

Paper Feed Unit TK1230/TK1240

Machine Code: M407/M408

Field Service Manual

Ver 1.0

Latest Release: Nov, 2016

Initial Release: Nov, 2016

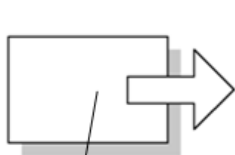
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Symbols, Abbreviations and Trademarks

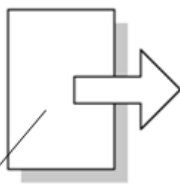
Symbols, Abbreviations

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

Symbol	What it means
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
	Flat Flexible Cable
	Timing Belt
SEF	Short Edge Feed
LEF	Long Edge Feed
K	Black
C	Cyan
M	Magenta
Y	Yellow
B/W, BW	Black and White
FC	Full color



[A]



[B]

c2790086

[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

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Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

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Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows 8 are as follows:

Microsoft® Windows® 8

Microsoft® Windows® 8 Pro

Microsoft® Windows® 8 Enterprise

- The product names of Windows 8.1 are as follows:

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Microsoft® Windows Server® 2012 Foundation

Microsoft® Windows Server® 2012 Essentials

Microsoft® Windows Server® 2012 Standard

- The product names of Windows Server 2012 R2 are as follows:

Microsoft® Windows Server® 2012 R2 Foundation

Microsoft® Windows Server® 2012 R2 Essentials

Microsoft® Windows Server® 2012 R2 Standard

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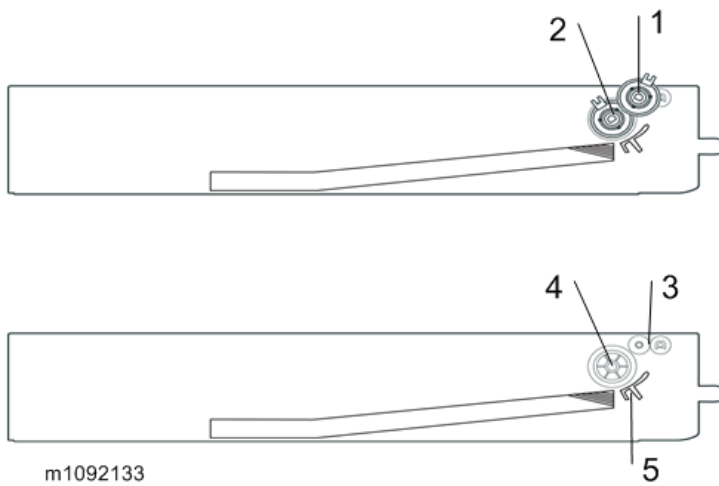
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1. Product Information

Overview

Specifications



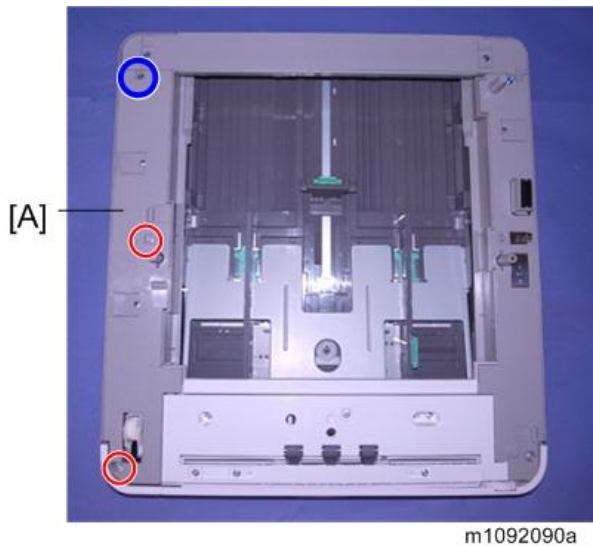
1. Grip roller clutch (Left side as viewed from the front of the machine)
2. Paper feed clutch (Right side as viewed from the front of the machine)
3. Grip roller
4. Paper feed roller
5. Friction pad

2. Replacement and Adjustment

Paper Feed Tray

Left Cover

1. Remove the left cover [A] (⌀×3).

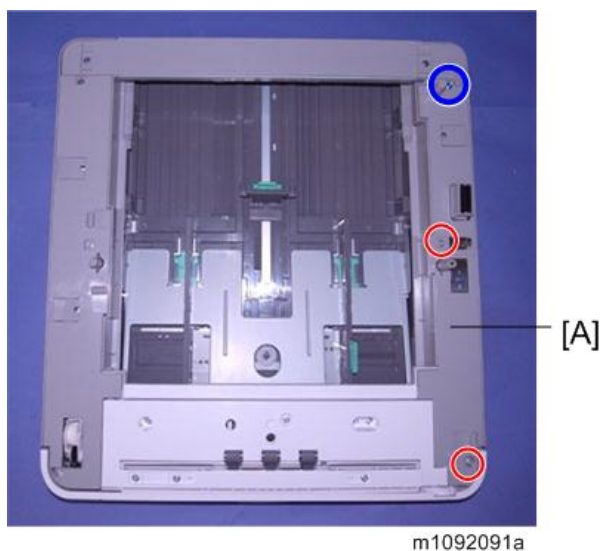


Note

- Two of the red circle is the tapping screws.

Right Cover

1. Remove the right cover [A] (⌀×3).



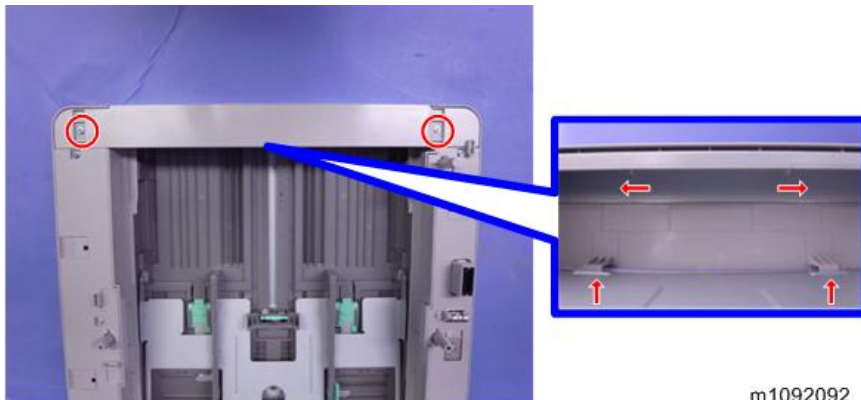
Note

- Two of the red circle is the tapping screws.

2.Replacement and Adjustment

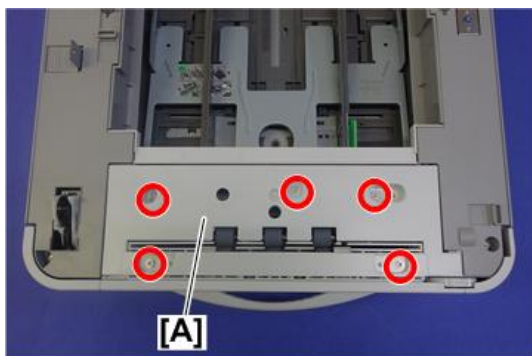
Rear Cover

1. Remove the rear cover [A] (⌀×2, Hook×4).



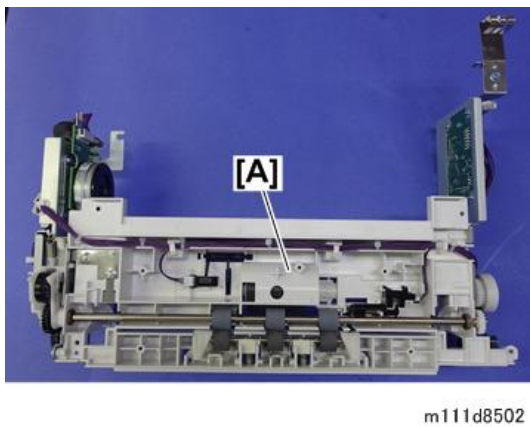
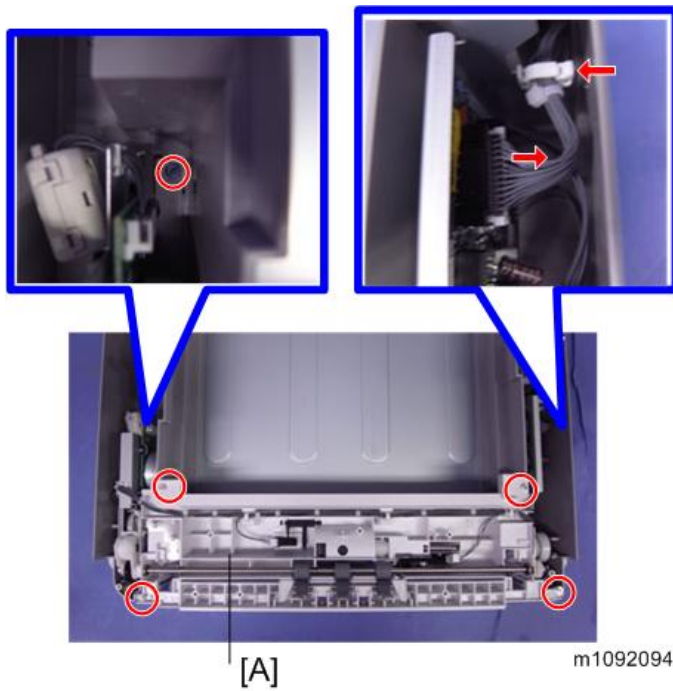
Paper Feed Unit

1. Remove the left cover (Left Cover).
2. Remove the right cover (Right Cover).
3. Remove the front cover [A] (⌀×5).



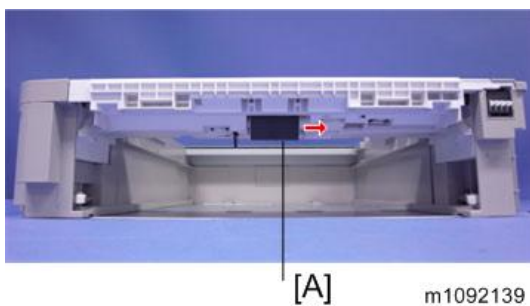
m111d8501

- 4.** Remove the paper feed unit [A] (⌀×5, ☐×1, 🌀×1).



Paper Feed Roller

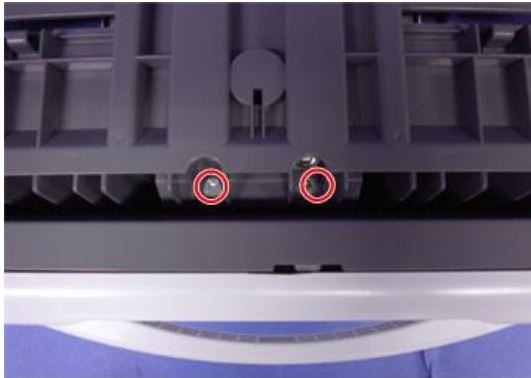
- 1.** Remove the paper feed roller [A].



2.Replacement and Adjustment

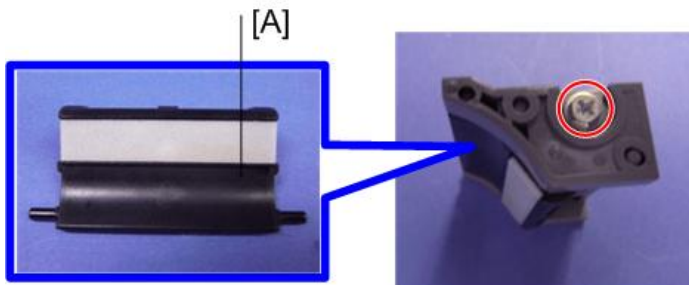
Friction Pad

- 1.** Remove the friction pad unit (🔩×2).



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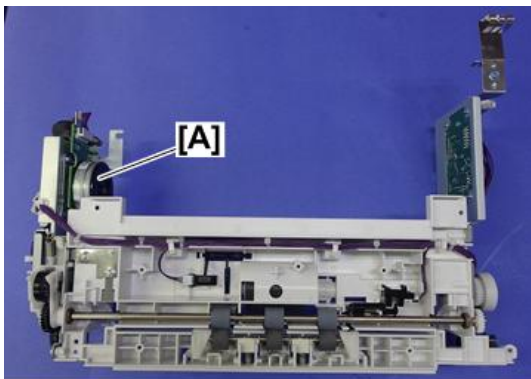
- 2.** Remove the friction pad [A] (🔩×1).



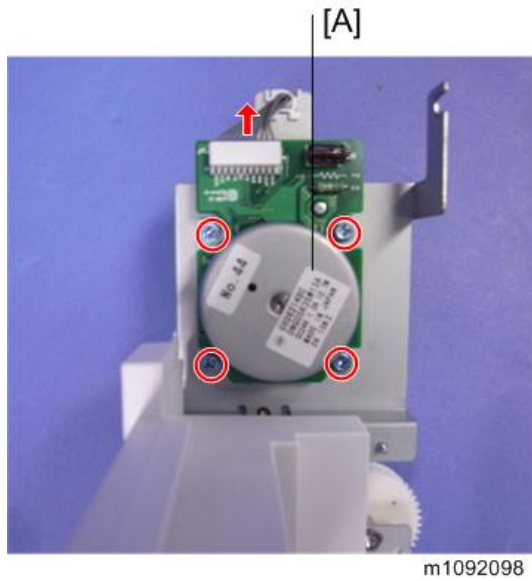
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Paper Feed Motor

- 1.** Remove the paper feed unit ([Paper Feed Unit](#)).
- 2.** Remove the paper feed motor [A] (🔩×4, 📦×1).

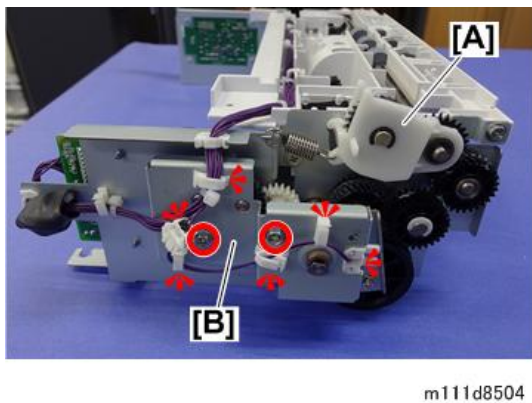


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Paper Feed Gear

1. Remove the paper feed unit ([Paper Feed Unit](#)).
2. Remove the gear cover [A] (⌀×2, ⌀×1) and the paper feed clutch bracket [B] (⌀×2, ⌀×1, ⌀×1), then remove each gear.

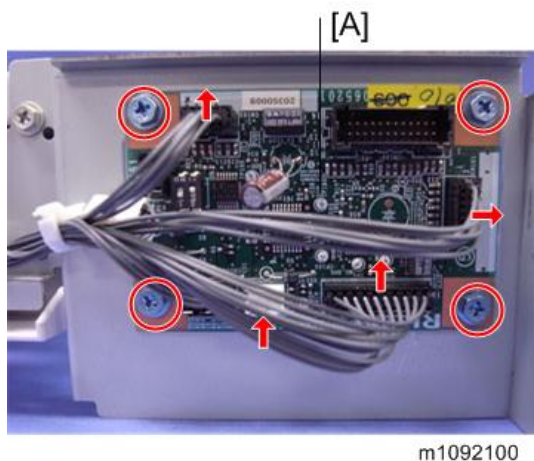


Paper Feed Tray Board

1. Remove the paper feed unit ([Paper Feed Unit](#)).

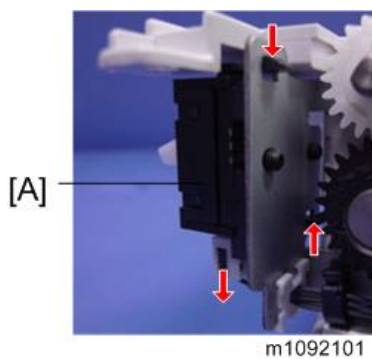
2.Replacement and Adjustment

2. Remove the paper feed tray board [A] (⌚×4, 📦×4).



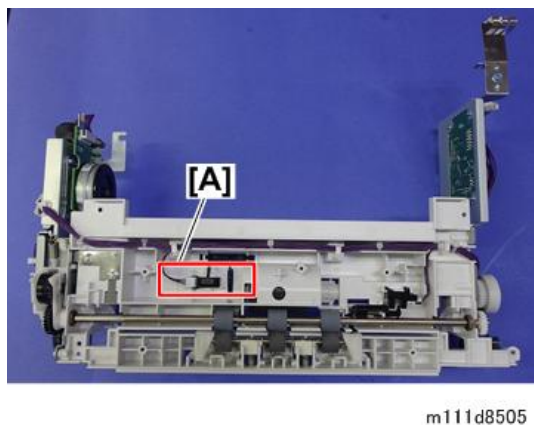
Paper Size Detection Switch

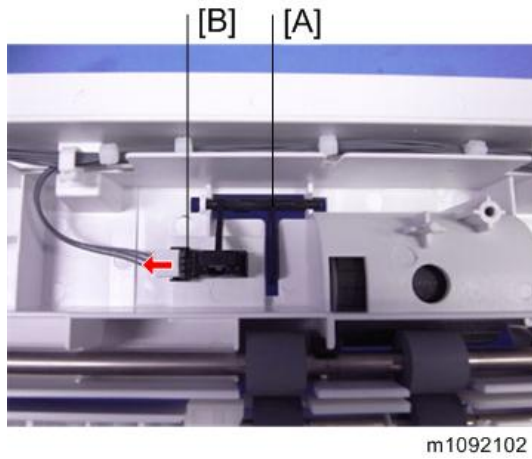
1. Remove the paper feed unit ([Paper Feed Unit](#)).
2. Remove the paper size detection switch [A] (📦×1, Hook×2).



Paper End Sensor

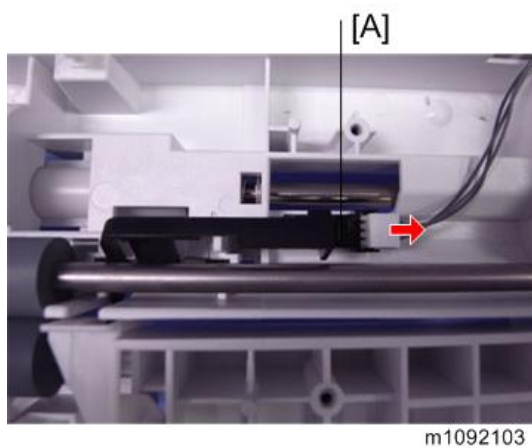
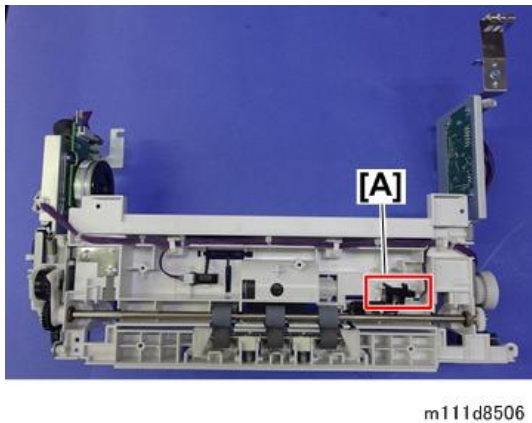
1. Remove the paper feed unit ([Paper Feed Unit](#)).
2. Remove the remove the feeler [B], then remove the paper end sensor [A] (📦×1).





Paper Feed Sensor

1. Remove the paper feed unit ([Paper Feed Unit](#)).
2. Remove the paper feed sensor [A] (🔧 ×1).



Side Fence Adjustment

For the optional paper tray, you can adjust the side-to-side registration within a range of 2 mm, by changing the position of the Pinion on the side fence.

1. Pull out the tray from the optional tray and then turn it over.

2.Replacement and Adjustment

Note

- With the default setting (± 0), the pinion is positioned so that the triangle marks are fully aligned.



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2. Loosen the screws and lift up the pinion. Adjust the side-to-side registration in the desired direction and then tighten the screws.



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Note

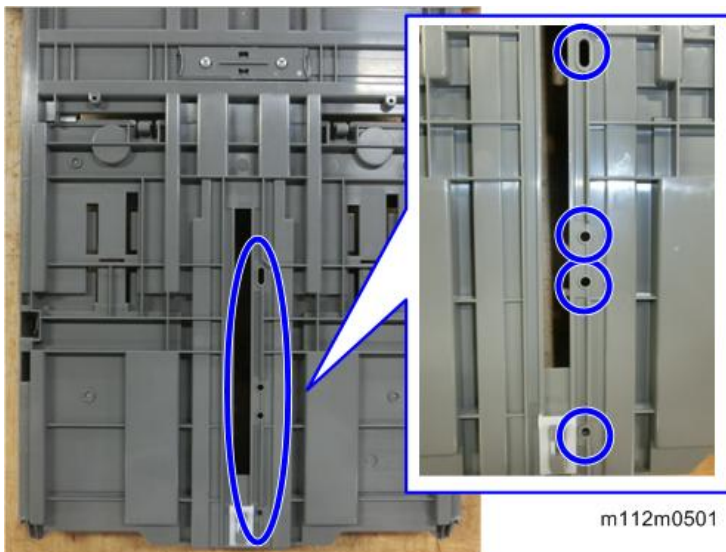
- The example image shows that the registration is adjusted by 2 mm to the right.

End fence and side fences

There are five screw holes so that the end fence and side fences can be fixed in place.

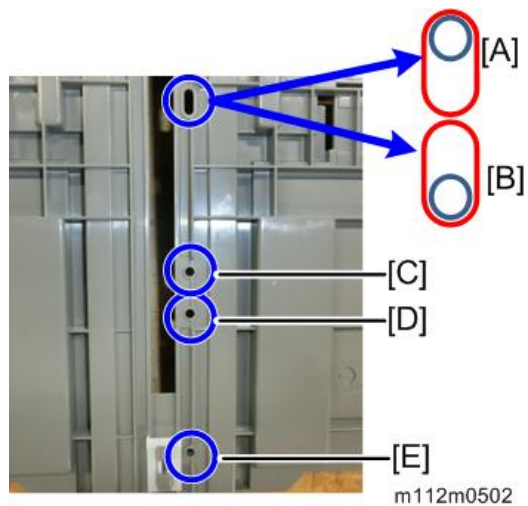
This is useful for ensuring that the paper guides will not move when the size of the paper to be used is fixed.

End fence



Note

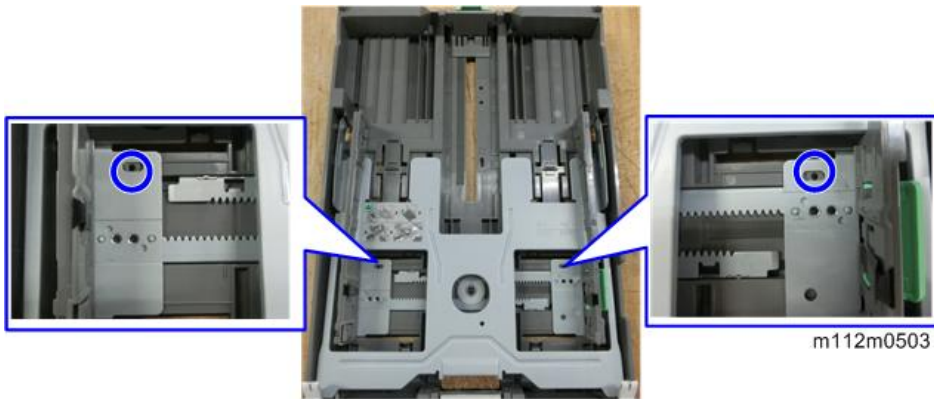
- Fixable paper sizes are shown below.



- [A]: A5 SEF
- [B]: 8.5" (HLT SEF)
- [C]: 11" (LT SEF)
- [D]: A4 SEF
- [E]: 14" (LG SEF)

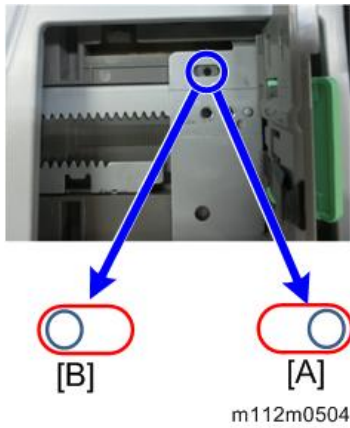
2.Replacement and Adjustment

Side fences



Note

- Fixable paper sizes are shown below.



- [A]: A4 SEF
- [B]: LG SEF/LT SEF

Mechanism

Paper Feed Separation Mechanism

Upon receiving the paper feed signal, the Paper Feed Clutch and the Griproller Clutch of the OptionalTray are turned on to rotate the Paper Feed Roller. Only the sheet in the top in the Cassette is fed by the Friction Pad.

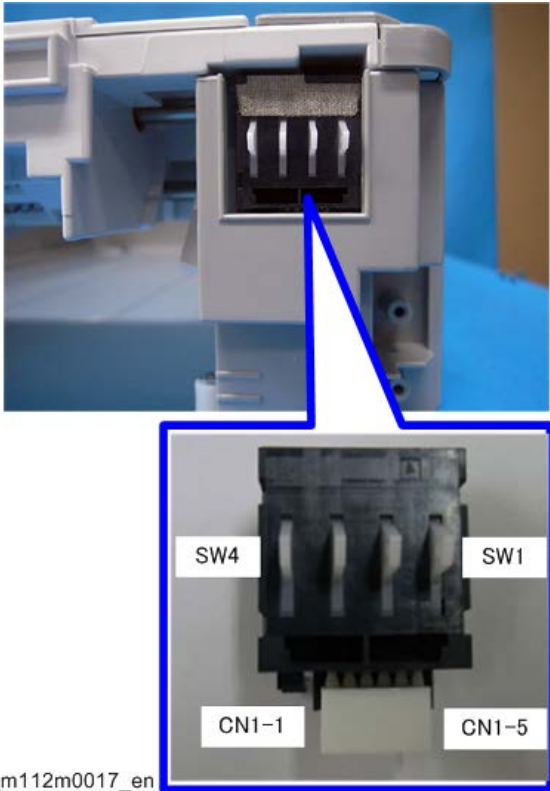
Paper Size Detection

The Paper Size Detection Dial, which is located on the right side of the Optional Tray, uses combination of four detection switches to detect the paper size. The size setting is indicated on the front of the tray.

Paper Size Detect Combination (Switch is pressed: L)

SW Knob	Knob 4	Knob 3	Knob 2	Knob 1	Paper Size
SW Side	CN1-1	CN1-2	CN1-4	CN1-5	
PCB Side	CN102-5	CN102-4	CN102-2	CN102-1	
SW value	SW3	SW2	SW1	SW0	
0	L	L	L	L	A5 T
1	L	L	L	H	Custom Size
2	L	L	H	L	B5 T
3	L	L	H	H	LG
4	L	H	L	L	LT
5	L	H	L	H	HLT
6	L	H	H	L	A4 T
7	L	H	H	H	No Cassette
8	H	L	L	L	No Cassette
9	H	L	L	H	No Cassette
10	H	L	H	L	No Cassette
11	H	L	H	H	No Cassette
12	H	H	L	L	No Cassette
13	H	H	L	H	No Cassette
14	H	H	H	L	No Cassette
15	H	H	H	H	No Cassette

2.Replacement and Adjustment



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