

**Printer/Scanner Option  
Machine Code: D383**

**SERVICE MANUAL**

September. 2007  
Subject to change

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# Safety, Conventions, Trademarks

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## Safety

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### PREVENTION OF PHYSICAL INJURY

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1. Before disassembling or assembling parts of the machine and peripherals, make sure that the machine and peripheral power cords are unplugged.
2. The plug should be near the machine and easily accessible.
3. Note that some components of the machine and the paper tray unit are supplied with electrical voltage even if the main power switch is turned off.
4. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
5. If the [Start] key is pressed before the machine completes the warm-up period (the [Start] key starts blinking red and green ), keep hands away from the mechanical and the electrical components as the machine starts making copies as soon as the warm-up period is completed.
6. The inside and the metal parts of the fusing unit become extremely hot while the machine is operating. Be careful to avoid touching those components with your bare hands.
7. To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.

### HEALTH SAFETY CONDITIONS

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1. Never operate the machine without the ozone filters installed.
2. Always replace the ozone filters with the specified types at the proper intervals.
3. Toner and developer are non-toxic, but if you get either of them in your eyes by accident, it may cause temporary eye discomfort. Try to remove with eye drops or flush with water as first aid. If unsuccessful, get medical attention.

### OBSERVANCE OF ELECTRICAL SAFETY STANDARDS

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1. The machine and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models.

### SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

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1. Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.

2. Dispose of used toner, developer, and organic photoconductors in accordance with local regulations. (These are non-toxic supplies.)
3. Dispose of replaced parts in accordance with local regulations.
4. 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.

## **⚠ CAUTION**

- The danger of explosion exists if a battery of this type is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer’s instructions.

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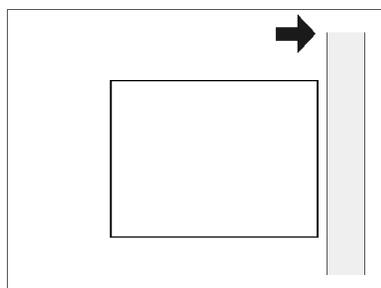
## **Conventions and Trademarks**

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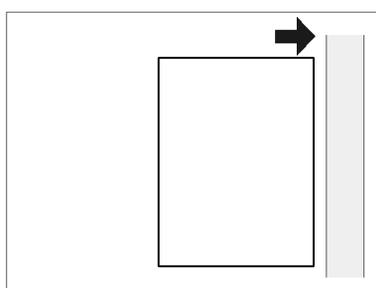
### **Conventions**

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Symbol	What it means
	Core Tech Manual
	Screw
	Connector
	E-ring
	C-ring
	Harness clamp
FFC	Flexible Film Connector



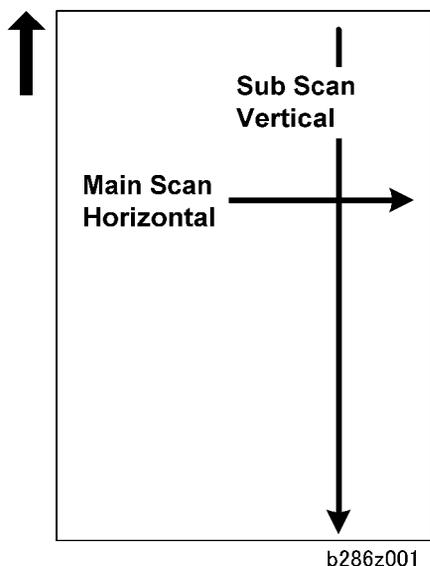
**SEF (Short Edge Feed)**



**LEF (Long Edge Feed)**

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The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Horizontal" means the "Main Scan Direction" and "Vertical" means the "Sub Scan Direction" relative to the paper feed direction.

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## Warnings, Cautions, Notes

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In this manual, the following important symbols and notations are used.

### **WARNING**

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

### **CAUTION**

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

### **Important**

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine

### **Note**

- This information provides tips and advice about how to best service the machine.

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## Trademarks

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- PCL<sup>®</sup> is a registered trademark of Hewlett-Packard Company.
- Ethernet<sup>®</sup> is a registered trademark of Xerox Corporation.
- PowerPC<sup>®</sup> is a registered trademark of International Business Machines Corporation.
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# 1. Installation

## Controller Board Slots

The following items are standard (not options) for the Color Scanner Unit on the D018/D020.

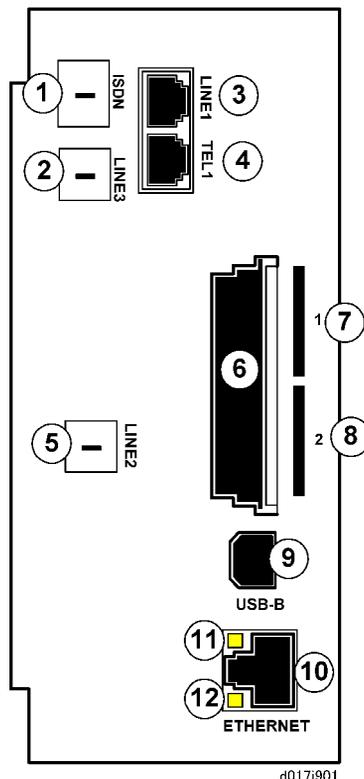
- Printer/Scanner Unit
- 256 MB memory

These items are available as options for the Monochrome Scanner Unit D017/D019.

## Interface Board, SD Card Slots

The machine controller box has one board slot and two SD card slots.

- Only one interface board option can be installed.
- Only two SD cards are available for applications and maintenance.



Board Slots

No.	Name	Description
①	ISDN	Jack for ISDN connection ( <b>Japan Only</b> )
②	Line 3	Not used. (G4 is not available for installation outside Japan at this time.)
③	Line 1	Jack for the main telephone line from the outside for connection to Fax Option (D361).
④	TEL1	Jack for telephone connection
⑤	Line 2	Jack for a 2nd line connection to the Fax Interface Unit (D361) (G3) when this option is installed.
⑥	Board Slot	Optional interface boards are installed here.
⑦	SD Card Slot 1	For options provided on SD cards. The application SD card (with the exception of the HDD Encryption unit or VM SD card) should be installed in Slot 1. If more than one application is to be used, move the applications to the same SD card with SP5873.
⑧	SD Card Slot 2	For options provided on SD cards and servicing. The HDD Encryption unit SD card and VM card must be installed in Slot 2.
⑨	USB-B	Built-in for connection of USB devices (USB 2.0)
⑩	Ethernet	Standard LAN connection point. 100BaseT LAN
⑪	Green LED	Lights when the network is connected and operating.
⑫	Orange LED	Indicates the current transmission speed: ON: 100Base OFF: 10Base

- Only two SD Card slots are available for applications.
- To install more applications, they must be moved onto one SD Card. (See Moving an Application to Another SD Card)

## Board Slot

The following optional interface boards are available. There is only one board slot so only one can be installed.

No.	Interface Board
B679	IEEE1284 Interface Board Type A (B679)
B826	Bluetooth Interface Unit Type 3245 (B826)
D377	File Format Converter Type E (D377)
D377	IEEE802.11a/g Interface Unit Type J/K (D377)
G831	Gigabit Ethernet Type 7300 (G831)

## SD Card Slots

The following options are provided on SD cards.

- Two SD card slots are available.
- The VM application SD card and HDD Encryption Unit SD Card must be installed in Slot 2 (lower).
- Other applications should be installed in Slot 1 (upper). If more than one application is required, move the applications onto one SD card with SP5873-1.
- Due to copyright restrictions, the PostScript Unit (D383) cannot be moved to another SD card. However, other applications can be moved onto the PostScript 3 SD card.

No.	SD Card Applications
D362	Data Overwrite Security Unit Type I (D362)
D377	Browser Unit Type D (D377)
D377	HDD Encryption Unit (D377)
D377	VM Card Type E (D377)
D383	PostScript3 Unit Type 3350 (D383)
D383	Printer Enhance Option Type 3350 (D383)
D383	Printer Unit Type 3350 (D383)
D383	Printer/Scanner Unit Type 3350 (D383)
D383	RPCS Printer Unit Type 3350 (D383)
D383	Scanner Enhance Option Type 3350 (D383)

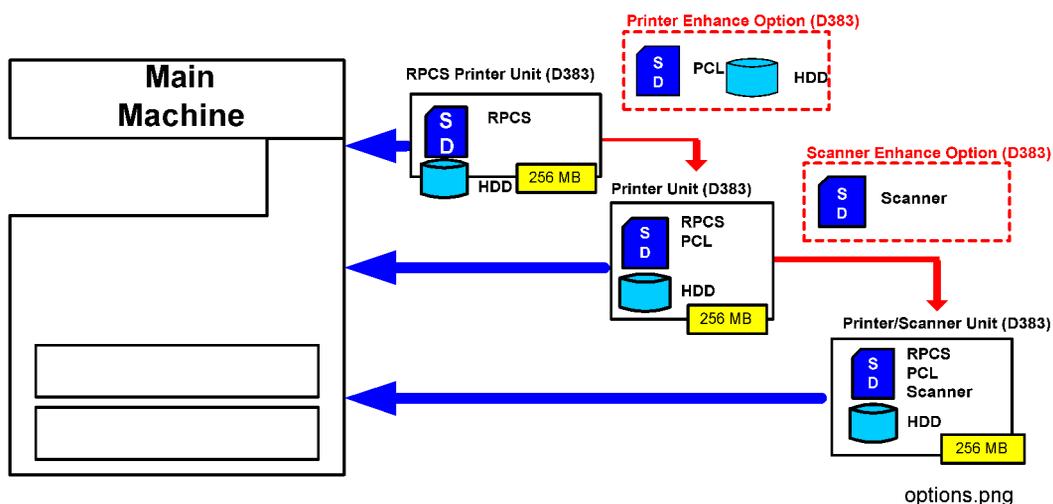
# Printer and P/S Options

## 1

### Overview

This section describes the installation of the following items:

- RPCS Printer Unit
- Printer Unit
- Printer/Scanner Unit
- 256 MB Memory. Optional memory is required for each unit.
- HDD unit
- Printer Enhance Option
- Scanner Enhance Option



### Main Units

The three main units are:

- **RPCS Printer Unit Type 3350.** For customers who require only basic copying and printing and the RPCS printer language. The HDD is not required but the 256 MB memory must be installed.
- **Printer Unit Type 3350.** For customers who do not require the extended scanning features but need more printing capability (both RPCS and PCL printer languages are provided). The 256 MB memory is required.

- **Printer/Scanner Unit Type 3350.** For customers who require the full range of DS features (advanced scanning and printing features such as "scan-to" solutions, virtual mailboxes, PCL, etc.). The 256 MB memory unit is required.

## Separate Options

There are three separate options: HDD, 256 MB memory and PS3.

- **HDD.** Provided with the following kits: Printer Enhance Option, Printer Unit, and Printer/Scanner Unit. Refer to the illustration above. If an HDD has already been installed as a separate item, the HDD unit in the machine does not need to be replaced with the HDD from the kit.
- **256 MB memory.** Not provided with any option. However, every unit (RPCS, Printer Unit, P/S unit) requires installation of the 256 MB memory.
- **PostScript 3 Unit.** The PS3 option can be used with the RPCS Unit, the Printer Unit, or the Printer/Scanner Unit.

## Enhance Options

There are two enhance options:

- **Printer Enhance Option Type 3350.** Updates the RPCS unit by adding PCL.
- **Scanner Enhance Option Type 3350.** Updates the RPCS unit or Printer Unit by adding the advanced scanning features.

## Kit Contents

Check the accessories and their quantities against the list below and the illustration on the next page. This is a common list for all the kits.

## Common Accessory Table

This common accessory table lists all the items of the following units and options for the D007/D008:

- **RPCS:** RPCS Printer Unit
- **PU:** Printer Unit
- **P/S:** Printer/Scanner Unit
- **PEO:** Printer Enhance Unit
- **SEO:** Scanner Enhance Unit

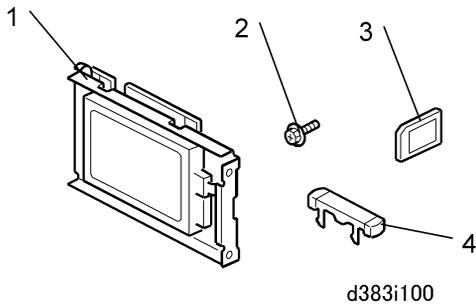
	Description	Qty	Kit Contents				
			RPCS	PU	P/S	PEO	SEO
	256 MB Memory* 1	1	No	No	No	No	No
1.	HDD* 2	1	No	Yes	Yes	Yes	No
2.	Screws	2	No	Yes	Yes	Yes	
3.	SD Card	1	Yes	Yes	Yes	Yes	Yes
4.	NA Keytop Set* 3	1	Yes	Yes	Yes	Yes	Yes
	EU Keytop Set* 3	1	Yes	Yes	Yes	Yes	Yes
5.	Ferrite Core	1	No	Yes	Yes	Yes	Yes

\* 1: The 256 Memory is a separate option and it is not provided in the kits. However, one memory unit is required for the installation of every print unit.

\* 2: The HDD can be installed anytime as a separate option. If an HDD unit has already been installed, it does not need to be replaced with the HDD unit from the Printer Enhance Option, Printer Unit, or Printer/Scanner Unit kit.

\* 3: The number of keytops provided varies:

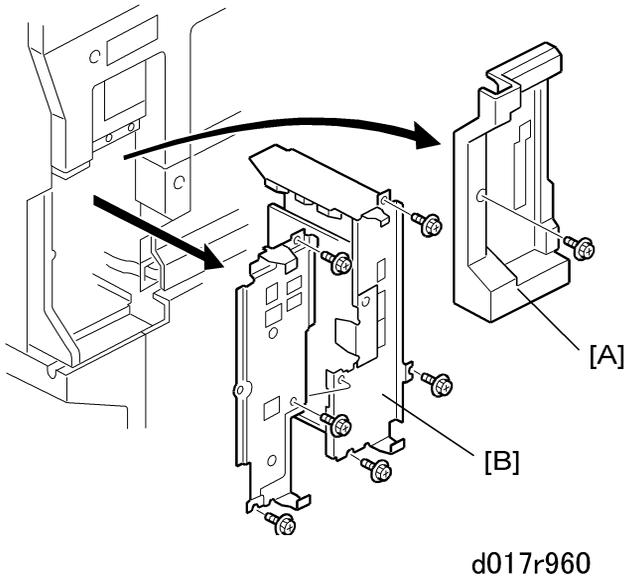
Kit	Keytops			
	Copy	Document Server	Printer	Scanner
RPCS Unit	1		1	
Printer Unit	1	1	1	
Printer/Scanner Unit	1	1	1	1
Printer Enhance Unit		1		
Scanner Enhance Unit				1



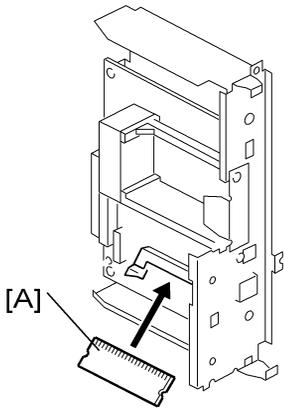
## Printer, Printer/Scanner Unit Installation

### ⚠ CAUTION

- Turn off the main power switch and disconnect the power supply cord.

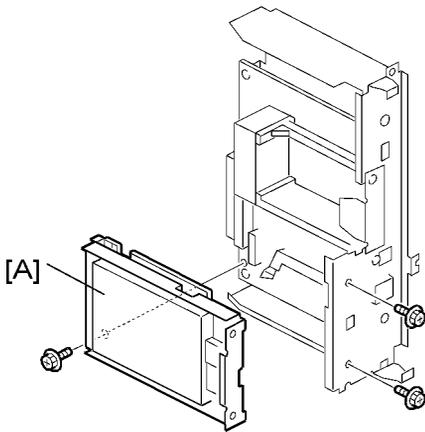


1. Remove the application cover [A] (⚙ x1).
2. Remove the controller board [B] (⚙ x3).



d017i501

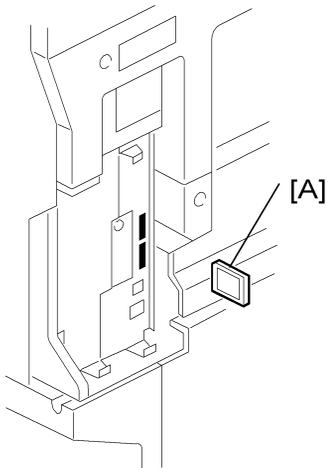
3. Install the 256 MB memory [A].



d017r965

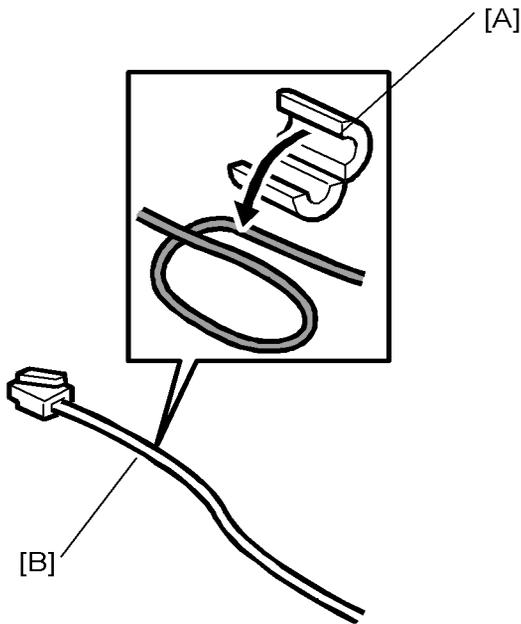
4. Attach the HDD unit [A] to the controller board bracket (⚙️ x2, ⚙️ x3).

5. Reinstall the controller board with the HDD.



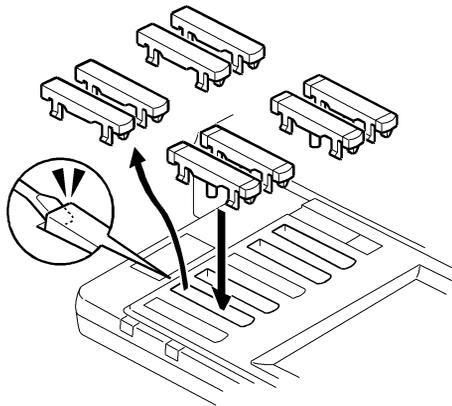
d017i502a

6. Insert the SD card [A] in SD card Slot 1 (upper).
7. Cycle the machine power off/on.
8. Format the HDD with SP5832-1.
9. Do SP5853 to copy the preset stamp data from the firmware to the hard disk.
10. Do SP5846-040 to copy the address book to the hard disk from the controller board.
11. Do SP5846-041 to let the user get access to the address book.
12. Reattach the application cover (🔑 x1).



b767i903

13. Attach the ferrite core [A] to the LAN cable [B].
14. Connect the LAN cable to the "NIC" connection.
15. Connect the USB cable to the "USB" connection.



d383i105

16. Remove the 1st, 2nd, 4th, and 5th blank key tops.

**Note**

- The 3rd blank keytop from the top is reserved for the "Fax" keytop. Do not remove it at this time.

17. Replace the blank keytops with the keytops received in the kit from top to bottom:

- 1st Copy

- 2nd Document Server
- 4th Printer
- 5th Scanner

18. Connect the machine power cord and turn the main power switch on.

19. Enable the NIB and/or USB function.

- To enable the NIB function, enter the SP mode and set SP5985-001 (On Board NIC) to "1" (Enable).
- To enable the USB function, enter the SP mode and set SP5985-002 (On Board USB) to "1" (Enable).

20. If there was no HDD in the machine before you installed the Printer Enhance Option, Printer Unit, or Printer/Scanner Unit:

- Do SP5846 41 so the user can use the address book.
- Do SP5853 to copy the preset stamp data to the hard disk. Then turn the main power switch off/on

### Important

- These SPs must be done immediately after installation of an HDD unit in a machine that previously had no HDD.
- The first time the machine power is turned on with the new HDD installed, the system automatically takes the address book from the NVRAM and writes it on the new HDD. However, only the system administrator can use the new address book on the HDD at this time.
- If you do SP5846 41 immediately after power on, then all users can use the address book.

### Note

- It is not necessary to format the new hard disk after installation.

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## Printer Enhance, Scanner Enhance Options

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### Accessory Check

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Refer to the "Common Accessory Table"

### Installation

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The installation of the printer enhance option and scanner enhance option is done with SP5873 001 (Application Move).

**Note**

- If you are going to update the RPCS unit with both the printer and scanner enhance options, the order of execution is not important.

1

1. Turn off the copier.
2. Remove the cover (  x1).
3. Confirm that the RPCS Unit or Printer Unit SD card is in the upper slot.
4. Put the option SD Card (Printer Enhance Option or Scanner Enhance Option) in the lower slot.
5. Turn the copier on.
6. Go into the SP mode and select SP5873-1.
7. Touch "Execute".
8. Obey the instructions on the display and touch "Execute" to start.
9. When the display tells you copying is completed, touch "Exit", then turn the machine off.
10. Remove the option SD card from the lower slot.
11. Turn the copier on.
12. Go into the User Tools mode and confirm that update was successful.  
User Tools> System Settings> Administrator Tools> Firmware Version> Next
13. Turn the copier off and reattach the SD card slot cover.
14. Return the copied SD card to the customer for safekeeping, or tape it to the faceplate of the controller.

**To undo an option update**

1. Turn the main switch off.
2. Confirm that the RPCS Unit or Printer Unit SD card is in SD card the upper slot
3. Put the empty SD card (Printer Enhance Option or Scanner Enhance Option D383) in the lower slot.
4. Turn the main switch on.
5. Go into the SP mode and do SP5873-2 (Undo Exec).
6. Obey messages on the operation panel to complete the procedure.
7. Turn the main switch off.
8. Remove the restored SD card from the lower slot..
9. Turn the main switch on.
10. Go into the User Tools mode and confirm that undo was successful.  
User Tools> System Settings> Administrator Tools> Firmware Version> Next
11. Turn the copier off again, then reattach the cover.

**Important Notes About SD Cards**

Here are some basic rules about moving an application to another SD card.

- The authentication data is moved with the application program to the target SD card.
- Once an application has been moved from the original SD card, the original SD card cannot be used unless the application is restored to the SD card with SP5873-2 (Undo Execute).
- SD cards must be stored in a safe location at the customer site. The empty SD card serves as proof of purchase and is the only evidence that the customer is licensed to use the application program.
- Before storing the card from which an application has been copied, label it carefully so that you can identify it easily if you need to do the undo procedure later.

### If PostScript3 is not used...

Move all applications which the customer wants onto one SD card. The destination card should have the largest amount of space available so it can hold as many other applications as possible.

#### ★ Important

- **The VM Card can be neither merged nor moved to another SD card. This card must be installed in Slot 2 (lower).**

SD Card Options	SD Card Size	Module Size
Printer/Scanner Unit Type 3350	32 MB	9.3 MB
RPCS Printer Unit Type 3350	32 MB	6.3 MB
Printer Unit Type 3350	32 MB	8.3 MB
Printer Enhance Option Type 3350	16 MB	4 MB
Scanner Enhance Option Type 3350	16 MB	3 MB
DataOverwriteSecurity Unit Type I	16 MB	4 MB
PostScript3 Unit Type 3350	64 MB	14.6 MB

### If PostScript3 is used...

Move all applications to the PostScript3 SD card.

# Installing Controller Options

1

## IEEE 1284 Interface board (B679)

### Accessories

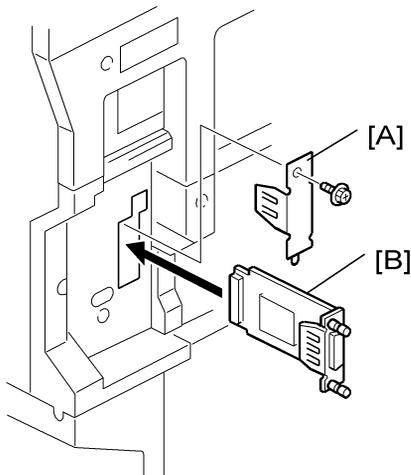
Check the accessories and their quantities against the following list:

No	Description	Quantity
1	IEEE 1284 Interface Board B679	1

### Installation

#### **⚠ CAUTION**

- Turn off the main power switch and disconnect the power supply cord.



d017i503

1. Remove the application cover (🔧 x1).
2. Remove the cover [A] of the board slot (🔧 x1).
3. Install the interface board [B] (🔧 x2 knob screws).

#### **⬇ Note**

- Use a screwdriver to tighten the knob-screws. Do not tighten manually, because this can disconnect the board.
4. Reattach the application cover (🔧 x1).

### ★ Important

- If the 500-Sheet Finisher is installed, remove it before you attach the parallel cable. Install the finisher again after you connect the parallel cable.

1

## IEEE 802.11a/g (D377)

### Accessories

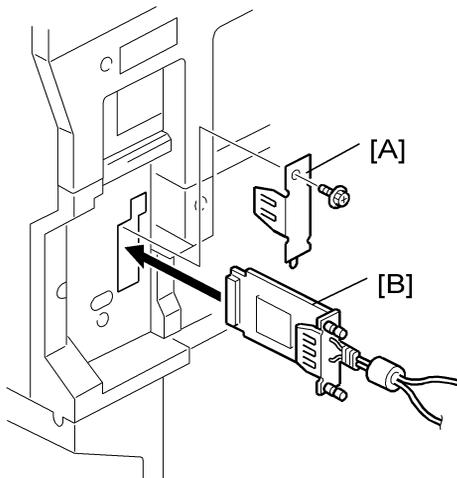
Check the accessories and their quantities against the following list:

No	Description	Quantity
1	IEEE 802.11a/b Interface Board	1
2	Antenna Cables	2
3	Antenna Clamps	8

### Installation

#### ⚠ CAUTION

- Turn off the main power switch and disconnect the power supply cord.



d017i507

1. Remove the plastic application cover (🔩 x1).
2. Remove the cover [A] of the board slot (🔩 x1).
3. Insert the interface card [B] as shown above.

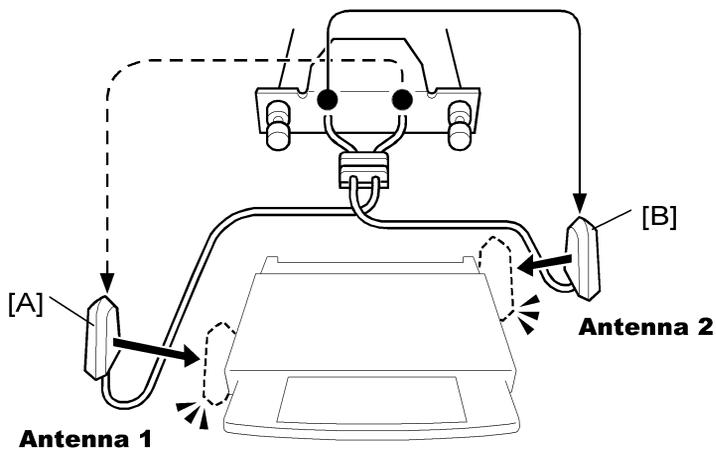
**Note**

- Use a screwdriver to tighten the knob-screws. Do not tighten manually, because this can disconnect the board.

1

1. Look at the markings on the antenna bracket.

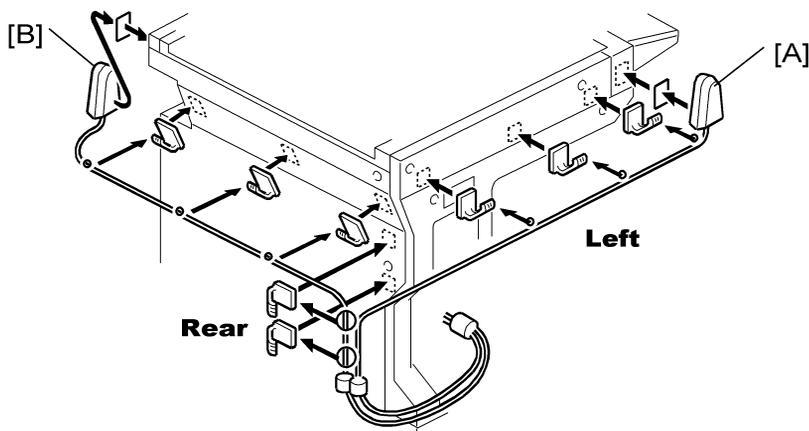
- **ANT1.** Antenna 1 transmits and receives. It must be installed on the front left corner of the main machine. (The core on the Antenna 1 cable is black.)
- **ANT2.** Antenna 2 only receives. It is installed on the rear right corner of the machine.



d017i508

**Important**

- To assure reliable data sending and receiving, Antenna 1 must be installed on the front left corner of the machine.



d017i509

2. Remove the seals from of the cable clamps and attach them to the left side of the machine as shown above.
3. Attach Antenna 1 [A] to the left front corner of the machine. (The core on the Antenna 1 cable is black.)
4. Set the cable of Antenna 1 in the clamps and close them.
5. Remove the seals from the cable clamps and attach them to the rear of the machine as shown above.
6. Attach Antenna 2 [B] to the right rear corner of the machine.
7. Set the cable of Antenna 2 in the clamps and close them.

## User Tool Settings for IEEE 802.11 a/g

Go into the User Tools mode and do the procedure below. These settings take effect every time the machine is powered on.

### ↓ Note

- You cannot use IEEE 802.11 a/g if you use Ethernet.

1. Press the "User Tools" key.
2. On the touch panel, touch "System Settings".

### ↓ Note

- The Network I/F (default: Ethernet) must be set for either Ethernet or wireless LAN.

3. Select "Interface Settings"> "Network"> "Network I/F Setting"
4. Press "IEEE 802.11". Only the wireless LAN options show.
5. Set the Communication Mode. Select either "802.11 Ad hoc", "Ad hoc" or "Infrastructure".
6. Enter the SSID setting. (The setting is case sensitive.)
7. Set the Channel. You need this setting when Ad Hoc Mode is selected.
  - Range: 1 to 14 (default: 11)
  - The allowed range for the channel settings may vary for different countries.
8. Do the WEP (Encryption) Setting.
  - The WEP (Wired Equivalent Privacy) setting is designed to protect wireless data transmission. The same WEP key is required on the receiving side in order to unlock encoded data. There are 64 bit and 128 bit WEP keys.
  - WEP: Select "Active" or "Inactive". ("Inactive" is the default.)
  - Range of Allowed Settings: 64-bit (10 characters) or 128-bit (26 characters)
9. Set the Transmission Speed.
  - Press the Next button to show more settings. Then select the transmission speed for the mode: Auto, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps (default: Auto). This setting should match the distance between the closest machine or access point. This depends on which mode is selected.

- For the Ad Hoc Mode, this is the distance between the machine and the closest PC in the network. For the Infrastructure Mode, this is the distance between the machine and the closest access point.

11 Mbps	140 m (153 yd.)
5.5 Mbps	200 m (219 yd.)
2 Mbps	270 m (295 yd.)
1 Mbps	400 m (437 yd.)

10. Press “Return to Default” to initialize the wireless LAN settings. Press “Yes” to initialize the following settings:

- Transmission mode
- Channel
- Transmission Speed
- WEP
- SSID
- WEP Key

### SP Mode Settings for IEEE 802.11b Wireless LAN

The following SP commands and UP modes can be set for IEEE 802.11b

SP No.	Name	Function
5840 006	Channel MAX	Sets the maximum range of the channel settings for the country.
5840 007	Channel MIN	Sets the minimum range of the channels settings allowed for your country.
5840 011	WEP Key Select	Used to select the WEP key (Default: 00).
UP mode	Name	Function
	SSID	Used to confirm the current SSID setting.
	WEP Key	Used to confirm the current WEP key setting.
	WEP Mode	Used to show the maximum length of the string that can be used for the WEP Key entry.

## Bluetooth Unit (B826)

### Accessories

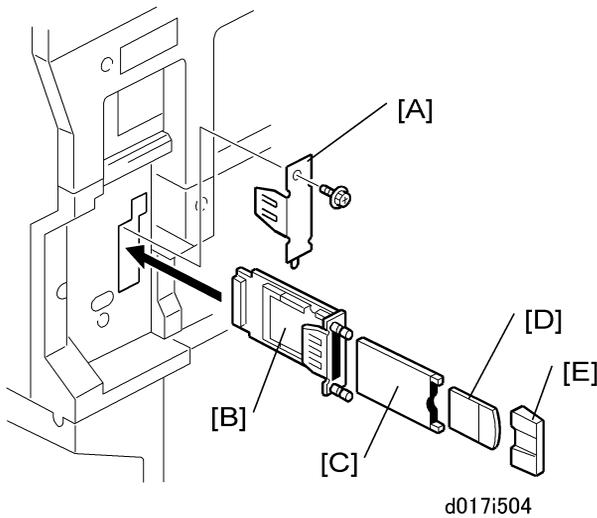
Check the accessories and their quantities against the following list:

No	Description	Quantity
1	Bluetooth Unit B826	1
2	PCI Card	1
3	Cap	1

### Installation

#### ⚠ CAUTION

- Turn off the main power switch and disconnect the power supply cord.



1. Remove the plastic application cover (🔩 x1).
2. Remove the cover [A] of board slot (🔩 x1).
3. Attach the interface board [B] to the controller board (🔩 x2 knob screws).

#### ⬇ Note

- Use a screwdriver to tighten the knob-screws. Do not tighten manually, because this can disconnect the board.

4. Install the Bluetooth card [C] in the slot in the Bluetooth unit.
5. Insert the antenna [D] into the Bluetooth card.
6. Attach the antenna cap [E].

1

## PostScript 3 Unit (D383)

### Accessories

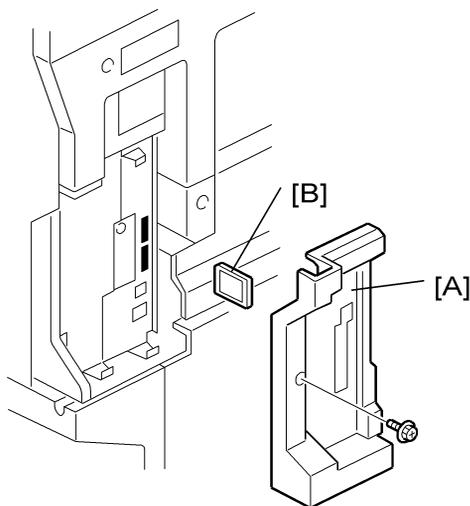
Check the accessories and their quantities against the following list:

No	Description	Quantity
1	PostScript 3 Emulation SD Card (D383)	1
2	Decal	1

### Installation

#### **⚠ CAUTION**

- Turn off the main power switch and disconnect the power supply cord.



d017i502

1. Remove the plastic application cover [A] (1 x 1).
2. Insert the SD card [B] into Slot 1 (upper slot).
3. Reattach the plastic application cover (1 x 1).

- Attach the "Adobe PostScript 3" decal to the front cover.

## Gigabit Ethernet (G831)

1

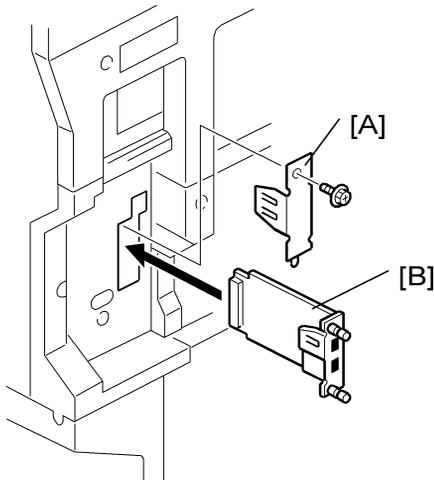
### Accessories

Check the accessories and their quantities against the following list:

No	Description	Quantity
1	Gigabit Ethernet (G381)	1
2	Ferrite Core	1

### Installation

- Switch the machine off.



d017i505

- Remove the plastic application cover (⚙️ x1).
- Remove the board cover [A] (⚙️ x 2).
- Insert the Gigabit Ethernet Board [B] into the slot and fasten it with the screws.
- Switch the machine on.
- Print a configuration page to confirm that the machine recognizes the installed board for USB2.0:  
User Tools > Printer Features > List/Test Print > Configuration Page

## Check All Connections

1

1. Connect the machine's power cord and turn on the main switch.
2. Go into the printer user mode and print the configuration page.
  - User Tools> Printer Settings> List Test Print> Config. Page

 **Note**

- The same data can also be printed with printer SP1-004 – Print Summary. All installed options are listed in the “System Reference” column.

## 2. Service Tables

### Printer Service Tables

SP	Number/Bit SW		Initial	
1001	Bit Switch			
	001	Bit SW 1	00H	Adjusts the bit switch settings. <b>Note:</b> These bit switches are currently not used.
	002	Bit SW 2	00H	
	003	Bit SW 3	00H	
	004	Bit SW 4	00H	
	005	Bit SW 5	00H	
	006	Bit SW 6	00H	
	007	Bit SW 7	00H	
	008	Bit SW 8	00H	

SP	Number/Name		Function/[Setting]
1003	Clear setting		
	001	Initialize Printer System	Initializes the settings in the printer feature settings of UP mode.
	002	Clear CSS Counter	DFU
	003	Delete Program	DFU
1004	Print Summary		Prints the printer summary sheet.
1005	Display Version.		Displays the version of the controller firmware.
1006	Sample/Proof Print		[0~1/0/1] 0: Link with Doc. Server 1: Enable

SP	Function/[Setting]					
7910	PDL Part No. Information					
	Returns a text string for the version.					
	RPCS	150	R55	156	PDF	162
	PS	151	RTIFF	157	BMLinks	163
	RPDL	152	PCL	156	PICTBRIDGE	164
	R98	153	PCLXL	159	FONT	180
	R16	154	MSIS	160	FONT1	181
	RPGL	155	MSIS (OPT)	161	FONT2	182
					FONT3	183

7911	PDL Version Information			Returns a text string for the version.		
	RPCS	150	R55	156	PDF	162
	PS	151	RTIFF	157	BMLinks	163
	RPDL	152	PCL	156	PICTBRIDGE	164
	R98	153	PCLXL	159	FONT	180
	R16	154	MSIS	160	FONT1	181
	RPGL	155	MSIS (OPT)	161	FONT2	182
					FONT3	183

## Scanner Service Tables

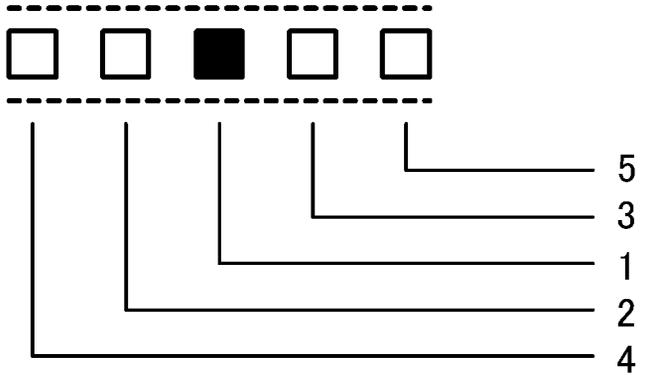
2

SP	Number/Name	Function/[Setting]
1004	Compression Type	Selects the compression type for binary picture processing. [1-3/1/1] 1: MH, 2: MR, 3: MMR
1005	Erase Margin	Creates an erase margin for all edges of the scanned image. If the machine has scanned the edge of the original, create a margin. [0 – 5/0/1mm]
1009	Forbid Using TWAIN	Sets the system not to use the network TWAIN scanner driver. 0: Not forbidden (can use TWAIN) 1: Forbid using TWAIN driver.

SP	Number/Name	Function/[Setting]
2021	Compression level (grayscale)	
	These SP codes set the compression ratio for the grayscale processing mode that can be selected with the notch settings on the operation panel. Range: 5 (lowest ratio) to 95 (highest ratio)	
2021 1	Level 3 (Middle I-Qual)	[5~95/40/1/step]
2021 2	Level 2 (High I-Qual)	[5~95/50/1/step]
2021 3	Level 4 (Low I-Qual)	[5~95/30/1/step]
2021 4	Level 1 (Highest I-Qual)	[5~95/60/1/step]
2021 5	Level 5 (Lowest I-Qual)	[5~95/20/1/step]

### Compression Notch Assignment

2



b767i910

# 3. Specifications

## Specifications

### Printer Controller (General)

Printing Speed	D017/D019: Maximum 25 ppm (A4/LT LEF) D018/D020: Maximum 33 ppm (A4/LT LEF)
Printer Languages	PCLXL/PCL5e PostScript 3 RPCS (Refined Printing Command Stream - an original Ricoh PDL)
Resolution (Driver)	RPCS 200/600 dpi PS3 300/600 dpi PCL5e 300/600 dpi PCLXL 300/600 dpi
Resident Fonts	PCL: TrueType: 10, Intellifont: 35, International: 13, Bitmap: 1 PS3: Option fonts PS3
Connectivity	Std.: RJ-45 network port (100BASE-TX, 10BASE-T, USB 2.0) Option: IEEE802.11a/g, g (Wireless LAN), Bluetooth, IEEE1284 (Centronics Parallel), Gigabit Ethernet
Network Protocols	TCP/IP, IPX/SPX, SMB (NetBIOS over TCP/IP), AppleTalk (Auto Switching)
RAM	Maximum MS model: 512 MB (Resident 256 MB + Additional 256 MB) CS model: 768 MB (Resident 512 MB + Additional 256 MB) Note: Additional 256 MB is required for all printer/scanner unit and printer units. <b>Note:</b> Additional 256 MB is required for all printer/scanner unit and printer units.

### USB Specifications

USB connectivity is built into the controller.

Interface	USB 2.0
Data rates	480 Mbps (high speed), 12 Mbps (full speed), 1.5 Mbps (low speed) High speed mode is only supported by USB 2.0.

### IEEE 802.11a/g, g Specifications

3

Standard applied	IEEE802.11a/g, g	
Data transmission rates	Speed	Distance
	11 Mbps	140 m (153 yd.)
	5.5 Mbps	200 m (219 yd.)
	2 Mbps	270 m (295 yd.)
	1 Mbps	400 m (437 yd.)
Network protocols	TCP/IP, Apple Talk, NetBEUI, IPX/SPX, SMB	
Bandwidth	2.4GHz (divided over 14 channels, 2400 to 2497 MHz for each channel)	

### Bluetooth Specifications

Transmission Specifications	Based on Bluetooth V1.1
Data Transfer Speed	1 Mbps
Profile	Hard Copy Cable Replacement Profile (HCRP), Serial Port Profile (SPP), BIP
Distance Between Devices	10 m (The maximum distance when using outdoors, otherwise depends on the office environment.)

### Scanner Specifications

Standard Scanner Resolution:	Main scan/Sub scan 600 dpi
Scanning Speed	MS:

	52 ipm, E-mail/Scan-to-Folder/Network Delivery Scanner (A4 LEF, Text 200 dpi, MH Compression) CS: 25 (D018)/ 32 (D020) ipm, E-mail/Scan-to-Folder/Network Delivery Scanner (A4 LEF, Text 200 dpi, MH Compression)
Available scanning Resolution Range:	100 to 1200 dpi (when used as a Network TWAIN scanner) 100, 200, 300, 400, 600 dpi (when used as a network delivery scanner, Scan-to-Folder, Scan-to-Email, or Document Server storage)
Grayscales:	8 bits/pixel
Interface:	Ethernet 10/100BASE TX, Wireless LAN 802.11a/g, g
Compression Method:	MH, MR, MMR (Binary Picture Processing) JPEG (Grayscale Processing)
Video Memory Capacity:	384 MB
Image Storage Capacity:	Number of originals per file: Maximum 1,000 pages Maximum of files: 3000 files Max. Storage on Doc. Server: 9,000 pages (B&W (ITU-T No. 1/200 dpi MMR))

## Software Accessories

### Printer

The printer drivers and utility software are provided on one CD-ROM. An auto-run installer allows you to select which components to install.

#### Printer Drivers

Printer Language	Windows 95/98/Me	Windows NT4.0	Windows 2000, XP, Server 2003/ Vista	Macintosh
PCL 6	Yes	Yes	Yes	No
PCL 5e	Yes	Yes	Yes	No
PS3	Yes	Yes	Yes	Yes

Printer Language	Windows 95/98/Me	Windows NT4.0	Windows 2000, XP, Server 2003/ Vista	Macintosh
RPCS	Yes	Yes	Yes	No

### ↓ Note

- The printer drivers for Windows NT 4.0 are only for the Intel x86 platform. There is no Windows NT 4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.
- The PS3 drivers are all genuine AdobePS drivers, except for Windows 2000/XP/Server 2003/Vista, which uses Microsoft PS. A PPD file for each operating system is provided with the driver.

### Utility Software

Software	Description
Agfa Monotype Font Manager 2000 (Win 95/98/Me, NT4, 2000)	A font management utility with screen fonts for the printer.
Smart Device Monitor for Admin (Win 95/98/Me, NT4, 2000/XP/Server 2003/Vista)	A printer management utility for network administrators. NIB setup utilities are also available.
DeskTopBinder – SmartDeviceMonitor for Client (Win 95/98/Me, NT4, 2000/XP/Server 2003/Vista)	A printer management utility for client users. Peer-to-peer printing utility and parallel/recovery printing functions are included.
LAN-Fax M7 Driver (Win 95/98/Me, NT4, 2000/XP)	This driver allows use of the LAN-Fax functions by installing the LAN-Fax driver, Address Book, and LAN-Fax Cover Sheet Editor.
PS Utility for Mac	This software provides several convenient functions for printing from Macintosh clients.
Acrobat Reader	A utility that allows reading PDF files.

### Scanner

The scanner driver and utility software are provided on one CD-ROM.

#### Scanner Driver

- Network Twain Driver for Win95/98/Me/NT4/2000/XP/Server 2003/Vista

#### Scanner Utilities

- DeskTopBinder Lite for 2000/XP/Server 2003

