

Paper Feed Unit PB2020
Machine Code: D3B1
Field Service Manual

June 2015

Safety and Symbols




Replacement Procedure Safety

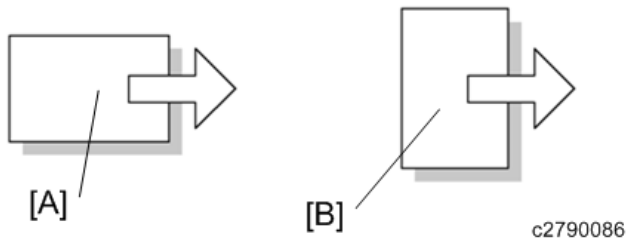
CAUTION

- Turn off the main power switch and unplug the machine before beginning any of the replacement procedures in this manual.

Symbols and Abbreviations

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

	Screw
	Shoulder screw
	Black screw (TCRU)
	Connector
	FFC (Flat Film Connector)
	Harness clamp
	Clip
	E-ring
	C-ring
	Timing belt
	Spring
SEF	Short Edge Feed
LEF	Long Edge Feed



[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

Cautions, Notes, etc.

The following headings provide special information:

WARNING

- FAILURE TO OBEY WARNING INFORMATION COULD RESULT IN SERIOUS INJURY OR DEATH.

CAUTION

- Obey these guidelines to ensure safe operation and prevent minor injuries.

Note

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

Trademarks

Bonjour is trademarks of Apple Inc., registered in the U.S. and other countries.

Java is a registered trademark of Oracle and/or its affiliates.

LINUX is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft, Windows, Windows Server, Windows Vista, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Red Hat is a registered trademark of Red Hat, Inc.

The SD is a trademark of SD-3C, LLC.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

Microsoft product screen shots reprinted with permission from Microsoft Corporation.

TABLE OF CONTENTS

Safety and Symbols.....	1
Replacement Procedure Safety.....	1
Symbols and Abbreviations.....	1
Cautions, Notes, etc.....	2
Trademarks.....	2

1. Replacement and Adjustment

Covers and Roller.....	5
Paper Tray.....	5
Rear Cover.....	5
Pick-up Roller.....	5
Paper Feed Roller.....	6
Friction Roller.....	7
Vertical Transfer Rollers.....	8
Vertical Transfer Roller (Driving Side).....	8
Vertical Transfer Roller (Driven Side).....	10
Motors and Clutch.....	12
Tray Lift Motor.....	12
Transport Motor.....	12
Paper Feed Clutch.....	13
Sensors and Board.....	16
Paper End Sensor.....	16
Tray Lift Sensor.....	16
Paper Feed Sensor.....	17
Tray Set Switch.....	17
Right Door Switch.....	18
Main Board.....	19



1. Replacement and Adjustment

Covers and Roller

1

Paper Tray

1. Pull out the paper tray [A].



d3b1k0001

Rear Cover

1. Rear cover [A] (⌀ x 4)

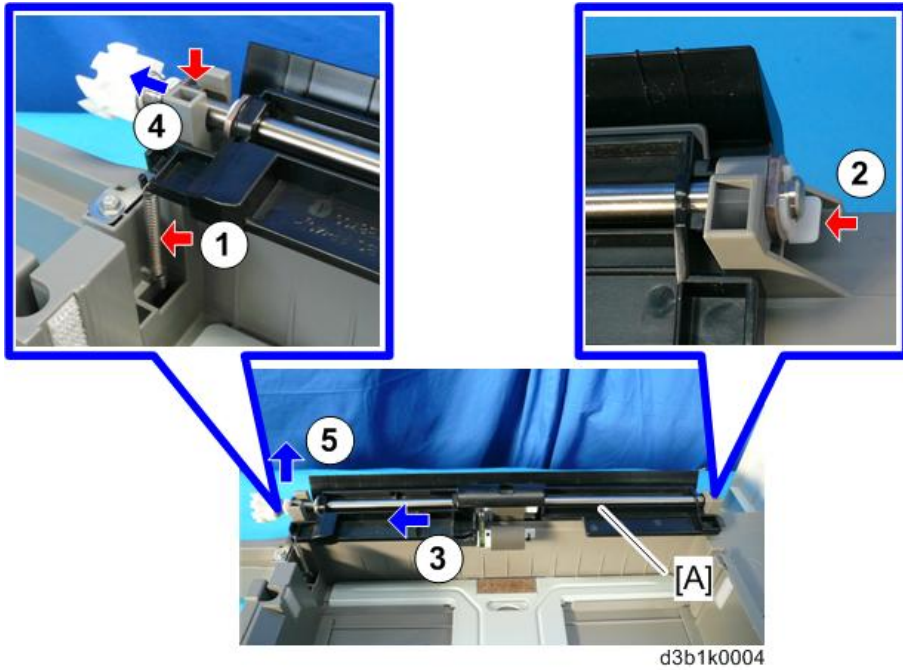


d3b1k0002

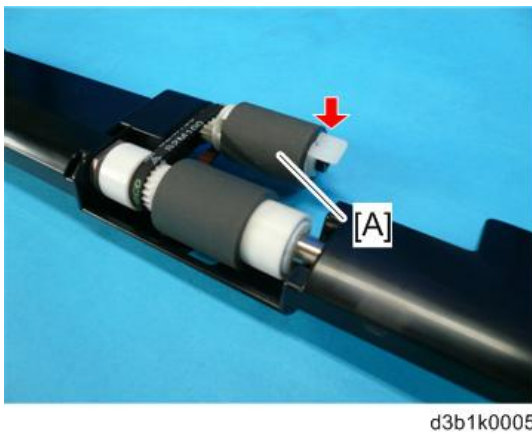
Pick-up Roller

1. Paper tray (page 5)

2. Pick-up roller unit [A] (⌀ x 1, bearing x 1)



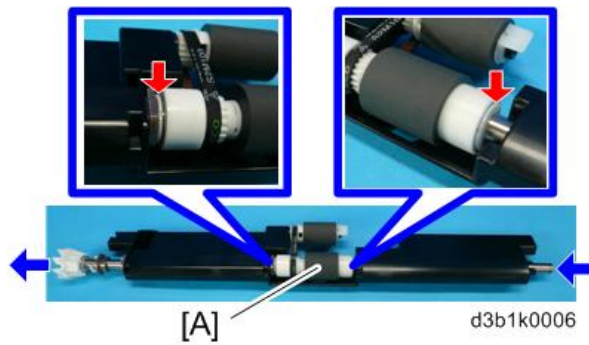
3. Pick-up roller [A] (⌀ x 1)



Paper Feed Roller

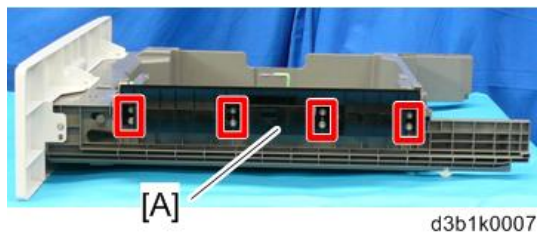
1. Pick-up roller unit (page 5)

2. Paper feed roller [A] (🔩 x 2)

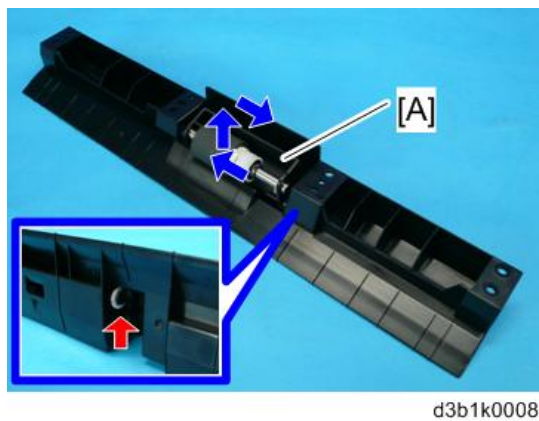


Friction Roller

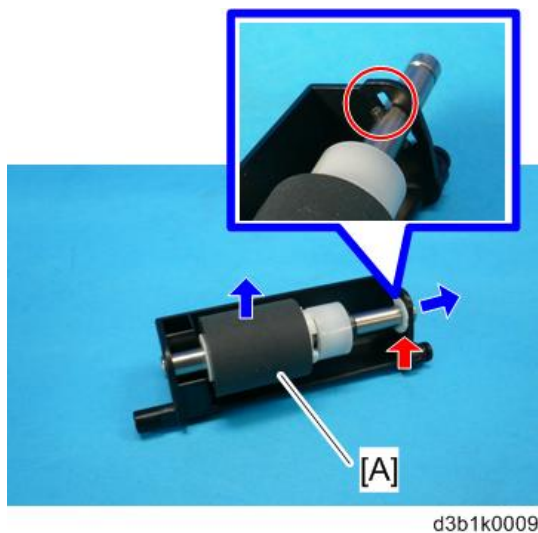
1. Paper feed guide [A] (🔩 x 8)



2. Friction roller bracket [A] (🔩 x 1)



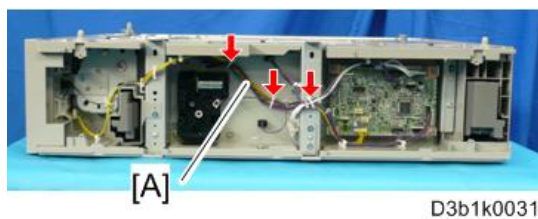
3. Friction roller [A] (🔩 x 1)



Vertical Transfer Rollers

Vertical Transfer Roller (Driving Side)

1. Paper tray (page 5)
2. Rear cover (page 5)
3. Release the sensor harness [A] (🔩 x 3)

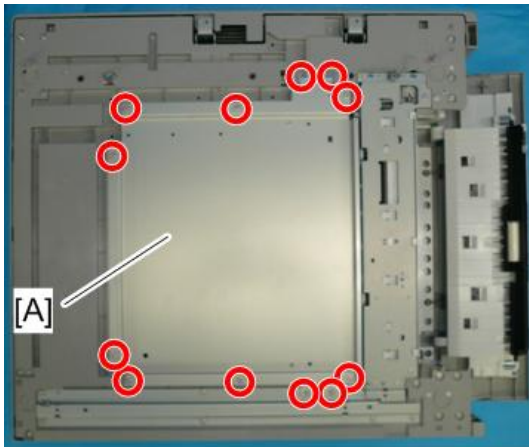


4. Open the right door [A].



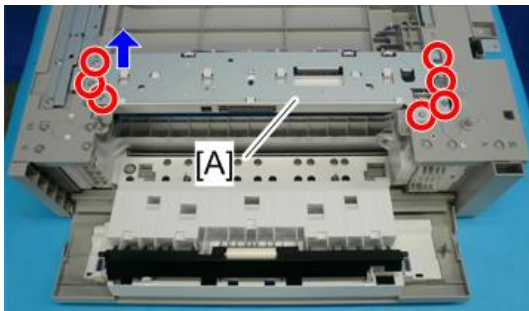
d3b1k0010

5. Top cover [A] (⌀ x 12)



d3b1k0011

6. Vertical transfer roller unit [A] (⌀ x 7)

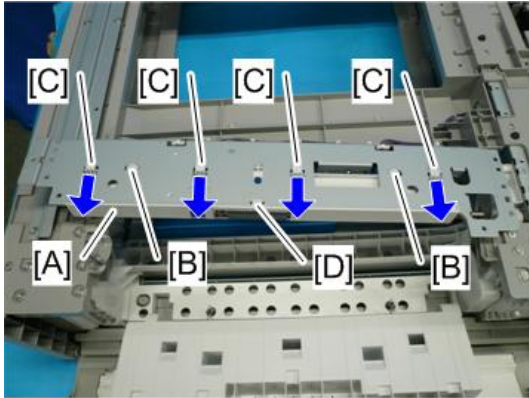


D3b1k0012

7. Vertical transfer roller cover [A]

↓ Note

- Slide the hooks [C] with the buttons [B] held pressed, and then release the hook [D] to remove the vertical transfer roller cover [A].



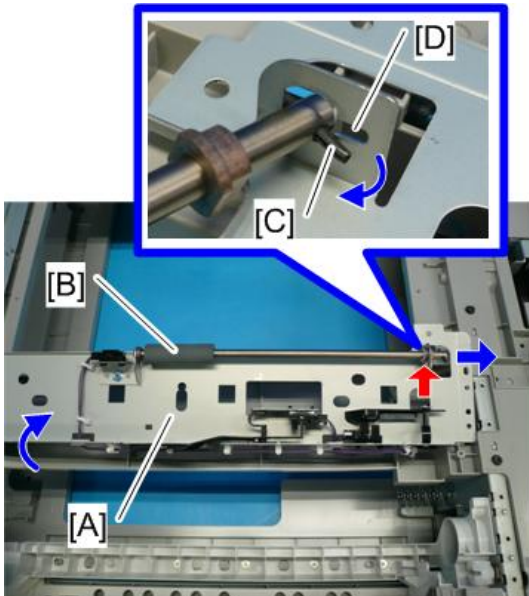
D3b1k0013

8. Turn the vertical transfer roller unit [A] upside down.

9. Vertical transfer roller [B] (1 x 1)

Note

- Slide the vertical transfer roller axis, and then pull out the vertical transfer roller [B] from the bracket by aligning the pin [C] with the slot [D] of the bracket.

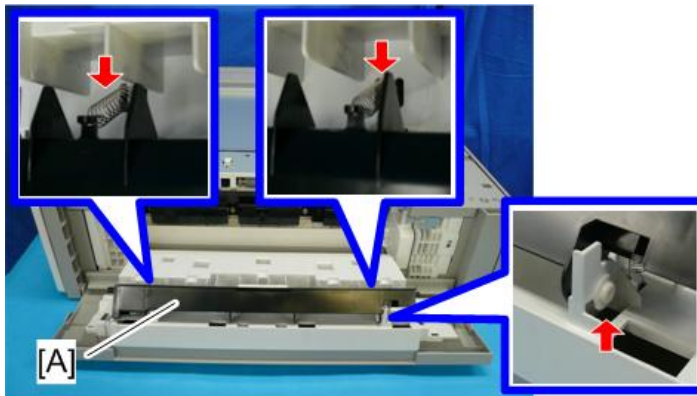


D3b1k0027

Vertical Transfer Roller (Driven Side)

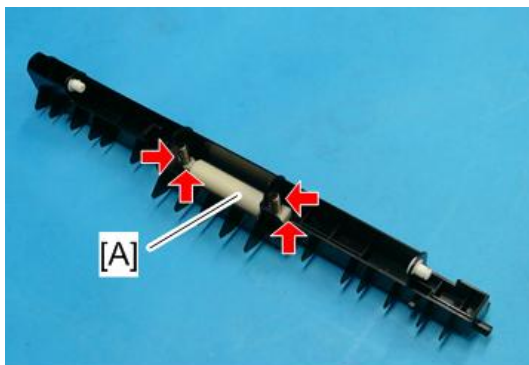
1. Open the right door (page 8).

2. Vertical transfer roller bracket [A] (🌀 x 1, 🌀 x 2)



D3b1k0025

3. Vertical transfer roller [A] (🌀 x 2, bushings x 2)



D3b1k0026

Motors and Clutch

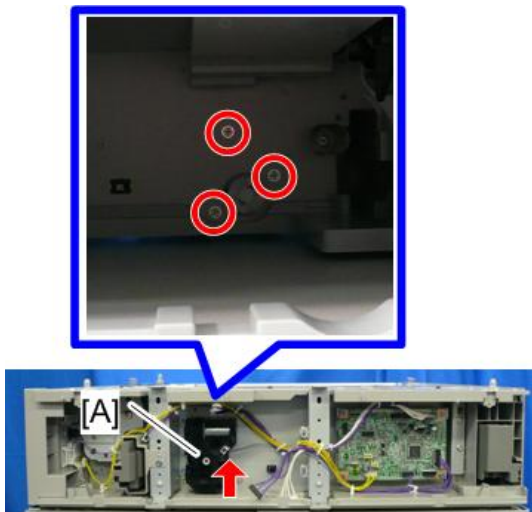
1

★ Important

- Unplug the machine power cord before starting the following procedure.

Tray Lift Motor

1. Paper tray (page 5)
2. Rear cover (page 5)
3. Tray lift motor [A] (⚙️ x 3, 📦 x 1)

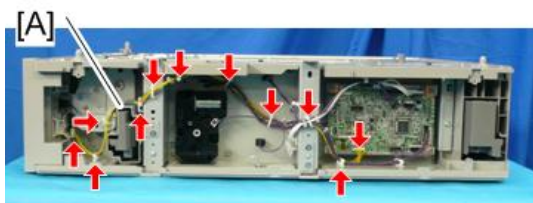


D3b1k0018

Transport Motor

1. Paper tray (page 5)
2. Rear cover (page 5)
3. Open the right door (page 8).

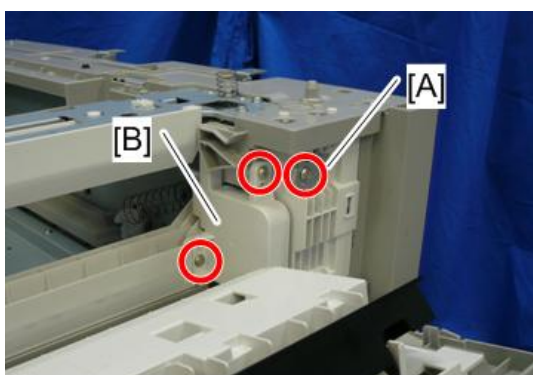
4. Transport motor harness [A] (🔌 x 10, 📦 x 1)



D3b1k0019

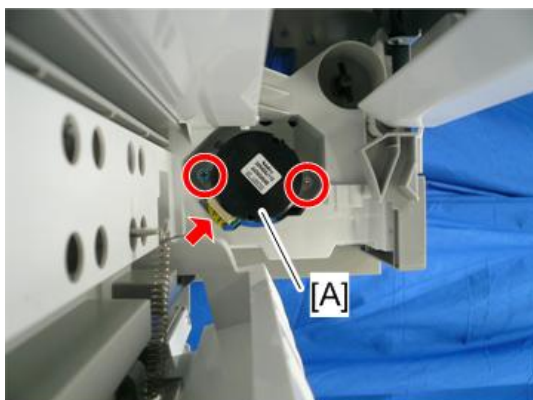
5. Right door bracket [A] (🔌 x 1)

6. Transport motor cover [B] (🔌 x 2)



D3b1k0020

7. Transport motor [A] (🔌 x 2, 📦 x 1)

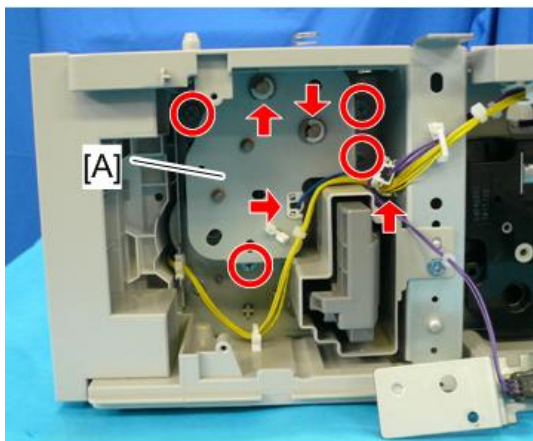


D3b1k0021

Paper Feed Clutch

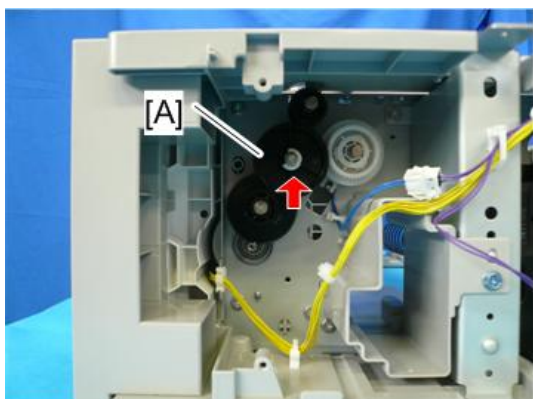
1. Rear cover (page 5)
2. Right door switch bracket (page 18)

3. Gear cover [A] (⌀ x 2, ⌀ x 2, ⌀ x 4)



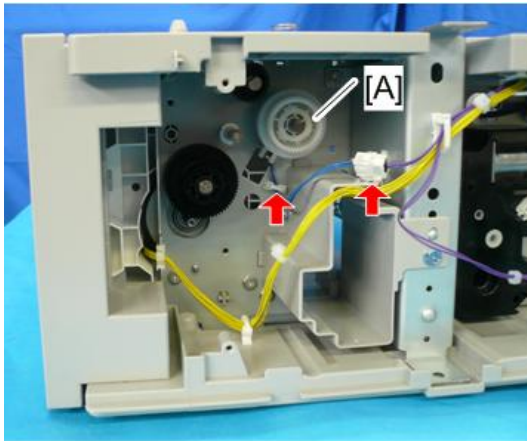
D3b1k0022

4. Gear [A] (⌀ x 1)



D3b1k0023

5. Paper feed clutch [A] (🔧 x 1, 📦 x 1)




D3b1k0024

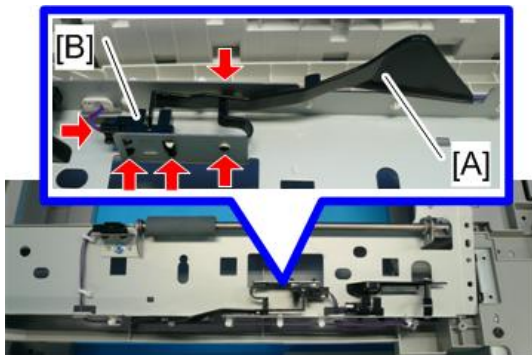
Sensors and Board

★ Important

- Unplug the machine power cord before starting the following procedure.

Paper End Sensor

1. Vertical transfer roller unit (page 8)
2. Paper end feeler [A] (▼ x 2)
3. Paper end sensor [B] (▼ x 2,  x 1)

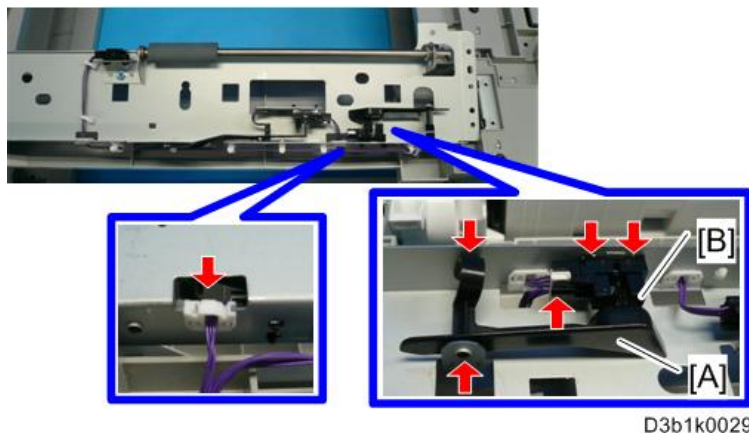


D3b1k0028




Tray Lift Sensor

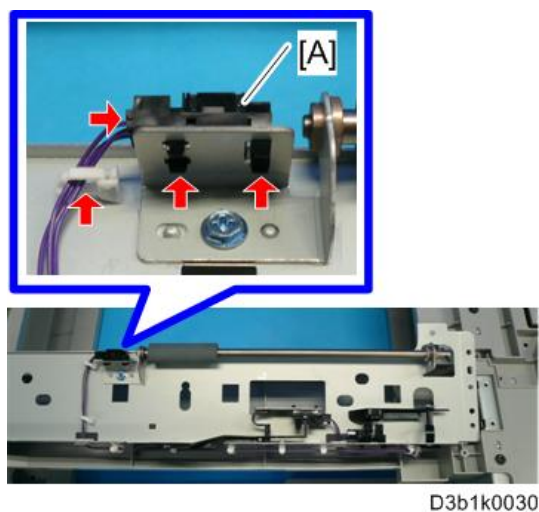
1. Vertical transfer roller unit (page 8)
2. Tray lift feeler [A] (▼ x 2)

3. Tray lift sensor [B] (x 2, x 1)



Paper Feed Sensor

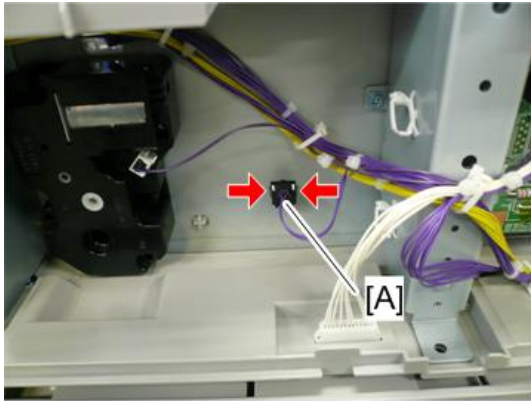
1. Vertical transfer roller unit (page 8)
2. Paper feed sensor [A] ( x 2,  x 1,  x 1)



Tray Set Switch

1. Paper tray (page 5)
2. Rear cover (page 5)

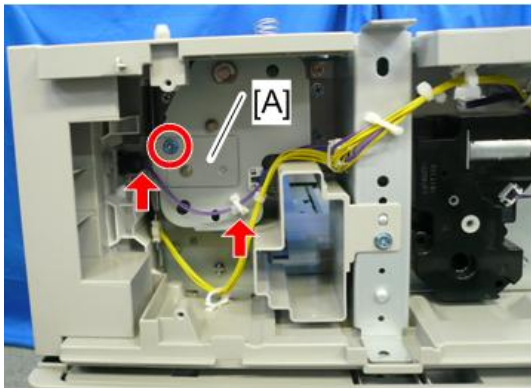
3. Pull out the tray set switch [A] from the front while releasing the hooks (🔧 x 2, 📦 x 1).



D3b1k0015

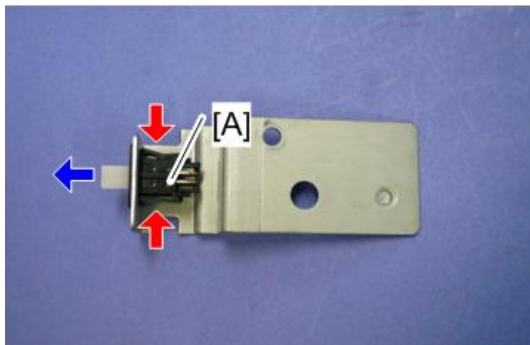
Right Door Switch

1. Rear cover (page 5)
2. Right door switch bracket [A] (🔧 x 1, 📦 x 1, 📦 x 1)



D3b1k0016

3. Right door switch [A] (▼ x 2)

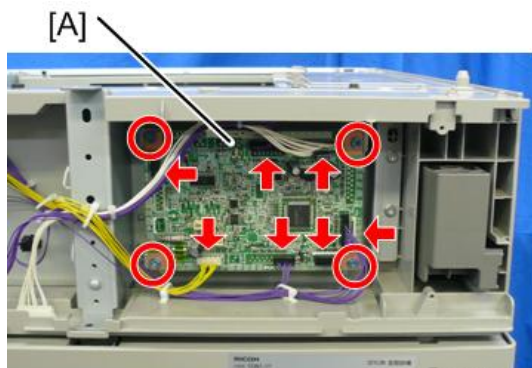


D3b1k0017

1

Main Board

1. Paper Tray (page 5)
2. Rear cover (page 5)
3. Main board [A] (▼ x 7, ⚙ x 4)



d3b1k0003

MEMO