Reissued: 7-Apr-05

Model: Model K-P4	Date: 17-Feb-05	No.: RG116001a

RTB Reissue
The items in bold italics have been added.

Subject: Controller Firmware Release History (System)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	
Classification: ☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

This RTB has been issued to announce the firmware history for the <u>System</u> of the Model K-P4 (G116 model).

Version	Program No.	C. SUM	Effective Date
1.03	*G1165430B*	*B52D*	*April '05 production*
1.01	G1165430A	F297	1st mass production (Jan 2005)

Descriptions of changes

Version	Symptom Corrected
1.03	*(Minor change applied for the Japan model only).*
1.01	1st Mass Production

Model: Model K-P4	Date: 17-Feb-05	No.: RG116002b

RTB Reissue
The items in bold italics have been added.

Subject: Controller Firmware Release History (Printer)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware history for the <u>Printer</u> of the Model K-P4 (G116 model).

Version	Program No.	C. SUM	Effective Date
1.04.2	*G1165441C*	*1AFF*	*July '05 production*
1.03	G1165441B	5703	April '05 production
1.01	G1165441A	D99C	1st mass production (Jan 2005)

Version	Symptom Corrected

1.04.2	*1. Sometimes, the keys on the operation panel do not work when the machine is in the Toner End condition.*
	2. Sometimes, the machine stalls when a duplex job is sent from an RPCS driver and then the job is cancelled.
	
	Other changes:
	3. Some features of a customization were added as standard:
	  - The IP address is displayed on the LCD.
	  - Thai and non-English Latin characters can be printed with the PS driver
	
	<u>Important</u>: To use these new features, you need to install all of the following firmware together as a set.
	    System v1.04 or later (P/N #G1165430C)
	    Printer v1.04.2 or later (P/N #G1165441C)
	    Websys v1.02 or later (P/N #G1165433B)

1.03	No changes (version standardization with System firmware only).
1.01	1st Mass Production

Reissued: 29-Jun-05

Model: Model K-P4	Date: 17-Feb-05	No.: RG116003a

RTB Reissue

The items in bold italics have been added.

Subject: Controller Firmware Release History (NCS)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the <u>NCS.</u>

Version	Program No.	C. SUM	Effective Date
4.14.1	*G1165432B*	*A964*	*July '05 production*
4.08.1	G1165432A	12A6	1st mass production (Jan 2005)

Version	Symptom Corrected
4.14.1	*1. If the paper type setting is changed with WIM while "Permit Settings by SNMPv1 and v2" is disabled, the browser will timeout. The paper type setting change will not be saved.* *2. SNMPv1/v2 will still send SNMP traps even if the SNMPv1/v2 function is disabled.* *3. Sometimes after a power cycle, the device will be unable to accept jobs from standard TCP/IP or SDM ports.* *4. The SNMP buffer may become full when a lot of SNMP traffic is sent to the device. As a result, the device cannot reply to SNMP requests.* *5. SDM for Admin cannot retrieve 1394 hostnames and devices when it is installed on a client PC with 1394 and Ethernet interfaces.* *6. The SNMP service may not start when the device is turned on. Utilities using SNMP do not receive status updates from the device.* *Other changes:* *Some features of a customization were added as standard:* *- The device can accept more than one diprint (port9100) session.* *- Communication via diprint (port 9100) is asynchronous.*
4.08.1	1st Mass Production

Reissued: 29-Jun-05

Model: Model K-P4	Date: 17-Feb-05	No.: RG116004a

RTB Reissue

The items in bold italics have been added.

Subject: Controller Firmware Release History (Websys)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the <u>Websys.</u>

Version	Program No.	C. SUM	Effective Date
1.02	*G1165433B*	*E686*	*July '05 production*
1.00	G1165433A	9274	1st mass production (Jan 2005)

Version	Symptom Corrected

1.02	*The following features from a customization were added to WIM as standard:*
	
	- *Display IP Address on the Display Panel: The device's IP address is displayed on the LCD.*
	  (SP5-055-001; [Configuration – Device Settings – System])
	- *Permit ROM Update: Allows the ROM firmware to be updated remotely via the local network.*
	  (SP5-886-001; [Configuration – ROM Update]
	
	<u>Important</u>: To use these new features, you need to install all of the following firmware together as a set.
	  System v1.04 or later (P/N #G1165430C)
	  Printer v1.04.2 or later (P/N #G1165441C)
	  Websys v1.02 or later (P/N #G1165433B)

1.00	1st Mass Production

Model: Model K-P4	Date: 17-Feb-05	No.: RG116005

Subject: Firmware Release History (Netfile)		Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☒ Other ( )	☐ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

This RTB has been issued to announce the firmware release information for the <u>Netfile.</u>

Version	Program No.	C. SUM	Effective Date
0.25	G1165435A	9E78	1st mass production (Jan 2005)

Version	Symptom Corrected
0.25	1st Mass Production

RICOH

Technical Bulletin

PAGE: 1/1

Model: Model K-P4	Date: 17-Feb-05	No.: RG116006

Subject: Firmware Release History (Font)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the Font.

Version	Program No.	C. SUM	Effective Date
1.01	G1165444A	21F7	1st mass production (Jan 2005)

Version	Symptom Corrected
1.01	1st Mass Production

Model: Model K-P4	Date: 17-Feb-05	No.: RG116007

Subject: Firmware Release History (Engine)	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the Engine.

Version	Program No.	C. SUM	Effective Date
1.02:20	G1115136B	59F2	1st mass production (Jan 2005)

Version	Symptom Corrected
1.02:20	1st Mass Production

Model: Model K-P4		Date: 25-Mar-05	No.: RG116008
Subject: Right Cover		Prepared by: A. Ishiyama	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

The procedure below was changed from the beginning of mass production:

One screw ($\mathscr{P}$ **x 1**) was added to the step for removing the right cover. See the **bold, underlined** area.

3.3.6 EXTERIOR COVERS [G116]

To remove the left or right cover, separate the machine from the optional paper tray unit first.
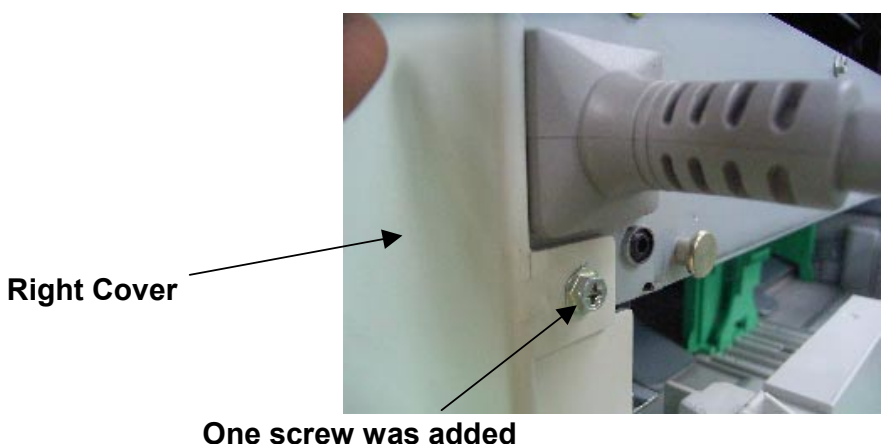
Open the front cover.
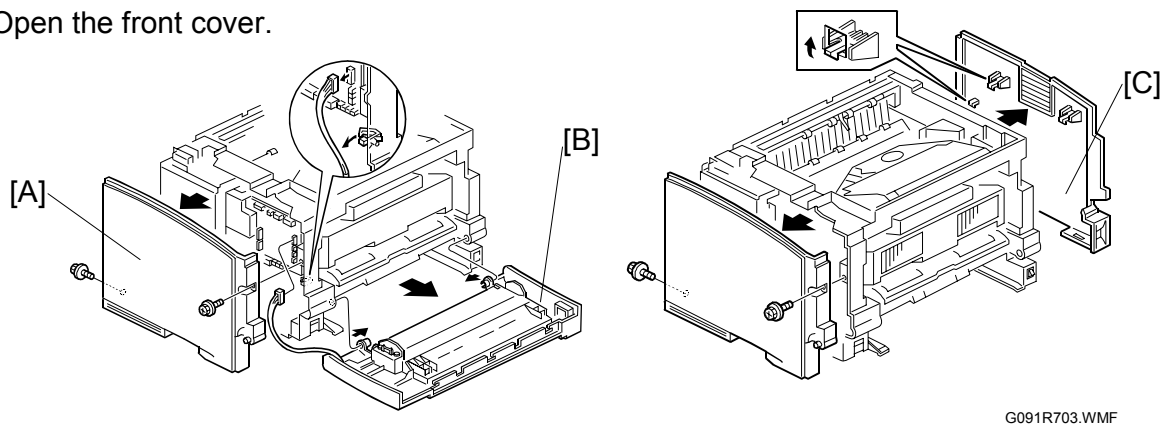
G091R702.WMF

G091R703.WMF

[A]: Left cover ($\mathscr{P}$ x 2)

[B]: Front cover (3 clamps, 2 harnesses)

[C]: Right cover (3 hooks **and $\mathscr{P}$ x 1**)

Right Cover

One screw was added

Model: Model K-P4	Date: 25-Mar-05	No.: RG116009

Subject: Bypass Tray Paper Pick-up Mechanism	Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

Important Note on the Bypass Feed Mechanism

The paper feed mechanism for the bypass tray will be **temporarily** changed from a clutch system to a **solenoid** system. The system will be changed back to the clutch system from around August 2005 production (cut-in S/N TBA).

Note:
- This is the same solenoid system that is used on the C-P1/K-P3.
- This change is for the C-P2b/P2c and K-P4.
- See MB MG116005 for the P/N details.

Solenoid System: Same as the C-P1/K-P3 system

G094D101.WMF
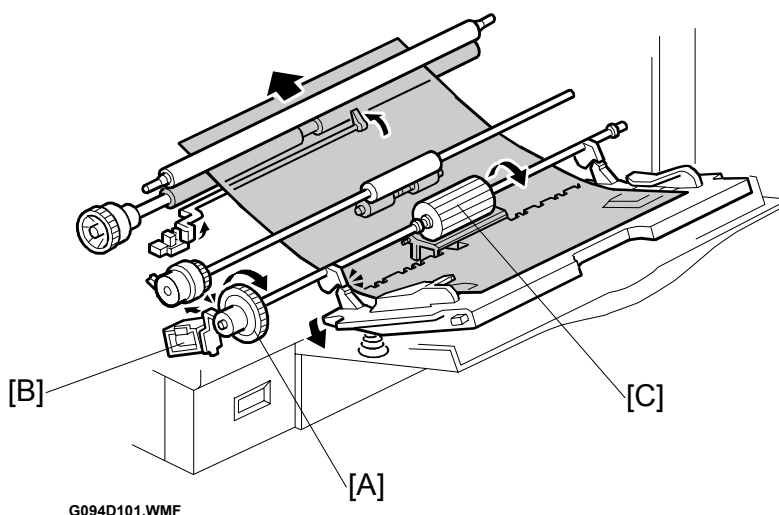
[A] Bypass feed gear

[B] Solenoid

[C] Bypass feed roller

Clutch System: Originally designed for the C-P2/K-P4

[A] Bypass feed clutch

[B] Stopper

[C] Bypass feed roller

Model: Model K-P4	Date: 19-Apr-05	No.: RG116010

Subject: Controller NVRAM	Prepared by: A. Ishiyama
From: 1st Technical Support Sec. Service Support Dept.	

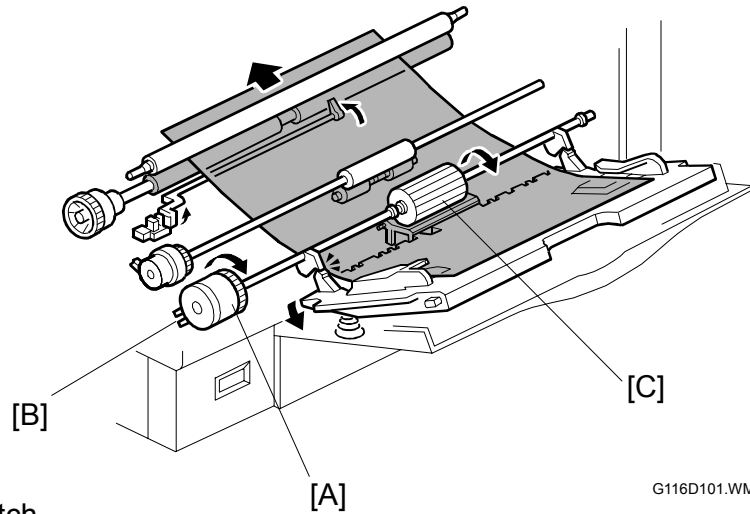| Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

Important Note: Blank NVRAM Service Parts

When you replace the controller NVRAM in the field, use the part shown below. This part is already listed in the Parts Catalog.

Model	Part No.	Description	IC No.	Product Code	Parts Catalog Information	
					Page	Index
K-P1	14075335	RAM – STK12C68-P55	IC27	G056/G058	27, 29	119
K-P2	14075497	RAM – FM1808-120-P	IC54	G073	27, 29	124
				G074	31, 33	121
K-P3	14075856	RAM – FM18L08-70-P	IC68	G091	29, 35	126
K-P4	14076465	RAM:FM25L256-PG(REV.AG)	IC5	G116	40, 45	130
C-P1	14075856	RAM – FM18L08-70-P	IC68	G094	31, 37	122
				G095	41, 47	126
C-P2b	14075856	RAM – FM18L08-70-P	IC68	G112	53, 57	121
C-P2c	14076465	RAM:FM25L256-PG(REV.AG)	IC5	G113	60, 65	130

- This is **completely blank** NVRAM. When you get this part from the Parts Center, it does **not** have a value of "0".

- After you install this NVRAM and turn the power OFF/ON, the machine will put a value of "0" inside the NVRAM.

IMPORTANT: When you install this NVRAM, make sure it is a <u>completely new</u> service part. DO NOT install the NVRAM if it was already used. If you do, machine problems can occur.

Reissued: 15-Apr-05

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

RTB Correction

The items in bold italics have been corrected or added.

Subject: Remote Firmware Update		Prepared by: H. Someya
From: 1st Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☒ Other ( )	☐ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

1. OVERVIEW

The remote firmware update function (referred to as RFU) is used to update the firmware remotely. Service representatives do this over the network. Note that this information is intended for service representatives only and not for end users.

2. SUPPORTED MODELS AND FIRMWARE

The models supporting RFU and the types of firmware that can be updated are shown in Fig. 1:

"04A": Autumn 2004

Printers

Model	Group	System	Network	WebSys	Printer	Engine
Model J-P2	Before 04A	OK	OK	---	OK	OK
Model J-P2CF	Before 04A	OK	OK	---	OK	OK
Model K-P3	Before 04A	OK	OK	OK	OK	OK
Model C-P1	Before 04A			OK	OK	OK
Model J-P3	Before 04A	OK	OK	OK	OK	OK
Model PL-P1	Before 04A	OK	OK	OK	OK	NG
Model G-P1	04A and later	OK	OK	OK	OK	OK
Model C-P2	04A and later	OK	OK	OK	OK	OK
Model K-P4	04A and later	OK	OK	OK	OK	OK

MFPs

Model	Group	System	Network	WebSys	Printer	PS	Engine
Model A-C3e/f	Before 04A	OK	OK	OK	OK	OK	OK
Model R-C3	Before 04A	OK	OK	OK	OK	OK	OK
Model K-C2	Before 04A	OK	OK	OK	OK	OK	OK
Model S-C2	Before 04A	OK	OK	OK	OK	OK	OK
Model B-C2e	Before 04A	OK	OK	OK	OK	OK	OK
Model J-C1	Before 04A	OK	OK	OK	OK	OK	OK
Model MT-C2	04A and later	OK	OK	OK	OK	OK	OK

Fig. 1 Models supporting RFU

OK: Remote firmware update via the network is possible.

NG: Remote firmware update via the network is not possible.

The following models do not support RFU:

- Printers:
  Model K-P1/P2, Model J-P1, Model A-P3, Model U-P1, Model AR-P1, and not GW products

- MFPs:
  Model A-C2/C3, Model R-C2, Model U-C1, Model MT-C1, and not GW products

3. SYSTEM REQUIREMENTS

Network Interface:
- 10 Base-T or faster Ethernet LAN
- IEEE1284 (Centronics) (A setting must be changed in SP mode.)

Note: IEEE1284 does not support error recovery after a power loss.

For Recovery Mode:
- 10 Base-T or faster Ethernet LAN – the note above says that only 1284 doesn't support it.

Protocols:
For RFU Mode & Recovery Mode:
- FTP (The port must be open)

Operating System:
- Windows Server 2003
- Windows XP
- Windows 2000
- Windows NT 4.0
- Windows 9x/Me
- Mac OS
- UNIX/Linux (Any version)

Note: RFU is available for any OS from which FTP is possible.

Unsupported environments:
- IPP
- SMB over TCP/IP
- Direct port
- AutoNet (169.254.x.x) with DHCP

Ftp settings and commands:
- *User name (default):*
  - *Before 04A: rsysupdate*
  - *04A and later: admin*

- *Password (default):*
  - *Before 04A: password*
  - *04A and later: (no password)*

Note: These default passwords are the same as the administrator passwords.

- Transfer mode: binary
- FTP commands supported:
  - binary (Transfer data in binary mode)
  - dir (List files and directories)
  - put "file name"
  - get version.txt - (Obtain the version.txt file and display its contents.)
  - get errlog.txt - (Obtain the errlog.txt file and display its contents.)

4. STATUS OF UNUPDATEABLE MACHINE

If the printer is in any of the following statuses, RFU will not work.
- Print job in progress (copier, printer, fax, network)
- Scan job in progress (copier, scanner, fax)
- Receiving a print image from the network
- Operation panel is in use
- Incoming/Outgoing fax message
- SC condition

You can check the status of the target machine using WebImageMonitor or SmartDeviceMonitor.

Reissued: 15-Apr-05

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

5. UPDATING PROCEDURE

Recommendation:
It is strongly recommended that RFU be performed on-site, to minimize the chances of a power-down during RFU.

5.1 Auto Rebooting

After receiving new firmware, the machine firmware is updated and the machine is automatically rebooted using the updated firmware. Fig.2 shows the kind of reboot required after the firmware is updated.

Printers

Model	System	Network	WebSys	Printer	Engine
Model J-P2	Auto	Auto	---	Auto	Auto
Model J-P2CF	Auto	Auto	---	Auto	Auto
Model K-P3	Auto		Auto	Auto	Auto
Model C-P1	Auto		Auto	Auto	Auto
Model J-P3	Auto	Auto	Auto	Auto	Auto
Model PL-P1	Auto	Auto	Auto	Auto	N/A
Model G-P1	*Auto*	*Auto*	*Auto*	*Auto*	*Auto*
Model C-P2	*Auto*	*Auto*	*Auto*	*Auto*	*Auto*
Model K-P4	*Auto*	*Auto*	*Auto*	*Auto*	*Auto*

MFPs

Model	System	Network	WebSys	Printer	PS	Engine
Model A-C3e/f	Auto	Auto	Auto	Auto	Auto	Manual
Model R-C3	Auto	Auto	Auto	Auto	Auto	Manual
Model K-C2	Auto	Auto	Auto	Auto	Auto	Auto
Model S-C2	Auto	Auto	Auto	Auto	Auto	Auto
Model B-C2e	Auto	Auto	Auto	Auto	Auto	Auto
Model J-C1	Auto	Auto	Auto	Auto	Auto	Auto
Model MT-C2	*Auto*	*Auto*	*Auto*	*Auto*	*Auto*	*Auto*

Fig. 2 Reboot Method

Auto: Automatically rebooted after updating the firmware.
Manual: The machine must be manually rebooted after updating the firmware.

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

5.2 Preparation

Before you update the firmware by RFU, carry out three items as shown below.

5.2.1 Checking the IP address

For a machine with static IP address:

- Search for the IP address using SmartDeviceMonitor for Admin or Web
- SmartDeviceMonitor.
- If the hostname of the machine is registered in a DNS server, use the nslookup command with the machines hostname. This can also be used for dynamic IP addresses if you are using DDNS.
- If the computer name of the machine is registered in a WINS server use the <……..> command.

For a machine with a dynamic IP address:

- Print the config sheet or the SMC for the machine.
- Check the IP address in the DHCP server.

5.2.2 Firmware

- Please download firmware (*.rru or *.rfu files) from our support site and store it in a folder on a local PC to be used for RFU.

5.2.3 Checking the machine status

- Please check the status of the target machine using WebImageMonitor or SmartDeviceMonitor.

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

5.3 RFU for Windows

1. Open a command prompt.
    -   [Start]-[Program]-[Accessories]-[Command Prompt]
2. Logon to the machine using ftp.

```
C:\> ftp xxx.xxx.xxx.xxx          Specify the machine's IP address

Connected to xxx.xxx.xxx.xxx.

220 (Product name) FTP server (1.00)ready.

User (IP address:(none)):
```

3. Enter the user name.

```
User (IP address:(none)):rsysupdate     User name

331 Password required for rsysupdate.

Password:
```

4. Enter the password.

```
Password:xxxxx

230 User rsysupdate logged in.          Login successful.

ftp>
```

5. Enter "dir" to check that version.txt exists.

```
ftp> dir

200 PORT command successful.

150 Opening ASCII mode data connection for '/'.

-r--r--r--root root 200 Jan 1 01:08 help

-r--r--r--root root 200 Jan 1 01:08 info

-r--r--r--root root 200 Jan 1 01:08 install

-r--r--r--root root 200 Jan 1 01:08 prnlog

-r--r--r--root root 200 Jan 1 01:08 stat

-r--r--r--root root 200 Jan 1 01:08 syslog

-r--r--r--root root 200 Jan 1 01:08 version.txt

-r--r--r--root root 200 Jan 1 01:08 errlog.txt

226 Transfer complete.

ftp:372 bytes received in n.nn Seconds n.nn Kbytes/sec.

ftp>
```

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

6. Enter "get version.txt -" to check the machine's firmware version.

```
200 PORT command successful.

150 Opening ASCII mode data connection for 'version.txt'.

PartNo.              Module Name        Version         Module ID

------------------------------------------------------------------------------------

G0000000             os & copy          0.20            XXXXXX_copy

G0000000             os & pf            0.20            XXXXXX_system

G570xxxx             Onboard Scn        2.04            XXXXXX_scn

G5705387A            OptDIMM Fax        1.07            XXXXXX_fax

G5700000             printer            0.19            XXXXXX_printer

G5705383D            Network DocBox     2.00            XXXXXX_netfile

G0805920A            Network            0.71            XXXXXX_net

G0805601             ENGINE             R0.14 :06       XXXXXX_eplot

...

------------------------------------------------------------------------------------

226 Transfer complete.

ftp>
```

7. Enter "binary" to set the file transfer mode to binary.

```
ftp> binary

200 Type set to I.

ftp>
```

8. Navigate to the directory on your PC containing the file xxx.rru.
9. Transmit the firmware module file (*.rru or *.rfu) using the "put" command.

```
ftp> put xxx.rru

200 PORT command successful.

150 Opening BINARY mode data connection for 'xxx.rru'.

226 Transfer complete.

ftp:nnnnnn bytes sent in s.ss Seconds pp.pp Kbytes/sec.

ftp>
```

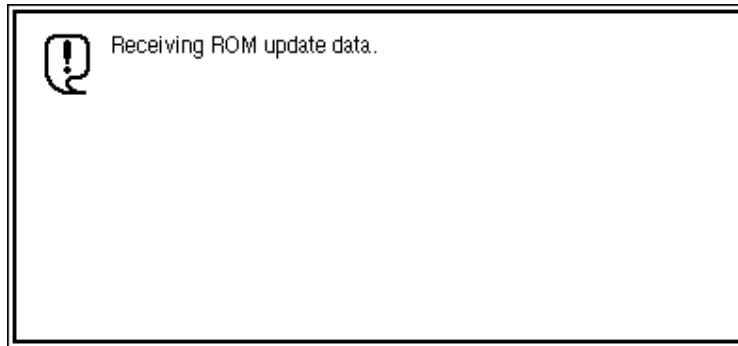**Note:** Do not turn off the power of the machine while updating the firmware.
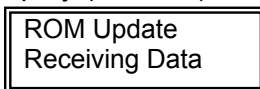
When the machine starts to receive the file, the following message appears on the machine's control panel and normal machine functions are disabled.
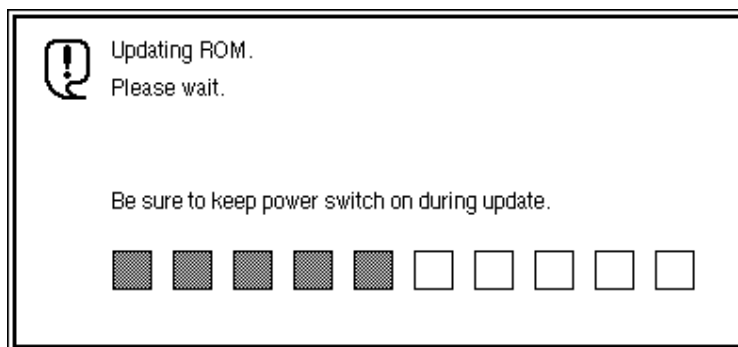
- Display panel (MFPs)

- Display (Printers)
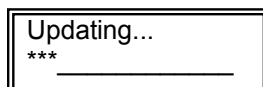
ROM Update Receiving Data

10. Once the machine has received the entire firmware module file, the firmware update starts automatically.

The following message appears:

- Display panel (MFPs)

- Display (Printers)

Updating... *** _____

Note: If the controller firmware is being updated, this message is displayed in English only.

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

11. After the firmware has been updated, the machine must restart. This may be automatic depending on the firmware and model.
12. Enter "bye" to exit ftp.

```
ftp> bye
C:\>
```

13. Check the firmware version as shown in step 6.
14. Update all required firmware by repeating steps 1 to 13 as necessary.

5.4 RFU for UNIX(LINUX)

1. Logon to the machine using ftp.

```
host% ftp "ip address"
User ("ip address"): User Name (for Administrator)
230 User xxxx logged in.
331 Password required for rsysupdate.
Password: Password (for Administrator)
230 User xxxx logged in.
Connected to "ip address"
Remote system type is UNIX.
Using binary mode to transfer files.
```

2. Change to binary mode.

```
ftp> binary
200 Type set to I.
```

3. Send the firmware data (*.rru or *.rfu) to the machine.

```
ftp> put "File Name of Firmware"
200 PORT command successful.
150 Opening BINARY mode data connection for "File Name of Firmware".
226 Transfer complete.
ftp: nnnnnn bytes sent in s.ss Seconds pp.p Kbytes/sec.
ftp>
```

4. Close the ftp session.

```
ftp> bye
host%
```

RICOH

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

5.5 Firmware Update for Centronics (IEEE1284)

Note:
- Firmware update via a centronics interface does not require a password.
- The only method of recovery available via a centronics interface is an IC or SD card.

1. Check the target firmware version by printing out the SMC sheet with SP5-990-4.
2. Set SP5-856-2 to a value of **1**. This will configure the machine for firmware update via the Centronics I/F.
3. Send the firmware to the target machine with the copy command.

```
C:\>copy/b "file name"
```

4. Cycle the machine's power (off then on).
5. Confirm the firmware version as shown in step 1.
6. Update all required firmware by repeating steps 1 to 5 as necessary.

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

5.6 Checking the Result of the Update

Check that the firmware has been updated.

Note:

- After transmitting the firmware file from the computer, it takes approximately 3 to 5 minutes for updating to complete and the machine to restart.
- To check the result, you need to logon to the machine again using ftp. However, you cannot log on during the update process, so you are unable to check that the update has completed until the machine has restarted.

If the update was successful

- Once the firmware has been updated successfully, the system automatically restarts using the new firmware.
  After the restart, verify that the firmware has been updated to the new version. Check that the error code in the error data file (errlog.txt) is "0" by performing procedure 7.1 "Checking the error status" (below).
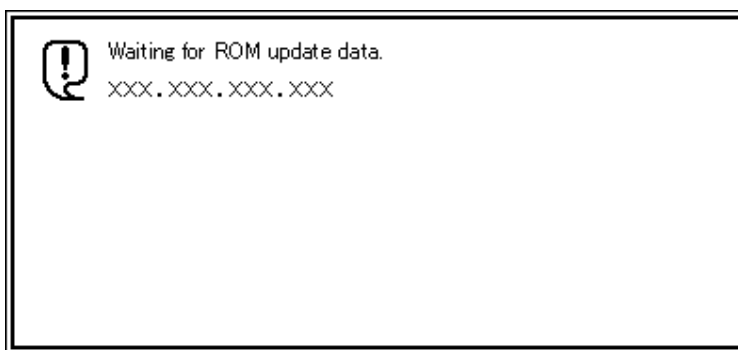
If an error occurs

- If an error occurs during the update, the system automatically restarts, the message shown below appears, and the machine waits to receive the firmware file again. If the update is interrupted by a power failure, the same thing happens once the power is restored.
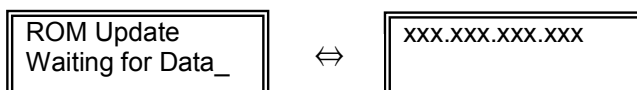
  Log on to the machine again using ftp and then resend the firmware file to the machine.

The following message appears for Type 1 firmware:

- Display panel (MFPs)


```
Waiting for ROM update data.
XXX.XXX.XXX.XXX
```

- Display (Printers)

ROM Update Waiting for Data_	⇔	xxx.xxx.xxx.xxx

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

6. ERROR RECOVERY

There are three ways to recover from a loss of power during RFU.

6.1 Recovery Procedure

There are three types for recovery after a power loss during RFU. (This will depend on the firmware and model). Procedures for types 1, 2 and 3 are on the next page.

Find the firmware and model you are downloading to, and <u>begin with the type</u> shown in the table below.

Recommendation:
As mentioned in *5. Updating Procedure*, it is strongly recommended that RFU be performed on-site, to minimize the chances of a power-down during RFU.

Printers

Model	System	Network	WebSys	Printer	Engine	Card Type
Model J-P2	Type1	Type1	---	Type1	Type1	IC
Model J-P2CF	Type1	Type1	---	Type1	Type1	IC
Model K-P3	Type1		Type1	Type1	Type1	IC
Model C-P1	Type1		Type1	Type1	Type1	IC
Model J-P3	Type1	Type3	Type3	Type3	Type1	SD
Model PL-P1	Type1	Type1	Type1	Type1	N/A	SD
Model G-P1	*Type1*	*Type1*	*Type1*	*Type1*	*Type1*	*SD*
Model C-P2	*Type1*	*Type1*	*Type1*	*Type1*	*Type1*	*SD*
Model K-P4	*Type1*	*Type1*	*Type1*	*Type1*	*Type1*	*SD*

MFPs

Model	System	Network	WebSys	Printer	PS	Engine	Card Type
Model A-C3e/f	Type2	Type2	Type2	Type2	Type2	Type1	IC
Model R-C3	Type2	Type2	Type2	Type2	Type2	Type1	IC
Model K-C2	Type1	Type1	Type1	Type3	Type3	Type3	SD
Model S-C2	Type1	Type1	Type1	Type3	Type3	Type1	SD
Model B-C2e	Type2	Type2	Type2	Type3	Type3	Type3	SD
Model J-C1	Type1	Type1	Type1	Type3	Type3	Type1	SD
Model MT-C2	*Type2*	*Type2*	*Type1*	*Type1*	*Type1*	*Type1*	*SD*

Fig. 3 Recovery Method

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

Important: Do not turn the main power off while you perform any of the procedures.

Procedure for type 1:

1. Restore power to the machine. The machine will wait for the operator to start the update.

2. Connect to the machine by FTP and upload the *.rru or *.rfu files.

Procedure for type 2:

1. Try 'Procedure for type 1'.

2. If this does not work, restore power to the machine.

3. Upload the firmware from an SD card or IC card.

Procedure for type 3:

1. Try 'Procedure for type 1'.

2. If this does not work, try 'Procedure for type 2'.

3. If this does not work, replace the internal SD card or circuit board.

Reissued: 15-Apr-05

Model: General RTB	Date: 15-Nov-04	No.: RGene019a

7. TROUBLESHOOTING

7.1 Checking the error status

You can check the error status using ftp.

Check whether an error occurred by viewing errlog.txt. This file is in the same directory as version.txt.

1. Logon to the machine using ftp.
2. Enter "dir" to check that errlog.txt exists.

```
ftp> dir

200 PORT command successful.

150 Opening ASCII mode data connection for '/'.

-r--r--r-- root root 200 Jan  1 01:08 help

-r--r--r-- root root 200 Jan  1 01:08 syslog

-r--r--r-- root root 200 Jan  1 01:08 version.txt

-r--r--r-- root root 200 Jan  1 01:08 errlog.txt

226 Transfer complete.

ftp: 191 bytes received in n.nn Seconds n.nn Kbytes/sec.

ftp>
```

3. Enter "get errlog.txt -" to check the error code.

```
ftp> get errlog.txt -

200 PORT command successful.

150 Opening ASCII mode data connection for 'errlog.txt'.

Module ID: xxxxxxxx

Error Code: 51

226 Transfer complete.

ftp: 31 bytes received in n.nn Seconds n.nn Kbytes/sec.

ftp>
```

The information in errlog.txt consists of the module IDs of the firmware modules that caused errors and the corresponding error codes.

For what the error codes mean and how to respond to them, see section 7.2 (below).

4. Enter "bye" to exit ftp.

```
ftp> bye

C:\>
```

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7.2 Error Code List

Error Code	Description/Causes	Solutions
51	The machine cannot be updated. • The machine is processing a print job. • The machine is processing a scan job. • The machine is receiving image data from the network. • The control panel is in use. • The machine is sending or receiving a fax. • The machine has detected a problem corresponding to an SC (service call) number (SC640 to SC649, SC670 to SC679, SC691, SC818, SC819, SC820 to SC839, and SC990).	Check that the machine is idle, and then try updating again. If an SC number appears, contact your service representative.
52	The file contains erroneous data. • The data is too large or too small. • The CRC (cyclic redundancy check) value and the checksum do not match. • The firmware does not match the target machine. • The firmware was not completely uploaded or is corrupt.	Download the correct file from the website, and then try updating again.
53	An error occurred while updating. • The machine is off.	If using a DNS server, the machine's IP address might have been changed. Check the IP address, and then try updating again.

RICOH

Reissued: 29-Jun-05

Model: Model K-P4	Date: 17-Feb-05	No.: RG116001b

RTB Reissue

The items in bold italics have been added.

Subject: Controller Firmware Release History (System)		Prepared by: A. Ishiyama
From: 1st Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

This RTB has been issued to announce the firmware history for the <u>System</u> of the Model K-P4 (G116 model).

Version	Program No.	C. SUM	Effective Date
1.04	*G1165430C*	*8E8C*	*July '05 production*
1.03	G1165430B	B52D	April '05 production
1.01	G1165430A	F297	1st mass production (Jan 2005)

Descriptions of changes

Version	Symptom Corrected

1.04	*1. A communication error occurs between the mainframe and RC Gate.*
	2. Sometimes, the firmware cannot be updated via RC Gate.
	3. The firmware cannot be updated if the administrator password is blank.
	4. The image shifts when the left margin is set to 3mm.
	Other changes:
	5. Some features of a customization were added as standard:
	    - SP5-055-001 (Display IP Address):
	      Displays the IP address on the second line of the operation panel when the printer is in the Ready condition.
	      0: OFF (default)
	      1: ON
	    - SP5-886-001 (ROM Update):
	      Allows the ROM firmware to be updated remotely via the local network.
	      0: ON (default)
	      1: OFF
	NOTE: The settings for the two SP modes above can be changed with Web Image Monitor.
	
	<u>Important</u>: To use these new features, you need to install all of the following firmware together as a set.
	    System v1.04 or later (P/N #G1165430C)
	    Printer v1.04.2 or later (P/N #G1165441C)
	    Websys v1.02 or later (P/N #G1165433B)

Reissued: 29-Jun-05

Model: Model K-P4	Date: 17-Feb-05	No.: RG116001b

Version	Symptom Corrected
1.03	(Minor change applied for Japan model only).
1.01	1st Mass Production