Color Controller: E-22B
(Machine Code: D729)

Field Service Manual

23 May, 2014

Revision History

Version	Revision Date	Revision History
V1.00	2013.06.28	-
V2.00	2014.05.23	See page 1 "Revision History (V2.00)" .

Revision History (V2.00)

Chapter	Items
1. Installation	E-22B: Startup and initial setup procedure

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

⚠️ WARNING

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠️ CAUTION

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

⚠️ WARNING

- Connect the power cord directly into a wall outlet and never use an extension cord.

- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.

- To avoid hazardous electric shock, do not remove any covers or screws other than those specified in this manual.

- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:

- 1) You spill something into the machine.

- 2) You suspect that your machine needs service or repair.

- 3) The external housing of your machine has been damaged.

⚠️ CAUTION

- Protect the machine from dampness or wet weather, such as rain and snow.

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.

- When you disconnect the plug from the wall outlet, always pull the plug (not the cable).

- Risk of explosion if battery is replaced by an incorrect type.

- Dispose of used batteries according to the instructions.

⚠️ ACHTUNG (Deutch)

- Die batterie darf nur durch eine des gleichen Typs ersetzt warden, da anderenfalls Explosionsgefahr besteht.

- Sie die debrauchten Batterien entsprechend den gegebenen Anweisungen.

Power Cord Precautions

To reduce the risk of electric shock or damage to the equipment:

- User the appropriate power cord which was set up by your manufacturer's authorized service provider.

- Do not place objects on AC power cords or cables. Arrange them so that no one may accidentally step on or trip over them.

- Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.

- Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

Power Supply

The socket-outlet shall be installed near the product and shall be easily accessible.

Netzanschluss (Deutch)

Die Wandsteckdose sollte in der Nähe Geräts installiert und leicht zugänglich sein.

⚠ WARNING

- Use of controls, adjustment or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

⚠ IMPORTANT SAFETY NOTICES

PREVENTION OF PHYSICAL INJURY

1). Before disassembling or assembling parts of the controller, make sure that the

AC power cord is unplugged.

2). The wall outlet should be near the controller and easily accessible.

3). Note that some components of the controller are supplied with electrical voltage even if the main power switch is turned off.

4). If any operation check has to be made with exterior covers off while the main switch is turned on, keep hands away from electrified or mechanically driven components.

OBSERVANCE OF ELECTRICAL SAFETY STANDARDS

1). The controller must be installed and maintained by a customer service representative who has completed the training course on the controller.

2). The danger of explosion exists if the battery on the motherboard is incorrectly replaced. Replace the battery only with the equivalent type recommended by the manufacturer. Discard the used motherboard battery in accordance with the manufacturer's instructions and local regulations.

SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

1). Dispose of replaced parts in accordance with local regulations.

2). When keeping used lithium batteries in order to dispose of them later, do not put more than 100 batteries per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.

Symbols:

Symbol	What it means
	Refer to section number/document
	Screw
	Connector
	Clamp

Trademarks:

Windows ® is a registered trademark of Microsoft Corporation in the United States and /or other countries.

Fiery ® is a registered trademark of Electronics For Imaging, Incorporated.

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1. Installation

Installation Requirements

Environment

1. Temperature Range:

   5°C to 40°C (41°F to 104°F)

2. Humidity Range:

   10% to 85% RH

3. Ambient Illumination:

   Less than 1500 lux (do not expose to direct sunlight or strong light)

4. Ambient Dust:
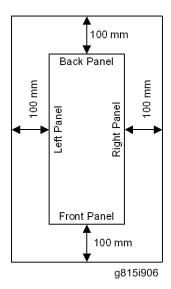
   Less than 0.10 mg/m^3

5. If the place of installation is air-conditioned or heated, do not place the machine where it will be:

   1) Subjected to sudden temperature changes

   2) Directly exposed to cool air from an air-conditioner

   3) Directly exposed to heat from a heater

6. Do not place the machine where it will be exposed to corrosive gases.

7. Do not install the machine at any location over 3,048 m (10,000 feet) above sea level.

8. Place the controller on a strong and level base.

9. Do not place the machine where it may be subjected to strong vibrations.

10. Do not connect the machine to a power source shared with another electrical appliance.

11. The machine can generate an electromagnetic field, which could interfere with radio or television reception.
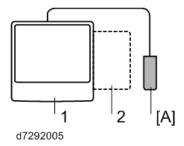
Machine Level

1. Front to back: Within ±5° (0.2") away from level

2. Right to left: Within ±5° (0.2") away from level

Minimum Space Requirements

g815i906

Place the machine near the power source, providing clearance as shown.

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1. Copier

2. Large Capacity Tray

You may place the machine [A] on the right side of the large capacity tray or copier as shown (top view) in the illustration.

Power Requirements

⚠CAUTION
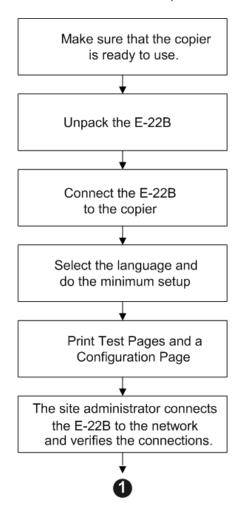
- Insert firmly the plug in the outlet.

- Avoid using an outlet extension plug or cord.

- Ground the machine. Avoid using a 3-pronged adapter in a 2-hole ungrounded outlet.

- Use the supplied AC power cord with this product.
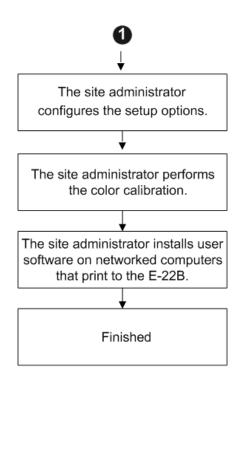
1. Input voltage level: 100 - 240V, 50 - 60Hz; 3A

2. Do not put anything on the AC power cord.

Installation Flow Chart

Recommended installation steps are as follows:


```
Make sure that the copier
is ready to use.
        ↓
Unpack the E-22B
        ↓
Connect the E-22B
to the copier
        ↓
Select the language and
do the minimum setup
        ↓
Print Test Pages and a
Configuration Page
        ↓
The site administrator connects
the E-22B to the network
and verifies the connections.
        ↓
        ❶
```

```
        ❶
        ↓
The site administrator
configures the setup options.
        ↓
The site administrator performs
the color calibration.
        ↓
The site administrator installs user
software on networked computers
that print to the E-22B.
        ↓
Finished
```

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Machine Installation

Setting Customer Expectations

Before installation, the customer should be informed of the following:
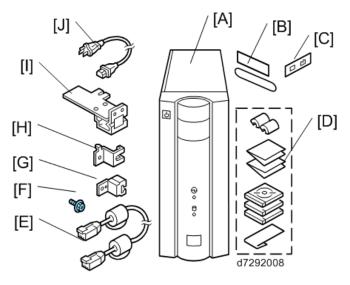
- Some nodes on the network may be unavailable for up to one hour.

- The copier may be unavailable for up to one hour

- The site administrator should be available during the installation for assistance with network connectivity issues.

- Equipment downtime and impact on the network can be minimized if the site administrator installs a network node for the E-22B and confirms network connection for the E-22B installation.

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

- The site administrator should install the user software shipped with the E-22B (user documentation is also included) onto the networked PCs and Mac OS computers that will print to the E-22B.

⬇ Note

- This guide covers hardware installation and service. It provides general information on connecting the E-22B to the customer's network. For network setup and configuration information, refer the site administrator to the "Configuration and Setup" manual.

Unpacking the E-22B

1. Open the box and remove the packing material.

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

1

d7292008
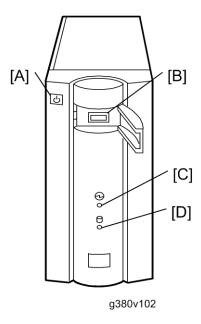
[A]: E-22B	[F]: Screw (M3 x 2)
[B]: Fiery Keytop Seal	[G]: Protection Plate (For E-22B)
[C]: Fierydriven Logo	[H]: Protection Plate (For Copier)
[D]: Media Pack	[I]: Gigabit Ethernet PCB
[E]: Interface Cable	[J]: AC Power Cord

3. Give the Media Pack [D] to the site administrator.

4. Take the remaining components out of the top container.

5. Remove the top container and any packing materials.

6. Carefully lift the E-22B out of the box.

Front and Back Panels

After unpacking the E-22B, familiarize yourself with the front and back panels before you connect the E-22B to the Copier.

1

g380v102
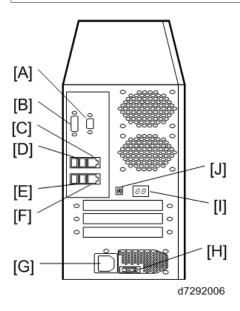
Front Panel

[A]: Soft Power Push Button
[B]: Front Panel USB Port
[C]: Power Indicator
[D]: HDD Access Indicator

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Back Panel

[A]: Not used (monitor port)
[B]: Not used (monitor port)
[C]: LAN Connector (For customer use)
[D]: Back Panel USB Ports
[E]: Back Panel USB Ports
[F]: Gigabit Ethernet connector
[G]: Power Connector
[H]: Main Power Switch
[I]: Diagnostic LEDs (For service use only)
[J]: Service Switches (For service use only)

Connecting E-22B to the Copier

Preparation for Installing the Color Controller E-22B
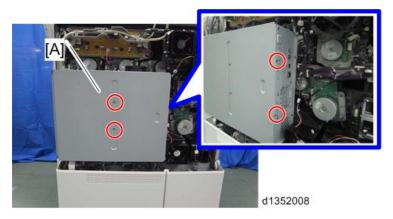
After you unpack the E-22B, connect the E-22B to the copier before you connect it to the network. This is to confirm that there are no problems with the hardware and controller itself.

⚠️WARNING
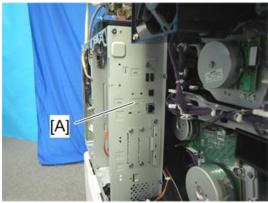
- Turn the controller main power switch and copier main power switch to off and disconnect the power cords before you do these procedures.

1. Rear center cover [A] (🔩 x 4).

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2. Controller box cover [A] ($\mathscr{P}$ x 4).

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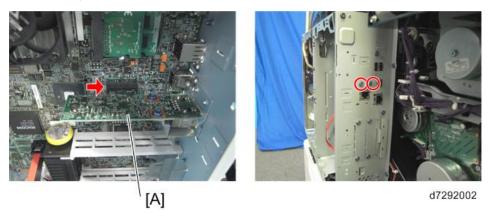
3. Remove the slot cover [A] with a screwdriver.

d7292001
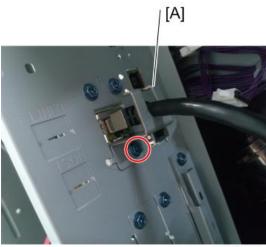
4. Attach the Gigabit Ethernet controller [A] (⬛x 1, 🖉 x 2).

[A]

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5. Reassemble the controller board.

6. Reassemble the controller cover.

7. Connect the interface cable [A] to the copier Gigabit Ethernet connector.

[A]

d7292003
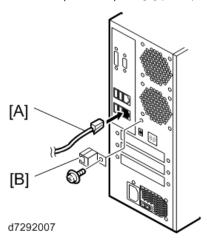
8. Attach the protector plate [A] (🖉 x1).

d7292004
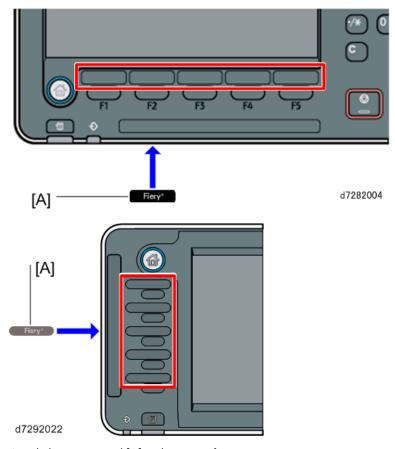
9. Connect the interface cable [A] to the E-22B.

10. Attach the protector plate [B] (🔩 x1).

d7292007
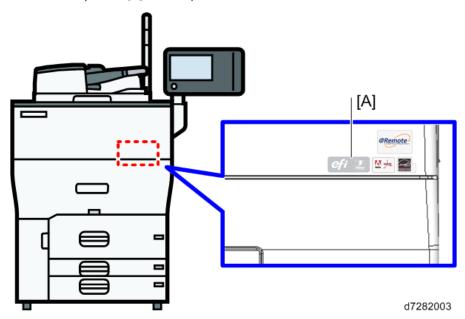
11. Connect the appropriate AC power cord to the power connector at the back of the E-22B.

12. Attach the Fiery key top seal [A] to the area above the function key to which the Fiery function is assigned.

    For information on function key configuration, see the Operating Instructions.

[A]   Fiery°

d7282004

[A]

d7292022
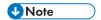
13. Attach the Fiery Decal [A] to the copier front cover.

[A]

d7282003

Startup and Initial Setup

1. Make sure that the power cord of the copier is connected to a power outlet and switch on the copier main power.

2. Enter SP mode.

3. Change the setting of SP5193-001 (External Controller Info. Settings) from "0 (Not installed)" to "1 (EFI)". (This enables the Fiery Printer and Fiery Scanner features.)

4. Change the setting of SP5895-001 (Application invalidation) from "0 (Enable the GW Printer)" to "1 (Disable the GW Printer)". (This disables the GW Printer features.)

5. Turn the copier main power switch off and wait until the main power indicator is off.

6. Turn the copier main power switch on.

   ⬇Note

   • The copier must be turned on before you turn the E-22B on.

   • Make sure that all firmware modules for the copier are updated to the newest versions. If they are not, update them before you turn on the E-22B. (☛ Copier Service Manual)

7. Turn the main power switch on the E-22B back panel to ON.

8. Press and release the soft power push button on the front panel of the E-22B.

9. Allow startup to proceed without interruption, while you watch the diagnostic LEDs on the back panel of the E-22B.

10. When the diagnostic LEDs remain at '00', go to the copier operation panel and press the Home button on the operation panel of the copier and wait for a few minutes until the Fiery icon appears on the Home screen.

11. Touch the Fiery icon. "Please Wait!" will be shown on the copier operation panel for a while.

12. Within about three minutes, the language selection screen is shown. (If this screen is not shown, then press the Home button on the operation panel of the copier and then touch the Fiery icon again.)

13. Select the desired language button, and touch "**Continue**".
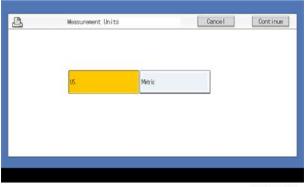
d7292009

- English
- Dutch
- French
- German
- Italian
- Spanish
- Simplified Chinese

⬇Note

- "Simplified Chinese" can be selected only when the controller is connected to CH-C1a Pro or CH-C1b Pro.
- After you have selected a language, you cannot change the language unless you perform **"Factory Defaults"** (☞page 97 "Restoring the E-22B to Factory Defaults") or re-install the system software.
- The default settings for the E-22B depend on the language selection as follows:

		Selected Language & Measurement Unit	
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French / Simplified Chinese
PS Setting	Default Paper Sizes	US	Metric
PCL Setting	Paper Size	Letter	A4
	Paper Size System Pages	US	Metric

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Units. Select either "**US**" or "**Metric**", and then touch "**Continue**".

d7292010

14. The System will reboot. Press the Home button on the copier operation panel and wait for a few minutes until the Fiery icon appears on the Home screen.

15. Touch the Fiery icon and wait about a few minutes until the Fiery menu screen appears.

16. To confirm that the reboot was successful, press the Fiery tab.

17. Now the E-22B can be used with the default settings (minimum setup).

⬇ **Note**

- The E-22B setup options should be configured later by the site administrator.

- GW Scanner, Fiery Scanner and Fiery Printer features are enabled by the above procedure.

Disabling the GW Scanner (Customization)

The GW Scanner feature can still be used when a Fiery controller is installed.

However, if the customer wants to disable the GW Scanner feature (customization request), it can be disabled by the following procedure.

1. Change the setting of SP5895-002 from "0" to "1".

2. Press the [User Tools/Counter] key.

3. Press [Edit Home].

4. Press [Delete icon].

5. Select the Scanner icon.

6. Press [OK].

7. Press the [User Tools/Counter] key.

Verifying the Connection (Local Test Print)

After you connect the E-22B to the copier, print the Test Page and the Configuration Page to verify that the connection between the E-22B and the copier is good.

1. Make sure that the copier is not in use.

2. Check the settings in the following table, and make sure that Letter or A4 paper is loaded in at least one of the paper trays of the copier.

	PS Setting Default Paper Size		PCL Setting Paper Size for System Setting	
Setup Option	"US"	"Metric"	"US"	"Metric"
Configuration Page requires...	Letter	A4	-	-
PS Test Page requires...	Letter	A4	-	-
PCL Test Page requires...	-	-	Letter	A4

3. Press the Home button on the operation panel of the copier and wait for a few minutes until the Fiery icon appears on the Home screen.

4. Touch the Fiery icon to access to the Fiery menu screen.

5. Move to the "**Fiery**" tab.

d7292011

6. Touch "**Printable Info**".

d7292012

7. Print the following pages:

   - Configuration Page

   - PS Test Page

   - PCL Test Page

8. Examine the quality of the test pages.

   - All patches should be visible, but it is acceptable if they are very faint in the 5% and 2% ranges.

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

   - Poor image quality may indicate that the copier needs service. For more information, see the documentation provided with the copier.

Verifying Connection to the Network

The E-22B provides twisted pair connectivity to an Ethernet network.

Cable requirements:

- 10BaseT (Ethernet): Unshielded Twisted Pair (UTP), Category 3 or higher

- 100BaseTX (Fast Ethernet): UTP, Category 5 or higher (4-pair/8-wire, short length)

- 1000BaseT (Gigabit Ethernet): UTP, Category 5e or higher (4-pair/8-wire, short-length)

Note
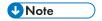
- If the print engine is 230V, use a shielded network cable.

1. Turn off the E-22B power before connecting the E-22B to any network device.

2. Connect the network cable to the LAN connector on the E-22B.

3. Make sure that the copier power is switched on.

4. Turn the power switch on the E-22B back panel to ON.

5. Press and release the soft power push button on the front panel of the E-22B.

6. Allow startup to proceed without interruption, while you watch the diagnostic LED on the back panel of the E-22B. When the diagnostic LEDs show '00', go to the copier operation panel.

7. Press the Home button on the operation panel of the copier and wait for a few minutes until the Fiery icon appears on the Home screen.

8. Touch the Fiery icon and wait about a few minutes until the Fiery menu screen appears.

9. Move to the **Fiery** tab.

10. Touch "**Setup**".

d7292011

11. You are asked to enter an administrator password. (The default is "**Fiery .1**")

12. Ask the site administrator to configure the Setup options.

   ⬇Note

   • It is the site administrator's responsibility to configure the correct setup options for the network and user environment. The default settings in the setup may be adequate, but they may not be optimal for the user's environment. Refer the site administrator to the "Configuration and Setup" manual for setup information.

   • If more than one E-22B unit should be installed at the customer site with almost the same system settings, tell the site administrator that the "Backup and Restore" feature will be useful. (☛ This feature is explained in the "Configuration and Setup" manual.)

   • If initial setup (with the exclusion of changing the IP Address/DNS/WINS) is not yet done, Fiery Setup Wizard menu is selectable from WebTools and CommandWorkStation. For details of Fiery Setup Wizard, refer to the Configuration and Setup Guide.

The Fiery controller initial setup is not complete. Click here to continue.

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13. After configuring the Setup options, verify the network connection.

14. Ask the site administrator to install the printer driver on a client PC, and to make a test print from that PC.

Installing Optional Features

Optional Features for E-22B

The following options can be purchased and installed to E-22B:

- Fiery Graphic Arts Basic Plus Package (B)
- Productivity Package (B)
- Spot-On (B)
- Auto Trapping (B)
- Hot Folders & Virtual Printers (B)
- Fiery Impose (A+B)
- Fiery Compose (A+B)
- Fiery Impose-Compose (A+B)

    (This is a package set of Fiery Impose and Compose.)
- EFI Color Profiler Suite (with ES-2000) (C)
- EFI Color Profiler Suite (Software only) (C)
- EFI Spectrometer ES-2000

Required Action:

A: Needs additional software installation.

☛page 29 "Installing Software for EFI Impose/Compose"

B: Needs activation with a license code.

☛page 30 "Activate Optional Features"

C: Needs software installation and activation in a unique way.

Please refer to the manual included in the software package

Installing Software for EFI Impose/Compose

To use the features of EFI Impose/Compose, install and activate the software in the following order.

1. Install Command WorkStation (from the User Software DVD of E-22B).

    ☛Utility manual

2. Activate Impose/Compose.

    ☛page 30 "Activate Optional Features"

3. Install Adobe Acrobat and Enfocus PitStop (from the CD included in the option package).

👉Utility manual

Activate Optional Features

Some of the options need to be activated (make ready for use through licensing), with an LAC (License Activation Code) which is provided with the optional feature box or envelope.

Optional Features Which Require Activation.

Server Options:

The license file is stored in the key chip on the motherboard of E-22.

- Fiery Graphic Arts Basic Plus Package
- Productivity Package
- Spot-On
- Auto Trapping
- Hot Folders & Virtual Printers

Client Options:

The license file is stored in the HDD of the Client PC.

- Fiery Impose
- Fiery Compose

Preparation: Requirements for Activation

- LAC (License Activation Code)

  A unique code of 20 digits that is printed on a sheet when open the optional feature box/ envelope.
- An installed E-22B.
- A PC with a web browser installed.
- Command WorkStation (Must be installed for Client Options)
- Internet Access Environment

⬇Note

- If the customer has already a USB dongle for a Client Option (purchased for previous models, etc.), it can be used with E-22B

Important Notes for Activation

1. If you have multiple Fiery options to activate, you must activate them one at a time. It is not possible to activate several options at once.

2. If the keychip (Server Options) or PC (Client Options) becomes defective, the following's are needed as evidence in order to get recovered.

   - Defective key chip

   - LAC

   - Option Name

   - Serial Number of E-22B

   - OS on the client PC where the software was installed.

   - The configuration page that shows that the defective key chip had the optional feature license installed.

   Therefore, please be sure that you always print a configuration page and note the above information and keep them together when you activate a new optional feature on the E-22B.
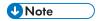
Automatic Activation and Manual Activation

There are two ways to activate the optional features: "Automatic" and "Manual".

Required Environment for Automatic Activation:

<Server Options>

1. The E-22B must be connected to the Internet.

   ⬇ Note

   - If the E-22B is not connected to the Internet directly, you can configure a proxy server for the connection.

2. At the same time, a PC that can access to E-22B with the web browser is needed.

   ⬇ Note

   - You can also start the activation procedure with the Command WorkStation, but later web browser access is required.

<Client Options>

1. The PC where the optional feature will be installed and used must be connected to the Internet.

2. At the same time, the same PC needs to access to E-22B with Command WorkStation and web browser.

Required Environment for Manual Activation:

<Server Options>

If the E-22B is not connected to the Internet, manual steps are required to transfer data between the E-22B and the EFI licensing website using another PC that is connected to the Internet.

1. The PC where the optional feature will be installed, must be connected to the Internet with web browser.

2. There is also another PC that can access to the E-22B with web browser is needed.

↓Note

- The above two PCs can be as same single PC (by switching the roles by changing the location/connection).

<Client Options>

If the PC where the optional feature will be installed, your PC is not connected to the Internet, manual steps are required to transfer data between the PC and the EFI licensing website using another PC that is connected to the Internet.

1. A PC where the optional feature will be installed, must be connected to E-22B with the Command WorkStation.

2. Another PC that can access to the Internet is needed.

↓Note

- The above two PCs can be the same single PC (by switching the roles by changing the location/connection).
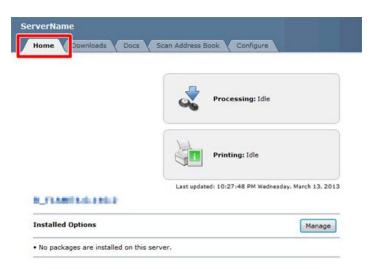
Confirming the Activated Options

There are three ways to confirm the activated options for a particular unit of E-22B.

1. Print the configuration sheet.

   ☛page 64 "Printing the Configuration Page or Test Sheets"

2. Confirm from WebTools.

   Launch the web browser and enter the IP address of E-22B in the URL column to execute the Web Tools.

   Click the Home tab and confirm the installed options.

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3. Confirm from Command WorkStation.

Launch Command WorkStation and move to Device Center > General > General Info > Option/Package to confirm.

w_d7292052
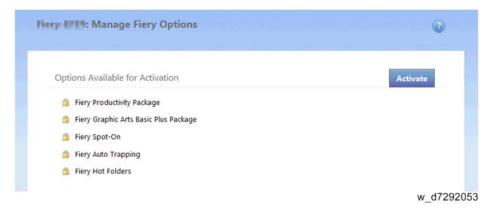
Access to the Manage Options Window (Auto/Manual Activation)

Activation will be done from the Manage Fiery Options window.

Note

- The names of options shown on the following screen samples may differ from the names of options for E-22B.

<Manage Options window for Server Options>

w_d7292053

<Manage Options window for Client Options>

w_d7292054

The procedure to access to the Manage Fiery Options window differs between Server Options and Client Options.

Server Options' procedure
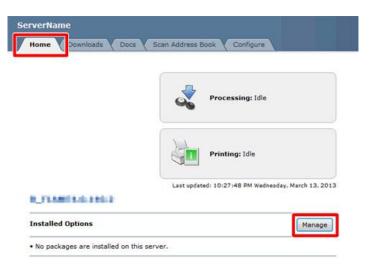
There are two ways to access to the Manage Server Options window.

1. Access from the WebTools.

   Launch the web browser and enter the IP address of E-22B in the URL column to execute the Web Tools.

   Click the Home tab and then click Manage.

w_d7292055

2. Access from the Command WorkStation.

   Launch Command WorkStation and move to Device Center > General > General Info > Option/Package and click Manage.

w_d7292056

Client Options' procedure
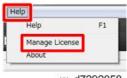
There are two ways to access to the Manage Client Options window.

1. Access from Command WorkStation.

   Launch Command WorkStation, right-click a job and select Preview, and then select Help > Manage License.
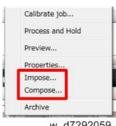
w_d7292057

w_d7292058

2. Access from Command WorkStation's Help.

   Launch Command WorkStation, right-click a job and select Impose or Compose. If you are prompted to activate or not, click Yes.

w_d7292059
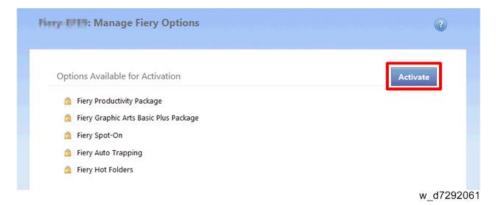
w_d7292060

Activation Procedure

Automatic Activation Procedure
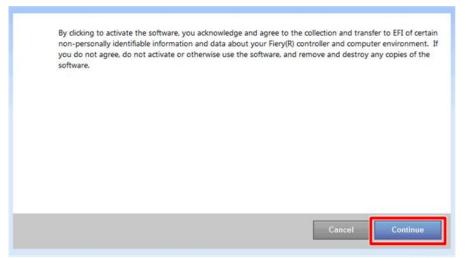
1. In the Manage Options window, click Activate.

   \<Manage Options window for Server Options>

w_d7292061

\<Manage Options window for Client Options>

w_d7292062

2. To agree to the terms and conditions of the license agreement, click Continue.

By clicking to activate the software, you acknowledge and agree to the collection and transfer to EFI of certain non-personally identifiable information and data about your Fiery(R) controller and computer environment. If you do not agree, do not activate or otherwise use the software, and remove and destroy any copies of the software.

Cancel   Continue

w_d7292063

3. For License Activation Code, type the LAC and....

Enter your License Activation Code:

(Contact your Fiery dealer or printer manufacturer to purchase a license, if you do not have one.)

w_d7292064

Server Options: click Activate.

Client Options: click Continue.
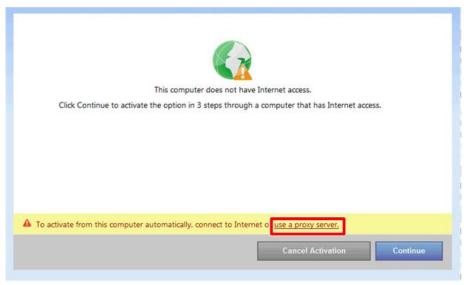
⤓Note
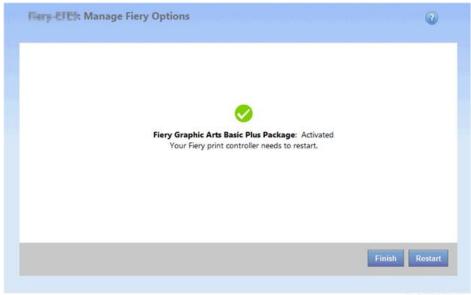
- If the E-22B needs a proxy server to connect to Internet, the following screen may appear. In such case, click the link of "use a proxy server" and fill in the necessary information for proxy server, then click Apply. Then click Continue.

This computer does not have Internet access.

Click Continue to activate the option in 3 steps through a computer that has Internet access.

⚠ To activate from this computer automatically, connect to Internet o use a proxy server.

Cancel Activation   Continue

w_d7292065
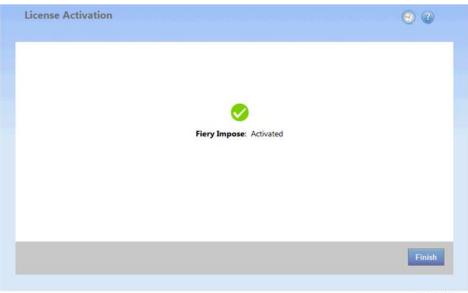
4. If the Fiery option name is correct, click Activate.

5. The Fiery option is activated.

   <Server Option>

Fiery E22B: Manage Fiery Options ?

Fiery Graphic Arts Basic Plus Package: Activated
Your Fiery print controller needs to restart.

Finish   Restart

w_d7292075

<Client Option>

w_d7292076

6. If the activation requires a restart of the Fiery print controller, click Restart to restart now, or click Finish to activate more options before restarting.

If the activation does not require a restart of the Fiery print controller, just click Finish.

If activation requires a restart:

<Server Option>

w_d7292077

39

1

If activation does not require a restart:

<Server Option>

w_d7292078

<Client Option>

w_d7292079

7. For Server Option only: Print the configuration sheet and keep it (for the case that the key chip becomes defective).

☛page 64 "Printing the Configuration Page or Test Sheets"

Manual Activation Procedure
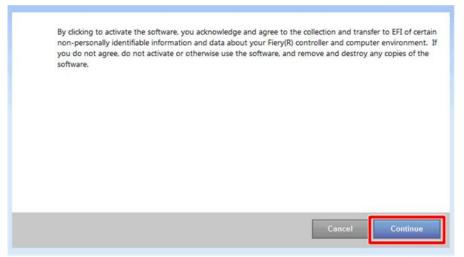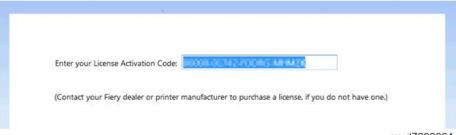
1. In the Manage Options window, click Activate.

   <Manage Options window for Server Options>

w_d7292061

<Manage Options window for Client Options>

w_d7292062

2. To agree to the terms and conditions of the license agreement, click Continue.

w_d7292063

3. For License Activation Code, type the LAC and....

Enter your License Activation Code: [_____]

(Contact your Fiery dealer or printer manufacturer to purchase a license, if you do not have one.)

w_d7292064

Server Options: click Activate.

Client Options: click Continue.

4. Click Continue to proceed with the manual process.

This computer does not have Internet access.

Click Continue to activate the option in 3 steps through a computer that has Internet access.

⚠ To activate from this computer automatically, connect to Internet or use a proxy server.

Cancel Activation   Continue
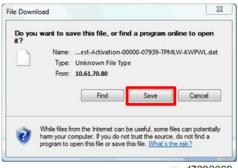
w_d7292067

5. Click Create Request File and save the file.

w_d7292068

w_d7292069

6. Copy the request file to a PC that is connected to the Internet.

   It is also possible that you use the same PC by changing the location/connection.

7. On the PC that is connected to the Internet, open a browser and go to licensing.efi.com.

8. Click Browse, select the request file, and then click Upload.

w_d7292070

9. If the Fiery option name is correct, click Continue.

w_d7292071

A license file is generated.

10. Click Download License File and save the file.

w_d7292072

11. Copy the license file to the PC where you first entered the License Activation Code.

12. Return to the Generate License window and click Yes.

If you had closed that window, restart from step 1 (open the Manage Options window) and click Activate, to reach to the following window.

w_d7292073
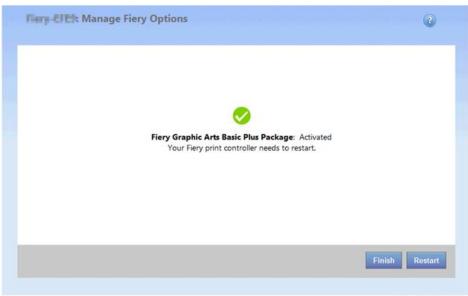
13. Click Browse, select and open the license file, and then click Activate.
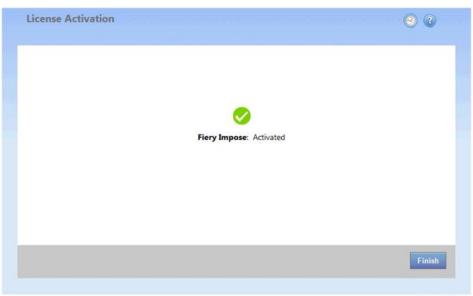
w_d7292074

14. The Fiery option is activated.
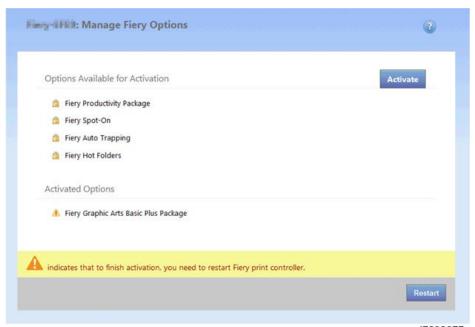
<Server Option>

1

w_d7292075

<Client Option>
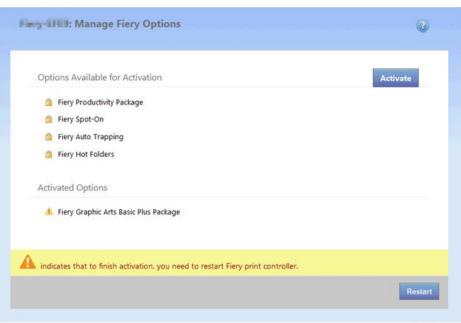
w_d7292076

15. If the activation requires a restart of the Fiery print controller, click Restart to restart now, or click Finish to activate more options before restarting.

If the activation does not require a restart of the Fiery print controller, just click Finish.
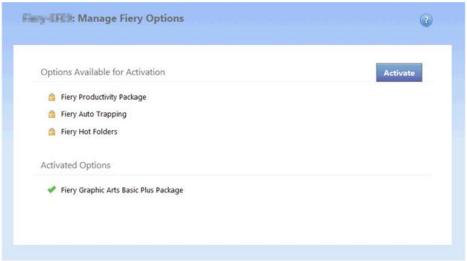
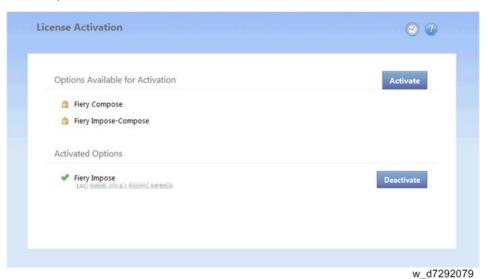If activation requires a restart:

<Server Option>

w_d7292077

If activation does not require a restart:

<Server Option>
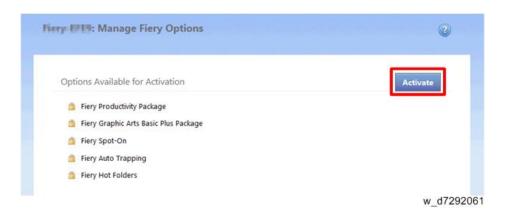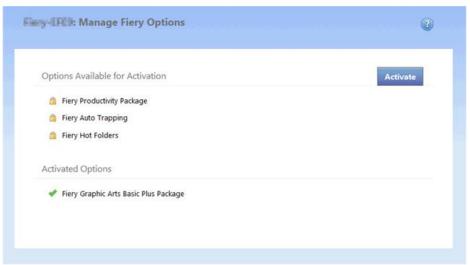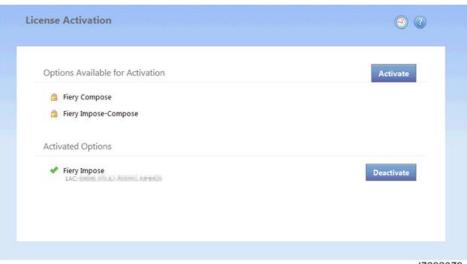

w_d7292078

<Client Option>

w_d7292079

16. For Server Option only: Print the configuration sheet and keep it (for the case that the key chip becomes defective).

☛ page 64 "Printing the Configuration Page or Test Sheets"

Deactivation of Client Options

If you want to transfer the license for a Client Option from one PC to another, you must first deactivate the option.

Deactivation makes the License Activation Code (LAC) for the option available again. You can activate the license on another PC using the LAC.

The deactivation process depends on whether your PC is connected to the Internet:

- If your PC is connected to the Internet: Use Automatic deactivation.
- If your PC is not connected to the Internet: Use Manual deactivation.

After deactivation is complete, you can View deactivation status and LAC of an option in the deactivation history.

d7292302
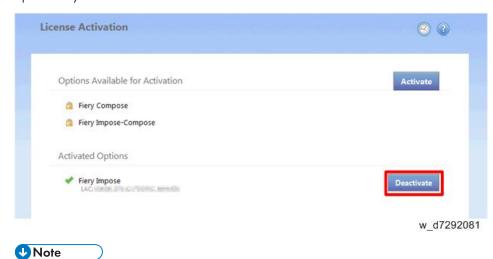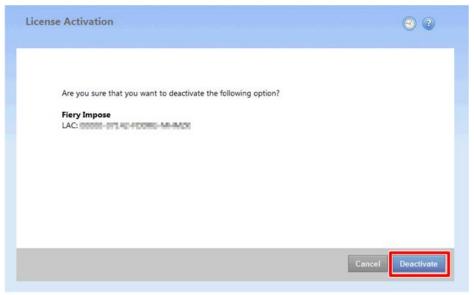
w_d7292080

Automatic Deactivation Procedure

1. In the Manage Client Options window, under Activated Options, click Deactivate next to the option that you want to deactivate.

w_d7292081

Note

- If there is no Deactivate button next to the option, the option is activated by a dongle.

2. Click Deactivate to confirm the deactivation.

w_d7292082

The Client Option is deactivated, and the LAC is displayed.

The LAC is available for reuse.
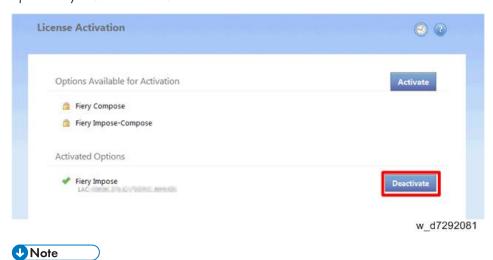
Request deactivationRequest- ▨▨▨▨-▨▨▨▨-▨▨▨▨.
▨▨▨▨▨ has been processed.

Your License Activation Code ▨▨▨▨-▨▨▨▨-▨▨▨▨-
▨▨▨▨▨ is now available for reuse.
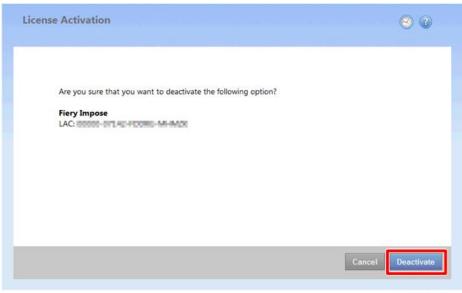
w_d7292083

Manual Deactivation Procedure

1. In the Manage Client Options window, under Activated Options, click Deactivate next to the option that you want to deactivate.

w_d7292081

🔽**Note**

- If there is no Deactivate button next to the option, the option is activated by a dongle.

2. Click Deactivate to confirm the deactivation.

w_d7292082
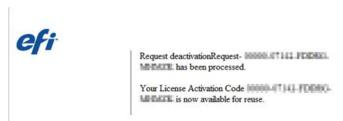
3. Click Continue to proceed with the manual process.

4. Click Create Request File and save the file.

   The Client Option is deactivated, and the LAC is displayed.

5. Click Finish.

6. Copy the request file to a PC that is connected to the Internet.

7. On the PC that is connected to the Internet, open a browser and go to licensing.efi.com.

8. Click Browse, select the request file, and then click Upload.

   The LAC is available for reuse.

w_d7292083

View deactivation status and LAC

1. In the Manage Client Options window, click the deactivation history icon.

d7292302

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Deactivated options and their corresponding LACs are listed. If an option is selectable, the deactivation may be incomplete.

To complete a deactivation, select the option, click Deactivate, and continue with manual deactivation.

See Manual deactivation for more information.

Reactivation of Client Options

If the license for a Client Option is corrupted, the option does not function even though it appears to be activated. When your PC starts, it attempts to reactivate a corrupted license by contacting the licensing server. If reactivation fails (because of a network interruption, for example) you can try to reactivate the option in the Manage Client Options window. You do not need to enter the LAC.

The reactivation process depends on whether your PC is connected to the Internet:

- If your PC is connected to the Internet: Use Automatic reactivation.

- If your PC is not connected to the Internet: Use Manual reactivation.

Automatic Reactivation Procedure

1. In the Manage Client Options window, under Activated Options, click Reactivate next to the option that you want to reactivate.

   The Client Option is activated.

2. Click Finish.

Manual Reactivation Procedure

1. In the Manage Client Options window, under Activated Options, click Reactivate next to the option that you want to reactivate.

2. Click Continue to proceed with the manual process.

3. Click Create Request File and save the file.

4. Copy the file to a PC that is connected to the Internet. (It is also possible to use the same PC by changing the location/connection.)

5. On the PC that is connected to the Internet, open a browser and go to licensing.efi.com.

6. Click Browse, select the request file, and then click Upload.

   License file is generated.

7. Click Download License File and save the file.

8. Copy the license file to the PC where you are reactivating the license.

9. Return to the Generate License window and click Yes.

10. Click Browse, select and open the license file, and then click Activate.

11. The Client Option is reactivated.

12. Click Finish.

Restoring Activated Client Options

If the licensing record for Client Options is not available (because you reinstalled the system software on your PC, for example) previously activated options do not appear to be activated. When your PC starts, it attempts to restore the licensing record by contacting the licensing server. If the restore fails (because of a network interruption, for example) you can try to restore the options in the Manage Client Options window.

The restore process depends on whether your PC is connected to the Internet:

- If your PC is connected to the Internet: Use Automatic restore
- If your computer is not connected to the Internet: Use Manual restore

Automatic Restore Procedure

1. In the Manage Client Options window, click the link in the message about restoring licenses.

   The Client Options are restored.

2. If you have no additional options to activate, click OK. Otherwise, to activate additional options, click Continue.

Manual Restore Procedure

1. In the Manage Client Options window, click the link in the message about restoring licenses.
2. Click Continue to proceed with the manual process.
3. Click Create Request File and save the file.
4. Copy the file to a computer that is connected to the Internet.

   (It is also possible to use the same PC by changing the location/connection.)

5. On the PC that is connected to the Internet, open a browser and go to licensing.efi.com.
6. 6. Click Browse, select the request file, and then click Upload.

   A license file is generated.

7. Click Download License File and save the file.
8. Copy the license file to the PC where you are restoring options.
9. Return to the Generate License window and click Yes.
10. Click Browse, select and open the license file, and then click Restore.

    The Client Options are restored.

Troubleshooting for Activation

If any error message or error code is shown during the activation procedure, take action as below table.

If the problem persists, prepare the following information for report your problem to your support XXXXX.

1. Serial Number of the controller.
2. Name of optional feature

3. LAC (License Activation Code)

4. OS of the PC

Error messages and recommended actions: From the license activation software:

Error message	Action
The code you enter is invalid, please correct it and try again.	The LAC is not in the correct format. Try entering the LAC again. Refer to the LAC card if you have one.
The file you selected is invalid, please select a different one and try again.	During manual activation, you obtained a license file from the EFI licensing website. Check that you selected the correct license file to upload. If the error still occurs, for Client options, you can restore Client options and try to activate again.
Error <number> System error. Please contact Fiery dealer or EFI technical support.	There is a problem with the license file. Try repeating the activation process from the beginning. If the error occurs again, for Client options, restore the options and try to activate again. If the error still occurs, contact technical support and provide the error code shown in the message.
Error <number> Proxy configuration is incorrect or proxy server is down.	There is no Internet connection. Check that the proxy settings are correct and try again. If the problem persists, contact your network administrator.
Proxy setting incorrect. Connection could not be established.	There is no Internet connection. Check that the proxy settings are correct and try again. If the problem persists, contact your network administrator.

Error message	Action
Error <number> Session expired. Please start again from Command WorkStation.	The license activation software was used in a different browser window more recently than this one. To continue, close this window and open a new one: • If you are activating a license for an option installed on the E-22B, click the Manage button in Configure (in Command WorkStation or in WebTools). • If you are activating a license for a Fiery JobMaster-Impose-Compose in Command WorkStation, right-click a job and select Preview. In Preview, select Help > Manage License.
Error <number> Please reinstall Fiery Software and try again.	The license activation software module is corrupted and Fiery system software must be reinstalled. Please contact technical support and provide the error code shown in the message.
Error <number> Please reinstall Command WorkStation and try again.	The license activation software module is corrupted. Reinstall Command WorkStation and try again. • On Windows, go to Control Panel > Add or Remove Programs and start Fiery User Software in maintenance mode. Select the Repair option and then select Command WorkStation. • On Mac OS, use Fiery Software Uninstaller to uninstall Command WorkStation, and then reinstall Command WorkStation.

Error messages and recommended actions: From the EFI licensing service

Message ID	Error message	Action
XX0004	License Activation Code is invalid.	The LAC is not recognized. Check that you entered the correct LAC. Refer to the LAC card if you have one.
XX0007	This option is already activated.	Check that the LAC is correct for the option that you want to activate.

Message ID	Error message	Action
XX0016	License Access Code has already been used and is no longer valid.	The license has already been activated for another computer. • For Fiery JobMaster-Impose-Compose, you can deactivate the license on the other computer and then activate it on this one. • For E-22B options, these options are not transferable. You must obtain a new LAC.
XX0017	You must first choose the Request File to upload.	You should have generated a request file on the E-22B or the computer where the license will be activated. The EFI licensing website needs this request file to generate your license file.
XX0018	Call to the web service failed. Please make sure that the input file is correct.	You submitted the wrong request file or the request file is corrupted. Try submitting a different request file. If the error occurs again, try regenerating the request file.
XX0025	Unable to activate: Error Code <number>	An error occurred on the EFI licensing service. Contact technical support and provide the error code shown in the message, the LAC, and the serial number of your E-22B.
XX0002	Server failure.	The EFI licensing website is unavailable. Try again later.
XX0009	Unable to determine option information.	The EFI licensing website is unavailable. Try again later.
XX0006	This option contains unsupported features and cannot be activated.	Check that the feature(s) activated by the LAC are correct for your E-22B model. Also check that you are not trying to use an LAC for a E-22B option to activate a license for Fiery JobMaster-Impose-Compose, or vice versa.

Message ID	Error message	Action
XX0011	Your system does not support some of the features included in this option. Do you want to continue?	The LAC activates multiple features and one or more features is not supported, as shown in the list. Obtain a new LAC that has only features that are supported. If you continue, you will not be able to use any unsupported features and you cannot use the LAC again.
XX0008	Some features of this option are already activated. Do you want to continue?	The LAC activates multiple features and one or more features is already activated, as shown in the list. Obtain a new LAC that has only features that are not already activated. If you continue, you will be paying twice for the same feature.

Error messages and recommended actions: From the EFI licensing service (Client Options only)

Message ID	Error message	Action
XX0026	Unable to deactivate: Error Code <number>	Try to restore Client options and deactivate again. If the error still occurs, contact technical support and provide the error code shown in the message.
XX0024	Unable to reactivate: Error Code <number>	Try to restore Client options and reactivate again. If the error still occurs, contact technical support and provide the error code shown in the message.
XX0027	No ID found.	No licenses have been previously activated on this computer, so you cannot restore any licenses.

1

2. General Operations For Servicing

Start-Up, Shut-Down, and Reboot

The copier and the E-22B have separate main power switches. During normal operation, you can leave the E-22B main power switch in the ON (I) position.

Starting the Copier and the E-22B

1. Turn on the main power switch of the copier.
2. If the main power switch of the E-22B is OFF (O), turn on the main power switch of the E-22B.
3. Press and release the soft power push button on the front of the E-22B.

    The controller enters into the boot-up sequence.
4. After the E-22B and the copier become idle, press the Home button on the operation panel of the copier and then touch the Fiery icon. The Fiery menu screen will appear on the copier operation panel.

Shutting Down the Copier and the E-22B

1. Press the Home button on the operation panel of the copier and then touch the Fiery icon. The fiery menu screen appears.
2. Move to the **Fiery** tab.
3. Touch "**Restart Fiery**".

d7292013

4. Touch "**Shut Down**", then touch "**OK**".

    The E-22B enters into the shut down sequence.

    The diagnostic LEDs on the back panel of the E-22B will turn off.

d7292014

5. Turn the copier main power switch off.

6. If the E-22B is being taken out of service, turn off the E-22B using its main power switch. (For example, if someone needs to move the E-22B, disconnect cables, or open the chassis.)

Shutting Down the E-22B Only

1. Press the Home button on the operation panel of the copier and then touch the Fiery icon. The Fiery menu screen appears.

2. Move to the **Fiery** tab.

3. Touch "**Restart Fiery**".

4. Touch "**Shut Down**", then touch "**OK**".

   The E-22B enters into the shut down sequence.

   The diagnostic LEDs on the back panel of the E-22B will turn off.

5. If the E-22B is being taken out of service, turn off the E-22B using its main power switch. (For example, if someone needs to move the E-22B, disconnect cables, or open the chassis.)

Restarting the E-22B

When restarting the E-22B to recover from a problem, try this procedure first. However, this procedure will only restart the E-22B application software that is now running on the system OS. To reboot the system OS (for example, after downloading a patch), see the next section "Rebooting the E-22B (☞ page 61 "Rebooting the E-22B")".

1. Make sure that the E-22B is not in use.

2. Press the Home button on the operation panel of the copier and then touch the Fiery icon. The Fiery menu screen appears.

3. Move to the **Fiery** tab.

4. Touch "**Restart Fiery**".

d7292013

5. Touch "**Restart Fiery Service**"

d7292015

6. Wait until the E-22B becomes idle.

Rebooting the E-22B

Use this procedure to reboot the system OS (for example, after downloading a patch).

1. Make sure that the E-22B is not in use.

2. Press the Home button on the operation panel of the copier and then touch the Fiery icon. The Fiery menu screen appears.

3. Move to the **Fiery** tab.

4. Touch "**Restart Fiery**".

d7292013

5. Touch "**Restart System**"
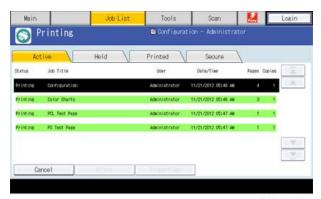
d7292016

6. Wait until the E-22B becomes idle.

Cancelling the Current Print Job

When you want to cancel the current print job, do the following:

1. Press the Home button on the operation panel of the copier and then touch the Fiery icon to access the Fiery menu screen.

2. Move to the **Job list** tab.

d7292017

3. From the Job List, touch the job that you want to cancel.

4. Touch "**Cancel**".

Printing the Configuration Page or Test Sheets

1. Make sure that the E-22B is not in use.

2. Press the Home button on the operation panel of the copier and then touch the Fiery icon to access the Fiery menu screen.

3. Move to the **Fiery** tab.

4. Touch "**Printable Info**", then touch the desired key.

   - Configuration Page
   - PS Test Page
   - PCL Test Page

d7292012

Running the E-22B Setup
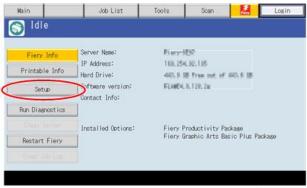
The following procedures show how to access the Setup menu from the Fiery menu screen.

⬇Note

- When the network settings (protocol, IP Address, etc.) are already configured and the "Enable Web Service" option is set to ON, you can also configure the E-22B setup from "Configure Webtools". To do this, use a web browser on a personal computer which is connected to the network. For more detailed instructions, please refer to the "Configuration and Setup" manual.

- When you try to get access to the Setup menu, you are always asked to input an administrator password. (The default password is "**Fiery.1**") Ask the site administrator to input the administrator password when you must get access to the Setup menu.

To Access the Setup Menu

1. Make sure that the E-22B is not in use.

2. Press the Home button on the operation panel of the copier and then touch the Fiery icon to access the Fiery menu screen.

3. Move to the **Fiery** tab.

4. Touch "**Setup**".

d7292018

5. You may be asked to enter an administrator password. (Ask the site administrator to enter the password. The default password is "**Fiery.1**")

6. The main setup screen appears.

   For the details of each setup option value, refer to the "Configuration and Setup" manual.

To Exit from the Setup Menu

1. At the main setup screen, touch "**Exit Setup**".

   The Fiery menu screen will disappear.

2. When you are prompted "System Requires to Reboot for Changes to Apply", touch "**Reboot now**".

Backup / Restore the System Settings

The administrator at the customer site can back up the current E-22B configuration and restore it later.

This feature is also useful when...

1. The customer purchases more than one unit of E-22B and wants to configure all of them with almost the same system configuration.

2. The E-22B needs to be re-configured after system software installation.

The following items can be backed up to a configuration settings file:

- Fiery System Settings (with the exclusion of Date/Time)

- Color Settings

- Scan Settings

- FreeForm/VDP Resources

- Server Presets

- Fonts

- Job Log

🔸 **Note**

- The configuration settings file is saved on the computer from which you access Configure Webtools. Make sure that you do not save the configuration settings file to the E-22B itself. Otherwise, when you reinstall system software, the configuration settings file residing on the E-22B is deleted.

To Access Configure Webtools Using a Internet Web Browser

🔸 **Note**
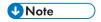
- The network settings (protocol, IP Address, etc) should be already configured and the "Enable Web Service" option should be set to ON (default), in order to access the Configure Webtools.

1. Start your internet web browser and type the IP address of the E-22B.

2. Click the Configure tab on the E-22B home page.

3. Click "**Launch Configure**".

4. Log on as an Administrator with the appropriate password.

   (The default password is "**Fiery.1**".)

Configure > Server > Backup/Restore

Backup/Restore

Backup...

Restore...

Restore Default Fiery Settings...

NOTE: SYSTEM REQUIRES REBOOT FOR CHANGES TO APPLY.

d7292048

🔽**Note**
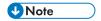
- The same menu can also be accessed from inside the Command WorkStation (Server > Backup & Restore).

To Back up E-22B Settings
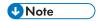
1. Choose Configure > Server > **Backup / Restore**.

2. Click **Backup**.

3. Select the items to backup and click Next.

4. Specify the destination (drive/folder), filename and option ("Add date to the name") and click **Next**.

5. The result of backup will be indicated as "Backup Summary". After you have checked the result, click **Finish**.

   🔽**Note**

   - The saved configuration settings file can only be restored to the same model (E-22B).

To Restore the E-22B Settings

1. Choose Configure > Server > **Backup / Restore**.

2. Click **Restore**.

3. Specify the file to restore.

   Click the "Browse..." button and select the backed-up file.

4. Click **Open**.

Note

- The server name and static IP address are restored therefore if the restore operation is used on more than one E-22B you must reconfigure them to be unique.

2

2

3. Replacement

General Caution

⚠️ WARNING

- Turn off the power and unplug the E-22B before attempting any of the procedures in this section.

Before accessing internal components, position the E-22B so that it is resting on its right-hand side on a flat, anti-static surface.

Cover Removal

Side Cover for the E-22B

1. Side cover [A] (🔩 x 6)
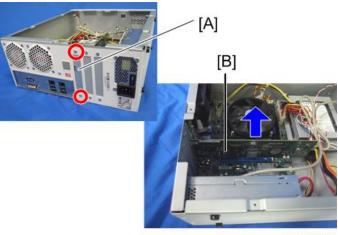
d7292024

Unit Removal
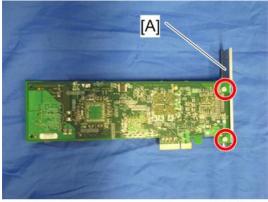
Video Board

1. Remove the Video board with bracket [A](✎ x 2)

2. Pull the Video board [B].

d7292025
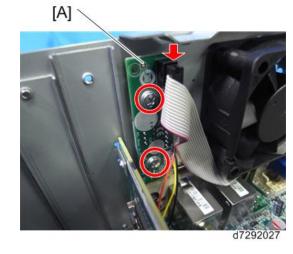
3. Bracket [A] (✎ x 2)

d7292026
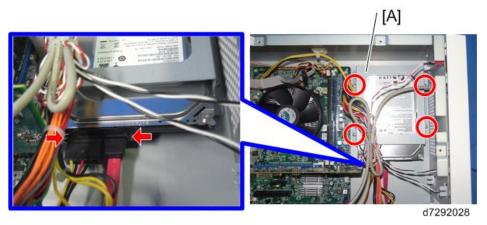
Diagnostic LED Board

1. Diagnostic LED board [A] (✎ x 2, 🔌 x 1)

d7292027
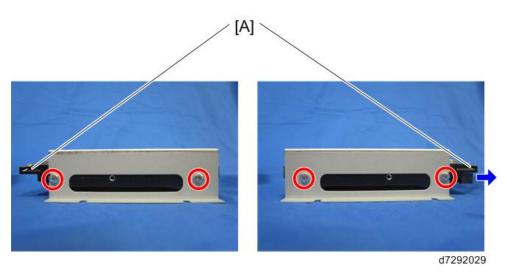
Hard Disk Drive (HDD)

1. HDD with bracket [A] (🔩 x 4, ⬜ x 2)

d7292028

2. HDD [A] (🔩 x 4)

d7292029

Note

- System software is not included on replacement HDDs. After installing a new HDD, be sure to install system software (page 99 "System Software Installation Procedure").

- If you notice that the E-22B takes longer than usual to start up after installing a new HDD and system software, clear the CMOS. For details, see "Clearing Procedure for CMOS" shown below (page 91 "Clearing Procedure for CMOS").
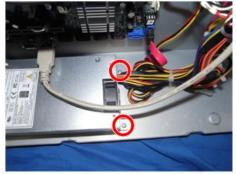
Power Supply Unit

1. Power supply unit [A] (x 5, x 3).

3
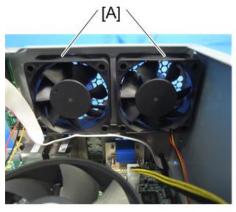
d7292030
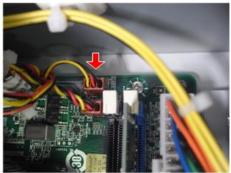
Fans

1. Video board (👉 page 73)
2. Fans [A] (🔩 x 8, 🔌 x 2)

d7292031

Motherboard

1. Video board (page 73)
2. Cables (x 8):

   24-pin power connector from ATX24P_1 [A].

   4-pin power connector from ATX POWER [B].
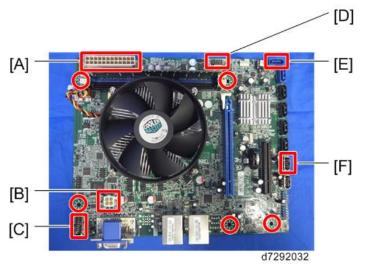
   DIAG cable from PORT80 HDR [C].

   Front panel cable from J20 [D].

PIN1 & 3	HDD LED
PIN2 & 4	Power LED
PIN6 & 8	Soft Switch

   SATA data cable from SATA 6G0 [E].

   USB cable from USB A1 [F].
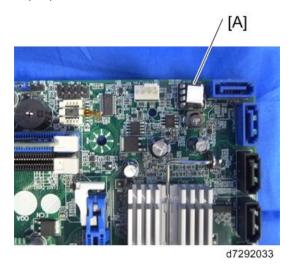
3. Remove the Motherboard ($\mathscr{F}$ x 5)

d7292032

4. Remove the Memory (page 82 "Memory – 2GB DIMM")

5. Remove the CPU Cooling Assembly (page 82 "CPU and Cooling Assembly")

6. Remove the CPU (page 82 "CPU and Cooling Assembly")

Note
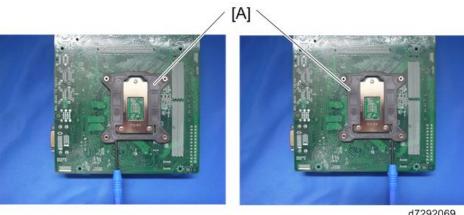
- When you replace the motherboard, remove the CPU and memory and attach them to the new motherboard (page 82 "CPU and Cooling Assembly").

7. Keychip [A].

d7292033

8. CPU holder bracket (on the back side of the motherboard)

The CPU holder bracket is attached to the motherboard with two strips of double-sided tape. In order to prevent the motherboard from being damaged, put a small screwdriver between the

bracket and the motherboard as shown below and twist the screwdriver to detach the CPU holder bracket.

d7292069

↓Note
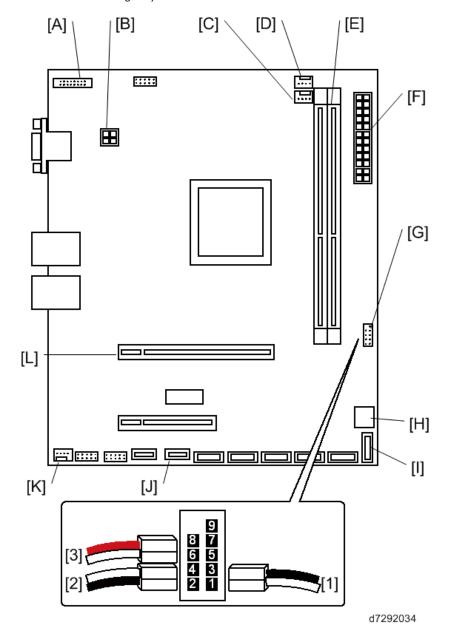
- When you replace the motherboard, move the CPU, CPU cooling assembly, video board, Keychip, and the CPU holder bracket from the old board to the new board. The Keychip contains option upgrade information and licensing information for the E-22B.

- A new motherboard comes with a protective cover [A] on the CPU slot. Remove it before using the motherboard.

d7292067

For reassembling:

- Make sure of where to connect the connectors for each cable.

- Make sure that all connectors are inserted firmly in the sockets. Also, do not put the connectors in the sockets the wrong way around.

d7292034
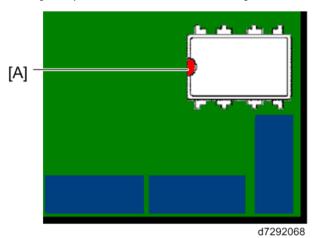
	Connector	Location
[A]	DIAG cable	PORT80 HDR

[B]	4-pin power	ATX POWER		
[C]	CPU fan	CPU_FAN		
[D]	Top chassis fan	SYS_FAN		
[E]	Memory	DIMM A1		
[F]	24-pin power	ATX24P_1		
[G]	Soft power button cable and activity LED cables	J20	1	For HDD LED
			2	For Power LED
			3	For Soft Switch
[H]	Keychip	J12		
[I]	SATA data cable	SATA 6G0		
[J]	Front panel USB port	USB A1		
[K]	Bottom chassis fan	Rear Fan		
[L]	Video interface board	PCIE_x16		

When installing the Keychip
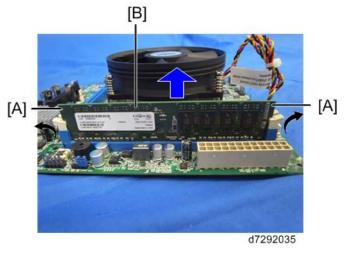
Make sure you install the Keychip in the correct direction. Installing it in the wrong direction may damage the pins. The cutout [A] must be facing toward the center of the motherboard.

d7292068

Memory – 2GB DIMM

1. Push outward on the levers [A] on each side of the DIMM.
2. Slide the DIMM [B] straight out of the socket.

d7292035

Note

- Always attach the DIMM [B] to the DIMM A1 socket.
- Gently slide the DIMM straight down into the socket and press so that the levers lock the DIMM into place. Make sure that the levers close securely around the ends of the DIMM.
- DIMMs fit in the socket only one way.

CPU and Cooling Assembly

Overview

You can replace the following parts.

- Cooling Assembly only
- CPU and Cooling Assembly (as a set). If you replace the CPU, you must replace the cooling assembly also, as a set.

The cooling assembly consists of a fan with heat sink and a clip assembly.

Note

- Be careful not to damage the motherboard, the CPU, or the CPU socket when you replace the cooling assembly. Remove the memory before you remove the cooling assembly.

- When you want to replace the CPU, replace the CPU and the cooling assembly as a set. This is very important, because the thermal pad that is attached to a new heat sink will make a good contact between the CPU and the heat sink when heated. If you attach a used cooling assembly to a new CPU by mistake, the heat sink will not contact the CPU properly, and this will cause the CPU to overheat.

- When replacing the CPU holder bracket on the back side of the motherboard, remove the release paper from the double-sided tape on the new CPU holder bracket first. Then, attach the CPU holder bracket to the motherboard using the double-sided tape.

Cooling assembly removal procedure

1. Cooling assembly [A] (🔩 x 4, 🔌 x 1).

d7292036

CPU removal procedure

1. Push the lever [A] to release the loadplate [B].

d7292037
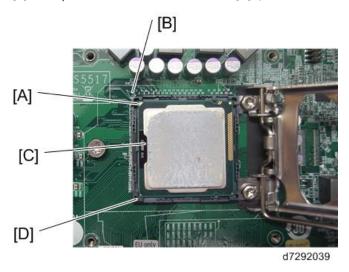
2. Grasp the CPU [A] by its edges and gently lift it from the socket.

83

d7292038

For Re-attaching:

- Check the location of the arrow [A] on the CPU [C] and align it with the arrow on the motherboard [B] when you insert the CPU into the socket [D]. (See the illustration below.)

d7292039

- Be careful not to bend the pins when you insert the CPU into the socket.

- Set the CPU in the socket completely and without forcing it.

Lithium Battery

⚠CAUTION

- There is danger of explosion if the battery is replaced with the incorrect type. Replace with only with the same lithium battery supplied as a spare part.

- Discard the used motherboard battery in accordance with the manufacturer's instructions and local regulations.

1. Lithium Battery [A].
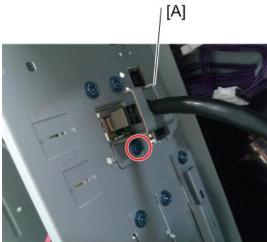
d7292040

For Re-assembling:

- You need to re-configure the system date and time.

- To configure the system date and time, enter the 'Server setup' menu from the Setup main menu. (☛page 65 "To Access the Setup Menu")

Gigabit Ethernet Controller

1. Protector plate [A] (🔩 x1).
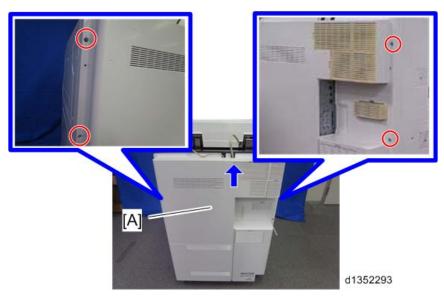
d7292004
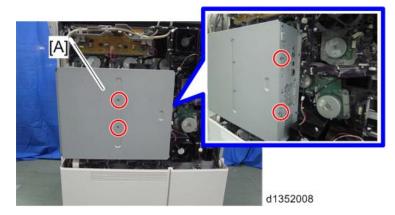
2. Interface cable [A].

d7292003
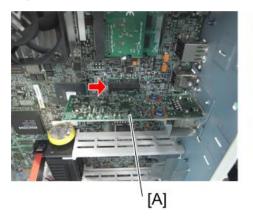
3. Rear center cover [A] (🔩 x 4).

d1352293

4. Controller box cover [A] (🔩 x 4).

d1352008

5. Gigabit Ethernet controller [A] (🔌x 1, 🔧 x 2).

d7292002

For Re-assembling:
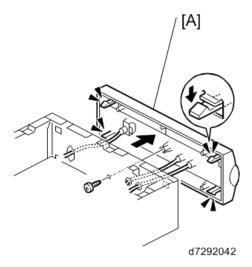
• Make sure that the Gigabit Ethernet controller is inserted straight.

Cables Connected to the Front Panel

1. Side cover
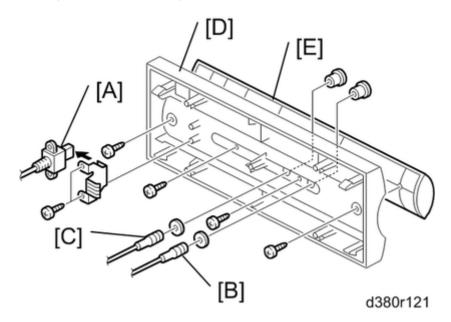
2. Video board (☞ page 73)

3. Front panel USB port cable [A] from USB A1

4. HDD LED cable [B] from J20

5. Power LED cable [C] from J20

d7292041

6. Front panel [A] (🔧 x 1)

3

d7292042

7. Front panel USB port cable [A] from front panel (🔩 x 2).

8. HDD LED cable [B] from front panel.

9. Power LED cable [C] from front panel.

10. Center panel [E] from the front panel [D] (🔩 x 4)
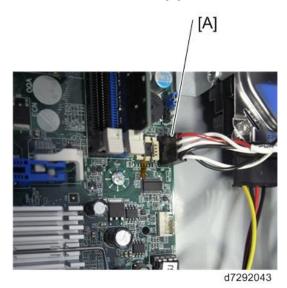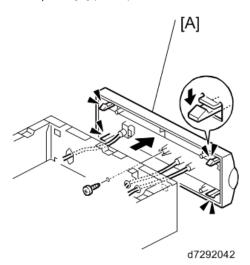
d380r121

For Re-assembling:

- Make sure of where to connect the connectors for each cable.

- Make sure that all connectors are inserted firmly in the sockets. Also, do not put the connectors in the sockets the wrong way around.

Soft Power Push Button

1. Side cover
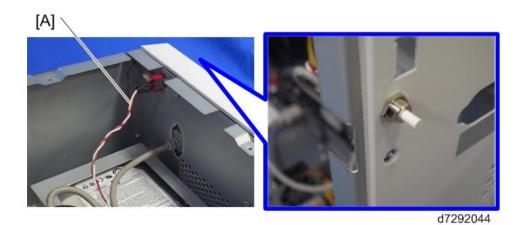
2. Video board (☛ page 73)

3. Soft Power Push Button cable [A] from J20

d7292043

4. Front panel [A] (🔩 x 1)

d7292042

5. Soft power button cable [A] from the front panel.

d7292044

For Re-assembling:

- Make sure of where to connect the connectors for each cable.

Clearing Procedure for CMOS

1. Make sure that the external power cable is removed from the back panel of the E-22B.

2. Remove the battery (☛page 84 "Lithium Battery").

3. Wait two minutes to allow the motherboard electrical components to fully discharge.

4. Reinstall the battery (☛page 84 "Lithium Battery").

5. After reassembling the E-22B, configure the time and date in Setup. For more information, see Configuration and Setup on the User Documentation CD.

3

4. Software Maintenance

General Notes and Cautions

You may use one of the following when you have a problem with the system software or the HDD.

- Clear Server: Deletes all queued print jobs from the E-22B
- Factory Defaults: Restores the E-22B to the factory defaults
- System Software Reinstallation

The following table shows whether the current data on the E-22B will remain or be deleted when each of these is used.

	"Clear Server"	"Factory Defaults"	System Software Reinstallation / Upgrade
Job Log	Not Deleted	Deleted	Deleted
Queued Jobs	Deleted	Deleted	Deleted
Scanned Jobs	Deleted	Deleted	Deleted
MailBox	Deleted	Deleted	Deleted
Archived Jobs	Deleted	Deleted	Deleted
FreeForm masters	Deleted	Deleted	Deleted
Resident Fonts	Not Deleted	Not Deleted	Deleted
Downloaded Fonts	Not Deleted	Deleted	Deleted
Language Selection	Not Deleted	Deleted	Deleted
Setup Options	Not Deleted	Deleted	Deleted
Patches	Not Deleted	Not Deleted	Deleted
Administrator Password	Not Deleted	Not Deleted	Deleted
Option Activation	Not Deleted	Not Deleted	Not Deleted

↓ Note

- In "System Software Reinstallation/Upgrade", "Upgrade" refers to replacing the software with a new version. It does not refer to the application of patches. When you apply a patch, data is not deleted.

Before you use any of the above features, make sure you inform the site administrator that the indicated data and settings will be deleted and should be re-installed after the feature has been used.

Job Log:

The list of jobs in the Job Log and all jobs in the queues are deleted. The site administrator can use E-22B Spooler to save a current list of jobs from the Job Log (the actual jobs are not saved, only a list of them).

Queued Jobs:

All queued print jobs (in the Print, Hold, and Printed queues) will be deleted.

Archived Jobs and Free Form masters:

Archived jobs on the E-22B HDD and FreeForm masters are deleted. The lists of archived jobs and FreeForm masters are deleted as well.

Fonts:

All fonts on the HDD are deleted when you reinstall the system software. Resident fonts are reinstalled when you reinstall the system software. Any customer-supplied fonts will need to be reinstalled by the site administrator using E-22B Downloader.

Administrator Password:

The administrator password will be deleted when system software is re-installed. (The administrator password will return to "**Fiery.1**" after the system software is re-installed.)

Configuration:

Make sure to print a configuration page before reinstalling the system software. The current Setup configuration will be lost when you reinstall the system software.

Compatibility:

When you upgrade the system software, make sure the latest user software is installed onto all computers that print to the E-22B. Using incompatible versions of the system and user software can result in system problems.

Clearing the Queued Print Jobs in the E-22B

The "**Clear Server**" command allows you to clear all queued print jobs from the E-22B; which means jobs from the E-22B Print, Hold, and Printed queues. Clear Server also clears all jobs archived on the E-22B hard disk, the index of archived jobs, and finally, all E-22B FreeForm masters and the index of E-22B FreeForm masters.

⬇**Note**
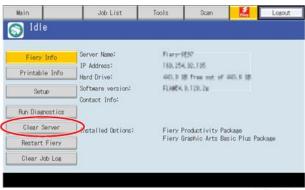
- Before using Clear Server, inform the site administrator that data on the E-22B hard disk will be deleted.

1. Make sure the E-22B is not in use.

2. Press the Home button on the operation panel of the copier and then touch the Fiery icon to access the Fiery menu screen. (☛page 65 "Running the E-22B Setup")

3. Move to the **Login** tab.

d7292019

4. You are asked to enter an administrator password. (The default password is "**Fiery.1**".)

5. Move to **Fiery** tab.

6. Touch "**Clear Server**". Then touch "**Clear Server**" again.

d7292020

7. When you are prompted "Clear all jobs from all queues?", touch "**OK**"

8. The Fiery menu screen will disappear and data will be cleared before the system restarts.

9. Press the Home button on the operation panel of the copier and then touch the Fiery icon. Check if the E-22B becomes idle.

Restoring the E-22B to Factory Defaults

To restore the default settings of E-22B and delete all the data stored on the HDD, use the "**Factory Defaults**" feature. Also use "**Factory Defaults**" when you want to change the language selection.

⬇**Note**

- Before using "**Factory Defaults**", inform the site administrator that all data (including the downloaded fonts) stored on the HDD and setup options will be deleted.

- Performing "**Factory Defaults**" will not delete the current administrator password, which was set for the E-22B (the initial password is "**Fiery.1**"). Before performing "**Factory Defaults**", check if the site administrator can input the current administrator password after the system software is restored.

- If a unique administrator password is already set for the E-22B, but the site administrator does not remember the password, you must re-install the system software from the DVD (or from a prepared the USB drive).

⬇**Note**

- There is a similar feature called "Restore Fiery Default Settings" in the Webtools.

- This feature will return the settings to the defaults (factory settings) but will not clear the language selection or data in the HDD, and does not require the E-22B to reboot. For details, refer to the "Configuration and Setup" manual.

1. Make sure the E-22B is not in use.

2. Print a configuration page (you may refer to this configuration page when you re-enter the setup options). (☞ page 64 "Printing the Configuration Page or Test Sheets")

3. Access the setup menu. (☞ page 65 "Running the E-22B Setup")

4. Touch "**Factory Defaults**".

d7292021

5. When you are prompted "Change all settings (including network) back to Factory Defaults and Reboot?", touch "**Continue**".

6. Wait for the diagnostic LEDs on the E-22B to turn off.

7. Press the Home button on the operation panel of the copier and then touch the Fiery icon.

8. The language selection screen will appear. Start to configure the E-22B.

   (For details, go to step 25 of the system software installation procedure. ☛page 99 "System Software Installation Procedure")

System Software Installation Procedure

Overview

System software should be installed in the following cases:

- You replace the HDD with a new one (on which the System Software is not installed)
- You update to a more recent version of the system software (this is not necessary when you apply a patch; it is necessary when you install a major version change)
- You have trouble with the system software (e.g. software corruption) and the problem cannot be solved by performing "Factory Defaults".
- The site administrator forgets the administrator password for the E-22B.

The system software is provided as follows:

- **System Software DVD:**

  System software and an installation program for the network port method are included.

- **User Software DVD**

  For E-22B, User Software DVD is also required at system software reinstallation/upgrade to load the driver/utility programs to the system.

- **USB Prep Tool program:**

  Windows application program for copying the system software DVD and User Software DVD to the USB drive, and at the same time making the USB drive bootable.

There are two ways to install/reinstall system software on the E-22B:

- **Installing system software over the network port:**

  Connect a PC to the E-22B directly, or through a hub using two network cables. Install the system software from the System Software DVD and User Software DVD.

- **Installing system software by booting the E-22B from a USB drive:**

  Use the USB Prep Tool program to install the USB Prep Tool Windows application on a PC. Then use the system software DVD, a USB drive, and the USB Prep Tool Windows application on the PC to make a bootable USB drive that includes E-22B system software. At the customer site, connect the USB port and turn the power ON. System installation will be done automatically.

  🔽 **Note**

  - Before you start system installation, give the site administrator the opportunity to print the Job Log and to save any custom simulations.
  - Also, print the **Configuration Page** and **Font Lists**.

- Backup and Restore feature are sometimes useful in order to reduce the time to re-configure the E-22B system settings after the system installation (☞ page 67 "Backup / Restore the System Settings").

Installing System Software over the Network Port

The system software DVD contains the system software and E-22B System Software Installer. To install system software using the LAN port on the E-22B, you need:

Either:

Two Ethernet cables and an isolated hub/switch

Cables must be 4-pair/8-wire, short-length Cat 5 (for 100BaseT) or Cat 5e (for 1000BaseT)

Or:

- For 100BaseTX: One Category 5 or higher Ethernet cross-over cable (4-pin/8-wire, short-length)
- For 1000BaseT: One Category 5e or higher Ethernet cross-over cable (4-pin/8-wire, short-length)
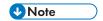
A Windows XP/2000/Vista/7/8 computer ("PC") with:

- CD/DVD drive, built in or attached
- Support for 100BaseTX or 1000BaseT

↓Note
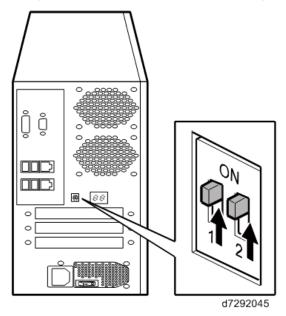
- This procedure describes using one cross-over cable. Instead of using a cross-over cable, you may use two Ethernet cables and an isolated hub/switch. (Do not connect any other devices to the hub/switch. Do not put the hub/switch on the LAN. Do not use the hub's optical port or uplink switch.)
- If the print engine is 230V, use shielded network cables.

1. Print the Configuration Page (☞ page 64 "Printing the Configuration Page or Test Sheets").

2. If possible, back up the system settings to a configuration settings file with the Backup feature (☞ page 67 "Backup / Restore the System Settings").

3. Perform the shut down procedure from the copier operation panel (☞ page 60 "Shutting Down the E-22B Only").

4. When the E-22B power is down (that is when the diagnostic LEDs are off), turn the main power switch of the E-22B to OFF.

5. Disconnect all cables from the E-22B connector panel.

6. Connect the Ethernet cross-over cable to the LAN port and to the Windows XP/2000/Vista/7 PC.

7. Turn on the PC's power and do the following procedure:

    - Close all software applications.
    - Stop all File Transfer Protocol (FTP) and Trivial FileTransfer Protocol (TFTP) services.
    - Disable all anti-virus and anti-spyware programs.

- Make sure that the PC is configured to obtain its IP address automatically (DHCP).

- Remove any network cables between the PC and the customer network.

- Disable all wireless network connections.

- Turn off the Windows Firewall.

- Disable all power-save and hibernation settings.

8. Insert the system software DVD into the PC's CD/DVD drive.

9. Navigate to the CD/DVD drive and click the icon for the Installer.vbs file, if it does not start automatically.

10. Click Next at the Welcome screen. Read the Software License Agreement and click the "I Agree" checkbox if you wish to continue the installation process, then click Next.

11. At the Connection Type screen, make sure Ethernet is selected. Click Next to advance to the Confirmation screen.

12. Set the E-22B service switches to the service mode position: ON.

⬇ **Note**

- Ignore the steps shown on the PC screen because they may be confusing at this stage of the procedure. Please continue to follow the steps of this procedure.

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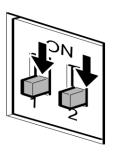
13. Turn the main power switch of the E-22B to ON, then press and release the soft power push button on the front of the E-22B.

14. Wait 10 seconds, then click Next on the PC screen.

15. At the Installation screen, click Next to start the installation. Wait while the files are copied and installed.

- The progress is slow at first.

  For most computers, you must wait approximately 30 min. Do not click Cancel.

- **If you do click Cancel**: Click **Finish** then turn the main power switch of the E-22B to OFF. Wait 10 seconds, and then repeat this procedure from the beginning. If the installation terminates abnormally, you may need to reboot the PC also.

⬇**Note**
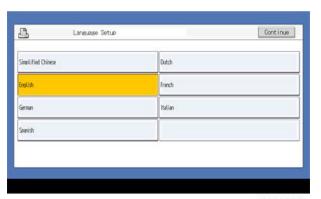
- If Windows detects more than one NIC card in the PC, Windows will prompt you to choose the NIC card that is connected to the E-22B. The NIC card to choose may be a card that is associated with IP Address 0.0.0.0.

16. When the message "Please Insert Disk 2 and Press OK to Continue." appears, remove the System Software DVD, insert the User Software DVD, and then click OK.

17. Click Next when installation is completed.

18. Click Exit and close the installer

19. Turn the main power switch of the E-22B to OFF.

20. Set the service switches in the normal position (not ON).

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21. Disconnect the cross-over cable from the LAN port and the Windows XP/2000/Vista/7 PC.

22. Reconnect all cables that you removed earlier from the E-22B panel.

23. Turn on the main power switch of the copier.

24. Turn on the main power switch of the E-22B.

25. Allow startup to proceed without interruption while you watch the diagnostic LEDs on the back panel of the E-22B.

26. When the diagnostic LEDs show '00', press the Home button on the operation panel of the copier and then touch the Fiery icon. 'Please wait' may be shown on the copier operation panel.

27. The language selection screen is shown. (If this screen is not shown, then press the Home button on the operation panel of the copier and then touch the Fiery icon again.)

    Select the desired language, and touch "**Continue**".

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- English

- Dutch

- French

- German

- Italian

- Spanish

- Simplified Chinese

⬇Note

- After you have selected a language, you cannot change the language unless you perform "Factory Defaults" (☞page 97 "Restoring the E-22B to Factory Defaults") or re-install the system software.

- The default settings for the E-22B depend on the language selection as follows:

		Selected Language & Measurement Unit	
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French
PS Setting	Default Paper Sizes	US	Metric
PCL Setting	Paper Size	Letter	A4
	Paper Size System Pages	US	Metric

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Unit. Select either "**US**" or "**Metric**", and then touch "**Continue**".

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28. Wait for a short time, then press the Home button on the operation panel of the copier and then touch the Fiery icon. Repeat if necessary until "Please wait" no longer appears.

29. Press the Fiery tab to access Setup, and press Setup at the Fiery menu screen.

30. You are asked to enter the administrator password. (The default password is "**Fiery.1**".)

31. Input the customer's settings from the Configuration pages that you printed earlier. If a backup exists of configuration settings file, restore it after the network configuration is completed. (☛ page 67 "Backup / Restore the System Settings")

⬇Note

- Ask the site administrator for the other settings that are not on the Configuration pages, You must reboot the E-22B to apply the settings. For more information, see the "Configuration and Setup" manual.

32. If you have been given any patches (system update files) for the version of system software you have just installed, install the patches now. See the instructions provided with each patch.

Installing System Software Using a USB Drive

Preparation

To prepare a USB drive, which is bootable and includes system software, the following items should be prepared:

- E-22B System Software DVD/User Software DVD
- USB Prep Tool program
- USB drive, at least 8 GB capacity

   Example: Seagate USB 2.0 Pocket Hard Drive, model number ST650211

- Windows XP SP3/Vista/7/8 computer ("PC") with:
   - CD/DVD drive, built-in or attached

- USB port (support for USB 2.0 or later is recommended)

Note

- USB1.x can also be used, but it will take more time to copy the system software.

Installation Procedure

1. Install the USB Prep Tool application on the PC, if is not already installed.

    1. Download the USB Prep Tool from the firmware download site and extract it.

    2. Open the created folder and double-click the Setup.exe to start the installer.

    3. Click Accept to accept the terms of the license agreement.

        Wait while the installer verifies the installation requirements.

    4. If a message appears on the screen prompting you to install .NET Framework, do one of the following:

        - Windows 8: Click "Install this feature" in the message that appears on the screen. In order to install the .NET Framework files, you must either connect the PC to the Internet or insert the Windows 8 OS DVD.

        - Windows 7/Vista/XP: Click Accept to accept the terms of the license agreement that appears on the screen. Wait up to 10 minutes as the files are installed.

        Note
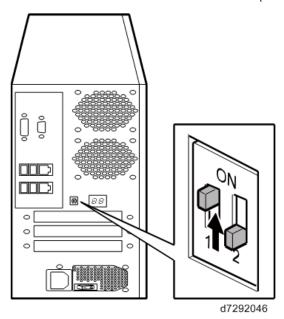
        - If no message appears, .NET Framework is already installed on the PC and you do not need to reinstall it.

    5. At the security warning screen, click Install.

        Wait while the application is installed on the PC.

        Note

        - After the installation is complete, the application automatically starts. If you are not ready to prepare the USB flash drive yet, you may click Cancel.

2. Prepare the USB drive.

    1. If necessary, start the USB Prep Tool application by clicking Start on the PC and choosing All Programs > Electronics for Imaging > USB Prep Tool.

    2. Insert the System Software DVD into the media drive of the PC.

    3. Attach the USB flash drive to the PC.

        All data on the USB flash drive is lost when the drive is reformatted during the preparation procedure. Make sure that no valuable data resides on the USB flash drive.

    4. Follow the on-screen prompts to the USB drive:

4

- Start screen: Specify the drive to copy from (the drive letter of the CD/DVD drive). Specify the drive to copy to (the drive letter of the USB drive). Click Proceed when the Proceed button appears and is available.

- Prepare screen: The progress bar and time remaining show that the files are being copied. Copying the files usually takes 15-30 minutes, but may take considerably longer depending on your PC. Do not cancel. Click Proceed when the Proceed button appears and is available.

- Finish screen: Confirm that the contents of the system software DVD were copied successfully to the USB drive. Click Finish to exit the application. The DVD will eject automatically. Remove the system software DVD.

3. Remove the USB drive in a safe way.

    (For example, with Windows 7, use "Safely Remove Hardware and Eject Media" menu.)

4. Power on the copier and the E-22B and print the configuration page.

5. If possible, back up the system settings to a configuration settings file with the backup feature (☞ page 67 "Backup / Restore the System Settings").

6. Perform the shut down procedure from the copier operation panel (☞ page 60 "Shutting Down the E-22B Only").

7. When the E-22B power is down (that is when the diagnostic LEDs are off), turn the main power switch of the E-22B to OFF.

8. Disconnect all cables from the E-22B connector panel.

9. Set the E-22B service switches as shown below. ("1" ON, "2" OFF)

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10. Attach the prepared USB drive to one of the USB ports on the E-22B.

Note

- If dust covers are attached to the USB Type A connectors, remove one dust cover using needle-nosed pliers.

11. Turn the main power switch of the E-22B to ON, then press and release the soft power push button on the front of the E-22B and wait until installation is complete. (The E-22B shuts down automatically after installation is complete.)

    The diagnostic LEDs increment quickly to initialize, then the diagnostic LEDs display 00 and increment every 30 seconds while the files transfer.

    Installation takes approximately 15-25 minutes. The LED on the USB drive should show that files are being transferred.

12. Turn the main power switch of the E-22B to OFF and remove the USB drive from the E-22B.

13. Reconnect all cables that you removed earlier from the E-22B panel.

14. Set the service switches in the normal position. (Not ON)
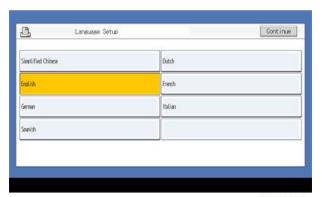
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15. Turn on the main power switch of the copier.

16. Turn the main power switch of the E-22B ON, then press and release the soft power push button on the front of the E-22B.

17. Allow startup to proceed without interruption while you watch the diagnostic LEDs on the back panel of the E-22B

    Note

    - Do not power off the E-22B.

18. When the diagnostic LEDs remain at '00', press the Home button on the operation panel of the copier and then touch the Fiery icon. 'Please wait' may be shown on the copier operation panel.

19. The language selection screen is shown. (If this screen is not shown, then press the Home button on the operation panel of the copier and then touch the Fiery icon again.)

    Select the desired language, and touch "**Continue**".

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- English
- Dutch
- French
- German
- Italian
- Spanish
- Simplified Chinese

↓Note
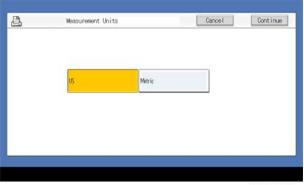
- "Simplified Chinese" can be selected only when the controller is connected to CH-C1a Pro or CH-C1b Pro.
- 1) After you have selected a language, you cannot change the language unless you perform "**Factory Defaults**" (☞ page 97 "Restoring the E-22B to Factory Defaults") or re-install the system software.
- 2) The default settings for the E-22B depends on the language selection as follows:

		Selected Language & Measurement Unit	
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French
PS Setting	Default Paper Sizes	US	Metric
PCL Setting	Paper Size	Letter	A4
	Paper Size System Pages	US	Metric

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Unit. Select either "**US**" or "**Metric**", and then touch "**Continue**".

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20. Wait for a short time, then press the Home button on the operation panel of the copier and then touch the Fiery icon. Repeat if necessary until "Please wait" no longer appears.

21. Press the Fiery tab to access Setup, and press Setup at the Fiery menu screen.

22. You are asked to enter the administrator password. (The default password is "**Fiery.1**".)

23. Input the customer's settings from the Configuration pages that you printed earlier. If there exists a backed up configuration settings file, restore it after the network configuration is completed. (☛ page 67 "Backup / Restore the System Settings")

🔽**Note**

- Ask the site administrator for the other settings that are not on the Configuration pages. You must reboot the E-22B to apply the settings. For more information, see the "Configuration and Setup" manual.

24. If you have been any patches (system update files) for the version of system software you have just installed, installed the patches now. See the instructions provided with each patch.

Patch Installation Procedure

When a software bug is found and fixed, or a new feature is added, a patch file (ps file) may be additionally released.

The patch installation procedure may vary depending on the patch; the download destination queue or system rebooting procedure may be different. Some patches may require prerequisite patches.

Therefore, when you install a patch, make sure to carefully read the attached release note and follow the instructions.

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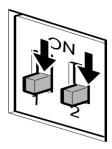
5. Troubleshooting

Overview

When a problem occurs during normal operation, check in the following order.

1. Verify that the service switches are in normal operation mode, not in a service mode. (The switches should be in the lower position.)

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2. Check that the Fiery menu appears on the copier's operation panel.

3. Verify that the network is functioning, no unauthorized software or hardware is installed on the E-22B, and there are no problems with a particular print job or application. The site administrator can help you to verify these issues.

4. Verify that the E-22B and its connection with the copier has no problem by printing test pages. (☛ page 64 "Printing the Configuration Page or Test Sheets")

5. If the E-22B can boot, check if the diagnostic LEDs on the back panel of E-22B stop on a particular diagnostic code. (☛ page 112 "LED Diagnostic Codes")

6. Check that all cables, connectors, and replacements are present, appear undamaged and are correctly installed and connected.

   (☛ page 71 "Replacement")

7. Try to solve the problem by performing "Clear Server" or "Factory Defaults".

   Inform the site administrator that the data stored in the HDD will be deleted.

   (☛ page 95 "Clearing the Queued Print Jobs in the E-22B" and page 97 "Restoring the E-22B to Factory Defaults")

8. Check if a newer version of system software, firmware, or patch for the E-22B and copier has been released. If so, install it. (☛ page 99 "System Software Installation Procedure")

9. If the problem will not disappear, reinstall the system software. (☛ page 99 "System Software Installation Procedure")

10. If the problem will still not disappear, you may need to replace parts of the hardware. (☛ page 116 "Errors and Suggested Actions")

LED Diagnostic Codes

During startup, the E-22B advances through a standard diagnostic sequence. Each diagnostic code flashes rapidly on the LED display during this sequence until the E-22B reaches the Idle condition. In the Idle condition, the LED display shows the 00 code. This shows that the E-22B is in normal operation mode. The E-22B may flicker or drift from 00 during normal operation, but it will always return to 00.

If the LED display stops on a diagnostic code before the E-22B completes the boot up process, one or more diagnostic tests may have failed. Look up the diagnostic code in the following table to determine the troubleshooting actions that you should take.

Note

- A component may be faulty without an error code being displayed. Also, it is possible for an error code to indicate a defective component but that component may not be defective. Use the error codes only as a guide for what to investigate further.

Overview

Try the following procedures if the E-22B is hanging up on a diagnostic code.

1: Rebooting the E-22B

When the E-22B is already ON and hanging up on a diagnostic code, reboot the E-22B properly to see if the problem persists. Results are unpredictable when the E-22B is rebooted incorrectly.

1. Press and hold the soft power button until the E-22B turns off.

2. Wait a full 30 seconds.

3. Press (but do not hold) the soft power button.

4. Wait to see if the E-22B reaches idle.

2: Checking the components

Always check the unit for visible problems.

1. Check the interior for foreign objects.

2. Check the cables to make sure they are intact, with no visible damage, and that each is the correct cable, and correctly installed.

3. Check all connectors for visible damage.

4. Check the replaceable parts for visible damage, and that each is the correct part and correctly installed.

3: Turn on the E-22B Power

After you reassemble the unit, turn on the E-22B power properly to see if the problem persists. Results are unpredictable when the E-22B power is turned on incorrectly.

1. Connect the AC power cord to the AC power outlet.

2. Toggle the AC power switch to the ON position.

3. Wait a full 30 seconds.

4. Press (but do not hold) the soft power button.

Wait to see if the E-22B reaches the idle status.

LED Diagnostic Code Tables

*[1]: Try in the listed order. If the problem persists, try the next one.

5

LED codes	Possible cause	Suggested action
00	When the Color Controller E-22B is in the Idle state and in Operational mode, the LED display shows 00. If the LED display shows 00, but the system is not functioning properly, one or more of the following may be the cause of the problem: • Faulty connection between the Color Controller E-22B and the copier • Service switches are set to an incorrect mode • Improper service board cable connection • Corrupted system software • Missing, faulty, or dead battery • Corrupted BIOS settings on the motherboard • Missing or faulty chassis fan • Faulty CPU and/or CPU cooling assembly • Faulty HDD or HDD connection • Faulty motherboard	1. Check and reseat all cable connections between the Color Controller E-22B and copier. 2. Make sure that the Color Controller E-22B service switches are set to OFF (both away from ON). 3. If the server date/time cannot be set or responds slowly, replace the battery on the motherboard, and then update the date/time in Server Setup. 4. Shut down and open the Color Controller E-22B, and do the following: Reseat the power and data cables to the HDD. Make sure that the data cable is connected to the proper connector on the motherboard. 5. Clear the CMOS. 6. Reinstall system software. 7. If no airflow or fan noise is evident at the vent holes of the chassis where the chassis fan is located, replace the chassis fan. 8. Replace external cables, one at a time. 9. Check and reseat the CPU cooling assembly, and then clear the CMOS. 10. Replace the CPU cooling assembly. 11. Replace the CPU, and then clear the CMOS. 12. Replace the HDD data cable. 13. Replace the HDD. 14. Replace the motherboard.
FF, A7, A8	Possibly one of the following: • Corrupted security chip • Faulty motherboard • Faulty or missing CPU	1. Clear the CMOS. 2. Replace the motherboard. 3. Replace the CPU, and then clear the CMOS.

LED codes	Possible cause	Suggested action
3b, 50, 52, E1	Possibly one of the following: • Corrupted security chip • Missing or faulty DIMM • Faulty motherboard	1. Clear the CMOS. 2. Replace the motherboard.
55	Possibly one of the following: • Missing or faulty DIMM • Faulty motherboard	1. Check and reseat the DIMMs. 2. Replace the DIMMs. 3. Replace the motherboard.
90	Possibly one of the following: • Corrupted security chip • Faulty motherboard	1. Clear the CMOS. 2. Replace the motherboard.
Any other code that the system hangs on before reaching the idle state	Possibly one of the following: • Corrupted security chip on the motherboard • Faulty motherboard	1. Clear the CMOS. 2. Make sure that you reseated the internal cable connections and verified system components. 3. Replace the motherboard.

5

Errors and Suggested Actions

The most common causes of hardware problems are loose connections. Before you decide to replace any parts of E-22B, make sure that the parts and connectors are correctly and firmly installed. (☛ page 71 "Replacement")

Start-Up Problems

The following symptoms are described in the tables below:

1. When the main power switch is turned on, no power is supplied to the E-22B.

2. The E-22B main power switch can be turned on, but the E-22B will not continue to boot-up.

3. The E-22B starts up and reaches 00 on the LED display. But after 5 minutes, the Fiery menu still does not appear on the copier operation panel when you press the Home button on the operation panel of the copier and then touch the Fiery icon.

4. The CPU cooling fan is not working.

5. The CPU cooling fan is making noise.

6. If the Fiery menu screen does not appear on the copier operation panel when you press the Home button on the operation panel of the copier and then touch the Fiery icon.

Start-Up Problem-1
Symptom:
When the main power switch is turned on, no power is supplied to the E-22B.
Possible cause:
• The AC power cord of the E-22B is not connected. • The soft power push button is not pressed. • Defective power supply

Start-Up Problem-1

Suggested action:

1. Connect the AC power cord.

2. Press and release the soft power push button.

3. Check if the connector of the power supply unit is correctly inserted into the motherboard ATX24P_1 socket.

4. If the connector is inserted correctly, replace the parts in the following order.

   1) AC Power cord

   2) Power supply unit

   3) Motherboard

Start-Up Problem-2

Symptom:

The E-22B main power switch can be turned on, but the E-22B will not continue to boot-up.

Possible cause:

- Motherboard, Memory or CPU is incorrectly installed.

- Motherboard defective

- Memory defective

- CPU defective

- Power supply unit defective

Suggested action:

1. Disconnect the AC power cord to the E-22B.

2. Check if the memory installed in the DIMM A1 socket, and is it installed firmly and correctly.

3. Check if CPU installed properly (no pins of the CPU bent or broken)

4. Check if cable of the CPU cooling assembly connected to the CPU_FAN socket.

5. Try to install the following parts correctly, and then try to replace the parts in the following order:

   - Power supply unit

   - CPU

   - Memory

   - Motherboard

5

Start-Up Problems-3
Symptom:
The E-22B starts up and reaches 00 on the LED display. But after 5 minutes, the Fiery menu still does not appear on the copier operation panel when you press the Home button on the operation panel of the copier and then touch the Fiery icon.   -or-   The E-22B shuts down after reaching idle (00).
Possible cause: • System software corruption.   • Defective video board.   • Missing or defective security chip
Suggested action: 1. Replace the interface cable. (☞ page 18 "Connecting E-22B to the Copier")   2. Reinstall the system software. (☞ page 99 "System Software Installation Procedure")   3. Make sure that the key chip is correctly installed on the video board.   4. Replace the video board.   5. Replace the key chip.

Start-Up Problems-4
Symptom:
The CPU cooling fan is not working.
Possible cause: • Incomplete cable connection.   • CPU cooling fan defective.
Suggested action: 1. Check if the cable of the CPU cooling assembly is connected firmly to CPU_FAN.   2. Replace the CPU cooling assembly.

Start-Up Problems-5
Symptom:
The CPU cooling fan is making noise.

Start-Up Problems-5
Possible cause:
• Dirty cooling fan.
Suggested action:
1. Remove the cooling fan, clean it, and re-attach it.

Start-Up Problems-6
Symptom:
The Fiery menu screen does not appear on the copier operation panel when you press the Home button on the operation panel of the copier and then touch the Fiery icon.
Possible cause:
• Controller not ready
• Loose connection of the Gigabit Ethernet PCB.
• Gigabit Ethernet PCB defective
• System software corruption
• Copier SP is not properly set.
Suggested action:
1. Check if the Gigabit Ethernet PCB is inserted straight and connected firmly into the C slot on the copier. (☛ page 18 "Connecting E-22B to the Copier")
2. If the above checks do not solve the problem, replace the interface cable or Gigabit Ethernet PCB
3. Check if SP5-193-001 is set to "1".
4. Check if SP5-895-001 is set to "1".

System Problems

The following symptoms are described in the tables below:

1. The system date on the configuration page will always be returned to an old date (factory defaults date) after you turn on the E-22B; or the time and date settings that appear on the configuration page are sometimes earlier or later than the actual time and date.

2. The system performs slowly or stops sometimes.

System Problem-1
Symptom:
The system date on the configuration page will always be returned to an old date (factory defaults date) after you turn on the E-22B; or the time and date settings that appear on the configuration page are sometimes earlier or later than the actual time and date.
• BIOS settings were lost due to a dead battery. • Motherboard defective
Suggested action: 1. Replace the lithium battery on the motherboard, and re-configure the system time and date. 2. Replace the motherboard.

5

System Problem-2
Symptom:
The system performs slowly or stops sometimes.
Possible cause: • DIMM defective or faulty DIMM connection • HDD defective • CPU overheated and/or defective • Motherboard defective
Suggested action: 1. Reconnect the DIMM. 2. Replace the DIMM. 3. Check if the connectors of the power supply unit and HDD are firmly inserted in the sockets. 4. Replace the soft power push button cable or activity LED cables. 5. Replace the HDD. 6. Make sure that the CPU on the motherboard is connected correctly and that the fan cable is connected. 7. Replace the CPU. 8. Replace the motherboard

System Software Installation

The following symptoms are described in the tables below:

1. The E-22B start page fails to print from the copier after the installation is complete.

2. One of the following:

   - Installer screen hangs up at Waiting for E-22B to be ready, FTP/TFTP Setup, or Transferring boot file for longer than 15 minutes.

   - Installation fails repeatedly.

3. Installation stalls for 5 minutes (or longer) while downloading.

4. Cannot load the contents of the System Software onto the USB drive using the USB Prep Tool program.

5. When installing the system software from the USB drive, the E-22B remains on for 30 minutes (or longer) after beginning the installation.

6. When installing the system software from the USB drive, the LED on the USB drive remains off or on (not blinking).

System Software Installation-1
Symptom:
The E-22B start page fails to print from the copier after the installation is complete.
Possible cause:
• The copier is not loaded with the required paper stock.
Suggested action:
1. Load the copier tray with the size of paper that is appropriate for the national language selected for the E-22B system.

Network Port Method

System Software Installation-2
Symptom:
One of the following:
• Installer screen hangs up at Waiting for E-22B to be ready, FTP/TFTP Setup, or Transferring boot file for longer than 15 minutes.
• Installation fails repeatedly.

System Software Installation-2

Possible cause:

- There is a conflict between the installer or the security settings on the PC.

- Incorrect or defective RJ-45 cable

- The installer is not compatible with the PC.

Suggested action:

1. Check again that you have disabled all software programs and network and security settings on the PC. Then retry the installation. Before you retry the installation, turn off the E-22B power using its dedicated AC power switch and wait 10 seconds.

2. Make sure you a using a cross-over RJ-45 cable. As an alternative, you can use two straight-through RJ-45 cables and a network hub. Connect only the PC and the E-22B to the hub. If the cable appears damaged, replace it.

3. If the problem persists, retry the installation using a different PC.

System Software Installation-3

Symptom:

Installation stalls for 5 minutes (or longer) while downloading.

Possible cause:

- The service switches are set to normal mode

- Incorrect or defective RJ-45 cable

- Motherboard defective

Suggested action:

1. Make sure the E-22B service switches are set to service mode (toward "ON).

2. Make sure you a using a cross-over RJ-45 cable. As an alternative, you can use two straight-through RJ-45 cables and a network hub. Connect only the PC and the E-22B to the hub. If the cable appears damaged, replace it.

3. Replace the motherboard.

USB Drive Method

System Software Installation-4
Symptom:
Cannot load the contents of the System Software onto the USB drive using the USB Prep Tool program.
Possible cause:
• The USB drive and/or PC do not meet the minimum system requirements. • There is a conflict between the USB Prep Tool program and the USB drive.
Suggested action:
1. Make sure that the USB drive and the PC meet the minimum system requirements described in this manual (☛page 104 "Installing System Software Using a USB Drive"). 2. If the problem persists, try using a different PC. If you have been using a laptop PC, try a desktop PC instead. 3. If the problem persists, try using a different USB drive.

System Software Installation-5
Symptom:
When installing the system software from the USB drive, the E-22B remains on for 30 minutes (or longer) after beginning the installation.
Possible cause:
• The position of the service switches are incorrect. • HDD defective • Motherboard defective • USB drive defective.

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System Software Installation-5

Suggested action:

1. Make sure that the service switches are set to 1=ON 2=OFF during the USB drive system software installation.

2. Check the LED on the USB drive. If the LED is not blinking (remains off or on), the drive may be connected incorrectly. Turn off the E-22B main power switch, and reconnect the drive. Then turn the main power switch on, and press and release the soft power push button and allow the installation to resume.

3. Check the connection of the power and SATA data cables.

4. Replace the SATA data cable.

5. Replace the HDD.

6. Replace the motherboard.

7. Replace the CPU.

8. Retry the installation with a different USB drive.

System Software Installation-6

Symptom:

When installing the system software from the USB drive, the LED on the USB drive remains off or on (not blinking).

Possible cause:

• USB drive defective or not correctly connected

• Motherboard defective

• HDD defective

Suggested action:

1. Turn off the E-22B main power switch and reconnect the USB drive. Then turn the power on, and press and release the soft power push button and allow the installation to resume.

2. Retry the installation with a different USB drive.

3. Replace the motherboard.

4. Check the connection of the power and SATA data cables.

5. Replace the SATA data cable.

6. Replace the HDD.

Network Problems

The following symptoms are described in the tables below:

1. E-22B does not communicate with the network.

2. Unable to connect to the network; or no LED on the 10/100/1000BaseT network connector is lit.

3. The system starts up slowly (seems to stop); and the Configuration Page shows an error on the "IP Address" line under "Network Setup".

Network Problem-1
Symptom:
The E-22B does not communicate with the network.
Possible cause:
• Wrong cables because the cross-over cable and the straight through network cable look alike.
Suggested action:
1. Check the labeling on the cable connectors and /or the wire color sequence on the connectors to make sure you are using a network straight-through cable to the customer's LAN from the RJ-45 second from the bottom.

Network Problem-2
Symptom:
Unable to connect to the network; or no LED on the 10/100/1000BaseT network connector is lit.
Possible cause:
• The cable is connected to a port that is not used.
• Defective network cable or connection
• Network problem
• Defective Ethernet interface on the motherboard

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Network Problem-2
Suggested action:

1. Make sure the network cable is the correct type and connected to the correct network port on the E-22B.

2. Check the cable connection to the network port.

3. Replace the cable with a new or tested cable.

4. Ask the network administrator to check other devices on the network.

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

6. If the rest of the network operates correctly and the problem persists, replace the motherboard.

Network Problem-3
Symptom:

The system starts up slowly (seems to stop); and the Configuration Page shows an error on the "IP Address" line under "Network Setup".

Possible cause:

Normal behavior. The system is searching for a nonexistent DHCP server. DHCP is enabled by default on the E-22B, but the customer's network is not using DHCP.

If the customer's network is using DHCP:

• Defective network cable or connection.

• Network problem.

• Defective Ethernet interface on the motherboard.

Suggested action:

1. If the problem persists, ask the network administrator to change the default in the E-22B network setup.

2. If no LED is lit on the E-22B's network port, check the cable connection to the E-22B and the network. Make sure the cable is the correct type.

3. Ask the network administrator to check other devices on the network.

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

5. If the rest of the network operates correctly and the problem persists, replace the motherboard.

Printing Problems

The following symptoms are described in the tables below:

1. A test page or configuration page cannot be printed, or the images on the printed pages are abnormal.

2. The E-22B appears on the list of printers on the customer's workstation, but certain jobs do not print.

3. A print job stops after one or few pages.

4. Print Quality is poor.

5. Pages come out blank, or tinted with green or some other color.

Printing Problem-1
Symptom: A test page or configuration page cannot be printed, or the images on the printed pages are abnormal.
Possible cause: • The copier is not ready to print.   • Copier problem   • Loose cable connection   • Interface cable defective   • Loose connection of the Gigabit Ethernet PCB   • Gigabit Ethernet PCB defective   • Video board defective   • Corrupted system software.   • HDD defective.

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Printing Problem-1

Suggested action:

1. Make sure the copier main power switch is on and the copier is ready to print.

2. Check the copier operation panel for indications or messages about the copier status.

3. Check that the copier operates correctly. (Check if you can make hard copies without any problem)

4. Make sure the E-22B main power switch is in the "ON" position.

5. Shut down the Copier and the E-22B. Then power on the Copier and the E-22B in this order.

6. Make sure the Fiery menu screen appears when you press the Home button on the operation panel of the copier and then touch the Fiery icon.

7. Check if the Gigabit Ethernet PCB is inserted straight and connected firmly into the C slot on the copier. (☞page 18 "Connecting E-22B to the Copier")

8. Check again that the video board is present and properly connected to the motherboard.

9. Replace the Gigabit Ethernet PCB.

10. Replace the video board.

11. If the problem persists, you may need to service the copier.

12. Try "Clear Server", "Factory Defaults", or re-install the system software. (☞page 95 "Clearing the Queued Print Jobs in the E-22B"/page 97 "Restoring the E-22B to Factory Defaults")

13. Replace the HDD

14. If replacing the HDD does not correct the problem, make sure you install the old HDD back in the E-22B.

Printing Problem-2

Symptom:

The E-22B appears on the list of printers on the customer's workstation, but certain jobs do not print.

Possible cause:

- PostScript error
- Application problem

Printing Problem-2

Suggested action:

1. Make sure 'Print to PostScript Error' in Setup is set to Yes. Check for error messages on the E-22B output.

2. Print a job from a different application to determine if the problem is associated with a particular application.

3. Make sure the connection between the E-22B and the workstation is operating. To do this, download a test page from the workstation or print a simple test file.

4. Resend the problem file.

Printing Problem-2

Symptom:

The configuration page is completely or mostly blank.

Possible cause:

- Defective DIMM

- Corrupted system software

Suggested action:

1. Check the DIMM and reconnect it, to remove oxidation on the connectors.

2. Reinstall the system software. (☞ page 99 "System Software Installation Procedure")

3. Replace the DIMM.

Printing Problem-3

Symptom:

A print job stops after one or few pages.

Possible cause:

- Normal process, if this occurs when printing the first copy of a multi-copy print job.

- PostScript or application error

- Defective DIMM.

Printing Problem-3

Suggested action:

1. The working area memory became full during ripping, and the printer switched to rip-only mode until all pages were ripped.

2. Cancel the E-22B print job.

3. If this fails to clear the problem, turn on and off the Copier and E-22B.

4. If the problem persists, perform Clear Server. (☞page 95 "Clearing the Queued Print Jobs in the E-22B")

5. Check the DIMM and reconnect it, to remove oxidation on the connectors.

6. Reinstall the system software. (☞ page 99 "System Software Installation Procedure")

7. Replace the DIMM.

Printing Problem-4

Symptom:

Print Quality is poor.

Possible cause:

- Missing or outdated printer description file.

- The application cannot find the necessary printer description file.

- Problem with the copier

- Out of calibration or calibration information/curves on the active partition are corrupted.

- Calibration information/curves on the active partition are corrupted.

Printing Problem-4

Suggested action:

1. Make sure the necessary printer description file is installed.

For information on printer files, see "Printing from Windows and Printing from Mac OS" on the user documentation CD.

1. Test the copier and service it if necessary (see the copier service manual).

2. Start ColorWise Pro Tools from a client computer and click the Calibratior icon. Then click Restore Device in the calibrator window. Restore Device restores the E-22B calibration information to the factory defaults. If restoring the default calibration does not solve the problem, you may need to service the copier.

3. If restoring the default calibration corrects the color quality, a custom calibration may have been the cause of the problem. Ask the site administrator to recalibrate the E-22B.

4. If the problem persists after recalibration, the calibration information on the HDD may be corrupted. Reinstall the system software. (☞ page 99 "System Software Installation Procedure")

5. If the problem persists, the HDD may be corrupted. Verify that all HDD cabling is correct.

6. If HDD cabling is correct, you may need to replace the HDD.

Printing Problem-5

Symptom:

Pages come out blank, or tinted with green or some other color.

Possible cause:

- Bad connection between the E-22B and the Copier.

- Problem with the copier.

Suggested action:

1. Turn on and off the Copier and E-22B.

2. Test the copier and service it if necessary (refer to the copier service manual).

If the customer can print the Configuration Page from the copier operation panel but cannot print a job from a computer on the network, ask the network administrator to do the following:

- Check all components of the network, including cables, connectors, network adapter boards, and network drivers.

- Activate the network and use it to communicate with other printers.

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

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Note

- EPS file generation is not fully standardized among applications. Some users may encounter problems while printing certain EPS files.

Test the Voltage Supplies

To check if the power supply is working, use a multimeter at the following locations on the power supply unit.
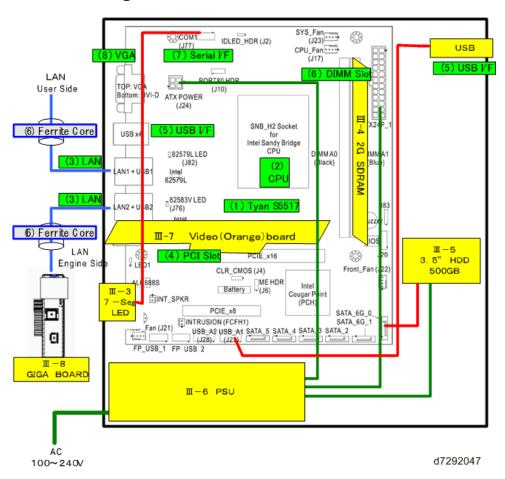
Test the voltages on the ends of the connectors coming from the power supply unit. The following table lists the power connectors.

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REF. D.	PIN NO.	SIGNAL	WIRE COLOR
P1	1	+3.3V	ORANGE
	2	+3.3V	ORANGE
	3	COM	BLACK
	4	+5V	RED
	5	COM	BLACK
	6	+5V	RED
	7	COM	BLACK
	8	PW-OK	GRAY
	9	+5Vab	PURPLE
	10	+12V	YELLOW
	11	+12V	YELLOW
	12	+3.3V	ORANGE
	13	+3.3V	ORANGE
		+3.3VS	BROWN
	14	-12V	BLUE
	15	COM	BLACK
	16	PS-ON	GREEN
	17	COM	BLACK
	18	COM	BLACK
	19	COM	BLACK
	20	-	-
	21	+5V	RED
	22	+5V	RED
	23	+5V	RED
	24	COM	BLACK

REF. D.	PIN NO.	SIGNAL	WIRE COLOR
P2	1	COM	BLACK
	2	COM	BLACK
	3	+12V	YELLOW
	4	+12V	YELLOW

6. Detailed Section Descriptions

Block Diagram and Functions

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Components

Component	Type	Configuration
Processor	Intel Pentium Processor G850	2.9GHz
Hard Drive	Serial ATA	500GB
SDRAM	PC3-10600	2GB, 240 pin
BIOS ROM	Flash	8MB
EEPROM	EEPROM	1Kbit

Networking

Cable requirements:

- 10BaseT (Ethernet): Unshielded Twisted Pair (UTP), Category 3 or higher
- 100BaseTX (Fast Ethernet): UTP, Category 5 or higher (4-pair/8-wire, short length)
- 1000BaseT (Gigabit Ethernet): UTP, Category 5e or higher (4-pair/8-wire, short-length)

↓Note

- If the print engine is 230V, use a shielded network cable.

Video Board

The Video Board functions include:

- High speed data transmission
- High speed data decompression
- Engine output at maximum rated output speed

The video interface controls such aspects of the print job as:

- Hardware decompression
- Print quality enhancement technologies

Hard Disk Drive

The hard disk drive is used to optimize many parts of the printing system as well as improving throughput and ease-of-use. The hard disk drive stores the following information:

- System software
- Non-volatile spooled print jobs
- Additional storage for compressed pages
- Non-volatile record of printed jobs (Job Log)
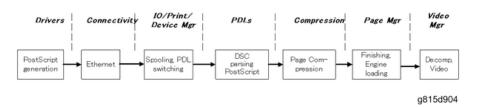- Resource storage space for downloaded fonts

Non-Volatile Memory

- The 8MB Flash Memory contains the BIOS, etc.
- The 1Kbit EEPROM holds the MAC address data.

Volatile Memory

- SDRAM is one 2GB, PC3-10600, Double Data Rate 3 (DDR3), 240-pin.

Print Data Processing

Flow Chart

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The key roles of each part of the print system are outlined below.

- The drivers are responsible for generating the page description on the host system and for transmitting data to the printer.

- The I/O manager mediates the connection with the network interface and establishes a device or print manager connection.

- The print manager is responsible for spooling the job (if appropriate) and for feeding jobs to the correct PDL interpreter.

- The PDL interpreters are responsible for turning page descriptions into rendered pages and for parsing job management comments.

- The compression subsystem manages compressed pages in memory.

- The page manager coordinates pages for sending to the engine for the most efficient printing, finishing, and accessory handling.

- The video subsystem is responsible for decompressing pages and feeding the engine with appropriate engine signals. The video subsystem also handles certain print quality processing functions.

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7. Specifications

General Specifications

Configuration:	External Type Printer Controller Unit
Motherboard:	CPU: Intel® Pentium® Processor G850 2.9GHz Network Interface: RJ-45 Network port (1000-Base/100-Base/10-BaseT)
Memory:	2GB x 1 (DDR3-1333-999) PC3-10600
HDD:	Internal HDD: 500GB
Operating System:	Linux
Network Protocols:	AppleTalk (for downloading fonts) TCP/IP (IPv4/IPv6) SMB
Printer Description Languages:	Adobe PostScript3 (Standard), PCL6/5c (Standard)
Supported Driver Language:	English, French, German, Italian, Spanish and Dutch
Print Resolution:	1200dpi (2bit)
Gradation:	1 bit/pixel, 4 bits/pixel
Scan Resolution:	Max. 600 dpi
Scan Source:	ADF / Exposure Glass
Scan Sides:	Simplex / Duplex
Scan Destination:	Hold Queue / MailBox / Email / FTP Server/ Internet Fax Client PC Disk (E-22B Remote Scan only)
Scan Format:	PDF/ TIFF/ JPEG

Printing Speed:	Ch-C1a: 65 ppm Ch-C1b: 80 ppm
Resident Fonts:	PostScript: 138 fonts PCL: 80 AGFA fonts
Power Consumption:	Rated: 80W
Noise Emission: (Sound Power Level)	Sound Power Level: Less than 51db(A) Sound Pressure Level: Less than 41db(A)
Dimensions (W x D x H):	124.3mm x 362.5mm x 294.6mm, 4.9" x 14.3" x 11.6"
Weight:	5.6 kg (12.4 lb)

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MEMO

MEMO