efi Printer Controller EB-32

Installation and Service Guide

A guide for service technicians

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

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INTRODUCTION

This document includes information about servicing the Printer Controller EB-32, which is referred to in this document as the "EB-32."

Document conventions

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

⚠ WARNING

The WARNING icon indicates a warning concerning operations which, if not performed correctly, may lead to death or injury. To use the EB-32 safely, always pay attention to WARNING icons and messages.

⚠ CAUTION

The CAUTION icon indicates a caution concerning operations which, if not performed correctly, may lead to injury. To use the EB-32 safely, always pay attention to CAUTION icons and messages.

IMPORTANT

The IMPORTANT icon indicates operational requirements and restrictions. To operate the EB-32 correctly and avoid damage to the EB-32 or other property, always pay attention to IMPORTANT icons and messages.

About the EB-32

The EB-32 adds computer connectivity and highly efficient PostScript and PCL printing ability to the Pro 8120S/8110S/8100S.

With the EB-32, customers can use the copier as a PostScript printer and scanner. Once it is connected to the copier through the network, customers can print to the EB-32 from supported client computers on the network.

The EB-32 ships with software preinstalled so that customers can use it immediately. However, as part of servicing the EB-32, you may need to reinstall software.

How the EB-32 operates

When a customer prints, the motherboard and copier interface board process image data. The copier interface board is a custom board and allows the EB-32 to communicate with the copier. The CPU controls the transfer of image data to and from the motherboard and runs the PostScript interpreter. DIMMs hold image data during printing.

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

Before you service the EB-32

Before you service the EB-32, it is strongly recommended that you make sure that you have the required tools (page 10) and carefully review all precautions.

Also, keep in mind that the most common cause of a hardware problem is a faulty or loose connection. Before you replace an expensive component, check internal and external connections.

Tools you will need

To install or service the EB-32, 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

- EB-32 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.

Precautions

Always observe the following general precautions when installing or servicing the EB-32:

WARNING

- **The EB-32 contains hazardous moving parts. When servicing the EB-32, keep away from moving fan blades.**

CAUTION

- **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 EB-32 display window.**

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

IMPORTANT

- **When connecting or disconnecting the power cable:**

  - *Only use* the power cable that shipped with the EB-32 or an appropriate replacement power cable available from an authorized provider.

  - *Always* disconnect the power cable from the EB-32 connector panel before opening the unit and servicing internal components.

  - *Do not* pull on the power cable when unplugging the EB-32. Instead, pull the plug.

  - *Do not* place objects on the power cable. Place the power cable away from foot traffic.

  - *Do not* tamper with or disable the power cable grounding plug.

  - *Do not* use a 3-prong adapter in a 2-hole, ungrounded outlet.

  - *Do not* use an extension cord.

  - *Do not* plug the EB-32 into a circuit with heating or refrigeration equipment (including water dispensers).

  - *Do not* plug the EB-32 into a switchable power outlet. This can result in the EB-32 being turned off accidentally.

- **Never set any liquid on or near the EB-32 or the copier. If liquid is spilled into the EB-32 or the copier, disconnect the power cable immediately.**

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

- **Handle the EB-32 LCD window with care.**

  If the EB-32 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 EB-32, as some edges on the unit may be sharp.**

- **Do not install third-party applications onto the EB-32. Third-party applications are not supported and can cause system problems. Although virus scans are permitted on the EB-32, 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 EB-32 may become unstable or even unusable. If this occurs, we recommend that you reinstall the EB-32 System Software, which reliably restores the Windows operating system software to its factory defaults.

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

  The EB-32 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 EB-32 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 EB-32 an incorrect IP address may cause unpredictable errors on any or all devices connected to the network.

- **When recycling or disposing of any product or packaging, please comply with local guidelines or regulations.**

- **Do not use flammable sprays or solvents in the vicinity of this machine. Also, avoid placing these items in the vicinity of this machine. Doing so could result in fire or electric shock.**

Creating an electrostatic discharge (ESD) safe environment

IMPORTANT

- **Follow standard ESD precautions while working on the internal components of the EB-32.**

  Static is always a concern when servicing electronic devices. It is highly unlikely that the area around the copier and the EB-32 is static-free. Carpeting, leather-soled shoes, synthetic clothing fibers, silks, and plastics may generate a static charge of more than 10,000 volts. Static discharge is capable of destroying the circuits etched in silicon microchips, or dramatically shortening their life span. By observing standard precautions, you may avoid extra service calls and save the cost of a new board.

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

  - Attach a grounding strap to your wrist. Attach the other end to a good ground.

  - When you unpack the EB-32 from the carton for the first time, touch a metal area of the copier to discharge the static on your body.

  - Before you remove any of the EB-32 panels and handle internal components, touch a metal part of the EB-32.

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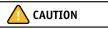
CAUTION: The power supply cord is used as the main disconnect device. Ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

Lithium Battery Notice

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

Short Circuit Protection

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

INSTALLING HARDWARE

This chapter includes the following topics:

- "Checking the customer site"
- "Unpacking the EB-32"
- "Connecting the EB-32"
- "Completing installation and starting up"

About the installation process

It is strongly recommended that you review this chapter before you install the EB-32. Also keep in mind that installation problems are easier to avoid and diagnose if you proceed from the component level to the system level, verifying functionality at each step.

Since the EB-32 is connected to the customer's network, be sure to coordinate your installation schedule with the network administrator at the customer site. For information about network setup, 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, if needed (see "Changing the factory default language" on page 82).

TO INSTALL THE EB-32

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

If possible, obtain verification that the network is operational (see page 16).

2 **Unpack the EB-32 (see page 18).**

3 **If applicable, connect the monitor, keyboard, mouse, and furniture to the EB-32.**

For more information on setting up the furniture, see the documentation that comes with the furniture kit.

4   **Do the following to prepare the copier for use with the EB-32:**

   • Install the Gigabit Ethernet board in the copier.

   • Install the Fiery key top on the copier.

   • Enter SP mode on the copier and specify the correct SP setting to enable communication
   between the copier and the EB-32.

   The following SP settings are needed for the EB-32:

   – SP5193-001:[1]

   – SP5895-001:[1]

   – SP5895-002:[0]

   – SP5985-001:[1]

   – SP4-201-011[1]

   – SP4-201-012[1]

   • Apply the Fiery decal the copier.

IMPORTANT

NOTE: For more information about installing the Gigabit Ethernet board and the Fiery key on
the copier, and changing the SP mode of the copier, see the Service Manual for the copier.
This information is not found in the documentation for the EB-32.

5   **Connect the following cables:**

   • Power cable (see page 19)

   • Copier interface cable (*crossover* Ethernet cable) from the *lower* Ethernet port (see page 19)

   • Network cable (*straight-through* Ethernet cable) from the *upper* Ethernet port (see page 20)

6   **Complete the installation (see page 22).**

Remind site administrator to install current user software on client computers that print to
the EB-32 (see *Printing* and *Utilities*, which are part of the user documentation set).

Checking the customer site

Before you install the EB-32, check site conditions and inform the customer of any installation requirements.

TO CHECK THE CUSTOMER SITE

• **Is the copier configured for use with the EB-32?**

For correct settings, see the documentation that accompanies the copier.

• **Is there adequate space for the EB-32 near the copier?**

Make sure there is enough space at the back and on both sides so that cables do not interfere with use or service of the copier (for example, clearing a paper jam).
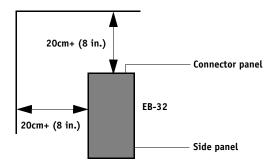
FIGURE 1:   Space requirements

• **Is a dedicated, grounded electrical outlet for the EB-32 available near the copier?**

Do not run the EB-32 and the copier on the same circuit. If the customer has provided one, use a surge suppressor for the EB-32.

IMPORTANT

• **Will the network be available at the time of installation? (See the network administrator.)**

• **Is the network functioning? (See the network administrator.)**

Setting customer expectations

When the site is ready, installation of the EB-32 takes about 1 hour. Inform the customer of the following:

- Some nodes on the network may be unavailable during service.

- The network administrator must be available during the installation for network connectivity.

  Equipment downtime and impact on the network can be minimized if the network administrator installs a network connector for the EB-32 and confirms network functionality with the connector in place before the date scheduled for the EB-32 installation.

- The network administrator must have a networked computer available during the installation. The appropriate software must be installed in advance. Documentation for the networked computer and the network operating software should be available.

- The network administrator must install the user software shipped with the EB-32 onto networked Windows and Mac OS computers that will print to the EB-32 (user documentation is also included).

Unpacking the EB-32

⚠ **WARNING**

Before you unpack the EB-32, it is strongly recommended that you review all "Precautions" on page 11 to avoid injury or damage to the EB-32.

The EB-32 is assembled and shipped from the factory with all necessary cables (except for the network cable) and documentation. For shipping contents, see the *Packing List*.

TO UNPACK THE EB-32

It is strongly recommended that you save all packing materials in case you need them later (for example, if you discover something is damaged and need to return it). Do not immediately discard packing materials.

1 Open the box and remove the packing material.

Save the original boxes and packing material in case you need to transport the EB-32 at a later date.

2 Remove the contents from the top accessory tray. Inspect the contents for visible damage.

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

Let the customer or network administrator know that in order to take full advantage of the EB-32, the user software must be installed on computers that will print to the EB-32.

4 Remove the top accessory tray and any packing material.

Set aside the packing material and note the orientation of the EB-32 inside the shipping container, in case you need to repack it later.

5 Carefully lift the EB-32 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 Locate the EFI/Fiery decal in the shipping container and affix it to the copier as shown.

EFI/Fiery decal
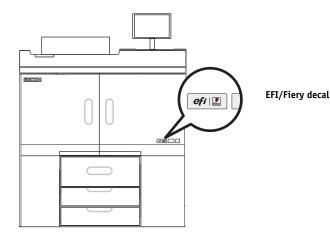
FIGURE 2:   Affixing the decal to the copier

Connecting the EB-32

After you unpack the EB-32, do the following:

- Connect to power

- Connect to the copier

- Connect to the network

TO CONNECT TO POWER

1 **Connect one end of the EB-32 power cable to the power connector on the back of the EB-32 (see Figure 7 on page 39).**

2 **Connect the other end of the EB-32 power cable to a power outlet.**

TO CONNECT TO THE COPIER

<div style="border:1px solid #000;padding:4px;display:inline-block">IMPORTANT</div>

NOTE: For more information about installing the Gigabit Ethernet board and the Fiery key on the copier, and changing the SP mode of the copier, see the Service Manual for the copier. This information is not found in the documentation for the EB-32.

1. **Make sure that the Gigabit Ethernet board is installed in the copier.**

2. **Enter SP mode on the copier and specify the correct SP setting to enable communication between the copier and the EB-32.**

The following SP settings are needed for the EB-32:

- SP5193-001:[1]

- SP5895-001:[1]

- SP5895-002:[0]

- SP5985-001:[1]

- SP4-201-011[1]

- SP4-201-012[1]

3 **Make sure that the EB-32 and the copier are powered off.**

4 **Connect the copier interface cable (*crossover* Ethernet cable) from the *lower* Ethernet port on the EB-32 connector panel to the copier (see Figure 7 on page 39).**

<div style="border:1px solid #000;padding:4px;display:inline-block">⚠ CAUTION</div>

NOTE: The copier interface cable included with the EB-32 is a *crossover* Ethernet cable that connects to the *lower* (crossover) Ethernet port on the EB-32 connector panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the *upper* (straight-through) Ethernet port on the EB-32 connector panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see Figure 7 on page 39).

To verify the cable type, align the connectors on each end of the cable as shown in Figure 3. On a straight-through cable, the wire arrangements are identical on both ends; on a crossover cable, the wire arrangements are different.

Align cable connectors side by side and examine wires:

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

1 2 3 4 = 1 2 3 4

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

1 2 3 4 ≠ 3 4 1 2
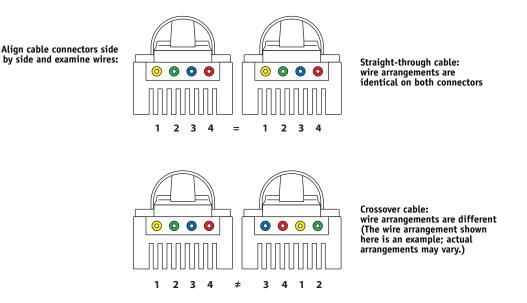
FIGURE 3: Straight-through and crossover Ethernet cables

TO CONNECT TO THE NETWORK

1 **Make sure that the EB-32 is powered off.**

2 **Make sure that the network cable is connected to the customer site network.**

3 **Connect the network cable (*straight-through* Ethernet cable) to the *upper* Ethernet port on the back of the EB-32 (see Figure 7 on page 39).**

The EB-32 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)

NOTE: Make sure that the network cable is a straight-through Ethernet cable. For more information, see Figure 3 on page 20.

After power on, the site administrator should perform network setup, verify the network connection, verify that the EB-32 appears in the list of printers, and then print a few test documents from a networked computer that will use the EB-32. For more information, see *Configuration and Setup*.

Configuring a static IP address for the EB-32

If the customer requires the EB-32 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 EB-32 as described in the following procedure.

TO CONFIGURE A STATIC IP ADDRESS FOR THE EB-32

1 **At the copier touch panel, press the Home button.**

2 **Press the Fiery icon.**

3 **Make sure that the EB-32 is not receiving, processing, or printing any files.**

If the system has just finished processing, wait at least five seconds after the system reaches Idle before you proceed.

4 **Press the Fiery tab.**

5 **Press Setup.**

6 **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.

7 **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 > IPv4 Address > Manual Configuration.

8 **On the Manual Configuration screen, enter an IP address, subnet mask IP address, and a default gateway IP address. Press Save and then press Go Back.**

9 **On the Setup screen, press Exit Setup.**

10 **Press Reboot Now.**

Completing installation and starting up

To finish the installation of the EB-32 at the customer site, make sure to do the following:

1 Make sure that the copier is turned on.

2 Set the power switch to the ON position ("|" symbol).

3 Power on the EB-32 using the power button (see Figure 6 on page 38).

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

4 Wait for the EB-32 to power on and reach Idle.

The EB-32 takes approximately two minutes to power on and reach Idle.

5 Perform any required system software upgrades.

Updates to Fiery System and User Software may be available for the EB-32 from a variety of sources. For example, System Updates (see page 90), updates provided on CD, or updates downloaded by the customer.

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

6 Print the Test Page and Configuration page and ask the customer to verify the output (see page 28).

7 If the EB-32 requires a static IP address (for example, in a non-DHCP network environment), work with the network administrator to configure a static IP address (see page 21).

8 If needed, change the factory default language (see page 82).

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

10 Store the output and the current Configuration page(s) near the copier.

11 Inform the site administrator that the EB-32 user software must be installed on networked computers that print to the EB-32.

12 Ask the site administrator to make sure that all media (DVDs and/or CDs) shipped with the EB-32 are stored in a safe location accessible to you.

USING THE EB-32

You can interface with the EB-32 with the following:

- The EB-32 control panel

- The copier touch panel

- The Fiery Advanced Controller Interface (FACI), which includes a monitor, keyboard, and mouse.

NOTE: FACI is available as an option with this product, but is not a standard feature.

EB-32 control panel

The control panel allows you to access, execute, and monitor certain EB-32 functions, such as printing system pages and rebooting or shutting down the system. The control panel also displays the current status of the EB-32.
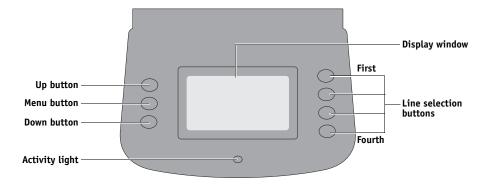
FIGURE 4: EB-32 control panel

Activity light

The activity light indicates the status of the EB-32 the following ways:

- **Flashing amber:** The EB-32 is starting up and the BIOS has established communication with the User Interface Board (UIB).

- **Flashing green:** The EB-32 is continuing startup and the Windows operating system has established communication with the UIB.

- **Solid green:** The EB-32 is powered on and in the Idle state.

- **Solid amber:** The EB-32 is powered off, but the AC power cable is plugged into the power source. The control panel LCD continues to draw power when the EB-32 is powered off.

- **Flashing or solid red:** An error has caused printing to be disabled.

- **No light:** The EB-32 is powered off and the AC power cable is not connected to a power source.

Buttons

The following buttons are on the control panel:

- **Line selection buttons**: Use the four line selection buttons on the right side of the control panel to select the command displayed on the corresponding line of the LCD display.

- **Up and Down buttons:** Use these buttons to scroll to different screens in multi-screen lists or prompts.

- **Menu button:** Press this button to view other display screens. Several different display screens show different types of information about the EB-32.

Functions menu

The following options are available from the EB-32 Functions menu:

```
Eject CD/DVD          ▶
IP Address            ▶        Use the line selection buttons
Restart Server        ▶        to the right to select an option.
Shut Down System      ▶
Server name
```

- **Eject CD/DVD** allows you to eject media from the DVD drive. Media is also automatically ejected whenever the EB-32 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 EB-32.

- **Restart Server** includes options to Restart (soft reset) or Reboot (hard reset) the EB-32. Selecting Restart resets the EB-32 server software, but does not reboot the entire system. Selecting Reboot shuts down all EB-32 activity and reboots the system. When you select Restart or Reboot, network access to the EB-32 is temporarily interrupted and all currently processing jobs are aborted and may be lost.

- **Shut Down System** shuts down all EB-32 server software and powers off the system. Always select this option before turning off the system.

Avoid using the reset button on the front panel, as doing so may cause the system to operate unpredictably. Use the reset button on the front of the EB-32 only if the system is unresponsive to keyboard or mouse actions.

Using the copier touch panel

There are tabs on the copier touch panel that are specific to the EB-32. They provide many of the same controls available from Command WorkStation and allow you to view status information, print system pages, and set up printing. For information about the job management features, see *Utilities*.

Main tab

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

Suspend Printing Suspend print activity between the EB-32 and the copier. Use this command to interrupt the current EB-32 job so that you can perform maintenance tasks. Jobs continue to process on the EB-32. After you complete maintenance, choose Resume Printing to continue printing jobs from the EB-32.

Resume Printing Resume print activity between the copier and the EB-32 after you select Suspend Printing.

Start Sample Print Print extra pages to an easily accessible output tray during a long print job, to verify that the copier is performing as expected.

PrintMe tab

The PrintMe tab allows you to submit print jobs using Document IDs if you have a PrintMe subscription.

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 provides access to jobs according to the status of the job, similar to the Active and Printed Jobs windows in Command WorkStation.

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 tab at the bottom of the copier touch panel.

On each of these lists, you can scroll up and down one line at a time, or advance to the top or bottom of the list. Select a job, and choose the appropriate button to Print, Print and Hold, Delete, or display the job properties. 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.

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 exactly the same alignment. For more information, see Command WorkStation Help.

Scan tab

The Scan tab allows you to scan documents. Depending on the copier model, Scanning may not be supported and the Scan tab may not appear on the copier touch panel. For more information, see *Utilities*.

Fiery tab

The Fiery tab contains most of the administrative features, especially entering settings for Setup options.

Fiery Info   Displays information about the current configuration of the EB-32.

Printable Info   Print these system pages from the EB-32:

PS/PCL Test Page: Confirms that the EB-32 is properly connected to the copier, and provides grayscale samples to troubleshoot problems with the copier or the EB-32. Settings on the Test Page may include: Server Name, printer model, and date and time the Test Page was printed.

PS Font List: Prints a list of all fonts currently on the EB-32 hard disk.

Configuration: Provides general information about the hardware and software configuration of the EB-32, the current Setup options, the current calibration, and the IP address of the EB-32.

Custom Paper Instruction: Prints a procedure for creating a custom paper entry.

Job Log: Prints a list of the last 55 jobs.

E-mail Log: Prints a list of recent e-mail activity.

FTP Log: Prints a list of recent FTP activity.

NOTE: To print the E-mail or FTP Log, you must first enable the appropriate service. For more information, see *Configuration and Setup*.

Setup   Enters the Setup menu to change Setup option settings.

Clear Job Log   Clears the Job Log from the EB-32.

Clear Server   Clears all jobs in all server queues, as well as all jobs archived on the EB-32 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.

Run Diagnostics   To troubleshoot e-mail printing issues, choose this menu and then choose Check E-mail System. For more information, see *Configuration and Setup*. The Check Video Board option is available for service technicians to run diagnostics on the video board.

Restart Fiery   Shuts down all EB-32 activity in the correct manner and then restarts. 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 EB-32 is temporarily interrupted and all currently processing jobs are aborted and may be lost.

Restart System: Shuts down and then reboots the EB-32.

Shut Down: Shuts down all EB-32 activity properly.

Printing EB-32 pages

You can print the following pages:

- **PS and PCL Test Pages:** Lets you confirm that the EB-32-to-copier interface is working properly. The Test Pages provide black and white and grayscale samples helpful when troubleshooting problems with the copier or the EB-32. The following information is also listed: server name, date and time printed, and compression information.

  When you print a Test Page to confirm that the EB-32-to-copier connection is operating properly, keep in mind that:

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

  – Each patch set should show uniform gradation from patch to patch as the shade lightens from 100% to 0%.

    Poor image quality may indicate a need to service the copier. For more information, see the documentation provided with the copier.

    If the Test Page fails to print, look up printing problems in "Table 3: EB-32 error messages and conditions" on page 105.

- **Configuration:** Prints the current server and device configuration. This includes information about all current Setup settings, and the Ethernet address of the EB-32. The Configuration page also provides version information for the BIOS chip and information about any options installed in the EB-32.

  Printing the Configuration page can be helpful during installation, Setup, and service. After installing the EB-32 (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.
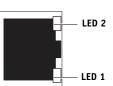
- **Job Log:** Prints the log of the last 55 jobs by default. For more information, see *Configuration and Setup*.

- **PS Font List:** A list of all PostScript fonts resident on the HDD.

- **PCL Font List:** A list of all PCL fonts resident on the HDD.

- **E-mail Log:** Lists jobs scanned on the copier and emailed over the network as well as jobs submitted to the copier as e-mail attachments. The log is available only when Print via E-mail is enabled in Setup. For more information, see *Configuration and Setup*.

- **FTP Log:** Lists jobs scanned on the copier and sent to the FTP site designated in the setup options. The log is available only when Scan to FTP is enabled in Setup. For more information, see *Configuration and Setup*.

1 On the copier touch panel, press the Home button.

2 Press the Fiery icon.

3 Press the Fiery tab.

4 Press Printable Info.

5 Press the name of the page you want to print.

Network Status LEDs

Two LEDs next to the Ethernet network port indicate the network speed. When data transfer occurs between the EB-32 and the network, the appropriate LED(s) blink to indicate network activity.

LED 2

LED 1

**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

⚠ CAUTION

NOTE: The copier interface cable included with the EB-32 is a *crossover* Ethernet cable that connects to the *lower* (crossover) Ethernet port on the EB-32 connector panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the *upper* (straight-through) Ethernet port on the EB-32 connector panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see Figure 7 on page 39).

FieryBar

FieryBar is accessible from a Fiery Advanced Controller Interface (FACI) connected to the EB-32 or when you access the EB-32 with Remote Desktop. For more information about using Remote Desktop, see *Configuration & Setup*.

NOTE: FACI is available as an option with this product, but is not a standard feature.

FieryBar appears at the top of the monitor when you power on the EB-32. You can use FieryBar to access and control various EB-32 functions.

Activity light

| Processing Idle | | Printing Idle | | | | | |

Click to expand and collapse FieryBar   Message area

FIGURE 5: FieryBar

Messages

When a job is processing or printing, the message area remains blue-gray and the Processing and Printing areas of FieryBar display the name and status of the job. When an error interferes with printing, FieryBar turns red and flashes, displaying a message that describes the error.

Activity light

FieryBar indicates the status of the EB-32. The color and appearance of FieryBar changes based on the following:

- **Solid red:** An error has occurred, causing the EB-32 to be disabled. For details about the error, check the message area.

- **Flashing red:** An error has occurred, causing printing to be disabled, but the EB-32 is capable of processing jobs. For details about the error, check the message area.

- **Solid green:** The EB-32 is Idle or powering on.

- **Flashing green:** The EB-32 is processing or printing a job, or communicating with a remote computer.

- **No light:** The EB-32 is powering on.

Commands

Right-clicking FieryBar allows you to access many EB-32 features. You can choose the following commands from the menu that appears:

- **Command WorkStation:** Starts Command WorkStation. For information about using Command WorkStation, see Command WorkStation Help.

- **WebTools:** Starts WebTools. For information about using WebTools, see *Utilities*.

- **Scan:** Starts Fiery Remote Scan application if the print engine supports scanning. For information about Fiery Remote Scan, see *Utilities*.

- **Stop Fiery:** Stops the EB-32 server software and puts FieryBar in exited state. To start server software again, right-click FieryBar and choose Start Fiery.

- **Restart Fiery:** Restarts the EB-32 system software without rebooting the entire system. Network access to the EB-32 is temporarily interrupted and all currently processing jobs are aborted and might be lost. Choose Restart Fiery instead of using the power or reset buttons on the front of the EB-32.

- **Clear Server:** Clears the Job Log and all jobs in all server queues. Check with the site administrator before choosing Clear Server.

- **Start Sample Print:** Prints a sample sheet or sample set of the job currently printing on the EB-32. The sample print is sent to the output tray specified in EB-32 Setup.

- **Stop Sample Print:** Stops a sample sheet or sample set of the job currently printing on the EB-32.

- **Cancel Processing:** Cancels the job currently processing on the EB-32.

- **Cancel Print:** Cancels the job currently printing on the EB-32.

- **Suspend Print:** Suspends communication between the EB-32 and the copier. To continue printing jobs from the EB-32, choose Resume Print.

- **Resume Print:** Resumes communication between the EB-32 and the copier after you choose Suspend Print.

- **Print Pages:** Allows you to print EB-32 informational pages, including the Test Page and Configuration pages. For more information, see page 28.

- **Run Diagnostics:** Allows you to run diagnostics on the following option:

    - Test Email tests the ability of the EB-32 to print a log of all jobs sent using the e-mail printing feature. For more information, see *Printing*.

- **Log Off Windows:** Allows you to log on to Windows as a different user. Network access to the EB-32 is suspended indefinitely, unless you log on with Windows administrator privileges.

- **Hide FieryBar:** Hides FieryBar. To show FieryBar after hiding it, right-click the Fiery icon on the right side of the Windows taskbar and choose Show FieryBar from the menu that appears.

About Configure

You can access Configure from Command WorkStation or WebTools, and you can find information about using it the following ways:

- When you access Configure from an Internet browser, in WebTools, on the Configure tab, click the Help icon.

- When you access Configure from Command WorkStation, see Command WorkStation Help.

TO ACCESS CONFIGURE FROM AN INTERNET BROWSER

1 **Open an Internet browser and type the IP address of the EB-32.**

2 **In WebTools, on the Configure tab, click Launch Configure.**

3 **Log on with Administrator privileges.**

TO ACCESS CONFIGURE FROM COMMAND WORKSTATION

1 **In Command WorkStation, as Administrator, do one of the following:**

- In the Server menu, click Configure.

- In Device Center, on the General or Users tabs, click Configure.

2 **If the Fiery Setup dialog box displays, click Configure.**

If you have not completed initial setup, you may want to click Fiery Setup Wizard instead. For more information, see *Configuration and Setup*.

If you use the Fiery Setup Wizard (from Command WorkStation or WebTools) and click Finish at the end of the wizard, the Fiery Setup dialog box does not display again in any location.

Starting, shutting down, restarting, and rebooting

The customer will generally leave the EB-32 on all the time. Remember that when the EB-32 is powered off, network access to the copier is interrupted. Power off the EB-32 when you need to service it and before you remove or attach any cables to it.

Keep in mind the following terms:

- **Restart Fiery Service (on the copier touch panel)/Restart Server (on the control panel)**

  Resets the EB-32 server software but does not reboot the entire system. Network access to the EB-32 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.

- **Restart System (on the copier touch panel)/Reboot Server (on the control panel)**

  Shuts down all EB-32 activity properly and then reboots. Network access to the EB-32 is temporarily interrupted and all currently processing jobs are aborted and may be lost.

- **Shut Down System**

  Shuts down all EB-32 server software and powers off the system. We recommend that you always select this option when you want to power off the system. Network access to the EB-32 is terminated and all currently processing jobs are aborted and may be lost.

Shutting down

⚠ CAUTION

Remember that when the EB-32 is powered off, network access to the copier is interrupted. Always obtain permission from the network administrator before you take the EB-32 off the network.

If you are cycling power, wait at least 10 seconds before powering back on.
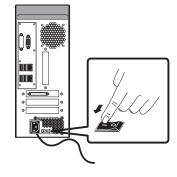
If you are unable to shut down the EB-32 through the copier touch panel, power off by holding down the power button on the front of the EB-32 for up to eight seconds.

NOTE: Avoid using the reset button, as doing so may cause the system to operate unpredictably. Use the reset button only if the system is unresponsive to keyboard or mouse actions.

TO START THE EB-32
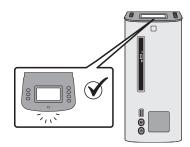
1   Make sure that the copier is turned on.

2   Make sure that the power cable is attached and that the power switch is in the ON position.

3   Press the power button.

4   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 CONTROL PANEL

Always verify that the EB-32 is not in use before you begin the following procedure.

1 Make sure that the EB-32 is not receiving, processing, or printing any files.

If the system has just finished processing, wait at least five seconds after the system reaches Idle before you proceed.

2 On the control panel, on the Idle screen, press the Menu button.

Display window

Up button
Menu button
Down button

Activity light

First

Line selection
buttons

Fourth

3 On the Functions menu, select one of the following:

• Restart Server

On the next screen, select one of the following:

– Restart Server

Restarts the EB-32 system software, but not the Windows operating system software on the EB-32.

– Reboot Server

Completely restarts the EB-32, both the EB-32 system software and the Windows operating system software on the EB-32.

• Shut Down System

Completely shuts down the EB-32.

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

1 **At the copier touch panel, press the Home button.**

4 **Press the Fiery icon.**

1 **Make sure that the EB-32 is not receiving, processing, or printing any files.**

If the system has just finished processing, wait at least five seconds after the system reaches Idle before you proceed.

2 **Press the Fiery tab and then Restart Fiery.**

3 **Choose one of the following:**

- **Restart Fiery Service**

  Restarts the EB-32 system software, but not the Windows operating system software on the EB-32.

- **Restart System**

  Completely restarts (reboots) the EB-32, both the EB-32 system software and the Windows operating system software on the EB-32.

- **Shut Down System**

  Completely shuts down the EB-32.

4 **If you shut down the EB-32, do the following:**

- Press the orange Operation button on the top of the copier, after shutting down the EB-32.

- Turn off the copier using the main power switch inside the front of the copier.

TO SHUT DOWN, RESTART, OR REBOOT FROM THE FIERY ADVANCED CONTROLLER INTERFACE (FACI)

NOTE: FACI is available as an option with this product, but is not a standard feature.

1 **Make sure that the EB-32 is not receiving, processing, or printing any files.**

If the system has just finished processing, wait at least five seconds after the system reaches Idle before you proceed.

2 **Close all applications except FieryBar.**

1 **Do one of the following:**

- Click the Windows Start button and select Shut Down.

- Click the Windows Start button, click the arrow next to Shut Down, and select Restart.

- Right-click FieryBar and, in the shortcut menu, select Restart Fiery. Click OK.

REPLACING PARTS

Generally, the EB-32 requires no regular service or maintenance. Use the procedures in this chapter to inspect, remove, reseat, and replace major hardware components, as well as install system software.

Overview

This chapter includes information about servicing the following components:

- Boards and cables

- Motherboard components (DIMMs, CPU, battery, and jumpers)

- Fan

- 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 mean the reinstallation of existing components. Install new components only when necessary. If you determine that a component you have removed is not faulty, make sure to reinstall it.

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

⚠ CAUTION

When performing the service procedures described in this chapter, follow the precautions listed on page 11.

The tools required to service the EB-32 are listed on "Tools you will need" on page 10.

EB-32 diagrams

The following figures provide an overview of EB-32 components.

Key

   1 Control panel
   2 DVD drive
   3 USB ports
   4 Reset button
   5 Power button

FIGURE 6:   EB-32 front panel

Key

1. **DIV port (unused)**
2. **Monitor (VGA) port**
3. **USB ports (x2)**
4. **Network port (straight-through Ethernet port)**
5. **USB ports (x2)**
6. **Copier interface port (crossover Ethernet port)**
7. **Video interface port (not used)**
8. **Power cable**
9. **Power switch**
   I: Power ON
   O: Power OFF
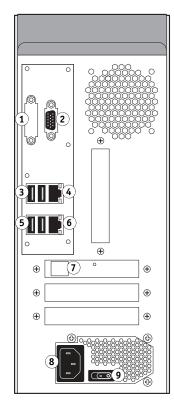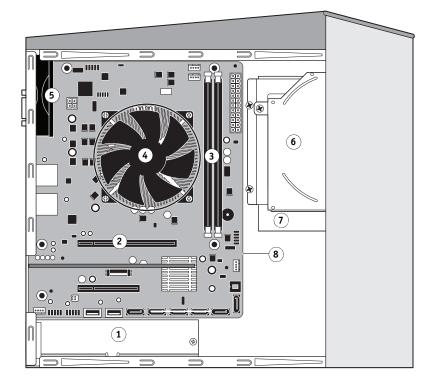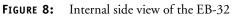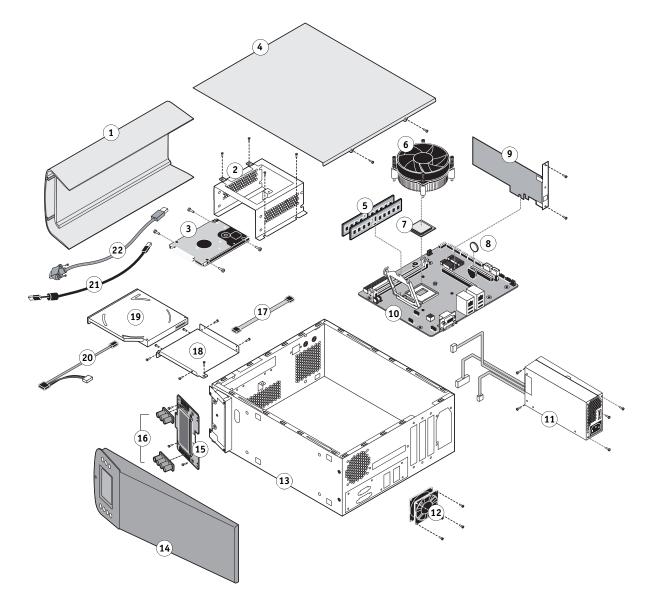
FIGURE 7: EB-32 connector panel

Key
   1 **Power supply**
   2 **Copier interface board slot**
   3 **DIMM slots**
   4 **CPU cooling assembly**
   5 **Chassis fan**
   6 **DVD drive**
   7 **Hard disk drive**
   8 **Motherboard**

NOT SHOWN: Cables, UIB, or front panel USB port.

FIGURE 8:   Internal side view of the EB-32

Key
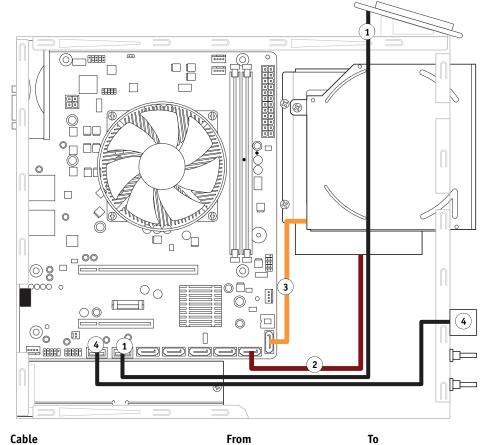
1 Front panel	**7 CPU**	**12 Chassis fan**	**17 Hard disk drive SATA cable**
2 Hard disk drive bracket	**8 Battery**	**13 Chassis**	**18 DVD drive bracket**
3 Hard disk drive	**9 Copier interface board**	**14 Top panel**	**19 DVD drive**
4 Side panel	**10 Motherboard**	**15 UIB**	**20 DVD drive power/data combo cable**
5 DIMMs	**11 Power supply**	**16 UIB buttons**	**21 UIB cable**
6 CPU cooling assembly			**22 Front panel USB port and cable**
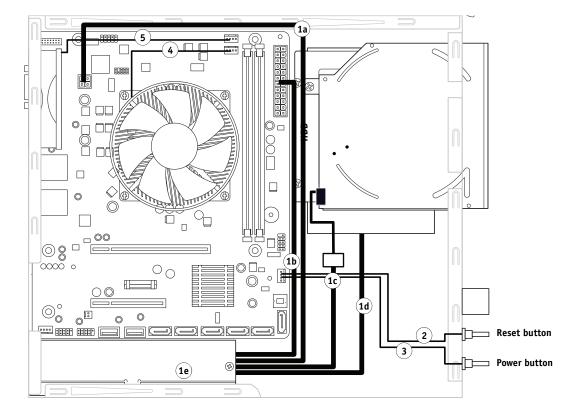
NOT SHOWN: Tie-wraps, cable clamps, dongle(s), or external cables.

FIGURE 9: Exploded view of EB-32 components

Cable	From	To
1 UIB cable	User Interface Board	Motherboard connector USB A1
2 Hard disk drive data cable	Hard disk drive	Motherboard connector SATA1
3 DVD data combo cable	DVD drive	Motherboard connector SATA0
4 Front panel USB port cable	Front panel USB port	Motherboard connector USB A2

FIGURE 10: Data cable connections inside the EB-32

Cable	From	To
1 Power supply cable	Power supply	a. 4-pin motherboard connector J24
		b. 20-pin motherboard connector ATX24P_1
		c. DVD drive power connector
		d. Hard disk drive power connector
2 Reset cable	Reset button	Motherboard connector J20, pins 5 (green cable) and 7 (white cable) (see Figure 19 on page 54)
3 Power cable	Power button	Motherboard connector J20, pins 6 (red cable) and 8 (white cable) (see Figure 19 on page 54)
4 CPU fan cable	CPU fan	Motherboard connector CPUFAN
5 Chassis fan cable	Chassis fan	Motherboard connector SYSFAN

FIGURE 11: Power cable connections inside the EB-32

Accessing internal components

This section describes how to shut down and open the EB-32. Always use the following procedures when opening the EB-32 for inspection or service.

Shutting down the system

If the EB-32 is powered on, you must shut it down before you access internal components. See "Starting, shutting down, restarting, and rebooting" on page 33.

Opening the EB-32

Before you open the EB-32, it is strongly recommended that you review "Precautions" on page 11 to avoid injury or damage to the EB-32.

TO OPEN THE EB-32

1 **Shut down the EB-32 (see page 44).**

2 **Remove all cables from the back of the EB-32.**

3 **Remove all panels necessary to access the component that you want to service.**

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

NOTE: When removing multiple panels from the EB-32, use the following order:

- Side panel (see page 45)

- Top panel (see page 46)

- Front panel (see page 47)

NOTE: When replacing panels, reverse the order.

4 **Place the EB-32 on a flat surface. Attach an ESD wrist strap before handling internal parts (see "Precautions" on page 11).**

5 **Carefully position the EB-32 so that it is resting on its side and the internal components are facing up.**

Place removed components on a grounded, antistatic surface.

TO REMOVE AND REPLACE THE SIDE PANEL

1 **Shut down the EB-32 (see page 44).**

2 **Remove the 2 screws that attach the side panel to the back of the chassis.**

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

3 **Slide the side panel toward the connector panel.**

It may help to use the palm of your hand to press down on the side panel as you slide it.

4 **Lift the side panel off the chassis.**
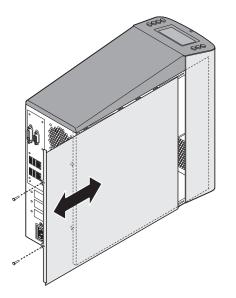
FIGURE 12: Removing/replacing the side panel

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

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

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

TO REMOVE AND REPLACE THE TOP PANEL

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

1 Shut down the EB-32 (see page 44).

2 From inside the chassis, bend the four tabs that secure the top panel to the chassis until they disengage the slots in the chassis, and then lift the top panel away from the chassis.

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

Top panel

Tab and slot (1 of 4)
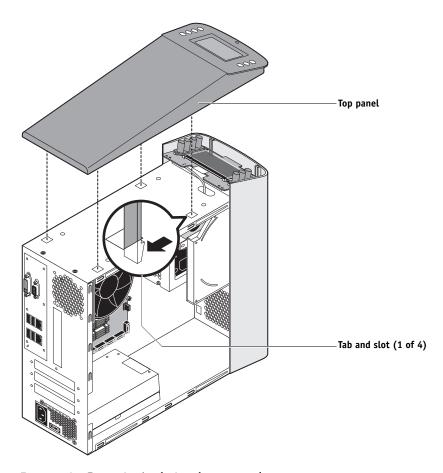
FIGURE 13: Removing/replacing the top panel

3 To replace the top panel, align the tabs on the underside of the panel with the slots on the top of the chassis.

4 Press the top panel against the chassis and snap it into place.

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

TO REMOVE AND REPLACE THE FRONT PANEL

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

1 **Shut down the EB-32 (see page 44).**

2 **From inside the chassis, bend outward on the four tabs that secure the front panel to the chassis, and then lift the panel away from the chassis.**

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

Front panel

Tab (1 of 4)
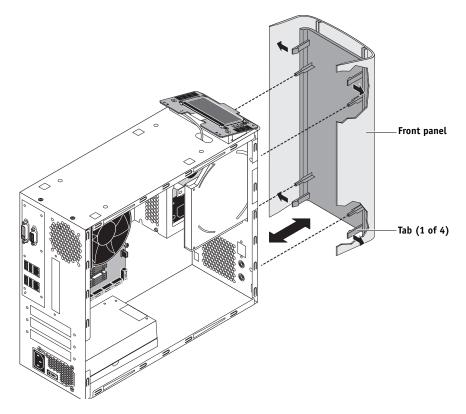
FIGURE 14: Removing/replacing the front panel

3 **To replace the front panel, align the openings in the panel with the DVD drive, power and reset buttons, and USB port.**

4 **Press the panel against the chassis and snap it into place.**

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

Removing and replacing EB-32 components

Before replacing costly components, be sure to verify the connections between the copier and the EB-32. Also, verify the connections of each replaceable EB-32 component. For more information about troubleshooting, see "Troubleshooting" on page 95.

The following sections describe how to remove and install replaceable parts on the EB-32:

- Copier interface board

- User Interface Board

- Motherboard

- Battery

- DIMM(s)

- CPU and CPU cooling assembly

- Chassis fan

- Power supply

- Hard disk drive

- DVD drive
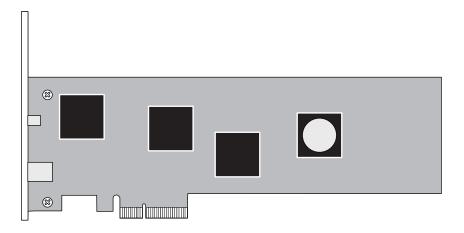
For information about replacing other components, see the copier manufacturer's documentation.

⚠ CAUTION
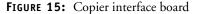
Be sure to use an ESD grounding wrist strap and follow standard ESD (electrostatic discharge) precautions while performing these procedures. For details, see "Precautions" on page 11.

Copier interface board

The copier interface board processes the image data and sends it to the copier through a cable connected from the EB-32 to the copier.

FIGURE 15: Copier interface board

TO REMOVE THE COPIER INTERFACE BOARD

1 Shut down and open the EB-32 (see pages 44).

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

2 Remove the two mounting bracket screws that attach the copier interface board to the chassis.

3 Remove the copier interface board from the motherboard.

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

4 Place the copier interface board in an antistatic bag.

TO REPLACE THE COPIER INTERFACE BOARD

1 Seat the copier interface board in connector PCI-E on the motherboard.

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

2 Secure the copier interface board to the chassis with the two mounting bracket screws that you removed earlier.

3 Reassemble the EB-32 and verify its functionality (see page 79).

User Interface Board

The User Interface Board (UIB) provides the interface between the EB-32 and the user. The front of the UIB contains circuitry for the following:

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

The UIB cable is routed from a connector on the User Interface Board to a USB connector on the motherboard (see Figure 20 on page 55).
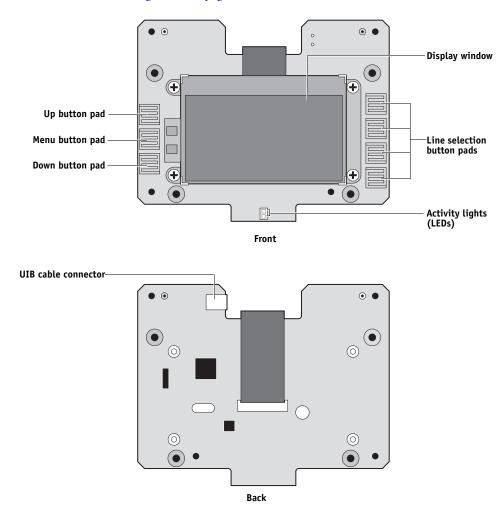
FIGURE 16: Diagram of the User Interface Board (front and back)

TO REMOVE THE USER INTERFACE BOARD

1 **Shut down and open the EB-32 (see pages 44).**

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

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

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

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

4 **Lift the UIB off the mount.**

Screw (1 of 4)

UIB cable connector

UIB cable
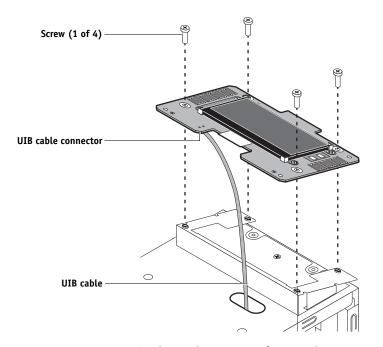
FIGURE 17: Removing/replacing the User Interface Board

5 **Place the UIB in an antistatic bag.**

6 **Attach the UIB cable to the connector on the top of the UIB (see Figure 17 on page 51).**

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

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

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

9 **Replace the top panel (see page 46).**

10 **Reassemble the EB-32 and verify its functionality (see page 79).**

Motherboard

This section describes the battery and default jumper settings on the EB-32 motherboard, as well as procedures for removing and replacing the motherboard.

NOTE: Do not move or change any of the default jumper configurations on the motherboard.

Battery

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

⚠ CAUTION

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

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

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

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

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

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

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

TO REPLACE THE BATTERY

1   **Access and open the EB-32 as described on page 44.**

2   **Locate the battery on the motherboard (see Figure 20 on page 55).**

3   **Carefully push the clip away from the battery until the socket ejects the battery.**

Clip

Battery

Socket
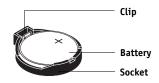
FIGURE 18: Motherboard battery

4   **Slide the battery out of its socket.**

5   **To insert a new battery, slide it into the socket so that the positive (+) side of the battery faces up.**

6   **Press the battery down into the socket until it snaps into place.**

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

7   **Reassemble the EB-32 and verify functionality (see page 79).**

8   **Configure the date and time in Setup (see page 53).**

TO CONFIGURE THE SYSTEM DATE AND TIME

1   **On a client computer that is connected to the same network as the EB-32, open a Web browser window.**

2   **In the URL field of the browser, type the IP address or DNS name of the EB-32, and press Enter.**

The IP address is listed under the Network Setup section of the EB-32 Configuration page.

3   **On the WebTools home page, click the Configure tab.**

4   **Click Launch Configure, type the Administrator password for the EB-32, and then click OK.**

The default Administrator password is Fiery.1. However, the network administrator may have configured a new password for the EB-32.

5   **Expand the Server item in the left pane, and click Regional Settings.**

6   **Click the Set button next to Date and Time.**

7   **In the dialog box that appears, specify the current date and time, and click OK.**

8   **In the Configure window, click Apply.**

9   **Click Reboot.**

Motherboard jumpers

IMPORTANT

Jumper configuration should not be changed.

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

Power and reset buttons
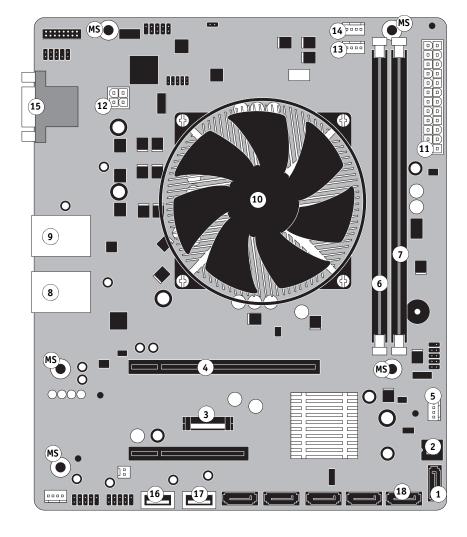
Align the triangle on each cable connector with the correct pin as shown in Figure 19.

- Power button: J20, pins 6 (red cable) and 8 (white cable)

- Reset button: J20, pins 5 (green cable) and 7 (white cable)

FIGURE 19: Cable connections for power button

Key

1 **DVD drive connector (SATA0)**

2 **Security chip (J12)**

3 **Battery (BT1)**

4 **Copier interface board (PCIE x16)**

5 **Power and reset button pins (J20)**

6 **DIMM (DIMM A1)**

7 **DIMM (DIMM A0)**

8 **Scan crossover connector (10/100BaseT), USB connectors (x2)**

9 **Network connector (10/100/1000BaseT), USB connectors (x2)**

10 **CPU and cooling assembly**

11 **24-pin power connector (ATX24P_1)**

12 **4-pin power connector (J24)**

13 **CPU fan connector (CPUFAN J17)**

14 **Chassis fan connector (SYSFAN J23)**

15 **DVI+VGA port**

16 **For front panel USB port (USB A2)**

17 **For UIB cable (USB A1)**

18 **For hard disk drive data cable (SATA1)**

MS—Mounting screws

NOTE: Any connectors not listed above are not used.

FIGURE 20: Diagram of the EB-32 motherboard

Removing the motherboard

⚠ CAUTION

Follow standard ESD precautions while handling the motherboard and all components. For details, see "Precautions" on page 11.

TO REMOVE MOTHERBOARD COMPONENTS FROM THE MOTHERBOARD

1 **Access and open the EB-32, as described on page 44.**

2 **Remove the following cables attached to the motherboard:**

   • Reset button cable

   • Power button cable

   • Front panel USB port cable

   • UIB cable

   • DVD data cable

   • Hard disk drive data cable

   • Motherboard power cable

   • CPU power cable

   • Chassis fan power cable

   For the location of each connector on the motherboard, see Figure 20 on page 55.

3 **Remove the copier interface board (see page 49).**

TO REMOVE THE MOTHERBOARD

⚠ CAUTION

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

1   Remove the power supply (see page 70).

2   Remove the five mounting screws that secure the motherboard to the base of the chassis (see Figure 20 on page 55 for the screw locations on the motherboard).

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

3   Remove the two screws from the coverplate on the unused DVI port on the connector panel (see page 39).

4   Lift the edge of the motherboard opposite the connector panel to release the motherboard from the chassis. Then gently slide the motherboard out of the chassis.

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

Lift edge of motherboard and remove from chassis.

Make sure that the motherboard connectors clear the cutouts in the chassis (cutouts not shown).
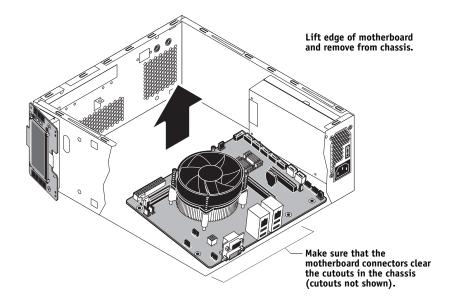
FIGURE 21: Removing the motherboard from the chassis

5   If you are replacing the motherboard with a new motherboard, remove the following from the old motherboard:

    • DIMM(s) (see page 64)

    • CPU (see page 65)

Replacing the motherboard

Use the following procedure to install the motherboard in the EB-32 chassis.

⚠ CAUTION

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.

⚠ CAUTION

Troubleshooting cautions

- Before deciding to install a new motherboard, consult "Troubleshooting" on page 95.

- Also review "Motherboard cautions" on page 59.

- Inspect all cables and internal components (see page 96 and page 97). If these inspections do not solve the problem, locate symptoms in the troubleshooting table beginning on page 105, and perform the suggested actions in the order listed.

- If troubleshooting strategies (checking cables and connections, reinstalling system software, and so forth) do not solve the problem and you suspect either the HDD or the motherboard is faulty, always troubleshoot in the following order:

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

  – First, replace the HDD and install system software.

    Always replace a faulty HDD with a new HDD. Transferring a HDD from one EB-32 to another is incorrect and strongly discouraged.

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

Motherboard cautions

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

⚠ CAUTION

- **Follow ESD and other safety precautions when handling the motherboard. If you need to remove the motherboard during service, place it on a grounded, anti-static surface.**

- **Transfer the DIMM, CPU, and CPU cooling assembly from the old motherboard onto the new motherboard.**

⚠ CAUTION

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

  BIOS chips are not interchangeable.

⚠ CAUTION

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

  Replacing both in the wrong order, without updating the system, will cause the system to malfunction. For the correct order, see "Troubleshooting cautions" on page 58.

- *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 63.)

TO REPLACE THE MOTHERBOARD

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

   - Install the DIMM(s) from the old motherboard onto the new motherboard (see page 64).

   - Install the CPU from the old motherboard onto the new motherboard (see page 65).

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

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

2 **Angle the motherboard so that the connectors on the motherboard fit into the cutouts in the connector panel of the chassis, and gently slide the motherboard into the chassis (see Figure 21 on page 57).**

IMPORTANT

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

3 **Align the mounting holes on the motherboard with the screw holes located in the base of the chassis (see Figure 20 on page 55 for the mounting hole locations).**

4 **Insert the five mounting screws that attach the motherboard to the chassis.**

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

5   **Replace the coverplate on the unused DVI port with the two screws you removed earlier (see).**

6   **Replace the power supply (see).**

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

TO REPLACE MOTHERBOARD COMPONENTS

1   **Replace the following cables to the motherboard (for the location of each connector on the motherboard, see and):**

- Reset button cable

- Power button cable

- Front panel USB port cable

- UIB cable

- DVD data cable

- Hard disk drive data cable

- Motherboard power cable

- CPU power cable

- Chassis fan power cable

2   **Reinstall the copier interface board (see).**

3   **Reassemble the EB-32 (see).**

Verifying new motherboard installation and transferring options

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

- Verify all functionality by using the 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 62).

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, FACI Enablement) expends the motherboard replacement dongle. For details, see "Entering Service Mode" on page 62.

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 EB-32 is powered off, no media is in the DVD drive, you have installed a new motherboard, and that you have reassembled the EB-32 and attached external cables.

1 Make sure the EB-32 is connected to the copier.

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 EB-32 starts up successfully in Service Mode.

4 Power on the EB-32 and allow it to boot without interruption.

At this point the EB-32 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 EB-32 control panel.

5 Print the EB-32 Test Page from the copier touch panel (see page 29).

6 Ask the network administrator to connect the EB-32 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 63), 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 95.

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 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 EB-32 is fully assembled with the new motherboard, and verified in Service Mode (see page 62).

1 Verify that all power is turned off on the EB-32.

2 Insert the motherboard replacement dongle into a USB port.

3 Turn on the EB-32.

Wait until the FieryBar reaches Idle.

4 On the EB-32 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 EB-32.

7 Remove the motherboard replacement dongle after the EB-32 reaches Idle on the copier touch panel.

8 Reinstall system software.

Replacing parts on the motherboard

This section describes how to remove and replace the DIMM(s), CPU, and battery on the motherboard. Before you perform any of these procedures, shut down and open the EB-32 (see page 44).

DIMM(s)

Each DIMM (dual in-line memory module) is held in place by a lever at each end of the DIMM socket. The motherboard contains two DIMM sockets (DIMM A0 and DIMM A1). The standard configuration includes two 2GB DIMMs.

If you are installing DIMMs of different capacities, be sure to install the lower-capacity DIMM in socket DIMM A1.

TO REMOVE OR REPLACE A DIMM

1 **Shut down and open the EB-32 (see pages 44).**

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

2 **To release a DIMM, push outward on the levers on each side of the DIMM.**
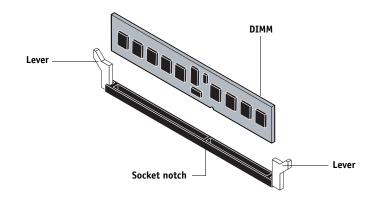
FIGURE 22: Removing or replacing a DIMM

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

4 **To replace a DIMM, position the DIMM in the socket and press the DIMM straight down into the socket so the levers lock the DIMM into place.**

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

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

5 **Reassemble the EB-32 and verify functionality (see page 79).**

6 **If you installed a new DIMM, make sure to reset the date and time in Setup. For more information, see Configure Help.**

CPU and CPU cooling assembly

The CPU is installed in a socket on the motherboard. Before removing the CPU from its socket, remove the motherboard from the chassis (see page 56), disconnect the CPU fan cable from the motherboard, and remove the cooling assembly from the CPU socket (see page 66). The CPU cooling assembly consists of a fan and a heatsink.

NOTE: Do not remove the CPU fan from the heatsink.
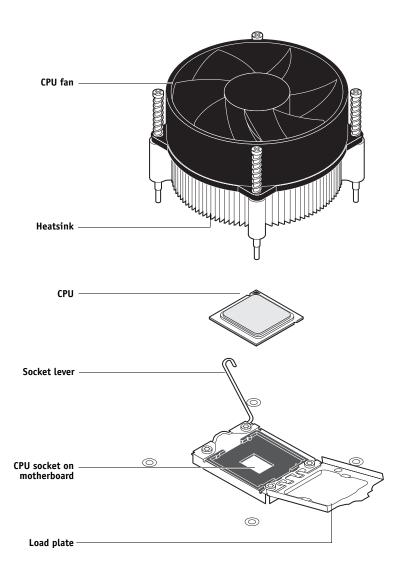
FIGURE 23: CPU cooling assembly

TO REMOVE A CPU

1 **Access and open the EB-32, as described on page 45.**

2 **Remove the motherboard components (see page 56).**

3 **Remove the power supply (see page 70).**

4 **Remove the motherboard from the chassis (see page 57).**

Place the motherboard on a flat, antistatic surface.

5 **Remove the CPU fan cable from motherboard connector CPUFAN.**

6 **Remove the CPU cooling assembly:**

⚠ CAUTION

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

- Rotate each fastener one quarter-turn counterclockwise to the position shown below.

- Pull straight up on each fastener cap until the retaining tang at the tip of the peg is released from the motherboard.

IMPORTANT

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

Loosen each screw to this position.

Screw (1 of 4)
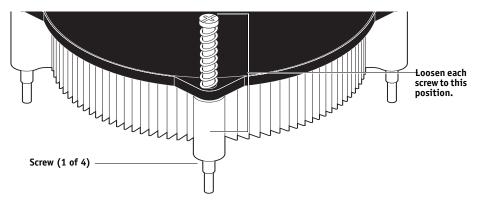
FIGURE 24: Removing the CPU cooling assembly

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

IMPORTANT

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

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

9 **Open the load plate (see Figure 25).**
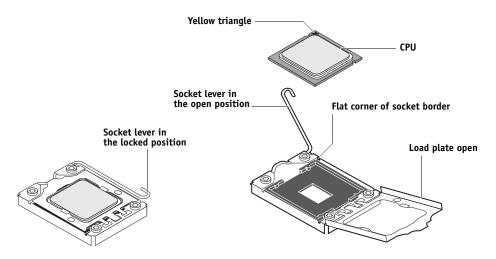
FIGURE 25: Removing/replacing the CPU

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

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

TO REPLACE A CPU

1 **Do one of the following:**

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

IMPORTANT

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

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

2 **Prepare the CPU socket by ensuring that:**

- The socket lever is in the open position.

- The load plate is open.

3 Place the CPU in the socket (see Figure 25 on page 67).

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 arrow stenciled on the motherboard next to the socket. Do not force the CPU.

Flat corner of socket
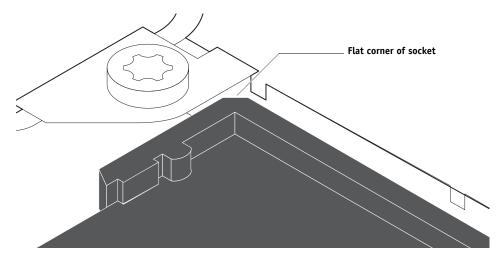
FIGURE 26: Locating the flat corner of the CPU socket

4 Close the load plate.

5 Lower the socket lever and place it in the locked position under the retention post.

6 Prepare the CPU cooling assembly for installation.

- Make sure that the motherboard is placed on a padded, antistatic work surface.

- Apply the fresh thermal compound square, as described in step 1 on page 67.

- Align the cooling assembly so that when it is installed, the fan cable easily reaches the CPU fan power connector CPUFAN on the motherboard.

7 Place the cooling assembly on the CPU.

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

⚠ CAUTION

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

- Align the four screws with the four screw posts.

- Tighten the screws. Partially tighten all the screws before tightening any one screw all the way.

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

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

9 **Install the motherboard in the chassis (see page 59).**

10 **Replace the motherboard components (see page 63).**

11 **Reassemble the EB-32 and verify its functionality (see page 79).**

12 **If you installed a new CPU, configure the time and date in Setup (see page 53).**

Chassis fan

A fan mounted inside the chassis blows air out of the EB-32 to cool components. The chassis fan runs continuously when the system is on. You should hear the chassis fan start as soon as you power on the EB-32. If you do not hear the chassis fan, there may be a faulty power connection (see Figure 11 on page 43).

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

To REMOVE AND REPLACE THE CHASSIS FAN

1 **Shut down and open the EB-32 (see pages 44).**

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

2 **Remove the fan cable from the motherboard**

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

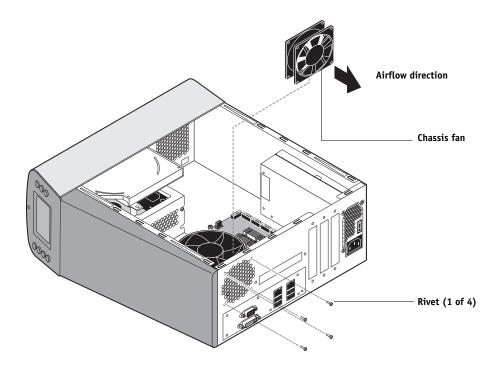Set the screws aside so that you can replace them later.

FIGURE 27: Removing/replacing the chassis fan

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

An arrow on the side of the chassis fan indicates the airflow direction. Make sure that the chassis fan is positioned with the label against the chassis. The chassis fan should blow air out of the vents in the connector panel when the system is reassembled and powered on (see Figure 27).

5   **Verify EB-32 functionality (see page 79).**

Power supply

This section describes how to remove and replace the EB-32 power supply. For more information on the power supply, see "Specifications" on page 115.

You can check power supply functionality using a multimeter at the power cable connectors supplying power to the motherboard, CPU, HDD, and DVD drive. Test voltages on the connectors of the power supply cables, not on the board or component connectors.

⚠ CAUTION

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

TO REMOVE THE POWER SUPPLY
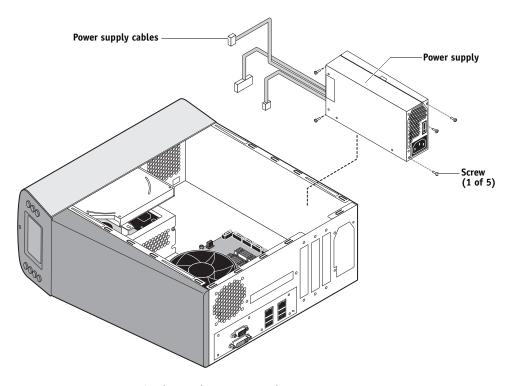
1   **Shut down and open the EB-32 (see pages 44).**

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

2   **Remove the following cables and components from the motherboard to provide room for removing the power supply:**

  • Copier interface board

  • Power and reset button cables

  • DVD drive and hard disk drive SATA cables

  • UIB cable and front panel USB port cable

3   **Remove the power cable from the hard disk drive.**

4   **Disconnect the power supply cable from the DVD drive power and data combination cable.**

5   **Remove the 20-pin motherboard power cable from the motherboard.**

6   **Remove the 4-pin CPU power cable from the motherboard.**

7   **Remove the power supply cables secured by the cable harness in the chassis.**

8   **Remove the five screws that attach the power supply to the chassis (see Figure 28 on page 71).**

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

9 Lift the power supply out of the chassis, taking care to gather the power supply cables.

Power supply cables

Power supply

Screw
(1 of 5)

FIGURE 28: Removing/replacing the power supply

TO REPLACE THE POWER SUPPLY

1 Attach the power switch leads to the terminals on the power switch.

You can attach the power leads to either terminal on the power switch.

IMPORTANT

If you are replacing the power supply with a new one, you do <u>not</u> need to remove the original power switch and replace it with the switch provided with the new power supply. The original switch is designed to remain mounted inside the chassis.

2 Place the power supply inside the chassis and align the mounting holes.

3 Attach the power supply to the chassis with the five screws that you removed earlier (see Figure 28 on page 71).

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.

4 Connect the 4-pin CPU power cable to the motherboard (for location, see Figure 20 on page 55).

5 Connect the 20-pin motherboard power cable to the motherboard (for location, see Figure 20 on page 55).

6 Connect a white, 4-pin power supply cable to the DVD drive power and data combination cable.

7 Connect the power cable to the hard disk drive.

CAUTION

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 power supply cable in the cable harness in the chassis.

9 Replace the following cables and components to their connectors on the motherboard:

- UIB cable and front panel USB port cable (see Figure 10 on page 42)
- DVD drive and hard disk drive SATA cables (see Figure 10 on page 42)
- Power and reset button cables (see Figure 11 on page 43)
- Copier interface board (see page 49)

10 Reassemble the EB-32 and verify its functionality (see page 79).

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 on the Info screen of the copier display panel and in Command WorkStation.

If you replace the hard disk drive with a new one, you must install system software as described on page 80. (Spare hard disk drives are hard disk drives shipped without system software installed.)

⚠ **CAUTION**

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 61), 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 pages 96 and 97) do not solve the problem, and you suspect 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 52).

Proper handling

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

• Use proper ESD practices when grounding yourself and the EB-32.

• 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 connection

• Faulty data cable

• Faulty hard disk drive

⚠ **CAUTION**

Make sure that you attach an ESD grounding wrist strap and follow standard ESD precautions before handling EB-32 components.

The hard disk drive is mounted inside a bracket.

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

• The appropriate system software and documentation for the EB-32.

• A compatible version of the user software for the networked computers that will print to the EB-32.

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 the Font Lists.**

   If desired, back up the system configuration (see page 82).

2 **Shut down and open the EB-32 (see pages 44).**

   To access the hard disk drive, you must remove the side and front panels.

3 **Remove the DVD drive (see page 77).**

4 **Remove the power supply cable from the hard disk drive.**

5 **Remove the hard disk drive data cable from the hard disk drive.**

6 **Remove the four screws securing the hard disk drive bracket to the chassis.**

7 **Lift the hard disk drive bracket out of the chassis (see Figure 29).**

⚠ CAUTION

NOTE: Avoid striking the motherboard as you remove the hard disk drive bracket.

Hard disk drive

Hard disk drive bracket
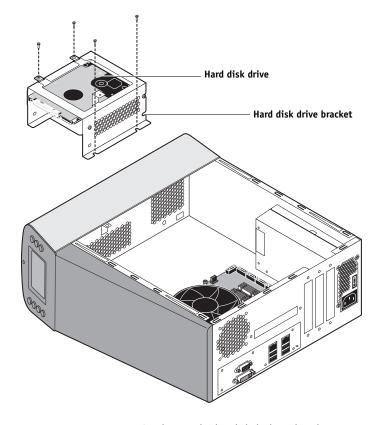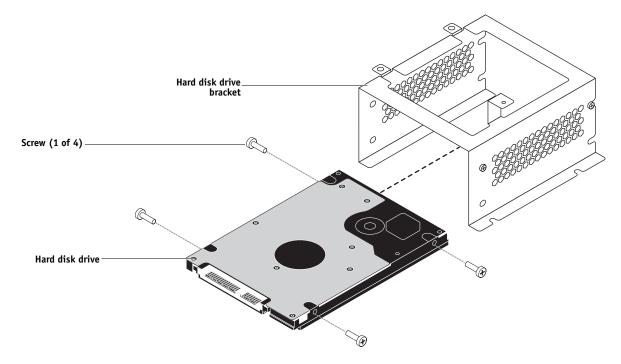
FIGURE 29: Removing/replacing the hard disk drive bracket

8   **Remove the four screws that attach the hard disk drive to the hard disk drive bracket (see Figure 30 on page 75).**

Hard disk drive bracket

Screw (1 of 4)

Hard disk drive

FIGURE 30: Removing/replacing the hard disk drive from the hard disk drive bracket
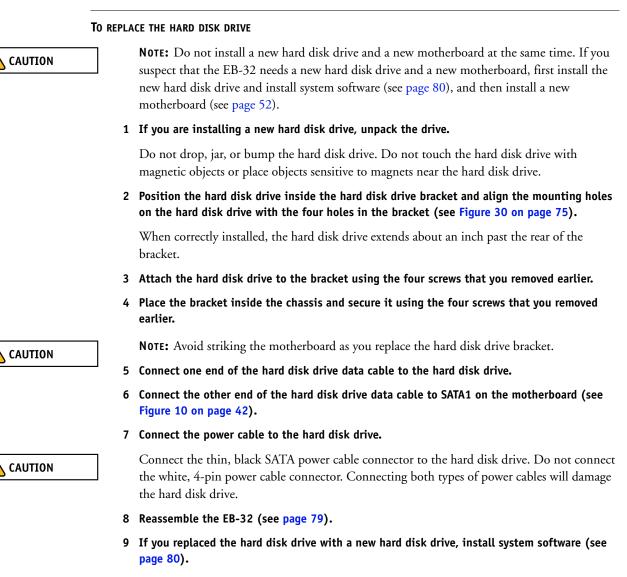
9   **Remove the hard disk drive from the hard disk drive bracket and place it in an antistatic bag.**

⚠ CAUTION

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 items such as credit cards and employee ID cards that are sensitive to magnets near the hard disk drive.

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

TO REPLACE THE HARD DISK DRIVE

CAUTION

NOTE: Do not install a new hard disk drive and a new motherboard at the same time. If you suspect that the EB-32 needs a new hard disk drive and a new motherboard, first install the new hard disk drive and install system software (see page 80), and then install a new motherboard (see page 52).

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 objects sensitive to magnets near the hard disk drive.

2 **Position the hard disk drive inside the hard disk drive bracket and align the mounting holes on the hard disk drive with the four holes in the bracket (see Figure 30 on page 75).**

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

3 **Attach the hard disk drive to the bracket using the four screws that you removed earlier.**

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

CAUTION

NOTE: Avoid striking the motherboard as you replace the hard disk drive bracket.

5 **Connect one end of the hard disk drive data cable to the hard disk drive.**

6 **Connect the other end of the hard disk drive data cable to SATA1 on the motherboard (see Figure 10 on page 42).**

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

CAUTION

   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 EB-32 (see page 79).**

9 **If you replaced the hard disk drive with a new hard disk drive, install system software (see page 80).**

   If a startup error displays on the control panel when you power on the EB-32, check the connections.

10 **If you installed a new hard disk drive, make sure to reset the date and time in Setup. For more information, see Configure Help.**

11 **Verify functionality (see page 79).**

DVD drive

The DVD drive is attached to a bracket mounted to the hard disk drive bracket and the chassis. 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 open the EB-32 (see pages).**

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

2   **Remove the DVD drive power/data combination cable from the back of the DVD drive.**

3   **Remove the screw that attaches the DVD drive bracket to the hard disk drive bracket.**

4   **Remove the two screws that attach the DVD drive bracket to the chassis.**

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

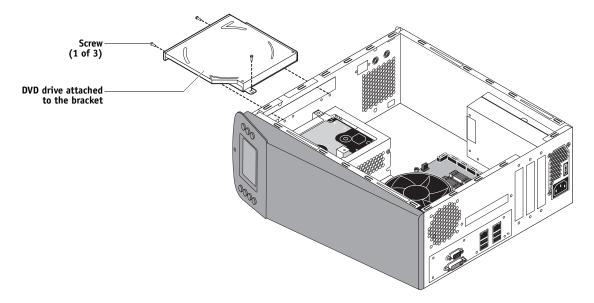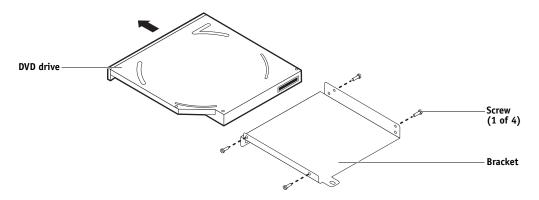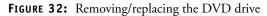5   **Slide the DVD drive bracket out the front of the chassis.**

Screw (1 of 3)

DVD drive attached to the bracket

FIGURE 31: Removing/replacing the DVD drive bracket

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

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

7 **Lift the DVD drive out of the bracket.**

DVD drive

Screw
(1 of 4)

Bracket

FIGURE 32: Removing/replacing the DVD drive

TO REPLACE THE DVD DRIVE

1 **Position the DVD drive inside the bracket and align the mounting holes on the DVD drive with the four holes in the bracket (see Figure 31 on page 77).**

2 **Place the bracket inside the chassis and secure it using the three screws that you removed earlier.**

3 **Attach the power and data combination cable to the back of the DVD drive (see Figure 10 on page 42 and Figure 11 on page 43).**

4 **Reassemble the EB-32 and verify functionality (see page 79).**

5 **If you installed a new DVD drive, make sure to reset the system date and time. For more information, see "To configure the system date and time" on page 53.**

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 95.

TO REASSEMBLE THE EB-32 AND VERIFY FUNCTIONALITY

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

When routing cables inside the EB-32, make sure that:

- Cables are securely installed after routing cables

- Cable routing does not interfere with the operation of internal components nor interfere with removing or replacing components

- Cables are not tangled nor looped around internal circuit boards, or components (such as capacitors and resistors)

- Cables do not lie on or against any internal heating element

- Cables do not interfere with opening or closing EB-32 panels

- Cable slack is secured with a tie-wrap

2 Restore the EB-32 to the upright position.

3 Replace any panels that you removed earlier, as described on page 45.

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 63).

5 Connect the power cable to the EB-32 (see page 19).

6 Connect the EB-32 to the copier (see page 19).

7 Print the Test Page and Configuration page.

- If the EB-32 does not start up, see startup problems on page 105.

- If pages do not print, verify that the interface cables are properly connected (see printing problems on page 113).

- If image quality is poor, test the copier. (See the service documentation that accompanies the copier.)

8 Connect to the network (see page 20).

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

If the job does not print or has poor image quality, see printing problems on page 105 and the Troubleshooting sections of the user documentation.

INSTALLING SYSTEM SOFTWARE

The EB-32 ships with preinstalled system software on the hard disk drive. If you must reinstall system software when servicing the EB-32, use the latest System Software and User Software DVDs.

Before you install 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 For more information, see Configure Help.

- **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 EB-32 by default. This will restore the EB-32 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*.

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 EB-32 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 EB-32 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 EB-32, 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*.

- **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 EB-32 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 .

- **User documentation:** All user documentation files resident on the EB-32 are deleted when you install system software. If user documentation is resident on the EB-32, 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*.

- **Monitor profiles:** Monitor profiles saved to the hard disk drive are deleted when you install system software. Monitor profiles for the EB-32 monitor are automatically reinstalled when you reinstall Command WorkStation on the system.

- **System software updates:** All updates to system software (Windows OS and Fiery System Software) which may be available for the EB-32 and installed from any source (for example, System Updates (see), 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 EB-32. 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 EB-32. User software may be installed directly on client computers equipped with a DVD drive, or over a network via the Fiery User Software Installer that resides on the EB-32.

- **Paper Catalog:** Before you reinstall system software, make sure to back up the Paper Catalog database in Command WorkStation and import it after system software installation.

Changing the factory default language

Before installing system software, you can change the EB-32 default language preinstalled at the factory using the Configure tool, available through Command WorkStation and WebTools.

TO CHANGE THE FACTORY DEFAULT LANGUAGE

1 Open Configure through either Command WorkStation or WebTools.

For more information, see .

2 Click Server > Regional Settings > Server Language, and choose a language.

3 Click Apply.

Changing languages takes approximately 15 minutes.

Backing up the system configuration

Using the Backup/Restore feature in Configure or Command WorkStation, you can back up EB-32 selected settings and restore them later, without reinstalling system software. When you back up settings, you save a configuration file with the settings.

You can back up and restore the following EB-32 settings:

- Fiery System Settings

- Scan Settings

- FreeForm/VDP resources

- Paper Catalog

- Virtual Printers

- Server Presets

- Fonts

- Job Log

For more information, see Configure Help or Command WorkStation Help.

If you cannot create a configuration file, ask the network administrator to archive custom color profiles, preflight templates, FreeForm masters, customer-installed fonts, and the Job Log to removable media or a network location.

TO SAVE THE SYSTEM CONFIGURATION

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

For more information, see "Printing EB-32 pages" on page 28.

2 In Configure > Server > Backup/Restore, click the Backup button.

For more information about accessing Configure, see "About Configure" on page 32.

Alternative procedures about using Backup/Restore from Command WorkStation are available in Command WorkStation Help.

3 In the Backup dialog box, select settings and click Next.

4 Enter a file name, select a location, and click Next.

5 Click Finish.

Restoring the system configuration

You can restore the configuration of the EB-32 to its previous state using a configuration file. For more information about a configuration file, see "To save the system configuration" on page 83.

If you could not save a configuration file, you must configure Setup. After you exit Setup and the EB-32 reboots, ask the network administrator to restore any archived settings and files. For more information, see *Configuration and Setup*.

TO RESTORE THE SYSTEM CONFIGURATION AFTER SYSTEM SOFTWARE INSTALLATION

1 In Configure > Server > Backup/Restore, click the Restore button.

For more information about accessing Configure, see "About Configure" on page 32.

Alternative procedures about using Backup/Restore from Command WorkStation are available in Command WorkStation Help.

2 In the Restore dialog box, browse to the configuration file that you created earlier and click Next.

3 Select settings and click Next.

4 Click Finish.

Fiery System Restore

The EB-32 system installer allows you to back up or restore the entire system to recover from a system crash or a hard disk failure. You can start the system installer from System Software DVD 1 to create a new system backup partition of the EB-32, load a system recovery partition to restore the EB-32 to an earlier state, or use utilities to troubleshoot and administer the EB-32.

After selecting a system language, you must select one of the following options.

- **New Installation:** Install new system software.

NOTE: The EB-32 is shipped with preinstalled system software. If you must reinstall system software, contact a service technician.

- **Restore from backup or recovery partition:** Restore an earlier backup partition, or the default EB-32 configuration. If you have not created a backup partition, this option allows only a recovery to the default configuration and "Restore from recovery partition" is displayed.

- **Back up hard disk drive(s):** Back up the hard disk to external media, such as a USB flash drive or network share location.

- **Platform Utilities:** Use the system installer for advanced procedures, such as erasing hard disks, or use Windows Task Manager to administer the EB-32.

TO BACK UP THE EB-32

1 **Select "Back up hard disk drive(s)."**

2 **Configure the backup image settings.**

- Select a backup destination from one of the following types of media: USB flash drive, external hard disk drive, local hard disk drive, or network share.

- Name the backup image folder. The folder name contains the name that you assign and a time stamp of the backup image. The default name is the server name. The installer automatically generates the time stamp.

- Enter a description of the backup image.

- Select the appropriate check boxes to include Fiery job files in the backup image or create bootable media with the backup.

- Save the backup image settings.

3 **Start the backup process.**

The installer begins creating the backup image.

TO RESTORE THE EB-32 TO AN EARLIER CONFIGURATION

1 Select "Restore from backup or recovery partition."

If you have not previously created a backup image, "Restore from recovery partition" is displayed.

2 Select the source of the backup.

Select one of the following options.

- One of the two most recently-created backup images.

- The recovery partition, which restores the default system settings from a hidden hard disk drive partition.

- Search for a backup that you have created on the EB-32.

The installer begins the recovery process.

NOTE: If you must search for backups, use the following steps.

3 Select a backup image.

The installer lists each backup image in the following categories.

- Location of the backup image: USB flash drive, external hard disk drive, network location, or local hard disk drive

- Time at which you created the backup image

- Folder location of the backup image

4 Click OK.

The system is restored.

Installing system software

System software is provided on the following media:

- DVD1: System software (Fiery)

- DVD2: Windows 7 Pro FES x64

- DVD3: Windows 7 Pro FES x64

- DVD4: User software (Drivers and Utilities)

Install system software in the following cases:

- The hard disk drive is replaced.

- The EB-32 must be updated to a more recent version of the system software.

- The language settings need to be changed.

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 Before you proceed, do the following:

- On the EB-32, remove all dongles and devices, except the keyboard and mouse.

If you do not, installation will fail.
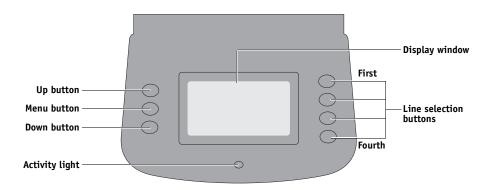
- Ask the network administrator to print the Job Log, Configuration page, and Font List, and to archive and customer-installed fonts and FreeForm masters (if possible).

2 If you are installing system software, back up the system configuration (if possible).

For more information, see "Backing up the system configuration" on page 82.

3 Insert System Software DVD 1 into the DVD drive.

NOTE: If you installed a new hard disk drive, power on the system, insert the System Software DVD, allow the system to boot from the System Software DVD, and then proceed to step 6.

4 Press the Menu button on the EB-32 control panel.

5   Select Restart Server and then select Reboot System. The EB-32 boots from the DVD.

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

This segment takes approximately 6 minutes.

6   When the Select Language screen displays, scroll to select a language and the press the corresponding line selection button on the control panel.

7   At the prompt, select New Installation.

8   When "Installation will erase all data on disk(s). Continue?" appears, select "Continue."

The installation starts immediately. Wait as messages display on the control panel describing the installation process. Do not press any buttons during this time. This segment takes approximately 5 minutes.

9   At the prompt for each DVD, insert System Software 2 DVD, and then System Software 3 DVD, for the OS installation. Wait for files to be copied to the EB-32.

Each disc ejects after files are copied.

This segment takes approximately 15 minutes.

10   At the prompt, insert the User Software DVD into the DVD drive.

User Software is copied automatically once the drive drawer is closed. The message "Installing..." displays on the control panel, followed by other messages describing the user software installation process. This segment takes approximately 45 minutes.

During this process, the following installations are performed:

•   The entire contents of the User Software DVD are copied to a shared folder on the EB-32 hard disk drive, in e:\efi\user_sw.

•   User software is installed on the EB-32.

After installation, when the EB-32 is connected to the customer's network, users can access the user software in the shared folder and install it onto client computers.

11   If a monitor, keyboard, and mouse are present:

NOTE: FACI is available as an option with this product, but is not a standard feature.

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.

12   If user documentation was previously resident on the EB-32, advise the site administrator to reinstall the documentation files from the user documentation set.

13   Advise the customer to check the System Updates feature for any required software updates or updates that may be available for the EB-32 (see "System updates" on page 90).

14   Reconnect any USB storage devices or dongles that you may have removed earlier.

15   If you were able to back up the system configuration, restore the system configuration page 83).

16 **Configure your system environment in Fiery Setup Wizard.**

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

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

- **Using the copier touch panel:** (Assumes the EB-32 is connected to the copier.) Press the Home button, the Fiery icon, and then the Fiery tab, and press Setup. Configure Setup using the Configuration page you printed earlier.

- **Using Command WorkStation:** (Assumes a monitor, keyboard, and mouse are connected to the EB-32.) 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.

18 **Reinstall any required software updates.**

- If you reinstalled the same version of system software, be sure to reinstall all software updates that were previously installed on the EB-32. For a list of previously installed updates, refer to the Configuration page that you printed earlier.

⚠ CAUTION

- 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 updates. Some or all of the updates 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 updates may be accessed from:

- From the FACI (if present), choose Start > All Programs > Fiery > System Updates, and then click Check Now. For more information, see "System updates" on page 90.

- From a client computer through Remote Desktop, choose Start > All Programs > Fiery > System Updates, and then click Check Now. For more information, see "System updates" on page 90.

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

After installation, the system prints the Configuration page.

Updating EB-32 system and user software

Using the tools **System Updates** and **Check for Product Updates** (**Software Downloads Site**), you can obtain updates to EB-32 System Software and User Software from a secure site on the Internet (referred to throughout this documentation as the Update Server).

Before updating the EB-32

Keep in the mind the following before updating the EB-32 using System Updates or Check for Product Updates:

IMPORTANT

- If you reinstall system software onto the EB-32 HDD from DVDs, all patches and updates previously downloaded and installed are deleted and must be reinstalled. You should obtain the most recent patches from the Update Server immediately after system software is reinstalled.

- The term **FACI** refers to the optional Fiery Advanced Controller Interface Kit which includes a monitor, keyboard, mouse, and enablement mechanism.

- If the EB-32 is behind a firewall and unable to access the Internet, the site administrator can configure a proxy server at the customer's organization to allow the EB-32 to receive updates (see page 91).

- While updates are being installed, you cannot print to the EB-32. Schedule the automatic updates when no one plans to print. While updates are being installed, the EB-32 may need to reboot several times.

- To view updates that have already been installed, print the Configuration page or access **Check Now** and select the History tab (see "To use Check Now" on page 91). Check Now is available when you access System Updates directly from a FACI-equipped EB-32 or a client computer using Remote Desktop (see page 94).

- The list that displays when you access Check for Product Updates (Software Downloads Site) may include:

  – Updates that are unavailable through System Updates and/or are not approved for all users.

  – Updates that may already be installed on some EB-32 print servers. To help you choose the updates to download, compare the list displayed with the EB-32 print server's Configuration Page > Updates log.

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

System updates

System Updates allows you to schedule regular inquiries to an Update Server on the Internet for available EB-32 updates. The EB-32 checks automatically for updates by contacting the Update Server periodically.

System Updates also allows users to obtain updated versions of EB-32 user software (utilities) and install them onto client computers that connect to the EB-32. The updated applications are first downloaded from the Update Server to a partition on the EB-32 HDD. Users access the EB-32 over the Internet and download the updated applications onto client computers and then manually install them.

You can also view and download updates at any time using the **Check Now** feature (requires FACI or a Remote Desktop connection; see page 94). Use Check Now to view and manually download updates that are available for installation (Patches tab) and/or view a list of updates that have already been installed (History tab).

You can also launch Check Now by clicking on an update notification in the task bar on the EB-32 monitor.

System Updates can be accessed in the following ways:

• Directly from a FACI-equipped EB-32.

• From a client computer through a Remote Desktop connection (must be enabled in Setup and on the client computer; see "To use Remote Desktop" on page 94).

• From a client computer through WebTools > Configure > Launch Configure.

• From a client computer through Command WorkStation > Server > Setup > Server > System Update.

For a detailed procedure, see "To schedule System Updates" on page 91.

Make sure to review "Before updating the EB-32" on page 89 before scheduling System Updates.

TO SCHEDULE SYSTEM UPDATES

1 **Do one of the following:**

- From Configure, click Server > System Update and select Enable System Updates (see "About Configure" on page 32).

- From the Fiery Advanced Controller Interface (FACI), click Start > All Programs > Fiery > System Updates.

- Log on to the EB-32 with Remote Desktop (see "Remote Desktop" on page 94) and click Start > All Programs > Fiery > System Updates.

2 **Specify how frequently the EB-32 contacts the update server.**

3 **If available, select any additional options to determine how updates are handled.**

4 **If you use a proxy server to connect through a firewall to the Update Server, click Proxy Settings. In the Proxy Settings dialog box, select Enable Proxy, enter the following information, and then click Save.**

- Address: proxy server IP address

- Port: port used by the proxy server

- User Name: user name for accessing the proxy server

- Password: password for accessing the proxy server

5 **Do one of the following:**

- From Configure, click Apply.

- From the FACI, click OK.

- If you logged on to the EB-32 with Remote Desktop, click OK.

TO USE CHECK NOW

1 **From the Fiery Advanced Controller Interface (FACI), click Start > All Programs > Fiery > System Updates.**

2 **In the System Updates Preferences dialog box, click the Check Now button at the bottom and do any of the following:**

- To view a description of an update, select it in the list.

- To install the update, click Install.

- To view updates that have already been installed, click the History tab.

- To close the window without installing an update, click the X in the upper-right corner.

Check for Product Updates (Software Downloads Site)

The Check for Product Updates URL (also known as the Software Downloads Site) allows you to access the Update Server to view and manually download all available updates for EB-32 System and User Software. You can access Check for Product Updates by copying and pasting a unique URL into a web browser from a client computer. (For details, see page 92.)

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

- Updates that are unavailable through System Updates and/or are not approved for all users.

- Updates that may already be installed on some EB-32 print servers. To help you choose the updates to download, compare the list displayed with the EB-32 print server's Configuration Page > Updates log.

Check for Product Updates is especially useful if your EB-32 cannot access the Internet, is behind a firewall, or is otherwise unable or not configured to seek and accept automatic updates from the Update Server (for instance, if you do not want—or the EB-32 is unable— to take advantage of the auto-download/auto-installation/auto-notification features available through System Updates).

For a detailed procedure, see "To install updates using Check For Product Updates" on page 92.

Make sure to review "Before updating the EB-32" on page 89 before using Check for Product Updates.

TO INSTALL UPDATES USING CHECK FOR PRODUCT UPDATES

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

https://liveupdate.efi.com/webupdater/
default.aspx?sid=da2e02f99a8db783e2526dfa1c3ac811EF520741.PPD

For Japanese products use the following URL instead.

https://liveupdate.efi.com/webupdater/
default.aspx?sid=e30122a2499f479e1dcc5f38204e3c3bEF722533.PPD

A window appears, listing available updates.

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

- Updates that are unavailable through System Updates and/or are not approved for all users.

- Updates that may already be installed on some EB-32 print servers. To help you choose which updates to download, compare the list displayed with the EB-32 print server's Configuration Page > Updates log.

FIGURE 33: Software Download Site example (page varies by product)

2. **For each update that you want to download, click the file name under Download and then select Save to download the update file to a location on the client computer.**

3. **When the updates files have been downloaded, browse to the location of the update file on the client computer and handle it according to the file type, circumstances, and site conditions.**

Remote Desktop

IMPORTANT

Since the EB-32 is Windows-based, you can use Remote Desktop to access the EB-32 from a remote computer.

Remote Desktop Connection is a Microsoft application that allows you to access one Windows computer from another. To use EB-32 with Remote Desktop, you must enable Remote Desktop in Setup and on the client computer.

TO USE REMOTE DESKTOP

1 **On the copier touch panel, in Setup, enable Remote Desktop.**

2 **On a client computer, in Configure, click Network > Protocol > TCP/IP > Security. In the list of available ports, select port 3389 (Remote Desktop).**

3 **On the remote computer, click the Windows Start button and in All Programs > Accessories, click Remote Desktop.**

4 **Type the EB-32 IP address or DNS name and click Connect.**

5 **If prompted, type the Administrator user name and password.**

Enter the Windows login user name. The default user name is "Admin".

TROUBLESHOOTING

This chapter identifies the source of common problems that may occur with the EB-32 and suggests ways of correcting the problems.

Troubleshooting process

Problems with the EB-32 configuration may occur in one of three areas:

- Inside the EB-32

- In the interface between the EB-32 and the copier

- In the interface between the EB-32 and the workstations or computers to which it is connected

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

⚠ CAUTION

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

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

Preliminary on-site checkout

Most problems with the EB-32 are caused by loose board or cable connections. This section describes the quick checks you can do to locate and fix obvious problems. It describes how to eliminate any problems with external connections to the back of the EB-32, and then addresses checking internal board and cable connections. Check external and internal connections before replacing any components.

NOTE: Verify that the network is functioning, no unauthorized software or hardware is installed on the EB-32, and no problems have occurred with a particular print job or application. The on-site administrator can help you verify these issues.

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

This section includes the following:

- "Checking external connections" on page 96

  Describes the quick checks you can do to make sure that the problem is not caused by a loose connection at the back of the EB-32.

- "Checking internal components" on page 97

  Describes the quick checks you can do to make sure that the problem is not caused by a loose board or cable connection inside the EB-32.

- "Inspecting the system" on page 98

  Provides a more comprehensive checklist for checking the EB-32 internally and externally. If your initial checks fail, complete this checklist before concluding that you need to replace a cable or component.

To troubleshoot problems that present specific symptoms, see "Table 3: EB-32 error messages and conditions" on page 105. Locate symptoms listed in the table to help you determine possible causes and steps to remedy them.

Checking external connections

Before removing the side and front panels of the EB-32 to check internal components, eliminate the most obvious sources of problems. Make sure that:

- All interface cables to the system are plugged into the proper connectors (see Figure 7 on page 39).

- The power cable is plugged into the wall power outlet.

- The LED on the network port is blinking to indicate network activity.

⚠ CAUTION

NOTE: The copier interface cable included with the EB-32 is a *crossover* Ethernet cable that connects to the *lower* (crossover) Ethernet port on the EB-32 connector panel. The network cable at the customer site is a *straight-through* Ethernet cable that connects to the *upper* (straight-through) Ethernet port on the EB-32 connector panel. The cables look similar, but are not interchangeable. Make sure that you connect the cables to the correct ports (see Figure 7 on page 39).

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

Checking internal components

To check the internal components, you must remove the side and front panels of the EB-32.

WARNING

Before you remove the EB-32 panels, be aware of the safety precautions that you should take when handling the EB-32. Use ESD precautions when handling printed circuit boards and electronic components. To review the safety precautions, see page 11.

See the disassembly procedures on page 44 and the reassembly procedures on page 79.

TO CHECK INTERNAL COMPONENTS

1 Shut down and open the EB-32 (see pages 44).

CAUTION

2 Before you touch any components inside the EB-32, attach a grounding strap to your wrist and discharge any static electricity on your body by touching a metal part of the EB-32.

3 Inspect the inside of the EB-32.

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

- Make sure that the power leads are attached to the connector panel power switch (see page 43).

- Make sure that the DVD and hard disk drive data cables are connected to the correct SATA connectors on the motherboard (see Figure 10 on page 42):

  – DVD drive power/data combination cable to motherboard connector

  – Hard disk drive data cable to motherboard connector

- Look for obviously loose boards and reseat each board securely in its connector on the motherboard.

- Look for obviously loose cables and reseat each cable connector firmly.

- Make sure that each connector is properly aligned with its mating connector. If the pins are offset from each other, the affected board will not function properly.

4 Reassemble the EB-32 and verify its functionality (see page 79).

Inspecting the system

⚠ CAUTION

If your initial checks of the cable and board connections do not fix the problem, you may need to inspect the system on a component-by-component basis, as described in "Table 1: Verifying the system." A comprehensive inspection allows you to verify that each hardware component is properly installed and configured, and helps you avoid replacing expensive components unnecessarily.

If the system you are servicing does not meet a condition listed in Table 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 "Table 3: EB-32 error messages and conditions" on page 105 and perform the suggested action(s) for the condition.

TABLE 1: Verifying the system

Conditions to verify	Part and additional page references
When problem occurs, verify that: • Power cable is connected properly into the power outlet. • Chassis fan is operating. • Network link activity LED on network port is blinking. • All external cables required are present, in correct connectors, and well-seated. • Cables, cable connectors, and mating connectors appear undamaged.	External ports and cable connections, page 96
If problem occurs at power up or reboot, verify that: • Activity light on the control panel illuminates. • Display window lights up. • The system does not hang, nor do error messages occur before the systems reaches Idle. • DVD drive is present and no disk is in the drive. • DVD LED blinks briefly. • After the system reaches Idle, the control panel buttons function.	Control panel, page 23

• All replaceable parts are:
  – Present
  – Properly aligned
  – Installed securely
  – Installed on the appropriate site
  – The correct part for the system
  – Properly configured, if configurable (such as hard disk drive jumper)
  – Appear undamaged
• Chassis and contents have not been tampered with.
• Chassis does not contain any foreign objects.
	Chassis

TABLE 1: Verifying the system

Conditions to verify	Part and additional page references
• Motherboard, including components and traces, appears undamaged, and no foreign objects are evident.	Motherboard, page 52
• CPU is present, well-seated, and appears undamaged.	
• CPU cooling assembly is well-aligned and firmly attached.	
• Each fan required (including fan cable) is well-positioned (not upside down), powered by the correct motherboard connector, and appears undamaged.	
• Boards required on the motherboard are present, well-seated, and in the correct slots.	
• Each DIMM is well-seated.	
• Battery is installed.	
• BIOS is well seated.	
• Each DIMM is well-seated.	DIMM(s) for EB-32, page 64
• DIMM edge connectors are not oxidized.	
Copier interface board is:	Copier interface board, page 49
• Present	
• Well-seated and installed in the correct slot5	
• Appears undamaged	
User Interface Board (UIB) is:	User Interface Board page 50
• Present	
• Correctly attached to its bracket	
• Appears undamaged	
UIB cable is:	
• Present	
• Firmly connected in the correct connector on the motherboard and the back of the UIB	
• Appears undamaged	
CPU is:	CPU with cooling assembly, page 65
• Present	
• Well-seated	
• Appears undamaged	
The CPU cooling assembly is:	
• Well-aligned	
• Firmly attached	
Fan is:	Chassis fan, page 69
• Properly positioned (not backwards)	
• Installed in the correct connector	
Fan, fan cable, cable connector, and mating connector appear undamaged	

TABLE 1: Verifying the system

Conditions to verify	Part and additional page references
The power supply required is:	Power supply,
• Present	
• Correctly installed	
• Appears undamaged	
Cable connectors are:	
• Firmly connected	
• Appear undamaged	
• Installed in the correct devices	
The hard disk drive required is:	Hard disk drive,
• Present	
• Correctly installed	
• Appears undamaged	
• Jumpered as the master (primary) according to label	
Hard disk drive data cable is:	
• Present	
• Firmly connected to the correct motherboard connector (see)	
• Appears undamaged	
The drive required is:	DVD drive,
• Present	
• Correctly installed	
• Appears undamaged	
• Jumpered as the master (secondary) according to label	
• Activity LED lights on power up	
DVD drive power/data combination cable:	
• Data segment is firmly connected to the correct motherboard connector (see)	
• Power segment is firmly connected to an available 4-pin power supply wire	
• Appears undamaged	

TABLE 1: Verifying the system

Conditions to verify	Part and additional page references
Each cable required is: • Present • The correct type • Installed in the correct connector • Well-seated • Appears undamaged (including connectors)	UIB cable, Figure 10 on page 42 Hard disk drive data cable, Figure 10 on page 42 DVD drive power and data combination cable, Figure 10 on page 42 Network cable (straight-through Ethernet cable), Figure 7 on page 39 Copier interface cable (crossover Ethernet cable), Figure 7 on page 39 Power cable(s), Figure 11 on page 43

TABLE 1: Verifying the system

Conditions to verify	Part and additional page references
If included in the system, the required mouse, monitor, and keyboard are present and appear undamaged. The mouse and keyboard are connected to the correct ports on the EB-32 connector panel.	For the following items, see the document that accompanies the optional components, if applicable.
The cables required are:	• Mouse (if applicable)
• Present	
• Installed in the correct connector	
• Well-seated	• Monitor (if applicable)
• Appear undamaged (including connectors)	
	• Keyboard (if applicable)
	• Monitor power cable (not pictured)

Normal startup sequence

When you turn on or reboot the EB-32, the system runs the following startup routine on the EB-32 control panel. The sequence takes approximately two minutes to complete.

The following table lists the normal startup sequence as it appears on the EB-32 Control Panel and on the monitor.

TABLE 2: Boot sequence at power on

Process	Control Panel	FACI or Monitor
1. EB-32 is powered on.	No backlight	Black screen
2. Code in the motherboard BIOS tests, initializes, and configures areas on the motherboard.	Lights and then displays efi|fiery logo	Phoenix SecureCore Server screen
		Serial ATA AHCI BIOS screen
		Intel Matrix Storage Manager screen
3. Windows operating system starts up.	efi|fiery logo	Windows logo screen
		Windows Log On Windows desktop appears after you log on and type the Administrator password.
4. Server software on the hard disk drives completes startup process.	efi|fiery logo	FieryBar appears with the message Starting... Please wait
	fiery logo	FieryBar indicates Idle

Error messages and conditions

To address specific error messages or conditions, see "Table 3: EB-32 error messages and conditions" on page 105. 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.

⚠ CAUTION

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

If troubleshooting strategies (checking cables and connections, reinstalling system software, and so forth) do not solve the problem and you suspect either the hard disk drive or the 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 EB-32 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 in the EB-32.

TABLE 3: EB-32 error messages and conditions

Symptom	Possible cause	Suggested action
Beep codes during startup		
1 beep	No error—the EB-32 is starting up normally.	**None**
6 long beeps	Missing, unmatched, incorrect, or faulty DIMM(s)	**Check for missing, unmatched, incorrect or faulty DIMM(s) and reseat the DIMM(s) to remove any oxidation on the connector (see page 64).**
Startup		
EB-32 does not start and the control panel is black. **Activity light status:** Off. **NOTE:** If the Activity light is solid yellow while the control panel is black, the EB-32 is in Sleep Mode.	Possibly one of the following: • Power cable is not plugged into the power connector on the EB-32 connector panel or into the wall power outlet. • The connector panel power switch is not in the ON position and/or the internal black and white power leads from the power supply are not connected to the correct prongs on the connector panel power switch. • UIB cable is not connected to the motherboard, the user interface board, or both. • Faulty power cable. • Faulty power supply (power supply may not be supplying power to the motherboard). • The CMOS jumper is not in the default position. • Faulty motherboard (motherboard power plane may not be supplying power to components).	**1 Recheck all cables and connections.** **2 Make sure the power switch on the connector panel is in the ON position (see page 34).** **3 Listen for the power supply fan and feel for air at the back of the unit where the power supply is located.** If air is not coming from the power supply fan, isolate possible faulty power cable as follows: • Power on using a different power cable. • Install a new or "known good" power supply. **4 Check the chassis and feel for air coming out of the back of the system.** If air is coming out of the power supply fan vent but is not coming out of the connector panel fan vent, the motherboard may be faulty. You may need to replace the motherboard (see page 52). **5 Review the jumper section on page 54 and ensure that the jumper is in the default position.**

Symptom	Possible cause	Suggested action
Startup (cont.)		
EB-32 is getting power, but the control panel is black. **Activity light status:** Off.	• UIB cable is not connected to the motherboard, the User Interface Board, or both. • Faulty UIB cable • Faulty User Interface Board	1 **Recheck all cables and connections.** 2 **Use a different UIB cable.** 3 **If the problem persists and you have verified that the power supply and the motherboard are functioning properly as described above, replace the User Interface Board (see page 50).**
Following installation of a new User Interface Board, the control panel remains blank, yet backlit, for more than five minutes. **Activity light status:** N/A.	• System software requires an additional reboot to synchronize with the firmware on the new User Interface Board.	**Wait 5 minutes, power off using the power button, wait 10 seconds, and then press the power button to power on again.**
NOT following installation of a new User Interface Board, system stops responding at this screen: efi | fiery **Activity light status:** Off.	Possibly one of the following: • Faulty BIOS • Faulty motherboard	1 **Recheck all cables and connections.** 2 **Reboot the EB-32.** 3 **If the problem persists, replace the motherboard (see page 58).**
System stops responding at this screen: efi | fiery STARTING UP... **Activity light status:** Blinking green.	Problem with the Fiery application.	1 **Recheck all cables and connections.** 2 **Reboot the EB-32.** 3 **If the problem persists, reinstall system software (see page 80).**

Symptom	Possible cause	Suggested action
Startup (cont.)		
Control panel screen and Activity light appear as follows: **Activity light status:** Off, then solid red.	Possibly one of the following: • Wrong, missing, incorrectly connected, or faulty DIMM(s) • Faulty motherboard	1 Recheck all cables and connections. 2 Reboot the EB-32. 3 If the problem persists, verify that the DIMM(s) are installed as described in the DIMM section on **page 64**. Check for incorrect type, wrong capacity, missing, or faulty DIMM(s). Reseat the DIMM(s) to remove any oxidation on the connector (see **page 64**). 4 If the problem persists, you may need to replace the motherboard (see **page 58**).
Control panel screen and Activity light appear as follows: **Activity light status:** Blinking amber, then solid red.	Possibly one of the following: • Faulty disk in the DVD drive • Faulty motherboard	1 Reboot the EB-32. 2 If the problem occurs when you are trying to install software from bootable media (DVD or CD), the media may be damaged. Try another DVD or CD. 3 If the problem persists, replace the motherboard. (see **page 58**).
Control panel screen and Activity light appear as follows: **Activity light status:** Blinking amber.	Possibly one of the following: • Faulty or incorrectly connected hard disk drive data cable • Hard disk drive power cable disconnected • Faulty hard disk drive • Faulty motherboard	1 Recheck all cables and connections. Make sure that the hard disk drive data cable is connected to the correct SATA connector on the motherboard (see **Figure 10 on page 42**). 2 Reboot the EB-32. 3 If the problem persists, replace the hard disk drive SATA cable. 4 If the problem persists, replace the hard disk drive (see **page 73**). If replacing the hard disk drive does not correct the problem, reinstall the old hard disk drive in the system. 5 If the problem persists, replace the motherboard. (see **page 58**).

Symptom	Possible cause	Suggested action
Startup (cont.)		
Control panel screen and Activity light appear as follows: **Activity light status:** Blinking green, then solid red.	Problem with the Windows operating system	1 **Recheck all cables and connections.** 2 **Reboot the EB-32.** 3 **If the problem persists, reinstall system software (see page 80).**
Activity light status progresses from solid green to solid red. **Activity light status:** Solid green, then solid red.	Possibly one of the following: • Problem with system software • Print job is corrupt or too large • Faulty UIB cable • CPU overheated • Faulty motherboard	1 **If you suspect that the problem may be caused by a print job, try printing a different job.** 2 **Recheck all cables and connections.** 3 **Reboot the EB-32 and check whether the CPU cooling assembly fan is operating. If the fan is properly connected to the motherboard but does not operate, replace the cooling assembly.** 4 **If the problem persists, reinstall system software (see page 80).** 5 **If the problem persists, try connecting another UIB cable (see Figure 10 on page 42).** 6 **If the problem persists, replace the motherboard (see page 58).**
The system takes a long time to start up.	Possibly one of the following: • The system may be taking longer to boot up in order to finalize installation of a patch or update. • The hard disk drive may have fallen to the bottom of the boot order in the BIOS. This can happen if the system is powered on when the hard disk drive is missing, faulty, or not connected. • System software may be corrupted.	1 **If the slow start up happens following installation of a software patch or update, shut down, and then restart to see if the problem persists.** 2 **If the problem persists, make sure that the hard disk drive is present and properly connected. When you reboot the EB-32, the hard disk drive will be moved to the top of the boot order in the BIOS.** 3 **If the problem persists, reinstall system software (see page 80).**

Symptom	Possible cause	Suggested action

	Control panel messages	
Check copier power & cable connections appears on the EB-32 control panel (and the optional monitor, if present).	Possibly one of the following: • Problem with the connection between the EB-32 and the copier. • The copier is not powered on. • The copier is on but is not ready to print.	1 **Make sure that the copier is powered on and ready to print.** 2 **Make sure that the copier interface cable is the correct type and that the cable is correctly connected to both the copier and to the lower Ethernet port on the EB-32.** 3 **If the problem persists:** • Recycle power on the copier. • Recycle power on the EB-32 by shutting down the system, waiting 10 seconds, and then powering the EB-32 back on (see page 33). 4 **If the problem persists, replace the copier interface cable (see page 42).** 5 **If the problem persists, replace the copier interface board (see page 49).** 6 **If the problem persists, you may need to service the copier.**

	Control panel functions	
EB-32 is getting power, the Control panel is not black, but the buttons on the control panel do not function.	Possibly one of the following: • Problem with the Fiery application • Faulty User Interface Board	1 **Recheck all cables and connections.** 2 **Reboot the EB-32.** 3 **If the problem persists, reinstall the system software (see page 80).** 4 **If the problem persists, replace the User Interface Board (see page 50).**

	DVD drive	
DVD drive is not responding, cannot be located by software, the disk will not eject, or the LED on the drive tray remains lit.	Possibly one of the following: • A disk is stuck in the DVD drive. • Cable connections to the DVD drive are loose or power/data combo cable is faulty. • Faulty DVD drive • Faulty motherboard	1 **Press the eject button to open the drive tray.** 2 **Insert a paper clip into the small hole near the eject button to force the drive tray to open.** 3 **If the problem persists, check the cable connections to the DVD drive (see Figure 10 on page 42).** 4 **Check DVD drive data cable connection to the motherboard.** 5 **If the problem persists, you may need to replace the DVD drive (see page 77).** 6 **If the problem persists, you may need to replace the motherboard (see page 58).**

Symptom	Possible cause	Suggested action
System performance		

Symptom	Possible cause	Suggested action
System performs slowly and/or hangs periodically.	Possibly one of the following: • Board or cable connections are loose or faulty. • Corrupted system software • Missing or faulty DIMM(s) • Faulty or overheated CPU • Faulty motherboard	1 **Recheck all cables and connections.** 2 **Make sure that the CPU is firmly seated in its socket and that the fan cable is connected to the motherboard.** 3 **If the problem persists, reinstall the system software (see page 80).** 4 **Check for missing or faulty DIMM and reseat the DIMM to remove any oxidation on the connector (see page 64).** 5 **If the problem persists, you may need to replace the motherboard (see page 58).**
Clock is slow.	Possibly one of the following: • Missing or dead battery on the motherboard	**If the problem persists, replace the battery on the motherboard and then update the date and time in the Windows Control Panel (if a monitor is connected), or in Command WorkStation or WebTools.**
The EB-32 hangs during system software installation.	Possibly one of the following: • The system time and date need to be configured in the EB-32 BIOS. (If the battery was removed from the EB-32 motherboard during service and the time and date were not configured in Setup afterward, the EB-32 will hang during system software installation.) • One of the System Software DVDs is corrupted. • The DVD drive is faulty. • The hard disk drive is faulty.	1 **Set the time and date in the BIOS:** • Power off the EB-32 and remove any media from the DVD drive. • If not already connected, connect a keyboard and a monitor to the EB-32. • Power on the EB-32 and immediately press F2 repeatedly to launch the BIOS setup utility. • Configure the time and date. (To navigate, use the tab key and the -/+ keys). • Save changes and exit (F10). • When the EB-32 reaches Idle, power off and then begin a full software installation again starting with System Software DVD 1 (see page 80). 2 **If the problem persists, obtain another set of System Software DVDs and begin a full software installation again starting with the System Software DVD 1.** 3 **If the problem persists, you may need to replace the DVD drive (see page 77).** If replacing the DVD drive does not correct the problem, reinstall the old DVD drive in the system. 4 **If the problem persists, replace the hard disk drive (see page 73).** If replacing the hard disk drive does not correct the problem, reinstall the old hard disk drive in the system.

Symptom	Possible cause	Suggested action
	Network	

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

- If the EB-32 does not appear in the list of printers on the network, there may be another device on the network with the same Ethernet hardware address.

- Conflicting network settings may have been configured in Setup and on the customer's workstation.

- Printing problems may be caused by inappropriate Setup options.

- Application-specific printing errors may be caused by missing or incorrectly placed printer description files.

- System software may be corrupted.

For additional information, see *Configuration and Setup* from the user documentation set.

Symptom	Possible cause	Suggested action
Unable to connect to the network, or the green LED on the network port is not lit.	Possibly one of the following: • Network cable is connected to the wrong Ethernet port. • No cable/wrong type of cable is connected to the network port. • Network cable or connection is faulty. • Network is faulty. • System software is corrupted. • Network interface on the EB-32 motherboard is faulty.	1 **Make sure that the correct cables are connected to the correct ports on the EB-32 connector panel. The upper Ethernet port is for the network straight-through cable; the lower Ethernet port is for the scan cable (crossover Ethernet).** 2 **If the green LED on the (upper) Ethernet network port is not lit, check the cable connection of the upper Ethernet network port and the network. Make sure that the cable is a straight-through cable, not a crossover cable (see page 96).** 3 **If the network cable is a straight-through cable and not a crossover cable and is properly connected to the (upper) Ethernet network port, connect a new network cable to the (upper) Ethernet network port.** 4 **If the problem persists, ask the network administrator to check Network Setup.** 5 **If the problem persists, make sure that the network administrator has checked other devices on the network.** If other devices are not functioning, there could be a problem with the network. 6 **If the problem persists, reinstall the system software (see page 80).** Corrupt system software may cause the system to hang. 7 **If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 58).**

Symptom	Possible cause	Suggested action
	Network (cont.)	
System starts up slowly then displays one or more DHCP error messages on the control panel.	Possibly one of the following: • Network cable is connected to the wrong Ethernet port. • No cable/wrong type of cable is connected to the network port. • Network cable or connection is faulty. • Network is faulty. • System searches for a nonexistent DHCP server because DHCP is enabled by default on the EB-32, but the customer's network is not using DHCP. • Ethernet interface on the EB-32 motherboard is faulty. • System software is corrupted.	1 **Make sure that the correct cables are connected to the correct ports on the EB-32 connector panel. The upper Ethernet port is for the network straight-through cable; the lower Ethernet port is for the scan cable (crossover Ethernet).** 2 **If the green LED on the (upper) Ethernet network port is not lit, check the cable connection of the upper Ethernet network port and the network. Make sure that the cable is a straight-through cable, not a crossover cable (see page 96).** 3 **If the network cable is a straight-through cable and not a crossover cable and is properly connected to the (upper) Ethernet network port, connect a new network cable to the (upper) Ethernet network port.** 4 **If the problem persists, ask the network administrator to check Network Setup.** 5 **If the problem persists, ask the network administrator to check other devices on the network.** If other devices are not functioning, the problem may be with the network. 6 **If the problem persists, reinstall system software (see page 80).** Corrupt system software may cause the system to hang. 7 **If the rest of the network is functioning properly and the problem persists, replace the motherboard (see page 58).**

Symptom	Possible cause	Suggested action

Printing		

NOTE: Intermittent print quality problems are difficult to trace. Before you try to troubleshoot print quality problems, print a Test Page to make sure that the copier does not need servicing or adjusting.

Symptom	Possible cause	Suggested action
Test Page fails to print.	The copier is not ready to print.	**Make sure that the copier is turned on and ready to print.**
	A problem exists with the connection between the EB-32 and the copier.	1 **Recheck that the copier interface cable is present and properly connected to the EB-32 and the copier (see page 39).** 2 **If the problem persists:** • Recycle power on the copier. • Recycle power on the EB-32 by shutting down through the Functions menu, waiting 10 seconds, and then powering the EB-32 back on (see page 35). 3 **If the problem persists, replace the copier interface cable (see page 42).** 4 **If the problem persists, replace the copier interface board (see page 49).** 5 **If the problem persists, you may need to service the copier.**
EB-32 appears in the list of printers on the customer's workstation, but certain jobs do not print.	A PostScript error	**Make sure that Print to PostScript Error in Setup is set to Yes. Check for error messages on the EB-32 output.**
	An application problem	1 **Print a job from a different application to determine if the problem is associated with a particular application.** 2 **Make sure that the connection between the EB-32 and the workstation is working by downloading a Test Page from the workstation, or by printing a simple file such as a text file.** 3 **Resend the problem file.**

Symptom	Possible cause	Suggested action
	Printing (cont.)	
A print job stalls or stops after one or a few pages.	Possibly one of the following: • A PostScript or application error. • System software is corrupted.	1 **Cancel the EB-32 print job.** 2 **If this fails to clear the problem, reboot the EB-32 (see page 33).** 3 **If the problem persists, select Clear Server from the control panel or Command WorkStation.** 4 **Set Print Cover Page to Yes and resend the problem job. The Cover Page will indicate "PS Error."** For more information about the PostScript error, double-click the problem job in the Command WorkStation window. 5 **If the problem persists, reinstall system software (see page 80).** Corrupt system software may cause the system to hang at this screen.
	Incorrect or faulty DIMM or faulty DIMM connection	1 **Reseat the DIMM(s) to remove any oxidation on the connectors (see page 64).** 2 **Verify memory amount on the Configuration page.** 3 **If the problem persists after replacing the DIMM, replace the motherboard (see page 58).**
Quality is inconsistent.	A copier problem	**Test the copier and if necessary service it (see the documentation that accompanies the copier).**
Print quality is poor.	Possibly one of the following: • A file or application problem. • A missing or outdated printer description file.	1 **Print the EB-32 Test Page.** 2 **If the quality of the EB-32 Test Page is good, the error condition may be a file or application problem.** 3 **Make sure that the appropriate printer files are installed. (For more information, see *Printing*.)**

If the user can print the EB-32 Test Page but cannot print a job from a computer on the network, make sure that the network administrator has:

• Checked all components of the network, including cables, connectors, terminators, network adapter boards, and network drivers.

• Activated the network and used it to communicate with other printers.

• Confirmed that the applicable network settings in Setup (such as AppleTalk zone, IP address, Subnet mask, and Gateway address) match the settings used in the network.

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

SPECIFICATIONS

This section provides an overview of EB-32 features, specifications, and safety certifications.

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

Hardware features

- 2.9 GHz Intel Pentium dual core G850 CPU

- Memory—4GB (2 x 2GB DIMMs)

- 500GB hard disk drive

- An Ethernet connector for 10BaseT/100BaseTX/1000BaseT Mbs connectivity over twisted pair cable (upper port)

- Built-in DVD-RW drive

Physical specifications

- Operating environment:
  - Temperature: +5°C to +40°C
  - Relative Humidity: 10%-85% (non-condensing)

- Power supply rating: 100-240V, 50-60Hz, 3A

- Rated Power Consumption: 180W

- Dimensions (height x depth x width):

  32.0 cm (12.5 in.) x 35.5 cm (14.0 in.) x 14.0 cm (5.5 in.)

- Weight: 6.8 kg (15.0 lbs.)

Networking and connectivity

- Supports AppleTalk and TCP/IP protocols simultaneously (for font download only).

- Ethernet connector (upper port) that supports 10BaseT/100BaseTX/1000BaseT twisted pair network connectivity.

- Ethernet connector (lower port) that provides the print and scan interface between the EB-32 and the copier.

User software

For optimal performance, maintain current versions of the user software on every network computer used to print to the EB-32. User software may be installed directly on client computers, or over a network via the Fiery User Software Installer that resides on the EB-32.

Safety and emissions compliance

The EB-32 has been certified to meet or surpass the following government standards.

Safety approvals

- UL 60950-1:2007 (TUV NRTL)

- CAN/CSA-22.2 #60950-1-07

- EN 60950-1:2006+A11+A1+A12

- CB scheme IEC 60950-1Amd1 (2nd edition)

- CCC

EMI/EMC approvals

- VCCI Class A

- FCC Part 15 Verification (NA) Class A

- ICES-003 (NA) Class A

- EN55022:2010 (EU) Class A

- EN55024:2010 (EU)

- EN 60950-1:2006+A11+A1+A12

- EN61000-3-2:2006 plus A1:2009 and A2:2009 (EU) Class A

- EN61000-3-3: 2008 (EU)

- EN62311:2008 (EU)

- C-Tick mark (Australia and New Zealand) Class A

- CCC Class A

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