### Technical Bulletin

Reissued: 25-Oct-10 Model: PN-MF2a

Date: 27-04-09

No.: RM048001e

#### **RTB Reissue**

The items in bold italics have been corrected.					
Subject: Firmwar	Subject: Firmware Release Note: System Firmware Prepared by: Y.Gaman				
From: 2nd Overs	From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/rec	eive	Retrofit information	
	Product Safety	🛛 Other (	)	🛛 Tier 2	

This RTB has been issued to announce the firmware release information for the **System Firmware**.

#### For China model

Version	Program No.	Effective Date
2.07m	M049CHN207m	September 2010 production
2.07g	M049207g	February 2010 production
2.06q	M049206q	September 2009 production
2.06K	M049206K	July 2009 production
2.06G	M049206G	1st Mass production
<del>2.05G</del>	M049205G	

Version	Modified Points or Symptom Corrected
2.07m	Other changes: 1. Supports the new CIS.
	<u>IMPORTANT:</u> Update the <u>boot file</u> in addition to the <u>regular firmware file</u> .
	<u>Procedure</u> <u>Note:</u> After you upgrade the System firmware to this version ( <u>ver. 2.07m</u> ), you cannot downgrade to a previous version. The procedure for updating the boot files is the same as the one used to update the regular firmware files.
	<ol> <li>First, update the bootfile to <u>ver. 3.01</u>, M049CHN207m-P02.fwf.</li> <li>Then, update the System firmware to this version (<u>ver. 2.07m</u>), M049CHN207m-P01.fwf.</li> </ol>
2.07g	<ul><li>Symptom corrected:</li><li>1. After a PC is turned OFF and ON, it may not detect the USB connection with the MFP.</li></ul>
	Other changes: 1. Scanner control was further improved.

### Reissued: 25-Oct-10

Model: PN-MF2a		Date: 27-04-09	No.: RM048001e
Version	Modified Points or S	ymptom Corrected	
2.06q	<ul> <li>Symptom corrected:</li> <li>1. The following occur when scanning a fi Media (USB): <ul> <li>Full-color mode: The image appea</li> <li>B/W mode: The image cannot be s</li> </ul> </li> <li>2. The "BRIGHTNESS" settings (Menu84 is rebooted.</li> </ul>	rs as an inverted negat tored to the USB media	ive. a.
2.06K	Other changes: To comply with Energy Star program ver1.1, the default setting for Eco Energy was changed so that the machine switches to Eco Energy Mode immediately after finishing a print job.		
2.06G <del>2.05G</del>	1st Mass production		

Reissued: 25-Oct-10

Model: PN-MF2a

Date: 27-04-09

No.: RM048001e

For ASIA/Europe model

Version	Program No.	Effective Date
2.07m	M049EU207m	September 2010 production
2.07g	M049207g	February 2010 production
2.05w	M049205w	September 2009 production
2.05Q	M049205Q	July 2009 production
2.05M	M049205M	1st Mass production
<del>2.05J</del>	M049205J	1st Mass production

Version	Modified Points or Symptom Corrected
2.07m	Other changes:
	1. Supports the new CIS.
	<u>IMPORTANT:</u> Update the <u>boot file</u> in addition to the <u>regular firmware file</u> .
	<u>Procedure</u>
	<u>Note:</u>
	After you upgrade the System firmware to this version ( <u>ver. 2.07m</u> ), you
	cannot downgrade to a previous version.
	The procedure for updating the boot files is the same as the one used to update the regular firmware files.
	upuale life regular miniware mes.
	1) First, update the bootfile to ver. 3.01, M049EU207m-P02.fwf.
	2) Then, update the System firmware to this version (ver. 2.07m),
	M049EU207m-P01.fwf.
2.07g	Symptom corrected:
	1. After a PC is turned OFF and ON, it may not detect the USB connection with
	the MFP.
	2. Wording errors (Finnish) appear in the operation panel display.
	Other changes: 1. Scanner control was further improved.
2.05w	Symptom corrected:
2.05W	1. The following occur when scanning a file as a multi-page PDF using Scan to
	Media (USB):
	- Full-color mode: The image appears as an inverted negative.
	- B/W mode: The image cannot be stored to the USB media.
2.05Q	Other changes:
	To comply with Energy Star program ver1.1, the default setting for Eco Energy
	was changed so that the machine switches to Eco Energy Mode immediately
0.0514	after finishing a print job.
2.05M	1st Mass production
<del>2.05J</del>	1st Mass production

### Technical Bulletin

### Reissued: 25-Oct-10

140	dal	
Mo	del:	PN-MF2b

Date: 1-May-09

No.: RM048002d

#### **RTB Reissue**

The items in bold italics have been corrected.

Subject: Firmware Release Note: System Firmware			Prepared by: Y.Gaman	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (	)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **System Firmware**.

#### For China model

Version	Program No.	Effective Date
2.07m	M048CHN207m	September 2010 production
2.07g	M048CHN207g	February 2010 production
2.06q	M048206q	September 2009 production
2.06h	M048206h	1st Mass production

Version	Modified Points or Symptom Corrected
2.07m	<ol> <li>Symptom corrected:</li> <li>An ADF motor malfunction may occur if a fax is received during machine initialization.</li> <li>Fax reception may fail if bit 6 of software switch 4 is set to a value of 1.</li> <li>In some cases, a Scan to PC image cannot be saved to the PC.</li> <li>In some cases, the first page of a Scan to PC image scanned in full color may appear blank.</li> </ol>
	Other changes: 1. Supports the new CIS. <u>IMPORTANT:</u> To apply the solution for the ADF motor malfunction, update the <u>boot file</u> in addition to the <u>regular firmware file.</u>
	<u>Procedure</u> <u>Note:</u> After you upgrade the System firmware to this version ( <u>ver. 2.07m</u> ), you cannot downgrade to a previous version. The procedure for updating the boot files is the same as the one used to update the regular firmware files.
	<ol> <li>First, update the bootfile to <u>ver. 3.01</u>, M048CHN207m-P02.fwf.</li> <li>Then, update the System firmware to this version (<u>ver. 2.07m</u>), M048CHN207m-P01.fwf.</li> </ol>



### Reissued: 25-Oct-10

Model: PN	Model: PN-MF2b Date: 1-May-09 No.: RM04800			
Version	Modified Points or S	symptom Corrected		
<u>2.07m</u>	<ul> <li>Symptom corrected:</li> <li>1. An ADF motor malfunction may occur if a FAX is received during machine initialization.</li> <li>2. FAX reception may fail if bit 6 of software switch 4 is set to a value of 1.</li> <li>3. In some cases, a Scan to PC image cannot be stored to the PC.</li> <li>4. In some cases, the first page of a Scan to PC image scanned in full color may appear blank.</li> </ul>			
	Other changes: 1. Supports the new CIS.			
	<u>IMPORTANT:</u> To apply the solution for the ADF motor ma (M048CHN207m-P02.fwf) in addition to the (M048CHN207m-P01.fwf).	· · · · ·	<del>oot file</del>	
	<ul> <li><u>Note:</u> The procedure for updating the bound of the procedure for update the regular firmware files.</li> </ul>	ot files is the same as tl	<del>ne one used to</del>	
2.07g	<ol> <li>Symptom corrected:</li> <li>The ADF can be selected for EcoTrans immediately.</li> <li>After a PC is turned OFF and ON, it ma the MFP.</li> <li>Other changes:</li> <li>ADF and Scanner control were further</li> </ol>	ay not detect the USB c		
2.06q	<ul> <li>Symptom corrected:</li> <li>1. The following occur when scanning a findedia (USB): <ul> <li>Full-color mode: The image appea</li> <li>B/W mode: The image cannot be set and the image will appear abnormal on the set and the image will appear abnormal on the set is rebooted.</li> </ul> </li> <li>4. Under specific conditions, the backgroup (see RTB #RM048003 for details).</li> </ul>	rs as an inverted negat stored to the USB media displayed, the machine receiving end. 6) return to default afte	ive. a. will freeze or r the machine	
2.06h	1st Mass production			

Reissued: 25-Oct-10

Model: PN-MF2b

Date: 1-May-09 No

No.: RM048002d

For ASIA/Europe model

Version	Program No.	Effective Date
2.07m	M048EU207m	September 2010 production
2.07g	M048EU207g	February 2010 production
2.05w	M048205w	September 2009 production
2.05k	M048205k	1st Mass production

Version	Modified Points or Symptom Corrected
2.07m	<ol> <li>Symptom corrected:</li> <li>An ADF motor malfunction may occur if a FAX is received during machine initialization.</li> <li>FAX reception may fail if bit 6 of software switch 4 is set to a value of 1.</li> <li>In some cases, a Scan to PC image cannot be saved to the PC.</li> <li>In some cases, the first page of a Scan to PC image scanned in full color may appear blank.</li> </ol>
	Other changes: 1. Supports the new CIS.
	<u>IMPORTANT:</u> To apply the solution for the ADF motor malfunction, update the <u>boot file</u> in addition to the <u>regular firmware file.</u>
	<u>Procedure</u> <u>Note:</u> After you upgrade the System firmware to this version ( <u>ver. 2.07m</u> ), you cannot downgrade to a previous version. The procedure for updating the boot files is the same as the one used to update the regular firmware files.
	<ol> <li>First, update the bootfile to <u>ver. 3.01</u>, M048EU207m-P02.fwf.</li> <li>Then, update the System firmware to this version (<u>ver. 2.07m</u>), M048EU207m-P01.fwf.</li> </ol>
<del>2.07m</del>	<ul> <li>Symptom corrected:</li> <li>An ADF motor malfunction may occur if a FAX is received during machine initialization.</li> <li>FAX reception may fail if bit 6 of software switch 4 is set to a value of 1.</li> <li>In some cases, a Scan to PC image cannot be stored to the PC.</li> <li>In some cases, the first page of a Scan to PC image scanned in full color may appear blank.</li> </ul>
	Other changes: 1. Supports the new CIS.
	<u>IMPORTANT:</u> To apply the solution for the ADF motor malfunction, update the <u>boot file</u> (M048EU207m-P02.fwf) in addition to the <u>regular firmware file</u> (M048EU207m- P01.fwf).



### Reissued: 25-Oct-10

Model: PN	I-MF2b	Date: 1-May-09	No.: RM048002d			
Version	Modified Points or S	symptom Corrected				
	- <u>Note:</u> The procedure for updating the bo	ot files is the same as th	ne one used to			
	update the regular firmware files.					
2.07g	Symptom corrected:					
	1. The ADF can be selected for EcoTrans	s, which will send the FA	АX			
	immediately.					
	2. After a PC is turned OFF and ON, it may	ay not detect the USB c	onnection with			
	the MFP.					
	3. Wording errors (Finnish) appear in the	operation panel display				
	Other changes:					
	1. ADF and Scanner control were further	improved.				
2.05w	Symptom corrected:					
	1. The following occur when scanning a fi	ile as a multi-page PDF	using Scan to			
	Media (USB):					
	- Full-color mode: The image appea					
	<ul> <li>B/W mode: The image cannot be s</li> </ul>					
	2. If a FAX is sent while error code 07 is displayed, the machine will freeze or					
	the image will appear abnormal on the receiving end.					
	3. Under specific conditions, the background of a received FAX appears black					
0.051	(see RTB #RM048003 for details).					
2.05k	1st Mass production					

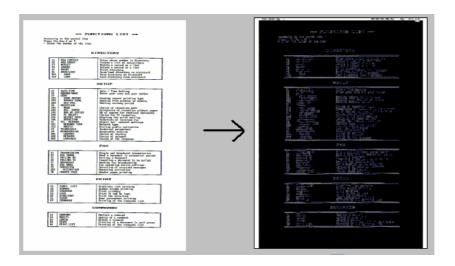
# Technical Bulletin

Model: PN-MF2b				e: 07-Aug	-09	No.: RM048003
Subject: Fax background appears black				Prepare	d by: Y.G	aman
From: 1st Tech. Support Sec. Service Support Dept.						
Classification:	Troubleshooting	Part inference	ormat	tion	Actior	n required
	Mechanical	Electric	al		🗌 Servio	ce manual revision
	Paper path	🗌 Transm	it/rec	eive	Retro	fit information
	Product Safety	🗌 Other (		)	🛛 Tier 2	

#### SYMPTOM

Under the following conditions, the background of a received fax appears black, as shown in the sample below:

- The fax is sent using Delayed Transmission (Memory Transmission)
- Contrast is set to "-----0" and Brightness set to "0-----".



### CAUSE

The same Contrast and Brightness settings for the scanning engine are applied to both copier and fax images. However, fax images are one-bit binary, while copier images are multi-bit digital. When the Contrast and Brightness settings are set to their extreme values (limits), the fax image will appear as shown above.

### SOLUTION

Please do not set Contrast and Brightness to the settings described above when using Delayed Transmission (Memory Transmission).

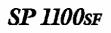
# Technical Bulletin

PAGE: 1/1

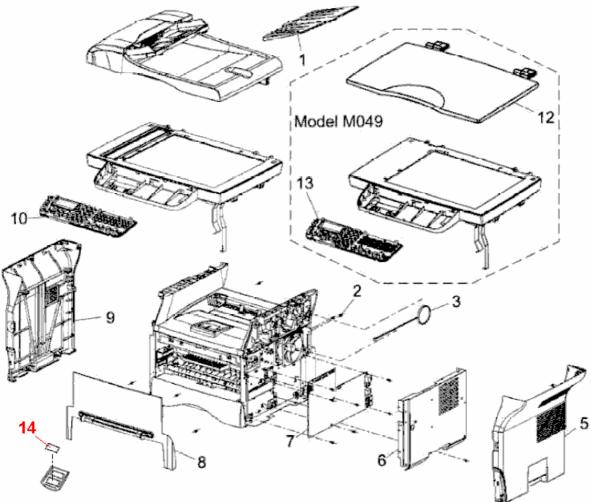
Model: PN-MF2b (Oceania only) Date				e: 02-Sep	-09	No. RM048004
Subject: Model name decal (Exterior 2)				Prepare	d by: Y.	Gaman
From: 1st Tech. Support Sec. Service Support Dept.						
Classification:	Troubleshooting	🛛 Part inf	orma	tion	Actio	on required
	Mechanical	Electric	al		🗌 Serv	vice manual revision
	Paper path	Transm	it/rec	eive	🗌 Retr	ofit information
	Product Safety	Other (		)	🗌 Tier	2

New part number	Description	Q'ty	Page	Index	Note
M0488634	DECAL:MODEL NAME PLATE:M048:LAN	1	5	14	Oceania only

This decal was added.



### 2.Exterior 2 (M048/M049)



# Technical Bulletin

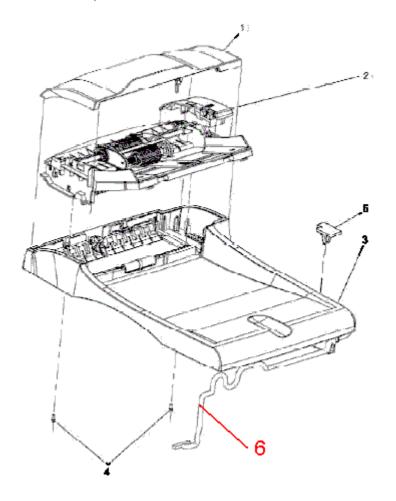
### PAGE: 1/1

Model: PN-MF2b				ate: 09-Dec-09		No.: RM048005		
Subject: Harness:Motor&Sensor (ADF Unit)				Prepare	d by: Y. G	Gaman		
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept								
Classification:	Troubleshooting	Part info	ormat	ation 🗌 Acti		n required		
	Mechanical	Electric	al		Servic	e manual revision		
	Paper path	Transmit/rec		Transmit/receiv		eive	Retrof	fit information
	Product Safety	Other (		)	Tier 2			

New part number	Description	Q'ty	Int	Page	Index	Note
M0481059	HARNESS:MOTOR & SENSOR	1	-	17	6	

Change: This part was added.

**Reason**: Requests from the field.



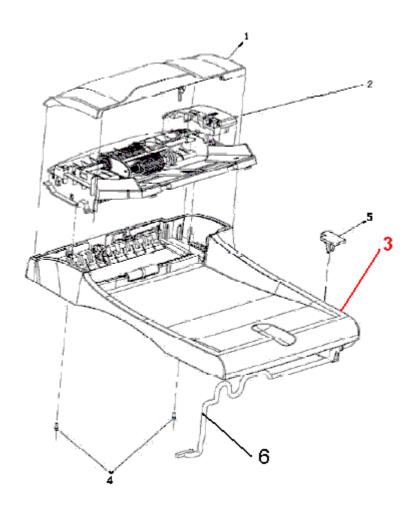
# Technical Bulletin

#### PAGE: 1/1

Model: PN-MF2t	Dat	te: 21-Jan-10		No.: RM048006				
Subject: ADF Exit Tray (ADF Unit)					d by: Y. C	Gaman		
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept								
Classification:	Troubleshooting	Part inf	ormat	tion Action		n required		
	🗌 Mechanical	Electric	al		Servic	ce manual revision		
	Paper path	Transmit/rec		Transmit/recei		eive	Retro	fit information
	Product Safety	Other (		)	Tier 2			

Incorrect part number	Correct part number	Description	Q'ty	Int	Page	Index	Note
M0481056	M0481057	ADF Exit Tray	1	X/O	17	3	

**Change/Reason:** The part number listed in the Parts Catalog for the DF Exit Tray was corrected.



### Technical Bulletin

Model: PN-MF2a/b

Date: 16-Nov-10

No.: RM048007a

#### **RTB Reissue**

The items in *bold italics* were corrected.

Subject: ADF Motor and Scanner Motor Malfunction				Prepared by: Y. Gaman		
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept						
Classification:	Troubleshooting	Part informat	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	Other (	)	🛛 Tier 2		

### SYMPTOM

- 1) Originals loaded in the ADF are not fed
- 2) The flatbed scanner doesn't scan
- 3) The machine does not reach the Ready condition

### CAUSE

An abnormal motor control signal is sent, causing the ADF motor or scanner motor to fail. Eventually, this failure damages the main board.

### SOLUTION

Do the procedures on the next page, part of which involves updating the System Firmware to **ver.2.07g** or newer.

#### Note:

With this version, the motor control programs were changed so that the abnormal control signals are not sent.

#### **Serial Numbers:**

	EUROPE (-27)	ASIA (-29)	OCEANIA (-22)	CHINA (-21)
PN-MF1a	<u>56308720384</u>	<i>S6308740105</i>	-	<b>S6308760001</b>
(M049)	<u>56398920218</u>	<u>S6398940051</u>		<u>S6399360160</u>
PN-MF1b	<b>S6208721153</b>	<b>S6208840001</b>	<b>S6208750001</b>	<u>56208660960</u>
(M048)	<del>S6299320010</del>	<del>S6299340288</del>	<u>S6299250280</u>	<del>56299360001</del>

- Serial numbers that are <u>underlined</u> are the last S/N before ver. 2.07g was applied.
- Serial numbers that are **not** underlined are the cut-in S/N for ver. 2.07g.

RIC	OH
Model:	PN-MF2a/

del:	PN-MF2a/b		
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#### Procedures

Do the following, depending on which symptom (Symptom #1, #2, or #3 above) is reported from the field.

#### Important:

- In these procedures, do not replace the main board by itself. Always be sure to replace the motors as well. This is to avoid damage to the main board.
- If it is not possible to check the impedance values of the motors, do the "Alternate **Procedures**" on the next page.

Symptom 1: Originals loaded in the ADF are not fed

- 1. Check the impedance levels of the ADF motor.
- 2. If the impedance between the common pin (red harness) and any of the other pins is **not** 60 ohms +/-10%, replace the **ADF motor.**

**Note:** The ADF motor connector is located inside the ADF upper cover.

- 3. If this does not solve the symptom, replace the main board.
- 4. Upgrade the System firmware to **v2.07g** or newer, even if **all** of the impedance values are normal.

Symptom 2: The flatbed scanner doesn't scan.

Do the same procedure as above for the scanner motor.

Note: The scanner motor connector is located on the main board.

Symptom 3: The machine does not reach the Ready condition.

Do **both** procedures described above (Symptoms 1 and 2).

### Model: PN-MF2a/b

Date: 16-Nov-10

No.: RM048007a

#### **Alternate Procedures**

Do the following if it is not possible to check the impedance values of the motors.

### Symptom 1:

- 1. Replace the ADF motor.
- 2. If this does not solve the symptom, replace the main board.
- 3. Upgrade the System firmware to **v2.07g** or newer.

### Symptom 2:

Do the same as above for the scanner motor.

### Symptom 3:

- 1. Check the elements of the main board for any damage (see the photos below).
- 2. If any of the elements are damaged, replace the ADF motor, the scanner motor, and the main board **together as a set**.

**Important:** If the elements appear normal, you do not need to replace these parts at this time. However if the symptom recurs later, replace these parts (two motors and main board) at that time, together as a set.

3. Upgrade the System firmware to **v2.07g** or newer.

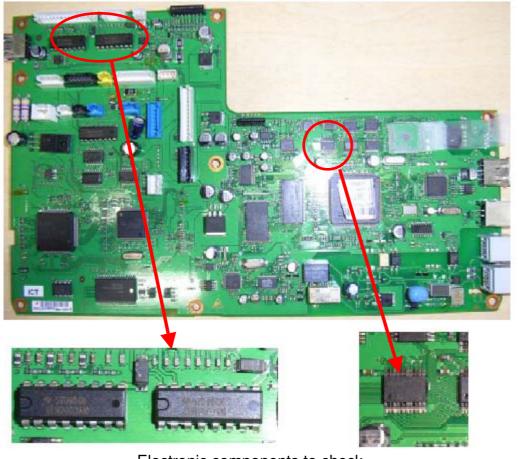
# Technical Bulletin

#### **PAGE: 4/4**

Model: PN-MF2a/b

### Date: 16-Nov-10

No.: RM048007a



Electronic components to check

# Technical Bulletin

#### **PAGE: 1/1**

Model: PN-MF2a/b Date					te: 10-May-11 No.:RM048		
Subject: CONTACT IMAGE SENSOR (CIS)					d by: Y. G	aman	
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept							
Classification:	Troubleshooting	Part info	ormat	tion	Action	required	
	🗌 Mechanical	Electric	al		Servic	e manual revision	
	Paper path	Transm	it/rec	eive	Retrof	it information	
	Product Safety	igvee Other (		)	Tier 2		

Old part	New part	Description	Q'ty	Int	Page	Index
number	number					
M0481089	M0481090	CONTACT IMAGE SENSOR: 186362807:186362828	1	0/0*	13	16

Change/Reason: Vendor change

Important: When you install the new part, upgrade the firmware to v2.07m or later.

**Note:** The box of the new part contains the following addendum sheet, which explains the required firmware update.

ADDENDUM			
-English:			
When the technician changes the CIS Liteon REF: 186362828, it's compulsory to			
upgrade the device with a FW $\geq$ 2.07j.			
For the different OEM models the latest version in production must be used.			

# Technical Bulletin

#### **PAGE: 1/1**

Model: PN-MF2 Date			e: 15-Mar	No.:RM048009		
Subject: Scanner Base					d by: Y. C	Gaman
From: 3rd Tech S	Service Sect., MFP/P Tech Serv	vice Dept.				
Classification:	Troubleshooting	Part inf	ormat	tion	Action	n required
	🗌 Mechanical	Electric	al		Servic	ce manual revision
	Paper path	Transm	it/rec	eive	Retro	fit information
	Product Safety	Other (		)	Tier 2	

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
M0481035	M0481102	RZF:253443548:SCANNERBOT	1	X/O	13	8	
M0481036		TOMKIT				9	
M0481040						13	

**Change:** The shapes of these parts were changed, and the parts were combined into one service part (the old part numbers were deleted).

Reason: Vendor change

# Technical Bulletin

**PAGE: 1/1** 

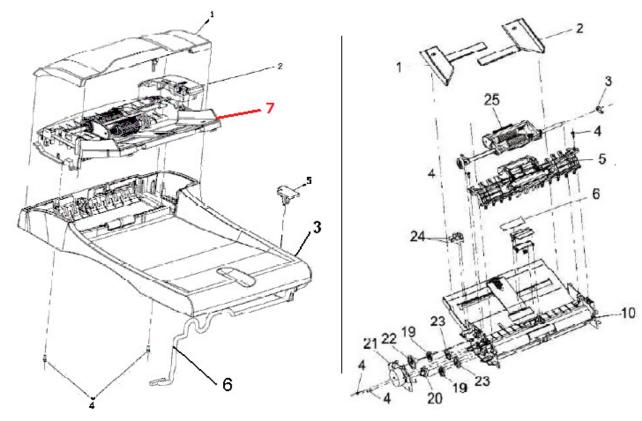
18

Model: PN-MF			Dat	te: 25-Mar	-15	No.:RM048010
Subject: ADF PAPER FEED ASS'Y					d by: Y. G	aman
From: 3rd Tech S	Service Sect., MFP/P Tech Ser	vice Dept.				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part infor Electrica	I		Servic	required e manual revision it information

Old	New	Description	Q'ty	Int	Page	Index	Note
part number	part number						
M0489501	-	PAPER FEED ROLLER	1	X/O	19	25	
		ASS'Y:253240690					
-	M0489502	ADF PAPER FEED	1	X/O	17	7	
		ASS'Y					
		253017421:252970629					

Change/Reason: Vendor change

Due to a vender change, Paper Roller Ass'y (Index 25) cannot be supplied any more. Please replace the assembly of M0489502 (New Index 7) instead.





### Technical Bulletin

**PAGE: 1/1** 

Model: PN-C1/MF2

Date: 28-Apr-15

No.: RM2990007

Subject: Part dis	continued	Prepared by: Takuma Sakakibara	
From: 2nd Tech	Service Sect., MFP/Printer Te		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part information</li> <li>Electrical</li> <li>Transmit/receive</li> <li>Other ()</li> </ul>	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

# The following part has been discontinued. It's not available anymore.

Description	PN	Memo
SEPARATION PAD ASSY:252876321	M0481065	ADF separation pad