RICOH

Technical Bulletin

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Model: PRIPORT HP4/HP4P/HP4-R2/HP4-R2P ver/HP4-R2CD ver			Date: 29-Jun-06	No: R-C249- 021
Subject: New Model HP4-R2 P/CD/CD P information			Prepared by:	1
		M. Kanomata, Priport Service Planning Section		
Classification:	☐ Troubleshooting	Part informati	ion	required
	☐ Mechanical	☐ Electrical	⊠ Service	e manual revision
	☐ Paper path	☐ Transmit/rece	eive 🔲 Retrofi	t information
	☑ Other (New model inform	mation)		
Model Name:				
HP4:	Ricoh JP4500, Gestetner CP6244, RexRotary CP6244, nashuatec CP6244,			
HP4P (China only):	Savin 3560DNP, Standard SD420, Lanier LDD145 Ricoh JP4510P, Gestetner CP6254P			
HP4-R2:	Ricoh DX4542/DX4242C, Gestetner CP6244+/CP6450C/DX4542, RexRotary DX4542, nashuatec DX4542, Savin 3270DNP, Standard SD430, Lanier LDD245			
HP4-R2 P				
(China only): HP4-R2 A3CD	Ricoh DX4542CP, Gestetner CP6450P			
(China only): HP4-R2 B4CD	Ricoh DX4543C, Gestetner CP6451C			
(China only): HP4-R2 A3CD P	Ricoh DX4443C, Gestetner CP6401C			
(China only): HP4-R2 B4CD P	Ricoh DX4543CP, Gestetner CP6451P			
(China only):	Ricoh DX4443CP, Gestetner CP6401P			

IMPORTANT INFORMATION ON THE CHINA-RELEASED HP4-R2 MODELS

- This RTB explains the following:
 - 1) All service-related information unique to the following HP4-R2 models, which will be released in China only.

HP4-R2 P (A3 only)

HP4-R2 A3 CD

HP4-R2 B4 CD

HP4-R2 A3 CD P

HP4-R2 B4 CD P

- 2) The differences between:
 - A3 models and B4 models (from pg. 2)
 - Standard versions and P versions (from pg. 9)
 - Standard versions and CD versions (from pg. 13)

Note:

- The HP4-R2 P only features an A3 model. (There is no B4 model.)
- > The CD P version is a combination of the CD version and P version.

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OVERALL INFORMATION

DIFFERENT SECTIONS BETWEEN THE A3 MODEL AND B4 MODEL

Section	Item	Remark
1	Installation	Some items added.
2	Preventive maintenance	No differences
3	Replacement and adjustment	No differences
4	Troubleshooting	Some items added
5	Service tables	Some items added
6	Detailed section descriptions	Some items added
7.	Point to Point diagram	Some items added
Spec	Specifications	Some items added

1. INSTALLATION

1.1 INSTALLATION PROCEDURE

1.2.5 OPTIONAL DRUMS

 B4 models support only one type of optional drum unit: the B4 size: Color drum. The B4 model does not support the A4 black drum.

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Model: PRIPORT HP4/HP4P/HP4-R2/HP4-R2P ver/HP4-R2CD

ver

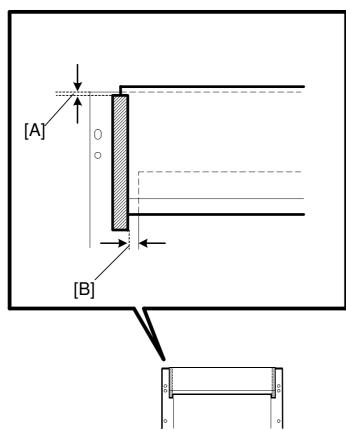
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3. REPLACEMENT AND ADJUSTMENT

3.8.4 MYLAR SEAL

The attachment position on the B4 model is different from that of the A3 and A4 models.
 Important: Clean the attachment area with isopropyl alcohol.

Attachment position for B4 models:



[A]: -0.5 to 0.5 mm [B]: 4.9 to 6.5 mm

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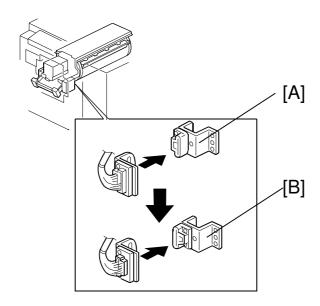
4. TROUBLESHOOTING

4.3 FUSE, LED, VR, DIP-SW, AND TP TABLES

4.3.4 DIP SWITCHES

Ink detection board

NO.	Normal drum (B4)	Color drum (B4)
SW1	OFF	OFF
SW2	OFF	ON
SW3	OFF	OFF
SW4	OFF	OFF



- As mentioned above, B4 models only support B4 drums.
- To ensure that the A3/A4 drum cannot be installed on the B4 model, the direction of the connector was changed from [A] to [B] (see above).

5. SERVICE TABLES

5.3 MAIN MENU NO.2: BASIC SETTINGS

5.3.1 SP TABLE

No.	Menu Items	Default	Settings
2-41	T/H energy control: B4	12	0 to 50%

5.3.10 SP2-41, 2-42: THERMAL HEAD ENERGY CONTROL

• The default for B4 mode is 12%. The means that during normal printing, the thermal head energy is 88% of the maximum possible T/H energy level.

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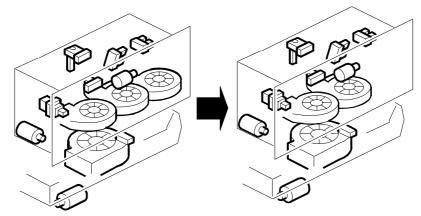
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6. DETAILED SECTION DESCRIPTIONS

6.1 MACHANISM OVERVIEW

6.1.2 ELECTRICAL COMPONENT LAYOUT



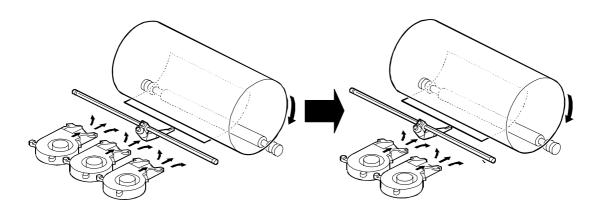
 The number of air knife fan motors was decreased from 3 to 2. This is because the size of the printable image area was decreased.

6.5.12 CUTTER MECHANISM

The cutter cuts a master of about 490mm in length when a B4 drum is used.

6.8.3 PAPER SEPARATION FROM THE DRUM

Air knife fan



 The number of air knife fan motors was decreased from 3 to 2. This is because the size of the printable image area was decreased.

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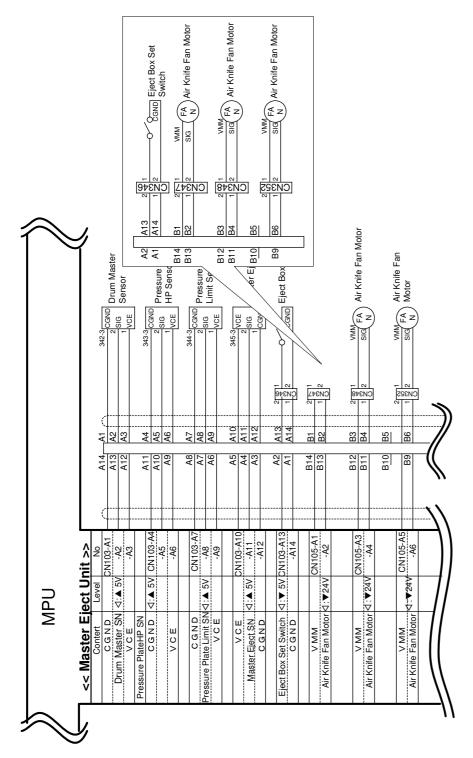
Model: PRIPORT HP4/HP4P/HP4-R2/HP4-R2P ver/HP4-R2CD ver Date:

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7. POINT TO POINT DIAGRAM

 The number of air knife fan motors was decreased from 3 to 2. CN347 is not used to connect the air knife fan motor on the B4 model.



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SPECIFICATIONS

GENERAL SPECIFICATIONS

• The specifications are the same as those of the A3 model, except for the following differences:

Printing Area: 251mm x 355mm

Power Source: China

220-240V, 50/60Hz

Master Processing Time: No more than 28 seconds (B4 copying)

Master Type: Thermal master roll type: 280mm width, 110m/roll

Yield: 220 masters/roll

Optical Equipment: B4 color drum



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OVERALL INFORMATION

DIFFERENT SECTIONS BETWEEN STANDARD VERSION AND P **VERSION MODEL**

Section	Item	Remark
1	Installation	No differences
2	Preventive maintenance	No differences
3	Replacement and adjustment	No differences
4	Troubleshooting	No differences
5	Service tables	No differences
6	Detailed section descriptions	No differences
7.	Point to Point diagram	No differences
Spec	Specifications	Some items added
CLT	Printer controller unit	New documents



Model: PRIPORT HP4/HP4-R2/HP4-R2P ver/HP4-R2CD ver

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SPECIFICATIONS

GENERAL SPECIFICATIONS

 The specifications for the standard version and P version are the same, except for the following differences:

Printer controller unit: Embedded Printer controller unit (VC-20) fitted as standard.

Printer driver: Drivers support Chinese

PRINTER CONTROLLER UNIT

INSTALLATION

• P versions are equipped with a standard printer controller unit and Video I/F board.

 Connect the printer controller unit to the host computer with a USB cable. Then, install the printer driver in the host computer.

Computer	PC/AT compatible PC
Interface	USB1.1, USB2.0 (Full speed) Compatible
Operating Systems Supported	Windows 98se/ME,
	Windows 2000/XP/Server 2003
Drivers	VC-20 A3 400 GDI (A3 model)
	VC-20 B4 400 GDI (B4 model)



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Model: PRIPORT HP4/HP4P/HP4-R2/HP4-R2P ver/HP4-R2CD ver

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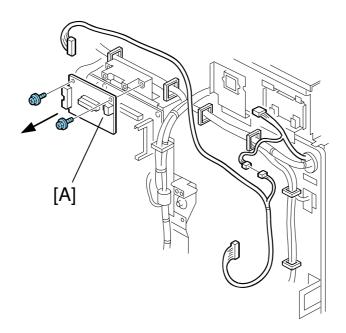
REPLACEMENT AND ADJUSTMENT

ACAUTION

Before removing any of the controller components, make sure to do the following:

- 1. Turn the machine main power OFF. Important: If the "Data-in" lamp on the operation panel is blinking or lit, turn the power OFF after the document or report is printed.
- 2. After the power is OFF, disconnect the power cord from the outlet. Then, disconnect the power cable from the machine.

[A]: Video I/F Board



SERVICE TABLES

There are no SP modes for the printer controller unit.



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SPECIFICATIONS

Controller Type	Embedded
Configuration	Internal embedded controller
Printer Language	GDI
Print Resolution	400 dpi
On Board Memory	16MB
Resident Font	None
Interface	USB1.1, USB2.0 (Full speed) Compatible
Operating Systems Supported	Windows 98se/ME,
	Windows 2000/XP/Server 2003
Drivers*	VC-20 A3 400 GDI (A3 model)
	VC-20 B4 400 GDI (B4 model)

^{*:} Common between Ricoh and Gestetner brands.

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Model: PRIPORT HP4/HP4P/HP4-R2/HP4-R2P ver/HP4-R2CD ver

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OVERALL INFORMATION

DIFFERENT SECTIONS BETWEEN STANDARD VERSION AND CD VERSION MODELS

- CD versions are the lower-cost versions of the HP4-R2, and have the following features.
 - > Conventional paper delivery tray (without buffer fins).
 - No soundproof cushions.