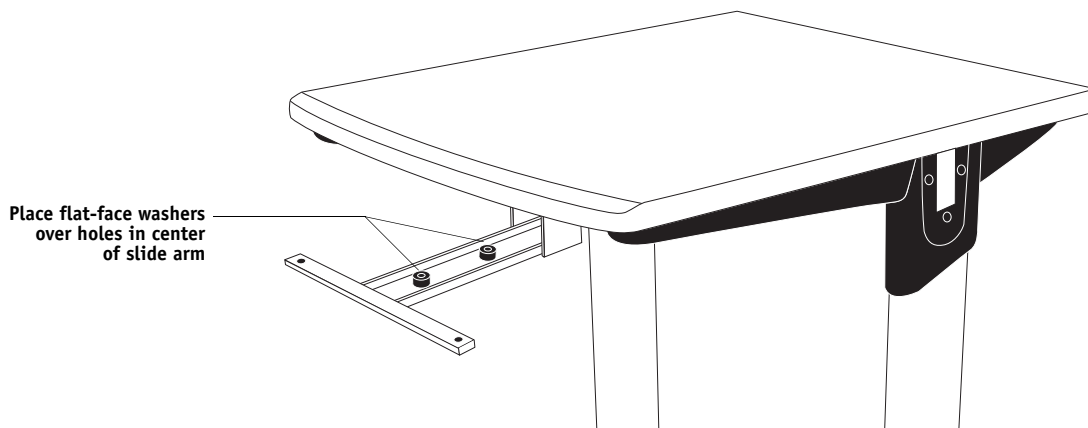
6. Tighten completely the four $\frac{1}{4} \times 2\frac{1}{2}$ [#11] screws that secure the lower cross-bars to the legs.

For the location of the screws, see the figure in step 3.

7. Place the table top assembly on top of the upper cross-bar and legs, as shown in the following figure. Align the four holes on the base of the table top with the holes in the support brackets of the legs, and secure using four 1/4 x 7/8 [#14] screws.

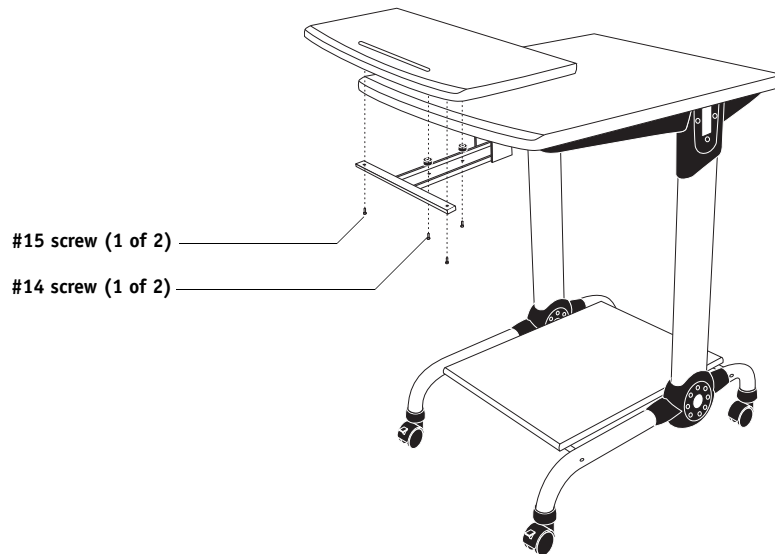


8. Pull the keyboard slide arm out until it is fully extended, and place two flat-face washers on top of the holes in the center (recessed area) of the slide arm.

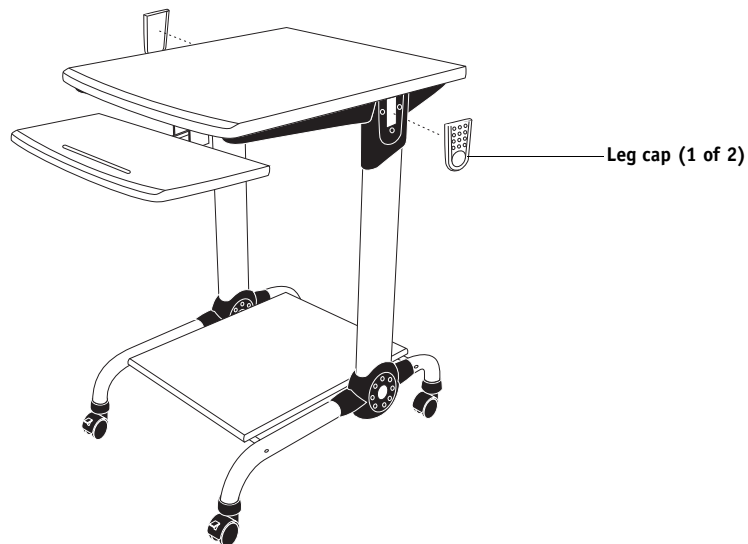


9. Carefully place the keyboard tray on top of the slide arm and washers. Align the four holes in the base of the keyboard tray with the holes in the slide arm, and secure the assembly using two 1/4 x 7/8 [#14] screws and two 1/4 x 3/4 [#15] screws.

- Use the two 1/4 x 7/8 [#14] screws for the holes in the center of the slide arm. Make sure that the screws extend through the holes in the slide arm, through the washers, and into the holes in the keyboard tray.
- Use the two 1/4 x 3/4 [#15] screws for the holes in the ends of the slide arm.

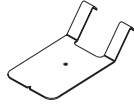


10. Install the upper leg caps on the outside of each leg, as shown in the following figure.



11. Attach the appropriate anti-tilt bracket to the bottom shelf (attach only one bracket).

- Select the correct bracket type for the Print Server (see the table on [page 9](#)).

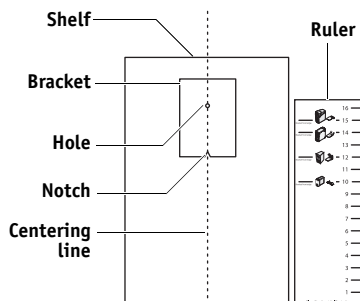


NOTE: The bracket pictured to the left is not used. Do not attach it to the shelf.

- Determine where to place the bracket on the shelf (use the ruler provided).

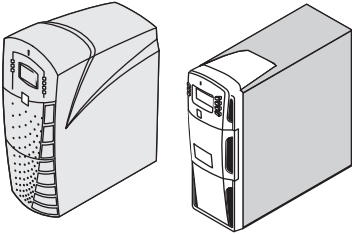
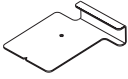
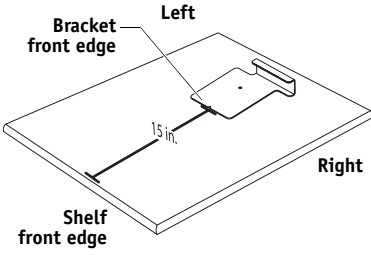
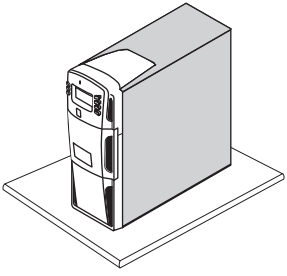
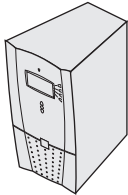
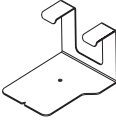
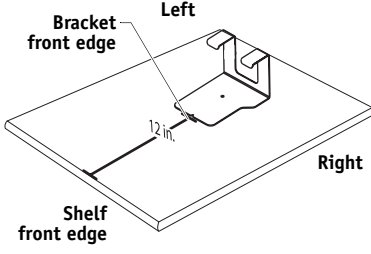
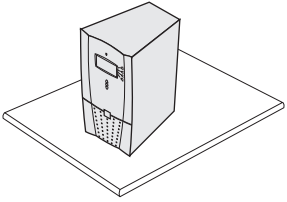
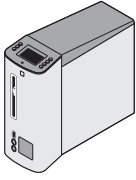
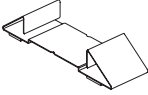
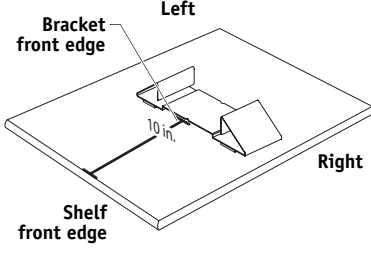
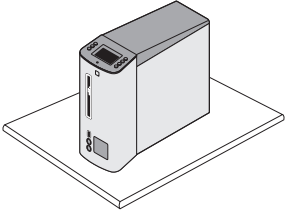
The bracket should be centered left to right on the shelf and its front edge located the specified distance from the front edge of the shelf (see the table on [page 9](#)).

- **Distance:** Use the ruler provided in this kit to measure the distance from the front edge of the shelf to the location where you will attach the bracket. Mark the location with a pencil.
- **Centering:** Before exposing the adhesive on the underside of the bracket, use the hole and notch on the bracket to help you center the bracket left to right on the shelf. Draw a straight line lengthwise down the center of the shelf with a pencil. Place the bracket on the shelf and adjust it until the line is in the notch and visible through the hole. Mark the location with a pencil.



- Remove the strip(s) on the underside of the bracket to expose the adhesive tape.
- Place the bracket on the shelf and press down firmly to ensure a secure bond.

(Proceed to the next page)

Print Server	Bracket type	Bracket position on bottom shelf	Print Server position on bottom shelf
 <p>S-series</p>	 <p>Place front edge 15 inches from shelf front edge.</p>		
 <p>X-series</p>	 <p>Place front edge 12 inches from shelf front edge.</p>		
 <p>SP30</p>	 <p>Place front edge 10 inches from shelf front edge.</p>		

12. Make sure all casters are in the locked position.

Locking the casters stabilizes the furniture as Print Server components are placed on it.

13. Place the Print Server components onto the furniture.

- Print Server—place on the bottom shelf, against the bracket
- Monitor—place on the top shelf
- Keyboard and mouse—place on the keyboard tray

To dismantle the furniture, disconnect any cables attached to Print Server components and reverse the steps of the assembly procedure.