LCIT RT5080 Machine Code: D732

Field Service Manual

Revision History

This is the Revision History for the LCIT RT5080 (A3 LCT) service manual.

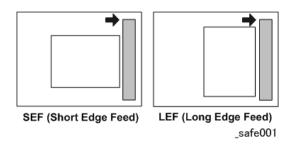
Version	Date	Changes
Ver. 1.1	31 Mar 2015	Text, Illustrations. In procedures the order of the text and illustrations has been reversed. For each step, the text description (action) is followed by the relevant illustration. The callouts [A], [B], [C] in text refer to the illustration below, not above.

Symbols, Abbreviations and Trademarks

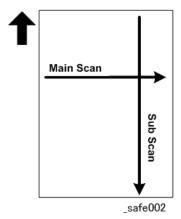
Conventions

Symbol	What it means
\$	Binding screw (shoulder hexagonal head)
8	Binding screw (round flathead)
*	Black screw (heavy, fusing unit, TCRU)
4	Bushing
Ω.	C-ring
‹♡	Clip
ĘJI	Connector
©	E-ring
	FFC (Flat Film Connector)
	FFC (Flat Film Connector)
•	FFC (Flat Film Connector)
•	Gear
â	Harness clamp
*	Harness clamp: metal: fusing unit
•	Hook (or tab release: sensors)
₽	Knob screw (black)
**	Knob screw (sliver)
•	Pivot screw
F	Screw: most common: silver
A)	Shoulder screw
*	Shoulder screw (black)

Symbol	What it means
#	Spring
•	Standoff
P	Stud screw
P	Tapping screw (for plastic)
0	Timing belt
0	Washer



The notations "SEF" and "LEF" describe the direction of paper feed. The arrows indicate the direction of paper feed.



In this manual "Main Scan" means "Horizontal" and "Sub Scan" means "Vertical", both relative to the direction of paper feed.

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

MARNING

 A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

ACAUTION

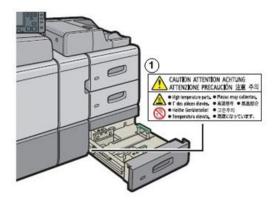
 A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

• Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.



• This information provides tips and advice about how to best service the machine.

Safety Label



d1790102

This label indicates parts that reach high temperature during operation.
To avoid personal injury, do not touch these parts.

Commonly Used Terms and Abbreviations

Here is a list of commonly used terms and abbreviations that are used throughout the Field Service Manual and Appendices.

Terms	Meaning
(ccw)	Counter-clockwise rotation of a drum, roller, gear, etc.

Terms	Meaning
(cw)	Clockwise rotation of a drum, roller, gear, etc.
BF	Booklet Finisher SR5060 (D734)*1
BW	Black and white (monochrome) copying or printing
Bank	Paper Bank (1st, 2nd, 3rd Tray of the main machine)
CIT	Cover Interposer Tray CI5030 (D738)*1
CIT-PB	Cover Interposer Tray for Perfect Binder Type S1 (D736-2)*1
FIN	Finisher SR5050 (D735) (corner staple only, no booklets)*1
ITB	Image Transfer Belt
JG	Junction Gate
LCIT	Large Capacity Input Tray. LCIT RT5080 (D732) or LCIT RT5070 (D733)*1
LD	Laser Diode (Laser Unit)
LE	Leading Edge
LSDB	Laser Synchronization Detection Board (Laser Unit)
MFU	Multi Folding Unit FD5020 (D740)*1
PCDU	Photoconductor Development Unit
РВ	Perfect Binder GB5010 (D736)*1
PFU	Paper Feed Unit (Tray 1, Tray 2, Tray 3)
PTB	Paper Transport Belt (between PTR and fusing unit)
PTR	Paper Transfer Roller
RB	Ring Binder RB5020 (D737)
TCRU	Trained Customer Replacement Units
TE	Trailing Edge
TM/P	ID sensor. "ID sensor" is used in this manual. However, you may see "TM/P" in the SP codes on the operation panel.

Terms	Meaning
TPU	Transit Path Unit for Perfect Binder Type S1 (D736)*1
TRM	Trimmer Unit 5040 (D520)*1
VTU	Vertical Transport Unit
*1	Optional peripheral devices.

Trademarks

- Microsoft[®], and Windows[®] are registered trademarks of Microsoft Corporation in the United States and /or other countries.
- PostScript[®] is a registered trademark of Adobe Systems, Incorporated.
- PCL[®] is a registered trademark of Hewlett-Packard Company.
- Ethernet[®] is a registered trademark of Xerox Corporation.
- PowerPC® is a registered trademark of International Business Machines Corporation.
- Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

TABLE OF CONTENTS

Revision History	1
Symbols, Abbreviations and Trademarks	2
Conventions	2
Warnings, Cautions, Notes	3
Safety Label	4
Commonly Used Terms and Abbreviations	4
Trademarks	6
1. Replacement and Adjustment	
Removing Trays	9
Doors and Covers	11
Top Covers	11
Left Rear Cover	13
Right Rear Cover	13
Right Cover	14
Inner Covers	14
Inner Upper Cover	14
Inner Lower Cover	15
Paper Feed	16
Paper Feed Unit	16
When reinstalling the paper feed unit	17
Paper Feed, Separation and Pickup Rollers	17
Top Tray (Tray 3)	17
Middle Tray (Tray 4)	19
Bottom Tray (Tray 5)	21
LCT Motors	25
Transport Motors, LCT Exit Motor	25
3rd, 4th, and 5th Transport Motors ① ② ③	25
LCT Exit Motor 4	26
Feed Motors, Grip Motors	26
Reinstallation	27
Lift Motors	27
3rd, 5th Lift Motors	27
4th Lift Motor	28

Exit Roller Lift Motor	29
Cooling Fan	30
Electrical Components	32
Paper Feed and End Sensors	32
When reinstalling the sensor bracket	32
Lift Sensor	33
LCT Exit Sensor	34
Exit Roller Lift Sensor	35
Removing the Vertical Feed Unit	36
4th Transport, 4th Relay Upper, Lower Sensors	38
5th Relay Sensor, 5th Transport Sensor	39
6th Relay Sensor, 6th Transport Sensor	40
Main Control Board	40
Paper Height, Paper Width Sensors	41
Paper Height Sensors	41
Paper Width Sensors	41
Adjustment	43
Side Registration Adjustment	43
Double Feed Problem from LCT	43

1. Replacement and Adjustment

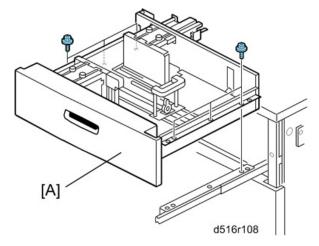
Removing Trays

ACAUTION

- Tray 4 weighs 27 kg (60 lb) empty. Trays 3 and 5 weigh 20 kg (44 lb) each empty.
- To prevent damage to the tray and personal injury, never attempt to lift a tray alone or without attaching the carrying handles, especially if a tray is loaded with paper.
- Two people on each side of the tray should lift the carrying handles together to lift and move the tray.
- Never remove the tray if the LCT has not been docked to the copier. Removing the tray while the LCT is standing alone can unbalance the LCT and cause it to fall over.



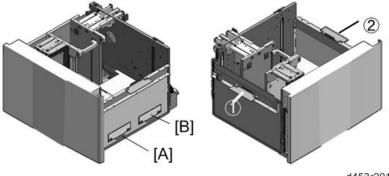
• Only one set of carrying handles is attached to the side of Tray 4. Follow the procedure below to attach and use these handles to move Tray 3, 4, or 5.



- 1. Pull the tray [A] out of the LCT until it stops.
- 2. Remove the screws from the right rail [B] (Fx3)
- 3. Remove the screws from the left rail [D] (** x3)



• You do not need to remove screw for the stopper pin bracket at the back of the left rail.



- d453r201
- 4. Remove carrying handles [A] and [B] from the right side of the tray (*\bar{k} \times 2 ea.)
- 5. Use the same screws to attach the carrying handles at 1 and 2.
- 6. With one person on each side of the tray, lift it carefully and remove it from the rails.

Doors and Covers

Top Covers



• The top covers must be removed in order from left to right.



d7320041

1. Open the front door.



d7320042

2. Disconnect the front [A] and rear [B] (*\bar{p} x4).



d7320043

3. Remove the top left cover.



d7320044

4. Remove the left flat cover (Fx2).



d7320045

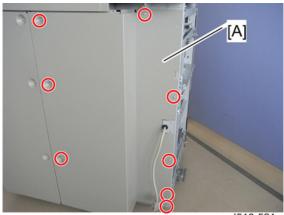
5. Remove the center flat cover (Fx2).



d7320046

6. Remove the right flat cover (*\mathbb{F} x2).

Left Rear Cover



d516r521

1. Left rear cover [A] (🗗 x8)

Right Rear Cover

1. Left rear cover



d516r522

2. Right rear cover [A] (Fx6)

Right Cover

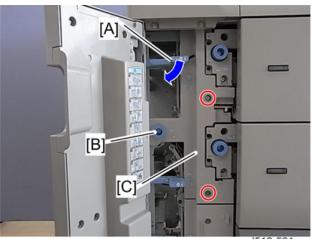


- 1. Pull all the LCT trays out a short distance.
- 2. Right cover [A] (*\bar{\mathbb{P}} \times 6)

Inner Covers

Inner Upper Cover

1. Open the front door.

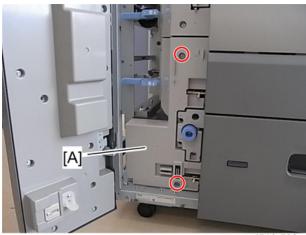


d516r501

- 2. Pull down the **U1** lever [A].
- 3. Remove:
 - [B] Knob (🗗 x1)
 - [C] Inner upper cover (Px2)

Inner Lower Cover

1. Open the front door.



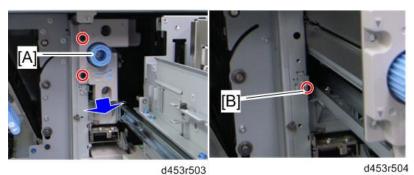
d516r502

2. Inner lower cover [A] (*\bar{x}2)

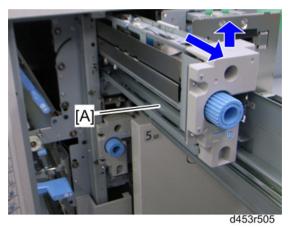
Paper Feed

Paper Feed Unit

- 1. Pull out the top, middle or bottom tray.
- 2. Inner upper or lower cover page 14
 - For the paper feed unit in the top tray or middle tray, remove the inner upper cover.
 - For the paper feed unit in the bottom tray, remove the inner lower cover.

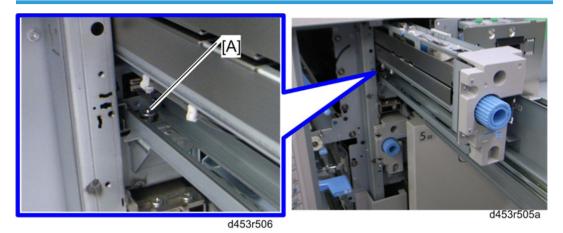


- 3. Pull the paper feed unit [A] (*x 2).
- 4. Stopper bracket [B] (🗗 x 1)



5. Pull the paper feed unit [A] out fully, and then lift it.

When reinstalling the paper feed unit



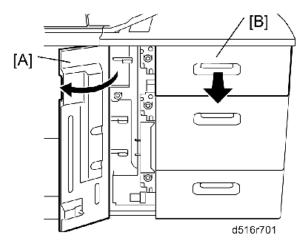
When reinstalling the paper feed unit, align the cutout in the slide rail with the stud screw, and then install the paper feed unit.

Paper Feed, Separation and Pickup Rollers

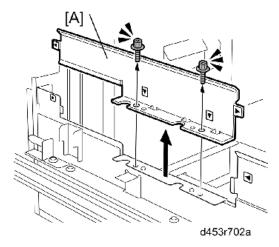
Top Tray (Tray 3)

ACAUTION

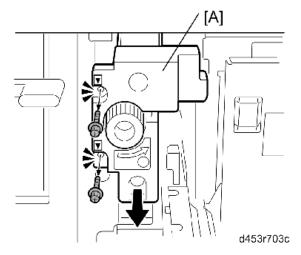
• Before doing this procedure, turn off the main machine and disconnect it from its power source.



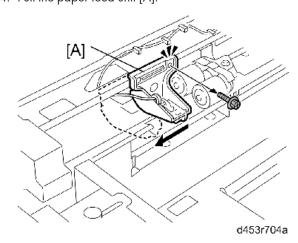
- 1. Open the front door [A].
- 2. Pull out the top tray [B] until it stops.



3. Side plate [A] (*x 2)



4. Pull the paper feed unit [A].

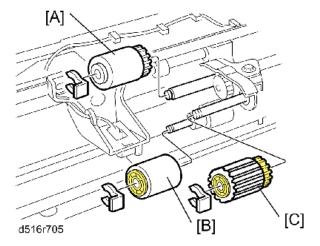


1

5. Slide the sensor bracket [A] to the front (*x 1).



• Note the original position of this bracket. It must be re-installed at its original position.



6. Remove:

[A]: Paper feed roller (🛱 x 1)

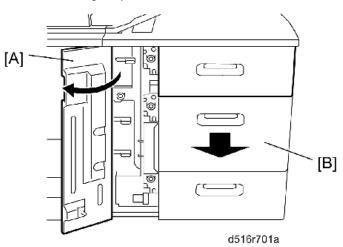
[B]: Separation roller ((x 1)

[C]: Pickup roller (🛱 x 1)

Middle Tray (Tray 4)

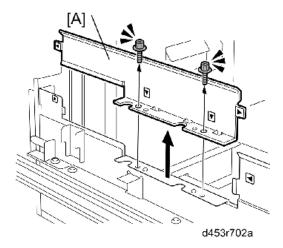
ACAUTION

• Before doing this procedure, turn off the main machine and disconnect it from its power source.

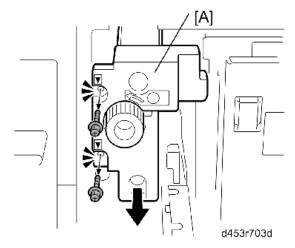


1. Open the front door [A].

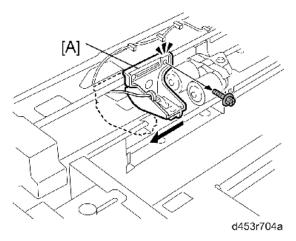
2. Pull out the middle tray [B].



3. Side plate [A] (*x 2)



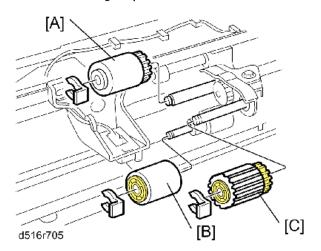
4. Pull the paper feed unit [A] (\$ x 2).



5. Slide the sensor bracket [A] to the front (*x 1).



• Note the original position of this bracket. It must be re-installed at its original position.



6. Remove:

[A]: Paper feed roller (🛱 x 1)

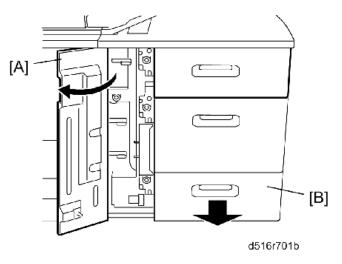
[B]: Separation roller (🛱 x 1)

[C]: Pickup roller (🛱 x 1)

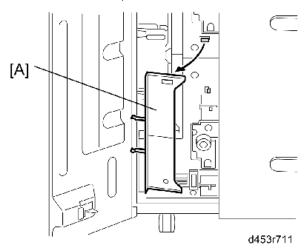
Bottom Tray (Tray 5)



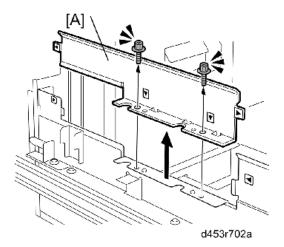
• Before doing this procedure, turn off the main machine and disconnect it from its power source.



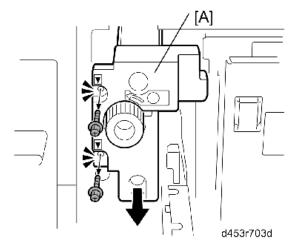
- 1. Open the front door [A].
- 2. Pull out the bottom tray [B].



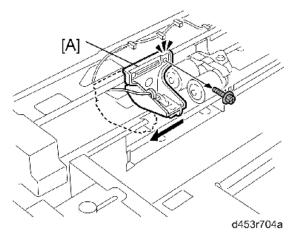
3. Paper end fence [A] if it is stored here.



4. Side plate [A] (*x 2)



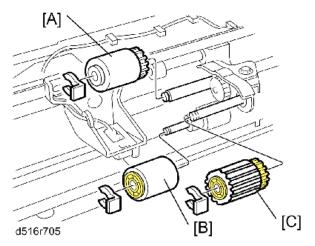
5. Pull the paper feed unit [A] (*x 2).



6. Slide the sensor bracket [A] to the front (*x 1).



• Note the original position of this bracket. It must be re-installed at its original position.



7. Remove:

[A]: Paper feed roller (🛱 x 1)

[B]: Separation roller (\$\overline{O}x 1)\$

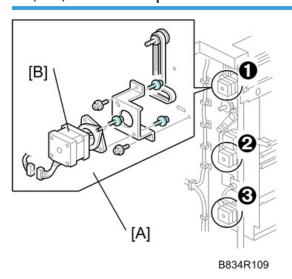
[C]: Pickup roller (🛱 x 1)

٦

LCT Motors

Transport Motors, LCT Exit Motor

3rd, 4th, and 5th Transport Motors 1 2 3



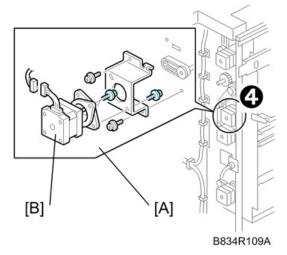
Remove:

• Left rear cover page 13

[A] Motor unit (x1, x1, x2)

[B] Motor (**?** x2)

LCT Exit Motor 4



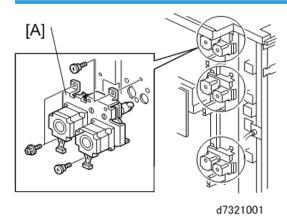
Remove:

• Left rear cover page 13

[A] Motor unit (x1, x1, x3)

[B] Motor (**?** x2)

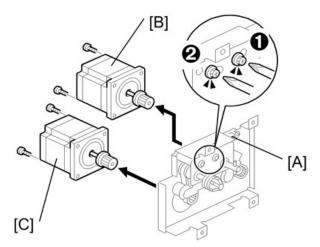
Feed Motors, Grip Motors



Each paper feed unit has a pick-up feed motor $^{\textcircled{1}}$ and a grip motor $^{\textcircled{2}}$. The removal procedure is the same for each feed tray.

- 1. Left rear cover page 13
- 2. Motor unit [A] (* x4, *x2, *x2)

1



B834R109C

3. Remove:

[A]: Springs (x2) (First, loosen the screws (x2) ①, ②.)

[B]: Paper feed motor (Fx2, Ox1)

[C]: Grip motor (*\bar{P} x2, *\bar{O} x1)

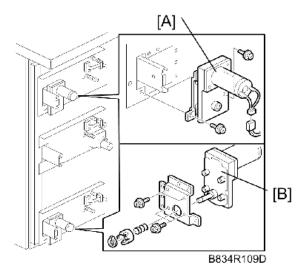
Reinstallation

Attach the tension spring, then tighten the screws to tighten the belts.

Lift Motors

3rd, 5th Lift Motors

The procedure for removing the 3rd and 5th lift motors is the same.

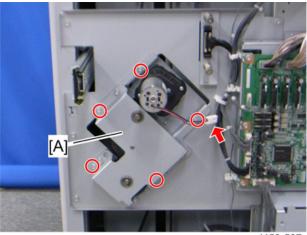


Remove:

• Right rear cover page 13

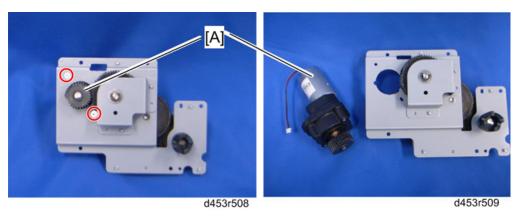
4th Lift Motor

1. Right rear cover



d453r507

2. Motor unit [A] (🗗 x 5, 🚅 x1)



3. 4th lift motor [A] (🗗 x 2)

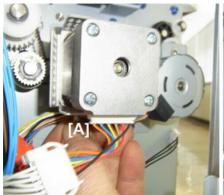
Exit Roller Lift Motor

1. Left rear cover page 13



d516r001

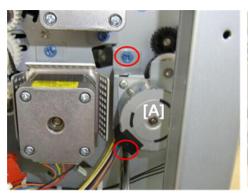
2. The motor is located at [A].

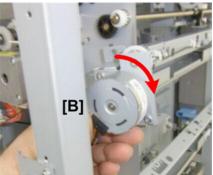




d516r002

3. Disconnect the motor at [A] and [B] (🖨 x 1, 🚅 x 1)





d516r003

- 4. Disconnect the motor mount [A] (*\bar{p} x1).
- 5. Remove the motor [B].





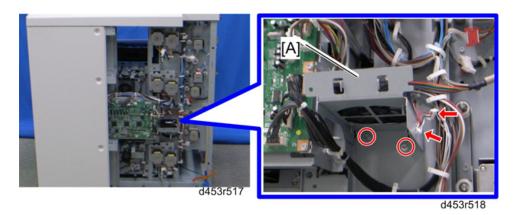


d516r004

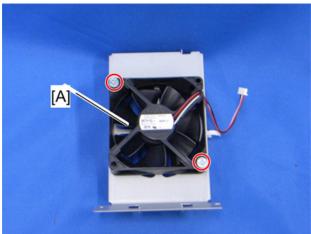
6. Separate the motor and bracket (\slashed{p} x2, \slashed{O} x1).

Cooling Fan

1. Left rear cover page 13



2. Fan bracket [A] (🎤 x 2, 🖨 x 1, 📬 x 1)



d453r519

3. Cooling fan [A] (🗗 x 2)



• When reinstalling the cooling fan, make sure that the cooling fan is installed with its decals facing upward.

Electrical Components

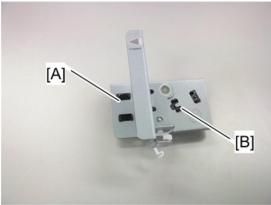
Paper Feed and End Sensors

1. Pull out the paper feed unit



d516r510

2. Sensor bracket [A] (Fx1, black screw x1, №x1, ₩x2)



d516r511

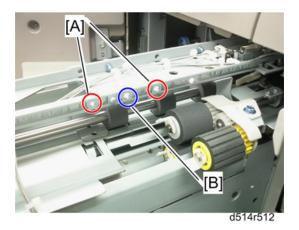
3. Remove:

[A]: Paper feed sensor (hooks)

[B]: Paper end sensor (hooks)

When reinstalling the sensor bracket

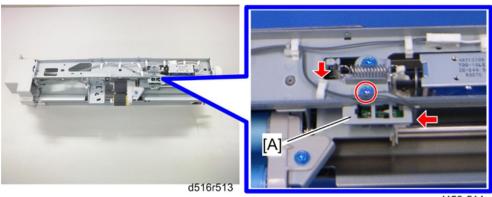
 Make sure that the white connector is connected to the paper feed sensor and the red connector is connected to the paper end sensor.



• Use two holes [A] when attaching the sensor bracket. Do not use the hole [B].

Lift Sensor

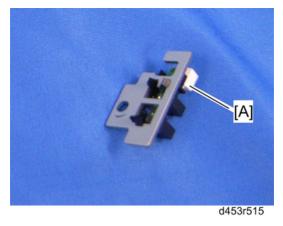
1. Paper feed unit page 16



d453r514

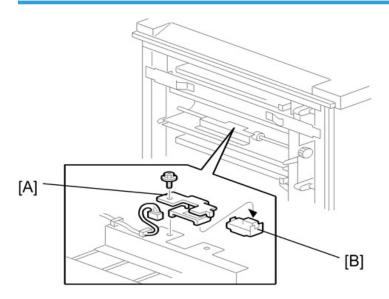
2. Sensor bracket [A] (🌶 x1, 🖨 x1, 📬 x1)





3. Lift sensor [A] (x3)

LCT Exit Sensor

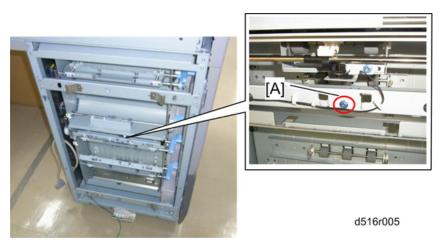


B834R105

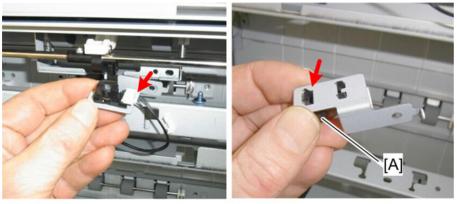
- Disconnect the LCT from the copier.
 - [A] Exit sensor unit (Fx1, LX1)
 - [B] Exit sensor

Exit Roller Lift Sensor

• Disconnect the LCT from the main machine.



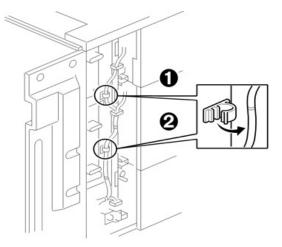
1. Sensor bracket [A] (**x1)



d516r006

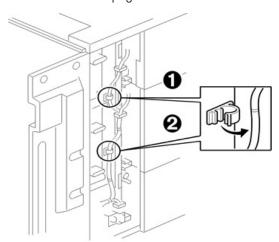
2. Exit roller lift sensor [A] (€ x1, x4)

Removing the Vertical Feed Unit



B834R105A

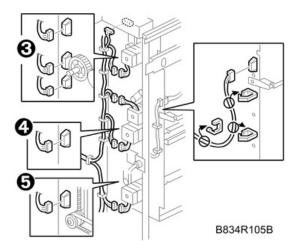
- 1. Open the front door.
- 2. Remove:
 - Inner upper cover page 14
 - Inner lower cover page 15
 - Left rear cover page 13



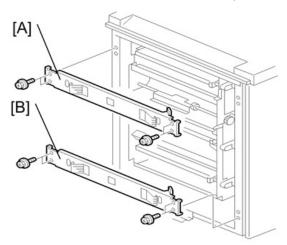
B834R105A

3. Disconnect the harness clamps 1 and 2 (2 x 2).

1



4. Disconnect the motor harnesses 3, 4, 5 (2 x 3, 11).



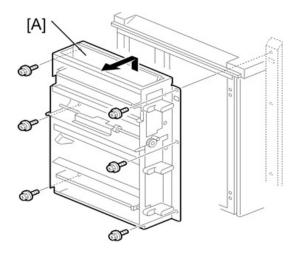
B834R105C

5. Remove:

[A]: Upper stay (🎤 x 2)

[B]: Lower stay (🎤 x 2)

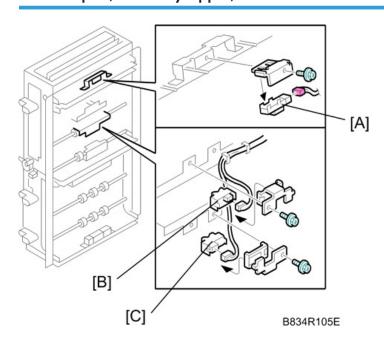




B834R105D

6. Vertical feed unit [A] (🗗 x 6)

4th Transport, 4th Relay Upper, Lower Sensors



- 1. Vertical feed unit page 36
- 2. Remove:

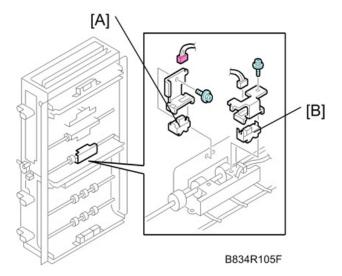
[A]: 3rd Transport sensor (🎤 x1, 📬 x1)

[B]: 3rd Relay sensor – upper (🎤 x1, 📬 x1)

٦

[C]: 3rd Relay sensor – lower (🎤 x1, 🚅 x1)

5th Relay Sensor, 5th Transport Sensor

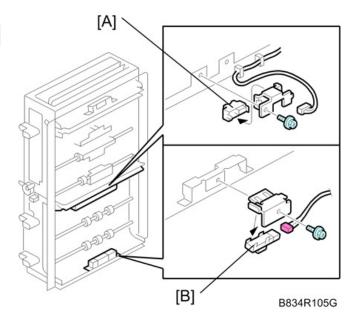


- 1. Vertical feed unit page 36
- 2. Remove:

[A]: 4th Relay sensor (🗗 x1, 📬 x1)

[B]: 4th Transport sensor (🎤 x1, 📬 x1)

6th Relay Sensor, 6th Transport Sensor



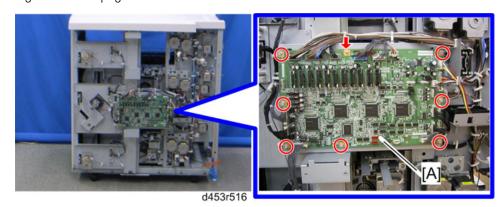
- 1. Vertical feed unit page 36
- 2. Remove:

[A]: 5th Relay sensor (🗗 x1, 🚅 x1)

[B]: 5th Transport sensor (🗗 x1, 📬 x1)

Main Control Board

- 1. Left rear cover page 13
- 2. Right rear cover page 13



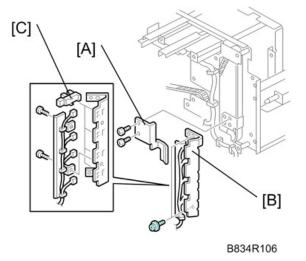
3. Main control board [A] (\mathcal{F} x 7, $\overline{\$}$ x 1, $\mathbf{L} \mathbf{J}$ x All).

1

1

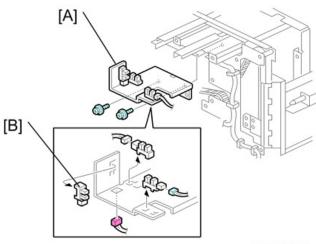
Paper Height, Paper Width Sensors

Paper Height Sensors



- 1. Left rear cover page 13
- 2. Remove:
 - [A]: Paper height sensor unit (🎤 x 2, 📬 x 4).
 - [B]: Clamp bracket (F x 2)
 - [C]: Paper height sensors (x 4) (\mathbf{x} 3, \mathbf{z} 4 x 2 each)

Paper Width Sensors

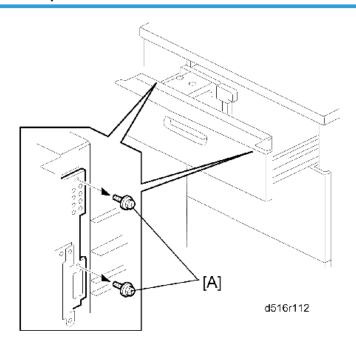


B834R106A

- 1
- 1. Left rear cover page 13
- 2. Remove:
 - [A]: Paper width sensor unit (🎤 x 2, 😂 x 3)
 - [B]: Paper width sensors (□ x 3) (▼x2 each)

Adjustment

Side Registration Adjustment



Normally the side registration of the image can be adjusted with SP1002-004 to -006 (Side-to-Side Registration – Tray 3, 4, 5). When the punch hole positions are not aligned from a particular feed station, adjust the side registration by changing the tray cover position for the tray, as described below. Then adjust the side registration of the image with the SP1002.

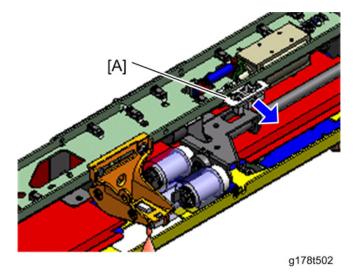
- 1. Pull out the tray.
- 2. Change the screw positions [A] at both the right and left sides as shown.



• Adjustment range: 0 ± 2.0 mm adjustment step: 0.5 mm/step

Double Feed Problem from LCT

If double feed occurs several times when paper is fed from an LCT (Tray 3, 4 or 5), try to change the upper limit of the paper stack in the LCT tray. Changing the upper limit of the paper stack in the LCT tray can improve paper separation for the paper stack in the LCT tray.



- 1. Remove the paper feed unit of the LCT unit. page 36
- 2. Loosen the screw on the paper lift sensor bracket [A].
- 3. Move the bracket 0.5 mm in the arrow direction as shown above.
- 4. Tighten the screw on the paper lift sensor bracket [A].

- To return the upper limit position to the default position, move the paper lift sensor bracket 0.5 mm to the opposite side.
- Return the upper limit position to the default if a paper jam occurs at the paper feed sensor in the LCT.