

# Installation and Service Guide

A guide for service technicians



Replacement parts and specifications  
are subject to change.

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# CONTENTS

<b>INTRODUCTION</b>	8
<b>About the E-42</b>	8
<b>How the E-42 operates</b>	8
<b>Preparing for hardware installation or service procedures</b>	10
Precautions	10
Creating an electrostatic discharge (ESD) safe environment	12
<b>Tools you will need</b>	13
<b>INSTALLING HARDWARE</b>	14
<b>Installation sequence</b>	14
<b>Checking the customer site</b>	15
Copier/printer readiness	15
Setting customer expectations	16
<b>Unpacking the E-42</b>	17
<b>Connecting the E-42</b>	19
Connecting the monitor, keyboard, mouse, and power	19
<b>Configuring a static IP address for the E-42</b>	22
<b>Completing installation and starting up</b>	23
<b>USING THE E-42</b>	24
<b>Using the E-42 control panel</b>	24
Buttons	25
Activity light	25

<b>Using the copier/printer touch panel</b>	27
Main tab	27
PrintMe tab	27
Tools tab	28
Scan tab	28
Fiery tab	29
Printable Info menu	30
<b>Network status LEDs</b>	31
<b>Starting, shutting down, restarting, and rebooting</b>	32

## **REPLACING PARTS** 35

<b>Overview</b>	35
<b>Accessing internal components</b>	40
Shutting down the system	40
<b>Removing and replacing boards</b>	48
Printer interface board	48
User interface board assembly	50
<b>Motherboard</b>	53
Removing the motherboard	53
Verifying new motherboard installation, and transferring options and BIOS information	61
<b>Replacing parts on the motherboard</b>	63
DIMMs	63
CPU	64
Jumpers	71
<b>Fan</b>	72
<b>Power supply</b>	73
<b>Hard disk drive</b>	76
<b>Switch bank assembly</b>	81
<b>DVD drive</b>	85
<b>Restoring and verifying functionality after service</b>	87

<b>SYSTEM SOFTWARE INSTALLATION</b>	88
<b>Before installing system software</b>	88
<b>Installing system software</b>	90
System updates	92
About backing up and restoring the E-42 and the system configuration	93
<b>TROUBLESHOOTING</b>	94
<b>Preliminary on-site checkout</b>	94
Checking internal components	95
<b>Error messages and conditions</b>	101
<b>SPECIFICATIONS</b>	112
Hardware features	112
Physical specifications	112
Networking and connectivity	112
<b>SERVICING THE E-42 WITH FURNITURE</b>	114
<b>Procedures</b>	114
<b>INDEX</b>	124

## LIST OF FIGURES

<b>FIGURE 1:</b> E-42 functional diagram	9
<b>FIGURE 2:</b> Affixing the decal to the copier/printer	18
<b>FIGURE 3:</b> Straight-through and crossover Ethernet cables	20
<b>FIGURE 4:</b> E-42 control panel	24
<b>FIGURE 5:</b> The copier/printer touch panel	27
<b>FIGURE 6:</b> Front and connector panel	36
<b>FIGURE 7:</b> Connector panel and internal side view	37
<b>FIGURE 8:</b> Exploded view of components	38
<b>FIGURE 9:</b> Power and data cable connections	39
<b>FIGURE 10:</b> Removing/replacing the side panels	44
<b>FIGURE 11:</b> Removing/replacing the front panel	45
<b>FIGURE 12:</b> Removing/replacing the top panel	46
<b>FIGURE 13:</b> Diagram of the printer interface board	48
<b>FIGURE 14:</b> Diagram of the user interface board (front and back)	50
<b>FIGURE 15:</b> Removing/replacing the user interface board	51
<b>FIGURE 16:</b> Removing/replacing the UIB buttons	52
<b>FIGURE 17:</b> Motherboard	54
<b>FIGURE 18:</b> CPU cooling assembly	65
<b>FIGURE 19:</b> Removing/replacing the CPU	67
<b>FIGURE 20:</b> Motherboard battery	69

<b>FIGURE 21:</b> Removing the fan	72
<b>FIGURE 22:</b> Removing/replacing the power supply	74
<b>FIGURE 23:</b> Removing/replacing the hard disk drive bracket	77
<b>FIGURE 24:</b> Removing/replacing the hard disk drive from/in the hard disk drive bracket	78
<b>FIGURE 25:</b> component sled with switch bank assembly	81
<b>FIGURE 26:</b> Removing/replacing the component sled from the chassis	82
<b>FIGURE 27:</b> Removing/replacing the switch bank assembly	83
<b>FIGURE 28:</b> Removing/replacing the DVD drive	85
<b>FIGURE 29:</b> Normal startup sequence	100
<b>FIGURE 30:</b> E-42 installed on the furniture	114

## INTRODUCTION

This document includes information about servicing the E-42. In this document, the Color Controller E-42, is referred to as “the E-42.”

### About the E-42

The E-42 adds computer connectivity and highly efficient Adobe PostScript 3 color printing capability to the copier/printer. It is optimized for high-speed network communications, processing, rasterization, and printing of color and black-and-white pages.

As an integral part of a color printing system, the E-42 enables users to:

- Send images over TCP/IP networks to E-42-supported devices.
- Spool print jobs and select a printing priority for each job. Users can control spooled print jobs sent to the E-42 with remote user software running on networked Windows and Mac OS computers.
- Print color, grayscale, and black-and-white jobs.
- Use the copier/printer as a high-resolution color scanner with Fiery Scan software.
- Use 136 resident fonts (126 Adobe Type 1 PostScript, and 10 TrueType), plus several Adobe Multiple Master fonts used for font substitution when printing PDF files. Use Command WorkStation or any third-party LaserWriter downloader, such as the Adobe Font Downloader, to download additional fonts.
- Use built-in ColorWise color management and NetWise network features.

The E-42 also supports the Microsoft version of Internet Printing Protocol (IPP) for Windows XP, Windows Vista, Windows Server 2003/2008/2008 R2, Windows 7, and e-mail printing.

### How the E-42 operates

The E-42 enables the customer to use the copier/printer as a high-performance, networked PostScript color printer and scanner. Users at the customer site can print to the E-42 from networked Windows computers, Mac OS computers, and UNIX workstations running TCP/IP.

The motherboard includes an Intel 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.

High-speed DIMMs (dual in-line memory modules) on the motherboard hold the image data during printing. The E-42 is configured with two 2GB DIMMs, for a total of 4GB of memory.



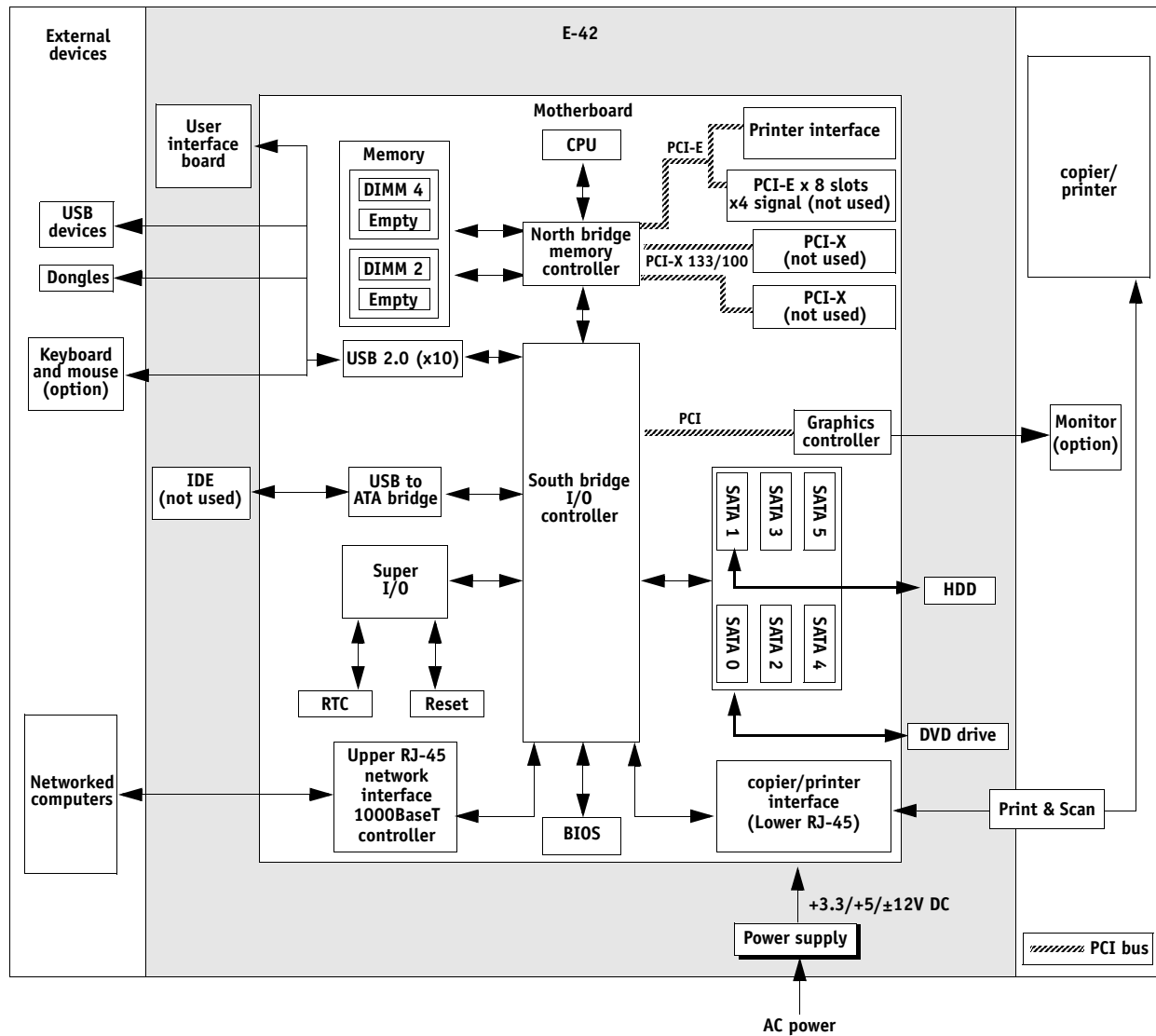


FIGURE 1: E-42 functional diagram

## Preparing for hardware installation or service procedures

Before installing or servicing the E-42, follow general precautions and obtain the correct tools.

### Precautions

Always observe the following general precautions when installing or servicing the E-42:

- **The E-42 weighs approximately 20Kg. Be careful when moving the device.**
- **Never lift the E-42 by grasping the top panel. The top panel does not support the weight of the system.**

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

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

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

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

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

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

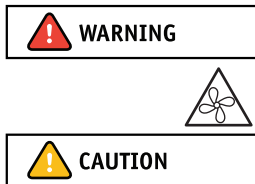
- **The E-42 contains hazardous moving parts. When servicing the E-42, keep away from moving fan blades.**

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

Applying excessive pressure to the LCD window causes it to change color.

- **Use a soft cloth moistened with Lens and Mirror Cleaner to clean the surface of the E-42 display window.**

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



**IMPORTANT**

- **When connecting or disconnecting the power cord:**
  - *Only use* the power cord that shipped with the E-42 or an appropriate replacement power cord available from an authorized provider.
  - *Always* disconnect the power cord from the E-42 connector panel before opening the unit and servicing internal components.
  - *Do not* pull on the power cord when unplugging the E-42. Instead, pull the plug.
  - *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 E-42 into a circuit with heating or refrigeration equipment (including water dispensers).
  - *Do not* plug the E-42 into a switchable power outlet. This can result in the E-42 being turned off accidentally.

- **Never set any liquid on or near the E-42 or the copier/printer. If liquid is spilled into the E-42 or the copier/printer, disconnect the power cord immediately.**

- **Do not attempt to open the power supply, DVD drive, or hard disk drive.**

- **Handle the E-42 LCD window with care.**

If the E-42 LCD window breaks and the liquid crystal inside leaks out, avoid contact. If you come in contact with the liquid crystal, immediately wash it off your skin with soap and water.

- **Use care when handling parts of the E-42, as some edges on the unit may be sharp.**
- **Do not install third-party applications onto the E-42. Third-party applications are not supported and can cause system problems. Although virus scans are permitted on the E-42, antivirus software should not be loaded in memory-resident mode.**
- **Do not change the Windows operating system software preference settings.**

Depending on the changes made, the E-42 may become unstable or even unusable. If this occurs, we recommend that you reinstall the E-42 System Software, which reliably restores the Windows operating system software to its factory defaults.

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

The E-42 will probably be connected to an existing Local Area Network (LAN) based on Ethernet hardware. The network is the link between the customer's computer, existing laser printers, and other prepress equipment. Never disturb the LAN by breaking or making a network connection, altering termination, installing or removing networking hardware or software, or shutting down networked devices without the knowledge and explicit permission of the system or network administrator or shop supervisor.

- **Unless you are the network administrator, never assign an IP address in E-42 Network Setup.**

In a DHCP environment, the system assigns the IP address automatically. In a non-DHCP environment, 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 E-42 an incorrect IP address may cause unpredictable errors on any or all devices connected to the network.

**IMPORTANT**

### **Creating an electrostatic discharge (ESD) safe environment**

- **Follow standard ESD precautions while working on the internal components of the E-42.**

Static is always a concern when servicing electronic devices. It is highly unlikely that the area around the copier/printer and the E-42 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 E-42 from the carton for the first time, touch a metal area of the copier/printer to discharge the static on your body.
  - Before you remove any of the E-42 panels and handle internal components, touch a metal part of the E-42.
  - Leave new electronic components inside their antistatic bags until you are ready to install them. When you remove components from an antistatic bag, place them on a grounded antistatic surface, component-side up.
  - When you remove an electronic component, place it in an antistatic bag immediately. Do not walk across a carpet or vinyl floor while carrying an unprotected board.
  - During service to the motherboard, avoid using excessive force and always place the motherboard on a grounded, non-metallic, antistatic 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**

**IMPORTANT**

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

**Lithium battery notice**

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

**Short circuit protection**

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

**Tools you will need**

To install or service the E-42, you will need the following tools and parts:

- ESD wrist grounding strap and antistatic mat
- Flathead screwdriver
- #0, #1, and #2 Phillips head screwdrivers
- Needlenose pliers
- E-42 documentation, including the customer media pack and any related service bulletins

**IMPORTANT**

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

## INSTALLING HARDWARE

Installation problems are easier to avoid and diagnose if you proceed from the component to the system level and verify functionality at each stage. The following procedure should take place:

- Preparing for hardware installation or service procedures (see [page 14](#))
- Installation sequence (see [page 14](#))
- Checking the customer site (see [page 15](#))
- Unpacking the E-42 (see [page 17](#))
- Installing the E-42 and connecting it to the copier/printer and the network (see [page 19](#))
- Completing the installation (see [page 23](#))
  - Print a Test Page and a Configuration page.
  - If the E-42 requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it as described on [page 22](#).
  - Remind the site administrator to install the current user software on networked computers that print to the E-42 (see *Printing* and *Utilities*, which are part of the user documentation set).

### Installation sequence

Because the E-42 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*, which is part of the user documentation set.

**NOTE:** You can change the default language that is preinstalled at the factory using the Configure tool available through Command WorkStation and WebTools. Start Configure, choose Server > General > Choose Server Language, and then click Apply. It takes up to three minutes to change languages.

#### 1 Check installation requirements and verify site conditions.

If possible, obtain verification that the network is operational (see [page 15](#)).

#### 2 Unpack the E-42 (see [page 17](#)).

#### 3 Connect the monitor, keyboard, mouse, and furniture to the E-42 if applicable.

For more information on setting up the fainter, see *Furniture, 19-inch Monitor, Keyboard, and Mouse for PRO Series*.

#### 4 Connect the interface cables (see [page 20](#)).

- Network cable (upper RJ-45)

- Ethernet crossover cable (lower RJ-45)
- 5 (Optional) If the E-42 requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it (see [page 22](#)).
  - 6 Complete the installation (see [page 23](#)).

Remind site administrator to install current user software on networked computers that print to the E-42 (see *Printing* and *Utilities*, which are part of the user documentation set).

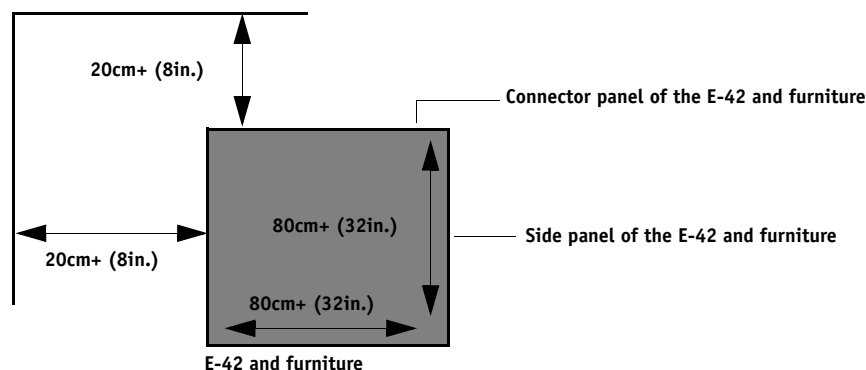
## Checking the customer site

Before you install the E-42, check site conditions and inform the customer of any installation requirements.

### Copier/printer readiness

- Is the copier/printer configured for use with the E-42? (For the proper settings, see the documentation that accompanies the copier/printer.)
- Is space available near the copier/printer for the E-42 and the furniture?

Make sure that adequate space is available for the E-42 and the furniture. Allow enough space at the connector panel for the cables to route easily and at the side panel so that the E-42 does not interfere with use of or service to the copier/printer (such as clearing a paper jam). You may need to move the copier/printer away from the wall so that the interface connectors are accessible.



- Does the copier/printer require service or adjustments?

Print the copier/printer Test Page before you install the E-42.

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

### Power

- **Is a dedicated, grounded electrical outlet for the E-42 available near the copier/printer?**

Locate the grounded electrical outlet that will supply power to the E-42. Do not run the E-42 and the copier/printer on the same circuit. If the customer has provided one, use a surge suppressor for the E-42.

### Network

- **Make sure that the network is available at the time set for installation.**
- **Verify with the network administrator that the network is functioning before you attach the E-42.**
- **Make sure that the configuration requirements specified in *Configuration Guide* (which is part of the user documentation set) have been met for remote computers and the network.**

## Setting customer expectations

When the site is ready, installation of the E-42 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/printer 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 E-42 and confirms network functionality with the connector in place before the date scheduled for the E-42 installation.

- The network administrator must make a networked computer available during the installation. The appropriate software must be installed in advance. Documentation for the networked computer and network operating software should be available.
- The network administrator must install the user software shipped with the E-42 onto networked Windows and Mac OS computers that print to the E-42 (user documentation is also included).

**NOTE:** This document covers hardware installation and service and provides general information about connecting the E-42 to the customer's network. Network Setup and configuration information exceeds the scope of this document. For Network Setup and configuration information, refer the network administrator to *Configuration and Setup*, which is part of the user documentation set.



## Unpacking the E-42

The E-42 is assembled and shipped from the factory with all necessary cables (except the network cable) and documentation.



- **The E-42 weighs approximately 20Kg. Be careful when moving the device.**
- **Never lift the E-42 by grasping the top panel. The top panel does not support the weight of the system.**

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

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

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

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

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

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

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### TO UNPACK THE E-42

- 1 **Open the box and remove the packing material.**

Save the original boxes and packing material, in case you need to transport the E-42 at a later date.

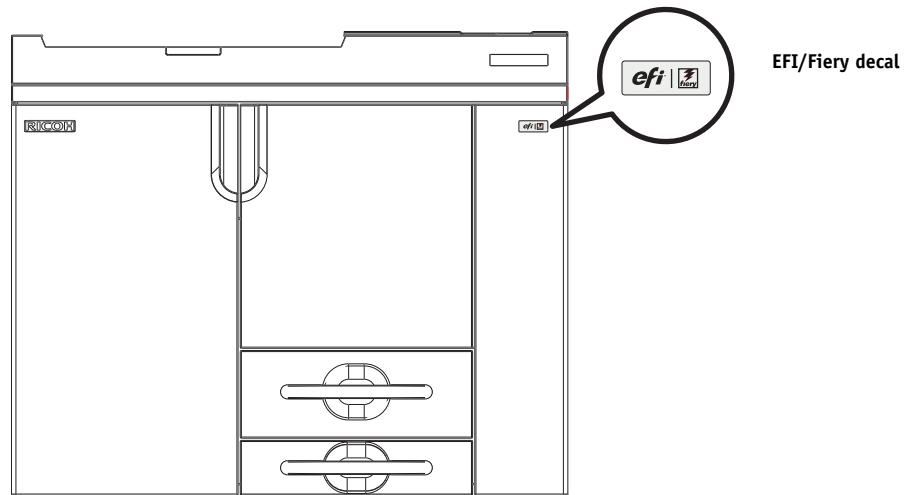
- 2 **Remove the contents from the top container. Inspect the contents for visible damage.**
- 3 **Set aside the remaining components from the top container.**
- 4 **Remove the top container and any packing material.**
- 5 **Carefully lift the E-42 out of the box.**

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

- 6 **Give the media pack to the customer or network administrator.**

Let the customer or network administrator know that in order to take full advantage of the E-42, the user software must be installed on computers that will print to the E-42.

- 7 **Locate the EFI/Fiery decal in the shipping container and affix it to the copier/printer as shown.**



**FIGURE 2:** Affixing the decal to the copier/printer

## Connecting the E-42

You are now ready to make the following connections:

- Monitor, keyboard, and mouse
- Power cable connection
- Network cable connection
- Ethernet crossover cable connection

For more information on connecting cables, see [page 35](#).

### Connecting the monitor, keyboard, mouse, and power

Before using the E-42, connect the monitor, keyboard, mouse, and power to the E-42 if applicable.

---

#### TO CONNECT THE MONITOR, KEYBOARD, MOUSE, AND POWER

**NOTE:** For detailed information about the monitor, keyboard, and mouse, see the documentation that accompanies those products.

- 1 Make sure that the E-42 is installed in the furniture and that the monitor is securely attached to the top of the E-42.**

For more information, see the assembly instructions that accompany the furniture.

- 2 Place the keyboard in the keyboard tray on the underside of the furniture table top. Place the mouse on the table top.**
- 3 Connect the keyboard and mouse cables to the USB ports on the E-42 connector panel.**
- 4 If the monitor VGA cable is not already attached to the monitor, attach it according to the instructions provided with the monitor. Connect the other end of the cable to the monitor VGA port on the back of the E-42.**

Depending on your E-42, the configuration of the VGA port may vary.

- 5 Connect the monitor power cable to the back of the monitor (some monitors may already have this cable attached). Connect the other end of the cable to a wall outlet.**

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

- 6 Connect the recessed end of the E-42 power cable to the power connector on the E-42 connector panel. Connect the other end of the cable to a wall outlet.**

## Connecting to the copier/printer

Connect the E-42 to the copier/printer to enable print and network connectivity.

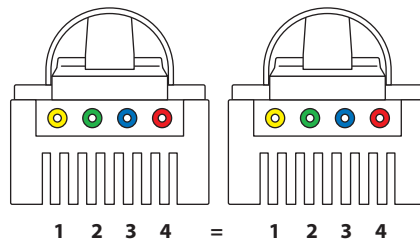
### TO CONNECT TO THE COPIER/PRINTER

- 1 Make sure that the E-42 and the copier/printer are powered off.
- 2 Connect the Ethernet crossover cable to the lower RJ-45 port on the E-42 and the copier/printer.

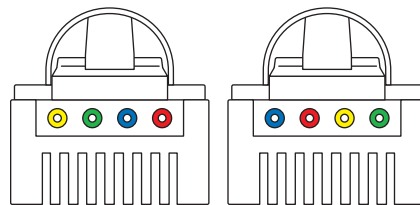
#### IMPORTANT

**NOTE:** The straight-through network cable at the customer site and the scan crossover cable included with the E-42 look similar, but are not interchangeable. Make sure that you connect the scan crossover cable to the lower RJ-45 port on the E-42 connector panel.

Align cables side by side and examine wires.



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



Crossover cable:  
wire arrangements  
are different

**FIGURE 3:** Straight-through and crossover Ethernet cables

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**To CONNECT TO THE NETWORK**

- 1 Make sure that the E-42 is powered off.**
- 2 Make sure that the network cable is connected to the customer site network.**
- 3 Connect the network cable to the upper RJ-45 network port on the back of the E-42.**

The E-42 provides twisted pair connectivity to an Ethernet network. When the network cable is connected, the Ethernet interface automatically detects the speed of the network environment. Depending on your network speed, the following unshielded twisted pair (UTP) network cables are supported:

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

After power on, the network administrator should perform Network Setup, verify the network connection, verify that the E-42 appears in the list of printers, and then print a few test documents from a networked computer that will use the E-42. For more information, see *Configuration Guide*, which is part of the user documentation set.

**IMPORTANT**

**NOTE:** The straight-through network cable at the customer site and the scan crossover cable included with the E-42 look similar, but are not interchangeable. Make sure that you connect the network cable to the upper RJ-45 port on the E-42 connector panel (see [page 35](#)).

## Configuring a static IP address for the E-42

If the customer requires the E-42 to be configured with a static IP address (for example, in a non-DHCP network environment), obtain a valid static IP address from the network administrator and configure the E-42 as described in the following procedure.

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### TO CONFIGURE A STATIC IP ADDRESS FOR THE E-42

- 1 Press the “fierydriven®” button on the copier/printer and make sure that Idle appears on the copier/printer touch panel (see [page 27](#)).**
- 2 Press the Fiery tab.**
- 3 Press Setup.**
- 4 On the Login screen, press Password. Enter Fiery.1. Press OK.**

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

- 5 On the Setup screen, do the following:**
  - Press WINS. If enabled (yellow), press Use WINS to disable this feature. Press Save.
  - Press DNS. If enabled (yellow), press Get DNS address automatically to disable this feature. Press Save.
  - Press IP Address. Enter an IP address. Press Save.
  - Press IPv4 Address. Press Manual Configuration.
- 6 On the Manual Configuration screen, do the following:**
  - In the IP Address field, enter an IPv4 address. Press OK.
  - In the Subnet Mask field, enter a subnet mask IP address. Press OK.
  - In the Default gateway field, enter a default gateway IP address. Press OK.
  - When done, press Save. Press Go Back.
- 7 On the Setup screen, press Exit Setup.**
- 8 Press Reboot Now.**

## Completing installation and starting up

To finish the installation of the E-42 at the customer site, make sure to do the following:

**NOTE:** When you power on the E-42 for the first time, make sure that the copier/printer is turned off.

**1 Power on the E-42 (see [page 32](#)).**

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

**2 Wait for the system to power on and for the E-42 Info screen to reach Idle.**

**NOTE:** If the message “Check power and cable” displays on the copier/printer copier/printer touch panel, verify that the copier/printer interface cable is connected correctly to the copier/printer and the E-42.

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

For instructions, see the documentation that accompanies the E-42 service upgrade.

Updates to Fiery Server Software may be available for the E-42 from a variety of sources (for example, System Updates (see [page 92](#)), patches provided on CD, or patches downloaded by the customer).

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

**4 Print a Test Page and a Configuration page and ask the customer to verify the output.**

**5 If the E-42 requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it as described on [page 22](#).**

**6 Ask the network administrator to perform Setup and to print some test documents over the network.**

**7 Store the output and the current Configuration page(s) near the copier/printer.**

**8 Inform the site administrator that the E-42 user software must be installed on networked computers that print to the E-42.**

**9 Ask the site administrator to make sure that all media (DVDs and/or CDs) shipped with the E-42 is stored in a safe location, accessible to you.**

## USING THE E-42

Three main user interfaces are available for the E-42:

- The control panel on the front of the E-42
- The copier/printer touch panel (see [page 27](#))
- The Fiery Advanced Controller Interface (FACI), which includes a monitor, keyboard, and mouse.

**NOTE:** The Fiery Advanced Controller Interface is provided as an option feature.

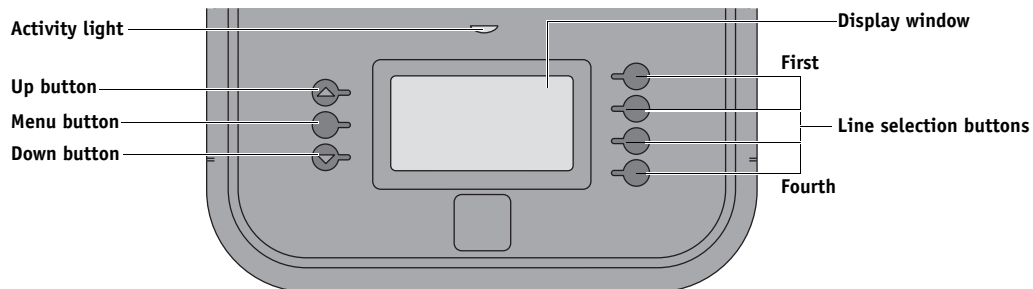
### Using the E-42 control panel

The control panel on the front of the E-42 allows you to do the following:

- Eject CDs and DVDs (a hardware eject button is also provided below the disc slot)
- Replace the motherboard (when the motherboard replacement dongle is inserted into a USB port)
- View the IP address of the E-42
- Shut down, restart, or reboot the E-42 (see [page 32](#))

**NOTE:** You can also shut down and restart the E-42 through the copier/printer touch panel (see [page 27](#)).

- Interact with the E-42 during software installation (see [page 88](#))
- Run certain diagnostics



**FIGURE 4:** E-42 control panel



## Buttons

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

## Activity light

The activity light on the E-42 control panel indicates current E-42 activity. If the light is:

Flashing amber	The E-42 is starting up and the BIOS has established communication with the User Interface Board (UIB).
Flashing green	The E-42 is continuing startup and the Windows operating system has established communication with the UIB.
Solid green	The E-42 is powered on and is in the Idle state.
Solid amber	The E-42 is powered off, but the printer interface cable is plugged into the power source. The control panel LCD continues to draw power when the E-42 is off.
Flashing or solid red	An error has caused printing to be disabled.
No light	The E-42 is powered off and the printer interface cable is not connected to a power source.

## E-42 control panel Functions menu

The following options are available from the E-42 Functions menu:

- **MB Replacement:** Allows you to transfer any options stored in the hard disk drive of the E-42 into a new motherboard.

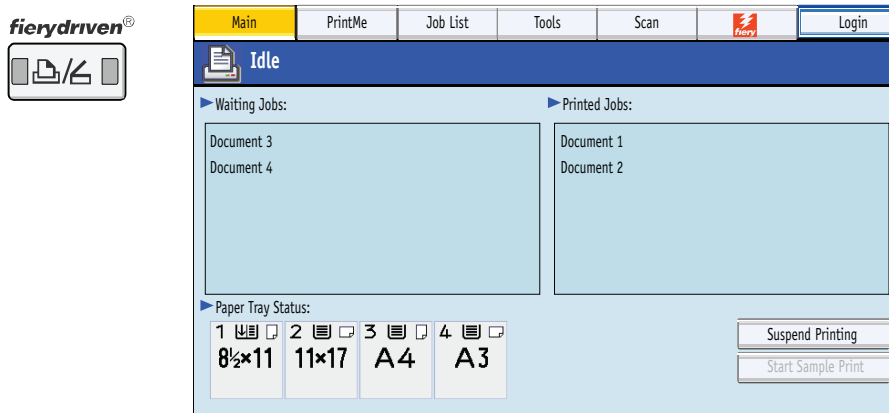
**NOTE:** The MB Replacement option appears only when you insert the motherboard replacement dongle into a USB port.

- **Eject CD/DVD:** Allows you to eject media from the DVD drive. Media is also automatically ejected whenever the E-42 is restarted, shut down, or rebooted. A hardware eject button is also located below the disc slot.
- **IP Address:** Displays the current IP address of the E-42.
- **Restart Server:** Includes options to Restart (soft reset) or Reboot (hard reset) the E-42. Selecting Restart resets the E-42 server software, but does not reboot the entire system. Selecting Reboot shuts down all E-42 activity and reboots the system. When you select Restart or Reboot, network access to the E-42 is temporarily interrupted and all currently processing jobs are aborted and may be lost.
- **Shut Down Server:** Shuts down all E-42 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 E-42 only if the system is unresponsive to keyboard or mouse actions.

## Using the copier/printer touch panel

The “fierydriven®” area of the copier/printer touch panel allows you to interact with the E-42 from the copier/printer. The menus provide access to many of the same options available from Command WorkStation.



**FIGURE 5:** The copier/printer touch panel

### 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 E-42 and the copier/printer. Use this command to interrupt the current E-42 job, for example, to perform maintenance tasks. Jobs continue to process on the E-42. After you complete maintenance tasks, choose Resume Printing to continue printing jobs from the E-42. |
| Resume Printing  | Resume print activity between the copier/printer and the E-42 after you select Suspend Printing.   |

### PrintMe tab

The PrintMe tab allows you to submit print jobs using Document IDs if you have a PrintMe subscription. For more information, see *Printing Guide*.

**NOTE:** PrintMe cloud printing must be enabled in Configure for the PrintMe tab to display in the menu.

## Job List tab

The Job List tab on the copier/printer touch 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/printer 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 <i>Utilities</i> .
Calibration	Calibrate the E-42 using ColorCal. For more information, see <i>Color Printing</i> .

## 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 E-42.
Printable Info	<p>Allows you to print these system pages from the E-42:</p> <p><b>PS Test Page/PCL Test Page:</b> Confirms that the E-42 is properly connected to the copier/ printer, and provides color and grayscale samples to troubleshoot problems with the copier/ printer or the E-42. Settings on the Test Page may include: Server Name, color settings, printer model, and date and time the Test Page was printed.</p> <p><b>PS Font List/PCL Font List:</b> Prints a list of all fonts currently on the E-42 hard disk.</p> <p><b>Configuration:</b> Provides general information about the hardware and software configuration of the E-42, the current settings for Setup, the current calibration, the IP address of the E-42, and a log of system updates.</p> <p><b>Color Charts:</b> Prints samples of the RGB, CMY, and PANTONE colors available from the E-42.</p> <p><b>Custom Paper Instructions:</b> Provides the instructions for setting up custom paper entry.</p> <p><b>Calibration Instructions:</b> Prints the information on how to perform the calibration.</p> <p><b>Job Log:</b> Prints a log of the last 55 jobs.</p> <p><b>E-mail Log:</b> Prints a log listing recent e-mail activity.</p> <p><b>FTP Log:</b> Prints a log listing recent FTP activity.</p> <p><b>NOTE:</b> 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.
Clear Job Log	Clears the job log from the E-42.
Run Diagnostics	To troubleshoot printer interface or e-mail printing issues, choose this menu.
Clear Server	Clear all jobs in all server queues, as well as all jobs archived on the E-42 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 with your administrator or operator before choosing Clear Server.

**Restart Fiery**

Shut down all E-42 activity in the correct manner and then restart. The following options are available from the submenu that appears:

**Restart Fiery Service:** Resets the server software but does not reboot the entire system. Network access to the E-42 is temporarily interrupted and all currently processing jobs are aborted and may be lost.

**Restart System:** Shuts down and then reboots the E-42. Network access to the E-42 is terminated and all currently processing jobs are aborted and may be lost.

**Shut Down:** Shuts down all E-42 activity properly.

**Printable Info menu**

This section describes how to print pages such as the Test Page and Configuration page from the Printable Info menu (described on [page 29](#)). The Printable Info menu is accessed through the Fiery tab (see [page 29](#)).

Printing the **Configuration page** can be helpful during installation, Setup, and service. After installing the E-42 (including connecting to the network), and before default settings are changed in Run Setup, you can obtain a record of the defaults by printing the Configuration page.

Before you perform any service procedure, you should print the E-42 Configuration page, if possible, so you are prepared to return the settings to their former configuration, if necessary.

Printing the **Test Page** indicates that the E-42 is functional and that the connection between the E-42 and the copier/printer is working.

**TO PRINT A PAGE FROM THE PRINTABLE INFO MENU**

- 1 **If it is not powered on already, power on the copier/printer and allow it to warm up.**
- 2 **If it is not powered on already, power on the E-42 using the power button on the front panel and allow it to start up completely (approximately three minutes).**
- 3 **Make sure that Idle appears on the Fiery Main menu.**

If Busy or Printing appears, the E-42 is processing and you must wait until Idle appears.

- 4 **Touch the Fiery tab.**
- 5 **Touch Printable Info and then select the page that you want to print.**

The E-42 sends the selected page(s) to the copier/printer.

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

If the Test Page prints, you know the E-42 is functional and the connection between the E-42 and the copier/printer is working. If the Test Page fails to print, look up printing problems in the Troubleshooting table on [page 109](#).

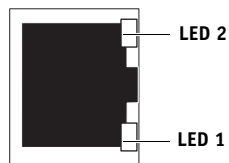
When you examine the Test Page, keep in mind the following:

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

Poor image or color quality may indicate a need to calibrate the system or service the copier/printer. Information on the Test Page includes the date and time of the last calibration, so the Test Page can be kept for future reference. For more information, look up printing problems on [page 109](#), or see *Color Printing* from the user documentation set.

## Network status LEDs

Two LEDs next to the Ethernet connector indicate the network speed. When a data transfer occurs between the E-42 and the network, the appropriate LED(s) blink to indicate network activity. For additional network information, see *Configuration and Setup*, which is part of the user documentation set.



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

### IMPORTANT

**NOTE:** Network connectivity is supported only through the upper RJ-45 port on the E-42 connector panel. The lower port is the scan interface. The network and scan cables look similar, but are not interchangeable. Make sure not to swap the cables. (For the correct connections, see [page 35](#)).

## Starting, shutting down, restarting, and rebooting

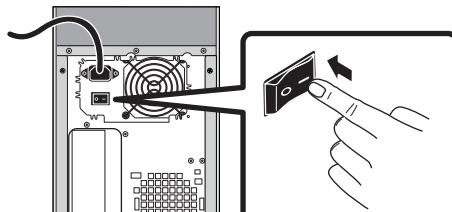
The customer will generally leave the E-42 on all of the time. Remember that when the E-42 is powered off, network access to the copier/printer is interrupted. Power off the E-42 when you need to service it and before you remove or attach any cables to it.

**NOTE:** Use the reset button on the front of the E-42 only if the system is unresponsive to keyboard or mouse actions.

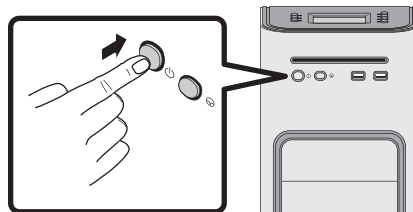
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### TO START THE E-42

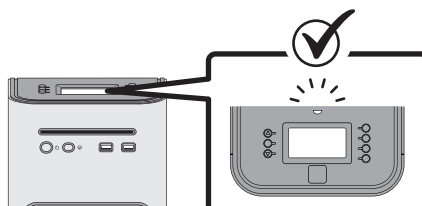
- 1 Make sure that the power cable is attached and that the power switch is in the ON position.
- 2 Make sure that the power cable is attached and that the power switch is in the ON position (I).



- 3 Press the power button on the front panel.
- 4 Press the power button (⏻) on the front panel.



- 5 Check the Activity light on the control panel.



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



## TO SHUT DOWN, RESTART, OR REBOOT FROM THE E-42 CONTROL PANEL

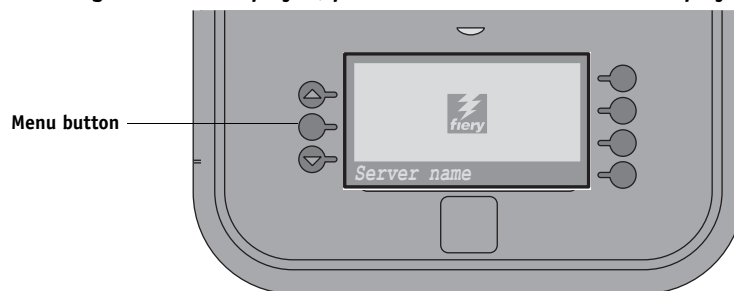
**NOTE:** Notify the network administrator before you remove the E-42 from the network.

### 1 Make sure that the E-42 is not receiving, processing, or printing any jobs.

If Printing appears on the control panel, the E-42 is processing. You must wait until the system finishes and reaches Idle before restarting or shutting down.

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

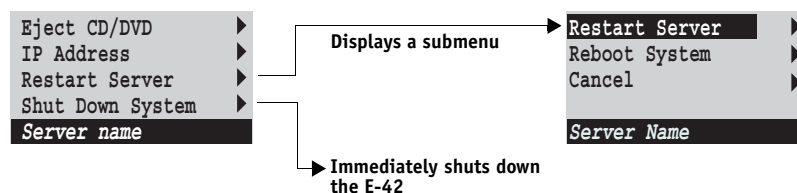
### 2 If the logo screen is displayed, press the Menu button once to display the Functions menu.



This logo screen indicates that the E-42 is Idle.

### 3 Make a selection:

- To restart or reboot the E-42, select Restart Server. A submenu displays allowing you to select Restart Server, Reboot System, or Cancel.
- To shut down the E-42 immediately, select Shut Down System.



**NOTE:** Use the reset button on the front of the E-42 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 1 minute or more for the server software to restart.

Before accessing internal components following a shutdown, make sure that all cables are disconnected from the back of the E-42.

---

**TO SHUT DOWN, RESTART, OR REBOOT FROM THE COPIER/PRINTER TOUCH PANEL**

**NOTE:** Notify the network administrator before you remove the E-42 from the network.

**1 Make sure that the E-42 is not receiving, processing, or printing any jobs.**

If Printing appears on the control panel, the E-42 is processing. You must wait until the system finishes and reaches Idle before restarting or shutting down.

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

**2 Press the “fierydriven®” button on the copier/printer and make sure that Idle appears on the copier/printer touch panel (see [page 27](#)).**

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 E-42 from the network.

**3 Press the Fiery tab.**

**4 Press Restart Fiery.**

**5 At the next screen, select one of the following options:**

- Restart Fiery Service (soft reset)—Resets the E-42 server software but does not reboot the entire system. Network access to the E-42 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 E-42 activity properly and then reboots. Network access to the E-42 is temporarily interrupted and all currently processing jobs are aborted and may be lost.
- Shut Down—Shuts down all E-42 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 E-42 is terminated and all currently processing jobs are aborted and may be lost.

**NOTE:** Use the reset button on the front of the E-42 only if the system is unresponsive to keyboard or mouse actions.

**6 Press OK.**

Before accessing internal components, make sure that all cables are disconnected from the back of the E-42.

## REPLACING PARTS

Generally, the E-42 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, CMOS, jumpers, and battery)
- Fans
- Power supply
- Hard disk drive
- DVD drive

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

**NOTE:** Replacement parts and specifications are subject to change. Install the correct parts as directed by your service/support center.

#### IMPORTANT

When performing the service procedures described in this chapter, follow the precautions listed on [page 10](#).

The tools required to service the E-42 are listed on [page 13](#).

## E-42 overview diagrams

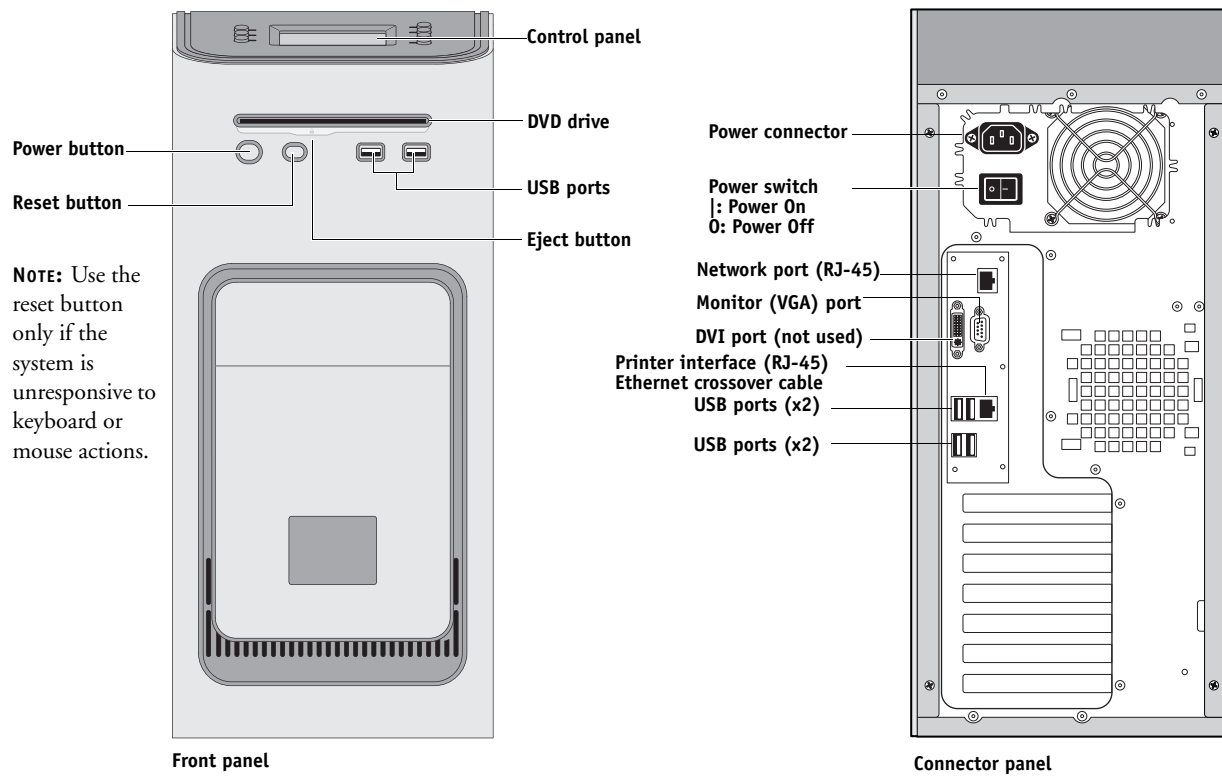
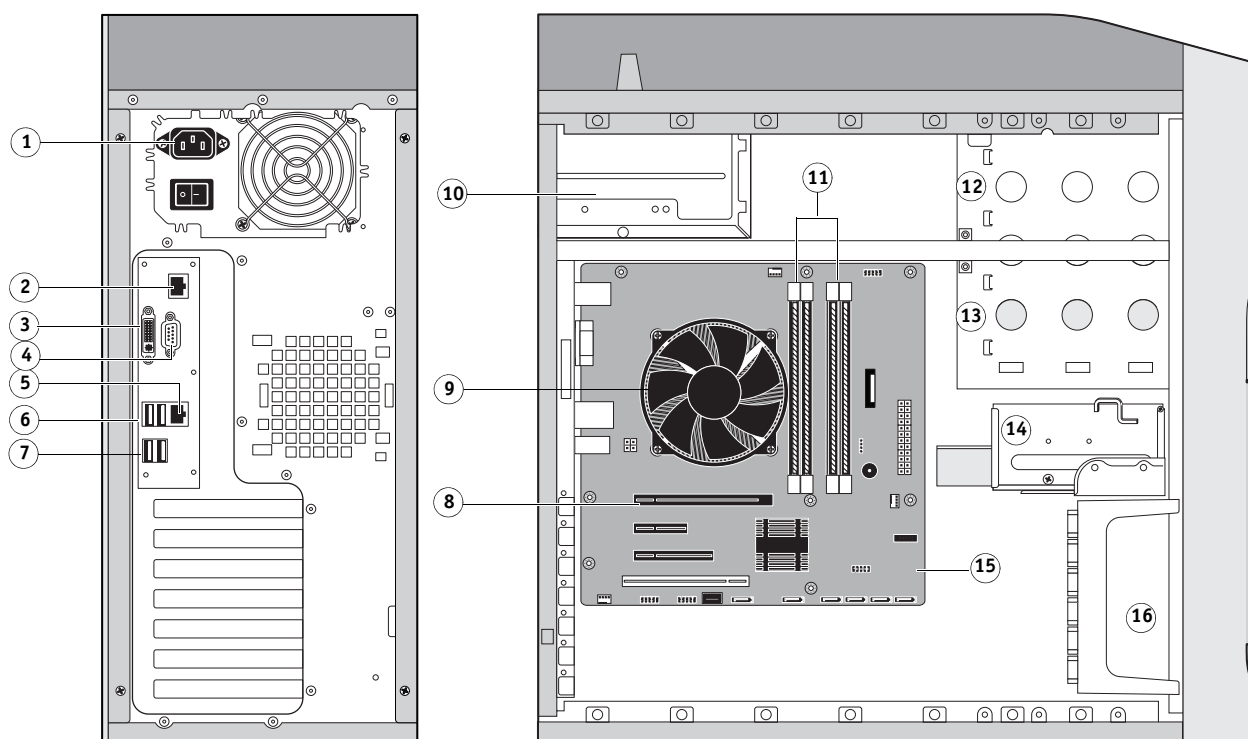


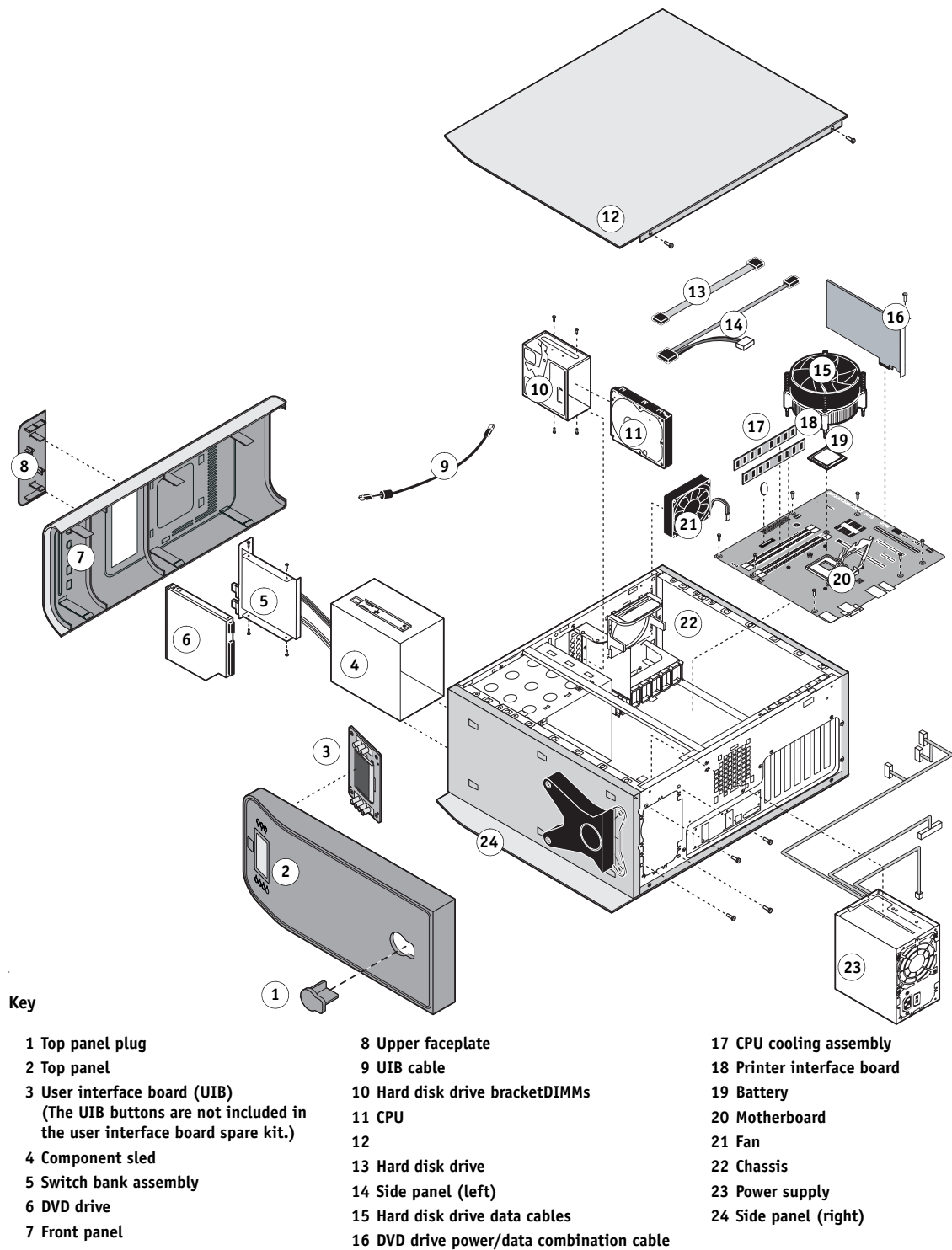
FIGURE 6: Front and connector panel

**Key**

- |                                 |                           |                               |
|---------------------------------|---------------------------|-------------------------------|
| 1 Power connector               | 7 USB ports (x2)          | 13 Removable drive (option)   |
| 2 Network port                  | 8 Printer interface board | 14 Hard disk drive in bracket |
| 3 DVI port (not used)           | 9 CPU cooling assembly    | 15 Motherboard                |
| 4 VGA port (for option monitor) | 10 Power supply           | 16 Front fan                  |
| 5 Scan port                     | 11 DIMM slots             |                               |
| 6 USB ports (x2)                | 12 DVD drive              |                               |

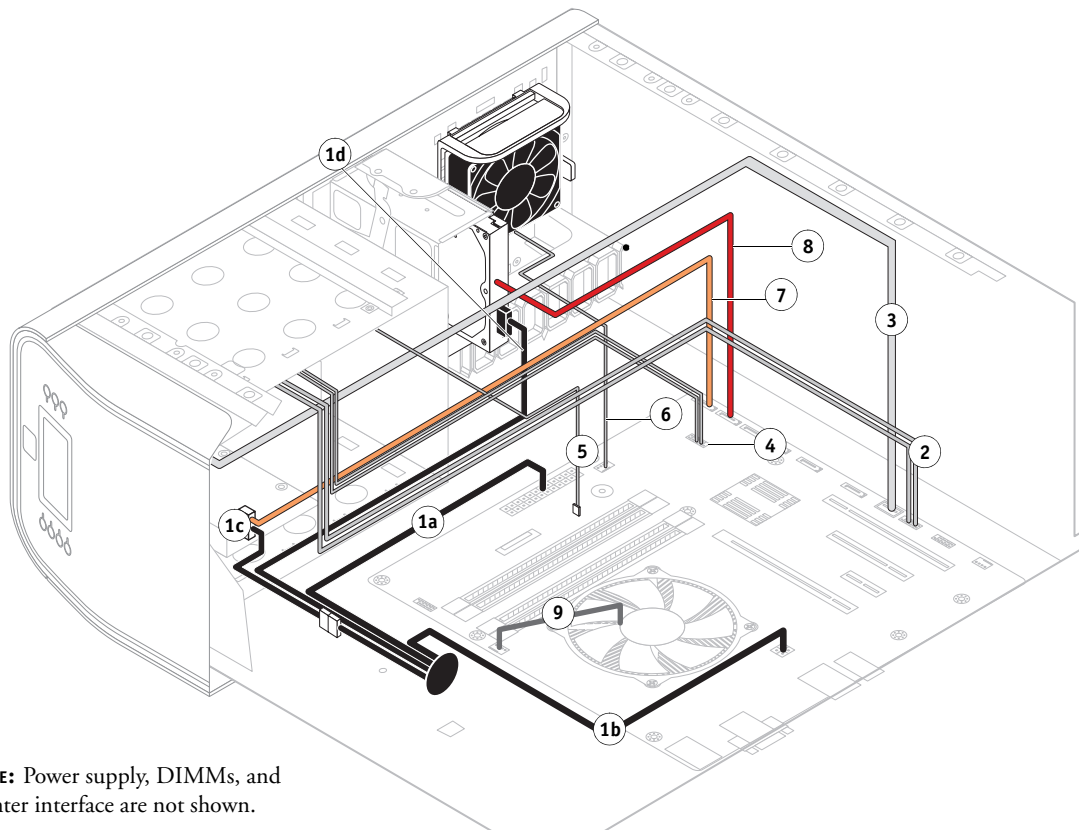
**NOTE:** Cables, UIB, and front panel USB ports are not shown.

**FIGURE 7:** Connector panel and internal side view



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

**FIGURE 8:** Exploded view of components



**NOTE:** Power supply, DIMMs, and printer interface are not shown.

Cable key	From	To
1 Power supply cable	Power supply	a. CPU power connector (PW1) b. Motherboard power connector (PW2) c. DVD drive power connector (combined with data) d. Hard disk drive power connector
2 Front panel USB port cables	Front panel	Motherboard connectors J22, J35 (see detail above)
3 UIB cable	User interface board	Motherboard connector J38 (see detail above)
4 Power and reset cables	Front panel	Motherboard connector JP4 (see detail above)
5 Speaker cable	Front panel	Motherboard connector J40 (see detail above)
6 Front panel fan cable	Front panel fan	Motherboard connector FAN 4 (see detail above)
7 DVD drive power/data combo cable	DVD drive	Motherboard connector SATA 0 (see detail above)
8 Hard disk drive (HDD) data cable	Hard disk drive (HDD)	Motherboard connector SATA 1 (see detail above)
9 CPU fan cable	CPU fan	Motherboard connector FAN 1 (If present, keep the cable cover on the CPU fan cable.)

**FIGURE 9:** Power and data cable connections

## Accessing internal components

Shut down and open the E-42 when you need to inspect or service internal components.

For more information on how to shut down the E-42, see [page 32](#).

## Shutting down the system

You can shut down the E-42 from the E-42 control panel or the copier/printer touch panel. When shutting down the E-42, do the following:

- Remove the power cable from the connector panel before removing or connecting interface cables or accessing the internal components.
- Remember that when the E-42 is powered off, network access to the copier/printer is interrupted. Always obtain permission from the network administrator before you take the E-42 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 E-42 through the control panel or the copier/printer touch panel, power off by holding down the power button on the front of the E-42 for up to eight seconds.
- Using the reset button may cause the system to operate unpredictably. Use the reset button on the front of the E-42 only if the system is unresponsive to keyboard or mouse actions.

**IMPORTANT**

**IMPORTANT**



## TO SHUT DOWN FROM THE E-42 CONTROL PANEL

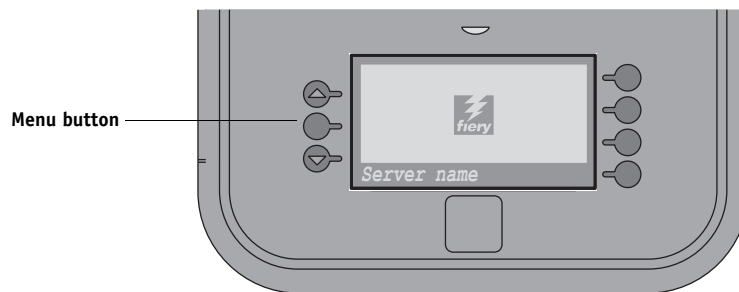
**NOTE:** Notify the network administrator before you remove the E-42 from the network.

### 1 Make sure that the E-42 is not receiving, processing, or printing any jobs.

If Printing appears on the copier/printer touch panel, the E-42 is processing. You must wait until the system finishes and reaches Idle before restarting or shutting down.

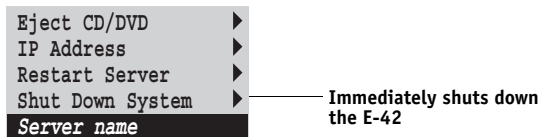
If the system has just finished processing, wait at least five seconds after the system reaches Idle before beginning the shutdown procedure.

### 2 If the logo screen is displayed, press the Menu button once to display the Functions menu.



This logo screen indicates that the E-42 is Idle.

### 3 Select Shut Down System.



**NOTE:** Use the reset button on the front of the E-42 only if the system is unresponsive to keyboard or mouse actions.

Allow the system to shut down and power off.

Before accessing internal components following a shutdown, make sure that all cables are disconnected from the back of the E-42.

---

**TO SHUT DOWN FROM THE COPIER/PRINTER TOUCH PANEL**

**NOTE:** Notify the network administrator before you remove the E-42 from the network.

- 1 Press the “fierydriven®” button on the copier/printer touch panel (see [page 27](#)).**
- 2 Make sure that the E-42 is not receiving, processing, or printing any jobs.**

If Printing appears on the touch panel, the E-42 is processing. You must wait until the system finishes and reaches Idle before restarting or shutting down.

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

- 3 On the copier/printer touch panel, press the Fiery tab and then press Restart Fiery.**
- 4 At the next screen, select Shut Down and press OK:**

Before accessing internal components, make sure that all cables are disconnected from the back of the E-42.

## Opening the E-42

To service internal components, open the E-42 as described in the following procedure.



- **The E-42 weighs approximately 20Kg. Be careful when moving the device.**
- **Never lift the E-42 by grasping the top panel. The top panel does not support the weight of the system.**

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

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

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

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

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

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

---

### TO OPEN THE E-42

- 1 **Shut down the E-42 (see [page 40](#)).**
- 2 **Remove all cables from the back of the E-42.**
- 3 **Remove the E-42 from the furniture (see [page 44](#)).**
- 4 **Remove all panels necessary to access the component that you need to service.**

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

**NOTE:** When removing multiple panels from the E-42, use the following order:

- Left panel (see [page 44](#))
- Right panel (see [page 44](#))
- Front panel (see [page 45](#))
- Top panel (see [page 46](#))

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

- 5 **Place the E-42 on a flat surface. Attach an ESD wrist strap before handling internal parts (see [page 12](#)).**
- 6 **Carefully position the E-42 so that it is resting on its side and the internal components are facing up.**

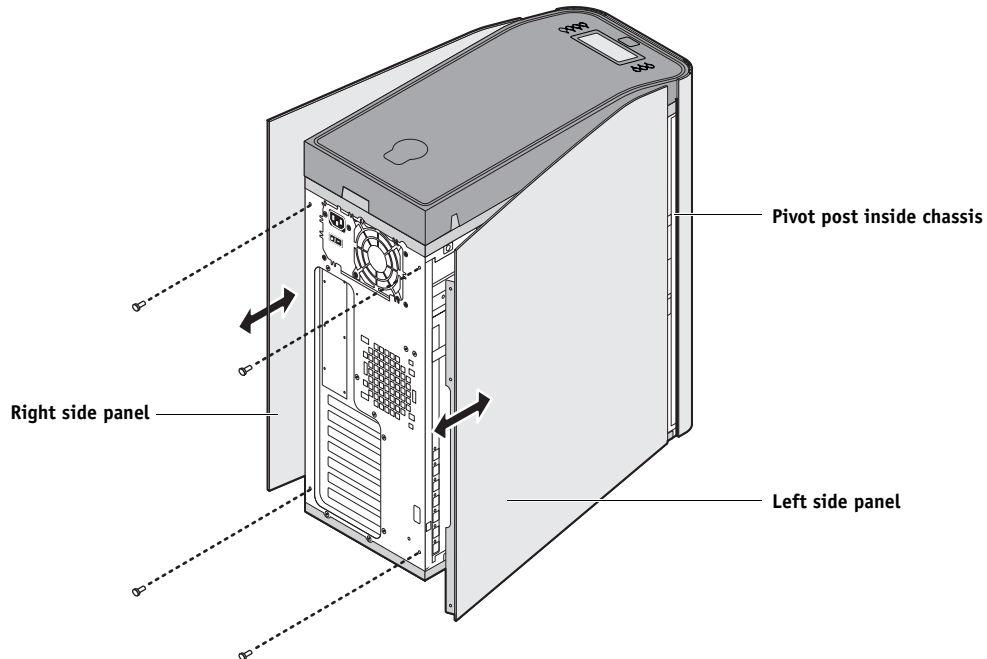
Place removed components on a grounded, antistatic surface.

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

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

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

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



**FIGURE 10:** Removing/replacing the side panels

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

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

**TO REMOVE AND REPLACE THE FRONT PANEL**

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

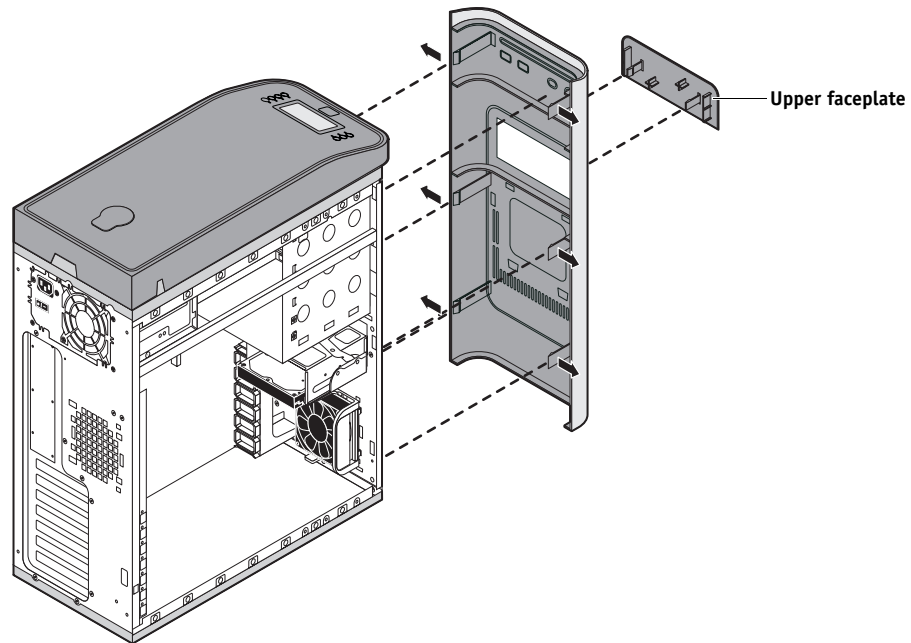
**1 Remove the upper faceplate from the front of the chassis.**

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

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

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

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



**FIGURE 11:** Removing/replacing the front panel

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

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

**5 Replace the upper faceplate.**

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

**TO REMOVE AND REPLACE THE TOP PANEL**

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

**1 Remove the plug from the top panel.**

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

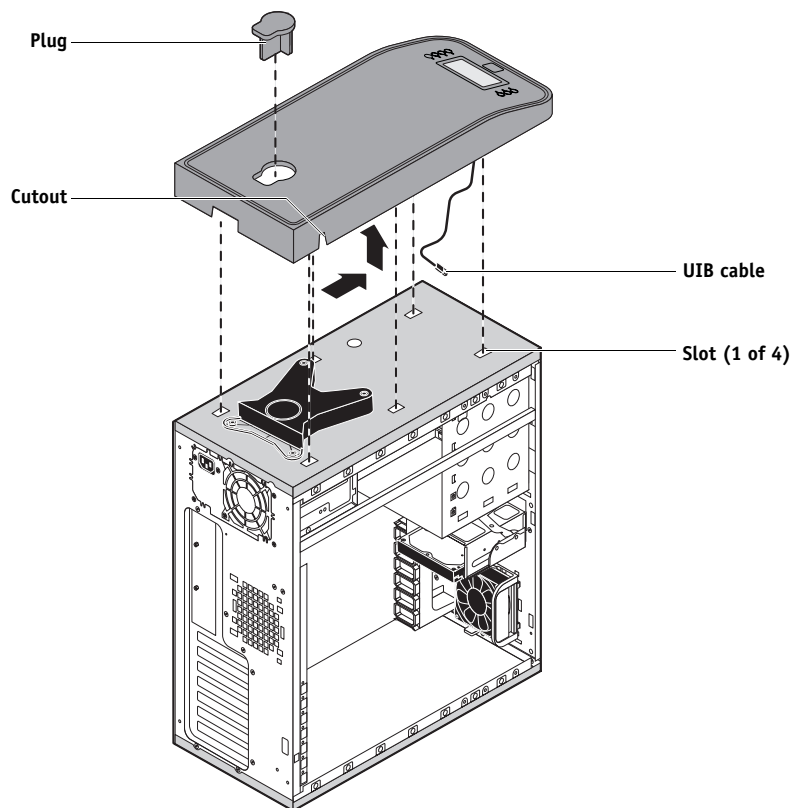
**2 Loosen the top panel.**

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

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

**3 Detach the UIB cable from the motherboard.****4 Remove the panel from the chassis.**

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



**FIGURE 12:** Removing/replacing the top panel

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

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

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

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

- 7 Replace the plug on the top panel.

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

## Removing and replacing boards

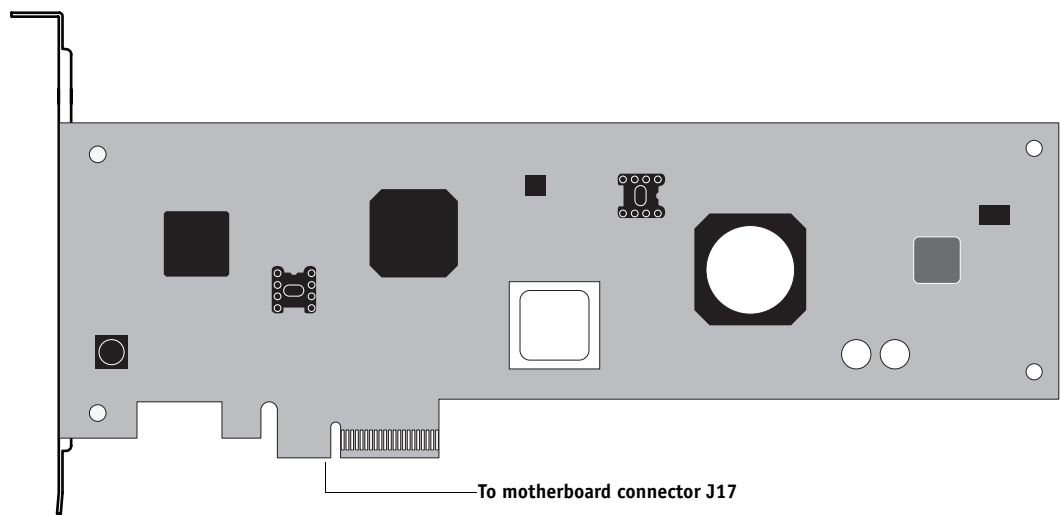
This section includes procedures for removing and replacing the following boards:

- Printer interface board
- User interface board
- Motherboard

The E-42 is shipped from the factory with a standard board configuration. If optional components have been installed, see the documentation that accompanies the particular option kit.

### Printer interface board

The printer interface board provides the print interface between the E-42 and the copier/printer. It is installed in motherboard connector J17. The printer interface board processes the image data and sends it to the copier/printer through the Ethernet crossover cable connected to lower RJ-45 port available on the E-42 connector panel.



**FIGURE 13:** Diagram of the printer interface board



---

**TO REMOVE THE PRINTER INTERFACE BOARD**

- 1 **Shut down and open the E-42 (see pages [40](#) and [43](#)).**

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

- 2 **Make sure that the printer interface cable is removed from the E-42 connector panel.**
- 3 **Remove the board mounting bracket screw that attaches the printer interface to the chassis.**
- 4 **Remove the printer interface board from the chassis.**

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

- 5 **Place the printer interface board in an antistatic bag.**

---

**TO REPLACE THE PRINTER INTERFACE BOARD**

- 1 **Seat the printer interface board in the mother connector, and then secure it to the chassis with the board mounting bracket screw that you removed earlier.**

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

- 2 **Reassemble the E-42 and verify its functionality (see [page 87](#)).**

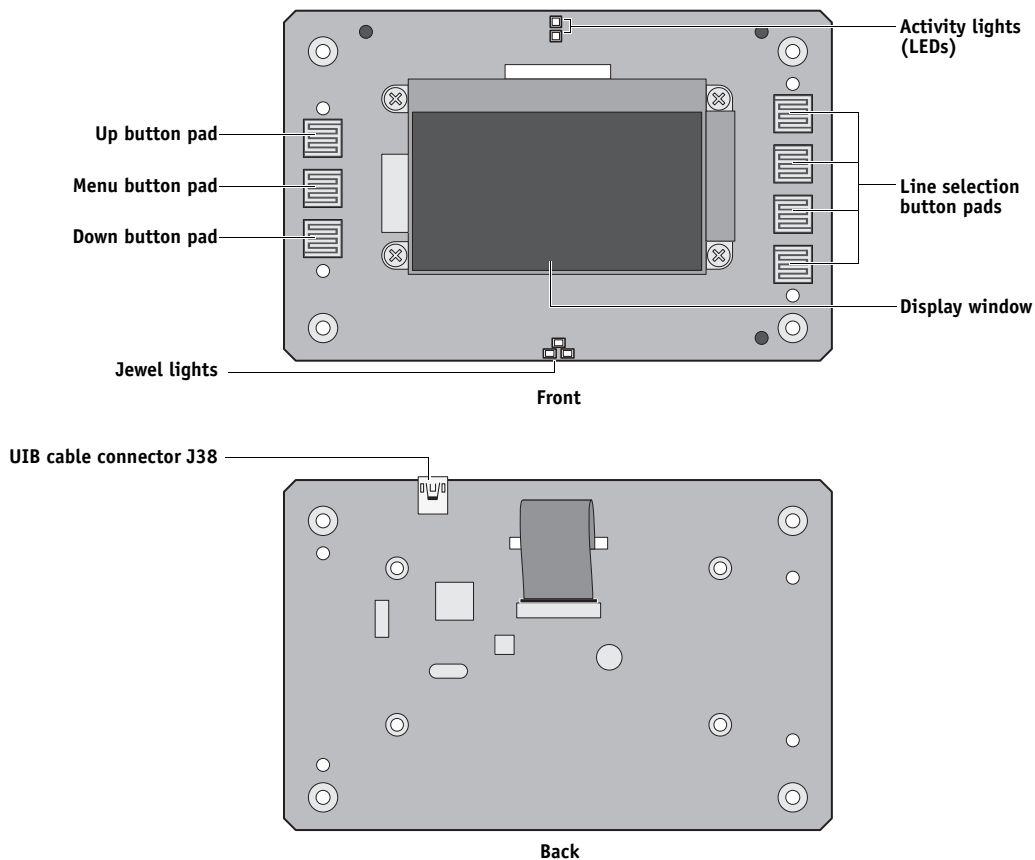
## User interface board assembly

The user interface board (UIB) provides the interface between the E-42 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

**NOTE:** The buttons are not included in the user interface board spare kit.

The UIB cable is routed from a connector on the back of the user interface board to connector J38 on the motherboard (see [Figure 17 on page 54](#)).



**FIGURE 14:** Diagram of the user interface board (front and back)

**TO REMOVE THE USER INTERFACE BOARD**

- 1 Shut down and open the E-42 (see [page 40](#)).

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

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

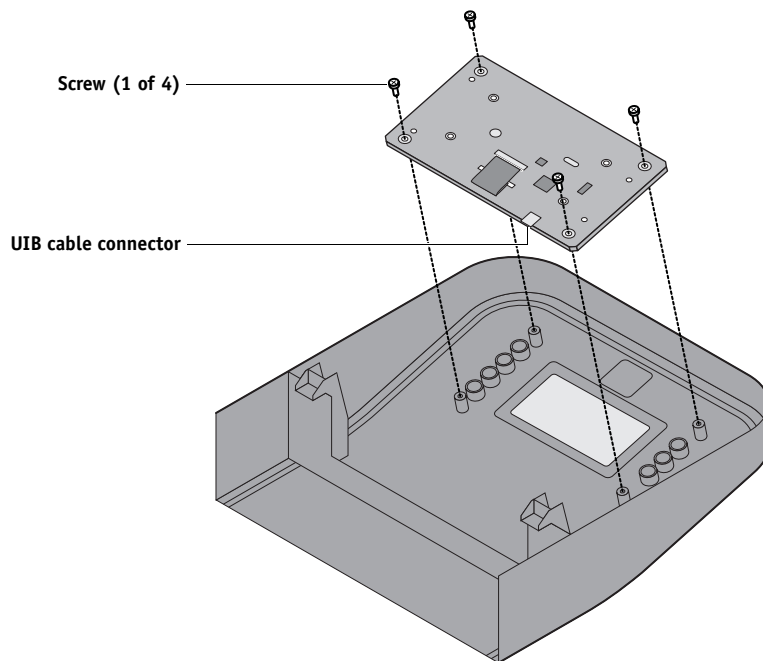
- 2 Turn the top panel over to expose its underside and place it on a padded surface.

- 3 Detach the UIB cable from the connector on the back of the UIB.

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

- 4 Remove the four screws that secure the UIB to the underside of the top panel.

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



**FIGURE 15:** Removing/replacing the user interface board

- 6 If you are removing the UIB to replace it with a new board, remove the UIB buttons from the old UIB (see [Figure 16 on page 52](#)).

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

- 7 Place the UIB in an antistatic bag.

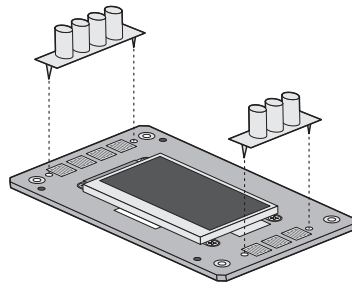
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**TO REPLACE THE USER INTERFACE BOARD**

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

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

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



**FIGURE 16:** Removing/replacing the UIB buttons

- 2 **Attach the UIB cable to the connector on the back of the UIB (see [Figure 15 on page 51](#)).**
- 3 **Turn the top panel over to expose its underside and place it on a padded surface.**
- 4 **Position the plastic lens around the display window of the UIB.**
- 5 **Secure the UIB to the underside of the top panel.**

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

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

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

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

- 7 **Replace the top panel (see [page 46](#)).**

Route the UIB cable through the chassis and connect it to the motherboard connector (see [page 53](#)).

- 8 **Reassemble the E-42 and verify its functionality (see [page 87](#)).**

## Motherboard

**IMPORTANT**

If you are removing the motherboard in order to replace it with a new motherboard, review the troubleshooting and motherboard cautions on [page 57](#).

The CPU mounted on the motherboard controls the image data transferred to and from the printer interface. The motherboard also controls hard disk drive functions and the communication between the E-42 and external devices.

### Removing the motherboard

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

- The left panel
- All boards installed on the motherboard
- All cables connected to the motherboard  
(including the motherboard power cable, CPU power cable, front panel fan cable, hard disk drive data cable, DVD drive power and data combination cable, power button cable, reset button cable, speaker cable, front panel USB port cables, and UIB cable)

This section also includes information about the following:

- Replacing or adding DIMMs
- Replacing the CPU
- Replacing the battery
- Clearing the CMOS
- Jumper configurations

**IMPORTANT**

Follow standard ESD and other safety precautions when handling components (see [page 12](#)). During service to the motherboard, avoid using excessive force and always place the motherboard on a grounded, non-metallic, static-free surface. Never allow any metal to touch the solder contacts on the underside of the motherboard, especially beneath the battery socket. Improper handling can short-circuit and permanently damage the motherboard.

## Key

- 1 Network interface
  - 2 Monitor
  - 3 Ethernet crossover port/USB ports (x2)
  - 4 USB ports (x2)
  - 5 CPU power (PW1)
  - 6 Motherboard power (PW2)
  - 7 CPU, heatsink, CPU fan
  - 8 Battery (BT1)
  - 9 Printer interface board (PCI-E X16)
  - 10 DIMM 1
  - 11 DIMM 2
  - 12 DIMM 3
  - 13 DIMM 4
  - 14 CPU fan power (FAN 1)
  - 15 Speaker (J83)
  - 16 UIB cable (J38)
  - 17 SATA 0, DVD drive data connection
  - 18 SATA 1, hard disk drive data connection
  - 19 Front panel cable (J22)
  - 20 Power and Reset (J20)
  - 21 Front panel fan (FAN 4)
  - 22 Clear CMOS Jumper (J4)
- MH—Mounting holes

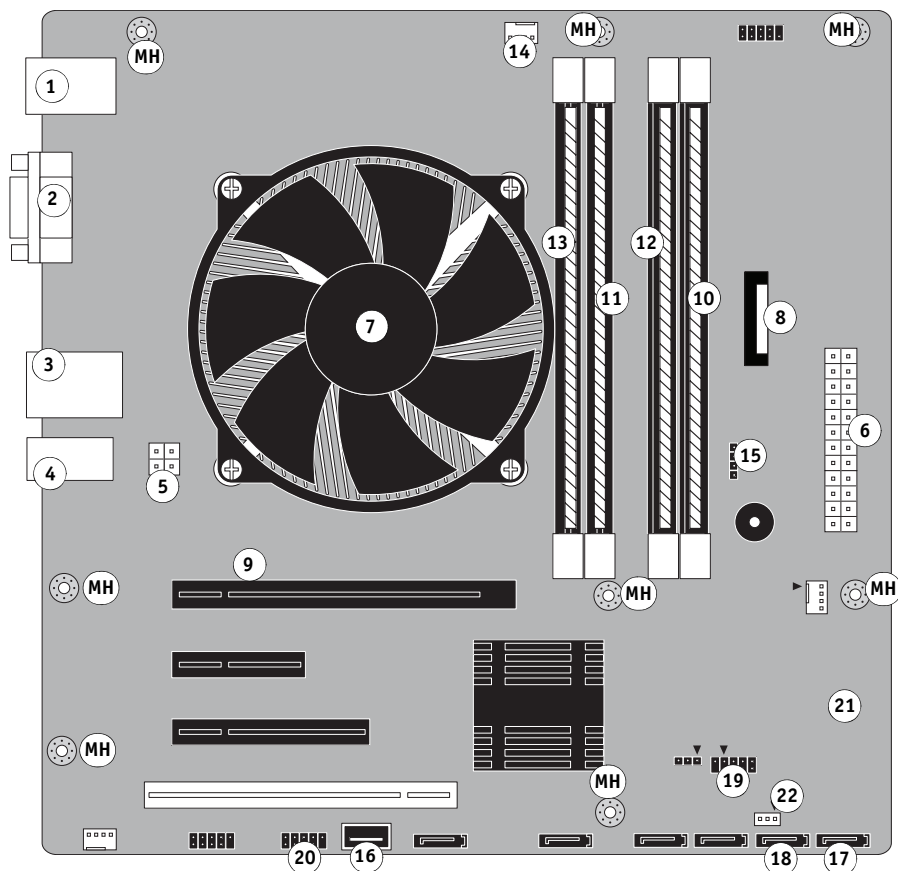


FIGURE 17: Motherboard

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**TO REMOVE BOARDS AND CABLES FROM THE MOTHERBOARD****1 Shut down and open the E-42 (see pages [40](#) and [43](#)).**

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

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

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

**3 Remove the following cables from the old motherboard:**

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

- Front panel fan cable
- Reset button cable
- Power button cable
- Speaker cable
- UIB cable
- Front panel USB port cables
- DVD drive cables:
  - SATA data cable
  - Power and data combination cable
- Hard disk drive cables:
  - SATA data cable
  - Power supply cable
- Motherboard power cable
- CPU power cable

For motherboard connector locations, see [page 53](#).

---

**TO REMOVE THE MOTHERBOARD**

**NOTE:** This procedure assumes that you have already performed the procedure “[To remove boards and cables from the motherboard](#)” on [page 55](#).

**1 Remove the hard disk drive bracket, with hard disk drive attached (see [page 77](#)).**

Remove the screw that attaches the bracket to the shelf. Removing the hard disk drive and hard disk drive bracket provides the clearance necessary for removing the motherboard. You must also detach the hard disk drive power cable to remove the hard disk drive.

**2 If the DVI port cover is attached to the connector panel, remove the two mounting screws and remove the DVI port cover.**

**3 Remove all the mounting screws securing the motherboard to the chassis (for screw locations, see [page 53](#)).**

**4 Remove the motherboard from the chassis.**

Lift the edge of the motherboard. Make sure that the motherboard connectors clear the chassis while you lift it out of the chassis. Do not touch the contacts and avoid using excessive force.

<b>IMPORTANT</b>
------------------

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



**IMPORTANT****IMPORTANT**

## 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.

### Troubleshooting cautions

- Before deciding to install a new motherboard, consult [“Troubleshooting” on page 94](#).
- Inspect all cables and internal components as described on pages [95](#) and [95](#). If these inspections do not solve the problem, locate symptoms in the troubleshooting table beginning on [page 101](#) 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 that the hard disk drive 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 the hard disk drive and the motherboard are defective; therefore, avoid replacing both to solve one problem.)

- First, replace the hard disk drive and install system software.

Always replace a faulty hard disk drive with a new hard disk drive. Transferring a hard disk drive from one E-42 to another is incorrect and strongly discouraged.

- If the problem persists, reinstall the original hard disk drive in the system, and then replace the motherboard.

**IMPORTANT****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:

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

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

Reinstalling system software is not necessary when installing a new motherboard and can result in an error if done before transferring options to the new motherboard (described on [page 61](#).)

- **Before you use the motherboard replacement dongle to sync the BIOS and options (for example, Fiery Graphic Arts, Premium Edition, if applicable) from the hard disk drive to the new motherboard, enter Service Mode (see [page 61](#)) and make sure that the new motherboard solves the problem that you are troubleshooting.**

The E-42 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 E-42. If the new motherboard does not solve the problem in Service Mode, do not transfer options. Return the new motherboard and motherboard replacement dongle to inventory.

- **If you can verify in Service Mode that the new motherboard solves the problem that you are troubleshooting, transfer options to the new motherboard using the motherboard replacement dongle included with the new motherboard (see [page 61](#)).**

**IMPORTANT**

- ***Do not* remove the motherboard replacement dongle while transferring options to the new motherboard.**

Removing the motherboard replacement 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, do the following:**

- Unpack the new motherboard.
- Open the load plate covering the CPU socket (see [page 67](#)) and remove the protective plastic cover on the CPU socket on the new motherboard. Later, you will transfer the protective plastic cover to the CPU socket of the old motherboard to protect the circuitry.
- Remove the DIMMs from the old motherboard and install them on the new motherboard (see [page 63](#)).
- Remove the CPU and cooling assembly from the old motherboard and install them on the new motherboard (see [page 64](#)). Make sure that the cable cover (if present) remains on the cooling assembly fan cable when transferring the cooling assembly to the new motherboard.

**IMPORTANT**

When transferring the CPU to the new motherboard, make sure to use the fresh thermal compound that came with the new motherboard. For more information about the thermal compound, see [page 68](#).

**IMPORTANT**

Do not transfer the BIOS chip from the old motherboard onto the new motherboard. Doing so can damage the E-42. BIOS chips are not interchangeable.

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

Angle the motherboard so that the motherboard connectors fit into the cutouts in the back of the chassis.

**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 standoffs located in the base of the chassis.****4 Secure the motherboard to the chassis using all the 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.

**5 Attached the DVI port cover to the connector panel using the two mounting screws that you removed earlier.**

You are now ready to complete motherboard installation.

---

**TO REPLACE BOARDS, CABLES, AND COMPONENTS****1 Replace the hard disk drive bracket, with hard disk drive attached (see [page 79](#)).**

You removed the hard disk drive bracket to provide clearance for removing the motherboard.

**2 Replace the following cables (see [page 54](#) for the connector locations).**

- CPU power cable
- Motherboard power cable
- UIB cable
- Hard disk drive cable
- DVD drive cables:
  - Power and data combination cable
  - SATA data cable

**IMPORTANT**

**NOTE:** Connect the thin, black SATA power cable connectors to the hard disk drive and DVD drive. Do not connect the white, 4-pin power cable connectors. Connecting both types of power cables will damage the hard disk drive and DVD drive. For more information on connector locations, refer to the label that is on the bottom surface of the chassis.

- Front panel USB port cables
- Speaker cable
- Power button cable
- Reset button cable
- Front panel fan cable

**3 Secure cables as necessary with any plastic cable clamp that you may have removed earlier.****4 Replace the printer interface in motherboard connector J17 (see [Figure 17 on page 54](#)).**

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

**IMPORTANT**

**NOTE:** Make sure that unused connector panel slots are covered with slot covers. Uncovered slots reduce air flow and may cause the E-42 to overheat.

**5 If you reinstalled the old motherboard, reassemble the E-42 and verify its functionality (see [page 87](#)).****6 If you replaced the motherboard with a new motherboard, clear the CMOS as follows:****IMPORTANT**

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

- Remove the battery (see [page 69](#)).
- Wait two minutes to allow the motherboard electrical components to fully discharge.

- Reinstall the battery.
- 7 If you replaced the motherboard with a new motherboard and cleared the CMOS, do the following:**
- Reassemble the E-42 (see [page 87](#)).
  - Reset the time and date in Setup (see Configure Help for more information).

## Verifying new motherboard installation, and transferring options and BIOS information

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

- Verify all functionality by using the motherboard replacement dongle to enter Service Mode. (Service Mode is not indicated on the monitor or LCD, but is entered once you power on with a new motherboard installed and the motherboard replacement 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 motherboard replacement dongle to transfer options to the new motherboard (see [“Entering Service Mode” on page 61](#)).

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

- If the new motherboard solves the problem that you are troubleshooting, use the motherboard replacement dongle 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 motherboard replacement dongle to transfer options to the new motherboard (described below), do not install system software, and do not replace the hard disk drive. Reinstall the old motherboard and return the new motherboard and the unused motherboard replacement dongle to inventory. You may then perform additional service and troubleshooting procedures.

Transferring options (for example, Fiery Graphic Arts, Premium Edition, if applicable) expends the motherboard replacement dongle. For details, see [“Entering Service Mode” on page 61](#).

### IMPORTANT

*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 motherboard replacement 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 E-42 is powered off, no media is in the DVD drive, you have installed a new motherboard, and that you have reassembled the E-42 and attached external cables.

- 1 Make sure the E-42 is connected to the copier/printer (see [page 20](#)).**
- 2 Locate the motherboard replacement dongle provided with the new motherboard and connect it to a USB port.**
- 3 Remove all USB devices (except for the keyboard and mouse) that may be currently connected to any other USB port.**

Reconnect other dongles and USB devices only after you verify that the E-42 starts up successfully in Service Mode.

- 4 Power on the E-42 and allow it to boot without interruption.**

- At the Log On to Windows dialog box, log in as Administrator, 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 E-42 is in Service Mode, so you can verify that the new motherboard solves the problem that you are trying to troubleshoot. Service Mode is not indicated on the monitor or on the E-42 control panel.

- 5 Print the E-42 Test Page.**
- 6 Ask the network administrator to connect the E-42 to the network and download a print job over the network (see *Configuration and Setup*, which is part of the user documentation set).**

If the problem that you are troubleshooting persists, or if you are unable to perform [steps 4](#) through [step 6](#) above while in Service Mode, you may conclude that the old motherboard was not the source of the problem and does not need to be replaced. If so, do not transfer options to the new motherboard (described on [page 61](#)), do not install system software, and do not replace the hard disk drive. Reinstall the old motherboard and return the new motherboard with the unexpended motherboard replacement dongle to inventory. For more information about troubleshooting system problems, see “[Troubleshooting](#)” on [page 94](#).

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

**Transferring options and BIOS information to the new motherboard**

After you verify that the new motherboard solves the problem that you are troubleshooting, you must use the motherboard replacement dongle to transfer options to the new motherboard.

---

**TO TRANSFER OPTIONS AND BIOS INFORMATION TO THE NEW MOTHERBOARD**

**NOTE:** This procedure, which takes approximately 15-20 minutes, assumes that the E-42 is fully assembled with the new motherboard, and verified in Service Mode (see [page 61](#)).

- 1 Verify that all power is turned off on the E-42.**
- 2 Insert the motherboard replacement dongle into a USB port.**
- 3 Turn on the E-42.**

Wait until the FieryBar reaches Idle.

- 4 On the E-42 control panel, select MB Replacement.**

The control panel displays “Reading dongle...”, then displays the number of licenses left to apply to the transfer.

- 5 Select Yes to confirm the license transfer.**

The control panel displays “Applying” to indicate the transfer of options and the backup BIOS from the hard disk drive to the BIOS chip on the replacement motherboard.

**NOTE:** If you select “No” the process ends and you return to the Functions menu.

- 6 Reboot the E-42.**
- 7 Remove the motherboard replacement dongle after the FieryBar reaches Idle.**
- 8 Reinstall system software.**

## Replacing parts on the motherboard

Before you remove and replace the DIMMs, CPU, and battery on the motherboard, shut down and open the E-42 (see [page 40](#)).

### DIMMs

When installing DIMMs, note the following:

- Different capacity DIMMs look alike. Make sure that you know the capacity of each DIMM before you install it in a socket.
- Install only approved DIMMs available from your service representative.
- DIMMs must be installed in matched pairs. A matched pair is comprised of two alternate sockets. DIMMs within a pair must be identical (same capacity and same number of chips on each side). For example, in a two-DIMM configuration, populate DIMM 4 and DIMM 2 with DIMMs of identical capacity, with the same number of chips on each side.

---

**TO REPLACE A DIMM**

- 1 Shut down, and then open the E-42 (see [pages 40 and 43](#)).**

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

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

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

**IMPORTANT**

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

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

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

- Remove the battery (see [page 69](#)).
- Wait two minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.

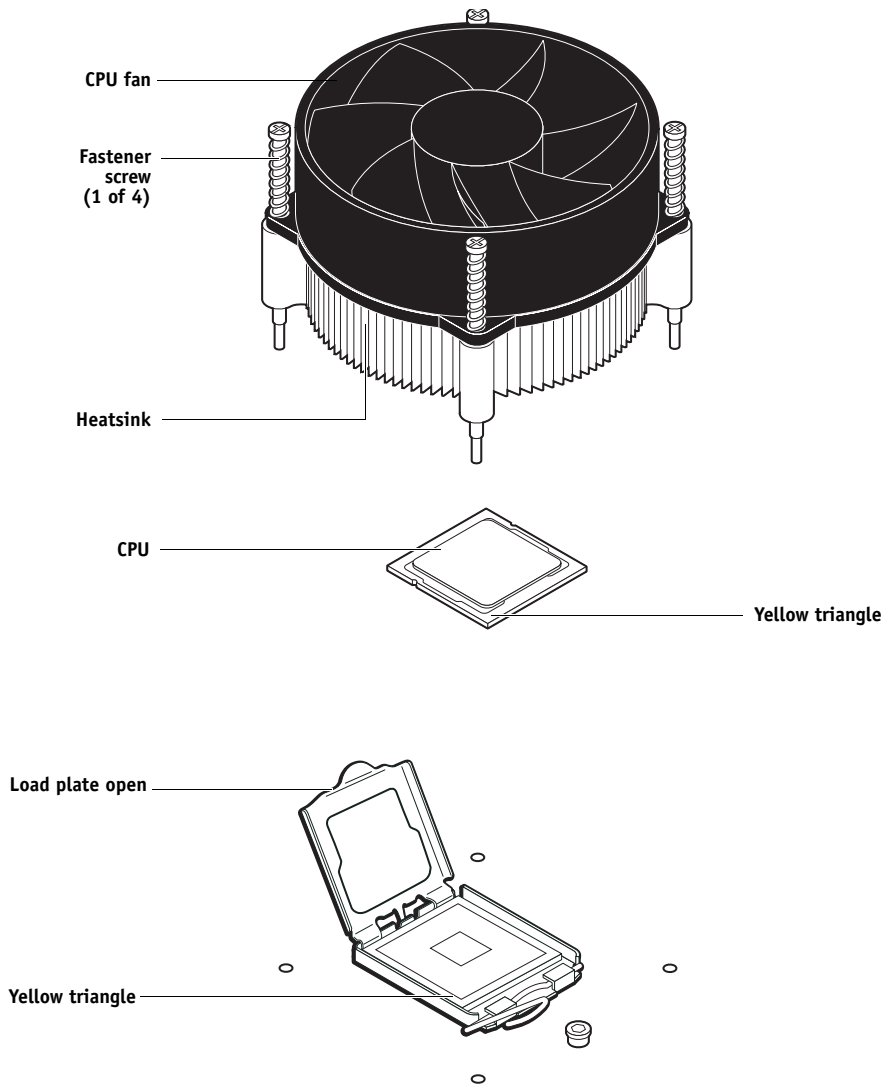
- 6 If you installed a new DIMM and cleared the CMOS, make sure to reset the time and date in Setup (see [Configure Help](#) for more information).
- 7 Reassemble the E-42 and verify its functionality (see [page 87](#)).

**CPU**

The CPU is installed in a socket on the motherboard. Before you remove the CPU from its socket, remove the motherboard from the chassis (see [page 53](#)), disconnect the CPU fan cable from the motherboard, and then remove the cooling assembly from the E-42 (see [page 65](#)). The CPU cooling assembly consists of a fan and a heatsink.



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



**FIGURE 18:** CPU cooling assembly

**IMPORTANT**

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

**TO REMOVE THE COOLING ASSEMBLY**

- 1 Shut down, and then open the E-42 (see pages 40 and 43).

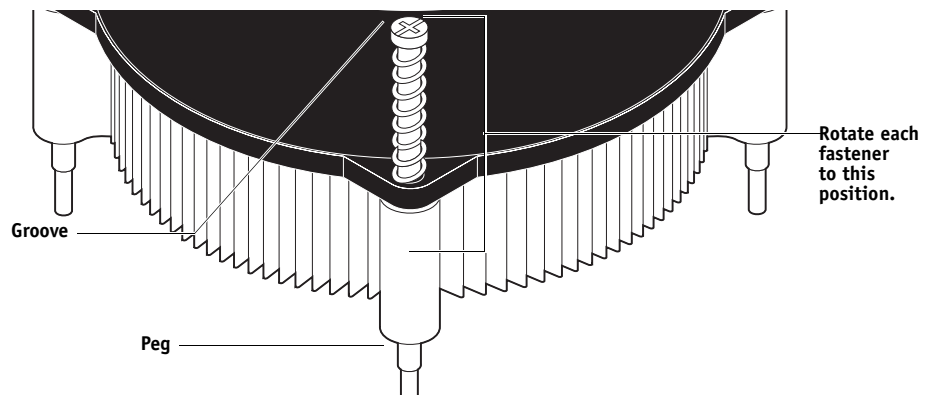
To access the CPU, you must remove the left panel.

**2 Remove the CPU fan cable from motherboard connector FAN 1.****3 Remove the CPU cooling assembly.**

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

**IMPORTANT**

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

**4 Lift the cooling assembly off the CPU socket and set it aside.****CAUTION**

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

**TO REMOVE AND REPLACE THE CPU**

- 1 **Unlock the CPU socket lever and raise it into the open position (flex the lever away from the retention post, and then raise it).**
- 2 **Open the load plate.**
- 3 **Grasp the CPU by its edges, lift it out of the socket, and then place the CPU in a safe place.**

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

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

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

- 5 **Prepare the CPU socket by ensuring that:**

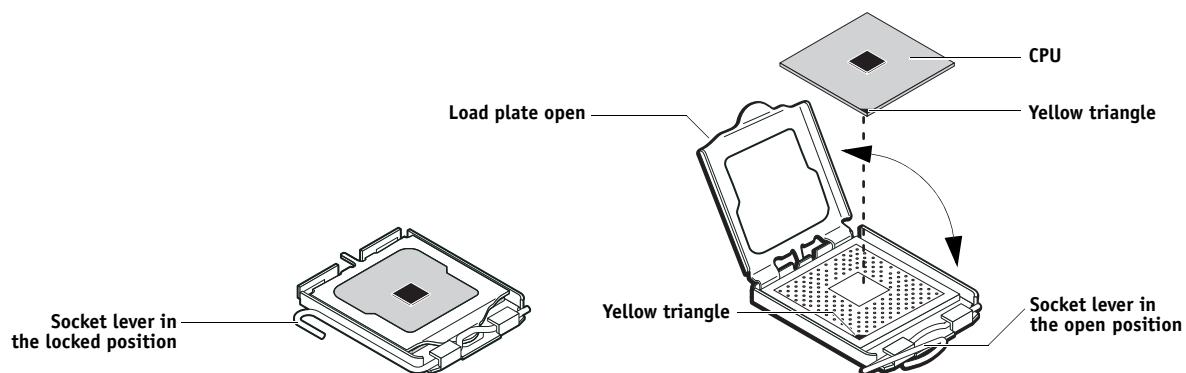
- The socket lever is in the open position.
- The load plate is open.

- 6 **Place the CPU in the socket.**

The CPU and the socket are keyed to ensure correct installation. The notches on the edges of the CPU correspond with the two small posts inside the socket. Align the yellow triangle on the CPU with the yellow triangle on the socket. Do not force the CPU.

- 7 **Close the load plate.**

- 8 **Lower the socket lever and place it in the locked position under the retention post.**



**FIGURE 19:** Removing/replacing the CPU

---

**TO REPLACE THE CPU COOLING ASSEMBLY**

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

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

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

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

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

**IMPORTANT**

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

**4 Connect the CPU fan cable to the motherboard connector FAN 1.****IMPORTANT**

If you are installing a new CPU, secure slack in the fan cable using a tie-wrap. The tie-wrap prevents the fan cable from interfering with the CPU fan. Also, make sure the connector on the cable is securely connected to the motherboard.

**5 If you replaced the CPU with a new CPU, clear the CMOS as follows:****IMPORTANT**

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

- Remove the battery (see [page 69](#)).
- Wait two minutes to allow the motherboard electrical components to fully discharge.
- Reinstall the battery.

**6 If you installed a new CPU and cleared the CMOS, make sure to reset the time and date in Setup (see Configure Help for more information).****7 Reassemble the E-42 and verify its functionality (see [page 87](#)).**

## Battery

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



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

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

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

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

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

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

**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.

### TO REPLACE THE BATTERY

- 1 Shut down, and then open the E-42 (see pages 40 and 43).
- 2 Locate the battery on the motherboard (see Figure 17 on page 54).
- 3 Carefully push the clip away from the battery until the socket ejects the battery.

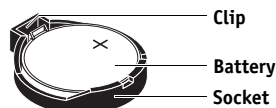


FIGURE 20: Motherboard battery

- 4 Slide the battery out of its socket.
- 5 Wait two minutes to allow the motherboard electrical components to fully discharge.

- 6 To insert a new battery, slide it into the socket so that the positive (+) side of the battery faces up.
- 7 Press the battery down into the socket until it snaps into place.  
Make sure that the battery is securely installed in the socket.
- 8 Reassemble the system and verify its functionality (see [page 87](#)).
- 9 Configure the time and date in Setup (see [Configure Help](#) for more information).

**IMPORTANT**

Failure to configure the time and date will cause the E-42 to hang when user software is being installed on the E-42. (See [page 107](#).)

Clearing the CMOS

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

To CLEAR THE CMOS

IMPORTANT

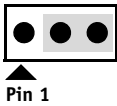
- 1 Shut down, and then open the E-42 (see pages [page 40](#) and [page 43](#)).
- Make sure to remove the printer interface cable from the power outlet before opening the E-42 and clearing the CMOS.
- 2 Remove the battery (see [page 69](#)).
- 3 Wait two minutes to allow the motherboard electrical components to fully discharge.
- 4 Reinstall the battery (see [page 69](#)).
- 5 Reassemble the E-42 and verify its functionality (see [page 87](#)).
- 6 Reset the time and date in Setup (see [Configure Help](#) for more information).

IMPORTANT

Failure to configure the time and date will cause the E-42 to hang when user software is being installed on the E-42 (see [page 107](#)).

Jumpers

Jumper configurations should not be changed.

Jumper	Description
J4	J4 is the Clear CMOS and Password jumper. Default configuration: jumper cap installed on pins 2 and 3.
	<b>NOTE:</b> Because J4 is not easily accessed on the motherboard and the jumper cap is very small, it is not necessary—and could introduce an error—to remove the jumper cap in order to clear the CMOS settings. Instead, clear the CMOS by denying power to the motherboard, as described earlier.

## Fan

A fan mounted inside the E-42 chassis draws air into the E-42 to cool components. The fan runs continuously when the system is on. You should hear the fan start as soon as you power on the E-42. If you do not hear the fan, there may be a faulty power connection.

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

---

### TO REMOVE THE FAN

- 1 **Shut down, and then open the E-42 (see pages 40 and 43).**

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

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

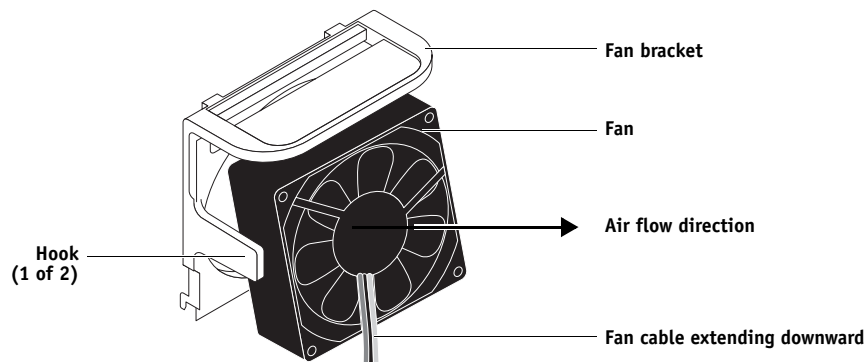


FIGURE 21: Removing the fan

- 4 **Remove the fan from the chassis.**

---

### TO REPLACE THE FAN

- 1 **Align the fan.**

An arrow on the side of the fan indicates the airflow direction. Make sure that the fan is positioned so that the arrow points inside the E-42 and the fan cable extends downward toward the motherboard (see Figure 21).

- 2 **Press the fan into the bracket until it clicks into place.**

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

- 3 **Connect the fan cable to motherboard connector FAN 4.**
- 4 **Reassemble the E-42 and verify its functionality (see page 87).**



## Power supply

For more information on the power supply, see “Specifications” on page 112.

**IMPORTANT**

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

---

### TO REMOVE THE POWER SUPPLY

- 1 Shut down, and then open the E-42 (see pages 40 and 43).

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

- 2 Remove the power cable from the hard disk drive.
- 3 Remove the power and data combination cable from the DVD drive.
- 4 Remove the 20-pin motherboard power cable from motherboard connector PW2.
- 5 Remove the 8-pin CPU power cable from motherboard connector PW1.
- 6 Remove the tie-wrap securing the power cables to the chassis support beam.
- 7 Remove the ferrites that are installed around the hard disk drive power cables.

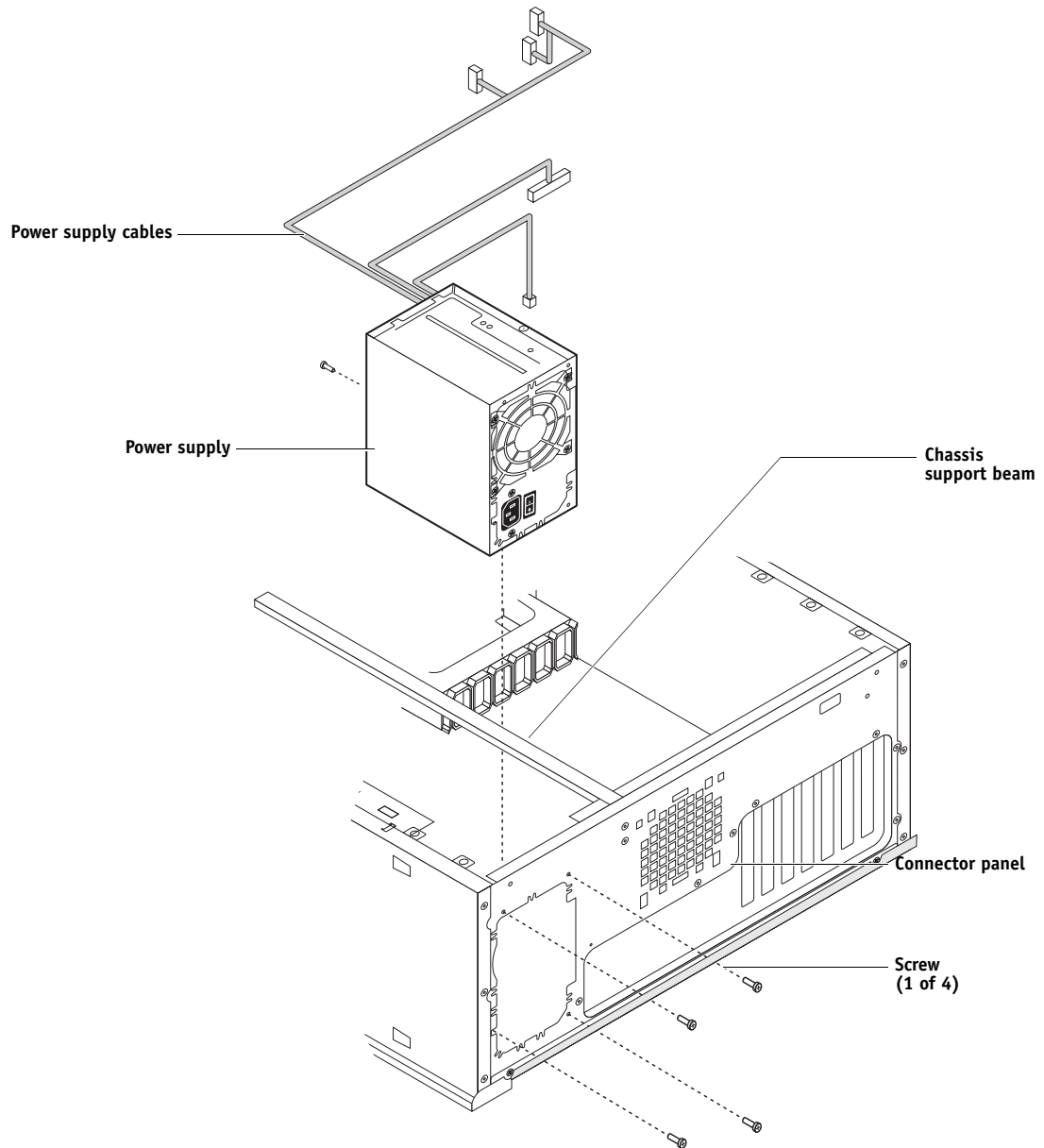
Carefully pry open the latches on the sides of the ferrites and remove the ferrites from the cables. Set the ferrites aside so that you can replace them later.

- 8 Remove four of the five screws that attach the power supply to the back of the chassis (see Figure 22 on page 74).
- 9 While supporting the power supply, remove the fifth screw.

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

- 10 Lift the power supply out of the chassis.

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



**FIGURE 22:** Removing/replacing the power supply

---

**TO REPLACE THE POWER SUPPLY**

- 1 Support the power supply inside the chassis and align the mounting holes.**
- 2 Attach the power supply to the chassis with the five screws that you removed earlier (see [Figure 22 on page 74](#)).**

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

- 3 Connect the 8-pin CPU power cable to motherboard connector PW1 (for connector locations, see [Figure 17 on page 54](#)).**
- 4 Connect the 20-pin motherboard power cable to motherboard connector PW2.**
- 5 Connect the power and data combination cable to the DVD drive.**
- 6 Install the ferrite around the hard disk drive power cable.**

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

- 7 Connect the power cable to the hard disk drive.**

**IMPORTANT**

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

- 8 Secure the loose section of the power cable to the chassis support beam with a tie-wrap.**
- 9 Reassemble the E-42 and verify its functionality (see [page 87](#)).**

## Hard disk drive

The factory-installed hard disk drive is formatted and loaded with system software, network drivers, and printer fonts. The hard disk drive is also used to store spooled print jobs. Available space on the hard disk drive is displayed in Command WorkStation.

If you replace the hard disk drive with a new one, you must install system software as described on [page 90](#). (Spare hard disk drives are not shipped with preinstalled system software.)

### IMPORTANT

Do not replace the hard disk drive and the motherboard at the same time. Doing so in the wrong order, without updating the system (see [page 57](#)), will cause the system to malfunction.

It is unlikely that both the hard disk drive and the motherboard are defective. Avoid replacing both to solve one problem. If troubleshooting strategies (such as checking cables and connections; see [page 95](#)) do not solve the problem, and you suspect either the hard disk drive or the motherboard is at fault, use the following order to troubleshoot: replace the hard disk drive, 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 57](#)).

### IMPORTANT

#### Proper handling

Improper handling can damage a hard disk drive. Handle the hard disk drive with extreme care.

- Use proper ESD practices when grounding yourself and the E-42.
- Keep magnets and magnetic-sensitive objects away from the hard disk drive.
- Do not remove the screws on top of the hard disk drive. Loosening these screws voids the warranty.
- Never drop, jar, bump, or put excessive pressure on the hard disk drive.
- Handle the hard disk drive by its sides and avoid touching the printed circuit board.
- Allow the hard disk drive to reach room temperature before installation.

Hard disk drive problems may be caused by the following:

- Loose or faulty connections
- Faulty data or power cable
- Faulty hard disk drive

### IMPORTANT

Make sure that you attach an ESD grounding wrist strap and follow standard ESD precautions before handling E-42 components.

The hard disk drive is mounted inside a bracket (see [Figure 24 on page 78](#)).

If you are replacing the hard disk drive with a new one, you will need:

- The appropriate system software and documentation for the E-42 that you are servicing.

- A compatible version of the user software for the networked computers that will print to the E-42.

#### TO REMOVE THE HARD DISK DRIVE

- 1 If you are removing the hard disk drive 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 Font List.
- 2 Shut down and open the E-42 (see pages 40 and 43).  
To access the hard disk drive, you must remove the left panel.
- 3 Remove the power supply cable from the hard disk drive.
- 4 Remove the hard disk drive data cable from the hard disk drive.
- 5 Remove the screw securing the hard disk drive bracket to the bracket shelf.
- 6 Slide the hard disk drive bracket off the shelf and lift it out of the chassis (see Figure 23).

Unlock the hard disk drive bracket by moving the latch toward the connector panel, and then sliding the bracket off the bracket shelf.

#### IMPORTANT

Avoid striking the DIMMs as you remove the hard disk drive bracket.

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

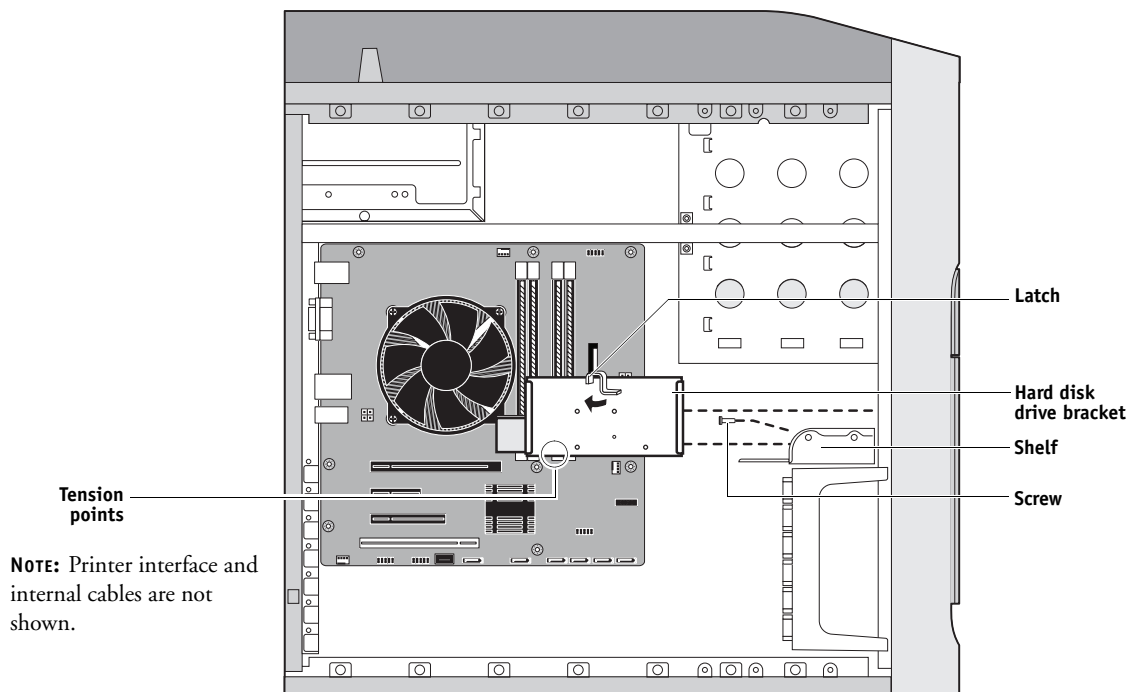
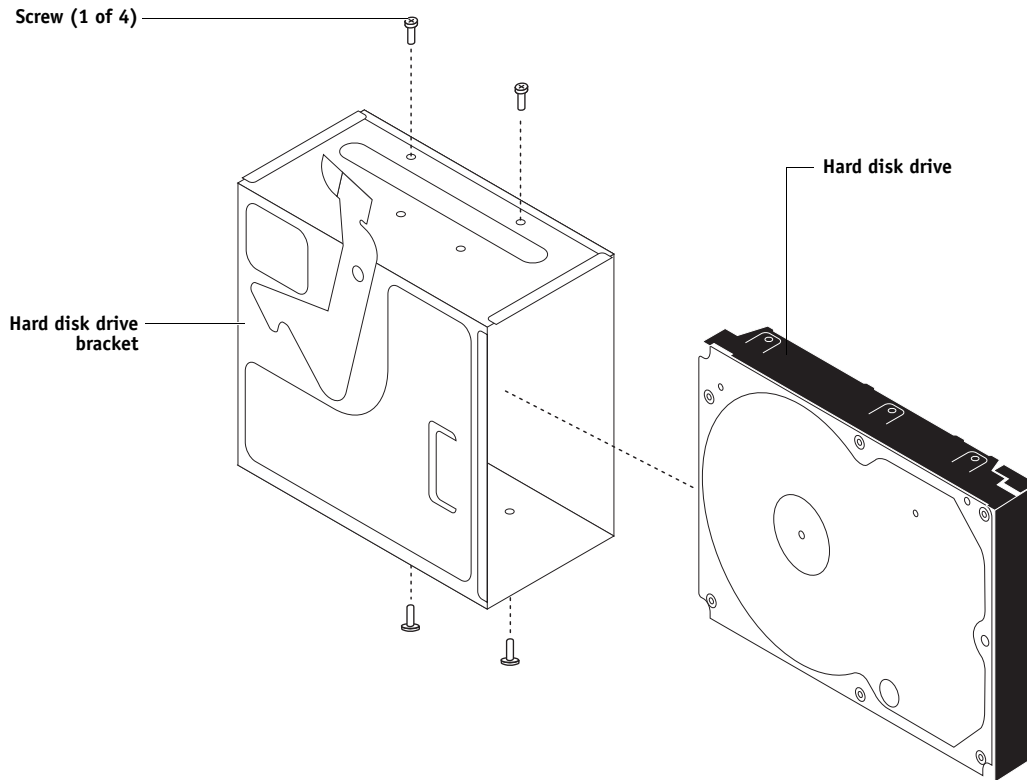


FIGURE 23: Removing/replacing the hard disk drive bracket

- 7 Remove the four screws that attach the hard disk drive to the hard disk drive bracket (see below).**



**FIGURE 24:** Removing/replacing the hard disk drive from/in the hard disk drive bracket

- 8 Remove the hard disk drive from the hard disk drive bracket and place it in an antistatic bag.**

**IMPORTANT**

Do not unscrew the screws on the hard disk drive cover. Loosening these hard disk drive screws breaks the seal and voids the hard disk drive warranty.

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

Replacement hard disk drives are not shipped with preinstalled system software. After you install the drive, you must install the appropriate system software.

---

**TO REPLACE THE HARD DISK DRIVE****IMPORTANT**

Do not install a new hard disk drive and a new motherboard at the same time. If you suspect that the E-42 needs a new hard disk drive and a new motherboard, first install the new hard disk drive and install system software, then install a new motherboard and transfer options (see pages 57 and 61).

**1 If you are installing a new hard disk drive, unpack the drive.**

Do not drop, jar, or bump the hard disk drive. Do not touch the hard disk drive with magnetic objects or place magnetic-sensitive objects near the hard disk drive.

**2 Position the hard disk drive inside the hard disk drive bracket and align the front-most mounting holes on the hard disk drive with the four holes in the bracket (see Figure 23 on page 77).**

When correctly installed, the hard disk drive extends about an inch past the rear of the bracket.

**3 Replace the four screws that you removed earlier to attach the hard disk drive to the bracket.****4 Slide the bracket all the way onto the shelf and lock it by moving the latch toward the front panel.****IMPORTANT**

Avoid striking the DIMMs as you replace the hard disk drive bracket.

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

**5 Secure the hard disk drive bracket to the hard disk drive shelf using the screw that you removed earlier.****6 Connect one end of the hard disk drive data cable to the hard disk drive and the other end to SATA1 on the motherboard (see Figure 17 on page 54).****7 Connect the power cable to the hard disk drive.****IMPORTANT**

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

**8 Reassemble the E-42 (see page 87).****9 If you replaced the hard disk drive with a new hard disk drive, install system software (see page 90).**

Troubleshooting tips:

- Following system software installation, if the E-42 boots up much slower than usual, clear the CMOS as follows:
  - Make sure that the power cable is removed from the power outlet, and then remove the battery (see [page 69](#)).
  - Wait two minutes to allow the motherboard electrical components to fully discharge.
  - Reinstall the battery.
  - After reassembling the system, reset the time and date in Setup (see Configure Help for more information).
- If a startup error displays on the control panel when you power on the E-42, check the connections.

**10 Verify functionality (see [page 87](#)).**

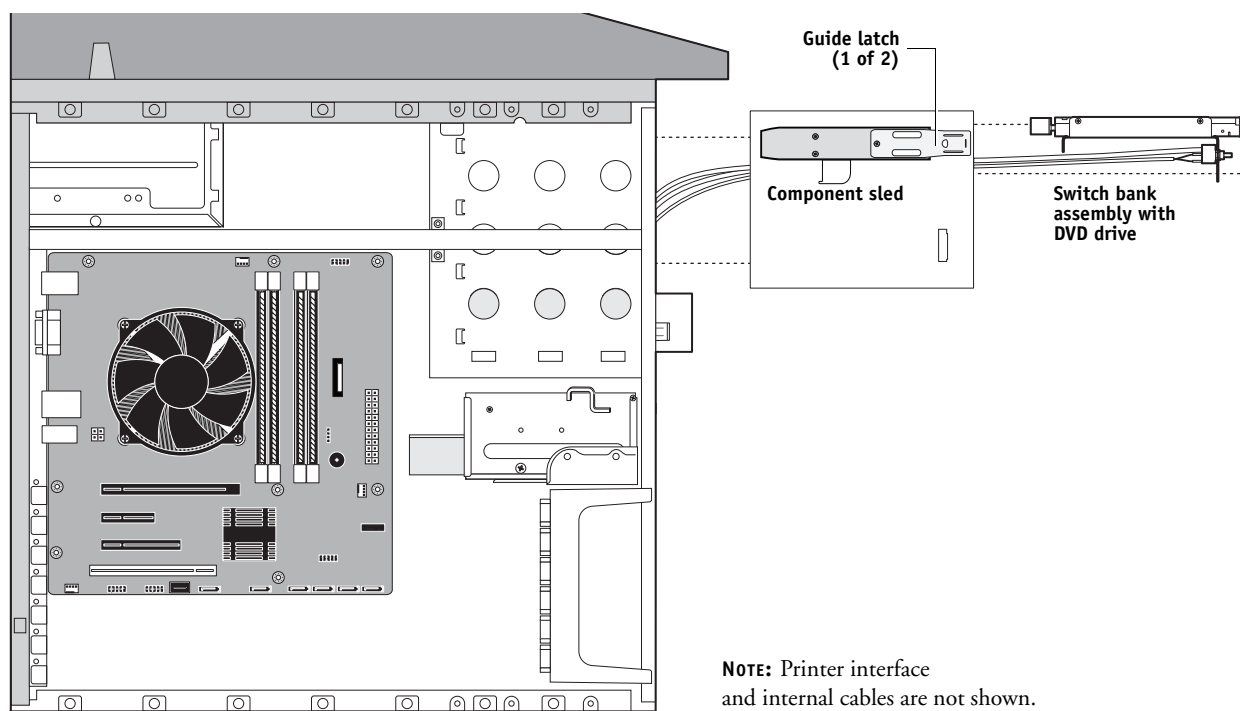


## Switch bank assembly

The switch bank assembly attaches to the component sled. The switch bank assembly includes the following components:

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

**NOTE:** For more information about servicing the DVD drive, see [page 85](#).



**FIGURE 25:** component sled with switch bank assembly

**TO REMOVE THE SWITCH BANK ASSEMBLY****1 Shut down, and then open the E-42 (see pages 40 and 43).**

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

**2 Disconnect the following cables:**

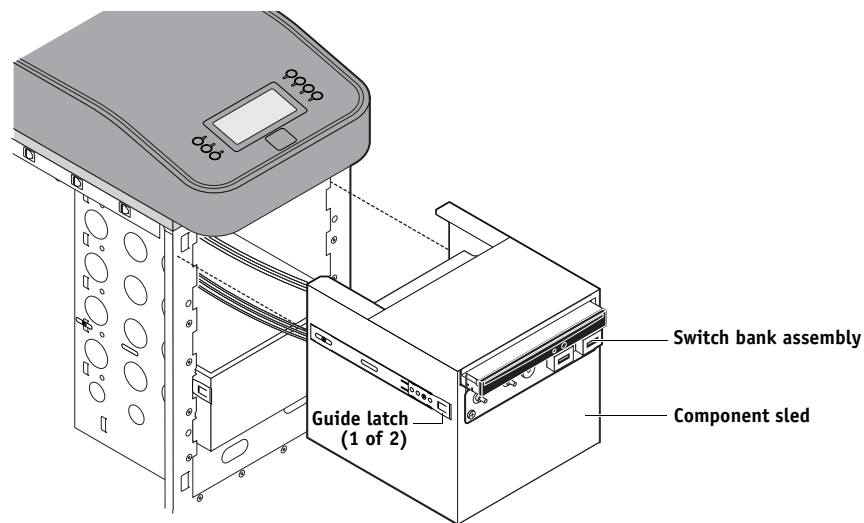
- Power and data combination cable from the back of the DVD drive
- Power and reset button cables from motherboard connector SSI CONN
- Speaker cable from motherboard connector JP5
- Front panel USB port cables from motherboard connectors USB2 and USB4

**3 Remove the ferrite that is installed around the front panel USB port cables near the motherboard.**

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

**4 Unharness the cables from the cable clamp(s) and tie-wraps inside the chassis.****5 Remove the component sled from the chassis (see Figure 25 on page 81).**

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

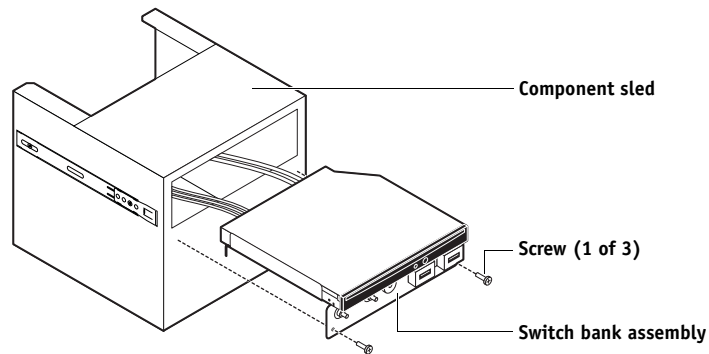


**FIGURE 26:** Removing/replacing the component sled from the chassis

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

**6 Remove the switch bank assembly from the component sled.**

- Remove the three screws that attach the switch bank assembly to the component sled.
- Pull the switch bank assembly straight out of the component sled.



**FIGURE 27:** Removing/replacing the switch bank assembly

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

**7 If you are removing the switch bank assembly to replace it with a new assembly, remove the DVD drive (see [page 85](#)).**

---

**TO REPLACE THE SWITCH BANK ASSEMBLY**

- 1 If it is not already attached, attach the DVD drive to the switch bank assembly (see [page 86](#)).**
- 2 Install the switch bank assembly in the component sled (see [Figure 27](#)).**

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

- Starting with the cables, insert the switch bank assembly through the opening in the front of the component sled. Be sure to fold the EMI gasket under and through the opening when inserting the assembly.
- Replace the three screws that secure the switch bank assembly to the component sled.

- 3 Install the component sled in the chassis (see [Figure 26](#)).**

- Route the cables of the switch bank assembly in through the chassis so that the cables are within reach of their connectors on the motherboard.
- Slide the sled into the front of the chassis until the guide latches click into place.

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

- 4 Connect the following cables (see [Figure 17 on page 54](#) for the location of connectors on the motherboard):**

- Power and data combination cable
- DVD data cable
- Power button cable
- Reset button cable
- Speaker cable
- Front panel USB port cables

- 5 Install the ferrite around the two front USB port cables near the motherboard.**

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

- 6 Secure the cables with the cable clamp(s) inside the chassis.**
- 7 Reassemble the E-42 and verify its functionality (see [page 87](#)).**

## DVD drive

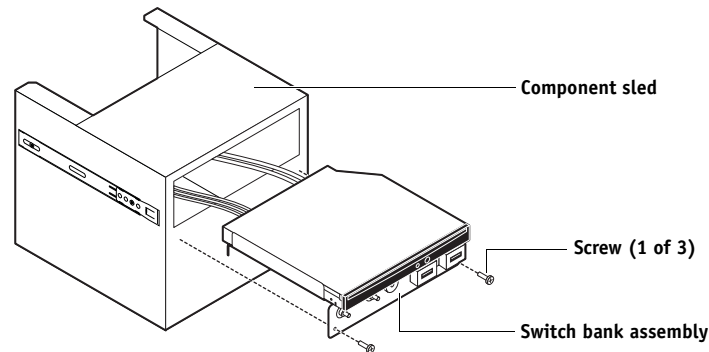
The DVD drive is attached to the switch bank assembly. The DVD drive is used to install system software onto the hard disk drive and archive data onto writable media.

### TO REMOVE THE DVD DRIVE

- 1 Shut down, and then open the E-42 (see pages 40 and 43).

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

- 2 Remove the power and data combination cable from the back of the DVD drive.
- 3 Remove the component sled from the chassis, and then remove the switch bank assembly from the component sled (see page 82).

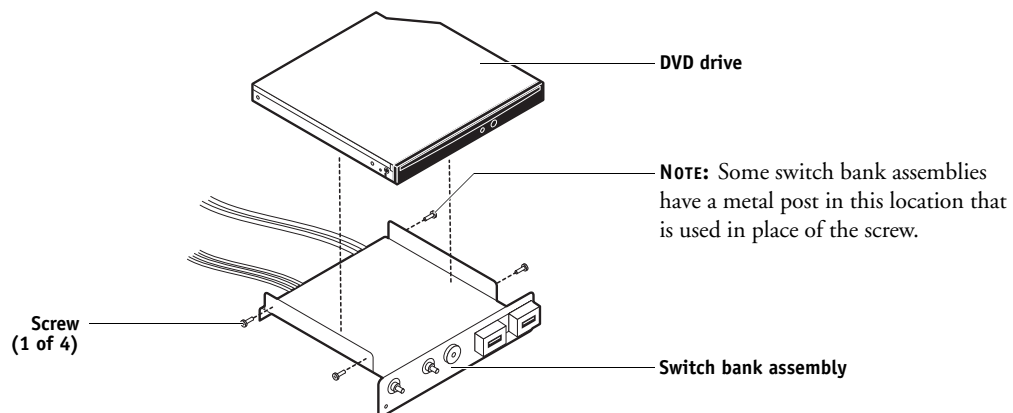


- 4 Remove the four screws that secure the DVD drive to the switch bank assembly.

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

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

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



**FIGURE 28:** Removing/replacing the DVD drive

---

**TO REPLACE THE DVD DRIVE**

- 1 Install the DVD drive in the switch bank assembly.
- 2 Install the switch bank assembly in the component sled, and then install the component sled in the chassis (see [page 84](#)).
- 3 Attach the power and data combination cable to the back of the DVD drive.
- 4 If you replaced the DVD drive with a new DVD drive, clear the CMOS as follows:

**IMPORTANT**

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

- Remove the battery (see [page 69](#)).
  - Wait two minutes to allow the motherboard electrical components to fully discharge.
  - Reinstall the battery.
- 5 If you installed a new DVD drive and cleared the CMOS, make sure to reset the time and date in Setup (see Configure Help for more information).
  - 6 Reassemble the E-42 and verify its functionality (see [page 87](#)).

## 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 94](#).

---

### TO REASSEMBLE THE E-42 AND VERIFY FUNCTIONALITY

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

When routing cables inside the E-42, make sure that:

- Covers 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 E-42 panels
- Cable slack is secured with a tie-wrap

#### 2 Restore the E-42 to the upright position.

#### 3 Replace any panels that you removed earlier, as described on [page 43](#).

#### 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 61](#)).

#### 5 Connect the power cable to the E-42 (see [page 19](#)).

#### 6 If you cleared the CMOS during service, reset the E-42 time and date in Setup.

#### 7 Connect the E-42 to the copier/printer (see [page 20](#)).

#### 8 Print the Test Page and Configuration page.

- If the E-42 does not start up, refer to the startup problems listed on [page 102](#).
- If pages do not print, verify that the interface cables are properly connected (see printing problems on [page 109](#)).
- If image quality is poor, test the copier/printer (see the service documentation that accompanies the copier/printer).

#### 9 Connect to the network (see [page 21](#)).

#### 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 and the Troubleshooting sections of the user documentation.

## SYSTEM SOFTWARE INSTALLATION

The E-42 ships with pre-installed system software on the hard disk drive. If you must reinstall system software when servicing the E-42, use the latest System Software and User Software DVDs.

**NOTE:** You can change the default language preinstalled at the factory using the Configure tool, available through Command WorkStation and WebTools. Start Configure, choose Server > Regional Settings > Server Language, and click Apply. Changing languages can take 3-5 minutes.

### Before installing system software

Consider the following settings and features before you install system software.

- **Battery, date, and time:** If you removed or replaced the motherboard battery during service, make sure to configure the time and date in Setup before installing system software. Otherwise, the system may hang during the user software installation segment (see [page 107](#)).
- **Backup/restore:** Before you reinstall the system software, check with the site administrator if there is any backup available to restore.

**NOTE:** If there is a backup for the entire hard disk drive, make sure to restore this backup first in the Fiery System Installer. Doing so ensures that all the customized settings and jobs on the HDD(s) will be restored. If this backup is not available, restore the image from recovery partition, which is provided with the E-42 by default. This will restore the E-42 to the factory default setting. You must install the system software using the System Software DVDs only when you replaced the hard disk drive, or restoring the backup does not solve the problem you are troubleshooting.

It is recommended to create a backup of the entire hard disk drive after you install the system software and run the initial Setup. To create the backup or restore the system, use the Fiery System Installer. For more information, see *Configuration and Setup*, which is part of the user documentation set.

The following issues apply to the scenario where you reinstall the system from the System Software DVDs.

- **Jobs:** All jobs in all print queues, and all jobs archived locally on the E-42 hard disk drive are deleted when you reinstall the system software. To save jobs, ask the site administrator to archive them to a CD/DVD or a location on the network, so that the jobs can be imported back into the E-42 queue after system software installation. For more information, see Command WorkStation Help.

#### IMPORTANT

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



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

To determine which additional fonts were downloaded to the E-42, print the Font List before you install the system software and again after you complete the system software installation. Any fonts not listed after installation must be reinstalled. For more information, see *Utilities*, which is part of the user documentation set.

- **Configuration:** The existing Setup configuration is lost when you install system software. Make sure to use Backup/Restore to create a backup of the system software configuration, and print a Configuration page before you install system software, so that you can reconfigure the settings in Setup.
- **Static IP address:** If the E-42 requires a static IP address (for example, in a non-DHCP network environment), be aware that the previous IP address configuration is deleted when system software is reinstalled. To reconfigure a static IP address (if applicable), work with the network administrator as described on [page 22](#).
- **User documentation:** All user documentation files resident on the E-42 are deleted when you install system software. If user documentation is resident on the E-42, remind the site administrator to reinstall the documentation files after you finish installing the system software.
- **Custom simulation and output profiles:** Custom simulation and custom output profiles saved on the hard disk drive are deleted when you install system software. Ask the site administrator to save a copy of any custom profiles to a CD or network location before you install software. Make sure to use Backup/Restore to create a backup of the system software configuration. For more information, see *Configuration and Setup*, which is part of the user documentation set.
- **Monitor profiles:** Monitor profiles saved to the hard disk drive are deleted when you install system software. Monitor profiles for the E-42 monitor are automatically reinstalled when you reinstall Command WorkStation on the system.
- **System software updates:** All updates to system software (Windows OS and Fieri System Software) which may be available for the E-42 and installed from any source (for example, System Updates (see [page 92](#)), patches provided on CD or downloaded by the customer) are deleted when you install system software.
- **Compatibility:** When upgrading the system software, make sure that the latest user software is installed on all computers that print to the E-42. Using incompatible versions of the system software may result in system problems.

- **User software updates:** For optimal performance, maintain current versions of the user software on every network computer used to print to the E-42. 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 E-42.

## Installing system software

E-42 system software is provided on the following media:

- System Software DVDs contain the Windows operating system software and the Fiery Server software.
- User Software DVD contains the E-42 user software.

Install system software in the following cases:

- The hard disk drive or motherboard is replaced.
- The E-42 must be updated to a more recent version of the system software.

System software installation takes approximately 1 hour and 10 minutes (not including the time required to configure Setup).

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### TO INSTALL SYSTEM SOFTWARE

IMPORTANT

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 Back up the E-42 configuration, if possible.

For more information, see *Configuration and Setup*, which is part of the user documentation set.

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

- **Configuration page:** Lists any installed options and records the customer's current Setup configuration.
- **Font List:** Lists the fonts currently on the hard disk drive. Along with the fonts provided in system software, the customer may have installed additional fonts.

#### 3 Remove all USB devices (except for the keyboard and mouse).

The system may hang if USB devices are connected to the E-42 during software installation.

#### 4 Insert System Software 1 DVD into the DVD drive.

**NOTE:** If you installed a new hard disk drive, power on the system, insert the System Software 1 DVD, allow the system to boot from the System Software 1 DVD, and then proceed to the next step.

IMPORTANT

- 5 From the control panel (or the Start menu, if a monitor is connected), restart the E-42 (approximately three minutes).

Do not push any buttons while the system is rebooting.

- 6 When the Language Select screen displays, select a language.
- 7 When the “What do you want to do?” screen displays, choose New Installation.
- 8 When the “Erase hard disk?” message appears, choose Continue.
- 9 At the prompt for each DVD, insert System Software 2 DVD, and then System Software 3 DVD, for the OS installation.
- 10 At the prompt, insert the User Software DVD. After a brief pause, installation continues (approximately 10 minutes).

During this segment, the following installations are performed:

- The entire contents of the User Software DVD are copied to a shared folder on the E-42 hard disk drive, in e:\efi\user\_sw.
- User software is installed on the E-42.

After installation, when the E-42 is connected to the customer’s network, users can access the user software in the shared folder and install it on client computers.

**IMPORTANT**

If the installation hangs during this segment, possibly the time and date were not configured in the BIOS following removal of the motherboard battery. To troubleshoot, see [page 107](#).

- 11 Remove the User Software DVD when it ejects automatically.
- 12 If a monitor, mouse, and keyboard are present:

The Log On to Windows dialog box appears on the monitor under the Administrator account. Type Fiery.1 in the password field and then click OK.

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

- 13 If you were able to back up the system configuration, restore the system configuration.

For more information, see *Configuration and Setup*, which is part of the user documentation set.

- 14 Configure your system environment in Fiery Setup Wizard.

For more information, see the *Quick Setup* poster.

- 15 If you were unable to back up the system configuration, configure Setup using one of the following methods:

- **Using the copier/printer touch panel:** (Assumes the E-42 is connected to the copier/printer.) Press the “fierydriven” button and select Fiery tab > Setup, then configure Setup using the Configuration page you printed earlier.
- **Using Command WorkStation:** (Assumes a monitor, keyboard, and mouse are connected to the E-42.) From the Server menu, choose Configure, and then configure Setup using the Configuration page that you printed earlier.

**NOTE:** Bypass any settings if it is more appropriate for the network administrator to set them. For more information, see *Configuration and Setup*, which is part of the user documentation set. The system reboots after you exit Setup.

**16 Reinstall any required software patches:**

**IMPORTANT**

- If you reinstalled the same version of system software, be sure to reinstall all software patches that were previously installed on the E-42. For a list of previously installed patches, see the Configuration page that you printed earlier.
- If you installed an upgraded version of system software (for example, version 1.0 to version 2.0), contact your authorized service/support center for a list of valid software patches. Some or all of the patches listed on the Configuration page that you printed earlier may no longer be valid. Before installing a patch, be sure to verify with your authorized service/support center that it is valid for your system version. Installing an invalid patch may result in system corruption.

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

- **System Updates:** Using the keyboard, choose Start > All Programs > Fiery > System Updates, and then click Check Now.
- **Check for Product Updates:** In a Web browser, connect to the IP address of the E-42, click the Configure tab, and then click Check for Product Updates.

**17 Reinstall fonts or custom simulations that may have been deleted when you installed the software.**

**18 If the E-42 requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure it as described on [page 22](#).**

## System updates

Advise the network administrator at the customer site that the System Updates feature available through the Start menu on FACS-enabled systems allows customers to schedule and accept installation of certain E-42 software updates from a secure site on the Internet. By default, the feature is configured to display a notification on the monitor (if the FACS option is present) that software updates are available for the E-42. You can also check for system updates via the monitor by choosing Start > All Programs > Fiery > System Updates, and then clicking Check Now. Depending on how it is configured, System Updates operates manually or automatically. For more information about how to schedule System Updates, see *Configuration and Setup*, which is part of the user documentation set. Microsoft Windows operating system updates should be obtained from Microsoft directly. Because such updates are available directly from Microsoft, EFI does not maintain or provide them via the System Updates feature.

### **About backing up and restoring the E-42 and the system configuration**

You can back up and restore the system configuration if you need to make any changes to the system software. Additionally, you can also back up or restore the E-42 to recover from a system crash or hard disk failure. For more information, see *Configuration and Setup*, which is part of the user documentation set.

## TROUBLESHOOTING

The E-42 is a server for copier/printers, and is generally part of a configuration that has connectivity to the copier/printer and workstations or computers. Problems may occur in one of three areas:

- Inside the E-42
- In the interface between the E-42 and the copier/printer
- In the interface between the E-42 and the workstations or computers to which it is connected

This chapter identifies the source of common problems that may occur with the E-42 and suggests ways of correcting them. This chapter does not attempt to provide troubleshooting information for attached computers such as Windows or Mac OS computers, copier/printers, or extensive networks. Refer problems in these areas to the appropriate service departments and network administrators.

**IMPORTANT**

When performing the service procedures described in this chapter, follow the precautions listed in [page 10](#).

### Preliminary on-site checkout

Most problems with the E-42 are caused by loose board or cable connections. This section describes the quick checks that you can do to locate and fix obvious problems. It describes how to eliminate any problems with external connections to the back of the E-42, 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 E-42, 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.

To troubleshoot problems that present specific symptoms, see “[E-42 error messages and condition](#)” on [page 102](#). 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 E-42 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 [page 40](#)).
- The power cable is plugged into the wall power outlet.
- The LED on the network port is blinking to indicate network activity.

## Checking internal components

To check the internal components, you must remove the side and front panels of the E-42.

**IMPORTANT**

Before you remove the E-42 panels, be aware of the safety precautions that you should take when handling the E-42. Use standard ESD precautions when handling printed circuit boards and electronic components. To review the safety precautions, see [page 10](#).

---

### TO CHECK INTERNAL COMPONENTS

**IMPORTANT**

- 1 **Shut down, and then open the E-42 (see [page 40](#)).**
- 2 **Before you touch any components inside the E-42, attach a grounding strap to your wrist and discharge any static electricity on your body by touching a metal part of the E-42.**
- 3 **Inspect the inside of the E-42**
  - Make sure that no foreign materials have been dropped into the chassis.
  - Make sure that the DVD and hard disk drive data cables are connected to the correct SATA connectors on the motherboard.
  - 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 E-42 and verify its functionality (see [page 87](#)).**

## Inspecting the system

### IMPORTANT

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 [“Verifying the system” on page 96](#). 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 1](#), 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 [“E-42 error messages and condition” on page 102](#) and perform the suggested action(s) for the condition.

**TABLE 1:** Verifying the system

Conditions to verify	Part and additional page references
When the problem occurs, verify that:	External connectors, chassis fans, and power button, <a href="#">page 95</a> and <a href="#">page 95</a>
<ul style="list-style-type: none"> <li>• Power cable is connected properly into the power outlet.</li> <li>• Chassis fans are operating.</li> <li>• Network link activity LED on RJ-45 connector is blinking.</li> <li>• All external cables required are present, in correct connectors, and well-seated.</li> <li>• Cables, cable connectors, and mating connectors appear undamaged.</li> </ul>	
If the problem occurs at power up or reboot, verify that:	Control panel, <a href="#">page 24</a>
<ul style="list-style-type: none"> <li>• Activity light on the control panel illuminates.</li> <li>• Display window lights up.</li> <li>• The system does not hang, and no error messages occur before the systems reaches Idle.</li> <li>• After the system reaches Idle, the control panel buttons function.</li> </ul>	
<ul style="list-style-type: none"> <li>• All replaceable parts are:               <ul style="list-style-type: none"> <li>– Present</li> <li>– Properly aligned</li> <li>– Installed securely</li> <li>– Installed on the appropriate site</li> <li>– The correct part for the system</li> <li>– Properly configured, if configurable (such as hard disk drive jumper)</li> <li>– Not visibly damaged</li> </ul> </li> <li>• Chassis and contents have not been tampered with.</li> <li>• Chassis does not contain any foreign objects.</li> </ul>	Chassis



**TABLE 1:** Verifying the system

Conditions to verify	Part and additional page references
<ul style="list-style-type: none"> <li>• Motherboard, including components and traces, appears undamaged, and no foreign objects are evident.</li> <li>• CPU is present, well-seated, and appears undamaged.</li> <li>• CPU cooling assembly is well-aligned and firmly attached.</li> <li>• Each fan required (including fan cable) is well-positioned (not upside down), installed in the correct connector, and appears undamaged.</li> <li>• Boards required on the motherboard are present, well-seated, and in the correct slots.</li> <li>• Each DIMM is well-seated.</li> <li>• Battery is installed.</li> <li>• BIOS is well seated.</li> </ul>	<p>Motherboard (with the motherboard replacement dongle), <a href="#">page 53</a>.</p> <p><b>IMPORTANT:</b> When replacing the motherboard, carefully review the cautions on <a href="#">page 58</a>.</p>
<ul style="list-style-type: none"> <li>• Each DIMM is well-seated.</li> <li>• DIMM edge connectors are not oxidized.</li> </ul>	DIMMs for E-42, <a href="#">page 63</a>
<p>Each board required is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Installed in the correct slot</li> <li>• Well-seated</li> <li>• Appears undamaged</li> </ul> <p>Required cables (if applicable) are:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Firmly connected in the correct connectors</li> <li>• Not visibly damaged</li> </ul>	Printer interface, <a href="#">page 48</a>
<p>User interface board (UIB) is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Correctly attached to its bracket</li> <li>• Appears undamaged</li> </ul> <p>UIB cable is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Firmly connected in the correct connector on the motherboard and the back of the UIB</li> <li>• Not visibly damaged</li> </ul>	User interface board, <a href="#">page 50</a>
<p>CPU is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Well-seated</li> <li>• Not visibly damaged</li> </ul> <p>The CPU cooling assembly is:</p> <ul style="list-style-type: none"> <li>• Well-aligned</li> <li>• Firmly attached</li> </ul>	CPU with cooling assembly, <a href="#">page 64</a>

**TABLE 1:** Verifying the system

Conditions to verify	Part and additional page references
<p>Fan is:</p> <ul style="list-style-type: none"> <li>• Properly positioned (not backwards)</li> <li>• Installed in the correct connector</li> </ul> <p>The fan, fan cable, cable connector, and mating connector are not visibly damaged.</p>	<p>Front panel fan, <a href="#">page 72</a></p>
<p>The power supply required is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Correctly installed</li> <li>• Not visibly damaged</li> </ul> <p>Cable connectors are:</p> <ul style="list-style-type: none"> <li>• Firmly connected</li> <li>• Not visibly damaged</li> <li>• Installed in the correct devices</li> </ul>	<p>Power supply, <a href="#">page 73</a></p>
<p>The hard disk drive required is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Correctly installed</li> <li>• Not visibly damaged</li> <li>• Jumpered as the master (primary) according to label</li> </ul> <p>Hard disk drive data cable is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Firmly connected to motherboard connector SATA 2</li> <li>• Not visibly damaged</li> </ul>	<p>Hard disk drive, <a href="#">page 76</a></p>

**TABLE 1:** Verifying the system

Conditions to verify	Part and additional page references
<p>The drive required is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Correctly installed</li> <li>• Not visibly damaged</li> <li>• Jumpered as the master (secondary) according to label</li> <li>• Activity LED lights on power up</li> </ul> <p>DVD drive SATA cable is:</p> <ul style="list-style-type: none"> <li>• Firmly connected to motherboard SATA 0</li> <li>• Not visibly damaged</li> </ul>	<p>DVD drive, <a href="#">page 85</a></p>
<p>Each cable required is:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• The correct type</li> <li>• Installed in the correct connector</li> <li>• Well-seated</li> <li>• Not visibly damaged (including connectors)</li> </ul>	<p>UIB cable, <a href="#">page 50</a></p> <p>Hard disk drive data cable, <a href="#">page 76</a></p> <p>Printer interface cable, <a href="#">page 48</a></p> <p>DVD drive power and data combination cable, <a href="#">page 85</a></p> <p>Power cable(s), <a href="#">page 73</a></p>
<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 E-42 connector panel.</p> <p>The cables required are:</p> <ul style="list-style-type: none"> <li>• Present</li> <li>• Installed in the correct connector</li> <li>• Well-seated</li> <li>• Not visibly damaged (including connectors)</li> </ul>	<ul style="list-style-type: none"> <li>• Mouse (if applicable)</li> <li>• Monitor (if applicable)</li> <li>• Keyboard (if applicable)</li> <li>• Monitor power cord (not pictured)</li> </ul>

## Normal startup sequence

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

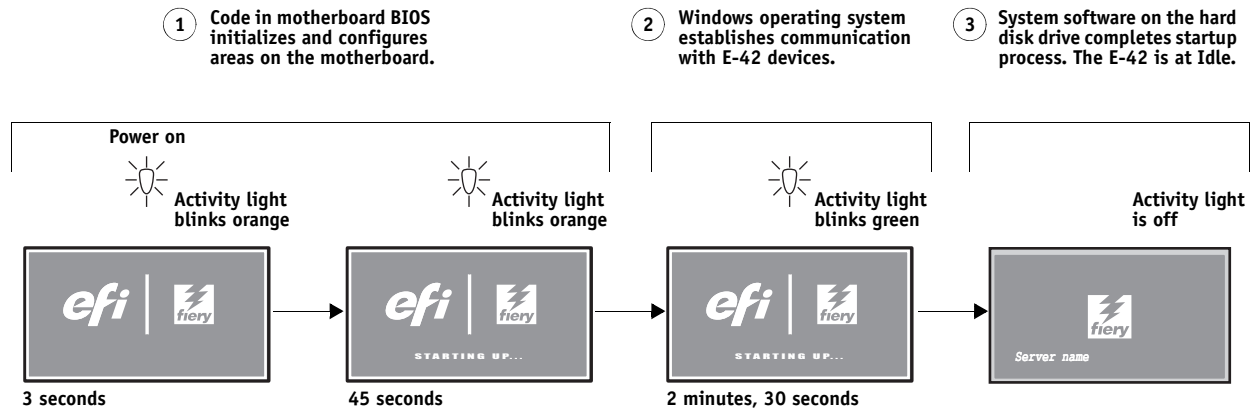


FIGURE 29: Normal startup sequence

## Error messages and conditions

To address specific error messages or conditions, see [“E-42 error messages and condition” on page 102](#). 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.

### IMPORTANT

Do not replace the hard disk drive and the motherboard at the same time. Doing so in the wrong order, without transferring options to the new motherboard, will cause the system to malfunction.

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


- **First, replace the hard disk drive and install system software.**







Always replace a faulty hard disk drive with a new hard disk drive. Transferring a hard disk drive from one E-42 to another is incorrect and strongly discouraged.


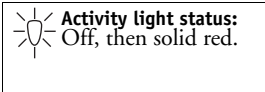
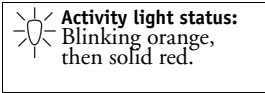

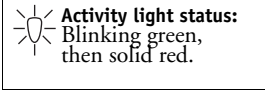
- **If the problem persists, reinstall the original hard disk drive in the system, and then replace the motherboard.**

If replacing a component does not correct the problem, make sure that you reinstall the old component back in the E-42.

**TABLE 2:** E-42 error messages and condition

Symptom	Possible cause	Suggested action
<b>Beep codes during Startup</b>		
1 beep	No error. The E-42 is starting up normally.	None
1 beep, followed by 3 beeps, followed by 3 beeps, followed by 1 beep	Missing, unmatched, incorrect, or faulty DIMMs	<b>Check for missing, unmatched, incorrect or faulty DIMMs and reseal the DIMMs to remove any oxidation on the connector (see <a href="#">page 63</a>).</b>
<b>Startup</b>		
<p>E-42 does not start and the control panel is black.</p> <div data-bbox="145 835 389 926">  <b>Activity light status:</b> Off. </div> <p><b>NOTE:</b> If the Activity light is solid orange while the control panel is black, the E-42 is in Sleep Mode.</p>	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• The E-42 is powered off</li> <li>• Power cable is not plugged into the power connector on the E-42 connector panel, or into the wall power outlet</li> <li>• The connector panel power switch is in the OFF position</li> <li>• UIB cable is not connected to the motherboard, the user interface board, or both</li> <li>• Faulty power cable</li> <li>• Faulty power supply (power supply may not be supplying power to the motherboard)</li> <li>• The CMOS jumper is not in the default position</li> <li>• Faulty motherboard (motherboard power plane may not be supplying power to components)</li> </ul>	<ol style="list-style-type: none"> <li><b>1 Recheck all cables and connections.</b></li> <li><b>2 Make sure the connector panel power switch is in the ON position (see <a href="#">page 40</a>).</b></li> <li><b>3 Listen for the power supply fan and feel for air at the back of the unit where the power supply is located.</b> If air is not coming from the power supply fan, isolate a possible faulty power cable as follows: <ul style="list-style-type: none"> <li>• Power on using a different power cable.</li> <li>• Install a new or “known good” power supply.</li> </ul> </li> <li><b>4 Check the connector panel fan vent and feel for air coming out of the back of the system.</b> If air is coming out of the power supply fan vent but is not coming out of the connector panel fan vent, the motherboard may be faulty. You may need to replace the motherboard (see <a href="#">page 57</a>).</li> <li><b>5 Review the jumper section on <a href="#">page 71</a> and ensure that the jumper is in the default position, then clear the CMOS (see <a href="#">page 71</a>).</b></li> </ol>

Symptom	Possible cause	Suggested action
<b>Startup (continued)</b>		
<p>E-42 is getting power, but the control panel is black.</p>  <b>Activity light status:</b> Off.	<ul style="list-style-type: none"> <li>• UIB cable is not connected to the motherboard, the user interface board, or both</li> <li>• Faulty UIB cable</li> <li>• Faulty user interface board</li> </ul>	<ol style="list-style-type: none"> <li>1 <b>Recheck all cables and connections.</b></li> <li>2 <b>Use a different UIB cable.</b></li> <li>3 <b>If the problem persists and you have verified that the power supply and motherboard are functioning properly as described earlier, replace the user interface board (see <a href="#">page 50</a>).</b></li> </ol>
<p>Following installation of a new user interface board, the control panel remains blank, yet backlit, for more than five minutes.</p>  <b>Activity light status:</b> N/A.	<p>System software requires an additional reboot to synchronize with the firmware on the new user interface board.</p>	<p><b>Wait five minutes, power off using the power button, wait 10 seconds, and then press the power button to power on again.</b></p>
<p>NOT following installation of a new user interface board, system stops responding at this screen:</p>   <b>Activity light status:</b> Off.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• Faulty BIOS</li> <li>• Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 <b>Recheck all cables and connections.</b></li> <li>2 <b>Reboot the E-42.</b></li> <li>3 <b>If the problem persists, replace the motherboard (see <a href="#">page 57</a>).</b></li> </ol>
<p>System stops responding at this screen:</p>   <b>Activity light status:</b> Blinking green.	<p>Problem with the Fiery application.</p>	<ol style="list-style-type: none"> <li>1 <b>Recheck all cables and connections.</b></li> <li>2 <b>Reboot the E-42.</b></li> <li>3 <b>If the problem persists, restore the backup, or reinstall system software (see <a href="#">page 90</a>).</b></li> </ol>

Symptom	Possible cause	Suggested action
<b>Startup (continued)</b>		
<p>screen and Activity light appear as follows:</p>  	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• Wrong, missing, incorrectly connected, or faulty DIMM(s)</li> <li>• Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 Recheck all cables and connections.</li> <li>2 Reboot the E-42.</li> <li>3 If the problem persists, verify that the DIMMs are installed. DIMMs must be installed in matching pairs in alternating sockets. Check for incorrect type, wrong capacity, missing, or faulty DIMM(s). Reseat the DIMM(s) to remove any oxidation on the connector (see <a href="#">page 63</a>).</li> <li>4 If the problem persists, you may need to replace the motherboard (see <a href="#">page 57</a>).</li> </ol>
<p>screen and Activity light appear as follows:</p>  	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• Faulty disk in the DVD drive</li> <li>• Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 Reboot the E-42.</li> <li>2 If the problem occurs when you are installing software from bootable media (DVD or CD), the media may be damaged. Try another DVD or CD.</li> <li>3 If the problem persists, replace the motherboard (see <a href="#">page 57</a>).</li> </ol>
<p>screen and Activity light appear as follows:</p>  	<p>Problem with the Windows operating system.</p>	<ol style="list-style-type: none"> <li>1 Recheck all cables and connections.</li> <li>2 Reboot the E-42.</li> <li>3 If the problem persists, restore the backup, or reinstall system software (see <a href="#">page 90</a>).</li> </ol>
<p>Activity light status progresses from solid green to solid red.</p> 	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• Problem with system software</li> <li>• Print job is corrupt or too large</li> <li>• Faulty UIB cable</li> <li>• CPU overheated</li> <li>• Faulty motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 If you suspect that the problem may be caused by a print job, try printing a different job.</li> <li>2 Recheck all cables and connections.</li> <li>3 Reboot the E-42 and check whether the CPU cooling assembly fan is operating. If the fan is properly connected to the motherboard but does not operate, replace the cooling assembly.</li> <li>4 If the problem persists, restore the backup, or reinstall system software (see <a href="#">page 90</a>).</li> <li>5 If the problem persists, try connecting another UIB cable (see <a href="#">page 40</a>).</li> <li>6 If the problem persists, replace the motherboard (see <a href="#">page 57</a>).</li> </ol>



Symptom	Possible cause	Suggested action
<b>Startup (continued)</b>		
The Fiery icon on the copier/printer touch panel remains unavailable for longer than 10 minutes after the E-42 and the copier/printer have started up.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>Printer interface firmware has been upgraded and a system reboot is required</li> <li>Required settings have not been enabled in Centware Internet Services</li> <li>Faulty connection between the E-42 and the copier/printer</li> </ul>	<ol style="list-style-type: none"> <li><b>1 Reboot the copier/printer and wait for the copier/printer to start up and reach Idle. Reboot the E-42 and wait for the E-42 to finish starting up.</b></li> <li><b>2 After the E-42 has finished starting up, press the Services Home button on the copier/printer.</b></li> <li><b>3 Verify that the E-42 and the copier/printer have the same time and date information. If the time and date information do not match on both devices, the Fiery icon may fail to appear.</b>  For information on how to check and set the time and date on the E-42, see <i>Configuration and Setup</i>, which is part of the user documentation set. For information on how to check and set the time and date on the copier/printer, see the copier/printer documentation.</li> <li><b>4 Reboot the E-42 (see step 1 on page 119). After the LED display reaches and remains at 00, reboot the copier/printer. If the Fiery icon still fails to appear, reboot the E-42 again.</b></li> <li><b>5 Check and reseal the cable connections between the E-42 and the copier/printer.</b></li> <li><b>6 Replace the external cables one by one.</b></li> </ol>
<b>Control panel messages</b>		
Could not mount the dos/boot partition.	When transferring options following installation of a new motherboard (page 62), you used the Feature Update CD. The E-42 does not support the Feature Update CD.	<b>Obtain the motherboard replacement dongle and follow the procedure on page 62.</b>
<b>Control panel functions</b>		
E-42 is getting power, the control panel is not black, but the buttons on the control panel do not function.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>Problem with the Fiery application</li> <li>Faulty user interface board</li> </ul>	<ol style="list-style-type: none"> <li><b>1 Recheck all cables and connections.</b></li> <li><b>2 Reboot the E-42.</b></li> <li><b>3 If the problem persists, restore the backup, or reinstall system software (see page 90).</b></li> <li><b>4 If the problem persists, replace the user interface board (see page 50).</b></li> </ol>

Symptom	Possible cause	Suggested action
DVD drive		
DVD drive is not responding, cannot be located, or the disk will not eject.	Possibly one of the following: <ul style="list-style-type: none"> <li>• A disk is stuck in the DVD drive</li> <li>• Cable connections to the DVD drive are loose or data cable is faulty</li> <li>• DVD drive is faulty</li> <li>• Motherboard is faulty</li> </ul>	<ol style="list-style-type: none"> <li>1 Press the eject button below the DVD slot on the front of the E-42.</li> <li>2 If the problem persists, check the cable connections to the DVD drive (see <a href="#">page 40</a>).</li> <li>3 If the problem persists, you may need to replace the DVD drive (see <a href="#">page 85</a>).</li> <li>4 If the problem persists, you may need to replace the motherboard (see <a href="#">page 57</a>).</li> </ol>
System performance		
System performs slowly and/or hangs periodically.	Possibly one of the following: <ul style="list-style-type: none"> <li>• Board or cable connections are loose or faulty</li> <li>• System software is corrupted</li> <li>• Missing or faulty DIMM(s)</li> <li>• CPU is overheated or faulty</li> <li>• CMOS settings need to be reset or are corrupted</li> <li>• Motherboard is faulty</li> </ul>	<ol style="list-style-type: none"> <li>1 Recheck all cables and connections.</li> <li>2 Make sure that the CPU is firmly seated in its socket and that the fan cable is connected to the motherboard.</li> <li>3 If the problem persists, restore the backup, or reinstall the system software (see <a href="#">page 90</a>).</li> <li>4 Check for missing or faulty DIMM and reseal the DIMM to remove any oxidation on the connector (see <a href="#">page 63</a>).</li> <li>5 Clear the CMOS (see <a href="#">page 71</a>).</li> <li>6 If the problem persists, you may need to replace the motherboard (see <a href="#">page 57</a>).</li> </ol>
Clock is slow.	<ul style="list-style-type: none"> <li>• CMOS settings need to be reset or are corrupted</li> <li>• Missing or dead battery on the motherboard</li> </ul>	<ol style="list-style-type: none"> <li>1 Clear the CMOS (see <a href="#">page 71</a>).</li> <li>2 Replace the battery on the motherboard and update the time in the Windows (if a monitor is connected), Command WorkStation, or WebTools.</li> </ol>

Symptom	Possible cause	Suggested action
System performance (continued)		
The E-42 hangs during the user software installation segment.	<p>Possibly one of the following:</p> <ul style="list-style-type: none"> <li>• The time and date need to be configured in the E-42 BIOS. (If the battery was removed from the E-42 motherboard during service and the time and date were not configured in Setup afterward, the E-42 will hang during the user software installation segment.)</li> <li>• User Software DVD is corrupted</li> <li>• The DVD drive is faulty</li> <li>• The hard disk drive is faulty</li> </ul>	<p><b>1 Set the time and date in the BIOS:</b></p> <ul style="list-style-type: none"> <li>• Power off the E-42 and remove the User Software DVD when it ejects.</li> <li>• If not already connected, connect a keyboard and a monitor to the E-42.</li> <li>• Power on the E-42 and immediately press F2 repeatedly to start the BIOS setup utility.</li> <li>• Configure the time and date. (To navigate, use the tab key and the -/+ keys).</li> <li>• Save changes and exit (F10).</li> <li>• When the E-42 reaches Idle, power off and then begin a full software installation again, starting with the System Software DVD (see <a href="#">page 90</a>).</li> </ul> <p><b>2 If the problem persists, obtain another User Software DVD and begin software installation again starting with the System Software DVD (see <a href="#">page 90</a>).</b></p> <p><b>3 If the problem persists, you may need to replace the DVD drive (see <a href="#">page 85</a>).</b></p> <p>If replacing the DVD drive does not correct the problem, reinstall the old DVD drive in the system.</p> <p><b>4 If the problem persists, replace the hard disk drive (see <a href="#">page 76</a>).</b></p> <p>If replacing the hard disk drive does not correct the problem, reinstall the old hard disk drive in the system.</p>

Symptom	Possible cause	Suggested action
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### Network

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

- If the E-42 does not appear in the list of printers on the network, another device on the network may have been assigned the same Ethernet hardware address.
- Conflicting 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*, which is part of the user documentation set.

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
- If the E-42 requires a static IP address (for example, in a non-DHCP network environment), it may need to be reconfigured. A static IP address is deleted when system software is reinstalled.
- System software is corrupted
- Network interface on the E-42 motherboard is faulty

**1 If the problem persists, have the network administrator check Network Setup. To configure a static IP address (if applicable for the customer site), work with the network administrator as described on [page 22](#).**

**2 If the problem persists, make sure that the network administrator has checked other devices on the network.**

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

**3 If the problem persists, restore the backup, or reinstall the system software (see [page 90](#)).**

Corrupt system software may cause the system to hang.

**4 If the rest of the network is functioning properly and the problem persists, replace the motherboard (see [page 57](#)).**

Symptom	Possible cause	Suggested action
<b>Network (continued)</b>		
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"> <li>• Network cable is connected to the wrong RJ-45 port</li> <li>• No cable/wrong type of cable is connected to the network port</li> <li>• Network cable or connection is faulty</li> <li>• Network is faulty</li> <li>• System searches for a nonexistent DHCP server because DHCP is enabled by default on the E-42, but the customer's network is not using DHCP</li> <li>• Ethernet interface on the E-42 motherboard is faulty</li> <li>• System software is corrupted</li> </ul>	<ol style="list-style-type: none"> <li><b>1 If the problem persists, ask the network administrator to check Network Setup. To configure a static IP address (if applicable for the customer site, as in a non-DHCP environment), work with the network administrator as described on <a href="#">page 22</a>.</b></li> <li><b>2 If the problem persists, ask the network administrator to check other devices on the network.</b> If other devices are not functioning, the problem may be with the network.</li> <li><b>3 If the problem persists, restore the backup, or reinstall system software (see <a href="#">page 90</a>).</b> Corrupt system software may cause the system to hang.</li> <li><b>4 If the rest of the network is functioning properly and the problem persists, replace the motherboard (see <a href="#">page 57</a>).</b></li> </ol>
<b>Printing</b>		
<b>NOTE:</b> Intermittent print quality and color quality problems are difficult to trace. Before you try to troubleshoot print quality problems, print a color Test Page to make sure that the copier/printer does not need servicing or adjusting.		
Test Page fails to print.	<p>The copier/printer is not ready to print.</p> <hr/> <p>A problem exists with the connection between the E-42 and the copier/printer.</p>	<p><b>Make sure that the copier/printer is turned on and ready to print.</b></p> <hr/> <ol style="list-style-type: none"> <li><b>1 If the problem persists:</b> <ul style="list-style-type: none"> <li>• Recycle power on the copier/printer.</li> <li>• Recycle power on the E-42 by shutting down through the Functions menu, waiting 10 seconds, and then powering the E-42 back on.</li> </ul> </li> <li><b>2 If the problem persists, replace the printer interface cable and board (see <a href="#">page 48</a>).</b></li> <li><b>3 If the problem persists, you may need to service the copier/printer.</b></li> </ol>

Symptom	Possible cause	Suggested action
Printing (continued)		
The E-42 appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error	<ol style="list-style-type: none"> <li>1 Make sure that <b>Print to PostScript Error in Setup</b> is set to <b>Yes</b>.</li> <li>2 Check for error messages on the E-42 output.</li> </ol>
	An application problem	<ol style="list-style-type: none"> <li>1 Print a job from a different application to determine if the problem is associated with a particular application.</li> <li>2 Make sure that the connection between the E-42 and the workstation is working by downloading a Test Page from the workstation, or by printing a simple file such as a text file.</li> <li>3 Resend the problem file.</li> </ol>
A print job stalls or stops after one or a few pages.	Possibly one of the following: <ul style="list-style-type: none"> <li>• A PostScript or application error</li> <li>• System software is corrupted</li> </ul>	<ol style="list-style-type: none"> <li>1 Cancel the E-42 print job.</li> <li>2 If this fails to clear the problem, reboot the E-42.</li> <li>3 If the problem persists, choose the <b>Clear Server</b> command from <b>Command WorkStation</b>.</li> <li>4 Set <b>Print Cover Page</b> to <b>Yes</b> 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 <b>Command WorkStation</b> window.</li> <li>5 If the problem persists, restore the backup, or reinstall system software (see <a href="#">page 90</a>).  Corrupt system software may cause the system to hang.</li> </ol>
	Incorrect or faulty DIMM or faulty DIMM connection	<ol style="list-style-type: none"> <li>1 Reseat the DIMMs to remove any oxidation on the connectors (see <a href="#">page 63</a>).</li> <li>2 Verify memory amount on the <b>Configuration</b> page.</li> <li>3 If the problem persists after replacing the DIMM, replace the motherboard (see <a href="#">page 63</a>).</li> </ol>
Color quality is inconsistent.	A copier/printer problem	Test the copier/printer and perform service, if necessary. See the service documentation that accompanies the copier/printer.

Symptom	Possible cause	Suggested action
Printing (continued)		
Print quality is poor.	Possibly one of the following: <ul style="list-style-type: none"><li>• A file or application problem</li><li>• A missing or outdated printer description file</li><li>• The application cannot find the appropriate printer description file</li><li>• The system is out of calibration</li></ul>	<ol style="list-style-type: none"><li>1 <b>Print a E-42 Test Page.</b></li><li>2 <b>If the quality of the E-42 Test Page is good, the error condition may be a file or application problem.</b></li><li>3 <b>Make sure that the appropriate printer description file is installed. (For details, see <i>Printing</i>, which is part of the user documentation set.)</b></li></ol>

If the user can print the E-42 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 an 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.

## SPECIFICATIONS

This section provides an overview of the E-42 features, specifications, and safety certifications.

### Hardware features

- Intel i5-2400 quad core 3.1GHz CPU (up to 3.4 GHz with Turbo Boost enabled)
- Memory: 4GB (2 x 2GB)
- An RJ-45 connector for 10BaseT/100BaseTX/1000BaseT Mbs connectivity over twisted pair cable (upper port)
- 1TB hard disk drive standard
- Built-in DVD drive

### Physical specifications

- Operating Environment:
  - Temperature: +5°C to +40°C
  - Relative Humidity: 10%-85% (non-condensing)
- Power Supply Rating: 100-240V, 50-60Hz, 6A
- Power Supply Voltage Input: 100-240V @ 50-60Hz
- Power Supply Current Input: 100V @ 6A Max.; 240V @ 3A Max.
- Rated Power Consumption: 350W
- Dimensions (Height x Depth x Width):  
48.84 cm (19.23 in.) x 48.26 cm (19.00 in.) x 21.23 cm (8.36 in.)
- Weight: 19.7 kg (43.4 lb.)

### Networking and connectivity

- Supports AppleTalk and TCP/IP protocols simultaneously.

**NOTE:** AppleTalk is supported only for downloading fonts.



## Safety and emissions compliance

The E-42 has been certified to meet or surpass the following government standards:

### Safety approvals

CB-scheme IEC 60950-1Amd1 (2nd edition)  
UL 60950-1:2007 (TUV NRTL)  
CAN/CSA-22.2 #60950-1-07 (TUV NRTL)  
GS mark by TUV, EN60950-1:2006+A11+A1+A12 C-TICK mark (Australia and New Zealand)  
(2nd edition) certificate and critical component part  
list

### EMI/EMC approvals

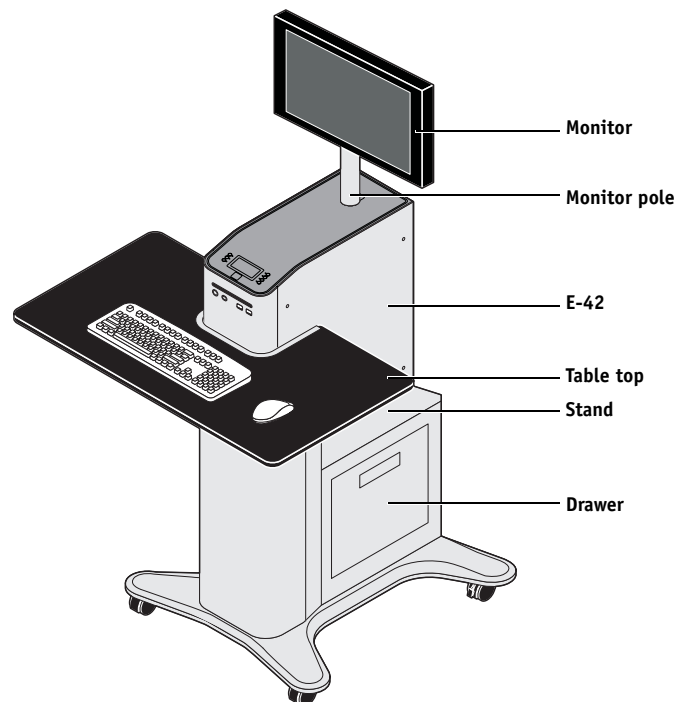
FCC Part 15 Verification (NA) Class A  
ICES-003 (NA) Class A  
EN55022:2010 (EU) Class A  
EN55024:2010 (EU) Class A  
EN610003-2: 2006 Plus A1:2009&A2:2009  
(EU) Class A  
EN610003-3: 2008 (EU) Class A  
EN62311:2008 (EU) Class A  
VCCI, CCC, BSMI Class A

## SERVICING THE E-42 WITH FURNITURE

This chapter describes how to remove the E-42 from the furniture in order to access internal components for service.

### Procedures

If the E-42 is installed in the optional furniture, you must remove it from the furniture before performing most service procedures.



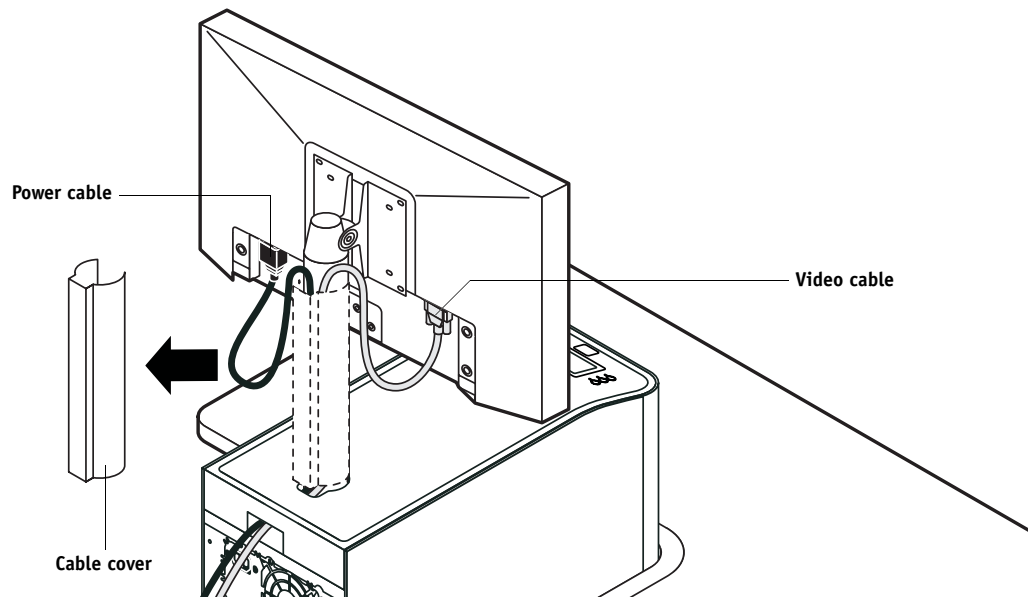
**FIGURE 30:** E-42 installed on the furniture

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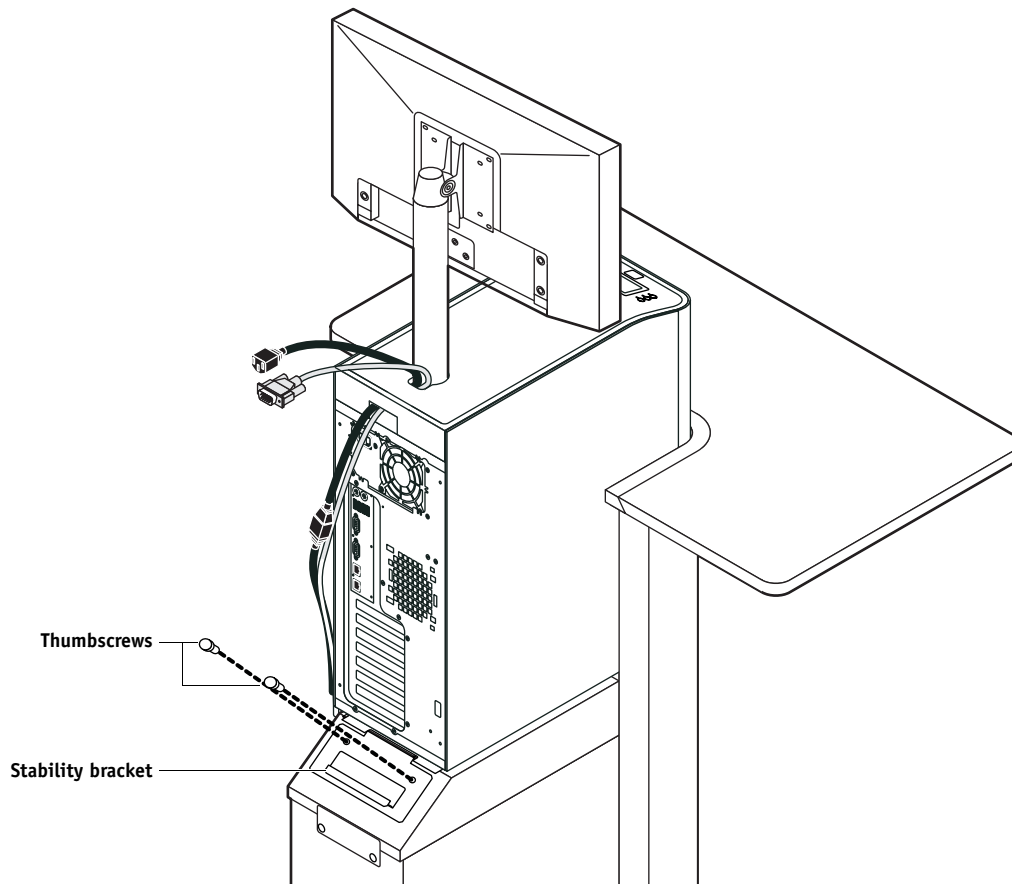
**REMOVING THE E-42 FROM THE FURNITURE****WARNING**

Never lift the E-42 by grasping the top panel. The top panel does not support the weight of the system.

- 1 Make sure that the E-42 is shut down and that all the cables are removed from the back of the E-42.**
- 2 Remove the cable cover and disconnect the two monitor cables (power and video):**
  - **Power** from the back of the monitor and from the wall outlet
  - **Video** from the back of the monitor and from the back of the E-42



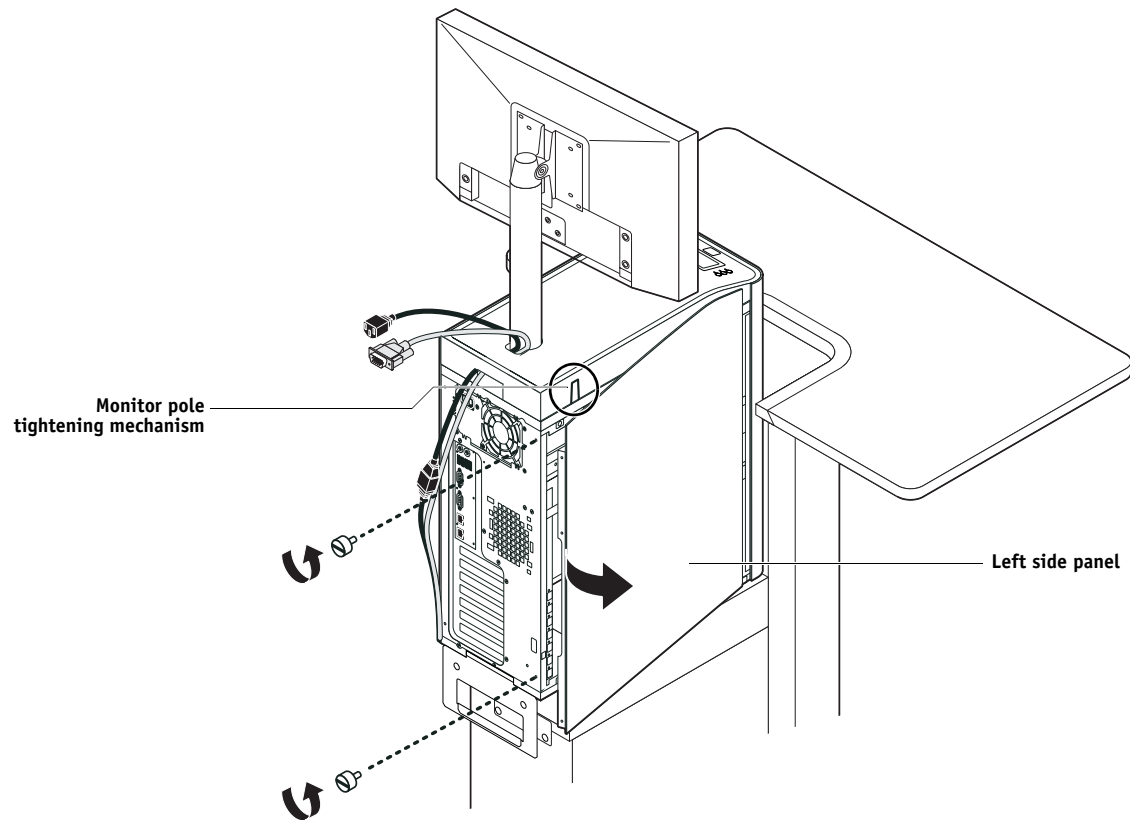
- 3 Remove the thumbscrews that attach the E-42 stability bracket to the stand.**



- 4 Lift the bracket and gently pull the E-42 away from the table top.**

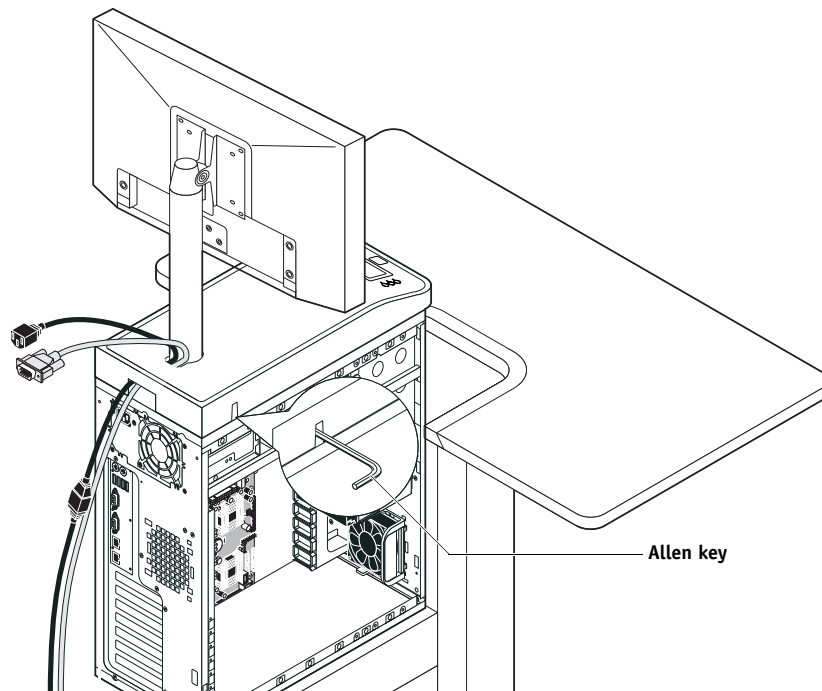
Make sure to pull the E-42 out just enough so that the front panel of the E-42 is aligned with the back edge of the table top.

- 5 Remove the E-42 left side panel (two screws) so that you can access the monitor pole tightening mechanism.

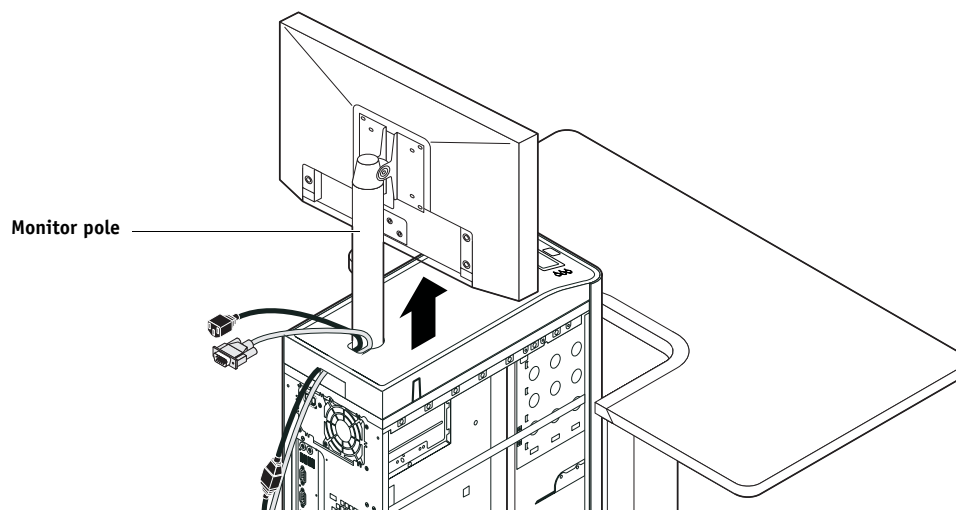


- 6 Use the allen key to loosen the screw that secures the monitor pole to the E-42.**

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



- 7 Holding the monitor pole, gently lift the monitor pole assembly up and out of the E-42 monitor mount.**



- 8 Continue servicing the Fiery controller.**

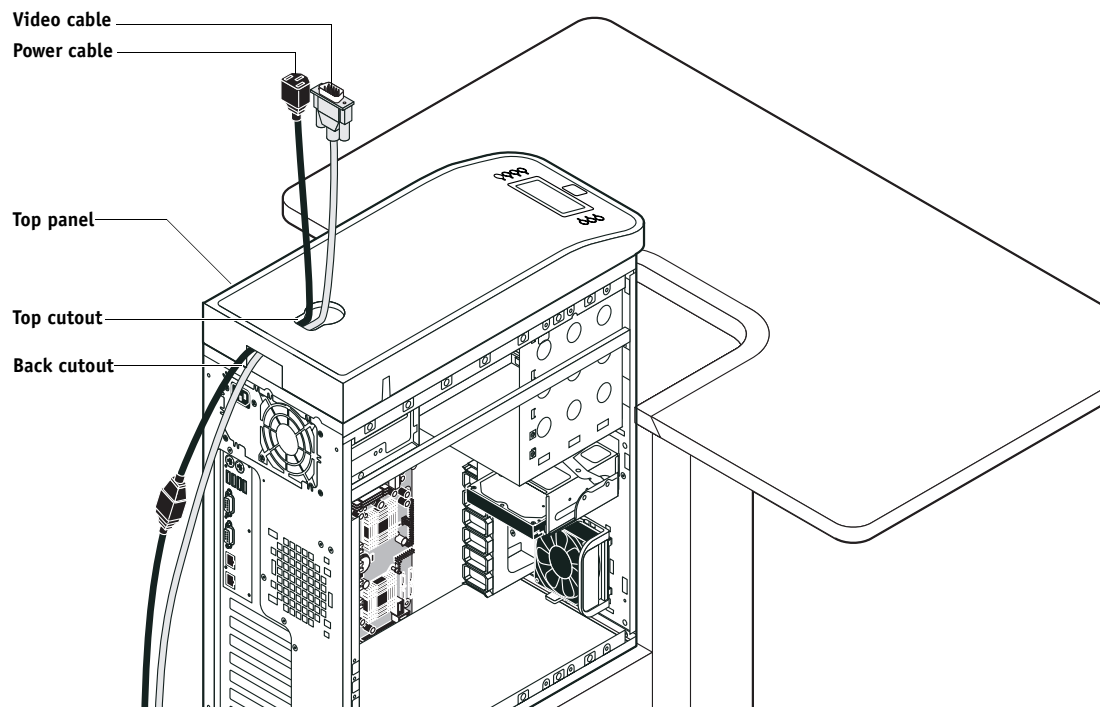
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**REPLACING THE E-42 IN THE FURNITURE**

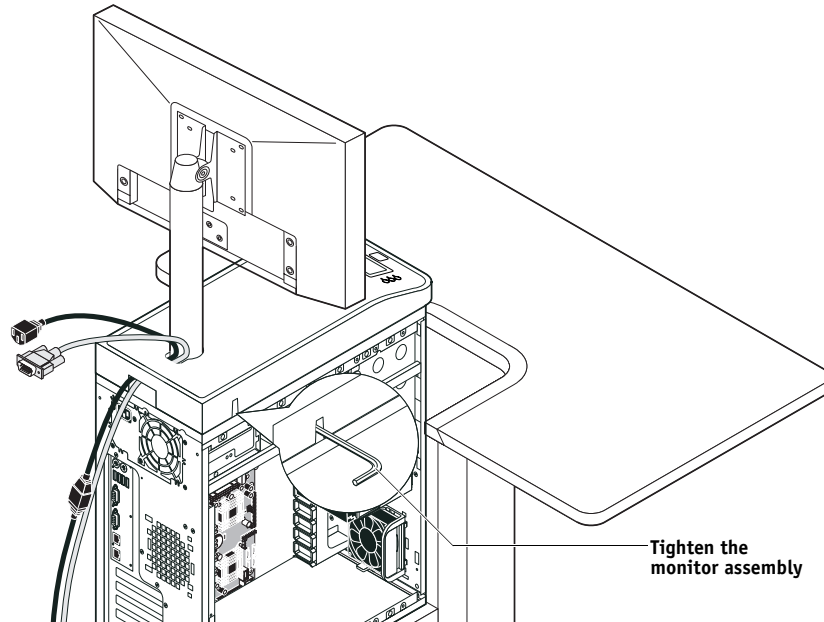
- 1 Make sure that the left side panel is removed from the E-42.
- 2 Place the E-42 upright on the furniture stand. Slide the E-42 forward just until its front panel is aligned with the back edge of the table top.

Use the handle on the stability bracket to lift the rear of the E-42 and slide it forward.

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

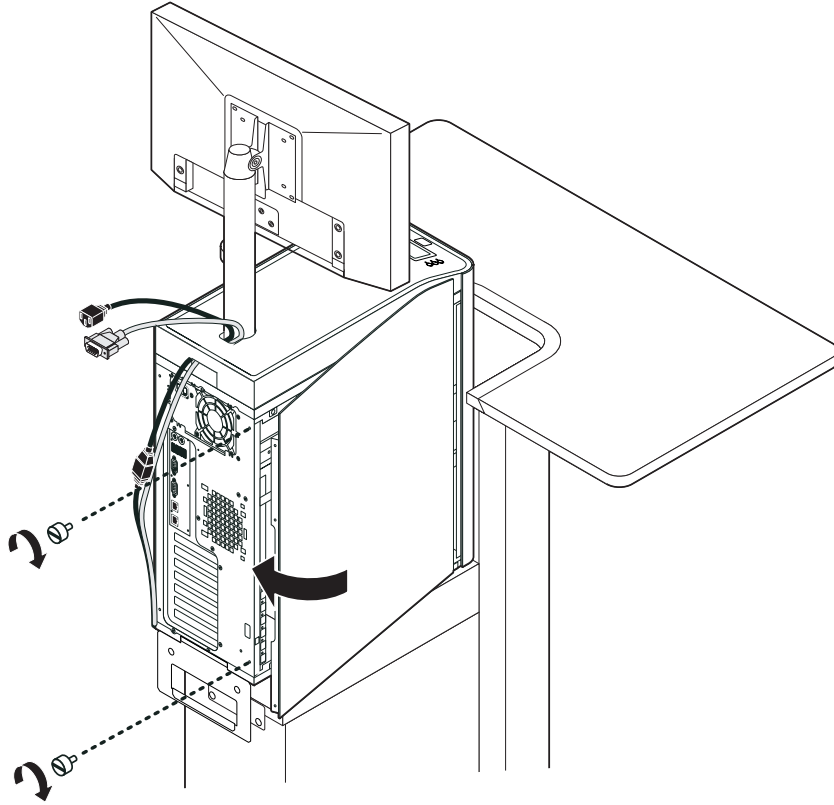


- 4 Lift up the pole assembly and insert the pole into the top of the E-42 so that it is inside the monitor mount. Tighten the assembly into place using the allen key.

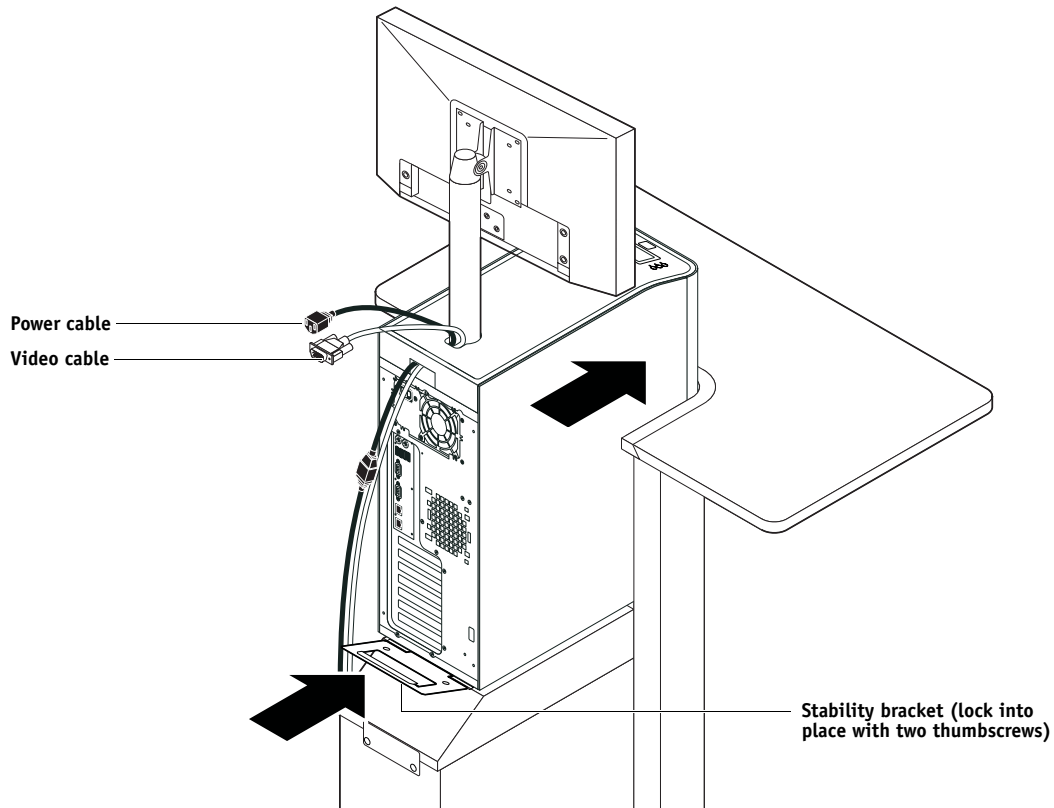




- 5 Replace the left side panel on the E-42 with the screws that you removed earlier.



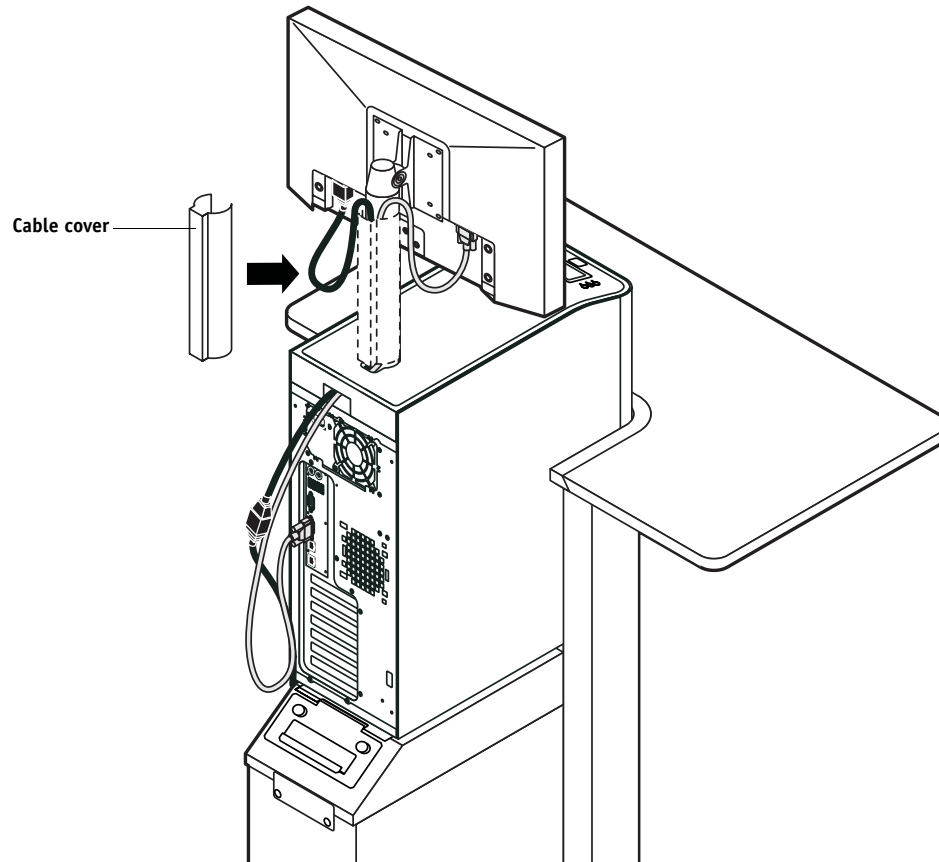
- 6 Use the handle on the stability bracket to lift the rear of the E-42. Slide the E-42 all the way forward into the stand. Lock the E-42 into place with the two thumbscrews that you removed earlier.



- 7 Connect the two monitor cables (power and video):

- **Power** to the back of the monitor and to the wall outlet
- **Video** to the back of the monitor and to the back of the E-42

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



- 9 Replace the allen key in the furniture drawer and continue reassembling the Fiery controller.

# INDEX

## Numerics

10BaseT/100BaseTX/1000BaseT 21

## A

AC connector 95  
activity light 25, 50, 102, 103, 104  
AppleTalk 8, 112

## B

battery 69, 106  
boards  
    motherboard 53  
    user interface 50  
    video 48  
boxes, unpacking 17  
bracket  
    HDD 76, 79  
buttons  
    down 24, 50  
    line selection (move left/right) 24, 50  
    menu 50  
    UIB, replacing 52  
    up 24, 50

## C

cables  
    checking 95  
    CPU fan 66, 68  
    DVD drive 39, 81  
    front panel fan 72  
    front panel USB ports 81, 82, 84  
    HDD data 39, 77, 79  
    HDD power 77, 79  
    keyboard 19  
    monitor 19  
    mouse 19  
    network, twisted pair 21  
    power and reset buttons 81, 82, 84  
    power supply 73  
    printer interface 48  
    speaker 81, 82, 84  
    UIB 39  
    unpacking 17

Calibration command 28  
changing the server's default language 14, 88  
checklist for service calls 15, 23, 87  
Clear Server command 29  
clearing the CMOS 71  
    after installing a new CPU 68  
    after installing a new DIMM 64  
    after installing a new DVD drive 86  
    after installing a new HDD 80  
    after installing a new motherboard 60  
    to troubleshoot slow performance 106  
clock 106  
closing the system 87  
CMOS 60, 64, 68, 71, 80, 86, 106  
    troubleshooting start up problems 102  
Color Charts 29  
color profiles 89  
Command WorkStation 8  
component sled 81, 82, 85  
components  
    checking 95  
    exploded view of 38  
Configuration page 29, 30  
    printing 29  
Configure tool, using to change the server's  
    default language 14, 88  
configuring a static IP address 22, 89, 92, 108  
connections, checking 95  
connectors  
    network 21, 36, 95  
    panel 36, 95  
    power, AC 36, 95  
    printer interface 36, 95  
    USB ports (dongle) 36, 62, 95  
    video board 48  
Control Panel  
    activity light 103, 104  
    buttons 50  
    display window 24  
control panel  
    using 24  
cooling assembly  
    CPU 64, 66

copier operation panel 27

covers, removing 43

CPU 8, 112

- clearing the CMOS after replacing 68
- connecting the CPU fan power cable 68
- overview 64
- removing and replacing 67
- removing the cooling assembly from 65
- replacing the cooling assembly on 68
- type 53

custom simulation and output profiles 89

customer site checklist 15

## D

damage, reporting 17

DHCP network environment 22, 89, 92, 108

diagnostics, Ethernet address 108

DIMMs

- clearing the CMOS after replacing 64
- configuration 8, 63, 112
- removing 63
- replacing 63

display window, Control Panel 24

dongle

- for entering Service Mode (motherboard replacement) 61, 62
- transferring options (motherboard replacement) 58, 61, 62

down button 24, 50

drives

- DVD 85
- hard disk drive (HDD) 76, 79

DVD drive 81, 85

- clearing the CMOS after replacing 86
- power and data cables 39
- removing 85
- replacing 86

## E

E-mail log 29, 30

E-mail printing 8

EMI approvals 113

error messages

- check power and cable 23
- when transferring options to new motherboard 105

Ethernet

- address 108
- cable 17, 21
- connector 21, 36

exploded view

CPU and cooling assembly 64

print server 38

## F

FACI monitor 19

fan

- CPU 64, 66
- front panel 72

ferrite

- installing on the front panel USB port cables 84
- installing on the power supply 75
- removing from the front panel USB port cables 82
- removing from the power supply 73

Fiery pages 29, 30

Fiery Scan 8

Fiery System Installer 88

Fiery.1 password 62

Font list

- definition 89
- printing prior to HDD replacement 77
- printing prior to system software installation 89

fonts

- printer fonts on server 29
- printing font list 29

front panel 36

- fan 72
- layout 24
- removing 45

front panel USB ports 81

FTP Log 29

functional diagram 9

Functions menu 26, 27

- Shut Down 34, 40

## H

hard disk drive (HDD) 76, 79

- bracket 76, 77, 79
- capacity 112
- caution about replacing 79, 101
- clearing the CMOS after replacing 80
- data cable 77, 79
- description 76
- mounting screws 78, 79
- proper handling 76
- removing 77
- replacing 79

heatsink, CPU 64, 66

**I**

installation sequence 14  
installing user software on client systems 16  
IP address, static 22, 89, 92, 108  
IPP 8

**J**

Job Log 89  
    Printable Info menu 29  
jobs 88, 89, 90  
jumpers 71

**K**

keyboard 19

**L**

language, changing on the print server 88  
language, changing the default 14, 88  
LCD 24, 25, 50  
line selection buttons 24, 50  
Logon Information password 62

**M**

master installer 16  
memory  
    configuration 8, 63, 112  
    removing 63  
    replacing 63  
menu button 50  
Menu tabs, copier operation panel 27  
monitor 19  
monitor profiles 89  
motherboard  
    battery 69  
    cautions about replacing 57  
    clearing the CMOS after replacing 60  
    description 53  
    DIMMs 63  
    errors when transferring options to 105  
    removing 53, 56  
    replacing 57  
    transferring options to 58, 61, 62  
    verifying in Service Mode 57, 61–62  
mouse 19  
move left/right buttons 50

**N**

network  
    cable, twisted pair 21  
    connector 21, 36  
    supported types 112

network administrator 14, 16  
networks  
    availability during installation 16  
    checklist 16  
    supported 8  
normal startup sequence 100

**O**

opening the system 43  
operation panel, copier 27

**P**

panels, removing 43, 45  
PANTONE 29  
password 62  
Portable Document Format (PDF) 8  
PostScript 8  
power  
    AC cable 95  
    AC connector 95  
    CPU fan 66, 68  
    DVD drive 86  
    front panel fan 72  
    HDD 79  
    power and reset cables 39  
    precautions 16  
power and reset buttons 81  
power supply  
    cables 73  
    removing 73  
    replacing 75  
    voltages 23, 32, 73, 112  
power, AC  
    connector 36  
Print Pages command 29  
printing  
    Configuration page 29  
    font list 29  
    server information pages 29  
profiles 89

**R**

reassembling the system 87  
reset and power buttons 26, 32, 40  
reset button 33, 34, 41  
Resume Printing command 27  
Run Diagnostics command 29

**S**

safety approvals 113  
scanning 8

- service calls
    - checklist 15, 23, 87
  - Service Mode 57, 61–62
  - service procedures, overview 35
  - Setup 27
  - shutting down 33, 34, 40, 41, 42
  - side panels
    - removing 44
    - replacing 44
  - software
    - system 58
    - user 16, 58
  - speaker
    - motherboard connection 39
    - removing 82, 84
  - specifications 112
  - startup 32
    - normal sequence 100
  - static IP address, configuring 22, 89, 92, 108
  - Suspend Printing command 27
  - switch bank assembly 81, 85
    - removing 82
    - replacing 84
  - system performance 106
  - system software
    - do not install after installing a new motherboard 58
    - installing 90
  - system updates 92
- T**
- terminology 35
  - Test Page 29, 30
  - Test Page, printing 29
  - thermal compound 59, 68
  - transferring options (motherboard replacement) 58, 61, 62
  - Tray Alignment command 28
  - troubleshooting
    - beep codes during startup 102
    - checking external connections 95
    - checking internal connections 95
    - control panel functions 105
    - control panel messages 105
    - DVD drive 106
    - error messages and conditions 101
    - network 108
    - normal startup sequence 100
    - preliminary on-site checkout 94
    - printing 109, 110
    - startup problems 102
    - system performance 106, 107
    - twisted pair network cable 21
- U**
- UIB cable
    - routing diagram 39
  - unpacking 17
  - up button 24, 50
  - updating software 92
  - updating the system 61
  - USB ports 81, 95
  - user interface board (UIB)
    - activity light 50
    - buttons on 52
    - description 50
    - display window 50
    - line selection buttons (move left/right buttons) 50
    - menu button 50
    - removing 51
    - replacing 52
    - up/down buttons 50
  - user software
    - do not install after installing a new motherboard 58
    - installing on client systems 16
    - troubleshooting problems during installation 107
- V**
- verifying functionality 87
  - verifying new motherboard installation 61
  - video board
    - connector 48
    - description 48
    - removing 49
    - replacing 49
  - voltages
    - checking 23, 32, 73
- W**
- Windows XPe
    - password 62