Technical Bulletin

Reissued: 01-Jul-15

Date: 12-Apr-12

No.: RC279001c

RTB Reissue

Model: PD-D1

The items in bold italics have been corrected or added.

Subject: Firmware Release Note: Main(A3)		Prepared by: Y. Kuwabara	
From: 2nd Tech S	Service Sect., MFP/Printer Tec	h Service Dept.	
Classification:	Troubleshooting	Part information	Action required
	🗌 Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Product Safety	Other (Firmware)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **Main (A3).**

Version	Program No.	Effective Date	Availability of RFU
1.12	C2795116F	June 2015 production	Not available
1.11	C2795116E	October 2014 production	Not available
1.09	C2795116D	June 2013 production	Not available
1.07	C2795116C	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

"Available" The firmware can be updated via RFU or SD card.

"Not available": The firmware can only be updated via SD card.

Reissued: 01-Jul-15

Model: PD-D1

Date: 12-Apr-12

No.: RC279001c

Version		Modified Points or Sy	mptom Co	rrected
1.12	Sympto - Us wo	om corrected: er Codes cannot be cleared in on rk).	e operation	n ("Clear all" does not
1.11	Other c The def	Other changes (only EU models): The default setting for the Auto-Off Timer was changed from OFF to ON.		
1.09	Other changes: The following SP modes were added. SP6-170: Displays the detection results of original length sensors 1 and 2. SP6-171-179: Displays the detection results of the width sensors. SP6-180: Adjusts the timing for turning the lamp ON when detecting the size of the original			
	SP6- Name Default Bange			
	170	APS Operation Check	-	ON/OFF
	171	Scan Size Detect Value (S1 R)	0	0~255 (digit)
	172	Scan Size Detect Value (S1 G)	0	0~255 (digit)
	173	Scan Size Detect Value (S1 B)	0	0~255 (digit)
	174	Scan Size Detect Value (S2 R)	0	0~255 (digit)
	175	Scan Size Detect Value (S2 G)	0	0~255 (digit)
	176	Scan Size Detect Value (S2 B)	0	0~255 (digit)
	177	Scan Size Detect Value (S3 R)	0	0~255 (digit)
	178	Scan Size Detect Value (S3 G)	0	0~255 (digit)
	179	Scan Size Detect Value (S3 B)	0	0~255 (digit)
	180	Lamp ON: Delay Time	40	0~200 (msec)
1.07	1st Mas	s production		

Technical Bulletin

Reissued: 01-Jul-15

Date: 12-Apr-12

No.: RC279002b

RTB Reissue

Model: PD-D1

The items in bold italics have been confected of added.

Subject: Firmware Release Note: Main(B4)		Prepared by: Y. Kuwabara	
From: 2nd Tech	Service Sect., MFP/Printer Tec	h Service Dept.	
Classification:	Troubleshooting	Part information	Action required
	🗌 Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Product Safety	Other (Firmware)	🖂 Tier 2

This RTB has been issued to announce the firmware release information for the Main(B4).

Version	Program No.	Effective Date	Availability of RFU
1.12	C2765116E	June 2015 production	Not available
1.09	C2765116D	June 2013 production	Not available
1.07	C2765116C	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

"Available" The firmware can be updated via RFU or SD card.

"Not available": The firmware can only be updated via SD card.

Sympto		Modified Points or Symptom Corrected		
Symptom corrected: - User Codes cannot be cleared in one operation ("Clear all" does not work).				
Other cl	hanges:			
SP6-170: Displays the detection results of original length sensors 1 and 2. SP6-171-179: Displays the detection results of the width sensors. SP6-180: Adjusts the timing for turning the lamp ON when detecting the size of the original				
SP6-	Name	Default	Range	
170	APS Operation Check	-	ON/OFF	
171	Scan Size Detect Value (S1 R)	0	0~255 (digit)	
172	Scan Size Detect Value (S1 G)	0	0~255 (digit)	
173	Scan Size Detect Value (S1 B)	0	0~255 (digit)	
174	Scan Size Detect Value (S2 R)	0	0~255 (digit)	
175	Scan Size Detect Value (S2 G)	0	0~255 (digit)	
176	Scan Size Detect Value (S2 B)	0	0~255 (digit)	
177	Scan Size Detect Value (S3 R)	0	0~255 (digit)	
178	Scan Size Detect Value (S3 G)	0	0~255 (digit)	
179	Scan Size Detect Value (S3 B)	0	0~255 (digit)	
180	Lamp ON: Delay Time	40	0~200 (msec)	
	Wo Other cl The follo SP6-17 SP6-17 SP6-18 the orig SP6- 170 171 172 173 174 175 176 177 178 179 180	Other changes: The following SP modes were added. SP6-170: Displays the detection results of or SP6-171-179: Displays the detection results SP6-180: Adjusts the timing for turning the lathe original SP6- Name 170 APS Operation Check 171 Scan Size Detect Value (S1 R) 172 Scan Size Detect Value (S1 G) 173 Scan Size Detect Value (S1 B) 174 Scan Size Detect Value (S2 R) 175 Scan Size Detect Value (S2 G) 176 Scan Size Detect Value (S2 B) 177 Scan Size Detect Value (S3 R) 178 Scan Size Detect Value (S3 B) 179 Scan Size Detect Value (S3 B) 180 Lamp ON: Delay Time	Other changes: The following SP modes were added. SP6-170: Displays the detection results of original leng SP6-171-179: Displays the detection results of the widt SP6-180: Adjusts the timing for turning the lamp ON with the original SP6- Name Default 170 APS Operation Check - - 171 Scan Size Detect Value (S1 R) 0 172 Scan Size Detect Value (S1 G) 0 173 Scan Size Detect Value (S1 B) 0 174 Scan Size Detect Value (S2 R) 0 175 Scan Size Detect Value (S2 B) 0 176 Scan Size Detect Value (S3 R) 0 177 Scan Size Detect Value (S3 B) 0 178 Scan Size Detect Value (S3 B) 0 179 Scan Size Detect Value (S3 B) 0 180 Lamp ON: Delay Time 40	



Reissued: 01-Jul-15

Model: PD-	D1	Date: 12-Apr-12	No.: RC279002b
Version	Modified Points or S	Symptom Corrected	
1.07	1st Mass production		

Technical Bulletin

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Model: PD-D1

Date: 12-Apr-12

No.: RC279003

Subject: Firmware Release Note: ADF_LHOTSE_PE		Prepared by: K. Yamamoto	
From: 1st Tech S	ervice Sect., MFP/Printer Tech	n Service Dept.	
Classification:	Troubleshooting	Part information	Action required
	Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Product Safety	Other (Firmware)	🖂 Tier 2

This RTB has been issued to announce the firmware release information for the ADF_LHOTSE_PE.

Version	Program No.	Effective Date	Availability of RFU
01.010:01	D5785390A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote "Available" The firmware can be updated via RFU or SD card. "Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
01.010:01	1st Mass production

Model: PD-D1

Date: 9-Sep-12

No.: RC279004

Subject: Exit Pawl Timing Adjustment			Prepared by: K. Yamamoto
From: 1st Tech S	ervice Sect., MFP/Printer Tech	n Service Dept.	
Classification:	☐ Troubleshooting	Part information	Action required
	🗌 Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Product Safety	Other (Firmware)	Tier 2

SYMPTOM

The Exit Pawl might be stuck to the drum during machine installation.

Target machines: Machines produced before July 2012. **Note:** Machines from July production have been modified to correct this symptom.

CAUSE

The exit pawl timing was not adjusted correctly at the factory.

SOLUTION

At machine installation or the next service visit:

Check whether the exit pawl timing is correct (**Procedure I** below), and if it is not, adjust the pawl timing (**Procedure II** below).

RICOH	Technical B	PAGE: 2/8	
Model: PD-D1		Date: 9-Sep-12	No.: RC279004

Procedure I: Checking whether exit pawl timing is correct

- 1. Pull out the drum from the machine.
- 2. Check whether you can see the screw hole behind the screw [A].
 - If you can see any part of the screw hole, even if only a very small part (shown in yellow in the diagrams below), you do not need to do the "Adjusting the exit pawl timing" procedure below.
 - If you cannot see any part of the screw hole, do the procedure below.



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Model: PD-D1		Date: 9-Sep-12	No.: RC279004

Procedure II: Adjusting the exit pawl timing

- 1. Remove the drum from the machine.
- 2. Remove the front cover [A] (screws x 6).



3. Remove the rear cover [B] (screws x 8).



4. Reattach the drum.

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Model: PD-D1

Date: 9-Sep-12 No.: RO

No.: RC279004

5. Turn the main drive unit slowly **clockwise**, using a size 7 spanner, until the gear [X] is in the position shown in the photograph.

Important: Do not turn the drive unit counter-clockwise.



RI	СОН

Model: PD-D1

Date: 9-Sep-12

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6. Insert the pin (diameter: 4mm) into the following hole.

Important: If the pin does not go through to the drive gear, turn the main drive slightly and try again.



7. Loosen screws [a], [b], [e], and [f].





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8. Make sure that the tip of the screw [g] touches the bracket [h].



9. Tighten screws [e] and [f] while pushing the cam follower up against the cam flange.



Important: Make sure the gap between the cam follower and cam flange is 0 to 0.5mm after you tighten screws [e] and [f].



RICOH	Technical Bu	PAGE: 7/8	
Model: PD-D1	D	Date: 9-Sep-12	No.: RC279004

10. Push the bracket [H] up using your thumb, and tighten screws [a] and [b].

Important:

- Make sure screw [b] is touching the bottom of the slot.
- Make sure the gap between the cam flange and cam follower is wider after you tighten screws [a] and [b].



11. Remove the pin from the hole.





RICOH	Technical Bulletin	PAGE: 8/8
Model: PD-D1	Date: 9-Sep-12	No.: RC279004

12. Turn the main drive unit slowly to its home position, using a spanner.

Note: The home position is the position where the hole in the gear [X] is lined up with the hole in the mainframe, as shown in the photo.



13. Insert the pin into the hole shown below [A], to check if the main drive is in the home position. Then, pull out the pin.



14. Reassemble the machine and make a few printouts to check if the machine works correctly.

Model: PD-D1

Date: 9-Sep-12

No.: RC279005

Subject: Replace base of side fence			Prepared by: K. Yamamoto
From: 1st Tech S	ervice Sect., MFP/Printer Tech	n Service Dept.	
Classification:	☐ Troubleshooting	Part information	Action required
	Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Product Safety	Other (Firmware)	Tier 2

SYMPTOM

The base of the side fence for the paper exit table might break.

Target machines: Machines produced before July 2012. **Note:** Machines from July production have been modified to correct this symptom.

CAUSE

The oil on the shaft of the side fence base reduces the strength of the base (this oil should not be present on the shaft).

SOLUTION

Replace the bases of the side fences for the paper exit table (screw x4 front, x4 rear).



Model: PD-D1

Date: 24-Sep -12

No.: RC279006

Subject: Part Catalog correction – Main Drive		Prepared by: K. Yamamoto		
From: 1st Tech S	ervice Sect., MFP/Printer Tech	n Service 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

23. Drive Section 1 (C277/C278/C279)

Incorrect part number	Correct part number	Description	Q'ty	Page	Index
C2791161	C2791160	Gear: Drive: Drum: Ass'y	1	53	10

Change/Reason: The part number in the catalog was incorrect.

PAGE: 1/2

Model: PD-D1

Date: 2-Jun-14

No.: RC279007

Subject: Special	friction pad for abrasion		Prepared by: K. Yamamoto
From: 1st Tech S	ervice Sect., MFP/Printer Tech	n Service Dept.	
Classification:	 Troubleshooting Mechanical Paper path Product Safety 	 Part information Electrical Transmit/receive Other (Firmware) 	 Action required Service manual revision Retrofit information Tier 2

SYMPTOM

The paper is abraded after contacting the friction pad during paper feed.

CAUSE

The friction of the normal friction pad is too high or too low for some paper types.

SOLUTION

If the symptom occurs, replace the friction pad with one of the following types, which are designed to handle a wide range of paper types.

Friction pad 2: C2649001 (Coefficient of friction is less than that of the normal pad)



Friction pad 3: **C2649002** (Coefficient of friction is **even less than** Friction pad 2) **Note:** Normal/plain paper types cannot be fed with this friction pad.



Model: PD-D1

Date: 2-Jun-14

No.: RC279007

IMPORTANT:

- Use these friction pads only when feeding thick paper (180K) for which the symptom (abrasion problem) occurs. If normal/plain paper is fed with these pads, a multi-feed will occur.
- The yield of friction pad 2 is lower than that of normal friction pads.
 - Friction pad 2: 300K
 - ♦ Friction pad 3: 1200K (same as normal friction pad)
- Try using friction pad 2 first, and then if the abrasion issue still occurs, adjust the separation and feed pressure as follows:
 - 1. Decrease the separation pressure a little at a time.
 - 2. If the symptom still occurs, decrease the feed pressure a little at a time.
 - 3. If the symptom still occurs, try using friction pad 3.

Technical Bulletin

Model: PD-D1 Dat			Date: 13-Mar-15		-15	No.: RC279008
Subject: Parts information(ADF GRIP)			Prepared by: A.Ishida			
From: 2nd Tech	Service Sect., MFP/P Tech Se	rvice Dept.				
Classification:	 Troubleshooting Mechanical Paper path Product Safety 	Part info	rmat al t/rec	tion eive)	Action Servic Retrof	required e manual revision it information

Change: The following assembly was added.

Reason: To increase the adhesive strength between the handgrip and DF base.

Note: The handgrip can be damaged when the DF is opened/closed repeatedly.

Model	Old part	New part	Description	Q'ty	Int	Page	Index	Note
	number	number						
LHOTSE-D ARDF 3060	-	D5781991	GRIP:PROTECT:ASS'Y	0-1	-	3	27	

Important: Attach the grip to the base using double-sided tape.





Technical Bulletin

Model: PD-D1			Date: 1	7-Apr-15	No.: RC279009	
Subject: No ink supply				Prepared by: K. Yamamoto		
From: 1st Tech S	Service Sect., MFP/Printer Tech S	ot.				
Classification:	☐ Troubleshooting □ ☐ Mechanical □ □ Paper path □ □ Product Safety □] Part infor] Electrical] Transmit/] Other (Fi	rmation /receive rmware)	Action C Servic Retrofi Tier 2	required e manual revision it information	

SYMPTOM

"No ink" is displayed while there is still ink remaining in the ink pack. **Note:** This occurs on machines manufactured between Dec. 2014 and Feb. 2015.

CAUSE

The ink nozzle is deformed, preventing a firm fit with the ink pack. As a result, air gets inside the pump and ink cannot be supplied to the machine correctly.



pump motor





Model: PD-D1

Date: 17-Apr-15

No.: RC279009

SOLUTION

Replace ink nozzle (P/N C2799001).

Procedure



1. Remove the two screws.



2. Remove the nozzle and check the following parts.





Model: PD-D1

Date: 17-Apr-15

No.: RC279009

3. Replace the nozzle only.



4. Tighten the two screws.



Technical Bulletin

Model: P PD-D1			Date: 21-Feb-17		No.: RC279010		
Subject: FSM revision (Master Edge Sensor Adgestment)					Prepared by: A.Ishida		
From: 1st Tech Service Sect., MFP/P Tech Service Dept.							
Classification:	 Troubleshooting Mechanical Paper path Product Safety 	Part inform Electrical Transmit/re Other (nation eceive)	 ☐ Action re ☑ Service n ☐ Retrofit in ☐ Tier 2 	quired nanual revision nformation Tier 0.5		

Service Manual Correction (P.111 Master Edge Sensor Adjustment)

Descriptions in **bold red** were corrected.

4. Replacement and adjustment > Master feed > Thermal head > Master Edge Sensor Adjustment (P. 111)

Master Edge Sensor Adjustment

Ensures that the sensor detects the leading edge of the master.



Standard : 2.0 Volts (within "+0.1" and "-0.1" volts) Tools: Circuit tester

- Rear cover (p.74 "Rear Cover")
- 1. Connect the terminals of a circuit tester to TP103 and a grounded place (e.g. iron base)
- 2. Connect the power plug, and turn on the main switch to access SP mode.
- 3. Select SP6-51 (Master edge sensor voltage)
- 4. Remove the lower master tray.
- 5. Pull out the master-making unit from the machine and open the master set cover.
- 6. Insert the leading edge of the master under the master tension roller, then close the master set cover and reinstall the master-making unit in the machine.
- Measure the voltage with the circuit tester, and turn VR103 until the value becomes between "-0.1V" and "+0.1" volts from the standard value. (3.0 Volts 2.0V within "+0.1"V and "-0.1"V)

|--|

Model: P PD-D1	Date: 21-Feb-17	No.: RC279010
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Note:

When the voltage cannot be adjusted to the standard value, adjust the threshold level of the master edge sensor. (SP6-51: Master edge sensor voltage)

Standard Value Master present	Threshold Level (SP6-51)	Standard Value Master not present
2.0V +- 0.1V	2.8V	Above 3.0V