

Reissued: 29-Aug-17

Model: OP-P3/MF3	Date:4-Nov-16	No.: RM0A1001a
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RTB Reissue

The items in ***bold italics*** were added.

Subject: Launch of the new model OP-P3/MF3 (differences from the predecessor model)		Prepared by: Y.Miyamoto	
From: 1nd Tech Service Sect., MFP/Printer Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other (New model)	<input checked="" type="checkbox"/> Tier 2

This bulletin announces the differences between the new model OP-P3/MF3 and its predecessor model OP-P2/MF2. As you are probably aware, an FSM exclusively for the new model will not be released. Please refer to the FSM of the predecessor model and this bulletin when servicing the OP-P3/MF3.

The following are the differences between the two models:

1. Safety Notices decal and Laser Unit decal
2. Supported printer language
3. Added caution note on PSU replacement
4. Updated SC table
5. Updated SP table

1. Safety Notices decal and Laser Unit decal

Important Safety Notices (pg.5)

The laser caution decal was modified in line with the revised laser safety standard.

WARNING

- Turn off the main switch before attempting any of the procedures in the Laser Optics Housing Unit section. Laser beams can seriously damage your eyes.

CAUTION MARKING:

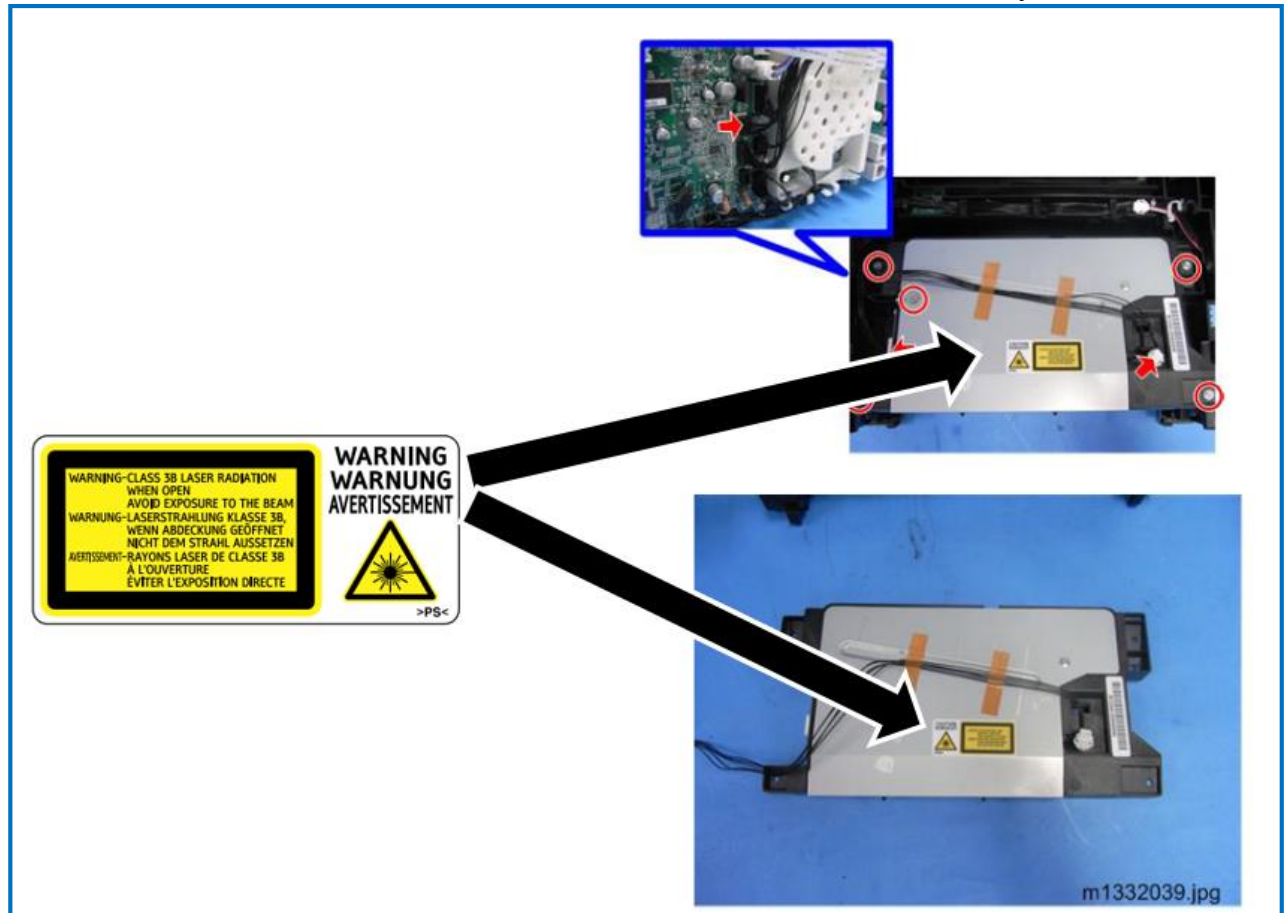


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Laser Unit (pg.58)

The laser caution decal was modified in line with the revised laser safety standard.


2. Supported printer language

OP-P3/MF3 is a GDI printer and does not support PCL.

FSM:

1. Product Information > Series Comparison > OP-P2/MF2 (Pg. 24)

3. Added caution note on PSU replacement

The following caution was added to the PSU replacement procedure.

FSM:

4. Replacement and Adjustment > Boards > PSU (Pg. 89)

⚠ CAUTION:

NEVER touch the areas outlined in red in the photos below to prevent electric shock caused by residual charge.

Residual charge of about 100V-400V remains on the PSU board for several months even if the board had been removed from the machine with the machine power turned off and the power cord unplugged.

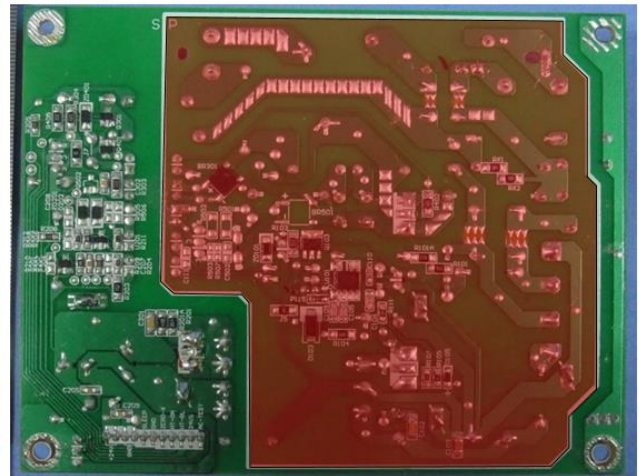
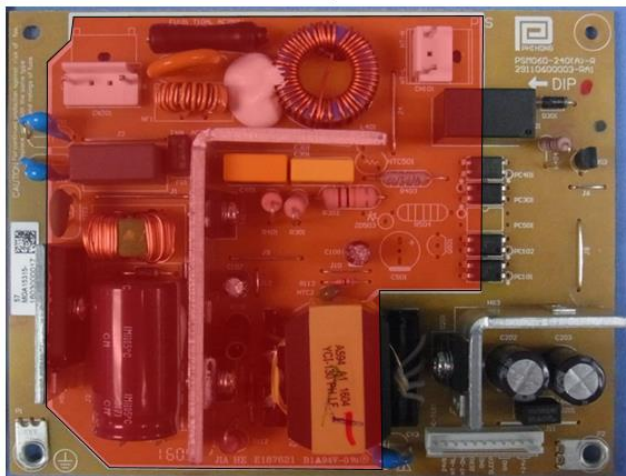
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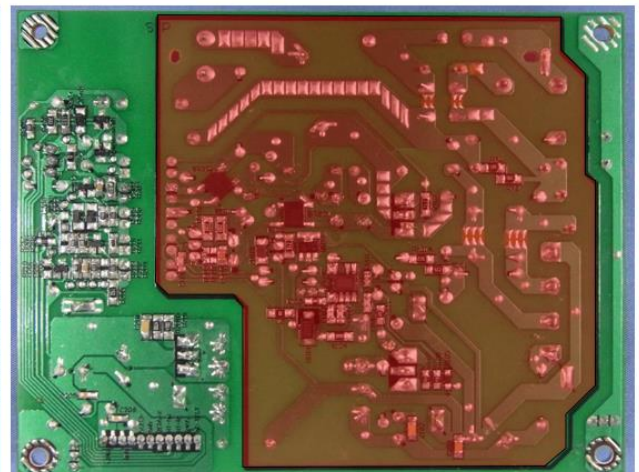
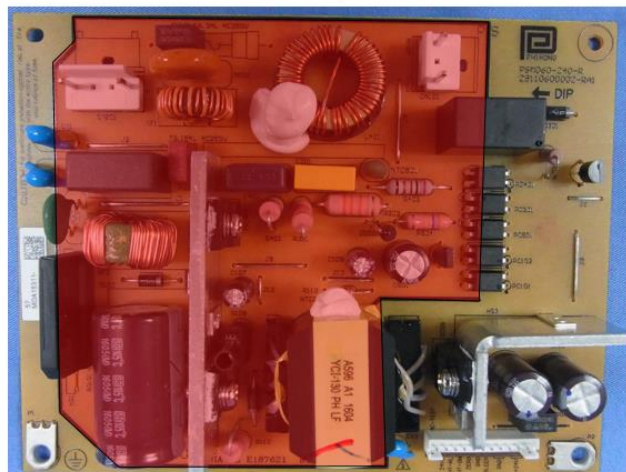
Date:4-Nov-16

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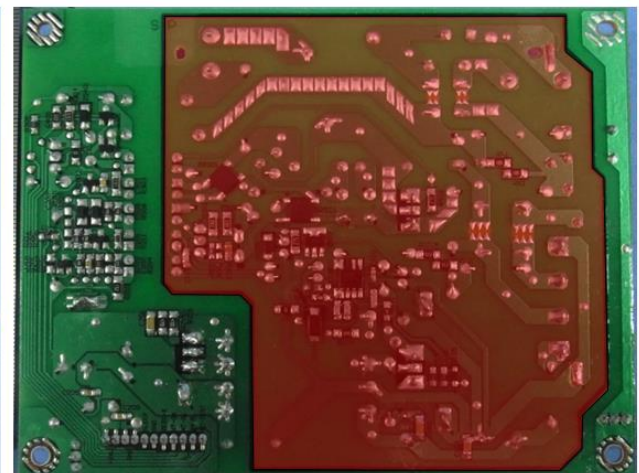
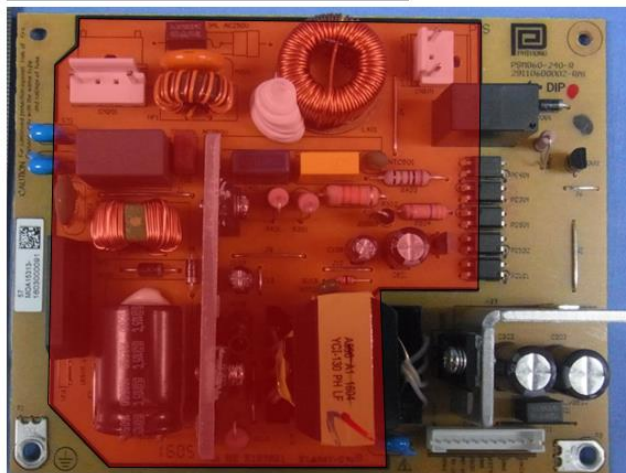
M0A15315 : TWN : PSU ASS'Y



M0A15311 : CHN : PSU ASS'Y



M0A15313 : EU/AA/IND : PSU ASS'Y



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4. Updated SC table

The following changes were made in the SC table.

- SC556 and SC 669 deleted.
- Revised descriptions in *red italics*.

FSM:

6. Troubleshooting > Service Call > SC Tables (pg.137)

SC 2xx : *Laser Optics Error*

SC202	Polygon Motor On Timeout Error
	No lock signal was received within <i>20</i> sec. after the polygon motor turned on. <ul style="list-style-type: none"> ● Check the laser unit harness connection ● Replace the laser unit 1. <i>Power cycle the machine off/on.</i>
SC203	Polygon Motor On Timeout Error
	No lock signal was received within 10 sec. after the polygon motor turned on. <ul style="list-style-type: none"> ● Check the laser unit harness connection ● Polygon motor/driver board defective 1. <i>Power cycle the machine off/on.</i>
SC204	Polygon Motor Lock Signal Error
	Four samplings within 200 ms revealed that the polygon motor lock signal remained HIGH beyond the prescribed number of revolutions. <ul style="list-style-type: none"> ● Check the laser unit harness connection ● Replace the laser unit 1. <i>Power cycle the machine off/on.</i>
SC220	Beam Synchronization Error
	Top cover (or maintenance cover) is down and locked, and the polygon motor is locked, but laser synchronization could not be achieved within 40 msec. <ul style="list-style-type: none"> ● Check the laser unit harness connection ● Replace the laser unit 1. <i>Power cycle the machine off/on.</i>
SC268	Laser Scanning Unit thermistor error
	After the main power switch ON, writing thermistor temperature is detected at 100ms intervals and... <ul style="list-style-type: none"> ● Less than -30 degrees Celsius is detected for more than 4 seconds (Thermistor defective). ● More than 105 degrees Celsius is detected for more than 1 second (Thermistor short).
	<ul style="list-style-type: none"> ● Check the laser unit harness connection ● Replace the laser unit 1. <i>Power cycle the machine off/on.</i>

SC 5xx: Motor, Fusing Error

SC500	Main Motor Error
	One of the following problems occurred: <ul style="list-style-type: none"> ● The machine failed to detect a LOCK signal within <i>550 ms</i> after the main motor was turned on. ● <i>Main motor lock was detected, but no signals from 16 samplings within 800ms.</i> ● The machine failed to detect a LOCK release signal with 2 sec. after the main motor was turned off.
	<ul style="list-style-type: none"> ● Cycle the machine off/on ● Check the areas around motor and main drive train for a physical obstruction (paper scraps, etc.). ● Clean the main motor drive train.

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	<ul style="list-style-type: none">● Replace the Main motor				
SC542	Fuser Reload error (Normal power supply)				
	This SC occurs, if any of the following conditions are met:				
	1. Increase of the fusing temperature detected.				
	<ul style="list-style-type: none">● The fusing temperature increased 45 degrees or less within 4 seconds or increased more than 45 degrees within 2 seconds.● The fusing temperature increased T1 degrees or less for 5 times consecutively within 1.5 seconds.				
		CHN	EU/ASIA/INDIA	NA	TWN
	T1	10°C	8°C	7°C	7°C
	T1 : Temperature by model (CHN/EU/ASIA/INDIA/NA/TWN)				
	2. Did not reach the reload temperature.				
	<ul style="list-style-type: none">● The fusing reload temperature was not reached within t2 sec after the heater control was activated in normal/high temperature environment.● The fusing reload temperature was not reached within t3 sec after the heater control was activated in low temperature environment.				
	t2/t3: Seconds by model (CHN/EU/ASIA/INDIA/NA/TWN)				
	CHN	EU/ASIA/INDIA	NA	TWN	
T2	33 sec	36 sec	36 sec	39 sec	
T3	35 sec	39 sec	38 sec	41 sec	
	<ul style="list-style-type: none">● Disconnected or defective thermistor● Incorrect input power supply detected at the main power socket● Broken heater or thermostat circuit				
	Important Execute "Reset Fusing Unit SC" after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and will not operate.				
SC543	High Temperature Error - Software (Fatal Error)				
	The temperature inside the fusing unit exceeded 240°C for more than 0.5 sec.				
	<ul style="list-style-type: none">● After this error has occurred three times, the machine will shut down and must be released with the Smart Organizing Monitor and serviced by a service technician.● Main board defective● PSU defective (TRIAC short)				
	<ul style="list-style-type: none">● Check all PCB harness connection● Check or replace PSU● Replace Main board				
	Important <ul style="list-style-type: none">● Execute "Reset Fusing unit SC" after completing the recovery procedure. Otherwise, the machine continues to issue this SC code and will not operate.				
SC545	Fuser full heater error				
	The heating element of the fusing lamp remained at full power longer than 6.5 sec.(CHN) / 5.5 sec.(WW) after the reload temperature was detected.				
	<ul style="list-style-type: none">● Fusing thermistor harness connector loose, broken, defective● Fusing thermistor warped or positioned incorrectly● Fusing lamp harness connector loose, broken, defective				
	<ul style="list-style-type: none">● Check Fusing thermistor position and it's harness connection● Check Fusing lamp and it's harness connection				
	Important <ul style="list-style-type: none">● Execute "Reset Fusing unit SC" after completing the recovery procedure.				

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	<i>Otherwise, the machine continues to issue this SC code and will not operate.</i>		
SC547	Zero cross Error		
	<ul style="list-style-type: none"> <i>The fusing lamp relay is off, but the zero cross signal was detected three times after the main power was turned on.</i> <i>The fusing lamp relay switch is turned on, but the zero cross signal was not detected for 3 seconds after the main power was turned on or after the front door was closed.</i> <i>The detection error occurs twice or more in the 11 zero cross signal detections. This error is defined when the detected zero cross signal is less than 45.</i> 		
	<ul style="list-style-type: none"> Reset by turning the power OFF/ON. Use high quality power supply. Replace the HVP or PSU. 		
SC556 (Deleted)	This SC was deleted.		

SC 6xx (Communication and other Error)

669 (Deleted)	This SC is deleted. Because this model don't have the EEPROM.
SC688	No CTL_PRREQ_N Signal
	Paper failed to feed after the machine reached the reload temperature because the main board did not issue a PRREQ signal. <ul style="list-style-type: none"> <i>Power cycle the machine off/on.</i>

5. Updated SP table

The following changes were made in the SP table.

- PDL Menu and Auto IP Setting deleted.
- Debug Tool and AirPrint added.
- Revised descriptions in *red italics*.

FSM:

5. Maintenance Reference > Service Tables > OP-P2/MF2 Service Mode (Pg. 117)

When entering the Service Mode from SOM (printer model)

Item	Selections	Remarks
Registration: Tray 1	Horizontal	Adjusts the horizontal registration for tray 1. If the machine settings are reset to the factory defaults, this value does not change. [-40 to 40 / 0 (Default) / 0.1 mm/step]
	Vertical: Plain Paper	Adjusts the vertical registration of plain paper for tray1. If the machine settings are reset to the factory defaults, this value does not change. [-40 to 40 / 0 (Default) / 0.1 mm/step]
Auto IP Setting (Deleted)	In SOM this item isn't described.	
Destination	Sets the destination and updates and updates the engine setting. (Factory use.) <i>TAIWAN / NA / EU / ASIA / CHINA / INDIA</i>	
PnP ID	0x00~0x7F	
PDL Menu (Deleted)	In SOM this item isn't described.	
Fusing Temperature	Plain Paper	Adjusts the fusing temperature for plain paper. [152 to 192 / 177 (Default) / 1°C/step]

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	Thick Paper	Adjusts the fusing temperature for thick paper. [157 to 197 / 187 (Default) / 1°C/step]	
	Thin Paper	Adjusts the fusing temperature for thin paper. [140 to 180 / 170 (Default) / 1 °C/step]	
	Recycled	Adjusts the fusing temperature for recycled paper. [145 to 185 / 175 (Default) / 1 °C/step]	
	Low Power Mode (Deleted)	In SOM this item isn't described.	
Debug Tool (New)	Specifies the location to where the logs are to be stored. Off / USB / TCP		
AirPrint (New)	Disables or enables AirPrint. Disable / Enable		

When entering the Service Mode from the operation panel (MF model)

Engine Maintenance		
Registration	Horiz. Tray1	Adjusts the horizontal registration for tray 1. If the machine settings are reset to the factory defaults, this value does not change. [-40.0 to 40.0 / 0.0 (Default) / 0.1 mm/step]
	Vert. Tray1 Plain	Adjusts the vertical registration of plain paper for tray1. If the machine settings are reset to the factory defaults, this value does not change. [-40.0 to 40.0 / 0 (Default) / 0.1 mm/step]
	Horiz Bypass tray	Adjusts the horizontal registration for the bypass tray. If the machine settings are reset to the factory defaults, this value does not change. [-40.0 to 40.0 / 0.0 (Default) / 0.1 mm/step]
	Vert Bypass Plain	Adjusts the vertical registration of plain paper for the bypass tray. If the machine settings are reset to the factory defaults, this value does not change. [-40.0 to 40.0 / 0.0 (Default) / 0.1 mm/step]
Destination	Sets the destination and updates the engine setting. Do not change this setting (Factory Use). [TAIWAN / NA / EU / ASIA / CHINA / INDIA]	
Debug Tool (New)	Specifies the location to where the logs are to be stored. Off / USB / TCP	
AirPrint Enable (New)	Disables or enables AirPrint. Disable / Enable	

Notes on AirPrint:

- AirPrint is not supported at the time of launch of OP-P3/MF3, as it is undergoing the certification process by Apple.
- Announcement will follow separately when supported.
- Announcement on the AirPrint supported firmware version will also follow.
- **The availability of AirPrint function is updated.**

-The availability of AirPrint function-

Model type		Description	Product name	Firmware for AirPrint Function
P3	a	P USB model	SP221	Not supported

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MF3	<i>aw</i>	<i>P Network model</i>	<i>SP220Nw/SP220Nw</i>	<i>Not supported</i>
	<i>awX</i>	<i>P Extra model</i>	<i>SP277NwX</i>	<i>Not supported</i>
	<i>a</i>	<i>3in1 USB model</i>	<i>SP221S</i>	<i>Not supported</i>
	<i>aw</i>	<i>3in1 Network model</i>	<i>SP220SNw/221SNw</i>	<i>Module: GDI Version: 1.05</i>
	<i>af</i>	<i>4in1 USB model</i>	<i>SP221SF</i>	<i>Not supported</i>
	<i>afw</i>	<i>4in1 Network model</i>	<i>SP220SFNw/221SFNw</i>	<i>Module: GDI Version: 1.05</i>
	<i>afwX</i>	<i>4in1 Extra model</i>	<i>SP277SFNwX</i>	<i>Module: GDI Version: 1.05</i>

Model: OP—MF3 3in1		Date: 9-Mar-17	No.: RM0A2005
Subject: Troubleshooting for vertical white streaks		Prepared by: K.Nakano	
From: Printer Sec., MFP/P FQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Part information <input type="checkbox"/> Action required <input type="checkbox"/> Mechanical <input type="checkbox"/> Electrical <input type="checkbox"/> Service manual revision <input type="checkbox"/> Paper path <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Retrofit information <input type="checkbox"/> Product Safety <input type="checkbox"/> Other () <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5		

SYMPTOM

Vertical white streaks may appear on the image.

Note: This occurs regardless of whether the original is scanned with the ADF or on the exposure glass.

White streaks (ADF scan, Op-MF3):



Normal:



CAUSE

Firmware bug.

Model: OP—MF3 3in1

Date: 9-Mar-17

No.: RM0A2005

SOLUTION

Production line:

The firmware was modified to Ver.1.04 (Cut-in S/N below)

Cut-In Serial Numbers

M0A2-21: Y737M200768 ~

M0A5-27: Y767M102013 ~

M0BF-27: Y897M100427 ~

M0A3-21: Y747M100218 ~

M0A6-27: Y777M260410 ~

M0BG-27: Y907M100627 ~

In the field:

Update the firmware to Ver.1.04 or newer.

Product Code	Product Name	Module	Program Number	Ver.
M0A2-21	SP 221S	GDI	M0A25053C	1.04
M0A5-27	SP 220SNw	GDI	M0A55053D	1.04
M0BF-27	SP 277SNwX			
M0A3-21	SP 221SF	GDI	M0A35053C	1.04
M0A6-19/-27	SP 220SFNw	GDI	M0A65053D	1.04
M0BG-27	SP 277SFNwX			

Model: Op-MF3 4 in1		Date: 15-Mar-18	No.: RM0A2006
Subject: Troubleshooting for sending/receiving a FAX		Prepared by: Akira Shigeta	
From: Tech. Support Sec., Product Marketing Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information

SYMPTOM

The machine fails to send/receive a FAX document.

SOLUTION

Step 1: Confirm which following case is applied on your machine.

- The machine **can** receive but **cannot** send a Fax. Then go to Step 2.
- The machine **cannot** receive but **can** send a Fax. Then go to Step 5.

Step 2: Confirm the detail situation for your machine.

- The machine cannot send a FAX to **all** receivers. Then go to Step 3.
- The machine cannot send a FAX to the **specific** receiver. Then go to Step 4.

Step 3: Gradually increase the TX Level (See **A** in Reference). If this won't improve the situation, switch off the ECM Transmission (See **C** in Reference).

Note: Max value of TX Level is "-1dBm". If this step doesn't help your symptom, a Configuration page (See **E** in Reference) and G3 protocol dump (See **F** in Reference) are required to analyze the symptom.

Step 4: The problem seems to be on the RX machine or its connecting line. Please adjust the setting of RX machine or ask the service provider.

Step 5: Confirm the detail situation for your machine.

- The machine cannot receive a FAX from **all** senders. Then go to Step 6.
- The machine cannot receive a FAX from the **specific** sender. Then go to Step 7.

Step 6: Gradually increase the RX level (See **B** in Reference). If this won't improve the situation, switch off the ECM Reception (See **D** in Reference).

Note: Max value of RX level is "-16dBm". If this step doesn't help your symptom, a Configuration page (See **E** in Reference) and G3 protocol dump (See **F** in Reference) are required to analyze the symptom.

Step 7: The problem is on the TX machine and its connecting line. Please adjust the setting of TX machine or ask the service provider.

REFERENCE

How to access each command on the machine is described below:

- A.** TX Level (Default is “-8dBm”): Maintenance mode -> Fax Maintenance -> Modem settings ->TX Level
- B.** RX Level (Default is “-43dBm”): Maintenance mode -> Fax Maintenance -> Modem settings ->RX Level
- C.** ECM Transmission (Default is “ON”): User Tools -> Fax Features -> Communication Settings -> ECM Transmission
- D.** ECM Reception (Default is “ON”): User Tools -> Fax Features -> Communication Settings -> ECM Reception
- E.** Configuration Page: User Tools -> Print List/Report -> Configuration Page
- F.** G3 Protocol Dump: Maintenance mode -> Print Reports -> G3 Protocol Dump