Color Controller: E-3200/5200
(Machine Codes: D557/D558)

SERVICE MANUAL

15 December, 2010

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
Ⓒ	E-ring
⍩	Clip

Trademarks:

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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/m3

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 machine 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

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Minimum Space Requirements
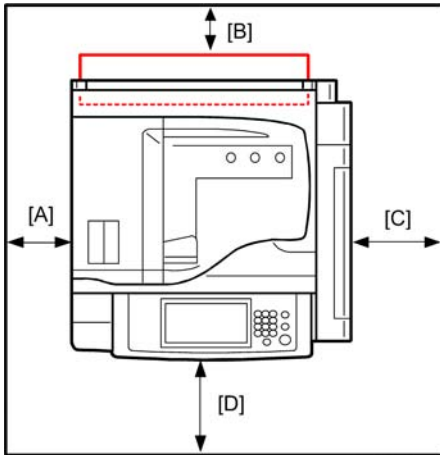
d479i001

Place the machine (with Fiery controller installed) near the power source, providing clearance as shown.

- A: Over 100 mm (3.9")
- B: Over 100 mm (3.9")
- C: Over 550 mm (21.7")
- D: Over 750 mm (29.5")

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 Fiery Controller.│
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│  Connect the Fiery Controller│
│        to the copier.       │
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│   Select the language and   │
│     do the minimum setup    │
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│    Print Test Pages and a   │
│      Configuration Page     │
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│ The site administrator      │
│ connects the Fiery          │
│ Controller to the network   │
│ and verifies the connections.│
└─────────────────────────────┘
              ↓
            ( 1 )
```

```
            ( 1 )
              ↓
┌─────────────────────────────┐
│   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 Fiery Controller.│
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│         Finished.           │
└─────────────────────────────┘
```

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Machine Installation

1 ## 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 Fiery controller and confirms network connection for the Fiery controller 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 Fiery controller (user documentation is also included) onto the networked PCs and Mac OS computers that will print to the Fiery controller.

🔽Note

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

Unpacking the Fiery Controller

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:

d479i100
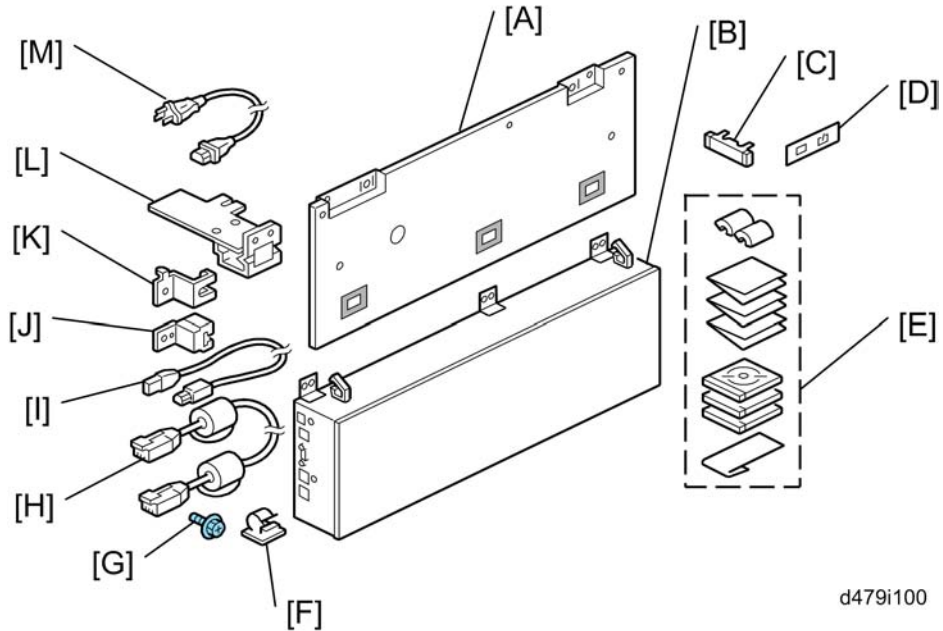
[A]: Fiery Controller Plate	[H]: Interface Cable
[B]: Fiery Controller	[I]: USB Power Cable
[C]: Fierydriven Keytop	[J]: Protection Plate (For Fiery Controller)
[D]: Fierydriven Logo	[K]: Protection Plate (For Copier)
[E]: Media Pack	[L]: Gigabit Ethernet PCB
[F]: Clamp	[M]: AC Power Cord
[G]: Screw (M3 x 6)	

3. Give the Media Pack [E] 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 Fiery controller out of the box.

Top and Side Panels

After unpacking the Fiery controller, familiarize yourself with the top and side panels before you connect the Fiery controller to the Copier.

d557i002
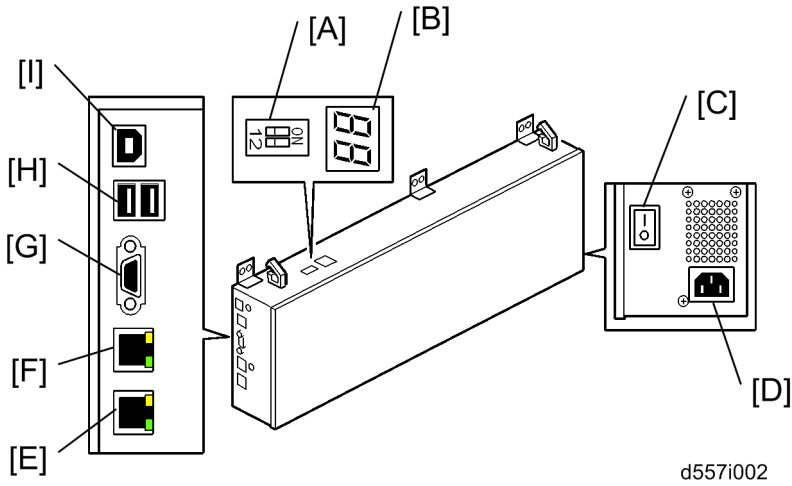
Top Panel

[A]: Service Switches (For service use only)
[B]: Service LEDs (For service use only)

Right Side Panel

[C]: AC Power Switch
[D]: Power Connector

Left Side Panel

[E]: LAN Connector (For customer use)
[F]: Gigabit Ethernet Connector
[G]: Not used (Monitor port)
[H]: USB Port (Host)
[I]: USB Port (For USB power cable)

Connecting the Fiery Controller to the Copier

Preparation for Installing the Fiery Controller

1

After you unpack the Fiery controller, connect the Fiery controller 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 AC power switch and copier main power switch to OFF and disconnect the power cords before you do these procedures.

d479i101
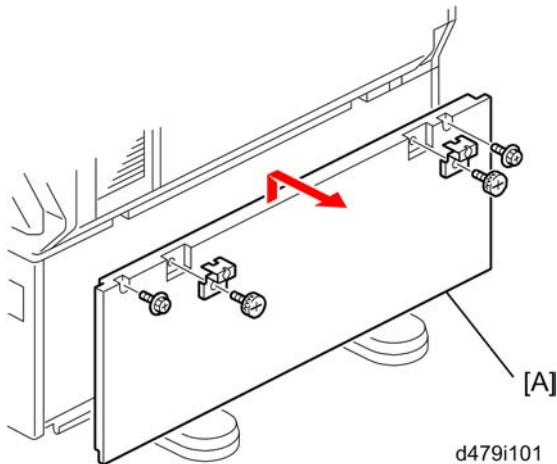
1. Remove the securing brackets (𝄽 x 1 each).

2. Remove the rear cover [A] of the optional paper feed unit or LCT (𝄽 x 2).

d479i102
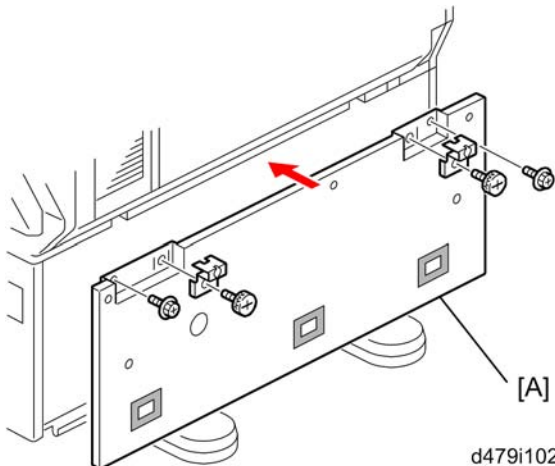
3. Attach the base plate [A] to the rear side of the optional PFU or LCT (𝄽 x 2)

4. Reinstall the two brackets (𝄽 x 1 each).

⬇Note

- Use the two screws which were removed in step 2.

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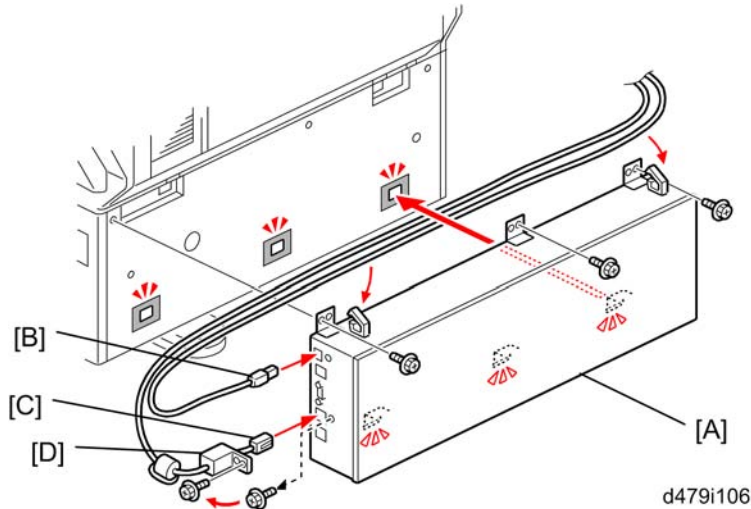
5. Align the three tabs on the rear side of the Fiery controller with the three holes on the base plate.

6. Attach the fiery controller [A] to the base plate (🖉 x 3).

7. Connect the USB cable [B] and interface cable [C] to the left side of the Fiery controller.

8. Attach the protector plate [D] to the Gigabit Ethernet connector of the Fiery controller (🖉 x 1).

9. Route the cables with clamps as shown above.

10. Connect the power cord of the copier to a power outlet.

1
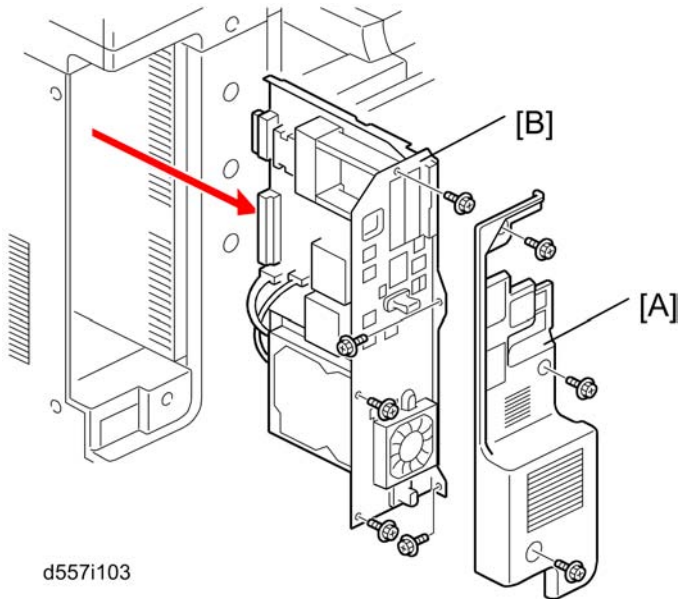
d557i103

11. Remove the controller cover [A] (🔩 x 3).

12. Pull out the copier controller unit [B] (🔩 x 5).
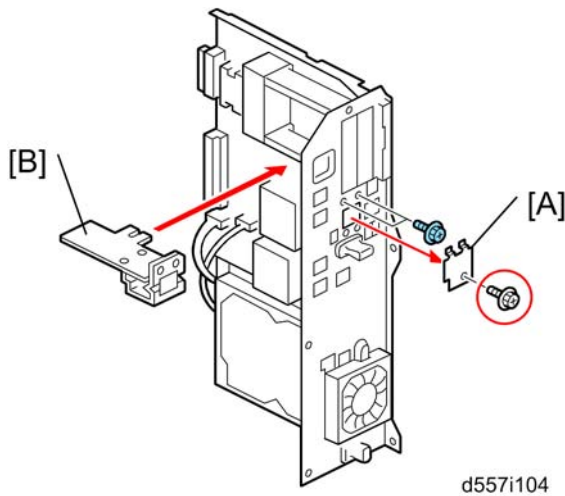
d557i104

13. Remove the I/F slot cover [A] (🔩 x 1).

14. Insert the Gigabit Ethernet PCB [B] into the slot (🔩 x 2).

⬇Note

- Make sure that the Gigabit Ethernet PCB [B] is inserted straight and firmly.

d557i105
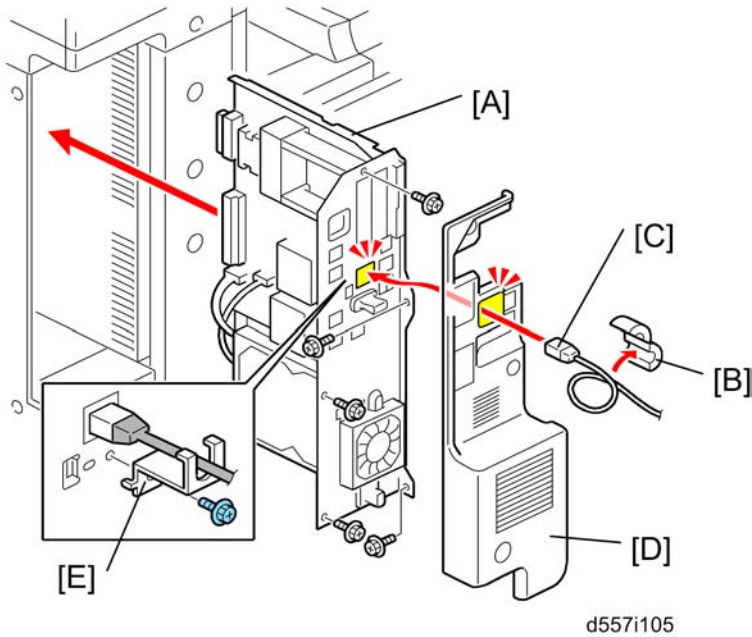
15. Reinstall the copier controller unit [A] in the machine (✏ x 5).

16. Remove the ferrite core [B] from the interface cable [C].

17. Put the interface cable [C] through the cutout in the controller cover [D] first, and then connect the interface cable [C] to the Gigabit Ethernet slot.

18. Attach the protector plate [E] to the Gigabit Ethernet slot of the Fiery controller (✏ x 1).

    ⬇ Note

    • Use the screw which was removed in step 13.

19. Reinstall the controller cover [D] (✏ x 3).

1
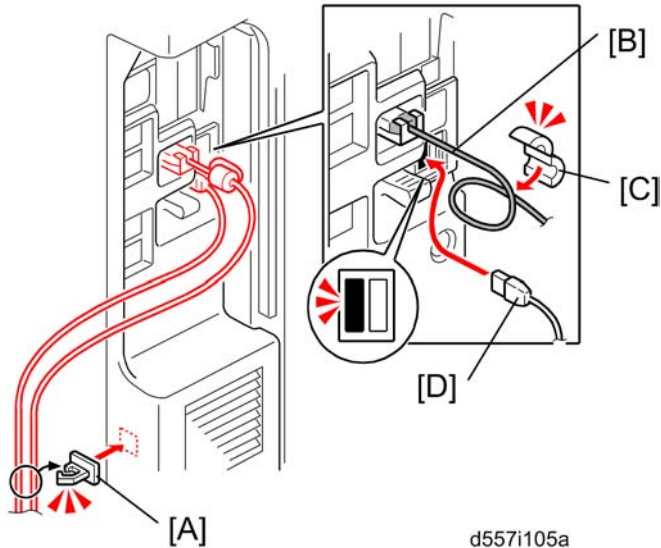
d557i105a

20. Attach the clamp [A] to the rear side of the controller cover.

21. Make a loop with the interface cable [B], and then attach the ferrite core [C] to the interface cable.

22. Connect the USB power cable [D] to the USB slot (rear side) of the controller unit.

23. Route the cables as shown above, and then clamp them with a clamp [A].

24. Turn the Fiery AC power switch to ON.

25. Turn the copier main power switch to ON, and enter SP mode.

26. Change the setting of SP5193-001 from "0" to "1" and SP5895-001 from "0" to "1".

27. Press the **On** switch (operation switch) on the copier operation panel and wait until the **On** indicator is OFF.

28. Turn the copier main power switch to OFF.

29. Connect the appropriate AC power cord to the power connector at the right side panel of the Fiery controller.
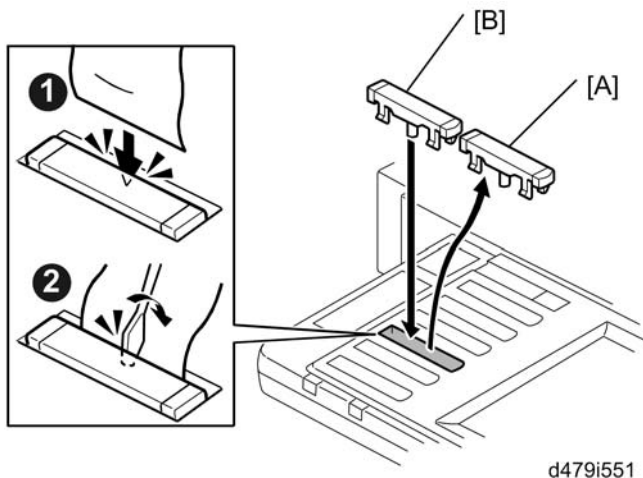
d479i551

30. Remove the printer key [A] on the operation panel of the copier and discard it.

1) Insert a piece of paper ❶ between the key top and the key slot to prevent damage to the operation panel.

2) Use a small flat-head screwdriver to remove the printer key top.

3) Insert the flat-head screwdriver as shown at the center of the slit ❷ between the key top and the paper, and then remove the key top.

⭐**Important**

- **The printer key [A] is the third from the bottom.**

31. Install the "**Fierydriven**" key top [B] in the empty slot.
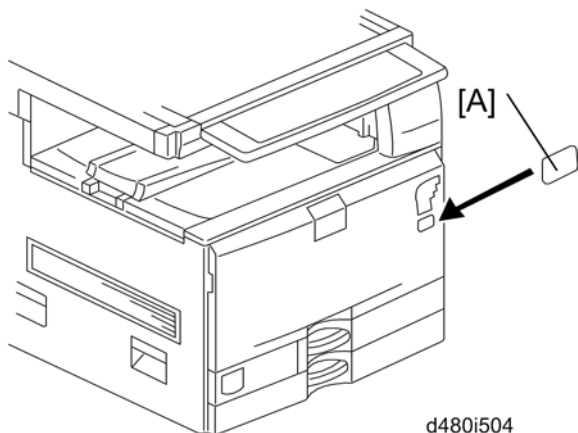
d480i504

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

Disabling the GW Scanner (Customization)

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

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

d479i551a
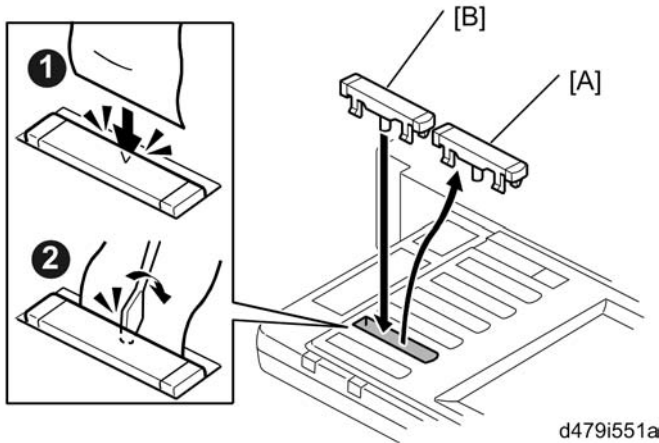
1. Change the setting of SP5895-002 from "0" to "1".

2. Remove the scanner key [A] on the operation panel of the copier and discard it.

    1) Insert a piece of paper ❶ between the key top and the key slot to prevent damage to the operation panel.

    2) Use a small flat-head screwdriver to remove the scanner key top.

    3) Insert the flat-head screwdriver as shown at the center of the slit ❷ between the key top and the paper, and then remove the key top.

    ⬇Note

    • The scanner key [A] is the second from the bottom.

3. Install a blank key top [B] (B2231518C) in the empty slot.

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.

    ⬇Note

    • The copier must be turned ON before you turn the Fiery controller 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 the Fiery controller ON. (☞ Copier Service Manual)

2. Turn the Fiery AC power switch on the left side panel to ON.

3. Allow startup to proceed without interruption, while you watch the service LEDs on the top panel of the Fiery controller.

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4. When the service LEDs remain at '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.

5. Within about three minutes, the language selection screen is shown. (If this screen is not shown, then press the **Fierydriven** key again.)

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

- English

- Dutch

- Spanish

- Italian

- German

- French

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⬇️**Note**

- After you have selected a language, you cannot change the language unless you perform "**Factory Defaults**" (☞ p.55 "Restoring the Fiery Controller to Factory Defaults") or re-install the system software.

- The default settings for the Fiery controller depend on the language selection as follows:

		Selected Language & Measurement Units	
		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 Units. Select either "**US**" or "**Metric**", and then touch "**Continue**".
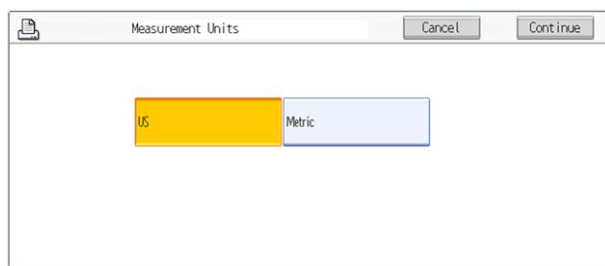
d380i501

7. The System will reboot. After a few minutes, to confirm that the reboot was successful, press the **"Fierydriven"** key.

8. Now the Fiery controller can be used with the default settings (minimum setup).

⬇Note

• The Fiery controller setup options should be configured later by the site administrator.

Verifying the Connection (Local Test Print)

After you connect the Fiery controller to the copier, print the Test Page and the Configuration Page to verify that the connection between the Fiery controller 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. On the operation panel of the copier, press the **"Fierydriven"** key to access the Fiery menu screen.

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

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5. Touch "**Printable Info**".
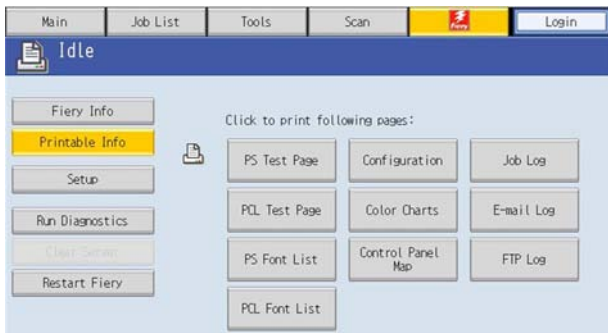
d479i503

6. Print the following pages:

- Configuration Page

- PS Test Page

- PCL Test Page

7. 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 Fiery controller provides twisted pair connectivity to an Ethernet network.

Cable requirements:

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

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- 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 the Fiery AC power switch to OFF before connecting the Fiery controller to any network device.

2. Connect the network cable to the LAN connector on the Fiery controller.

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

4. Turn the Fiery AC power switch on the left side panel to ON.

5. Allow startup to proceed without interruption, while you watch the service LED on the left side panel of the Fiery controller. When the service LEDs remain at '00', go to the copier operation panel.

6. Press the **Fierydriven** key on the copier operation panel to access the Fiery menu screen.

7. Move to the **Fiery** tab.

8. Touch "**Setup**".

d557i502

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

10. 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 Fiery controller 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.)

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

12. 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

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Overview

The system software for the Fiery controller contains the following optional features:

- EFI Hot Folders
- EFI Auto Trap
- EFI Spot On

Initially, the above three optional functions cannot be used. When the customer purchases these options, a hardware USB dongle which includes a license for the optional feature will be provided.

After the license for the feature is transferred to the Fiery controller, the dongle will be locked to that particular Fiery controller (a unique value will be written to the dongle).

- To transfer the license from the dongle to the Fiery controller, you turn the Fiery AC power switch to OFF, connect the dongle, turn the Fiery AC power switch to ON, wait for the Fiery controller to get to the idle condition, then remove the dongle. The feature is now activated. There is a detailed procedure on the next page.

After this, the same dongle cannot be used on another Fiery controller, unless the license is first removed from the original Fiery controller using that dongle. (You must use the same dongle.)

- To remove the license from the Fiery controller, do exactly the same procedure that you use when you transfer the license from the dongle to the Fiery controller. This deactivates the feature.

When the feature is removed from the original Fiery controller, the unique value will be removed from the dongle. The dongle can now be used on another Fiery controller.

If a dongle that has already a unique value (had its unit ID locked to a Fiery controller) is inserted into another Fiery controller unit, the dongle will have no effect.

The number of times the license can be removed from the Fiery controller is limited as shown in the table below. (Activate 4 times and deactivate 3 times.) When this limit is reached, the dongle can no longer be used to remove the license, so the license will stay on the Fiery controller. If a dongle is inserted to remove a feature but the limit has been reached, there will be no effect.

Fiery Controller AC Power Turned ON (or Fiery Controller Rebooted) with Dongle Connected	Activates/Deactivates the feature on the Fiery Controller	License Transferred to
1st time	Activates	Fiery Controller
2nd time	Deactivates	Original Dongle
3rd time	Activates	Fiery Controller

4th time	Deactivates	Original Dongle
5th time	Activates	Fiery Controller
6th time	Deactivates	Original Dongle
7th time	Activates	Fiery Controller
8th time and after	No effect	No effect

Activate / Deactivate an Optional Feature Using a Dongle

The optional feature dongle can be used to either activate or deactivate a feature. The operation for both of these procedures is exactly the same, and the successful activation or deactivation can be confirmed by printing the configuration page.

The purpose of the ability to remove the license (deactivation) is to handle cases where the license was accidentally installed on the wrong Fiery controller unit.

Immediately after the Fiery AC power switch is turned on or the Fiery controller is rebooted, the Fiery controller checks for the presence of the feature activation dongle.

1. Print the configuration page of the Fiery controller. (☞ p.34 "Printing the Configuration Page or Test Sheets")

2. With the configuration sheet, check the condition of the optional feature that you will activate/deactivate. (If activated, the option name will appear on the configuration page.)

3. Turn the operation panel and main power switch of the copier to OFF.

4. Insert the dongle in one of the USB ports.

5. Make sure that the copier main power is already ON.

6. Turn the AC power switch on the Fiery controller to ON.

7. Wait for the Fiery controller to come to the idle status. During this startup sequence, the optional feature will be activated/deactivated.

   ⬇ Note

   • If the Fiery controller already has a particular feature activated, and a new dongle for the same feature is inserted, the license will not be affected and the new dongle will remain active.

   • If the Fiery controller already has a particular feature activated and the matching dongle is inserted, the feature will be removed, and the dongle can then be re-used on another Fiery controller unit.

8. Remove the dongle from the USB port.

   ⚠ **CAUTION**

   • Do not forget to remove the dongle at this time.

1

- If you leave the dongle in the USB port and the copier and / or the Fiery controller AC power is restarted or the Fiery controller is rebooted, then the condition of the optional feature will be reversed. (For example, if you wanted to activate the feature, it is now deactivated.) The only exception is that after you activate a feature for the 4th time, it cannot be deactivated.

9. Print a configuration page (☞ p.29 "Shutting Down the Copier and the Fiery Controller").

10. On the configuration page, check if the desired optional feature is activated/deactivated. (If activated, the option name will appear on the configuration page.)

If you have activated an optional feature, keep the configuration page. You may need it later for troubleshooting purposes, as shown in the following caution.

⚠️CAUTION

- After an optional feature has been activated, the optional feature license information is kept inside the U7301 chip on the motherboard of the Fiery controller.

- If the U7301chip becomes defective, the following are needed as evidence in order to get a new U7301 chip and optional feature dongle:

- The defective U7301 chip

- The configuration page that shows that the defective U7301 chip had the optional feature license installed.

- Therefore, always print a configuration page and keep it when you activate a new optional feature on the Fiery controller.
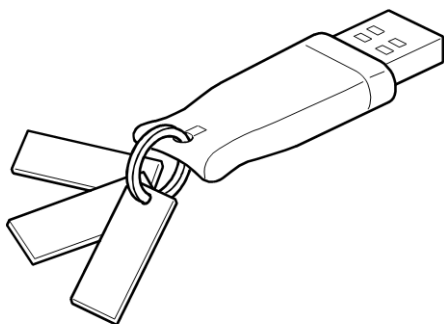
g815r023

11. Three tags with six labels are attached to each optional feature dongle.

a) Optional Feature Name: **Printed**

b) Optional dongle serial number: **Printed**

c) Installed Controller Model Name: **Blank**

d) Installed Controller Serial Number: **Blank**

e) 4 check boxes for Activation: **Not checked**

f) 3 check boxes for Deactivation: **Not checked**

For the labels c) to f), you can fill in the related information or check the boxes, if you want to keep a record of the status of each dongle.

2. General Operations For Servicing

Start-Up, Shut-Down, and Reboot

The copier and Fiery controller have separate main power switches. During normal operation, you can leave the Fiery AC power switch in the ON (I) position.

The copier and Fiery controller are connected with a USB power cable.

When the Fiery controller detects 5V input from the copier through the USB power cable, the system will start to boot-up.

Service Switch 1	Service Switch 2	Purpose	Behavior
OFF	OFF	**Default Setting** Normal Operation	The System won't boot unless it gets the 5V input from the Copier.
ON	OFF	**For Service Only** System re-installation via USB	The system will boot without the 5V input.
ON	ON	**For Service Only** System re-installation via Network	The system will boot without the 5V input.

When the copier main power switch is turned OFF, the Fiery controller enters the system shut-down sequence automatically.

Starting the Copier and the Fiery Controller

1. Turn the main power switch of the copier to ON.

2. If the AC power switch of the Fiery controller is OFF (O), turn ON the AC power switch of the Fiery controller. The controller enters into the boot-up sequence.

3. After the Fiery controller and the copier become idle, press the **Fierydriven** key. The Fiery menu screen will appear on the copier operation panel.

Shutting Down the Copier and the Fiery Controller

1. Make sure the USB power cable is connected between the Fiery and the copier.

2. Press the **On** switch (operation switch) on the copier operation panel and wait until the **On** indicator is off.

⬇Note

- Do not turn OFF the main power switch of the copier when the On indicator is on or blinking. Doing so could cause system problems such as copier hard disk drive or memory problems.

3. Wait for Fiery to shut down. If the Fiery is shut down, the service LEDs go off.

4. Turn the copier main power switch to OFF.

⬇Note

- If the Fiery controller is being taken out of service, turn OFF the Fiery controller using its AC power switch. (For example, if someone needs to move the Fiery controller, disconnect cables, or open the chassis.)

Restarting the Fiery Controller

When restarting the Fiery controller to recover from a problem, try this procedure first. However, this procedure will only restart the Fiery controller 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 Fiery controller (📕 p.31 "Rebooting the Fiery Controller")".

1. Make sure that the Fiery controller is not in use.

2. Press the **Fierydriven** key on the operation panel of the copier. The Fiery menu screen appears.

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

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

d479i505

5. Touch "**Restart Fiery Service**"
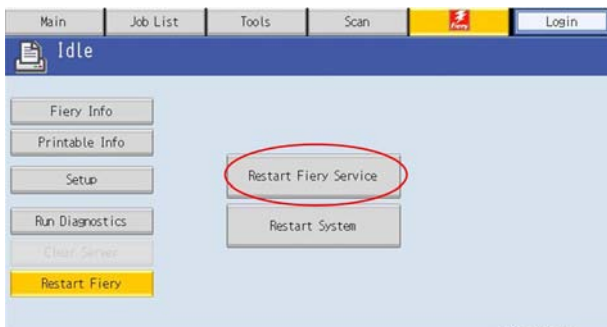
d479i505a

6. Wait until the Fiery controller becomes idle.

Rebooting the Fiery Controller

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

1. Make sure that the Fiery controller is not in use.

2. Press the **Fierydriven** key on the operation panel of the copier. The Fiery menu screen appears.

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

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

d479i505

5. Touch "**Restart System**"

d479i505b

31

6. Wait until the Fiery controller becomes idle.

2

Cancelling the Current Print Job

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

1. Press the **Fierydriven** key on the operation panel of the copier to access the Fiery menu screen.

2. Move to the **Job list** tab.
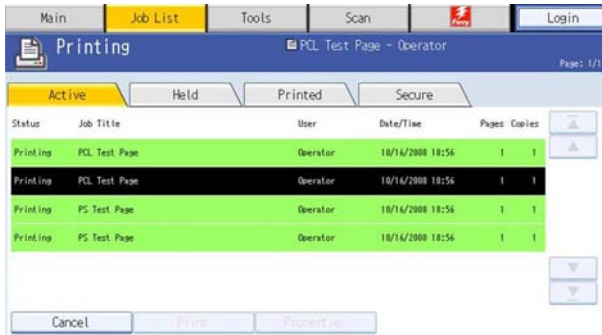
d479i506

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 Fiery controller is not in use.

2. Press the **Fierydriven** key on the operation panel of the copier 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
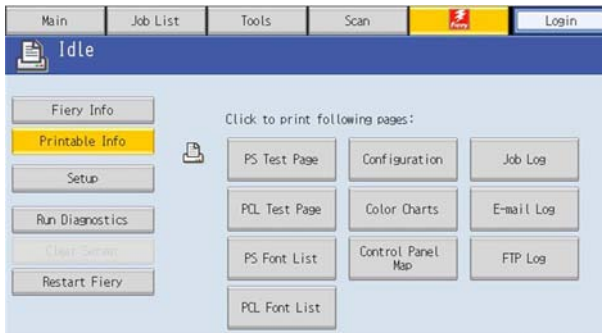
d479i503

Running the Fiery Controller 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 Fiery controller 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 Fiery controller is not in use.
2. Press the **Fierydriven** key on the operation panel of the copier to access the Fiery menu screen.
3. Move to the **Fiery** tab.
4. Touch "**Setup**".
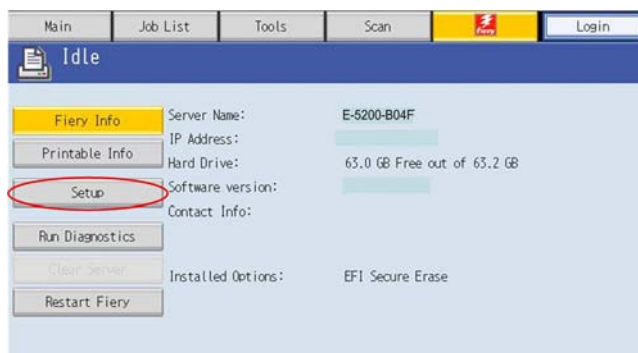
d557i502a

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 Fiery controller configuration and restore it later.

This feature is also useful when...

1. The customer purchases more than one unit of Fiery controller and wants to configure all of them with almost the same system configuration.

2. The Fiery controller needs to be re-configured after system software installation.

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

- All system settings with the exclusion of Date / Time.

- Imposition templates saved in the default directory for these files on the Fiery controller

- Address books

- Virtual Printer settings

- Users and Groups information (login names and passwords)

- Custom spot colors

🔸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 Fiery controller itself. Otherwise, when you reinstall system software, the configuration settings file residing on the Fiery controller 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 Configure Webtools.

1. Start your internet web browser and type the IP address of the Fiery controller.

2. Click the Configure tab on the Fiery controller home page.

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

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

   (The default password is "**Fiery.1**".)
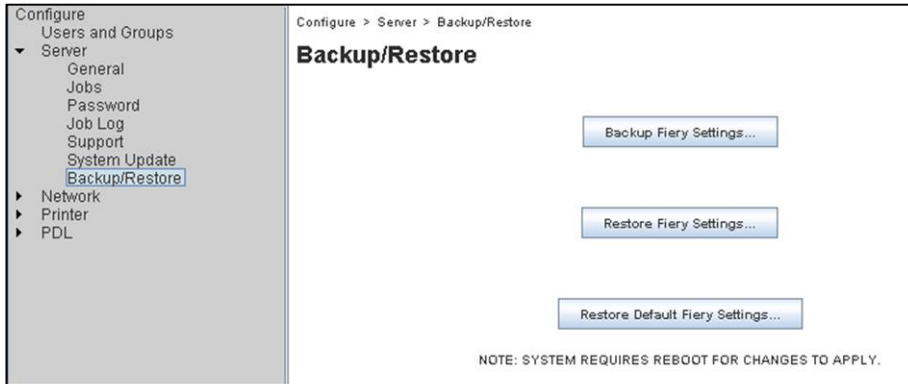
d380i508

⬇Note

- The same menu can also be accessed from inside the Command WorkStation, Windows Edition (Server > SetUp > Server > Backup / Restore).

To Back up the Fiery Controller Settings

1. Choose Configure > Server > **Backup / Restore**.
2. Click **Backup Fiery Settings**.
3. In the dialog box that appears, accept the default file name or type a new name for the backup file.
4. Click **Save**.

   ⬇Note

   - The saved configuration settings file can only be restored to the same model of Fiery controller.

To Restore the Fiery Controller Settings

1. Choose Configure > Server > **Backup / Restore**.
2. Click **Restore Fiery Settings**.
3. In the dialog box that appears, type the name of the configuration settings file or select it from the list.
4. Click **Open**.

   ⬇Note

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

3. Replacement

General Caution

⚠ WARNING

- Turn OFF the power and unplug the Fiery controller before attempting any of the procedures in this section.

Before accessing internal components, position the Fiery controller so that it is resting on its rear side on a flat, anti-static surface.

Cover Removal

Rear Cover for the Fiery Controller
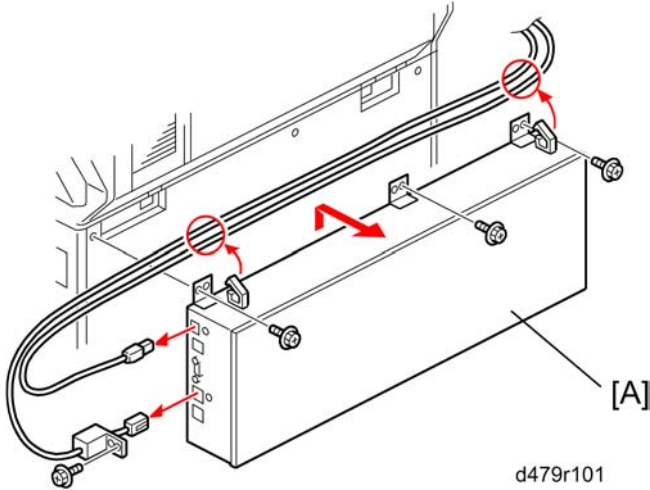
d479r101

[A]: Fiery controller ($\mathscr{P}$ x 4, 🖳 x 2, Interface cable x 1, USB power cable x 1)
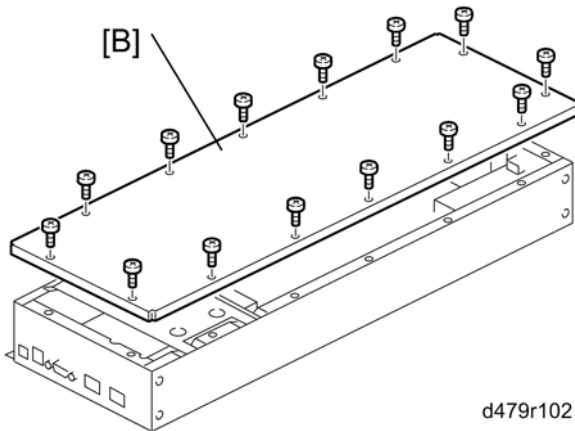
d479r102

[B]: Rear cover ($\mathscr{P}$ x 14)

Unit Removal

Hard Disk Drive (HDD)
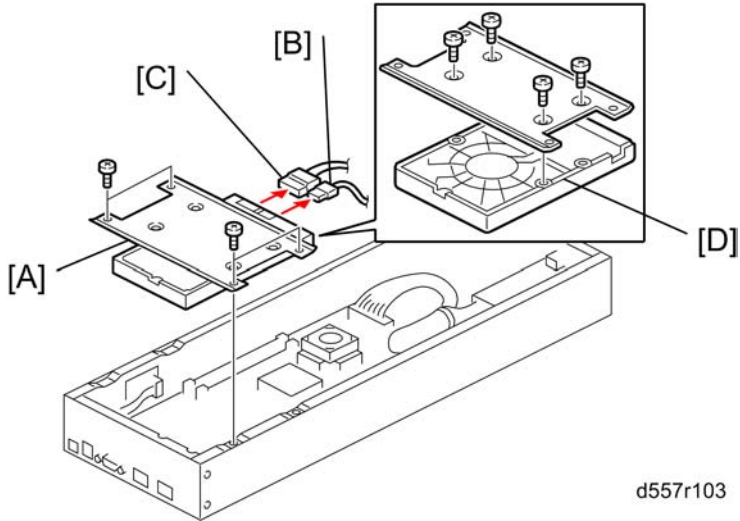
d557r103

[A]: HDD with bracket (✏ x 4)

[B]: SATA data cable (🔌 x 1)

[C]: SATA power cable (🔌 x 1)

[D]: HDD (✏ x 4)

Power Supply Unit
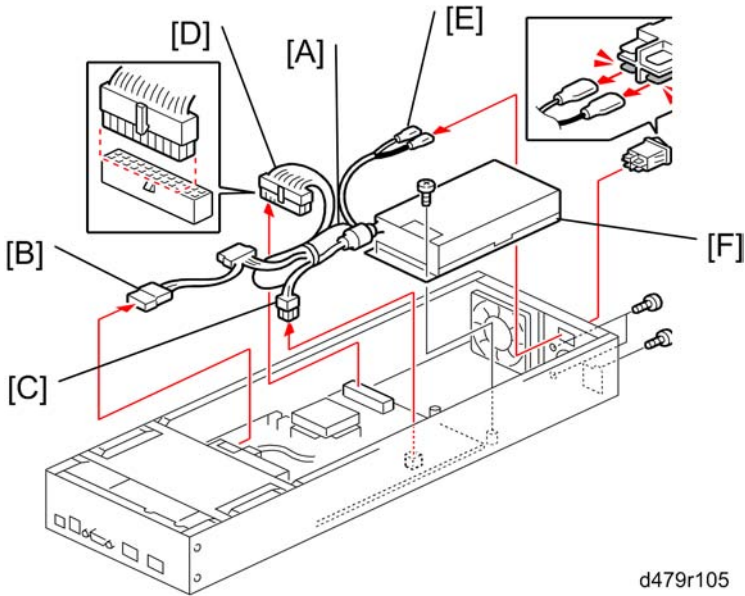
d479r105

1. Power supply cable (⬚ x 4).

   - [A]: Power harness.

   - [B]: HDD power connector for HDD

   - [C]: 4-pin power connector for the J8009 socket on the motherboard.

   - [D]: 20-pin power connector for the J8008 socket on the motherboard.

   - [E]: Connects to the main power switch

2. Power supply unit [F] (🔧 x 5)

Fan

d479r104
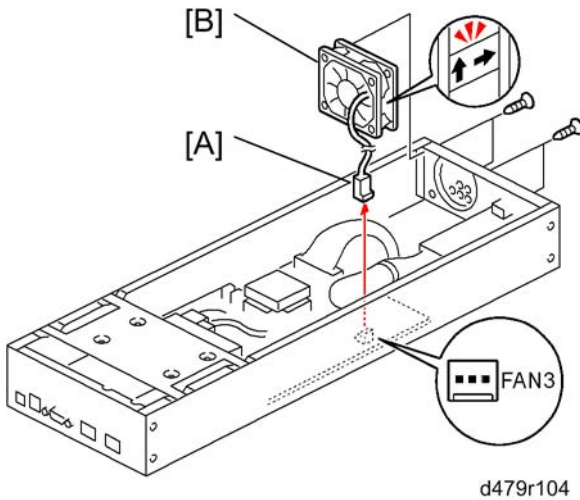
[A] Cable (📷 x 1)

[B] Fan (🔩 x 4)

Motherboard

⭐ **Important**

- The motherboard that you use as a spare part does not include the U7301 chip.

- When you replace the motherboard, do not forget to move the U7301 chip from the old board to the new board.

1. Rear cover (👉 p.40)

d557r114
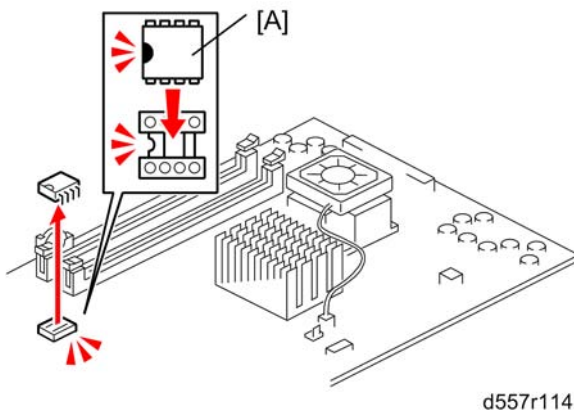
2. U7301 chip [A]

- U7301: Contains option upgrade information and licensing information for the Fiery controller.

  ⬇Note

  - Use a PROM extractor to remove the key chip; Align this part carefully when inserting it into the socket on the new motherboard because the pins on the chip are easily damaged.

3. HDD (👉 p.41)
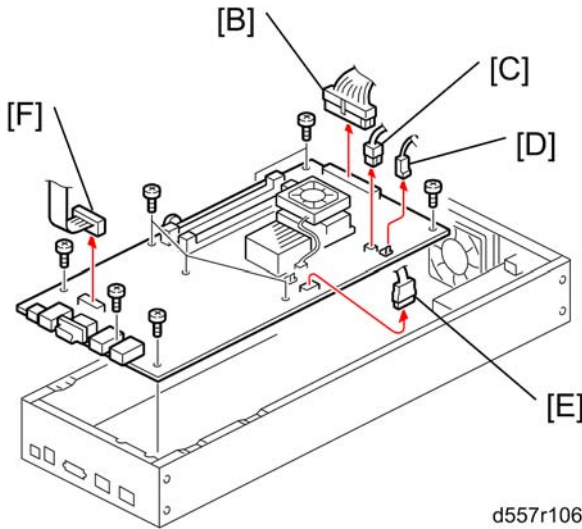
d557r106

4. Cables (▣ x 5):

   [B]: 20-pin power connector from J8008

   [C]: 4-pin power connector from J8009

   [D]: Fan cable from FAN3

   [E]: SATA cable from J820

   [F]: Service cable from J750

5. Screws (🔩 x 9)

6. Memory (👉 p.46)

7. CPU Cooling Assembly (👉 p.47)

8. CPU (👉 p.47)

   ⬇Note

   - When you replace the motherboard, remove the CPU and memory and attach them to the new motherboard (👉 p.47).

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.

d557r112
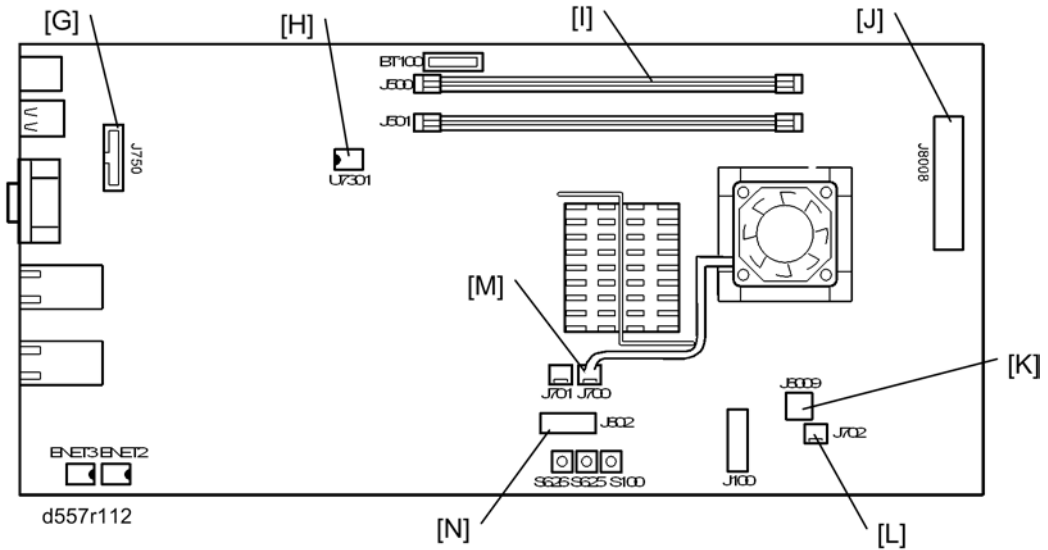
	Connector	Location
[G]	Service cable	J750
[H]	Key Chip	U7301
[I]	Memory	J500
[J]	20-pin power	J8008
[K]	4-pin power	J8009
[L]	Chassis fan	FAN3 (J702)
[M]	CPU fan	FAN1 (J700)
[N]	SATA data cable	J820

Service LED Board

d479r111
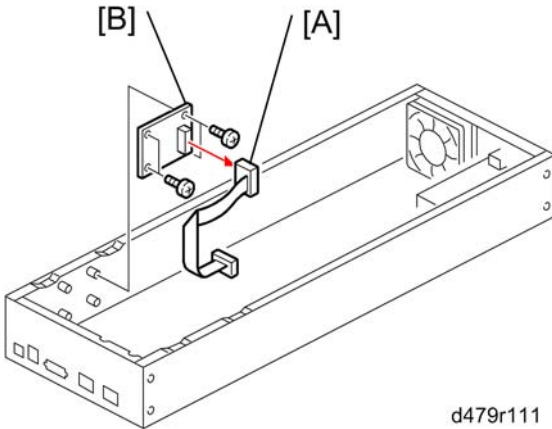
1. Motherboard (☛ p.43)

   [A]: Service cable (▯ x 1)

   [B]: Service board (⚲ x 4)

Memory – 1GB DIMM

d557r107
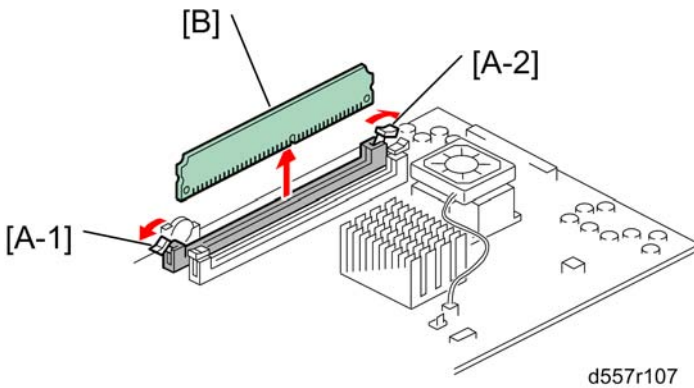
1. Push outward on the levers [A-1], [A-2] on each side of the DIMM.

2. Slide the DIMM [B] straight out of the socket.

🡇 Note

• Always attach the DIMM [B] to the J500 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.

Cooling assembly removal procedure

d557r109
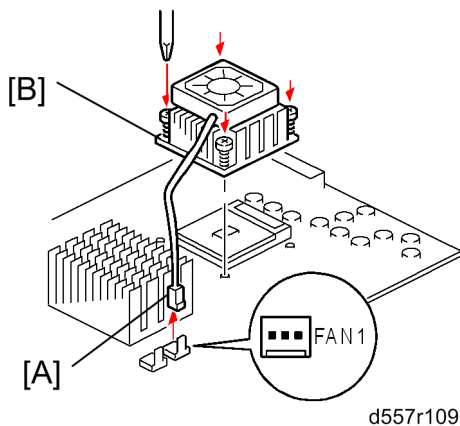
1. Remove the CPU fan cable [A] from the motherboard (⬚ x 1).
2. Remove the fan heat sink [B] (⬚ x 4).

CPU removal procedure

d479r110
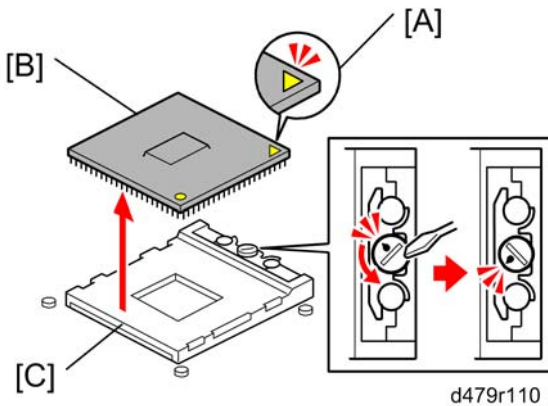
1. Release the locking screw to release the CPU [B] from the socket [C].

2. Grasp the CPU by its edges and gently lift it from the socket.

For re-attaching:

- Check the location of the arrow [A] on the CPU [B] when you insert the CPU into the socket [C]. (See the illustration above.)

- 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.

d557r108
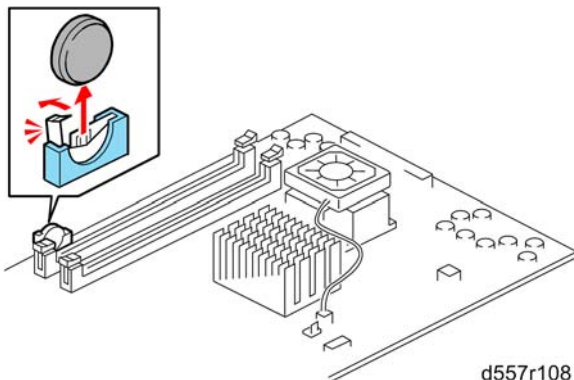
For re-assembling:

- 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. (☞ p.35 "To Access the Setup Menu")

Gigabit Ethernet PCB

d557i201

d557i202
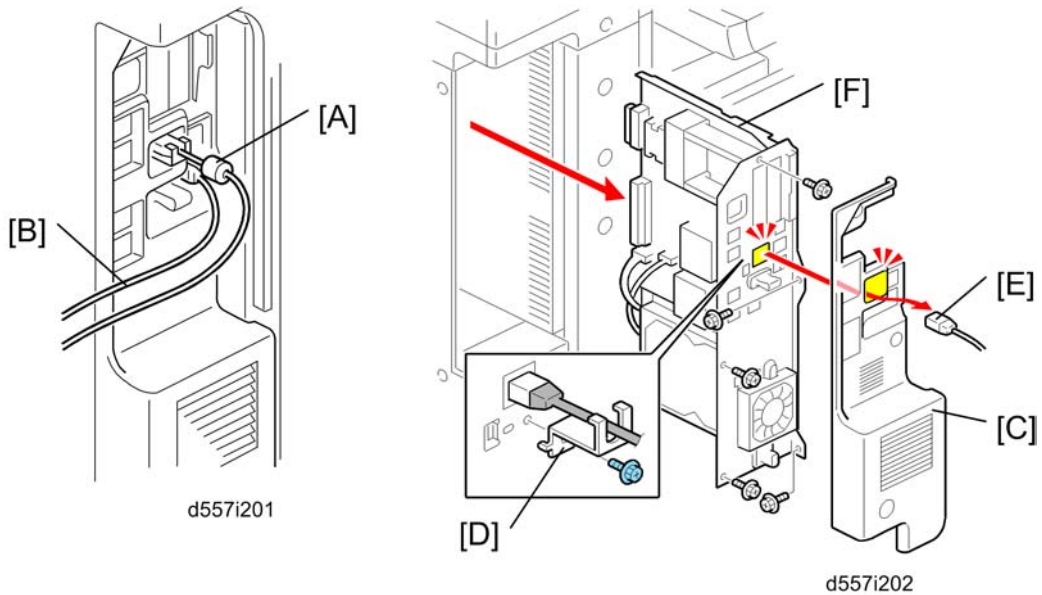
1. Ferrite core [A]

2. USB power cable [B]

3. Copier controller cover [C] (🖉 x 3)

4. Protector plate [D] (🖉 x 1)

5. Interface cable [E]

6. Copier controller unit [F]
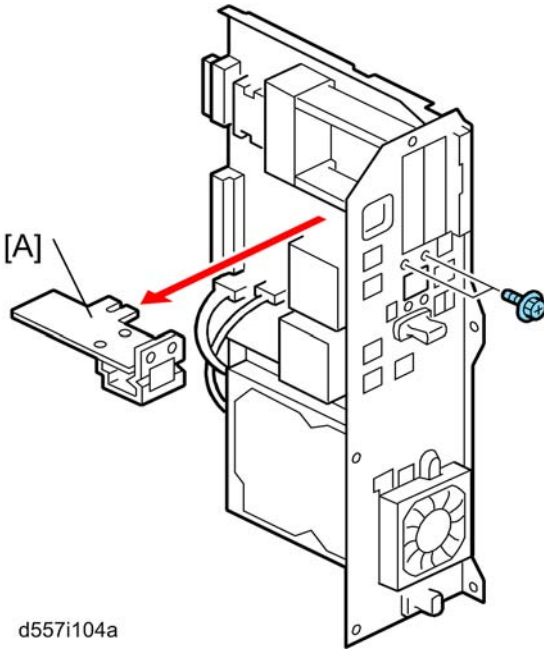
d557i104a

7. Gigabit Ethernet PCB [A] (🖊 x 1)

For re-assembling:

- Make sure that the Gigabit Ethernet PCB is inserted straight.

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 Fiery controller
- Factory Defaults: Restores the Fiery controller to the factory defaults
- System Software Reinstallation

The following table shows whether the current data on the Fiery controller 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 Fiery controller 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 Fiery controller 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 Fiery controller 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 Fiery controller. Using incompatible versions of the system and user software can result in system problems.

Clearing the Queued Print Jobs in the Fiery Controller

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

🔸 **Note**

- Before using Clear Server, inform the site administrator that data on the Fiery controller hard disk will be deleted.

1. Make sure the Fiery controller is not in use.
2. Press the Fierydriven key on the operation panel of the copier to access the Fiery menu screen. (☞ p.35 "Running the Fiery Controller Setup")
3. Move to the **Login** tab.

d557i502b

4. You are asked to enter an administrator password. (The default password is "**Fiery.1**".)
5. The main setup screen appears.
6. Move to the **Fiery** tab.
7. Touch "**Clear Server**".
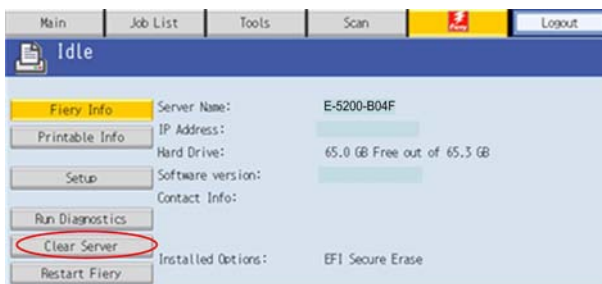
d557i507

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

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

10. Press the **Fierydriven** key and check if the Fiery controller becomes idle.

4

Restoring the Fiery Controller to Factory Defaults

To restore the default settings of Fiery controller 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 Fiery controller (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 Fiery controller, 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 Fiery controller to reboot. For details, refer to the "Configuration and Setup" manual.

1. Make sure the Fiery controller is not in use.

2. Print a configuration page (you may refer to this configuration page when you re-enter the setup options). (👉 p.34 "Printing the Configuration Page or Test Sheets")

3. Access the setup menu. (👉 p.35 "Running the Fiery Controller Setup")

4. Touch "**Factory Defaults**".
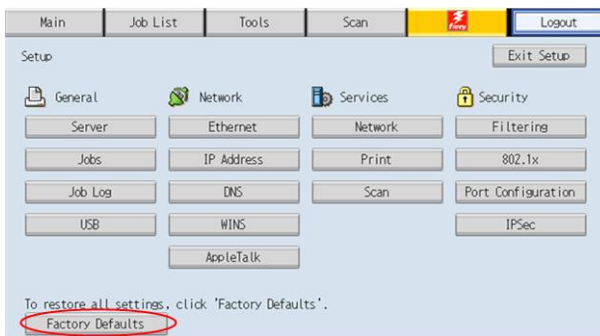
d380i506

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

6. Wait for the service LEDs on the Fiery controller to turn OFF.

7. Go to the copier and press the **Fierydriven** key.

8. The language selection screen will appear. Start to configure the Fiery controller.

    (For details, go to step 23 of the system software installation procedure. ☛p.58 "Installing System Software over the Network Port")

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 Fiery controller.

The system software is provided as follows:

- **System Software DVD:**

  The system software DVD is included in the Media Pack.

- **USB Prep Tool:**

  The USB Prep Tool will be provided via the firmware/patch download site.

There are two ways to install/reinstall system software on the Fiery controller:

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

  Connect a PC to the Fiery controller directly, or through a hub using two network cables. Install the system software from the System Software DVD.

- **Installing system software by booting the** Fiery controller **from a USB drive:**

  Use the USB Prep Tool 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 Fiery controller 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 are sometimes useful in order to reduce the time to re-configure the Fiery controller system settings after the system installation (☞ p.37 "Backup / Restore the System Settings").

Installing System Software over the Network Port

The system software DVD contains the system software and Fiery controller System Software Installer. To install system software using the LAN port on the Fiery controller, 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/Windows 7 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 (☞ p.34 "Printing the Configuration Page or Test Sheets").
2. If possible, back up the system settings to a configuration settings file with the Backup feature (☞ p.37 "Backup / Restore the System Settings").
3. Turn the main power switch of the copier to OFF.
4. When the Fiery AC power is down (that is when the service LEDs are off), turn the AC power switch of the Fiery controller to OFF.
5. Disconnect all cables from the Fiery controller connector panel. Leave the AC power cord connected to the Fiery controller.
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 File Transfer 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 double-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 Fiery controller 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.

d479i114
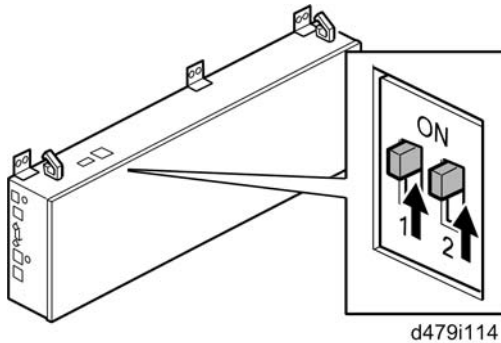
13. Turn the AC power switch of the Fiery controller to ON.

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

15. At the Installation screen, click Next to commence 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 AC power switch of the Fiery controller 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 Fiery controller. The NIC card to choose may be a card that is associated with IP Address 0.0.0.0.

16. Click Next when the screen shows that the installation has finished successfully, do the following:

   1). Remove the System Software DVD from the PC.

2). Turn the AC power switch of the Fiery controller to OFF.

3). Set the service switches in the normal position (not ON).
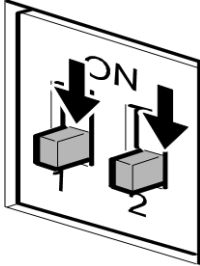
g815r021

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

5). Click the Next button.

17. Click Finish at the Confirmation screen.

18. Reconnect all cables that you removed earlier from the Fiery controller panel.

19. Turn the main power switch of the copier to ON.

20. Turn the AC power switch of the Fiery controller to ON.

21. Allow startup to proceed without interruption while you watch the service LEDs on the top panel of the Fiery controller.

22. When the service LEDs remain at '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.

23. The language selection screen is shown. (If this screen is not shown, then press the **Fierydriven** key again.)

    Select the desired language, and touch "**Continue**".
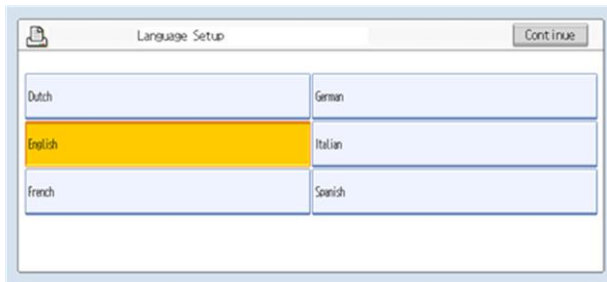
d380i500

- English
- Dutch
- Spanish
- Italian

- German
- French

↓ Note

- After you have selected a language, you cannot change the language unless you perform "Factory Defaults" (☞ p.55 "Restoring the Fiery Controller to Factory Defaults") or re-install the system software.

- The default settings for the Fiery controller 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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24. Wait for a short time, then press the **Fierydriven** key on the operation panel. Repeat if necessary until "Please wait" no longer appears.

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

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

27. Input the customer's settings from the Configuration pages that you printed earlier. If a backup exists of the configuration settings file, restore it after the network configuration is completed. (☞ p.37 "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 Fiery controller to apply the settings. For more information, see the "Configuration and Setup" manual.

28. 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:

- Fiery controller System Software DVD
- USB Prep Tool
- USB drive, more than 5 GB capacity

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

- Windows XP SP2/Vista/Windows 7 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 it is not already installed:
   1. Open the "PT" folder.
   2. Click "Setup.exe".
   3. Select Install and wait a few moments for the application to be installed on the PC.

   Note

   - After the application is installed, it will automatically launch. If you are not ready to prepare the USB drive now, you can click Cancel and remove the USB Prep Tool.
   - After the application is installed on the PC, the "PT" folder is no longer needed. When you wish to prepare a USB drive, go to the Windows Start Menu, navigate to All Programs > Electronics For Imaging > USB Prep Tool and follow the prompts.

2. Prepare the USB drive.

   1) Insert the system software DVD in the PC's CD/DVD drive.

   2) Attach the USB drive to the PC.

   ⬇ Note

   - All data on the USB drive will be lost when the USB drive is reformatted during the next step of this procedure. You may wish at this time to make sure that no valuable data resides on the USB drive.

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

   - 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. Turn the main power switch of the copier to OFF.

4. Turn the AC power switch of the Fiery controller to OFF.

5. Disconnect all cables from the Fiery controller connector panel. Leave the AC power cord connected to the Fiery controller.

6. Set the Fiery controller service switches as shown below. ("1" ON, "2" OFF)

d479i114a
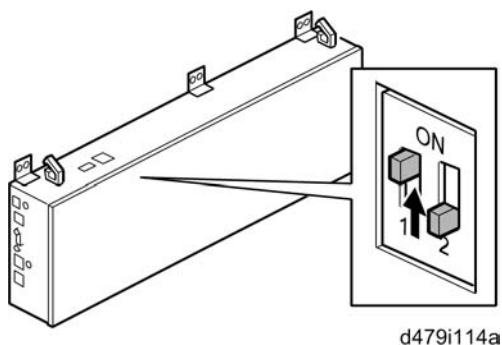
7. Attach the prepared USB drive to one of the USB ports on the Fiery controller.

   ⬇ Note

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

8. Turn the AC power switch of the Fiery controller to ON, and wait until installation is complete. (The Fiery controller shuts down automatically after installation is complete.)

   The service LEDs increment quickly to initialize, then the service 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.

9. After the Fiery controller has shut down and the service LEDs are off, turn the AC power switch of the Fiery controller to OFF and remove the USB drive from the Fiery controller.

10. Reconnect all cables that you removed earlier from the Fiery controller panel.

11. Set the service switches in the normal position. (Not ON)
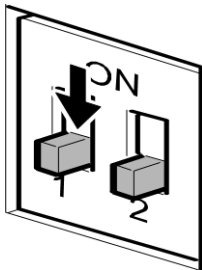
   g815r021a

12. Turn the main power switch of the copier to ON

13. Turn the AC power switch of the Fiery controller to ON.

14. Allow startup to proceed without interruption while you watch the service LEDs on the top panel of the Fiery controller

   ⬇Note

   • Do not power OFF the Fiery controller.

15. When the service LEDs remain at '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.

16. The language selection screen is shown. (If this screen is not shown, then press the **Fierydriven** key again.)

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

d380i500

- English
- Dutch
- Spanish
- Italian
- German
- French

⬇Note

- 1) After you have selected a language, you cannot change the language unless you perform "**Factory Defaults**" (☞ p.55 "Restoring the Fiery Controller to Factory Defaults") or re-install the system software.

- 2) The default settings for the Fiery controller 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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d380i501

17. Wait for a short time, then press the **Fierydriven** key on the operation panel. Repeat if necessary until "Please wait" no longer appears.

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

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

20. 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. (☞ p.37 "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 Fiery controller to apply the settings. For more information, see the "Configuration and Setup" manual.

21. If you have 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.

4

4

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 **NOT** be in the ON position.)
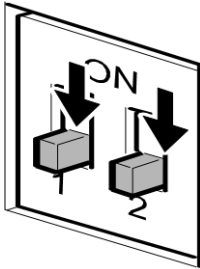
g815r021

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 Fiery controller, 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 Fiery controller and its connection with the copier has no problem by printing test pages. (☛ p.34 "Printing the Configuration Page or Test Sheets")

5. If the Fiery controller can boot, check if the service LEDs on the top panel of Fiery controller stop on a particular service code. (☛ p.70 "LED Service Codes")

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

   (☛ p.39 "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.

   (☛ p.53 "Clearing the Queued Print Jobs in the Fiery Controller")

8. Check if a newer version of system software, firmware, or patch for the Fiery controller and copier has been released. If so, install it. (☛ p.57 "System Software Installation Procedure")

9. If the problem will not disappear, reinstall the system software. (☛ p.57 "System Software Installation Procedure")

10. If the problem will still not disappear, you may need to replace parts of the hardware. (☛ p.76 "Errors and Suggested Actions")

LED Service Codes

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

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

⬇️Note

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

Overview Initial Checklist

Try the following procedures if the Fiery controller is hanging up on a service code.

1: Rebooting the Fiery controller

When the Fiery controller is already ON and hanging up on a service code, reboot the Fiery controller properly to see if the problem persists. Results are unpredictable when the Fiery controller is rebooted incorrectly.

1. Turn the Fiery AC power switch to OFF.
2. Wait 30 seconds.
3. Turn the Fiery AC power switch to ON.
4. Wait to see if the Fiery controller 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 Fiery controller power

After you reassemble the unit, turn the AC power switch of the Fiery controller to ON properly to see if the problem persists.

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

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

3. Wait to see if the Fiery controller reaches the idle status.

LED Service Code Tables

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

LED Service Code	Details (Possible cause, Suggested action *[1])

Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle, such as: 04, 06-0C, 12, 1D-1F, 28-38, 3B-3F, 5A-5F, 67-7F, 80-83, 8D, 9E-A3, AC-AF, BD-E0, E2-EE.	• BIOS settings on the motherboard are corrupted.
	• Motherboard defective
	1. **Clear CMOS using the following procedure:**
	   1. Turn OFF the controller and unplug the AC power cord.
	   2. Open the controller and remove the battery from the motherboard. Make sure the USB power cable is not connected to the controller.
	   3. Wait a full 5 minutes.
	   4. Re-install the battery.
	   5. Reassemble the Fiery controller and turn the AC power ON properly (☞ p.70 "Overview Initial Checklist").
	2. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist").
	3. Replace the motherboard.

5

LED Service Code	Details (Possible cause, Suggested action *[1])
00	When the Fiery controller is idle and in operational mode, the LED display shows 00. If the LED display shows 00 but the Fiery controller is not functioning properly, one or more components may be at fault depending on the problems you are experiencing with the Fiery controller (p.76 "Errors and Suggested Actions" for symptoms) • Fiery controller has booted and is functioning correctly. • Battery missing or defective • Chassis fan missing or defective • CPU and/or CPU cooling assembly defective • HDD defective • BIOS settings on the motherboard are corrupted. • Motherboard defective 1. No action required. 2. If date/time cannot be set or are slow, replace the battery. 3. If no air or fan noise is evident at the fan, replace the fan. 4. Replace the CPU. 5. Replace the HDD. 6. Clear the CMOS (Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 7. Make sure you have checked all cables, connections, and components (p.70 "Overview Initial Checklist"). 8. Replace the motherboard.

LED Service Code	Details (Possible cause, Suggested action *[1])
One of the following: 31, 3B, 52, D3, D4, D5, D9, E1, E2, E3, E4, E5, E6, E7, E8, EC, ED, EE, EF	Possibly one of the following: • DIMM missing, defective, or in the wrong slot • BIOS settings on the motherboard are corrupted. • Motherboard defective • Reboot the Fiery controller (☞ p.70 "Overview Initial Checklist"). 1. Check this DIMM is in the correct (outer) slot. 2. Reseat them to remove oxidation on the connectors. 3. Replace the DIMM. 4. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 5. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist"). 6. Replace the motherboard.
One of the following: 02, 11, 13, 18-1C, 20-22, 40-65, 92-98, A4, B1-B9	Possibly one of the following: • CPU defective • BIOS settings on the motherboard are corrupted. • Motherboard defective 1. Reboot the Fiery controller (☞ p.70 "Overview Initial Checklist"). 2. Replace the CPU. 3. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 4. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist"). 5. Replace the motherboard.

5

LED Service Code	Details (Possible cause, Suggested action *[1])
One of the following: 0D, 0E, 0F, 10, 39, 3A, 84-86, 8E, 8F	Possibly one of the following: • BIOS settings on the motherboard are corrupted. • Motherboard battery is defective or dead. • Motherboard defective 1. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 2. Replace the battery. 3. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist"). 4. Replace the motherboard.
90, 91	Possibly one of the following: • HDD is faulty. • BIOS settings on the motherboard are corrupted. • Motherboard defective 1. Reboot the Fiery controller (☞ p.70 "Overview Initial Checklist"). 2. Reconnect the power and SATA data cables to the HDD. 3. Replace the SATA data cable. 4. Replace the HDD. 5. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 6. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist"). 7. Replace the motherboard.

LED Service Code	Details (Possible cause, Suggested action *[1])
FF	Possibly one of the following: • Fiery controller is not booting. • Service switches are set to Service mode. • DIMM missing or defective • HDD defective • CPU missing or defective • BIOS settings on the motherboard are corrupted. • Motherboard missing or defective 1. Check external and internal connections and cables. 2. Make sure the Fiery controller service switches are set to Normal mode (away from "ON"). 3. Reboot the Fiery controller (☞ p.70 "Overview Initial Checklist"). 4. Reconnect the power and SATA data cables to the HDD. 5. Replace the HDD. 6. Replace the CPU. 7. Check the DIMM. For details, see the Action for code C1 (above). 8. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 9. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist") 10. Replace the motherboard.
One of the following: 03, 14-17, 23-27, 66, 87-8C, 99, 9A, A5-AB, B0, BA, BC	• Motherboard Defective 1. Clear the CMOS (☞Any specific code not listed elsewhere in this table that the machine hangs on before the system reaches Idle) 2. Make sure you have checked all cables, connections, and components (☞ p.70 "Overview Initial Checklist"). 3. Replace the motherboard.

Errors and Suggested Actions

The most common causes of hardware problems are loose connections. Before you decide to replace any parts of Fiery controller, make sure that the parts and connectors are correctly and firmly installed. (☞ p.39 "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 Fiery controller.

2. The Fiery AC power switch can be turned on, but the Fiery controller will not continue to boot-up.

3. The Fiery controller 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 **Fierydriven** key.

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 **Fierydriven** key.

Start-Up Problem-1
Symptom:
When the Fiery AC power switch is turned ON, no power is supplied to the Fiery controller.
Possible cause:
• The AC power cord of the Fiery controller is not connected. • Defective power supply
Suggested action:

1. Connect the AC power cord.
 	
2. Check if the connector of the power supply unit is correctly inserted into the motherboard J8008 socket.
 	
3. 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 Fiery AC power switch can be turned ON, but the Fiery controller 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 Fiery controller.
 	
2. Check if the memory installed in the J500 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 FAN1 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

Start-Up Problems-3
Symptom:
The Fiery controller 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 **Fierydriven** key. -or- The Fiery controller shuts down after reaching idle (00).
Possible cause:
• System software corruption. • Defective motherboard. • Missing or defective security chip

5

Start-Up Problems-3
Suggested action:

1. Replace the interface cable. (☞p.15 "Connecting the Fiery Controller to the Copier")
2. Reinstall the system software. (☞ p.57 "System Software Installation Procedure")
3. Make sure that the U7301 chip is correctly installed on the motherboard.
4. Replace the motherboard.
5. Replace the U7301 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 FAN1.
2. Replace the CPU cooling assembly.

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

Start-Up Problems-6

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. (☞ p.15 "Connecting the Fiery Controller 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".

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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 Fiery controller; 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 Fiery controller; 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.

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 LED cable. 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 Fiery controller 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 Fiery controller 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 CD.

5. When installing the system software from the USB drive, the Fiery controller 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 Fiery controller 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 Fiery controller system.

Network Port Method

System Software Installation-2
Symptom:
One of the following:
• Installer screen hangs up at waiting for Fiery controller to be ready, FTP/TFTP Setup, or Transferring boot file for longer than 15 minutes.
• Installation fails repeatedly.
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 Fiery controller 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 Fiery controller to the hub. If the cable appears damaged, replace it.
3. If the problem persists, retry the installation using a different PC.

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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 Fiery controller 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 Fiery controller 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 CD.

Possible cause:

- The USB drive and/or PC do not meet the minimum system requirements.
- There is a conflict between the USB Prep Tool CD 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 (☛ p.62 "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 Fiery controller remains on for 30 minutes (or longer) after beginning the installation.

Possible cause:

- The position of the service switches is incorrect.
- HDD defective
- Motherboard defective
- USB drive defective.

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 Fiery controller 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

System Software Installation-6
Suggested action:

1. Turn OFF the Fiery AC power switch and reconnect the USB drive, then turn the power ON, 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. The Fiery controller 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 Fiery controller 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.

Network Problem-2

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

Suggested action:

1. Make sure the network cable is the correct type and connected to the correct network port on the Fiery controller.

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 Fiery controller, 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.

Network Problem-3

Suggested action:

1. If the problem persists, ask the network administrator to change the default in the Fiery controller network setup.

2. If no LED is lit on the Fiery controller's network port, check the cable connection to the Fiery controller 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 Fiery controller 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
- Motherboard defective
- Corrupted system software.
- HDD defective.

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 Fiery AC power switch is in the "ON" position.

5. Shut down the Copier and the Fiery controller. Then power ON the Copier and the Fiery controller.

6. Make sure the Fiery menu screen appears when you press the **Fierydriven** key.

7. Check if the Gigabit Ethernet PCB is inserted straight and connected firmly into the C slot on the copier. (☞ p.15 "Connecting the Fiery Controller to the Copier")

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

9. Replace the Gigabit Ethernet PCB.

10. Replace the motherboard.

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

12. Try "Clear Server", "Factory Defaults", or re-install the system software. (☞ p.55 "Restoring the Fiery Controller 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 Fiery controller.

Printing Problem-2

Symptom:

The Fiery controller 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 Fiery controller 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 Fiery controller 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. (☞ p.57 "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 Fiery controller print job.

3. If this fails to clear the problem, turn off and on the Copier and the Fiery controller.

4. If the problem persists, perform Clear Server. (☞ p.53 "Clearing the Queued Print Jobs in the Fiery Controller")

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

6. Reinstall the system software. (☞ p.57 "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.

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

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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 Fiery controller 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 Fiery controller.

4. If the problem persists after recalibration, the calibration information on the HDD may be corrupted. Reinstall the system software. (☞ p.57 "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 Fiery controller and the Copier.

- Problem with the copier.

Suggested action:

1. Turn the Copier and the Fiery controller OFF and ON.

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.

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

Note

- EPS file generation is not 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.

Connector No.	Connected To	Position	Output	Wire Color
20-pin connector	Motherboard (PW1)	1	+3.3V	Violet
		2	+3.3V	Violet
		3	Ground	Black
		4	+5V	Red
		5	Ground	Black
		6	+5V	Red
		7	Ground	Black
		8	(No output)	White
		9	+5V aux	Green
		10	+12V	Orange
		11	+3.3V and +3.3V Remote Sense	Violet
		12	-12V	Blue
		13	Ground	Black
		14	On/Off	Gray
		15	Ground	Black
		16	Ground	Black
		17	Ground	Black
		18	(Not Connected)	-
		19	+5V	Red
		20	+5V	Red
		4	+5V	Red

Connector No.	Connected To	Position	Output	Wire Color
4-pin connector	PW2	1	+12V	Orange
		2	Ground	Black
		3	Ground	Black
		4	+5V	Red

6. Detailed Section Descriptions

Block Diagram and Functions

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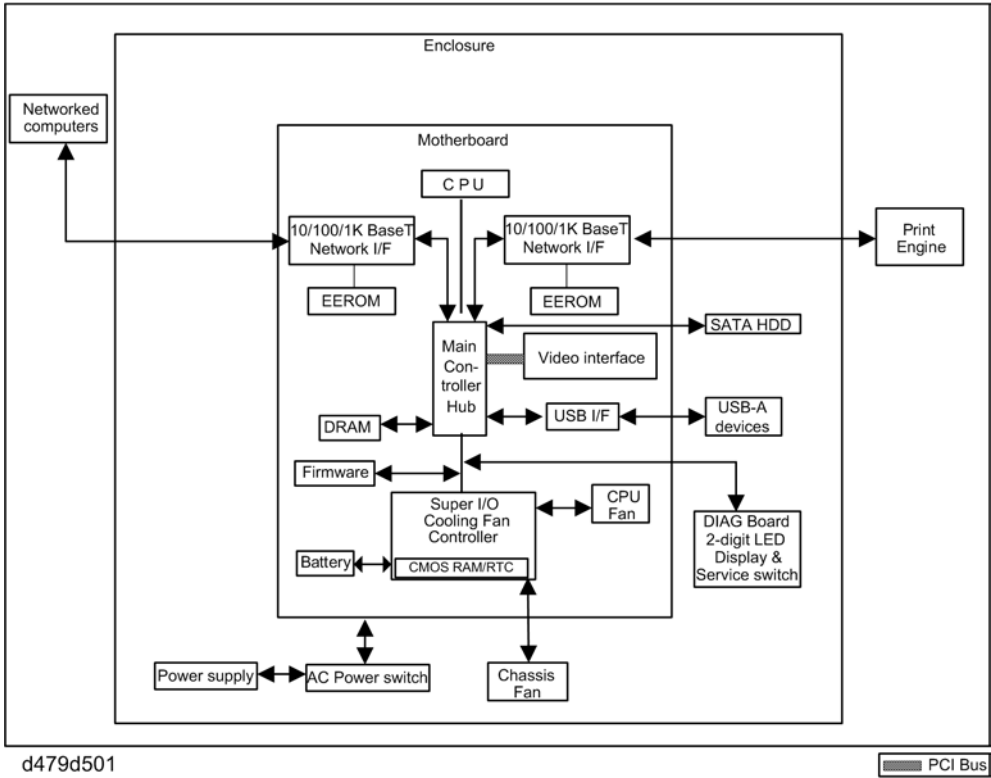
Components

Component	Type	Configuration
Processor	Intel Celeron M	1.86GHz
Hard Drive	Serial ATA	80GB
SDRAM	PC3200 DDR2	1GB, 240 pin
BIOS ROM	Flash	8MB
EEPROM	EEEROM	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 Interface

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
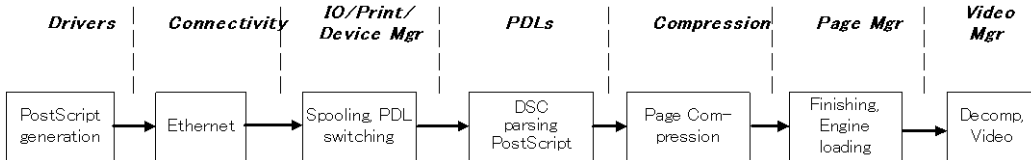
Non-Volatile Memory

- The 8MB Flash Memory contains the BIOS, etc.

- The 1Kbit EEPROM holds the MAC address data.

Volatile Memory

- SDRAM is one 1GB, PC3200, Double Data Rate 2 (DDR2), 240-pin.

Print Data Processing

Flow Chart

g815d904

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 Celeron-M 1.86GHz Network Interface: RJ-45 Network port (1000-Base/100-Base/10-BaseT)
Memory:	1GB (standard) 240 pin SDRAM: PC3200 DDR2
HDD:	Internal HDD: 80GB
Operating System:	Linux
Network Protocols:	AppleTalk (Auto switching) TCP/IP (IPv4/IPv6) SMB IPX/SPX
Printer Description Languages:	Adobe PostScript3 (Standard), PCL6 (Standard)
Supported Driver Language:	English, French, German, Italian, Spanish and Dutch
Print Resolution:	1200 dpi (1-bit only), 600 dpi (4-bit)
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 (Remote Scan only)
Scan Format:	PDF / TIFF/JPEG

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Printing Speed:	AT-C2.5a: 30 ppm B/W, 30 ppm color
	AT-C2.5b: 35 ppm B/W, 35 ppm color
	AP-C2.5a: 45 ppm B/W, 45 ppm color
	AP-C2.5b: 55 ppm B/W, 55 ppm color
	(A4/Letter, LEF 600dpi)
Resident Fonts:	PS3: 138 fonts
	PCL: 80 AGFA fonts
Power Consumption:	Maximum 135 W
Noise Emission:	Sound Power Level: Less than 51 db(A)
(Sound Power Level)	Sound Pressure Level: Less than 41 db(A)
Dimensions (W x D x H):	556 mm x 210 mm x 95 mm, 22" x 8.25" x 3.75"
Weight:	5.0 kg (11 lb.)

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