

Model: Leo-C1

Date: 11-Dec-14

No.: RD194004

Subject: Firmware Release Note: NetworkDocBox			Prepared	d by: Y.Yamada
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	ion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **NetworkDocBox.**

Version	Program No.	Effective Date	Availability of RFU
1.00	D1955731A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
1.00	1st Mass production



Model: Leo-C1

Date: 11-Dec-14

No.: RD194006

Subject: Firmware Release Note: Option Netware			Prepared	d by: Y.Yamada
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🖂 Tier 2

This RTB has been issued to announce the firmware release information for the **Option Netware.** 

Version	Program No.	Effective Date	Availability of RFU
14.57	D3A85760	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
14.57	1st Mass production

## Technical Bulletin

Reissued: 08-Apr-15

Date: 11-Dec-14

No.: RD194007a

#### **RTB Reissue**

Model: Leo-C1

The items in bo	Id italics have been corre	ected or added	d.	
Subject: Firmwa	re Release Note: PowerSaving	j Sys	Prepare	d by: A.Tajima
From: 1st PP Teo	ch Service Sect., PP Tech Ser	vice Dept.		
Classification:	Troubleshooting	Part informa	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	Other (Firm)	ware)	🖂 Tier 2

This RTB has been issued to announce the firmware release information for the **PowerSaving Sys.** 

Version	Program No.	Effective Date	Availability of RFU
1.24	D1955723B	March 2015 production	Not available
1.23	D1955723A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
1.24	Symptoms Corrected:
	SC672-11 occurs when the machine recovers from the energy saving
	mode.
1.23	1st Mass production

## Technical Bulletin

Reissued: 06-Sep-16

Date: 11-Dec-14

No.: RD194012b

#### **RTB Reissue**

Model: Leo-C1

The items in <b>bold italics</b> have been corrected or added.					
Subject: Firmware Release Note: Web Uapl			Prepare	d by: A. Tajima	
From: 1st PP Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part informa</li> <li>Electrical</li> <li>Transmit/rec</li> <li>Other (Firms)</li> </ul>	tion eive vare)	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>	

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

Version	Program No.	Effective Date	Availability of RFU
1.03	D1955727D	August 2016 production	Not Available
1.01	D1955727C	1st Mass production	Not Available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
1.03	Symptoms Corrected:
	Minor bug correction.
	This firmware is dependent on the following firmware modules. Please be sure to update all of them:
	<ul> <li>System/Copy firmware ver.3.08 or later</li> </ul>
	- Printer firmware ver.3.03 or later ( <i>if external controller is not used</i> )
	<ul> <li>OpePanel firmware ver.2.05 or later</li> </ul>
	- Web Support firmware ver.1.08 or later
1.01	1st Mass production



Model: Leo-P1

Date: 11-Dec-14

No.: RD194016

Subject: Firmware Release Note: NetworkDocBox		Prepare	d by: Y.Yamada	
From: 1st PP Tec	h Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part information	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🔀 Tier 2

# This RTB has been issued to announce the firmware release information for the **NetworkDocBox.**

Version	Program No.	Effective Date	Availability of RFU
1.00	M1965730A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
1.00	1st Mass production

## **T**echnical **B**ulletin

Reissued: 04-Nov-16

Model: Leo-P1

Date: 11-Dec-14	No.:
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RD194017g

#### **RTB Reissue**

The items in <b>bol</b>	<i>d italics</i> have been o	corrected or added	
Subject: Firmwar	e Release Note: OpePa	nel	Prepared by: A.Tajima
From: 1st PP Teo	ch Service Sect., PP Tec	h Service Dept.	
Classification:	Troubleshooting	Part informa	tion Action real

Classification:	I roubleshooting	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 OpePanel.

Version	Program No.	Effective Date	Availability of RFU
2.06	M1965727H	October 2016 production	Not available
2.05	M1965727G	August 2016 production	Not available
2.04	M1965727F	July 2016 production	Not available
2.03	M1965727E	September 2015 production	Not available
2.02	M1965727D	April 2015 production	Not available
2.01	M1965727C	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
2.06	Specification Change: - Support of new special color
	Note:
	Make sure to update the below software as a set. Updating individually will mix up the display of Clear and Special.
	Firmware Engine: v1 19:06 or later
	<ul> <li>System/Copy (Copier), System (Printer): v 3.10 or later</li> <li>Web Support: v1.09 or later</li> <li>OpePanel: v2.06 or later</li> </ul>
	Total Flow Print Server R-60A/R-61A
	- Microcode: v2.2.003 or later
	- Driver (Windows): V1.1.0.0 or later Driver (Mac): v.2.1.58 or later
	For more detail about the new special color toner, please refer to RTB RD194151.
2.05	Specification change: Improved usability of the IMSS functions



Reissued: 04-Nov-16

Model: Leo-P1		Date: 11-Dec-14	No.: RD194017g	
Version	Modified Points or Symptom Corrected			
	<ul> <li>In "Edit Custom Paper" settings, the Settings" and "Delete."</li> <li>A new button "New Program" wa new paper.</li> <li>Numbers assigned for existing ci Several terms used in the paper comprehensibility.</li> <li>Better display of search result of</li> </ul>	multiple papers can be is added to enable easi- ustom paper can be cha library were changed fo paper.	selected for "Print er registration of anged. or better	
	Improved usability of the "Adjustment Settings for Skilled Operators" menus - Numeric keypad on the operation - Changed the descriptions of seve	t Settings for Operators s n panel can be used to eral items in the menu.	" and "Adjustment enter values.	
	<ul> <li>This firmware is dependent on the following firmware modules.</li> <li>Please be sure to update all of them: <ul> <li>System firmware ver.3.08 or later</li> <li>Printer firmware ver.3.05 or later (if external controller is not used)</li> <li>Web Support firmware ver.1.08 or later</li> </ul> </li> </ul>			
2.04	Specification change:			
	<ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> <li>For the above change to take effect, the following firmware, controller patches,</li> </ul>			
	driver, and media library <u>must be updated together as a set.</u> Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.			
	Firmware - Engine 1.17:06 - System/Copy or System v3.06			
	- Websys v1.06 - Printer v3.02			
	- OpePane v2.04			
Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004				
Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3				

RICOH Reissued: 04-Nov-16

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Model: Leo-P1		Date: 11-Dec-14	No.: RD194017g	
Version	Modified Points or Symptom Corrected			
	Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0 Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9			
2.03	<ul> <li>Specification Change: <ul> <li>"Paper Type Auto Identify" buttor Unit setup screen:</li> <li>Edit Custom Paper</li> <li>Recall from Paper Library</li> <li>Recall from Saved Paper Library</li> </ul> </li> <li>Error Correction: <ul> <li>Jam removal procedure shown o that occur with banner printing.</li> <li>"Administrator" was misspelled ir NOTE: The following firmware combitake effect.</li> <li>Engine: 1.10:06</li> <li>System/Copy: 3.03</li> <li>Animation: 2.00</li> <li>OpePanel: 2.03</li> </ul> </li> </ul>	n was added to the Med on the operation panel is n Spanish language set nations are required for	ia Identification incorrect for jams ting. this release to	
2.02	Spec change: In the Tray Paper Settings menu, "Ec "Edit" and a new "Search" button was IMPORTANT: System firmware must	lit Custom Paper" butto s added next to the Edit be updated to Ver.3.00	n was changed to button. ) for the above to	
2.01	1st Mass production			
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Model: Leo-P1

Date: 11-Dec-14

No.: RD194018

Subject: Firmware Release Note: Option Netware		Prepared	d by: Y.Yamada	
From: 1st PP Teo	ch Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **Option Netware.** 

Version	Program No.	Effective Date	Availability of RFU
14.61	D3A85763	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
14.61	1st Mass production

## Technical Bulletin

Reissued: 03-Apr-15 Model: Leo-P1

Date: 11-Dec-14

No.: RD194019a

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.			
Subject: Firmware Release Note: PowerSaving Sys	Prepared by: A.Tajima		
From: 1st PP Tech Service Sect., PP Tech 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 **PowerSaving Sys.** 

Version	Program No.	Effective Date	Availability of RFU
1.24	M1965723B	March 2015 production	Not available
1.23	M1965723A	1st Mass production	Not available
1.23	M1965723A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
1.24	Symptoms Corrected: SC672-11 occurs when the machine recovers from the energy saving mode.
1.23	1st Mass production

### Technical Bulletin

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Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194023

Subject: Firmware Release Note: BufferPassUnit			Prepared by: Y.Yamada	
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🖂 Tier 2

# This RTB has been issued to announce the firmware release information for the **BufferPassUnit**.

Version	Program No.	Effective Date	Availability of RFU
02.000:02	D7951702	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
02.000:02	1st Mass production

## Technical Bulletin

Reissued: 14-Oct-16

Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194025a

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: PDF			Prepared by: A. Tajima			
From: 1st PP Tech Service Sect., PP Tech Service Dept.		vice Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	Other (Firmv	vare)	🛛 Tier 2		

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

Version	Program No.	Effective Date	Availability of RFU
1.04	D3A85733B	October 2016 production	Not Available
1.03	D3A85733A	1st Mass production	Not Available

Note: Definition of Availability of RFU via @Remote

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

i	
Version	Modified Points or Symptom Corrected
1.04	<ul> <li>Modified Points or Symptom Corrected</li> <li>Symptom corrected: <ol> <li>An SC899 error might occur if a PDF that contains a JPEG 2000 image is printed by using the PDF Direct Print feature.</li> <li>PDF file may not be printed via direct print if the PDF file contains True Type fonts.</li> <li>Printing might be slow when a spreadsheet containing many cells with patterns that are different from the default pattern in the following setting is printed from Microsoft Excel 2013:</li> </ol></li></ul>
	Select Format Cell, select the Fill tab, and change the Faltern Style" setting 4. It takes a significant amount of time to output the first page by using
	PDF Direct Print when the print data contains a large number of pages (GEPR#RE16060016)
1.03	1st Mass production

### Technical Bulletin

Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194026

Subject: Firmware Release Note: PS3			Prepared by: Y.Yamada	
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	ion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	X Tier 2

This RTB has been issued to announce the firmware release information for the **PS3**.

Version	Program No.	Effective Date	Availability of RFU
1.00	D3A85731	1st Mass production	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
1.00	1st Mass production

## Technical Bulletin

Reissued: 08-Oct-15

Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194027c

#### **RTB Reissue**

The items in <b>bo</b>	<i>ld italics</i> have been corre	ected or added.	
Subject: Firmwar	e Release Note: TDCU		Prepared by: A.Tajima
From: 1st PP Teo	ch Service Sect., PP Tech Serv	rice Dept.	
Classification:	Troubleshooting	Part information	Action required
	Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receiv	e Retrofit information
	Product Safety	Other (Firmwar	e) 🛛 Tier 2

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

Version	Program No.	Effective Date	Availability of RFU
1.06:05	D1945528F	September 2015 production	Not available
1.05:05	D1945528E	June 2015 production	Not available
1.04:05	D1945528D	March 2015 production	Not available
1.02:05	D1945528C	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
1.06:05	Error Correction: - SC472 occurs, if front door is closed, opened, and then closed again immediately.
1.05:05	<ul> <li>Specification Change</li> <li>Enabled the ITB steering control arm to retrieve its home position with higher accuracy.</li> </ul>
1.04:05	<ul> <li>Error Correction:</li> <li>Machine cannot recover from a jam. Cancelling the job causes SC919.</li> <li>SC625</li> </ul>
1.02:05	1st Mass production

## Technical Bulletin

Model: Leo-C1/Leo-P1/BR-C1/BR-P1/Andromeda-P1

Date: 11-Dec-14

No.: RD194028b

#### **RTB Reissue**

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Subject: Firmwar	e Release Note: LCT1_LCIT5	100	Prepared	d by: H. Matsui
From: 1st PP Tec	h Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part informat	tion	Action required
	🗌 Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **LCT1\_LCIT5100.** 

Version	Program No.	Effective Date	Availability of RFU
01.040:06	D7775510F_LCT1	April 2016 production	Not available
01.030:06	D7775510E_LCT1	February 2015 production	Not available
01.020:06	D7775510D_LCT1	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.040:06	Specification Change:
	- Automatic detection of SRA3 size on EU machines -
	When 12x18 inch or SRA3 is loaded on the tray of an EU machine, the
	size is automatically detected as SRA3 instead of 12x18.
	Note:
	1. This automatic size detection will not apply to NA machines.
	2. For Pro 8100EX/8100S/8110S/8120S, Engine F/W should be upgraded to Ver 4.05:08 or newer as a set.
	3. For Pro 8110/8120, Engine F/W should be upgraded to Ver 1.05:00 or newer as a set.
	4. For Pro C9100/C9110, this automatic size detection will not be
	activated for Multi Bypass Tray BY5010.
01.030:06	Error Correction:
	Minor bug fix
01.020:06	1st Mass production

## Technical Bulletin

Reissued: 09-May-16	
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Model: Leo-C1/Leo-P1/BR-C1/BR-P1/Andromeda-P1

Date: 11-Dec-14

No.: RD194029b

#### **RTB Reissue**

The lients in <b>bold liance</b> have been confected of added.
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Subject: Firmware Release Note: LCT2_LCIT5100		Prepared by: H. Matsui		
From: 1st PP Tec	h Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part informat	tion	Action required
	🗌 Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the LCT2\_LCIT5100.

Version	Program No.	Effective Date	Availability of RFU
01.040:06	D7775510F_LCT2	April 2016 production	Not available
01.030:06	D7775510E_LCT2	February 2015 production	Not available
01.020:06	D7775510D_LCT2	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.040:06	Specification Change:
	- Automatic detection of SRA3 size on EU machines -
	When 12x18 inch or SRA3 is loaded on the tray of an EU machine, the
	size is automatically detected as SRA3 instead of 12x18.
	Note:
	1. This automatic size detection will not apply to NA machines.
	2. For Pro 8100EX/8100S/8110S/8120S, Engine F/W should be upgraded to Ver 4.05:08 or newer as a set.
	3. For Pro 8110/8120, Engine F/W should be upgraded to Ver 1.05:00 or newer as a set.
	4. For Pro C9100/C9110, this automatic size detection will not be
	activated for Multi Bypass Tray BY5010.
01.030:06	Error Correction:
	Minor bug fix
01.020:06	1st Mass production

## Technical Bulletin

Reissued: 09-May-16

Model: Leo-C1/Leo-P1/Andromeda-P1	Date: 11-Dec-14	No.: RD194030b
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#### **RTB Reissue**

The items in <b>bo</b>	Id italics have been corre	ected or addec		
Subject: Firmware Release Note: LCT3_LCIT5100		Prepared by: H. Matsui		
From: 1st PP Tec	h Service Sect., PP Tech Serv	rice Dept.		
Classification:	Troubleshooting	Part informat	ion	Action required
	🗌 Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the LCT3\_LCIT5100.

Version	Program No.	Effective Date	Availability of RFU
01.040:06	D7775510F_LCT3	April 2016 production	Not available
01.030:06	D7775510E_LCT3	February 2015 production	Not available
01.020:06	D7775510D_LCT3	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.040:06	Specification Change: - Automatic detection of SRA3 size on EU machines - When 12x18 inch or SRA3 is loaded on the tray of an EU machine, the size is automatically detected as SRA3 instead of 12x18.
	Note: 1. This automatic size detection will not apply to NA machines. 2. For Pro C9100/C9110, this automatic size detection will not be activated for Multi Bypass Tray BY5010.
01.030:06	Error Correction: Minor bug fix
01.020:06	1st Mass production

### Technical Bulletin

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Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194031

Subject: Firmware Release Note: Stacker_SK5030_1		Prepare	d by: Y.Yamada	
From: 1st PP Tec	h Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **Stacker\_SK5030\_1.** 

Version	Program No.	Effective Date	Availability of RFU
01.000:06	D7765300B_up	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
01.000:06	1st Mass production

### Technical Bulletin

Model: Leo-C1/ Leo-P1

Date: 11-Dec-14

No.: RD194032

Subject: Firmware Release Note: Stacker_SK5030_2		Prepare	d by: Y.Yamada	
From: 1st PP Tec	h Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **Stacker\_SK5030\_2.**

Version	Program No.	Effective Date	Availability of RFU
01.000:06	D7765300B_down	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote "Available": The firmware can be updated via RFU or SD card.

Version	Modified Points or Symptom Corrected
01.000:06	1st Mass production

	10011		
Reissued: 11-De	ec-14		
Model: MET-C1cde/MET-C1cde_SOP		Date: 01-Jul-1	3 No.: RD149014b
CH-C1/CH-C1 Pro/BR-C1/Z-C2/Z-C2_SOP/ <i>Leo-C1/Leo-P1</i>		Leo-	
RTB Reissue The items in <i>bol</i> e	<i>d italics</i> have been cha	nged or added.	
Subject: Firmware Release Note: Font EXP			Prepared by: N. Yoshida
From: 1st Tech S	Service Sect., MFP/Printer	Tech Service Dept.	
Classification:	Troubleshooting	Part information	Action required
	Mechanical	Electrical	Service manual revision
	Paper path	Transmit/receive	Retrofit information

🛛 Tier 2

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#### Important Information about Normal/Smart Panel Firmware Updates

Other (Firmware)

- When updating machine firmware, make sure **NOT** to install Smart Panel supported firmware on a machine with a normal operation panel (and vice-versa). If you do, the machine may not function as designed and product warranty may not apply.
- To avoid this, when updating the firmware, make sure that the numbers next to "NEW" and "ROM" are **the same** on the operation panel.
- If you install the wrong firmware, repeat the update procedure and check the numbers mentioned above.

This RTB has been issued to announce the firmware release information for the **Font EXP.** 

Version	Program No.	Effective Date	Availability of RFU
1.00	D1495581	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote

BICOH

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

Product Safety

Version		Modified Points or Symptom Corrected
1.00	1st Mass production	

Model: MET-C1cc CH-C1 Office/CH-C C1/Leo-P1	le/MET-C1cde_SOP C1 Pro/Z-C2/Z-C2_SOP/ <i>Le</i>	Date: 18-Jun-1 o-	3	No.: RD149025b
RTB Reissue The items in <i>bold</i>	italics have been chang	ged or added.		
Subject: Firmware	e Release Note: PCL Font		Prepared	by: N. Yoshida
From: 1st Tech Se	ervice Sect., MFP/Printer Te	ch Service Dept.		
Classification:	Troubleshooting	Part information	Action re	equired
	Mechanical	Electrical	Service	manual revision
	Paper path	Transmit/receive	🗌 Retrofit i	nformation
	Product Safety	🛛 Other (Firmware)	🛛 Tier 2	

PAGE: 1/1

#### Important Information about Normal/Smart Panel Firmware Updates

- When updating machine firmware, make sure **NOT** to install Smart Panel supported firmware on a machine with a normal operation panel (and vice-versa). If you do, the machine may not function as designed and product warranty may not apply.
- To avoid this, when updating the firmware, make sure that the numbers next to "NEW" and "ROM" are **the same** on the operation panel.
- If you install the wrong firmware, repeat the update procedure and check the numbers mentioned above.

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

Version	Program No.	Effective Date	Availability of RFU
1.06	D1315586A	1st Mass production	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.

RICOH

Reissued: 11-Dec-14

Version	Modified Points or Symptom Corrected	
1.06	1st Mass production	

Reissued: 11-De	ec-14		
Model: MET-C1cde/MET-C1cde_SOP		Date: 01-Jul-1	3 No.: RD149026b
CH-C1 Office/CH-C1 Pro/BR-C1/Z-C2/Z- C2_SOP/ <i>Leo-C1/Leo-P1</i>			
<b>RTB Reissue</b> The items in <i>bolc</i>	<b>l italics</b> have been cha	inged or added.	
Subject: Firmware Release Note: PS3 Font		Prepared by: N. Yoshida	
From: 1st Tech S	ervice Sect., MFP/Printer	Tech 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

PAGE: 1/1

#### Important Information about Normal/Smart Panel Firmware Updates

- When updating machine firmware, make sure **NOT** to install Smart Panel supported firmware on a machine with a normal operation panel (and vice-versa). If you do, the machine may not function as designed and product warranty may not apply.
- To avoid this, when updating the firmware, make sure that the numbers next to "NEW" and "ROM" are **the same** on the operation panel.
- If you install the wrong firmware, repeat the update procedure and check the numbers mentioned above.

This RTB has been issued to announce the firmware release information for the **PS3 Font**.

Version	Program No.	Effective Date	Availability of RFU
1.12	D6205681	1st Mass production	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.

RICOH

Version	Мо	dified Points or Symptom Corrected
1.12	1st Mass production	

## Technical Bulletin

Reissued: 03-Oct-16

Model: BR-C1/Leo-C1/BR-C2

Date: 23-Aug-13

No.: RD179016e

#### **RTB Reissue**

The items in <b>bo</b>	<i>ld italics</i> have been adde	ed.		
Subject: Firmware Release Note: ADF_SINAI_B			Prepare	d by: J. Ohno
From: 3rd PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part information	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **ADF\_SINAI\_B**.

Version	Program No.	Effective Date	Availability of RFU
01.110:05	D7315550J	September 2016 production	Not available
01.100:05	D7315550H	September 2014 production	Not available
01.090:05	D7315550G	March 2014 production	Not available
01.080:05	D7315550F	January 2014 production	Not available
01.070:05	D7315550E	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.110:05	Specification Change:
	changed.
01.100:05	Symptoms corrected: The bug of SC687 (ADF) is corrected
01.090:05	<ul> <li>Symptoms corrected:</li> <li>The ADF could stall after a jam removal or turning on the main power switch or when recovering from the energy saver mode.</li> <li>An abnormal error message could appear on the operation panel, if a custom size paper, for example, 280x128mm (SEF) is fed through the ADF.</li> <li>The machine could stall and the operation panel contniues to display "Copying" when feeding sheets through the ADF.</li> <li>The red LED on the operation panel could light for a moment when recovering from the energy saver mode.</li> </ul>
01.080:05	Symptom Corrected: If an original (for example A3) is fed from the ADF followed by a smaller original (for example A4 SEF) in mixed size mode, the smaller original is falsely detected as the preceding larger original.
01.070:05	1st Mass production

## Technical Bulletin

Reissued: 02-Jun-15
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Model: BR-C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1

Date: 23-Aug-13

No.: RD179017k

#### **RTB Reissue**

The items in <i>bold italics</i> have been corrected or added.					
Subject: Firmware Release Note: BookletFinisher_SR5060		Prepared by: J.Ohno			
From: 1st PP Tech Service Sect., PP Tech Service I		vice Dept.			
Classification:	Troubleshooting	Part information	tion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/rec	eive	Retrofit information	
	Product Safety	🛛 Other (Firmv	vare)	🖾 Tier 2	

This RTB has been issued to announce the firmware release information for the **BookletFinisher\_SR5060.** 

Version	Program No.	Effective Date	Availability of RFU
02.590:10	D7345620Q	July 2015 production	Not available
02.570:10	D7345620P	May 2015 production	Not available
02.530:10	D7345620M	March 2015 production	Not available
02.510:10	D7345620L	January 2015 production	Not available
02.500:10	D7345620K	December 2014 production	Not available
01.460:10	D7345620J	September 2014 production	Not available
01.420:09	D7345620H	June 2014 production	Not available
01.410:09	D7345620G	March 2014 production	Not available
01.400:09	D7345620F	February 2014 production	Not available
01.390:09	D7345620E	January 2014 production	Not available
01.380:09	D7345620D	January 2014 production	Not available
01.350:09	D7345620C	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
02.590:10	Specification Change: To match the spec with the GBC StreamPunch Ultra, print operation was made to suspend when the paper size switches during the job.
	Error Correction: Jam occurs when punching with the GBC StreamPunch Ultra, because the paper interval is too short.

#### Reissued: 02-Jun-15

Model: BR-C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1 Date: 23-Aug-13 No.: RD179017						
Version	on Modified Points or Symptom Corrected					
02.570:10	<ol> <li>Symptoms corrected:         <ol> <li>Wrinkles or folds might occur when feeding Z fold paper.</li> <li>After Shift tray keeps down by pressing the Emergency Shift Tray Stop Switch and system is turned off power, stall might occur after turning on the power.</li> <li>SC 990 might occur on Plockmatic system when Jams occur in SR5050 and SR5060.</li> <li>Operation panel indicates that printed papers remain in Plockmatic when stacker of Plockmatic is full.</li> </ol> </li> <li>Note:</li> </ol>					
02.530:10	<ul> <li>Symptoms corrected:</li> <li>1. If sheets are fed through SR5050/5060 and saddle-stitched booklets created in Plockmatic and jam occurs in SR5050/5060, the saddle-stitching operation immediately stops.</li> <li>2. Line speed automatically set for feeding out jobs to the SR5050/5060 shift tray according to paper size, type and weight might not be correct.</li> <li>3. If the system internally detects a SC720-41 (stapling related SC) while running a non-stapling job, Jam106 might occur.</li> <li>Note:</li> </ul>					
02.510:10	Symptom corrected: When the Stream Punch Ultra is connected and paper longer than 431.9 mm is used, jams might occur at finisher.					
02.500:10	Software bugs were fixed before the mas	ss production of Leo-C1	/P1.			
01.460:10	<ul> <li>Additional Model Information <ul> <li>Leo-C1/P1 are applied</li> <li>Banner paper is applied</li> </ul> </li> <li>Symptom Corrected: <ul> <li>The Entrance Motor might not work</li> <li>Stall might occur if printing on mixple</li> <li>Jam 125 might occur if postcard is fe</li> <li>Operation panel indicates the wrong 126 occurs.</li> </ul> </li> </ul>	and jam might occur. ex and shift mode. ed with SEF direction. I location of jammed pa	per when jam			
01.420:09	Symptom corrected: SC720-35 might occur, caused by the po Firmware of the home position detection	osition of the swing unit. and the swing plate mo	otor is modified.			

#### Reissued: 02-Jun-15

Model: BR-C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1 Date: 23-Aug-13 No.: RD179017k							
Version	ersion Modified Points or Symptom Corrected						
01.410:09	<ul> <li>Specification Change :</li> <li>Waiting time before feeding the 1st sheet of a job was extended to 15sec from the previous 7sec to prevent jams with the Plockmatic RCT5030 finisher. (1st sheet enters the finisher before the finisher completes the initialization process, resulting in the jam.)</li> <li>Interval between sheets when connecting Plockmatic finisher was reduced to maintain the productivity prescribed by the engine specifications.</li> <li>To prevent Jam115 that occur with booklets consisted of 2-5 sheets, an extra 500msec was added to create booklets when the number of folding operation in SP6-203-001 is set to '0'.</li> </ul>						
	<ul> <li>Symptom corrected:</li> <li>The shift jogger motor remains active during the job, if the previous job was run using a custom paper of a length between 323.94mm and 324.30mm in feed direction.</li> <li>The following problems occur, if creating a booklet with 14 or more sheets and reducing the number of folding operation in SP6-203-001: <ul> <li>JAM115 or JAM124 occurs in jobs with number of copies set to 2 or more.</li> <li>Motors that drive the paper transport rollers remain active in jobs with number of copies set to 1</li> </ul> </li> </ul>						
01.400:09	<ul> <li>Error Correction:</li> <li>Jam could occur, if specifying Z-fold and staple options in the same job.</li> <li>Jam80 or Jam111 or Jam103 could occur, if stapling only a few sheets.</li> <li>Jam could occur, if stapled in mixed size mode.</li> </ul> Specification Change: <ul> <li>Higher productivity is achieved for jobs specified with both Z-fold and staple options.</li> </ul>						
01.390:09	Error Correction: Jam and miss staple might occur in the fold and staple job when system includes both FD5020 and SR5050/SR5060.						
01.380:09	<ul> <li>Error Correction: <ol> <li>Job process timings were modified to enhance productivity for stapling jobs run together with the z-fold option.</li> <li>Valid sheets contained in the Plockmatic connected to the downstream of the Finisher is detected as invalid sheets.</li> <li>If selecting the saddle-stitch option on the operataion panel while the shift tray ascends after pressing the emergency stop button on the Finisher, the machine continues to run idle.</li> <li>If a jam occurs at the entrance of the TR5040 and the jam sheet is removed, jam indication message does not disappear or the job in process does not resume.</li> </ol> </li> </ul>						
01.350:09	1st Mass production						

## Technical Bulletin

Reissued: 30-Mar-16

Model: BR-C1/Leo-C1/Leo-P1/BR-P1/Andromeda-P1

Date: 23-Aug-13

No.: RD179019b

#### **RTB Reissue**

|--|

Subject: Firmware Release Note: Inserter_INSERTER				by: J.Ohno
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	ion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **Inserter\_INSERTER.** 

Version	Program No.	Effective Date	Availability of RFU
01.060:03	D7385510C	April 2016 production	Not available
01.050:03	D7385510B	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.060:03	Specification Change: - Automatic detection of SRA3 size on EU machines - When 12x18 inch or SRA3 is loaded on the tray of an EU machine, the size is automatically detected as SRA3 instead of 12x18.
	Note: This automatic size detection will not apply to NA machines.
01.050:03	1st Mass production

## Technical Bulletin

Reissued: 11-Dec-14

Model: BR-C1/Leo-C1/Leo-P1

Date: 23-Aug-13

No.: RD179021a

#### **RTB Reissue**

The items in <i>bold italics</i> have been added.						
Subject: Firmware Release Note: LCT_SIBERIA_G				d by: J.Ohno		
From: 3rd PP Teo	ch Service Sect., PP Tech Serv	vice Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

This RTB has been issued to announce the firmware release information for the LCT\_SIBERIA\_G.

Version	Program No.	Effective Date	Availability of RFU
01.020:05	D7325510B	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.020:05	1st Mass production

## Technical Bulletin

Reissued: 11-Dec-14

Model: BR-C1/Leo-C1/Leo-P1

Date: 05-Sep-13

No.: RD179033b

#### **RTB Reissue**

The items in bold italics have been corrected or added.
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Subject: Firmware Release Note: RingBinder_RB5020_B1			Prepared	d by: Y.Tanimoto
From: 3rd PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

This RTB has been issued to announce the firmware release information for the **RingBinder\_RB5020\_B1.** 

Version	Program No.	Effective Date	Availability of RFU
01.500:06	D7375510C	December 2014 production	Not available
01.200:05	D7375510B	January 2014 production	Not available
01.000:05	D7375510A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
01.500:06	Software bugs were fixed before the mass production of Leo-C1/P1.
01.200:05	Error Correction: The system might continue to be wait mode, when jam occurs on peripherals connected downstream of RB5020 which is in wait mode.
01.000:05	1st Mass production

## Technical Bulletin

#### Reissued: 3-Dec-15

Model: Leo-C1a/C1b (D194/D195)	Date: 26-Dec-14	No.: RD194033c
RTB Reissue		
The items in <b>bold italics red</b> were added.		

Subject: Important request regarding developer installation			Prepared	by: Hiroshi Inenaga
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				
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/rec</li> <li>Other (</li> </ul>	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

#### **IMPORTANT:**

#### After the Engine firmware is updated to Ver. 1.11:06 or later, you do not need to do the "Temporary Developer Installation Procedure" in this RTB. Replace the procedures in the service manual with this

Replace the procedures in the service manual with this procedure, until you install ver 1.11:06 or later.

#### **IMPORTANT REQUEST REGARDING DEVELOPER INSTALLATION**

Installing developer according to the procedure described in the field service manual was found to cause scratches on the drum surface.

As a preventive measure, please install developer by following the temporary procedure described below (for the 5th station at new site installs and for all other stations whenever the developer needs to be replaced) until a permanent solution becomes available. See the next page for more detail.

Please contact your supervisor because you will have to enter the "Super SP mode" to perform the requested action.

Make sure you have completed "5th station selection" and "color selection (clear or white)" before installing the developer.



#### Reissued: 3-Dec-15

Model: Leo-C1a/C1b (D194/D195)

Date: 26-Dec-14

No.: RD194033c

#### **Temporary Developer Installation Procedure**

#### IMPORTANT

Set SP3-106-001 (4st/5st Selection) to "1" (1: 5st) and select the color of the special toner in SP3-107-001 (Clear: 2, White: 3) before performing this procedure.

- 1. Pull out the PCDU and remove the charger unit, cleaning unit and drum.
- 2. Put back only the development unit into the machine.
- 3. Enter the Super SP mode.
- 4. Uncap the developer supply port, press the "ON" button in SP 5-804-160 (Output Check Development Motor (S):Low Speed), and pour in the developer.
- 5. Wait for 10 seconds.
- 6. Press the "OFF" button in SP5-804-160 to stop the motor and cap the port.
- 7. Pull out the development unit, put back the components removed in Step 1, and put the PCDU back into the machine.
- 8. Specify "1" in all of the following SPs:
  - SP 3-510-015 (ImgQltyAdj:ExeFlag Init TD Sensor:S)
  - SP 3-510-021 (ImgQltyAdj:ExeFlag Process Control)
  - SP 3-510-022 (ImgQltyAdj:ExeFlag Developer Agitating)
  - SP 3-510-024 (ImgQltyAdj:ExeFlag MUSIC)
  - SP 3-510-026 (ImgQltyAdj:ExeFlag Charge AC Adj.)
  - SP 3-510-027 (ImgQltyAdj:ExeFlag Charge R Cleaning)
  - SP 3-510-029 (ImgQltyAdj:ExeFlag Transfer Bias Adj.)
  - SP 3-510-055 (ImgQltyAdj:ExeFlag DEMS Adj:S)
- 9. Exit the SP mode and close the front doors to run the initialization process.

## Technical Bulletin

#### **Reissued: 3-Dec-15**

Model: Leo-C1a/C1b (D194/D195)	Date: 26-Dec-14	No.: RD194033c
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#### Detail

The original developer installation procedure as described in the service manual causes developer to pile up unevenly on the surface of the development roller. Running the machine under this condition generates scratches on the drum.



While the root cause of the problem is still under investigation, RCL engineering is suspecting a fluctuation in the component dimensions of the development unit.

In the temporary procedure described in the previous page, the developer is installed with the drum removed. Also, more time is provided in agitating the developer so that it is evenly distributed inside the entire development unit.

#### **Permanent Solution**

The firmware has been updated to prevent the scratches even if the developer is installed according to the procedure described in the service manual.

The fix is applied in the following version: Engine ver. 1.11:06 or later.

# Technical Bulletin

**PAGE: 1/1** 

Model:         Leo-C1/P1         I           (D194/D195/D203/D204/M195/M196/M207/M208)         I			Da	)ate: 22-Dec-14		0.: RD194034
Subject: Notes on installation of E-43A/E-83A and 5th station kit				Prepared by:	Yasutal	ka Yamada
From: 1 <sup>st</sup> PP Teo	ch Service Sec., PP Tech Ser	vice Dept.				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>□ Part info</li> <li>□ Electrica</li> <li>□ Transmi</li> <li>□ Other (</li> </ul>	ormat al it/rec	tion ☐ Ac ⊠ Se eive ☐ Re ) ☐ Ti	ction req ervice m etrofit inf er2	quired nanual revision formation

Please take note of the following points when installing the color controller E-43A/E-83A and the 5th station kit.

- If the controller does not activate even after turning on the power at new site install, check the mother board. The cable connecting the mother board and video card may be disconnected on the mother board side.
- When installing the 5th station kit, work carefully to avoid contact with the above connector to prevent its disconnection from the mother board, especially on the E-43A. (E-83A is larger and provides enough space.)







**PAGE: 1/2** 

Model: Leo-C1a/C1b (D194/D195)

Date: 6-Jan-14

No.: RD194035

Subject: Service Manual Correction: Trimmer Installation Procedure			Prepared	d by: Shinnosuke Sasaki
From: 1st PP Tec	h Service Sec., PP Tech Serv	ice Dept.,		
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/rec</li> <li>Other (</li> </ul>	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

#### **Correction 1**

#### Section

2. Installation > Trimmer Unit TR5040 (D520) > Installation > Preparing the Booklet Finisher SR5060 for Docking

4. Remove the booklet tray from the left side of the finisher (For details, please refer to the Field

Service Manual for the Booklet Finisher SR5060).	Add the following description
5. Insert the tray harness into the finisher.	between Step 4 and Step 5.

#### Added step

Remove the bracket [A]. (Screw x2)





Model: Leo-C1a/C1b (D194/D195)

Date: 6-Jan-14

No.: RD194035

#### **Correction 2**

#### Section

2. Installation > Trimmer Unit TR5040 (D520) > Installation > Docking

Sponges 1 and 2 were attached to the wrong position in the illustration. Replace the illustration with the photos below.

2. Peel the tape from the back of the sponges and attach sponges (1) and (2).



#### Correction

Non-operator Side





Operator Side





Model: Leo-C1a/C1b (D194/D195)			Date: 14-Jan-15		n-15	No.: RD194036
Subject: Correcting the remaining toner amount for new site installs				Prepared by: Akihiro Tajima		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	Troubleshooting Mechanical Paper path	Part infor	rmat I /rec	tion eive	Action	required e manual revision : information
	Product Safety	Other (		)	🛛 Tier 2	

This bulletin announces the temporary solution that needs to be applied to machines at new site installs.

Please contact your supervisor as you will have to enter the "Super SP mode" to perform the requested action.

#### Symptom

RICOH

Remaining toner amount is indicated 90% on the engine operation panel and in Command WorkStation when installing a brand new toner bottle.

(If the machine is used without applying the following temporary solution, the toner near-end alert will appear on the banner earlier than the near-end timing based on the actual remaining toner amount.)

#### Cause

Toner related SP settings were not reset at the factory.

#### **Temporary Solution**

If the toner bottles are not installed yet:

- 1. Enter the Super SP mode.
- 2. Specify "1" in the following SPs.

3-510-001 (ImgQltyAdj:ExeFlag Toner Recovery:K) 3-510-002 (ImgQltyAdj:ExeFlag Toner Recovery:C) 3-510-003 (ImgQltyAdj:ExeFlag Toner Recovery:M) 3-510-004 (ImgQltyAdj:ExeFlag Toner Recovery:Y)

3. Install the toner bottles.


Model: Leo-C1a/C1b (D194/D195)

Date: 14-Jan-15

No.: RD194036

If the toner bottles are already installed:

- 1. Enter the Super SP mode.
- 2. Specify "1" in the following SPs.

3-510-001 (ImgQltyAdj:ExeFlag Toner Recovery:K) 3-510-002 (ImgQltyAdj:ExeFlag Toner Recovery:C) 3-510-003 (ImgQltyAdj:ExeFlag Toner Recovery:M) 3-510-004 (ImgQltyAdj:ExeFlag Toner Recovery:Y)

3. Execute SP 3-051-001 (Manual Toner Fill:Exe:Execute:All)

**NOTE:** Make sure the engine is in the ready status before executing the above SPs. SP modification will otherwise not take effect.

### **Permanent Solution**

Toner related SP values will be reset to the correct values at the factory.

### Technical Bulletin

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Model: Leo-C1/ Leo-P1/ Andromeda-P1/ BR-P1

Date: 03-Feb-15

No.: RD194037a

Tier 2

### RTB Reissue

The items in <b>bold italics</b> have been corrected or added.							
Subject: Firmwar	re Release Note: Fin_IFBox	Prepare	d by: A.Tajima				
From: 1st PP Tech Service Sect., PP Tech Service Dept.							
Classification:	Troubleshooting	Part information		Action required			
	Mechanical			Service manual revision			
	Paper path	Transmit/receive		Retrofit information			

This RTB has been issued to announce the firmware release information for the **Fin\_IFBox.** 

Version	Program No.	Effective Date	Availability of RFU
01.010:02	M4625510A	February 2016 production	Not available
01.000:02	M4625510	1st Mass production	Not available

Other (Firmware)

Note: Definition of Availability of RFU via @Remote

Product Safety

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

Version	Modified Points or Symptom Corrected
01.010:02	Specification Change:
	1. Line speed data is transferred to third party vendor peripherals.
	Symptom corrected:
	1. When connected to a third party vendor peripheral, "Printing" status
	falsely remains displayed on the control panel.
	<ol><li>Falsely sends on-line status to the engine without receiving on-line status from third party vendor peripheral.</li></ol>
	3. If printing stops during a booklet job (stapling, ring binding, perfect binding) and resumes, part of the job is duplicated.
	4. Time-out jam (J225) occurs before reaching the set time-out.
	5. The operation panel does not display the part number of custom RPIP
	Interface Box Type S3 firmware.
01.000:02	1st Mass production

## Technical Bulletin

Model: Leo-C1/P1(D194/D195)

Date: 3-Feb-15

No.: RD194038

Subject: Service Manual Correction: Protective sheets for the Multi Bypass Banner Sheet Tray Option			Prepared	d by: Shinnosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part informat Electricat Transmit/rec	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

### **Field Service Manual Correction**

Please add the following descriptions to your field service manual in the section:

2. Installation > Multi Bypass Banner Sheet Tray Type S3 (D517) > Installation

#### Addition

Protective sheets are included as accessories to the Multi Bypass Banner Sheet Tray option to protect the top cover of the LCIT (or Bridge Unit).



# Attaching the protective sheets to the Vacuum Feed LCIT RT5100 and LCIT RT5090





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Model: Leo-C1/P1(D194/D195)

Date: 3-Feb-15

No.: RD194038

#### Attaching the protective sheets to the Bridge Unit

Attach the decals to the Bridge Unit, if the Multi Bypass Banner Sheet Tray option is installed on the Vacuum Feed LCIT.



## **Technical Bulletin**

#### Reissued: 06-Feb-15

RICOH

Model: MET-C1ab/ MET-C1cde/MET-C1yz/MET-C1yz_SOP/	Date: 13-Mar-14
Z-C2/Z-C2_SOP/ CH-C1 Office/OR-C2/Cor-C1/Cor-C1_SOP/K-C4	
/Gim-MF1a/Gim-MF1b/Gim-MF1d/Gim-P1c/Gim-P1d/BR-C1/	
Leo-C1/Leo-P1	

No.: RD147059a

#### **RTB Reissue**

The items in *bold italics* have been corrected or added.

Subject: Firmware	Prepared by: N. Yoshida		
From: 1st Tech Se			
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 (Firmware)</li> </ul>	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

### Important Information about Normal/Smart Panel Firmware Updates

- When updating machine firmware, make sure **NOT** to install Smart Panel supported firmware on a machine with a normal operation panel (and vice-versa). If you do, the machine may not function as designed and product warranty may not apply.
- To avoid this, when updating the firmware, make sure that the numbers next to "NEW" and "ROM" are **the same** on the operation panel.
- If you install the wrong firmware, repeat the update procedure and check the numbers mentioned above.

This RTB has been issued to announce the firmware release information for the **SD card for Fonts Type D.** 

Version	Program No.	Effective Date	Availability of RFU
0.00	M1095277	1st Mass production	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	
0.00	1st Mass production	

## <u>RICOH</u>

## Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)

Date: 12-Feb-15

No.: RD194039

Subject: Recovery procedure for 5th station development unit installation error			Prepared by: Hiroshi Inenaga
From: 1st PP Tech Service Sec., PP Tech Service Dept.,			
Classification:	<ul> <li>☐ Troubleshooting</li> <li>☐ Part information</li> <li>☐ Mechanical</li> <li>☐ Electrical</li> <li>☐ Paper path</li> <li>☐ Transmit/re</li> <li>☐ Product Safety</li> <li>☐ Other (</li> </ul>		ation       Action required         Service manual revision         ceive       Retrofit information         )       Tier 2

This bulletin provides the recovery procedure, which should be applied when the 5th station is specified with the wrong toner color as a result of an incorrect installation procedure. The system will not operate due to a mismatch in the toner color acknowledged by the mainframe system and the TD sensor.

An incorrect installation procedure, for example, closing the front door or turning ON the machine power before specifying the toner color in the SP mode, may occur in the following situations:

- When specifying the toner color of the 5th station at a new site install
- When changing the toner color of the 5th station for the first time (by installing the 5th Station Replacement Kit Type S3)
- When replacing the development unit of the 5th station with a new one

**To prevent the above, make sure to complete the following BEFORE** replacing with a new development unit or changing the toner color of the 5th station using the 5th Station Replacement Kit Type S3, as described in the field service manual:

- Specify "1" in **SP3-106-001** (4 station: 0, 5 station: 1)
- Specify the toner color in **SP3-107-001** (Clear: 2, White: 3)

See the following pages for the recovery procedure.

**NOTE:** The procedure requires login to the "Super Service" mode. Please contact your supervisor for the login procedure.

## Technical Bulletin

PAGE: 1/6

Model: Leo-C1a/C1b (D194/D195)

Date: 12-Feb-15

-15 No.: RD194039

### **Recovery Procedure for White Toner**

			Special Color ID		Process Control		
Steps	Specifying <b>WHITE</b> for the brand new developmen	ıt unit	Toner color identified by mainframe (SP3-107-001)	Toner color identified by TD sensor	Target toner color	Toner color adjusted of Vtcnt	Notes
1	Developer installation: Keep the front door open, enter the SP mode, and do SP3-024- 005 to fill the developer.		Clear				Start from Step 3, if the developer has already been installed.
2	Check the result of developer installation in SP3-025-001 and confirm that the far right digit is "1."		(2)				-
	Enter the <b>Super Service mode</b> and specify the following SP values.			Clear		-	
2	Special color selection	White					* See NOTE 1 below this table.
3	SP3-107-001	3					
	Process control color setting: 5st-Bk	Enable *					
	SP3-600-008	1			Clear		
4	Exit the Super Service mode, close the front door and wait for the machine to complete the warm up process.		White (3)				-
5	TD sensor initialization: If the procedure is carried out from Step 1, TD sensor of the 5th station is initialized automatically. If the procedure is carried out from Step 3, initialize the TD sensor of the 5th station by doing SP3-030-007.			White		Black	Black toner is used on the 5th station to run process control at the factory.
	6 Enter the Super Service mode and specify the following SP values. • Special color selection Clear		Clear			White	See NOTES 2 and 3 below this
6			(2)				
	SP3-107-001	2					

RIC	OH Technical	Bulletin		PAGE: 1/6			
Model	: Leo-C1a/C1b (D194/D195)	Date: 12-Feb-15	No.:	RD194039			
	Process control method for 5st-Bk SP3-600-008	Default 0					
	SP value of following SP:						
7	Special color selection     SP3-107-001	White 3	White				
8	Turn the machine power OFF and then ON.		(3)				
9	After the machine warms up, initialize the TD se station by doing SP3-030-007.	ensor of the 5th			White		
	•	FINISI	Η	•	•	•	•

NOTE 1: Specifying "1" in SP3-600-008 prevents the engine from obtaining the toner color information stored in the TD sensor.

NOTE 2: Vtcnt is a coefficient of Vt (TD sensor output value) and is updated only when the TD sensor is initialized.

NOTE 3: By enabling SP3-600-008 and initializing the TD sensor in Step 3, Vtcnt of Black is calculated. This is why Steps 6 through 9 are needed to calculate the Vtcnt of White.

## Technical Bulletin

**PAGE: 1/6** 

Model: Leo-C1a/C1b (D194/D195)

Date: 12-Feb-15

5 No.: RD194039

### **Recovery Procedure for Clear Toner**

				Special Color ID		Control	
Steps	Specifying <b>CLEAR</b> for the brand new development unit		Toner color identified by mainframe (SP3-107-001)	Toner color identified by TD sensor	Target toner color	Toner color adjusted of Vtcnt	Note
1	Developer installation: Keep the front door open, enter the SP mode, and do S 005 to fill the developer.	P3-024-	White				Start from Step 3, if the developer has already been installed.
2	Check the result of developer installation in SP3-025-00 confirm that the far right digit is "1."	)1 and	(3)				-
	Enter the <b>Super Service mode</b> and specify the followin values.	Ig SP		White	\\/bita		
	Special color selection     Clear     SP3-107-001     2     Process control color setting: 5st-Bk     *			VVIIIC	VVIIIC		
3							below.
	SP3-600-008	1					
4	Exit the Super Service mode, close the front door and w the machine to complete the warm up process.	vait for	Clear				-
5	TD sensor initialization: If the procedure is carried out from Step 1, TD sensor of the 5th station is initialized automatically. If the procedure is carried out from Step 3, initialize the TD sensor of the 5th station by doing SP3-030-007.		(2)	Clear	Clear	Black	Black toner is used on the 5th station to run process control at the factory.
	Enter the <b>Super Service mode</b> and specify the following SP values.						
6	Process control method for 5st-Bk	Default				Clear	
	SP3-600-008	0					

<u>RIC</u>	OH T	echnical <b>B</b> u	ulletin			PAGE: 1/6		
Model	: Leo-C1a/C1b (D194/D195)		Date: 12-Feb	-15	No.: F	RD194039		
7	Initialize the TD sensor of the	e 5th station by doing §	SP3-030-007.					-
	FINISH							

NOTE 1: Specifying "1" in SP3-600-008 prevents the engine from obtaining the toner color information stored in the TD sensor.

NOTE 2: Vtcnt is a coefficient of Vt (TD sensor output value) and is updated only when the TD sensor is initialized.

NOTE 3: By enabling SP3-600-008 and initializing the TD sensor in Step 3, Vtcnt of Black is calculated. This is why Steps 6 and 7 are needed to calculate the Vtcnt of Clear.

## Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)

Date: 12-Feb-15 No

No.: RD194040

Subject: Trouble	shooting SC472 at new site in	Prepared	by: Shinnosuke Sasaki	
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				
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/rec</li> <li>Other (</li> </ul>	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

### SYMPTOM

SC472 (Steering control homing error) at new site installs

### CAUSE

The steering control arm at the back of the ITB unit is not in home position when the machine power is turned on, which is caused by shock from transportation. The SC is detected before the arm retrieves its home position during initialization, because the SC detection is too strict.











Т	echnical	<b>B</b> ulletin	
	Commoa		

Model: Leo-C1a/C1b (D194/D195)

Date: 12-Feb-15

No.: RD194040

### ACTION

Rotate the gears [A] and [B] counterclockwise to align the arm with the bracket, if you experience SC472 at new site installs.



(View from the non-operator side)

### PERMANENT SOLUTION

Engine firmware will be modified to make the SC detection less strict so that the SC is not detected before the arm retrieves its home position.

Modification will be applied around April, 2015.



## Technical Bulletin

|--|

Model: Leo-C1/	'P1		Da	ite: 4-Mar-	15	No.: RD194041
Subject: Troubleshooting SC535				Prepared by: Shinnosuke Sasaki		
From: 1st PP Tee	ch Service Sec., PP Tech Serv	ice Dept.,				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> </ul>	Part infor	rmat I /rec	tion eive	<ul> <li>Action</li> <li>Service</li> <li>Retrofit</li> </ul>	required e manual revision i information
	Product Safety	🗌 Other (		)	🛛 Tier 2	

### SYMPTOM

SC535-00 (Belt Cooling Fan Error)

### CAUSE

Static electricity built up inside the machine damages the fan(s) in the Paper Transport Belt Unit, which then damages the IOB.

### **TEMPORARY SOLUTION**

Add fuses to the fan circuits. These fuses will blow to protect the IOB when the fan breaks down. An SC will not be issued.



#### NOTE

This temporary solution DOES NOT prevent the fan itself from getting damaged and is intended to protect the IOB, which is a rather expensive part.





### Technical Bulletin

Model: Leo-C1/P1

Date: 4-Mar-15

No.: RD194041

1. Disconnect the fan harnesses from the connectors.



2. Connect the fuses [A], [B] and [C] between the connectors and harnesses you just disconnected. See the following pages for details.



RICOH Technical			ulletin	PAGE: 3/7
	Model: Leo-C1/P1		Date: 4-Mar-15	No.: RD194041

- The connectors of the fuse are Red on one end and White on the other end.
- Connect both ends of the fuse to the connectors disconnected and clamp the harnesses of the fuse at the positions indicated in blue.

### Fuse [A]





Clamp the harnesses here.



## Technical Bulletin

Model: Leo-C1/P1

Date: 4-Mar-15

No.: RD194041

### Fuses [B] and [C]







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echnical	<b>B</b> ulletin

Model: Leo-C1/P1

Date: 4-Mar-15

No.: RD194041

### PERMANENT SOLUTION

Replace all 3 fans in the Paper Transport Belt Unit with the modified ones. The modified fans have higher resistance against static electricity.

If the machine you are working has been fitted with the temporary solution and has the fuses, remove the fuses and install only the modified fans.



#### NOTE 1

To install the modified fans, projections on the Paper Transport Belt unit (circled in red) need to be cut off and removed. Use a pair of nippers to cut off the projections.

#### **Operator Side**



#### **Center**





## Technical Bulletin

Model: Leo-C1/P1

Date: 4-Mar-15

No.: RD194041

Non-Operator Side



#### NOTE 2

Make sure that the label on the fan faces up.



The modified fans should be installed as follows.



## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194043e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.				
Subject: Firmwar	e Release Note: MediaLibEUc	I AB	Prepare	d by: A.Tajima
From: 1st Tech Service Sec., PP Tech Service Dept.				
Classification:	Troubleshooting	Part information	tion	Action required
	🗌 Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **MediaLibEUcl AB.**

Version	Program No.	Effective Date	Availability of RFU
10	D1945755_R10	-	Not available
9	D1945755_R9	-	Not available
8	D1945755_R8	-	Not available
6	D1945755_R6	-	Not available
5	D1945755_R5	-	Not available
4	D1945755_R4	-	Not available
3	D1945755_R3	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
10	[R10]
	- 3 new rank A and 1 new rank C media were added to the media list.
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers":
	NE_00190, NE_00191 Modia name was corrected from "Creative Rives Dat" to " Rives Dat"
	for the following:
	RE_00190, RE_00191
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":
	RE_00157, RE_00158, RE_00173, RE_00174, RE_00256
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins
	Graphic":
	RE_00223, RE_00224, RE_00261
	- 3 new rank A media were added to the media libraly.
9	[R9]
	Specification change:
	<ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>

Reissued: 08-	leissued: 08-Sep-16				
Model: Leo-C1	Date: 13-Mar-15 No.: RD194043e				
Version	Modified Points or Symptom Corrected				
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.				
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04				
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004				
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0				
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9				
	Symptoms Corrected:				
	<ul> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> </ul>				
8	[R8] 8 new media were added to the media list under ST2 type.				
	[R7] Luminance values were modified for the following media types: light color, dark				

### Reissued: 08-Sep-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194043e		
Version	Modified Points or Symptom Corrected				
	color, metallic, clear File Folder. - Coloured_paper_edge_detection_adjustment - Coloured_paper_detection_lighting_mode_setting				
6	<ul> <li>The following media information was deleted: RE_00209, RE_00210</li> <li>The following media information was added: RE_00250</li> <li>Symptoms Corrected</li> <li>Japanese keyboard appears on the screen when attempted to change the custom paper name.</li> </ul>				
5	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Anatalis" to "Antalis". RE_00016B to RE_00019B, RE_00212B to RE_00216B</li> <li>The following media list was corrected according to the correction of the image quality priority from "NA" to "-". RE_00141</li> <li>The following media information was added: RE_00028</li> <li>The following media information was deleted: RE_000132</li> <li>Media size data was corrected from "SRA3" to "A4" for the following: RE_00012, RE_00025, RE_00026, RE_00027, RE_00035, RE_00036, RE_00036A, RE_00037, RE_00037A, RE_00168, RE_00226, RE_00242,</li> </ul>				
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was added: RE_00049, RE_00054, RE_00058, RE_00082, RE_00142, RE_00143, RE_00227, RE_00187, RE_00188</li> <li>RE_00094 was deleted.</li> <li>Remark *1 on thick paper was corrected.</li> <li>Ten media information was added.</li> <li>Information on the following media was corrected: RE_00204, RE_00235.</li> </ul>				
3	1st Release				

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194044e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibEUwh AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibEUwh AB**.

Version	Program No.	Effective Date	Availability of RFU
10	D1945756_R10	-	Not available
9	D1945756_R9	-	Not available
8	D1945756_R8	-	Not available
6	D1945756_R6	-	Not available
5	D1945756_R5	-	Not available
4	D1945756_R4	-	Not available
3	D1945756_R3	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
10	[R10]
	- 3 new rank A and 1 new rank C media were added to the media list.
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers":</li> </ul>
	RE_00190, RE_00191
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following:</li> </ul>
	RE_00190, RE_00191
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":</li> </ul>
	RE_00157, RE_00158, RE_00173, RE_00174, RE_00256
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins"
	Graphic":
	RE_00223, RE_00224, RE_00261
	- 3 new rank A media were added to the media libraly.
9	[R9]
	Specification change:
	- Setup location of the HQ mode was changed from Custom Paper Library to
	Driver/Utility.

Madalul an C1						
Model: Leo-CT	Date: 13-Mar-15 No.: RD194044e					
Version	Modified Points or Symptom Corrected					
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.					
	Firmware Engine 1.17:06 System/Copy or System v3.06 Websys v1.06 Printer v3.02 OpePane v2.04					
	Controller patches Fiery E-43A Fiery Patch FIT101135696 Fiery E-83A Fiery Patch FIT101135696 TotalFlow Print Server R-60A MicroCode v1.6.004					
Driver GW model PCL6 (Windows) v1.3 PS3 (Windows) v1.4 PCL6 for Universal Print (Windows) v4.10.0.0 PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A PS3 (Windows) v1.0.2 PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A PS3 (Windows) v1.5.0.0 PS3 (Mac) v1.0.56.0						
	Paper Library For China: Rev.7 For RA: Rev.7 For RE: Rev.9 For RAC: Rev.9					
	Symptoms Corrected:					
	Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE 00082, RE 00083, RE 00084, RE 00085					
8	[R8] 8 new media were added to the media list under ST2 type.					
	[R7] Luminance values were modified for the following media types: light color, dark					

### Reissued: 08-Sep-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194044e		
Version	Modified Points or Symptom Corrected				
6	color, metallic, clear File Folder. Coloured_paper_edge_detection Coloured_paper_detection_lightin The following media information	_adjustment ng_mode_setting was deleted:			
	RE_00209, RE_00210 The following media information was added: RE_00250 Symptoms Corrected Japanese keyboard appears on the screen when attempted to change the custom paper name.				
5	The media list was corrected as follows according to the correction of the vendor name of the media from "Anatalis" to "Antalis". RE_00016B to RE_00019B, RE_00212B to RE_00216B The following media list was corrected according to the correction of the image quality priority from "NA" to "-". RE_00141 The following media information was added: RE_00028 The following media information was deleted: RE_000132 Media size data was corrected from "SRA3" to "A4" for the following: RE_00012, RE_00025, RE_00026, RE_00027, RE_00035, RE_00036, RE_00036A, RE_00037, RE_00037A, RE_00168, RE_00226, RE_00242,				
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was added:</li> <li>RE_00049, RE_00054, RE_00058, RE_00082, RE_00142, RE_00143,</li> <li>RE_00227, RE_00187, RE_00188</li> <li>RE_00094 was deleted.</li> <li>Remark *1 on thick paper was corrected.</li> <li>Ten media information was added.</li> <li>Information on the following media was corrected:</li> <li>RE_00204, RE_00235.</li> </ul>				
3	1st Release				

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194046e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibEUcl AB			Prepared by: A.Tajima			
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibEUcl AB.**

Version	Program No.	Effective Date	Availability of RFU
10	D1945763_R10	-	Not available
9	D1945763_R9	-	Not available
8	D1945763_R8	-	Not available
6	D1945763_R6	-	Not available
5	D1945763_R5	-	Not available
4	D1945763_R4	-	Not available
3	D1945763_R3	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
10	[R10]
	- 3 new rank A and 1 new rank C media were added to the media list.
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RF_00190_RF_00191
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> </ul>
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":
	RE_00157, RE_00158, RE_00173, RE_00174, RE_00256
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins
	Graphic":
	ne_00223, ne_00224, ne_00201 3 new rank A media were added to the media libraly
0	
9	Specification change:
	- Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.

Reissued: 08-	leissued: 08-Sep-16				
Model: Leo-P1	Date: 13-Mar-15 No.: RD194046e				
Version	Modified Points or Symptom Corrected				
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.				
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04				
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004				
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0				
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9				
	Symptoms Corrected:				
	<ul> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> </ul>				
8	[R8] 8 new media were added to the media list under ST2 type.				
	[R7] Luminance values were modified for the following media types: light color, dark				

### Reissued: 08-Sep-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194046e		
Version	Modified Points or Symptom Corrected				
6	color, metallic, clear File Folder.         - Coloured_paper_edge_detection_adjustment         - Coloured_paper_detection_lighting_mode_setting         - The following media information was deleted:				
	<ul> <li>The following media information was added: RE_00250</li> <li>Symptoms Corrected</li> <li>Japanese keyboard appears on the screen when attempted to change the</li> </ul>				
5	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Anatalis" to "Antalis". RE_00016B to RE_00019B, RE_00212B to RE_00216B</li> <li>The following media list was corrected according to the correction of the image quality priority from "NA" to "-". RE_00141</li> <li>The following media information was added: RE_00028</li> <li>The following media information was deleted: RE_000132</li> <li>Media size data was corrected from "SRA3" to "A4" for the following: RE_00012, RE_00025, RE_00026, RE_00027, RE_00035, RE_00036, RE_00036A, RE_00037, RE_00037A, RE_00168, RE_00226, RE_00242,</li> </ul>				
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was added: RE_00049, RE_00054, RE_00058, RE_00082, RE_00142, RE_00143, RE_00227, RE_00187, RE_00188</li> <li>RE_00094 was deleted.</li> <li>Remark *1 on thick paper was corrected.</li> <li>Ten media information was added.</li> <li>Information on the following media was corrected: RE_00204, RE_00235.</li> </ul>				
3	1st Release				

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194047e

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibEUwh AB			Prepared by: A.Tajima			
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibEUwh AB**.

Version	Program No.	Effective Date	Availability of RFU
10	D1945764_R10	-	Not available
9	D1945764_R9	-	Not available
8	D1945764_R8	-	Not available
6	D1945764_R6	-	Not available
5	D1945764_R5	-	Not available
4	D1945764_R4	-	Not available
3	D1945764_R3	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
10	<ul> <li>[R10]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Ariowiggins" to "Ariowiggins"</li> </ul>
	Creative Papers": RE_00190, RE_00191
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> </ul>
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":</li> </ul>
	<ul> <li>RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins"</li> </ul>
	Graphic": RE 00223. RE 00224. RE 00261
	- 3 new rank A media were added to the media libraly.
9	[R9] Specification change:
	<ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>

Reissued: 08-	Sep-16					
Model: Leo-P1	Date: 13-Mar-15 No.: RD194047e					
Version	Modified Points or Symptom Corrected					
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.					
	<ul> <li>Firmware</li> <li>Engine 1.17:06</li> <li>System/Copy or System v3.06</li> <li>Websys v1.06</li> <li>Printer v3.02</li> <li>OpePane v2.04</li> </ul>					
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004					
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0					
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9					
	Symptoms Corrected:					
	<ul> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> </ul>					
8	[R8] 8 new media were added to the media list under ST2 type.					
	[R7] Luminance values were modified for the following media types:					

### Reissued: 08-Sep-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194047e		
Version	Modified Points or Symptom Corrected				
6	light color, dark color, metallic, clear - Coloured_paper_edge_detectior - Coloured_paper_detection_lighti - The following media information	File Folder. n_adjustment ng_mode_setting was deleted:			
	<ul> <li>RE_00209, RE_00210</li> <li>The following media information was added: RE_00250</li> <li>Symptoms Corrected</li> <li>Japanese keyboard appears on the screen when attempted to change the surface parameters.</li> </ul>				
5	<ul> <li>Custom paper name.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Anatalis" to "Antalis". RE_00016B to RE_00019B, RE_00212B to RE_00216B</li> <li>The following media list was corrected according to the correction of the image quality priority from "NA" to "-". RE_00141</li> <li>The following media information was added: RE_00028</li> <li>The following media information was deleted: RE_000132</li> <li>Media size data was corrected from "SRA3" to "A4" for the following: RE_00012, RE_00025, RE_00026, RE_00027, RE_00035, RE_00036, RE_00036A, RE_00037, RE_00037A, RE_00168, RE_00226, RE_00242,</li> </ul>				
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was added, RE_00049, RE_00054, RE_00056, RE_00027, RE_00187, RE_00188</li> <li>RE_00094 was deleted.</li> <li>Remark *1 on thick paper was co</li> <li>Ten media information was added</li> <li>Information on the following media RE_00204, RE_00235.</li> </ul>	was added: 8, RE_00082, RE_0014 8 rrected. d. a was corrected:	42, RE_00143,		
3	1st Release				

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194049e

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibAPcl AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service De		Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibAPcI AB.**

Version	Program No.	Effective Date	Availability of RFU
8	D1945757_R8	-	Not available
7	D1945757_R7	-	Not available
6	D1945757_R6	-	Not available
4	D1945757_R4	-	Not available
3	D1945757_R3	-	Not available
2	D1945757_R2	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
8	[R8]
	- 3 new rank A and 1 new rank C media were added to the media list.
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers":
	RE_00190, RE_00191
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE 00190 RE 00191</li> </ul>
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":</li> </ul>
	RE 00157, RE 00158, RE 00173, RE 00174, RE 00256
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic":</li> </ul>
	RE 00223. RE 00224. RE 00261
	- 3 new rank A media were added to the media libraly.
7	[R7]
	Specification change:
	Setup location of the HQ mode was changed from Custom Paper Library to
	Driver/Utility.

Reissueu: 00-3					
Model: Leo-C1	Date: 13-Mar-15 No.: RD194049e				
Version	Modified Points or Symptom Corrected				
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.				
	Firmware Engine 1.17:06 System/Copy or System v3.06 Websys v1.06 Printer v3.02 OpePane v2.04				
	Controller patches Fiery E-43A Fiery Patch FIT101135696 Fiery E-83A Fiery Patch FIT101135696 TotalFlow Print Server R-60A MicroCode v1.6.004				
	Driver GW model PCL6 (Windows) v1.3 PS3 (Windows) v1.4 PCL6 for Universal Print (Windows) v4.10.0.0 PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A PS3 (Windows) v1.0.2 PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A PS3 (Windows) v1.5.0.0 PS3 (Mac) v1.0.56.0				
	Paper Library For China: Rev.7 For RA: Rev.7 For RE: Rev.9 For RAC: Rev.9				
6	<ul> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type.</li> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following:</li> <li>RE_00082, RE_00083, RE_00084, RE_00085</li> <li>Media name was corrected from "Colotec+" to "Colotech+" for the following:</li> <li>AP_00023</li> </ul>				
	[R5] Luminance values were modified for the following media types: light color, dark color, metallic, clear File Folder.				

### Reissued: 08-Sep-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194049e		
Version	Modified Points or Symptom Corrected				
	Coloured_paper_edge_detection	_adjustment			
	Coloured_paper_detection_lightin	ng_mode_setting			
4	The following media information	was added:	A.D. 00004		
	RE_00250, AP_00012, AP_00013, A	NP_00014, AP_00022,	AP_00024,		
	The following media information	was deleted:			
	RE 00209, RE 00210				
	Moses data was corrected for the	e following:			
	RE_00250				
	Currente neg Correcte de				
	Symptoms Conected.				
3	"High Quality entry" was added	lear when moully cusic	ni paper name.		
Ŭ	The following media information v	was added:			
	RE_00049,ŘE_00054,RE_00058	8,RE_00082,RE_0014	2,RE_00143,RE_00		
	227,RE_00187,RE_00188				
	RE_00094 was deleted.				
	"Productivity" data was added to following paper				
	RE_00187, RE_00188 Remark *1 on thick paper was corrected				
	Fifty one paper information was added				
	Information on the following media was corrected:				
	RE_00204, RE_00235.				
2	1st Release				

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194050e

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibAPwh AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service De		Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibAPwh AB**.

Version	Program No.	Effective Date	Availability of RFU
8	D1945758_R8	-	Not available
7	D1945758_R7	-	Not available
6	D1945758_R6	-	Not available
4	D1945758_R4	-	Not available
3	D1945758_R3	-	Not available
2	D1945758_R2	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

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

Version	Modified Points or Symptom Corrected
8	[R8]
	- 3 new rank A and 1 new rank C media were added to the media list.
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers":
	RE_00190, RE_00191
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following:</li> <li>DE 00100 RE 00101</li> </ul>
	The modia list was servested as follows assorting to the servestion of
	the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":
	RE_00157, RE_00158, RE_00173, RE_00174, RE_00256
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins" Craphic":
	$\Box = 00000 \Box = 00000 \Box = 00001$
	nc_00223, nc_00224, nc_00201 2 now rank A madia wara addad ta tha madia librahy
7	
/	
	Specification change:
	Setup location of the HQ mode was changed from Custom Paper Library to
	Driver/Utility.

Reissued: 08-Sep-16		
Model: Leo-C	1 Date: 13-Mar-15 No.: RD194050e	
Version	Modified Points or Symptom Corrected	
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.	
	Firmware Engine 1.17:06 System/Copy or System v3.06 Websys v1.06 Printer v3.02 OpePane v2.04	
	Controller patches Fiery E-43A Fiery Patch FIT101135696 Fiery E-83A Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004	
	Driver GW model PCL6 (Windows) v1.3 PS3 (Windows) v1.4 PCL6 for Universal Print (Windows) v4.10.0.0 PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A PS3 (Windows) v1.0.2 PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A PS3 (Windows) v1.5.0.0 PS3 (Mac) v1.0.56.0	
	Paper Library For China: Rev.7 For RA: Rev.7 For RE: Rev.9 For RAC: Rev.9	
6	<ul> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type. Media name was corrected from "CreatorStar" to "Creator Star" for the following:</li> <li>RE_00082, RE_00083, RE_00084, RE_00085 Media name was corrected from "Colotec+" to "Colotech+" for the following:</li> <li>AP_00023</li> <li>[R5]</li> </ul>	
	Luminance values were modified for the following media types: light color, dark color, metallic, clear File Folder.	


### Reissued: 08-Sep-16

Model: Leo-C1	C1 Date: 13-Mar-15 No.: RD194050e					
Version	Modified Points or Symptom Corrected					
	Coloured_paper_edge_detection_	Coloured_paper_edge_detection_adjustment				
	Coloured_paper_detection_lighting_mode_setting					
4	I he following media information w	as added: > 00014 ΔΡ 00022 ΔΕ	00024			
	AP 00028. AP 00035	_00014, AI _00022, AI	_00024,			
	The following media information w	as deleted:				
	RE_00209, RE_00210					
	Moses data was corrected for the t	following:				
	RE_00250					
	Symptoms Corrected:	Symptoms Corrected				
	Japanese software keyboard appear when modify custom paper name.					
3	"High Quality entry" was added.					
	The following media information w	as added:				
	27 BE_00187 BE_00188					
	BE 00094 was deleted.					
	"Productivity" data was added to following paper					
	RE_00187, RE_00188					
	Remark *1 on thick paper was corrected.					
	Fifty one paper information was added					
	Information on the following media was corrected:					
2	1st Release					

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194052e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibAPcI AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibAPcI AB.**

Version	Program No.	Effective Date	Availability of RFU
8	D1945765_R8	-	Not available
7	D1945765_R7	-	Not available
6	D1945765_R6	-	Not available
4	D1945765_R4	-	Not available
3	D1945765_R3	-	Not available
2	D1945765_R2	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			
8	[R8]			
	- 3 new rank A and 1 new rank C media were added to the media list.			
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers":</li> </ul>			
	RE 00190. RE 00191			
	<ul> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190_RE_00191</li> </ul>			
	<ul> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers":</li> </ul>			
	RE_00157, RE_00158, RE_00173, RE_00174, RE_00256			
	- The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic":			
	RE 00223, RE 00224, RE 00261			
	- 3 new rank A media were added to the media libraly.			
7	[R7]			
	Specification change:			
	<ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>			

neissueu. vo-s	
Model: Leo-P1	Date: 13-Mar-15 No.: RD194052e
Version	Modified Points or Symptom Corrected
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9
6	<ul> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type.</li> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> <li>Media name was corrected from "Colotec+" to "Colotech+" for the following: AP_00023</li> </ul>
	[R5] Luminance values were modified for the following media types: light color, dark color, metallic, clear File Folder.

### Reissued: 08-Sep-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194052e	
Version	Modified Points	or Symptom Correcte	ed	
	- Coloured_paper_edge_detection	_adjustment		
	<ul> <li>Coloured_paper_detection_lightir</li> </ul>	ng_mode_setting		
4	<ul> <li>The following media information was added: RE_00250, AP_00012, AP_00013, AP_00014, AP_00022, AP_00024, AP_00028, AP_00035</li> <li>The following media information was deleted: RE_00209, RE_00210</li> </ul>			
	Symptoms Corrected:			
	- Japanese software keyboard appear when modify custom paper name.			
3	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was added: RE_00049,RE_00054,RE_00058,RE_00082,RE_00142,RE_00143,RE_00 227,RE_00187,RE_00188</li> <li>RE_00094 was deleted.</li> <li>"Productivity" data was added to following paper RE_00187, RE_00188</li> <li>Remark *1 on thick paper was corrected.</li> <li>Fifty one paper information was added</li> <li>Information on the following media was corrected: BE_00204_RE_00235</li> </ul>			
2	1st Release			

## Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194053e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibAPwh AB		Prepared by: A.Tajima				
From: 1st Tech Service Sec., PP Tech Service Dept.						
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

This RTB has been issued to announce the firmware release information for the **MediaLibAPwh AB.** 

Version	Program No.	Effective Date	Availability of RFU
8	D1945766_R8	-	Not available
7	D1945766_R7	-	Not available
6	D1945766_R6	-	Not available
4	D1945766_R4	-	Not available
3	D1945766_R3	-	Not available
2	D1945766_R2	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
8	<ul> <li>[R8]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic": RE_00223, RE_00224, RE_00261</li> <li>Anew rank A media were added to the media libraly.</li> </ul>
7	<ul> <li>[R7]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> <li>For the above change to take effect, the following firmware, controller patches, driver, and media library must be updated together as a set. Make sure to</li> </ul>

**RICOH** Reissued: 08-Sep-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194053e		
Version	Modified Points	Modified Points or Symptom Corrected			
	refer to RTB No.RD194138 for the update procedure, which also in format conversion of the custom paper library				
	ionnal conversion of the custom pape	i ilbrary.			
	Firmware				
	- Engine 1.17:06 - System/Copy or System v3.06				
	- Websys v1.06				
	- Printer v3.02				
	Controller patches				
	- Fiery Patch FIT101135696				
	Fiery E-83A				
	- Fiery Patch FII 101135696 TotalFlow Print Server B-60A				
	- MicroCode v1.6.004				
	Driver				
	GW model				
	- PCL6 (Windows) v1.3				
	<ul> <li>PCL6 for Universal Print (Windows)</li> </ul>	s) v4.10.0.0			
	- PS for Universal Print (Windows)	v1.0.3			
	Fiery E-43A/83A - PS3 (Windows) v1 0 2				
	- PS3 (Mac) v1.0.3				
	TotalFlow Print Server R-60A				
	- PS3 (Mac) v1.0.56.0				
	Deper Librery				
	- For China: Rev.7				
	- For RA: Rev.7				
	- For RE: Rev.9 - For BAC: Rev.9				
6	[R6]				
	<ul> <li>8 new media were added to the m</li> <li>Media name was corrected from "</li> </ul>	edia list under ST2 typ CreatorStar" to "Creat	)e. or Star" for the		
	following:				
	RE_00082, RE_00083, RE_00084	4, RE_00085			
	<ul> <li>Media name was corrected from " following:</li> </ul>	Colotec+" to "Colotech	1+" for the		
	AP_00023				
	   [B5]				
	Luminance values were modified for t	he following media typ	es:		
	light color, dark color, metallic, clear F	ile Folder.			
	- Coloured paper detection lightin	aujustinent na mode settina			

Reissued: 08-Sep-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194053e		
Version	Modified Points	or Symptom Correcte	ed		
4	<ul> <li>The following media information was added: RE_00250, AP_00012, AP_00013, AP_00014, AP_00022, AP_00024, AP_00028, AP_00035</li> <li>The following media information was deleted: RE_00209, RE_00210</li> </ul>				
	Symptoms Corrected:				
	<ul> <li>Japanese software keyboard ap</li> </ul>	pear when modify custo	om paper name.		
3	<ul> <li>"High Quality entry" was added.</li> <li>The following media information RE_00049,RE_00054,RE_00058 227,RE_00187,RE_00188</li> <li>RE_00094 was deleted.</li> <li>"Productivity" data was added to RE_00187, RE_00188</li> </ul>	was added: 8,RE_00082,RE_00142 following paper	,RE_00143,RE_00		
	<ul> <li>Remark *1 on thick paper was corrected.</li> <li>Fifty one paper information was added</li> <li>Information on the following media was corrected: RE_00204, RE_00235.</li> </ul>				
2	1st Release				

## Technical Bulletin

Reissued: 14-Oct-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194055e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibNAcl AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part information	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibNAcI AB**.

Version	Program No.	Effective Date	Availability of RFU
11	D1945753_R11		Not available
9	D1945753_R9	-	Not available
8	D1945753_R8	-	Not available
6	D1945753_R6	-	Not available
5	D1945753_R5	-	Not available
4	D1945753_R4	-	Not available
3	D1945753_R3	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
11	<ul> <li>[R11]</li> <li>4 new media were added to the media list under ST2 type.</li> <li>[R10]</li> <li>18 new media were added to the media list under ST2 type.</li> <li>Paper Weight was made common with other Production name: NA_00010, NA_00011, NA_00012, NA_00013, NA_00032, NA_00033, NA_00034, NA_00035, NA_00036, NA_00037, NA_00091, NA_00093, NA_00094, NA_00095, NA_00096, NA_00097, NA_00098, NA_00101, NA_00102, NA_00186, NA_00187, NA_00189, NA_00197, NA_00198, NA_00200, NA_00209, NA_00213, NA_00214, NA_00215, NA_00221, NA_00223, NA_00224, NA_00225</li> <li>Symbols used to denote the media ranks were changed. NA_00111, NA_00116</li> </ul>
9	<ul> <li>[R9]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> <li>For the above change to take effect, the following firmware, controller patches, driver, and media library must be updated together as a set. Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format</li> </ul>

RICOH Reissued: 14-Oct-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194055e
Version	Modified Points	or Symptom Correcte	ed
	<ul> <li>conversion of the custom paper libra</li> <li>Firmware <ul> <li>Engine 1.17:06</li> <li>System/Copy or System v3.06</li> <li>Websys v1.06</li> <li>Printer v3.02</li> <li>OpePane v2.04</li> </ul> </li> </ul>	ry.	
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004		
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Window - PS for Universal Print (Windows) Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0	vs) v4.10.0.0 v1.0.3	
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9		
8	[R8] - 29 new media were added to the	e media list under ST2 t	ype.
	[R7] Luminance values were modified for color, metallic, clear File Folder. - Coloured_paper_edge_detection - Coloured_paper_detection_light	the following media typ n_adjustment ting_mode_setting	es: light color, dark
6	- The following media information NA_00114	was deleted:	
	<ul> <li>Symptoms Corrected</li> <li>Japanese keyboard appears on custom paper name.</li> </ul>	the screen when attem	oted to change the



### Reissued: 14-Oct-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194055e
Version	Modified Points or Symptom Corrected		
5	<ul> <li>The following media information NA_00059, NA_00060, NA_0007</li> </ul>	was deleted: 75, NA_00083, NA_000	84
4	"High Quality entry" was added. The following media information was added: NA_00076, NA_00078 and NA_00119 Thirteen media information was added. Remark *1 on thick paper was corrected.		
3	1st Release		

## Technical Bulletin

Reissued: 14-Oct-16

Model: Leo-C1

Date: 13-Mar-15

No.: RD194056e

#### **RTB Reissue**

The items in <b>bo</b>	Id italics have been corre	ected or addec	l.	
Subject: Firmware Release Note: MediaLibNAwh AB		Prepare	d by: A.Tajima	
From: 1st Tech Service Sec., PP Tech Service Dept.				
Classification:	Troubleshooting	Part information	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **MediaLibNAwh AB.**

Version	Program No.	Effective Date	Availability of RFU
11	D1945754_R11	-	Not available
9	D1945754_R9	-	Not available
8	D1945754_R8	-	Not available
6	D1945754_R6	-	Not available
5	D1945754_R5	-	Not available
4	D1945754_R4	-	Not available
3	D1945754_R3	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
11	<ul> <li>[R11]</li> <li>4 new media were added to the media list under ST2 type.</li> <li>[R10]</li> <li>18 new media were added to the media list under ST2 type.</li> <li>Paper Weight was made common with other Production name: NA_00010, NA_00011, NA_00012, NA_00013, NA_00032, NA_00033, NA_00034, NA_00035, NA_00036, NA_00037, NA_00091, NA_00093, NA_00094, NA_00095, NA_00096, NA_00097, NA_00098, NA_00101, NA_00102, NA_00186, NA_00187, NA_00189, NA_00197, NA_00198, NA_00200, NA_00209, NA_00213, NA_00214, NA_00215, NA_00221, NA_00223, NA_00224, NA_00225</li> <li>Symbols used to denote the media ranks were changed. NA_00111, NA_00116</li> </ul>
9	<ul> <li>[R9] Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> <li>For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u>. Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format</li> </ul>

RICOH Reissued: 14-Oct-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194056e
Version	Modified Points	or Symptom Correcte	ed
	<ul> <li>conversion of the custom paper libra</li> <li>Firmware <ul> <li>Engine 1.17:06</li> <li>System/Copy or System v3.06</li> <li>Websys v1.06</li> <li>Printer v3.02</li> <li>OpePane v2.04</li> </ul> </li> <li>Controller patches <ul> <li>Fiery E-43A</li> </ul> </li> </ul>	ry.	
	<ul> <li>Fiery Patch FIT101135696</li> <li>Fiery E-83A</li> <li>Fiery Patch FIT101135696</li> <li>TotalFlow Print Server R-60A</li> <li>MicroCode v1.6.004</li> </ul>		
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Window - PS for Universal Print (Windows) Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0	vs) v4.10.0.0 v1.0.3	
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9		
8	<ul> <li>[R8]</li> <li>29 new media were added to the</li> <li>[R7]</li> <li>Luminance values were modified for</li> <li>color, metallic, clear File Folder.</li> <li>Coloured_paper_edge_detection</li> <li>Coloured_paper_detection_light</li> </ul>	e media list under ST2 t the following media typ n_adjustment ing_mode_setting	ype. es: light color, dark
6	<ul> <li>The following media information NA_00114</li> <li>Symptoms Corrected</li> <li>Japanese keyboard appears on custom paper name.</li> </ul>	was deleted: the screen when attem	oted to change the



### Reissued: 14-Oct-16

Model: Leo-C1		Date: 13-Mar-15	No.: RD194056e
Version	Modified Points or Symptom Corrected		
5	<ul> <li>The following media information NA_00059, NA_00060, NA_0007</li> </ul>	was deleted: 75, NA_00083, NA_000	84
4	"High Quality entry" was added. The following media information was added: NA_00076, NA_00078 and NA_00119 Thirteen media information was added. Remark *1 on thick paper was corrected.		
3	1st Release		

## Technical Bulletin

Reissued: 14-Oct-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194058e

#### **RTB Reissue**

The items in <b>bo</b>	Id italics have been corre	ected or addec	1.	
Subject: Firmware Release Note: MediaLibNAcl AB		Prepare	d by: A.Tajima	
From: 1st Tech Service Sec., PP Tech Service Dept.				
Classification:	Troubleshooting	Part information	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2

# This RTB has been issued to announce the firmware release information for the **MediaLibNAcI AB**.

Version	Program No.	Effective Date	Availability of RFU
11	D1945761_R11	-	Not available
9	D1945761_R9	-	Not available
8	D1945761_R8	-	Not available
6	D1945761_R6	-	Not available
5	D1945761_R5	-	Not available
4	D1945761_R4	-	Not available
3	D1945761_R3	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
11	<ul> <li>[R11]</li> <li>4 new media were added to the media list under ST2 type.</li> <li>[R10]</li> <li>18 new media were added to the media list under ST2 type.</li> <li>Paper Weight was made common with other Production name: NA_00010, NA_00011, NA_00012, NA_00013, NA_00032, NA_00033, NA_00034, NA_00035, NA_00036, NA_00037, NA_00091, NA_00093, NA_00094, NA_00095, NA_00096, NA_00097, NA_00098, NA_00101, NA_00102, NA_00186, NA_00187, NA_00189, NA_00197, NA_00198, NA_00200, NA_00209, NA_00213, NA_00214, NA_00215, NA_00221, NA_00223, NA_00224, NA_00225</li> <li>Symbols used to denote the media ranks were changed.</li> </ul>
	NA_00111, NA_00116
9	<ul> <li>[R9]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set.</u> Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format

## Technical Bulletin

### Reissued: 14-Oct-16

Model: Leo-P1		Date: 13-Mar-15	No.: RD194058e
Version	Modified Points	or Symptom Correcte	d
	conversion of the custom paper library		
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04		
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004		
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0	) v4.10.0.0 1.0.3	
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9		
8	[R8]	adia list under ST2 tur	<u>م</u>
6	[R7] Luminance values were modified for th color, metallic, clear File Folder. - Coloured_paper_edge_detection_ - Coloured_paper_detection_lighting	adjustment	e. s: light color, dark
Ö	NA_00114		
	Symptoms Corrected - Japanese keyboard appears on th custom paper name.	e screen when attempt	ed to change the



### Reissued: 14-Oct-16

Model: Leo-P1	Ddel: Leo-P1         Date: 13-Mar-15         No.: RD19405				
Version	Modified Points or Symptom Corrected				
5	<ul> <li>The following media information w NA_00059, NA_00060, NA_00075</li> </ul>	/as deleted: 5, NA_00083, NA_0008	4		
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was NA_00076, NA_00078 and NA_00</li> <li>Thirteen media information was ad</li> <li>Remark *1 on thick paper was corr</li> </ul>	as added: 119 ded. rected.			
3	1st Release				

## Technical Bulletin

Reissued: 14-Oct-16

Model: Leo-P1

Date: 13-Mar-15

No.: RD194059e

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibNAwh AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.						
Classification:	Troubleshooting	Part information	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibNAwh AB.**

Version	Program No.	Effective Date	Availability of RFU
11	D1945762_R11	-	Not available
9	D1945762_R9	-	Not available
8	D1945762_R8	-	Not available
6	D1945762_R6	-	Not available
5	D1945762_R5	-	Not available
4	D1945762_R4	-	Not available
3	D1945762_R3	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
11	<ul> <li>[R11]</li> <li>4 new media were added to the media list under ST2 type.</li> <li>[R10]</li> <li>18 new media were added to the media list under ST2 type.</li> <li>Paper Weight was made common with other Production name: NA_00010, NA_00011, NA_00012, NA_00013, NA_00032, NA_00033, NA_00034, NA_00035, NA_00036, NA_00037, NA_00091, NA_00093, NA_00094, NA_00095, NA_00096, NA_00097, NA_00098, NA_00101, NA_00102, NA_00186, NA_00187, NA_00189, NA_00197, NA_00198, NA_00200, NA_00209, NA_00213, NA_00214, NA_00215, NA_00221, NA_00223, NA_00224, NA_00225</li> <li>Symbols used to denote the media ranks were changed.</li> </ul>
	NA_00111, NA_00116
9	<ul> <li>[R9]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>
	For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format

### RICOH Reissued: 14-Oct-16

## Technical Bulletin

Model: Leo-P1		Date: 13-Mar-15	No.: RD194059e
Version	Modified Points	or Symptom Correcte	ed
	conversion of the custom paper libra	ry.	
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04		
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004		
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Window - PS for Universal Print (Windows) Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0	vs) v4.10.0.0 v1.0.3	
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9		
8	[R8]	media list under ST2 t	
	[R7] Luminance values were modified for color, metallic, clear File Folder. - Coloured_paper_edge_detection - Coloured_paper_detection_light	the following media type n_adjustment ing_mode_setting	es: light color, dark
o	NA_00114	was ueleleu.	
	Symptoms Corrected - Japanese keyboard appears on custom paper name.	the screen when attemp	oted to change the



### Reissued: 14-Oct-16

Model: Leo-P1	Date: 13-Mar-15 No.: RD194059e					
Version	Modified Points	Modified Points or Symptom Corrected				
5	<ul> <li>The following media information NA_00059, NA_00060, NA_0007</li> </ul>	was deleted: 75, NA_00083, NA_000	84			
4	<ul> <li>"High Quality entry" was added.</li> <li>The following media information was a NA_00076, NA_00078 and NA_0</li> <li>Thirteen media information was a Remark *1 on thick paper was co</li> </ul>	was added: 0119 Idded. rrected.				
3	1st Release					



## Technical Bulletin

Model: Leo-C1/P1			Date: <sup>-</sup>	18-Mar-15	No.: RD194061
Subject: Trouble	shooting Jam109	Pre	pared by: Hiros	shi Inenaga	
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>☑ Paper path</li> </ul>	<ul> <li>Part infor</li> <li>Electrical</li> <li>Transmit</li> </ul>	mation /receive	Action     Action     Service     Retrofit	required e manual revision t information
	Product Safety	🗌 Other (	)	🛛 Tier 2	

### SYMPTOM

Jam109 with Finisher SR5050 or Booklet Finisher SR5060

### CAUSE

The spring used for the TE (trailing edge) press-down lever of the finisher shift tray breaks, because it is attached in the opposite orientation.

**Note:** The TE press-down lever is used ONLY when printing on coated paper longer than 364mm in the feed direction. The number of users affected by this symptom is believed to be very few.

### SOLUTION

Check if the spring is attached in the correct orientation or not by following the procedure on the following pages. Correct the orientation, if necessary.

### **Affected Units**

Product Name	Product Code	S/N Apr 2014 ~ Sep 2014
Rooklat Einigher SDE060	D73417	E844E410001 ~ E844E910102
Bookiet Finisher SR5060	D73427	E844E420001 ~ E844E920070
Einicher SP5050	D73517	E854E410001 ~ E854E910120
	D73527	E854E420001 ~ E854E920080

### How to check the orientation of the spring attached to the TE press-down lever

1. Press the emergency shift stop switch and descend the tray. (Confirm the light on the switch turns on.)





2. Look for the spring under the roller.



3. Check whether the end of the spring is facing to the left or to the right hand side.



Facing left: GOOD



4. If the end of the spring faces to the LEFT, the procedure is complete. Reassemble the machine. If the end of the spring faces to the RIGHT, reattach the spring in the opposite orientation by following the procedure below.

### **Reattaching the spring**

1. Remove the drag roller unit according to the procedure in the Service manual.





2. Remove the rear bracket together with the rear TE press-down lever. (screw x1)



3. Detach the spring and reattach it in the opposite orientation so that the end of the spring faces the direction as shown in the correct example below.



4. Hook the spring to the stay and reconfirm correct orientation of the spring.





Make sure the edge of the spring faces to the left hand side.

5. Attach the bracket. (screw x1)



6. Install the drag roller unit to complete the procedure.

### Technical Bulletin

Model: Leo-C1/P1(D194/D195)

Date: 25-Mar-15

No.: RD194062

Subject: Service Manual Correction: GW Printer Controller Settings			Prepared by: Hiroshi Inenaga	а
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				
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/rec</li> <li>Other (</li> </ul>	tion Action required Service manual r ceive Retrofit information ) X Tier 2	evision on

### **Field Service Manual Correction**

Please add the following descriptions to your field service manual in the section:

2. Installation > Main Machine Installation > GW Printer Controller Settings

Cover plate (D0145974: COVER: CONNECTOR: EFI) is included as an accessory to the main machine to cover the hole that appears after removing the Gigabit Ethernet board. Attach the cover plate and fix it with the screw removed together with the Gigabit Ethernet board.



## Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)		Date: 27-Mar-15		No.: RD194063		
Subject: False display of the fuser cleaning web counter			Prepared by: Shinnosuke Sasaki			
From: 1st PP Tech Service Sec., PP Tech Service Dept.,			pt.,			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>☐ Part informat</li> <li>☐ Electrical</li> <li>☐ Transmit/rec</li> <li>☐ Other (</li> </ul>		tion	] Actior ] Servio ] Retro ] Tier 2	n required ce manual revision fit information

### SYMPTOM

The fuser cleaning web (Fuser Cleaning Unit: Roller) counter does not count up and affects the following.

- No. 115 of the PM counter list
- SP7954-115 Pg Counter(%): Fuser Cleaning Unit: Roller

This is a display issue and does not affect the Near-end and End alert timings. Near-end and End alerts are issued at the correct times (because the system refers to a different SP to calculate near-end/end.)

### CAUSE

Firmware bug

### WORKAROUND

To find out the correct fuser cleaning web consumption rate, refer to the following SP until the fix becomes available. This SP displays the correct value.

• SP1902-1 Cleaning Web Setting: Web Consumption

### SOLUTION

The firmware will be fixed in April, 2015.

## Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)		Date: 1-APR-1			No.: RD194064	
Subject: Machine stalls in "Self checking" status if S station toner refresh is interrupted.				Prepared	d by: Shi	nnosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>☑ Paper path</li> <li>☑ Product Safety</li> </ul>	☐ Part inf ☐ Electric ☐ Transm ☐ Other (	ormat al iit/rec	tion eive )	Action Action Servia Retro Tier 2	n required ce manual revision fit information

### SYMPTOM

During the initialization process when the machine power is turned ON, the machine stalls in "Self checking..." status and does not recover, which occurs if manual toner refreshing\* of the S station was interrupted by opening the front door(s) in a previous operation. The problem does not occur on YMCK stations.

\* Toner refreshing: SP3062-006 [Manual Tnr Ref:Exe] / 0515 [Execute Developer Refreshing] in Adjustment Settings for Skilled Operators

### CAUSE

Firmware bug

### **TEMPORARY SOLUTION**

While the machine is stalling, enter the SP mode and change SP3509-001 to "1" and turn the machine OFF and then ON.

Make sure to change the SP value back to "0" after the machine recovers.

The machine can also be recovered in the following procedure.

- 1. Turn the machine OFF and then ON.
- 2. The message "Self checking..." appears at the lower left corner of the operation panel
- 3. Wait for a couple of seconds, and then open the front doors.
- 4. The system will not attempt to resume the adjustment.

As a preventive measure, do not open the doors during manual toner refreshing. This process takes only  $2 \sim 5$  min.

### SOLUTION

Engine firmware will be fixed around April, 2015.

## Technical Bulletin

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

Model: Leo-C1a/C1b (D194/D195) Da			Date	e: 3-Apr-15	No.: RD194065
Subject: Request regarding decal attachment at new installs			Prepared by: Shinnosuke Sasaki		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inf</li> <li>Electric</li> <li>Transm</li> <li>Other (</li> </ul>	ormat al hit/rec	ion 🛛 Action Servie eive 🔤 Retro ) 🔲 Tier 2	n required ce manual revision fit information 2

### Request

Please make sure to attach all decals included as accessories at new site installs. See the following section of the service manual to identify the locations to where the decals attach:

Installation > Main Machine Installation > Installation: Power Off > Attach Decals



Decals are important in alerting users to cautions and notes on machine operations, but are also important for contract reasons, especially the "Adobe" decal.

## Technical Bulletin

Model: Leo-C1a/C1b (D194/D195) Da			i <b>te</b> : 16-Ma	r-15	No.: RD194060	
Subject: Troubleshooting SC545/565			Prepared by: Shinnosuke Sasaki			
From: 1st PP Tech Service Sec., PP Tech Service Dept.,			.,			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	☐ Part infor ☐ Electrical ☐ Transmit ☐ Other (	rmat I /rec	tion eive )	<ul> <li>Action</li> <li>Service</li> <li>Retrofit</li> <li>Tier 2</li> </ul>	required e manual revision t information

### Symptom

SC545/565 (Heater lit continuously: Heating Roller Fusing Lamps) occurs in the following conditions:

- Low temperature environment (17 degrees Celsius or lower)
- Machine is left unused for approximately 15 min

### Cause

The target heating roller temperature is too high.

In a low temperature environment, the machine automatically sets a slightly high target heating roller temperature to counterbalance, but this target temperature is too high and keeps the heaters lit for a duration that exceeds the threshold (25 sec) to issue the SC.

The problem may occur regardless of the room temperature, if the standby target temperature is set to 165 degrees Celsius or higher.

### Action

Set SP1154-002 (Standby Rotation: Rotation Time) to "20 sec" (default 30 sec).

and

Ensure both of the following are set lower than 165 degrees Celsius.

- SP1107-\* (Standby Target Temp. Setting)
- 0207 Adjust Fusing Temperature on Standby in Adjustment Settings for Skilled Operators

### PERMANENT SOLUTION

The default of SP1154-002 (Standby Rotation: Rotation Time) was changed to 20 sec. This solution has been applied since mid-February, 2015.

Model: Leo-C1/P1

Reissued: 16-Mar-18

Date: 21-Apr-15

No.: RD194066b

#### **RTB Reissue**

#### The descriptions in magenta were corrected or added.

Subject: Manual correction: Retrieving the Debug Logs			Prepared by: S.Kato		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part informat</li> <li>Electrical</li> <li>Transmit/rec</li> <li>Other (</li> </ul>	ion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>	

### **Service Manual Revision**

Step 6 & 7 7 & 8 were deleted, as they are not necessary.

#### Step 3 was added

Top Page > Main Chapters > System Maintenance > Capturing the Debug Logs > Retrieving the Debug Logs > Procedure for Retrieving the Debug Log

#### Retrieving the Debug Logs

#### 🚼 Important 🔵

- Retrieve debug logs to identify the date of occurrence of the problems and to find details of the problems
- e.g.: At around 8:00 am on March 10, an engine stall occurred. The operation panel does not respond. Turn the main power supply off / on.
- You need to retrieve the debug logs dating back three days from the date of the problem.
- Analysis of the debug log is effective for problems caused by the software. Analysis of the debug log is
  not valid for the selection of defective parts or problems caused by hardware.

#### Procedure for Retrieving the Debug Log

This section explains debug log saving with SD card as example.

1. Insert the SD card into the slot [A] on the side of the operation panel.



🚼 Important

• It is recommended to use the SD card provided as a service part. This is because the log data can be acquired much faster than when using commercially available SD cards.

#### 2. Enter SP mode.

3. Check if SP5857-002 sets to "2: HDD". If not, change the value to 2 and turn main power switch off and on.

NOTE: When SP5857-002 sets to the values other than "2: HDD", debug log collection will fail.

## Technical Bulletin

#### Reissued: 16-Mar-18

RICOH

lodel: Leo-C1/P1	Date: 21-Apr-15	No.: RD194066b
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- 4. Enable debug log saving function with SP5-857-001 (Save Debug Log). Default setting is 4 0(Enable).
- 5. Set the start date of the log with SP5-857-101 (Start date of debug log output) e.g.: March 28, 2013: input 20130328 (yyyymmdd) Set the date three days earlier than the occurrence of the problems.
- 6. Set the end date of the log with SP5-857-102 (End date of debug log output) e.g.: March 31, 2013: input 20130331 (yyyymmdd)
- 7. Set storage location to "3 (SD card)" with SP5-857-002 (Target 2: HDD 3: SD).
- 8. After specifying SP5-857-002, turn the main power switch [A] OFF and ON.



- 9. Execute SP5-857-103 (Get a debug log of all) to write the debug log to the SD card.
  - SP5-857-104 gets controller debug log (GW debug log)
  - SP5-857-105 gets engine debug log
  - SP5-857-107 gets operation panel debug log
- 10. If the transfer is finished successfully, 'completed' is displayed on the touch panel display.
- 11. Make sure that the SD card access LED is off, and then remove the SD card.
- If 'failed' appears on the touch panel display, turn the main power switch off, and then recover from step 1 again.
- 12. The debug logs are saved with the following file names.

Controller debug log (GW debug log)	/LogTrace/machine number/watching/yyyymmdd_hhmmss_unique identification number.gz		
Engine debug log	/LogTrace/machine number/engine/yyyymmdd_hhmmss.gz		
Operation panel debug log	/LogTrace/machine number/opepanel/yyyymmdd_hhmmss.tar.gz		

#### Approximate Time to Transfer Debug Log

The approximate time it takes to transfer the debug log is as follows. Transfer time may be affected by the type or format of the SD card. (It is recommended that you format the SD card using the Panasonic SD Formatter (freeware)).

- Controller debug log (GW debug log): 2 20 minutes
- Engine debug log: 2 minutes
- Operation panel debug log: 2 20 minutes

#### Approximate time display

When getting debug logs by using an SD card, following SP display approximate time on the operation panel.



Reissued: 16-Mar-18 Model: Leo-C1/P1

Date: 21-Apr-15

No.: RD194066b

SP	Descriptions				
Get All Debug Logs Time Disp (SP5-857-151)	<ul> <li>Displays the approximate time for all debug logs.</li> <li>Controller debug log</li> <li>Engine debug log</li> <li>Operation panel debug log</li> <li>SMC</li> </ul>				
Get Controller Debug Logs Time Disp (SP5-857-152)	Displays the approximate time for controller debug log.				
Get Engine Debug Logs Time Disp (SP5-857-153)	Displays the approximate time for engine debug log.				
Get Opepanel Debug Logs Time Disp (SP5-857-154)	Displays the approximate time for operation panel debug log.				
Get SMC Time Disp (SP5-857-155)	Displays the approximate time for SMC.				

#### Error Code

If the approximate time can not be displayed, the minus value appears on the operation panel. The meaning of value is as follows.

time	Descriptions
-1min	An error other than -2, -3 or -4min has occurred.
-2min	There is no SC card in operation panel SD card slot or service slot.
-3min	Write protected SC card is inserted.
-4min	SP5-857-101 (Debug Logging Start Date) is set to a date in the future after the Debug Logging Output End Date (SPR-857-102).

## Technical Bulletin

#### **PAGE: 1/7**

Model: Leo-C1/P1			Da	Date: 20-April-15		No.: RD194067
Subject: Duct covers to reduce noise level			Prepared by: Akihiro Tajima			
From: 1st Tech. Support Sec. Service Support Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>☑ Part info</li> <li>☑ Electrica</li> <li>☑ Transmi</li> <li>☑ Other (</li> </ul>	ormat al t/rec	tion eive )	<ul> <li>Action</li> <li>Service</li> <li>Retrofit</li> <li>Tier 2</li> </ul>	required e manual revision it information

The following duct covers were registered as new service parts. Attach these covers if you are requested by your customers to reduce the machine noise level.

Part number	Description	Call out numbers used in the following installation procedure
D1947011	DUCT:EXHAUST:C/T BOX:REAR:ASS'Y	1-1, 1-2, 1-3
D1947012	DUCT:EXHAUST:C/T BOX:LEFT SIDEWAYS:ASS'Y	2
D7771290	DUCT:EXHAUST:REAR:ASS'Y	3-1, 3-2

### Without the duct covers





#### **IMPORTANT**

- \*1: This is because attaching covers 3-1 and 3-2 has the risk of causing toner blocking. **DO NOT** attach covers 3-1 and 3-2 unless the noise level has not been reduced to an acceptable level without these two covers. That is, attach covers 1-1, 1-2, 1-3 and 2, and operate the machine and check with your customer if the noise level is accepted. Attach covers 3-1 and 3-2 only if your customer requires further noise reduction provided that the side effect is explained to and accepted by the customer.
- \*2: Noise level at waiting status approximate to that of Pro C651/C751 can be achieved by attaching only cover 2. If this noise level at waiting status is accepted by the customer, attach only cover 2.

Model: Leo-C1/P1

Date: 20-April-15 No.: F

### Procedure

- Clean the surface of the rear covers to where the duct covers attach, in advance.
- Remove the liners of the double sided tapes on the covers and attach the covers to the positions described on the following pages.
- After attaching the duct covers, press the covers to confirm secure attachment.







Make sure the cover attaches between the screws circled in red and covers the duct.

#### Cover 1-2





## Technical Bulletin

Model: Leo-C1/P1

Date: 20-April-15

No.: RD194067

Cover 1-3



Cover 2




# Technical Bulletin

Model: Leo-C1/P1

Date: 20-April-15

No.: RD194067

Cover 3-1





# Technical Bulletin

Model: Leo-C1/P1

Date: 20-April-15

No.: RD194067

Cover 3-2



# Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 27-Apr-15

No.: RD194068d

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibCNwh AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibCNwh AB.**

Version	Program No.	Effective Date	Availability of RFU
8	D1945760_R8	-	Not available
7	D1945760_R7	-	Not available
6	D1945760_R6	-	Not available
4	D1945760_R4	-	Not available
2	D1945760_R2	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		
8	<ul> <li>[R8]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic": RE_00223, RE_00224, RE_00261</li> <li>3 new rank A media were added to the media libraly.</li> </ul>		
7	<ul> <li>[R7]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> <li>For the above change to take effect, the following firmware, controller patches,</li> </ul>		

Reissued: 08-	Sep-16				
Model: Leo-C1	Date: 27-Apr-15 No.: RD194068d				
Version	Modified Points or Symptom Correcteddriver, and media library must be updated together as a set. Make sure to referto RTB No.RD194138 for the update procedure, which also involves formatconversion of the custom paper library.				
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04				
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004				
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0				
Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9					
6	<ul> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type.</li> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> <li>Media name was corrected from "Colotec+" to "Colotech+" for the following: AP_00023</li> </ul>				
<ul> <li>[R5]</li> <li>Luminance values were modified for the following media types:</li> <li>light color, dark color, metallic, clear File Folder.</li> <li>Coloured_paper_edge_detection_adjustment</li> <li>Coloured_paper_detection_lighting_mode_setting</li> </ul>					



## Reissued: 08-Sep-16

Model: Leo-C1		Date: 27-Apr-15	No.: RD194068d	
Version	Modified Points	or Symptom Correcte	d	
4	<ul> <li>The following media information AP_00012, AP_00013, AP_0001 AP_00035,</li> <li>The following media information RE_00209, RE_00210</li> <li>Moses data was corrected for the RE_00250</li> </ul>	was added: 4, AP_00022, AP_0002 was deleted: e following:	24, AP_00028,	
	Symptoms Corrected: Display of paper names on the operation panel was changed from simplified Chinese to Pinyin (alphabet) characters to prevent character corruption.			
2	1st Release			

# Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-C1

Date: 27-Apr-15

No.: RD194069d

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibCNcl AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.						
Classification:	Troubleshooting	Part information	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibCNcl AB**.

Version	Program No.	Effective Date	Availability of RFU
8	D1945759_R8	-	Not available
7	D1945759_R7	-	Not available
6	D1945759_R6	-	Not available
4	D1945759_R4	-	Not available
2	D1945759_R2	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		
8	<ul> <li>[R8]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic": RE_00223, RE_00224, RE_00261</li> <li>3 new rank A media were added to the media libraly.</li> </ul>		
7	<ul> <li>[R7]</li> <li>Specification change:         <ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul> </li> <li>For the above change to take effect, the following firmware, controller patches,</li> </ul>		

Reissued: 08-S	Sep-16					
Model: Leo-C1	Date: 27-Apr-15 No.: RD194069d					
Version	Modified Points or Symptom Corrected driver, and media library <u>must be updated together as a set</u> . Make sure to refer to RTB No.RD194138 for the update procedure, which also involves format conversion of the custom paper library.					
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04 Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004					
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0					
Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9						
	- Paper Name and Vendor were changed from Pinyin to Chinese characters.					
6	<ul> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type.</li> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> <li>Media name was corrected from "Colotec+" to "Colotech+" for the following: AP_00023</li> </ul>					
	Luminance values were modified for the following media types: light color, dark color, metallic, clear File Folder.					



## Reissued: 08-Sep-16

Model: Leo-C1		Date: 27-Apr-15	No.: RD194069d	
Version	Modified Points	or Symptom Correcte	ed	
	<ul> <li>Coloured_paper_edge_detection_adjustment</li> <li>Coloured paper detection lighting mode setting</li> </ul>			
4	<ul> <li>The following media information AP_00012, AP_00013, AP_0001 AP_00035,</li> <li>The following media information RE_00209, RE_00210</li> <li>Moses data was corrected for the RE_00250</li> <li>Symptoms Corrected:</li> </ul>	was added: 4, AP_00022, AP_0002 was deleted: e following:	24, AP_00028,	
	Chinese to Pinyin (alphabet) characters to prevent character corruption.			
2	1st Release	·	·	

# Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 27-Apr-15

No.: RD194071d

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.						
Subject: Firmware Release Note: MediaLibCNwh AB			Prepare	d by: A.Tajima		
From: 1st Tech Service Sec., PP Tech Service Dept.						
Classification:	Troubleshooting	Part informat	tion	Action required		
	🗌 Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

# This RTB has been issued to announce the firmware release information for the **MediaLibCNwh AB.**

Version	Program No.	Effective Date	Availability of RFU
8	D1945768_R8	-	Not available
7	D1945768_R7	-	Not available
6	D1945768_R6	-	Not available
4	D1945768_R4	-	Not available
2	D1945768_R2	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
8	<ul> <li>[R8]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic": RE_00223, RE_00224, RE_00261</li> <li>3 new rank A media were added to the media libraly.</li> </ul>
7	<ul> <li>[R7]</li> <li>Specification change: <ul> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul> </li> <li>For the above change to take effect, the following firmware, controller patches, driver, and media library <u>must be updated together as a set</u>. Make sure to refer</li> </ul>

RICOH Reissued: 08-Sep-16

Model: Leo-P1		Date: 27-Apr-15	No.: RD194071d
Version	Modified Points	or Symptom Corre	cted
	to RTB No.RD194138 for the update conversion of the custom paper libra	procedure, which als	so involves format
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04		
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004		
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windo - PS for Universal Print (Windows Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0	ws) v4.10.0.0 ) v1.0.3	
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9		
	- Paper Name and Vendor were of	hanged from Pinyin t	o Chinese characters.
6	<ul> <li>[R6]</li> <li>8 new media were added to the r</li> <li>Media name was corrected from following: RE_00082, RE_00083, RE_0008</li> <li>Media name was corrected from AP_00023</li> <li>[R5]</li> <li>Luminance values were modified for</li> </ul>	nedia list under ST2 f "CreatorStar" to "Cre 34, RE_00085 "Colotec+" to "Colote	type. ator Star" for the ch+" for the following:
	light color, dark color, metallic, clear	File Folder.	урсэ.



## Reissued: 08-Sep-16

Model: Leo-P1	Date: 27-Apr-15 No.: RD194071d						
Version	Modified Points	or Symptom Correcte	ed				
		ng_mode_setting					
4	<ul> <li>The following media information AP_00012, AP_00013, AP_0001 AP_00035,</li> <li>The following media information RE_00209, RE_00210</li> <li>Moses data was corrected for the RE_00250</li> <li>Symptoms Corrected:</li> </ul>	was added: 4, AP_00022, AP_0002 was deleted: e following:	24, AP_00028,				
	Display of paper names on the operation panel was changed from simplified Chinese to Pinyin (alphabet) characters to prevent character corruption.						
2	1st Release						

# Technical Bulletin

Reissued: 08-Sep-16

Model: Leo-P1

Date: 27-Apr-15

No.: RD194072d

#### **RTB Reissue**

he items in <b>bold italics</b> have been corrected or added.							
Subject: Firmware Release Note: MediaLibCNcl AB			Prepare	d by: A.Tajima			
From: 1st Tech Service Sec., PP Tech Service Dept.		Dept.					
Classification:	Troubleshooting	Part information	tion	Action required			
	🗌 Mechanical	Electrical		Service manual revision			
	Paper path	Transmit/receive		Retrofit information			
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2			

# This RTB has been issued to announce the firmware release information for the **MediaLibCNcl AB**.

Version	Program No.	Effective Date	Availability of RFU
8	D1945767_R8	-	Not available
7	D1945767_R7	-	Not available
6	D1945767_R6	-	Not available
4	D1945767_R4	-	Not available
2	D1945767_R2	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
8	<ul> <li>[R8]</li> <li>3 new rank A and 1 new rank C media were added to the media list.</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>Media name was corrected from "Creative Rives Dot" to " Rives Dot" for the following: RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00190, RE_00191</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins Creative" to "Arjowiggins Creative Papers": RE_00157, RE_00158, RE_00173, RE_00174, RE_00256</li> <li>The media list was corrected as follows according to the correction of the vendor name of the media from "Arjowiggins" to "Arjowiggins Graphic": RE_00223, RE_00224, RE_00261</li> <li>3 new rank A media were added to the media libraly.</li> </ul>
7	<ul> <li>[R7]</li> <li>Specification change:</li> <li>Setup location of the HQ mode was changed from Custom Paper Library to Driver/Utility.</li> </ul>

Reissued: 08-9	Зер-16							
Model: Leo-P1	Date: 27-Apr-15 No.: RD194072c							
Version	Modified Points or Symptom CorrectedFor the above change to take effect, the following firmware, controller patchesdriver, and media library must be updated together as a set.Make sure to referto RTB No.RD194138 for the update procedure, which also involves formatconversion of the custom paper library	, ər						
	Firmware - Engine 1.17:06 - System/Copy or System v3.06 - Websys v1.06 - Printer v3.02 - OpePane v2.04							
	Controller patches Fiery E-43A - Fiery Patch FIT101135696 Fiery E-83A - Fiery Patch FIT101135696 TotalFlow Print Server R-60A - MicroCode v1.6.004							
	Driver GW model - PCL6 (Windows) v1.3 - PS3 (Windows) v1.4 - PCL6 for Universal Print (Windows) v4.10.0.0 - PS for Universal Print (Windows) v1.0.3 Fiery E-43A/83A - PS3 (Windows) v1.0.2 - PS3 (Mac) v1.0.3 TotalFlow Print Server R-60A - PS3 (Windows) v1.5.0.0 - PS3 (Mac) v1.0.56.0							
	Paper Library - For China: Rev.7 - For RA: Rev.7 - For RE: Rev.9 - For RAC: Rev.9							
6	<ul> <li>Paper Name and Vendor were changed from Pinyin to Chinese characters</li> <li>[R6]</li> <li>8 new media were added to the media list under ST2 type.</li> <li>Media name was corrected from "CreatorStar" to "Creator Star" for the following: RE_00082, RE_00083, RE_00084, RE_00085</li> <li>Media name was corrected from "Colotec+" to "Colotech+" for the following AP_00023</li> </ul>	<u>s.</u> j:						
	נחסן Luminance values were modified for the following media types:							

## Reissued: 08-Sep-16

Model: Leo-P1	Date: 27-Apr-15 No.: RD194072d						
Version	Modified Points	or Symptom Correcte	ed				
	light color, dark color, metallic, clear - Coloured_paper_edge_detectior - Coloured_paper_detection_lighti	light color, dark color, metallic, clear File Folder Coloured_paper_edge_detection_adjustment - Coloured paper detection lighting mode setting					
4	<ul> <li>The following media information AP_00012, AP_00013, AP_0001 AP_00035,</li> <li>The following media information RE_00209, RE_00210</li> <li>Moses data was corrected for the RE_00250</li> <li>Symptoms Corrected: Display of paper names on the opera Chinese to Pinvin (alphabet) character</li> </ul>	was added: 4, AP_00022, AP_000 was deleted: e following: tion panel was changed	24, AP_00028, d from simplified				
2	1st Release						

# Technical Bulletin

Model: Leo-C1/P1			Date: 7-May-15			No.: RD194074
Subject: Bands in main scan direction when single color printing with Special toner			Prepare	d by: N.Y	oshida	
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electric Transm Other (	ormat al it/rec	tion eive )	Action Servic Retrof Tier 2	n required ce manual revision fit information

#### SYMPTOM

Random white bands appear across the feed direction (main scan direction) when running single color jobs using special toner at a high room temperature.

## CAUSE

Rotation of the ITB is unstable, because only one image transfer roller is in contact with the ITB when running single color jobs using the special toner.

## SOLUTION

In the Advanced Settings, set the value of menu item No. 28 (ITB current setting: special) to **54** (default: 49).

#### IMPORTANT

Note that residual images may appear as a side effect.

If the above does not resolve the problem, change SP1-024-002 (imaging mode: S FCS mode) from 0 (OFF) to 1 (ON).

#### NOTE

- This SP will not work if any of the toner bottles has reached "toner end."
- PM counters of all five PCDUs will count up.
- Image density may be slightly reduced.

# Technical Bulletin

**PAGE: 1/3** 

Model: Leo-C1/P1			Date: 7-May-15			No.: RD194075
Subject: Toner stains on trailing edge of thick paper				Prepared by: N.Yoshida		
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>□ Part info</li> <li>□ Electrica</li> <li>□ Transm</li> <li>□ Other (</li> </ul>	ormat al it/rec	tion eive )	Action Servic Retrof Tier 2	n required ce manual revision fit information

#### SYMPTOM

The trailing edge is stained with toner when printing on thick paper.



## CAUSE

Feeding thick paper causes its trailing edge to catch the toner accumulated on the ITB guide plate.

## SOLUTION

Clean both sides of the ITB guide plate.



**IMPORTANT:** Work carefully to prevent the guide plate from bending when cleaning. A bent guide plate will cause scratch marks on prints.



Technical B	ulletin
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Date: 7-May-15

No.: RD194075

## Procedure

Remove the ITB guide plate. (screw x 3) To avoid damage, slide it out slowly. Do not drop.



2. Place the guide plate on a flat surface.

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3. Clean the top and bottom sides and edges of the guide plate with a dry cloth.





4. Use a duster spray to remove toner particles caught in between the plates.



5. Put back the guide plate to complete the procedure.

# Technical Bulletin

Model: Leo-C1/P1 D			Date: 11-May-15			No.: RD194076
Subject: Wax sta		Prepared	d by: N.Ya	shida		
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part infor</li> <li>Electrical</li> <li>Transmit</li> <li>Other (</li> </ul>	mat /rec	tion eive )	<ul> <li>Action</li> <li>Service</li> <li>Retrofit</li> <li>Tier 2</li> </ul>	required e manual revision : information

#### SYMPTOM

Wax stains appear in an area covering 204mm from the leading edge on the back side of prints. The symptom is noticeable when printing on transparent media.



## CAUSE

Running high volume and high coverage jobs causes the wax content of the toner to exude and adhere to the pressure roller via the fusing belt.

## SOLUTION

- 1. In either #129 [Paper Feed Interval Setting: Productivity] or #130 [Paper Feed Interval Setting: Quality] of the Advanced Settings menu, decrease the value currently applied by "20".
- 2. Print out two sheets to confirm that the wax stains have disappeared.

# Technical Bulletin

**PAGE: 1/3** 

Model: Leo-C1/P1 Da			Dat	:e: 11-May	-15	No.: RD194077
Subject: Jam097 / Jam098 with small size paper				Prepare	d by: N.Y	oshida
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>☑ Paper path</li> <li>☑ Product Safety</li> </ul>	Part info Electric Transm Other (	ormai al it/rec	tion eive )	Action Servic Retrof Tier 2	n required ce manual revision fit information

#### **SYMPTOM**

Jam097 (skew) or Jam098 (shift) occurs when printing jobs on paper sizes smaller than A4/LT SEF.

## CAUSE

Intensity of the light emitted from the center of the CIS has reduced because the adhesives applied to the CIS have degraded and the CIS has become opaque over time, disabling proper scanning.



NOTE: The jams do not occur with paper sizes larger than A4/LT (SEF) because such sizes are not scanned at the center of the CIS.

## SOLUTION

Since the CIS cannot be disassembled to remove the degraded adhesives, increase the light intensity of the CIS by performing the procedure described on the following pages.

RICOH	Technical B	ulletin	PAGE: 2/3
Model: Leo-C1/P1		Date: 11-May-15	No.: RD194077

1. Remove the cover. (TCRU screw x 3)



2. Remove the CIS. (screw x 2)



- 3. Clean the surface of the CIS with dry cloth.
- 4. Insert a sheet of paper as shown in the photo below. NOTE:
  - Make sure the paper covers the area to where the CIS attaches.



 Use plain white paper. It is recommended to use Hammermill Fore MP White (20lb) LT or Data Copy Everyday Printing (80g/m<sup>2</sup>) A4.

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Date: 11-May-15

- No.: RD194077
- 6. Put back the CIS and cover and turn on the machine power with the paper remained inserted.

NOTE: Disregard the Jam001, which will appear after turning on the machine power, and continue with the following steps.

7. Execute SP1-912-001 (CIS power adjustment).

.

- 8. Confirm that the value in SP1-913-001 falls in the range between 13h and 57h. If the value does not fall within the range, the CIS is defective. Replace with a new CIS.
- 9. Exit the SP mode and remove the paper to complete the procedure.



## Technical Bulletin

**PAGE: 1/2** 

Model: Leo-C1/P1

Date: 11-May-15

No.: RD194078

Subject: White spots / Colored lines				Prepared by: N.Yoshida		
From: 1st Tech S	ervice Sect., PP Tech Service	Dept.				
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/rec</li> <li>Other (</li> </ul>	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>		

## SYMPTOM

#### White spots



# Colored lines

## CAUSE

Both of the above symptoms are caused by caked toner.

- Toner cannot transfer to the drum because it is caked, causing non-printed white spots.
- Caked toner disintegrates on the development roller, causing colored lines.

Toner tends to cake up in the following conditions.

- The machine is left unused for an extended period in a high temp/humidity environment.
- Toner adhered to the housing of the development unit cakes up and falls into the mixture when the PCDU or toner supply unit is given an intense shock.
- Toner bottle is not stored in a plastic bag in a high temp/humidity environment.
- The air cooling system is defective and causes the internal temperature of the development unit to increase.



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## SOLUTION

- 1. Press [+] to increase toner adhesion in #0204 [Adjust Maximum Image Density] of the skilled operators menu. Note that the effect brought from this adjustment depends on the media in use.
- 2. Do #0201 [Adjust Image Density/DEMS] of the skilled operators menu.

Check if the problem has been solved. If the problem persists, continue with the next step.

3. Open the air flow box and verify proper function of the liquid cooling system using SP5-805-056 (OUTPUT check). If the pump is not working, replace the pump.

If the cooling pump is working properly, continue with the next step.

- 4. Set SP2-109-003 to 26 and SP2-109-005 to 2(C), 3(M), 4(Y) and 5(K) and print out solid fills to identify which color the problem is occurring on.
- 5. Print 30 300 copies of solid fills on A3/DLT in the affected color to get rid of caked toner from the development unit.

If the problem persists, continue with the next step.

 Replace the toner bottle of the affected color and print 300 copies of solid fills on A3/DLT. Caked toner in the toner hopper or development unit can be removed with this method.

If the problem persists, continue with the next step.

7. Install a new toner hopper and print 300 copies of solid fills on A3/DLT.

If the problem persists, do the final step below.

8. Install a new development unit and developer and print 300 copies of solid fills on A3/DLT.



## Technical Bulletin

#### Reissued: 7-Dec-15

Model: Leo-C1/P1	Date: 14-May-15	No.: RD194079a

#### **RTB Reissue**

The items in red were corrected or added.

Subject: Importa	nt notice on replacing the PCU	Prepared	by: N. Yoshida	
From: QAC Field Quality Management Dept., Group 2				-
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/rec</li> <li>Other (</li> </ul>	tion [ Eive [ ) [	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier2</li> </ul>

#### **IMPORTANT:**

After the Engine firmware has been updated to Ver. 1.11:06, ignore the revisions to the procedure (in red) in this RTB. Instead, use the original procedure in the Service Manual.

#### Service Manual Revision

This bulletin announces the revised procedure of initialization and adjustment required after replacing/cleaning the drum cleaning unit. The procedure has been added with a step to execute SP 3-032-00X (Cleaning Setup: Exe) to prevent SC39X (Drum Motor error) occurrences, which could result in replacement of the cleaning unit.

Descriptions in red were added in the following section of the service manual:

Replacement and Adjustments > Photoconductor Development Unit (PCDU) > PCU Cleaning Unit > After Replacing/Cleaning a PCU Cleaning Unit

## PROCEDURE

**PCU Cleaning Unit** 

#### 

- When replacing the PCU cleaning unit or parts of the PCU cleaning unit, do not replace any other parts of other units at the same time.
- After replacing the PCU cleaning unit or parts of the PCU cleaning unit, do page 2. Otherwise, cleaning blade curling may occur.

#### Note

- If a banner informing you it is time to replace the PCU cleaning unit appears, replace it as soon as you can.
- Once the lubricant is consumed to the specified level, the lubricant end sensor stops the main unit.
- 1. Pull out the PCDU.
- 2. Charger unit.エラー! ブックマークが定義されていません。エラー! 参照元が見つかりません。
- 3. Raise the drum wing [1] to the vertical position.
- 4. Lower the cleaning unit lock lever [2]

# **Technical Bulletin**

## **Reissued: 7-Dec-15**



d074r049 5. Roll the cleaning unit toward you [1] and lift it straight up [2].



d074r050

#### Note

- Replacement precautions
- When a new PCU cleaning unit is installed and lubricant or toner remains on the surface of the drum, these particles will stick to the edge of the blade and some will be transferred to the charge roller further down.
- Wipe the white material off the drum before installing the PCU cleaning unit.



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#### After Replacing /Cleaning a PCU Cleaning Unit

The PCU cleaning unit must be lubricated when it is replaced or cleaned. A SC39x (drum lock error) could occur if there is not enough lubricant. What needs to be done.

#### Reissued: 7-Dec-15

Model: Leo-C1/P1	Date: 14-May-15		No.: RE	)194079a		
	Lubrication of the cleaning brush	Lubrication of the cleaning blade edges	Manually rotating the drum	Initiali: cleani	zing the ng unit	
Replaced	Yes	Yes	Yes	١	/es	
Cleaned	Yes	Yes	Yes	١	/es	
Re-installed (not Replaced or Cleaned)	No	No	Yes		No	

#### Lubrication of the cleaning brush

- 1. Mix an equal amount of Zinc stearate powder and yellow toner.
- 2. Apply the mixture to the lubrication roller with a brush.



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#### Lubrication of the cleaning blade edges

Apply the Zinc stearate powder on the cleaning blade edges, lubrication blade edges and side seals with a blower brush or similar tool.



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Lubricant amount: Use the boundary example shown below (reference: 0.003 - 0.01 g/location).

- "Objective": An appropriate amount of lubricant
- "Lower limit": Apply more lubricant than this.
- "Large": Do not apply more lubricant than this.





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Technical Bulletin

#### **Reissued: 7-Dec-15**

Model: Leo-C1/P1

Date: 14-May-15 No.: RD

No.: RD194079a

#### Initialization and adjustment after clearing the counter

#### Note

- Use the following procedure to clear the counter. This makes it possible for the machine to initialize and make adjustments.
- 1. After replacing a unit, open the front doors.
- 2. Turn the AC power switch and main power switch ON with front doors open.
- 3. Execute SP-7-622-xxx to clear the counter.
- 4. Close the front doors.
- 5. Execute SP3-032-0XX (03: K, 04: C, 05: M, 06: Y, 07: S) for the replaced color(s). Note: "Failed" will appear if the SP is executed without closing the door.

IMPORTANT: DO NOT execute SP3-032-001 (ALL) or -002 (Color).

- 6. Open the front doors.
- 7. Exit the SP mode and then close the front doors. This action starts the cleaning initialization, process initialization and DEMS adjustment.

**IMPORTANT:** If you close the doors by mistake before you exit SP mode, turn the machine power OFF and then ON again. This will complete the cleaning initialization, process initialization, and DEMS adjustment.

#### **Counter Clear SP**

SP No.	Color	Parts
7-622-005		PCU Cleaning Unit
7-622-006		<ul> <li>Cleaning Blade</li> </ul>
7-622-007		Lubrication Roller
7-622-008		Lubricant
7-622-009	К	Lubrication Blade
7-622-010		<ul> <li>Joint</li> </ul>
7-622-011		Gears
7-622-012		<ul> <li>Cleaning Blade Side Seal</li> </ul>
7-622-013		<ul> <li>Lubrication Blade Side Seal</li> </ul>
7-622-022		PCU Cleaning Unit
7-622-023		<ul> <li>Cleaning Blade</li> </ul>
7-622-024		<ul> <li>Lubrication Roller</li> </ul>
7-622-025	С	<ul> <li>Lubricant</li> </ul>
7-622-026		Lubrication Blade
7-622-027		Joint
7-622-028		Gears

# **Technical Bulletin**

## Reissued: 7-Dec-15

Mod

el:	Leo-C1/P1		Date: 14-May-15	No.: F	RD194079a
	SP No.	Color	Parts		
	7-622-029		Cleaning Blade Side Seal		
	7-622-030		Lubrication Blade Side Seal		
	7-622-039		PCU Cleaning Unit		
	7-622-040		Cleaning Blade		
	7-622-041		Lubrication Roller		
	7-622-042		Lubricant		
	7-622-043	М	Lubrication Blade		
	7-622-044		<ul> <li>Joint</li> </ul>		
	7-622-045		Gears		
	7-622-046		Cleaning Blade Side Seal		
	7-622-047		Lubrication Blade Side Seal		
	7-622-056		PCU Cleaning Unit		
	7-622-057		Cleaning Blade		
	7-622-058		Lubrication Roller		
	7-622-059		Lubricant		
	7-622-060	Y	<ul> <li>Lubrication Blade</li> </ul>		
	7-622-061		<ul> <li>Joint</li> </ul>		
	7-622-062		<ul> <li>Gears</li> </ul>		
	7-622-063		<ul> <li>Cleaning Blade Side Seal</li> </ul>		
	7-622-064		<ul> <li>Lubrication Blade Side Seal</li> </ul>		
	7-622-073		PCU Cleaning Unit		
	7-622-074		<ul> <li>Cleaning Blade</li> </ul>		
	7-622-075		<ul> <li>Lubrication Roller</li> </ul>		
	7-622-076		<ul> <li>Lubricant</li> </ul>		
	7-622-077	S	Lubrication Blade		
	7-622-078		Joint		
	7-622-079		Gears		
	7-622-080		Cleaning Blade Side Seal		
	7-622-081		Lubrication Blade Side Seal		

# **Technical Bulletin**

Model: Leo-C1/P1 Date				e: 18-May-15 No.: RI		No.: RD194080
Subject: CIS clea		Prepared	d by: N. Y	⁄oshida		
From: QAC Field Quality Management Dept., Group 2						
Classification:	Troubleshooting	Part info	orma	tion	Action	n required
	Mechanical	Electrical		🛛 Servio		e manual revision
	Paper path	Transmit/red		ceive 🗌 Retrofit info		fit information
	Product Safety	Other (		)	Tier2	

#### Background

It was found that the machine may detect a paper jam despite no actual occurrence of a paper jam. The problem occurs because the light emitted from the CIS is stronger on the Leo-C1/P1 compared to its predecessor model (Taurus-C1/P1), thus more sensitive. Chances of false jam detections are higher if the paper in use is abundant in paper dust, as the CIS is more likely to become covered with paper dust and become less sensitive. The problem can be resolved by cleaning the CIS.

A special cleaning tool was developed and registered as a service part, which is to be used by machine operators for periodical cleaning.

## Part information

Part description Cleaner: Contact Image Sensor

Part number

D1947691



## Request

If the paper in use by your customer is abundant in paper dust and causes false jam detections, procure the above tool for your customer and advise the machine operator to clean the CIS on a weekly basis with the tool according to the procedure on the following page. (Note that the cleaning interval will depend upon the amount of paper dust and job duty.)

RICOH	Technical B	ulletin	PAGE: 2/2
Model: Leo-C1/P1		Date: 18-May-15	No.: RD194080

## **Cleaning procedure**

- 1. Open the front doors and fully pull out the right drawer unit.
- 2. Insert the cleaning tool into the gap indicated with the red dotted line.



3. Slide the tool back-and-forth 3 times in the direction indicated with the yellow arrow.





RICOH	<b>Technical Bulletin</b>					
Model: Leo-C1a/C1b (D194/D195)			Date: 28-May-15		No.: RD194081	
Subject: Trouble From: 1st PP Te	and white spots)	) Prepa	Prepared by: Akihiro Tajima			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	☐ Part info ☐ Electrica ☐ Transmi ☐ Other (	rmation Il t/receive )	☐ Action ☐ Serv ☐ Retro ⊠ Tier	on required vice manual revision ofit information 2	
<b>SYMPTOM</b> Small wavy lines (and white spots)		Simplex or 1st Small w	side of dup avy lines	lex :	2nd side of duplex White spots	

Conditions that increase the risk:

- Printing in low temperature
- High humidity
- Moist paper

The symptom is noticeable on 4x4 and 2x2 test patterns.



## CAUSE

Wavy lines: Condensation on the fusing exit guide plate affects the print AFTER fusing White spots: Condensation on the fusing exit guide plate affects the print BEFORE fusing

## ACTION

Try the following to prevent the problem and to improve the situation:

- Apply good paper storage conditions and plastic bags to prevent paper from absorbing moisture.
- Turn on the tray heater.
- Apply the following settings so that the machine is fully warmed up when running jobs:
  - Turn ON the machine 30 min before running the first job. Timer setting is convenient.
  - > Set SP1-101-007 (Rotation time: Cold) to 500 sec.
  - > Set SP1-121-001: Time: After Reload) to 900 sec.
- Print 30 sheets of A3/DLT in duplex before running jobs



## Technical Bulletin

#### Reissued: 18-Jun-15

Model: Leo-C1/P1

Date: 5-Jun-15

No.: RD194082

#### **RTB Reissue**

Subject: Troubleshooting Grainy Image			Prepared by: Shinnosuke Sasaki		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	<ul> <li>☐ Troubleshooting</li> <li>☐ Mechanical</li> <li>☐ Paper path</li> </ul>	<ul> <li>Part information</li> <li>Electrical</li> <li>Transmit/rec</li> </ul>	tion eive	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> </ul>	
	Product Safety	🗌 Other (	)	🔀 Tier 2	

#### **SYMPTOM**

Grainy image

## CAUSE

Toner deteriorates and does not transfer to the paper as expected.

As the toner deteriorates, dots become rough and gloss uneven (because the height of the dots are uneven).



The symptom tends to become more severe when printing under the following conditions:

- After the machine is unused for an extended period
- High temperature and high humidity environment
- After continuous printing of low coverage images

# Technical Bulletin

#### Reissued: 18-Jun-15

Model: Leo-C1/P1	Date: 5-Jun-15	No.: RD194082
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## SOLUTION

- 1. Register the paper in use as Custom Paper.
- 2. For the affected color, execute SP 3062 (Manual Tnr Ref:Exe) or 0515: [Execute Developer Refreshing] of the Adjustment Settings for Skilled Operators menu.
- 3. Print the affected image and see if the problem resolves. If not, repeat Step 2. (Do not repeat Step 2 more than twice).
- 4. If you see no improvement even after executing the manual toner refresh 3 times, enter the SP mode and select [12: Independent Pattern 2dot] in SP 2-109-003.
- 5. Select the affected color in SP 2109-005 (Test Pattern Color Selection).
- 6. Print 240 copies of the test pattern on A3/DLT.
- 7. Print the affected image and check with the customer if the image quality achieved is acceptable. If accepted, *the procedure is completed*. If unaccepted, do the final step.
- 8. Set the screening to 200 lines or 175 lines. No further adjustments are available.

# Technical Bulletin

Model: Leo-C1/P1			Date: 5-Jun-15		5	No.: RD194083
Subject: Troubleshooting White Bands along feed direction in FCS mode				Prepared	d by: Shir	nnosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electric Transm	ormat al it/rec	tion eive )	Action Servic Retrof	required e manual revision it information

#### SYMPTOM

White bands along the feed direction (sub scan direction) appear when printed in FCS mode.



## CAUSE

Lubrication on the ITB is insufficient and makes toner transfer from ITB to paper difficult. Continuous printing under the following conditions tends to induce the symptom:

- High temperature / high humidity environment
- Coated paper
- High image coverage / High toner amount (for example, 2C image with clear toner)

## SOLUTION

Increase lubrication on the ITB with the following procedure.

- 1. Execute Process Initialization in SP3020-001 (Process Setup:Exe) or "0501 Execute Process Initial Setting" of the Adjustment Settings for Skilled Operators menu.
- 2. Print the affected job and check the image quality. If the problem has not been resolved, execute the process initialization again.
- 3. If the problem is not resolved after executing process initialization 5 times, run 50 copies of blank pages. (Note that the counter will count up when printing blank pages.)

# Technical Bulletin

Model: Leo-C1/P1			Date: 5-Jun-15			No.: RD194084	
Subject: Troubleshooting Bands in Half-tone image 95mm following a Solid image				Prepared by: Shinnosuke Sasaki			
From: 1st PP Tech Service Sec., PP Tech Service Dept.,							
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part informat		tion eive )	Action C Servic Retrof Tier 2	required e manual revision it information	

#### SYMPTOM

If a halftone image follows a solid image regardless of whether they are on the same page or not, bands across the feed direction (main scan direction) approximately 20mm (0.8inch) in width appear in the halftone area 95mm (3.7inch) away from the solid image.



## CAUSE

The solid image is composed of toner piled up high on the ITB, which causes a shock when it enters and leaves the nip between the drum and the image transfer roller(s). Vibration from the shock transfers to the charge roller via the drum and affects the charging process.



Charge Roller

You can distinguish this symptom from other types of banding problems by printing the affected image rotated 90

degrees so that the halftone image does not follow the solid image, which is also an effective workaround.
2	C	.(		

Model: Leo-C1/P1

Date: 5-Jun-15

No.: RD194084

### SOLUTION

#### Case 1: Solid image and affected halftone image are on the same page.

- 1. Register the paper in use as Custom Paper.
- 2. Reduce the process speed in No.127 "Process Speed Setting: Productivity" and No.128 "Process Speed Setting: Quality" which will reduce the vibration. Take note that the productivity will decrease.

#### Note

The problem can also be worked around by rotating the image 90 degrees or 180 degrees, if accepted by your customer.

#### Case 2: Solid image is affecting the halftone page on the succeeding page.

- 1. Register the paper in use as Custom Paper
- 2. Reduce the CPM in No.129 "Paper Feed Interval Setting: Productivity" and No.130 "Paper Feed Interval Setting: Quality" which will change the rotation speed of the components and move the bands toward the trailing edge. Try moving the bands away from the halftone image. For reference, see the table below for the distance the bands move when reducing the CPM setting 1%.

	80 ppm model	90 ppm model
HLT	3 mm	3 mm
A4Y	3 mm	3 mm
LTT	4 mm	4 mm
A4T	4 mm	4 mm
B4	5 mm	4 mm
A3	5 mm	5 mm
DLT	6 mm	5 mm
SRA3	6 mm	5 mm
12×18	6 mm	5 mm
13×19.2	6 mm	6 mm

#### Note

Again, the problem can also be worked around by rotating the image 90 degrees or 180 degrees, if accepted by your customer.

## Technical Bulletin

**PAGE: 1/3** 

Model: Leo-C1a/C1b (D194/D195)

Date: 5-Jun-15

No.: RD194085

Subject: Request to instruct machine operators on how to hold the development unit			Prepared by: Shinnosuke Sasaki		
From: 1st PP Te	ch Service Sec., PP Tech S	Service Dept.,			
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/rec</li> <li>Other (</li> </ul>	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>	

### Request

When providing instructions to machine operators on Special Color Replacement, please make sure to advise them where to hold and where not to hold the development unit to avoid damage. The "Replacement Guide" will be updated to add this infromation.





### Background

There have been cases reported from the field where the toner shield glass was frequently dirty with toner. According to our investigations, the operator had deformed the development unit entrance seal when performing special color replacement, causing toner to spill.





Model: Leo-C1a/C1b (D194/D195)

Date: 5-Jun-15

No.: RD194085

**DO NOT** hold the development unit and PCDU as shown below.









The locations indicated are fragile. **DO NOT** hold the development unit at these locations.





# **Technical Bulletin**

Model: Leo-C1/P1 Dat			te: 29-Jun-15		No.: RD194086	
Subject: Skew image on banner sheet				Prepared by: N.Yoshida		
From: QAC Field Quality Management Dept., Group 1				-	-	
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part info</li> <li>Electrica</li> <li>Transm</li> <li>Other (</li> </ul>	ormat al it/rec	tion eive )	Action     Servic     Retrol     Tier2	n required ce manual revision fit information

#### SYMPTOM

Image skew occurs when banner sheets are fed from the Vacuum Feed LCIT RT5100 (D777).



### CAUSE

The trailing edge of the banner is not moved (it is held by the transport roller in the LCIT) during side-to-side registration.

### SOLUTION

Activate (turn ON) the following setting in "Advanced Settings" for custom paper:

013: [Deactivate Image Position Adjustment]

# **Technical Bulletin**

Model: Leo-C1/P1			Dat	ate: 29-Jun-15		No.: RD194087
Subject: Wrong detection for S toner end				Prepared by: N.Yoshida		
From: QAC Field Quality Management Dept., Group 1				-	-	
Classification:	<ul> <li>☐ Troubleshooting</li> <li>☐ Mechanical</li> <li>☐ Paper path</li> <li>☐ Product Safety</li> </ul>	Part info	ormat al it/rec	tion eive	Action	n required ce manual revision fit information
	Product Safety	U Other (		)	∐ Her2	

#### SYMPTOM

"Toner End" for special toner types is reached even though there is still toner remaining.

#### Note:

- 1. When the toner bottle is removed and attached again, hundreds or thousands of pages can be printed out.
- 2. This symptom occurs only with clear and white toner.
- 3. When the machine detects Toner End for special toners, the bar showing the amount of toner remaining disappears from the operation panel display.

### CAUSE

This occurs as a result of the combination of firmware design and conditions that lower the sensitivity of the sensor to detect the toner concentration.

### SOLUTION

Update the Engine firmware to version **1.06.06 or later.** 

**Note:** This firmware ensures that the Toner End condition is not mistakenly detected under the conditions described above.

# Technical Bulletin

Model: Leo-C1/P1 Da			ate: 21-Jul-15		No.: RD194091	
Subject: Incorrec	et PM Counters			Prepare	d by: Shin	nosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part infor Electrical Transmit	rmat l /rec	tion eive )	Action C Service Retrofit Tier 2	required e manual revision t information

#### **SYMPTOM**

The "Target" values displayed for the pressure roller bearings and paper transfer unit lubricant are incorrect.



### CAUSE

...

Firmware bug.

### SOLUTION

At the next service visit, change the following SPs to the "Correct value" shown below, **Note:** 

- As shown in the table, there are two separate targets for the PTU lubricant (one for the C1a/P1a, and one for the C1b/P1b).
- There is an SP for the target rotational distance of the fusing unit's pressure roller bearings (SP7940-111), but this SP can be ignored. This is because distance is not used for the target PM intervals of fusing unit components.

		Incorrect value	Correct value
Paper Transfer Unit:	Page	450000 (a models)	600000 (a models)
Lubricant	(SP7623-103)	500000 (b models)	670000 (b models)
	Distance	186000	248000
	(SP7940-103)		
Fuser Unit: Pressure	Page	1200000	900000
Roller Bearings	(SP7623-111)		

Model: Leo-C1/P1 Date			te: 27-Julr-15		No.: RD194092	
Subject: SC558 (Fuser Belt Smoothing Roller Contact Error Detection)			Prepared	by: N. Y	<i>Y</i> oshida	
From: QAC Field Quality Management Dept., Group 2						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info	ormat al it/rec	tion eive )	Action     Servic     Retrol     Tier2	n required ce manual revision fit information

#### SYMPTOM

RICOH

SC558-00 (Fuser Belt Smoothing Roller Contact Error Detection)

### CAUSE

- 1. Home position of the belt smoothing roller is not detected, because the feeler is positioned incorrectly, not reaching the sensor.
- 2. The gears marked [A] and [B] in the photo below are not tightly engaged, preventing sufficient drive of the components.





Date: 27-Julr-15

No.: RD194092

### SOLUTION

#### **Production line:**

The sensor bracket and stopper bracket were modified as follows.

#### Sensor bracket:

The position of the hole circled in red was adjusted to optimize the sensor position. This has been applied from '15 March mass productions.



Stopper bracket:

Changed the shape of the stopper bracket for better engagement of the gears. This has been applied from '15 July mass productions. (p/n: D1944268)



#### In the field:

Procure the kit (p/n: D1949905) and replace with the modified sensor bracket (p/n: D1944306) and gear holder bracket (p/n: D1949904) included in the kit.





See the following pages for the replacement procedure.

Model: Leo-C1/P1

Date: 27-Julr-15

No.: RD194092

### Replacing the sensor bracket

1. Open the front doors.



2. Lower the lock lever [A] and pull the left drawer [B] out completely until it stops.



3. Remove the screw [A] and push the lock lever [B] to the right.



4. Raise the fusing exit idle roller cover [A], then lift the fuser unit out of the left drawer and set it on a flat clean surface.





Model: Leo-C1/P1

Date: 27-Julr-15

No.: RD194092

5. Remove the rear cover of the fusing unit. (Screw x3)



6. Disconnect the connector.



7. Remove the metal gear cover. (Screw x1)





8. Remove the sensor bracket. (Screw circled in red x1, Spring indicated with the yellow arrow x1)



<b>RICOH</b> Technical B		ulletin	PAGE: 5/5
Model: Leo-C1/P1		Date: 27-Julr-15	No.: RD194092

9. Replace the sensor bracket with the modified one (p/n: D1944306).



### Replacing the gear holder bracket

10. Remove the gear holder bracket. (E-ring x1)



11. Remove the gear from its holder. (E-ring x1)



12. Replace the gear holder bracket with the modified one (p/n: D1949904).

#### IMPORTANT

Make sure the protrusion on the bracket (squared in red) inserts into the hole in the part indicated in yellow.



13. Put back the unit by following the above steps in reverse order to complete the procedure.



Reissued: 7-Aug-15

Model: Leo-C1/P1	Date: 3-Jul-15	No.: RD194090a

#### **RTB Reissue**

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

Subject: Troubles	shooting Jam98		Prepared	d by: Shinnosuke Sasaki
From: 1st PP Tec	h Service Sec., PP Tech Servi	ce Dept.,		
Classification:	Troubleshooting Mechanical Paper path	Part informat	tion eive	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> </ul>
	Product Safety	🗌 Other (	)	🛛 Tier 2

#### SYMPTOM

Jam98 when printing on black or colored paper

### CAUSE

The CIS mistakenly detects the fan duct of the registration unit as the paper's edge when applying maximum light power, which is when printing on black paper or colored paper.



#### Failure rate: Approximately 20%.

(CIS detection sensitivity varies slightly with each unit.)

### SOLUTION

Procure and install the additional bracket and masking sheet (p/n: D1949903 - SHEET:CIS:KIT) to prevent misdetection by the CIS.



# Technical Bulletin

#### Reissued: 7-Aug-15

Model: Leo-C1/P1	Date: 3-Jul-15	No.: RD194090a
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#### Procedure

- 1. Pull out the left drawer unit.
- 2. Dismount the left drawer unit from the slide rails. (Screw x2)



**NOTE:** Two persons are required to dismount the left drawer unit from the slide rails.

3. Remove the inner covers.



4. Remove the cover and dust tray. (Screw x3, Screw x2)





## Technical Bulletin

Reissued: 7-Aug-15

Model: Leo-C1/P1

Date: 3-Jul-15	No.: RD194090a
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5. Remove the CIS unit. (Screw x2, Connector x1)



6. Remove the screws fixing the shift timing motor bracket. (Screw x3)



## Technical Bulletin

### Reissued: 7-Aug-15

Model: Leo-C1/P1

Date: 3-Jul-15 No.: RD194090a



8. Remove the shift unit. (Screw x1, E-ring x1)





#### Reissued: 7-Aug-15

Model: Leo-C1/P1	Date: 3-Jul-15	No.: RD194090a
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9. Check if the masking sheets are already attached to the bracket of the shift unit.



10. If the sheets are not attached, attach as shown below.



11. Remove the fan duct. (Screw x1)





Reissued: 7-Aug-15

Model: Leo-C1/P1

Date: 3-Jul-15 No.: RD194090a

12. Attach the masking sheets to the fan duct.

NOTE: The masking sheets are black, but yellow sheets are used for better visibility in the photos below.



(1)



(2)



## Technical Bulletin

Reissued: 7-Aug-15

Model: Leo-C1/P1

Date: 3-Jul-15 No.: RD194090a

13. Attach the masking sheet to the stay as shown below.





#### Reissued: 7-Aug-15

Model: Leo-C1/P1	Date: 3-Jul-15	No.: RD194090a

14. Attach the sheet to the procured additional bracket by aligning the edges indicated in red.



Note that the shape of the bracket may appear slightly different.

15. Firmly attach the bracket to the stay and cover the fan. (Peel off the liner from the double-sided tape attached to the bottom of the bracket.)





### Reissued: 7-Aug-15



16. Put back the unit by following the above steps in reverse order.

Note: Rotate the cam 180 degrees for easy installation of the shift unit.



# Technical Bulletin

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

Model: Leo-C1a/Leo-C1b			Dat	Date: 4-Aug-15		No.: RD194093
Subject: P/N of Service Slot board and SD Card			Prepared by: A. Tajima			
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electrica Transmit Other (	ormat al t/reco	ion eive )	<ul> <li>Action</li> <li>Servic</li> <li>Retrofi</li> <li>Tier 2</li> </ul>	required e manual revision it information

The Service Slot Board (p/n: D1945827) and SD card (p/n: B6455040) were registered as new service parts for Engine debug logging.

Old P/N	New P/N	Description	Q'ty	Int	Note
-	D1945827	BRACKET:SD-CARD:ASS'Y		-	Add
-	B6455040	SD-CARD:SERVICE PARTS:8GB:ASS'Y		-	Add



d194d9607

• For the installation procedure of the service slot board, see the following section of the service manual:

2. Installation > Service Slot Board (Service Option)

• For the debug log capturing procedure, see the following section of the troubleshooting manual:

11. Advanced Instructions > Capturing the Engine Debug Log > Procedures for Capturing the Engine Debug log via the Service Slot Board

### Technical Bulletin

Reissued: 9-Sep-16 Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

#### **RTB Reissue**

The items in <b>bold italics</b> were corrected or added.					
Subject: SC558(	Fuser Belt Smoothing Roller Co	Prepared by: N. Yoshida			
From: QAC Field	Quality Management Dept., G				
Classification:	☑ Troubleshooting	Part information	Action required		
	🗌 Mechanical	Electrical	Service manual revision		
	Paper path	Transmit/receive	Retrofit information		
	Product Safety	Other ( )	Tier2		

#### SYMPTOM

SC558-00 (Fuser Belt Smoothing Roller Contact Error Detection)

### CAUSE

- 1. Home position of the belt smoothing roller is not detected, because the feeler is positioned incorrectly, not reaching the sensor.
- 2. The gears marked [A] and [B] in the photo below are not tightly engaged, disabling sufficient drive of the components.



### SOLUTION Production line:

The sensor bracket and stopper bracket were modified as follows.

#### Sensor bracket:

The position of the hole circled in red was adjusted to optimize the sensor position. This has been applied from '15 March mass productions.



Reissued: 9-Sep-16 Model: Leo-C1/P1

**RICOH** 

Date: 27-Jul-15

No.: RD194092a

#### Stopper bracket:

Changed the shape of the stopper bracket for better engagement of the gears. This has been applied from '15 July mass productions. (p/n: D1944268)



#### In the field:

#### Do the PROCEDURE below.

*Note: The replacement kit (P/N D1949905) with gear holder bracket (D1949904) are no longer available.* 



See the following pages for the replacement procedure.

# Technical Bulletin

Reissued: 9-Sep-16

Model: Leo-C1/P1 Date: 27-Jul-15 No.: RD194092a

### PROCEDURE

1. Open the front doors.



2. Lower the lock lever [A] and pull the left drawer [B] out completely until it stops.



3. Remove the screw [A] and push the lock lever [B] to the right.



4. Raise the fusing exit idle roller cover [A], lift the fuser unit out of the left drawer and set it on a flat clean surface.



# **Technical Bulletin**

Reissued: 9-Sep-16

Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

Remove the rear cover of the fusing unit. (Screw x3) 5.



6. Remove the lock plate [A].



7. Remove the Exit guide [A]



m194e2017

- 8. Press in on the side of the connector [A] to release it.
- 9. Pull the connector up to disconnect it.





m194e2022

Model: Leo-C1/P1

Date: 27-Jul-15 No.:

No.: RD194092a

10. Pull the drawer connectors [A] [B] to the left.



m194e2021

11. Raise the separation unit [A].



m194e2020

- 12. Remove the Coupling [A] (x1)
- 13. Release the Harness [B] (x1, x3).
- 14. Remove the Rear frame [C] (x5 M3x6)



m194e2023

Reissued: 9-Sep-16 Model: Leo-C1/P1

**RICOH** 

Date: 27-Jul-15 No.: RD194092a

Note: The sensor bracket and stopper bracket (P/N D1944268) are attached to the inner face of the rear frame.



15. Remove the sensor bracket (screw x 1 (circled in red), spring x 1 (indicated by yellow arrow)).



## Technical Bulletin

Reissued: 9-Sep-16 Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

16. Remove the stopper bracket (screw x 3).



17. Attach the modified sensor bracket and stopper bracket.18. Reattach all parts you removed in the reverse order.

### Technical Bulletin

Reissued: 9-Sep-16 Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

#### **RTB Reissue**

The items in <b>bold italics</b> were corrected or added.					
Subject: SC558(	Fuser Belt Smoothing Roller Co	Prepared by: N. Yoshida			
From: QAC Field	Quality Management Dept., G				
Classification:	☑ Troubleshooting	Part information	Action required		
	🗌 Mechanical	Electrical	Service manual revision		
	Paper path	Transmit/receive	Retrofit information		
	Product Safety	Other ( )	Tier2		

#### SYMPTOM

SC558-00 (Fuser Belt Smoothing Roller Contact Error Detection)

### CAUSE

- 1. Home position of the belt smoothing roller is not detected, because the feeler is positioned incorrectly, not reaching the sensor.
- 2. The gears marked [A] and [B] in the photo below are not tightly engaged, disabling sufficient drive of the components.



### SOLUTION Production line:

The sensor bracket and stopper bracket were modified as follows.

#### Sensor bracket:

The position of the hole circled in red was adjusted to optimize the sensor position. This has been applied from '15 March mass productions.



Reissued: 9-Sep-16 Model: Leo-C1/P1

**RICOH** 

Date: 27-Jul-15

No.: RD194092a

#### Stopper bracket:

Changed the shape of the stopper bracket for better engagement of the gears. This has been applied from '15 July mass productions. (p/n: D1944268)



#### In the field:

#### Do the PROCEDURE below.

*Note: The replacement kit (P/N D1949905) with gear holder bracket (D1949904) are no longer available.* 



See the following pages for the replacement procedure.

# Technical Bulletin

Reissued: 9-Sep-16

Model: Leo-C1/P1 Date: 27-Jul-15 No.: RD194092a

### PROCEDURE

1. Open the front doors.



2. Lower the lock lever [A] and pull the left drawer [B] out completely until it stops.



3. Remove the screw [A] and push the lock lever [B] to the right.



4. Raise the fusing exit idle roller cover [A], lift the fuser unit out of the left drawer and set it on a flat clean surface.



# **Technical Bulletin**

Reissued: 9-Sep-16

Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

Remove the rear cover of the fusing unit. (Screw x3) 5.



6. Remove the lock plate [A].



7. Remove the Exit guide [A]



m194e2017

- 8. Press in on the side of the connector [A] to release it.
- 9. Pull the connector up to disconnect it.





m194e2022

Model: Leo-C1/P1

Date: 27-Jul-15 No.:

No.: RD194092a

10. Pull the drawer connectors [A] [B] to the left.



m194e2021

11. Raise the separation unit [A].



m194e2020

- 12. Remove the Coupling [A] (x1)
- 13. Release the Harness [B] (x1, x3).
- 14. Remove the Rear frame [C] (x5 M3x6)



m194e2023

Reissued: 9-Sep-16 Model: Leo-C1/P1

**RICOH** 

Date: 27-Jul-15 No.: RD194092a

Note: The sensor bracket and stopper bracket (P/N D1944268) are attached to the inner face of the rear frame.



15. Remove the sensor bracket (screw x 1 (circled in red), spring x 1 (indicated by yellow arrow)).



## Technical Bulletin

Reissued: 9-Sep-16 Model: Leo-C1/P1

Date: 27-Jul-15

No.: RD194092a

16. Remove the stopper bracket (screw x 3).



17. Attach the modified sensor bracket and stopper bracket.18. Reattach all parts you removed in the reverse order.
# Technical Bulletin

Model: Leo-C1/P1 Dat			ate: 7-Aug-15 No.: RD194		No.: RD194094	
Subject: Troubleshooting J031					d by: Shin	nosuke Sasaki
From: 1st PP Teo	ch Service Sec., PP Tech Servi	ce Dept.,				
Classification:	<ul> <li>☐ Troubleshooting</li> <li>☐ Mechanical</li> <li>☐ Paper path</li> </ul>	Part infor Electrical	mat /rec	tion eive	Action Service Retrofit	required e manual revision t information
	Product Safety	Other (		)	🛛 Tier 2	

## SYMPTOM

J031 occurs continually, even after the shift timing motor is replaced.

## CAUSE

Jammed paper is pulled out with force, which causes the motors in the right drawer unit to turn manually. In some cases, the electricity generated is strong enough to damage element(s) on the DRB.



## SOLUTION

#### **Production line**

The DRB was modified so that the damage is prevented even when jammed sheets are forcefully removed.

Applied from: October 2015 production

#### In the field

- 1. Replace the broken DRB.
- 2. Advise the customer as follows:
  - Use the knobs to remove jammed paper whenever possible.
  - If jammed sheets must be removed manually, pull them out slowly and carefully.
  - Do not pull out jammed sheets with force.

# Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)		Date: 7-Aug-15		No.: RD194095
Subject: Request when installing 5 <sup>th</sup> Station Replacement Kit Type S3 ("Wrong PCDU" message).				d by: Shinnosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service De		ervice Dept.,		
Classification:	☑ Troubleshooting       [         ☑ Mechanical       [         ☑ Paper path       [         ☑ Product Safety       [	Part informat Electrical Transmit/rec Other (	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

## SYMPTOM

The error message "Set PCU clean Unt/Wrong PCDU" is displayed when the development unit is installed.

## CAUSE

The wrong development unit was included in fourteen 5<sup>th</sup> Station Replacement Kits manufactured in December 2014 (the kits were configured for BK development units).

Note:

- The development unit inside each replacement kit contains a chip that stores the color information. This chip is normally blank when the kit is shipped out, and the machine writes the information to the chip at installation ("White" or "Clear").
- For these fourteen units, "Black" was written to the chip.

## SOLUTION

Do the following when you install the 5<sup>th</sup> Station Replacement Kit Type S3.

1. Check the serial number on the top of the PCDU front panel (boxed in red in the photo) to check if the development unit is an affected unit.



#### Affected serial numbers:

SP6141250001	SP6141250002	SP6141250003	SP6141250004
SP6141250006	SP6141250007	SP6141250008	SP6141250009
SP6141250010	SP6141250011	SP6141250013	SP6141250014

RICOH	Technic	cal <b>B</b> ulletin	PAGE: 2	/2
Model: Leo-C1a/C1b (D194/	D195)	Date: 7-Aug-15	No.: RD194095	

2. If it the development unit is an affected unit, replace it with the **Service parts** development unit and report the serial number of the affected unit to your supervisor.

#### Serial number composition:

Model/component prefix + Year/month of production + Nth unit produced that month



# Technical Bulletin

#### **PAGE: 1/5**

Model: Leo-C1/P1 D			Date: 27-A	ug-15	No.: RD194089
Subject: Special PTR springs effective for Worm Holes/Unprinted Image					by: A. Tajima
From: 1st Tech Se	rvice Sect., PP Tech Servic	ce Sect., PP Tech Service Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform	nation eceive )	Action re Service n Retrofit ir Tier 2	quired nanual revision Iformation

## Change

The following springs were added as new service parts.

- D1946262 (COIL SPRING:TRANSFER ROLLER:EXCHANGEABLE:20N)

- D1946263 (COIL SPRING:TRANSFER ROLLER:EXCHANGEABLE:30N)

## Reason

These special PTR springs have lower tension than the default springs and are effective in improving the following symptoms:

Image Quality Problem: Full Page > Unprinted> Worm Holes: Text or Edge of an Image

Worm Holes: When Using the Clear Toner Unprinted: When Using a Transparent Film



#### Possible Side Effect When Applying the Special Springs

Mottled effect may appear when printing on rough surfaced or textured paper.

## When and how to apply the special springs

- Apply the special springs if the troubleshooting procedures in the service manual do not improve the symptom to a sufficient level.
- First, try the 20N springs (p/n: D1946262). If the side effect described above occurs and is unacceptable, try the 30N springs (p/n: D1946263).

#### Note

- Make sure to procure the springs in a pair, because springs on the operator and nonoperator sides must be replaced together.
- You may instruct the customer to replace the springs by themselves. In this case, procure a pair of the default springs (p/n: D1946266 COIL SPRING:TRANSFER ROLLER:EXCHANGEABLE:60N) in addition to the above 20N and 30N springs, so that your customer can make adjustments depending on the results.



Model: Leo-C1/P1

Date: 27-Aug-15

No.: RD194089

## How to Replace the PTR Springs

- 1. Open the front doors.
- 2. Pull out the right drawer unit.
- 3. Remove the PTR unit.



4. Locate the following switch at the non-operator side of the right drawer unit.



5. Push down the switch to free the lever and turn the lever to the lock position.





Model: Leo-C1/P1

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6. Remove the springs.

## Operator side



#### Non-operator side



7. Hook the new special spring.





8. Pull up the wire and hook the ring.



9. Clamp the wire as shown.



10. Fix the tip of the wire with the TCRU screw.



Note: Make sure the wire does not stick out, or it may interfere with the ITB.





Model: Leo-C1/P1

Date: 27-Aug-15

No.: RD194089

11. Hook the spring on the other side in the same manner.



12. Route the wire as shown below.





- 13. Install the PTR unit and push the right drawer back in the machine.
- 14. Close the front door.

# **Technical Bulletin**

Model: Leo-C1/P1 Dat			:e: 1-Sep-1	5	No.: RD194097		
Subject: SC586-25 (Shift Unit Motor)					Prepared by: N.Yoshida		
From: QAC Field	Quality Management Dept., G	roup 1		-	-		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info	ormat al it/rec	tion eive )	<ul> <li>Action</li> <li>Servic</li> <li>Retrol</li> <li>Tier2</li> </ul>	n required ce manual revision fit information	

## SYMPTOM

SC586-25 (Shift Unit Motor error) occurs after the right front door is opened and closed.

## CAUSE

The B5 lever is not returned to the home position, i.e. the lever is not locked again after being released. The right front door is then closed with the lever in this position.

## SOLUTION

#### **Production line**

A sponge spacer (P/N: D1942927) was added to the right front door, so that the right front door cannot be closed when the lever is in the unlocked position.

Applied from: February 2015 production

#### In the field

Attach the spacer (circled in red).

#### Important:

- Make sure to attach the left edge of the spacer flush against the frame, as shown.
- Make sure to attach the spacer 0- 1mm below the curved portion of the corner, as shown.











#### Reissued: 30-Aug-17

	Model: Leo-C1/P1 Date: 4-	I-Sep-15 No.: RD194098c
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#### Reissue

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

Subject: Uneven image at 189mm intervals			Prepared by: N.Yoshida	
From: QAC Field	Quality Management Dept., G	roup 2		
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>□ Paper path</li> <li>□ Product Safety</li> </ul>	Part information Electrical Transmit/rec Other (	ation Action required Service manual re ceive Retrofit informatio ) X Tier2	evision n

## SYMPTOM

Patches of uneven image density appear at intervals of 189mm when the machine is used following a pause of 30 minutes or longer.

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## CAUSE

High concentrations in the air cause certain areas of the charge roller surface to deteriorate when the machine is run under high-temperature, high-humidity (HH) conditions for an extended period. This is because the combination of high ozone concentration and HH conditions generates ammonium hydroxide, which promotes the deterioration.

## SOLUTION

#### **Production line:**

• The following firmware were modified to reduce the amount of ozone that remains inside the machine (Applied from: July 2015).

System/copy:v3.02 or laterEngine:v1.09:06 or later

**Note:** If you install Engine v1.09:06 or later without the hardware modification described below, SC584-00 will be displayed. To clear this SC, see the Release Note for Engine v3.02.



Reissued: 30-Aug-17

Model: Leo-C1/P1

Date: 4-Sep-15

No.: RD194098c

• The following parts were modified.

Old part number	New part number	Description	Q'ty	Int
	D1947124	DUCT:PCU:FRONT:4ST:ASS'Y	4	-
	D1947129	DUCT:PCU:FRONT:5ST:ASS'Y	1	-
D1941184 —	—— D1941189	SEAL:OPTICAL WRITING UNIT:UPPER:LEFT	5	XO
	—— D1941190	SEAL:OPTICAL WRITING UNIT:UPPER:RIGHT	5	XO
D1947172		SEAL:OPTICAL WRITING UNIT:LOWER:5ST	2 -> 1	-
	D1947158	SEAL:OPTICAL WRITING UNIT:LOWER:M:K	2	XO
	D1947159	SEAL:OPTICAL WRITING UNIT:LOWER:S	1	XO
D1947065	D1947055	FILTER:DUCT:MM120:41.5MM	5	00
D1947130	D1947135	OZONE FILTER:C/T BOX:MM120:16MM	2	XX
-	D1947135	OZONE FILTER:C/T BOX:MM120:16MM	3	-
AX660621	AX660905	DC FAN MOTOR:DC24V:MM120:PWM CONTROL:18W	1	XO
-	D1947144	BRACKET:DUCT:PCU:UPPER FRONT:AUXILIARY	4	-
D1945296	D1945294	HARNESS:DC:POWER SUPPLY UNIT:5:CONNECTING	1	ХО
-	D1945269	HARNESS:OZONE:FAN:FRONT	1	-
-	D1945267	HARNESS:OZONE:FAN:FRONT:IOB	1	-
-	D1945298	HARNESS:OZONE:POWER SUPPLY UNIT:5:CONNECTING	1	-
-	D1945299	HARNESS:OZONE:LIQUID COOLING:BOX:CONNECTING	1	-

#### In the field:

Do the following.

1. Replace the charge roller.

**NOTE:** Although 189mm is equal to the drum circumference, you do not need to replace the drum.

2. If this does not solve the symptom, replace the charge roller and install the following new parts (See **PROCEDURE** below).

**Note:** The symptom may occur again after the charge roller is replaced, if the user continues to operate the machine as described above in CAUSE.

#### Component list

No.	Description	PN	Q'ty
1.	DUCT:PCU:UPPER FRONT:SERVICE:ASS'Y	D1947042	2

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## Reissued: 30-Aug-17

Model: L	eo-C1/P1	Date: 4-Sep-15 No.: RD19409		
2.	FILTER:DUCT:MM120:41.5MM	D1947055	5	
3.	OZONE FILTER:C/T BOX:MM120:16MM	D1947135	5	
4.	BRACKET:DUCT:PCU:UPPER FRONT:AUXILIAR	Y D1947144	4	
5.	DUCT:PCU:FRONT:4ST:ASS'Y	D1947127	4	
	DUCT:PCU:FRONT:5ST:ASS'Y	D1947129	1	
6.	SCREW:M4X8	03604008N	6	
7.	FAN:PCU:UPPER FRONT:ASS'Y	D1947152	2	
8.	DUCT:PCU:UPPER FRONT:SST:ASS'Y	D1947103	1	
9.	SEAL:OPTICAL WRITING UNIT:UPPER:LEFT	D1941189	5	
10.	SEAL:OPTICAL WRITING UNIT:UPPER:RIGHT	D1941190	5	
11.	SCREW:M4X10	03604010N	4	
12.	HARNESS:OZONE:FAN:FRONT:IOB	D1945267	1	
	HARNESS:OZONE:FAN:FRONT	D1945269		
13.	HARNESS:OZONE:LIQUID COOLING:BOX:CONNECTING	D1945299	1	
	HARNESS:OZONE:POWER SUPPLY UNIT:5:CONNECTING	D1945298		
14.	HARNESS:DC:POWER SUPPLY UNIT:5:CONNECTING	D1945294	1	
	HARNESS:OZONE:POWER SUPPLY UNIT:5:CONNECTING	D1945298		
15.	DC FAN MOTOR:DC24V:MM120:PWM CONTROL:1	8W AX660905	3	





Technical Bulletin

#### Reissued: 30-Aug-17

Model: Leo-C1/P1

Date: 4-Sep-15 No.: RD194098c

## PROCEDURE

Estimated working time: Approximately 4 hours

- Check and adjust the SP mode related to Laser unit Skew. Detailed procedure (Service Manual): Top Page > Main Chapters > Replacement and Adjustments > Laser Unit > Laser Units > Before Replacing the Laser Unit
- 2. Press [OK] under [Unscrew/Screw-on Cap to Replace Toner Bottle] in Skilled Operators' mode.
- 3. Remove the finishers and LCTs from the mainframe.
- Remove the laser units.
   Detailed procedure (Service Manual):
   Top Page > Main Chapters > Replacement and Adjustments > Laser Unit
- 5. Remove the front left cover [A] with screws (x2).



d194z0133

6. Remove the inner cover [A] with 3 screws.



d194z0134

7. Remove the sponge with double sided tape [A] and [B].



**Note:** Some machines in the field do not have the circular holes shown in the photo above (some have square-shaped holes and some have no holes). This does not affect this procedure.



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8. Open the clamp [A] and release the harness [B].





9. Attach the sponges with double-sided tape to the inside of the area shown by the yellow line.

#### **IMPORTANT:**

- There are engraved marks at the four corners shown by the yellow lines. Attach the sponge within 1mm of these engraved marks.
- Make sure that the Mylar is located as shown in the photo.





 Attach the shorter sponge (top sponge in the photo below) on the right, and the longer sponge on the left.



• Route the cable between the left and right sponges. Make sure there is no gap between the sponges and the cable.



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10. Remove the bracket with the 2 screws (circled in red).



11. Attach the bracket as shown in the photo with the double-sided tape.





- 12. Remove the PCDUs for all colors.
- 13. Remove the brackets for the laser units for all colors.



14. Put the toner supply tube from the clamp [A] into the upper one and remove the clamp [A].





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15. Attach the two ducts as shown (screws x XXXX each).



16. Tighten the ducts with the 2 screws from the front side.



17. Attach the intake fan for the 5<sup>th</sup> station (screws x2).



[A]: Intake fan for YM and CK color, [B]: Intake fan for 5<sup>th</sup> station



## **Technical Bulletin**

#### Reissued: 30-Aug-17

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19. Attach the intake fans for YM and CK (screw x2 each).



20. Push the Mylar attached to the laser unit glass to the back of the duct that you attached in Step 16.





21. Attach the silicone duct in front of the laser unit glass (instead of the bracket).

#### **IMPORTANT:**

- Make sure that the duct is not tucked between the attachment screw and plastic. Otherwise, the silicone duct can be torn.
- Make sure that the Mylar is not tucked between the duct attached in Step 16 and the duct attached in this step.



**Note:** There are two types of duct, one for YM/CK (gray finish) and another for the Special color (white finish).



# Technical Bulletin

#### Reissued: 30-Aug-17

Model: Leo-C1/P1	Date: 4-Sep-15	No · RD194098c
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Note: In the following steps, the harness marked [12] is used.

22. Connect the harnesses (D1945267 and D1945269).



- 23. Connect the harness (blue) to the intake fans you attached in Step 19.
- 24. Tighten the clamps circled in red in the photo below.
- 25. Route the harness to the right side of the machine, as shown.



26. Route the harness alongside the same path as the purple harness, which is already attached.



# Technical Bulletin

#### Reissued: 30-Aug-17

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**IMPORTANT:** Secure the extra length in the harness with the clamp (fold this section back), as shown in the photo.

27. Open the rear cover.

28. Replace the exhaust fans ([A], [C] and [E]) with the modified parts.



29. Replace the existing filters ([B] and [D]) with the new ones ("New dust filter" + "New ozone filter" combination shown in the table below).

30. Attach (add) three of the same new filters to areas [A], [C], and [E].

#### **IMPORTANT:**

The interchangeability of the dust filter and ozone filter is O/O and X/X. Therefore, the following combinations can be expected in the field.

	Old dust filter	New dust filter
Old ozone filter		15 mm
New ozone filter	8 mm	7 mm

**Note:** The new filters are thicker than the old filters.

# **Technical Bulletin**

## Reissued: 30-Aug-17

Model: Leo-C1/P1



New dust filter + new ozone filter (larger gap between frame and filter):



- 31. Open the controller box.
- 32. Make a line on the connectors with oil, paint, or a similar substance, as shown in the photo. The applicable connectors are circled in blue.

**IMPORTANT:** The three connectors are the same shape. Make sure that the paint marks you make are absolutely clear, so that you can easily tell them apart when you go to reconnect the connectors.





#### Reissued: 30-Aug-17

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33. Remove ducts [A] (screws x4, circled in red; connector x4, circled in blue) and [B] (screws x1, circled in yellow; connectors x1, circled in green).



34. Remove the AC drive board bracket (screws x4, connectors x7).



35. Remove the PSU 5 box (screws x2, connectors x4).



**36.** If the harness is connected to the board connector circled in red in the photo, go to Step **36.** If not, go to Step **35.** 



Technical Bulletin

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Model: Leo-C1/P1	Date: 4-Sep-15	No.: RD194098c

- **Note:** There are two types (levels of mass production), one with no harness and another with the harness attached.
- 37. Replace the harness with the harness (D1945294) provided as a Service part and attach it to PSU 5.



38. Reattach the PSU 5 box (screws x2).

39. Remove the connector (circled in red) from one end of the harness and attach it to the <u>other end (circled in blue)</u>.



40. Connect one end of each of the harnesses (D1945298 and D1945299) provided as a service part.



41. Clamp the blue connector that you connected in Step 38 between the two positions shown in the photo.



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42. Route the harness highlighted in red as shown on the photo.

43. Connect the end [A] of the connector for the mainframe side.

44. Connect the end [B] to the harness originally connected to connector circled in blue.



45. Route the harness as shown by the red line, and clamp it with the clamps circled in red.



46. Connect the connecter [B] to the PSU 5 box [A].

47. Connect the connector [C] to the harness [D] originally attached to the machine.



48. Reattach all parts that you removed in this procedure. **IMPORTANT:** Make sure that all harnesses are not tucked under

**IMPORTANT:** Make sure that all harnesses are not tucked under or pinched by any brackets.



#### Reissued: 30-Aug-17

Model: Leo-C1/P1	Date: 4-Sep-15	No.: RD194098c
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49. Insert the SD card containing the firmware (System **v3.02**, Engine **v1.09:06** or later). 50. Turn the machine main power switch ON.

- 51. Wait for the firmware update to complete.
- 52. Run the fan for at least one minute using the following Output SPs to make sure that each fan works correctly.
  - SP5-805-045
  - SP5-805-047
  - SP5-805-049
  - SP5-805-051
  - SP5-805-053
  - SP5-805-213
  - SP5-805-214
  - SP5-805-215
- 53. Make sure that SCs do not occur during the output check. If any SCs occur, check the fans related to the SCs.
- 54. Do the SP adjustments related to the Laser unit. Detailed procedure (Service Manual):

Top Page > Main Chapters > Replacement and Adjustments > Laser Unit > Laser Units > SP Adjustments after Laser Unit Replacement

# Technical Bulletin

Model: BR-C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1 Date: 09-Sep-13

No.: RD179035c

#### **RTB Reissue**

he items in bold italics have been corrected or added.						
Subject: Firmware Release Note: P-Binder_GB5010_B1			Prepared by: J.Ohno			
From: 1st PP Tech Service Sect., PP Tech Service D		vice Dept.				
Classification:	Troubleshooting	Part informat	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2		

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

#### P-Binder\_GB5010\_B1.

Version	Program No.	Effective Date	Availability of RFU
01.210:11	D7365021B	February 2017 production	Not available
01.200:11	D7365021A	September 2015 production	Not available
01.160:11	D7365021	February 2015 production	Not available
1.02:09	D7365020A	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				
01.210:11	<u>Specification Change</u> Feeding cover sheets from the Cover Interposer tray or the Perfect Binder tray is not possible, if the tray cover is open. Feeding from the mainframe remains possible even when these tray covers are open.				
	<u>Error Correction</u> f the main power is turned OFF and then ON with the Cover Interposer Tray or the Perfect Binder inserter cover open, the operation panel may not display the "cover open" message. If attempted to run a job in this state, the system stalls with SC990.				
	<u>Important Note</u> The following firmware must be installed as a set.				
	P-Binder B B1:D7365021B :Ver01.210:11				
	P-Binder_B_B2:D7365071 :Ver01.040:00				
	P-Binder_B_B3:D7365730 :Ver00.050:00				
	P-Binder_B_B4:D7365121A :Ver01.070:00				
	P-Binder_B_B5:D7365171 :Ver01.020:00				
01.200:11	<ul> <li>Error Correction</li> <li>1. System stalls, if a jam is triggered by opening the front door of the Transit Pass Unit while running a job fed through the straight path of the glue binder.</li> </ul>				
	2. System stalls, if a jam is triggered by opening top cover of the inserter or the front door of the Transit Pass Unit while the cover sheet is being fed.				
	3. System stalls after Jam420.				



Reissued: 25-Jan-17

Model: BR-C1/L	eo-C1/Leo-P1/Andromeda-P1/BR-P1 Date: 09-Sep-13 No.: RD179035c				
Version	Modified Points or Symptom Corrected				
	<ul> <li>stacking tray is opened and closed while processing the first booklet.</li> <li>Jam510 occurs after recovering from Jam420.</li> <li>Glue temperature adjustment does not complete, disabling the job to start.</li> <li>NOTE: Make sure to apply the firmware versions listed below for this release to take effect.</li> </ul>				
	- P-Binder_B_B2:D7365071 :Ver01.040:00				
	- P-Binder_B_B3:D7365730 : Ver00.050:00				
	- P-Binder_B_B4:D7365121A : Ver01.070:00				
01.160:11	Additional Model Information				
011100111	Leo-C1/P1				
	<ul> <li><u>Specification Change</u></li> <li>Supports 178.5mm/s line speed</li> <li>Supports 700mm length media (in feed direction)</li> <li>Supports Leo-C1/P1</li> </ul>				
	<ul> <li>Symptoms Corrected</li> <li>The Perfect Binder is not ready but receives jobs from the engine, causing jams at the entrance.</li> <li>Some of the input checks do not work.</li> <li>The Perfect Binder stalls, if the job is run immediately after opening and closing the front doors in a low temperature environment, because the glue temperature is not adjusted.</li> <li>J423 occurs, if the Buffer Pass unit is connected.</li> <li>J343 occurs when the stacking tray becomes full.</li> <li>Can not resume the job immediately after removing booklets from a "tacking tray full" status.</li> <li>Can not start the next job, if the previous job is canceled with the "Stop" key at a particular timing.</li> <li>Jam occurs, if the cover sheet is fed from the Inserter.</li> <li>The Perfect Binder stalls, if a jam occurs and the stacking tray becomes full at a particular timing.</li> </ul>				
	Important Note The following firmware must be installed as a set.				
	P-Binder_B_B1:D7365021 :Ver01.160:11 P-Binder_B_B2:D7365071 :Ver01.040:00 P-Binder_B_B3:D7365730 :Ver00.050:00 P-Binder_B_B4:D7365121 :Ver01.050:00 P-Binder_B_B5:D7365171 :Ver01.020:00				
1.02:09	1st Mass production				

# Technical Bulletin

Reissued: 09-Sep-15
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Model: BR-C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1 Da

Date: 09-Sep-13

No.: RD179038b

#### **RTB Reissue**

Subject: Firmware Release Note: P-Binder_GB5010_B4			Prepared by: J.Ohno		
From: 1st PP Tech Service Sect., PP Tech Service Dept.					
Classification:	Troubleshooting	Part information	tion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/rec	eive	Retrofit information	
	Product Safety	Other (Firmv	vare)	🛛 Tier 2	

This RTB has been issued to announce the firmware release information for the **P-Binder\_GB5010\_B4.** 

Version	Program No.	Effective Date	Availability of RFU
01.070:00	D7365121A	September 2015 production	Not available
01.050:00	D7365121	February 2015 production	Not available
1.01:00	D7365120A	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			
01.070:00	<ol> <li>Error Correction:         <ol> <li>System stalls, if a jam is triggered by opening the front door of the Transit Pass Unit while running a job fed through the straight path of the glue binder.</li> <li>System stalls, if a jam is triggered by opening top cover of the inserter or the front door of the Transit Pass Unit while the cover sheet is being fed.</li> <li>System stalls after Jam420.</li> <li>In a job specified of multiple copies, an extra booklet is created, if the book stacking tray is opened and closed while processing the first booklet.</li> <li>Jam510 occurs after recovering from Jam420.</li> <li>Glue temperature adjustment does not complete, disabling the job to start.</li> </ol> </li> </ol>			
	NOTE: Make sure to apply the firmware versions listed below for this release to take effect. - P-Binder_B_B1:D7365021A :Ver01.200:11 - P-Binder_B_B2:D7365071 :Ver01.040:00 - P-Binder_B_B3:D7365730 :Ver00.050:00 - P-Binder_B_B5:D7365171 :Ver01.020:00			
01.050:00	Additional Model Information Leo-C1/P1			

Technical Bulletin

## Reissued: 09-Sep-15

Model: BR-C	C1/Leo-C1/Leo-P1/Andromeda-P1/BR-P1	Date: 09-Sep-13	No.: RD179038b			
Version	Version Modified Points or Symptom Corrected					
	<ul> <li><u>Specification Change</u></li> <li>Supports 178.5mm/s line speed</li> <li>Supports 700mm length media (in fe</li> <li>Supports Leo-C1/P1</li> </ul>	ed direction)				
	<ul> <li><u>Symptoms Corrected</u></li> <li>The Perfect Binder is not ready but it jams at the entrance.</li> <li>Some of the input checks do not wo</li> <li>The Perfect Binder stalls, if the job is closing the front doors in a low temperature is not adjusted.</li> <li>J423 occurs, if the Buffer Pass unit it</li> <li>J343 occurs when the stacking tray</li> <li>Can not resume the job immediately tray full" status.</li> <li>Can not start the next job, if the prevat a particular timing.</li> <li>Jam occurs, if the cover sheet is fed</li> <li>The Perfect Binder stalls, if a jam oc at a particular timing.</li> </ul>	receives jobs from the e rk. s run immediately after perature environment, b s connected. becomes full. after removing booklet vious job is canceled with from the Inserter. cours and the stacking the	engine, causing opening and ecause the glue s from a "tacking th the "Stop" key ray becomes full			
	Important Note The following firmware must be installed	as a set.				
	P-Binder_B_B1:D7365021 :Ver01.160:1 P-Binder_B_B2:D7365071 :Ver01.040:0 P-Binder_B_B3:D7365730 :Ver00.050:0 P-Binder_B_B4:D7365121 :Ver01.050:0 P-Binder_B_B5:D7365171 :Ver01.020:0	1 0 0 0 0				
1.01:00	1st Mass production					

# Technical Bulletin

Model: Leo-C1/P1			Date: 11-S	Sep-15	No.: RD194099
Subject: Quick reference guide for four major problems			Prepared by: A. Tajima		
From: 1st Tech Service Sect., PP Tech Service Dept.					
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>		Action required     Service manual revision     Retrofit information     Tier 2     Tier 0.5	

This is a quick reference guide on cleaning maintenance to prevent the following major problems:

- Color inconsistency
- Stain on backside / White spots
- Dirty leading or trailing edge
- Color registration errors (referred to as 'color shift' on page 2) / SC499

The instructions are summarized on the second page of this bulletin. It is recommended to perform the cleaning maintenance procedures at service visits, because they are effective preventive measures.

This guide is also available in PowerPoint file format in GKM.

Answer ID: <u>210621</u> File Name: Quick reference guide.pptx



#### **PAGE: 2/2**

Quick reference guide for major problems

Date: 11-Sep-15

No.: RD194099

Wipe off toner/paper dust adhered to the guide plate and Mylar sheet PTR guide plate. [9] Dirty leading edge or trailing edge Wipe off toner/paper dust adhered to the ribs on the Stains on backside and White spots Clean the toner shield glass Color inconsistency What you will need Optical cloth 8 min (2 min / station) NOTE Estimated work time Make sure to turn OFF the machine before cleaning Estimated work time What you will need Coth 1 min ): Estimated work time 5 min cleaner What you will need Cloth, Air blower, Vacuum

NOTE

To prevent damages to the Mylar sheet, use an air Work carefully to avoid damages to the Mylar sheet in between the guide plate and Mylar sheet blower or a vacuum cleaner to remove toner stuck

> Clean the ITB speed sensors. [9] Color shift and SC499

(ProC651 series, ProC7100 series)





What you will need Air blower, Vacuum cleaner, Cotton swab, Gloves

Estimated work time

5 min

- NOTE
   DO NOT touch the belt surface with bare hands.
- DO NOT scrub the sensors too hard, or the surface coating will scrape off and affect the sensor detection Wear gloves.
- Do the below procedure after cleaning.

# Procedure after cleaning

- Turn ON the machine and wait until it reaches "Ready"
- Remove the front cover of the ITB cleaning unit Open both front doors.
- Turn both levers of the ITB cleaning unit clockwise to

4

- Keep the doors open and execute SP2920-001 retract the blades from the ITE
- Close the front doors.

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- Open the doors and turn both levers of the ITB cleaning unit counter-clockwise and install the front Wait until the panel displays "Completed."
- cover
- Close the front doors.
   Execute SP2-912-001. Turn the main switch off and then on.
- 11. Execute SP2-914-001. Turn the main switch off and then on.
- 12. Confirm that the value of SP2-915-001 is "1." If "0," repeat the sensor cleaning procedure until it changes
- to "1." 13. Execute SP3011-4

# Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)			Dat	e: 14-Sep-	15	No.: RD194100
Subject: Actions to ease toner deterioration (Banding, Grainy, Dirty Background)			Prepared	d by: Shi	nnosuke Sasaki	
From: 1st PP Tech Service Sec., PP Tech Service Dept.,			ot.,			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electric Transm	ormai al iit/rec	tion eive )	Action	n required ce manual revision fit information

## SYMPTOM

One or more of the following recurs, after a temporary improvement brought about by toner refresh:

- Banding
- Grainy images
- Dirty background

## CAUSE

Deterioration of the toner

Fresh toner supplied to the development unit deteriorates over time while agitated in the development unit, gradually losing its transferability.

- **Note:** The following factors promote faster toner deterioration. They commonly occur on showroom machines.
  - ♦ Printing at low image coverage
  - ♦ Printing at low P/J
  - Printing with mixed paper sizes and media types (This results in more pauses to optimize the fusing temperature, during which the development unit continues to rotate).
  - ♦ Frequent usage of finishing options, especially folding
  - ♦ Frequent machine power OFF/ON
  - ♦ Intermittent use of the machine

## SOLUTION

Do the PROCEDURE shown, if the effect brought about by toner refresh was found to be temporary.



Model: Leo-C1a/C1b (D194/D195)

Date: 14-Sep-15

## PROCEDURE

1. Refresh the toner using the following steps.

Note: This will completely replace the toner currently inside the development unit.

- 1. Set SP2109-003 (Pattern Selection) to 26 (Full Dot Pattern).
- 2. Set SP2109-005 (Color Selection) to 1 (Full Color).
- 3. Set SP2109-006 (Density: K) to 15.
- 4. Set SP2109-007 (Density: C) to 15.
- 5. Set SP2109-008 (Density: M) to 0.
- 6. Set SP2109-009 (Density: Y) to 0.
- 7. Print or copy 60 duplex pages (30 sheets) onto A3.
- 8. Set SP2109-006 (Density: K) to 0.
- 9. Set SP2109-007 (Density: C) to 0.
- 10. Set SP2109-008 (Density: M) to 15.
- 11. Set SP2109-009 (Density: Y) to 15.
- 12. Print or copy 60 duplex pages (30 sheets) onto A3.
   **IMPORTANT:** Do not print 4C solid images (i.e., Do not set all four of the following SPs to 15 at the same time: SP2109-006, -007, -008 or -009; at least two of these SPs must be kept at zero). If you do, toner may scatter inside the machine

**IMPORTANT:** Only continue with this procedure if Step 1 (refreshing of the toner) improved the situation. (Doing the following steps will increase toner consumption).

2. Set **SP3820-032** (Tnr Refresh Mode: Accumulated refresh length: Upper Limit) to a value of **50000.0mm**.

#### Note:

- SP3820-011, 012, 013, 014, 015 (Tnr Refresh Mode: Amount) indicate the amount of the toner that needs to be refreshed (i.e., how much the toner has deteriorated).
- This SP change will allow the machine to continually refresh the toner even when the machine is used under relatively severe conditions.

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Technical	<b>B</b> ulletin

Model: Leo-C1a/C1b (D194/D195)	Date: 14-Sep-15	No.: RD194100
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- 3. Set all of the following SP modes to a value of "0".
  - **SP3530-001** (Power ON ProCon:Set:Non-use Time Setting) SP3530-002 (Power ON ProCon:Set:Temperature Range) SP3530-003 (Power ON ProCon:Set:Relative Humidity Range) SP3530-004 (Power ON ProCon:Set:Absolute Humidity Range)

#### Note:

- This is done because process control can accelerate toner deterioration, especially with machines that are turned OFF/ON frequently. This is also true of machines that are used intermittently, as process control is also triggered after the machine is not used for over 30 minutes. These settings will cancel process control at these times.
- There are no side-effects in terms of image quality (as process control is still performed before the next job is printed). However, this process control before the next job will take longer to complete.
- Set the following SP modes to the values shown.
   SP3820-022 (Tnr Refresh Mode:Max Job End Pattern): Set to 1000mm. SP3820-024 (Tnr Refresh Mode:Job End Ptn Start threshold): Set to 1mm.

#### Note:

- This will enable toner refresh at job end. By doing this, there are more opportunities for the machine to refresh the toner.
- Toner consumption will increase.

# Technical Bulletin

#### **PAGE: 1/2**

Model: Leo-C1a/C1b (D194/D195)		Date: 16-Sep-15		No.: RD194101	
Subject: Preventing SC441 caused by new ITB/Cleaning unit			nit	Prepared by: A.	Tajima
From: 1st PP Teo	ch Service Sec., PP Tech Servi	ce Dept.,			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inf</li> <li>Electric</li> <li>Transm</li> <li>Other (</li> </ul>	ormat al iit/rec	tion Action Servi eive Retro ) Tier 2	n required ce manual revision fit information ?

## SYMPTOM

SC441 may occur after replacing the ITB or ITB cleaning unit.

## CAUSE

- Brand new ITBs and ITB cleaning units tend to put excess load on the ITB drive motor due to insufficient lubrication.
- Rollers inside the ITB slip, because they are covered with toner and dust.

## SOLUTION

#### When replacing the ITB

- 1. Clean the rollers inside the ITB.
- 2. Do the "After Intermediate Transfer Belt Replacement" procedure described in the service manual in the section:

Replacement and Adjustments > Intermediate Transfer Belt (ITB) Unit > After Intermediate Transfer Belt Replacement

NOTE: If SC446 persists, manually lubricate the ITB instead of executing SP2-301-1 (Force Lubricant - Belt Cleaning).

Apply lubricant powder (p/n: B1329700) evenly across the ITB by manually rotating the ITB drive motor.



**IMPORTANT:** Work carefully to avoid touching the belt with bare hands. Reference

Minimum lubrication

Maximum lubrication



# Technical Bulletin

Model: Leo-C1a/C1b (D194/D195)

Date: 16-Sep-15

No.: RD194101

#### When replacing the ITB cleaning unit

1. Apply lubricant (p/n: D0159501) to the edge of the cleaning blade of the new cleaning unit using the blower brush (p/n: D0747960).



Apply lubricant powder to the edge of the blade.

#### Reference



3. Do the "After Intermediate Transfer Belt Replacement" procedure described in the service manual in the section:

Replacement and Adjustments > ITB Cleaning Unit > ITB Cleaning Unit > After Replacing the ITB Cleaning Unit

#### Lubricant p/n and tool:

B1329700	D0159501	D0747960
For ITB	For the lubrication brush (Mixed with lubricant powder p/n: D0159500)	Use the brush on the head of the blower to apply powder to the lubrication brush.



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#### Reissued: 13-Sep-17

Model: Leo-C1/P1

Date: 16-Sep-15 No

No.: RD194102b

#### Reissue

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

Subject: Troubleshooting SC670			Prepared by: S. Sasaki	
From: 1st Tech Service Sect., PP Tech Service Dept.				
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> <li>Tier 0.5</li> </ul>	

#### **SYMPTOM**

SC670 (Engine start up error)

## CAUSE

Mostly caused by defective boards / blown fuse induced by unexpected electrical surge

#### Note

This bulletin provides troubleshooting procedures that efficiently leads to the exact cause of SC670, as there are quite many possible factors that can cause this SC.

#### ACTION

Do the procedure described below.
## **T**echnical **B**ulletin

#### Reissued: 13-Sep-17



#### How to identify the short-circuited line

- 1. Check the resistance between TP41 (near CN234) and GND (machine frame). If the fuse is blown, the reading will be "0".
- 2. While measuring the resistance, disconnect/reconnect the harnesses on the BCU one by one to identify the line that has been short-circuited.
- 3. Remove the short-circuited line and replace the BCU.

## Technical Bulletin

### Reissued: 13-Sep-17

Model: Leo-C1/P1

Date: 16-Sep-15 No.: RD194102b









#### Reissued: 13-Sep-17



#### (2) Checking the IOB



How to identify the short-circuited line

- 1. Check the resistance between TP80 (bottom left of the board) and GND (machine frame).
- 2. While measuring the resistance, disconnect/reconnect the harnesses on the IOB one by one to identify the line that has been short-circuited.
- 3. Remove the short-circuited line and replace the IOB.

# Technical Bulletin

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### Reissued: 13-Sep-17

Model: Leo-C1/P1	Date: 16-Sep-15	No.: RD194102b



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#### Reissued: 13-Sep-17

Model: Leo-C1/P1 Date: 16-Sep-15 No.: RD194102b

#### (3) Checking the IPU



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## Technical Bulletin

#### Reissued: 13-Sep-17

Model: Leo-C1/P1	Date: 16-Sep-15	No.: RD194102b
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(4) Checking the connections between BCU-IOB / BCU-IPU

ALC: NO.

**B** 

- 1. Disconnect/Reconnect the board-to-board connectors CN202 on BCU and CN300 on the IOB.
- 2. Disconnect/Reconnect the harness connection between CN211 on BCU and CN301 on the IOB.
- 3. If the symptom is not solved even after the above steps, replace the IOB.



Reissued: 13-Sep-17

Model: Leo-C1/P1

Date: 16-Sep-15 No.: RD194102b

### (5) Checking if 5V is supplied to the BCU (Checking the PFB)





#### Reissued: 13-Sep-17





## Technical Bulletin

#### Reissued: 13-Sep-17

Model: Leo-C1/P1

Date: 16-Sep-15 No.: RD194102b

#### (7) Checking the NRYF



On PSU 3





## Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1 Date: 17-5			Date: 17-S	Sep-15	No.: RD194103	
Subject: Request regarding DEMS execution			Prepared by: S. Sasaki			
From: 1st Tech Se	rvice Sect., PP Tech Servic	e Dept.				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	ting Part information Electrical Transmit/receive		<ul> <li>☐ Action required</li> <li>☑ Service manual revision</li> <li>☐ Retrofit information</li> <li>☐ Tier 2</li> <li>☐ Tier 0.5</li> </ul>		

### REQUEST

- 1. If the PCDU was pulled out to perform any maintenance around the PCDU (drum, charge roller, drum cleaning unit, development unit, developer) including cleaning, make sure to execute DEMS.
- 2. If banding has worsened after executing DEMS, re-execute DEMS.
- 3. Instruct the above two points to TCRU operators.

### **REASON/BACKGROUND**

- 1. DEMS monitors fluctuation in image density and adjusts the development bias to cancel the fluctuation. Pulling out the PCDU may change the relative position of the drum, development roller and their couplings, and change the fluctuation pattern, which is why DEMS should be executed after any service maintenance around the PCDU.
- 2. In very rare occasions, DEMS picks up noise and make maladjustments, which results in worse banding. DEMS should be re-executed to correct the maladjustment.



Model: Leo-C1

Date: 18-Sep-15

No.: RD194104

Subject: Firmware Release Note: animation			Prepared by: A.Tajima		
From: 1st PP Teo	ch Service Sect., PP Tech Serv	vice Dept.			
Classification:	Troubleshooting	Part informat	ion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/rec	eive	Retrofit information	
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2	

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

Version	Program No.	Effective Date	Availability of RFU
2.00	D1955728A	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
2.00	1st Release



Model: Leo-P1

Date: 18-Sep-15

No.: RD194105

Subject: Firmware Release Note: animation			Prepared by: A.Tajima		
From: 1st PP Teo	ch Service Sect., PP Tech Serv	vice Dept.			
Classification:	Troubleshooting	Part informat	ion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/rec	eive	Retrofit information	
	Product Safety	🛛 Other (Firmv	vare)	🖂 Tier 2	

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

Version	Program No.	Effective Date	Availability of RFU
2.00	M1965726A	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
2.00	1st Release

## Technical Bulletin

#### **PAGE: 1/5**

Model: Leo-C1/P1 Date: 2-Oc			ct-15	No.: RD194106	
Subject: Important Notice on the New 5th Station Toner Hopper			Prepared by: A. Tajima		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> <li>Paper ()</li> </ul>		nation eceive )	Action red Service n Retrofit in	quired nanual revision nformation

The connector that connects the toner hopper of the 5th station to the mainframe was modified in August 2015, for higher reliability. The part number of the 5th station toner hopper was changed as follows.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
D2033430	D2033429	TONER HOPPER: TONER SUPPLY: TAURUS-C2: 5ST: ASS'Y	1	x/x			Change

# When replacing the old type toner hopper with the new type, <u>make sure to replace the</u> <u>following 3 parts as a set.</u>

	Part Description	P/N	Illustration
1	TONER HOPPER:TONERUPPLY:TAURUS-C2:5ST:ASS'Y	D2033429	
2	HOLDER:RECEPTACLE:TONER SUPPLY UNIT:5ST: ASS'Y	D2033493	
3	STAND:INNER COVER:RECEPTACLE:TONER SUPPLY	D1943496	

See the following pages for the replacement procedure.



Т	echnic	al <b>B</b>	ulle	tin
			and	LIII

Model: Leo-C1/P1

Date: 2-Oct-15

No.: RD194106

#### NOTE

If stocked at your customer site, replace the old type toner hopper included in 5th Station Replacement Kit Type S3 with the new type, and procure the new toner hopper tray below, which will also be needed to prevent toner spillage when replacing the toner hopper.



P/N: D8803049 TRAY: TONER HOPPER: TOKUSHOKU: ASS'Y

How to replace the 5th station Old type toner hopper with the New type toner hopper

1. Open both front doors and the toner bottle cover [A].



2. Open the ARDF.



3. Remove the scanner cover [A]. (screw x3, cap x1)



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Model: Leo-C1/P1

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4. Remove the upper front cover [A]. (screw x2)



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5. Remove the right inner cover [A]. (screw x3)



6. Remove the PCDU of the 5th station.

7. Disconnect the toner supply tube [A] and connect it to the stud [B].



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RICOH	Technical Βι	PAGE: 4/5	
Model: Leo-C1/P1		Date: 2-Oct-15	No.: RD194106

8. Remove the toner hopper [A]. (screw x2, connector x1)



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9. Remove the bracket [A] (screw x2) and disconnect the harness [B] (clamp x2, connector x1).



10. Attach new bracket [A] provided in the kit (screw x2) and route the tube as shown.



Model: Leo-C1/P1

Date: 2-Oct-15 No.: RD194106

11. Attach the drawer bracket [A] to the bracket attached in Step 10 (screw x2) and connect the harness indicated with the red arrow (clamp x2, connector x1).



12. Install the new toner hopper [A] and connect the tube. (screw X 2)



13. Re-assemble the machine.

# If the old type toner hopper included in 5th Station Replacement Kit Type S3 is stocked at your customer site

14. Replace the toner hopper and toner hopper tray included in the kit with the new parts (p/n: D2033429, p/n: D8803049).

# Technical Bulletin

**PAGE: 1/2** 

Model: Leo-C1/P1 Date: 1			Date: 14-C	Oct-15	No.: RD194107
Subject: Troubleshooting Low Image Density in Black Areas					by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification: Troubleshooting Part information Mechanical Electrical Paper path Transmit/receiv Product Safety Other ()		nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation	

### SYMPTOM

Low image density occurs in solid black image areas.



Note: This occurs most easily under the following conditions:

- High-temperature, high-humidity
- Full-color or FCS mode (these modes use a higher paper transfer current than B/W mode does)

### CAUSE

Black toner has a lower transfer charge than colored toner. As a result, excessive transfer of toner occurs at the PTR unit.

### SOLUTION

Do the following.

- 1. Program the paper used as a custom paper type.
- Increase the values of the following by +5.
   Important: Before you do this step, write down the current values.

Advanced Settings for custom paper:

- No.22 Image Transfer Current: B&W
- No.23 Image Transfer Current: FC: Black
- 3. Print out the affected image and check the quality.
- If the symptom still occurs, repeat Step 2.
   Note: When you do this, you can increase the values up to +20 above the default.
- 5. If the symptom still occurs, do **Steps 6-8** below.

<b>RICOH</b> Technical Bulletin		<b>PAGE: 2/2</b>
Model: Leo-C1/P1	Date: 14-Oct-15	No.: RD194107

6. Decrease the **absolute values** of the following by **5.** 

**Important:** The values for these settings are negative, so for the absolute value, simply ignore the "-".

Example. Change the value from "-82" to "-77"

- No. 29 Paper Transfer Current: B&W: Side 1
- No. 30 Paper Transfer Current: B&W: Side 2
- No. 35 Paper Transfer Current: FC: Side 1
- No. 36 Paper Transfer Current: FC: Side 2
- 7. Print out the affected image and check the quality.
- If the symptom still occurs, repeat Step 6.
   Note: When you do this, you can increase the values up to +20 above the default.
- 9. If the symptom still occurs, do **Steps 10-12** below.
- 10. Do the following. **Note:** This is to completely refresh the toner.
  - 7-1. Set **SP2109-003** to a value of "26" (Solid pattern).
  - 7-2. Set SP2109-007, -008, and -009 to a value of "0".
  - 7-3. Print/copy a solid black image onto A3 paper x 60pg.
- 11. Set the following SPs as shown.
  - SP3620-202: Set to a value of +0.011.
  - **SP3620-203**: Set to a value of **+0.021**.
- 12. Execute SP3011-002 (Manual ProCon:Exe:Density Adjustment).

# Technical Bulletin

Model: Leo-C1 Da			Da	ate: 2-Nov	<i>י</i> -15	No.: RD194108
Subject: Manual c replacem		Prepared	d by: Akihiro	o Tajima		
From: 1st PP Tech Service Sec., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/r</li> <li>Other (</li> </ul>	nat rece	ion eive )	<ul> <li>☐ Action re</li> <li>☑ Service</li> <li>☐ Retrofit i</li> <li>☐ Tier 2</li> </ul>	equired manual revision nformation

Please add the following caution in the field service manual in this section: Replacement and Adjustment > Main Boards, HDD Units > PSU3/ PSU4/ PSU5

Parts number	Parts description
AZ240259	POWER SUPPLY UNIT:ECO:200V:456.4W

## Technical Bulletin

PAGE: 2/2

Model: Leo-C1

Date: 2-Nov-15

No.: RD194108

#### ACAUTION:

**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 in the AC circuits on the PSU board for several months even when the board has been removed from the machine after turning off the machine power and unplugging the power cord.

The procedure to discharge residual charge from the machine by unplugging the power cord from the AC wall outlet and pressing the main power switch works only for the DC circuits on this board. Residual charge remains in the AC circuits.





Model: BR-C1

**RICOH** 

Date: 18-Nov-15

No.: RD179113

Subject: SC72	20-80 or Jam100 on SR5050/	Prepared by: Y, Tanimoto	
From: QAC F	ield Quality Management		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part informa</li> <li>Electrical</li> <li>Transmit/red</li> <li>Other (</li> </ul>	ation       Action required         Service manual revision         ceive       Retrofit information         )       Tier2

#### SYMPTOM

SC720-80 or Jam 100 occurs under the following configurations: SR5050/5060 Finisher + [Pro 8100 series, Pro C7100 series, or Pro C9100 series]

### CAUSE

The contact surfaces of the interlock switch on the finisher door were covered in small particles of insulating impurities during the plating process. As a result, a contact failure may occur in the switch.

Interlock SW



Bad contact:



Normal contact:







**Note:** The impurities are very small. As a result, the symptom only occurs on a small percentage of affected machines.

Potentially affected machines See page 5/9 SOLUTION

#### **Production line:**

- All affected parts will be switched out with normal ones.
- Reworks will be performed on affected finishers in field inventory.

#### In the field:

Replace the interlock switch using the **PROCEDURE** on the next page, if:

- 1. You are dispatched to deal with SC720-80 or Jam 100, AND
- 2. You can confirm in the SMC report that SC720-80 or Jam 100 has occurred at least 2 times.
- **IMPORTANT:** If this SC or Jam has not occurred recently, you **do not need** to replace the switch. This is because the insulating impurities may be forced off the contact surface during the normal opening and closing of the door.

Model: BR-C1

RICOH

Date: 18-Nov-15

No.: RD179113

Model: BR-C1

RICOH

Date: 18-Nov-15

No.: RD179113

### PROCEDURE

Part to be replaced (Interlock Switch, Free of Charge) P/N: **D7349900** (Free of Charge) Description: **SW:FA3L-CA12** Qty: 1 **Note:** This part contains the 12042925 interlock switch.



1. Remove the cover (screws x4).



Remove the interlock switch.
 See Service Manual for details (Booklet Finisher SR5060, Finisher SR5050, Machine Code: D734/D735, Field Service Manual).



d434r416

d434r417

RICOH	Technical Bulletin		PAGE: 4/9
Model: BR-C1		Date: 18-Nov-15	No.: RD179113

3. Remove the attached cover from the interlock switch as described below.



Create a gap between the cover and switch.



Insert the tip of a small standard-head (minus) screw driver into this gap.



Twist the screw driver to divide the cover and switch.

- 4. Replace the switch.
- 5. Reattach all parts in the reverse order you removed them.



Model: BR-C1

Date: 18-Nov-15

No.: RD179113

### Potentially affected machines

	Model	S/N	Sub- Total	Total	Reworked (*)	Not- reworked
NA	D734-17	E844E810001~E844E810070	70			
		E844E910001~E844E910102	102			
		E844EA10001~E844EA10140	140			
		E844EB10001~E844EB10008	8			
		E844EC10001~E844EC10040	40			
		E845E710020~E845E710280	<b>26</b> 1			
		E845E810001~E845E810110	110		68	
		E845E910001~E845E910080	80	811	80	663
	D735-17	E854E710397~E854E710430	34			
		E854E810001~E854E810220	220			
		E854E910001~E854E910120	120			
		E854EA10001~E854EA10247	247			
		E854EB10001~E854EB10264	264			
		E854EC10001~E854EC10140	140			
		E855E710001~E855E710210	210			
		E855E810001~E855E810226	226			
		E855E910001~E855E910130	130	1591	95	1496
EU	D734-27	E844E820001~E844E820018	18			
		E844E920001~E844E920070	70			
		E844EA20001~E844EA20066	66			
		E844EB20001~E844EB20070	70			
		E844EC20001~E844EC20085	85			
		E845E720001~E845E720100	100			
		E845E820001~E845E820146	146			
		E845E920001~E845E920101	101	656	59	597
	D735-27	E854E820001~E854E820110	110			
		E854E920001~E854E920080	80			
		E854EA20001~E854EA20193	193			
		E854EB20001~E854EB20110	110			
		E854EC20001~E854EC20140	140			
		E855E720009~E855E720200	192			
		E855E820001~E855E820154	154			
		E855E920001~E855E920211	211	1190	111	1079
		Total	4248	4248	413	3835

#### (\*) Reworked machine S/N list (not need to replace switch)

	D734-17	D735-17	D734-27	D735-27
1	E845E810001	E855E910001	E845E920001	E855E920101
2	E845E810002	E855E910002	E845E920002	E855E920102
3	E845E810003	E855E910003	E845E920003	E855E920103

Date: 18-Nov-15

No.: RD179113

4	E845E810004	E855E910004	E845E920005	E855E920104
5	E845E810005	E855E910005	E845E920006	E855E920105
6	E845E810006	E855E910006	E845E920007	E855E920106
7	E845E810007	E855E910007	E845E920008	E855E920107
8	E845E810008	E855E910008	E845E920009	E855E920108
9	E845E810009	E855E910009	E845E920010	E855E920109
10	E845E810010	E855E910010	E845E920011	E855E920110
11	E845E810011	E855E910011	E845E920013	E855E920111
12	E845E810012	E855E910012	E845E920014	E855E920112
13	E845E810013	E855E910013	E845E920015	E855E920113
14	E845E810014	E855E910014	E845E920016	E855E920114
15	E845E810015	E855E910015	E845E920017	E855E920115
16	E845E810016	E855E910016	E845E920018	E855E920116
17	E845E810017	E855E910017	E845E920019	E855E920117
18	E845E810018	E855E910018	E845E920020	E855E920118
19	E845E810019	E855E910019	E845E920022	E855E920119
20	E845E810020	E855E910020	E845E920023	E855E920120
21	E845E810021	E855E910021	E845E920024	E855E920121
22	E845E810022	E855E910022	E845E920025	E855E920122
23	E845E810023	E855E910023	E845E920026	E855E920123
24	E845E810024	E855E910024	E845E920027	E855E920124
25	E845E810025	E855E910025	E845E920030	E855E920125
26	E845E810026	E855E910026	E845E920033	E855E920126
27	E845E810027	E855E910027	E845E920036	E855E920127
28	E845E810028	E855E910028	E845E920038	E855E920128
29	E845E810029	E855E910029	E845E920039	E855E920129
30	E845E810030	E855E910030	E845E920040	E855E920130
31	E845E810031	E855E910031	E845E920054	E855E920131
32	E845E810032	E855E910032	E845E920057	E855E920132
33	E845E810033	E855E910033	E845E920058	E855E920133
34	E845E810034	E855E910034	E845E920059	E855E920134
35	E845E810035	E855E910035	E845E920060	E855E920135
36	E845E810036	E855E910036	E845E920061	E855E920136
37	E845E810037	E855E910037	E845E920062	E855E920137
38	E845E810039	E855E910038	E845E920063	E855E920138
39	E845E810041	E855E910039	E845E920064	E855E920139
40	E845E810042	E855E910040	E845E920065	E855E920140
41	E845E810043	E855E910041	E845E920066	E855E920141
42	E845E810044	E855E910042	E845E920067	E855E920142
43	E845E810045	E855E910043	E845E920068	E855E920143
44	E845E810046	E855E910044	E845E920069	E855E920144
45	E845E810048	E855E910045	E845E920070	E855E920145
46	E845E810050	E855E910046	E845E920071	E855E920146
47	E845E810053	E855E910047	E845E920072	E855E920147

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48	E845E810068	E855E910048	E845E920074	E855E920148
49	E845E810071	E855E910051	E845E920076	E855E920149
50	E845E810072	E855E910052	E845E920078	E855E920150
51	E845E810073	E855E910053	E845E920080	E855E920151
52	E845E810074	E855E910054	E845E920081	E855E920152
53	E845E810075	E855E910055	E845E920082	E855E920153
54	E845E810076	E855E910056	E845E920085	E855E920154
55	E845E810077	E855E910057	E845E920087	E855E920155
56	E845E810078	E855E910058	E845E920089	E855E920156
57	E845E810079	E855E910059	E845E920090	E855E920157
58	E845E810080	E855E910060	E845E920092	E855E920158
59	E845E810081	E855E910061	E845E920097	E855E920159
60	E845E810082	E855E910062		E855E920160
61	E845E810083	E855E910063		E855E920161
62	E845E810084	E855E910064		E855E920162
63	E845E810085	E855E910065		E855E920163
64	E845E810086	E855E910067		E855E920164
65	E845E810087	E855E910070		E855E920165
66	E845E810088	E855E910076		E855E920166
67	E845E810089	E855E910077		E855E920167
68	E845E810090	E855E910078		E855E920168
69	E845E910001	E855E910080		E855E920169
70	E845E910002	E855E910082		E855E920170
71	E845E910003	E855E910083		E855E920171
72	E845E910004	E855E910084		E855E920172
73	E845E910005	E855E910085		E855E920173
74	E845E910006	E855E910087		E855E920174
75	E845E910007	E855E910089		E855E920175
76	E845E910008	E855E910110		E855E920176
77	E845E910009	E855E910111		E855E920177
78	E845E910010	E855E910113		E855E920178
79	E845E910011	E855E910114		E855E920179
80	E845E910012	E855E910115		E855E920180
81	E845E910013	E855E910116		E855E920181
82	E845E910014	E855E910117		E855E920182
83	E845E910015	E855E910118		E855E920183
84	E845E910016	E855E910119		E855E920184
85	E845E910017	E855E910120		E855E920185
86	E845E910018	E855E910121		E855E920186
87	E845E910019	E855E910122		E855E920187
88	E845E910020	E855E910123		E855E920188
89	E845E910021	E855E910124		E855E920189
90	E845E910022	E855E910125		E855E920190
91	E845E910023	E855E910126		E855E920191

Мос	lel: BR-C1			Date: 18	-Nov-15	No.: RD179113
02	E045E010024	E955E010107			1	
92	E845E910024	E855E010127		E855E920192	_	
90	E845E910025	E855E910120		E855E920193	-	
95	E845E910020	E855E910120		E855E920194	-	
96	E845E910027	20002010100		E855E920195	-	
97	E845E910029			E855E920197	-	
98	E845E910030			E855E920198	-	
99	E845E910031			E855E920199	-	
100	E845E910032			E855E920200		
101	E845E910033			E855E920201	-	
102	E845E910034			E855E920202	-	
103	E845E910035			E855E920202		
104	E845E910036			E855E920204	-	
105	E845E910037			E855E920205		
106	E845E910038			E855E920206		
107	E845E910039			E855E920207	-	
108	E845E910040			E855E920208		
109	E845E910041			E855E920209	-	
110	E845E910042			E855E920210	-	
111	E845E910043			E855E920211		
112	E845E910044					
113	E845E910045				1	
114	E845E910046					
115	E845E910047					
116	E845E910048					
117	E845E910049					
118	E845E910050					
119	E845E910051					
120	E845E910052					
121	E845E910053					
122	E845E910054					
123	E845E910055					
124	E845E910056					
125	E845E910057					
126	E845E910058					
127	E845E910059					
128	E845E910060					
129	E845E910061					
130	E845E910062					
131	E845E910063					
132	E845E910064					
133	E845E910065					
134	E845E910066					
135	E845E910067				1	

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**RICOH** Technical Bulletin

|--|

Model: BR-C1

Date: 18-Nov-15

No.: RD179113

136	E845E910068		
137	E845E910069		
138	E845E910070		
139	E845E910071		
140	E845E910072		
141	E845E910073		
142	E845E910074		
143	E845E910075		
144	E845E910076		
145	E845E910077		
146	E845E910078		
147	E845E910079		
148	E845E910080		

# Technical Bulletin

Model: Leo-C1/P1		lov-15	No.: RD194110		
Subject: Important	Information about 5th Stati	Prepared I	by: S. Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	ssification: Troubleshooting Sification: Mechanical		nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

### Important Information about 5th Station Replacement Kit

- Do the following when you install the 5<sup>th</sup> Station Replacement Kit.
- This is necessary because some development units produced in August 2015 have a misshaped groove.
- This **does not** apply to individual development units already installed in the machine or to service parts inventory.

#### Before you install a new 5<sup>th</sup> Station Replacement Kit:

 Check the see whether the kit was produced in August 2015. If the number "508" appears on the bottom of the label (boxed in red in the photo below), proceed to Step 2.



2. If the serial number of the development unit matches any from the **Affected Serial Numbers** list below, replace the development unit.



Model: Leo-C1/P1

Date: 16-Nov-15

No.: RD194110

### **Affected Serial Numbers**

SP7150800001	SP7150800035	SP7150800150	SP7150800201	SP7150800239
SP7150800002	SP7150800036	SP7150800151	SP7150800202	SP7150800240
SP7150800003	SP7150800037	SP7150800152	SP7150800203	SP7150800241
SP7150800004	SP7150800038	SP7150800153	SP7150800204	SP7150800242
SP7150800006	SP7150800039	SP7150800154	SP7150800205	SP7150800246
SP7150800007	SP7150800040	SP7150800155	SP7150800206	SP7150800247
SP7150800008	SP7150800041	SP7150800156	SP7150800207	SP7150800249
SP7150800010	SP7150800042	SP7150800157	SP7150800208	SP7150800252
SP7150800012	SP7150800043	SP7150800159	SP7150800209	SP7150800254
SP7150800013	SP7150800044	SP7150800160	SP7150800210	SP7150800256
SP7150800015	SP7150800045	SP7150800161	SP7150800211	SP7150800257
SP7150800016	SP7150800046	SP7150800163	SP7150800213	SP7150800261
SP7150800017	SP7150800049	SP7150800164	SP7150800214	
SP7150800018	SP7150800050	SP7150800165	SP7150800215	
SP7150800019	SP7150800054	SP7150800166	SP7150800216	
SP7150800020	SP7150800055	SP7150800167	SP7150800217	
SP7150800021	SP7150800057	SP7150800168	SP7150800218	
SP7150800022	SP7150800058	SP7150800169	SP7150800219	
SP7150800023	SP7150800060	SP7150800171	SP7150800220	
SP7150800024	SP7150800061	SP7150800172	SP7150800221	
SP7150800025	SP7150800064	SP7150800180	SP7150800222	
SP7150800026	SP7150800066	SP7150800181	SP7150800223	
SP7150800027	SP7150800068	SP7150800186	SP7150800224	
SP7150800028	SP7150800069	SP7150800189	SP7150800231	
SP7150800029	SP7150800072	SP7150800190	SP7150800233	
SP7150800030	SP7150800075	SP7150800193	SP7150800234	
SP7150800031	SP7150800076	SP7150800196	SP7150800235	
SP7150800032	SP7150800078	SP7150800197	SP7150800236	
SP7150800033	SP7150800080	SP7150800199	SP7150800237	
SP7150800034	SP7150800084	SP7150800200	SP7150800238	

# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1		lov-15	No.: RD194111		
Subject: Broken g	rip plate of fusing unit		Prepared I	by: N. Yoshida	
From: 3rd Tech Se	ervice Sect., MFP/P Tech S				
Classification: Classificati		<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> <li>Tier 0.5</li> </ul>	

### SYMPTOM

The grip plate (B1324168) of the fusing separation unit breaks.



### CAUSE

The operator pushes the blue grip (see photo) with excessive force when closing the fusing guide unit.



### SOLUTION

Replace the broken grip plate (B1324168).

**IMPORTANT:** Advise users to push the part marked [B] in the photo (and not the blue grip [A]).





#### Reissued: 24-Mar-16

Model: Leo-C1/P1

Date: 24-Mar-16 No.: F

No.: RD194112b

птр	Delegue
RID	Reissue

Subject: Manual C	orrection: FSM Troublesho	Prepared by: A. Tajima	
From: 1st Tech Se	rvice Sect., PP Tech Servic		
Classification: Classificati		<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> <li>Tier 0.5</li> </ul>

Please make the following 33 corrections to the Field Service Manual Troubleshooting.

### 1) Transfer

Relation between Print Mode and Settings > Applied Setting Items for Custom Paper Setting > Transfer

#### Incorrect

#### Transfer

Image Transfer Electric Current

Print Mode	Items Applied	
B/W	022: [Image Transfer Current: B&W]	
FC, FCS, FCS Quality	023: [Image Transfer Current: FC: Black] 025: [Image Transfer Current: FC: Magenta] 026: [Image Transfer Current: FC: Yellow] 027: [Image Transfer Current: FC: Special]	

#### Correct

023: [Image Transfer Current: FC: Black]

024: [Image Transfer Current: FC: Cyan]

025: [Image Transfer Current: FC: Magenta]

026: [Image Transfer Current: FC: Yellow]

027: [Image Transfer Current: FC: Special]

## Technical Bulletin

#### Reissued: 24-Mar-16

Model: Leo-C1/P1

Date: 24-Mar-16

No.: RD194112b

### 2) SC400 (Engine: Around the Drum)

SC Codes > Service Call 400-498 > SC400 (Engine: Around the Drum) > SC451-\*\*

#### Incorrect

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC451-**	D	PTR/ITB Cleaning Motor Error	
		* see the table below.	
		Error at motor startup	
		A lock signal was not detected for 1 second or longer after 1 second has passed from the motor START signal switching ON.	
		ror during motor running normally	
		A Lock signal was not detected for 1 second or longer during the motor START signal being output.	
		<ul> <li>Connector unplugged of PTR/ITB Cleaning Motor.</li> </ul>	
		<ul> <li>Abnormal increase in paper transfer unit torque (such as overload due to bearing lock)</li> </ul>	
		Motor driver defective	
		<ul> <li>PTR/ITB Cleaning Motor defective</li> </ul>	
		Reconnect the motor connector	
		<ul> <li>Remove the cause of overloading inside the paper transfer unit</li> </ul>	
		Replace the motor driver	
		<ul> <li>Replace the PTR/ITB Cleaning Motor.</li> </ul>	

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Correct

· Connector unplugged of PTR/ITB Cleaning Motor.

 $\cdot$  Abnormal increase in paper transfer unit torque (such as overload due to bearing lock)

- · Motor driver defective
- · PTR/ITB Cleaning Motor defective
- Abnormal torque increase detected in the PTR/ITB Cleaning Unit
- $\cdot$  Reconnect the motor connector
- · Remove the cause of overloading inside the paper transfer unit
- · Replace the motor driver
- · Replace the PTR/ITB Cleaning Motor.
- · Check the PTR/ITB Cleaning Unit and remove any foreign substances.
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# 3) <u>SC500 (Engine: Paper transport 1: Paper Feed, Duplex, and Transport)</u>

SC Codes > Service Call 501-595 > SC500 (Engine: Paper transport 1: Paper Feed, Duplex, and Transport)

			<ul> <li>Replace the Lift Motor</li> <li>Reconnect the Lift Motor connection.</li> <li>Replace the Lift Sensor.</li> <li>Reconnect the Lift Sensor connection.</li> <li>Replace the corresponding harness.</li> <li>Replace the Main Control Board.</li> </ul>
-	SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	SC505-12	В	Vacuum Feed LCIT 1 : 1st Tray Error : Lift timeout
	Insert h	ere	

## Additional tables:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-06	В	Vacuum Feed LCIT 1st Tray Error (before side fan Front switched
		ON)
		Monitoring of the signal starts one second after this fan activates.
		Abnormal status was detected for 700 msec in the monitoring.
		Side fan Front defective
		Loose connection
		Harness broken
		PCB defective
		Replace or reconnect the Front side fan.
		Replace the broken harness.
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution		
SC503-07	В	Vacuum Feed LCIT 1st Tray Error (after side fan Rear switched ON)		
		Monitoring of the signal starts one second after this fan activates.		
		Abnormal status was detected for 700 msec.		
		Side fan Rear defective		
	Loose connection			
		Harness broken		
		PCB defective		
	Replace or reconnect the Rear side fan.			
		Replace the broken harness.		
		Replace the PCB.		



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	<ul> <li>Set the Paper Fee</li> <li>Replace or recon</li> <li>Replace the broke</li> <li>Replace the PCB.</li> </ul>	<ul> <li>Set the Paper Feed Belt Unit.</li> <li>Replace or reconnect the Paper Feed Belt Unit connector.</li> <li>Replace the broken harness.</li> <li>Replace the PCB.</li> </ul>		
SC No. Lev	el Error Name,	/Error Condition/Major Co	use/Solution	
SC504-12 B	Vacuum Feed LCIT 2: 2	Vacuum Feed LCIT 2: 2nd Tray Error (Lifting Timeout)		
	Either of the following in total.	conditions has been detecte	ed 5 times consecutively	
Insert here				

## Additional tables:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-06	В	Vacuum Feed LCIT 2nd Tray Error (before side fan Front switched
		ON)
		Monitoring of the signal starts one second after this fan activates.
		Abnormal status was detected for 700 msec.
		Side fan Front defective
		Loose connection
		<ul> <li>Harness disconnected or defective</li> </ul>
		PCB defective
		<ul> <li>Replace or reconnect the Front side fan.</li> </ul>
		<ul> <li>Replace the broken harness.</li> </ul>
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC504-07	В	Vacuum Feed LCIT 2nd Tray Error (after side fan Rear switched ON)
		Monitoring of the signal starts one second after this fan activates.
		Abnormal status was detected for 700 msec.
		Side fan Rear defective
	Loose connection	
		Harness broken
		PCB defective
		<ul> <li>Replace or reconnect the Rear side fan.</li> </ul>
		Replace the broken harness.
		Replace the PCB.



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-	Set the Paper Feed I     Replace or reconner     Replace the broken     Replace the PCB.		<ul> <li>Set the Paper Feed Be</li> <li>Replace or reconnect</li> <li>Replace the broken ho</li> <li>Replace the PCB.</li> </ul>	elt Unit. the Paper Feed Belt Unit connector. arness.	
[	SC No.	Level	Error Name/Erro	or Condition/Major Caus	e/Solution
	SC505-12	В	Vacuum Feed LCIT 2: 1 st Tr	ay Error (Lifting Timeout)	

Insert here

### Additional tables:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-06	В	Vacuum Feed 3rd Tray Error (before side fan Front switched ON)
		Monitoring of the signal starts one second after this fan activates. Abnormal status was detected for 700 msec.
		Side fan Front defective
	Loose connection	
		Harness broken
		PCB defective
	<ul> <li>Replace or reconnect the Front side fan.</li> </ul>	
		<ul> <li>Replace the broken harness.</li> </ul>
		Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution	
SC505-07	В	Vacuum Feed 3rd Tray Error (after side fan Rear switched ON)	
		Monitoring of the signal starts one second after this fan activates. Abnormal status was detected for 700 msec.	
		Side fan Rear defective	
		Loose connection	
		Harness broken	
		PCB defective	
		<ul> <li>Replace or reconnect the Rear side fan.</li> </ul>	
		<ul> <li>Replace the broken harness.</li> </ul>	
		Replace the PCB.	

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# 4) Main Machine+A3 LCIT

JAM Codes > Jam Detection > Jam Code Descriptions > Main Machine+A3 LCIT

## Incorrect

56	2nd Paper Feed Sensor(A3 LCIT) lag jam	U4
57	3rd Paper Feed Sensor lag jam	Uó
58	Bypass: Paper Feed Sensor lag jam	٧

## Correct

3rd Paper Feed Sensor (A3 LCIT) lag jam

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# 5) J033 Appears (Paper Weight 7)

Troubleshooting: Paper Delivery Problems > Main Machine Paper Transport Problems > J033 Appears (Paper Weight 7)

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Delete





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# 6) Frequent Paper Misfeeds

Troubleshooting: Paper Delivery Problems > Main Machine Paper Transport Problems > Frequent Paper Misfeeds > Sheets absorbed moisture and became limp.

## Sheets absorbed moisture and became limp.

Sheets that will not be used for a long time should be protected from moisture by, for example, storing them in a sealed bag.

If the machine is plugged in, the heater inside the paper tray starts operating when the main power is off to prevent sheets from absorbing moisture.

The temperature and humidity of the paper tray is checked in the following SP.

Delete

- SP1-910-001 (Paper Bank Temp/Humidity: Temperature Reading)
- SP1-910-002 (Paper Bank Temp/Humidity: Humidity Reading)

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# 7) J098 Appears (Shift Over)

Troubleshooting: Paper Delivery Problems > Main Machine Paper Transport Problems > J098 Appears (Shift Over) > Solution

### Solution



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### Correct

Set 121 [Color Paper Edge Detection Adjustment] in the Custom Paper Settings to "10.00."

## 8) <u>Disturbed Images, Scratches, Streaks, Waves and Creases (Line</u> <u>Speed Fine-tuning)</u>

Troubleshooting: Paper Delivery Problems > Main Machine Paper Transport Problems > Disturbed Images, Scratches, Streaks, Waves and Creases (Line Speed Fine-tuning) > Cause

### Incorrect

The margin of the leading edge is **narrow**, and the whole image shrinks.

### Correct

The margin of the leading edge is too large, and the whole image shrinks.

### Incorrect

The margin of the leading edge is **too large**, and the whole image stretches.

### Correct

The margin of the leading edge is too small, and the whole image stretches.



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## 9) Roller Marks on Buffer Pass Unit

Troubleshooting: Paper Delivery Problems > Main Machine Paper Transport Problems > Roller Marks on Buffer Pass Unit

## Incorrect

In printing a solid image with high coverage, two 14mm-width bands are generated at 33 mm away from the center of transfer on the 2nd side in duplex printing or on the side where image transferred in simplex face-down.

### Correct

In printing a solid image with high coverage, two 14mm-width bands are generated at 33 mm away from the center of transfer on the 2nd side in duplex printing or on the side where image transferred in simplex face-up.

## 10) J099 Appears (Vacuum Feed LCIT)

## > 10 - 01

Troubleshooting: Paper Delivery Problems > Paper Feed Problems (Input Tray) > J099 Appears (Vacuum Feed LCIT)

## Incorrect

J099 Appears (Vacuum Feed LCIT)

This problem is caused by a variety of factors. Implement the following measures.

### Correct

• Many factors can induce the problem, for example, paper curl, friction between sheets (paper was not fanned in advance), burrs on paper edges, and moisture content.

• There are two different types in a double feed jam. One is when multiple sheets are tightly stuck and fed together in a bundle (J099). Another is when the leading edge of two sheets are slightly shifted but picked up and fed together (J470, J471, J485, J486, J500, J501).

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#### Incorrect

## J099 Appears (Vacuum Feed LCIT)

This problem is caused by a variety of factors. Implement the following measures.

- 1. In Custom Paper Settings, set 112: [Blower Fan] to "initial value +10%."
  - → If the problem occurs again, proceed to the next step.
- 2. In Custom Paper Settings, set 112: [Blower Fan] to "initial value +20%."
  - → If the problem occurs again, proceed to the next step.
- In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [High] (12mm) to [Low] (18mm).

→ If the problem occurs again, proceed to the next step.

- 4. Manually adjust the paper load upper limit (+1 mm).
  - → If the problem occurs again, proceed to the next step.
- 5. Manually adjust the paper load upper limit (+2mm).

→ If the problem occurs again, proceed to the next step.

6. Manually adjust the paper load upper limit (+3mm).



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Section "Manually Adjusting the Paper Load Upper Limit (Corresponding to the No Feeding)" (p. 723-724) was deleted.

## Incorrect

## • Note

 When tightening the screw, use your hand to firmly hold the sensor bracket in the proper position and prevent it from sliding.

### Correct

• Register a new paper in the customer paper settings, if the paper feeding mode will be changed.



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## > 10 - 02

Troubleshooting: Paper Delivery Problems > Paper Feed Problems (Input Tray) > J099 Appears (Vacuum Feed LCIT) > J430, 431,445, 446, 460, or 461 Appears

### Incorrect

### J430, 431, 445, 446, 460, or 461 Appears

This problem is caused by a variety of factors. Implement the following measures.

## Correct

Cause

• The top sheet on the stack does not float up. Many factors may induce the problem, for example, paper curl, friction between sheets (paper was not fanned in advance), burrs on paper edges, and moisture content.

### Incorrect

 In Custom Paper Settings, change 117: [Switch Paper Load Upper Limit] from [Low] (18mm) to [High] (12mm).

→ If the problem occurs again, proceed to the next step.

2. Manually adjust the paper load upper limit (-1mm).

→ If the problem occurs again, proceed to the next step.

3. Manually adjust the paper load upper limit (-2mm).

→ If the problem occurs again, proceed to the next step.

4. Manually adjust the paper load upper limit (-3mm).

→ If the problem occurs again, proceed to the next step.

5. Clean the paper feed belt.



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#### Incorrect

#### 🕓 Note

 If no feeding occurs when feeding remaining uncoated paper in tray, try feeding again through paper tray of main machine, instead of the vacuum feed LCIT

### Correct

• Register a new paper in the customer paper settings, if the paper feeding mode will be changed.

Section "Manually Adjusting the Paper Load Upper Limit (Corresponding to the No Feeding)" (p. 725-730) was deleted.

## 11) Premature Detection of Full When Paper Discharged to Shift Tray

Troubleshooting: Post-Processing Option > Finishing Problems > High Capacity Stacker > Premature Detection of Full When Paper Discharged to Shift Tray

#### Premature Detection of Full When Paper Discharged to Shift Tray

#### Cause:

When paper that is about as wide as the paper height sensor feeler is discharged to the shift tray, if it has side face curl, the edge of the paper may fail to go under the paper height sensor feeler and ride up on the feeler; alternatively, by coming in contact with the paper height sensor feeler, it may ride up and press against the feeler and the load from this may hinder the movement of the feeler. In this case, even if the shift tray lowers down, the paper height sensor feeler fails to turn OFF, and the lowering time of the shift tray ends up exceeding **360** ms, and the unit ends up sensing it is full.





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Delete



## 12) Improving Metallic Paper Productivity

Improving Throughput > Improving Throughput > Improving Metallic Paper Productivity > Solution.

<Checking the fusing capability>

- There is no toner coming off.
- · Toner does not come off when gently scratching the image with your nail
- Toner does not come off when rubbing the image with the optical cloth.

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## 13) <u>Recovering SC499-03</u>, <u>Preventive Maintenance of Intermediate</u> <u>Transfer Scale</u>

Detailed Procedures of SC Occur > Detailed Procedures of SC Occur > Recovering SC499-03, Preventive Maintenance of Intermediate Transfer Scale

### Incorrect

Cause

- Belt scale dirty
- Transfer Belt Speed Feedback Sensor dirty
- Transfer Belt Speed Feedback Sensor defective
- Connector disconnected or harness broken

TDCU defective

### Correct

TDCU/TDRB defective

#### Incorrect

#### Solution

- Clean the belt scale
- Clean the Transfer Belt Speed Feedback Sensor
- Reconnect or replace the harness
- Replace the TDCU

### Correct

Replace the TDCU/TDRB



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# 14) SC441: ITB Drive Motor Error Measure Flow

Detailed Procedures of SC Occur > SC441: ITB Drive Motor Error Measure Flow > Procedure: 1





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# 15) Horizontal White Streaks

Image Quality Problem: Lines > Streaks > Horizontal White Streaks > Solution



# 16) Vertical Black (color) Streaks (1)

## > 16 - 01

Image Quality Problem: Lines > Streaks > Vertical Black (color) Streaks (1) > Cause **Incorrect** 

## Cause

A sheet of paper picks up toner residues on the roller, rib or pawl in the paper path.

This problem occurs frequently when the inside of the machine is contaminated with toner.

## Correct

- Stains on the rollers
- Stains on the guide plate ribs
- Stains on the charge roller
- Aging of the drum cleaning unit
- Scratched drum
- Aging of the ITB cleaning unit
- Aging of the PTR unit.



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## > 16 - 02

Image Quality Problem: Lines > Streaks > Vertical Black (color) Streaks (1) > Solution > Chart 2

### Incorrect



## Correct

Wipe the charge roller with damp cloth and then with dry cloth.

## 17) Vertical White Streaks (2)

## ▶ 17 – 01

Image Quality Problem: Lines > Streaks > Vertical White Streaks (2) > Solution > Chart 1



## > 17 – 02

Image Quality Problem: Lines > Streaks > Vertical White Streaks (2) > Solution > Chart A



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## ≻ 17 – 03

Image Quality Problem: Lines > Streaks > Vertical White Streaks (2) > Solution > Chart B

## Incorrect

- \* 1: Guidelines for Fusing Quality
  - No image peeling.
  - No toner peeling even when rubbing the image gently with fingernails.
  - No toner peeling even when rubbing the image with the optical cloth.

## Correct

- \*1: Guidelines for Fusing Quality
- No image peeling.
- · Glossy residual image is within an acceptable level.

## 18) Glossy Lines at the Edge of the Paper

Image Quality Problem: Lines > Streaks > Glossy Lines at the Edge of the Paper > Solution

### Solution

 Execute "0506: [Smooth Fusing Belt] – [For Belt Scratches] (SP1-133-110)" in the "Adjustment Settings for Skilled Operators".

120

When executing once, fusing belt smoothing is performed for <del>99</del> seconds.

2. Print the target image (1 sheet).

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#### **Vertical White Bands** 19)

Image Quality Problem: Lines > Bands > Vertical White Bands > Solution

## Incorrect

Solution (Customer Engineer only)

1. Increase the paper transfer current value by 20 uA in SP2-651-055 (PTR Bias:FC: Transpar:Weight 5:Side1) and SP2-652-055 (PTR Bias:FC: Transpar:Weight 5:Side2).

#### Correct

#### Solutions:

Configure the following settings in [Advanced Settings] for the custom paper you are using.

#### <Printing in black and white>

Increase the value in 029: [Paper Transfer Current: B&W: Side 1] or 030: [Paper Transfer Current: B&W: Side 2] by -20 µA.

Eg., -100 VA to -120 VA

<Printing in full color/Printing in full color including the clear toner while the special color is not set to high quality>

Increase the value in 035: [Paper Transfer Current: FC: Side 1] or 036: [Paper Transfer Current: FC: Side 2] by -20 µA.

Eg., -100 PA to -120 PA

### <Printing in full color including the clear toner and the special color is set to high quality/ printing in full color including the white toner>

Increase the value in 037: [Paper Trnsfr. Current: FC: Side 1: Qual.] or 038: [Paper Trnsfr. Current: FC: Side 2: Qual.] by -20 HA.

Eg., -100 µA to -120 µA

### Note

 After performing the solution, it is recommended to perform the color calibration of the external controller.



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# 20) Banding (General)

## > 20 - 01

Image Quality Problem: Lines > Bands > Banding (General)

## Incorrect

Uneven density occurs due to different pitch phases of the charge roller, development roller, paper transfer roller, and drum.

## Correct

Uneven density appears at intervals corresponding to the circumference of the charge roller or development roller or paper transfer roller or drum

# > 20 - 02

Image Quality Problem: Lines > Bands > Banding (General) > Solution

Pitch (Problem Unit)	Measures	
	<ol> <li>Clean the charge roller. (Wipe the charge roller with a damped cloth, and then wipe it with a dry cloth)</li> </ol>	
40 mm	2. Never use alcohol to clean.	
(Charge Roller)	3. Execute "0502 [Execute Process InitialSetting]" (SP3-020-001).	
	<ol> <li>Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check the output image.</li> </ol>	
50 mm, 25 mm (Development Roller)	<ol> <li>Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check the output image.</li> </ol>	

## Incorrect

Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" (SP3-040-001), and then check the output image.

## Correct

Execute [DEMS] for each color in "0201 [Adjust Image Density/DEMS]" (SP3-040-0xx), and then check the output image.

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# 21) Black (color) Spots (1)

Image Quality Problem: Spots > Spots > Black (color) Spots (1) > Cause

## Incorrect

## Cause

If black spots occur at 189mm interval, this problem is caused by a damaged or dirty drum.

• If black spots occur at 40mm interval, this problem is caused by a damaged or dirty charge roller.

## Correct

Black spots observed at 189mm intervals is caused by scratched/dirty drum.

• Black spots observed at 40mm intervals is caused when the charge roller is not sufficiently charged due to scratches/contamination (including the rollers on both ends) or when running the machine from a cold start.

The following are conditions that tend to make the symptom more noticeable:

- White or black solid images, single color 2-dot independent patterns
- Printing on long paper in the feed direction, for example, A3/DLT/SRA3

## 22) White Spots/Toner Blasting

Image Quality Problem: Spots > Spots > White Spots/Toner Blasting > Solution

## Incorrect

🕑 Note

 There is a trade-off relationship between white spots and toner scattering. Think of the balance between two problems, and then decide the final adjustments after you have got a customer's agreement.

Toner scattering gets worse when paper transfer current is lowered and improves when it is raised. White Spots improve when paper transfer current is lowered and get worse when it is raised.

### Correct

For toner scattering observed around a solid image, decrease the paper transfer current to ease the symptom. (Increasing the paper transfer current will worsen the symptom.)

For white spots, increase the paper transfer current to ease the symptom. (Decreasing the paper transfer current will worsen the symptom.)

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# 23) Blister-like White Spots

Image Quality Problem: Spots > Spots > Blister-like White Spots > Solution > Process Speed Adjustment

- [High] (75 ppm) => [Middle] (52.5 ppm),
- [Middle] (<del>52.5</del> ppm) => [Low] (37.5 ppm)

# 24) Unprinted: Around Clear-toner Images

Image Quality Problem:Full Page > Unprinted > Unprinted:Around Clear-toner Images > Solution

## Incorrect

6. In Custom Paper Settings, set 049 [Textured Paper Mode] to "On"

## Correct

In Custom Paper Settings, set 049 [Textured Paper Mode] to "On", "127 [Process Speed Setting: Productivity]" and 128 [Process Speed Setting: Quality] to "Low".

## 25) <u>Unprinted: When Using a Transparent Film/Worm Holes: Text or</u> <u>Edge of an Image/Worm Holes: When Using the Clear Toner</u>

Image Quality Problem: Full Page > Unprinted > Unprinted: When Using a Transparent Film/Worm Holes: Text or Edge of an Image/Worm Holes: When Using the Clear Toner

## Change

The following springs were added as new service parts.

- D1946262 (COIL SPRING: TRANSFER ROLLER: EXCHANGEABLE: 20N)

- D1946263 (COIL SPRING:TRANSFER ROLLER:EXCHANGEABLE:30N)

## Reason

These special PTR springs have lower tension than the default springs and are effective in improving the following symptoms:

Worm Holes: Text or Edge of an Image Worm Holes: When Using the Clear Toner Unprinted: When Using a Transparent Film







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Possible Side Effect When Applying the Special Springs

Mottled effect may appear when printing on rough surfaced or textured paper.

## When and how to apply the special springs

- Apply the special springs, if the troubleshooting procedures in the service manual do not improve the symptom to a sufficient level.
- First, try the 20N springs (p/n: D1946262). If the side effect described above occurs and is unacceptable, try the 30N springs (p/n: D1946263).

## Note

- Make sure to procure the springs in a pair, because springs on the operator and non-operator sides must be replaced together.
- You may instruct the customer to replace the springs by themselves. In this case, procure a pair of the default springs (p/n: D1946266 COIL SPRING:TRANSFER ROLLER:EXCHANGEABLE:60N) in addition to the above 20N and 30N springs, so that your customer can make adjustments depending on the results.

## How to Replace the PTR Springs

- 1. Open the front doors.
- 2. Pull out the right drawer unit.
- 3. Remove the PTR unit.



4. Locate the following switch at the non-operator side of the right drawer unit.



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5. Push down the switch to free the lever and turn the lever to the lock position.



6. Remove the springs.

Operator side



Non-operator side





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7. Hook the new special spring.



8. Pull up the wire and hook the ring.



9. Clamp the wire as shown.





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10. Fix the tip of the wire with the TCRU screw.



Note: Make sure the wire does not stick out, or it may interfere with the ITB.



11. Hook the spring on the other side in the same manner.





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12. Route the wire as shown below.





- 13. Install the PTR unit and push the right drawer back in the machine.
- 14. Close the front door.

## 26) Horizontal White Streaks: Around Black Text

Image Quality Problem: Full Page > Uneven Density > Horizontal White Streaks: Around Black Text

## SYMPTOM

Low image density occurs in solid black image areas.



Note: This occurs most easily under the following conditions:

- High-temperature, high-humidity
- Full-color or FCS mode (these modes use a higher paper transfer current than does B/W mode)



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## CAUSE

Black toner has a lower transfer charge than colored toner. As a result, excessive transfer of toner occurs at the PTR unit.

## SOLUTION

Do the following.

- 1. Program the paper used as a custom paper type.
- Increase the values of the following by +5.
   Important: Before you do this step, write down the current values.

Advanced Settings for custom paper:

- No.22 Image Transfer Current: B&W
- No.23 Image Transfer Current: FC: Black
- 3. Print out the affected image and check the quality.
- If the symptom still occurs, repeat Step 2.
   Note: When you do this, you can increase the values up to +20 above the default.
- 5. If the symptom still occurs, do **Steps 6-8** below.
- Decrease the absolute values of the following by 5. Important: The values for these settings are negative, so for the absolute value, simply ignore the "-".

**EX.** Change the value from "-82" to "-77"

- No. 29 Paper Transfer Current: B&W: Side 1
- No. 30 Paper Transfer Current: B&W: Side 2
- No. 35 Paper Transfer Current: FC: Side 1
- No. 36 Paper Transfer Current: FC: Side 2
- 7. Print out the affected image and check the quality.
- If the symptom still occurs, repeat Step 6.
   Note: When you do this, you can increase the values up to +20 above the default.
- 9. If the symptom still occurs, do **Steps 10-12** below.
- 10. Do the following.

**Note:** This is to completely refresh the toner.

- 7-1. Set SP2109-003 to a value of "26" (Solid pattern).
- 7-2. Set SP2109-007, -008, and -009 to a value of "0".
- 7-3. Print/copy a solid black image onto A3 paper x 60pg.



Model: Leo-C1/P1	Date: 24-Mar-16	No.: RD194112b
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- 11. Set the following SPs as shown.
  - SP3620-202: Set to a value of +0.011.
  - SP3620-203: Set to a value of +0.021.
- 12. Execute SP3011-002 (Manual ProCon:Exe:Density Adjustment).

## 27) <u>Uneven Density between Left and Right of an Image: 40 mm</u> Interval

Image Quality Problem: Full Page > Uneven Density > Uneven Density between Left and Right of an Image: 40 mm Interval > Solution

14. Replace the charger unit.

 If the problem cannot be solved by steps 5 to 7 above and if immediate response is necessary, replace the charger unit.

#### Incorrect

**14.** Replace the charge unit.

• If the problem cannot be solved by steps 5 to 7 above and if immediate response is necessary, replace the charge unit.

### Correct

14. Wipe the charge roller with damp cloth and then with dry cloth.

- **DO NOT use alcohol or any other solvents.**
- **15.** Replace the charge unit.

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## 28) Uneven Density: 189 mm Interval (1)

Image Quality Problem: Full Page > Uneven Density > Uneven Density: 189 mm Interval (1)

Incorrect

Uneven density occurs due to different pitch phases of the Drum.

## Correct

Uneven density is caused by radial run-out of the drum.

## 29) <u>Uneven Density (Textured Paper)</u>

Image Quality Problem: Full Page > Uneven Density > Uneven Density (Textured Paper) > Solution

The order is incorrect (see the next page).

Insert "When using paper with paper weight 3 or less" before "When unprinted areas occur:".



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## Reissued: 24-Mar-16

Model: Leo-C1/P1		Date: 24-Mar-16	No.: RD194112b
Solution			
When unprin	ited areas occur:		
1. Set 049	e: [Textured Paper Mode] to "On" i	in Custom Paper Settings.	
2. Adjust t	he paper transfer voltage for textur	ed paper*1 in Custom Pa	oer Settings.
3. Increase	e the set value by 0.2kV.		
4. Print the	image.		
5. Is the pr	oblem solved?		
Yes: Fini	ish		
No: Inc	rease the value again by another 0	).2kV.	
6. Repeat is high″	step 4. If the image density become (below).	es high, refer to measures f	for "When image densi
7. When a	a J032 paper jam occurs, refer to p	age 898 "Mottling".	
<ul> <li>When image</li> </ul>	density is high:		
1. Set 049	P: [Textured Paper Mode] to "On" i	in Custom Paper Settings.	
2. Adjust t	2. Adjust the paper transfer voltage for textured paper*1 in Custom Paper Settings.		
3. Decreas	<ol><li>Decrease the set value by 0.2kV.</li></ol>		
4. Print the	image.		
5. Is the pr	oblem solved?		
Yes: Fini	ish		
No: Dec	crease the value again by another	0.2kV.	
6. Repeat (above)	step 3. If unprinted areas occur, re	fer to measures for "When	unprinted areas occur"
7. When a	1 J032 paper jam occurs, refer to p	age 898 "Mottling".	_
<ul> <li>When using provide the standard stand Standard standard st Standard standard stand Standard standard stand Standard standard stand Standard standard stand Standard standard standard standard standard standard standard standard standard stand Standard standard standard standard standard</li></ul>	paper with paper weight 3 or less		
1. ISet 049	9: [Textured Paper Mode] to "On"	in Custom Paper Settings.	
2. Print the	image.		
3. Is the pr	oblem solved?		
Yes: Fini	ish		
No: Dec	crease the value again by another	0.2kV.	
4. When a	J032 paper jam occurs, refer to p	age 898 "Mottling".	

\* 1 Adjustment items for paper transfer voltage for textured paper

### Reissued: 24-Mar-16

Model: Leo-C1/P1

Date: 24-Mar-16

d194z061911

No.: RD194112b

## 30) Uneven Gloss: Wavy

Image Quality Problem: Full Page > Uneven Density > Uneven Gloss: Wavy > Cause

## Incorrect

Cause

When toner which is used for a previous job remains on the fuser belt, a wax substance from the toner adheres to the fuser belt surface, and then applies more glossiness to an image. This causes different glossiness between an area with much glossiness and an area with less glossiness (interleaf, top/bottom margins, no image area, etc.).

### Correct

Difference in gloss is due to the difference in how the paper separates from the pressure roller, which depends on the amount of toner adhered to the pressure roller via the fusing belt after printing the first side.

## 31) Dirty Background

## > 30 - 01

Image Quality Problem: Full Page > Dirtied Printouts > Dirty Background

Add "Cause" section

This is likely to occur if:

When using in a high temperature, high humidity environment

Correct

#### Cause

Low charge level of the developer; the operational environment is high in temp and humidity or the development unit is aged. In addition to either of these conditions, the jobs run are low in image cover ratio or frequently apply finishing options.

The symptom is especially noticeable with coated paper due to its high surface smoothness.


#### Reissued: 24-Mar-16

Model: Leo-C1/P1	Date: 24-Mar-16	No.: RD194112b

> 30 - 02

Image Quality Problem: Full Page > Dirtied Printouts > Dirty Background > Solution 1

#### Incorrect

2. In Adjustment Settings for Skilled Operators > 0201: [Adjust Image Density/ DEMS],

#### Correct

 In Adjustment Settings for Skilled Operators > 0201: [Adjust Image Density: Manual execution],

#### Incorrect

8. In 0510: [Temperature / Humidity outside the Machine] (SP3-260-003),

#### Correct

8. In 0510: [Temperature / Humidity outside the Machine] (SP3-261-003),

#### Incorrect

9. Does the value of 0510 show a high temperature, high humidity environment of 27°C and 80% (guidelines) humidity or higher?

\*For SP3-260-003, is the value 17 or higher?

#### Correct

9. Does the value of 0510 show a high temperature, high humidity environment of 27°C and 80% (guidelines) humidity or higher?

\*For SP3-260-003, is the value 12 or higher?

Reissued: 24-Mar-16

Model: Leo-C1/P1	Date: 24-Mar-16	No.: RD194112b

> 30 - 03

Image Quality Problem: Full Page > Dirtied Printouts > Dirty Background > Solution 2

Incorrect

1. Check the required refresh amount in SP3-820-011 to 015 (Tnr Refresh Mode).

2. Do any colors exceed 10,000mm?

Yes: Go to next step.

No: Go to step 4.

3. Select "26: Full Dot Pattern" in SP2-109-003 (Test Pattern Pattern Selection) to print a solid image.

4. In Adjustment Settings for Skilled Operators, execute 0502: [Execute Process Initial Setting] (SP3-020-001).

5. Print the image.

6. Is the printed image acceptable?

Yes: Finish

No: Go to next step.

7. Check the condition of developer in SP3-930-051 to 055(Life Prediction: Dis.).

8. Is "1" displayed for any colors?

Yes: Replace the developer for the applicable color and then print the image and check quality.

No: No further improvement can be expected in the field.

#### Correct

1. Select "26: Full Dot Pattern" in SP2-109-003 (Test Pattern Pattern Selection) to print a solid image.

2. In Adjustment Settings for Skilled Operators, execute 0201: [Adjust Image Density: Manual execution] (SP3-020-001).

3. Print the image.

4. Is the printed image acceptable?

Yes: Finish

No: Go to the next step.



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### 32) Adjusting the Image Position

Advanced Instructions > Adjusting the Image Position > Adjusting the Image Position on Side 2 in Alignment with Side 1 (Registration to Align Front and Back Images Using Template) > TCRU Procedures: Further Reducing the Off-Registration for Side 1 and Side 2 > 2. Follow the steps below to adjust the image magnification in the perpendicular direction and feed direction.

### Incorrect

· Perpendicular direction

\*Magnification adjustment reference: A3 short direction (297mm)

0.025%: near equal 0.1mm, 0.1%: near equal 0.4mm

### Correct

· Perpendicular direction

\*Magnification adjustment reference: A3 short direction (297mm)

0.025%: near equal 0.07mm, 0.1%: near equal 0.3mm

### Incorrect

· Feed direction

\*Magnification adjustment reference: A3 long direction (420mm)

0.025%: near equal 0.07mm, 0.1%: near equal 0.3mm

### Correct

· Feed direction

\*Magnification adjustment reference: A3 long direction (420mm)

0.025%: near equal 0.1mm, 0.1%: near equal 0.4mm

### 33) Capturing the TDCU Log

Advanced Instructions > Capturing the Engine Debug Log > Procedures for Capturing the Engine Debug Log via the Debug Cable > Capturing the TDCU Log > Procedures for Capturing TDCU Log

### Correct

7. At [Setup] > [Serial Port], open the Serial port setup screen and specify the following settings. Select the COM number for Port according to the connection port of the PC.



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Model: Leo-C1/P1	Date: 24-Mar-16	No.: RD194112b
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### 34) <u>PSU2</u>

Fuses > Fuses > PSU2

		U U	
Fuse	Power To	Rating	If Fuse Blows at Power On
FU3	TDCU	250Vac 10A	SC202-01
FU4	IOB	250Vac 10A	SC685-02
FU5	None	250Vac 10A	-
FU7	None	250Vac 10A	-

### 35) Mottling

Image Quality Problem: Full Page > Uneven Density > Mottling > Solution

Chart A





#### Reissued: 24-Mar-16

Model: Leo-C1/P1	Date: 24-Mar-16	No.: RD194112b

#### Incorrect

Set the settings of "049 [Textured Paper Mode]" to "Enable" in "Custom Paper Settings."

#### Correct

Set the settings of "049 [Textured Paper Mode]" to "Enable", "127 [Process Speed Setting: Productivity]" and 128 [Process Speed Setting: Quality] to "Low" in "Custom Paper Settings."

# Technical Bulletin

**PAGE: 1/6** 

Model: Leo-C1/P1			Date: 7-Dec-15		No.: RD194109
Subject: Not Reco	Prepared	by: N.Yoshida			
From: 2nd Tech Se	ervice Sect., PP Tech Servi	ce Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/m Other (	nation eceive )	Action re Service n Retrofit ir Tier 2	quired nanual revision nformation

### SYMPTOM

The machine cannot recover from the Toner End or Near End condition after the toner bottle is replaced.

### CAUSE

The user turns the toner bottle while the chuck is in the process of pulling the cap to open the bottle. As a result, the chuck and spring (see the photo) break, and cannot pull the cap to open the bottle.



Note:

- Once the bottle is completely inserted, the bottle must not be turned.
- This symptom only occurs if the user turns the bottle at the time the chuck is pulling the cap. It will not occur if the user pulls the bottle after the cap has been removed (the bottle has been opened).

### SOLUTION

#### **Production line:**

• Temporary solution

The following decal is attached to alert the user not to turn the bottle.

Applied from: Mid-November 2015 production





Model: Leo-C1/P1	
------------------	--

Date: 7-Dec-15

• Permanent solution

The following reinforcement bracket (P/N: TBA) will be added. This will protect the chuck so that it is not broken even if the user turns the bottle as described above.

Applied from: February 2016 production.

**Note:** The temporary solution (decal) will not be applied to these machines.



### In the field:

Do the following until the new bracket is available.

### Note: This RTB will be updated when the new bracket becomes available.

a. Replace the broken parts with the toner bank unit (p/n: D1943554) which includes the broken chuck and spring inside. (Estimated working time: 30min) ,

OR

b. Replace the broken parts with the individual parts, chuck (p/n: B2343356) and spring (p/n: D1943724). (Estimated working time: 40 min)

### AND

Attach the decal and advise customers about the correct procedure.



Do the **PROCEDURES** below.



Model: Leo-C1/P1

Date: 7-Dec-15

No.: RD194109

### PROCEDURES

### Replacing the toner bank unit

Estimated working time: 30min

- The toner bank unit (P/N D1943554) includes the chuck and spring.
- 1. Make sure to execute "OFF" on SP3-162-001 to 004 (Bottle OPEN/CLOSE) to release the bottle lock.
- 2. Remove the toner bottles for all colors.
- 3. Remove the Toner Bank Door, Toner Bank Top Cover and Toner Bank Front Cover.

See the "Exterior Covers" of "Replacement and Adjustments" section in the FSM.

4. Remove the Toner Bank rear bracket. Screw x 7



5. Replace the toner bank. Screw x 5, connector x 4





Model: Leo-C1/P1

Date: 7-Dec-15

No.: RD194109

6. Attach the decal to the following position.



### **IMPORTANT:**

Using this decal, instruct users to insert the new toner bottle **straight in** (without twisting it), **all the way** until it stops.

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_	•••••••	
_		

Model: Leo-C1/P1

Date: 7-Dec-15

No.: RD194109

### Replacing the chuck and spring

- Estimated working time: 40 min
- Chuck: P/N B2343356, Spring: P/N D1943724
- 1. Do Steps 1-4 in the procedure above.
- 2. Remove the motor (screws x2).



3. Push the part shown in the photo towards the front (operator side) of the machine and loosen the screw.



4. Remove the chuck and replace it with a new one.



5. Reinstall the part removed in step 3 and position the spring as shown in the photo:



6. Push the black plastic part to the end.



Model: Leo-C1/P1

Date: 7-Dec-15

No.: RD194109

### **IMPORTANT:**

• Make sure to insert the white part shown in the photo when you reattach the chuck. Also make sure to insert the rib as shown. This is because the part circled in yellow can come loose easily when the chuck is reattached from behind.



7. Attach the decal to the following position.



### **IMPORTANT:**

Using this decal, instruct users to insert the new toner bottle **straight in** (without twisting it), **all the way** until it stops.

# Technical Bulletin

Model: Leo-C1/P1 Date:				lov-15	No.: RD194113
Subject: Important information about SP1935(Side Fan Shutter Setting)				Prepared	by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.					
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>		Action re Service r Retrofit ir	quired nanual revision nformation

### Important Information about SP1935 (Side Fan Shutter Setting)

• At the next customer site visit, set the following SPs to a value of "1" (Disabled):

SP1935-001, -002, -003, -004, -005, and -006 (Side Fan Shutter Setting)

• This is necessary because the default values of these SPs were found to be incorrect. Normally, the side fan shutters should only be enabled when performing troubleshooting for multi-feeds (See RTB **#RD777001a**). If these SPs are enabled unnecessary, non-feed jams can occur.

#### Note:

- These SPs affect only the Manual Paper settings. Entries in the custom library have the correct default value, as they do not refer to these SPs.
- The firmware will be modified with the correct default values and released in February 2016.

# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1	Date: 2-De	ec-15	No.: RD194114		
Subject: Troubleshooting SC992 (Undefined Error)					by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	bleshootingPart informationhanicalElectricaler pathTransmit/receiveluct SafetyOther ()		Action re Service n Retrofit ir Tier 2	quired nanual revision nformation

### **SYMPTOM**

SC992 (Undefined Error)

### CAUSE

Firmware bug

Due to one of the following, the firmware detects SC992-00 incorrectly, even though SC570 (Fan Error: Ozone Exhaust Fan or Controller Box Ozone Collecting Fan) should be triggered.

- The Ozone exhaust fan or controller box Ozone collecting fan is overloaded
- One of the fans stops due to a foreign object, or
- A connector is disconnected

### SOLUTION

#### **Production line:**

The firmware will be modified so that SC570 is triggered (To be released: Feb. 2016).

#### In the field:

Reconnect the connector, remove the foreign object, or replace the ozone exhaust fan.

**Note:** For the locations and replacement procedures, see the following section of the Service Manual.

Top Page > Main Chapters > Replacement and Adjustments > Fans and Filters



# Technical Bulletin

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

Model: Leo-C1	Date	ate: 2-Dec-15		No.: RD194116		
Subject: FSM Correction: Exit guide plate rollers				Prepared	d by: Akil	hiro Tajima
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part informat Electrical Transmit/rec		tion eive )	Action Servio Retro Tier 2	n required ce manual revision fit information

### **Service Manual Correction**

Please make the following correction to your Field Service Manual.

The description outlined in red below is a mistake and needs to be deleted.

There are no rollers on the exit guide plate, as PETF (Polyethylene Terephthalate Film) tape and Teflon tape were found to be enough to prevent scratches on printed paper.

New Features > Prevention of Paper Scratch



# Technical Bulletin

Model: Leo-C1	Date: 2-Dec-15		5	No.: RD194117		
Subject: Manual Correction: SC399-06				Prepared	d by: Aki	hiro Tajima
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	☐ Part inforr ☐ Electrical ☐ Transmit/ ☐ Other (		tion eive )	Action Servio Retro Tier 2	n required ce manual revision fit information

### **Service Manual Correction**

Please add the SC table below in the following section of your field service manual:

No.	Level	Detail (Symptom, Possible Cause, Troubleshooting)
		Means no pulse from motor.
		<ol> <li>Loose harness connection may be causing the problem. Disconnect and then connect the connectors at the following locations to confirm proper connection:</li> </ol>
SC399-06	D	CN88 on TDCU board $\leftarrow \rightarrow$ CN91 on EXDB board $\leftarrow \rightarrow$ Special color drum motor
		2. If the above does not resolve the problem, replace the drum motor and/or EXDB board and/or TDCU board.

Troubleshooting > SC Codes > SC300-398



Reissued: 17-Jun-16

Model: Leo-C1/P1

Date: 17-Jun-16

No.: RD194118a

#### Reissue

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

Subject: No Recov	very from Toner End	Prepared by: N.Yoshida	
From: 2nd Tech Se	ervice Sect., PP Tech Servio	ce Dept.	
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> <li>Tier 0.5</li> </ul>

### SYMPTOM

The machine cannot recover from the Toner End or Near End condition after the toner bottle is replaced.

### CAUSE

The user turns the toner bottle while the chuck is in the process of pulling the cap to open the bottle. As a result, the chuck and spring (see the photo) break, and cannot pull the cap to open the bottle.



### SOLUTION

#### **Production line:**

• Temporary solution:

The following decal is attached to alert the user not to turn the bottle.

Applied from: Mid-November 2015 production





#### Reissued: 17-Jun-16

MODEL: Leo-C1/P1 Date: 17-Jun-16 NO.:
---------------------------------------

• Permanent solution:

A reinforcement bracket (P/N: D1943713) has been added. This will protect the chuck so that it is not broken even if the user turns the bottle as described above.

Applied from: February 2016 production.



#### In the field:

Attach the reinforcement brackets at all color stations except the 5<sup>th</sup> station at the next service visit.

See **PROCEDURE** below.

### PROCEDURE

- Note: Each modification kit (P/N D1949921) includes four reinforcement brackets, i.e. one kit is needed per machine.
- 1. Check whether the white cap is attached correctly to the removed toner bottle, as shown in the "OK" photo.
  - ➢ If it is (OK), go to Step 2.
  - If the white cap is NOT attached, check the toner hopper at the rear side of the machine. The cap may still be inside the machine.



Make sure that SP3162 (Bottle OPEN/CLOSE) is set to OFF.
 Note: This is to release the bottle lock.

# Technical Bulletin

#### Reissued: 17-Jun-16

Model: Leo-C1/P1	Date: 17-Jun-16	No.: RD194118a

- 3. Remove the toner bottles for all colors.
- Remove the Toner Bank Door, Toner Bank Top Cover, and Toner Bank Front Cover.
   Note: See the "Exterior Covers" of "Replacement and Adjustments" sections of the FSM.
- 5. Remove the Toner Bank rear bracket (screws x7).



## Technical Bulletin

### Reissued: 17-Jun-16

Model: Leo-C1/P1

Date: 17-Jun-16

No.: RD194118a

6. Attach the bracket from the top, and then pinch the bracket with a pair of needle-nose pliers, as shown below.





Reissued: 17-Jun-16

Model:	Leo-C1/P1

Date: 17-Jun-16 No.:	RD194118a
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#### **IMPORTANT:**

- > Make sure that the hooks of the bracket are correctly attached, as shown below.
- > Make sure that the spring is not missing and is correctly installed.







Execute SP3162 (Bottle OPEN/CLOSE).
 Note: This is to make sure that the toner bottle cap can be correctly opened and closed.

# Technical Bulletin

Model: Leo-C1/P1			Date: 17-D	)ec-15	No.: RD194119	
Subject: Important Note on SP5104 and FSM Correction					Prepared by: A Tajima	
From: 1st Tech Service Sect., PP Tech Service Dept.						
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>		Action red Service n Retrofit ir Tier 2	quired nanual revision nformation	

# This is a very IMPORTANT NOTICE regarding SP5-104-001. Please take note of the following when servicing your customer's machines at all times.

- SP5-104-001 (A3/DLT Double Count) is set to "1" (ON) as a factory default. However, it changes to "0" (OFF), if the NVRAM is replaced or cleared without downloading the original SP settings with an SD card created with SP5-824-001 (NVRAM Data Upload). In this case, make sure to change the setting back to "1" (ON).
- Make sure SP5-104-001 is set in accordance with the customer contract at a new site installation and after clearing/replacing the NVRAM.

#### **FSM Correction**

Please make the following corrections to your field service manual in this section:

Appendices: Service Program Mode Tables > Group 5000

5104	[Counter Size Setting] (Printer Model only) Correction #1					
5104	-					
5-104-001	A3/DLT Double Count *CTL [0 or 1 📈 1 / -]					
	Sets double count on/off when u	sing A3/DLT.	T October #0			
	0: OFF	Correction #2				
	1: ON					

#### Correction #1

This SP applies to both copier and printer models.

#### Correction #2

The factory default setting is "1" (ON).

**NOTE:** SP5-104 is available in SP mode as shown in this table.

Model	SP mode	SSP mode
Leo-C1		~
Leo-P1	<b>~</b>	~

# Technical Bulletin

Model: Leo-C1 Da				Date: 21-Dec-15		No.: RD194120
Subject: Developer Replacement Jig				Prepared by: Akihiro Tajima		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,			pt.,			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>☑ Part inf</li> <li>☑ Electric</li> <li>☑ Transm</li> <li>☑ Other (</li> </ul>	ormat al hit/rec	iion eive )	☐ Action ⊠ Servic ☐ Retro ⊠ Tier 2	n required ce manual revision fit information

The developer replacement jig has been stocked at SPC and can be ordered.

P/N : D1943396 Part description : JIG:SERVICE:DEVELOPMENT UNIT

### **Service Manual Correction**

Please replace the photo of the jig with the correct photo below in the following section of your field service manual.

4. Replacement Adjustments > Photoconductor Development Unit (PCDU) > Replacing Developer > Removing Old Developer > Step 10

#### Incorrect





Correct





### Reissued: 6-Jan-16

Model: Leo-C1/P1

Date: 21-Dec-15 No.: RD194121a

#### **RTB Reissue**

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

Subject: Slow prin	ting speed/SC865	Prepared by: N.Yoshida	
From: 2nd Tech S	ervice Sect., PP Tech Serv	vice Dept.	
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> <li>Tier 0.5</li> </ul>

### SYMPTOM

SC865 occurs or the printing speed is very slow.

### CAUSE

External vibration is transmitted to the HDD via the HDD bracket.

#### Note:

- Some of the projections on the HDD bracket (circled below) can contact the HDD directly.
- The amount that the printing speed is reduced depends on how much vibration is transmitted to the HDD.



### SOLUTION

Do the **PROCEDURE** below, in order to determine whether the symptom is caused by external vibration. Then, if necessary, apply the **Temporary Solution** or **Permanent Solution**.

# Technical Bulletin

### Reissued: 6-Jan-16

Model: Leo-C1/P1 Da	Date: 21-Dec-15	No.: RD194121a
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### PROCEDURE

1. Compare the printing speeds of **Jobs A** and **B**.

### <u>Job A</u>:

Copier model: Copy any ONE A4/LT original to 40 copies.

Printer model: Print out any PDF or Word file with only ONE A4/LT page to 20 40 copies.

#### Job B:

**Copier** model: Copy any **TWO** A4/LT originals to **40 20** copies in **FC mode** using the **Sorting** feature.

**Printer** model: Print out any PDF or Word file with **TWO** A4/LT pages to 20 copies in **FC mode** using the **Sorting** feature.

2. If Job **B** is **slower than** Job **A** by about 50 to 80%, do the **Temporary Solution** or **Permanent Solution** below.

### **Temporary Solution**

- 1. Check whether the following projections on the bracket are contacting the HDD.
- 2. Bend back the projections that are touching the HDD so that they do not touch it any more.
- 3. Make sure that the gap between the projection(s) and HDD is about 1mm.



### Technical Bulletin

#### Reissued: 6-Jan-16

Model: Leo-C1/P1	Date: 21-Dec-15	No.: RD194121a
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#### **Permanent Solution**

Replace the HDD bracket with P/N: D1365978.

#### **IMPORTANT:**

- 1. Make sure to reinstall the HDDs in the same order they were originally installed. It is recommended to attach a mark (such as a red decal shown below). This makes it easier to remember which HDD is which, and when they were attached.
- 2. Make sure to put the HDD onto a sheet of paper when laying it down. This is because the back of the HDD is electrically sensitive, and may touch the bracket or another HDD.





Model: Leo-C1			Dat	e: 24-Dec-	15	No.: RD194122
Subject: FSM Correction: SP 1131-001, 002, 101 to 250				Prepared	by: J. C	hno
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electrica Transm Other (	ormat al it/rec	tion eive )	<ul> <li>☐ Action</li> <li>⊠ Servic</li> <li>☐ Retrof</li> <li>☐ Tier 2</li> </ul>	required e manual revision it information

Please make the following corrections to your field service manual in this section:

Appendices  $\rightarrow$  3. Appendices: Service Program Mode Tables  $\rightarrow$  Group 1000

### Correction 1

RICOH

		[0 to 1 / 0 / 1 ]
1-131-001	Feed Permit Condition	0: Productivity priority
		1: Fusing quality priority

The settings were described the wrong way around. Correct description is as follows.

- 0: Fusing quality priority
- 1: Productivity mode

#### Correction 2

1 121 002	Ripple Gloss Uneven Mode 0:Off/	[0 to 1 / 1 / 1 ]
1-131-002	1:On	0: Off, 1: On

This is an SP that used to exist in pre-mass production units. Please delete this SP.

RICOH	Techr	PAGE: 2/2	
Model: Leo-C1		Date: 24-Dec-15	No.: RD194122
Correction 3			
1-131-101	Plain:Weight 1	[0 to 3 / 0 / 1 ]	
1-131-102	Plain:Weight 2	[0 to 3 / 0 / 1 ]	
1-131-103	Plain:Weight 3	[0 to 3 / 0 / 1 ]	
1-131-104	Plain:Weight 4	[0 to 3 / 0 / 1 ]	
1-131-105	Plain:Weight 5	[0 to 3 / 0 / 1 ]	
1-131-106	Plain:Weight 6	[0 to 3 / 0 / 1 ]	
1 101 107			

This SP allows the selection of whether or not to continue printing without a pause when switching between FC and Bk within a job. "Suspend" is supposed to optimize the fusing temperature (with a trade-off in productivity).

- 0 : Continue
- 1-3 : Suspend (See Note below.)
- Note: 1-3 will all Suspend; no differences between 1, 2 and 3. The setting was originally given a range from 0 to 3, considering a possible expansion of the feature.

# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1		Date: 15-Jan-16		No.: RD194123		
Subject: Custom paper size disabled for Perfect Binder Interposer				Prepared by: S. Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service r Retrofit ir	quired nanual revision nformation	

### SYMPTOM

Custom paper sizes cannot be programmed for Perfect Binder Interposer trays.

### CAUSE

Firmware bug

The default value of **SP5112-001** (Non-Std. Paper Sel.) was mistakenly set to "0" (Not Permitted).

### SOLUTION

#### **Production line:**

The firmware will be modified so that SP5112-001 is at a value of "1" (Permitted) by default.

Release date: TBA

#### In the field:

Set SP5112-001 to "1" (Permitted).

### PAGE: 1/1

Model: Leo-C1		Date: 10-Feb-16		16	No.: RD194124	
Subject: FSM Correction: SP for CIS LED Output Check				Prepared	by: J. C	hno
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electrica Transm Other (	ormat al it/rec	tion eive )	<ul> <li>☐ Action</li> <li>⊠ Servic</li> <li>☐ Retrof</li> <li>☐ Tier 2</li> </ul>	required e manual revision it information

Please make the following corrections to your field service manual in section:

Appendices  $\rightarrow$  3. Appendices: Service Program Mode Tables  $\rightarrow$  Group 1000

#### Correction 1

RICOH

1913	[CIS LED Adj. Result Display] DFU				
	Displays the result of the adjustment to adjust the level of the CIS LED power (done with SP1912).				
	PWM Duty	[0x00 to 0xAA / 0x3A / 1 ]			

This SP is no longer used, as it was used only on pre-mass production units. The value displayed will always be "3A."

#### Correction 2

1911	[CIS LED Power Adjustment]				
	Adjusts and stores the CIS LED power.				
1-911-001	Red	[1 to 99 / 99 / 1 %]			
1-911-002	Green	[1 to 99 / 99 / 1 %]			
1-911-003	Blue	[1 to 99 / 99 / 1 %]			

SP1911-001, 002, 003 displays the result of the CIS LED power level adjustment performed in SP1912 [CIS LED Power Adjustment].

Note: "5" will frequently appear as the output result, but this is not abnormal.

# Technical Bulletin

Model: Leo-C1		Date: 15-Feb-16		16	No.: RD194125	
Subject: Troubleshooting: Notes on updating the Printer f/w			Prepared by: J. Ohno			
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>☑ Paper path</li> <li>☑ Product Safety</li> </ul>	Part info Electric Transm	ormat al it/rec	tion eive )	Action Servic Retrof Tier 2	n required ce manual revision fit information

### SYMPTOM

If attempting to update the Printer firmware on a Fiery controller driven printer, update fails.

### CAUSE

The printer is set up to use the Fiery controller instead of the GW controller. (Printer firmware is used only for the GW controller).

### SOLUTION

Set the following SPs to "0."

SP 5193-001 [External Controller Info. Settings]

SP-5895-001 [Application invalidation] for Printer

If you attempted to update the Printer firmware without making the above SP setting, the operation panel will display "No Valid Data."

Kara -) KM		Exit(0)
	No Valid Data E3a	Territe and

### NOTE

If the printer is run by the Fiery controller, Printer firmware does not have to be updated.

Model: Leo-C1/P1

**Reissued: 8-Nov-16** 

Date: 15-Feb-16

No.: RD194126b

#### **RTB Reissue**

The item in <i>bold italics</i> was corrected.	
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Subject: Excel SMC analysis file for Leo-C1/P1			Prepared by: A. Tajima	
From: 1st Tech Se				
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> <li>Tier 0.5</li> </ul>	

### Excel SMC analysis file for Leo-C1/P1

#### This RTB announces the update of the excel file for SMC analysis.

The Excel SMC analysis file is used for rendering the SMC data obtained with an SD card with SP5992-001 to make it easier to understand.

You can download the Excel file for SMC analysis from the GKM website Answer ID: 237639 File name: SMC\_Analysis(Pro C7100)\_Ver1.1.xlsm

### How to read SMC data

- 1. Open the excel file.
- 2. Press "Add-Ins" on the tool bar. **Note:** Make sure macros are enabled.
- 3. Press "Read SMC data"
- 4. Open the SMC data directory taken with SP5992-001, and select one of the csv files.

#### Note

It does not matter which one you select. The macro will sort/read all related data automatically as long as they are in the same directory.

G354F770003_5992002_20150518_112611	2015/05/18 11:26	Microsoft I
🕼 G354F770003_5992003_20150518_112635	2015/05/18 11:26	Microsoft I
🕼 G354F770003_5992004_20150518_112639	2015/05/18 11:27	Microsoft I
G354F770003_5992005_20150518_112713	2015/05/18 11:27	Microsoft I
G354F770003_5992006_20150518_112715	2015/05/18 11:27	Microsoft I
G354F770003_5992007_20150518_112726	2015/05/18 11:27	Microsoft I
G354F770003_5992021_20150518_112743	2015/05/18 11:27	Microsoft I
G354F770003_5992022_20150518_112753	2015/05/18 11:27	Microsoft I
G354F770003_5992023_20150518_112753	2015/05/18 11:27	Microsoft I
G354F770003_5992024_20150518_112756	2015/05/18 11:27	Microsoft I
G354F770003_5992025_20150518_112756	2015/05/18 11:27	Microsoft I
🕼 G354F770003_5992026_20150518_112757	2015/05/18 11:27	Microsoft I

5. Macros start processing the SMC data. Wait until the processing finishes.

Reissued: 8-Nov-16

MODEL LEO-C1/P1 Date. 15-Feb-16 INC RD1941260	Model: Leo-C1/P1 D	Date: 15-Feb-16	No.: RD194126b
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# History V1.1

• • • •	
New Feature	
Sheet	History
Firmware&Setting	Added information about which external controller is set.
Counter	Added colors to indicate the PM status of PM parts to improve readability. 0%-70% Green 71%- 95% Orange 95% - More: Red
SC&JAM	Highlighted high incidences of jam codes, preferably based on Jam Ratio.
Engine diagnosis	In process control data, it is indicated using colors (Green, Orange, Red) to show how "healthy" the values are.
Bug Correction	
All sheets	The Total Counter is wrong when double counting is set

# Technical Bulletin

### PAGE: 1/11

Model: Leo-C1/P1 Date: 17-F			eb-16	No.: RD194127		
Subject: Registration Alignment Procedure			Prepared I	by: N yoshida		
From: PP Tech Service Dept., 1st PP Tech Service Sect.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> </ul>	Part Elect Trans	informa rical smit/rec	ition ceive	Action red Service n Retrofit ir	quired nanual revision nformation
	Product Safety	Othe	r (	)	🛛 Tier 2	🗌 Tier 0.5

This bulletin announces the adjustment procedures for each of the following registration problems. To adjust front-and-back (sides 1 and 2) registration, do all of the procedures in order from 1 through 5. It is recommended to use the Custom Media settings.

Registration Problems Illustration		Adjustment Procedure / Note
1. Paper Squareness / Length of the four sides	Side 2 Side 1 [A]: Deviation $\begin{bmatrix} 1\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	See Section 1 of this bulletin on how to measure the squareness and length of the four sides.
2. Image Skew		Skilled Operators Menu #0107
3. Paper Skew		Mechanically adjust the registration gate. See RTB RD777004 for paper skews that occur with banner sheet printing.

RICOH	Technical Bu	ullet	tin	PAGE: 2/11	
Model: Leo-C1/P1		Date: 17-Feb-16		No.: RD194127	
4. Image Magnification	Target Size Actual Size		Custom Media , No. 5-8.	Advanced Settings;	
5. Image Position			Custom Media , No. 1-4. * Adjustable als	Advanced Settings; o in job properties.	

### What you will need

- Fresh pack of A3 or DLT paper
- Precision scaled eye magnifier capable of 0.1mm measurement



10x

Example of a magnifier:

Peak 1983 Scale Loupe 10x

Magnification:

Minimum Scale Division: 0.1 mm

Link to web site:

http://www.peakoptics.com/index.php?main\_page=product\_info&cPath=24&products\_id =12

RICOH	Technical B	PAGE: 3/11	
Model: Leo-C1/P1		Date: 17-Feb-16	No.: RD194127

### **1.** Paper Squareness / Length of the Four Sides

Before doing any registration adjustments, confirm that the squareness of the paper and the length of the four sides of the paper are within target by doing "Measuring the Squareness of Paper-1" and "Measuring the Squareness of Paper-2" described on the following pages.

### NOTE

- Poor cut, expansion and shrinkage of the paper are possible factors that may affect the squareness of paper.
- Confirm that all the lengths [A] through [F] are correct. This will avoid mixing up image skew with paper skew.

If both image skew and paper skew are occurring ([A]=[B] and [C]=[D] and  $[E] \neq [F]$ ), correct the paper skew first so that [E] and [F] become equal, and then correct the image skew.





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### Measuring the Squareness of Paper - 1

### Procedure

1. Pull out the 5th sheet from the top of the ream and the 5th sheet from the bottom of ream.

### NOTE

- Use a fresh pack of A3 or DLT paper.
- > The 5th sheets are used to ensure there are no dog-ear folds on the paper.



2. Flip the sheet (5th from the bottom) so that its Side 2 faces up and place it on top of the other sheet (5th sheet from the top).


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- 3. Align the sides A1-B1 and C2-D2 [3], and corners B1 and C2.
- 4. Measure the distance [2] with the precision scaled eye magnifier. If less than 0.3mm, angle [1] is +/- 0.04 degrees and is within tolerance.



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5. To do the same on the other side, rotate the sheet with Side 2 facing up 180 degrees. Align the sides A1-B1 and B2-A2 [3], and corners B1 and A2 [4], and measure the distance [2] to find out the angle [1].



#### Procedure NOTE:

*Measure the distance [2] with the precision scaled eye magnifier. If less than 0.3mm, angle [1] is +/- 0.04 degrees and is within tolerance.* 

If the angles are within tolerance in both Steps 4 and 5, all four corners are within 90 +/-0.08 degrees. If otherwise, **DO NOT USE** the paper.

**NOTE:** The tolerance of registration misalignment between sides 1 and 2 when all four corners are within 90 +/- 0.08 degrees is 0.6mm at maximum with A3/DLT size paper.

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### Measuring the Squareness of Paper - 2

1. Randomly pull out a sheet of paper [1] from a fresh pack of paper [2].



2. Measure the length of all four sides [1] ~ [4] using a metal scale [5] and precision scaled eye magnifier [6].



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3. Check if the length	ns are +/- 0.1mm against th	ne target size.	
For A3 (420 X	297 mm)		
Sides [1] and [2	2] should <b>both</b> be 420 +/- (	D.1mm.	

Sides [3] and [4] should both be 297 +/- 0.1mm.

For DLT (11" X 17") Sides [1] and [2] should both be 431.8 +/- 0.1mm. Sides [3] and [4] should both be 279.4 +/- 0.1mm.

4. Pick three more sheets randomly from the same ream and repeat the above steps.

### IMPORTANT

Measurements made for all four sheets must be +/- 0.1mm against the target. Otherwise, DO NOT use the paper for front-and-back registration.

### 2. Image Skew

- 1. Go to Skilled Op Menu #0107 [Perpendicularity Adjustment].
- 2. Adjust the value. Increase the value to rotate the image counterclockwise, decrease to rotate clockwise.
- 3. Measure [A], [B] and [E] and do the calculation below to verify if the skew is within the tolerance.

[A] – [B] / ( [E] / 200 ) = +/- 0.2mm

4. Do color registration from [User Tools] > [Maintenance] > [Color Registration].



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### 3. Paper Skew

- -

#### Before making the adjustment

Make sure the squareness of the paper is within the tolerance and measure [A]  $\sim$  [F], to avoid mixing up paper skew with image skew.





### **Procedure**

1. Remove the handle, cover of the right drawer unit, and loosen the bottom screw on the adjusting plate.



2. Move the adjusting plate according to the skew direction. (1 notch on the adjusting plate scale is equivalent to 0.2mm.)

[A] > [B]





4->	0-0	C
Feed Direction		T
++		

3. Measure [A], [B] and [E] and do the following calculation to verify if the skew is within the tolerance: [A] – [B] / ( [E] / 200 ) = +/- 0.2mm



# Technical Bulletin

Model: Leo-C1/P1

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### 4. Image Magnification

Do this procedure when the actual size of the image is slightly smaller or larger than the expected size. The adjustment can be made in the Custom Media settings.





### **Procedure**

- 1. Measure the difference between the actual size and target size.
- 2. Calculate the magnification rate.

Example Target length: 420.0 mm, Actual length: 419.5 mm 420 / 419.5 = 100.12% +0.12% needed.

- 3. Input the calculation result in Custom Media Advanced Setting #5 or #6 or #7 or #8 depending on where the adjustment is needed. The value can be increased/decreased by 0.025%.
  - #5: Side 1, Magnification in main scan direction
  - #6: Side 2, Magnification in main scan direction
  - #7: Side 1, Magnification in sub scan direction
  - #8: Side 2, Magnification in sub scan direction



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### 5. Image Position

In Custom Media Advanced Setting, input the adjustment value for the side and direction that requires the image position adjustment.

- #1: Side 1, Image Position in main scan direction
- #2: Side 2, Image Position in main scan direction
- #3: Side 1, Image Position in sub scan direction
- #4: Side 2, Image Position in sub scan direction



### **APPENDIX-1:**

See RTB #RM205021, pages 6~8, for procedure on "Using the Template to Align the Image Positions on Sides 1 and 2." This will automatically apply the optimum values in Advanced Setting #1 through #8.





Model: Andromeda-P1

Date: 30-Apr-15 N

No.: RM205021

Subject: Manual Correction: Image Adjustment procedure		Prepared	by: Hiroaki H Matsui	
From: PP Tech Se	rvice Dept., 1st PP Tech Servi	ce Sect.		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part information Electrical Transmit/rec Other (	tion eive )	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> </ul>

### **Service Manual Correction**

Please add the Image Adjustment procedure described in this bulletin to the "4. Replacement and Adjustment" section.

# Image Adjustment

### Adjusting the Image Position on Side 1

<If custom paper is used>
 Perform the solution described in "(a) Adjust the image skew", "(b) Adjust the image position (If custom paper is used)", "(c) Adjust the magnification (Across feed direction)" and then "(d) Adjust the magnification (With feed direction)".

#### <If custom paper is not used>

Perform the solution described in "(a) Adjust the image skew", "(e) Adjust the image position (If custom paper is not used)".

• Note

- You cannot adjust the vertical magnification and horizontal magnification of all types of paper other than custom paper. Therefore, it is recommended to preregister the type of paper in use as a custom paper.
- If it is difficult to check and adjust the image position on the printed sheet, print one side of the format used in "Aligning the Image Position on Side 2 to That on Side 1 (Using a Template to Align the Image Position on Side 1 and 2)".
- (a) Adjust the image skew
   Adjust the vertical position of the print image.



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STEP1 **Print the image in black and white.** 

STEP2 Check the direction of the skew.

- STEP3 In the 01: [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, select 0107: [Perpendicularity Adjustment] and adjust the value. Move the cursor to [+] to skew the image counterclockwise or to [-] to skew it clockwise.
- STEP4 Print the image in black and white. Check the image skew. If the problem persists, increase the value slightly.
- STEP5 Execute color registration.

Press [User Tools] key, and then press [Maintenance] > [Color Registration]. Press [OK] to execute color registration. In executing color registration, the black adjustment will also be applied to cyan, magenta, and yellow.

Note

 In 0107: [Perpendicularity Adjustment], you cannot individually adjust the image position on sides 1 and 2.

#### • (b) Adjust the image position (If custom paper is used)

Adjust the vertical and horizontal image position so that the center (A) of the leading edge of the image is aligned to the registration mark.



In [Advanced Settings] for the custom paper, adjust the image position.

- 001: [Adj Image Position of Side1 Across Feed]
- 003: [Adj Image Position of Side1 With Feed]

#### • (c) Adjust the magnification (Across feed direction)

Adjust the horizontal magnification to adjust the width between the front (B) and back corners (B) on the leading edge of the image.



Model: Andromeda-P1



In [Advanced Settings] for the custom paper, adjust the value in 005: [Adj Magnification of Side1 Across Feed].

Press [+] to increase the scaling and [-] to reduce it.

 (d) Adjust the magnification (With feed direction) Adjust the vertical magnification to adjust the length (position of (C)) of the image.



In [Advanced Settings] for the custom paper, adjust the value in 007: [Adj Magnification of Side1 With Feed].

Press [+] to increase the scaling and [-] to reduce it.

(e) Adjust the image position (If custom paper is not used)

Adjust the vertical and horizontal image position so that the center (A) of the leading edge of the image is aligned to the registration mark.



In the 01: [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, adjust the image position.

- 0101: [Adjust Image Position Across Feed Direction]
- 0102: [Adjust Image Position With Feed Direction]

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RICOH

Date: 30-Apr-15

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### Adjusting the Image Position on Side 2

If you want to align an image position on Side 2 to an image position on Side 1 that has been adjusted, see "Aligning the Image Position on Side 2 to That on Side 1 (Using a Template to Align the Image Position on Side 1 and 2)".

# <If custom paper is used> Perform the solution described in "(a) Adjust the image skew", "(b) Adjust the image position (If custom paper is used)", "(c) Adjust the magnification (Across feed direction)" and then "(d) Adjust the magnification (With feed direction)".

#### <If custom paper is not used>

Perform the solution described in "(a) Adjust the image skew", "(e) Adjust the image position (If custom paper is not used)"

U Note

- You cannot adjust the vertical magnification and horizontal magnification of all types of paper other than custom paper. Therefore, it is recommended to pre-register the type of paper in use as a custom paper.
- If it is difficult to check and adjust the image position on the printed sheet, print one side of the format used in "Aligning the Image Position on Side 2 to That on Side 1 (Using a Template to Align the Image Position on Side 1 and 2)".

### • (a) Adjust the image skew

Adjust the vertical position of the print image.



STEP1 **Print the image in black and white.** 

- STEP2 Check the direction of the skew.
- STEP3 In the 01: [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, select 0107: [Perpendicularity Adjustment] and adjust the value. Move the cursor to [+] to skew the image counterclockwise or to [-] to skew it clockwise.
- STEP4 **Print the image in black and white. Check the image skew. If the problem persists, increase the value slightly.**

STEP5 Execute color registration.

Press [User Tools] key, and then press [Maintenance] > [Color Registration]. Press [OK] to execute color registration. In executing color registration, the black adjustment will also be applied to cyan, magenta, and yellow.

Note

 In 0107: [Perpendicularity Adjustment], you cannot individually adjust the image position on sides 1 and 2.

(b) Adjust the image position (If custom paper is used)

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Adjust the vertical and horizontal image position so that the center (A) of the leading edge of the image is aligned to the registration mark.



In [Advanced Settings] for the custom paper, adjust the image position.

- 002: [Adj Image Position of Side2 Across Feed]
- 004: [Adj Image Position of Side2 With Feed]

#### (c) Adjust the magnification (Across feed direction)

Adjust the horizontal magnification to adjust the width between the front (B) and back corners (B) on the leading edge of the image.



In [Advanced Settings] for the custom paper, select 006: [Adj Magnification of Side2 Across Feed].

Press [+] to increase the scaling and [-] to reduce it.

#### • (d) Adjust the magnification (With feed direction)

Adjust the vertical magnification to adjust the length (position of (C)) of the image.



In [Advanced Settings] for the custom paper, select 008: [Adj Magnification of Side2 With Feed].

Press [+] to increase the scaling and [-] to reduce it.

RICOH
Model: Andromeda-P

|--|

Ddel: Andromeda-P1	Date: 30-Apr-15	No.: RM205021

#### • (e) Adjust the image position (If custom paper is not used)

Adjust the vertical and horizontal image position so that the center (A) of the leading edge of the image is aligned to the registration mark.



In the 01: [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, adjust the image position.

- 0101: [Adjust Image Position Across Feed Direction]
- 0102: [Adjust Image Position With Feed Direction]

Aligning the Image Position on Side 2 to That on Side 1 (Using a Template to Align the Image Position on Side 1 and 2)

This section explains how to adjust settings so that images on both sides are aligned using duplex printing.

First, print the format and measure the length of specified parts. By specifying the measured length on the machine, you can adjust the image position automatically. It is necessary to specify the settings for each paper size being used. The adjusted settings are stored as custom paper presets and can be applied again in the future. To adjust the image position, the machine administrator privilege is required.

#### Preparation

Before adjusting image positions, perform the following:

1. Prepare the template file.

The templates for each paper size are included as PDF file on the CD-ROM provided with this machine.

• Paper size of PDF file templates

A3 SEF, A4 SEF/LEF, B4 SEF, B5 SEF/LEF, DLT SEF, Legal SEF, Letter SEF/LEF, Government LG SEF, 8K SEF, 16K SEF/LEF, 12×18 SEF, 13×19.2 SEF, 13×19 SEF, 13×18 SEF, SRA3 SEF, SRA4 SEF/LEF

- Unsupported paper types
  - Index paper, tracing paper, label paper, envelope, magnet paper, clear file
  - No restrictions for paper thickness
- 2. Prepare a 500 mm or longer stainless steel ruler (with the scale in 0.5 mm) and magnifier (for measuring the format)
- 3. Adjust the image position on Side 1. For details about adjusting the position, see "Adjusting the Image Position on Side 1".

Technical Bulletir
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Model: Andromeda-P1	Date: 30-Apr-15	No.: RM205021
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- To adjust the following settings, pre-register the type of paper in use as a custom paper. In [Advanced Settings] for the custom paper, set the value in the following settings to "0.000".
  - 002: [Adj Image Position of Side2 Across Feed]
  - 004: [Adj Image Position of Side2 With Feed]
  - 006: [Adj Magnification of Side2 Across Feed]
  - 008: [Adj Magnification of Side2 With Feed]

#### Printing and Measuring the Format

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STEP1 Using the computer and the machine, print the format matching the size of the paper requiring image position adjustment.

Continuously print the format on both sides of 10 sheets.

# STEP2 Measure the length of specified parts on the 6th sheet among the printed copies of the format.

The format has arrows on 4 corners.

Using the ruler and magnifier, measure the length between each corner of the paper and the top of its adjoining arrow, and the length between the top of arrows with the scale in 0.1 mm.



- **1.** Length between the top of each arrow
- 2. Length between each corner and the top of its adjoining arrow
- 3. Length between the top of each arrow
- 4. Length between each corner and the top of its adjoining arrow
- 5. Length between each corner and the top of its adjoining arrow
- 6. Length between the top of each arrow
- 7. Length between each corner and the top of its adjoining arrow 8. Length between the top of each arrow
- STEP3 Write the measured value within the framework of the format.

In total (including both sides of the sheet), measure the position of 16 parts.

 Depending on the paper size, the paper transport interval for the first 3-4 sheets and the last 3-4 sheets may differ from the middle sheets when performing continuous duplex printing. This causes discrepancy in the extent of thermal contraction for paper. Therefore, we recommend measuring the middle sheets when adjusting front/back register for which continuous printing may be performed. (When printing 10 sheets, the 6th sheet is considered as the final middle sheet.)



Model:	Andromeda-P1
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Entering the Value

When you specify the lengths of the template after measuring them, the values to adjust the image position are automatically calculated and applied.

STEP1 In [Advanced Settings] for the custom paper, select [Registration to Align Front and Back Images Using Template].

#### STEP2 Enter the value you wrote on the printed template.

Select the item, enter the value using the number keys, and then press [#]. You can enter values from 0.1 to 999.9 mm in 0.1-mm increments.



STEP3 Press [OK].

- STEP4 Press [Exit].
- STEP5 Press [OK].
- STEP6 Press [Overwrite].
- STEP7 Press [Yes].
- STEP8 Press [Exit].

#### **Checking Adjusted Results**

STEP1 Print the file of the format matching the size of the paper requiring image position adjustment. Continuously print the format on both sides of 10 sheets.

- STEP2 Using the 6th sheet among the printed copies, check whether any misregistration occurs on the front and back of the paper.
  - When using thin paper, check for misregistration by seeing through the paper.
  - When using thick paper or paper that cannot be seen through, pierce the paper with a tool such as an eyeleteer and check for misregistration.

Eliminating misregistrations on the front and back of the paper

Adjust the image position and magnification on Side 2 to match those on Side 1.

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#### Adjustment Method

STEP1 Print the file of the format matching the size of the paper requiring image position adjustment. Continuously print the format on both sides of 10 sheets. Use the 6th sheet among the printed copies for adjustment.

STEP2 Through visual inspection of the 4th, 5th, and 6th sheets, check that misregistrations on Side 1 and 2 are almost the same.

If not, adjust the misregistrations according to the usual method.

- STEP3 In [Advanced Settings] for the registered custom paper preset, adjust the following settings to match the image position on Side 1.
  - 002: [Adj Image Position of Side2 Across Feed]
  - 004: [Adj Image Position of Side2 With Feed]
  - 006: [Adj Magnification of Side2 Across Feed]
  - 008: [Adj Magnification of Side2 With Feed]
- Adjusting the image position in the vertical and paper feed directions
   <Across feed direction>

Adjusting the center line [A] on Side 2 to match the center line [B] on Side 1



In [Advanced Settings] for the custom paper, select 002: [Adj Image Position of Side2 Across Feed].

Press [+] to shift the image to the top.

Press [-] to shift the image to the bottom.



<With feed direction>

Adjusting the image [A] on the leading edge of the paper on Side 2 to match the corresponding image [B] on Side 1



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In [Advanced Settings] for the custom paper, select 004: [Adj Image Position of Side2 With Feed].

Press [+] to shift the image to the left (trailing edge).

Press [-] to shift the image to the right (leading edge).



# Adjusting magnification in the vertical and paper feed directions <Across feed direction>

Adjusting magnification to match the length between the arrows [A] on the leading edge of the paper on Side 2 to the length between the arrows [B] on Side 1



In [Advanced Settings] for the custom paper, select 006: [Adj Magnification of Side2 Across Feed].



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Model: Andromeda-P1	
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Press [+] to increase the scaling.

Press [-] to reduce the scaling.

The adjustment value is applied evenly both upward and downward.

To feed A3 paper with its short side parallel to the paper feed direction, increase the value by 0.025 percentage point to move the image by approximately 0.1 mm (0.004 inches).



<With feed direction>

Adjusting magnification to match the position of the arrow [A] on the trailing edge of the paper on Side 2 to the position of the arrow [B] on Side 1



In [Advanced Settings] for the custom paper, select 008: [Adj Magnification of Side2 With Feed].

Press [+] to increase the scaling.

Press [-] to reduce the scaling.

To feed A3 paper with its long side parallel to the paper feed direction, increase the value by 0.025 percentage point to move the image by approximately 0.07 mm (0.0028 inches).



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Model: Andromeda-P1

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When to check for misregistrations on the front and back of the paper

Check for misregistrations on the front and back of the paper when:

- Using paper of a different lot, means of acquisition, or storage condition
- Changing an advanced fusing settings
- The machine's ambient temperature has changed drastically. For instance, the machine's adjustment values and settings are checked in summer while the machine is used in winter)
- Changing the paper size in a custom paper preset
- Registering a custom paper preset based on an already registered custom paper preset

# Technical Bulletin

Model: Leo-C1/P1		Date: 22-M	1ar-16	No.: RD194128	
Subject: Manual Correction: Developer Replacement Procedure					by: A. Tajima
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/re</li> <li>Other (</li> </ul>	nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

# Please replace the developer replacement procedure described in the following section of the field service manual with the procedure provided in this bulletin.

Replacement and Adjustments > Photoconductor Development Unit (PCDU) > Replacing Developer > Removing Old Developer

This is because following the current procedure may contaminate the bearing of the development roller and cause the image quality issue known as 'banding'.

### Procedure

- 1. Pull out the Development unit.
- 2. Remove the Developer supply port cover [A].



d074e100a 3. Disconnect the front cover [A]. (screw x3)



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Model: Leo-C1/P1

4. Remove the front cover [B] while you press down the PCDU lock [A].



- 5. Disconnect the entrance seal [A]. (screw x3)
- 6. Remove the entrance seal [B].





Remove the Developer supply port [A]. 7.

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- 8. Spread some paper or plastic to catch the old developer.
- 9. Face the development roller upward.



- 10. Hold the development unit as shown over the paper with the port facing down, and rotate the transport coil with the developer replacement jig (p/n: D1943396) to pour out the old developer.
  - DO NOT tilt the unit over 45 degrees.
  - DO NOT rotate the development roller. Rotate only the transport coil.



# Technical Bulletin

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11. Place the development unit on a flat surface and rotate the development roller with the developer replacement jig counterclockwise 5 to 10 times to remove loose developer.



- 12. Repeat Steps 9 11 several times to remove old developer. Move on to Step 13 when loose developer becomes hardly visible.
- 13. Slightly rotate the development roller (clockwise) to loosen the developer inside the sleeve.



- 14. As you continue to rotate the roller, use a vacuum cleaner to clean all the developer from the top of the sleeve.
- 15. Re-assemble the PCDU and install it in the machine.
- 16. Reset the PM counter of the replaced developer.



Model: Leo-C1/P1

Date: 31-Mar-16

No.: RD194129a

#### **RTB Reissue**

The item in *bold italics* were added.

Subject: "Manual ( Codes	Correction" SP3012 / SP30	Prepared by: A. Tajima	
From: 1st Tech Se	rvice Sect., PP Tech Servic		
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> <li>Tier 0.5</li> </ul>

Please add the following detailed information on Process Control result codes to your FSM in section:

Appendices > 3. Appendices: SP Mode Tables>Group 3000(1/3) > SP3012, SP3013

#### Not executed

Code	Result	Cause	Solution
00	Not executed (Factory default setting)	-	-

#### Success

Code	Result	Cause	Solution
11	Successful	-	-

#### **Potential Sensor related errors**

Code	Result	Cause	Solution
15	Vd detection error: Upper Limit	Vd is exceeding the upper limit of -950V.	<ol> <li>Disconnect and then connect the potential sensor harness connected to the potential sensor board.</li> <li>Clean the potential sensor with blower brush.</li> <li>Replace the potential sensor.</li> </ol>
16	Vd detection error: Lower Limit	Vd is below the lower limit of -50V.	<ol> <li>Disconnect and then connect the harness connecting the mainframe with the potential sensor board and the harness connected to the IOB.</li> <li>Replace the potential sensor board.</li> </ol>



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### **ID Sensor related errors**

Code	Result	Cause		Solution
21	ID Sensor Vsg adjustment error	Vsg_reg is not within the target range of 4.0±0.5V.	1.	Clean the windows of the TM and ID sensors with a cloth moistened with
22	ID Sensor LED adjustment error	Ifsg is greater than 27mA.	2.	alconol. <u>DO NOT clean with dry cloth.</u> Dry cloth may generate static and attract dust. Replace the TM and ID sensors.
23	ID Sensor output error (Positive reflect)	Vsg_reg is less than 0.5V.	1. 2.	Confirm proper connections of the TM and ID sensors. Replace the TM and ID sensors.
25	ID Sensor offset voltage error (Positive reflect)	Voffset_reg is greater than 0.05 [V]	1. 2.	Confirm proper connections of the TM and ID sensors. Replace the TM and ID sensors.
26	ID Sensor offset voltage error (diffuse reflect)	Voffset_dif is greater than 0.05 [V]	1. 2.	Confirm proper connections of the TM and ID sensors. Replace the TM and ID sensors.

#### **TD Sensor related errors**

Code	Result	Cause	Solution
41	Vt error: Upper Limit	Vt is exceeding the upper limit of 4.7V.	<ol> <li>Check the sub hopper connecter. If connector has problem, do SP3-050 - 001~006 (Forced Toner Supply) and then SP3-011-002 (Density Adjustment Process Control).</li> <li>Check the TD sensor connector. If SP3- 011-002 (Density Adjustment Process Control).</li> <li>If the result code still reoccurs, replace the development unit.</li> </ol>
42	Vt error: Lower Limit	Vt is below the lower limit of 0.5V.	<ol> <li>Check the TD sensor connector. If SP3- 011-002 (Density Adjustment Process Control).</li> <li>If the result code still reoccurs, replace the development unit.</li> </ol>



Model: Leo-C1/P1					Date: 31-Mar-16	No.: RD194129a
43	TD sensor error (Upper Limit)	Development gamma is within the target range of 0.5 ~ 2.0, but Vt is exceeding the upper limit of 4.7V.	1. C 0 2. If	<ol> <li>Check the TD sensor connector. If SI 011-002 (Density Adjustment Proces Control).</li> <li>If the result code still reoccurs, replace development unit.</li> </ol>		nnector. If SP3- nent Process ccurs, replace the
44	TD sensor error (Lower Limit)	Development gamma is within the target range of 0.5 ~ 2.0, but Vt is below the lower limit of 0.5V.	1. 2.	( ;       	Check the TD sensor SP3-011-002 (Densit Process Control). IF the result code still the development unit	connector. If y Adjustment reoccurs, replace

#### Patch pattern detection related errors

Code	Result	Cause		Solution
52	K5 error (Upper Limit)	<i>K5 is greater than 3.5 [-]</i>	1. 2. 3. 4.	Clean the windows of the TM and ID sensors with a cloth moistened with alcohol. <u>DO NOT clean with dry cloth.</u> Dry cloth may generate static and attract dust. Do SP3-011-002 (Density Adjustment Process Control). Do SP-062-001 (Manual Toner Refresh) Note: Maximum three times Replace the TM and ID sensors.
53	K5 error (Lower Limit)	K5 is less than 0.5 [-]	1. 2. 3. 4.	Clean the windows of the TM and ID sensors with a cloth moistened with alcohol. <u>DO NOT clean with dry cloth.</u> Dry cloth may generate static and attract dust. Do SP3-011-002 (Density Adjustment Process Control). Do SP-062-001 (Manual Toner Refresh) Note: Maximum three times Replace the TM and ID sensors.
55	Development gamma error (Upper Limit)	Development gamma is exceeding the upper limit of 6.0 [mg/cm <sup>2</sup> /- kV].	1. 2.	Do SP3-011-002 (Density Adjustment Process Control). Do SP-062-001 (Manual Toner Refresh) Note: Maximum three times



Model: Leo-C1/P1				Date: 31-Mar-16	No.: RD194129a
56	Development gamma error (Lower Limit)	Development gamma is below the lower limit of 0.3 [mg/cm²/-kV].	1. 2. 3.	Reset PCDU and do SP3 Adjustment Process Con Check the coupling of de there is problem, reset de and do SP3-011-002 (De Process Control). Do SP-062-001 (Manual Note: Maximum three tim	3-011-002 (Density trol). velopment unit. If evelopment unit nsity Adjustment Toner Refresh) ies
57	Development start voltage: Vk error (Upper Limit)	Development start voltage is exceeding the upper limit of 300V.			
58	Development start voltage: Vk error (Lower Limit)	Development start voltage is below the lower limit of -300V.	1.	Do SP3-011-002 (Densi Process Control). Do SP-062-001 (Manua	ity Adjustment
59	Insufficient active data	Not enough active data to calculate development gamma. At least 2 points are needed for gamma correction.	2.	Note: Maximum three ti	mes



Model: Leo-C1/P1

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### Potential adjustment related errors

Code	Result	Cause	Solution
61	LD failure	LD failed to fire and write the ID sensor pattern.	<ol> <li>Clean the dust shield glass of the laser unit with a blower brush.</li> </ol>
62	Residual potential: Vr error	Vr is greater than -200V.	<ol> <li>Swap the drum with an unaffected drum and do SP3-011-001 (normal Process Control).         <ol> <li>i) If the error occurs with a different color, the drum is affected. Replace the drum.</li> <li>ii) If the error occurs with the same color, clean the potential sensor with a blower brush.</li> </ol> </li> <li>Replace the potential sensor.</li> </ol>
63	Electrified potential: Vd adjustment error	Vd could not be adjusted within ±8V.	<ol> <li>Do SP3-020-001 (Process Setup) x3</li> <li>Do the troubleshooting procedure for the 189 mm interval banding. Please refer to FSM Troubleshooting how to troubleshooting.</li> </ol>
64	Exposure potential: Vpl adjustment error	Vpl could not be adjusted within ±5V.	<ol> <li>Do SP3-020-001 (Process Setup) x3</li> <li>Do the troubleshooting procedure for the 189 mm interval banding. Please refer to FSM Troubleshooting how to troubleshooting.</li> </ol>

#### **Forced termination**

Code	Result	Cause	Solution
99	Forced termination	Process Control was forcefully terminated by door open or power OFF or other interfering problem.	-

# Technical Bulletin

**PAGE: 1/3** 

Model: Leo-C1/P1		Date: 25-A	vpr-16	No.: RD194130	
Subject: Manual C	orrection: Procedure of Rep	Prepared	by: Akihiro Tajima		
From: 1st Tech Se	rvice Sect., PP Tech Servic	e Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/re</li> <li>Other (</li> </ul>	nation eceive )	<ul> <li>☐ Action re</li> <li>⊠ Service n</li> <li>☐ Retrofit in</li> <li>⊠ Tier 2</li> </ul>	quired nanual revision nformation

Please add to your field service manual the procedure of replacing the Drive Roller, after the following section:

Replacement and Adjustments > ITB Drive Motor

**NOTE:** For the procedure required before replacing the drive roller, refer to RTB No. RD074049 'Procedure for Replacing the Encoder Shaft.'

#### **Drive Roller**



[A]: Drive Roller

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Model: Leo-C1/P1	

Date: 25-Apr-16

No.: RD194130

### How to Replace the Drive Roller

- **NOTE:** Photos shown in the following instructions are taken from the rear side of the ITB unit.
- 1. Remove the drum stay [A]. (screw x3)



2. Remove the gear [A].





3. Remove the housing drive [A]. (screw x3)



4. Remove the drive roller [A].



5. Follow the above steps in reverse order to install the new drive roller.

# Technical Bulletin

Reissued:11-Jun-12

Model: Taurus-C1a/C1b (D074/D075)	Date: 29-Feb-12	No.: RD074049a

#### **RTB Reissue**

The numbers of the steps were corrected and a photograph was deleted.					
Subject: Procedure for Replacing the Encoder Shaft		Prepared by: Shinnosuke Sasaki			
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	ssification: Troubleshooting Part informatic		tion	Action required	
	Mechanical	Electrical		Service manual revision	
	Paper path	Transmit/receive		Retrofit information	
	Product Safety	🗌 Other (	)	🛛 Tier 2	

Please add the following procedure for replacing the Encoder Shaft to your Taurus service manual.

## **Overview of the Encoder**



- Encoder shaft [A]
- The encoder is installed in the housing [B].

# Technical Bulletin

Reissued:11-Jun-12

Model: Taurus-C1a/C1b (D074/D075)

Date: 29-Feb-12 No

No.: RD074049a

## Procedure for Replacing the Encoder Shaft.

Preparation



1. Pull out the ITB unit to the second position according to the service manual in the section: 4. Replacement and Adjustments > Common Procedures > Pulling Out the ITB Unit > 2nd Stop Position

The encoder shaft [A] can be reached in this position.

# Technical Bulletin

### Reissued:11-Jun-12

Model: Taurus-C1a/C1b (D074/D075)	Date: 29-Feb-12	No.: RD074049a
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Note



If possible, remove the entire ITB unit from the mainframe because it will be easier to perform the procedure. In this case, the unit should be supported by its shafts [A].

# Technical Bulletin

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### Reissued:11-Jun-12

Model: Taurus-C1a/C1b (D074/D075)	Date: 29-Feb-12	No.: RD074049a

### **Procedure**



2. Remove the 4 pins [A] on the housing.



*3.* Disconnect the harness [A] and pull out the boards [B] in the direction indicated with the arrows. The harnesses on [B] do not have to be disconnected because the boards can be detached from the housing.

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### RICOH Reissued:11-Jun-12

Model: Taurus-C1a/C1b (D074/D075)	Date: 29-Feb-12	No.: RD074049a
	[4]	
	[A]	

4. Remove the housing [A]. (Screw x1)



5. Remove the rubber [A], the encoder [B] and the encoder plate[C]. Work carefully to avoid damaging the encoder.



6. Unscrew the shaft [A]. Hold the motor when you unscrew to prevent the shaft from slipping.

Note: Make sure to fasten the shaft securely with a wrench when reinstalling the shaft.
Reissued:11-Jun-12

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Model: Taurus-C1a/C1b (D074/D075)	Date: 29-Feb-12	No.: RD074049a
	[A]	

7. Remove the shaft [A]



#### Installation

Follow the above procedure in the reverse order.

#### Note

When installing the encoder shaft, make sure to fasten the shaft with a wrench until the shaft locks. Do not further fasten after the shaft locks because doing so will cause the shaft to lose its grip.

#### Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1		Date: 9-Ma	ay16 No.: RD194131							
Subject: Troublest	nooting black paper not dete		Prepared I	oy: S. Sasaki						
From: 1st Tech Service Sect., PP Tech Service Dept.										
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action red Service n Retrofit ir	quired nanual revision nformation Tier 0.5					

#### **SYMPTOM**

Some types of black paper are not detected by the Vacuum Feed LCIT.

#### CAUSE

With some types of black paper, not enough light is reflected off the surface for the sensor to read.

#### SOLUTION

- Try loading the paper in the opposite feed direction (for example, SEF instead of LEF).
- If this does not solve the issue, contact your sales team and request that they issue a • customization request.

Note: As a customization, a sensor with higher sensitivity can be provided.

**IMPORTANT:** Do not change the height of the sensor. This will cause jams to occur more frequently.



#### Technical Bulletin

PAGE: 1/32

Model: Leo-C1/P1		/lay-16	No.: RD194132		
Subject: Corresponent and SP Mode	ndence Table for Adjustmer	Operators	Prepared	by: A. Tajima	
From: 1st Tech Se	rvice Sect., PP Tech Service	e Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> <li>Paper Date</li> </ul>		Action re Service n Retrofit ir	quired nanual revision nformation Tier 0.5

# Correspondence Table for Adjustment Settings for Operators and SP Mode

The correspondence table for Adjustment Settings for Operators and SP settings is as follows.

Adjustment Settings for operators			SP mode			
Adjustmen Settings fo operators	t Adjustm r Settings Skilled operato	nent s for rs		SP No.		
	0101	01	[Adjust Image Position Across Feed Direction]	1-003-001	[Side-to-Side Reg]	Tray1
		02	[Adjust Image Position Across Feed Direction]	1-003-002	[Side-to-Side Reg]	Tray2
		03	[Adjust Image Position Across Feed Direction]	1-003-003	[Side-to-Side Reg]	Duplex Tray
		04	[Adjust Image Position Across Feed Direction]	1-003-004	[Side-to-Side Reg]	3-Tray LCT Tray1
		05	[Adjust Image Position Across Feed Direction]	1-003-005	[Side-to-Side Reg]	3-Tray LCT Tray2
		06	[Adjust Image Position Across Feed Direction]	1-003-006	[Side-to-Side Reg]	3-Tray LCT Tray3
		07	[Adjust Image Position Across Feed Direction]	1-003-007	[Side-to-Side Reg]	Bypass Tray
		08	[Adjust Image Position Across Feed Direction]	1-003-008	[Side-to-Side Reg]	2-Tray LCT_1 Tray1
		09	[Adjust Image Position Across Feed Direction]	1-003-009	[Side-to-Side Reg]	2-Tray LCT_1 Tray2
		10	[Adjust Image Position Across Feed Direction]	1-003-010	[Side-to-Side Reg]	2-Tray LCT_2 Tray1



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Model:	Leo-C1/P1				Da	ate: 11-May-16	No.: RD194132
		11	[Adjust Image Position Across Feed Direction]	1-003-0	11	[Side-to-Side Reg]	2-Tray LCT_2 Tray2
		12	[Adjust Image Position Across Feed Direction]	1-003-0	12	[Side-to-Side Reg]	2-Tray LCT_3 Tray1
		13	[Adjust Image Position Across Feed Direction]	1-003-0	13	[Side-to-Side Reg]	2-Tray LCT_3 Tray2
	0102	01	[Adjust Image Position With Feed Direction]	1-001-00	01	[Lead Edge Reg]	Thick 1
		02	[Adjust Image Position With Feed Direction]	1-001-00	02	[Lead Edge Reg]	Thick 2
		03	[Adjust Image Position With Feed Direction]	1-001-00	03	[Lead Edge Reg]	Thick 3
		04	[Adjust Image Position With Feed Direction]	1-001-00	04	[Lead Edge Reg]	Thick 4
		05	[Adjust Image Position With Feed Direction]	1-001-00	05	[Lead Edge Reg]	Thick 5
		06	[Adjust Image Position With Feed Direction]	1-001-00	06	[Lead Edge Reg]	Thick 6
		07	[Adjust Image Position With Feed Direction]	1-001-00	07	[Lead Edge Reg]	Thick 7
		08	[Adjust Image Position With Feed Direction]	1-001-00	08	[Lead Edge Reg]	Thick 8
	0103	01	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	01	[Side-to-Side Reg Disable]	Tray1 (0:Off 1:On)
		02	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	02	[Side-to-Side Reg Disable]	Tray2 (0:Off 1:On)
		03	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	03	[Side-to-Side Reg Disable]	Dupx Tray (0:Off 1:On)
		04	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	04	[Side-to-Side Reg Disable]	3-Tray LCT Tray1 (0:Off 1:On)
		05	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	05	[Side-to-Side Reg Disable]	3-Tray LCT Tray2 (0:Off 1:On)
		06	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	06	[Side-to-Side Reg Disable]	3-Tray LCT Tray3 (0:Off 1:On)
		07	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	07	[Side-to-Side Reg Disable]	Bypass Tray (0:Off 1:On)



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			08	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	)8 [Side-to-Side Reg Disable]	2-Tray LCT_1 Tray1 (0:Off 1:On)
			09	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-00	)9 [Side-to-Side Reg Disable]	2-Tray LCT_1 Tray2 (0:Off 1:On)
			10	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-0	0 [Side-to-Side Reg Disable]	2-Tray LCT_2 Tray1 (0:Off 1:On)
			11	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-0	1 [Side-to-Side Reg Disable]	2-Tray LCT_2 Tray2 (0:Off 1:On)
			12	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-0	2 [Side-to-Side Reg Disable]	2-Tray LCT_3 Tray1 (0:Off 1:On)
			13	[Deactivate Image Position Adjustment Across Feed Dir]	1-917-01	3 [Side-to-Side Reg Disable]	2-Tray LCT_3 Tray2 (0:Off 1:On)
0104	01	0104	01	[Skew Detection]	1-021-00	01 [Skew Detect]	Tray1 (0:Off 1:On)
	02		02	[Skew Detection]	1-021-00	02 [Skew Detect]	Trav2 (0:Off 1:On)
	03		03	[Skew Detection]	1-021-00	)3 [Skew Detect]	Duplex Tray (0:Off 1:On)
	04		04	[Skew Detection]	1-021-00	)4 [Skew Detect]	A3LCT Tray3 (0:Off 1:On)
	05		05	[Skew Detection]	1-021-00	)5 [Skew Detect]	A3LCT Tray4 (0:Off 1:On)
	06		06	[Skew Detection]	1-021-00	)6 [Skew Detect]	A3LCT Tray5 (0:Off 1:On)
	07		07	[Skew Detection]	1-021-00	)7 [Skew Detect]	Bypass Tray (0:Off 1:On)
	08		08	[Skew Detection]	1-021-00	)8 [Skew Detect]	3-Tray LCT 1: Tray 3 (0:Off 1: <u>On)</u>
	09		09	[Skew Detection]	1-021-00	)9 [Skew Detect]	3-Tray LCT 1: Tray 4 (0:Off 1:On)
	10		10	[Skew Detection]	1-021-0	0 [Skew Detect]	3-Tray LCT 2: Tray 5 (0:Off 1:On)
	11		11	[Skew Detection]	1-021-0	1 [Skew Detect]	3-Tray LCT 2: Tray 6 (0:Off 1:On)
	12		12	[Skew Detection]	1-021-0	2 [Skew Detect]	3-Tray LCT 3: Tray 7 (0:Off 1:On)
	13		13	[Skew Detection]	1-021-0	3 [Skew Detect]	3-Tray LCT 3: Tray 8 (0:Off 1:On)
		0105	01	[Skew Detection Level]	1-116-00	)1 [Skew Correction Level Setting]	Tray1
			02	[Skew Detection Level]	1-116-00	2 [Skew Correction Level Setting]	Tray2
			03	[Skew Detection Level]	1-116-00	)3 [Skew Correction Level Setting]	Duplex Tray

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Model	: Leo-	C1/P1			D	ate: 11-May-16	No.: RD194132
			04	[Skew Detection	1-116-004	[Skew Correction	A3LCT Tray3
			05	[Skew Detection Level]	1-116-005	[Skew Correction Level Setting]	A3LCT Tray4
			06	[Skew Detection Level]	1-116-006	[Skew Correction Level Settina]	A3LCT Tray5
			07	[Skew Detection Level]	1-116-007	[Skew Correction Level Settina]	Bypass Tray
			08	[Skew Detection Level]	1-116-008	[Skew Correction Level Setting]	LCT 1: Tray 3
			09	[Skew Detection Level]	1-116-009	[Skew Correction Level Setting]	LCT 1: Tray 4
			10	[Skew Detection Level]	1-116-010	[Skew Correction Level Setting]	LCT 2: Tray 5
			11	[Skew Detection Level]	1-116-011	[Skew Correction Level Setting]	LCT 2: Tray 6
			12	[Skew Detection Level]	1-116-012	[Skew Correction Level Setting]	LCT 3: Tray 7
			13	[Skew Detection Level]	1-116-013	[Skew Correction Level Setting]	LCT 3: Tray 8
		0106	01	[Adjust Erase Margin With Feed Direction]	2-121-001	[Erase Margin Adj]	Erase Margin Adj Leading Edge
			02	[Adjust Erase Margin With Feed Direction]	2-121-002	[Erase Margin Adj]	Erase Margin Adj Trailing Edge
		0107	01	[Perpendicularity Adjustment]	2-104-041	[Skew Adjustment]	Manual K Üser
0201	01	0201	01	[Adjust Image Density/ DEMS]	3-011-002	[Manual ProCon :Exe]	Density Adjustment
	02		02	[Adjust Image Density/ DEMS]	3-040-001	[DEMS:Execute]	ALL
		0202	01	[Image Density Adjustment Execute Interval]	3-533-011	[Interrupt ProCon :Set]	Interval: Set: FC
		0203	01	[Buffer Pass Unit Fan Activation Setting]	1-932-002	[Buffer Pass Unit]	Fan drive Setting
		0204	01	[Adjust Maximum Image Density]	3-620-011	[ProCon Target M/A]	Maximum M/A Adj.:K
			02	[Adjust Maximum Image Density]	3-620-012	[ProCon Target M/A]	Maximum M/A Adj.:C
			03	[Adjust Maximum Image Density]	3-620-013	[ProCon Target M/A]	Maximum M/A Adj.:M
			04	[Adjust Maximum Image Density]	3-620-014	[ProCon Target M/A]	Maximum M/A Adj.:Y
			05	[Adjust Maximum Image Density]	3-620-015	[ProCon Target M/A]	Maximum M/A Adj.:S
		0205	01 02	[Adjust Line Width] [Adjust Line Width]	3-623-061 3-623-062	[LD Power Set] [LD Power Set]	Line Width Adj.:K Line Width Adi.:C
			03	[Adjust Line Width]	3-623-063	[LD Power Set]	Line Width Adj.:M
			04	[Adjust Line Width]	3-623-064	[LD Power Set]	Line Width Adj.:Y
		0206	01	[Adjust Density Difference Across Feed Direction]	2-113-001	[Adjust LR Density Difference]	K



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		02	[Adjust Density Difference Across Feed Direction]	2-113-00	2 [Adjust LR Density Difference]	С
		03	[Adjust Density Difference Across Feed Direction]	2-113-00	3 [Adjust LR Density Difference]	М
		04	[Adjust Density Difference Across Feed Direction]	2-113-00	4 [Adjust LR Density Difference]	Y
		05	[Adjust Density Difference Across Feed Direction]	2-113-00	5 [Adjust LR Density Difference]	S
	0207	01	[Adjust Fusing Temperature on Standby]	1-107-00	1 [Standby Target Temp. Setting]	Standby: Center
		02	[Adjust Fusing Temperature on Standby]	1-107-00	3 [Standby Target Temp. Setting]	Standby: Press
		03	[Adjust Fusing Temperature on Standby]	1-107-00	7 [Standby Target Temp. Setting]	Preheat: Center
		04	[Adjust Fusing Temperature on Standby]	1-107-00	2 [Standby Target Temp. Setting]	Preheat: Press
		05	[Adjust Fusing Temperature on Standby]	1-107-00	4 [Standby Target Temp. Setting]	Low Power: Center
		06	[Adjust Fusing Temperature on Standby]	1-107-00	6 [Standby Target Temp. Setting]	Low Power: Press
		07	[Adjust Fusing Temperature on Standby]	1-107-00	8 [Standby Target Temp. Setting]	Print Ready: Press
		08	[Adjust Fusing Temperature on Standby]	1-108-00	2 [After Reload/Job Target Temp.]	Press
		09	[Adjust Fusing Temperature on Standby]	1-101-00	3 [Reload Permit Setting]	Reload Target Temp.:Press
		10	[Adjust Fusing Temperature on Standby]	1-101-00	6 [Reload Permit Setting]	Temp.:Delta:Cold: Press:Center
		11	[Adjust Fusing Temperature on Standby]	1-101-01	0 [Reload Permit Setting]	Temp.:Delta:War m:Press:Center
		12	[Adjust Fusing Temperature on Standby]	1-101-01	4 [Reload Permit Setting]	Temp.:Delta:Hot: Press:Center
		13	[Adjust Fusing Temperature on Standby]	1-153-00	4 [Press Roller Cooling Fan]	Duplex Exhaust Fan:1
		14	[Adjust Fusing Temperature on Standby]	1-153-00	5 [Press Roller Cooling Fan]	Duplex Exhaust Fan:2

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Mode	l: Leo	-C1/P1			D	ate: 11-May-16	No.: RD194132	
			15	[Adjust Fusing Temperature on Standby]	1-153-0	06	[Press Roller Cooling Fan]	Duplex Exhaust Fan:3
0208	01	0208	01	[Photoconductor Special Mode]	2-225-05	51	Cleaning Speed: Col]	Special Mode Selection:K
	02		02	[Photoconductor Special Mode]	2-225-05	52	Cleaning Speed: Col]	Special Mode Selection:C
	03		03	[Photoconductor Special Mode]	2-225-05	53	Cleaning Speed: Col]	Special Mode Selection:M
	04		04	[Photoconductor Special Mode]	2-225-05	54	Cleaning Speed: Col]	Special Mode Selection:Y
	04		05	[Photoconductor Special Mode]	2-225-05	55	Cleaning Speed: Col]	Special Mode Selection:S
		0209	01	[Adjust PCU Potential]	3-621-02	21	[Backgroud Pot:Set]	CorrStep:K
			02	[Adjust PCU Potential]	3-621-02	22	[Backgroud Pot:Set]	CorrStep:C
			03	[Adjust PCU Potential]	3-621-02	23	[Backgroud Pot:Set]	CorrStep:M
			04	[Adjust PCU Potential]	3-621-02	24	[Backgroud Pot:Set]	CorrStep:Y
			05	[Adjust PCU Potential]	3-621-02	25	[Backgroud Pot:Set]	CorrStep:S
		0301	01	[Adjust Wide LCT Fan Level]	1-920-00	01	[LCT Tray Fan Duty Adjustment]	A3LCT Tray3
			02	[Adjust Wide LCT Fan Level]	1-920-00	)2	[LCT Tray Fan Duty Adjustment]	A3LCT Tray4
			03	[Adjust Wide LCT Fan Level]	1-920-00	03	[LCT Tray Fan Duty Adjustment]	A3LCT Tray5
		0302	01	[Adjust Wide LCT Fan Timer]	1-921-00	01	[LCT Fan Start Time Setting]	A3LCT Tray3
			02	[Adjust Wide LCT Fan Timer]	1-921-00	)2	[LCT Fan Start Time Setting]	A3LCT Tray4
			03	[Adjust Wide LCT Fan Timer]	1-921-00	03	[LCT Fan Start Time Setting]	A3LCT Tray5
		0303	01	[Pickup Assist Setting]	1-923-00	01	[LCT Pickup Assist ON/OFF]	Tray1
			02	[Pickup Assist Setting]	1-923-00	)2	[LCT Pickup Assist ON/OFF]	Tray2
			03	[Pickup Assist Setting]	1-923-00	03	[LCT Pickup Assist ON/OFF]	A3LCT Tray3
			04	[Pickup Assist Setting]	1-923-00	04	[LCT Pickup Assist ON/OFF]	A3LCT Tray4
			05	[Pickup Assist Setting]	1-923-00	05	[LCT Pickup Assist ON/OFF]	A3LCT Tray5
			06	[Pickup Assist Setting]	1-923-00	06	[LCT Pickup Assist ON/OFF]	Bypass
0304	01	0304	01	[Adjust Paper Curl]	1-906-00	01	[De-curler Setting]	Tray1: Paper Path Selection
	02		02	[Adjust Paper Curl]	1-906-00	)2	[De-curler Setting]	Tray2: Paper Path Selection
	03		03	[Adjust Paper Curl]	1-906-00	03	[De-curler Setting]	A3LCT Tray3: Paper Path Selection



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Mode	l: Leo	-C1/P1				Date: 11-May-16	No.: RD194132
	04		04	[Adjust Paper Curl]	1-906-004	4 [De-curler Setting]	A3LCT Tray4: Paper Path Selection
	05		05	[Adjust Paper Curl]	1-906-00	5 [De-curler Setting]	A3LCT Tray5: Paper Path Selection
	06		06	[Adjust Paper Curl]	1-906-00	6 [De-curler Setting]	Bypass Tray: Paper Path Selection
	07		07	[Adjust Paper Curl]	1-906-00	7 [De-curler Setting]	3-Tray LCT 1: Tray 3: Paper Path Selection
	08		08	[Adjust Paper Curl]	1-906-008	8 [De-curler Setting]	3-Tray LCT 1: Tray 4: Paper Path Selection
	09		09	[Adjust Paper Curl]	1-906-009	9 [De-curler Setting]	3-Tray LCT 2: Tray 5: Paper Path Selection
	10		10	[Adjust Paper Curl]	1-906-010	0 [De-curler Setting]	3-Tray LCT 2: Tray 6: Paper Path Selection
	11		11	[Adjust Paper Curl]	1-906-01	1 [De-curler Setting]	3-Tray LCT 3: Tray 7: Paper Path Selection
	12		12	[Adjust Paper Curl]	1-906-01	2 [De-curler Setting]	3-Tray LCT 3: Tray 8: Paper Path Selection
0305	01	0305	01	[Illumination Mode for Color Paper Detection]	1-915-00	1 [CIS Mode Setting]	Tray 1
	02		02	[Illumination Mode for Color Paper Detection]	1-915-00	2 [CIS Mode Setting]	Tray 2
	03		03	[Illumination Mode for Color Paper Detection]	1-915-003	3 [CIS Mode Setting]	Duplex Tray
	04		04	[Illumination Mode for Color Paper Detection]	1-915-004	4 [CIS Mode Setting]	3-Tray LCT Tray1
	05		05	[Illumination Mode for Color Paper Detection]	1-915-00	5 [CIS Mode Setting]	3-Tray LCT Tray2
	06		06	[Illumination Mode for Color Paper Detection]	1-915-00	6 [CIS Mode Setting]	3-Tray LCT Tray3
	07		07	[Illumination Mode for Color Paper Detection]	1-915-00	7 [CIS Mode Setting]	Bypass Tray
	08		08	[Illumination Mode for Color Paper Detection]	1-915-008	8 [CIS Mode Setting]	2-Tray LCT_1 Tray1
	09		09	[Illumination Mode for Color Paper Detection]	1-915-00	9 [CIS Mode Setting]	2-Tray LCT_1 Tray2



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10		10	[Illumination Mode for Color Paper Detection]	1-915-01	0 [CIS Mode Setting]	2-Tray LCT_2 Tray1
11		11	[Illumination Mode for Color Paper Detection]	1-915-01	1 [CIS Mode Setting]	2-Tray LCT_2 Tray2
12		12	[Illumination Mode for Color Paper Detection]	1-915-01	2 [CIS Mode Setting]	2-Tray LCT_3 Tray1
13		13	[Illumination Mode for Color Paper Detection]	1-915-01	3 [CIS Mode Setting]	2-Tray LCT_3 Tray2
	0306	01	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	)1 [Over Shift Level Setting]	Tray 1
		02	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	2 [Over Shift Level Setting]	Tray 2
		03	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	03 [Over Shift Level Setting]	Duplex Tray
		04	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	04 [Over Shift Level Setting]	2-Tray LCT: Tray 3
		05	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	05 [Over Shift Level Setting]	2-Tray LCT: Tray 4
		06	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	6 [Over Shift Level Setting]	2-Tray LCT: Tray 5
		07	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	07 [Over Shift Level Setting]	Bypass Tray
		08	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	08 [Over Shift Level Setting]	3-Tray LCT 1: Tray 3
		09	[Registration Jam Detection Level with Across Feed Direction]	1-918-00	9 [Over Shift Level Setting]	3-Tray LCT 1: Tray 4
		10	[Registration Jam Detection Level with Across Feed Direction]	1-918-01	0 [Over Shift Level Setting]	3-Tray LCT 2: Tray 5
		11	[Registration Jam Detection Level with	1-918-01	1 [Over Shift Level Setting]	3-Tray LCT 2: Tray 6



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				Across Feed Direction]				
			12	[Registration Jam Detection Level with Across Feed Direction]	1-918-01	12	[Over Shift Level Setting]	3-Tray LCT 3: Tray 7
			13	[Registration Jam Detection Level with Across Feed Direction]	1-918-01	13	[Over Shift Level Setting]	3-Tray LCT 3: Tray 8
		0307	01	[Adjust Registration Paper Buckle]	1-004-00	)1	[Reg Buckle Adj]	Tray1 & Tray2
			02	[Adjust Registration Paper Buckle]	1-004-00	)3	[Reg Buckle Adj]	Dupx Tray
			03	[Adjust Registration Paper Buckle]	1-004-00	)2	[Reg Buckle Adj]	2/3-Tray LCT Trays, Bypass Tray
		0308	01	[Adjust Registration Paper Buckle (Thick Paper)]	1-005-00	)1	[Reg Buckle Adj(Thick)]	Thick 5
			02	[Adjust Registration Paper Buckle (Thick Paper)]	1-005-00	)2	[Reg Buckle Adj(Thick)]	Thick 6
			03	[Adjust Registration Paper Buckle (Thick Paper)]	1-005-00	)3	[Reg Buckle Adj(Thick)]	Thick 7
			04	[Adjust Registration Paper Buckle (Thick Paper)]	1-005-00	)4	[Reg Buckle Adj(Thick)]	Thick 8
0309	01	0309	01	[Double Feed Detection]	1-302-00	)1	[Dbl-Feed Detect]	Tray 1 (0:Off 1:On)
	02		02	[Double Feed Detection]	1-302-00	)2	[Dbl-Feed Detect]	Tray 2 (0:Off 1:On)
	03		03	[Double Feed Detection]	1-302-00	)3	[Dbl-Feed Detect]	A3LCT Tray3 (0:Off 1:On)
	04		04	[Double Feed Detection]	1-302-00	)4	[Dbl-Feed Detect]	A3LC1 Tray4 (0:Off 1:On)
	05		05	[Double Feed Detection]	1-302-00	15		(0:Off 1:On)
	06		06	Detection]	1-302-00	00 70	[Dbl-Feed Delect]	(0:Off 1:On)
	07		07	Detection]	1-302-00	)7	[DDI-Feed Delect]	Tray 3 (0:Off 1:On)
	08		08	[Double Feed Detection]	1-302-00	)8	[Dbl-Feed Detect]	3-Tray LCT 1: Tray 4 (0:Off 1:On)
	09		09	[Double Feed Detection]	1-302-00	)9	[Dbl-Feed Detect]	3-Tray LCT 2: Tray 5 (0:Off 1:On)
	10		10	[Double Feed Detection]	1-302-01	10	[Dbl-Feed Detect]	3-Tray LCT 2: Tray 6 (0:Off 1:On)



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Mode	l: Leo	-C1/P1			C	)ate: 11-May-16	No.: RD194132
	11		11	[Double Feed Detection]	1-302-011	[Dbl-Feed Detect]	3-Tray LCT 3: Tray 7 (0:Off 1:On)
	12		12	[Double Feed Detection]	1-302-012	[Dbl-Feed Detect]	3-Tray LCT 3: Tray 8 (0:Off 1:On)
0310	01	0310	01	[When Double Feed is Detected]	1-303-001	[After Dbl-Feed Det Op Set]	Tray 1 (0:JAM 1:Purge Tray)
	02		02	[When Double Feed is Detected]	1-303-002	[After Dbl-Feed Det Op Set]	Tray 2 (0:JAM 1:Purge Tray)
	03		03	[When Double Feed is Detected]	1-303-003	[After Dbl-Feed Det Op Set]	A3LCT Tray3 (0:JAM 1:Purge Tray)
	04		04	[When Double Feed is Detected]	1-303-004	[After Dbl-Feed Det Op Set]	A3LCT Tray4 (0:JAM 1:Purge Tray)
	05		05	[When Double Feed is Detected]	1-303-005	[After Dbl-Feed Det Op Set]	A3LCT Tray5 (0:JAM 1:Purge Tray)
	06		06	[When Double Feed is Detected]	1-303-006	[After Dbl-Feed Det Op Set]	Bypass Tray (0:JAM 1:Purge Tray)
	07		07	[When Double Feed is Detected]	1-303-007	[After Dbl-Feed Det Op Set]	3-Tray LCT 1: Tray 3 (0:JAM 1:Purge Tray)
	08		08	[When Double Feed is Detected]	1-303-008	[After Dbl-Feed Det Op Set]	3-Tray LCT 1: Tray 4 (0:JAM 1:Purge Tray)
	09		09	[When Double Feed is Detected]	1-303-009	[After Dbl-Feed Det Op Set]	3-Tray LCT 2: Tray 5 (0:JAM 1:Purge Tray)
	10		10	[When Double Feed is Detected]	1-303-010	[After Dbl-Feed Det Op Set]	3-Tray LCT 2: Tray 6 (0:JAM 1:Purge Tray)
	11		11	[When Double Feed is Detected]	1-303-011	[After Dbl-Feed Det Op Set]	3-Tray LCT 3: Tray 7 (0:JAM 1:Purge Tray)
	12		12	[When Double Feed is Detected]	1-303-012	[After Dbl-Feed Det Op Set]	3-Tray LCT 3: Tray 8 (0:JAM 1:Purge Tray)
		0311	01	[ADF Adjustment] (Pro C7100S/Pro C7110S/Pro C7100SX/Pro C7110SX)	6-006-010	[ADF Adjustment]	L-Edge Regist (1- Pass): Front
			02	[ADF Adjustment] (Pro C7100S/Pro C7110S/Pro C7100SX/Pro C7110SX)	6-006-011	[ADF Adjustment]	L-Edge Regist (1- Pass): Rear
			03	[ADF Adjustment] (Pro C7100S/Pro C7110S/Pro	6-017-001	DF Magnification Adj.	

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Mode	l: Leo	-C1/P1				Date: 11-May-16	No.: RD194132
				C7100SX/Pro C7110SX)			
		0401	01	[Auto Color Selection Setting]	2-907-00	1 [ACS Switch Set]	FC to BW
			02	[Auto Color Selection Setting]	2-907-00	3 [ACS Switch Set]	FCS to FC
		0501	01	[Execute Cleaning Initial Setting for PCU]	3-032-00	1 [Cleaning Setup :Exe]	Execute: ALL
			02	[Execute Cleaning Initial Setting for PCU]	3-032-00	2 [Cleaning Setup :Exe]	Execute: COL
			03	[Execute Cleaning Initial Setting for PCU]	3-032-00	3 [Cleaning Setup :Exe]	Execute: K
			04	[Execute Cleaning Initial Setting for PCU]	3-032-00	4 [Cleaning Setup :Exe]	Execute: C
			05	[Execute Cleaning Initial Setting for PCU]	3-032-00	5 [Cleaning Setup :Exe]	Execute: M
			06	[Execute Cleaning Initial Setting for PCU]	3-032-00	6 [Cleaning Setup :Exe]	Execute: Y
			07	[Execute Cleaning Initial Setting for PCU]	3-032-00	7 [Cleaning Setup :Exe]	Execute: S
		0502	01	[Execute Process Initial Setting]	3-020-00	1 [Process Setup :Exe]	KCMY
		0503	01	[ITB Manual Lubrication]	2-696-00	1 [Force Apply Lubricant]	Belt Cleaning
		0504	01	[Tighten Fuser Cleaning Unit at Replacement]	1-161-00	3 [Fusing Cleaning Web]	Execute Takeup After Replacement
0505	01	0505	01	[Fusing Belt Smoothing Setting]	1-133-00	1 [Fusing Belt Smoothing Roller]	0:Off 1:Auto
0506	01	0506	01	[Smooth Fusing Belt]	1-133-11	0 [Fusing Belt Smoothing Roller]	Manual Smoothing:Execut ion
	02		02	[Smooth Fusing Belt]	1-133-11	1 [Fusing Belt Smoothing Roller]	Exec Condition Lvl 2
		0507	01	[Reset Replaceable Parts Counter]	7-622-00	5 #PCU Cleaning Unit(Bk)	
			02	[Reset Replaceable Parts Counter]	7-622-01	5 #Charger Unit(Bk)	
			03	[Reset Replaceable Parts Counter]	7-622-01	6 #Photoconductor Unit(Bk)	
			04	[Reset Replaceable Parts Counter]	7-622-02	2 #PCU Cleaning Unit(C)	
			05	[Reset Replaceable Parts Counter]	7-622-03	2 #Charger Unit(C)	
			06	[Reset Replaceable Parts Counter]	7-622-03	3  #Photoconductor  Unit(C)	

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Model: Leo-C1/P1				Date: 11-May-16	No.: RD194132
	07	[Reset Replaceable	7-622-03	9 #PCU Cleaning	
		Parts Counter]		Unit(M)	
	08	[Reset Replaceable Parts Counter]	7-622-04	9 #Charger Unit(M)	
	09	[Reset Replaceable	7-622-05	0 #Photoconductor	
	10	Parts Counter]	7 000 05		
	10	Parts Counter	7-622-05	Unit(Y)	
	11	[Reset Replaceable Parts Counter]	7-622-06	6 #Charger Unit(Y)	
	12	[Reset Replaceable	7-622-06	7 #Photoconductor	
	13	[Reset Replaceable	7-622-07	3 #PCU Cleaning	
	1/	Paris Couriler	7-622-08	Unit(S)	
	17	Parts Counter]	7-022-00		
	15	[Reset Replaceable Parts Counter]	7-622-08	<pre>4 #Photoconductor Unit(S)</pre>	
	16	[Reset Replaceable Parts Counter]	7-622-09	3 #ITB Cleaning Unit	
	17	[Reset Replaceable Parts Counter]	7-622-09	9 #Paper Transfer Unit	
	18	[Reset Replaceable Parts Counter]	7-622-10	6 #Fuser Unit	
	19	[Reset Replaceable Parts Counter]	7-622-11	2 #Refresh Roller	
	20	[Reset Replaceable Parts Counter]	7-622-11	3 #Fuser Cleaning Unit	
	21	[Reset Replaceable Parts Counter]	7-622-11	8 #Ozone Filter:Main	
	22	[Reset Replaceable Parts Counter]	7-622-12	1 #Dust Proof Filter:Main	
	23	[Reset Replaceable Parts Counter]	7-622-13	1 #Tray1	
	24	[Reset Replaceable Parts Counter]	7-622-13	6 #Tray2	
	25	[Reset Replaceable Parts Counter]	7-622-14	1 #3-Tray LCT:Tray3	
	26	[Reset Replaceable Parts Counter]	7-622-14	6 #3-Tray LCT:Tray4	
	27	[Reset Replaceable Parts Counter]	7-622-15	1 #3-Tray LCT:Tray5	
	28	[Reset Replaceable Parts Counter]	7-622-15	6 #Bypass Tray	
	29	[Reset Replaceable Parts Counter]	7-622-16	1 #Interposer Upper Tray	
	30	[Reset Replaceable Parts Counter]	7-622-16	6 #Interposer Lower Trav	
	31	[Reset Replaceable Parts Counter]	7-622-17	1 #ADF	
	32	[Reset Replaceable Parts Counter]	7-622-17	6 #2-Tray LCT:Tray3:Feed Belt	



Model: Le	∋o-C1/P1				Date: 11-May-16	No.: RD194132
		33	Reset Replaceable	7-622-17	7 #2-Trav	
			Parts Counter]		I CT·Trav4·Feed	
					Belt	
		34	Reset Replaceable	7-622-17	/8 #2-Trav	
			Parte Counter]		I CT·Trav5·Feed	
					Relt	
		35	Reset Replaceable	7-622-17	<u>'</u> 9 #2-Trav	
			Parts Counter]	,	I CT·Trav6·Feed	
					Belt	
		36	Reset Replaceable	7-622-18	10 #2-Trav	
			Parts Counter]	,	I CT Trav7:Feed	
					Belt	
		37	Reset Replaceable	7-622-18	1 #2-Trav	
		0.	Parts Counter]	,	I CT Trav8:Feed	
					Belt	
	0508	01	Fstimated Life	7-960-00	15 #PCU Cleaning	K
	0000		Already Used]	,	Unit(Bk)	
		02	Fstimated Life	7-960-01	5 #Charger Unit(Bk)	ĸ
		<b> </b> -	Already Used]	,		
		03	Estimated Life	7-960-01	6 #Photoconductor	K
			Already Used]		Unit(Bk)	
	-	04	Estimated Life	7-960-02	2 #PCU Cleaning	С
		-	Already Used]		Unit(C)	
		05	Estimated Life	7-960-03	2 #Charger Unit(C)	С
		-	Already Used]			
		06	[Estimated Life	7-960-03	3 #Photoconductor	С
		-	Already Used]	· - ·	Unit(C)	
		07	[Estimated Life	7-960-03	9 #PCU Cleaning	M
			Already Used]		Unit(M)	
		08	[Estimated Life	7-960-04	9 #Charger Unit(M)	M
			Already Used]			
		09	[Estimated Life	7-960-05	0 #Photoconductor	M
			Already Used]		Unit(M)	
		10	[Estimated Life	7-960-05	6 #PCU Cleaning	Υ
			Already Used]		Unit(Y)	
		11	[Estimated Life	7-960-06	6 #Charger Unit(Y)	Υ
			Already Used]			
		12	[Estimated Life	7-960-06	7 #Photoconductor	Υ
			Already Used]		Unit(Y)	
		13	[Estimated Life	7-960-07	'3 #PCU Cleaning	S
			Already Used]		Unit(S)	
		14	[Estimated Life	7-960-08	3 #Charger Unit(S)	S
			Already Used]			
		15	[Estimated Life	7-960-08	4 #Photoconductor	S
			Already Used]		Unit(S)	
		16	[Estimated Life	7-960-09	3 #ITB Cleaning Unit	
			Already Used]			
		17	[Estimated Life	7-960-09	9 #Paper Transfer	
			Already Used]		Unit	
		18	[Estimated Life	7-960-10	6 #Fuser Unit	
			Already Used]			
		19	[Estimated Life	7-960-11	2 #Refresh Roller	
			Already Used]			

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Mode	el: Leo-C	C1/P1				D	ate: 11-May-16	No.: RD194132
			20	[Estimated Life	7-960-1	13	#Fuser Cleaning	
			_	Already Used]		-	Unit	
			21	Estimated Life	7-960-1	18	#Ozone Filter:Main	
				Already Used]		-		
			22	[Estimated Life	7-960-12	21	#Dust Proof	
				Already Used]			Filter:Main	
			23	[Estimated Life	7-960-13	31	#Trav1	
				Already Used]				
			24	[Estimated Life	7-960-13	36	#Trav2	
				Already Used]				
			25	[Estimated Life	7-960-14	41	#3-Trav LCT:Trav3	
				Already Used]				
			26	[Estimated Life	7-960-14	46	#3-Trav LCT:Trav4	
				Already Used]			,	
			27	[Estimated Life	7-960-15	51	#3-Trav LCT:Trav5	
				Already Used]				
			28	[Estimated Life	7-960-15	56	#Bypass Tray	
				Already Used]				
			29	[Estimated Life	7-960-16	61	#Interposer Upper	
				Already Used]			Trav	
			30	[Estimated Life	7-960-16	66	#Interposer Lower	
			00	Already Used]			Trav	
			31	[Estimated Life	7-960-17	71	#ADF	
			0.	Already Used]				
			32	[Estimated Life	7-960-17	76	#2-Trav	
				Already Used]		•	LCT:Trav3:Feed	
							Belt	
			33	[Estimated Life	7-960-17	77	#2-Trav	
				Already Used1			LCT:Trav4:Feed	
				, ,			Belt	
			34	[Estimated Life	7-960-17	78	#2-Tray	
				Already Used]			LCT:Tray5:Feed	
							Belt	
			35	[Estimated Life	7-960-17	79	#2-Tray	
				Already Used]			LCT:Tray6:Feed	
							Belt	
			36	[Estimated Life	7-960-18	30	#2-Tray	
				Already Used]			LCT:Tray7:Feed	
							Belt	
			37	[Estimated Life	7-960-18	31	#2-Tray	
				Already Used]			LCT:Tray8:Feed	
							Belt	
0509	01	0509	01	[Temperature /	3-260-00	01	[Temp/Humid	
				Humidity inside the			(PCU)]	
				Machine]				
	02		02	[Temperature /	3-260-00	)2	[Temp/Humid	
				Humidity inside the			(PCU)]	
				Machine]				
	03		03	[Temperature /	1-945-03	31	Temperature	
				Humidity inside the				
				Machine]		<u>.</u>		 
0510	01	0510	01	[[Iemperature /	3-261-00	01	[[Iemp/Humid(Body	Iemperature
				Humidity outside the			)]	
				INIACHINEJ				

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Mode	l: Leo	-C1/P1				No.: RD194132	
	02		02	[Temperature / Humidity outside the Machine]	3-261-00	2 [Temp/Humid(Body )]	Relative Humidity
		0511	01	[Select Color of Special Toner]	3-170-00	5 [Color Change Exe]	2: Clear 3: White
		0512	01	[Clean Special Toner Supply Tube on Replacement]	3-170-00	1 [Tube Cleaning:Exe]	
0513	01	0513	01	[Back Up / Restore Custom Paper Data]		Backup IMSS data	
	02		02	[Back Up / Restore Custom Paper Data]		Backup custom paper data	
	03		03	[Back Up / Restore Custom Paper Data]		Restore custom	
		0514	01	[Unscrew/Screw-on Cap to Replace Toner Bottle]	3-162-00	1 [Bottle OPEN/CLOSE]	OPEN/CLOSE:K
			02	[Unscrew/Screw-on Cap to Replace Toner Bottle]	3-162-00	2 [Bottle OPEN/CLOSE]	OPEN/CLOSE:C
			03	[Unscrew/Screw-on Cap to Replace Toner Bottle]	3-162-00	3 [Bottle OPEN/CLOSE]	OPEN/CLOSE:M
			04	[Unscrew/Screw-on Cap to Replace Toner Bottle]	3-162-00	4 [Bottle OPEN/CLOSE]	OPEN/CLOSE:Y
0515	01	0515	01	[Execute Developer Refreshing]	3-062-00	1 [Manual Tnr Ref:Exe]	KCMY
	02		02	[Execute Developer Refreshing]	3-062-00	2 [Manual Tnr Ref:Exe]	CMY
	03		03	[Execute Developer Refreshing]	3-062-00	3 [Manual Tnr Ref:Exe]	К
	04		04	[Execute Developer Refreshing]	3-062-00	4 [Manual Tnr Ref:Exe]	С
	05		05	[Execute Developer Refreshing]	3-062-00	5 [Manual Tnr Ref:Exe]	М
	06		06	[Execute Developer Refreshing]	3-062-00	6 [Manual Tnr Ref:Exe]	Y
	07		07	[Execute Developer Refreshing]	3-062-00	7 [Manual Tnr Ref:Exe]	S
0516	01	0516	01	[Switch Print Screen] (Pro C7100S/Pro C7110S/Pro C7100SX/Pro C7110SX)	5-070-00	1 Switching of Print Application	
0601	01	0601	01	[Adjust Staple Position Across Feed Direction 1]	6-210-00	1 [Staple Pos Set:Main Scan:1]	A3 SEF
	02		02	[Adjust Staple Position Across Feed Direction 1]	6-210-00	2 [Staple Pos Set:Main Scan:1]	B4 SEF
	03		03	[Adjust Staple Position Across Feed Direction 1]	6-210-00	4 [Staple Pos Set:Main Scan:1]	A4 LEF



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Mode	l: Leo	-C1/P1				Date: 11-May-16	No.: RD194132
	04		04	[Adjust Staple Position Across Feed Direction 1]	6-210-003	3 [Staple Pos Set:Main Scan:1]	A4 SEF
	05		05	[Adjust Staple Position Across Feed Direction 1]	6-210-006	5 [Staple Pos Set:Main Scan:1]	B5 LEF
	06		06	[Adjust Staple Position Across Feed Direction 1]	6-210-005	5 [Staple Pos Set:Main Scan:1]	B5 SEF
	07		07	[Adjust Staple Position Across Feed Direction 1]	6-210-007	7 [Staple Pos Set:Main Scan:1]	DLT SEF
	08		08	[Adjust Staple Position Across Feed Direction 1]	6-210-008	3 [Staple Pos Set:Main Scan:1]	LG SEF
	09		09	[Adjust Staple Position Across Feed Direction 1]	6-210-010	) [Staple Pos Set:Main Scan:1]	LT LEF
	10		10	[Adjust Staple Position Across Feed Direction 1]	6-210-009	) [Staple Pos Set:Main Scan:1]	LT SEF
	11		11	[Adjust Staple Position Across Feed Direction 1]	6-210-011	[Staple Pos Set:Main Scan:1]	8-Kai SEF
	12		12	[Adjust Staple Position Across Feed Direction 1]	6-210-013	3 [Staple Pos Set:Main Scan:1]	16-Kai LEF
	13		13	[Adjust Staple Position Across Feed Direction 1]	6-210-012	2 [Staple Pos Set:Main Scan:1]	16-Kai SEF
	14		14	[Adjust Staple Position Across Feed Direction 1]	6-210-014	I [Staple Pos Set:Main Scan:1]	Other
0602	01	0602	01	[Adjust Staple Position Across Feed Direction 2]	6-212-001	I [Staple Pos Set:Main Scan:2]	A3 SEF
	02		02	[Adjust Staple Position Across Feed Direction 2]	6-212-002	2 [Staple Pos Set:Main Scan:2]	B4 SEF
	03		03	[Adjust Staple Position Across Feed Direction 2]	6-212-004	I [Staple Pos Set:Main Scan:2]	A4 LEF
	04		04	[Adjust Staple Position Across Feed Direction 2]	6-212-003	3 [Staple Pos Set:Main Scan:2]	A4 SEF
	05		05	[Adjust Staple Position Across Feed Direction 2]	6-212-006	S [Staple Pos Set:Main Scan:2]	B5 LEF
	06		06	[Adjust Staple Position Across Feed Direction 2]	6-212-005	5 [Staple Pos Set:Main Scan:2]	B5 SEF
	07		07	[Adjust Staple Position Across Feed Direction 2]	6-212-007	7 [Staple Pos Set:Main Scan:2]	DLT SEF

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Mode	l: Leo	-C1/P1				Date: 11-May-16	No.: RD194132
	08		08	[Adjust Staple Position Across Feed Direction 2]	6-212-00	8 [Staple Pos Set:Main Scan:2]	LG SEF
	09		09	[Adjust Staple Position Across Feed Direction 2]	6-212-01	0 [Staple Pos Set:Main Scan:2]	LT LEF
	10		10	[Adjust Staple Position Across Feed Direction 2]	6-212-00	9 [Staple Pos Set:Main Scan:2]	LT SEF
	11		11	[Adjust Staple Position Across Feed Direction 2]	6-212-01	1 [Staple Pos Set:Main Scan:2]	8-Kai SEF
	12		12	[Adjust Staple Position Across Feed Direction 2]	6-212-01	3 [Staple Pos Set:Main Scan:2]	16-Kai LEF
	13		13	[Adjust Staple Position Across Feed Direction 2]	6-212-01	2 [Staple Pos Set:Main Scan:2]	16-Kai SEF
	14		14	[Adjust Staple Position Across Feed Direction 2]	6-212-01	4 [Staple Pos Set:Main Scan:2]	Other
0603	01	0603	01	[Adjust Staple Position With Feed Direction]	6-213-00	01 [Staple Pos Adj:Sub Scan]	A3 SEF
	02		02	[Adjust Staple Position With Feed Direction]	6-213-00	02 [Staple Pos Adj:Sub Scan]	B4 SEF
	03		03	[Adjust Staple Position With Feed Direction]	6-213-00	04 [Staple Pos Adj:Sub Scan]	A4 LEF
	04		04	[Adjust Staple Position With Feed Direction]	6-213-00	03 [Staple Pos Adj:Sub Scan]	A4 SEF
	05		05	[Adjust Staple Position With Feed Direction]	6-213-00	06 [Staple Pos Adj:Sub Scan]	B5 LEF
	06		06	[Adjust Staple Position With Feed Direction]	6-213-00	5 [Staple Pos Adj:Sub Scan]	B5 SEF
	07		07	[Adjust Staple Position With Feed Direction]	6-213-00	07 [Staple Pos Adj:Sub Scan]	DLT SEF
	08		08	[Adjust Staple Position With Feed Direction]	6-213-00	08 [Staple Pos Adj:Sub Scan]	LG SEF
	09		09	[Adjust Staple Position With Feed Direction]	6-213-01	0 [Staple Pos Adj:Sub Scan]	LT LEF
	10		10	[Adjust Staple Position With Feed Direction]	6-213-00	9 [Staple Pos Adj:Sub Scan]	LT SEF
	11		11	[Adjust Staple Position With Feed Direction]	6-213-01	1 [Staple Pos Adj:Sub Scan]	8-Kai SEF



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Model: Leo-	C1/P1				Da	ate: 11-May-16	No.: RD194132
12		12	[Adjust Staple Position With Feed Direction]	6-213-01	13	[Staple Pos Adj:Sub Scan]	16-Kai LEF
13		13	[Adjust Staple Position With Feed Direction]	6-213-01	12	[Staple Pos Adj:Sub Scan]	16-Kai SEF
14		14	[Adjust Staple Position With Feed Direction]	6-213-01	14	[Staple Pos Adj:Sub Scan]	Other
	0604	01	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	01	Adj End Bind Jogge	A3 SEF
		02	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	02	Adj End Bind Jogge	B4 SEF
		03	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	04	Adj End Bind Jogge	A4 LEF
		04	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	03	Adj End Bind Jogge	A4 SEF
		05	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	06	Adj End Bind Jogge	B5 LEF
		06	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	05	Adj End Bind Jogge	B5 SEF
		07	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	07	Adj End Bind Jogge	DLT SEF
		08	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	80	Adj End Bind Jogge	LG SEF
		09	[Paper Alignment for Stapling Across Feed Direction]	6-725-01	10	Adj End Bind Jogge	LT LEF
		10	[Paper Alignment for Stapling Across Feed Direction]	6-725-00	09	Adj End Bind Jogge	LT SEF
		11	[Paper Alignment for Stapling Across Feed Direction]	6-725-01	11	Adj End Bind Jogge	8-Kai SEF
		12	[Paper Alignment for Stapling Across Feed Direction]	6-725-01	13	Adj End Bind Jogge	16-Kai LEF
		13	[Paper Alignment for Stapling Across Feed Direction]	6-725-01	12	Adj End Bind Jogge	16-Kai SEF
		14	[Paper Alignment for Stapling Across Feed Direction]	6-725-01	14	Adj End Bind Jogge	Other
	0605	01	[Paper Alignment for Stapling With Feed Direction]	6-726-00	01	Adj Leading Edge Stopper	A3 SEF



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Model: Leo-C1/P1				Date: 11-May-16	No.: RD194132
	02	[Paper Alignment for Stapling With Feed Direction]	6-726-002	2 Adj Leading Edge Stopper	B4 SEF
	03	[Paper Alignment for Stapling With Feed Direction]	6-726-004	Adj Leading Edge Stopper	A4 LEF
	04	[Paper Alignment for Stapling With Feed Direction]	6-726-003	3 Adj Leading Edge Stopper	A4 SEF
	05	[Paper Alignment for Stapling With Feed Direction]	6-726-006	S Adj Leading Edge Stopper	B5 LEF
	06	[Paper Alignment for Stapling With Feed Direction]	6-726-005	5 Adj Leading Edge Stopper	B5 SEF
	07	[Paper Alignment for Stapling With Feed Direction]	6-726-007	7 Adj Leading Edge Stopper	DLT SEF
	08	[Paper Alignment for Stapling With Feed Direction]	6-726-008	B Adj Leading Edge Stopper	LG SEF
	09	[Paper Alignment for Stapling With Feed Direction]	6-726-010	) Adj Leading Edge Stopper	LT LEF
	10	[Paper Alignment for Stapling With Feed Direction]	6-726-009	Adj Leading Edge Stopper	LT SEF
	11	[Paper Alignment for Stapling With Feed Direction]	6-726-011	Adj Leading Edge Stopper	8-Kai SEF
	12	[Paper Alignment for Stapling With Feed Direction]	6-726-013	B Adj Leading Edge Stopper	16-Kai LEF
	13	[Paper Alignment for Stapling With Feed Direction]	6-726-012	2 Adj Leading Edge Stopper	16-Kai SEF
	14	[Paper Alignment for Stapling With Feed Direction]	6-726-014	Adj Leading Edge Stopper	Other
0606	01	[Number of Sheet Align for Stapling]	6-225-001	[Adj Pre Stack Number]	A3 SEF
	02	[Number of Sheet Align for Stapling]	6-225-002	2 [Adj Pre Stack Number]	B4 SEF
	03	[Number of Sheet Align for Stapling]	6-225-004	I [Adj Pre Stack Number]	A4 LEF
	04	[Number of Sheet Align for Stapling]	6-225-003	3 [[Adj Pre Stack Number]	A4 SEF
	05	[Number of Sheet Align for Stapling]	6-225-006	6 [Adj Pre Stack Number]	B5 LEF
	06	Align for Stapling]	6-225-005	Number]	B5 SEF
	07	[Number of Sheet Align for Stapling]	6-225-007	[Adj Pre Stack Number]	DLI SEF

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Mode	l: Leo	-C1/P1				Date: 11-May-16	No.: RD194132
			08	[Number of Sheet	6-225-00	8 [Adj Pre Stack	LG SEF
				Align for Stapling]		Number]	
			09	[Number of Sheet	6-225-01	0 [Adj Pre Stack	LT LEF
				Align for Stapling]		Number]	
			10	[Number of Sheet	6-225-00	9 [Adj Pre Stack	LT SEF
				Align for Stapling]		Number]	
			11	[Number of Sheet	6-225-01	1 [Adj Pre Stack	8-Kai SEF
				Align for Stapling]		Number]	
			12	[Number of Sheet	6-225-01	3 [Adj Pre Stack	16-Kai LEF
				Align for Stapling]		Number]	
			13	[Number of Sheet	6-225-01	2 [Adj Pre Stack	16-Kai SEF
				Align for Stapling]		Number]	
			14	[Number of Sheet	6-225-01	4 [Adj Pre Stack	Other
				Align for Stapling]		Number]	
0607	01	0607	01	[Adjust Punch	6-728-00	1 Adj Punch Posi	2-Hole EU/JPN
				Position Across Feed		Main Scan	l
				Direction]			
	02		02	[Adjust Punch	6-728-00	2 Adj Punch Posi	3-Hole NA
				Position Across Feed		Main Scan	
				Direction]			
	03		03	Adjust Punch	6-728-00	3 Adj Punch Posi	4-Hole EU
				Position Across Feed		Main Scan	
		-			0 700 00		
	04		04	Adjust Punch	6-728-00	Adj Punch Posi	4-Hole
				Position Across Feed		Main Scan	Scandinavia
		+			0.000		
	05		05	[Adjust Punch	6-728-00	15 Adj Punch Posi	2-HOIE
				POSILION ACTOSS FEED		Main Scan	Scanoinavia
0608	01	0608	01		6 727-00	11 Adi Dunch Posi Sub	
0000	01	0000	01	Desition With Food	6-121-00	Auj Funch Fusi Sub	
				Direction		Scan	
	02	+	02	I Adjust Punch	6-727-00	12 Adi Punch Posi Sub	
	02		02	Position With Feed		Scan	
				Direction		ocan	
	03	+	03	IAdjust Punch	6-727-00	Adi Punch Posi Sub	4-Hole FU
	00		00	Position With Feed	0,2,00	Scan	
				Direction1			
	04		04	IAdiust Punch	6-727-00	Adi Punch Posi Sub	4-Hole
				Position With Feed	0,	Scan	Scandinavia
				Direction]			
	05	+	05	IAdiust Punch	6-727-00	5 Adi Punch Posi Sub	2-Hole
	-		-	Position With Feed		Scan	Scandinavia
				Direction]			
		0609	01	[Punch Skew	6-226-00	1 [Adj Registration	0: Corr:OFF 1:
				Correction]		Control]	Corr:ON (Default)
		0610	01	[Correct Punch	6-729-00	1 Adj Registration	A4 LEF
				Skew]		Buckle	
			02	[Correct Punch	6-729-00	04 Adj Registration	A5 SEF
				Skew]		Buckle	
			03	[Correct Punch	6-729-00	3 Adj Registration	A5 LEF
				Skew]		Buckle	
			04	[Correct Punch	6-729-00	2 Adj Registration	B5 LEF
				Skew]		Buckle	

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Model: Leo-0	C1/P1				Date: 11-May-16	No.: RD194132
		05	[Correct Punch Skew]	6-729-005	Adj Registration Buckle	LT LEF
		06	[Correct Punch Skew]	6-729-007	7 Adj Registration Buckle	HLT SEF
		07	[Correct Punch Skew]	6-729-006	6 Adj Registration Buckle	HLT LEF
		80	[Correct Punch Skew]	6-729-008	3 Adj Registration Buckle	Other
	0611	01	[Paper Alignment in Shift Tray Setting]	6-243-001	I [Shift Tray:Paper Jogger Set]	1: Accuracy Priority
	0612	01	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-001	Adj Output Jog Position	A3 SEF
		02	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-002	2 Adj Output Jog Position	B4 SEF
		03	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-004	Adj Output Jog Position	A4 LEF
		04	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-003	3 Adj Output Jog Position	A4 SEF
		05	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-008	3 Adj Output Jog Position	B5 LEF
		06	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-007	7 Adj Output Jog Position	B5 SEF
		07	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-006	6 Adj Output Jog Position	A4 LEF
		08	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-005	5 Adj Output Jog Position	A5 SEF
		09	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-009	Adj Output Jog Position	DLT SEF
		10	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-010	) Adj Output Jog Position	LG SEF
		11	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-012	2 Adj Output Jog Position	LT LEF
		12	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-011	Adj Output Jog Position	LT SEF
		13	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-014	Adj Output Jog Position	HLT LEF
		14	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-013	3 Adj Output Jog Position	HLT SEF

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Model: Leo-C1/P1							ate: 11-May-16	No.: RD194132	
			15	[Paper Alignment in Shift Tray Across Feed Direction]	6-730-01	15	Adj Output Jog Position	Other	
		0613	01	[Adjust Output Tray Descending Position]	6-236-00	01	[Exit Paper Tray Lowering Adj]	0: Default 1: More 2: Less	
		0614	01	[Adjust Exit Guide Close Timing (Booklet Fin)]	6-219-00	01	[ExitGuidePlate CloseTiming Adj]	0: Default 1: Thin Paper	
		0615	01	[Output Trail Edge Press Setting]	6-244-00	01	[Outputed:Trail Edge Press Set]	0: Auto 1: Force ON 2: Force OFF	
		0616	01	[Output Fan Setting]	6-245-001		[Paper Exit Fan Setting]	0: Auto 1: Force ON 2: Force OFF	
		0617	01	[Adjust Output Fan Level]	6-246-001		[Paper Exit Fan Vol Adil	0: Auto 1: Fan Vol Up	
0618	01	0618	01	[Adjust Staple Position for Booklet]	st Staple 6-721-008 on for Booklet]		Adj Booklet Staple Position	A3 LEF	
	02		02	[Adjust Staple Position for Booklet]	6-721-00	)9	Adj Booklet Staple Position	B4 LEF	
	03		03	[Adjust Staple Position for Booklet]	6-721-013		Adj Booklet Staple Position	A4 LEF	
	04		04	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	14	Adj Booklet Staple Position	B5 LEF	
	05		05	[Adjust Staple Position for Booklet]	6-721-00	06	Adj Booklet Staple Position	SRA3 LEF	
	06		06	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	10	Adj Booklet Staple Position	SRA4 LEF	
	07		07	[Adjust Staple Position for Booklet]	6-721-00	01	Adj Booklet Staple Position	13" X19.2" LEF	
	08		08	[Adjust Staple Position for Booklet]	6-721-00	)2	Adj Booklet Staple Position	13" X19" LEF	
	09		09	[Adjust Staple Position for Booklet]	6-721-00	)5	Adj Booklet Staple Position	13" X18" LEF	
	10		10	[Adjust Staple Position for Booklet]	6-721-00	03	Adj Booklet Staple Position	12.6" X19.2" LEF	
	11		11	[Adjust Staple Position for Booklet]	6-721-00	04	Adj Booklet Staple Position	12.6" X18.5" LEF	
	12		12	[Adjust Staple Position for Booklet]	6-721-00	)7	Adj Booklet Staple Position	12" X18" LEF	
	13		13	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	15	Adj Booklet Staple Position	DLT LEF	
	14		14	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	16	Adj Booklet Staple Position	LG LEF	
	15		15	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	17	Adj Booklet Staple Position	LT LEF	
	16		16	[Adjust Staple Position for Booklet]	6-721-0 <sup>-</sup>	18	Adj Booklet Staple Position	Other	
0619	01	0619	01	[Adjust Folding Position for Booklet]	6-722-00	38	Adj Booklet Fold Position	A3 LEF	
	02		02	[Adjust Folding Position for Booklet]	6-722-00	09	Adj Booklet Fold Position	B4 LEF	
	03		03	[Adjust Folding Position for Booklet]	6-722-0 <sup>-</sup>	13	Adj Booklet Fold Position	A4 LEF	
	04		04	[Adjust Folding Position for Booklet]	6-722-0	14	Adj Booklet Fold Position	B5 LEF	

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Model: Leo-	C1/P1				Da	ate: 11-May-16	No.: RD194132
05		05	[Adjust Folding Position for Booklet]	6-722-00	)6	Adj Booklet Fold Position	SRA3 LEF
06		06	[Adjust Folding Position for Booklet]	6-722-01	10	Adj Booklet Fold Position	SRA4 LEF
07		07	[Adjust Folding Position for Booklet]	6-722-00	D1	Adj Booklet Fold	13" X19.2" LEF
08		08	[Adjust Folding Position for Booklet]	6-722-00	)2	Adj Booklet Fold	13" X19" LEF
09		09	[Adjust Folding Position for Booklet]	6-722-00	)5	Adj Booklet Fold Position	13" X18" LEF
10		10	[Adjust Folding Position for Booklet]	6-722-003		Adj Booklet Fold Position	12.6" X19.2" LEF
11		11	[Adjust Folding Position for Booklet]	6-722-004		Adj Booklet Fold Position	12.6" X18.5" LEF
12		12	[Adjust Folding Position for Booklet]	6-722-00	)7	Adj Booklet Fold Position	12" X18" LEF
13		13	[Adjust Folding Position for Booklet]	6-722-01	15	Adj Booklet Fold Position	DLT LEF
14		14	[Adjust Folding Position for Booklet]	6-722-01	16	Adj Booklet Fold Position	LG LEF
15		15	[Adjust Folding Position for Booklet]	6-722-01	17	Adj Booklet Fold Position	LT LEF
16		16	[Adjust Folding Position for Booklet]	6-722-01	18	Adj Booklet Fold Position	Other
	0620	01	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	. 80	Adj Booklet Jog Fence Position	A3 LEF
		02	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	)9	Adj Booklet Jog Fence Position	B4 LEF
		03	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	13	Adj Booklet Jog Fence Position	A4 LEF
		04	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	14	Adj Booklet Jog Fence Position	B5 LEF
		05	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	06	Adj Booklet Jog Fence Position	SRA3 LEF
		06	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	10	Adj Booklet Jog Fence Position	SRA4 LEF
		07	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	. 01	Adj Booklet Jog Fence Position	13" X19.2" LEF
		08	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	)2	Adj Booklet Jog Fence Position	13" X19" LEF
		09	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	)5	Adj Booklet Jog Fence Position	13" X18" LEF
		10	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	03	Adj Booklet Jog Fence Position	12.6" X19.2" LEF



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Model: Leo-C1/P1					Date: 11-May-16	No.: RD194132	
			11	[Paper Alignment for Booklet Across Feed Dir.]	6-723-004	4 Adj Booklet Jog Fence Position	12.6" X18.5" LEF
			12	[Paper Alignment for Booklet Across Feed Dir.]	6-723-00	7 Adj Booklet Jog Fence Position	12" X18" LEF
			13	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	5 Adj Booklet Jog Fence Position	DLT LEF
			14	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	6 Adj Booklet Jog Fence Position	LG LEF
			15	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	7 Adj Booklet Jog Fence Position	LT LEF
			16	[Paper Alignment for Booklet Across Feed Dir.]	6-723-01	8 Adj Booklet Jog Fence Position	Other
0621	01	0621	01	[Set Number of Folds for Booklet]	6-203-00	1 [Set Number of Folds for Book]	Default:0 -1 to +9
		0622	01	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	8 Adj Booklet Stapler Jog Pawl	A3 LEF
			02	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	9 Adj Booklet Stapler Jog Pawl	B4 LEF
			03	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	3 Adj Booklet Stapler Jog Pawl	A4 LEF
			04	[Paper Alignment for Booklet With Feed Dir.]	6-724-014	4 Adj Booklet Stapler Jog Pawl	B5 LEF
			05	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	6 Adj Booklet Stapler Jog Pawl	SRA3 LEF
			06	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	0 Adj Booklet Stapler Jog Pawl	SRA4 LEF
			07	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	1 Adj Booklet Stapler Jog Pawl	13" X19.2" LEF
			08	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	2 Adj Booklet Stapler Jog Pawl	13" X19" LEF
			09	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	5 Adj Booklet Stapler Jog Pawl	13" X18" LEF
			10	[Paper Alignment for Booklet With Feed Dir.]	6-724-003	3 Adj Booklet Stapler Jog Pawl	12.6" X19.2" LEF
			11	[Paper Alignment for Booklet With Feed Dir.]	6-724-004	4 Adj Booklet Stapler Jog Pawl	12.6" X18.5" LEF



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Mode	Model: Leo-C1/P1 Date: 11-May-16					Date: 11-May-16	No.: RD194132
			12	[Paper Alignment for Booklet With Feed Dir.]	6-724-00	07 Adj Booklet Stapler Jog Pawl	12" X18" LEF
			13	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	5 Adj Booklet Stapler Jog Pawl	DLT LEF
			14	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	6 Adj Booklet Stapler Jog Pawl	LG LEF
			15	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	7 Adj Booklet Stapler Jog Pawl	
			16	[Paper Alignment for Booklet With Feed Dir.]	6-724-01	8 Adj Booklet Stapler Jog Pawl	Other
		0623	01	[Z-fold Skew Correction]	6-229-00	1 [Skew Corr Adj(Z- Fold)]	0: Corr: OFF 1: Corr: ON 2: Rev Corr: ON (Default)
		0624	01	[Correct Z-fold Skew]	6-230-00	01 [Adj Registration Buckle]	Default:0 -9 to 0
		0625	01	[Correct Z-fold Skew (Reverse)]	6-231-00	01 [Skew Corr Reverse Amt Adj(Z- F)]	Default:0 -3 to 0
0701	01	0701	01	[Half Fold Position (Multi-sheet Fold)]	6-752-10	)1 [FM2 Equal 1/2:FineAdjFld]	A3 SEF (Multi Sheet)
	02		02	[Half Fold Position (Multi-sheet Fold)]	6-752-10	02 [FM2 Equal 1/2:FineAdjFld]	B4 SEF (Multi Sheet)
	03		03	[Half Fold Position (Multi-sheet Fold)]	6-752-10	03 [FM2 Equal 1/2:FineAdjFld]	A4 SEF (Multi Sheet)
	04		04	[Half Fold Position (Multi-sheet Fold)]	6-752-10	9 [FM2 Equal 1/2:FineAdiFld]	B5 SEF (Multi Sheet)
	05		05	[Half Fold Position (Multi-sheet Fold)]	6-752-11	5 [FM2 Equal 1/2:FineAdiFld]	SRA3 (Multi Sheet)
	06		06	[Half Fold Position (Multi-sheet Fold)]	6-752-11	6 [FM2 Equal 1/2:FineAdjFld]	SRA4 (Multi Sheet)
	07		07	[Half Fold Position (Multi-sheet Fold)]	6-752-11	8 [FM2 Equal 1/2:FineAdjFld]	310*432 (Multi Sheet)
	08		08	[Half Fold Position (Multi-sheet Fold)]	6-752-11	7 [FM2 Equal 1/2:FineAdjFld]	226*310 (Multi Sheet)
	09		09	[Half Fold Position (Multi-sheet Fold)]	6-752-11	1 [FM2 Equal 1/2:FineAdiFld]	13"*19.2" (Multi Sheet)
	10		10	[Half Fold Position (Multi-sheet Fold)]	6-752-11	0 [FM2 Equal 1/2:FineAdiFld]	13"*19" (Multi Sheet)
	11		11	[Half Fold Position (Multi-sheet Fold)]	6-752-11	2 [FM2 Equal 1/2:FineAdiFld]	13"*18" (Multi Sheet)
	12		12	[Half Fold Position	6-752-11	4 [FM2 Equal 1/2:EineAdiEld]	12.6"*19.2" (Multi Sheet)
	13		13	[Half Fold Position	6-752-11	3 [FM2 Equal 1/2:FineAdiEld]	12.6"*18.5" (Multi
	14		14	[Half Fold Position (Multi-sheet Fold)]	6-752-10	07 [FM2 Equal 1/2:FineAdiFld]	12"*18" (Multi Sheet)
	15		15	[Half Fold Position (Multi-sheet Fold)]	6-752-10	04 [FM2 Equal 1/2:FineAdjFld]	DLT SEF (Multi Sheet)

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Mode	Model: Leo-C1/P1				C	No.: RD194132	
	16		16	[Half Fold Position	6-752-105	[FM2 Equal	LG SEF (Multi
	17		17	(IVIUITI-Sheet Fold)]	6 750 100		
	17		17	(Multi shoot Fold)]	0-752-100	1/2: Eino Adi Eldi	Shoot
	10		10	[Holf Fold Position	6 752 109		Sheet)
	10		10	(Multi-sheet Fold)]	0-752-100	1/2:FineAdjFld]	
	19		19	[Half Fold Position	6-752-119	[FM2 Equal	Custom (Multi
				(Multi-sheet Fold)]		1/2:FineAdjFld]	Sheet)
0702	01	0702	01	[Letter Fold-out	6-753-101	[FM3 Equal	B4 SEF (Multi
				Position 1 (Multi-		3rds:Fine Adj 1st]	Sheet)
				sheet Fold)]			
	02		02	[Letter Fold-out	6-753-102	[FM3 Equal	A4 SEF (Multi
				Position 1 (Multi-		3rds:Fine Adj 1st]	Sheet)
				sheet Fold)]			
	03		03	[Letter Fold-out	6-753-107	[FM3 Equal	B5 SEF (Multi
				Position 1 (Multi-		3rds:Fine Adj 1st]	Sheet)
				sheet Fold)]			
	04		04	[Letter Fold-out	6-753-103	[FM3 Equal	LG SEF (Multi
				Position 1 (Multi-		3rds:Fine Adj 1st]	Sheet)
				sheet Fold)]			
	05		05	[Letter Fold-out	6-753-104	[FM3 Equal	LT SEF (Multi
				Position 1 (Multi-		3rds:Fine Adj 1st]	Sheet)
			-	sheet Fold)	0 750 /00		
	06		06	Letter Fold-out	6-753-108	[FM3 Equal	Custom (Multi
				Position 1 (Multi-		3rds:Fine Adj 1stj	Sheet)
0700	01	0700	01	Sheet Fold out	C 754 101		
0703	01	0703	01	Desition 2 (Multi	6-754-101	I [FINIS Equal 2rde: Eine Adi 2nd]	B4 SEF (IVIUILI Shoot)
				rosition 2 (Multi-		Sius.Fille Auj Ziluj	Sheel)
	02		02	I attar Fold-out	6-754-102	[EM3 Equal	Δ4 SEE (Multi
	02		02	Position 2 (Multi-	0-734-102	3rds:Fine Adi 2nd	Sheet)
				sheet Fold)]			Chooly
	03		03	[Letter Fold-out	6-754-107	[FM3 Equal	B5 SEF (Multi
				Position 2 (Multi-		3rds:Fine Adi 2nd]	Sheet)
				sheet Fold)]		, ,	,
	04		04	[Letter Fold-out	6-754-103	[FM3 Equal	LG SEF (Multi
				Position 2 (Multi-		3rds:Fine Adj 2nd]	Sheet)
				sheet Fold)]			
	05		05	[Letter Fold-out	6-754-104	[FM3 Equal	LT SEF (Multi
				Position 2 (Multi-		3rds:Fine Adj 2nd]	Sheet)
				sheet Fold)]			
	06		06	[Letter Fold-out	6-754-108	[FM3 Equal	Custom (Multi
				Position 2 (Multi-		[3rds:Fine Adj 2nd]	Sheet)
0704	0.1	0704	0.1	sheet Fold)	0 755 404		
0704	01	0704	01	Letter Fold-in	6-755-101	[FM4 3rds 1	A3 SEF (Multi
				Position 1 (Multi-		Fiap:Fine Adj 1stj	Sheet)
	00		00	Sheet Fold)j	0 755 100		
	02		02	Letter Fold-In	6-755-102	[[FIVI4 3rds ]	B4 SEF (IVIUILI
				sheet Fold\1		riap.rine Auj Istj	Sileel)
	03	+	03	I atter Fold in	6-755 102	[EMA 3rds 1	
	00		03	Position 1 (Multi-	0-700-100	Flan Fine Δdi 1etl	Sheet)
				sheet Fold)]			
	1	1	1	/]	1	1	1



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Mode	Model: Leo-C1/P1					Date: 11-May-16	No.: RD194132	
	04		04	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	09 [FM4 3rds 1 Flap:Fine Adj 1st]	B5 SEF (Multi Sheet)	
	05		05	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	07 [FM4 3rds 1 Flap:Fine Adj 1st]	12"*18" (Multi Sheet)	
	06		06	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	04 [FM4 3rds 1 Flap:Fine Adj 1st]	DLT SEF (Multi Sheet)	
	07		07	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	05 [FM4 3rds 1 Flap:Fine Adj 1st]	LG SEF (Multi Sheet)	
	08		08	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	06 [FM4 3rds 1 Flap:Fine Adj 1st]	LT SEF (Multi Sheet)	
	09		09	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-10	08 [FM4 3rds 1 Flap:Fine Adj 1st]	8-kai (Multi Sheet)	
	10		10	[Letter Fold-in Position 1 (Multi- sheet Fold)]	6-755-1 <sup>-</sup>	10 [FM4 3rds 1 Flap:Fine Adj 1st]	Custom (Multi Sheet)	
0705	01	0705	01	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	01 [FM4 3rds 1 Flap:Fine Adj 2nd]	A3 SEF (Multi Sheet)	
	02		02	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	02 [FM4 3rds 1 Flap:Fine Adj 2nd]	B4 SEF (Multi Sheet)	
	03		03	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	03 [FM4 3rds 1 Flap:Fine Adj 2nd]	A4 SEF (Multi Sheet)	
	04		04	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	09 [FM4 3rds 1 Flap:Fine Adj 2nd]	B5 SEF (Multi Sheet)	
	05		05	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	07 [FM4 3rds 1 Flap:Fine Adj 2nd]	12"*18" (Multi Sheet)	
	06		06	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	04 [FM4 3rds 1 Flap:Fine Adj 2nd]	DLT SEF (Multi Sheet)	
	07		07	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	05 [FM4 3rds 1 Flap:Fine Adj 2nd]	LG SEF (Multi Sheet)	
	08		08	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	06 [FM4 3rds 1 Flap:Fine Adj 2nd]	LT SEF (Multi Sheet)	
	09		09	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-10	08 [FM4 3rds 1 Flap:Fine Adj 2nd]	8-kai (Multi Sheet)	
	10		10	[Letter Fold-in Position 2 (Multi- sheet Fold)]	6-756-1	10 [FM4 3rds 1 Flap:Fine Adj 2nd]	Custom (Multi Sheet)	
		0706	01	[Folding Unit Tray Full Detection]	6-762-00	01 [Top Tray Full Set: Enable]		

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Mode	Model: Leo-C1/P1 Date: 11-May-16		No.: RD194132				
		0707	01	[Number of Sheets Folded after Full Detection]	6-763-00	1 [Top Tray Full Set: Limit Output]	
0801	01	0801	01	[Cover Sheet Position for Perfect Binding With Feed Dir]	6-780-00	1 Cover Center Adjustment	
0802	01	0802	01	[Cover Sheet Position for Perfect Binding Across Feed Dir]	6-781-00	01 Cover Horizontal Adjustment	
0803	01	0803	01	[Adjust Perfect Binding Finishing Angle]	6-782-00	01 Finishing Angle Adjustment	Backward
	02		02	[Adjust Perfect Binding Finishing Angle]	6-782-00	2 Finishing Angle Adjustment	Forward
	03		03	[Adjust Perfect Binding Finishing Angle]	6-782-00	03 Finishing Angle Adjustment	Toward Small Hole
0804	01	0804	01	[Adjust Applying Binding Glue]	6-783-00	1 Glue Coating Amt Adj	
		0901	01	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	1 Jog Position Adjust Stacker1	A3 SEF
			02	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	2 Jog Position Adjust Stacker1	B4 SEF
			03	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	04 Jog Position Adjust Stacker1	A4 LEF
			04	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	3 Jog Position Adjust Stacker1	A4 SEF
			05	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	08 Jog Position Adjust Stacker1	B5 LEF
			06	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	07 Jog Position Adjust Stacker1	B5 SEF
			07	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	6 Jog Position Adjust Stacker1	A4 LEF
			08	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	5 Jog Position Adjust Stacker1	A5 SEF
			09	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-00	9 Jog Position Adjust Stacker1	DLT SEF
			10	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-01	0 Jog Position Adjust Stacker1	LG SEF



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Model: Leo-C1/P1				D	ate: 11-May-16	No.: RD194132
	11	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-0	12	Jog Position Adjust Stacker1	LT LEF
	12	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-01	11	Jog Position Adjust Stacker1	LT SEF
1	13	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-0	14	Jog Position Adjust Stacker1	HLT LEF
	14	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-0 <sup>-</sup>	13	Jog Position Adjust Stacker1	HLT SEF
	15	[Paper Alignment in Stacker Tray Across Feed Direction 1]	6-740-015		Jog Position Adjust Stacker1	Other
0902 0	01	[Paper Alignment in Stacker Tray Across Feed Direction 2]	6-742-1		Sub Jog Adjust Stacker1	A3 SEF
	02	[Paper Alignment in Stacker Tray Across Feed Direction 2]	6-742-2		Sub Jog Adjust Stacker1	B4 SEF
	03	[Paper Alignment in Stacker Tray Across Feed Direction 2]	6-742-9		Sub Jog Adjust Stacker1	DLT SEF
	04	[Paper Alignment in Stacker Tray Across Feed Direction 2]	6-742-10	)	Sub Jog Adjust Stacker1	LG SEF
	05	[Paper Alignment in Stacker Tray Across Feed Direction 2]	6-742-15	5	Sub Jog Adjust Stacker1	Other
0903 (	01	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	01	LE Stopper Adjust Stacker1	A3 SEF
	02	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	)2	LE Stopper Adjust Stacker1	B4 SEF
	03	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	)4	LE Stopper Adjust Stacker1	A4 LEF
	04	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	)3	LE Stopper Adjust Stacker1	A4 SEF
	05	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	08	LE Stopper Adjust Stacker1	B5 LEF
	06	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	)7	LE Stopper Adjust Stacker1	B5 SEF
	07	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	06	LE Stopper Adjust Stacker1	A4 LEF
	08	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	)5	LE Stopper Adjust Stacker1	A5 SEF



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Model: Le	o-C1/P1				Date: 11-May-16	No.: RD194132
		09	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-00	9 LE Stopper Adjust Stacker1	DLT SEF
		10	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	0 LE Stopper Adjust Stacker1	LG SEF
		11	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	2 LE Stopper Adjust Stacker1	LT LEF
		12	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	1 LE Stopper Adjust Stacker1	LT SEF
		13	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	4 LE Stopper Adjust Stacker1	HLT LEF
		14	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	3 LE Stopper Adjust Stacker1	HLT SEF
		15	[Paper Alignment in Stacker Tray With Feed Direction]	6-741-01	5 LE Stopper Adjust Stacker1	Other
	0904	01	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	1 Jog Position Adjust Stacker2	A3 SEF
		02	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	2 Jog Position Adjust Stacker2	B4 SEF
		03	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	4 Jog Position Adjust Stacker2	A4 LEF
		04	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	3 Jog Position Adjust Stacker2	A4 SEF
		05	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	8 Jog Position Adjust Stacker2	B5 LEF
		06	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	7 Jog Position Adjust Stacker2	B5 SEF
		07	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	6 Jog Position Adjust Stacker2	A4 LEF
		08	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	5 Jog Position Adjust Stacker2	A5 SEF
		09	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-00	9 Jog Position Adjust Stacker2	DLT SEF
		10	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-01	0 Jog Position Adjust Stacker2	LG SEF
		11	[Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-01	2 Jog Position Adjust Stacker2	LT LEF



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Model: Leo-C1/P1		C	ate: 11-May-16	No.: RD194132
1:	2 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-011	Jog Position Adjust Stacker2	LT SEF
1:	3 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-014	Jog Position Adjust Stacker2	HLT LEF
14	4 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-013	Jog Position Adjust Stacker2	HLT SEF
1	5 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 1]	6-743-015	Jog Position Adjust Stacker2	Other
0905 0	1 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 2]	6-745-001	Sub Jog Adjust Stacker2	A3 SEF
02	2 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 2]	6-745-002	Sub Jog Adjust Stacker2	B4 SEF
03	3 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 2]	6-745-009	Sub Jog Adjust Stacker2	DLT SEF
04	4 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 2]	6-745-010	Sub Jog Adjust Stacker2	LG SEF
0	5 [Paper Alignment in 2nd Stacker Tray Across Feed Dir. 2]	6-745-015	Sub Jog Adjust Stacker2	Other
0906 0	1 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-001	LE Stopper Adjust Stacker2	A3 SEF
02	2 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-002	LE Stopper Adjust Stacker2	B4 SEF
03	3 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-004	LE Stopper Adjust Stacker2	A4 LEF
04	4 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-003	LE Stopper Adjust Stacker2	A4 SEF
0	5 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-008	LE Stopper Adjust Stacker2	B5 LEF
0	6 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-007	LE Stopper Adjust Stacker2	B5 SEF
0.	7 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-006	LE Stopper Adjust Stacker2	A4 LEF
08	8 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-005	LE Stopper Adjust Stacker2	A5 SEF
09	9 [Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-009	LE Stopper Adjust Stacker2	DLT SEF



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Model: Leo-C1/P1						Date: 11-May-16	No.: RD194132
			10	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	0 LE Stopper Adjust Stacker2	LG SEF
			11	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	2 LE Stopper Adjust Stacker2	LT LEF
			12	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	1 LE Stopper Adjust Stacker2	LT SEF
			13	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	4 LE Stopper Adjust Stacker2	HLT LEF
			14	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	3 LE Stopper Adjust Stacker2	HLT SEF
			15	[Paper Alignment in 2nd Stacker Tray With Feed Direction]	6-744-01	5 LE Stopper Adjust Stacker2	Other
0907	01	0907	01	[Maximum Stack Quantity in Stacker Tray]	6-746-00	)1 Stacker Full Setting	Large Size(0:100% 1:75% 2:50% 3:25%)
	02		02	[Maximum Stack Quantity in Stacker Tray]	6-746-00	02 Stacker Full Setting	Small Size(0:100% 1:75% 2:50% 3:25%)

#### Technical Bulletin

#### PAGE: 1/2

Model: Leo-C1/P1		Date: 24-N	1ay-16	No.: RD194134	
Subject: FSM corre	ection: Added and Deleted	SPs		Prepared I	by: Rie Shohda
From: 1st Tech Se	rvice Sect., PP Tech Servic		]		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action real Service n Retrofit in Tier 2	quired nanual revision nformation Tier 0.5

This bulletin provides information on the newly added and deleted SPs.

Please apply these changes to your FSM.

#### Newly Added SPs:

#### Engine 1.06:06

3103	[Toner replacement decision]	
3-103-001	Toner replacement decision Replacement decision threshold	[ 30000 to 60000 / <b>60000.0</b> / 0.1mg ]
Decesso Duce to		

Reason: Due to the change to the VA toner bottle

3205	[TD. Sens Sensitivity]	
3-205-043	TC Between H-M: CMY	[ 1 to 10 / <b>3.40</b> / 0.01wt% ]
3-205-044	TC Between M-L: CMY	[ 1 to 10 / <b>4.82</b> / 0.01wt% ]

Reason: For further optimization of toner density in the development unit

#### Engine 1.09:06

1945	[Set Cooling Operation]	
1-945-049	Ozone In Fan: KC	[ 20 to 100 / <b>50</b> / <b>1</b> % ]
1-945-050	Ozone In Fan: MY	[ 20 to 100 / <b>50</b> / <b>1</b> % ]
1-945-051	Ozone In Fan: S	[ 20 to 100 / <b>45</b> / <b>1</b> % ]
1-945-052	Ozone In Fan: ON/OFF	[0 to 1 / <b>1</b> / 1]
1-945-053	Operation Recovery: Switch Time: Ozone Fan	[ 0 to 1440 / <b>0.5</b> / 0.5min ]

Reason: In line with the increased exhaust intensity around the charge unit to prevent blurred images caused by ozone

5805	[Output Check]	
5-805-213	Ozone In Fan: KC	[ 0 to 1 / <b>0</b> / 1 ]
5-805-214	Ozone In Fan: MY	[ 0 to 1 / <b>0</b> / 1 ]
5-805-215	Ozone In Fan: S	[ 0 to 1 / <b>0</b> / 1 ]

Reason: In line with the increased exhaust intensity around the charge unit to prevent blurred images caused by ozone

RI	СОН

|--|

Model: Leo-C1/P1

Date: 24-May-16

No.: RD194134

#### **Deleted SPs:**

Unnecessary and already existing SPs were deleted.

#### Engine 1.06:06

- SP1-131-002
- SP1-945-030
- SP2-907-004

#### Engine 1.09:06

- SP1-902-001
#### **PAGE: 1/1**

Model: Leo-C1			Date: 17-May-16		No.: RD194133	
Subject: FSM Correction: Trade-off of the ITB guide plate				Prepared by: A. Tajima		
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	☐ Troubleshooting       ☑         ☐ Mechanical       ☑         ☐ Paper path       ☑         ☐ Product Safety       ☑	Part info Electrica Transmi Other (	ormat al it/rec	ion ☐ Ac ⊠ Se eive ☐ Re ) ⊠ Tie	ction required ervice manual revision etrofit information er 2	

Description of the trade-off relationship between Line scattering and Trailing edge scattering in the Troubleshooting manual was corrected in line with the release of the new Special guide plate 2.

p/n: D1946222 (GUIDE:TRANSPORT:INTERMEDIATE TRANSFER:5.0-:ASS'Y)

Please replace the "Trade-off" table in the following two sections of the manual with the table below.

- 10. Image Quality Problem: Full Page → Dirtied Print outs →Toner Scattering: Lines → Trade-off of the ITB guide plate
- 10. Image Quality Problem: Full Page → Dirtied Print outs →Toner Scattering: Trailing Edge → Trade-off of the ITB guide plate

#### Trade-off of the ITB guide plate

RICOH

There is a trade-off relationship between Line scattering and Trailing edge scattering for all 4 options below.

Guide plate type	Effect on Line scattering	Effect on Trailing edge scattering	Remark
Default	Low ~ Medium	Medium	Same as Pro C651/C751 special plate 1
Special guide plate 1	High	Low	Same as Pro C651/C751 special plate 2 (Pro C651/C751 special plate 1 + 5mm)
Special guide plate 2	Low ~ Medium	Medium	Purpose of this plate is to prevent contamination on the plate, not for toner scattering issues.
None (No guide plate installed)	Low	High	For paper lighter than Weight 4. Image may appear lighter at the trailing edge.

# Technical Bulletin

#### **PAGE: 1/2**

Model: Leo-C1/P1 Date: 25-N			Date: 25-M	1ay-16	No.: RD194135
Subject: Troubleshooting C1 lever					b <b>y:</b> S. Sasaki
From: 1st Tech Se	rvice Sect., PP Tech Servic	e Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action real Service n Retrofit ir	quired nanual revision Iformation Tier 0.5

### SYMPTOM

- 1) The left drawer lever (C1 lever) is loose (Photo 1) or,
- 2) The lever is locked in the incorrect position (Photo 2)



### **Correct** position



## CAUSE

The lock mechanism engages incorrectly or is disengaged.



Date: 25-May-16

No.: RD194135

### SOLUTION

#### **Production line**

The mechanism will be modified so that the lever stays in the correct position. Applied from: **TBA** 

#### In the field

Do the following if the symptoms occur on machines produced before the modification.

Symptom 1 (lever is loose):

Rotate the lever back, in the direction shown in the diagram.

**Important:** Make sure NOT to rotate the lever in the opposite direction. Advise the customer not to do this. This is because the lever will become locked in the incorrect position.



Symptom 2 (lever is locked in the incorrect position):

- 1. Push the bracket of the locking mechanism.
- 2. While pushing, rotate the lever to the correct position.
- 3. Release the bracket.



# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1 Date: 27-Ma			1ay-16	No.: RD194136	
Subject: Troubleshooting color/density change after paper end					oy: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action real Service n Retrofit in Tier 2	quired nanual revision nformation Tier 0.5

### SYMPTOM

The color and image density changes after Paper End occurs.

### CAUSE

Firmware bug

The machine mistakenly performs job-end Process Control when the Paper End condition occurs, automatically switching to another tray when the current tray runs out of paper.

### SOLUTION

#### **Production line**

The firmware will be modified so that the job-end Process Control is not performed at Paper End.

Applied from: November 2016 production

#### In the field

- Install the modified firmware (To be released: Nov. 2016).
- Until this firmware is available: Set SP3534-001, -011, and -021 to a value of "0".

**Note:** This will completely disable job-end Process Control. No side effects are expected, as the machine performs Process Control whenever it goes unused for 30 minutes, and when a large temperature or humidity change is detected.

## Technical Bulletin

Reissued: 04-Aug-16

Model: BR-C1/Leo-C1/Leo-P1/BR-P1/Andromeda-P1

Date: 23-Aug-13

No.: RD179018d

#### **RTB Reissue**

The items in <b>bold italics</b> have been corrected.							
Subject: Firmwar	e Release Note: Folder_FD50	20	Prepared by: J. Ohno				
From: 1st PP Tech Service Sect., PP Tech Service Dept.							
Classification:	Troubleshooting	Part informat	tion	Action required			
	🗌 Mechanical	Electrical		Service manual revision			
	Paper path	Transmit/rec	eive	Retrofit information			
	Product Safety	🛛 Other (Firmv	vare)	🛛 Tier 2			

# This RTB has been issued to announce the firmware release information for the **Folder\_FD5020.**

Version	Program No.	Effective Date	Availability of RFU
02.010:04	D7405300G	September 2016 production	Not available
02.000:04	D7405300F	June 2016 production	Not available
01.030:04	D7405300E	January 2014 production	Not available
01.020:04	D7405300D	December 2013 production	Not available
01.000:04	D7405300C	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
02.010:04	Error Correction: When turning ON the machine power or recovering from energy saver mode, the following stepper motors may not activate in the initialization process: Stopper 1 Motor, Stopper 2 Motor, Stopper 3 Motor, Dynamic Roller Lift Motor, Jogger Fence Motor
02.000:04	Specification Change: Added specification for future model. No effect on the current models.
01.030:04	Symptom corrected: When jams occur in a peripheral connected to the downstream of the Folding unit the operation panel might continue to display "Copying" instead of "Jam."
01.020:04	<ul> <li>Error Correction:</li> <li>If the door of the Multi-folder unit is opened during a job, a jam code indicating jammed sheet in the Multi-folder unit appears even if there are no jammed sheets in the unit.</li> <li>If running multi-fold jobs from the ADF or in Batch mode and the Multi-folder unit door is opened immediately after pressing the # key (to determine the last page of job), the system could freeze.</li> </ul>
01.000:04	1st Mass production

# Technical Bulletin

## PAGE: 1/7

Model: Leo-C1/P1 Date: 5-				ıg-16	No.: RD194137a
Subject: Troubleshooting Dirty Backgound					by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

### SYMPTOM

Dirty background

Туре	Sample (magnified)	CAUSE
A Small dots	<u>Dot size:</u> Approx. 5μm	Insufficiently charged developer Charge level of the developer is low due to either or both of the following:
		<ul> <li>High TC (toner concentration) in the development unit</li> </ul>
		<ul> <li>Degradation of the developer</li> </ul>
	She was a set of the set of the set of the	High humidity
		High humidity reduces the charge level of the developer.
		Coated paper (surface coating)
	The entire background appears dirty with very fine toner particles.	Some coatings may cause excess toner to be transferred to the paper.
В	Dot size: Approx.0.1-0.3mm	OPC deterioration
Large dots	О • • О	The electrostatic potential on the drum surface decreases due to deterioration.
	the second s	High humidity
		High humidity reduces the charge level of the developer.
	0	
	and the second sec	Coated paper (surface coating)
	0	Some coatings may cause excess toner to be transferred to the paper.
1		

RICOH	Technical Bulletin	PAGE: 2/7
Model: Leo-C1/P1	Date: 5-Aug-	16 No.: RD194137a

Note: The large yellow dots in the example below are not part of the symptom. These are embedded into the image by the machine, as part of a tracking pattern. They are virtually invisible to the naked eye.



### SOLUTION

Do the following if the symptom occurs.

#### Important:

- Check the counter values of the PM parts in the PCDU and replace any that have exceeded target yield.
- Make sure to calibrate the color with DFE after you complete the adjustments.
- Make a test print after you perform each action/step. If enough improvement is made, stop the procedure.
- 1. Print out test charts in **SP2109** using the following settings. SP2109 test chart print parameters

SP sub no.	Parameter
3: Pattern Selection	14: Trimming Area, or 19: Checker Flag Pattern
5: Color Selection	2: Cyan, 3: Magenta, (4: Yellow), 5: Black
6 ~ 9: Density	15 (default)



Date: 5-Aug-16

No.: RD194137a

- 2. Determine the affected colors and dot size (small or large).
  - If the dots are about 5µm, do the PROCEDURE: SMALL DOTS (Type A) below.
  - If the dots are about 0.1-0.3mm, do the PROCEDURE: LARGE DOTS (Type B) below.

No.	Action	Effective for		Side Effects
		Smaller	Larger	
		dots	dots	
1	Process Control	$\checkmark$	$\checkmark$	-
2	Toner Refresh	$\checkmark$	-	-
3	Increasing Background Potential	$\checkmark$	-	White Spots in LL environment
4	Decreasing Max image density	$\checkmark$	$\checkmark$	Lower Density
6	Increasing Paper Transfer	$\checkmark$	-	Lower Density, Mottled Image,
	Current			White spots
7	Increasing Image Transfer	$\checkmark$	-	Ghosting
	Current			
8	Increasing Process Speed	$\checkmark$	-	Lower Fusibility

Date: 5-Aug-16

No.: RD194137a

## PROCEDURE: SMALL DOTS (Type A)

1 Execute image density process control.

Adjustment setting	No	SP number
Adjust Image Density	0201	SP3011-002

- 2 Refresh the toner using the following steps.
  - 2.1 Set **SP2109-003** (Pattern Selection) to **26** (Full Dot Pattern).
  - 2.2 Set SP2109-005 (Color Selection) to 1 (Full Color).
  - 2.3 Set SP2109-006 (Density: K) to 15.
  - 2.4 Set SP2109-007 (Density: C) to 15.
  - 2.5 Set SP2109-008 (Density: M) to 0.
  - 2.6 Set SP2109-**009** (Density: Y) to **0.**
  - 2.7 Print or copy 60 duplex pages (30 sheets) onto A3.
  - 2.8 Set SP2109-006 (Density: K) to 0.
  - 2.9 Set SP2109-007 (Density: C) to 0.
  - 2.10 Set SP2109-008 (Density: M) to 15.
  - 2.11 Set SP2109-009 (Density: Y) to 15.
  - 2.12 Print or copy 60 duplex pages (30 sheets) onto A3.
    - **IMPORTANT:** Do not print 4C solid images (i.e., Do not set all four of the following SPs to 15 at the same time in step 2: SP2109-006, -007, -008 or 009; at least two of these SPs must be kept at zero). If you do, toner may scatter inside the machine.

# Note: It is recommended to apply the settings explained in RTB #RD194100, which decrease toner deterioration.

3 SP3621-011~015 (Background Pot:Set) in Super SP mode as follows:

IMSS setting	Color	Default Value	Set to:
SP3621-011	K	100	200
SP3621-012	С	30	55
SP3621-013	Μ	30	55
SP3621-014	Y	30	55
SP3621-015	S	30	55

IMPORTANT: White spots and/or damage to the cleaning blade may occur as a side effect of this action, especially in LT/LH environments. It is recommended to set these values to the default during winter months.

Date: 5-Aug-16

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#### 4 Execute image density process control.

Adjustment setting	No	SP number
Adjust Image Density	0201	SP3011-002

#### 5 Adjust either of the following:

 To apply the adjustment to all paper types: Set 0204 Adjust Maximum Image Density in Adjustment Settings for Skilled Operator to "-5".

Adjustment setting	No	SP number
Adjust Maximum Image Density	0204	SP3620-11~15

#### To apply the adjustment to specific paper types only: Set 017~021 (Adjust Toner Adhesion in Advanced Settings) to "-5".

	<u>190) to</u>
IMSS setting	No
Adjust Toner Adhesion (Black)	17
Adjust Toner Adhesion (Cyan)	18
Adjust Toner Adhesion (Magenta)	19
Adjust Toner Adhesion (Yellow)	20
Adjust Toner Adhesion (Special)	21

Note: As a side effect, the maximum image density will be decreased.

6 Increase the **absolute value** of the Paper Transfer Current **by 10** from the current value. (Example:  $-70 \rightarrow -80$ ).

IMSS setting	No
Paper Transfer Current Setting: B&W: Side 1	29
Paper Transfer Current Setting: Full Color: Side 1	35
Paper Transfer Current Setting: Full Color Special : Side 1	37
Paper Transfer Current Setting: S: Side 1	43
Paper Transfer Current Setting: B&W: Side 2	30
Paper Transfer Current Setting: Full Color: Side 2	36
Paper Transfer Current Setting: Full Color Special : Side 2	38
Paper Transfer Current Setting: S: Side 2	44

**Note:** As a side effect, low image density, mottled images, or white spots may occur.



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7 Add "5" to the present image transfer current value for the color(s) downstream of the affected color.

Example: If M is the affected color, modify C and K from a value of  $+70 \rightarrow +75$ .



Downstream

IMSS setting	No
Image Transfer Current Setting: B&W	22
Image Transfer Current Setting: FC: Black	23
Image Transfer Current Setting: FC: Cyan	24
Image Transfer Current Setting: FC: Magenta	25
Image Transfer Current Setting: FC: Yellow	26
Image Transfer Current Setting: FC: Special	27
Image Transfer Current Setting: Special	28

#### Note:

- ♦ This may result in reverse-transfer at the downstream stations.
- Black is the most downstream station, so this action is not effective for Black.
- $\diamond$  As a side effect, ghost images may occur.
- 8 If the above does not resolve the problem, increase the process speed.

IMSS setting	No
Process Speed Setting: Productivity	127
Process Speed Setting: Quality	128

Note: As a side effect, fusibility may worsen.

Date: 5-Aug-16

No.: RD194137a

## PROCEDURE: LARGE DOTS (Type B)

1 Execute image density process control.

Adjustment setting	No	SP number
Adjust Image Density	0201	SP3001-001

- 2 Decrease the Max Image Density.
  - To apply the adjustment to all paper types: Set 0204 Adjust Maximum Image Density in Adjustment Settings for Skilled Operator to "-5".

Adjustment setting	No	SP number
Adjust Maximum Image Density	0204	SP3620-11~15

#### To apply the adjustment to specific paper types only: Set 017~021 (Adjust Toner Adhesion in Advanced Settings) to "-5".

	5 /
IMSS setting	No
Adjust Toner Adhesion (Black)	17
Adjust Toner Adhesion (Cyan)	18
Adjust Toner Adhesion (Magenta)	19
Adjust Toner Adhesion (Yellow)	20
Adjust Toner Adhesion (Special)	21



Reissued: 11-Oct-16

Model: Leo-C1/P1	Date: 1-Jul-16	No.: RD194138c

#### Reissue

#### The items in *bold italics* were corrected or added.

Subject: Firmware Update Procedure for New HQ mode		Prepared by: A. Tajima	
From: 1st Tech Se	rvice Sect., PP Tech Servic	e Dept.	
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 (Firmware)</li> </ul>	<ul> <li>Action required</li> <li>Service manual revision</li> <li>Retrofit information</li> <li>Tier 2</li> <li>Tier 0.5</li> </ul>

#### Request

Update the mainframe firmware, DFE patch, printer drivers/utility, and convert the custom paper library **as a set** according to the procedure in this RTB.

### Background

 The Paper Library of the Leo-C1/P1 has entries with the suffix "HQ". The settings for these entries are optimized for better fusibility (less Gloss Ghosting), at the expense of productivity.

- A.V.	A. W.	A. V.	
0001 W	H_plain 52,3 plain	52.3~63.0gsm_WH	52.3- 63.0g/m2
0002 W	H_HQ_plain 5 plain	52.3~63.0gsm_WH_HQ	52.3- 63.0g/m2

 With the latest update, the customer can easily select whether to use HQ mode via a printer driver/utility (such as Command WorkStation), instead of changing the paper library entry assigned to the tray.



- In order to apply this improvement, you need to:
  - > Update the mainframe firmware, DFE patch, and printer drivers/utility as a set, and
  - Convert the custom paper library that the customer is currently using. Note: This is done with a conversion application.

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### What you need

You need the following to update the firmware.

• A laptop that meets the following system requirements:

Item	Requirements
CPU	x86, x64, AMD64 compatible CPU 1GHz or faster
HDD	10MB available hard disk space
RAM	2GB or larger
OS	Microsoft Windows 7, Windows 8, Windows 8.1, Windows 10
	Both 32bit and 64bit are supported.
Runtime	.NET Framework 4.5 or later
	https://www.microsoft.com/en-us/download/details.aspx?id=30653

- SD cards
- Update package (Visit GKM answer ID: **241759** to download the package).

The package includes:

> MQP Converter (PC tool that converts the mqp file to the new style) \*

#### NOTE: MQP Converter v. 1.1 was released on Sep 14, 2016. Make sure that the MQP Converter version is v. 1.1 when converting the MQP files to the new style. Help $\rightarrow$ About this software

#### > Firmware

	Version for Copier	Version for Printer
Engine	Ver.1.17:06 (D1945405S)	Ver.1.17:06 (M1955405S)
System/Copy	Ver. 3.06 (D1955720K)	Ver.3.06 (M1965720K)
Printer	Ver.3.02 (D1955735E)	Ver.3.04 (M1965734D)
OpePanel	Ver.2.04 (D1955729F)	Ver.2.04 (M1965727F)
Web Support	Ver. 1.06 (D1955726G)	Ver. 1.06 (M1965725G)

#### Paper Library (library.mqp)

	Version for Copier	Version for Printer
NA	Rev.9	Rev.9
EU	Rev.9	Rev. <i>9</i>
AP	Rev.7	Rev.7
CN	Rev.7	Rev.7

> Leaflet for the customer



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Fierv Patch

	Version
Fiery	FIT101135696

**Important:** Before you visit the customer site, make sure that your MQP Converter can be launched correctly. This is because downloading .NET Framework 4.5 is often required, which takes a relatively long time.

(Optional) Microcodes •

> The microcodes for Aldebaran are not included in this package. If the customer is using Aldebaran, obtain the latest microcodes from the firmware website and then install them.

	Version
Aldebaran	v1.6.004

- (Optional) Update files for printer drivers The update files for the printer drivers are not included in this package. If the customer uses any of the printer drivers, obtain the latest version from the Ricoh support site in your region, and then update the printer drivers on the customer's PC/Mac.
  - ➢ GW printer driver

	Version
PCL6	1.3
PS	1.4

EFI printer driver (PS driver)

	Version
for Windows	v1.0.2
for Mac	v1.0.3

> Aldebaran printer driver

	Version
for Windows	1.5.0.0
for Mac	1.0.56.0



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### **Overview of procedure**

- 1. Back up the customer paper library to an SD card.
- 2. If necessary, back up the saved paper library to an SD card.
- 3. Convert the mqp file(s) saved in Steps 1 and 2 with the MQP converter.
- 4. Update the firmware on the mainframe (Engine, System/Copy, Printer, OpePanel, Web Support, Scanner).
- 5. Apply Patches/Microcode to the DFE.
- 6. Reinstall the mqp file(s) processed in Step 3 on the machine.
- 7. Update the paper library.
- Only if White is currently installed on the 5<sup>th</sup> station: Set SP3107-001 to "2: Clear" and back to "3: White".

**Important:** This step is not necessary if the Clear color is currently installed on the machine. This is true even if the customer uses both colors.

9. Explain to the customer that how to use HQ mode has changed.

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### PROCEDURE

### 1. Back up the custom paper library

- 1. Insert the SD card into the card slot on the operation panel.
- 2. Open the Adjustment Settings for Skilled Operators menu.
- 3. Press [05. Machine: Maintenance].
- 4. Press [0513: Back Up/Restore Custom Paper Data].
- 5. Press [Back Up Custom Paper Settings]

<b>\$</b> 4	Adjustment Settings for Skilled	Operators	To Print Screen	Back
▶ 0513	: Back Up / Restore Custom Paper Data			
001	Back Up Saved Paper Library	]		
002	Back Up Custom Paper Settings	]		
003	Restore Custom Paper Settings	]		

6. After "Complete" is displayed, remove the SD card.

#### NOTE

- The Fiery controller must be turned on and connected (only for Fiery models).
- Backup/restore cannot be performed if any entry is assigned to a tray.
- Backup/restore cannot be performed if any job using an entry remains in the Fiery controller.
- Backup files created on other models cannot be restored.

### 2. Back up the saved paper library

- 1. Insert an SD card into **Slot 1 on the rear box.**
- 2. Open the Adjustment Settings for Skilled Operators menu.
- 3. Press [05. Machine: Maintenance].
- 4. Press [0513: Back Up/Restore Custom Paper Data].
- 5. Press [Back Up Saved Paper Library]



6. After "Complete" is displayed, remove the SD card.



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### 3. Convert the mqp file(s) saved in Steps 1 and 2

#### NOTE:

MQP Converter v. 1.1 was released on Sep 14, 2016. Make sure that the MQP Converter version is v. 1.1 when converting the MQP files to the new style. Help  $\rightarrow$  About this software

The previous v.1.0 contained a bug that falsely sets the fusing temperature to "0" for the entries made. The fusing temperature for such entries can be corrected by simply reprocessing the incorrectly processed file using v. 1.1.

1. Double-click 'MQPConverter.exe' to activate the converter on your PC.

#### NOTE:

• The following error message will appear if '.NET Framework (v.4.5 or later)' is not installed on the PC. If the program is not installed, download v.4.5 from the Microsoft website linked below.

URL: https://www.microsoft.com/en-us/download/details.aspx?id=30653

MQPConve	rter.exeNET Framework Initialization Error		×
8	To run this application, you first must install one of the follo versions of the .NET Framework: v4.0.30319 Contact your application publisher for instructions about ob appropriate version of the .NET Framework.	owing otaining	the
		(	ок



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2. Wait for the screen below to appear.

MQP File Conv	erter		□ ×
		Language (L)	Help (H)
Drag and drop	o the file you wish to conve	ert.	
Target File Name			
New File Name			
MQP File Type	Preserve (preserve.mqp) 🔹		
Progress			
	Convert (C)	Cancel (L)	
		Version: 0.5, Build:5918, Rev	ision:24444

3. Drag the MQP file ("preserve.mqp" or "user.mqp") to the converter screen. **Note:** The file can be dragged anywhere within the screen.

MQP File Conv	erter	-	□ ×
		Language (L)	Help (H)
Ready. Click	Convert (C).		
Target File Name	C:¥Users¥Administrator¥Desktop¥p	reserve.mqp	
New File Name	C:¥Users¥Administrator¥Desktop¥p	reserve_20160420110501.mqp	
MQP File Type	Preserve (preserve.mqp) 🔻		
Progress			
	Convert (C)	Cancel (L)	
		Version: 0.5, Build:5918, Rev	ision:24444

#### Important:

If there is a problem with the MQP file, an error message will appear, such as the one shown below. If this happens, correct the file and redo the steps. See the last page of this RTB for details on how to resolve errors.

MQP File Converter	×
	Language (L) Help (H)
Error	Confirm (0)
(002) MQP file header is invalid.	
Target File Name	
New File Name	



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4. Confirm that the correct file type has been selected for the MQP File Type.

MQP File Type	Preserve (preserve.mqp) 🔻	
Drogroes	Preserve (preserve.mqp)	
Flogress	User (user.mqp)	ļ

#### Important:

The file type is automatically selected depending on the name of the drag-and-drop file.

If the wrong file type is selected, correct it manually by selecting the correct type.

- preserve (preserve.mqp) : for Custom Paper Settings
- User(user.mqp) : for Saved Paper Library
- 5. Click [Convert]. Wait for the conversion to complete, and then click [Confirm].

MQP File Conv	erter	_ □ ×
		Language (L) Help (H)
Completed. Co	onfirm the new file created.	Confirm (O)
Target File Name	C:¥Users¥Administrator¥Desktop¥pre	eserve.mqp
New File Name	C:¥Users¥Administrator¥Desktop¥pre	eserve_20160420111030.mqp
MQP File Type	Preserve (preserve.mqp) 🔹	
Progress		
	0	0
	Convert (C)	Cancel (L)
		Version: 0.5, Build:5918, Revision:24444

#### Note

- The converted file is saved as "preserve YYYYMMDDhhmmss.mqp".
- Though "HQ" entries are no longer required after this update, the converter does not erase "HQ" entries in the Custom Paper Library or Saved Paper Library. This is because the settings of those entries may be tweaked by the customer to meet their needs, and erasing them may require the customer to do the adjustment again.

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## 4. Update the firmware on the mainframe.

The following firmware should be updated as a set.

	Version for Copier	Version for Printer
Engine	Ver.1.17:06	Ver.1.17:06
	D1945405S	M1955405S
System/Copy	Ver. 3.06	Ver.3.06
	D1955720K	M1965720K
Printer	Ver.3.02	Ver.3.04
	D1955735E	M1965734D
OpePanel	Ver.2.04	Ver.2.04
	D1955729F	M1965727F
Web Support	Ver.1.06	Ver.1.06
	D1955726G	M1965725G

### 5. Apply Patches/Microcodes to the DFE.

Apply the following patches/microcodes depending on the type of DFE the customer is using.

	Version
Fiery	FIT101135696
Aldebaran	v1.6.004

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### 6. Restore the custom paper library

- 1. Rename the converted file "preserve\_YYYYMMDDhhmmss.mqp" as "preserve.mqp" and put it under "mqp" folder in a SD card.
- 2. Insert the SD card containing the Custom Paper settings into the card slot on the operation panel.
- 3. Open the Adjustment Settings for Skilled Operators menu.
- 4. Press [05. Machine: Maintenance].
- 5. Press [0513: Back Up/Restore Custom Paper Data]
- 6. Press [Restore Custom Paper Settings].

<b>\$</b> A	Adjustment Settings for Skilled	Operators	To Print Screen	Back
▶ 0513	: Back Up / Restore Custom Paper Data			
001 (	Back Up Saved Paper Library	]		
002 (	Back Up Custom Paper Settings	]		
003	Restore Custom Paper Settings	]		

7. After "Complete" is displayed, remove the SD card.

#### NOTE

- The Fiery controller must be turned on and connected (only for Fiery models).
- Backup/restore cannot be performed if any entry is assigned to a tray.
- Backup/restore cannot be performed if any job using an entry remains in the Fiery controller.
- Backup files created on other models cannot be restored.

### 7. Restore the saved paper library.

- 1. Rename the converted file "user\_YYYYMMDDhhmmss.mqp" as "user.mqp" and save it to an "mqp" folder in an SD card.
- 2. Insert the SD card containing the Saved Paper Library data into Card Slot #2 on the right side of the controller box.
- 3. Execute SP5711-002: Custom Paper Data UpLoad.
- 4. Reboot the machine.



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### 8. Install the Paper Library.

Install the latest version of the Paper Library on the machine. Make sure to choose a file that fits your region, model, and special color the customer uses.

	Version for Copier	Version for Printer
NA	Rev.9	Rev.9
EU	Rev. <i>9</i>	Rev. <i>9</i>
AP	Rev.7	Rev.7
CN	Rev.7	Rev.7

### 9. Reactivate White toner (Only if White is currently installed.)

- 1. Set SP3107-001 to "2: Clear"
- 2. Set SP3107-001 back to "3 White".

**Note:** You do NOT need to reboot the machine.

### 10. Update the drivers.

Update the necessary printer driver on the customer's PC/Mac, depending on the type of controller the customer is using.

➢ GW printer driver

	Version
PCL6	1.3
PS	1.4

EFI printer driver (PS driver)

	Version
for Windows	v1.0.2
for Mac	v1.0.3

Aldebaran printer driver

	Version
for Windows	1.5.0.0
for Mac	1.0.56.0



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## Appendix 1: IMPORTANT NOTE about Aldebaran

After the PROCEDURE above is completed, the error "Mismatch detected between DFE Catalog and Printer Paper Library" may occur.

O Err	or				Samole Stop	Start
Opera	tions	Jobs		Paper Setting	UserTools/Adjustmer	nt
Operator N	llessage					
Tray Inf	ormation		Interp	oser Tray Informati	on	
1 🔳	+EaEElale	8½×11D	63.1 - 80.0 ssm	6 🗐	8½×11₽	63.1 - 80.0 ssm
2 🗐	Disabled	11×17⊡	63.1 - 80.0 gsm	7 🗐	8½×11₽	63.1 - 80.0 gsm
3 🗐		8½×11₽	63.1 - 80.0 gsm	8 🗐	8½×11 🕞	63.1 - 90.0 gsm
4 🔳		8½×11D	63.1 - 80.0 gsm	A	8½×11 🕞	63.1 -
s I≣I		85×111	69.1 -			00.0 850

Make sure to **select "Use Printer Paper Library".** DO NOT select "Use DFE Catalog". Otherwise, the customer's paper library will be overwritten with the older version.





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### Appendix 2: Error Messages and Causes/Solutions

Error code



Error code	Error message	Solution	
001	MQP file size or type is invalid.	File size is invalid or the file is not an MQP file. Download the correct MQP file again.	
002	File header is invalid.	Download the MQP file again.	
003	File not found.	The file may have been deleted or moved to a different location after being dragged and dropped.	
004	Library file not found.	Verify that the Libraries folder is located under the same directory as the folder for the converter.	
005	Machine not supported.	The MQP file was not created for the Leo- C1/P1. MQP files of other models cannot be converted.	
006	File structure version not supported.	Download the MQP file again.	
007	Data invalid.	Download the MQP file again.	
008	Library file not loaded.	The file may be corrupted. Download and re-install the converter tool.	
009	File header is incorrect.	Download the MQP file again.	
010	No data available.	Data for conversion is not present in the MQP file. The data may already have been converted, or there is no data present in the file.	
011	No disk space available.	Delete files to secure disk space.	

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Model: Leo-C1/P1		Date: 1-Jul-16	No.: RD194138c
The update _Package			
RAC			
Update_Package_Leo-C1_RAC.zip	Update_Pac	ckage_Leo-P1_RAC.	zip
RE			
Update_Package_Leo-C1_RE.zip	Update_Pack	age_Leo-P1_RE.zip	
RA			
Update_Package_Leo-C1_RA.zip	Update_Pack	age_Leo-P1_RA.zip	
MQP Converter v. 1.1			
MQPConverter_v11.zip			

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Model: Leo-C1/P1		Date: 15-Jul-16		No.: RD194139	
Subject: Troubleshooting J080/image fluctuation to with-feed direction			Prepared by: S. Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service n Retrofit ir Tier 2	quired nanual revision nformation Tier 0.5

### SYMPTOM

J080 occurs and/or the image position shifts along the feed direction.

Note:

- This symptom occurs more easily:
  - The higher the printing speed, and
  - The higher the paper stiffness
- Given this, it will occur most easily when using paper that corresponds to "Thick 7". This is because the default printing speed is High, and the paper itself has a high stiffness. (The printing speed for all other thick paper types is Middle or Low).

## CAUSE

The spring that holds the registration gate in place is relatively weak. As a result, when the paper bumps the gate, the paper is not slowed down sufficiently and arrives at the transfer timing sensor too soon.



## SOLUTION

#### **Production line:**

The strength of the spring was increased. Applied from: June 2016 production

In the field:

Replace the spring with stronger one (P/N **D1942648**). **See IMPORTANT and NOTE below.** 

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**IMPORTANT:** Be careful not to injure your hands on the edges of the brackets.



Note: The new spring is marked in red, as shown below.



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**PAGE: 1/1** 

Model: Leo-C1/P1		Date: 23-Aug-16		No.: RD194140	
Subject: Service Manual Correction: Right Drawer Unit Replacement			Prepared by: S. Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

## SERVICE MANUAL CORRECTION

The following description was corrected.

### Incorrect

Main Chapters > Replacement and Adjustments > Right Drawer > Right Drawer



## CORRECT

### **IMPORTANT:**

 DO NOT depress the rail release levers. Doing so can make the right drawer unit drop off the rails.

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Model: Leo-C1/P1		Date: 30-Aug-16		No.: RD194141		
Subject: Change in IMSS Advanced settings log-in/out Spec		с	Prepared by: A. Tajima			
From: 1st Tech Service Sec. PP Tech Service Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electrica Transmi Other (S	ormati al it/rece Spec o	ion	Action Servic Retrofi Tier 2	required e manual revision it information

Change: IMSS Advanced settings log-in/log-out spec

**Reason:** Better user-friendliness (For users other than the machine administrator, having to log out and log in every time after making a change to the IMSS settings is time consuming and inconvenient when they want to make multiple changes.)

The new spec will be effective with the following System/Copy firmware:

#### Leo-C1: System/Copy Version 3.08

#### Leo-P1: System version 3.08

The firmware will be released by the end of August, 2016.

#### In detail

Once logged in to the IMSS Advanced settings menu on a machine configured in either of the following ways, the new spec allows users to make multiple changes without having to log out and log in repeatedly.

- [User Tools]  $\rightarrow$  [System Settings]  $\rightarrow$  [Administrator tools]
  - > [Administrator Authentication Management]  $\rightarrow$  [Machine Management]  $\rightarrow$  [Admin. Authentication: **ON**]  $\rightarrow$  [Available Settings: Tray Paper Settings: **OFF**]
  - [User Authentication Management: OFF]
- [User Tools] → [System Settings] → [Administrator tools]
  - ▷ [Administrator Authentication Management] → [Machine Management] → [Admin. Authentication: **ON**] → [Available Settings: Tray Paper Settings: **OFF**]
  - > [User Authentication Management: **ON**]

# Technical Bulletin

### **PAGE: 1/6**

Model: Leo-C1/P1		Date: 11-Jul-17		No.: RD194144a	
Subject: 5.6mm, 6.1mm, Random in Mix color banding			Prepared by: H Kawamura		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

### SYMPTOM

- Banding

## CAUSE / SOLUTION

Interval	CAUSE	SOLUTION (Details on next pg.)
40mm	Normal variations in the	- Clean the charge roller
	circularity of the charge	<ul> <li>Do process initialization</li> </ul>
	roller	- DEMS
52mm, 25mm	Normal variations in the	<ul> <li>Do process initialization</li> </ul>
	circularity of the	- Do toner refresh
	development roller	- DEMS
63mm	Normal variations in the	- Reduce the paper transfer speed
	image transfer ratio (paper	
	transfer roller)	
189mm	Normal variations in the	- DEMS
	circularity of the drum	- Do toner refresh
		<ul> <li>Do process initialization</li> </ul>
		<ul> <li>Do the drum shaft alignment</li> </ul>
Random in	Normal variations in the	- Do toner refresh
Mixed color	image transfer ratio (image	- Reduce the drum rotation speed
	transfer roller)	<ul> <li>Reduce the engine speed</li> </ul>
5.6mm	Normal variations in the	- Insert a new ITB encoder
	smoothness of ITB encoder	



Model: Leo-C1/P1			Date: 11-Jul-17	No.: RD194144a
6.1 <i>mm</i>	Moiré from the Screen	- d	Set the screen patte lot".	rn to "200

### **SOLUTION (Details)**

Do the following procedure(s), depending on the banding interval.

**Important:** Check the image quality after each step, and then go to the next step only if the results are not acceptable.

#### 40mm

- Clean the charge roller (wipe the charge roller with a damp cloth, and then wipe it with a dry cloth).
   Important: Never use alcohol to clean.
- 2. Execute "0502 [Execute Process InitialSetting]" in the Adjustment Settings (or SP3-020-001).
- 3. Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" in the Adjustment Settings (or SP3-040-001).

#### 52mm, 25mm

- 1. Execute "0502 [Execute Process InitialSetting]" in the Adjustment Settings (or SP3-020-001).
- 2. Refresh the toner (See Appendix 1 for the procedure).
- 3. Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" in the Adjustment Settings (or SP3-040-001).
- 4. If there is no improvement, execute DEMS up to 3 times.
- 5. If you executed DEMS 3 times, refresh the toner again.

#### 63mm

1. Check the value of "016: [Paper Transfer Feed Speed Adjustment]" in Custom Paper Settings.

-> If the value is -0.5% or lower, no further action can be taken.

-> If the value is larger than -0.5%, continue to the next step.

2. Change the value of "016: [Paper Transfer Feed Speed Adjustment]" in Custom Paper Settings to the current value - 0.1%.



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3. If there is no improvement, reduce the value further by -0.1% until the value reaches - 0.5%.

#### 189mm

- 1. Refresh the toner (See Appendix 1 for procedure).
- 2. Execute [DEMS] in "0201 [Adjust Image Density/DEMS]" in the Adjustment Settings (or SP3-040-001).
- 3. Align the drum shaft.
  - Align the white mark [B] on the drum shaft with the notch mark [A] on the top of the drum gear.



- 4. Execute [DEMS] again, and then check the image.
- 5. If there is no improvement, execute DEMS up to 3 times (check the image quality after each time).
- 6. If you executed DEMS 3 times, refresh the toner again.

#### Random (Mixed Color mode; 5.6mm, 6.1mm)

#### For 200 dpi printing:

- 1. Refresh the toner.
  - > See Appendix 1 for the procedure.
- 2. Insert the encoder (D1941496).
  - See the Service Manual for the procedure (4. Replacement and Adjustments
     > ITB unit > ITB Drive Motor Encoder Shaft > Step 7).

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- 3. If Random in Mixed color banding has occurred:
- Set the [Process Speed Setting] to "Middle" or "Low".
- Set the following SP modes to a value of "-0.8%": SP1010-001 thru -005, SP1011-001 thru -005, SP1012-001 thru 005.

#### Important:

RICOH

- A potential side effect is that shock jitter on a single color may worsen.
- Improving banding in this way will reduce productivity. "Low" will give the best results, but "Middle" and "High" will give a faster print speed.
- Therefore, set the Process Speed in accordance with the customer's requirements.
- 4. If you reduced the [Process Speed Setting] in Step 3, reduce [Fusing Heat Roller Temp] (#085, #086 depending on the productivity setting) in the Custom Paper Settings.
  - If you reduced the engine speed in Step 1 from Middle to Low, reduce the fusing heat roller temperature <u>by 5 degrees</u>.
  - If you reduced the engine speed in Step 1 from High to Low, reduce the fusing heat roller temperature <u>by 10 degrees</u>.

#### For 175 dpi printing:

- 1. Refresh the toner.
  - > See Appendix 1 for the procedure.
- 2. Set the following SP modes to a value of "0%". SP1010-001 thru -005, SP1011-001 thru -005, SP1012-001 thru 005.
- 3. Insert the encoder (D1941496).
  - See the Service Manual for the procedure (4. Replacement and Adjustments
     > ITB unit > ITB Drive Motor Encoder Shaft > Step 7).

CUTIN SERIAL NUMBER for the ENCODER G347F501471



RICOH

Date: 11-Jul-17

No.: RD194144a

### Appendix 1: How to Refresh the toner

- 1. Set SP2109-003 (Pattern Selection) to 26 (Full Dot Pattern).
- 2. Set SP2109-005 (Color Selection) to 1 (Full Color).
- 3. Set SP2109-006 (Density: K) to 15.
- 4. Set SP2109-007 (Density: C) to 15.
- 5. Set SP2109-008 (Density: M) to 0.
- 6. Set SP2109-009 (Density: Y) to 0.
- 7. Print or copy 60 duplex pages (30 sheets) onto A3.
- 8. Set SP2109-006 (Density: K) to 0.
- 9. Set SP2109-007 (Density: C) to 0.
- 10. Set SP2109-008 (Density: M) to 15.
- 11. Set SP2109-009 (Density: Y) to 15.
- 12. Print or copy 60 duplex pages (30 sheets) onto A3.

**IMPORTANT**: Do not print 4C solid images (i.e., Do not set all four of the following SPs to 15 at the same time: SP2109-006, -007, -008 or -009; at least two of these must be kept at zero). If you do, toner may scatter inside the machine.
## Technical Bulletin

Model: Leo-C1/P1		Date: 15-Sep-16		No.: RD194145	
Subject: Important information about duct filters			Prepared by: S. Sasaki		
From: 1st Tech Se	rvice Sect., PP Tech Service	e Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Part information</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> <li>Other ()</li> </ul>		Action required Service manual revision Retrofit information Tier 2 Tier 0.5		

### **Important Information about Dust Filters**

- Make sure to **replace the dust filters** (P/N D1947153) in the horizontal duct at **400KP** intervals. If you do not, this can cause toner scattering.
- These filters have already been announced as PM parts, but data from the field shows that the filters are rarely replaced.
- Order 4 pcs or 5 pcs, depending on how many filters the model has (There is one filter per color).



## Technical Bulletin

Model: Leo-C1/P1		Date: 11-Oct-16		No.: RD194148	
Subject: Tips when overprinting FC image on White		Prepared by: S. Sasaki			
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>☑ Paper path</li> <li>☑ Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/re</li> <li>Other (</li> </ul>	nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

#### **SYMPTOM**

The image position is different when printing the same image in S-only mode vs. full-color mode.

**Note:** This is most notable when white is printed first and then other colors printed over this.

### CAUSE

Difference in ITB speed control

To control the rotational speed of the ITB, the machine uses a feedback sensor (#6 below) for full-color mode, and an encoder (#5) in S-only mode.



### SOLUTION

#### In the field

Do the following to disable the feedback sensor. This will force the machine to switch to encoder-based control in full-color mode.

Set SP2915-001 (Encoder Sn Ctrl Condition: Scale FB Control Enable) to "0."

Note: Color registration may worsen when this is done.

## Technical Bulletin

Model: Leo-C1/P1		Date: 14-Oct-15		No.: RD194149	
Subject: Request regarding ITB cleaning unit installation		Prepared by: S. Sasaki			
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	ng Dert information Electrical Transmit/receive y Other ()		Action required Service manual revision Retrofit information Tier 2 Tier 0.5	

### Important Note for when Installing a New ITB cleaning Unit

- When you install a new ITB cleaning unit (service part), adjust the coupling as shown below.
  - 1. Loosen the screw circled in red.
  - 2. Push down the coupling gently.
  - 3. While pushing down, tighten the screw.
  - **Note:** You do not have to push it down strongly. It is only necessary to fix it in place (so that it does not rattle loosely).



 In very rare cases, due to variations in the manufacturing process, the ITB cleaning unit coupling and its drive gear in the mainframe do not engage completely. This can cause banding at an interval of about 5-6mm.



## Technical Bulletin

Model: Leo-C1/P1		Date: 25-Oct-16		No.: RD194150
Subject: Important information about toner receptacle		Prepared by: S. Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.				
Classification:	<ul> <li>Troubleshooting</li> <li>Part information</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> <li>Other ()</li> </ul>		Action required C Service manual revision Retrofit information Tier 2 Tier 0.5	

## Important Information about the Toner Receptacle

- Make sure to wipe off the toner that has collected on the toner receptacle [A] with a dry cloth **every 400KP.**
- If you do not, this can cause toner scattering.







#### Reissued: 15-Nov-16

Model: Leo-C1/P1

Date: 9-Sep-16 No

No.: RD194151a

#### **RTB** reissue

The items in *bold italics* were corrected or added

Subject: Release of the new Neon Yellow toner			Prepared by: A. Tajima
From: 1st Tech Service Sect., PP Tech Service Dept.			
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> <li>Tier 0.5</li> </ul>

This bulletin announces the requested actions and information regarding service maintenance for machines with the Neon Yellow toner installed, which will be released as a new special color toner in November 2016.

### REQUEST

#### Prior to installation

The following will be needed for the installation of the Neon Yellow toner. Procure these items prior to installation if necessary.

- A set of Neon Yellow toner decals (p/n: D1948520) one for the sub hopper and one for the toner supply unit
- Special color kit
- Printed notes on the modification points for explanation to your customer procure from your local support.

Download the firmware listed below in advance.

#### Firmware

	version	Release date
Engine	v 1.19:06 or later	Nov 4, 2016
System/Copy (Copier)	v 3.10 or later	Nov 4, 2016
System (Printer)		
Web Support	v 1.09 or later	Nov 4, 2016
OpePanel	v 2.06 or later	Nov 4, 2016

#### **Total Flow Print server R-60A**

	Version	Release date
Microcode	v 2.2.003 or later	Nov 8, 2016
	Note: Upgrade the BOS to 123.19.048	
	or later before applying this microcode.	
Driver (Windows)	v 1.1.0.0 or later	Nov 8, 2016
Driver (Mac)	v 2.1.58 or later	Nov 8, 2016

#### **Total Flow Print server R-61A**

	Version	Release date
Microcode	v 2.2.003 or later	Nov 8, 2016
Driver (Windows)	v 1.1.0.0 or later	Nov 8, 2016
Driver (Mac)	v 2.1.58 or later	Nov 8, 2016



#### Reissued: 15-Nov-16

Model: Leo-C1/P1

#### No.: RD194151a

#### Fiery E-43A/E-83A

	Version	Release date
Patch	No Update	-
Driver	No Update	-

#### At installation

- **1.** Install the above firmware.
- 2. The procedure for installing the Neon Yellow is no different to other colors. See the FSM for the procedure.
  - 2. Installation -> 5th Station Replacement kit Type S3.
- 3. Explain the modification points to your customer using the notes procured from your local support.

#### Service maintenance information

- Modification of the UI
  - To support the new special color, Clear was changed to Special. White will remain as White. All special color toners except for White are displayed as Special.
  - Similarly, in the Adjustment Settings for Skilled Operators [0511: Select Color  $\geq$ of Special Toner], special toner that used to be displayed as [Clear] and [White] were changed to [Special] and [White]. When switching to a special color other than White, select [Special], and then clean the tube. The system will acknowledge the toner bottle set after the tube cleaning as the new color.
  - Make sure to update the above firmware and driver as a set. Updating individually will mix up the display of Clear and Special.
  - $\geq$ Fiery Controller, Fiery Driver and Command Workstation will not apply the changes regarding special color toner. Clear will remain as Clear and White as White on the Fiery Controller, Fiery Driver and Command WorkStation. Make sure to explain this to your customer with the printed notes.

#### Remark Part Number Developer for neon yellow Developer D1949710 The set contains two decals for the special color kit Decal D1948520 (sub hopper and toner supply unit).

#### Part number information

The following parts were added for the Neon Yellow toner.



#### Reissued: 15-Nov-16

Model: Leo-C1/P1	Date: 9-Sep-16	No.: RD194151a
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- Added/modified SP table See the SP table on the following pages.
- Production of the Neon Yellow toner will be discontinued when any of the following conditions are met:
  - 1. The vendor discontinued the production of the raw materials contained in the toner, making it difficult for Ricoh to procure the toner.
  - 2. Five years passed after the last production of Pro C7100.
  - 3. No orders placed for the Neon Yellow toner for a period of one year. (Minimum lot for production: 100kg)

An announcement will follow when any of the above conditions are met. RCL will make arrangements for the last production of the Neon Yellow toner within 6 months.

SP number	Description	[Range/Default/Step]
3-170-011	Tube Cleaning: Exe Color Change Flag	[0 to 1/0/1]
3-030-201	Init TD Sensor: Exe Color Change Flag	[0 to 1/0/1]
3-201-211	TnrDensity Upper TC:Special Color 1	[1 to 20/ 9/ 0.1]
3-201-212	TnrDensity Upper TC:Special Color 2	[1 to 20/ 9/ 0.1]
3-201-213	TnrDensity Upper TC:Special Color 3	[1 to 20/ 9/ 0.1]
3-201-214	TnrDensity Upper TC:Special Color 4	[1 to 20/ 9/ 0.1]
3-201-215	TnrDensity Upper TC:Special Color 5	[1 to 20/ 9/ 0.1]
3-201-216	TnrDensity Upper TC:Special Color 6	[1 to 20/ 9/ 0.1]
3-201-217	TnrDensity Upper TC:Special Color 7	[1 to 20/ 9/ 0.1]
3-201-218	TnrDensity Upper TC:Special Color 8	[1 to 20/ 9/ 0.1]
3-201-219	TnrDensity Upper TC:Special Color 9	[1 to 20/ 9/ 0.1]
3-201-220	TnrDensity Upper TC:Special Color 10	[1 to 20/ 9/ 0.1]
3-332-211	M/A Calculation Correct Coef: Special Color 1	[0.5 to 2/ 1/ 0.01]
3-332-212	M/A Calculation Correct Coef: Special Color 2	[0.5 to 2/ 1/ 0.01]
3-332-213	M/A Calculation Correct Coef: Special Color 3	[0.5 to 2/ 1/ 0.01]
3-332-214	M/A Calculation Correct Coef: Special Color 4	[0.5 to 2/ 1/ 0.01]
3-332-215	M/A Calculation Correct Coef: Special Color 5	[0.5 to 2/ 1/ 0.01]
3-332-216	M/A Calculation Correct Coef: Special Color 6	[0.5 to 2/ 1/ 0.01]
3-332-217	M/A Calculation Correct Coef: Special Color 7	[0.5 to 2/ 1/ 0.01]
3-332-218	M/A Calculation Correct Coef: Special Color 8	[0.5 to 2/ 1/ 0.01]

#### Added SP

### Reissued: 15-Nov-16

Model: Leo-C1/P1 Date: 9-Sep-16		p-16	No.: RD194151a
3-332-219	M/A Calculation Correct Coef: Special Color 9	[0.5 to	2/ 1/ 0.01]
3-332-220	M/A Calculation Correct Coef: Special Color 10	[0.5 to	2/ 1/ 0.01]
3-620-211	ProCon Target M/A Plain: Maximum M/A Special Co	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-212	ProCon Target M/A Plain: Maximum M/A Special Co 2	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-213	ProCon Target M/A Plain: Maximum M/A Special Co 3	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-214	ProCon Target M/A Plain: Maximum M/A Special Co	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-215	ProCon Target M/A Plain: Maximum M/A Special Co 5	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-216	ProCon Target M/A Plain: Maximum M/A Special Co	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-217	ProCon Target M/A Plain: Maximum M/A Special Co 7	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-218	ProCon Target M/A Plain: Maximum M/A Special Co 8	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-219	ProCon Target M/A Plain: Maximum M/A Special Co 9	olor [0.20 0.001]	to 1.500 / 0.444/
3-620-220	ProCon Target M/A Plain: Maximum M/A Special Co 10	olor [0.20 0.001]	to 1.500 / 0.444/
3-621-211	Background Pot: set intercept:Special Color1	[-70 to	255 / 30/ 1]
3-621-212	Background Pot: set intercept:Special Color2	[-70 to	255 / 30/ 1]
3-621-213	Background Pot: set intercept:Special Color3	[-70 to	255 / 30/ 1]
3-621-214	Background Pot: set intercept:Special Color4	[-70 to	255 / 30/ 1]
3-621-215	Background Pot: set intercept:Special Color5	[-70 to	255 / 30/ 1]
3-621-216	Background Pot: set intercept:Special Color6	[-70 to	255 / 30/ 1]
3-621-217	Background Pot: set intercept:Special Color7	[-70 to	255 / 30/ 1]
3-621-218	Background Pot: set intercept:Special Color8	[-70 to	255 / 30/ 1]
3-621-219	Background Pot: set intercept:Special Color9	[-70 to	255 / 30/ 1]
3-621-220	Background Pot: set intercept:Special Color10	[-70 to	255 / 30/ 1]
3-622-211	Dev Pot : UpperLimit: Special Color1	[400 to	800/ 600 / 1]
3-622-212	Dev Pot : UpperLimit: Special Color2	[400 to	800/ 600 / 1]
3-622-213	Dev Pot : UpperLimit: Special Color3	[400 to	800/ 600 / 1]
3-622-214	Dev Pot : UpperLimit: Special Color4	[400 to	800/ 600 / 1]
3-622-215	Dev Pot : UpperLimit: Special Color5	[400 to	800/ 600 / 1]
3-622-216	Dev Pot : UpperLimit: Special Color6	[400 to	800/ 600 / 1]
3-622-217	Dev Pot : UpperLimit: Special Color7	[400 to	800/ 600 / 1]
3-622-218	Dev Pot : UpperLimit: Special Color8	[400 to	800/ 600 / 1]
3-622-219	Dev Pot : UpperLimit: Special Color9	[400 to	800/ 600 / 1]
3-622-220	Dev Pot : UpperLimit: Special Color10	[400 to	800/ 600 / 1]

### Reissued: 15-Nov-16

Model: Leo-C1/P1		Date: 9-Sep-16		No.: RD194151a
3-630-211	Dev gamma :Disp/Set Initial:Special Co	lor1	[0.5 to	6/ 1/ 0.01]
3-630-212	Dev gamma :Disp/Set Initial:Special Co	lor2	[0.5 to	6/ 1/ 0.01]
3-630-213	Dev gamma :Disp/Set Initial:Special Co	lor3	[0.5 to	6/ 1/ 0.01]
3-630-214	Dev gamma :Disp/Set Initial:Special Co	lor4	[0.5 to	6/ 1/ 0.01]
3-630-215	Dev gamma :Disp/Set Initial:Special Co	lor5	[0.5 to	6/ 1/ 0.01]
3-630-216	Dev gamma :Disp/Set Initial:Special Co	lor6	[0.5 to	6/ 1/ 0.01]
3-630-217	Dev gamma :Disp/Set Initial:Special Co	lor7	[0.5 to	6/ 1/ 0.01]
3-630-218	Dev gamma :Disp/Set Initial:Special Co	lor8	[0.5 to	6/ 1/ 0.01]
3-630-219	Dev gamma :Disp/Set Initial:Special Co	lor9	[0.5 to	6/ 1/ 0.01]
3-630-220	Dev gamma :Disp/Set Initial:Special Co	lor10	[0.5 to	6/ 1/ 0.01]
3-107-002	Fifth Station Special Color ID		[0 to 2	55/ 0/ 1]
3-107-003	Fifth Station Pattern ID		[1 to 2	55/ 1/ 1]

#### **Modified SP**

SP number	Description	[Range/Default/Step]
3-201-005	TnrDensity Upper TC:S	[1 to 20/ 9/ 0.1]
3-332-005	M/A Calculation Corrct Coef:S	[0.5 to 2/ 1/ 0.01]
3-620-115	ProCon Target M/A Procon:Maximum M/A:S	[0.20 to 1.500/ 0.444/ 0.001]
3-620-125	ProCon Target M/A gloss:Maximum M/A:S	[0.20 to 1.500/ 0.444/ 0.001]
3-620-145	ProCon Target M/A Texture:Maximum M/A:S	[0.20 to 1.500/ 0.444/ 0.001]
3-621-015	Background Pot:Set intercept:S	[-70 to 255/ 30 /1]
3-622-055	Dev Pot :Set UpperLimit:S	[400 to 800/ 600/ 1]
3-630-025	Dev gamma :Disp/Set Initial:S	[0.5 to 6/ 1/ 0.01]
3-107-001	Fifth Station Color Selection	[1 to 4/ 2/ 1]



## Technical Bulletin

Model: Leo-C1/P1			Date: 14-Nov-16		No.: RD194152
Subject: Troubleshooting: How to fix Fiery frozen in "PRINTING" status		Prepared by	r: S. Sasaki		
From: Field Quality	Management Group 4, FQN	I Dept, QAC			
Classification:	Troubleshooting	Part inform	nation	Action required	
	Mechanical	al Electrical		Service r	nanual revision
	Paper path Transmit/rec		eceive	🗌 Retrofit i	nformation
	Product Safety	Other (	)	🛛 Tier 2	Tier 0.5

### SYMPTOM

The fiery indicated that a spooled job is printing but nothing prints after System version up to 3.06 or later.

### CAUSE

GW System firmware bug.

#### Occurrence condition:

- 1. System firmware version is 3.06 or later.
- 2. Transition "Yes" or "No" settings while printing from DFE to Skilled Operator Menu Items is enabled (bit 0 of "SP5-748-102" is "1")
- 3. Before the problem occurs, there is a track record of transition to the press to print screen from the Operator menu or Skilled Operator Menu Items screen



### SOLUTION

Apply the modified firmware to be released at the beginning of Dec.2016.

#### Workaround

Change SP5-748-102 from "1" to "0."

## Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1 Da			Date: 22-Nov-16		No.: RD194153
Subject: Important request not to cover the machine rear side			Prepared I	by: S. Sasaki	
From: 1st Tech Se	rvice Sect., PP Tech Service	e Dept.			
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action red Service n Retrofit ir	quired nanual revision nformation

### **Important Information about Noise Reduction Duct Covers**

- Make sure that the machine's rear side (where the exhaust fan openings are located) is **at least 80 cm** (approx. 32 inches) from the wall, table, or other object. If this is not done, the temperature inside the machine will rise and lead to toner clogging and other issues.
- If the customer wants to avoid the direct airflow from the rear of the machine, attach the noise reduction duct covers (see RTB RD194067). DO NOT use anything else to block the airflow, as the duct covers have been designed to maintain the proper airflow efficiency.

#### Noise reduction covers



## Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1			Date: 12-Dec-16		No.: RD194154
Subject: The change of Printer name for Heidelberg model			Prepared I	by: Rie Shohda	
From: 1st Tech Service Sect., PP Tech Service Dept.					
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>		Action re Service n Retrofit ir Tier 2	quired nanual revision nformation

### Change of Printer name for Heidelberg models

Printer name for the Heidelberg model was changed from Linoprint to Versafire.

This change may not be correctly reflected to the user interface depending on the combination of the engine system firmware version and DFE microcode version.

When connecting the DFE with Leo-C1/P1, make sure to update the microcode and firmware to the versions described below.

#### System/copy Firmware (Leo-C1/P1)

Version 3.10 or later

**Prinect DFE** MicroCode ver 1.6.004 or later



## Technical Bulletin

#### Reissued: 26-Mar-18

Model <sup>.</sup>	Leo-C1/P1
INDUCT.	

Date: 8-Feb-17

No.: RD194155b

#### **RTB Reissue**

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

Subject: Service M	lanual Correction: Add SP r	Prepared by: Rie Shohda	
From: Sales Strate	gy Sect., 1st CP Business [	Dept.	
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> <li>Tier 0.5</li> </ul>

### **Service Manual Correction**

Please add the following SP to your FSM, in section:

3. Appendices: Preventive Maintenance Tables > Group 2000

2912	[Encoder Sn:Adj Light]					
	This SP adjusts the strength of the LED beam of the ITB feed-back sensors (main sensor and sub sensor).					
2-912-002	Light Amt Adj: Pass/Fail	[0 to 9 / <b>0</b> / 1 ]				
		Adjustment result codes				
		0 :	No adjustment performed			
		1 :	Success			
		2 :	Canceled			
		7 :	Failure of the main sensor			
		8 :	Failure of the sub sensor			
		9 :	Failure of the main and sub sensors			

#### 3. Appendices: SP Mode Tables > Group 5000

5748	[OpePanel S	Setting]				
5-748-102	External Cor Action Settin	ntroller Ig	*C	TL	* See BitSwitch below:	
Bit 0	Mear	nings	<ul> <li>Enables or disables the Paper Setting / Adjustment Settings for Skilled Operator menu while printing.</li> </ul>			
	0	1				
	Disable	Enable	] -	Enable Setting Setting	es or disables the Adjustment gs for Operators or Adjustment gs for Skilled Operators while printing.	

Reissued: 26-Mar-18

Model: Leo-C1/P1

Date: 8-Feb-17

No.: RD194155b

### 3. Appendices: SP Mode Tables > Group 7000

7624	Part Replacement Operation ON/OFF	
7-624-001	#Development Unit(Bk)	[0 to 1 / <b>1</b> / 1 step]
7-624-002	#Developer(Bk)	[0 to 1 / <b>1</b> / 1 step]
7-624-003	#Development Unit(Bk):Vent Filter	[0 to 1 / 1 / 1 step]
7-624-005	#PCU Cleaning Unit(Bk)	[0 to 1 / 1 / 1 step]
7-624-006	PCU CL(Bk):Cleaning Blade	[0 to 1 / <b>1</b> / 1 step]
7-624-007	PCU CL(Bk):Lubrication Roller	[0 to 1 / <b>1</b> / 1 step]
7-624-008	PCU CL(Bk):Lubricant	[0 to 1 / <b>1</b> / 1 step]
7-624-009	PCU CL(Bk):Lubrication Blade	[0 to 1 / <b>1</b> / 1 step]
7-624-010	PCU CL(Bk):Joint	[0 to 1 / <b>1</b> / 1 step]
7-624-011	PCU CL(Bk):Gears	[0 to 1 / <b>1</b> / 1 step]
7-624-012	PCU CL(Bk):CL Blade:Side Seal	[0 to 1 / <b>1</b> / 1 step]
7-624-013	PCU CL(Bk):Lub Blade:Side Seal	[0 to 1 / <b>1</b> / 1 step]
7-624-015	#Charger Unit(Bk)	[0 to 1 / <b>1</b> / 1 step]
7-624-016	#Photoconductor Unit(Bk)	[0 to 1 / <b>1</b> / 1 step]
7-624-018	#Development Unit(C)	[0 to 1 / <b>1</b> / 1 step]
7-624-019	#Developer(C)	[0 to 1 / <b>1</b> / 1 step]
7-624-020	#Development Unit(C):Vent Filter	[0 to 1 / <b>1</b> / 1 step]
7-624-022	#PCU Cleaning Unit(C)	[0 to 1 / <b>1</b> / 1 step]
7-624-023	PCU CL(C):Cleaning Blade	[0 to 1 / <b>1</b> / 1 step]
7-624-024	PCU CL(C):Lubrication Roller	[0 to 1 / <b>1</b> / 1 step]
7-624-025	PCU CL(C):Lubricant	[0 to 1 / <b>1</b> / 1 step]
7-624-026	PCU CL(C):Lubrication Blade	[0 to 1 / <b>1</b> / 1 step]
7-624-027	PCU CL(C):Joint	[0 to 1 / <b>1</b> / 1 step]
7-624-028	PCU CL(C):Gears	[0 to 1 / <b>1</b> / 1 step]
7-624-029	PCU CL(C):CL Blade:Side Seal	[0 to 1 / <b>1</b> / 1 step]
7-624-030	PCU CL(C):Lub Blade:Side Seal	[0 to 1 / <b>1</b> / 1 step]
7-624-032	#Charger Unit(C)	[0 to 1 / <b>1</b> / 1 step]
7-624-033	#Photoconductor Unit(C)	[0 to 1 / <b>1</b> / 1 step]
7-624-035	#Development Unit(M)	[0 to 1 / <b>1</b> / 1 step]
7-624-036	#Developer(M)	[0 to 1 / <b>1</b> / 1 step]

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7-624-037	#Development Unit(M):Vent Filter	[0 to	1 / <b>1</b> / 1 step]
7-624-039	#PCU Cleaning Unit(M)	[0 to	1 / <b>1</b> / 1 step]
7-624-040	PCU CL(M):Cleaning Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-041	PCU CL(M):Lubrication Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-042	PCU CL(M):Lubricant	[0 to	1 / <b>1</b> / 1 step]
7-624-043	PCU CL(M):Lubrication Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-044	PCU CL(M):Joint	[0 to	1 / <b>1</b> / 1 step]
7-624-045	PCU CL(M):Gears	[0 to	1 / <b>1</b> / 1 step]
7-624-046	PCU CL(M):CL Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-047	PCU CL(M):Lub Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-049	#Charger Unit(M)	[0 to	1 / <b>1</b> / 1 step]
7-624-050	#Photoconductor Unit(M)	[0 to	1 / <b>1</b> / 1 step]
7-624-052	#Development Unit(Y)	[0 to	1 / <b>1</b> / 1 step]
7-624-053	#Developer(Y)	[0 to	1 / <b>1</b> / 1 step]
7-624-054	#Development Unit(Y):Vent Filter	[0 to	1 / <b>1</b> / 1 step]
7-624-056	#PCU Cleaning Unit(Y)	[0 to	1 / <b>1</b> / 1 step]
7-624-057	PCU CL(Y):Cleaning Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-058	PCU CL(Y):Lubrication Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-059	PCU CL(Y):Lubricant	[0 to	1 / <b>1</b> / 1 step]
7-624-060	PCU CL(Y):Lubrication Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-061	PCU CL(Y):Joint	[0 to	1 / <b>1</b> / 1 step]
7-624-062	PCU CL(Y):Gears	[0 to	1 / <b>1</b> / 1 step]
7-624-063	PCU CL(Y):CL Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-064	PCU CL(Y):Lub Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-066	#Charger Unit(Y)	[0 to	1 / <b>1</b> / 1 step]
7-624-067	#Photoconductor Unit(Y)	[0 to	1 / <b>1</b> / 1 step]
7-624-069	#Development Unit(S)	[0 to	1 / <b>1</b> / 1 step]
7-624-070	#Developer(S)	[0 to	1 / <b>1</b> / 1 step]
7-624-071	#Development Unit(S):Vent Filter	[0 to	1 / <b>1</b> / 1 step]
7-624-073	#PCU Cleaning Unit(S)	[0 to	1 / <b>1</b> / 1 step]
7-624-074	PCU CL(S):Cleaning Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-075	PCU CL(S):Lubrication Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-076	PCU CL(S):Lubricant	[0 to	1 / <b>1</b> / 1 step]
7-624-077	PCU CL(S):Lubrication Blade	[0 to	1 / <b>1</b> / 1 step]

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7-624-078	PCU CL(S):Joint	[0 to	1 / <b>1</b> / 1 step]
7-624-079	PCU CL(S):Gears	[0 to	1 / <b>1</b> / 1 step]
7-624-080	PCU CL(S):CL Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-081	PCU CL(S):Lub Blade:Side Seal	[0 to	1 / <b>1</b> / 1 step]
7-624-083	#Charger Unit(S)	[0 to	1 / <b>1</b> / 1 step]
7-624-084	#Photoconductor Unit(S)	[0 to	1 / <b>1</b> / 1 step]
7-624-086	#Intermediate Transfer Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-087	#Image Transfer Roller(1st.)	[0 to	1 / <b>1</b> / 1 step]
7-624-088	#Image Transfer Roller(2st.)	[0 to	1 / <b>1</b> / 1 step]
7-624-089	#Image Transfer Roller(3st.)	[0 to	1 / <b>1</b> / 1 step]
7-624-090	#Image Transfer Roller(4st.)	[0 to	1 / <b>1</b> / 1 step]
7-624-091	#Image Transfer Roller(5st.)	[0 to	1 / <b>1</b> / 1 step]
7-624-092	#Paper Transfer Bias Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-093	#ITB Cleaning Unit	[0 to	1 / <b>1</b> / 1 step]
7-624-094	ITB CL Unit:Cleaning Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-095	ITB CL Unit:Lubrication Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-096	ITB CL Unit:Lubricant	[0 to	1 / <b>1</b> / 1 step]
7-624-097	ITB CL Unit:Lubrication Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-099	#Paper Transfer Unit	[0 to	1 / <b>1</b> / 1 step]
7-624-100	Paper Transfer Unit:Discharger	[0 to	1 / <b>1</b> / 1 step]
7-624-101	Paper Transfer Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-102	Paper Transfer Unit:CL Blade	[0 to	1 / <b>1</b> / 1 step]
7-624-103	Paper Transfer Unit:Lubricant	[0 to	1 / <b>1</b> / 1 step]
7-624-106	#Fuser Unit	[0 to	1 / <b>1</b> / 1 step]
7-624-107	Fuser Unit:Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-108	Fuser Unit:Fusing Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-109	Fuser Unit:FusingR:Bearings	[0 to	1 / <b>1</b> / 1 step]
7-624-110	Fuser Unit:Pressure Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-111	Fuser Unit:PressR:Bearings	[0 to	1 / <b>1</b> / 1 step]
7-624-112	#Fuser Belt Smoothing Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-113	#Fuser Cleaning Unit	[0 to	1 / <b>1</b> / 1 step]
7-624-114	Fuser Cleaning Unit:web	[0 to	1 / <b>1</b> / 1 step]
7-624-115	Fuser Cleaning Unit:Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-116	Fuser Cleaning Unit:Spring Plate	[0 to	1 / <b>1</b> / 1 step]

Model: Leo-C1/P1 Da		Date: 8-Feb-17	No.: RD194155b
7-624-118	#Ozone Filter:Main	[0 to	0 1 / <b>1</b> / <b>1</b> step]
7-624-119	Ozone Filter	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-120	Ozone Filter:C/T BOX	[0 to	o 1 / <b>1</b> / 1 step]
7-624-121	#Dust Proof Filter:Main	[0 to	0 1 / <b>1</b> / 1 step]
7-624-122	Filter:Prevent Fence	[0 to	o 1 / <b>1</b> / 1 step]
7-624-123	Filter:Duct	[0 to	o 1 / <b>1</b> / 1 step]
7-624-124	Filter: Absorb Dust Sub-Unit	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-131	#Tray1	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-132	Tray1:Pickup Roller	[0 to	o 1 / <b>1</b> / 1 step]
7-624-133	Tray1:Feed Roller	[0 to	o 1 / <b>1</b> / 1 step]
7-624-134	Tray1:Separate Roller	[0 to	o 1 / <b>1</b> / 1 step]
7-624-136	#Tray2	[0 to	o 1 / <b>1</b> / 1 step]
7-624-137	Tray2:Pickup Roller	[0 to	o 1 / <b>1</b> / 1 step]
7-624-138	Tray2:Feed Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-139	Tray2:Separate Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-141	#3-Tray LCT:Tray3	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-142	3-Tray LCT:Tray3:Pickup Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-143	3-Tray LCT:Tray3:Feed Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-144	3-Tray LCT:Tray3:Separate Roller	[0 to	o 1 / <b>1</b> / 1 step]
7-624-146	#3-Tray LCT:Tray4	[0 to	o 1 / <b>1</b> / 1 step]
7-624-147	3-Tray LCT:Tray4:Pickup Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-148	3-Tray LCT:Tray4:Feed Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-149	3-Tray LCT:Tray4:Separate Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-151	#3-Tray LCT:Tray5	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-152	3-Tray LCT:Tray5:Pickup Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-153	3-Tray LCT:Tray5:Feed Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-154	3-Tray LCT:Tray5:Separate Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-156	#Bypass Tray	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-157	Bypass Tray:Pickup Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-158	Bypass Tray:Feed Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-159	Bypass Tray:Separate Roller	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-161	#Interposer Upper Tray	[0 tc	o 1 / <b>1</b> / 1 step]
7-624-162	Interposer Upper Tray:Pickup Rolle	er [O to	o 1 / <b>1</b> / 1 step]
7-624-163	Interposer Upper Tray:Feed Belt	[0 to	o 1 / <b>1</b> / 1 step]

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7-624-164	Interposer Upper Tray:Separate Ro	oller [0 to	1 / <b>1</b> / 1 step]
7-624-166	#Interposer Lower Tray	[0 to	1 / <b>1</b> / 1 step]
7-624-167	Interposer Lower Tray:Pickup Rolle	er [O to	1 / <b>1</b> / 1 step]
7-624-168	Interposer Lower Tray:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-169	Interposer Lower Tray:Separate Ro	oller [0 to	1 / <b>1</b> / 1 step]
7-624-171	#ADF	[0 to	1 / <b>1</b> / 1 step]
7-624-172	ADF:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-173	ADF:Pickup Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-174	ADF:Separate Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-176	#2-Tray LCT:Tray3:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-177	#2-Tray LCT:Tray4:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-178	#2-Tray LCT:Tray5:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-179	#2-Tray LCT:Tray6:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-180	#2-Tray LCT:Tray7:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-181	#2-Tray LCT:Tray8:Feed Belt	[0 to	1 / <b>1</b> / 1 step]
7-624-183	#Trimming Unit	[0 to	1 / <b>1</b> / 1 step]
7-624-184	#Trimmings Catcher	[0 to	1 / <b>1</b> / 1 step]
7-624-185	#Rotation Clamp Pad	[0 to	1 / <b>1</b> / 1 step]
7-624-186	#Stack Rotation Vibrating Plate	[0 to	1 / <b>1</b> / 1 step]
7-624-187	#Switchback Roller	[0 to	1 / <b>1</b> / 1 step]
7-624-188	#Ripple Idle Roller (Center)	[0 to	1 / <b>1</b> / 1 step]
7-624-189	#Ripple Idle Rollers	[0 to	1 / <b>1</b> / 1 step]
7-624-190	#TE Press Roller (Large)	[0 to	1 / <b>1</b> / 1 step]
7-624-191	#TE Press Roller (Small)	[0 to	1 / <b>1</b> / 1 step]
7-624-192	#Spine Fold Harness (Right)	[0 to	1 / <b>1</b> / 1 step]
7-624-193	#Spine Fold Harness (Left)	[0 to	1 / <b>1</b> / 1 step]
7-624-194	#Signature Transport Harness	[0 to	1 / <b>1</b> / 1 step]
7-624-195	#Stack Rotation Up-down Harness	[0 to	1 / <b>1</b> / 1 step]
7-624-196	#Stack Rotation Grip Harness	[0 to	1 / <b>1</b> / 1 step]
7-624-197	#Stack Rotate Press LED Harness	[0 to	1 / <b>1</b> / 1 step]
7-624-198	#Pick-up Roller Upper	[0 to	1 / <b>1</b> / 1 step]
7-624-199	#Separation Roller Upper	[0 to	1 / <b>1</b> / 1 step]
7-624-200	#Feed Roller Upper	[0 to	1 / <b>1</b> / 1 step]
7-624-201	#Pick-up Roller Lower	[0 to	1 / <b>1</b> / 1 step]

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7-624-202	#Separation Roller Lower	[0 t	o 1 / <b>1</b> / 1 step]
7-624-203	#Feed Roller Lower	[0 t	o 1 / <b>1</b> / 1 step]
7-624-204	#Blade Cradle	[0 t	o 1 / <b>1</b> / 1 step]
7-624-205	#Switchback Torque Limiter	[0 t	o 1 / <b>1</b> / 1 step]
7-624-206	#Deodorant Filter (Upper&Lower)	[0 t	o 1 / <b>1</b> / 1 step]
7-624-207	#Cover Feed Switchback Roller	[0 t	to 1 / <b>1</b> / 1 step]
7-624-208	#Jogger Motor	[0 t	o 1 / <b>1</b> / 1 step]
7-624-209	#Main Grip Motor	[0 t	o 1 / <b>1</b> / 1 step]
7-624-210	#Signature Thickness Sensor	[0 t	o 1 / <b>1</b> / 1 step]
7-624-211	#Signature Rotate Torque Diode	[0 t	o 1 / <b>1</b> / 1 step]
7-624-212	#Trimmings Buffer Motor	[0 t	o 1 / <b>1</b> / 1 step]
7-624-213	#Signature Press Trq Lmt Clutch	[0 t	o 1 / <b>1</b> / 1 step]
7-624-214	#Gluing Unit	[0 t	o 1 / <b>1</b> / 1 step]
7-624-215	#Ball Screw Unit	[0 t	o 1 / <b>1</b> / 1 step]
7-624-216	#Sign/Stacking Discharger	[0 t	to 1 / 1 / 1 step]
7-624-217	#Horizontal/Reg Discharger	[0 t	to 1 / 1 / 1 step]
7-624-218	#Booklet Stack Drawer Connector	[0 t	to 1 / 1 / 1 step]
7-624-219	#Edge Press Plate Sproket Ass'y	[0 t	o 1 / <b>1</b> / 1 step]

## Technical Bulletin

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Model: Leo-C1/P1	Model: Leo-C1/P1 Date: 9-Feb-1		7	No.: RD194156	
Subject: Custom Paper Settings for Administrators: Added items and revised item numbers		ems and	Prepared by: Rie Sho		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/re</li> <li>Other (Use</li> </ul>	nation eceive er Document)	Action C Servic Retrof Tier 2	required te manual revision tit information Tier 0.5

### Notes for Pro C7100S/C7100SX/C7110S/ C7110SX, Pro C7100/C7100X/C7110/C7110X

The following settings are added. They are applied if [Fuser Setting] is set to [High Quality] in the driver dialog box, Color Controller's Command Workstation, or TotalFlow Print Server window.

#### **Custom Paper Settings for Administrators**

#### Machine: Image Quality

#### 104: [Fus. Ht.Rol. Tmp.Adj.: Prod. :HQ]

Adjust the heat roller temperature.

The setting specified in 105: [Fus. Ht.Rol. Tmp.Adj.: Qual. :HQ] is applied in the following cases:

- · Printing in full color including the clear toner and the special color is set to high quality
- Printing in full color including the white toner
- Press [+] or [-] to adjust the temperature.

#### Note

- Decreasing the temperature too much may cause the toner to not properly fuse to the paper (cold offset).
- Increasing the temperature too much may distort the paper and cause glossy lines, paper jams, and insufficient toner fusing (hot offset).

Setting Item	Max. Value	Min. Value	Step	Unit
[Fusing Heat Roller Temp. Adjust.: Prod.: HQ]	200	100	1	degree(s)

#### 105: [Fus. Ht.Rol. Tmp.Adj.: Qual. :HQ]

This function is available for Pro C7100X, Pro C7110X, Pro C7100SX, and Pro C7110SX.

Adjust the heat roller temperature in the following conditions:

- · Printing in full color including the clear toner and the special color is set to high quality
- Printing in full color including the white toner
- Press [+] or [-] to adjust the temperature.

Note

- Decreasing the temperature too much may cause the toner to not properly fuse to the paper (cold offset).
- Increasing the temperature too much may distort the paper and cause glossy lines, paper jams, and insufficient toner fusing (hot offset).

Setting Item	Max. Value	Min. Value	Step	Unit
[Fusing Heat Roller Temp. Adjust.: Qual.: HQ]	200	100	1	degree(s)

Date: 9-Feb-17

#### 106: [Adj.Fus.Tmp.Trans.Ppr.:Ppr.:Qul.:HQ]

Specify the fusing temperature to feed paper after warm-up to print in the following conditions:

 Printing without using the special color when the fusibility throughput setting is set to give higher priority to image quality

Paper feeding starts when the fusing unit reaches the temperature specified by the selected mode.

Press [+] to increase the temperature range for paper feeding and [-] to decrease it. If the fusibility throughput setting is set to give higher priority to throughput, the setting specified in 089: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Prod] is applied.

For details about the fusibility throughput setting, contact your service representative.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adj. Fus.Tmp. Trans. Ppr: By Ppr.Tp.: Qual.: HQ]	16	1	1	None

#### 107: [Adj.Fus.Tmp.Trans.Pp.:Pp.:Qul.:S:HQ]

This function is available for Pro C7100X, Pro C7110X, Pro C7100SX, and Pro C7110SX.

Specify the fusing temperature to feed paper after warm-up to print in the following conditions:

 Printing using the special color when the fusibility throughput setting is set to give higher priority to image quality

Paper feeding starts when the fusing unit reaches the temperature specified by the selected mode.

Press [+] to increase the temperature range for paper feeding and [-] to decrease it.

If the fusibility throughput setting is set to give higher priority to throughput, the setting specified in 091: [Adj Fsng Tmp to Trnsf Ppr: Ppr: Prod: S] is applied.

For details about the fusibility throughput setting, contact your service representative.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adj.Fus.Tmp.Trans.Ppr: By Ppr.Tp.: Qual.: S: HQ]	16	1	1	None

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#### 108: [Adj. Adding Fus. Tmp.1: HQ]

Adjust the temperature applied to the fusing unit at the start of paper transfer when printing without using the special color.

Press [+] to increase the temperature and [-] to reduce it.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adjust Adding Fusing Temperature 1: HQ]	30	0	1	degree(s)

#### 109: [Adj. Adding Fus. Tmp.1: Sp.: HQ]

This function is available for Pro C7100X, Pro C7110X, Pro C7100SX, and Pro C7110SX.

Adjust the temperature applied to the fusing unit at the start of paper transfer when printing using the special color.

Press [+] to increase the temperature and [-] to reduce it.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adjust Adding Fusing Temp. 1: Special: HQ]	30	0	1	degree(s)

#### 110: [Adjust Adding Fus. Temp. 2: HQ]

Adjust the temperature applied to the fusing unit immediately before the start of paper transfer when printing without using the special color.

Press [+] to increase the temperature and [-] to reduce it.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adjust Adding Fusing Temperature 2: HQ]	30	0	1	degree(s)

#### 111: [Adj. Adding Fus. Tmp.2: Sp.: HQ]

This function is available for Pro C7100X, Pro C7110X, Pro C7100SX, and Pro C7110SX.

Adjust the temperature applied to the fusing unit immediately before the start of paper transfer when printing in special color mode.

Press [+] to increase the temperature and [-] to reduce it.

Setting Item	Max. Value	Min. Value	Step	Unit
[Adjust Adding Fusing Temp. 2: Special: HQ]	30	0	1	degree(s)

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#### Machine: Productivity

#### 143: [Process Speed Setting: Prod.: HQ]

Adjust the machine's operating speed.

The setting specified in 144: [Process Speed Setting: Qual.: HQ] is applied in the following cases:

- Printing in full color including the clear toner and the special color is set to high quality
- · Printing in full color including the white toner

Setting Item	Values
[Process Speed Setting: Productivity: HQ]	[High]: Full Speed [Middle]: 85% of full speed [Low]: 42.5% of full speed

#### 144: [Process Speed Setting: Qual.: HQ]

Adjust the machine's operating speed in the following conditions:

- Printing in full color including the clear toner and the special color is set to high quality
   Printing in full color including the white toner
- Setting Item
   Values

   [Process Speed Setting: Quality: HQ]
   [High]: Full Speed

   [Middle]: 85% of full speed
   [Low]: 42.5% of full speed

#### 145: [Rdc.CPM: LowTmp.Env.: Prod.:HQ]

Adjust the level of reducing the print speed at the start of paper transfer in low-temperature environments.

The setting specified in 146: [Rdc.CPM: LowTmp.Env.: Qual.:HQ] is applied in the following cases:

- · Printing in full color including the clear toner and the special color is set to high quality
- · Printing in full color including the white toner

Note

 The setting will take effect if the ambient temperature is 17°C (62.6°F) or lower. Since the temperature of the fusing unit may decrease in a cold environment, specify this setting in addition to 147: [Rdc.CPM:N./H.Tmp.Env.:Prod.:HQ] and 148: [Rdc.CPM: N/H Tmp.Env.:Qual.:HQ].

Setting Item	Values
[Reduce Initial CPM: Low Temp. Env.: Prod.: HQ]	[Do not Reduce]: Full speed [Reduce Level 1]: 80% of full speed [Reduce Level 2]: 65% of full speed [Reduce Level 3]: 50% of full speed

Date: 9-Feb-17

#### 146: [Rdc.CPM: LowTmp.Env.: Qual.:HQ]

Adjust the level of reducing the print speed at the start of paper transfer in low-temperature environments in the following conditions:

- · Printing in full color including the clear toner and the special color is set to high quality
- · Printing in full color including the white toner

Note

 The setting will take effect if the ambient temperature is 17°C (62.6°F) or lower. Since the temperature of the fusing unit may decrease in a cold environment, specify this setting in addition to 147: [Rdc.CPM:N./H.Tmp.Env.:Prod.:HQ] and 148: [Rdc.CPM: N/H Tmp.Env.:Qual.:HQ].

Setting Item	Values
[Reduce Initial CPM: Low Temp. Env.: Qual.:	[Do not Reduce]: Full speed
HQ]	[Reduce Level 1]: 80% of full speed
	[Reduce Level 2]: 65% of full speed
	[Reduce Level 3]: 50% of full speed

#### 147: [Rdc.CPM:N./H.Tmp.Env.:Prod.:HQ]

Adjust the level of reducing the print speed at the start of paper transfer in normal room temperature and higher temperature environments.

The setting specified in 148: [Rdc.CPM:N/H Tmp.Env.:Qual.:HQ] is applied in the following cases:

- Printing in full color including the clear toner and the special color is set to high quality
- Printing in full color including the white toner

Note

The setting will take effect if the ambient temperature is higher than 17°C (62.6°F).

Setting Item	Values
[Reduce CPM: Norm./High Temp. Env.: Prod.: HQ]	[Do not Reduce]: Full speed [Reduce Level 1]: 80% of full speed [Reduce Level 2]: 65% of full speed [Reduce Level 3]: 50% of full speed



Date: 9-Feb-17

#### 148: [Rdc.CPM:N/H Tmp.Env.:Qual.:HQ]

Adjust the level of reducing the print speed at the start of paper transfer in normal room temperature and higher temperature environments in the following conditions:

- · Printing in full color including the clear toner and the special color is set to high quality
- · Printing in full color including the white toner

Note

The setting will take effect if the ambient temperature is higher than 17°C (62.6°F).

Setting Item	Values
[Reduce CPM: Norm./High Temp. Env.: Qual.: HQ]	[Do not Reduce]: Full speed [Reduce Level 1]: 80% of full speed [Reduce Level 2]: 65% of full speed [Reduce Level 3]: 50% of full speed

Model: Leo-C1/P1

Date: 9-Feb-17

No.: RD194156

#### Menu Items

This table includes all changes specified above. Please note that item numbers were also changed.

Group	Previously	Currently	Item
Machine: Image Quality		104	Fus. Ht.Rol. Tmp.Adj.: Prod. :HQ
		105	Fus. Ht.Rol. Tmp.Adj.: Qual. :HQ
		106	Adj.Fus.Tmp.Trans.Ppr.:Ppr.:Qul.:HQ
		107	Adj.Fus.Tmp.Trans.Pp.:Pp.:Qul.:S:HQ
		108	Adj. Adding Fus. Tmp.1: HQ
		109	Adj. Adding Fus. Tmp.1: Sp.: HQ
		110	Adjust Adding Fus. Temp. 2: HQ
		111	Adj. Adding Fus. Tmp.2: Sp.: HQ
Machine: Paper Feed/ Output	104	112	Fusing Feed Speed Adjustment
	105	113	Decurler Feed Speed Adj: Curl Adj Off
	106	114	Decurler Feed Speed Adj: Curl Adj Weak
	107	115	Decurler Feed Speed Adj: Curl Adj Strg
	108	116	Wide LCT Fan Setting
	109	117	Adjust Wide LCT Fan Level
	110	118	Pickup Assist Setting
	111	119	Updraft Fan
	112	120	Blower Fan
	113	121	Side Fan
	114	122	Vacuum Fan
	115	123	Updraft Fan Shutter
	116	124	Side Fan Shutter
	117	125	Switch Paper Load Upper Limit
	118	126	Paper Feed Mode (Adjust Fan Level)
	119	127	Double Feed Detection
	120	128	Illumin. Mode for Color Paper Detctn.
	121	129	Color Paper Edge Detection Adjustment
	122	130	Regist Jam Detection with Feed Dir
	123	131	Exit Motor Feed Speed Adjustment
	124	132	Switchback Entrance Feed Speed Adj
	125	133	Switchback Exit Feed Speed Adj
	126	134	Ppr Fd Sttg for 2 Sd Sml Siz Thckst Ppr

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Group	Previously	Currently	Item
Machine: Productivity	127	135	Process Speed Setting: Productivity
	128	136	Process Speed Setting: Quality
	129	137	Paper Feed Interval Setting: Productivity
	130	138	Paper Feed Interval Setting: Quality
	131	139	Rdc. Init. CPM: Low Tmp. Envir.: Prod.
	132	140	Rdc. Init. CPM: Low Tmp. Envir.: Qual.
	133	141	Rdc. In. CPM: N./H. Temp. Envr.: Prod.
	134	142	Rdc. In. CPM: N./H. Temp. Envr.: Qual.
		143	Process Speed Setting: Prod.: HQ
		144	Process Speed Setting: Qual.: HQ
		145	Rdc.CPM: LowTmp.Env.: Prod.:HQ
		146	Rdc.CPM: LowTmp.Env.: Qual.:HQ
		147	Rdc.CPM:N./H.Tmp.Env.:Prod.:HQ
		148	Rdc.CPM:N/H Tmp.Env.:Qual.:HQ
Finishing: Fold	135	149	Adjust Z-fold Position 1
	136	150	Adjust Z-fold Position 2
	137	151	Half Fold Position: Single-sheet Fold
	138	152	Letter Fold-out Posn 1: Single-sheet Fld
	139	153	Letter Fold-out Posn 2: Single-sheet Fld
	140	154	Letter Fold-in Posn 1: Single-sheet Fold
	141	155	Letter Fold-in Posn 2: Single-sheet Fold
	142	156	Double Parallel Fold Position 1
	143	157	Double Parallel Fold Position 2
	144	158	Adjust Gate Fold Position 1
	145	159	Adjust Gate Fold Position 2
	146	160	Adjust Gate Fold Position 3

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## Technical Bulletin

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### Reissued: 15-Jun-17

Model: Leo-C1/P1

Date: 28-Feb-17 No.:

No.: RD194157c

#### **RTB Reissue**

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

Subject: Service N	Ianual Correction: SC table	Prepared by: Sayaka Katoh	
From: Sales Strate	gy Section, 1st CP Busine		
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> <li>Tier 0.5</li> </ul>

#### **Service Manual Correction**

Please add the following SC Codes to your FSM, in this section:

SC No	Level	Error Name/Error Condition/Major Cause/Solution
SC440-01	D	Image Transfer Power Pack Voltage Leak (K)
SC440-02	D	Image Transfer Power Pack Voltage Leak (C)
SC440-03	D	Image Transfer Power Pack Voltage Leak (M)
SC440-04	D	Image Transfer Power Pack Voltage Leak (Y)
SC440-05	D	Image Transfer Power Pack Voltage Leak (S)
		An interrupt checks the status of the power pack every 10 msec. This SC is issued if a short in the power pack for K, C, M, Y or S is detected 50 times consecutively. Details:
		SC issued when the image transfer power pack output current is leaking. The IOB checks for SC signals as described above. Check with which color the problem occurred.
		<ul> <li>Image transfer power pack output current is leaking.</li> </ul>
		<ul> <li>Remove the high voltage cable from the output terminal of the image transfer power pack and check the following items.</li> <li>1. PWM: T1 signal check for the corresponding color If signal does not change during image transfer, replace the cable or the IOB.</li> <li>2. Image transfer power pack output check If output does not change during image transfer, replace the power pack. If output is normal during image transfer, replace the high voltage cable, ITB or the transfer roller.</li> </ul>

## Technical Bulletin

### Reissued: 15-Jun-17

Model: Leo-C1/P1	Date: 28-Feb-17	No.: RD194157c
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SC No	Level	Error Name/Error Condition/Major Cause/Solution
SC440-11	D	Image Transfer Error (low output) (K)
SC440-12	D	Image Transfer Power Pack Error (low output) (C)
SC440-13	D	Image Transfer Power Pack Error (low output) (M)
SC440-14	D	Image Transfer Power Pack Error (low output) (Y)
SC440-15	D	Image Transfer Power Pack Error (low output) (S)
		The transfer roller resistance level for a color was lower than 0.1kV.
		<ul> <li>Image transfer power pack defective</li> </ul>
		<ul> <li>Problem with input harness to the image transfer power pack (loose connection, harness broken, or connector disconnected).</li> </ul>
		<ul> <li>Confirm proper connection of the harness connecting the Image Transfer Power Pack and TDCU. If this does not solve the problem, replace the harness.</li> <li>Confirm proper connection of the harness connecting the TDCU and ITB unit. If this does not solve the problem, replace the harness.</li> <li>Replace the TDCU.</li> <li>Confirm proper connection of the harness connecting the ITB unit and BCU. If this does not solve the problem, replace the harness.</li> <li>Replace the drawer connector on the ITB unit side.</li> <li>Confirm proper connection of the connectors on the BCU.</li> <li>Confirm proper connection of the harness connecting the ITB unit and BCU. If this does not solve the problem, replace the harness.</li> <li>Replace the drawer connector on the ITB unit side.</li> <li>Confirm proper connection of the harness connecting the ITB unit and BCU. If this does not solve the problem, replace the harness.</li> <li>Replace the BCU. If this does not solve the problem, replace the BCU.</li> </ul>

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Model: Leo-C1/P1

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SC No	Level	Error Name/Error Condition/Major Cause/Solution
		Paper Transfer Roller end-of-life
		The paper transfer roller resistance level was "R+3".
SC453-00	С	<ul> <li>Paper transfer roller resistance increased through time (Roller endof-life)</li> </ul>
		<ul> <li>Connection fault between the Paper Transfer Power Pack</li> </ul>
		(AC/DC) and the paper transfer roller (High voltage harness broken, connector disconnected, or contact failure of paper transfer roller bushes, etc.)
		<ul> <li>Paper Transfer Power Pack (AC/DC) defective</li> </ul>
		Replace the paper transfer roller.
		Reconnect or replace the high voltage harness or the unit.
		• Fix or replace the Paper Transfer Power Pack (AC/DC).
		•Replace the paper transfer bias roller.

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Model: Leo-C1/P1

Date: 28-Feb-17 N

No.: RD194157c

SC No	Level	Error Name/Error Condition/Major Cause/Solution		
		Separation Power Pack Error (Leak)		
SC460-00	D	Separation Power Pack Error (Leak) An interrupt checks the status of the power pack every 10 ms. This SC is issued if a problem exists with 50 consecutive samplings (500 ms). Details: SC issued when the separation power pack output current is leaking. The IOB checks for SC signals as described above. • Separation Power Pack AC output is leaking. • If using normal paper is OK such as 70W, it may be because of the paper Try changing the paper • Leak due to debris around the paper transfer or poor harness connection or separation power pack defective Inspect and clean around the paper transfer, inspect and reconnect the harness Replace the separation power pack • Increased resistance due to Paper Transfer Bias Roller life Replace the Paper Transfer Bias Roller. Remove the high voltage cable from the output terminal of the separation power pack and check the following items. • PWM: D(ac)signal check If signal is fixed during image transfer, replace the cable or the IOB.		
		Separation power pack output check      If output is fixed during image transfer, replace the power pack		
		If output is normal during image transfer, replace the high voltage		
		cable or the discharge plate.		

### Reissued: 15-Jun-17

Model: Leo-C1/P1	Date: 28-Feb-17	No.: RD194157c

Troubleshooting: SC Codes > Service Call 501-595 > SC500 (Engine: Paper transport 1: Paper Feed, Duplex, and Transport)

SC No	Level	Error Name/Error Condition/Major Cause/Solution	
SC568-00	A	Overheat detection (hardware): Heating Roller Thermopile	
		Heating Roller Thermopile detected 270 degrees or higher.	
		<ul> <li>Triac shorted.</li> <li>IOB board defective.</li> <li>Sensor defective.</li> </ul>	
		<ul> <li>Replace the triac.</li> <li>Replace the IOB board.</li> <li>Clean/Replace the sensor(thermopile).</li> </ul>	

# Troubleshooting: SC Codes > Service Call 600-672 (Controller) > SC632 to SC653, SC670 to SC672

SC No	Level	Error Name/Error Condition/Major Cause/Solution	
SC670-00	D	Engine start up error	
		• Case 1	
		<ul> <li>/ENGRDY signal was not asserted when the machine was</li> </ul>	
		turned on or returned from energy saver mode.	
		<ul> <li>/IPURDY signal was not asserted when the machine was</li> </ul>	
		turned on or returned from energy saver mode.	
		<ul> <li>EC response was not received within specified time from power on.</li> </ul>	
		<ul> <li>PC response was not received within specified time from power on.</li> </ul>	
		<ul> <li>SC response was not received within specified time from power on.</li> </ul>	
		<ul> <li>Writing to Rapi driver failed (the other party not found through PCI).</li> </ul>	
		• Case 2	
		<ul> <li>Unexpected down status was detected after /ENGRDY assertion.</li> </ul>	
		• Case 3	
		DEMS execution for yellow failed.	
		The engine board was reset, triggered by an irregular process control run during a print operation. (Engine firmware defect)	



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Model: Leo-C1/P1		Date: 28-Feb-17	No.: RD194157c
	Case 1 • Engine board does not start up		
	Case 2 <ul> <li>Engine board reset unexpected</li> </ul>	ly.	
	Case3		
	$\cdot$ HP sensor in the yellow drum	motor is defective.	
	NOTE:		
	- This error does not occur.		
	- This error does not occur with	h the magenta/cyan/blacl	k drum motors.
	Case 1, 2		
	<ul> <li>Check the connection between the e</li> <li>If it is always reproduced, replaconsider replacing the controlle</li> <li>If reproducibility is low, multiple software, engine board, control</li> </ul>	engine board and the contr ce the engine board. If the r board or other boards be causes are to be consider ler board, and PSU.	oller board. problem persists, tween them. ed, such as
	Case 3		
	Check if the HP sensor in the yell following the steps below.	ow drum motor is defect	ive or not by
	1. Set SP3-600-030 (IBACC: 0	ON/OFF) to "1" or "2" (de	fault: 1).
	2. Execute SP3-040-005 (DE	MS:Execute:Y).	
	3. Check the result in SP3-04	41-001 (DEMS Exe OK?: I	From Left:YMCK).
	If the result code is "4XXX", the H defective. Replace the yellow dru	IP sensor in the yellow d Im motor.	rum motor is



## Technical Bulletin

#### Reissued: 13-Jun-17

Model: Leo-C1/P1

Date: 10-Mar-17

No.: RD194158a

#### **RTB Reissue**

#### The items in *bold italics* were corrected or added.

Subject: Important	request to prevent SC324	Prepared by: H Kawamura	
From: PP CS Sect.	, PP Field Quality Manager		
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> <li>Tier 0.5</li> </ul>

#### SYMPTOM

- SC324
- In-track lines

#### CAUSE

The developer reaches high-temperatures in certain moderate-temperature, moderatehumidity environments, and the toner coagulates.

#### SOLUTION

Do the following.

If the solution for uneven image density (189mm intervals) has already been applied on the machine: (See RTB RD194098b)

- 1. Install Engine firmware v1.22:06.
- 2. Make sure that SP1-945-003 is set to a value of 41.
- 3. Make sure that **SP1-945-052** is set to a value of **1**. **Note:** Modified machines have the following duct attached (see RTB# RD194098b for details).



4. Reboot the machine.

If the solution for even image density (189mm intervals) has not been applied yet:

- 1. Install Engine firmware v1.22:06.
- 2. Make sure that SP1-945-003 is set to a value of 38.
- Make sure that SP1-945-052 is set to a value of 0.
   Note: SC584-00 will appear if this SP is at a value of 1, but it will be cleared when you set this SP to 0.
- 4. Reboot the machine.



#### Reissued: 13-Jun-17

Model: Leo-C1/P1	Date: 10-Mar-17	No.: RD194158a

#### **IMPORTANT:**

• Ozone bands (189mm) may occur as a side effect of the above procedure, especially in the morning or after a short pause in usage.



- If this occurs, and is not acceptable to the customer, do the action explained in RTB #RD194098b. Then, do the following:
  - 1. Install Engine firmware v1.22:06.
  - 2. Make sure that SP1-945-003 is set to a value of 41.
  - 3. Make sure that **SP1-945-052** is set to a value of **1.**
  - 4. Reboot the machine.



## Technical Bulletin

#### Reissued: 11-Jul-17

Model: Leo-C1/P1	Date: 25-May-17	No.: RD194159

#### **RTB Reissue**

The item in *bold italics* were corrected or added.

Subject: SC code	added for ITB power pack f	Prepared by: H Kawamura	
From: 1st Tech Se	rvice Sect., PP Tech Servic		
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> <li>Tier 0.5</li> </ul>

#### SYMPTOM

White spots and/or SC453

### CAUSE

- 1. There is no SC to detect abnormal loads applied to the ITB power pack, and
- 2. The machine is used under the following conditions:
  - The opposed roller in the ITB unit is used past its yield, and
  - Temperature and humidity are both below machine specifications, and
  - The surface resistance of the paper is high.

As a result, abnormal loads are applied to the ITB power pack, which may break and generate abnormal power output.

### SOLUTION

#### **Production line**

The Engine firmware was modified so that an SC (SC **450**) will be triggered when a problem is detected with the ITB power pack, and the machine will stop.

Applied from: May 2017 Production

#### In the field

Install the following Engine firmware at the next site visit.

Copier:	Ver. <b>1.21:06</b> (F/W No. D1945405X)
Printer:	Ver. 1.21:06 (F/W No. M1955405X)
# Technical Bulletin

#### **PAGE: 1/7**

Model: Leo-C1/P1		Date: 2-Ju	un-17 No.: RD194160		
Subject: Drive Transmission Failure due to Rusted Coupling					by: H Kawamura
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> <li>Other ( )</li> </ul>			quired nanual revision nformation

### SYMPTOM

The following may occur (see CAUSE below for details):

Rusting of the PTR coupling gear:

- Jam 032
- Jam 033
- Jam 082
- Jam 083
- Banding within 100mm from the leading edge or trailing edge



- The image is reduced in size
- Paper creasing

RICOH	Technical <b>B</b> u	PAGE: 2/7	
Model: Leo-C1/P1		Date: 2-Jun-17	No.: RD194160
Rusting of the PTB unit coup - Jam 033 - Jam 083 - Uneven image density	ling gear:		



- Paper creasing

Rusting of the fusing unit coupling gear or paper exit unit coupling gear:

- Jam 034
- Jam 035
- Jam 084
- Jam 085
- Paper creasing

## CAUSE

The machine is used under high-temperature, high-humidity conditions. This can cause the joints of the coupling gear mentioned above to rust. As a result, the gears may not engage properly.

## SOLUTION

Do the **PROCEDURE** below.

RI	COH

Model: Leo-C1/P1	Date: 2-Jun-17	No.: RD194160

## PROCEDURE

- 1. Check whether each coupling gear rotates smoothly.
  - If it does not, apply "Moly High Temp Grease: 50G" (P/N: VSSG9001) to the area shown in the diagrams below.
  - Do this for each of the coupling gears mentioned below.
- 2. If the gear still does not rotate smoothly, replace the gear. **Important:** If no grease has been applied to the service part gear, apply the grease.

### PTR coupling gear

- 1. Remove the left and right drawers (See the Service Manual for the procedure). **Important:** Two people are required to do this step.
- 2. Apply the grease to the area inside the red square. **Note:** This area is located at the rear of the machine.



### **IMPORTANT:**

- Apply the grease to the entire surface (front/back) shown inside the red square.
- Apply the grease using the **minimum** and **maximum** guidelines shown in the photos.



## **T**echnical **B**ulletin

Model: Leo-C1/P1

Date: 2-Jun-17

No.: RD194160

### PTB unit coupling gear

Do the <u>same procedure as for the PTR coupling gear</u> (shown above). The area to apply the grease and minimum/maximum amounts are shown below.







## Technical Bulletin

Model: Leo-C1/P1

Date: 2-Jun-17

No.: RD194160

## Fusing Unit coupling gear

Do the <u>same procedure as for the PTR coupling gear</u> (shown above). The area to apply the grease and minimum/maximum amounts are shown below.





### **PAGE: 6/7**

Model: Leo-C1/P1

Date: 2-Jun-17

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## Technical Bulletin

Model: Leo-C1/P1

Date: 2-Jun-17

No.: RD194160

## Paper Exit Unit coupling gear

Do the <u>same procedure as for the PTR coupling gear</u> (shown above). The area to apply the grease and minimum/maximum amounts are shown below.



# Technical Bulletin

**PAGE: 1/1** 

Model: Taurus-C2	/P2	Date: 7-Jul	-17	No.: RD194161	
Subject: Troubleshooting: Paper Delivery Problems					by: Sayaka Katoh
From: Sales Strategy Section, 1st CP Business Department					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	shootingPart informationicalElectricalathTransmit/receiveSafetyOther ()		Action re Service r Retrofit in Tier 2	equired manual revision nformation

The items in *bold italics* were added.

3. Troubleshooting: Paper Delivery Problems > J097 Appears (Skew Detection) > Solution

### Make sure to level the machine before carrying out the following procedure.



# Technical Bulletin

**PAGE: 1/8** 

Model: Leo-C1/P1 (D194)				ul-17	No.: RD194162
Subject: Troubleshooting J082 (Fuser Coupling Broken)					by: Y. Sano
From: PP CS Sect., PP Field Quality Management Dept.					
Classification:	<ul> <li>☑ Troubleshooting</li> <li>☑ Mechanical</li> <li>□ Paper path</li> <li>□ Product Safety</li> </ul>	nation eceive )	Action re Service n Retrofit ir Tier 2	quired nanual revision nformation	

### **SYMPTOM**

A jam in the PTB unit (Paper Jam J082; Paper transport sensor) may occur.

### CAUSE

The joints of some fusing unit drive gears produced between October and December 2016 have lower mechanical strength. As a result, the joints may break during printing and prevent the fusing rollers from rotating.

Damaged drive gear



### SOLUTION

Replace the drive gear with one of the following two parts (See **PROCEDURE** below). **Note:** These two parts are the same part.

Parts information:

P/N	Description	Other
BB013037	GEAR:JOINT:PRESSURE:ASS'Y	Service Part
D2709901	GEAR:FUSING UNIT:ASS'Y	QA part (free of charge)

Affected serial numbers:

See Affected Serial Numbers for each region below.

Т	echnical	<b>B</b> ulletin
	Connoa	

Model: Leo-C1/P1 (D194)

Date: 11-Jul-17

No.: RD194162

### PROCEDURE

Estimated work time:

Mainframe: 10 min.

TCRU & Service parts: 13min.

Note: The three minute difference is due to the longer unpacking and packing procedure.

**IMPORTANT:** The fusing unit may be very hot, so take extra care.

- 1. Remove the fuser unit from the machine.
- 2. Remove the coupling [A] (Screws x 1).



3. Apply FLUOTRIBO MG GREASE (VSSG9002) to the gear [B].



Amount of grease to apply:



Model: Leo-C1/P1 (D194)

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4. Attach the new coupling.



5. Fix the gear in place with the screw. **Important:** Push the screw while turning it.



6. Re-attach the fuser unit.

Date: 11-Jul-17

No.: RD194162

## Affected Serial Numbers: NA

### Mainframe

**Note:** In cases where the machine's MB&R serial number is not yet known, only the last five digits are shown. You can identify an affected machine using the last 5 digits, as they are unique to each machine.

G366LC01112	G366LB01113	01114	01115	01116	G356LC01117
G366LC01118	01119	01120	G366LC01121	G366LC01122	G366LC01123
01124	G366LC01125	G366LC01126	G377L101127	01128	01129
01130	01131	01132	01133	G367L101134	G377L101135
G377L201136	01137	01138	G367L101139	01140	01141
01142	01143	01144	01145	G367L101146	01147
G367L101148	G367L101149	G367L201150	G367L201151	01152	01153
G367L201154	01155	G367L201156	01157	G356LC01158	01159
G367L101160	G357L101161	01162	G367L101163	G357L101164	01165
01166	G357L101167	01168	01169	G377L101170	G377L101171
G367L101172	G367L101173	G367L101174	G367L101175	G377L101176	G367L101177
G377L101178	G367L101179	G377L101180	01181	G367L101182	G377L201183
G377L201184	G377L101185	G367L201186	G367L201187	01188	G367L101189
G367L101190	01191	01192	G367L101193	G377L101194	G377L101195
01196	01197	G367L101198	G377L101199	X436LC01248	01249
X436LC01250	01251	X447L101252	X426LC01253	X447L101254	X426LC01255
X447L101256	X436LC01257	X447L101258	X447L101259	X436LC01260	X436LC01261
X447L101262	01263	X437L101264	X437L201265	X437L101266	X437L201267
01268	01269	X427L201270	01271	X437L201272	X447L201273
X446LC01274	01275	X437L101276	01277	01278	X447L101279
X437L201280	01281	X446LC01282	X447L101283	01284	X437L201285
X447L201286	01287	X447L201288	X447L101289	X437L201290	X447L201291
X447L101292	X437L101293	X437L201294	X437L101295	X447L101296	X437L101297
X447L101298	X447L101299	X447L101300	X447L101301	X447L101302	X447L101303
X437L101304	X437L101305	X437L101306	X437L101307	X447L101308	X447L101309
X437L101310	X447L101311	01312	X437L101313	X447L101314	X437L101315
X437L201316	X437L201317	01318	01319	01320	01321
01322	X437L201323	X427L201324	01325	X437L201326	01327
01328	X447L201329	X427L201330	01331	01332	01333
X447L201334	X447L201335	X437L201336	X437L201337	X447L201338	X427L201339

### TCRU

531610001991	531610002059	531610002295	531610002400	531610002394	531610002387
531610002516	531610002370	531610002523	531610002530	531610002653	531610002622
531610002660	531610002608	531610002615	531610002592	531610002639	531610002646
531610002738	531611000092	531611000252	531611000269	531611000276	531611000382
531611000221	531611000122	531611000108	531611000245	531611000115	531611000207

# Technical Bulletin

### **PAGE: 5/8**

Model: Leo-C1/P1 (D194)				1-Jul-17	No.: RD194162
531611000214	531611000139	531611000146	531611000153	531611000405	5 531611000467
531611000375	531611000399	531611000412	531611000351	531611000368	3 531611000344
531611000788	531611000696	531611000733	531611000894	531611000740	531611000689
531611000672	531611000719	531611000887	531611000863	531611000900	531611000917
531611000726	531611000870	531611000931	531611000948	531611000924	531611001136
531611001082	531611001105	531611001099	531611001204	531611001112	2 531611001228
531611001235	531611001129	531611001242	531611001211	531611001310	531611001334
531611001358	531611001365	531611001341	531611001518	531611001440	531611001464
531611001327	531611001488	531611001433	531611001471	531611001457	7 531611001501
531611001525	531611001594	531611001426	531611001495	531611001648	3 531611001600
531611001631	531611001624	531611001617	531611001778	531611001587	7 531611001761
531611001303	531611001792	531611001785	531611001808	531612000138	3 531612000336
531612000343	531612000350	531612000251	531612000367	531612000435	5 531612000473
531612000244	531612000381	531612000497	531612000466	531612000452	2 531612000442
531612000374					

### Service Parts Unit

521610000049	521610000063	521610000070	521610000032	521610000056	521611000307
521611000291	521611000284	521611000222	521611000215	521611000208	521611000185
521611000192	521611000277	521611000260	521611000253	521611000499	521611000505
521611000512	521611000475	521611000482	521611000802	521611000765	521611000758
521611000772	521611000789	521611000819	521611000796	521611000826	521611000840
521611000833	521611000871	521611000888	521611000864	521611000857	

Date: 11-Jul-17

## Affected Serial Numbers: EU

#### Mainframe

**Note:** In cases where the machine's MB&R serial number is not yet known, only the last five digits are shown. You can identify an affected machine using the last 5 digits, as they are unique to each machine.

G377J110926	G367J110927	10928	G346FA10929	G377J110930	G346FA10931
G346FA10932	G377J110933	G367J210934	G367J110935	G346FA10936	G346FA10937
G346FA10938	G346FA10939	G346FA10940	G346FA10941	G366JC10942	G346FA10943
G346FA10944	10945	10946	G346FB10947	10948	10949
10950	10951	10952	10953	10954	10955
10956	10957	G367J210958	10959	10960	10961
10962	10963	G346FB10964	G346FB10965	G346FB10966	10967
10968	10969	G346FB10970	10971	G346FB10972	10973
10974	10975	G367J210976	10977	G357J210978	10979
G357J210980	G367J210981	10982	G346FB10983	G367J210984	10985
G367J210986	10987	10988	10989	10990	10991
10992	10993	10994	10995	10996	10997
10998	10999	11000	11001	11002	11003
11356	11357	X437J111358	11359	11360	X447J111361
X437J111362	X437J111363	X416FA11364	11365	X447J111366	X427J111367
X437J111368	X447J111369	11370	11371	11372	11373
11374	11375	11376	11377	11378	X437J211379
11380	11381	X437J211382	11383	11384	11385
11386	11387	11388	X416FB11389	X437J211390	X437J211391
X437J211392	11393	X427J211394	X437J211395	X437J211396	X427J211397
11398	11399	11400	X437J211401	X437J211402	X416FB11403
X437J111404	X416FB11405	X437J111406	X437J211407	X437J211408	X437J111409
X437J111410	X437J111411	X437J211412	X437J211413	X437J211414	X437J211415
11416	X437J211417	11418	X437J211419	X437J211420	X437J211421
X437J211422	X437J211423	X437J211424	X427J211425	X437J211426	X437J211427
X437J211428	X416FB11429	X437J211430	X437J211431	X437J211432	X437J211433
X437J211434	11435	X437J111436	X437J211437	11438	11439
11440	11441	11442	11443	11444	11445
11446	11447	11448	11449	11450	11451
11452	11453	11454	11455	11456	11457
11458	11459	11460	11461	11462	0

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Model: Leo-C1/	P1 (D194)		Date: 1	1-Jul-17	No.: RD194162
TCRU					
541610001716	541610001730	541610001860	541610001747	541610001884	4 541610001914
541610001891	541610002027	541610001907	541610001723	541610001877	7 541610002041
541610002003	541610002058	541610002065	541610002072	54161000192	1 541610002294
541610002287	541610002300	541610002317	541610002478	541610002454	4 541610002447
541610002430	541610002461	541610002416	541610002423	541611000183	3 541611000176
541611000190	541611000169	541611000268	541611000152	54161100014	5 541611000381
541611000374	541611000480	541611000541	541611000602	541611000473	3 541611000688
541611000671	541611000824	541611000800	541611000831	541611000848	3 541611000817
541611001104	541611001074	541611001173	541611001081	541611001098	3 541611001197
541611001272	541611001296	541611001289	541611001319	541611001302	2 541611001418
541611001401	541611001432	541611001425	541611001524	541611001500	0 541611001449
541611001494	541611001517	541611001678	541611001845	54161100166	1 541611001838
541611001883	541611001821	541611001784	541611001814	541611001807	7 541611001791
541611001920	541611002255	541611001937	541611002316	541611002323	3 541611002224
541612000090	541612000083	541612000106	541611002293	541611002309	9 541612000076
541612000113	541612000137	541612000120	541612000274	541612000229	9 541612000205
541612000151	541612000144	541612000212	541612000236	541612000458	3 541612000434
541612000243	541612000465	541612000281	541612000267	541612000250	0 541612000595
541612000427	541612000403	541612000410	541612000632	541612000607	1 541612000304
541612000588	541612000618	541612000397	541612000625	54161200044	1

### **Service Parts**

541610001341	541610001402	541610001334	541610001372	541610001358	541610001549
541610001518	541610001389	541610002188	541610002140	541610002164	541610002171
541610002157	541611000534	541611000596	541611000558	541611000572	541611000589
541611000565	541611000510	541611000527	541611001180	541611001203	541611001227
541611001210	541611001913	541611001944	541611001906	541611001890	541611002200
541611002330	541611002354	541611002347	541611002286	541611002279	541611002194
541611002262	541611002231	541611002217	541611002248	541612000311	541612000571
541612000298					

Model: Leo-C1/P1 (D194)

Date: 11-Jul-17

No.: RD194162

## Affected Serial Numbers: AP

### Mainframe

G346FB20027	G346FB20028	G346FB20029	G346FB20030	G366FA20066	G366FB20067
G366FB20068	X416FB20088	X416FB20089	X416FB20090	X416FB20091	X416FB20092
X416FB20093	X416FB20094	X416FB20095	X416FB20096	X416FC20097	X416FC20098
X416FC20099	X436FA20321	X436FB20322	X436FB20323	X436FB20324	X436FB20325
X436FB20326	X436FB20327	X436FB20328	X436FB20329	X436FB20330	X436FB20331
X436FB20332	X436FC20333	X436FC20334	X436FC20335	X436FC20336	X436FC20337
X436FC20338	X446FB20058	X446FC20059	X446FC20060		

### **Affected Serial Numbers: CN**

#### Mainframe

G366FB30004			

### **Location of Fuser Unit Serial Number Label**





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### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.:

No.: RD194163b

#### **RTB Reissue**

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

Subject: Toner chi	uck failure	Prepared by: H Kawamura	
From: PPCS Section	on, CIP Product Quality Mar	nagement Dept.	
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> <li>Tier 0.5</li> </ul>

### SYMPTOM

Toner is not supplied after the toner bottle is replaced and the machine halts operation.

### CAUSE

Deformation and subsequent breakage of the toner chuck.

Normal toner chuck (left) and broken toner chuck (right):



## SOLUTION

#### **Temporary:**

Update the Engine firmware to ver. **1.24:06 or newer** when replacing the toner chuck.

#### Permanent:

- Update the Engine firmware to ver. 1.24:06 or newer when replacing the toner chuck, AND
- Install modified parts (Part Number : D1949923)
   See PROCEDURE below.

**Note:** This is necessary since the symptom can still occur with the new firmware if the toner chuck is already cracked.

### Reissued: 27-Mar-18

Model: Leo-C1/P1 Da	Date: 29-Sep-17	No.: RD194163b
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### PROCEDURE

- 1. Remove the external covers and ADF. See "Replacement and Adjustments" (Toner Supply section) in the Service Manual.
- 2. Remove the old brackets (screws x3).



## Technical Bulletin

### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.

No.: RD194163b

3. Remove the two gears and DC motor (e-rings x 2).



4. Pull the rack forward and unscrew the screw shown.



## Technical Bulletin

### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.: RD194163b

5. Remove the lever, rack and, spring.



IMPORTANT! Do NOT remove this SPRING.

## Technical Bulletin

### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.: RD194163b

6. Remove the slider from the front side of the machine. Note: The slide is comprised of the following two parts.



7. Remove the old seal and clean the surface, then attach the new seal.



### IMPORTANT:

- 1. Clean the surface of the slider.
- 2. Make sure the seal is attached properly.
- 3. Be careful not to bend or damage the new seal.
- 4. Make sure the seal does not ride up on the rib.

## Technical Bulletin

### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17

No.: RD194163b

8. Reattach the slider and spring.





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### Reissued: 27-Mar-18

Model: Leo-C1/P1



## Technical Bulletin

### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.: RD194163b

10. Reattach the gears and e-rings.





### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17

No.: RD194163b

11. Push the rack until the chuck is closed, and then reattach the motor.



## Technical Bulletin

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### Reissued: 27-Mar-18

Model: Leo-C1/P1

Date: 29-Sep-17 No.: RD194163b

12. Hook the new bracket and then attach it using the screws.



13. Reattach the external cover and ADF.

# Technical Bulletin

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

Model: Leo-C1/P1 Date: 1			Date: 11-C	Oct-17	No.: RD194164
Subject: SC453				Prepared	by: H Kawamura
From: PPCS Section	on, CIP Product Quality Man	agement Dept	t.		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform Electrical Transmit/re Other (	nation eceive )	Action re Service r Retrofit ir	quired nanual revision nformation

### **SYMPTOM**

SC453 may appear before the paper transfer bias roller reaches its yield under low-temperature, low-humidity conditions.

## CAUSE

The combination of the following factors triggers the SC:

- The voltage of the Paper Transfer Bias Roller
- The machine temperature
- The machine humidity

## SOLUTION

Do the action in the flowchart below.



## Technical Bulletin

Model: Leo-C1/P1 Date: 9-		te: 9-Nov-17	No.: RD194165	
Subject: Release of the new Neon Pink toner			Prepared	by: S. Katoh
From: Sales Strategy Section, 1st CP Business Department				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part informatic     Electrical     Transmit/receiv     Other ()	on 🛛 Action re Service ve 🗌 Retrofit i Tier 2	equired manual revision information Tier 0.5

This bulletin announces the requested actions and information regarding service maintenance for machines with the Neon Pink toner installed, which will be released as a new special color toner in November 2017.

### REQUEST

### Prior to installation

The following will be needed for the installation of the Neon Pink toner. Procure these items prior to installation if necessary.

- A set of Neon Pink toner decals (p/n: D1948523) one for the sub hopper and one for the toner supply unit
- Special color kit
- Printed notes on the modification points for explanation to your customer procure from your local support.

Download the firmware described below in advance.

	version	Release date
Engine	<ul> <li>v 1.19:06 or later (Requires SP modification. See the NOTE in the following section <u>At installation</u>.</li> <li>v 1.25 or later (Does not require SP modification)</li> </ul>	Nov 4, 2016
Sustam/Canu (Caniar)	v 2 10 er leter	Nov 4, 2016
System/Copy (Copier)	v 3.10 or later	NOV 4, 2016
System (Printer)		
Web Support	v 1.09 or later	Nov 4, 2016
OpePanel	v 2.06 or later	Nov 4, 2016

#### Firmware

#### Total Flow Print server R-60A

	Version	Release date
Microcode v 2.2.003 or later		Nov 8, 2016
	Note: Upgrade the BOS to 123.19.048	
	or later before applying this microcode.	
Driver (Windows)	v 1.1.0.0 or later	Nov 8, 2016
Driver (Mac)	v 2.1.58 or later	Nov 8, 2016

Total Flow Print server R-61A

	Version	Release date
Microcode	v 2.2.003 or later	Nov 8, 2016



Mod	el: Leo-C1/P1		Date: 9-Nov-17		No.: RD194165
	Driver (Windows)	v 1.1.0.0 or later		No	v 8, 2016
	Driver (Mac)	v 2.1.58 or later		No	v 8, 2016

#### Fiery E-43A/E-83A

	Version	Release date
Patch	No Update	-
Driver	No Update	-

### At installation

- **1.** Install the above firmware.
- 2. The procedure of installing the Neon Pink is no different to other colors. See the FSM for the procedure.
  - 2. Installation -> 5th Station Replacement kit Type S3.
- 3. Explain the modification points to your customer using the notes procured from your local support.

#### NOTE

For v1.19:06 ~ v1.24, modify the SP settings as shown in the table below.

Starting from v1.25, which is scheduled for release in Nov 2017, this SP modification will not be required.

SP number	Description	Default	Modify to
3-201-213	TnrDensity Upper TC:Special Color3	9.0	11.0
3-332-213	M/A Calculation-Corrct Coef:Special Color3	1.00	0.94
3-620-213	ProCon Target M/A Plain:Maximum M/A:Special Color3	0.20	0.39
3-630-213	Dev gamma :Disp/Set Initial:Special Color3	1.00	1.20

#### Service maintenance information

- Modification of the UI
  - To support the new special color, Clear was changed to Special. White will remain as White. All special color toners except for White are displayed as Special.
  - Similarly, in the Adjustment Settings for Skilled Operators [0511: Select Color of Special Toner], special toner that used to be displayed as [Clear] and [White] were changed to [Special] and [White]. When switching to a special color other than White, select [Special], and then clean the tube. The system will acknowledge the toner bottle set after the tube cleaning as the new color.
  - Make sure to update the above firmware and driver as a set. Updating individually will mix up the display of Clear and Special.
  - Fiery Controller, Fiery Driver and Command Workstation will not apply the changes regarding special color toner. Clear will remain as Clear and White as White on the Fiery Controller, Fiery Driver and Command WorkStation. Make sure to explain this to your customer with the printed notes.



Model: Leo-C1/P1

Date: 9-Nov-17

No.: RD194165

### • Part number information

The following parts were added for the Neon Pink toner.

	Part Number	Remark
Developer	D1949720	Developer for Neon Pink
Decal	D1948523	Please procure these items prior to installation

- Production of the Pink toner will be discontinued when any of the following conditions are met:
  - 1. The vendor discontinued the production of the raw materials contained in the toner, making it difficult for Ricoh to procure the toner.
  - 2. Five years passed after the last production of Pro C7100.
  - 3. No orders placed for the Neon Pink toner for a period of one year. (Minimum lot for production: 100kg)

An announcement will follow when any of the above conditions are met. RCL will make arrangements for the last production of the Neon Pink toner within 6 months.

# Technical Bulletin

PAGE: 1/2

Model: Leo-C1/P1		Date: 24-Aug-16		No.: RD194142		
Subject: Troubleshooting toner scattering (dirty laser shield glass)			Prepared by: S. Sasaki			
From: 1st Tech Service Sect., PP Tech Service Dept.						
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> <li>Tier 0.5</li> </ul>		

### SYMPTOM

Toner leaks from the development unit entrance seal at 4k or shorter intervals. **Note:** 

- This often dirties the laser glass shield.
- The symptom occurs only with the CMY stations.



Toner is shown having leaked onto the upper seal and bracket.

**Note:** The toner leaks in an upward direction due to the pressure inside the development unit.

## CAUSE

The seal on some development units is too long. As a result, the seal can sometimes physically interfere with the developer on the roller surface. In addition, the seal does not contain/seal the entrance to the unit properly.





Model: Leo-C1/P1

Date: 24-Aug-16

No.: RD194142

### SOLUTION

### **Production line**

The length of the seal was shortened slightly so that it does not interfere with the developer mixture.

Applied from: April 2016 production

### In the field

Replace the entrance seal with the modified one (see **PROCEDURE**).

Free of charge part: D1949918

Normal Service part: D1943330



### **IMPORTANT:**

- The modified seal has a blue marking on its inner surface.
- DO NOT install this seal on K or S development units. This is because it was confirmed that the old seal is more effective for the K and S units.



# Technical Bulletin

**PAGE: 1/6** 

Model: Leo-C1/P1		Date: 29-Aug-16		No.: RD194143	
Subject: Troubleshooting J031 with thin paper			Prepared by: S. Sasaki		
From: PP CS Sect., PP Field Quality Management Dept.					
Classification:	<ul> <li>☐ Troubleshooting</li> <li>☐ Mechanical</li> <li>☑ Paper path</li> <li>☐ Product Safety</li> </ul>	<ul> <li>Part inform</li> <li>Electrical</li> <li>Transmit/re</li> <li>Other (</li> </ul>	nation eceive )	Action real Service n Retrofit ir	quired nanual revision nformation

### SYMPTOM

J031 occurs frequently when printing onto thin paper types.

**Note:** RTB #RD194094 is effective if the jams are continuous and/or occur when printing onto thick paper types.

### CAUSE

The bending angle in some CIS brackets is slightly large, causing thin paper types to contact the bracket during paper transport.





**Note:** The difference in angle is very slight but visible.



Model: Leo-C1/P1

Date: 29-Aug-16

No.: RD194143

### SOLUTION

#### **Production line:**

The manufacturing process has been improved so that all CIS brackets have the necessary bending angle.

Applied from: March 2016 production

#### In the field:

Replace the CIS bracket with the modified one (see **PROCEDURE** below). P/N D1942960 GUIDE PLATE: REGISTRATION: PEEN

### PROCEDURE

#### Confirming that the CIS bracket needs to be replaced

- 1. Open the front doors.
- 2. Pull out the right drawer unit.
- 3. Remove the cover bracket (screw x3).
- 4. Place a scale or other straight instrument on the guide plate, as shown below.



5. Slide the scale upstream along with the guide plate, to see if the scale bumps into the bracket.





Model: Leo-C1/P1

Date: 29-Aug-16

No.: RD194143

**<u>Normal</u>** (no action needed): The leading edge of the scale bumps into the bracket as shown.



NOT normal (Do the action in Step 6 onward): The scale does **not** bump into the bracket as shown.



6. Remove the inner cover of the right drawer.





Date: 29-Aug-16

No.: RD194143

7. Remove the Mylar bracket.



8. Remove the board cover.



9. Disconnect the connector.




#### **PAGE: 5/6**

Model: Leo-C1/P1

Date: 29-Aug-16

No.: RD194143

10. Remove the CIS assembly.



11. Remove the screws on the operator side.



12. Remove the Shift Roller Motor at the non-operator side.





Model: Leo-C1/P1

Date: 29-Aug-16

No.: RD194143

13. Remove the screws.



14. Remove the CIS bracket.



15. Install the new bracket.



16. Re-install the parts/units in the reverse order.

### Technical Bulletin

Model: Leo-C1/P1			Date: 27-F	eb-18	No.: RD194166
Subject: Release of the new Invisible Red toner				Prepared by: S. Katoh	
From: Sales Strategy Section, 1st CP Business Department					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inforn Electrical Transmit/r Other (	nation eceive )	Action re Service r Retrofit in Tier 2	equired manual revision nformation

This bulletin announces the requested actions and information regarding service maintenance for machines installed with the Invisible Red toner, which will be released as a new special color toner in March 2018.

#### REQUEST

#### Prior to installation

The following will be needed for the installation of the Invisible Red toner. Procure these items prior to installation if necessary.

- A set of Invisible Red toner decals (p/n: D1948524) one for the sub hopper and one for the toner supply unit
- 5th Station Replacement kit Type S3
- Printed notes on the modification points for explanation to your customer procure from your local support.

Download the firmware described below in advance.

	version	Release date
Engine	<ul> <li>v 1.19:06 or later (Requires SP modification. See the NOTE under the following section <u>At installation</u>.</li> <li>v 1.25 or later (Does not require SP modification.)</li> </ul>	Nov 4, 2016
System/Copy (Copier) System (Printer)	v 3.10 or later	Nov 4, 2016
Web Support	v 1.09 or later	Nov 4, 2016
OpePanel	v 2.06 or later	Nov 4, 2016

#### Firmware

#### Total Flow Print server R-60A

	Version	Release date
Microcode	code v 2.2.003 or later	
	Note: Upgrade the BOS to 123.19.048	
	or later before applying this microcode.	
Driver (Windows)	v 1.1.0.0 or later	Nov 8, 2016
Driver (Mac)	v 2.1.58 or later	Nov 8, 2016

Total Flow Print server R-61A

	Version	Release date
Microcode	v 2.2.003 or later	Nov 8, 2016



PAGE: 2/3

Mod	el: Leo-C1/P1		Date: 27-Feb-18		No.: RD194166
	Driver (Windows)	v 1.1.0.0 or later		No	v 8, 2016
	Driver (Mac)	v 2.1.58 or later		No	v 8, 2016

#### Fiery E-43A/E-83A

	Version	Release date
Patch	No Update	-
Driver	No Update	-

#### At installation

- **1.** Install the above firmware.
- **2.** The procedure of installing the Invisible Red is no different to other colors. See FSM for procedure.
  - 2. Installation -> 5th Station Replacement kit Type S3.
- 3. Explain to your customer on the modification points using the notes procured from your local support.

#### NOTE

# For v1.19:06 ~ v1.25, modify the SP settings as described in the table below. Starting from v1.26:06, which is scheduled for release in Mar 2018, this SP modification will not be required.

SP number	Description	Default	Modify to
3-201-214	TnrDensity Upper TC:Special Color4	9.0	11.0
3-332-214	M/A Calculation-Corrct Coef:Special Color4	1.00	1.06
3-620-214	ProCon Target M/A Plain:Maximum M/A:Special Color4	0.20	0.444
3-630-214	Dev gamma :Disp/Set Initial:Special Color4	1.00	1.2

#### Service maintenance information

- Modification of the UI
  - To the purpose of support new special color, Clear was changed to Special. White will remain as White. All special color toner except for White are displayed as Special.
  - Similarly, in the Adjustment Settings for Skilled Operators [0511: Select Color of Special Toner], special toner that used to be displayed as [Clear] and [White] were changed to [Special] and [White]. When switching to a special color other than White, select [Special], and then clean the tube. The system will acknowledge the toner bottle set after the tube cleaning as the new color.
  - Make sure to update the above firmware and driver as a set. Updating individually will mix up the display of Clear and Special.
  - Fiery Controller, Fiery Driver and Command Workstation will not apply the changes regarding special color toner. Clear will remain as Clear and White as White on the Fiery Controller, Fiery Driver and Command WorkStation. Make sure to explain to your customer with the printed notes.



Model: Leo-C1/P1

#### • Part number information

The following parts were added for the Invisible Red toner.

	Part Number	Remark
Developer	D1949730	Developer for Invisible Red
Decal	D1948524	Please procure these items prior to installation

- Production of the Invisible Red toner will be discontinued when any of the following conditions are met:
  - 1. The vendor discontinued the production of the raw materials contained in the toner, making it difficult for Ricoh to procure the toner.
  - 2. Five years passed after the last production of Pro C7100.
  - 3. No orders placed for the Invisible Red toner for a period of one year. (Minimum lot for production: 100kg)

Announcement will follow when any of the above conditions are met. RCL will make arrangements of the last production of the Invisible Red toner within 6 months.

# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1			Date:13-M	ar-18	No.: RD194167
Subject: Mix Color After Replacing Special Color					by: H Kawamura
From: PPCS Section, CIP Product Quality Management Dept.					
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> <li>Tier 0.5</li> </ul>	

#### SYMPTOM

When the special toner color is replaced, the new is mixed with the old.

#### CAUSE

A small amount of the previous special toner remains in the toner path between the toner bottle and development unit.

#### SOLUTION

Set the following SPs to the values shown.

SP 3-170-002: Set to a value of **2**. SP 3-170-003: Set to a value of **10,000**.

**Note:** This will extend the time taken to clean out the previous toner (Process Control) by a maximum of 10 minutes longer than default.

#### **IMPORTANT:**

Only execute the above cleaning once, each time the special toner is replaced. If it is executed multiple times, SC362-05 will occur, which would require replacement of the developer mixture.

# Technical Bulletin

Model: Leo-C1/P1 Date			te: 26-Mar-18		No.: RD194168	
Subject: PM par		Prepared	d by: R. S	Shohda		
From: 1st Tech S	Service Sect., PP Tech Service	Dept.				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info Electrica Transmi Other (	ormat al it/rec	tion eive )	<ul> <li>Action</li> <li>Servio</li> <li>Retrot</li> <li>Tier 2</li> </ul>	n required ce manual revision fit information

#### Notice Regarding PM Alert Banner Message

Specification of the PM parts replacement alert banner message that appears on the operation panel for the following parts is not explained in the FSM and has caused confusion in the field. This bulletin clarifies on this point.

- PCU CL(Bk): Lubricant
- PCU CL(C): Lubricant
- PCU CL(M): Lubricant
- PCU CL(Y): Lubricant
- PCU CL(S): Lubricant
- #Fuser Cleaning Unit

SP5062 provides the option to choose whether or not to display the PM parts replacement alert (0: Not display, 1: Display).

However, by spec, the alert message will appear for the above parts regardless of the SP5062 setting, because these are critical components to maintain machine operation.

Note that the machine will automatically stop if they are not replaced at the appropriate timing.

# Technical Bulletin

PAGE: 1/2

Model: Leo-C1/P1 D			Date: 17-A	pr-18	No.: RD194169
Subject: Half tone density improvment for special color				Prepared by: H Kawamura	
From: PPCS Section, CIP Product Quality Management Dept.					
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>		Action re Service n Retrofit ir	quired nanual revision nformation

#### SYMPTOM

Gradation of special color is not smooth, especially at density lower than 30% the image appeared almost as white.

### CAUSE

The screen setting for special color was not smooth

### SOLUTION

Proceed the following action at following condition

- When installing 5 station machine
- When customer purchase the new 5<sup>th</sup> station toner, and technician install it
- For the machine in the field, when customer pointed out the above symptom

Apply the Fiery patch,

Patch File	Issue(s)
FIT101651303.exe	Feature Request for re-linearization screen.

Before installing FIT101651303.exe

- 1. Known issues listed below, read before installing FIT101651303.exe patch:
- None.

2. The following prerequisite(s) must be installed in the order specified before applying the FIT101651303.exe patch:

- FIT100868801.exe
- FIT101183864.exe
- SP3\_FIT101633955

3. Do NOT install any of the following patch(es) after installing the FIT101651303.exe patch. If you must install any of the patch(es) below, do so before installing the FIT101651303.exe patch:

• None.

4. This patch is not exclusive if installed manually. One server Reboot is sufficient for all patches to take effect on the system. System Updates may require an exclusive install if this patch becomes a prerequisite for a future patch.

5. In the case where the customer needs to install a patch which was previously skipped in the patch order, it is necessary to reinstall the system.

6. This patch has uninstaller capability. Please refer uninstaller release notes for more details.

Patch installation instructions

Т	echnical	<b>B</b> ulletin
	Common	

Model: Leo-C1/P1	Date: 17-Apr-18	No.: RD194169
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1. Make sure that the Fiery printer controller reaches Idle.

2. Execute FIT101651303.exe and follow the instructions in the Fiery Patch Downloader.

3. Notes about the Fiery Patch Downloader

a. Logon must be admin. This is fixed and cannot be modified.

b. Password is the Fiery administrator login password.

c. Hostname can be the IP address or the Fiery server name.

4. After the patch is downloaded, and when prompted by the Fiery Patch Downloader, choose Reboot.

5. Wait until the Fiery controller reaches Idle and print the Configuration page.

6. If the controller does not eventually reach Idle, please manually start the Fiery service.

7. Verify that the System Updates Log section contains the patch number FIT101651303.

Patch is uploaded in the GKM Answer ID 256644

To adjust the tone curve for special color, please refer to "MakeToneCurve\_HowToUse\_ver1.pptx" which is uploaded in the GKM Answer ID 256643

# Technical Bulletin

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Model: Leo-C1/P1			Date: 7-May-18		No.: RD194170
Subject: Part for Charge Roller Lever Replacement					by: H Kawamura
From: PPCS Section, CIP Product Quality Management Dept.					
Classification:	tion: Troubleshooting Part information Mechanical Electrical Paper path Transmit/receive Product Safety Other ()		nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation

#### SYMPTOM

The Charge Roller Lever becomes damaged, requiring the replacement of the entire PCDU assembly.

### CAUSE

Inserting the PCDU into the machine without securing the Charge Roller Lever.

### SOLUTION

Apply the Charge Roller lever on top of the broken part Part Number : D1949100 Part Description : Charge Roller Lever



Note: This solution only works if the remaining part in the red circle is still in the PCDU



<Procedure for applying the part>

- 1. Pull out the affected PCDU
- 2. Turn the broken lever to the close position







Date: 7-May-18

3. Put the new part on top of the broken lever.





Note : Actual part is gray, not orange

4. Press down the lever - you should feel it click into place





<Procedure for replacing the charge roller>

1. Pull the release (white circle) away from the frame to unlock the part, and remove it.









# Technical Bulletin

Model: Leo-C1/P1 Date					18	No.: RD194171	
Subject: FSM Correction: SC570					Prepared by: A. Tajima		
From: 1st Tech S	Service Sect., PP Tech Service	Dept.					
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part info	ormat al it/rec	tion eive )	<ul> <li>☐ Action</li> <li>⊠ Servio</li> <li>☐ Retrot</li> <li>⊠ Tier 2</li> </ul>	n required ce manual revision fit information	

Please add the following description in **bold** on SC570 to your field service manual in section:

6. Troubleshooting  $\rightarrow$  SC Tables  $\rightarrow$  SC570

SC570	D	Ozone Collection Fan Error
		The ozone collection fan is the large fan on the right end the upper
		horizontal dust across the back of the machine.
		Fan harness disconnected or broken
		Fan overload due to physical obstruction
		Fan motor defective
		Replace the following fans.
		Ozone collection fan
		Ozone exhaust fan (Y)
		Ozone exhaust fan (M) Ozone exhaust fan (C)
		Ozone exhaust fan $(C)$
		Cooling Box Ozone Exhaust Fan (This is at the rear box)
		Ozone filter
		If the fan did not solve, replace the harness connected to above
		fans.

# Technical Bulletin

**PAGE: 1/1** 

Model: Leo-C1/P1	Date: 13-Sep-18		No.: RD194172			
Subject: Process Control Error 59				Prepared by: H Kawamura		
From: PPCS Section, CIP Product Quality Management Dept.						
Classification:	Assification: Troubleshooting Part informat Mechanical Electrical Paper path Transmit/rece Product Safety Other (		nation eceive )	Action re Service n Retrofit ir	quired nanual revision nformation	

#### SYMPTOM

Error code 59 appears continuously as a result of process control.

### CAUSE

If the development voltage is larger than the charger votage, dirty background occurs. Due to the dirty background, the ID/ MUSIC sensor cannot read the Process Controll Pattern correctly.

SOLUTION

#### Preventative

Access Super SP mode, and change SP 3-621-051 to "199".

#### When the symptom occurs

- Connect the teraterm cable to the machine. (For the procedure, see "Troubleshooting Manual, 11. Advanced Instructions > "Procedures for Capturing the Engine Debug Log via the Debug Cable)
- 2. Check and write down the value of SP 3-611-101,
- 3. Change the value in SP 3-612-101 using the teraterm (this SP is read only). The value to put into SP 3-612-101, is 150 less than the value in SP 3-611-101. Example: If SP 3-611-101 is 700, then the value is 550.

Let "aaa" stand for the value in SP 3-611-101 - 150. In the teraterm, enter the following command, then press ENTER. spw\_3\_612\_101\_aaa

\* "\_" indicates the space

- 4. Check that SP 3-612-101 shows "aaa".
- 5. Execute the Process control from SP 3-011-001.

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Model: Leo-C1/P1	Date: 12-Feb-19		No.: RD194173		
Subject: Modificati	Prepared by: Rie Shoda				
From: 1st CP Business Department CP Business Center					
Classification: Troubleshooting Part info Mechanical Electrica Paper path Transmit Product Safety Other (		Part inform	nation eceive )	Action re Service r Retrofit ir	quired nanual revision nformation Tier 0.5

#### Changes:

- The fans in the transport belt unit were modified for higher durability. The cut-out on the corner of the fans purposed to prevent faulty installation was changed on the new fans.
- The shape of the frame (p/n: D1943818) and supporting plate (p/n: D1943809) of the transport belt unit were modified to match the new position of the cut-out on the fans.

Old p/n	New p/n	Description	Q'ty	Int	Set	Note
	D1943809	SUPPORTING PLATE:VACUUM:C2	1	-	А	Added
	D1943818	VACUUM:C1C2:C2	1	-	А	Added
AX640201	AX640207	FAN:MM60	3	X/0	А	

**NOTE:** When replacing the fan, replace all of the above as a set. The new fan cannot be installed on the old supporting plate and frame.



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Model: Leo-C1/P1	Date: 12-Feb-19		No.: RD194173		
Subject: Modificati	Prepared by: Rie Shoda				
From: 1st CP Business Department CP Business Center					
Classification: Troubleshooting Part info Mechanical Electrica Paper path Transmit Product Safety Other (		Part inform	nation eceive )	Action re Service r Retrofit ir	quired nanual revision nformation Tier 0.5

#### Changes:

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- The shape of the frame (p/n: D1943818) and supporting plate (p/n: D1943809) of the transport belt unit were modified to match the new position of the cut-out on the fans.

Old p/n	New p/n	Description	Q'ty	Int	Set	Note
	D1943809	SUPPORTING PLATE:VACUUM:C2	1	-	А	Added
	D1943818	VACUUM:C1C2:C2	1	-	А	Added
AX640201	AX640207	FAN:MM60	3	X/0	А	

**NOTE:** When replacing the fan, replace all of the above as a set. The new fan cannot be installed on the old supporting plate and frame.



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Model: Leo-C1/P1		Date: 26-I	Feb-19	No.: RD194174			
Subject: Arcing around ITB Pulley					Prepared by: H Kawamura/SC		
From: PPCS Section	on, CIP Product Quality Mar	nagement Dept	t.				
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform	nation eceive )	Action re	quired nanual revision nformation		

#### SYMPTOM

Arcing around the ITB pulley due to high voltage leak damages the pulley.

#### CAUSE

- 1. SC450-001 displayed due to a failure to the DC Power Supply
- 2. High resistance occurs around the PTR section due to low temperature/humidity conditions and feeding high resistance paper. High voltage leaks from the opposed roller to the ITB timing belt generates arcing and damages the ITB pulley.

### ACTION

Mandatory at the next visit to install a new modified pulley part number D1949924 for the ITB oppose roller.

Pro C7100 series are no longer manufactured; therefore, every serial number requires the new pulley.

Ricoh will allocate the new pulley to every service location based on mainframe shipping information.

<Procedure>

1. Turn off the main power and lower the ITB level.



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Model: Leo-C1/P1

В

[A]

Date: 26-Feb-19

No.: RD194174

2. Remove the ITB lock plate. 1 screw.



3. Remove the right-hand side ITB inner cover. 3 screws.

No need to pull out the ITB unit.



4. Disconnect the sensor assembly. 2 screws. No need to disconnect the sensor.



Model: Leo-C1/P1	
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Date: 26-Feb-19

No.: RD194174

- 5. Remove the timing belt.
- 6. Remove the plastic retaining ring, at the edge of the opposed roller.



7. Remove the Pulley and replace it with the modified part.

Install the pulley so the design outlined in the red circle faces the front cover, as shown below.



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Model: Leo-C1/P1

Date: 26-Feb-19

No.: RD194174

Original pulley is black. Modified pulley is white.

The modified pulley material has improved flame retardant, and shape was modified to have greater creepage distance.



- 8. Reassemble the machine by following steps 1 to 6 in reverse order.
- 9. Check SC log for any occurrences of SC450-001

10. Troubleshoot and resolve SC450-001 noting that a failed DC Power Supply may be damaged.

11. Verify that the firmware level is 1.21:06 or higher

# Technical Bulletin

#### **PAGE: 1/3**

Model: Leo-C1/P1 Date			Date:	14-Jun-19	No.: RD194175	
Subject: New service parts - PCDU Drive Unit			Prepared by: R. Shohda			
From: Service Planning Sect., Global Engineering Support Dept.						
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	<ul> <li>☑ Part inf</li> <li>☑ Electric</li> <li>☑ Transm</li> <li>☑ Other (</li> </ul>	ormatior al nit/receiv )	n Action Servio re Retro Tier 2	n required ce manual revision fit information 2	

The PCDU Drive Unit was registered as service parts to meet requests received from the field.

Old p/n	New p/n	Description	Q'ty	Int	Note
-	DD1941420	DRIVE UNIT: AROUND THE PHOTOCONDUCTOR: ASS'Y	1	-	Add



RICOH
Model: Leo-C1/P1

Techni	cal <b>B</b>	ullet	in
	uai 🖬	リロロレ	

Date: 14-Jun-19 No.:

No.: RD194175

#### How to Replacing the PCDU Drive Unit

**NOTE:** The drive unit is different for KS stations and CMY stations. The system will not detect the drive unit if the wrong unit is installed.

#### Removing the Old DRIVE UNIT

- 1-1. Remove the two screws (09544008N) that fix the belt tension.
- 1-2. Remove the three screws (03604006N) that fix the drive unit to the mainframe.
- 1-3. Remove the drive unit.

#### Fig.1



Date: 14-Jun-19

#### Installing the New DRIVE UNIT

2-1. Pull out the PDCU halfway on its rail.

- 2-2. Apply approximately 0.1g of grease equally to 6 points around the surface of the gear, hatched in red in Fig.2 below.
  - Recommend grease: p/n: VSSG9006 (MOLYKOTE(R) G-1077 GREASE 50G)
  - Grease application is unnecessary if the gear is already greased.
- 2-3. Press the joint [A] and apply approximately 0.1g of grease to the area circled in red on both front and rear sides.
  - Recommend grease: p/n: VSSG0006 (DRYSURF:MDF-2400E 25G)
- 2-4. Set the DRIVE UNIT on the mainframe.
- 2-5. Fix the DRIVE UNIT to the mainframe with three screws (03604006N) removed in step 1-2.
  - Make sure the screws and screw holes are aligned.
  - Steps 2-5 and 2-6 are not interchangeable. Follow the steps in order as described.
- 2-6. Fasten the two screws (09544008N) that fix the belt tension removed in step 1-1.

Fig.2



# Technical Bulletin

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Model: Leo-C1/F	P1		Date: 30-0	Oct-19	No.: RD194176
Subject: Machine I	locking up			Prepared	by: H Kawamura
From: PPCS Section	on, CIP Product Quality Mar	nagement Dept	t.		
Classification:	<ul> <li>Troubleshooting</li> <li>Mechanical</li> <li>Paper path</li> <li>Product Safety</li> </ul>	Part inform	nation eceive )	☐ Action re ☐ Service r ☐ Retrofit ir ⊠ Tier 2	quired nanual revision nformation

#### SYMPTOM

Machine locks up during printing jobs

Following symptom appears when the machine locks up

- "Printing" appeared on panel and Command Work Station
- No paper fed, and no paper released from machine
- There was no JAM indication
- Open door, add paper, and other interruptions, not recognized during lock-up

Note This RTB will not fix Fiery disconnect issues.

The way to distinguish:

While the machine is locked up, open the front door of main frame.

#### IF door open is not indicated on operation panel → Follow this RTB

#### IF operation panel shows door open $\rightarrow$ It is Fiery disconnecting

For Fiery disconnect, please try to reload system software, or replace gigabit Ethernet adapter and/or cable

### CAUSE

Noise on the harness between the BCU and IPU boards interfere with communication between the BCU and Controller board

### ACTION

1.Replace IPU, with modified version (increased noise filter capacity)

IPU part number changed to D1945706 (from D1945702)

2. Re-route harness to reduce noise on the signal line

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Model: Leo-C1/P1

Date: 30-Oct-19

No.: RD194176

<Procedure to re-route the harness>

- Tools required
  - > Nipper
  - Tie band

To distinguish between other harnesses, the one connected to CN204 is named "Harness A"

1. Open tie band No 1 to separate "Harness A" from others. Tie up "Harness A and others separately using tie bands.





After: Band No4-6

Before: Band No1-3 Notes

A) There will be red, blue and yellow circles

Red Circles: Before re-routing the harness

Blue Circles: After re-routing the harness - "Harness A"

Yellow Circles: After re-routing the harness – others harness

B) There are some areas, where it is difficult to separate "Harness A" from others -

Try to separate as much as possible.

Do NOT use excessive force to separate.

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As long as there is some separation, noise on the signal line will reduce.

C) It is recommended to open and tie the harness one band at a time, as it's very easy to mix up "Harness A" with others

2. Open tie band No 2 and separate "Harness A" from the others. Tie up "Harness A and others separately using tie bands.

Repeat the same process for bands No 3 to 10.



Before: Band No4-6



After: Band No4-6



Before: Band No7



After: Band No7



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Model: Leo-C1/P1

Date: 30-Oct-19

No.: RD194176



Before: Band No8-10



After: Band No8-10



Model: Leo-C1/P1

Date: 30-Oct-19 No.:

No.: RD194176

3. Be sure to re-position all harnesses in the original configuration below

