

!

fi-6800, Image Scanner fi-680PRF/fi-680PRB, Imprinter Maintenance Manual



						Name	fi-6800/fi-680PRF/fi-680PRB Maintenance Manual					
						Drawing No.	P1PA03575→ B0XX/6					
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION					PFU LIMITED	Page	1/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	I.Fujioka					

Revision Record		
Edition	Date published	Revised contents
Draft	April 20, 2009	Draft version released.

The contents of this manual are subject to change without prior notice.

All rights Reserved. Copyright© PFU LIMITED, 2009

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	2 / 383

Preface

This manual provides the technical information such as maintenance, troubleshooting procedure and parts replacement procedure for field Engineers on fi-6800 image scanner and fi-680PRF/fi-680PRB imprinter (option).

This manual is not responsible if used for other than maintenance.

For information that is not contained in this manual, refer to the following manuals:

Item	Manuals	P/N *
1	fi-6800 Image Scanner Operator's Guide	P3PC-2492-xxENZ0
2	fi-6800 Image Scanner Getting Started	P3PC-2482-xxEN
3	fi-680PRF/PRB Imprinter Operator's Guide	P3PC-2512-xxEN
4	[Important] Read Before Using VRS	P3PC-2652-xxENZ0
5	fi-6800/fi-680PRF/fi-680PRB Illustrated Parts Catalog	P4PA03576-B5XX/6

* xx represents revision number of the manuals.

Convention

Special information, such as warnings, cautions, are indicated as follows:

WARNING

WARNING indicates that personal injury may result if you do not follow a procedure correctly.

CAUTION

CAUTION indicates that damage to the scanner may result if you do not follow a procedure correctly.

NOTICE

NOTICE provides 'how-to' tips or suggestions to help you perform a procedure correctly.

General note:

Be careful not to power off the scanner while communicating with the host computer. In case that the scanner is accidentally powered off during communication with the host, follow the procedure below:

1. Power off the host computer.
2. Power on the scanner.
3. Power on the host computer.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	$\frac{3}{383}$

Trademarks

Microsoft, Windows, Windows Server, Windows Vista, and SharePoint are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

ISIS and Quick Scan are either registered trademarks or trademarks of EMC Corporation in the United States.

Adobe, the Adobe logo, Acrobat, and the Acrobat logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Kofax and VRS are either registered trademarks or trademarks of Kofax Image Products, Inc.

Other product names are the trademarks or registered trademarks of the respective companies.

How Trademarks are Indicated in This Manual

The operating systems and products in this manual are indicated as follows:

Windows 2000: Microsoft® Windows® 2000 Professional operating system (Service Pack 4 or later)

Windows XP: Microsoft® Windows® XP Professional (Service Pack 2 or later)
 Microsoft® Windows® XP Professional x64 Edition
 Microsoft® Windows® XP Home Edition (Service Pack 2 or later)

Windows Server 2003: Microsoft® Windows Server® 2003, Standard Edition
 Microsoft® Windows Server® 2003, Standard x64 Edition
 Microsoft® Windows Server® 2003, R2 Standard Edition
 Microsoft® Windows Server® 2003, R2 Standard x64 Edition

Windows Vista: Microsoft® Windows Vista® Home Basic (32/64-bit)
 Microsoft® Windows Vista® Home Premium (32/64-bit)
 Microsoft® Windows Vista® Business (32/64-bit)
 Microsoft® Windows Vista® Enterprise (32/64-bit)
 Microsoft® Windows Vista® Ultimate (32/64-bit)

Windows Server 2008: Microsoft® Windows Server® 2008, Standard (32/64-bit)

Microsoft SharePoint Server: Microsoft® Office SharePoint® Portal Server 2003
 Microsoft® Office SharePoint® Server 2007

Where there is no distinction between the different versions of the above operating system, the general term “Windows” is used.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 4 / 383

Contents

Chapter 1 Overview	11
1.1 Scanner Overview	11
1.1.1 Features	11
1.1.2 Scanner Specification	12
1.1.2a Imprinter Specification	15
1.1.3 Environmental Specification	16
1.1.4 Appearance	17
1.1.5 Operator Panel	19
1.2 Document Specification	20
1.2.1 Paper Size	20
1.2.2 Paper Quality	21
1.2.3 Loading Capacity	22
1.2.4 Areas Not to be Perforated	23
1.2.5 Multi feed Detection Conditions	24
1.2.6 Restricting the Background Color Area	25
1.2.7 Job Separation Sheet	25
1.2.8 Scanning a Mixed Batch of Documents	26
1.2.9 De-skew and Auto-cropping	27
Chapter 2 Scanner Configuration	28
2.1 Scanner Configuration	28
2.1.1 Description of Units	28
2.2 Operational Sequence	30
2.2.1 Power ON ~ Initialization completes	30
2.2.2 Flow of Paper Feeding/Transporting/Ejecting	32
2.3 Cable Connection Diagram	36
2.3.1 CT PCA/MD PCA Mounting Drawing	36
2.4 Circuit Diagram	37
Chapter 3 Installation	38
3.1 Unpacking	38
3.1.1 Unpacking the Scanner	38
3.1.2 Checking the Appearance and Accessories	39
3.2 Installing the Scanner	40
3.2.1 For Safety Installation	40
3.2.2 Software	40
3.2.3 Installing the Bundled Software	41
3.2.4 Installing the Scanner	44
Chapter 4 Maintenance Parts	45
4.1 Maintenance Parts List	45
4.2 Specifications / Appearances of Maintenance Parts	47
4.2.1 Hopper Unit	47
4.2.2 Stacker Unit	47
4.2.3 Stacker Under Sheet	48
4.2.4 Stacker Stopper S	48
4.2.5 Stacker Stopper L	48
4.2.6 FX Cover L	49
4.2.7 FX Cover R	49
4.2.8 RV Cover L	50
4.2.9 RV Cover R	50
4.2.10 Stacker Under Cover	50
4.2.11 Top Cover	51
4.2.12 Juno SW (SW PCA)	51
4.2.13 Juno CSL (CSL PCA)	51
4.2.14 LCD	52
4.2.15 Optical Unit	52
4.2.16 LED Glass FX	53

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	5 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.	IFujioka			

4.2.17 LED Glass RV	53
4.2.18 LED Unit-FX	53
4.2.19 LED Unit-RV	53
4.2.20 BW Unit	54
4.2.21 BW Motor Unit	54
4.2.22 HB Unit	54
4.2.23 Brake Adjustment Jig	55
4.2.24 HB Pad	55
4.2.25 B-BRK Unit	55
4.2.26 Brake Unit	55
4.2.27 HB Adjustment Jig	56
4.2.28 (Reserved)	56
4.2.29 Feed Motor Unit 1	56
4.2.30 Feed Motor Unit 2	56
4.2.31 LU Motor Unit	57
4.2.32 Feed Belt 1	57
4.2.33 Feed Belt 2	57
4.2.34 Juno MD (MD PCA)	58
4.2.35 Pick Roller Unit	58
4.2.36 Pick Motor Unit	58
4.2.37 Guide SEP	59
4.2.38 Separator Brush	59
4.2.39 Exit Brush	59
4.2.40 Exit Motor	60
4.2.41 Exit Belt 1	60
4.2.42 Exit Belt 2	60
4.2.43 US Sensor FX	61
4.2.44 US Sensor RV	61
4.2.45 Sensor	61
4.2.46 Prism Sensor	62
4.2.47 Photo Sensor	62
4.2.48 Empty Sensor	62
4.2.49 Micro Switch	63
4.2.50 Sensor PTR	63
4.2.51 Sensor LED	63
4.2.52 Juno CT (CT PCA)	64
4.2.53 Memory	64
4.2.54 CGA Board	65
4.2.55 CGA Memory	65
4.2.56 (Reserved)	65
4.2.57 (Reserved)	65
4.2.58 Power Supply	66
4.2.59 Fan	66
4.2.60 (Reserved)	66
4.2.61 (Reserved)	66
4.2.62 Latch	67
4.2.63 Gas Damper	67
4.2.64 Damper Kit	67
4.2.65 Lock Arm	67
4.2.66 Lock Lever	68
4.2.67 USB Cable	68
4.2.68 CCD Cable RV	68
4.2.69 CSL Cable	68
4.2.70 Assist Roller	69
4.2.71 Feed Roller 2	69
4.2.72 Feed Roller 3	69
4.2.73 Feed Roller 4	69

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	6/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.74 Feed Roller 5	69
4.2.75 Feed Roller 6	69
4.2.76 Exit Roller 1	70
4.2.77 Exit Roller 2	70
4.2.78 RV Roller 1	70
4.2.79 RV Roller 2	70
4.2.80 RV Roller 3	70
4.2.81 CSL Sheet Kit	71
4.2.82 Adjustment Chart Kit	71
4.2.83 Adjustment Sheet	71
4.2.84 Test Chart	71
4.2.85 Adjustment Chart	71
Chapter 5 Troubleshooting	72
5.1 Troubleshooting Procedure	72
5.1.1 Scanner does not turn ON	73
5.1.2 Malfunction after power on	74
5.1.3 Error Codes	75
5.1.4 Scanned image is abnormal	92
5.1.5 Imprinter errors	97
5.1.6 Error Message	98
Chapter 6 Maintenance Procedure	102
6.1 For Safety Operation	102
6.2 Periodic Maintenance	103
6.2.1 Periodic Maintenance Items	103
6.3 Cleaning	104
6.3.1 Optical Unit	104
6.3.2 BW Unit / LED Unit / LED Glass (Fixed Unit / Revolve Unit)	104
6.4 Maintenance Tools	105
6.4.1 Maintenance Tool List	105
6.4.2 Test Chart List	105
6.5 Non-disassembly Parts	106
6.5.1 Non-disassembly Parts (Optical Unit)	106
6.5.2 Non-disassembly Parts (Motor Units which are already adjusted)	106
6.5.3 Non-disassembly Parts (Brake Roller which is already adjusted)	107
6.6 Removing the Power Cable, USB/SCSI Cable	110
6.7 Replacing the Hopper Unit / Stacker Unit	111
6.7.1 Hopper Unit	111
6.7.2 Stacker Unit <<TBD>>	112
6.7.3 Stacker Under Sheet	113
6.7.4 Stacker Stopper S	114
6.7.5 Stacker Stopper L	114
6.8 Replacing the Outer Covers	115
6.8.1 FX Cover L	115
6.8.2 FX Cover R	116
6.8.3 RV Cover L	118
6.8.4 RV Cover R	119
6.8.5 SW PCA	121
6.8.6 Stacker Under Cover	122
6.8.7 Top Cover	123
6.9 Replacing the Parts on the Operator Panel	124
6.9.1 CSL PCA	124
6.9.2 LCD	126
6.10 Replacing the Parts on the CT PCA Unit	128
6.10.1 CT PCA	128
6.10.2 Memory (CT PCA)	133
6.10.3 CGA Board / Memory	134
6.10.4 HB Pad	135

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	7 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

6.10.5 CCD Cable RV.....	136
6.10.6 CSL Cable.....	137
6.11 Replacing the Parts in the Power Supply.....	138
6.11.1 Power Supply.....	138
6.11.2 Fan.....	140
6.12 Replacing the Parts in the Fixed Unit.....	141
6.12.1 Optical Unit.....	141
6.12.2 BW Unit.....	142
6.12.3 BW Motor Unit.....	143
6.12.4 Front Side Background Changeover Sensor (Sensor).....	144
6.12.5 LED Glass FX.....	144
6.12.6 LED Unit FX.....	145
6.12.7 ADF Open Switch (Micro Switch).....	146
6.12.8 Assist Roller.....	147
6.12.9 Feed Rollers (Fixed Unit).....	148
6.12.10 Feed Motor Unit 1 (for driving the Assist Roller).....	158
6.12.11 Hopper Bottom Sensor (Sensor).....	159
6.12.12 Feed Motor Unit 2 (for driving the Feed Rollers 2 ~ 6).....	160
6.12.13 LU Motor Unit (for driving the Hopper).....	161
6.12.14 Empty Sensor.....	162
6.12.15 Feed Belt 1.....	164
6.12.16 Feed Belt 2 (for driving Feed Rollers 2 ~ 6).....	165
6.12.17 B-BRK Unit.....	166
6.12.18 HB Unit.....	167
6.12.19 Brake Encoder Sensor (Sensor).....	169
6.12.20 Brake Unit.....	170
6.13 Replacing the Parts in the Revolve Unit.....	171
6.13.1 Optical Unit.....	171
6.13.2 Read Top Sensor (Prism Sensor).....	173
6.13.3 Imprinter Top Sensor (Prism Sensor).....	174
6.13.4 Stacker Sensor (Sensor PTR).....	176
6.13.5 Stacker Sensor (Sensor LED).....	177
6.13.6 BW Unit.....	178
6.13.7 BW Motor Unit.....	180
6.13.8 Backside Background Changeover Sensor (Sensor).....	181
6.13.9 LED Glass RV.....	182
6.13.10 LED Unit RV.....	183
6.13.11 Exit Roller (Revolve Unit).....	185
6.13.12 Feed Motor Unit 1 (for driving the Separator Roller).....	187
6.13.13 Feed Belt 1 (for driving the Separator Roller).....	189
6.13.14 Feed Roller Rotation Detection Sensor (Photo Sensor).....	190
6.13.15 Pick Sensor / Skew Sensor / Feed Top Sensor (Prism Sensor).....	191
6.13.16 Jam Sensor (Prism Sensor).....	192
6.13.17 LU Motor Unit (for driving the Stacker).....	193
6.13.18 Exit Motor.....	195
6.13.19 Exit Sensor (Prism Sensor).....	197
6.13.20 Exit Belt 1.....	198
6.13.21 Exit Belt 2.....	199
6.13.22 Pick Roller Unit.....	202
6.13.23 Pick Motor Unit.....	204
6.13.24 Manual Feed Sensor / Pick Position Sensor (Sensor).....	205
6.13.25 Guide SEP.....	207
6.13.26 (Reserved).....	207
6.13.27 Stacker Bottom Sensor (Sensor).....	208
6.13.28 MD PCA.....	209
6.13.29 Top Cover Open Switch (Micro Switch).....	210
6.13.30 Separator Brush.....	211

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	8 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					

6.13.31 Exit Brush	212
6.13.32 Latch	213
6.13.33 Lock Arm / Lock Lever.....	214
6.13.34 RV Roller	216
6.14 Replacing the Ultrasonic Sensor.....	226
6.14.1 Ultrasonic Sensor (US Sensor FX).....	226
6.14.2 Ultrasonic Sensor (US Sensor RV).....	229
6.15 Replacing the Damper Section	230
6.15.1 Gas Damper.....	230
6.15.2 Damper Kit.....	231
Chapter 7 Adjustment/Settings	233
7.1 Offline Maintenance Mode	234
7.1.1 Basic operation and maintenance mode items.....	234
7.1.2 Paper Feeding Test.....	238
7.1.3 Adjustment (Offset / Magnification / White level / Ultrasonic)	239
7.1.4 Motor Test.....	245
7.1.5 Sensor Test.....	247
7.1.6 Operator Panel Test.....	258
7.1.7 Lamp Test	259
7.1.8 Thermistor Test	260
7.1.9 Backing up / Restoring EEPROM Information	261
7.1.10 Emulation Mode Switching.....	263
7.1.11 Option Information Display	264
7.1.12 Device Information Display	264
7.1.13 Error Log Display.....	264
7.1.14 Clearing Periodical Maintenance Alarm	265
7.1.15 Display / Clearing Consumable Counters.....	265
7.2 Maintenance Tool (Online Test).....	266
7.2.1 Connecting the Scanner.....	266
7.2.2 Starting up / Shutting down the Maintenance Tool.....	267
7.2.3 List of Tests / Diagnostic Items.....	268
7.2.4 Adjustments (Offset / Magnification / White Level).....	269
7.2.5 EEPROM R/W Test	270
7.2.5.1 Save.....	270
7.2.5.2 Restore	271
7.2.5.3 Initialize	272
7.2.6 Operator Panel Test.....	273
7.2.7 Memory Test.....	274
7.2.8 Motor Test.....	275
7.2.9 Sensor Test.....	276
7.2.10 Sensor Current Value Test	277
7.2.11 Automatic Sensor Judgment.....	278
7.2.12 ADF Running Test	279
7.2.13 Lamp Test	280
7.2.14 Thermistor Test	281
7.2.15 Option Display	282
7.2.16 MTBF Test.....	283
7.2.17 Error Information	284
7.2.18 Consumable Count	285
Chapter 8 Operation and Daily Maintenance.....	286
8.1 Basic Operation	286
8.1.1 Turning the Power ON/OFF	286
8.1.2 Opening/Closing the Hopper.....	287
8.1.3 Opening/Closing the ADF.....	288
8.1.4 Opening/Closing the Top Cover.....	289
8.1.5 Setting the Loading Capacity of the Hopper	290
8.1.6 Loading the Documents on the Hopper.....	291

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	9/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi						

8.1.7 Stacker Setting	295
8.1.8 Setting the Paper Thickness (Adjusting the Paper Separation Force).....	297
8.1.9 How to Use the Operator Panel	298
8.2 ADF Scanning	307
8.2.1 Document Scanning	307
8.2.2 Scanning Documents of Different Widths.....	309
8.3 Cleaning	313
8.4 Consumables	318
8.4.1 List of Consumables.....	318
8.4.2 Checking and Resetting the Counters.....	318
8.4.3 Replacing the Pick Roller.....	319
8.4.4 Replacing the Separator Roller.....	320
8.4.5 Replacing the Brake Roller	323
8.5 Periodical Replacement Parts	325
8.6 Scanner Settings	326
8.6.1 Software Operation Panel.....	326
8.6.2 How to Start Up	326
8.6.3 Software Operation Panel Items.....	327
Chapter 9 fi-680PRF/fi-680PRB Imprinter.....	336
9.1 Imprinter Specification	336
9.1.1 Printing Specification	336
9.1.2 Environmental Specification.....	336
9.1.3 Appearance and Names of Component Parts.....	336
9.2 Operation	337
9.2.1 Operation.....	337
9.2.2 Block Diagram.....	337
9.3 Unpacking and Installation of Imprinter.....	338
9.3.1 Unpacking.....	338
9.3.2 Installing the Imprinter	339
9.4 Maintenance Parts for Imprinter	355
9.4.1 Maintenance Parts List.....	355
9.4.2 Maintenance Parts Descriptions / Appearance.....	356
9.5 Troubleshooting.....	358
9.6 Maintenance Procedure.....	359
9.6.1 For Safety Operation.....	359
9.6.2 Maintenance Tools.....	359
9.6.3 Replacing the Parts in the Print Section.....	360
9.7 Adjustment / Setting	370
9.7.1 Positioning the Print Cartridge.....	370
9.7.2 Print Setup	371
9.8 Imprinter Basic Operation.....	372
9.8.1 Basic Operation	372
9.8.2 Cleaning.....	377
9.8.3 Consumables.....	379
Appendix 1 Screws.....	380

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	10 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi						

Chapter 1 Overview

1.1 Scanner Overview

1.1.1 Features

The fi-6800, image scanner has the following features:

[Scanning speed]

[Feeding mechanism]

Batch scanning (Documents with different paper weight/size/color/brightness can be scanned at once.)

Reduced work loss caused by multifeeds

-The scanner mounts three ultrasonic sensors that accurately detect multifeed.

-Paper separation force (torque tension) can be changed to detect multifeed of the different types of documents.

[Document Protection]

Staple detection (When documents are stapled, the scanner urgently stops paper feeding operation.)

[Image processing]

Kofax VRS, known for their quality in image processing, is included as standard equipment.

[Option]

Equipped with imprinter options (Front-side post imprinter / Back-side post imprinter)

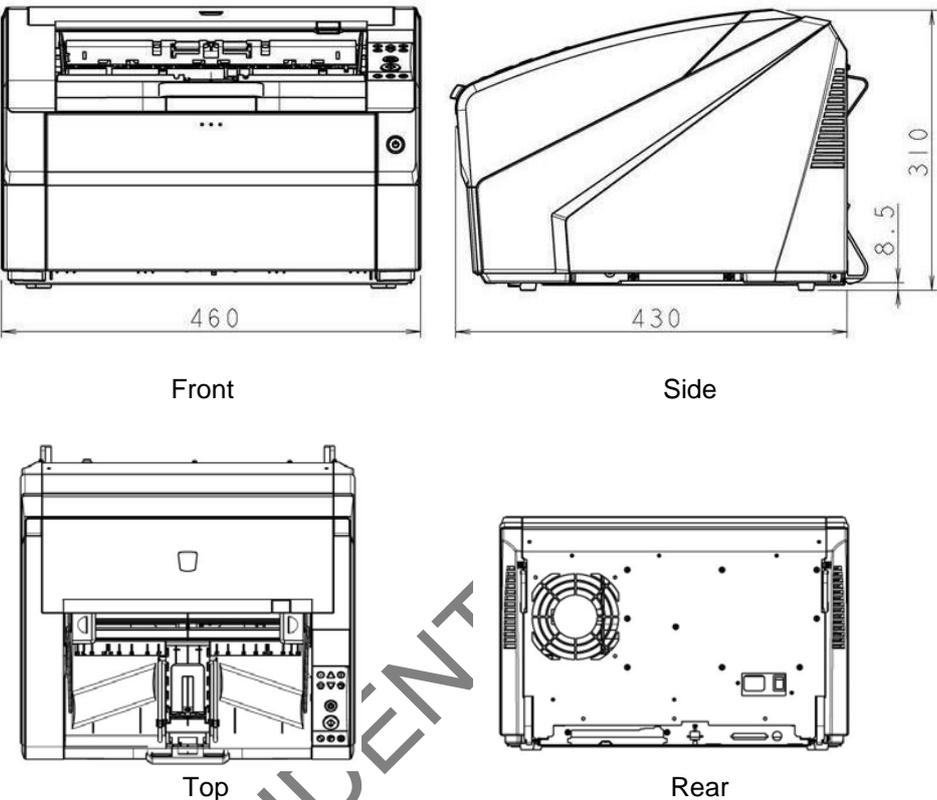
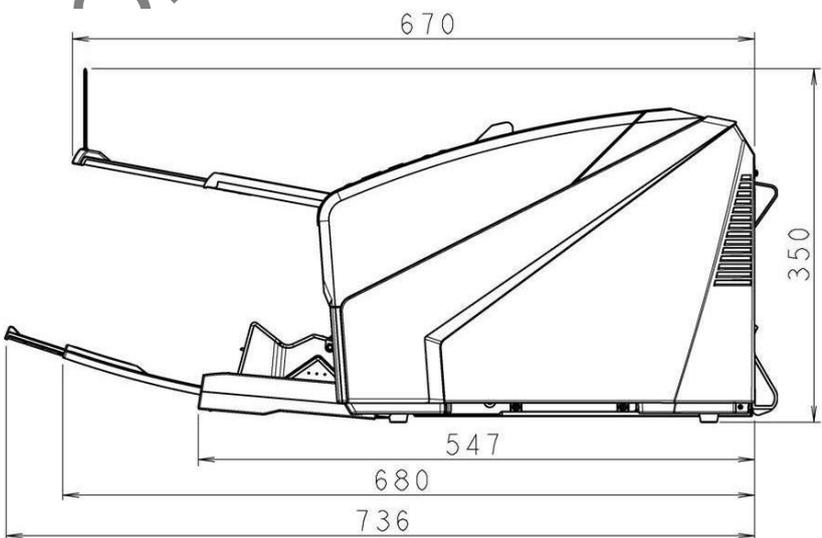
PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 11 / 383

1.1.2 Scanner Specification

No.	Item	Specification	Remarks		
1	Operating method	Automatic Document Feeder (ADF) + Manual feeding (separation/non-separation)			
2	Image sensor	Color CCD (Charge-coupled device) x 2	ADF front/back		
3	Light source	White LED array			
4	Optical resolution	600dpi x 600dpi (main scanning x sub-scanning)			
5	Internal video processing	1024 levels (10bit)			
6	Video output format	Monochrome: 1 bit/pixel Grayscale: 8 bit/pixel Color: 24 bit/pixel			
7	Output resolution	TWAIN/ ISIS	50-600 dpi (in increments of 1dpi)	Paper size	Resolution
				DL ~ 863mm	400 or less
			863mm~3m	300 or less	
	VRS	100, 150, 200, 240, 300, 400 dpi	Multi image (up to DL)	400 or less	
			DL ~ 2.7m	300 or less	
			2.7 ~ 3m	200 or less	
8	Scanning speed (A4 Portrait)	TWAIN/ ISIS		Simplex (ppm)	Duplex (ipm)
			200dpi	100	200
			300dpi	100	200
			400dpi	60	120
		600dpi	30	60	
		VRS	100dpi		
			150dpi		
			200dpi		
			240dpi		
			300dpi		
400dpi					
9	Paper size	TWAIN/ ISIS	Minimum: 52 x 74 mm, A8 (Portrait) Maximum: 304.8 x 431.8 mm (Portrait)	Up to 3,048 mm (120 in.) at custom setting	
		VRS	Minimum: 52 x 74 mm, A8 (Portrait) Maximum: 304.8 x 431.8 mm (Portrait)	Up to 863mm at custom setting	
10	Paper weight	B4 or less: 31~209g/m ² B4 or over: 52~157g/m ²			
11	Hopper	Capacity : maximum 50 mm, 500 sheets (80 g/m ²), Less than 5kg Shape : Side guide independently adjustable (detachable)			
12	Stacker	Capacity : maximum 50 mm, 500 sheets (80 g/m ²), Less than 5kg Shape : Position controlled by height detection Side guide position adjustable, Page bottom alignment			
13	Mixed size scanning	- Document side edge shall not be placed within 26mm from the hopper centerline. - Center aligning is recommended at paper loading			
14	Background	TWAIN/ ISIS	White / Black selectable		Front and back side image shall be the same color.
		VRS	Not selectable		
15	Multifeed	Three ultrasonic sensors (in main scanning direction) * iMFF function * Selectable MF recovery function			
16	Paper protection	Document feeding is stopped by, - skew detection - staple detection			
17	Interface	TWAIN/ ISIS	Ultra-SCSI Shielded 50-pin type USB2.0 (High-SPEED)		
		VRS	Ultra Wide SCSI shielded 68-pin type USB2.0 (High-SPEED)		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	12 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

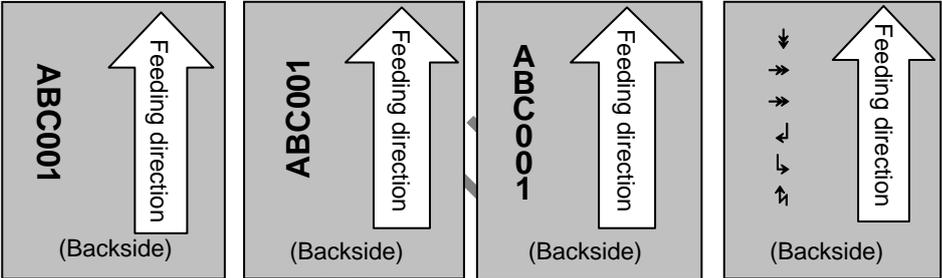
No.	Item	Specification
18	Dimensions (W x D x H)	<p>Hopper and Stacker Extensions stored: 160 x 430 x 310mm (protrusions not included)</p>  <p>Front</p> <p>Side</p> <p>Top</p> <p>Rear</p> <p>Hopper and Stacker Extensions opened: 460 x 736 x 350mm (protrusions not included)</p> 

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	13 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

No	Item	Function	TWAIN/ISIS	VRS
	Image processing function	Automatic color-monochrome detection	✓	✓
		Multipage	✓	
		Blank page deletion (color, grayscale, monochrome)	✓	✓
		Simple automatic black and white	✓	
		Error diffusion/Dither	✓	
		Automatic de-skew	✓	
		Automatic page size detection	✓	✓
		Soft-IPC	✓	
		Automatic rotation	✓ (11 languages)	✓ (9 languages)
		Automatic image quality check	✓	
		Toggle patch	✓	✓
		Cropping for dark background paper	✓	
		Prescan	✓	
		Patch code number notification	✓	
		Background smoothing		✓
		Advanced Clarity		✓
		Automatic black & white		✓
		Dropout colors	R/G/B dropout colors	✓
	Non-dropout color		✓	✓
	Select dropout color		✓	
	Multi dropout colors		✓	
	Image compression function	Hardware real-time JPEG compression 4:4:4	✓	✓
		Hardware real-time JPEG compression 4:2:2	✓	✓
		Hardware real-time JPEG compression 4:1:1	✓	
	Installed memories	DDR2-SODIMM 512MB	2 (Total: 1024MB)	3 (two on the CT PCA, one on the CGA card)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	14 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

1.1.2a Imprinter Specification

No.	Item	Specification	Remarks
1	Printing Method	Thermal inkjet printing -Post-imprinter, Front Side (print after scan) -Post-imprinter, Back Side (print after scan)	
2	Printing direction	Document feeding direction	
3	Print color	Black	
4	Printing Characters	Alphabet : A~Z, a~z Numeric Characters : 0, 1~9 Symbols: ! " \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~ * Character pattern downloaded, printing of special character and character spacing setting are not available. VRS: Alphabet : A~Z, a~z Numeric Characters : 0, 1~9 Symbols: ! " \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~ Standard only	ANSi code 95 types (including space) Standard and bold, Narrow
5	Print orientation	 <p>String angle: 0° 180° 90° 270° (vertical) VRS: String angle is 0° only</p>	
6	Character size (Vertical x Horizontal)	Normal / Bold: 2.91 x 3.03 mm (96 x 67 dpi) Narrow: 2.91 x 1.71 mm (96 x 67 dpi)	
7	Dot matrix of character (Vertical x Horizontal)	Normal / Bold: 12 x 9 dot Narrow: 12 x 5.5 dot	
8	Maximum characters	43 characters	
9	Printing area	TBD	
10	Character position accuracy	Feeding direction: ±4mm (at reference position)	
11	Replacing cycle of print cartridge	4,000,000 characters Or 6 month after opening the bag. * The replacing cycle may differ depending on the number of dots on the printed characters.	
12	Document requirement	Thickness: 52 to 157g/m ² . Size: Same as the scanner Type: Same document types of ADF are available except the paper types, which do not easily soak the ink such as Art paper or Coated paper.	

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	15 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

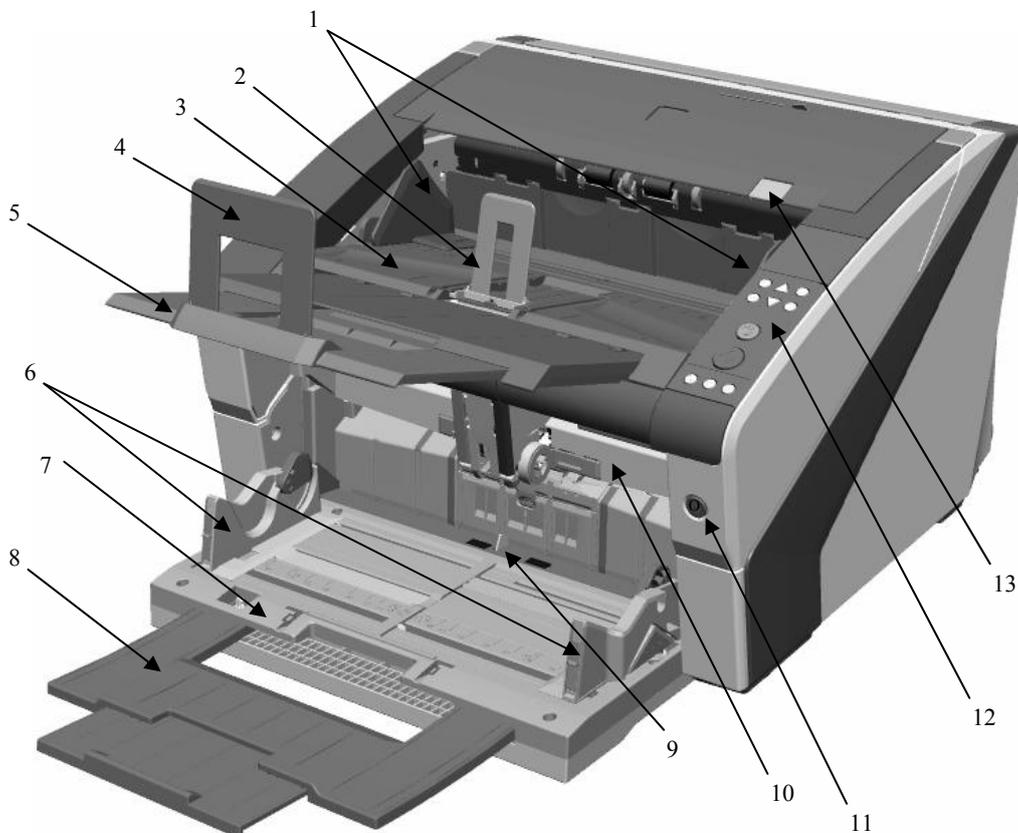
1.1.3 Environmental Specification

No.	Item		Specification	Remarks										
1	Input power	Voltage range	AC100V to 240V \pm 10% (Single phase)											
		Frequency range	50/60Hz \pm 3Hz											
2	Power consumption	Operating	200 W or less	International Energy Star: less than 6.9W										
		Not operating	TBD											
		Sleep mode	TWAIN/ISIS		4.0W or less (AC 100-120V) 4.2W or less (AC 220-240V)									
			VRS		5.0W or less (AC 100-120V) 5.1W or less (AC 220-240V)									
3	Outer dimension		460 (W) x 430 (D) x 310 (H) mm	- Protrusion not included - Hopper and Stacker extension stored										
4	Installation space		<table border="1"> <thead> <tr> <th>Side</th> <th>Required space</th> </tr> </thead> <tbody> <tr> <td>Right side</td> <td>200mm</td> </tr> <tr> <td>Left side</td> <td>200mm</td> </tr> <tr> <td>Rear side</td> <td>600mm</td> </tr> <tr> <td>Front side</td> <td>600mm</td> </tr> </tbody> </table> 	Side	Required space	Right side	200mm	Left side	200mm	Rear side	600mm	Front side	600mm	
Side	Required space													
Right side	200mm													
Left side	200mm													
Rear side	600mm													
Front side	600mm													
5	Weight		32 kg (70.6 lb) or less											
6	Environmental condition	Temperature	Operating	15 to 35 °C (59 to 95 °F)	No condensation									
			Not operating	-20 to 60 °C (-4 to 140 °F)										
			Stored Transported	-20 to 60 °C (-4 to 140 °F)										
	Humidity	Operating	20 ~ 80 %											
		Not operating	8 ~ 95 %											
		Stored Transported	8 ~ 95 %											
7	Calorific value	Operating		172 Kcal/Hr or less										
		Not operating		TBD Kcal/Hr or less										
		Sleep mode	TWAIN/ISIS	3.5 Kcal/Hr or less (AC100-120V) 3.7 Kcal/Hr or less (AC220-240V)										
			VRS	4.3 Kcal/Hr or less (AC100-120V) 4.4 Kcal/Hr or less (AC220-240V)										
8	Packaged Weight		TBD											

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	16 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	IFujioka			

1.1.4 Appearance

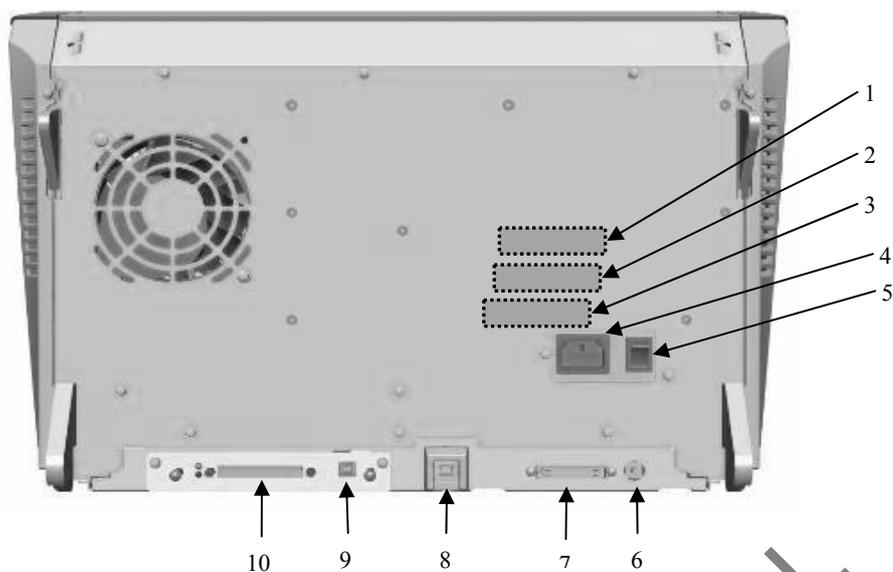
[Front]



No.	Parts name	Function
1	Stacker Side Guide	Guides the documents ejected onto the stacker in width direction.
2	Paper Stop S	Pull out when the documents are short.
3	Stacker	Stacks up the ejected documents.
4	Paper Stop L	Guides the ejected documents in length direction and prevents them from being scattered.
5	Stacker Extension	Pull out to adjust the length for scanning long page documents.
6	Hopper Side Guide	Guides the documents loaded on the hopper in the direction of the width.
7	Hopper	A table for loading documents to scan.
8	Hopper Extension	Pull out to place long documents on the hopper.
9	Empty Sensor	Detects whether documents are loaded onto the Hopper.
10	ADF Release Tab	Lift up to open the ADF.
11	Power Button	Press to turn the power ON/OFF.
12	Operator Panel	Can be used to operate the scanner or check its status.
13	Top Cover Release Tab	Lift up to open the top cover.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	17 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

[Rear]



No.	Parts name	Function
1		
2	Label B (Certification label)	
3	Label A (Manufacturing Label)	
4	Power Connector	A connector for the power cable.
5	Main Power Switch	Powers ON/OFF the scanner.
6	SCSI ID Switch	Used to configure the SCSI ID (Factory default setting: 5)
7	SCSI Connector	For connecting a SCSI cable. Ultra-SCSI (50-pin)
8	USB Connector	For connecting a USB cable.
9	USB Connector exclusively for VRS	For connecting a SCSI cable. SCSI connector for using Kofax VRS (image processing).
10	SCSI Connector exclusively for VRS	For connecting a SCSI cable. SCSI connector for using Kofax VRS (image processing). <Ultra Wide SCSI Shield 68-pin type>

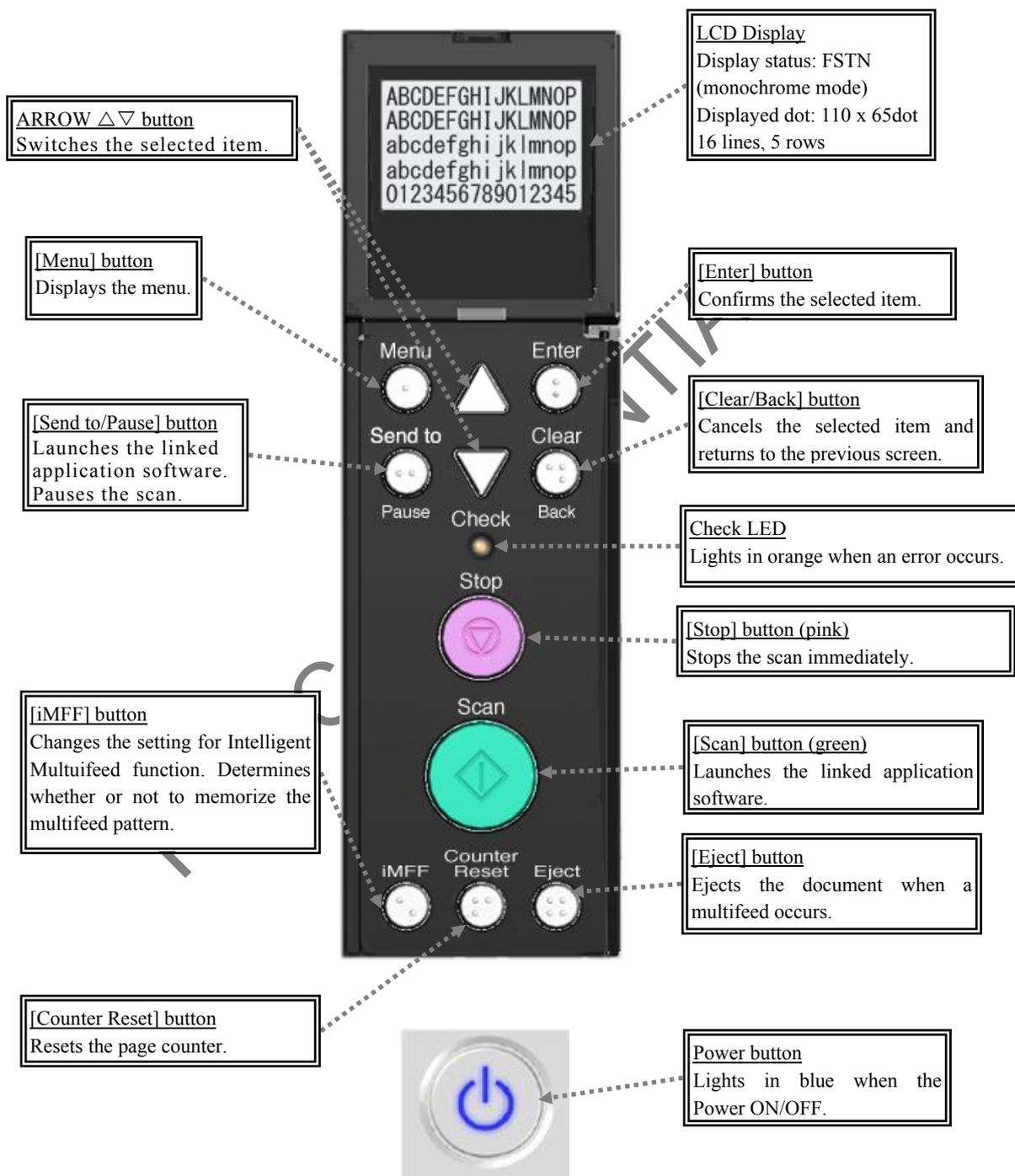
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	18 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					

1.1.5 Operator Panel

The fi-6800 equips the operator panel with LCD panel which improves work efficiency.

The operator panel can display the scanner setting information, the number of scanned documents, and error status, in order to enhance the operability and scanning performance.

For the maintenance, the maintenance mode can be launched on the operator panel.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	19 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

1.2 Document Specification

The following table shows the paper size, weight and quality required for the appropriate operation by the ADF.

1.2.1 Paper Size

No	Item	Specification	Remarks
1	Paper size	TWAIN /ISIS Minimum: 52 x 74 mm, A8 (Portrait) Maximum: 304.8 x 431.8 mm (Portrait)	Up to 3,048 mm (120 in.) at custom setting
		VRS Minimum: 52 x 74 mm, A8 (Portrait) Maximum: 304.8 x 431.8 mm (Portrait)	Up to 863mm at custom setting
2	Paper weight	B4 or less: 31 ~ 209g/m ² (8.3 ~ 56 lb) B4 or over: 52 ~ 157g/m ² (14 ~ 42 lb)	Paper weight is represented by "basis weight".
3	Mixed size scanning	Mixed size range: - Document side edge shall not be placed within 26mm from the hopper centerline. - Center aligning is recommended at paper loading	

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	20 / 383

1.2.2 Paper Quality

Paper type and precautions before scanning operation are described in this section.

- Paper Type

Recommended paper types for scanning are as follows:

- Wood-free paper
- Wood containing paper

When using paper types other than the above, make sure to test with the same type of paper and see if it can be scanned before you start scanning the actual document.

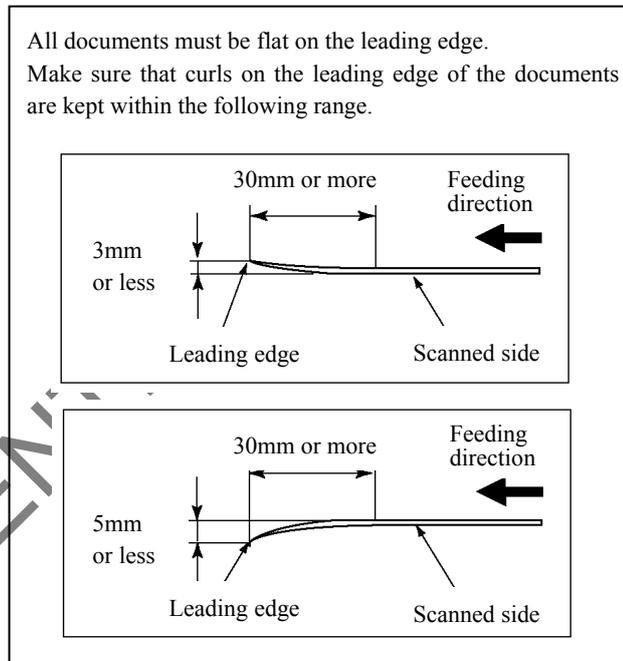
- Precautions

The following types of documents may not be scanned successfully:

- Ⓢ! Documents of non-uniform thickness (e.g. envelopes, documents with photographs attached)
- Ⓢ! Wrinkled or curled documents
- Ⓢ! Folded or torn documents
- Ⓢ! Tracing paper
- Ⓢ! Coated paper
- Ⓢ! Carbon paper
- Ⓢ! Non carbon paper
- Ⓢ! Photosensitive paper
- Ⓢ! Perforated documents
- Ⓢ! Documents that are neither square nor rectangular
- Ⓢ! Very thin documents

Also, do not scan the following types of documents:

- Ⓢ! Paper-clipped or stapled documents
- Ⓢ! Documents on which the ink is still wet
- Ⓢ! Documents smaller than A8 size
- Ⓢ! Documents wider than 304.8mm (12 in.)
- Ⓢ! Documents other than papers such as fabric, metal foil and OHP film.
- Ⓢ! Important documents such as certificates and cash vouchers which must not be damaged



NOTICE

- To scan documents that are semi-transparent, slide the [Brightness] bar to light to avoid bleed through.
- To prevent the rollers from becoming dirty, avoid scanning documents containing large areas filled with pencil. If you have to scan such documents, make sure to perform cleaning frequently.
- If a pick error, paper jam or multifeed occurs frequently, refer to Section "xxx".
- Carbonless paper contains chemical substances that may harm the paper-feeding rollers (e.g. Pick Rollers, Separator Roller, Brake Rollers) when documents are fed. Pay attention to the following:

Cleaning: If document jams occur frequently, clean the paper-feeding rollers.

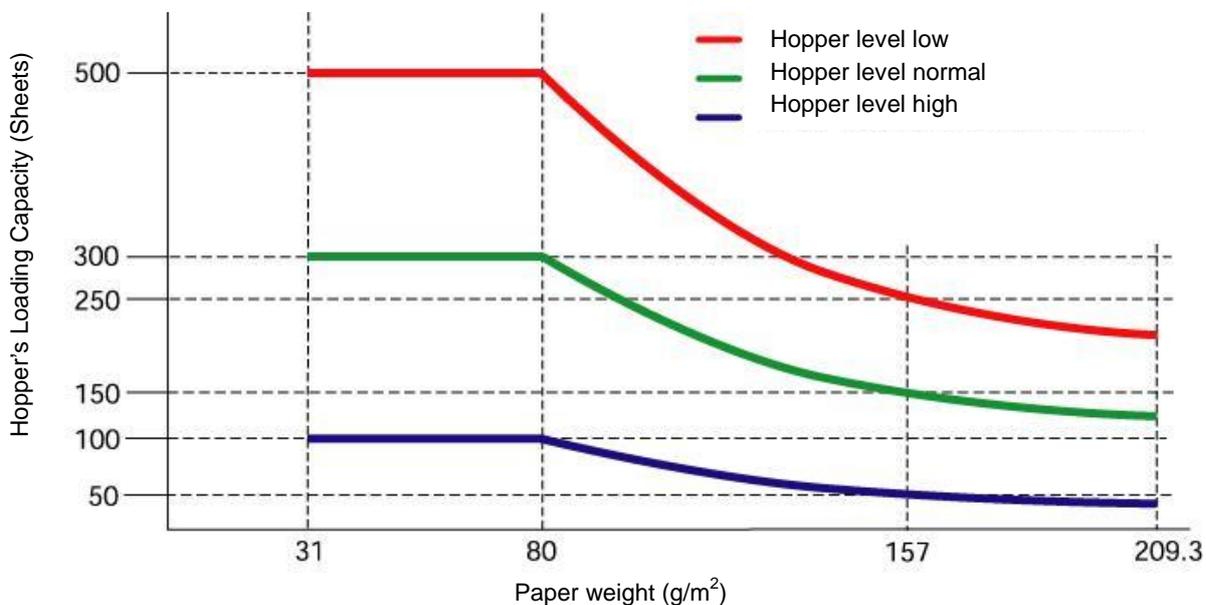
Replacing parts: The service life of the consumables for scanning "carbonless paper" may be shorter than that for scanning "wood containing paper."

When scanning wood containing papers, the life of each roller may end quicker compared to when scanning woodfree papers".

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	21 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

1.2.3 Loading Capacity

The number of sheets that can be loaded on the hopper is determined by the paper size and paper weight of the document. See the following graph:



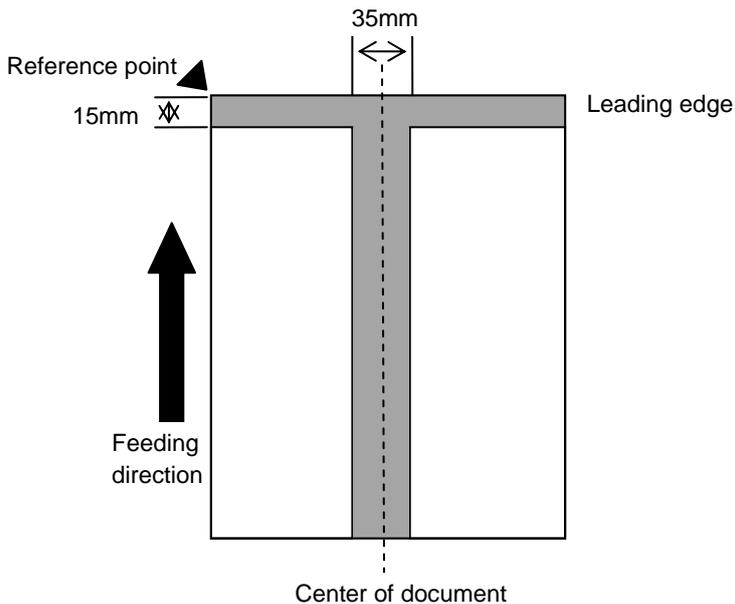
Paper thickness (unit)	Conversion									
	g/m ²	31	52	64	75	80	90	104	127	157
lb	8.3	14	17	20	21	24	28	34	42	56.1
kg	26.7	45	55	64.5	69	77.5	90	110	135	180

PFU.COM

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual				
						Drawing No.	P1PA03575 → B0XX/6				
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED				Page	22 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					IFujioka	

1.2.4 Areas Not to be Perforated

An error may occur when there are punched holes in the area shaded in light blue in the following picture. Refer to Section 1.2.7 for the Job Separation Sheet.



NOTICE

If there are any holes in the 35 mm-wide central column, you can move the document to the left or right to avoid an error.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	23 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

1.2.5 Multi feed Detection Conditions

Multifeed detection is performed by either checking the overlapping of documents, length of the documents, or the combination of both. The following conditions are required for an accurate detection.

1) Detection by overlapping

- Paper weight: 20 ~ 209g/m² (8.3 ~ 56.1lb) (0.025~ 0.25mm)
- Do not punch holes within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. (See Fig.1.)
- Do not attach other documents within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. (See Fig.1.)

2) Detection by length

- Document length deviation: 1 % or less
- Do not punch holes within 35 mm (1.38 in.) over the vertical center line of the document. (See Fig.2.)

3) Detection by overlapping and length

- Paper weight: 20 ~ 209g/m² (8.3 ~ 56.1lb) (0.025~ 0.25mm)
- Document length deviation: 1 % or less
- Do not punch holes within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. (See Fig.1.)
- Do not attach other documents within 35 mm (1.38 in.) of the vertical lines in the left, center and right of the document. (See Fig.1.)

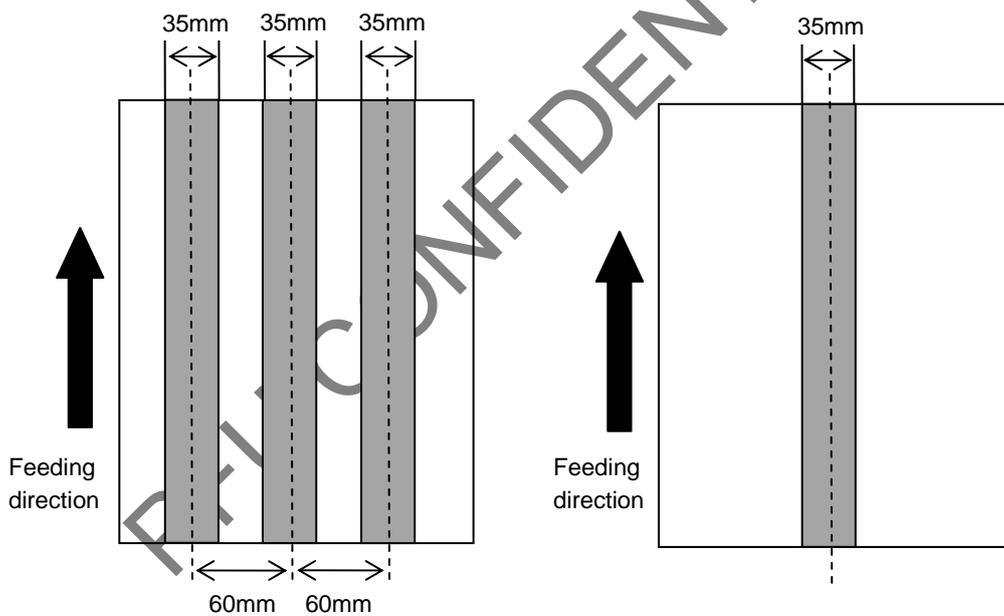


Fig. 1

Fig. 2

The rate of multifeed may drop with some documents such as glued paper or electro-statically charged paper when multifeed is detected by overlapping.

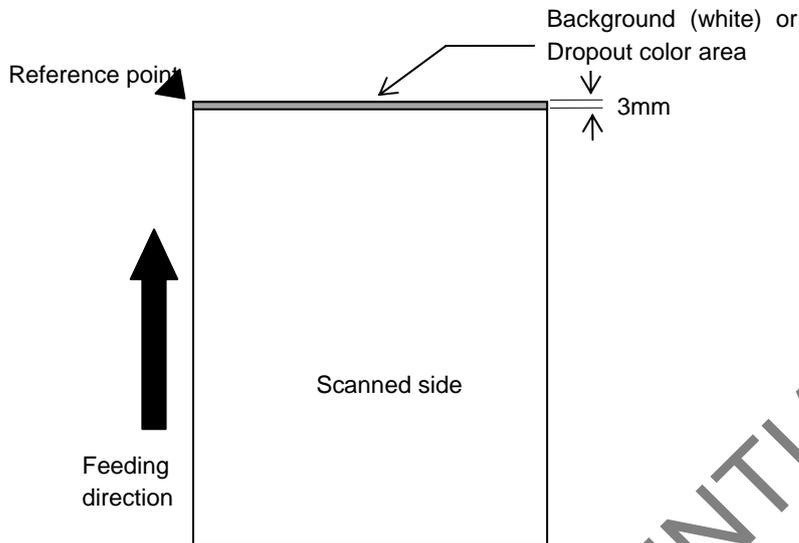
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	24 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

1.2.6 Restricting the Background Color Area

The scanning area from the leading edge to the first 3 mm should be in white (ground color of the document).

If [White level follower] is enabled, the following area (shaded in gray) must be the same as the ground color or the color to be dropped out.

If the document contains text, frames or signatures in this area, disable [White Level Follower].



1.2.7 Job Separation Sheet

The following is a typical form of a Job Separation Sheet

TBD

The document must be wider than A4/Letter size (210mm / 8.27 in.)

The above condition applies when the document is placed at the center of the pick roller width.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 25 / 383

1.2.8 Scanning a Mixed Batch of Documents

The following conditions apply when scanning a mixed batch of documents with different paper thicknesses/friction coefficients/sizes.

Always test scan a few sheets and see if the documents can be fed through before scanning a mixed batch of documents.

- ! Paper type
Align the direction of the paper fiber with the feeding direction.
- ! Paper thickness
When scanning documents with different paper thicknesses in the same batch, keep the paper thicknesses within the following range:
 - A5 or larger, A4 or smaller: 20 ~ 209.3 g/m² (5.5 ~ 56.1 lb)
 - Smaller than A5, larger than A4: 40.7 ~ 209.3 g/m² (11.0 ~ 56.1 lb)
 - A8 size: 127 ~ 209 g/m² (34 ~ 56.1 lb)
- ! Friction coefficient
We recommend that you use the same type of paper from the same manufacturer.
When papers of different manufacturers/brands are mixed, it affects the feeding performance as the difference in the friction coefficient increases.
The recommended friction coefficients are as follows:
0.35 to 0.60 (reference value for paper friction coefficient)
- ! Paper size
When scanning a mixed batch of documents, refer to Section 3.1.6 "XXXXXXX" and table below.

Note

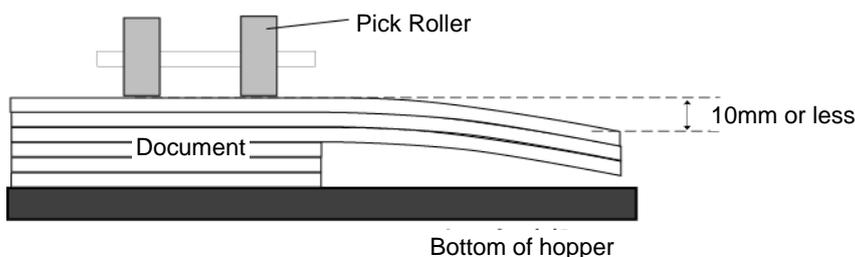
- When scanning a mixed batch of documents with different sizes, it is more likely to skew because the hopper side guides do not function on every sheet.
- We recommend scanning with [Automatic Page Size Detection] enabled.
- Multifeed detection by checking the length cannot be used together with [Automatic Page Size Detection].

Maximum size		A3	DL	B4	LTR	A4	B5	A5	B6	A6	B7	A7	B8	A8
	Width (mm)	297	279	257	216	210	182	149	129	105	91	74.3	64.3	52.5
Minimum size	A3	297												
	DL	279												
	B4	257												
	LTR	216												
	A4	210												
	B5	182												
	A5	149												
	B6	129												
	A6	105												
	B7	91												
	A7	74.3												
B8	64.3													
A8	52.5													

DL: 11×17

When a set of wider documents are placed on top of smaller documents within the same batch, the wider documents on top may hang down and affect the feeding performance.

Try to meet the following condition:



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	26 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

1.2.9 De-skew and Auto-cropping

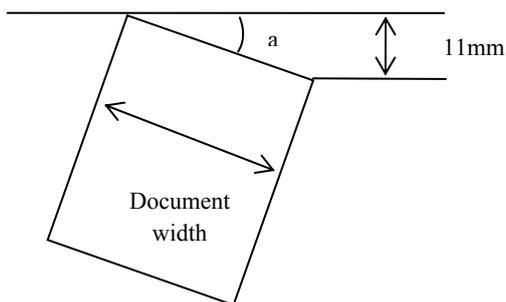
Available scanning mode

ADF front side/back side: Binary/Gray/Color

Following condition is required for De-skew and Auto-cropping.

- 1) Document thickness: 31 to 209 g/m² (8.3 ~ 56 lb)
- 2) Shape of document: Rectangle
- 3) Edges of document with 5 mm from edges shall not be black.
- 4) Skew angle (a) shall be less than 45 degree.

<ADF>



Note: This function may cause error by the image noise.

Clean the ADF to reduce the error rate.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	27 / 383

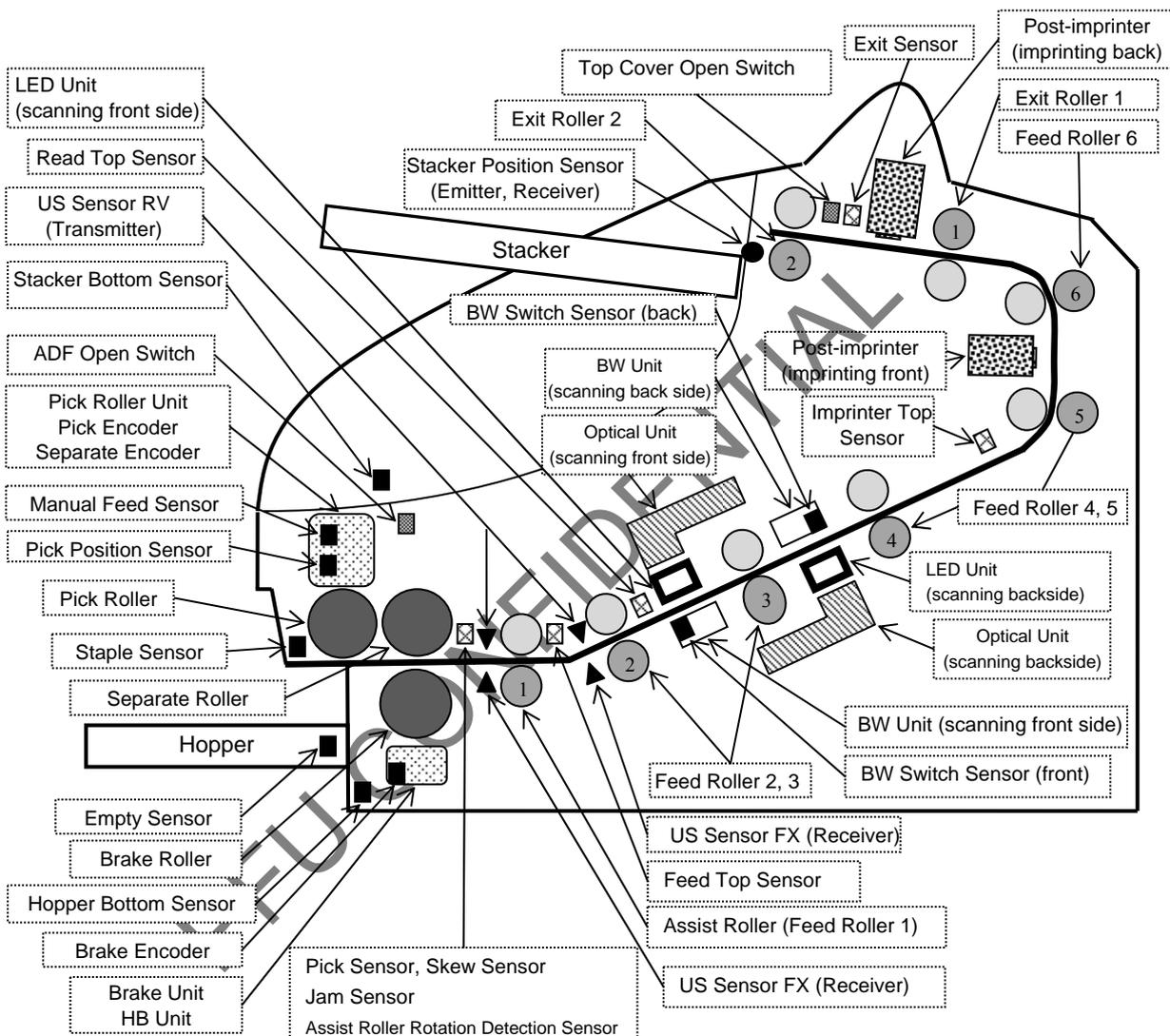
Chapter 2 Scanner Configuration

2.1 Scanner Configuration

This section describes the operation of each unit.

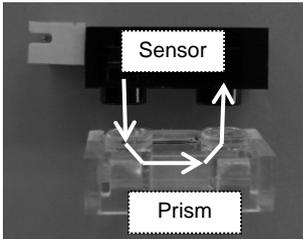
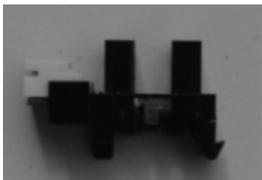
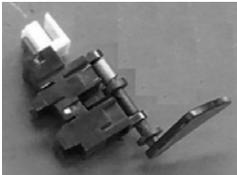
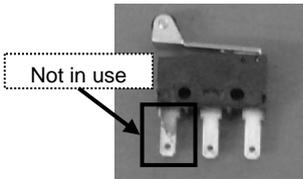
2.1.1 Description of Units

The illustration below shows positions of component parts such as sensors, switches and feeding rollers from side of the scanner.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	28 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

Names and Functions of Sensors/Switches

Name	Function	Remarks
Pick Sensor	Prism type sensor A signal is sent out from the sensor, reflected by prism, and returns to the receiver sensor. Confirm if there are documents or not by checking whether communication between the sensor and prism is interrupted or not.	
Skew Sensor		
Jam Sensor		
Feed Top Sensor		
Read Top Sensor		
Imprinter Top Sensor		
Exit Sensor		
Stacker Bottom Sensor	Horseshoe-shaped sensor Turns on/off the switch by shading between the sensors.	
Manual Feed Sensor		
Pick Position Sensor		
Staple Sensor		
Hopper Bottom Sensor		
Brake Encoder Sensor		
BW Switching Sensor (F, B)		
Empty Sensor	Horseshoe-shaped sensor Principle of operation is the same as that of the horseshoe-shaped sensor above. Detects that documents are loaded onto the Hopper by the paper detection arm on the sensor.	
Assist Roller Rotation Detection Sensor	Detects the Assist roller rotation	
Stacker Position Sensor	Detects documents on the Stacker. The Paper detection sensor functions with the emitter and receiver as a sensor. The sensor at right side transmits and the sensor at left side receives. Detects the error when excessive amount of documents are stacked on the Stacker.	
Ultrasonic Sensor (US Sensor RV/FX)	Consists of a transmitter and receiver. Detects layers of air between two documents by the ultrasonic wave. If there is no layers of air between the documents because they are glued, detection cannot be made.	
ADF Open Switch	Detects the Cover open/close. Only two terminals are available on this scanner.	
Top Cover Open Switch		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	29 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

2.2 Operational Sequence

2.2.1 Power ON ~ Initialization completes

<LCD display>

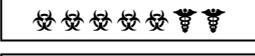
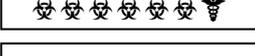
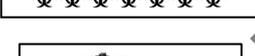
The LCD panel display changes in eight steps when the power is supplied until the scanner becomes ready.

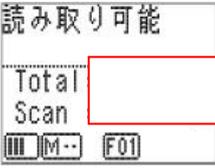
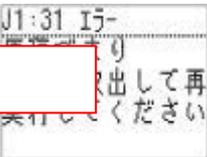
If an error occurs during initialization, the Check LED on the Operator Panel lights up, and the error is displayed on the LCD display.

Usually, the progress bar does not stop even when an error occurs during initialization, and either the scanner becomes ready or the error is displayed.

* If the progress bar stops in midstream, this is a scanner error.

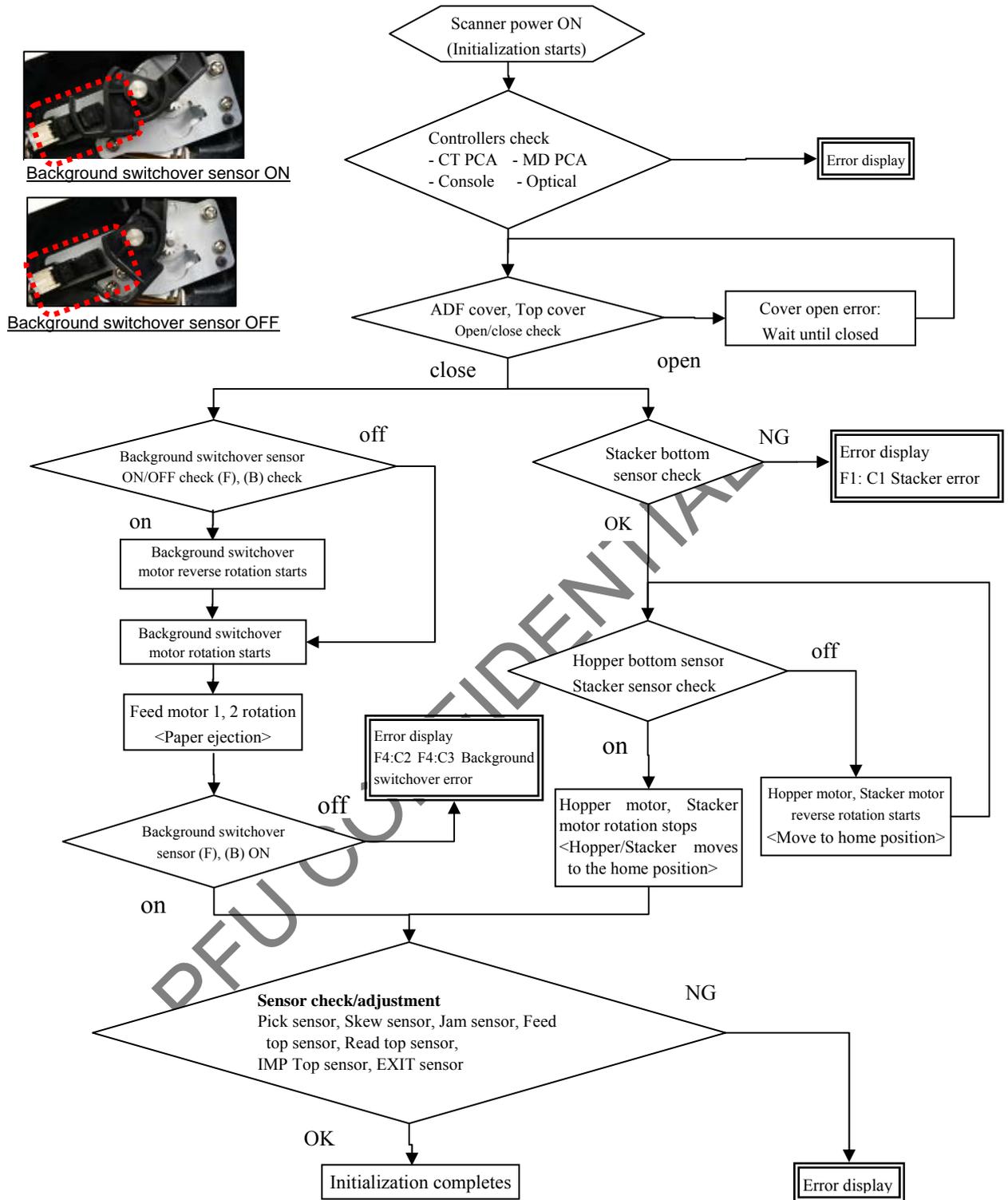
[LCD display from power ON ~ Initialization completes]

	Power ON (No progress bar display)
	Main initialization starts -Initializes LSI -Initializes DDR
	EEPROM check and initialization setting starts ~ completes
	CCD operation initialization setting starts ~ completes
	Interruption controller initialization setting ~ Initializes MTU and CMT
	Checks SDRAM ~ Checks TPS, Initializes SCI and RS232C
	Parameter initialization setting ~ Ejects paper and restores carrier
	Waits for ready (CGA)
	Initialization completes - If no error is detected during initialization, the following scanning ready screen appears. - If any error is detected, the initialization error screen appears. If an error occurs, check the detail by referring to Chapter 5 "Troubleshooting".

	TBD	
Scanning ready		Error

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	30 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

<Flowchart>

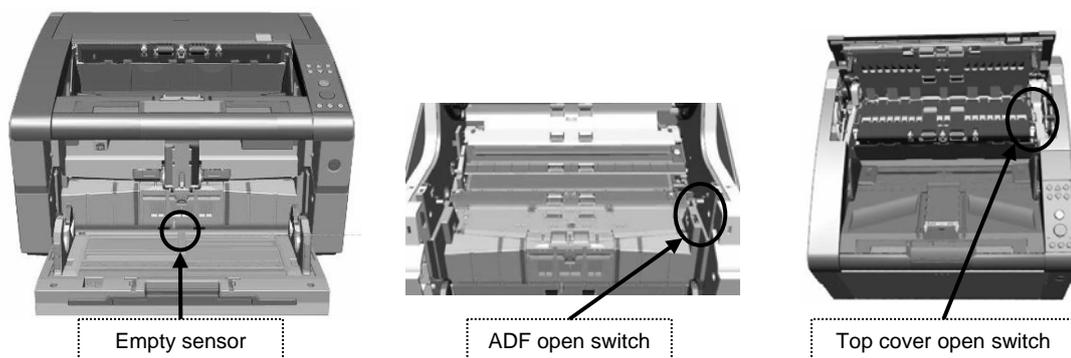


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	31 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

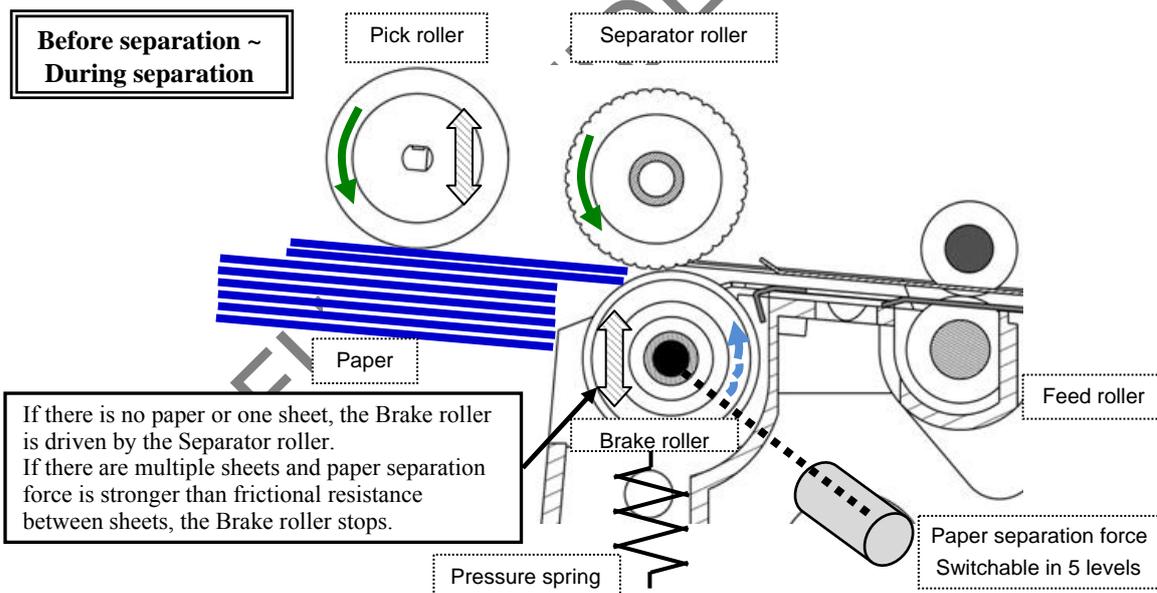
2.2.2 Flow of Paper Feeding/Transporting/Ejecting

<Flow of Feeding>

1. When the scanner receives the scan command, the Empty sensor detects paper, checks that the ADF open switch/Top cover open switch are closed, the scanner lifts up the Hopper, and then starts feeding documents (except for manual feeding mode).

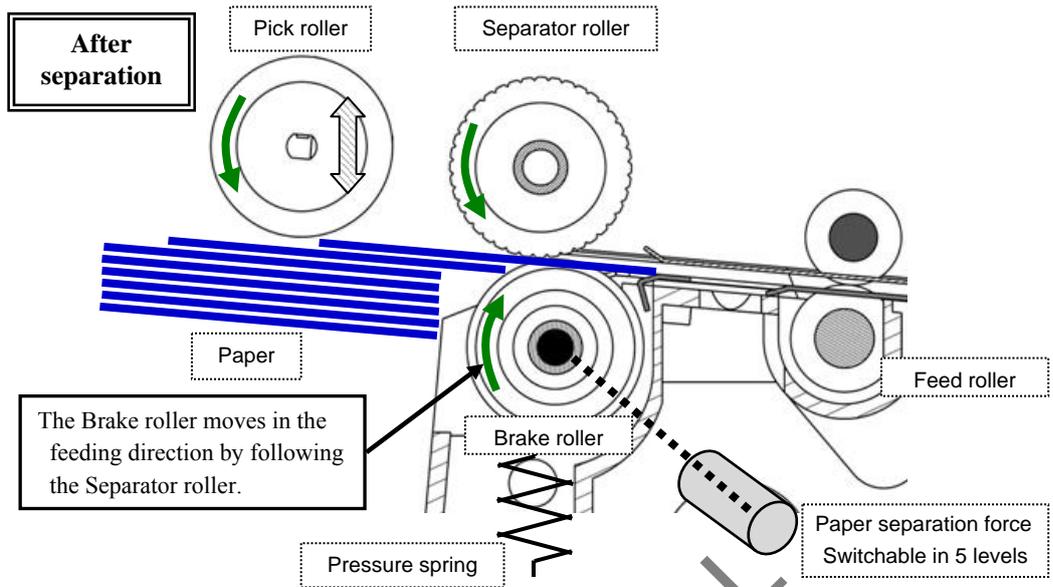


2. The pick roller starts normal rotation, and feeds documents to the Separator roller and Brake roller.
3. The fed documents are separated by the Separator roller and the Brake roller. The Brake roller is not connected to the motor that drives the roller so that it never feed documents in opposite direction. The Brake roller stops until the paper separation is complete. The force to opposite direction of the Brake roller to the documents can be switched in 5 levels by the paper separation force. When the friction coefficient between the documents is high, the torque needs to be high.

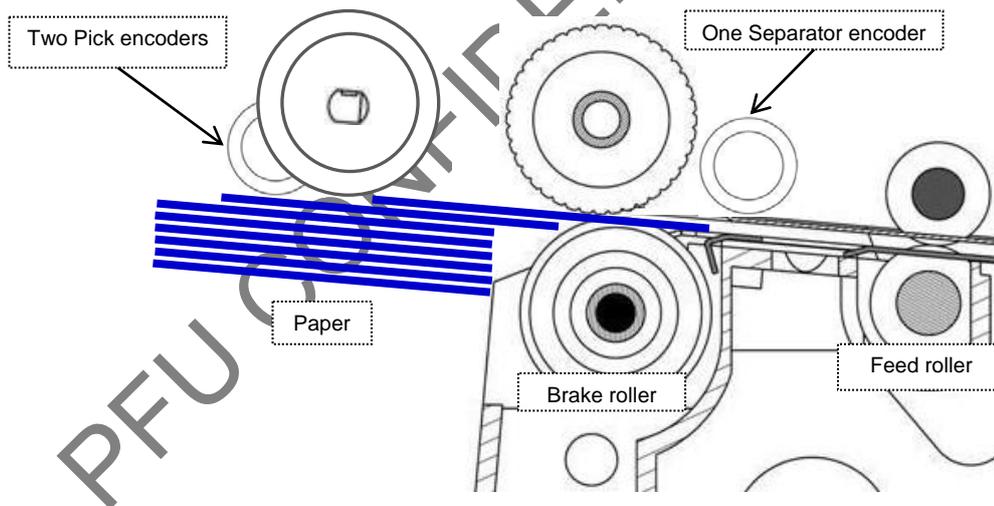


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	32 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4. After paper separation, the Brake roller moves in the feeding direction by following the Separator roller.

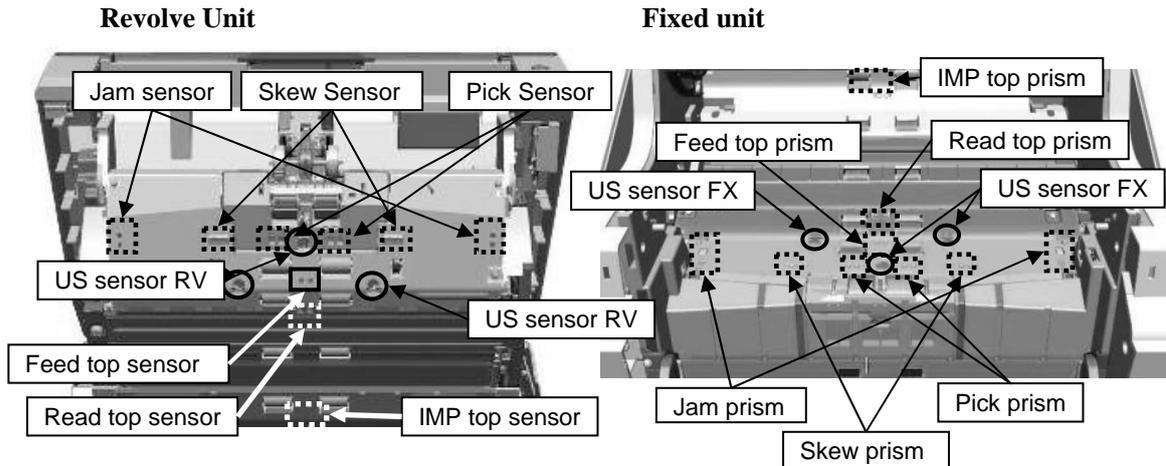


5. The Pick encoder and Separator encoder detect the document feeding amount and difference of feeding amount at right and left. If any abnormal feeding is detected, a feeding error such as staple detection and paper jam occurs.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	33 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

- The documents are separated by the Separator roller and Brake roller, and fed to the Feed rollers. Any faulty feeding such as Paper jam and multifeed, and document reach are detected by each sensor. The firmware judges errors based on the detected information.

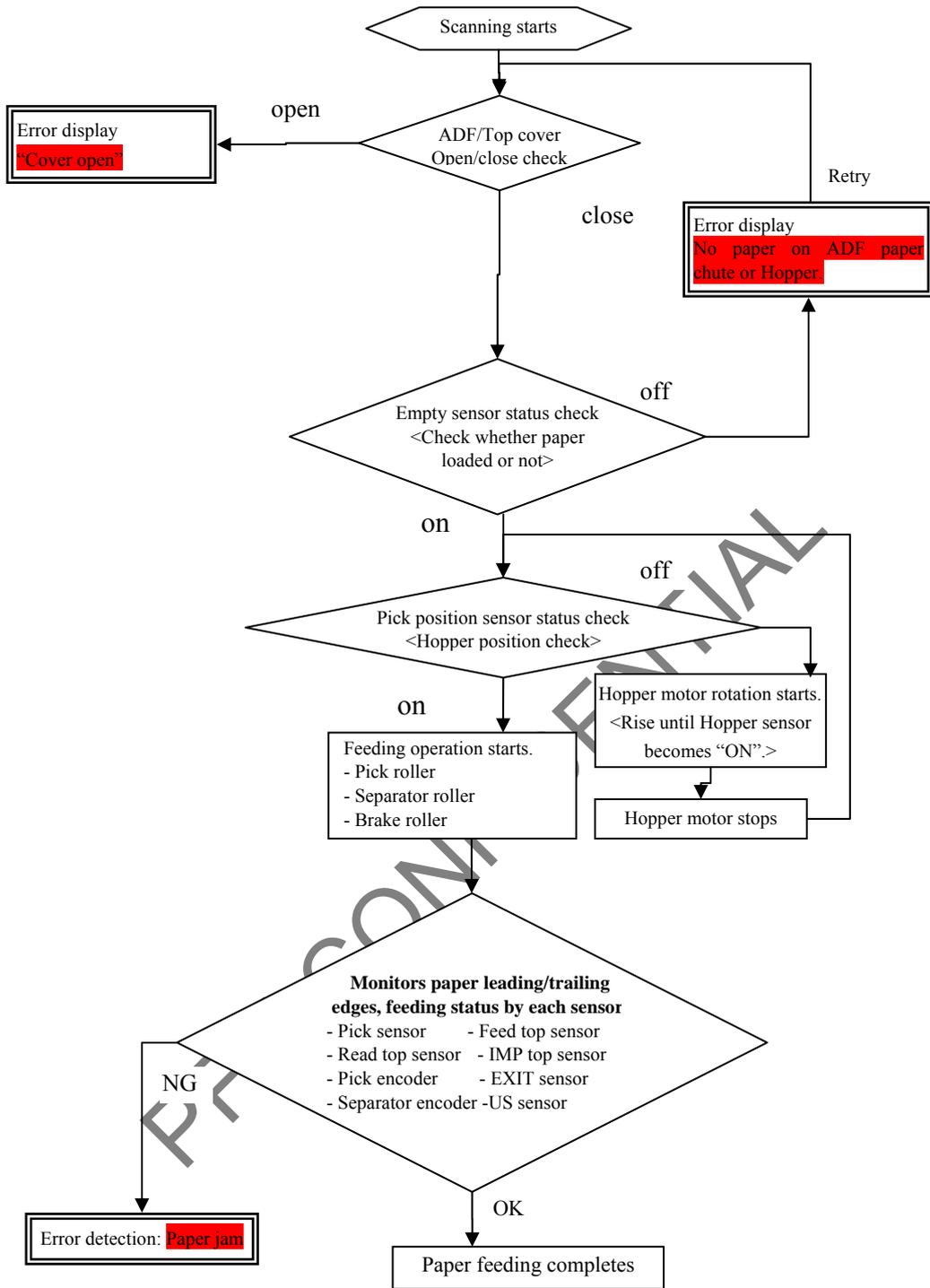


- The documents fed properly are ejected to the Stacker. At paper ejection, the Exit motor controls the Exit roller rotation to avoid the ejected documents being scattered on the Stacker.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	34 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

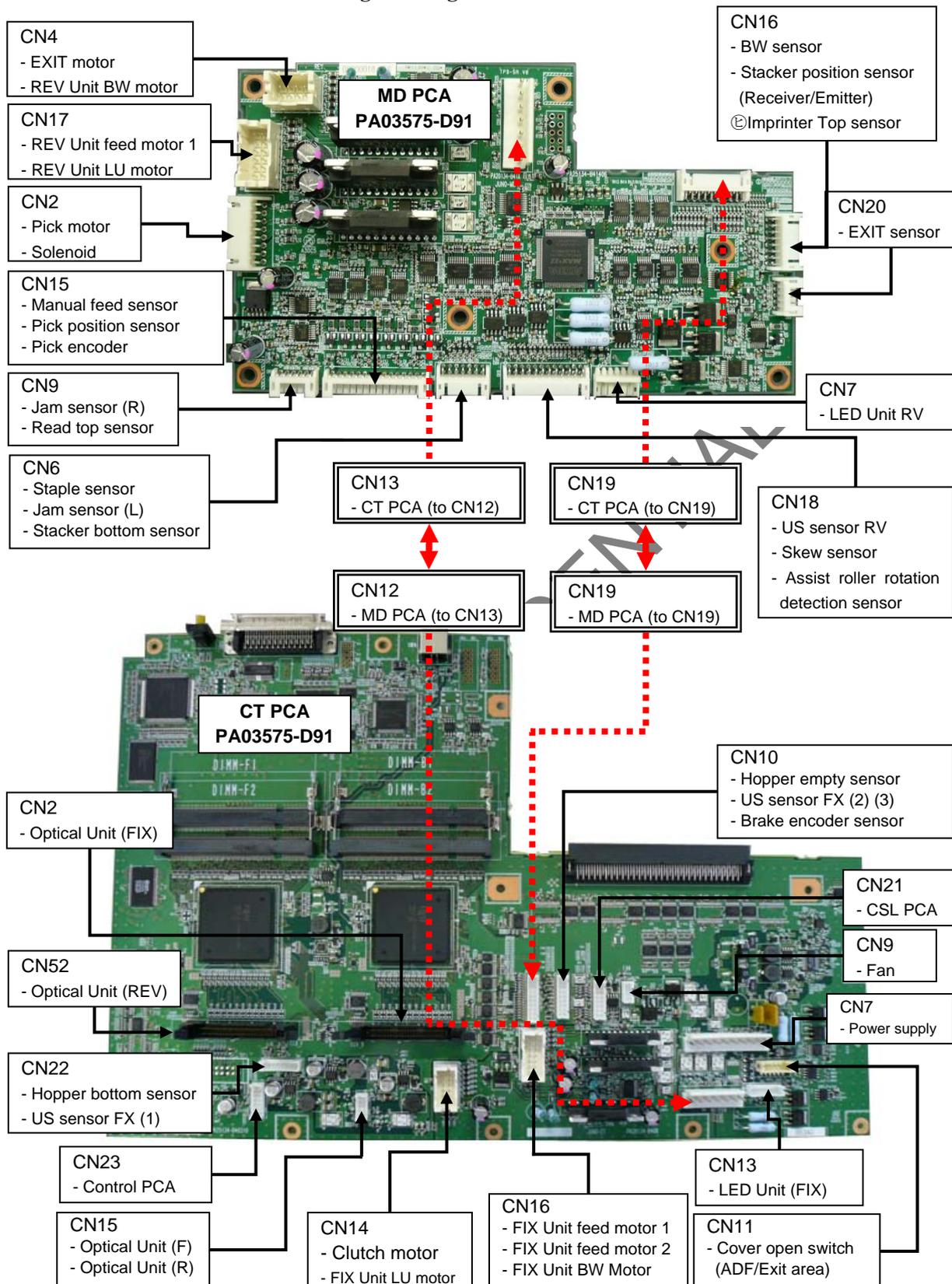
<Feeding Flowchart>



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	35 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

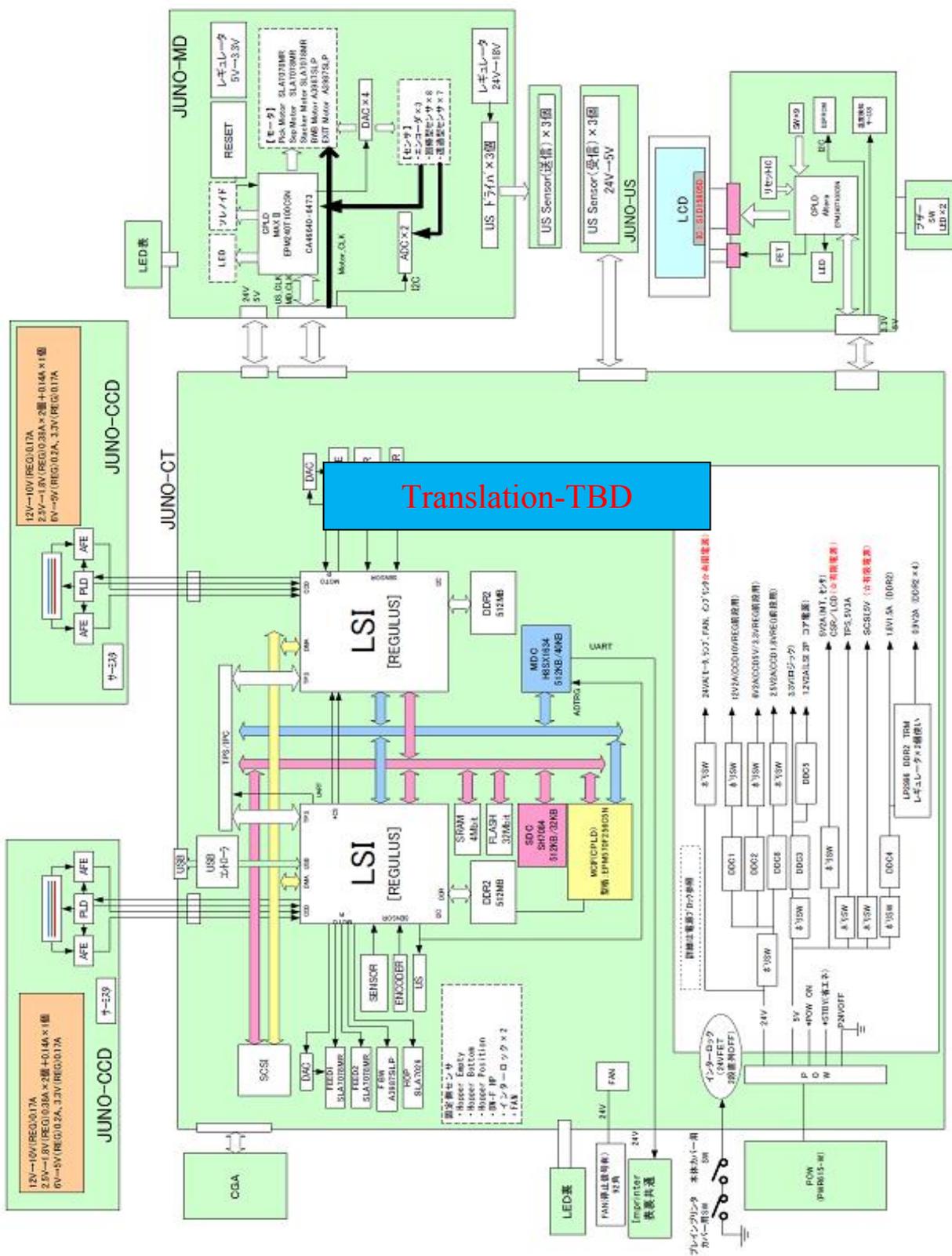
2.3 Cable Connection Diagram

2.3.1 CT PCA/MD PCA Mounting Drawing



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	36 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

2.4 Circuit Diagram



Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi	Drawing No.	P1PA03575→ B0XX/6
						PFU LIMITED	Page 37 / 383

Chapter 3 Installation

3.1 Unpacking

3.1.1 Unpacking the Scanner

⚠ CAUTION

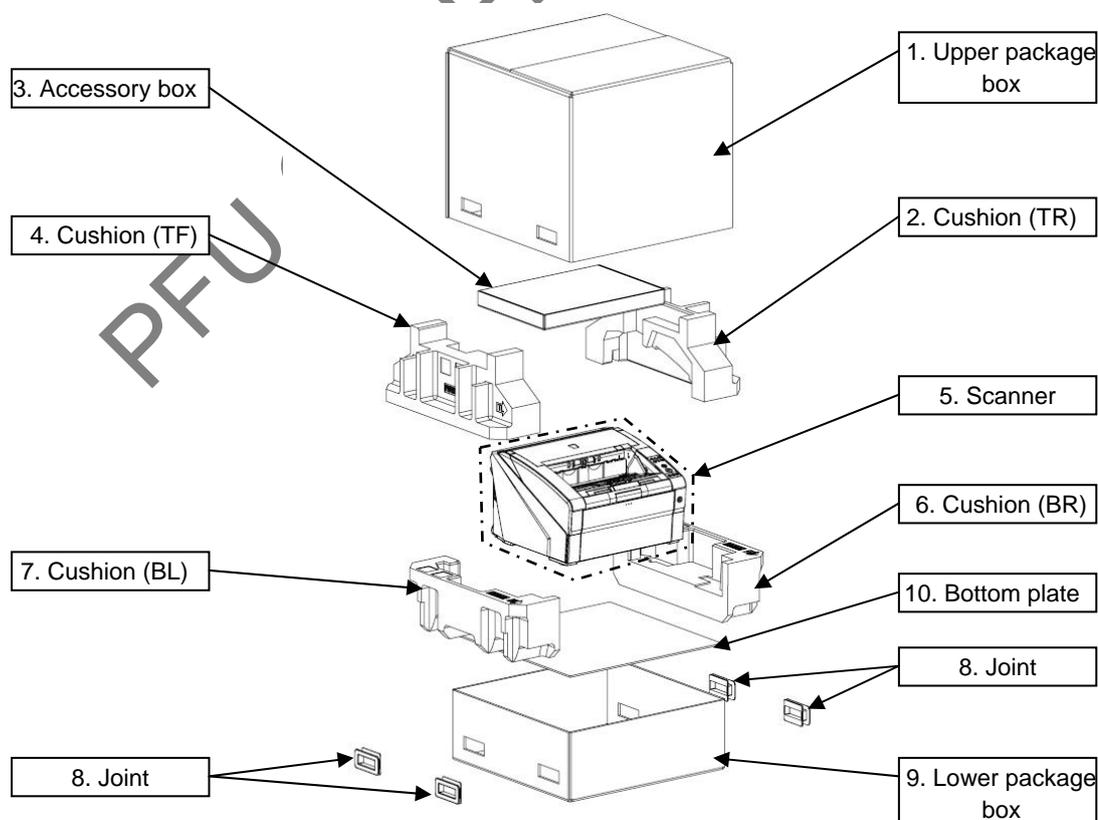
1. This scanner weighs 32kg, 70.6lb. Carry, unpack and install the scanner by two or more personnel.
2. The packaging box and packaging materials are required for storage or transportation of the product. Ask the customers not to discard the packaging materials.

Follow the procedure below to unpack the scanner.

- (1) Remove the joints from the box.
- (2) Remove the upper box.
- (3) Remove the appended goods box.
- (4) Remove the cushions TF and TR, and then remove the scanner (wrapped with polyethylene bag) from the box.
- (5) Remove the scanner from the polyethylene bag.
- (6) Remove all the accessories and remove the tape protecting the scanner.

The following table lists the packaging configuration.

No.	Item	Quantity	Remarks
1	Upper package box	1	Package box size: 642 (W) x 618 (D) x 548 (H) mm 25.28 (W) x 24.33 (D) x 21.57 (H) in.
2	Cushion (TR)	1	
3	Accessory box	1	Check the contents by referring to Section 3.1.2.
4	Cushion (TF)	1	
5	Scanner	1	Wrapped with polyethylene bag
6	Cushion (BR)	1	
7	Cushion (BL)	1	
8	Joint	4	
9	Lower package box	1	
10	Bottom plate	1	

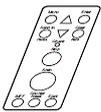
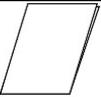


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	38 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

3.1.2 Checking the Appearance and Accessories

Check the following points for the components in the package.

- No stain and scratch that disfigures the scanner
- No missing part in the accessories
- No damage on the cables and connectors
- No damage on the brochures and discs

No.	Package	Name of Component	Quantity	Appearance	Remarks
1		Scanner	1		
2	Accessory box	Operator panel overlay	6		Includes the following language panels: French German Italian Spanish Chinese Russian (English panel is installed already.)
3		Power cable	1		
4		USB cable	1		
5		Getting Stared	1		
6		Safety Precautions	1		
7		SETUP DISK	1		
8		Adobe Acrobat DVD-ROM	4		
9		fi-6800 Convenient Operation	1		
10		fi-6800 Maintenance Guide	1		
11		QuickScan™ Pro brochure	1		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	39 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

3.2 Installing the Scanner

3.2.1 For Safety Installation

Before installing the scanner, read the following precautions carefully to avoid scanning trouble.

Refer to Section 1.1.3 “Environmental Specification” for information on input power and Section 1.1.2 “Scanner Specification” for outer dimensions.

- ! Install the scanner away from strong magnetic fields and other sources of noise.
- ! Do not install the scanner near heating apparatus or in the direct sunlight.
- ! Install the scanner in a location which is level and subject to minimal vibration.
- ! Do not install the scanner in locations subject to humidity and dust.
- ! Do not block the ventilation ports.
- ! Protect the scanner from static electricity.
- ! Use attached AC Cable, and use proper AC voltage.
- ! Make sure the rubber pads on the bottom of the scanner are level on the table or desk.

3.2.2 Software

This product includes the SETUP DISK which contains software and the Adobe Acrobat DVD-ROM which contains Adobe Acrobat. The following is a list of software that is enclosed in each disk.

The SETUP DISK includes the following software.

No.	Software name	Description
1	FUJITSU TWAIN32 [TWAIN driver] *1	Conforms to the TWAIN standard. Used when you operate the scanner using TWAIN-compliant applications.
2	ISIS [ISIS driver] *1	Conforms to the ISIS standard. Used when you operate the scanner using ISIS-compliant applications.
3	Software Operation Panel	Configures settings for scanning behavior and consumables management. Installed together with the scanner drivers (FUJITSU TWAIN 32/ISIS).
4	Error Recovery Guide	Shows the error status and the action to take when an error occurs. Can be installed together with the scanner drivers (FUJITSU TWAIN 32/ISIS). Note this guide will not work if you use Kofax VRS.
5	Image Processing Software Option	A software option featuring advanced binarization of scanned images. Can be installed together with the scanner drivers (FUJITSU TWAIN 32/ISIS).
6	Kofax VRS [VRS]*1	A software program that allows you to generate high-quality images with simple operations. The application automatically detects and corrects document skews during scanning, and characters blurred by coloring or shading.
7	ScandAll PRO	A TWAIN/ISIS-compliant image scanning software (recommended). You can define scanning settings as batch profiles, to suit your various operation requirements. By defining scanning settings as batch profiles, you can easily perform scans in accordance with various operation requirements.
8	Scan to Microsoft SharePoint	A software program that allows you to upload your files easily from ScandAll PRO to a SharePoint site. Can be installed together with ScandAll PRO.
9	QuickScan Pro Trial version	A software program for scanning that conforms to the ISIS standard. By using an ISIS scanner driver, you can read scanned documents and create their images. This is a trial version, and can be executed 30 times before it is disabled. You will need to purchase the full product version if you wish to continue using it.
10	Manuals	Includes the Getting Started, Operator's Guide, How to Use ScandAll PRO, FUJITSU TWAIN 32 User's Guide, Image Processing Software Option User's Guide, and Read Before Using VRS.

*1: Where the product name and installation name are different, square brackets are used to indicate the [Installation Name].

The Adobe Acrobat DVD-ROM includes the following software.

No.	Software name	Description
1	Adobe Acrobat Standard	The de-facto standard application used for creating, editing, managing, and making use of digitalized documents in PDF format.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	40 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

3.2.3 Installing the Bundled Software

This section describes how to install the scanner drivers that are used when scanning documents by the scanner, and software for image scanning.

NOTICE

1. Confirm your computer by referring to the System Requirement below before installation.
2. FUJITSU ISIS driver and QuickScan Pro (Trial) are not installed by [INSTALLTION (Recommended)].
To scan with ISIS standard, you need to install FUJITSU ISIS driver.

[System Requirements]

Supported Operating System Software Y: Supported N: Not guaranteed Not supported	Windows 2000 Professional	Windows XP		Windows Vista (32/64bit)	Windows Server	
		Home Edition (32bit)	Professional (32/64bit)		2003 R2 Standard Edition (32/64bit)	2008 Standard (32/64bit)
FUJITSU TWAIN32	Y	Y	Y	Y	Y	Y
FUJITSU ISIS	Y	Y	Y	Y	Y	Y
Software Operation Panel	Y	Y	Y	Y	Y	Y
Error Recovery Guide	Y	Y	Y	Y	Y	Y
Image Processing Software Option	Y	Y	Y	Y	Y	Y
Kofax VRS	Y	∅	Y (*2)	Y (*1)	N	N
ScandAll Pro	Y	Y	Y	Y	Y	Y
Scan to Microsoft Share Point	Y	Y	Y	Y	Y	Y
QuickScan Pro (Trial)	Y	Y	Y (*2)	Y (*2)	Y (*2)	Y
Manuals	Y	Y	Y	Y	Y	Y

*1: Windows Vista versions supported by Kofax VRS are as follows:

- Windows Vista Business
- Windows Vista Enterprise

*2: QuickScan Pro does not support the Windows 64-bit version.

<Recommended Installation Method>

- (1) Log in as a user with "Administrator" privileges.
- (2) Insert the SETUP DISK into your computer.
- (3) On the [FUJITSU Image Scanner Setup] screen, click [fi-6800], and click the [Next] button on the displayed screen.
- (4) Click the [INSTALL (Recommended)] button, and click the [Next] button on the displayed screen.
- (5) Install the software, following the on-screen instructions.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	41 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka		

PFU CONFIDENTIAL

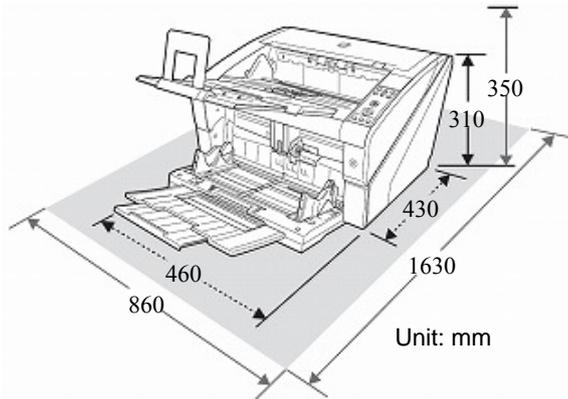
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	42 / 383

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	43 / 383

3.2.4 Installing the Scanner

(1) Place the scanner at its installation site.



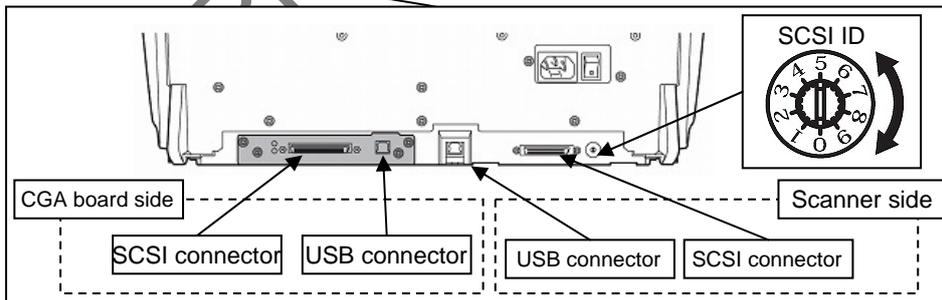
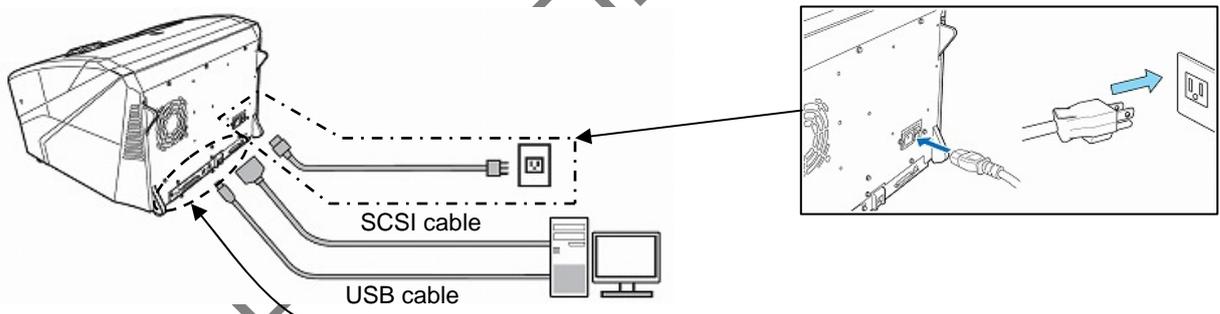
Clear the following space for installing the scanner.

Width: 860mm
Depth: 1630mm

- (2) Connect the scanner to your computer either with a USB or SCSI cable.
- (3) Connect the power cable to the Power Connector of your scanner and to the power outlet.

NOTICE

1. If the USB or SCSI cable is connected to the USB/SCSI connector at the CGA board side, scanning is available only by “Kofax VRS” and scanning by TWAIN32 or SCSI is not available.
2. If the USB connector at the CGA board side is connected, do not turn the “SCSI ID” to “9”. Doing so prohibits VRS operation.
3. If the cable is rewired between the CGA Board side and scanner side, turn off and back on the scanner.
4. If you connect with SCSI interface, purchase the following SCSI card and SCSI cable:
 <Connectable SCSI card>
 Adaptec: ASC-29160 / ASC-29320 / ASC-39160 / ASC-39320
 Kofax: Adrenaline 650i



(4) Press the “|” side of the main power switch on the back to turn on the scanner.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	44 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

Chapter 4 Maintenance Parts

4.1 Maintenance Parts List

No.	Description	Part Number	Quantity	Appearance (Section)	Replacement Procedure (Section)	Remarks
1	HOPPER-UNIT	PA03575-D940	1	4.2.1	6.7.1	
2	STACKER-UNIT	PA03575-D941	1	4.2.2	6.7.2	
3	STK-UNDER-SHEET	PA03575-D959	1	4.2.3	6.7.3	
4	STK-STOPPER-S	PA03575-D942	1	4.2.4	6.7.4	
5	STK-STOPPER-L	PA03575-D943	1	4.2.5	6.7.5	
6	FX-COVER-L	PA03575-D973	1	4.2.6	6.8.1	
7	FX-COVER-R	PA03575-D974	1	4.2.7	6.8.2	
8	RV-COVER-L	PA03575-D975	1	4.2.8	6.8.3	
9	RV-COVER-R	PA03575-D976	1	4.2.9	6.8.4	
10	STK-UNDER-COVER	PA03575-D977	1	4.2.10	6.8.6	
11	TOP-COVER	PA03575-D978	1	4.2.11	6.8.7	
12	SW PCA	PA03575-D913	1	4.2.12	6.8.5	
13	JUNO-CSL	PA03575-D912	1	4.2.13	6.9.1	
14	LCD	PA03575-D922	1	4.2.14	6.9.2	
15	OPT-UNIT	PA03575-D930	2	4.2.15	FX‡ 6.12.1 RV‡ 6.13.1	
16	LED-GLASS-FX	PA03575-D934	1	4.2.16	6.12.5	
17	LED-GLASS-RV	PA03575-D935	1	4.2.17	6.13.9	
18	LED-UNIT-FX	PA03575-D932	1	4.2.18	6.12.6	
19	LED-UNIT-RV	PA03575-D933	1	4.2.19	6.13.10	
20	BW UNIT	PA03575-D931	2	4.2.20	FX‡ 6.12.2 RV‡ 6.13.6	
21	BW-MOTOR-UNIT	PA03575-D962	2	4.2.21	FX‡ 6.12.3 RV‡ 6.13.7	
22	HB-UNIT	PA03575-D870	1	4.2.22	6.12.18	
23	BRAKE-ADJ-JIG?	PA03575-D998	1	4.2.23		Necessary when HB Unit is replaced
24	HB-PAD	PA03575-D874	1	4.2.24	6.10.4	
25	B-BRK-UNIT	PA03575-D871	1	4.2.25	6.12.17	
26	BRAKE-UNIT	PA03575-D972	1	4.2.26	6.12.20	
27	HB-ADJ-JIG	PA03575-D997	1	4.2.27	---	
28	(Reserved)		---	---	---	
29	FEED-MOT-UNIT	PA03575-D960	2	4.2.29	FX‡ 6.12.10 RV‡ 6.13.12	
30	FEED-MOT-UNIT2	PA03575-D961	1	4.2.30	6.12.12	
31	LU-MOTOR-UNIT	PA03575-D963	2	4.2.31	FX‡ 6.12.13 RV‡ 6.13.17	
32	FEED-BELT-1	PA03575-D966	2	4.2.32	FX‡ 6.12.15 RV‡ 6.13.13	
33	FEED-BELT-2	PA03575-D967	1	4.2.33	6.12.16	
34	JUNO-MD	PA03575-D911	1	4.2.34	6.13.28	
35	PIC-ROLLER-UNIT	PA03575-D970	1	4.2.35	6.13.22	
36	PIC-MOTOR-UNIT	PA03575-D965	1	4.2.36	6.13.23	
37	GUIDE-SEP	PA03575-D873	1	4.2.37	6.13.25	
38	SEP-BRUSH	PA03575-D938	1	4.2.38	6.13.30	
39	EXIT-BRUSH	PA03575-D939	1	4.2.39	6.13.31	
40	EXIT-MOTOR	PA03575-D964	1	4.2.40	6.13.18	
41	EXIT-BELT-1	PA03575-D968	1	4.2.41	6.13.20	
42	EXIT-BELT-2	PA03575-D969	2	4.2.42	6.13.21	
43	JUNO-US-FX	PA03575-D925	3	4.2.43	Left: 6.14.1.1 Right: 6.1.4.1.2 Center: 6.14.1.3	
44	JUNO-US-RV	PA03575-D929	3	4.2.44	6.14.2	

Refer to Section 9.4.1 for the maintenance parts for Imprinter.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	45 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

No.	Description	Part Number	Quantity	Appearance (Section)	Replacement Procedure (Section)	Remarks
45	SENSOR	PA03575-D936	9	4.2.45	Front side Background changeover sensor: 6.12.4 Hopper bottom sensor: 6.12.11 Brake encoder sensor: 6.12.19 Backside Background changeover sensor: 6.13.8 Manual feed sensor: 6.13.24 Pick position sensor: 6.13.24 Stacker bottom sensor: 6.13.27	
46	PRISM-SENSOR	PA03575-D926	10	4.2.46	Read top sensor: 6.13.2 IMP top sensor: 6.13.3 Pick sensor: 6.13.15 Skew sensor: 6.13.15 Feed top sensor: 6.13.15 Jam sensor: 6.13.16 Exit sensor: 6.13.18	
47	PHOTO-SENSOR	PA03575-D927	1	4.2.47	6.13.14	
48	EMPTY-SENSOR	PA03575-D928	1	4.2.48	6.12.14	
49	MICRO SWITCH	CA98010-2258	2	4.2.49	FX \ddagger 6.12.7 RV \ddagger 6.13.29	
50	SNSOR-PTR	PA03450-D933	1	4.2.50	6.13.4	Receiver side
51	SNSOR-LED	PA03450-D935	1	4.2.51	6.13.5	Emitter side
52	JUNO-CT	PA03575-D910	1	4.2.52	6.10.1	
53	DIMM	PA03575-D915	2	4.2.53	6.10.2	
54	CGA BOARD	PA03575-D914	1	4.2.54	6.10.3	
55	DIMM CGA	PA03575-D916	1	4.2.55	6.10.3	
56	(Reserved)	---	---	---	---	
57	(Reserved)	---	---	---	---	
58	POWER-SUPPLY	PA03575-D920	1	4.2.58	6.11.1	
59	FAN	PA03575-D921	1	4.2.59	6.11.2	
60	(Reserved)	---	---	---	---	
61	(Reserved)	---	---	---	---	
62	LATCH	PA03575-D944	1	4.2.62	6.13.32	
63	GAS DAMPER	PA03575-D945	1	4.2.63	6.15.1	
64	DAMPER-KIT	PA03575-D872	1	4.2.64	Damper gear: 6.15.2.1 Damper ASSY-L: 6.15.2.2 Damper ASSY-R: 6.15.2.3	
65	LOCK-ARM	PA03575-D949	2	4.2.65	6.13.33.1	
66	LOCK-LEVER	PA03575-D887	1	4.2.66	6.13.33.2	
67	USB CABLE	PA61001-0142	1	4.2.67	---	
68	CCD-CABLE-RV	PA03575-D989	1	4.2.68	6.10.5	
69	CSL-CABLE	PA03575-D991	1	4.2.69	6.10.6	
70	ASSIST ROLLER	PA03575-D951	1	4.2.70	6.12.8	
71	FEED ROLLER 2	PA03575-D892	1	4.2.71	6.12.9.1	
72	FEED ROLLER 3	PA03575-D893	1	4.2.72	6.12.9.2	
73	FEED ROLLER 4	PA03575-D894	1	4.2.73	6.12.9.3	
74	FEED ROLLER 5	PA03575-D895	1	4.2.74	6.12.9.4	
75	FEED ROLLER 6	PA03575-D896	1	4.2.75	6.12.9.5	
76	EXIT ROLLER 1	PA03575-D897	1	4.2.76	6.13.11.1	
77	EXIT ROLLER 2	PA03575-D898	1	4.2.77	6.13.11.2	
78	RV-ROLLER-1	PA03575-D881	1	4.2.78	6.13.34.1	
79	RV-ROLLER-2	PA03575-D882	3	4.2.79	Receiving Feed roller 2 drive: 6.13.34.2 Receiving Feed roller 3 drive: 6.13.34.3 Receiving Feed roller 4 drive: 6.13.34.4	
80	RV-ROLLER-3	PA03575-D883	4	4.2.80	Receiving Feed roller 5 drive: 6.13.34.5 Receiving Feed roller 6 drive: 6.13.34.6 Receiving Exit roller 1 drive: 6.13.34.7 Receiving Exit roller 2 drive: 6.13.34.8	
81	CSL-SHEET-KIT	PA03575-D986	1	4.2.81	---	
82	ADJ-CHART-KIT	PA03575-D990		4.2.82	---	
83	ADJUSTMENT SHEET	PA03296-Y990		4.2.83	---	
84	TEST CHART (W)	PA03277-Y123		4.2.84	---	
85	ADJUST-CHART	PA93008-Y497		4.2.85	---	

Refer to Section 9.4.1 for the maintenance parts for Imprinter.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575\rightarrow B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	46 /383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2 Specifications / Appearances of Maintenance Parts

4.2.1 Hopper Unit

Description	Parts No.	Replacement Procedure	Remarks
HOPPER-UNIT	PA03575-D940	6.7.1	



4.2.2 Stacker Unit

Description	Parts No.	Replacement Procedure	Remarks
STACKER-UNIT	PA03575-D941	6.7.2	Stacker unit includes the following maintenance parts: Stacker Under Sheet Stacker Stopper S Stacker Stopper L



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	47 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

4.2.3 Stacker Under Sheet

Description	Parts No.	Replacement Procedure	Remarks
STK-UNDER-SHEET	PA03575-D959	6.7.3	



4.2.4 Stacker Stopper S

Description	Parts No.	Replacement Procedure	Remarks
STK-STOPPER-S	PA03575-D942	6.7.4	



4.2.5 Stacker Stopper L

Description	Parts No.	Replacement Procedure	Remarks
STK-STOPPER-L	PA03575-D943	6.7.5	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	48 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

4.2.6 FX Cover L

Description	Parts No.	Replacement Procedure	Remarks
FX-COVER-L	PA03575-D973	6.8.1	



4.2.7 FX Cover R

Description	Parts No.	Replacement Procedure	Remarks
FX-COVER-R	PA03575-D974	6.8.2	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	49 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

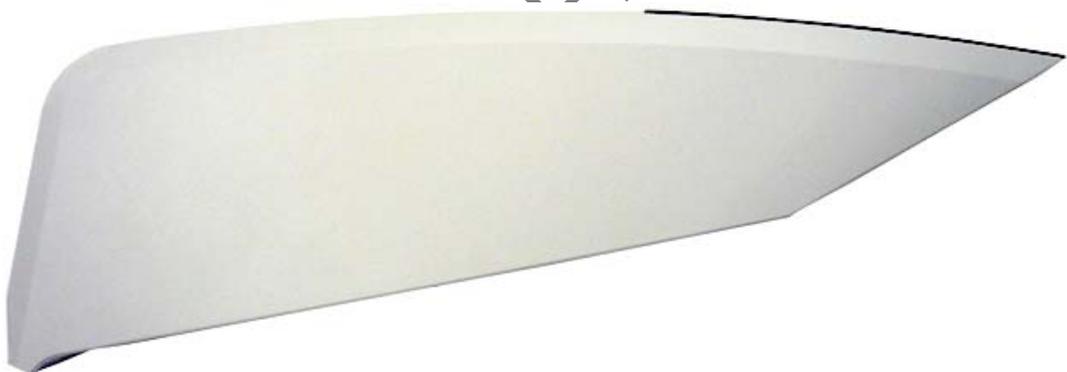
4.2.8 RV Cover L

Description	Parts No.	Replacement Procedure	Remarks
RV-COVER-L	PA03575-D975	6.8.3	



4.2.9 RV Cover R

Description	Parts No.	Replacement Procedure	Remarks
RV-COVER-R	PA03575-D976	6.8.4	



4.2.10 Stacker Under Cover

Description	Parts No.	Replacement Procedure	Remarks
STK-UNDER-COVER	PA03575-D977	6.8.6	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	50 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

4.2.11 Top Cover

Description	Parts No.	Replacement Procedure	Remarks
TOP-COVER	PA03575-D978	6.8.7	



4.2.12 Juno SW (SW PCA)

Description	Parts No.	Replacement Procedure	Remarks
JUNO-SW	PA03575-D913	6.8.5	



4.2.13 Juno CSL (CSL PCA)

Description	Parts No.	Replacement Procedure	Remarks
JUNO-CSL	PA03575-D912	6.9.1	EEPROM backup/restoration is required before and after replacing this part. (Refer to Section 7.1.9.)



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	51 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.14 LCD

Description	Parts No.	Replacement Procedure	Remarks
LCD	PA03575-D922	6.9.2	



4.2.15 Optical Unit

Description	Parts No.	Replacement Procedure	Remarks
OPT-UNIT	PA03575-D930	FX: 6.12.1 RV: 6.13.1	Some parts are prohibited to disassemble. (Refer to Section 6.5.1.) Perform White level adjustment after replacement. (Refer to Section 7.1.3.3.)



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	52 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

4.2.16 LED Glass FX

Description	Parts No.	Replacement Procedure	Remarks
LED-GLASS-FX	PA03575-D934	6.12.5	



4.2.17 LED Glass RV

Description	Parts No.	Replacement Procedure	Remarks
LED-GLASS-RV	PA03575-D935	6.13.9	



4.2.18 LED Unit-FX

Description	Parts No.	Replacement Procedure	Remarks
LED-UNIT-FX	PA03575-D932	6.12.6	



4.2.19 LED Unit-RV

Description	Parts No.	Replacement Procedure	Remarks
LED-UNIT-RV	PA03575-D933	6.13.10	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	53 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.20 BW Unit

Description	Parts No.	Replacement Procedure	Remarks
BW UNIT	PA03575-D931	FX: 6.12.2 RV: 6.13.6	



4.2.21 BW Motor Unit

Description	Parts No.	Replacement Procedure	Remarks
BW-MOTOR-UNIT	PA03575-D962	FX: 6.12.3 RV: 6.13.7	



4.2.22 HB Unit

Description	Parts No.	Replacement Procedure	Remarks
HB-UNIT	PA03575-D870	6.12.18	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	54 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

4.2.23 Brake Adjustment Jig

Description	Parts No.	Replacement Procedure	Remarks
BRK-ADJ-JIG	PA03575-D998		Necessary when HB Unit is replaced.



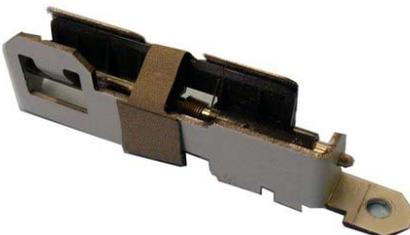
4.2.24 HB Pad

Description	Parts No.	Replacement Procedure	Remarks
HB-PAD	PA03575-D874	6.10.4	



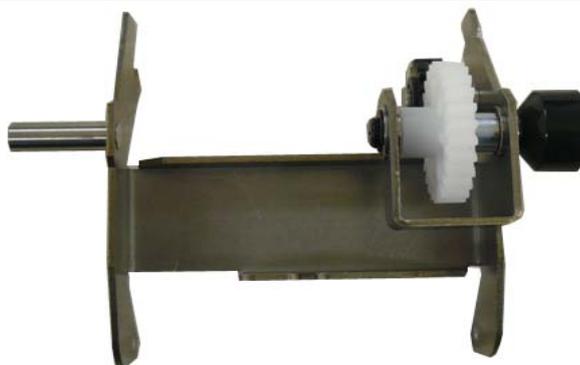
4.2.25 B-BRK Unit

Description	Parts No.	Replacement Procedure	Remarks
B-BRK-UNIT	PA03575-D871	6.12.17	



4.2.26 Brake Unit

Description	Parts No.	Replacement Procedure	Remarks
BRAKE-UNIT	PA03575-D972	6.12.20	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	55 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

4.2.27 HB Adjustment Jig

Description	Parts No.	Replacement Procedure	Remarks
HB-ADJ-JIG	PA03575-D997		

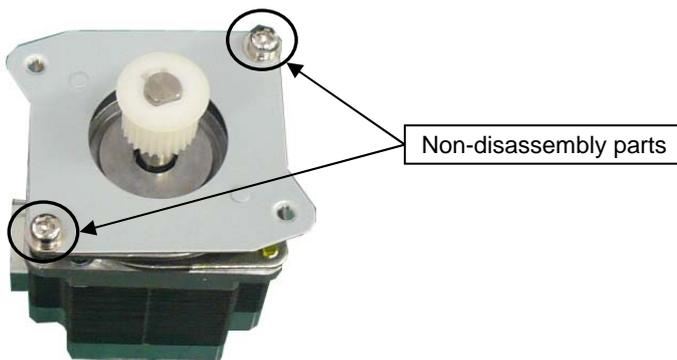


4.2.28 (Reserved)

Description	Parts No.	Replacement Procedure	Remarks
(Reserved)			

4.2.29 Feed Motor Unit 1

Description	Parts No.	Replacement Procedure	Remarks
FEED-MOT-UNIT	PA03575-D960	FX: 6.12.10 RV: 6.13.12	



4.2.30 Feed Motor Unit 2

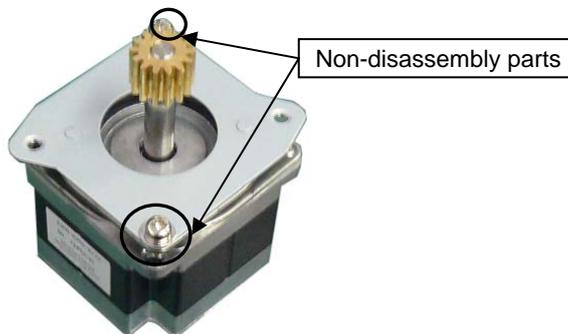
Description	Parts No.	Replacement Procedure	Remarks
FEED-MOT-UNIT2	PA03575-D961	6.12.12	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	56 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.31 LU Motor Unit

Description	Parts No.	Replacement Procedure	Remarks
LU-MOTOR-UNIT	PA03575-D963	FX: 6.12.13 RV: 6.13.17	



4.2.32 Feed Belt 1

Description	Parts No.	Replacement Procedure	Remarks
FEED-BELT-1	PA03575-D966	FX: 6.12.15 RV: 6.13.13	Belt length: 138mm Belt width: 9mm Number of cogs: 69



4.2.33 Feed Belt 2

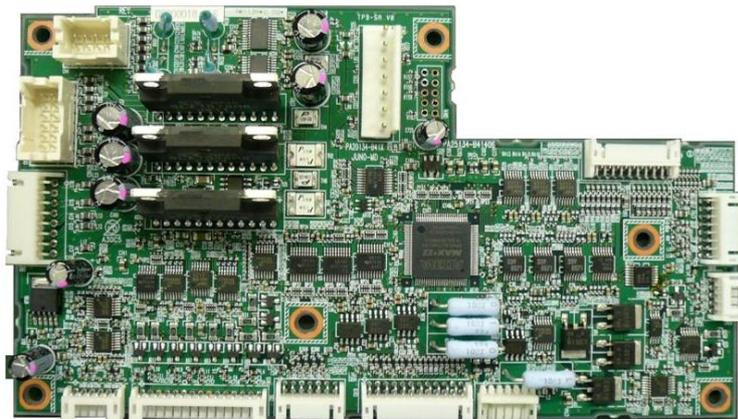
Description	Parts No.	Replacement Procedure	Remarks
FEED-BELT-2	PA03575-D967	6.12.16	Belt length: 800mm Belt width: 6mm Number of cogs: 400



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	57 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

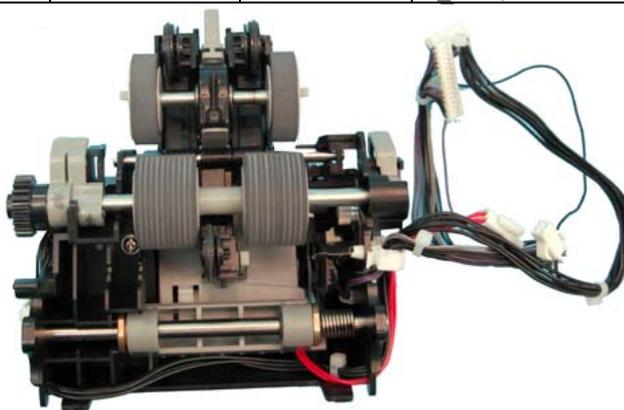
4.2.34 Juno MD (MD PCA)

Description	Parts No.	Replacement Procedure	Remarks
JUNO-MD	PA03575-D911	6.13.28	



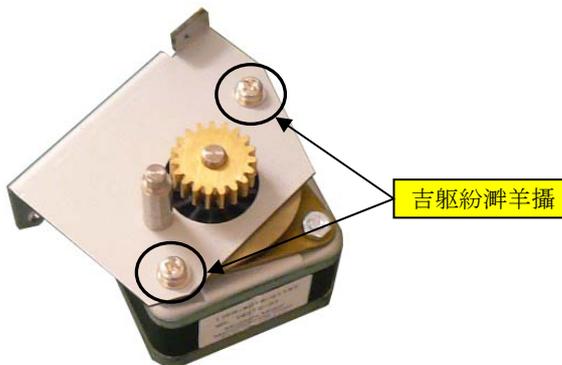
4.2.35 Pick Roller Unit

Description	Parts No.	Replacement Procedure	Remarks
PIC-ROLLER-UNIT	PA03575-D970	6.13.22	



4.2.36 Pick Motor Unit

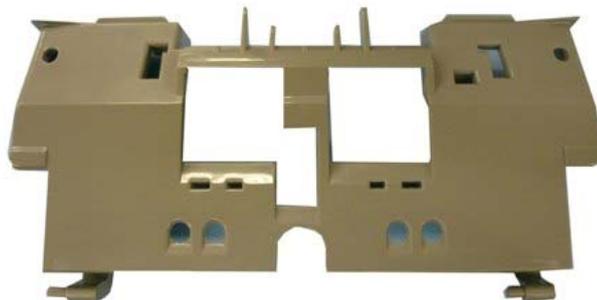
Description	Parts No.	Replacement Procedure	Remarks
PIC-MOTOR-UNIT	PA03575-D965	6.13.23	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	58 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.37 Guide SEP

Description	Parts No.	Replacement Procedure	Remarks
GUIDE-SEP	PA03575-D873	6.13.25	



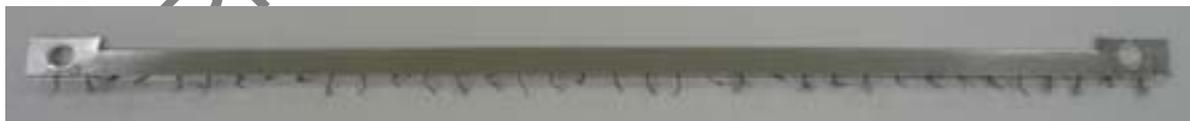
4.2.38 Separator Brush

Description	Parts No.	Replacement Procedure	Remarks
SEP-BRUSH	PA03575-D938	6.13.30	



4.2.39 Exit Brush

Description	Parts No.	Replacement Procedure	Remarks
EXIT-BRUSH	PA03575-D939	6.13.31	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	59 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.40 Exit Motor

Description	Parts No.	Replacement Procedure	Remarks
EXIT-MOTOR	PA03575-D964	6.13.18	



4.2.41 Exit Belt 1

Description	Parts No.	Replacement Procedure	Remarks
EXIT-BELT-1	PA03575-D968	6.13.20	Belt length: 126mm Belt width: 6mm Number of cogs: 63



4.2.42 Exit Belt 2

Description	Parts No.	Replacement Procedure	Remarks
EXIT-BELT-2	PA03575-D969	6.13.21	Belt length: 144mm Belt width: 6mm Number of cogs: 72



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	60 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.43 US Sensor FX

Description	Parts No.	Replacement Procedure	Remarks
JUNO-US-FIX	PA03575-D925	6.14.1.1 6.14.1.2 6.14.1.3	



4.2.44 US Sensor RV

Description	Parts No.	Replacement Procedure	Remarks
JUNO-US-RV	PA03575-D929	6.14.2	



4.2.45 Sensor

Description	Parts No.	Replacement Procedure	Remarks
SENSOR	PA03575-D936	Hopper Bottom Sensor: Section 6.12.11 Brake Encoder Sensor: Section 6.12.19 Front Background Switching Sensor (FX): Section 6.12.4 Back Background Switching Sensor (RV): Section 6.13.8 Manual Feed Sensor: Section 6.13.24 Pick Position Sensor: Section 6.13.24 Stacker Bottom Sensor: Section 6.13.27	Transmissive photo sensor



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	61 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.46 Prism Sensor

Description	Parts No.	Replacement Procedure	Remarks
PRISM-SENSOR	PA03575-D926	Read Top Sensor: Section 6.13.2 IMP Top Sensor: Section 6.13.3 Pick Sensor: Section 6.13.15 Skew Sensor: Section 6.13.15 Feed Top Sensor: Section 6.13.15 Jam Sensor: Section 6.13.16 Exit Sensor: Section 6.13.18	



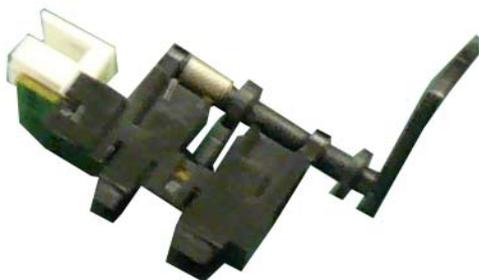
4.2.47 Photo Sensor

Description	Parts No.	Replacement Procedure	Remarks
SENSOR	PA03575-D927	6.13.14	Reflective photo sensor



4.2.48 Empty Sensor

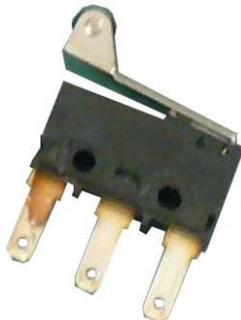
Description	Parts No.	Replacement Procedure	Remarks
EMPTY-SENSOR	PA03575-D928	6.12.14	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	62 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.49 Micro Switch

Description	Parts No.	Replacement Procedure	Remarks
MICRO SWITCH	CA98010-2258	FX: 6.12.7 RV: 6.13.29	



4.2.50 Sensor PTR

Description	Parts No.	Replacement Procedure	Remarks
SNSOR-PTR	PA03450-D933	6.13.4	Receiver side



4.2.51 Sensor LED

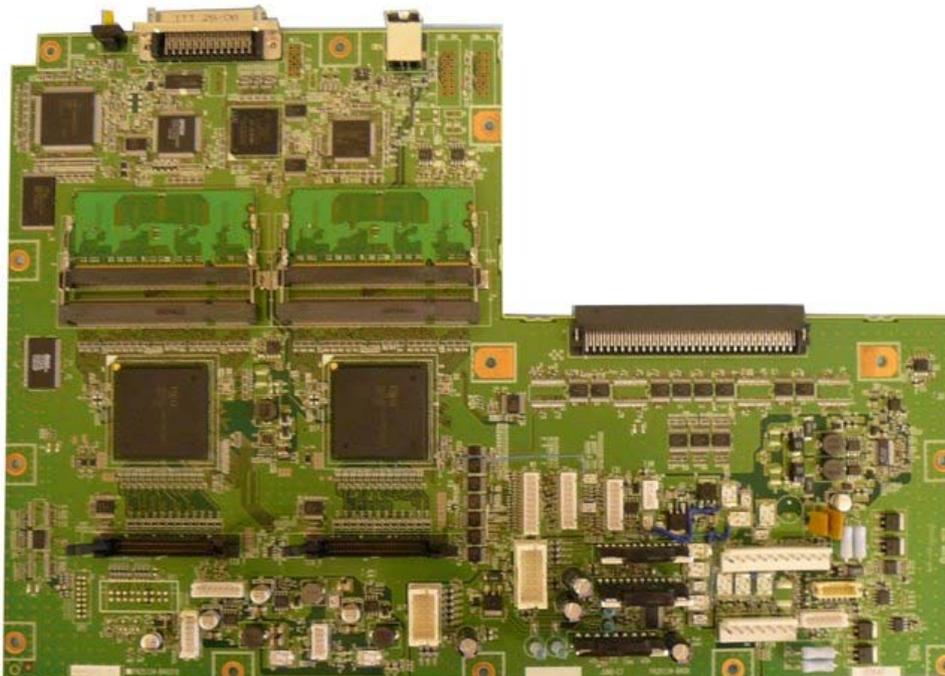
Description	Parts No.	Replacement Procedure	Remarks
SNSOR-LED	PA03450-D935	6.13.5	Emitter side



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	63 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

4.2.52 Juno CT (CT PCA)

Description	Parts No.	Replacement Procedure	Remarks
JUNO-CT	PA03575-D910	6.10.1	



4.2.53 Memory

Description	Parts No.	Replacement Procedure	Remarks
DIMM	PA03575-D915	6.10.2	Memory for CT PCA.



* Memory for CT PCA is single-sided.
Do not confuse it with the CGA Memory.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	64 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi			

4.2.54 CGA Board

Description	Parts No.	Replacement Procedure	Remarks
CGA BOARD	PA03575-D914	6.10.3	Memory is mounted already.



4.2.55 CGA Memory

Description	Parts No.	Replacement Procedure	Remarks
DIMM-CGA	PA03575-D916	6.10.3	



* CGA Memory is double-sided.
Do not confuse it with the Memory for CT PCA.

4.2.56 (Reserved)

Description	Parts No.	Replacement Procedure	Remarks
(Reserved)			

4.2.57 (Reserved)

Description	Parts No.	Replacement Procedure	Remarks
(Reserved)			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	65 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.58 Power Supply

Description	Parts No.	Replacement Procedure	Remarks
POWER-SUPPLY	PA03575-D920	6.11.1	



4.2.59 Fan

Description	Parts No.	Replacement Procedure	Remarks
FAN	PA03575-D921	6.11.2	



4.2.60 (Reserved)

Description	Parts No.	Replacement Procedure	Remarks
(Reserved)			

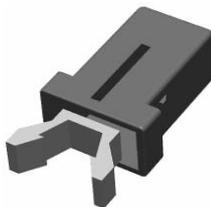
4.2.61 (Reserved)

Description	Parts No.	Replacement Procedure	Remarks
(Reserved)			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	66	/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.62 Latch

Description	Parts No.	Replacement Procedure	Remarks
LATCH	PA03575-D944	6.13.32	



4.2.63 Gas Damper

Description	Parts No.	Replacement Procedure	Remarks
GAS DAMPER	PA03575-D945	6.15.1	



4.2.64 Damper Kit

Description	Parts No.	Replacement Procedure	Remarks
DAMPER-KIT	PA03575-D872	Damper gear: 6.15.2.1 Damper ASSY L: 6.15.2.2 Damper ASSY R: 6.15.2.3	Damper gear: 2 (Common for L/R) Damper ASSY L: White (opposite face of the gear) Damper ASSY R: Black (opposite face of the gear)



4.2.65 Lock Arm

Description	Parts No.	Replacement Procedure	Remarks
LOCK-ARM	PA03575-D949	6.13.39	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	67 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.66 Lock Lever

Description	Parts No.	Replacement Procedure	Remarks
LOCK-LEVER	PA03575-D887	6.13.6.3	



Front



Back

4.2.67 USB Cable

Description	Parts No.	Replacement Procedure	Remarks
USB CABLE	PA61001-0142	---	



4.2.68 CCD Cable RV

Description	Parts No.	Replacement Procedure	Remarks
CCD-CABLE-RV	PA03575-D989	6.10.5	Two nylon bands are attached. Reinstall the Ferrite core.



4.2.69 CSL Cable

Description	Parts No.	Replacement Procedure	Remarks
CSL-CABLE	PA03575-D991	6.10.6	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	68 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

4.2.70 Assist Roller

Description	Parts No.	Replacement Procedure	Remarks
ASSIST-ROLLER	PA03575-D951	6.12.8	



4.2.71 Feed Roller 2

Description	Parts No.	Replacement Procedure	Remarks
FEED-ROLLER-2	PA03575-D892	6.12.9.1	



4.2.72 Feed Roller 3

Description	Parts No.	Replacement Procedure	Remarks
FEED-ROLLER-3	PA03575-D893	6.12.9.2	



4.2.73 Feed Roller 4

Description	Parts No.	Replacement Procedure	Remarks
FEED-ROLLER-4	PA03575-D894	6.12.9.3	



4.2.74 Feed Roller 5

Description	Parts No.	Replacement Procedure	Remarks
FEED-ROLLER-5	PA03575-D895	6.12.9.4	



4.2.75 Feed Roller 6

Description	Parts No.	Replacement Procedure	Remarks
FEED-ROLLER-6	PA03575-D896	6.12.9.5	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	69 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

4.2.76 Exit Roller 1

Description	Parts No.	Replacement Procedure	Remarks
EXIT-ROLLER-1	PA03575-D897	6.13.11.1	



4.2.77 Exit Roller 2

Description	Parts No.	Replacement Procedure	Remarks
EXIT-ROLLER-2	PA03575-D898	6.13.11.2	



4.2.78 RV Roller 1

Description	Parts No.	Replacement Procedure	Remarks
RV-ROLLER-1	PA03575-D881	6.13.34.1	



4.2.79 RV Roller 2

Description	Parts No.	Replacement Procedure	Remarks
RV-ROLLER-2	PA03575-D882	For receiving Feed roller 2 drive: 6.13.34.2 For receiving Feed roller 3 drive: 6.13.34.3 For receiving Feed roller 4 drive: 6.13.34.4	



4.2.80 RV Roller 3

Description	Parts No.	Replacement Procedure	Remarks
RV-ROLLER-3	PA03575-D883	For receiving Feed roller 5 drive: 6.13.34.5 For receiving Feed roller 6 drive: 6.13.34.6 For receiving Exit roller 1 drive: 6.13.34.7 For receiving Exit roller 2 drive: 6.13.34.8	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	70 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

4.2.81 CSL Sheet Kit

Description	Parts No.	Replacement Procedure	Remarks
CSL-SHEET-KIT	PA03575-D986		CSL sheet kit includes the CSL sheets in the following seven languages: - English - French - German - Italian - Spanish - Russian - Chinese

**4.2.82 Adjustment Chart Kit**

Description	Parts No.	Replacement Procedure	Remarks
ADJ-CHART-KIT	PA03575-D990		

4.2.83 Adjustment Sheet

Description	Parts No.	Replacement Procedure	Remarks
ADJUSTMENT SHEET	PA03296-Y990		

4.2.84 Test Chart

Description	Parts No.	Replacement Procedure	Remarks
TEST CHART (W)	PA03277-Y123		

4.2.85 Adjustment Chart

Description	Parts No.	Replacement Procedure	Remarks
ADJUST-CHART	PA93008-Y497		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	71 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

Chapter 5 Troubleshooting

5.1 Troubleshooting Procedure

If an error occurs on the scanner, its details and code are displayed on the Operator Panel. The error for TWAIN driver or Error Recovery Guide may appear depending on system configuration.

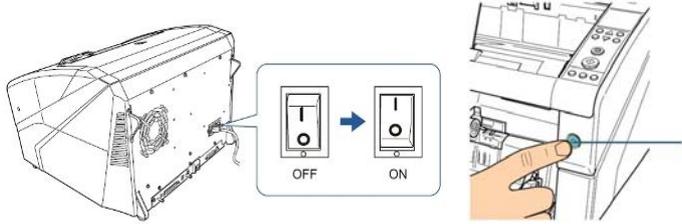
Specify where the error occurs by following the procedures below.

Trouble category		Refer to (Title)	Section
Scanner does not turn on		Power is not turned on	5.1.1
Malfunction after power on		Scanning does not start	5.1.2.1
		"No paper on the Hopper" appears	5.1.2.2
Error code appears	J series	Feeding section errors	5.1.3.1
	U series	Cover open / Imprinting errors	5.1.3.2
	A series	Imprinter errors	5.1.3.3
	E series	Optical errors / Memory errors	5.1.3.4
	F series	Overrun errors	5.1.3.5
	C series	LSI errors	5.1.3.6
	H series	Motor errors	5.1.3.7
Scanned image is abnormal	L series	Sensor errors	5.1.3.8
	Scanned image is distorted		5.1.4.1
	Resolution is not satisfactory or tone error is too large		5.1.4.2
	Too much jitter on scanned image		5.1.4.3
	Scanned image is misaligned		5.1.4.4
	Scan magnification error is too large		5.1.4.5
	Vertical streaks appear in scanned image		5.1.4.6
White area of scanned image is not correct		5.1.4.7	
Imprinter errors	No printing / Printed letters are not clear		5.1.5.1
	Print form is dirty		5.1.5.2
	Printed letters are distorted		5.1.5.3

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	72 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

5.1.1 Scanner does not turn ON

If the power is not supplied to the scanner, troubleshoot in the following procedure.

Item No.	Check items	How/where to check
1	Is the power cable is connected properly? If the main switch of the scanner turned on ([I] side)? When you checked the two items above, press the Power button.	
2	Is the supply voltage appropriate?	Ⓢ! Measure the supply voltage with a tester, and check that the rated voltage is achieved. Ⓢ! Try plugging the power cable into the other outlet.
3	Does the power cable have damage?	Ⓢ! Check the conduction of the power cable with a tester. Ⓢ! Replace the power cable with the other cable.
4	Check each cable connection status.	Ⓢ! Remove the Operator panel, and check that the cable between SW PCA and MD PCA is connected properly. Ⓢ! Check that the cable between MD PCA and CT PCA is connected properly. Ⓢ! Check that the cable between the CT PCA and Power supply unit is connected properly.
5	Check whether the SW PCA is abnormal.	Replace the SW PCA and see if the error is resolved.
6	Check whether the Power supply unit is abnormal.	Replace the Power supply unit and see if the error is resolved.
7	Check whether the CT PCA is abnormal.	Replace the CT PCA and see if the error is resolved.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	73 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

5.1.2 Malfunction after power on

5.1.2.1 Scanning does not start

Power is supplied, but scanning does not start

Item No.	Check items	How/where to check																								
1	Does the same symptom appear after turning OFF and ON the scanner?	Turn off/on the scanner by referring to Section 5.1.1.																								
2	If the interface cable connected properly?	Ⓢ! Check SCSI cable/USB cable connection Ⓢ! Check SCSI ID.																								
3	Is any error code displayed on the Operator panel?	If an error code is displayed on the Operator panel, refer to Section 5.1.3.																								
4	Is the scanner recognized correctly?	<p>Check the device on the Control Panel or Device Manager. This scanner has two USB connectors and two SCSI connectors, one of which at scanner side, another at CGA board side. The scanner is recognized differently depending on which connector is used.</p> <p>Control Panel (Scanners and Cameras)</p> <table border="1"> <thead> <tr> <th>Connector position</th> <th>Twain driver</th> <th>ISIS driver</th> <th>VRS driver</th> </tr> </thead> <tbody> <tr> <td>Scanner side (USB/SCSI)</td> <td>fi-6800dj</td> <td>fi-6800</td> <td>Inoperable</td> </tr> <tr> <td>CGA board side</td> <td>Inoperable</td> <td>Inoperable</td> <td>Kofax VRS Scanner</td> </tr> </tbody> </table> <p>Device Manager</p> <table border="1"> <thead> <tr> <th>Connector position</th> <th>Twain driver</th> <th>ISIS driver</th> <th>VRS driver</th> </tr> </thead> <tbody> <tr> <td>Scanner side (USB/SCSI)</td> <td>fi-6800dj</td> <td>fi-6800</td> <td>Inoperable</td> </tr> <tr> <td>CGA board side</td> <td>Inoperable</td> <td>Inoperable</td> <td>Kofax VRS Scanner</td> </tr> </tbody> </table> <p>If the scanner is not recognized properly, replace the CT PCA (CGA board) and see if the error is resolved.</p>	Connector position	Twain driver	ISIS driver	VRS driver	Scanner side (USB/SCSI)	fi-6800dj	fi-6800	Inoperable	CGA board side	Inoperable	Inoperable	Kofax VRS Scanner	Connector position	Twain driver	ISIS driver	VRS driver	Scanner side (USB/SCSI)	fi-6800dj	fi-6800	Inoperable	CGA board side	Inoperable	Inoperable	Kofax VRS Scanner
Connector position	Twain driver	ISIS driver	VRS driver																							
Scanner side (USB/SCSI)	fi-6800dj	fi-6800	Inoperable																							
CGA board side	Inoperable	Inoperable	Kofax VRS Scanner																							
Connector position	Twain driver	ISIS driver	VRS driver																							
Scanner side (USB/SCSI)	fi-6800dj	fi-6800	Inoperable																							
CGA board side	Inoperable	Inoperable	Kofax VRS Scanner																							
5	Is each sensor operating normally?	<p>Check the following sensors:</p> <ul style="list-style-type: none"> Ⓢ! Empty sensor Ⓢ! ADF open switch Ⓢ! Top cover open switch 																								

5.1.2.2 "No Paper on the Hopper"

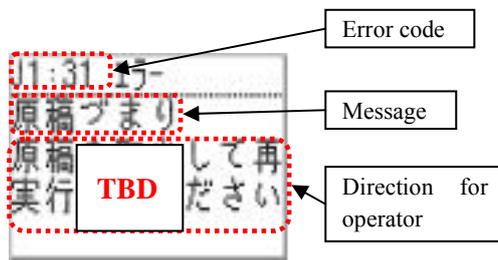
Item No.	Check items	How/where to check
1	Does the Empty sensor move smoothly?	If the Sensor is abnormal, replace it.
2	Is the Sensor functioning effectively?	Enter Maintenance mode to check the Empty sensor operation. If the error persists, replace it.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

5.1.3 Error Codes

When an error occurs on this scanner, the error code and error item are displayed on the Operator Panel. (Refer to the table below.)

The displayed error code determines the abnormal part. The error codes are categorized



Error	Remarks
Feeding section errors	J series
Cover open/Imprinting errors	U series
Imprinter errors	A series
Optical errors/Memory errors	E series
Overrun errors	F series
LSI errors	C series
Motor errors	H series
Sensor errors	L series

5.1.3.1 Feeding section errors

Error code	Error message	Occurrence Conditions/Countermeasure						
J0:51	Stopped scanning to prevent paper damage.	<p><<Occurrence Condition>> This error occurs when more than defined amount of documents were fed by the Pick roller and Separator roller, and the encoder (pick encoder/separator encoder) detected it.</p> <p>The error code is distinguished depending on the timing when the error is detected.</p> <table border="1"> <thead> <tr> <th>Error code</th> <th>Error timing</th> </tr> </thead> <tbody> <tr> <td>J0:51</td> <td>Until the leading edge reached the Pick sensor</td> </tr> <tr> <td>J0:52</td> <td>Until the leading edge go through the Pick sensor and reached the Feed top sensor</td> </tr> </tbody> </table> <p>Revolve Unit</p> <p>Pick encoder Separator encoder</p>	Error code	Error timing	J0:51	Until the leading edge reached the Pick sensor	J0:52	Until the leading edge go through the Pick sensor and reached the Feed top sensor
Error code	Error timing							
J0:51	Until the leading edge reached the Pick sensor							
J0:52	Until the leading edge go through the Pick sensor and reached the Feed top sensor							
J0:52	Paper jam	<p><<Countermeasure>> When encoder jam is detected, skew or paper jam may have been occurred.</p> <ul style="list-style-type: none"> ① Check whether the fed document satisfies the specification. Check if there is lopsided abrasion of the rollers or any obstacles on the feeding path. ② Staple may be adhered because the encoders are magnetic sensors. Remove staples if adhered, otherwise the Sensor may miss-detect them. ③ If an error occurs even when paper is fed normally, check no cable damage or connector defect between each encoder and MD PCA, and perform paper feeding test in the Maintenance Mode. If any error was found at the encoder test, replace the Pick Roller unit and see if the error is recovered. ④ If the error persists, replace the MD PCA. 						
J1:32	Paper jam	<p><<Occurrence Condition>> This error occurs when sequence error between CPU's (MDC, SDC) was detected.</p> <p><<Countermeasure>> Perform Sensor test in the Maintenance mode. If no Sensor error is found, replace the CT PCA, and see if the error is resolved.</p>						

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	75 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Feeding section errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
J1:31	Paper jam <Read top sensor jam>	Occurs when the leading edge of paper does not reach the Read top sensor even though the specified amount of paper is fed after the leading edge of the paper passed the Feed top sensor.
J1:34	Paper jam <EXIT sensor jam 1>	Occurs when the leading edge of paper does not reach the EXIT sensor even though the specified amount of paper is fed after the leading edge of the paper passed the IMP top sensor.
J1:35	Paper jam <EXIT sensor jam 2>	Occurs when the trailing edge of paper does not reach the EXIT sensor even though the specified amount of paper is fed after the leading edge of the paper passed the EXIT sensor.
J1:3A	Paper jam <Feed top sensor jam 1>	Occurs when the leading edge of paper does not reach the Feed top sensor even though the specified amount of paper is fed after the leading edge of the paper passed the Pick sensor.
J1:3B	Paper jam <Feed top sensor jam 2>	Occurs when the trailing edge of paper does not reach the Feed top sensor even though the specified amount of paper is fed after the leading edge of the paper passed the Feed top sensor.
J1:3C	Paper jam <Read top sensor jam>	Occurs when the trailing edge of paper does not reach the Read top sensor even though the specified amount of paper is fed after the leading edge of the paper passed the Read top sensor.
J1:3D	Paper jam <IMP top sensor jam 1>	Occurs when the leading edge of paper does not reach the IMP top sensor even though the specified amount of paper is fed after the leading edge of the paper passed the Read top sensor.
J1:3E	Paper jam <IMP top sensor jam 2>	Occurs when the trailing edge of paper does not reach the IMP top sensor even though the specified amount of paper is fed after the trailing edge of the paper passed the Read top sensor.
J1:50	Paper jam <Pick error>	Occurs when the leading edge of paper does not reach the Pick sensor even after pick retry.

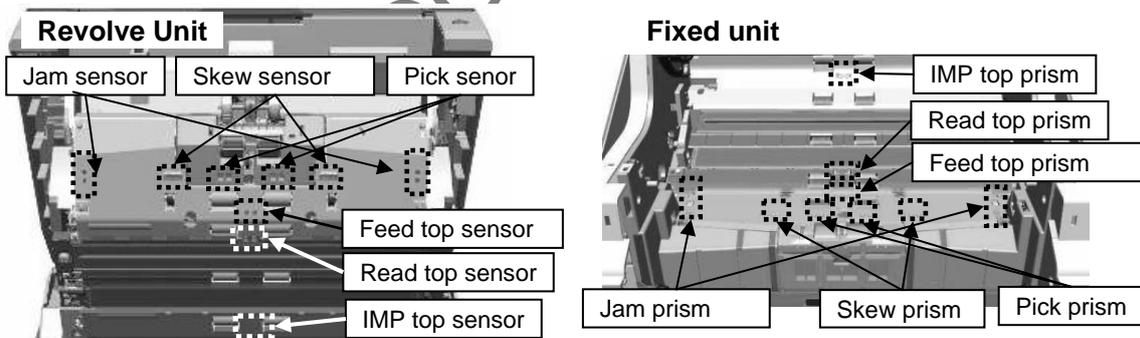
<<Occurrence Condition>>

This error occurs if any anomaly was found according to paper feeding status and paper feeding amount sent from each prism sensor located on the feeding path.

<<Countermeasure>>

If paper jam occurred, confirm whether the fed document satisfies the specification. Check if there is lopsided abrasion of the rollers or any obstacles on the feeding path.

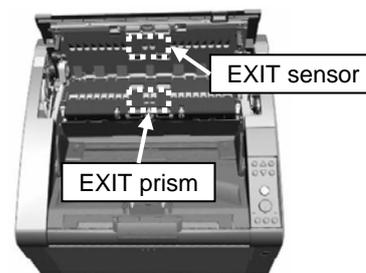
If the error occurs even though paper jam does not occur, perform Sensor test in Maintenance mode to specify where the error occurs. If any error was found in the Sensor test, check no cable damage or connector defect between each sensor and MD PCA, and replace the sensors to see if the error still occurs. If the error persists, replace the MD PCA.



<<Note>>

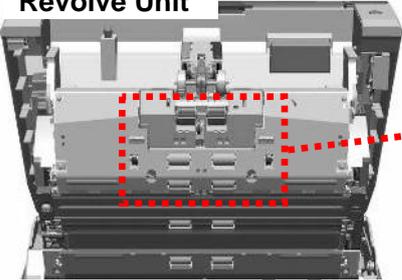
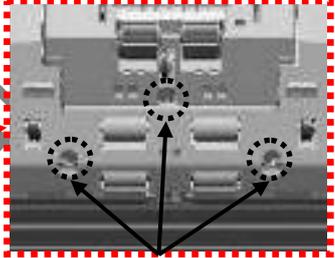
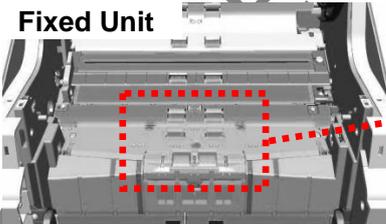
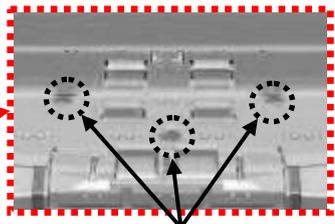
The following sensor error is detected if each sensor error occurred during launching:

Sensor name	Error code
Pick sensor	L0:11
Skew sensor	L5:17
Jam sensor	L7:1C
Feed top sensor	L1:12
Read top sensor	L2:13
IMP top sensor	L4:15
EXIT sensor	L3:14



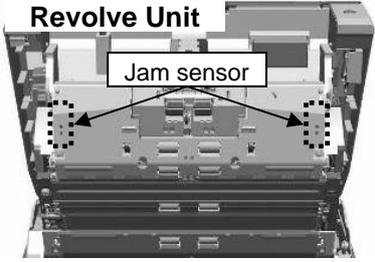
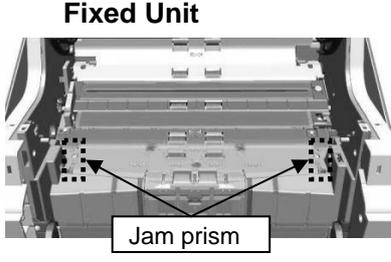
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	76 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Feeding section errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
J2:55	Multifeed detected (Overlap)	<p><<Occurrence Condition>> The Ultrasonic sensor (US sensor) detects multifeed.</p> <p><<Countermeasure>> Open the ADF Cover, and check if multifeed occurs. If multifeed occurs, check abrasion (check counter) and any other anomalies at the feeding section (Separator roller, Brake roller), removed the documents, and restart scanning. If multifeed has not occurred, check if there are any foreign objects or Sensor is installed correctly. If no anomaly is found, the US sensor, MD PCA or the cable between US Sensor and MD PCA may be defect. * This scanner has three US Sensors. Note: If the US sensor error is detected during launching, the error code <u>L6:1B</u> is displayed.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Revolve Unit</p>  </div> <div style="text-align: center;">  <p><u>US Sensor (Transmitter)</u></p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>Fixed Unit</p>  </div> <div style="text-align: center;">  <p><u>US Sensor (Receiver)</u></p> </div> </div>
J2:56	Multifeed detected (Length)	<p><<Occurrence Condition>> This error occurs when multifeed occurs, and sub-scanning (feeding direction) of the specified paper size exceeded  ↓. * This error is applicable only when Automatic paper size detection is enabled.</p> <p><<Countermeasure>> Remove the documents, and rescan it. If paper cannot be separated, change the torque setting or check the abrasion of the Separator roller and Brake roller. If this error occurred even when multifeed has not occurred, the following sensors may be defect. Clean the following sensors and perform Sensor test in Maintenance mode. Target sensor: Pick sensor, Feed top sensor, Read top sensor, Imprinter top sensor</p>

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	77 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Feeding section errors (Cont'd)

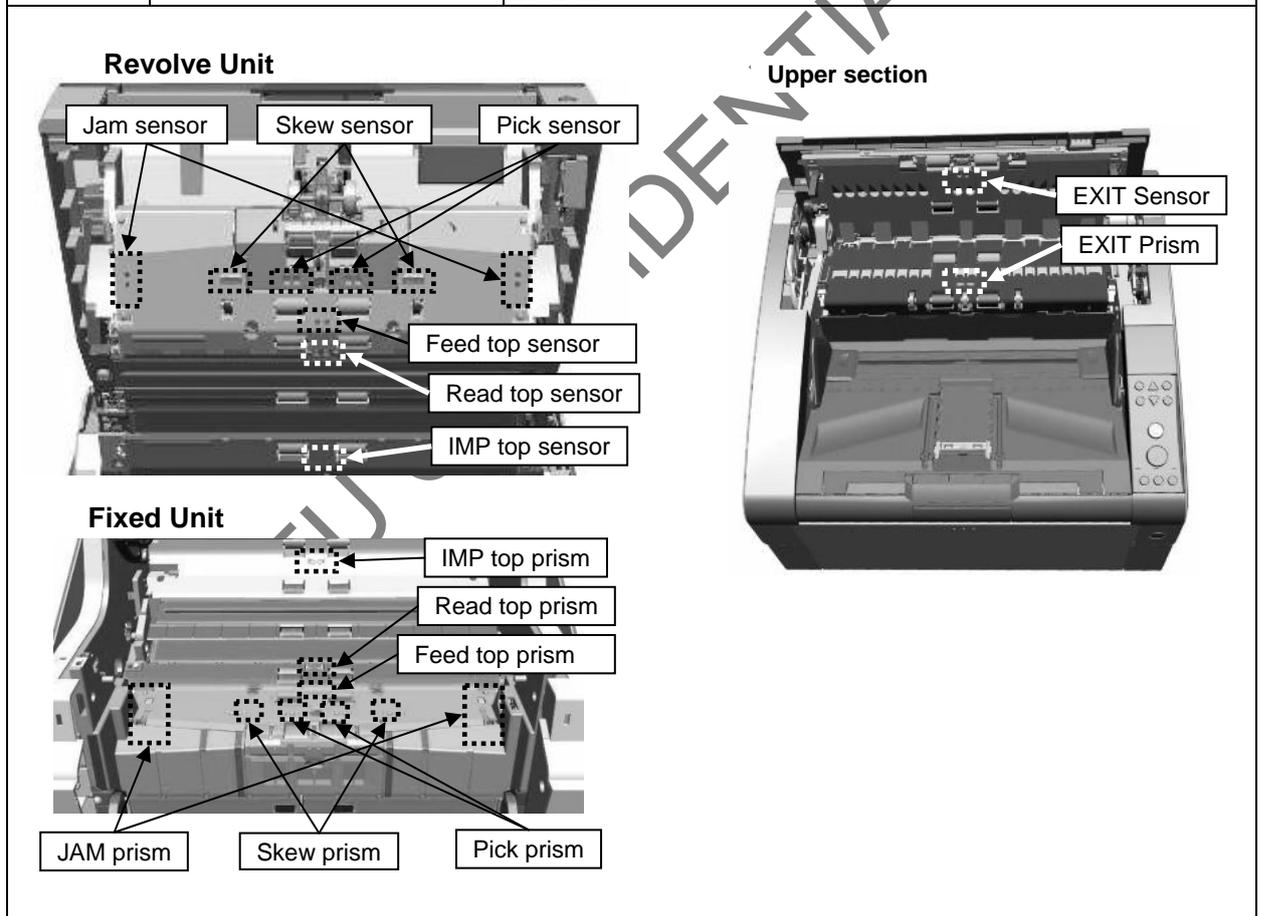
Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
J3:54	Skew detected	<p><<Occurrence Condition>> This error occurs when paper passed on the JAM sensor. If the JAM sensor error is detected during launching, the error code <u>L7:1C</u> is displayed.</p> <p><<Countermeasure>> The paper path on the JAM sensor is out of scannable area. If this error occurs by scanning paper that satisfies the specification, skew may occurred.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Revolve Unit</p>  </div> <div style="text-align: center;"> <p>Fixed Unit</p>  </div> </div>

PFU CONFIDENTIAL

						Name		fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.		P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	78 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Feeding section errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
J8:01	Sensor(s) dirty <Dirty Pick sensor>	<p><<Occurrence Condition>> The signal transmitted from each sensor go through the prism and back to each sensor. Whether document exists or not is confirmed by checking whether the signal is blocked by the document on the sensor or the signal is not blocked without document on the sensor. If the received signal is less than the specified value, it is judged depressed on the sensors/prisms, and the dirty sensor error occurs. If each sensor cannot receive or adjust the signal, the sensor error occurs.</p> <p><<Countermeasure>> Check if there are any foreign objects around the error sensor or if the sensor is installed correctly. If no anomaly is found, the sensor, MD PCA or the cable between the sensor and MD PCA may be defect. If no anomaly is found on the cable, specify the defect sensor in the Maintenance mode. If the error persists after cleaning the sensors and prisms, replace the sensor and see if the error is resolved. If the error still persists, replace the CT PCA and see if the error is resolved.</p>
J8:02	Sensor(s) dirty <Dirty Skew sensor>	
J8:03	Sensor(s) dirty <Dirty Feed top sensor>	
J8:04	Sensor(s) dirty <Dirty Read top sensor>	
J8:05	Sensor(s) dirty <Dirty IMP top sensor>	
J8:06	Sensor(s) dirty <Dirty EXIT sensor>	
J8:07	Sensor(s) dirty <Dirty JAM sensor>	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	79 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

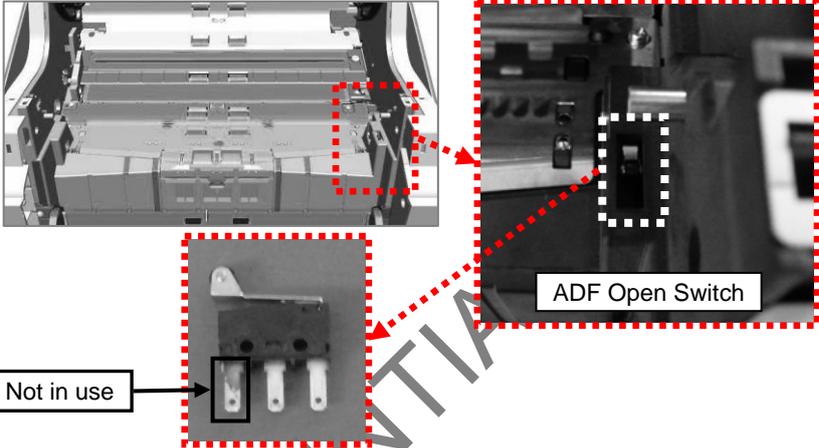
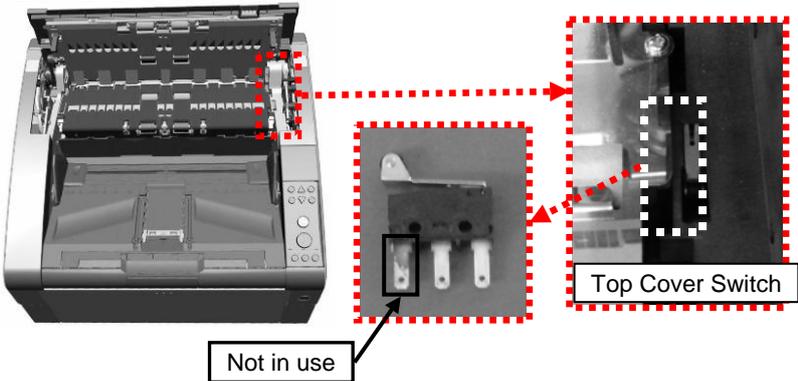
Feeding section errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
J9:61	Pick Roller error	<p><<Occurrence Condition>> This error occurs the scanning is performed when there is paper on the Hopper and Pick Unit is set to Upper (Manual feed mode).</p> <p><<Countermeasure>> Ⓔ! If the Pick Unit is set to Upper, lower it. Ⓔ! If more than specified amount of paper is set on the Hopper, reduce the paper. Ⓔ! If the error occurred even though the Pick Unit is not set to Upper, replace the Pick Roller Unit and see if the error is resolved.</p>
J9:64	Brake roller/separator roller(s) not installed correctly	<p><<Occurrence Condition>> This error occurs when torque is not loaded to the Brake roller, rotation of the Separator roller is not transmitted to the Brake roller, which results that no rotation is detected on the Brake encoder. (If torque is not loaded to the Brake roller, rotation of the Separator roller is transmitted to the Brake roller.)</p> <p><<Countermeasure>> Check if the Brake roller rotates smoothly. <u>Rotates smoothly</u> Check if the Brake roller is installed correctly. Check that the Brake roller and Separator roller has no abrasion. If the Brake roller is installed correctly, check that gears on the Brake unit and HB unit rotate smoothly. If anomaly is found, replace them. <u>Does not rotate</u> The Brake encoder may not detect rotation. Replace the HB unit and see if the error is resolved.</p>

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	80	/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

5.1.3.2 Cover open/Imprinting errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
U4:40	ADF open	<p><<Occurrence Condition>> This error occurs when the ADF is open.</p> <p><<Countermeasure>> Check if the ADF is completely closed. If the error occurs in spite of ADF closed, the ADF open switch, CT PCA, or the cable between the ADF open switch and CT PCA may be defect. Perform Sensor test in the Maintenance mode. If any error is found, replace the sensor.</p> 
U4:41	Top cover open	<p><<Occurrence Condition>> This error occurs when the top cover is open.</p> <p><<Countermeasure>> Check if the Top cover is completely closed. If the error occurs in spite of Top cover closed, the Top cover switch, CT PCA, or the cable between the Top cover switch and CT PCA may be defect.. Perform Sensor test in the Maintenance mode. If any error is found, replace the sensor.</p> 

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	81 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Cover open/Imprinting errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure						
U6:B4	Print cartridge not installed (back-side imprinter)	<p><<Occurrence Condition>> This error occurs if the ink cartridge is not installed although the Imprinter is installed. The error code differs depending on where it occurred.</p> <table border="1"> <thead> <tr> <th>Error code</th> <th>Corresponding LSI</th> </tr> </thead> <tbody> <tr> <td>U6:B4</td> <td>Back-side</td> </tr> <tr> <td>U6:BA</td> <td>Front side</td> </tr> </tbody> </table>	Error code	Corresponding LSI	U6:B4	Back-side	U6:BA	Front side
Error code	Corresponding LSI							
U6:B4	Back-side							
U6:BA	Front side							
U6:BA	Print cartridge not installed (front-side imprinter)	<p><<Countermeasure>></p> <ul style="list-style-type: none"> ● Check if the Ink Cartridge is installed properly. ● Check if the Ink Cartridge and electrode section of the Holder Unit is not dirty. ● If dirty, clean the dirty section by referring to Section 9.8.2.1. ● If the error occurs even though the Ink cartridge is installed properly, the Holder Unit, Ink cartridge, Joint PCA or Control PCA may be defect. 						

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	82 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

5.1.3.3 Imprinter errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure						
A0:B2	Imprinter error (RAM)	<p><<Occurrence Condition>> This error occurs when access to the RAM on the Control PCA (Imprinter) is not possible.</p> <p><<Countermeasure>> Replace the Control PCA.</p>						
A1:B3	Imprinter error (communication timeout)	<p><<Occurrence Condition>> This error occurs when communication between the Control PCA (Imprinter) and CT PCA is not possible.</p> <p><<Countermeasure>> Check if the cable between the Control PCA (Imprinter) and CT PCA is damaged or connector is defect. If no problem is found, replace the Control PCA, and then the CT PCA, and see if the error is resolved.</p>						
A2:B5	Imprinter error (back-side print head)	<p><<Occurrence Condition>> This error occurs when anomaly was found in the Imprinter head pin.</p> <p><<Countermeasure>></p> <ul style="list-style-type: none"> ● Check if junctions of the Ink cartridge or Holder Unit have no anomaly. ● Check if the cables between the Holder Unit and Joint PCA, or the Joint PCA and Control PCA (Imprinter) are damaged or connectors are defect. ● If no problem is found, replace the Ink cartridge, Holder Unit, Control PCA, and then Joint PCA in the order, and see if the error is resolved. 						
A2:BB	Imprinter error front-side print head)	<table border="1"> <thead> <tr> <th>Error code</th> <th>Corresponding position</th> </tr> </thead> <tbody> <tr> <td>A2:B5</td> <td>Back Side</td> </tr> <tr> <td>A2:BB</td> <td>Front side</td> </tr> </tbody> </table>	Error code	Corresponding position	A2:B5	Back Side	A2:BB	Front side
Error code	Corresponding position							
A2:B5	Back Side							
A2:BB	Front side							
A3:B6	Imprinter error (EEPROM)	<p><<Occurrence Condition>> This error occurs when anomaly was found in the EEPROM in the Control PCA (Imprinter).</p> <p><<Countermeasure>> Replace the Control PCA (Imprinter) and see if the error is resolved.</p>						
A4:B8	Imprinter error (ROM)	<p><<Occurrence Condition>> This error occurs when anomaly was found in the firmware of the Control PCA (Imprinter).</p> <p><<Countermeasure>> Replace the Control PCA (Imprinter) and see if the error is resolved.</p>						

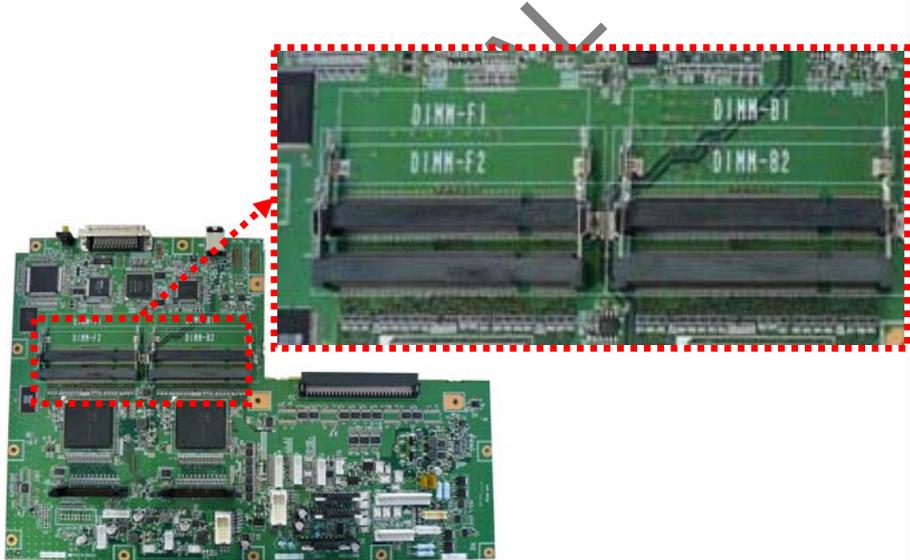
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	83 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

5.1.3.4 Optical errors/Memory errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
E2:74	Optical error (ADF Front)	<p><<Occurrence Condition>> This error occurs when CCD output level does not reach the reference level at each Optical Unit.</p> <p><<Countermeasure>> Check the following:</p> <ul style="list-style-type: none"> Ⓔ LED lights (all) Ⓔ Dirt on the scanning section/white reference area Ⓔ White reference sheet on the background switchover section moves smoothly <p>-----</p> <ul style="list-style-type: none"> Ⓔ Optical Unit installed correctly Ⓔ Dirt on the scanning section on the Optical Unit Ⓔ Cable damage between Optical Unit and CT PCA, connector defect <p>If the items above are not the cause, replace the corresponding Optical Unit see if the error is resolved. If the error persists, replace the CT PCA.</p>
E3:75	Optical error (ADF Back)	
E6:D3	Operator Panel error	<p><<Occurrence Condition>> This error occurs if the old CSL PCA which has EEPROM no more is reinstalled.</p> <p><<Countermeasure>> Replace with a new CSL PCA.</p> <p><<Note>> Before replacing the CSL PCA, save the EEPROM data from the CSL PCA to the CT PCA temporarily, and restore the data to the new CSL PCA after installing it. The old CSL PCA which has EEPROM data no more becomes unusable, and E6:D3 error occurs if it is reinstalled.</p>
E7:D2	EEPROM error	<p><<Occurrence Condition>> This error occurs when EEPROM (mounted on CSL PCA) does not respond.</p> <p><<Countermeasure>> Check the connection between the CSL PCA and CT PCA. If no problem is found, the CSL PCA or CT PCA may be defect.</p>
E8:8E	SCSI error	<p><<Occurrence Condition>> This error occurs when SCSI fuse blown on the CT PCA is detected.</p> <p><<Countermeasure>> Disconnect the SCSI cable, and check if the error is resolved. If the error persists, replace the CT PCA.</p>

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	84 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Optical errors/Memory errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure															
E9:F5	Image memory read-write error(F)	<p><<Note>> Memory error messages are displayed in English regardless of selected language.</p> <p><<Occurrence Condition>> This error occurs when comparison error occurred at Write/Read in the image memory for front side at firmware initialization process. The error code differs depending on which memory or memory slot is the cause. The error (E9:F5, E9:F6) is displayed when no memory is installed on the memory slots for standard equipment (DIMM-F1, DIMM-B1). An error occurs if an unsupported DIMM is installed. (DDR2)</p>															
E9:F6	Image memory read-write error(B)	<table border="1"> <thead> <tr> <th>Error code</th> <th>Corresponding slot</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>E9:F5</td> <td>DIMM-F1</td> <td>Memory for front side</td> </tr> <tr> <td>E9:F6</td> <td>DIMM-B1</td> <td>Memory for backside</td> </tr> <tr> <td>E9:F7</td> <td>DIMM-F2</td> <td>Expanded memory for front side (not used usually)</td> </tr> <tr> <td>E9:F8</td> <td>DIMM-B2</td> <td>Expanded memory for backside (not used usually)</td> </tr> </tbody> </table>	Error code	Corresponding slot	Remarks	E9:F5	DIMM-F1	Memory for front side	E9:F6	DIMM-B1	Memory for backside	E9:F7	DIMM-F2	Expanded memory for front side (not used usually)	E9:F8	DIMM-B2	Expanded memory for backside (not used usually)
Error code	Corresponding slot	Remarks															
E9:F5	DIMM-F1	Memory for front side															
E9:F6	DIMM-B1	Memory for backside															
E9:F7	DIMM-F2	Expanded memory for front side (not used usually)															
E9:F8	DIMM-B2	Expanded memory for backside (not used usually)															
E9:F7	Image memory read-write error (EXT-F)																
E9:F8	Image memory read-write error (EXT-B)																
		<p><<Countermeasure>> Check that the standardized memory is installed correctly. If no problem is found, replace the corresponding memory and see if the error is resolved. If the error persists, replace the CT PCA.</p>															

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	85 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

5.1.3.5 Overrun errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
F0:C0	Hopper malfunction	<p><<Occurrence Condition>> This error occurs if the Hopper bottom sensor does not respond when the Hopper motor moves the defined distance.</p> <p><<Countermeasure>> Check if there are any obstacles that block Hopper elevation. Check if the Hopper bottom sensor is installed correctly, and the cable between the Hopper bottom sensor and CT PCA has no damage. Perform Hopper test in Maintenance mode. (Motor test menu → Hopper)</p> <p>Ⓜ! If the Hopper motor does not move or abnormal sound is heard, replace the LU motor and see if the error is resolved. Ⓜ! If the Hopper motor moves a bit and stops, replace the Hopper bottom sensor and see if the error is resolved. Ⓜ! If the error persists, replace the CT PCA.</p>
F1:C1	Stacker malfunction	<p><<Occurrence Condition>> This error occurs if the Stacker bottom sensor does not respond when the Stacker motor moves the defined distance.</p> <p><<Countermeasure>> Check if there are any obstacles that block Stacker elevation. Check if the Stacker bottom sensor is installed correctly, and the cable between the Stacker bottom sensor and MD PCA has no damage. Perform Stacker test in Maintenance mode. (Motor test menu → Stacker)</p> <p>Ⓜ! If the Stacker motor does not move or abnormal sound is heard, replace the LU motor and see if the error is resolved. Ⓜ! If the Stacker motor moves a bit and stops, replace the Stacker bottom sensor and see if the error is resolved. Ⓜ! If the error persists, replace the MD PCA.</p>

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 86 / 383

Overrun errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
F4:C2	Background switching mechanism error (F)	<p><<Occurrence Condition>> This error occurs if the Background Switching sensor does not respond when the Background Switching motor for front side moves the defined distance.</p> <p><<Note>> The background Switching unit for front side is installed on the Fixed Unit.</p> <p><<Countermeasure>> Check if the Background Switching motor for front side is initialized while the scanner is starting up. If the error occurs even though initialization was performed, check if the cable between the Background switching sensor and CT PCA is damaged. If the cable is not damaged, replace the Background Switching sensor and see if the error is resolved. If initialization is not performed while the scanner is starting up, replace the Background Switching motor and see if the error is resolved. If the error persists, replace the CT PCA.</p>
F4:C3	Background switching mechanism error (B)	<p><<Occurrence Condition>> This error occurs if the Background Switching sensor does not respond when the Background Switching motor for backside moves the defined distance.</p> <p><<Note>> The background Switching unit for backside is installed on the Revolve Unit.</p> <p><<Countermeasure>> Check if the Background Switching motor for backside is initialized while the scanner is starting up. If the error occurs even though initialization was performed, check if the cable between the Background switching sensor and MD PCA is damaged. If the cable is not damaged, replace the Background Switching sensor and see if the error is resolved. If initialization is not performed while the scanner is starting up, replace the Background Switching motor and see if the error is resolved. If the error persists, replace the MD PCA.</p>
F6:EC	Fan error	<p><<Occurrence Condition>> This error occurs when the cooling fan rotation is not detected.</p> <p><<Countermeasure>> Check if the cable between the cooling fan and CT PCA is damaged or the connector is defect. If the cable and connector are normal, replace the Fan and see if the error is resolved. If the error persists, replace the CT PCA.</p>

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	87 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

5.1.3.6 LSI errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure						
C0:E5	Memory error (F)	<p><<Occurrence Condition>> This error occurs when comparison error occurred at Write/Read in the LSI RAM at firmware initialization process. The error code differs depending on the error occurred at front or backside.</p> <table border="1"> <thead> <tr> <th>Error code</th> <th>Corresponding LSI</th> </tr> </thead> <tbody> <tr> <td>C0:E5</td> <td>Front side</td> </tr> <tr> <td>C0:E6</td> <td>Backside</td> </tr> </tbody> </table>	Error code	Corresponding LSI	C0:E5	Front side	C0:E6	Backside
Error code	Corresponding LSI							
C0:E5	Front side							
C0:E6	Backside							
C0:E6	Memory error (B)	<p><<Countermeasure>> Replace the CT PCA and see if the error is resolved.</p>						
C0:E9	LSI error (F)	<p><<Occurrence Condition>> This error occurs when register access cannot be made. The error code differs depending on the error occurred at front or backside.</p> <table border="1"> <thead> <tr> <th>Error code</th> <th>Corresponding LSI</th> </tr> </thead> <tbody> <tr> <td>C0:E9</td> <td>Front side</td> </tr> <tr> <td>C0:EA</td> <td>Backside</td> </tr> </tbody> </table>	Error code	Corresponding LSI	C0:E9	Front side	C0:EA	Backside
Error code	Corresponding LSI							
C0:E9	Front side							
C0:EA	Backside							
C0:EA	LSI error (B)	<p><<Countermeasure>> Replace the CT PCA and see if the error is resolved.</p>						
C6:EF	SPC error	<p><<Occurrence Condition>> This error occurs when anomaly is detected at SCSI controller initialization.</p> <p><<Countermeasure>> Replace the CT PCA and see if the error is resolved.</p>						
C6:F9	USB error	<p><<Occurrence Condition>> This error occurs when anomaly is detected at USB controller initialization.</p> <p><<Countermeasure>> Replace the CT PCA and see if the error is resolved.</p>						
C8:F0	Internal communication error of the scanner	<p><<Occurrence Condition>> This error occurs when the communication between CT PCA and MD PCA has no response which results in communication timeout.</p> <p><<Countermeasure>> Check if the cable between the CT PCA and MD PCA is connected properly. If the connection is correct, the CT PCA or MD PCA may be defect.</p>						

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	88 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	IFujioka			

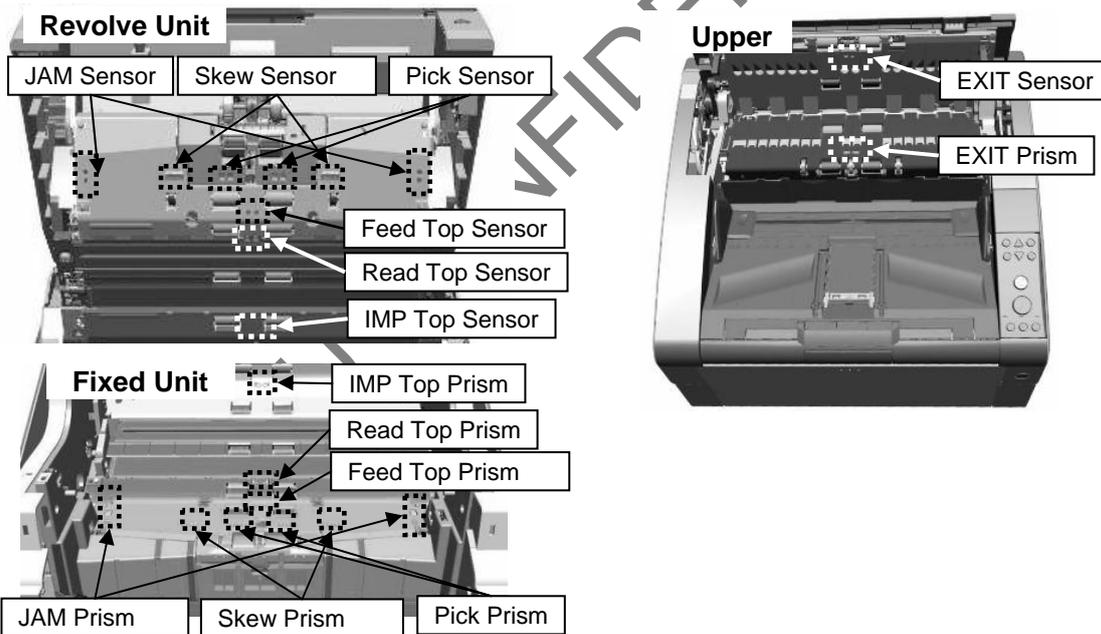
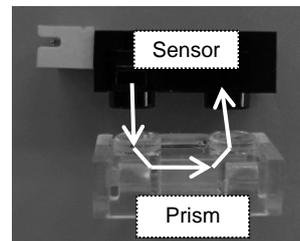
5.1.3.7 Motor errors

Error code	Error message <Detail>	Fuse installed on	Occurrence Conditions/Countermeasure
H1:80	Motor circuit error <Feed 1 Motor alarm>	CT PCA	<p><<Operational Principle>> The resettable fuses are automatic restoration type, which are mounted on the CT PCA and MD PCA. A provisional overcurrent makes the resettable fuse block the circuit. Removing the cause of overcurrent recovers in ten seconds.</p> <p><<Occurrence Condition>> This error occurs when overcurrent is allowed to the resettable fuses on the CT PCA or MD PCA, which blocks each fuse. The following defects are assumed as occurrence conditions.</p> <ul style="list-style-type: none"> Ⓓ Short circuit by the cable between CT PCA/MD PCA and corresponding motor/lamp caught Ⓔ Defect of corresponding motors and lamps Ⓕ Defect of CT PCA or MD PCA <p><<Countermeasure>> Check if the cable between the corresponding motor/lamp and CT PCA /MD PCA is caught. If no damage is found on the cable, replace the corresponding motor/lamp and see if the error is resolved. If the error persists, replace the CT PCA and MD PCA.</p>
H1:8A	Motor circuit error <Feed 2 Motor alarm>	CT PCA	
H1:8B	Motor circuit error <Exit Motor alarm>	MD PCA	
H2:81	Motor circuit error <Separator Motor alarm>	CT PCA	
H2:82	Motor circuit error <Pick Motor alarm>	MD PCA	
H2:8F	Motor circuit error <Clutch Motor alarm>	CT PCA	
H2:90	Motor circuit error <Pick Solenoid alarm>	MD PCA	
H3:8C	Motor circuit error <Hopper Motor alarm>	CT PCA	
H4:8D	Motor circuit error <Stacker Motor alarm>	MD PCA	
H5:86	Motor circuit error <MD PCA alarm>	CT PCA	
H6:B1	Imprinter system error <Imprinter alarm>	CT PCA	
H7:84	Lamp circuit error <LED alarm (F)>	MD PCA	
H7:85	Lamp circuit error <LED alarm (B)>	CT PCA	
H8:88	Motor circuit error <Background Switchover Motor alarm for front> <Fixed Unit side>	CT PCA	
H8:89	Motor circuit error <Background Switchover Motor alarm for back> <Revolve Unit side>	MD PCA	
H9:91	CCD 24V error <Optical Unit alarm> <For front and backside>	CT PCA	

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	89 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

5.1.3.8 Sensor errors

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
L0:11	Sensor error <Pick sensor error>	<p><<Operational Principle>> The current is emitted by the following sensors, reflected by the Prism, and returns to the receiver of the sensor. Paper existence is confirmed by checking whether communication is lost because it is cut by paper between the sensor and prism.</p> <p><<Occurrence Condition>> This error occurs when the receiver outputs the current even though the current emitted by the sensor is 0, or the output from the receiver is small even though the emitted current is raised to maximum. The following defects are assumed as occurrence conditions. ① Foreign object between the sensor and prism ② Installation error (slant) of the sensor and prism ③ Cable damage between the sensor and MD PCA ④ Faulty sensor ⑤ Faulty MD PCA</p> <p><<Countermeasure>> Check the slant or foreign objects (paper strip) in the sensor and prism. If no damage is found on the cable between the Sensor and MD PCA, perform Sensor test to specify a faulty sensor, and replace it. If the error persists, replace the MD PCA and see if the error is resolved.</p>
L1:12	Sensor error <FEED-TOP sensor error>	
L2:13	Sensor error <READ-TOP sensor error>	
L3:14	Sensor error <EXIT sensor error>	
L4:15	Sensor error <IMP-TOP sensor error>	
L5:17	Sensor error <Skew sensor error>	
L7:1C	Sensor error <JAM sensor error>	



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	90 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Sensor errors (Cont'd)

Error code	Error message <Detail>	Occurrence Conditions/Countermeasure
L6:1B	Sensor error <US sensor error>	<p><<Operating principle>> The Ultrasonic sensor (US sensor) transmits the ultrasonic wave from the transmitter (Revolve unit), and the receiver (Fixed Unit) receives it. The error is detected as a result that the receiver of the US sensor checked the ultrasonic wave variance that passed the layer of air between paper when several pages of documents go through the sensor area.</p> <p><<Occurrence Condition>> This error occurs when voltage other than specified value (0.5 ~ 1.2V) is received even though the Sensor transmission is halting state, or when the received voltage is specified voltage or lower (2.5V) even though the Sensor is transmitting the ultrasonic wave. The following defects are assumed as occurrence conditions.</p> <ul style="list-style-type: none"> Ⓓ Foreign objects between the US sensor RV and US sensor FX Ⓔ Installation error (slant) of US sensor RV and US sensor FX Ⓕ Cable damage between the US sensor RV and MD PCA Ⓖ Cable damage between the US sensor FX and CT PCA Ⓗ Faulty US sensor RV or US sensor FX Ⓘ Faulty MD PCA and CT PCA <p><<Countermeasure>> Check the slant or foreign objects (paper strip) in the US Sensor RV and US Sensor FX. If no damage is found on the cable between the US Sensor RV and MD PCA, or the cable between US Sensor FX and CT PCA, perform Sensor test to specify a faulty sensor, and replace it. If the error persists, replace the MD PCA and CT PCA and see if the error is resolved.</p>

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	91 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

5.1.4 Scanned image is abnormal

When the scanned image is abnormal, select the symptom from the list below.

Trouble category	Refer to
Scanned image is distorted	Section 5.1.4.1
Resolution is not satisfactory or tone error is too large	Section 5.1.4.2
Too much jitter on scanned image	Section 5.1.4.3
Scanned image is misaligned	Section 5.1.4.4
Scan magnification error is too large	Section 5.1.4.5
Vertical streaks appear in scanned image	Section 5.1.4.6
White area of scanned image is not correct	Section 5.1.4.7

5.1.4.1 Scanned image is distorted

Item No.	Check items	How/where to check
1	Check the items listed in the right column.	Ⓢ! Check the interface cable (SCSI or USB) connection. Ⓢ! If any temporary error or alarm is indicated, follow the corresponding troubleshooting.
2	Are the cables between the CT PCA and Optical Unit damaged? Is the connector connected correctly? If no anomaly is found on the cables and connection, replace the Optical Unit and see if the error is resolved.	ADF front scanning (Revolve Unit): Refer to Section 6.13.1. ADF back scanning (Fixed Unit): Refer to Section 6.12.1.
3	Replace the CT PCA and see if the error is resolved.	Refer to Section 6.10.1.

5.1.4.2 Resolution is not satisfactory or tone error is too large

Item No.	Check items	How/where to check
1	Check the items listed in the right column.	Ⓢ! Does the document satisfy the paper specifications? Ⓢ! Are the scan settings (resolution/density) correctly specified for the application software used? Ⓢ! Check the interface cable (SCSI or USB) connection. Ⓢ! If any temporary error or alarm is indicated, follow the corresponding troubleshooting.
2	Clean the scanning area (glass) and see if the error is resolved.	Refer to Section 6.3.2.
3	Remove the scanning glass, and clean the back of the glass and scanning glass surface on the Optical Unit. Is the error resolved?	Refer to Section 6.3.2.
4	Clean the feed rollers and pinch rollers, and see if the error is resolved.	Refer to Section 8.3.
5	Is the Optical Unit clean? Check damages and dirt on the cables for the Optical Unit, LED Unit and BW Unit	Refer to Section 6.3.1.
6	Replace the Optical Unit, and see if the error is resolved.	FX side: Refer to Section 6.12.1. RV side: Refer to Section 6.13.1.
7	Replace the LED Unit, and see if the error is resolved.	FX side: Refer to Section 6.12.6 RV side: Refer to Section 6.13.10.
8	Replace the CT PCA, and see if the error is resolved.	Refer to Section 6.10.1.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	92/383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	

5.1.4.3 Too much jitter on scanned image

The following shows the sample of scanned image when “jitter” error occurs.

This error occurs when feeding around the scanning section is not smooth. Check the feeding.

Scanned image with jitter ABCDEFG
 Normal scanned image ABCDEFG

Item No.	Check items	How/where to check
1	Does the document satisfy the paper specification?	Refer to Section 1.2.
2	Do any obstacles get inside and block paper feeding?	Remove obstacles if any, and see if the error is resolved.
3	Are any foreign obstacles stuck on the Feed rollers or Pinch rollers? Are these rollers distorted?	Clean or replace any faulty rollers, and see if the error is resolved.
4	Are the Pick rollers, Separator roller and Brake roller worn away or distorted?	Check the consumable counter on the Software Operation Panel (Section XXXXX) or Maintenance mode (Section XXXXX). Make sure that the counter is not exceeding the specified number of sheets and rollers are not distorted. If any anomaly is found, clean or replace the rollers, and see if the error is resolved.
5	Check that the cables between the CT PCA and Feed motor are not damaged and the connector connected correctly.	
6	Check the Optical Unit installation at the abnormal scanning side.	Reinstall it if not installed correctly.
7	Check the abnormal Optical Unit installation.	ADF front scanning (Revolve Unit): Refer to Section 6.13.1. ADF back scanning (Fixed Unit): Refer to Section 6.12.1.
8	Are the Feed belt 1, Feed belt 2 and Exit belt damaged? Is the connector connected correctly?	Feed belt 1: Refer to Sections 6.12.15, 6.13.13. Feed belt 2: Refer to Section 6.12.16.
9	Replace the Feed motor, and see if the error is resolved.	Refer to Section 6.12.10.
10	Replace the Exit motor, and see if the error is resolved.	Refer to Section 6.13.18.
11	Replace the Optical Unit, and see if the error is resolved.	FX: Refer to Section 6.12.1. RV: Refer to Section 6.13.1.

5.1.4.4 Scanned image is misaligned

You can move the Hopper guides on the scanner separately.

If the image is misaligned with main scanning (Landscape) direction, check that the side guide is bilaterally symmetrical.

Item No.	Check items	How/where to check
1	Check that the side guide is bilaterally symmetrical.	Refer to Section 8.1.6.
2	Check the items listed in the right column.	Ⓢ! Does the document satisfy the paper specifications? (Refer to Section 1.2.) Ⓢ! Are the scan settings (paper size) correctly specified for the application software used?
3	Check if the user-specific offset adjustment is performed on the Software Operation Panel. (Refer to Section 8.6.1.)	
4	Clean the Feed rollers and Pinch rollers, and see if the error is resolved.	Refer to Section 8.3.
5	Perform Offset adjustment in Maintenance mode #3 to check the offset.	Refer to Section 7.1.3.
6	Check the Optical Unit installation.	FX: Refer to Section 6.12.1. RV: Refer to Section 6.13.1.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	93 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

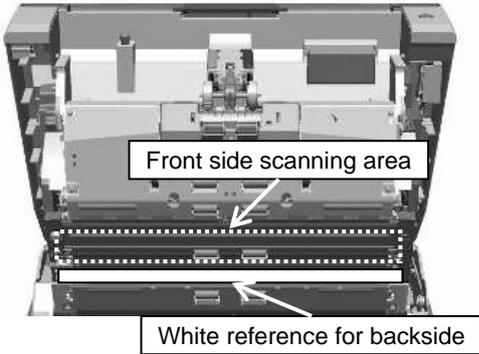
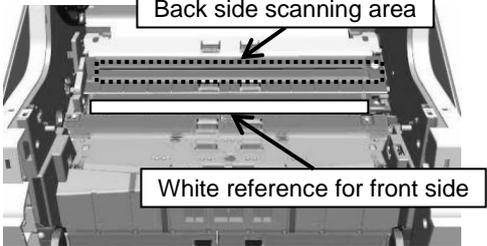
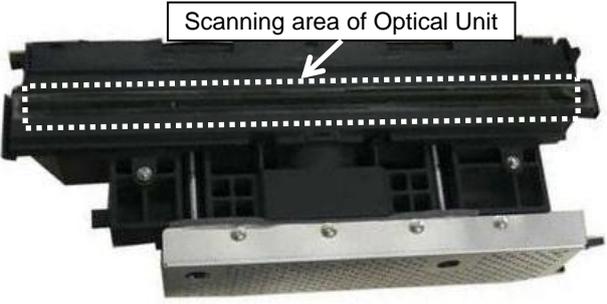
5.1.4.5 Scan magnification error is too large

Item No.	Check items	How/where to check
1	Check the item in the right column.	Are the scan settings (resolution) correctly specified for the application software used?
2	Which direction of magnification is abnormal?	Portrait (sub-scanning direction) is abnormal: Go to #3. Landscape (main scanning direction) is abnormal: Go to #9.
3	Check if the user-specific magnification adjustment is performed on the Software Operation Panel. (Refer to Section 8.6.1.)	
4	Clean the Feed rollers and Pinch rollers, and see if the error is resolved.	Refer to Section 8.3.
5	Do any foreign obstacles that may block feeding operation exist on the feeding path?	Examine peripheral part of the Feed rollers.
6	Are tensions of the Feed Belt 1 and Feed Belt 2 loose?	Feed belt 1: Refer to Sections 6.12.15, 6.13.13. Feed belt 2: Refer to Section 6.12.16.
7	Replace the Feed Motor, and see if the error is resolved.	Refer to Section 6.12.10.
8	Replace the HB Unit, and see if the error is resolved.	Refer to Section 6.12.18.
9	Is the Optical Unit installed correctly?	FX: Refer to Section 6.12.1.
10	Replace the Optical Unit, and see if the error is resolved.	RV: Refer to Section 6.13.1.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED
							Page	94 / 383	

5.1.4.6 Vertical streaks appear in scanned image

Item No.	Check items	How/where to check
1	Check the item in the right column.	Interface cable connection
2	<p>Check if the scanning area and white reference area are dirty or have damages. The white reference area is included inside of the BW Unit, which is hermetically closed and cannot be disassembled to clean inside.</p> <p>The front side scanning area and the white reference area is separated into two, Revolve Unit and Fixed Unit.</p> <p>For front side, vertical streaks and cleaning position are on the same side: Vertical streaks on the left: Clean left Vertical streaks on the right: Clean right</p> <p>For backside, vertical streaks and cleaning position are left-right reversal: Vertical streaks on the left: Clean right Vertical streaks on the right: Clean left</p>	<p>Revolve Unit</p>  <p>Fixed Unit</p>  <p>If the scanning section is damaged, replace the LED Glass RV and LED Glass FX. Fixed Unit: Section 6.12.5 Revolve Unit: Section 6.13.9</p> <p>If glass surface on the BW Unit (white reference) is damaged, replace the BW Unit. The white reference is hermetically closed and cleaning inside is not possible. Fixed Unit: Section 6.12.2 Revolve Unit: Section 6.13.6</p>
3	Check that the cables between the Optical Unit and CT PCA are connected correctly and not damaged.	
4	<p>Check if there are any dirt or damages on the scanning area of the Optical Unit that generates vertical streaks.</p> <p>The Optical Unit is hermetically closed and cannot be disassembled to clean inside.</p>	 <p>If the scanning area is dirty, clean the Optical Unit. (Refer to Section 6.3.1.)</p> <p>If there are damages on the scanning area or inside is dirty, replace the Optical Unit. Fixed Unit: Section 6.12.1 Revolve Unit: Section 6.13.1</p>
5	Replace the CT PCA, and see if the error is resolved.	Refer to Section 6.10.1.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	95 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

5.1.4.7 White area of scanned image is not correct

Item No.	Check items	How/where to check
1	Check the items listed in the right column.	☹! Are the scan settings (density/colors) correctly specified for the application software used? ☹! The white reference area on the ADF scanning section is not dirty.
2	Perform White level adjustment in the Maintenance mode.	Refer to Section 7.1.3.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual				
						Drawing No.	P1PA03575→ B0XX/6				
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION						
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	96 / 383

5.1.5 Imprinter errors

5.1.5.1 No printing/Printed letters are not clear

Item No.	Check items	How/where to check
1	Check if the message indicating that the remaining ink is not enough.	If the message appears, replace the print cartridge. (Refer to Section 9.8.1.1.)
2	Turn ON/OFF the power several times and perform printing. Does the same symptom occur? (Be sure that the scanner becomes "Ready" before turning it OFF.)	
3	Clean the nozzle of the Print cartridge and see if the error is resolved.	Refer to Section 9.8.32.1.
4	Communication between the Print cartridge and Imprinter Control PCA may be faulty. Check the connection of the parts on the right and replace them if necessary.	Front-side imprinter: -Holder Unit (Front-side): Section 9.6.3.2 -Junction PCA: Section 9.6.3.3 Back-side imprinter: -Holder Unit (Backside): Section 9.6.3.6 -Junction PCA: Section 9.6.3.7
5	Replace the Imprinter Control PCA and see if the error is resolved.	Refer to Section 9.6.3.1.
6	Replace the scanner CT PCA and see if the error is resolved.	Refer to Section 6.10.1.

5.1.5.2 Print form is dirty

Item No.	Check items	How/where to check
1	Is the sheet guide of the Imprinter dirty with ink?	If dirty, clean it by referring to Sections 9.8.2.1 and 9.8.2.2.

5.1.5.3 Printed letters are distorted

Item No.	Check items	How/where to check
1	Check if the printing position is specified within the printable area?	Refer to Section 1.1.2.2 for the printable area. Refer to Section 9.7.2 for the print setup. Check if the length of the documents loaded on the Hopper satisfies the specification.
2	Communication between the Print cartridge and Imprinter Control PCA may be faulty. Check the connection of the parts on the right and replace them if necessary.	Front-side imprinter: -Holder Unit (Front-side): Section 9.6.3.2 -Junction PCA: Section 9.6.3.3 Back-side imprinter: -Holder Unit (Backside): Section 9.6.3.6 -Junction PCA: Section 9.6.3.7
3	Replace the Imprinter Control PCA and see if the error is resolved.	Refer to Section 9.6.3.1

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	97 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	IFujioka			

5.1.6 Error Message

If an error occurs on the scanner, the error is displayed on the TWAIN driver and Error Recovery Guide as well as the error code on the Operator panel. Troubleshooting procedure for the displayed error messages and codes is described below.

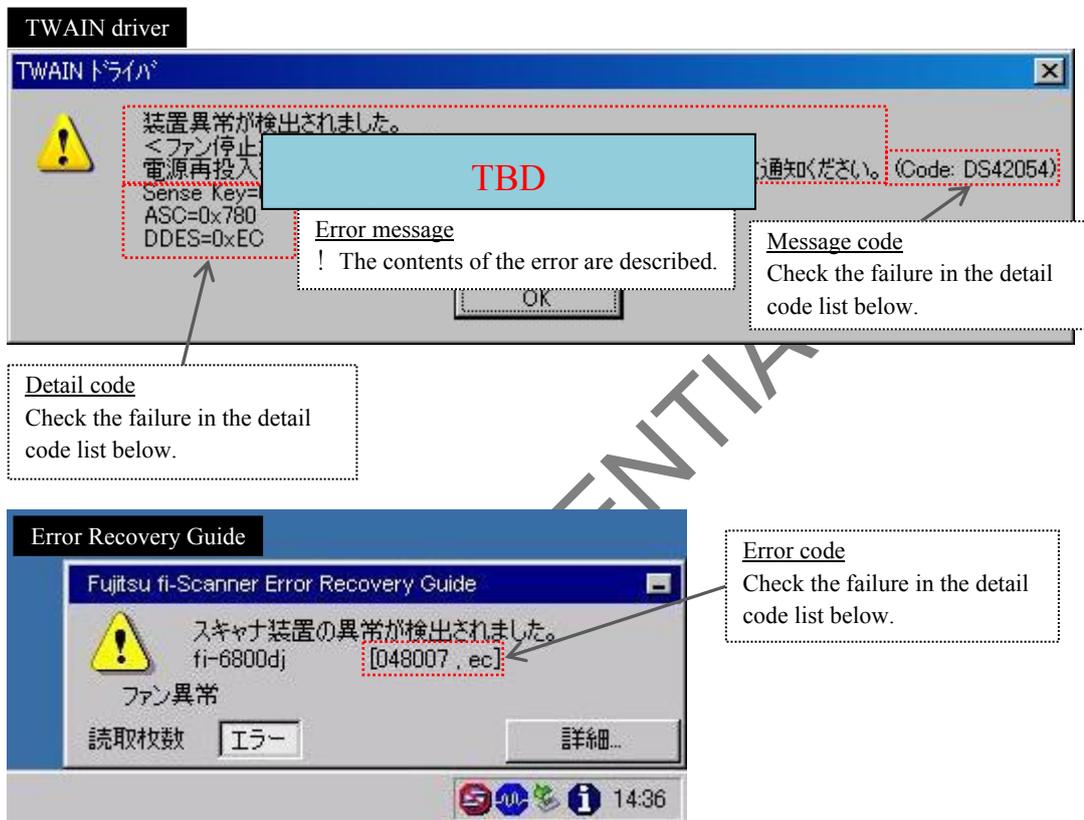
5.1.6.1 TWAIN Driver/Error Recovery Guide

When an error occurs during scanning by TWAIN driver, the TWAIN driver and Error Recovery Guide display the following error messages, message codes and detail codes.

(The detail code such as temporary error code may not be displayed.)

If the message code and detail code appear, troubleshoot in the following procedure:

Ex) Fan error



TWAIN driver error / Sense key / Detail code list

Detail code			Error message <Detail>	TWAIN driver error	Sense key/ detail code	Error code
Sense Key	ASC	DDES				
		0x31	Paper jam <READ-TOP sensor jam>	DS32002	038001-31	J1:31
		0x32	Paper jam <Paper feed sequence jam>	DS32002	038001-32	J1:33
		0x34	Paper jam <EXIT sensor jam 1>	DS32002	038001-34	J1:34
		0x35	Paper jam <EXIT sensor jam 2>	DS32002	038001-35	J1:35

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	98 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi			

TWAIN driver error / Sense key / Detail code list (Cont'd)

Detail code			Error message <Detail>	TWAIN driver error	Sense key/ detail code	Error code
Sense Key	ASC	DDES				
0x3	0x180	0x3A	Paper jam <FEED-TOP sensor JAM 1>	DS32002	038001-3a	J1:3A
		0x3B	Paper jam <FEED-TOP sensor JAM 2>	DS32002	038001-3b	J1:3B
		0x3C	Paper jam <READ-TOP sensor JAM>	DS32002	038001-3c	J1:3C
		0x3D	Paper jam <IMP-TOP sensor JAM 1>	DS32002	038001-3d	J1:3D
		0x3E	Paper jam <IMP-TOP sensor JAM 2>	DS32002	038001-3e	J1:3E
		0x50	Paper jam <Pick error>	DS32002	038001-50	J1:50
		0x51	Paper jam <Encoder JAM 1>	DS32002	038001-51	J0:51
		0x52	Paper jam <Encoder JAM 2>	DS32002	038001-52	J0:52
		0x54	Skew detected <Outside of scanning area JAM>	DS32002	038001-54	J3:54
	0x280	0x40	ADF open <ADF open>	No error code	038002-40	U4:40
		0x41	Top cover open <Top Cover open>	No error code	038002-41	U4:41
	0x780	0x55	Multifeed <Overlap>		038007-55	J2:55
		0x56	Multifeed <Length>		038007-56	J2:56
	0x880	0x01	Sensor(s) dirty <Dirty Pick sensor>		038008-01	J8:01
		0x02	Sensor(s) dirty <Dirty Skew sensor>		038008-02	J8:02
		0x03	Sensor(s) dirty <Dirty FEED-TOP sensor>		038008-03	J8:03
		0x04	Sensor(s) dirty <Dirty READ-TOP sensor>		038008-04	J8:04
		0x05	Sensor(s) dirty <Dirty POSTIMP-TOP sensor>		038008-05	J8:05
		0x06	Sensor(s) dirty <Dirty EXIT sensor>		038008-06	J8:06
		0x07	Sensor(s) dirty <Dirty JAM sensor>		038008-07	J8:07
		0x61	Pick Roller error	DS32022	038008-61	J9:61
		0x64	Brake roller/separater roller(s) worn		038008-64	J9:64
	1x080	0xB4	Print cartridge not installed (back-side imprinter)		038010-b4	U6:B4
		0xBA	Print cartridge not installed (back-side imprinter)		038010-ba	U6:BA

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	99 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

TWAIN driver error / Sense key / Detail code list (Cont'd)

Detail code			Error message <Detail>	TWAIN driver error	Sense key/ detail code	Error code
Sense Key	ASC	DDES				
0x4	0x180	0xB2	Imprinter <RAM>		048010-b2	A0:B2
		0xB3	Imprinter error <communication timeout>		048010-b3	A1:B3
		0xB5	Imprinter error <back-side print head>		048010-b5	A2:B5
		0xBB	Imprinter error <front-side print head>		048010-bb	A2:BB
		0xB6	Imprinter error <EEPROM>		048010-b6	A3:B6
		0xB8	Imprinter error <ROM>		048010-b8	A4:B8
	0x380	0x84	Lamp circuit error <Lamp fuse alarm (F)>		048003-84	H7:84
		0x85	Lamp circuit error <Lamp fuse alarm (B)>		048003-85	H7:85
	0x480	0x80	Motor circuit error <Feed 1 Motor alarm>		048004-80	H1:80
		0x8A	Motor circuit error <Feed 2 Motor alarm>		048004-8a	H1:8A
		0x8B	Motor circuit error <Exit Motor alarm>		048004-8b	H1:8B
		0x81	Motor circuit error <Separator Motor alarm>		048004-81	H2:81
		0x82	Motor circuit error <Pick alarm>		048004-82	H2:82
		0x8F	Motor circuit error <Hysteresis Motor alarm>		048004-8f	H2:8F
		0x90	Motor circuit error <Solenoid alarm>		048004-90	H2:90
		0x8C	Motor circuit error <Hopper Motor alarm>		048004-8c	H3:8C
		0x8B	Motor circuit error <Stacker Motor alarm>		048004-8d	H4:8D
		0x86	Motor circuit error <MD alarm>		048004-86	H5:86
		0x88	Motor circuit error <Background Front Motor alarm>		048004-88	H8:88
		0x89	Motor circuit error <Background Back Motor alarm>		048004-89	H8:89
		0x91	CCD 24V error <Optical alarm> <Front/Back>		048004-91	H9:91
		0x580	0xC0	Hopper malfunction	DS42051	048005-c0
	0xC1		Stacker malfunction		048005-c1	F1:C1
	0xC2		Background switching mechanism error (F)		048005-c2	F4:C2
	0xC3		Background switching mechanism error (B)	DS42046	048005-c3	F4:C3
	0x680	0x74	Optical error <ADF Front>		048006-74	E2:74
		0x75	Optical error <ADF Back>		048006-75	E3:75
	0x780	0xEC	Fan error	DS42054	048007-ec	F6:EC

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	100 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

TWAIN driver error / Sense key / Detail code list (Cont'd)

Sense Key	Detail code		Error message <Detail>	TWAIN driver error	Sense key/ detail code	Error code	
	ASC	DDES					
0x4	1x180	0xB1	Imprinter error <Imprinter system error>		048011-b1	H6:B1	
	4x044	0x11		Sensor error <Pick sensor error>		044400-11	L0:11
		0x12		Sensor error <FEED-TOP sensor error>		044400-12	L1:12
		0x13		Sensor error <READ-TOP sensor error>		044400-13	L2:13
		0x14		Sensor error <EXIT sensor error>		044400-14	L3:14
		0x15		Sensor error <IMP-TOP sensor error>		044400-15	L4:15
		0x17		Sensor error <Skew sensor error>		044400-17	L5:17
		0x1B		Sensor error <US sensor error>	No error code	044400-1b	L6:1B
		0x1C		Sensor error <JAM sensor error>		044400-1c	L7:1C
		0xD2		EEPROM error		044400-d2	E7:D2
		0xD3		Operator Panel error		044400-d3	E6:D3
		0xE8		SCSI error		044400-e8	E8:8E
		0xF5		Image memory read-write error (F)		044400-f5	E9:F5
		0xF6		Image memory read-write error (B)		044400-f6	E9:F6
		0xF7		Image memory read-write error (EXT-F)		044400-f7	E9:F7
		0xF8		Image memory read-write error (EXT-B)		044400-f8	E9:F8
		0xE5		Memory error (F)		044400-e5	C0:E5
		0xE6		Memory error (B)		044400-e6	C0:E6
		0xE9		LSI error (F)		044400-e9	C0:E6
	0xEA		LSI error (B)		044400-ea	C0:EA	
			Internal communication error of the scanner		044400-f0	C8:F0	
			SPC error		N/A	C6:EF	
			USB error		N/A	C6:F9	

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	101 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Chapter 6 Maintenance Procedure

This chapter describes how to replace maintenance parts, and clean the scanner to ensure normal operations. When assembling the maintenance parts, conduct necessary cleaning when instructed in this manual.

6.1 For Safety Operation!

Read this page carefully before disassembling or assembling.



WARNING

Electric shock

Turn the power switch off, and unplug the AC power source from the outlet before disassembling or assembling. Otherwise, an electric shock may occur.



CAUTION

Injury

Be careful not to get your fingers, hair, clothes or accessories caught in a moving part. It may cause injury.

Machine damage

Static Electricity may cause the damage to the scanner.

When repairing the scanner, wear a wrist strap or dielectric mat to avoid ESD.

Notes when cleaning

When cleaning the scanner, be careful not to allow foreign matter, such as dried ink and toner, to fall inside the scanner.

- You may accidentally drop screws or springs into the scanner. To avoid this, covering the scanner with paper or cloth before disassembling/assembling is recommended.
- Be careful to avoid the parts from dropping into the paper path lower-side while you are replacing the parts in the Revolve Unit (inside of ADF).
- Be careful not to damage the glasses.
- Wipe any dirt and fingerprints on the entire of the paper path (stainless parts, glass parts and sensor parts). (Refer to Section 8.3.)
- Refer to Appendix 1 for the screw names used in this manual.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 102 / 383

6.2 Periodic Maintenance

Periodic maintenance should be performed on the scanner at the following intervals.

Item	Maintenance cycle
Periodic maintenance	Every 12 months

During a service call, clean the scanner if dirty. (Refer to Sections 8.3.)

6.2.1 Periodic Maintenance Items

No.	Item		Remarks
1	Inquiry to the user	Check the scanner status <input type="checkbox"/> Scanned image <input type="checkbox"/> Status of use <input type="checkbox"/> Errors	Check the scanned image status.
2	Check	Clean the scanner <input type="checkbox"/> Body <input type="checkbox"/> Port, Fan <input type="checkbox"/> Rollers <input type="checkbox"/> Feeding section <input type="checkbox"/> Sensors	Clean the scanner by referring to Section 8.3 "Cleaning".
		Check the operation (Maintenance Mode) <input type="checkbox"/> Paper Feeding Test <input type="checkbox"/> Motor Test <input type="checkbox"/> Sensor Test <input type="checkbox"/> Operator Panel Test <input type="checkbox"/> Lamp Test <input type="checkbox"/> Thermistor Test	Check each operation by referring to Chapter 7 "Adjustment/Settings". <input type="checkbox"/> Motor/Fan operation and sounds are normal. <input type="checkbox"/> The sensors, Operator Panel, lamps and thermistor temperature are normal.
4	Confirmation	Confirm the scanner status (Maintenance Mode) <input type="checkbox"/> Error log display <input type="checkbox"/> Clearing Periodical Maintenance Alarm <input type="checkbox"/> Displaying/Clearing Page counter	Check the scanner status by referring to Chapter 7 "Adjustment/Settings". <input type="checkbox"/> Configure the maintenance date by referring to "Clearing Periodical Maintenance Alarm".
5			
6			
7			

Check the parts to be cleaned at periodical maintenance. Clean them if necessary. (Refer to Section 8.3.)

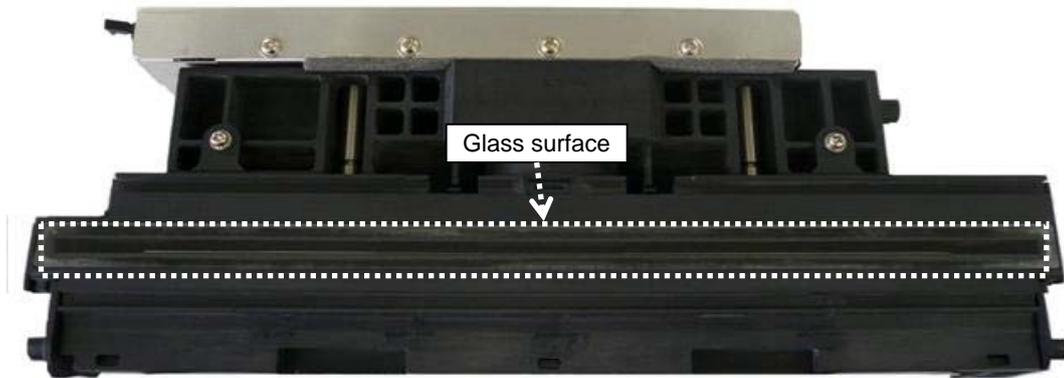
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual					
						Drawing No.	P1PA03575→ B0XX/6					
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION					PFU LIMITED	Page	103 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	I.Fujioka				

6.3 Cleaning

6.3.1 Optical Unit

Wipe the glass surface with a dry lint-free cloth. Be sure to wipe from one end to the other in one direction. Do not use alcohol but rub with a dry cloth. If stains are not eliminated yet, apply alcohol on a cloth, and wipe off in one direction. After using alcohol, be sure to wipe off with a dry cloth.

* Clean the glass surface only as the Optical Unit is hermetically closed.



6.3.2 BW Unit / LED Unit / LED Glass (Fixed Unit / Revolve Unit)

Wipe the glass surface with a dry lint-free cloth. Be sure to wipe from one end to the other in one direction. Do not use alcohol but rub with a dry cloth. If stains are not eliminated yet, apply alcohol on a cloth, and wipe off in one direction. After using alcohol, be sure to wipe off with a dry cloth.

* Clean the glass only as the BW Unit and LED Unit are hermetically closed.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	104 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.4 Maintenance Tools

6.4.1 Maintenance Tool List

Special tools to maintain this scanner are shown in the table below.

No.	Tools	Remarks	Purpose
1	Phillips screwdriver	For M3, M4 screws	
2	Small Phillips screwdriver	For M2, M2.5 screws	Removing Micro Switch
3	Small flat-blade screwdriver		Removing sensors and connectors
4	Longnose plier		Installing E-ring
5	Hex wrench	For M3 screws	Removing hexagonal nut in Pick Roller
6	Alcohol	Ethyl alcohol	Cleaning
7	Blower brush		Cleaning mirrors
8	Cloth	Bleached or nonwoven cloth	Cleaning

6.4.2 Test Chart List

Special charts to maintain this scanner are shown in the table below.

No.	Chart Name (Part Number)	Quantity	Remarks	Purpose
1	ADJ-CHART-KIT (PA03575-D990)	1	Includes the following charts: #2: ADJUST-CHART #3: TEST CHART (W) #4: ADJUSTMENT SHEET	
2	ADJUST-CHART (PA93008-Y497)	1	Adjustment is required after the following parts replacement: - BW Unit (Section 6.12.2) - BW Unit (Section 6.12.3) - Optical Unit (Section 6.12.1) - Optical Unit (Section 6.13.1)	Offset / Magnification adjustment
3	TEST CHART (W) (PA03277-Y123)	1	Adjustment is required after the following parts replacement: - BW Unit (Section 6.12.2) - BW Unit (Section 6.12.3) - LED Unit FX (Section 6.12.3) - LED Unit RV (Section 6.13.3) - Optical Unit (Section 6.12.1) - Optical Unit (Section 6.13.1)	White level adjustment
4	ADJUSTMENT SHEET (PA03296-Y990)	1	Adjustment is required after the following parts replacement: - US Sensor FX (Section 6.14.1) - US Sensor RV (Section 6.14.2)	Ultrasonic sensor adjustment

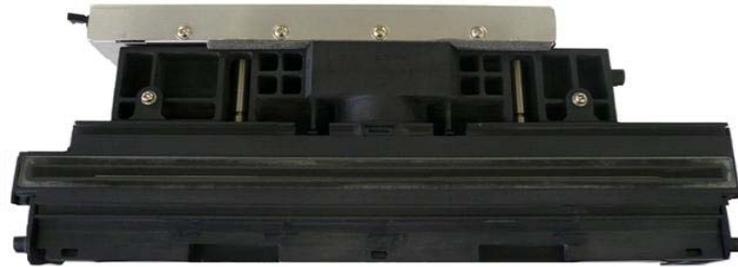
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	105 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.5 Non-disassembly Parts

6.5.1 Non-disassembly Parts (Optical Unit)

Besides the non-disassembly screws, do NOT disassemble any parts on this unit (printed board / mirrors).

* If you disassembled any non-disassembly parts by mistake, replace the Optical Unit with the new one.



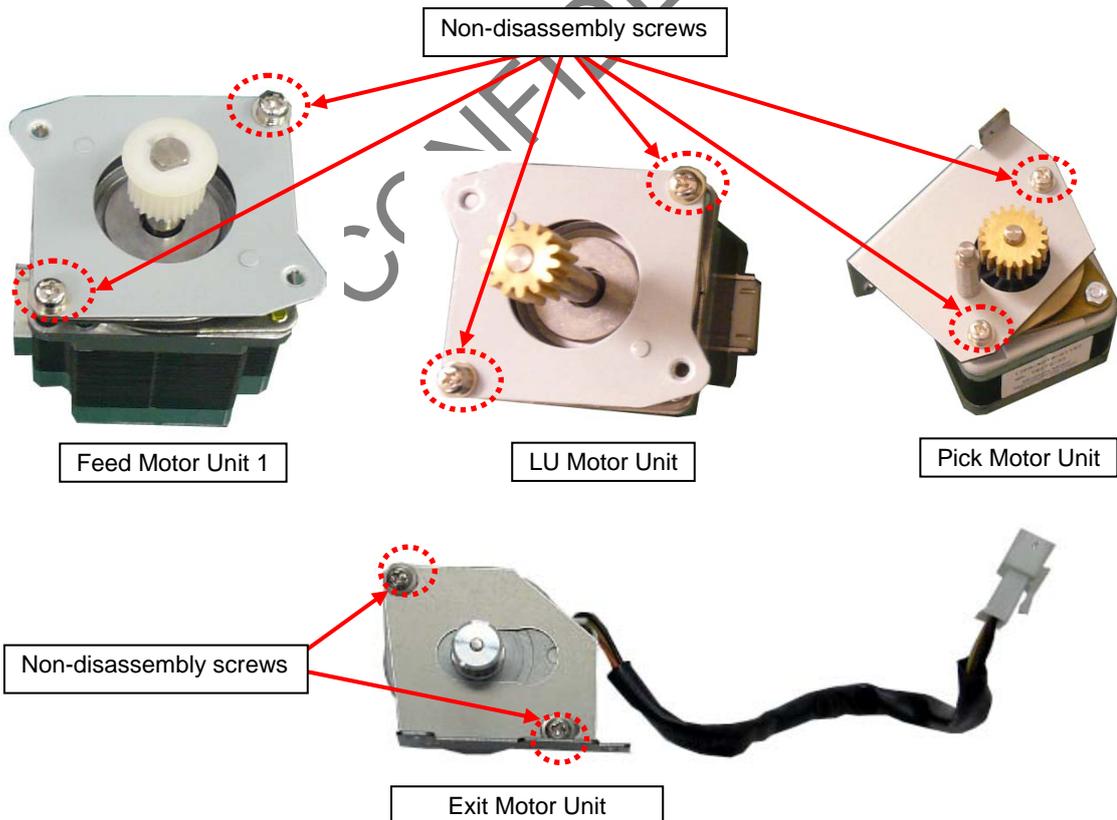
Optical Unit

6.5.2 Non-disassembly Parts (Motor Units which are already adjusted)

The following motors do not require belt tension adjustment as their motor bracket positions are fixed. Do NOT loosen the non-disassembly screws in the photos below:

* If you disassembled the non-disassembly parts by mistake, replace each motor with the new one.

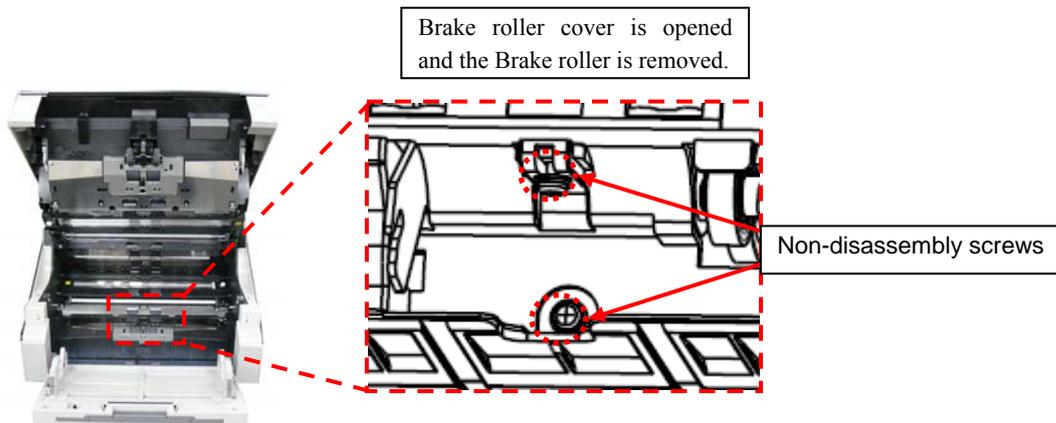
- Ⓢ! Feed Motor Unit 1
- Ⓢ! LU Motor Unit
- Ⓢ! Pick Motor Unit
- Ⓢ! Exit Motor Unit



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	106 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

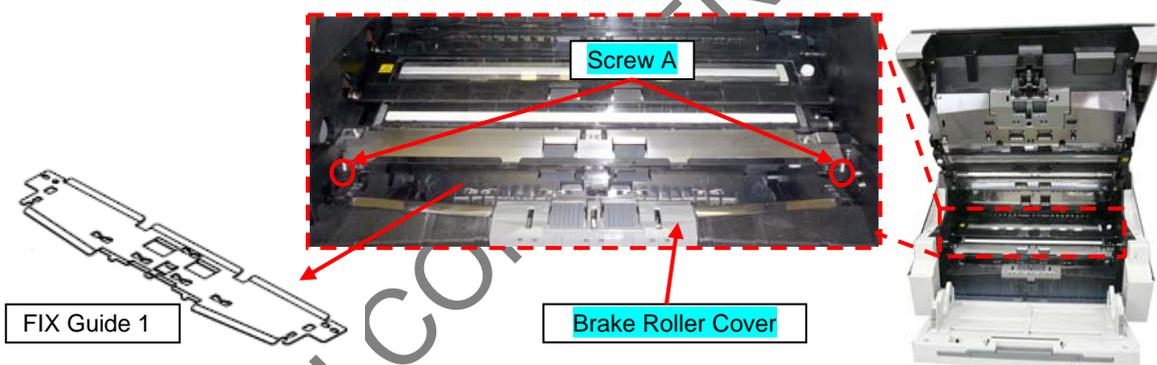
6.5.3 Non-disassembly Parts (Brake Roller which is already adjusted)

The following Brake roller installation part cannot be adjusted because the pressure has been adjusted for the Brake roller. If any non-disassembly screws were loosened or tightened, or the Brake Roller spring was replaced, re-adjust the Brake Roller by referring to the adjustment procedure below.

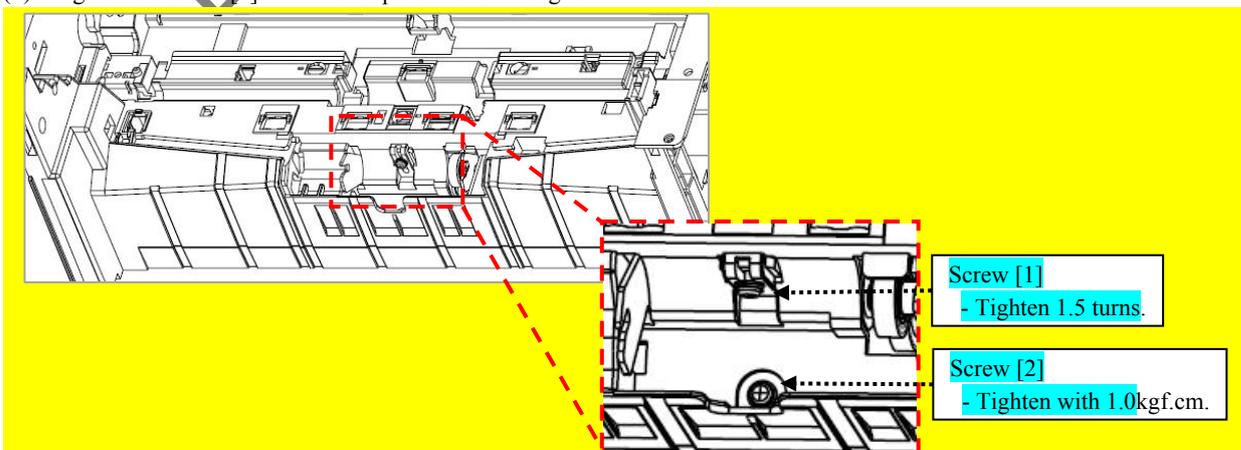


Brake Roller Pressure Adjustment Procedure

- (1) Open the ADF, remove two screws A (circled) securing the FIX Guide 1 to remove the FIX Guide 1. (Refer to steps (2) and (3) in Section 6.12.8.)
- (2) Remove the Brake Roller Cover.

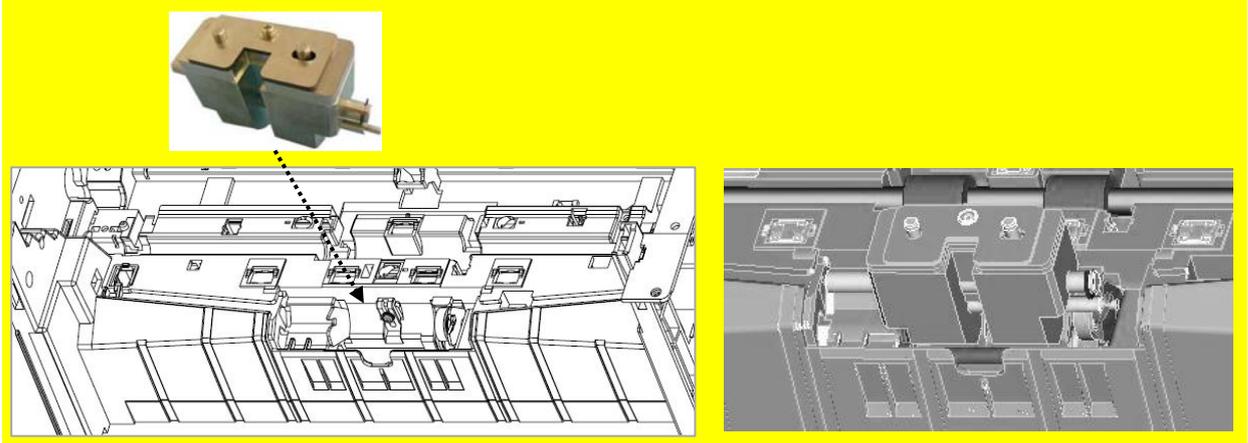


- (3) Remove a screw A (circled) securing the B-BRK Unit to remove the B-BRK Unit.
- (4) Loosen the screw [1] 1.5 turns.
* Loosening more or less than specified turns may cause adjustment error.
- (5) Tighten the screw [2] with the torque driver of 1.0kgf.cm.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	107 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

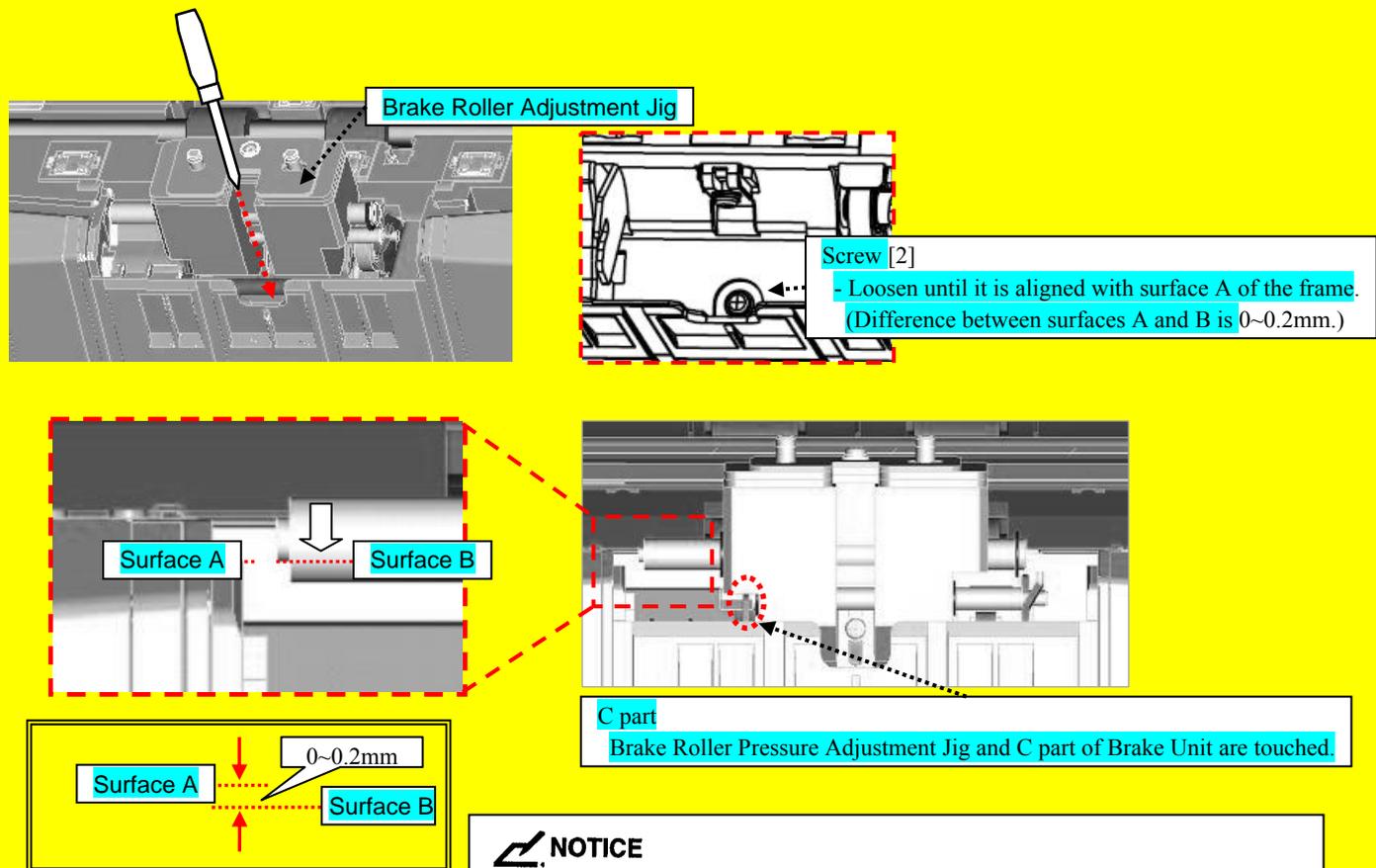
(6) Install the Brake Roller Pressure adjustment jig.



(7) Tighten the screw [2] to adjust the brake pressure.

Lower the **surface B** at the shaft protrusion, and align it with the **surface A** of the frame. (Difference between the surfaces A and B is 0 to 0.2mm.)

The Brake Roller Pressure Adjustment Jig and the **C part** of the Brake Unit must be touched.

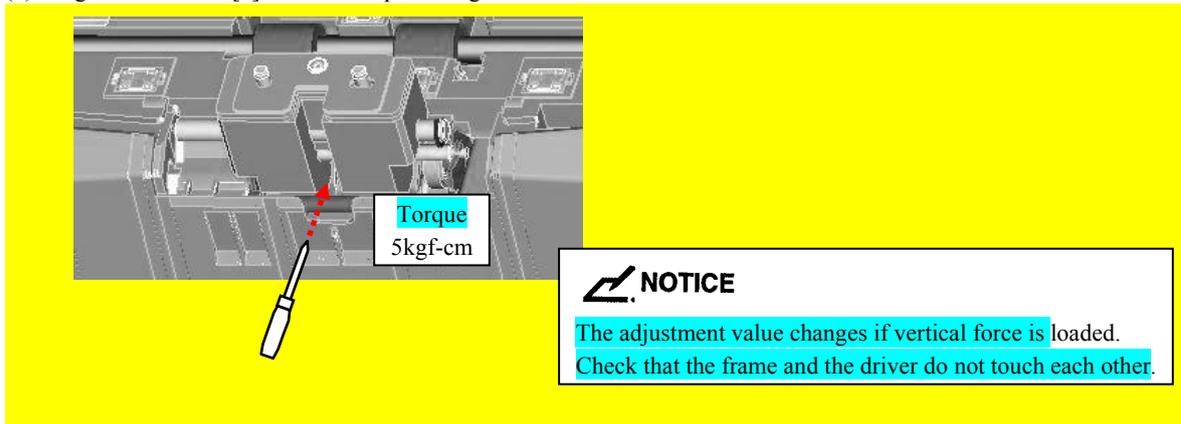


NOTICE

- Be sure to loosen (not tighten) the screw [2] when adjusting it.
- If the screw [2] was loosened too much, tighten it once and then loosen it again.
- When the driver and the jig touched, tighten the screw once and then loosen it again.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	108 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

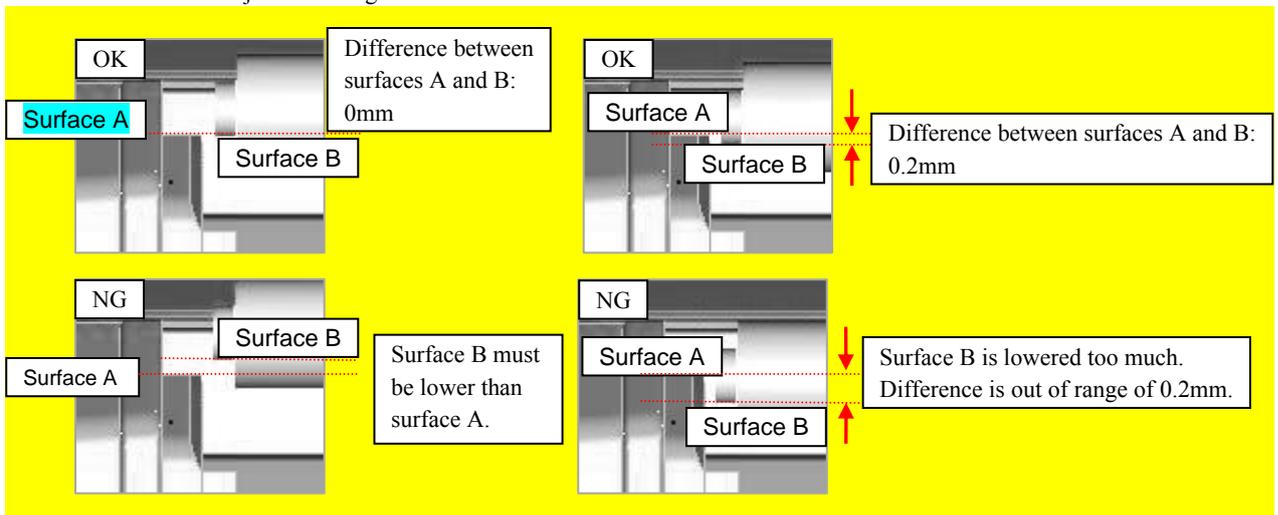
(8) Tighten the screw [1] with the torque of 5kgf.cm.



(9) Loosen the screw [2] slightly.

(10) Check the Brake Roller pressure.

Ⓞ Lift up the Brake Roller pressure adjustment jig once, and check that the difference between the surfaces A and B is within the adjustment range of 0~0.2mm.



(11) The adjustment is complete if the adjustment value is within the specified range (0~0.2mm).

Ⓞ Install the B-BRK Unit, Brake Roller, and FIX Guide 1.

Ⓞ If the result is NG, re-adjust the pressure from step (4).

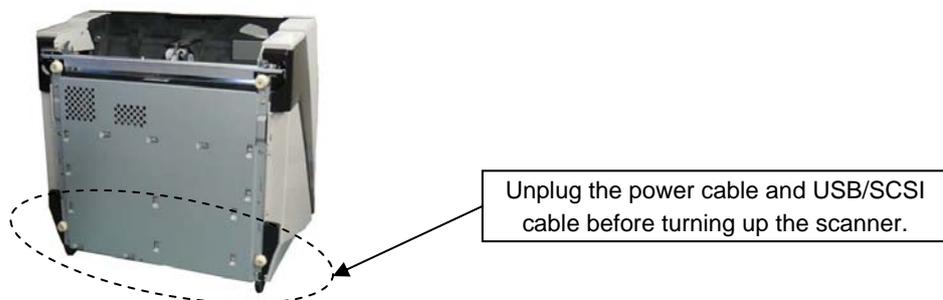
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	109 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.6 Removing the Power Cable, USB/SCSI Cable

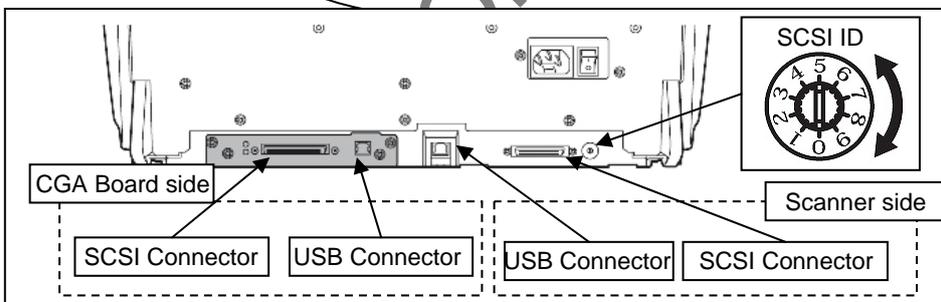
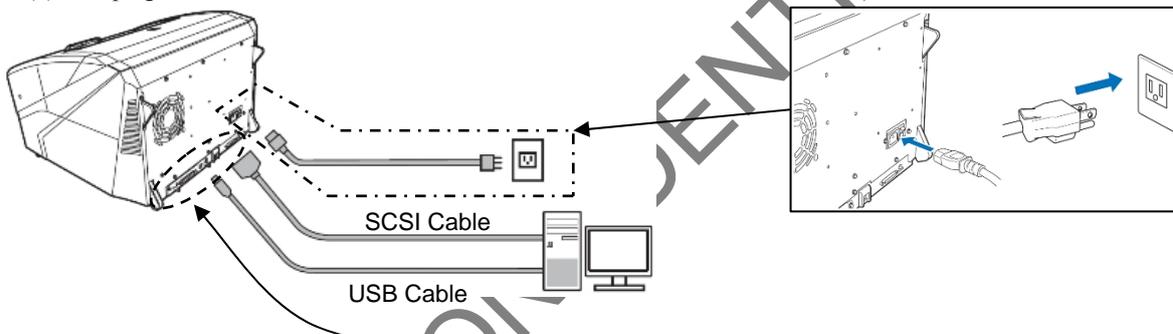
<Removal>

NOTICE

Before turning up the scanner with its back to the bottom, be sure to unplug the power cable and USB/SCSI cable. Otherwise, the connectors and the CT PCA may be damaged.



- (1) Turn off the power of the scanner by referring to <Turning off the power> in Section 8.1.1 "Turn the power on/off".
- (2) Unplug the power cable that is connected to the scanner.
- (3) Unplug the USB cable or SCSI cable that is connected to the scanner.



<Installation>

Follow the above procedure in reverse.

NOTICE

There are two locations for the USB/SCSI cable connectors, one of which is at the scanner side and the other at the CGA Board side.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	110 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.7 Replacing the Hopper Unit / Stacker Unit

6.7.1 Hopper Unit

NOTICE

Refer to Section 4.2.1 for the part number and appearance of the Hopper Unit.

<Removal>

Raising the front edge of the Hopper Unit slightly, pull it out of the scanner while the Hopper Unit is slanting.



<Installation>

Align the rotating shaft of the Hopper with the right and left frame guides, insert the shaft to install.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	111	/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

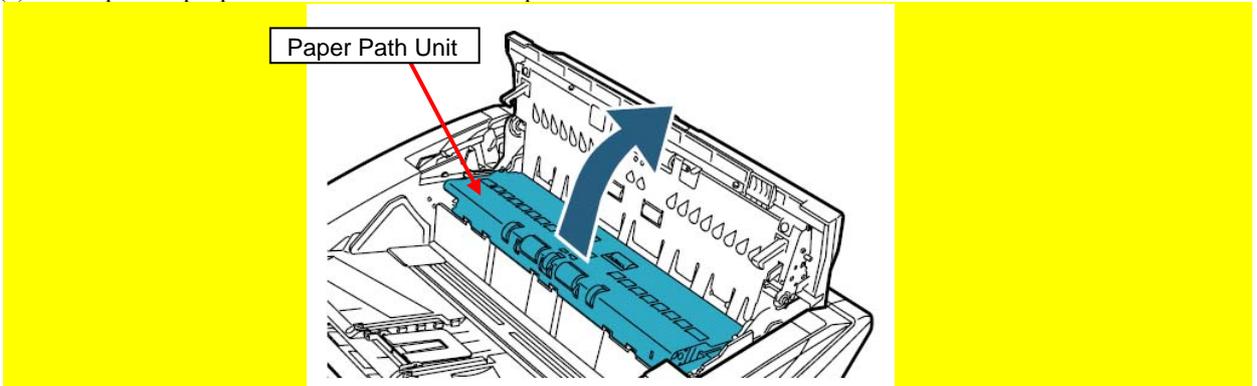
6.7.2 Stacker Unit <<TBD>>

NOTICE

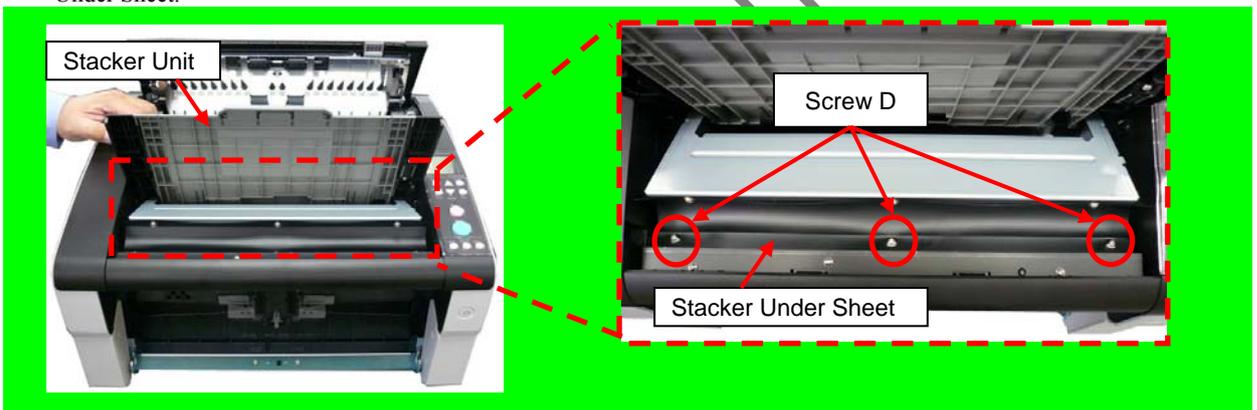
Refer to Section 4.2.2 for the part number and appearance of the Stacker Unit.

<Removal>

- (1) Open the Top Cover. (Refer to Section 8.1.4.)
- (2) Lift up the Paper path lower unit inside of the Top Cover.



- (3) Open the Stacker Unit, remove three screws D (circled) securing the Stacker Under Sheet and then remove the Stacker Under Sheet.



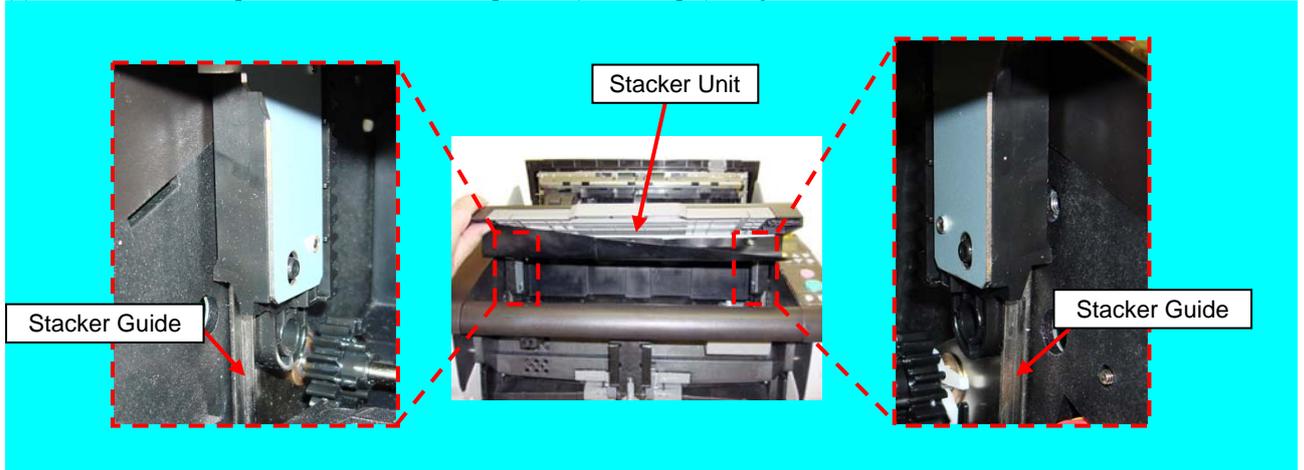
- (4) Lift up the Stacker Unit to remove.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	112 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

<Installation>

- (1) Insert the stacker guides to the Stacker Unit grooves (left and right) and pull down the Stacker Unit.



- (2) Tighten the three tapping screws (circled) to install the Stacker Under Sheet.
- (3) Lower the paper path unit, and then close the Top Cover.

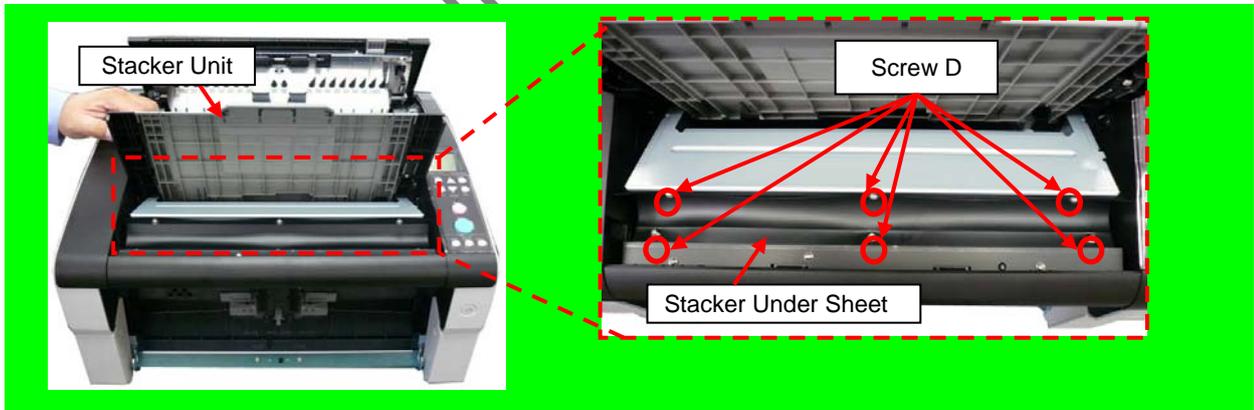
6.7.3 Stacker Under Sheet

NOTICE

Refer to Section 4.2.3 for the part number and appearance of the Stacker Under Sheet.

<Removal>

Open the Stacker unit and remove six screws D (circled) securing the Stacker Under Sheet, and then remove the Stacker Under Sheet.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	113 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

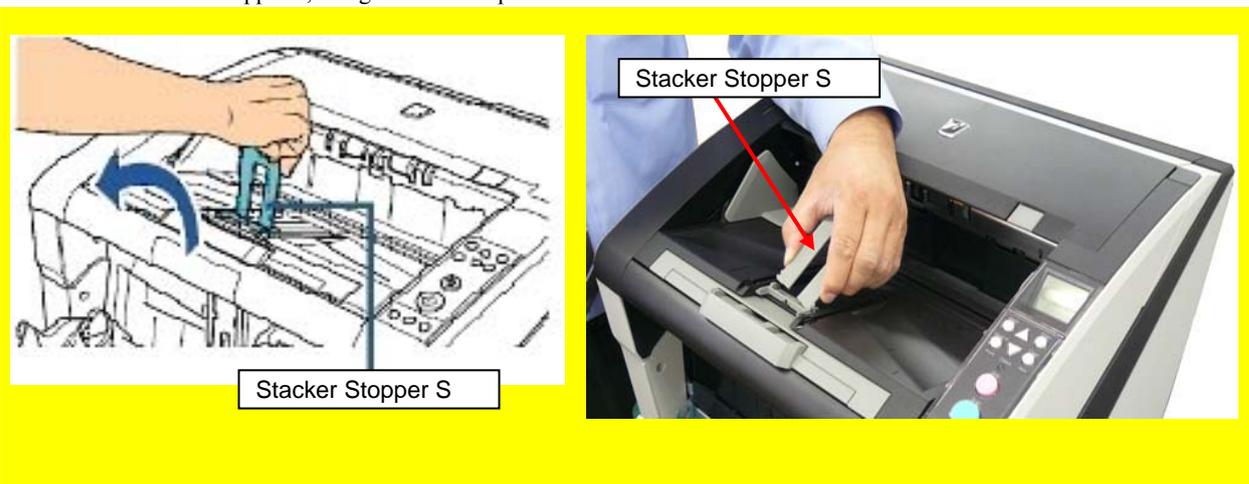
6.7.4 Stacker Stopper S

NOTICE

Refer to Section 4.2.4 for the part number and appearance of the Stacker Stopper S.

<Removal>

Raise the Stacker Stopper S, and grab its lower part to remove.



<Installation>

Follow the above procedure in reverse.

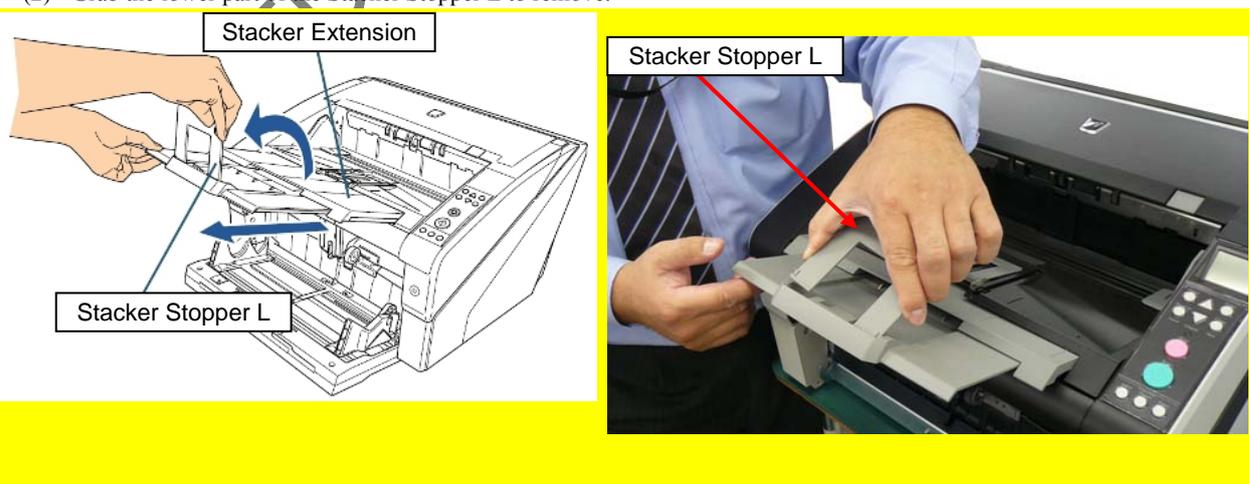
6.7.5 Stacker Stopper L

NOTICE

Refer to section 4.2.5 for the part number and appearance of the Stacker Stopper L.

<Removal>

- (1) Pull out the Stacker Extension, and raise the Stacker Stopper L.
- (2) Grab the lower part of the Stacker Stopper L to remove.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	114 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.8 Replacing the Outer Covers

6.8.1 FX Cover L

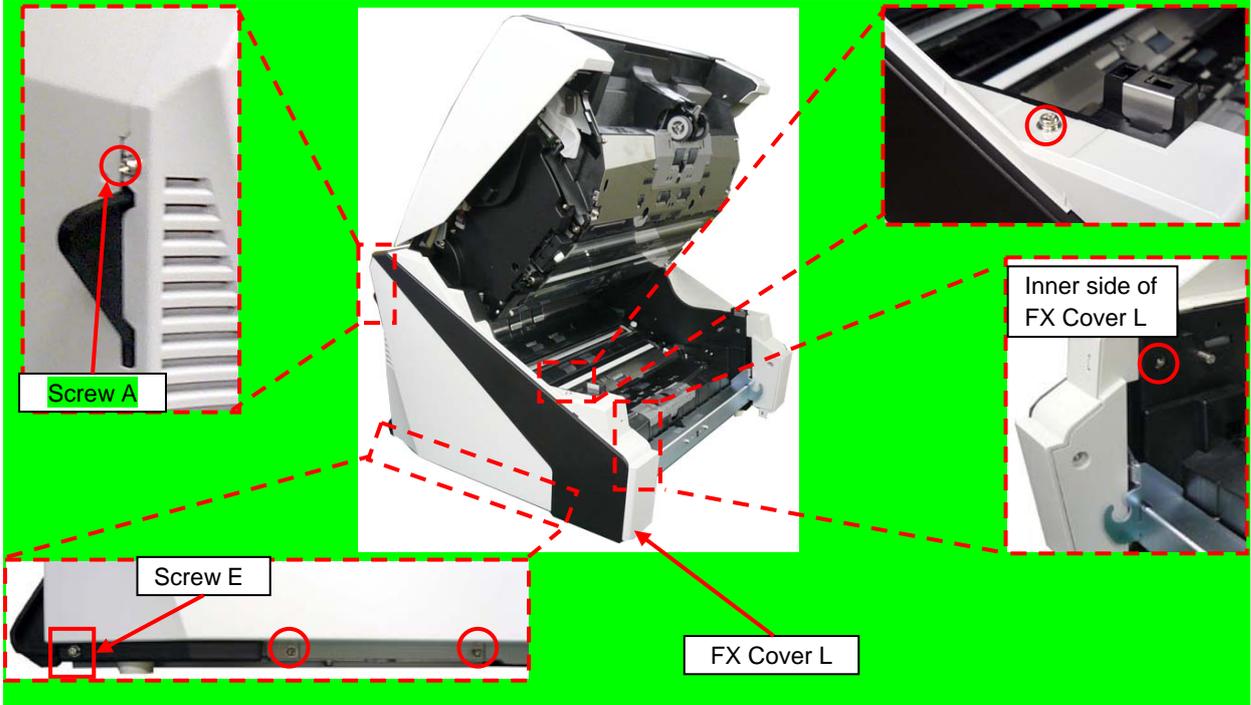
NOTICE

Refer to Section 4.2.6 for the part number and appearance of the FX Cover L.

<Removal>

(1) Remove the Hopper Unit. (Refer to Section 6.7.1.)

(2) Remove five screws A (circled) and one screw E (enclosed with square) securing the FX Cover L.



(3) Close the ADF, open the Top Cover, and then unlatch a latch (circled).



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page 115 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(4) Open the ADF, unlatch a latch (circled), and then open the rear of the FX Cover L to remove it to the front side of the scanner.

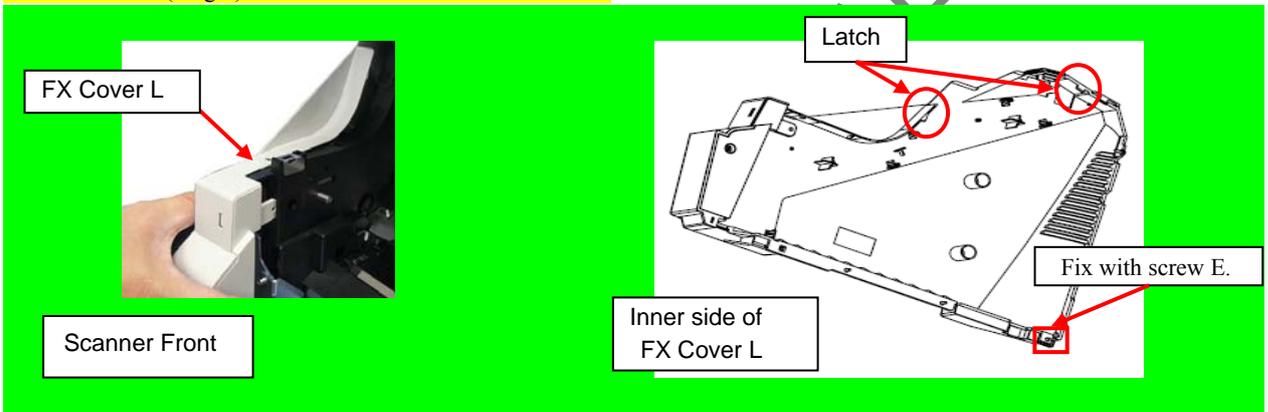


<Installation>

(1) Install the FX Cover L from the front side of the scanner, latch with latches to the scanner frame, and fix with the five screws A and one screw E.

NOTICE

Use the screw E (longer) at the rear bottom of the FX Cover L.



(2) Install the Hopper Unit. (Refer to Section 6.7.1.)

6.8.2 FX Cover R

NOTICE

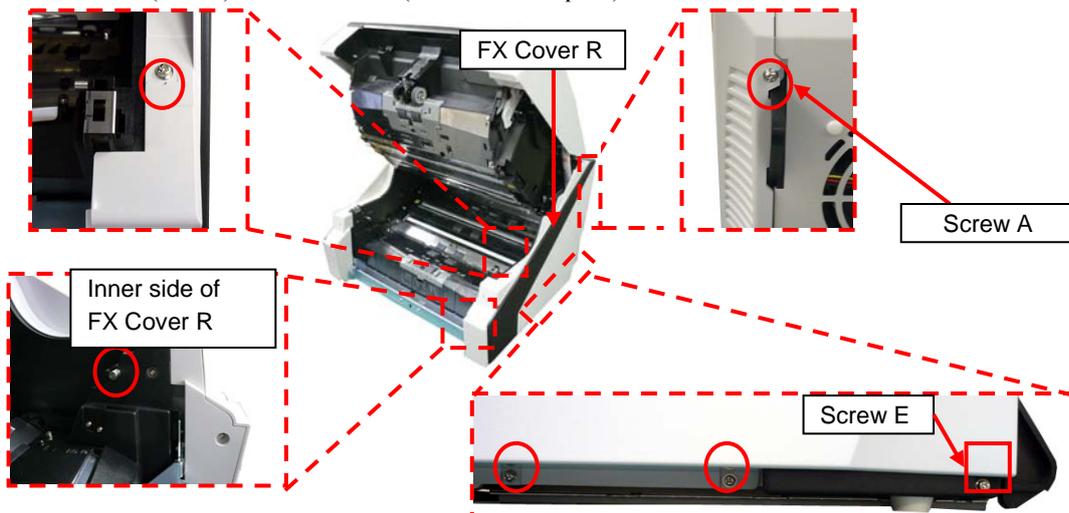
Refer to Section 4.2.7 for the part number and appearance of the FX Cover R.

<Removal>

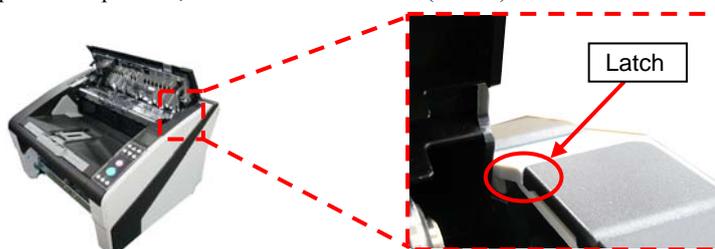
(1) Remove the Hopper Unit. (Refer to Section 6.7.1.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	116 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

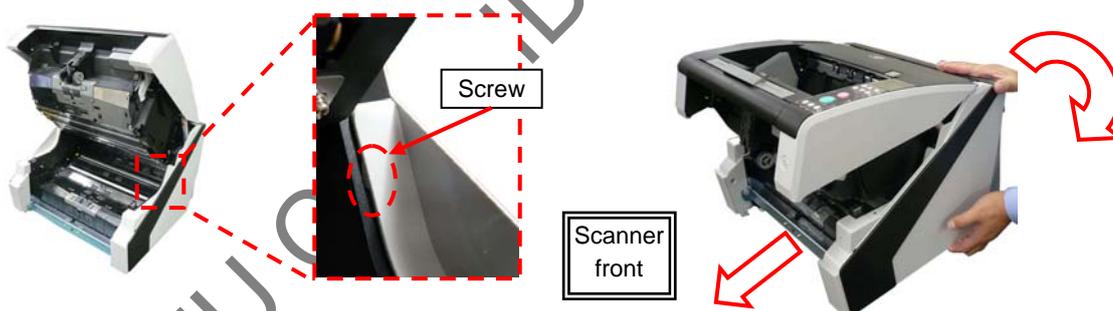
(2) Remove five screws A (circled) and one screw E (enclosed with square).



(3) Close the ADF, open the Top Cover, and then unlatch a latch (circled).



(4) Open the ADF, unlatch a latch (circled), and then open the rear of the FX Cover R to remove it to the front side of the scanner.

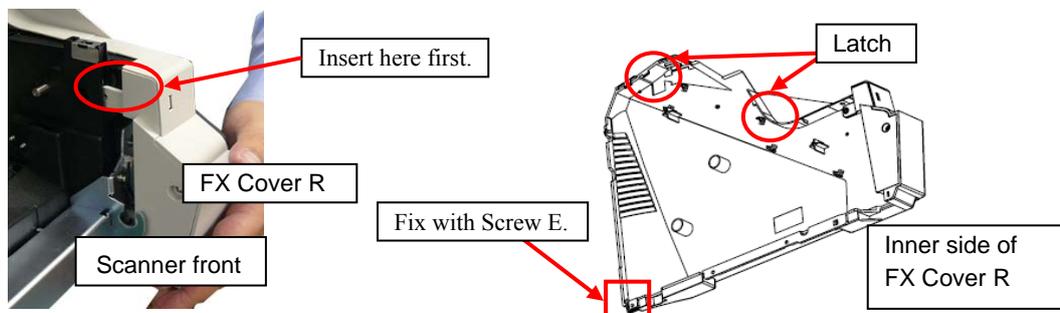


<Installation>

Install the FX Cover R from the front side of the scanner, latch with latches to the scanner frame, and fix with the five screws A and the screw E.

NOTICE

Use the screw E (longer) at the rear bottom of the FX Cover L.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 117 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi				

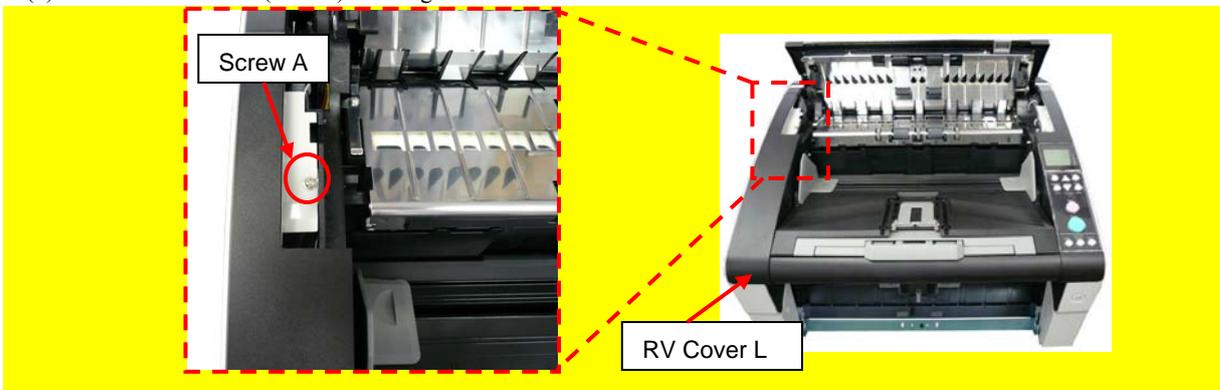
6.8.3 RV Cover L

NOTICE

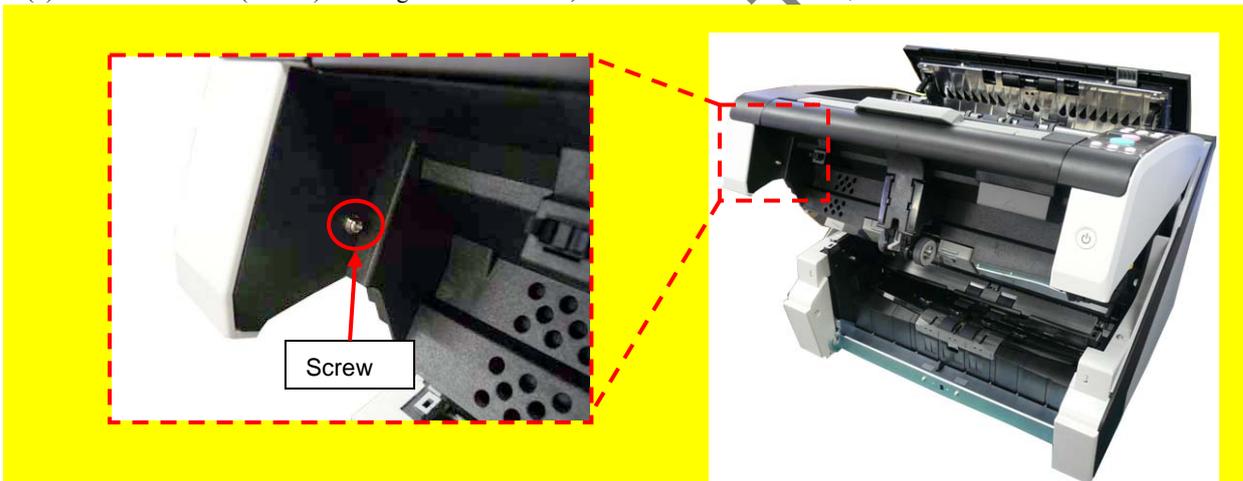
Refer to Section 4.2.8 for the part number and appearance of the RV Cover L.

<Removal>

- (1) Open the Top Cover. (Refer to Section 8.1.4.)
- (2) Remove a screw A (circled) securing the RV Cover L.



- (3) Open the ADF. (Refer to Section 8.1.3.)
- (4) Remove a screw (circled) securing the RV Cover L, and then remove the RV Cover L.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	118 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

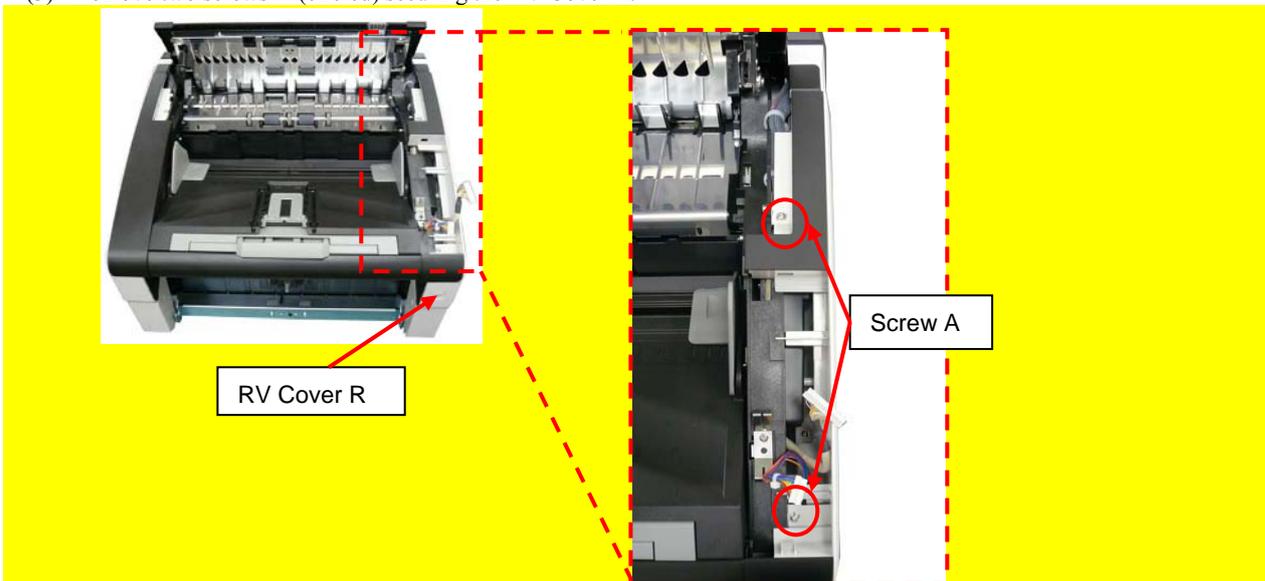
6.8.4 RV Cover R

NOTICE

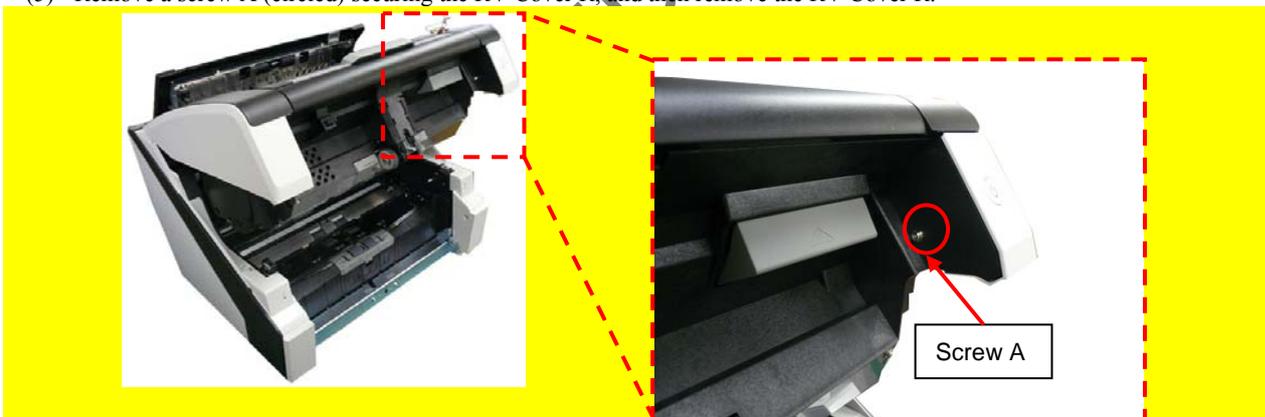
Refer to Section 4.2.9 for the part number and appearance of the RV Cover R.

<Removal>

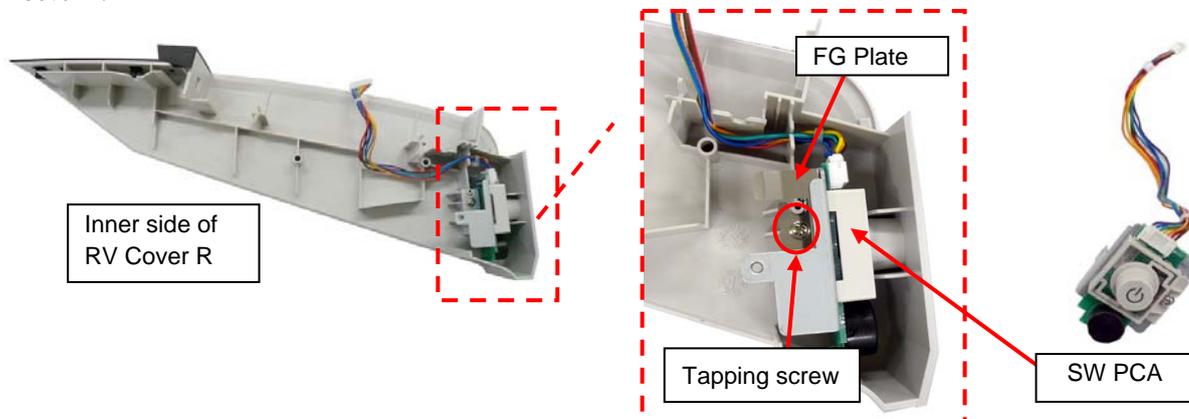
- (1) Remove the Operator Panel. (Refer to removal steps (1) ~ (2) in Section 6.9.1.)
- (2) Open the Top Cover. (Refer to Section 8.1.4.)
- (3) Remove two screws A (circled) securing the RV Cover R.



- (4) Open the ADF. (Refer to Section 8.1.3.)
- (5) Remove a screw A (circled) securing the RV Cover R, and then remove the RV Cover R.



- (6) Remove a tapping screw (circled) securing the SW PCA, and then remove the SW PCA and FG Plate from the RV Cover R.



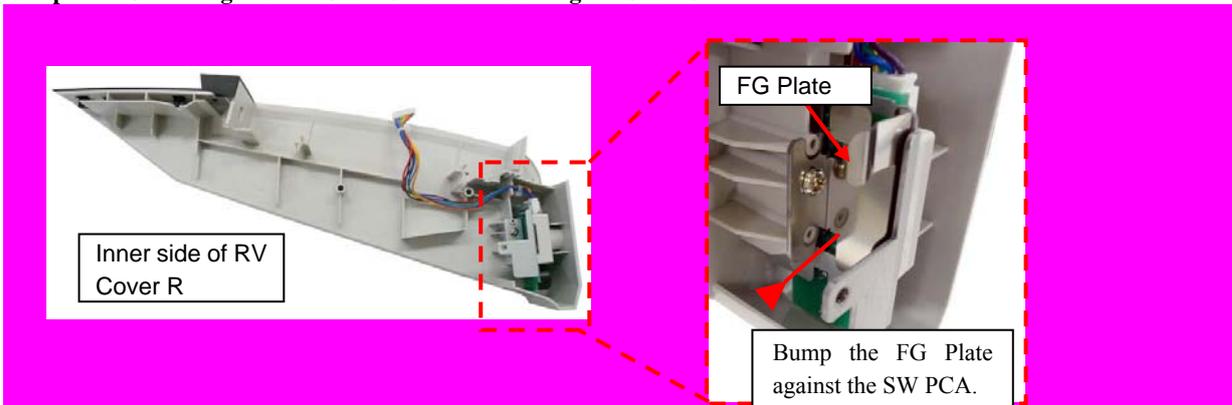
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	119 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

Follow the above procedure in reverse.

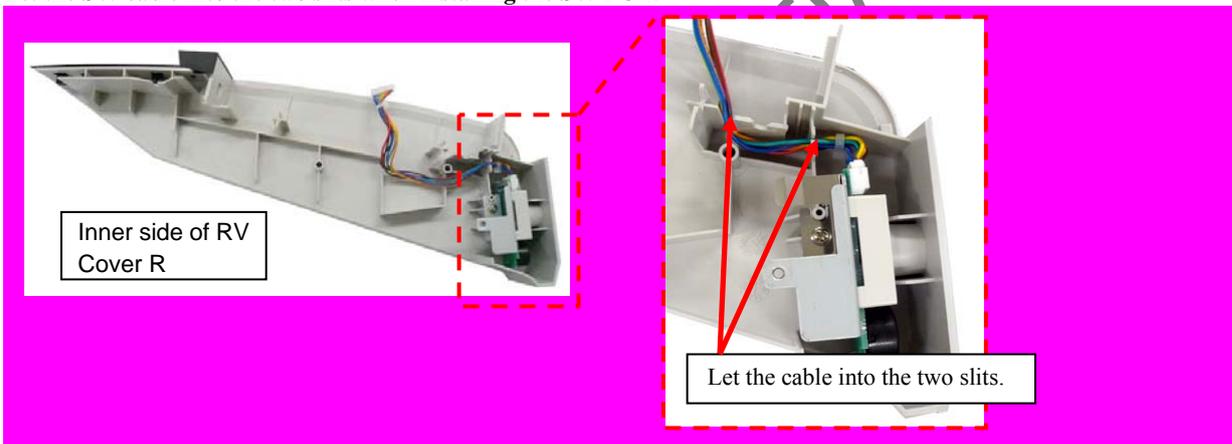
NOTICE

Bump the FG Plate against the SW PCA when installing the SW PCA.



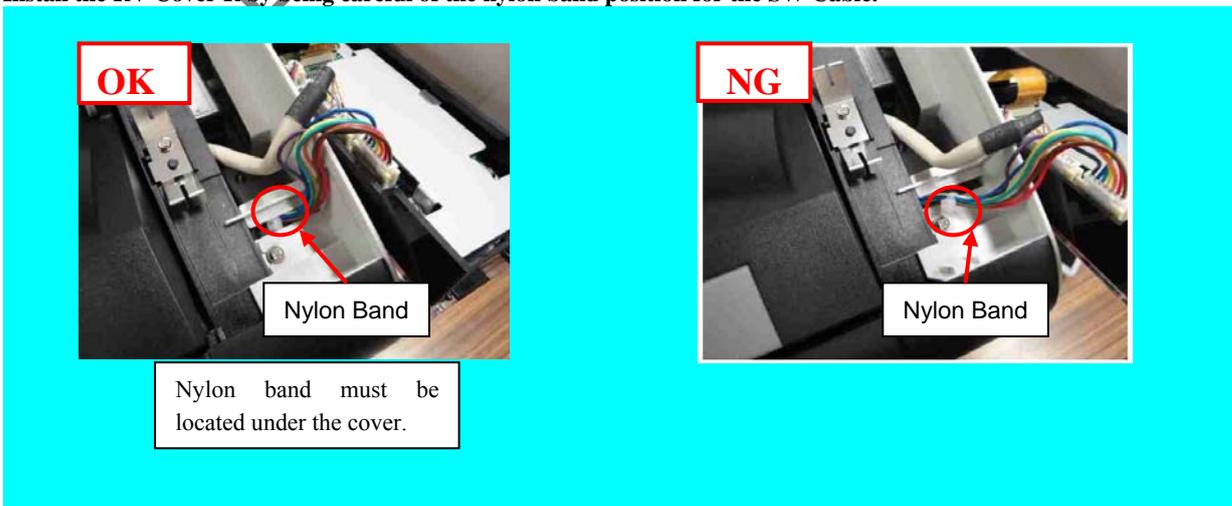
NOTICE

Let the SW cable into the two slits when installing the SW PCA.



NOTICE

Install the RV Cover R by being careful of the nylon band position for the SW Cable.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	120 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

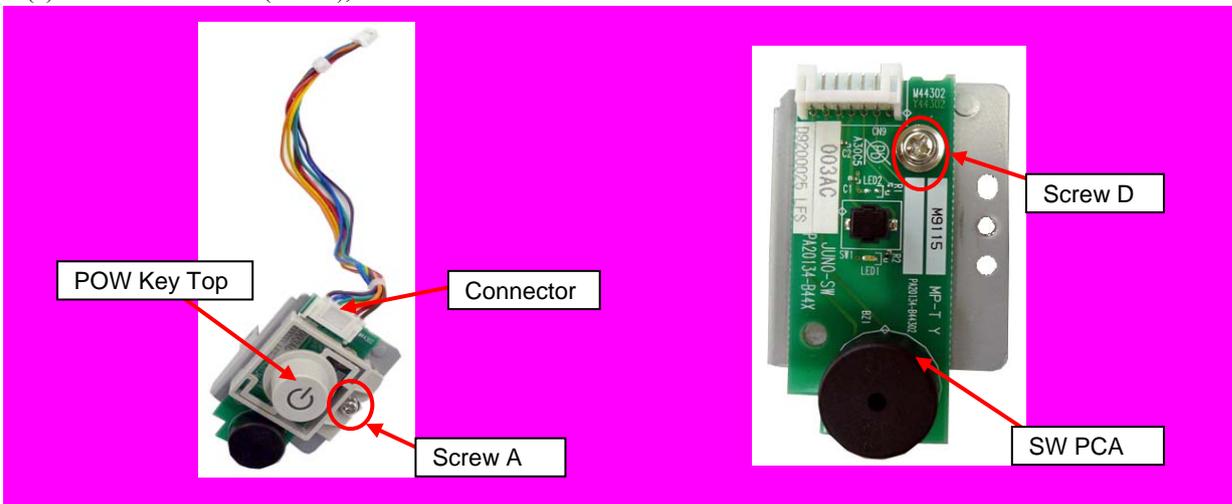
6.8.5 SW PCA

NOTICE

Refer to Section 4.2.12 for the part number and appearance of the SW PCA.

<Removal>

- (1) Remove the SW PCA. (Refer to removal steps (1) ~ (4) in Section 6.8.4.
- (2) Disconnect a connector, and a screw A (circled), and then remove the POW Key Top.
- (3) Remove a screw D (circled), and then remove the SW PCA.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	121 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.8.6 Stacker Under Cover

NOTICE

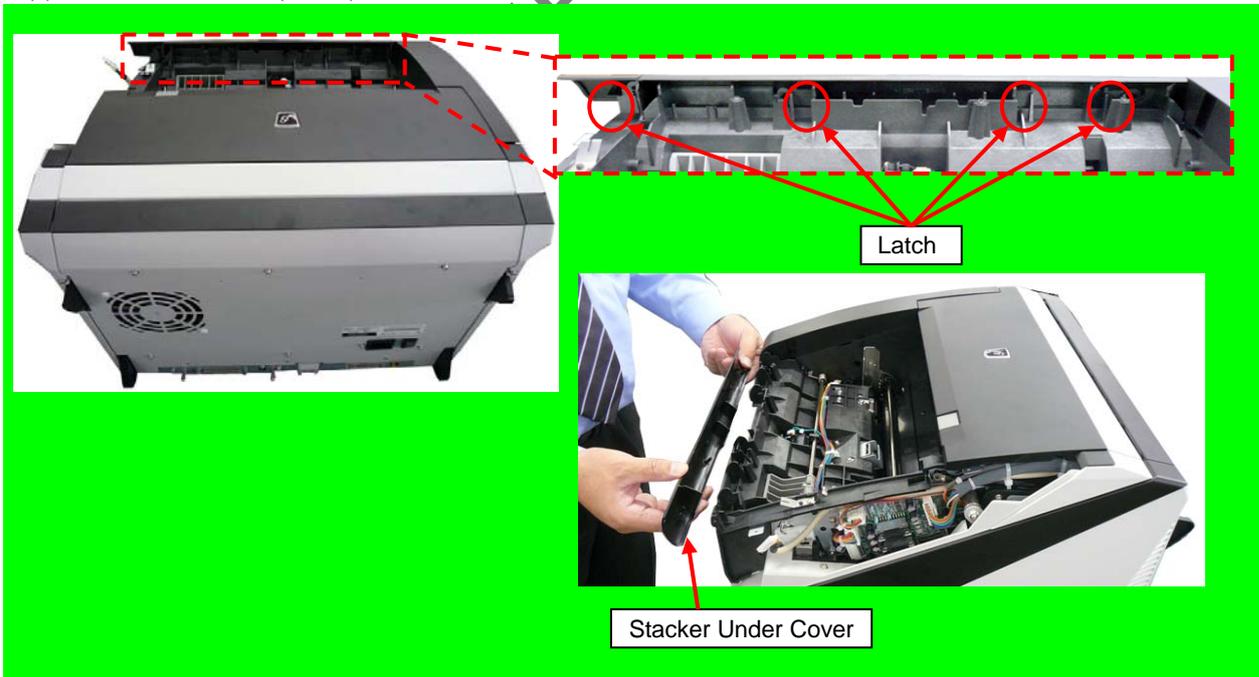
Refer to Section 4.2.10 for the part number and appearance of the Stacker Under Cover.

<Removal>

- (1) Remove the following parts.
 - Ⓔ Stacker Unit (Refer to Section 6.7.2.)
 - Ⓔ RV Cover R. (Refer to Section 6.8.4.)
- (2) Unlatch three tapping screws (circled) securing the STK-UNCOVER-FX, and then remove the STK-UNCOVER-FX.



- (3) Unlatch four latches (circled) to remove the Stacker Under Cover.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	122 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

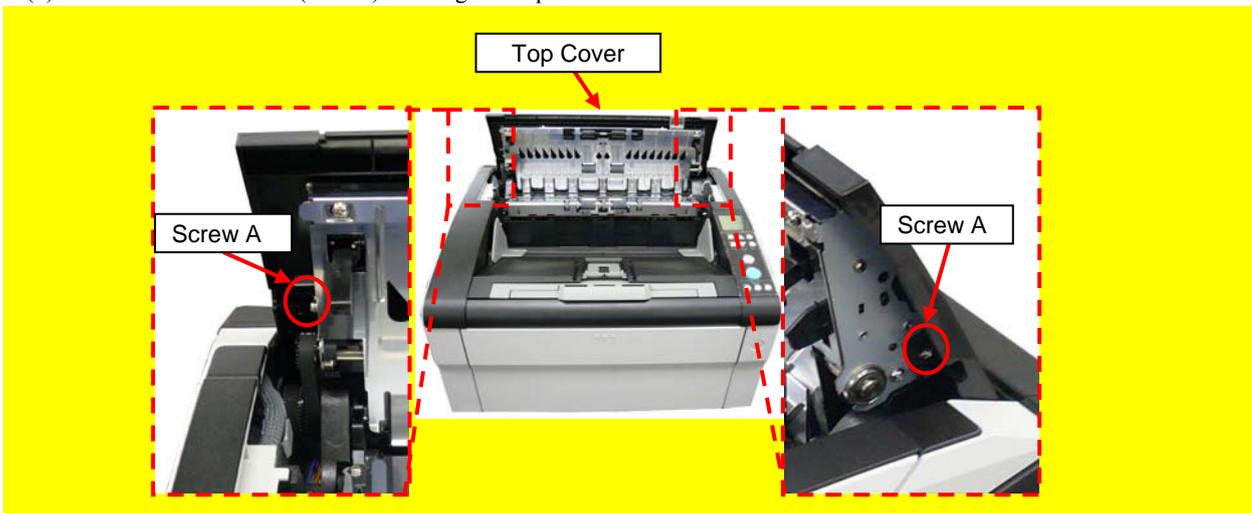
6.8.7 Top Cover

NOTICE

Refer to Section 4.2.11 for the part number and appearance of the Top Cover.

<Removal>

- (1) Open the Top Cover. (Refer to Section 8.1.4.)
- (2) Remove two screws A (circled) securing the Top Cover.

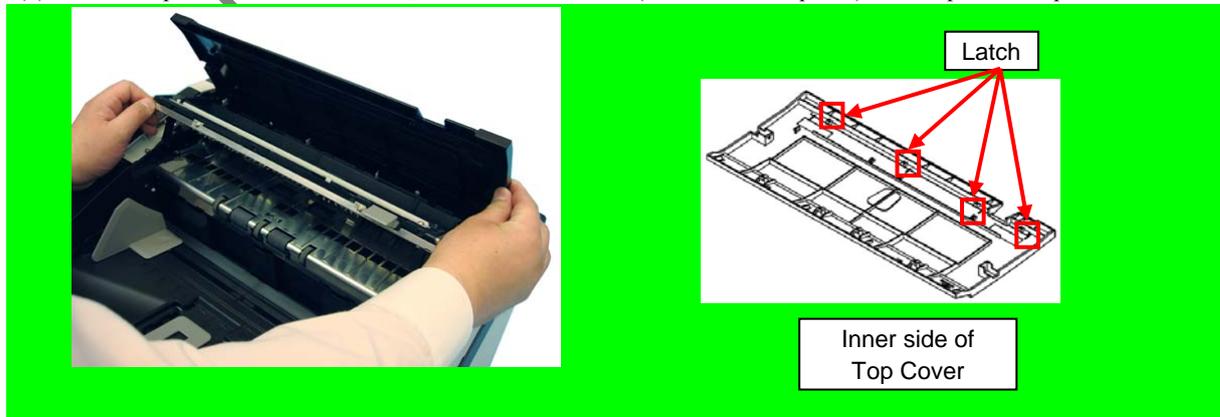


- (3) Open the rear side of the Top Cover to remove.



<Installation>

- (1) Attach Top Cover from its rear side, and latch four latches (enclosed with squares) at the top of the Top Cover.



- (2) Fix the Top Cover with the two screws.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	123 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.9 Replacing the Parts on the Operator Panel

6.9.1 CSL PCA

NOTICE

- Refer to Section 4.2.13 for the part number and appearance of the CSL PCA.
- The CSL PCA includes EEPROM. Back up the EEPROM data to the CT PCA temporarily before replacing the CSL PCA. (Refer to Section 7.1.9.)

<Removal>

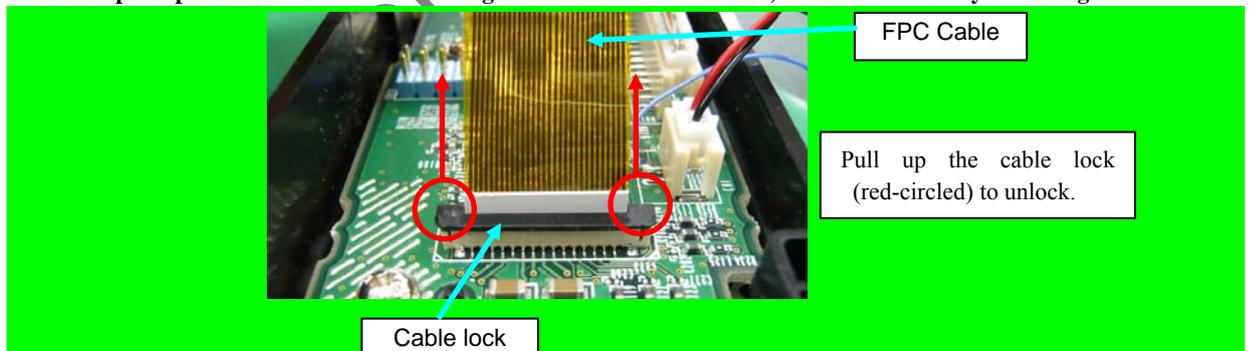
- (1) Open the Stacker Unit, and push up the Operator Panel to remove.
- (2) Disconnect two connectors (enclosed with square) from the rear of the Operator Panel.



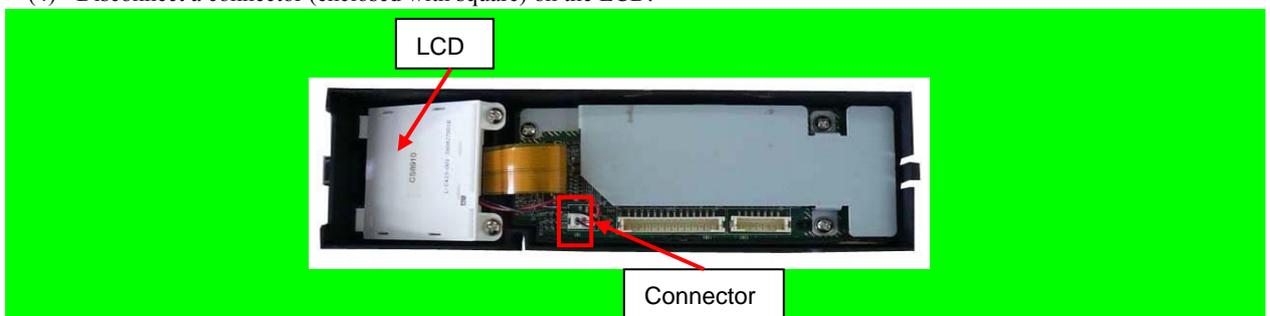
- (3) Pull up the cable lock securing the FPC Cable on the LCD to disconnect the FPC Cable.

NOTICE

Be sure to pull up the lock before disconnecting the FPC Cable. Otherwise, the FPC Cable may be damaged.

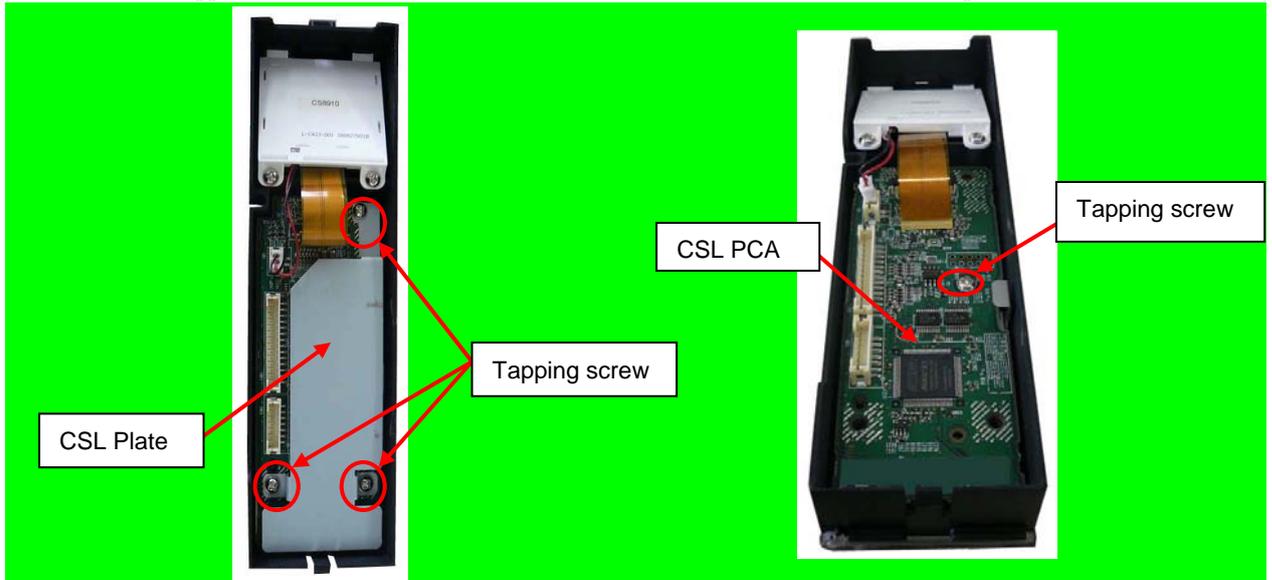


- (4) Disconnect a connector (enclosed with square) on the LCD.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	124 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

- (5) Remove three tapping screws securing the CSL Plate to remove the CSL Plate.
- (6) Remove a tapping screw securing the CSL PCA, and then remove the CSL PCA from the Operator Panel.



<Installation>

Follow the above procedure in reverse.

NOTICE

- Be sure to insert the FPC Cable all the way into the connector. (Refer to installation procedure in Section 6.9.2.)
- After replacing the CSL PCA, be sure to restore the EEPROM data from the CT PCA to the CSL PCA. (Refer to Section 7.1.9.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	125 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.9.2 LCD

NOTICE

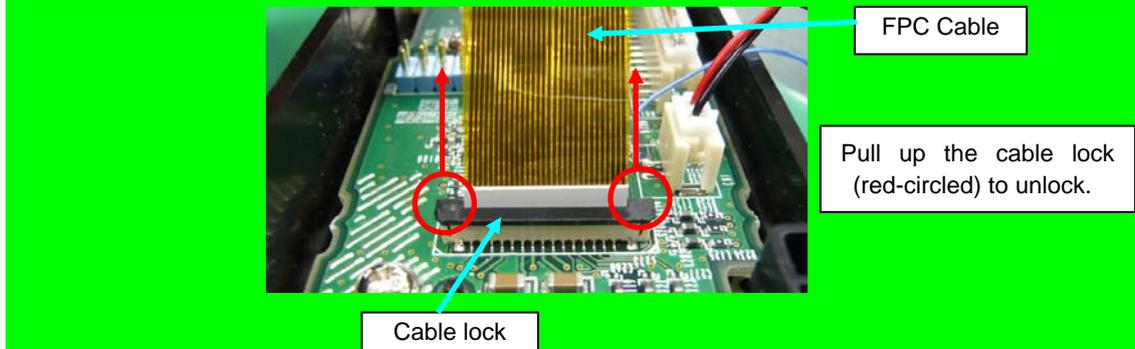
Refer to Section 4.2.14 for the part number and appearance of the LCD.

<Removal>

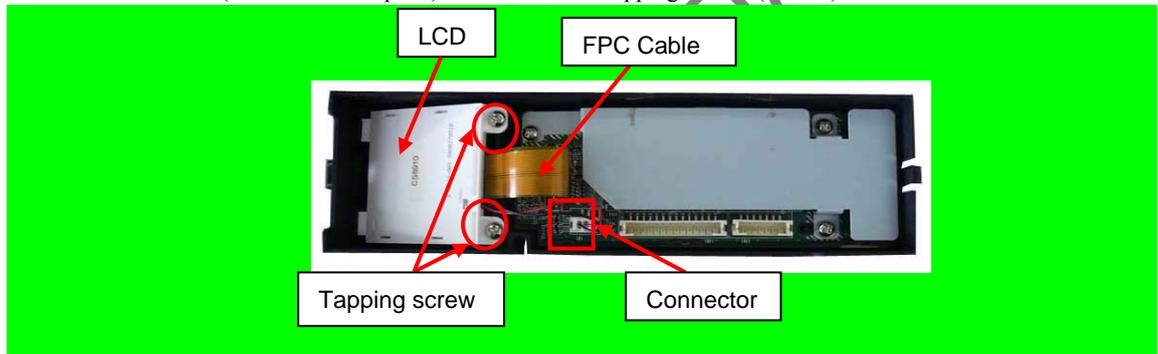
- (1) Remove the Operator Panel by referring to steps (1) ~ (2) in Section 6.9.1.
- (2) Pull up the cable lock securing the FPC Cable on the LCD to disconnect the FPC Cable.

NOTICE

Be sure to pull up the lock before disconnecting the FPC Cable. Otherwise, the FPC Cable may be damaged.

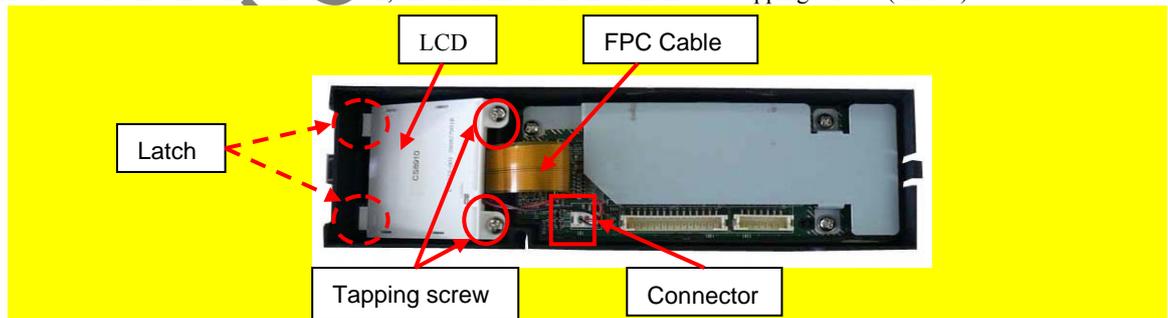


- (3) Disconnect a connector (enclosed with square) and remove two tapping screws (circled) to remove the LCD.



<Installation>

- (1) Insert two latches into the console cover, and then fix the LCD with the two tapping screws (circled).

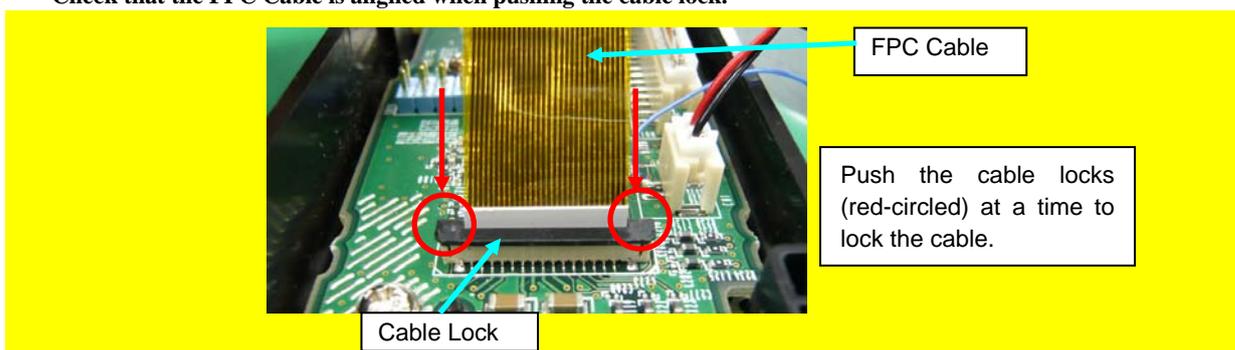


- (2) Connect the connector (enclosed with square) on the LCD.
- (3) Insert the FPC cable on the LCD horizontally all the way into the connector, and then push the cable locks (red-circled) at a time to lock the FPC Cable.

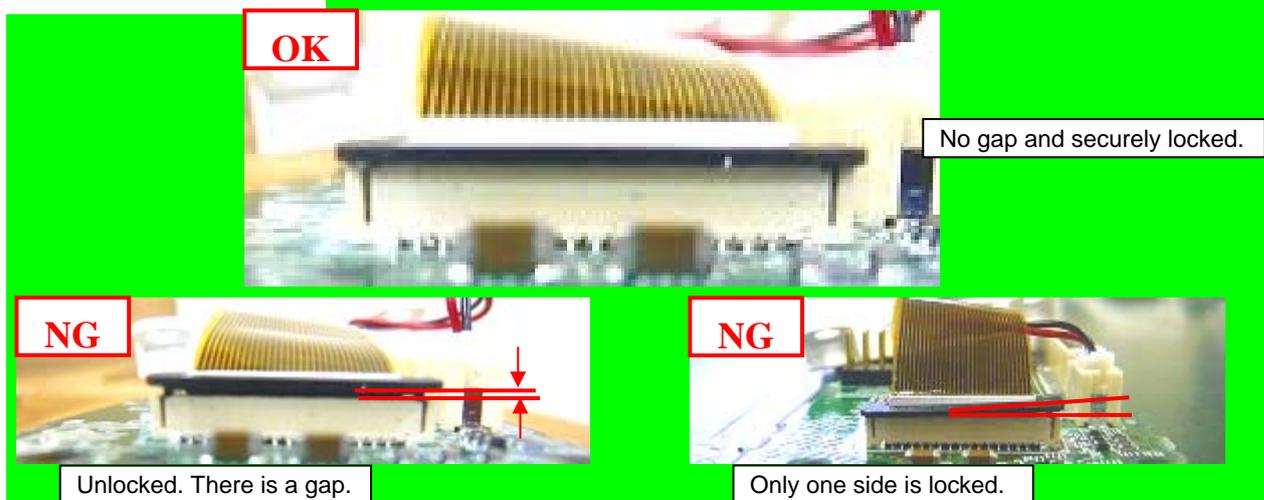
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	126 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

NOTICE

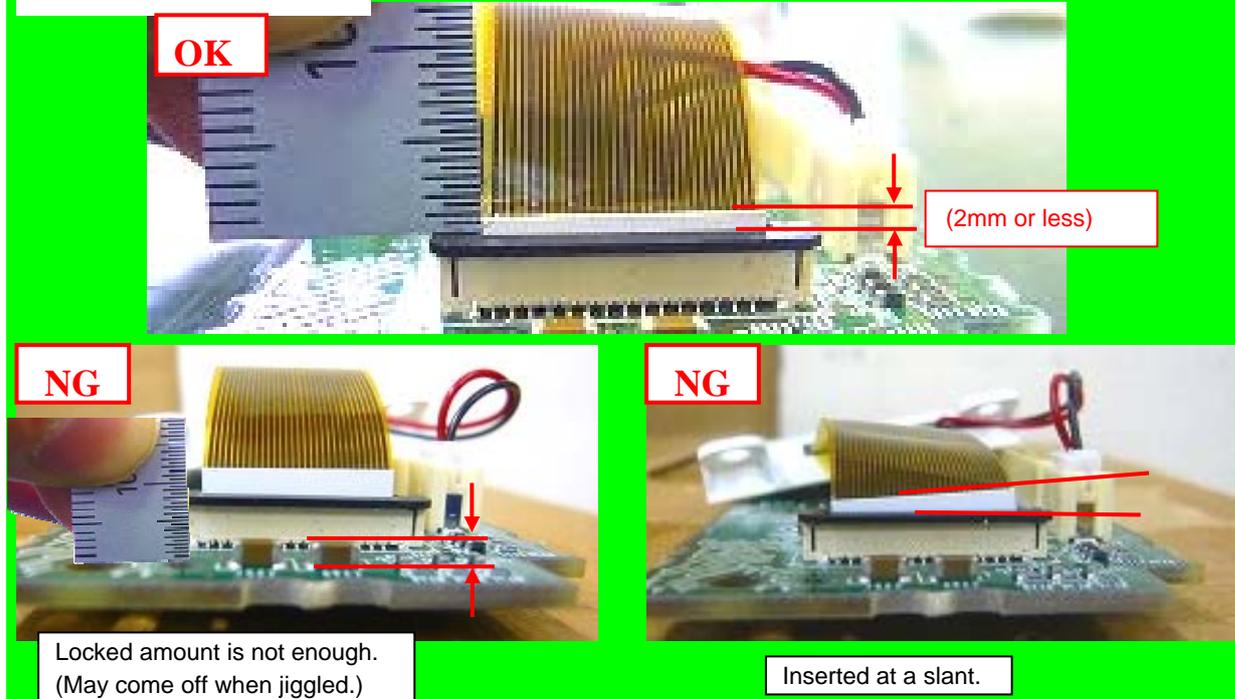
Check that the FPC Cable is aligned when pushing the cable lock.



<Cable lock confirmation>



<Check the locked amount>



(4) Install the Operator Panel.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	127 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.10 Replacing the Parts on the CT PCA Unit

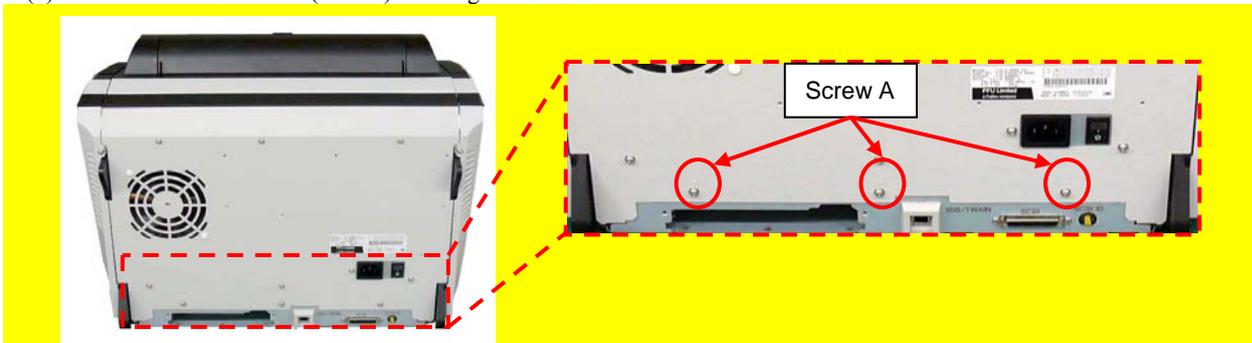
6.10.1 CT PCA

NOTICE

Refer to Section 4.2.52 for the part number and appearance of the CT PCA.

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Remove three screws A (circled) securing the CT Base.



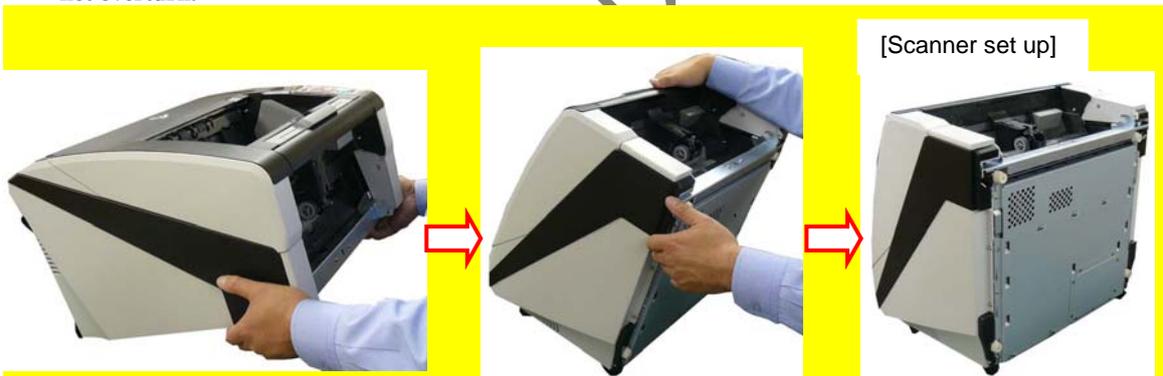
NOTICE

Unplug the power cable and USB/SCSI cable before setting up the scanner (rear side on the bottom). (Refer to Section 6.6.)

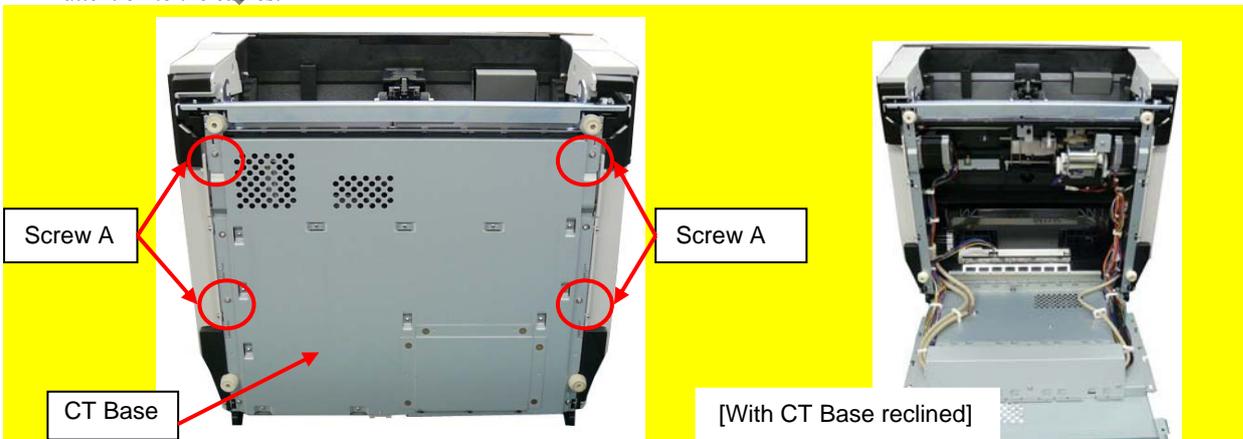
- (3) Make sure that the ADF is completely closed, and then set up the scanner by holding the bottom of the scanner at right and left sides (the rear side comes to bottom).

NOTICE

- If the ADF is not closed completely, it may be open and damaged when the scanner is set up.
- When setting up the scanner (rear comes to bottom), check that the place has enough space and the scanner does not overturn.

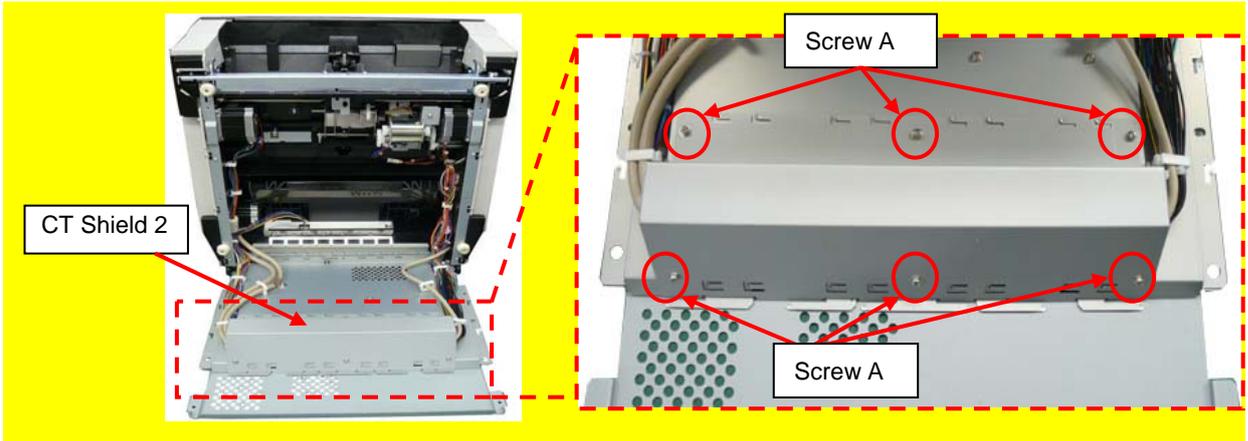


- (4) Holding the CT Base, remove four screws A (circled) securing the CT Base, and tilt the CT Base slowly by paying attention to the cables.

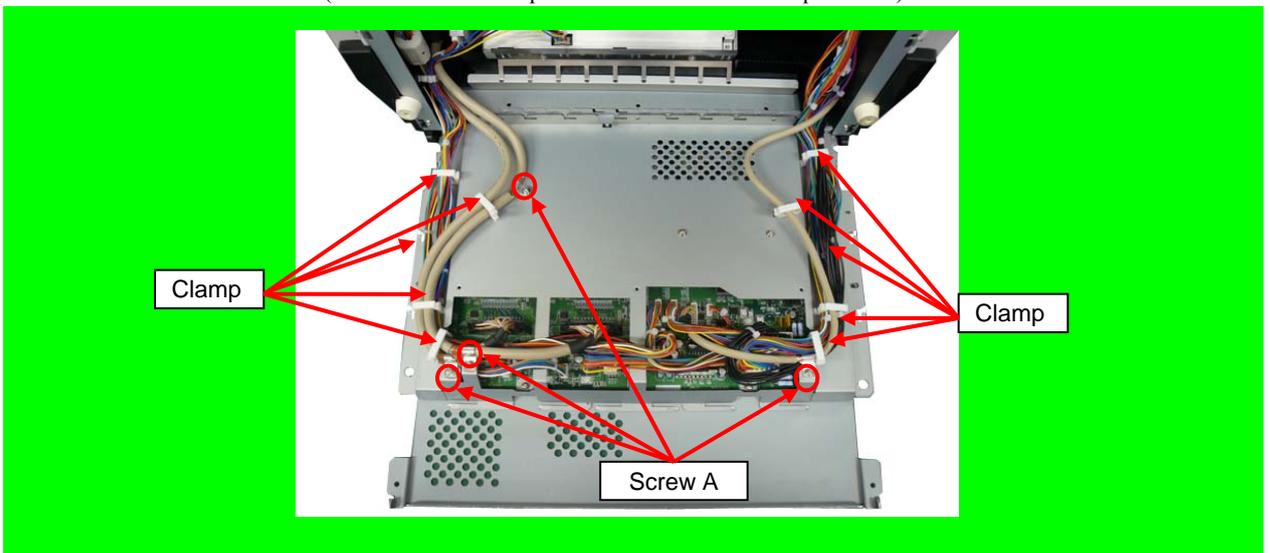


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	128 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

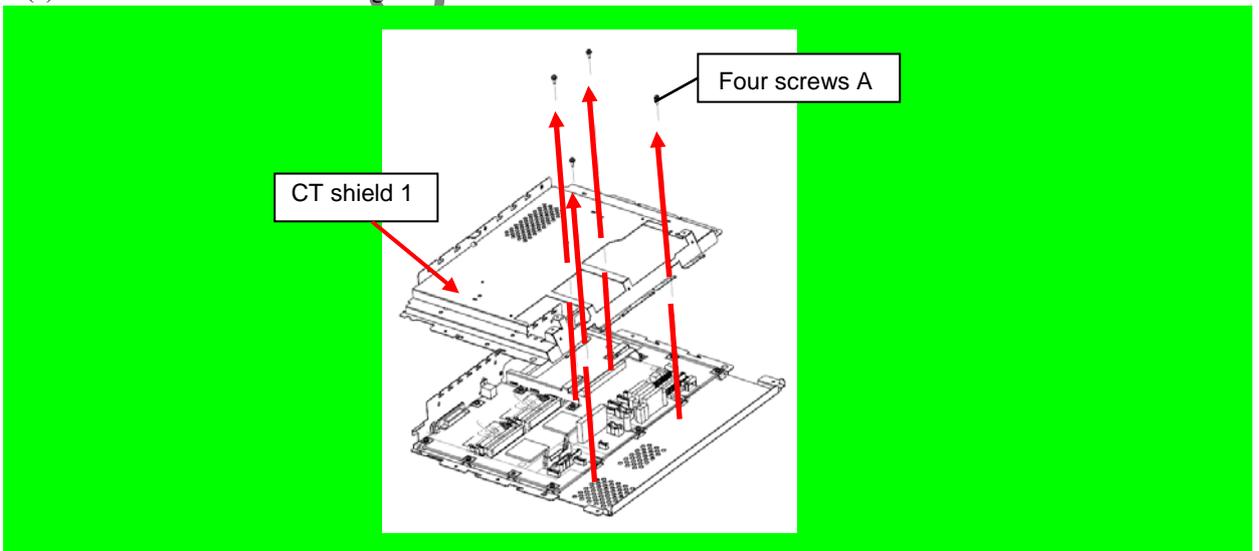
(5) Remove six screws A (circled) securing the CT Shield 2 to remove the CT Shield 2.



(6) Disconnect four screws A (circled), and remove all cables from ten white clamps. And then disconnect 15 connectors connected to the CT PCA. (Refer to installation procedure for the connector positions.)

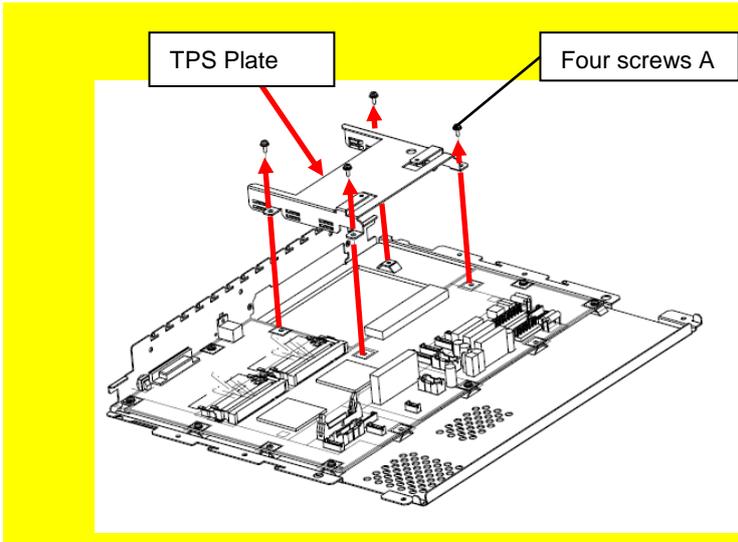


(7) Remove four screws A securing the CT Shield 1 to remove the CT Shield 1.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	129 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

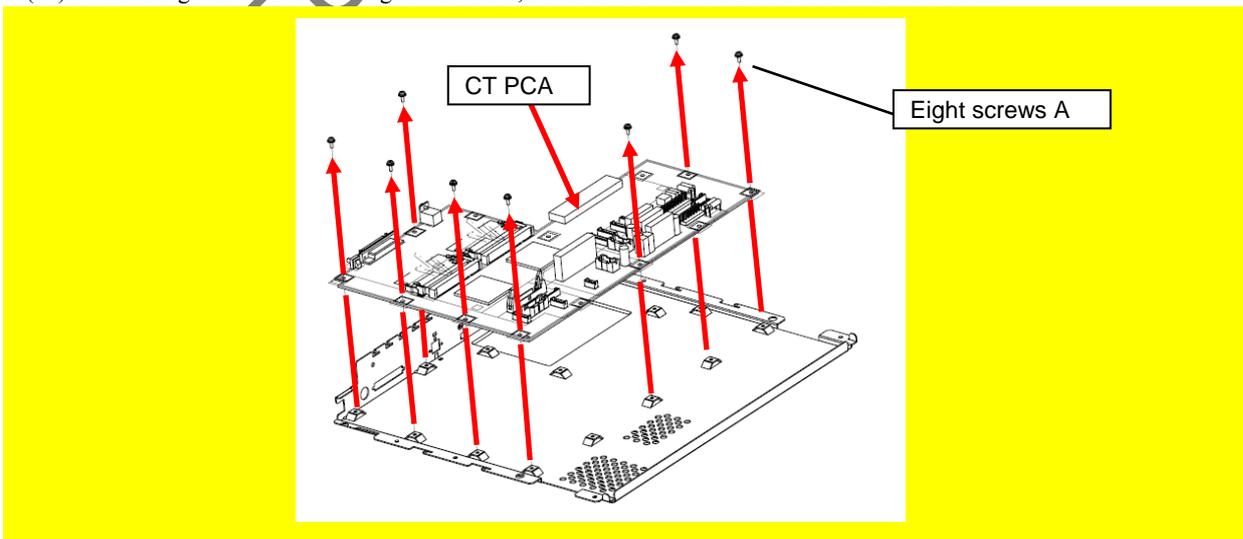
- (8) Remove two Memories. (Refer to Section 6.10.3.)
- (9) Remove four screws securing the TPS Plate to remove the TPS Plate.



- (10) Unlatch one latch (enclosed with square) and remove the USB Protector. Remove one screw H and two screws I.



- (11) Remove eight screws A securing the CT PCA, and then remove the CT PCA from the CT Base.



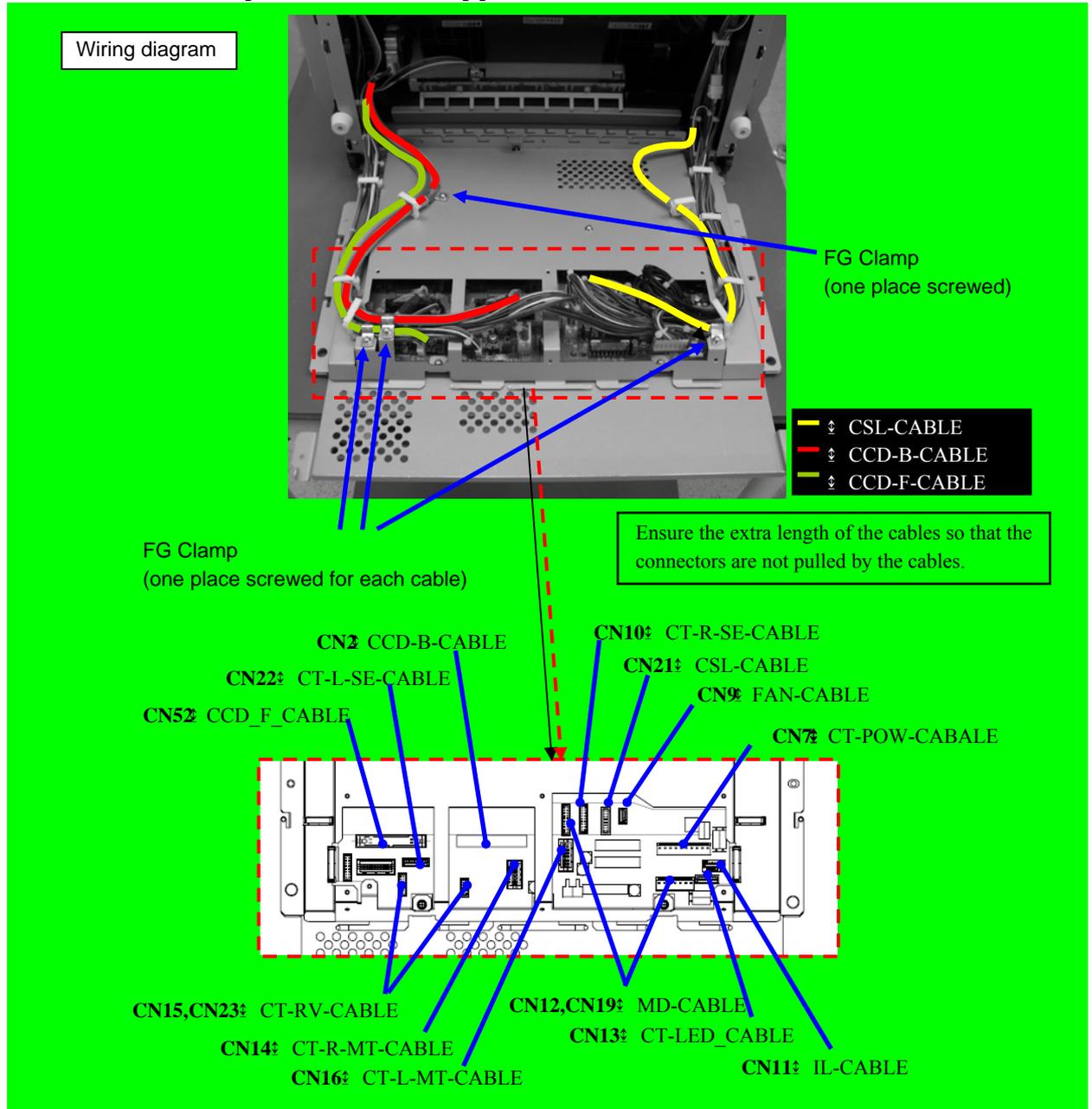
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	130 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

Follow the above procedure in reverse.

NOTICE

- Refer to Installation procedure in Section 6.10.2 for where to install the Memories.
- Check the connector positions and cable clamp positions at installation.

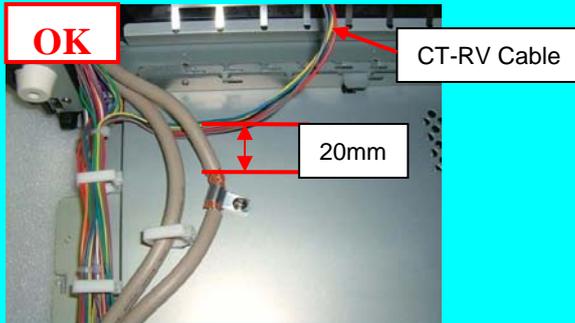


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	131 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

NOTICE

Check the cable route while installing the CT PCA.

(1) CT-RV Cable

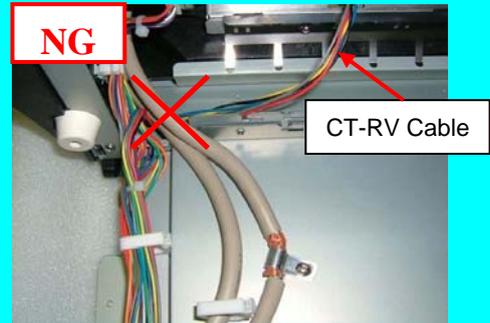


OK

CT-RV Cable

20mm

Route the CT-RV Cable under the CCD_F_Cable and CCD-B-Cable, and 20mm closer to the rear side from the FG Clamp for the CCD-B Cable (in the middle of the FG Clamp and back of the plate).

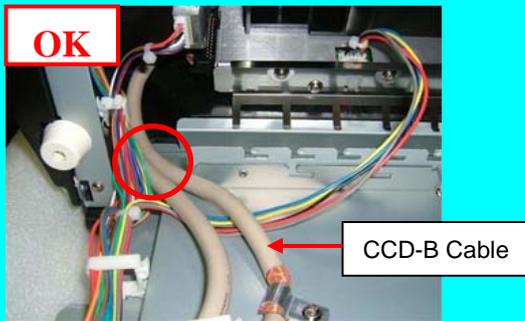


NG

CT-RV Cable

Bad example:
CT-RV Cable comes out of the plate.

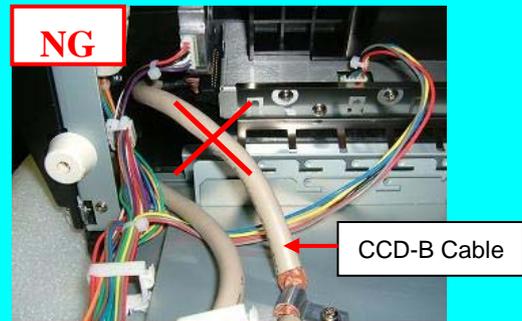
(2) CCD-B Cable



OK

CCD-B Cable

CCD-B Cable touches the rising edge of the plate, and it does not touch the Feed Motor Unit 2.

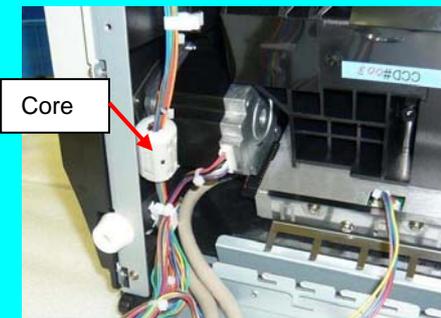


NG

CCD-B Cable

Bad example:
CCD-B Cable is located on the plate.
(CCD-B Cable touches the Feed Motor Unit 2.)

(3) Notes on closing the CT Base



Core

Check that the cables are wrapped with the core so that they do not touch the Feed Motor Unit 2.



When closing the CT Base, check that the CCD-B Cable touches the rising edge of the plate and does not touch the Feed Motor Unit 2.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	132 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

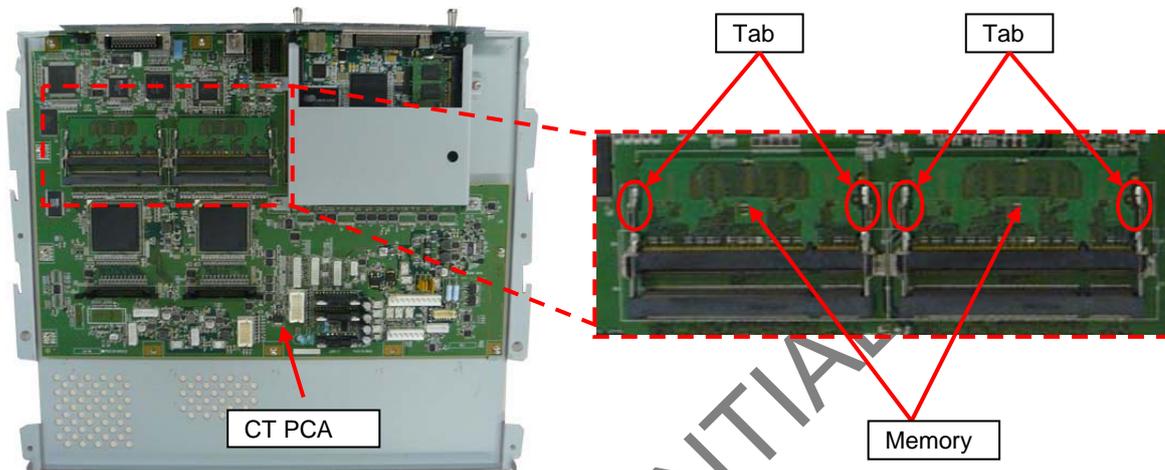
6.10.2 Memory (CT PCA)

NOTICE

Refer to Section 4.2.53 for the part number and appearance of the Memory (DIMM).

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base, and remove the CT Shield 2 and CT Shield 1. (Refer to steps (2) ~ (7) in Section 6.10.1.)
- (3) Open two tabs (circled) at right and left sides of the Memories on the CT Board, and remove the Memories.

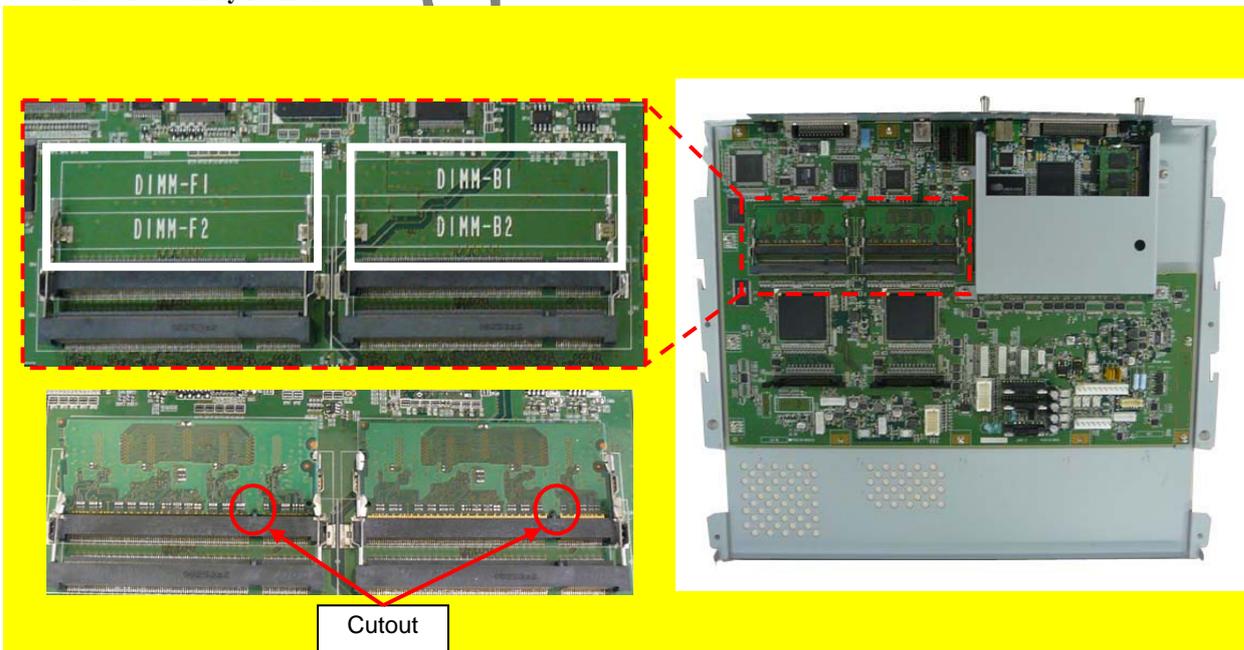


<Installation>

Follow the above procedure in reverse.

NOTICE

- Check the Memory slot positions (DIMM-F1, DIMM-B1, enclosed with square) before installing the Memories. (Do NOT install them onto DIMM-F2 and DIMM-B2.)
- Place the Memories aligning with the cutouts, tilt them downward, and make sure that the tabs at right and left sides are securely latched.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	133 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

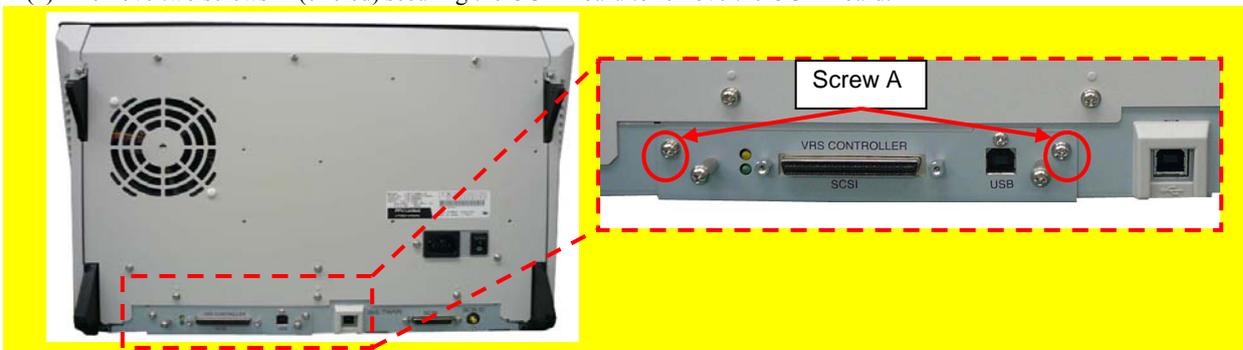
6.10.3 CGA Board / Memory

NOTICE

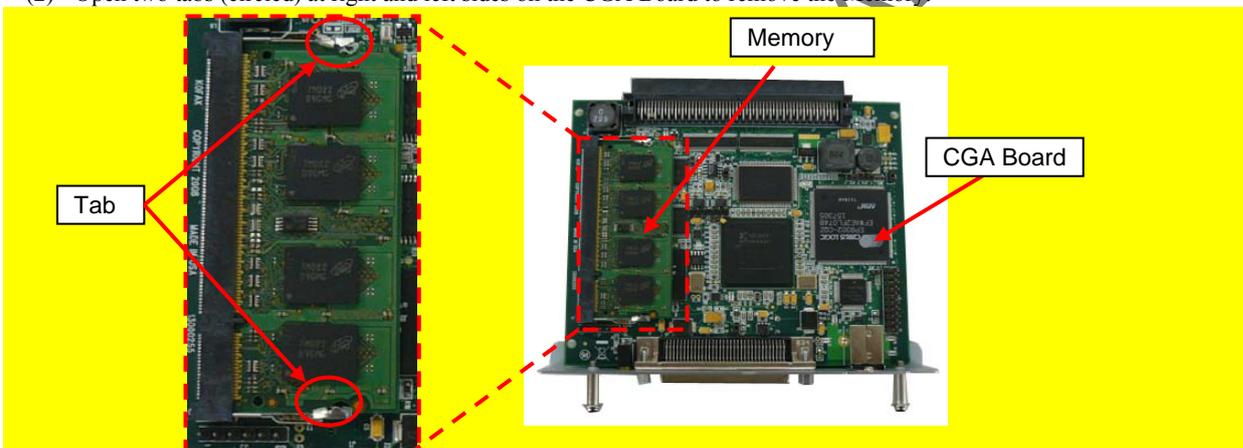
Refer to Section 4.2.54 for the part number and appearance of the CGA Board and Section 4.2.55 for the Memory (DIMM). CGA Board includes the Memory (DIMM).

<Removal>

- (1) Remove two screws A (circled) securing the CGA Board to remove the CGA Board.



- (2) Open two tabs (circled) at right and left sides on the CGA Board to remove the Memory.

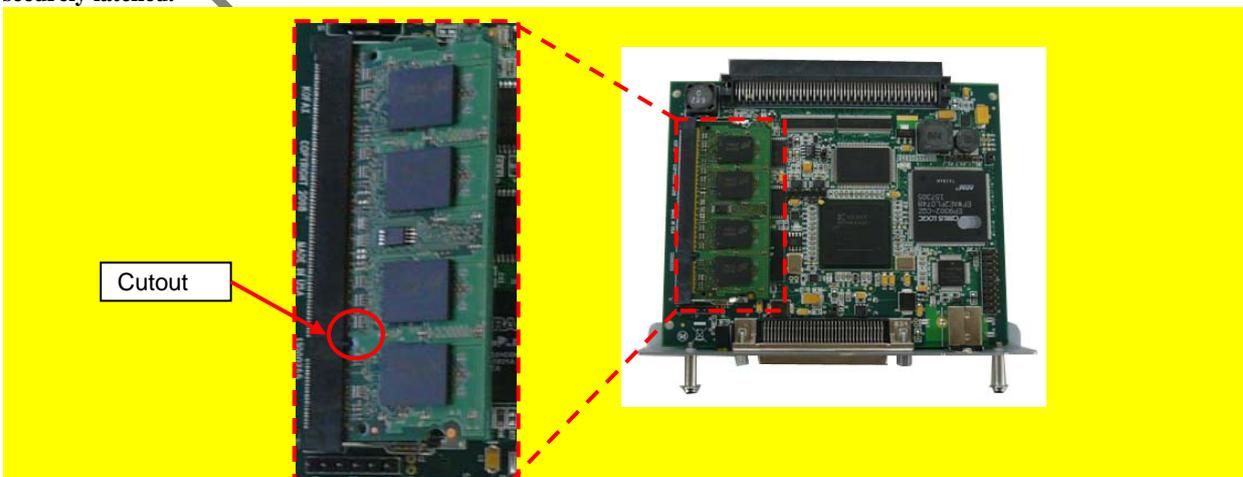


<Installation>

Follow the above procedure in reverse.

NOTICE

Place the Memory aligning with the cutouts, tilt them downward, and make sure that the tabs at right and left sides are securely latched.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	134 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

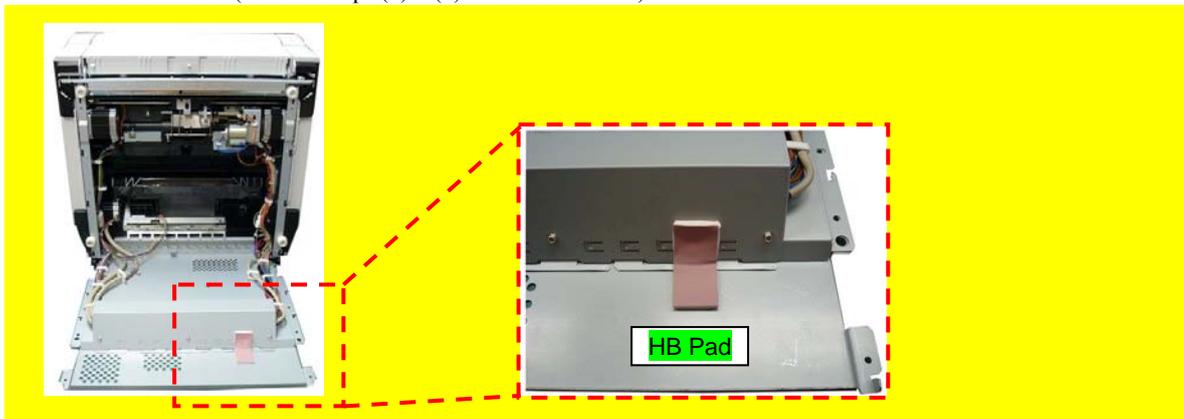
6.10.4 HB Pad

NOTICE

Refer to Section 4.2.24 for the part number and appearance of the HB Pad.

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)



<Installation>

- Follow the above procedure in reverse.
- Paste the HB Pad along the guide line.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	135 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

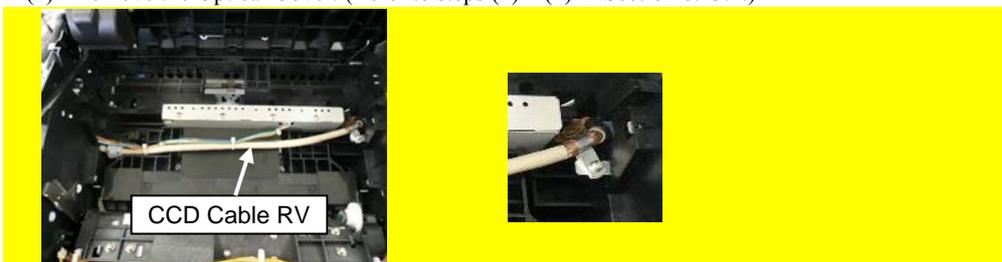
6.10.5 CCD Cable RV

NOTICE

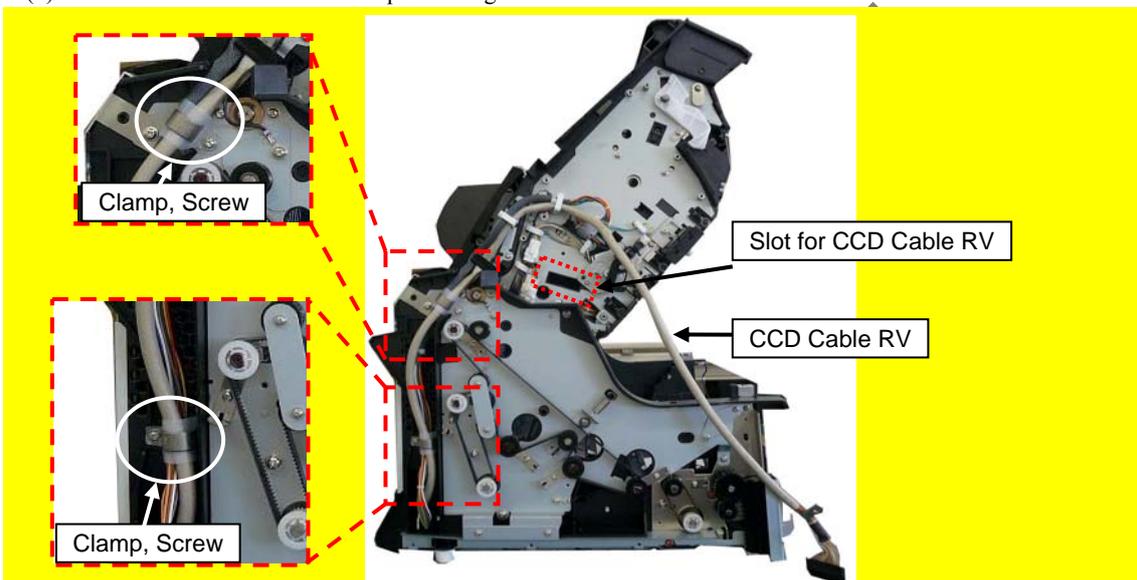
Refer to Section 4.2.68 for the part number and appearance of the CCD Cable RV.

<Removal>

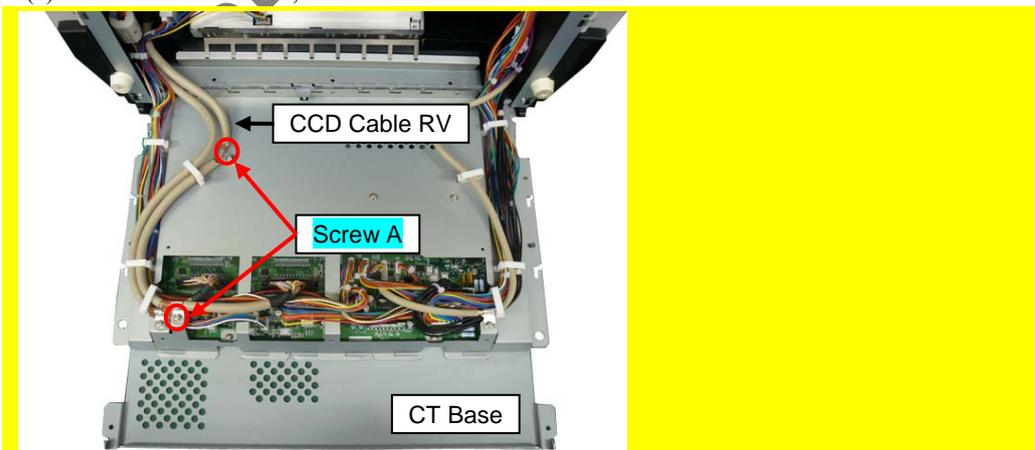
- (1) Remove the Stacker Unit. (Refer to Section 6.7.2.)
- (2) Remove the Optical Cover. (Refer to steps (2) ~ (4) in Section 6.13.1.)



- (3) Remove the FX Cover L (Section 6.8.1), RV Cover L (Section 6.8.3) and RV Side Cover L (step (2) in Section 6.13.6).
- (4) Remove two screws on the clamps securing the CCD Cable RV.



- (5) Remove the CT Base. (Refer to steps (1) ~ (6) in Section 6.10.1.)
- (6) Remove two screws A, and remove the CCD Cable RV.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	136 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

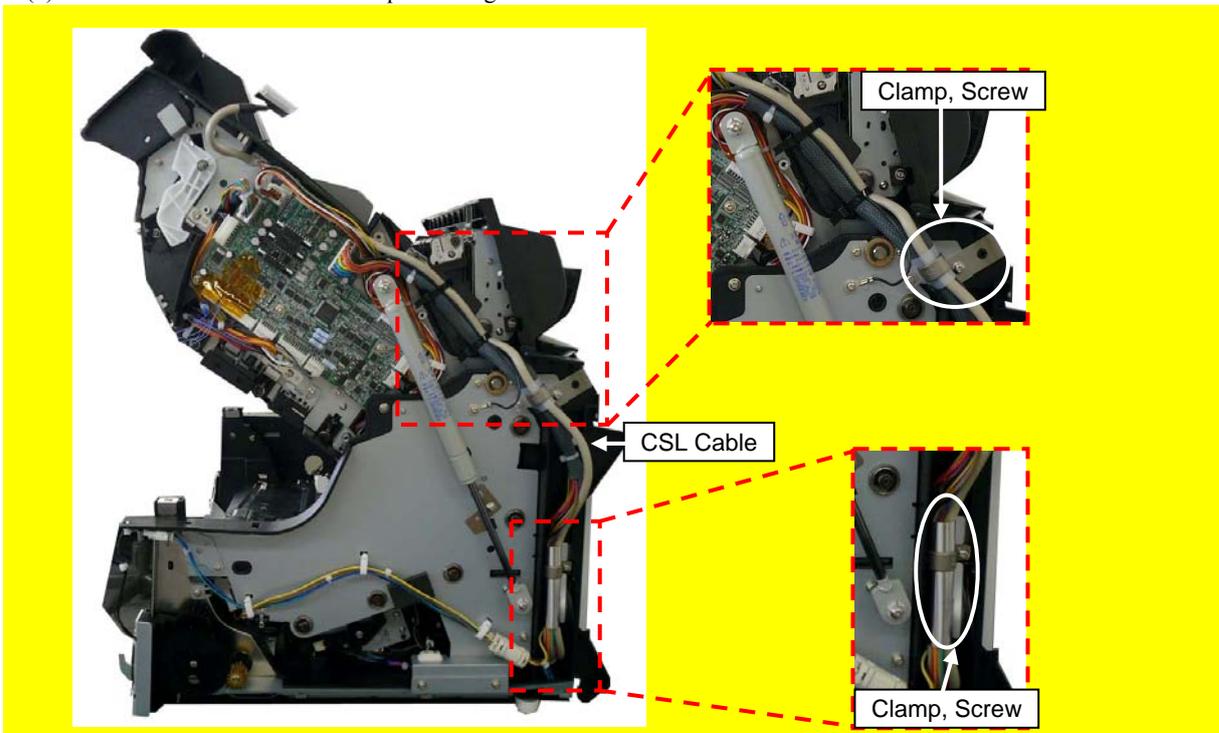
6.10.6 CSL Cable

NOTICE

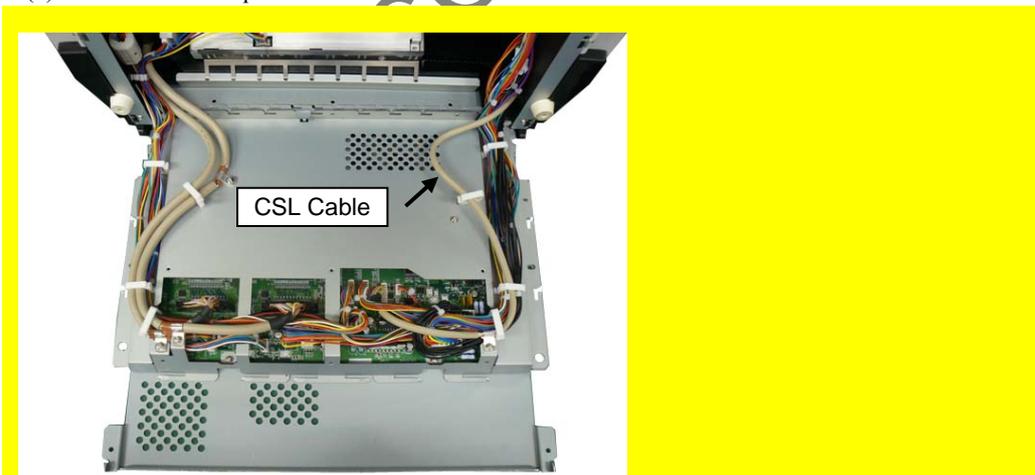
Refer to Section 4.2.69 for the part number and appearance of the CSL Cable.

<Removal>

- (1) Remove the FX Cover R (Section 6.8.2), RV Cover L (Section 6.8.4) and RV Side Cover R (step (3) in Section 6.13.6).
- (2) Remove two screws on the clamps securing the CSL Cable.



- (3) Remove the CT Base. (Refer to steps (1) ~ (6) in Section 6.10.1.)
- (4) Remove the clamps and then the CSL Cable.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	137 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

6.11 Replacing the Parts in the Power Supply

6.11.1 Power Supply

NOTICE

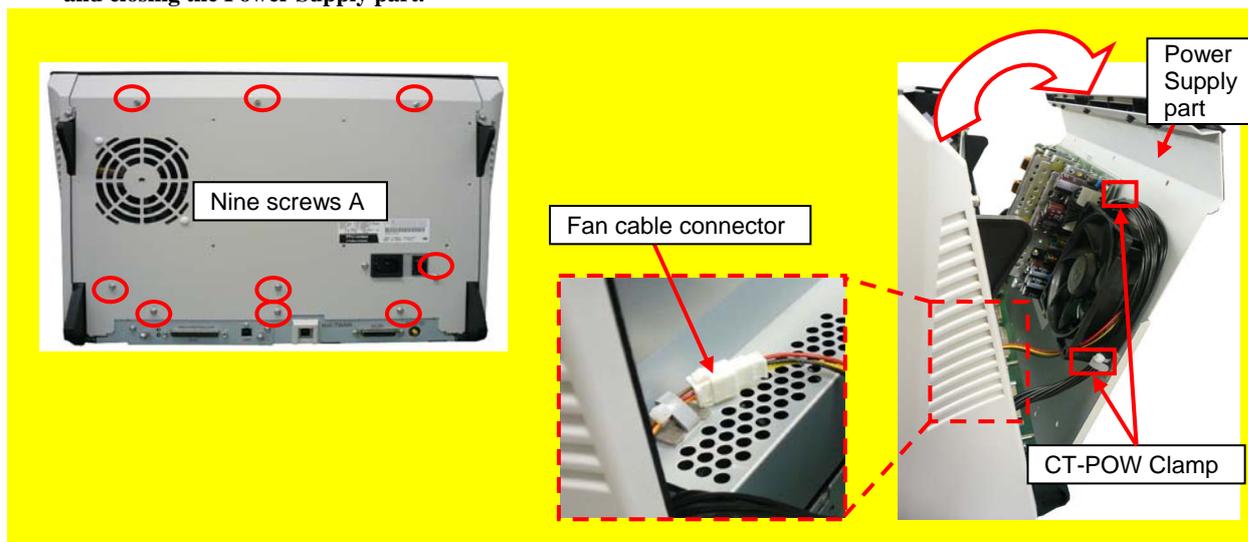
Refer to Section 4.2.58 for the part number and appearance of the Power Supply.

<Removal>

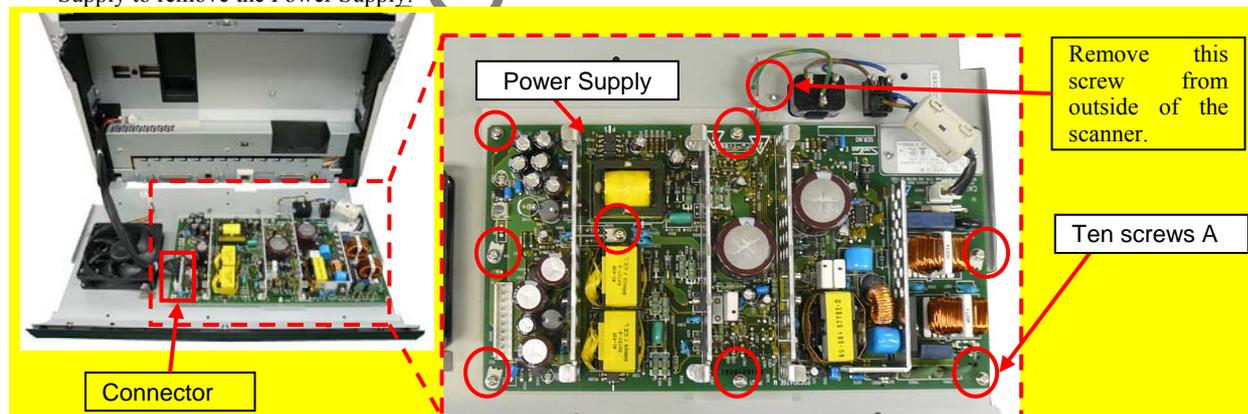
- (1) Remove nine screws A (circled) securing the Power Supply, open the Power Supply part, disconnect the Fan cable connector and remove two clamps (enclosed with square) for the CT-POW Cable.

NOTICE

The FAN cable and CT-POW cable are short because the surpluses of them are clamped. Be careful when opening and closing the Power Supply part.



- (2) Disconnect a connector (enclosed with square) for CT-POW Cable and remove ten screws A (circled) securing the Power Supply to remove the Power Supply.



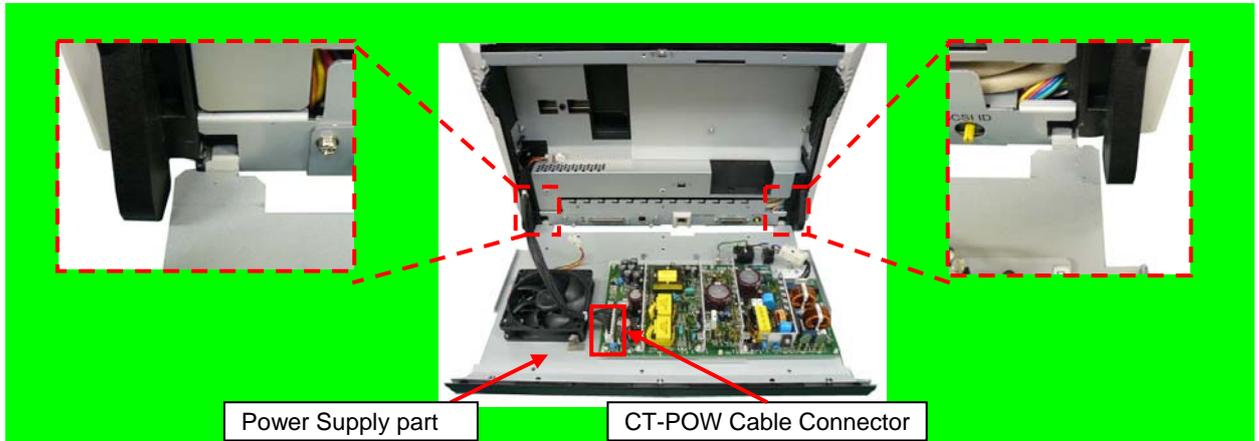
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	138 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

Follow the above procedure in reverse.

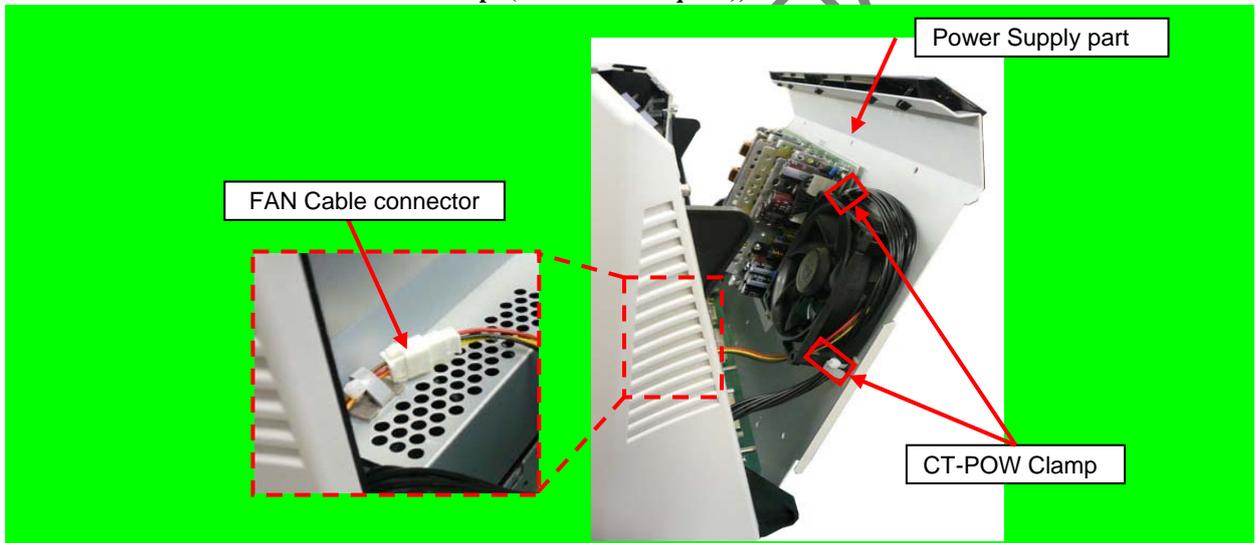
NOTICE

When installing the Power Supply part, set the hooks at right and left sides in the frame on the scanner first, and connect the CT-POW Cable connector.



NOTICE

Hook the CT-POW Cable onto two clamps (enclosed with square), and then install the Fan Cable connector.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	139 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

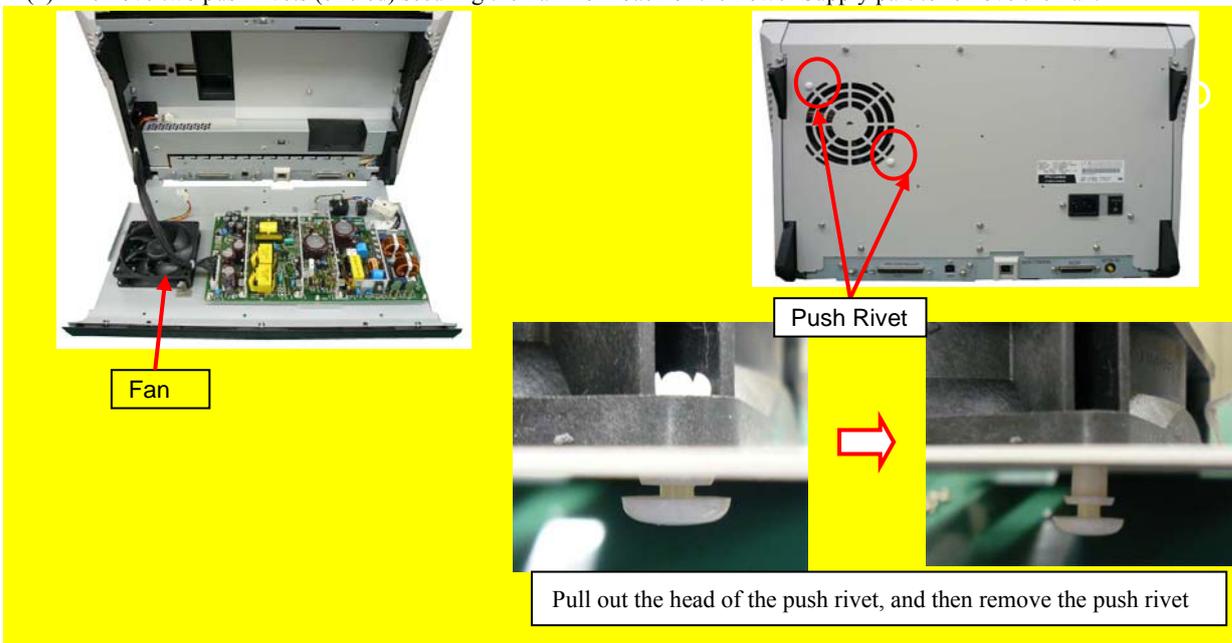
6.11.2 Fan

NOTICE

Refer to Section 4.2.59 for the part number and appearance of the Fan.

<Removal>

- (1) Remove the Power Supply part. (Refer to step (1) in Section 6.11.1.)
- (2) Remove two push rivets (circled) securing the Fan from back of the Power Supply part to remove the Fan.

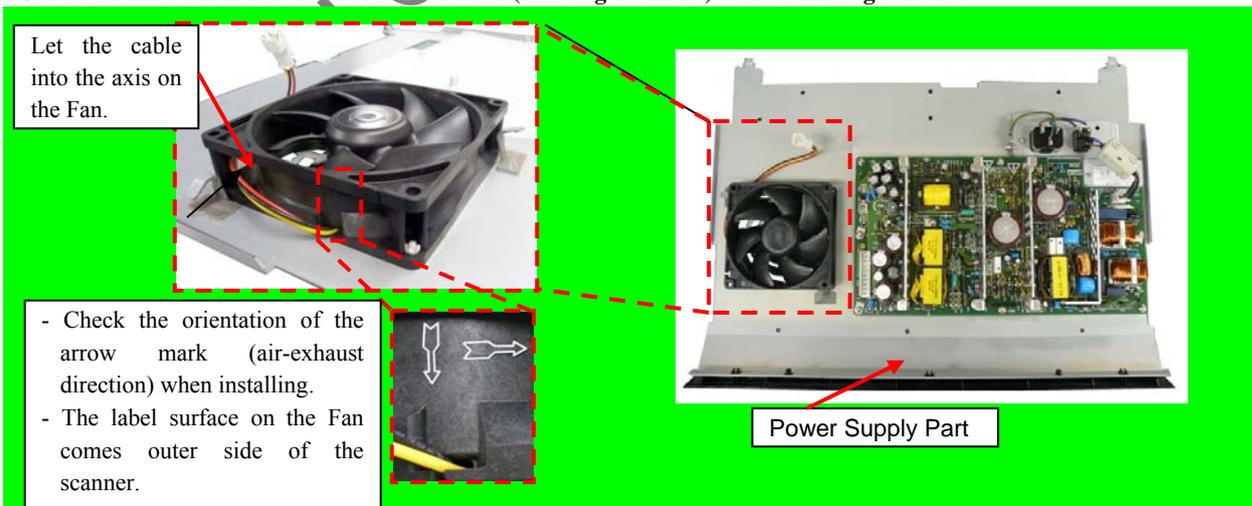


<Installation>

Follow the above procedure in reverse.

NOTICE

- Check the cable route and direction of the wind (emitting direction) when installing the Fan.



- Refer to Section 6.11.1 “Power Supply installation procedure” for how to install the Fan connector.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	140 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12 Replacing the Parts in the Fixed Unit

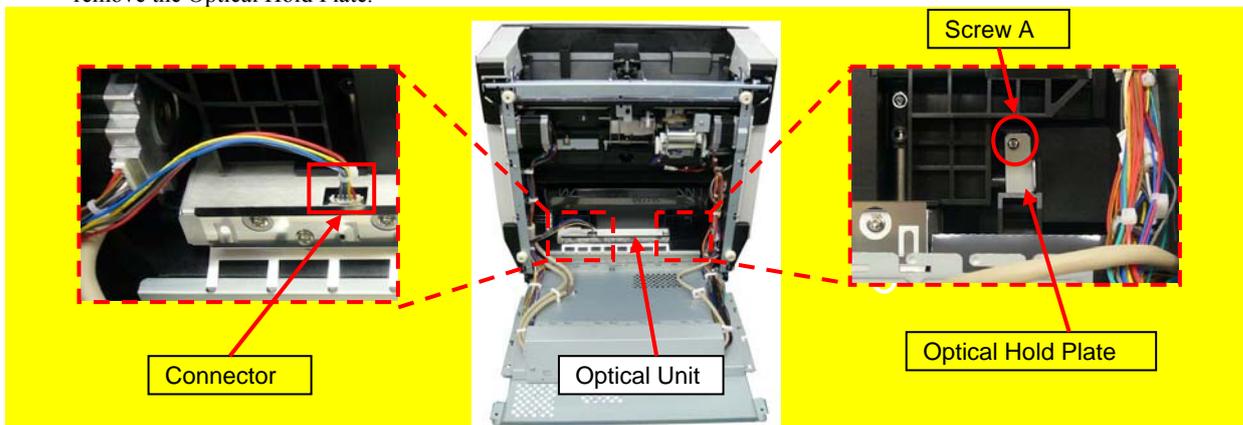
6.12.1 Optical Unit

NOTICE

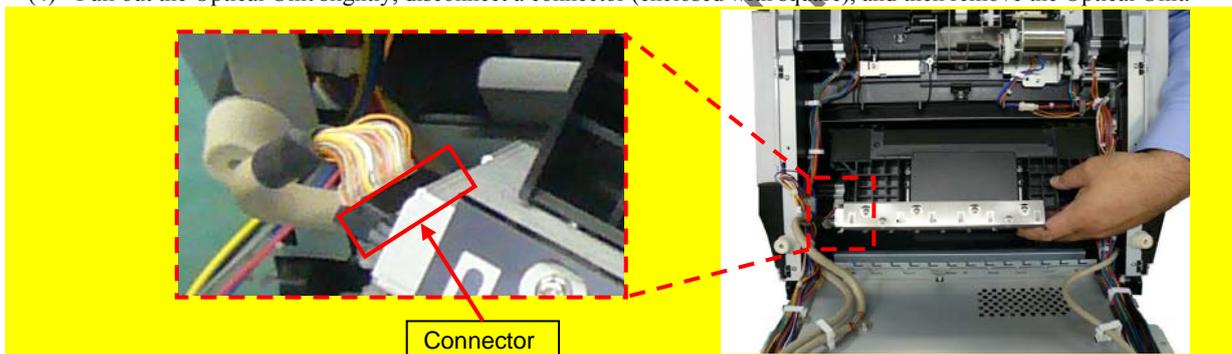
Refer to Section 4.2.15 for the part number and appearance of the Optical Unit.

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Disconnect a connector (enclosed with square), and then remove a screw A (circled) securing the Optical Hold Plate to remove the Optical Hold Plate.



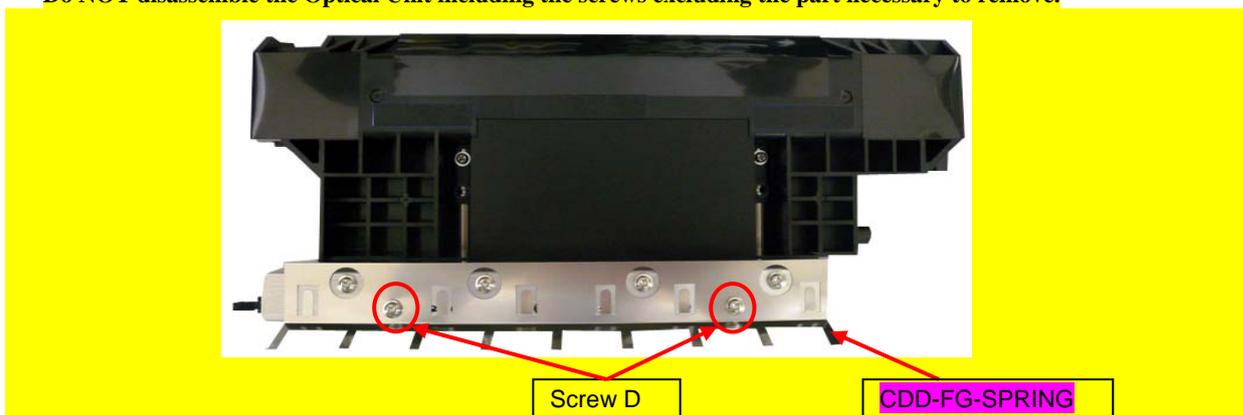
- (4) Pull out the Optical Unit slightly, disconnect a connector (enclosed with square), and then remove the Optical Unit.



- (5) Remove two screws D, and then remove the CDD-FG-SPRING from the Optical Unit.

NOTICE

Do NOT disassemble the Optical Unit including the screws excluding the part necessary to remove.



<Installation>

Follow the above procedure in reverse.

NOTICE

- When holding the Optical Unit, do not touch the CCD board (metal frame) or mirror (glass) but the black frame.
- After replacing the Optical Unit, perform Offset adjustment and White level adjustment. (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	141 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

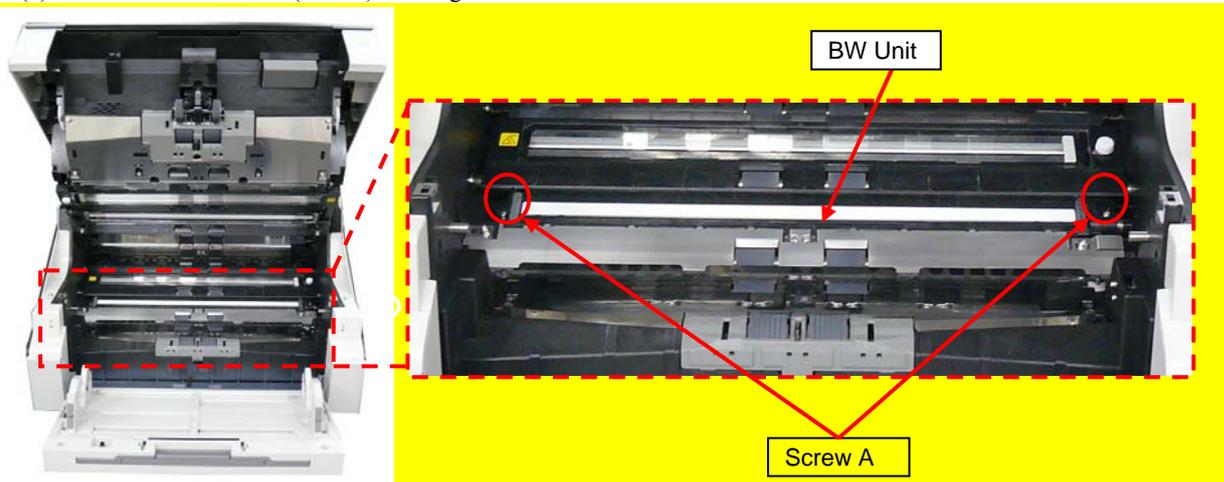
6.12.2 BW Unit

NOTICE

Refer to Section 4.2.20 for the part number and appearance of the BW Unit.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove two screws A (circled) securing the BW Unit to remove the BW Unit.



- (3) Remove the Glass FG bracket from the BW Unit.

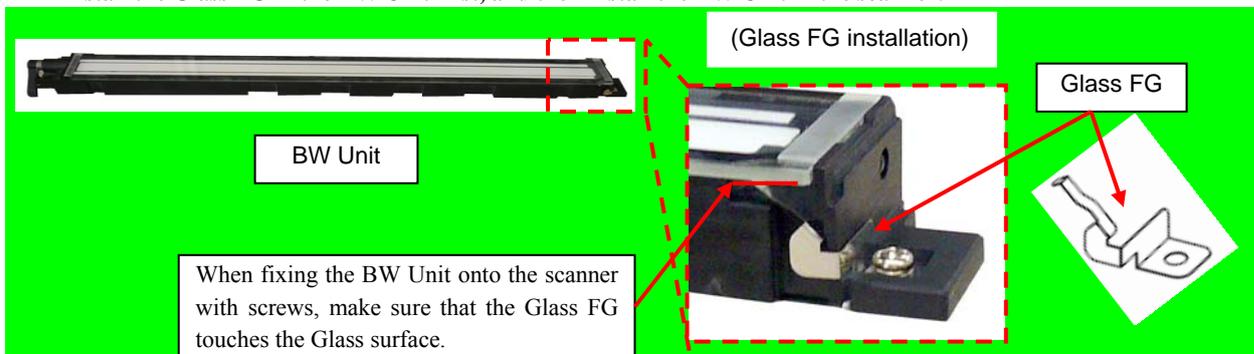


<Installation>

Follow the above procedure in reverse.

NOTICE

- Install the Glass FG in the BW Unit first, and then install the BW Unit in the scanner.



- When holding the BW Unit, do not touch the mirror (glass) but the black frame.
- After replacing the BW Unit, perform Offset adjustment and White level adjustment. (Refer to Chapter 7.3.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	142 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

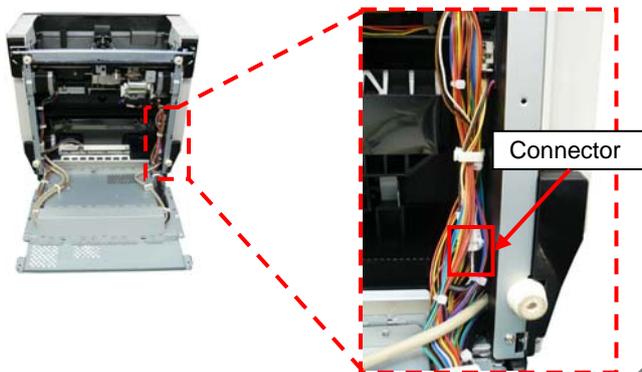
6.12.3 BW Motor Unit

NOTICE

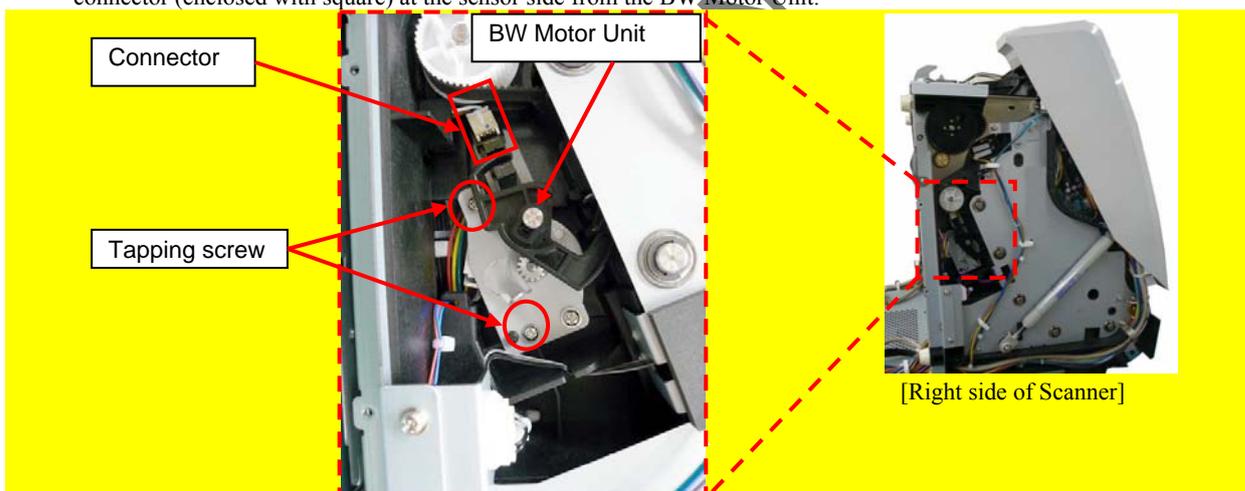
Refer to Section 4.2.21 for the part number and appearance of the BW Motor Unit.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Recline the CT Base (Refer to removal steps (2) ~ (4) in Section 6.10.1.).
- (3) Unhook the BW Motor Unit cable from the clamps inside of the Fixed Unit, and then disconnect a connector (enclosed with square).



- (4) Remove two tapping screws (circled) securing the BW Motor Unit to remove the BW Motor Unit, and disconnect a connector (enclosed with square) at the sensor side from the BW Motor Unit.

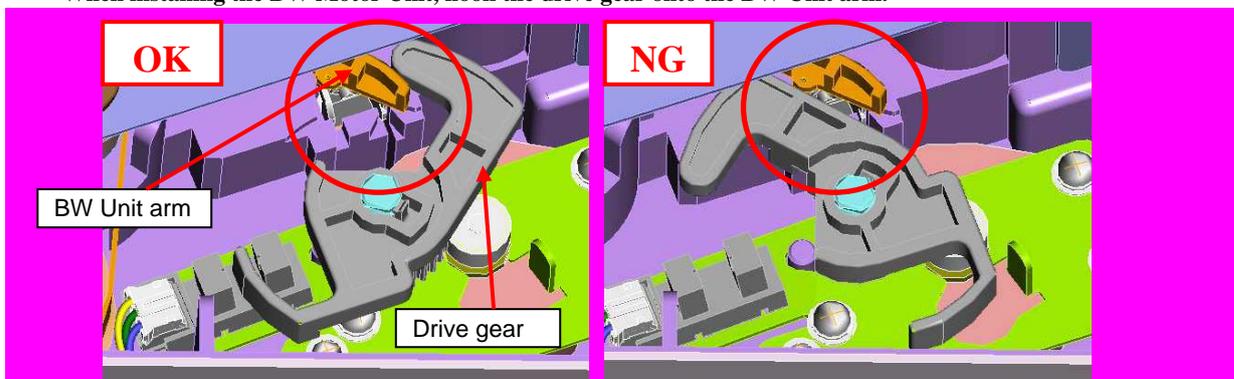


<Installation>

Follow the above procedure in reverse.

NOTICE

- When installing the BW Motor Unit, hook the drive gear onto the BW Unit arm.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	143 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

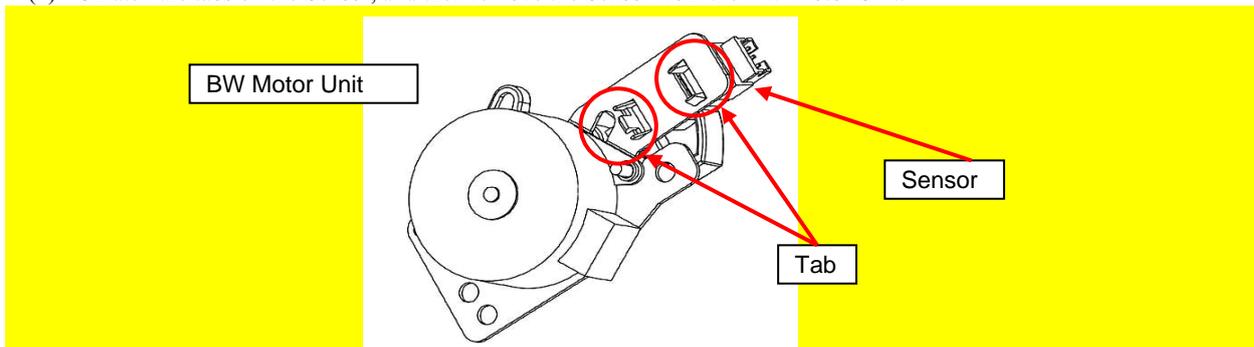
6.12.4 Front Side Background Changeover Sensor (Sensor)

NOTICE

Refer to Section 4.2.45 for the part number and appearance of the front side background changeover sensor.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the BW Motor Unit (Refer to Section 6.12.3.)
- (4) Unlatch the tabs on the Sensor, and then remove the Sensor from the BW Motor Unit.



<Installation>

Follow the above procedure in reverse.

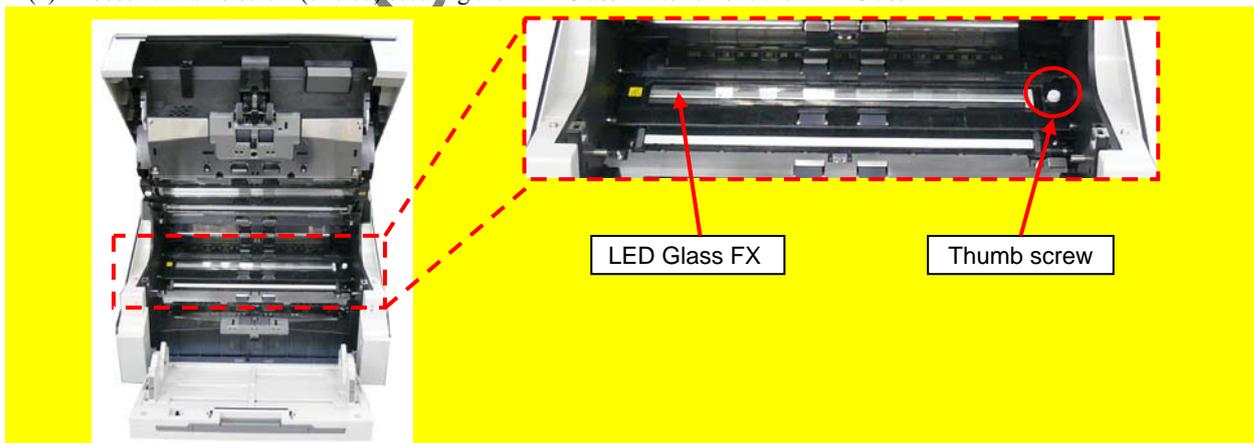
6.12.5 LED Glass FX

NOTICE

Refer to Section 4.2.16 for the part number and appearance of the LED Glass FX.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Loosen a thumb screw (circled) securing the LED Glass FX to remove the LED Glass FX.



<Installation>

Follow the above procedure in reverse.

NOTICE

When holding the LED Glass FX, do not touch the mirror (glass) but the black frame.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	144 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

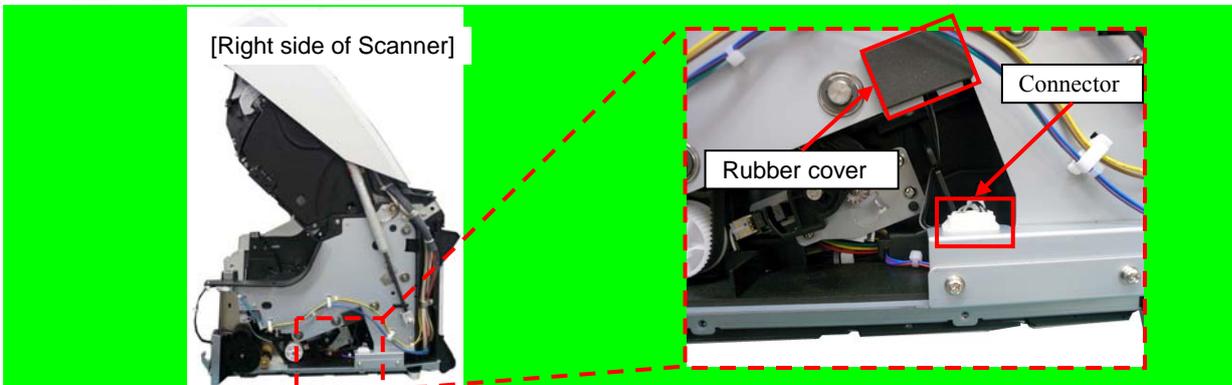
6.12.6 LED Unit FX

NOTICE

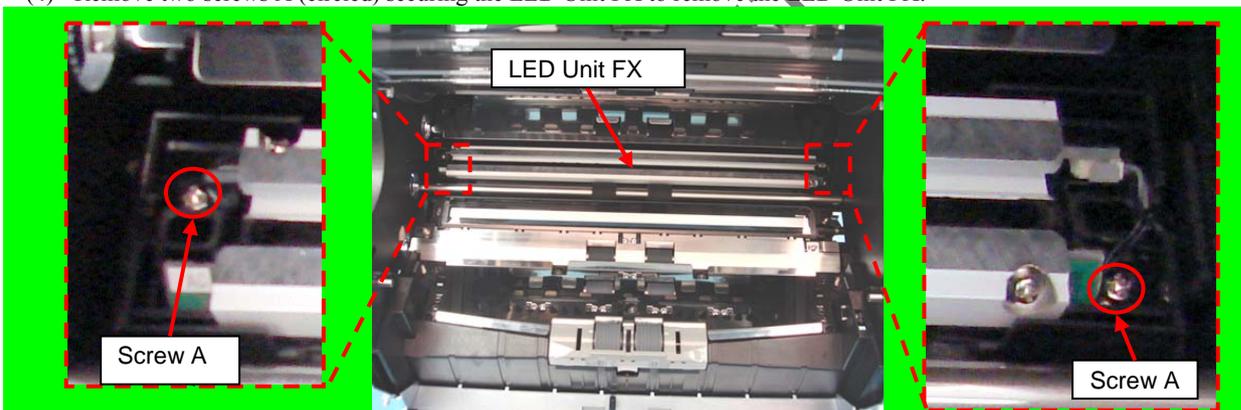
Refer to Section 4.2.18 for the part number and appearance of the LED Unit FX.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R. (Refer to Section 6.8.2.)
- (2) Remove the rubber cover and disconnect a connector (enclosed with square) from right side of the scanner, and then remove the cable from the frame.



- (3) Remove the LED Glass FX. (Refer to Section 6.12.5.)
- (4) Remove two screws A (circled) securing the LED Unit FX to remove the LED Unit FX.

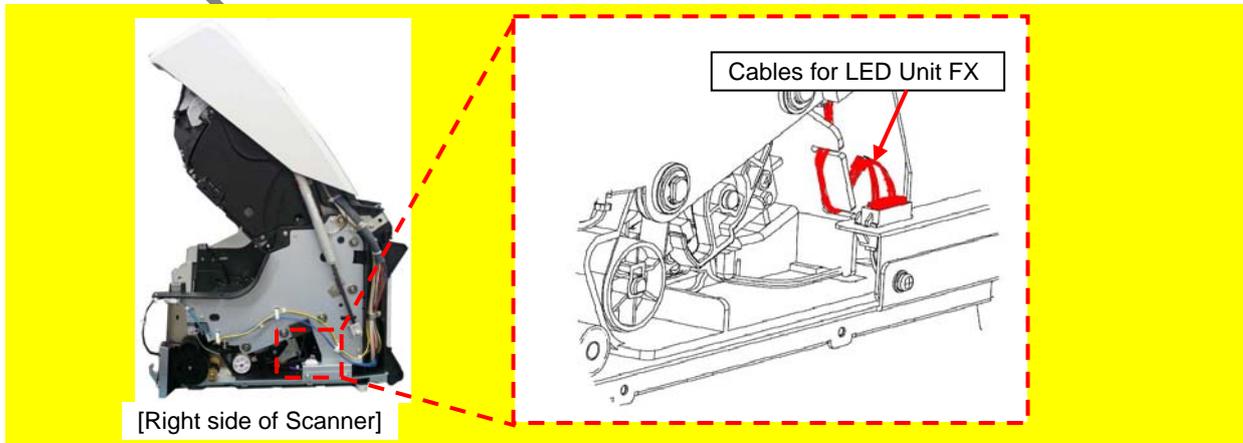


<Installation>

Follow the above procedure in reverse.

NOTICE

- When holding the LED Unit FX, do not touch the mirror (glass) but the black frame.
- Route the cables for the LED Unit FX as shown below.



- After replacing the LED Unit FX, perform White level adjustment. (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	145 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

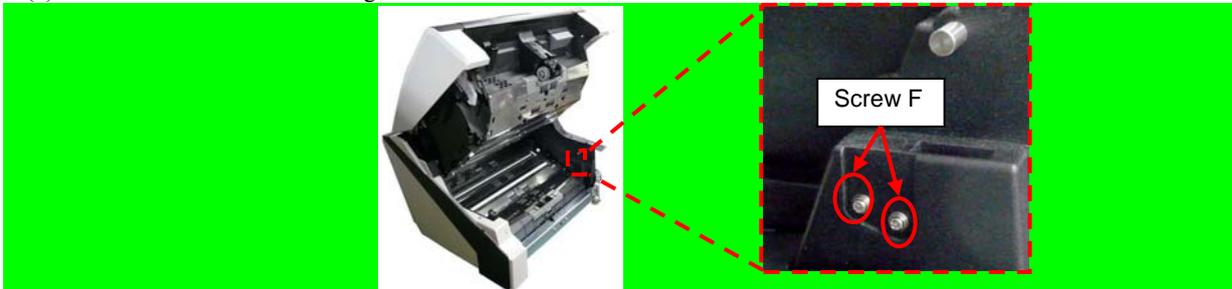
6.12.7 ADF Open Switch (Micro Switch)

NOTICE

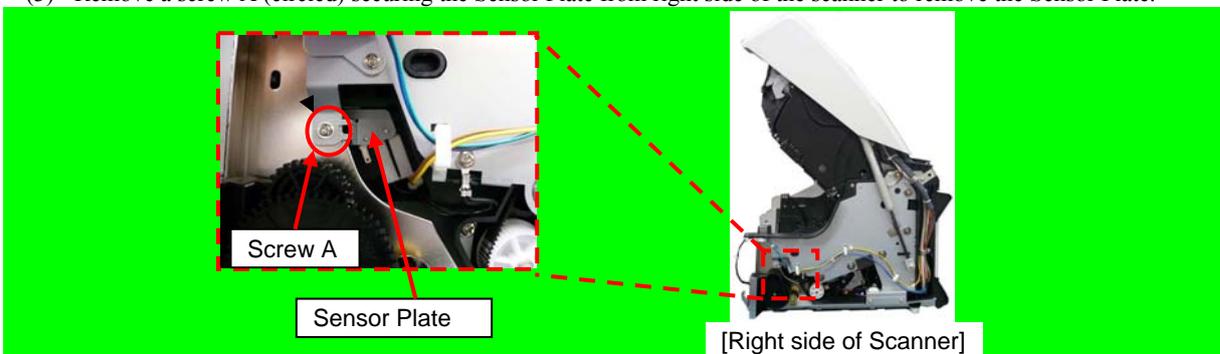
Refer to Section 4.2.49 for the part number and appearance of the Micro Switch.

<Removal>

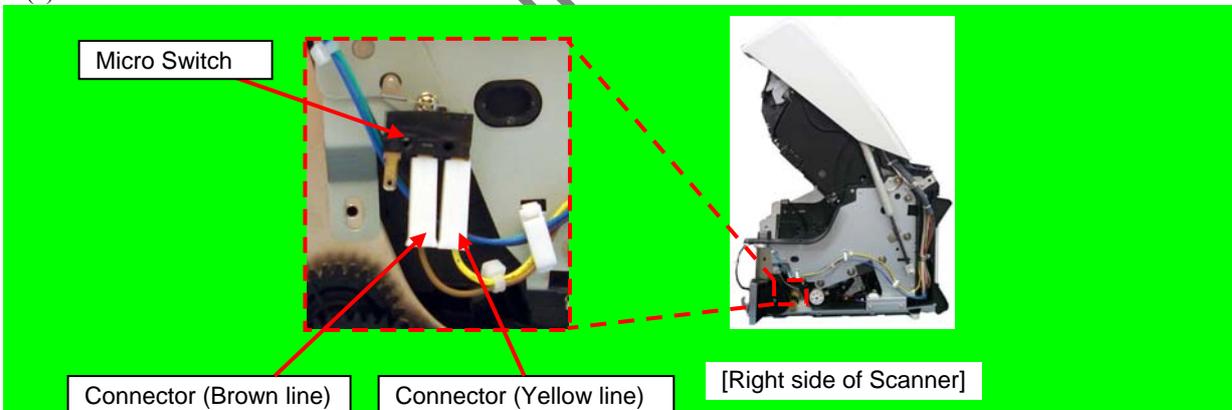
- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R. (Refer to Section 6.8.2.)
- (2) Remove two screws F securing the Micro Switch from inner side of the scanner.



- (3) Remove a screw A (circled) securing the Sensor Plate from right side of the scanner to remove the Sensor Plate.



- (4) Disconnect two connectors connected to the Micro Switch to remove the Micro Switch.

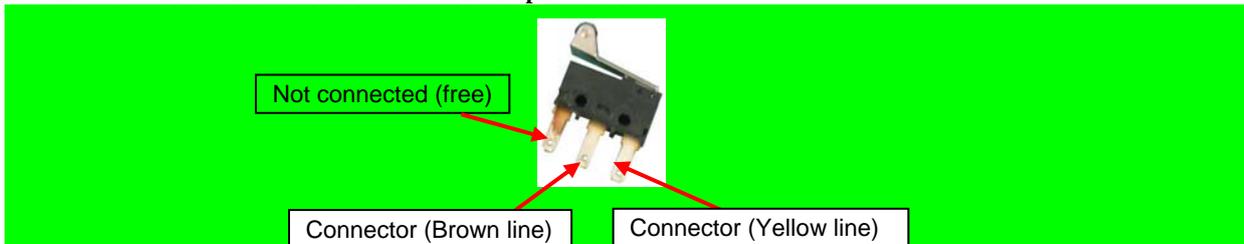


<Installation>

Follow the above procedure in reverse.

NOTICE

Install the connectors on the Micro Switch as shown in the photo below.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	146 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

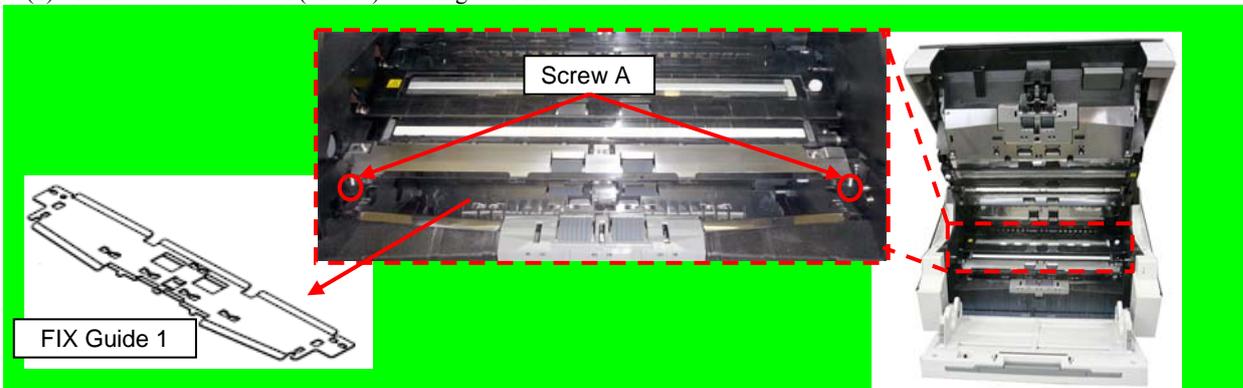
6.12.8 Assist Roller

NOTICE

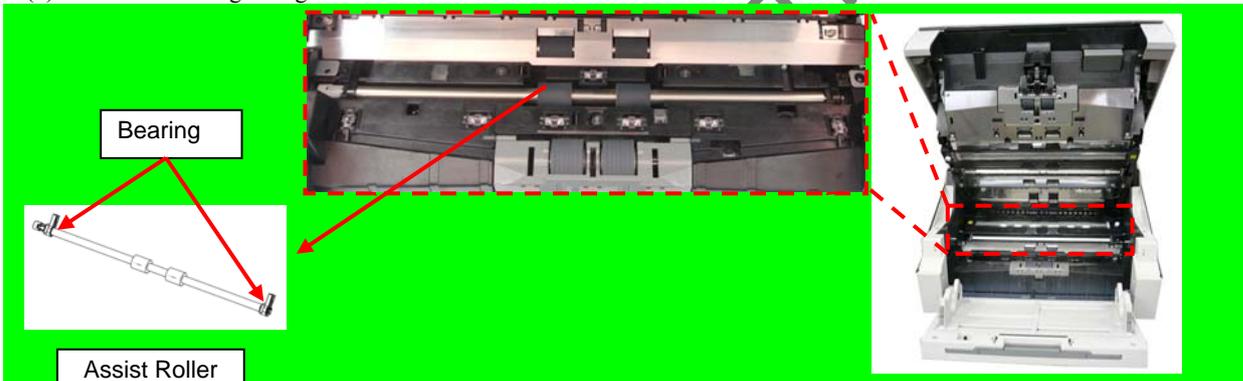
Refer to Section 4.2.70 for the part number and appearance of the Assist Roller.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove two screws A (circled) securing the FIX Guide 1 to remove the FIX Guide 1.



- (3) Raise the bearings at right and left of the Assist Roller to remove the Assist Roller.

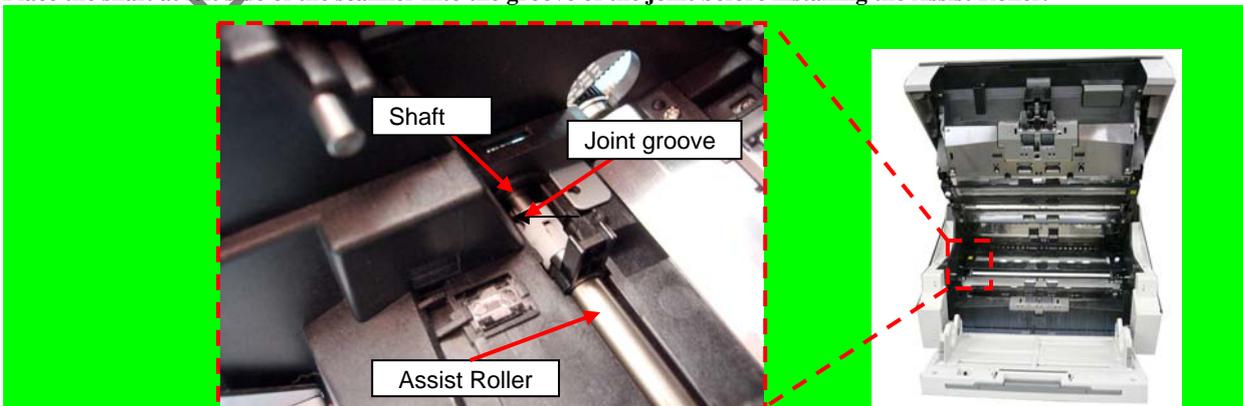


<Installation>

Follow the above procedure in reverse.

NOTICE

Place the shaft at left side of the scanner into the groove of the joint before installing the Assist Roller.



Adjustment - [TBD]

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	147 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12.9 Feed Rollers (Fixed Unit)

6.12.9.1 Feed Roller 2

NOTICE

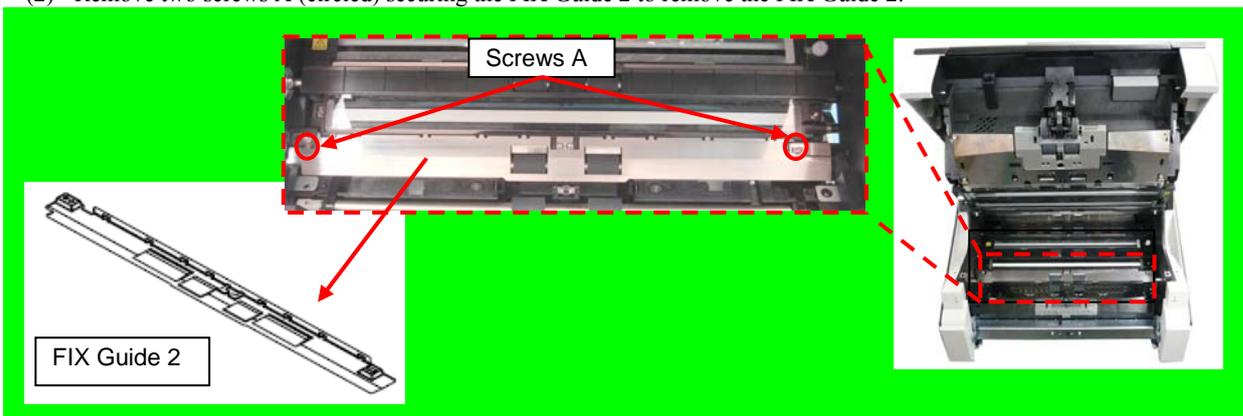
Refer to Sections 4.2.71 for the part number and appearance of the Feed Roller 2.

<Removal>

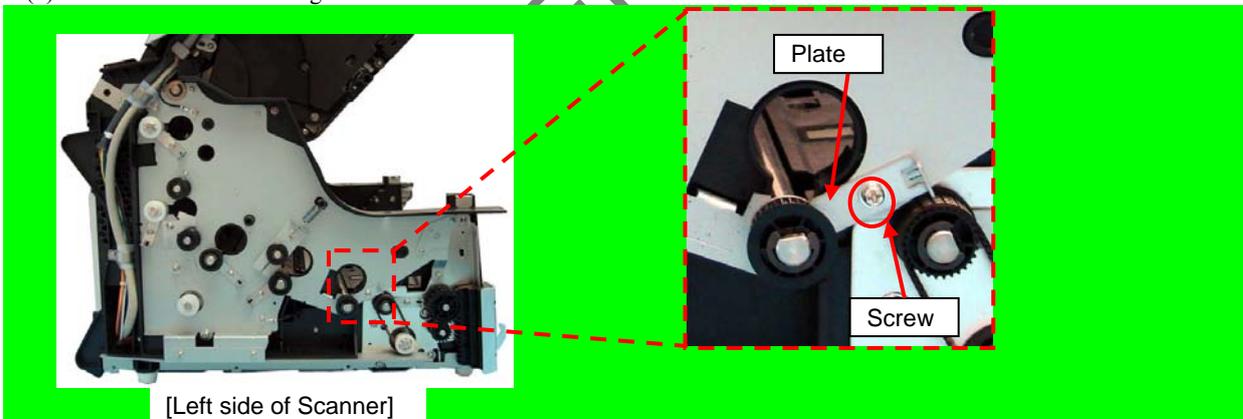
(1) Remove the following parts.

- Hopper Unit (Refer to Section 6.7.1.)
- FX Cover L. (Refer to Section 6.8.1.)
- FX Cover R. (Refer to Section 6.8.2.)
- FIX Guide 1 (Refer to step (2) in Section 6.12.8.)
- Feed Belt 2 (Refer to Section 6.12.13.)

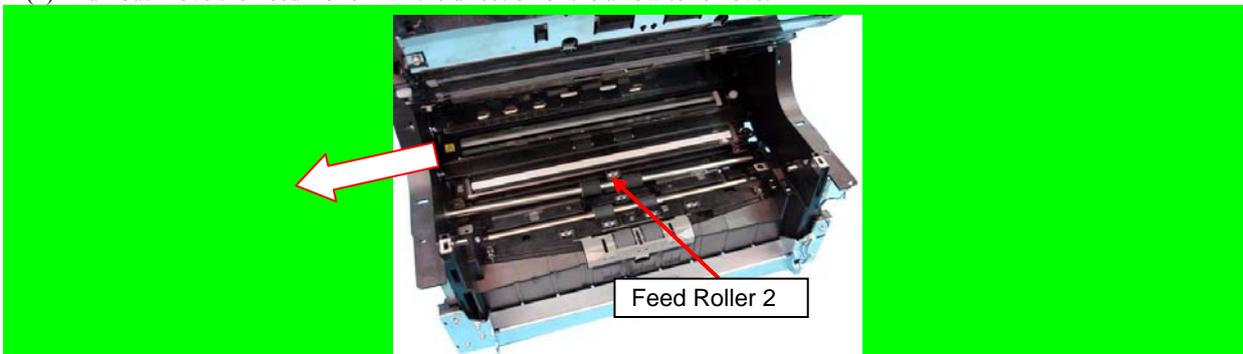
(2) Remove two screws A (circled) securing the FIX Guide 2 to remove the FIX Guide 2.



(3) Remove a screw securing the Plate from left side of the scanner to remove the Plate.



(4) Pull out Move the Feed Roller 2 in the direction of the arrow to remove.



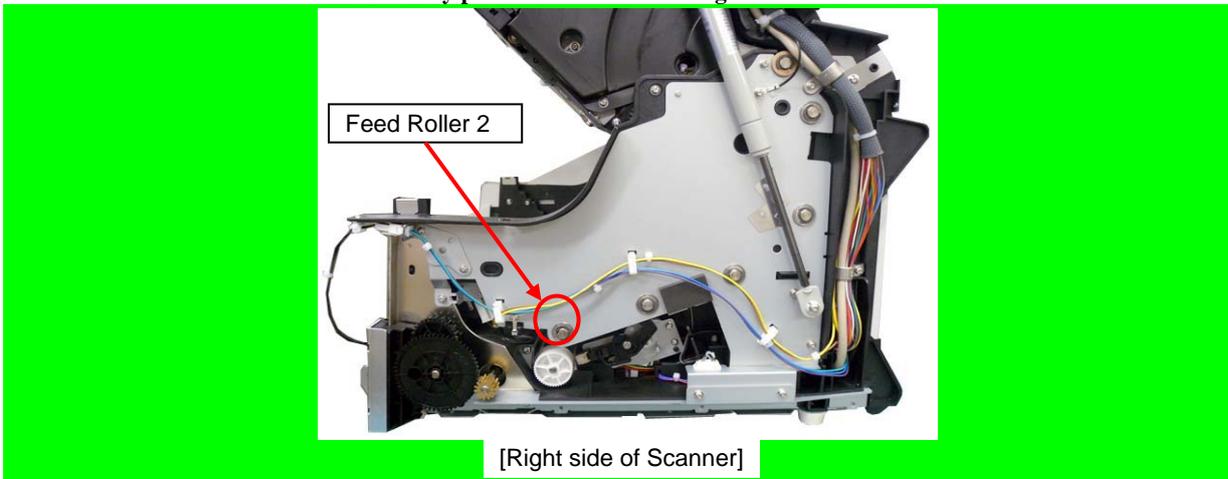
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	148 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

- (1) Follow the above procedure in reverse.

NOTICE

Make sure that the Feed Roller 2 is securely placed on the frame at right side of the scanner.



- (2) Install the Feed Belt 2 by referring to Section 6.12.16 in reverse.

NOTICE

- Tension adjustments for Feed Belt 1 and Feed Belt 2 are not necessary.
- Adjustment - [TBD] (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	149 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

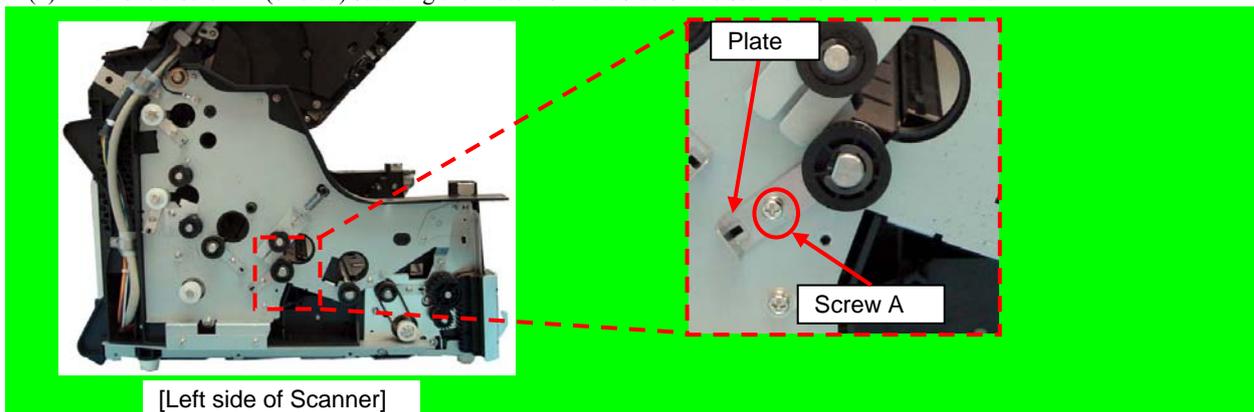
6.12.9.2 Feed Roller 3

NOTICE

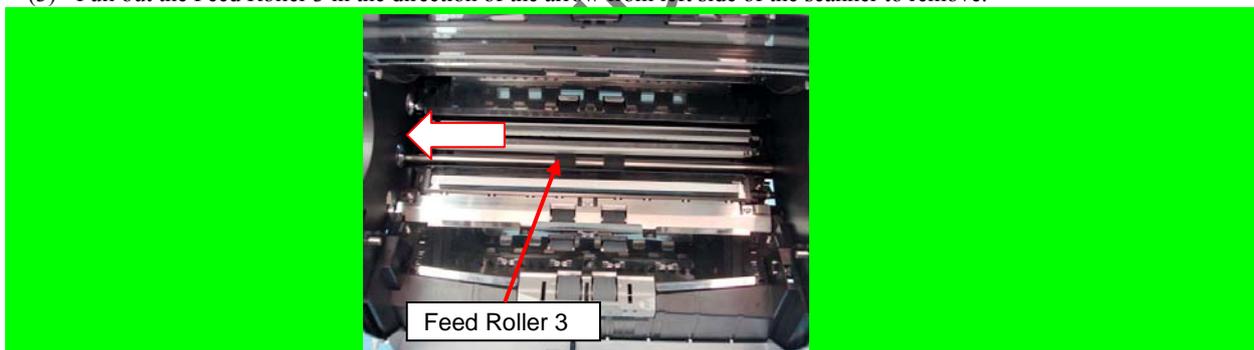
Refer to Sections 4.2.72 for the part number and appearance of the Feed Roller 3.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L. (Refer to Section 6.8.1.)
 - FX Cover R. (Refer to Section 6.8.2.)
 - LED Glass FX (Refer to Section 6.12.5.)
 - Feed Belt 2 (Refer to Section 6.12.16.)
- (2) Remove a screw A (circled) securing the Plate from left side of the scanner to remove the Plate.



- (3) Pull out the Feed Roller 3 in the direction of the arrow from left side of the scanner to remove.



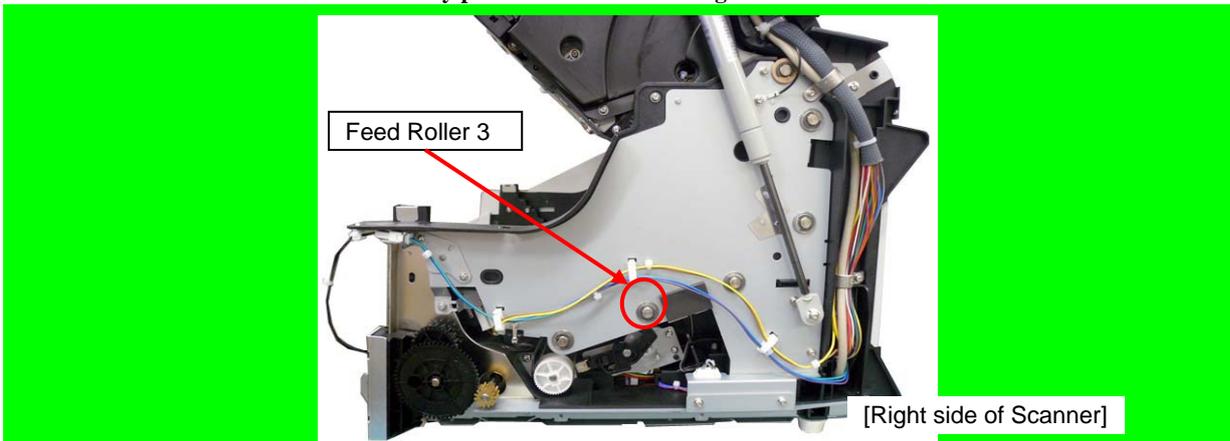
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	150 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

(1) Follow the above procedure in reverse.

NOTICE

Make sure that the Feed Roller 3 is securely placed on the frame at right side of the scanner.



(2) Install the Feed Belt 2 by referring to Section 6.12.16 in reverse.

NOTICE

- Tension adjustment for Feed Belt 2 is not necessary.
- Adjustment - [TBD]

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	151 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12.9.3 Feed Roller 4

NOTICE

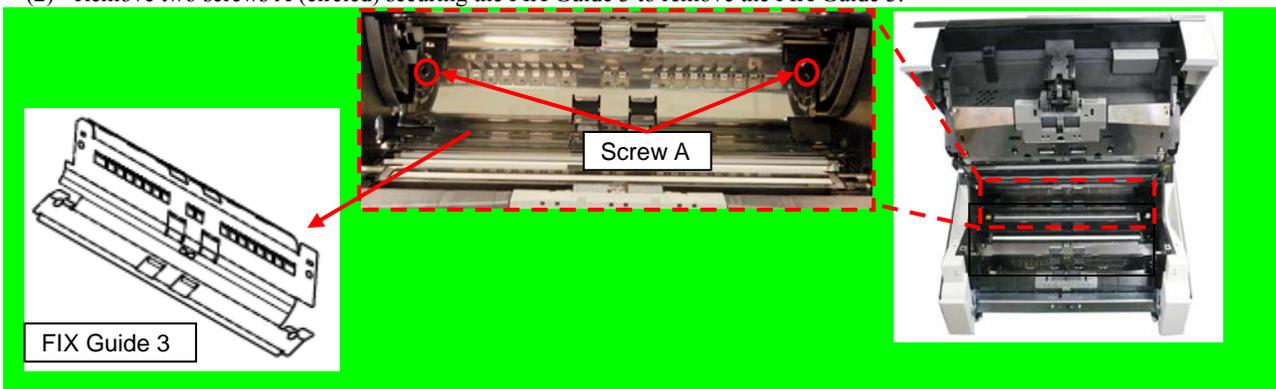
Refer to Sections 4.2.73 for the part number and appearance of the Feed Roller 4.

<Removal>

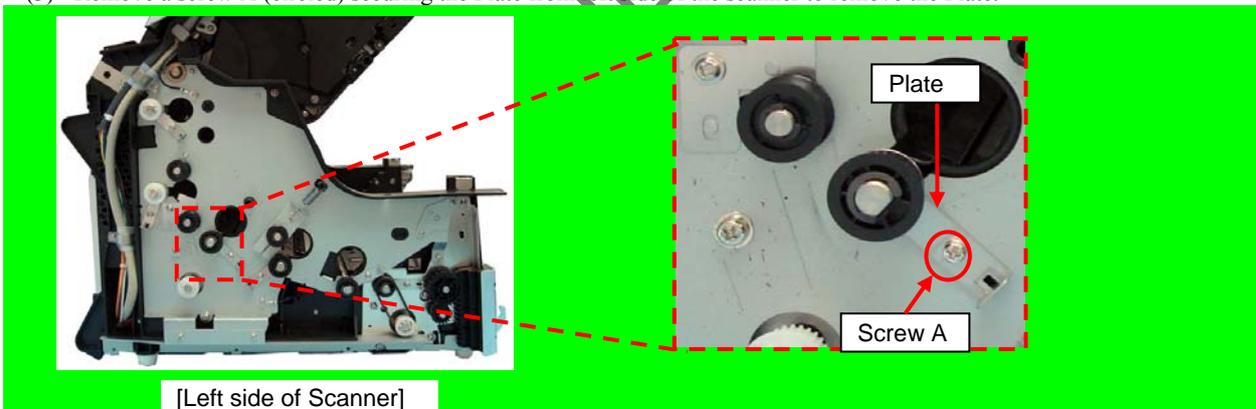
(1) Remove the following parts.

- Hopper Unit (Refer to Section 6.7.1.)
- FX Cover L. (Refer to Section 6.8.1.)
- FX Cover R. (Refer to Section 6.8.2.)
- LED Glass FX (Refer to Section 6.12.5.)
- Feed Belt 2 (Refer to Section 6.12.16.)

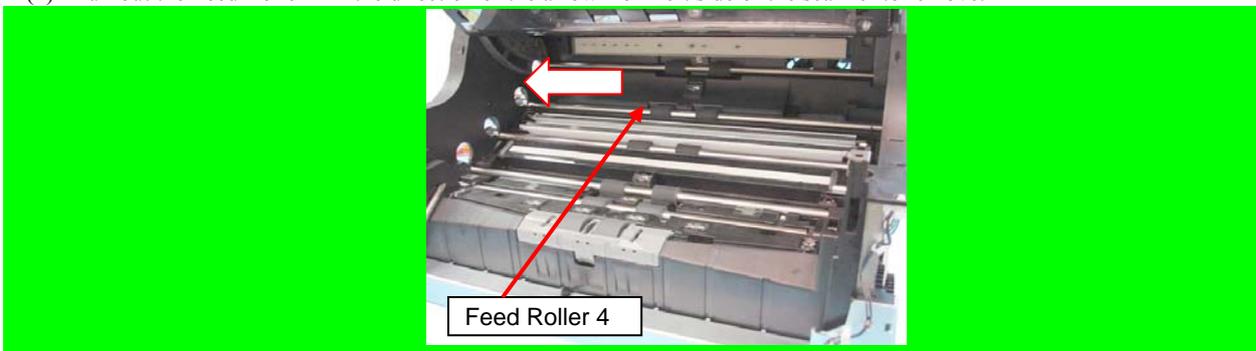
(2) Remove two screws A (circled) securing the FIX Guide 3 to remove the FIX Guide 3.



(3) Remove a screw A (circled) securing the Plate from left side of the scanner to remove the Plate.



(4) Pull out the Feed Roller 4 in the direction of the arrow from left side of the scanner to remove.



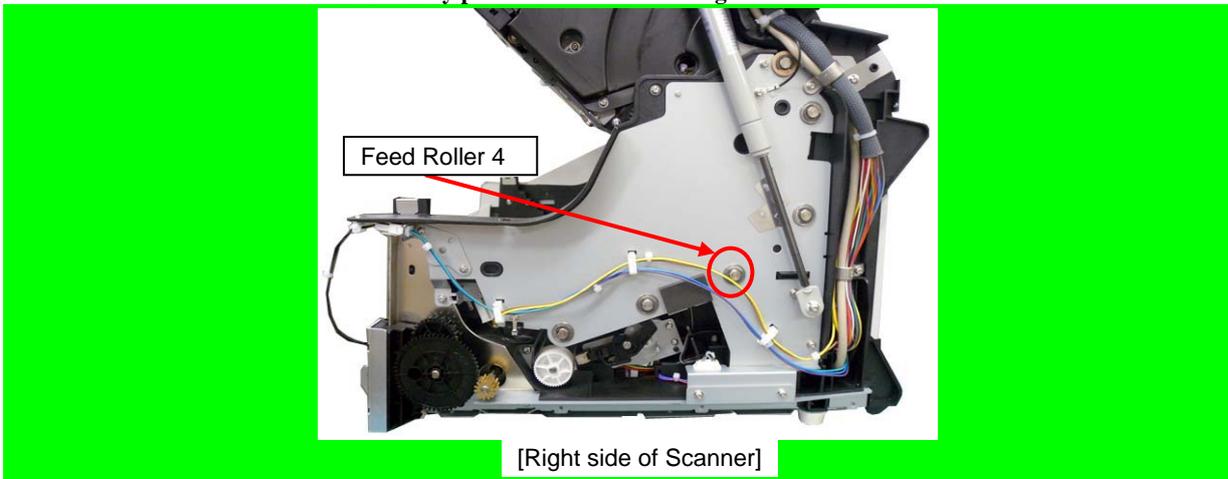
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	152 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

- (1) Follow the above procedure in reverse.

NOTICE

Make sure that the Feed Roller 4 is securely placed on the frame at right side of the scanner.



- (2) Install the Feed Belt 2 by referring to Section 6.12.16 in reverse.

NOTICE

- Tension adjustment for Feed Belt 2 is not necessary.
- Adjustment - [TBD] (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	153 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12.9.4 Feed Roller 5

NOTICE

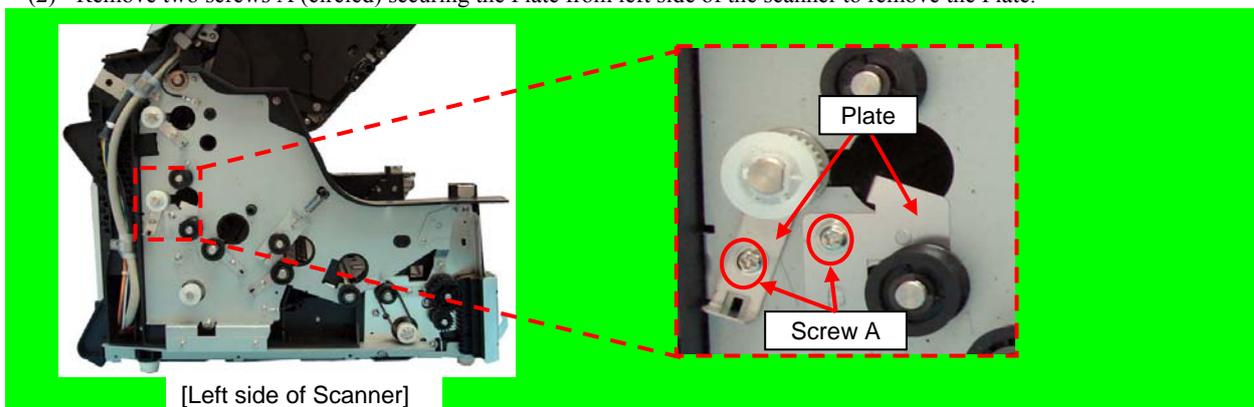
Refer to Sections 4.2.74 for the part number and appearance of the Feed Roller 5.

<Removal>

(1) Remove the following parts.

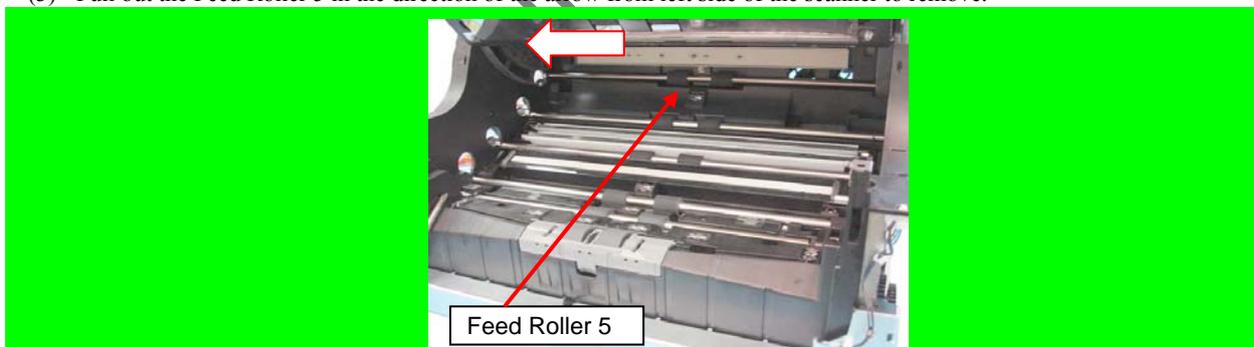
- Hopper Unit (Refer to Section 6.7.1.)
- FX Cover L. (Refer to Section 6.8.1.)
- FX Cover R. (Refer to Section 6.8.2.)
- LED Glass FX (Refer to Section 6.12.5.)
- FIX Guide 3 (Refer to step (2) in Section 6.12.9.3.)
- Feed Belt 2 (Refer to Section 6.12.16.)

(2) Remove two screws A (circled) securing the Plate from left side of the scanner to remove the Plate.



[Left side of Scanner]

(3) Pull out the Feed Roller 5 in the direction of the arrow from left side of the scanner to remove.



Feed Roller 5

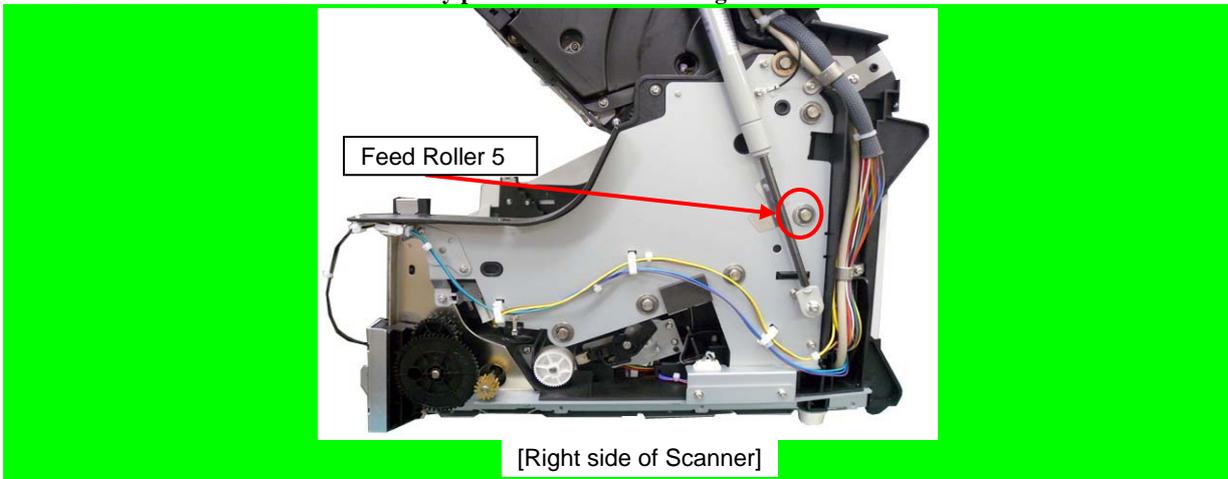
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	154 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

<Installation>

- (1) Follow the above procedure in reverse.

NOTICE

Make sure that the Feed Roller 5 is securely placed on the frame at right side of the scanner.



- (2) Install the Feed Belt 2 by referring to Section 6.12.16 in reverse.

NOTICE

- Tension adjustment for Feed Belt 2 is not necessary.
- Adjustment - [TBD] (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	155 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12.9.5 Feed Roller 6

NOTICE

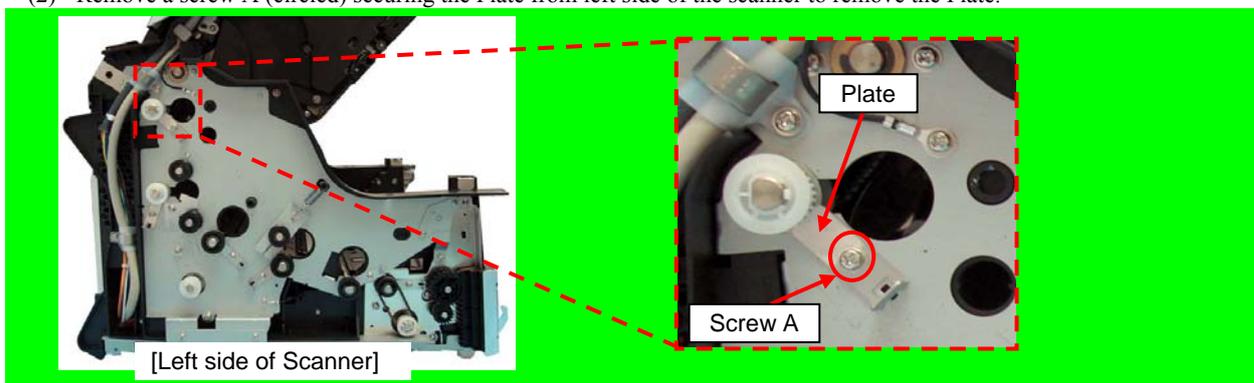
Refer to Sections 4.2.75 for the part number and appearance of the Feed Roller 6.

<Removal>

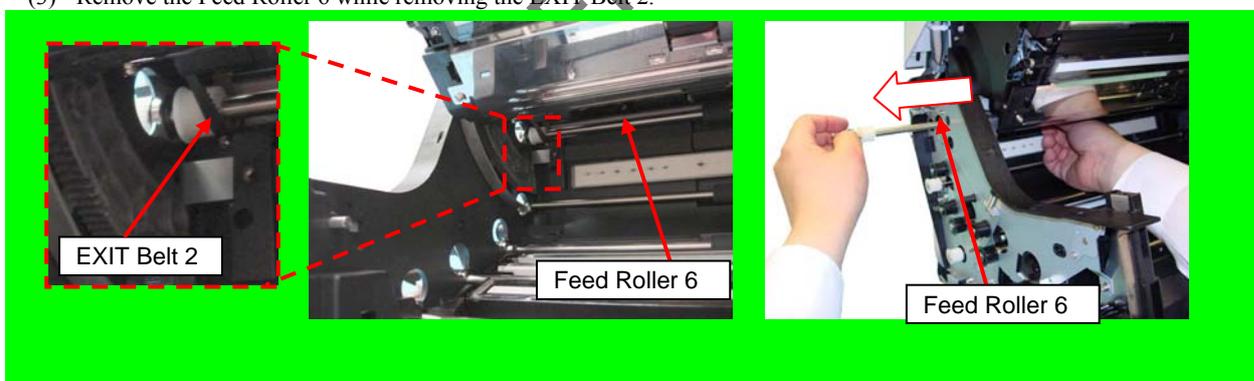
(1) Remove the following parts.

- Hopper Unit (Refer to Section 6.7.1.)
- FX Cover L. (Refer to Section 6.8.1.)
- FX Cover R. (Refer to Section 6.8.2.)
- LED Glass FX (Refer to Section 6.12.5.)
- FIX Guide 3 (Refer to step (2) in Section 6.12.9.3.)
- Feed Belt 2 (Refer to Section 6.12.16.)

(2) Remove a screw A (circled) securing the Plate from left side of the scanner to remove the Plate.



(3) Remove the Feed Roller 6 while removing the EXIT Belt 2.



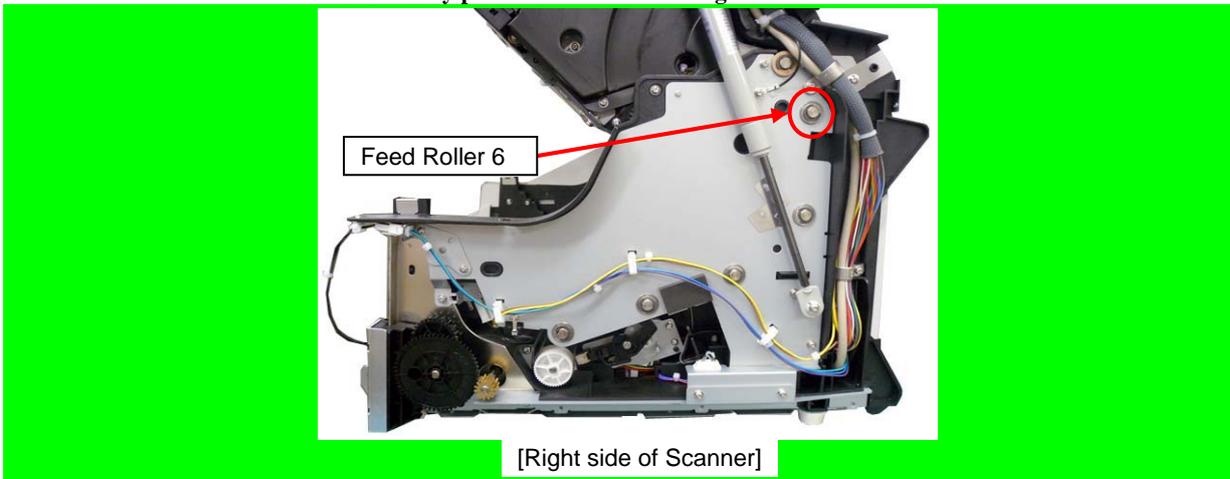
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	156 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

- (1) Follow the above procedure in reverse.

NOTICE

Make sure that the Feed Roller 6 is securely placed on the frame at right side of the scanner.



- (2) Install the Feed Belt 2 by referring to Section 6.12.16 in reverse.

NOTICE

- Tension adjustments for Feed Belt 2 and EXIT Belt 2 are not necessary.
- Adjustment - [TBD] (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	157 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

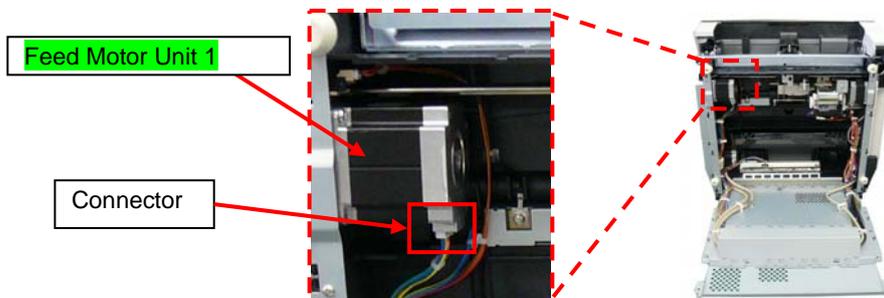
6.12.10 Feed Motor Unit 1 (for driving the Assist Roller)

NOTICE

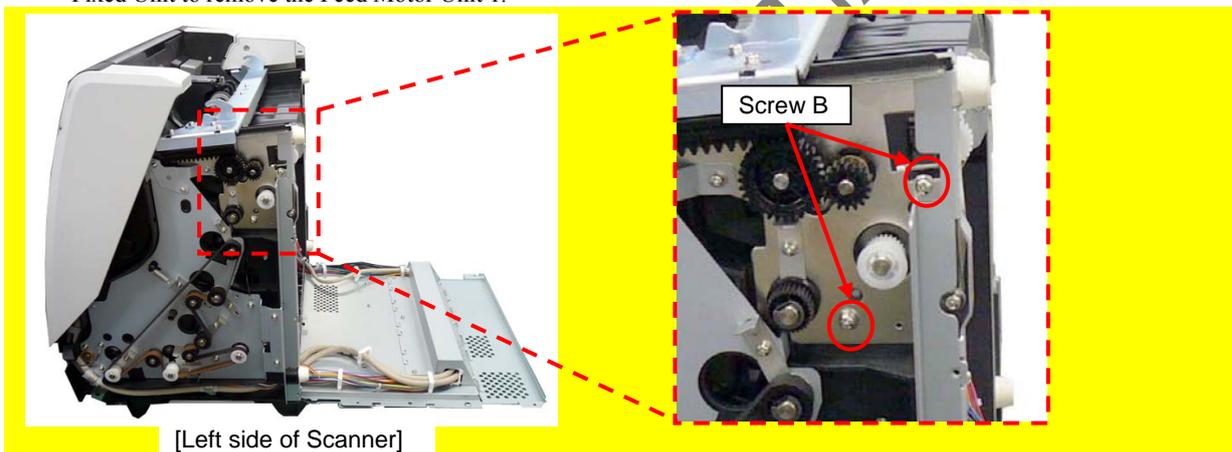
Refer to Section 4.2.29 for the part number and appearance of the Feed Motor Unit.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - Feed Belt 1 [for driving the Assist Roller] (Refer to Section 6.12.15.1.)
- (2) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (3) Disconnect a connector (enclosed with square) from inside of the Fixed Unit.



- (4) Remove two screws B (circled) securing the Feed Motor Unit 1 while pushing the Feed Motor Unit 1 from inside of the Fixed Unit to remove the Feed Motor Unit 1.



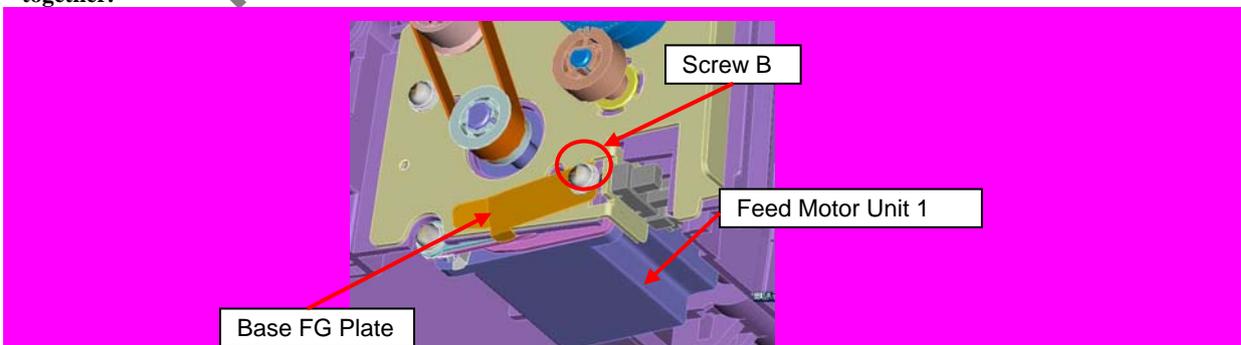
[Left side of Scanner]

<Installation>

Follow the above procedure in reverse.

NOTICE

- When installing the Feed Motor Unit 1, screw the Base FG Plate and Feed Motor Unit 1 with a screw B (circled) together.



- Tension adjustment for Feed Belt 1 is not necessary.

Do not loosen the non-disassembly parts. When the Motor installation bracket position is fixed, belt tension adjustment is not necessary. (Refer to Section 6.5.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	158 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

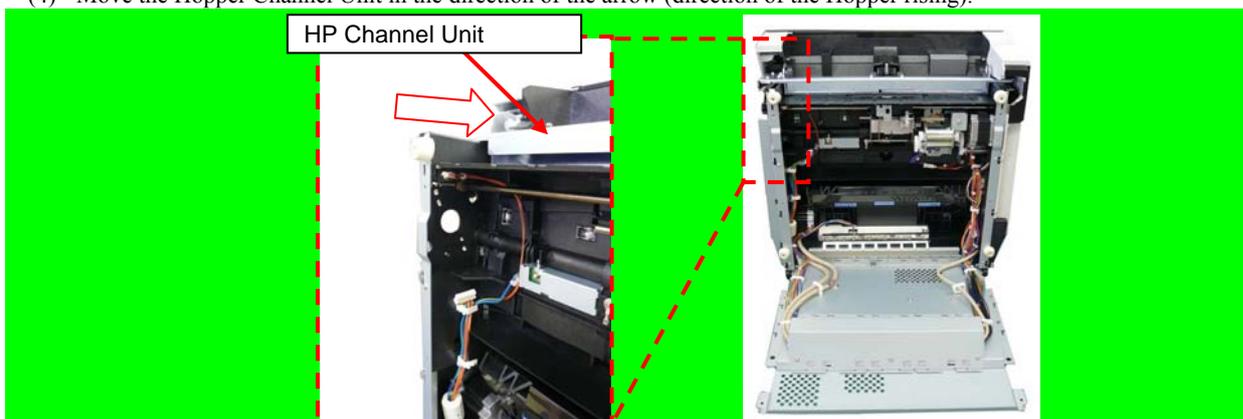
6.12.11 Hopper Bottom Sensor (Sensor)

NOTICE

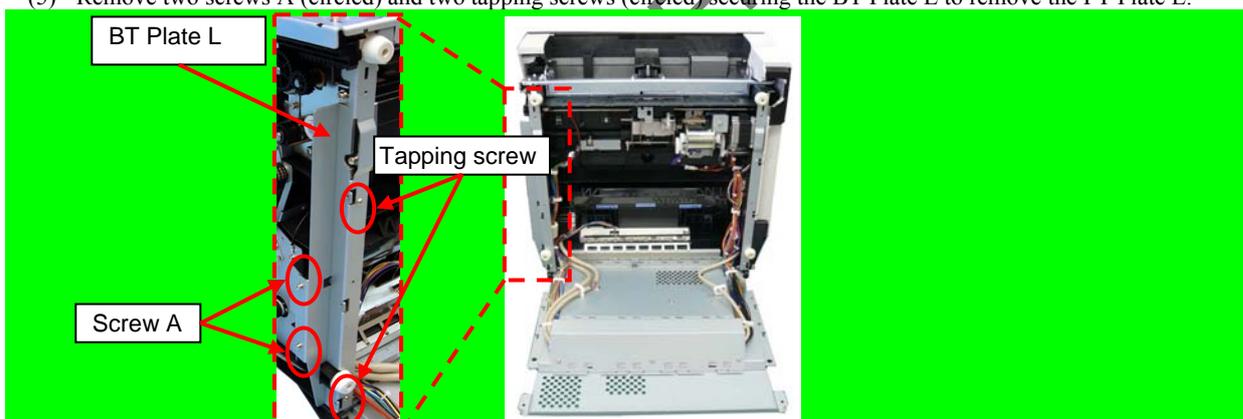
Refer to Section 4.2.45 for the part number and appearance of the (Hopper Bottom) Sensor.

<Removal>

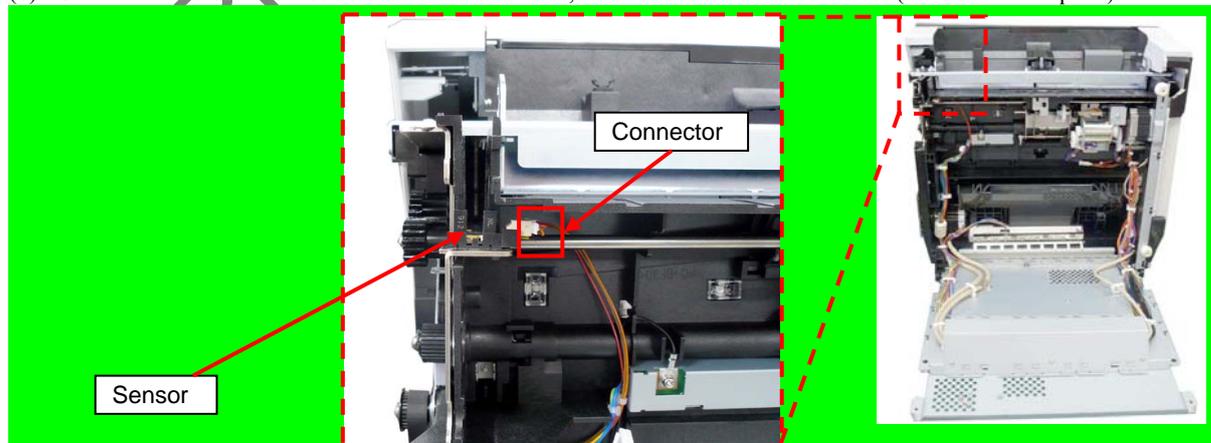
- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - Feed Belt 1 [for driving the Assist Roller] (Refer to Section 6.12.15.1.)
- (2) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the Feed Motor Unit 1. (Refer to Section 6.12.10.)
- (4) Move the Hopper Channel Unit in the direction of the arrow (direction of the Hopper rising).



- (5) Remove two screws A (circled) and two tapping screws (circled) securing the BT Plate L to remove the PT Plate L.



- (6) Unlatch the tab of the Sensor from the scanner frame, and then disconnect a connector (enclosed with square).



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	159 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

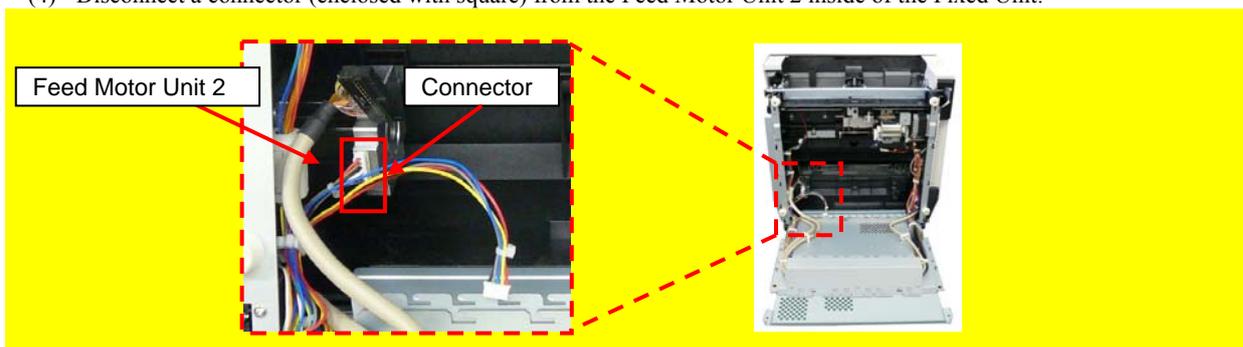
6.12.12 Feed Motor Unit 2 (for driving the Feed Rollers 2 ~ 6)

NOTICE

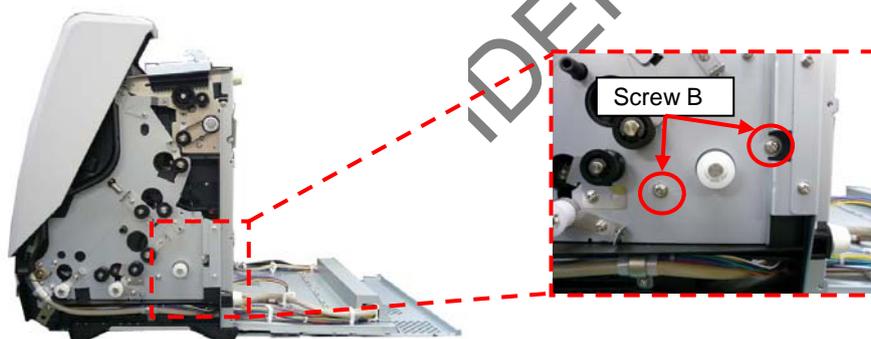
Refer to Section 4.2.30 for the part number and appearance of the Feed Motor Unit 2.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - Feed Belt 2 (Refer to Section 6.12.16.)
- (2) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the Optical Unit. (Refer to removal steps (3) ~ (4) in Section 6.12.1.)
- (4) Disconnect a connector (enclosed with square) from the Feed Motor Unit 2 inside of the Fixed Unit.



- (5) Remove two screws B (circled) securing the Feed Motor Unit 2 while holding the Feed Motor Unit 2 from inside of the Fixed Unit, and then remove the Feed Motor Unit 2.



[Left side of Scanner]

<Installation>

Follow the above procedure in reverse.

NOTICE

- Tension adjustment for Feed Belt 2 is not necessary.

Adjustment - [TBD] (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	160 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

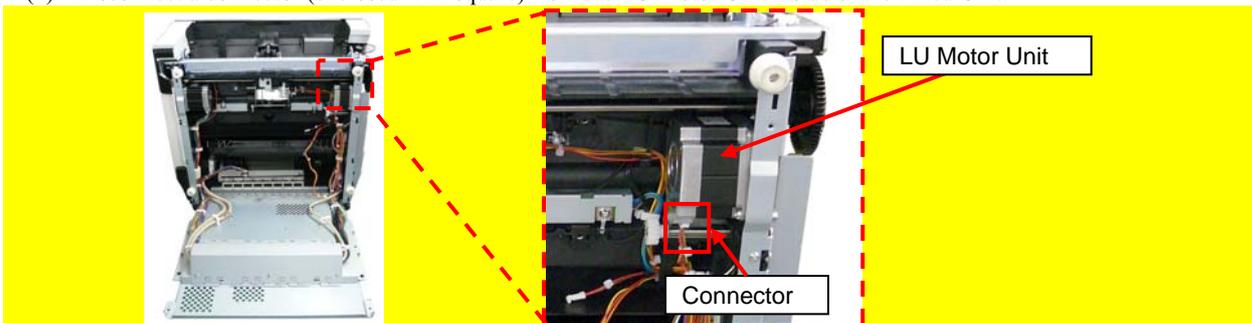
6.12.13 LU Motor Unit (for driving the Hopper)

NOTICE

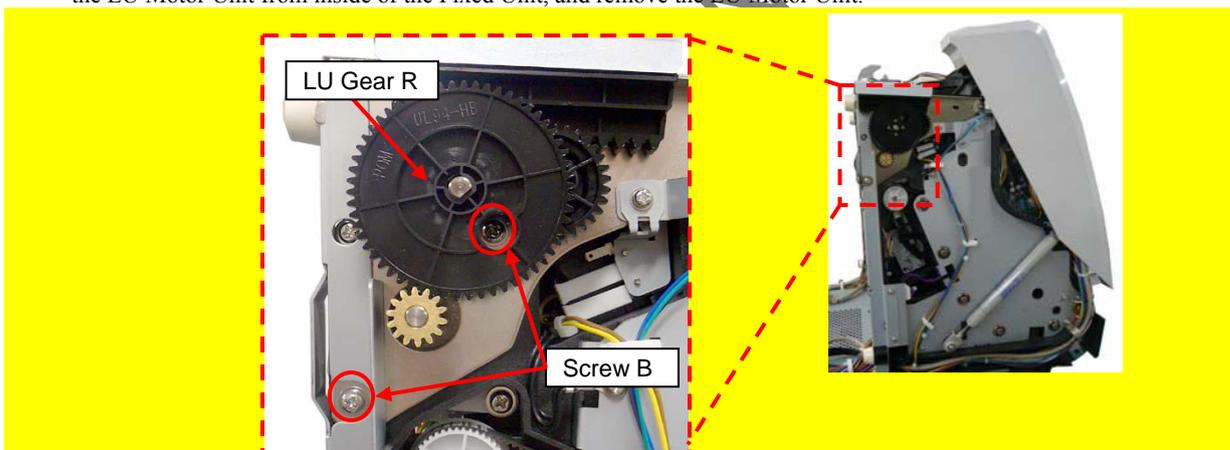
Refer to Section 4.2.31 for the part number and appearance of the LU Motor Unit.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the HB Unit. (Refer to Section 6.12.18.)
- (4) Disconnect a connector (enclosed with square) from the LU Motor Unit inside of the Fixed Unit.



- (1) Rotate the LU Gear R to the screw position. Remove two screws B (circled) securing the LU Motor Unit while holding the LU Motor Unit from inside of the Fixed Unit, and remove the LU Motor Unit.

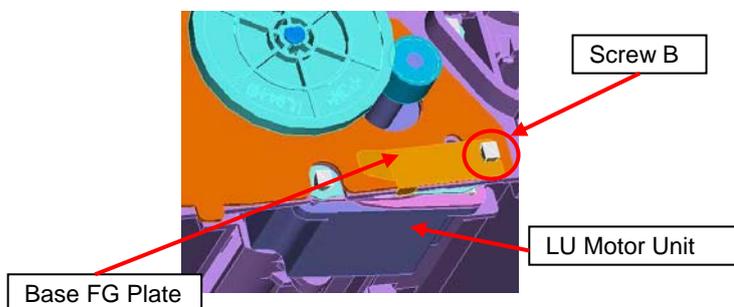


<Installation>

Follow the above procedure in reverse.

NOTICE

- When installing the LU Motor Unit, tighten the Base FG Plate and LU Motor Unit with a screw B (circled) together.



- Do not loosen the non-disassembly parts. When the Motor installation bracket position is fixed, the Motor position adjustment is not necessary. (Refer to Section 6.5.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	161 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

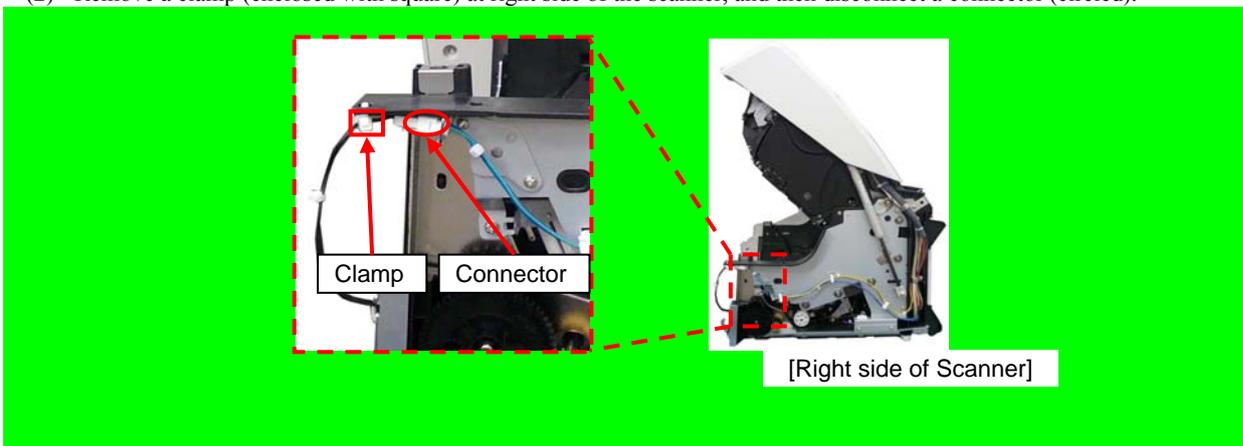
6.12.14 Empty Sensor

NOTICE

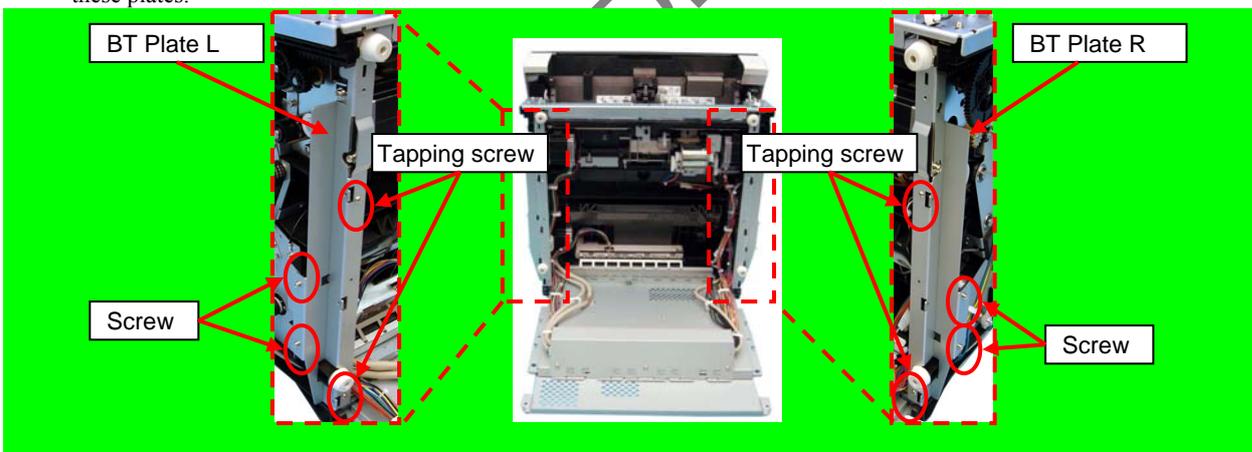
Refer to Section 4.2.48 for the part number and appearance of the Empty Sensor.

<Removal>

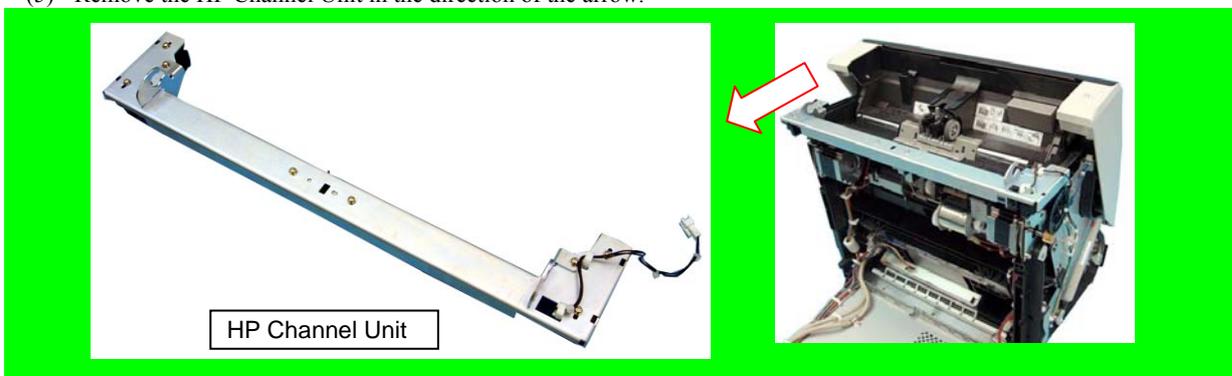
- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Remove a clamp (enclosed with square) at right side of the scanner, and then disconnect a connector (circled).



- (3) Recline the CT Base. (Refer to removal steps (2) ~ (4) in Section 6.10.1.)
- (4) Remove four screws A (circled) and four tapping screws (circled) securing the BT Plate L and BT Plate R to remove these plates.

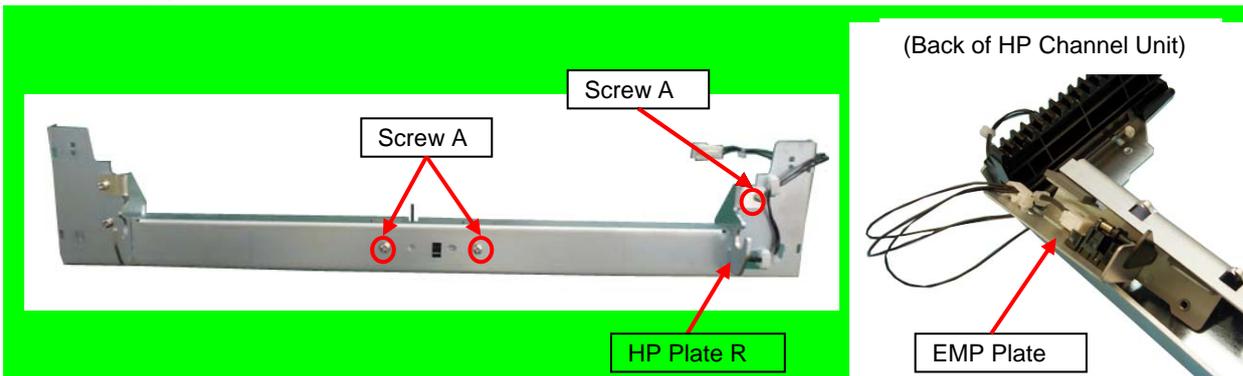


- (5) Remove the HP Channel Unit in the direction of the arrow.

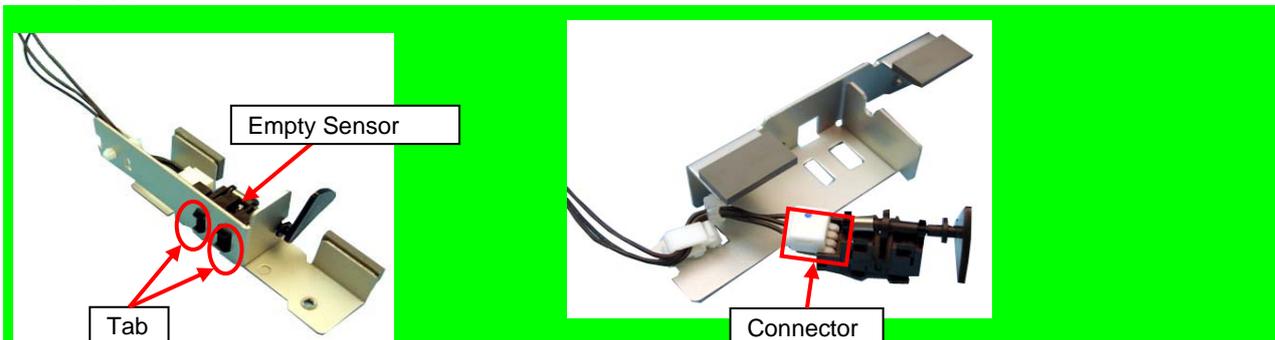


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	162 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

- (6) Remove a screw A (circled) securing the HP Plate R and two screws A (enclosed with square) securing the EMP Plate to remove the HP Plate R. Move the EMP Plate toward the HP Plate R from back of the HP Channel Unit to remove the EMP Plate.



- (7) Unlatch the tabs securing the Empty Sensor, disconnect a connector (enclosed with square) and remove the Empty Sensor.

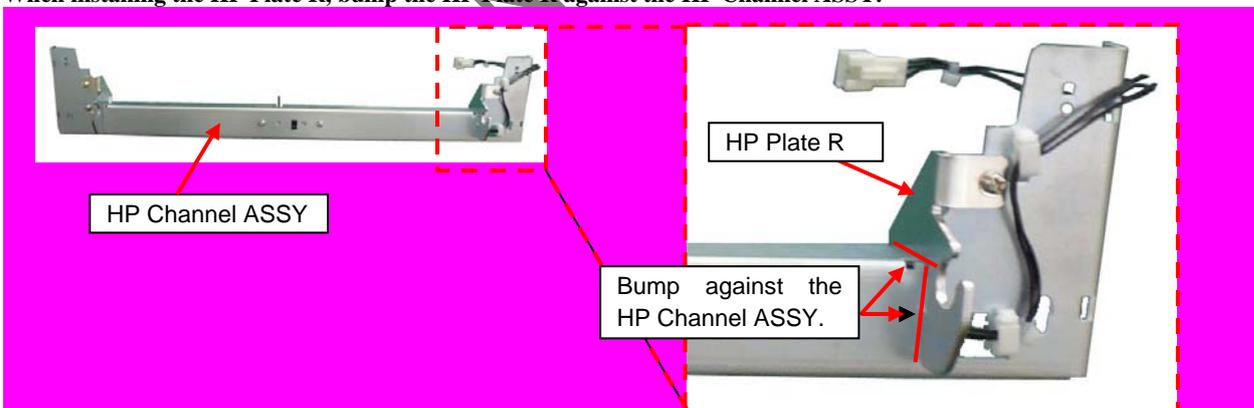


<Installation>

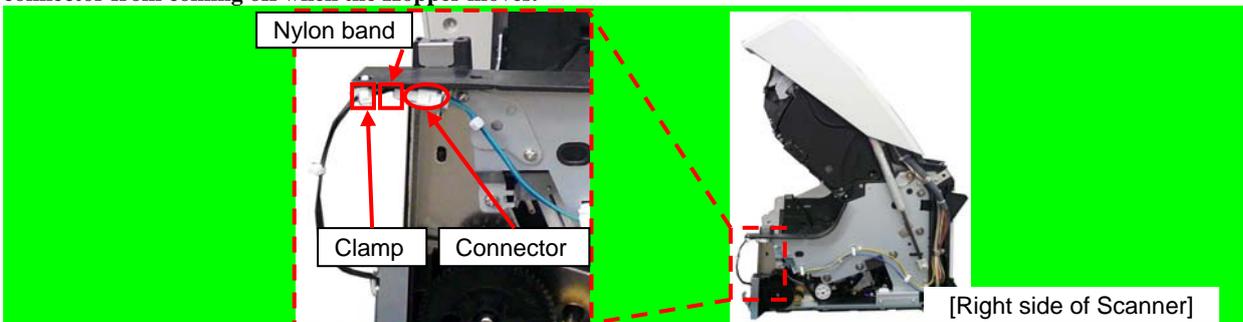
Follow the above procedure in reverse.

NOTICE

When installing the HP Plate R, bump the HP Plate R against the HP Channel ASSY.



Be sure to clamp the cable so that the nylon band is positioned between the connector and clamp in order to avoid the connector from coming off when the Hopper moves.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	163 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.12.15 Feed Belt 1

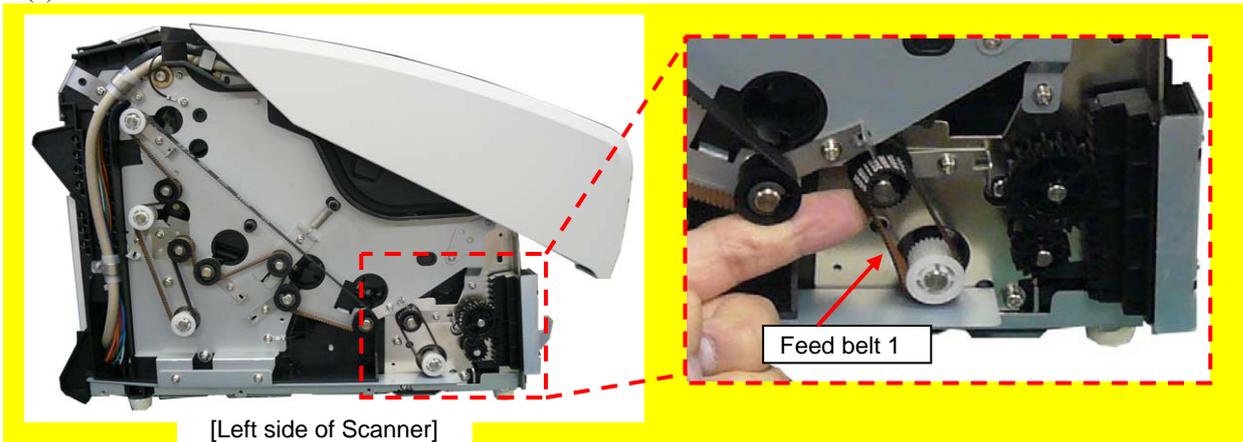
6.12.15.1 Feed Belt 1 (for driving the Assist Roller)

NOTICE

Refer to Section 4.2.32 for the part number and appearance of the Feed Belt 1.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
- (2) Remove the Feed Belt 1 from left side of the scanner.



[Left side of Scanner]

<Installation>

Follow the above procedure in reverse.

NOTICE

Tension adjustment for Feed Belt 1 is not necessary.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	164 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

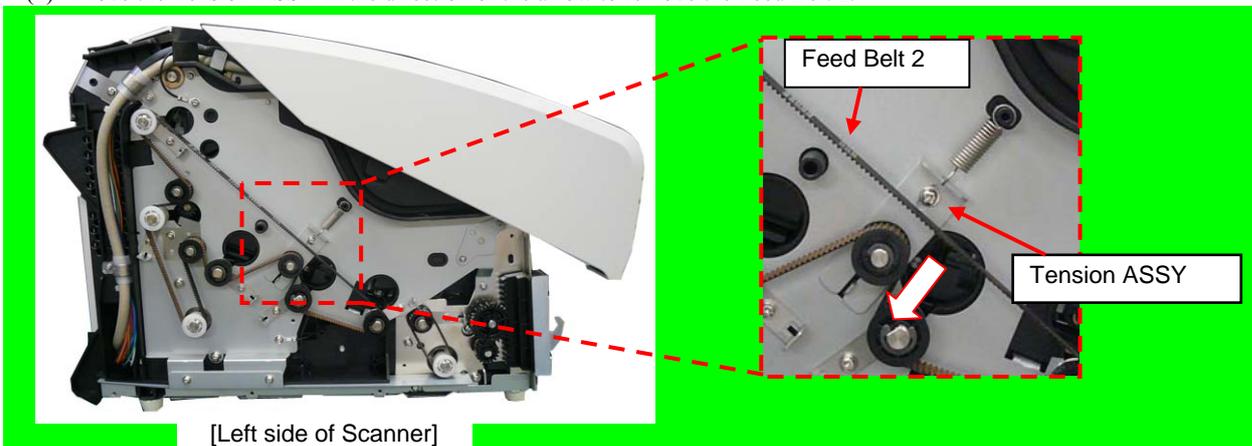
6.12.16 Feed Belt 2 (for driving Feed Rollers 2 ~ 6)

NOTICE

Refer to Section 4.2.28 for the part number and appearance of the Feed Belt 2.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
- (2) Move the Tension ASSY in the direction of the arrow to remove the Feed Belt 2.



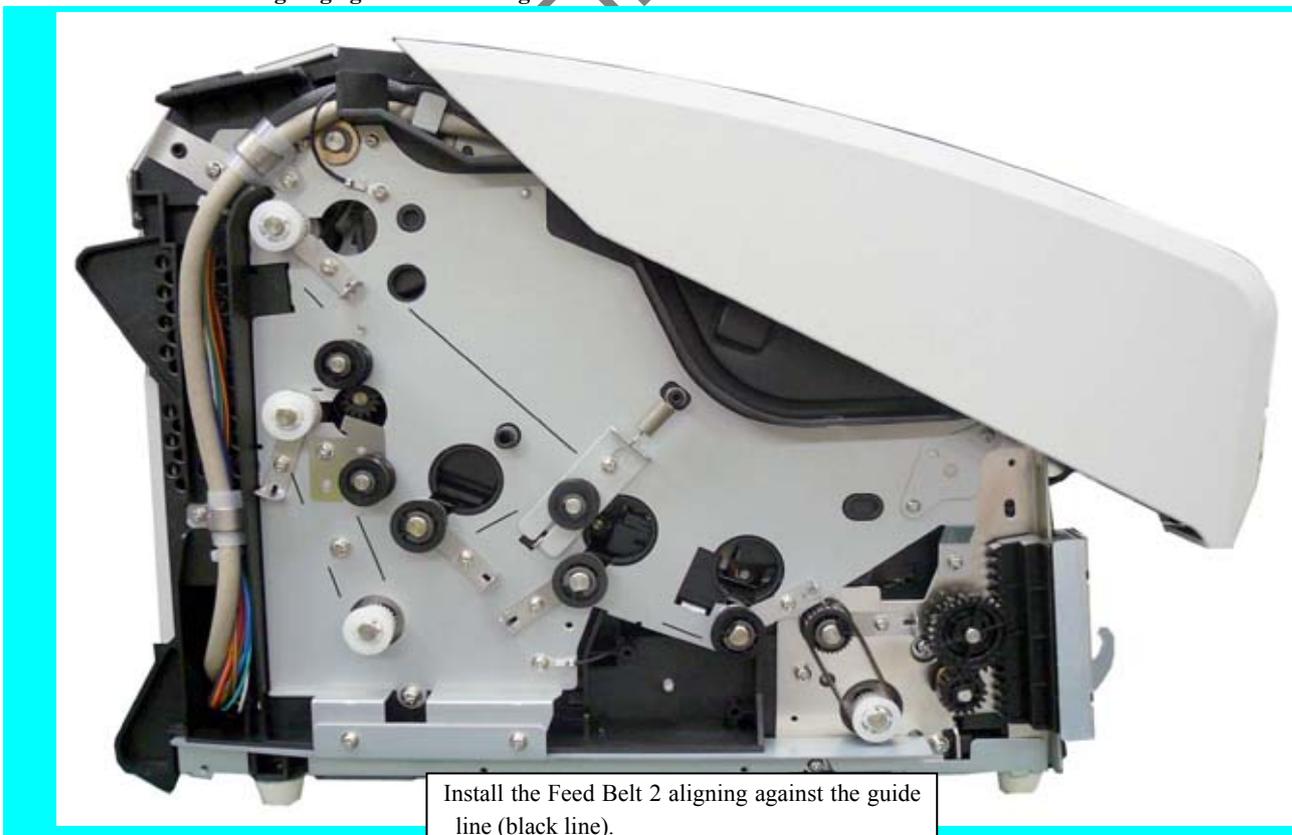
[Left side of Scanner]

<Installation>

Follow the above procedure in reverse.

NOTICE

- Tension adjustment for Feed Belt 2 is not necessary.
- Install the Feed Belt 2 aligning against the black guide line on the frame at left side of the scanner.



Install the Feed Belt 2 aligning against the guide line (black line).

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	165 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

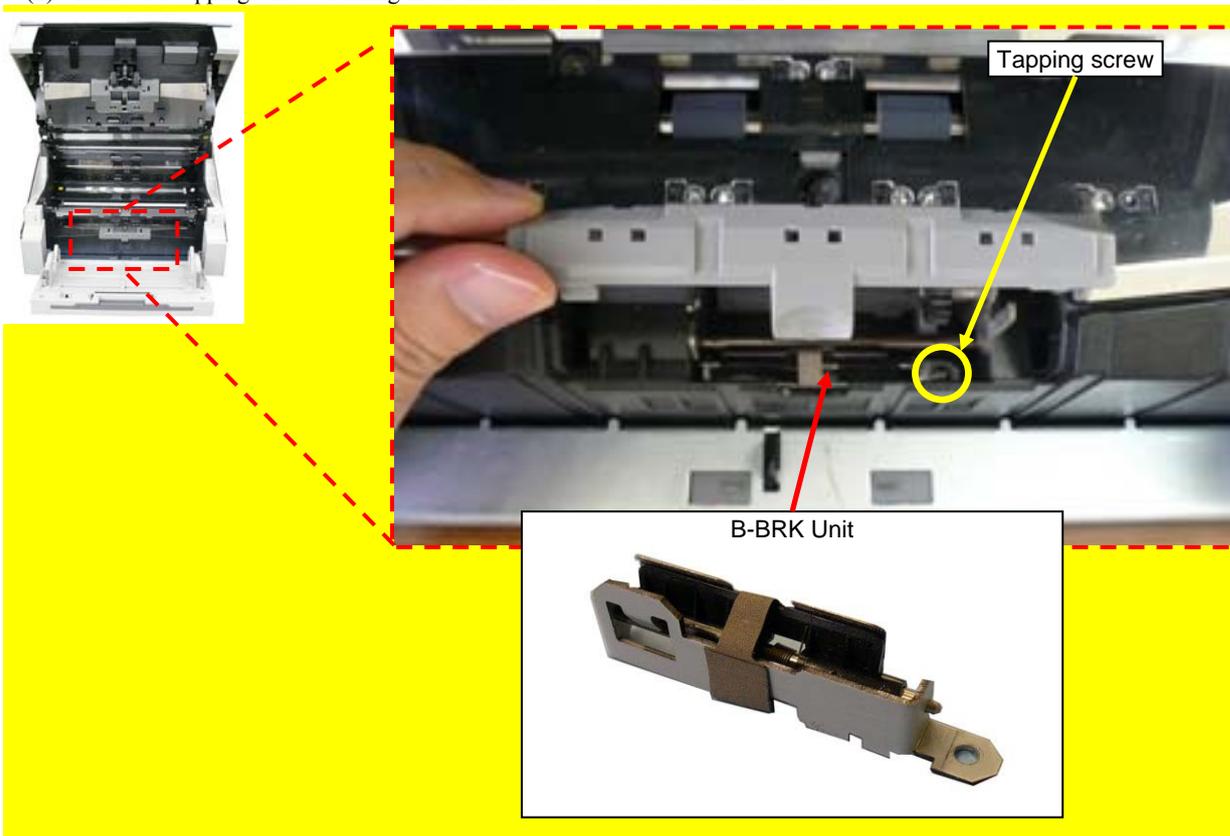
6.12.17 B-BRK Unit

NOTICE

Refer to Section 4.2.25 for the part number and appearance of the B-BRK Unit.

<Removal>

- (1) Open the Brake Roller Cover, and remove the Brake Unit. (Refer to steps (4) ~ (4) in Section 8.4.5.)
- (2) Remove a tapping screw securing the B-BRK Unit to remove the B-BRK Unit.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	166 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

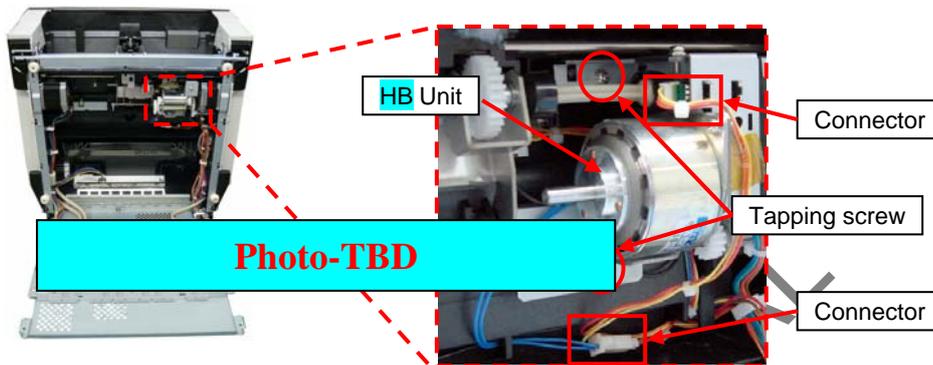
6.12.18 HB Unit

NOTICE

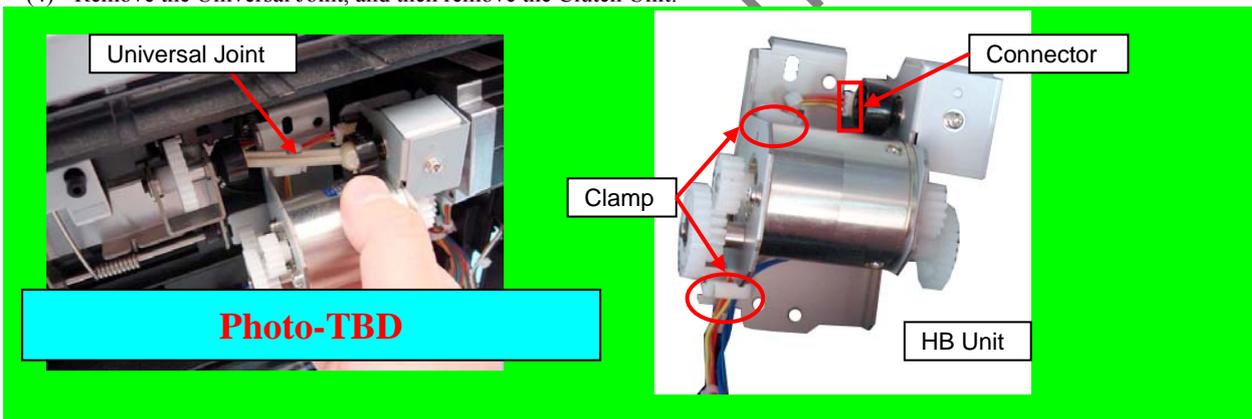
Refer to Section 4.2.22 for the part number and appearance of the HB Unit.

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Disconnect two connectors (enclosed with square). Remove two tapping screws (circled) securing the HB Unit while holding the HB Unit.



- (4) Remove the Universal Joint, and then remove the Clutch Unit.



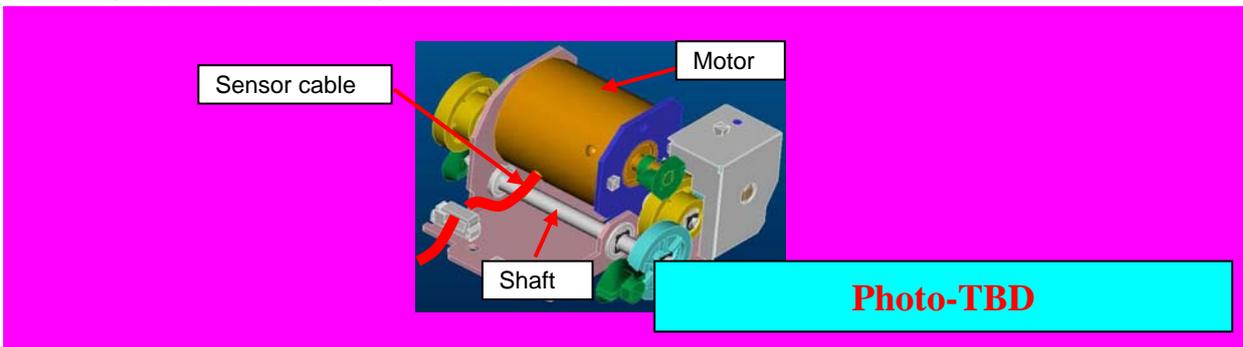
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	167 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

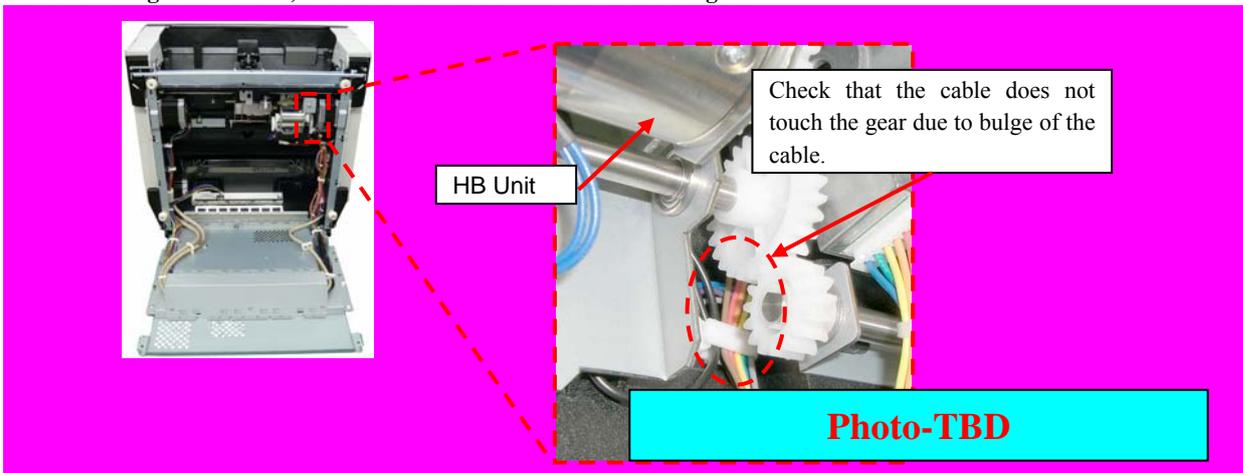
Follow the above procedure in reverse.

NOTICE

Route the Sensor cable between the Shaft and Motor to install.



After installing the HB Unit, check that the cable does not touch the gear.



Adjustment - [TBD] (Refer to Chapter 7.)

PFU.COM

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	168 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

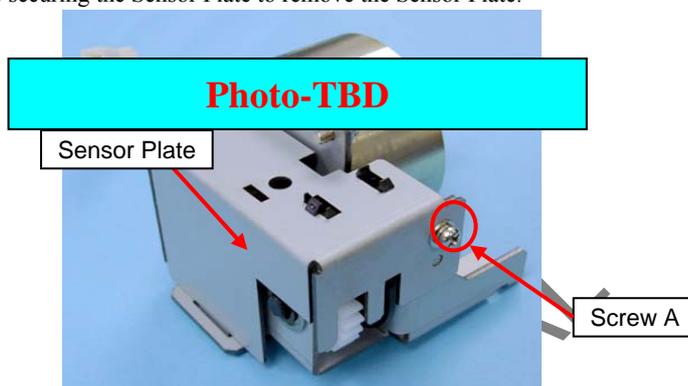
6.12.19 Brake Encoder Sensor (Sensor)

NOTICE

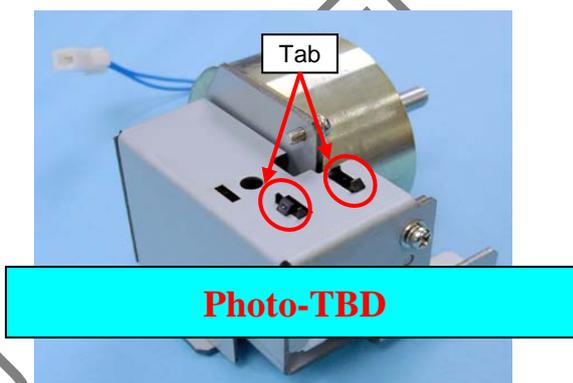
Refer to Section 4.2.45 for the part number and appearance of the Brake Encoder Sensor.

<Removal>

- (1) Remove the Hopper Unit (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the HB Unit. (Refer to Section 6.12.18.)
- (4) Remove a screw A (circled) securing the Sensor Plate to remove the Sensor Plate.



- (5) Unlatch the tabs from the Sensor Plate to remove the Sensor.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	169 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

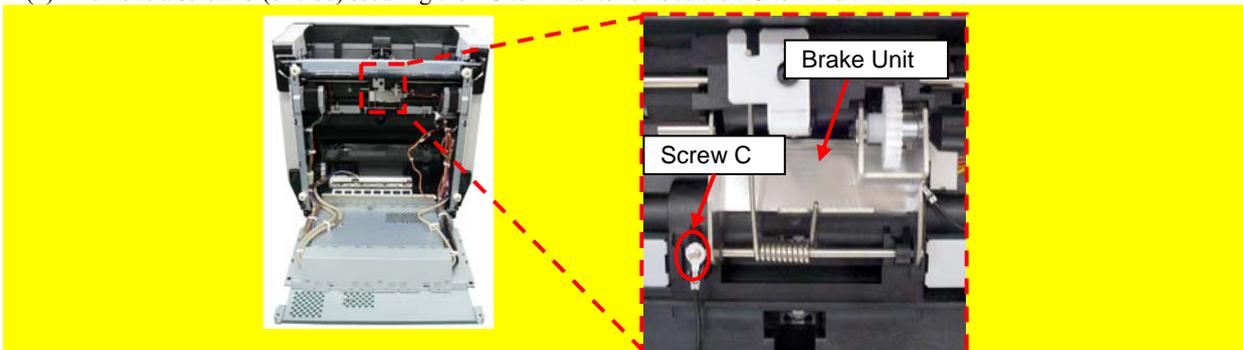
6.12.20 Brake Unit

NOTICE

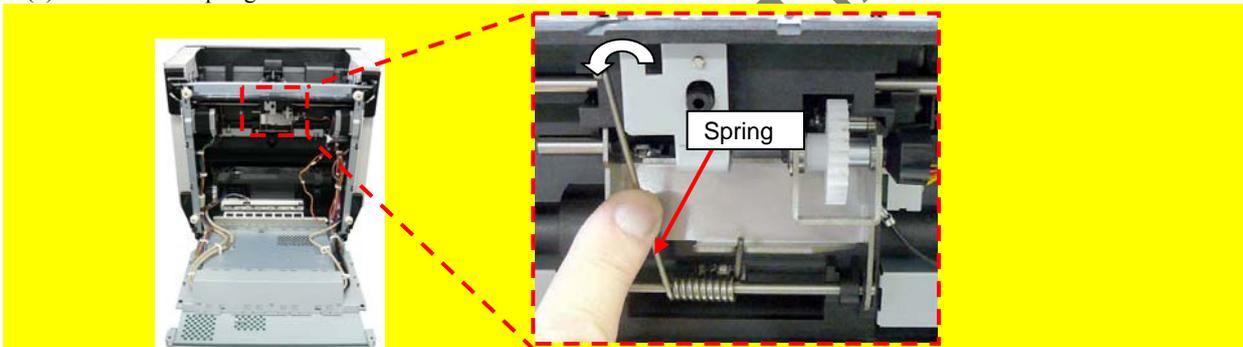
Refer to Section 4.2.26 for the part number and appearance of the Brake Unit.

<Removal>

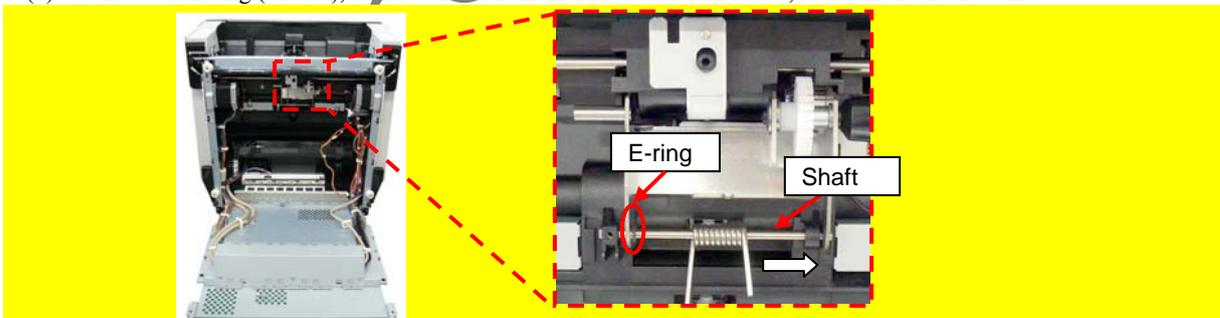
- (1) Remove the following parts:
 - Hopper Unit (Refer to Section 6.7.1.)
 - Brake Roller (Refer to step (2) in Section 8.4.5.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the HB Unit. (Refer to Section 6.12.18.)
- (4) Remove a screw C (circled) securing the FG terminal to remove the FG terminal.



- (5) Remove the spring from the frame.



- (6) Remove an E-ring (circled), remove the shaft in the direction of the arrow, and then the Brake Unit.

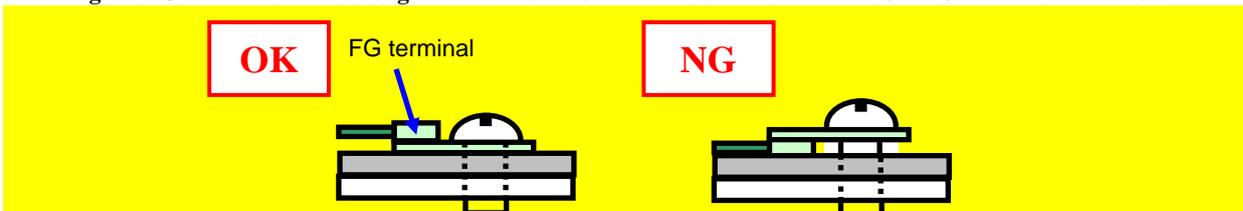


<Installation>

Follow the above procedure in reverse.

NOTICE

Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	170 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.13 Replacing the Parts in the Revolve Unit

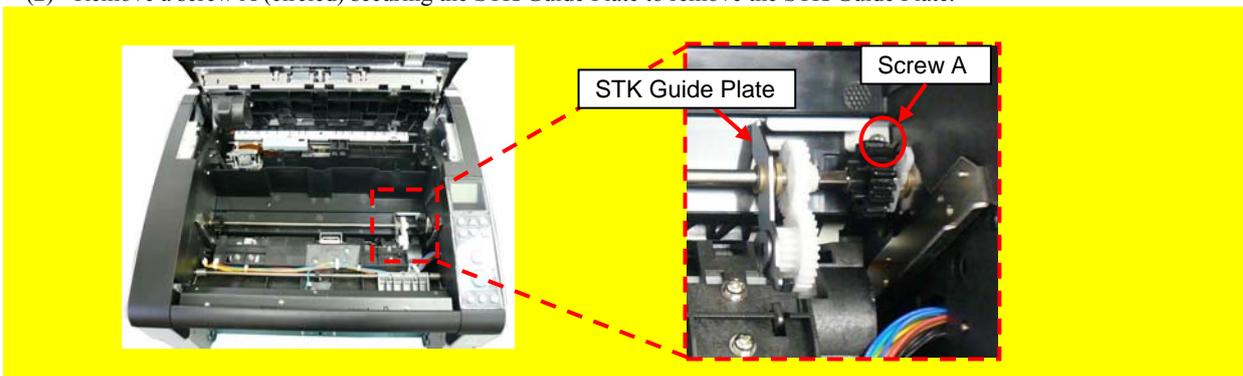
6.13.1 Optical Unit

NOTICE

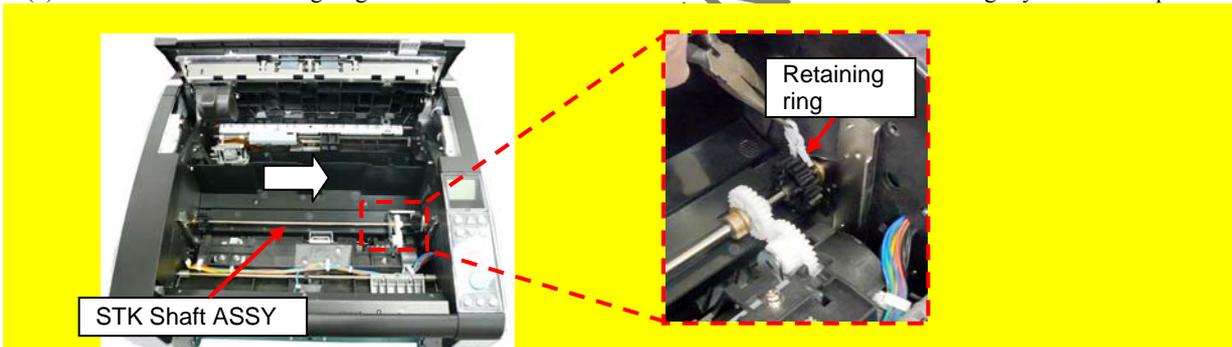
Refer to Section 4.2.15 for the part number and appearance of the Optical Unit.

<Removal>

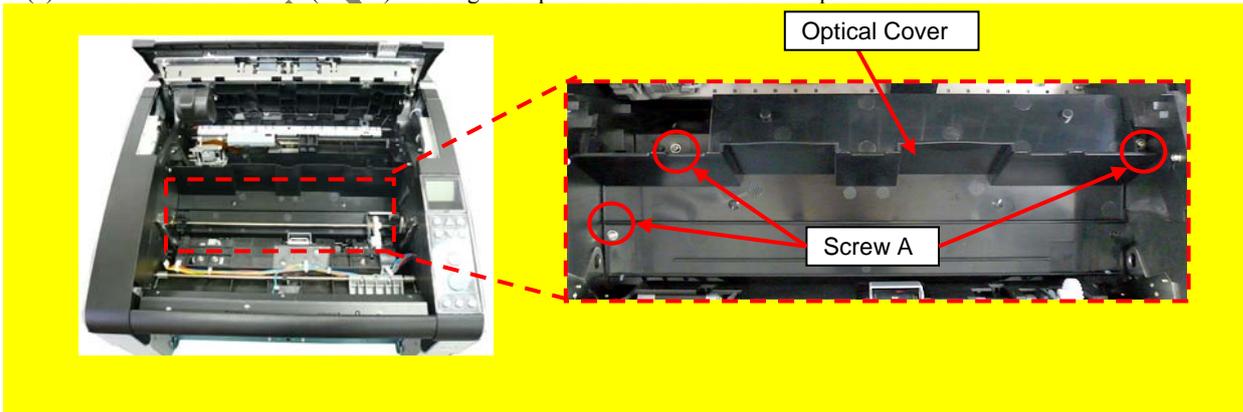
- (1) Remove the Stacker Unit. (Refer to Section 6.7.2.)
- (2) Remove a screw A (circled) securing the STK Guide Plate to remove the STK Guide Plate.



- (3) Remove a white retaining ring and move the STK Shaft ASSY in the direction of the arrow slightly to remove upward.

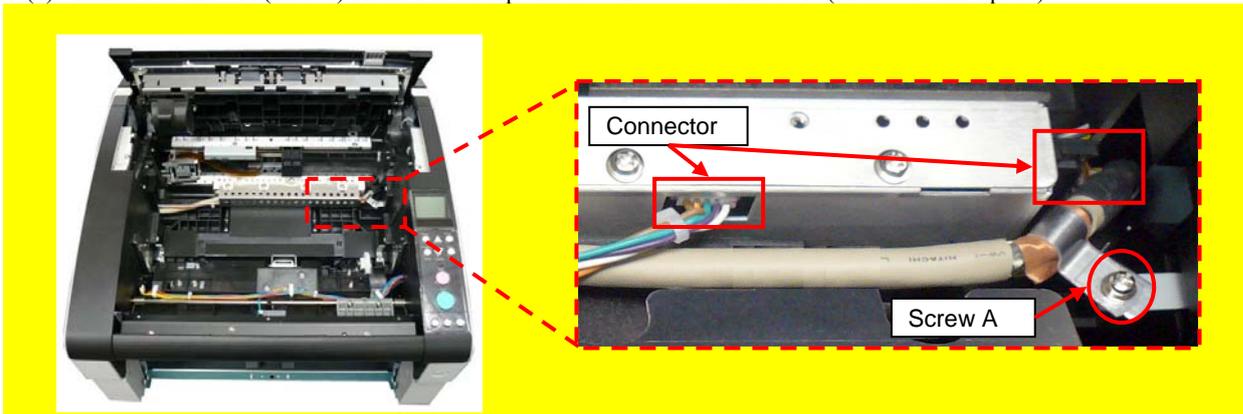


- (4) Remove three screws A (circled) securing the Optical Cover to remove the Optical Cover.

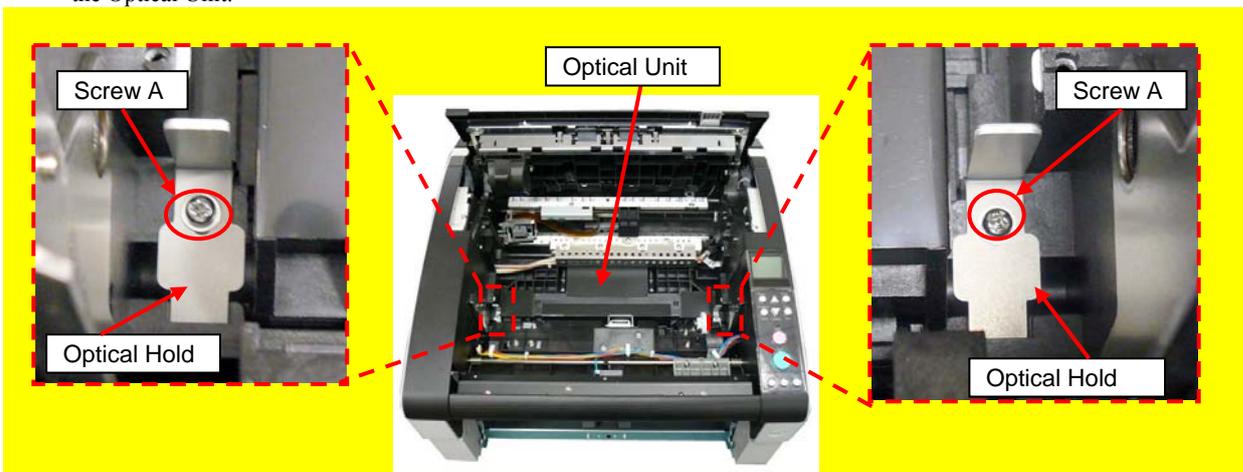


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	171 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(5) Remove a screw A (circled) on the FG Clamp and disconnect two connectors (enclosed with square).



(6) Remove a screw A (circled) securing the Optical Hold, remove the Optical Holds at right and left sides, and then remove the Optical Unit.

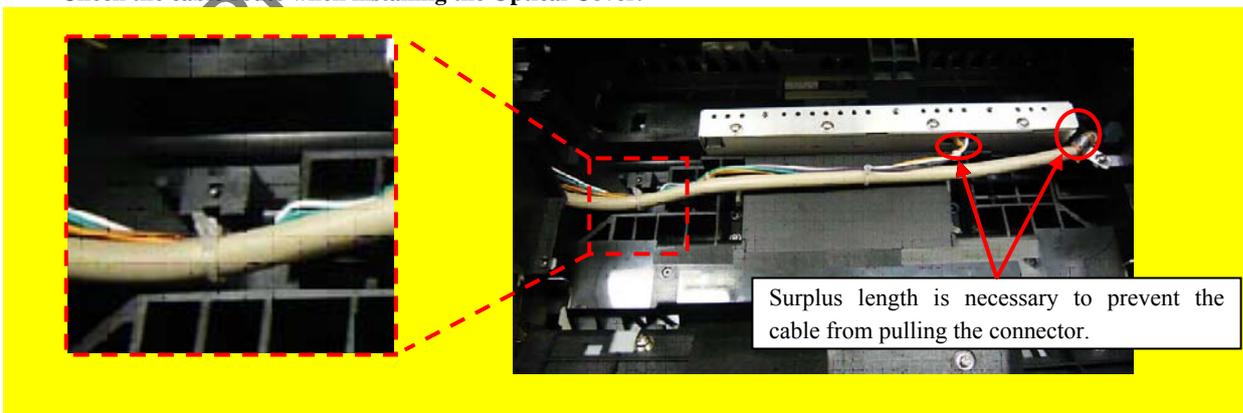


<Installation>

Follow the above procedure in reverse.

NOTICE

- When holding the Optical Unit, do not touch the mirror (glass) or the CCD board (metal frame part) but the black frame.
- Check the cable route when installing the Optical Cover.



- After replacing the Optical Unit, perform Offset adjustment and White level adjustment. (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	172 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

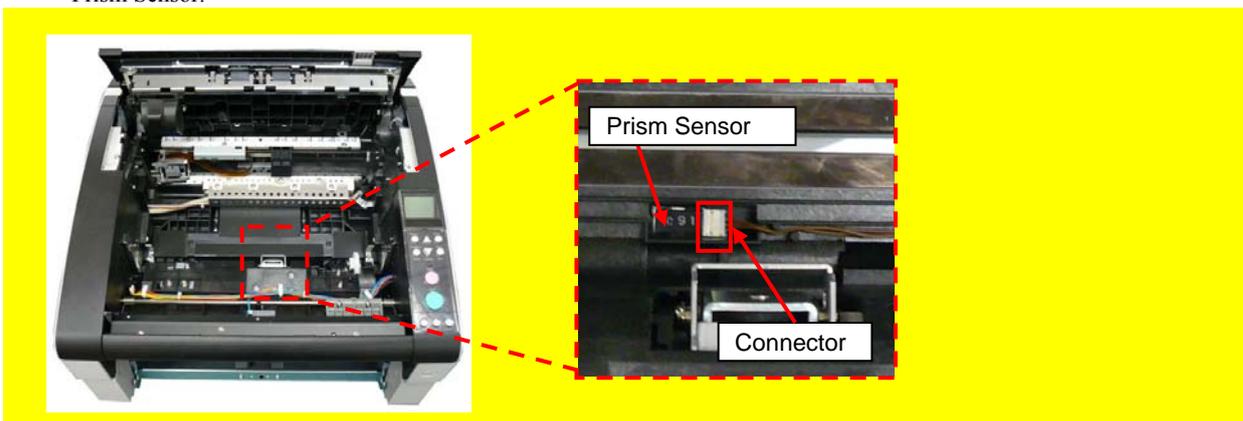
6.13.2 Read Top Sensor (Prism Sensor)

NOTICE

Refer to Section 4.2.46 for the part number and appearance of the Read Top Sensor.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - Optical Unit (Refer to Section 6.13.1.)
- (2) Remove the Prism Sensor from the Revolve Unit, and then disconnect a connector (enclosed with square) from the Prism Sensor.



<Installation>

Follow the above procedure in reverse.

NOTICE

Adjustment – (TBD) (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	173 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

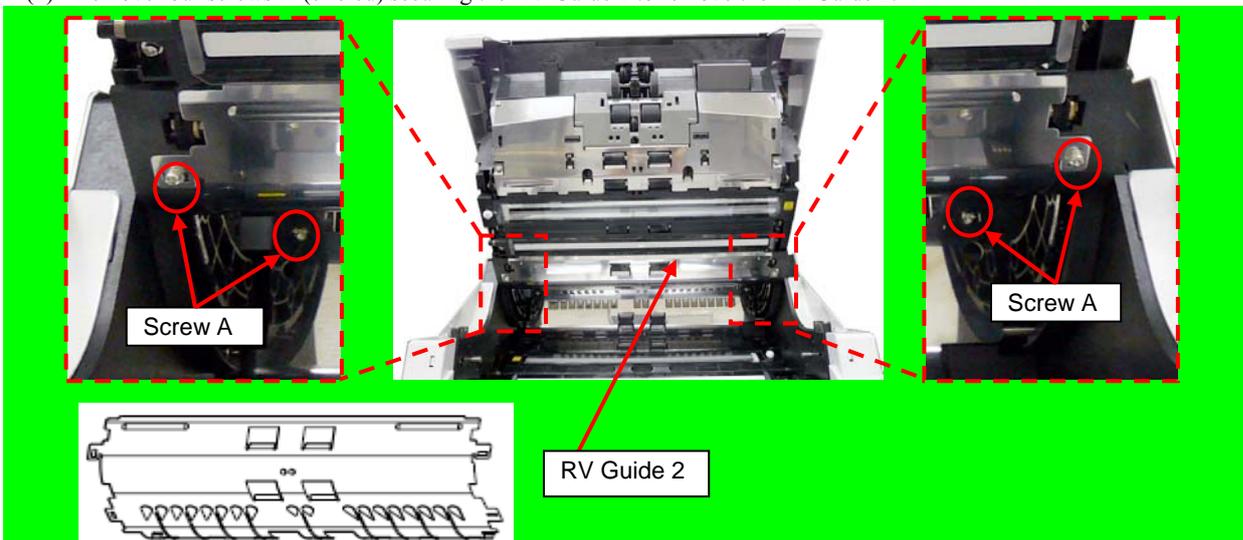
6.13.3 Imprinter Top Sensor (Prism Sensor)

NOTICE

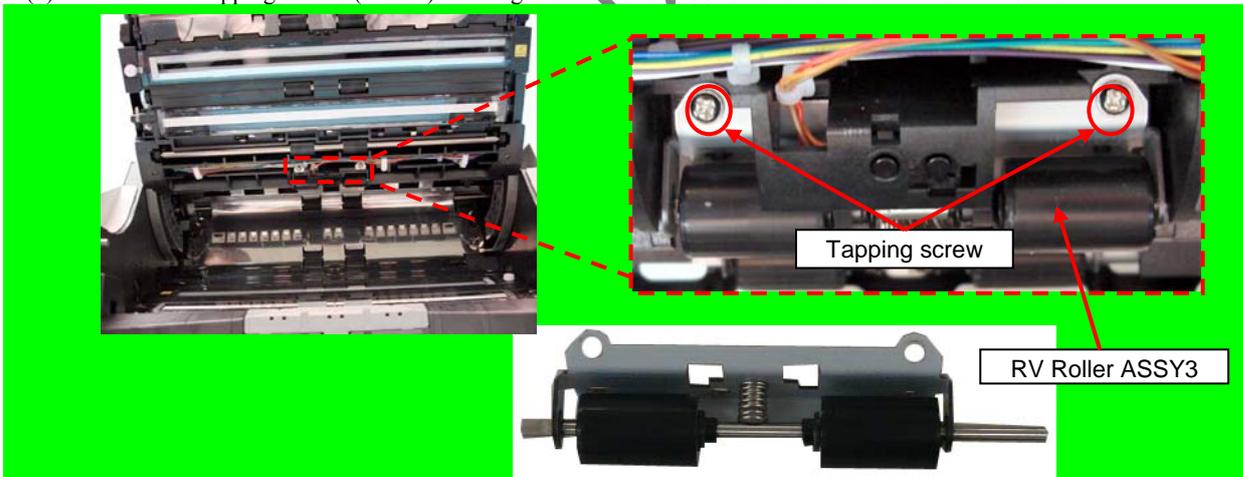
Refer to Section 4.2.46 for the part number and appearance of the Imprinter Top Sensor.

<Removal>

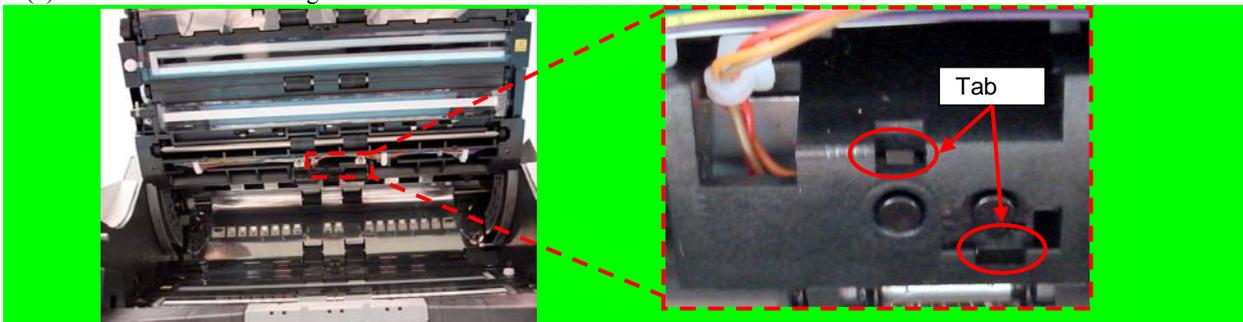
- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove four screws A (circled) securing the RV Guide 2 to remove the RV Guide 2.



- (3) Remove two tapping screws (circled) securing the RV Roller ASSY3 to remove the RV Roller ASSY3.

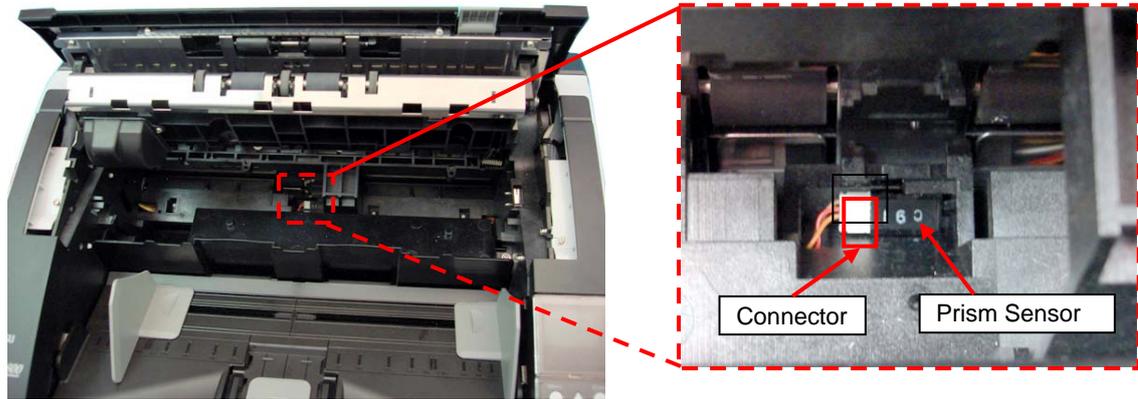


- (4) Unlatch the tabs securing the Prism Sensor from inside of the Revolve Unit.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	174 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

- (5) Remove the Prism Sensor from the Revolve Unit, and then disconnect a connector (enclosed with square) from the Prism Sensor.



<Installation>

Follow the above procedure in reverse.

NOTICE

If fi-680PRF imprinter option is installed, insert the IM-FG-SHEET between RV Guide 2 and RV-FRAME and fix it. (Refer to installation procedure in Section 9.6.3.2.)

Adjustment – (TBD) (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	175 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

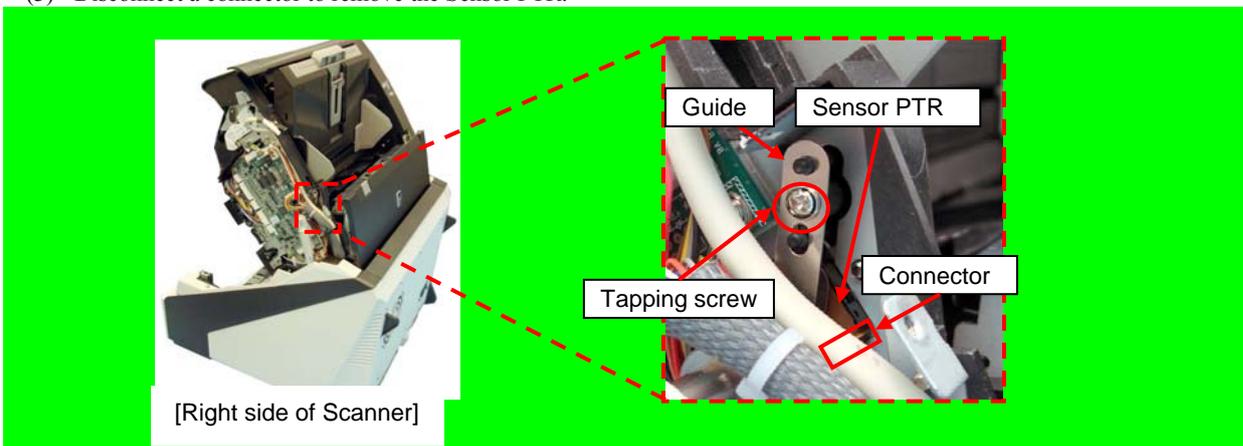
6.13.4 Stacker Sensor (Sensor PTR)

NOTICE

Refer to Section 4.2.50 for the part number and appearance of the Stacker Sensor.

<Removal>

- (1) Remove the RV Cover R. (Refer to Section 6.8.4.)
- (2) Remove a tapping screw (circled) securing the Guide from right side of the scanner to remove the Guide.
- (3) Disconnect a connector to remove the Sensor PTR.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	176 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

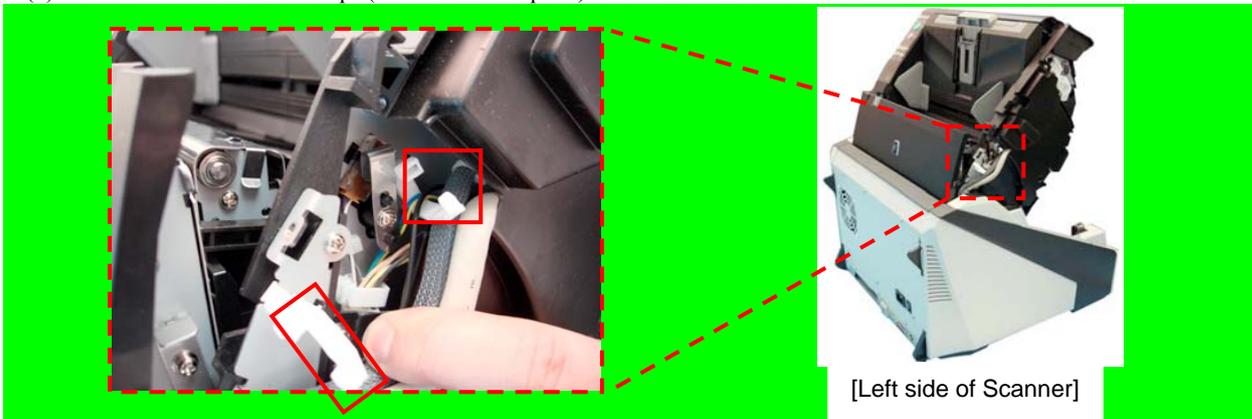
6.13.5 Stacker Sensor (Sensor LED)

NOTICE

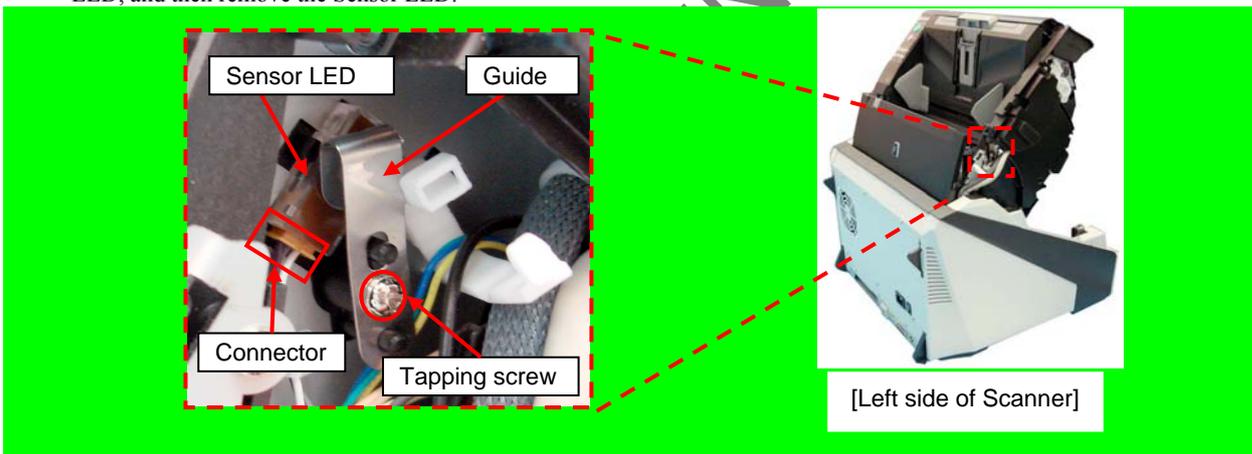
Refer to Section 4.2.51 for the part number and appearance of the Stacker Sensor.

<Removal>

- (1) Remove the RV Cover L. (Refer to Section 6.8.3.)
- (2) Unhook the two cable clamps (enclosed with square) to remove the Stacker Sensor cable.



- (3) Remove a tapping screw (circled) securing the Guide, disconnect a connector (enclosed with square) from the Sensor LED, and then remove the Sensor LED.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	177 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

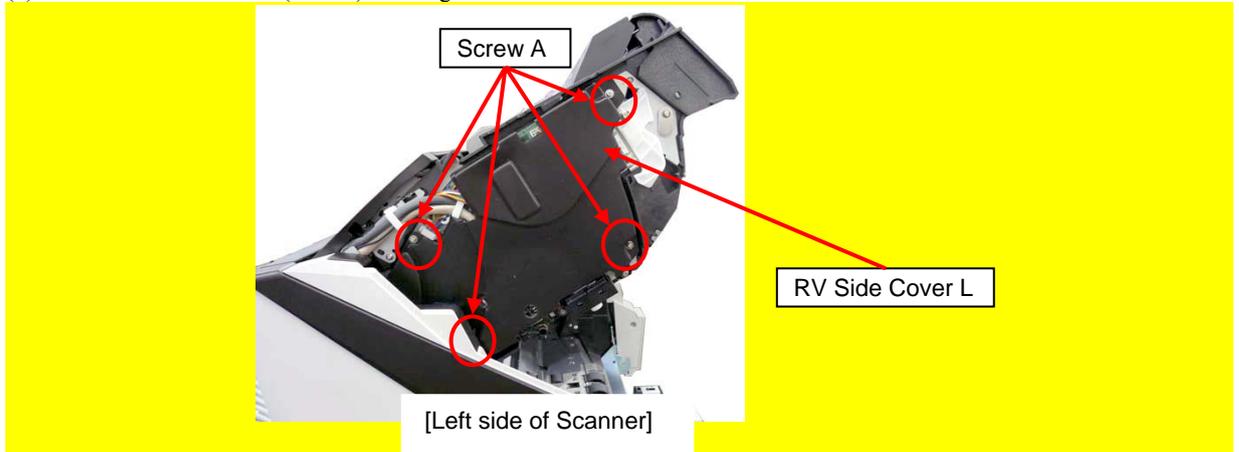
6.13.6 BW Unit

NOTICE

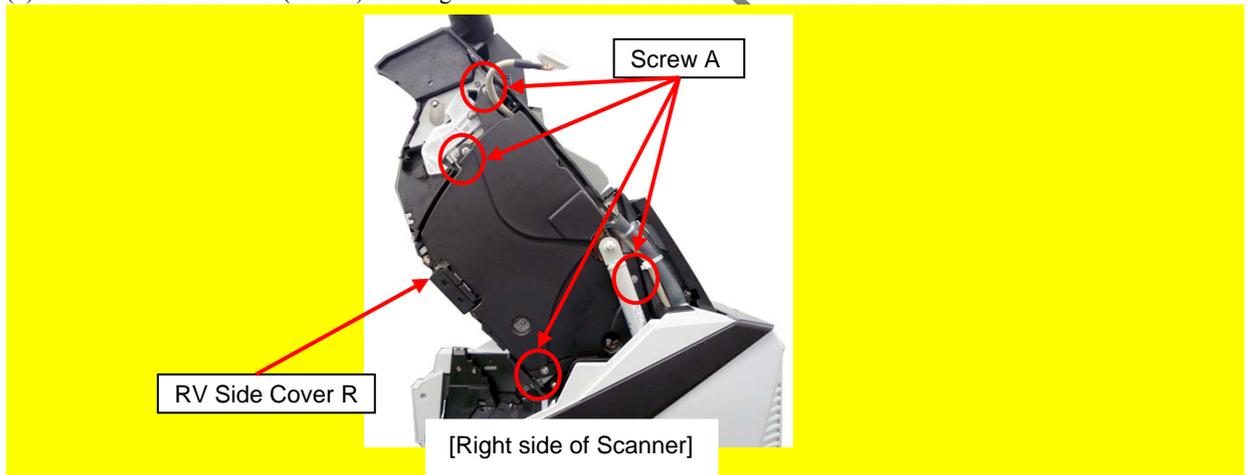
Refer to Section 4.2.20 for the part number and appearance of the BW Unit.

<Removal>

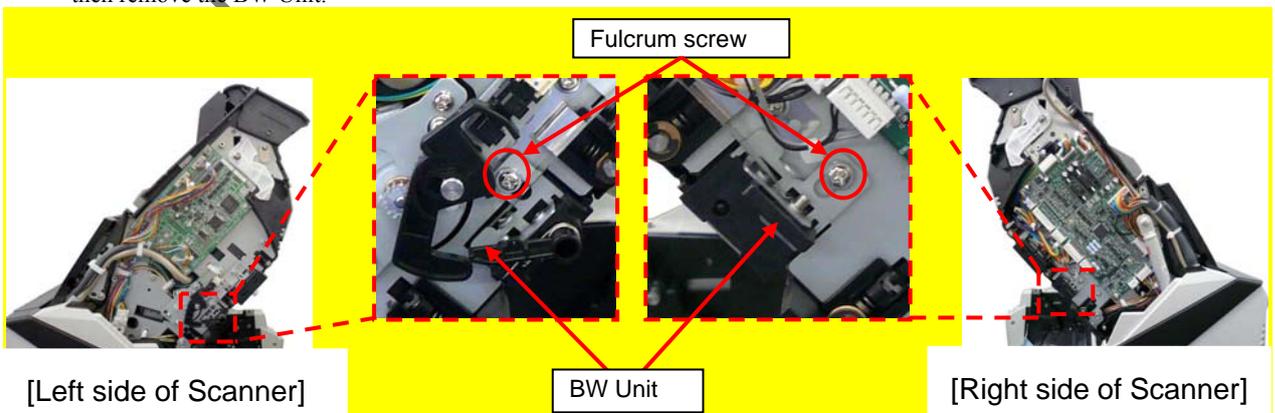
- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Cover R (Refer to Section 6.8.4.)
- (2) Remove four screws A (circled) securing the RV Side Cover L to remove the RV Side Cover L.



- (3) Remove four screws A (circled) securing the RV Side Cover R to remove the RV Side Cover R.

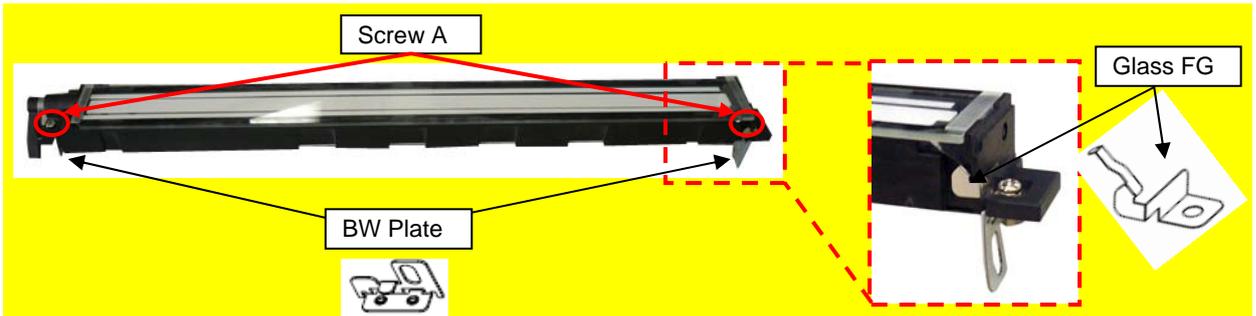


- (4) Remove fulcrum screws (one for each right and left sides, circled) securing the BW Unit while holding the BW Unit, and then remove the BW Unit.

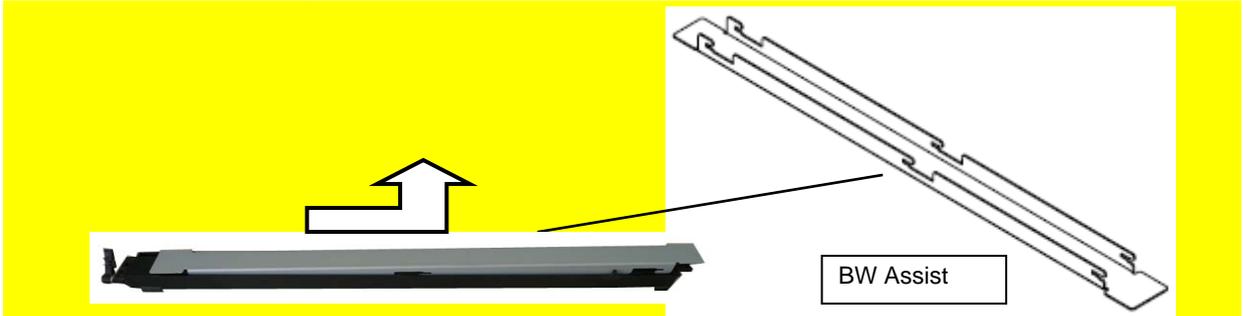


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	178 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

- (5) Remove two screws A (circled) securing the BW Plate and Glass FG, and then remove the BW Plate and Glass FG from the BW Unit.



- (6) Move the BW Assist slightly from the back of the BW Unit to remove.

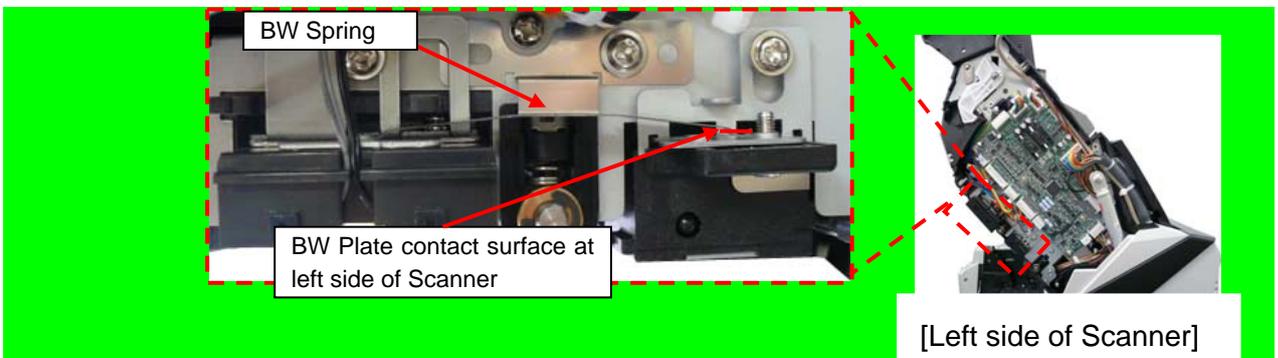
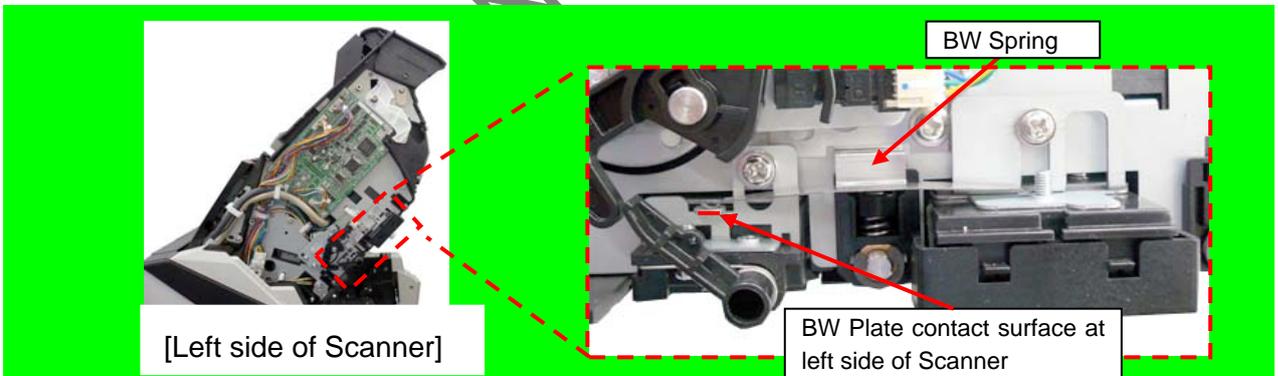


<Installation>

Follow the above procedure in reverse.

NOTICE

- Install the BW Assist, Glass FG, and BW Plate into the BW Unit first before installing the BW Unit into the scanner.
- When holding the BW Unit, do not touch the mirror (glass) but the black frame.
- BW Plate contact surface on the right side of the scanner and that on the left side are not the same. Check right and left at installation.



- After replacing the BW Unit, perform "Offset adjustment" and "White level adjustment". (Refer to Section 7.X.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	179 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

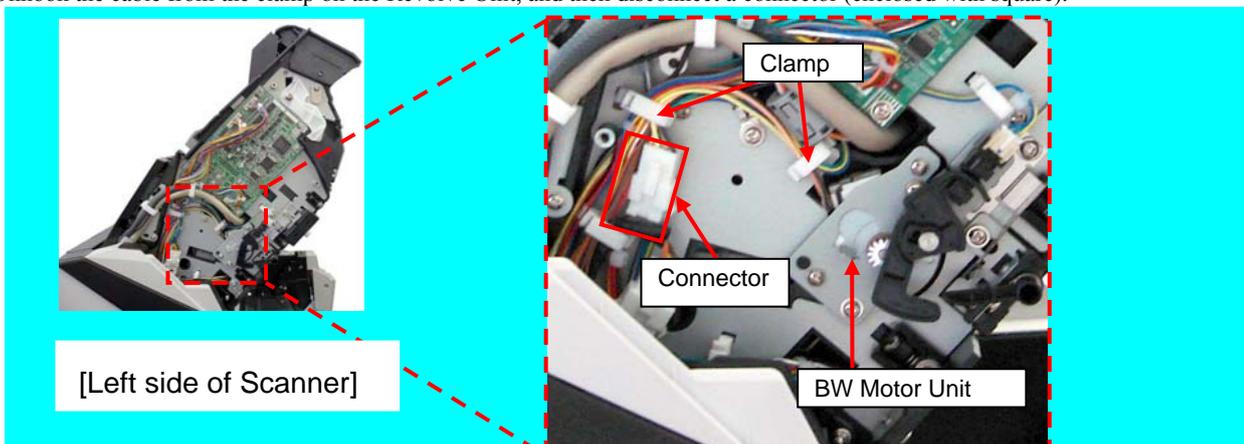
6.13.7 BW Motor Unit

NOTICE

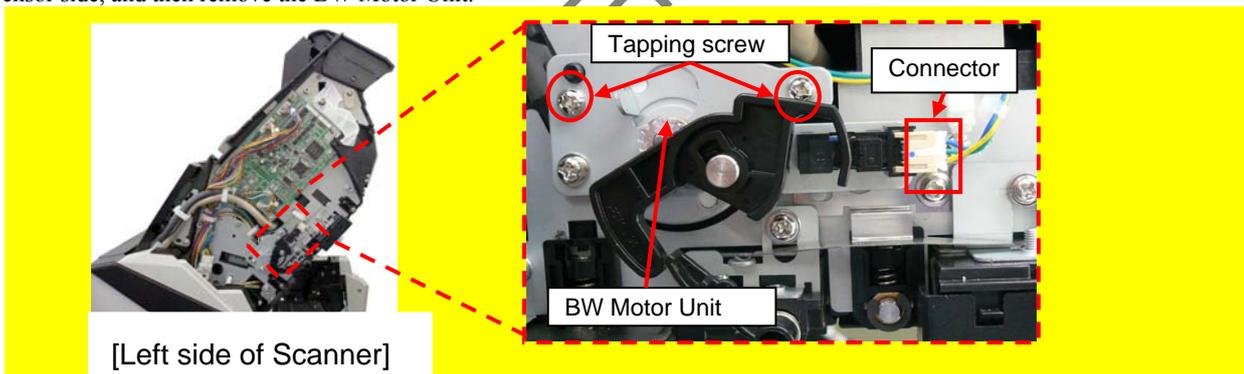
Refer to Section 4.2.21 for the part number and appearance of the BW Motor Unit.

<Removal>

- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6.)
- (2) Unhook the cable from the clamp on the Revolve Unit, and then disconnect a connector (enclosed with square).



- (3) Remove two tapping screws (circled) securing the BW Motor Unit, disconnect a connector (enclosed with square) at the Sensor side, and then remove the BW Motor Unit.

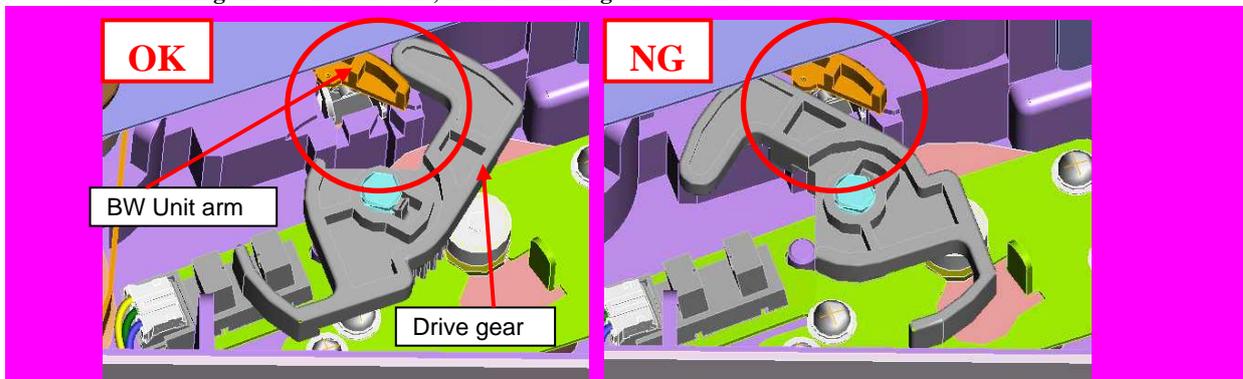


<Installation>

Follow the above procedure in reverse.

NOTICE

- When installing the BW Motor Unit, hook the drive gear onto the BW Unit arm.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	180 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

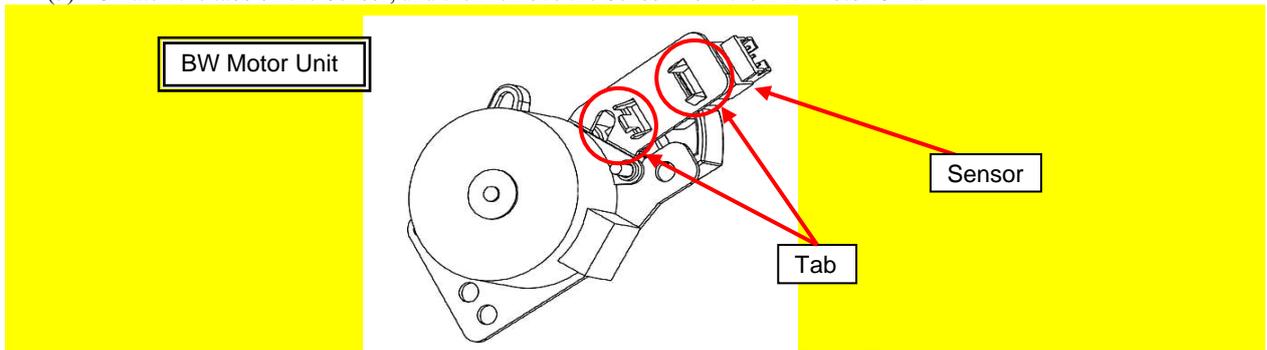
6.13.8 Backside Background Changeover Sensor (Sensor)

NOTICE

Refer to Section 4.2.45 for the part number and appearance of the Sensor.

<Removal>

- (4) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6.)
 - BW Motor Unit (Refer to Section 6.13.7.)
- (5) Unlatch the tabs on the Sensor, and then remove the Sensor from the BW Motor Unit.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	181 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

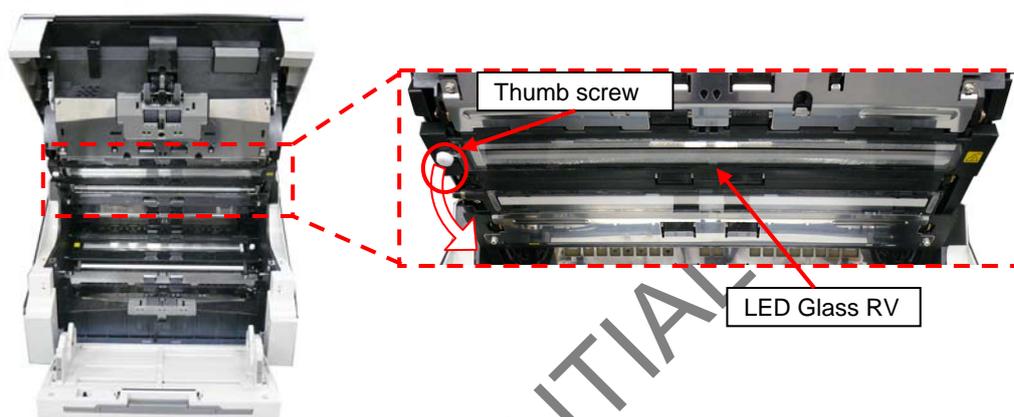
6.13.9 LED Glass RV

NOTICE

Refer to Section 4.2.17 for the part number and appearance of the LED Glass RV.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Loosen a thumb screw (circled) securing the LED Glass RV, and open the LED Glass RV slightly in the direction of the arrow to remove the LED Glass RV.

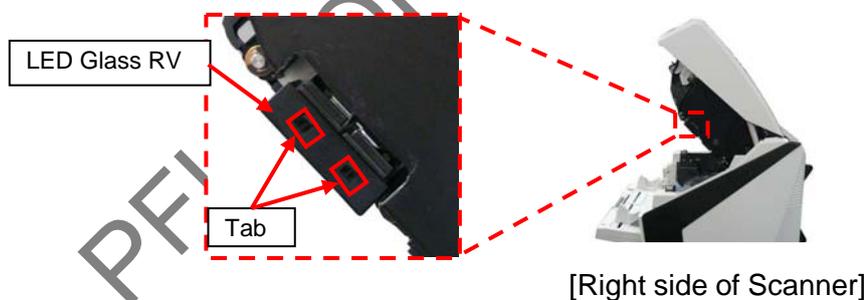


<Installation>

Latch the LED Glass RV on two tabs at right side of the LED Unit RV, and fix the LED Glass RV on the scanner with the thumb screw.

NOTICE

When holding the LED Glass FX, do not touch the mirror (glass) but the black frame.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	182 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

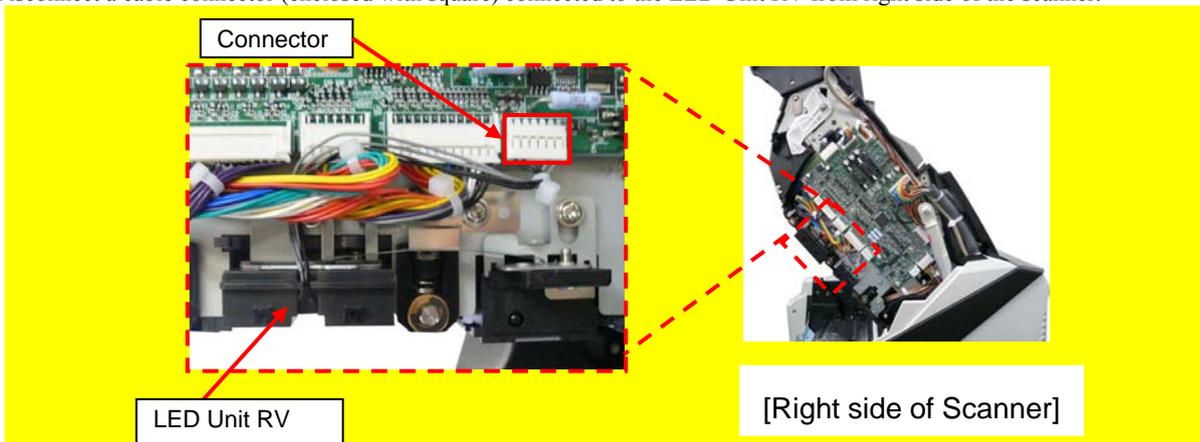
6.13.10 LED Unit RV

NOTICE

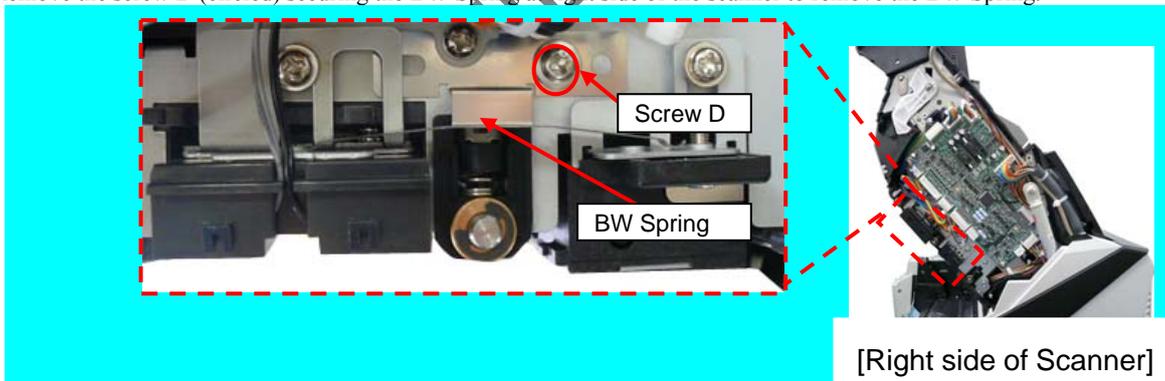
Refer to Section 4.2.19 for the part number and appearance of the LED Unit RV.

<Removal>

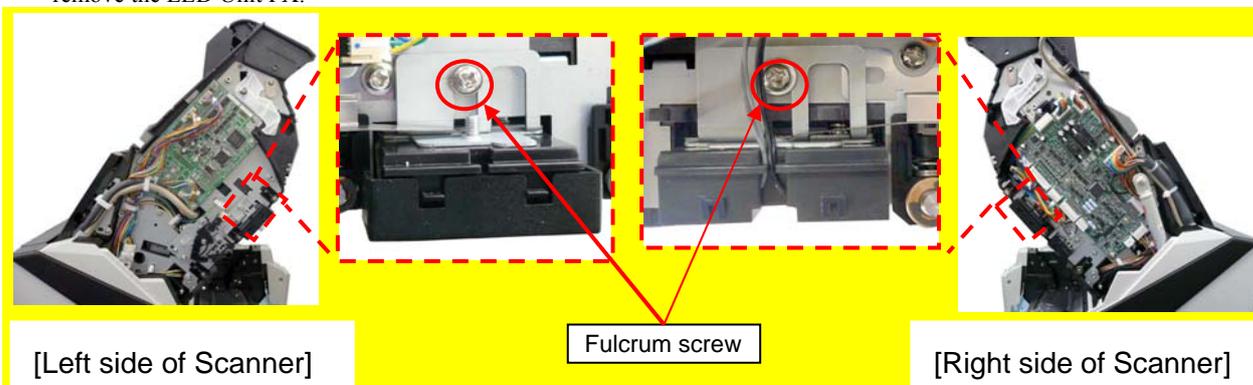
- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - LED Glass RV (Refer to Section 6.13.9.)
- (2) Disconnect a cable connector (enclosed with square) connected to the LED Unit RV from right side of the scanner.



- (3) Remove the screw D (circled) securing the BW Spring at right side of the scanner to remove the BW Spring.



- (4) Remove fulcrum screws (one for each side, circled) that support the LED Unit FX while holding the LED Unit FX, and remove the LED Unit FX.



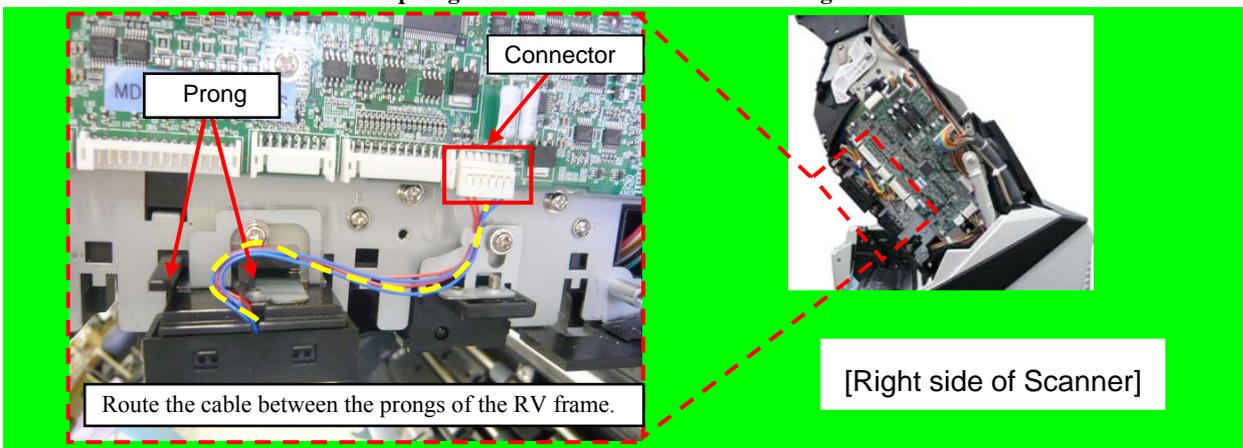
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	183 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

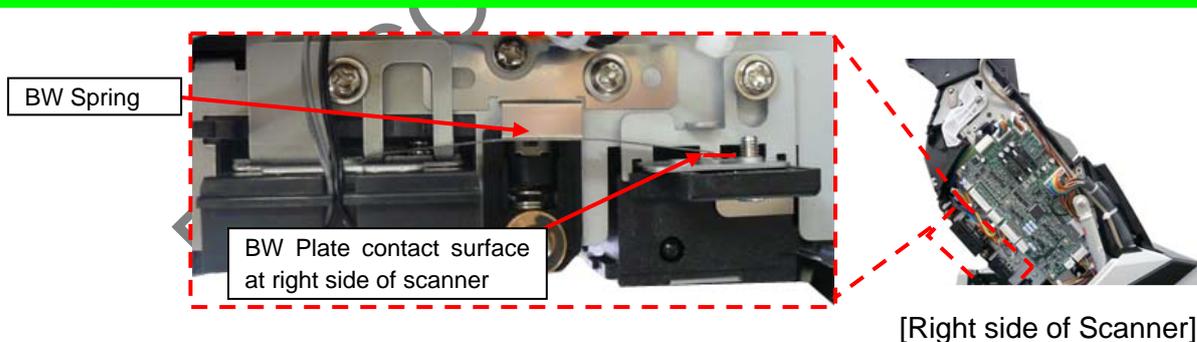
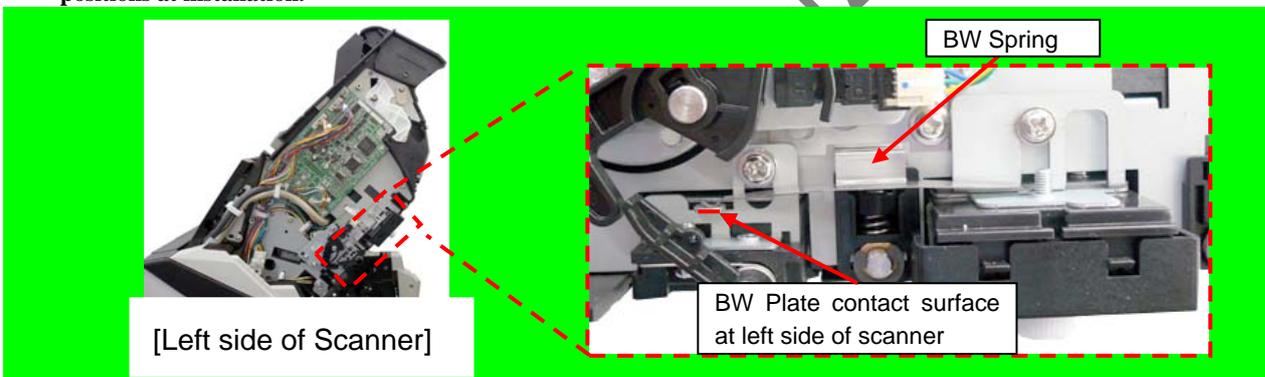
Follow the above procedure in reverse.

NOTICE

- When holding the LED Unit FX, do not touch the mirror (glass) but the black frame.
- Route the cable between the two prongs on the RV Frame when connecting the connector.



- BW Spring contact surface on the right side of the scanner and that on the left side are not the same. Check the positions at installation.



- After replacing the LED Unit FX, perform White level adjustment. (Refer to Section 7.X.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	184 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.13.11 Exit Roller (Revolve Unit)

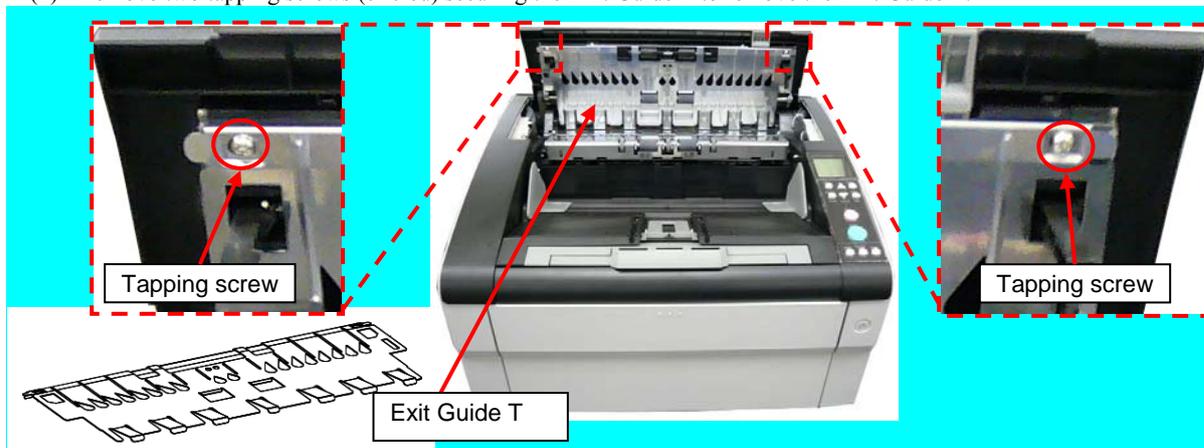
6.13.11.1 Exit Roller 1

NOTICE

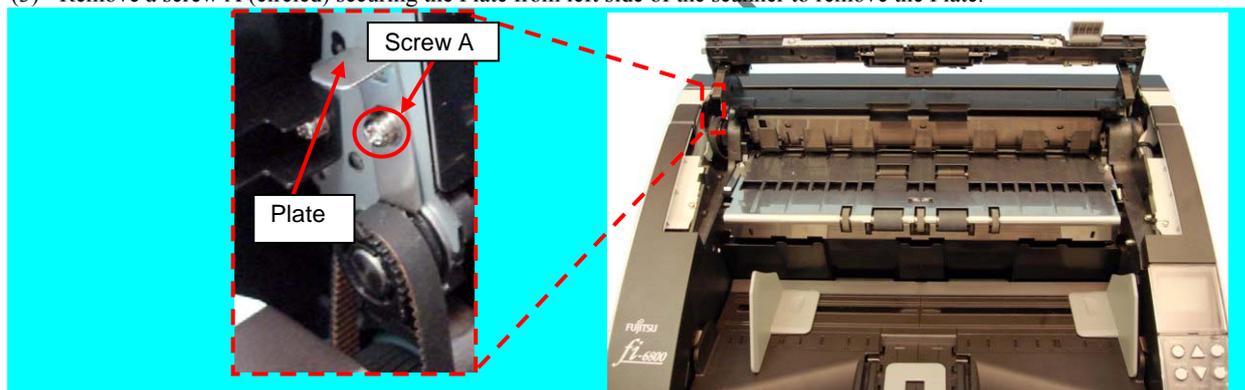
Refer to Sections 4.2.76 for the part number and appearance of the Exit Roller.

<Removal>

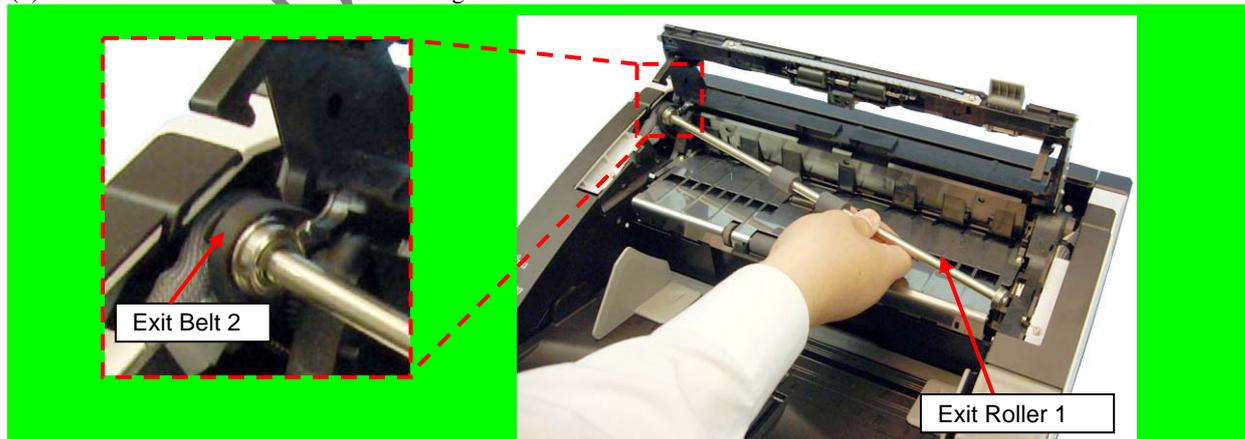
- (1) Remove the following parts.
 - Top Cover (Refer to Section 6.8.3.)
 - [With fi-680PRB Imprinter option installed] Top Cover IMP (Refer to Section 9.6.3.5.)
- (2) Remove two tapping screws (circled) securing the Exit Guide T to remove the Exit Guide T.



- (3) Remove a screw A (circled) securing the Plate from left side of the scanner to remove the Plate.



- (4) Remove the Exit Roller 1 while removing the Exit Belt 2.



<Installation>

Follow the above procedure in reverse.

NOTICE

Tension adjustment for Exit Belt 2 is not necessary.

Adjustment - [TBD] (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	185 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

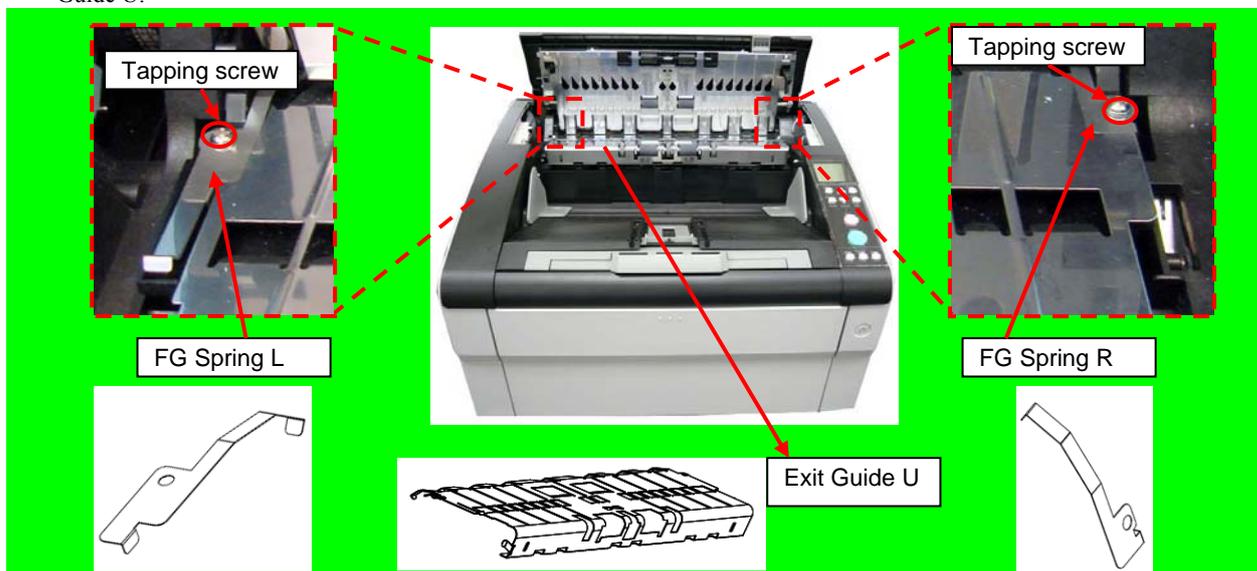
6.13.11.2 Exit Roller 2

NOTICE

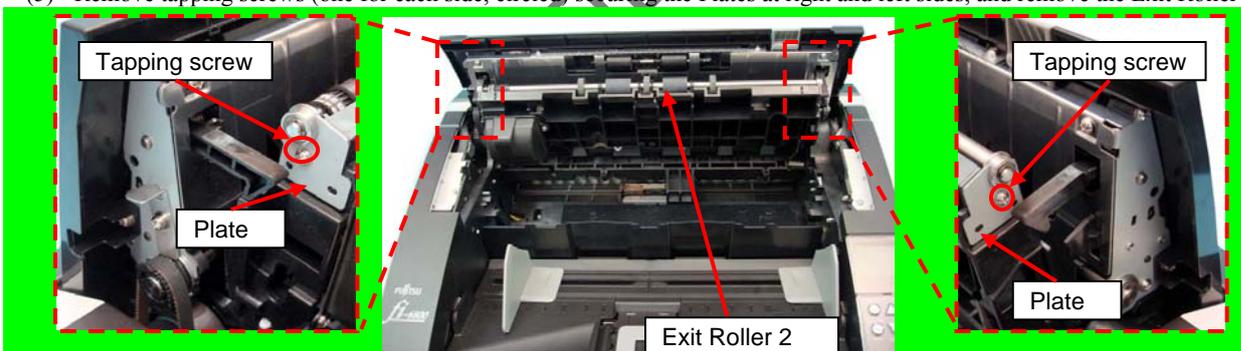
Refer to Sections 4.2.77 for the part number and appearance of the Exit Roller 2.

<Removal>

- (1) Open the Top Cover. (Refer to Section 8.1.4.)
- (2) Remove two tapping screws (circled) securing the Exit Guide U, and remove the FG Spring L, FG Spring R and Exit Guide U.



- (3) Open the Paper Path Unit. (Refer to step (2) in Section 6.7.2.)
- (4) Remove the Exit Belt 1. (Refer to steps (3) ~ (4) in Section 6.13.18.)
- (5) Remove tapping screws (one for each side, circled) securing the Plates at right and left sides, and remove the Exit Roller 2.



<Installation>

Follow the above procedure in reverse.

NOTICE

Tension adjustment for Exit Belt 1 is not necessary.

Adjustment - [TBD] (Refer to Chapter 7.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575 → B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	186 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

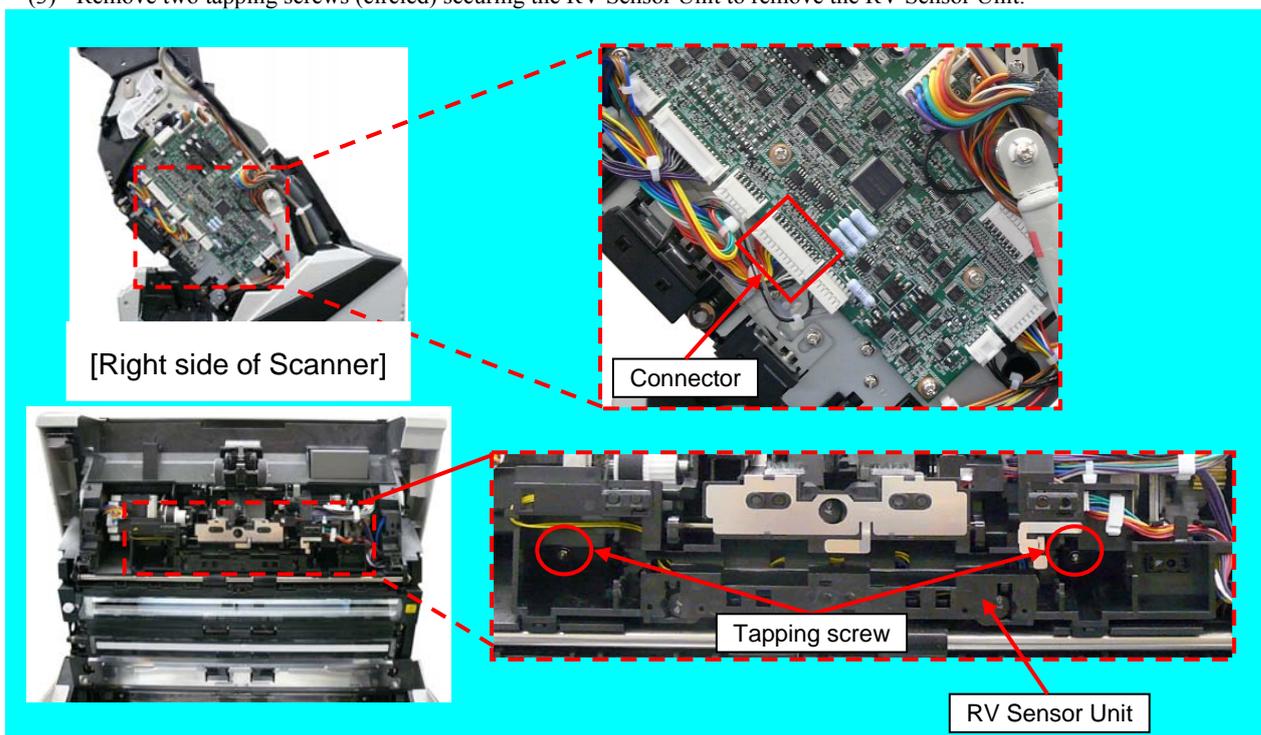
6.13.12 Feed Motor Unit 1 (for driving the Separator Roller)

NOTICE

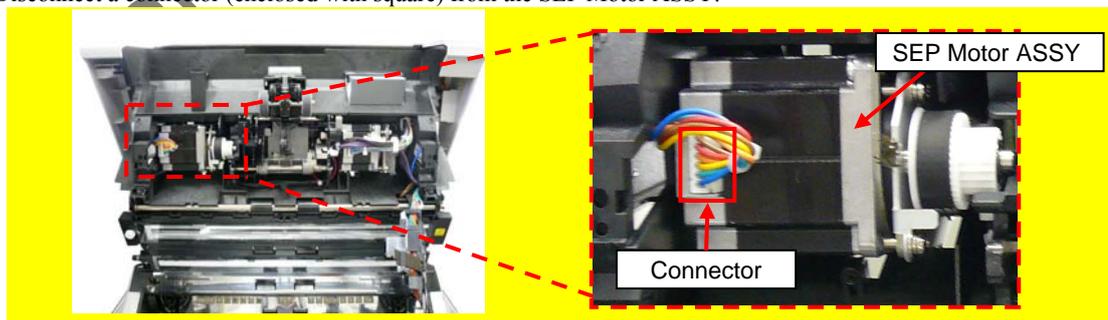
Refer to Section 4.2.29 for the part number and appearance of the Feed Motor Unit 1.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - Guide SEP (Refer to Section 6.13.25.)
- (2) Disconnect a cable connector (enclosed with square) connected to the Sensor Unit from right side of the scanner, and pull it out.
- (3) Remove two tapping screws (circled) securing the RV Sensor Unit to remove the RV Sensor Unit.



- (4) Disconnect a connector (enclosed with square) from the SEP Motor ASSY.

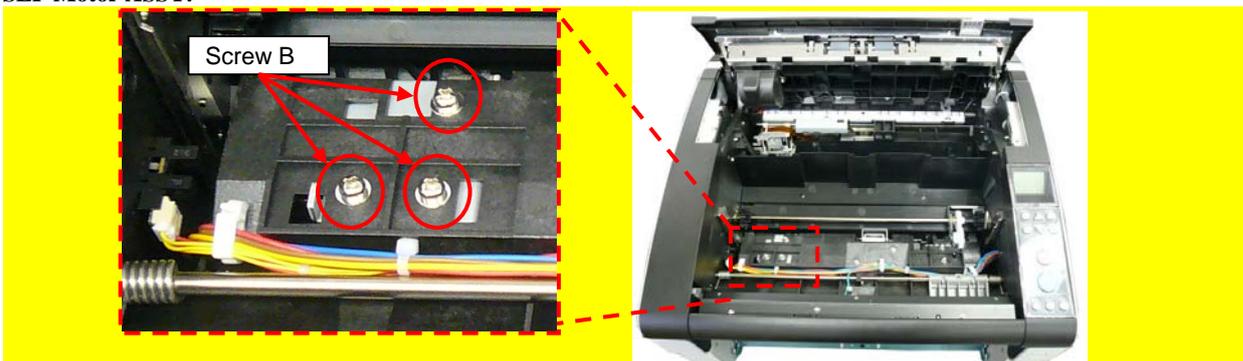


- (5) Remove three screws B (circled) securing the SEP Motor ASSY while holding the SEP Motor ASSY from the bottom, and then remove the SEP Motor ASSY.

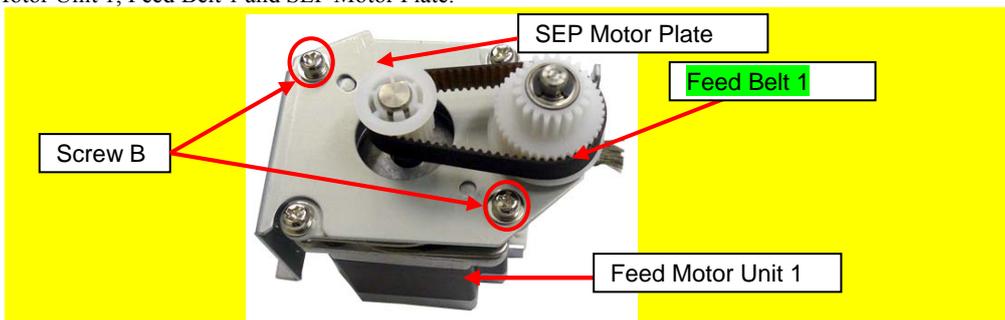
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	187 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

NOTICE

Inside of the ADF may be damaged if the Motor falls off. Be sure to hold the Motor from the bottom when removing the SEP Motor ASSY.



(6) Remove two screws B (circled) securing the SEP Motor Plate, and then separate the SEP Motor ASSY into the Feed Motor Unit 1, Feed Belt 1 and SEP Motor Plate.



<Installation>

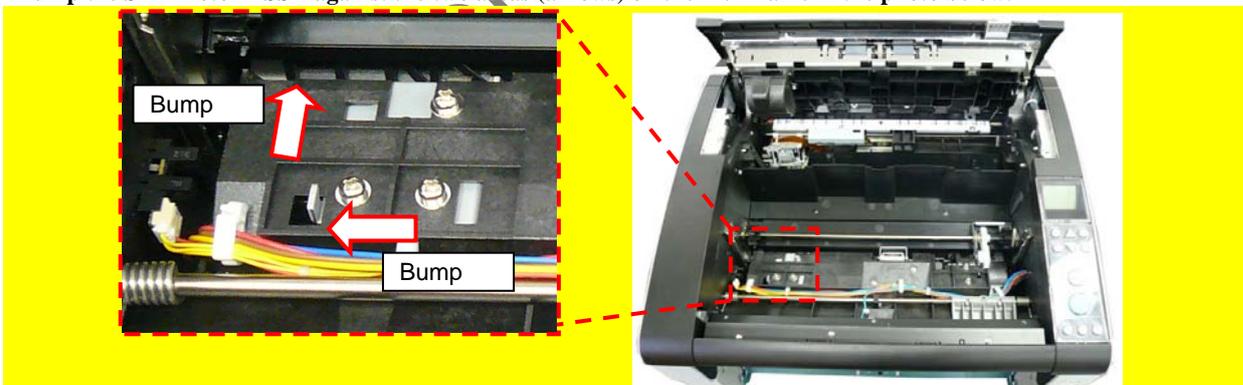
NOTICE

Reverse procedure in reverse.

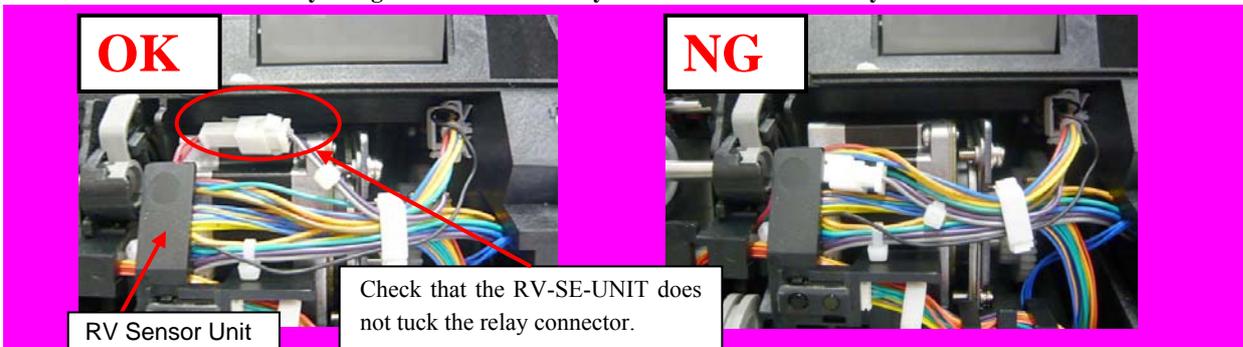
- Tension adjustment for Feed Belt 1 is not necessary.

Do not loosen the non-disassembly parts. When the motor installation bracket position is fixed, belt tension adjustment is not necessary. (Refer to Section 6.5.)

- Bump the SEP Motor ASSY against the two areas (arrows) on the RV Frame in the photo below.



- Install the RV Sensor Unit by being careful that the relay connector is not tucked by the RV Sensor Unit.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	188 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

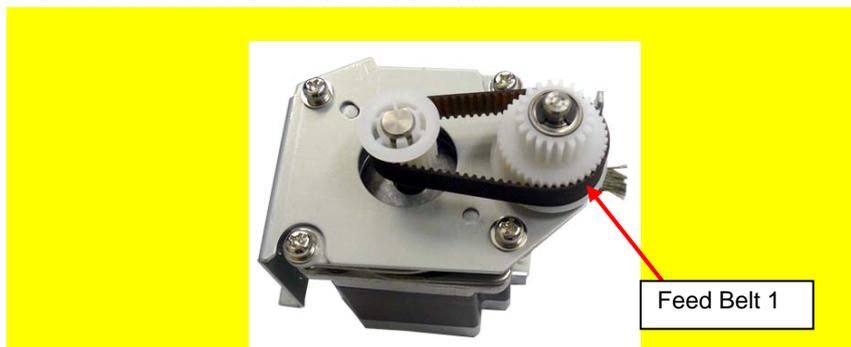
6.13.13 Feed Belt 1 (for driving the Separator Roller)

NOTICE

Refer to Section 4.2.32 for the part number and appearance of the Feed Belt 1.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - Guide SEP (Refer to Section 6.13.25.)
 - SEP Motor ASSY (Refer to steps (2) ~ (5) in Section 6.13.12.)
- (2) Remove the Feed Belt 1 from the SEP Motor ASSY.



<Installation>

Follow the above procedure in reverse.

NOTICE

Tension adjustment for Feed Belt 1 is not necessary.

This motor does not require belt tension adjustment as the motor bracket position is fixed. Do NOT loosen the non-disassembly screws. (Refer to Section 6.5.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	189 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

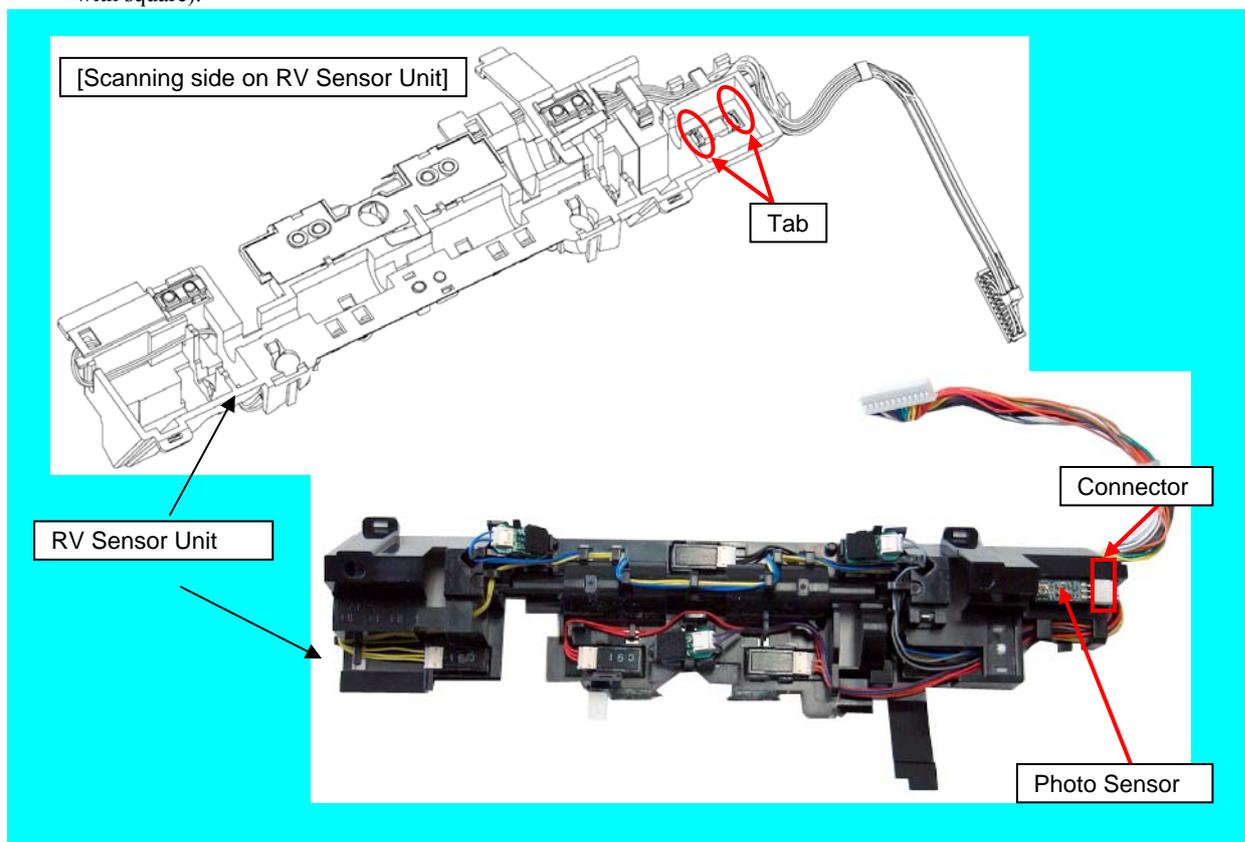
6.13.14 Feed Roller Rotation Detection Sensor (Photo Sensor)

NOTICE

Refer to Section 4.2.47 for the part number and appearance of the Sensor.

<Removal>

- (1) Remove the following parts.
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ^ (3) in Section 6.13.34.1.)
 - Guide SEP (Refer to Section 6.13.25.)
 - RV Sensor Unit (Refer to steps (2) ~ (5) in Section 6.13.12.)
- (2) Unlatch two tabs (circled) securing the Photo sensor from the RV Sensor Unit, and then disconnect a connector (enclosed with square).



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	190 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

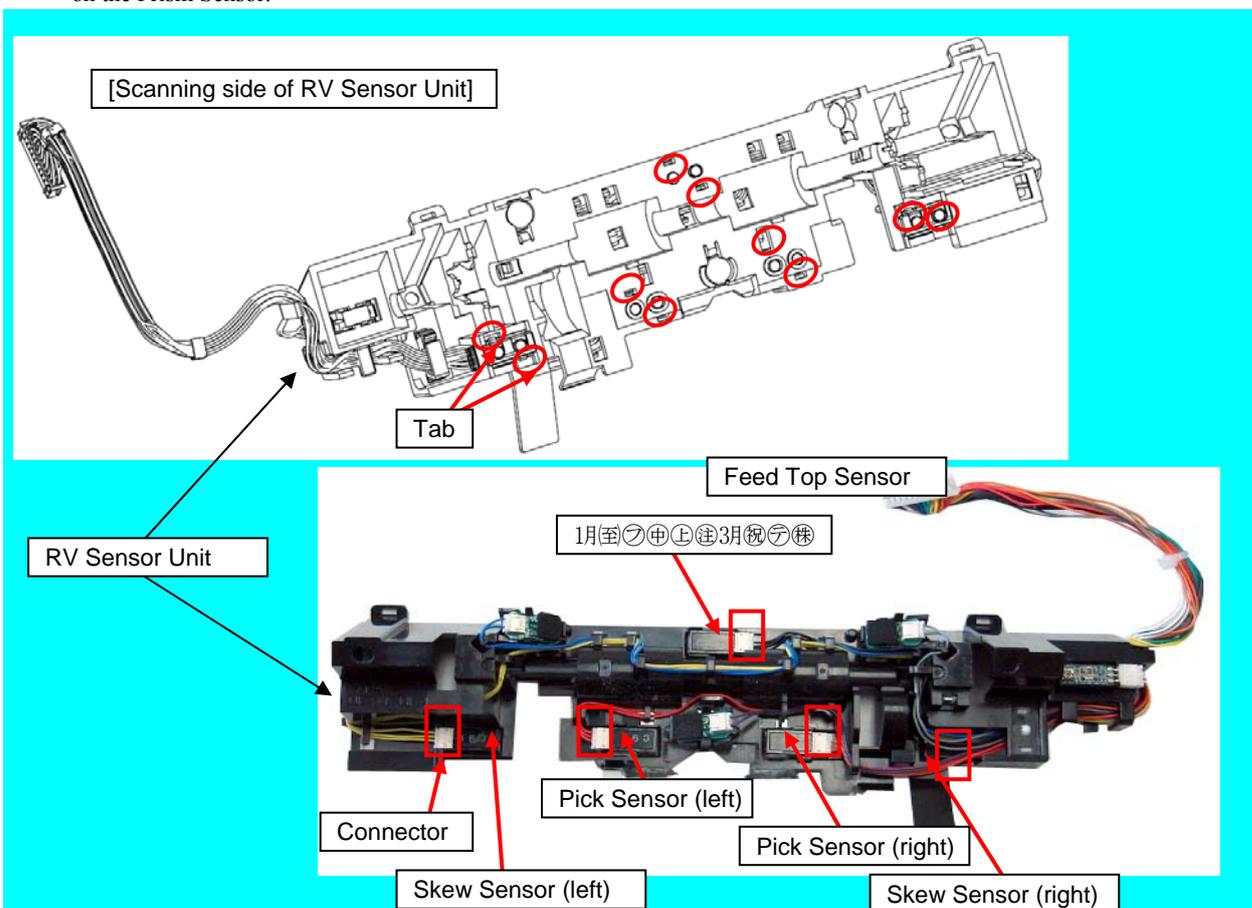
6.13.15 Pick Sensor / Skew Sensor / Feed Top Sensor (Prism Sensor)

NOTICE

Refer to Section 4.2.46 for the part number and appearance of the Sensor.

<Removal>

- (1) Remove the following parts.
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - Guide SEP (Refer to Section 6.13.25.)
 - RV Sensor Unit (Refer to steps (2) ~ (3) in Section 6.13.12.)
 - [When replacing the Pick Sensor] Separator Brush (Refer to Section 6.13.30.)
- (2) Unlatch two tabs (circled) from the RV Sensor Unit, and then disconnect connectors (one for each, enclosed with square) on the Prism Sensor.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	191 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

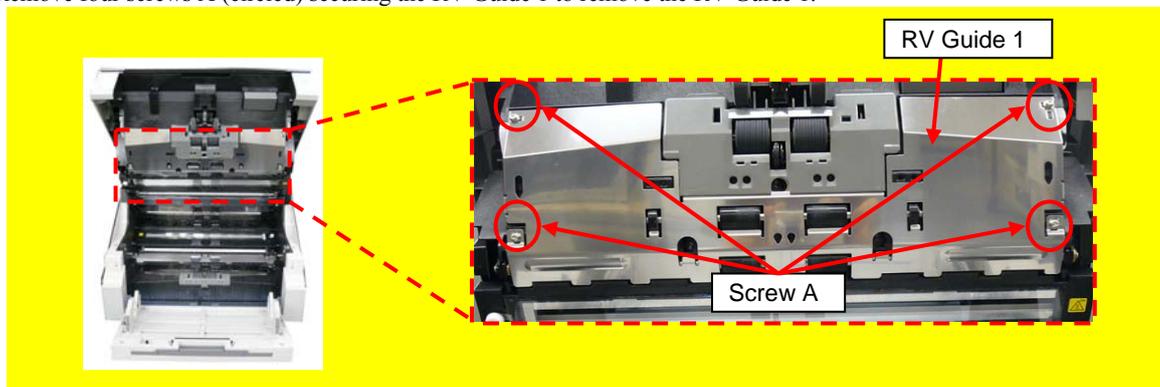
6.13.16 Jam Sensor (Prism Sensor)

NOTICE

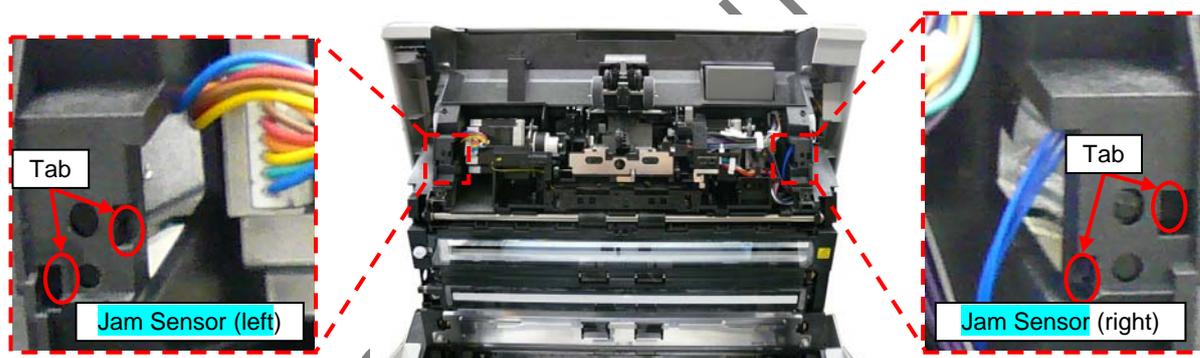
Refer to Section 4.2.46 for the part number and appearance of the Sensor.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove four screws A (circled) securing the RV Guide 1 to remove the RV Guide 1.



- (3) Unlatch tabs (two at each side, circled) from the Revolve Unit, and then disconnect connectors (one at each side).



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	192 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

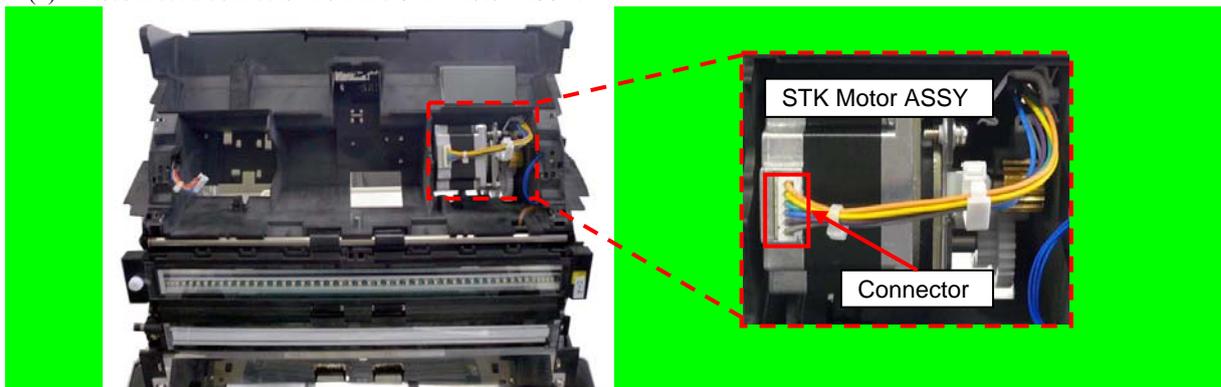
6.13.17 LU Motor Unit (for driving the Stacker)

NOTICE

Refer to Section 4.2.31 for the part number and appearance of the LU Motor Unit.

<Removal>

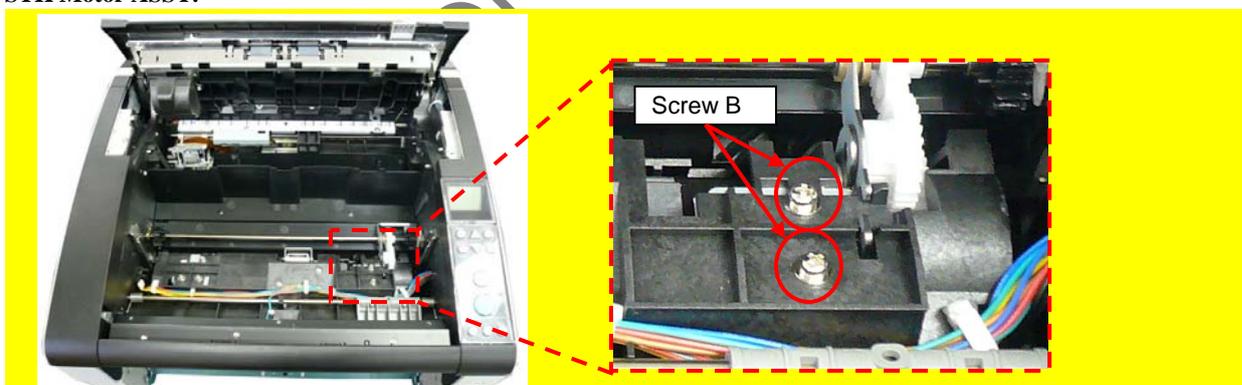
- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to step (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - SEP Motor Unit (Refer to steps (2) ~ (5) in Section 6.13.12.)
 - Pick Roller Unit (Refer to Section 6.13.22.)
- (2) Disconnect a connector from the STK Motor ASSY.



- (3) Remove two screws B (circled) securing the STK Motor ASSY while holding the STK Motor ASSY from the bottom,, and then remove the STK Motor ASSY.

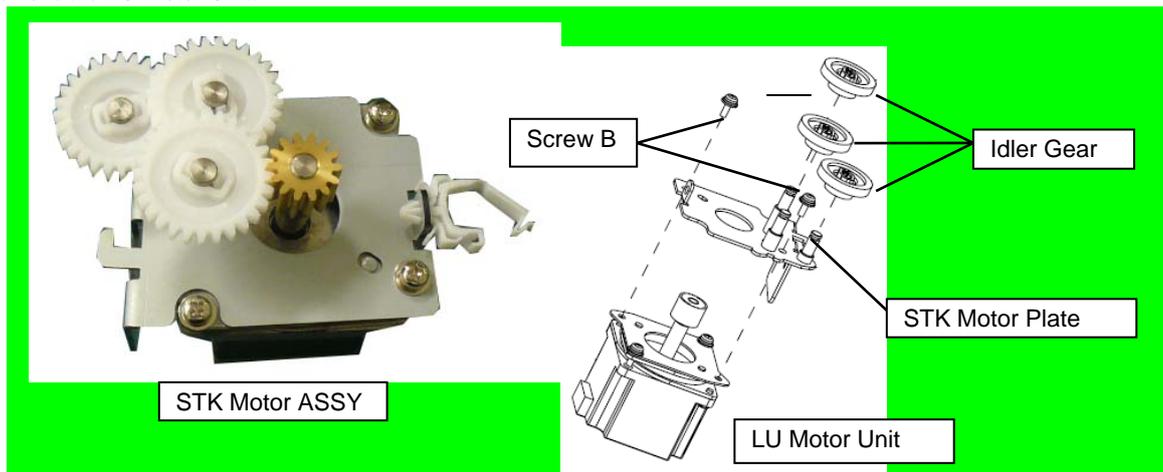
NOTICE

Inside of the ADF may be damaged if the Motor falls off. Be sure to hold the Motor from the bottom when removing the STK Motor ASSY.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	193 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

- (4) Remove three Idler gears and two screws B (circled) securing the STK Motor Plate from the STK Motor ASSY, and then remove the LU Motor Unit.



<Installation>

Follow the above procedure in reverse.

NOTICE

Do not loosen the non-disassembly parts. When the Motor installation bracket position is fixed, Motor position adjustment is not necessary. (Refer to Section 6.5.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	194 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

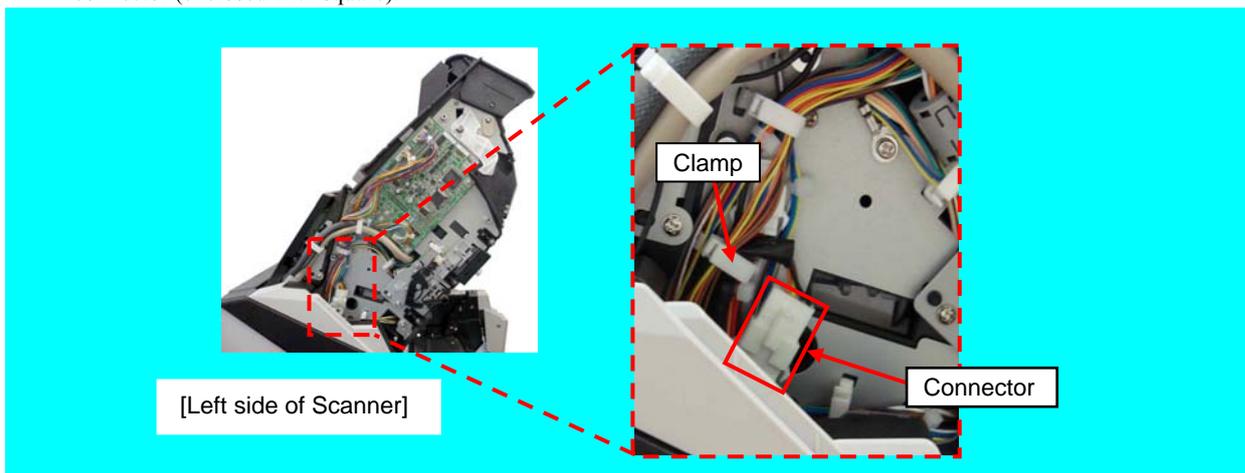
6.13.18 Exit Motor

NOTICE

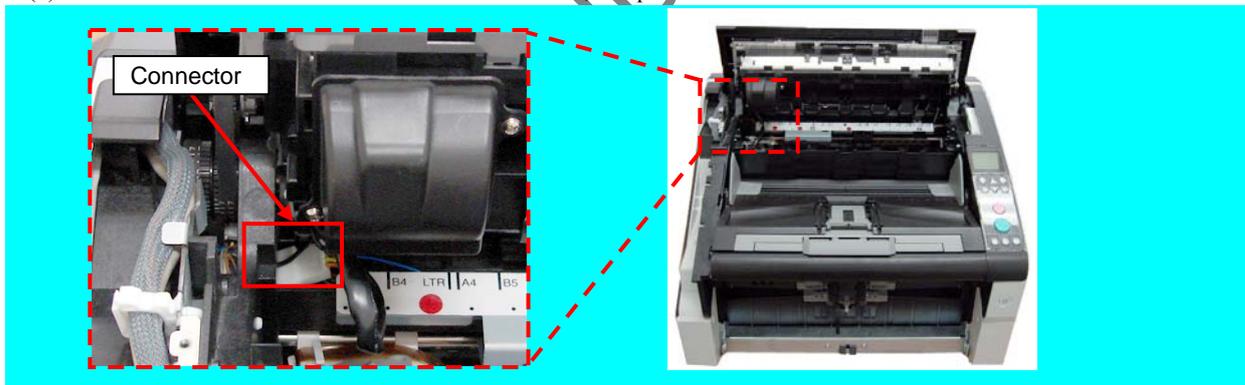
Refer to Section 4.2.40 for the part number and appearance of the Exit Motor.

<Removal>

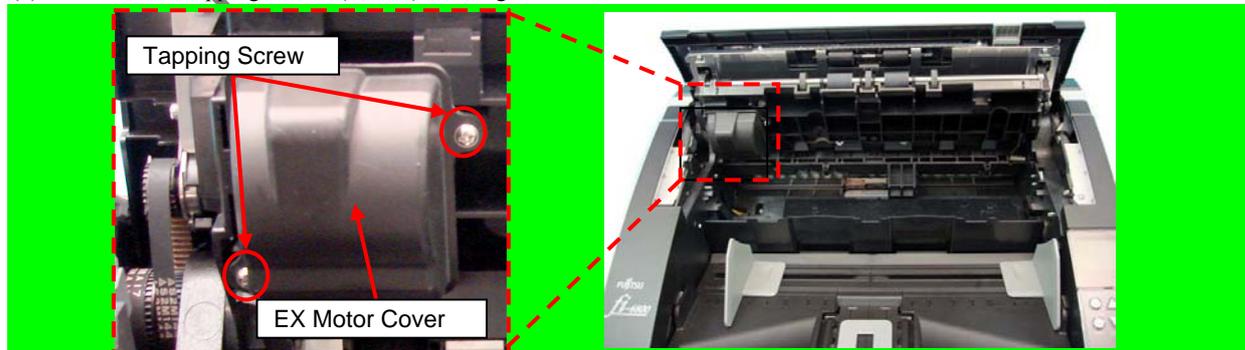
- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L. (Refer to step (2) in Section 6.13.6.)
- (2) Open the paper path unit. (Refer to step (2) in Section 6.7.2.)
- (3) Unhook the EXIT Motor cable from the clamp on the Revolve Unit from left side of the scanner, and then disconnect a connector (enclosed with square).



- (4) Insert the EXIT Motor connector into the frame hole, and push it into the EXIT Motor side.

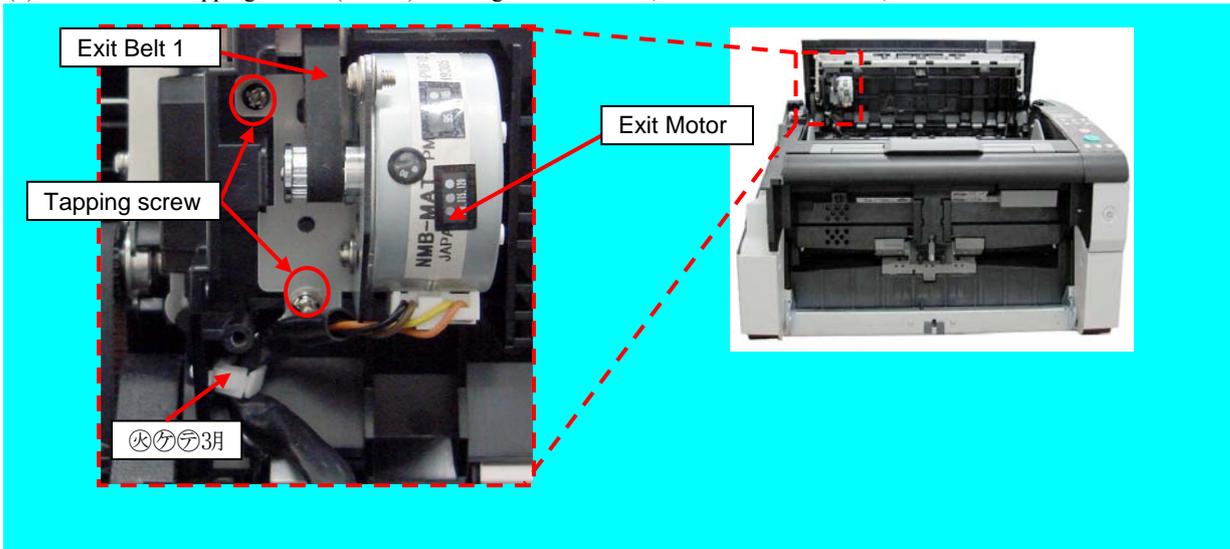


- (5) Remove two tapping screws (circled) securing the EX Motor Cover to remove the EX Motor Cover.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	195 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(6) Remove two tapping screws (circled) securing the Exit Motor, remove the Exit Belt 1, and then remove the Exit Motor.

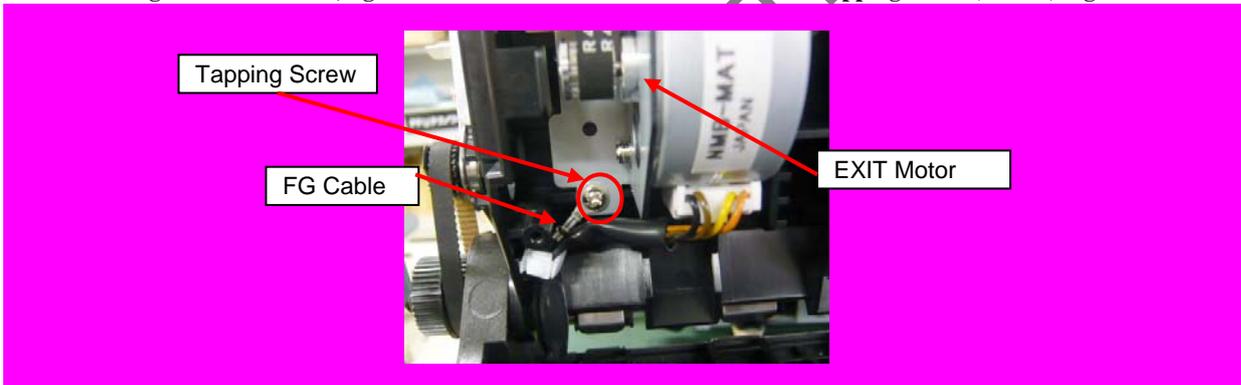


<Installation>

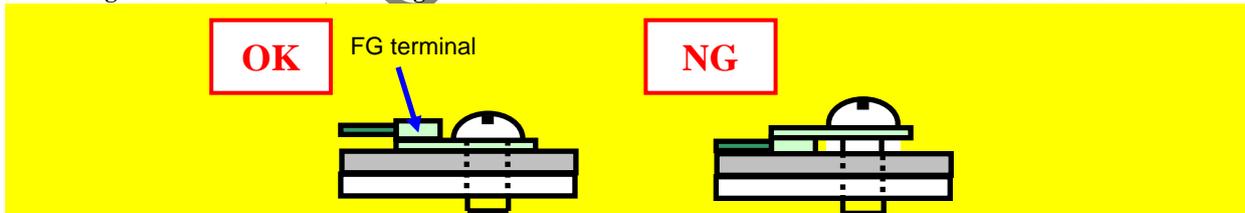
Follow the above procedure in reverse.

NOTICE

- When installing the EXIT Motor, tighten the FG Cable and EXIT Motor with a tapping screw (circled) together.



- Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.



- Tension adjustment for the Exit Belt 1 is not necessary.

Do not loosen the non-disassembly parts. When the Motor installation bracket position is fixed, Motor position adjustment is not necessary. (Refer to Section 6.5.)

Adjustment – (TBD) (Refer to Chapter 7.)

Confirming

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	196 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

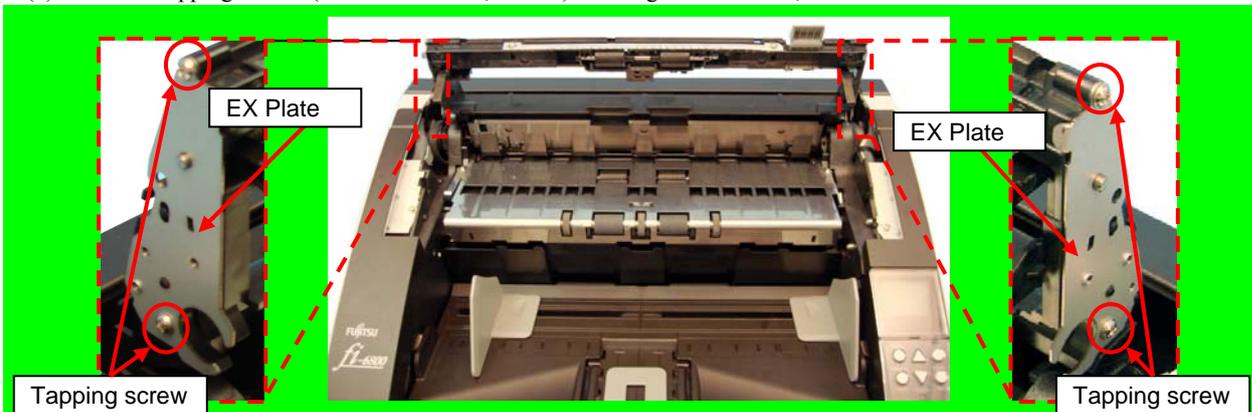
6.13.19 Exit Sensor (Prism Sensor)

NOTICE

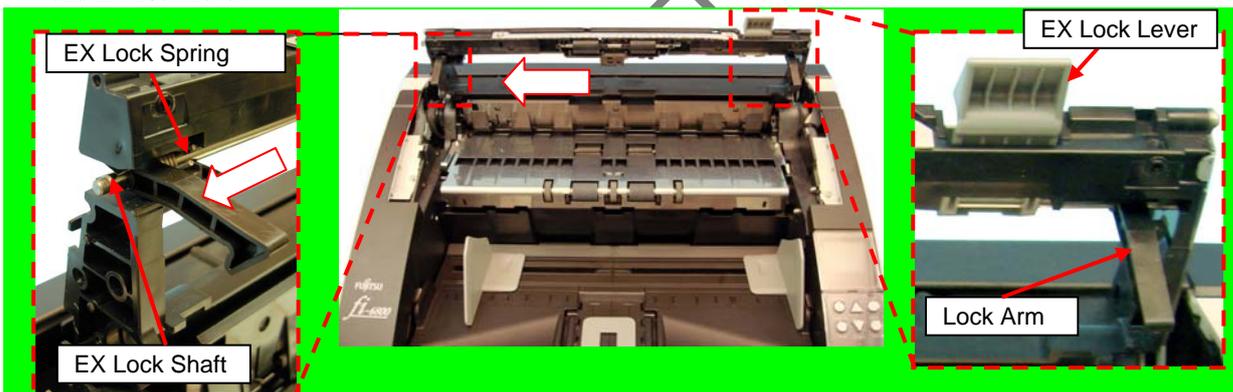
Refer to Section 4.2.46 for the part number and appearance of the Exit Sensor.

<Removal>

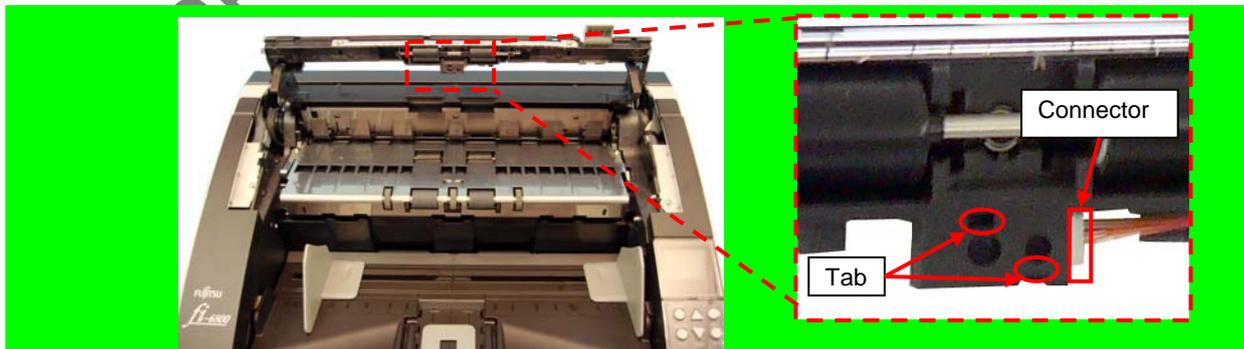
- (1) Remove the following parts.
 - Top Cover (Refer to Section 6.8.7.)
 - Exit Roller (Refer to Section 6.13.11.1.)
- (2) Remove tapping screws (two for each side, circled) securing the EX Plates, and then remove the EX Plates.



- (3) Remove the EX Lock Spring, remove the EX Lock Shaft in the direction of the arrow, and then remove the Lock Arm and EX Lock Lever.



- (4) Unlatch the tabs securing the Prism Sensor, disconnect a connector (enclosed with square) from the Prism Sensor, and then remove the Prism Sensor.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	197 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

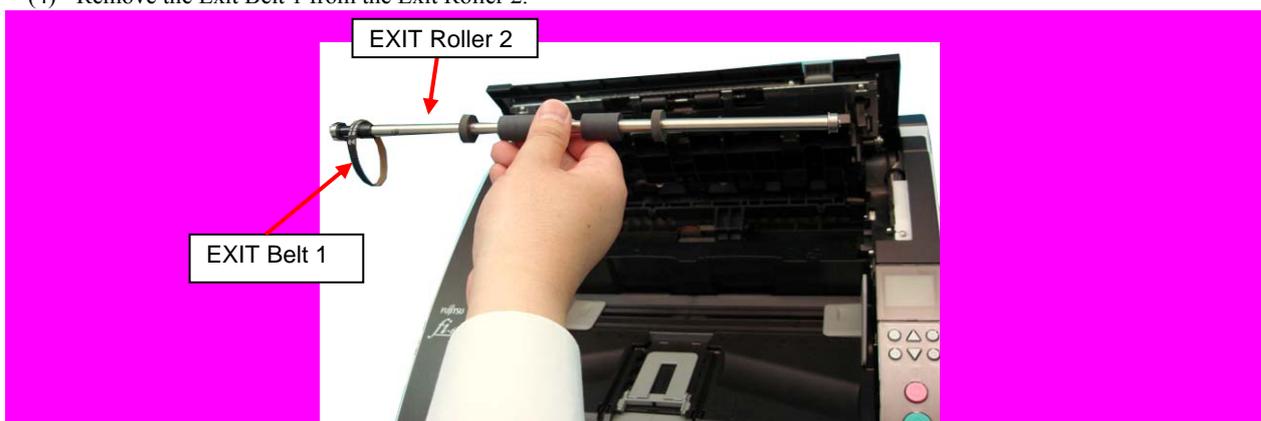
6.13.20 Exit Belt 1

NOTICE

Refer to Section 4.2.41 for the part number and appearance of the Exit Belt 1.

<Removal>

- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6.)
- (2) Open the Paper Path Unit. (Refer to step (2) in Section 6.7.2.)
- (3) Remove the following parts.
 - Exit Belt 1 (Refer to steps (3) ~ (4) in Section 6.13.18.)
 - Exit Roller 2 (Refer to Section 6.13.11.2.)
- (4) Remove the Exit Belt 1 from the Exit Roller 2.



<Installation>

Follow the above procedure in reverse.

NOTICE

Tension adjustment for the Exit Belt 1 is not necessary.
 Adjustment-(TBD) (Refer to Chapter 7.)

PFU CONFIDENTIAL

						Name		fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.		P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	
								Page	198 / 383

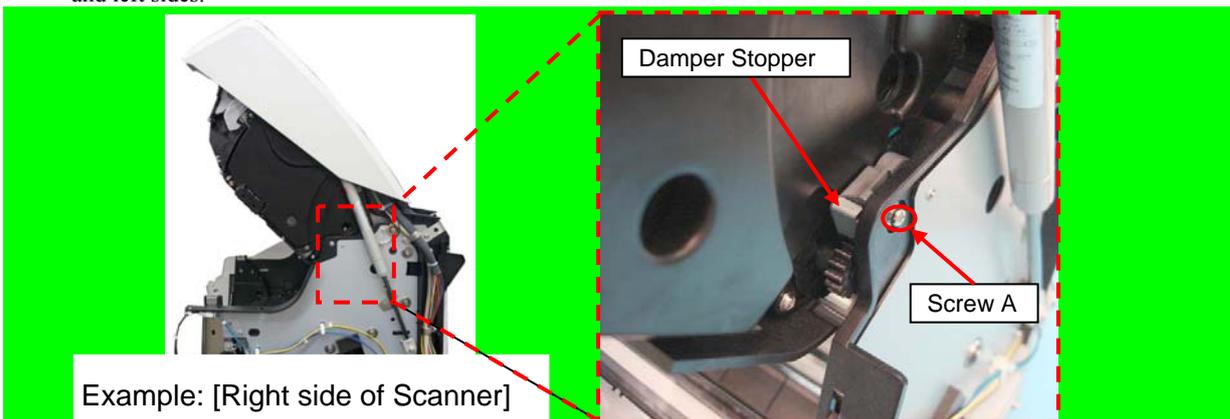
6.13.21 Exit Belt 2

NOTICE

Refer to Section 4.2.42 for the part number and appearance of the Exit Belt 2.

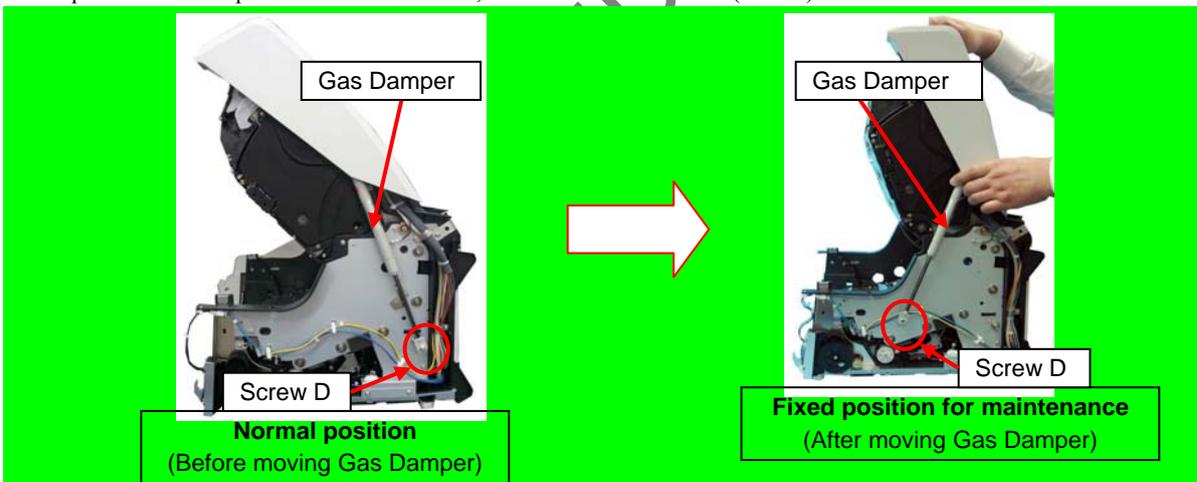
<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - FX Cover R (Refer to Section 6.8.2.)
 - RV Cover L (Refer to Section 6.8.3.)
 - LED Glass FX (Refer to Section 6.12.5.)
 - FIX Guide 3 (Refer to step (2) in Section 6.12.9.3.)
 - Feed Belt 2 (Refer to Section 6.12.16.)
 - Feed Roller 6 (Refer to Section 6.12.9.5.)
- (2) Remove screws A (one at each side, circled) securing the Damper Stoppers, and remove the Damper Stoppers at right and left sides.

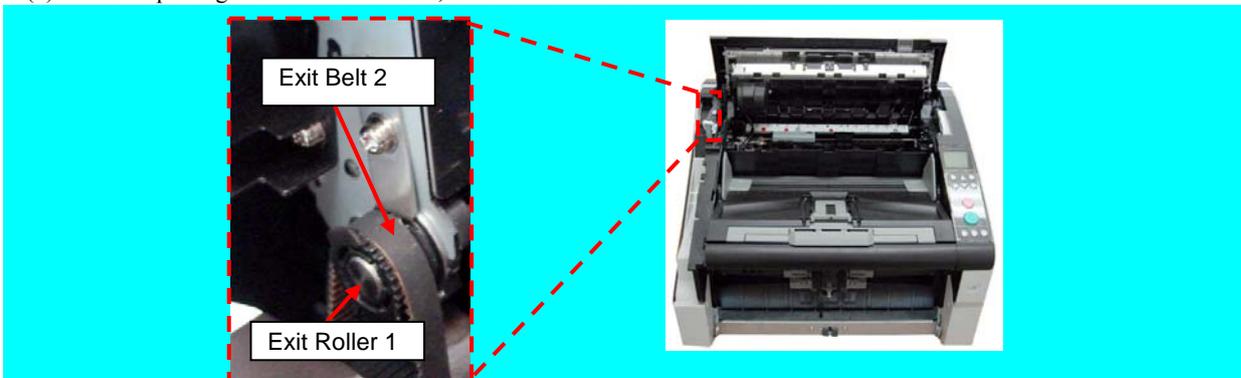


Example: [Right side of Scanner]

- (3) Remove a screw D (circled) securing the Gas Damper, change the installing position of the Gas Damper from the normal position to fixed position for maintenance, and fix it with a screw D (circled).

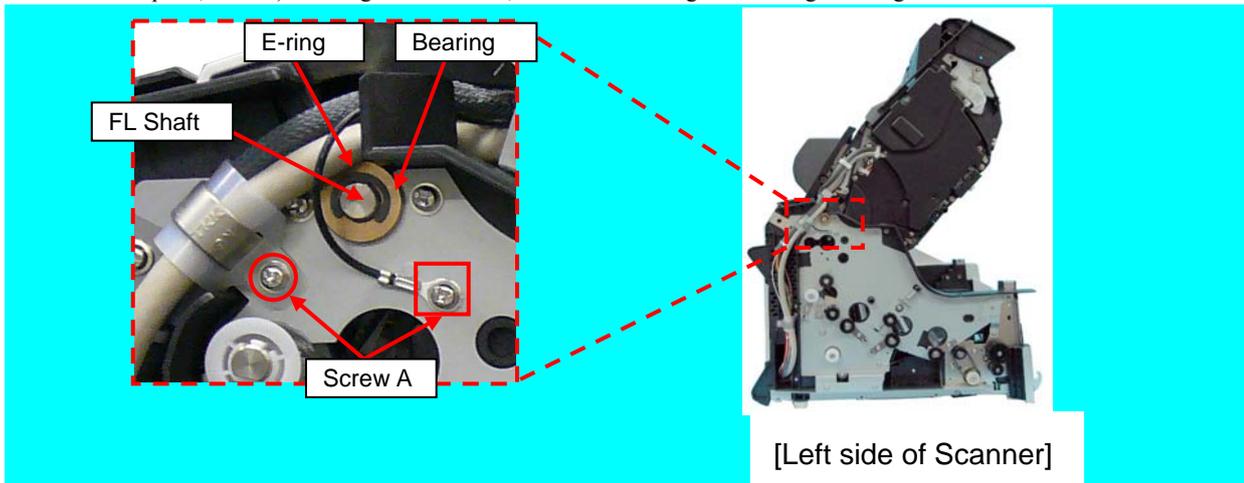


- (4) When replacing the Exit Belt 2 inside, remove the Exit Belt 2 from the Exit Roller 1.

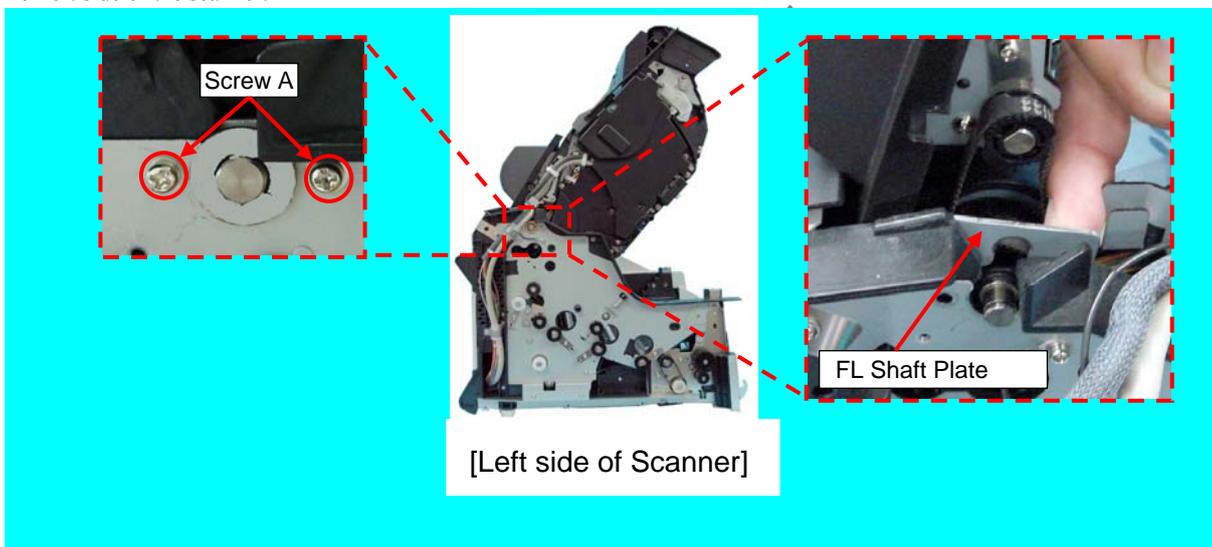


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	199 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi					

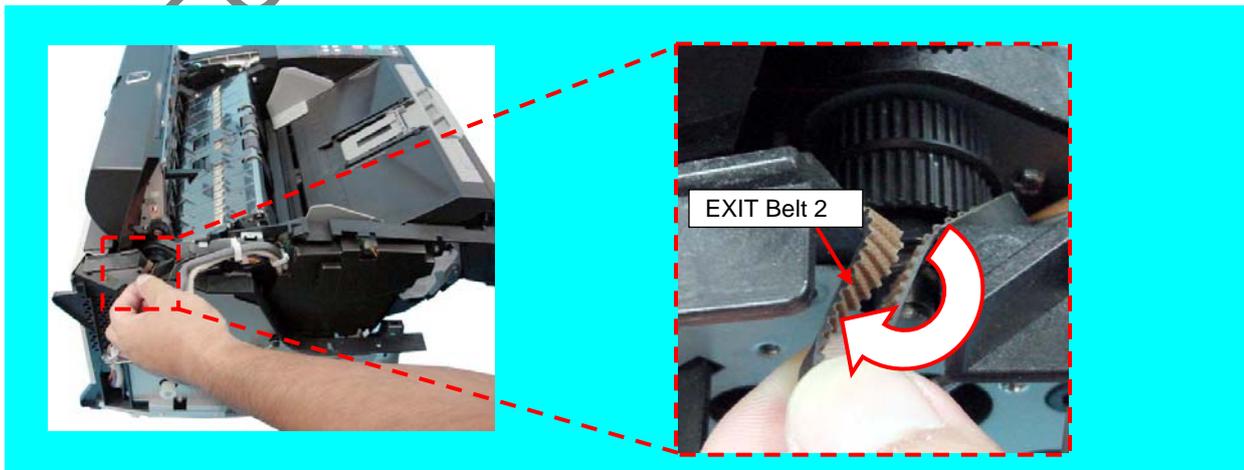
- (5) Remove a screw A (circled) securing the Cable clamp on the Fixed Unit from left side of the scanner and screw A (enclosed with square, circled) securing the FG Cable, and then an E-ring and bearing securing the FL Shaft.



- (6) Remove two screws A (circled) securing the FL Shaft Plate, and then remove the FL Shaft Plate on the Fixed Unit from inner left side of the scanner.



- (7) Wind in the EXIT Belt 2 outside under the FL Shaft, raise the Revolve Unit and remove the Exit Belt 2 by rotating it in the direction of the arrow.



- (8) Remove the Exit Belt 2 inside in step (7) again if necessary to remove it.

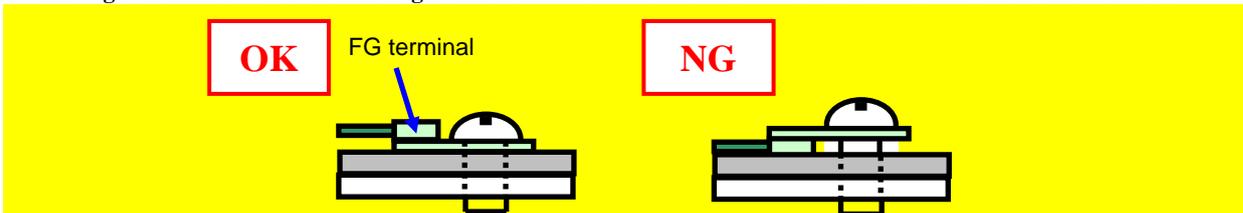
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	200 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

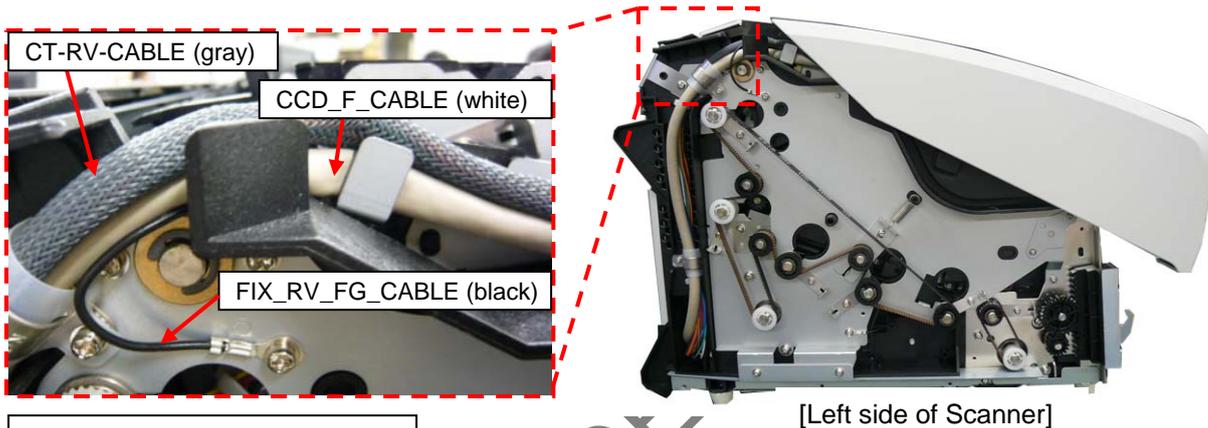
Follow the above procedure in reverse.

NOTICE

- Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.

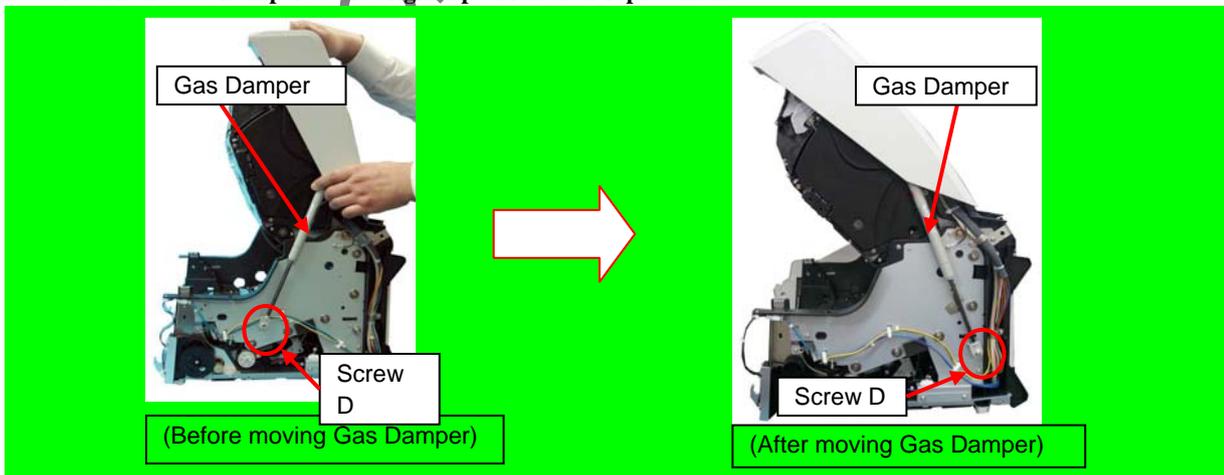


- Route the cable as shown below.



Cable order from the top:
 ① CT-RV-CABLE (gray)
 ② CCD_F_CABLE (white)
 ③ FIX_RV_FG_CABLE (black)

- Tension adjustment for the Exit Belt 2 is not necessary.
- Be sure to return the Gas Damper to the original position after replacement.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 201 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

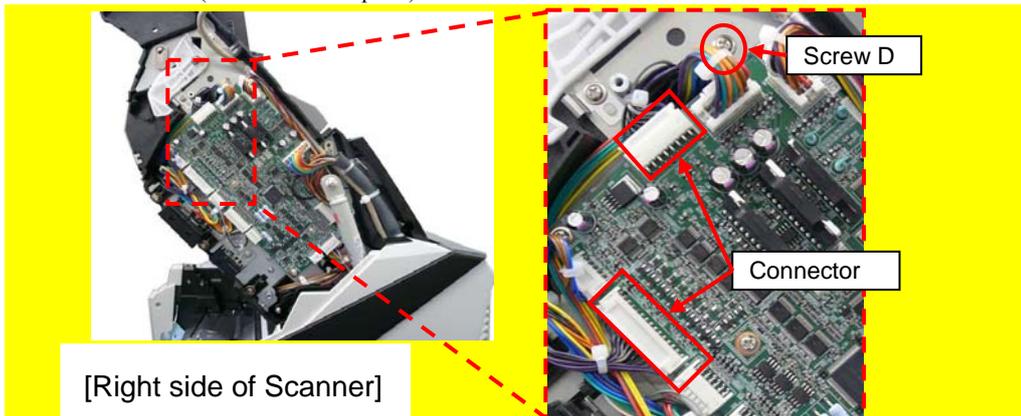
6.13.22 Pick Roller Unit

NOTICE

Refer to Section 4.2.35 for the part number and appearance of the Pick Roller Unit.

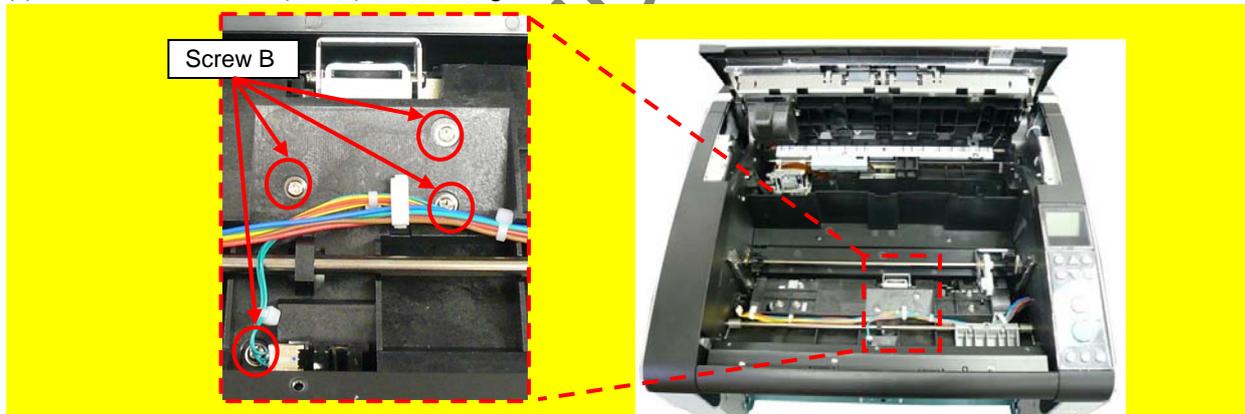
<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - SEP Motor Unit (Refer to steps (2) ~ (5) in Section 6.13.12.)
- (2) Remove a screw D (circled) securing the FG Cable on the Revolve Unit from right side of the scanner, and disconnect two cable connectors (enclosed with square) of the Pick Roller Unit.

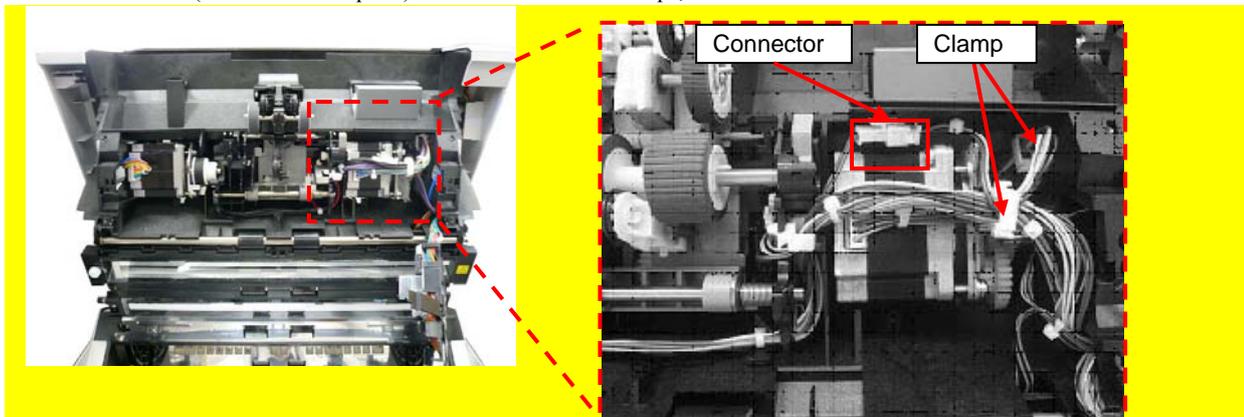


[Right side of Scanner]

- (3) Remove four screws B (circled) while holding the Pick Roller Unit from the bottom.



- (4) Unhook a connector (enclosed with square) and cable from two clamps, and then remove the Pick Roller Unit.



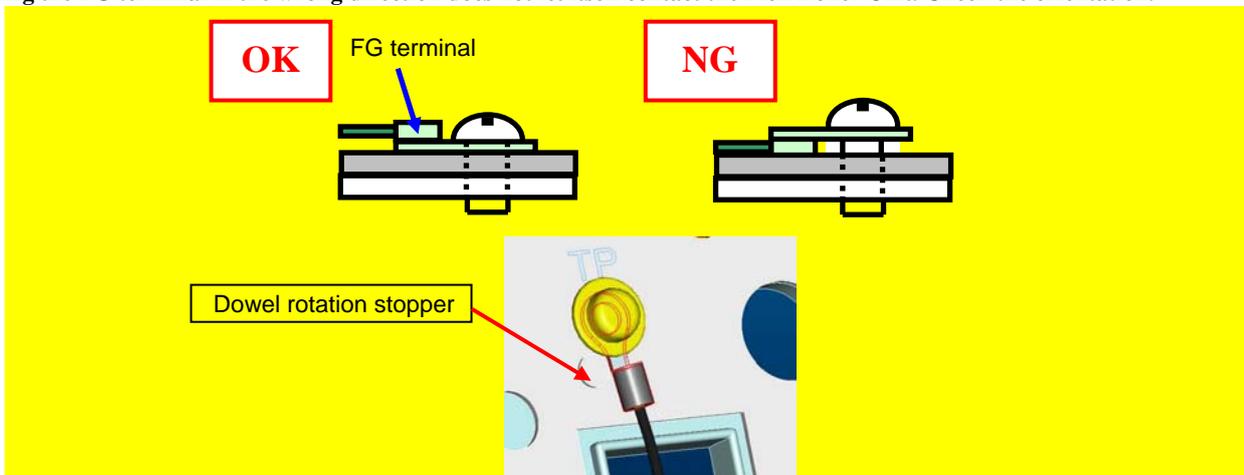
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	202 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

<Installation>

Follow the above procedure in reverse.

NOTICE

- When the Pick Chute Plate is set other than at the center (normal), return it to the original position. (Refer to Section 6.13.24.)
- Installing the FG terminal in the wrong direction does not let itself contact the Pick Roller Unit. Check the orientation.



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	203 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

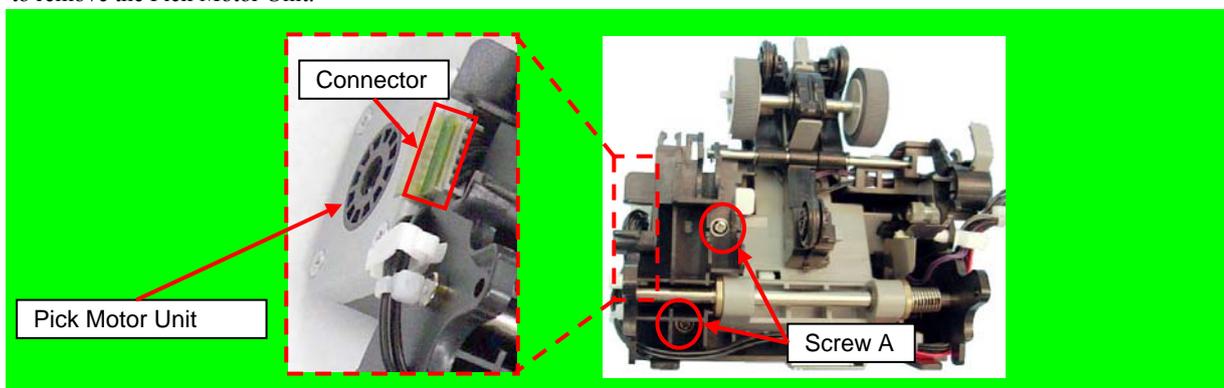
6.13.23 Pick Motor Unit

NOTICE

Refer to Section 4.2.36 for the part number and appearance of the Pick Motor Unit.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - SEP Motor ASSY (Refer to steps (2) ~ (5) in Section 6.13.12.)
 - Pick Roller Unit (Refer to Section 6.13.22.)
- (2) Disconnect the Pick Motor Unit connector (enclosed with square) and two screws A (circled) on the Pick Roller Unit to remove the Pick Motor Unit.

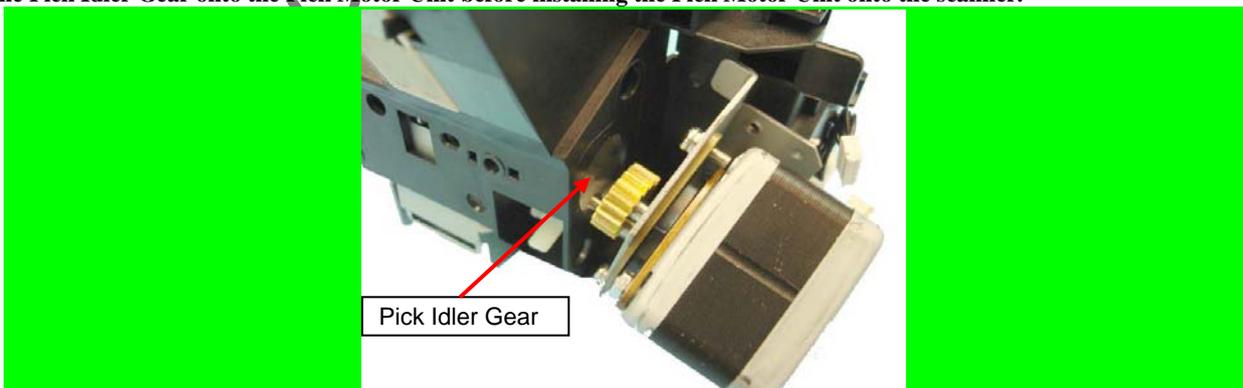


<Installation>

Follow the above procedure in reverse.

NOTICE

Install the Pick Idler Gear onto the Pick Motor Unit before installing the Pick Motor Unit onto the scanner.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	204 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.13.24 Manual Feed Sensor / Pick Position Sensor (Sensor)

NOTICE

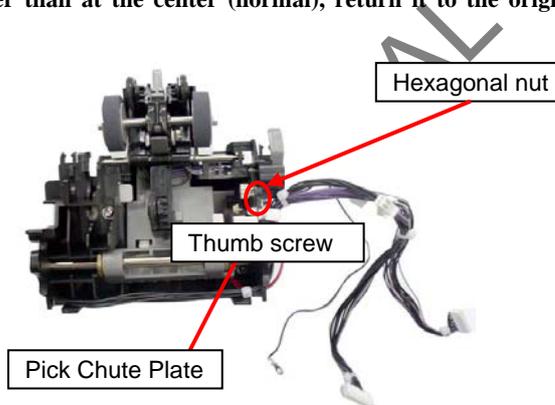
Refer to Section 4.2.45 for the part number and appearance of the Sensor.

<Removal>

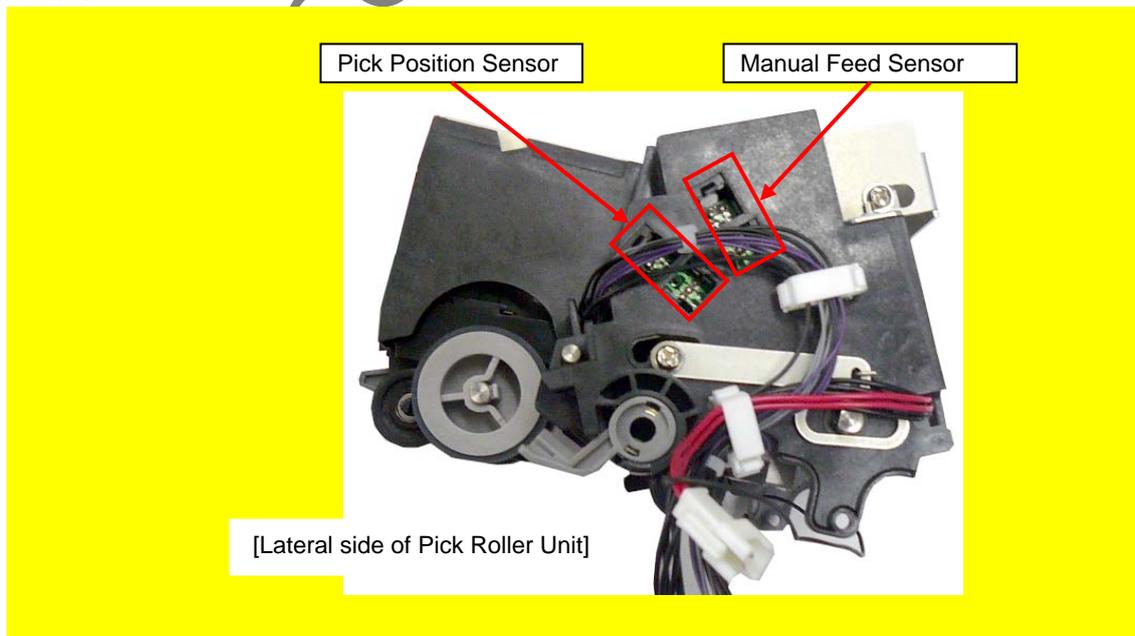
- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - SEP Motor ASSY (Refer to steps (2) ~ (5) in Section 6.13.12.)
 - Pick Roller Unit (Refer to Section 6.13.22.)
- (2) Remove a thumb screw (circled) to remove the Pick Chute Plate.

NOTICE

When the Pick Chute Plate is set other than at the center (normal), return it to the original position. (Refer to Section 6.13.24.)



- (3) Unlatch the tab from lateral side of the Pick Roller Unit to remove the Sensor. Disconnect connectors (one for each) from the Sensor.



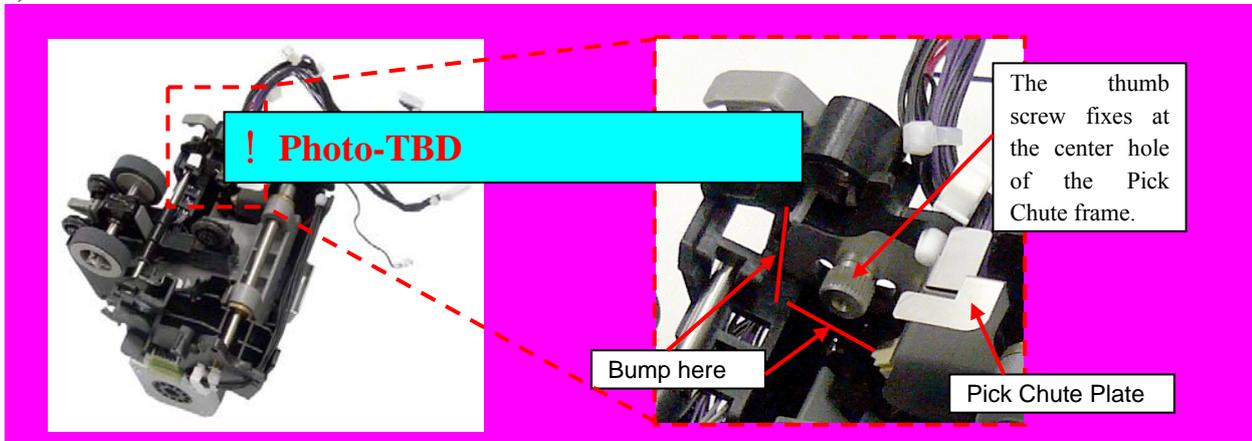
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	205 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

Follow the above procedure in reverse.

NOTICE

- Bump the Pick Chute Plate against the Pick Roller Unit frame, and fix it with hexagonal nut.
- When the Pick Chute Plate is set other than at the center (normal), return it to the original position. (Refer to Section 6.13.24.)



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	206 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

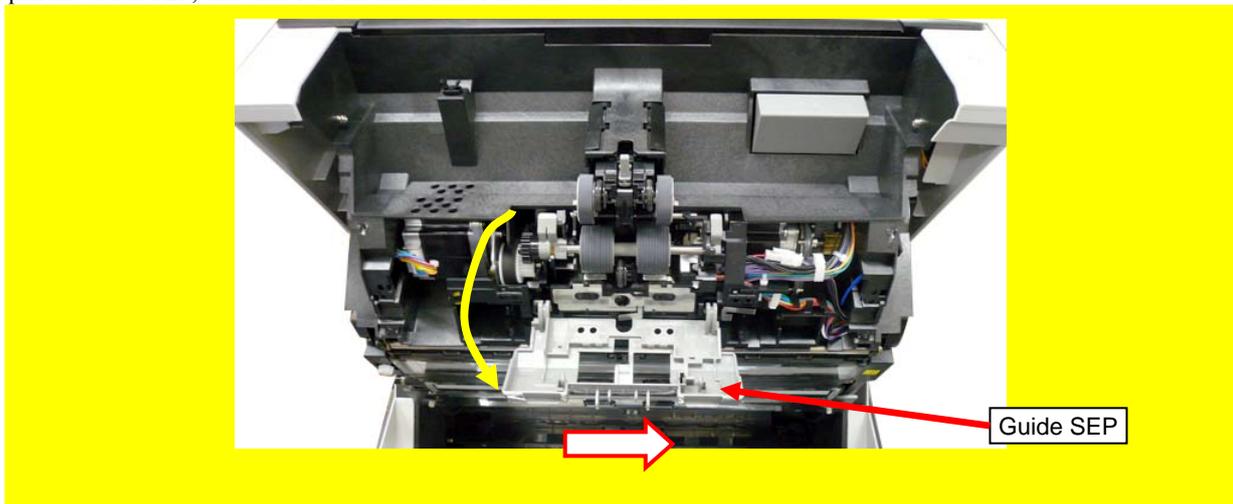
6.13.25 Guide SEP

NOTICE

Refer to Section 4.2.37 for the part number and appearance of the Guide SEP

<Removal>

- (1) Remove the RV Roller 1. (Refer to Section 6.13.34.1.)
- (2) Open the Guide SEP, and slide it in the direction of the arrow to remove.



<Installation>

Follow the above procedure in reverse.

6.13.26 (Reserved)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	207 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

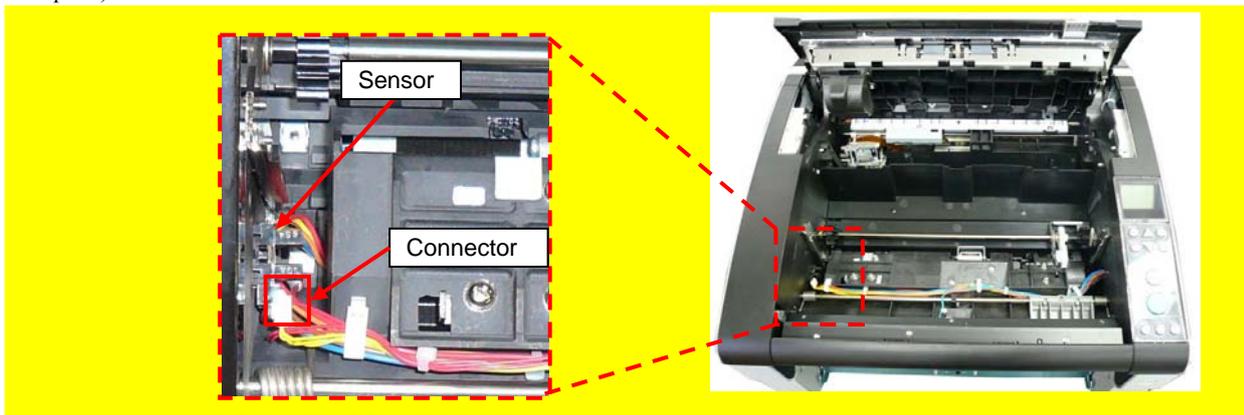
6.13.27 Stacker Bottom Sensor (Sensor)

NOTICE

Refer to Section 4.2.45 for the part number and appearance of the Sensor.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (3) in Section 6.13.6.)
 - [With the imprinter installed] Control PCA (Refer to steps (2) ~ (4) in Section 9.6.3.1.)
- (2) Unlatch the tab on the Sensor at the Revolve unit from left side of the scanner, and then disconnect a connector (enclosed with square) to remove the Sensor.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	208 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

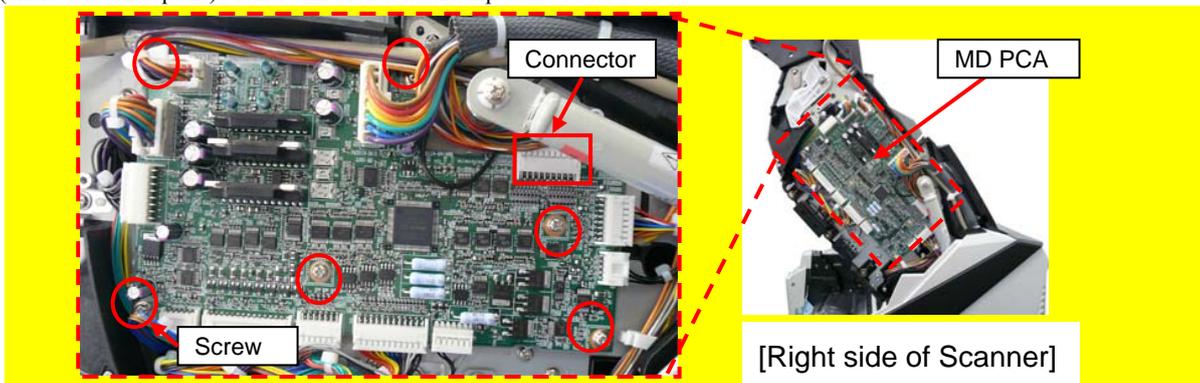
6.13.28 MD PCA

NOTICE

Refer to Section 4.2.34 for the part number and appearance of the MD PCA.

<Removal>

- (1) Remove the following parts.
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
- (2) Disconnect 11 connectors connected to the MD PCA. (Refer to installation procedure for the connector positions.)
- (3) Remove six screws A (circled) securing the MD PCA, move the MD PCA slightly, and then disconnect a connector (enclosed with square) at the back of the Gas Damper.



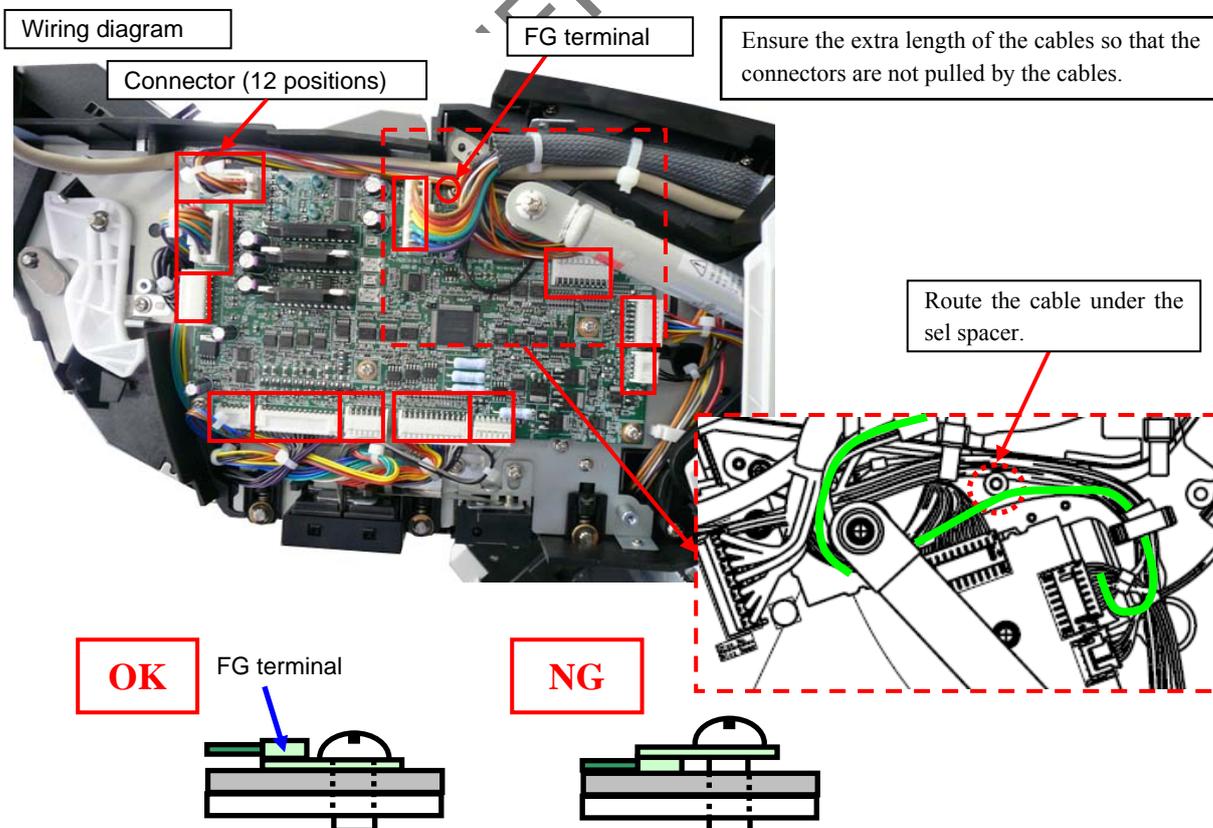
<Installation>

Follow the above procedure in reverse.

NOTICE

Check the 12 connector positions (enclosed with square) and cable route at installation.

- Installing the FG terminal in the wrong direction does not let itself contact the MD PCA. Check the orientation.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 209 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

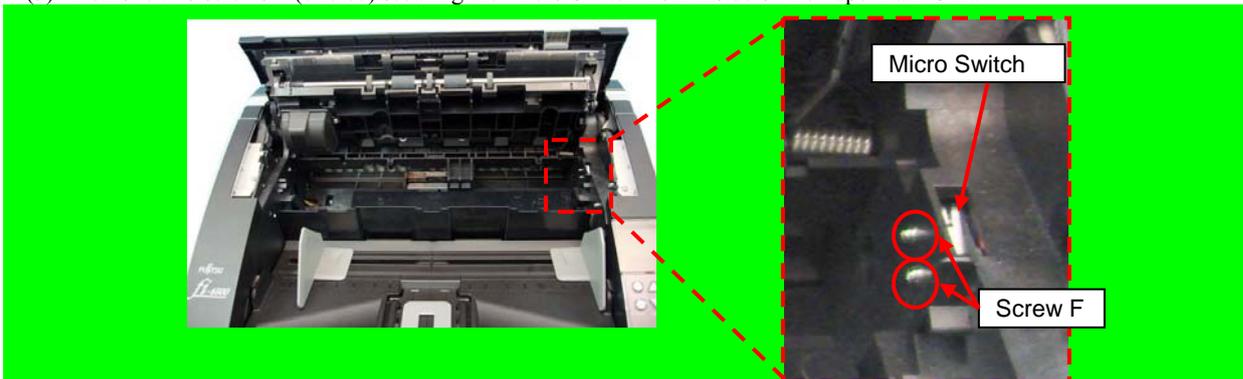
6.13.29 Top Cover Open Switch (Micro Switch)

NOTICE

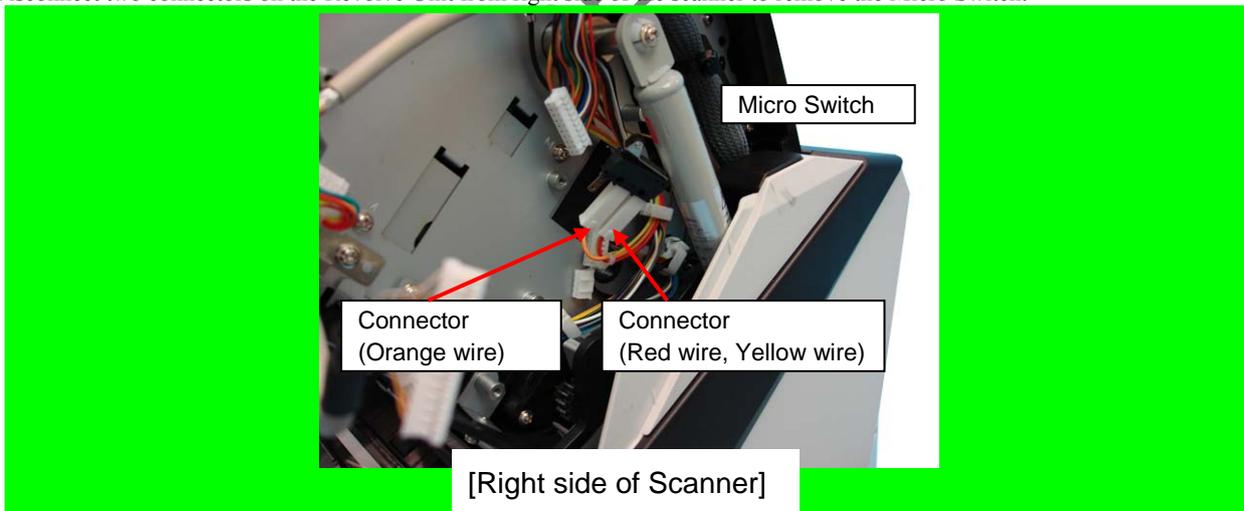
Refer to Section 4.2.49 for the part number and appearance of the Micro Switch.

<Removal>

- (1) Remove the following parts.
 - Remove the RV Cover R (Refer to Section 6.8.4.)
 - Remove the RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Remove the MD PCA (Refer to Section 6.13.28.)
- (2) Open the Paper Path Unit. (Refer to step (2) in Section 6.7.2.)
- (3) Remove two screws F (circled) securing the Micro Switch from inside of the Paper Path Unit.



- (4) Disconnect two connectors on the Revolve Unit from right side of the scanner to remove the Micro Switch.

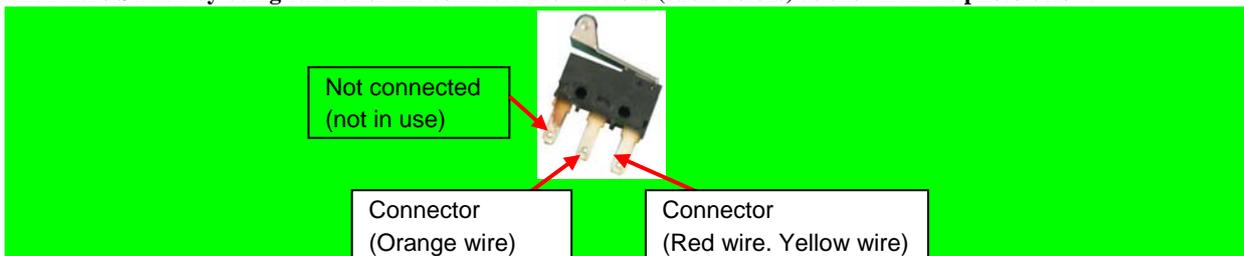


<Installation>

Follow the above procedure in reverse.

NOTICE

Install the Micro Switch by being careful of the connected connectors (cable colors) as shown in the photo below.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	210 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

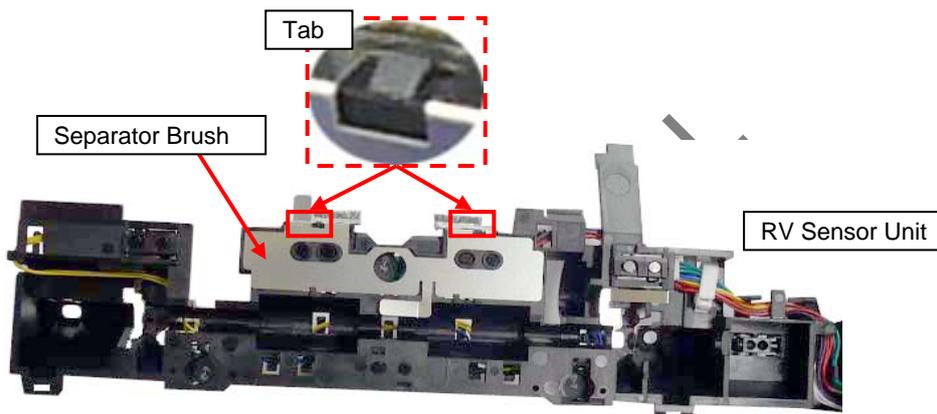
6.13.30 Separator Brush

NOTICE

Refer to Section 4.2.38 for the part number and appearance of the Separator Brush.

<Removal>

- (1) Remove the following parts.
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - RV Sensor Unit (Refer to steps (2) ~ (3) in Section 6.13.12.)
- (2) Unlatch two tabs (enclosed with square) securing the Separator Brush from the RV Sensor Unit, and then remove the Separator Brush.

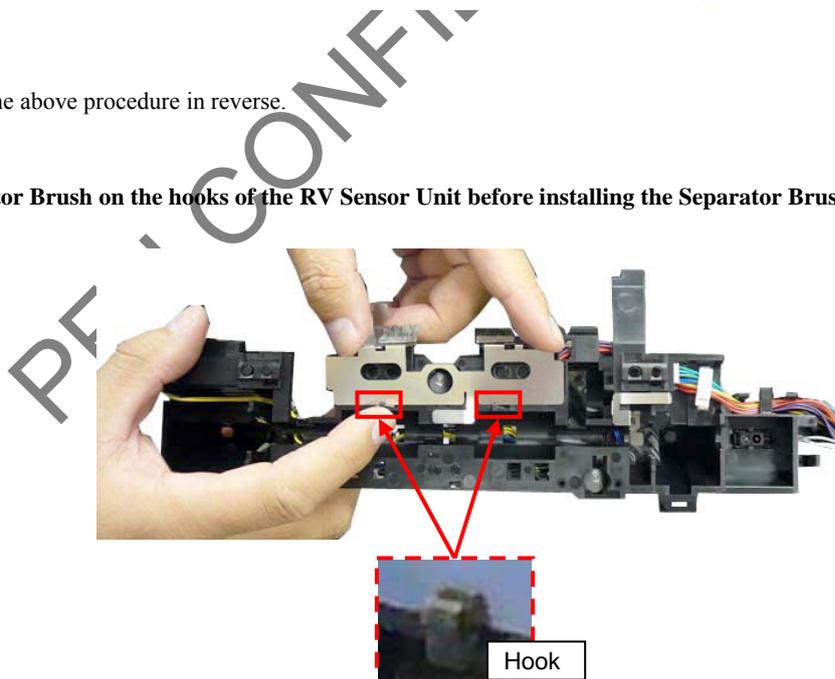


<Installation>

Follow the above procedure in reverse.

NOTICE

Set the Separator Brush on the hooks of the RV Sensor Unit before installing the Separator Brush.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	211 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

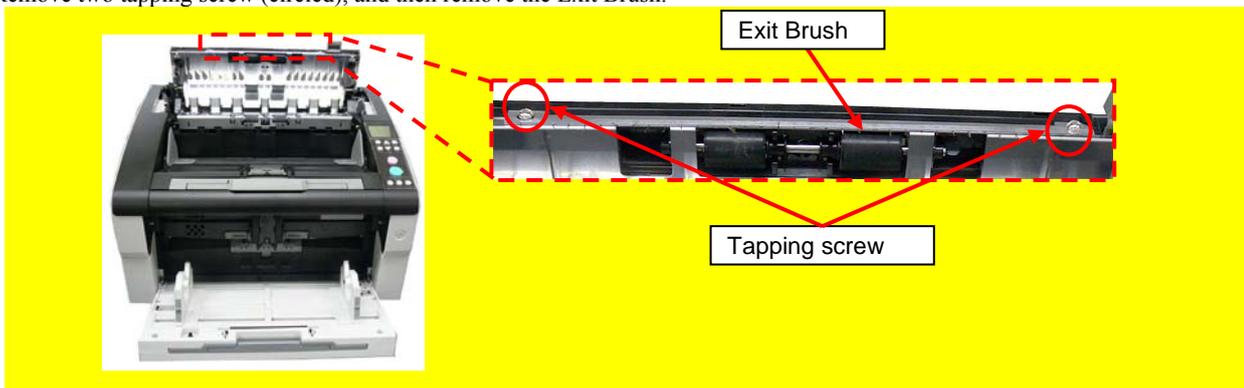
6.13.31 Exit Brush

NOTICE

Refer to Section 4.2.39 for the part number and appearance of the Exit Brush.

<Removal>

- (1) Remove the following parts.
 - Top Cover (Refer to Section 6.8.7.)
 - [With fi-680PRB imprinter option installed] Top Cover IMP (Refer to Section 9.6.3.5.)
- (1) Remove two tapping screw (circled), and then remove the Exit Brush.

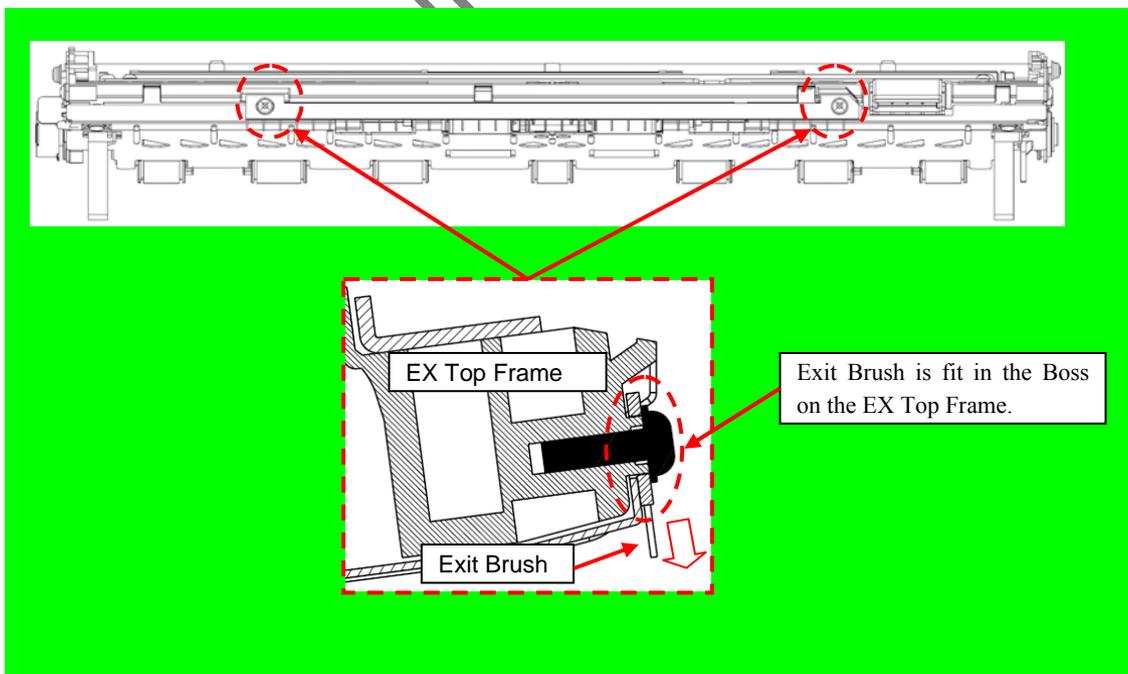


<Installation>

Follow the above procedure in reverse.

NOTICE

Check that the Exit Brush orientation is correct (direction of the arrow) and that the Brush is fit in the boss on the EX Top Frame.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	212 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

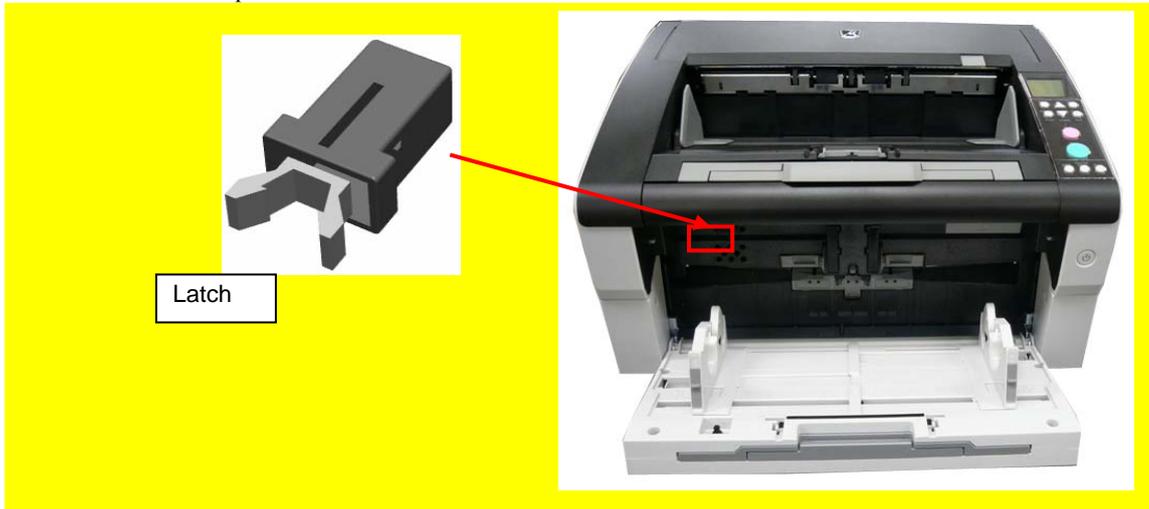
6.13.32 Latch

NOTICE

Refer to Section 4.2.62 for the part number and appearance of the Latch.

<Removal>

- (1) Open the Hopper Unit. (Refer to Section 8.1.2.)
- (2) Pull out the Latch with a plier.



<Installation>

- (1) Insert the Latch into the Revolve Unit.
- (2) Close the Hopper Unit. (Refer to Section 8.1.2.)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	213 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

6.13.33 Lock Arm / Lock Lever

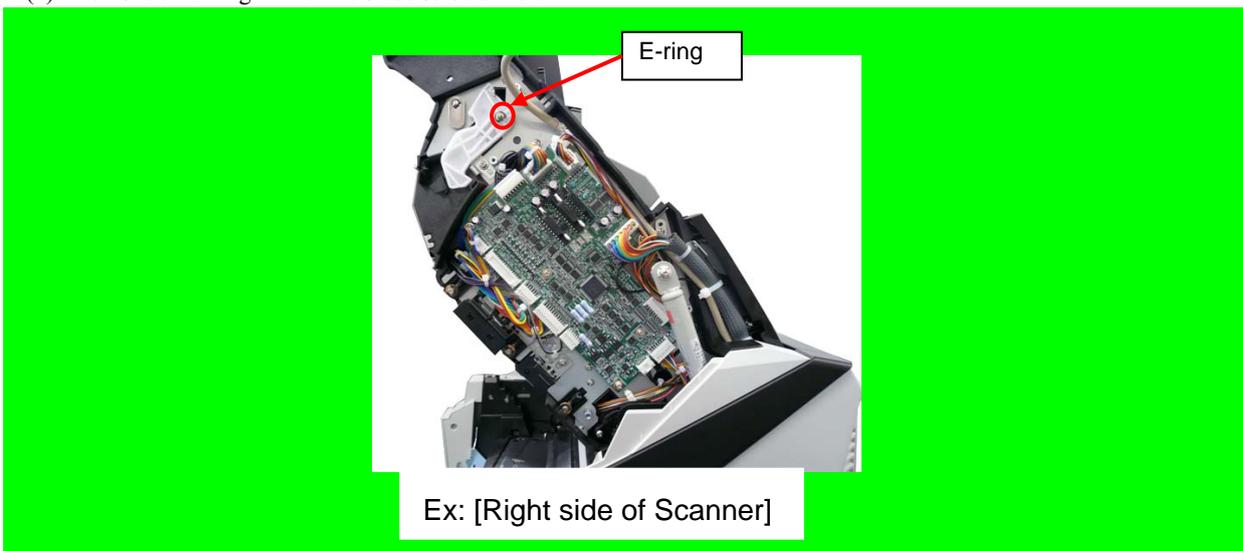
6.13.33.1 Lock Arm

NOTICE

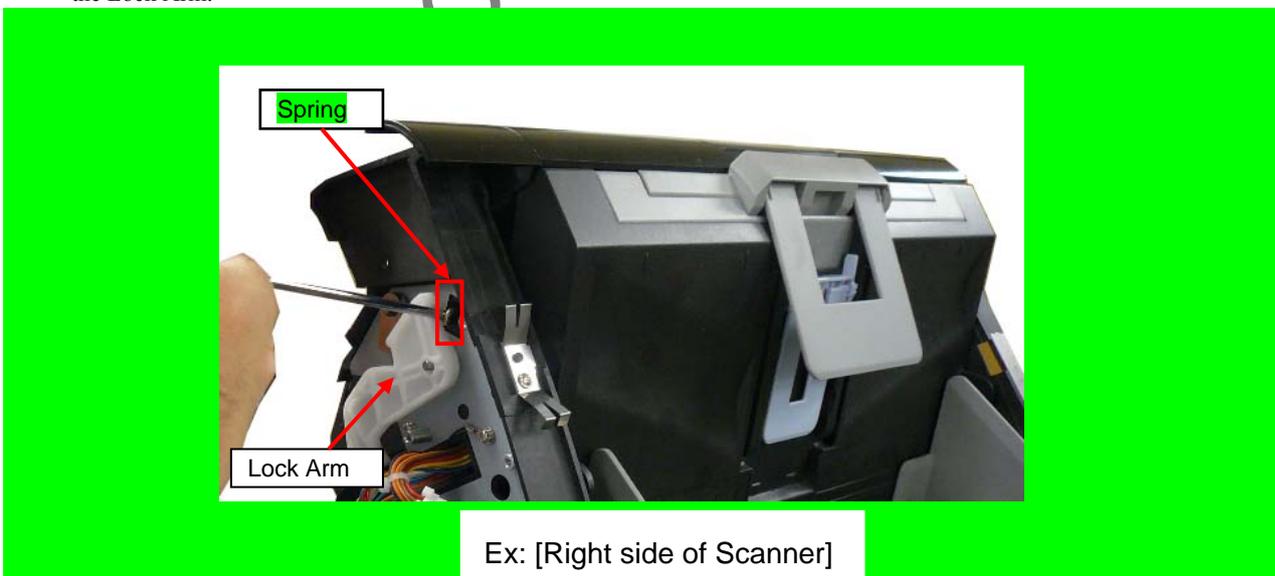
Refer to Section 4.2.65 for the part number and appearance of the Lock Arm.

<Removal>

- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
- (2) Remove an E-ring with a flat-blade screwdriver.



- (3) Insert a flat-blade screwdriver between the scanner and Spring. Make an interval with the Lock Arm, and then remove the Lock Arm.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	214 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

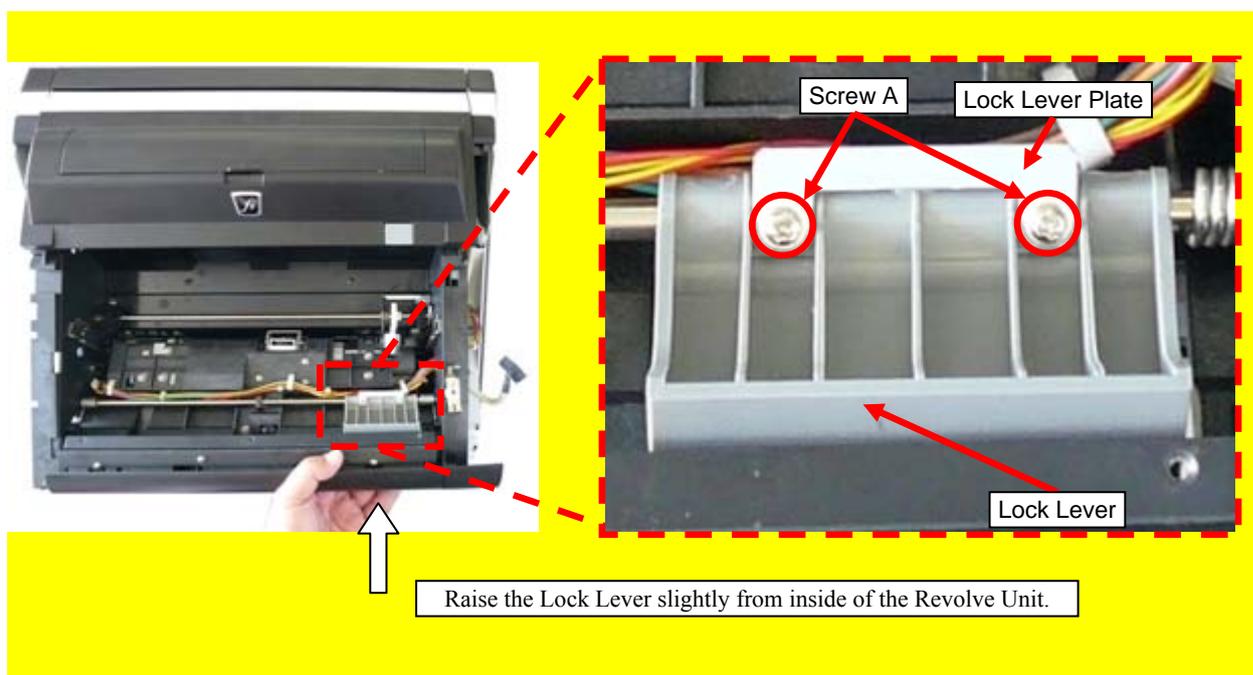
6.13.33.2 Lock Lever

NOTICE

Refer to Section 4.2.66 for the part number and appearance of the Lock Lever.

<Removal>

- (1) Remove the following parts.
 - Stacker Unit (Refer to Section 6.7.2.)
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
- (2) Remove the Lock Arms at right and left sides. (Refer to Section 6.13.33.1.)
- (3) Raise the Lock Lever from inside of the Revolve Unit slightly, remove two screws A to remove the Lock Lever.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	215 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.13.34 RV Roller

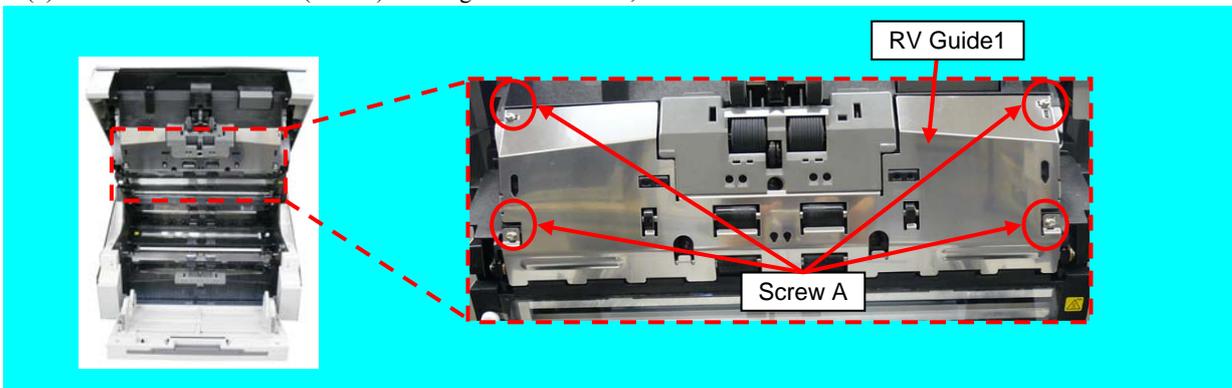
6.13.34.1 RV Roller 1 (for receiving the Assist Roller drive)

NOTICE

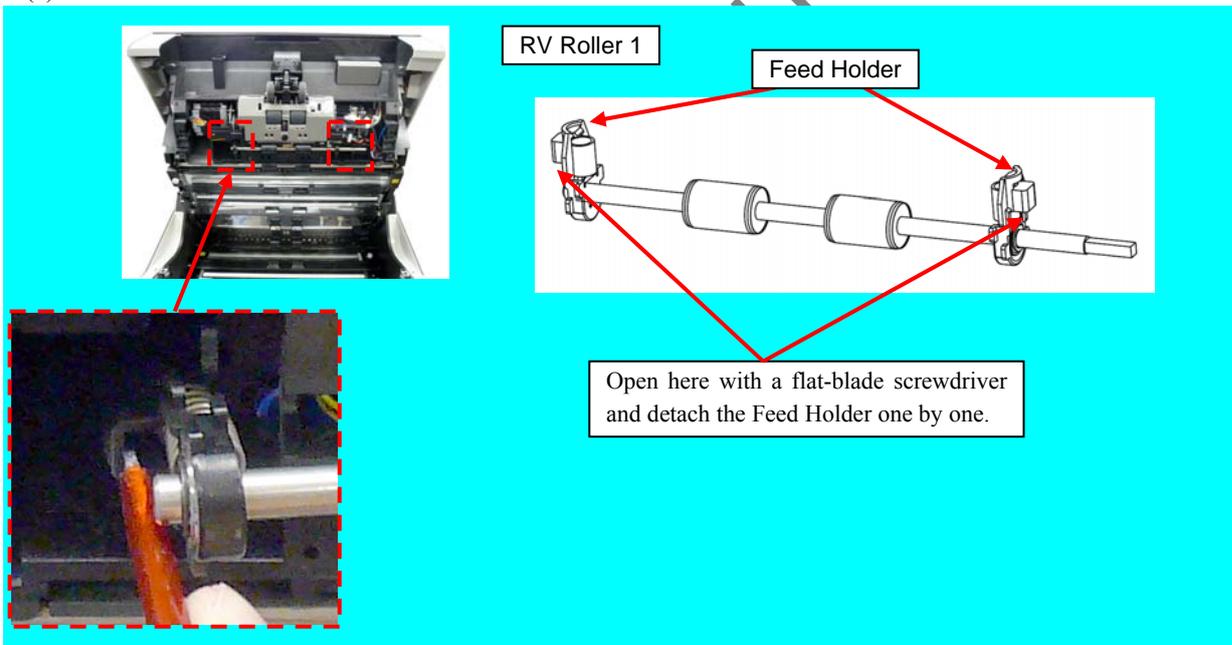
Refer to Section 4.2.78 for the part number and appearance of the RV Roller 1.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove four screws A (circled) securing the RV Guide 1, and remove the RV Guide 1.



- (3) Remove two Feed Holders to remove the RV Roller 1.



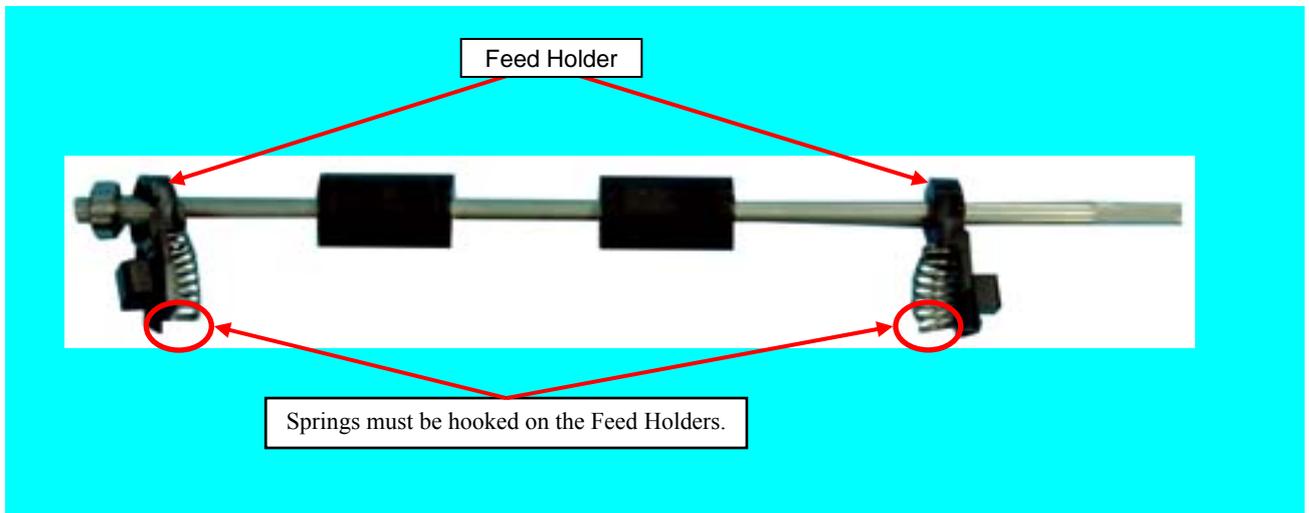
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	216 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

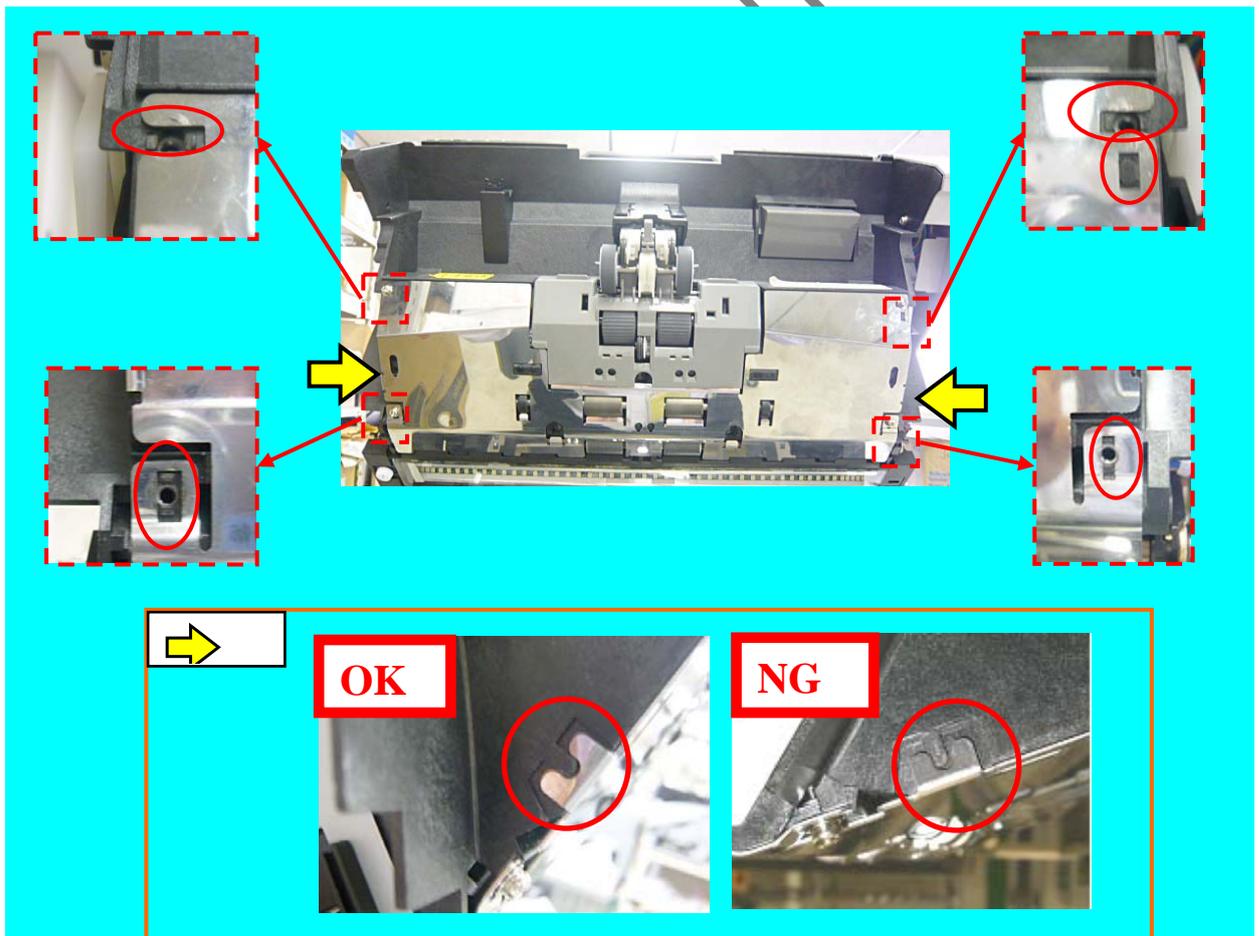
Follow the above procedure in reverse.

NOTICE

- Check that the springs of the RV Roller 1 are hooked on the Feed Holders before installing the RV Roller 1 onto the scanner.



- Check that the RV Guide 1 is not located above the RV Frame when installing the RV Guide 1.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	217 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

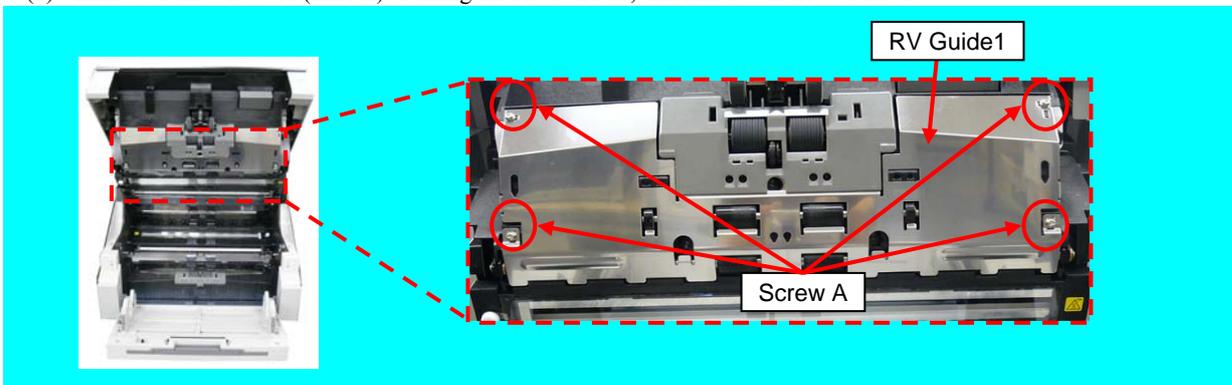
6.13.34.2 RV Roller 2 (for receiving the Feed Roller 2 drive)

NOTICE

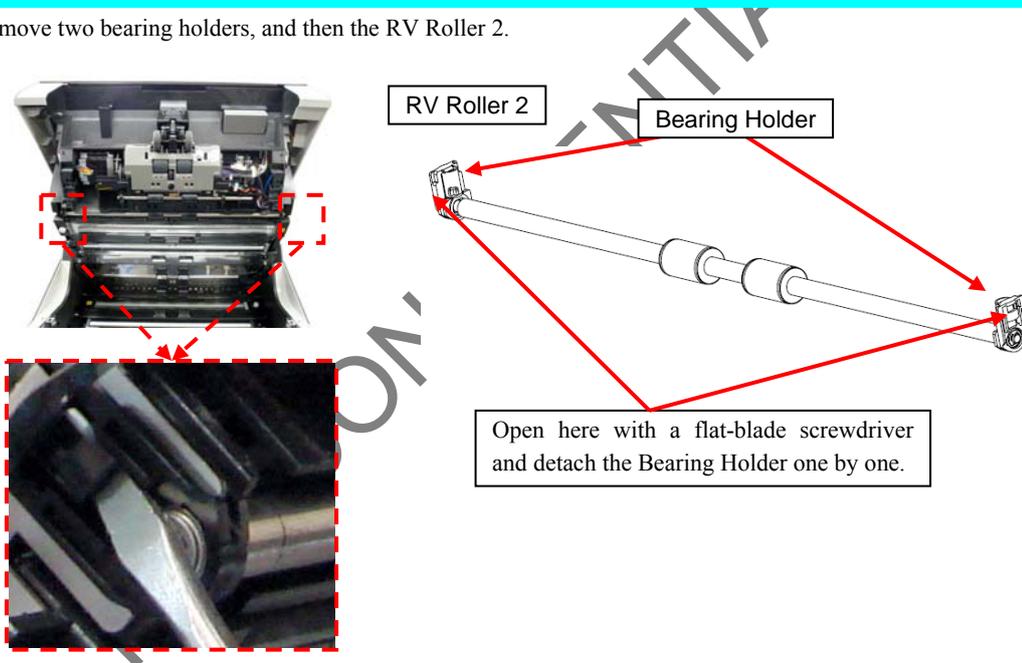
Refer to Section 4.2.79 for the part number and appearance of the RV Roller 2.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove four screws A (circled) securing the RV Guide 1, and remove the RV Guide 1.



- (3) Remove two bearing holders, and then the RV Roller 2.



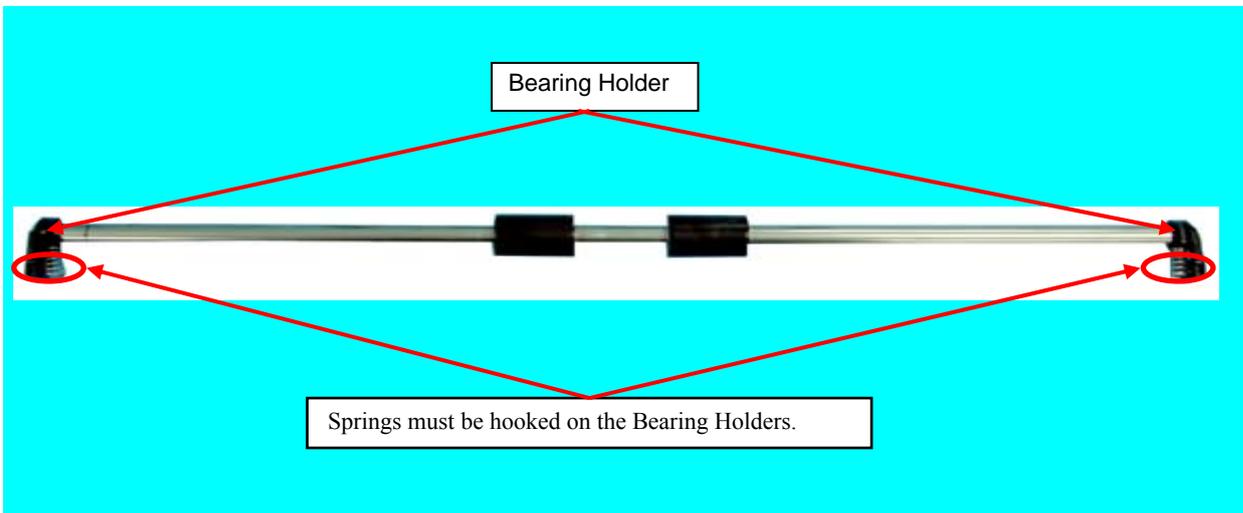
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	218 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

<Installation>

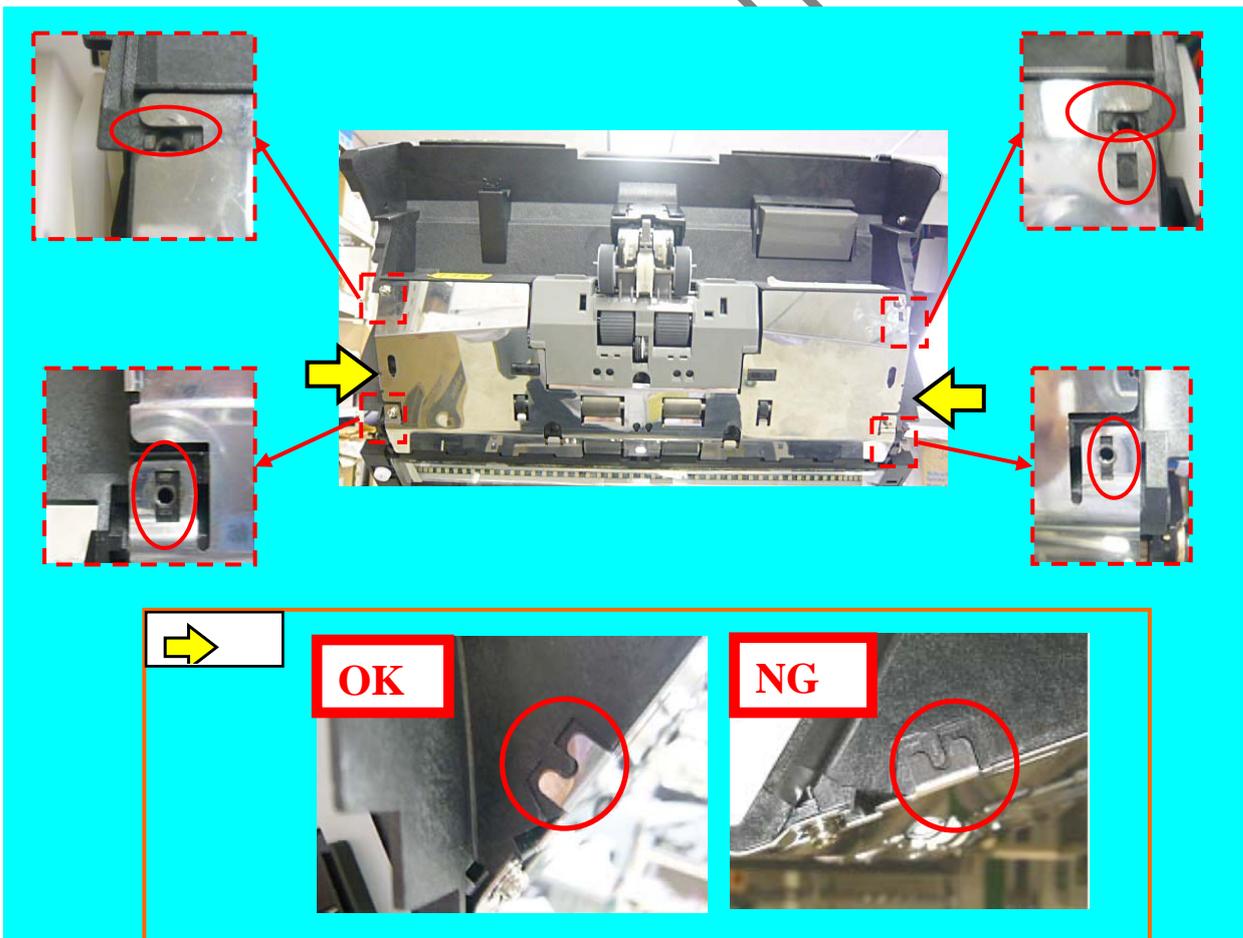
Follow the above procedure in reverse.

NOTICE

- Check that the springs of the RV Roller 2 are hooked on the Bearing Holders before installing the RV Roller 2 onto the scanner.



- Check that the RV Guide 1 is not located above the RV Frame when installing the RV Guide 1.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	219 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

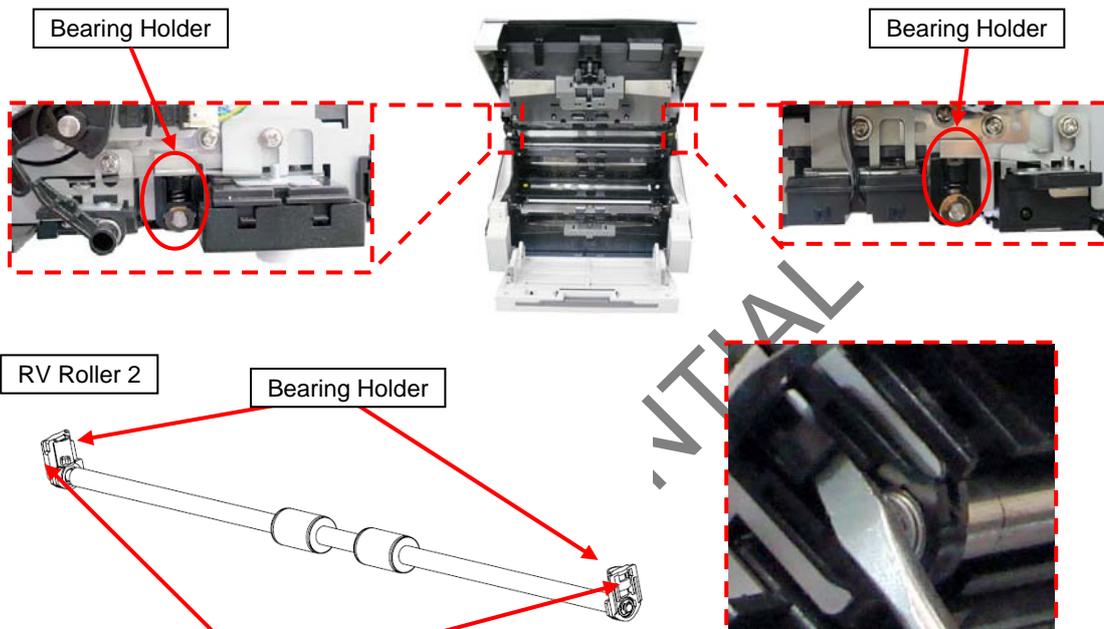
6.13.34.3 RV Roller 2 (for receiving the Feed Roller 3 drive)

NOTICE

Refer to Section 4.2.79 for the part number and appearance of the RV Roller 2.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove the LED Glass RV. (Refer to Section 6.13.9.)
- (3) Remove two bearing holders, and then the RV Roller 2.



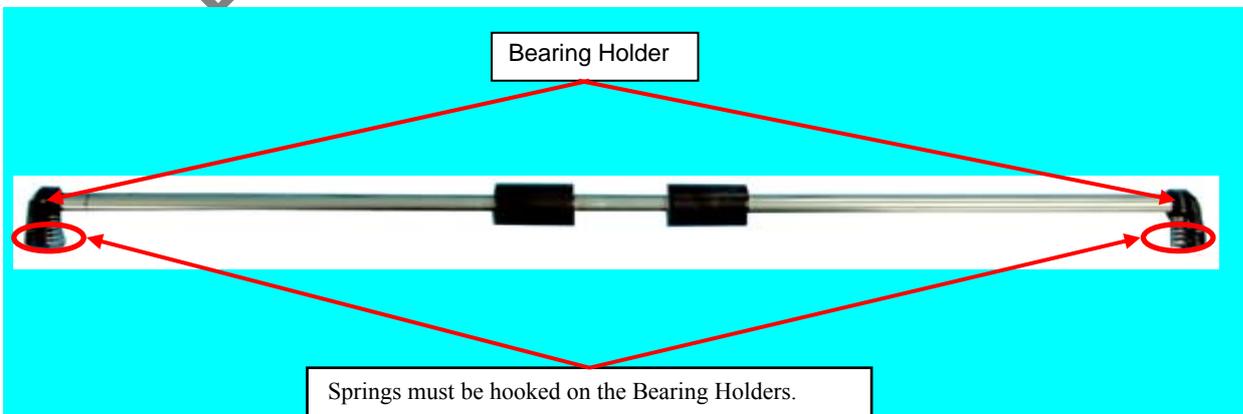
Open here with a flat-blade screwdriver and detach the Bearing Holder one by one.

<Installation>

Follow the above procedure in reverse.

NOTICE

- Check that the springs of the RV Roller 2 are hooked on the Bearing Holders before installing the RV Roller 2 onto the scanner.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	220 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

6.13.34.4 RV Roller 2 (for receiving the Feed Roller 4 drive)

NOTICE

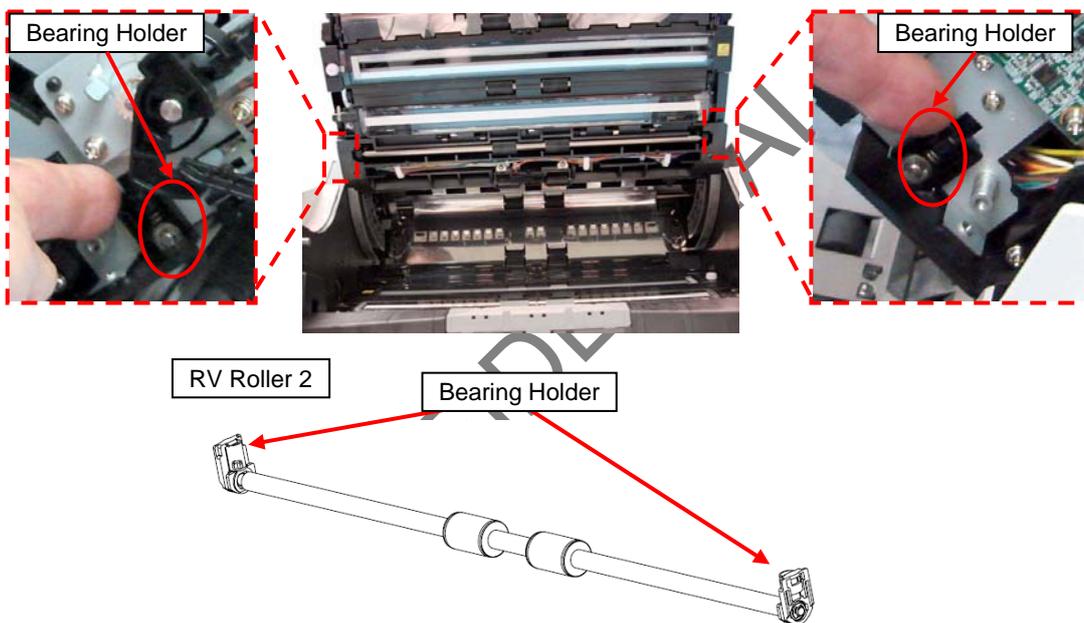
Refer to Section 4.2.79 for the part number and appearance of the RV Roller 2.

<Removal>

- (1) Remove the following parts.
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - RV Guide 2 (Refer to steps (1) ~ (2) in Section 6.13.3.)
- (2) Remove two bearing holders, and then the RV Roller 2.

NOTICE

In order to avoid the RV Roller 2 from falls off, be sure to hold the RV Roller 2 from the bottom when removing it.

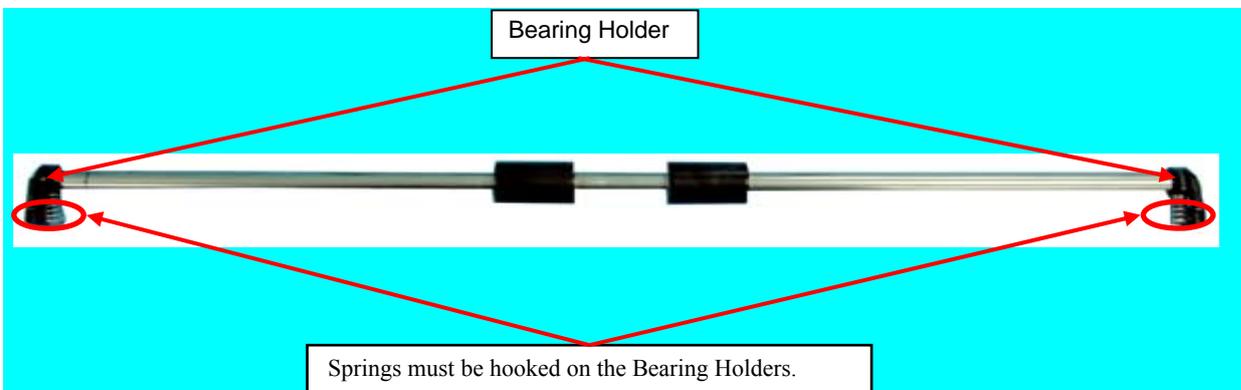


<Installation>

Follow the above procedure in reverse.

NOTICE

- Check that the springs of the RV Roller 2 are hooked on the Bearing Holders before installing the RV Roller 2 onto the scanner.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	221 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

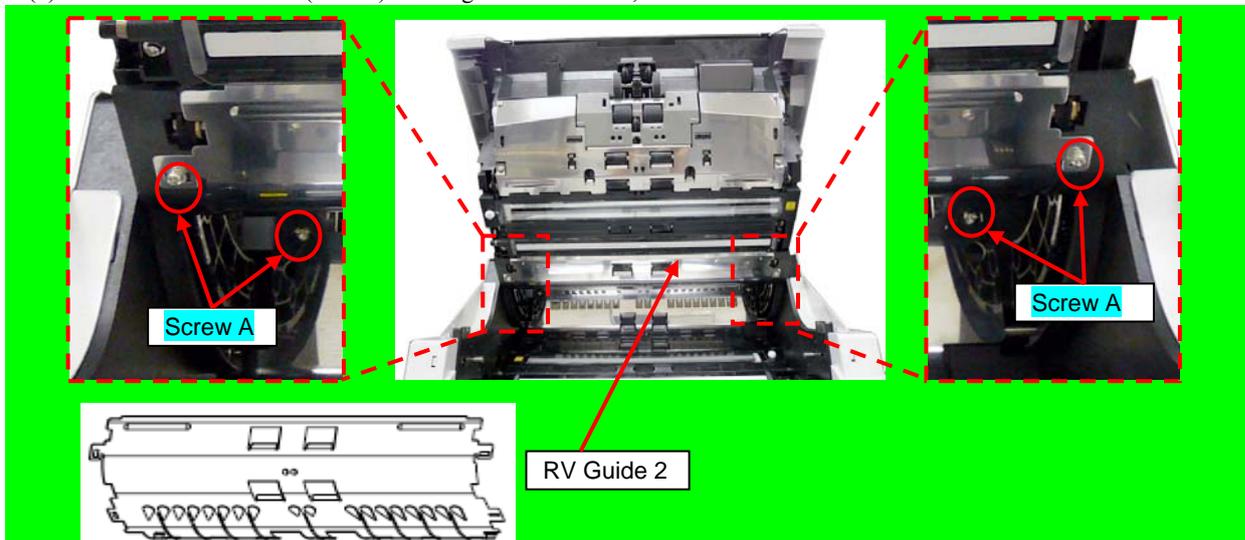
6.13.34.5 RV Roller 3 (for receiving the Feed Roller 5 drive)

NOTICE

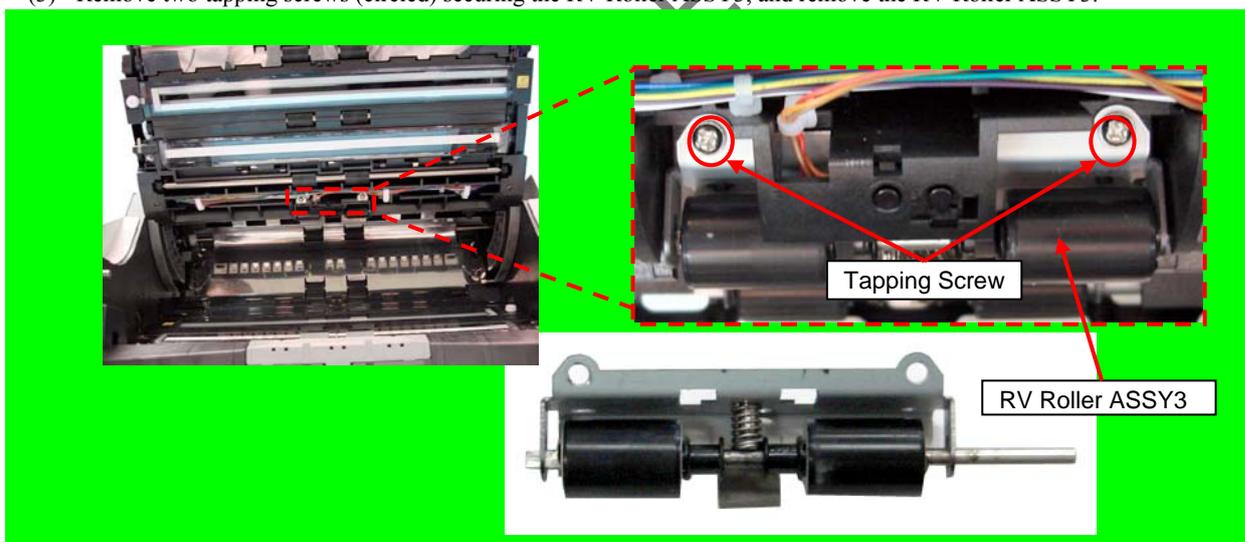
Refer to Section 4.2.80 for the part number and appearance of the RV Roller 3.

<Removal>

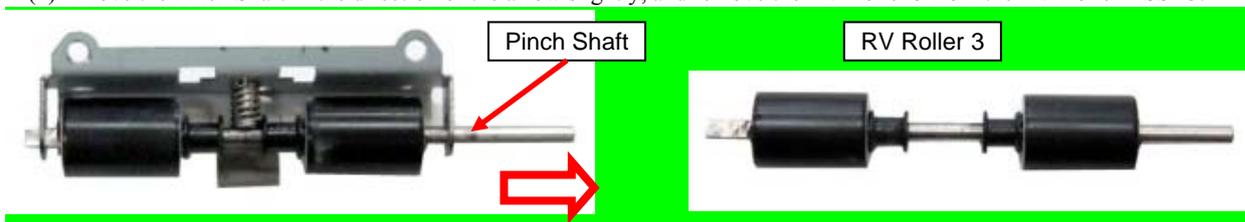
- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove four screws A (circled) securing the RV Guide 2, and remove the RV Guide 2.



- (3) Remove two tapping screws (circled) securing the RV Roller ASSY3, and remove the RV Roller ASSY3.



- (4) Move the Pinch Shaft in the direction of the arrow slightly, and remove the RV Roller 3 from the RV Roller ASSY3.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	222 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

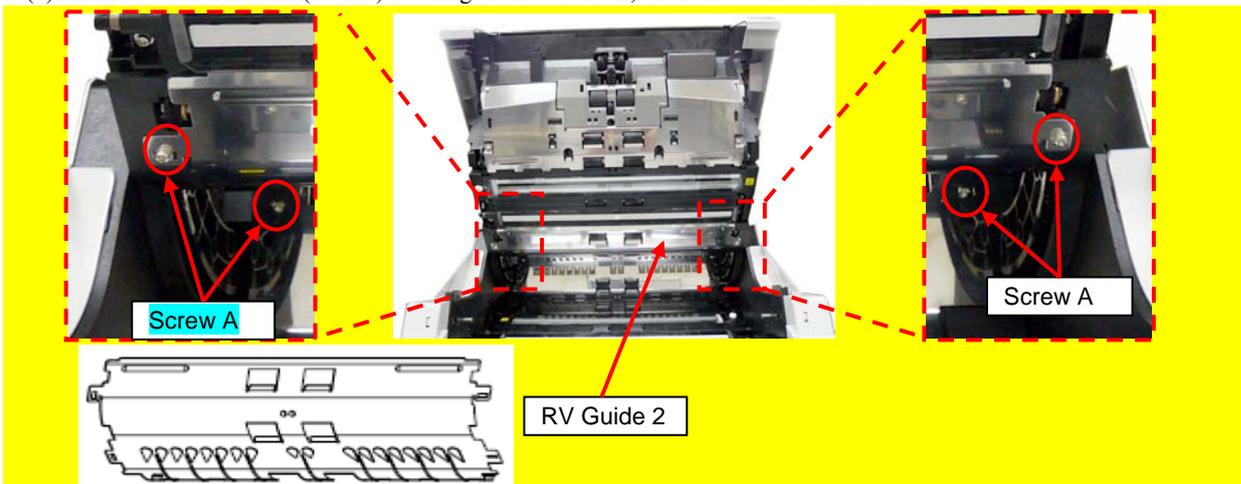
6.13.34.6 RV Roller 3 (for receiving the Feed Roller 6 drive)

NOTICE

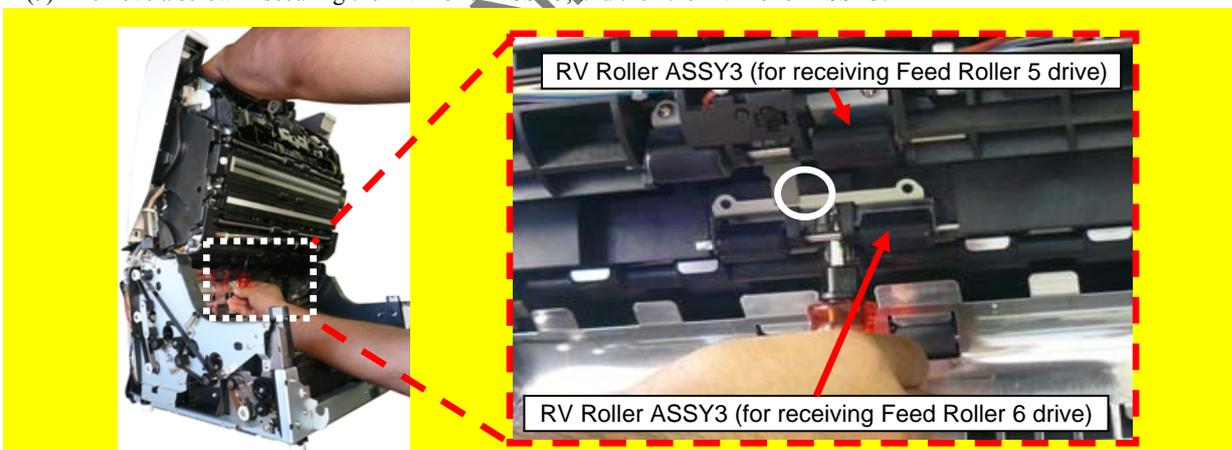
Refer to Section 4.2.80 for the part number and appearance of the RV Roller 3.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Remove the Damper Stoppers at right and left sides, and change the Gas Damper installation position to the fixed position for maintenance. (Refer to steps (2) ~ (3) in Section 6.13.21.)
- (3) Remove four screws A (circled) securing the RV Guide 2, and remove the RV Guide 2.



- (4) Remove the Gas Damper from the fixed position for maintenance, and open the Revolve Unit all the way to the maximum angle by supporting with another hand.
- (5) Remove a screw A securing the RV Roller ASSY3, and then the RV Roller ASSY3.



- (6) Move the Pinch Shaft in the direction of the arrow slightly, and remove the RV Roller 3 from the RV Roller ASSY3.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	223 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

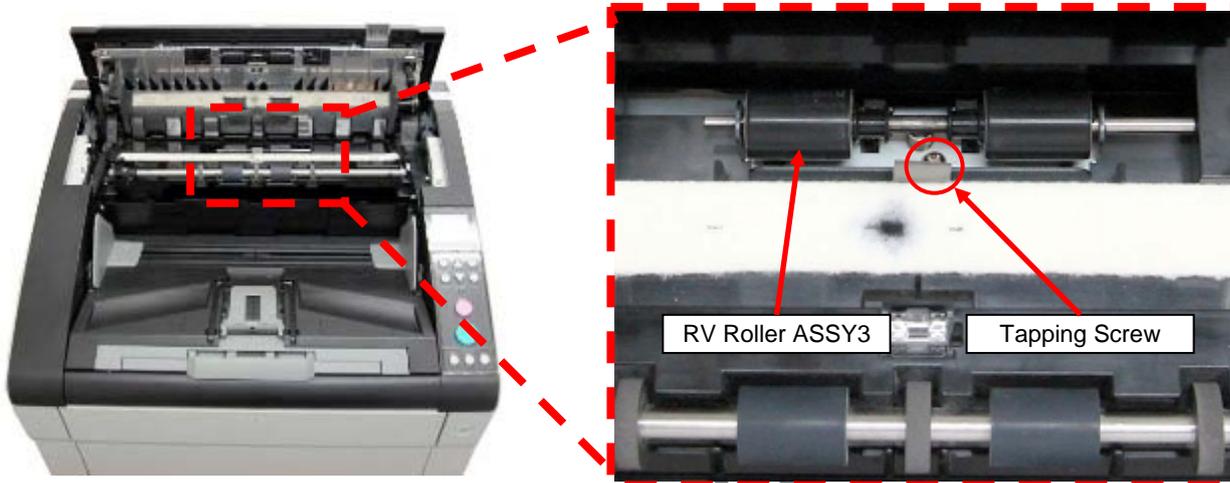
6.13.34.7 RV Roller 3 (for receiving the Exit Roller 1 drive)

NOTICE

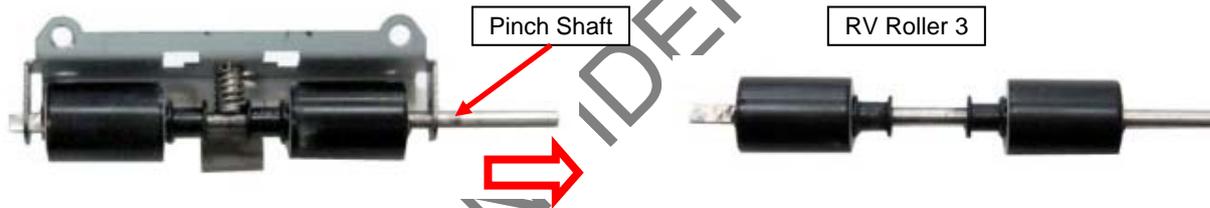
Refer to Section 4.2.80 for the part number and appearance of the RV Roller 3.

<Removal>

- (1) Remove the Exit Guide U. (Refer to steps (1) ~ (2) in Section 6.13.11.2.)
- (2) Remove two tapping screws (circled) securing the RV Roller ASSY3, and remove the RV Roller ASSY3.



- (3) Move the Pinch Shaft in the direction of the arrow slightly, and remove the RV Roller 3 from the RV Roller ASSY3.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	224 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

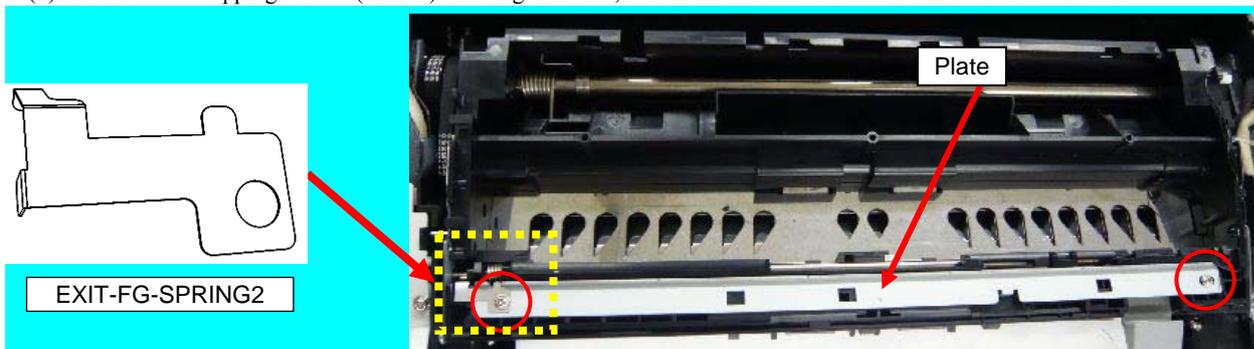
6.13.34.8 RV Roller 3 (for receiving the Exit Roller 2 drive)

NOTICE

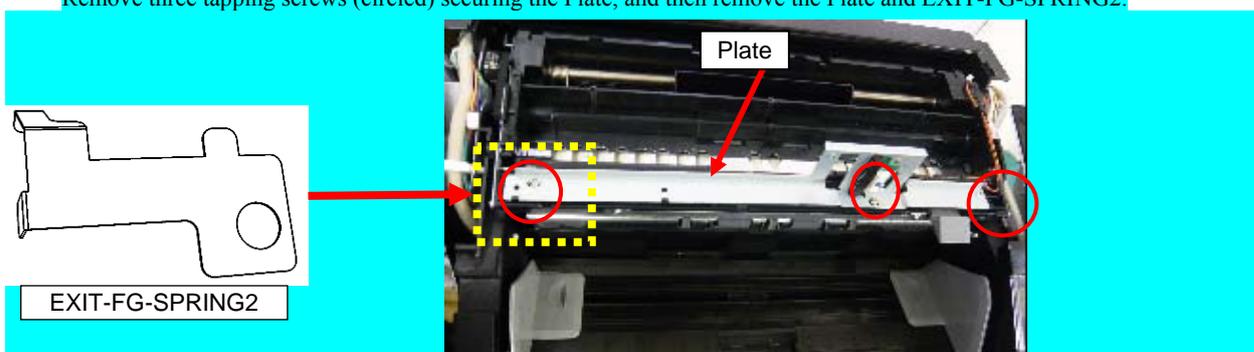
Refer to Section 4.2.80 for the part number and appearance of the RV Roller 3.

<Removal>

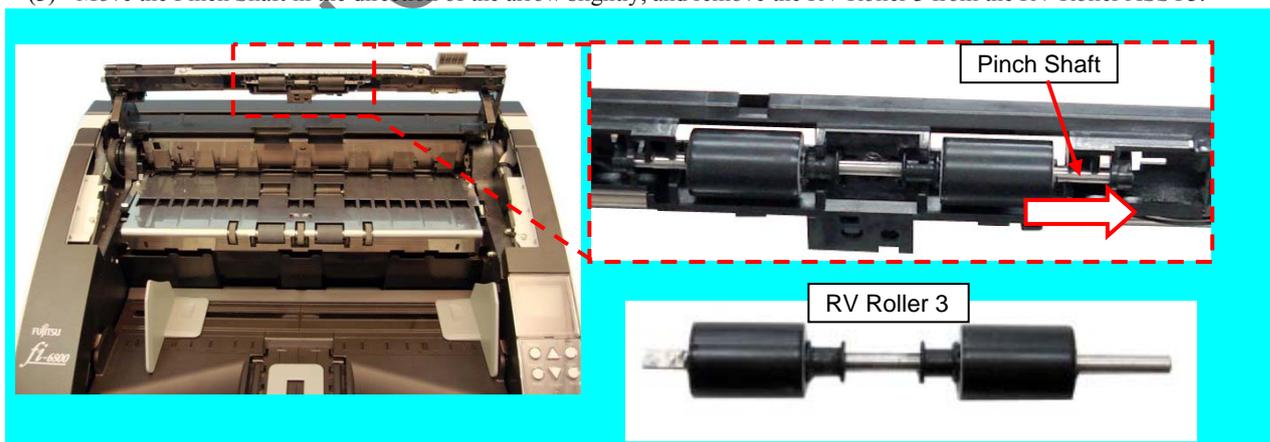
- (1) Remove the following parts.
 - Top Cover (Refer to Section 6.8.7.)
 - [with fi-680PRB imprinter option installed] Top Cover IMP (Refer to Section 9.6.3.5.)
 - Exit Guide T (Refer to step (2) in Section 6.13.11.1.)
- (2) Remove two tapping screws (circled) securing the Plate, and then remove the Plate and EXIT-FG-SPRING2.



[When fi-680PRB imprinter option is installed]
Remove three tapping screws (circled) securing the Plate, and then remove the Plate and EXIT-FG-SPRING2.



- (3) Move the Pinch Shaft in the direction of the arrow slightly, and remove the RV Roller 3 from the RV Roller ASSY3.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	225 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.14 Replacing the Ultrasonic Sensor

6.14.1 Ultrasonic Sensor (US Sensor FX)

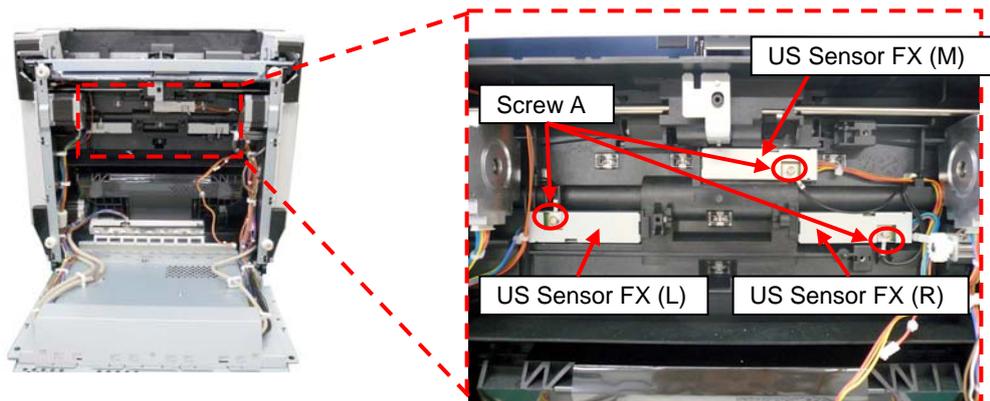
NOTICE

Refer to Section 4.2.43 for the part number and appearance of the US Sensor FX.

6.14.1.1 Ultrasonic Sensor (Left) (US Sensor FX)

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove a screw A (circled) and a connector securing the FG Cable to remove the US Sensor FX (L).



- (4) Remove the US Sensor FX from the US Shield.

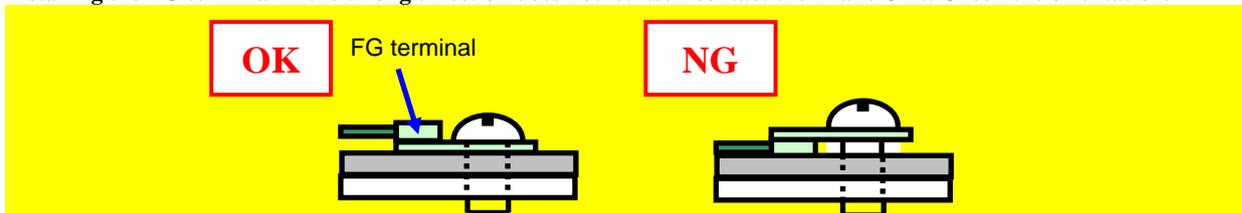


<Installation>

Follow the above procedure in reverse.

NOTICE

Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.



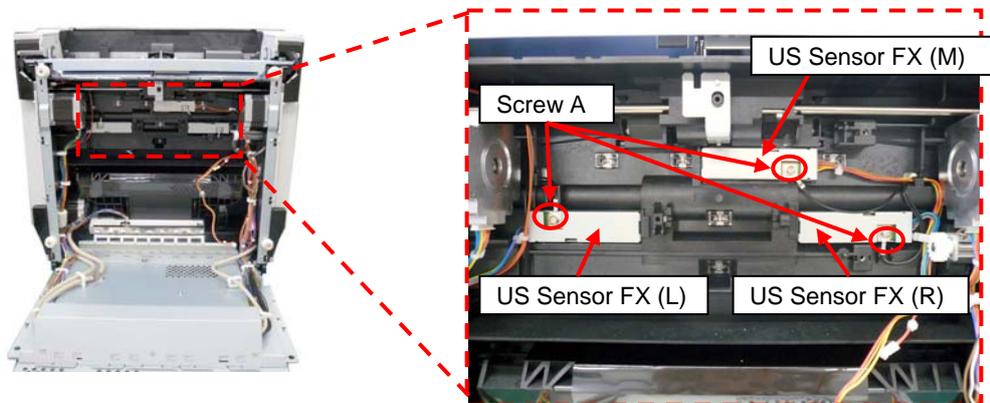
After replacing the US Sensor FX, perform "US Sensor adjustment". (Refer to Section 7.X.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	226 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.14.1.2 Ultrasonic Sensor (Right) (US Sensor FX)

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the HB Unit. (Refer to Section 6.12.18.)
- (4) Remove a screw A (circled) and a connector securing the FG Cable to remove the US Sensor FX (R).



- (5) Remove the US Sensor FX from the US Shield.

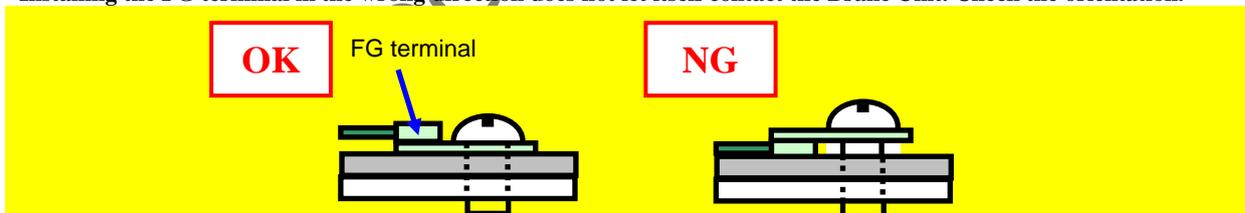


<Installation>

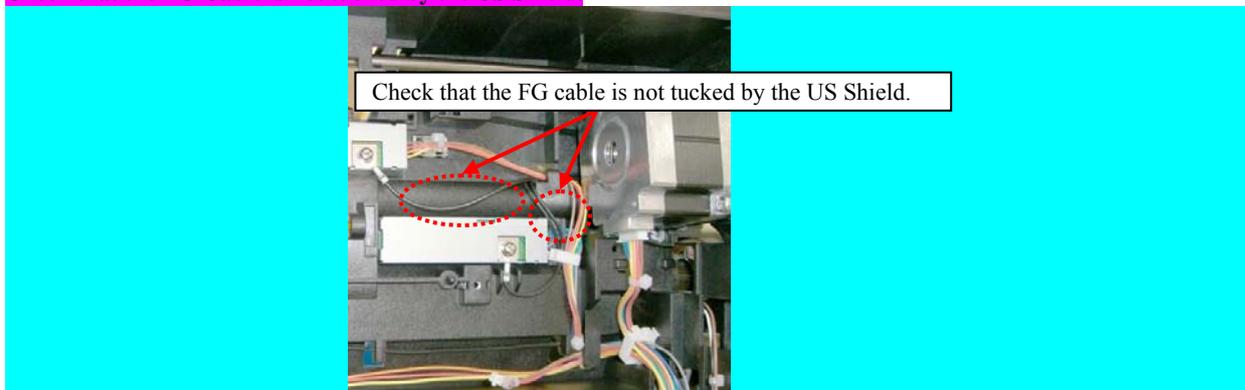
Follow the above procedure in reverse.

NOTICE

- Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.



Check that the FG Cable is not tucked by the US Shield.



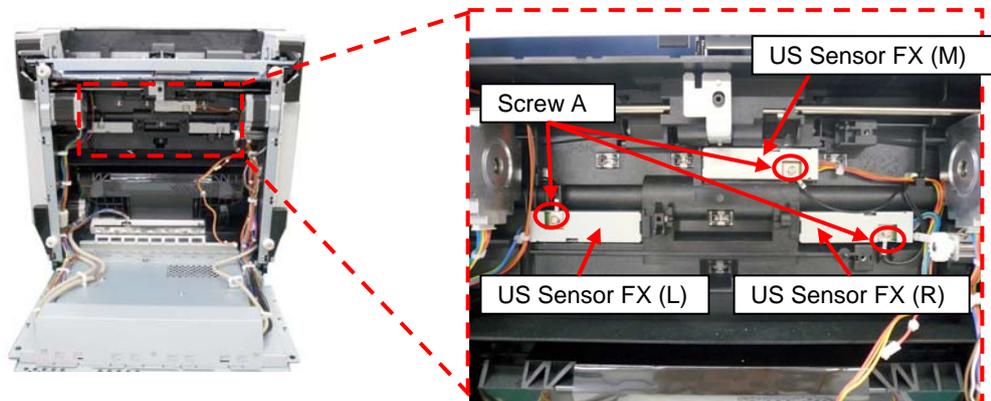
- After replacing the US Sensor FX, perform "US Sensor adjustment". (Refer to Section 7.X.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	227 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.14.1.3 Ultrasonic Sensor (Middle) (US Sensor FX)

<Removal>

- (1) Remove the Hopper Unit. (Refer to Section 6.7.1.)
- (2) Recline the CT Base. (Refer to steps (2) ~ (4) in Section 6.10.1.)
- (3) Remove the HB Unit. (Refer to Section 6.12.18.)
- (4) Remove the Brake Unit. (Refer to Section 6.12.20.)
- (5) Remove a screw A (circled) and a connector securing the FG Cable to remove the US Sensor FX (M).



- (6) Remove the US Sensor FX from the US Shield.

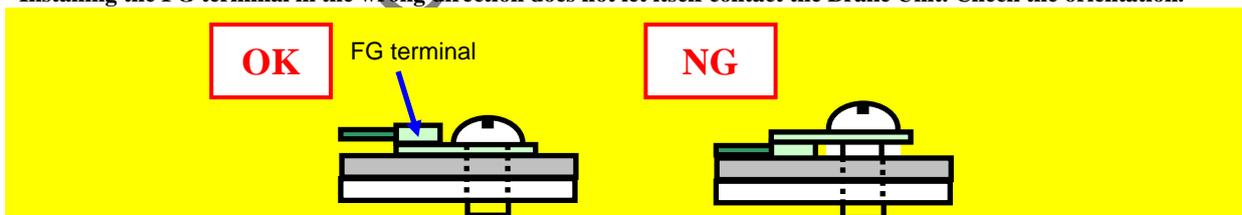


<Installation>

Follow the above procedure in reverse.

NOTICE

- Installing the FG terminal in the wrong direction does not let itself contact the Brake Unit. Check the orientation.



- After replacing the US Sensor FX, perform "US Sensor adjustment". (Refer to Section 7.X.)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	228 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

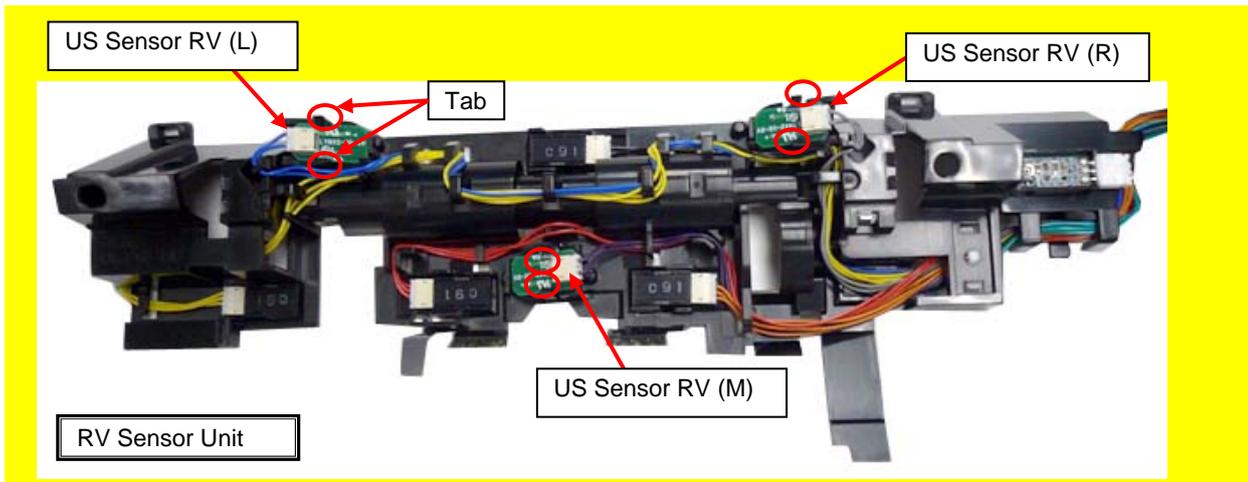
6.14.2 Ultrasonic Sensor (US Sensor RV)

NOTICE

Refer to Section 4.2.41 for the part number and appearance of the US Sensor RV.

<Removal>

- (1) Remove the following parts.
 - RV Cover R (Refer to Section 6.8.4.)
 - RV Side Cover R (Refer to step (3) in Section 6.13.6.)
 - Separator Roller (Refer to steps (3) ~ (5) in Section 8.4.4.)
 - RV Roller 1 (Refer to steps (2) ~ (3) in Section 6.13.34.1.)
 - RV Sensor Unit (Refer to steps (2) ~ (3) in Section 6.13.12.)
- (2) Unlatch two tabs (circled) on the RV Sensor Unit, and then disconnect the connectors (one for each) on the US Sensor RV's.



<Installation>

Follow the above procedure in reverse.

NOTICE

After replacing the US Sensor RV, perform "US Sensor adjustment". (Refer to **Chapter 7.**)

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	229 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

6.15 Replacing the Damper Section

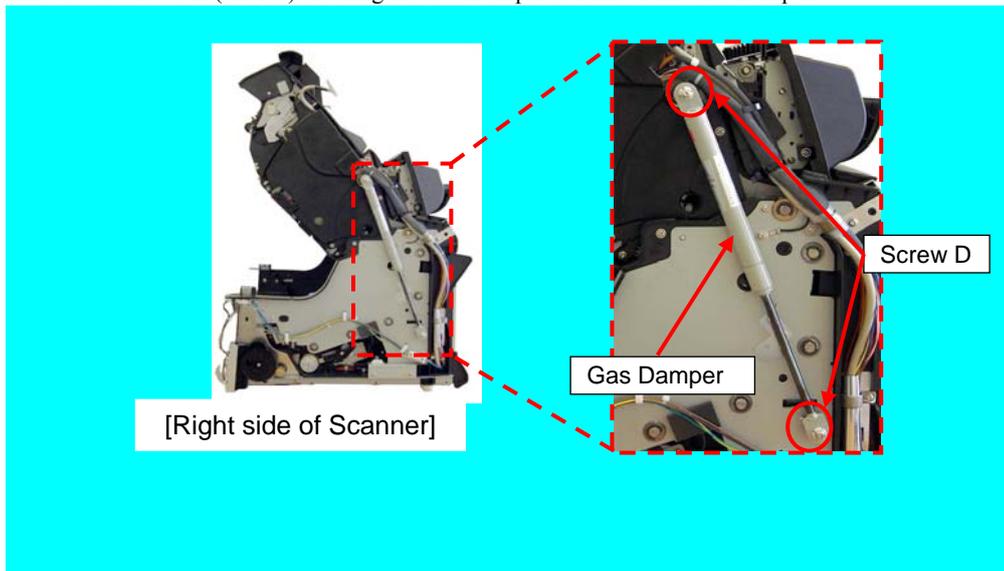
6.15.1 Gas Damper

NOTICE

Refer to Section 4.2.63 for the part number and appearance of the Gas Damper.

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover R (Refer to Section 6.8.2.)
 - RV Cover R (Refer to Section 6.8.4.)
- (2) Remove two screws D (circled) securing the Gas Damper to remove the Gas Damper.

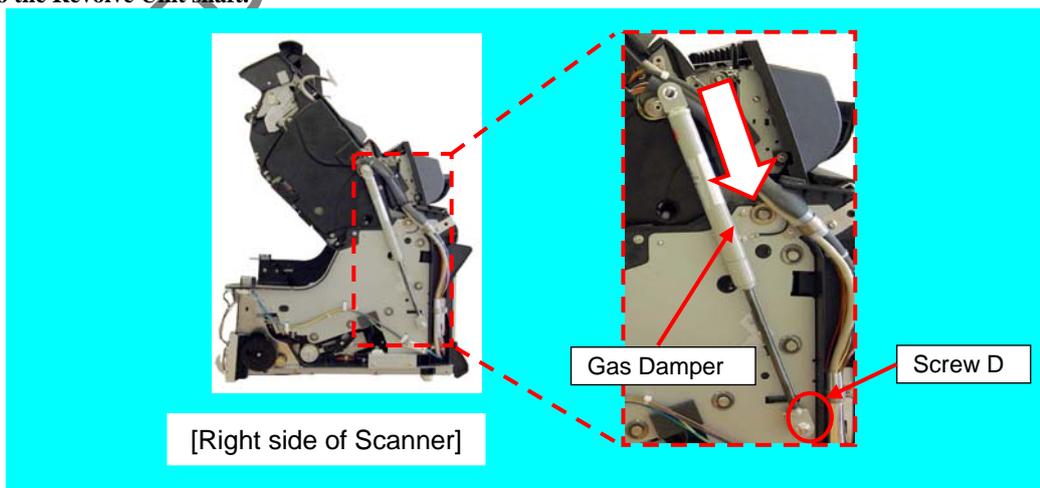


<Installation>

Follow the above procedure in reverse.

NOTICE

Install the Gas Damper into the shaft on the Fixed Unit side with a screw D (circled), and then lower the Gas Damper to install it to the Revolve Unit shaft.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	230 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

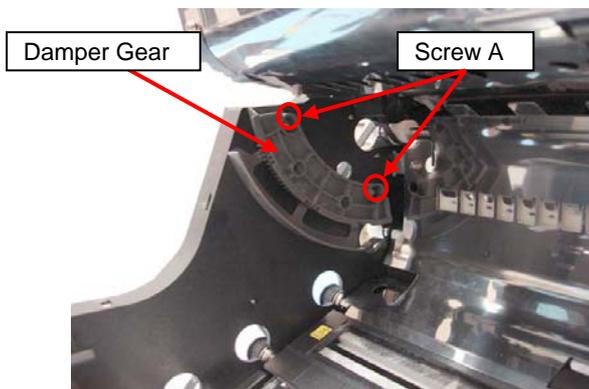
6.15.2 Damper Kit
6.15.2.1 Damper Gear

NOTICE

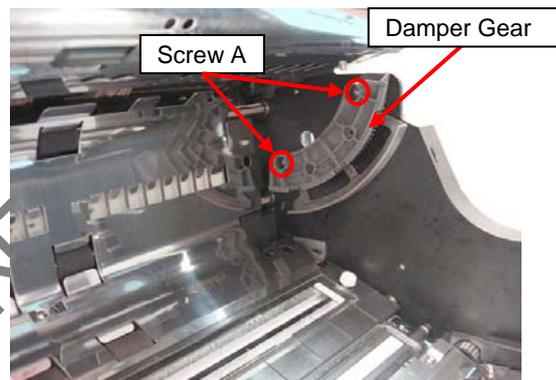
- Refer to Section 4.2.64 for the part number and appearance of the Damper Gear.
- **Replace the Damper Gears one by one to avoid dropping the ADF.**

<Removal>

- (1) Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- (2) Change the Gas Damper installation position. (Refer to steps (2) ~ (3) in Section 6.13.21.)
- (3) Lift up the ADF until the Damper Gear comes off, remove two screws A (circled), and then remove the Damper Gear.



[Left side of Scanner]



[Right side of Scanner]

<Installation>

Follow the above procedure in reverse.

NOTICE

Be sure to return the Gas Damper to the original position.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	231 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

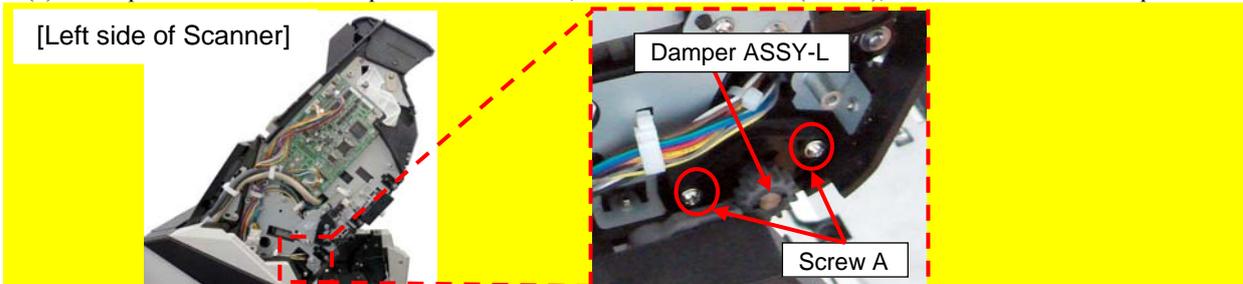
6.15.2.2 Damper ASSY-L

NOTICE

- Refer to Sections 4.2.64 for the part number and appearance of the Damper ASSY
- **Replace the Damper ASSY's one by one to avoid dropping the ADF.**

<Removal>

- Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.21.)
- Change the Gas Damper installation position. (Refer to steps (2) ~ (3) in Section 6.13.21.)
- Lift up the ADF until the Damper ASSY comes off, remove two screws A (circled), and then remove the Damper ASSY L.



<Installation>

Follow the above procedure in reverse.

NOTICE

When installing the Damper ASSY L, check the orientation (color) and rotation-free direction.
 The opposite side of the Gear: White, Rotation-free direction: Counterclockwise
 Be sure to return the Gas Damper to the original position.

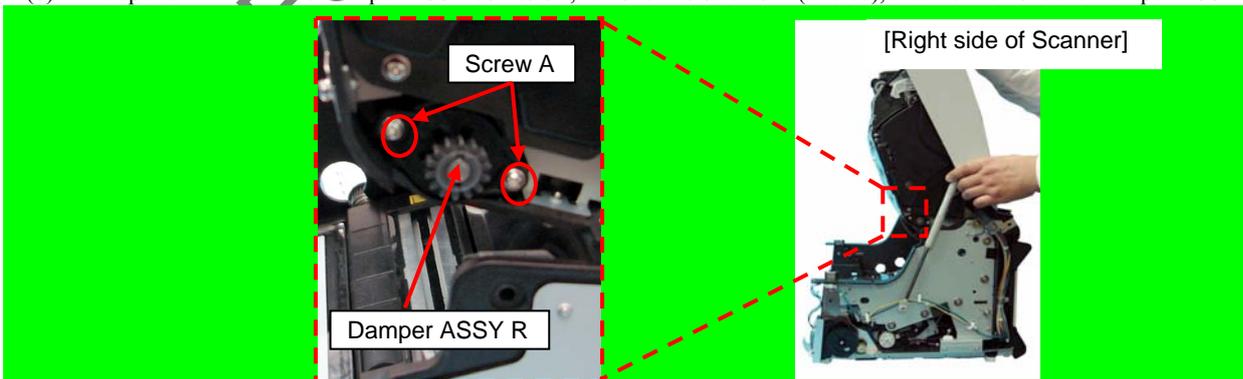
6.15.2.3 Damper ASSY R

NOTICE

- Refer to Sections 4.2.64 for the part number and appearance of the Damper ASSY
- **Replace the Damper ASSY's one by one to avoid dropping the ADF.**

<Removal>

- Remove the following parts.
 - Hopper Unit (Refer to Section 6.7.1.)
 - FX Cover L (Refer to Section 6.8.1.)
 - FX Cover R (Refer to Section 6.8.2.)
- Change the Gas Damper installation position. (Refer to steps (2) ~ (3) in Section 6.13.21.)
- Lift up the ADF until the Damper ASSY comes off, remove two screws A (circled), and then remove the Damper ASSY R.



<Installation>

Follow the above procedure in reverse.

NOTICE

When installing the Damper ASSY R, check the orientation (color) and rotation-free direction.
 The opposite side of the Gear: Black, Rotation-free direction: Clockwise
 Be sure to return the Gas Damper to the original position.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	232 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Chapter 7 Adjustment/Settings

There are two methods of scanner maintenance (adjustments/settings);

“Maintenance mode (offline)”: Built into the scanner

“Maintenance tool (online)”:

The list below shows which maintenance is available in each mode.

NO	Adjustment/Test/Settings Items	Offline	Online (Maintenance tool)
1	Paper feeding test	☑	☑
2	Adjustment		
3	Motor test		
4	Sensor test		
5	Console test		
6	B W change unit check		
7	EEPROM information		
8	Emulation mode switching		
9	Option information display		
10	Scanner information display		
11	Error log display		
12	Cancel periodic maintenance alarm		
13	Display/Clear the consumable counter		

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	233 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1 Offline Maintenance Mode

You can test the operation, adjust, and check the setting for the scanner with the built-in offline Maintenance mode.

7.1.1 Basic operation and maintenance mode items

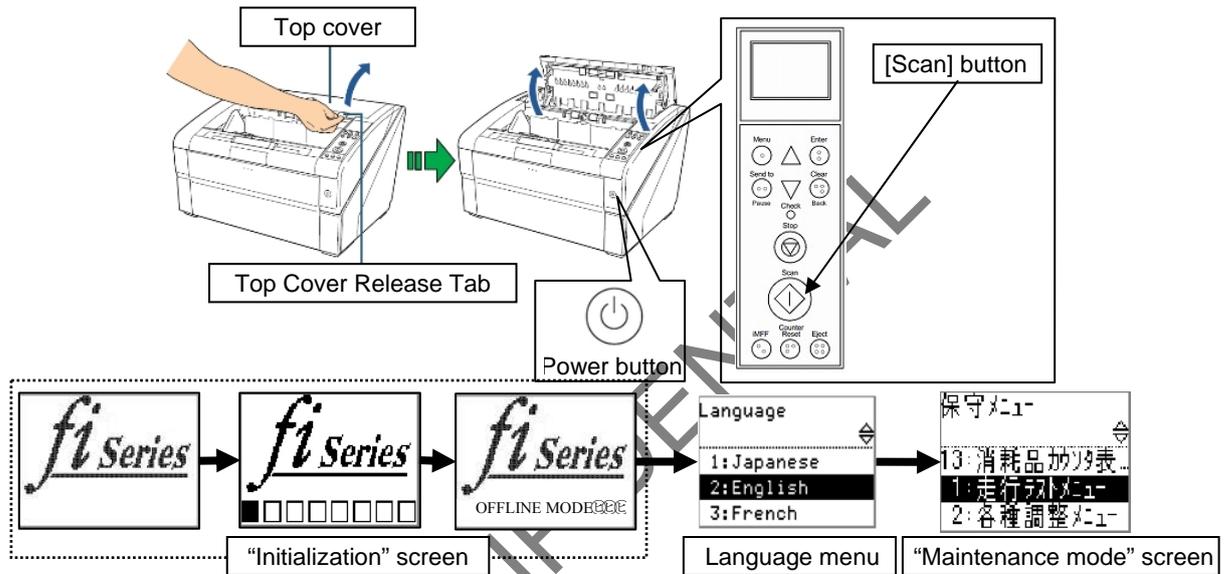
7.1.1.1 Start up/Shut down

<Start up>

With the top cover open, press the **Power** button while pressing the **Scan** button to turn on the scanner.
After “Initializing” screen, language selection menu appears. Select your language. “Maintenance” mode screen appears.

NOTICE

The selected language is effective until the maintenance menu is terminated (power is turned off).
In the Maintenance mode, the all interfaces with the host become invalid.

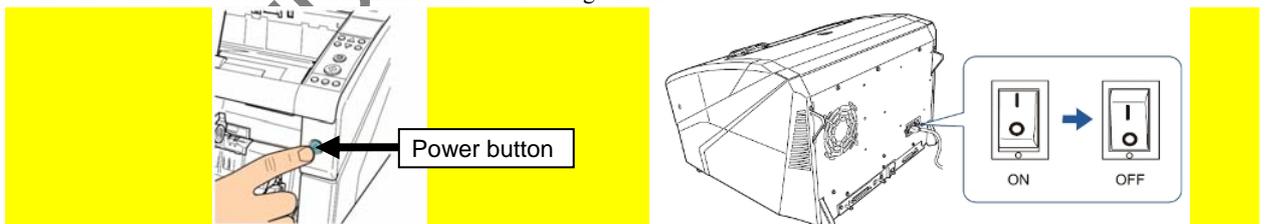


<Shut down>

Press the Power button on the front for more than two seconds.
Press the “O” side of the main power switch on the back to turn off the scanner.

NOTICE

Do not turn off the scanner while EEPROM data is being written.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	234 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

7.1.1.2 Operation method on the menu

The list below shows the basic operations of the buttons on the Operator Panel in the Maintenance mode.

No.	Button	Available	Operation
1	Menu	Yes	Returns to the Maintenance menu screen from each menu screen.
2	Enter	Yes	Executes the selected function.
3	Send to / Pause	No	=
4	Clear / Back	Yes	Returns to the previous screen.
5	☰	Yes	Scrolls up the menu/log screen and selects the previous item. (Keep pressing the ☰ button conducts the cyclic operation.)
6	♀	Yes	Scrolls up the menu/log screen and selects the next item. (Keep pressing the ☰ button conducts the cyclic operation.)
7	Stop	Yes	Cancels the test and returns to the Maintenance menu screen.
8	Scan	Yes	Starts scanning at each adjustment item.
9	iMFF	No	=
10	Counter Reset	Yes	Clears the page counter.
11	Eject	No	=

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	235 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.1.3 Maintenance Mode Items

This scanner has the following operation tests/ adjustments / setting items as Maintenance mode menus (1) ~ (13).

The list below shows all the items.

Main Menu	Sub Menu	Item	Refer to	Remarks
1: Test Run			7.1.2	
2: Adjustment Menus	1: Offset	1: ADF front side 2: ADF back side 3: ADF both sides	7.1.3	
	2: Magnification	1: Main-scan ADF front 2: Main-scan ADF back 3: Main-scan ADF (both) 4: Sub-scan Assist Roller 5: Sub-scan Feed Roller 6: Sub-scan Assist/Feed Roller		
	3: White Level	1: ADF front side 2: ADF back side 3: ADF both sides		
	4: Ultrasonic Sensors			
	5: Separation Force Adjustment			
3: Motor Test Menu	1: Pick 2: Feeding System 3: Separator 4: Hopper 5: Stacker 6: Background Changeover 7: Pick Solenoid 8: MTBF Running		7.1.4	
4: Sensor Test Menu	1: Manual Ope. Menu	1: Ultrasonic 2: Cover 3: Paper Empty 4: Pick Position 5: Manual Feed 6: Stacker Position 7: Jam Sensor (L) 8: Jam Sensor (R)	7.1.5	
	2: Paper Feed Test			
5: Ope. Panel Test Menu	1: LCD	1: All ON 2: All OFF 3: H Pattern 4: Scroll display	7.1.6	
	2: LED	1: ON 2: Blink 3: OFF		
	3: Button			
	4: Alarm	1: High 2: Low 3: None		
6: Background Changeover Test			7.1.7	
7: EEPROM Operation	1: Backup 2: Restore 3: Edit 4: Default settings		7.1.8	
8: Emulation Mode			7.1.9	
9: Option Info			7.1.10	
10: Device Info			7.1.11	
11: Error Log			7.1.12	
12: Clear Periodic Mainte. Alarm			7.1.13	
13: Show/Clear Counters			7.1.14	

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	236 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.1.4 Test Sheets / Adjustment jigs

The list below shows the test charts which are required for each adjustment and test.

No	Description Part number	Specification/Size	Chart used for	Remarks
1	ADJ-CHART-KIT PA03575-D990	Test chart Standard for the following No.2, No.3 and No.4.		Includes the following sheets. No.2: ADJUST-CHART No.3: TEST CHART No.4: ADJUSTMENT SHEET
2	ADJUST-CHART PA93008-D497	<p>← 297[±] 0.6 mm → A3 White 420[±] 2.0 mm</p>	<ul style="list-style-type: none"> - Paper feeding test - Offset adjustment - Magnification adjustment - White level adjustment - Ultrasonic sensor adjustment - Sensor test (Ultrasonic sensor) (Paper feeding test) 	A3 size
3	TEST CHART (W) PA03277-Y123	<p>← 215 mm → A4 White Glossy paper 297 mm</p>	<ul style="list-style-type: none"> - White level adjustment 	Glossy paper for adjusting white level No significant dirt, scratch or wrinkles
4	ADJUSTMENT SHEET PA03296-Y990	<p>← 210 mm → 297 mm</p> <p>209.3g/m² (56 lb.)</p>	Ultrasonic sensor adjustment	For adjusting ultrasonic sensor 209.3g/m ² (56 lb.) Cardboard
5	CLUTCH-ADJ-JIG PA03575-D996	<p>Master 1 Master 2</p>	- Separation force adjustment	Separation force adjustment jig (Master 1, Master 2)

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	237 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.2 Paper Feeding Test

Paper feeding test is performed in the specified resolutions to check the paper feeding condition in this test item.

The sheets for the scanner (refer to Section 1.2) are required for the paper feeding test.

(A3-sized paper bundled with ADJ-CHART-KIT is acceptable.)

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "1. Test Run Menu" by pressing and press the Enter button.	Maintenance Menu 1: Test Run Menu 		
2	Select a resolution for Test Run by pressing and press the Enter button.	<1/6> Resolution 1: 600dpi 2: 400dpi 3: 300dpi 4: 200dpi		Default: 4: 200dpi
3	Select the number of sheets to be scanned by pressing and press the Enter button. If the Imprinter option is not installed, go to No.6 <5/5 Test Run>.	<2/6> No. of sheets scanned 1: Single sheet only 2: Multiple sheets		Default: 1: One sheet
4	Select imprinting side or no imprinting by pressing and press the Enter button. If you selected "1: None", go to No.6 <5/5 Test Run>.	<3/6> Print 1: None 2: Front Side 3: Back Side		Default: 1: None
5	Select print pattern by pressing and press the Enter button. Refer to *1 for the imprinting pattern specification.	<4/6> Print Pattern 1: (horizontal) ABCDE... 2: (horizontal) abcde... 3: (horizontal) !"#%... 4: (vertical) ABCDE... 5: (vertical) abcde... 6: (vertical) !"#%... 		Default: 1: (horizontal)
6	Select whether to detect multifeed by pressing and press the Enter button. *2	<5/6> Multifeed Detection 1: Enable 2: Disable		Default: 1: Enable
7	Set the number of sheets selected on No.3 on the Hopper, and select "1: Yes" by pressing and press the Enter button to start the paper feeding test. If you selected "2: No", the screen returns to the Maintenance Menu.	<6/6> Test Run Execute? 1: Yes 2: No		
8	Executes the paper feeding test. When the test proceeded successfully, the message on the right appears. Press the Enter button to return to the menu. If an error occurs during the test, an error message is displayed on the LCD. Refer to Chapter 5 "Troubleshooting" for the details of the errors.	Test Run Test in progress Test Run Test completed		

*1: Imprinting pattern specification (The last letter of the imprinting pattern is the selected imprinting pattern number.)

[1: (horizontal)], [4: (vertical)] → ABCDEFGHIJKLMNOPQRSTUVWXYZ[¥]^_`00000000

[2: (horizontal)], [5: (vertical)] → abcdefghijklmnopqrstuvwxyz{}~00000000

[3: (horizontal)], [6: (vertical)] → !"#%&'()*+,-./0123456789;<=>?@00000000

*2: When multifeed detection is enabled, the message which appears when multifeed occurs at paper feeding test differs from the message at normal scanning.

Message: 10月 1月 国 国 (彙ル水汗叶)! Eject 8月 名 斛ペラ 噴 綫 晨 叶 名 脏 ヅ (-) ペ ぬ]-TBD

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575 → B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	238 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka		

7.1.3 Adjustment (Offset / Magnification / White level / Ultrasonic)

The following adjustments are performed in this test item.

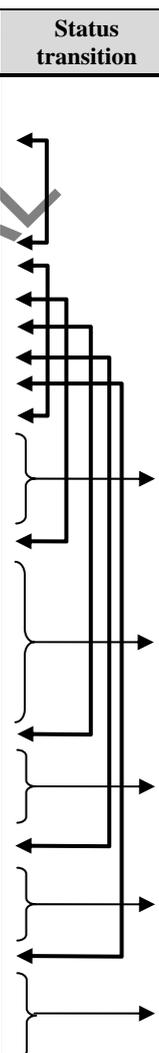
When the maintenance part that requires adjustments are replaced, be sure to perform the requisite adjustment.

NOTICE

The special test sheets described in Section 7.1.1.4 are required for the adjustments. Prepare them before adjustment.

<Adjustment item>

- ⚠! Offset
- ⚠! Magnification
- ⚠! White level
- ⚠! Ultrasonic sensor
- ⚠! Separation force adjustment

No	Procedure	Menu display	Status transition	Refer to
		Selected item/Display		
1	Select "2. Adjustment Menus" by pressing  and press the Enter button.	Maintenance Menu ⓪ 2: Adjustment Menus ⓪ ⓪		
2	Select an adjustment by pressing  and press the Enter button.	Adjustment Menu 1: Offset 2: Magnification 3: White Level 4: Ultrasonic Sensors 5: Separation Force		
3	To perform "Offset adjustment", select the side to be adjusted by pressing  and press the Enter button. Refer to Section 7.1.3.1 for detail.	Offset 1: ADF front side 2: ADF back side 3: ADF both sides		Section 7.1.3.1
4	To perform "Magnification adjustment", select the scanning direction to be adjusted by pressing  and press the Enter button. Refer to Section 7.1.3.2 for detail.	Magnification 1: Main-scan ADF front 2: Main-scan ADF back 3: Main-scan ADF (both) 4: Sub-scan Assist Roller 5: Sub-scan Feed Roller 6: Sub-scan Assist/Feed Roller		Section 7.1.3.2
5	To perform "White level adjustment", select the side to be adjusted by pressing  and press the Enter button. Refer to Section 7.1.3.3 for detail.	White Level 1: ADF front side 2: ADF back side 3: ADF both sides		Section 7.1.3.3
6	To perform "Ultrasonic sensor adjustment", the message on the right appears. Refer to Section 7.1.3.4 for detail.	Ultrasonic Sensors Set dedicated chart and press the Scan button.		Section 7.1.3.4
7	To perform "Separation force adjustment", the message on the right appears. Refer to Section 7.1.3.5 for detail.	Separation Force Remove the Brake roller, and set the Separation force adjustment jig (Master 1)...		Section 7.1.3.5

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	239 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.3.1 Offset Adjustment

Calculates the offset value automatically so that ADF main/sub-scanning offset values become as follows:

Offset adjustment target value Main scanning: The maximum offset is within 0² 24 dots (paper size is A6 or larger)
 Sub-scanning: The maximum offset is within 0² 33 dots (paper size is A6 or larger)

NOTICE

- The values above are just adjustment target values. Image specification is as follows:
 Main scanning: The smaller value between the leading edge and the trailing edge at left edge of the paper is 0~1.5mm.
 Sub-scanning: The smaller value between the left edge and the right edge at the leading edge of the paper is 0~2.0mm.
- The special test sheet ADJUST-CHART described in No.2 in Section 7.1.1.4 is required for the adjustment. Prepare it before adjustment.

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select the side to be adjusted by pressing and press the [Enter] button.	Offset 1: ADF front side 2: ADF back side 3: ADF both sides		
2	Load the A3-sized paper (bundled with ADJUST-CHART. Refer to No.2 in Section 7.1.1.4) on the Hopper, adjust the Side guides to the paper width, and then press the [Scan] button.	ADF (*) Set dedicated chart and press the Scan button.		The selected item is displayed on *.
3	Scan operation starts and adjustment is performed. If an error occurs during adjustment, check [Offset adjustment - Error message].	ADF (*) Adjusting...		The selected item is displayed on *.
4	When the test proceeded successfully, the message on the right appears. To write the adjustment value into the EEPROM, press the [Enter] button. If the [Clear] button is pressed, the value is not written into the EEPROM, but the display returns to the Maintenance menu.	ADF (*) Ended successfully. Press Enter button to write to EEPROM. Press Clear button to return to Main Menu without writing.		The selected item is displayed on *.
5	The confirmation screen on the right appears: To write the value into the EEPROM, select [1: Yes] by pressing and press the [Enter] button. If [2: No] is selected, the display returns to the Maintenance menu.	ADF (*) Want to write? 1: Yes 2: No		The selected item is displayed on *.
6	The screen on the right appears: After writing the value into the EEPROM, the screen returns to the Maintenance Menu.	ADF (*) Writing...		The selected item is displayed on *.

[Offset adjustment - Error message]

No	Error message	Occurrence Condition/Action
1	No paper. Load documents onto the Hopper.	<Condition>The test chart is not set on the Hopper. <Action>Load the paper on the Hopper and start adjustment.
2	Top edge detection error Image is shifted up. Check the position of the document set on the Hopper.	<Condition> - The paper may not be loaded on the Hopper properly. - The specified test chart may not be used. <Action> - Set the test chart on the Hopper properly, and start adjustment. Refer to "1. Setting the documents at the center of the hopper" in Section 8.1.6 "Loading the documents on the Hopper" for how to set the test chart. - Use the specified test chart (ADJUST-CHART. Refer to No.2 in Section 7.1.1.4).
3	Left edge detection error Image is shifted left. Check the position of the document set on the Hopper.	
4	Right edge detection error Image is shifted right. Check the position of the document set on the Hopper.	
5	確認! 噴紙ネ動ゾツ(→)へみ 7月倉レ①へみ噴紙ワ難茹名籠辛へヨバメブジみ	
6	Offset top edge detection error Out of the available adjustment range. Confirm that you are using the adjustment sheet.	<Condition>EEPROM is failed to be written. <Action> Perform adjustment again and write the value into the EEPROM.
7	Offset left edge detection error Out of the available adjustment range. Confirm that you are using the adjustment sheet.	
8	Failed to write to EEPROM. Adjustment result will not be applied.	

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	240 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi			

7.1.3.2 Magnification Adjustment

Calculates the magnification correction value automatically so that ADF magnification values become as follows:

Magnification correction value: Within 1.0% (Within ± 2.0% when start/stop scanning is performed.)

NOTICE

The special test sheet ADJUST-CHART described in No.2 in Section 7.1.1.4 is required for the adjustment. Prepare it before adjustment.

No	Procedure	Menu display	Status transition	Remarks	
		Selected item/Display			
1	Select the scanning direction to be adjusted by pressing and press the [Enter] button.	Magnification 1: Main-scan ADF front 2: Main-scan ADF back 3: Main-scan ADF (both) 4: Sub-scan Assist Roller 5: Sub-scan Feed Roller 6: Sub-scan Assist/Feed Roller			
2	Load the A3-sized paper (bundled with ADJUST-CHART. Refer to No.2 in Section 7.1.1.4) on the Hopper, adjust the Side guides to the paper width, and then press the [Scan] button. To perform the sub-scanning Feed roller, Sub-scanning Assist/Feed roller adjustment, 10 ADJUST-CHARTs are required.	* Set dedicated chart and press the Scan button.		The selected item is displayed on *.	
3	Scan operation starts and adjustment is performed. If an error occurs during adjustment, check [Magnification adjustment - Error message].	* Adjusting... 		Clear	The selected item is displayed on *.
4	When the test proceeded successfully, the message on the right appears. To write the adjustment value into the EEPROM, press the [Enter] button. If the [Clear] button is pressed, the value is not written into the EEPROM, but the display returns to the Maintenance menu.	* Ended successfully. Press Enter button to write to EEPROM. Press Clear button to return to Main Menu without writing.		Enter Yes	The selected item is displayed on *.
5	The confirmation screen on the right appears: To write the value into the EEPROM, select [1: Yes] by pressing and press the [Enter] button. If [2: No] is selected, the display returns to the Maintenance menu.	* Want to write? 1: Yes 2: No		No	The selected item is displayed on *.
6	The screen on the right appears: After writing the value into the EEPROM, the screen returns to the Maintenance Menu.	* Writing... 			The selected item is displayed on *.

[Magnification adjustment - Error message]

No	Error message	Occurrence Condition/Action
1	No paper. Load documents onto the Hopper.	<Condition>The test chart is not set on the Hopper. <Action>Load the paper on the Hopper and start adjustment.
2	Top edge detection error Image is shifted up. Check the position of the document set on the Hopper.	<Condition> - The paper may not be loaded on the Hopper properly. - The specified test chart may not be used. <Action> - Set the test chart on the Hopper properly, and start adjustment. Refer to "1. Setting the documents at the center of the hopper" in Section 8.1.6 "Loading the documents on the Hopper" for how to set the test chart. - Use the specified test chart (ADJUST-CHART. Refer to No.2 in Section 7.1.1.4).
3	Bottom edge detection error Image is shifted down. Check the position of the document set on the Hopper.	
4	Skew The document slants. Check the position of the document set on the Hopper.	
5		
6		<Condition>Adjustment sheet is insufficient. <Action>Load the test chart on the Hopper and perform the adjustment.
7		
8	Failed to write to EEPROM. Adjustment result will not be applied.	<Condition>EEPROM is failed to be written. <Action> Perform adjustment again and write the value into the EEPROM.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	241 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi				APPR.	IFujioka

7.1.3.3 White Level Adjustment

Calculates the white level correction value automatically so that ADF white level becomes as follows:

 **NOTICE**

The special test sheet TEST-CHART described in No.3 in Section 7.1.1.4 is required for the adjustment. Prepare it before adjustment.

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select the scanning direction to be adjusted by pressing  and press the [Enter] button.	White Level 1: ADF front side 2: ADF back side 3: ADF both sides		
2	Load the test chart (Refer to No.3 TEST-CHART in Section 7.1.1.4.) on the Hopper, adjust the Side guides to the paper width, and then press the [Scan] button.	* Set dedicated chart and press the Scan button.		The selected item is displayed on *.
3	Scan operation starts and adjustment is performed. Scanning for adjustment is performed 5 times in total. If an error occurs during adjustment, check [White level adjustment - Error message].	* Adjusting... ----- X / 5		The selected item is displayed on *. X: Total number of adjustment
4	When the test proceeded successfully, the message on the right appears. To write the adjustment value into the EEPROM, press the [Enter] button. If the [Clear] button is pressed, the value is not written into the EEPROM, but the display returns to the Maintenance menu.	* Ended successfully. Press Enter button to write to EEPROM. Press Clear button to return to Main Menu without writing.		The selected item is displayed on *.
5	The confirmation screen on the right appears: To write the value into the EEPROM, select [1: Yes] by pressing  and press the [Enter] button. If [2: No] is selected, the display returns to the Maintenance menu.	* Want to write? 1: Yes 2: No		The selected item is displayed on *.
6	The screen on the right appears: After writing the value into the EEPROM, the screen returns to the Maintenance Menu.	* Writing... -----		The selected item is displayed on *.

[White level adjustment - Error message]

No	Error message	Occurrence Condition/Action
1	No paper. Load documents onto the Hopper.	<Condition>The test chart is not set on the Hopper. <Action>Load the paper on the Hopper and start adjustment.
2	Time-out Could not finish scanning required for the adjustment on time.	<Condition> - The paper may not be loaded on the Hopper properly. - The specified test chart may not be used.
3	Abnormal White level There is more than 1% of low output pixels. Confirm that you are using the adjustment sheet.	<Action> - Set the test chart on the Hopper properly, and start adjustment. - Set the test chart horizontally, adjust the Side guides to the paper width.
4	通棒鋸夾確快 通棒嚙葉ル鋸夾(名)醒ドヨツ(ト)へみ 通棒鋸ワ噴綫(名)分確へヨツ(名)ピラ(名)籠幸へヨバメフ ツる	- Use the specified test chart (TEST-CHART. Refer to No.3 in Section 7.1.1.4).
5	Failed to write to EEPROM. Adjustment result will not be applied.	<Condition>EEPROM is failed to be written. <Action> Perform adjustment again and write the value into the EEPROM.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	242 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

7.1.3.4 Ultrasonic Sensor Adjustment

Corrects the Ultrasonic sensor output to the optimal value in order to improve the multifeed detection accuracy for the specified media.

NOTICE

The special test sheet ADJUSTMENT SHEET described in No.4 in Section 7.1.1.4 is required for the adjustment. Prepare it before adjustment.

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The screen on the right appears. Load the adjustment sheet (Refer to No.4 ADJUSTMENT SHEET in Section 7.1.1.4.) on the Hopper, adjust the Side guides to the paper width, and then press the [Scan] button.	Ultrasonic Sensors Set dedicated chart, and press the Scan button.		
2	Scan operation starts and adjustment is performed. If an error occurs during adjustment, check [Ultrasonic sensor adjustment - Error message].	Ultrasonic Sensors Adjusting... =====		
3	When the test proceeded successfully, the message on the right appears. To write the adjustment value into the EEPROM, press the [Enter] button. If the [Clear] button is pressed, the value is not written into the EEPROM, but the display returns to the Maintenance menu.	Ultrasonic Sensors Ended successfully. Press Enter button to write to EEPROM. Press Clear button to return to Main Menu without writing.		
4	The confirmation screen on the right appears: To write the value into the EEPROM, select [1: Yes] by pressing  and press the [Enter] button. If [2: No] is selected, the display returns to the Maintenance menu.	Ultrasonic Sensors Want to write? 1: Yes 2: No		
5	The screen on the right appears: After writing the value into the EEPROM, the screen returns to the Maintenance Menu.	Ultrasonic Sensors Writing... =====		

[Ultrasonic sensor adjustment - Error message]

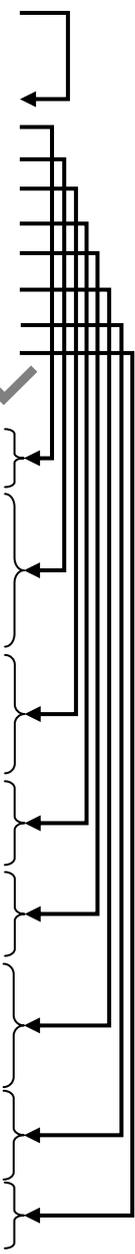
No	Error message	Occurrence Condition/Action
1	Ultrasonic Sensor error	<Condition> - The paper may not be loaded on the Hopper properly. - The specified test chart may not be used. <Action> - Set the test chart on the Hopper properly, and start adjustment. - Set the test chart horizontally, adjust the Side guides to the paper width. - Use the specified test chart (ADJUSTMENT SHEET. Refer to No.4 in Section 7.1.1.4). - Perform the sensor test (Section 7.15.1: Ultrasonic Sensor) and check the sensor status.
2	Failed to write to EEPROM. Adjustment result will not be applied.	<Condition>EEPROM is failed to be written. <Action> Perform adjustment again and write the value into the EEPROM.
3	噴紙ルへ	<Condition>The ADJUSTMENT SHEET may not be set. <Action> Lad the ADJUSTMENT SHEET and perform the adjustment.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	243 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.1.4 Motor Test

The following motor operation tests are performed in this test item.

Refer to [Motor operating position] for detail of motor operation position.

No	Procedure	Menu display	Status transition	Remarks	
		Selected item/Display			
1	Select "3: Motor test menu" from the Maintenance menu by pressing  and press the Enter button.	Maintenance Menu ⊖ 3: Motor Test Menu ⊖ ⊖			
2	Select the item to be tested by pressing  and press the Enter button.	Motor Test Menu 1: Pick 2: Feeding 3: Separator 4: Hopper 5: Stacker 6: Background Changeover 7: Pick Solenoid 8: MTBF Running			
3	The screen on the right appears and the selected motor starts rotating. Check the following at each motor test.	[Selected test item] (*2) Test in progress			
	☞1: Pick Check the Pick roller rotating operation.				
	☞2: Feeding The feed rollers in the ADF and the feed rollers (EXIT rollers) in the Top cover rotate. Check the operation with the ADF closed and the feed roller operation with the ADF and Top cover opened (*1).				
	☞3: Separator The separator roller rotates. Check the operation with the ADF closed and the separator roller operation with the ADF opened (*1).				
	☞4: Hopper Hopper moves up and down. Check the operation.				
	☞5: Stacker The stacker moves up and down. Check the operation.				
	☞6: Background changeover The background changeover operates. Check the operation with the ADF closed and the background changeover operation with the ADF opened (*).				
	☞7: Pick solenoid Check that the Hopper moves to the upper position and the Pick roller moves up and down in small motions. Check the operation.				
☞8: MTBF running The motors in #1 ~ 7 above move. Check the operation.				(*3)	
4	Press the Stop button to terminate the test. Press the Clear button to return to the menu.	[Selected test item] (*2) Test completed			

(*1): When the ADF and Top cover are opened, turn ON the cover switch with a stick of other than metal.

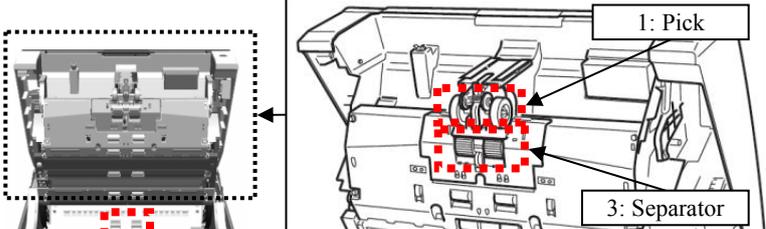
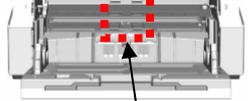
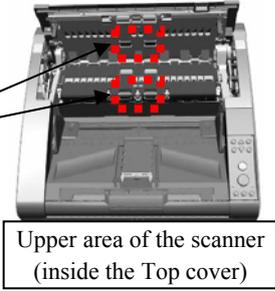
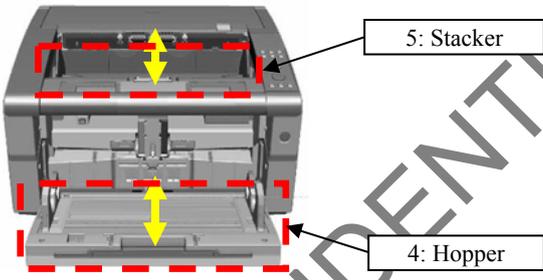
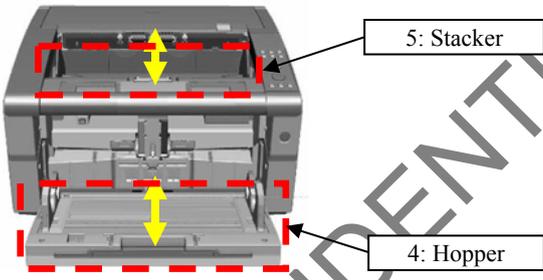
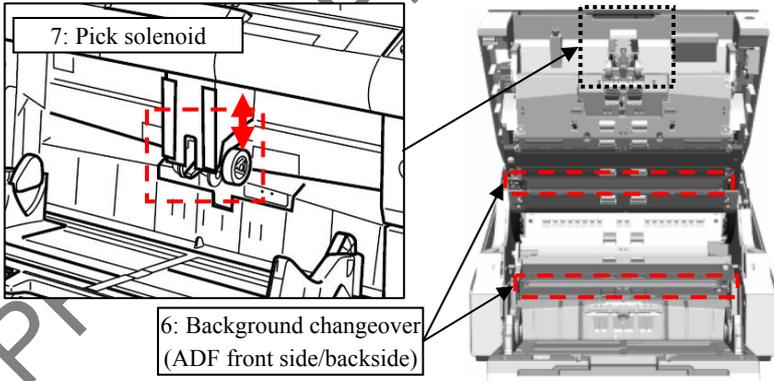
(*2): The selected test item selected on the Motor test menu is displayed.

(*3): Start MTBF running test after the scanner initial operation is complete.

Do NOT open/close the ADF and TOP cover during MTBF running test.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page 245 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

[Motor operating position]

Test item	Operating position	
1: Pick		
2: Feeding		
3: Separator		
4: Hopper		
5: Stacker		
6: Background changeover		
7: Pick solenoid		
8: MTBF running	<p>The following test items start operating. (Refer to above for the operating positions.)</p> <p>1: Pick 2: Feeding 3: Separator 4: Hopper 5: Stacker 6: Background changeover</p>	

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575 → B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	246 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

7.1.5 Sensor Test

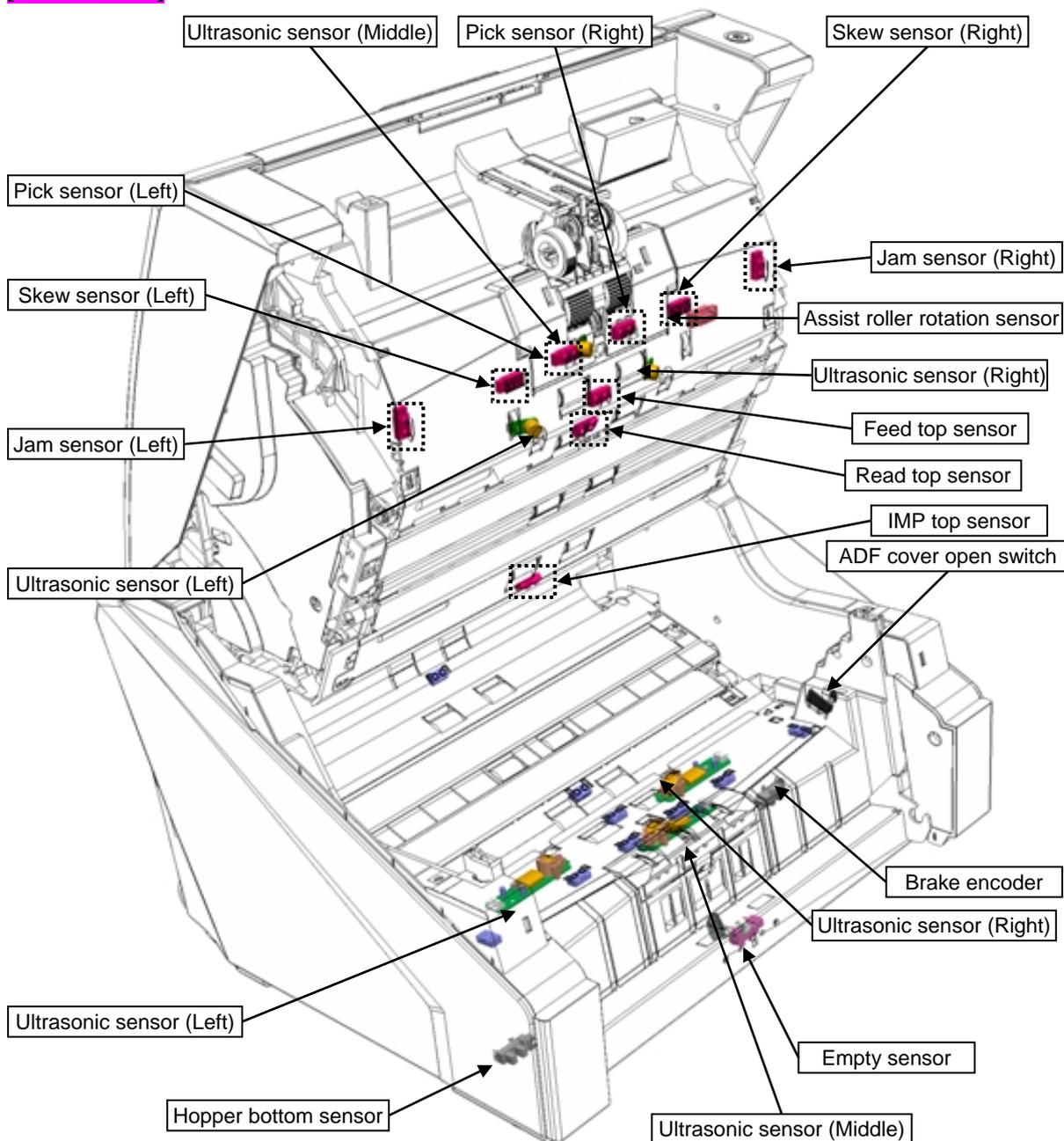
The following sensor operation tests are performed by “manual operation” or “paper feeding test” in this test item.

NOTICE

A3-sized ADJUST-CHARTs (refer to No.2 in Section 7.1.1.4) are required for the sensor test. Prepare them before adjustment.

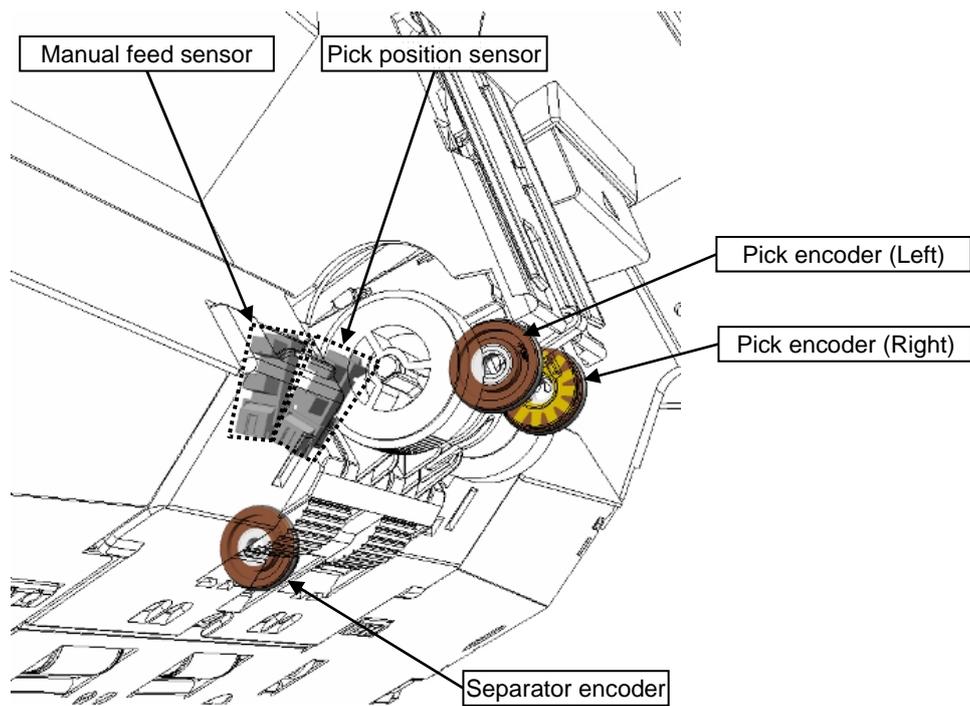
The following sensors are tested in this test item.

Inside of ADF

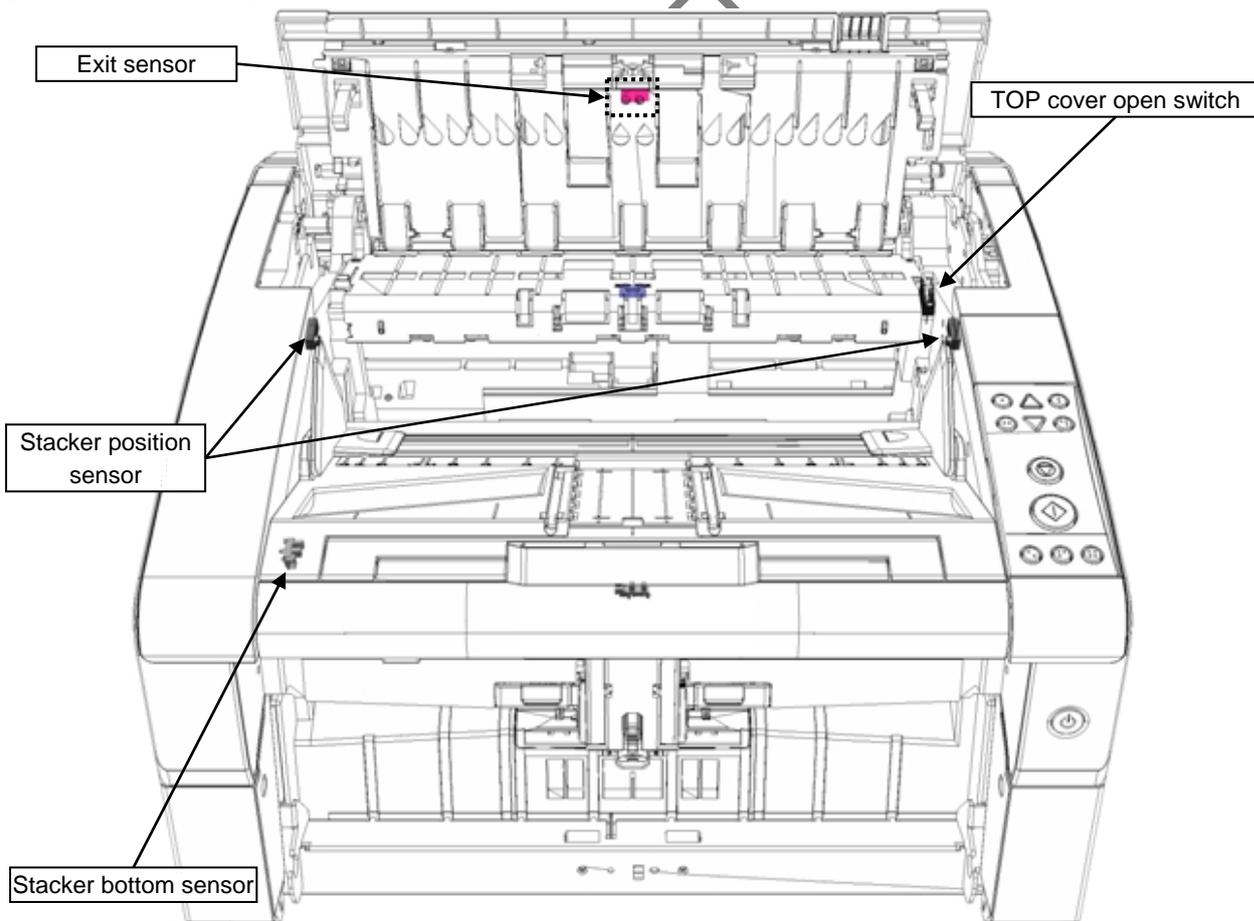


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 247 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

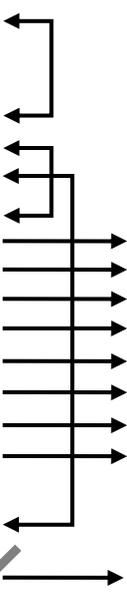
[Pick roller unit]



[Inside of ADF Cover]



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 248 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

No	Procedure	Menu display	Status transition	Refer to
		Selected item/Display		
1	Select "4: Sensor test menu" by pressing  and press the Enter button.	Maintenance Menu		
		4: Sensor Test Menu		
2	The screen on the right is displayed.	Sensor Test Menu		
		1: Manual Ope. Menu 2: Paper Feed Test		
3	Select the item to be tested by pressing  and press the Enter button.	Manual Ope. Menu	Section 7.1.5.1 Section 7.1.5.2 Section 7.1.5.3 Section 7.1.5.4 Section 7.1.5.5 Section 7.1.5.6 Section 7.1.5.7 Section 7.1.5.7	
		1: Ultrasonic 2: Cover 3: Paper Empty 4: Pick Position 5: Manual Feed 6: Stacker Position 7: Jam Sensor (L) 8: Jam Sensor (R)		
4	Pressing the Stop button terminates the test.	Paper Feed Test		Section 7.1.5.9
		Load documents and press the Scan button.		

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	249 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.1 Ultrasonic Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Ultrasonic Sensor Check that [OFF] is displayed on the panel when two sheets are loaded.		
2	The screen on the right appears. When there is no paper on the ADF feeding path, check that each status indicates [OFF]. If the status is [ON] when no paper is loaded, the Ultrasonic sensor adjustment or the sensor itself may be defect.	Ultrasonic Sensor Left: OFF Middle: OFF Right: OFF		
3	Open the ADF, and load one sheet on the Ultrasonic sensor. Load a sheet. With one sheet loaded , check that each status on the LCD panel displays [OFF] when the ADF is closed. If the status is [ON] when there is one sheet on the ADF feeding path, the Ultrasonic sensor adjustment or the sensor itself may be defect.	Ultrasonic Sensor Left: OFF Middle: OFF Right: OFF		
	Open the ADF, and load two sheets in piles on the Ultrasonic sensor. Load two sheets in piles. With two sheets loaded in piles , check that each status on the LCD panel displays [ON] when the ADF is closed. If the status is [OFF] when there are two sheets in piles on the ADF feeding path, the Ultrasonic sensor adjustment or the sensor itself may be defect.	Left: ON Middle: ON Right: ON		
4	Pressing the Stop button terminates the test.			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	250 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.2 Cover Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Cover Make sure [ON] is shown on the panel while the cover is open.		
2	The screen on the right appears. Check that the status is [OFF] with the ADF closed.  [ADF] and [TOP cover] are closed. If the status is [ON] when the ADF and Top cover are closed, the ADF open switch or Top cover switch may be defect.	Cover OFF		
3	Open and close the ADF and Top cover. Check that the status becomes [ON] when the ADF or Top cover is open.  [ADF] open  [Top cover] open If the status is [OFF] when the ADF and Top cover are open, the ADF open switch or Top cover switch may be defect.	Cover ON		
4	Pressing the Stop button terminates the test.			

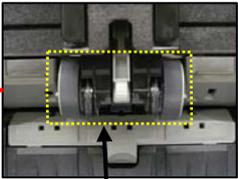
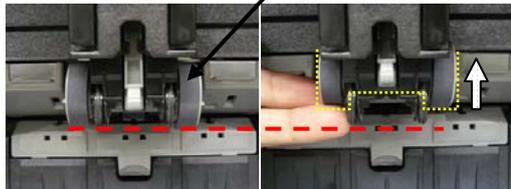
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	251 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.3 Paper Empty Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Paper Empty Make sure [ON] is shown on the panel while the Paper-Empty Sensors are held down.		
2	The screen on the right appears. Check that the status is [OFF] while the Empty sensor is not pressed (no paper is on the Empty sensor). Empty sensor If the status is [ON] while the Empty sensor is not pressed (no paper is on the Empty sensor), the Empty sensor may be defect.	Paper Empty OFF		
3	Load paper on the Hopper. Check that the status becomes [ON] when the Empty sensor is pressed (paper is loaded on the Empty sensor). Paper If the status is [OFF] while the Empty sensor is pressed (paper is loaded on the Empty sensor), the Empty sensor may be defect.	Paper Empty ON		
4	Pressing the Stop button terminates the test.			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	252 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

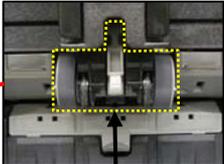
7.1.5.4 Pick Position Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Pick Position Make sure [ON] is shown on the panel when the Pick Position Unit is raised.		
2	The screen on the right appears. Check that the status is [OFF] while the Pick roller unit is not raised.   Pick roller unit	Pick position sensor OFF		
3	Raise the Pick roller section. Check that the status becomes [ON] when the Pick roller section is raised.  Pick roller	Pick position sensor ON		
4	Pressing the Stop button terminates the test.			

PFU CONFIDENTIAL

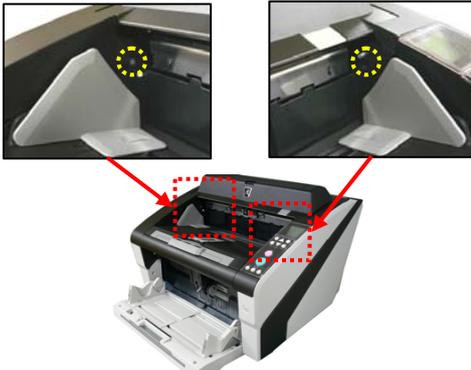
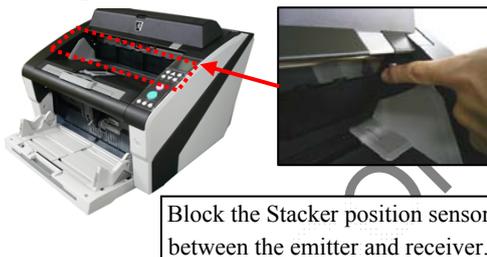
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	253 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.5 Manual Feed Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Manual Feed Make sure [ON] is shown on the panel while the Pick Roller Unit is raised.		
2	The screen on the right appears. Check that the status is [OFF] while the Pick roller unit is not raised.   Pick roller unit If the status is [ON] while the Pick roller unit is not raised, the Manual feed sensor may be defect.	Manual Feed OFF		
3	Raise the Pick roller unit until the click sound is heard and fix it. Check that the status is [ON] while the Pick roller unit is raised (single feeding mode).    [Pick roller unit] fixed (Single feeding mode) Note: When the Pick roller unit is fixed, the Hopper moves to upper position. Be careful not to get your finger pinched. If the status is [OFF] while the Pick roller unit is raised, the Manual feed sensor may be defect.	Manual Feed ON		
4	Pressing the Stop button terminates the test.			

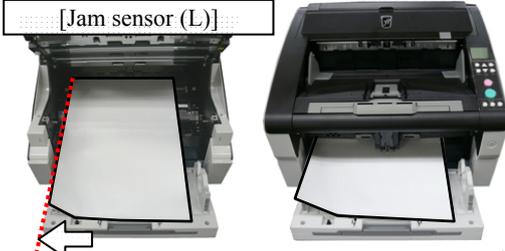
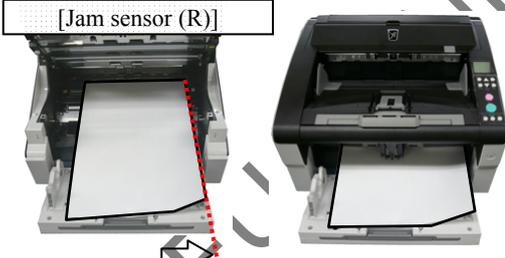
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	254 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.6 Stacker Position Sensor

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Press the Enter button.	Stacker Position Make sure [ON] is shown on the panel while the Stacker Position Sensors are blocked.		
2	The screen on the right appears. Check that the status is [OFF] while the Stacker position sensor is not blocked. 	Stacker Position OFF		
3	Block the Stacker position sensor with a hand. Check that the status becomes [ON] when the Stacker position sensor is blocked.  Block the Stacker position sensor between the emitter and receiver.	Stacker Position ON		
4	Pressing the Stop button terminates the test.			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	255 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.1.5.7 Jam Sensor (L) / Jam Sensor (R)

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select the jam sensor position to be checked. Left jam sensor: Select [8: Jam sensor (L)]. Right jam sensor: Select [9: Jam sensor (R)].	Manual Ope. Menu 8: Jam Sensor (L) 9: Jam Sensor (R)		
2	The confirmation screen on the right appears. Press the Enter button.	Jam Sensor (*) Make sure [ON] is shown on the panel while the Jam Sensor (*) is blocked.		* indicates the selected sensor.
3	The screen on the right appears. Check that the status is [OFF] while the Jam sensor is not blocked by paper. If the status is [ON] while the Jam sensor is not blocked, the Jam sensor section may be defect.	Jam Sensor (*) OFF		* indicates the selected sensor (L/R).
4	Open the ADF, load paper on the sensor position (left/right) that is selected on the menu, and close the ADF. Check that the status becomes [ON] when the Jam sensor is blocked by paper.	Jam Sensor (*) ON		* indicates the selected sensor (L/R).
	 <p>Load paper by aligning with left edge (where the Jam sensor (L) is blocked), and close the ADF.</p>  <p>Load paper by aligning with right edge (where the Jam sensor (R) is blocked), and close the ADF.</p> <p>If the status is [OFF] while the Jam sensor is blocked, the Jam sensor section may be defect.</p>			
5	Open the ADF, remove any paper on the ADF, and press the Stop button to terminate the test.			(*1)

(*1): **Note** After Jam sensors (Left)/(Right) test, be sure to remove paper before pressing the **Stop** button. Otherwise, the initial operation will start which results in paper jam in the ADF.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED
									Page 256 / 383

7.1.5.8 Feeding Path Test

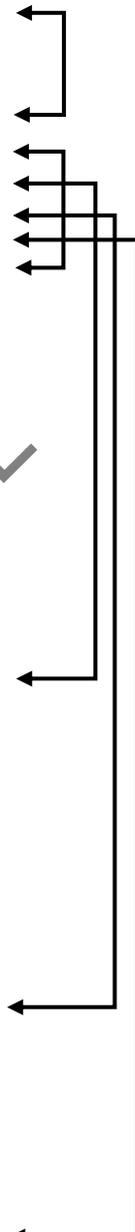
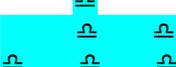
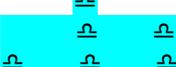
No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	The confirmation screen on the right appears. Load paper on the Hopper and press the Scan button.	Paper Feed test Set dedicated chart and press the Scan button.		
2	Scanning starts and the paper starts to be fed.	Paper Feed Test Test in progress		
3	The contents as shown on the right appears and the confirmation [RESULT] of each sensor operation. ☞ [Passed]: The target sensor operates correctly. ☞ [NG]: The target sensor may be abnormal.	Paper Feed Test Pick Encoder -Left : Passed -Right : Passed Break Encoder : Passed Sepa Encoder : Passed Pick -Left : Passed -Right : Passed Skew -Left : Passed -Right : Passed Feed Roller : Passed Read Top : Passed Imprinter Top : Passed Feed Top : Passed Exit : Passed Hopper Bottom : Passed Stacker Bottom : Passed Pick Position : Passed Sensor test end.		
4	Pressing the Stop button terminates the test.			

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	257 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

7.1.6 Operator Panel Test

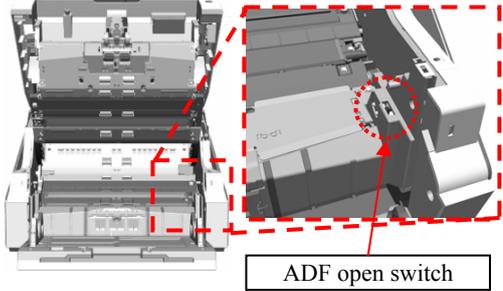
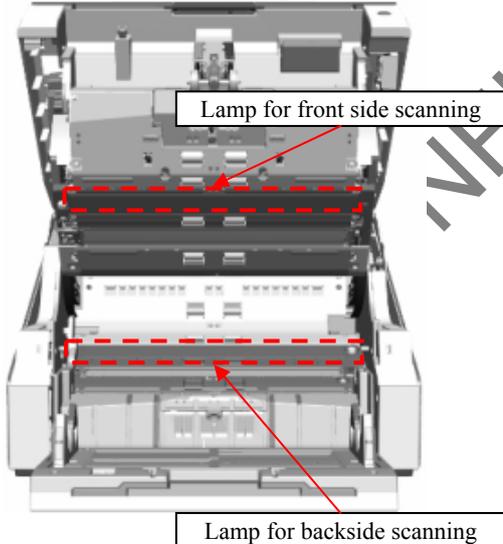
Operator panel test procedure is described in this section.

No	Procedure	Menu display	Status transition	Remarks	
		Selected item/Display			
1	Select "5. Ope. Panel Test Menu" by pressing  /  and press the Enter button.	Maintenance Menu  5: Ope. Panel Test Menu  			
2	Select an item to be tested and press the Enter button.	Ope. Panel Test Menu 1: LCD 2: LED 3: Button 4: Alarm			
3	The items to be selected appear as shown on the right. Select the item to be confirmed by pressing  /  button and press the Enter button. Check the following items: [1: All ON]: The liquid crystal LCD lights on. Make sure that entire liquid crystal LCD lights on without exception. [2: All OFF]: The liquid crystal LCD lights off. Make sure that entire liquid crystal LCD lights off without exception. [3: H Pattern]: [H] pattern is displayed on the entire LCD. Make sure that the whole surface displays the pattern correctly. [4: Scroll display]: Characters are scroll-displayed from right to left on the LCD. Make sure that the characters are scroll-displayed correctly. Pressing the Clear button returns to the menu.	LCD 1: All ON 2: All OFF 3: H Pattern 4: Scroll display			
4	The items to be selected appear as shown on the right. Select the item to be confirmed by pressing  /  button and press the Enter button. Check the following items: [1: ON]: The Check lamp (orange) and power button LED (blue) light on. [2: Blink]: The Check lamp (orange) and power button LED (blue) blink. [3: OFF]: The Check lamp (orange) and power button LED (blue) go off. Pressing the Clear button returns to the menu.	LED 1: ON 2: Blink 3: OFF			
5	The pattern on the right is displayed on the LCD. Pressing each button or power button on the Operator panel changes the LCD display from  to  (reverse display). Pressing the power button highlights [pow]. Check that each button functions correctly. Pressing the Stop button for more than two seconds returns to the Operator panel test menu.	  			* Pressing the power button for more than two seconds turns off the power even during the test.
6	The items to be selected appear as shown on the right. Select the item to be confirmed by pressing  /  button and press the Enter button. Check the following items: [1: High]: Sounds with a large volume. [2: Low]: Sounds with a small volume. [3: None]: No buzzer sound Pressing the Clear button returns to the menu.	Alarm 1: High 2: Low 3: None			

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	258 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

7.1.7 Lamp Test

Lamp test procedure is described in this section.

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select [6: Background changeover test] by pressing  button and press the Enter button.	Maintenance Menu 6: Lamp Test		
2	The screen on the right appears. Following the displayed instruction, open the ADF, and press the Scan button while pressing the ADF open switch with a stick other than metal. 	Lamp Test Open the ADF Cover. Press the Scan button while pushing the ADF Cover Sensor with a non-metallic stick		
3	The message on the right appears and the lamp blinks. Check that the “lamp for front side scanning and “lamp for backside scanning” are blinking. 	Lamp Test Test in progress		
4	Pressing the Stop button terminates the test.	Background Changeover Test Test completed		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	259 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

7.1.8 Thermistor Test

Thermistor test procedure is described in this section.

No	Procedure	Menu display		Status transition	Remarks
		Selected item/Display			
1	Select [7: Thermistor] by pressing button and press the Enter button.	Maintenance Menu 7: Thermistor Test 			
2	The screen on the right appears. Select the thermistor item to be confirmed by pressing button and check that the temperature at each position is within the allowable range. Allowable range [1 ~ 90 °C] - ADF front CCD temperature - ADF back CCD temperature Allowable range [1 ~ 65 °C] - ADF (MD PCA) ambient temperature - ADF (US Sensor FX) ambient temperature - ADF (CSL PCA) ambient temperature If the temperature is not within the allowable range, temperature is highlighted.	Thermistor Test ADF front CCD temperature ** °C / ** °F ADF back CCD temperature ** °C / ** °F ADF (MD PCA) ambient temperature ** °C / ** °F ADF (US Sensor FX) ambient temperature ** °C / ** °F ADF (CSL PCA) ambient temperature ** °C / ** °F			
3	Pressing the Stop button terminates the test.				

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page 260 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			

7.1.9 Backing up / Restoring EEPROM Information

This scanner has a function to save the EEPROM data from the Operator panel section (CSL PCA) to CT PCA.

Before replacing the CSL PCA, be sure to “back up EEPROM”. And “restore EEPROM” after replacing the CSL PCA.

NOTICE

- Back up the EEPROM information only when the CSL PCA is broken.
Be sure to prepare a new CSL PCA before saving the EEPROM to CT PCA.
- The CSL PCA that does not have EEPROM data any more becomes unavailable.
(Once the EEPROM data is backed up in the CT PCA, the data to prohibit the use of the current CSL PCA is written in order to avoid the reuse of it. If the power is supplied when the CSL PCA that has no EEPROM data any more is installed, an error message is displayed on the Operator panel. Refer to “E6:D3 Operator Panel error” in Section 5.1.3.4 for detail.)
- If the EEPROM information cannot be backed up/restored, the scanner setting becomes the factory default (initial setting) because scanner’s unique settings cannot be taken over. Ask your customer to configure the scanner setting again.

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select “8. EEPROM Operation” by pressing  and press the Enter button.	Maintenance Menu 8: EEPROM Operation		
2	Select an item to perform in the “EEPROM operation” by pressing  and press the Enter button. Select [1: Backup] if you want to back up EEPROM. Select [2: Restore] if you want to restore EEPROM.	EEPROM Operation 1: Backup 2: Restore 3: Browse 4: Default Setting		
3	If [Backup] is selected, the screen on the right appears. To execute Backup EEPROM , press [1: Run] by pressing  and press the Enter button. If [2: Cancel] is selected, EEPROM is not saved and the screen returns to [EEPROM Operation] selection menu.	Backup 1: Run 2: Cancel		
4	If the [Restore] is selected, the screen on the right appears. To execute Restore EEPROM , select [1: Run] by pressing  and press the Enter button. If [2: Cancel] is selected, EEPROM is not restored and the screen returns to [EEPROM operation] selection menu.	Restore 1: Run 2: Cancel		
5	If [Browse] is selected, the screen on the right appears. You can refer to the value for the [Address] selected by pressing  .	Browse Address: XXX Value: XX		
6	If [Default Settings] is selected, the screen on the right appears. Select [1: Yes] by pressing  and press the Enter button to write [Default Settings]*1 in the EEPROM. If [2: No] is selected, the screen returns to the maintenance menu.	Default Settings Configure? 1: Yes 2: No		

*1: Factory default setting value excludes the following:

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	261 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi				APPR.	IFujioka

7.1.9.1 Backing up EEPROM Information by Scanner Operation

This section describes how to back up the EEPROM information without the Operator panel operation due to defect CSL PCA.

NOTICE

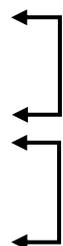
1. Back up EEPROM information in this procedure only when normal EEPROM backup procedure on the Operator Panel is not available due to defect CSL PCA.
2. The CSL PCA that does not have EEPROM data is not available to avoid the reuse of it. (Once the EEPROM data is backed up in the current CSL PCA, the data to prohibit the use of the current CSL PCA is written in order to avoid the reuse of it. If the current CSL PCA is replaced with a new CSL PCA that has no EEPROM data any more, the scanner does not start up properly.)
3. Be sure to prepare a new CSL PCA before starting this procedure.

- (1) Turn off the power.
- (2) Fix the Pick Unit to the single feeding position (by lifting the Pick Roller Unit) while the Top cover is opened.
- (3) Press the power button to turn on while the Hopper Empty Sensor is raised (no paper is set on the Hopper).
- (4) If the transition has been succeeded, the LCD displays the following [Backup] window.
- (5) Return the Pick Unit from single feeding position to the normal position.
- (6) Move the Pick Unit from the normal position to single feeding position again, and repeat this action twice.
- (7) Closing the Top cover displays the following window on the LCD.

PFU CONFIDENTIAL

						Name		fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.		P1PA03575→ B0XX/6	
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	262 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.1.10 Emulation Mode Switching

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "9. Emulation Mode" by pressing  and press the Enter button.	Maintenance Menu ⊖ 9: Emulation Mode ⊖ ⊖		
2	Select the scanner to perform emulation by pressing  and press the Enter button.	Emulation Mode 1: fi-6800 2: fi-5900C 3: fi-4860C2		Initial setting fi-6800
3	The screen on the right appears. To select a model for emulation mode, select [1: Yes] by pressing  and press the Enter button. If [2: No] is selected, the screen returns to the maintenance menu.	Emulation Mode Configure? 1: Yes 2: No		

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	263 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

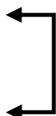
7.1.11 Option Information Display

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "10. Option Info" by pressing  and press the Enter button.	Maintenance Menu ⓪ 10: Option Info ⓪ ⓪		
2	The equipped option information is displayed. If the imprinter for front side/backside is equipped, the equipped option side indicates [Yes]. If no imprinter is installed, [No] is displayed.	Option Info Imprinter Front Side: *** Back Side: ***		

7.1.12 Device Information Display

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "11. Device Info" by pressing  and press the Enter button.	Maintenance Menu ⓪ 11: Device Info ⓪ ⓪		
2	The scanner information on the right appears. The following information can be confirmed on the scanner information display. <ul style="list-style-type: none"> ⓪ Start Date to Use ⓪ Total sheets scanned ⓪ Firmware Version ⓪ CGA Firmware Version ⓪ Imprinter Firmware Version (only when installed) ⓪ Serial No. 	Device Info Start Date to Use YYYY→MM→DD Total sheets scanned XXXX Firmware Version SDC: XXXX MDC: XXXX CGA: XXXX IMPR: XXXX Serial No. *****		

7.1.13 Error Log Display

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "12. Error Log" by pressing  and press the Enter button.	Maintenance Menu ⓪ 12: Error Log ⓪ ⓪		
2	The error log display screen is displayed as shown on the right. Pressing  switches display of previous and next logs. The displayed log items are as follows: Refer to Section XXX for the details of the logs. <Error log display> [Logs(No.xxxxx)]: "x" indicates the log number. [YYYY-MM-DD hh:mm]: The date and time when the log was collected. [Total: XXXXX]: Total number of scanned sheets [Error code + Description]: The code of the error that occurred and its description	Logs (No.xxxxx) YYYY-MM-DD hh:mm Total: XXXXX Error code + Description		* The logs are displayed in reverse chronological order (the latest log is displayed on top).

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	264 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi			

7.1.14 Clearing Periodical Maintenance Alarm

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "13. Clear Periodic Mainte. Alarm" by pressing and press the Enter button.	Maintenance Menu ⓪ 13: Clear Periodic Mainte. Alarm ⓪ ⓪		
2	The screen on the right appears. Press the Enter button.	Maintenance Date Enter Maintenance Date.		
3	"Maintenance Date" on the right is displayed. Configure the date (year/month/day) when maintenance and checking ware done. Select the selected (highlighted) item by pressing and press the Enter button to configure.	Maintenance Date Year: YYYY Month: MM Day: DD		
4	The confirmation screen on the right appears. To configure the maintenance/checking date to the setting value, select [1: Yes] by pressing and press the Enter button. If [2: No] is selected, the screen returns to the maintenance menu.	Maintenance Date Configure? 1: Yes 2: No		

7.1.15 Display / Clearing Consumable Counters

No	Procedure	Menu display	Status transition	Remarks
		Selected item/Display		
1	Select "14. Show/Clear Counters" by pressing and press the Enter button.	Maintenance Menu ⓪ 14: Show/Clear Counters ⓪ ⓪		
2	"Show/Clear Counters" screen is displayed. Pressing the button selects a consumable and maintenance part to refer to it. Display the counter that you want to clear, and then press the Counter Reset button to display the window to confirm resetting the counter (Now:). The displayed consumables and maintenance parts are as follows: ☞ Brake roller (consumable) ☞ Pick roller (consumable) ☞ Separator roller (consumable) ☞ Assist roller (maintenance part) ☞ Feed roller (maintenance part) ☞ Cleaning (cleaning cycle) [Set:] Life duration setting counter [Now:] The number of sheets scanned	Show/Clear Counters Brake Roller Set: XXXXXX Now: XXXXXX Pick Roller Set: XXXXXX Now: XXXXXX Separator Roller Set: XXXXXX Now: XXXXXX Assist Roller Now: XXXXXX Feed Roller Now: XXXXXX Cleaning Set: XXXXXX Now: XXXXXX		
	The screen on the right appears. To clear the counter (Now:), select [1: Yes] by pressing and press the Enter button. If [2: No] is selected, the screen returns to the maintenance menu.	* 1: Yes 2: No		

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	
							PFU LIMITED	Page	265 / 383

7.2 Maintenance Tool (Online Test)

7.2.1 Connecting the Scanner



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual				
						Drawing No.	P1PA03575→ B0XX/6				
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION						
DESIG.	April 20, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	266 / 383

7.2.2 Starting up / Shutting down the Maintenance Tool

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	267 / 383

7.2.3 List of Tests / Diagnostic Items

No	Function	Description
1	Adjustments	Adjusts the scanner. There are the following adjustment items: Ⓞ! Offset (ADF front/ADF back/ADF duplex) Ⓞ! Magnification (Main scanning ADF front/ADF back/AD duplex, Sub-scanning Feed/Assist/Feed & Assist) Ⓞ! White level (ADF front/ADF back)/ADF duplex) Ⓞ! Ultrasonic sensor output level
2	EEPOM R/W test	Performs EEPROM R/W test. Tested items are "Save", "Restore" and "Initialize". (Select whether the consumable counter is cleared or not at restoration.
3	Operator panel test	Performs the test for the Operator panel buttons.
4	Memory test	Performs the memory R/W test. (Compares the write data with the read data).
5	Motor test *1	Performs the motor operation test. There are the following test items: Ⓞ! Pick motor Ⓞ! Feed motor Ⓞ! Background changeover motor Ⓞ! Separation motor Ⓞ! Hopper motor Ⓞ! Stacker motor Ⓞ! Pick solenoid
6	Sensor test	Performs the sensor test and displays the sensor status with ON or OFF. There are the following test items: Ⓞ! Ultrasonic sensor Ⓞ! Other sensors Ⓞ! Sensor current value test Ⓞ! Feeding sensor test
7	ADF Running test	Performs the feeding test. Feeds paper on the ADF until the hopper become empty.
8	Lamp test *1	Flashes the lamps on the ADF front and ADF back.
9	Thermistor test	Performs the operation test for each thermistor. The test item is ambient temperature of the ADF.
10	Option display	Displays the Imprinter connection status.
11	MTBF test	Performs the MTBF test.
12	Error information	Collects the log information of the error type and the date the error occurred which are saved in the scanner, and saves it into the log file which is created when this tool is terminated.
13	Consumable count	Displays the consumable counters. Displays the followings: Ⓞ! Pick roller Ⓞ! Brake roller Ⓞ! Separator roller Ⓞ! The date of the scanner used for the first time Ⓞ! The total number of sheets scanned by the ADF Ⓞ! The number of the times the Feed rollers and Assist rollers are used

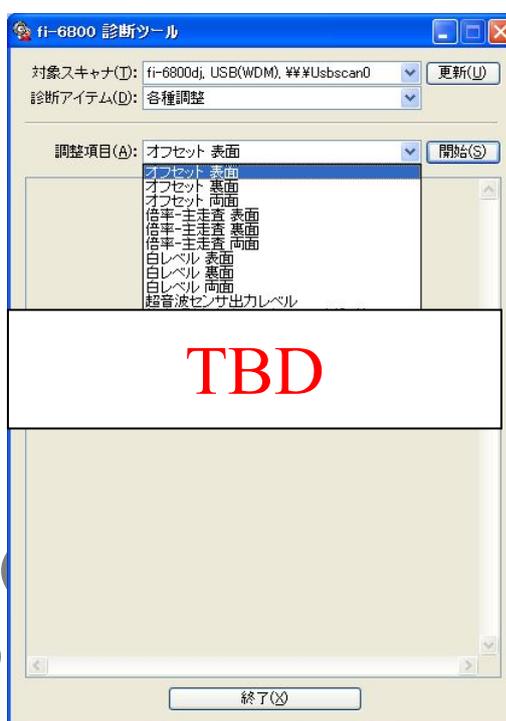
*1: Interlock needs to be cancelled.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	268 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	IFujioka

7.2.4 Adjustments (Offset / Magnification / White Level)

Select an item and click the [Start] button to start the adjustment.

No	Adjustment item		Adjustment method
1	Offset	Front Back Duplex	Prepare A3-size (297x420mm) white sheets. Load the sheets and click the [Start] button.
2	Magnification	Main scanning, front	Prepare A3-size (297x420mm) white sheets. (10 sheets are required when the Feed roller is included at sub-scanning.) Load the sheets and click the [Start] button. For sub-scanning, the counter clear confirmation screen appears when the adjustment is complete successfully. Click [Yes] to clear the counter. Click [No] if you do not want to clear the counter.
3	White level		Prepare the TESTCHART(W) PA03277-Y123. Load the sheet and click the [Start] button.
4	Ultrasonic sensor output level		Prepare the ADJUSTMENT SHEET PA03296-Y990. Load the sheet and click the [Start] button.



PFU

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	269 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.5 EEPROM R/W Test

Configure the data and then select an item (read/write/save/restore) to perform the test.

No	Test item	Test method
1	Save	Saves the EEPROM data and stores it on PC.
2	Restore	Restores the EEPROM data to the factory default.
3	Initialize	Initializes the EEPROM data.

7.2.5.1 Save

TBD

Click [Save].

The message “EEPROM data is saved” appears.

The data is saved as “EEPROM.TXT” in the folder where “MMeDiag.exe” exists.

TBD

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED
									Page 270 / 383

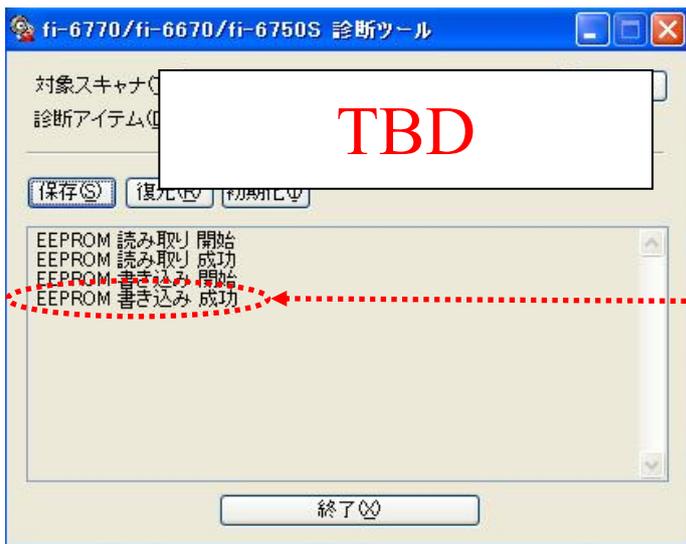
7.2.5.2 Restore



Click [Restore]

Factory default restoration setting confirmation screen appears.
The displayed three items are not restored but if you clear the checkbox and click [Write], the data is restored to the factory default.
Check the contents before clicking [Write].

Click [Write] to start writing to EEPROM.



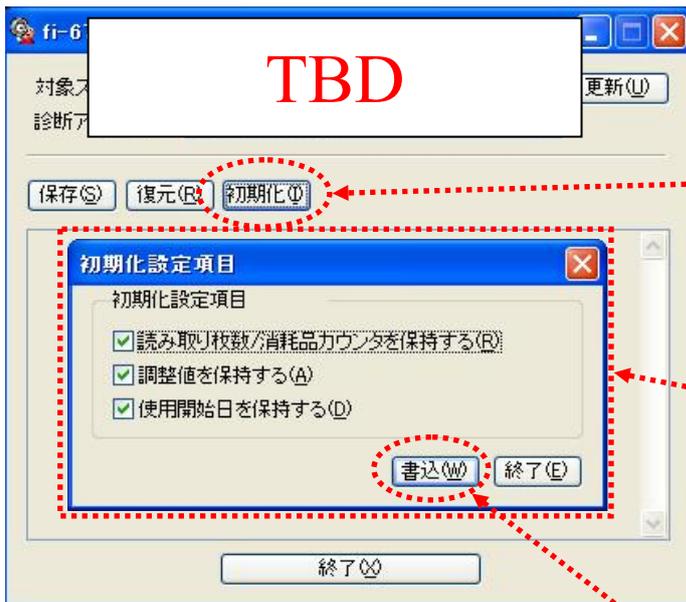
The screen as shown on the left appears when EEPROM write is complete successfully.

NOTICE

EEPROM restoration function does not restore the saved EEPROM text file.
This is the function that restores the data that has been saved at factory default testing.
EEPROM data is restored to the factory default, but white level, magnification and offset values are not the adjusted values under the current condition of the scanner. Readjustment may be required. Perform readjustment on the Maintenance tool.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	271 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.5.3 Initialize



Click [Initialize]

Factory default restoration setting confirmation screen appears.

The displayed three items are not initialized but if you clear the checkbox and click [Write], the data is initialized to the factory default. Check the contents before clicking [Write].

Click [Write] to start writing to EEPROM.



The screen as shown on the left appears when EEPROM write is complete successfully.

NOTICE

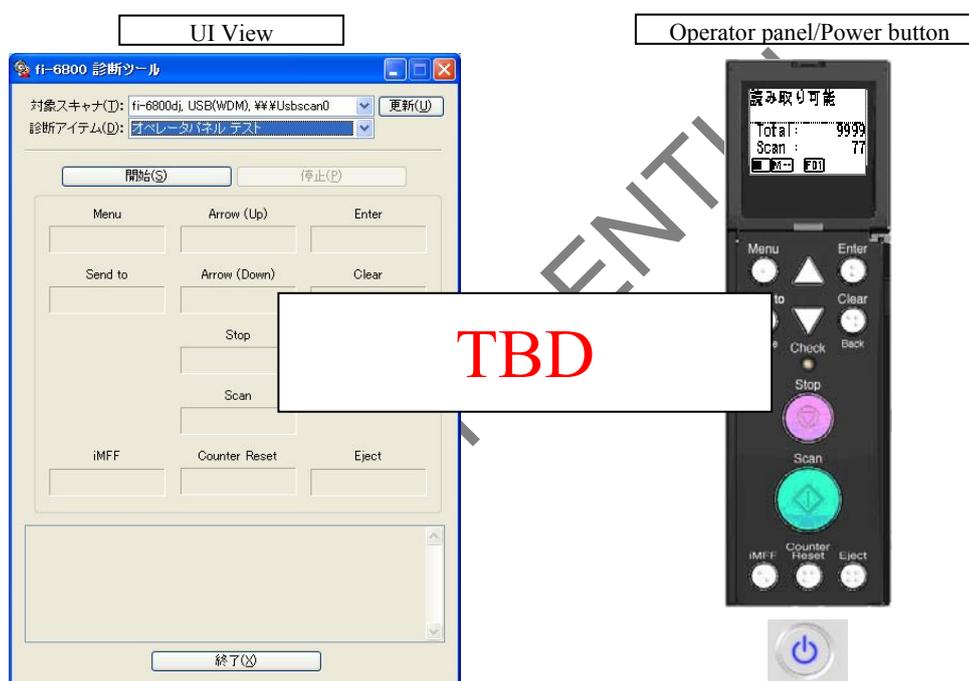
The initial setting value is written to EEPROM data according to the EEPROM specification.
 Each value becomes unadjusted value. Be sure to perform each adjustment on the Maintenance tool.
 The initialized data is all data except for the unique data such as serial number.

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	272 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.6 Operator Panel Test

Select an item and click the [Start] button to start testing.

No	Test item	Test method
1	LCD	All lights on (two seconds), all lights off c, H pattern (two seconds), Scroll pattern (ten seconds)
2	LED	Check/Power LED flashes (five seconds), Check/Power LED lights (two seconds), Check/Power LED lights off (two seconds)
3	BUZZER	Buzzer volume (small) (two seconds), Buzzer volume (large) (two seconds)
4	Scan	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
5	Stop	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
6	Menu	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
7	Send	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
8	Enter	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
9	Cancel	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
10	Arrow(Up)	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
11	Arrow(Down)	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
12	iMFF	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
13	Eject	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.
14	Counter Reset	[Off] is displayed while the button is not pressed. The UI changes to [On] while the button pressed.

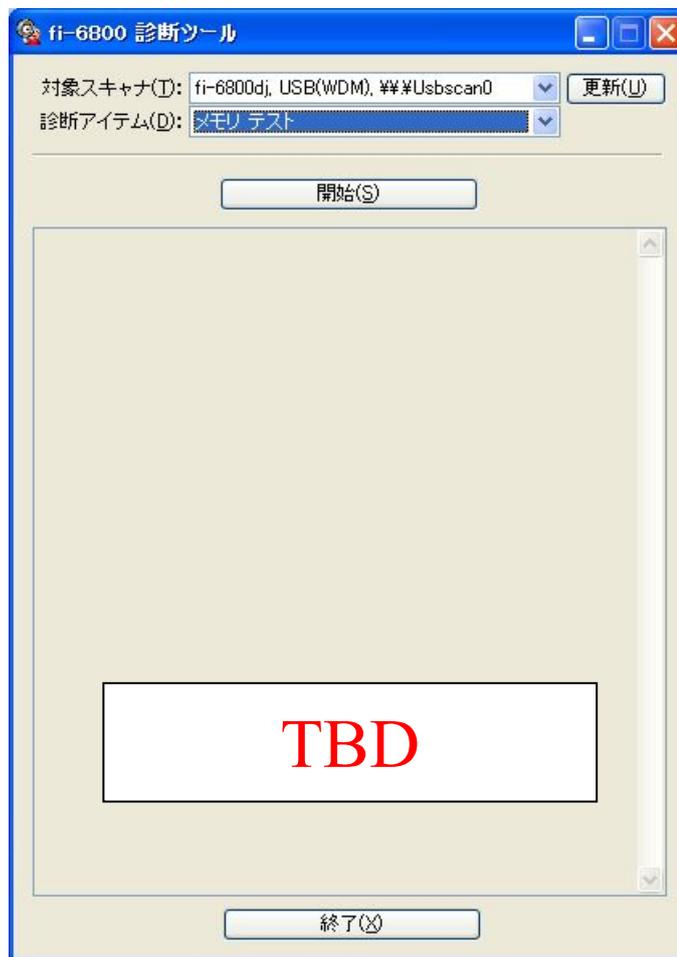


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	273 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.7 Memory Test

Select an item and click the [Start] button to start testing.

No	Test item	Test method
1	Memory test	Click the [Start] button.



PFU

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	274 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.8 Motor Test

Select an item and click the [Start] button to start testing.

No	Test item	Test method
1	Pick motor	Click the [Start] button. The Pick motor operates until the [Stop] button is clicked.
2	Feed motor	Click the [Start] button. The Feed motor operates until the [Stop] button is clicked.
3	Background changeover motor	Click the [Start] button. The Background changeover motor operates until the [Stop] button is clicked.
4	Separation motor	Click the [Start] button. The Separation motor operates until the [Stop] button is clicked.
5	Hopper motor	Click the [Start] button. The Hopper motor operates until the [Stop] button is clicked.
6	Stacker motor	Click the [Start] button. The Stacker motor operates until the [Stop] button is clicked.
7	Pick solenoid	Click the [Start] button. The Pick solenoid operates until the [Stop] button is clicked.



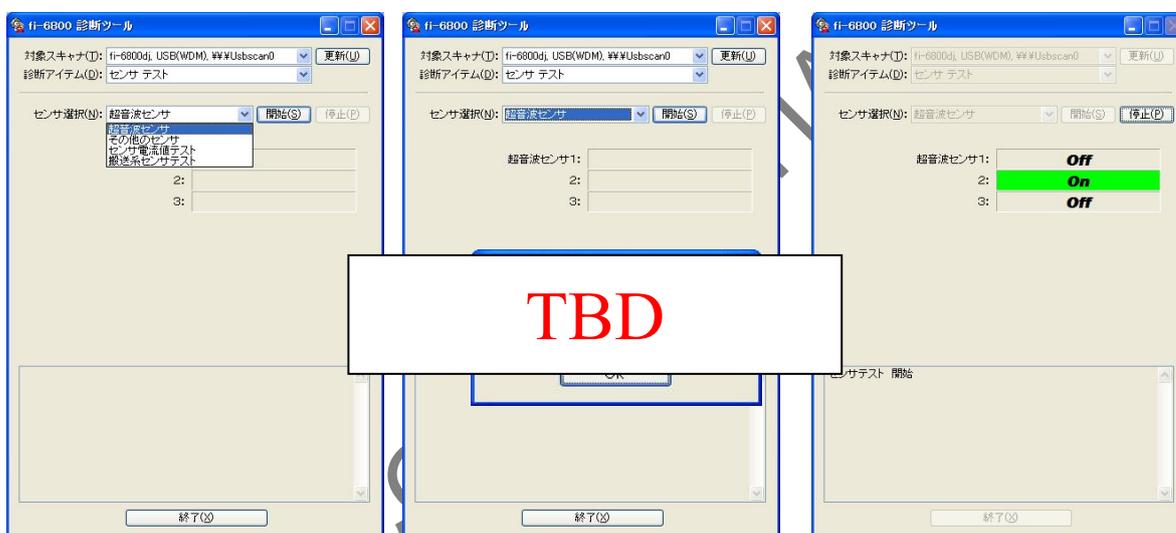
						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	275 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	IFujioka				

7.2.9 Sensor Test

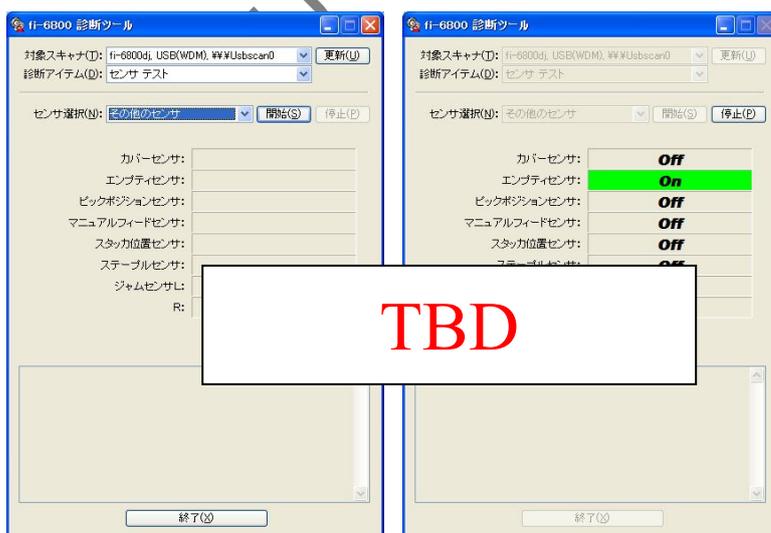
Click the [Start] button.

No	Test item	Test method
1	Ultrasonic sensor 1, 2, 3	[Off] is displayed when there is no paper. The UI changes to [On] when two sheets are loaded in piles.
2	Other sensors	Cover sensor [Off] is displayed when the cover is closed. The UI changes to [On] when the cover is open.
3		Empty sensor [Off] is displayed when there is no paper. The UI changes to [On] when the Empty sensor is pressed.
4		Pick position sensor [Off] is displayed when the Pick roller is lowered. The UI changes to [On] when the Pick roller is raised.
5		Manual feed sensor
6		Stacker position sensor [Off] is displayed when there is no paper. The UI changes to [On] when the Stacker position sensor is blocked.
7		Staple sensor [Off] is displayed when there is no paper. The UI changes to [On] when the sensor is turned on.
8		JAM sensor L, R [Off] is displayed when there is no paper. The UI changes to [On] when the JAM sensor is blocked.

Ultrasonic sensor



Other sensors



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	276 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka	

7.2.10 Sensor Current Value Test

You can change the current value of each sensor while checking the sensor output level.

No	Target sensor	
1	Pick sensor L, R	
2	Skew sensor L, R	
3	JAM sensor L, R	
4	Feed top sensor	
5	Read top sensor	
6	Imprinter top sensor	
7	Exit sensor	



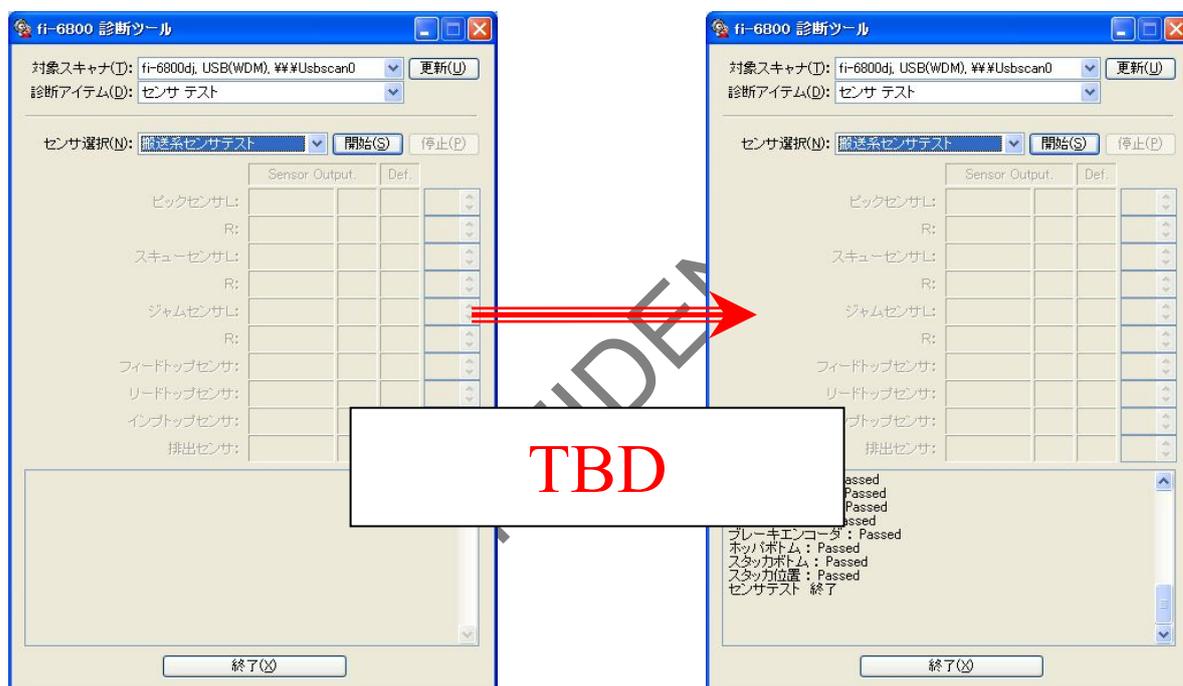
PFU

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	277 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

7.2.11 Automatic Sensor Judgment

When an A4-size sheet is fed, the sensor ON/OFF is automatically **judged** and its result is displayed. (In case of NG, the sensor that is NOT operating normally is displayed.)

No	Target sensor	
1	Feed top sensor Feed roller sensor	
2	Read top sensor	
3	Imprinter top sensor	
4	Exit sensor	
5	Pick encoder sensor L/R Pick sensor L/R Pick position sensor	
6	Skew sensor L/R	
7	Separator encoder	
8	Brake encoder	
9	Hopper bottom sensor	
10	Stacker bottom sensor	

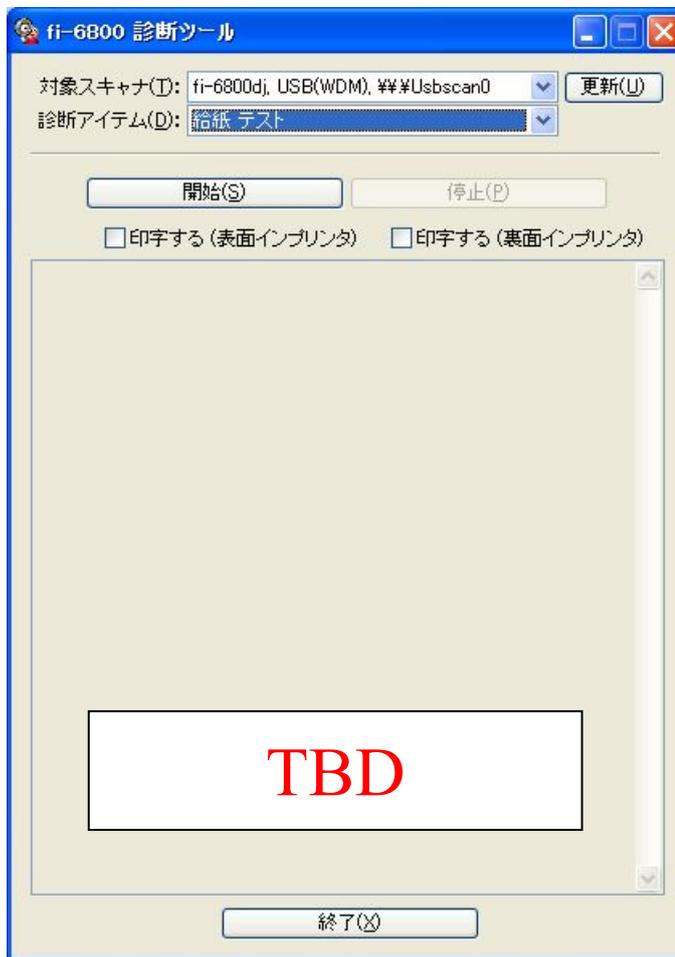


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	278 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

7.2.12 ADF Running Test

Select an item and click the [Start] button to start testing.

No	Test item	Test method
1	Feeding test	Load paper on the ADF and click the [Start] button. Feed all the sheets until no paper remains on the ADF. <i>If the Post-imprinter (front/back) is installed, imprinting test is available.</i>



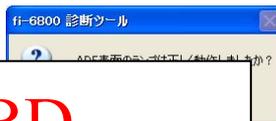
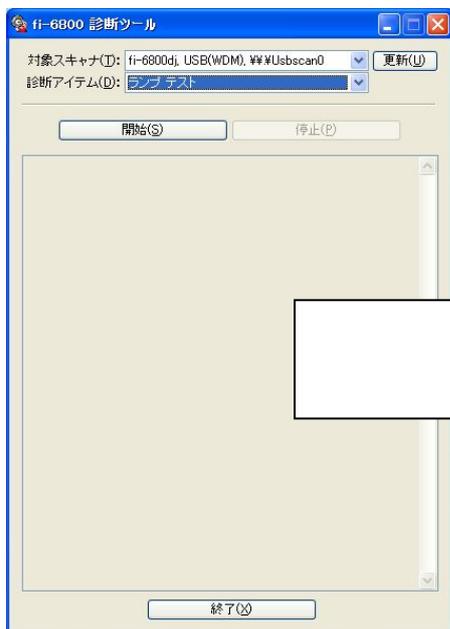
PFU

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual	
						Drawing No.	P1PA03575→ B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	279 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka			

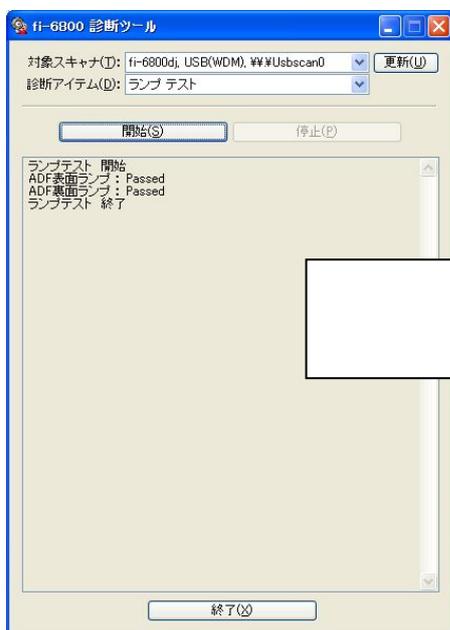
7.2.13 Lamp Test

Select an item and click the [Start] button to start testing.

No	Test item	Test method
1	ADF front lamp	Click the [Start] button to flash the ADF front lamp.
2	ADF back lamp	Click the [Start] button to flash the ADF back lamp.



TBD



TBD

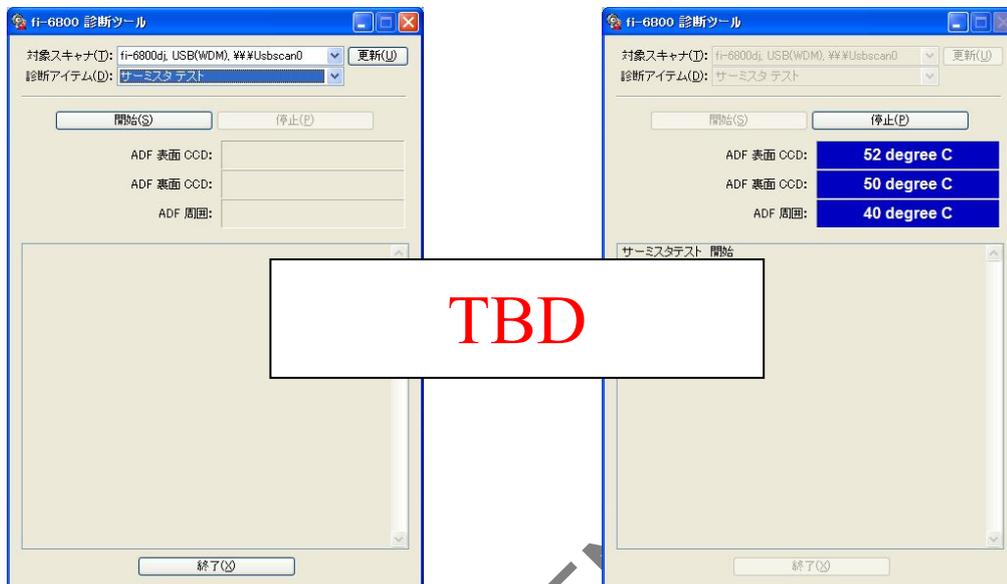
CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	280	/383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

7.2.14 Thermistor Test

Select an item and click the [Start] button to start testing.

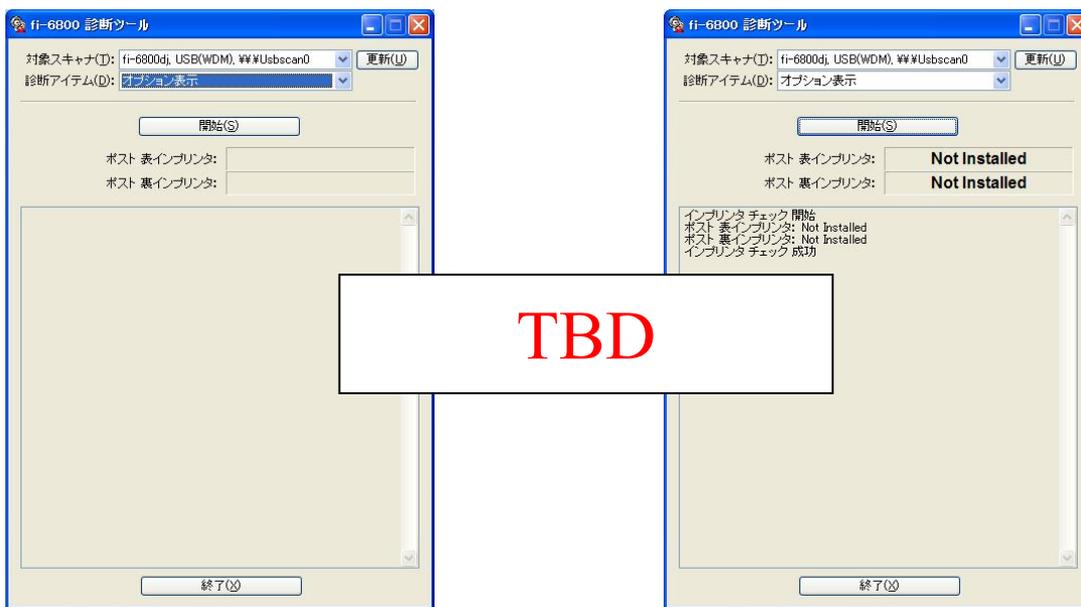
No	Test item	Test method
1	ADF ambient	Measures the ambient temperature of the ADF and displays it.
2	ADF front CCD	Measures the ambient temperature of the CCD and displays it.
3	ADF back CCD	Measures the ambient temperature of the CCD and displays it.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	281 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

7.2.15 Option Display

Connection status of the Post-imprinter (front/back) is displayed.

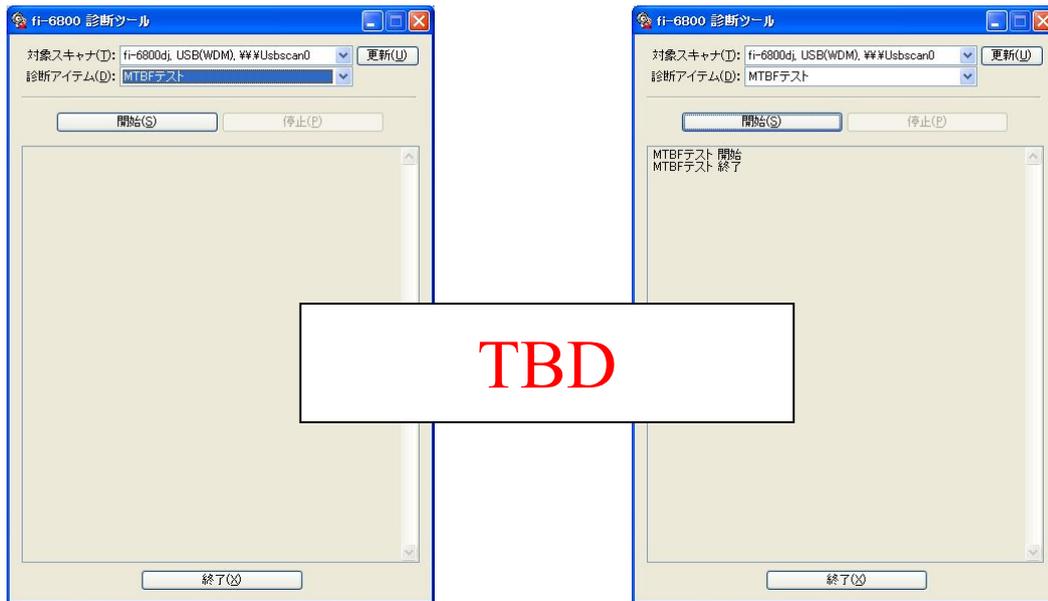


PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	282 / 383	
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

7.2.16 MTBF Test

Performs the MTBF test.



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	283 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR. IFujioka				

7.2.17 Error Information

Click the [Start] button to execute.

No	Test item	Test method
1	Start	Collects the log information of the error type and date that the error occurred which is stored in the scanner, and then saves it into the log file that is created when this tool is completed.

[Log information]

The log information includes the date (year/month/day) and time (hour/minute) that the error occurred, and the total number of sheets scanned.

It also stores the information of the driver starting up, power off, consumable alarm, and consumable alarm clear.

(Example)

Date (Y/M/D), Time (H/M),	Total number of sheets scanned,	Error code,	Description
08/09/07, 08:50	151000	0x00,	Driver starts up
08/09/07, 09:35	151300	0x31,	Paper jam (Read Top sensor)
08/09/07, 09:52	152000	0x00,	Consumable alarm (Pick roller)
08/09/07, 15:10	152450	0x55,	Multifeed (overlapping)
08/09/07, 17:01	153200	0x00,	Power off
08/09/08, 08:40	154000	0x00,	Driver starts up
08/09/08, 08:50	154000	0x00,	Consumable alarm clear (Pick roller)
08/09/08, 10:42	154100	0x50,	Paper jam (miss-picking)
08/09/08, 11:05	154950	0x55,	Multifeed (overlapping)

Scanner log storage size: 448 KB (= 64 KB x 7)

Each log information size: 16 byte

The maximum number of stored logs: 28,672

(Example)

If ten logs are stored per day, 2,400 logs are stored for a year, so all the logs can be kept for about 12 years.

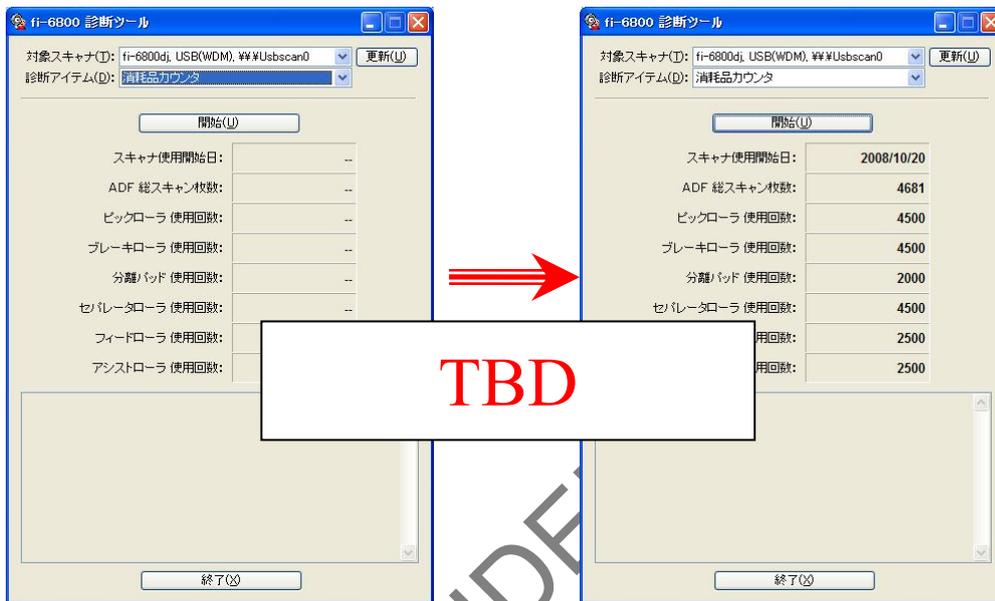


						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual			
						Drawing No.	P1PA03575→ B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	284 / 383
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				IFujioka	

7.2.18 Consumable Count

Displays the consumable counters. The following items are displayed:

- 受! The first date the scanner is used
- 受! The total number of sheets scanned by ADF
- 受! The number of times the Pick roller is used
- 受! The number of times the Brake roller is used
- 受! The number of times the Separator roller is used
- 受! The number of times the Feed roller is used
- 受! The number of times the Assist roller is used



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	285 / 383	
DESIG.	April 20, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Chapter 8 Operation and Daily Maintenance

8.1 Basic Operation

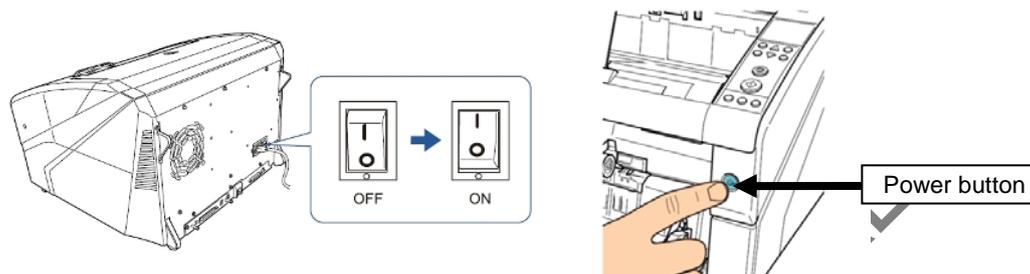
8.1.1 Turning the Power ON/OFF

Turning the Power ON

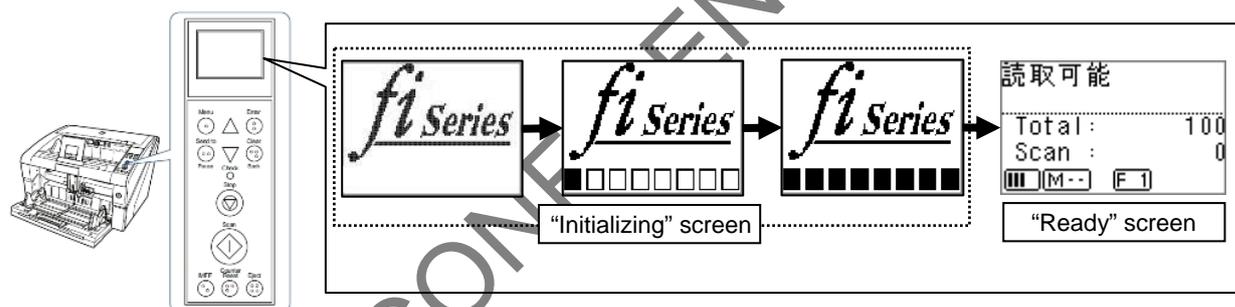
NOTICE

When connecting via SCSI, turn on the scanner and confirm that [Ready] is displayed on the LCD before you turn on the computer.

- (1) Press the "I" side of the main power switch on the back.
- (2) Press the power button on the front of the scanner.
- (3) The power is turned on, and the power button lights in blue.



- (4) Note that the following screen is displayed on the operator panel LCD during initialization. When [Ready] is displayed on the LCD, the scanner is ready to start scanning.

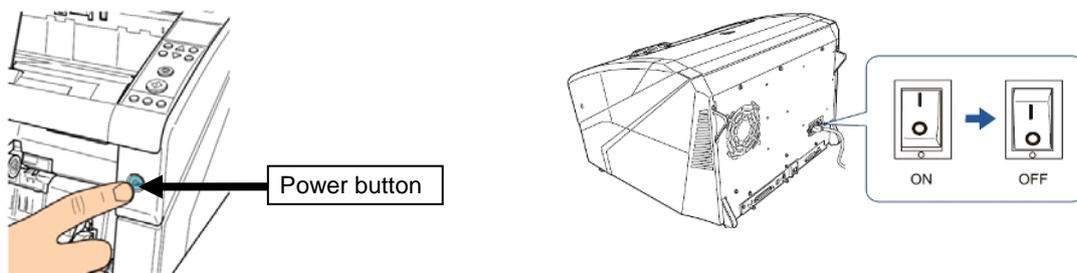


Turning the Power OFF

NOTICE

If the ON/OFF function is disabled on the front of the scanner, turn off the power using the main power switch.

- (1) Press the power button on the front for more than two seconds.
- (2) The power is turned off and the power button switches off.
- (3) Press the "O" side of the main power switch and turn off the power.



						Name	fi-6800/fi-668PRF/fi-680PRB Maintenance Manual		
						Drawing No.	P1PA03575→ B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	286 / 383
DESIG.	April 20, 2009		K.Okada	CHECK	A.Miyoshi				

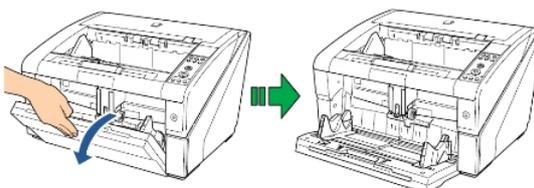
8.1.2 Opening/Closing the Hopper

How to Open the Hopper

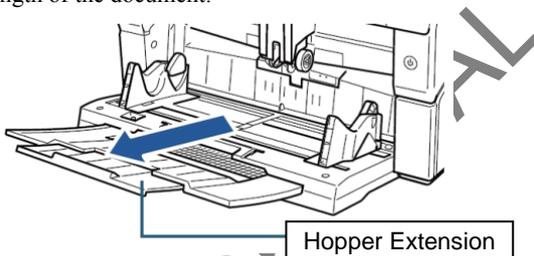
(1) Push the upper middle section of the hopper.



(2) Bring down the hopper as you support it with your hand.



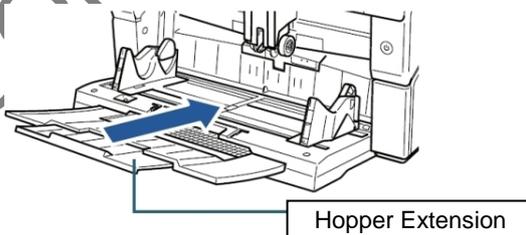
(3) Adjust the hopper extension to the length of the document.



How to Close the Hopper

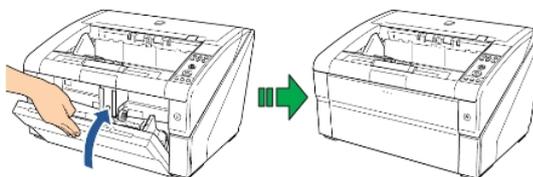
(1) Remove all documents from the hopper.

(2) Slide in the hopper extension.



(3) If the hopper level has been adjusted, set the hopper back to the lower position.

(4) Close the hopper and make sure to push the hopper until it locks.



						Name	fi-6800/fi-680PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	287 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				I.Fujioka	

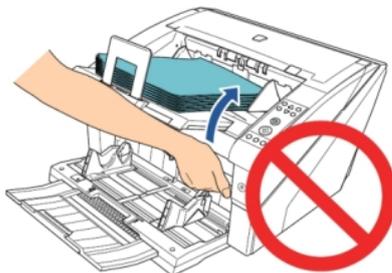
8.1.3 Opening/Closing the ADF

How to Open the ADF

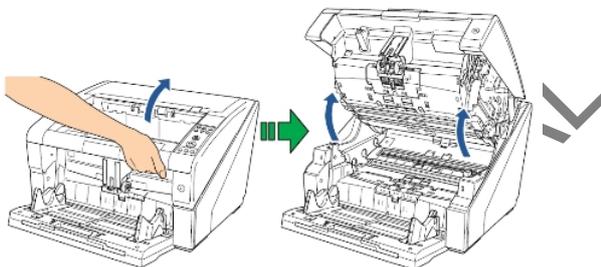
(1) Remove all documents from the stacker.

NOTICE

Do not open the ADF when there is a large volume of documents left on the stacker. You may have your fingers caught if the ADF closes from the weight of the documents.



(2) Grab the ADF release tab and lift it up to open the ADF.

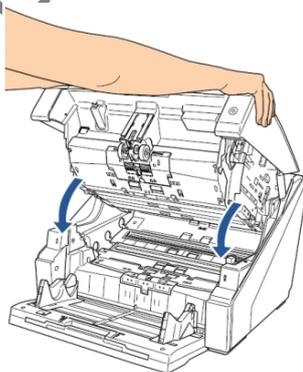


How to Close the ADF

NOTICE

- Make sure that there is no foreign matter caught inside the ADF when closing it.
- Be careful not to have your fingers caught when closing the ADF.

Hold the ADF with both hands and push it down slowly until it locks.



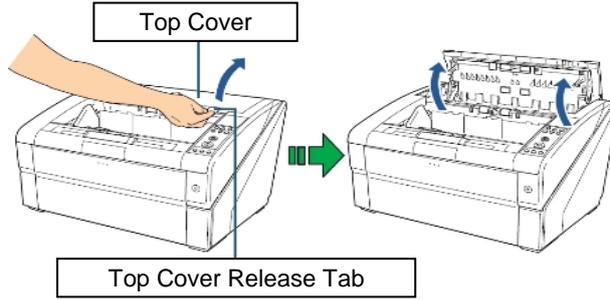
PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	288 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

8.1.4 Opening/Closing the Top Cover

How to Open the Top Cover

Hold on to the top cover release tab and push it up to open the top cover.



How to Close the Top Cover

Close the top cover and push it down gently until it locks.



!!

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	289 / 383
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				I.Fujioka	

8.1.5 Setting the Loading Capacity of the Hopper

You can change hopper's position when the scanner is ready to scan ([Ready] is displayed on the LCD).

If there are only a few documents, you can set the hopper to a higher position and shorten the time to get to feeding position.

NOTICE

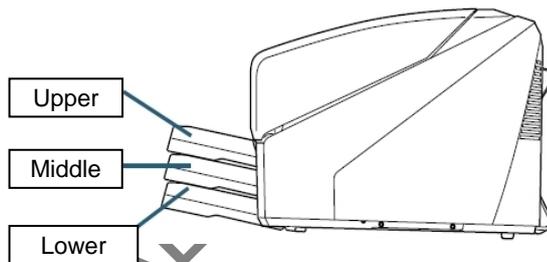
- Do not touch the hopper while it is moving up/down to avoid the risk of jamming your fingers.
- Do not place anything on top of the hopper while it is moving. The scanner may be damaged if any other object is caught inside.
- To avoid any contact that may damage the scanner, do not place anything beneath the hopper.
- Do not adjust the hopper height from the operator panel when the hopper is closed as it may damage the hopper.

This function is not available under the following conditions:

- During scanning
- When the hopper is closed
- When the Software Operation Panel is running

The loading capacity of the hopper can be set to three different capacities.

- Upper: A maximum of 100 sheets (*1) can be loaded.
- Middle: A maximum of 300 sheets (*1) can be loaded.
- Lower: A maximum of 500 sheets (*1) can be loaded.



*1: Long Page Scanning supports scanning of documents with a length up to 3048 mm (120 in.) in feeding direction.

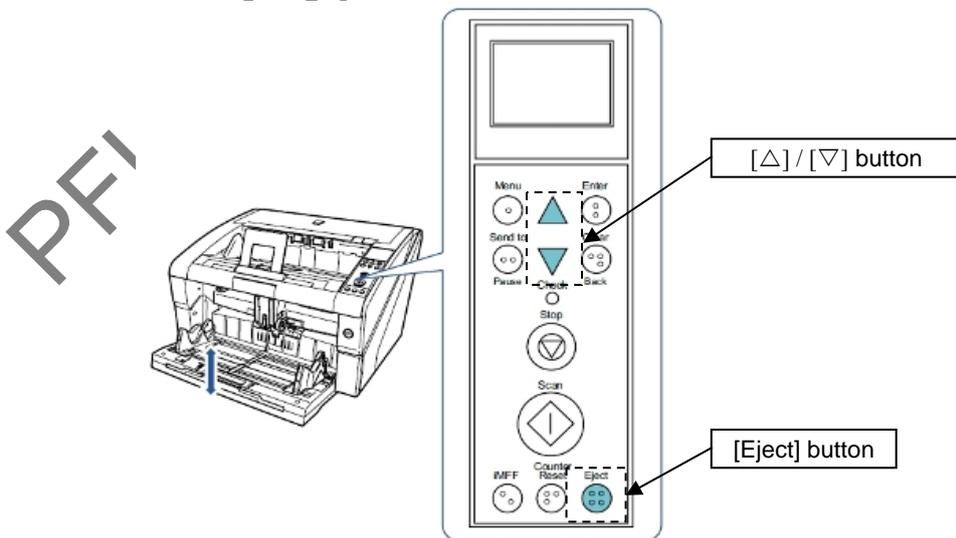
NOTICE

The capacity varies depending on the paper thickness of the document. For more details, refer to Section 1.2.3 "Loading capacity".

How to Set the Loading Capacity of the Hopper

Setting Method 1: Set the [Hopper Level] using scanner's operator panel
Configure the settings by selecting [10: Hopper Level] in the [Main Menu] of the operator panel.

Setting Method 2: Set the [Hopper Level] using shortcut keys.



- When you press the [Eject] button and [≡] button at the same time, the hopper level will increase by one level. (Lower → Middle → Upper)
- When you press the [Eject] button and [♀] button at the same time, the hopper level will decrease by one level. (Upper → Middle → Lower)

NOTICE

The Hopper level is set to [Lower] position right after the scanner has been turned on.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	290 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.1.6 Loading the Documents on the Hopper

Preparation

NOTICE

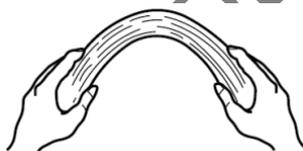
For details about the paper size and paper quality, refer to Section 1.2 “Document Specification”.

- (1) Check the documents to be loaded.
 - Ⓐ Check if the documents to be loaded are of the same size or different sizes. Ways to load documents differ depending on whether the documents are the same size or not.
For more details about how to load documents, refer to “How to Load Documents”.
 - Ⓑ Check the number of sheets.
Up to 500 sheets can be loaded (with paper weight of 80 g/m² [20 lb], thickness of the document stack under 50 mm, and the total weight under 5 kg).

For more details, refer to Section 1.2.3 “Loading Capacity”.

NOTICE

- 1) For documents with tabs or non-rectangular documents, refer to “Loading Documents with Tabs or Non-rectangular Documents”.
- 2) For documents with different widths, refer to Section 1.2.8 “Scanning a Mixed Batch of Documents” or “Scanning Documents of Different Widths”.
- (2) Fan the documents.
 - Ⓐ Hold both ends of the documents and bend them.



- Ⓑ Firmly holding the documents with both hands, bend them back in the opposite direction as follows.



- Ⓒ Repeat steps 1) and 2) a few times.
- Ⓓ Rotate the documents by 90 degrees and fan them in the same manner.
- Ⓔ Align the edges of the documents.

									Name	fi-6800/fi-668PR Maintenance Manual	
									Drawing No.	P1PA03575 – B0XX/6	
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION			PFU LIMITED		Page	291 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	I.Fujioka				

How to Load Documents

There are two ways to load the documents on the hopper.

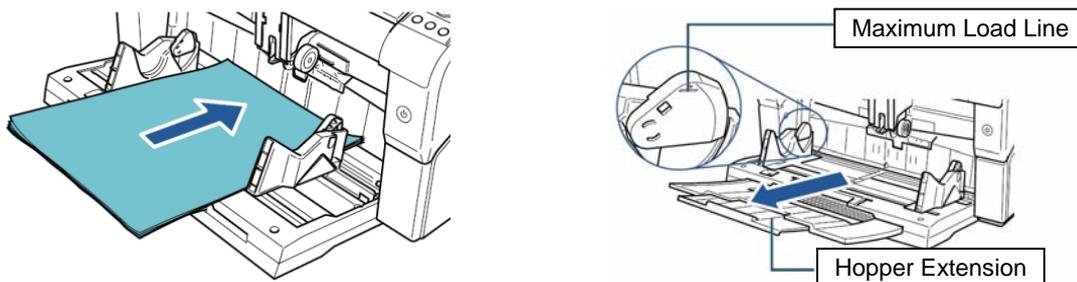
- ① **Setting the documents at the center of the hopper** (mainly when the documents are of the same size)
- ② **Setting the documents by the left or right side of the hopper** (mainly when the documents are in different sizes or when you want to shift the center of the documents)

NOTICE

Note that different conditions apply for multifeed detection when you set the documents by either left or right side of the hopper.

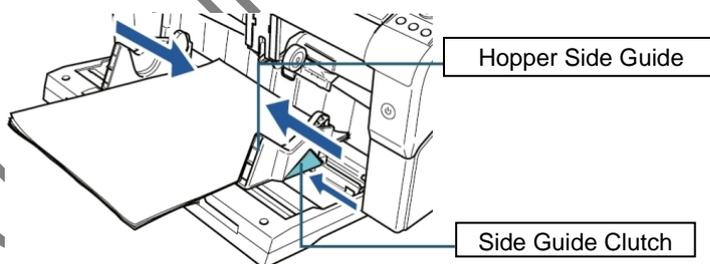
① **Setting the documents at the center of the hopper**

- (1) Load the documents on the hopper.
 - ! Set the documents with the front side, scanning side, facing up.



NOTICE

- 1) Make sure to keep the documents within the maximum load line on the inside of the hopper side guides.
 - 2) Pull out the hopper extension according to the length of the document before placing the documents.
- (2) Adjust the hopper side guides to the document width. Move the hopper side guides while pressing the side guide clutch so that there is no space left between the documents and the hopper side guides. Otherwise, the documents may be scanned skewed.



NOTICE

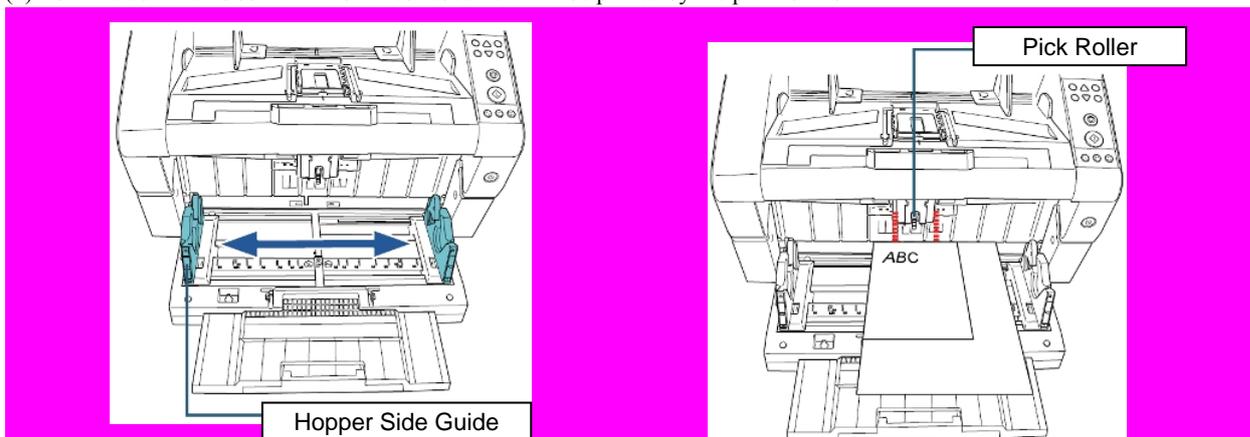
Remove all paper clips and staples. Reduce the amount of documents if a multifeed or pick error occurs.

- (3) Adjust the stacker extension to the document length, and pull up the paper stop. For information on how to set the stacker, refer to Section 8.1.7 “Stacker Setting”.
- (4) Start up an application for scanning and scan the documents. For information on how to scan using ScandAll PRO, refer to Section 8.2 “ADF Scanning”.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	292 / 383
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

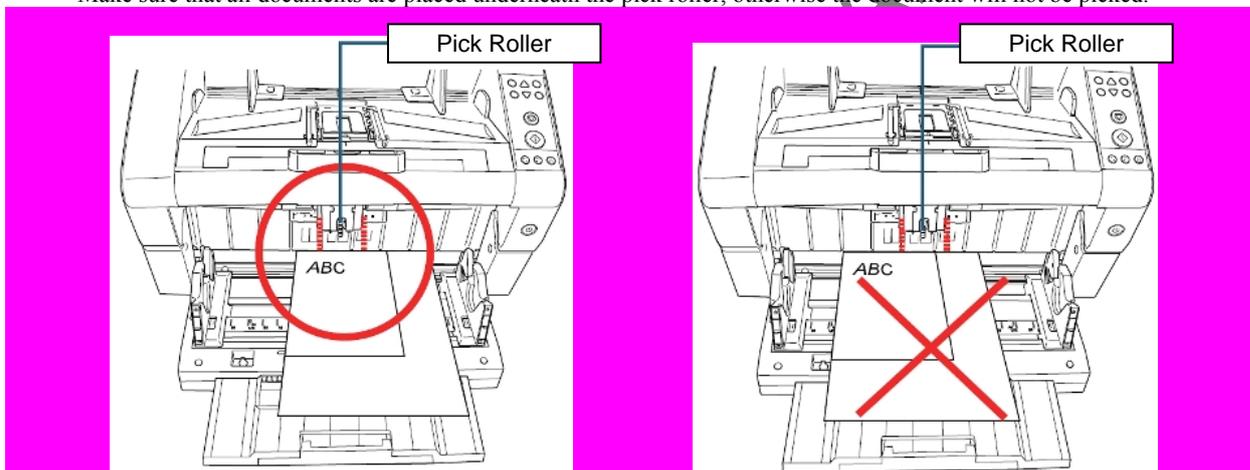
② Setting the documents by the left or right side of the hopper

- (1) Slide the hopper side guides to their outermost positions.
- (2) Set the documents so that the smallest document can be picked by the pick rollers.

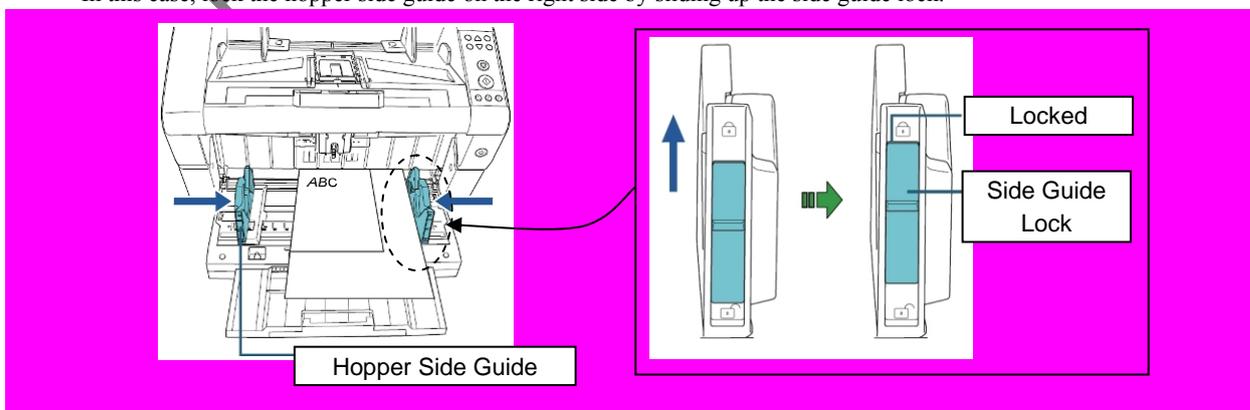


NOTICE

Make sure that all documents are placed underneath the pick roller, otherwise the document will not be picked.

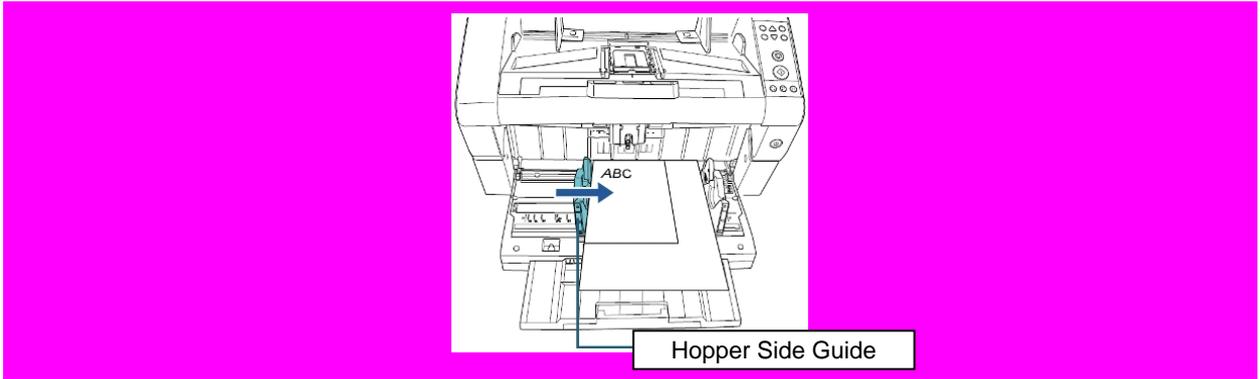


- (3) Adjust the hopper side guides to the document width.
Move the hopper side guides towards the center as you press the side guide clutches, and leave no space between the hopper side guide and the widest document.
- (4) Lock one of the hopper side guides.
In this case, lock the hopper side guide on the right side by sliding up the side guide lock.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	293 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

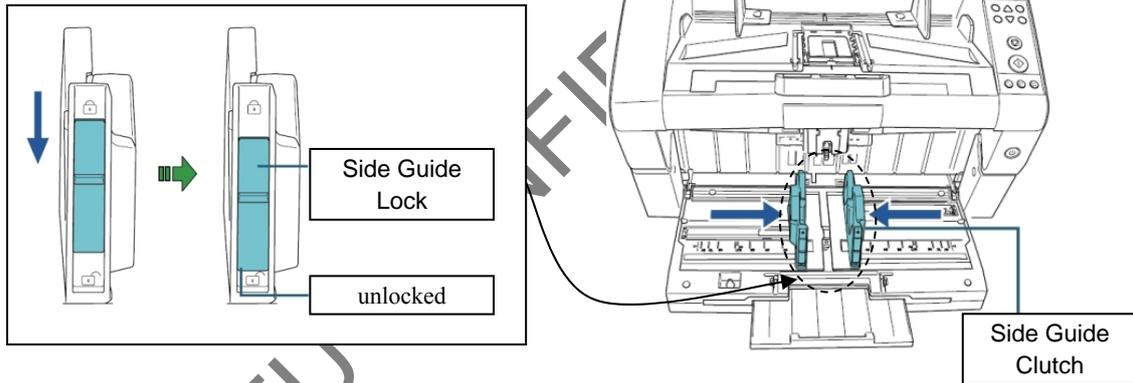
- (5) Move the other hopper side guide to the target position while pressing the side guide clutch. In this case, slide the left hopper side guide as you press the side guide clutch and leave no space between the hopper side guide and the document.



- (6) Adjust the stacker extension to the document length, and pull up the paper stop. For information on how to set the stacker, refer to Section 8.1.7 “Stacker Setting”.
- (7) Start up an application for scanning and scan the documents. For information on how to scan using ScandAll PRO, refer to Section 8.2 “ADF Scanning”.

How to Unlock the Hopper Side Guides

- (1) Slide down the side guide lock of the hopper side guide that is locked.
- (2) Move both hopper side guides towards the center while pressing the side guide clutches.



- (3) Release the side guide clutches. Both hopper side guides will now move in conjunction with each other.

!!

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	294 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

8.1.7 Stacker Setting

When you perform a scan, the document loaded on the hopper is ejected onto the stacker. As shown in the procedure below, documents can be stacked neatly by using the stacker extension and the stacker side guides to keep them straight. You can also fix the stacker at certain heights.

How to Guide Documents

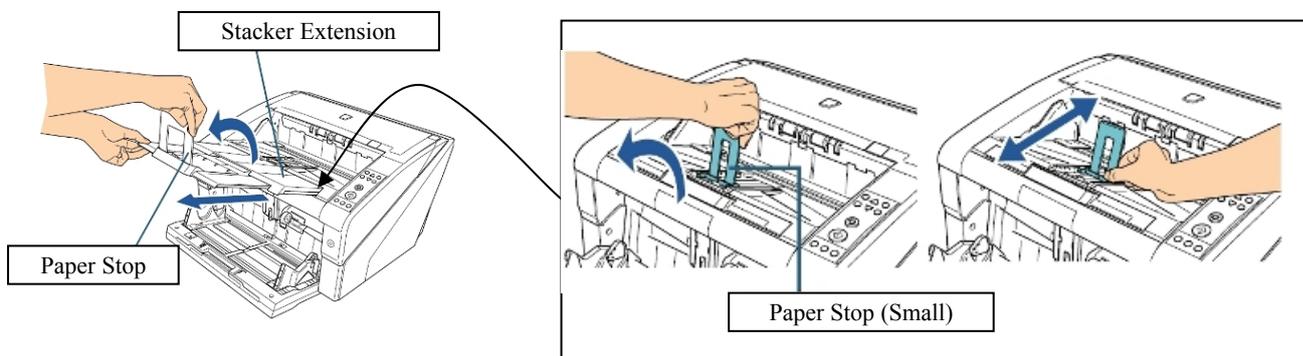
- (1) Adjust the stacker extension to the length of the document, and pull up the paper stop.

NOTICE

- 1) Do not hold the paper stop when you pull out the stacker extension because it may break.
- 2) Make sure that the position of the paper stop is set longer than the document length.

Reference

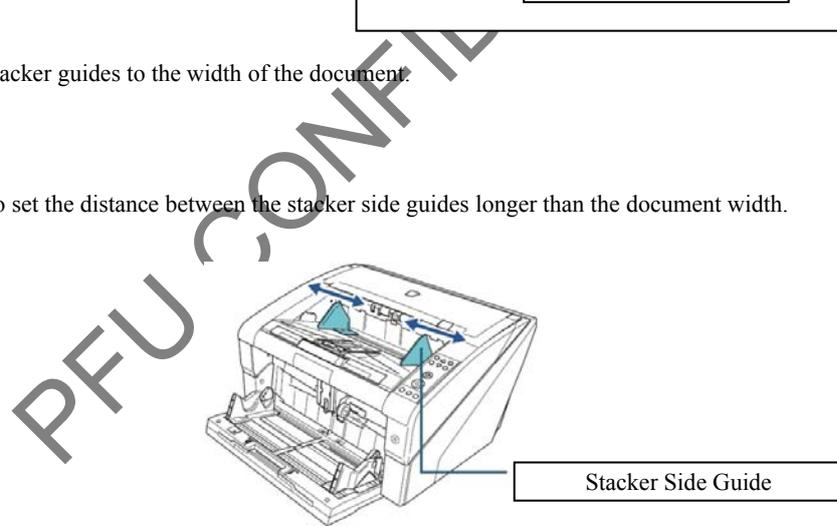
- 1) Use the paper stop (small) when the document length is short.
- 2) To scan documents longer than A3 size, pull out the hopper extension and the stacker extension all the way. Also, make sure not to pull up the paper stop.



- (2) Adjust the stacker guides to the width of the document.

NOTICE

Make sure to set the distance between the stacker side guides longer than the document width.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	295 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

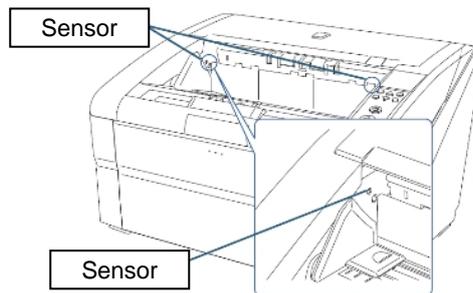
How to Fix the Stacker Height

When thin documents are fed, the ejected documents on the stacker can be curled and may not be stacked neatly. In such a case, fixing the stacker height may improve the symptom.

- (1) If the scanner driver's setup dialog box is being displayed, close the dialog box.
- (2) In the [Main Menu] of the operator panel, select [2: Fixed] for [9: Stacker Positioning].
For more details about the settings, refer to Section 8.1.9.4 "Operator Panel Main Menu Items".

Reference

- 1) When the scanner has just been turned on, it is set to [1: Movable].
- 2) In the rear ends of the stacker, a sensor is mounted on each side which detects documents. Make sure that nothing is placed in a location that may block the sensor.
- 3) The stacker may move just after turning the power on or when the scanning starts. Do not touch or place anything on top.



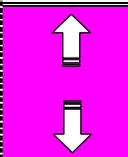
PFU CONFIDENTIAL

						Name		fi-6800/fi-668PR Maintenance Manual	
						Drawing No.		P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	296 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.1.8 Setting the Paper Thickness (Adjusting the Paper Separation Force)

When you experience frequent multifeds, pick errors or paper jams, you can fix these by adjusting the force that separates the papers. Keep the default setting for normal use.

Paper separation force can be set in five different levels depending on paper thickness.

Level	LCD display		Separation Force	Paper typet	Remarks
	Low	High			
1	■ □ □ □ □		Low		Prevents pick error and paper jam
2	■ ■ □ □ □		Slightly low		
3	■ ■ ■ □ □		Normal (*1)		
4	■ ■ ■ ■ □		Slightly high		
5	■ ■ ■ ■ ■		High		
				Low friction, Easy to separate	
				High friction, Difficult to separate	Prevents multifeed

*1: Paper weight is between 52g/m² and 127g/m².

NOTICE

- 1) Set the paper separation force lower when pick errors or paper jams occur frequently.
- 2) Set the paper separation force higher when multifeds occur frequently.
- 3) Errors such as multifeed, pick error and paper jam may also be caused by worn-out consumables or contamination in the feeding mechanism. If these symptoms do not change after setting the paper thickness, either replace the consumables or clean the inside of the scanner.
- 4) Documents may be damaged if the paper separation force is set too high. In that case, set the paper separation force lower.

How to Configure the Settings

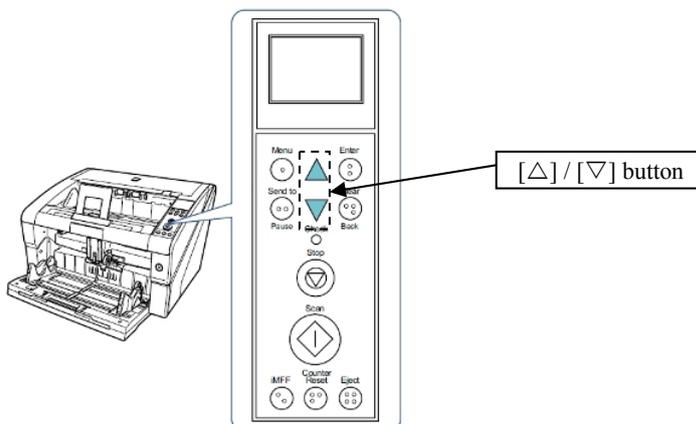
[11: Paper Separation Force] can be adjusted in the [Main Menu] of the operator panel of the scanner.

For more details about the settings, refer to Section 8.1.9.4 "Operator Panel Main Menu items".

NOTICE

- 5) The paper separation force is set to [△△△△▽] (Normal: default) when the power has just been turned on. However, note that. You can also have the paper separation force setting memorized by using the Software Operation Panel.
- 6) [Paper Separation Force] can also be set using shortcut key.
 - When you press the [△] button, paper separation force increases by one level.
 - When you press the [▽] button, paper separation force decreases by one level.

When [Paper Separation Force] is displayed by shortcut key, the screen returns to [Ready] after a certain period of time. This period of time can be configured in [18: Operation Panel Timeout] of the operator panel.

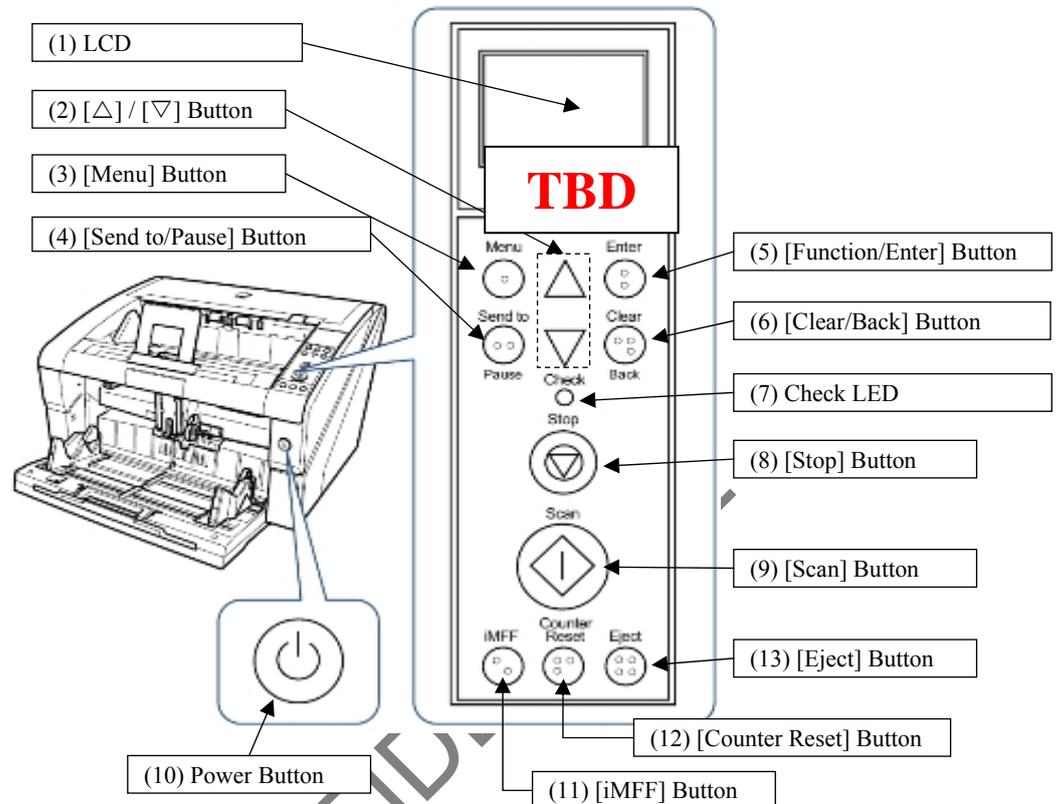


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	297 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	I.Fujioka		

8.1.9 How to Use the Operator Panel

8.1.9.1 Names and Functions of the Operator Panel

The illustration below explains the name and function of each button on the Operator Panel.



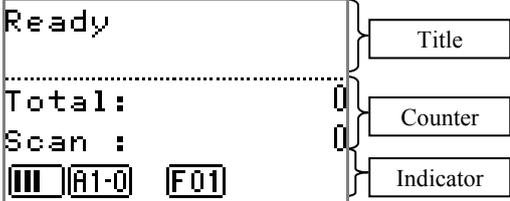
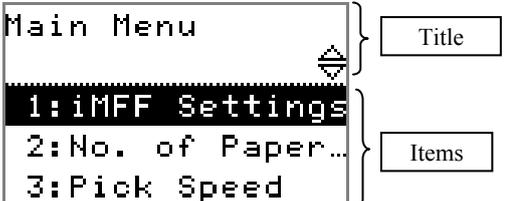
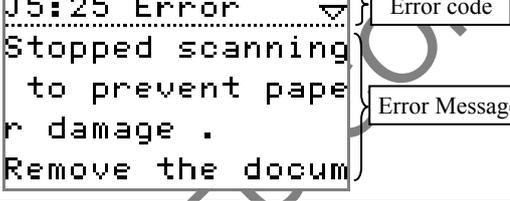
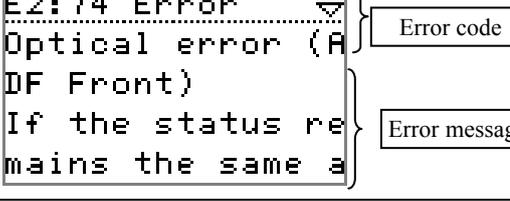
No	Name	Function
(1)	LCD	Indicates the status of the scanner. For details, refer to "8.1.9.2 Indications on LCD".
(2)	[Δ] / [▽] Button	Switches the selected item. Changes the paper separation force.
(3)	[Menu] Button	Configures various types of scanning operations.
(4)	[Send to/Pause] Button	Launches the linked application software. Pauses the scan. (*1)
(5)	[Function/Enter] Button	Confirms the selected item. Switches the number (No.01 to No.50/No.C) for the application launched by pressing the [Send to/Pause] button.
(6)	[Clear/Back] Button	Cancels the selected item and returns to the previous screen. Clears the displayed error indication.
(7)	Check LED	Lights in orange when an error occurs. Flashes when consumables reach the end of the life cycle.
(8)	[Stop] Button	Stops the scan immediately.
(9)	[Scan] Button	Launches the linked application software. Resumes the scan. (*1)
(10)	Power Button	Turns the power ON/OFF. Lights in blue when the scanner is turned on.
(11)	[iMFF] Button	Changes the setting for Intelligent Multifeed function when pressed down (for more than two seconds). Determines whether or not to memorize the pattern if pressed when a multifeed occurs.
(12)	[Counter Reset] Button	Resets the page counter when pressed down (for more than two seconds). Stops the scan when pressed while scanning in Manual Feed mode.
(13)	[Eject] button	Ejects the document when multifeed occurs.

*1: In order to scan by using the [Scan] button or [Send to/Pause] button, you need to assign the launching application to each button on the computer.

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	298 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	I.Fujioka			

8.1.9.2 Indications on LCD

The table below explains about the conditions displayed on the LCD.

No	Display	Description
1		Processing initialization. For details, refer to “2.1.2 Power ON ~ Initialization completes”.
2		Ready to start scanning. It indicated that the initialization was successfully completed. For more details about the indicators, refer to “8.1.9.3 About the Indicators”.
3		An item from the menu can be selected. When you press the [Menu] button in the [Ready] screen, the [Main Menu] screen is displayed. Main Menu is used to configure various operational settings upon scanning. For more details about the Main Menu, refer to Section 8.1.9.4 “Operator Panel Main Menu Items”.
4		A function can be selected. When you press the [Function/Enter] button in the [Ready] screen, the [Function Selection] screen is displayed. By using this, you can configure an application to launch when the [Send to/Pause] button is pressed.
5		It indicates that a recoverable error occurred during scanning. Error codes beginning with the letter “J” or “U” are displayed. For more details about errors, refer to “5.2.2 Temporary Errors”. If you press the [Clear/Back] button after handling the error, it will return to the [Ready] status.
6		It indicates that a device error (alarm) occurred during initialization or scanning. Error codes beginning with the letter “E”, “F”, “C”, “H”, “A” or “L” are displayed. For more details about errors, refer to “5.2.2 Temporary Errors”.
7		When the scanner has not been in operation for the set sleep interval, it enters Power Saving mode. The time to start Power Saving mode can be set from the Software Operator Panel. For more details, refer to Section 8.6 “Scanner Settings”

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	Page 299 / 383!

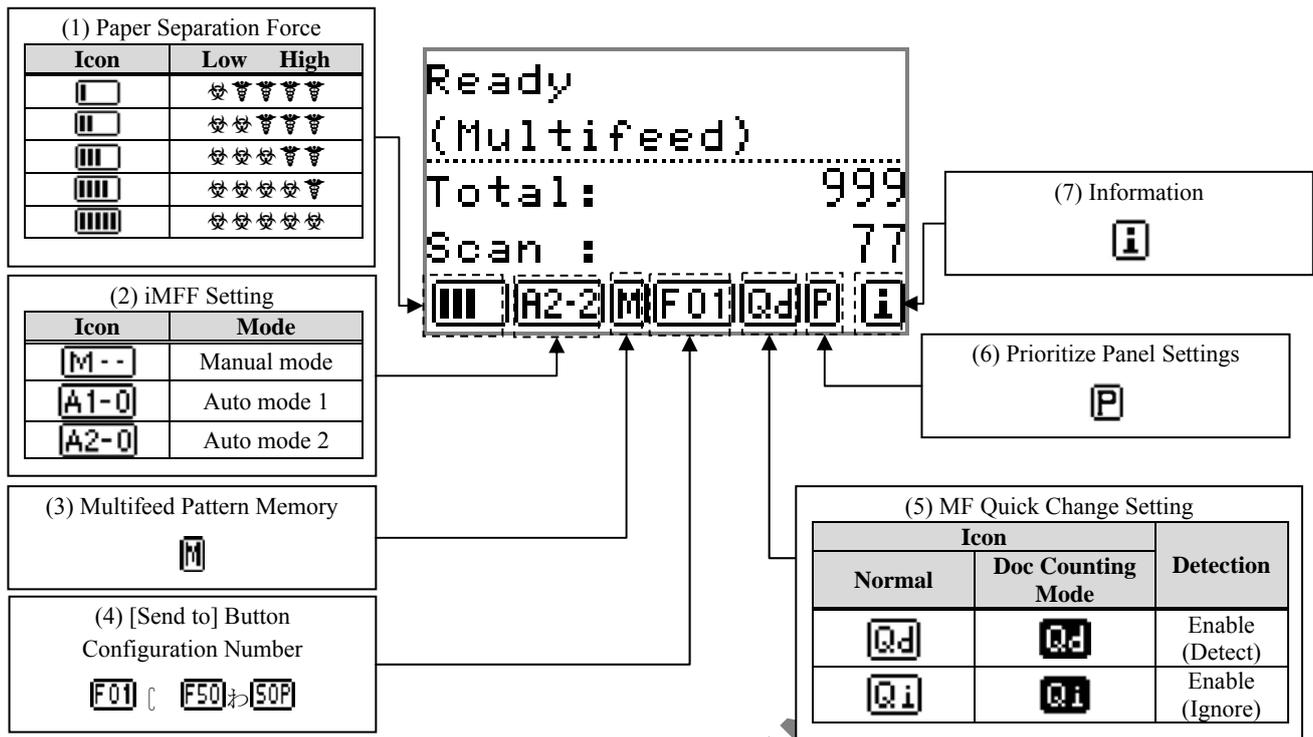
PFU LIMITED

Page

299 / 383!

8.1.9.3 About the Indicators

Below is explained about each of the indicator icons which is displayed on the LCD.



- (1) Paper Separation Force
Displays the paper separation force setting. For information on how to configure the settings, refer to Section 8.1.8 “Setting the Paper Thickness (Adjusting the Paper Separation Force).”
- (2) iMFF Setting
Displays the iMFF setting. The displayed icon switches when the [iMFF] button is pressed down for more than two seconds. In Manual Mode, * is displayed at all times. In Auto mode 1 and Auto mode 2, it displays the number of multifeed patterns memorized (max. of 8 patterns). For more information, refer to Section 8.1.9.4 “Operator Panel Main Menu Items”.
- (3) Multifeed Pattern Memory
 is displayed when memorizing a multifeed pattern.
- (4) [Send to] Button Configuration Number
It displays the number assigned (to) to the application that is launched when the [Send to] button is pressed. When the setting for the application to be launched is set to Software Operation Panel, is displayed.
- (5) MF Quick Change Settings
When [Enable (Detect)] or [Enable (Ignore)] is specified for MF quick change setting, it displays whether or not to detect multifeed. The displayed icon switches when the [Eject] button is pressed. For more information, refer to Section 8.1.9.4 “Operator Panel Main Menu Items”.
- (6) Prioritize Panel Settings
 appears when the operator panel settings are prioritized. For more information, refer to Section 8.1.9.4 “Operator Panel Main Menu Items”.
- (7) Information
 appears when a message for replacing consumables/cleaning/replacing maintenance parts/regular maintenance is displayed. For more information, refer to Section 8.1.9.4 “Operator Panel Main Menu Items”.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi				
							PFU LIMITED	Page	300 / 383!

8.1.9.4 Operator Panel Main Menu Items

The table below explains the operator panel main menu items.

Operator Panel Main Menu Items (1/5)

No	Item	Description	Setting/Value	Factory Default	SOP Setting (*1)
=	Information	[Information] appears as an item in [Main Menu] only when I is displayed on the LCD.	Message for replacing consumables/cleaning/replacing maintenance parts/regular maintenance	Only displayed when there is information	=
1	iMFF Setting	When there is a paper of the same size attached to a designated location on the page, you can have the scanner memorize the location of the attachment and not detect the same pattern as multifeed. Note that you need to specify [Detect by overlap (Ultrasonic)] in either the scanner driver's setup dialog box or the multifeed detection setting. By selecting [Clear pattern], you can clear the overlapping patterns (length, location) that were previously memorized in Auto mode.	1: Manual mode 2: Auto mode 1 3: Auto mode 2 4: Clear pattern	1: Manual Mode	☒
2	No. of Paper Feed Retries	It is used to reduce the number of paper feeding retries (when the document is not picked properly).	1 to 12 (times)	3 times	☒
3	Pick Speed	When you experience frequent multifeeds and paper jams, the symptom may be improved by slowing down the speed in which documents are picked (fed).	1: Normal 2: Slow	1: Normal	☒
4	Soft Pick Setting	When skew or multifeeds occur frequently, the symptom may be improved by bringing down the pick roller unit and keeping the unit at the lower position (disabling the Soft Pick Setting).	1: Enable 2: Disable	2: Enable	☒
5	Manual Feed Timeout	Specify the waiting time to clear the Manual Feed mode.	For SCSI or USB Connector 1: 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 300, 360, 420, 480, 540, 600, 900, 1200, 1500, 1800, 1999 (seconds) For SCSI or USB Connector 2: 5, 10, 20, 30 (seconds)	10	☒

*1) SOP Setting☒ Availability of configuring the settings from Software Operation Panel

(Configurable☒ O, Not Configurable☒ Ø, No setting☒ →)

						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	IFujioka	301 / 383!

Operator Panel Main Menu Items (2/5)

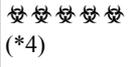
No	Item	Description	Setting/Value	Factory Default	SOP Setting (*1)
6	Paper Protection	<p>Select whether to enable or disable Paper Protection.</p> <p>Enabling this setting reduces the risk of having the documents damaged upon feeding errors, by stopping the scan when the scanner detects a document that is unusually warped. You can specify the level of sensitivity to detect an abnormal feeding of documents when Paper Protection is enabled.</p> <p>Documents are deformed (e.g. warped, bent, creased) when they are not being fed by the rollers properly. To detect such a symptom and stop the scan, select [1: Low] to only detect documents that are highly deformed, and [3: High] to also detect documents that are slightly deformed.</p> <p>Paper Protection is disabled in Manual Feed mode.</p> <p>Enable/Disable can also be configured from the scanner driver's setup dialog box or the Software Operation Panel. In this case, priority is given to the scanner driver setting unless you have prioritized the operator panel setting.</p> <p>Sensitivity can also be configured from the Software Operation Panel. Priority is given to the scanner driver setting unless you have prioritized the operator panel setting.</p>	<p>1: Enable 2: Disable</p> <p>Sensitivity: 1: Low 2: Normal 3: High</p>	<p>2: Disable</p> <p>Sensitivity: 2: Normal</p>	<u>○</u>
7	MF Quick Change	<p>Enables you to switch whether or not to detect multifeed by a push of a button. Priority is given to the driver setting when [1: Disable] is selected.</p> <p>When [2: Enable(Detect)] or [3: Enable(Ignore)] is selected, it switches between detecting/not detecting multifeed every time the [Eject] button is pressed. It can be switched during scanning.</p> <p>For [2: Enable(Detect)], it detects multifeed by default and multifeed detection is performed according to the driver setting.</p> <p>For [3: Enable(Ignore)], it does not detect multifeed by default and this setting is given priority over the driver setting.</p>	<p>1: Disable 2: Enable (Detect) 3: Enable (Ignore)</p>	1: Disable	<u>○</u>
8	Alarm Volume	Specify whether or not to ring an alarm when an error such as multifeed or paper jam occurs.	<p>1: OFF 2: Low 3: High</p>	1: OFF	<u>○</u>
9	Stacker Positioning	<p>Adjust the stacker position.</p> <p>You can set the stacker at certain heights.</p>	<p>1: Movable 2: Fixed</p>	--- (*2)	∅

*1) SOP Setting‡ Availability of configuring the settings from Software Operation Panel
(Configurable‡ O, Not Configurable‡ ∅, No setting: -)

*2) Although there is no factory default setting, it is set to [1: Movable] when you turn on the power. Therefore, the setting does not change even when you initialize the operator panel.

						Name	fi-6800/fi-668PR Maintenance Manual					
						Drawing No.	P1PA03575 – B0XX/6					
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION					PFU LIMITED	Page	302 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	I.Fujioka				

Operator Panel Main Menu Items (3/5)

No	Item	Description	Setting/Value	Factory Default	SOP Setting (*1)
10	Hopper Level	Change the hopper level during standby. Selecting [1: Manual (Continuous)] switches the scanner to Manual Feed mode (Continuous Feed mode). The hopper level cannot be changed in Manual Feed mode (Single Feed mode). Remove all documents from the hopper when you configure this item. The hopper is set to [4: Lower] when you clear manual feeding (continuous).	1: Manual (Continuous) 2: Upper 3: Middle 4: Lower	--- (*3)	∅
11	Paper Separation Force	When you experience frequent multifeeds, pick errors or paper jams, take measures by adjusting the force to separate the papers. Keep the default setting for normal use. For more details, refer to Section 8.1.8 "Setting the Paper Thickness (Adjusting the Paper Separation Force)".	Low High 	 (*4)	∅
12	Alarm Sound Time	Specify the duration to ring the alarm when errors such as multifeed and paper jam occur.	0.5, 1, 1.5, 2.0, 2.5 (seconds)	2.0 seconds	∅
13	Button Sound Vol.	Specify whether or not to make a sound when a button on the operator panel is pressed.	1: OFF 2: Low 3: High (ring time fixed at 0.01 second)	1: OFF	∅
14	Contrast	Specify the contrast for the LCD on the operator panel.	Weak! Strong 		∅
15	Backlight ON	Specify the duration for which the backlight is ON. Until initialization is complete after turning the power on, this item operates in [ON] regardless of the setting configured.	OFF, ON, 5, 10, 20, 30, 40, 50, 60, 90, 120, 150, 180, 210, 240, 270, 300 (seconds)	ON	∅
16	LED Blink Cycle	Specify the interval in which the Check LED flashes when  (for Information) is displayed on the LCD.	0.5, 1.0, 1.5, 2.0, 2.5 (seconds)	2.0 seconds	∅
17	Horizontal Scroll Speed	Specify the speed in which the display is horizontally scrolled. The displayed item is scrolled horizontally when the text does not fit in the LCD.	1: Fast 2: Normal 3: Slow 4: OFF	2: Normal	∅

*1) SOP Setting‡ Availability of configuring the settings from Software Operation Panel (Configurable‡ O, Not Configurable‡ ∅, No setting: -)

*3) Although there is no factory default setting, it is set to [Lower] just when you turn on the power: [2: Multiple sheets] for [No. of sheets scanned], [1: Front Side] for [Print], [1: (L)ABCDEFGHIJKLMNQRSTUWXYZ[]^_`00000000] for [Print Pattern], and [1: Yes] for [Test Print]. Therefore, the setting does not change even when you initialize the operator panel.

18	Operation Panel Timeout	Specify the time to return to the [Ready] screen from [Hopper Level] or [Paper Separation Force]. Note that this option is only available when you display [Hopper Level] or [Paper Separation Force] from the	OFF/5 to 9 (seconds)	7 seconds	∅
----	-------------------------	--	----------------------	-----------	---

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED
									Page 303 / 383!

		<p>[Ready] screen by using a shortcut key.</p> <p>To display [Hopper Level] by shortcut key, press the [Eject] button and either [△] or [▽] button at the same time when [Ready] is displayed.</p> <p>Note that the [Hopper Level] screen is not displayed unless the two buttons are pressed simultaneously.</p> <p>To display the [Paper Separation Force] screen by shortcut key, press the [△] or [▽] button in the [Ready] screen.</p>			
19	Language	Specify the language in which the data is displayed.	1: Japanese 2: English 3: French 4: German 5: Italian/ 6: Spanish 7: Russian 8: Chinese	2: English	∅
20	Prioritize Panel Settings	Prioritize the operator panel setting for Paper Protection. When [1: Paper Protection] is selected, the Paper Protection setting of the operator panel is prioritized. When [2: Clear] is selected, the Paper Protection setting is no longer prioritized.	1: Paper Protection 2: Clear	2: Clear	∅
21	Cleaning	Use this setting when you clean the scanner.	=	=	∅

*1) SOP Setting‡ Availability of configuring the settings from Software Operation Panel
(Configurable‡ O, Not Configurable‡ ∅, No setting‡ -)

PFU CONFIDENTIAL

									Name	fi-6800/fi-668PR Maintenance Manual	
									Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION						
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page	304 / 383!

Operator Panel Main Menu Items (4/5)

No	Item	Description	Setting/Value	Factory Default	SOP Setting (*1)
22	Test Print	Use this option to run a test print when the Imprinter is installed.	No. of sheets scanned: 1: Single sheet only 2: Multiple sheets Print: (*5) 1: Front Side 2: Back Side Print Pattern: (*6) Test Print: 1: Yes 2: No	(*4)	∅
23	Show/Clear Counters	Check the replacement cycle of the consumables and the total page count of the maintenance parts. Also, use it to reset the counter when you have replaced the consumables or performed cleaning.	Brake Roller / Pick Roller / Separator Roller / Assist Roller / Cleaning Ink Level: Front / Ink Level: Back (only when imprinter is installed).	0 Only displayed when imprinter is installed	<u>∅</u>
24	Ope. Panel Initialization	Initialize the settings of the operator panel, except for the language setting and any items without a factory default setting.	1: Yes 2: No	(*7)	=
25	Doc Counting Mode	Compare the number of sheets scanned in Doc Counting Mode and Doc Count Check Mode.	=	=	=

*1) SOP Setting: Availability of configuring the settings from Software Operation Panel (Configurable: O, Not Configurable: ∅, No setting: -)

*4) Although there is no factory default setting, the settings are configured as follows just after the power has been turned on: [2: Multiple Sheets] for [No. of sheets scanned], [1: Front Side] for [Print], [1: (L)ABCDEFGHIJKLMN OPQRSTUVWXYZ []^_`00000000] for [Print Pattern], and [1: Yes] for [Test Print]. Therefore the settings do not change even when you initialize the operator panel.

*5) [Print: 1: Front Side/2: Back Side] does not appear unless both Front-Side and Back-Side Imprinters are installed.

*6) Print Pattern:

1. (L)ABCDEFGHIJKLMN OPQRSTUVWXYZ[]^_`00000000
2. (L)abcdefghijklmnopqrstuvwxy z{}~00000000
3. (L)!"#\$%&'()*+,-./0123456789:;=?@00000000
4. (P)ABCDEFGHIJKLMN OPQRSTUVWXYZ[]^_`00000000
5. (P)abcdefghijklmnopqrstuvwxy z{}~00000000
6. (P)!"#\$%&'()*+,-./123456789:;=?@00000000

*7) Although there is no factory default setting, it is set to [No] just after the power has been turned on. Therefore, the setting does not change even when you initialize the operator panel.

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION					
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED	Page 305 / 383!

Operator Panel Initialization – Changed Items

No.	Setting Item	Initialization	Factory Default	Setting retainment (EEPROM)	Setting on SOP	Remarks
1	iMFF Setting	N/A	1: Manual Mode	☞	☞	
2	No. of Paper Feed Retries	N/A	3	☞	☞	
3	Pick Speed	N/A	1: Normal	☞	☞	
4	Soft Pick Setting	N/A	2: Enable	☞	☞	
5	Manual Feed Timeout	N/A	10	☞	☞	
6	Paper Protection	N/A	Detection: 2: Disable Sensitivity: 2: Normal	☞	☞	
7	MF Quick Change	OK	1: Disable	☞	∅	
8	Alarm Volume	N/A	1: OFF	☞	☞	
9	Stacker Positioning	N/A	1: Movable	∅	∅	
10	Hopper Level	N/A	4: Lower	∅	∅	
11	Paper Separation Force	OK	☞☞☞☞☞	☞	∅	
12	Alarm Sound Time	OK	2.0 (seconds)	☞		
13	Button Sound Vol	OK	1: OFF	☞		
14	Contrast	OK	☞☞☞☞☞	☞		
15	Backlight ON	OK	ON	☞		
16	LED Blink Cycle	OK	2.0 (seconds)	☞		
17	Horizontal Scroll Speed	OK	2: Normal	☞		
18	Operation Panel Timeout	OK	7	☞		
19	Language	N/A	2: English	☞		
20	Prioritize Panel Settings	OK	2: Clear	☞		
21	Cleaning	=	=	=		
22	Print Test	=	=	=		
23	Show/Clear Counters	=	=	☞		
24	Ope. Panel Initialization	=	=	=		
25	Doc. Counting Mode	=	=	=		

								Name	fi-6800/fi-668PR Maintenance Manual		
								Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION			PFU LIMITED		Page	306 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	I.Fujioka			

8.2 ADF Scanning

8.2.1 Document Scanning

- (1) Turn on the scanner. (Refer to Section 8.1.1.)
- (2) Turn on the computer.

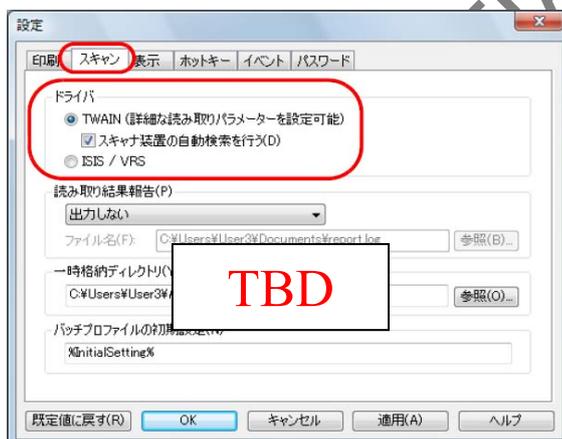
NOTICE

When connecting via SCSI, turn on the scanner and confirm that [Ready] is displayed on the LCD before you turn on the computer.

- (3) Load documents on the hopper. (Refer to Section 8.1.6.)
- (4) Set the stacker. (Refer to Section 8.1.7.)
- (5) Start up ScandAll PRO
 - Select the [Start] menu → [All Programs] → [Fujitsu ScandAll PRO] → [ScandAll PRO]
- (6) Select [Tool] → [Setup].
 - ∩∩ The [Setup] screen appears.
- (7) Select a scanner driver to use for scanning in the [Scan] tab and click the [OK] button.
 - Using TWAIN driver: Select [TWAIN].
 - Using ISIS driver: Select [ISIS/VRS]
 - Using VRS [SCSI or USB Connector 2 (CGA board)]: Select [ISIS/VRS].

NOTICE

The scanner driver needs to be installed beforehand.

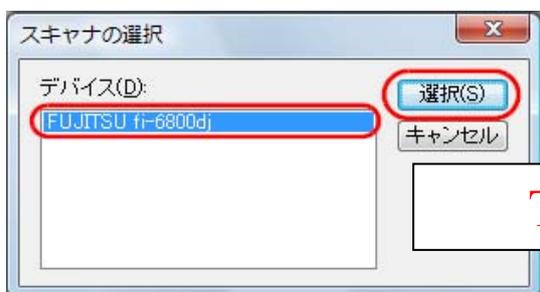


[For FUJITSU TWAIN 32]

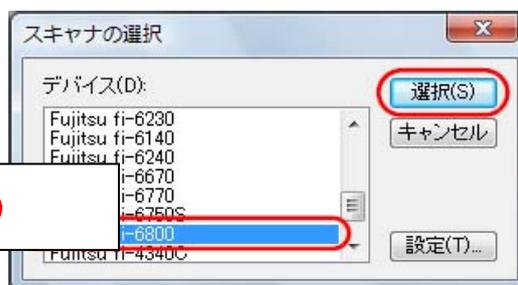
- (8) Click [Scan] menu → [Select Scanner]
 - ∩∩ [Select Scanner] dialog box appears.
- (9) Select a scanner to use and click the [Select] button.

The scanner name displayed differs depending on the scanner driver you use.

ScandAll PRO [Driver setting]	TWAIN	ISIS → VRS	
Scanner driver	FUJITSU TWAIN32	FUJITSU ISIS	Kofax VRS
Displayed scanner name (device)	FUJITSU fi-6800dj	Fujitsu fi-6800	Kofax VRS Scanner



[For FUJITSU TWAIN 32]



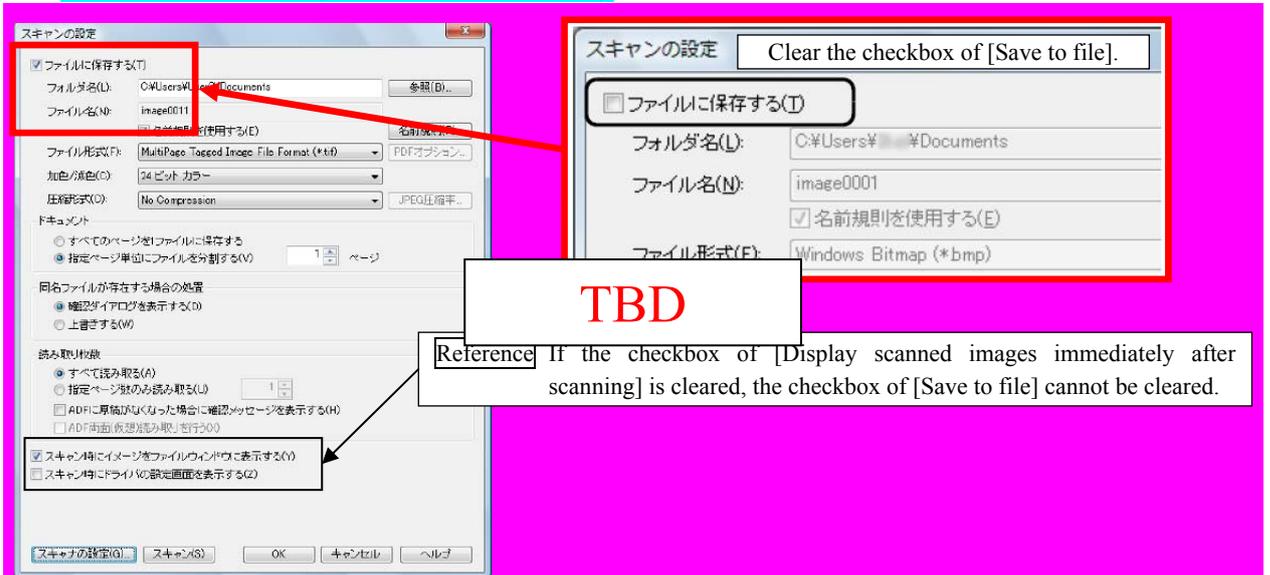
[For ISIS]

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	307 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

- (10) Click [Scan] menu → [Scan Settings]
 ↳ [Scan Settings] dialog box appears.
- (11) On the [Scan Settings] dialog box, clear the checkbox on [Save to file].

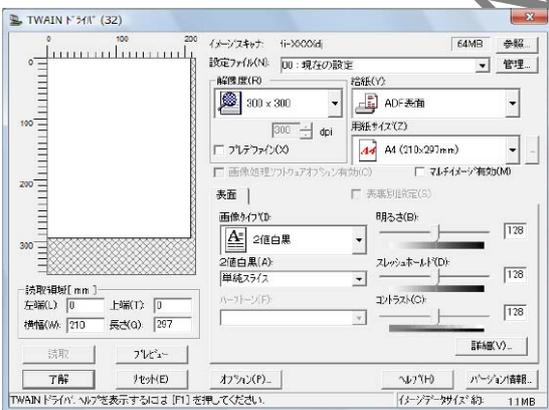
NOTICE

The user may configure specific destination folder and name rule. This procedure describes as the image data is confirmed on the window (the data is not saved as a file).

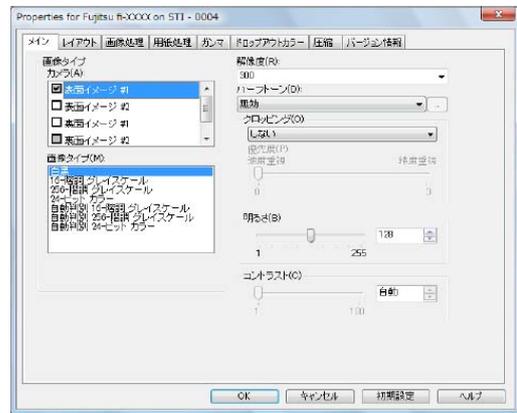


TBD
 Reference If the checkbox of [Display scanned images immediately after scanning] is cleared, the checkbox of [Save to file] cannot be cleared.

- (12) On the [Scan Settings] window, click the [Scanner Setting] button.
 ↳ Scanner driver setting dialog box appears.
- (13) Scan settings such as scan resolution, document size and such can be configured.
 ⚠ For FUJITSU TWAIN 32
 Set the scanning conditions and click the [OK] button.
 ⚠ For ISIS
 Set the scanning conditions and click the [OK] button.

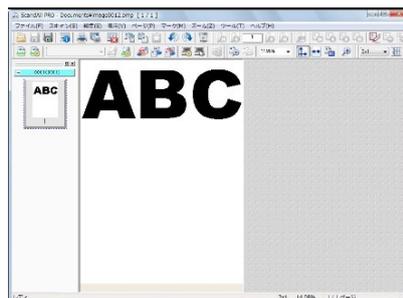


[For FUJITSU TWAIN 32]



[For ISIS]

- (14) On the [Scan Settings] window, click the [Scan] button.
 ↳ The document is scanned and the image data is displayed on the ScandAll PRO screen.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 - B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	308 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

8.2.2 Scanning Documents of Different Widths

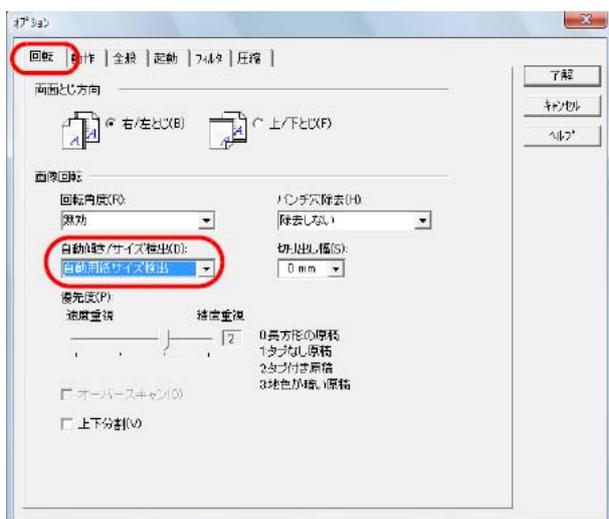
When you scan a batch of documents with different widths, load the documents using the following procedure:

NOTICE

- 1) When you scan documents of different widths at the same time, some of the smaller documents may be skewed or may not be fed into the scanner. Try to scan documents of the same widths at once.
- 2) For more details about the conditions of scanning documents in mixed batches, refer to Section 1.2.8 “Scanning a Mixed Batch of Documents”.

(1) To avoid skewed images, select [Automatic Page Size Detection] in [Automatic Size and Skew Detection].

- Ⓐ Start up ScandAll PRO and display [TWAIN Driver 32] dialog box.
- Ⓑ Click the [Option] button.
 ↳ The [Option] dialog box appears.
- Ⓒ Click the [Rotation] tab and select [Automatic Deskew] or [Automatic Page Size Detection] in the [Automatic Size and Skew detection] drop-down list.

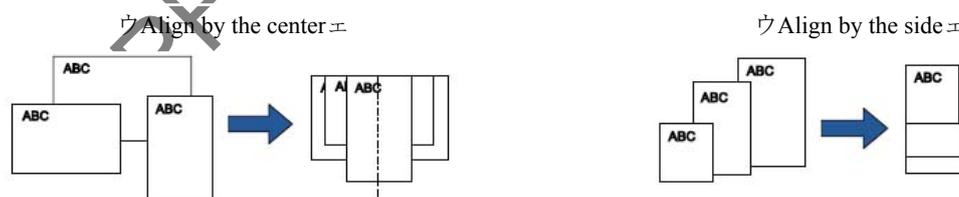


Priority	Documents suitable for scanning
0	Rectangular documents with straight edges
1	Documents without tabs (those that have no index sheets, sticky notes, or index stickers)
2	Documents with tabs (those that have index sheets, sticky notes, or index stickers)

Cropping width	Description
0mm	No adjustment is made to the output image.
1 to 5 mm	Black areas are added around the edges of the document so that the image is not chipped. Specify the amount to add from 1 to 5 mm in increments of 1 mm.
-5 to -1mm	It deletes the area around the document and leave no black areas. Specify the amount to delete from -5 to -1mm in increments of 1mm.

- Ⓓ Click the [OK] button.
 ↳ It returns to the [TWAIN Driver 32] dialog box.
- Ⓔ Click the [OK] button on the [TWAIN Driver 32] dialog box.
 ↳ The settings are saved.

(2) Align the edges of the documents.



- (3) Place the documents on the hopper and adjust the hopper side guides to the widest document in the batch. For information on how to load documents on the hopper, refer to Section 8.1.6 “Loading the documents on the Hopper”.
- (4) Perform a scan from ScandAll PRO.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	309 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

8.2.3 Feeding Documents Manually

Besides the normal automatic document feeding in which you load a batch of documents on the hopper and scan them one by one, you can also use the “Manual Feed mode” where you manually feed each sheet and perform scanning.

Normally, in automatic feeding, the scanner stops scanning once all the loaded documents are scanned.

In manual feeding, the scanner waits for the next sheet to be set within a specified time. It continues scanning if an additional document is loaded within the specified time, or stops scanning if no document is loaded.

With this option, you can perform scanning as you check the documents one by one.

Manual feeding is effective for:

- Scanning as you check the contents of each sheet
- Scanning documents that cause multifeed or paper jam when they are loaded together
- Continuously scanning documents such as clippings of magazines and newspapers which cannot be loaded together at once

NOTICE

Paper Protection is disabled in Manual Feed mode.

Pause function ([Send to/Pause] button) is disabled during manual feeding.

There are two modes in manual feeding.

Single Feed mode

Only one sheet is manually fed and scanned.

- Suitable for scanning thick papers, envelopes and folded papers that are difficult to scan using Automatic Feed Mode (In case of folded paper, make the folding line as the leading edge).
- Reduces the pressure applied to the document when it enters the ADF (because the pick roller does not touch the document).
- Used to accurately feed and scan one particular sheet of document.
- No paper separation force is applied regardless of the paper separation force setting (five levels) which enables you to scan documents such as envelopes which cause paper jams in automatic document feeding.

Continuous Feed mode

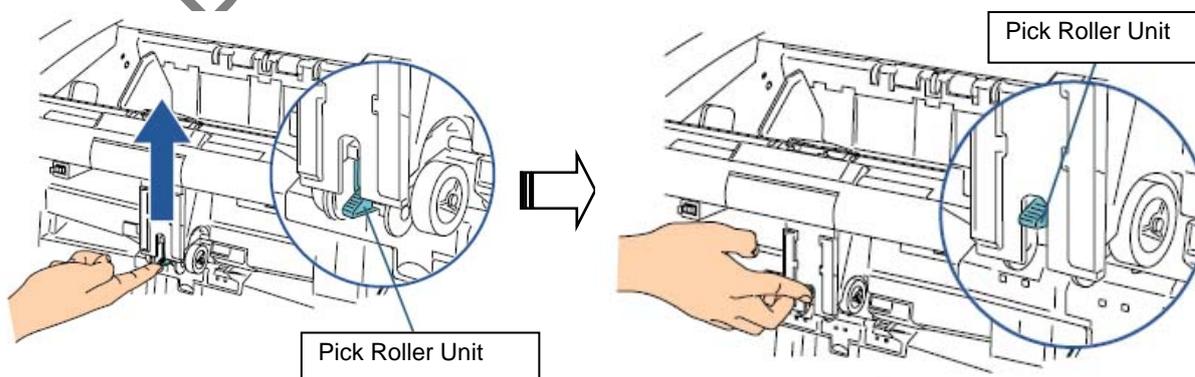
Multiple sheets of document are manually fed one at a time and continuously scanned.

- Documents are scanned one by one even multiple sheets are mistakenly fed.
- When you scan more than one sheet, you can check every sheet as you scan.
- Used to accurately feed and scan multiple sheets of documents.
- The paper separation force setting (five levels) is enabled as with scanning in automatic document feeding. Adjust the paper separation force when a multifeed, pick error or paper jam occurs frequently.

Scanning in Single Feed mode

(1) Lift up the pick roller unit.

Push up the tab in the middle with your finger.

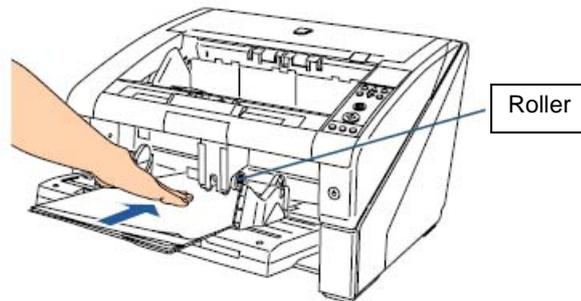


∩∩ The pick roller will click into place. The hopper moves up to the feeding position.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	310 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

NOTICE

- Make sure that there is no document left on the hopper.
 - Be careful not to have your fingers or anything caught when the hopper moves up.
- (2) Load a document on the hopper with the front side (scanning side) facing up.
Make sure not to place the document all the way in.
 - (3) Perform a scan from ScandAll PRO.
 - (4) Insert the document until the top edge touches the rollers on the inside.



∩∩ The document is picked, scanned, then ejected onto the stacker. After the scan, the scanner waits for the next sheet to be fed for the time specified in the Software Operation Panel.

NOTICE

Let go of the document as soon as you confirm that the document is being fed by the rollers.

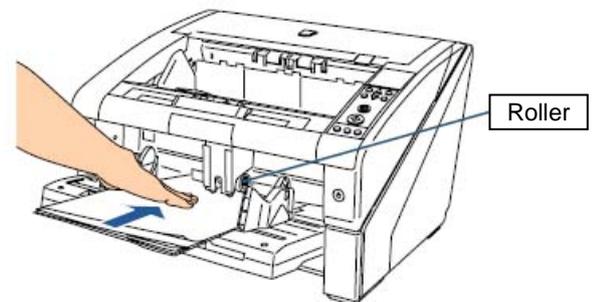
- (5) Repeat step 4 until all the documents are scanned.
 - ∩∩ Scanning stops when no document is loaded on the hopper after the time specified in the Software Operation Panel.
 - Ⓢ! Scanning can be stopped immediately by pressing the [Counter Reset] button on the operator panel.
 - Ⓢ! The scanner waits for the period of manual feed timeout even if there is no document left on the hopper.
 - Ⓢ! To release Manual Feed mode, bring the pick roller unit back down to its original position. Put your finger on the tab in the center and push it down.

Scanning in Continuous Feed mode

- (1) Open the hopper if it is closed (Refer to Section 8.1.2.)
- (2) Configure by selecting [Main Menu] → [10: Hopper Level] → [1: Manual (Continuous)] on the operator panel.
For more details about the setting, refer to! Section 8.1.9.4 “Operator Panel Main Menu Items”.
∩∩ The hopper moves up to the feeding position.

NOTICE

- Make sure that there is no document left on the hopper.
 - Be careful not to have your fingers or anything else caught when the hopper moves up.
 - You can also set it to [Manual (Continuous)] from the [Hopper Level] screen via shortcut key.
- (3) Load documents on the hopper with the front side (scanning side) facing up.
Make sure not to place the documents all the way in.
 - (4) Perform a scan from ScandAll PRO.
 - (5) Insert the document until the top edge touches the rollers on the inside.
When more than one sheet is loaded, only insert the document on the top of the stack. The document is picked, scanned, then ejected onto the stacker. After the scan, the scanner waits for the next sheet to be fed for the time specified in the Software Operation Panel.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	311 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

- (6) Repeat step 5 until all the documents are scanned.
 - ∩∩ Scanning stops if no document is set on the hopper after the time specified in the Software Operation Panel.
 - Ⓢ! Scanning can be stopped immediately by pressing the [Counter Reset] button on the operator panel.
 - Ⓢ! The scanner waits for the period of manual feed timeout even if there is no document left on the hopper.
 - Ⓢ! Continuous Feed mode can be cleared in [10: Hopper level] of the [Main Menu] on the operator panel. The hopper is set to [4: Lower] when you clear manual feeding (Continuous).

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	312 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.3 Cleaning

Cleaning should be performed approximately every 10,000 sheets scanned. Note that this guideline varies depending on the type of documents you scan. (Refer to Notice 1 for details.)

NOTICE

- 1) Cleaning must be performed more frequently when the following types of documents are scanned:
 - Ⓢ! Smooth-faced documents such as coated paper
 - Ⓢ! Documents with printed text/graphics that almost cover the entire surface
 - Ⓢ! Chemically-treated documents such as carbonless paper
 - Ⓢ! Documents containing a large amount of calcium carbonate
 - Ⓢ! A large volume of documents written with lead pencil
 - Ⓢ! Documents on which the toner is not sufficiently fused
 - Ⓢ!
- 2) Use a dry cloth or cloth moistened with alcohol.

No.	Cleaning location	Refer to
1	Pick Roller	Section 8.3 (1)
2	Separator Roller	Section 8.3 (2)
3	Brake Roller	Section 8.3 (3)
4	Pinch Roller	Section 8.3 (4)
5	Feed Roller	Section 8.3 (5)
6	Assist Roller	Section 8.3 (6)
7	Paper Path / Sheet Guide	
8	Glass	
9	Document Sensor	
10	Friction Pad	
11	Ventilation Port	
12	Fan	

TBD

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	313 / 383
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

- (1) Remove the pick rollers from the scanner (Refer to Section 8.4.3 “Replacing the Pick Roller”) and clean them.

How to Clean the Pick Roller

Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Clean thoroughly because the feeding performance is affected especially when there is foreign matter stuck on the roller.

- (2) Remove the separator roller from the scanner (Refer to Section 8.4.4 “Replacing the Separator Roller”) and clean them.

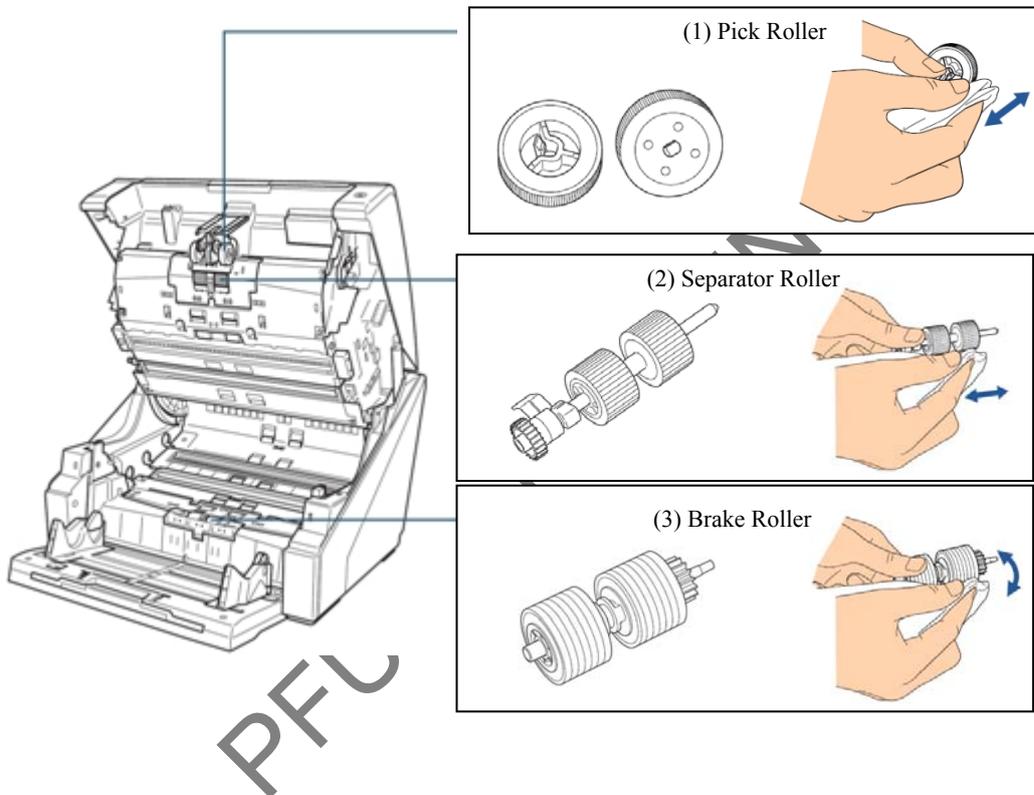
How to Clean the Separator Roller

Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Clean thoroughly because the feeding performance is affected especially when there is foreign matter stuck on the roller.

- (3) Remove the brake roller from the scanner (Refer Section 8.4.5 “Replacing the Brake Roller”) and clean them.

How to Clean the Brake Roller

Gently wipe the rollers so that the roller surface does not get damaged. Wipe along the grooves of the roller surface. Clean thoroughly because the feeding performance is affected especially when there is foreign matter stuck on the roller.



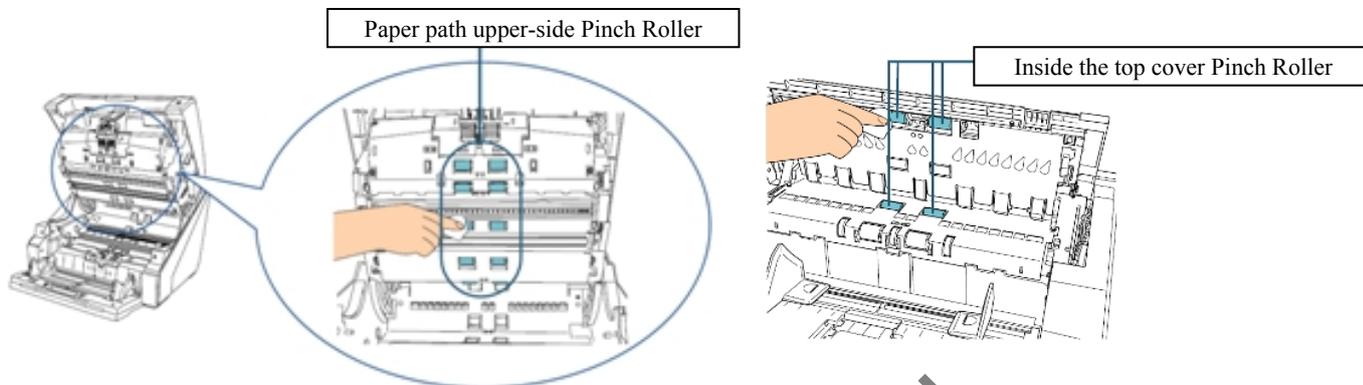
									Name	fi-6800/fi-668PR Maintenance Manual		
									Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION					PFU LIMITED	Page	314 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka				

(4) Clean the pinch rollers (inside the top cover and paper path upper-side).

How to Clean the Pinch Roller

Gently wipe the rollers so that the roller surface does not get damaged. Clean the whole surface as you rotate the roller manually. Pinch rollers to be cleaned are located as shown below.

- Paper path upper-side (rollers: 6 locations x 5 units)
- Inside the top cover (rollers: 2 locations x 2 units)

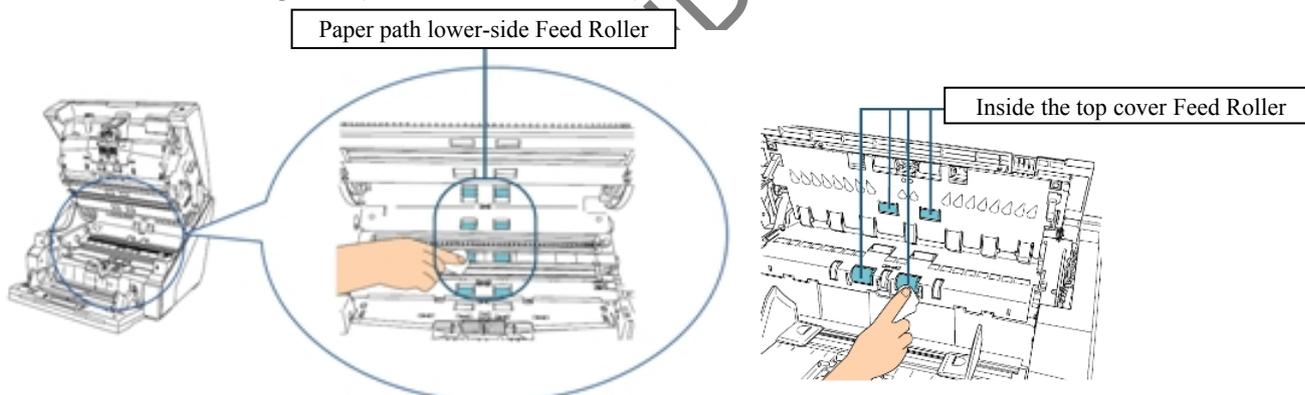


(5) Clean the feed roller.

How to Clean the Feed Roller

Gently wipe off the rollers so that the roller surface does not get damaged. Clean the whole surface as you rotate the roller manually. Make sure to clean thoroughly because the feeding performance is affected especially when there is black foreign matter on the roller. Feed rollers to be cleaned are located as shown below.

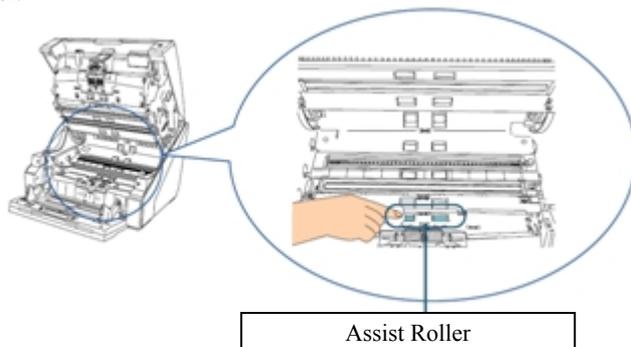
- Paper path lower-side (rollers: 5 locations x 2 units)
- Inside the top cover (rollers: 2 locations x 2 units)



(6) Clean the assist roller

How to Clean the Assist Roller

Gently wipe the rollers so that the roller surface does not get damaged. Clean the whole surface as you rotate the roller manually. Make sure to clean thoroughly because the feeding performance is affected especially when there is black foreign matter on the roller.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	315 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

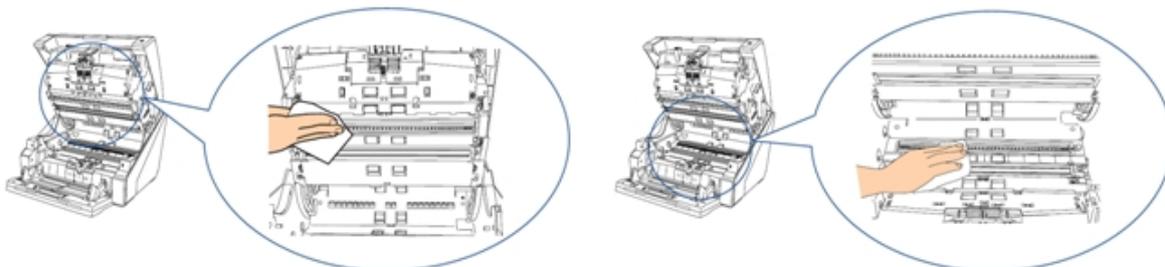
(7) Clean the paper path/sheet guide and scan glass

How to Clean the Paper Path/Sheet Guide and Scan Glass

Clean the area with a piece of cloth.

NOTICE

- 1) Vertical streaks may appear on the scanned image when the glass is dirty.
- 2) Remove the glass on paper path upper-side and lower-side to clean if the scanning result is not good.
- 3) If the paper path contains a large amount of paper dust, clean it with a vacuum cleaner.

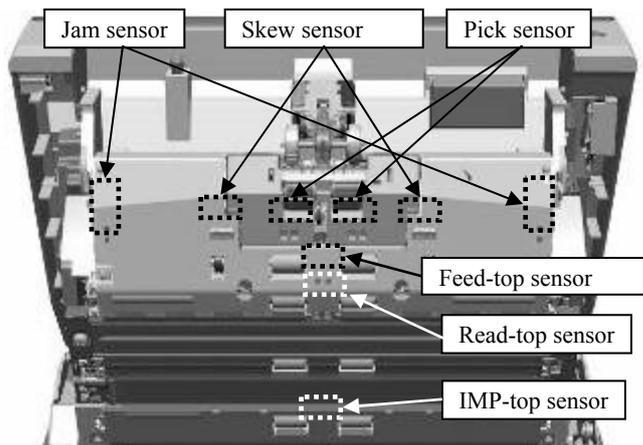


(8) Clean the document sensor.

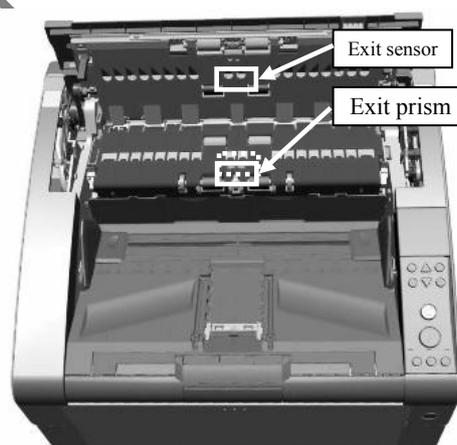
How to Clean the Document Sensor

Clean the sensors located inside the top cover, paper path upper-side and paper path lower-side. Their locations are as below:

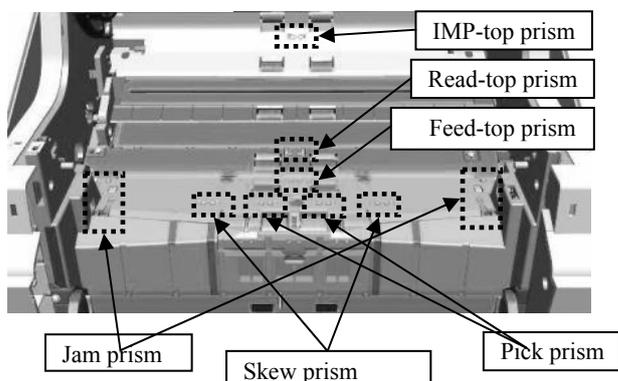
Rotating parts



Top view



Fixed parts

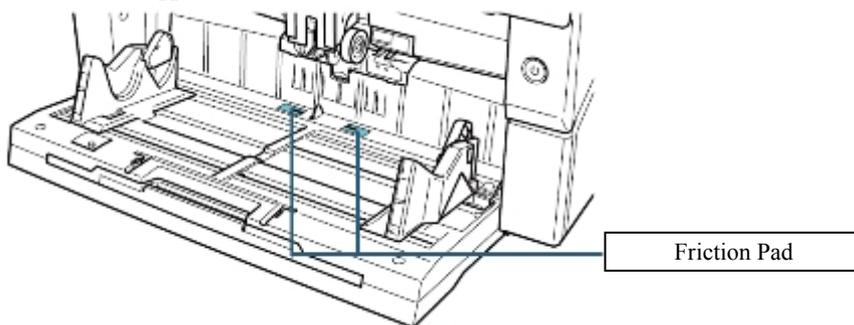


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	316 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

(9) Cleaning the Friction Pad

How to clean the Friction Pad

Clean the friction pads located on the hopper table.



(10) Reset the cleaning counter.

For more information about how to reset the cleaning counter, refer to 'xxxxx'.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	317 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

8.4 Consumables

Consumables must be replaced periodically. It is recommended that the user keep a stock of new consumables and replace them before it reaches the end of the consumable life.

Some parts (other than the consumables) need to be replaced by a service engineer, depending on the type of documents scanned and how often the scanner is used. Refer to Section 8.5 “Periodical Replacement Parts”.

8.4.1 List of Consumables

The following table shows the consumables used for the scanner which must be replaced periodically.

You can check the status of usage for each consumable on Operator Panel and replace the consumable before it reaches the end of the consumable life.

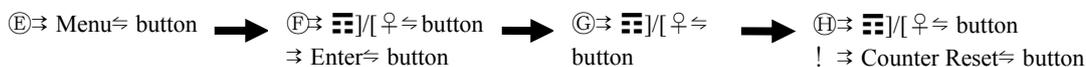
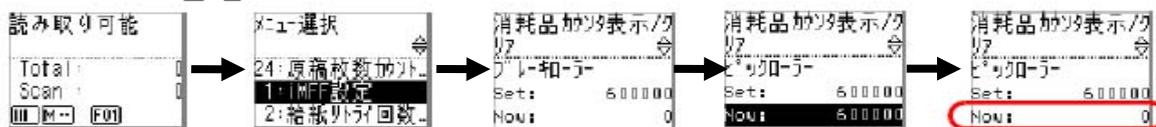
Refer to Section 9.9 for imprinter (option) consumables.

No.	Name	Part No.	Product No.	Suggested replacement cycle	Usage status check	How to replace
1	PICK ROLLER	PA03575-K011	0637911	600,000 sheets or one year		
2	SEPARATOR ROLLER	PA03575-K012	0637912	600,000 sheets or one year		
3	BRAKE ROLLER	PA03575-K013	0637913	600,000 sheets or one year		

*Note that the suggested replacement cycles are guidelines for using A4 (80 g/m² [20 lb]) wood-free or wood containing paper as these cycles vary depending on the type of papers scanned and how often the scanner is used and cleaned.

8.4.2 Checking and Resetting the Counters

- Press the power button on the front of the scanner.
 ↳ [Ready] is displayed on the LCD.
- Press the [Menu] button.
 ↳ [Main Menu] is displayed on the LCD.
- Press the [△] or [▽] button and select [Show/Reset Counters], then press [Enter] button to confirm.
 ↳ [Show/Reset Counters] is displayed on the LCD.
- Press the [△] or [▽] button and check the counter.
 For more details about setting values, refer to “Items Configurable in the Main Menu”.
 The counter will appear highlighted when the page count after replacing the consumable reaches 95% of the value configured in the Software Operation Panel.
- After replacing the consumables or cleaning, select the highlighted counter with the [△] or [▽] button, and press the [Counter Reset] button (longer than 2 seconds).
 ↳ The counter value will be reset to 0. For ink level, the value will be set to 100.



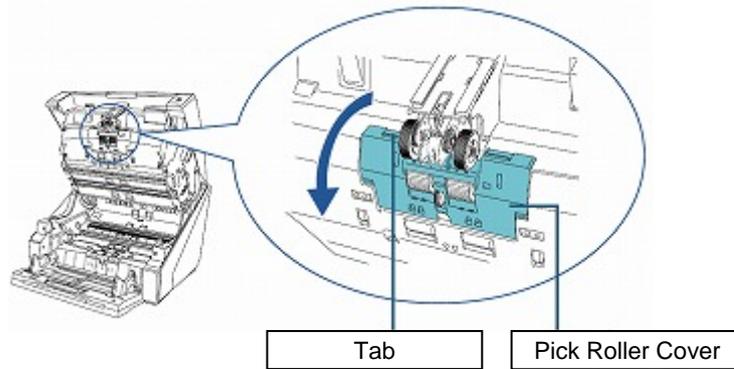
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	318 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.4.3 Replacing the Pick Roller

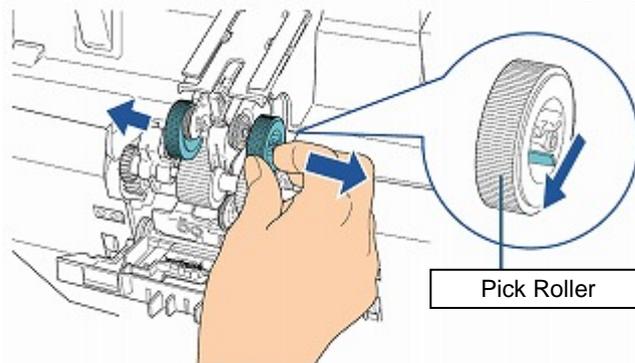
NOTICE

There are two pick rollers. Make sure to replace both two units upon replacing them.

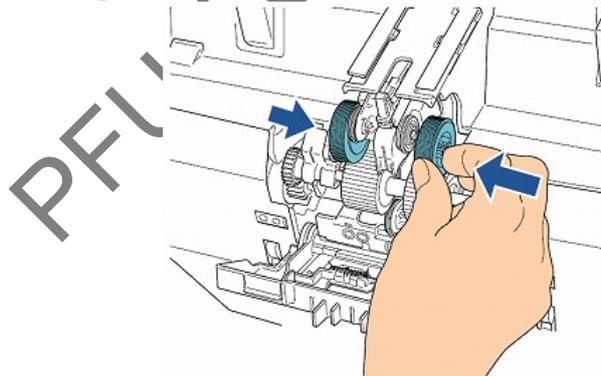
- (1) Remove all documents from the stacker.
- (2) Open the ADF. (Refer to Section 8.1.3 “Opening/Closing the ADF”.)
- (3) Open the pick roller cover. Grab the tabs on the left and right side with your fingers and pull down the cover towards you.



- (4) Pull the pick roller off the rotating shaft as you grab the tab on the pick roller (x2).



- (5) Install a new set of pick rollers (x2) in the scanner.

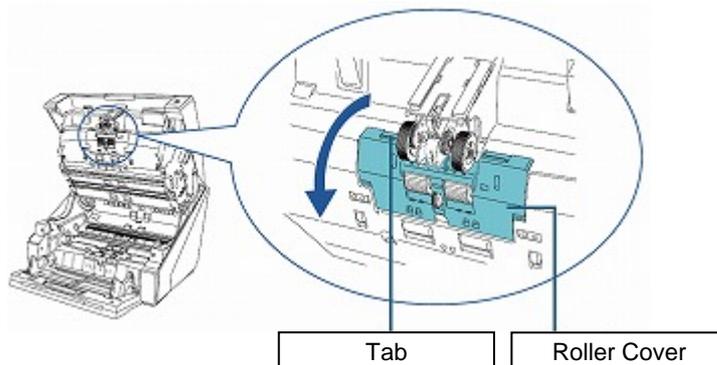


- (6) Close the roller cover and make sure that both ends of the cover are locked firmly.
- (7) Close the ADF (Refer to Section 8.1.3 “Opening/Closing the ADF”.)
- (8) Reset the pick roller counter.

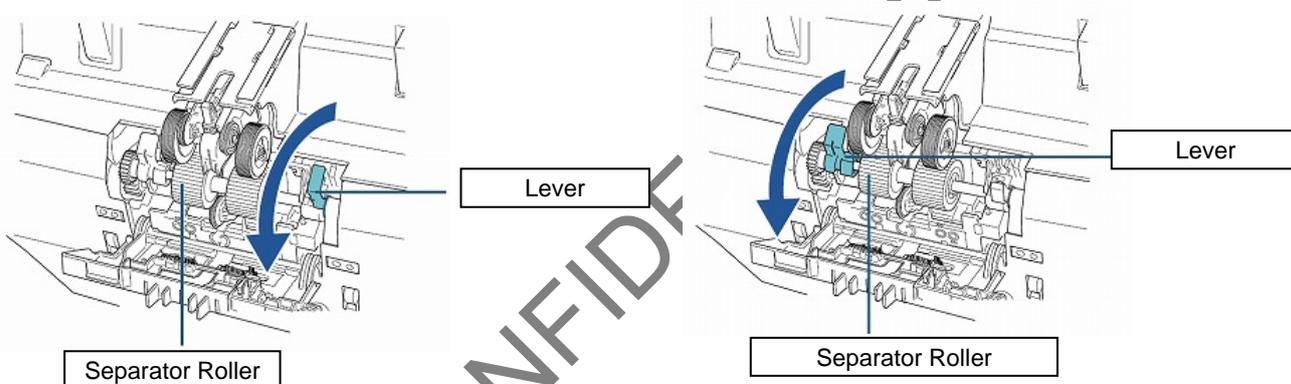
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	319 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.4.4 Replacing the Separator Roller

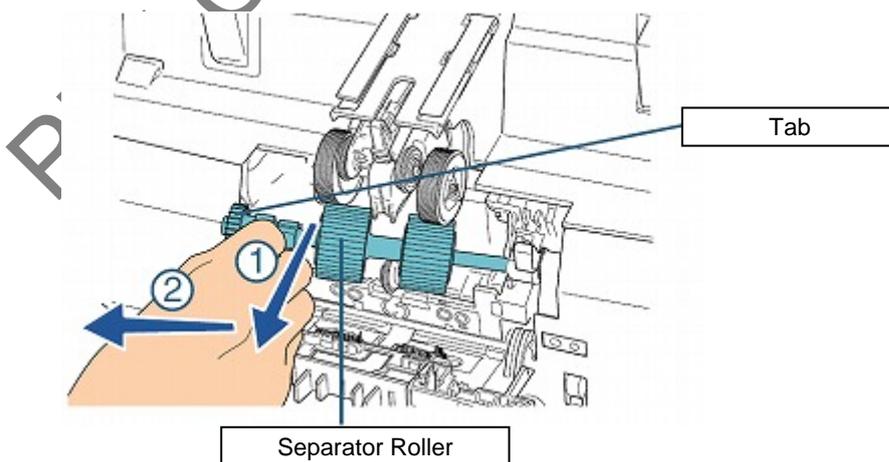
- (1) Remove all documents from the stacker.
- (2) Open the ADF. (Refer to Section 8.1.3 “Opening/Closing the ADF”.)
- (3) Open the roller cover. Grab the tabs on the left and right with your fingers and pull down the cover towards you.



- (4) Pull down the lever which is located on the right-hand side, and then left-hand side of the separator roller.

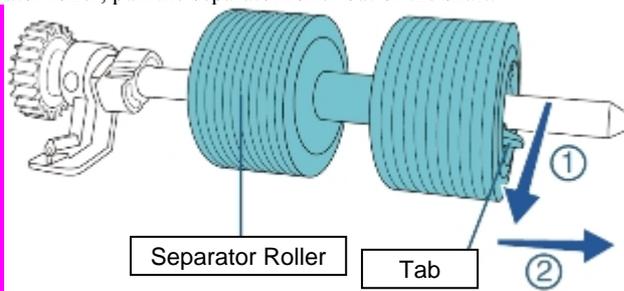


- (5) Pull the lever on the left side of the separator roller towards you and remove it with the shaft.

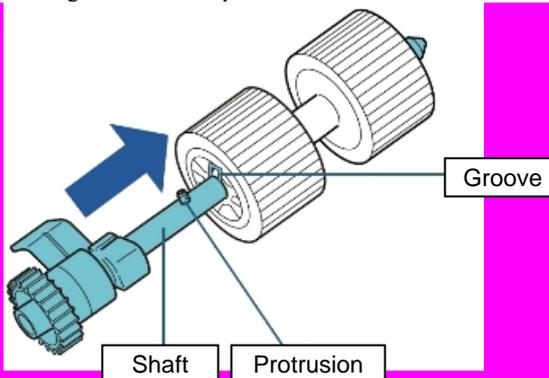


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	320 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

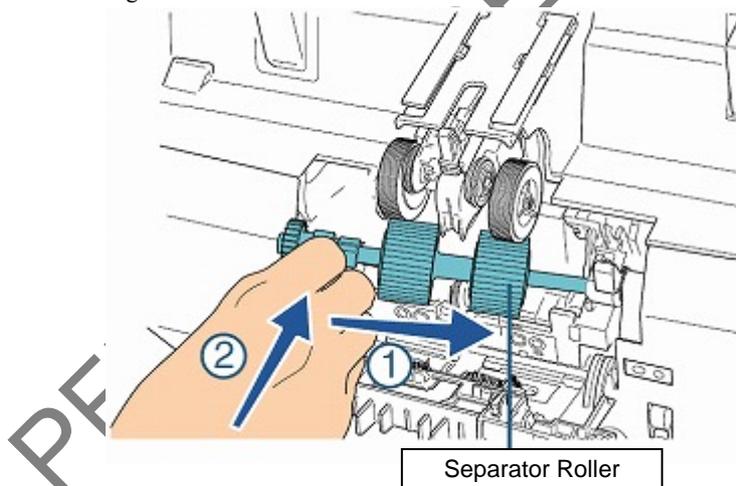
(6) Pulling the tab on the separator roller, pull the separator roller out of the shaft.



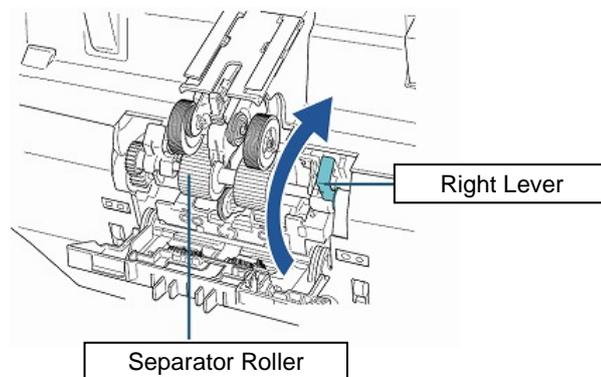
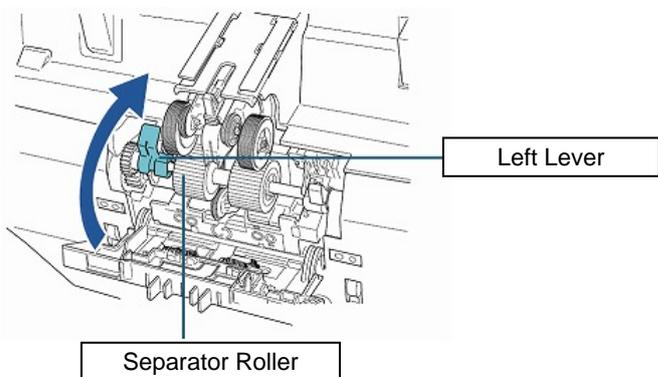
(7) Align the protrusion of the shaft with the groove of the separator roller to insert.



(8) Install the new separator roller on the scanner by inserting the right side of the shaft first, then the left side so that the tab fits in the groove.

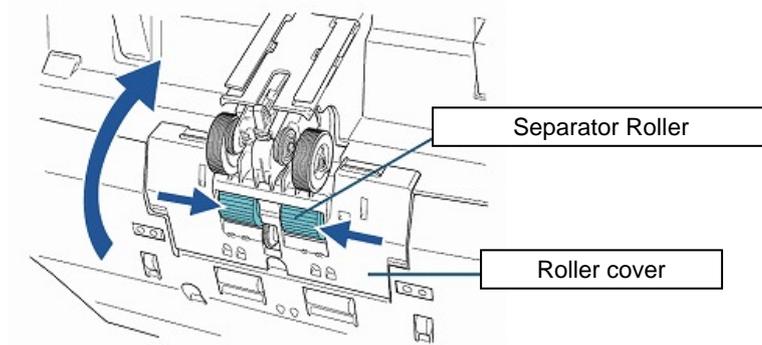


(9) Push up the levers located on the left and then right side of the separator roller.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	321 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

(10) Close the roller cover. Make sure that both ends of the cover are locked firmly.



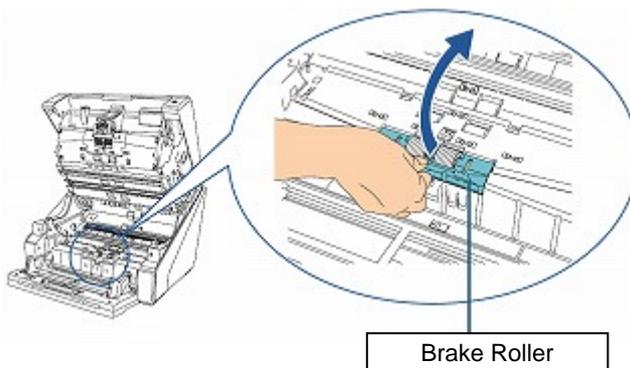
(11) Close the ADF. (Refer to Section 8.1.3 “Opening/Closing the ADF”.)
 (12) Reset the separator roller counter.

PFU CONFIDENTIAL

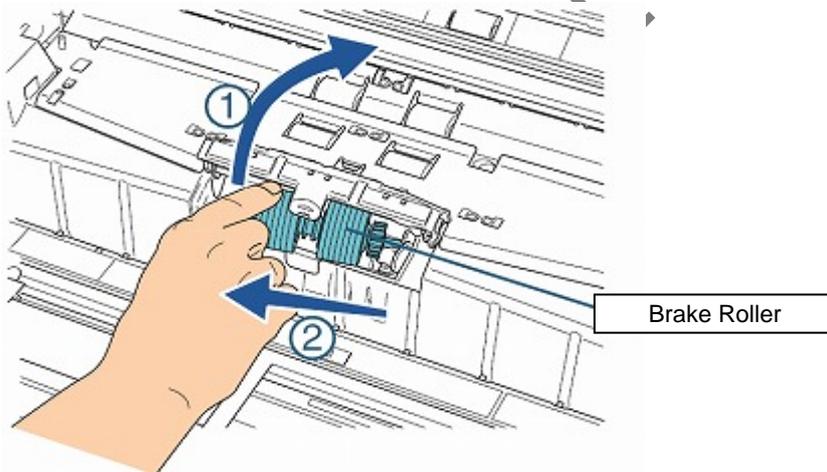
						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	322 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				I.Fujioka	

8.4.5 Replacing the Brake Roller

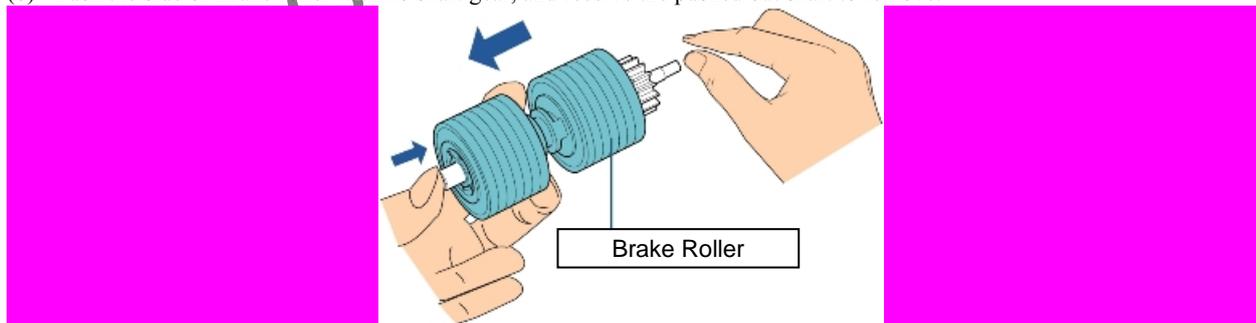
- (1) Remove all documents from the stacker.
- (2) If the hopper has been raised, bring it back down to the lower position. (Refer to Section 8.1.5 “Setting the Loading Capacity of the Hopper”.)
- (3) Open the ADF. (Refer to Section 8.1.3 “Opening/Closing the ADF”.)
- (4) Open the Brake roller cover and lift up the cover from the lower middle.



- (5) Remove the brake roller by lifting the left side of the roller first, and then pull out the shaft from left to right.

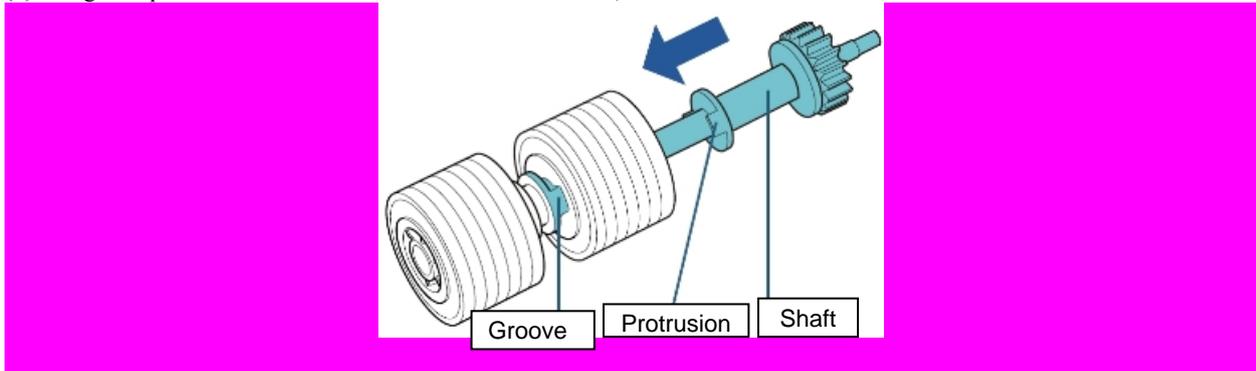


- (6) Push the side of Brake roller with no shaft gear, and receive the pushed out shaft to remove.

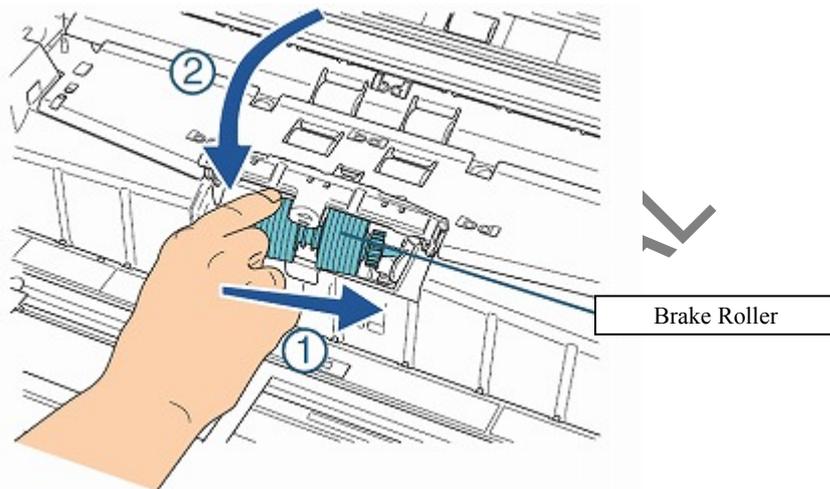


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	323 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(7) Align the protrusion of the shaft and the Brake roller shaft, and then insert the shafts.



(8) Install a new brake roller on the scanner by inserting the shaft from the right side to the left.



- (9) Close the Brake roller cover. Make sure that both ends of the cover are locked firmly.
- (10) Close the ADF. (Refer to Section 8.1.3 "Opening/Closing the ADF".)
- (11) Reset the brake roller counter.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	324 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

8.5 Periodical Replacement Parts

The scanner contains the following parts which need periodical replacement. These parts need to be replaced before they reach the end of the consumable life.

No	Part Name	Part Number	Replacement Cycle	Quantity	Parts to be Replaced	Replacement Procedure	Adjustment Procedure
1	EX-KIT-300	PA03575-E991	3,000,000 sheets	1	Assist Roller		
2	EX-KIT-500	PA03575-E992	5,000,000 sheets	1	Feed Roller 2		
					Feed Roller 3		
					Feed Roller 4		
					Feed Roller 5		
					Feed Roller 6		
					EXIT Roller 1		
					EXIT Roller 2		
					RV Roller 1		
					RV Roller 2		
					RV Roller 3		
					Feed Belt 1		
					Feed Belt 2		
					EXIT Belt 1		
					EXIT Belt 2		
Stacker Under Sheet							

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	325 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

8.6 Scanner Settings

8.6.1 Software Operation Panel

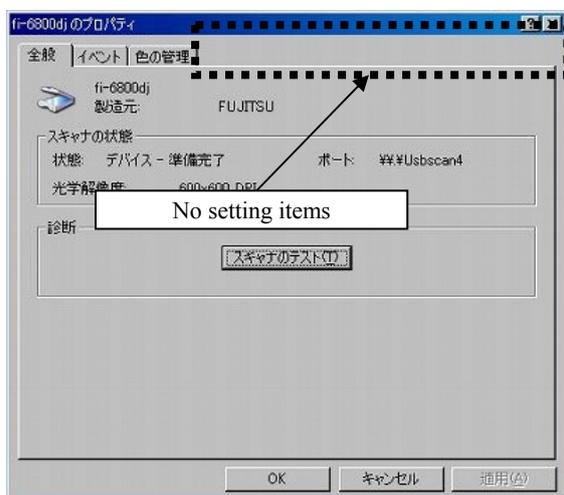
The Software Operation Panel (SOP) is an application where you can configure various settings for operating the scanner and managing the consumables. The Software Operation Panel (SOP) is installed together with the scanner drivers TWAIN and ISIS and the setting information is stored in EEPROM.

You can configure and check the following items using the Software Operation Panel.

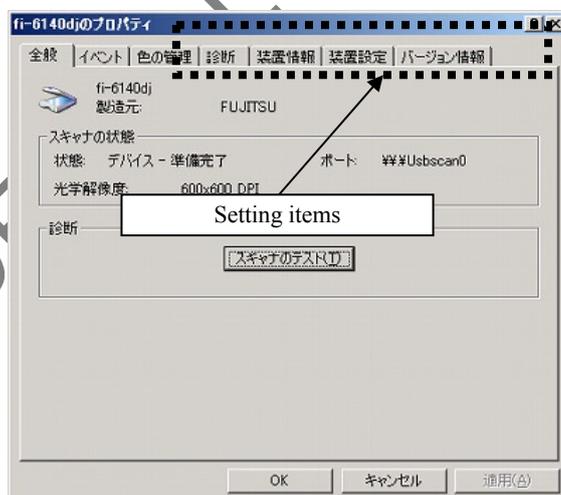
- ⚠ Diagnosis: Configure device setting. For more information, see Section “8.6.3.1”.
- ⚠ Device Info: Various kinds of information about the device. For more information, see Section “8.6.3.2”.
- ⚠ Device Setting/Device Setting 2: Configure operational settings for scanning. For more information, see Section “8.6.3.3” and “8.6.3.4”.

NOTICE

You cannot refer to [Device Info] or manage [Device Settings] on the [Properties] dialog box of [Scanners and Cameras] for this device.



fi-6800 Properties



fi-6140 Properties (for reference)

8.6.2 How to Start Up

T.B.D

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	326 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

8.6.3 Software Operation Panel Items

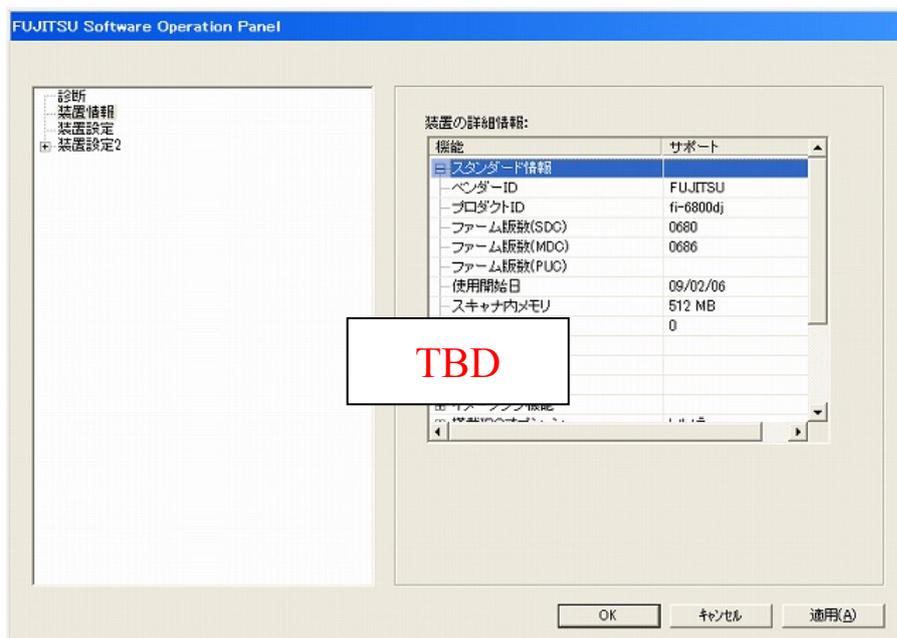
8.6.3.1 Diagnosis



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	327 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

8.6.3.2 Device Info



■Device Info. (1/2)

Function	Support	Remarks
Standard Information		
Vendor Identification	FUJITSU	
Product Identification	fi-6800dj	
Firmware Ver.[SDC]	XXXX	
Firmware Ver.[MDC]	XXXX	
Firmware Ver.[PUC]		
Initial Use	YY/MM/DD	
Scanner Memory	512MB	
Serial Number	XXXXXXX	
Scanning Area		
Basic X Resolution	600dpi	
Basic Y Resolution	600dpi	
Maximum X Resolution	600dpi	
Maximum Y Resolution	600dpi	
Minimum X Resolution	50dpi	
Minimum Y Resolution	50dpi	
Window Width	7500pixel	
Window Length	21870pixel	
Max Paper Size	A3 / DL	

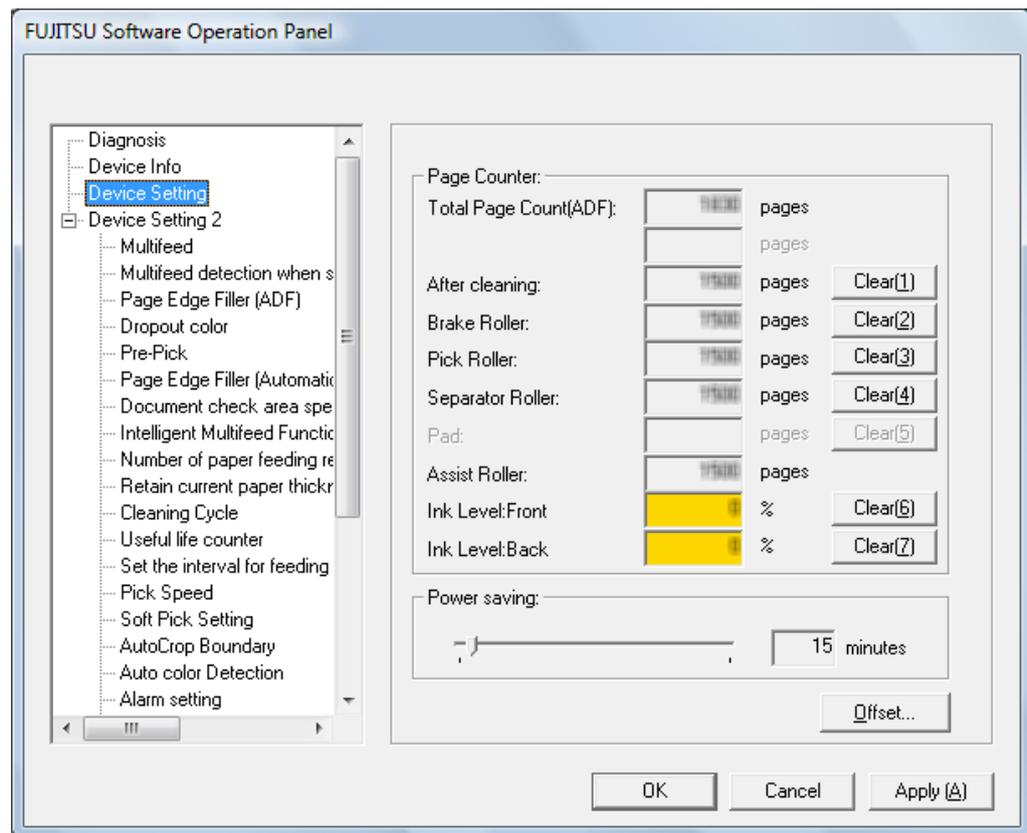
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	328 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

■ Device Info (2/2)

Function	Support	Remarks
Video Output		
Black and White Support	Yes	
Dither/Halftone	Yes	
Gray Scale Support	Yes	
RGB Color Support	Yes	
Physical Function		
Operator Panel	Yes	
Duplex	Yes	
Transparency	No	
Flatbed	No	
Automatic Document Feeder	Yes	
Buffering Capability	512MB	
Imaging		
Brightness Steps	255 steps	
Threshold Steps	255 steps	
Contrast Steps	255 steps	
Number Of Resident Dither	4	
Number Of Registrable Dither	2	
Number Of Resident Gamma Function	4	
Number Of Registrable Gamma Function	4	
White Level Follower	Yes	
Sub Window	No	
Error Diffusion	Yes	
On Board IPC		
Reserve Image Format	Yes	
Dynamic Threshold	No	
Simplified DTC	Yes	
Outline Extract	Yes	
Image Emphasis	Yes	
Automatic Separation	Yes	
Selective Edge Emphasis	Yes	
Mirror Image	No	
Compression Function		
MH	No	
MR	No	
MMR	No	
JBIG	No	
JPEG Base Line System	Yes	
JPEG Extended System	No	
JPEG Independent Function	No	
Endorser [Post]	No	
Endorser [Pre]	No	
Miscellaneous		
Sleep Mode	Yes	
White/Black Background Switchable	Yes	
Multifeed Detection	Yes	
Dropout Color	Yes	
Buffered Scan	Yes	
Blank Page Detection	No	
Page End Detection	Yes	
Long Paper Scanning	Yes	
Batch Detection	Yes	
Skew detection	Yes	
Calibration	No	
Interface		
Currently connected interface	USB2.0	

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka	PFU LIMITED
									Page 329 / 383!

8.6.3.3 Device Setting 1

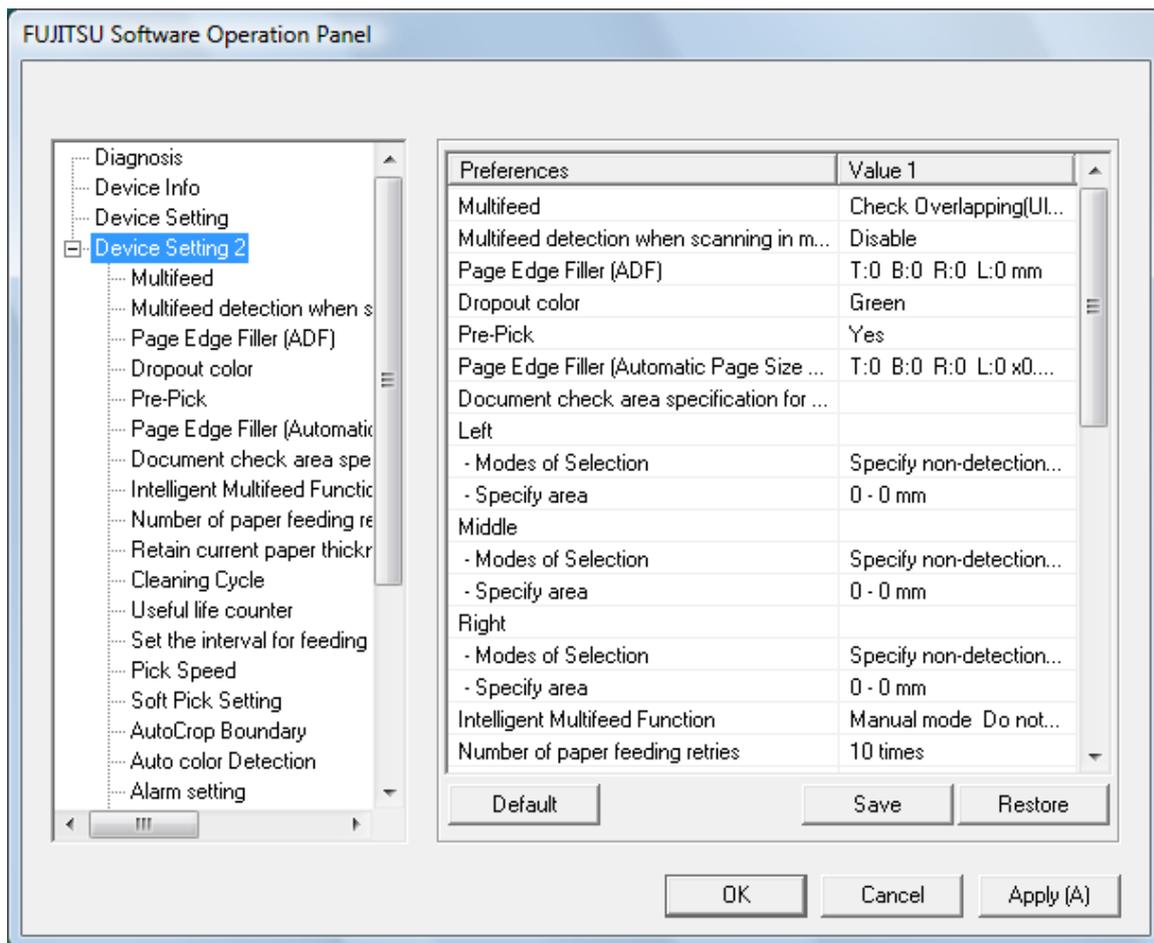


■ Device Setting

Item	Description	Setting/Value	Factory Default	Scanner	CGA board
				SCSI or USB Connector	
Page Counter (Consumables Counter)	Check the replacement cycle of the consumables and the total page count of the maintenance parts. Also use this function to reset the counters after replacing consumables and cleaning.	Total page count (ADF)/After cleaning/ Brake Roller/Pick Roller/Separator Roller/Assist Roller	0		
		Ink Level: Front/Ink Level: Back (only when imprinter is installed)	Only displayed when imprinter is installed	☒	☒
Power saving	Specify the waiting time before entering Power saving mode.	Range: 5 min. to 235 min. (in increments of 5 min.)	15 min.	☒	☒
Offset	Adjust the position to start scanning for the specified scanning side(s).	Applied to: Connected via SCSI/USB Connector 1 ADF (Front)/ADF (Back) Connected via SCSI/USB Connector 2 ADF (Back) Main/Sub: -2mm to 3 mm (in increments of 0.5mm)	Main/Sub: 0mm	☒	☒
Vertical Magnification Adjustment	Adjust the magnification level in feeding direction for the specified scanning method.	Applied to: ADF Setting range: -3.1% to 3.1% (in increments of 0.1%)	0%	☒	☒

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi				
							PFU LIMITED	Page	330 / 383!

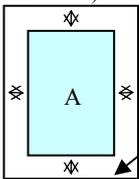
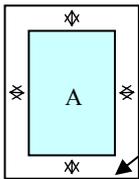
8.6.3.4 Device Setting 2



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	331 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

■ Device Setting 2

Item	Description	Setting/Value	Factory Default	Scanner	CGA Board
				SCSI or USB Connector	
Multifeed	Specify a method for multifeed detection. Detect by monitoring the overlapping, the document length, or the combination of both. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	None/Check Overlapping [Ultrasonic]/Check Length/Check Overlapping and Length (when detecting from the length difference, select from 10/15/20 mm)	Check Overlapping [Ultrasonic]	<input type="radio"/>	<input type="radio"/>
Multifeed detection when scanning in manual feed mode	Enable multifeed detection when using Manual Feed mode. It can also be configured from the operator panel.	For SCSI or USB Connector 1: Disabled/Follow driver settings For SCSI or USB Connector 2: Disabled/Follow Multifeed settings	Disable	<input type="radio"/>	<input type="radio"/>
Page Edge Filler (ADF)	Specify a width for the margin off the edge of the scanned image to fill in black or white. The margins are filled in white when the background is white and filled in black when the background is black. It can also be configured from the scanner driver's setup dialog box. Note that the priority is given to the setting with a larger value. This setting does not appear when Kofax VRS is used.	Top/Left/Right: 0 mm to 15 mm Bottom: -7 mm to 7 mm (in increments of 1 mm)  (A: Image, B: Filled area, A+B: Output)	Top/Bottom/Left/Right: 0 mm	<input type="radio"/>	—
Dropout Color	Select a color to be dropped out from the scanned image (black & white/grayscale only). It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the setting with a larger value.	Red/Green/Blue/White	Green	<input type="radio"/>	—
Pre-pick	Select [Yes] to prioritize the processing speed and [No] for otherwise. It can also be specified from the scanner driver's setup dialog box. Note that priority is given to the scanner driver setting.	Yes/No	Yes	<input type="radio"/>	—
Page Edge Filler (Automatic paper size detection)	Specify a range of area to fill in when Automatic paper size detection is selected. Specify a width for the margin off the edge of the scanned image to fill in black or white. It can also be configured from the scanner driver's setup dialog box. Note that priority is given to the setting with a larger value.	Top/Bottom/Left/Right: 0 mm to 7.5 mm (in increments of 0.5 mm)  (A: Image, B: Filled area, A+B: Output)	Top/Bottom/Left/Right: 0 mm	<input type="radio"/>	—
Document check area specification for Multifeed Detection	Selected range: Select this item to restrict the area to be run multifeed detection on.	[Selected range] check box	Not selected	<input type="radio"/>	<input type="radio"/>
	Enable/Disable (Left/Middle/Right): Specify whether to enable or disable multifeed detection for the specified area.	Enable/Disable (when [Selected range] is selected)	Disable		
	Start: Specify the start point of the check area in length (mm) from the top edge of the document.	0 mm to 510 mm (in increments of 2 mm)	0 mm		
	End: Specify the end point of the check area in length (mm) from the top edge of the document.	0 mm to 510 mm (in increments of 2 mm)	0 mm		

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	332 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

■ Device Setting 2 (Cont'd)

Item	Description	Setting/Value	Factory Default	Scanner	CGA Board
				SCSI or USB Connector	
Intelligent Multifeed Function	When there a paper of the same size attached to a designated location on the page, configure the scanner to memorize the location of the attachment and not detect the location as multifeed. Note that you first need to select [Check Overlapping (Ultrasonic)] for multifeed detection setting from the scanner driver's setup dialog box. It can also be configured from the operator panel.	Manual mode/Auto mode 1/Auto mode 2	Manual mode	<input type="radio"/>	<input type="radio"/>
	Select to clear the overlap pattern (length, location) memorized in Auto mode.	[Clear overlap pattern] check box	Not selected		
	Specify whether to enable or disable the [Scan] button when using Kofax VRS.	Enable Scan button (VRS)	Disable		
	Select to specify whether or not to memorize the multifeed pattern in the window that shows the multifeed image.	[Auto-Memorize MF Pattern (Only when multifeed image is displayed)] check box	Not selected		
	Specify whether or not to memorize the multifeed pattern at power-off.	Remember/Do not remember	Do not remember		
Number of paper feeding retries	Configure this setting to reduce the number of feeding retries upon pick errors. It can also be configured from the operator panel.	1 to 12 times	10 times	<input type="radio"/>	<input type="radio"/>
Retaining the Current Paper Thickness after Power off	Specify whether or not to keep the operator panel's paper separation force setting upon turning the power off.	Remember/Do not remember	Do not remember	<input type="radio"/>	<input type="radio"/>
Cleaning Cycle	Specify the cycle for cleaning the scanner. Changes in the value specified here and the background color of page counter (consumable counter) are as below: • The background color of the counter changes to yellow when the page count after cleaning reaches 100% or higher of the value specified in this setting. Also specify whether or not to show a message for cleaning from the scanner driver.	1,000 to 255,000 sheets (in increments of 1,000) [Show cleaning instructions] check box	10,000 sheets Not selected	<input type="radio"/>	<input type="radio"/>
Useful Life Counter	Specify the replacement cycles for the consumables. Changes in the value specified here and the background color of page counter (consumable counter) are as below: • The background color of the counter changes to light yellow when the page count after cleaning reaches 95% of the value specified here. • The background color of the counter turns to yellow when it reaches 100% or higher of the value specified here.	Each consumable 10,000 to 2,555,000 sheets (in increments of 10,000)	600,000 sheets	<input type="radio"/>	<input type="radio"/>
Setting the interval for feeding	If the bottom of the scanned image is partially missing due to a large skew when scanning in Automatic page size detection, specify a longer interval to feed the documents. Specifying a longer interval leaves more time between each document to be scanned.	Short (default) – Long (1 to 4 levels)	Short (default)	<input type="radio"/>	<input type="radio"/>

						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	333 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi				

■ Device Setting 2 (Cont'd)

Item	Description	Setting/Value	Factory Default	Scanner	CGA Board
				SCSI or USB Connector	
Pick Speed	When multifeeds or paper jams occur frequently, enable this setting to slow down the speed (pick speed) in which the documents are fed. It can also be configured from the operator panel.	Normal/Slower	Normal	<input type="radio"/>	<input type="radio"/>
Soft Pick Setting	When documents are skewed or multifeeds occur frequently, the symptom may be improved by bringing down the pick roller unit and keeping the unit at the lower position (Soft Pick Setting). It can also be configured from the operator panel.	Enable/Disable	Disable	<input type="radio"/>	<input type="radio"/>
AutoCrop Boundary	Specify whether or not to optimize (round up/down) the fractional part of the scanned image data.	Normal/Optimize	Normal	<input type="radio"/>	—
Auto Color Detection	Specify the slice level for automatic color/monochrome detection.	1 to 255 levels	5	<input type="radio"/>	—
Alarm setting	Specify whether or not to sound an alarm when an error such as multifeed or paper jam occurs. It can also be configured from the operator panel.	Disable alarm/Low volume alarm/High volume alarm	Disable alarm	<input type="radio"/>	<input type="radio"/>
Jam Detection outside of Scannable Area when Transporting Paper	Specify whether or not to judge the symptom as paper jam when a document is skewed and passes outside the supported scanning area.	Enable/Disable	Enable	<input type="radio"/>	<input type="radio"/>
Imprinter selection	Specify which imprinter to use when you have installed both Front-Side Imprinter and Back-Side Imprinter. It can also be configured from the scanner driver's setup dialog box. Note that the priority is given to the scanner driver setting.	Normal (obey Host specification)/Forcible select Front-Side Imprinter /Forcible select Back-Side Imprinter (only when the imprinter option is installed)	Normal (Obey Host specification)	<input type="radio"/>	<input type="radio"/>
Timeout for Manual Feeding	Specify the waiting time to cancel manual feeding.	When connected via SCSI/USB Connector 1: 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 300, 360, 420, 480, 540, 600, 900, 1200, 1500, 1800, 1999 (seconds) When connected via CGA, SCSI/USB Connector 2: 5, 10, 20, 30 (seconds)	10 seconds	<input type="radio"/>	<input type="radio"/>
Paper Protection	Specify whether to enable or disable the paper protection. When this setting is enabled, you can have the scanner detect a folded document or a thin paper that is not being fed by the rollers properly and stop the scan. Paper protection is disabled in Manual Feed mode. It can also be configured from the scanner driver's setup dialog box or the operator panel. Note that priority is given to the scanner driver setting unless you have prioritized the operator panel setting.	Enable/Disable	Enable	<input type="radio"/>	<input type="radio"/>
Paper Protection Sensitivity	When paper protection is enabled, you can specify the level of sensitivity to detect a folded document or a thin paper that is not being fed by the rollers properly and stop the scan. It can also be configured from the operator panel. Note that you can prioritize the operator panel setting.	Low/Normal/High	Normal	<input type="radio"/>	<input type="radio"/>

						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	334 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka			

■ Device Setting 2 (Cont'd)

Item	Description	Setting/Value	Factory Default	Scanner	CGA Board
				SCSI or USB Connector	
Staple Detection	Specify whether to enable or disable the staple detection. When you enable this setting, the scanner detects stapled documents as error documents, and prevent the stapled section of the documents from being torn apart (documents being separated). Staple detection is disabled in Manual Feed mode. It can also be configured from the scanner driver's setup dialog box or the operator panel. Note that priority is given to the scanner driver setting unless you have prioritized the operator panel setting.	Enable/Disable	Enable	<input type="radio"/>	<input type="radio"/>
Staple Detection Range/Sensitivity	When staple detection is enabled, you can specify the range (area) and the level of sensitivity in which the stapled documents are detected. It can also be configured from the operator panel. Note that you can prioritize the operator panel setting.	Range: Both top and bottom edges/Top edge/Bottom edge Sensitivity: Low/Normal/High	Range: Both top and bottom edges Sensitivity: Normal	<input type="radio"/>	<input type="radio"/>
Scan Setting for Documents with Tabs (Automatic Paper Size Detection)	For documents with index tabs or index stickers attached on the bottom of the page, you can keep the tab (index or index stickers) on the scanned image when scanning in automatic paper size detection. The scanning speed slows down slightly if [Document with tab] is selected.	When connected via SCSI or USB Connector 1: Document with tab/Document without tab/Non-rectangular document When connected via CGA SCSI or USB Connector 2: Document with tab/Document without tab	Document without tab	<input type="radio"/>	<input type="radio"/>
Scan Setting for Document with Dark Background Color	Configure this setting when the edges of a document with dark background color are falsely detected. You can specify the level of sensitivity to accurately detect the edges of documents with dark backgrounds.	Enable/Disable Density of ground color: 1 to 5 (level)	Disable	—	<input type="radio"/>
Overcrop/Undercrop	Adjust the size of the scanned document output image detected in [Automatic Paper Size Detection].	Over: 0 mm to 5 mm (in increments of 1 mm) Under: -5mm to 0 mm (in increments of 1 mm)	0mm	—	<input type="radio"/>
Maintenance and Inspection Cycle	Specify the cycle for scanner maintenance and inspection to be performed by a service engineer. When the specified period elapses since the last periodical maintenance and inspection, a message for periodical maintenance appears.	Disable/Enable Maintenance/Inspection cycle: 1 month to 12 months	Disable	<input type="radio"/>	<input type="radio"/>
Multi dropout colors	Specify a color to be dropped out from the scanned image (black & white/grayscale mode only). You can select any color(s) to drop out in [Multi dropout colors]. Note that priority is given to the scanner driver setting if any dropout color has been specified in the scanner driver's setup dialog box.	Use driver settings/Custom	Use driver settings	—	<input type="radio"/>
Overscan Control	Outputs the image in the optimum position when the image is partially missing due to a large skew.	Normal/Optimize Black frame thickness: Small (normal) to Large (1 to 3 levels)	Normal	<input type="radio"/>	—

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	335 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	I.Fujioka			

Chapter 9 fi-680PRF/fi-680PRB Imprinter

9.1 Imprinter Specification

9.1.1 Printing Specification

Refer to Section 1.1.2 “Scanner Specification”.

9.1.2 Environmental Specification

Refer to Section 1.1.3 “Environmental Specification”.

9.1.3 Appearance and Names of Component Parts

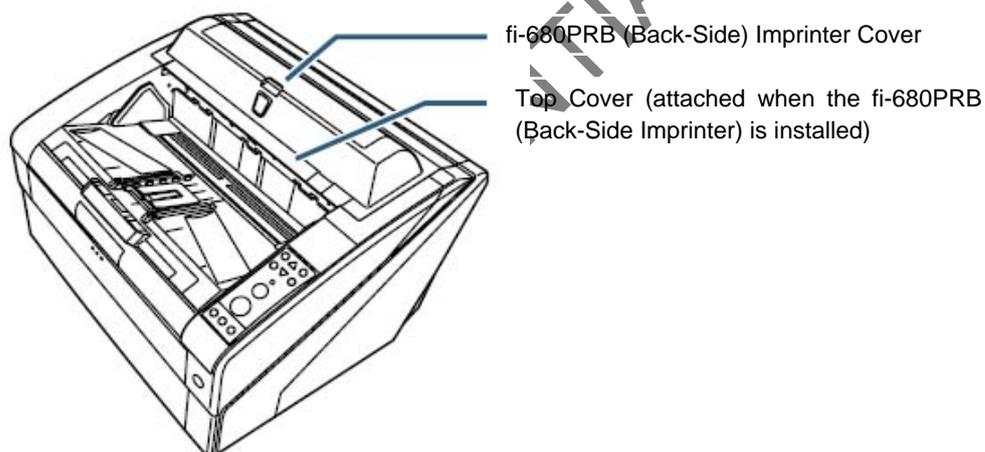
Refer to Section 1.1.4 “Appearance” for the scanner section.

<Appearance of Scanner>

With fi-680PRF (Front-Side) Imprinter installed

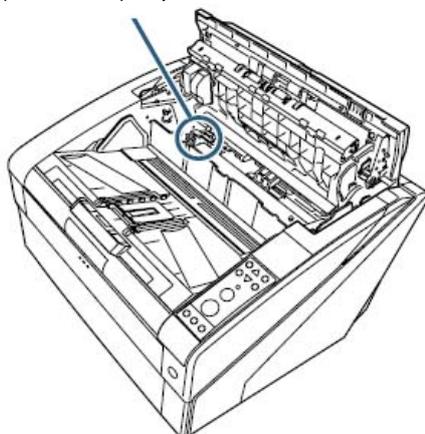
The appearance is the same as that for the scanner section because the fi-680PRF is installed internally.

With fi-680PRB (Back-Side) Imprinter installed

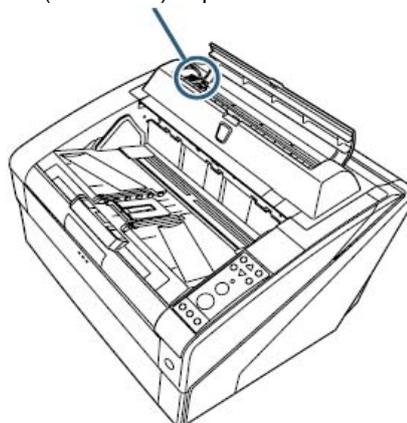


<Imprinter>

fi-680PRF (Front-Side) Imprinter



fi-680PRB (Back-Side) Imprinter



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	336 / 383
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

9.2 Operation

9.2.1 Operation

When the power is turned ON, the scanner firmware checks if the Imprinter EXT cable is connected to the scanner. If the EXT cable is connected, the firmware judges that the Imprinter is installed, and then starts controlling the print head and sensors, and driving the Feed rollers by the Feed motor.

The leading edges of documents fed from the ADF are detected by the sensors, and used for imprinting timing control. When the Print section is open, "Imprinter cover" is detected by the Switch (Section 4.3.13).

To prevent the Print section and ADF cover from opening each other, open the Print section of the Imprinter first and then open the ADF cover. When closing them, close the ADF cover first and then the Print section.

If Print cartridge replacement message appears on the monitor, replace the cartridge, and then reset the Remaining ink counter (Section 8.9.4).

TBD

9.2.2 Block Diagram

TBD

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	337 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	I.Fujioka		

9.3 Unpacking and Installation of Imprinter

9.3.1 Unpacking

Table below shows the components list for the Imprinter.

(1) fi-680PRF (Front-Side) Imprinter

No.	Description	Part No.	Quantity	Remarks
1	Control PCA	PA03575-F740	1	
2	Front-Side Imprinter Junction PCA	PA03575-F720	1	
3	Holder Unit	PA03575-F700	1	
4	IM Holder Rail	PA03575-Y706	1	
5	IM Holder Shaft	PA03575-Y705	1	
6	Shaft Stopper	PA03575-Y322	1	
7	IMP-F Cable	PA70002-5394	1	
8	Felt Set	PA03575-F035	1	
9	Operator's Guide	P3PC-2512-XXXX	1	
10	Installation Guide	P2PC2642-XXXX	1	
11	Print Cartridge	CA00050-0262	1	
12	IMP-F Label	PA93008-Y858	1	
13	Screw	U30L-0010-0030#M3	1	
14	Screw	RU6SW2N3-08121	5	
15	Tapping Screw	PA83952-2638	4	

(2) fi-680PRB (Back-Side) Imprinter

No.	Description	Part No.	Quantity	Remarks
1	Control PCA	PA03575-F740	1	
2	Back-Side Imprinter Junction PCA	PA03575-F730	1	
3	Holder Unit	PA03575-F700	1	
4	IM Holder Rail	PA03575-Y706	1	
5	IM Holder Shaft	PA03575-Y705	1	
6	Shaft Stopper	PA03575-Y322	1	
7	IMP-B Cable	PA70002-5395	1	
8	Clamp	PA83952-1202	1	
9	Clamp	PA83951-2901	2	
10	Imprinter Top Cover	PA03575-F666	1	
11	Felt	PA03575-Y175	1	
12	Operator's Guide	P3PC-2512-XXXX	1	
13	Installation Guide	P3PC-2700-XXXX	1	
14	Print Cartridge	CA00050-0262	1	
15	Screw	U30L-0010-0030#M3	1	
16	Screw	RU6SW2N3-08121	4	
17	Tapping Screw	PA83952-2638	3	
18	Ferrite Core	PA53003-0339	1	

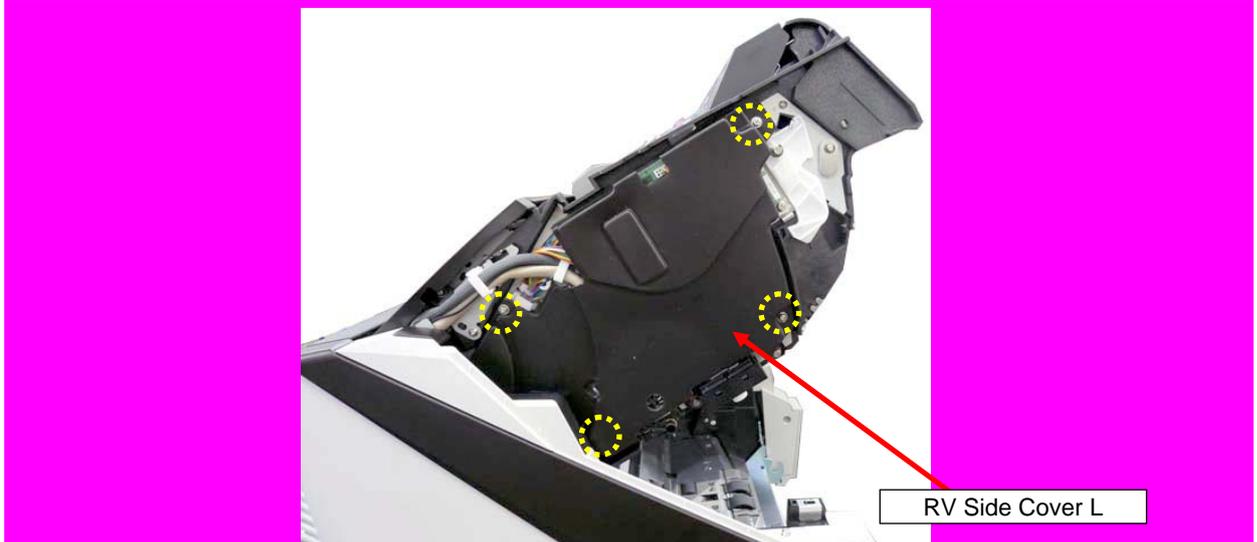
						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	338 / 383
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka			

9.3.2 Installing the Imprinter

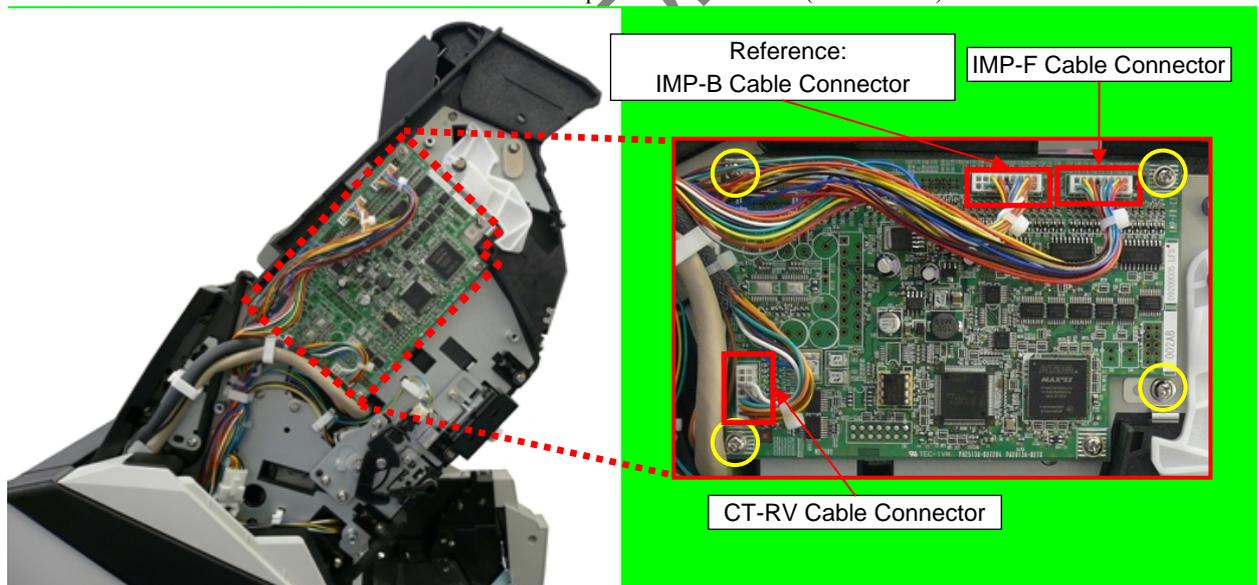
9.3.2.1 fi-680PRF (Front-Side) Imprinter

<Installation Procedure>

- (1) Turn off the scanner (Refer to Section 8.1.1 “Turning the Power ON/OFF”) and remove the power cable.
- (2) Remove the Hopper Unit. (Refer to Section 6.7.1)
- (3) Remove the RV Cover L. (Refer to Section 6.8.3.)
- (4) Remove the FX Cover L. (Refer to Section 6.8.1.)
- (5) Remove four screws (circled) securing the RV Side Cover L, and then remove the RV Side Cover L.

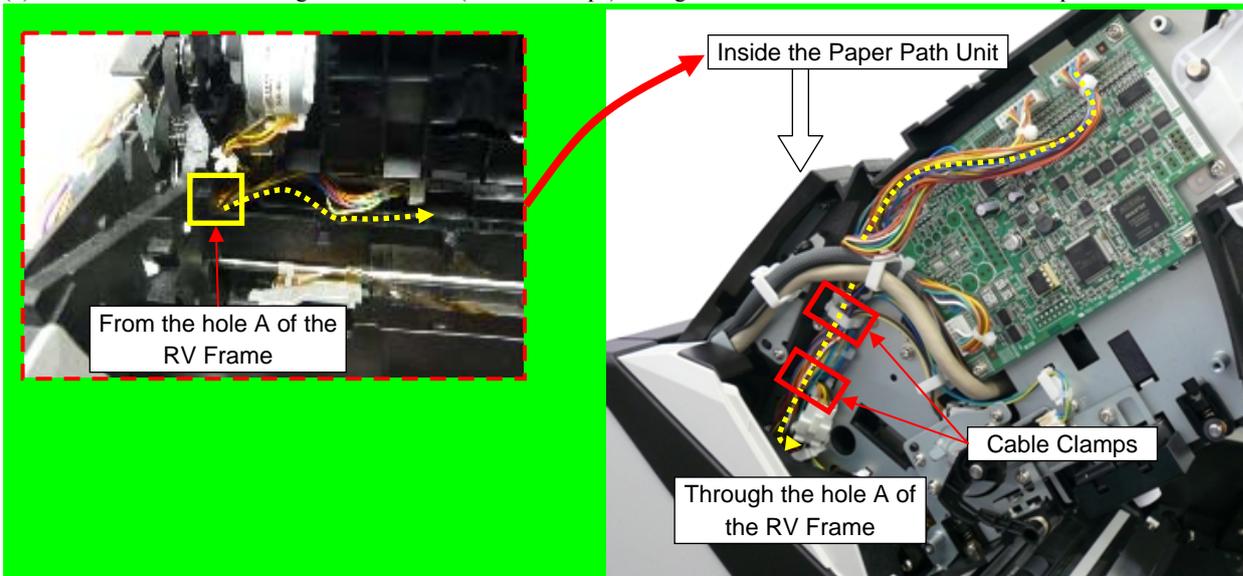


- (6) Attach the Control PCA board to the space framed by the dotted line with four screws (circled), and then connect the CT-RV cable located on the side of the scanner and the provided IMP-F cable (2 connectors).



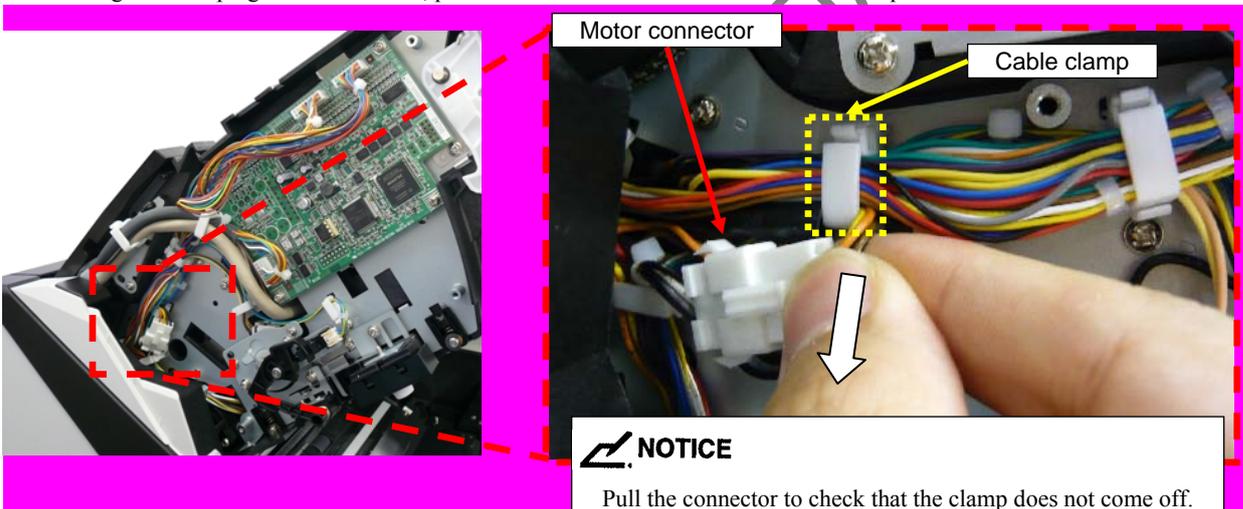
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	339 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

(7) Wire the IMP-F cable along the dotted line (2 cable clamps) through the hole of the RV Frame into the Paper Path Unit.



NOTICE

After wiring and clamping the IMP-F cable, pull the motor connector to check that the clamp does not come off.

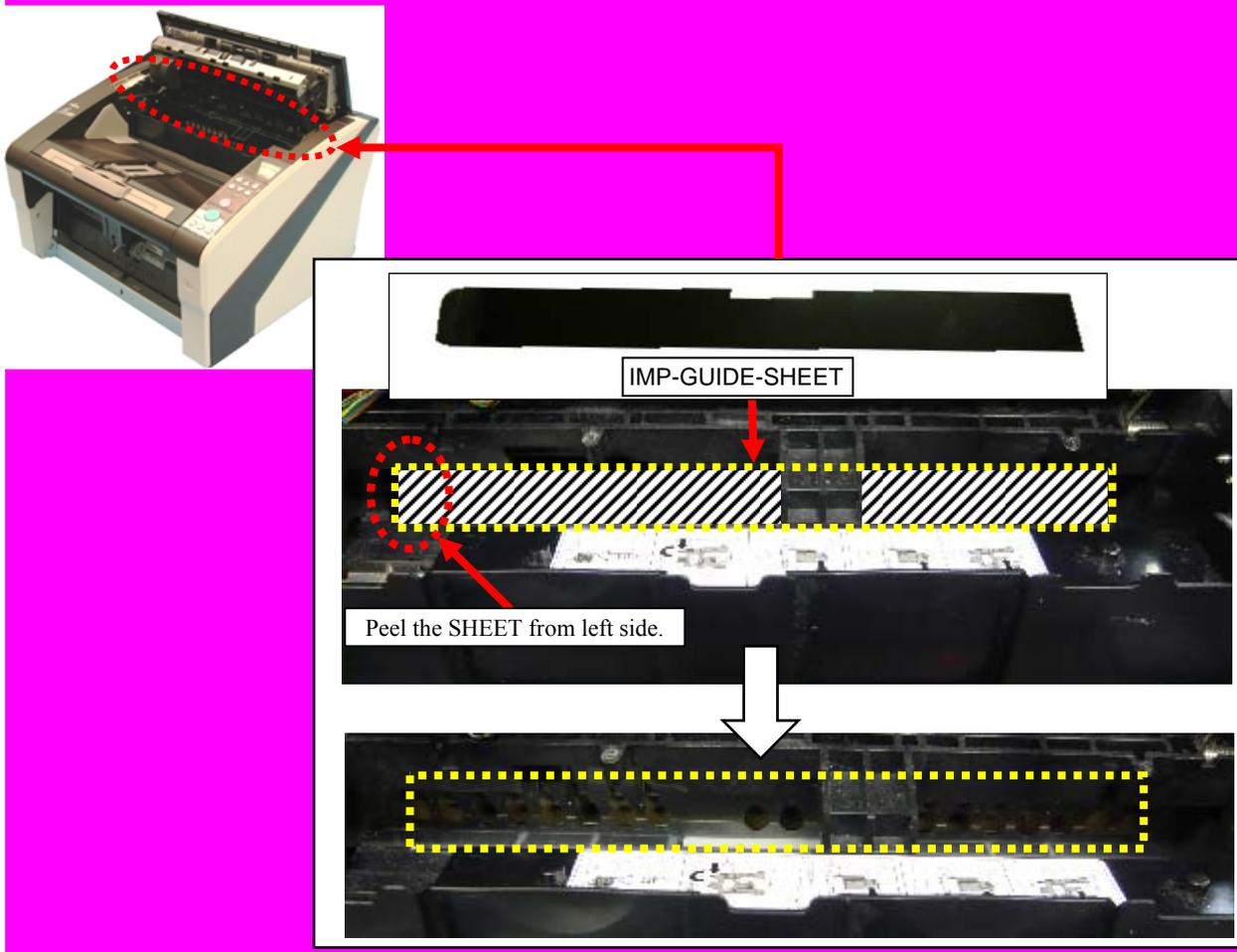


NOTICE

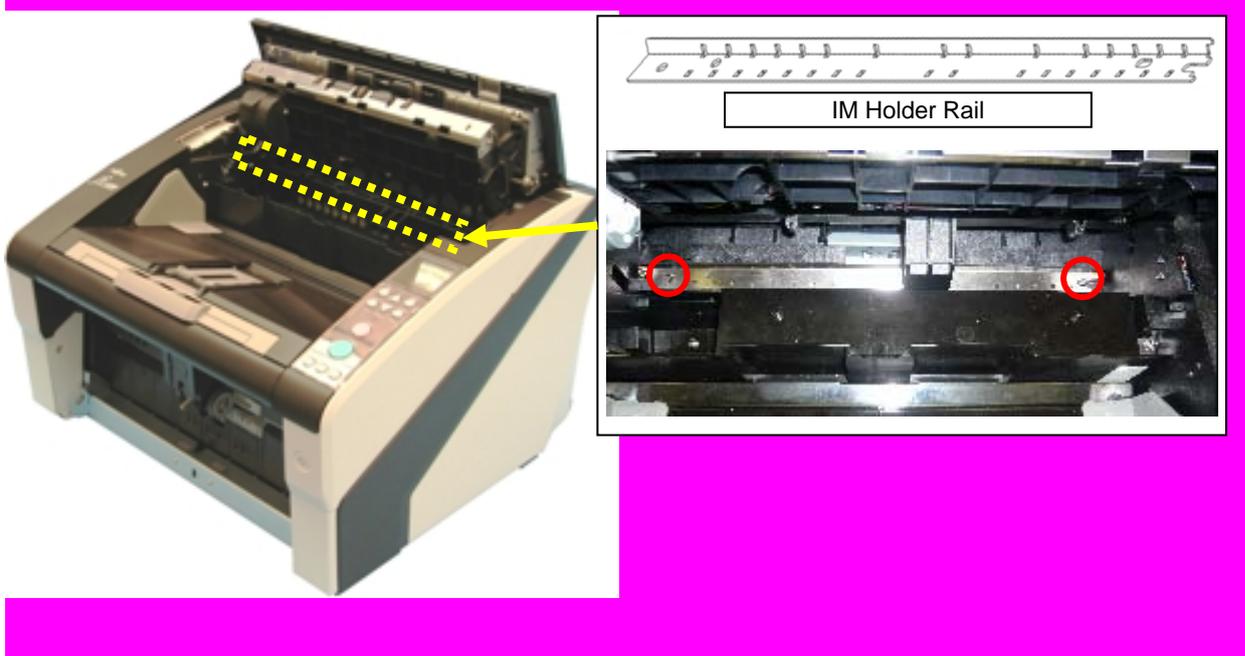
Pull the connector to check that the clamp does not come off.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	340 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(8) Remove the IMP-GUIDE-SHEET attached inside of the Feeder Unit

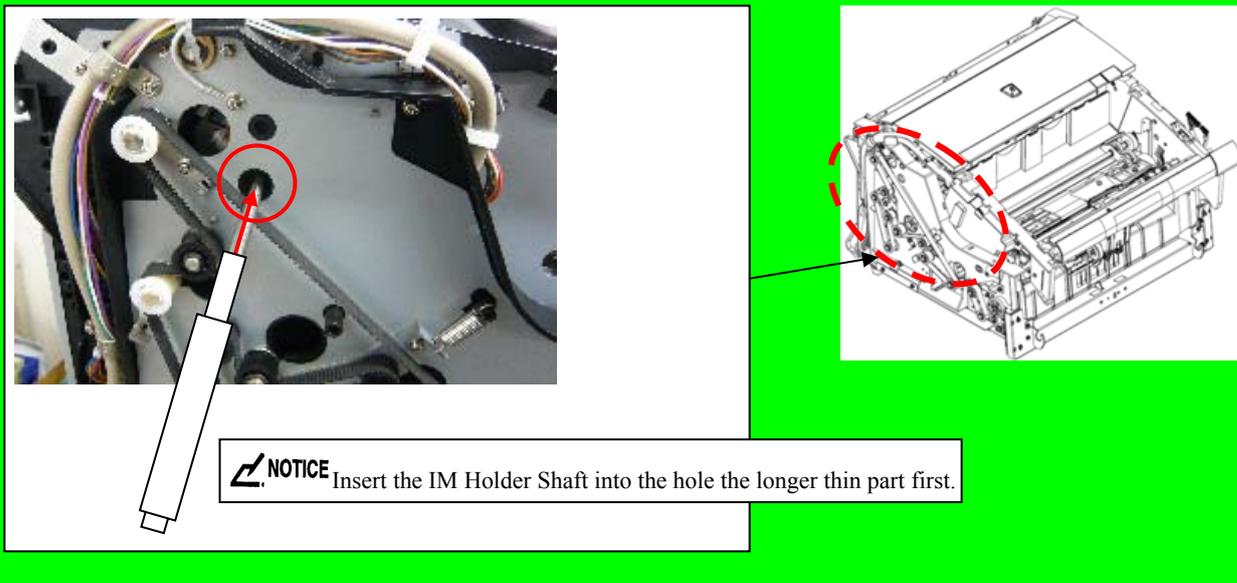


(9) Attach the IM Holder Rail to the inside of the Feeder Unit with two tapping screws (circled).

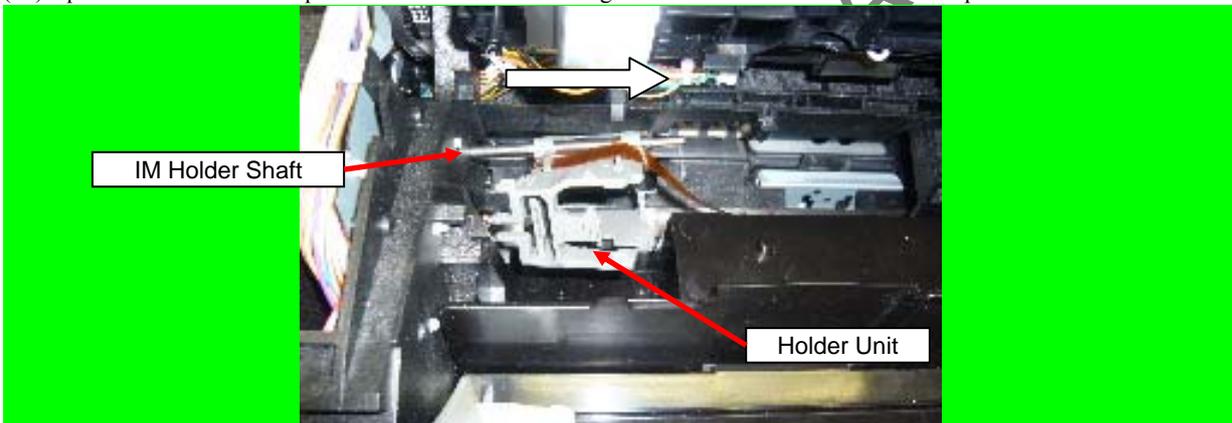


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	341 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

(10) With the ADF closed, insert the IM Holder Shaft into the hole on the left side of the device.



(11) Open the Feeder Unit and pass the IM Holder shaft through the Holder Unit hole shown in the picture below.



PFU CO.

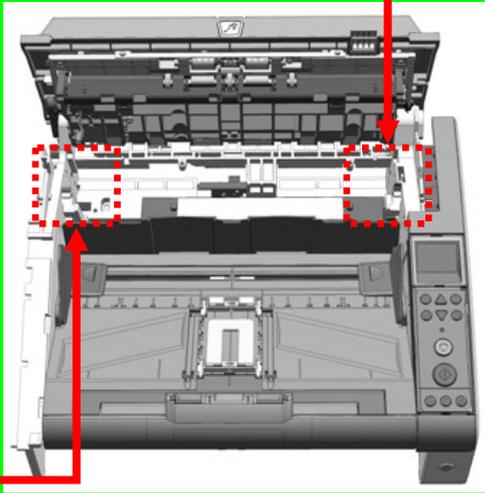
									Name	fi-6800/fi-668PR Maintenance Manual	
									Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				PFU LIMITED		Page
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	I.Fujioka			342 / 383!

(12) Insert the Holder Shaft into the RV Frame hole following in the procedure below:

- Ⓓ Insert into the smaller hole located at the rear right of the RV Frame.
- Ⓔ Insert into the smaller hole located at the rear left of the RV Frame.
- Ⓕ Check that the tab on the Holder Unit and the edge of the IM Holder Rail are aligned.

Ⓓ Insert into the smaller hole located at the rear right of the RV Frame.





Ⓔ Insert into the smaller hole located at the rear left of the RV Frame.



Ⓕ Check that the tab on the Holder Unit and the edge of the IM Holder Rail are aligned.

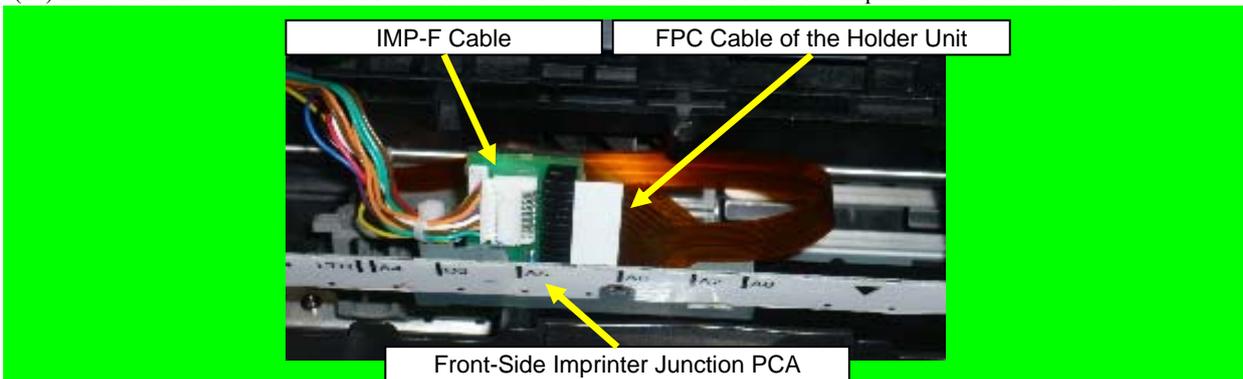


(13) Fix the IM Holder Shaft with the Shaft Stopper.

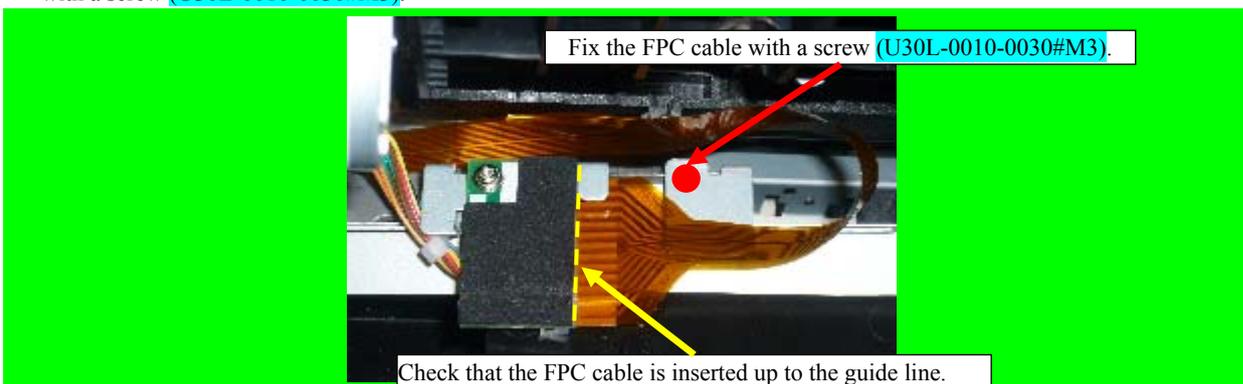


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	343 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	I.Fujioka		

(14) Insert the IMP-F cable and the FPC cable of the Holder Unit into the Front-Side Imprinter Junction PCA board.



(15) Check that the FPC Cable is inserted up to the guide line and fix the transparency film part of the FPC cable into place with a screw (U30L-0010-0030#M3).

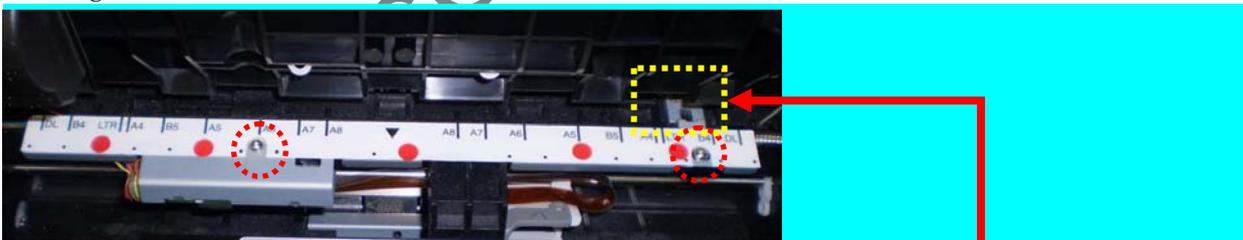


(16) Fix the Front-Side Imprinter Junction PCA unit with two tapping screws (circled).

NOTICE

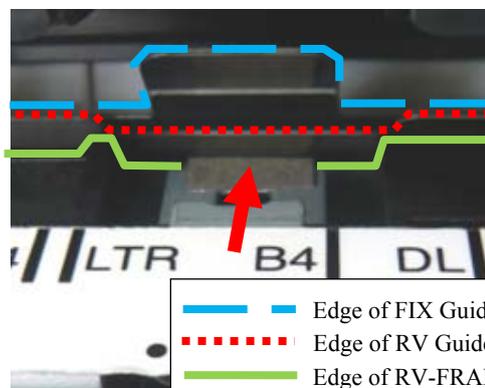
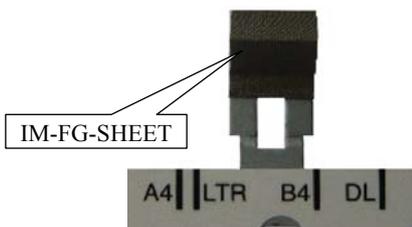
Insert the IM-FG-SHEET between the [RV Guide 2] and [RV-FRAME] and fix it when installing the Front-Side Imprinter Junction PCA.

Check that the IM-FG-SHEET has been installed correctly by referring to <<Checking method for IM-FG-SHEET mounting location>>.



NOTICE

Insert IM-FG-SHEET between [RV Guide 2] and [RV-FRAME] and fix it.

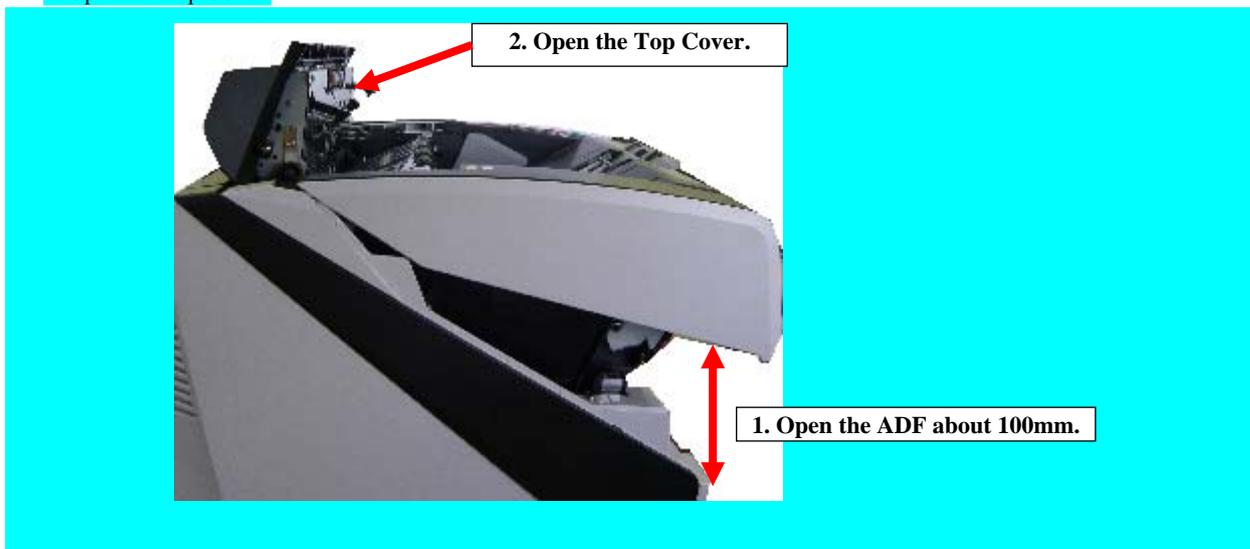


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	344 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

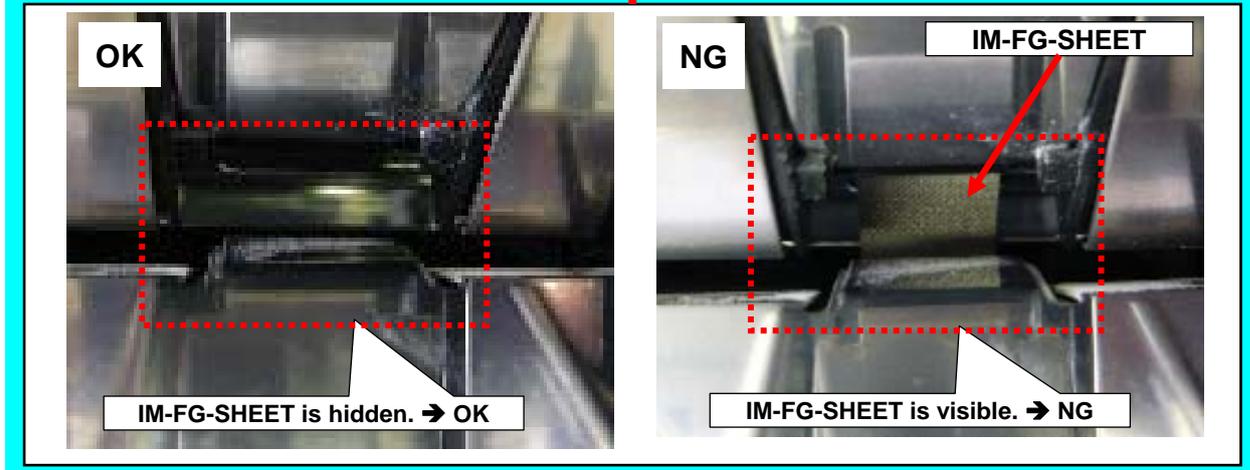
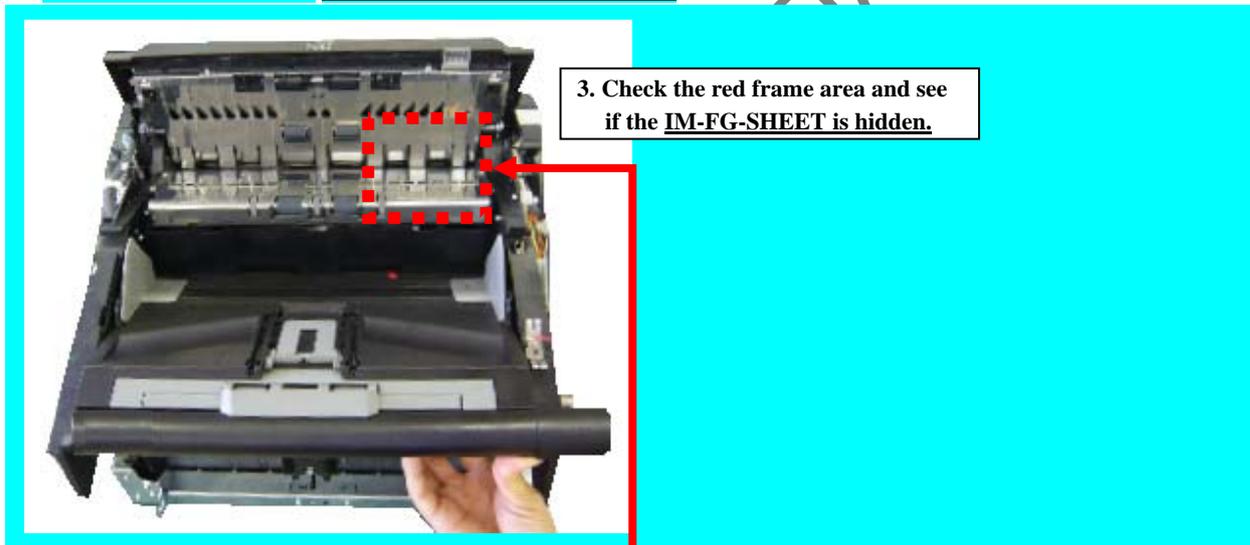
<<Checking method for IM-FG-SHEET mounting location>>

Be sure to check whether the IM-FG-SHEET is installed onto the proper position.

- 1. Open the ADF about 100mm.
- 2. Open the Top Cover.



- 3. Check the red frame area. The IM-FG-SHEET must be hidden.

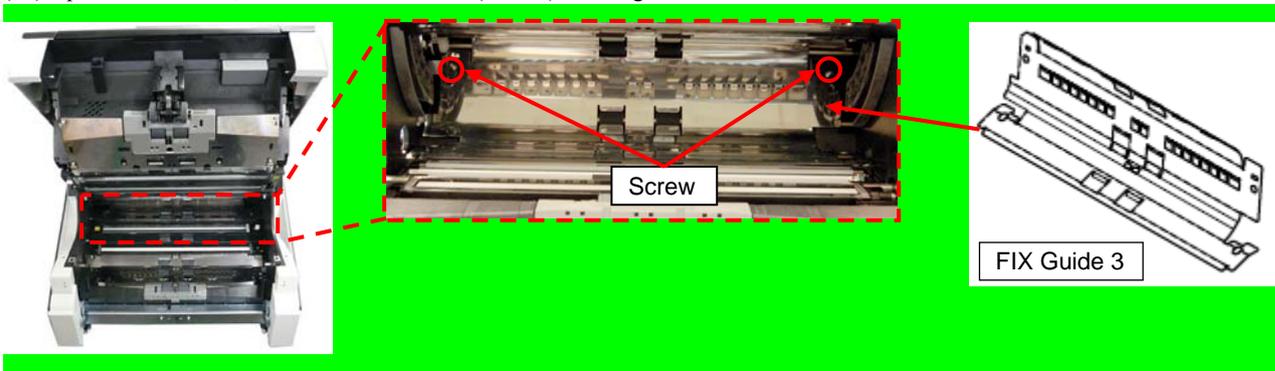


									Name	fi-6800/fi-668PR Maintenance Manual		
									Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION			PFU LIMITED		Page	345 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.					

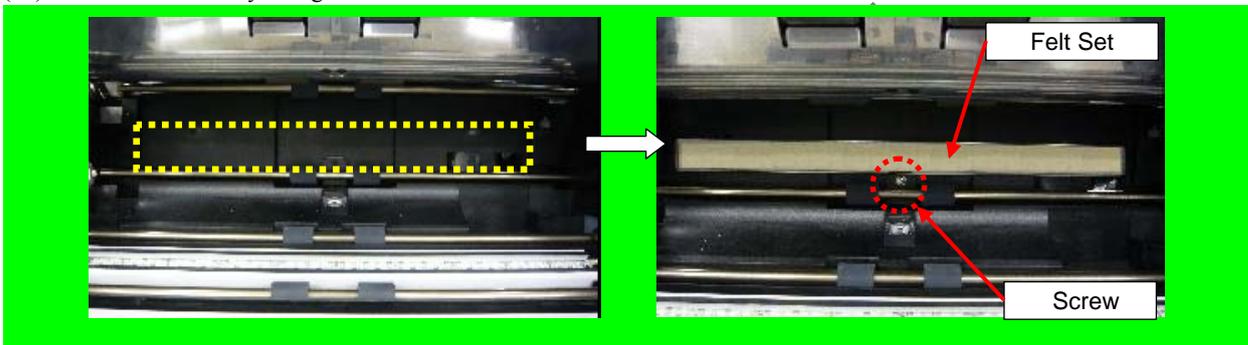
(17) Attach all the covers back by reversing the removal procedure.

- RV Side Cover-L
- RV Cover-L (Refer to Section 6.8.3)
- FX Cover-L (Refer to 6.8.1)

(18) Open the ADF unit, remove the two screws (circled) securing the FIX Guide 3 and take out the FIX Guide 3.



(19) Attach the Felt Set by fixing it with a screw.



(20) Attach the FIX Guide 3 back by reversing the removal procedure.

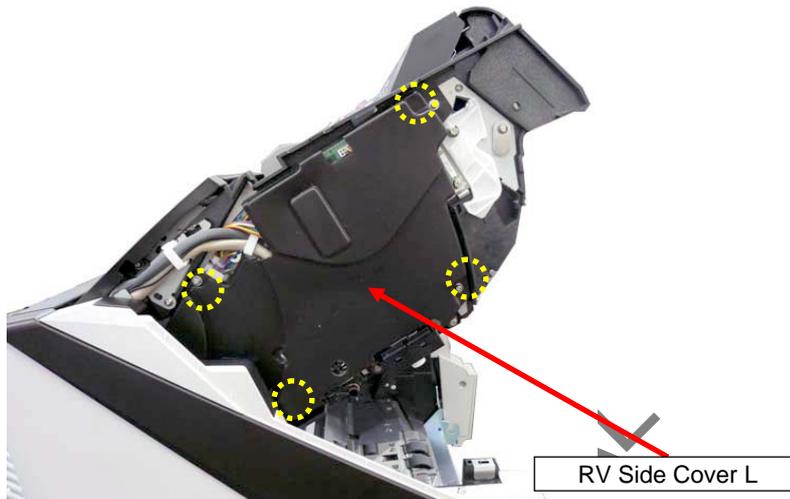
PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	346 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

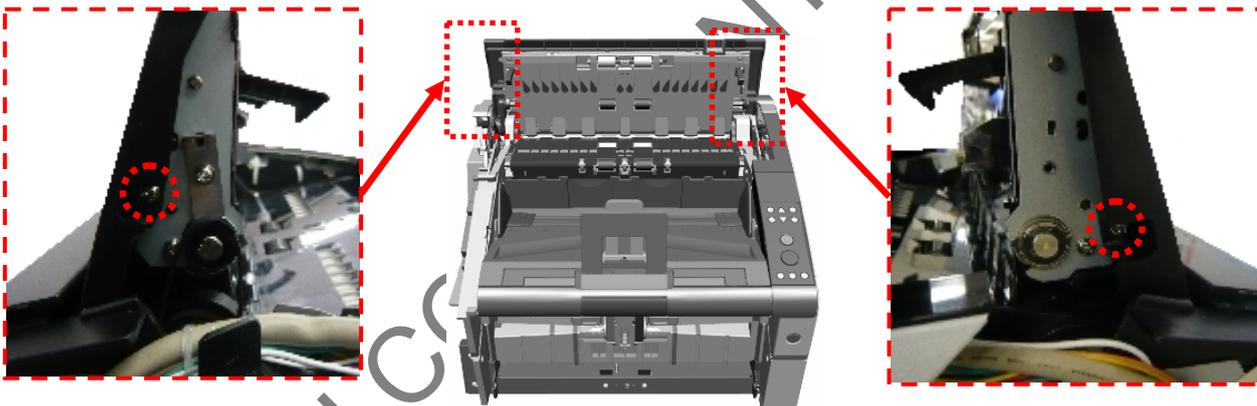
9.3.2.2 fi-680PRB (Back-Side) Imprinter

<Installation Procedure>

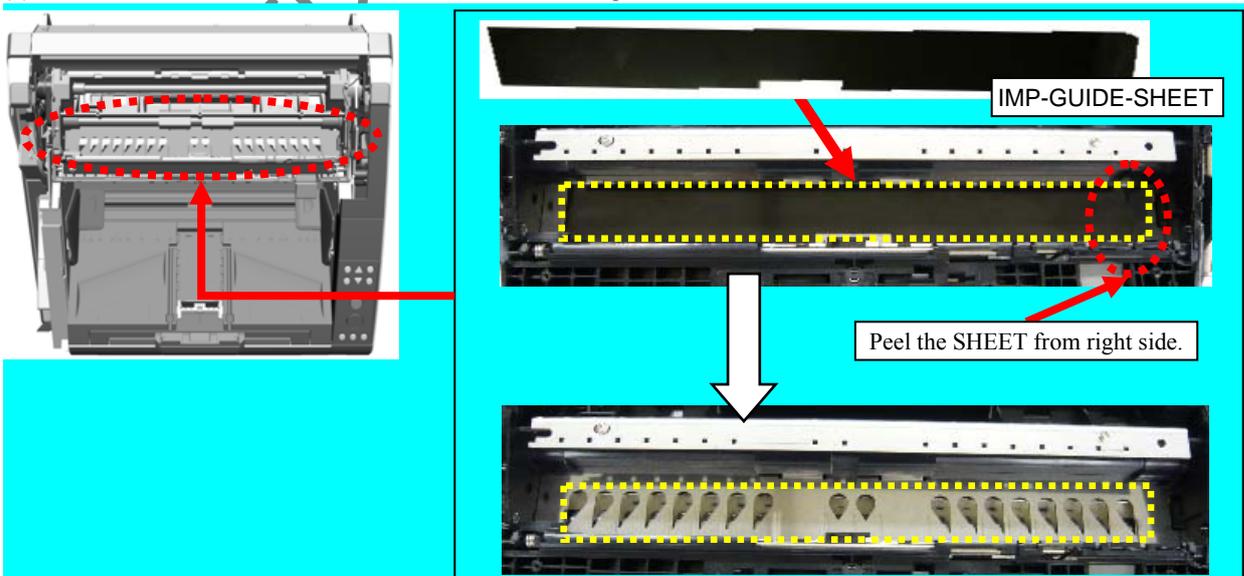
- (1) Turn off the scanner (Refer to Section 8.1.1 “Turning the Power ON/OFF”) and remove the power cable.
- (2) Remove the Hopper Unit. (Refer to Section 6.7.1)
- (3) Remove the RV Cover-L. (Refer to Section 6.8.3.)
- (4) Remove the four screws securing the RV Side Cover-L, and then remove the RV Side Cover-L.



- (5) Remove the top cover by taking out the right and left screws (2 screws) fixing the top cover into place.



- (6) Remove the IMP-GUIDE-SHEET attached inside of the Top Cover.

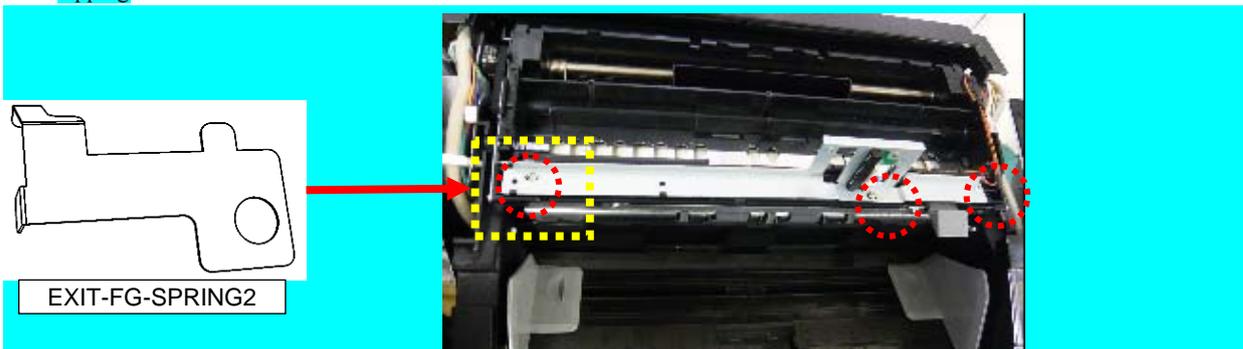


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	347 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

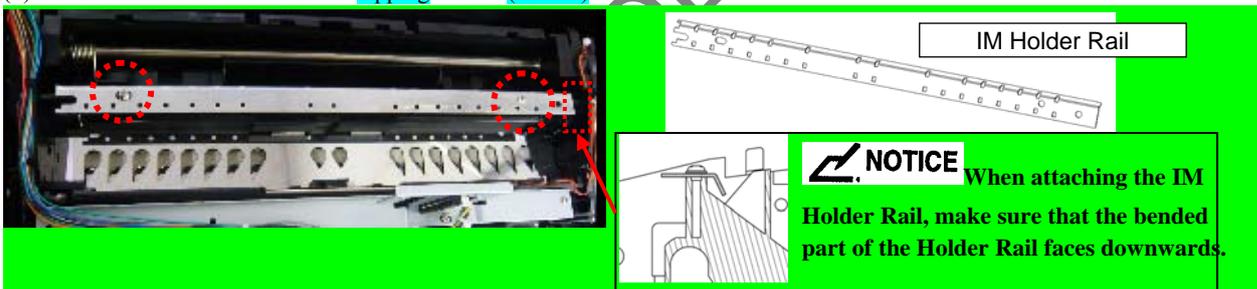
(7) Remove two tapping screws securing the stiffening sheet metal, and then remove the stiffening sheet metal and EXIT-FG-SPRING2.



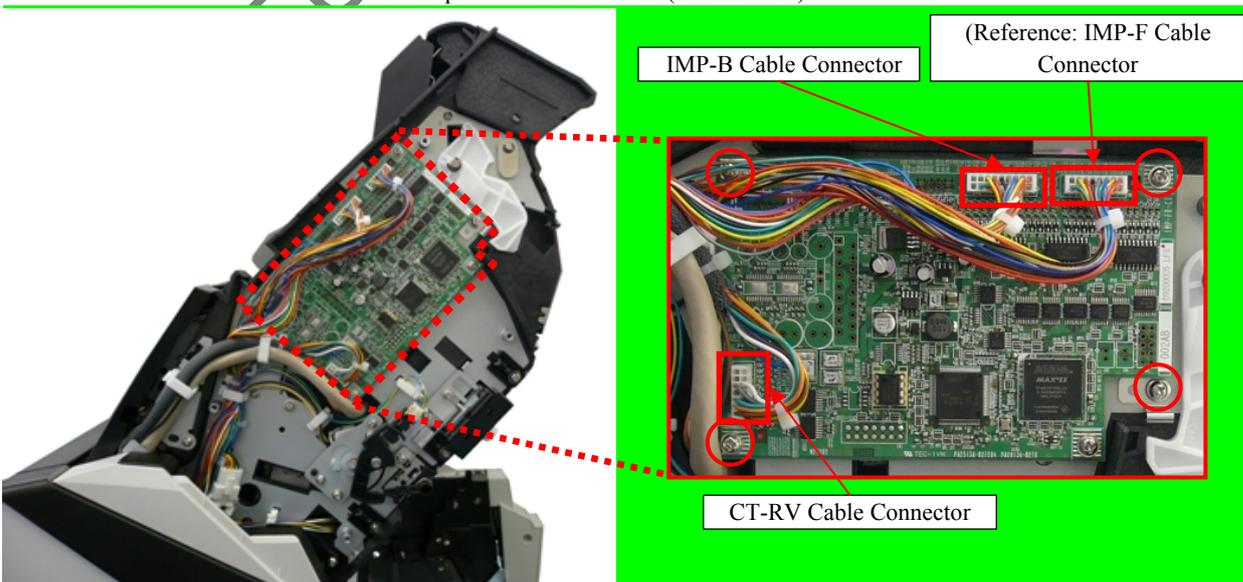
(8) Attach the Back-Side Imprinter Junction PCA and EXIT-FG-SPRING2 to where the stiffening sheet metal was fixed with three tapping screws.



(9) Fix the IM Holder Rail with two tapping screws (circled).



(10) Attach the Control PCA board to the space framed by the dotted line with four screws, and then connect the CT-RV cable located on the side of the scanner and the provided IMP-B cable (2 connectors).

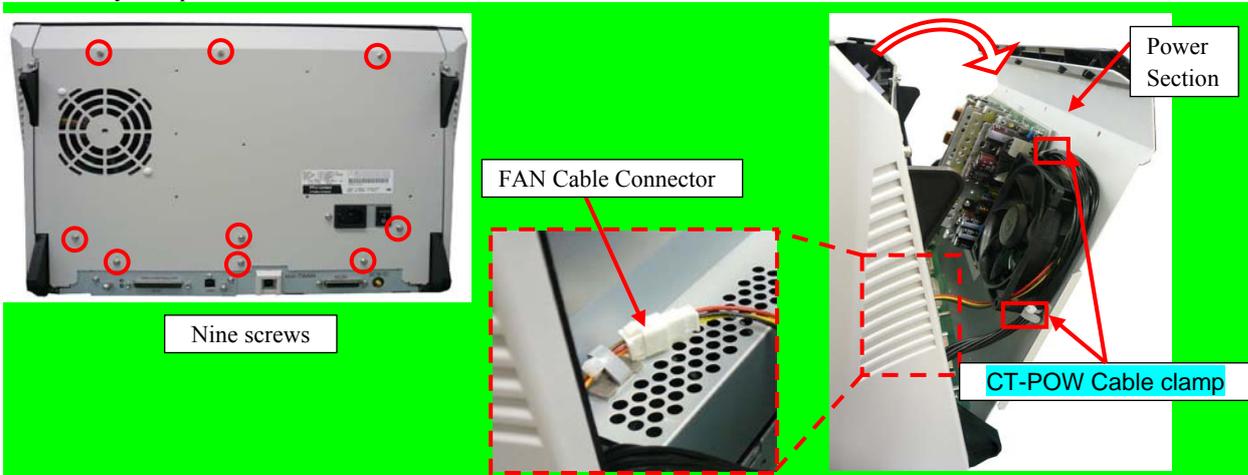


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	348 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi	APPR.	IFujioka		

(11) Open the power section by removing the nine screws fixing it into place, and remove the FAN Cable Connector and the two CT-POW cable clamps of the power connector.

NOTICE

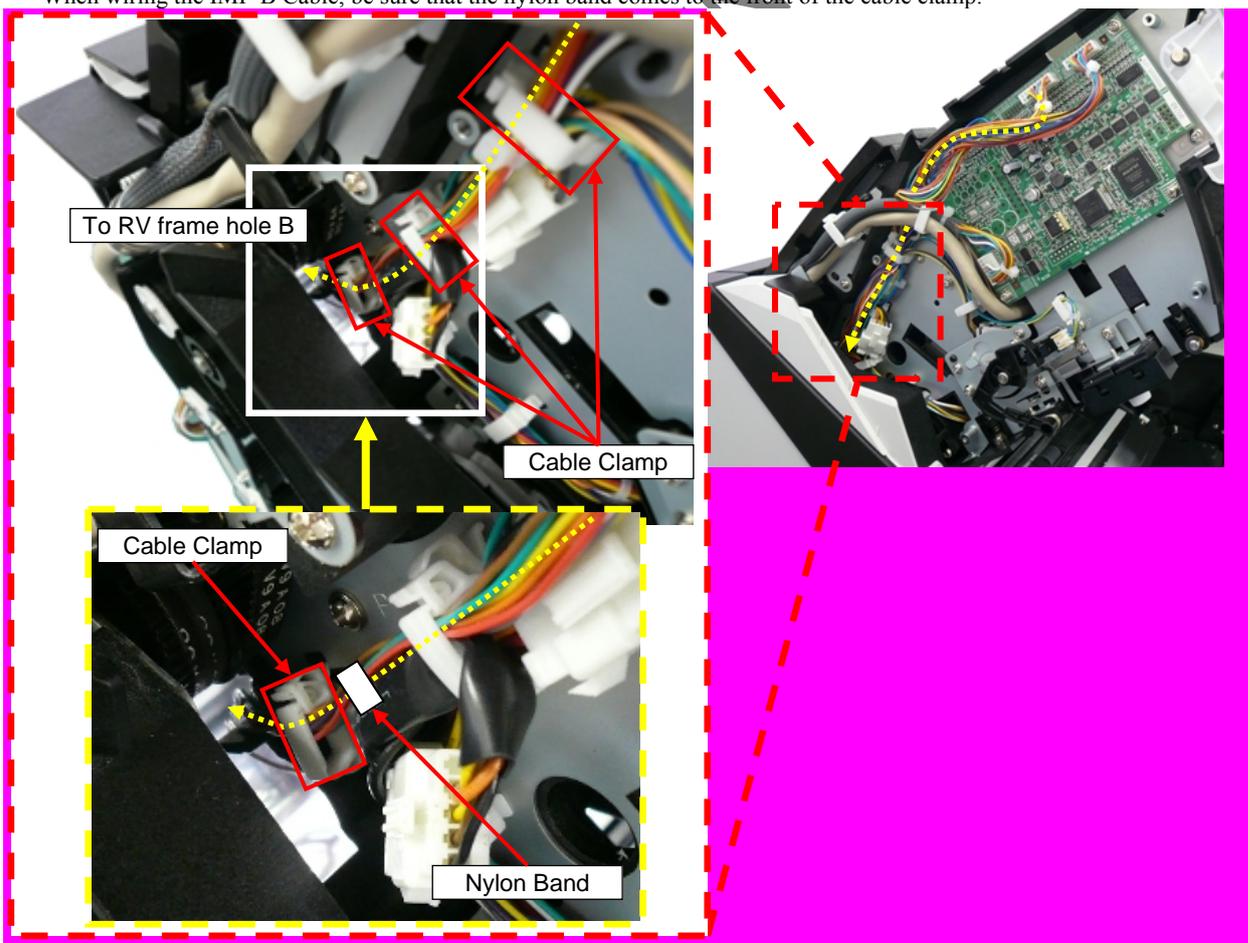
Be careful when opening and closing the power section as the excess cable length of the FAN Cable and the CT-POW cable is shortened by clamps.



(12) Wire the IMP-B Cable along the dotted line (3 cable clamps) through the B hole of the RV Frame and pull it out on the back side of the scanner.

NOTICE

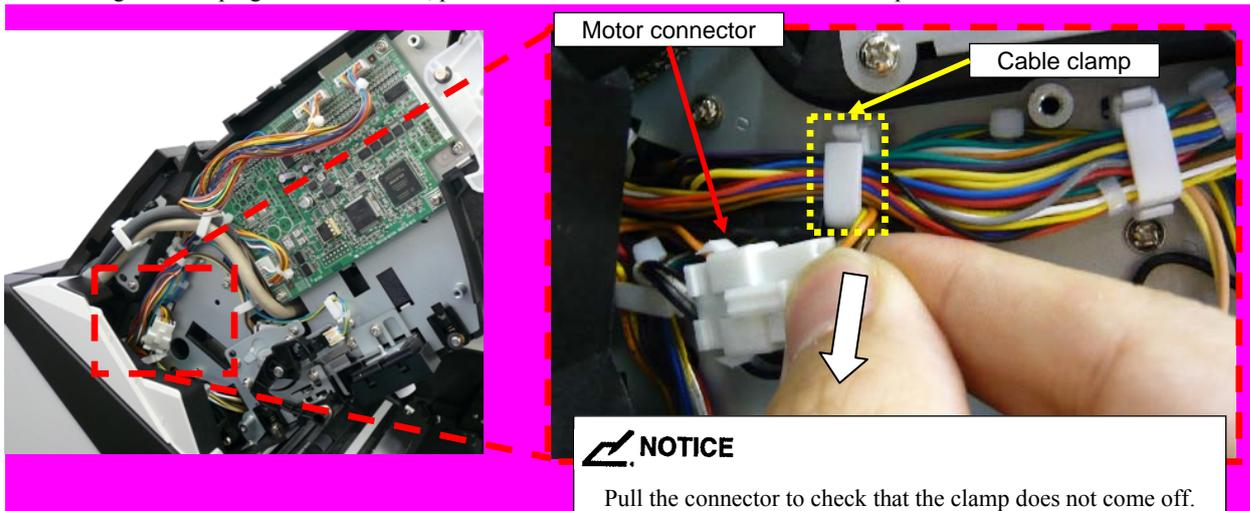
When wiring the IMP-B Cable, be sure that the nylon band comes to the front of the cable clamp.



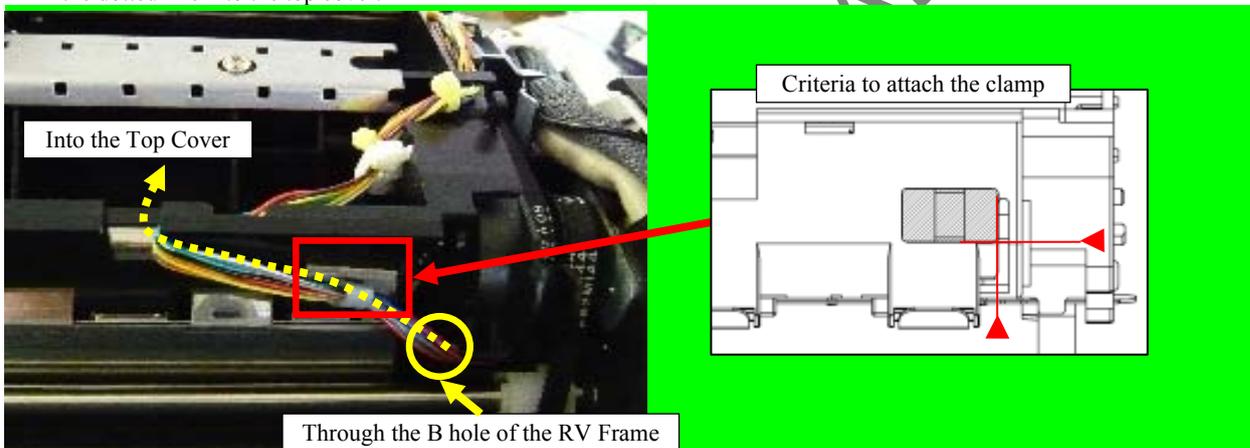
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	349 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

NOTICE

After wiring and clamping the IMP-B cable, pull the motor connector to check that the clamp does not come off.



(13) First attach the clamp to the back of the device and fix the cables with the clamp before wiring the IMP-B Cable along the dotted line into the top cover.



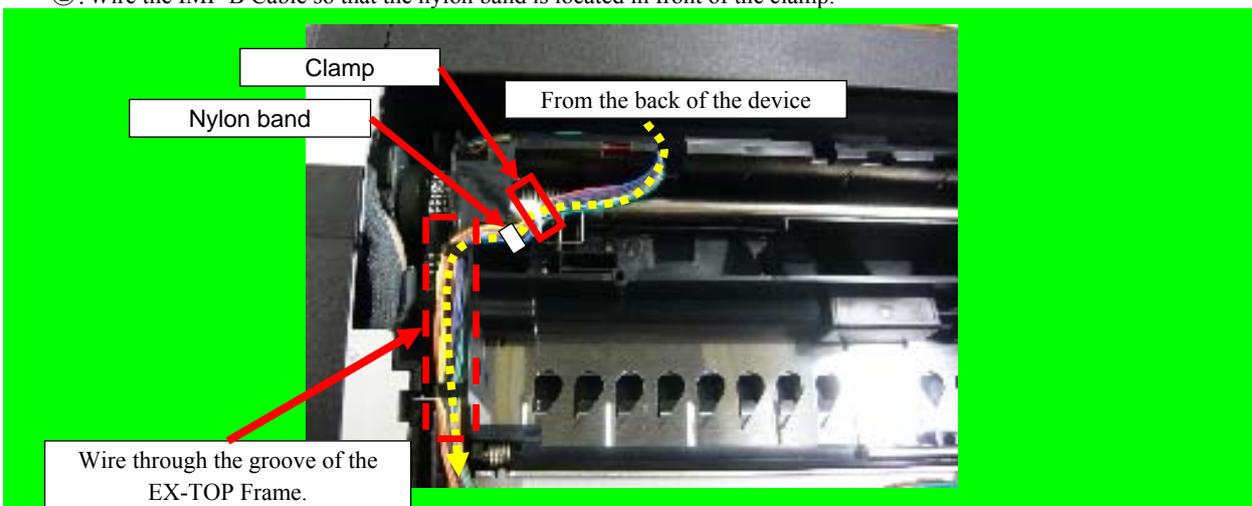
PFU CO.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	350 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

(14) Fix the IMP-B Cable with a clamp after passing it through the EX-TOP Frame cutout, and wire it along the dotted line.

NOTICE

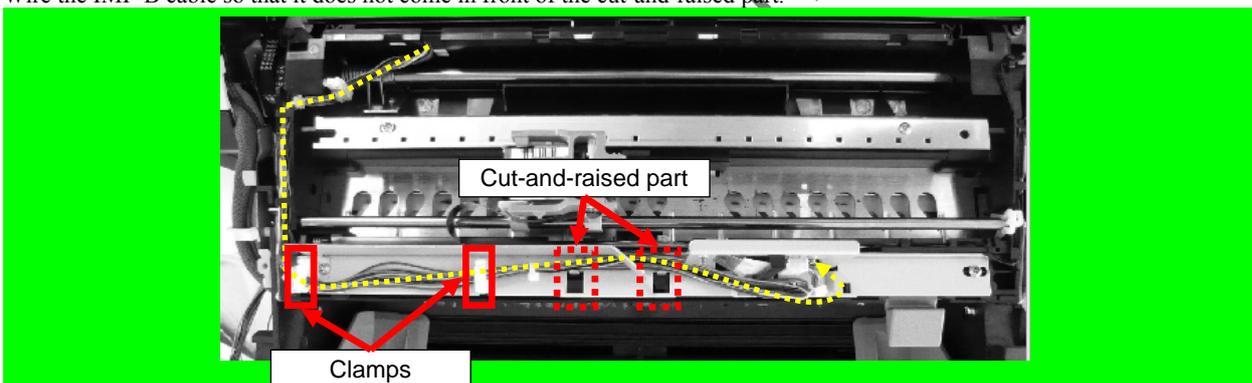
- Ⓢ! Wire the IMP-B Cable so that it passes through the groove of the EX-TOP Frame.
- Ⓢ! Wire the IMP-B Cable so that the nylon band is located in front of the clamp.



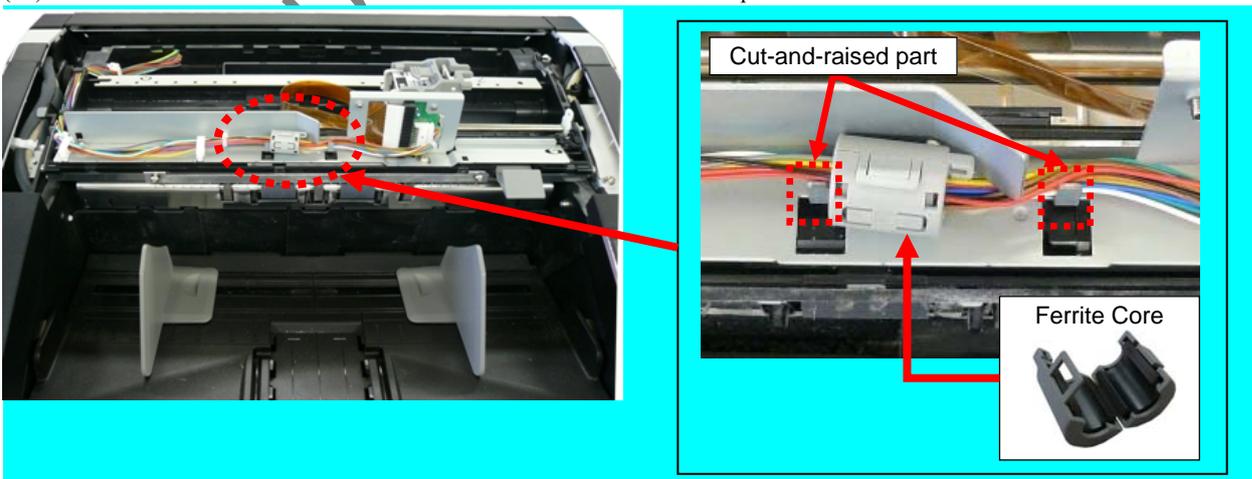
(15) Attach the IMP-B Cable to the Back-Side Imprinter Junction PCA connector with two clamps.

NOTICE

Wire the IMP-B cable so that it does not come in front of the cut-and-raised part.

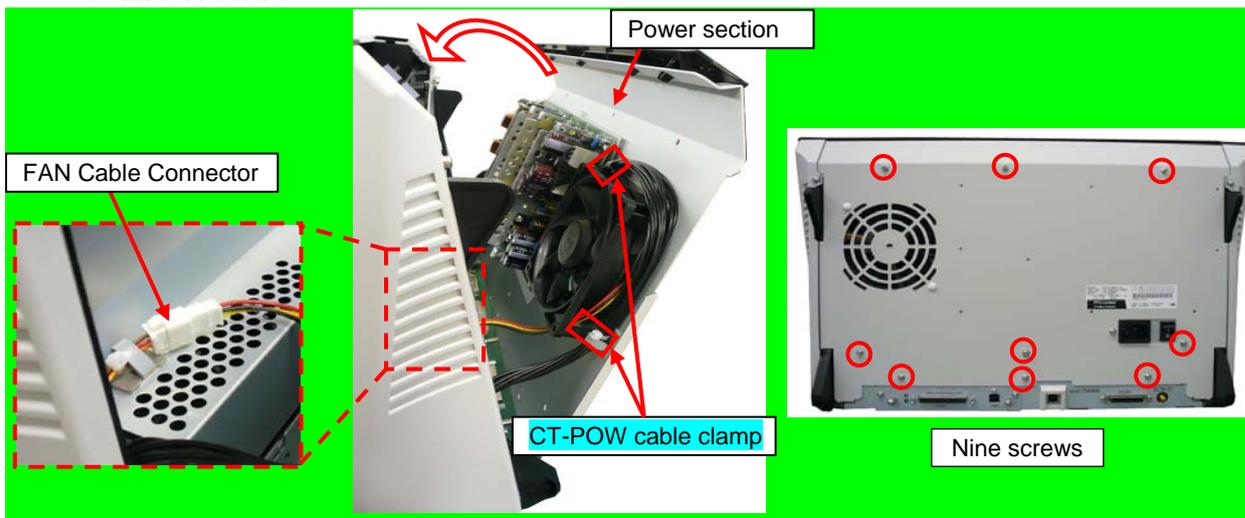


(16) Attach the Ferrite core on the IMP-B Cable between the cut-and-raised parts.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	351 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

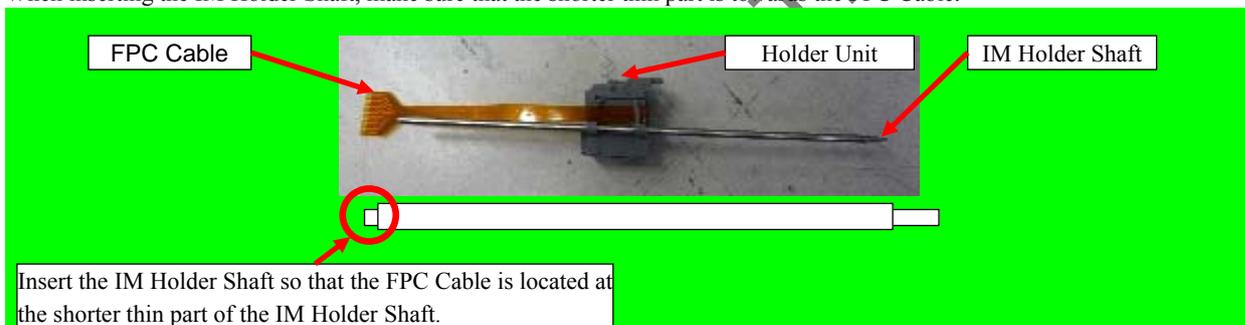
(17) Attach the power section back in place with nine screws after fixing the CT-POW cable with two clamps (boxed) and the FAN Cable Connector.



(18) Insert the IM Holder Shaft into the Holder Unit.

NOTICE

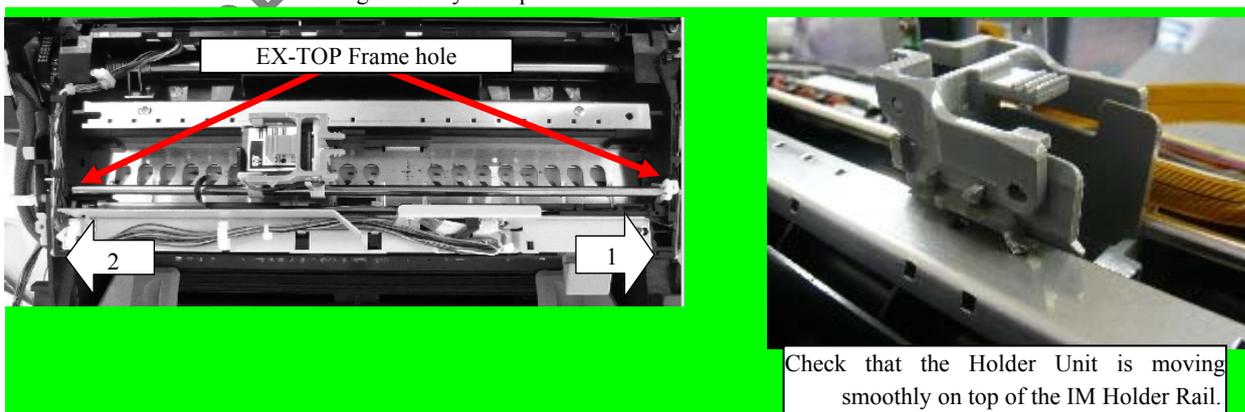
When inserting the IM Holder Shaft, make sure that the shorter thin part is towards the FPC Cable.



(19) Open the Top Cover slightly and insert the IM Holder shaft into the EX-TOP frame hole the right side first (1), followed by the left side (2).

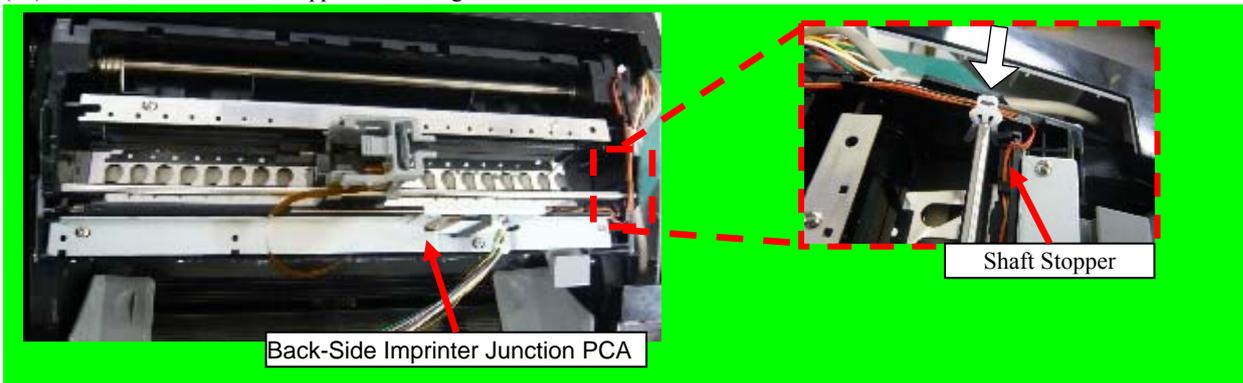
NOTICE

Check that the Holder Unit is moving smoothly on top of the IM Holder Rail.

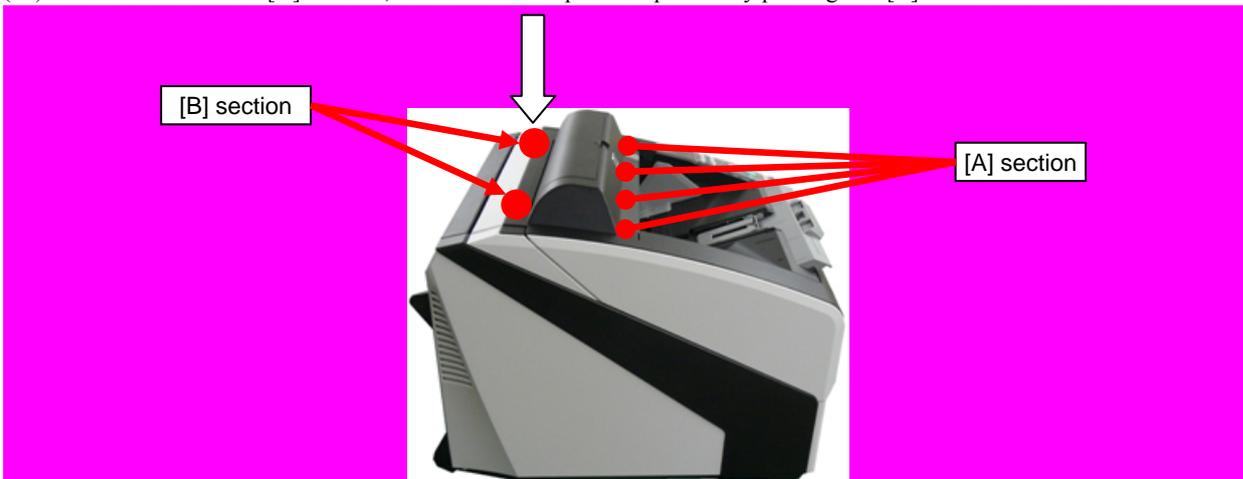


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	352 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

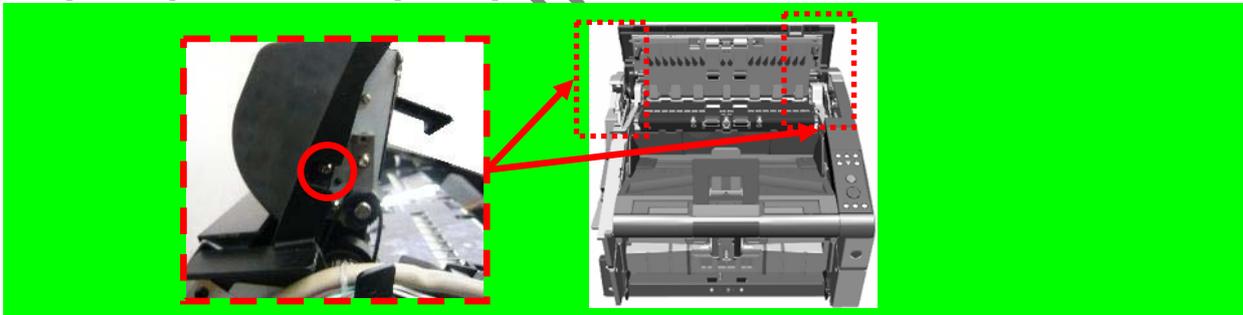
- (20) Insert the FPC Cable into Back-Side Imprinter Junction PCA and fix it with a screw (U30L-0010-0030#M3).
- (21) Insert and fix the Shaft Stopper into the right side of the IM Holder Shaft.



- (22) Latch the four tabs on [A] sections, and install the Imprinter top cover by pushing two [B] sections from above.



- (23) Open the Top Cover, and fix the Imprinter Top Cover with screws (one at each side).



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	353 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

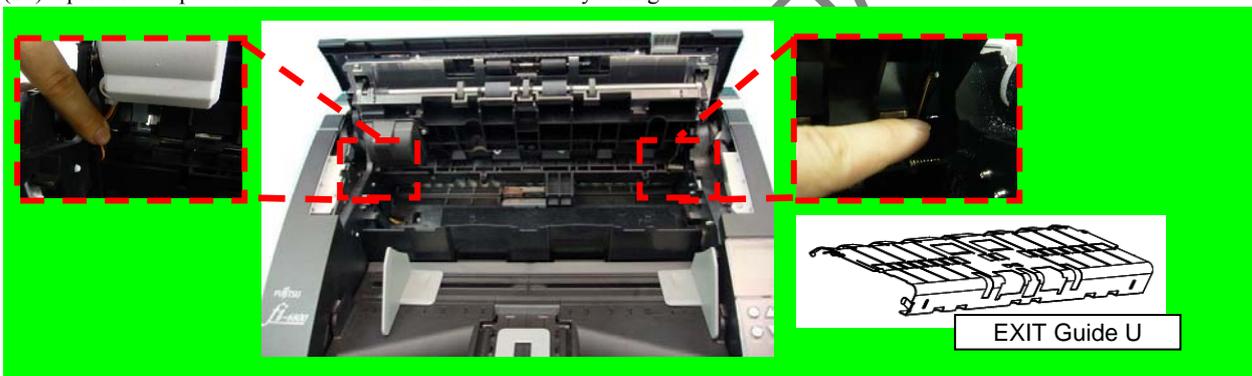
(24) Attach all the covers back by reversing the removal procedure.

- RV Side Cover-L
- RV Cover-L (Refer to Section 6.8.3)

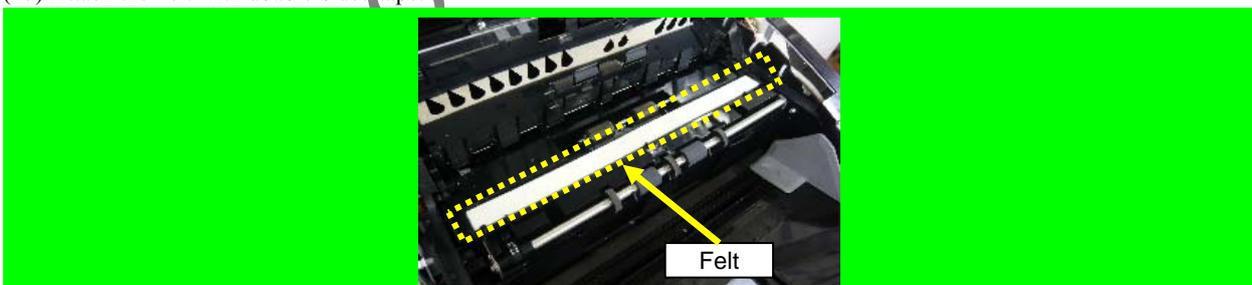
(25) Open the Top Cover, remove the two tapping screws securing the EXIT Guide U, and remove the FG Spring L and FG Spring R.



(26) Open the Output Unit and remove the EXIT Guide U by taking out its hooks.



(27) Attach the Felt with double-sided tape.



(28) Attach the EXIT Guide U back by reversing the removal procedure.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	354 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

9.4 Maintenance Parts for Imprinter

9.4.1 Maintenance Parts List

No.	Description	Part Number	Quantity	Appearance (Section)	Replacement Procedure (Section)	Adjustment	Remarks
1	CONTROL PCA	PA03575-D980	1	9.4.2.1	9.6.3.1	—	
2	HOLDER UNIT	PA03575-D983	1	9.4.2.2	FX: 9.6.3.2 RV: 9.6.3.6	—	
3	JUNCTION PCA	PA03450-F926	1	9.4.2.3	FX: 9.6.3.3 RV: 9.6.3.7	—	
4	FELT	PA03575-D985	1	9.4.2.4	FX: 9.6.3.4 RV: 9.6.3.8	—	
5	TOP COVER IMP	PA03575-D979	1	9.4.2.5	9.6.3.5	—	

PFU CONFIDENTIAL

								Name	fi-6800/fi-668PR Maintenance Manual	
								Drawing No.	P1PA03575 – B0XX/6	
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION			PFU LIMITED	Page	355 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	IFujioka			

9.4.2 Maintenance Parts Descriptions / Appearance

9.4.2.1 Control PCA

Description	Part Number	Replacement Procedure	Remarks
CONTROL-PCA	PA03575-D980	9.6.3.1	



9.4.2.2 Holder Unit

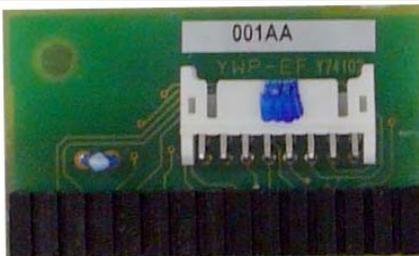
Description	Part Number	Replacement Procedure	Remarks
HOLDER-UNIT	PA03575-D983	FX: 9.6.3.2 RV: 9.6.3.6	



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	356 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

9.4.2.3 Junction PCA

Description	Part Number	Replacement Procedure	Remarks
JUNCTION-PCA	PA03450-F926	FX: 9.6.3.3 RV: 9.6.3.7	



9.4.2.4 Felt

Description	Part Number	Replacement Procedure	Remarks
FELT	PA03575-D985	FX: 9.6.3.4 RV: 9.6.3.8	



9.4.2.5 Imprinter Top Cover

Description	Part Number	Replacement Procedure	Remarks
TOP-COVER-IMP	PA03575-D979	9.6.3.5	



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	357 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

9.5 Troubleshooting

TBD

PFU CONFIDENTIAL

									Name	fi-6800/fi-668PR Maintenance Manual	
									Drawing No.	P1PA03575 – B0XX/6	
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION			PFU LIMITED		Page	358 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	I.Fujioka				

9.6 Maintenance Procedure

This chapter explains the precautions needed before maintenance, removing and attaching covers, and replacing the maintenance parts for the Imprinter.

9.6.1 For Safety Operation

Periodic inspection of the Imprinter shall be performed with the same timing of the scanner inspection or once a year.

Precaution before maintenance:

- Thoroughly clean the area where the unit is disassemble/assemble before working.
- Follow the disassembly and assembly instructions carefully. Do not loosen the screws on the non-disassembly parts.
- Store the disassembled parts so as not to lose them.
- Check the condition and parts count after replacement.
- Assemble the unit in reverse order of disassembly.

CAUTION

Machine damage

Static Electricity may cause the damage to the scanner and imprinter.

When repairing circuit boards such as system board main control board, wear a wrist strap or dielectric mat to avoid ESD.

Injury

Be careful not to get your fingers, hair, clothes or accessories caught in moving parts of the unit. It may cause injury.

For detail cleaning method for the imprinter, refer to Section 9.8 "Imprinter Daily Care".

9.6.2 Maintenance Tools

Table below lists tools for maintenance of the Imprinter.

No.	Tools	Remarks	Purpose
1	Philips screw driver		For M3 and M4 screws
2	Small flat-blade screwdriver		For removing E-ring
3	Pliers		For removing clamp, assembling E-ring
4	Alcohol		For cleaning
5	Cloth	Bleached cloth or nonwoven fabric	For cleaning

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	359 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	I.Fujioka

9.6.3 Replacing the Parts in the Print Section

9.6.3.1 Control PCA

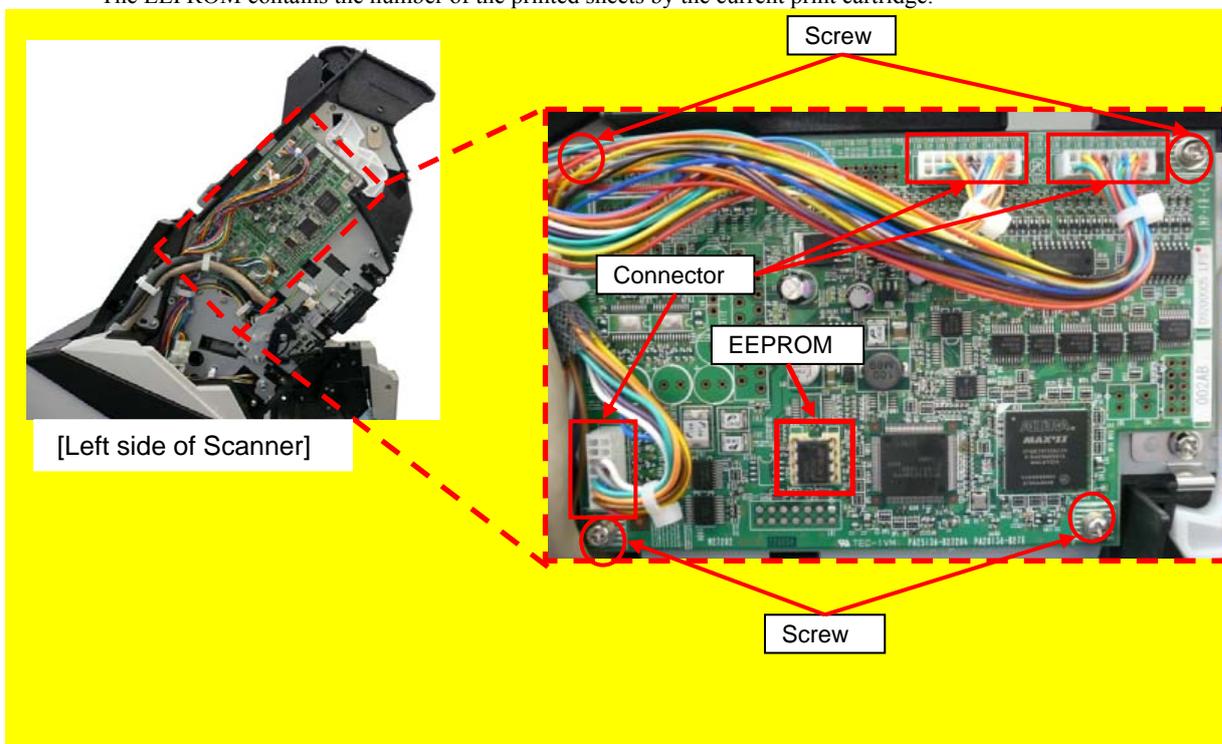
NOTICE

Refer to Section 9.4.2.1 for the part number and appearance of the Control PCA.

<Removal>

- (1) Remove the following parts.
 - FX Cover L (Refer to Section 6.8.1.)
 - RV Cover L (Refer to Section 6.8.3.)
 - RV Side Cover L (Refer to step (2) in Section 6.13.6.)
- (2) Disconnect three connectors (enclosed with squares) connected to the Control PCA.
- (3) Remove four screws (circled) securing the Control PCA to remove the Control PCA.
- (4) Detach the EEPROM (enclosed with square) from the Control PCA, and attach it to the new Control PCA.

The EEPROM contains the number of the printed sheets by the current print cartridge.



<Installation>

Follow the above procedure in reverse.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	360 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

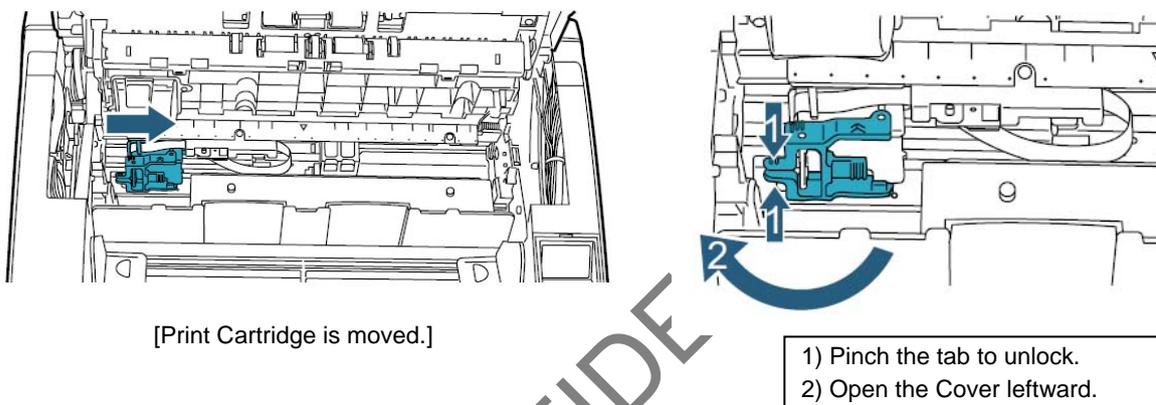
9.6.3.2 Holder Unit (Front-Side Imprinter)

NOTICE

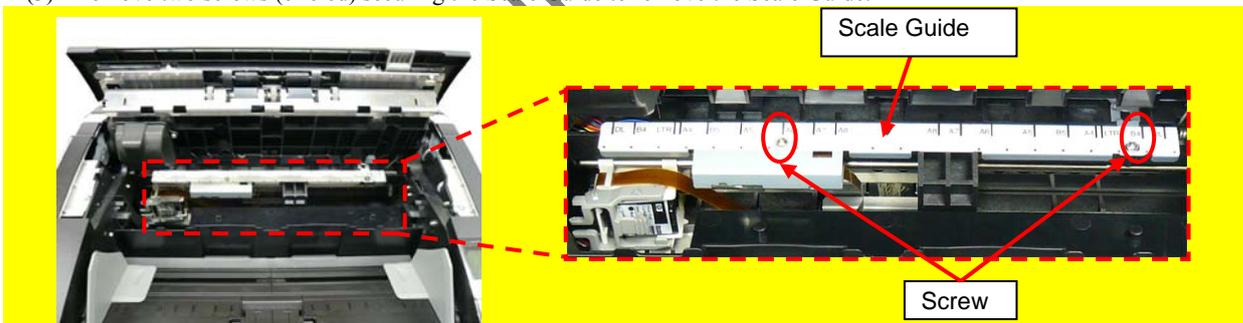
Refer to Section 9.4.2.2 for the part number and appearance of the Holder Unit.

<Removal>

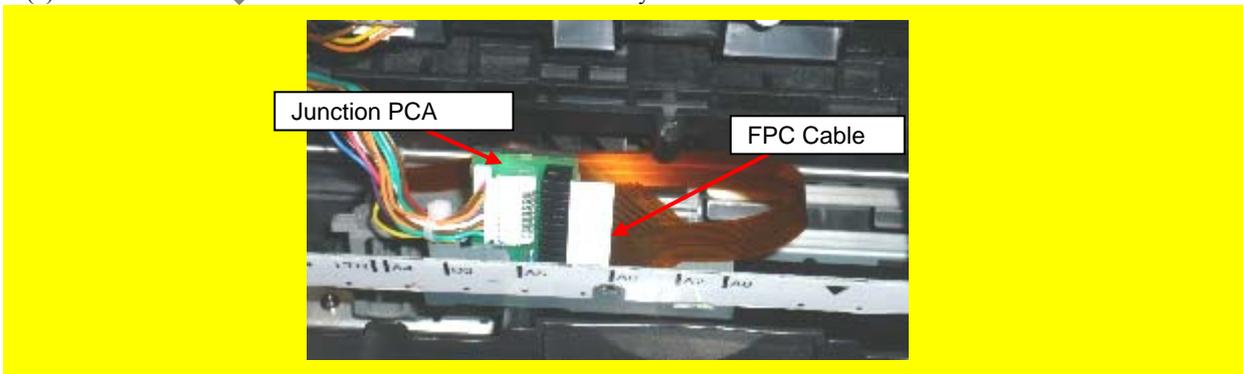
- (1) Perform the following:
 - Remove the Hopper Unit. (Refer to Section 6.7.1.)
 - Remove the FX Cover L. (Refer to Section 6.8.1.)
 - Remove the RV Cover L. (Refer to Section 6.8.3.)
 - Remove the RV Side Cover L. (Refer to step (2) in Section 6.13.6.)
 - Open the Paper Path Unit. (Refer to step (2) in Section 6.7.2.)
- (2) Move the Print Cartridge Holder to the convenient position to work on, and open the Print Cartridge Holder cover to remove the Print Cartridge.



- (3) Remove two screws (circled) securing the Scale Guide to remove the Scale Guide.

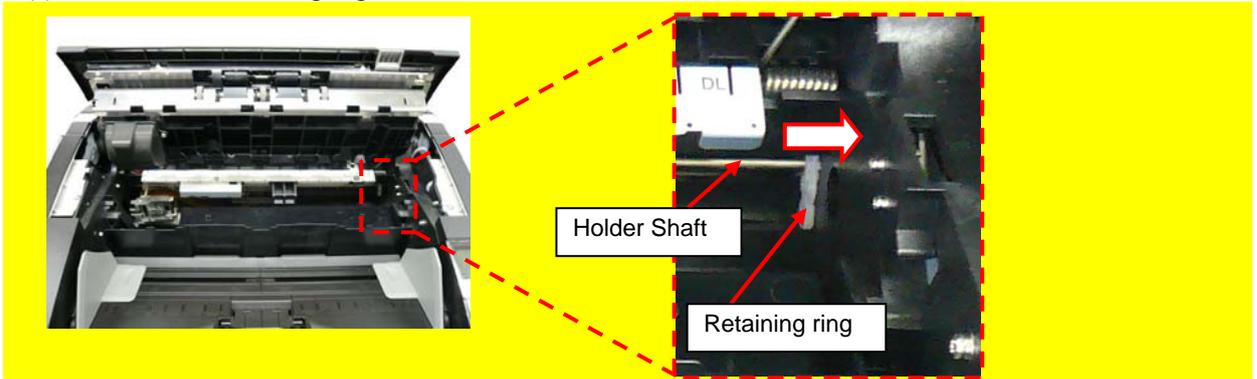


- (4) Disconnect the FPC Cable from the Junction PCA carefully.

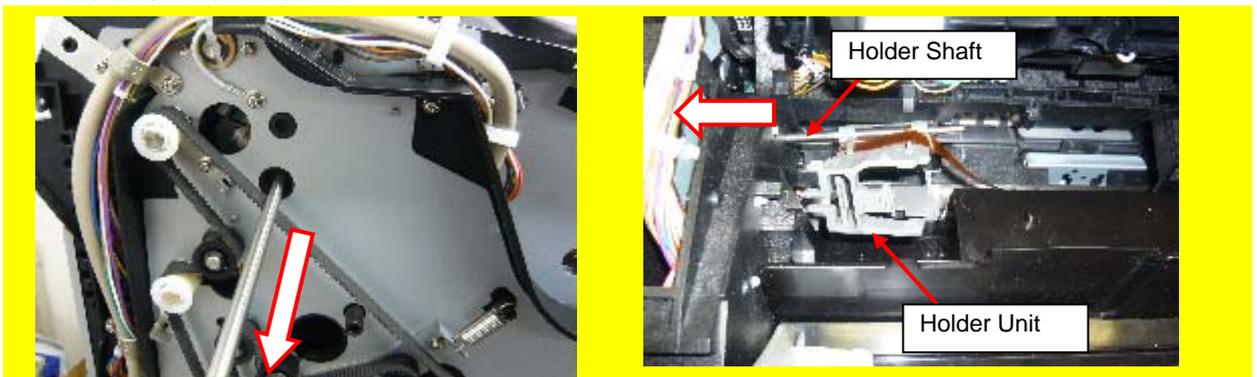


						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	361 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			I.Fujioka	

(5) Remove a white retaining ring, and move the Holder Shaft in the direction of the arrow.



(6) Remove the Holder Shaft from the hole at left side of the scanner (circled) while the ADF is closed, and remove the Holder Unit from the scanner

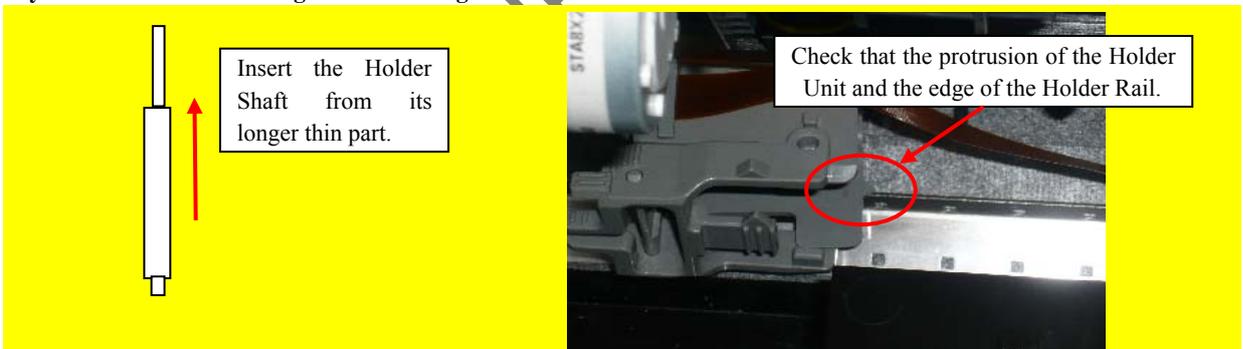


<Installation>

Follow the above procedure in reverse.

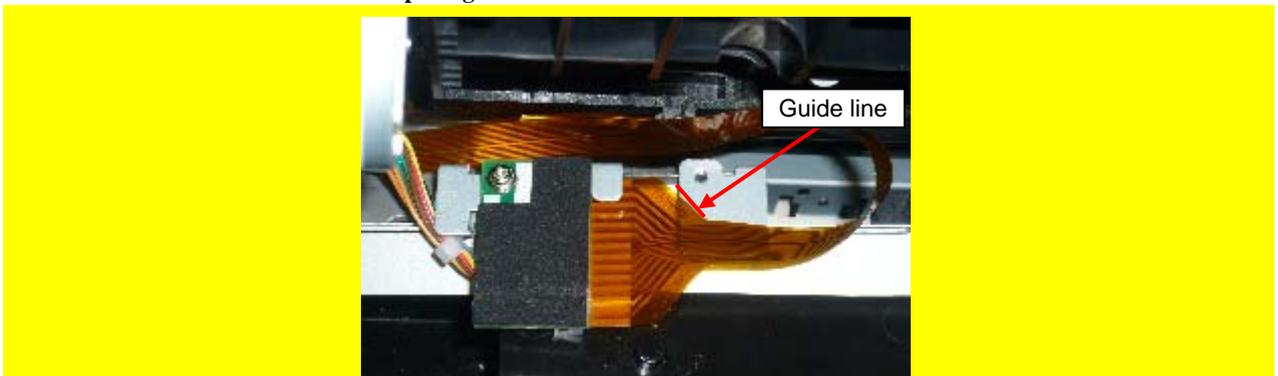
NOTICE

Pay attention to the following when installing the Holder Unit.



NOTICE

Check that the FPC Cable is inserted up the guide line.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page 362 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

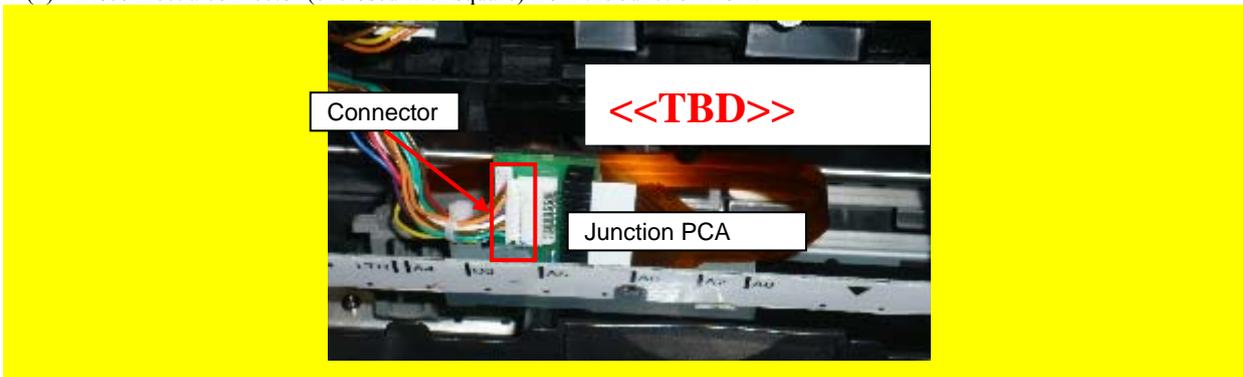
9.6.3.3 Junction PCA (Front-Side Imprinter) <<TBD>>

NOTICE

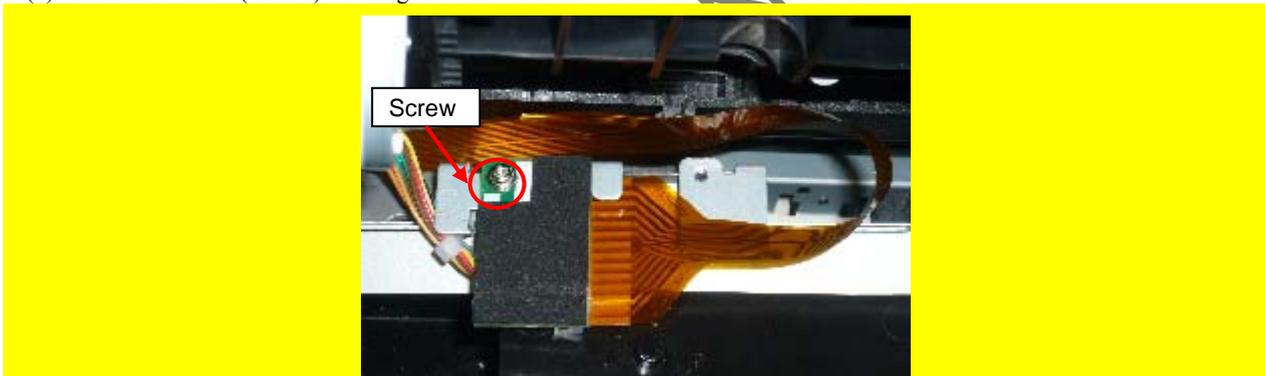
Refer to Section 9.4.2.3 for the part number and appearance of the Junction PCA.

<Removal>

- (1) Perform the following:
 - Open the Paper Path Unit. (Refer to step (2) in Section 6.7.2.)
 - Remove the FPC Cable. (Refer to steps (2) ~ (4) in Section 9.6.3.2.)
- (2) Disconnect a connector (enclosed with square) from the Junction PCA.



- (3) Remove a screw (circled) securing the Junction PCA to remove the Junction PCA.

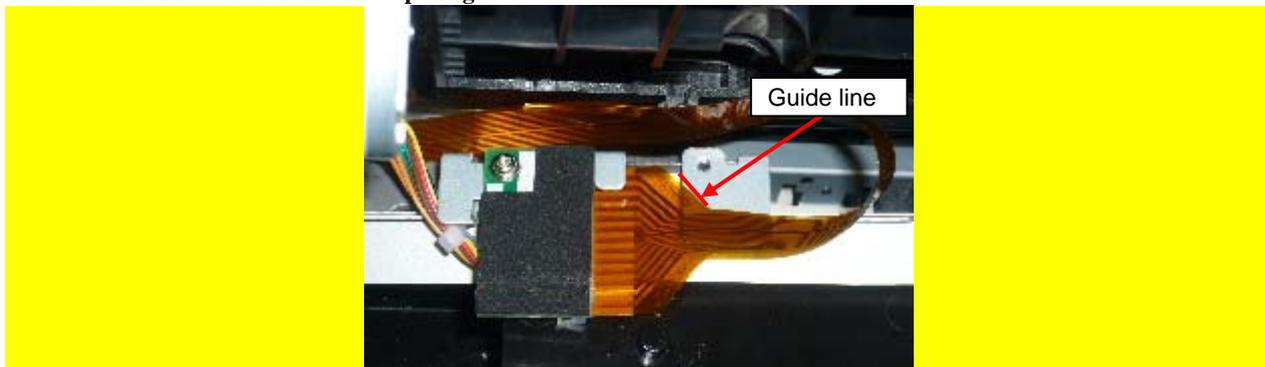


<Installation>

Follow the above procedure in reverse.

NOTICE

Check that the FPC Cable is inserted up the guide line.



									Name	fi-6800/fi-668PR Maintenance Manual		
									Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION				PFU LIMITED	Page	363 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	CHECK	A.Miyoshi		APPR.	IFujioka				

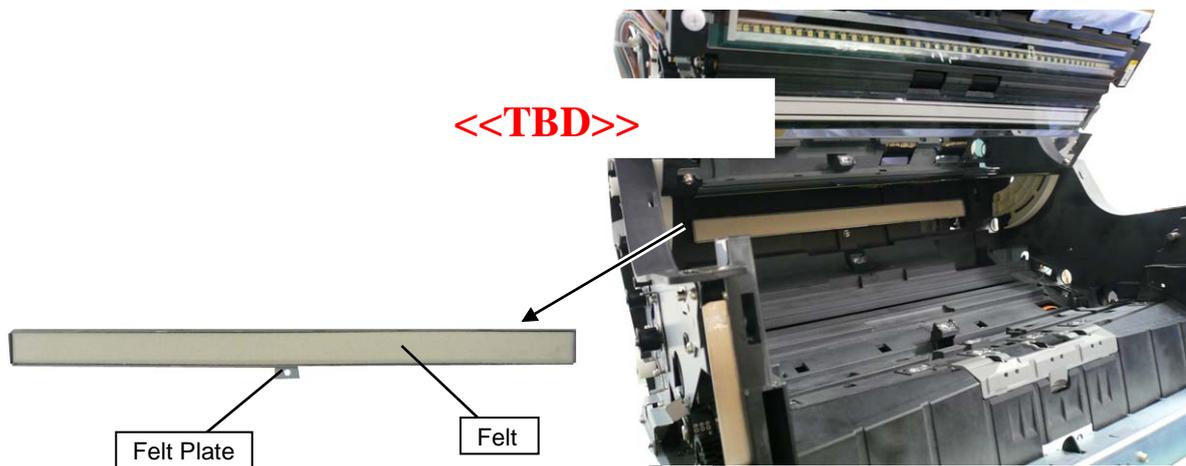
9.6.3.4 Felt (Front-Side Imprinter) <<TBD>>

NOTICE

Refer to Section 9.4.2.4 for the part number and appearance of the Felt.

<Removal>

- (1) Open the ADF. (Refer to Section 8.1.3.)
- (2) Remove the FIX Guide 3. (Refer to step (2) in Section 6.12.9.3.)
- (3) Remove the Felt from the Felt Plate.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	364 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

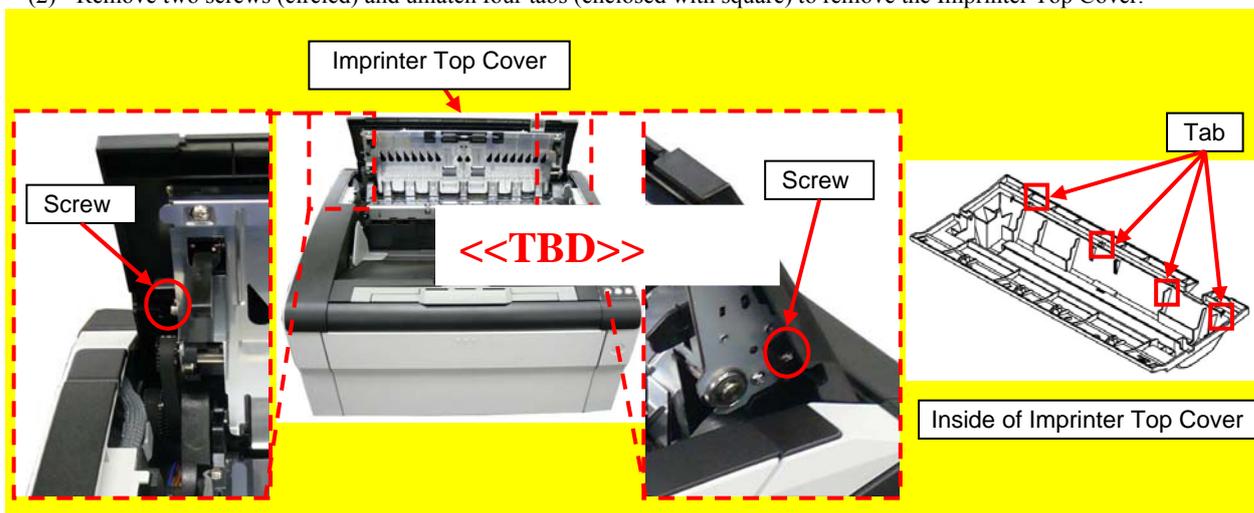
9.6.3.5 Imprinter Top Cover

NOTICE

Refer to Section 9.4.2.5 for the part number and appearance of the Imprinter Top Cover.

<Removal>

- (1) Open the Top Cover. (Refer to Section 8.1.4.)
- (2) Remove two screws (circled) and unlatch four tabs (enclosed with square) to remove the Imprinter Top Cover.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	365 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

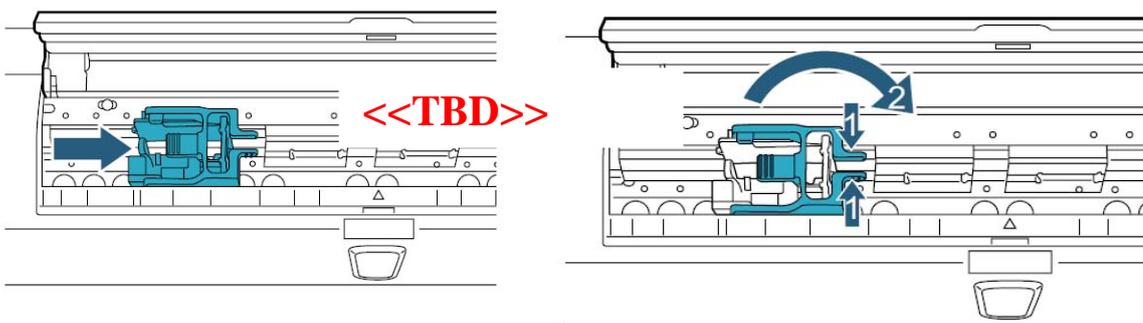
9.6.3.6 Holder Unit (Back-Side Imprinter) <<TBD>>

NOTICE

Refer to Section 9.4.2.2 for the part number and appearance of the Holder Unit.

<Removal>

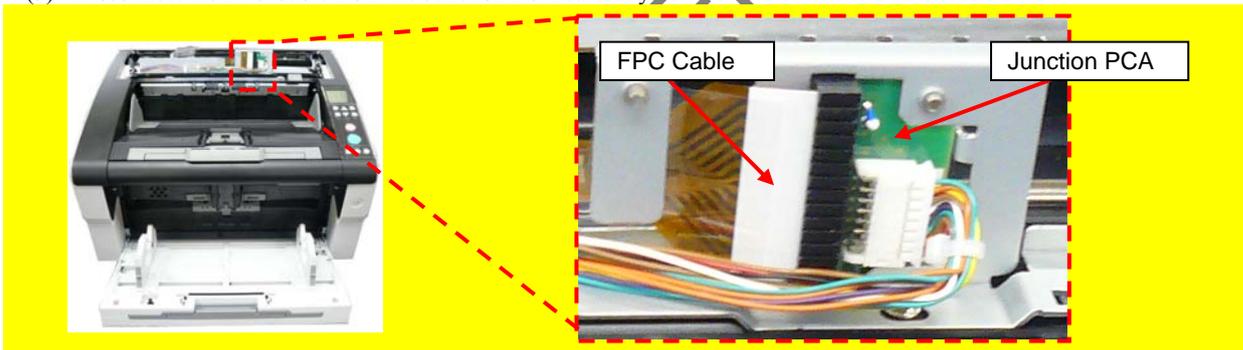
- (1) Remove the Imprinter Top Cover. (Refer to Section 9.6.3.5.)
- (2) Move the Print Holder Cartridge to the convenient position to work on, and open the Print Cartridge Holder cover to remove the Print Cartridge.



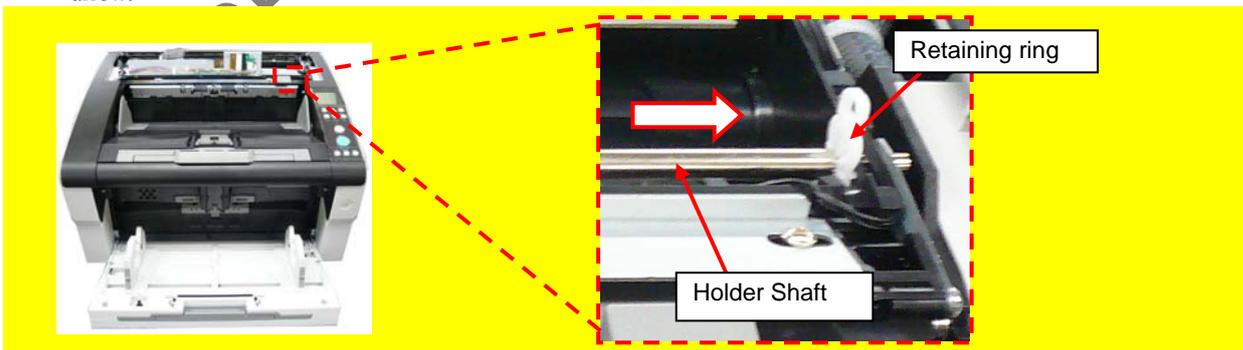
[Print Cartridge is moved.]

- 1) Pinch the tab to unlock.
- 2) Open the Cover rightward.

- (3) Disconnect the FPC Cable from the Junction PCA carefully.

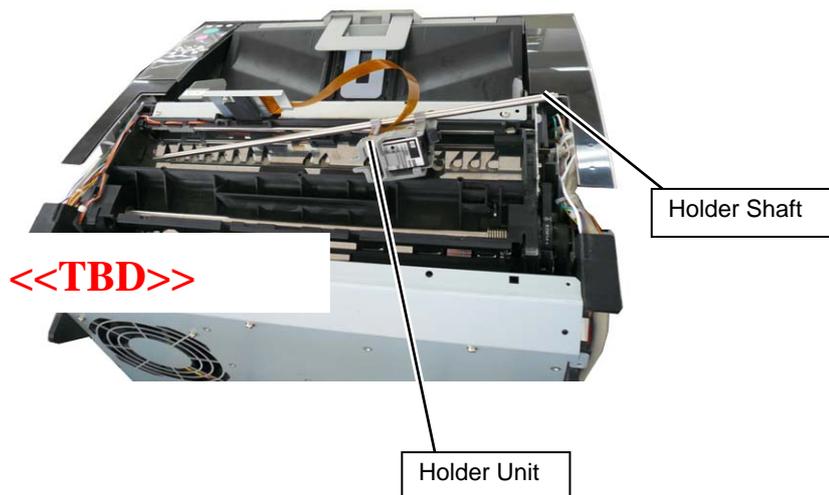


- (4) Remove a white retaining ring, open the Top cover slightly, and then move the Holder Shaft in the direction of the arrow.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	366 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.			IFujioka	

(5) Remove the Holder Shaft from the Holder Unit, and then remove the Holder Unit from the scanner.



<Installation>

Follow the above procedure in reverse.

NOTICE

Pay attention to the following when installing the Holder Unit.

Longer thin part of the Holder Shaft comes to the right.

Check that the positions of the IM Holder Rail and Holder Unit are as shown in the photo above.

Be sure to insert the FPC Cable all the way into the connector. (Refer to installation procedure in Section 6.9.2.)

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	367 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

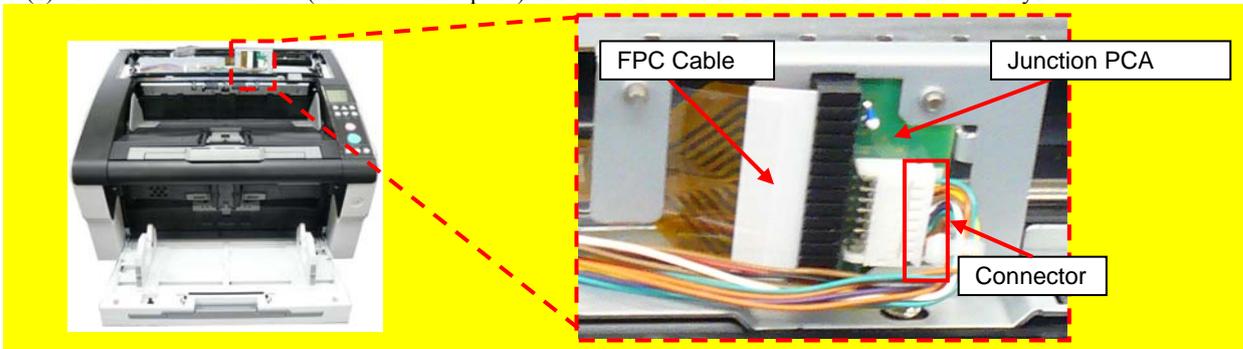
9.6.3.7 Junction PCA (Back-Side Imprinter)

NOTICE

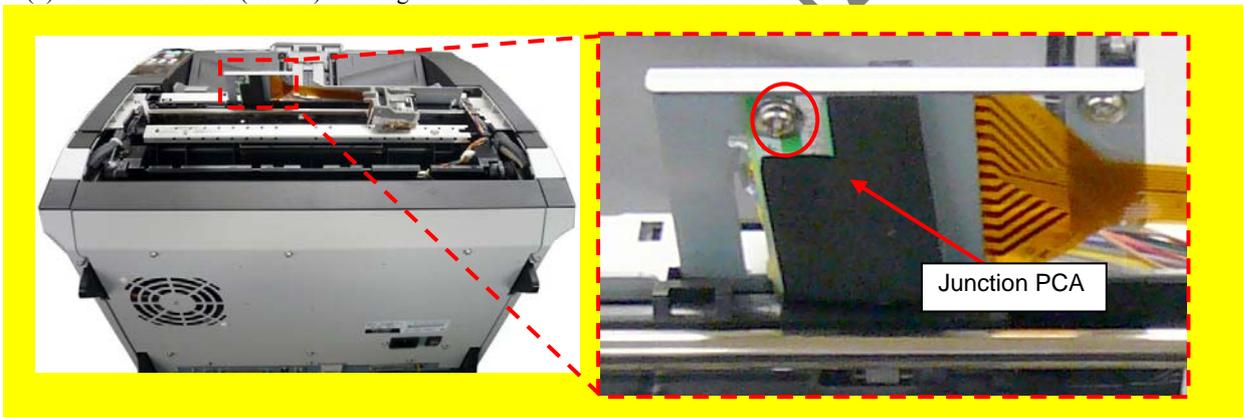
Refer to Section 9.4.2.3 for the part number and appearance of the Junction PCA.

<Removal>

- (1) Remove the Imprinter Top Cover. (Refer to Section 9.6.3.5.)
- (2) Disconnect a connector (enclosed with square) and the FPC Cable from the Junction PCA carefully.



- (3) Remove a screw (circled) securing the Junction PCA to remove the Junction PCA.



<Installation>

Follow the above procedure in reverse.

NOTICE

Be sure to insert the FPC Cable all the way into the connector. (Refer to installation procedure in Section 6.9.2.)

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	368 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

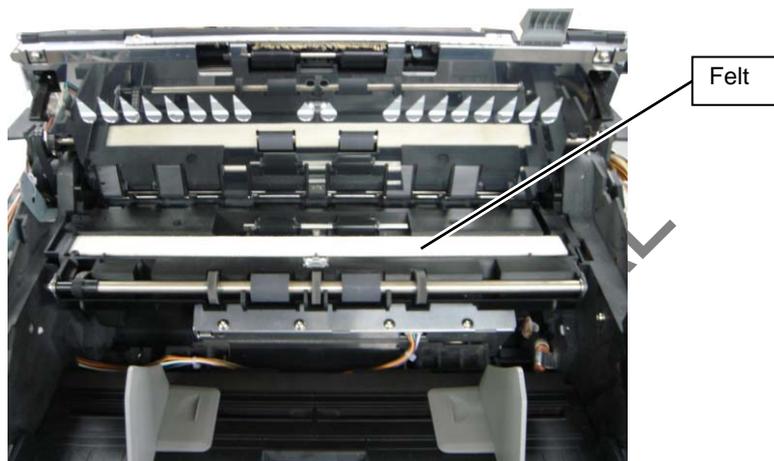
9.6.3.8 Felt (Back-Side Imprinter) <<TBD>>

NOTICE

Refer to Section 9.4.2.4 for the part number and appearance of the Felt.

<Removal>

- (1) Remove the FG Spring L, FG Spring R and Exit Guide U. (Refer to steps (1) ~ (2) in Section 6.13.11.2.)
- (2) Remove the Felt from the EXIT-UNDER Unit.



<Installation>

Follow the above procedure in reverse.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	369 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

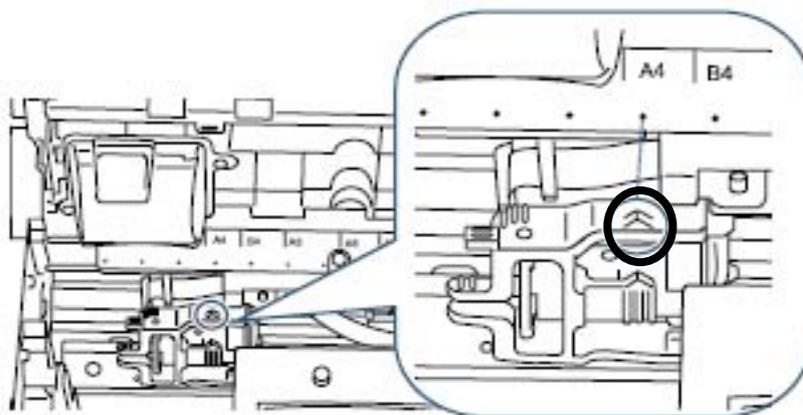
9.7 Adjustment / Setting

9.7.1 Positioning the Print Cartridge

Position the print cartridge for printing as follows.

<Front-Side Imprinter>

- (1) Open the Top Cover and lift up the Output Feeder Unit by referring to Section 9.8.1.1 “Installing the Print Cartridge <Front-Side Imprinter>”.
- (2) Align the print position pointer with the print position mark where printing should be started.



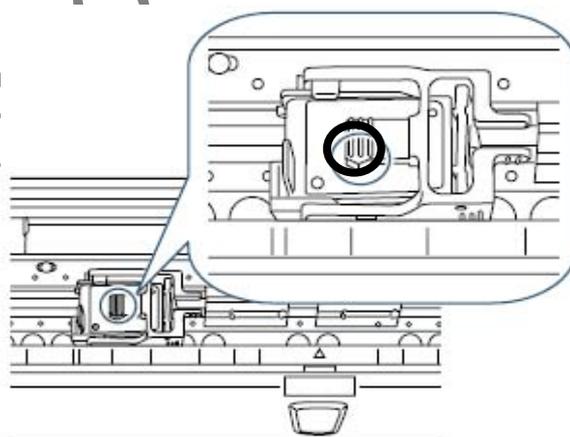
NOTICE

1. Do not set a print cartridge at the non-printable area. Otherwise, the document may be smudged with ink.
2. Place paper for actual printing in the stacker, and make sure that the print cartridge is positioned within the document width.

- (3) Close the Output Feeder Unit and then the Top Cover.

<Back-Side Imprinter>

- (1) Open the Top Cover by referring to Section 9.8.1.1 “Installing the Print Cartridge <Back-Side Imprinter>”.
- (2) Align the top of the print position pointer with the print position mark where printing should be started.



NOTICE

1. Do not set a print cartridge at the non-printable area. Otherwise, the document may be smudged with ink.
2. Place paper for actual printing in the stacker, and make sure that the print cartridge is positioned within the document width.

- (3) Close the Back-Side Imprinter Cover.

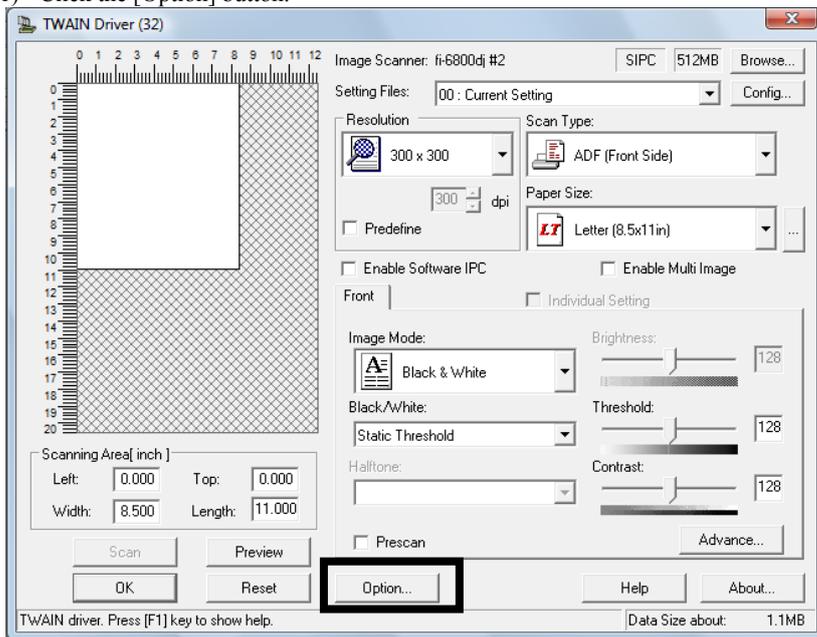
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	370 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi				APPR.	IFujioka

9.7.2 Print Setup

You can configure the print setup for the Imprinter on the scanner driver setup dialog box.

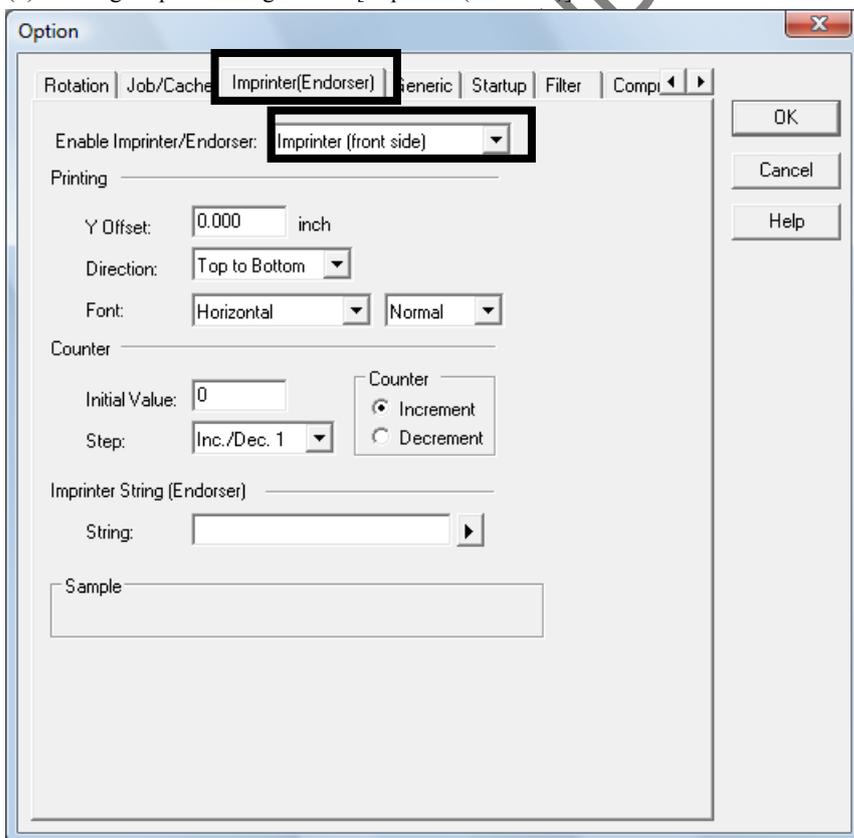
FUJITSU TWAIN driver (Example)

- (1) Click the [Option] button.



⇒ The [Option] dialog box appears.

- (2) Configure print settings on the [Imprinter (Endorser)] tab.



						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	371 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

9.8 Imprinter Basic Operation

9.8.1 Basic Operation

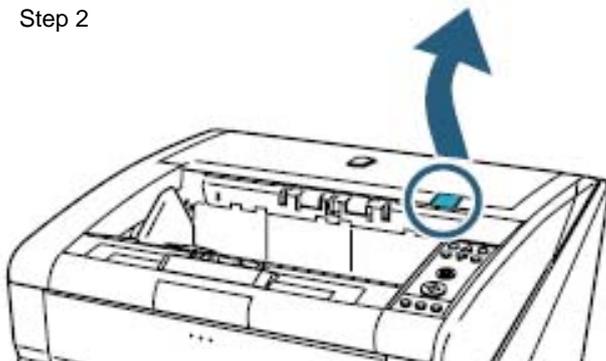
9.8.1.1 Installing the Print Cartridge

Install the print cartridge as follows.

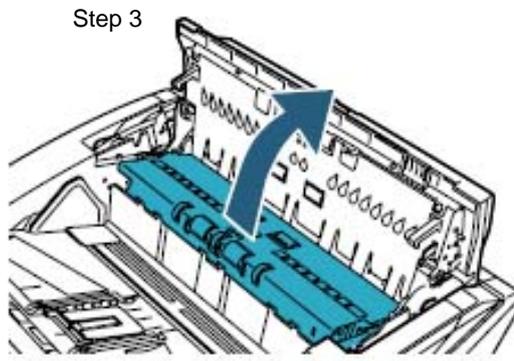
<Front-Side Imprinter>

- (1) Make sure that the scanner power cable is unplugged from the outlet.
- (2) Push up the top cover release tab with your fingers to open the Top Cover.
- (3) Lift the Output Feeder Unit.

Step 2

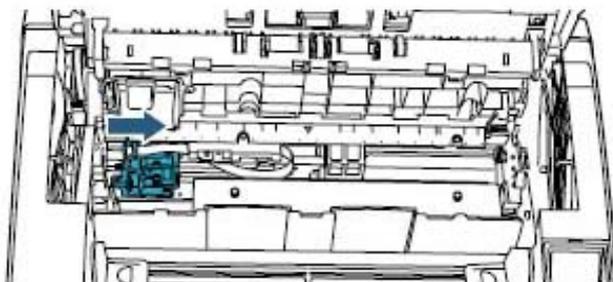


Step 3



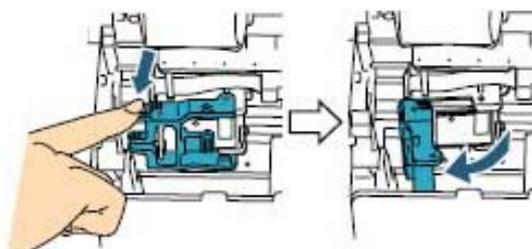
- (4) Move the print cartridge holder to a location where a print cartridge can be installed easily.
- (5) Open the Print Cartridge Holder cover.

Step 4



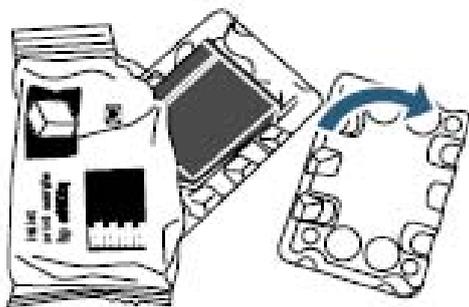
Step 5

1. Press the release tab to release the lock.
2. Open the cover to the left.



- (6) Remove the new print cartridge from its pouch.
- (7) Remove the protection tape.

Step 6



Step 7



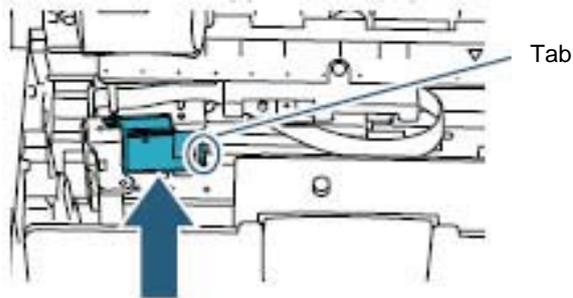
NOTICE

Do not touch the metal part of the cartridge nor put the tape back on again.

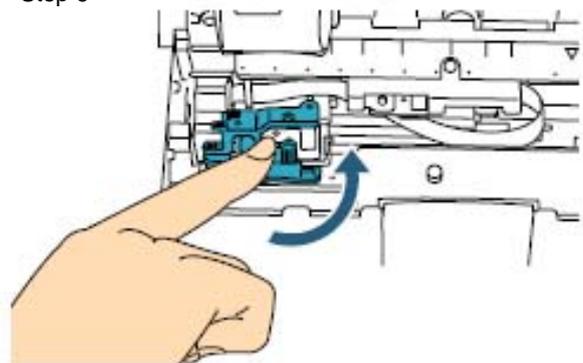
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	372 / 383!	
DESIG.	March 9, 2009		K.Okada	CHECK	A.Miyoshi				

- (8) Insert the print cartridge into the print cartridge holder.
- (9) Gently close the print cartridge holder on the right side until it is locked, to fix the print cartridge.

Step 8



Step 9



NOTICE

Insert the print cartridge with the tab on the right side.
Be careful not to let the print cartridge touch or catch on to the FFC.

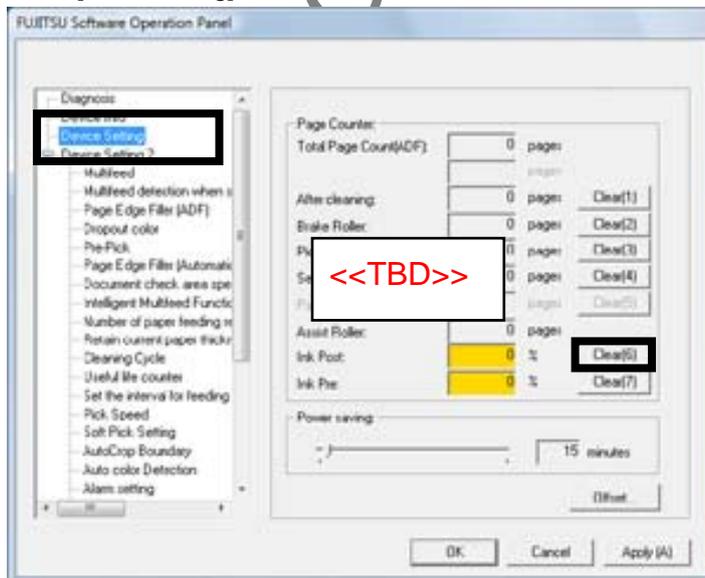
- (10) Align the top of the print position pointer with the print position mark where printing should be performed on the document.
- (11) Close the Output Feeder Unit and then the Top Cover.
- (12) Turn on the scanner.
- (13) Reset the ink level counter as follows.

NOTICE

You must reset the ink level counter whenever you replace the print cartridge

The ink level counter can be reset from the operator panel. For details, refer to Section 8.4.2 **“Confirming replacement time and resetting the consumable counter”**

1. Click the [Start] menu → [All Programs] → [Scanner Utility for Microsoft Windows] → [Software Operation Panel].
→ The [FUJITSU Software Operation Panel] window appears.
2. Click [Device Setting] from left side list in the window.



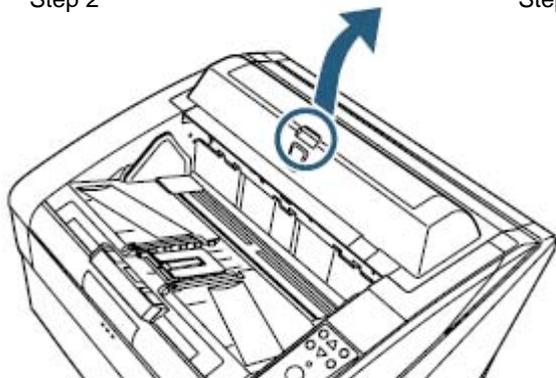
3. Click the [Clear] button for [Ink Post].
4. Click the [OK] button on the confirmation dialog box.
→ The value of the [Ink Post] counter is set to 100.
5. Click the [OK] button on the [FUJITSU Software Operation Panel] window.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	373 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

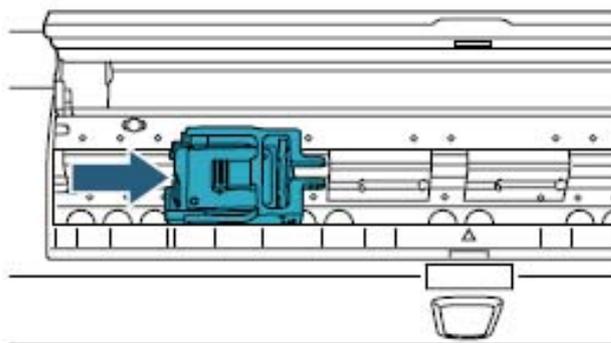
<Back-Side Imprinter>

- (1) Make sure that the scanner power cable is unplugged from the outlet.
- (2) Open the Back-Side Imprinter cover by pressing the cover tab.
- (3) Move the print cartridge holder to a location where a print cartridge can be installed easily.

Step 2

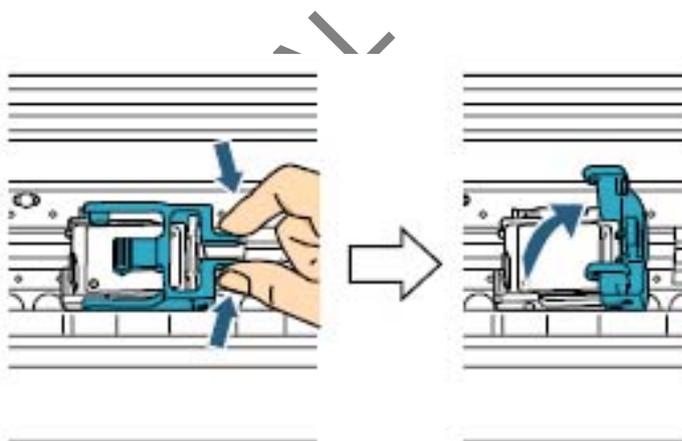


Step 3



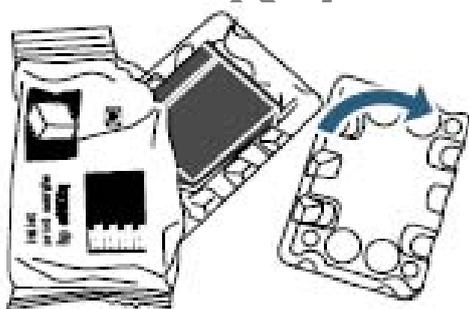
- (4) Open the Print Cartridge Holder cover.

1. Pinch the release tab to release the lock.
2. Open the cover to the right.



- (5) Remove the new print cartridge from its pouch.
- (6) Remove the protection tape.

Step 6



Step 7

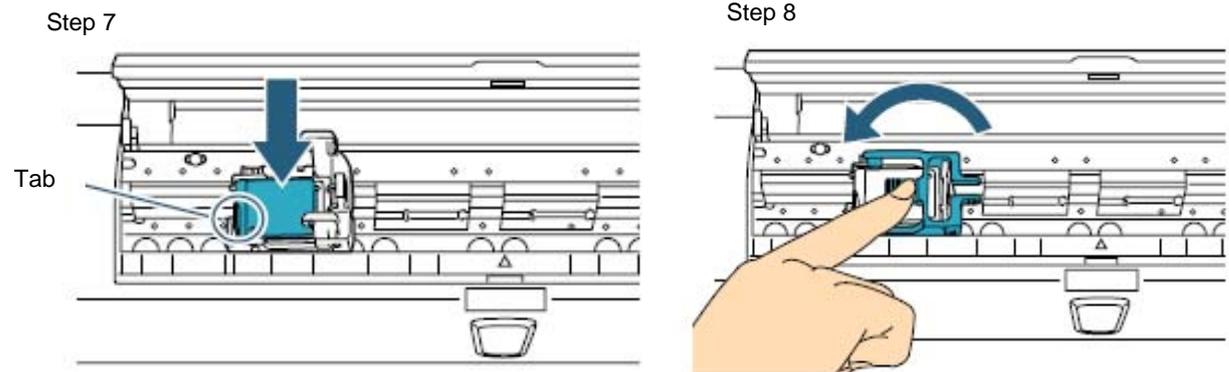


NOTICE

Do not touch the metal part of the cartridge nor put the tape back on again.

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	374 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi					APPR.	I.Fujioka

- (7) Insert the print cartridge into the print cartridge holder.
- (8) Gently close the print cartridge holder on the left side until it is locked, to fix the print cartridge.



NOTICE

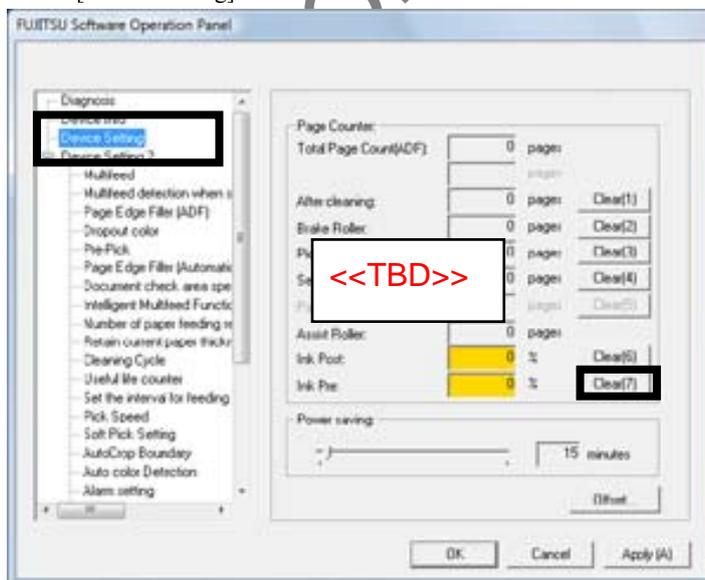
Insert the print cartridge with the tab on the left side.
Be careful not to let the print cartridge touch or catch on to the FFC.

- (9) Align the top of the print position pointer with the print position mark where printing should be performed on the document.
- (10) Close the Back-Side Imprinter cover.
- (11) Turn on the scanner.
- (12) Reset the ink level counter as follows.

NOTICE

- You must reset the ink level counter whenever you replace the print cartridge
- The ink level counter can be reset from the operator panel. For details, refer to Section 8.4.2 **“Confirming replacement time and resetting the consumable counter.”**

1. Click the [Start] menu → [All Programs] → [Scanner Utility for Microsoft Windows] → [Software Operation Panel].
 - The [FUJITSU Software Operation Panel] window appears.
2. Click [Device Setting] from left side list in the window.



3. Click the [Clear] button for [Ink Pre].
4. Click the [OK] button on the confirmation dialog box.
 - The value of the [Ink Pre] counter is set to 100.
5. Click the [OK] button on the [FUJITSU Software Operation Panel] window.

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	375 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

9.8.1.2 Operating Test

After installing the Print cartridge, check whether characters can be printed.

- (1) Press the power button on the scanner front.
→ The [Ready] screen is shown on the LCD.
- (2) Place a blank document on the hopper.

NOTICE

- Use A4 or Letter size paper. If the size is smaller than A4 or Letter, printing may not successfully complete.
 - Confirm that the print cartridge is positioned within the document width.
- (3) Press the [Menu] button.
→ The [Main Menu] screen is shown on the LCD.
 - (4) Select [Test Print] by pressing the [☰] or [♀] button, and press the [Enter] button.
→ The [No. of Sheets Scanned] screen is shown on the LCD.
 - (5) Select [Test Print] by pressing the [☰] or [♀] button, and press the [Enter] button.
When [Multiple Sheets] is selected, printing is performed for all sheets set in the hopper.
→ The [Print] screen is shown on the LCD.
 - (6) Select the Imprinter to be used by pressing the [☰] or [♀] button, and press the [Enter] button.
Select [Front Side] for the Front-Side Imprinter, or [Back-Side] for the Back-Side Imprinter.

NOTICE

Select one Imprinter. You cannot print on front and back-side at a time.

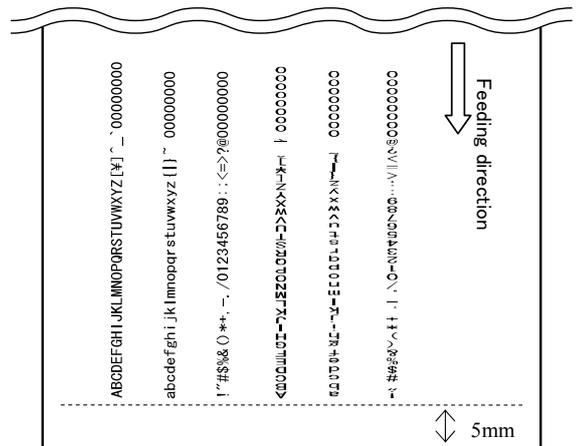
- The [Print Pattern] screen is shown on the LCD.
- (7) Select a print pattern by pressing the [☰] or [♀] button, and press the [Enter] button.

The following print patterns are available for vertical and horizontal orientation.

- Test pattern 1 (Landscape):**
ABCDEFGHIJKLMNOPQRSTUVWXYZ [☰] ^ ` 00000000
- Test pattern 2 (Landscape):**
abcdefghijklmnopqrstuvwxyz {} ~ 00000000
- Test pattern 3 (Landscape):**
!"#\$%&()*+,-./0123456789:;<=>?@00000000
- Test pattern 4 (Portrait):**
ABCDEFGHIJKLMNOPQRSTUVWXYZ [♀] ^ ` 00000000
- Test pattern 5 (Portrait):**
abcdefghijklmnopqrstuvwxyz {} ~ 00000000
- Test pattern 6 (Portrait):**
!"#\$%&()*+,-./0123456789:;<=>?@00000000

When multiple sheets are set in the hopper, printing is performed for all the sheets.
The section "00000000" begins with 0, and increases in increments of 1.

- The [Test Print] screen is shown on the LCD.
- (8) Select a print pattern by pressing the [☰] or [♀] button, and press the [Enter] button.
→ Paper is fed into the ADF, and the Imprinter prints out the Print Test Characters starting at 5mm (±4 mm) from the paper's edge.



①!!!②!!!③!!!④!!!⑤

Print test sample

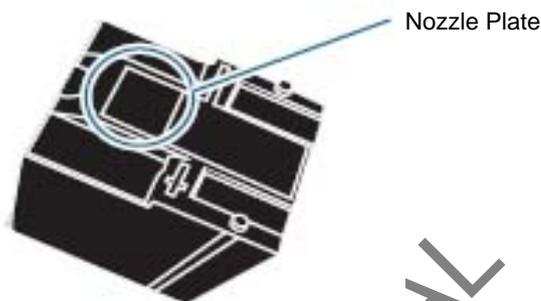
						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	376 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka				

9.8.2 Cleaning

9.8.2.1 Cleaning the Print Cartridge

Poor quality prints can occur due to blocked ink emission holes in the nozzle. Leaving the imprinter unused for long periods can also cause emission holes to become blocked. When the emission holes are blocked, clean the nozzle plate of the print cartridge.

- (1) Press the power button on the scanner front.
- (2) Remove the print cartridge. (Refer to Section 9.8.1.1.)
- (3) Gently wipe dirt and dust off the nozzle plate.



NOTICE

Be careful not to touch the nozzle plate or the contact parts of the cartridge directly by hand. Touching them by hand may cause incorrect printing or contact failure.

- (4) Make sure that all dirt and stains are removed, before installing the print cartridge.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual			
						Drawing No.	P1PA03575 – B0XX/6			
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED			Page	377 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.					

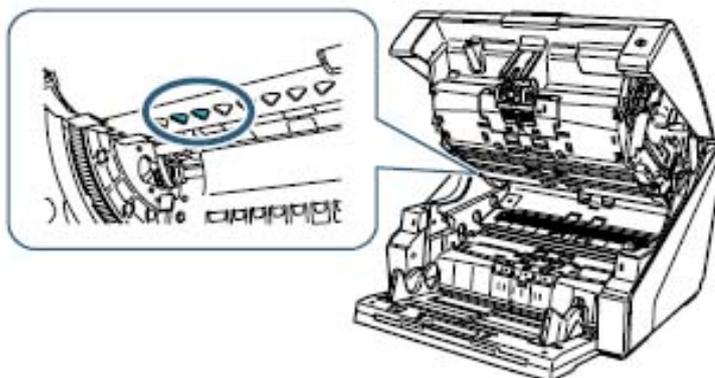
9.8.2.2 Cleaning the Imprinter

We recommend you to clean the scanner after 5,000 sheets scanning to avoid smudge on the scanned image. Note that the required cleaning cycle may vary depending upon document type to be scanned.

When you print documents on which ink does not easily dry, cleaning more frequently than once per 5,000 sheets may be required.

<Front-Side Imprinter>

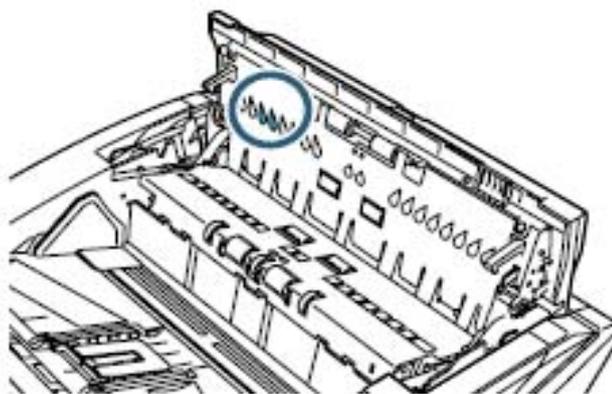
- (1) Make sure that the scanner power cable is unplugged from the outlet.
- (2) Remove the print cartridge. (Refer to Section 9.8.1.1 <Front-Side Imprinter>.)
- (3) Open the hopper. (Refer to Section 8.1.2.)
- (4) Open the ADF. (Refer to Section 8.1.3.)
- (5) Gently wipe the Imprinter head by using a cloth moistened with isopropyl alcohol.



- (6) Close the ADF. (Refer to Section 8.1.3.)
- (7) Put the hopper back up. (Refer to Section 8.1.2.)
- (8) Reinstall the print cartridge. (Refer to Section 9.8.1.1 <Front-Side Imprinter>.)

<Back-Side Imprinter>

- (1) Make sure that the scanner power cable is unplugged from the outlet.
- (2) Remove the Print Cartridge. (Refer to Section 9.8.1.1 <Back-Side Imprinter>.)
- (3) Open the Top Cover. (Refer to Section 8.1.4.)
- (4) Gently wipe the Imprinter head by using a cloth moistened with isopropyl alcohol.



- (5) Close the Top Cover.
- (6) Reinstall the print cartridge. (Refer to Section 9.8.1.1 <Back-Side Imprinter>.)

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	378 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

9.8.3 Consumables

9.8.3.1 List of Consumables

The following is the list of the consumables for the Imprinter. The consumables need to be replaced by the customers.

The amount of the remaining ink can be checked on the Operator Panel. The message to notify the consumable replacement appears when the amount of remaining ink reached the specified amount. (TBD)

No.	Description	Part Number	Replacement Cycle	Checking the Remaining Ink	Replacement Procedure
1	Print Cartridge	CA00050-0262	4,000,000 characters *	8.4.2	9.7.1.1

* The number of characters may decrease depending on the font selection.

PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	379 / 383!	
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				

Appendix 1 Screws

The screws that are used in this device (scanner and imprinter) are as follows.

Name on this manual	Description	Part number	Remarks
Screw A	<u>SCREW</u>	<u>RU6SW2N3-08121</u>	



Name on this manual	Description	Part number	Remarks
Screw B	<u>SCREW</u>	<u>RU6SW2N4-10121</u>	



Name on this manual	Description	Part number	Remarks
Screw C	<u>SCREW</u>	<u>RU6SNA2R5-05121</u>	



						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi		APPR.	I.Fujioka	380 / 383!

Name on this manual	Description	Part number	Remarks
Screw D	SMALL SCREW	U30L-0010-0030#M3X5	



Name on this manual	Description	Part number	Remarks
Screw E	SMALL SCREW	RU6SW2N3-10121	

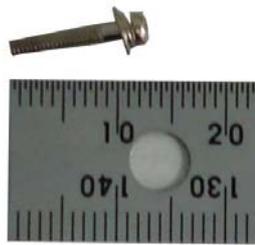


Name on this manual	Description	Part number	Remarks
Tapping screw	PT SCREW	PA83952-2638	



						Name	fi-6800/fi-668PR Maintenance Manual	
						Drawing No.	P1PA03575 – B0XX/6	
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED	Page	381 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR. I.Fujioka			

Name on this manual	Description	Part number	Remarks
Screw F	SCREW	RU6SW2N2-12121	



Name on this manual	Description	Part number	Remarks
Screw G	SMALL SCREW	RU6SW2N3-20121	



Name on this manual	Description	Part number	Remarks
Screw H	SMALL SCREW	RU6SNA3-06121	



Name on this manual	Description	Part number	Remarks
Screw I	SCREW	CA98001-8785	



									Name	fi-6800/fi-668PR Maintenance Manual		
									Drawing No.	P1PA03575 – B0XX/6		
Rev.	D A T E	DESIG.	CHECK	APPR.	DESCRIPTION				PFU LIMITED		Page	382 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi			APPR.	I.Fujioka				

Name on this manual	Description	Part number	Remarks
Fulcrum screw	Fulcrum screw	U30L-0010-0043	



Name on this manual	Description	Part number	Remarks
PUSH RIVET	PUSH RIVET	PA03951-1147	



PFU CONFIDENTIAL

						Name	fi-6800/fi-668PR Maintenance Manual		
						Drawing No.	P1PA03575 – B0XX/6		
Rev.	DATE	DESIG.	CHECK	APPR.	DESCRIPTION	PFU LIMITED		Page	383 / 383!
DESIG.	March 9, 2009	K.Okada	CHECK	A.Miyoshi	APPR.				