Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

RTB Reissue

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

Subject: Adjustments in Vacuum Feed LCIT to prevent no-feed and double-feed jams	Prepared by: Shinnosuke Sasaki
From: 1st PP Tech Service Sec., PP Tech Service Dept.,	

Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Supplementary Explanation on the Adjustments to Prevent No-feed and Double-feed Jams in the Vacuum Feed LCIT

The vacuum feed LCIT is capable of feeding a versatile range of media, but is also susceptible to paper curl by the nature of its mechanism of blowing air to separate the sheets. This bulletin provides explanations on the adjustments to prevent double-feed and no-feed jams, especially caused by paper curl. The main jam codes are as follows:

Jam type	Jam location	Jam code
No-feed	Upper Tray of 1st LCIT	J430
	Lower Tray of 1st LCIT	J431
	Upper Tray of 2nd LCIT	J445
	Lower Tray of 2nd LCIT	J446
	Upper Tray of 3rd LCIT	J460
	Lower Tray of 3rd LCIT	J461

Jam type	Jam location	Jam code
Double-feed	Upper Tray of 1st LCIT	J470
	Lower Tray of 1st LCIT	J471
	Upper Tray of 2nd LCIT	J485
	Lower Tray of 2nd LCIT	J486
	Upper Tray of 3rd LCIT	J500
	Lower Tray of 3rd LCIT	J501

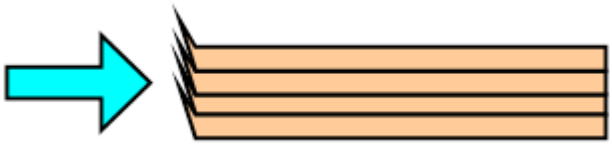
Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

Adjustments

Code	Action
J430 J431 J445 J446 J460 J461	● Do the following. 1. Fan and decurl the paper, as shown. 2. Set No. 118 [Paper Feed Mode (Adjust Fan Level)] in Advanced Settings to [Moderate Nonfdg Red. (Higher)]. 3. If the above does not solve the jam, change the setting to [Max Nonfdng Reduc. (Highest)]. ● If none of the above solves the jam, do the following. <u>If dog ears occur on the jammed paper, and you are printing onto thin paper:</u> Set No. 117 [Switch Paper Load Upper Limit] in Advanced Settings to [High].
J470 J471 J485 J486 J500 J501	● Do the following. 1. Make sure the Paper Size has been set correctly, and then fan/decurl the paper. 2. Set No.118 [Paper Feed Mode (Adjust Fan Level)] to [Moderate Dble Fd Red. (Lower)]. ● If the above does not solve the jam, change this setting to [Max Dble Fd Reduc. (Lowest)]. ● If none of the above solves the jam, do the following. <u>If the paper curl is too strong, even after decurling.</u> 1. Set No.116 [Side Fan Shutter] to [Active]. <u>If you are using paper with high porosity such as recycled paper:</u> 1. Increase No. 114 [Vacuum Fan] in Advanced Settings by +10%. <u>If you are using small envelopes:</u> 1. Decrease No.111 [Updraft Fan] to [0].

<u>Tips</u>
Burrs on the paper edges may disturb the air flow and cause feeding problems. Fan the paper to remove the burrs.

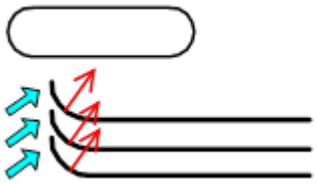


Idea behind the adjustment

The Vacuum Feed LCIT blows air to the leading and side edges of the paper to separate the topmost sheet from the stack, sucks up the sheet, and feeds with the belt. Paper with large curls hinders this function and affects the feed performance.

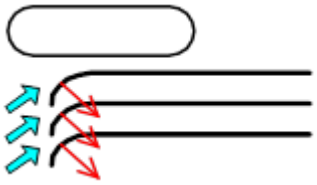
Face-curl increases the risk of double-feeds, because the air flow pushes up the paper.

Face-curl



Back-curl increases the risk of no-feeds, because the air flow presses down the paper.

Back-curl



In both cases, reducing the air flow improves the situation as the force applied to the paper reduces. For no-feed jams, increasing the vacuum power can also produce good results.

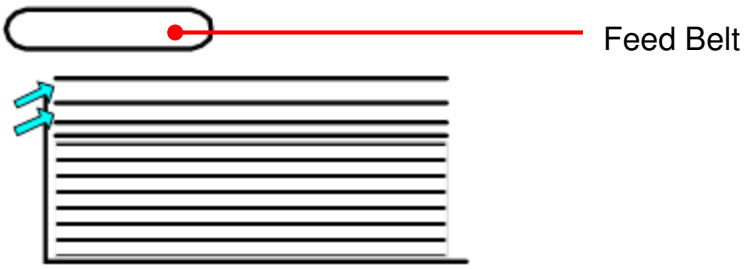
Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

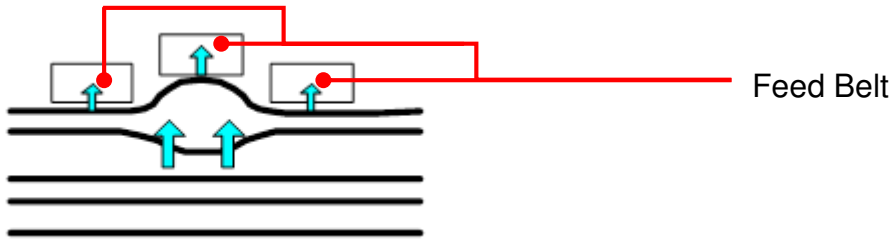
Adjustments in Advanced Settings for Custom Paper

The following are the adjustments available in the Advanced Settings for Customer Paper.

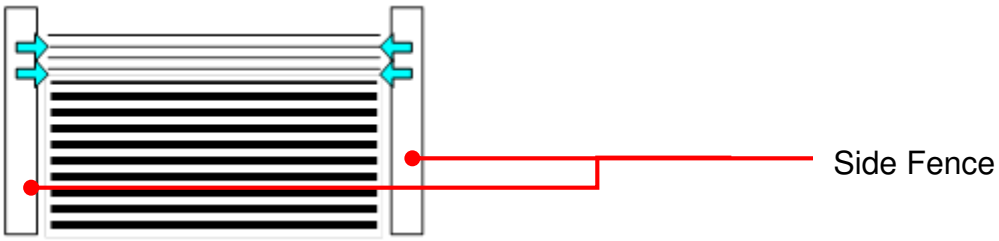
111 [Up Draft Fan]
Function: Blows air to the leading edge to float the paper.



112 [Blower Fan]
Function: Blows air in between the topmost sheet and the stack to separate the sheet.



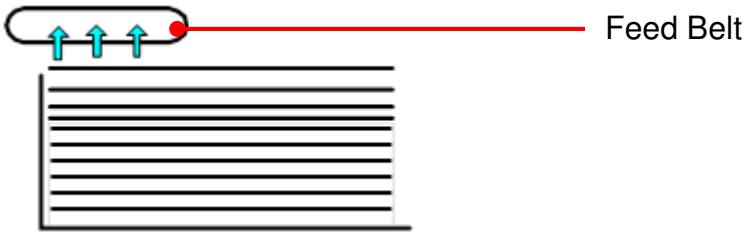
113 [Side Fan]
Function: Blows air from both side fences to float the paper.



Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

114 [Vacuum Fan]
Function: Sucks up the floating paper to the feed belt.



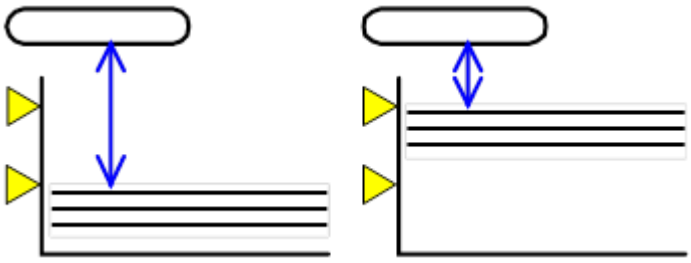
115 [Up Draft Fan Shutters]
Function: Blocks the air flow from the updraft and blower fans immediately before feeding to positively separate the topmost sheet from the stack.

116 [Side Fan Shutter]
Function: Blocks the air flow from the side fans immediately before feeding to positively separate the topmost sheet from the stack. This function is disabled by default, because it delays suction of the succeeding sheet and may cause a no-feed jam.

117 [Switch Paper Load Upper Limit]
Function: Controls the position of the topmost sheet according to paper weight.

Weight 3 or lighter (thinner)
The position is set to LOW, because light paper tends to easily float.

Weight 4 or heavier (thicker)
The position is set to HIGH, because heavy paper does not easily float.



Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

118 [Paper Feed Mode (Adjust Fan Level)]

Function: Enables easy adjustment of the updraft fans and side fans together. For example, selecting “Moderate Nonfdg Red. (Higher)” will increase the fan power 10% for both fans.

Selection	Updraft fans	Side fans
Max Double Feed Reduce (Lowest)	x - 20	y - 20
Moderate Double Feed Red (Lower)	x - 10	y - 10
Standard (No Adjustment)		
Moderate No-feed Reduce (Higher)	x + 10	y + 10
Maximum No-feed Reduce (Highest)	x + 20	y + 20

x = current value of 111 [Up Draft Fans]
y = current value of 113 [Side Fans]

Although the fan power can be adjusted within the range 0% ~ 100%, the actual fan duties do not go below 20%. If set to a value lower than 20%, the vacuum, side and blower fans will operate at 20% and the updraft fan will be inactivated.

This is because fan operation becomes unstable below 20%.

Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

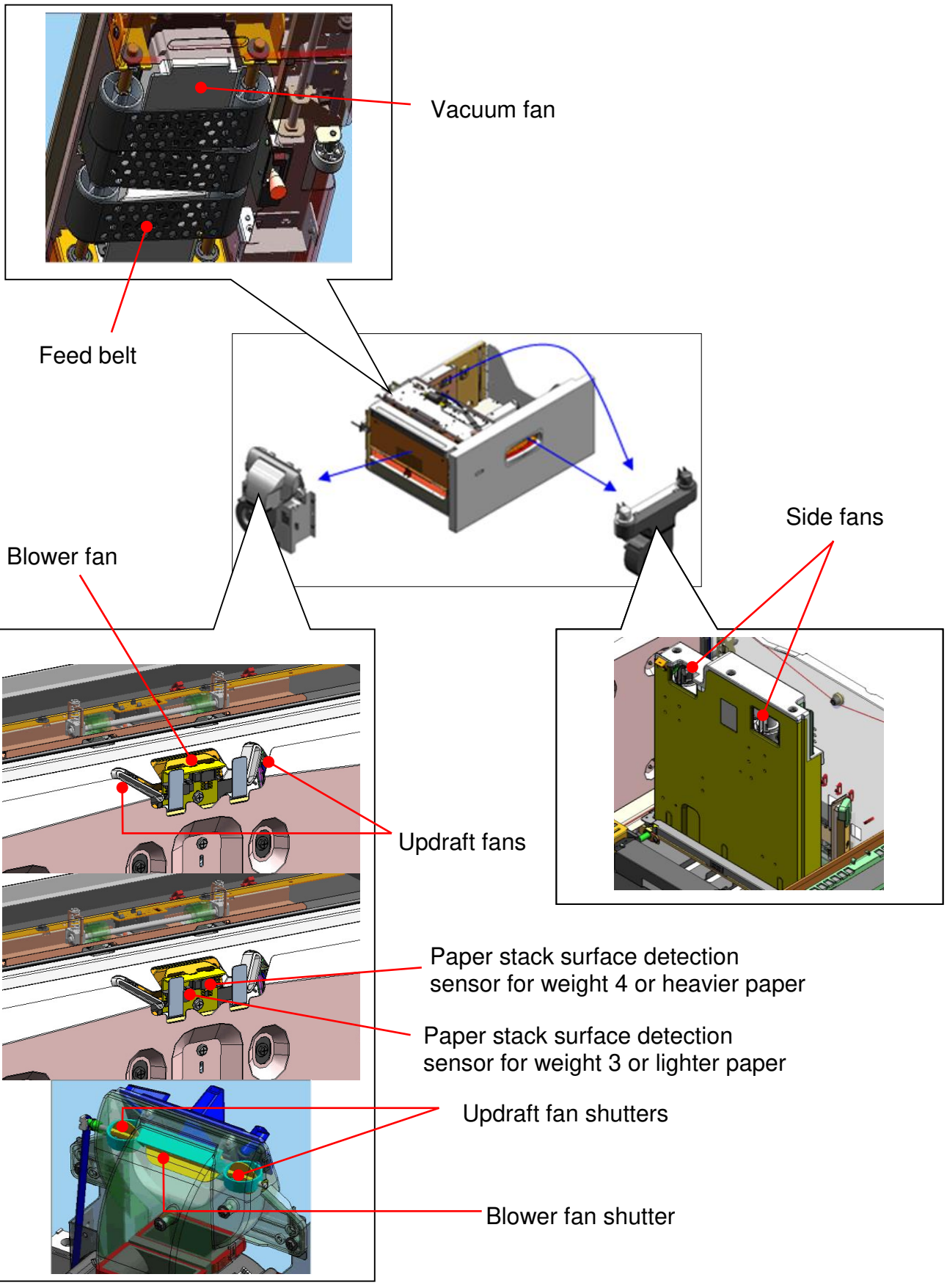
Appendix 1: Available adjustments

Thickness	Weight [gsm]	Adjustment Items		Default	
				Small sizes (139.7mm~ 147.9mm)	Large sizes (148.0mm~)
8 and 9	300.1~400	119	2-Tray LCT: Updraft Fan Level	0%	90%
		120	2-Tray LCT: Blower Fan Level	70%	70%
		121	2-Tray LCT: Side Fan Level	90%	90%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	HIGH	HIGH
5 ~ 7	63.1~300	119	2-Tray LCT: Updraft Fan Level	0%	70%
		120	2-Tray LCT: Blower Fan Level	70%	70%
		121	2-Tray LCT: Side Fan Level	70%	70%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	HIGH	HIGH
4	105.1~163	119	2-Tray LCT: Updraft Fan Level	0%	50%
		120	2-Tray LCT: Blower Fan Level	70%	70%
		121	2-Tray LCT: Side Fan Level	70%	50%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	HIGH	HIGH
3	80.1~105	119	2-Tray LCT: Updraft Fan Level	0%	50%
		120	2-Tray LCT: Blower Fan Level	70%	70%
		121	2-Tray LCT: Side Fan Level	70%	50%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	HIGH	LOW
2	63.1~80	119	2-Tray LCT: Updraft Fan Level	30%	40%
		120	2-Tray LCT: Blower Fan Level	40%	70%
		121	2-Tray LCT: Side Fan Level	30%	40%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	LOW	LOW
1	52.3~63	119	2-Tray LCT: Updraft Fan Level	30%	30%
		120	2-Tray LCT: Blower Fan Level	40%	70%
		121	2-Tray LCT: Side Fan Level	30%	30%
		122	2-Tray LCT: Vacuum Fan Level	80%	80%
		123	2-Tray LCT: Updraft Fan Shutter	Active	Active
		124	2-Tray LCT: Side Fan Shutter	Inactive	Inactive
		125	2-Tray LCT: Paper Feed Position	LOW	LOW

Reissued: 21-Nov-16

Model: Leo-C1a/C1b (D194/D195)	Date: 23-Feb-15	No.: RD777001b

Appendix 2: Components



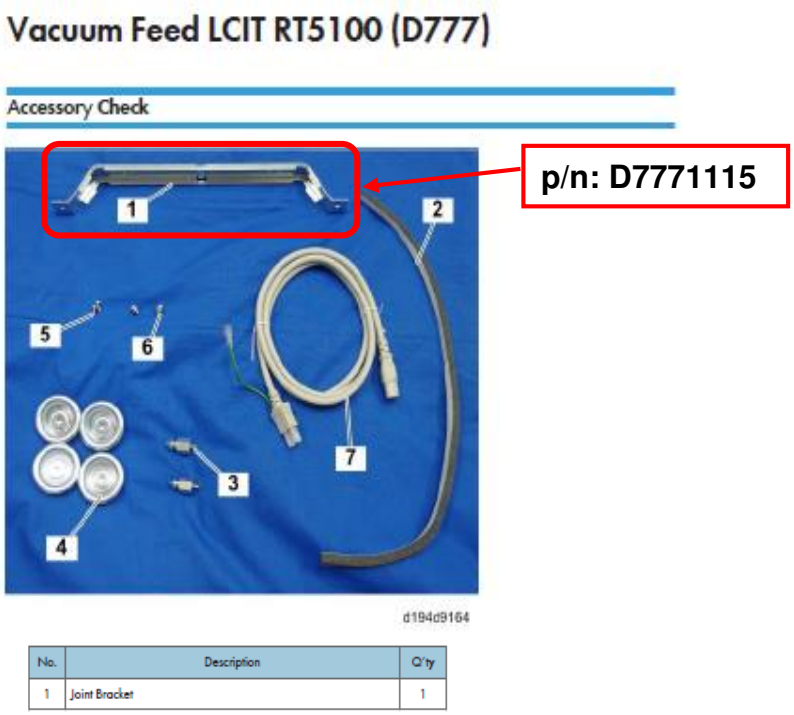
Model: Vacuum Feed LCIT RT5100	Date: 29-Jul-15	No.: RD077002

Subject: Part Catalog Correction Vacuum Feed LCIT RT5100 – Joint bracket	Prepared by: Takezoh Miyamoto
From: 1st PP Tech Service Sec., PP Tech Service Dept.,	

Classification:			
	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

The following part was missing from the parts catalog. Please add to your parts catalog.

Old p/n	New p/n	Description	Q'ty	Int	Note
-	D7771115	BRACKET:COUPLING	1	-	Add



This bracket is used for connecting the Vacuum Feed LCIT5100, and attaches to the right side of the Mainframe.

Model: BR-C1/BR-P1	Date: 28-Sep-15	No.: RD777003

Subject: Adjustments in Vacuum Feed LCIT to prevent no-feed and double-feed jams for BR-C1/P1	Prepared by: J. Ohno
From: 1st PP Tech Service Sec., PP Tech Service Dept.,	

Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Supplementary Explanation on the Adjustments to Prevent No-feed and Double-feed Jams in the Vacuum Feed LCIT

The vacuum feed LCIT can feed a wide range of media, but is also susceptible to paper curl by the nature of its mechanism of blowing air to separate the sheets. This bulletin provides explanations on the adjustments to prevent double-feed and no-feed jams, especially caused by paper curl. The main jam codes are as follows:

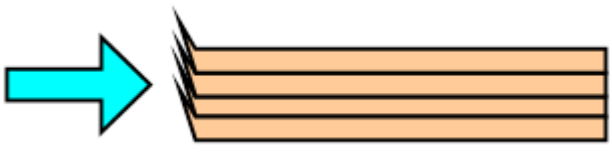
Jam type	Jam location	Jam code
No-feed	Upper Tray of 1st LCIT	J430
	Lower Tray of 1st LCIT	J431
	Upper Tray of 2nd LCIT	J445
	Lower Tray of 2nd LCIT	J446

Jam type	Jam location	Jam code
Double-feed	Upper Tray of 1st LCIT	J470
	Lower Tray of 1st LCIT	J471
	Upper Tray of 2nd LCIT	J485
	Lower Tray of 2nd LCIT	J486

Adjustments

Code	Action
J430 J431 J445 J446	● Do the following. 1. Fan and decurl the paper. 2. Set No. 41 [Paper Feed Mode (Adjust Fan Level)] in Advanced Settings to [Moderate Nonfdg Red. (Higher)]. 3. If the above does not solve the jam, change the setting to [Max Nonfdng Reduc. (Highest)]. ● If none of the above solves the jam, do the following. <u>If dog ears occur on the jammed paper, and you are printing onto thin paper:</u> Set No. 40 [Switch Paper Load Upper Limit] in Advanced Settings to [High].
J470 J471 J485 J486	● Do the following. 1. Make sure the Paper Size has been set correctly, and then fan/decurl the paper. 2. Set No.41 [Paper Feed Mode (Adjust Fan Level)] to [Moderate Dble Fd Red. (Lower)]. ● If the above does not solve the jam, change this setting to [Max Dble Fd Reduc. (Lowest)]. ● If none of the above solves the jam, do the following. <u>If the paper curl is too strong, even after decurling:</u> 1. Set No.39 [Side Fan Shutter] to [Active]. <u>If you are using paper with high porosity such as recycled paper:</u> 1. Increase No. 37 [Vacuum Fan] in Advanced Settings by +10%. <u>If you are using small envelopes:</u> 1. Decrease No.34 [Updraft Fan] to [0].

<u>Tips</u>
Burrs on the paper edges may disturb the air flow and cause feeding problems. Fan the paper to remove the burrs.



Idea behind the adjustment

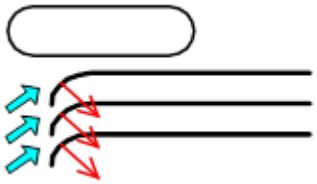
The Vacuum Feed LCIT blows air to the leading and side edges of the paper to separate the topmost sheet from the stack, sucks up the sheet, and feeds it with a belt. Paper with large curls hinders this function and affects the feed performance.

Face-curl increases the risk of double-feeds, because the air flow pushes up the paper.

Face-curl

Back-curl increases the risk of no-feeds, because the air flow presses down the paper.

Back-curl

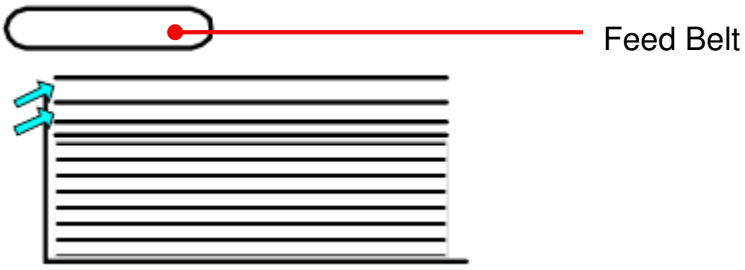


In both cases, reducing the air flow improves the situation because the force applied to the paper is reduced. For no-feed jams, increasing the vacuum power can also produce good results.

Adjustments in Advanced Settings for Custom Paper

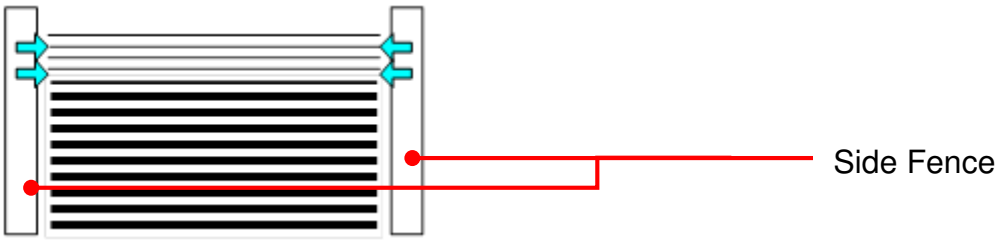
The following are the adjustments available in the Advanced Settings for Custom Paper.

34 [Updraft Fan]
Function: Blows air to the leading edge to float the paper.

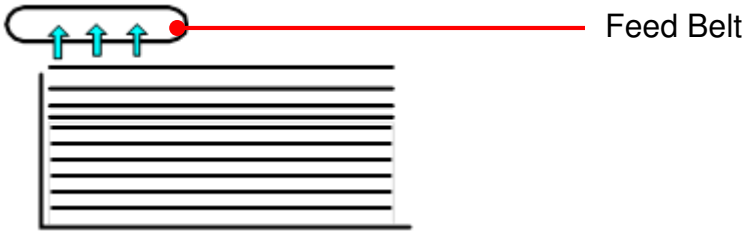


35 [Blower Fan]
Function: Blows air in between the topmost sheet and the stack to separate the sheet.

36 [Side Fan]
Function: Blows air from both side fences to float the paper.



37 [Vacuum Fan]
Function: Sucks up the floating paper to the feed belt.



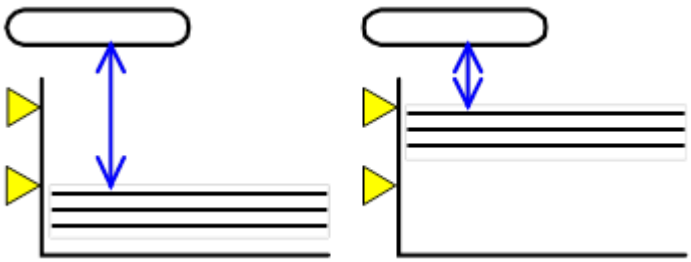
38 [Updraft Fan Shutters]
Function: Blocks the air flow from the up draft and blower fans immediately before feeding to positively separate the topmost sheet from the stack.

39 [Side Fan Shutter]
Function: Blocks the air flow from the side fans immediately before feeding to positively separate the topmost sheet from the stack. This function is disabled by default, because it delays suction of the succeeding sheet and may cause a no-feed jam.

40 [Switch Paper Load Upper Limit]
Function: Controls the position of the topmost sheet according to paper weight.

Weight 3 or lighter (thinner)
The position is set to LOW, because light paper tends to float easily.

Weight 4 or heavier (thicker)
The position is set to HIGH, because heavy paper does not float easily.



41 [Paper Feed Mode (Adjust Fan Level)]

Function: Enables easy adjustment of the up draft fans and side fans together. For example, selecting “Moderate Nonfdg Red. (Higher)” will increase the fan power 10% for both fans.

Selection	Up draft fans	Side fans
Max Double Feed Reduce (Lowest)	x - 20	y - 20
Moderate Double Feed Red (Lower)	x - 10	y - 10
Standard (No Adjustment)	-	-
Moderate No-feed Reduce (Higher)	x + 10	y + 10
Maximum No-feed Reduce (Highest)	x + 20	y + 20

x = current value of 34 [Updraft Fans]
y = current value of 36 [Side Fans]

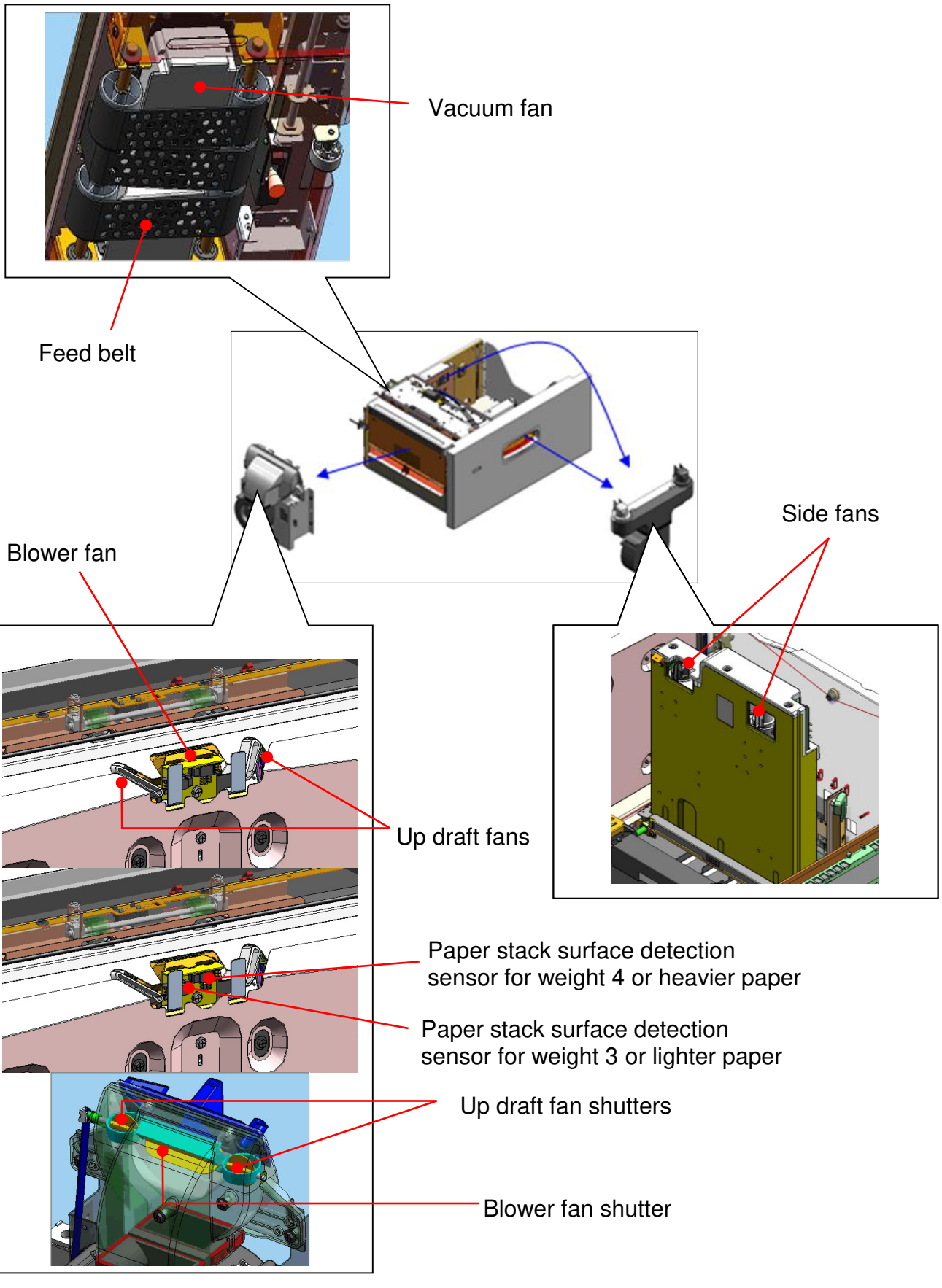
Although the fan power can be adjusted within the range 0% ~ 100%, the actual fan duties do not go below 20%. If set to a value lower than 20%, the vacuum, side and blower fans will operate at 20% and the up draft fan will be inactivated.

This is because fan operation becomes unstable below 20%.

Appendix 1: Available adjustments

Thickness	Weight [gsm]	Adjustment Items		Default	
				Small sizes (139.7mm~ 147.9mm)	Large sizes (148.0mm~)
8	300.1~350	34	Updraft Fan	0%	90%
		35	Blower Fan	70%	70%
		36	Side Fan	90%	90%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	HIGH	HIGH
5 ~ 7	163.1~300	34	Updraft Fan	0%	70%
		35	Blower Fan	70%	70%
		36	Side Fan	70%	70%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	HIGH	HIGH
4	105.1~163	34	Updraft Fan	0%	50%
		35	Blower Fan	70%	70%
		36	Side Fan	70%	50%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	HIGH	HIGH
3	80.1~105	34	Updraft Fan	0%	50%
		35	Blower Fan	70%	70%
		36	Side Fan	70%	50%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	HIGH	LOW
2	63.1~80	34	Updraft Fan	30%	40%
		35	Blower Fan	40%	70%
		36	Side Fan	30%	40%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	LOW	LOW
0 ~ 1	40~63	34	Updraft Fan	30%	30%
		35	Blower Fan	40%	70%
		36	Side Fan	30%	30%
		37	Vacuum Fan	80%	80%
		38	Updraft Fan Shutter	Active	Active
		39	Side Fan Shutter	Inactive	Inactive
		40	Switch Paper Load Upper Limit	LOW	LOW

Appendix 2: Components

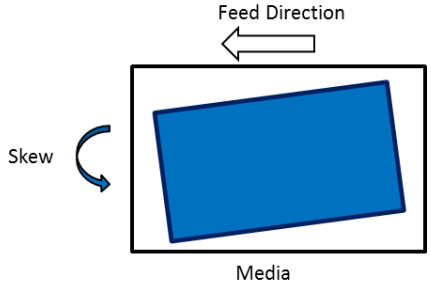


Model: Vacuum Feed LCIT	Date: 28-Oct-15	No.: RD777004

Subject: Troubleshooting banner sheet skew			Prepared by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☐ Tier 2 ☐ Tier 0.5

SYMPTOM

Skew occurs when a banner sheet is fed from the Vacuum Feed LCIT.

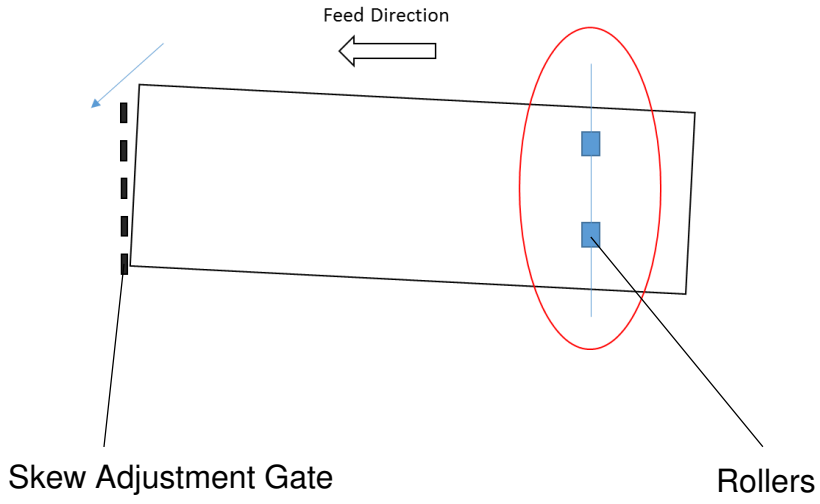


Note

Thicker paper (Weight 5 or thicker) tends to be more affected by the skew.

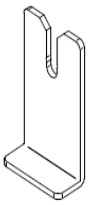
CAUSE

The skew of the banner sheet cannot be corrected efficiently with the skew adjustment gate, because the trailing edge of the banner sheet is still held by rollers when the leading edge reaches the adjustment gate.



SOLUTION

Apply the skew adjustment plates under the connection pins on the mainframe following the procedure described in this document, in order to adjust the angle with which the LCIT is connected to the mainframe.



8 adjustment plates come with the Vacuum Feed LCIT. Adding 1 adjustment plate will correct approx 0.25mm/100mm of skew. Up to 4 plates can be inserted under the pin, which means approx 1.0mm/100mm of skew can be corrected.

You can also procure the plate and screw as a service part to fasten it.

D7771116	ADJUSTING PLATE:BRACKET:COUPLING
09545014N	SCREW - M5X14

Procedure

1. Register the banner paper in use as a custom paper type.

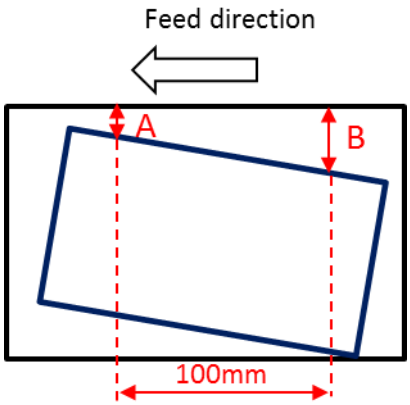
2. **Only Andromeda:** Change 013: [Deactivate Image Position Adjustment] to “ON” to turn off the image position adjustment.

   NOTE: It is turned off in Leo by default.

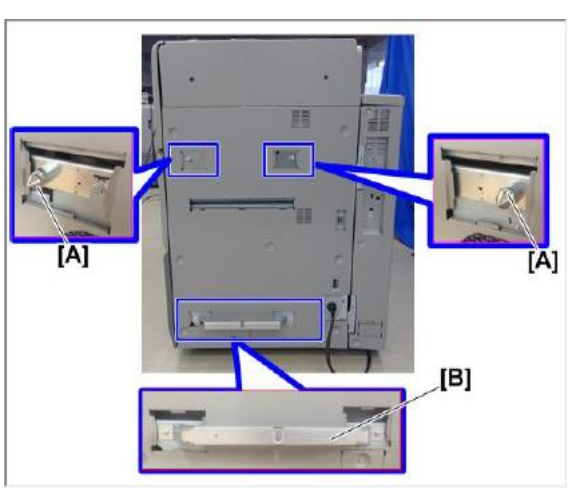
3. Print trim patterns to check the skew amount with the following procedure.
   3-1. Enter SP mode and select [14: Trimming Area] in SP 2-109-003 (Test Pattern - Pattern Selection).

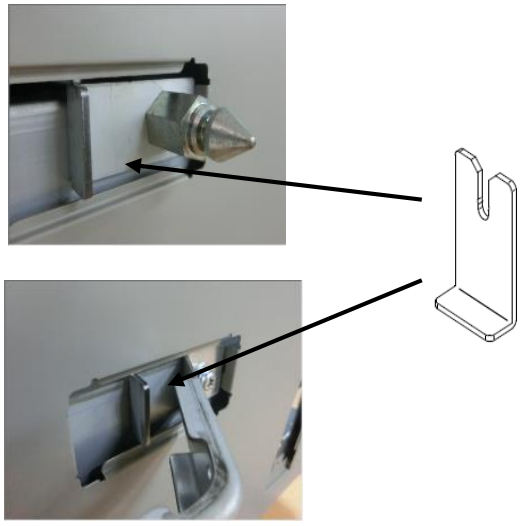
   3-2. Print 3 sheets of the test pattern.

   3-3. Check the skew direction and measure the distance A and B.

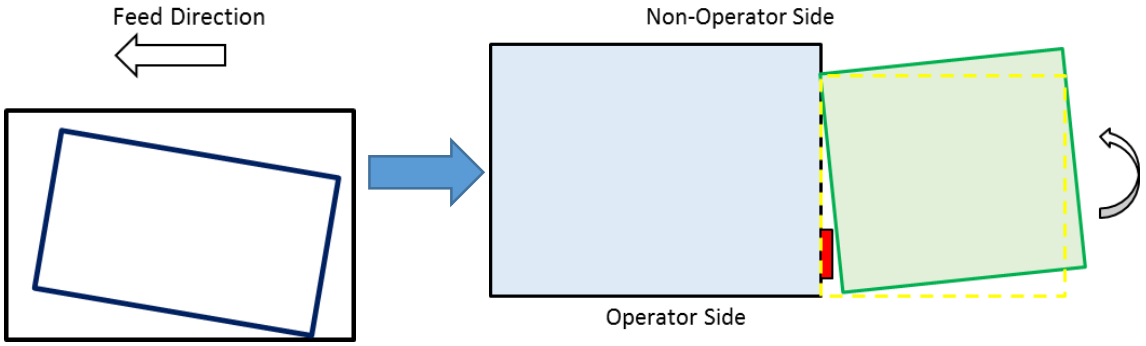


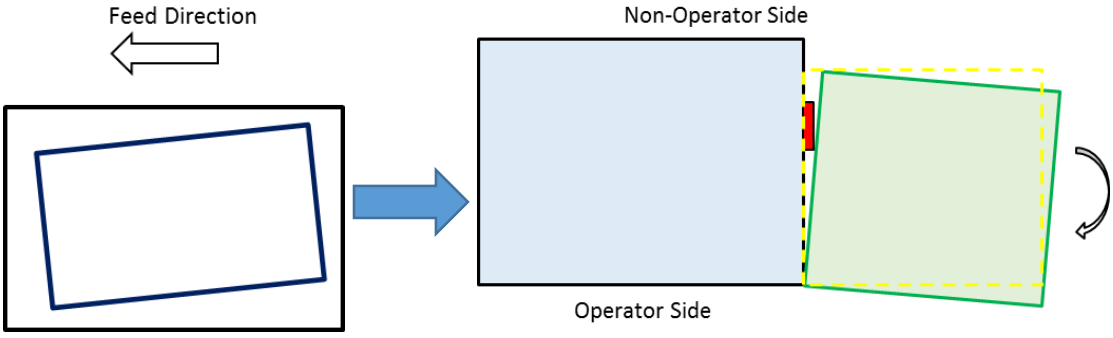
4. Insert the skew adjustment plates under the connection pins. Apply them on either the operator side or the non-operator side depending on skew direction. Applying a plate will correct 0.25mm/100mm of skew. Apply up to 4 pieces under a pin depending on the skew amount measured in the previous step.





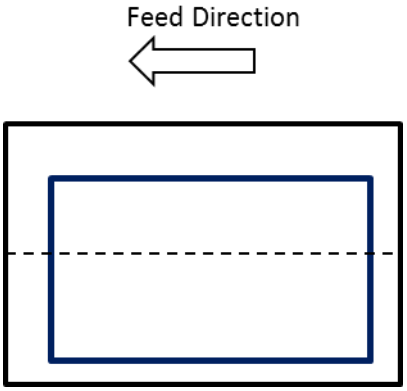
<u>Apply them on either the operator side or the non-operator side depending on skew direction.</u>





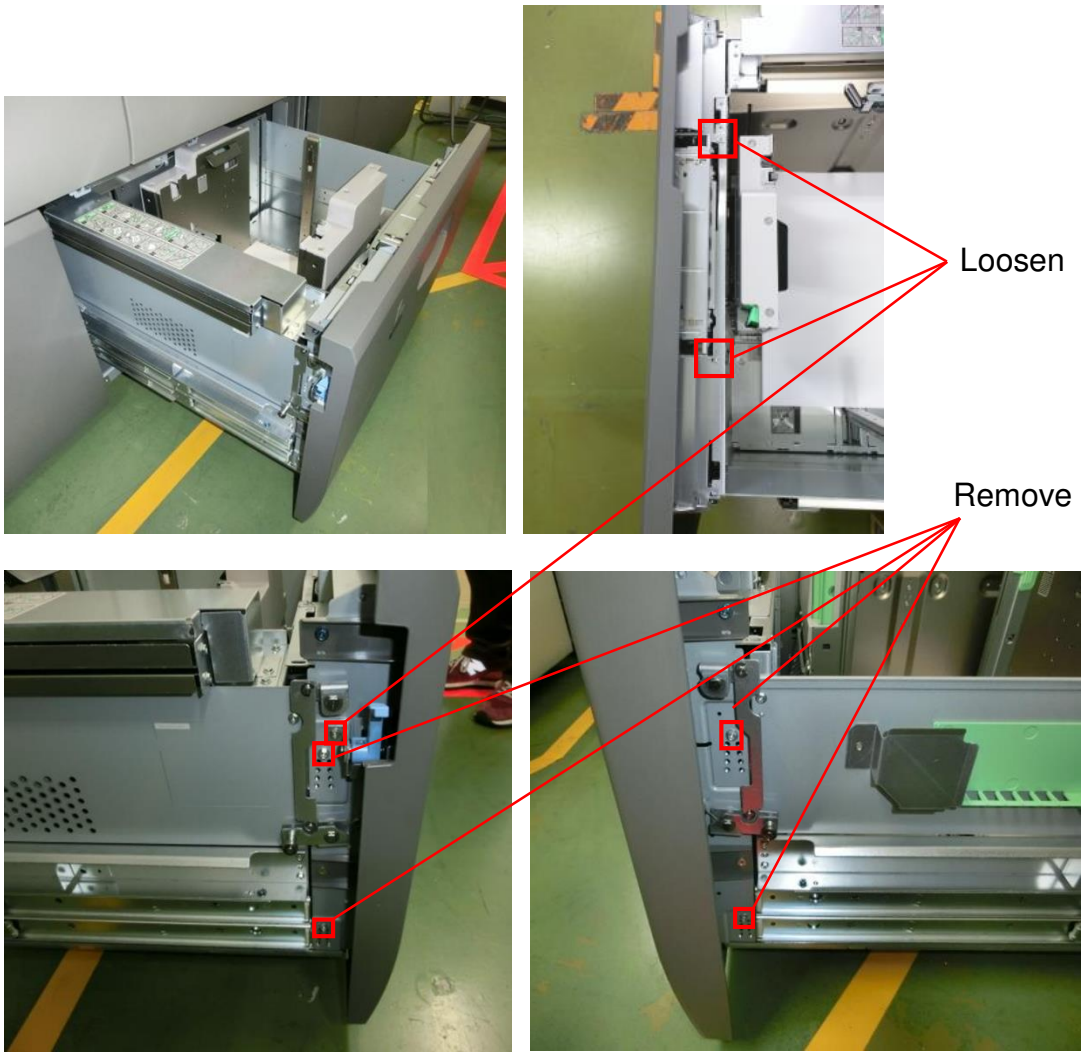
5. Print a trim pattern to check if the skew is corrected and check the image position.

Note: Image position may be decentered after the skew adjustment plates are applied.



6. If the image is decentered, adjust the tray position.

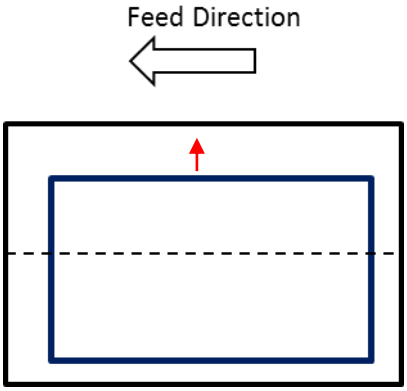
6-1. Loosen some screws and remove some other screws as indicated below.



6-2. Re-fasten the screws in one of the other screw holes to shift the image position.

Note
There are 8 screw holes for each screw. Choose a screw hole depending on in which direction and how much you want to move the image position. If you move the screw to a screw hole on the non-operator side, the image position moves towards the non-operator side (the paper position moves to the operator side) and vice versa.

Example: To move the image towards the non-operator side by 2mm, install the screw at the following place at all 4 adjustment positions.



7. **Only Andromeda:** Change 013: [Deactivate Image Position Adjustment] back to "OFF" to turn on the image position adjustment.

8. Finished.

Model: Vacuum Feed LCIT	Date: 30-Nov-15	No.: RD777005

Subject: Preventing J430/J431 caused by Improper set of Paper feed belt unit	Prepared by: T. Miyamoto
From: 1st Tech Service Sect., PP Tech Service Dept.	

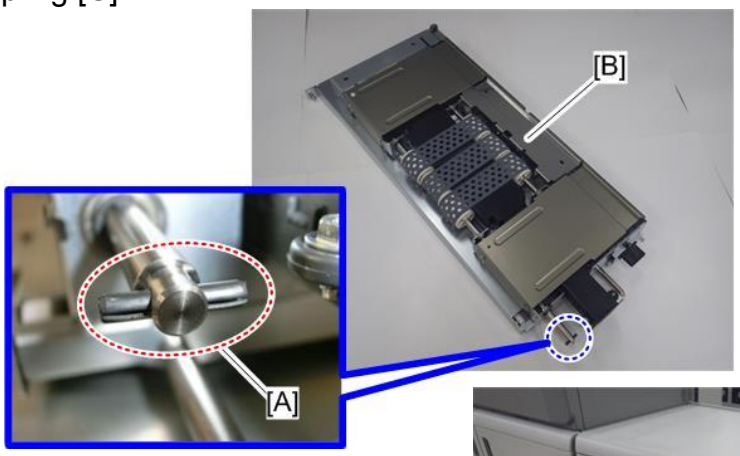
Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

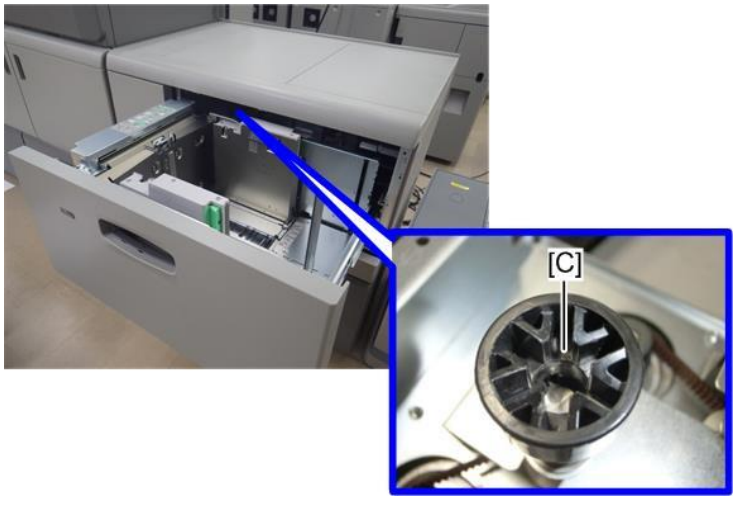
SYMPTOM

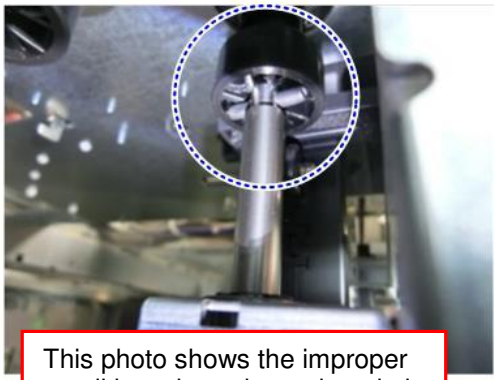
J430: LCT1 Paper Feed Sensor (Tray1)
J431: LCT1 Paper Feed Sensor (Tray2)

CAUSE

Paper cannot be fed, because the spring pin [A] located at the rear side of the paper feed belt unit [B] (of the main machine or Vacuum Feed LCIT RT5100) is not connected to the coupling [C].







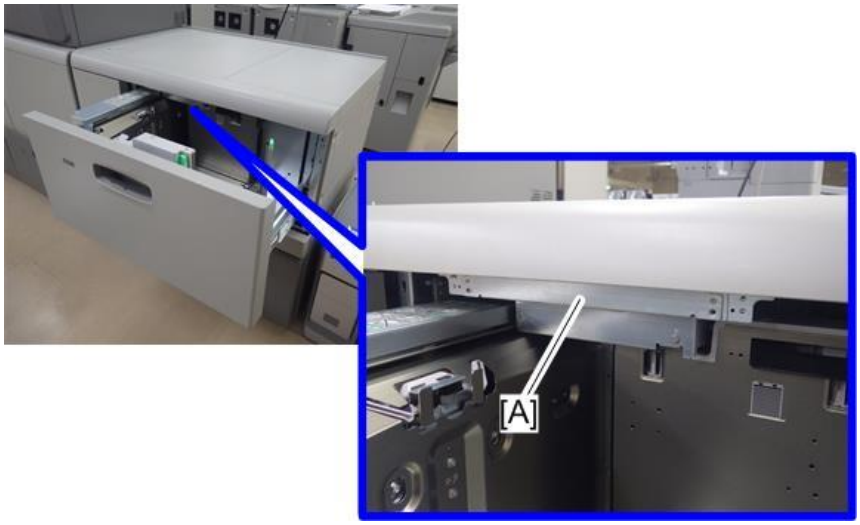
This photo shows the improper condition where the spring pin is not connected to the coupling.

SOLUTION

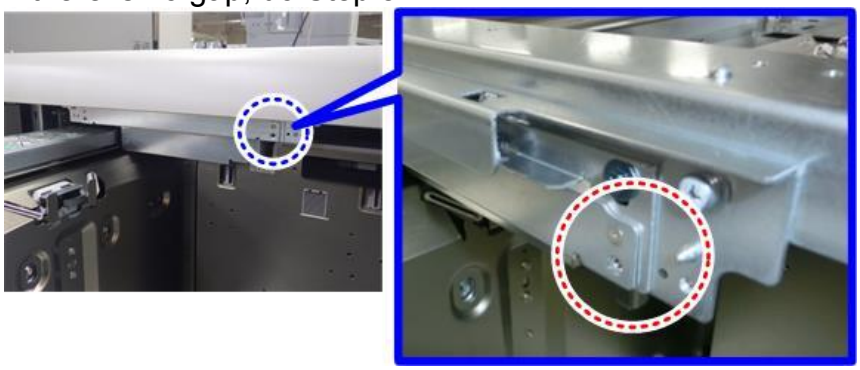
Connect the spring pin to the coupling with the following procedure. The procedure is the same for the paper feed belt unit of the main machine and of the Vacuum Feed LCIT RT5100, and can be performed either when the main power switch is turned ON or OFF.

Procedure when the main power switch is ON

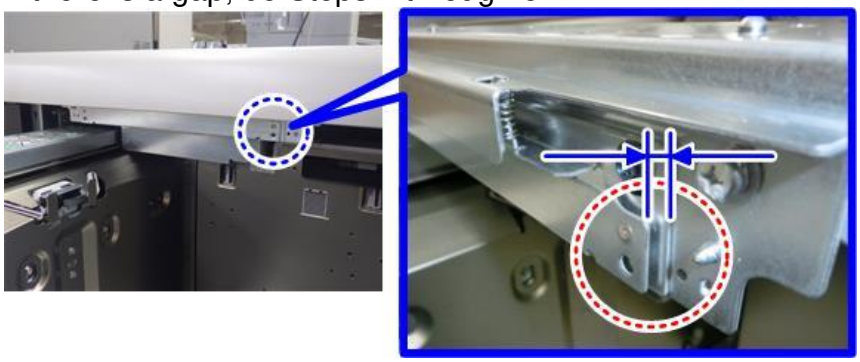
1. With the paper feed belt unit [A] installed, pull out the tray(s) showing the symptom and check if there is a gap between the frames at the location indicated with the red dotted circle.



If there is no gap, do Step 5.



If there is a gap, do Steps 2 through 5.



2. Close the tray.

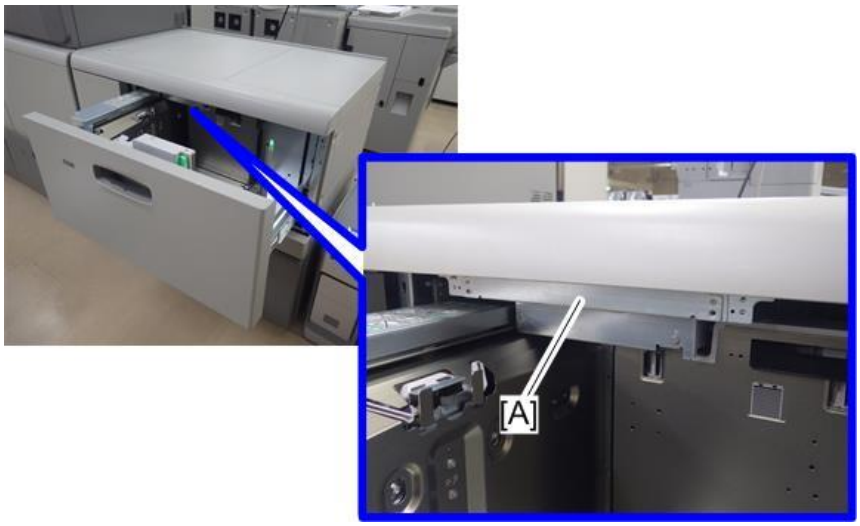
3. Execute the SP for the tray(s) showing the symptom. This will rotate the paper feed belt for 5 seconds so that the spring pin connects with the coupling.
   - SP5-805-100 (Output Check: LCT1: Paper Feed Belt Motor: Tray3)
   - SP5-805-114 (Output Check: LCT1: Paper Feed Belt Motor: Tray4)
   - SP5-805-131 (Output Check: LCT2: Paper Feed Belt Motor: Tray5)
   - SP5-805-145 (Output Check: LCT2: Paper Feed Belt Motor: Tray6)
   - SP5-805-162 (Output Check: LCT3: Paper Feed Belt Motor: Tray7)
   - SP5-805-176 (Output Check: LCT3: Paper Feed Belt Motor: Tray8)

4. Pull out the tray and confirm that there is no gap between the frames.

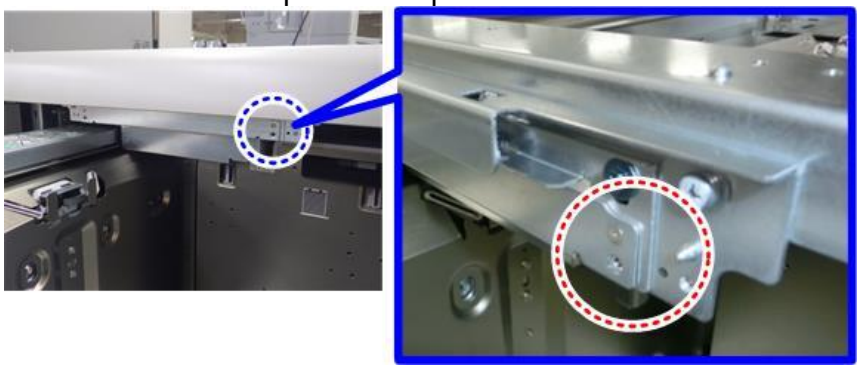
5. Confirm that the two screws fixing the paper feed belt unit are tightly fastened.

Procedure when the main power switch is OFF

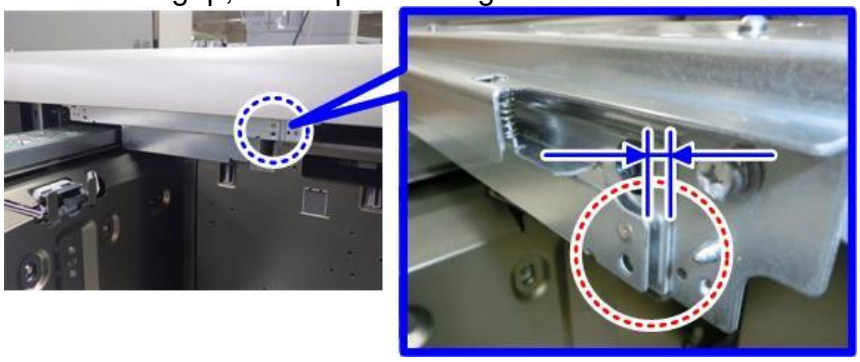
1. With the paper feed belt unit [A] installed, check if there is a gap between the frames at the location indicated with the red dotted circle.



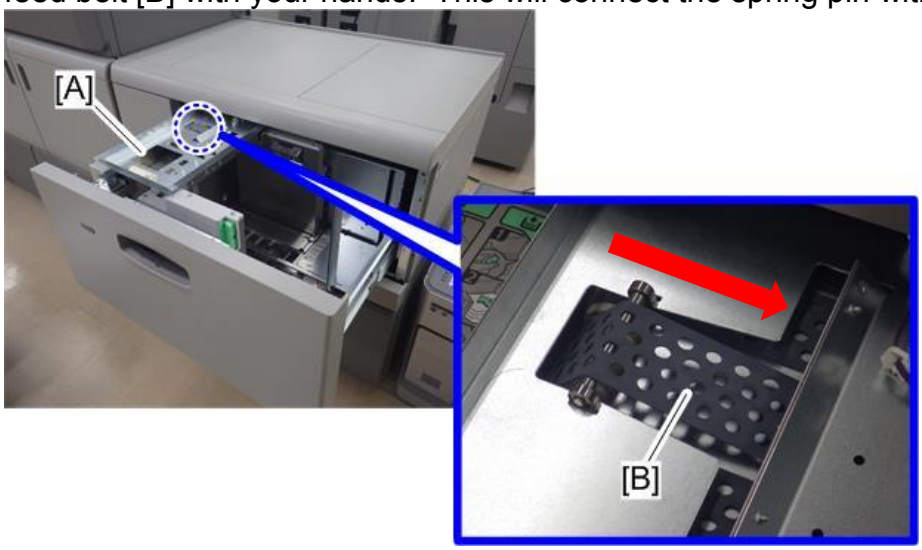
If there is no gap, confirm that the two screws fixing paper feed belt unit are securely fastened. This completes the procedure.



If there is a gap, do Steps 2 through 4.



2. Remove the two screws to pull out the paper feed unit [A] and slowly turn the paper feed belt [B] with your hands. This will connect the spring pin with the coupling.



3. Push the paper feed belt unit back in and confirm that there is no gap between the frames. Repeat Step 2 until you confirm that there is no gap.

4. Fasten the paper feed belt unit with the screws.

Model: Vacuum Feed LCIT RT5100	Date: 2-Mar-16	No.: RD777006

Subject: Troubleshooting non-feed from Vacuum Feed LCIT RT5100 with grain long paper	Prepared by: Hiroaki H Matsui
From: 1st Tech Service Sect., PP Tech Service Dept.	

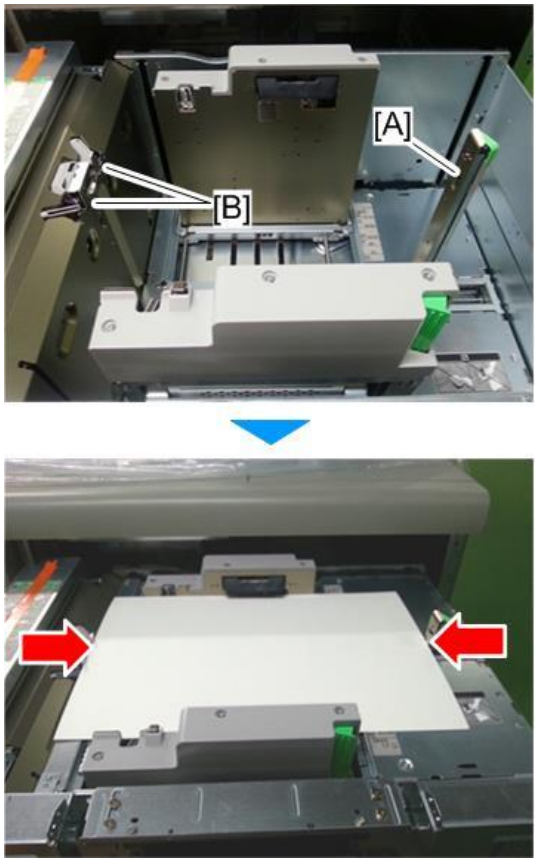
Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM

Non-feed jam occurs with the last few sheets of the stack that remain on the paper feed tray when fed from the Vacuum Feed LCIT RT5100, if the paper is grain long (the grain of the paper is parallel to the paper's long side) and Weight 8 (300.1~350.0 gsm).

CAUSE

The above type of paper tends to get caught between the spring [A] of the end fence and the paper stopper plates [B], and does not float up.

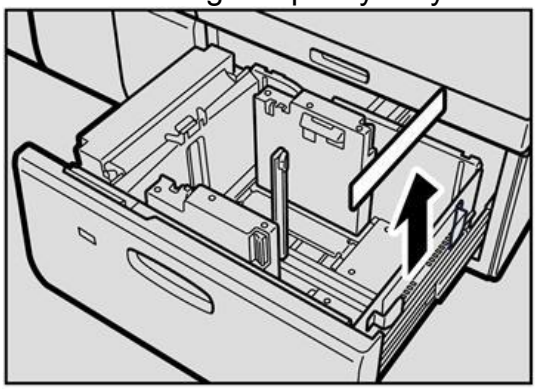


Model: Vacuum Feed LCIT RT5100	Date: 2-Mar-16	No.: RD777006

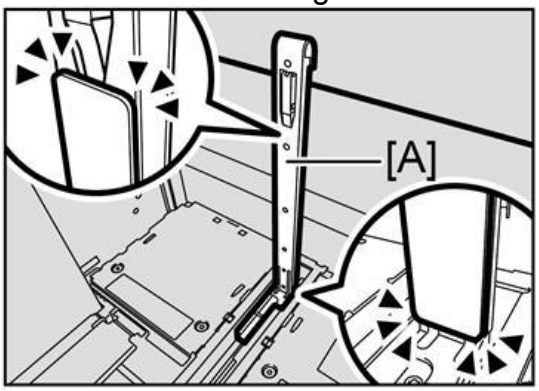
SOLUTION

Attach the magnet sheet to the end fence.

1. Pull out the tray and take out the magnet sheet from the pocket on the right-hand side of the wide Large Capacity Tray.



2. Attach the magnet sheet to the side [A] of the end fence where it contacts the paper.
   - Firmly press the bottom corners of the magnet plate.
   - Make sure the magnet sheet does not obstruct the opening in the end fence.



3. Load paper and carefully close the tray.

Reissued: 26-Aug-16

Model: Vacuum Feed LCIT	Date: 28-Apr-16	No.: RD777007a

RTB Reissue

The items in red were corrected or added.

Subject: Troubleshooting No-feed jams (J430, 431, J445, J446) due to clogged filter			Prepared by: S. Sasaki
From: 1st Tech Service Sect., PP Tech Service Dept.			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☐ Tier 2 ☐ Tier 0.5

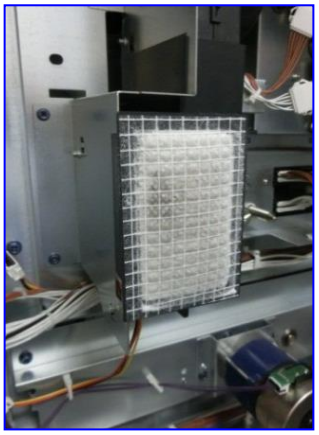
SYMPTOM

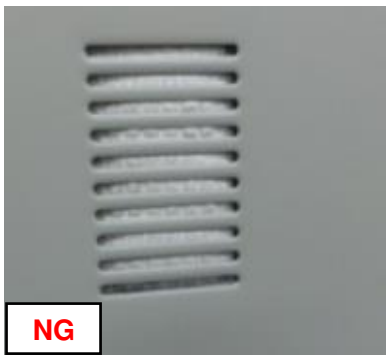
Non-feed jams occur inside the Vacuum Feed LCIT (J430, J431, J445, J446).

CAUSE

The exhaust fan filter becomes clogged with paper dust.

Rear Cover





NG

OK

Still OK, but almost clogged

Reissued: 26-Aug-16

Model: Vacuum Feed LCIT	Date: 28-Apr-16	No.: RD777007a

SOLUTION

Production line

The filter will be changed to an external type, so that it is easier to clean.

Applied from: August 2016 production

Note: The filter in the photo is a prototype, and is different in color than the production-level part.

In the field

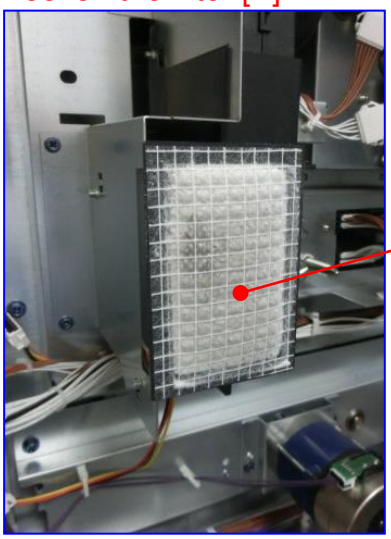
Replace the filter with the new type (see **PROCEDURE** below).

PROCEDURE

Parts required:

Positioning sponge:	D7771294 (SEAL:BLOWER:DUCT) * 2
Filter Ass'y:	D7771295 (COVER:FILTER:ASS'Y)

1. Remove the rear covers.
2. Peel off the filter [A].

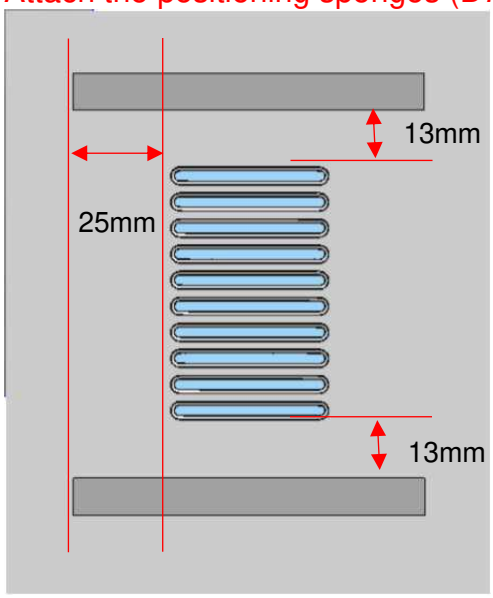


3. Reattach the rear covers.

Reissued: 26-Aug-16

Model: Vacuum Feed LCIT	Date: 28-Apr-16	No.: RD777007a

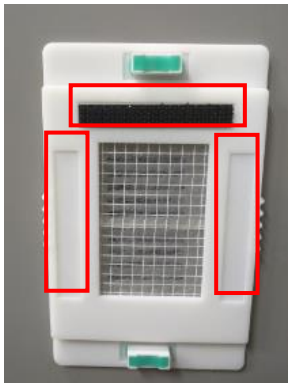
4. Attach the positioning sponges (D7771294) as follows.

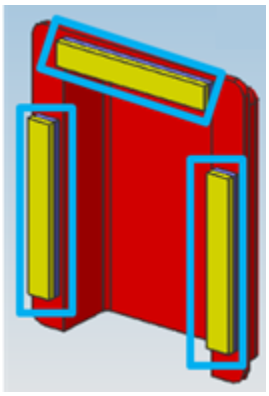


5. Attach the filter assembly (P/N D7771295).

IMPORTANT:

- Check the filter every PM visit and clean it if clogged.
- If the noise reduction covers (D7771290) need to be installed along with the external filters, you can do so by attaching double-sided tape to the covers. This tape is included with the noise reduction covers.





RICOH **Technical Bulletin**

Model: Vacuum Feed LCIT RT5100	Date: 24-May-16	No.: RD777008

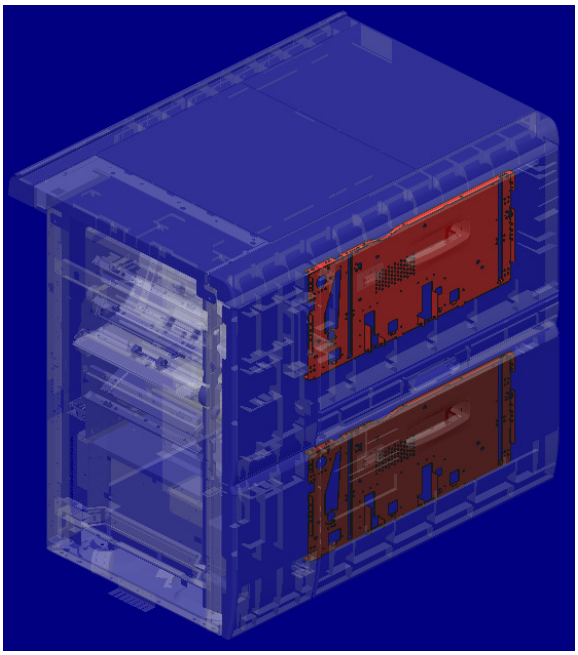
Subject: New side plate for LCIT RT5100	Prepared by: Rie Shohda
From: 1st Tech Service Sect., PP Tech Service Dept.	

Classification:			
	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2 ☐ Tier 0.5

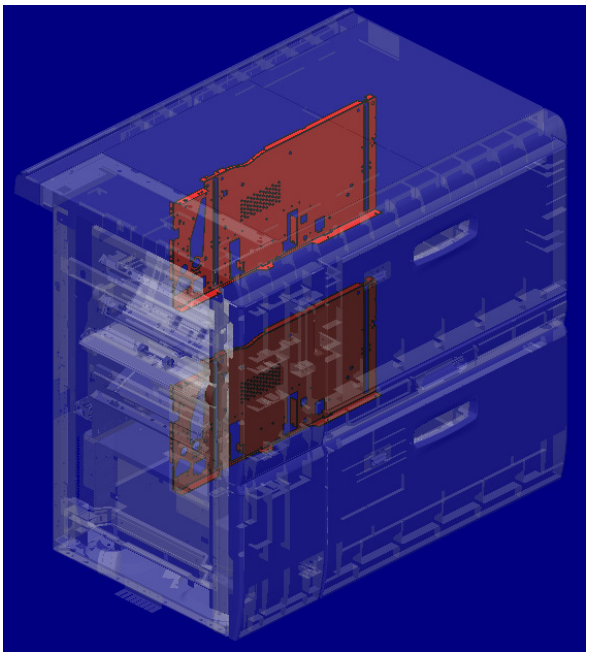
The following parts were registered as new service parts to meet requests received from the field.

Old p/n	New p/n	Description	Q'ty	Int	Note	
-	D7772620	SIDE PLATE:TRAY:REAR:PEEN	2	-	Add	
-	D7772615	SIDE PLATE:TRAY:FRONT:PEEN	2	-	Add	

D7772615 SIDE PLATE: TRAY: FRONT: PEEN



D7772620 SIDE PLATE: TRAY: REAR: PEEN

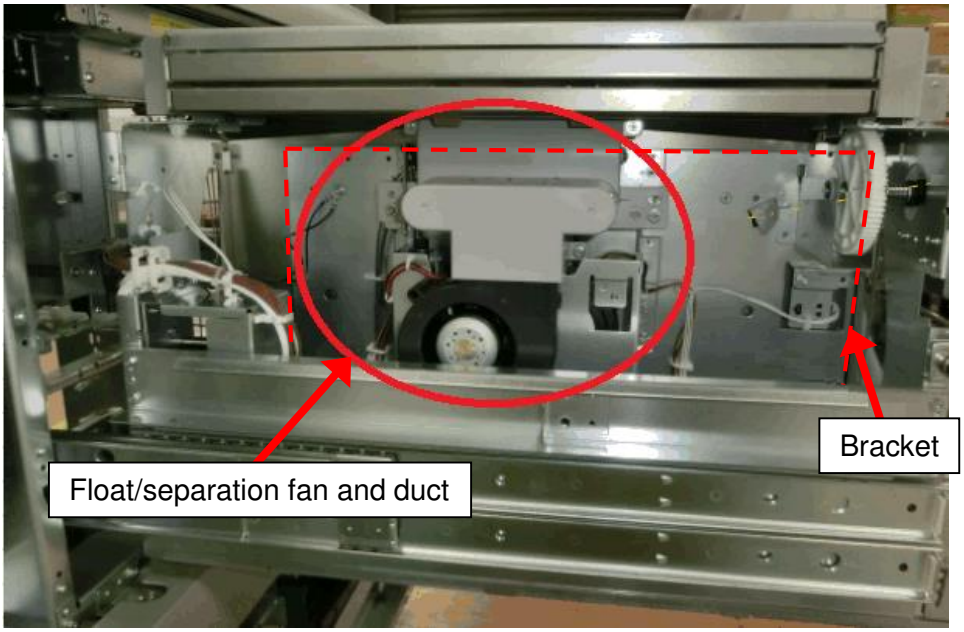


Model: Vacuum Feed LCIT RT5100	Date: 24-May-16	No.: RD777008

Note when replacing the Side Plates

Take note of the following points when replacing the newly registered Side Plates, because the bracket is attached with the float/separation fan and duct. See photo below, which is a shot of the tray taken from the left hand side.

1. Do not remove the float/separation fan and duct from the bracket.
2. Do not remove the bracket, as it affects the position of the float/separation fan and duct. This bracket is factory installed and cannot be adjusted outside the factory.



Model: Vacuum Feed LCIT RT5100	Date: 3-Aug-16	No.: RD777009

Subject: Rework procedure: How to improve wire-cut risk w/ paper tray			Prepared by: Junji Kobayashi
From: Field Quality Management Group 4, FQM Dept, QAC			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2 ☐ Tier 0.5

SYMPTOM
The lift wire for the bottom plate may be cut.

CAUSE
There is a small clearance between the side plates and the bottom plate. This creates up-and-down movement of the bottom plate that is not smooth, and loosens the lift wire. As a result, the wire may become tangled with the pulley and create excessive tension in the wire.

SOLUTION
Adjust the distance between the side plates (see **Rework PROCEDURE** below).

Rework PROCEDURE

Normal Tray

1. Remove the front cover of the problem tray.
2. Put a few sheets of paper on the bottom tray to raise the tray to its upper position (Fig. 1).
3. Remove the paper tray while holding the pulley.
   Note: This is so that the bottom plate does not fall when you remove the tray.

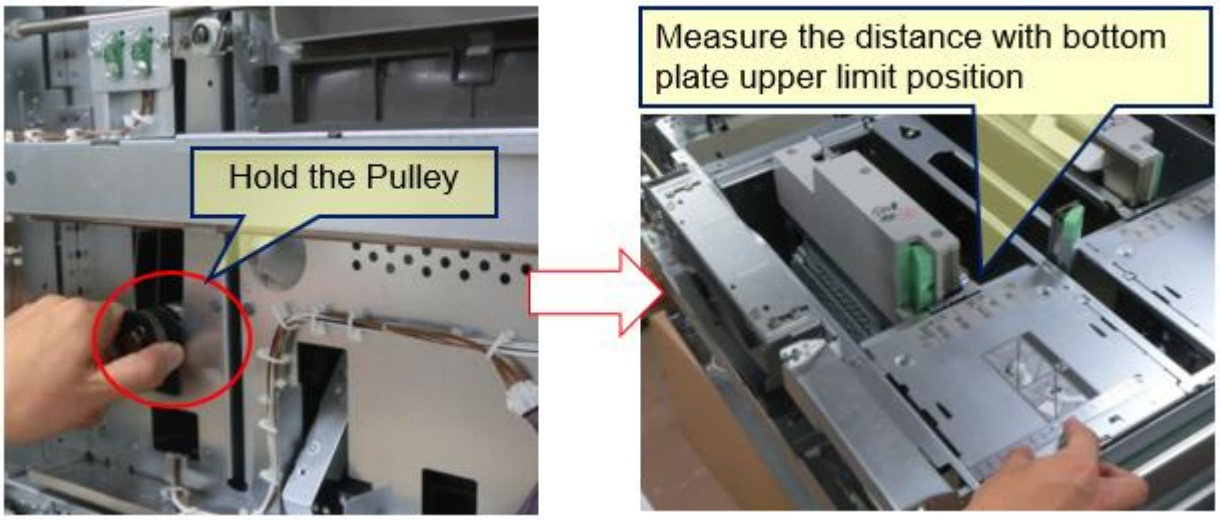


Fig. 1

4. Measure the distance (span) between the two side plates (Fig. 2).
   Important: The scale ends should touch the bent portion of the side plates.

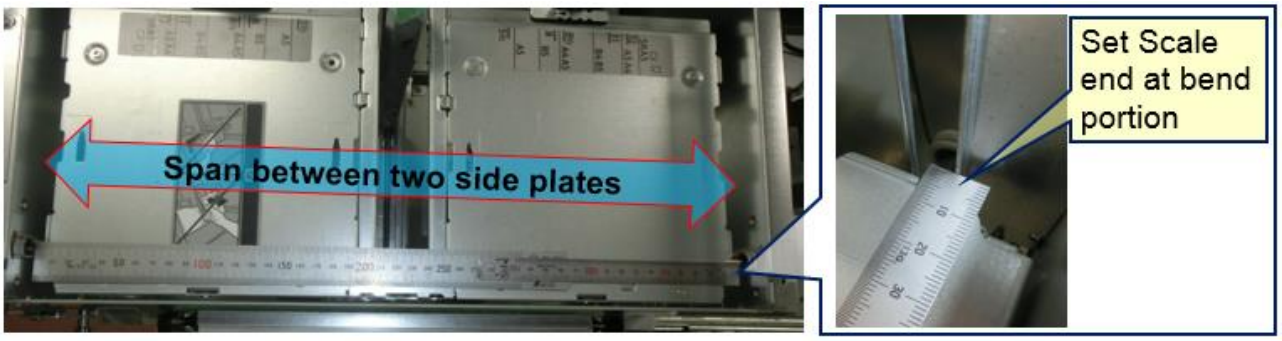


Fig. 2

5. Take the same measurement with the tray in the **middle** and **lower** positions (Fig. 3).

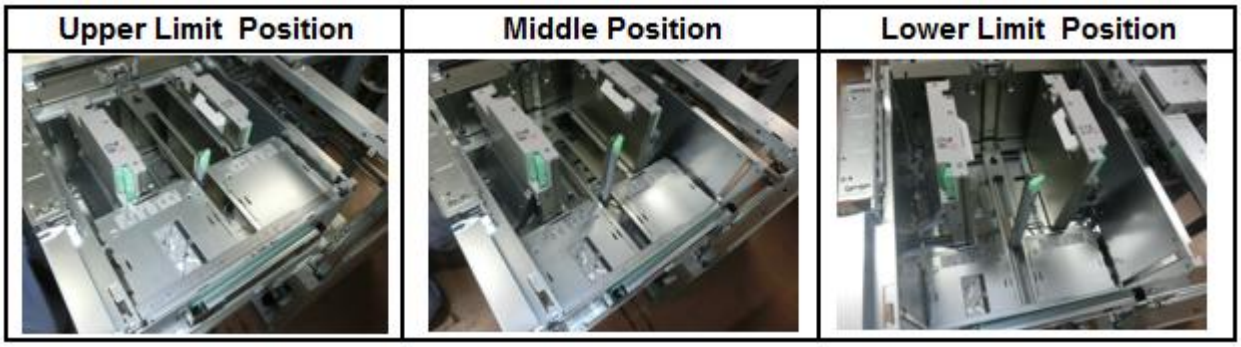


Fig. 3

6. Measure the clearance between the bent portion of the side plate and the bearing flange.
   Important: To do this, shift the bottom plate toward the rear side (Fig. 4).

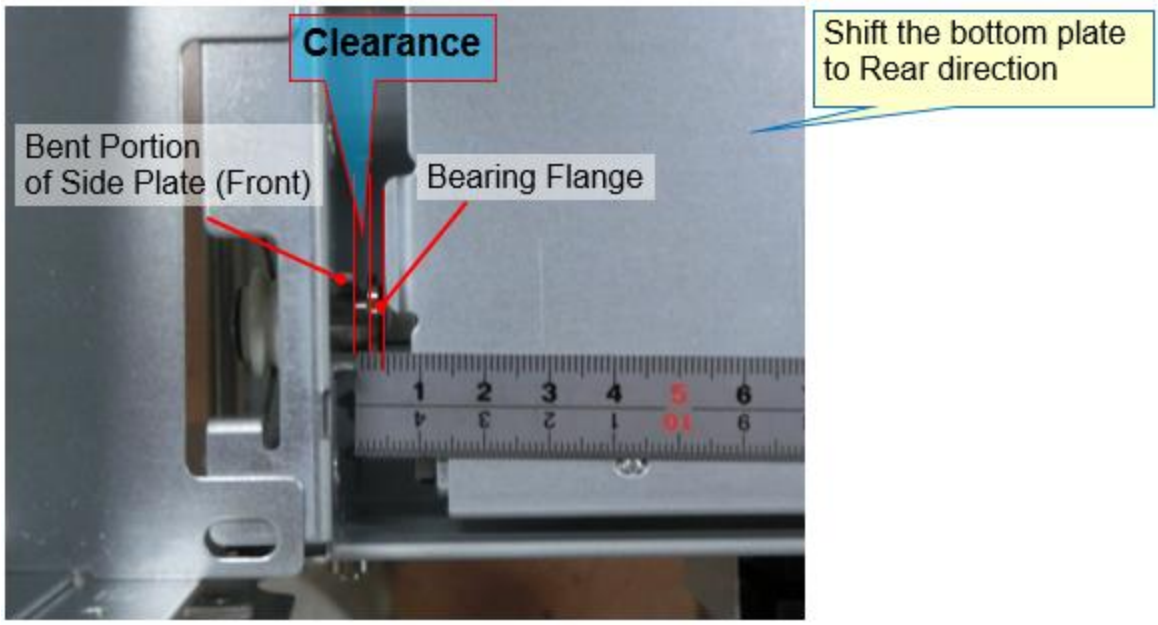


Fig. 4

Target dimensions

a. Span between the two side plates (Fig. 2, 3): **446.8 – 448.4 mm**
b. Clearance (Fig. 4): **0.5 – 3.0 mm**

If **BOTH** the span and clearance are within these dimensions when the tray is in **ALL THREE** positions (upper, middle, lower positions), this Rework is complete.

If **ANY** of these measurements is not within the dimensions mentioned above, continue this procedure.

7. Check for the following, which indicate a higher risk of the wire breaking.

1) Presence of scraped powder generated by bottom plate sliding

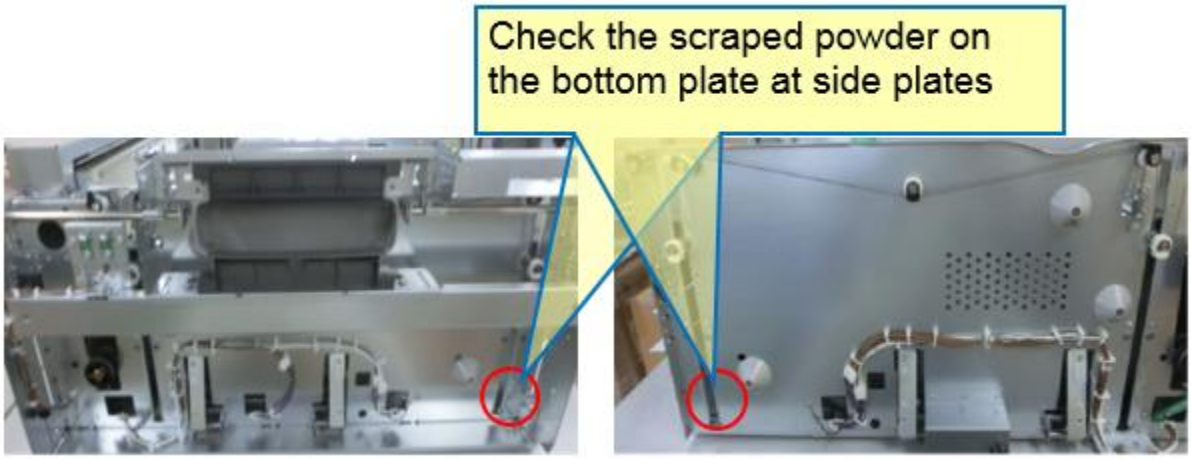


Fig. 5

2) Less smooth up-and-down movement of the bottom plate.
   a. Set a sheet of paper in the tray
   b. Close the tray, then pull out the tray when the tray ascends to its upper limit.
   c. Make sure there is no friction while the bottom plate is descending (Fig. 6).

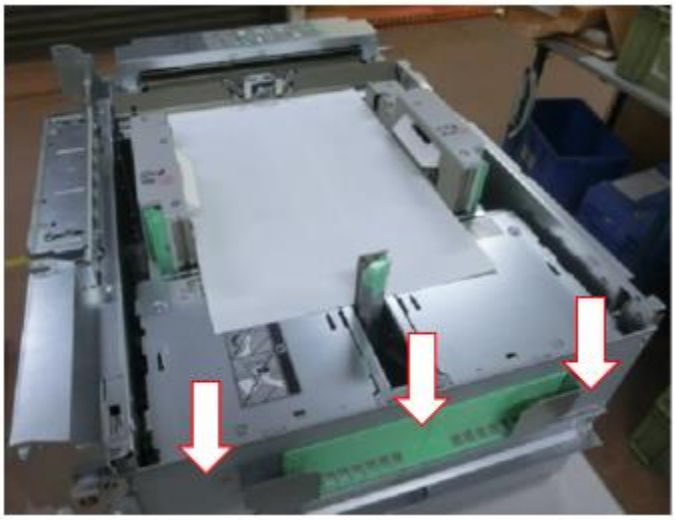


Fig. 6

8. Rework the tray assembly:
   Adjust the tray dimensions if any of the spans or clearances are **less than** the target (See page 3).
   Important: Do not adjust the span or clearance beyond the target dimensions.

   Procedure (Fig. 7):
   a. Loosen the 4 screws circled in red on the right side of the tray plate
   d. Shift the front & rear side plates in the direction of the white arrow as far as they will go, until each screw touches the inner edge of the screw hole.
   e. Tighten the 4 screws.

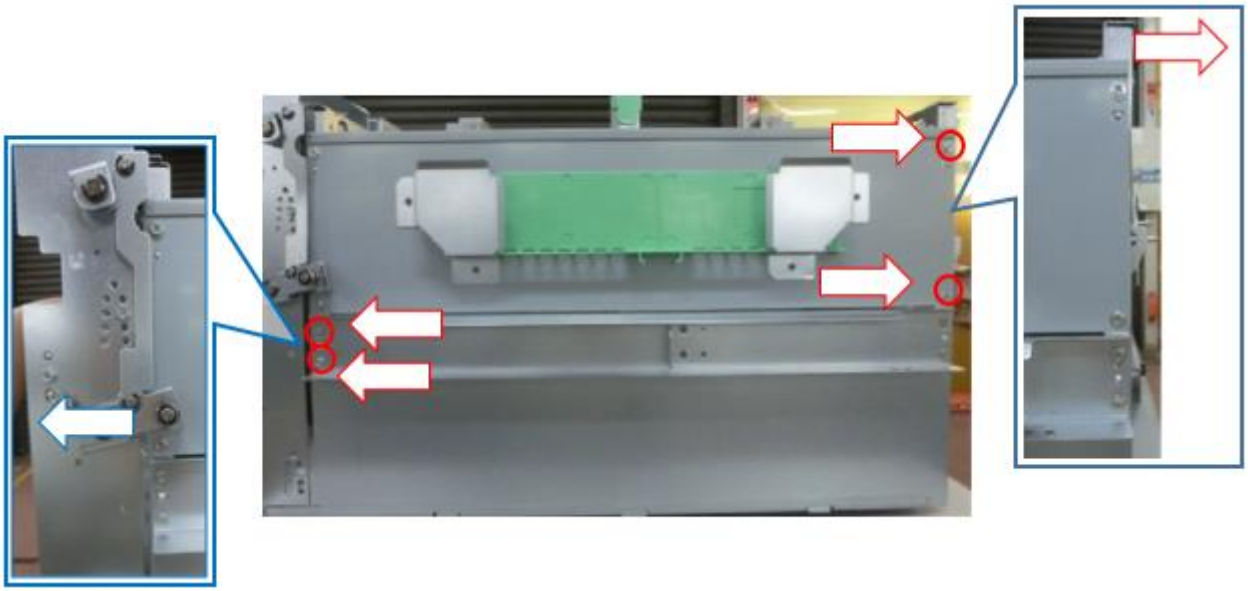


Fig. 7

Banner Tray

1. Measure the distance between the two side plates
   - Set the scale in the same way as described above.
   - Measure the span as the distance between the two side plates at two positions, both Upper (Fig. 8) and Lower (Fig. 9).

Upper Position

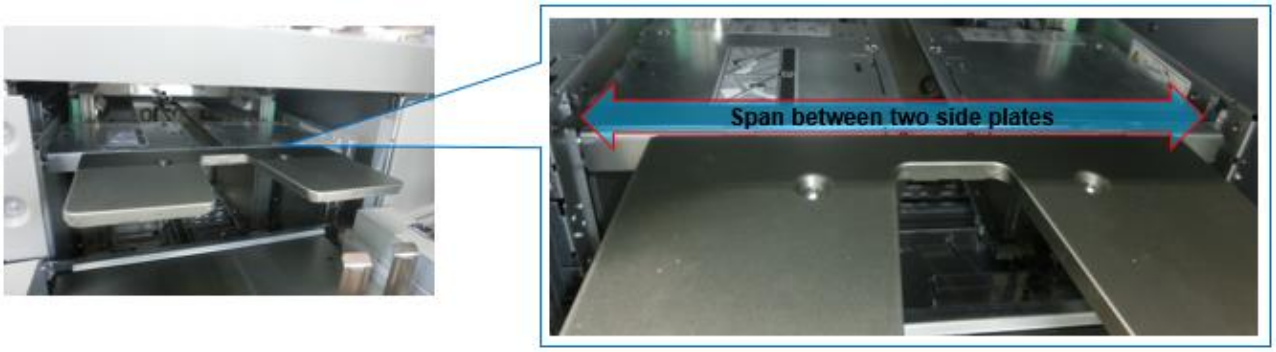


Fig. 8

Lower Position

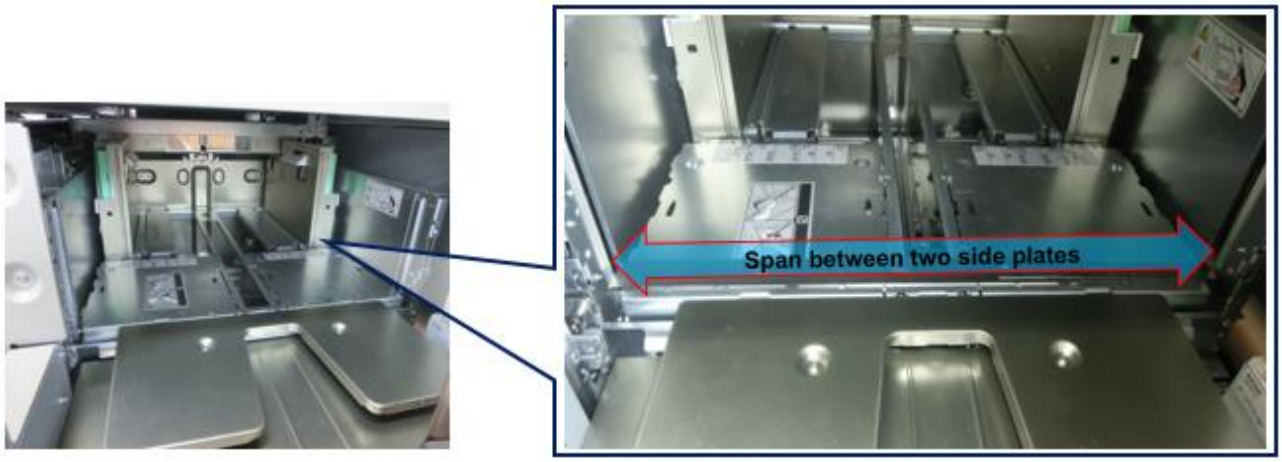


Fig. 9

2. Measure the clearance between the bent portions of the side plate and the bearing flange by shifting the bottom plate to the rear side (both the Upper (Fig. 10) and Lower (Fig. 11) positions).

Upper Position

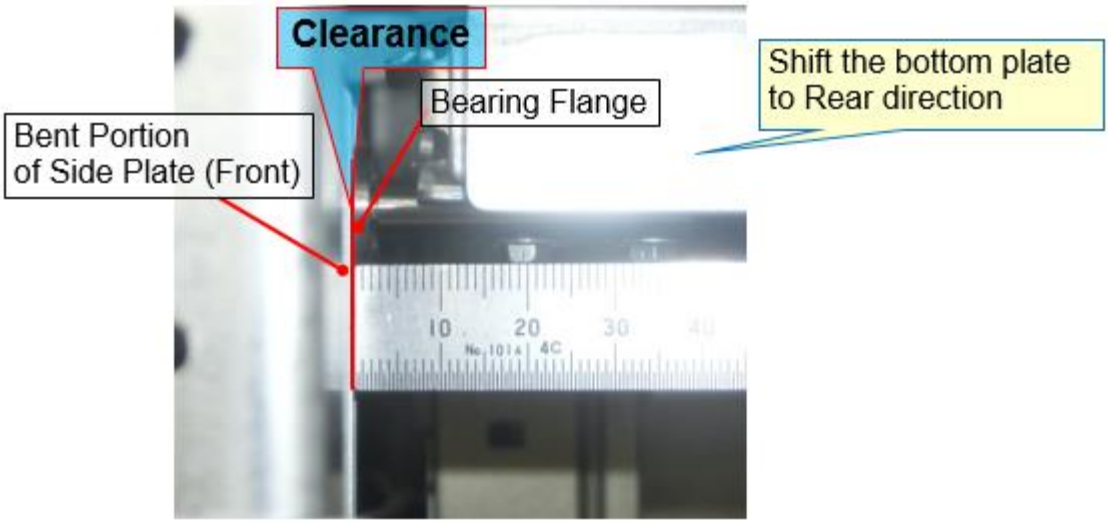


Fig. 10

Lower Position

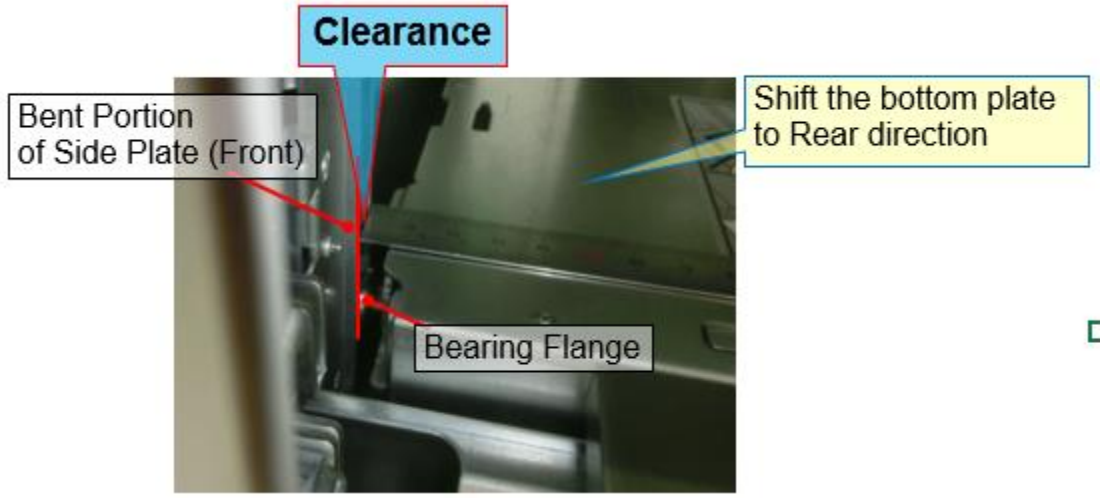


Fig. 11

Target dimensions:

a. **Span between the two side plates** (Fig.8, 9): **446.8 – 448.4 mm**
b. **Clearance** (Fig. 10, 11): **0.5 – 3.0 mm**

If **BOTH** the span and clearance are within these dimensions when the tray is in **BOTH** positions (upper and lower positions), this Rework is complete.
If **ANY** of these measurements is not within the dimensions mentioned above, continue this procedure.

3. Check for the following, which indicate a higher risk of the wire breaking.
   See Page 3 above for details.

1) Presence of scraped powder generated by bottom plate sliding
2) Less smooth up-and-down movement of the bottom plate.
3) Adjust the tray dimensions if either the span or clearance at EITHER of the two positions is less than the target (See Page 6).

   Important: Do not adjust the span or clearance beyond the target dimensions.

   Procedure (Fig. 12):
   a. Loosen the 2 screws circled in red on the right side of the tray plate
   b. Shift the front & rear side plates in the direction of the white arrow as far as they will go, until each screw touches the inner edge of the screw hole.
   c. Tighten the 2 screws.

Fig. 12

Replace the side plate as shown in Table 1 below if the span is not adjustable to within the target dimension and the cut-off portion is deformed.

Table 1

No.	Part Number	Part Description
1	D7772615	Side Plate: Tray: Front: Peen
2	D7772620	Side Plate: Tray: Rear: Peen

Deformation check procedure of the side plate

1) Put the scale in the cut-out portion, as shown in Fig. 13 below.
2) Check the deformation of the cut-out portion circled in red.
   If you can see the light in between the plate and scale, this portion may be deformed.

Important: Check both the front and the rear.

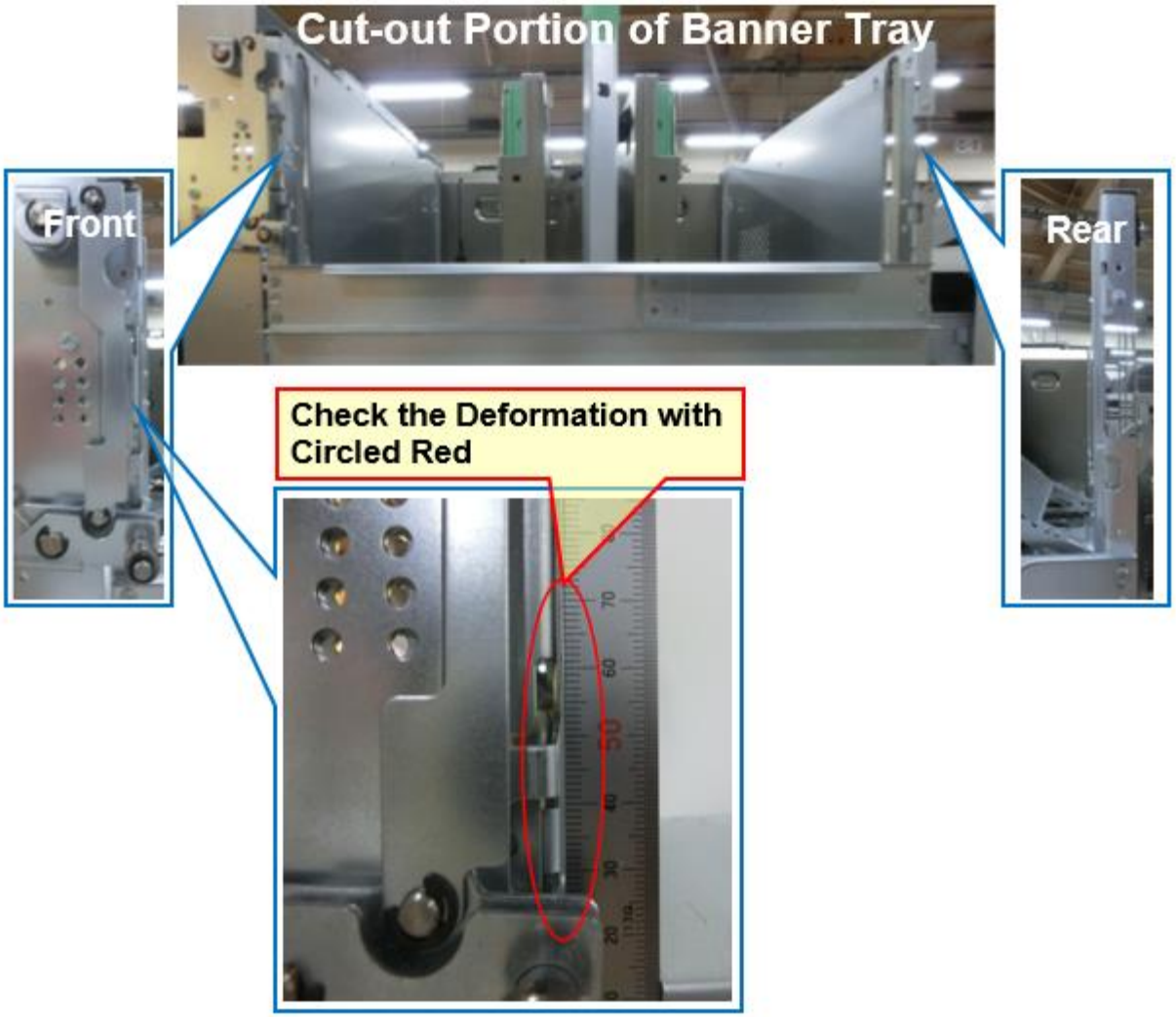


Fig. 13

Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

RTB Reissue

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

Subject: Modified parts to prevent paper tray lift wire breakage / replacement procedure			Prepared by: Hiroaki H Matsui
From: 1st PP Tech Service Sec., PP Tech Service Dept.			
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☒ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2 ☐ Tier 0.5

The following parts were modified to prevent the tray lift wire from breaking.

The modified parts have been applied to mass production since July 2016.

Follow the procedures described in this bulletin when installing or replacing with the modified parts for units manufactured before July 2016.

Modified parts

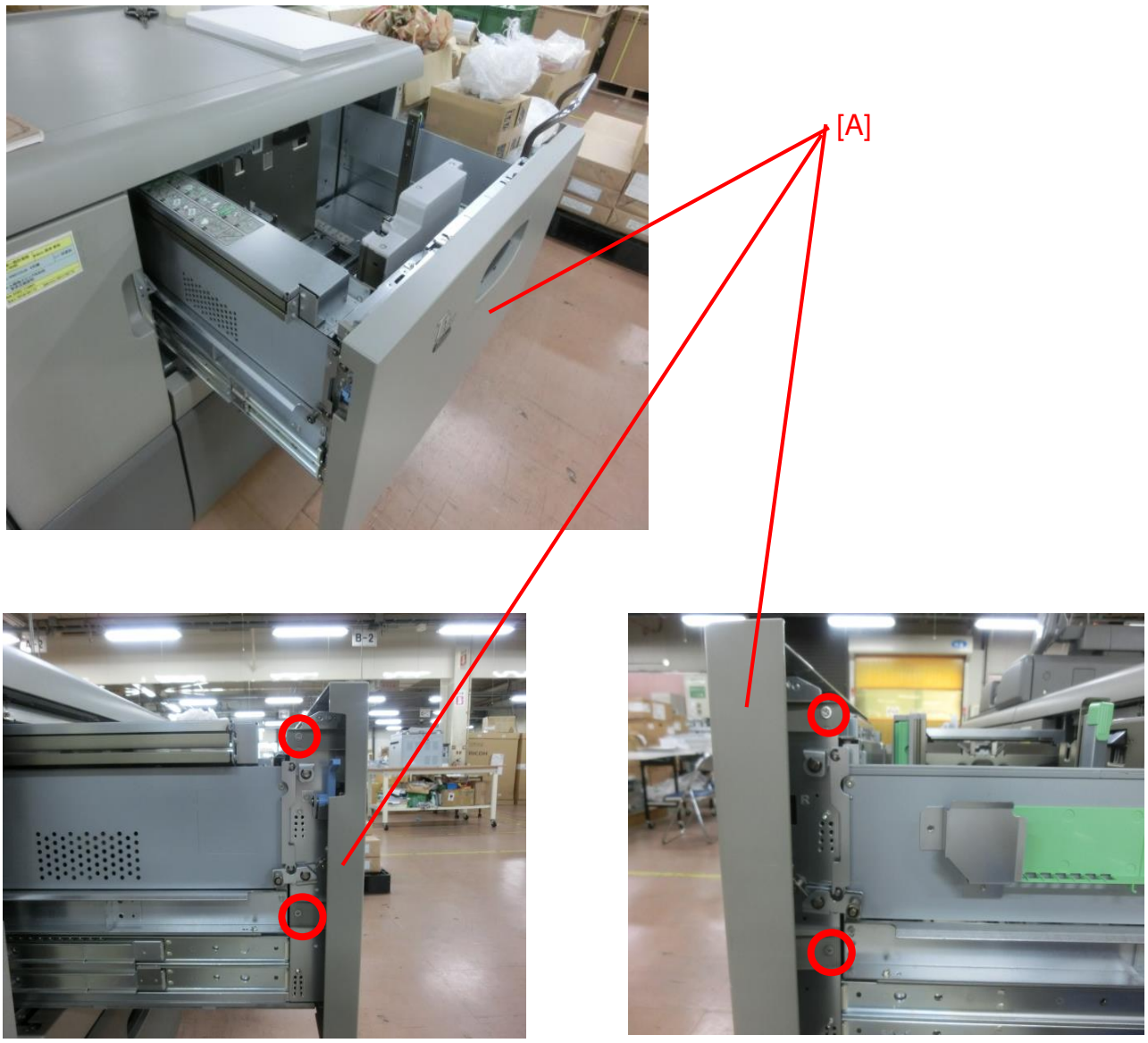
Items	New P/N	Description	*Qty required for 1 Tray*	Page # in this RTB
Pulley Cover	D7772784	COVER:WIRE:PULLEY	***2***	5
Collar	D7772769	COLLAR:BASE	***2***	8
Stud	D7777769	STUD:PAPER TRAY	***2***	9
Ball Bearing Ass'y (Rear)	D7772745	ROLLER:TRAY BOTTOM PLATE:REAR RIGHT:SUB-ASS'Y	***1***	9
Ball Bearing Ass'y (Front)	D7772746	ROLLER:TRAY BOTTOM PLATE:FRONT RIGHT:SUB-ASS'Y	***1***	9
Sheet (Front)	D7772655	SHEET:HOOK:WIRE:FRONT	***2***	10
Sheet (Rear)	D7772657	SHEET:HOOK:WIRE:REAR	***2***	11

Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

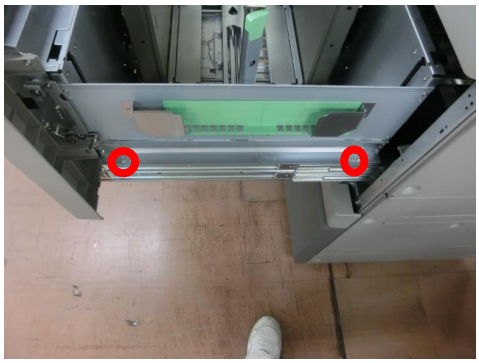
Common procedure

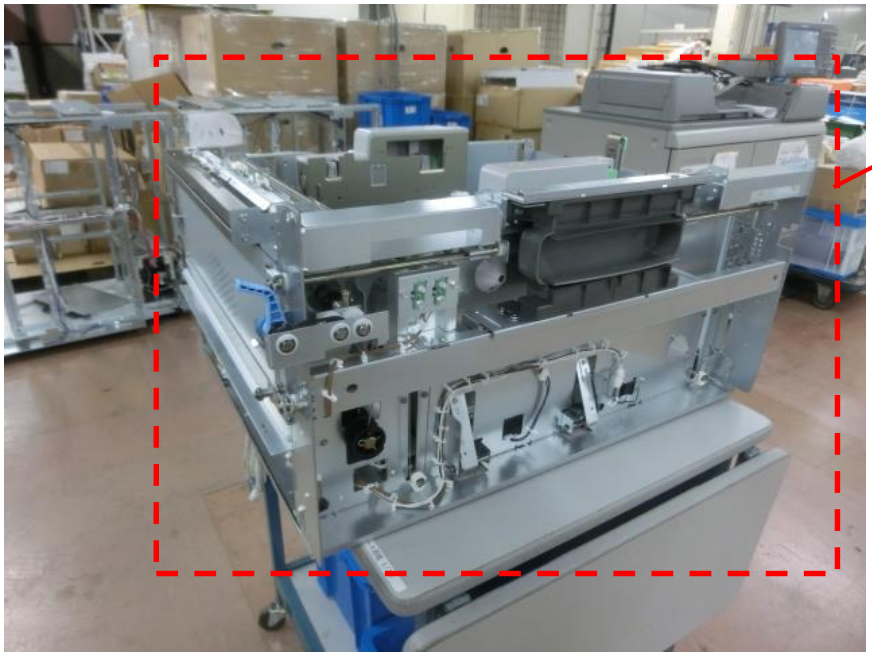
1. Pull out the paper tray and remove the front cover [A]. (screw x4)



2. Remove the paper tray [B] from the main frame and place it on a flat sturdy table or a bench. (screw x4)

   NOTE: The tray is very heavy. Two persons are needed to remove the tray.

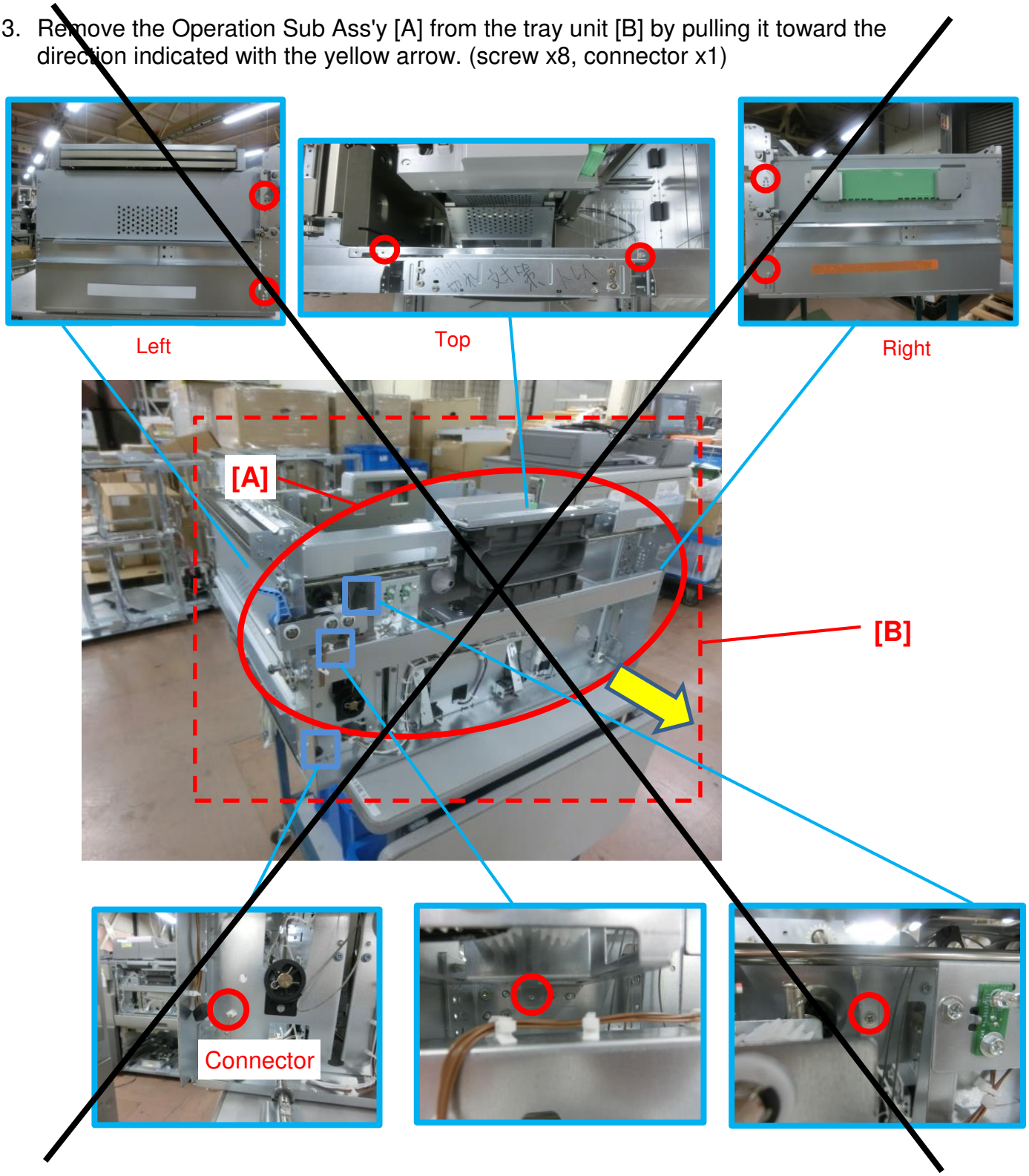




Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

3. Remove the Operation Sub Ass'y [A] from the tray unit [B] by pulling it toward the direction indicated with the yellow arrow. (screw x8, connector x1)



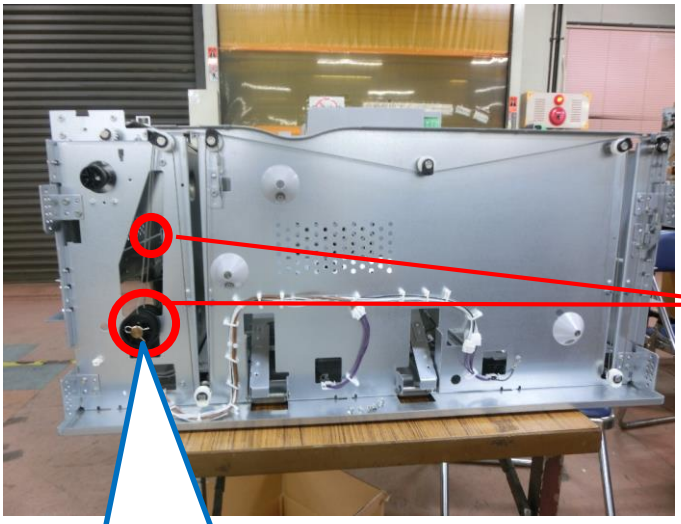
NOTE: Step 3 in the previous version RTB#RD777010a turned out to be not necessary.

Reissued: 17-Jan-17

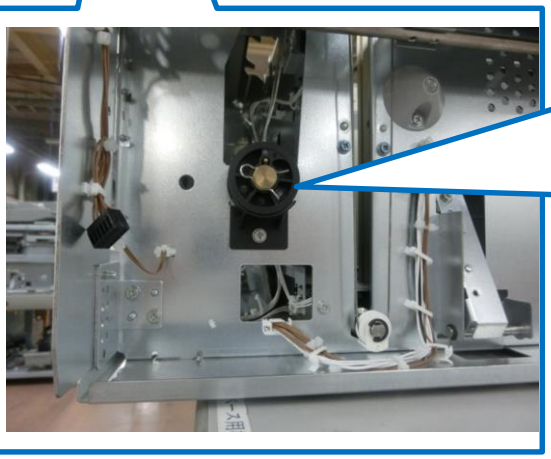
Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

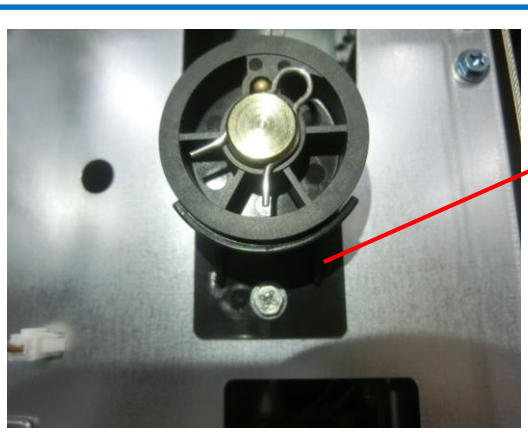
How to replace the Pulley Cover (p/n: D7772784)

1. Replace the pulley cover [A] with the new type cover.



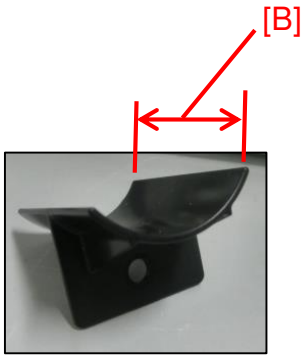
The pulley cover is installed at front and rear sides of the paper tray respectively.

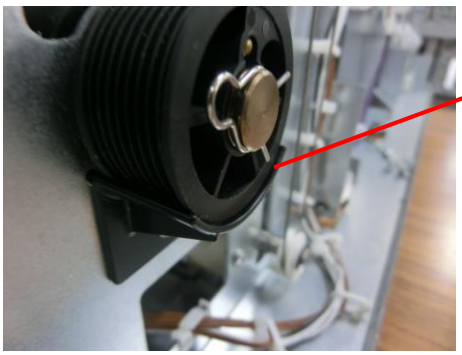




[A]

NOTE: The pulley used to stick out from the pulley cover with the old type cover, so the new type cover has been made wider [B] (37.4mm → 42.4mm) and covers the edge of the pulley as shown in [C].





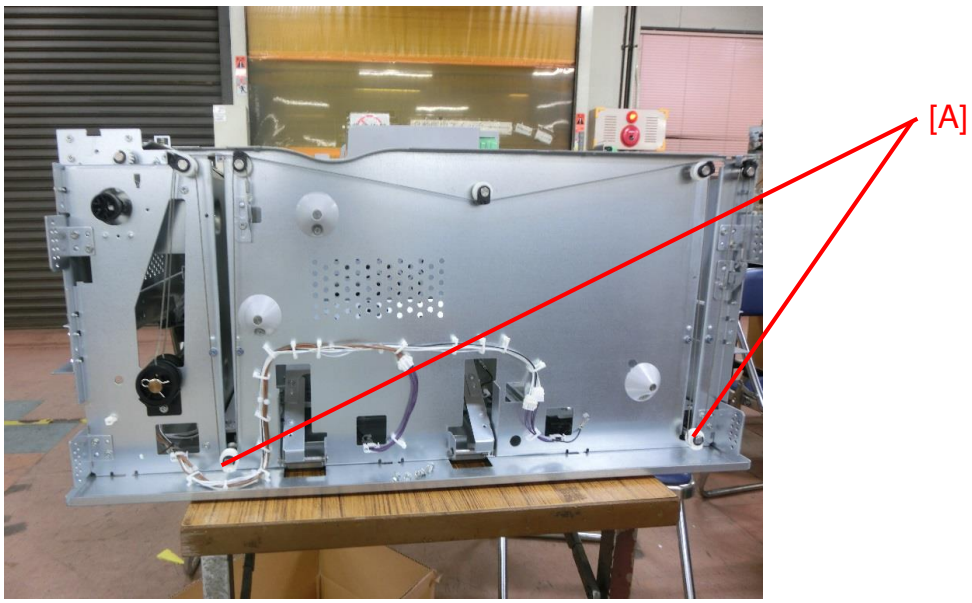
New type pulley cover

Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

How to replace the Collar (p/n: D7772769, *2pcs*), Ball Bearing - Front (p/n: D7772746, *1pc*), Ball Bearing - Rear (p/n: D7772745, *1pc*) and Stud (p/n: D7777769, *2pcs*)

1. At the front side, remove the two pulleys [A]. (E-ring x2)

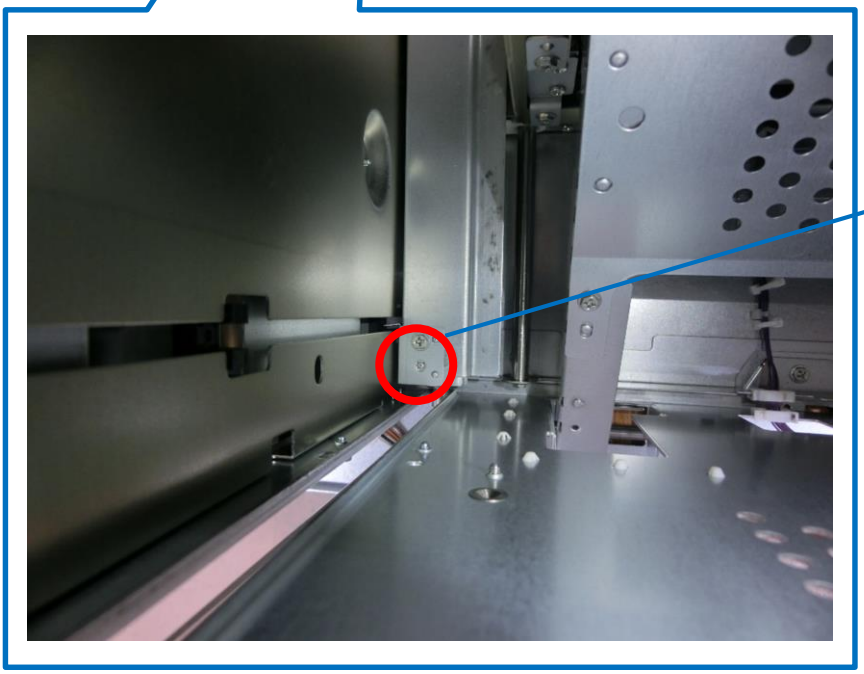


2. At the rear side, remove the two pulleys [B]. (E-ring x2)

Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

3-1. Remove the feeler [A]. (screw x1)

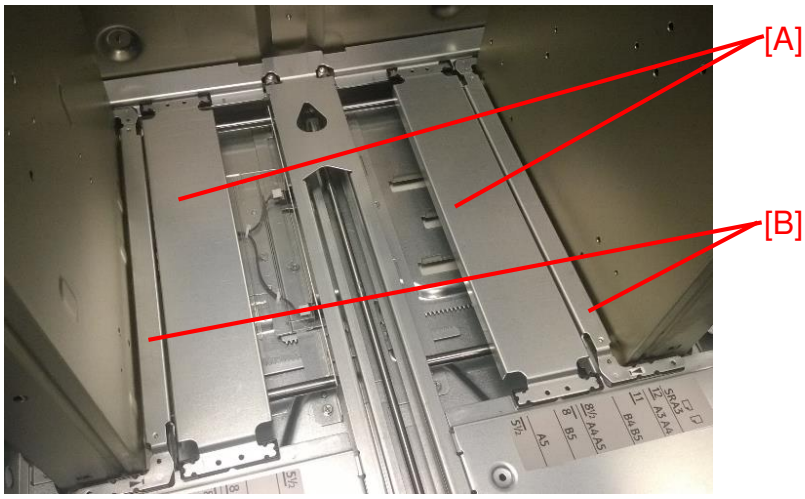


Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

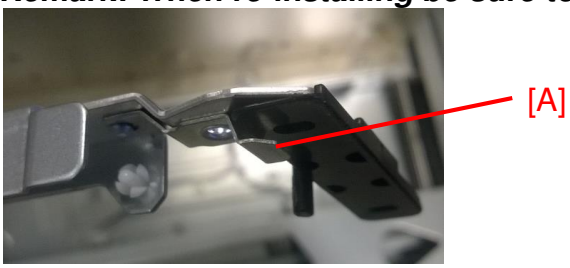
NOTE: Step 3-2 and 3-3 have been added.

3-2 Remove the plates [A] (if installed) and [B] – (See step 3-3)



3-3. To remove plates [B] gently skew the plate as indicated in the picture below. Some force is required.

Remark: When re-installing be sure to hook part [A] under the bottom plate.

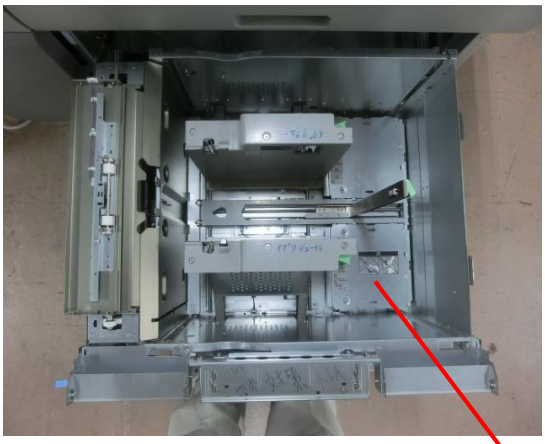


Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

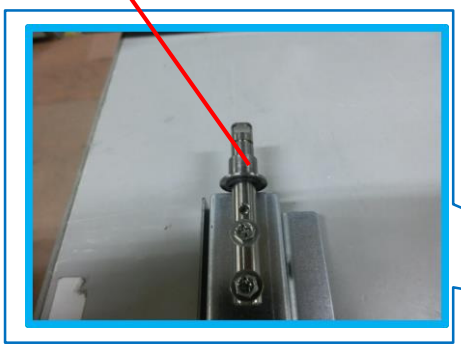
4. Remove the bottom plate [A] from the tray and place it upside down on a flat sturdy table or a bench, and then replace the collars [B] and [C] with the new type collors**.**

   NOTE: The new type collars are tapered.

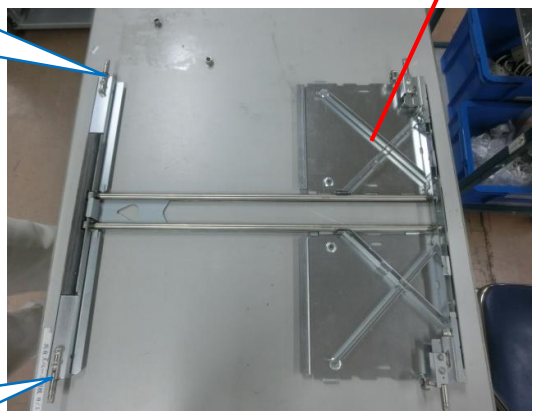


[A]

[B]



The flange faces inside.



Place the bottom plate [A] upside down.

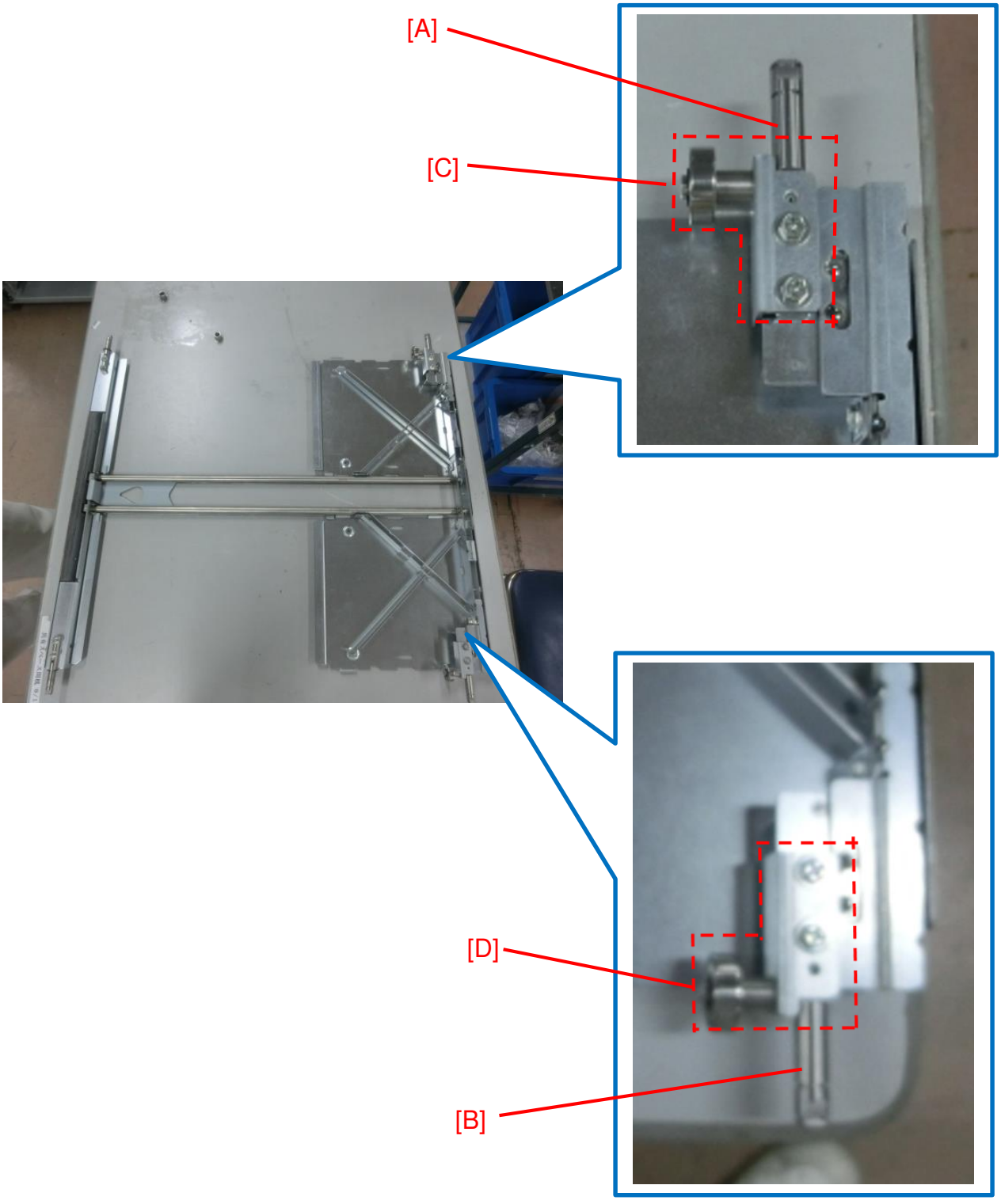
[C]

The flange faces inside.

Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

5. Replace the studs [A] and [B] with the new type studs, and then install the ball bearing assemblies front [C] and rear [D]. (screw x4)

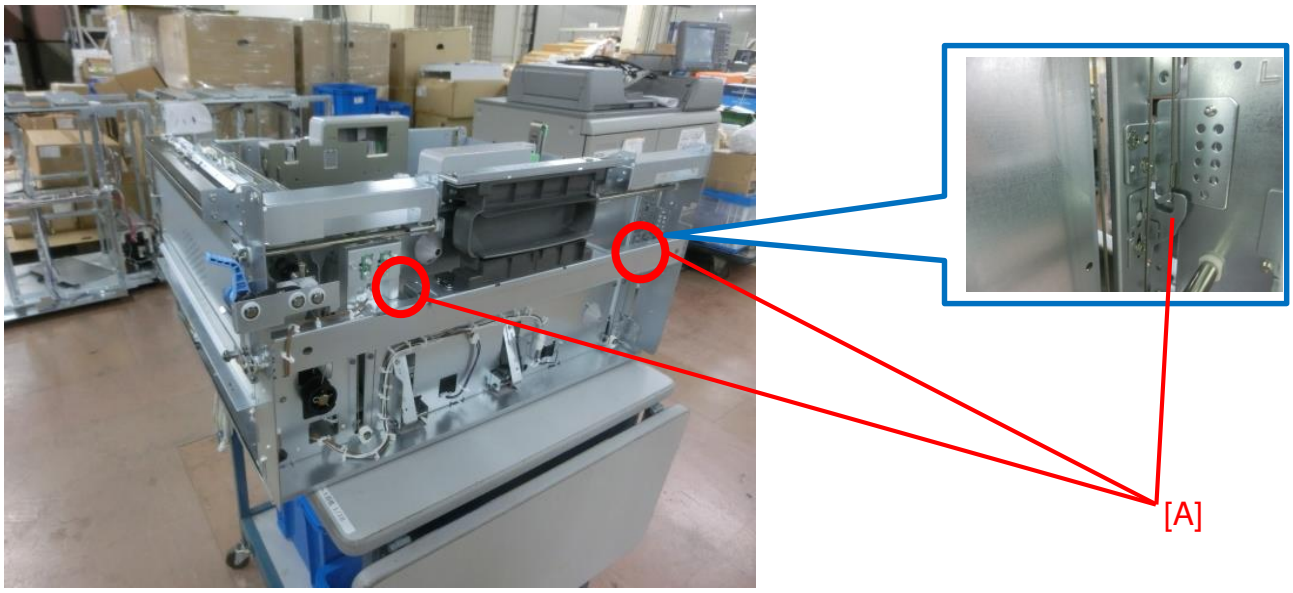


Reissued: 17-Jan-17

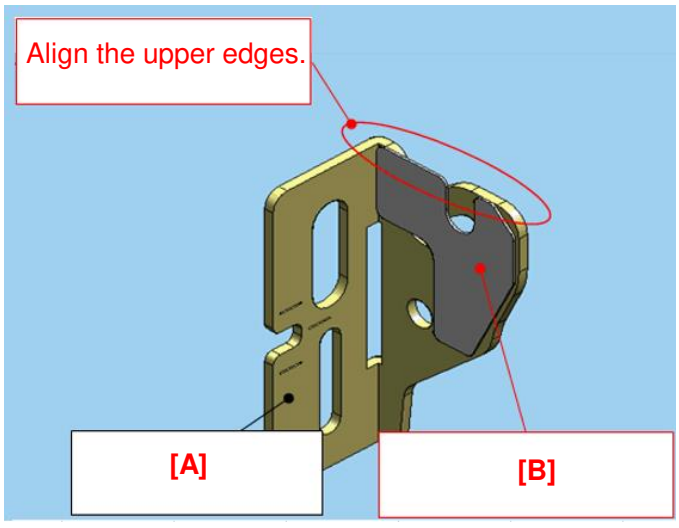
Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

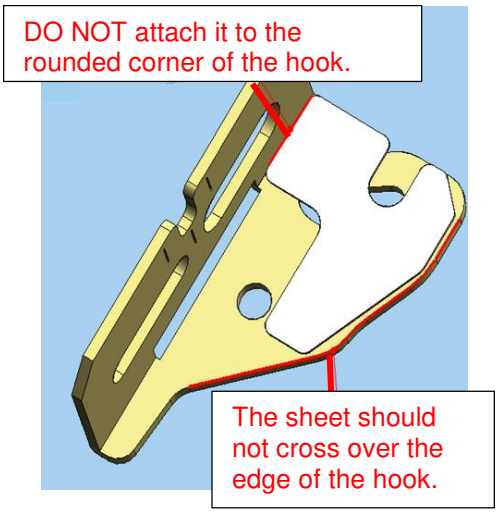
How to attach the Front Sheet (p/n: D7772655) to the front wire hook

1. At the front side of the tray, remove the two wire hooks [A]. (screw x2)



2. Attach the front sheet [B] which has double-sided tape to the front wire hook [A] as shown below.



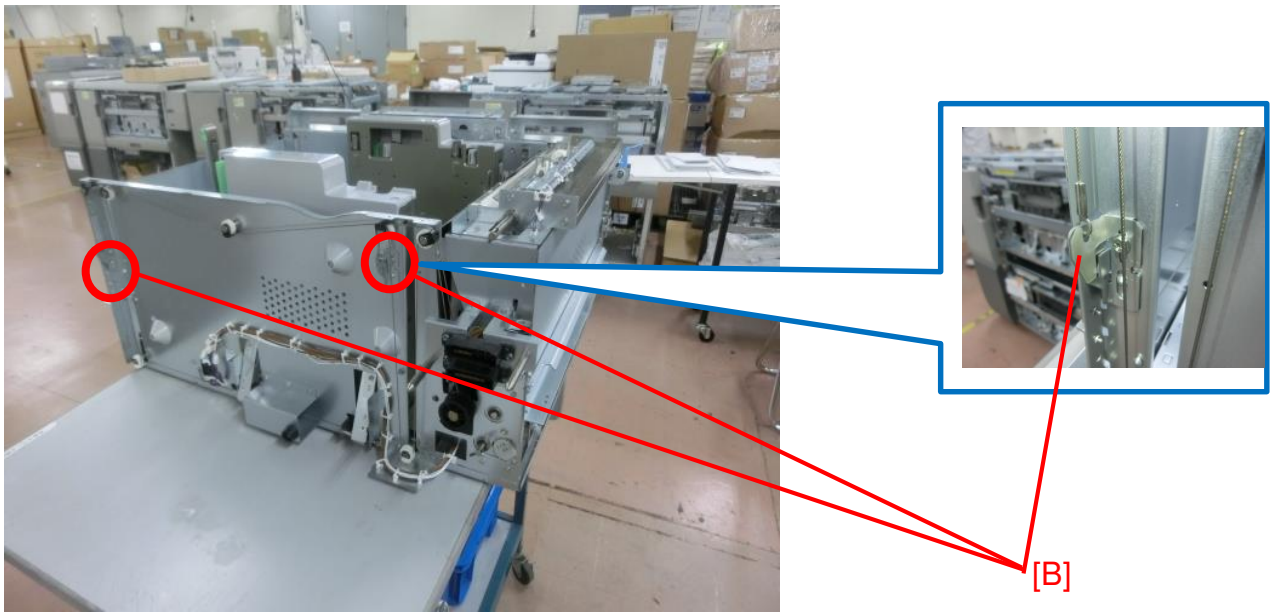


Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

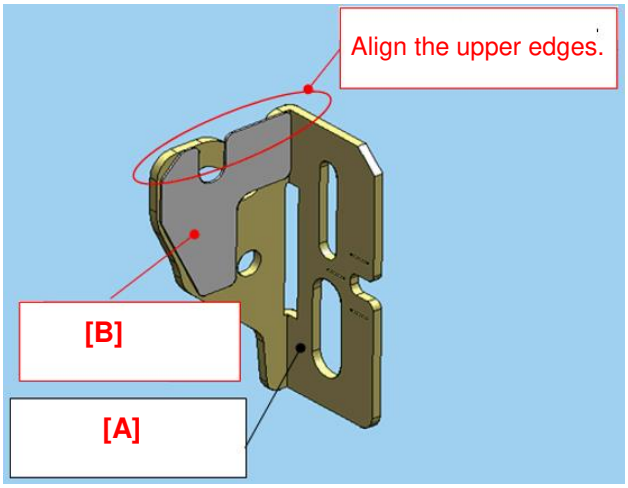
How to attach the Rear Sheet (p/n: D7772657) to the rear wire hook

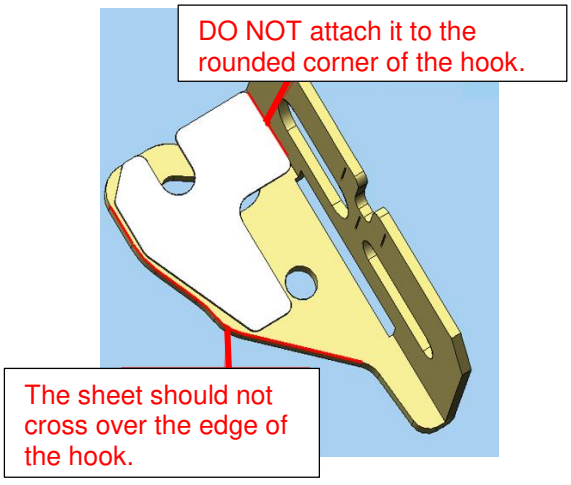
1. At the rear side of the tray, remove the two wire hooks [B]. (screw x2)



Rear side

2. Attach the rear sheet [B] which has double-sided tape to the rear wire hook [A] as shown below.



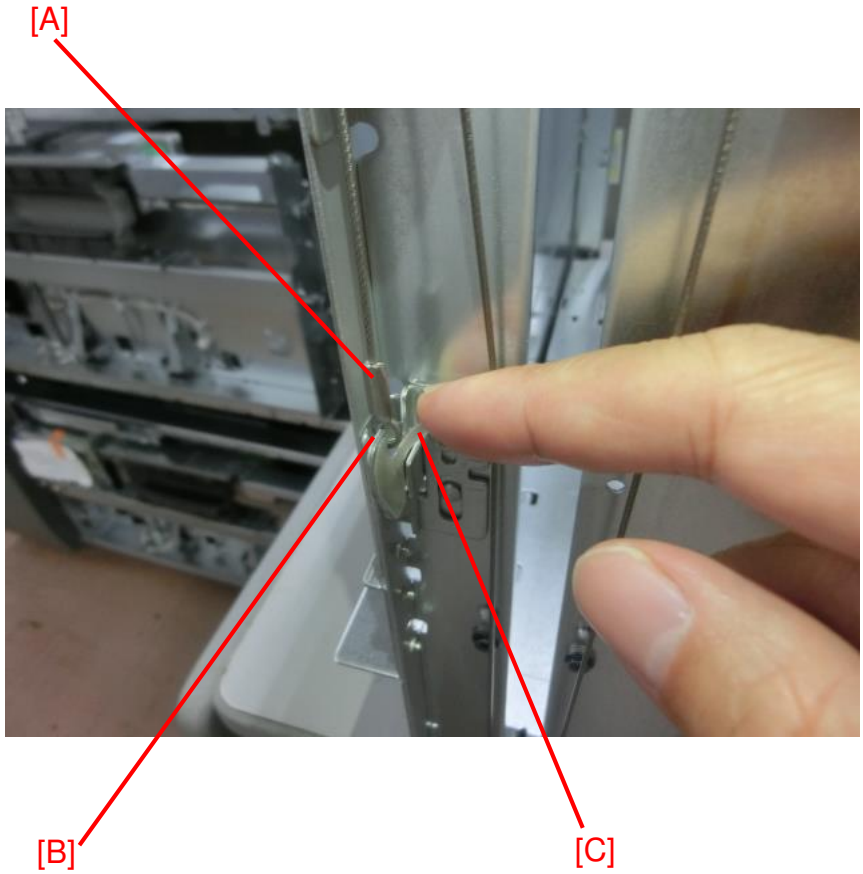


Reissued: 17-Jan-17

Model: Vacuum Feed LCIT RT5100	Date: 20-Oct-16	No.: RD777010b

Common procedure for front and rear sides

1. Hook the wire [A] onto the wire hook [B] as you slightly bend the sheet [C].
   Do the same for the remaining three hooks.



Reassembling

Reassemble the paper tray by following the above steps in reverse order.

Model: Vacuum Feed LCIT RT5100	Date: 31-Oct-16	No.: RD777011

Subject: Rework procedure: Side Fence Cleaning and Oil lubrication			Prepared by: Takuya Hirakawa
From: Field Quality Management Group 4, FQM Dept, QAC			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2 ☐ Tier 0.5

SYMPTOM
The side fence cannot slide smoothly.

CAUSE
Paper dust gets on the surface of the slide shaft and inside the bearings.

SOLUTION
Do the **PROCEDURE** below every 900K pages (PM cycle).

PROCEDURE

1. Clean the shaft of the side fence with a cloth as shown.

   Important: If you cannot clean off all the dust and foreign material with the cloth, use a vacuum cleaner.

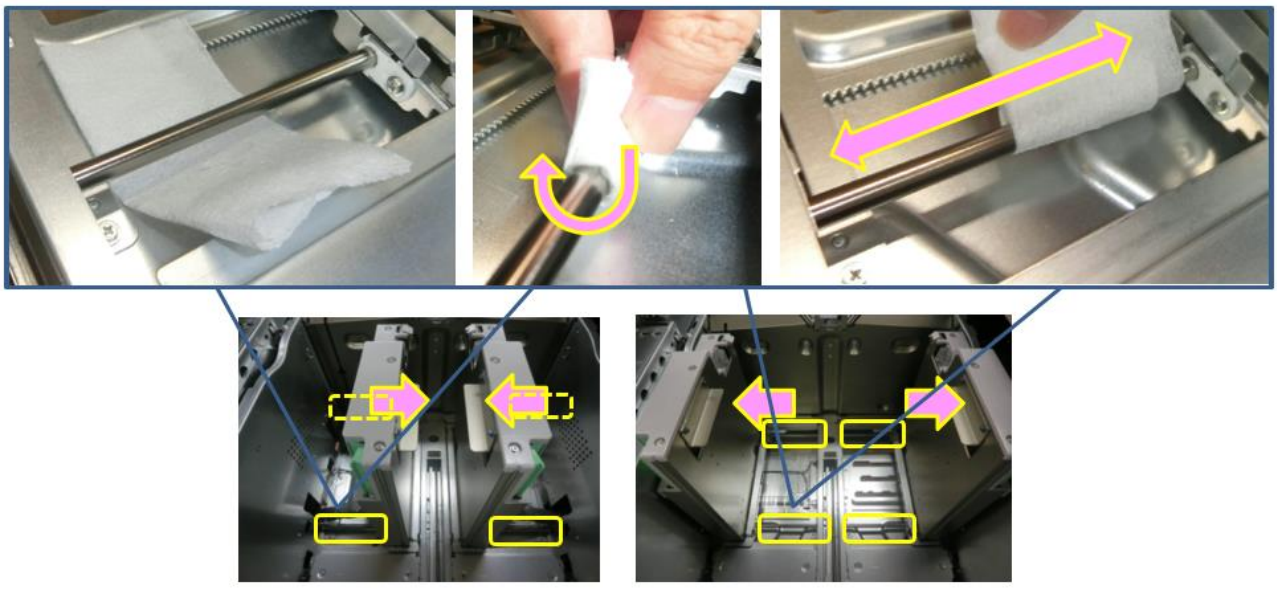


Fig. 1

2. Apply engine oil to the **right side** of the side fence shaft (positions are marked by red stars in **Fig. 2**).

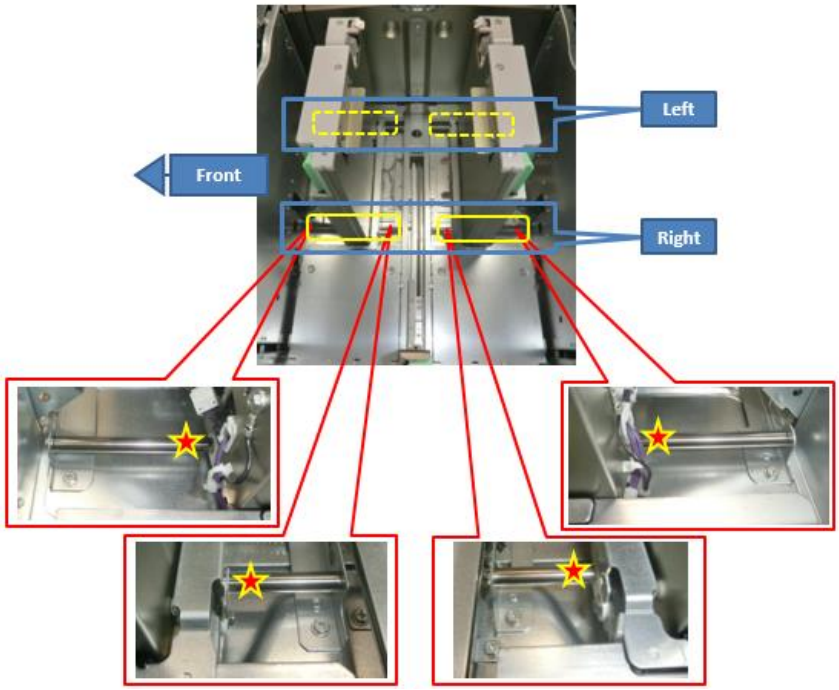


Fig. 2

IMPORTANT:

- Apply the oil as **3 large drops** for each shaft, near the shaft bearing, as shown in Fig. 3.
- You only need to apply the oil to the **right** side of each shaft. This is because POM bearings are used on the left side, and these are not affected by paper dust. (Dry bearings are used on the right side).
- The recommended oil is JOMO GP-S 10W-30 produced by Japan Energy. If you use another oil, make sure it has the **viscosity of 10W-30.**

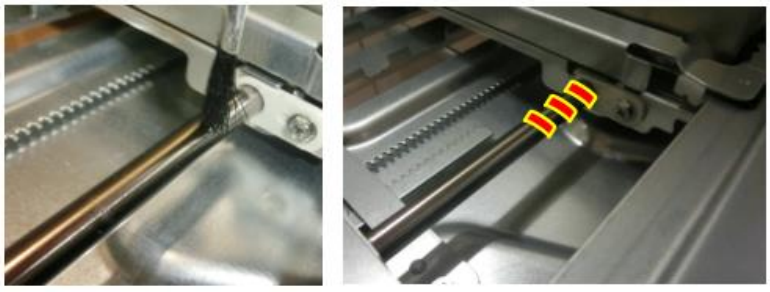


Fig. 3

3. Slide the side fence back and forth about ten round trips.

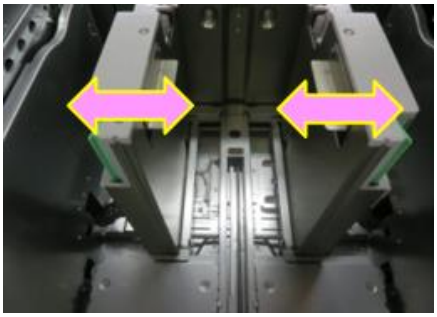


Fig. 4

4. Clean off any paper dust or foreign material that was scraped out, using a cloth.
5. Repeat **Steps 2-4** until there are no foreign materials or dust on the cloth after cleaning the shaft.
6. Apply small drops of engine oil to the shaft in the areas shown in Fig. 5 (marked by red stars).
   Note: Each small drop would amount to roughly 0.0570±0.0114g.
7. Slide the side fence back and forth for three round trips.

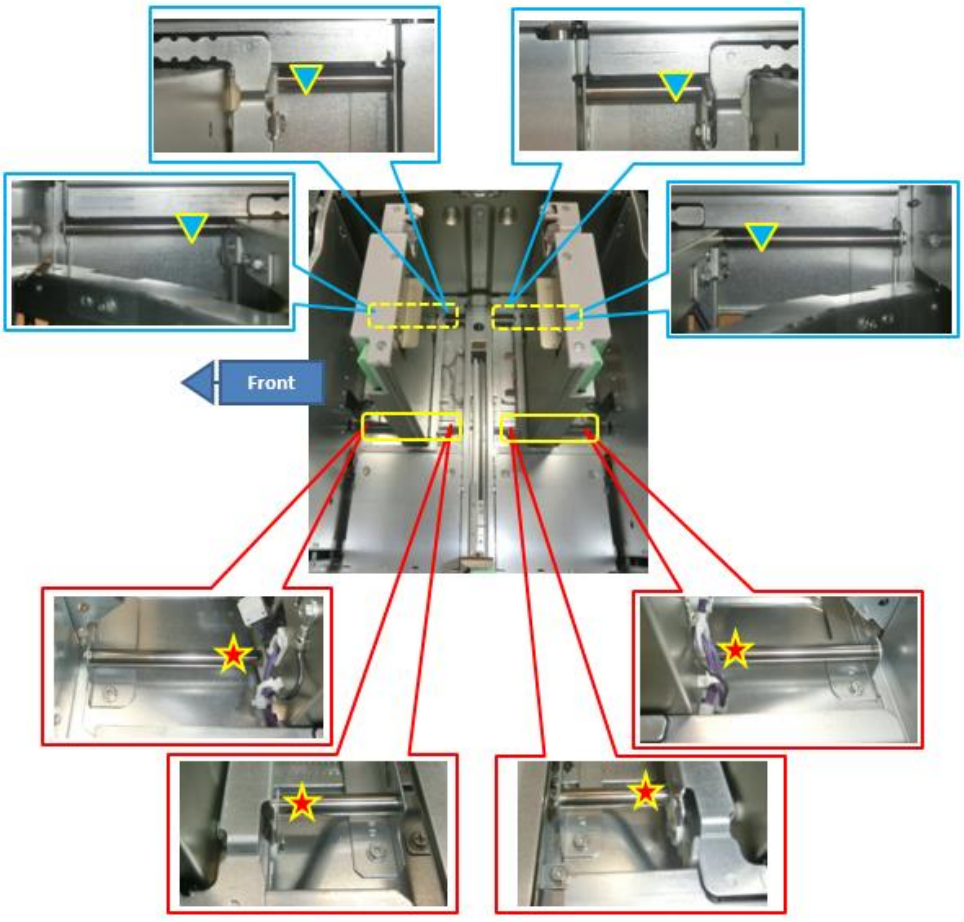


Fig. 5

Model: Vacuum Feed LCIT RT5100	Date: 31-Oct-16	No.: RD777012

Subject: Rework procedure: How to improve image shift on main scan			Prepared by: Takuya Hirakawa
From: Field Quality Management Group 4, FQM Dept, QAC			
Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM
The image shifts along the main-scan direction.

CAUSE
The top/bottom and front/rear side fences are ether deformed or tilted slightly. As a result, the span between the fences at the top/bottom is not the same as for the front/rear.

SOLUTION
Do the following:
- Do Oil lubrication and cleaning. See RTB#RD777011, make sure to perform the Oil lubrication and cleaning (See **RTB＃RD777011**).
- Do the **work PROCEDURE** below.

Rework PROCEDURE

1. Remove the front cover of the tray on which the symptom occurs.
2. Put a few sheets of paper onto the bottom tray, in order to raise the tray to its upper position (Fig. 1).
3. Remove the paper tray while holding the pulley.
   Note: This is so that the bottom plate does not fall when you remove the tray.

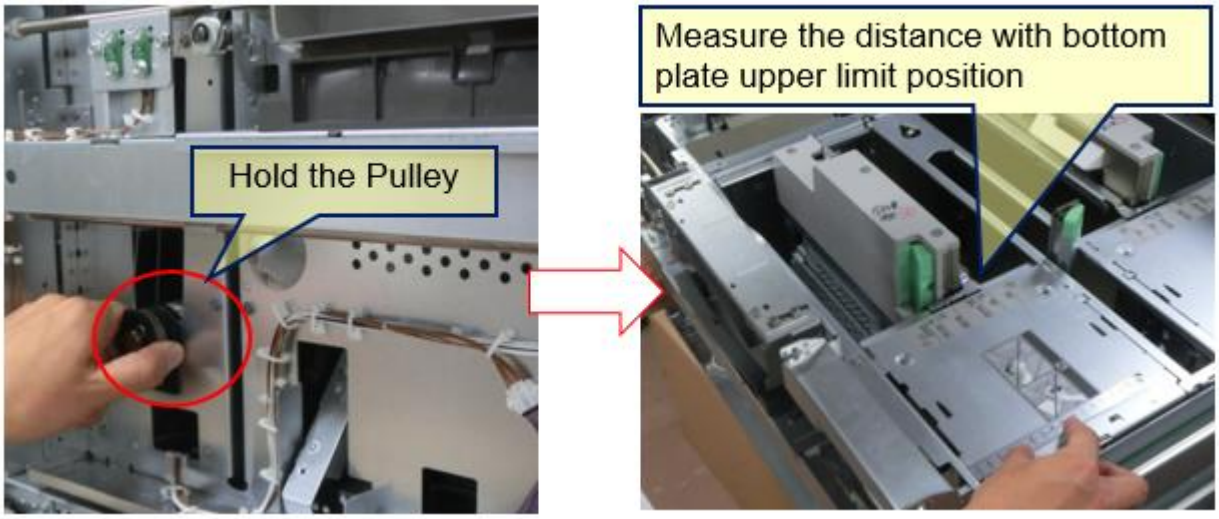


Fig. 1

4. Measure the distances (spans **A, B, C, D**) between the two side fences as shown in **Figs. 2 and 3.**

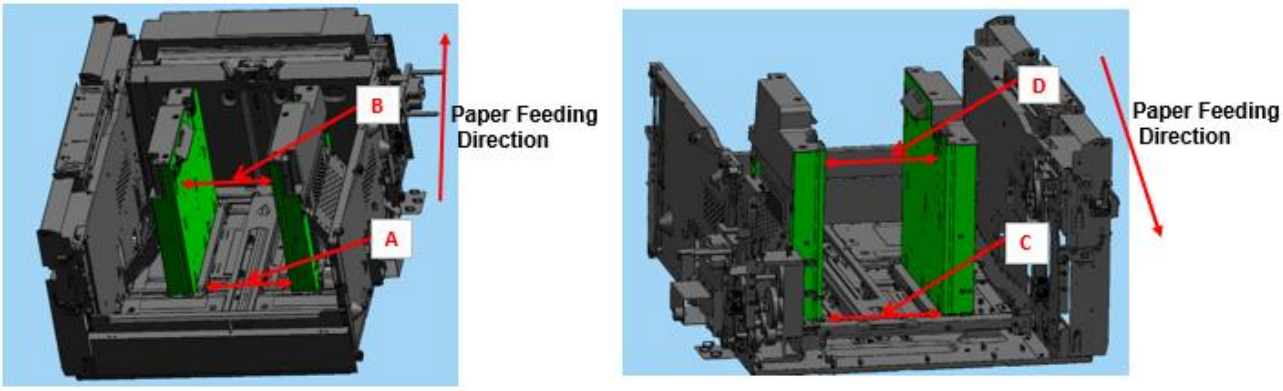


Fig. 2

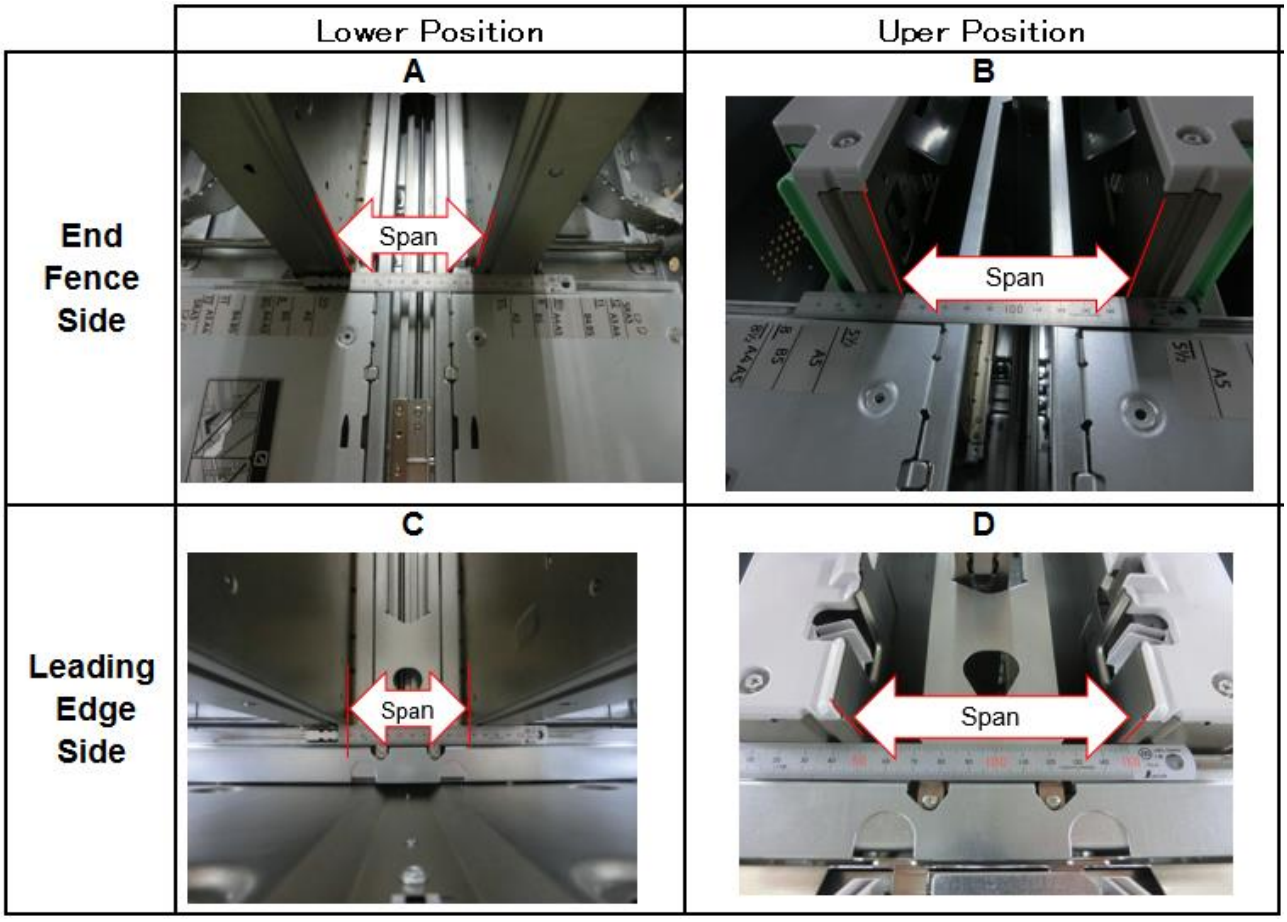


Fig. 3

IMPORTANT:

- Make sure the scale ends touch the bent portion of each side fence.
- See Fig. 4 below for the correct and incorrect measuring positions.

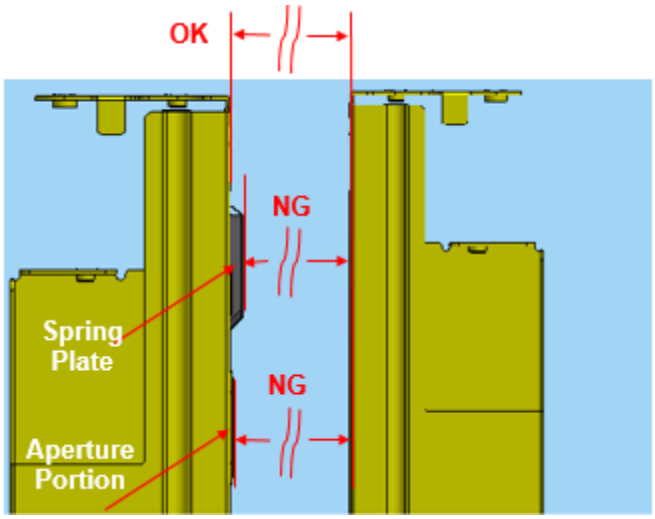


Fig. 4

5. Compare span A to B, and then C to D.
   Specification: Difference between top and bottom is **0-2.0 mm.**

   - If the difference for either is **more than 2.0mm, go to Step 6.**
   - Otherwise, the procedure is finished.

6. Disassemble the tray as shown in Fig.5.

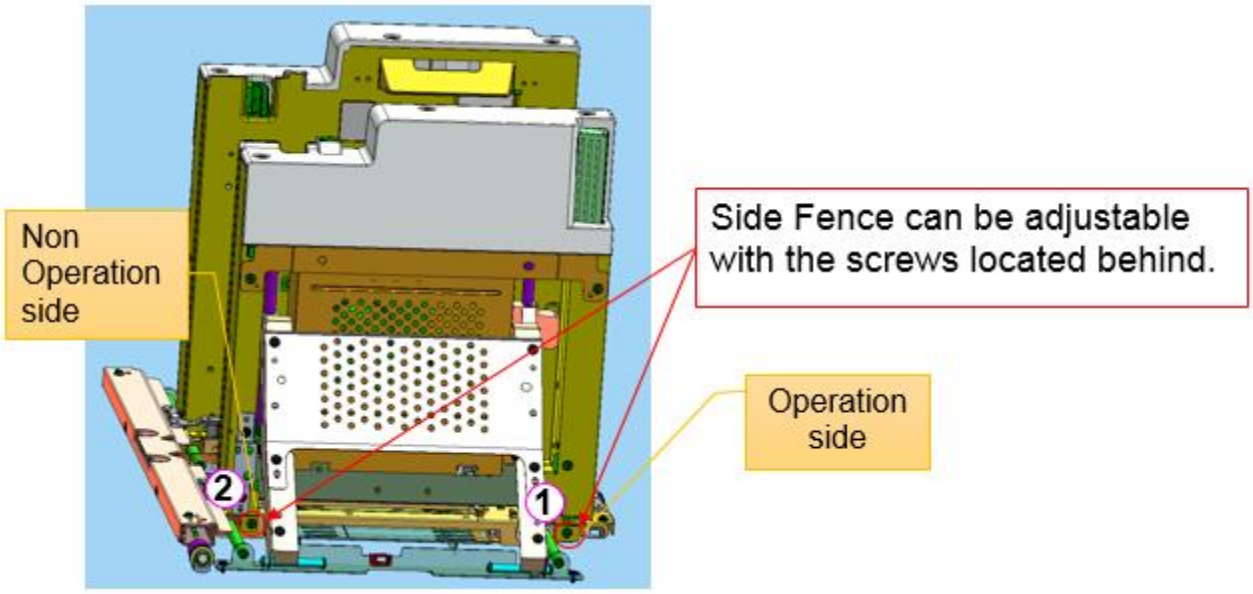


Fig. 5

7. Loosen the screw shown below.
   Note: This screw is located inside the round hole in the side plate on the operator side of the machine.

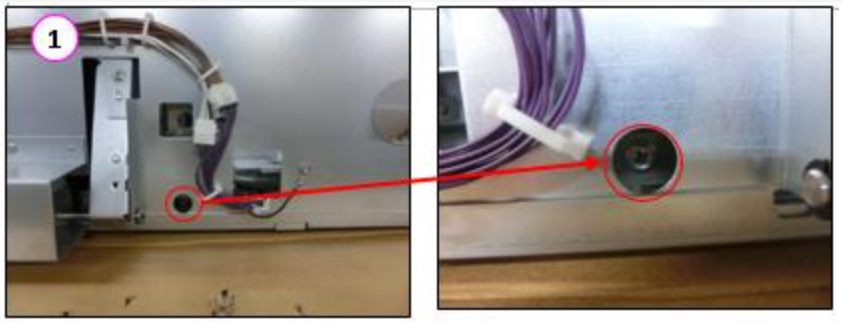


Fig. 6

8. Loosen the screw shown below.
   Note: This screw is located on the non-operator side of the machine.

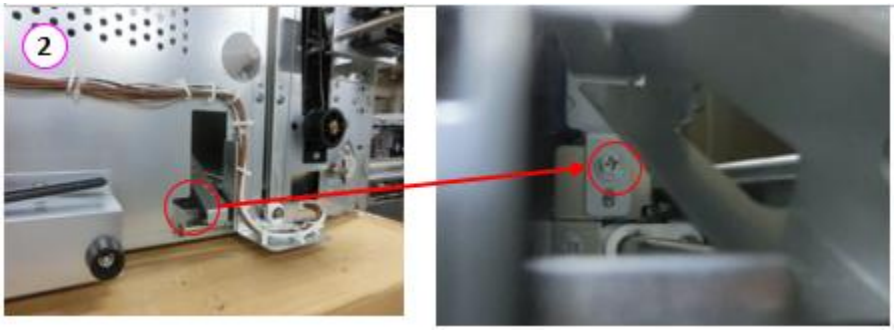


Fig. 7

9. Adjust the side fences into the correct position (within 2.0mm).

10. Hold the side fences in place while you tighten the two screws mentioned in Steps 7 and 8.

11. Do the same correction for the other side fence.

12. Reassemble the tray and measure the spans again to make sure they are within specification.

Model: Vacuum Feed LCIT RT5100	Date: 2-Mar-17	No.: RD777013

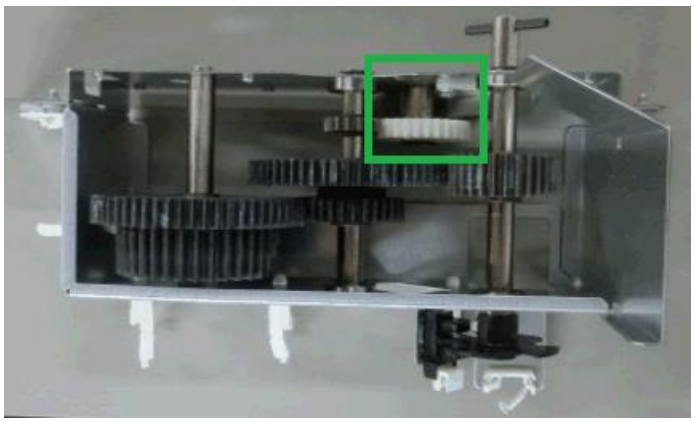
Subject: Abnormal noise from tray set with A3/DLT or heavier paper			Prepared by: Hiroaki H Matsui
From: PP Tech Service Dept., 1st PP Tech Service Sect.			
Classification:	☒ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part information ☐ Electrical ☐ Transmit/receive ☐ Other ( )	☐ Action required ☐ Service manual revision ☐ Retrofit information ☒ Tier 2 ☐ Tier 0.5

SYMPTOM

Abnormal noise is heard from trays set with A3/DLT or larger paper.

CAUSE

A tray loaded with A3/DLT or larger paper causes the shaft of the tray lift-up gear to slant over time due to the heavy load, preventing proper engagement of the gears.



SOLUTION

Modify the gear assembly by procuring the following parts.

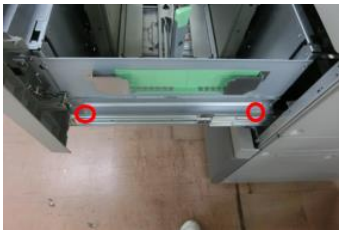
Call-out #	P/N	Description	Photo	Q'ty
1	D7773013	BRACKET:DAMPER: PEEN		1

Model: Vacuum Feed LCIT RT5100	Date: 2-Mar-17	No.: RD777013

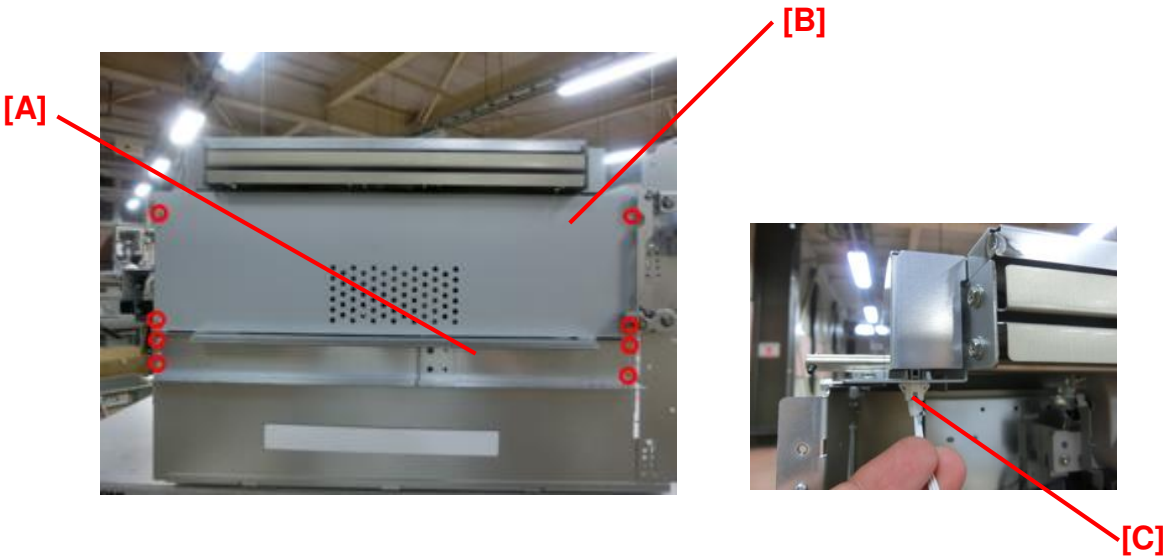
Call-out #	P/N	Description	Photo	Q'ty
2	D7773020	BRACKET:DAMPER: GEAR:PLATE		1
3	D7773018	BRACKET:GEAR: PEEN		1
4	04543006N	TAPPING SCREW: ROUND POINT:3X6		2

Rework procedure

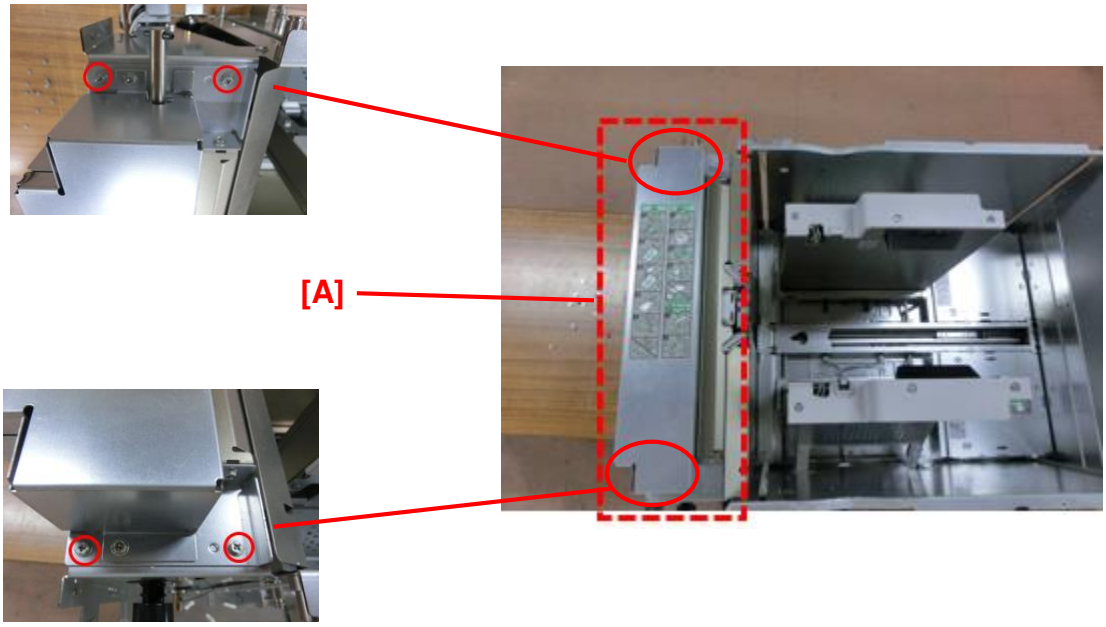
1. Pull out the paper tray [A] and remove it from the LCIT (screw x4).



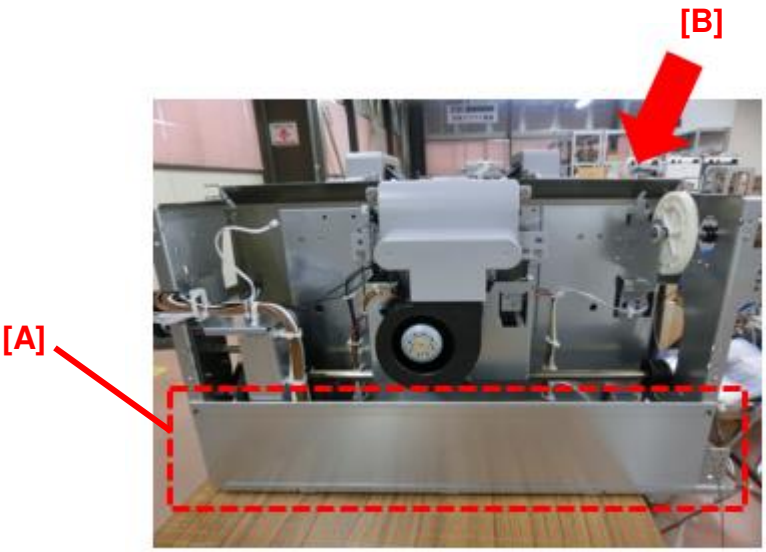
2. Remove the left slide rail [A] (screw x4) and the upper left cover [A] (screw x4) and disconnect the connector [C].

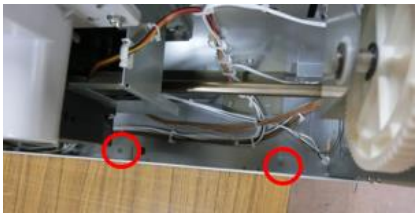


3. Remove the paper feed unit [A] from the paper tray (screw x4).



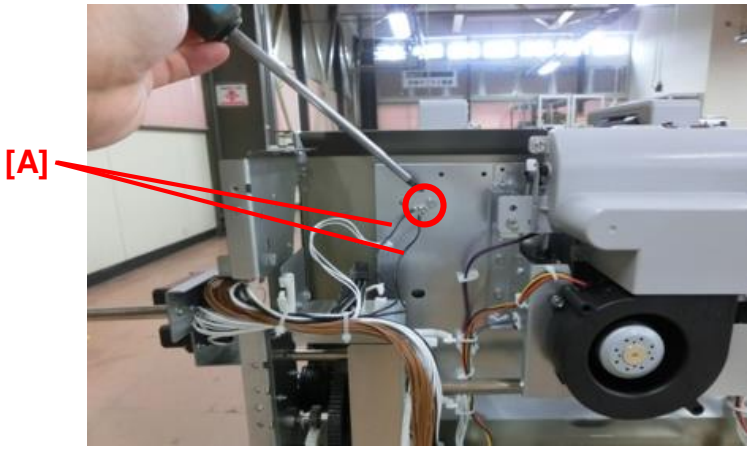
4. Remove the lower face plate [A] (screw x2).



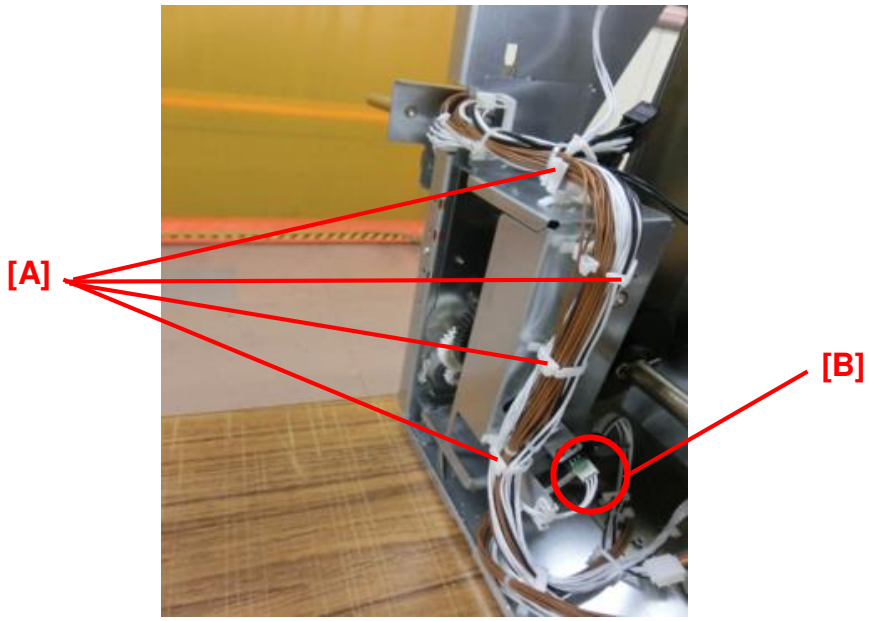


View from the direction indicated with the arrow [B]

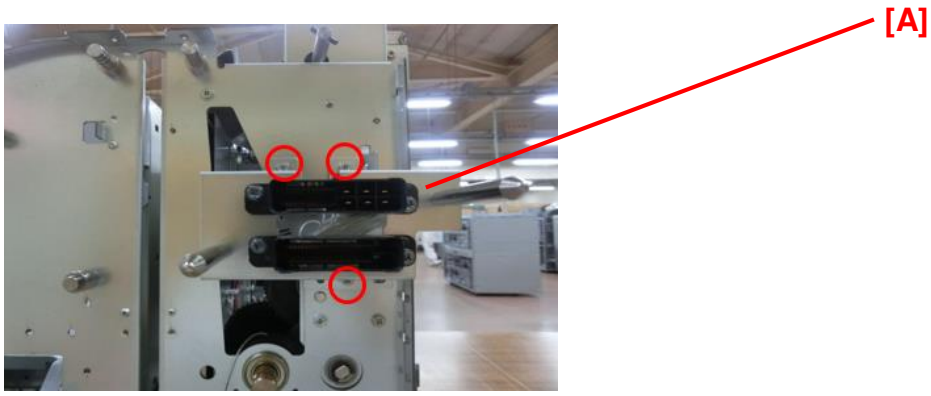
5. Remove the grounding wires [A] (screw x1).



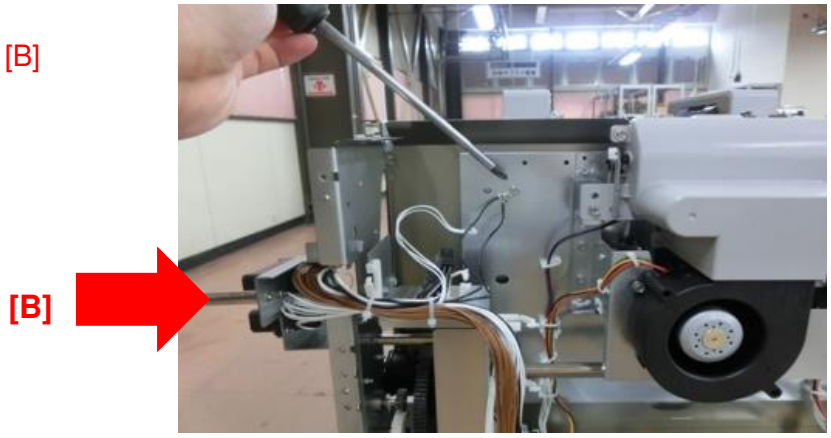
6. Remove the edge saddles [A] and disconnect the harness connector [B].



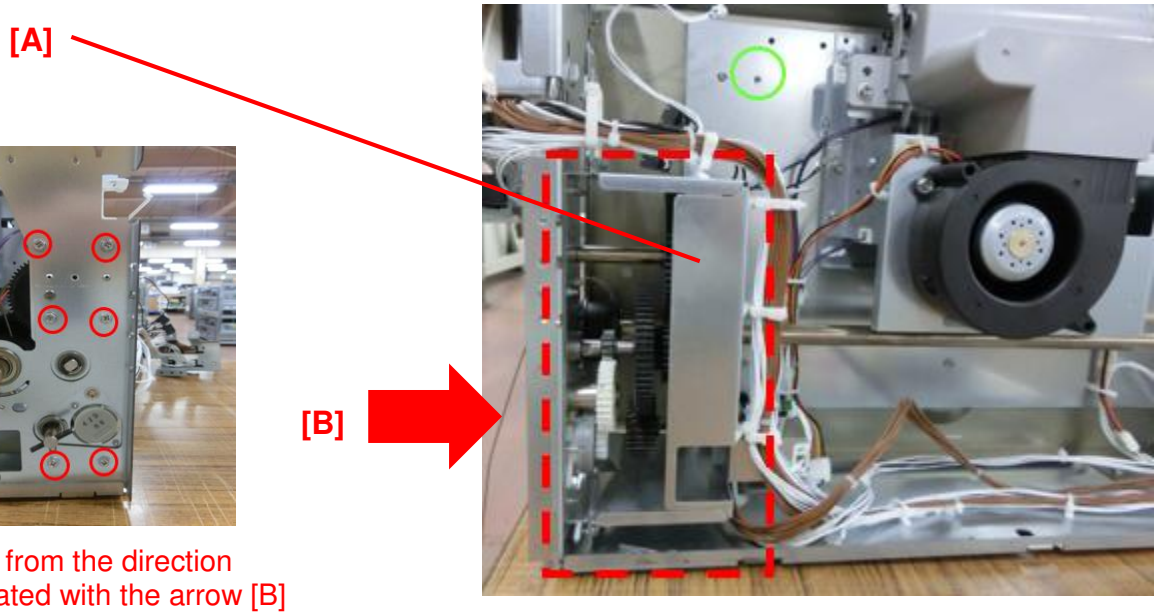
7. Remove the drawer connector bracket [A] (screw x3).



View from the direction indicated with the arrow [B]

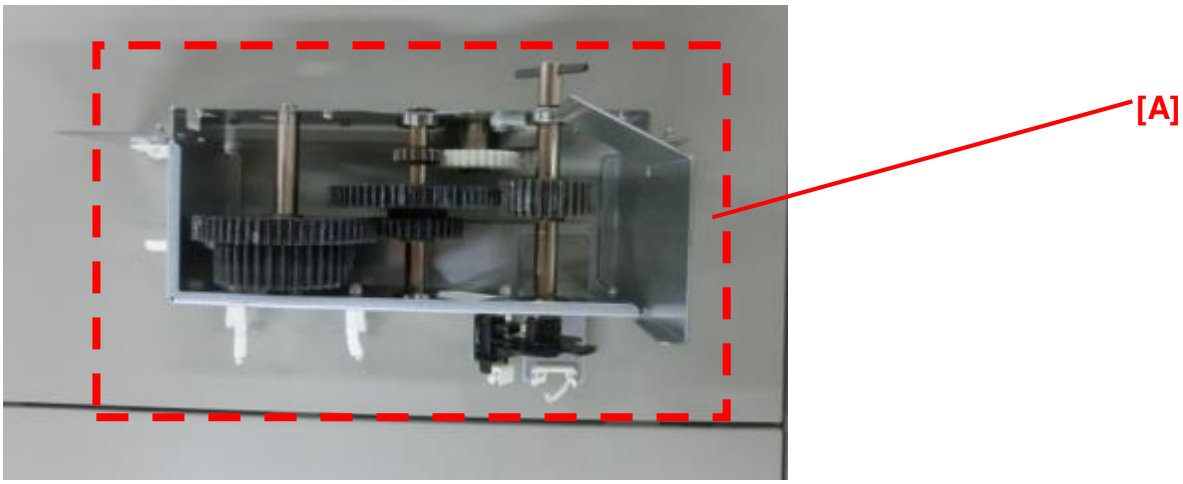


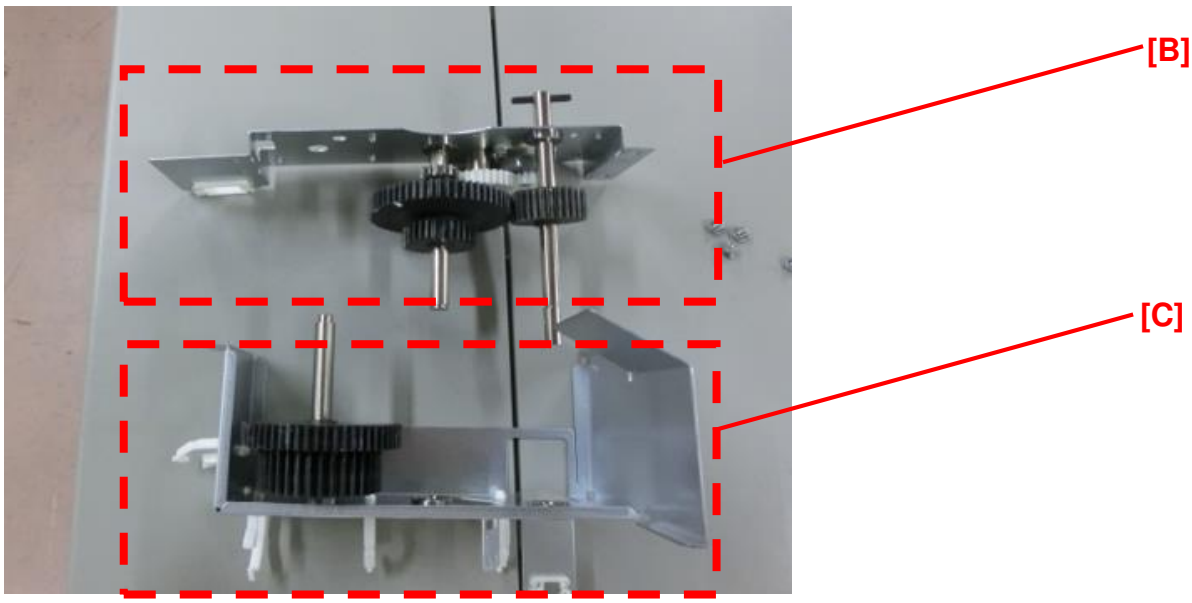
8. Remove the gear box [A] (screw x6).



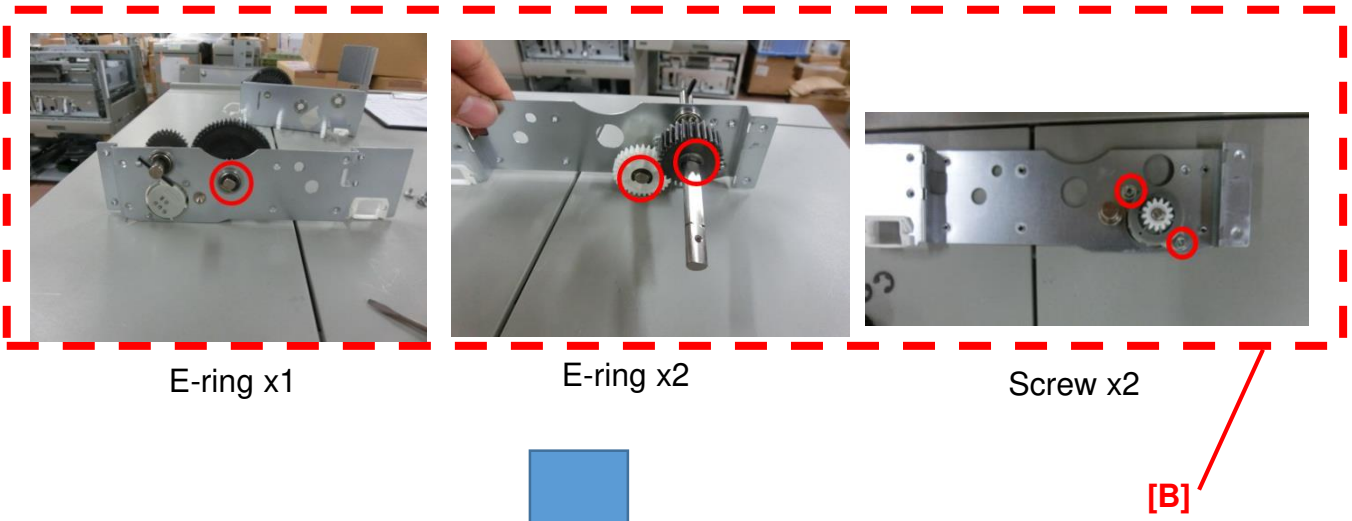
View from the direction indicated with the arrow [B]

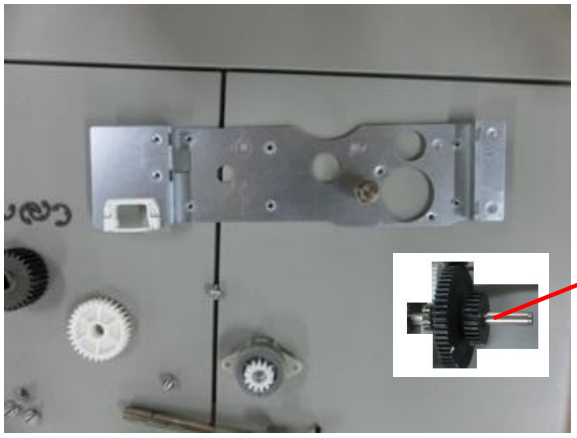
9. Disassemble the gear box [A] as shown below.
   - Divide the gear box [A] into the small sub assembly [B] and the large sub assembly [C] (screw x5, sensor x1, sensor feeler, E-ring x2).



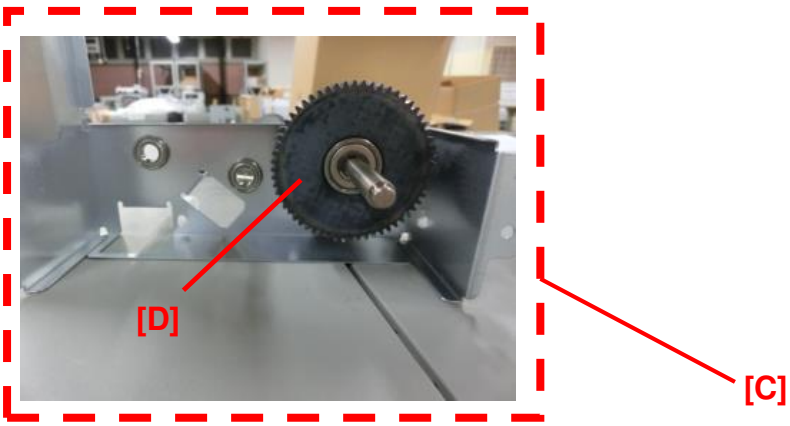


➢ Disassemble the small sub assembly [B] as follows.



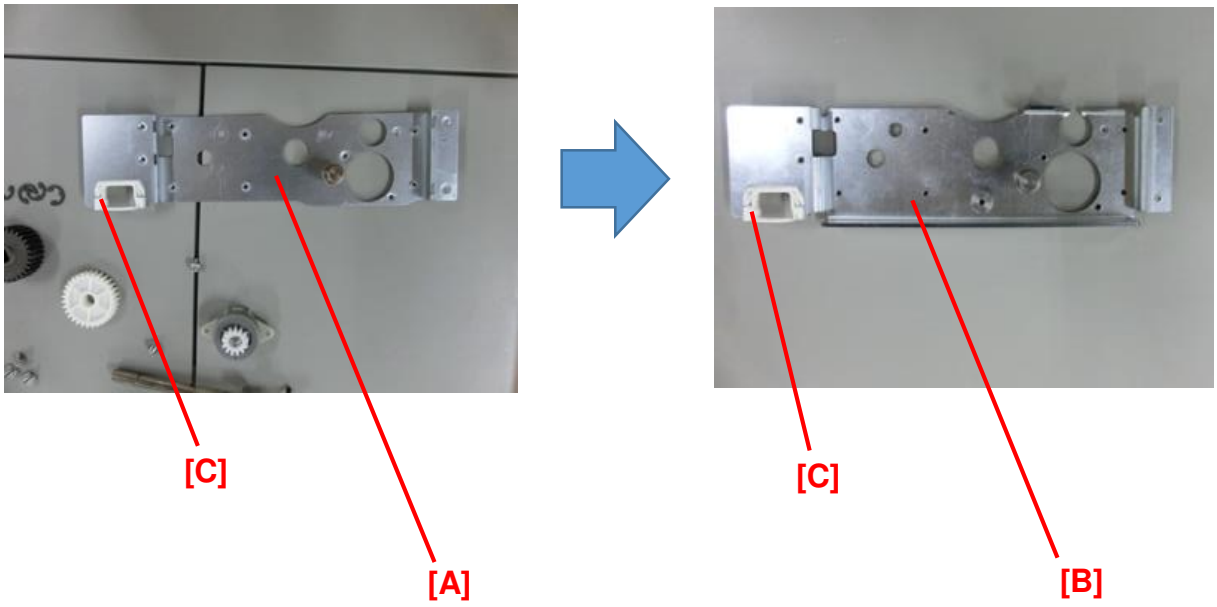


➢ Remove the gear assembly [D] from the small sub assembly [C] (E-ring x1).

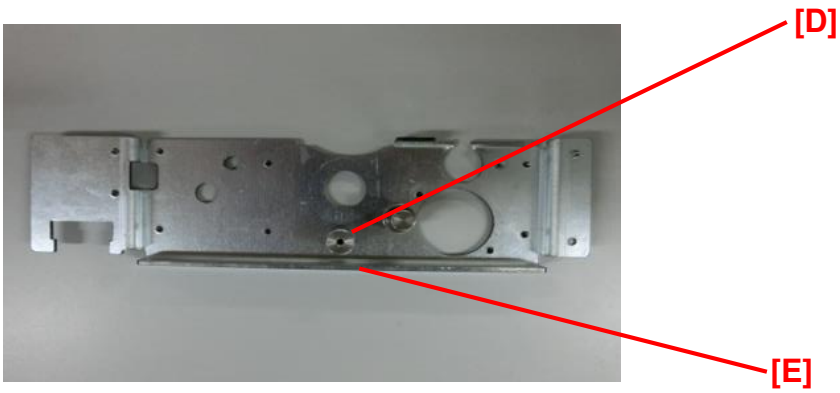


10. Replace the bracket [A] removed in Step 9 with the new type bracket [B] (call-out [#1] in the table on page 1).

    NOTE: Reuse the edge saddle [C].

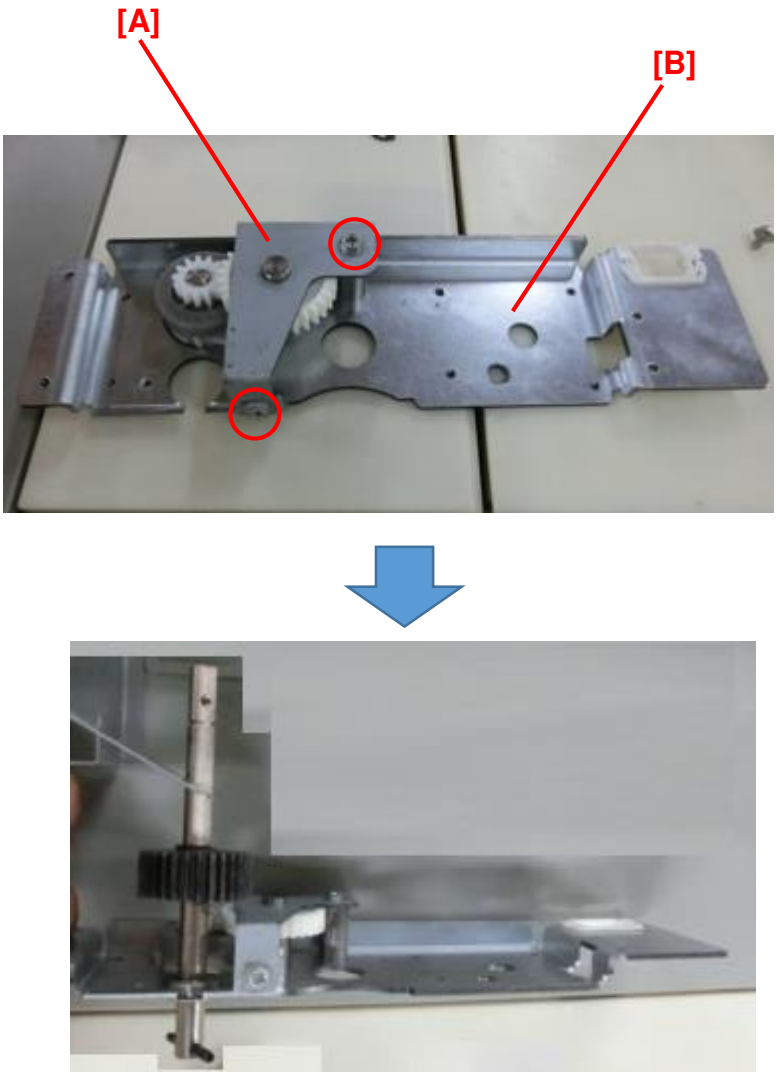


NOTE: The new type bracket [B] has an additional stud [D] and a bent edge [E].

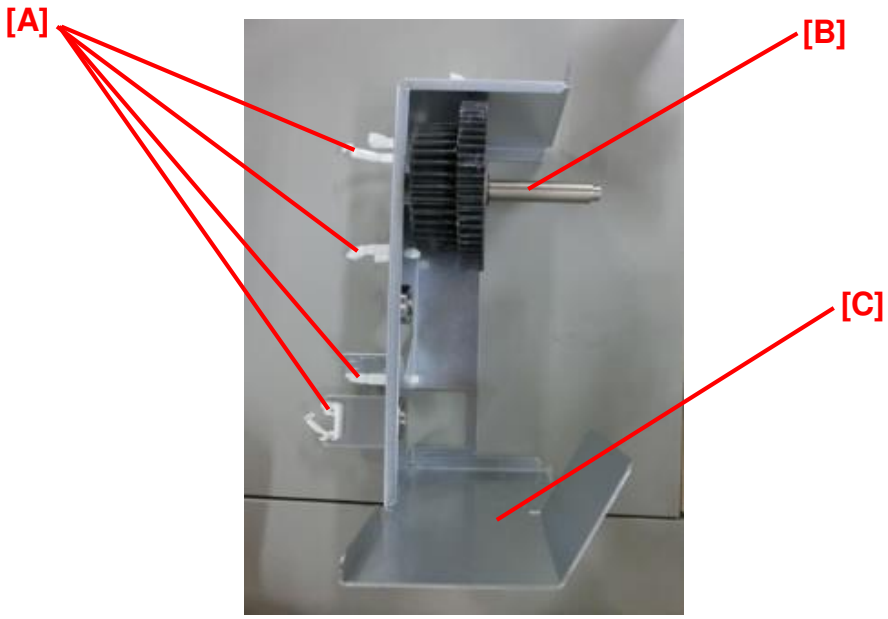


11. Attach the plastic gear [A] (removed in Step 9) to the new type bracket (screw x2).

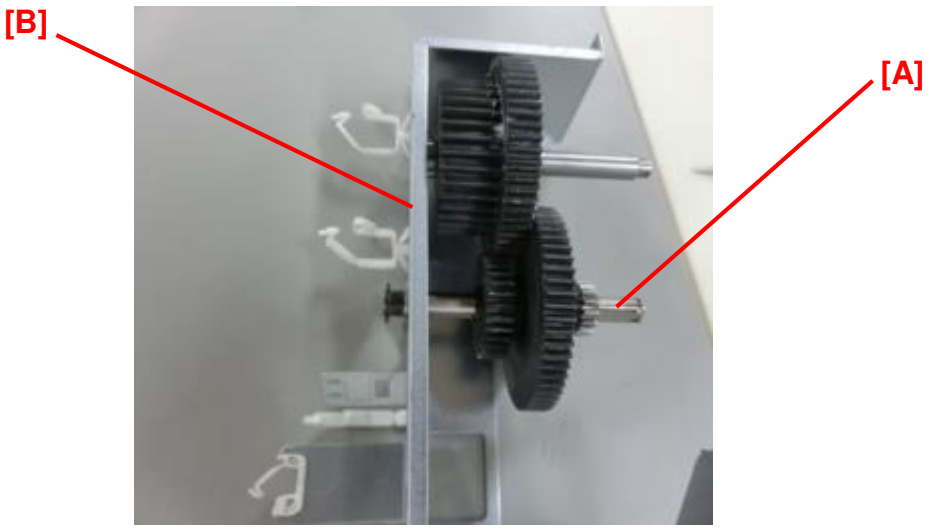
12. Attach the new bracket [A] (call-out [#2] in the table on page 1) with two screws (call-out [#4] in the table on page 2) and reattach all remaining parts removed in Step 9 (except for the shaft with three gears) to the new type bracket [B].



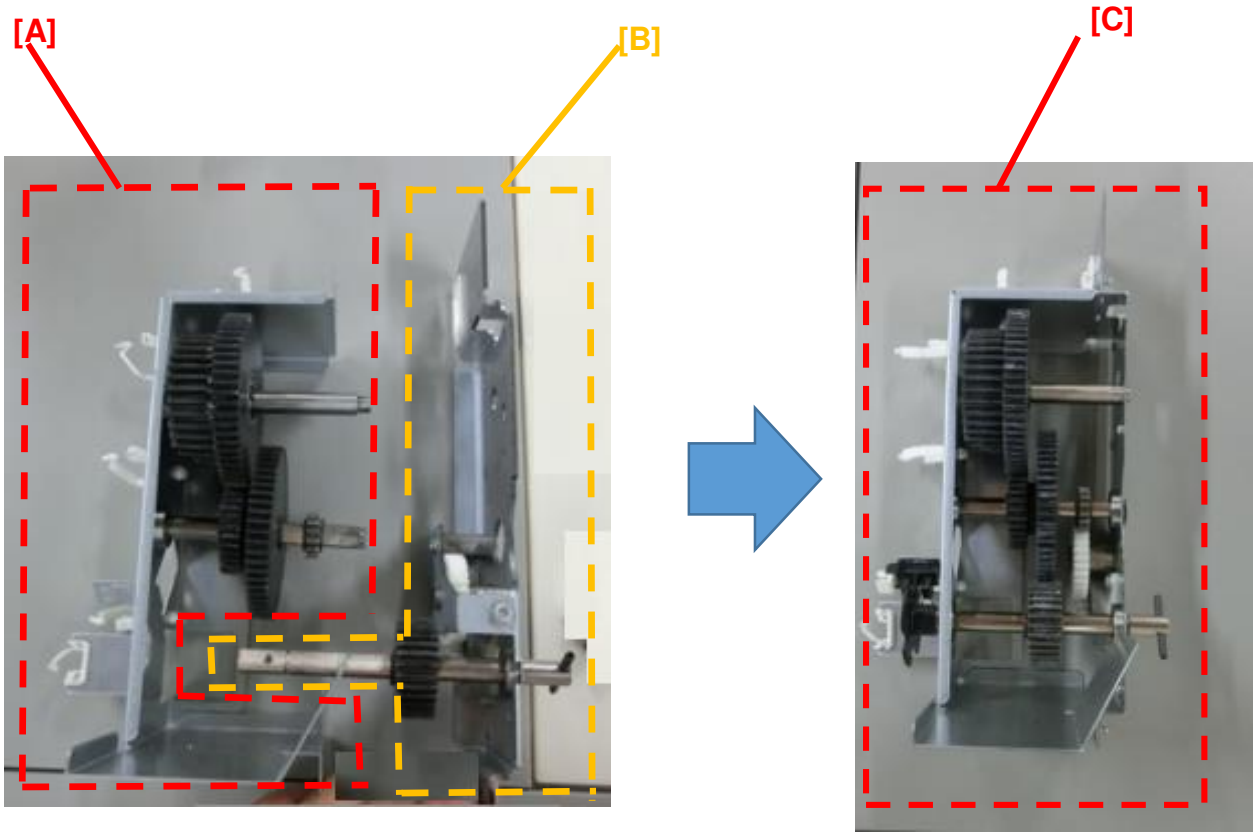
13. Attach the clamps [A] and gear assy [B] removed in Step 9 to the new bracket [C] (call-out [#3] in the table on page 2).



14. Attach the shaft with three gears [A] removed in Step 9 to the new bracket [B] (call-out [#3] in the table on page 2).



15. Couple the sub assembly units [A] and [B] to reassemble the gear box [C].



NOTE:
Re-install the following components also:
- Bearings (Install the bearings so that the flanges face outside.)
- Feelers and E-rings

16. Reinstall the gear box by following Steps 1-8 in reverse order.

Model: Vacuum Feed LCIT	Date: 30-Nov-17	No.: RD777015

Subject: Paper Weight 1-3 misfeed / double feed from Vacuum Feed LCIT	Prepared by: H Kawamura
From: PPCS Section, CIP Product Quality Management Dept.	

Classification:			
	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

SYMPTOM

A paper mis-feed or mutli-feed occurs (paper weight 1, 2, 3) when feeding 100-200 sheets from the Vacuum Feed LCIT.

CAUSE

The airflow between sheets of paper is not optimal, causing a delay in the paper picking process (mis-feed) or failing to separate the sheets of paper (multi-feed).

SOLUTION

Do the following.

1. Set No. 125 “2-Tray LCT : Paper Feed Position” to “**High**” in the Paper Library settings.
2. Upgrade the Paper Library as follows.

   Pro91xx Series:
   EU: Version **R10 or later**
   NA: Version **R9 or later**
   AP: Version **R8 or later**
   CN: Version **R3 or later**

   Pro71xx Series:
   EU: Version **R16 or later**
   NA: Version **R13 or later**
   AP: Version **R11 or later**
   CN: Version **R11 or later**

   Pro81xx Series:
   EU: Version **R4 or later**
   NA: Version **R3 or later**
   AP: Version **R4 or later**

   Note: In these modified versions, the default setting for the paper feed position has been changed to “High”.

3. If the symptom occurs when using custom paper sizes/types created before the above firmware was installed, set the paper feed position to “High” manually.

4. Upgrade the Engine firmware to version **1.24:06 or later.**

Note: The default setting of the paper feed position for generic paper has been changed to “High”.

Model: Vacuum Feed LCIT RT5100	Date: 25-Apr-19	No.: RD777016

Subject: Interlock Switch & Safety Switch Cover	Prepared by: H.K.
From: 1st CP Business Department CP Business Center	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Note
12042541	12042384	INTERLOCK SWITCH	1 - 1	X/X	O/O as a set
D3551325	D3EW1330	COVER:SAFETY SWITCH:HOOK	1 - 1	X/X	
(Not listed in the Parts Catalog)	D7771141	BRACKET:SAFETY SWITCH	1 - 1	X/X	

Change:

- The material and shape of the Interlock Switch were changed.
- The shape of the Hook Safety Switch Cover was changed for the new switch.
- The cutout on the Safety Switch Bracket was changed in line with the above.

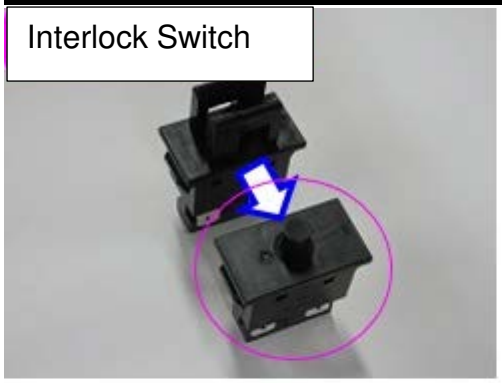
Reason:

Production of the old switch was discontinued.

NOTE: There is no interchangeability (X/X) between the old and new parts. Make sure to replace all the parts listed in the table together as a set.

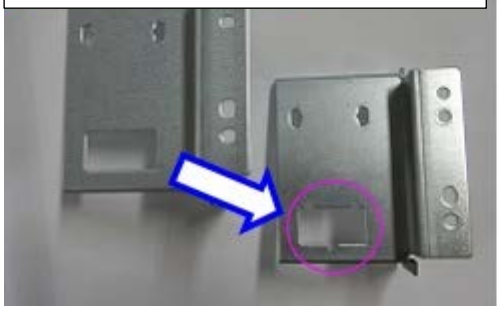
Model: Vacuum Feed LCIT RT5100	Date: 25-Apr-19	No.: RD777016

Interlock Switch

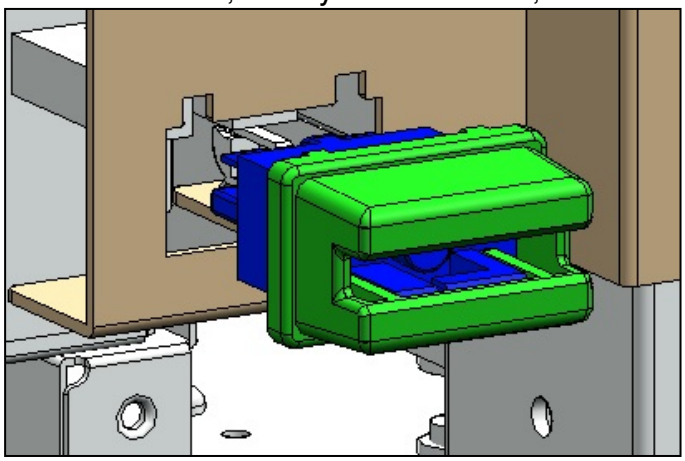


Hook Safety Switch Cover

Safety Switch Bracket



Interlock Switch, Safety Switch Cover, and Safety Switch Bracket



Cut-in S/N: TBA

Model: Vacuum Feed LCIT RT5100	Date: 25-May-15	No.: RD777017

Subject: New Idle Gear for tray bottom plate lift motor for higher durability			Prepared by: J. Ohno
From: Service Planning Sect., Global Engineering Support Dept.			
Classification:	☐ Troubleshooting	☒ Part information	☒ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2 ☐ Tier 0.5

Change: Idle gear of the tray bottom plate lift motor

Reason: For higher durability of the gear

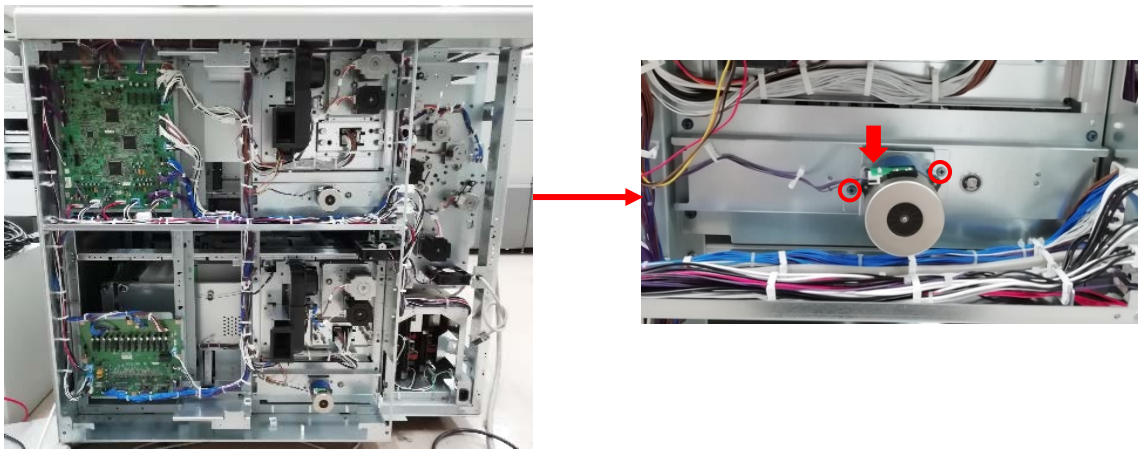
Old P/N	New P/N	Description	Q'ty	Int	Note
D7771188	D7773009	GEAR: RISE: DRIVEN: ASS'Y	1	X/O	Change

Note: The parts catalog is already corrected of the above information.

Request: If the gear breaks, replace it with the above new gear. Note that replacing with the old gear may cause the gear to break again.

How to replace the gear

1. Remove the rear right and left covers.
2. Remove and the LCIT lift motor. (Screw x2, Connector x1)



The procedure is the same for both top and bottom trays.

3. Remove the tray lift drive unit. (Screw x4, Clamp x2)

4. Remove the E-type retaining ring and the two screws on the back side, to remove the gear box.

5. Replace the idle gear. (E-type retaining ring x1)

6. Put back the assembly by following the above steps in reverse order.

Model: Vacuum Feed LCIT RT5100	Date: 12-Sep-19	No.: RD777018

Subject: Troubleshooting: SC50X-03/12, SC50X-23/32, SC50X-13/14/22			Prepared by: Takuya Hirakawa
From: Field Quality Management Group 4, FQM Dept, QAC			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2 ☐ Tier 0.5

Symptom

SC50X-03/12, -23/32, -13/14/22 may occur (Tray error: Paper Height Middle Sensor or Lower Limit Sensor error).

Note: The SC error code depends on the mainframe.

Pro C9100 series: SC50X-03/12

Pro C7100 series: SC50X-23/32

Pro 8200 series: SC50X-13/14/22

Cause

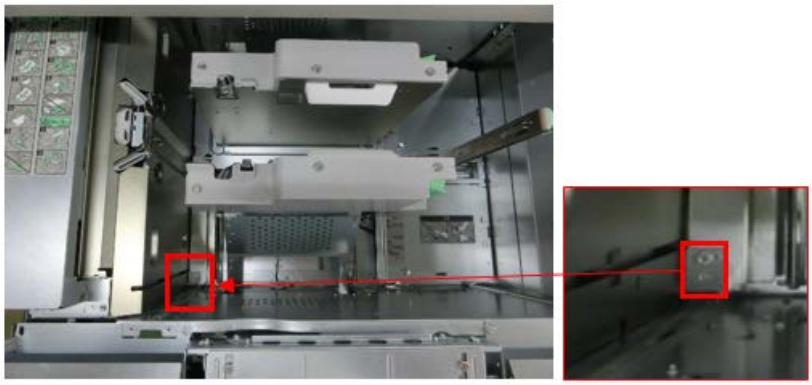
The paper is loaded repeatedly in the tray, causing the bottom plate to deform slightly. As a result, the intermediate remaining amount sensor moves away from the feeler and the intermediate position cannot be detected.

Solution

Cut and paste the black Mylar (P/N: AA150394) to the sensor feeler on the bottom plate.

Procedure

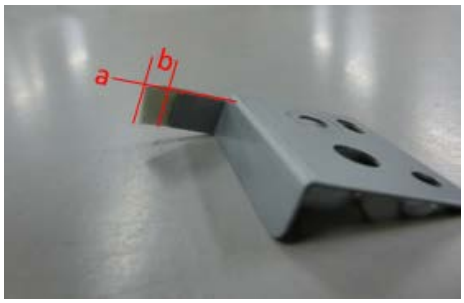
1. Remove the feeler attached to the tray bottom plate (1 screw).

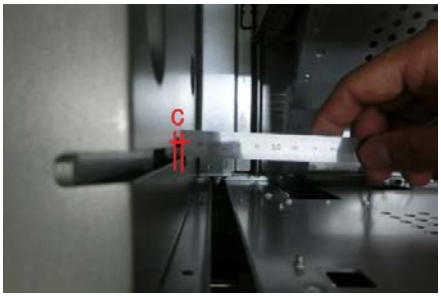


2. Paste the Mylar to the feeler.

IMPORTANT:

- Paste it so that it does not extend beyond the edge **[a]** of the feeler. The detection timing may be change, which may cause other trouble.
- Does not use transparent Mylar.
- Adjust the length **[b]** according to the gap **[c]** of the actual machine.





GAP **[c] mm**	Length **[b] mm**
1	0.5
2	1
2.5	2
3	2.5
3.5	3
4	3.5

3. Attach the feeler in the reverse order and check the following to confirm the effectiveness:
   - Whether the SC recurs by lifting the tray
   - Whether Mylar is interfering with other parts during lifting
   - Whether there is any indication that the Mylar has hit/contacted something
   - Whether the bottom plate is inclined